



Full wwPDB X-ray Structure Validation Report

Oct 9, 2014 – 09:45 PM BST

PDB ID : 4U4O
Title : Crystal structure of Geneticin bound to the yeast 80S ribosome
Authors : Garreau de Loubresse, N.; Prokhorova, I.; Yusupova, G.; Yusupov, M.
Deposited on : 2014-07-24
Resolution : 3.60 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

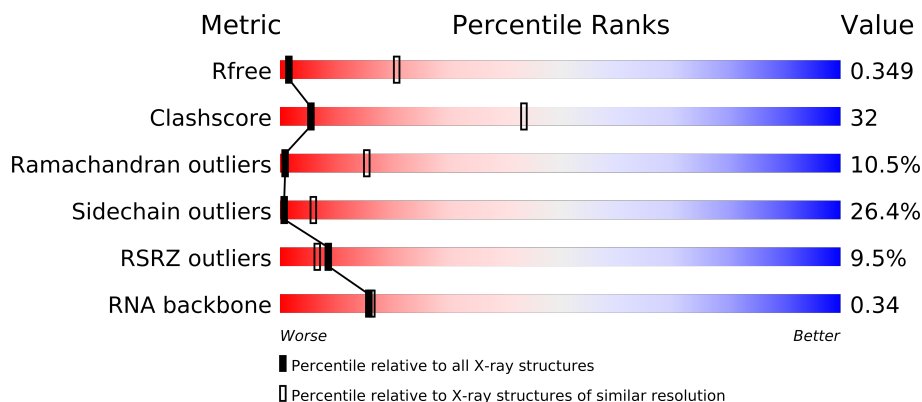
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.16 November 2013
Xtriage (Phenix) : dev-1323
EDS : stable24037
Percentile statistics : 21963
Refmac : 5.8.0049
CCP4 : 6.3.0 (Settle)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable24037

1 Overall quality at a glance

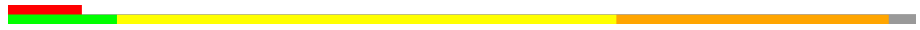
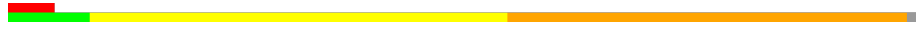


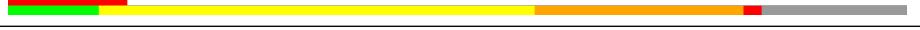



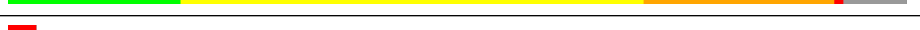
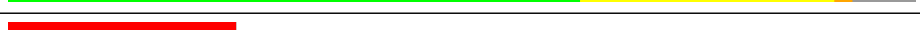

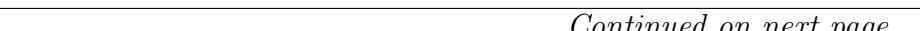
The reported resolution of this entry is 3.60 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	66092	1020 (3.86-3.34)
Clashscore	79885	1155 (3.80-3.40)
Ramachandran outliers	78287	1109 (3.80-3.40)
Sidechain outliers	78261	1108 (3.80-3.40)
RSRZ outliers	66119	1000 (3.84-3.36)
RNA backbone	1838	1012 (4.40-2.76)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	2	1800	
1	6	1800	
2	S0	251	
2	s0	251	
3	S1	254	
3	s1	254	
4	S2	253	
4	s2	253	
5	S3	239	
5	s3	239	
6	S4	260	
6	s4	260	

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Mol	Chain	Length	Quality of chain
7	S5	224	
7	s5	224	
8	S6	236	
8	s6	236	
9	S7	189	
9	s7	189	
10	S8	200	
10	s8	200	
11	S9	196	
11	s9	196	
12	C0	105	
12	c0	105	
13	C1	155	
13	c1	155	
14	C2	142	
14	c2	142	
15	C3	150	
15	c3	150	
16	C4	136	
16	c4	136	
17	C5	141	
17	c5	141	
18	C6	142	
18	c6	142	
19	C7	136	
19	c7	136	
20	C8	145	
20	c8	145	
21	C9	143	
21	c9	143	
22	D0	120	
22	d0	120	
23	D1	87	
23	d1	87	
24	D2	129	
24	d2	129	
25	D3	144	
25	d3	144	
26	D4	134	
26	d4	134	
27	D5	107	
27	d5	107	

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Mol	Chain	Length	Quality of chain
28	D6	97	
28	d6	97	
29	D7	81	
29	d7	81	
30	D8	66	
30	d8	66	
31	D9	55	
31	d9	55	
32	E0	60	
33	E1	76	
34	SR	318	
34	sR	318	
35	SM	273	
35	sM	273	
36	1	3396	
36	5	3396	
37	3	121	
37	7	121	
38	4	158	
38	8	158	
39	L2	253	
39	l2	253	
40	L3	386	
40	l3	386	
41	L4	361	
41	l4	361	
42	L5	296	
42	l5	296	
43	L6	175	
43	l6	175	
44	L7	243	
44	l7	243	
45	L8	255	
45	l8	255	
46	L9	191	
46	l9	191	
47	M0	220	
47	m0	220	
48	M1	173	
48	m1	173	
49	M3	198	
49	m3	198	

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Mol	Chain	Length	Quality of chain
50	M4	137	
50	m4	137	
51	M5	203	
51	m5	203	
52	M6	198	
52	m6	198	
53	M7	183	
53	m7	183	
54	M8	185	
54	m8	185	
55	M9	188	
55	m9	188	
56	N0	172	
56	n0	172	
57	N1	159	
57	n1	159	
58	N2	120	
58	n2	120	
59	N3	136	
59	n3	136	
60	N4	155	
60	n4	155	
61	N5	141	
61	n5	141	
62	N6	126	
62	n6	126	
63	N7	135	
63	n7	135	
64	N8	148	
64	n8	148	
65	N9	58	
65	n9	58	
66	O0	104	
66	o0	104	
67	O1	112	
67	o1	112	
68	O2	129	
68	o2	129	
69	O3	106	
69	o3	106	
70	O4	119	
70	o4	119	

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Mol	Chain	Length	Quality of chain
71	O5	119	
71	o5	119	
72	O6	99	
72	o6	99	
73	O7	87	
73	o7	87	
74	O8	77	
74	o8	77	
75	O9	50	
75	o9	50	
76	Q0	52	
76	q0	52	
77	Q1	25	
77	q1	25	
78	Q2	105	
78	q2	105	
79	Q3	91	
79	q3	91	
80	e0	62	
81	e1	76	
82	m2	160	
83	p0	311	
84	p1	47	
85	p2	46	

The following table lists non-polymeric compounds that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3402	-	X
86	MG	1	3403	-	X
86	MG	1	3404	-	X
86	MG	1	3407	-	X
86	MG	1	3408	-	X
86	MG	1	3410	-	X
86	MG	1	3412	-	X
86	MG	1	3413	-	X
86	MG	1	3414	-	X
86	MG	1	3415	-	X
86	MG	1	3416	-	X
86	MG	1	3417	-	X
86	MG	1	3419	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3421	-	X
86	MG	1	3422	-	X
86	MG	1	3423	-	X
86	MG	1	3425	-	X
86	MG	1	3427	-	X
86	MG	1	3428	-	X
86	MG	1	3430	-	X
86	MG	1	3431	-	X
86	MG	1	3432	-	X
86	MG	1	3433	-	X
86	MG	1	3434	-	X
86	MG	1	3435	-	X
86	MG	1	3438	-	X
86	MG	1	3439	-	X
86	MG	1	3440	-	X
86	MG	1	3441	-	X
86	MG	1	3443	-	X
86	MG	1	3444	-	X
86	MG	1	3446	-	X
86	MG	1	3447	-	X
86	MG	1	3448	-	X
86	MG	1	3449	-	X
86	MG	1	3450	-	X
86	MG	1	3451	-	X
86	MG	1	3452	-	X
86	MG	1	3453	-	X
86	MG	1	3454	-	X
86	MG	1	3456	-	X
86	MG	1	3457	-	X
86	MG	1	3458	-	X
86	MG	1	3459	-	X
86	MG	1	3460	-	X
86	MG	1	3461	-	X
86	MG	1	3462	-	X
86	MG	1	3463	-	X
86	MG	1	3465	-	X
86	MG	1	3468	-	X
86	MG	1	3469	-	X
86	MG	1	3470	-	X
86	MG	1	3473	-	X
86	MG	1	3475	-	X
86	MG	1	3476	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3478	-	X
86	MG	1	3479	-	X
86	MG	1	3480	-	X
86	MG	1	3483	-	X
86	MG	1	3484	-	X
86	MG	1	3485	-	X
86	MG	1	3486	-	X
86	MG	1	3488	-	X
86	MG	1	3490	-	X
86	MG	1	3491	-	X
86	MG	1	3492	-	X
86	MG	1	3493	-	X
86	MG	1	3496	-	X
86	MG	1	3498	-	X
86	MG	1	3500	-	X
86	MG	1	3501	-	X
86	MG	1	3502	-	X
86	MG	1	3503	-	X
86	MG	1	3504	-	X
86	MG	1	3505	-	X
86	MG	1	3506	-	X
86	MG	1	3508	-	X
86	MG	1	3509	-	X
86	MG	1	3511	-	X
86	MG	1	3512	-	X
86	MG	1	3513	-	X
86	MG	1	3514	-	X
86	MG	1	3515	-	X
86	MG	1	3516	-	X
86	MG	1	3517	-	X
86	MG	1	3518	-	X
86	MG	1	3519	-	X
86	MG	1	3520	-	X
86	MG	1	3522	-	X
86	MG	1	3523	-	X
86	MG	1	3524	-	X
86	MG	1	3525	-	X
86	MG	1	3526	-	X
86	MG	1	3527	-	X
86	MG	1	3528	-	X
86	MG	1	3529	-	X
86	MG	1	3530	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3531	-	X
86	MG	1	3532	-	X
86	MG	1	3533	-	X
86	MG	1	3534	-	X
86	MG	1	3535	-	X
86	MG	1	3537	-	X
86	MG	1	3538	-	X
86	MG	1	3539	-	X
86	MG	1	3540	-	X
86	MG	1	3541	-	X
86	MG	1	3542	-	X
86	MG	1	3543	-	X
86	MG	1	3544	-	X
86	MG	1	3545	-	X
86	MG	1	3546	-	X
86	MG	1	3547	-	X
86	MG	1	3548	-	X
86	MG	1	3549	-	X
86	MG	1	3550	-	X
86	MG	1	3552	-	X
86	MG	1	3553	-	X
86	MG	1	3554	-	X
86	MG	1	3555	-	X
86	MG	1	3556	-	X
86	MG	1	3557	-	X
86	MG	1	3559	-	X
86	MG	1	3560	-	X
86	MG	1	3562	-	X
86	MG	1	3563	-	X
86	MG	1	3564	-	X
86	MG	1	3565	-	X
86	MG	1	3567	-	X
86	MG	1	3568	-	X
86	MG	1	3569	-	X
86	MG	1	3570	-	X
86	MG	1	3571	-	X
86	MG	1	3572	-	X
86	MG	1	3573	-	X
86	MG	1	3574	-	X
86	MG	1	3575	-	X
86	MG	1	3576	-	X
86	MG	1	3577	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3578	-	X
86	MG	1	3580	-	X
86	MG	1	3581	-	X
86	MG	1	3583	-	X
86	MG	1	3584	-	X
86	MG	1	3585	-	X
86	MG	1	3586	-	X
86	MG	1	3587	-	X
86	MG	1	3588	-	X
86	MG	1	3589	-	X
86	MG	1	3590	-	X
86	MG	1	3591	-	X
86	MG	1	3593	-	X
86	MG	1	3594	-	X
86	MG	1	3595	-	X
86	MG	1	3596	-	X
86	MG	1	3597	-	X
86	MG	1	3598	-	X
86	MG	1	3599	-	X
86	MG	1	3603	-	X
86	MG	1	3604	-	X
86	MG	1	3605	-	X
86	MG	1	3607	-	X
86	MG	1	3609	-	X
86	MG	1	3611	-	X
86	MG	1	3612	-	X
86	MG	1	3613	-	X
86	MG	1	3615	-	X
86	MG	1	3618	-	X
86	MG	1	3619	-	X
86	MG	1	3620	-	X
86	MG	1	3621	-	X
86	MG	1	3624	-	X
86	MG	1	3625	-	X
86	MG	1	3626	-	X
86	MG	1	3628	-	X
86	MG	1	3629	-	X
86	MG	1	3630	-	X
86	MG	1	3632	-	X
86	MG	1	3633	-	X
86	MG	1	3636	-	X
86	MG	1	3639	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3641	-	X
86	MG	1	3642	-	X
86	MG	1	3645	-	X
86	MG	1	3646	-	X
86	MG	1	3647	-	X
86	MG	1	3648	-	X
86	MG	1	3649	-	X
86	MG	1	3650	-	X
86	MG	1	3651	-	X
86	MG	1	3652	-	X
86	MG	1	3653	-	X
86	MG	1	3654	-	X
86	MG	1	3655	-	X
86	MG	1	3656	-	X
86	MG	1	3657	-	X
86	MG	1	3658	-	X
86	MG	1	3661	-	X
86	MG	1	3663	-	X
86	MG	1	3665	-	X
86	MG	1	3666	-	X
86	MG	1	3667	-	X
86	MG	1	3668	-	X
86	MG	1	3669	-	X
86	MG	1	3671	-	X
86	MG	1	3672	-	X
86	MG	1	3673	-	X
86	MG	1	3674	-	X
86	MG	1	3675	-	X
86	MG	1	3676	-	X
86	MG	1	3677	-	X
86	MG	1	3678	-	X
86	MG	1	3679	-	X
86	MG	1	3680	-	X
86	MG	1	3681	-	X
86	MG	1	3682	-	X
86	MG	1	3684	-	X
86	MG	1	3687	-	X
86	MG	1	3688	-	X
86	MG	1	3689	-	X
86	MG	1	3690	-	X
86	MG	1	3691	-	X
86	MG	1	3692	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3693	-	X
86	MG	1	3696	-	X
86	MG	1	3697	-	X
86	MG	1	3699	-	X
86	MG	1	3700	-	X
86	MG	1	3701	-	X
86	MG	1	3702	-	X
86	MG	1	3704	-	X
86	MG	1	3706	-	X
86	MG	1	3711	-	X
86	MG	1	3712	-	X
86	MG	1	3713	-	X
86	MG	1	3714	-	X
86	MG	1	3716	-	X
86	MG	1	3717	-	X
86	MG	1	3718	-	X
86	MG	1	3719	-	X
86	MG	1	3720	-	X
86	MG	1	3721	-	X
86	MG	1	3722	-	X
86	MG	1	3726	-	X
86	MG	1	3727	-	X
86	MG	1	3729	-	X
86	MG	1	3730	-	X
86	MG	1	3731	-	X
86	MG	1	3732	-	X
86	MG	1	3733	-	X
86	MG	1	3735	-	X
86	MG	1	3736	-	X
86	MG	1	3738	-	X
86	MG	1	3739	-	X
86	MG	1	3740	-	X
86	MG	1	3742	-	X
86	MG	1	3743	-	X
86	MG	1	3744	-	X
86	MG	1	3746	-	X
86	MG	1	3749	-	X
86	MG	1	3750	-	X
86	MG	1	3751	-	X
86	MG	1	3752	-	X
86	MG	1	3753	-	X
86	MG	1	3754	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3756	-	X
86	MG	1	3758	-	X
86	MG	1	3759	-	X
86	MG	1	3760	-	X
86	MG	1	3761	-	X
86	MG	1	3762	-	X
86	MG	1	3763	-	X
86	MG	1	3764	-	X
86	MG	1	3765	-	X
86	MG	1	3766	-	X
86	MG	1	3768	-	X
86	MG	1	3770	-	X
86	MG	1	3771	-	X
86	MG	1	3772	-	X
86	MG	1	3773	-	X
86	MG	1	3774	-	X
86	MG	1	3776	-	X
86	MG	1	3777	-	X
86	MG	1	3778	-	X
86	MG	1	3779	-	X
86	MG	1	3781	-	X
86	MG	1	3782	-	X
86	MG	1	3783	-	X
86	MG	1	3784	-	X
86	MG	1	3785	-	X
86	MG	1	3786	-	X
86	MG	1	3787	-	X
86	MG	1	3789	-	X
86	MG	1	3791	-	X
86	MG	1	3793	-	X
86	MG	1	3794	-	X
86	MG	1	3795	-	X
86	MG	1	3796	-	X
86	MG	1	3797	-	X
86	MG	1	3798	-	X
86	MG	1	3802	-	X
86	MG	1	3805	-	X
86	MG	1	3807	-	X
86	MG	1	3808	-	X
86	MG	1	3810	-	X
86	MG	1	3811	-	X
86	MG	1	3812	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	3813	-	X
86	MG	1	3814	-	X
86	MG	1	3815	-	X
86	MG	1	3816	-	X
86	MG	1	3817	-	X
86	MG	1	3818	-	X
86	MG	1	3819	-	X
86	MG	1	3821	-	X
86	MG	1	3822	-	X
86	MG	1	3823	-	X
86	MG	1	3824	-	X
86	MG	1	3826	-	X
86	MG	1	3827	-	X
86	MG	1	3828	-	X
86	MG	1	3829	-	X
86	MG	1	3831	-	X
86	MG	1	3832	-	X
86	MG	1	3833	-	X
86	MG	1	3834	-	X
86	MG	1	3835	-	X
86	MG	1	3838	-	X
86	MG	1	3839	-	X
86	MG	1	3841	-	X
86	MG	1	3843	-	X
86	MG	1	3844	-	X
86	MG	1	3845	-	X
86	MG	1	3846	-	X
86	MG	1	3848	-	X
86	MG	1	3849	-	X
86	MG	1	3850	-	X
86	MG	1	3851	-	X
86	MG	1	3852	-	X
86	MG	1	3853	-	X
86	MG	1	3855	-	X
86	MG	1	3856	-	X
86	MG	1	3857	-	X
86	MG	1	3860	-	X
86	MG	1	3861	-	X
86	MG	1	3862	-	X
86	MG	1	3863	-	X
86	MG	1	3864	-	X
86	MG	1	3865	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	1	4213	-	X
86	MG	1	4214	-	X
86	MG	1	4215	-	X
86	MG	2	1902	-	X
86	MG	2	1903	-	X
86	MG	2	1904	-	X
86	MG	2	1905	-	X
86	MG	2	1908	-	X
86	MG	2	1910	-	X
86	MG	2	1912	-	X
86	MG	2	1913	-	X
86	MG	2	1914	-	X
86	MG	2	1916	-	X
86	MG	2	1917	-	X
86	MG	2	1918	-	X
86	MG	2	1919	-	X
86	MG	2	1921	-	X
86	MG	2	1922	-	X
86	MG	2	1923	-	X
86	MG	2	1926	-	X
86	MG	2	1927	-	X
86	MG	2	1928	-	X
86	MG	2	1930	-	X
86	MG	2	1933	-	X
86	MG	2	1935	-	X
86	MG	2	1937	-	X
86	MG	2	1939	-	X
86	MG	2	1941	-	X
86	MG	2	1942	-	X
86	MG	2	1943	-	X
86	MG	2	1944	-	X
86	MG	2	1945	-	X
86	MG	2	1946	-	X
86	MG	2	1947	-	X
86	MG	2	1956	-	X
86	MG	2	1957	-	X
86	MG	2	1958	-	X
86	MG	2	1960	-	X
86	MG	2	1962	-	X
86	MG	2	1966	-	X
86	MG	2	1967	-	X
86	MG	2	1969	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	2	1970	-	X
86	MG	2	1973	-	X
86	MG	2	1974	-	X
86	MG	2	1976	-	X
86	MG	2	1978	-	X
86	MG	2	1979	-	X
86	MG	2	1981	-	X
86	MG	2	1982	-	X
86	MG	2	1983	-	X
86	MG	2	1984	-	X
86	MG	2	1985	-	X
86	MG	2	1986	-	X
86	MG	2	1988	-	X
86	MG	2	1990	-	X
86	MG	2	1992	-	X
86	MG	2	1994	-	X
86	MG	2	1995	-	X
86	MG	2	1997	-	X
86	MG	2	1999	-	X
86	MG	2	2001	-	X
86	MG	2	2002	-	X
86	MG	2	2004	-	X
86	MG	2	2006	-	X
86	MG	2	2007	-	X
86	MG	2	2009	-	X
86	MG	2	2010	-	X
86	MG	2	2011	-	X
86	MG	2	2014	-	X
86	MG	2	2015	-	X
86	MG	2	2016	-	X
86	MG	2	2017	-	X
86	MG	2	2018	-	X
86	MG	2	2019	-	X
86	MG	2	2020	-	X
86	MG	2	2023	-	X
86	MG	3	202	-	X
86	MG	3	204	-	X
86	MG	3	205	-	X
86	MG	3	206	-	X
86	MG	3	208	-	X
86	MG	3	210	-	X
86	MG	3	212	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	4	201	-	X
86	MG	4	202	-	X
86	MG	4	203	-	X
86	MG	4	204	-	X
86	MG	4	206	-	X
86	MG	4	207	-	X
86	MG	4	208	-	X
86	MG	4	210	-	X
86	MG	4	211	-	X
86	MG	4	213	-	X
86	MG	4	214	-	X
86	MG	4	215	-	X
86	MG	4	217	-	X
86	MG	4	219	-	X
86	MG	4	220	-	X
86	MG	4	221	-	X
86	MG	4	222	-	X
86	MG	5	3403	-	X
86	MG	5	3404	-	X
86	MG	5	3405	-	X
86	MG	5	3406	-	X
86	MG	5	3407	-	X
86	MG	5	3408	-	X
86	MG	5	3409	-	X
86	MG	5	3410	-	X
86	MG	5	3411	-	X
86	MG	5	3412	-	X
86	MG	5	3414	-	X
86	MG	5	3416	-	X
86	MG	5	3418	-	X
86	MG	5	3420	-	X
86	MG	5	3424	-	X
86	MG	5	3425	-	X
86	MG	5	3426	-	X
86	MG	5	3427	-	X
86	MG	5	3428	-	X
86	MG	5	3430	-	X
86	MG	5	3431	-	X
86	MG	5	3432	-	X
86	MG	5	3433	-	X
86	MG	5	3434	-	X
86	MG	5	3435	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3439	-	X
86	MG	5	3440	-	X
86	MG	5	3441	-	X
86	MG	5	3442	-	X
86	MG	5	3443	-	X
86	MG	5	3444	-	X
86	MG	5	3445	-	X
86	MG	5	3447	-	X
86	MG	5	3449	-	X
86	MG	5	3450	-	X
86	MG	5	3451	-	X
86	MG	5	3452	-	X
86	MG	5	3454	-	X
86	MG	5	3455	-	X
86	MG	5	3457	-	X
86	MG	5	3458	-	X
86	MG	5	3459	-	X
86	MG	5	3461	-	X
86	MG	5	3464	-	X
86	MG	5	3465	-	X
86	MG	5	3467	-	X
86	MG	5	3468	-	X
86	MG	5	3469	-	X
86	MG	5	3470	-	X
86	MG	5	3471	-	X
86	MG	5	3473	-	X
86	MG	5	3474	-	X
86	MG	5	3475	-	X
86	MG	5	3476	-	X
86	MG	5	3481	-	X
86	MG	5	3482	-	X
86	MG	5	3484	-	X
86	MG	5	3485	-	X
86	MG	5	3486	-	X
86	MG	5	3487	-	X
86	MG	5	3488	-	X
86	MG	5	3489	-	X
86	MG	5	3491	-	X
86	MG	5	3493	-	X
86	MG	5	3494	-	X
86	MG	5	3495	-	X
86	MG	5	3496	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3497	-	X
86	MG	5	3498	-	X
86	MG	5	3499	-	X
86	MG	5	3500	-	X
86	MG	5	3501	-	X
86	MG	5	3503	-	X
86	MG	5	3504	-	X
86	MG	5	3505	-	X
86	MG	5	3506	-	X
86	MG	5	3507	-	X
86	MG	5	3509	-	X
86	MG	5	3510	-	X
86	MG	5	3511	-	X
86	MG	5	3513	-	X
86	MG	5	3514	-	X
86	MG	5	3515	-	X
86	MG	5	3516	-	X
86	MG	5	3517	-	X
86	MG	5	3518	-	X
86	MG	5	3519	-	X
86	MG	5	3520	-	X
86	MG	5	3521	-	X
86	MG	5	3522	-	X
86	MG	5	3523	-	X
86	MG	5	3524	-	X
86	MG	5	3525	-	X
86	MG	5	3526	-	X
86	MG	5	3528	-	X
86	MG	5	3529	-	X
86	MG	5	3530	-	X
86	MG	5	3531	-	X
86	MG	5	3532	-	X
86	MG	5	3534	-	X
86	MG	5	3535	-	X
86	MG	5	3536	-	X
86	MG	5	3537	-	X
86	MG	5	3538	-	X
86	MG	5	3539	-	X
86	MG	5	3540	-	X
86	MG	5	3541	-	X
86	MG	5	3544	-	X
86	MG	5	3545	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3546	-	X
86	MG	5	3547	-	X
86	MG	5	3548	-	X
86	MG	5	3549	-	X
86	MG	5	3551	-	X
86	MG	5	3552	-	X
86	MG	5	3553	-	X
86	MG	5	3554	-	X
86	MG	5	3555	-	X
86	MG	5	3557	-	X
86	MG	5	3559	-	X
86	MG	5	3560	-	X
86	MG	5	3561	-	X
86	MG	5	3562	-	X
86	MG	5	3563	-	X
86	MG	5	3564	-	X
86	MG	5	3565	-	X
86	MG	5	3566	-	X
86	MG	5	3567	-	X
86	MG	5	3568	-	X
86	MG	5	3569	-	X
86	MG	5	3570	-	X
86	MG	5	3571	-	X
86	MG	5	3572	-	X
86	MG	5	3573	-	X
86	MG	5	3574	-	X
86	MG	5	3575	-	X
86	MG	5	3576	-	X
86	MG	5	3578	-	X
86	MG	5	3580	-	X
86	MG	5	3581	-	X
86	MG	5	3582	-	X
86	MG	5	3583	-	X
86	MG	5	3584	-	X
86	MG	5	3585	-	X
86	MG	5	3586	-	X
86	MG	5	3587	-	X
86	MG	5	3588	-	X
86	MG	5	3589	-	X
86	MG	5	3590	-	X
86	MG	5	3593	-	X
86	MG	5	3594	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3595	-	X
86	MG	5	3597	-	X
86	MG	5	3598	-	X
86	MG	5	3600	-	X
86	MG	5	3601	-	X
86	MG	5	3602	-	X
86	MG	5	3603	-	X
86	MG	5	3604	-	X
86	MG	5	3605	-	X
86	MG	5	3606	-	X
86	MG	5	3608	-	X
86	MG	5	3610	-	X
86	MG	5	3614	-	X
86	MG	5	3616	-	X
86	MG	5	3617	-	X
86	MG	5	3619	-	X
86	MG	5	3621	-	X
86	MG	5	3622	-	X
86	MG	5	3623	-	X
86	MG	5	3624	-	X
86	MG	5	3625	-	X
86	MG	5	3626	-	X
86	MG	5	3627	-	X
86	MG	5	3628	-	X
86	MG	5	3629	-	X
86	MG	5	3634	-	X
86	MG	5	3635	-	X
86	MG	5	3636	-	X
86	MG	5	3637	-	X
86	MG	5	3639	-	X
86	MG	5	3640	-	X
86	MG	5	3641	-	X
86	MG	5	3642	-	X
86	MG	5	3643	-	X
86	MG	5	3644	-	X
86	MG	5	3645	-	X
86	MG	5	3646	-	X
86	MG	5	3647	-	X
86	MG	5	3648	-	X
86	MG	5	3649	-	X
86	MG	5	3650	-	X
86	MG	5	3651	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3653	-	X
86	MG	5	3654	-	X
86	MG	5	3655	-	X
86	MG	5	3656	-	X
86	MG	5	3657	-	X
86	MG	5	3658	-	X
86	MG	5	3659	-	X
86	MG	5	3660	-	X
86	MG	5	3661	-	X
86	MG	5	3664	-	X
86	MG	5	3665	-	X
86	MG	5	3666	-	X
86	MG	5	3667	-	X
86	MG	5	3669	-	X
86	MG	5	3670	-	X
86	MG	5	3671	-	X
86	MG	5	3672	-	X
86	MG	5	3673	-	X
86	MG	5	3674	-	X
86	MG	5	3675	-	X
86	MG	5	3676	-	X
86	MG	5	3677	-	X
86	MG	5	3678	-	X
86	MG	5	3679	-	X
86	MG	5	3680	-	X
86	MG	5	3683	-	X
86	MG	5	3684	-	X
86	MG	5	3685	-	X
86	MG	5	3687	-	X
86	MG	5	3688	-	X
86	MG	5	3689	-	X
86	MG	5	3690	-	X
86	MG	5	3691	-	X
86	MG	5	3694	-	X
86	MG	5	3695	-	X
86	MG	5	3697	-	X
86	MG	5	3699	-	X
86	MG	5	3701	-	X
86	MG	5	3702	-	X
86	MG	5	3703	-	X
86	MG	5	3704	-	X
86	MG	5	3705	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3707	-	X
86	MG	5	3708	-	X
86	MG	5	3709	-	X
86	MG	5	3711	-	X
86	MG	5	3712	-	X
86	MG	5	3713	-	X
86	MG	5	3714	-	X
86	MG	5	3717	-	X
86	MG	5	3718	-	X
86	MG	5	3720	-	X
86	MG	5	3723	-	X
86	MG	5	3724	-	X
86	MG	5	3725	-	X
86	MG	5	3726	-	X
86	MG	5	3727	-	X
86	MG	5	3728	-	X
86	MG	5	3729	-	X
86	MG	5	3730	-	X
86	MG	5	3731	-	X
86	MG	5	3733	-	X
86	MG	5	3734	-	X
86	MG	5	3735	-	X
86	MG	5	3736	-	X
86	MG	5	3737	-	X
86	MG	5	3739	-	X
86	MG	5	3741	-	X
86	MG	5	3742	-	X
86	MG	5	3745	-	X
86	MG	5	3746	-	X
86	MG	5	3748	-	X
86	MG	5	3749	-	X
86	MG	5	3750	-	X
86	MG	5	3752	-	X
86	MG	5	3753	-	X
86	MG	5	3754	-	X
86	MG	5	3755	-	X
86	MG	5	3756	-	X
86	MG	5	3757	-	X
86	MG	5	3759	-	X
86	MG	5	3760	-	X
86	MG	5	3762	-	X
86	MG	5	3764	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3765	-	X
86	MG	5	3767	-	X
86	MG	5	3771	-	X
86	MG	5	3772	-	X
86	MG	5	3773	-	X
86	MG	5	3774	-	X
86	MG	5	3775	-	X
86	MG	5	3777	-	X
86	MG	5	3779	-	X
86	MG	5	3780	-	X
86	MG	5	3783	-	X
86	MG	5	3784	-	X
86	MG	5	3785	-	X
86	MG	5	3786	-	X
86	MG	5	3787	-	X
86	MG	5	3790	-	X
86	MG	5	3792	-	X
86	MG	5	3793	-	X
86	MG	5	3794	-	X
86	MG	5	3797	-	X
86	MG	5	3798	-	X
86	MG	5	3799	-	X
86	MG	5	3800	-	X
86	MG	5	3801	-	X
86	MG	5	3802	-	X
86	MG	5	3803	-	X
86	MG	5	3805	-	X
86	MG	5	3806	-	X
86	MG	5	3807	-	X
86	MG	5	3808	-	X
86	MG	5	3809	-	X
86	MG	5	3812	-	X
86	MG	5	3814	-	X
86	MG	5	3816	-	X
86	MG	5	3817	-	X
86	MG	5	3818	-	X
86	MG	5	3819	-	X
86	MG	5	3821	-	X
86	MG	5	3822	-	X
86	MG	5	3823	-	X
86	MG	5	3824	-	X
86	MG	5	3828	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3829	-	X
86	MG	5	3830	-	X
86	MG	5	3831	-	X
86	MG	5	3832	-	X
86	MG	5	3833	-	X
86	MG	5	3835	-	X
86	MG	5	3837	-	X
86	MG	5	3840	-	X
86	MG	5	3841	-	X
86	MG	5	3842	-	X
86	MG	5	3843	-	X
86	MG	5	3845	-	X
86	MG	5	3847	-	X
86	MG	5	3848	-	X
86	MG	5	3850	-	X
86	MG	5	3853	-	X
86	MG	5	3854	-	X
86	MG	5	3856	-	X
86	MG	5	3857	-	X
86	MG	5	3858	-	X
86	MG	5	3859	-	X
86	MG	5	3860	-	X
86	MG	5	3862	-	X
86	MG	5	3863	-	X
86	MG	5	3864	-	X
86	MG	5	3865	-	X
86	MG	5	3866	-	X
86	MG	5	3867	-	X
86	MG	5	3868	-	X
86	MG	5	3869	-	X
86	MG	5	3870	-	X
86	MG	5	3871	-	X
86	MG	5	3873	-	X
86	MG	5	3874	-	X
86	MG	5	3875	-	X
86	MG	5	3876	-	X
86	MG	5	3877	-	X
86	MG	5	3878	-	X
86	MG	5	3879	-	X
86	MG	5	3880	-	X
86	MG	5	3881	-	X
86	MG	5	3882	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	5	3883	-	X
86	MG	5	3885	-	X
86	MG	5	3886	-	X
86	MG	5	3893	-	X
86	MG	5	4247	-	X
86	MG	5	4248	-	X
86	MG	5	4249	-	X
86	MG	5	4250	-	X
86	MG	5	4252	-	X
86	MG	6	1901	-	X
86	MG	6	1903	-	X
86	MG	6	1905	-	X
86	MG	6	1908	-	X
86	MG	6	1911	-	X
86	MG	6	1912	-	X
86	MG	6	1913	-	X
86	MG	6	1914	-	X
86	MG	6	1916	-	X
86	MG	6	1917	-	X
86	MG	6	1918	-	X
86	MG	6	1921	-	X
86	MG	6	1922	-	X
86	MG	6	1923	-	X
86	MG	6	1926	-	X
86	MG	6	1927	-	X
86	MG	6	1929	-	X
86	MG	6	1930	-	X
86	MG	6	1932	-	X
86	MG	6	1934	-	X
86	MG	6	1937	-	X
86	MG	6	1938	-	X
86	MG	6	1939	-	X
86	MG	6	1941	-	X
86	MG	6	1942	-	X
86	MG	6	1943	-	X
86	MG	6	1944	-	X
86	MG	6	1945	-	X
86	MG	6	1946	-	X
86	MG	6	1948	-	X
86	MG	6	1949	-	X
86	MG	6	1950	-	X
86	MG	6	1951	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	6	1954	-	X
86	MG	6	1957	-	X
86	MG	6	1958	-	X
86	MG	6	1960	-	X
86	MG	6	1962	-	X
86	MG	6	1963	-	X
86	MG	6	1964	-	X
86	MG	6	1965	-	X
86	MG	6	1967	-	X
86	MG	6	1969	-	X
86	MG	6	1970	-	X
86	MG	6	1971	-	X
86	MG	6	1972	-	X
86	MG	6	1973	-	X
86	MG	6	1974	-	X
86	MG	6	1975	-	X
86	MG	6	1976	-	X
86	MG	6	1977	-	X
86	MG	6	1978	-	X
86	MG	6	1980	-	X
86	MG	6	1982	-	X
86	MG	6	1983	-	X
86	MG	6	1984	-	X
86	MG	6	1985	-	X
86	MG	6	1988	-	X
86	MG	6	1989	-	X
86	MG	6	1995	-	X
86	MG	6	1996	-	X
86	MG	6	1997	-	X
86	MG	6	1998	-	X
86	MG	6	2000	-	X
86	MG	6	2001	-	X
86	MG	6	2003	-	X
86	MG	6	2009	-	X
86	MG	6	2011	-	X
86	MG	6	2012	-	X
86	MG	6	2013	-	X
86	MG	6	2014	-	X
86	MG	6	2016	-	X
86	MG	6	2017	-	X
86	MG	6	2020	-	X
86	MG	6	2021	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	6	2022	-	X
86	MG	6	2024	-	X
86	MG	6	2025	-	X
86	MG	6	2027	-	X
86	MG	6	2029	-	X
86	MG	6	2031	-	X
86	MG	6	2032	-	X
86	MG	6	2033	-	X
86	MG	6	2034	-	X
86	MG	6	2035	-	X
86	MG	6	2036	-	X
86	MG	6	2037	-	X
86	MG	6	2038	-	X
86	MG	6	2039	-	X
86	MG	6	2040	-	X
86	MG	6	2043	-	X
86	MG	6	2044	-	X
86	MG	6	2045	-	X
86	MG	6	2046	-	X
86	MG	6	2049	-	X
86	MG	7	202	-	X
86	MG	7	203	-	X
86	MG	7	204	-	X
86	MG	7	205	-	X
86	MG	7	206	-	X
86	MG	7	207	-	X
86	MG	7	208	-	X
86	MG	7	210	-	X
86	MG	7	211	-	X
86	MG	7	212	-	X
86	MG	7	215	-	X
86	MG	8	202	-	X
86	MG	8	203	-	X
86	MG	8	204	-	X
86	MG	8	205	-	X
86	MG	8	206	-	X
86	MG	8	207	-	X
86	MG	8	209	-	X
86	MG	8	211	-	X
86	MG	8	212	-	X
86	MG	8	214	-	X
86	MG	8	215	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	8	216	-	X
86	MG	8	217	-	X
86	MG	D3	201	-	X
86	MG	D4	201	-	X
86	MG	L3	402	-	X
86	MG	L4	402	-	X
86	MG	L6	201	-	X
86	MG	L6	202	-	X
86	MG	L7	302	-	X
86	MG	L8	301	-	X
86	MG	M0	302	-	X
86	MG	M0	303	-	X
86	MG	M3	201	-	X
86	MG	M5	301	-	X
86	MG	M5	302	-	X
86	MG	M7	202	-	X
86	MG	M7	203	-	X
86	MG	M7	204	-	X
86	MG	N3	201	-	X
86	MG	N5	201	-	X
86	MG	N8	203	-	X
86	MG	N8	204	-	X
86	MG	N9	101	-	X
86	MG	O1	201	-	X
86	MG	O3	201	-	X
86	MG	O5	201	-	X
86	MG	O7	102	-	X
86	MG	SM	301	-	X
86	MG	l3	401	-	X
86	MG	l3	402	-	X
86	MG	l3	403	-	X
86	MG	l3	405	-	X
86	MG	l3	406	-	X
86	MG	l7	301	-	X
86	MG	m0	301	-	X
86	MG	m1	201	-	X
86	MG	m4	201	-	X
86	MG	m5	301	-	X
86	MG	m5	302	-	X
86	MG	m6	201	-	X
86	MG	m7	201	-	X
86	MG	m7	202	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
86	MG	m7	203	-	X
86	MG	m7	204	-	X
86	MG	n3	201	-	X
86	MG	n4	201	-	X
86	MG	n8	201	-	X
86	MG	n8	202	-	X
86	MG	n9	101	-	X
86	MG	n9	102	-	X
86	MG	o1	201	-	X
86	MG	o2	201	-	X
86	MG	o3	201	-	X
86	MG	o3	202	-	X
86	MG	o4	201	-	X
86	MG	q0	203	-	X
86	MG	q1	101	-	X
86	MG	q3	503	-	X
86	MG	s8	302	-	X
87	OHX	1	3866	-	X
87	OHX	1	3872	-	X
87	OHX	1	3887	-	X
87	OHX	1	3891	-	X
87	OHX	1	3897	-	X
87	OHX	1	3946	-	X
87	OHX	1	4025	-	X
87	OHX	1	4056	-	X
87	OHX	1	4061	-	X
87	OHX	1	4092	-	X
87	OHX	1	4098	-	X
87	OHX	1	4112	-	X
87	OHX	1	4116	-	X
87	OHX	1	4123	-	X
87	OHX	1	4131	-	X
87	OHX	1	4136	-	X
87	OHX	1	4137	-	X
87	OHX	1	4138	-	X
87	OHX	1	4168	-	X
87	OHX	1	4169	-	X
87	OHX	1	4170	-	X
87	OHX	1	4175	-	X
87	OHX	1	4176	-	X
87	OHX	1	4178	-	X
87	OHX	1	4186	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
87	OHX	1	4189	-	X
87	OHX	1	4195	-	X
87	OHX	1	4199	-	X
87	OHX	1	4202	-	X
87	OHX	1	4203	-	X
87	OHX	1	4205	-	X
87	OHX	1	4206	-	X
87	OHX	1	4208	-	X
87	OHX	1	4209	-	X
87	OHX	1	4212	-	X
87	OHX	2	2108	-	X
87	OHX	2	2113	-	X
87	OHX	2	2149	-	X
87	OHX	2	2159	-	X
87	OHX	2	2160	-	X
87	OHX	2	2162	-	X
87	OHX	3	222	-	X
87	OHX	3	224	-	X
87	OHX	4	233	-	X
87	OHX	5	3895	-	X
87	OHX	5	3896	-	X
87	OHX	5	3899	-	X
87	OHX	5	3901	-	X
87	OHX	5	3905	-	X
87	OHX	5	3907	-	X
87	OHX	5	3939	-	X
87	OHX	5	3989	-	X
87	OHX	5	4068	-	X
87	OHX	5	4076	-	X
87	OHX	5	4091	-	X
87	OHX	5	4116	-	X
87	OHX	5	4123	-	X
87	OHX	5	4128	-	X
87	OHX	5	4134	-	X
87	OHX	5	4141	-	X
87	OHX	5	4144	-	X
87	OHX	5	4149	-	X
87	OHX	5	4151	-	X
87	OHX	5	4153	-	X
87	OHX	5	4173	-	X
87	OHX	5	4176	-	X
87	OHX	5	4178	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
87	OHX	5	4179	-	X
87	OHX	5	4182	-	X
87	OHX	5	4183	-	X
87	OHX	5	4188	-	X
87	OHX	5	4191	-	X
87	OHX	5	4196	-	X
87	OHX	5	4197	-	X
87	OHX	5	4198	-	X
87	OHX	5	4199	-	X
87	OHX	5	4216	-	X
87	OHX	5	4223	-	X
87	OHX	5	4224	-	X
87	OHX	5	4226	-	X
87	OHX	5	4229	-	X
87	OHX	5	4231	-	X
87	OHX	5	4244	-	X
87	OHX	6	2052	-	X
87	OHX	6	2057	-	X
87	OHX	6	2058	-	X
87	OHX	6	2113	-	X
87	OHX	6	2131	-	X
87	OHX	6	2170	-	X
87	OHX	6	2180	-	X
87	OHX	6	2183	-	X
87	OHX	6	2185	-	X
87	OHX	6	2193	-	X
87	OHX	6	2198	-	X
87	OHX	7	225	-	X
87	OHX	7	226	-	X
87	OHX	8	226	-	X
87	OHX	8	233	-	X
87	OHX	8	234	-	X
87	OHX	14	403	-	X
87	OHX	15	306	-	X
87	OHX	15	307	-	X

2 Entry composition

There are 89 unique types of molecules in this entry. The entry contains 411095 atoms, of which 0 are hydrogen and 0 are deuterium.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called *Saccharomyces cerevisiae* chromosome XII cosmid 9634.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	2	1750	Total	C	N	O	P	0	0	0
			37283	16668	6591	12274	1750			
1	6	1791	Total	C	N	O	P	0	0	0
			38149	17055	6738	12565	1791			

- Molecule 2 is a protein called 40S ribosomal protein S0-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	S0	206	Total	C	N	O	S	0	0	0
			1577	1014	278	283	2			
2	s0	206	Total	C	N	O	S	0	0	0
			1583	1017	281	283	2			

- Molecule 3 is a protein called 40S ribosomal protein S1-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	S1	214	Total	C	N	O	S	0	0	0
			1709	1084	310	311	4			
3	s1	216	Total	C	N	O	S	0	0	0
			1722	1091	312	315	4			

- Molecule 4 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	S2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			
4	s2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			

- Molecule 5 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	S3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			
5	s3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			

- Molecule 6 is a protein called 40S ribosomal protein S4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	S4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			
6	s4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			

- Molecule 7 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	S5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			
7	s5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			

- Molecule 8 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	S6	226	Total	C	N	O	S	0	0	0
			1799	1129	346	321	3			
8	s6	218	Total	C	N	O	S	0	0	0
			1755	1102	337	313	3			

- Molecule 9 is a protein called 40S ribosomal protein S7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	S7	184	Total	C	N	O		0	0	0
			1481	951	265	265				
9	s7	186	Total	C	N	O		0	0	0
			1491	957	267	267				

- Molecule 10 is a protein called 40S ribosomal protein S8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	S8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	s8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

- Molecule 11 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	S9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			
11	s9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			

- Molecule 12 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	C0	96	Total	C	N	O	S	0	0	0
			773	500	126	145	2			
12	c0	96	Total	C	N	O	S	0	0	0
			762	491	125	144	2			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C0	89	ALA	GLY	conflict	UNP Q08745
c0	89	ALA	GLY	conflict	UNP Q08745

- Molecule 13 is a protein called 40S ribosomal protein S11-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	C1	155	Total	C	N	O	S	0	0	0
			1214	775	230	206	3			
13	c1	146	Total	C	N	O	S	0	0	0
			1168	747	221	197	3			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C1	147	ALA	GLY	conflict	UNP P0CX47
c1	147	ALA	GLY	conflict	UNP P0CX47

- Molecule 14 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	C2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			
14	c2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C2	104	ALA	GLY	conflict	UNP P48589
C2	110	ALA	GLY	conflict	UNP P48589
c2	104	ALA	GLY	conflict	UNP P48589
c2	110	ALA	GLY	conflict	UNP P48589

- Molecule 15 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	C3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			
15	c3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			

- Molecule 16 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	C4	127	Total	C	N	O	S	0	0	0
			891	545	182	163	1			
16	c4	128	Total	C	N	O	S	0	0	0
			949	582	188	176	3			

- Molecule 17 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	C5	124	Total	C	N	O	S	0	0	0
			977	622	182	166	7			
17	c5	135	Total	C	N	O	S	0	0	0
			1039	658	196	178	7			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C5	137	SER	ARG	conflict	UNP Q01855
c5	137	SER	ARG	conflict	UNP Q01855

- Molecule 18 is a protein called 40S ribosomal protein S16-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	C6	141	Total	C	N	O	0	0	0
			1105	708	203	194			
18	c6	142	Total	C	N	O	0	0	0
			1111	711	204	196			

- Molecule 19 is a protein called 40S ribosomal protein S17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	C7	120	Total	C	N	O	S	0	0	0
			926	577	177	170	2			
19	c7	117	Total	C	N	O	S	0	0	0
			906	563	174	167	2			

- Molecule 20 is a protein called 40S ribosomal protein S18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	C8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			
20	c8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			

- Molecule 21 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	C9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			
21	c9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			

- Molecule 22 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	D0	107	Total	C	N	O	S	0	0	0
			855	539	156	159	1			
22	d0	110	Total	C	N	O	S	0	0	0
			882	554	161	166	1			

- Molecule 23 is a protein called 40S ribosomal protein S21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	D1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			
23	d1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			

- Molecule 24 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	D2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			
24	d2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			

- Molecule 25 is a protein called 40S ribosomal protein S23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	D3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			
25	d3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			

- Molecule 26 is a protein called 40S ribosomal protein S24-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
26	D4	134	Total	C	N	O	0	0	0
			1073	676	208	189			
26	d4	134	Total	C	N	O	0	0	0
			1073	676	208	189			

- Molecule 27 is a protein called 40S ribosomal protein S25-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	D5	70	Total	C	N	O	0	0	0
			563	360	104	99			
27	d5	69	Total	C	N	O	0	0	0
			558	357	103	98			

- Molecule 28 is a protein called 40S ribosomal protein S26-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	D6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	d6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

- Molecule 29 is a protein called 40S ribosomal protein S27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	D7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			
29	d7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			

- Molecule 30 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	D8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			
30	d8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			

- Molecule 31 is a protein called 40S ribosomal protein S29-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	D9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			
31	d9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			

- Molecule 32 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	E0	60	Total	C	N	O	S	0	0	0
			475	299	98	77	1			

- Molecule 33 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	E1	71	Total	C	N	O	S	0	0	0
			566	362	106	94	4			

- Molecule 34 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	SR	318	Total	C	N	O	S	0	0	0
			2441	1544	419	470	8			
34	sR	318	Total	C	N	O	S	0	0	0
			2442	1544	418	472	8			

- Molecule 35 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	SM	159	Total	C	N	O		0	0	0
			1104	652	221	231				
35	sM	104	Total	C	N	O		0	0	0
			679	402	140	137				

- Molecule 36 is a RNA chain called TPA_inf: Saccharomyces cerevisiae S288c chromosome XII, complete sequence.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1	3149	Total	C	N	O	P	0	0	0
			67355	30086	12142	21978	3149			
36	5	3150	Total	C	N	O	P	0	0	0
			67376	30095	12145	21987	3149			

- Molecule 37 is a RNA chain called TPA_inf: Saccharomyces cerevisiae S288c chromosome XII, complete sequence.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	3	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			
37	7	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			

- Molecule 38 is a RNA chain called Saccharomyces cerevisiae genomic DNA containing ITS1, 5.8S rRNA gene, ITS2, 28S rRNA gene, strain Kw97.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	4	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			
38	8	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			

- Molecule 39 is a protein called 60S ribosomal protein L2-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	L2	252	Total	C	N	O	S	0	0	0
			1914	1191	388	334	1			
39	l2	252	Total	C	N	O	S	0	0	0
			1912	1190	388	333	1			

- Molecule 40 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	L3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			
40	l3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			

- Molecule 41 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	L4	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			
41	l4	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			

- Molecule 42 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	L5	296	Total	C	N	O	S	0	0	0
			2375	1501	414	458	2			
42	l5	294	Total	C	N	O	S	0	0	0
			2359	1489	412	456	2			

- Molecule 43 is a protein called 60S ribosomal protein L6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	L6	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			
43	l6	157	Total	C	N	O	S	0	0	0
			1248	806	224	217	1			

- Molecule 44 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	L7	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	17	223	Total	C	N	O	S	0	0	0
			1791	1155	325	310	1			

- Molecule 45 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	L8	233	Total	C	N	O	S	0	0	0
			1804	1151	323	327	3			
45	18	231	Total	C	N	O	S	0	0	0
			1763	1130	316	314	3			

- Molecule 46 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	L9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			
46	19	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			

- Molecule 47 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	M0	211	Total	C	N	O	S	0	0	0
			1705	1083	322	294	6			
47	m0	213	Total	C	N	O	S	0	0	0
			1722	1094	325	297	6			

- Molecule 48 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	M1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			
48	m1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			

- Molecule 49 is a protein called 60S ribosomal protein L13-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	M3	193	Total	C	N	O	0	0	0
			1543	962	315	266			
49	m3	194	Total	C	N	O	0	0	0
			1548	965	316	267			

- Molecule 50 is a protein called 60S ribosomal protein L14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	M4	136	Total	C	N	O	S	0	0	0
			1053	675	199	177	2			
50	m4	137	Total	C	N	O	S	0	0	0
			1059	678	200	179	2			

- Molecule 51 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	M5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			
51	m5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			

- Molecule 52 is a protein called 60S ribosomal protein L16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	M6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			
52	m6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			

- Molecule 53 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	M7	183	Total	C	N	O	S	0	0	0
			1420	882	281	257				
53	m7	155	Total	C	N	O	S	0	0	0
			1227	764	238	225				

- Molecule 54 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	M8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			
54	m8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			

- Molecule 55 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
55	M9	188	Total	C	N	O	0	0	0
			1521	935	326	260			
55	m9	188	Total	C	N	O	0	0	0
			1521	935	326	260			

- Molecule 56 is a protein called 60S ribosomal protein L20-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	N0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			
56	n0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

- Molecule 57 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	N1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			
57	n1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			

- Molecule 58 is a protein called 60S ribosomal protein L22-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
58	N2	100	Total	C	N	O	0	0	0
			796	516	131	149			
58	n2	98	Total	C	N	O	0	0	0
			778	505	127	146			

- Molecule 59 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	N3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			
59	n3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			

- Molecule 60 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	N4	98	Total	C	N	O	S	0	0	0
			699	443	137	118	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	n4	135	Total	C	N	O	S	0	0	0
			1038	651	206	180	1			

- Molecule 61 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	N5	121	Total	C	N	O	S	0	0	0
			964	620	169	173	2			
61	n5	120	Total	C	N	O	S	0	0	0
			959	617	168	172	2			

- Molecule 62 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	N6	126	Total	C	N	O		0	0	0
			993	625	192	176				
62	n6	126	Total	C	N	O		0	0	0
			993	625	192	176				

- Molecule 63 is a protein called 60S ribosomal protein L27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	N7	135	Total	C	N	O		0	0	0
			1092	710	202	180				
63	n7	135	Total	C	N	O		0	0	0
			1092	710	202	180				

- Molecule 64 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	N8	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			
64	n8	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			

- Molecule 65 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	N9	58	Total	C	N	O		0	0	0
			462	289	100	73				
65	n9	58	Total	C	N	O		0	0	0
			462	289	100	73				

- Molecule 66 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	O0	97	Total	C	N	O	S	0	0	0
			743	479	124	139	1			
66	o0	100	Total	C	N	O	S	0	0	0
			767	492	128	146	1			

- Molecule 67 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	O1	109	Total	C	N	O	S	0	0	0
			876	556	167	152	1			
67	o1	109	Total	C	N	O	S	0	0	0
			883	559	167	156	1			

- Molecule 68 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	O2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			
68	o2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

- Molecule 69 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	O3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			
69	o3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			

- Molecule 70 is a protein called 60S ribosomal protein L34-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	O4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			
70	o4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			

There are 22 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
O4	110	GLU	-	expression tag	UNP P87262

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Chain	Residue	Modelled	Actual	Comment	Reference
O4	111	ALA	-	expression tag	UNP P87262
O4	112	ALA	-	expression tag	UNP P87262
O4	113	LYS	-	expression tag	UNP P87262
O4	114	SER	-	expression tag	UNP P87262
O4	115	GLU	-	expression tag	UNP P87262
O4	116	LYS	-	expression tag	UNP P87262
O4	117	LYS	-	expression tag	UNP P87262
O4	118	ALA	-	expression tag	UNP P87262
O4	119	LYS	-	expression tag	UNP P87262
O4	120	LYS	-	expression tag	UNP P87262
o4	110	GLU	-	expression tag	UNP P87262
o4	111	ALA	-	expression tag	UNP P87262
o4	112	ALA	-	expression tag	UNP P87262
o4	113	LYS	-	expression tag	UNP P87262
o4	114	SER	-	expression tag	UNP P87262
o4	115	GLU	-	expression tag	UNP P87262
o4	116	LYS	-	expression tag	UNP P87262
o4	117	LYS	-	expression tag	UNP P87262
o4	118	ALA	-	expression tag	UNP P87262
o4	119	LYS	-	expression tag	UNP P87262
o4	120	LYS	-	expression tag	UNP P87262

- Molecule 71 is a protein called 60S ribosomal protein L35-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	O5	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			
71	o5	119	Total	C	N	O	S	0	0	0
			965	612	185	167	1			

- Molecule 72 is a protein called 60S ribosomal protein L36-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	O6	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			
72	o6	99	Total	C	N	O	S	0	0	0
			770	481	156	131	2			

- Molecule 73 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	O7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			
73	o7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			

- Molecule 74 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	O8	77	Total	C	N	O	S	0	0	0
			612	391	115	106				
74	o8	77	Total	C	N	O	S	0	0	0
			608	388	114	106				

- Molecule 75 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	O9	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			
75	o9	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			

- Molecule 76 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	Q0	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			
76	q0	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			

- Molecule 77 is a protein called 60S ribosomal protein L41-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	Q1	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			
77	q1	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			

- Molecule 78 is a protein called 60S ribosomal protein L42-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	Q2	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	q2	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			

- Molecule 79 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	Q3	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			
79	q3	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			

- Molecule 80 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
80	e0	62	Total	C	N	O	S	0	0	0
			491	309	101	80	1			

- Molecule 81 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
81	e1	76	Total	C	N	O	S	0	0	0
			608	388	117	99	4			

- Molecule 82 is a protein called unknown protein chain m2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
82	m2	150	Total	C	N	O	0	0	0
			750	450	150	150			

- Molecule 83 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
83	p0	143	Total	C	N	O	S	0	0	0
			1076	686	192	195	3			

- Molecule 84 is a protein called unknown protein chain p1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
84	p1	47	Total	C	N	O	0	0	0
			235	141	47	47			

- Molecule 85 is a protein called unknown protein chain p2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
85	p2	46	Total	C	N	O	0	0	0
			230	138	46	46			

- Molecule 86 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	L7	2	Total	Mg	0	0
			2	2		
86	N9	1	Total	Mg	0	0
			1	1		
86	n8	2	Total	Mg	0	0
			2	2		
86	o1	1	Total	Mg	0	0
			1	1		
86	N5	2	Total	Mg	0	0
			2	2		
86	6	150	Total	Mg	0	0
			150	150		
86	n4	1	Total	Mg	0	0
			1	1		
86	m5	2	Total	Mg	0	0
			2	2		
86	l3	6	Total	Mg	0	0
			6	6		
86	M1	1	Total	Mg	0	0
			1	1		
86	d6	1	Total	Mg	0	0
			1	1		
86	2	124	Total	Mg	0	0
			124	124		
86	O3	1	Total	Mg	0	0
			1	1		
86	L4	2	Total	Mg	0	0
			2	2		
86	l7	2	Total	Mg	0	0
			2	2		
86	M5	2	Total	Mg	0	0
			2	2		
86	o0	1	Total	Mg	0	0
			1	1		
86	S2	2	Total	Mg	0	0
			2	2		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	L8	1	Total 1	Mg 1	0	0
86	D3	1	Total 1	Mg 1	0	0
86	o4	1	Total 1	Mg 1	0	0
86	M9	1	Total 1	Mg 1	0	0
86	q0	2	Total 2	Mg 2	0	0
86	SM	1	Total 1	Mg 1	0	0
86	c8	1	Total 1	Mg 1	0	0
86	M0	3	Total 3	Mg 3	0	0
86	5	499	Total 499	Mg 499	0	0
86	L5	1	Total 1	Mg 1	0	0
86	O7	1	Total 1	Mg 1	0	0
86	l4	1	Total 1	Mg 1	0	0
86	n9	2	Total 2	Mg 2	0	0
86	1	468	Total 468	Mg 468	0	0
86	s2	1	Total 1	Mg 1	0	0
86	d3	1	Total 1	Mg 1	0	0
86	S8	1	Total 1	Mg 1	0	0
86	l2	1	Total 1	Mg 1	0	0
86	O2	1	Total 1	Mg 1	0	0
86	q3	2	Total 2	Mg 2	0	0
86	o3	2	Total 2	Mg 2	0	0

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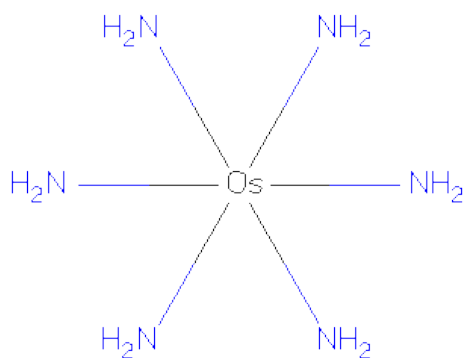
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	M3	2	Total 2	Mg 2	0	0
86	N3	2	Total 2	Mg 2	0	0
86	N8	4	Total 4	Mg 4	0	0
86	4	23	Total 23	Mg 23	0	0
86	D4	1	Total 1	Mg 1	0	0
86	L2	2	Total 2	Mg 2	0	0
86	m1	1	Total 1	Mg 1	0	0
86	l5	3	Total 3	Mg 3	0	0
86	m7	4	Total 4	Mg 4	0	0
86	M7	5	Total 5	Mg 5	0	0
86	m4	1	Total 1	Mg 1	0	0
86	L6	2	Total 2	Mg 2	0	0
86	s1	1	Total 1	Mg 1	0	0
86	l9	1	Total 1	Mg 1	0	0
86	O1	1	Total 1	Mg 1	0	0
86	s8	2	Total 2	Mg 2	0	0
86	o2	1	Total 1	Mg 1	0	0
86	c7	1	Total 1	Mg 1	0	0
86	7	15	Total 15	Mg 15	0	0
86	n3	1	Total 1	Mg 1	0	0
86	q1	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	L3	2	Total 2	Mg 2	0	0
86	O5	1	Total 1	Mg 1	0	0
86	m6	3	Total 3	Mg 3	0	0
86	N6	1	Total 1	Mg 1	0	0
86	8	17	Total 17	Mg 17	0	0
86	m0	1	Total 1	Mg 1	0	0
86	M6	1	Total 1	Mg 1	0	0
86	N0	1	Total 1	Mg 1	0	0
86	3	14	Total 14	Mg 14	0	0

- Molecule 87 is osmium (III) hexammine (three-letter code: OHX) (formula: $\text{H}_{12}\text{N}_6\text{Os}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	2	1	Total 7	N 6	Os 1	0	0
87	2	1	Total 7	N 6	Os 1	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	4	1	Total	N	Os	0	0
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87	4	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	4	1	Total	N	Os	0	0
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87	4	1	Total	N	Os	0	0
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87	L3	1	Total	N	Os	0	0
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87	L3	1	Total	N	Os	0	0
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87	L4	1	Total	N	Os	0	0
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87	M0	1	Total	N	Os	0	0
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87	M5	1	Total	N	Os	0	0
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87	M6	1	Total	N	Os	0	0
			7	6	1		
87	M7	1	Total	N	Os	0	0
			7	6	1		
87	M9	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	N9	1	Total	N	Os	0	0
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87	O1	1	Total	N	Os	0	0
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87	O2	1	Total	N	Os	0	0
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87	O3	1	Total	N	Os	0	0
			7	6	1		
87	O7	1	Total	N	Os	0	0
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87	O7	1	Total	N	Os	0	0
			7	6	1		
87	Q2	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	6	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		

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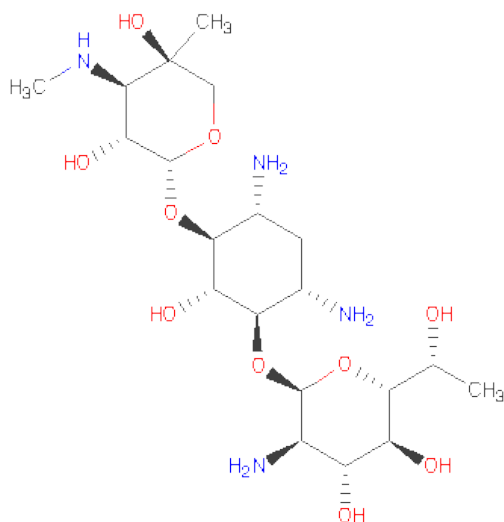
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	13	1	Total	N	Os	0	0
			7	6	1		
87	13	1	Total	N	Os	0	0
			7	6	1		
87	14	1	Total	N	Os	0	0
			7	6	1		
87	14	1	Total	N	Os	0	0
			7	6	1		
87	15	1	Total	N	Os	0	0
			7	6	1		
87	15	1	Total	N	Os	0	0
			7	6	1		
87	15	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	l5	1	Total	N	Os	0	0
			7	6	1		
87	l9	1	Total	N	Os	0	0
			7	6	1		
87	m0	1	Total	N	Os	0	0
			7	6	1		
87	m0	1	Total	N	Os	0	0
			7	6	1		
87	m1	1	Total	N	Os	0	0
			7	6	1		
87	m4	1	Total	N	Os	0	0
			7	6	1		
87	m5	1	Total	N	Os	0	0
			7	6	1		
87	m7	1	Total	N	Os	0	0
			7	6	1		
87	m9	1	Total	N	Os	0	0
			7	6	1		
87	n3	1	Total	N	Os	0	0
			7	6	1		
87	n9	1	Total	N	Os	0	0
			7	6	1		
87	o3	1	Total	N	Os	0	0
			7	6	1		
87	o7	1	Total	N	Os	0	0
			7	6	1		
87	o9	1	Total	N	Os	0	0
			7	6	1		
87	q1	1	Total	N	Os	0	0
			7	6	1		
87	q2	1	Total	N	Os	0	0
			7	6	1		

- Molecule 88 is GENETICIN (three-letter code: GET) (formula: C₂₀H₄₀N₄O₁₀).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
88	2	1	Total	C	N	O	0	0
			34	20	4	10		

- Molecule 89 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
89	q0	1	Total	Zn	0	0
			1	1		
89	D6	1	Total	Zn	0	0
			1	1		
89	Q2	1	Total	Zn	0	0
			1	1		
89	e1	1	Total	Zn	0	0
			1	1		
89	Q3	1	Total	Zn	0	0
			1	1		
89	D9	1	Total	Zn	0	0
			1	1		
89	E1	1	Total	Zn	0	0
			1	1		
89	Q0	1	Total	Zn	0	0
			1	1		
89	d7	1	Total	Zn	0	0
			1	1		
89	q3	1	Total	Zn	0	0
			1	1		
89	d9	1	Total	Zn	0	0
			1	1		

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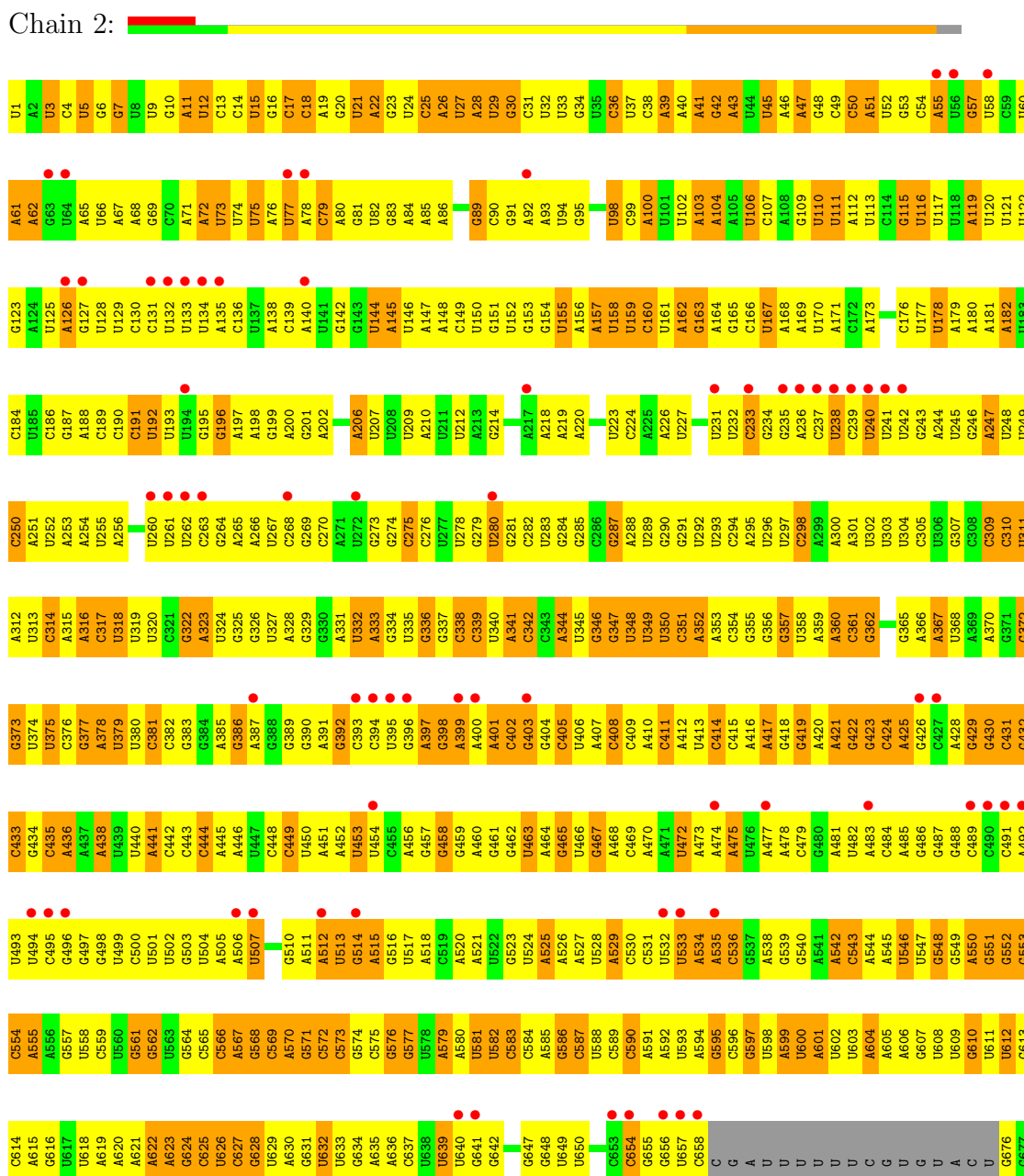
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
89	D7	1	Total 1	Zn 1	0	0
89	d6	1	Total 1	Zn 1	0	0
89	o7	1	Total 1	Zn 1	0	0
89	O7	1	Total 1	Zn 1	0	0
89	q2	1	Total 1	Zn 1	0	0

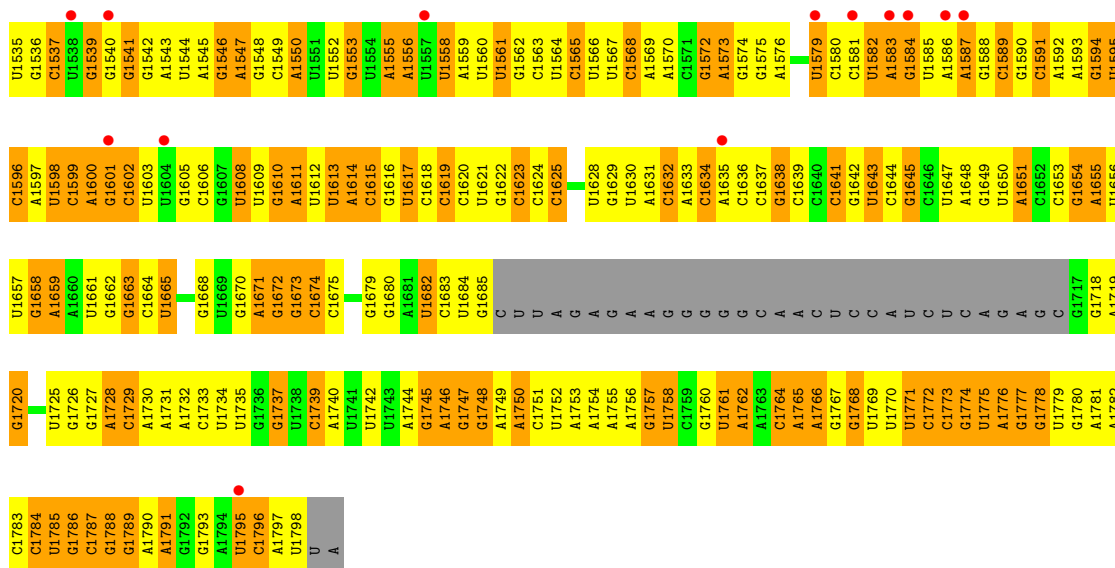
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: *Saccharomyces cerevisiae* chromosome XII cosmid 9634

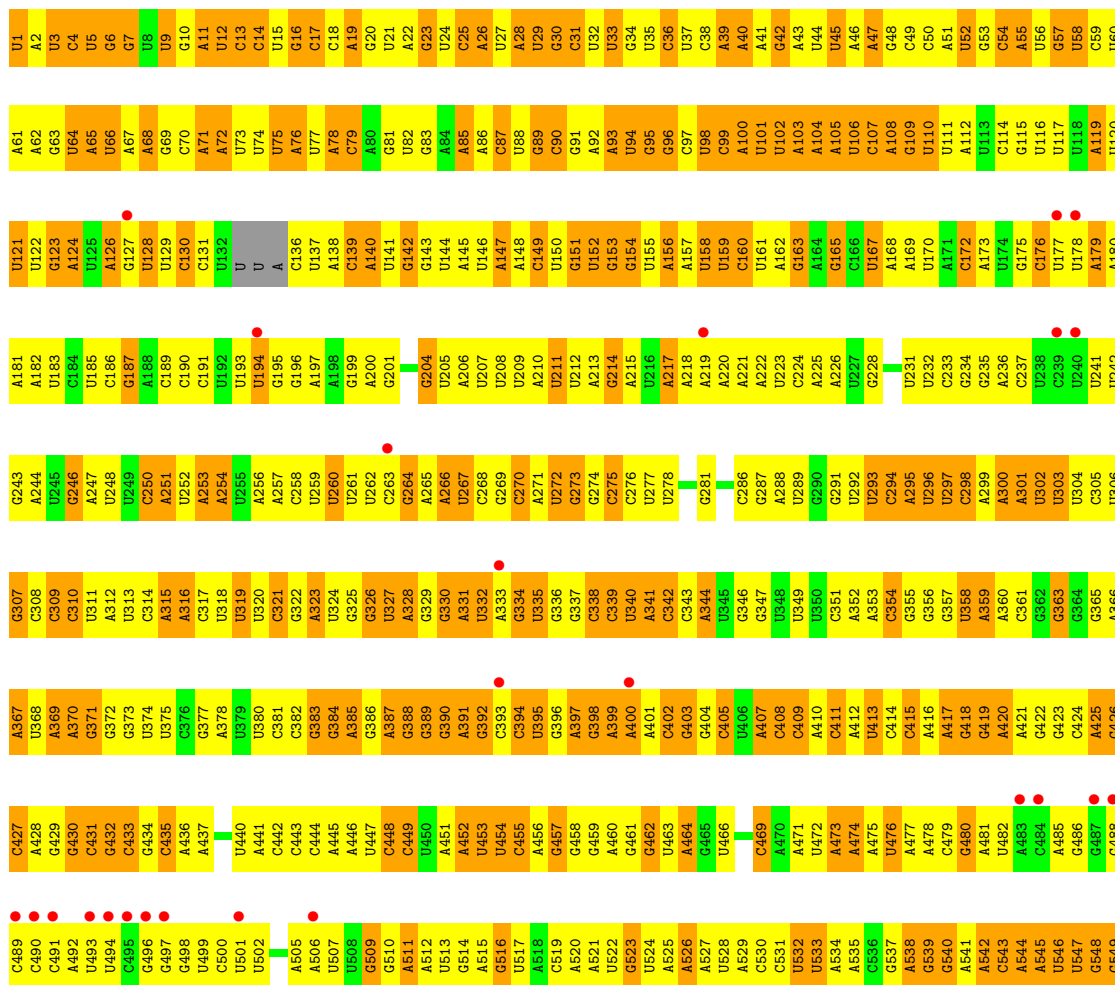


G1474	U1414	U1353	U1293	U1231	A1171	G1111	G1051	G987	C927	G866	A804	U743	A878
A1475	U1415	G1354	G1294	U1232	G1172	G1112	U1052	A988	U926	G867	U805	U744	U679
G1476	G1416	G1355	G1295	G1233	C1173	A1113	U1053	U989	A929	G868	A806	U745	U680
G1477	U1417	U1356	G1296	G1234	U1174	G1114	U1054	C990	A930	A869	A807	A746	U681
A1478	G1418	G1357	G1297	C1235	U1175	U1115	U1055	G991	U932	C870	U808	C747	C682
G1479	G1419	G1358	U1298	G1236	U1176	A1116	U1056	A992	U932	G871	A809	U748	C683
G1480	C1420	C1359	G1299	G1237	C1177	U1117	U1057	A993	A933	G872	G810	U749	A884
C1481	A1421	A1360	A1300	A1238	G1178	G1118	U1058	G994	C934	U873	A811	U750	A885
C1482	U1422	U1361	U1301	U1239	G1179	G1119	U1059	A995	U935	U873	A812	G751	C686
A1483	U1423	U1362	U1302	G1240	U1180	U1120	U1060	G996	C936	C874	A812	U752	G688
G1484	C1424	U1363	U1303	G1241	U1181	C1121	A1061	U996	C937	G875	U813	A753	A763
C1485	G1425	G1364	U1304	A1242	U1182	G1122	U1062	G997	U938	G876		A754	G689
G1486	C1426	C1365	U1305		A1183	G1123	U1063		A939		G816		
A1427	U1366	C1366	C1306	G1245	A1184	A1124	G1064	G1000	A940	G879	A817	A765	
G1428	G1367	U1367	U1307	C1246	U1185	A1125	A1065	A1001		C880	C818	A766	U694
U1429	G1368	G1368	U1308	U1247	U1186	G1126	C1066	U1002	A941	C881	G819	A767	U695
U1430	U1369	C1369	C1309	U1248	U1187	G1127	C1067	A1003	U820	U882	U820	U758	C696
C1431	U1370	U1370	U1310	C1249	G1188	C1128	U1068	U1004	C943	C883	U821	U759	C697
U1432	U1371	U1371	U1311	U1250	A1189	U1129	A1069	A1005	A944	A884	U822	A760	U698
G1433	U1372	U1372	A1312	U1251	C1190	G1130	C1070	C1006	U945	G885	G823		
A1434	A1373	A1373	A1313	C1252	U1191	A1131	U1071	C1007	U946	U886	G824		G702
G1435	C1374	C1374	U1314	U1253	C1192	A1132	C1072	G1008	U947	A887	U825	U764	G703
U1436	A1375	U1375	U1315	U1254	A1193	A1133	U1073	U1009	U948	U888	U826	G765	C704
U1437	C1376	G1376	U1316	G1255	A1194	C1134	G1074	C1010	C949	U889	C827	U766	U705
G1438			C1317	A1256	C1195	U1135	C1075	G1011	C950	C890	U828	U767	A706
C1439			G1318	U1257	A1196	U1136	A1076	U1012	A951	A891	A829	C768	A707
C1440			A1319	U1258	C1197	A1137	C1077	A1013	A952	A892	U830	A769	C708
C1441			U1320	U1259	G1198	A1138	C1078	G1014	G953	U893	U831	A770	C709
C1442			A1321	U1260	C1199	A1139	U1079	U1015	G954	U894	U832	A771	U710
G1383	U1443	G1383	A1322		G1199	A1139	U1079	C1016	A955	G895	U833	C772	U711
A1384	U1444	A1384	C1323		G1200	G1140	U1080	U1017	C956	U896		C773	G712
G1445	G1445	G1385	G1324	G1263	G1201	G1141	A1081	U1018	U957	C897	U836	A774	A713
G1446	A1446	G1386	A1325	G1264	A1202	A1142	C1082	A1019	U958	A898	G837	G775	G714
C1447	G1447	G1387	C1326	G1265	A1203	A1143	G1083		U959	G899	G838	G776	U715
C1448			U1327	G1267	C1205	U1145	A1084	C1022	U960	A900	U839	C777	C716
U1449	C1389	C1389	G1328	G1268	U1206	U1146	G1085		U961	G901	U840	G778	C717
U1450	U1390	U1390	U1329	U1269	C1207	A1147	A1086	A1026	C962	G902	U841	U779	G902
C1451	A1391	A1391	G1330	G1270	A1208	C1148	A1087	A1027	U964	U903	U843	A780	U719
U1452	U1392	U1392	C1331	G1271	C1209	G1149	U1089	C1028	U965	G904	U844	U781	G720
G1453	C1393	C1393	C1332	U1272	C1210	G1150	C1090	U1029	A966	A905	A844	U782	U721
G1454	G1394	G1394	C1333	C1273	A1211	A1151	A1091	A1030	U967	A906	G845	U783	G722
G1455	G1395	G1395	U1334	C1274	G1212	A1152	A1092	U1031	U968	A907	G846	C784	G723
U1396	U1396	U1396	U1335	A1275	G1213	G1153	A1093	G1032	C969	U908	A847	U785	C724
C1457	U1397	U1397	A1336	U1276	U1214	G1154	G1094	G1033	A970	C910	C848	C786	U725
G1458	U1398	U1398	A1337	G1277	C1215	G1155	U1095	C1034	A971	U911	C849	G787	C726
C1459	C1399	C1399	C1338	U1278	C1216	C1156	U1096		U972	U912	A850	A788	U727
A1460	A1400	A1400	C1339	C1279	A1217	A1157	U1097	G1035	G972	U913	U851	A789	U728
C1461	A1401	A1401	U1340	C1280	G1218	C1158	U1098	A1036	A973	G912	C852	U790	G729
G1462	G1402	G1402	A1341	G1281	A1219	U1159	U1099	C1037	A974	G914	G853	A791	G730
C1463	C1403	C1403	C1342	U1282	C1220	G1160	U1100	U1038	C975	A915	U854	U792	C731
G1464	G1404	G1404	U1343	U1283	A1221	C1161	G1101	A1039	G976	U916	A855	A793	G732
C1465	G1405	G1405	A1344	U1284	C1222	C1162	G1102	U1041	A977	U917	A856	U794	A733
G1466	A1406	A1406	A1345	U1285	A1223	C1163	U1103	G1042	A978	U918	A857	U795	A734
C1467	U1407	U1407	U1346	U1286	A1224	G1164	U1104	A1043	A979	A919	G858	A796	C735
U1468	U1347	U1347	A1347	A1287	U1225	G1165	C1105	A1043	U980	U920	A859	G797	C736
G1409	G1409	G1409	A1348	C1288	U1226	A1166	U1106	C1045	U981	U921	U860	C798	A737
C1470	A1410	A1410	G1349	U1289	A1227	G1167	G1107	G1046	U982	G922	U861	A799	G738
A1411	C1471	C1471	U1350	U1290	G1228	U1168	G1108		A983	A923	A862	U800	G739
C1472	G1412	G1412	G1229	U1291	G1229	U1169	G1109	U1049	G984	A924	A863	G801	A740
U1473	U1413	U1413	G1292	G1292	A1230	G1170	G1110	G1050	G986	G925	U864	G802	C741

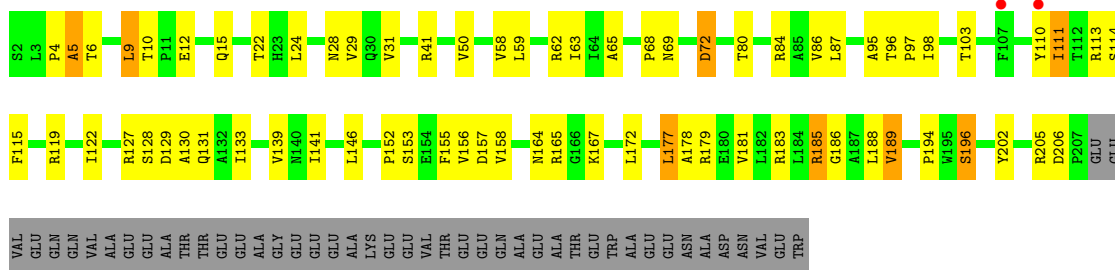


- Molecule 1: *Saccharomyces cerevisiae* chromosome XII cosmid 9634

Chain 6:

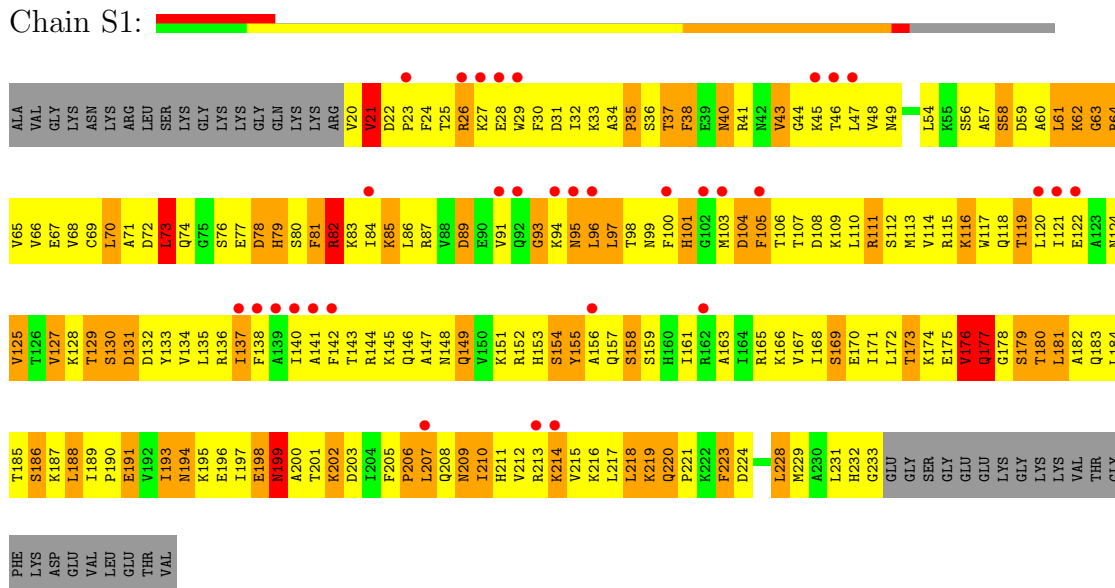


G1402	C1342	G1281	C1220	A1160	G1100	A1039	A979	A919	A859	U795	C735	C674	G610	A550
C1403	U1343	U1282	A1221	C1161	G1101	G1040	G980	U920	U860	A796	C736	U675	U611	G551
G1404	A1344	U1283	C1222	C1162	G1102	G1041	U981	U921	U861	C797	A737	G676	U612	G552
A1405	A1345	C1284	A1223	A1163	U1103	G1042	U982	G922	G798	C798	G738	G677	G613	G553
A1406	U1346	U1285		G1164	U1104	A1043	A983	A923	A863	U799	G739	A678	C614	C554
U1407	U1347	U1286	A1226	G1165	C1105	U1044	G984	A924	U864	U800	A740	U679	A615	A555
G1408	A1348	A1287	A1227	A1166	U1106	C1045	G985	G925	A865	G801	C741	U680	G616	A556
A1409	G1349	G1288	G1228	A1167	G1107	G1046	G986	A926	G866	G802	U742	U681	G617	G557
A1410	U1350	U1289	G1229	U1168	G1108	G1047	G987	C927	A803	A803	U743	C882	U618	U558
A1411	G1351	U1290	A1230	G1169	G1109	U1048	A988	U928	A804	A804	U744	G683	A619	C559
G1412	G1352	G1291	U1231	G1170	G1110	U1049	U989	A929	A868	U805	U745	A684	A620	U560
U1413	U1353	U1292	G1232	A1171	G1111	G1050	C990	A930	C870		A746	A685	A621	G561
U1414	G1354	U1293	G1233	G1172	G1112	G1051	G991	C931	C871	U808	C747	C686	A622	G562
C1415	C1355	G1294	A1234	C1173	A1113	U1052	A992	U932	G872	A809	U748	C687	A623	U563
U1416	U1356	G1295	C1236	U1174	G1114	G1053	A993	A933	U873	G810	U749	G688	G624	G564
A1417	A1357	A1296	A1237	U1175	U1115	U1054	C994	C934	C874	A811	U750	C625	C626	C565
G1418	G1358	G1297	G1237	G1176	U1116	U1055	A995	U935	G875	A812	G751	G689	U626	C566
A1419	U1359	U1298	A1238	C1177	U1117	U1056	U996	G936	G876	U813	A752	C591	G627	A567
C1420	G1360	G1299	U1239	G1178	G1118	U1058	C997	C937	G877	A814	A753	C692	G628	G568
A1421	U1361	A1300	U1240	G1179	G1119	U1059	A998	G938	G878	G815	A754	U693	U629	C569
A1422	U1362	A1301	G1241	C1180	U1120	U1060	U999	A939	G879		A755	U694	A630	A570
U1423	U1363	U1302	A1242	U1181	C1121	A1061	U999	A940	C880		A756	U695	A631	G571
A1424	G1364	U1303	G1243	A1182	G1122	A1062	A1001	A941	A881		A757	C696	U632	C572
A1425	C1365	G1304	A1244	A1183	C1123	U1063	G1002	G942	U882	U820	U758	C697	U633	C573
C1426	U1366	U1305	G1245	A1184	A1124	G1064	U1003	C943	C883	U821	U759	U698	G634	G574
A1427	G1367	C1306	C1246	U1185	A1125	A1065	U1004	A944	A884	U822	A760	U699	A635	C575
G1428	U1368	U1307	U1247	U1186	G1126	C1066	U1005	U945	G885	G823	G761	C700	A636	G576
A1429	U1369	G1308	C1248	U1187	G1127	C1067	C1006	U946	U886	G824	A762	U701	C637	G577
U1430	U1370	C1309	U1249	G1188	C1128	U1068	C1007	U947	U887	U825	G763	G702	U638	U578
A1431	A1371	U1310	U1250	A1189	G1129	A1069	G1008	G948	U888	U826	U764	G703	U639	A579
U1432	U1372	U1311	G1251	C1190	G1130	U1070	U1009	C949	U889	G827	G765	C704	U640	A580
C1433	C1373	A1312	C1252	U1191	A1131	U1071	G1010	C950	C990	U828	U766	U705	G641	U581
U1434	C1374	A1313	U1253	C1192	A1132	C1072	U1011	A951	A891	A829	U767	A706	G642	U582
G1435	A1375	U1314	U1254	A1193	G1133	G1073	U1012	A952	A892	U830	C768	A707	G643	C583
A1436	C1376	U1315	G1255	A1194	C1134	A1074	G953	G953	U893	U831	A769	C708	C644	C584
U1437	U1377	G1316	A1256	C1195	U1135	C1075	G1014	G954	U894	U832	A770	C709	G645	A585
G1438	U1378	C1317	U1257	A1196	U1136	A1076	U1015	A955	G895	U833	A771	U710	G646	G586
C1439	C1379	G1318	U1258	C1197	A1137	C1077	G1016	C956	U896	G834	G772	U711	G647	C587
C1440	U1380	A1319	U1259	G1198	A1138	C1078	U1017	G957	C897	U835	C773	G712	G648	U588
A1441	U1381	U1320	U1260	G1199	A1139	U1079	U1018	U958	A898	U836	A774	A713	U649	C589
U1442	A1382	A1321	G1261	C1200	G1140	U1080	A1019	U959	G899	U837	G775	G714	U650	C590
U1443	G1383	A1322	U1262	G1201	G1141	A1081	A1020	U960	A900	G838	G776	U715	G651	A591
A1444	C1384	C1323	G1263	A1202	A1142	G1082	C1021	U961	G901	U839	C777	C716	G652	A592
G1445	G1385	G1324	G1264	A1203	A1143	G1083	C1022	C962	G902	U841	C778	C717	C653	U593
A1446	U1386	A1325	G1265	A1204	U1144	A1084	A1023	A963	U903	C842	U779	U718	C654	A594
C1447	G1387	A1326	U1266	C1205	U1145	G1085	U1024	U964	G904	U843	A780	U719	G655	G595
G1448	A1388	U1267	G1267	U1206	G1146	A1086	A1025	U965	A905	A844	U781	G720		C596
U1449	C1389	G1268	G1268	U1207	A1147	A1026	A966	A966	A906	G845	U782	U721		C597
U1450	U1390	U1269	U1269	A1208	C1148	A1088	A1027	A967	A907	G846	G783	G722	A661	U598
C1451	A1391	C1209	G1270	C1210	G1149	U1089	C1028	U968	U908	A847	C784	G723	G660	
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G1454	G1394	G1273	G1273	A1152	A1152	A1093	U1031	A971	U911	A850	C787	C726	U664	A601
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C1459	A1399	C1339	G1278	A1217	C1157	U1097	A1036	C976	U916	A856	U792	C731	G	A607
A1460	U1400	C1279	G1279	G1218	A1158	U1098	C1037	A977	U917	U857	U793		U	U608
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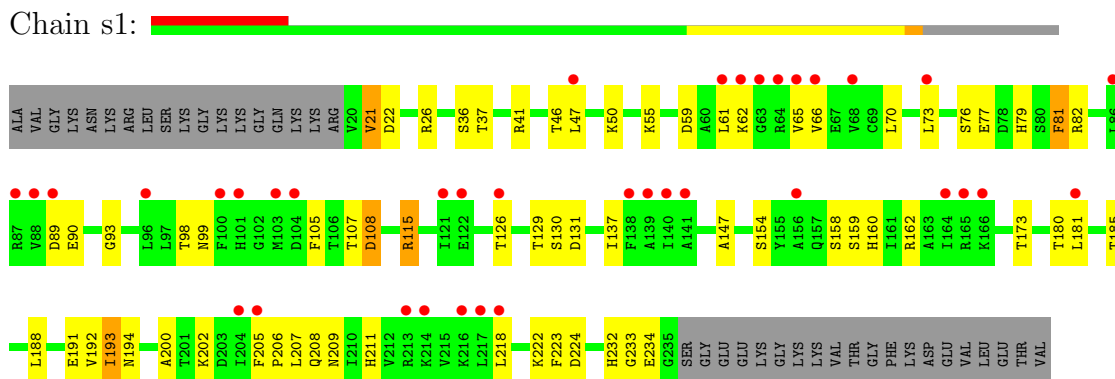
- Molecule 3: 40S ribosomal protein S1-A

Chain S1:



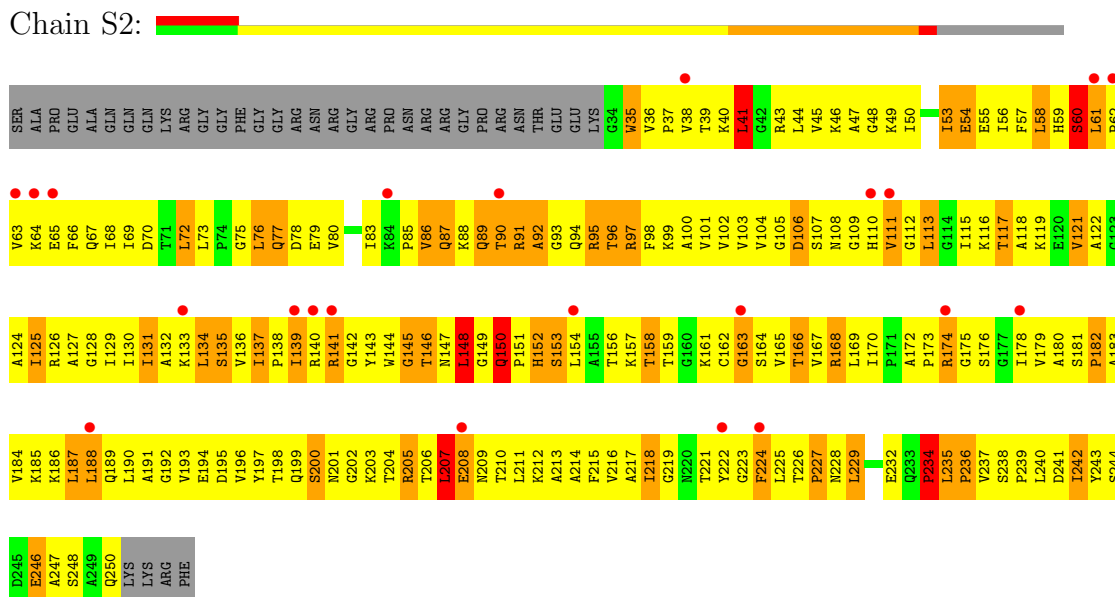
- Molecule 3: 40S ribosomal protein S1-A

Chain s1:



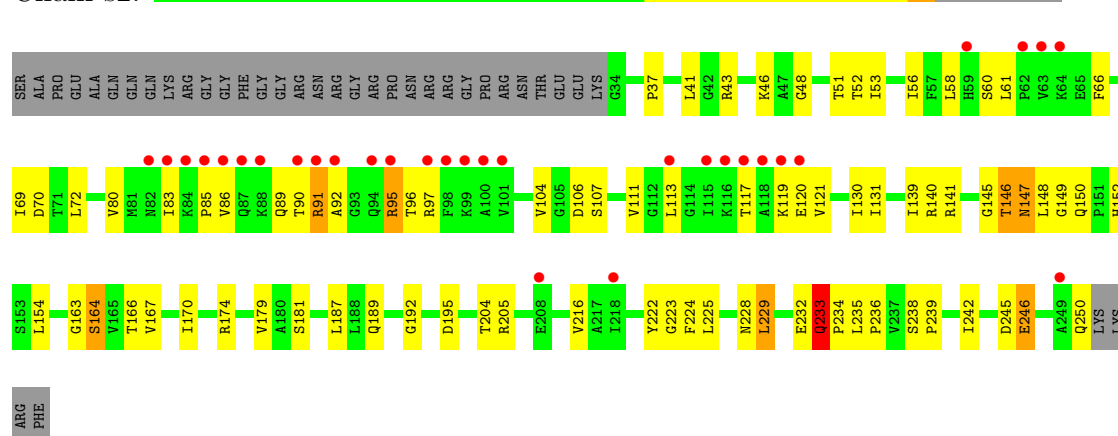
- Molecule 4: 40S ribosomal protein S2

Chain S2:



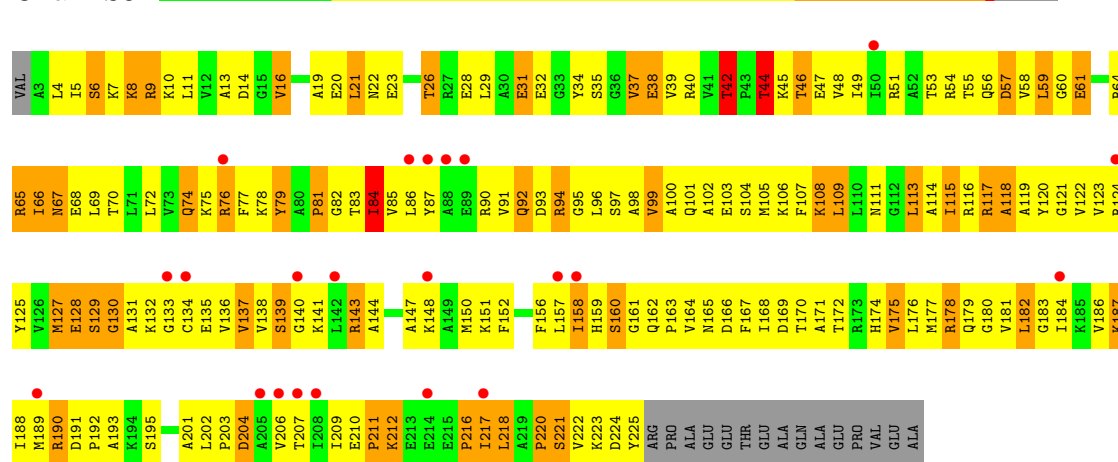
- Molecule 4: 40S ribosomal protein S2

Chain s2:



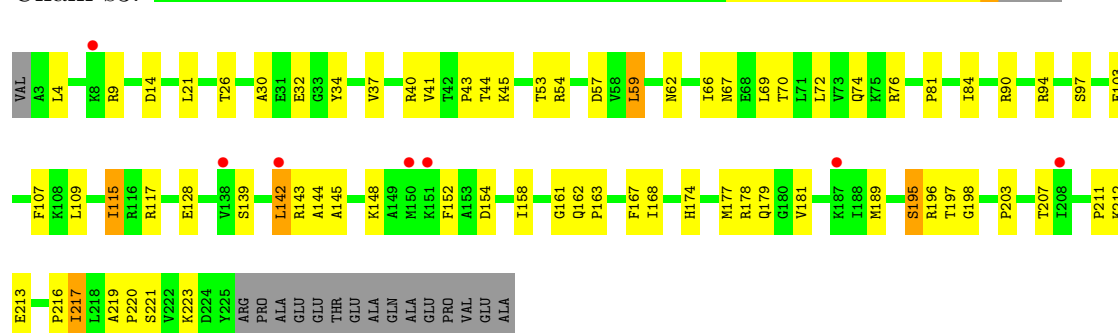
- Molecule 5: 40S ribosomal protein S3

Chain S3:



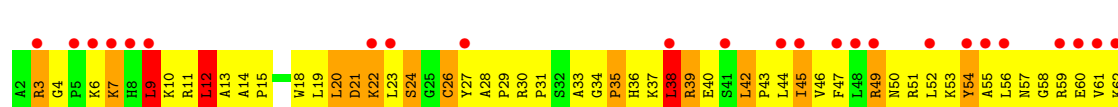
- Molecule 5: 40S ribosomal protein S3

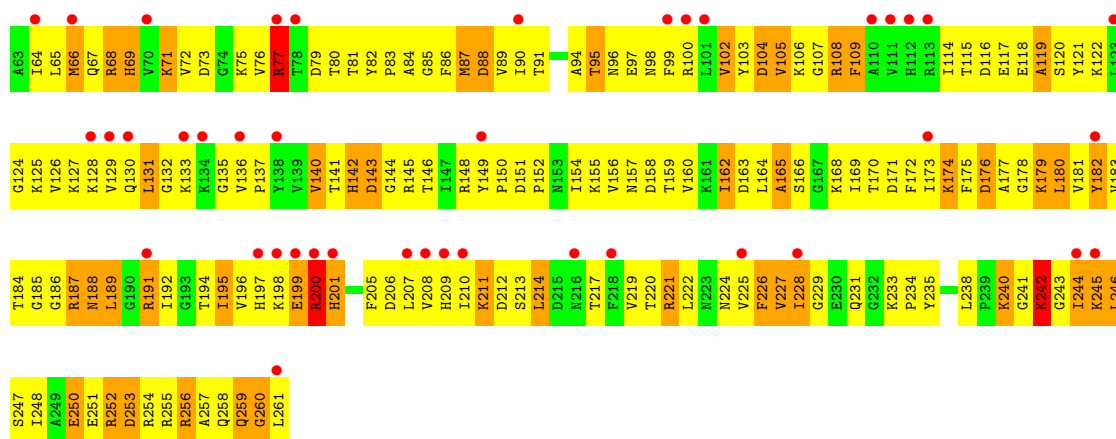
Chain s3:



- Molecule 6: 40S ribosomal protein S4-A

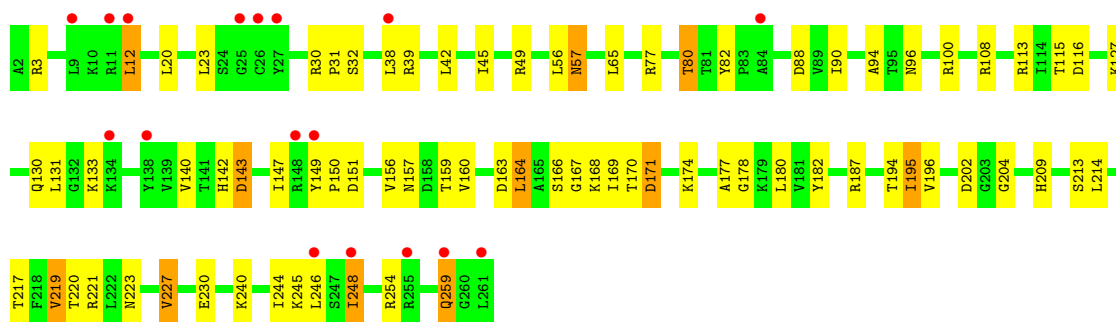
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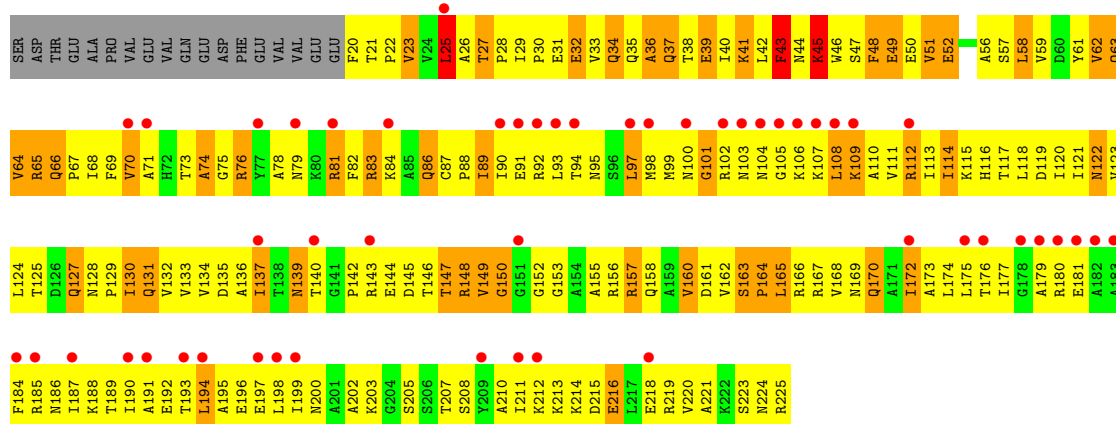
• Molecule 6: 40S ribosomal protein S4-A

Chain s4:



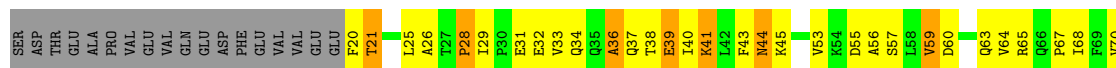
• Molecule 7: 40S ribosomal protein S5

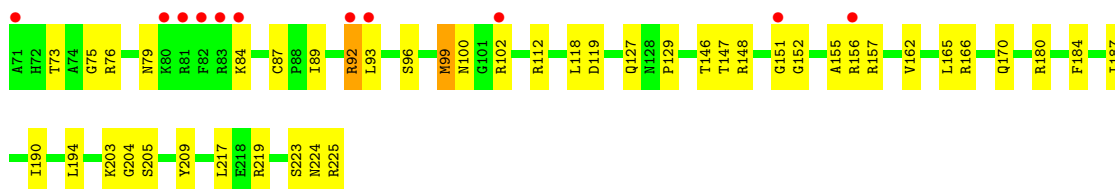
Chain S5:



• Molecule 7: 40S ribosomal protein S5

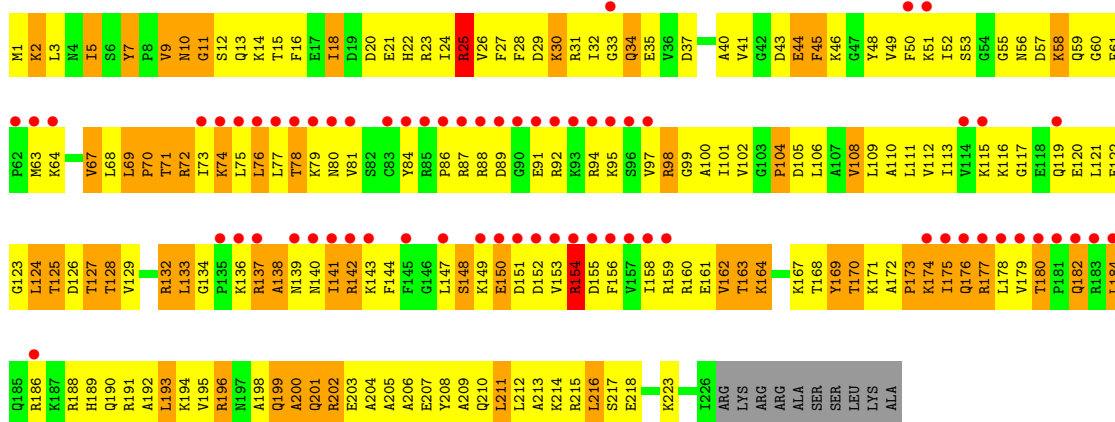
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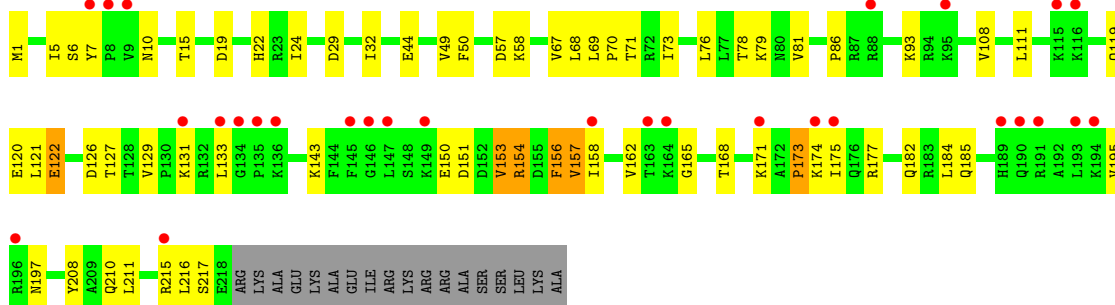
• Molecule 8: 40S ribosomal protein S6-A

Chain S6:



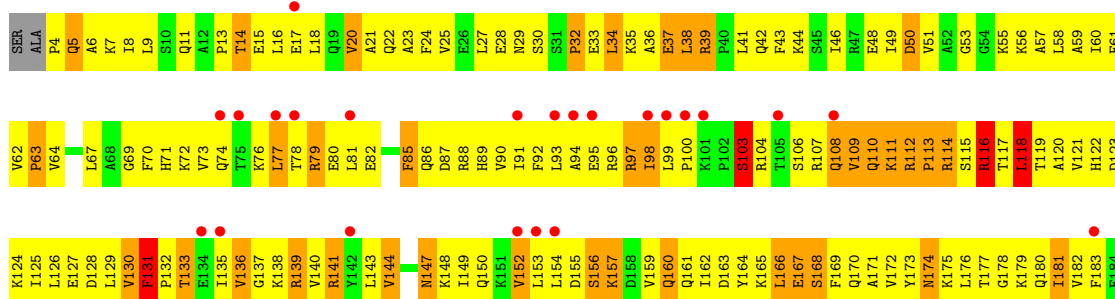
• Molecule 8: 40S ribosomal protein S6-A

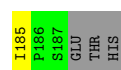
Chain s6:



• Molecule 9: 40S ribosomal protein S7-A

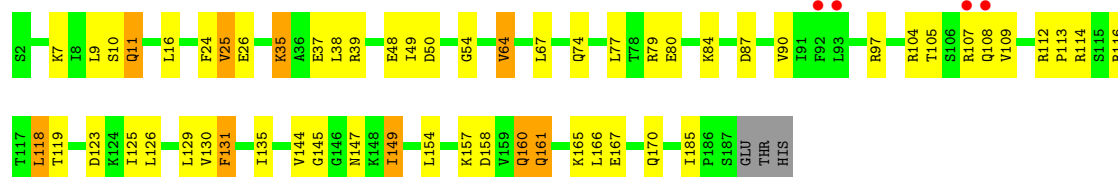
Chain S7:





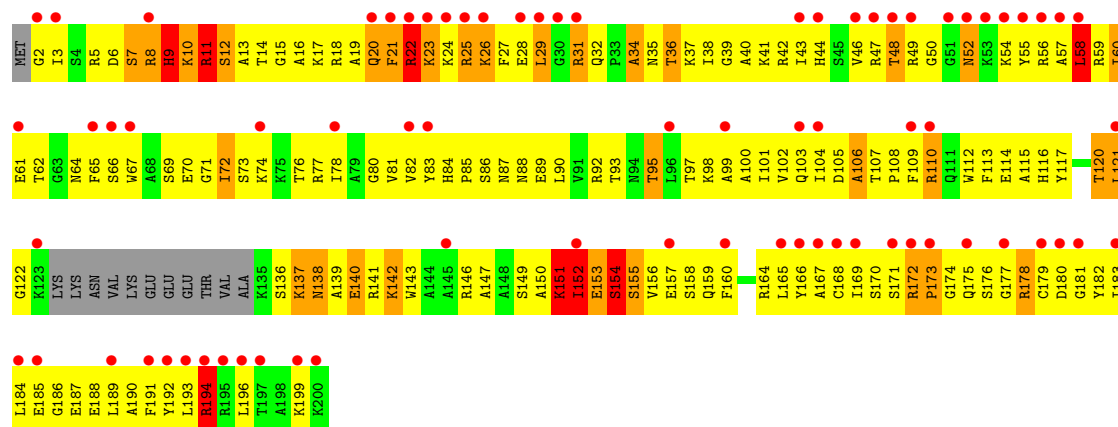
• Molecule 9: 40S ribosomal protein S7-A

Chain s7:



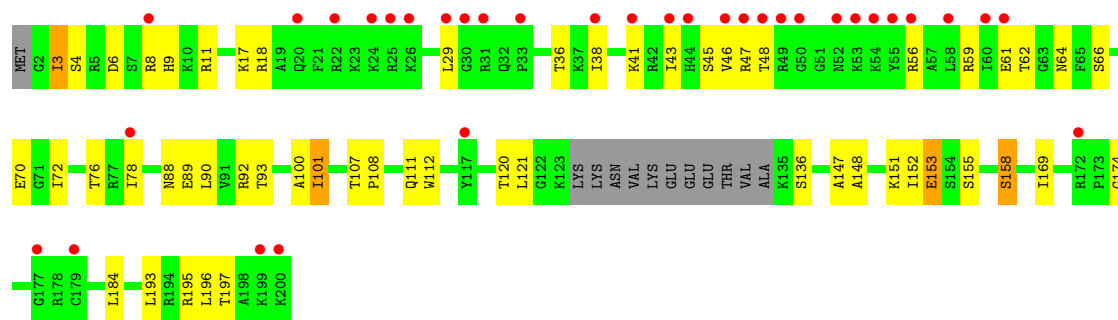
• Molecule 10: 40S ribosomal protein S8-A

Chain S8:



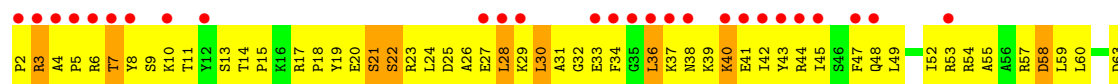
• Molecule 10: 40S ribosomal protein S8-A

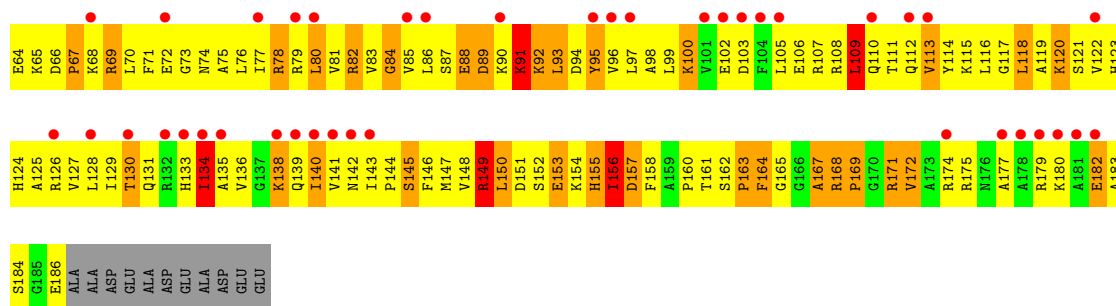
Chain s8:



• Molecule 11: 40S ribosomal protein S9-A

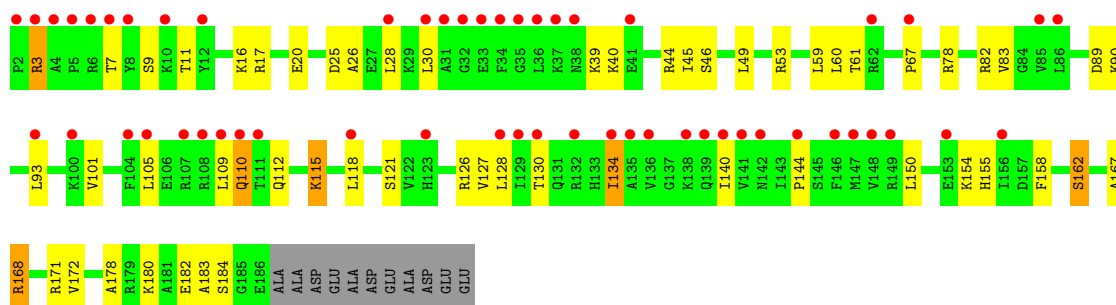
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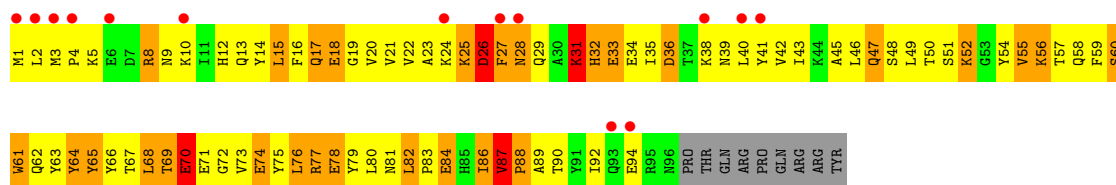
• Molecule 11: 40S ribosomal protein S9-A

Chain s9:



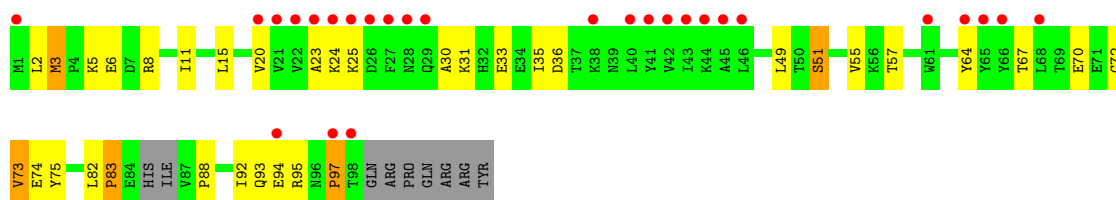
• Molecule 12: 40S ribosomal protein S10-A

Chain C0:



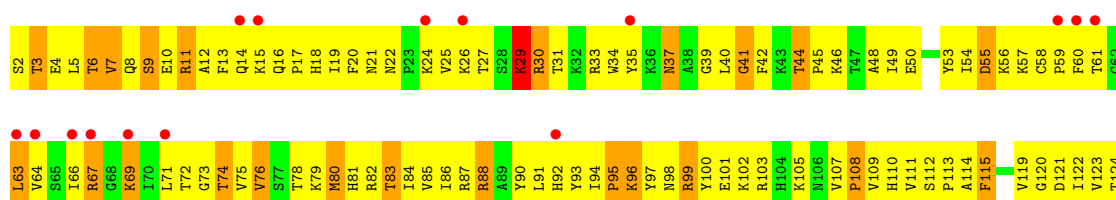
• Molecule 12: 40S ribosomal protein S10-A

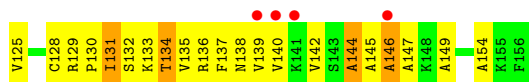
Chain c0:



• Molecule 13: 40S ribosomal protein S11-A

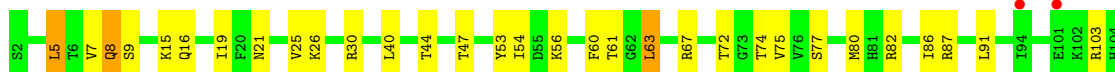
Chain C1:





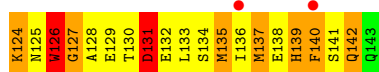
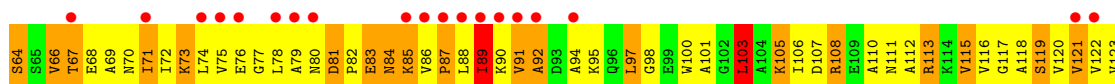
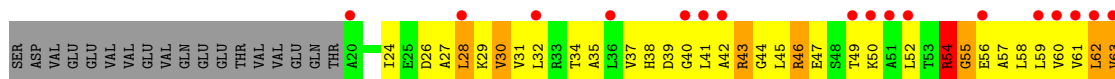
• Molecule 13: 40S ribosomal protein S11-A

Chain c1:



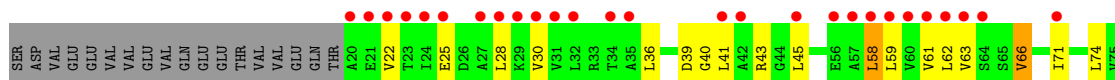
• Molecule 14: 40S ribosomal protein S12

Chain C2:



• Molecule 14: 40S ribosomal protein S12

Chain c2:



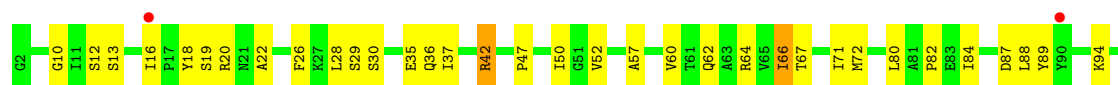
• Molecule 15: 40S ribosomal protein S13

Chain C3:



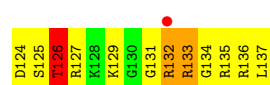
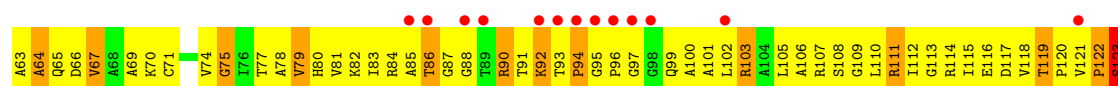
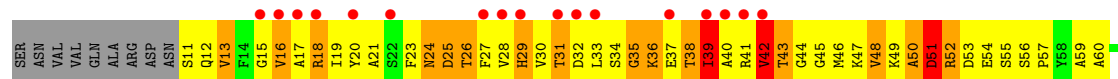
• Molecule 15: 40S ribosomal protein S13

Chain c3:



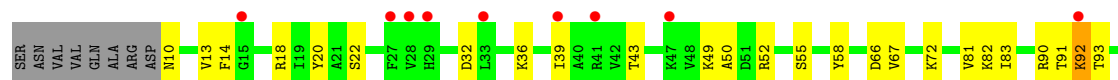
- Molecule 16: 40S ribosomal protein S14-A

Chain C4:



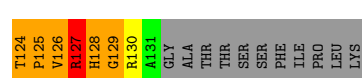
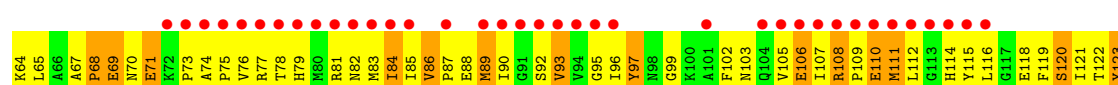
- Molecule 16: 40S ribosomal protein S14-A

Chain c4:



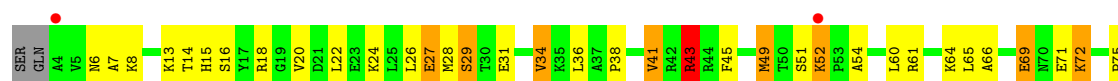
- Molecule 17: 40S ribosomal protein S15

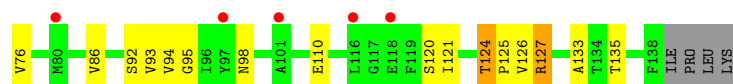
Chain C5:



- Molecule 17: 40S ribosomal protein S15

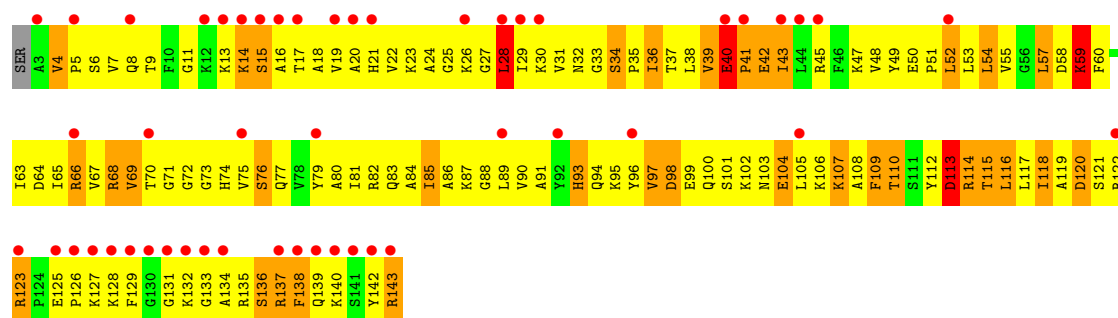
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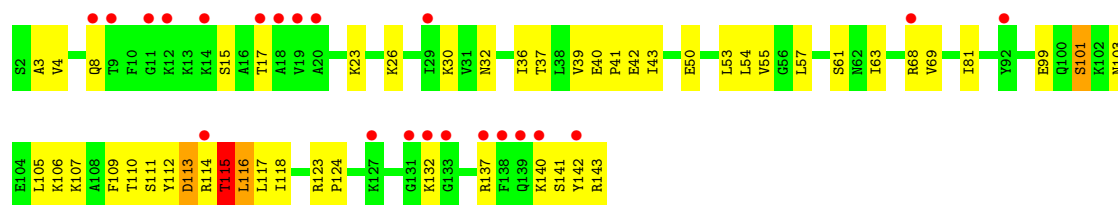
- Molecule 18: 40S ribosomal protein S16-A

Chain C6:



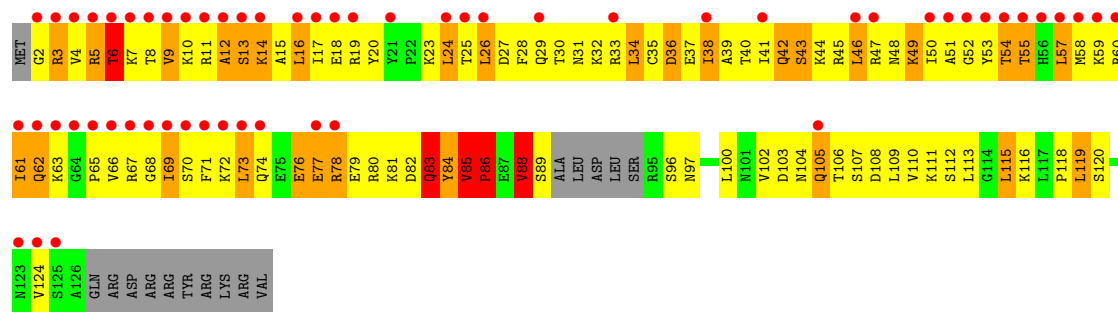
- Molecule 18: 40S ribosomal protein S16-A

Chain c6:



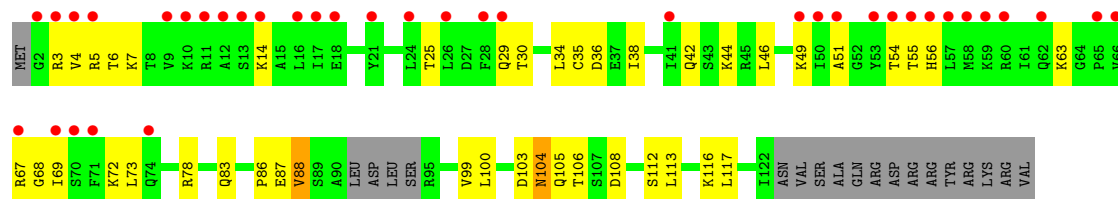
- Molecule 19: 40S ribosomal protein S17-A

Chain C7:



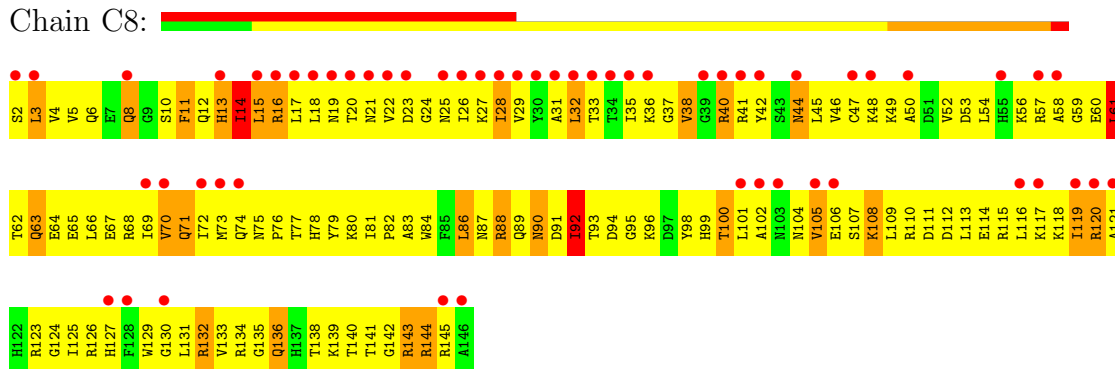
- Molecule 19: 40S ribosomal protein S17-A

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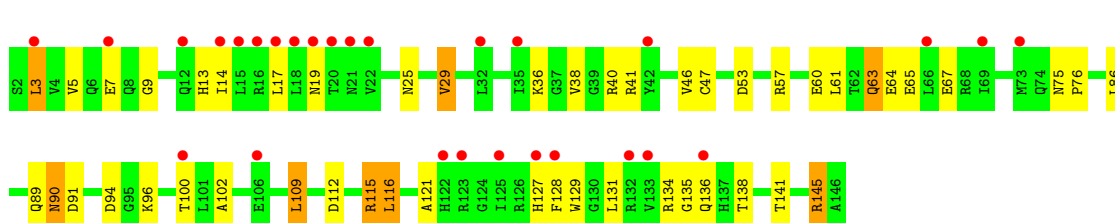
- Molecule 20: 40S ribosomal protein S18-A

Chain C8:



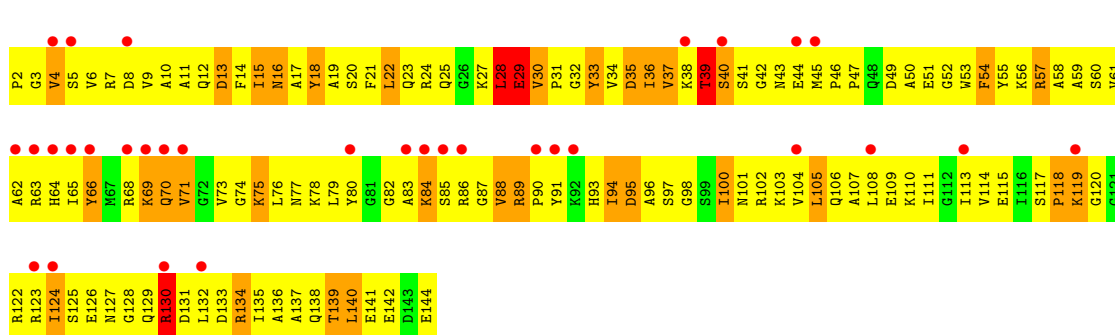
- Molecule 20: 40S ribosomal protein S18-A

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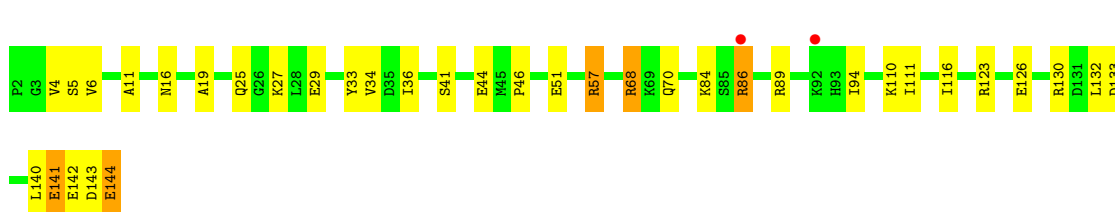
- Molecule 21: 40S ribosomal protein S19-A

Chain C9:



- Molecule 21: 40S ribosomal protein S19-A

Chain c9:



- Molecule 22: 40S ribosomal protein S20

Chain D0:





- Molecule 22: 40S ribosomal protein S20

Chain d0:



- Molecule 23: 40S ribosomal protein S21-A

Chain D1:



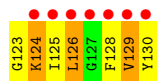
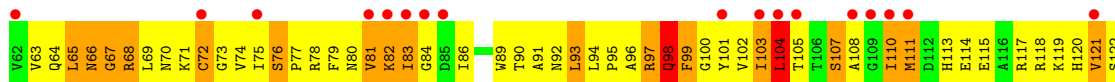
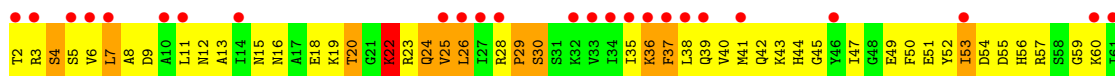
- Molecule 23: 40S ribosomal protein S21-A

Chain d1:



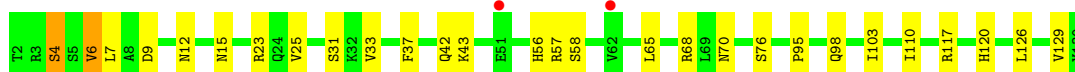
- Molecule 24: 40S ribosomal protein S22-A

Chain D2:



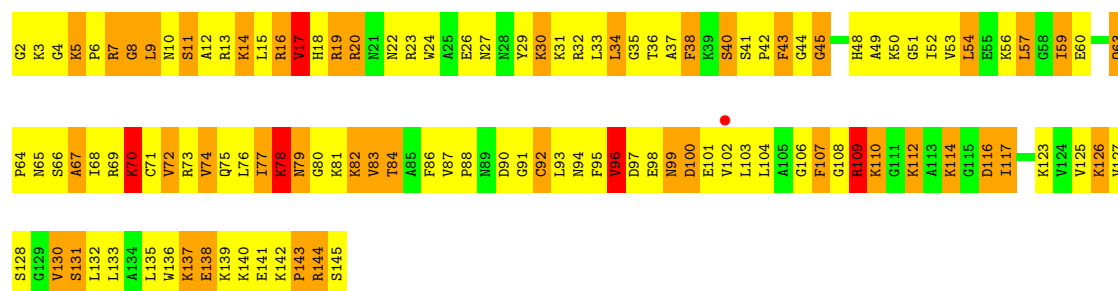
- Molecule 24: 40S ribosomal protein S22-A

Chain d2:



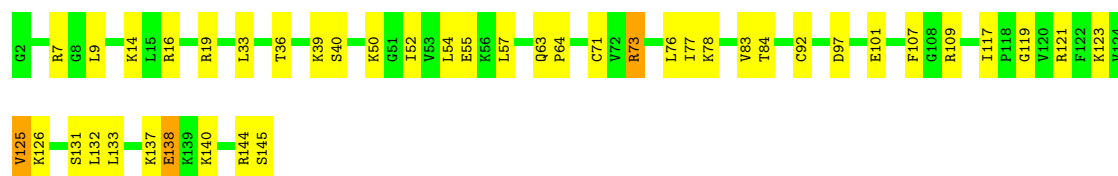
- Molecule 25: 40S ribosomal protein S23-A

Chain D3:



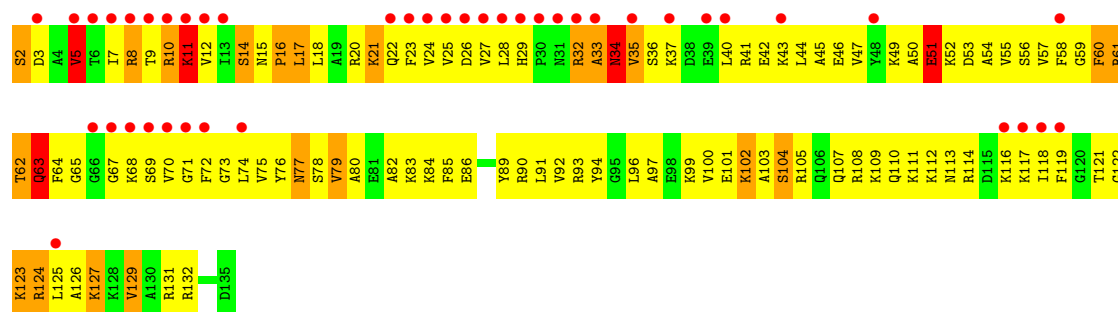
• Molecule 25: 40S ribosomal protein S23-A

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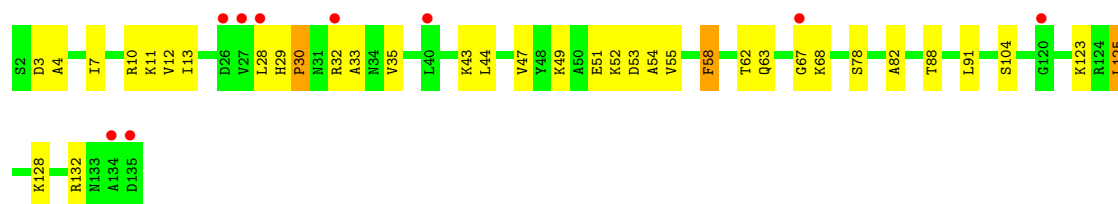
• Molecule 26: 40S ribosomal protein S24-A

Chain D4:



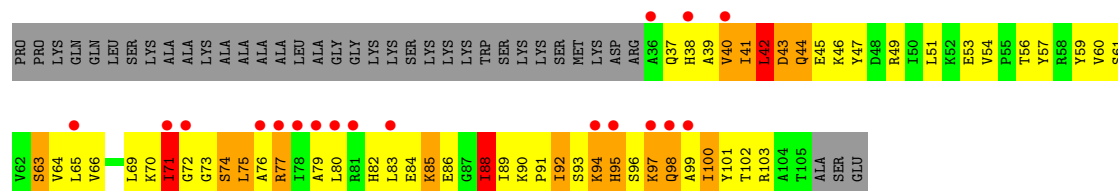
• Molecule 26: 40S ribosomal protein S24-A

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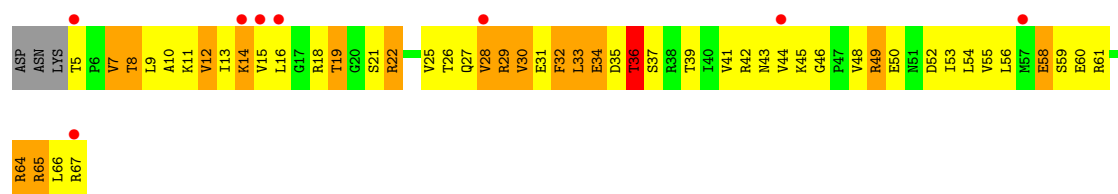
• Molecule 27: 40S ribosomal protein S25-A

Chain D5:



- Chain d5:





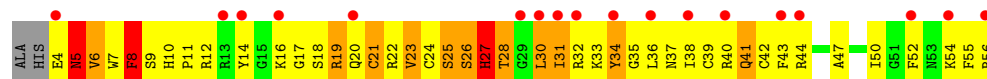
- Molecule 30: 40S ribosomal protein S28-A

Chain d8:



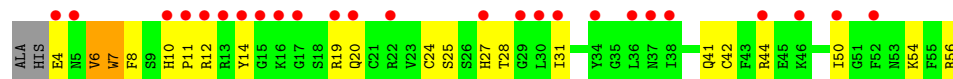
- Molecule 31: 40S ribosomal protein S29-A

Chain D9:



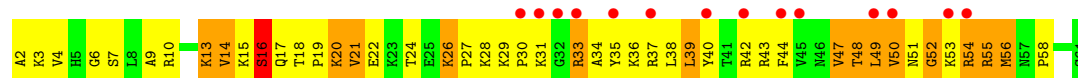
- Molecule 31: 40S ribosomal protein S29-A

Chain d9:



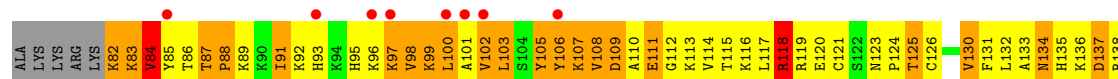
- Molecule 32: 40S ribosomal protein S30-A

Chain E0:



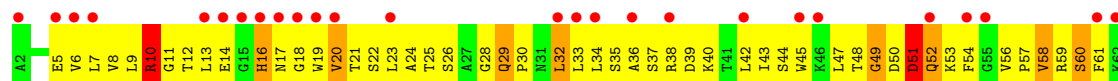
- Molecule 33: Ubiquitin-40S ribosomal protein S31

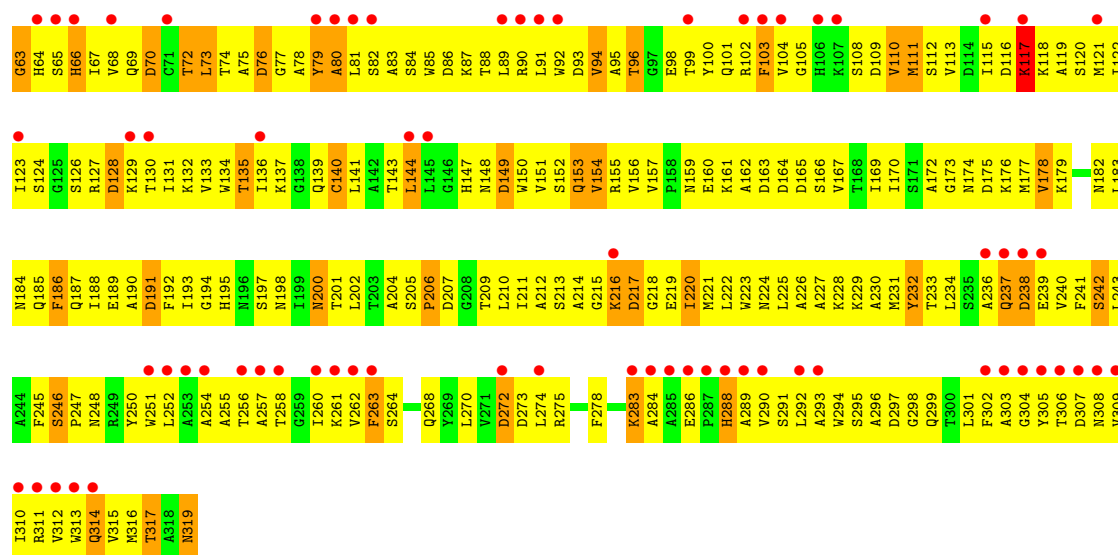
Chain E1:



- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

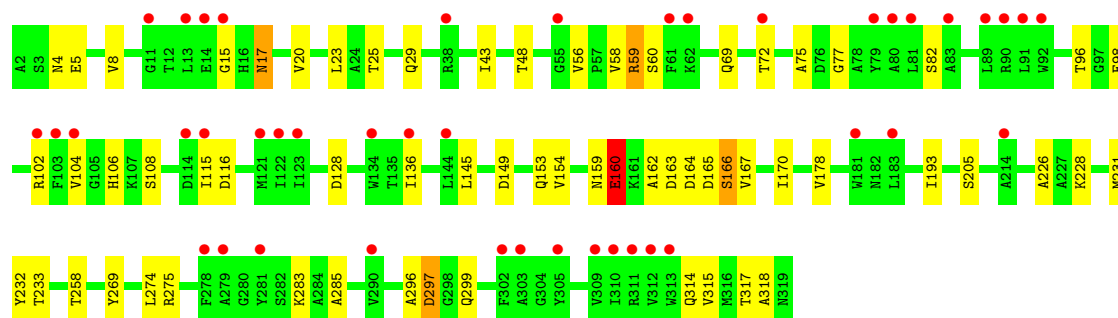
Chain SR:





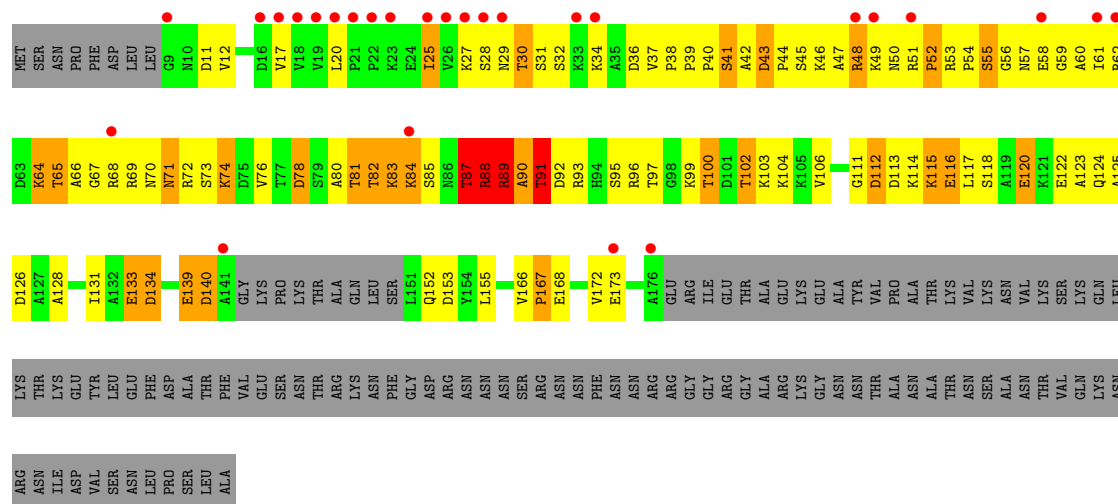
• Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

Chain sR:



• Molecule 35: Suppressor protein STM1

Chain SM:



• Molecule 35: Suppressor protein STM1

Chain sM:

G1576	A1456	C1396	U1336	C1275	A1212	G1152	U1028	A967	G907	A847	U723
G1577	U1457	C1397	A1337	U1276	G1213	A1153	G1029	C968	C908	A848	U724
G1578	U1458	C1398	C1338	C1277	U1214	A1154	A1030	C969	G909	C849	G726
G1579	A1459	C1399	C1339	A1278	U1215	C1155	U1096	A970	G910	C850	G726
A1580	U1460	G1400	C1340	C1279	C1216	C1156	C1032	C971	C911	C851	G727
G1581	A1461	A1401	U1341	C1280	A1217	G1157	U1033	A972	C912	U852	G728
G1582	A1462	C1402	C1342	G1281	G1218	A1158	U1034	C973	C913	C852	C729
G1583	U1463	C1403	A1343	U1282	U1220	A1159	U1035	C974	A914	C853	C730
A1584	G1464	G1404	C1344	C1283	A1221	C1160	A1036	C975	G915	C854	C731
G1585	U1465	U1405	G1345	G1284	G1222	G1161	C1037	U976	C916	U855	C732
G1586	U1466	A1406	C1346	G1285	A1223	U1162	C1038	C977	A917	C857	G733
G1587	G1467	G1407	U1347	G1286	C1224	A1163	U1039	C978	C918	C858	C734
A1588	U1468	G1408	U1348	A1287	A1225	G1164	A1040	C979	C919	C859	A735
A1589	U1469	G1409	G1349	U1288	G1226	A1165	A1105	C980	A920	C860	C736
G1590	U1470	U1410	A1350	C1227	C1227	G1166	C1043	U981	A921	C861	G737
G1591	C1531	U1471	U1351	U1289	G1228	U1167	U1044	C982	C922	U862	G737
G1592	C1532	G1412	A1352	C1290	C1229	U1168	C1045	C983	C923	C863	A738
U1593	G1473	G1413	U1353	U1293	G1230	A1169	U109	C984	C924	C864	G740
A1594	A1474	G1414	A1354	U1294	A1231	G1170	A1046	U985	G925	C865	G741
U1595	U1475	U1415	C1355	G1295	C1232	G1171	A1047	U986	A926	C866	C742
G1596	G1476	C1416	U1356	C1296	G1233	U1172	A1048	C987	C927	C867	C743
U1597	A1477	G1417	G1357	C1297	G1234	C1173	G1113	U988	C928	U868	A744
G1598	C1478	A1418	C1358	C1298	U1235	G1174	U1051	C989	A929	C869	C745
A1599	U1479	A1419	C1359	U1299	G1236	C1175	G1115	U990	C930	C870	A746
U1600	G1480	C1420	C1360	G1300	G1237	C1176	A1053	C991	C931	U871	A747
G1601	A1481	A1421	U1361	C1301	C1238	G1177	A1054	C992	U932	C872	A748
A1602	G1482	G1422	G1362	A1302	C1239	C1178	A1055	C993	A933	U873	C749
G1603	G1483	C1423	A1363	C1303	U1240	A1179	U1056	U994	G934	U874	G750
G1604	U1484	C1424	C1364	A1304	A1241	C1180	A1057	U995	U935	C875	A751
A1605	U1485	U1425	G1365	U1305	G1242	U1181	U1058	A996	A936	A876	C752
U1606	G1486	C1426	A1366	G1306	G1243	A1182	U1121	C997	G937	C877	C753
U1607	U1487	U1427	G1367	C1307	A1244	C1183	U1122	U998	C938	C878	G754
G1608	G1488	A1428	U1368	A1308	G1245	A1184	U1061	C999	U939	U879	G755
U1609	A1489	G1429	A1369	U1309	U1246	C1185	U1125	C1000	G940	C880	G756
G1610	U1490	U1430	C1370	G1310	U1247	G1186	G1063	G1001	G941	C881	C757
G1611	A1491	G1431	G1371	C1311	C1248	C1187	A1064	A1002	U942	A882	U758
A1612	G1492	C1432	C1372	C1312	G1249	U1188	U1128	A1003	U943	C883	C759
G1613	G1493	A1433	A1373	C1313	C1250	C1189	A1129	U1004	C944	C884	U760
G1614	U1494	G1434	G1374	C1314	A1251	A1190	U1067	C885	C945	G822	U761
U1615	U1495	A1435	G1375	U1315	C1252	U1191	G1131	A1006	U946	C823	G762
G1616	C1496	U1436	C1376	C1316	G1254	C1192	C1068	C1069	G947	C824	G763
G1617	G1497	C1437	G1377	A1317	C1255	A1193	C1132	U1070	C948	C825	C764
G1618	U1498	A1438	U1378	A1318	C1256	G1194	A1133	U1008	C949	C826	C765
A1619	C1499	U1439	G1379	C1319	G1257	A1195	G1134	A1009	C950	A827	U766
U1620	G1500	C1440	A1380	C1320	U1258	C1196	A1135	G1010	C951	C828	C767
A1621	G1501	G1441	G1381	C1321	A1259	A1197	A1136	C891	U952	U829	C768
G1622	C1502	U1442	G1382	U1322	C1260	C1198	U1074	U830	C953	C831	G770
G1623	G1503	G1443	G1383	C1323	G1261	C1199	U1138	G953	U954	C832	A771
U1624	A1504	G1444	U1384	U1324	C1262	A1200	G1139	U1015	C955	C833	U772
G1625	C1505	U1445	C1385	U1325	A1263	C1201	G1140	C1016	U956	G834	C773
A1626	U1446	A1446	A1386	A1326	G1264	A1202	U1078	C1017	C957	U835	G774
U1627	G1507	G1447	G1387	C1327	U1265	A1203	A1080	G1019	C958	A836	A775
G1628	C1508	U1448	U1388	G1328	U1266	C1199	U1144	G1020	U959	A837	U776
U1629	A1509	A1449	G1389	U1329	G1268	A1205	G1145	G1021	U960	C838	U777
G1630	U1510	C1450	A1390	C1330	U1269	G1206	G1146	U1022	C961	C839	C778
C1631	U1511	C1451	C1391	U1331	A1270	C1207	A1084	G1083	C962	C840	G779
U1512	U1512	A1452	G1392	C1332	C1271	U1208	G1148	C1086	C963	A841	A780
G1633	G1513	A1453	A1393	C1333	C1272	G1209	G1149	A1025	C964	A904	G781
G1634	C1514	A1454	A1394	U1334	A1273	U1210	A1150	G1026	A965	C842	U782
U1575	U1455	C1455	C1395	C1335	A1274	C1211	U1151	C1027	U966	A905	A783



G3333	A3213	A3153	C3093	A3032	G2972	G2912	C2852	A2792	U2731	A2671	U2611	A2547
U3394	U3214	C3154	A3094	A3033	G2973	C2913	A2853	G2793	G2732	G2672	U2612	C2948
A3335	A3215	U3155	U3095	C3034	U2974	G2914	U2854	G2794	A2733	A2673	U2613	G2549
A3336	G3216	U3156	C3096	U3037	U2975	U2915	U2855	U2795	A2734	A2674	U2614	U2550
G3337	A3217	U3157	C3097	U3038	G2977	U2916	C2857	G2796	U2735	C2675	G2615	U2551
A3338	A3218	G3158	G3098	U3039	U2978	G2917	U2858	C2797	U2736	A2676	G2616	G2552
A3339	G3219	C3159	C3099	C3039	U2978	G2918	U2859	C2798	C2737	G2677	U2617	U2553
U3340	G3220	U3160	U3100	A3040	U2979	A2919	U2860	C2799	A2738	A2678	U2618	A2554
U3341	G3221	G3161	G3101	U3041	U2980	A2920	U2861	G2800	A2739	A2679	G2619	U2555
A3342	U3222	C3162	G3102	A3042	U2981	U2921	U2862	A2801	A2740	G2680	G2620	C2556
G3343	A3223	A3163	A3103	C3043	A2982	G2922	U2863	A2802	C2741	U2681	G2621	U2557
A3344	G3224	C3164	U3104	G3044	C2983	U2923	G2863	A2803	C2742	G2682	G2622	U2558
G3345	G3225	A3165	U3105	G3045	C2984	U2924	A2864	A2804	G2743	U2683	G2623	U2559
	A3226	C3166	A3106	C3046	C2985	C2925	U2865	G2805	U2744	C2684	G2624	C2560
	A3227	U3167	U3107	U3047	U2986	A2926	U2866	U2806	G2745	C2685	G2625	A2561
	C3228	A3168	G3108	A3048	U2987	C2927	C2867	U2807	A2746	A2686	A2626	A2562
	G3229	U3169	G3109	A3049	C2988	C2928	U2868	A2808	A2747	G2687	G2627	G2563
U3351	G3230	C3170	C3110	U3050	U2989	C2929	U2869	C2809	U2748	U2688	G2628	G2564
U3352	U3231	U3171	U3111	U3051	G2990	A2930	C2870	C2810	C2749	A2689	U2629	U2565
G3353	G3232	A3172	G3112	G3052	A2991	C2931	G2871	C2811	U2750	G2690	C2630	C2566
U3354	C3233	G3173	A3113	G3053	U2992	U2932	A2872	C2812	U2751	U2691	G2632	C2567
	A3234	U3174	A3114	U3054	G2993	A2933	U2873	A2813	U2752	G2692	G2633	C2568
	C3235	U3175	C3115	U3055	A2994	A2934	G2874	G2814	G2753	C2693	U2634	U2569
	U3236	G3176	G3116	U3056	U2995	U2935	U2875	G2815	G2754	A2694	U2635	U2570
	U3237	G3177	C3117	U3057	U2996	A2936	C2876	C2816	C2755	A2695	A2636	U2571
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	G3239	U3179	U3119	G3059	U2998	G2938	C2878	U2818	U2757	A2697	C2638	G2573
A3361	C3240	A3180	C3120	C3060	U2999	G2939	G2879	A2819	A2758	G2698	G2639	G2574
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	C3242	G3182	U3122	C3062	C3001	A2941	C2881	C2821	C2760	G2700	U2641	
	A3243	A3183	A3123	G3063	C3002	C2942	U2882	U2892	G2761	U2701	A2642	G2579
	A3244	U3184	G3124	U3064	G3003	G2943	U2883	G2823	U2763	A2702	A2643	C2582
	A3245	U3185	U3125	G3065	C3004	U2944	C2884	G2824	C2764	A2703	G2644	G2583
	G3246	A3186	C3126	A3066	A3005	A2945	C2885	U2825	C2765	A2704	G2645	G2584
	C3247	A3187	A3127	C3067	A3006	G2946	U2886	U2826	U2766	G2705	C2646	G2585
	G3248	G3188	G3128	U3068	U3007	G2947	U2887	G2827	U2767	C2706	A2647	G2586
	C3249	C3189	A3129	G3069	A3008	U2948	U2888	C2828	U2768	C2707	G2648	
	U3250	C3190	A3130	A3070	G3009	U2949	C2889	U2829	U2769	C2708	A2649	G2589
	U3251	U3191	U3131	U3071	U3010	G2950	A2890	G2830	A2770	C2709	U2650	A2590
	G3252	G3192	C3132	C3072	A3011	G2951	U2891	G2831	U2771	C2710	G2651	A2591
	U3253	C3193	C3133	A3073	A3012	G2952	A2892	C2832	U2772	C2711	U2652	G2592
	G3254	A3194	A3134	G3074	U3013	U2953	C2893	A2833	C2772	U2712	G2653	C2593
	U3255	U3195	U3135	G3075	U3014	U2954	G2894	G2834	C2773	C2713	C2654	A2594
	G3256	U3196	G3136	C3076	G3015	U2955	C2895	U2835	C2774	G2714	U2655	A2595
	C3257	G3197	C3137	A3077	A3016	A2956	A2896	C2836	U2775	A2715	U2656	U2596
	U3258	U3198	U3138	U3078	A3017	G2957	A2897	A2837	C2776	U2716	A2657	U2597
	U3259	A3199	A3139	U3079	C3018	A2958	G2898	A2838	G2777	U2717	G2658	U2598
	G3260	G3200	G3140	G3080	U3019	C2959	C2899	C2839	U2778	U2718	G2659	U2599
	C3261	C3201	A3141	C3081	U3020	C2960	A2900	C2840	A2779	U2719	G2660	C2600
	U3262	G3202	A3142	C3082	A3021	G2961	G2901	G2841	U2780	G2720	G2661	A2601
	G3263	U3203	C3143	G3083	G3022	U2962	A2902	U2842	U2781	A2721	G2662	G2602
	C3264	C3204	G3144	U3084	U3023	C2963	A2903	U2843	U2782	G2722	G2663	G2603
	G3265	G3205	C3145	G3085	A3024	U2964	U2904	A2844		U2723	C2664	U2604
	C3266	C3206	G3146	A3086	C3025	G2965	U2905	A2845	A2785	U2724	G2665	G2605
	U3267	U3207	G3147	G3087	G3026	U2966	C2906	A2846	C2786	U2725	G2666	G2606
	G3268	U3208	U3148	A3088	A3027	G2967	C2907	A2847	G2787	C2726	A2667	G2607
	U3269	A3209	G3149	C3089	G3028	U2968	G2908	G2848	C2788	A2727	U2668	G2608
	C3270	U3210	A3150	U3090	A3029	A2969	U2909	C2849	U2789	G2728	G2669	A2609
	G3271	C3211	U3151	G3091	G3030	C2970	A2910	G2850	U2790	U2729	G2670	G2610
	C3272	C3212	U3152	C3092	G3031	A2971	A2911	A2851	G2791	G2730		

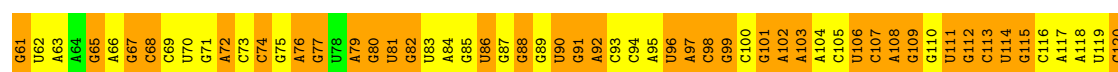
- Molecule 36: TPA_inf: *Saccharomyces cerevisiae* S288c chromosome XII, complete sequence

Chain 5:

A916	G854	U794	C732	A672	U612	A551	C	U429	A369
G916	U855	G795	G733	U673	G613	G552	A	U430	U370
A917	G856	U796	C734	G674	C614	U553	C491	U431	G371
C918	G857	U797	A735	G675	U615	A554	G494	G432	A372
U919	A858	G798	A736	G676	G616	U555	G495	A433	A373
A920	G859	G799	G737	A677	G617	U556	G496	U434	A374
A921	G860	G800	A738	G678	C618	U558	C497	C435	A375
U922		A801	G739	U679	A619	A559	A497	A436	G376
C923	C863	C802	G740	G680	U620	G560	A498	G437	A377
A924	G864	C803	U741	U681	A621	C561	A499	A438	A378
G925	U865	C804	G742	U682	A622	C562	C500	C439	A379
A926	A866	G805	C743	U683	U623	U563	A501	U440	U380
C927	G867	A806	A744	G684	G624	G564	U502	U441	U381
C928	C868	A807	C745	G685	G625	U565	C503	G442	C200
A929	G869	A808	A746	G686	U626	G566	A504	G443	A201
U930	G870	G809	A747	U687	U627	G567	G505	U	G139
C931	U871	A810	U748	G688	A628	G568	U506	G	U78
U932	U872	U811	C749	U689	U629	A569	U507	U	C263
A933	C873	G812	G750	A690	A630	A570	U508	U	A204
G934	U874	C813	A751	A691	U631	U571	U509	U	C205
U935	G875	U814	C752	A692	G632	A572	G510	U	A144
A936	A876	G815	C753	A693	C633	G573	G511	U	U83
G937	C877	A816	G754	C694	C634	U574	U512	G	U146
C938	U878	A817	A755	C695	U635	G575	G513	G	U147
U939	U879	C818	U756	C696	C636	C576	G514	C	G148
G940	C880	U819	C757	A697	C637	C577	C515	C	U149
C941	C881	A820	G760	U698	C638	A578	A516	C	A150
U942	A882	U821		A699	G639	G579	G517	C	A151
A943	A883	G822		C700	U640	C580	A518	C	U152
C944	A884	C823	G763	G701	C641	U581	A519	U	G91
U945	U885	C824	G764	C702	U642	G582	U520	G	G92
G946	C886	U825	C765	G703	U643	G583	A521	C	G93
U947	G887	G826	U766	U704	G644	G584	A522	U	G94
C948	A888	A827	U767	A705	A645	C585	A523	C	A95
U949	U889	U828	C768	A706	A646	G586	U524	C	A96
C950	C890	U829	G769	U707	A647	U587	C525	U	G97
A951	G891	A830	G770	G708	G648	G588	C526	U	G98
U952	U892	G831	A771	A709	A649	A589	A527	G	A99
C953	C893	G832	U772	A710	C650	G590	U528	U	A100
U954	G894	G833	G773	G711	G651	G591	A529	G	G101
A955	A895	U834	G774	G712	G652	A592	G530	U	C163
U956	A896	G835	A775	U713	A653	C593	G531	G	A164
C957	U897	A836	U776	G714	C654	U594	A532	U	G103
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C968	G908	A847	G787	G725	A665	U605	C543	U	A238
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U970	G910	C849	A789	G727	C667	A607	G423	G	G241
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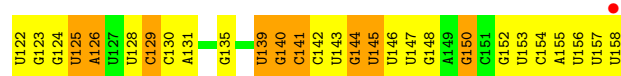
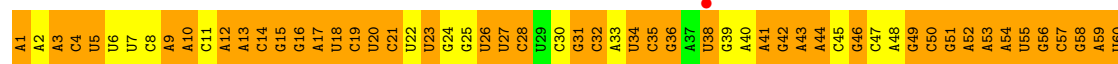
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U121

- Molecule 38: *Saccharomyces cerevisiae* genomic DNA containing ITS1, 5.8S rRNA gene, ITS2, 28S rRNA gene, strain Kw97

Chain 4:



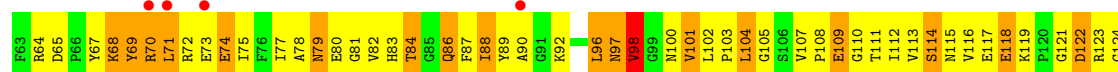
- Molecule 38: *Saccharomyces cerevisiae* genomic DNA containing ITS1, 5.8S rRNA gene, ITS2, 28S rRNA gene, strain Kw97

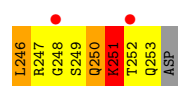
Chain 8:



- Molecule 39: 60S ribosomal protein L2-A

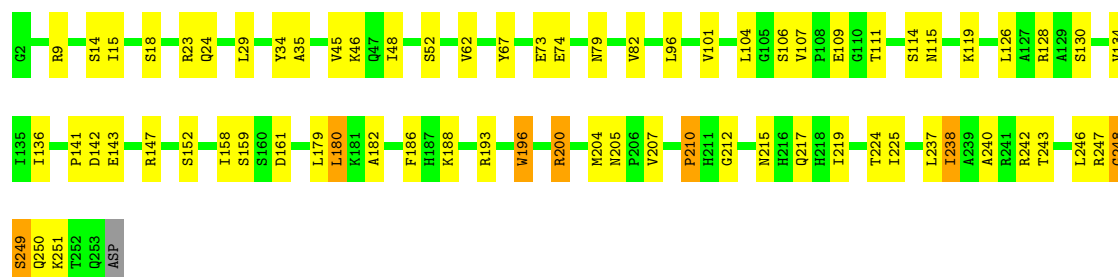
Chain L2:





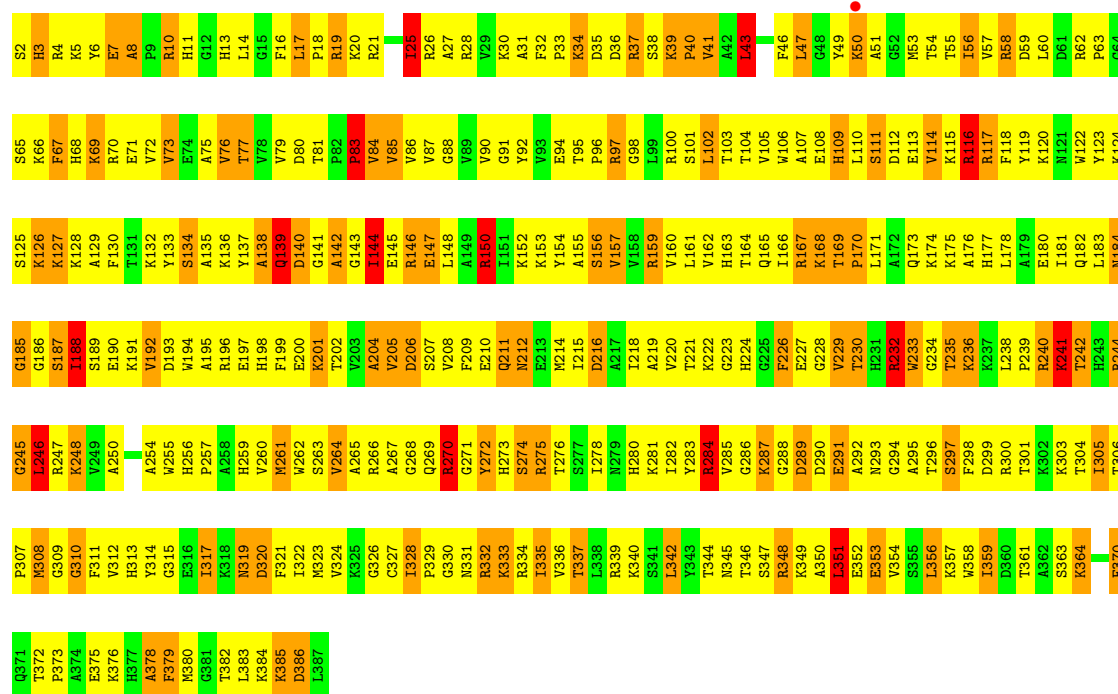
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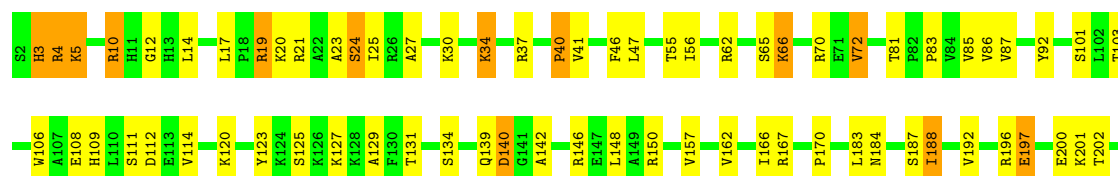
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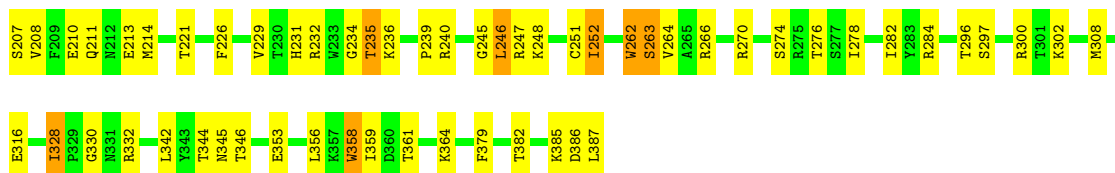
Chain L3:



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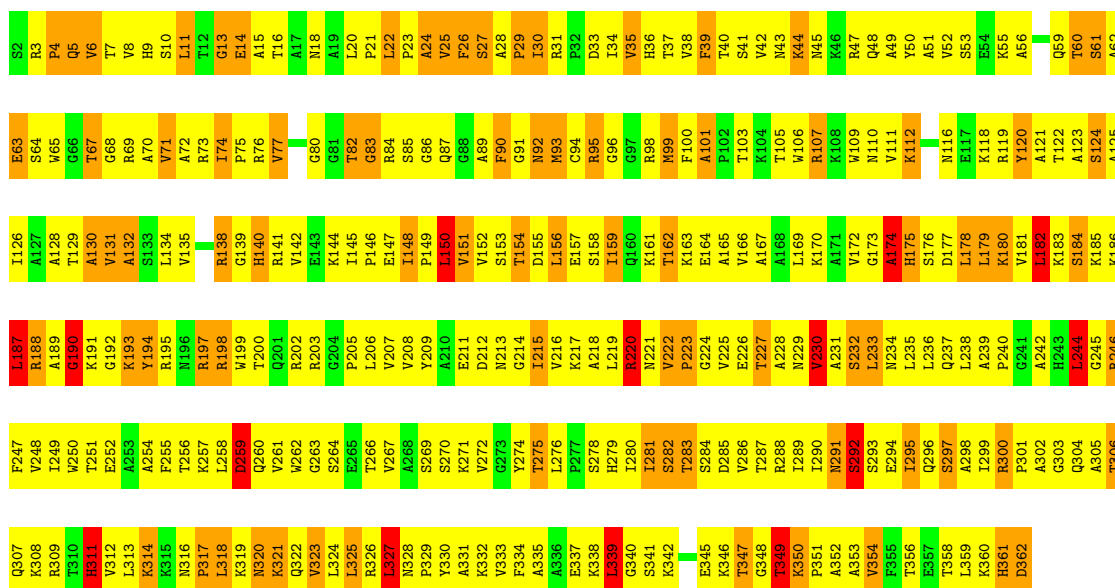
Chain l3:





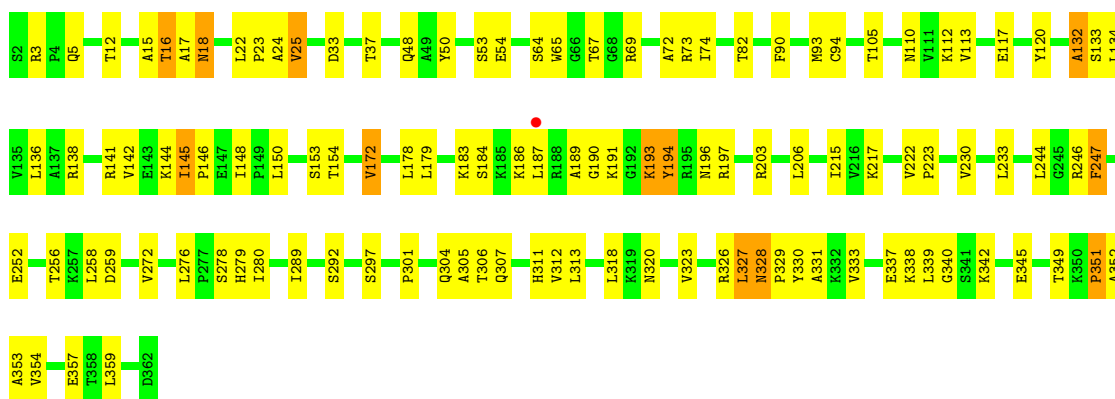
• Molecule 41: 60S ribosomal protein L4-A

Chain L4:



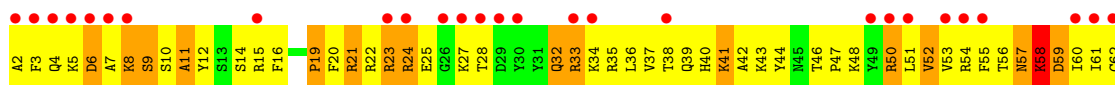
• Molecule 41: 60S ribosomal protein L4-A

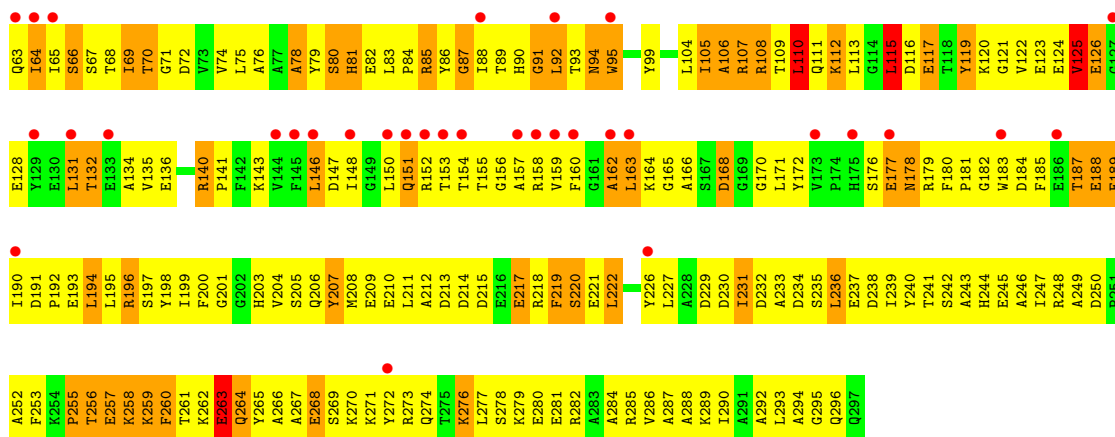
Chain L4:



• Molecule 42: 60S ribosomal protein L5

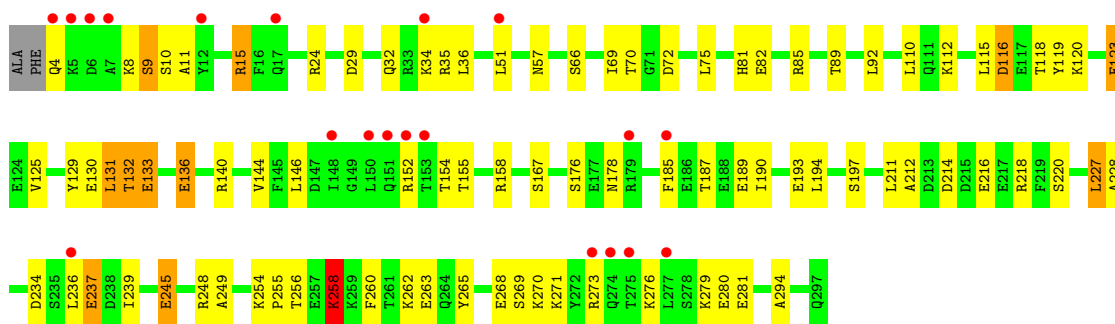
Chain L5:





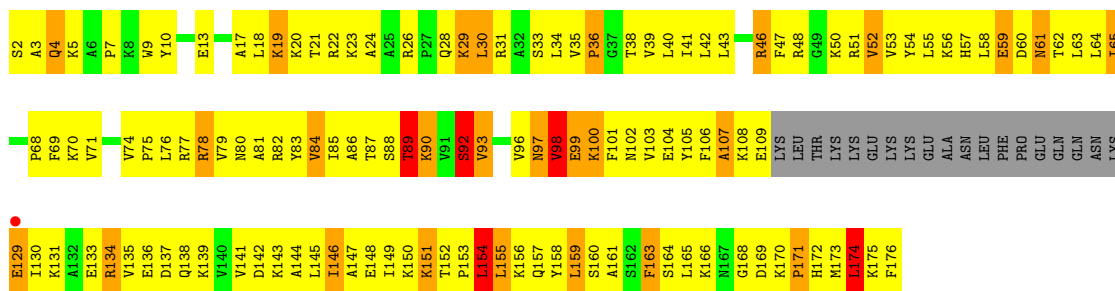
- Molecule 42: 60S ribosomal protein L5

Chain 15:



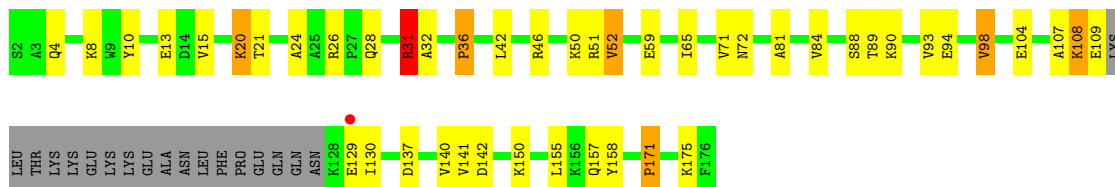
- Molecule 43: 60S ribosomal protein L6-A

Chain L6:



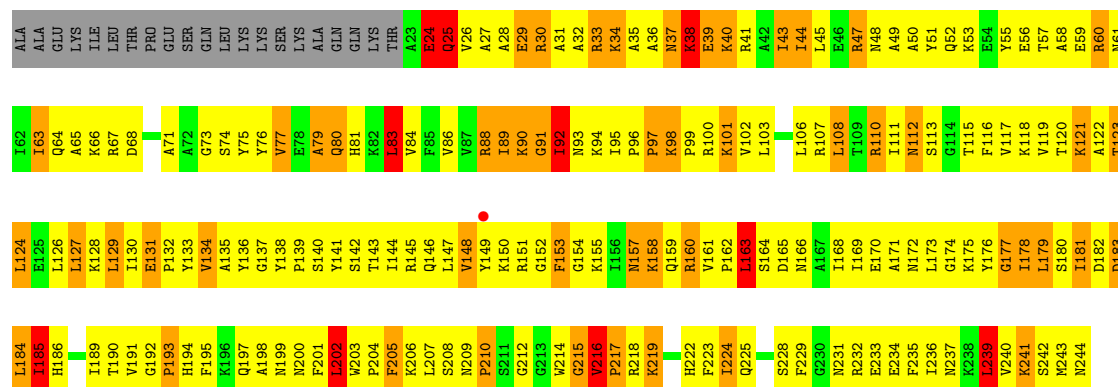
- Molecule 43: 60S ribosomal protein L6-A

Chain 16:



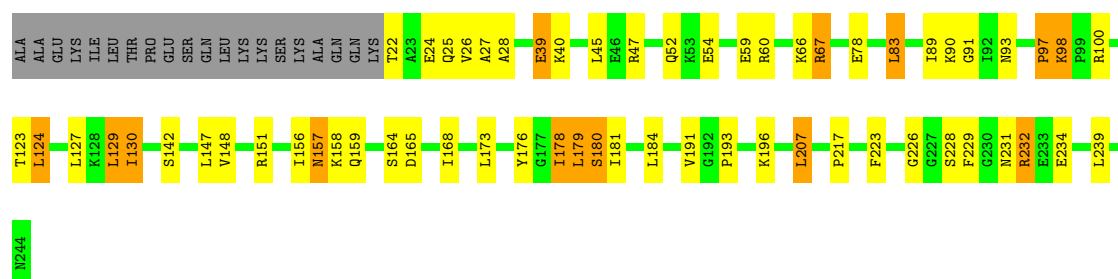
- Molecule 44: 60S ribosomal protein L7-A

Chain L7:



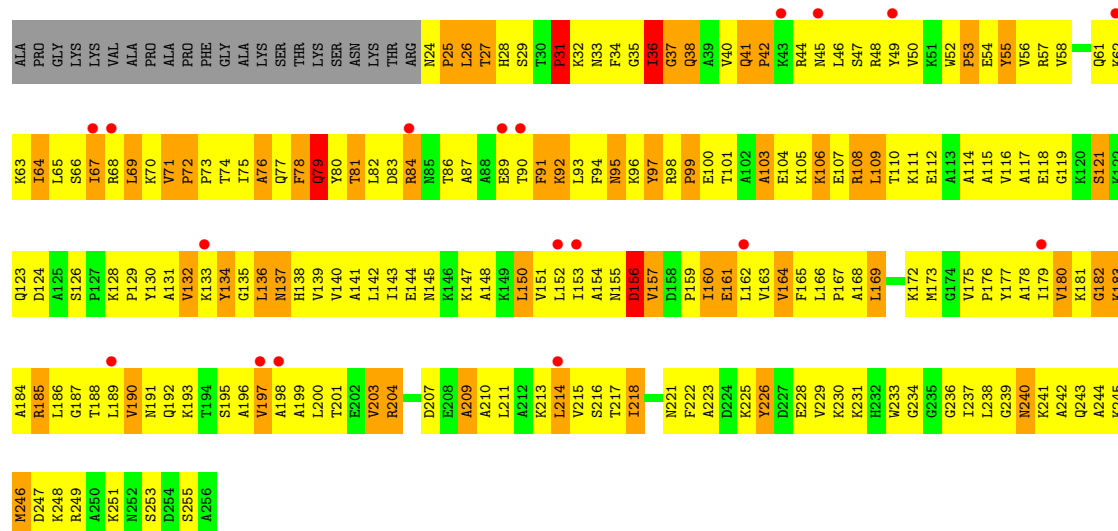
- Molecule 44: 60S ribosomal protein L7-A

Chain 17:



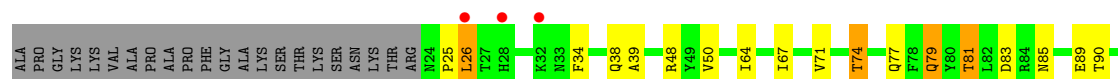
- Molecule 45: 60S ribosomal protein L8-A

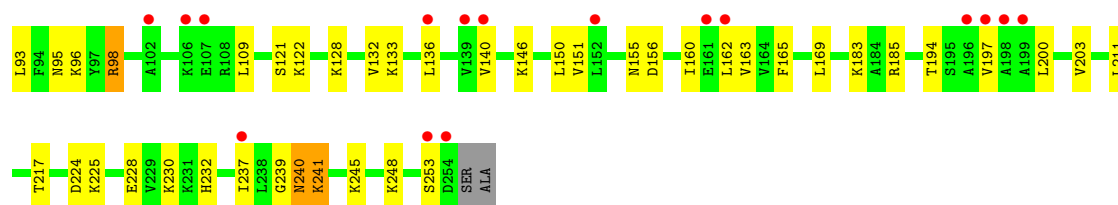
Chain L8:



- Molecule 45: 60S ribosomal protein L8-A

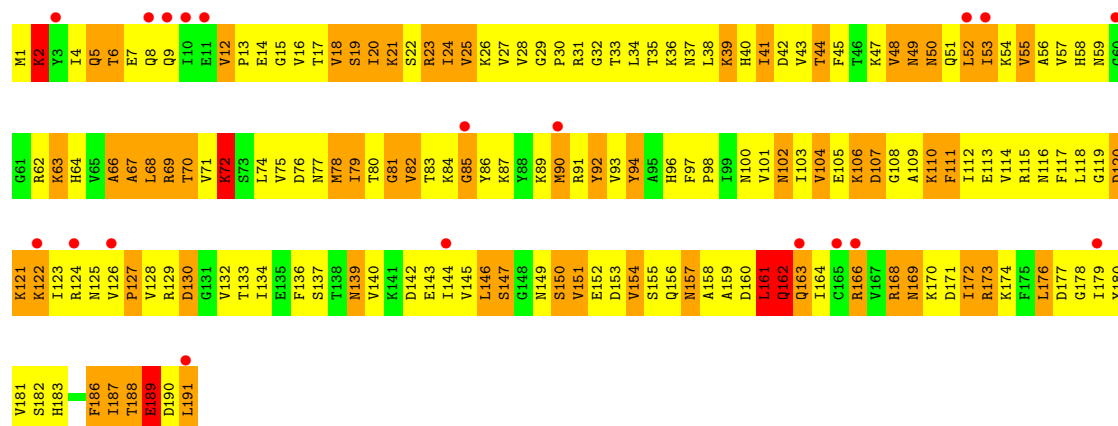
Chain 18:





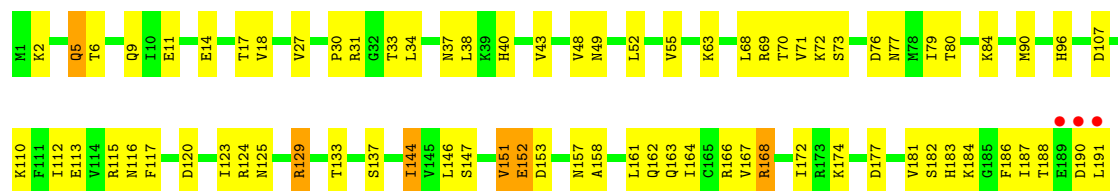
• Molecule 46: 60S ribosomal protein L9-A

Chain L9:



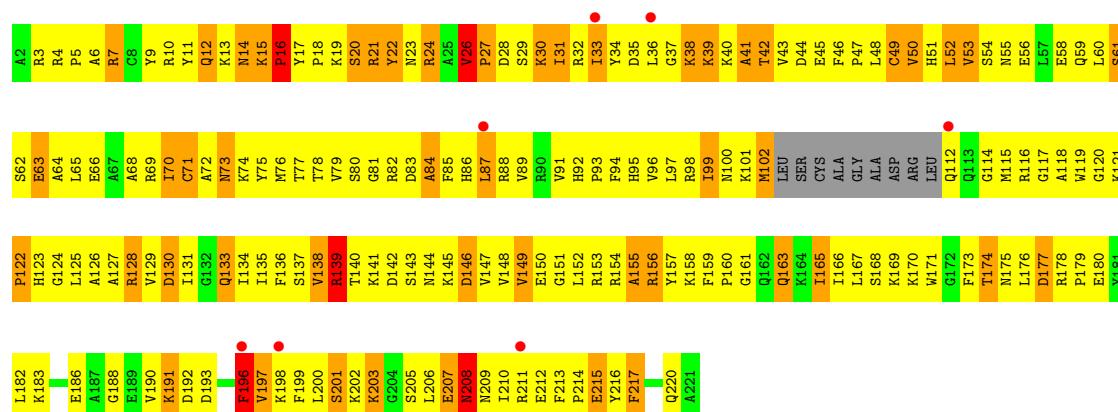
• Molecule 46: 60S ribosomal protein L9-A

Chain L9:



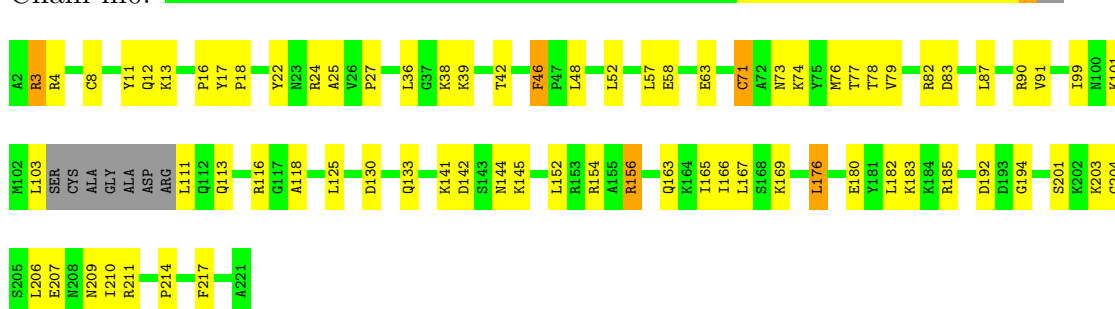
• Molecule 47: 60S ribosomal protein L10

Chain M0:



• Molecule 47: 60S ribosomal protein L10

Chain m0:



- Molecule 48: 60S ribosomal protein L11-B

Chain M1:



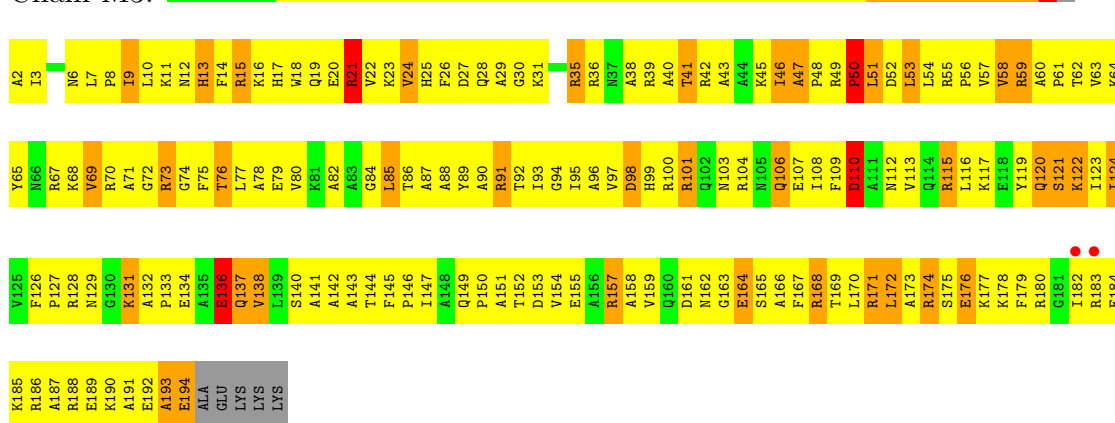
- Molecule 48: 60S ribosomal protein L11-B

Chain m1:



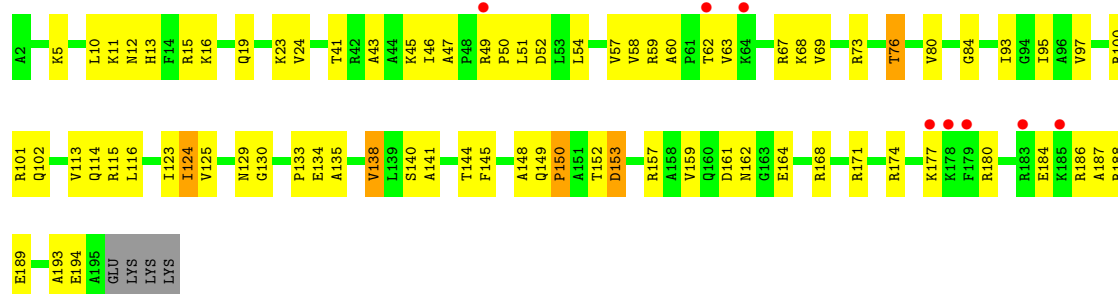
- Molecule 49: 60S ribosomal protein L13-A

Chain M3:



- Molecule 49: 60S ribosomal protein L13-A

Chain m3:



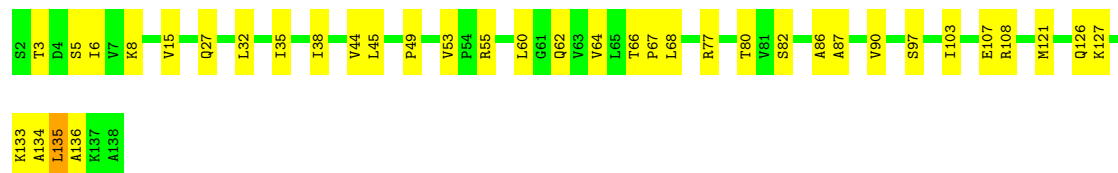
- Molecule 50: 60S ribosomal protein L14-A

Chain M4:



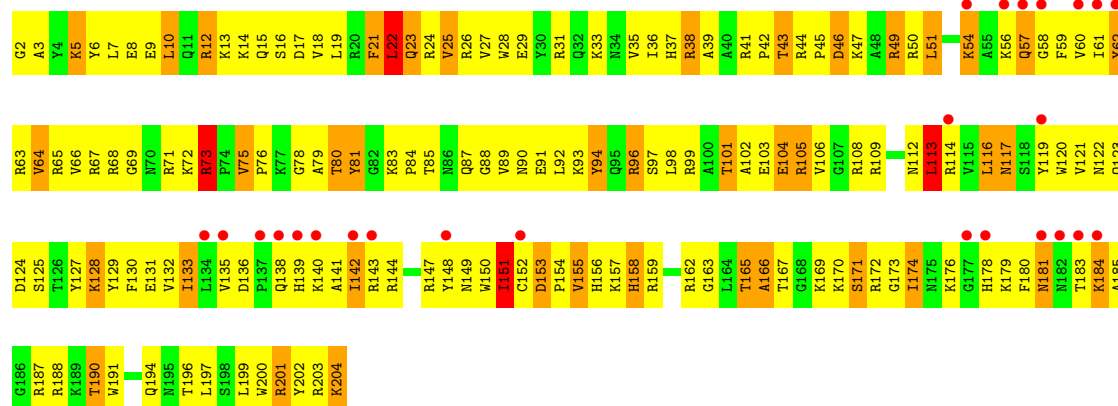
- Molecule 50: 60S ribosomal protein L14-A

Chain m4:



- Molecule 51: 60S ribosomal protein L15-A

Chain M5:



- Molecule 51: 60S ribosomal protein L15-A

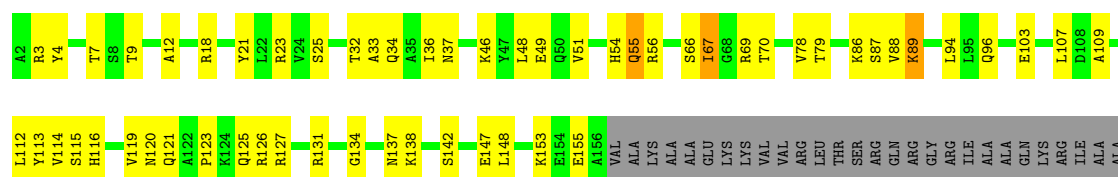
- Molecule 52: 60S ribosomal protein L16-A

- Molecule 52: 60S ribosomal protein L16-A

- Molecule 53: 60S ribosomal protein L17-A

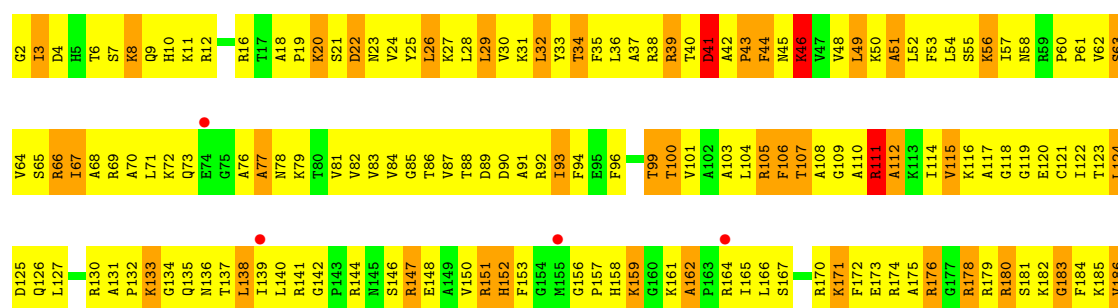
- Molecule 53: 60S ribosomal protein L17-A





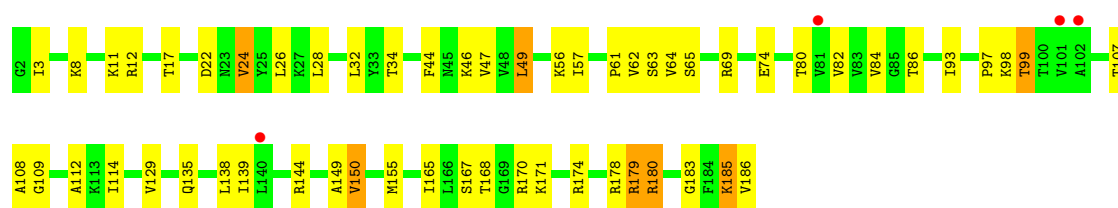
• Molecule 54: 60S ribosomal protein L18-A

Chain M8:



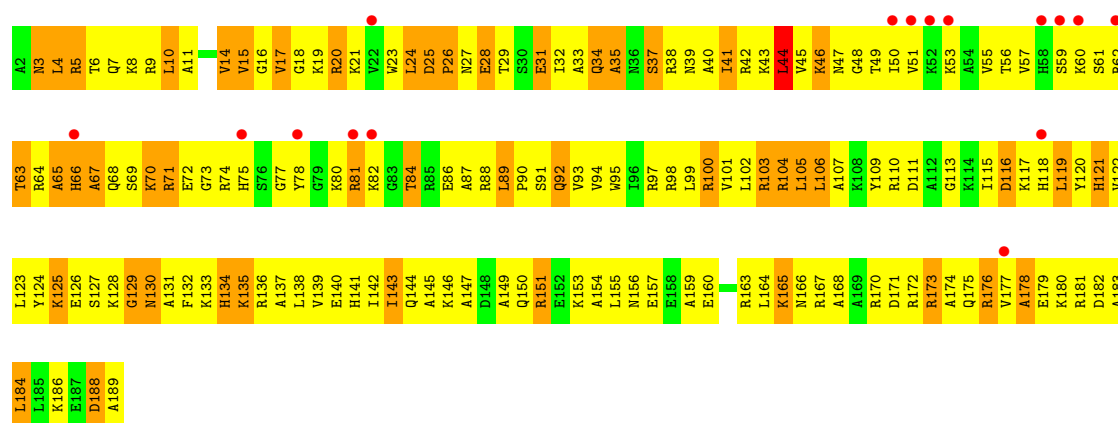
• Molecule 54: 60S ribosomal protein L18-A

Chain m8:



• Molecule 55: 60S ribosomal protein L19-A

Chain M9:



• Molecule 55: 60S ribosomal protein L19-A

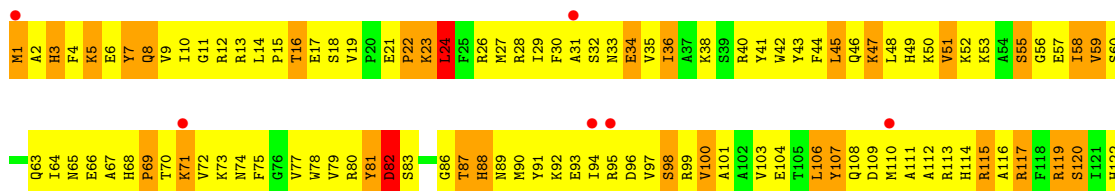
Chain m9:





- Molecule 56: 60S ribosomal protein L20-A

Chain N0:



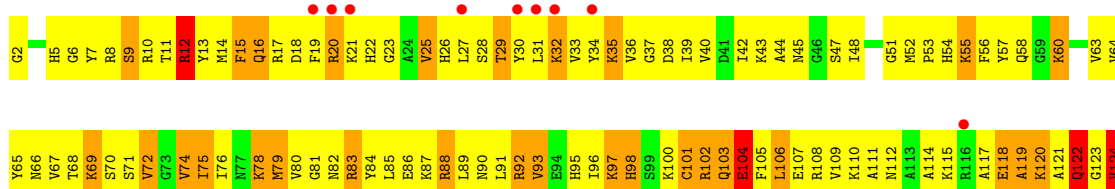
- Molecule 56: 60S ribosomal protein L20-A

Chain n0:



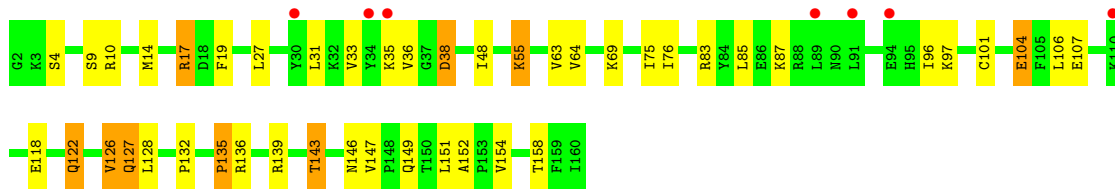
- Molecule 57: 60S ribosomal protein L21-A

Chain N1:



- Molecule 57: 60S ribosomal protein L21-A

Chain n1:

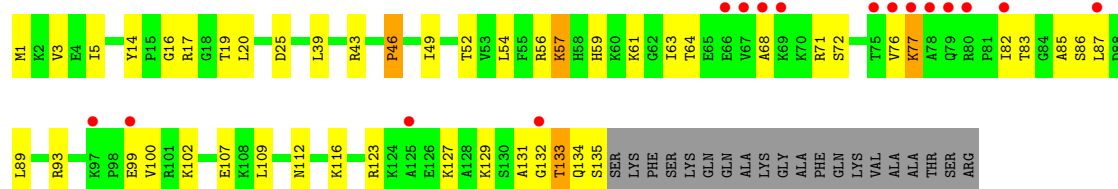


- Molecule 58: 60S ribosomal protein L22-A

Chain N2:

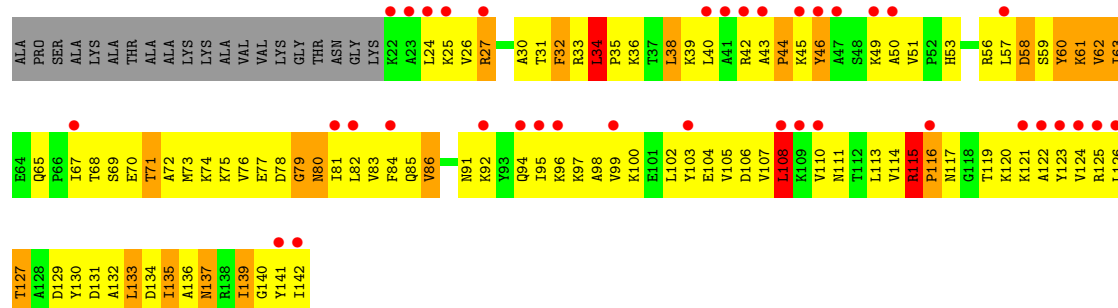


Chain n4:



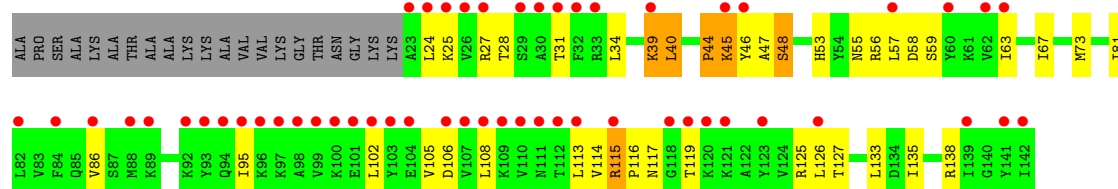
- Molecule 61: 60S ribosomal protein L25

Chain N5:



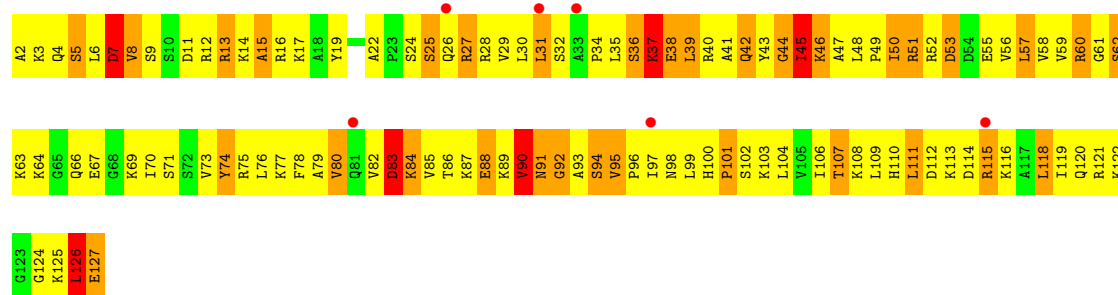
- Molecule 61: 60S ribosomal protein L25

Chain n5:



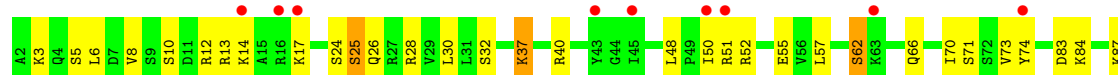
- Molecule 62: 60S ribosomal protein L26-A

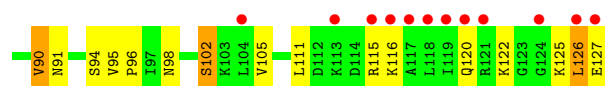
Chain N6:



- Molecule 62: 60S ribosomal protein L26-A

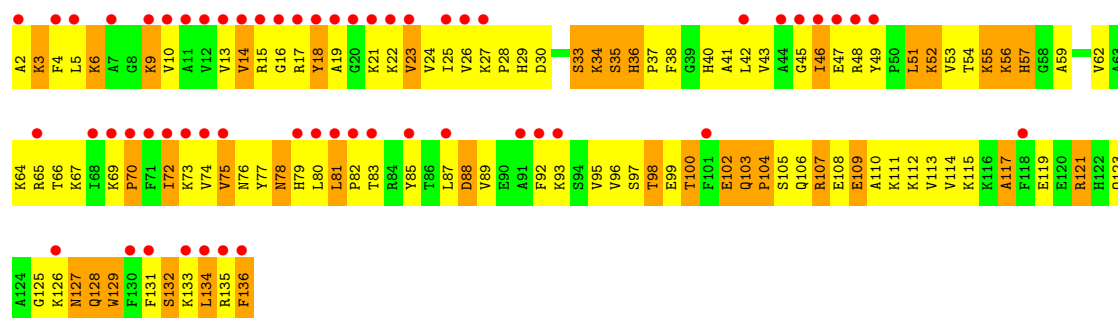
Chain n6:





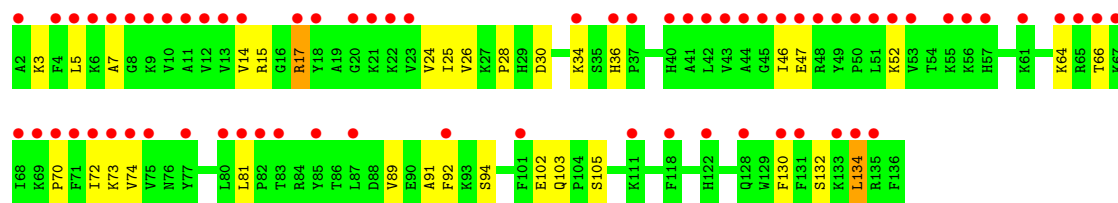
- Molecule 63: 60S ribosomal protein L27-A

Chain N7:



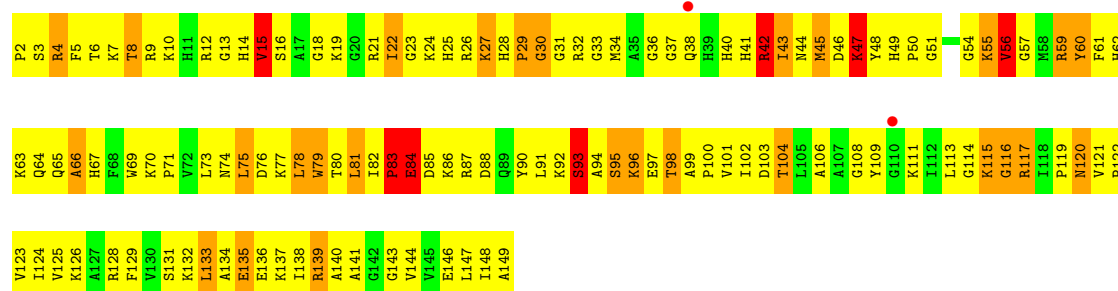
- Molecule 63: 60S ribosomal protein L27-A

Chain n7:



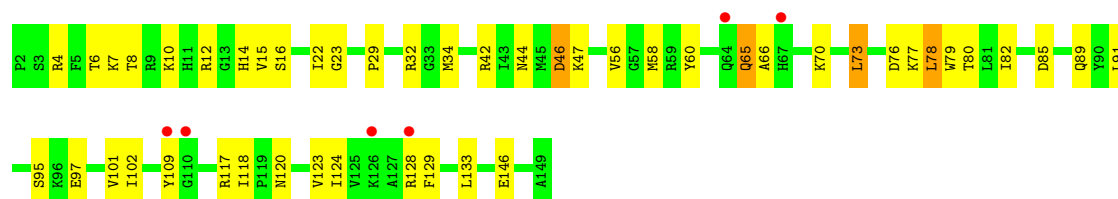
- Molecule 64: 60S ribosomal protein L28

Chain N8:



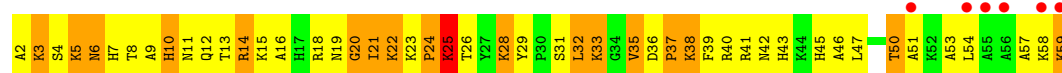
- Molecule 64: 60S ribosomal protein L28

Chain n8:



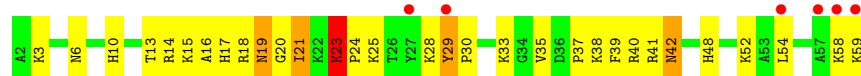
- Molecule 65: 60S ribosomal protein L29

Chain N9:



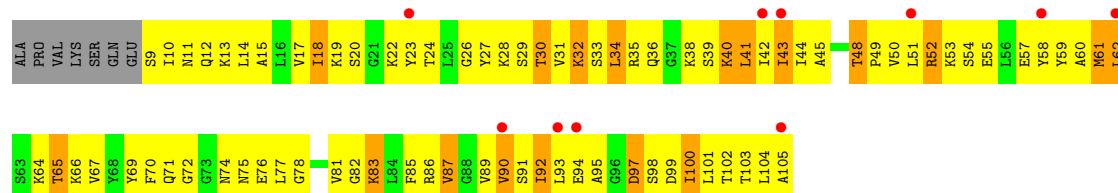
- Molecule 65: 60S ribosomal protein L29

Chain n9:



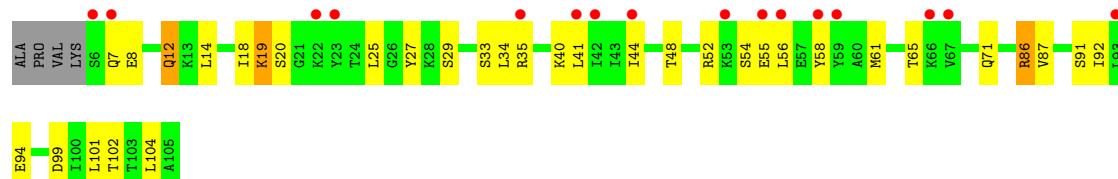
- Molecule 66: 60S ribosomal protein L30

Chain 00:



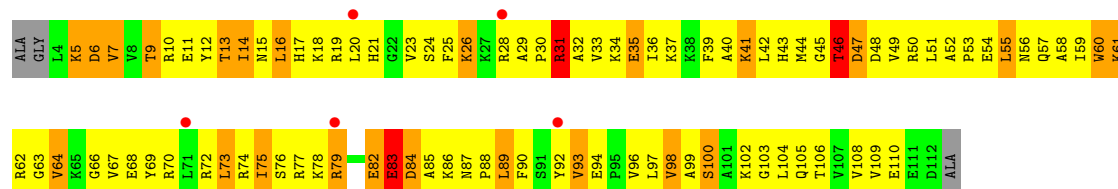
- Molecule 66: 60S ribosomal protein L30

Chain o0:



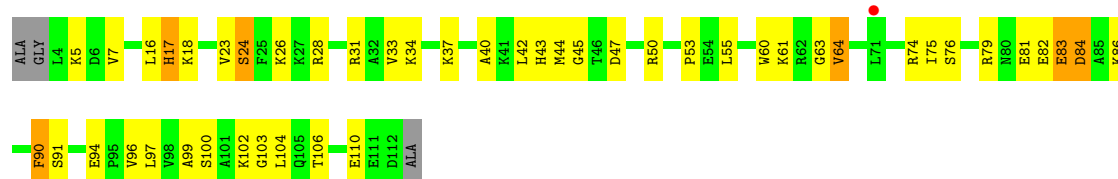
- Molecule 67: 60S ribosomal protein L31-A

Chain 01: 



- Molecule 67: 60S ribosomal protein L31-A

Chain 01:



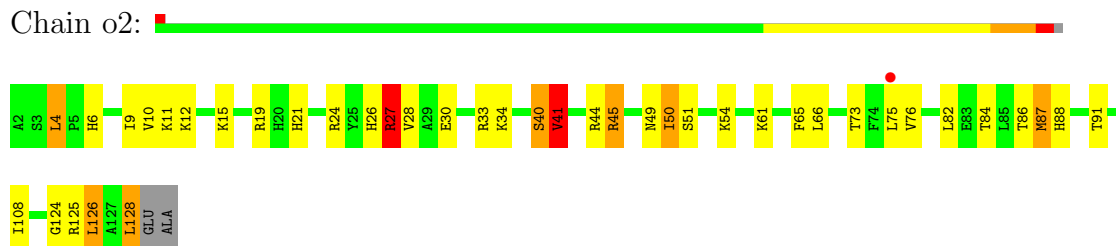
- Molecule 68: 60S ribosomal protein L32

Chain O2:



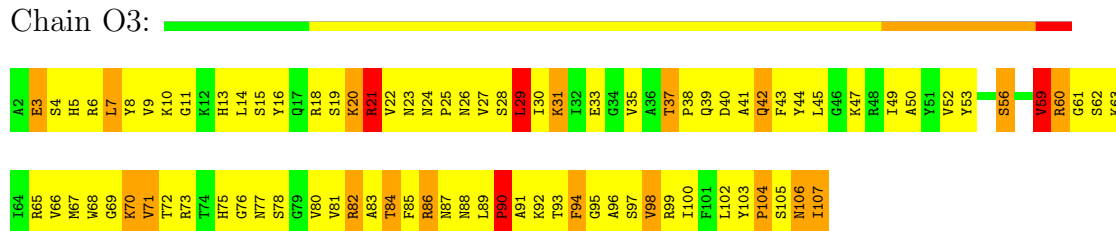
- Molecule 68: 60S ribosomal protein L32

Chain o2:



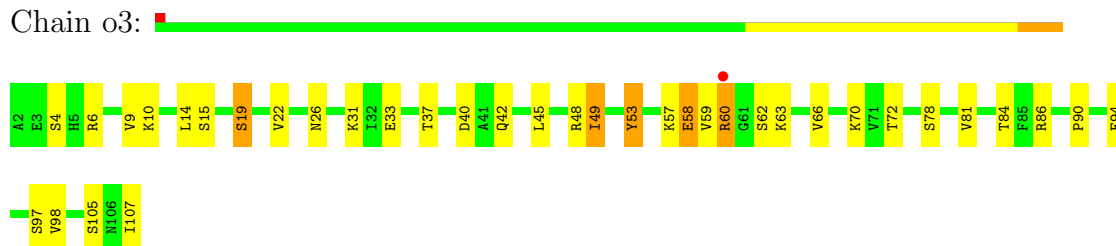
- Molecule 69: 60S ribosomal protein L33-A

Chain O3:



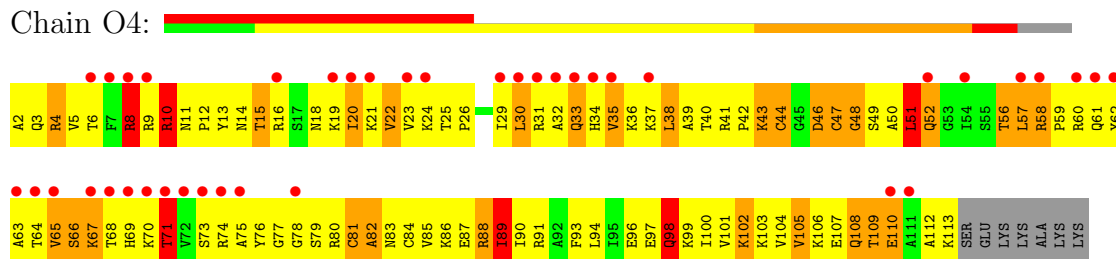
- Molecule 69: 60S ribosomal protein L33-A

Chain o3:



- Molecule 70: 60S ribosomal protein L34-A

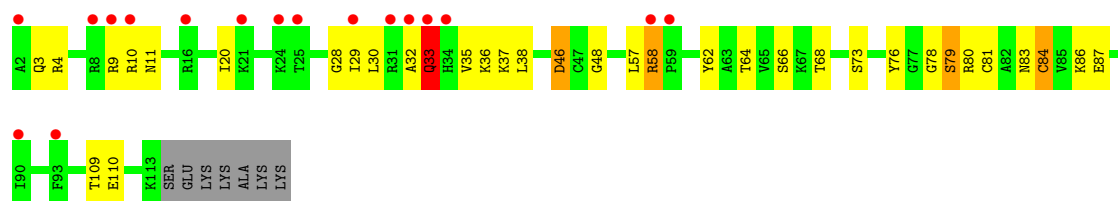
Chain O4:



- Molecule 70: 60S ribosomal protein L34-A

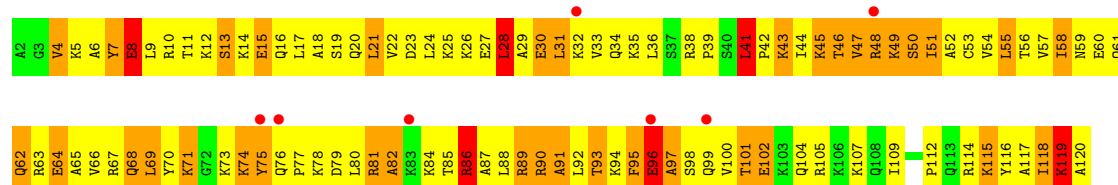
Chain o4:





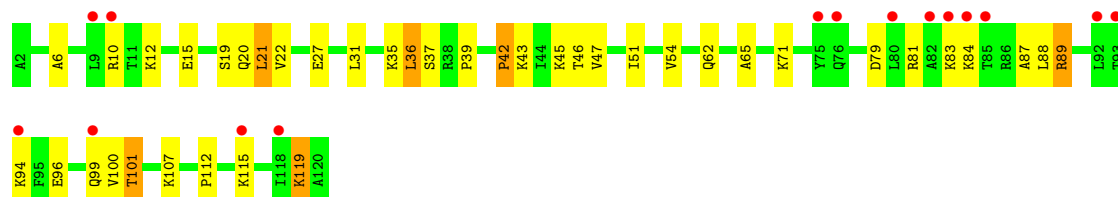
- Molecule 71: 60S ribosomal protein L35-A

Chain O5:



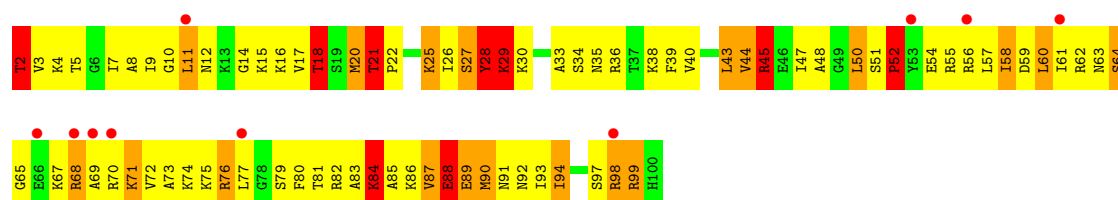
- Molecule 71: 60S ribosomal protein L35-A

Chain o5:



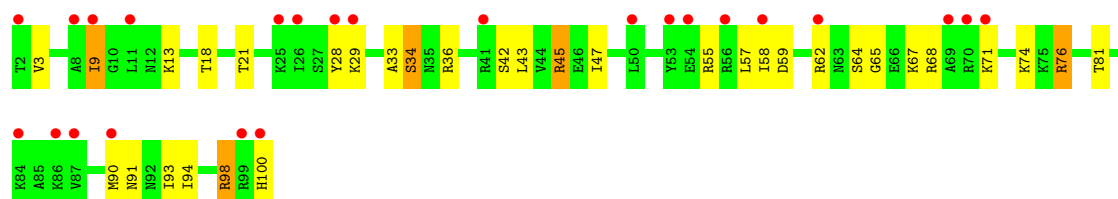
- Molecule 72: 60S ribosomal protein L36-A

Chain O6:



- Molecule 72: 60S ribosomal protein L36-A

Chain o6:



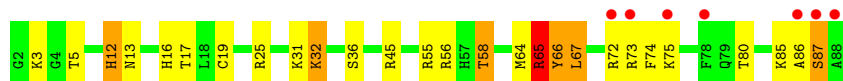
- Molecule 73: 60S ribosomal protein L37-A

Chain O7:



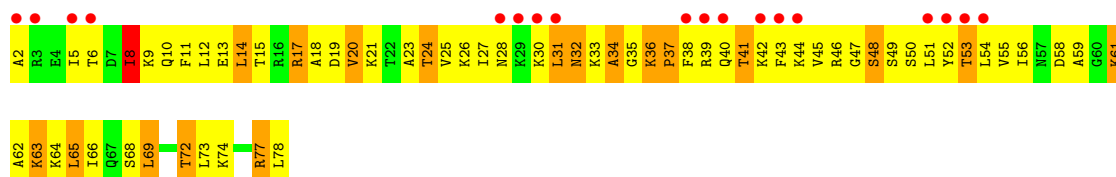
- Molecule 73: 60S ribosomal protein L37-A

Chain o7:



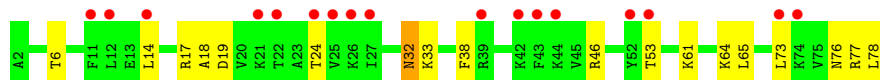
- Molecule 74: 60S ribosomal protein L38

Chain O8:



- Molecule 74: 60S ribosomal protein L38

Chain o8:



- Molecule 75: 60S ribosomal protein L39

Chain O9:



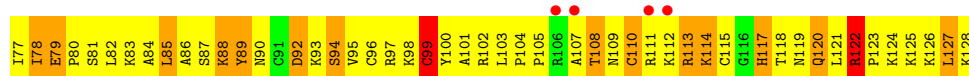
- Molecule 75: 60S ribosomal protein L39

Chain o9:



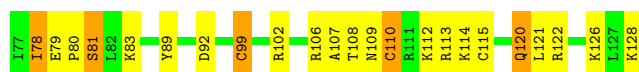
- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain Q0:



- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain q0:



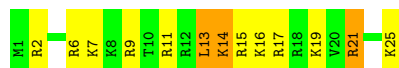
- Molecule 77: 60S ribosomal protein L41-A

Chain Q1:



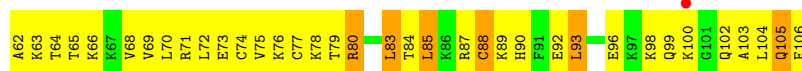
- Molecule 77: 60S ribosomal protein L41-A

Chain q1:



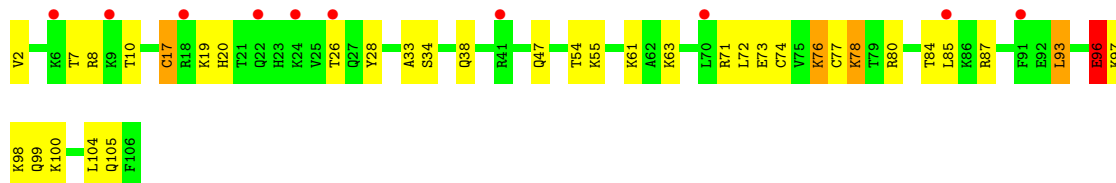
- Molecule 78: 60S ribosomal protein L42-A

Chain Q2:



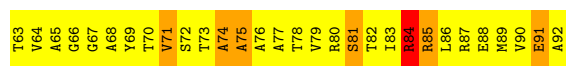
- Molecule 78: 60S ribosomal protein L42-A

Chain q2:



- Molecule 79: 60S ribosomal protein L43-A

Chain Q3:



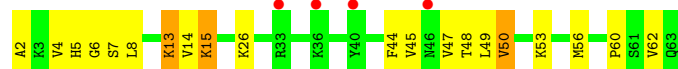
- Molecule 79: 60S ribosomal protein L43-A

Chain q3:



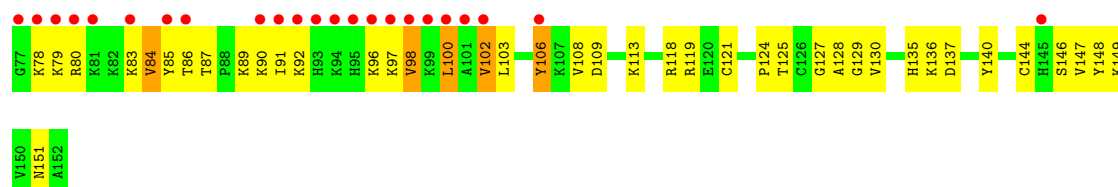
- Molecule 80: 40S ribosomal protein S30-A

Chain e0: 



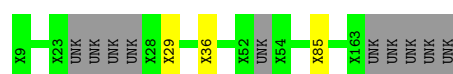
- Molecule 81: Ubiquitin-40S ribosomal protein S31

Chain e1: 



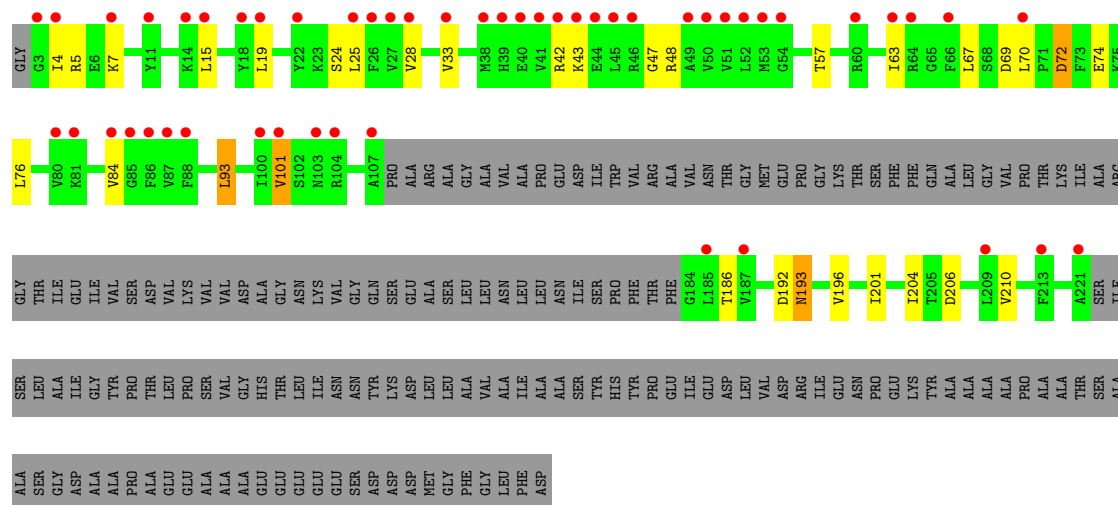
- Molecule 82: unknown protein chain m2

Chain m2: 



- Molecule 83: 60S acidic ribosomal protein P0

Chain p0: 



- Molecule 84: unknown protein chain p1

Chain p1: 

There are no outlier residues recorded for this chain.

- Molecule 85: unknown protein chain p2

Chain p2: 

There are no outlier residues recorded for this chain.

4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	437.00Å 286.75Å 305.18Å 90.00° 99.24° 90.00°	Depositor
Resolution (Å)	135.58 – 3.60 143.38 – 3.60	Depositor EDS
% Data completeness (in resolution range)	100.0 (135.58-3.60) 99.9 (143.38-3.60)	Depositor EDS
R_{merge}	0.52	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.26 (at 3.58Å)	Xtriage
Refinement program	PHENIX (phenix.refine: dev_1702)	Depositor
R, R_{free}	0.190 , 0.267 0.284 , 0.349	Depositor DCC
R_{free} test set	10648 reflections (1.25%)	DCC
Wilson B-factor (Å ²)	115.6	Xtriage
Anisotropy	0.083	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 87.1	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning	$\langle L \rangle = 0.43$, $\langle L^2 \rangle = 0.25$	Xtriage
Outliers	0 of 855155 reflections	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	411095	wwPDB-VP
Average B, all atoms (Å ²)	98.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.62% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, OHX, MG, GET

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	2	1.08	91/41698 (0.2%)	1.83	1528/64972 (2.4%)
1	6	1.44	367/42663 (0.9%)	2.19	2982/66472 (4.5%)
2	S0	0.60	0/1617	0.83	0/2215
2	s0	0.75	0/1623	0.92	1/2222 (0.0%)
3	S1	0.46	0/1735	0.74	0/2335
3	s1	0.67	0/1748	0.87	3/2352 (0.1%)
4	S2	0.74	2/1665 (0.1%)	0.90	2/2263 (0.1%)
4	s2	0.87	1/1665 (0.1%)	1.01	4/2263 (0.2%)
5	S3	0.72	0/1759	0.86	1/2368 (0.0%)
5	s3	0.72	0/1759	0.89	1/2368 (0.0%)
6	S4	0.65	0/2109	0.86	2/2839 (0.1%)
6	s4	0.77	0/2109	0.90	1/2839 (0.0%)
7	S5	0.54	0/1629	0.76	0/2202
7	s5	0.89	1/1629 (0.1%)	1.02	4/2202 (0.2%)
8	S6	0.64	0/1823	0.79	0/2439
8	s6	0.88	0/1779	0.99	2/2379 (0.1%)
9	S7	0.54	0/1506	0.75	0/2028
9	s7	0.68	0/1516	0.91	2/2043 (0.1%)
10	S8	0.79	0/1514	0.92	1/2021 (0.0%)
10	s8	0.86	0/1514	0.94	1/2021 (0.0%)
11	S9	0.65	0/1519	0.84	1/2035 (0.0%)
11	s9	0.79	0/1519	0.91	2/2035 (0.1%)
12	C0	0.66	0/790	0.86	2/1069 (0.2%)
12	c0	0.56	0/777	0.87	2/1049 (0.2%)
13	C1	0.82	0/1240	0.88	0/1675
13	c1	0.91	0/1194	1.00	2/1610 (0.1%)
14	C2	0.51	0/900	0.80	1/1224 (0.1%)
14	c2	0.46	0/900	0.69	1/1224 (0.1%)
15	C3	0.59	0/1215	0.76	0/1638
15	c3	0.80	0/1215	0.96	2/1638 (0.1%)
16	C4	0.50	0/901	0.79	0/1217
16	c4	0.76	0/960	0.91	0/1290

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	C5	0.69	0/998	0.81	0/1341
17	c5	0.89	0/1060	1.05	3/1426 (0.2%)
18	C6	0.60	0/1125	0.89	3/1510 (0.2%)
18	c6	0.93	0/1131	1.06	2/1518 (0.1%)
19	C7	0.59	0/935	0.87	3/1254 (0.2%)
19	c7	0.80	0/914	0.91	1/1224 (0.1%)
20	C8	0.61	0/1211	0.82	0/1628
20	c8	0.92	2/1211 (0.2%)	1.08	5/1628 (0.3%)
21	C9	0.61	0/1130	0.83	0/1517
21	c9	0.94	1/1130 (0.1%)	1.01	2/1517 (0.1%)
22	D0	0.65	0/865	0.83	0/1169
22	d0	0.79	0/892	0.97	1/1205 (0.1%)
23	D1	0.65	0/693	0.88	2/935 (0.2%)
23	d1	0.79	0/693	0.92	0/935
24	D2	0.63	0/1038	0.89	1/1395 (0.1%)
24	d2	0.88	0/1038	0.98	1/1395 (0.1%)
25	D3	0.90	1/1139 (0.1%)	1.04	1/1518 (0.1%)
25	d3	1.17	5/1139 (0.4%)	1.14	4/1518 (0.3%)
26	D4	0.66	0/1087	0.80	0/1449
26	d4	0.77	0/1087	0.92	0/1449
27	D5	0.61	0/571	0.84	0/768
27	d5	0.81	0/566	0.96	0/761
28	D6	0.66	0/782	0.84	0/1047
28	d6	0.81	0/782	0.92	1/1047 (0.1%)
29	D7	0.53	0/620	0.81	1/838 (0.1%)
29	d7	0.67	0/620	0.93	2/838 (0.2%)
30	D8	0.49	0/499	0.74	0/670
30	d8	0.76	0/499	0.97	1/670 (0.1%)
31	D9	0.75	0/452	0.86	0/600
31	d9	0.97	0/452	0.97	0/600
32	E0	0.69	0/483	0.87	0/643
33	E1	0.65	0/577	0.90	0/770
34	SR	0.54	0/2494	0.72	0/3393
34	sR	0.69	0/2495	0.85	2/3395 (0.1%)
35	SM	0.72	0/1113	0.91	2/1502 (0.1%)
35	sM	0.77	0/682	0.98	1/921 (0.1%)
36	1	1.76	1434/75394 (1.9%)	2.53	7929/117545 (6.7%)
36	5	1.87	1867/75414 (2.5%)	2.61	8463/117575 (7.2%)
37	3	1.50	28/2883 (1.0%)	2.28	214/4491 (4.8%)
37	7	2.04	91/2883 (3.2%)	2.85	410/4491 (9.1%)
38	4	1.54	29/3746 (0.8%)	2.42	331/5832 (5.7%)
38	8	1.43	34/3746 (0.9%)	2.16	250/5832 (4.3%)
39	L2	0.98	1/1948 (0.1%)	1.08	2/2617 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
39	l2	0.96	1/1946 (0.1%)	1.03	4/2614 (0.2%)
40	L3	1.12	3/3146 (0.1%)	1.12	11/4228 (0.3%)
40	l3	1.32	9/3146 (0.3%)	1.24	17/4228 (0.4%)
41	L4	1.03	0/2800	1.15	13/3790 (0.3%)
41	l4	1.02	1/2800 (0.0%)	1.11	5/3790 (0.1%)
42	L5	0.84	1/2425 (0.0%)	0.97	2/3271 (0.1%)
42	l5	1.16	2/2408 (0.1%)	1.08	3/3248 (0.1%)
43	L6	1.15	2/1260 (0.2%)	1.17	4/1694 (0.2%)
43	l6	1.18	2/1269 (0.2%)	1.15	3/1705 (0.2%)
44	L7	1.09	0/1821	1.13	9/2451 (0.4%)
44	l7	1.26	3/1828 (0.2%)	1.17	7/2461 (0.3%)
45	L8	0.74	0/1836	0.91	0/2481
45	l8	0.72	0/1795	0.86	1/2429 (0.0%)
46	L9	0.97	0/1539	1.07	1/2073 (0.0%)
46	l9	1.33	4/1539 (0.3%)	1.23	8/2073 (0.4%)
47	M0	1.02	4/1741 (0.2%)	1.04	1/2335 (0.0%)
47	m0	1.23	5/1758 (0.3%)	1.20	7/2358 (0.3%)
48	M1	0.80	1/1374 (0.1%)	0.93	3/1842 (0.2%)
48	m1	1.09	3/1374 (0.2%)	1.09	5/1842 (0.3%)
49	M3	0.96	2/1568 (0.1%)	1.09	4/2106 (0.2%)
49	m3	0.87	0/1573	1.02	0/2113
50	M4	1.10	0/1068	1.13	1/1438 (0.1%)
50	m4	1.30	1/1074 (0.1%)	1.15	3/1446 (0.2%)
51	M5	0.97	0/1757	1.04	5/2354 (0.2%)
51	m5	0.84	0/1757	0.93	2/2354 (0.1%)
52	M6	1.25	6/1585 (0.4%)	1.28	12/2128 (0.6%)
52	m6	1.54	9/1585 (0.6%)	1.38	14/2128 (0.7%)
53	M7	1.21	3/1443 (0.2%)	1.09	3/1944 (0.2%)
53	m7	1.18	1/1250 (0.1%)	1.19	2/1683 (0.1%)
54	M8	1.03	0/1465	1.12	5/1965 (0.3%)
54	m8	0.98	1/1465 (0.1%)	1.06	3/1965 (0.2%)
55	M9	0.84	0/1538	0.92	3/2050 (0.1%)
55	m9	0.88	1/1538 (0.1%)	0.92	2/2050 (0.1%)
56	N0	1.05	0/1481	1.10	5/1990 (0.3%)
56	n0	1.46	7/1481 (0.5%)	1.21	5/1990 (0.3%)
57	N1	1.09	1/1300 (0.1%)	1.10	4/1743 (0.2%)
57	n1	1.28	6/1300 (0.5%)	1.17	5/1743 (0.3%)
58	N2	0.73	1/812 (0.1%)	0.89	1/1099 (0.1%)
58	n2	0.73	0/794	0.84	1/1076 (0.1%)
59	N3	1.09	2/1018 (0.2%)	1.07	3/1369 (0.2%)
59	n3	1.35	7/1018 (0.7%)	1.28	7/1369 (0.5%)
60	N4	0.90	0/712	0.98	1/958 (0.1%)
60	n4	1.04	0/1052	1.04	0/1398

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
61	N5	0.86	1/979 (0.1%)	1.00	4/1321 (0.3%)
61	n5	0.85	0/974	1.03	2/1314 (0.2%)
62	N6	0.92	0/1004	1.11	6/1341 (0.4%)
62	n6	0.89	0/1004	1.02	5/1341 (0.4%)
63	N7	0.68	0/1118	0.89	1/1497 (0.1%)
63	n7	0.67	0/1118	0.83	0/1497
64	N8	1.05	0/1204	1.10	5/1612 (0.3%)
64	n8	0.98	1/1204 (0.1%)	1.08	2/1612 (0.1%)
65	N9	0.98	0/473	1.07	1/629 (0.2%)
65	n9	1.12	1/473 (0.2%)	1.33	3/629 (0.5%)
66	O0	0.71	0/751	0.87	0/1008
66	o0	0.69	0/775	0.88	2/1040 (0.2%)
67	O1	0.90	0/890	1.00	1/1196 (0.1%)
67	o1	1.13	2/897 (0.2%)	1.20	3/1205 (0.2%)
68	O2	1.21	2/1041 (0.2%)	1.20	4/1394 (0.3%)
68	o2	1.15	2/1041 (0.2%)	1.13	5/1394 (0.4%)
69	O3	1.32	2/868 (0.2%)	1.23	3/1168 (0.3%)
69	o3	1.38	3/868 (0.3%)	1.19	2/1168 (0.2%)
70	O4	0.84	0/890	1.00	4/1189 (0.3%)
70	o4	0.83	1/890 (0.1%)	0.99	2/1189 (0.2%)
71	O5	0.98	2/978 (0.2%)	1.09	2/1301 (0.2%)
71	o5	0.82	0/974	0.89	1/1297 (0.1%)
72	O6	0.84	0/778	0.98	1/1034 (0.1%)
72	o6	0.79	0/777	0.98	1/1033 (0.1%)
73	O7	1.08	0/696	1.20	4/923 (0.4%)
73	o7	0.99	0/696	1.07	3/923 (0.3%)
74	O8	0.72	0/618	0.84	0/826
74	o8	0.66	0/614	0.90	0/822
75	O9	1.05	0/443	1.19	3/588 (0.5%)
75	o9	0.82	0/443	0.99	0/588
76	Q0	1.04	2/423 (0.5%)	1.14	1/562 (0.2%)
76	q0	1.58	3/423 (0.7%)	1.44	5/562 (0.9%)
77	Q1	0.76	0/234	1.11	2/300 (0.7%)
77	q1	1.03	0/234	1.30	3/300 (1.0%)
78	Q2	1.12	1/860 (0.1%)	1.07	2/1136 (0.2%)
78	q2	1.13	2/860 (0.2%)	1.09	2/1136 (0.2%)
79	Q3	1.04	0/701	1.10	3/934 (0.3%)
79	q3	1.07	1/701 (0.1%)	1.05	0/934
80	e0	0.81	0/499	0.95	0/665
81	e1	0.51	0/619	0.87	0/822
83	p0	0.75	0/1091	0.85	0/1472
All	All	1.39	4070/429970 (0.9%)	1.97	22469/631198 (3.6%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	S0	0	2
2	s0	0	2
3	s1	0	3
5	S3	0	2
5	s3	0	2
6	s4	0	2
7	s5	0	3
9	s7	0	1
11	S9	0	2
11	s9	0	1
12	C0	0	2
15	c3	0	1
16	C4	0	1
17	c5	0	1
18	C6	0	1
18	c6	0	3
19	C7	0	1
19	c7	0	2
20	c8	0	1
21	c9	0	1
22	d0	0	1
23	D1	0	1
24	D2	0	1
24	d2	0	2
25	D3	0	2
26	D4	0	1
26	d4	0	2
27	D5	0	1
27	d5	0	1
28	D6	0	1
28	d6	0	1
33	E1	0	2
35	SM	0	1
39	l2	0	2
40	L3	0	3
40	l3	0	5
41	L4	0	5
41	l4	0	2
42	L5	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
42	l5	0	3
43	L6	0	2
43	l6	0	1
44	L7	0	2
44	l7	0	3
45	l8	0	1
47	M0	0	2
47	m0	0	1
48	m1	0	1
49	m3	0	2
52	M6	0	2
52	m6	0	2
53	M7	0	1
53	m7	0	2
54	m8	0	1
56	n0	0	2
57	N1	0	1
57	n1	0	1
60	n4	0	1
61	n5	0	1
63	N7	0	2
64	N8	0	4
64	n8	0	2
65	N9	0	2
65	n9	0	1
67	o1	0	1
68	o2	0	2
69	O3	0	2
70	O4	0	2
70	o4	0	2
72	O6	0	1
76	q0	0	1
80	e0	0	2
81	e1	0	1
82	m2	0	3
83	p0	0	1
All	All	0	130

All (4070) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	Q2	17	CYS	CB-SG	15.17	2.08	1.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	806	A	N9-C4	-14.79	1.28	1.37
37	7	89	G	C6-O6	14.62	1.37	1.24
36	5	2397	A	N9-C4	-14.38	1.29	1.37
36	5	2875	U	N1-C2	13.97	1.51	1.38
36	5	1303	A	C5-C6	-13.90	1.28	1.41
36	5	2689	A	N3-C4	-13.75	1.26	1.34
1	6	1753	A	N9-C4	13.53	1.46	1.37
36	5	2358	A	N9-C4	-13.26	1.29	1.37
36	1	408	A	N3-C4	-12.89	1.27	1.34
36	1	1432	C	N1-C6	-12.89	1.29	1.37
36	1	2875	U	C2-N3	12.87	1.46	1.37
36	5	1152	G	N9-C4	-12.77	1.27	1.38
36	1	2726	C	N3-C4	-12.50	1.25	1.33
36	1	3011	A	N9-C4	-12.47	1.30	1.37
36	1	2373	A	N9-C4	-12.37	1.30	1.37
36	5	367	A	N9-C4	-12.32	1.30	1.37
36	5	1589	A	C5-C6	-12.05	1.30	1.41
36	1	2834	G	N3-C4	-11.96	1.27	1.35
36	5	1159	A	N9-C4	-11.92	1.30	1.37
36	5	1195	A	N3-C4	-11.89	1.27	1.34
36	5	958	C	N1-C6	-11.88	1.30	1.37
36	1	1103	A	N7-C5	11.71	1.46	1.39
36	1	2636	A	N9-C4	-11.68	1.30	1.37
76	q0	99	CYS	CB-SG	-11.64	1.62	1.82
36	5	917	A	N9-C4	-11.55	1.30	1.37
36	1	2409	G	N9-C8	-11.52	1.29	1.37
37	7	104	A	N9-C4	-11.52	1.30	1.37
36	1	645	A	C6-N6	-11.48	1.24	1.33
37	7	84	A	N3-C4	-11.45	1.27	1.34
36	1	2875	U	N1-C2	11.42	1.48	1.38
36	1	2820	A	N9-C4	-11.37	1.31	1.37
36	1	3142	A	N9-C4	-11.35	1.31	1.37
36	5	3005	A	N7-C5	-11.35	1.32	1.39
36	5	2875	U	C2-N3	11.35	1.45	1.37
36	5	2988	C	N1-C6	-11.35	1.30	1.37
36	5	1183	C	N1-C6	-11.29	1.30	1.37
36	5	994	G	C5-C4	-11.23	1.30	1.38
36	1	2860	U	C4-O4	11.21	1.32	1.23
36	5	2291	A	N9-C4	-11.17	1.31	1.37
36	5	2892	A	N3-C4	-11.10	1.28	1.34
36	1	2877	G	N3-C4	-11.07	1.27	1.35
36	1	1316	C	N1-C6	-11.05	1.30	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2636	A	N3-C4	-11.02	1.28	1.34
36	5	1197	A	N3-C4	-10.91	1.28	1.34
36	1	1330	A	N9-C4	-10.90	1.31	1.37
36	5	2799	A	N3-C4	-10.88	1.28	1.34
36	5	523	A	N3-C4	-10.87	1.28	1.34
36	1	2619	G	C5-C4	-10.85	1.30	1.38
36	5	523	A	N9-C4	-10.85	1.31	1.37
36	5	1159	A	N3-C4	-10.84	1.28	1.34
36	5	960	U	N1-C2	10.82	1.48	1.38
36	1	3006	A	N9-C4	-10.81	1.31	1.37
36	5	2936	A	C5-C4	-10.80	1.31	1.38
36	5	1303	A	C5-C4	-10.79	1.31	1.38
36	5	2743	A	N9-C4	-10.74	1.31	1.37
36	1	936	A	N9-C4	-10.68	1.31	1.37
36	1	962	A	N3-C4	-10.66	1.28	1.34
36	1	962	A	N9-C4	-10.66	1.31	1.37
36	5	2875	U	C4-C5	10.62	1.53	1.43
36	1	1135	A	N3-C4	-10.62	1.28	1.34
37	7	102	A	N9-C4	-10.60	1.31	1.37
36	5	40	A	N9-C4	-10.56	1.31	1.37
36	1	744	A	N9-C4	-10.56	1.31	1.37
1	6	1131	A	C5-C6	-10.55	1.31	1.41
36	1	2409	G	C8-N7	-10.53	1.24	1.30
36	5	1195	A	N9-C4	-10.52	1.31	1.37
1	6	1537	C	N1-C6	10.52	1.43	1.37
36	5	2386	A	N9-C4	-10.49	1.31	1.37
36	1	2404	A	N3-C4	10.48	1.41	1.34
1	6	992	A	N9-C4	-10.48	1.31	1.37
36	5	1178	G	C6-N1	-10.45	1.32	1.39
36	5	2397	A	N3-C4	-10.44	1.28	1.34
36	1	2877	G	C5-C4	-10.43	1.31	1.38
36	5	2879	C	N1-C6	-10.41	1.30	1.37
36	5	2892	A	N9-C4	-10.36	1.31	1.37
36	5	1883	A	N3-C4	-10.34	1.28	1.34
36	1	2409	G	N7-C5	-10.32	1.33	1.39
36	1	1103	A	C5-C6	10.30	1.50	1.41
36	1	2404	A	C5-C4	10.26	1.46	1.38
36	5	2703	A	N3-C4	-10.25	1.28	1.34
36	1	1411	C	N3-C4	-10.22	1.26	1.33
36	5	2813	A	N7-C5	-10.22	1.33	1.39
36	1	3011	A	N3-C4	-10.17	1.28	1.34
56	n0	128	GLU	CG-CD	10.15	1.67	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2379	U	C2-N3	-10.15	1.30	1.37
36	1	423	A	N3-C4	-10.14	1.28	1.34
36	5	3310	A	N7-C5	-10.14	1.33	1.39
36	1	367	A	N9-C4	-10.13	1.31	1.37
1	6	1778	G	C5-C4	-10.12	1.31	1.38
36	1	70	A	N9-C4	-10.11	1.31	1.37
36	5	3012	A	C5-C4	-10.11	1.31	1.38
36	5	2836	C	N1-C6	-10.11	1.31	1.37
36	5	2994	A	N3-C4	-10.04	1.28	1.34
36	5	2139	A	N3-C4	-10.02	1.28	1.34
36	5	1320	C	N1-C6	-10.01	1.31	1.37
36	1	1180	A	N9-C4	-10.00	1.31	1.37
36	5	94	G	N9-C4	-9.99	1.29	1.38
36	1	962	A	N7-C5	-9.97	1.33	1.39
1	6	1537	C	C2-N3	9.97	1.43	1.35
36	1	2605	G	N9-C4	-9.96	1.29	1.38
36	1	35	A	C5-C6	-9.95	1.32	1.41
36	5	2404	A	C5-C6	9.94	1.50	1.41
36	5	3245	A	C5-C6	-9.93	1.32	1.41
36	1	806	A	N9-C4	-9.92	1.31	1.37
36	5	654	C	N1-C6	-9.92	1.31	1.37
36	5	1174	G	C5-C4	-9.92	1.31	1.38
36	5	1332	A	N9-C4	-9.89	1.31	1.37
36	1	2860	U	N3-C4	9.88	1.47	1.38
36	1	3305	A	N7-C5	-9.86	1.33	1.39
36	5	3012	A	N9-C4	-9.84	1.31	1.37
36	5	2689	A	N9-C4	-9.83	1.31	1.37
1	6	1556	A	N9-C4	-9.82	1.31	1.37
36	5	1330	A	N9-C4	-9.81	1.31	1.37
36	1	1154	A	N3-C4	-9.79	1.28	1.34
36	5	1399	A	N9-C4	-9.79	1.31	1.37
56	n0	78	TRP	CB-CG	-9.78	1.32	1.50
36	5	1370	G	C6-N1	-9.77	1.32	1.39
36	5	2353	G	C5-C6	-9.75	1.32	1.42
36	5	3091	A	N7-C5	-9.71	1.33	1.39
36	1	1393	A	N3-C4	-9.67	1.29	1.34
36	5	1040	A	N9-C4	-9.67	1.32	1.37
36	1	2605	G	N3-C4	-9.66	1.28	1.35
36	5	1047	A	N3-C4	-9.64	1.29	1.34
36	5	2644	C	N1-C6	-9.63	1.31	1.37
36	5	3029	A	N9-C4	-9.59	1.32	1.37
36	5	2920	U	C2-N3	-9.58	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	667	C	N3-C4	-9.58	1.27	1.33
36	1	1369	A	N9-C4	-9.56	1.32	1.37
36	5	994	G	C5-C6	-9.55	1.32	1.42
1	6	1028	C	N1-C6	-9.54	1.31	1.37
36	5	3043	C	N1-C6	-9.54	1.31	1.37
36	5	2986	U	N1-C2	-9.53	1.29	1.38
36	1	913	A	N7-C5	-9.53	1.33	1.39
36	1	2377	G	C6-N1	-9.51	1.32	1.39
36	5	1292	C	N1-C2	-9.51	1.30	1.40
36	1	402	A	N7-C5	-9.50	1.33	1.39
36	1	2333	C	N3-C4	-9.50	1.27	1.33
36	5	1103	A	C5-C4	9.49	1.45	1.38
36	1	2964	G	N7-C5	-9.44	1.33	1.39
37	7	44	C	C2-O2	9.44	1.32	1.24
36	5	2626	A	N3-C4	-9.43	1.29	1.34
36	1	2326	A	N9-C4	-9.42	1.32	1.37
36	1	2644	C	N1-C6	-9.40	1.31	1.37
1	6	1003	A	N9-C4	-9.40	1.32	1.37
36	5	806	A	N3-C4	-9.39	1.29	1.34
36	5	1332	A	N7-C5	-9.38	1.33	1.39
36	5	3213	A	N9-C4	-9.38	1.32	1.37
36	1	2871	G	N9-C8	9.37	1.44	1.37
36	1	1432	C	N3-C4	-9.37	1.27	1.33
36	1	2878	G	N9-C8	-9.36	1.31	1.37
36	5	1103	A	N3-C4	9.36	1.40	1.34
36	1	1320	C	N3-C4	-9.35	1.27	1.33
57	n1	104	GLU	CB-CG	9.30	1.69	1.52
36	5	848	A	N7-C5	-9.28	1.33	1.39
36	1	421	G	N1-C2	-9.27	1.30	1.37
36	5	884	A	C5-C6	-9.26	1.32	1.41
36	5	345	G	N9-C8	-9.26	1.31	1.37
36	5	1205	A	N3-C4	-9.26	1.29	1.34
36	5	428	A	N9-C4	-9.26	1.32	1.37
36	5	2918	G	C6-N1	-9.26	1.33	1.39
36	1	1103	A	N9-C4	9.25	1.43	1.37
36	1	3272	C	N1-C6	-9.25	1.31	1.37
36	5	3195	U	C2-N3	9.23	1.44	1.37
36	5	2626	A	N9-C4	-9.20	1.32	1.37
36	5	2970	C	N1-C6	-9.20	1.31	1.37
36	1	422	A	N3-C4	-9.19	1.29	1.34
36	1	2644	C	N3-C4	-9.19	1.27	1.33
1	6	100	A	N3-C4	-9.18	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	345	G	N7-C5	-9.17	1.33	1.39
36	5	1136	A	N3-C4	-9.16	1.29	1.34
36	5	2145	A	N7-C5	-9.15	1.33	1.39
36	5	2401	A	C5-C4	9.13	1.45	1.38
36	1	2877	G	C2-N3	-9.11	1.25	1.32
1	6	1778	G	C5-C6	-9.10	1.33	1.42
36	5	422	A	N3-C4	-9.09	1.29	1.34
36	1	1304	A	N9-C4	-9.09	1.32	1.37
36	1	2969	A	N9-C4	-9.08	1.32	1.37
36	5	1204	A	N9-C4	-9.07	1.32	1.37
36	1	644	G	C6-N1	-9.06	1.33	1.39
36	1	2159	U	N1-C2	9.06	1.46	1.38
36	5	512	U	C2-N3	-9.06	1.31	1.37
36	5	2149	A	N9-C4	-9.05	1.32	1.37
36	1	3181	C	N3-C4	-9.04	1.27	1.33
36	5	2908	G	N7-C5	-9.04	1.33	1.39
36	5	2309	A	N3-C4	-9.03	1.29	1.34
36	1	2948	C	N3-C4	-9.02	1.27	1.33
36	5	2879	C	C4-C5	-9.02	1.35	1.43
36	5	1589	A	N7-C5	-9.01	1.33	1.39
36	5	1592	G	C6-O6	8.99	1.32	1.24
36	5	3024	A	N9-C4	-8.99	1.32	1.37
36	5	1406	A	N3-C4	-8.98	1.29	1.34
36	1	1154	A	N7-C5	-8.95	1.33	1.39
37	7	73	C	N1-C6	8.95	1.42	1.37
36	5	2857	C	N3-C4	-8.95	1.27	1.33
36	1	357	A	N3-C4	-8.95	1.29	1.34
36	1	2641	U	C2-N3	-8.95	1.31	1.37
36	5	1152	G	N3-C4	-8.94	1.29	1.35
36	5	2401	A	N9-C4	8.91	1.43	1.37
36	5	2821	C	N1-C2	8.90	1.49	1.40
36	1	638	C	N1-C6	-8.89	1.31	1.37
36	1	70	A	N3-C4	-8.89	1.29	1.34
36	1	2878	G	C5-C4	-8.88	1.32	1.38
36	5	2936	A	N3-C4	-8.88	1.29	1.34
36	5	2304	C	C4-C5	-8.87	1.35	1.43
36	1	3142	A	N3-C4	-8.87	1.29	1.34
37	3	10	C	N1-C6	-8.86	1.31	1.37
36	5	2703	A	N7-C5	-8.86	1.33	1.39
36	5	2404	A	C5-C4	8.86	1.45	1.38
36	1	693	A	N3-C4	-8.84	1.29	1.34
36	5	367	A	N7-C5	-8.84	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2938	G	N7-C5	-8.83	1.33	1.39
36	5	1103	A	N9-C4	8.82	1.43	1.37
36	5	3038	U	C4-O4	-8.82	1.16	1.23
36	5	2386	A	N3-C4	-8.81	1.29	1.34
78	q2	17	CYS	CB-SG	8.81	1.97	1.82
36	5	884	A	N7-C5	-8.81	1.33	1.39
36	5	3310	A	C5-C4	-8.80	1.32	1.38
36	1	780	A	N3-C4	-8.80	1.29	1.34
36	5	2279	A	C5-C6	-8.79	1.33	1.41
36	1	2811	A	N3-C4	-8.77	1.29	1.34
1	6	1148	C	N3-C4	-8.77	1.27	1.33
36	5	2940	A	N7-C5	-8.77	1.33	1.39
36	5	2381	G	N9-C8	-8.74	1.31	1.37
36	5	3012	A	N7-C5	-8.73	1.34	1.39
36	5	2637	A	N3-C4	-8.72	1.29	1.34
36	1	1204	A	N9-C4	-8.72	1.32	1.37
36	1	1867	A	N9-C4	-8.71	1.32	1.37
36	5	2980	U	N3-C4	-8.71	1.30	1.38
36	5	39	A	N9-C4	-8.71	1.32	1.37
36	5	3213	A	C5-C4	-8.71	1.32	1.38
37	7	95	A	N3-C4	-8.70	1.29	1.34
36	5	2378	C	N1-C6	-8.70	1.31	1.37
36	5	2902	A	N3-C4	-8.70	1.29	1.34
36	5	2404	A	N9-C4	8.68	1.43	1.37
36	5	2875	U	C5-C6	8.67	1.42	1.34
36	5	2830	G	N3-C4	-8.67	1.29	1.35
36	1	1901	A	N9-C4	-8.67	1.32	1.37
36	5	2353	G	N7-C5	-8.66	1.34	1.39
36	5	2377	G	C5-C4	-8.66	1.32	1.38
36	5	3310	A	N3-C4	-8.66	1.29	1.34
36	1	2601	A	N3-C4	-8.65	1.29	1.34
36	5	2933	A	C6-N1	-8.65	1.29	1.35
36	5	2996	U	N3-C4	8.64	1.46	1.38
36	1	806	A	N3-C4	-8.64	1.29	1.34
36	5	2637	A	N9-C4	-8.62	1.32	1.37
36	1	2819	A	C5-C4	-8.62	1.32	1.38
36	1	3142	A	C6-N1	-8.62	1.29	1.35
36	1	635	G	C5-C6	-8.61	1.33	1.42
36	1	1145	G	N7-C5	-8.61	1.34	1.39
36	5	1307	G	N7-C5	-8.61	1.34	1.39
36	5	2412	G	N7-C5	-8.61	1.34	1.39
1	6	1025	A	N7-C5	-8.60	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1047	A	C6-N1	-8.60	1.29	1.35
36	5	1197	A	N7-C5	-8.59	1.34	1.39
36	1	2277	C	N1-C6	-8.59	1.31	1.37
36	1	2627	C	N1-C6	-8.59	1.31	1.37
36	5	951	A	C6-N1	-8.59	1.29	1.35
36	1	1333	C	N3-C4	-8.58	1.27	1.33
36	5	2125	A	N9-C4	-8.58	1.32	1.37
36	5	3035	A	N9-C4	-8.58	1.32	1.37
36	1	2365	C	N1-C6	-8.58	1.32	1.37
36	1	1398	U	C2-N3	-8.58	1.31	1.37
36	5	2726	C	N3-C4	-8.57	1.27	1.33
36	1	2971	A	N9-C4	8.56	1.43	1.37
36	5	3242	G	N1-C2	-8.56	1.30	1.37
36	1	2325	G	N7-C5	-8.56	1.34	1.39
36	5	345	G	C8-N7	-8.56	1.25	1.30
36	1	2187	G	N3-C4	-8.56	1.29	1.35
36	1	1182	A	N9-C4	-8.56	1.32	1.37
36	5	1178	G	N3-C4	-8.55	1.29	1.35
36	5	1205	A	C6-N1	-8.55	1.29	1.35
36	1	1178	G	C6-N1	-8.55	1.33	1.39
36	1	2880	U	N3-C4	-8.54	1.30	1.38
36	5	2816	G	N9-C4	-8.54	1.31	1.38
36	5	2934	A	C5-C6	-8.54	1.33	1.41
36	1	1884	A	N9-C4	-8.53	1.32	1.37
36	5	1203	A	C5-C6	-8.53	1.33	1.41
36	1	639	G	N9-C4	-8.53	1.31	1.38
36	1	2878	G	N7-C5	-8.53	1.34	1.39
1	6	1660	A	N3-C4	-8.51	1.29	1.34
36	5	2379	U	N3-C4	-8.51	1.30	1.38
36	5	1847	A	N9-C4	-8.51	1.32	1.37
1	2	1208	A	N9-C4	-8.50	1.32	1.37
36	5	2986	U	N1-C6	-8.50	1.30	1.38
36	5	2285	C	N1-C6	-8.50	1.32	1.37
36	1	1178	G	N1-C2	-8.50	1.30	1.37
36	5	2386	A	N7-C5	-8.49	1.34	1.39
36	1	804	C	N1-C6	-8.49	1.32	1.37
36	5	1120	A	N3-C4	-8.49	1.29	1.34
38	4	12	A	C5-C6	-8.48	1.33	1.41
36	5	3061	G	N9-C4	-8.48	1.31	1.38
36	5	1794	G	N9-C4	-8.46	1.31	1.38
36	5	806	A	N7-C5	-8.46	1.34	1.39
36	5	1175	C	N3-C4	-8.46	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2813	A	C5-C6	-8.45	1.33	1.41
36	1	2326	A	N3-C4	-8.45	1.29	1.34
38	4	24	G	N3-C4	-8.45	1.29	1.35
36	5	668	G	C5-C4	-8.44	1.32	1.38
36	1	2869	U	C4-C5	-8.44	1.35	1.43
36	1	1046	A	C5-C6	-8.43	1.33	1.41
36	1	1127	G	N3-C4	-8.42	1.29	1.35
36	5	367	A	N3-C4	-8.42	1.29	1.34
36	1	2356	A	N7-C5	-8.42	1.34	1.39
36	1	1156	C	N3-C4	-8.41	1.28	1.33
36	5	2933	A	N3-C4	-8.41	1.29	1.34
36	5	3209	A	C5-C4	8.41	1.44	1.38
36	5	3308	C	N1-C6	-8.41	1.32	1.37
36	1	348	A	N9-C4	-8.40	1.32	1.37
36	5	425	G	N3-C4	-8.40	1.29	1.35
36	1	421	G	C6-N1	-8.39	1.33	1.39
36	1	423	A	N9-C4	-8.39	1.32	1.37
36	1	2618	G	C6-N1	-8.39	1.33	1.39
36	5	1300	G	N9-C8	-8.39	1.31	1.37
36	1	2404	A	N9-C4	8.39	1.42	1.37
36	1	639	G	N3-C4	-8.39	1.29	1.35
36	5	2811	A	N3-C4	-8.38	1.29	1.34
1	6	1753	A	N3-C4	8.38	1.39	1.34
36	1	1366	A	C5-C6	-8.37	1.33	1.41
36	1	3098	G	C5-C4	-8.36	1.32	1.38
36	5	2976	A	C5-C4	-8.35	1.32	1.38
36	1	808	A	N9-C4	-8.35	1.32	1.37
36	5	2620	G	C6-N1	-8.34	1.33	1.39
36	1	645	A	C6-N1	-8.33	1.29	1.35
36	5	1149	G	C6-O6	8.33	1.31	1.24
36	5	3005	A	N3-C4	-8.33	1.29	1.34
36	5	3005	A	C5-C4	-8.33	1.32	1.38
36	5	921	A	N3-C4	-8.33	1.29	1.34
36	5	2979	U	C2-N3	-8.33	1.31	1.37
36	5	2375	G	N3-C4	-8.32	1.29	1.35
36	5	1165	A	N7-C5	-8.31	1.34	1.39
36	1	612	U	C2-N3	-8.30	1.31	1.37
36	5	1546	A	N3-C4	-8.30	1.29	1.34
36	5	422	A	C6-N1	-8.29	1.29	1.35
36	5	2285	C	N3-C4	-8.29	1.28	1.33
1	6	100	A	C6-N1	-8.28	1.29	1.35
25	d3	63	GLN	CB-CG	8.28	1.75	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2743	A	N3-C4	-8.28	1.29	1.34
36	5	3195	U	N3-C4	8.28	1.45	1.38
36	5	345	G	N7-C5	-8.27	1.34	1.39
36	1	27	C	N3-C4	-8.27	1.28	1.33
37	7	95	A	N9-C4	-8.27	1.32	1.37
36	1	1001	G	C6-N1	8.26	1.45	1.39
36	5	642	U	C2-N3	-8.26	1.31	1.37
36	1	1431	G	C5-C4	-8.25	1.32	1.38
36	1	1197	A	C6-N1	-8.24	1.29	1.35
36	1	189	G	N3-C4	-8.24	1.29	1.35
36	1	408	A	N9-C4	-8.23	1.32	1.37
36	5	1886	A	N3-C4	-8.23	1.29	1.34
36	1	1134	G	N9-C8	-8.22	1.32	1.37
36	5	3382	U	N1-C2	8.21	1.46	1.38
36	5	1867	A	N9-C4	-8.21	1.32	1.37
36	1	2811	A	N7-C5	-8.20	1.34	1.39
36	1	2619	G	N9-C8	-8.19	1.32	1.37
1	6	1746	A	N9-C4	-8.19	1.32	1.37
36	1	1156	C	N1-C6	-8.19	1.32	1.37
36	5	2879	C	N1-C2	-8.18	1.31	1.40
49	M3	176	GLU	CG-CD	8.18	1.64	1.51
36	1	2819	A	N3-C4	-8.17	1.29	1.34
36	5	1295	G	C5-C6	-8.17	1.34	1.42
36	1	2415	C	N3-C4	-8.16	1.28	1.33
36	5	2302	G	N3-C4	-8.16	1.29	1.35
36	1	2619	G	N7-C5	-8.15	1.34	1.39
36	5	1292	C	N1-C6	-8.15	1.32	1.37
36	5	994	G	C8-N7	-8.15	1.26	1.30
36	5	2302	G	C6-N1	-8.15	1.33	1.39
36	5	1053	A	N3-C4	-8.14	1.29	1.34
36	1	2306	C	N1-C2	8.13	1.48	1.40
36	5	2819	A	N3-C4	-8.13	1.29	1.34
36	1	1369	A	N3-C4	-8.12	1.29	1.34
36	5	1891	A	N9-C4	-8.12	1.32	1.37
1	6	757	A	N9-C4	-8.12	1.32	1.37
36	5	2117	A	N9-C4	-8.11	1.32	1.37
36	5	2935	U	N1-C2	-8.10	1.31	1.38
36	1	1116	G	C6-N1	-8.10	1.33	1.39
36	1	1197	A	N3-C4	-8.09	1.29	1.34
36	1	2802	A	N9-C4	-8.09	1.32	1.37
36	5	1005	G	N9-C4	-8.09	1.31	1.38
36	5	2302	G	N1-C2	-8.08	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2414	G	N3-C4	-8.08	1.29	1.35
36	1	2623	G	C5-C6	-8.08	1.34	1.42
36	5	2392	C	N1-C6	-8.08	1.32	1.37
36	5	1513	G	N7-C5	-8.07	1.34	1.39
36	1	2372	A	N9-C4	8.06	1.42	1.37
36	5	402	A	N7-C5	-8.05	1.34	1.39
36	1	2979	U	C2-N3	-8.04	1.32	1.37
36	5	921	A	C6-N1	-8.04	1.29	1.35
36	1	1883	A	N9-C4	-8.04	1.33	1.37
36	5	3310	A	N9-C4	-8.04	1.33	1.37
36	5	1432	C	N1-C6	-8.03	1.32	1.37
36	5	2387	A	N3-C4	-8.03	1.30	1.34
36	1	2377	G	N7-C5	-8.02	1.34	1.39
36	1	2860	U	C4-C5	8.02	1.50	1.43
36	1	1197	A	C5-C6	-8.02	1.33	1.41
36	1	2981	U	C2-N3	-8.01	1.32	1.37
36	5	2934	A	N7-C5	-8.01	1.34	1.39
36	1	2640	A	N3-C4	-8.00	1.30	1.34
36	5	920	A	N3-C4	-8.00	1.30	1.34
36	1	905	U	N1-C2	-8.00	1.31	1.38
36	5	1845	G	N9-C8	-8.00	1.32	1.37
1	6	1655	A	N7-C5	-7.98	1.34	1.39
36	5	3012	A	C5-C6	-7.98	1.33	1.41
36	1	1399	A	N3-C4	-7.98	1.30	1.34
36	1	2956	A	N3-C4	-7.98	1.30	1.34
36	5	2637	A	C6-N1	-7.97	1.29	1.35
37	3	88	G	C6-N1	-7.97	1.33	1.39
36	1	796	U	C4-C5	-7.97	1.36	1.43
36	5	437	G	N9-C4	7.96	1.44	1.38
36	5	2847	A	N9-C4	-7.96	1.33	1.37
36	1	1127	G	N9-C4	-7.96	1.31	1.38
36	1	1145	G	N9-C8	-7.96	1.32	1.37
36	5	1794	G	C5-C4	-7.96	1.32	1.38
36	5	1129	A	C5-C6	-7.95	1.33	1.41
36	1	2356	A	N9-C4	-7.95	1.33	1.37
36	1	1146	C	C4-C5	-7.95	1.36	1.43
36	5	367	A	N9-C8	-7.94	1.31	1.37
1	6	321	C	N1-C2	7.93	1.48	1.40
36	5	2150	G	N7-C5	-7.92	1.34	1.39
36	1	2404	A	C5-C6	7.92	1.48	1.41
36	1	366	A	N7-C5	-7.91	1.34	1.39
36	1	651	G	C8-N7	-7.91	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1116	G	N7-C5	-7.91	1.34	1.39
36	5	2917	G	N3-C4	-7.91	1.29	1.35
36	5	1337	A	N9-C4	-7.91	1.33	1.37
1	6	1670	G	N7-C5	-7.90	1.34	1.39
36	5	1332	A	N9-C8	-7.90	1.31	1.37
36	5	2130	G	N9-C4	-7.90	1.31	1.38
36	5	3112	G	N9-C8	-7.89	1.32	1.37
1	6	1119	G	N7-C5	-7.89	1.34	1.39
36	5	585	A	N7-C5	-7.89	1.34	1.39
36	5	1887	A	N7-C5	-7.88	1.34	1.39
36	1	691	A	N9-C4	-7.88	1.33	1.37
37	7	81	U	C2-N3	-7.88	1.32	1.37
37	7	84	A	C6-N1	-7.88	1.30	1.35
36	1	3006	A	N3-C4	-7.88	1.30	1.34
36	5	1139	G	N9-C4	-7.88	1.31	1.38
36	5	1203	A	N7-C5	-7.87	1.34	1.39
1	6	1778	G	N7-C5	-7.87	1.34	1.39
38	4	15	G	N7-C5	-7.86	1.34	1.39
36	5	3207	U	C4-C5	7.86	1.50	1.43
36	1	2819	A	N9-C4	-7.85	1.33	1.37
36	5	1205	A	N9-C4	-7.85	1.33	1.37
36	5	3209	A	C5-C6	7.85	1.48	1.41
36	5	1520	G	N9-C4	7.85	1.44	1.38
36	5	3310	A	C5-C6	-7.85	1.33	1.41
36	1	3273	A	N3-C4	-7.84	1.30	1.34
36	1	423	A	N7-C5	-7.84	1.34	1.39
36	5	3006	A	N3-C4	-7.83	1.30	1.34
36	5	3093	C	N1-C6	-7.83	1.32	1.37
36	1	1886	A	N3-C4	-7.83	1.30	1.34
36	1	3081	C	N3-C4	-7.83	1.28	1.33
36	5	3124	G	N3-C4	-7.83	1.29	1.35
36	5	363	G	N7-C5	-7.83	1.34	1.39
36	5	2172	A	N7-C5	-7.83	1.34	1.39
36	1	2980	U	C2-O2	-7.82	1.15	1.22
36	5	367	A	C5-C4	-7.82	1.33	1.38
36	5	2884	C	N1-C2	-7.82	1.32	1.40
36	1	3150	A	C5-C6	-7.82	1.34	1.41
36	1	414	U	C2-N3	-7.81	1.32	1.37
36	1	425	G	C6-N1	-7.81	1.34	1.39
36	1	916	G	C5-C4	-7.81	1.32	1.38
36	1	880	G	N9-C4	-7.80	1.31	1.38
36	1	2809	C	N1-C2	-7.80	1.32	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3182	G	C6-N1	-7.80	1.34	1.39
1	6	1671	A	N3-C4	-7.80	1.30	1.34
36	1	1145	G	C5-C4	-7.80	1.32	1.38
36	1	2834	G	C5-C4	-7.80	1.32	1.38
36	5	396	A	N9-C4	-7.80	1.33	1.37
36	5	2138	A	N3-C4	-7.80	1.30	1.34
36	5	1174	G	C6-N1	-7.80	1.34	1.39
36	1	1153	A	N3-C4	-7.79	1.30	1.34
36	5	2665	U	C4-C5	-7.79	1.36	1.43
36	5	1486	G	N9-C4	-7.79	1.31	1.38
36	1	644	G	N3-C4	-7.79	1.29	1.35
36	5	1217	A	N9-C4	-7.79	1.33	1.37
36	5	3130	A	N3-C4	-7.78	1.30	1.34
36	5	3091	A	C5-C6	-7.77	1.34	1.41
36	1	1197	A	N9-C4	-7.76	1.33	1.37
36	5	2404	A	N3-C4	7.76	1.39	1.34
1	6	1137	A	N9-C4	-7.76	1.33	1.37
36	5	2940	A	N3-C4	-7.76	1.30	1.34
36	5	1174	G	N1-C2	-7.75	1.31	1.37
36	5	2400	G	C2-N3	-7.75	1.26	1.32
37	7	25	G	C6-N1	-7.75	1.34	1.39
36	1	1401	A	N9-C4	-7.74	1.33	1.37
36	5	647	A	N3-C4	-7.74	1.30	1.34
36	5	2415	C	N1-C6	-7.74	1.32	1.37
36	1	1180	A	N3-C4	-7.74	1.30	1.34
36	5	51	A	N7-C5	-7.74	1.34	1.39
36	5	3025	C	N3-C4	-7.73	1.28	1.33
36	1	3011	A	C5-C4	-7.73	1.33	1.38
36	5	1101	G	C6-N1	-7.73	1.34	1.39
40	L3	233	TRP	CB-CG	-7.73	1.36	1.50
36	5	1197	A	C5-C4	-7.73	1.33	1.38
36	5	1197	A	C6-N1	-7.73	1.30	1.35
38	8	80	A	N9-C4	7.73	1.42	1.37
36	5	1175	C	N1-C6	-7.72	1.32	1.37
36	1	1197	A	C5-C4	-7.72	1.33	1.38
36	1	3172	A	N7-C5	-7.72	1.34	1.39
36	5	3132	C	N1-C6	-7.72	1.32	1.37
36	5	918	C	N1-C6	-7.72	1.32	1.37
36	1	2875	U	N3-C4	7.72	1.45	1.38
36	1	357	A	N9-C4	-7.72	1.33	1.37
36	5	2386	A	C5-C6	-7.72	1.34	1.41
1	6	309	C	N1-C6	-7.71	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	971	G	C6-N1	-7.71	1.34	1.39
36	5	2373	A	C6-N1	-7.71	1.30	1.35
36	1	2614	G	N1-C2	-7.70	1.31	1.37
36	1	2875	U	N1-C6	7.70	1.44	1.38
36	5	2382	G	N9-C4	-7.70	1.31	1.38
36	5	2743	A	N7-C5	-7.70	1.34	1.39
36	1	2996	U	N1-C2	7.69	1.45	1.38
36	5	3085	G	C5-C4	-7.69	1.32	1.38
36	1	1149	G	C6-O6	7.69	1.31	1.24
36	1	3180	A	C6-N1	-7.68	1.30	1.35
1	6	65	A	N9-C4	-7.68	1.33	1.37
1	6	391	A	N3-C4	-7.68	1.30	1.34
36	5	2811	A	N9-C4	-7.68	1.33	1.37
36	5	2329	C	N1-C6	-7.68	1.32	1.37
36	1	402	A	C5-C6	-7.68	1.34	1.41
36	5	1910	A	C5-C6	-7.68	1.34	1.41
36	5	1307	G	N3-C4	-7.68	1.30	1.35
36	1	865	U	C2-N3	-7.67	1.32	1.37
36	1	2913	C	N1-C6	-7.67	1.32	1.37
36	1	2164	A	N3-C4	-7.67	1.30	1.34
36	1	2953	U	C4-O4	7.66	1.29	1.23
36	5	2875	U	N1-C6	7.66	1.44	1.38
36	1	2956	A	N7-C5	-7.66	1.34	1.39
36	5	189	G	N3-C4	-7.66	1.30	1.35
36	5	363	G	C5-C6	-7.66	1.34	1.42
38	8	53	A	N3-C4	-7.66	1.30	1.34
36	5	2364	G	N7-C5	-7.65	1.34	1.39
36	1	2613	U	C2-O2	-7.65	1.15	1.22
1	6	1778	G	N3-C4	-7.65	1.30	1.35
1	6	1729	C	N1-C6	-7.65	1.32	1.37
36	1	65	A	N9-C4	-7.64	1.33	1.37
36	1	583	G	C6-N1	-7.64	1.34	1.39
36	1	2356	A	N3-C4	-7.64	1.30	1.34
36	5	2946	A	N3-C4	-7.64	1.30	1.34
36	5	2341	A	N9-C4	-7.64	1.33	1.37
36	5	2370	G	N7-C5	-7.64	1.34	1.39
37	3	87	G	C2-N3	-7.63	1.26	1.32
36	5	95	A	N9-C4	-7.63	1.33	1.37
36	5	2868	U	C2-N3	-7.63	1.32	1.37
36	1	883	A	C6-N1	-7.62	1.30	1.35
36	5	994	G	N7-C5	-7.62	1.34	1.39
36	5	2287	C	N3-C4	-7.62	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3061	G	C5-C6	-7.62	1.34	1.42
36	1	883	A	N3-C4	-7.62	1.30	1.34
37	7	79	A	N9-C4	-7.62	1.33	1.37
36	1	1905	G	N3-C4	-7.61	1.30	1.35
36	5	2849	C	N1-C6	-7.61	1.32	1.37
36	1	952	A	C6-N1	-7.61	1.30	1.35
36	1	1340	G	C5-C4	-7.61	1.33	1.38
36	1	2641	U	N3-C4	-7.61	1.31	1.38
37	3	89	G	C5-C4	-7.61	1.33	1.38
36	5	1370	G	N3-C4	-7.61	1.30	1.35
36	1	397	A	N3-C4	-7.61	1.30	1.34
36	5	588	G	C5-C4	-7.61	1.33	1.38
36	5	2120	A	N9-C4	-7.61	1.33	1.37
36	5	1298	C	C4-C5	-7.60	1.36	1.43
36	1	964	G	C5-C6	-7.60	1.34	1.42
36	1	1910	A	N9-C4	-7.60	1.33	1.37
1	6	1547	A	N9-C4	-7.60	1.33	1.37
36	5	958	C	N3-C4	-7.60	1.28	1.33
36	5	201	A	N9-C4	-7.59	1.33	1.37
37	7	95	A	N7-C5	-7.59	1.34	1.39
1	6	163	G	N3-C4	-7.59	1.30	1.35
36	5	3344	A	N9-C4	-7.59	1.33	1.37
36	1	2409	G	C5-C4	-7.58	1.33	1.38
36	5	883	A	N3-C4	-7.58	1.30	1.34
36	1	1340	G	C5-C6	-7.57	1.34	1.42
36	1	2864	A	N3-C4	-7.57	1.30	1.34
36	1	940	G	C5-C4	-7.57	1.33	1.38
36	1	1103	A	N3-C4	7.57	1.39	1.34
36	1	2385	G	C5-C6	-7.57	1.34	1.42
36	5	1205	A	C5-C4	-7.57	1.33	1.38
36	5	2867	C	N1-C6	-7.57	1.32	1.37
36	5	633	C	C4-C5	-7.56	1.36	1.43
36	5	1879	A	N3-C4	-7.56	1.30	1.34
36	5	2242	A	N3-C4	-7.56	1.30	1.34
36	1	942	U	C4-O4	7.56	1.29	1.23
36	5	637	C	N1-C6	-7.56	1.32	1.37
36	5	2856	G	N3-C4	-7.55	1.30	1.35
36	1	1405	U	C2-N3	-7.55	1.32	1.37
1	6	1025	A	C5-C6	-7.55	1.34	1.41
36	5	2639	G	N3-C4	-7.55	1.30	1.35
36	5	2936	A	N9-C8	-7.55	1.31	1.37
36	1	2422	C	N3-C4	-7.54	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3130	A	N7-C5	-7.54	1.34	1.39
36	5	418	A	N3-C4	-7.53	1.30	1.34
36	1	2353	G	N7-C5	-7.53	1.34	1.39
36	1	1159	A	N9-C4	-7.53	1.33	1.37
36	1	596	C	N3-C4	-7.52	1.28	1.33
36	5	1402	C	N1-C6	-7.52	1.32	1.37
1	6	1746	A	N3-C4	-7.52	1.30	1.34
36	5	799	G	N3-C4	-7.52	1.30	1.35
36	5	3227	A	C5-C6	-7.52	1.34	1.41
1	2	1655	A	N9-C4	-7.51	1.33	1.37
36	5	1332	A	C5-C6	-7.51	1.34	1.41
36	1	1854	C	N1-C6	-7.51	1.32	1.37
36	5	647	A	N7-C5	-7.51	1.34	1.39
36	5	2401	A	N3-C4	7.51	1.39	1.34
36	5	1127	G	N9-C8	-7.51	1.32	1.37
36	5	2936	A	C6-N1	-7.50	1.30	1.35
36	5	2920	U	N3-C4	-7.50	1.31	1.38
36	1	422	A	N7-C5	-7.49	1.34	1.39
36	1	937	G	C5-C6	-7.49	1.34	1.42
36	1	973	A	N9-C4	-7.49	1.33	1.37
36	1	220	G	N9-C4	-7.49	1.31	1.38
36	1	1887	A	N9-C4	-7.49	1.33	1.37
36	5	2375	G	N7-C5	-7.48	1.34	1.39
36	1	660	A	C6-N1	-7.48	1.30	1.35
36	5	2877	G	C6-N1	-7.48	1.34	1.39
36	1	810	A	C6-N1	-7.48	1.30	1.35
36	5	1879	A	N9-C4	-7.48	1.33	1.37
36	1	1131	G	N9-C8	-7.48	1.32	1.37
36	5	2922	G	C6-N1	-7.47	1.34	1.39
36	1	979	U	N1-C2	7.47	1.45	1.38
36	5	941	G	C5-C4	-7.47	1.33	1.38
36	1	401	U	N1-C2	7.47	1.45	1.38
36	1	645	A	N9-C4	7.47	1.42	1.37
36	1	2373	A	N3-C4	-7.47	1.30	1.34
36	1	365	A	N3-C4	-7.47	1.30	1.34
38	8	2	A	N3-C4	-7.47	1.30	1.34
36	5	1177	G	C6-N1	-7.46	1.34	1.39
1	6	623	A	N9-C4	-7.46	1.33	1.37
36	1	2755	C	N3-C4	-7.46	1.28	1.33
1	2	377	G	N9-C4	-7.45	1.31	1.38
36	5	2952	G	N7-C5	-7.45	1.34	1.39
36	5	503	C	N1-C6	-7.45	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	943	U	N1-C6	-7.45	1.31	1.38
36	1	2635	A	N3-C4	-7.44	1.30	1.34
36	1	1366	A	C6-N1	-7.44	1.30	1.35
36	1	1366	A	C6-N6	-7.44	1.27	1.33
36	5	2620	G	N3-C4	-7.44	1.30	1.35
37	7	113	C	N1-C6	-7.44	1.32	1.37
36	1	2983	C	N3-C4	-7.43	1.28	1.33
1	6	1131	A	N7-C5	-7.43	1.34	1.39
36	5	669	U	N1-C2	7.43	1.45	1.38
36	5	2976	A	N3-C4	-7.43	1.30	1.34
70	o4	84	CYS	CB-SG	-7.43	1.69	1.82
36	1	2377	G	C5-C4	-7.43	1.33	1.38
36	5	1374	G	C5-C6	-7.43	1.34	1.42
36	5	2385	G	N7-C5	-7.42	1.34	1.39
36	5	408	A	N3-C4	-7.42	1.30	1.34
37	7	102	A	C5-C4	-7.42	1.33	1.38
36	1	699	A	N9-C4	-7.42	1.33	1.37
36	5	2125	A	N3-C4	-7.42	1.30	1.34
36	5	3005	A	N9-C8	-7.41	1.31	1.37
36	5	3035	A	N3-C4	-7.41	1.30	1.34
36	1	909	G	N7-C5	-7.41	1.34	1.39
36	5	706	A	N9-C4	-7.41	1.33	1.37
36	1	1542	G	C5-C6	-7.40	1.34	1.42
36	1	2412	G	N1-C2	-7.40	1.31	1.37
36	1	2869	U	N1-C2	-7.40	1.31	1.38
36	1	1313	G	N9-C4	-7.40	1.32	1.38
36	1	2639	G	N9-C4	-7.40	1.32	1.38
38	8	2	A	C6-N1	-7.40	1.30	1.35
36	1	2954	U	N3-C4	7.39	1.45	1.38
1	6	506	A	N9-C4	7.39	1.42	1.37
1	2	1455	G	C6-O6	7.39	1.30	1.24
36	1	1154	A	C5-C4	-7.39	1.33	1.38
36	1	1901	A	C5-C4	-7.39	1.33	1.38
36	1	2371	G	C6-N1	-7.39	1.34	1.39
36	1	2387	A	C6-N6	-7.39	1.28	1.33
1	6	456	A	N3-C4	-7.38	1.30	1.34
36	5	2943	G	C5-C6	-7.38	1.34	1.42
36	5	2969	A	N3-C4	-7.38	1.30	1.34
36	5	2374	C	N1-C6	-7.37	1.32	1.37
36	5	1310	G	C5-C6	-7.37	1.34	1.42
36	5	2823	G	N7-C5	-7.36	1.34	1.39
38	8	53	A	C5-C4	-7.36	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1336	A	N9-C4	-7.36	1.33	1.37
36	1	2358	A	N9-C4	-7.36	1.33	1.37
37	3	82	G	N3-C4	-7.36	1.30	1.35
36	5	2662	G	N9-C8	-7.36	1.32	1.37
36	5	1128	U	N1-C2	-7.36	1.31	1.38
1	6	1525	A	N3-C4	-7.35	1.30	1.34
36	1	28	C	N1-C6	-7.35	1.32	1.37
36	1	2916	U	C2-O2	7.34	1.28	1.22
36	1	608	A	N9-C4	7.34	1.42	1.37
36	5	1116	G	C6-N1	-7.34	1.34	1.39
36	5	3085	G	N1-C2	-7.34	1.31	1.37
36	1	189	G	C6-N1	-7.33	1.34	1.39
37	7	104	A	N3-C4	-7.33	1.30	1.34
37	3	95	A	C5-C6	-7.32	1.34	1.41
36	1	2652	U	N1-C2	-7.32	1.31	1.38
36	5	2833	A	C5-C4	-7.31	1.33	1.38
36	5	2994	A	N7-C5	-7.31	1.34	1.39
36	5	1182	A	N3-C4	-7.31	1.30	1.34
36	5	3017	A	C5-C4	-7.31	1.33	1.38
36	5	1006	A	N3-C4	-7.31	1.30	1.34
36	5	3041	U	C2-N3	-7.31	1.32	1.37
36	1	808	A	N3-C4	-7.31	1.30	1.34
36	5	878	G	N9-C4	7.30	1.43	1.38
36	1	2605	G	N7-C5	-7.30	1.34	1.39
36	1	3307	A	C5-C6	-7.30	1.34	1.41
36	5	1849	C	N1-C6	-7.29	1.32	1.37
1	6	1645	G	N3-C4	7.29	1.40	1.35
36	5	1048	A	N3-C4	-7.29	1.30	1.34
36	5	3048	A	N9-C4	-7.29	1.33	1.37
36	1	1203	A	N9-C4	-7.29	1.33	1.37
1	2	1336	A	N9-C4	-7.29	1.33	1.37
36	1	408	A	C6-N1	-7.29	1.30	1.35
1	6	746	A	N7-C5	-7.29	1.34	1.39
42	15	193	GLU	CG-CD	7.28	1.62	1.51
38	8	138	A	C6-N1	-7.28	1.30	1.35
36	1	2344	U	N1-C2	-7.28	1.32	1.38
36	1	385	A	N3-C4	-7.27	1.30	1.34
36	1	1594	A	C6-N1	-7.27	1.30	1.35
36	5	417	A	N3-C4	-7.27	1.30	1.34
36	5	1307	G	C5-C4	-7.27	1.33	1.38
36	1	2802	A	C5-C4	-7.27	1.33	1.38
36	5	1556	C	N1-C2	7.27	1.47	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	933	A	N9-C4	7.26	1.42	1.37
36	1	408	A	C5-C4	-7.26	1.33	1.38
36	1	1131	G	C5-C4	-7.26	1.33	1.38
36	5	2900	A	N7-C5	-7.26	1.34	1.39
36	5	2796	G	N9-C8	-7.25	1.32	1.37
36	5	3180	A	N9-C4	-7.25	1.33	1.37
1	6	163	G	N9-C4	-7.25	1.32	1.38
36	1	52	A	N3-C4	-7.24	1.30	1.34
36	5	2986	U	C2-O2	-7.24	1.15	1.22
36	1	2864	A	N9-C4	-7.24	1.33	1.37
36	1	2937	G	C5-C4	-7.24	1.33	1.38
36	1	2639	G	C2-N3	-7.24	1.26	1.32
38	4	104	A	N9-C4	-7.24	1.33	1.37
36	5	2957	G	N9-C4	-7.23	1.32	1.38
36	5	426	G	C5-C4	-7.23	1.33	1.38
36	5	1327	C	N3-C4	-7.23	1.28	1.33
36	5	1053	A	N9-C4	-7.23	1.33	1.37
36	5	2863	G	N9-C4	-7.23	1.32	1.38
36	1	1134	G	N3-C4	-7.23	1.30	1.35
36	5	1116	G	C5-C6	-7.23	1.35	1.42
36	5	2954	U	N1-C2	7.22	1.45	1.38
36	1	1432	C	C2-O2	-7.22	1.18	1.24
36	5	2897	A	N3-C4	-7.22	1.30	1.34
36	5	3172	A	C5-C4	-7.22	1.33	1.38
36	5	1309	U	C2-N3	-7.22	1.32	1.37
36	5	940	G	N7-C5	7.22	1.43	1.39
36	5	1892	G	N7-C5	-7.22	1.34	1.39
36	1	2640	A	N9-C4	-7.22	1.33	1.37
1	6	1777	G	C5-C6	-7.22	1.35	1.42
36	1	908	G	N7-C5	-7.21	1.34	1.39
36	1	2168	A	N3-C4	-7.21	1.30	1.34
37	7	73	C	N1-C2	7.21	1.47	1.40
36	5	1140	G	C5-C4	-7.21	1.33	1.38
36	1	913	A	C5-C6	-7.21	1.34	1.41
36	1	1197	A	N7-C5	-7.21	1.34	1.39
36	1	2874	G	N9-C4	7.21	1.43	1.38
36	5	958	C	C4-C5	-7.20	1.37	1.43
36	5	803	C	C4-C5	-7.20	1.37	1.43
36	1	282	G	C2-N3	-7.20	1.26	1.32
36	5	799	G	N9-C4	-7.20	1.32	1.38
36	1	2156	C	N1-C6	-7.19	1.32	1.37
36	1	1506	A	N7-C5	-7.18	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	407	A	N9-C8	-7.18	1.32	1.37
36	5	607	A	N3-C4	-7.18	1.30	1.34
36	1	659	G	N9-C8	-7.18	1.32	1.37
37	7	49	G	N7-C5	-7.18	1.34	1.39
36	5	2367	A	N3-C4	-7.18	1.30	1.34
36	5	1933	A	N3-C4	-7.17	1.30	1.34
36	1	585	A	N3-C4	-7.17	1.30	1.34
36	1	2802	A	N7-C5	-7.17	1.34	1.39
36	5	3376	A	N3-C4	-7.17	1.30	1.34
76	Q0	99	CYS	CB-SG	-7.17	1.70	1.82
36	5	1116	G	N3-C4	-7.17	1.30	1.35
36	1	2912	G	C6-N1	-7.17	1.34	1.39
36	5	2931	C	C4-N4	-7.17	1.27	1.33
1	6	1313	A	N9-C4	-7.17	1.33	1.37
36	5	1006	A	N9-C4	-7.17	1.33	1.37
36	1	2999	U	C2-N3	-7.17	1.32	1.37
36	1	883	A	N9-C4	-7.16	1.33	1.37
36	1	1116	G	N3-C4	-7.16	1.30	1.35
36	1	2371	G	N7-C5	-7.16	1.34	1.39
36	5	1041	U	N1-C2	-7.16	1.32	1.38
36	1	3277	U	N1-C2	7.16	1.45	1.38
7	s5	87	CYS	CB-SG	-7.16	1.70	1.82
36	1	2187	G	C6-N1	-7.16	1.34	1.39
36	1	2117	A	C5-C4	-7.16	1.33	1.38
36	5	2400	G	N9-C4	-7.15	1.32	1.38
36	5	3189	G	N9-C8	-7.15	1.32	1.37
36	1	2296	A	C5-C6	-7.15	1.34	1.41
36	1	3130	A	N3-C4	-7.15	1.30	1.34
36	5	2857	C	N1-C6	-7.15	1.32	1.37
36	1	80	G	C6-N1	-7.14	1.34	1.39
36	5	677	A	C5-C6	-7.14	1.34	1.41
36	5	2919	A	C6-N1	-7.14	1.30	1.35
36	5	2799	A	N9-C4	-7.14	1.33	1.37
36	5	789	A	N3-C4	-7.14	1.30	1.34
36	1	789	A	N3-C4	-7.14	1.30	1.34
36	5	1145	G	C5-C4	-7.13	1.33	1.38
36	5	2338	C	N1-C6	-7.13	1.32	1.37
1	6	1100	G	N9-C4	-7.13	1.32	1.38
36	5	3016	A	C6-N1	-7.12	1.30	1.35
36	5	3085	G	C6-N1	-7.12	1.34	1.39
36	5	995	U	C2-N3	-7.12	1.32	1.37
36	5	1054	A	N9-C4	-7.12	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3015	G	N9-C4	-7.12	1.32	1.38
36	5	2953	U	C4-O4	7.11	1.29	1.23
36	5	917	A	N3-C4	-7.11	1.30	1.34
36	5	3310	A	C6-N1	-7.11	1.30	1.35
36	1	911	C	N3-C4	-7.11	1.28	1.33
36	1	1116	G	N7-C5	-7.11	1.34	1.39
36	5	3122	A	N9-C4	-7.10	1.33	1.37
36	5	731	U	C2-N3	-7.10	1.32	1.37
36	5	911	C	N1-C6	-7.10	1.32	1.37
36	5	2995	A	N9-C4	-7.10	1.33	1.37
1	2	615	A	N9-C4	7.10	1.42	1.37
36	5	96	G	N7-C5	7.10	1.43	1.39
36	5	1887	A	N3-C4	-7.10	1.30	1.34
36	1	2878	G	N3-C4	-7.10	1.30	1.35
36	5	3053	G	N9-C8	-7.10	1.32	1.37
1	6	1614	A	C5-C6	-7.09	1.34	1.41
36	5	3172	A	N9-C4	-7.09	1.33	1.37
59	n3	39	VAL	CA-CB	-7.09	1.39	1.54
36	5	795	G	N1-C2	-7.09	1.32	1.37
36	5	2736	A	N9-C4	-7.09	1.33	1.37
47	m0	71	CYS	CB-SG	7.09	1.94	1.82
36	1	1307	G	P-O5'	-7.08	1.52	1.59
1	6	1658	G	N3-C4	-7.08	1.30	1.35
36	5	1289	G	N1-C2	-7.08	1.32	1.37
36	5	589	A	N7-C5	-7.08	1.35	1.39
36	5	2996	U	C2-N3	7.08	1.42	1.37
36	5	2401	A	C5-C6	7.08	1.47	1.41
36	1	808	A	C5-C4	-7.07	1.33	1.38
36	5	2743	A	N9-C8	-7.07	1.32	1.37
36	5	2919	A	N3-C4	-7.07	1.30	1.34
36	5	3189	G	N1-C2	-7.07	1.32	1.37
36	5	1175	C	C2-N3	-7.07	1.30	1.35
36	5	1332	A	C5-C4	-7.06	1.33	1.38
36	1	2939	G	N9-C8	-7.06	1.32	1.37
36	5	818	C	N1-C6	-7.06	1.32	1.37
36	5	1202	A	N7-C5	-7.06	1.35	1.39
36	5	2936	A	N1-C2	-7.06	1.27	1.34
1	6	1504	G	N3-C4	-7.06	1.30	1.35
36	5	61	A	C6-N1	-7.05	1.30	1.35
36	5	637	C	C4-C5	-7.05	1.37	1.43
53	M7	138	LYS	CD-CE	7.05	1.68	1.51
36	5	2733	A	N9-C4	-7.05	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3344	A	N3-C4	-7.05	1.30	1.34
36	5	866	A	N9-C4	-7.04	1.33	1.37
36	5	1099	A	N9-C4	-7.04	1.33	1.37
36	1	422	A	C5-C4	-7.04	1.33	1.38
36	1	3006	A	N7-C5	-7.04	1.35	1.39
36	1	45	A	N9-C4	-7.04	1.33	1.37
36	1	2330	C	N3-C4	-7.04	1.29	1.33
36	5	522	A	N9-C4	-7.04	1.33	1.37
36	5	2968	G	N9-C4	-7.04	1.32	1.38
36	5	2872	A	C6-N1	7.03	1.40	1.35
36	5	1184	A	N9-C4	-7.03	1.33	1.37
36	5	1348	U	N1-C2	7.03	1.44	1.38
36	5	1310	G	C6-O6	-7.03	1.17	1.24
36	5	2813	A	N3-C4	-7.02	1.30	1.34
36	5	2833	A	N3-C4	-7.02	1.30	1.34
36	5	2359	C	N1-C6	-7.02	1.32	1.37
36	1	920	A	N3-C4	-7.02	1.30	1.34
38	8	111	A	N9-C4	-7.02	1.33	1.37
1	6	1005	A	C6-N1	-7.02	1.30	1.35
36	5	2837	A	C5-C4	-7.02	1.33	1.38
36	1	2207	A	N9-C4	7.01	1.42	1.37
36	5	416	A	N9-C4	-7.01	1.33	1.37
36	5	1150	A	N9-C4	-7.01	1.33	1.37
36	5	67	A	N9-C4	-7.01	1.33	1.37
52	M6	40	GLU	CB-CG	7.01	1.65	1.52
36	1	1504	A	N3-C4	-7.00	1.30	1.34
36	1	2404	A	C6-N1	7.00	1.40	1.35
36	5	2976	A	N9-C4	-7.00	1.33	1.37
36	1	860	G	N7-C5	-7.00	1.35	1.39
36	1	1409	G	N7-C5	-7.00	1.35	1.39
36	1	1880	U	C2-N3	-7.00	1.32	1.37
36	1	1401	A	N3-C4	-7.00	1.30	1.34
36	1	3084	C	N3-C4	-7.00	1.29	1.33
36	5	1332	A	N3-C4	-7.00	1.30	1.34
1	6	1201	G	N9-C4	-6.99	1.32	1.38
36	5	3206	C	N3-C4	-6.99	1.29	1.33
38	4	54	A	N7-C5	-6.99	1.35	1.39
36	5	289	A	N9-C4	-6.99	1.33	1.37
36	5	2665	U	C4-O4	-6.99	1.18	1.23
36	1	2303	A	N3-C4	-6.99	1.30	1.34
1	6	580	A	N9-C4	6.99	1.42	1.37
36	1	812	G	N3-C4	-6.99	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	787	G	N9-C8	-6.99	1.32	1.37
36	1	2689	A	N3-C4	-6.99	1.30	1.34
36	5	1298	C	N1-C6	-6.99	1.32	1.37
36	5	1404	G	C6-N1	-6.99	1.34	1.39
36	5	1437	C	N1-C6	-6.99	1.32	1.37
36	5	2876	C	C2-N3	-6.99	1.30	1.35
36	5	2367	A	C6-N1	-6.98	1.30	1.35
37	3	56	A	N9-C4	-6.98	1.33	1.37
36	1	89	A	N3-C4	-6.98	1.30	1.34
36	5	1107	C	N1-C6	-6.97	1.32	1.37
36	1	1131	G	N9-C4	-6.97	1.32	1.38
36	1	2960	C	C2-N3	-6.97	1.30	1.35
36	5	2884	C	N1-C6	-6.97	1.32	1.37
36	5	2898	G	N9-C8	-6.97	1.32	1.37
36	5	3016	A	C5-C6	-6.97	1.34	1.41
36	5	969	C	N1-C6	-6.97	1.32	1.37
36	1	3316	A	N9-C4	-6.97	1.33	1.37
1	6	1108	G	C6-N1	-6.97	1.34	1.39
36	5	2607	G	N7-C5	-6.97	1.35	1.39
36	1	911	C	N1-C6	-6.96	1.32	1.37
36	1	1100	U	C2-N3	-6.96	1.32	1.37
36	5	1163	A	C6-N1	-6.96	1.30	1.35
36	1	2404	A	N7-C5	6.96	1.43	1.39
36	5	2259	A	N9-C4	-6.96	1.33	1.37
36	1	2986	U	C4-C5	-6.96	1.37	1.43
36	5	3203	U	C2-N3	-6.95	1.32	1.37
36	5	2284	C	C4-C5	-6.95	1.37	1.43
36	5	2874	G	C6-O6	6.95	1.30	1.24
36	5	2956	A	C6-N1	-6.95	1.30	1.35
36	5	94	G	N7-C5	-6.94	1.35	1.39
36	5	943	U	N1-C2	-6.94	1.32	1.38
36	1	635	G	C6-O6	-6.94	1.18	1.24
36	1	806	A	C6-N1	-6.94	1.30	1.35
36	5	583	G	C5-C4	-6.94	1.33	1.38
36	5	3017	A	C6-N1	-6.94	1.30	1.35
1	6	746	A	C5-C6	-6.94	1.34	1.41
36	5	3106	A	N7-C5	-6.94	1.35	1.39
36	5	1146	C	C4-C5	-6.94	1.37	1.43
36	5	3242	G	C6-N1	-6.94	1.34	1.39
36	1	206	G	C5-C4	-6.93	1.33	1.38
36	1	660	A	N7-C5	-6.93	1.35	1.39
36	1	3142	A	C5-C4	-6.93	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1660	A	N7-C5	-6.93	1.35	1.39
36	5	3060	C	C4-C5	-6.93	1.37	1.43
36	1	1310	G	N9-C4	-6.93	1.32	1.38
36	1	85	A	N3-C4	-6.93	1.30	1.34
36	1	2308	C	N1-C6	-6.92	1.32	1.37
1	6	1116	A	N7-C5	-6.92	1.35	1.39
36	5	2903	A	N3-C4	-6.92	1.30	1.34
36	5	3140	G	C5-C6	-6.92	1.35	1.42
36	1	3150	A	N9-C4	-6.91	1.33	1.37
36	5	1867	A	N3-C4	-6.91	1.30	1.34
36	5	3045	G	N7-C5	-6.91	1.35	1.39
36	1	2796	G	N1-C2	-6.91	1.32	1.37
36	1	952	A	N3-C4	-6.91	1.30	1.34
36	5	897	U	N1-C2	-6.91	1.32	1.38
36	5	1405	U	N1-C2	-6.91	1.32	1.38
36	1	1153	A	N7-C5	-6.90	1.35	1.39
36	1	218	G	C5-C4	-6.90	1.33	1.38
36	1	918	C	N3-C4	-6.90	1.29	1.33
36	1	2914	G	N3-C4	-6.90	1.30	1.35
36	5	2405	C	N3-C4	-6.90	1.29	1.33
36	1	272	G	N9-C4	-6.90	1.32	1.38
36	5	2402	A	N3-C4	-6.90	1.30	1.34
1	2	104	A	N9-C4	6.90	1.42	1.37
36	1	589	A	N9-C8	-6.90	1.32	1.37
36	5	2246	G	N7-C5	-6.89	1.35	1.39
36	1	2185	G	N7-C5	-6.89	1.35	1.39
36	5	3016	A	C6-N6	-6.89	1.28	1.33
36	1	656	A	C5-C4	-6.89	1.33	1.38
36	1	1186	G	N1-C2	-6.89	1.32	1.37
36	5	3005	A	C5-C6	-6.89	1.34	1.41
36	5	651	G	N7-C5	-6.88	1.35	1.39
36	5	1150	A	N7-C5	-6.88	1.35	1.39
36	5	654	C	N1-C2	-6.88	1.33	1.40
36	1	338	A	N7-C5	-6.88	1.35	1.39
36	5	352	A	N9-C4	-6.88	1.33	1.37
36	5	1318	A	N3-C4	-6.88	1.30	1.34
36	5	3127	A	C6-N6	-6.88	1.28	1.33
36	5	3172	A	C5-C6	-6.88	1.34	1.41
36	1	1583	A	N3-C4	-6.88	1.30	1.34
36	1	2802	A	N3-C4	-6.88	1.30	1.34
36	5	1924	U	N1-C2	-6.88	1.32	1.38
36	1	1146	C	N1-C6	-6.87	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	521	A	N3-C4	-6.87	1.30	1.34
36	5	1076	C	N1-C6	-6.87	1.33	1.37
36	5	1136	A	N7-C5	-6.87	1.35	1.39
36	5	2689	A	C6-N1	-6.87	1.30	1.35
36	1	2878	G	N9-C4	-6.87	1.32	1.38
36	5	2145	A	C5-C6	-6.87	1.34	1.41
36	5	2284	C	N3-C4	-6.87	1.29	1.33
36	1	589	A	C5-C4	-6.87	1.33	1.38
36	5	2616	C	N1-C6	-6.87	1.33	1.37
1	6	427	C	N3-C4	-6.87	1.29	1.33
36	5	1131	G	N3-C4	-6.87	1.30	1.35
36	5	3038	U	N3-C4	-6.87	1.32	1.38
36	1	2802	A	C6-N1	-6.87	1.30	1.35
36	1	587	U	N1-C2	-6.87	1.32	1.38
36	1	2364	G	N9-C8	-6.86	1.33	1.37
36	1	2985	C	N3-C4	-6.86	1.29	1.33
36	5	406	G	N9-C4	-6.86	1.32	1.38
36	5	1477	A	C6-N1	-6.86	1.30	1.35
36	1	2377	G	C6-O6	-6.86	1.18	1.24
36	1	2287	C	N1-C6	-6.86	1.33	1.37
36	1	1120	A	N3-C4	-6.86	1.30	1.34
36	1	1893	A	N3-C4	-6.86	1.30	1.34
57	n1	104	GLU	CG-CD	6.86	1.62	1.51
36	5	1141	C	N3-C4	-6.86	1.29	1.33
36	5	3146	G	C8-N7	-6.86	1.26	1.30
37	7	72	A	N9-C4	6.86	1.42	1.37
1	6	797	G	C5-C4	-6.85	1.33	1.38
36	5	2853	A	C5-C6	-6.85	1.34	1.41
71	O5	64	GLU	CG-CD	6.85	1.62	1.51
1	6	1537	C	C5-C6	6.85	1.39	1.34
36	5	2821	C	N3-C4	6.85	1.38	1.33
36	1	1340	G	N7-C5	-6.85	1.35	1.39
36	5	695	C	N1-C6	-6.85	1.33	1.37
36	5	3036	G	N3-C4	-6.85	1.30	1.35
37	7	88	G	N7-C5	-6.85	1.35	1.39
36	1	654	C	N1-C6	-6.84	1.33	1.37
36	5	21	G	N3-C4	-6.84	1.30	1.35
36	5	1456	A	N3-C4	-6.84	1.30	1.34
1	2	1270	G	N7-C5	-6.84	1.35	1.39
36	1	1139	G	N9-C4	-6.84	1.32	1.38
36	1	2969	A	N3-C4	-6.84	1.30	1.34
36	5	2931	C	C4-C5	-6.84	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1554	U	C2-N3	6.84	1.42	1.37
36	5	1149	G	C6-N1	6.84	1.44	1.39
36	5	2847	A	N3-C4	-6.84	1.30	1.34
36	5	2967	A	N3-C4	-6.84	1.30	1.34
1	6	100	A	C5-C6	-6.84	1.34	1.41
1	6	971	A	N9-C4	-6.84	1.33	1.37
36	5	2895	G	N3-C4	-6.84	1.30	1.35
36	5	3127	A	C6-N1	-6.84	1.30	1.35
36	1	344	A	N9-C4	-6.83	1.33	1.37
36	1	2394	G	N9-C8	-6.83	1.33	1.37
36	1	1428	A	C5-C6	-6.83	1.34	1.41
36	1	2960	C	N3-C4	-6.83	1.29	1.33
1	6	441	A	N7-C5	-6.83	1.35	1.39
36	5	1403	C	N1-C6	-6.83	1.33	1.37
36	1	2821	C	N3-C4	6.83	1.38	1.33
36	1	904	A	N9-C4	-6.83	1.33	1.37
36	1	2386	A	N3-C4	-6.83	1.30	1.34
36	1	3273	A	C5-C4	-6.82	1.33	1.38
36	5	3226	A	N3-C4	-6.82	1.30	1.34
36	1	34	A	N3-C4	-6.82	1.30	1.34
36	1	1881	A	N3-C4	-6.82	1.30	1.34
36	5	2184	U	C2-N3	-6.82	1.32	1.37
36	1	2639	G	N3-C4	-6.82	1.30	1.35
36	1	1366	A	N7-C5	-6.81	1.35	1.39
36	1	2834	G	N9-C4	-6.81	1.32	1.38
36	5	2994	A	C6-N1	-6.81	1.30	1.35
36	1	2617	U	N3-C4	-6.81	1.32	1.38
36	1	3130	A	C6-N1	-6.81	1.30	1.35
36	5	3091	A	N3-C4	-6.81	1.30	1.34
36	1	1901	A	N3-C4	-6.80	1.30	1.34
36	1	2875	U	C2-O2	6.80	1.28	1.22
36	5	1289	G	C6-N1	-6.80	1.34	1.39
36	1	1887	A	C5-C6	-6.80	1.34	1.41
1	6	1732	A	N9-C4	-6.80	1.33	1.37
36	1	2919	A	N9-C4	-6.79	1.33	1.37
36	1	663	C	N1-C6	-6.79	1.33	1.37
36	1	218	G	N9-C4	-6.79	1.32	1.38
36	1	2633	U	N1-C2	-6.79	1.32	1.38
47	M0	186	GLU	CG-CD	6.79	1.62	1.51
36	5	2099	A	N9-C4	6.79	1.42	1.37
36	1	358	G	N9-C4	-6.79	1.32	1.38
36	1	364	G	N7-C5	-6.79	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2385	G	N9-C4	-6.78	1.32	1.38
36	5	3127	A	N7-C5	-6.78	1.35	1.39
36	1	952	A	N9-C4	-6.78	1.33	1.37
36	1	2143	A	C5-C4	-6.78	1.34	1.38
36	5	3272	C	N3-C4	-6.78	1.29	1.33
36	5	217	U	N3-C4	-6.78	1.32	1.38
36	1	1913	A	N9-C4	-6.77	1.33	1.37
36	5	2290	C	N1-C6	-6.77	1.33	1.37
36	5	2794	G	C5-C4	-6.77	1.33	1.38
36	1	2205	U	N1-C2	6.77	1.44	1.38
36	1	2809	C	N1-C6	-6.77	1.33	1.37
36	5	1217	A	N3-C4	-6.76	1.30	1.34
36	5	3045	G	C6-N1	-6.76	1.34	1.39
36	5	2892	A	N7-C5	-6.76	1.35	1.39
36	1	282	G	N1-C2	-6.76	1.32	1.37
36	1	1103	A	C5-C4	6.76	1.43	1.38
1	6	1093	A	N9-C4	6.76	1.42	1.37
36	5	3043	C	N3-C4	-6.76	1.29	1.33
36	1	1887	A	N7-C5	-6.76	1.35	1.39
36	1	2956	A	C5-C6	-6.76	1.34	1.41
36	5	1115	G	C5-C6	-6.76	1.35	1.42
36	1	635	G	C6-N1	-6.76	1.34	1.39
1	6	1762	A	N3-C4	-6.76	1.30	1.34
36	5	402	A	N3-C4	-6.76	1.30	1.34
36	5	2151	C	N1-C2	-6.76	1.33	1.40
36	5	3199	G	C5-C4	-6.75	1.33	1.38
1	6	46	A	C5-C6	-6.75	1.34	1.41
36	5	633	C	N1-C6	-6.75	1.33	1.37
36	5	2864	A	C5-C6	-6.75	1.34	1.41
25	d3	63	GLN	CG-CD	6.75	1.66	1.51
36	5	3275	U	N1-C2	6.75	1.44	1.38
36	1	2613	U	N1-C2	-6.75	1.32	1.38
1	6	19	A	N3-C4	-6.75	1.30	1.34
36	5	3209	A	N3-C4	6.75	1.38	1.34
36	5	1430	U	N1-C6	-6.74	1.31	1.38
36	1	2748	A	N9-C4	-6.74	1.33	1.37
36	1	109	A	N3-C4	-6.74	1.30	1.34
1	6	179	A	N9-C4	6.74	1.41	1.37
36	1	2374	C	N3-C4	-6.74	1.29	1.33
36	1	900	G	C5-C4	-6.74	1.33	1.38
52	M6	40	GLU	CG-CD	6.74	1.62	1.51
1	6	391	A	N9-C4	-6.74	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	628	A	N3-C4	-6.73	1.30	1.34
36	1	2302	G	N1-C2	-6.73	1.32	1.37
36	5	1433	A	N7-C5	-6.73	1.35	1.39
36	5	2946	A	N9-C4	-6.73	1.33	1.37
40	l3	66	LYS	CD-CE	6.73	1.68	1.51
36	5	2938	G	C5-C4	-6.73	1.33	1.38
36	1	1429	G	N1-C2	-6.72	1.32	1.37
36	1	2948	C	N1-C6	-6.72	1.33	1.37
36	5	189	G	C6-N1	-6.72	1.34	1.39
36	1	211	A	N9-C4	-6.72	1.33	1.37
36	1	1886	A	N9-C4	-6.72	1.33	1.37
36	5	924	G	N3-C4	-6.72	1.30	1.35
36	5	951	A	N9-C4	-6.72	1.33	1.37
36	5	2247	G	N1-C2	-6.72	1.32	1.37
36	5	2886	U	C2-N3	-6.72	1.33	1.37
36	5	3030	G	C5-C4	-6.72	1.33	1.38
36	5	3226	A	N9-C4	-6.72	1.33	1.37
36	1	693	A	N9-C4	-6.71	1.33	1.37
36	5	1300	G	C8-N7	-6.71	1.26	1.30
37	7	5	G	C5-C4	-6.71	1.33	1.38
37	7	29	C	N1-C6	-6.71	1.33	1.37
36	1	2137	U	N1-C6	-6.71	1.31	1.38
36	5	1845	G	C5-C4	-6.71	1.33	1.38
36	5	2837	A	N3-C4	-6.71	1.30	1.34
36	5	2911	A	N7-C5	-6.71	1.35	1.39
36	5	2980	U	C4-O4	-6.71	1.18	1.23
36	1	920	A	C6-N1	-6.70	1.30	1.35
36	5	2126	A	C5-C4	-6.70	1.34	1.38
36	1	34	A	N9-C4	-6.70	1.33	1.37
36	1	343	U	N1-C6	-6.70	1.31	1.38
36	5	958	C	C2-N3	-6.70	1.30	1.35
36	1	2385	G	C5-C4	-6.70	1.33	1.38
36	5	2956	A	C5-C6	-6.70	1.35	1.41
36	5	2963	C	N1-C2	-6.70	1.33	1.40
36	1	1306	G	N7-C5	-6.70	1.35	1.39
36	1	2954	U	C2-N3	6.70	1.42	1.37
20	c8	47	CYS	CB-SG	-6.70	1.70	1.82
36	5	1867	A	C6-N1	-6.70	1.30	1.35
36	1	1432	C	C2-N3	-6.69	1.30	1.35
1	6	310	C	C4-C5	-6.69	1.37	1.43
38	8	12	A	N9-C4	6.69	1.41	1.37
36	1	220	G	N3-C4	-6.69	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	52	A	N3-C4	-6.69	1.30	1.34
36	5	3295	A	C6-N1	-6.69	1.30	1.35
36	5	1883	A	N9-C4	-6.69	1.33	1.37
56	n0	128	GLU	CB-CG	6.69	1.64	1.52
36	1	2847	A	N9-C4	-6.69	1.33	1.37
36	5	2813	A	N9-C4	-6.69	1.33	1.37
36	1	904	A	N3-C4	-6.68	1.30	1.34
69	O3	71	VAL	CB-CG1	-6.68	1.38	1.52
36	5	1064	A	N9-C4	-6.68	1.33	1.37
36	5	1296	C	N3-C4	-6.68	1.29	1.33
36	1	361	A	N9-C4	-6.68	1.33	1.37
1	2	1654	G	N1-C2	-6.68	1.32	1.37
1	6	46	A	N7-C5	-6.68	1.35	1.39
1	6	758	U	N3-C4	-6.68	1.32	1.38
1	6	982	U	C2-N3	-6.68	1.33	1.37
36	5	1116	G	N9-C8	-6.68	1.33	1.37
36	5	1173	U	N3-C4	-6.68	1.32	1.38
36	5	2404	A	C6-N1	6.68	1.40	1.35
36	5	2416	U	C2-N3	-6.68	1.33	1.37
36	5	1197	A	N9-C4	-6.68	1.33	1.37
36	1	2762	A	C5-C4	-6.68	1.34	1.38
1	6	369	A	N9-C4	6.68	1.41	1.37
1	6	758	U	C2-N3	-6.68	1.33	1.37
36	5	900	G	N7-C5	-6.68	1.35	1.39
36	1	1915	A	N9-C4	-6.67	1.33	1.37
38	8	15	G	C6-N1	-6.67	1.34	1.39
36	5	647	A	N9-C4	-6.67	1.33	1.37
36	1	2979	U	P-O5'	-6.67	1.53	1.59
36	5	973	A	N7-C5	-6.67	1.35	1.39
36	1	1158	A	C5-C4	-6.67	1.34	1.38
36	1	100	A	N7-C5	-6.67	1.35	1.39
36	5	583	G	N7-C5	-6.67	1.35	1.39
36	1	2129	U	C2-N3	-6.66	1.33	1.37
1	6	23	G	N3-C4	-6.66	1.30	1.35
36	5	1306	G	N3-C4	-6.66	1.30	1.35
36	5	3295	A	N3-C4	-6.66	1.30	1.34
36	1	1440	G	C5-C4	-6.66	1.33	1.38
1	6	1087	A	C6-N1	-6.66	1.30	1.35
36	5	2689	A	N7-C5	-6.66	1.35	1.39
36	5	2374	C	N1-C2	-6.66	1.33	1.40
1	6	992	A	N7-C5	-6.66	1.35	1.39
36	1	1061	A	N9-C8	-6.65	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	585	A	C5-C4	-6.65	1.34	1.38
38	4	3	A	C5-C4	-6.65	1.34	1.38
36	5	2276	G	N3-C4	-6.65	1.30	1.35
36	5	2847	A	C5-C6	-6.65	1.35	1.41
36	1	2811	A	C5-C6	-6.65	1.35	1.41
1	6	797	G	N9-C4	-6.65	1.32	1.38
36	5	1128	U	C2-O2	-6.65	1.16	1.22
36	5	1887	A	N9-C4	-6.65	1.33	1.37
36	5	2313	A	N3-C4	-6.65	1.30	1.34
36	5	2637	A	C5-C6	-6.64	1.35	1.41
1	6	1337	A	N9-C4	-6.64	1.33	1.37
36	1	1369	A	N7-C5	-6.64	1.35	1.39
36	1	1398	U	C2-O2	-6.64	1.16	1.22
36	5	1417	G	C6-N1	-6.64	1.34	1.39
36	5	2941	A	N7-C5	-6.64	1.35	1.39
36	5	990	U	C2-N3	-6.64	1.33	1.37
36	5	1481	A	N7-C5	-6.64	1.35	1.39
1	2	1751	C	C2-N3	-6.63	1.30	1.35
36	1	2932	U	N3-C4	-6.63	1.32	1.38
1	6	342	C	N1-C6	-6.63	1.33	1.37
36	5	559	A	N7-C5	-6.63	1.35	1.39
36	5	2139	A	C6-N1	-6.63	1.30	1.35
36	5	2915	U	C4-C5	-6.63	1.37	1.43
40	13	251	CYS	CB-SG	-6.63	1.71	1.82
36	1	1320	C	N1-C6	-6.63	1.33	1.37
36	5	2915	U	N1-C2	-6.63	1.32	1.38
36	1	1910	A	C6-N1	-6.63	1.30	1.35
36	1	2831	G	C5-C6	-6.63	1.35	1.42
1	6	401	A	N3-C4	-6.63	1.30	1.34
36	5	944	C	N1-C6	-6.63	1.33	1.37
36	1	85	A	C6-N1	-6.63	1.30	1.35
36	5	920	A	C5-C6	-6.63	1.35	1.41
37	7	22	A	C6-N1	-6.62	1.30	1.35
36	1	85	A	N7-C5	-6.62	1.35	1.39
36	5	1310	G	N7-C5	-6.62	1.35	1.39
36	5	2335	G	C5-C4	-6.62	1.33	1.38
36	1	1435	A	C6-N1	-6.62	1.30	1.35
36	5	1899	G	N9-C8	-6.62	1.33	1.37
36	5	425	G	N9-C4	-6.62	1.32	1.38
36	1	1387	G	C6-N1	-6.61	1.34	1.39
1	6	1777	G	N7-C5	-6.61	1.35	1.39
36	5	2728	G	N7-C5	-6.61	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1112	G	N3-C4	-6.61	1.30	1.35
36	1	788	C	N1-C6	-6.61	1.33	1.37
36	1	2994	A	N7-C5	-6.61	1.35	1.39
1	6	1763	A	N3-C4	-6.60	1.30	1.34
36	5	2796	G	C5-C4	-6.60	1.33	1.38
36	1	327	A	C5-C6	-6.60	1.35	1.41
36	1	943	U	C2-O2	-6.60	1.16	1.22
1	6	26	A	C6-N6	-6.60	1.28	1.33
36	5	1178	G	N1-C2	-6.60	1.32	1.37
36	5	3141	A	N3-C4	-6.60	1.30	1.34
38	8	2	A	C5-C6	-6.60	1.35	1.41
36	5	1515	A	N9-C4	-6.59	1.33	1.37
1	2	353	A	N7-C5	-6.59	1.35	1.39
36	1	2398	A	N9-C8	-6.59	1.32	1.37
36	1	3009	G	N7-C5	-6.59	1.35	1.39
36	5	2856	G	N7-C5	-6.59	1.35	1.39
36	1	96	G	N9-C4	-6.59	1.32	1.38
1	6	1226	A	N9-C4	6.59	1.41	1.37
36	5	2277	C	N1-C6	-6.59	1.33	1.37
36	1	709	A	C5-C4	-6.59	1.34	1.38
36	1	2377	G	N3-C4	-6.58	1.30	1.35
36	1	3005	A	N3-C4	-6.58	1.30	1.34
36	5	3047	U	N1-C2	-6.58	1.32	1.38
36	1	1159	A	N7-C5	-6.58	1.35	1.39
1	6	427	C	N1-C6	-6.58	1.33	1.37
36	5	1081	U	N1-C2	6.58	1.44	1.38
37	3	82	G	C6-N1	-6.58	1.34	1.39
36	1	2733	A	C5-C4	-6.58	1.34	1.38
36	5	2404	A	C6-N6	6.58	1.39	1.33
36	5	2828	G	N1-C2	-6.58	1.32	1.37
36	1	1704	A	N9-C4	-6.57	1.33	1.37
36	1	2613	U	C4-O4	6.57	1.28	1.23
1	6	1517	U	N1-C2	-6.57	1.32	1.38
36	5	2968	G	N3-C4	-6.57	1.30	1.35
36	5	1911	A	N3-C4	-6.57	1.30	1.34
36	5	2816	G	N3-C4	-6.57	1.30	1.35
36	1	796	U	C4-O4	-6.57	1.18	1.23
36	1	2365	C	N3-C4	-6.57	1.29	1.33
36	5	433	A	C5-C6	-6.57	1.35	1.41
36	5	3088	G	N7-C5	-6.57	1.35	1.39
1	6	388	G	N3-C4	-6.57	1.30	1.35
36	5	2296	A	N9-C8	-6.57	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2796	G	C8-N7	-6.57	1.27	1.30
47	m0	8	CYS	CB-SG	-6.57	1.71	1.82
36	1	1046	A	N9-C4	-6.57	1.33	1.37
37	7	88	G	C6-N1	-6.57	1.34	1.39
36	5	3004	C	C4-C5	-6.56	1.37	1.43
36	5	2750	U	C2-N3	-6.56	1.33	1.37
36	5	2332	A	C5-C4	-6.56	1.34	1.38
1	6	565	C	N1-C6	-6.56	1.33	1.37
36	5	2922	G	N3-C4	-6.56	1.30	1.35
36	5	3344	A	C5-C4	-6.56	1.34	1.38
36	1	32	U	N1-C6	-6.56	1.32	1.38
36	1	907	G	C2-N3	6.56	1.38	1.32
36	1	916	G	N3-C4	-6.56	1.30	1.35
36	5	2418	G	N1-C2	6.56	1.43	1.37
36	1	2659	G	N7-C5	-6.55	1.35	1.39
1	6	1112	G	N9-C4	-6.55	1.32	1.38
36	5	1310	G	C6-N1	-6.55	1.34	1.39
36	5	3061	G	N7-C5	-6.55	1.35	1.39
36	5	2977	G	N3-C4	-6.55	1.30	1.35
1	2	1631	A	N9-C4	-6.55	1.33	1.37
36	1	1400	G	N9-C8	-6.55	1.33	1.37
37	7	24	A	C6-N1	-6.55	1.30	1.35
36	1	345	G	N9-C8	-6.55	1.33	1.37
36	5	1290	A	C5-C6	-6.55	1.35	1.41
36	1	2412	G	C2-N3	-6.55	1.27	1.32
36	5	2743	A	C5-C4	-6.55	1.34	1.38
36	5	1350	A	N9-C4	6.54	1.41	1.37
36	5	2690	G	N9-C4	-6.54	1.32	1.38
36	5	3173	G	C6-N1	-6.54	1.34	1.39
38	8	133	G	N9-C4	-6.54	1.32	1.38
36	5	1212	A	C6-N6	-6.54	1.28	1.33
36	5	2117	A	N3-C4	-6.54	1.30	1.34
36	5	1370	G	C6-O6	-6.54	1.18	1.24
36	1	1159	A	N3-C4	-6.53	1.30	1.34
36	1	2145	A	C6-N6	-6.53	1.28	1.33
36	1	820	A	C6-N1	-6.53	1.30	1.35
36	5	1180	A	N3-C4	-6.53	1.30	1.34
36	5	3305	A	N3-C4	-6.53	1.30	1.34
36	1	1656	A	N9-C4	-6.53	1.33	1.37
36	1	659	G	C5-C4	-6.53	1.33	1.38
36	5	588	G	N7-C5	-6.53	1.35	1.39
36	5	1309	U	N1-C2	-6.53	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1432	C	C4-C5	-6.53	1.37	1.43
36	1	935	U	C2-O2	-6.52	1.16	1.22
36	5	1150	A	N3-C4	-6.52	1.30	1.34
1	2	599	A	N9-C4	6.52	1.41	1.37
36	1	33	G	N3-C4	-6.52	1.30	1.35
36	1	2424	A	N3-C4	-6.52	1.30	1.34
1	6	601	A	C5-C4	-6.52	1.34	1.38
36	5	218	G	P-O5'	-6.52	1.53	1.59
36	5	1370	G	N1-C2	-6.52	1.32	1.37
36	1	1309	U	N1-C2	-6.51	1.32	1.38
36	5	2333	C	N1-C6	-6.51	1.33	1.37
36	1	860	G	C5-C6	-6.51	1.35	1.42
37	3	95	A	N3-C4	-6.51	1.30	1.34
36	5	937	G	N9-C8	-6.51	1.33	1.37
36	1	1195	A	N7-C5	-6.51	1.35	1.39
36	5	857	G	N7-C5	-6.51	1.35	1.39
36	5	1295	G	N1-C2	-6.51	1.32	1.37
36	1	2311	G	N7-C5	-6.51	1.35	1.39
36	5	408	A	C6-N1	-6.51	1.30	1.35
36	5	3206	C	N1-C6	-6.51	1.33	1.37
1	6	901	G	C6-N1	6.50	1.44	1.39
36	1	335	G	C2-N3	-6.50	1.27	1.32
36	5	425	G	N7-C5	-6.50	1.35	1.39
36	5	962	A	N7-C5	-6.50	1.35	1.39
36	5	2644	C	N1-C2	-6.50	1.33	1.40
36	5	3130	A	C5-C4	-6.50	1.34	1.38
1	2	757	A	N9-C4	6.50	1.41	1.37
36	1	780	A	N7-C5	-6.50	1.35	1.39
36	1	505	G	N3-C4	-6.50	1.30	1.35
36	1	1144	U	N1-C2	-6.50	1.32	1.38
36	1	2363	A	N9-C4	-6.50	1.33	1.37
36	1	358	G	C5-C6	-6.49	1.35	1.42
36	5	424	G	C5-C6	-6.49	1.35	1.42
1	2	1750	A	N3-C4	-6.49	1.30	1.34
36	5	3044	G	N7-C5	-6.49	1.35	1.39
37	7	14	U	C2-N3	-6.49	1.33	1.37
36	1	929	A	C5-C6	-6.49	1.35	1.41
36	5	1892	G	C6-N1	-6.49	1.35	1.39
36	5	2889	C	C2-N3	-6.49	1.30	1.35
36	5	2950	G	C5-C6	-6.49	1.35	1.42
36	1	1401	A	N7-C5	-6.48	1.35	1.39
36	5	1139	G	N3-C4	-6.48	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2396	G	N9-C4	-6.48	1.32	1.38
36	5	2371	G	N9-C8	-6.48	1.33	1.37
36	5	1408	G	C8-N7	-6.48	1.27	1.30
36	1	3045	G	N7-C5	-6.48	1.35	1.39
36	5	2913	C	N1-C6	-6.48	1.33	1.37
56	n0	34	GLU	CG-CD	6.48	1.61	1.51
1	6	39	A	N3-C4	-6.48	1.30	1.34
36	1	364	G	N9-C4	-6.47	1.32	1.38
36	1	2878	G	C6-N1	-6.47	1.35	1.39
36	5	2817	A	N3-C4	-6.47	1.30	1.34
36	1	109	A	N9-C4	-6.47	1.33	1.37
36	1	367	A	N9-C8	-6.47	1.32	1.37
36	5	2303	A	C5-C6	-6.47	1.35	1.41
36	1	585	A	N7-C5	-6.47	1.35	1.39
36	1	1306	G	N3-C4	-6.47	1.30	1.35
36	5	1060	U	C2-N3	-6.47	1.33	1.37
36	5	2877	G	N1-C2	-6.47	1.32	1.37
36	5	2863	G	N7-C5	-6.46	1.35	1.39
1	6	1002	G	N9-C4	-6.46	1.32	1.38
1	6	1535	U	N3-C4	-6.46	1.32	1.38
1	6	1765	A	N3-C4	-6.46	1.30	1.34
36	5	1303	A	N9-C4	-6.46	1.33	1.37
36	1	25	U	C2-N3	6.46	1.42	1.37
36	1	1440	G	N1-C2	-6.46	1.32	1.37
36	1	2801	A	C5-C6	-6.46	1.35	1.41
36	5	406	G	N3-C4	-6.46	1.30	1.35
36	5	1886	A	C6-N1	-6.45	1.31	1.35
36	5	500	C	N1-C6	-6.45	1.33	1.37
36	5	3140	G	N1-C2	-6.45	1.32	1.37
36	1	2834	G	N9-C8	-6.45	1.33	1.37
36	5	2119	A	N7-C5	-6.45	1.35	1.39
1	6	992	A	C5-C6	-6.45	1.35	1.41
36	5	2375	G	N9-C4	-6.45	1.32	1.38
36	1	2620	G	C2-N3	-6.44	1.27	1.32
36	5	2980	U	C2-N3	-6.44	1.33	1.37
36	1	220	G	N7-C5	-6.44	1.35	1.39
36	1	1309	U	C2-O2	-6.44	1.16	1.22
36	1	1534	A	N3-C4	-6.44	1.30	1.34
36	5	2848	G	N3-C4	-6.44	1.30	1.35
36	5	235	A	N9-C4	-6.44	1.33	1.37
36	5	283	G	N1-C2	-6.44	1.32	1.37
36	5	3118	C	N3-C4	-6.44	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	971	G	N9-C8	-6.44	1.33	1.37
57	n1	63	VAL	CA-CB	-6.44	1.41	1.54
36	1	1460	A	C5-C4	-6.43	1.34	1.38
36	5	2755	C	N1-C6	-6.43	1.33	1.37
1	6	1651	A	C5-C6	-6.43	1.35	1.41
36	5	2307	G	N3-C4	-6.43	1.30	1.35
36	5	1188	U	N1-C6	-6.43	1.32	1.38
36	5	1913	A	C5-C6	-6.43	1.35	1.41
36	1	697	A	N3-C4	6.42	1.38	1.34
36	1	1135	A	N9-C4	-6.42	1.33	1.37
36	1	1398	U	N1-C2	-6.42	1.32	1.38
36	5	278	U	N3-C4	-6.42	1.32	1.38
36	5	942	U	C4-O4	6.42	1.28	1.23
36	1	1094	U	C2-N3	6.42	1.42	1.37
36	1	432	G	N3-C4	-6.42	1.30	1.35
36	1	2424	A	N9-C4	-6.42	1.33	1.37
1	6	151	G	N3-C4	-6.42	1.30	1.35
36	5	2875	U	C4-O4	6.42	1.28	1.23
36	5	3315	G	C6-N1	-6.42	1.35	1.39
36	5	52	A	N9-C4	-6.41	1.34	1.37
36	5	1314	C	N1-C6	-6.41	1.33	1.37
36	5	2326	A	N7-C5	-6.41	1.35	1.39
36	1	322	U	C2-N3	-6.41	1.33	1.37
1	6	1592	A	N3-C4	-6.41	1.31	1.34
1	2	6	G	N9-C4	6.41	1.43	1.38
36	1	916	G	N9-C4	-6.41	1.32	1.38
1	2	1751	C	N3-C4	-6.41	1.29	1.33
36	1	2641	U	C4-O4	-6.41	1.18	1.23
36	1	2971	A	C6-N1	6.41	1.40	1.35
36	5	2748	A	C6-N1	-6.41	1.31	1.35
36	5	1929	G	N9-C4	-6.40	1.32	1.38
36	5	2116	G	N7-C5	-6.40	1.35	1.39
36	5	2634	U	C4-O4	-6.40	1.18	1.23
37	7	42	A	N7-C5	-6.40	1.35	1.39
1	6	410	A	N7-C5	-6.40	1.35	1.39
36	5	2849	C	N1-C2	-6.40	1.33	1.40
36	5	2890	A	N3-C4	-6.40	1.31	1.34
36	1	1867	A	N3-C4	-6.39	1.31	1.34
36	5	428	A	N7-C5	-6.39	1.35	1.39
36	5	929	A	C5-C4	-6.39	1.34	1.38
36	5	1127	G	N7-C5	-6.39	1.35	1.39
36	5	1897	G	C5-C6	-6.39	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	572	A	N3-C4	-6.39	1.31	1.34
36	5	2872	A	N3-C4	6.39	1.38	1.34
36	5	2983	C	C4-C5	-6.39	1.37	1.43
37	7	99	G	C5-C4	-6.39	1.33	1.38
1	6	349	U	C2-N3	-6.39	1.33	1.37
36	5	2926	A	N3-C4	-6.39	1.31	1.34
1	6	1653	C	N1-C6	-6.39	1.33	1.37
1	6	1750	A	N3-C4	-6.39	1.31	1.34
36	5	2172	A	C5-C6	-6.38	1.35	1.41
36	5	2416	U	C2-O2	-6.38	1.16	1.22
36	1	3260	G	N3-C4	-6.38	1.30	1.35
36	5	1834	U	C4-O4	6.38	1.28	1.23
36	5	3094	A	C6-N1	-6.38	1.31	1.35
36	1	2899	C	N3-C4	-6.38	1.29	1.33
1	2	1208	A	N3-C4	-6.38	1.31	1.34
38	4	104	A	N3-C4	-6.38	1.31	1.34
36	1	2651	G	N9-C8	-6.37	1.33	1.37
36	5	1205	A	C6-N6	-6.37	1.28	1.33
36	1	3011	A	C6-N1	-6.37	1.31	1.35
36	5	2919	A	N9-C4	-6.37	1.34	1.37
36	1	2756	C	N3-C4	-6.37	1.29	1.33
36	5	1129	A	N7-C5	-6.37	1.35	1.39
36	5	1174	G	N7-C5	-6.37	1.35	1.39
47	m0	11	TYR	CE2-CZ	6.37	1.46	1.38
36	1	1402	C	N3-C4	-6.37	1.29	1.33
1	6	46	A	C6-N1	-6.37	1.31	1.35
36	5	1795	U	C2-N3	-6.37	1.33	1.37
36	5	2969	A	N9-C4	-6.37	1.34	1.37
36	1	2326	A	C6-N1	-6.36	1.31	1.35
36	1	2910	A	C6-N1	-6.36	1.31	1.35
36	5	1286	A	N9-C4	-6.36	1.34	1.37
36	5	2830	G	C6-N1	-6.36	1.35	1.39
36	1	1169	A	N3-C4	-6.36	1.31	1.34
36	1	1357	G	N7-C5	-6.36	1.35	1.39
36	5	365	A	C5-C6	-6.36	1.35	1.41
36	5	3096	C	N1-C6	-6.36	1.33	1.37
36	1	1333	C	C4-N4	-6.36	1.28	1.33
36	1	1340	G	C6-O6	-6.36	1.18	1.24
36	1	1905	G	N9-C4	-6.36	1.32	1.38
36	1	2386	A	C5-C4	-6.36	1.34	1.38
36	1	2830	G	N9-C4	-6.36	1.32	1.38
36	5	2969	A	N7-C5	-6.36	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1321	G	C5-C4	-6.35	1.33	1.38
38	4	53	A	N3-C4	-6.35	1.31	1.34
36	5	577	C	N3-C4	-6.35	1.29	1.33
36	1	100	A	N3-C4	-6.35	1.31	1.34
36	5	1212	A	C5-C6	-6.35	1.35	1.41
36	5	2108	C	N1-C6	-6.35	1.33	1.37
36	5	2385	G	N3-C4	-6.35	1.31	1.35
1	2	47	A	N7-C5	-6.35	1.35	1.39
36	1	2145	A	C5-C6	-6.35	1.35	1.41
36	5	1198	C	N3-C4	-6.35	1.29	1.33
36	5	2407	C	C4-C5	-6.35	1.37	1.43
36	5	520	U	N1-C2	6.35	1.44	1.38
36	5	1189	C	N1-C6	-6.35	1.33	1.37
36	1	1311	G	N9-C8	-6.34	1.33	1.37
1	6	1765	A	C6-N1	-6.34	1.31	1.35
36	5	3094	A	N3-C4	-6.34	1.31	1.34
36	1	189	G	C5-C4	-6.34	1.33	1.38
36	1	2289	U	N1-C6	-6.34	1.32	1.38
37	3	65	G	N9-C4	-6.34	1.32	1.38
36	5	932	U	C4-O4	-6.34	1.18	1.23
36	5	1133	A	N7-C5	-6.34	1.35	1.39
36	5	3190	C	N1-C6	-6.34	1.33	1.37
36	5	423	A	N7-C5	-6.34	1.35	1.39
36	5	1922	A	N9-C4	-6.34	1.34	1.37
36	1	157	A	N3-C4	-6.34	1.31	1.34
36	1	914	A	N9-C4	6.34	1.41	1.37
36	1	2404	A	C2-N3	6.34	1.39	1.33
36	5	960	U	C2-O2	6.34	1.28	1.22
36	5	2816	G	C2-N3	-6.34	1.27	1.32
36	5	3122	A	N7-C5	-6.33	1.35	1.39
36	5	3207	U	C5-C6	6.33	1.39	1.34
36	1	32	U	C5-C6	-6.33	1.28	1.34
36	1	1444	G	N7-C5	-6.33	1.35	1.39
1	6	102	U	N1-C2	-6.33	1.32	1.38
36	5	1196	C	C4-C5	6.33	1.48	1.43
36	5	3209	A	N9-C4	6.33	1.41	1.37
36	5	1138	U	N1-C6	-6.33	1.32	1.38
36	5	2370	G	C6-N1	-6.33	1.35	1.39
36	1	3273	A	C6-N1	-6.33	1.31	1.35
36	1	1906	G	C5-C4	-6.33	1.33	1.38
36	1	1371	G	N9-C8	-6.33	1.33	1.37
36	1	3087	A	N3-C4	-6.33	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	425	G	N9-C8	-6.33	1.33	1.37
36	5	1317	A	C5-C4	-6.33	1.34	1.38
36	5	2806	U	C2-N3	-6.33	1.33	1.37
36	5	1592	G	C5-C6	6.32	1.48	1.42
36	5	2746	A	N9-C4	-6.32	1.34	1.37
38	8	44	A	C5-C6	-6.32	1.35	1.41
36	1	373	A	C6-N1	-6.32	1.31	1.35
40	L3	27	ALA	CA-CB	-6.32	1.39	1.52
1	6	407	A	N3-C4	-6.32	1.31	1.34
36	5	2976	A	N7-C5	-6.32	1.35	1.39
1	2	1654	G	C6-N1	-6.32	1.35	1.39
36	1	942	U	N1-C6	-6.32	1.32	1.38
36	5	2300	G	C6-N1	-6.32	1.35	1.39
1	2	1004	U	N3-C4	-6.32	1.32	1.38
36	1	2117	A	N7-C5	-6.32	1.35	1.39
36	1	2932	U	C2-N3	-6.32	1.33	1.37
1	6	358	U	C2-N3	-6.32	1.33	1.37
36	5	2967	A	C6-N1	-6.32	1.31	1.35
36	1	517	G	N3-C4	-6.32	1.31	1.35
36	1	3033	A	N9-C4	6.32	1.41	1.37
36	1	3141	A	C5-C6	-6.32	1.35	1.41
36	1	3217	C	N1-C6	-6.32	1.33	1.37
36	5	1192	C	N1-C2	6.32	1.46	1.40
69	o3	33	GLU	CG-CD	6.32	1.61	1.51
36	5	2111	G	N9-C4	-6.31	1.32	1.38
36	5	2288	G	N1-C2	-6.31	1.32	1.37
36	5	2871	G	N9-C8	6.31	1.42	1.37
36	1	409	A	N7-C5	-6.31	1.35	1.39
36	5	1929	G	N3-C4	-6.31	1.31	1.35
36	1	1906	G	N7-C5	-6.31	1.35	1.39
37	3	98	C	N3-C4	-6.31	1.29	1.33
36	5	921	A	N7-C5	-6.31	1.35	1.39
36	1	45	A	N3-C4	-6.31	1.31	1.34
36	1	955	U	N1-C2	-6.31	1.32	1.38
36	5	1103	A	N9-C8	6.31	1.42	1.37
42	l5	136	GLU	CG-CD	6.31	1.61	1.51
36	5	3276	G	C6-N1	6.30	1.44	1.39
52	m6	40	GLU	CG-CD	6.30	1.61	1.51
36	1	2861	U	C2-N3	-6.30	1.33	1.37
36	1	3273	A	N9-C4	-6.30	1.34	1.37
36	5	3181	C	N1-C6	-6.30	1.33	1.37
1	6	597	G	N7-C5	-6.30	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1073	U	C2-N3	-6.30	1.33	1.37
36	5	1120	A	N9-C4	-6.30	1.34	1.37
36	5	2900	A	C5-C6	-6.30	1.35	1.41
1	6	1411	A	N9-C4	-6.30	1.34	1.37
36	1	752	C	N3-C4	-6.30	1.29	1.33
36	1	1886	A	C6-N1	-6.29	1.31	1.35
36	1	2236	G	N7-C5	-6.29	1.35	1.39
38	4	52	A	N3-C4	-6.29	1.31	1.34
36	5	705	A	N3-C4	-6.29	1.31	1.34
1	6	3	U	C2-N3	-6.29	1.33	1.37
1	6	1631	A	C5-C6	-6.29	1.35	1.41
36	5	2862	U	C2-N3	-6.29	1.33	1.37
36	5	1145	G	N7-C5	-6.29	1.35	1.39
36	5	3020	U	C4-C5	-6.29	1.37	1.43
36	5	1180	A	C5-C4	-6.29	1.34	1.38
36	5	2815	G	N9-C8	-6.29	1.33	1.37
36	1	422	A	N9-C4	-6.29	1.34	1.37
36	5	994	G	N1-C2	-6.29	1.32	1.37
36	5	1142	G	C5-C6	-6.29	1.36	1.42
36	1	826	G	C5-C6	-6.29	1.36	1.42
36	1	2325	G	C5-C6	-6.29	1.36	1.42
36	1	2834	G	C6-N1	-6.29	1.35	1.39
36	5	433	A	N7-C5	-6.29	1.35	1.39
36	1	440	A	N9-C4	6.28	1.41	1.37
40	L3	7	GLU	CG-CD	6.28	1.61	1.51
36	5	3083	G	C5-C6	-6.28	1.36	1.42
36	5	3129	A	C6-N1	-6.28	1.31	1.35
36	5	506	U	N1-C2	-6.28	1.32	1.38
36	5	2648	G	N9-C4	-6.28	1.32	1.38
38	8	41	A	N3-C4	-6.28	1.31	1.34
36	1	391	A	N3-C4	-6.28	1.31	1.34
36	1	1176	C	N3-C4	-6.28	1.29	1.33
36	5	278	U	C2-N3	-6.28	1.33	1.37
36	1	612	U	N1-C6	-6.27	1.32	1.38
36	5	1430	U	N1-C2	-6.27	1.32	1.38
76	q0	110	CYS	CB-SG	-6.27	1.71	1.82
36	1	1126	G	N7-C5	-6.27	1.35	1.39
36	1	1534	A	C5-C6	-6.27	1.35	1.41
36	1	2801	A	C5-C4	-6.27	1.34	1.38
36	1	3274	A	N7-C5	-6.27	1.35	1.39
36	5	1150	A	C5-C4	-6.27	1.34	1.38
36	5	2816	G	C5-C6	-6.27	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2946	A	C6-N1	-6.27	1.31	1.35
36	1	1465	A	N9-C4	-6.27	1.34	1.37
36	5	589	A	N3-C4	-6.27	1.31	1.34
36	5	2836	C	N3-C4	-6.27	1.29	1.33
36	5	2385	G	N9-C8	-6.26	1.33	1.37
36	5	2956	A	N3-C4	-6.26	1.31	1.34
36	1	2649	A	N7-C5	-6.26	1.35	1.39
36	5	2365	C	N1-C6	-6.26	1.33	1.37
36	1	1403	C	P-O5'	-6.26	1.53	1.59
37	3	63	A	N9-C4	-6.26	1.34	1.37
36	5	2346	C	N1-C2	-6.26	1.33	1.40
36	5	519	A	N7-C5	-6.26	1.35	1.39
36	1	2376	G	N3-C4	-6.26	1.31	1.35
1	6	1762	A	N9-C4	-6.26	1.34	1.37
36	1	2917	G	C6-N1	-6.25	1.35	1.39
36	1	1153	A	N9-C4	-6.25	1.34	1.37
36	1	2193	U	N1-C2	-6.25	1.32	1.38
36	1	2942	C	N3-C4	6.25	1.38	1.33
36	1	1117	G	C5-C4	-6.25	1.33	1.38
36	5	2698	G	C5-C4	-6.25	1.33	1.38
36	1	1131	G	N7-C5	-6.25	1.35	1.39
36	1	1454	A	N9-C4	-6.25	1.34	1.37
36	5	2913	C	N3-C4	-6.25	1.29	1.33
36	1	357	A	C6-N1	-6.24	1.31	1.35
36	1	2614	G	C6-N1	-6.24	1.35	1.39
36	5	1151	U	C4-O4	6.24	1.28	1.23
36	5	2618	G	C6-N1	-6.24	1.35	1.39
1	6	316	A	N9-C4	-6.24	1.34	1.37
36	5	1295	G	N3-C4	-6.24	1.31	1.35
36	5	1889	G	C5-C6	-6.24	1.36	1.42
36	5	3010	U	N3-C4	-6.24	1.32	1.38
1	2	1782	A	N7-C5	-6.24	1.35	1.39
1	6	1648	A	N9-C4	-6.24	1.34	1.37
36	5	1048	A	C6-N1	-6.24	1.31	1.35
37	7	39	C	N1-C6	-6.24	1.33	1.37
36	1	318	A	N9-C4	-6.24	1.34	1.37
36	5	1303	A	C6-N6	-6.24	1.28	1.33
36	1	206	G	N1-C2	-6.23	1.32	1.37
36	5	1179	A	C6-N1	-6.23	1.31	1.35
36	5	1205	A	C5-C6	-6.23	1.35	1.41
36	5	2647	A	N9-C4	-6.23	1.34	1.37
36	1	2656	A	C6-N1	-6.23	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	102	U	C2-N3	-6.23	1.33	1.37
36	5	2400	G	C5-C6	-6.23	1.36	1.42
36	5	1145	G	C8-N7	-6.23	1.27	1.30
36	5	2983	C	N1-C6	-6.23	1.33	1.37
37	3	92	A	N9-C4	-6.23	1.34	1.37
36	1	351	A	N9-C4	-6.22	1.34	1.37
1	6	1642	G	N1-C2	-6.22	1.32	1.37
36	5	890	C	N1-C6	-6.22	1.33	1.37
36	5	1186	G	C6-N1	-6.22	1.35	1.39
36	1	89	A	C6-N1	-6.22	1.31	1.35
37	3	102	A	N9-C4	-6.22	1.34	1.37
1	6	630	A	N7-C5	-6.22	1.35	1.39
36	5	645	A	N7-C5	-6.22	1.35	1.39
36	5	1060	U	N3-C4	-6.22	1.32	1.38
36	5	3189	G	C5-C4	-6.22	1.33	1.38
37	7	84	A	N9-C4	-6.22	1.34	1.37
36	5	650	C	N3-C4	-6.22	1.29	1.33
36	5	3203	U	N3-C4	-6.22	1.32	1.38
36	1	1169	A	C6-N1	-6.21	1.31	1.35
36	5	1098	A	N9-C4	-6.21	1.34	1.37
36	5	2977	G	C5-C4	-6.21	1.33	1.38
36	1	955	U	C2-N3	-6.21	1.33	1.37
1	6	630	A	C5-C6	-6.21	1.35	1.41
36	5	2893	C	C4-C5	-6.21	1.38	1.43
36	1	1176	C	N1-C6	-6.21	1.33	1.37
36	1	85	A	C5-C6	-6.21	1.35	1.41
36	5	3020	U	C4-O4	-6.21	1.18	1.23
1	2	1124	A	N9-C4	-6.21	1.34	1.37
36	1	294	U	C2-N3	-6.21	1.33	1.37
36	1	3102	G	C6-N1	-6.21	1.35	1.39
1	6	1777	G	C6-N1	-6.21	1.35	1.39
36	5	973	A	C5-C6	-6.21	1.35	1.41
36	5	1477	A	N3-C4	-6.21	1.31	1.34
36	1	880	G	C5-C4	-6.21	1.34	1.38
36	5	1140	G	N7-C5	-6.21	1.35	1.39
36	5	2925	C	N1-C2	-6.21	1.33	1.40
36	5	2932	U	N3-C4	-6.21	1.32	1.38
36	5	2895	G	C6-N1	-6.21	1.35	1.39
36	1	343	U	C4-C5	-6.20	1.38	1.43
36	5	189	G	C5-C4	-6.20	1.34	1.38
36	5	3088	G	N3-C4	-6.20	1.31	1.35
36	5	1199	C	N1-C6	-6.20	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	383	G	N9-C8	-6.20	1.33	1.37
36	1	2382	G	C6-N1	-6.20	1.35	1.39
36	1	101	G	C5-C6	-6.20	1.36	1.42
36	1	3147	G	C5-C4	-6.20	1.34	1.38
36	5	1300	G	N7-C5	-6.19	1.35	1.39
36	5	1099	A	C5-C4	-6.19	1.34	1.38
36	5	1316	C	N1-C6	-6.19	1.33	1.37
36	5	2632	G	P-O5'	-6.19	1.53	1.59
1	6	1124	A	C5-C6	-6.19	1.35	1.41
1	6	1596	C	N1-C6	-6.19	1.33	1.37
36	5	2199	G	N7-C5	-6.19	1.35	1.39
36	1	648	C	N1-C6	-6.19	1.33	1.37
1	6	1614	A	N9-C4	-6.19	1.34	1.37
36	1	1170	A	C5-C6	-6.18	1.35	1.41
36	5	1884	A	N7-C5	-6.18	1.35	1.39
36	5	2903	A	N9-C4	-6.18	1.34	1.37
36	5	425	G	C5-C4	-6.18	1.34	1.38
36	5	512	U	N3-C4	-6.18	1.32	1.38
36	5	2117	A	N7-C5	-6.18	1.35	1.39
36	5	2395	G	N3-C4	-6.18	1.31	1.35
36	5	2881	C	N3-C4	-6.18	1.29	1.33
36	1	35	A	N3-C4	-6.18	1.31	1.34
36	1	629	U	C2-N3	-6.18	1.33	1.37
1	2	1454	G	C5-C4	-6.18	1.34	1.38
36	1	3121	U	C2-N3	-6.18	1.33	1.37
36	5	64	G	N7-C5	-6.18	1.35	1.39
36	1	41	G	C5-C4	-6.17	1.34	1.38
36	5	1295	G	C5-C4	-6.17	1.34	1.38
36	5	2698	G	N9-C8	-6.17	1.33	1.37
36	5	2892	A	C6-N1	-6.17	1.31	1.35
36	5	591	G	N9-C8	-6.17	1.33	1.37
36	1	2952	G	N3-C4	-6.17	1.31	1.35
1	6	1592	A	C6-N1	-6.17	1.31	1.35
36	5	2294	U	C2-N3	-6.17	1.33	1.37
36	1	3319	U	N1-C2	6.17	1.44	1.38
36	5	800	G	C5-C4	-6.17	1.34	1.38
25	D3	60	GLU	CG-CD	6.17	1.61	1.51
36	1	2350	C	N1-C6	-6.17	1.33	1.37
36	5	1307	G	C5-C6	-6.17	1.36	1.42
1	2	1148	C	N3-C4	-6.17	1.29	1.33
36	5	2768	U	C2-N3	-6.17	1.33	1.37
36	1	793	C	N1-C6	-6.17	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2753	G	N9-C8	-6.17	1.33	1.37
36	5	2913	C	C4-C5	-6.17	1.38	1.43
36	1	751	A	C6-N1	-6.16	1.31	1.35
36	1	1846	C	N1-C2	-6.16	1.33	1.40
36	5	642	U	N1-C2	-6.16	1.33	1.38
36	1	146	U	N1-C2	6.16	1.44	1.38
36	1	2834	G	N7-C5	-6.16	1.35	1.39
36	1	218	G	N3-C4	-6.16	1.31	1.35
36	5	962	A	N9-C4	-6.16	1.34	1.37
36	5	3362	A	N3-C4	-6.16	1.31	1.34
36	1	649	A	N3-C4	-6.16	1.31	1.34
36	1	1910	A	C5-C4	-6.16	1.34	1.38
36	1	2823	G	N3-C4	-6.16	1.31	1.35
36	5	2247	G	C5-C4	-6.15	1.34	1.38
36	5	2920	U	C4-O4	-6.15	1.18	1.23
37	7	112	G	C6-N1	-6.15	1.35	1.39
69	o3	81	VAL	CB-CG1	-6.15	1.40	1.52
36	1	1350	A	N9-C4	6.15	1.41	1.37
36	1	1534	A	N7-C5	-6.15	1.35	1.39
36	1	2733	A	N3-C4	-6.15	1.31	1.34
36	5	3016	A	N7-C5	-6.15	1.35	1.39
36	5	3146	G	C5-C6	-6.15	1.36	1.42
36	5	3210	A	C6-N1	-6.15	1.31	1.35
36	1	338	A	N9-C8	-6.15	1.32	1.37
36	5	2381	G	N7-C5	-6.15	1.35	1.39
36	5	3336	A	N9-C4	-6.15	1.34	1.37
36	1	409	A	C5-C4	-6.15	1.34	1.38
36	5	2188	A	N9-C8	-6.15	1.32	1.37
1	6	1660	A	N9-C4	-6.15	1.34	1.37
36	5	1372	C	N1-C6	-6.15	1.33	1.37
36	1	2399	A	C5-C4	-6.14	1.34	1.38
36	1	2833	A	C6-N1	-6.14	1.31	1.35
1	6	794	U	N1-C2	6.14	1.44	1.38
36	1	907	G	C6-O6	-6.14	1.18	1.24
36	1	1910	A	N3-C4	-6.14	1.31	1.34
1	6	1584	G	N7-C5	-6.14	1.35	1.39
36	1	2693	C	N1-C6	-6.14	1.33	1.37
36	1	3244	A	C6-N1	-6.14	1.31	1.35
36	5	3128	G	N3-C4	-6.14	1.31	1.35
37	7	13	A	C5-C6	-6.14	1.35	1.41
36	5	945	C	N1-C6	-6.14	1.33	1.37
36	5	3138	U	N1-C2	-6.14	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1517	U	C2-N3	-6.13	1.33	1.37
36	5	2977	G	N7-C5	-6.13	1.35	1.39
36	1	2314	U	C2-N3	6.13	1.42	1.37
36	1	2358	A	N3-C4	-6.13	1.31	1.34
36	5	2918	G	C6-O6	-6.13	1.18	1.24
36	5	1152	G	C5-C6	-6.13	1.36	1.42
36	1	1061	A	N9-C4	-6.13	1.34	1.37
36	1	2335	G	C6-N1	-6.13	1.35	1.39
38	4	12	A	N7-C5	-6.13	1.35	1.39
36	5	1085	A	N3-C4	-6.13	1.31	1.34
36	5	3172	A	N3-C4	-6.13	1.31	1.34
36	1	1129	A	N7-C5	-6.12	1.35	1.39
36	5	289	A	C5-C6	-6.12	1.35	1.41
36	5	2815	G	N7-C5	-6.12	1.35	1.39
36	5	3245	A	N7-C5	-6.12	1.35	1.39
36	5	1142	G	C6-N1	-6.12	1.35	1.39
36	5	3098	G	C6-N1	-6.12	1.35	1.39
36	5	3114	A	C5-C6	-6.12	1.35	1.41
36	1	612	U	N3-C4	-6.12	1.32	1.38
36	1	2733	A	N9-C4	-6.12	1.34	1.37
36	1	2831	G	N7-C5	-6.12	1.35	1.39
36	5	706	A	N3-C4	-6.12	1.31	1.34
36	5	710	A	N7-C5	-6.12	1.35	1.39
36	1	1904	C	N1-C6	-6.12	1.33	1.37
36	1	2309	A	N3-C4	-6.12	1.31	1.34
1	6	1778	G	N1-C2	-6.12	1.32	1.37
36	5	2996	U	C4-O4	6.12	1.28	1.23
1	2	1212	G	N7-C5	-6.12	1.35	1.39
1	6	397	A	N9-C4	-6.12	1.34	1.37
1	6	1166	A	N9-C4	-6.12	1.34	1.37
36	5	1330	A	C5-C6	-6.12	1.35	1.41
36	5	1845	G	N7-C5	-6.12	1.35	1.39
36	5	1043	C	N1-C6	-6.11	1.33	1.37
36	5	2705	A	C5-C4	-6.11	1.34	1.38
36	5	3095	U	N1-C6	-6.11	1.32	1.38
36	1	2623	G	C2-N3	-6.11	1.27	1.32
1	6	1768	G	N3-C4	-6.11	1.31	1.35
36	5	505	G	N3-C4	-6.11	1.31	1.35
36	5	2373	A	N3-C4	-6.11	1.31	1.34
43	16	175	LYS	CD-CE	6.11	1.66	1.51
52	M6	40	GLU	CD-OE2	6.11	1.32	1.25
36	1	1374	G	N7-C5	-6.11	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3130	A	N9-C4	-6.11	1.34	1.37
36	5	807	A	N9-C4	-6.11	1.34	1.37
36	5	1887	A	C5-C4	-6.11	1.34	1.38
36	1	2374	C	C5-C6	-6.11	1.29	1.34
36	5	1428	A	C6-N1	-6.11	1.31	1.35
68	O2	8	LYS	CD-CE	6.10	1.66	1.51
36	5	1114	U	N1-C2	-6.10	1.33	1.38
36	5	2400	G	C5-C4	-6.10	1.34	1.38
36	1	1907	C	N3-C4	-6.10	1.29	1.33
36	5	1195	A	N7-C5	-6.10	1.35	1.39
36	5	2954	U	N3-C4	6.10	1.44	1.38
36	1	2724	U	N1-C2	-6.10	1.33	1.38
1	6	1762	A	C5-C4	-6.10	1.34	1.38
36	5	1374	G	N3-C4	-6.10	1.31	1.35
36	5	2316	G	N3-C4	-6.10	1.31	1.35
36	1	1381	A	N3-C4	-6.10	1.31	1.34
36	1	1425	U	C2-N3	-6.10	1.33	1.37
38	4	54	A	N3-C4	-6.10	1.31	1.34
36	5	1149	G	N3-C4	-6.10	1.31	1.35
36	5	1406	A	N9-C8	-6.10	1.32	1.37
36	5	2698	G	N9-C4	-6.10	1.33	1.38
36	1	911	C	C2-N3	-6.10	1.30	1.35
1	6	1124	A	N9-C4	-6.10	1.34	1.37
36	1	2917	G	N9-C8	-6.09	1.33	1.37
36	5	51	A	C5-C6	-6.09	1.35	1.41
36	5	1910	A	N7-C5	-6.09	1.35	1.39
1	6	1780	G	N9-C8	-6.09	1.33	1.37
36	5	1065	A	N9-C4	-6.09	1.34	1.37
36	5	3010	U	C2-N3	-6.09	1.33	1.37
36	1	1192	C	N1-C2	6.09	1.46	1.40
36	1	2963	C	N3-C4	-6.09	1.29	1.33
36	5	2943	G	N3-C4	-6.09	1.31	1.35
36	1	1399	A	N9-C4	-6.09	1.34	1.37
36	5	960	U	C2-N3	6.09	1.42	1.37
36	5	1174	G	N3-C4	-6.09	1.31	1.35
36	1	2971	A	C5-C4	6.09	1.43	1.38
36	5	82	C	N1-C6	-6.09	1.33	1.37
37	7	49	G	C6-N1	6.09	1.43	1.39
38	8	45	C	N1-C6	-6.09	1.33	1.37
36	5	630	A	N9-C4	-6.08	1.34	1.37
36	5	2683	U	C4-C5	-6.08	1.38	1.43
36	1	642	U	C4-O4	6.08	1.28	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2960	C	N1-C6	-6.08	1.33	1.37
36	5	2932	U	C4-O4	-6.08	1.18	1.23
36	1	980	A	C5-C4	6.08	1.43	1.38
36	1	1851	G	C2-N3	-6.08	1.27	1.32
36	1	1888	U	C2-N3	-6.08	1.33	1.37
1	6	107	C	N1-C6	-6.08	1.33	1.37
36	5	633	C	N3-C4	-6.08	1.29	1.33
36	5	1370	G	C5-C4	-6.08	1.34	1.38
36	5	2305	G	N3-C4	-6.08	1.31	1.35
36	1	1406	A	N3-C4	-6.08	1.31	1.34
36	1	2908	G	N7-C5	-6.08	1.35	1.39
36	5	1062	A	N9-C4	-6.08	1.34	1.37
36	5	3184	A	C5-C6	-6.08	1.35	1.41
1	6	1635	A	N9-C4	-6.08	1.34	1.37
1	6	1411	A	N3-C4	-6.08	1.31	1.34
1	6	1655	A	N3-C4	-6.08	1.31	1.34
36	5	1364	C	N3-C4	-6.08	1.29	1.33
36	1	433	A	N3-C4	-6.07	1.31	1.34
36	1	2981	U	N3-C4	-6.07	1.32	1.38
69	O3	3	GLU	CG-CD	6.07	1.61	1.51
36	5	1196	C	N1-C2	6.07	1.46	1.40
44	17	59	GLU	CG-CD	6.07	1.61	1.51
36	5	2819	A	C5-C4	-6.07	1.34	1.38
1	6	410	A	N3-C4	-6.07	1.31	1.34
36	5	893	C	N1-C6	-6.07	1.33	1.37
36	5	2392	C	N3-C4	-6.07	1.29	1.33
36	1	2910	A	N7-C5	-6.07	1.35	1.39
36	5	1909	A	N9-C4	-6.07	1.34	1.37
36	5	3306	U	N1-C6	-6.07	1.32	1.38
36	5	2367	A	N9-C4	-6.07	1.34	1.37
36	1	2270	A	C5-C6	-6.06	1.35	1.41
36	1	2323	G	C5-C4	-6.06	1.34	1.38
36	5	2841	G	C6-N1	-6.06	1.35	1.39
36	5	635	G	N9-C8	-6.06	1.33	1.37
36	5	1200	A	C5-C6	-6.06	1.35	1.41
36	5	3324	C	N1-C6	-6.06	1.33	1.37
1	6	1108	G	N3-C4	-6.06	1.31	1.35
36	5	630	A	N9-C8	-6.06	1.32	1.37
36	1	2333	C	C2-N3	-6.06	1.30	1.35
36	1	2364	G	C5-C4	-6.05	1.34	1.38
59	n3	120	LYS	CD-CE	6.05	1.66	1.51
36	1	2374	C	N1-C6	-6.05	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	410	A	C5-C6	-6.05	1.35	1.41
36	1	2378	C	N1-C6	-6.05	1.33	1.37
36	5	856	G	C6-N1	-6.05	1.35	1.39
36	5	2768	U	N3-C4	-6.05	1.33	1.38
36	5	799	G	N7-C5	-6.05	1.35	1.39
36	5	2851	A	N9-C4	-6.05	1.34	1.37
36	5	2891	U	C2-N3	-6.05	1.33	1.37
36	1	1909	A	N9-C4	-6.04	1.34	1.37
38	4	13	A	N7-C5	-6.04	1.35	1.39
36	5	2341	A	C6-N1	-6.04	1.31	1.35
36	5	2994	A	C5-C4	-6.04	1.34	1.38
36	5	367	A	C6-N1	-6.04	1.31	1.35
36	5	660	A	C6-N1	-6.04	1.31	1.35
36	5	2287	C	N1-C6	-6.04	1.33	1.37
36	1	200	C	N1-C6	-6.04	1.33	1.37
36	1	519	A	N9-C4	-6.04	1.34	1.37
36	1	1887	A	N9-C8	-6.04	1.32	1.37
36	1	1320	C	C2-N3	-6.04	1.30	1.35
36	1	907	G	C6-N1	-6.04	1.35	1.39
1	6	417	A	N9-C4	6.04	1.41	1.37
36	1	2825	C	N1-C6	-6.03	1.33	1.37
36	1	3172	A	N3-C4	-6.03	1.31	1.34
36	5	936	A	C6-N1	-6.03	1.31	1.35
36	1	368	G	N3-C4	-6.03	1.31	1.35
36	5	3125	U	C2-N3	-6.03	1.33	1.37
36	5	1188	U	N1-C2	-6.03	1.33	1.38
36	5	2642	A	C5-C6	-6.03	1.35	1.41
36	5	2868	U	N1-C2	-6.03	1.33	1.38
36	1	1459	C	N1-C6	-6.03	1.33	1.37
36	5	1379	G	C6-N1	-6.03	1.35	1.39
1	2	1127	G	N3-C4	-6.03	1.31	1.35
1	6	611	U	N1-C6	-6.03	1.32	1.38
36	5	869	G	C6-N1	-6.03	1.35	1.39
36	5	1342	C	C2-N3	-6.03	1.30	1.35
36	5	2168	A	N7-C5	-6.03	1.35	1.39
36	1	1061	A	C5-C4	-6.03	1.34	1.38
36	1	3180	A	N3-C4	-6.03	1.31	1.34
1	6	401	A	N9-C4	-6.03	1.34	1.37
36	5	535	G	N7-C5	-6.02	1.35	1.39
36	5	2660	G	N9-C4	-6.02	1.33	1.38
36	5	3026	G	N7-C5	-6.02	1.35	1.39
38	4	2	A	C6-N1	-6.02	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	29	C	N1-C6	-6.02	1.33	1.37
36	1	1429	G	C2-N2	-6.02	1.28	1.34
36	1	2916	U	N1-C2	6.02	1.44	1.38
36	5	996	A	N9-C4	-6.02	1.34	1.37
36	1	2374	C	C4-C5	-6.02	1.38	1.43
36	5	648	C	C4-N4	6.02	1.39	1.33
36	5	2391	G	C5-C4	-6.02	1.34	1.38
36	1	2875	U	C4-O4	6.01	1.28	1.23
36	1	2601	A	C5-C4	-6.01	1.34	1.38
36	5	2286	U	N3-C4	-6.01	1.33	1.38
37	7	84	A	N7-C5	-6.01	1.35	1.39
36	1	1386	A	C5-C6	6.01	1.46	1.41
36	5	2977	G	C5-C6	-6.01	1.36	1.42
68	o2	41	VAL	CA-CB	-6.01	1.42	1.54
36	1	865	U	N1-C2	-6.01	1.33	1.38
36	1	2382	G	N1-C2	-6.01	1.32	1.37
36	5	2705	A	C6-N1	-6.01	1.31	1.35
36	1	1401	A	C5-C4	-6.01	1.34	1.38
36	1	2838	A	N9-C4	-6.01	1.34	1.37
36	5	569	A	C5-C4	-6.01	1.34	1.38
36	1	2431	C	N1-C6	-6.00	1.33	1.37
36	5	206	G	N1-C2	-6.00	1.32	1.37
36	5	2702	A	N7-C5	-6.00	1.35	1.39
36	1	2966	G	N3-C4	-6.00	1.31	1.35
1	2	1655	A	C5-C4	-6.00	1.34	1.38
36	1	2986	U	N1-C6	-6.00	1.32	1.38
36	5	883	A	C5-C4	-6.00	1.34	1.38
36	1	27	C	N1-C6	-6.00	1.33	1.37
36	5	2965	U	C4-C5	-6.00	1.38	1.43
38	8	138	A	N3-C4	-6.00	1.31	1.34
1	6	1570	A	N9-C4	-6.00	1.34	1.37
36	5	396	A	C6-N1	-6.00	1.31	1.35
36	1	1120	A	C6-N1	-5.99	1.31	1.35
36	1	1695	U	C2-N3	-5.99	1.33	1.37
1	6	1671	A	N9-C4	-5.99	1.34	1.37
36	5	1172	G	N7-C5	-5.99	1.35	1.39
36	5	1302	A	N3-C4	-5.99	1.31	1.34
1	6	1025	A	N3-C4	-5.99	1.31	1.34
1	2	1762	A	N9-C4	-5.99	1.34	1.37
36	1	608	A	C5-C6	-5.99	1.35	1.41
36	5	2799	A	N7-C5	-5.99	1.35	1.39
36	1	2948	C	C4-C5	-5.99	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	3	83	U	C2-N3	-5.99	1.33	1.37
37	7	14	U	N1-C2	-5.99	1.33	1.38
36	1	838	G	N9-C4	-5.99	1.33	1.38
1	6	1470	C	N3-C4	-5.99	1.29	1.33
36	5	958	C	C5-C6	-5.99	1.29	1.34
36	5	2130	G	C5-C4	-5.99	1.34	1.38
36	5	3374	U	C2-N3	-5.98	1.33	1.37
1	2	405	C	N1-C6	-5.98	1.33	1.37
36	1	1310	G	N7-C5	-5.98	1.35	1.39
1	6	1524	A	N7-C5	-5.98	1.35	1.39
36	5	3032	A	C6-N1	-5.98	1.31	1.35
36	1	787	G	N7-C5	-5.98	1.35	1.39
36	5	3336	A	N3-C4	-5.98	1.31	1.34
36	1	784	A	N9-C4	-5.98	1.34	1.37
36	1	1424	C	N1-C6	-5.98	1.33	1.37
36	1	2939	G	C6-N1	-5.98	1.35	1.39
36	1	2346	C	N1-C6	-5.98	1.33	1.37
36	5	1177	G	N9-C8	-5.98	1.33	1.37
36	5	1146	C	N1-C6	-5.98	1.33	1.37
36	5	2637	A	C6-N6	-5.98	1.29	1.33
36	1	2386	A	N7-C5	-5.97	1.35	1.39
1	6	1137	A	N9-C8	-5.97	1.32	1.37
36	5	519	A	C6-N1	-5.97	1.31	1.35
36	5	1490	A	N3-C4	-5.97	1.31	1.34
36	1	2935	U	N1-C2	-5.97	1.33	1.38
36	5	2314	U	N1-C2	5.97	1.44	1.38
36	5	2386	A	C5-C4	-5.97	1.34	1.38
36	5	2662	G	C6-N1	-5.97	1.35	1.39
36	5	2956	A	N7-C5	-5.97	1.35	1.39
36	1	95	A	N3-C4	-5.97	1.31	1.34
36	1	2371	G	N9-C8	-5.97	1.33	1.37
36	1	3059	G	N7-C5	5.97	1.42	1.39
36	1	2811	A	C5-C4	-5.97	1.34	1.38
36	5	1153	A	N7-C5	-5.97	1.35	1.39
36	5	2884	C	C2-N3	-5.97	1.30	1.35
36	1	2274	U	C2-N3	-5.96	1.33	1.37
36	1	2605	G	C5-C6	-5.96	1.36	1.42
1	6	1655	A	C5-C6	-5.96	1.35	1.41
36	1	1192	C	C2-N3	5.96	1.40	1.35
1	6	1467	C	N3-C4	-5.96	1.29	1.33
36	5	1791	C	N1-C6	-5.96	1.33	1.37
36	1	2919	A	N3-C4	-5.96	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2975	U	C2-N3	-5.96	1.33	1.37
36	5	2270	A	N9-C4	-5.96	1.34	1.37
36	5	2671	A	N9-C4	-5.96	1.34	1.37
36	5	3146	G	N7-C5	-5.96	1.35	1.39
36	5	569	A	N9-C4	-5.96	1.34	1.37
1	2	353	A	C5-C6	-5.96	1.35	1.41
36	1	39	A	N9-C4	-5.96	1.34	1.37
36	1	3308	C	N3-C4	-5.96	1.29	1.33
36	5	3091	A	N9-C4	-5.96	1.34	1.37
37	7	33	U	C2-N3	-5.96	1.33	1.37
36	5	422	A	C5-C4	-5.96	1.34	1.38
36	5	2182	A	N9-C4	-5.96	1.34	1.37
36	1	511	G	N9-C4	-5.95	1.33	1.38
36	1	1171	G	N3-C4	-5.95	1.31	1.35
36	5	639	G	C6-N1	-5.95	1.35	1.39
36	5	1136	A	C6-N1	-5.95	1.31	1.35
36	5	2637	A	N7-C5	-5.95	1.35	1.39
36	1	435	C	N1-C6	-5.95	1.33	1.37
36	1	3295	A	C6-N1	-5.95	1.31	1.35
36	5	1406	A	N9-C4	-5.95	1.34	1.37
36	5	2701	U	C4-O4	-5.95	1.18	1.23
1	6	151	G	C2-N3	-5.95	1.27	1.32
36	1	1116	G	N1-C2	-5.95	1.32	1.37
1	6	1644	C	N3-C4	-5.95	1.29	1.33
36	5	585	A	N9-C8	-5.95	1.32	1.37
36	5	1607	U	C4-O4	5.95	1.28	1.23
36	5	3061	G	C5-C4	-5.95	1.34	1.38
36	1	397	A	C6-N1	-5.94	1.31	1.35
36	5	1143	A	N9-C4	-5.94	1.34	1.37
36	1	430	U	C2-N3	-5.94	1.33	1.37
36	1	2199	G	N1-C2	-5.94	1.32	1.37
36	1	2981	U	C2-O2	-5.94	1.17	1.22
36	5	2840	C	N3-C4	-5.94	1.29	1.33
36	1	879	U	N1-C2	-5.94	1.33	1.38
36	1	2296	A	C6-N1	-5.94	1.31	1.35
1	6	1375	A	N9-C4	-5.94	1.34	1.37
36	5	3130	A	N7-C5	-5.94	1.35	1.39
36	5	654	C	N3-C4	-5.94	1.29	1.33
38	4	10	A	C6-N1	-5.94	1.31	1.35
1	2	1096	C	N1-C2	5.93	1.46	1.40
36	1	1305	U	N1-C2	-5.93	1.33	1.38
36	5	43	A	C5-C6	-5.93	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1113	A	C6-N1	-5.93	1.31	1.35
36	1	358	G	N7-C5	-5.93	1.35	1.39
36	1	2778	G	C6-N1	-5.93	1.35	1.39
36	5	860	G	C5-C6	-5.93	1.36	1.42
36	5	1103	A	N7-C5	5.93	1.42	1.39
36	1	1314	C	N1-C6	-5.93	1.33	1.37
36	5	637	C	C5-C6	-5.93	1.29	1.34
36	5	3298	C	N1-C6	-5.93	1.33	1.37
25	d3	71	CYS	CB-SG	-5.92	1.72	1.81
36	5	2701	U	C4-C5	-5.92	1.38	1.43
36	1	3054	U	C4-O4	5.92	1.28	1.23
36	5	1003	A	C5-C6	-5.92	1.35	1.41
36	1	2188	A	N3-C4	-5.92	1.31	1.34
36	5	2955	U	N1-C2	-5.92	1.33	1.38
36	5	2882	U	C2-N3	-5.92	1.33	1.37
36	5	2122	G	N9-C4	-5.92	1.33	1.38
36	5	2177	G	C6-N1	-5.92	1.35	1.39
36	5	2704	A	N7-C5	-5.92	1.35	1.39
36	1	1192	C	C2-O2	5.92	1.29	1.24
36	5	1429	G	N3-C4	-5.92	1.31	1.35
36	5	2307	G	N7-C5	-5.92	1.35	1.39
36	5	2316	G	C6-N1	-5.92	1.35	1.39
36	5	2678	A	N9-C4	-5.92	1.34	1.37
36	1	2324	A	C5-C6	-5.92	1.35	1.41
36	1	22	G	N3-C4	-5.91	1.31	1.35
36	1	1305	U	C2-O2	-5.91	1.17	1.22
36	1	1516	C	N3-C4	-5.91	1.29	1.33
36	5	1202	A	N9-C8	-5.91	1.33	1.37
36	5	2382	G	C5-C4	-5.91	1.34	1.38
36	5	2404	A	N7-C5	5.91	1.42	1.39
1	2	1744	A	N3-C4	-5.91	1.31	1.34
36	1	2425	G	C6-N1	-5.91	1.35	1.39
36	1	2607	G	N9-C8	-5.91	1.33	1.37
36	5	561	C	N1-C6	-5.91	1.33	1.37
36	5	3048	A	N7-C5	-5.91	1.35	1.39
58	N2	92	TRP	CB-CG	5.91	1.60	1.50
36	5	1185	C	N1-C6	-5.91	1.33	1.37
36	1	1583	A	N9-C4	-5.91	1.34	1.37
36	1	1906	G	C5-C6	-5.90	1.36	1.42
36	1	2920	U	C4-C5	-5.90	1.38	1.43
36	1	2149	A	N3-C4	-5.90	1.31	1.34
37	3	97	A	N9-C8	-5.90	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	646	A	C6-N1	-5.90	1.31	1.35
36	5	1174	G	N9-C8	-5.90	1.33	1.37
36	1	1163	A	N9-C4	-5.90	1.34	1.37
36	5	2116	G	N3-C4	-5.90	1.31	1.35
36	5	3242	G	N9-C4	5.90	1.42	1.38
36	5	1160	C	N1-C6	-5.90	1.33	1.37
36	5	1477	A	C5-C4	-5.90	1.34	1.38
36	1	962	A	C5-C4	-5.89	1.34	1.38
36	5	3104	U	C2-N3	-5.89	1.33	1.37
56	n0	79	VAL	CB-CG2	-5.89	1.40	1.52
36	1	808	A	C6-N6	-5.89	1.29	1.33
36	1	2279	A	N9-C4	-5.89	1.34	1.37
36	1	2996	U	N3-C4	5.89	1.43	1.38
36	5	1008	U	P-O5'	-5.89	1.53	1.59
36	1	2773	C	N1-C6	-5.89	1.33	1.37
36	5	3012	A	N3-C4	-5.89	1.31	1.34
36	1	1450	G	C2-N3	-5.89	1.28	1.32
36	1	1114	U	C2-N3	-5.89	1.33	1.37
36	1	3140	G	N1-C2	-5.89	1.33	1.37
36	5	895	A	C6-N1	-5.89	1.31	1.35
36	5	984	G	N7-C5	-5.89	1.35	1.39
36	1	751	A	C6-N6	-5.88	1.29	1.33
36	1	1404	G	N9-C8	-5.88	1.33	1.37
1	6	635	A	N9-C4	-5.88	1.34	1.37
36	1	367	A	C5-C4	-5.88	1.34	1.38
36	1	2241	U	N1-C2	-5.88	1.33	1.38
36	5	1163	A	N3-C4	-5.88	1.31	1.34
36	5	2798	C	N1-C6	-5.88	1.33	1.37
36	5	3110	C	N3-C4	-5.88	1.29	1.33
36	1	3213	A	N7-C5	-5.88	1.35	1.39
36	5	981	U	N1-C2	5.88	1.43	1.38
36	5	1625	A	N9-C4	-5.88	1.34	1.37
36	5	2912	G	C5-C4	-5.88	1.34	1.38
36	1	628	A	C6-N1	-5.88	1.31	1.35
36	5	2145	A	C6-N1	-5.88	1.31	1.35
36	1	306	A	C6-N1	-5.87	1.31	1.35
36	1	900	G	N7-C5	-5.87	1.35	1.39
36	1	1182	A	C5-C6	-5.87	1.35	1.41
36	1	2831	G	N9-C4	-5.87	1.33	1.38
1	6	390	G	N7-C5	-5.87	1.35	1.39
1	6	576	G	N7-C5	-5.87	1.35	1.39
36	1	2672	G	C5-C4	-5.87	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2997	G	N7-C5	-5.87	1.35	1.39
36	5	2370	G	N3-C4	-5.87	1.31	1.35
36	5	365	A	N7-C5	-5.87	1.35	1.39
36	5	583	G	C6-N1	-5.87	1.35	1.39
36	5	1152	G	C8-N7	5.87	1.34	1.30
36	5	2242	A	N9-C4	-5.87	1.34	1.37
36	5	2754	G	N1-C2	-5.87	1.33	1.37
36	5	2762	A	N9-C4	-5.87	1.34	1.37
1	6	1594	G	N9-C8	-5.87	1.33	1.37
37	7	73	C	C2-N3	5.87	1.40	1.35
1	2	390	G	N3-C4	-5.87	1.31	1.35
36	5	1406	A	N7-C5	-5.87	1.35	1.39
36	5	2813	A	C6-N1	-5.87	1.31	1.35
36	5	2871	G	N7-C5	5.87	1.42	1.39
36	1	2857	C	N1-C6	-5.86	1.33	1.37
52	M6	80	PHE	CB-CG	-5.86	1.41	1.51
36	1	2738	A	N3-C4	-5.86	1.31	1.34
36	1	431	U	N1-C2	-5.86	1.33	1.38
36	1	1309	U	C2-N3	-5.86	1.33	1.37
36	1	1335	C	N1-C6	-5.86	1.33	1.37
36	1	3139	A	N3-C4	-5.86	1.31	1.34
1	6	19	A	N7-C5	-5.86	1.35	1.39
36	5	88	A	N7-C5	-5.86	1.35	1.39
36	5	752	C	N1-C6	-5.86	1.33	1.37
38	8	12	A	C5-C6	-5.86	1.35	1.41
40	l3	46	PHE	CB-CG	-5.86	1.41	1.51
67	o1	90	PHE	CB-CG	-5.86	1.41	1.51
36	1	1401	A	C8-N7	-5.86	1.27	1.31
36	1	431	U	C2-N3	-5.86	1.33	1.37
36	1	2431	C	N3-C4	-5.86	1.29	1.33
36	5	2831	G	C6-O6	5.86	1.29	1.24
36	5	3013	U	C4-O4	-5.86	1.19	1.23
37	7	121	U	N1-C2	5.86	1.43	1.38
36	5	1557	A	N3-C4	-5.85	1.31	1.34
36	1	3213	A	C5-C6	-5.85	1.35	1.41
36	5	402	A	N9-C8	-5.85	1.33	1.37
36	5	1314	C	C4-C5	-5.85	1.38	1.43
36	1	2877	G	N9-C4	-5.85	1.33	1.38
36	1	3086	A	N3-C4	-5.85	1.31	1.34
36	5	3137	C	N1-C6	-5.85	1.33	1.37
1	2	551	G	N9-C4	-5.85	1.33	1.38
38	4	52	A	N9-C4	-5.85	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1759	C	N1-C6	-5.85	1.33	1.37
36	5	888	A	N9-C4	-5.85	1.34	1.37
36	5	2950	G	N9-C4	-5.85	1.33	1.38
37	7	89	G	C6-N1	5.85	1.43	1.39
36	1	317	A	C6-N1	-5.85	1.31	1.35
36	5	884	A	N9-C8	-5.85	1.33	1.37
36	5	3195	U	C4-O4	5.85	1.28	1.23
38	8	14	C	N1-C6	-5.85	1.33	1.37
36	1	1366	A	N3-C4	-5.85	1.31	1.34
36	5	2940	A	C5-C6	-5.85	1.35	1.41
36	1	2402	A	C5-C4	-5.84	1.34	1.38
1	6	410	A	C6-N1	-5.84	1.31	1.35
36	5	421	G	C6-N1	-5.84	1.35	1.39
36	5	1303	A	C6-N1	-5.84	1.31	1.35
36	1	338	A	C5-C4	-5.84	1.34	1.38
36	1	498	A	C5-C4	-5.84	1.34	1.38
36	5	3110	C	N1-C6	-5.84	1.33	1.37
1	2	978	A	N9-C4	5.84	1.41	1.37
36	1	828	A	C5-C6	-5.84	1.35	1.41
36	1	2811	A	C6-N1	-5.84	1.31	1.35
36	5	559	A	N3-C4	-5.84	1.31	1.34
36	5	920	A	C2-N3	-5.84	1.28	1.33
36	5	1432	C	N3-C4	-5.84	1.29	1.33
36	5	2865	U	C2-N3	-5.84	1.33	1.37
36	5	1148	G	C8-N7	-5.84	1.27	1.30
36	5	2110	G	C6-N1	-5.84	1.35	1.39
36	5	2168	A	C5-C6	-5.84	1.35	1.41
36	5	2703	A	N9-C8	-5.84	1.33	1.37
36	1	209	A	C6-N1	-5.84	1.31	1.35
36	1	2391	G	N9-C8	-5.84	1.33	1.37
36	5	396	A	N3-C4	-5.84	1.31	1.34
36	5	1852	G	C5-C6	-5.84	1.36	1.42
36	1	2779	A	N3-C4	-5.83	1.31	1.34
36	1	2802	A	C5-C6	-5.83	1.35	1.41
36	1	1076	C	N1-C6	-5.83	1.33	1.37
36	1	3083	G	C5-C4	-5.83	1.34	1.38
36	5	755	A	N7-C5	-5.83	1.35	1.39
36	1	1585	C	C2-O2	5.83	1.29	1.24
36	5	2278	C	C2-O2	5.83	1.29	1.24
36	1	1554	U	N3-C4	5.83	1.43	1.38
49	M3	176	GLU	CB-CG	5.83	1.63	1.52
36	5	1180	A	C6-N1	-5.83	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2965	U	N1-C2	-5.83	1.33	1.38
36	1	1313	G	C5-C6	-5.83	1.36	1.42
36	1	3206	C	N1-C6	-5.82	1.33	1.37
47	M0	14	ASN	CB-CG	5.82	1.64	1.51
20	c8	129	TRP	CB-CG	-5.82	1.39	1.50
36	1	2641	U	N1-C6	-5.82	1.32	1.38
1	6	402	C	N1-C6	-5.82	1.33	1.37
36	5	2790	A	N9-C4	-5.82	1.34	1.37
36	1	676	G	N9-C4	5.82	1.42	1.38
36	1	2309	A	C5-C6	-5.82	1.35	1.41
36	5	2119	A	C5-C6	-5.82	1.35	1.41
36	1	2273	G	N3-C4	-5.82	1.31	1.35
36	1	2353	G	C5-C6	-5.82	1.36	1.42
36	5	3129	A	N7-C5	-5.82	1.35	1.39
36	1	3085	G	C5-C4	-5.82	1.34	1.38
36	5	353	G	N7-C5	-5.82	1.35	1.39
1	6	1730	A	C6-N1	-5.81	1.31	1.35
36	1	1171	G	C5-C4	-5.81	1.34	1.38
36	1	1184	A	N3-C4	-5.81	1.31	1.34
36	5	2364	G	C5-C6	-5.81	1.36	1.42
36	1	2383	C	C2-N3	5.81	1.40	1.35
36	1	2672	G	N1-C2	-5.81	1.33	1.37
36	5	2951	G	N1-C2	-5.81	1.33	1.37
36	5	3134	A	C6-N1	-5.81	1.31	1.35
36	5	3140	G	N3-C4	-5.81	1.31	1.35
37	7	84	A	C5-C6	-5.81	1.35	1.41
36	1	1316	C	C2-O2	-5.81	1.19	1.24
36	1	1431	G	N9-C8	-5.81	1.33	1.37
36	1	1877	U	C2-N3	-5.81	1.33	1.37
1	6	1142	A	C6-N1	-5.81	1.31	1.35
36	5	2892	A	C5-C6	-5.81	1.35	1.41
36	1	585	A	N9-C8	-5.81	1.33	1.37
36	5	3195	U	N1-C2	5.81	1.43	1.38
36	1	397	A	C5-C4	-5.80	1.34	1.38
36	1	2884	C	P-O5'	-5.80	1.53	1.59
1	6	1005	A	N3-C4	-5.80	1.31	1.34
36	5	3207	U	C4-O4	5.80	1.28	1.23
36	1	2360	C	C4-C5	-5.80	1.38	1.43
36	1	2964	G	N9-C8	-5.80	1.33	1.37
36	1	3272	C	C4-C5	-5.80	1.38	1.43
1	6	1133	A	N7-C5	-5.80	1.35	1.39
36	5	26	A	N9-C4	-5.80	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	N1	104	GLU	CG-CD	5.80	1.60	1.51
36	5	1784	G	N1-C2	-5.80	1.33	1.37
36	5	889	U	C2-N3	-5.80	1.33	1.37
36	5	2911	A	N3-C4	-5.80	1.31	1.34
36	5	2811	A	C5-C4	-5.80	1.34	1.38
1	6	1159	C	N1-C6	-5.79	1.33	1.37
36	1	1136	A	N3-C4	-5.79	1.31	1.34
1	6	1130	G	N1-C2	-5.79	1.33	1.37
36	1	939	U	C4-C5	-5.79	1.38	1.43
36	1	1377	G	C5-C6	-5.79	1.36	1.42
36	5	980	A	N3-C4	5.79	1.38	1.34
36	1	962	A	N9-C8	-5.79	1.33	1.37
1	6	46	A	N3-C4	-5.79	1.31	1.34
36	1	2651	G	N7-C5	-5.79	1.35	1.39
36	1	2853	A	N9-C4	-5.79	1.34	1.37
36	1	3085	G	N9-C4	-5.79	1.33	1.38
36	5	3148	U	C2-N3	-5.79	1.33	1.37
36	5	3362	A	N7-C5	-5.79	1.35	1.39
36	1	1906	G	N9-C4	-5.78	1.33	1.38
36	5	2303	A	N9-C4	-5.78	1.34	1.37
36	5	2400	G	N7-C5	-5.78	1.35	1.39
36	5	2662	G	C8-N7	-5.78	1.27	1.30
36	1	61	A	N7-C5	-5.78	1.35	1.39
36	1	3009	G	N9-C4	-5.78	1.33	1.38
36	5	3309	G	N1-C2	-5.78	1.33	1.37
1	6	157	A	N9-C4	-5.78	1.34	1.37
36	1	2933	A	C5-C6	-5.78	1.35	1.41
36	5	1185	C	C2-N3	-5.78	1.31	1.35
36	1	659	G	C6-N1	-5.78	1.35	1.39
36	1	2358	A	C5-C4	-5.78	1.34	1.38
1	6	1166	A	N3-C4	-5.78	1.31	1.34
36	5	2302	G	C2-N3	-5.78	1.28	1.32
36	1	2954	U	N1-C2	5.77	1.43	1.38
36	5	951	A	N7-C5	-5.77	1.35	1.39
36	5	1374	G	N9-C4	-5.77	1.33	1.38
36	5	2379	U	N1-C2	-5.77	1.33	1.38
36	5	2947	G	C6-O6	-5.77	1.19	1.24
36	1	1438	U	C2-O2	-5.77	1.17	1.22
1	6	991	G	C2-N3	-5.77	1.28	1.32
36	5	2954	U	C2-N3	5.77	1.41	1.37
36	1	2288	G	N1-C2	-5.77	1.33	1.37
36	1	2302	G	C5-C4	-5.77	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
42	L5	74	VAL	CA-CB	-5.77	1.42	1.54
36	5	2326	A	N9-C4	-5.77	1.34	1.37
36	5	2342	U	C4-O4	-5.77	1.19	1.23
36	1	77	A	N9-C4	-5.76	1.34	1.37
36	5	651	G	C5-C4	-5.76	1.34	1.38
36	5	1406	A	C5-C4	-5.76	1.34	1.38
36	5	3013	U	C4-C5	-5.76	1.38	1.43
1	6	1548	G	C5-C4	-5.76	1.34	1.38
1	2	1751	C	N1-C6	-5.76	1.33	1.37
36	1	1406	A	C5-C6	-5.76	1.35	1.41
36	1	3244	A	N3-C4	-5.76	1.31	1.34
36	5	589	A	N9-C8	-5.76	1.33	1.37
36	5	1152	G	C2-N3	-5.76	1.28	1.32
36	5	2151	C	N1-C6	-5.76	1.33	1.37
36	1	2201	G	N1-C2	-5.76	1.33	1.37
1	6	1584	G	C5-C4	-5.76	1.34	1.38
36	5	2339	C	C4-C5	-5.76	1.38	1.43
36	5	2647	A	C6-N1	-5.76	1.31	1.35
1	6	367	A	N3-C4	-5.75	1.31	1.34
36	5	2723	U	N3-C4	-5.75	1.33	1.38
36	1	2159	U	C2-O2	5.75	1.27	1.22
1	6	1039	A	N9-C4	-5.75	1.34	1.37
36	1	1373	A	N9-C4	-5.75	1.34	1.37
1	6	96	G	N7-C5	-5.75	1.35	1.39
36	5	2994	A	N9-C4	-5.75	1.34	1.37
36	5	2868	U	C4-C5	-5.75	1.38	1.43
38	8	8	C	C4-C5	-5.75	1.38	1.43
36	1	370	U	C4-C5	-5.75	1.38	1.43
36	1	780	A	C6-N1	-5.75	1.31	1.35
36	1	1891	A	N9-C4	-5.75	1.34	1.37
36	1	1924	U	C2-N3	-5.75	1.33	1.37
36	1	3011	A	C5-C6	-5.75	1.35	1.41
36	5	423	A	C5-C4	-5.75	1.34	1.38
36	5	2419	A	P-O5'	5.75	1.65	1.59
47	M0	49	CYS	CB-SG	-5.75	1.72	1.81
36	5	2936	A	C6-N6	-5.75	1.29	1.33
36	1	1206	G	C8-N7	-5.75	1.27	1.30
36	5	994	G	N9-C8	-5.75	1.33	1.37
36	5	1174	G	C8-N7	-5.74	1.27	1.30
36	1	955	U	N3-C4	-5.74	1.33	1.38
36	1	1163	A	C5-C6	-5.74	1.35	1.41
36	5	3207	U	N1-C6	5.74	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1752	A	C6-N1	-5.74	1.31	1.35
36	1	2833	A	N9-C4	-5.74	1.34	1.37
47	M0	186	GLU	CB-CG	5.74	1.63	1.52
36	5	314	U	N1-C2	-5.74	1.33	1.38
36	5	3004	C	N1-C6	-5.74	1.33	1.37
36	5	3209	A	N9-C8	5.74	1.42	1.37
36	1	1874	A	N7-C5	-5.74	1.35	1.39
36	1	883	A	C6-N6	-5.74	1.29	1.33
36	1	3180	A	N9-C4	-5.74	1.34	1.37
36	5	2868	U	N1-C6	-5.74	1.32	1.38
36	5	3131	U	C2-N3	-5.74	1.33	1.37
36	5	1352	A	N9-C4	5.73	1.41	1.37
36	1	570	A	N9-C4	-5.73	1.34	1.37
1	6	542	A	C6-N1	-5.73	1.31	1.35
36	5	1456	A	C5-C4	-5.73	1.34	1.38
36	1	80	G	N7-C5	-5.73	1.35	1.39
36	1	2377	G	N9-C8	-5.73	1.33	1.37
36	5	1319	G	N9-C8	-5.73	1.33	1.37
40	l3	197	GLU	CG-CD	5.73	1.60	1.51
1	6	1614	A	N7-C5	-5.73	1.35	1.39
36	5	2813	A	C5-C4	-5.73	1.34	1.38
36	5	2837	A	C6-N1	-5.73	1.31	1.35
36	5	3042	U	C4-O4	-5.73	1.19	1.23
36	1	2363	A	N7-C5	-5.73	1.35	1.39
1	6	408	C	N3-C4	-5.73	1.29	1.33
1	6	1638	G	N7-C5	-5.73	1.35	1.39
36	5	563	U	C2-N3	-5.73	1.33	1.37
36	5	3120	C	N1-C6	-5.73	1.33	1.37
36	5	378	A	N9-C4	-5.73	1.34	1.37
36	5	503	C	N3-C4	-5.72	1.29	1.33
36	5	1881	A	N3-C4	-5.72	1.31	1.34
36	5	2100	A	N3-C4	5.72	1.38	1.34
36	5	2952	G	N9-C8	-5.72	1.33	1.37
1	2	1454	G	N9-C8	-5.72	1.33	1.37
36	5	2976	A	N9-C8	-5.72	1.33	1.37
64	n8	16	SER	CA-CB	5.72	1.61	1.52
36	1	2800	G	N3-C4	-5.72	1.31	1.35
36	1	1407	A	C6-N1	-5.72	1.31	1.35
36	1	2401	A	C5-C4	5.72	1.42	1.38
1	6	568	G	C6-N1	-5.72	1.35	1.39
1	6	1111	G	N7-C5	-5.72	1.35	1.39
25	d3	138	GLU	CG-CD	5.72	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1933	A	N9-C4	-5.72	1.34	1.37
36	5	2748	A	N3-C4	-5.72	1.31	1.34
36	1	1154	A	C6-N1	-5.71	1.31	1.35
36	5	2401	A	C6-N6	5.71	1.38	1.33
36	5	844	G	N9-C4	-5.71	1.33	1.38
36	5	2943	G	C2-N3	-5.71	1.28	1.32
1	6	1110	G	N7-C5	-5.71	1.35	1.39
1	6	1116	A	C5-C6	-5.71	1.35	1.41
36	5	2886	U	C2-O2	-5.71	1.17	1.22
36	5	3127	A	C5-C6	-5.71	1.35	1.41
36	1	2093	A	N9-C4	5.71	1.41	1.37
36	5	1307	G	N9-C8	-5.71	1.33	1.37
36	1	607	A	N7-C5	-5.71	1.35	1.39
36	5	3114	A	N9-C4	-5.71	1.34	1.37
37	7	88	G	C6-O6	-5.71	1.19	1.24
36	5	2936	A	C5-C6	-5.71	1.35	1.41
36	5	3180	A	C6-N6	-5.71	1.29	1.33
36	1	1409	G	C5-C4	-5.71	1.34	1.38
36	1	2640	A	C6-N1	-5.71	1.31	1.35
36	5	560	G	N3-C4	-5.70	1.31	1.35
36	5	3047	U	C2-O2	-5.70	1.17	1.22
36	5	3172	A	N7-C5	-5.70	1.35	1.39
36	5	647	A	C6-N1	-5.70	1.31	1.35
1	2	525	A	N9-C4	-5.70	1.34	1.37
36	1	41	G	N9-C4	-5.70	1.33	1.38
36	1	2129	U	N3-C4	-5.70	1.33	1.38
36	1	2985	C	N1-C2	-5.70	1.34	1.40
1	6	933	A	N3-C4	-5.70	1.31	1.34
36	5	884	A	C5-C4	-5.70	1.34	1.38
36	5	2986	U	C2-N3	-5.70	1.33	1.37
36	1	1363	A	C5-C6	-5.70	1.35	1.41
36	1	2974	U	N1-C2	-5.70	1.33	1.38
36	1	3058	U	N1-C2	-5.70	1.33	1.38
36	5	1753	G	C5-C4	-5.70	1.34	1.38
36	1	2697	A	N3-C4	-5.70	1.31	1.34
1	6	1651	A	C6-N1	-5.70	1.31	1.35
36	5	2418	G	C5-C4	5.70	1.42	1.38
36	1	1178	G	C5-C6	-5.70	1.36	1.42
36	1	2860	U	C2-N3	5.70	1.41	1.37
36	1	3098	G	C6-N1	-5.70	1.35	1.39
36	1	585	A	C6-N1	-5.69	1.31	1.35
36	1	1154	A	N9-C4	-5.69	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	582	U	N1-C2	5.69	1.43	1.38
36	1	523	A	N9-C4	-5.69	1.34	1.37
36	1	652	G	N1-C2	-5.69	1.33	1.37
36	1	398	A	N3-C4	5.69	1.38	1.34
36	1	630	A	N7-C5	-5.69	1.35	1.39
36	1	1343	A	N9-C4	-5.69	1.34	1.37
37	7	102	A	C5-C6	-5.69	1.35	1.41
59	n3	137	VAL	CB-CG2	-5.69	1.41	1.52
36	1	807	A	C5-C6	-5.69	1.35	1.41
36	1	939	U	N1-C2	-5.69	1.33	1.38
36	5	1101	G	N1-C2	-5.69	1.33	1.37
36	5	3245	A	N9-C4	-5.69	1.34	1.37
36	5	1432	C	N1-C2	-5.69	1.34	1.40
36	1	2689	A	N7-C5	-5.68	1.35	1.39
36	5	1402	C	N3-C4	-5.68	1.29	1.33
36	5	2816	G	C5-C4	-5.68	1.34	1.38
37	7	98	C	N1-C6	-5.68	1.33	1.37
36	1	402	A	C5-C4	-5.68	1.34	1.38
36	5	3092	C	N1-C6	-5.68	1.33	1.37
36	1	2743	A	C5-C4	-5.68	1.34	1.38
37	7	113	C	N3-C4	-5.68	1.29	1.33
1	6	85	A	N9-C4	-5.68	1.34	1.37
1	6	1119	G	C5-C4	-5.68	1.34	1.38
36	5	2195	C	N3-C4	-5.68	1.29	1.33
36	5	2401	A	N7-C5	5.68	1.42	1.39
36	1	1369	A	N9-C8	-5.68	1.33	1.37
36	1	2185	G	N9-C8	-5.68	1.33	1.37
36	1	2396	G	N7-C5	-5.68	1.35	1.39
1	6	2	A	N9-C4	5.68	1.41	1.37
36	5	900	G	C6-N1	-5.68	1.35	1.39
36	5	946	U	C2-O2	-5.68	1.17	1.22
36	5	3075	G	N9-C4	-5.68	1.33	1.38
36	1	1927	G	N1-C2	-5.67	1.33	1.37
36	1	2913	C	N1-C2	-5.67	1.34	1.40
36	1	906	A	N7-C5	-5.67	1.35	1.39
1	6	1753	A	C2-N3	5.67	1.38	1.33
36	1	633	C	C4-C5	-5.67	1.38	1.43
36	1	3011	A	C6-N6	-5.67	1.29	1.33
1	6	119	A	N3-C4	-5.67	1.31	1.34
1	6	746	A	N3-C4	-5.67	1.31	1.34
36	5	1429	G	N1-C2	-5.67	1.33	1.37
37	7	37	G	N9-C4	5.67	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1405	U	N3-C4	-5.67	1.33	1.38
39	12	196	TRP	CB-CG	-5.67	1.40	1.50
36	1	967	A	N7-C5	-5.67	1.35	1.39
36	5	2607	G	N9-C8	-5.67	1.33	1.37
36	1	2367	A	N3-C4	-5.67	1.31	1.34
36	5	1332	A	C6-N1	-5.67	1.31	1.35
36	5	1376	C	C4-C5	-5.67	1.38	1.43
1	6	1243	G	N9-C4	5.67	1.42	1.38
36	5	2628	A	N3-C4	-5.67	1.31	1.34
36	5	3139	A	C6-N1	-5.67	1.31	1.35
36	1	1393	A	C6-N1	-5.66	1.31	1.35
36	5	1197	A	N9-C8	-5.66	1.33	1.37
36	5	2879	C	C5-C6	-5.66	1.29	1.34
36	1	2833	A	N3-C4	-5.66	1.31	1.34
36	5	1188	U	C2-O2	-5.66	1.17	1.22
1	6	1525	A	C5-C4	-5.66	1.34	1.38
36	5	1399	A	C5-C6	-5.66	1.35	1.41
36	5	1411	C	N1-C6	-5.66	1.33	1.37
36	5	2641	U	C4-C5	-5.66	1.38	1.43
36	1	1398	U	N3-C4	-5.66	1.33	1.38
1	6	72	A	N9-C4	5.66	1.41	1.37
36	5	876	A	C5-C6	-5.66	1.35	1.41
36	5	2419	A	N3-C4	-5.66	1.31	1.34
36	1	2731	U	N1-C2	-5.66	1.33	1.38
1	6	865	A	N3-C4	-5.66	1.31	1.34
78	q2	96	GLU	CG-CD	5.66	1.60	1.51
36	1	1180	A	C5-C4	-5.66	1.34	1.38
36	1	2628	A	N7-C5	-5.66	1.35	1.39
1	6	779	U	N1-C2	5.66	1.43	1.38
36	5	1166	G	N9-C4	-5.66	1.33	1.38
36	1	25	U	C4-O4	5.65	1.28	1.23
1	6	1000	C	N3-C4	-5.65	1.29	1.33
1	6	1649	G	N7-C5	-5.65	1.35	1.39
36	5	1883	A	N7-C5	-5.65	1.35	1.39
36	5	3009	G	C6-N1	-5.65	1.35	1.39
36	5	512	U	N1-C2	-5.65	1.33	1.38
36	1	3047	U	C2-N3	-5.65	1.33	1.37
1	2	1737	G	N9-C4	-5.64	1.33	1.38
36	1	35	A	C5-C4	-5.64	1.34	1.38
36	1	691	A	C5-C6	-5.64	1.35	1.41
36	1	2794	G	N9-C4	5.64	1.42	1.38
36	5	566	G	N1-C2	-5.64	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1163	A	N7-C5	-5.64	1.35	1.39
36	5	744	A	C5-C6	-5.64	1.35	1.41
36	5	798	G	N7-C5	-5.64	1.35	1.39
4	S2	35	TRP	CB-CG	5.64	1.60	1.50
36	1	920	A	C5-C6	-5.64	1.35	1.41
36	1	1541	G	N7-C5	-5.64	1.35	1.39
37	3	95	A	C6-N1	-5.64	1.31	1.35
36	5	353	G	N3-C4	-5.64	1.31	1.35
36	1	2302	G	C6-N1	-5.64	1.35	1.39
36	5	1861	G	C6-N1	-5.64	1.35	1.39
37	7	87	G	N3-C4	-5.64	1.31	1.35
46	l9	11	GLU	CG-CD	5.64	1.60	1.51
36	1	2188	A	C5-C4	-5.63	1.34	1.38
1	6	1517	U	C2-O2	-5.63	1.17	1.22
36	5	944	C	N3-C4	-5.63	1.30	1.33
36	1	1178	G	N9-C4	5.63	1.42	1.38
36	1	1332	A	N7-C5	-5.63	1.35	1.39
36	1	405	U	N1-C2	-5.63	1.33	1.38
36	1	1187	C	N1-C6	-5.63	1.33	1.37
36	5	639	G	N3-C4	-5.63	1.31	1.35
1	6	1139	A	N7-C5	-5.63	1.35	1.39
36	5	1145	G	N9-C8	-5.63	1.33	1.37
36	1	343	U	N3-C4	-5.63	1.33	1.38
36	1	2143	A	N3-C4	-5.63	1.31	1.34
1	6	906	A	N9-C4	-5.63	1.34	1.37
1	6	1642	G	C6-N1	-5.63	1.35	1.39
36	5	2342	U	N3-C4	-5.63	1.33	1.38
36	5	3273	A	N3-C4	-5.63	1.31	1.34
36	5	1101	G	N9-C8	-5.62	1.33	1.37
38	4	103	G	N9-C4	5.62	1.42	1.38
36	5	1200	A	P-O5'	-5.62	1.54	1.59
36	5	2652	U	C4-C5	-5.62	1.38	1.43
36	5	2833	A	C6-N1	-5.62	1.31	1.35
36	1	35	A	N7-C5	-5.62	1.35	1.39
36	1	866	A	N3-C4	-5.62	1.31	1.34
36	1	2629	U	N1-C2	-5.62	1.33	1.38
36	1	2697	A	C6-N1	-5.62	1.31	1.35
36	5	2828	G	C6-N1	-5.62	1.35	1.39
36	5	845	G	C6-O6	5.62	1.29	1.24
36	1	425	G	N7-C5	-5.62	1.35	1.39
36	1	2932	U	N1-C2	-5.62	1.33	1.38
36	5	2113	A	N9-C4	-5.62	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3119	U	N3-C4	-5.62	1.33	1.38
36	5	3213	A	C5-C6	-5.62	1.35	1.41
36	1	2401	A	N7-C5	5.62	1.42	1.39
36	5	1062	A	N7-C5	-5.62	1.35	1.39
36	5	2307	G	C5-C4	-5.62	1.34	1.38
36	5	2892	A	C5-C4	-5.62	1.34	1.38
36	1	637	C	N3-C4	-5.62	1.30	1.33
36	1	1348	U	N1-C2	5.62	1.43	1.38
36	1	2111	G	C5-C4	-5.62	1.34	1.38
36	1	2185	G	C5-C6	-5.62	1.36	1.42
36	5	3213	A	N3-C4	-5.62	1.31	1.34
38	8	38	U	N1-C2	5.62	1.43	1.38
36	5	1784	G	C5-C4	-5.61	1.34	1.38
36	5	3122	A	C5-C6	-5.61	1.35	1.41
37	7	27	A	C6-N1	-5.61	1.31	1.35
40	l3	106	TRP	CB-CG	-5.61	1.40	1.50
36	1	1888	U	N1-C6	-5.61	1.32	1.38
36	5	911	C	C2-O2	-5.61	1.19	1.24
36	1	2756	C	N1-C6	-5.61	1.33	1.37
1	6	1147	A	N3-C4	-5.61	1.31	1.34
36	5	1535	A	C5-C4	-5.61	1.34	1.38
52	m6	40	GLU	CD-OE1	5.61	1.31	1.25
36	1	1117	G	N7-C5	-5.60	1.35	1.39
36	5	3305	A	N7-C5	-5.60	1.35	1.39
1	2	373	G	N7-C5	-5.60	1.35	1.39
36	1	654	C	N3-C4	-5.60	1.30	1.33
36	5	2371	G	N7-C5	-5.60	1.35	1.39
36	5	3015	G	N3-C4	-5.60	1.31	1.35
36	5	2872	A	C5-C6	5.60	1.46	1.41
36	5	2910	A	N9-C4	-5.60	1.34	1.37
36	1	2149	A	N9-C4	-5.60	1.34	1.37
36	1	2401	A	N9-C8	5.60	1.42	1.37
36	5	651	G	C8-N7	-5.60	1.27	1.30
36	5	3245	A	C2-N3	-5.60	1.28	1.33
79	q3	8	VAL	CB-CG2	-5.60	1.41	1.52
36	5	2995	A	C5-C6	-5.60	1.36	1.41
36	1	52	A	C6-N1	-5.59	1.31	1.35
36	1	2827	U	N3-C4	-5.59	1.33	1.38
36	5	424	G	N7-C5	-5.59	1.35	1.39
36	5	2363	A	N3-C4	-5.59	1.31	1.34
36	5	2830	G	N9-C4	-5.59	1.33	1.38
37	3	87	G	N3-C4	-5.59	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	760	A	N3-C4	-5.59	1.31	1.34
36	5	1863	G	C5-C4	-5.59	1.34	1.38
36	1	780	A	N9-C4	-5.59	1.34	1.37
36	1	2920	U	N1-C2	-5.59	1.33	1.38
1	6	781	U	N1-C2	5.59	1.43	1.38
36	5	1142	G	N7-C5	-5.59	1.35	1.39
36	5	2961	G	C8-N7	-5.59	1.27	1.30
36	1	1143	A	N7-C5	-5.59	1.35	1.39
36	1	1397	C	N1-C6	-5.59	1.33	1.37
37	3	25	G	N1-C2	-5.59	1.33	1.37
37	3	75	G	N3-C4	-5.59	1.31	1.35
1	6	100	A	N7-C5	-5.59	1.35	1.39
36	5	2155	G	N3-C4	-5.59	1.31	1.35
36	5	2259	A	C5-C4	-5.59	1.34	1.38
36	5	2394	G	C2-N3	-5.59	1.28	1.32
36	5	3057	U	C4-C5	-5.59	1.38	1.43
36	5	3144	G	C2-N2	-5.59	1.28	1.34
36	5	3220	G	C6-N1	-5.59	1.35	1.39
36	1	1176	C	C4-C5	-5.58	1.38	1.43
36	1	2520	A	N9-C4	-5.58	1.34	1.37
36	1	2650	U	N3-C4	-5.58	1.33	1.38
36	1	2997	G	C5-C6	-5.58	1.36	1.42
52	M6	166	GLU	CG-CD	5.58	1.60	1.51
1	6	375	U	N1-C2	-5.58	1.33	1.38
36	5	1119	C	N1-C6	-5.58	1.33	1.37
36	1	2273	G	C5-C4	-5.58	1.34	1.38
36	1	2874	G	P-O5'	5.58	1.65	1.59
1	6	1636	C	N1-C6	-5.58	1.33	1.37
36	5	2627	C	N1-C6	-5.58	1.33	1.37
36	1	2971	A	N3-C4	5.58	1.38	1.34
36	5	1141	C	C4-N4	-5.58	1.28	1.33
36	1	964	G	N7-C5	-5.58	1.35	1.39
36	1	1432	C	N1-C2	-5.58	1.34	1.40
36	1	2155	G	C6-N1	-5.58	1.35	1.39
36	5	1137	C	N1-C6	-5.58	1.33	1.37
36	5	3224	G	C5-C4	-5.58	1.34	1.38
36	5	2151	C	N3-C4	-5.58	1.30	1.33
36	5	3226	A	C6-N1	-5.58	1.31	1.35
36	5	2379	U	C2-O2	-5.57	1.17	1.22
36	1	909	G	C5-C6	-5.57	1.36	1.42
36	1	2111	G	C6-N1	-5.57	1.35	1.39
36	1	2335	G	N1-C2	-5.57	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	635	G	N7-C5	-5.57	1.35	1.39
36	1	1310	G	C6-O6	-5.57	1.19	1.24
36	5	281	G	C6-N1	-5.57	1.35	1.39
36	1	1169	A	C5-C4	-5.57	1.34	1.38
36	1	13	A	N7-C5	-5.57	1.35	1.39
53	M7	83	TRP	CB-CG	-5.57	1.40	1.50
36	1	628	A	N9-C4	-5.57	1.34	1.37
36	1	1180	A	P-O5'	-5.57	1.54	1.59
36	1	1096	U	P-O5'	5.56	1.65	1.59
36	1	2321	A	N9-C4	-5.56	1.34	1.37
36	1	1145	G	C8-N7	-5.56	1.27	1.30
36	1	2213	A	N9-C4	-5.56	1.34	1.37
36	5	501	A	C5-C4	-5.56	1.34	1.38
36	5	1473	G	N1-C2	-5.56	1.33	1.37
36	5	1665	C	N3-C4	-5.56	1.30	1.33
36	5	1897	G	N7-C5	-5.56	1.35	1.39
36	5	2748	A	C2-N3	-5.56	1.28	1.33
38	8	106	C	N1-C6	-5.56	1.33	1.37
36	5	349	A	N3-C4	-5.56	1.31	1.34
36	5	2933	A	C5-C4	-5.56	1.34	1.38
36	1	1207	G	N7-C5	-5.56	1.35	1.39
36	1	1361	U	N1-C2	-5.56	1.33	1.38
36	1	2145	A	C6-N1	-5.56	1.31	1.35
36	5	789	A	C6-N1	-5.56	1.31	1.35
36	5	2648	G	N9-C8	-5.56	1.33	1.37
36	5	2884	C	C2-O2	-5.56	1.19	1.24
36	5	3034	C	N1-C6	-5.56	1.33	1.37
1	2	562	G	C6-N1	-5.56	1.35	1.39
36	1	980	A	N9-C4	5.56	1.41	1.37
36	1	1791	C	N3-C4	-5.56	1.30	1.33
36	5	923	C	N3-C4	-5.56	1.30	1.33
36	5	566	G	C6-N1	-5.56	1.35	1.39
36	5	2670	G	N3-C4	-5.56	1.31	1.35
36	1	666	A	C6-N1	-5.55	1.31	1.35
36	5	1205	A	N7-C5	-5.55	1.35	1.39
36	5	3112	G	C5-C4	-5.55	1.34	1.38
36	1	1438	U	N1-C2	-5.55	1.33	1.38
36	1	1506	A	N9-C4	-5.55	1.34	1.37
36	1	2699	G	N9-C4	-5.55	1.33	1.38
36	1	3085	G	N7-C5	-5.55	1.35	1.39
1	6	318	U	N1-C2	-5.55	1.33	1.38
1	6	788	A	N9-C4	-5.55	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	842	G	C5-C4	-5.55	1.34	1.38
36	1	335	G	C5-C6	-5.55	1.36	1.42
1	6	1529	C	N1-C6	-5.55	1.33	1.37
1	2	623	A	N3-C4	-5.55	1.31	1.34
36	5	1451	C	C4-C5	-5.55	1.38	1.43
36	5	3181	C	N3-C4	-5.55	1.30	1.33
1	6	1002	G	C5-C4	-5.54	1.34	1.38
36	5	1136	A	C5-C4	-5.54	1.34	1.38
1	2	449	C	N3-C4	-5.54	1.30	1.33
36	1	2402	A	C6-N6	-5.54	1.29	1.33
36	5	847	A	N3-C4	-5.54	1.31	1.34
1	2	390	G	C2-N3	-5.54	1.28	1.32
36	1	1400	G	N7-C5	-5.54	1.35	1.39
36	5	3038	U	C4-C5	-5.54	1.38	1.43
36	1	640	U	N1-C2	-5.54	1.33	1.38
36	5	958	C	N1-C2	-5.54	1.34	1.40
36	5	3046	A	N9-C4	-5.54	1.34	1.37
36	1	2145	A	C5-C4	-5.54	1.34	1.38
1	6	1631	A	N9-C4	-5.54	1.34	1.37
36	5	2731	U	N3-C4	-5.54	1.33	1.38
36	5	2807	U	C4-C5	-5.54	1.38	1.43
36	1	1886	A	C5-C4	-5.54	1.34	1.38
1	6	781	U	C2-N3	5.54	1.41	1.37
36	5	725	G	C6-N1	-5.54	1.35	1.39
36	1	900	G	N3-C4	-5.53	1.31	1.35
36	1	2647	A	C5-C6	-5.53	1.36	1.41
36	5	2973	G	C2-N3	-5.53	1.28	1.32
36	1	2305	G	C6-N1	-5.53	1.35	1.39
1	6	1597	A	N7-C5	-5.53	1.35	1.39
36	5	2863	G	N3-C4	-5.53	1.31	1.35
36	1	3273	A	N1-C2	-5.53	1.29	1.34
36	5	199	A	N9-C4	5.53	1.41	1.37
36	5	2993	G	N7-C5	-5.53	1.35	1.39
37	7	25	G	C5-C4	-5.53	1.34	1.38
36	1	2649	A	C5-C6	-5.53	1.36	1.41
36	5	583	G	N3-C4	-5.53	1.31	1.35
38	8	1	A	N9-C8	-5.53	1.33	1.37
36	5	3086	A	N9-C4	-5.53	1.34	1.37
36	5	2244	A	P-O5'	-5.53	1.54	1.59
36	5	2632	G	C8-N7	-5.53	1.27	1.30
36	1	943	U	N1-C2	-5.52	1.33	1.38
36	5	1005	G	N3-C4	-5.52	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2378	C	N1-C2	-5.52	1.34	1.40
36	1	3045	G	C5-C6	-5.52	1.36	1.42
36	5	2307	G	N9-C4	-5.52	1.33	1.38
36	5	2616	C	C2-O2	-5.52	1.19	1.24
36	1	619	A	N3-C4	5.52	1.38	1.34
36	1	2153	U	C4-O4	-5.52	1.19	1.23
36	1	2881	C	C2-O2	5.52	1.29	1.24
36	1	3027	A	N9-C4	-5.52	1.34	1.37
38	4	52	A	C6-N1	-5.52	1.31	1.35
36	5	644	G	N9-C4	5.52	1.42	1.38
36	5	2630	C	N1-C6	-5.52	1.33	1.37
36	1	424	G	C6-O6	-5.51	1.19	1.24
36	1	744	A	N3-C4	-5.51	1.31	1.34
36	1	1913	A	N3-C4	-5.51	1.31	1.34
36	5	1589	A	C5-C4	-5.51	1.34	1.38
36	5	1908	A	N9-C4	5.51	1.41	1.37
36	5	2647	A	N3-C4	-5.51	1.31	1.34
36	5	2871	G	C5-C4	5.51	1.42	1.38
36	5	3056	U	C2-N3	-5.51	1.33	1.37
37	7	49	G	N9-C4	-5.51	1.33	1.38
36	1	2858	U	N1-C6	-5.51	1.32	1.38
36	5	1305	U	N1-C6	-5.51	1.32	1.38
36	5	2968	G	N9-C8	-5.51	1.33	1.37
36	5	588	G	C6-N1	-5.51	1.35	1.39
36	5	2172	A	C6-N1	-5.51	1.31	1.35
37	7	14	U	N1-C6	-5.51	1.32	1.38
36	1	691	A	N7-C5	-5.51	1.35	1.39
36	5	1116	G	C5-C4	-5.51	1.34	1.38
36	5	1182	A	C5-C4	-5.51	1.34	1.38
36	5	1397	C	N1-C6	-5.51	1.33	1.37
36	5	2703	A	P-O5'	-5.51	1.54	1.59
36	5	2757	U	N3-C4	-5.51	1.33	1.38
36	1	2996	U	C2-N3	5.51	1.41	1.37
36	1	3008	A	N9-C4	-5.51	1.34	1.37
36	5	3045	G	N3-C4	-5.51	1.31	1.35
36	1	2403	G	N9-C4	5.50	1.42	1.38
36	5	2848	G	N9-C4	-5.50	1.33	1.38
36	5	668	G	N3-C4	-5.50	1.31	1.35
36	5	1047	A	N9-C4	-5.50	1.34	1.37
36	5	2665	U	C2-N3	-5.50	1.33	1.37
36	5	3065	G	N3-C4	-5.50	1.31	1.35
36	1	2891	U	N1-C2	-5.50	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2980	U	N1-C6	-5.50	1.33	1.38
36	5	1193	A	N7-C5	-5.50	1.35	1.39
36	5	1217	A	C5-C4	-5.50	1.34	1.38
36	5	2188	A	N3-C4	-5.50	1.31	1.34
36	1	1467	A	N9-C4	-5.50	1.34	1.37
36	1	2940	A	N7-C5	-5.50	1.35	1.39
36	5	2409	G	N7-C5	-5.50	1.35	1.39
36	5	2618	G	P-O5'	-5.50	1.54	1.59
37	7	117	A	N3-C4	-5.50	1.31	1.34
1	2	323	A	N9-C4	-5.50	1.34	1.37
36	1	34	A	C5-C6	-5.49	1.36	1.41
36	1	2415	C	N1-C6	-5.49	1.33	1.37
36	1	3022	G	C5-C6	-5.49	1.36	1.42
36	5	2187	G	N3-C4	-5.49	1.31	1.35
1	2	42	G	N9-C8	-5.49	1.34	1.37
36	5	951	A	N3-C4	-5.49	1.31	1.34
36	5	3026	G	C8-N7	-5.49	1.27	1.30
36	1	1079	A	N3-C4	-5.49	1.31	1.34
36	1	2755	C	C2-N3	-5.49	1.31	1.35
36	1	3150	A	N7-C5	-5.49	1.35	1.39
36	5	1869	C	N1-C6	-5.49	1.33	1.37
36	5	1916	U	C2-N3	-5.49	1.33	1.37
36	5	3124	G	C5-C6	-5.49	1.36	1.42
36	1	2994	A	N3-C4	-5.49	1.31	1.34
36	1	3210	A	C6-N1	-5.49	1.31	1.35
36	5	2628	A	C6-N1	-5.49	1.31	1.35
36	5	2918	G	N1-C2	-5.49	1.33	1.37
36	5	2950	G	N7-C5	-5.49	1.35	1.39
36	5	3262	U	C2-O2	-5.49	1.17	1.22
36	5	2130	G	N3-C4	-5.49	1.31	1.35
36	5	1370	G	C2-N3	-5.49	1.28	1.32
36	5	2995	A	C5-C4	-5.49	1.34	1.38
1	6	1300	A	C5-C4	-5.48	1.34	1.38
1	2	1786	G	N3-C4	-5.48	1.31	1.35
36	1	2875	U	C5-C6	5.48	1.39	1.34
1	6	631	G	N3-C4	-5.48	1.31	1.35
1	6	1111	G	C6-N1	-5.48	1.35	1.39
1	6	1584	G	C5-C6	-5.48	1.36	1.42
36	5	915	A	N7-C5	-5.48	1.35	1.39
36	5	3139	A	N9-C8	-5.48	1.33	1.37
36	5	3299	A	N3-C4	-5.48	1.31	1.34
1	6	1127	G	C6-N1	5.48	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	356	C	N1-C6	-5.48	1.33	1.37
36	5	844	G	C5-C4	-5.48	1.34	1.38
36	5	1311	G	N9-C8	-5.48	1.34	1.37
36	5	2606	G	N9-C4	-5.48	1.33	1.38
36	1	650	C	N1-C6	-5.48	1.33	1.37
36	1	1417	G	N9-C4	-5.48	1.33	1.38
36	5	2188	A	N9-C4	-5.48	1.34	1.37
36	1	3130	A	C5-C6	-5.48	1.36	1.41
36	5	651	G	C6-N1	-5.48	1.35	1.39
36	5	1076	C	N3-C4	-5.48	1.30	1.33
36	5	2830	G	N9-C8	-5.48	1.34	1.37
43	l6	52	VAL	CB-CG2	-5.48	1.41	1.52
36	1	518	G	N9-C4	-5.48	1.33	1.38
36	5	2124	G	N7-C5	-5.48	1.35	1.39
36	1	1401	A	N9-C8	-5.47	1.33	1.37
36	1	3121	U	N1-C6	-5.47	1.33	1.38
36	5	1309	U	C2-O2	-5.47	1.17	1.22
36	5	1892	G	C5-C4	-5.47	1.34	1.38
36	5	2353	G	C6-O6	-5.47	1.19	1.24
38	8	15	G	N3-C4	-5.47	1.31	1.35
38	8	111	A	C5-C6	-5.47	1.36	1.41
36	1	916	G	C6-N1	-5.47	1.35	1.39
36	1	1186	G	C6-N1	-5.47	1.35	1.39
36	5	1894	U	N1-C6	-5.47	1.33	1.38
36	5	2117	A	C6-N1	-5.47	1.31	1.35
36	5	2886	U	N1-C6	-5.47	1.33	1.38
36	5	3047	U	C2-N3	-5.47	1.33	1.37
57	n1	107	GLU	CG-CD	5.47	1.60	1.51
36	1	2122	G	N9-C8	5.47	1.41	1.37
36	5	2159	U	N1-C2	5.47	1.43	1.38
36	5	2616	C	C4-C5	-5.47	1.38	1.43
36	1	659	G	N3-C4	-5.47	1.31	1.35
36	1	973	A	N3-C4	-5.47	1.31	1.34
36	1	1599	G	N3-C4	-5.47	1.31	1.35
36	1	2394	G	N3-C4	-5.47	1.31	1.35
36	1	2831	G	C2-N3	-5.47	1.28	1.32
1	6	615	A	N3-C4	-5.47	1.31	1.34
36	5	1156	C	P-O5'	-5.47	1.54	1.59
36	5	1157	G	N9-C8	-5.47	1.34	1.37
36	5	3180	A	C6-N1	-5.47	1.31	1.35
36	5	3194	C	N1-C6	-5.47	1.33	1.37
36	5	2382	G	N3-C4	-5.47	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2994	A	C6-N1	-5.47	1.31	1.35
36	1	522	A	C6-N1	-5.46	1.31	1.35
36	1	1522	U	C2-N3	-5.46	1.33	1.37
36	1	3226	A	N9-C4	-5.46	1.34	1.37
37	7	45	A	C6-N1	-5.46	1.31	1.35
55	m9	140	GLU	CG-CD	5.46	1.60	1.51
36	1	2821	C	C4-N4	5.46	1.38	1.33
36	5	1136	A	N9-C8	-5.46	1.33	1.37
36	5	2390	A	N9-C4	-5.46	1.34	1.37
36	5	3083	G	N9-C4	-5.46	1.33	1.38
37	7	46	A	C5-C6	-5.46	1.36	1.41
36	1	944	C	N1-C6	-5.46	1.33	1.37
1	6	1525	A	N9-C4	-5.46	1.34	1.37
40	l3	72	VAL	CA-CB	-5.46	1.43	1.54
36	1	1431	G	N1-C2	-5.46	1.33	1.37
36	1	2924	U	N1-C2	-5.46	1.33	1.38
36	1	3010	U	N1-C2	-5.46	1.33	1.38
36	5	428	A	N3-C4	-5.46	1.31	1.34
36	5	505	G	C2-N3	-5.46	1.28	1.32
36	5	2401	A	C6-N1	5.46	1.39	1.35
36	5	2916	U	C4-O4	-5.46	1.19	1.23
36	1	1362	G	N9-C4	-5.46	1.33	1.38
36	5	1186	G	P-O5'	-5.46	1.54	1.59
36	5	888	A	N7-C5	-5.45	1.35	1.39
36	5	1117	G	C6-N1	-5.45	1.35	1.39
36	5	2881	C	N1-C6	-5.45	1.33	1.37
1	2	1146	G	N7-C5	-5.45	1.35	1.39
36	1	741	U	N1-C2	-5.45	1.33	1.38
36	1	2153	U	N3-C4	-5.45	1.33	1.38
36	5	1047	A	C5-C4	-5.45	1.34	1.38
36	5	1143	A	N7-C5	-5.45	1.35	1.39
36	5	2649	A	C5-C6	-5.45	1.36	1.41
36	5	2717	U	N1-C2	-5.45	1.33	1.38
1	2	162	A	N9-C4	5.45	1.41	1.37
36	1	1310	G	N3-C4	-5.45	1.31	1.35
36	5	1195	A	C6-N1	-5.45	1.31	1.35
36	5	1594	A	N3-C4	-5.45	1.31	1.34
36	1	85	A	N9-C4	-5.45	1.34	1.37
36	5	706	A	C5-C4	-5.45	1.34	1.38
36	5	789	A	N9-C4	-5.45	1.34	1.37
36	5	2754	G	C5-C4	-5.45	1.34	1.38
36	5	925	A	C6-N1	5.45	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1153	A	C5-C4	-5.45	1.34	1.38
36	5	2614	G	N1-C2	-5.45	1.33	1.37
36	5	2908	G	N9-C4	-5.45	1.33	1.38
36	5	2279	A	C6-N1	-5.44	1.31	1.35
36	1	2638	C	N3-C4	-5.44	1.30	1.33
36	1	3184	A	N3-C4	-5.44	1.31	1.34
38	4	20	U	N1-C2	-5.44	1.33	1.38
36	5	1177	G	C5-C4	-5.44	1.34	1.38
36	5	2934	A	N9-C4	-5.44	1.34	1.37
36	1	1306	G	C5-C6	-5.44	1.36	1.42
1	6	1638	G	N3-C4	-5.44	1.31	1.35
36	5	633	C	C5-C6	-5.44	1.29	1.34
36	5	943	U	C2-O2	-5.44	1.17	1.22
36	5	1175	C	C2-O2	-5.44	1.19	1.24
36	5	1382	G	N9-C4	-5.44	1.33	1.38
36	5	2369	G	N9-C8	-5.44	1.34	1.37
52	m6	135	TYR	CD1-CE1	-5.44	1.31	1.39
1	2	1782	A	N9-C4	-5.44	1.34	1.37
1	6	399	A	N9-C4	-5.44	1.34	1.37
36	5	2242	A	C5-C4	-5.44	1.34	1.38
37	7	39	C	C4-C5	-5.44	1.38	1.43
36	1	1513	G	N7-C5	-5.44	1.35	1.39
36	1	2107	A	C6-N1	-5.44	1.31	1.35
1	6	294	C	N1-C6	-5.44	1.33	1.37
36	5	1435	A	C6-N1	-5.44	1.31	1.35
36	1	2603	G	N7-C5	-5.44	1.35	1.39
36	1	2702	A	N7-C5	-5.44	1.35	1.39
36	5	2601	A	C5-C4	-5.44	1.34	1.38
36	1	935	U	N1-C6	-5.43	1.33	1.38
36	1	1210	U	C2-N3	-5.43	1.33	1.37
36	5	2422	C	N1-C6	-5.43	1.33	1.37
36	5	2819	A	N1-C2	-5.43	1.29	1.34
36	1	1353	U	N1-C2	5.43	1.43	1.38
36	1	958	C	N1-C6	-5.43	1.33	1.37
36	1	272	G	C2-N3	-5.43	1.28	1.32
36	1	985	U	C2-O2	-5.43	1.17	1.22
36	1	1928	G	N9-C4	-5.43	1.33	1.38
1	6	317	C	N1-C6	-5.43	1.33	1.37
4	s2	120	GLU	CG-CD	5.43	1.60	1.51
36	5	1135	A	N3-C4	-5.43	1.31	1.34
36	5	1203	A	C5-C4	-5.43	1.34	1.38
36	5	3046	A	C6-N6	-5.43	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
48	m1	157	GLU	CB-CG	5.43	1.62	1.52
36	1	2157	G	N9-C8	-5.43	1.34	1.37
36	1	2605	G	C5-C4	-5.43	1.34	1.38
36	5	804	C	C2-N3	5.43	1.40	1.35
36	5	1487	G	N7-C5	-5.43	1.35	1.39
36	1	638	C	C5-C6	-5.42	1.30	1.34
36	1	2639	G	N7-C5	-5.42	1.35	1.39
36	1	2799	A	C6-N1	-5.42	1.31	1.35
36	1	644	G	N1-C2	-5.42	1.33	1.37
36	1	934	G	N1-C2	-5.42	1.33	1.37
36	1	2954	U	N1-C6	5.42	1.42	1.38
1	6	1118	G	N3-C4	-5.42	1.31	1.35
36	5	418	A	C5-C4	-5.42	1.34	1.38
36	5	518	G	N9-C4	-5.42	1.33	1.38
38	8	44	A	N7-C5	-5.42	1.35	1.39
36	1	931	C	C4-C5	-5.42	1.38	1.43
36	1	2918	G	N7-C5	-5.42	1.35	1.39
36	5	661	G	C6-N1	-5.42	1.35	1.39
36	5	3060	C	N1-C6	-5.42	1.33	1.37
36	1	206	G	N9-C8	-5.42	1.34	1.37
36	1	2812	C	C2-O2	-5.42	1.19	1.24
1	6	407	A	C5-C6	-5.42	1.36	1.41
21	c9	144	GLU	CB-CG	5.42	1.62	1.52
36	5	1107	C	N3-C4	-5.42	1.30	1.33
36	1	512	U	C4-O4	5.42	1.27	1.23
36	1	2755	C	N1-C6	-5.42	1.33	1.37
36	1	3098	G	N1-C2	-5.42	1.33	1.37
36	5	325	A	N9-C4	-5.42	1.34	1.37
36	5	1320	C	C4-C5	-5.42	1.38	1.43
36	5	2358	A	N3-C4	-5.42	1.31	1.34
36	1	2639	G	C5-C6	-5.42	1.36	1.42
36	5	1293	U	C4-O4	-5.42	1.19	1.23
37	3	97	A	C5-C4	-5.41	1.34	1.38
1	6	1	U	N1-C2	5.41	1.43	1.38
36	5	2917	G	C2-N3	-5.41	1.28	1.32
36	1	3007	U	C2-N3	-5.41	1.33	1.37
36	1	2156	C	N3-C4	-5.41	1.30	1.33
1	6	1645	G	N9-C4	5.41	1.42	1.38
36	1	1135	A	C6-N1	-5.41	1.31	1.35
36	5	1901	A	N1-C2	-5.41	1.29	1.34
36	5	2110	G	C5-C4	-5.41	1.34	1.38
36	5	2915	U	N1-C6	-5.41	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2323	G	N9-C8	-5.41	1.34	1.37
36	1	284	A	N7-C5	-5.41	1.36	1.39
1	6	1028	C	N3-C4	-5.41	1.30	1.33
36	5	2418	G	C2-N3	5.41	1.37	1.32
1	6	746	A	C6-N1	-5.40	1.31	1.35
36	5	2343	C	C2-N3	-5.40	1.31	1.35
36	5	2936	A	N7-C5	-5.40	1.36	1.39
36	5	3310	A	N9-C8	-5.40	1.33	1.37
1	2	974	A	N9-C4	-5.40	1.34	1.37
36	1	2332	A	C5-C6	-5.40	1.36	1.41
36	1	2917	G	C5-C4	-5.40	1.34	1.38
36	5	344	A	N7-C5	-5.40	1.36	1.39
36	5	1161	G	N3-C4	-5.40	1.31	1.35
36	5	1422	G	N7-C5	-5.40	1.36	1.39
37	7	42	A	N9-C8	-5.40	1.33	1.37
1	6	28	A	C6-N1	-5.40	1.31	1.35
1	6	1655	A	N9-C4	-5.40	1.34	1.37
36	5	998	A	C6-N1	-5.40	1.31	1.35
36	5	2185	G	N3-C4	-5.40	1.31	1.35
36	1	2848	G	C5-C4	-5.40	1.34	1.38
1	6	1634	C	N1-C2	5.40	1.45	1.40
36	5	3182	G	N1-C2	-5.40	1.33	1.37
38	8	15	G	N9-C8	-5.40	1.34	1.37
36	1	93	C	C4-C5	-5.40	1.38	1.43
37	7	88	G	C5-C4	-5.40	1.34	1.38
36	1	375	A	N9-C4	-5.39	1.34	1.37
36	1	2659	G	C5-C6	-5.39	1.36	1.42
38	4	13	A	C6-N1	-5.39	1.31	1.35
36	1	333	G	C6-N1	-5.39	1.35	1.39
36	1	1295	G	N1-C2	-5.39	1.33	1.37
36	1	2803	A	C5-C4	-5.39	1.34	1.38
36	1	2958	A	C6-N1	-5.39	1.31	1.35
37	7	90	U	P-O5'	-5.39	1.54	1.59
1	2	470	A	N9-C4	-5.39	1.34	1.37
36	1	2922	G	N1-C2	-5.39	1.33	1.37
36	5	2994	A	C5-C6	-5.39	1.36	1.41
36	5	3199	G	N7-C5	-5.39	1.36	1.39
36	1	941	G	N9-C8	-5.39	1.34	1.37
36	5	66	A	N9-C4	-5.39	1.34	1.37
36	5	589	A	N9-C4	-5.39	1.34	1.37
36	5	2311	G	N3-C4	-5.39	1.31	1.35
37	7	102	A	N3-C4	-5.39	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1003	A	C5-C6	-5.39	1.36	1.41
36	5	755	A	C5-C6	-5.39	1.36	1.41
1	2	632	U	C2-N3	-5.39	1.33	1.37
1	2	1322	A	N9-C4	-5.39	1.34	1.37
36	1	2229	A	C5-C6	-5.39	1.36	1.41
36	5	1025	A	N9-C4	5.39	1.41	1.37
36	5	423	A	N3-C4	-5.38	1.31	1.34
36	5	2933	A	N7-C5	-5.38	1.36	1.39
1	2	1795	U	N1-C2	5.38	1.43	1.38
1	6	1631	A	C5-C4	-5.38	1.34	1.38
36	5	1060	U	C4-O4	-5.38	1.19	1.23
36	5	1881	A	N7-C5	-5.38	1.36	1.39
36	5	2367	A	C5-C6	-5.38	1.36	1.41
76	q0	115	CYS	CB-SG	-5.38	1.73	1.81
36	1	920	A	C5-C4	-5.38	1.34	1.38
36	1	1341	U	C4-C5	-5.38	1.38	1.43
36	1	2988	C	C2-N3	-5.38	1.31	1.35
36	5	1376	C	N1-C6	-5.38	1.33	1.37
36	5	2637	A	C5-C4	-5.38	1.34	1.38
1	6	100	A	N9-C4	-5.38	1.34	1.37
36	5	984	G	C5-C4	-5.38	1.34	1.38
36	5	1178	G	C5-C4	-5.38	1.34	1.38
36	5	1304	A	P-O5'	-5.38	1.54	1.59
36	5	2348	A	N3-C4	-5.38	1.31	1.34
36	1	3049	A	C5-C4	-5.37	1.34	1.38
36	1	1402	C	N1-C6	-5.37	1.33	1.37
36	1	2344	U	C2-N3	-5.37	1.33	1.37
36	5	969	C	N1-C2	-5.37	1.34	1.40
44	17	78	GLU	CG-CD	5.37	1.60	1.51
36	1	3049	A	N9-C8	-5.37	1.33	1.37
1	6	1547	A	C5-C6	-5.37	1.36	1.41
1	6	1610	G	C8-N7	-5.37	1.27	1.30
36	5	1443	G	N9-C4	-5.37	1.33	1.38
36	1	677	A	C5-C4	-5.37	1.34	1.38
36	1	1440	G	C6-N1	-5.37	1.35	1.39
36	1	3141	A	N9-C4	-5.37	1.34	1.37
37	3	10	C	C4-C5	-5.37	1.38	1.43
37	3	25	G	C6-N1	-5.37	1.35	1.39
38	4	4	C	C2-O2	-5.37	1.19	1.24
1	6	1460	A	N9-C4	-5.37	1.34	1.37
36	5	40	A	N3-C4	-5.37	1.31	1.34
36	1	1613	A	N9-C4	-5.37	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2259	A	C5-C6	-5.37	1.36	1.41
36	5	2641	U	N1-C6	-5.37	1.33	1.38
36	1	1296	C	N3-C4	-5.37	1.30	1.33
36	1	2423	U	C2-N3	5.37	1.41	1.37
36	5	1461	A	C5-C4	-5.37	1.34	1.38
36	5	2411	U	C2-O2	-5.37	1.17	1.22
37	7	25	G	C6-O6	-5.37	1.19	1.24
37	7	99	G	N9-C4	-5.37	1.33	1.38
1	2	7	G	N7-C5	-5.36	1.36	1.39
36	1	2143	A	C5-C6	-5.36	1.36	1.41
36	1	3244	A	C5-C6	-5.36	1.36	1.41
36	5	2631	U	N1-C2	-5.36	1.33	1.38
36	1	2880	U	C2-N3	-5.36	1.33	1.37
36	1	365	A	C6-N1	-5.36	1.31	1.35
36	1	949	C	N1-C6	-5.36	1.33	1.37
36	1	1911	A	C5-C4	-5.36	1.34	1.38
1	6	415	C	N3-C4	-5.36	1.30	1.33
1	6	815	G	N9-C4	-5.36	1.33	1.38
36	5	981	U	N1-C6	5.36	1.42	1.38
36	5	1332	A	C8-N7	-5.36	1.27	1.31
36	5	2956	A	C6-N6	-5.36	1.29	1.33
36	5	3272	C	N1-C6	-5.36	1.33	1.37
36	1	1460	A	N3-C4	-5.36	1.31	1.34
37	3	89	G	N9-C8	-5.36	1.34	1.37
36	5	916	G	C5-C4	-5.36	1.34	1.38
36	5	917	A	C5-C4	-5.36	1.35	1.38
36	5	1153	A	C5-C6	-5.36	1.36	1.41
36	5	1200	A	C6-N1	-5.36	1.31	1.35
36	5	2255	A	C5-C4	-5.36	1.34	1.38
46	19	181	VAL	CB-CG2	-5.36	1.41	1.52
52	m6	40	GLU	CD-OE2	5.36	1.31	1.25
36	1	1135	A	N7-C5	-5.36	1.36	1.39
36	1	1349	G	N9-C4	5.36	1.42	1.38
36	1	1915	A	N3-C4	-5.36	1.31	1.34
36	1	2146	C	N1-C6	-5.36	1.33	1.37
1	6	1580	C	N1-C6	-5.36	1.33	1.37
36	5	1062	A	C5-C6	-5.36	1.36	1.41
36	5	1860	G	C6-N1	-5.36	1.35	1.39
36	5	2167	A	N3-C4	-5.36	1.31	1.34
36	1	205	C	N1-C6	-5.35	1.33	1.37
1	6	1004	U	N3-C4	-5.35	1.33	1.38
36	5	3314	A	N7-C5	-5.35	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	1133	A	N3-C4	-5.35	1.31	1.34
36	1	1175	C	N1-C2	-5.35	1.34	1.40
36	5	2317	A	N3-C4	-5.35	1.31	1.34
36	5	2996	U	C2-O2	5.35	1.27	1.22
36	5	3211	C	N1-C6	-5.35	1.33	1.37
36	1	1886	A	C2-N3	-5.35	1.28	1.33
36	1	3175	U	N1-C2	5.35	1.43	1.38
38	8	14	C	N1-C2	-5.35	1.34	1.40
40	13	358	TRP	CB-CG	-5.35	1.40	1.50
36	1	402	A	C6-N6	-5.35	1.29	1.33
36	5	353	G	N9-C4	-5.35	1.33	1.38
36	5	400	G	N9-C4	-5.35	1.33	1.38
36	5	1056	U	N1-C2	5.35	1.43	1.38
36	5	1085	A	C5-C6	-5.35	1.36	1.41
37	7	45	A	N7-C5	5.35	1.42	1.39
1	6	1117	U	N1-C2	-5.35	1.33	1.38
36	1	411	U	N1-C2	-5.34	1.33	1.38
36	1	1836	C	N1-C6	-5.34	1.33	1.37
1	6	1004	U	C2-N3	-5.34	1.34	1.37
36	5	916	G	N7-C5	-5.34	1.36	1.39
36	5	2387	A	N9-C4	-5.34	1.34	1.37
36	5	1099	A	N3-C4	-5.34	1.31	1.34
36	5	2995	A	N3-C4	-5.34	1.31	1.34
36	1	2357	A	C3'-C2'	-5.34	1.46	1.52
36	1	3125	U	C2-N3	-5.34	1.34	1.37
36	1	3127	A	C6-N1	-5.34	1.31	1.35
36	1	3341	U	N1-C2	5.34	1.43	1.38
1	6	1100	G	N9-C8	-5.34	1.34	1.37
1	6	1778	G	N9-C4	-5.34	1.33	1.38
36	5	1117	G	C6-O6	-5.34	1.19	1.24
36	5	2304	C	N1-C6	-5.34	1.33	1.37
37	7	95	A	N9-C8	-5.34	1.33	1.37
36	5	888	A	N3-C4	-5.34	1.31	1.34
36	5	2202	C	N1-C6	-5.34	1.33	1.37
36	5	2722	U	C4-C5	-5.34	1.38	1.43
36	5	2982	A	N9-C4	-5.34	1.34	1.37
36	5	3090	U	C4-C5	-5.34	1.38	1.43
37	7	83	U	C4-O4	-5.34	1.19	1.23
36	5	2902	A	C6-N1	-5.34	1.31	1.35
36	1	960	U	N1-C2	5.34	1.43	1.38
1	6	1322	A	N9-C4	-5.34	1.34	1.37
1	6	1610	G	N7-C5	-5.34	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1780	G	C8-N7	-5.34	1.27	1.30
36	5	1175	C	N1-C2	-5.34	1.34	1.40
36	5	3257	C	N3-C4	-5.34	1.30	1.33
37	7	112	G	N1-C2	-5.34	1.33	1.37
37	7	13	A	N7-C5	-5.33	1.36	1.39
36	1	2972	G	N3-C4	-5.33	1.31	1.35
1	6	1780	G	N7-C5	-5.33	1.36	1.39
36	5	1337	A	C6-N1	-5.33	1.31	1.35
36	5	1451	C	N3-C4	-5.33	1.30	1.33
36	5	2639	G	N9-C4	-5.33	1.33	1.38
36	1	2955	U	N1-C2	5.33	1.43	1.38
1	6	1309	C	N1-C6	-5.33	1.33	1.37
36	5	277	G	N3-C4	-5.33	1.31	1.35
36	5	916	G	C8-N7	-5.33	1.27	1.30
36	5	1185	C	N3-C4	-5.33	1.30	1.33
36	5	1369	A	N7-C5	-5.33	1.36	1.39
52	m6	34	VAL	CB-CG1	-5.33	1.41	1.52
36	1	1794	G	N9-C8	-5.33	1.34	1.37
52	m6	75	ALA	CA-CB	-5.33	1.41	1.52
1	2	397	A	N9-C4	-5.33	1.34	1.37
36	1	70	A	C5-C4	-5.33	1.35	1.38
36	1	537	A	N9-C4	-5.33	1.34	1.37
36	1	1102	A	N9-C4	-5.33	1.34	1.37
36	5	951	A	C6-N6	-5.33	1.29	1.33
1	6	1652	C	N1-C6	-5.33	1.33	1.37
36	1	499	G	C2-N3	-5.33	1.28	1.32
36	1	1154	A	C5-C6	-5.33	1.36	1.41
37	3	46	A	N9-C4	-5.33	1.34	1.37
1	6	408	C	N1-C2	-5.33	1.34	1.40
52	m6	4	GLU	CD-OE2	5.33	1.31	1.25
1	2	550	A	N7-C5	-5.32	1.36	1.39
36	1	367	A	N3-C4	-5.32	1.31	1.34
36	5	353	G	C5-C4	-5.32	1.34	1.38
36	5	1604	G	C6-N1	-5.32	1.35	1.39
36	5	3332	U	N1-C2	-5.32	1.33	1.38
37	7	104	A	N7-C5	-5.32	1.36	1.39
46	19	27	VAL	CB-CG2	-5.32	1.41	1.52
36	1	2419	A	N9-C4	-5.32	1.34	1.37
36	5	2212	C	N1-C2	5.32	1.45	1.40
36	5	952	A	N9-C4	-5.32	1.34	1.37
38	8	138	A	N7-C5	-5.32	1.36	1.39
36	1	2877	G	C6-N1	-5.32	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	551	G	N3-C4	-5.32	1.31	1.35
36	1	952	A	N7-C5	-5.32	1.36	1.39
1	6	441	A	N9-C8	-5.32	1.33	1.37
1	6	1521	G	C5-C4	-5.32	1.34	1.38
1	6	1556	A	C5-C6	-5.32	1.36	1.41
36	1	2159	U	N3-C4	5.32	1.43	1.38
36	1	2834	G	C2-N3	-5.32	1.28	1.32
38	4	89	A	N9-C4	-5.32	1.34	1.37
36	5	1140	G	N9-C8	-5.32	1.34	1.37
36	5	3115	C	N1-C2	-5.32	1.34	1.40
36	1	1134	G	C6-N1	-5.31	1.35	1.39
1	6	48	G	N3-C4	-5.31	1.31	1.35
1	2	1119	G	C6-N1	-5.31	1.35	1.39
36	1	1893	A	N9-C4	-5.31	1.34	1.37
36	5	2234	G	C5-C4	-5.31	1.34	1.38
36	5	2658	G	C6-N1	-5.31	1.35	1.39
36	5	2718	U	C2-N3	-5.31	1.34	1.37
36	5	3124	G	N7-C5	-5.31	1.36	1.39
37	7	89	G	C8-N7	-5.31	1.27	1.30
59	n3	96	GLU	CG-CD	5.31	1.59	1.51
36	1	3197	G	N9-C4	-5.31	1.33	1.38
36	1	2619	G	C8-N7	-5.31	1.27	1.30
36	1	2896	A	N7-C5	-5.31	1.36	1.39
36	1	2918	G	C5-C4	-5.31	1.34	1.38
36	5	2339	C	N1-C6	-5.31	1.33	1.37
36	5	2971	A	N9-C4	5.31	1.41	1.37
36	1	2164	A	C5-C4	-5.31	1.35	1.38
36	5	1051	U	N1-C2	-5.31	1.33	1.38
36	5	2329	C	N1-C2	-5.31	1.34	1.40
36	5	1366	A	N3-C4	-5.31	1.31	1.34
36	5	3037	U	N1-C2	-5.31	1.33	1.38
36	1	44	U	C5'-C4'	-5.30	1.45	1.51
36	1	2939	G	N9-C4	5.30	1.42	1.38
50	m4	66	THR	CA-CB	-5.30	1.39	1.53
1	2	1139	A	N9-C4	-5.30	1.34	1.37
36	1	881	C	N3-C4	-5.30	1.30	1.33
1	6	755	A	C5-C6	-5.30	1.36	1.41
1	6	1399	C	N1-C6	5.30	1.40	1.37
1	6	1629	G	C6-N1	-5.30	1.35	1.39
36	5	360	G	N3-C4	-5.30	1.31	1.35
36	5	644	G	C6-N1	-5.30	1.35	1.39
36	5	1307	G	N9-C4	-5.30	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2938	G	N9-C8	-5.30	1.34	1.37
36	1	896	A	N7-C5	-5.30	1.36	1.39
1	6	751	G	N9-C4	-5.30	1.33	1.38
36	5	588	G	N1-C2	-5.30	1.33	1.37
36	5	3049	A	N3-C4	-5.30	1.31	1.34
36	1	943	U	N3-C4	-5.30	1.33	1.38
36	1	2918	G	N9-C8	-5.30	1.34	1.37
1	6	609	U	N1-C6	-5.30	1.33	1.38
36	1	583	G	N1-C2	-5.30	1.33	1.37
36	5	2707	C	C4-C5	-5.30	1.38	1.43
36	1	2283	G	C2-N3	-5.29	1.28	1.32
36	5	1203	A	N9-C4	-5.29	1.34	1.37
36	5	2307	G	C5-C6	-5.29	1.37	1.42
36	5	2930	A	N9-C4	-5.29	1.34	1.37
36	5	2316	G	N1-C2	-5.29	1.33	1.37
36	1	2801	A	N3-C4	-5.29	1.31	1.34
36	5	983	A	N9-C4	-5.29	1.34	1.37
36	5	1188	U	C2-N3	-5.29	1.34	1.37
36	1	937	G	N3-C4	-5.29	1.31	1.35
36	5	1295	G	N7-C5	-5.29	1.36	1.39
36	5	1432	C	C2-N3	-5.29	1.31	1.35
36	5	1545	A	N7-C5	-5.29	1.36	1.39
36	5	2659	G	C5-C6	-5.29	1.37	1.42
36	5	2906	C	N3-C4	5.29	1.37	1.33
36	1	1656	A	N3-C4	-5.29	1.31	1.34
1	6	152	U	N1-C2	-5.29	1.33	1.38
36	5	1296	C	C2-O2	-5.29	1.19	1.24
36	5	1430	U	C2-N3	-5.29	1.34	1.37
36	5	1865	A	C5-C6	-5.29	1.36	1.41
36	5	2397	A	N7-C5	-5.29	1.36	1.39
36	5	3063	C	N1-C6	-5.29	1.33	1.37
36	1	372	A	N7-C5	-5.28	1.36	1.39
36	1	574	U	N1-C2	-5.28	1.33	1.38
36	1	887	G	C6-O6	-5.28	1.19	1.24
36	1	1400	G	C5-C4	-5.28	1.34	1.38
36	1	3011	A	N9-C8	-5.28	1.33	1.37
36	5	1374	G	C5-C4	-5.28	1.34	1.38
36	5	2916	U	C2-O2	5.28	1.27	1.22
1	6	678	A	N9-C4	5.28	1.41	1.37
36	5	2611	U	N1-C2	-5.28	1.33	1.38
36	1	654	C	C2-N3	-5.28	1.31	1.35
36	1	2386	A	C6-N1	-5.28	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3221	C	N1-C6	-5.28	1.33	1.37
1	6	103	A	C5-C6	-5.28	1.36	1.41
1	6	1491	U	C2-N3	5.28	1.41	1.37
36	5	1085	A	N7-C5	-5.28	1.36	1.39
36	5	1435	A	C5-C4	-5.28	1.35	1.38
36	5	2834	G	C5-C4	-5.28	1.34	1.38
36	5	2341	A	C6-N6	-5.28	1.29	1.33
36	5	2375	G	C2-N3	-5.28	1.28	1.32
1	2	1084	A	C5-C4	-5.28	1.35	1.38
36	1	985	U	N1-C2	-5.28	1.33	1.38
36	1	3141	A	N7-C5	-5.28	1.36	1.39
1	6	407	A	N9-C4	-5.28	1.34	1.37
1	6	1100	G	C5-C4	-5.28	1.34	1.38
1	6	1768	G	C2-N3	-5.28	1.28	1.32
36	5	1889	G	N7-C5	-5.28	1.36	1.39
36	5	3295	A	C5-C4	-5.28	1.35	1.38
37	7	25	G	N1-C2	-5.28	1.33	1.37
36	1	2399	A	C5-C6	-5.27	1.36	1.41
36	1	3260	G	N7-C5	-5.27	1.36	1.39
1	6	139	C	N3-C4	-5.27	1.30	1.33
36	5	1161	G	N9-C4	-5.27	1.33	1.38
36	1	220	G	N9-C8	-5.27	1.34	1.37
36	1	409	A	N9-C4	-5.27	1.34	1.37
36	1	2121	G	C5-C6	5.27	1.47	1.42
36	1	2370	G	N9-C8	-5.27	1.34	1.37
36	5	1288	U	C2-N3	-5.27	1.34	1.37
36	5	3144	G	N1-C2	-5.27	1.33	1.37
37	7	51	A	N7-C5	-5.27	1.36	1.39
1	6	1445	G	N9-C4	-5.27	1.33	1.38
36	5	1173	U	C2-N3	-5.27	1.34	1.37
36	5	2691	A	N9-C4	-5.27	1.34	1.37
36	1	2905	U	N1-C2	-5.27	1.33	1.38
1	6	1418	G	C6-O6	5.27	1.28	1.24
36	5	2298	U	N1-C6	-5.27	1.33	1.38
36	5	3179	U	N1-C6	-5.27	1.33	1.38
36	1	74	G	C6-N1	-5.27	1.35	1.39
36	1	200	C	N3-C4	-5.27	1.30	1.33
36	1	2376	G	C6-N1	-5.27	1.35	1.39
36	1	2819	A	N1-C2	-5.27	1.29	1.34
52	M6	100	GLU	CD-OE1	5.27	1.31	1.25
36	5	1915	A	C6-N1	-5.27	1.31	1.35
36	5	2368	A	N7-C5	-5.27	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2912	G	N3-C4	-5.27	1.31	1.35
1	6	1031	U	C2-N3	-5.27	1.34	1.37
36	5	1040	A	N3-C4	-5.27	1.31	1.34
36	5	3275	U	C2-N3	5.27	1.41	1.37
36	5	595	G	C8-N7	-5.26	1.27	1.30
36	5	1310	G	C5-C4	-5.26	1.34	1.38
36	5	3125	U	N3-C4	-5.26	1.33	1.38
37	7	94	C	N3-C4	-5.26	1.30	1.33
36	5	521	A	N7-C5	-5.26	1.36	1.39
36	5	1184	A	N3-C4	-5.26	1.31	1.34
1	2	597	G	C5-C6	-5.26	1.37	1.42
36	1	2643	A	N9-C4	-5.26	1.34	1.37
36	5	1843	C	N1-C6	-5.26	1.33	1.37
36	5	3058	U	N1-C2	-5.26	1.33	1.38
36	1	712	G	N9-C8	-5.26	1.34	1.37
36	1	2843	U	N1-C2	5.26	1.43	1.38
37	3	79	A	N9-C4	-5.26	1.34	1.37
1	6	78	A	C6-N1	-5.26	1.31	1.35
1	6	1543	A	C6-N1	-5.26	1.31	1.35
36	5	2636	A	N9-C4	-5.26	1.34	1.37
1	2	577	G	C5-C6	-5.26	1.37	1.42
36	1	433	A	N9-C4	-5.26	1.34	1.37
36	1	2938	G	C8-N7	-5.26	1.27	1.30
36	5	654	C	C2-O2	-5.26	1.19	1.24
36	5	3310	A	C8-N7	-5.26	1.27	1.31
36	5	3326	G	N9-C8	-5.26	1.34	1.37
36	5	884	A	C8-N7	-5.26	1.27	1.31
36	5	920	A	C6-N1	-5.26	1.31	1.35
36	5	2954	U	C4-C5	5.26	1.48	1.43
36	1	3140	G	C5-C6	-5.25	1.37	1.42
36	5	3096	C	N3-C4	-5.25	1.30	1.33
36	1	334	A	C6-N6	-5.25	1.29	1.33
36	5	796	U	C2-N3	-5.25	1.34	1.37
36	5	1183	C	C4-C5	-5.25	1.38	1.43
36	5	2644	C	N3-C4	-5.25	1.30	1.33
1	2	1589	C	N3-C4	-5.25	1.30	1.33
36	1	1207	G	C5-C6	-5.25	1.37	1.42
36	1	2963	C	C4-C5	-5.25	1.38	1.43
36	5	2100	A	N9-C4	5.25	1.41	1.37
36	5	2320	A	N3-C4	-5.25	1.31	1.34
36	5	2858	U	N1-C6	-5.25	1.33	1.38
36	1	41	G	N7-C5	-5.25	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3009	G	C5-C6	-5.25	1.37	1.42
36	5	2705	A	C6-N6	-5.25	1.29	1.33
37	7	26	C	N1-C2	5.25	1.45	1.40
36	1	1891	A	C6-N1	-5.25	1.31	1.35
59	N3	52	ALA	CA-CB	-5.25	1.41	1.52
36	5	944	C	C2-N3	-5.25	1.31	1.35
36	5	1892	G	N9-C8	-5.25	1.34	1.37
1	2	983	A	N9-C4	5.25	1.41	1.37
36	1	368	G	C6-N1	-5.25	1.35	1.39
36	1	751	A	N7-C5	-5.25	1.36	1.39
36	1	2385	G	P-O5'	-5.25	1.54	1.59
38	4	53	A	C5-C4	-5.25	1.35	1.38
1	6	147	A	C5-C6	-5.25	1.36	1.41
36	5	1059	G	N3-C4	-5.25	1.31	1.35
36	5	1891	A	N3-C4	-5.25	1.31	1.34
36	1	994	G	C6-N1	-5.24	1.35	1.39
36	5	951	A	C5-C4	-5.24	1.35	1.38
36	5	990	U	C4-O4	-5.24	1.19	1.23
36	5	2262	A	C5-C6	-5.24	1.36	1.41
36	5	2697	A	C5-C4	-5.24	1.35	1.38
36	5	3177	G	C6-N1	-5.24	1.35	1.39
36	1	899	U	N3-C4	-5.24	1.33	1.38
36	1	2627	C	N1-C2	-5.24	1.34	1.40
37	7	86	U	N1-C2	-5.24	1.33	1.38
1	2	1375	A	N9-C4	-5.24	1.34	1.37
36	1	627	U	N1-C2	-5.24	1.33	1.38
1	6	1403	C	N1-C6	-5.24	1.34	1.37
36	5	2799	A	C6-N1	-5.24	1.31	1.35
36	1	2805	G	C5-C4	-5.24	1.34	1.38
36	1	3147	G	N3-C4	-5.24	1.31	1.35
36	5	1311	G	N7-C5	-5.24	1.36	1.39
36	5	2381	G	C5-C4	-5.24	1.34	1.38
36	5	2328	U	C4-O4	-5.24	1.19	1.23
1	2	529	A	N9-C4	-5.24	1.34	1.37
36	1	1299	U	N1-C2	-5.24	1.33	1.38
36	1	2761	G	N7-C5	-5.24	1.36	1.39
1	6	865	A	C5-C4	-5.24	1.35	1.38
36	5	3103	A	N9-C4	-5.24	1.34	1.37
59	n3	53	SER	CA-CB	-5.24	1.45	1.52
36	1	573	C	N3-C4	-5.23	1.30	1.33
1	6	332	U	C2-N3	-5.23	1.34	1.37
1	6	1537	C	N3-C4	5.23	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3299	A	N9-C4	-5.23	1.34	1.37
36	5	1290	A	N7-C5	-5.23	1.36	1.39
36	5	1386	A	N9-C4	-5.23	1.34	1.37
36	5	2167	A	N9-C4	-5.23	1.34	1.37
36	5	3118	C	C4-C5	-5.23	1.38	1.43
36	5	357	A	N3-C4	-5.23	1.31	1.34
36	5	629	U	N1-C2	-5.23	1.33	1.38
36	5	2967	A	N7-C5	-5.23	1.36	1.39
36	1	1171	G	C6-N1	-5.23	1.35	1.39
36	1	2894	C	N1-C6	-5.23	1.34	1.37
36	5	21	G	N9-C4	-5.23	1.33	1.38
36	5	1401	A	C5-C4	-5.23	1.35	1.38
36	5	2688	U	N1-C6	-5.23	1.33	1.38
37	7	49	G	C6-O6	5.23	1.28	1.24
36	1	635	G	C5-C4	-5.23	1.34	1.38
36	1	1153	A	C6-N1	-5.23	1.31	1.35
1	6	1658	G	N9-C4	-5.23	1.33	1.38
36	5	816	A	N9-C4	5.23	1.41	1.37
36	5	1884	A	N3-C4	-5.23	1.31	1.34
37	7	2	G	C6-N1	-5.23	1.35	1.39
36	1	2377	G	C5-C6	-5.22	1.37	1.42
36	1	2404	A	N1-C2	5.22	1.39	1.34
36	5	583	G	C5-C6	-5.22	1.37	1.42
36	5	1431	G	C5-C6	-5.22	1.37	1.42
36	5	2611	U	N1-C6	-5.22	1.33	1.38
36	1	1410	U	C4-C5	-5.22	1.38	1.43
1	6	788	A	N3-C4	-5.22	1.31	1.34
36	5	501	A	C6-N1	-5.22	1.31	1.35
36	5	3033	A	N7-C5	-5.22	1.36	1.39
36	5	2694	A	N9-C4	-5.22	1.34	1.37
36	1	1456	A	N9-C4	-5.22	1.34	1.37
36	1	1657	C	N1-C6	-5.22	1.34	1.37
1	6	383	G	N7-C5	-5.22	1.36	1.39
36	5	668	G	C6-N1	-5.22	1.35	1.39
36	5	2931	C	N3-C4	-5.22	1.30	1.33
36	1	1481	A	N7-C5	-5.22	1.36	1.39
1	2	1650	U	N1-C2	-5.22	1.33	1.38
36	1	2872	A	N9-C4	5.22	1.41	1.37
36	1	2930	A	C5-C4	-5.22	1.35	1.38
1	6	331	A	N7-C5	-5.22	1.36	1.39
36	5	523	A	N7-C5	-5.22	1.36	1.39
36	5	1456	A	N7-C5	-5.22	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	7	8	G	C6-N1	-5.22	1.35	1.39
53	m7	4	TYR	CD1-CE1	-5.22	1.31	1.39
36	1	2800	G	C5-C6	-5.21	1.37	1.42
36	1	2991	A	N7-C5	-5.21	1.36	1.39
36	5	595	G	N7-C5	-5.21	1.36	1.39
36	5	788	C	N3-C4	-5.21	1.30	1.33
36	5	1149	G	N7-C5	-5.21	1.36	1.39
38	8	133	G	C5-C4	-5.21	1.34	1.38
36	5	1468	A	N9-C4	-5.21	1.34	1.37
36	1	2389	C	N3-C4	-5.21	1.30	1.33
36	1	2631	U	C2-N3	-5.21	1.34	1.37
1	6	1670	G	N9-C8	-5.21	1.34	1.37
37	7	24	A	C6-N6	-5.21	1.29	1.33
65	n9	16	ALA	CA-CB	-5.21	1.41	1.52
36	1	2521	U	C2-N3	-5.21	1.34	1.37
36	5	3017	A	N3-C4	-5.21	1.31	1.34
48	m1	157	GLU	CG-CD	5.21	1.59	1.51
36	1	1658	G	N3-C4	-5.21	1.31	1.35
36	1	2307	G	C5-C4	-5.21	1.34	1.38
36	1	2318	U	C4-O4	-5.21	1.19	1.23
36	1	2641	U	C5-C6	-5.21	1.29	1.34
36	1	3135	U	N3-C4	-5.21	1.33	1.38
36	5	1299	U	N1-C2	-5.21	1.33	1.38
36	5	1846	C	P-O5'	-5.21	1.54	1.59
36	1	860	G	C5-C4	-5.21	1.34	1.38
1	6	1584	G	N9-C8	-5.21	1.34	1.37
37	7	5	G	N1-C2	-5.21	1.33	1.37
52	m6	166	GLU	CG-CD	5.21	1.59	1.51
36	1	1446	A	N7-C5	-5.21	1.36	1.39
36	5	3094	A	C5-C6	-5.21	1.36	1.41
36	1	715	A	N3-C4	-5.20	1.31	1.34
36	1	2826	U	N1-C2	-5.20	1.33	1.38
36	1	2914	G	C6-N1	-5.20	1.35	1.39
1	6	307	G	C6-N1	-5.20	1.35	1.39
1	6	1086	A	C6-N1	-5.20	1.31	1.35
36	5	3373	U	N3-C4	-5.20	1.33	1.38
36	1	2187	G	N1-C2	-5.20	1.33	1.37
1	6	1504	G	C6-N1	-5.20	1.35	1.39
36	1	1061	A	C8-N7	-5.20	1.27	1.31
36	1	1141	C	N3-C4	-5.20	1.30	1.33
36	5	1190	A	C5-C6	-5.20	1.36	1.41
36	5	1851	G	C2-N3	-5.20	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2690	G	N3-C4	-5.20	1.31	1.35
36	1	2371	G	C5-C4	-5.20	1.34	1.38
1	6	1194	A	N3-C4	-5.20	1.31	1.34
36	5	1128	U	N3-C4	-5.20	1.33	1.38
36	5	2299	A	N3-C4	-5.20	1.31	1.34
36	5	2629	U	N1-C6	-5.20	1.33	1.38
36	5	2821	C	C2-O2	5.20	1.29	1.24
36	5	3005	A	N9-C4	-5.20	1.34	1.37
1	2	1750	A	N7-C5	-5.20	1.36	1.39
36	1	1120	A	C5-C4	-5.20	1.35	1.38
36	1	1411	C	N1-C6	-5.20	1.34	1.37
36	1	3197	G	C2-N3	-5.20	1.28	1.32
36	5	906	A	N3-C4	-5.20	1.31	1.34
36	1	2805	G	N1-C2	-5.20	1.33	1.37
1	6	320	U	C2-O2	5.20	1.27	1.22
36	5	1375	G	N7-C5	-5.20	1.36	1.39
36	5	2391	G	N9-C8	-5.20	1.34	1.37
36	5	2703	A	C5-C4	-5.19	1.35	1.38
36	1	3135	U	N1-C6	-5.19	1.33	1.38
36	5	651	G	N9-C8	-5.19	1.34	1.37
36	5	2309	A	N9-C4	-5.19	1.34	1.37
36	1	433	A	C5-C4	-5.19	1.35	1.38
36	1	1143	A	C6-N1	-5.19	1.31	1.35
1	6	1116	A	C6-N1	-5.19	1.31	1.35
1	6	1781	A	N7-C5	-5.19	1.36	1.39
36	1	1404	G	N9-C4	-5.19	1.33	1.38
1	2	1659	A	C6-N1	-5.19	1.31	1.35
36	1	33	G	C6-N1	-5.19	1.35	1.39
36	1	643	U	C4-C5	-5.19	1.38	1.43
36	1	987	U	N1-C2	-5.19	1.33	1.38
36	1	1156	C	C4-C5	-5.19	1.38	1.43
36	1	3206	C	N1-C2	-5.19	1.34	1.40
1	6	1537	C	C2-O2	5.19	1.29	1.24
36	5	512	U	N1-C6	-5.19	1.33	1.38
36	1	2125	A	N9-C4	-5.19	1.34	1.37
36	1	1123	U	N1-C2	-5.18	1.33	1.38
36	5	523	A	C5-C4	-5.18	1.35	1.38
36	5	2177	G	C6-O6	-5.18	1.19	1.24
37	7	99	G	N9-C8	-5.18	1.34	1.37
36	1	144	A	N3-C4	-5.18	1.31	1.34
43	L6	59	GLU	CD-OE2	5.18	1.31	1.25
1	6	796	A	N9-C4	-5.18	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	998	A	C6-N1	-5.18	1.31	1.35
1	6	1800	A	N9-C4	5.18	1.41	1.37
36	5	569	A	C5-C6	-5.18	1.36	1.41
36	5	718	G	N7-C5	-5.18	1.36	1.39
36	5	1431	G	C5-C4	-5.18	1.34	1.38
1	6	1152	A	N3-C4	-5.18	1.31	1.34
1	6	1750	A	N7-C5	-5.18	1.36	1.39
38	8	57	C	N3-C4	-5.18	1.30	1.33
36	1	1372	C	N1-C6	-5.18	1.34	1.37
36	1	2356	A	C5-C6	-5.18	1.36	1.41
1	6	1602	C	N3-C4	-5.18	1.30	1.33
36	5	1784	G	N9-C8	-5.18	1.34	1.37
36	5	2375	G	C5-C4	-5.18	1.34	1.38
57	n1	149	GLN	CG-CD	5.18	1.62	1.51
36	1	557	A	N9-C4	-5.18	1.34	1.37
1	6	326	G	N7-C5	-5.18	1.36	1.39
36	5	3015	G	N9-C8	-5.18	1.34	1.37
36	1	2888	U	N1-C6	-5.18	1.33	1.38
1	6	441	A	C5-C4	-5.18	1.35	1.38
1	6	859	A	N9-C4	-5.18	1.34	1.37
36	5	2947	G	C5-C6	-5.18	1.37	1.42
1	2	1739	C	N1-C2	-5.17	1.34	1.40
36	1	890	C	C2-N3	-5.17	1.31	1.35
36	1	1303	A	N3-C4	-5.17	1.31	1.34
1	6	152	U	N3-C4	-5.17	1.33	1.38
36	5	811	U	N1-C6	-5.17	1.33	1.38
36	5	2144	A	N9-C4	5.17	1.41	1.37
36	1	1046	A	N7-C5	-5.17	1.36	1.39
48	M1	52	TYR	CD1-CE1	-5.17	1.31	1.39
36	5	518	G	N7-C5	-5.17	1.36	1.39
36	5	587	U	C4'-C3'	-5.17	1.47	1.52
36	5	595	G	N9-C8	-5.17	1.34	1.37
36	5	3392	U	C2-N3	-5.17	1.34	1.37
38	8	7	U	N1-C2	-5.17	1.33	1.38
1	2	1524	A	N7-C5	-5.17	1.36	1.39
36	1	612	U	C2-O2	-5.17	1.17	1.22
36	5	904	A	C5-C6	-5.17	1.36	1.41
36	5	2157	G	N9-C4	-5.17	1.33	1.38
36	5	2197	C	C5-C6	-5.17	1.30	1.34
36	1	973	A	C6-N1	-5.17	1.31	1.35
36	1	1411	C	C4-N4	-5.17	1.29	1.33
76	Q0	110	CYS	CB-SG	-5.17	1.73	1.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	651	G	N3-C4	-5.17	1.31	1.35
36	1	646	A	C6-N1	-5.17	1.31	1.35
36	1	2941	A	N9-C4	5.17	1.41	1.37
43	L6	104	GLU	CD-OE1	5.17	1.31	1.25
36	5	799	G	C5-C4	-5.17	1.34	1.38
36	5	869	G	N3-C4	-5.17	1.31	1.35
36	5	1794	G	N3-C4	-5.17	1.31	1.35
36	5	2647	A	C5-C6	-5.17	1.36	1.41
36	1	2388	U	N1-C6	-5.17	1.33	1.38
61	N5	86	VAL	CB-CG1	-5.17	1.42	1.52
36	5	1300	G	N3-C4	-5.17	1.31	1.35
36	5	2399	A	N9-C4	-5.17	1.34	1.37
36	1	433	A	C5-C6	-5.17	1.36	1.41
1	6	1467	C	C4-C5	-5.17	1.38	1.43
36	5	820	A	N3-C4	-5.17	1.31	1.34
36	5	2731	U	N1-C6	-5.17	1.33	1.38
59	n3	68	GLU	CD-OE2	5.17	1.31	1.25
1	2	433	C	N1-C6	-5.16	1.34	1.37
1	2	440	U	N1-C2	-5.16	1.33	1.38
1	2	1658	G	C6-N1	-5.16	1.35	1.39
36	1	358	G	C5-C4	-5.16	1.34	1.38
36	1	1608	C	N3-C4	-5.16	1.30	1.33
36	1	2297	U	C2-O2	-5.16	1.17	1.22
38	4	4	C	N1-C6	-5.16	1.34	1.37
36	5	425	G	C6-N1	-5.16	1.35	1.39
36	5	1139	G	C6-N1	-5.16	1.35	1.39
36	5	3382	U	C2-N3	5.16	1.41	1.37
36	5	2631	U	C4-C5	-5.16	1.39	1.43
36	1	2387	A	C6-N1	-5.16	1.31	1.35
36	1	3127	A	N3-C4	-5.16	1.31	1.34
36	1	3305	A	C6-N6	-5.16	1.29	1.33
1	6	609	U	N3-C4	-5.16	1.33	1.38
36	5	2964	G	N7-C5	-5.16	1.36	1.39
36	5	3065	G	N9-C4	-5.16	1.33	1.38
36	1	803	C	N3-C4	-5.16	1.30	1.33
36	1	1442	U	C2-N3	5.16	1.41	1.37
1	6	1487	A	N9-C4	5.16	1.41	1.37
36	5	866	A	C5-C4	-5.16	1.35	1.38
36	5	980	A	N7-C5	5.16	1.42	1.39
36	1	580	C	N3-C4	-5.16	1.30	1.33
37	7	43	U	C2-N3	-5.16	1.34	1.37
36	1	349	A	C6-N1	-5.16	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2761	G	N9-C8	-5.16	1.34	1.37
36	1	2999	U	N3-C4	-5.16	1.33	1.38
36	1	3010	U	C4-C5	-5.16	1.39	1.43
1	6	1787	C	N1-C6	-5.16	1.34	1.37
36	5	2283	G	N7-C5	5.16	1.42	1.39
37	7	95	A	C5-C4	-5.16	1.35	1.38
47	m0	46	PHE	CB-CG	-5.16	1.42	1.51
36	1	628	A	N7-C5	-5.15	1.36	1.39
36	5	787	G	N7-C5	-5.15	1.36	1.39
37	7	94	C	C2-N3	-5.15	1.31	1.35
36	1	900	G	N9-C8	-5.15	1.34	1.37
36	5	1140	G	C6-N1	-5.15	1.35	1.39
36	5	2149	A	N7-C5	-5.15	1.36	1.39
36	5	2621	G	N3-C4	-5.15	1.31	1.35
36	1	611	A	N9-C4	-5.15	1.34	1.37
36	1	1850	A	N7-C5	-5.15	1.36	1.39
36	1	2884	C	N1-C2	-5.15	1.34	1.40
1	6	314	C	N3-C4	-5.15	1.30	1.33
1	6	761	G	C6-N1	-5.15	1.35	1.39
1	6	1765	A	N9-C4	-5.15	1.34	1.37
36	5	1303	A	N1-C2	-5.15	1.29	1.34
36	5	2343	C	C2-O2	-5.15	1.19	1.24
1	6	1124	A	C6-N6	-5.15	1.29	1.33
36	5	3004	C	N1-C2	-5.15	1.35	1.40
36	5	3299	A	N9-C4	-5.15	1.34	1.37
1	2	1615	C	N1-C2	5.15	1.45	1.40
1	6	876	G	N9-C4	-5.15	1.33	1.38
1	6	1502	G	C6-N1	-5.15	1.35	1.39
36	5	998	A	N3-C4	-5.15	1.31	1.34
36	5	1050	U	N1-C6	-5.15	1.33	1.38
37	7	101	G	C2-N3	-5.15	1.28	1.32
36	1	1174	G	N9-C8	-5.15	1.34	1.37
36	5	1366	A	C5-C6	-5.15	1.36	1.41
36	5	1514	G	C8-N7	-5.15	1.27	1.30
36	5	2607	G	C6-N1	-5.15	1.35	1.39
36	5	2956	A	C5-C4	-5.15	1.35	1.38
36	1	1385	C	N3-C4	-5.14	1.30	1.33
36	1	1473	G	C5-C4	-5.14	1.34	1.38
36	5	218	G	P-OP2	-5.14	1.40	1.49
36	5	648	C	N1-C6	-5.14	1.34	1.37
36	5	2912	G	N7-C5	-5.14	1.36	1.39
36	5	2918	G	N9-C8	-5.14	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	104	G	N9-C4	-5.14	1.33	1.38
36	1	915	A	N3-C4	-5.14	1.31	1.34
37	3	65	G	N9-C8	-5.14	1.34	1.37
1	6	1007	C	C2-N3	-5.14	1.31	1.35
1	6	1762	A	N7-C5	-5.14	1.36	1.39
36	5	848	A	C5-C6	-5.14	1.36	1.41
36	5	2826	U	C2-N3	-5.14	1.34	1.37
36	5	3017	A	N7-C5	-5.14	1.36	1.39
36	5	3200	G	N3-C4	-5.14	1.31	1.35
59	n3	39	VAL	CB-CG1	-5.14	1.42	1.52
36	1	1150	A	N9-C4	-5.14	1.34	1.37
1	6	1135	U	C2-N3	-5.14	1.34	1.37
36	5	1403	C	N1-C2	-5.14	1.35	1.40
36	5	1429	G	N9-C8	-5.14	1.34	1.37
36	1	89	A	N7-C5	-5.14	1.36	1.39
1	6	1776	A	N9-C4	5.14	1.41	1.37
36	5	1374	G	C6-N1	-5.14	1.35	1.39
36	5	3043	C	C2-N3	-5.14	1.31	1.35
1	2	346	G	N3-C4	-5.14	1.31	1.35
36	1	970	A	C6-N1	-5.14	1.31	1.35
36	5	2667	A	C6-N1	-5.14	1.31	1.35
36	1	1607	U	N3-C4	-5.14	1.33	1.38
36	1	2398	A	C6-N6	-5.14	1.29	1.33
36	1	2706	G	C8-N7	-5.14	1.27	1.30
36	1	3060	C	N1-C6	-5.14	1.34	1.37
36	1	3226	A	N3-C4	-5.14	1.31	1.34
36	5	1344	G	N3-C4	-5.14	1.31	1.35
36	5	2422	C	N3-C4	-5.14	1.30	1.33
36	5	3146	G	C5-C4	-5.14	1.34	1.38
56	n0	166	LYS	CD-CE	5.14	1.64	1.51
36	1	2143	A	N1-C2	-5.13	1.29	1.34
1	6	1133	A	N9-C4	-5.13	1.34	1.37
36	5	1399	A	N3-C4	-5.13	1.31	1.34
36	5	1431	G	C6-N1	-5.13	1.35	1.39
36	5	2636	A	N3-C4	-5.13	1.31	1.34
1	6	552	G	N7-C5	-5.13	1.36	1.39
36	1	107	A	C5-C6	-5.13	1.36	1.41
36	5	2393	G	C5-C6	-5.13	1.37	1.42
36	5	2797	C	N1-C6	-5.13	1.34	1.37
36	5	2926	A	N7-C5	-5.13	1.36	1.39
36	5	3139	A	C5-C4	-5.13	1.35	1.38
36	1	1899	G	N7-C5	-5.13	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1177	G	N1-C2	-5.13	1.33	1.37
36	5	1913	A	N7-C5	-5.13	1.36	1.39
36	5	2882	U	N3-C4	-5.13	1.33	1.38
36	5	2918	G	C5-C4	-5.13	1.34	1.38
36	5	2959	C	C2-O2	-5.13	1.19	1.24
36	5	3088	G	N9-C8	-5.13	1.34	1.37
36	5	3328	G	C5-C4	-5.13	1.34	1.38
36	1	1103	A	C6-N1	5.12	1.39	1.35
39	L2	219	ILE	CA-CB	-5.12	1.43	1.54
36	1	641	C	P-O5'	-5.12	1.54	1.59
36	1	2969	A	C5-C4	-5.12	1.35	1.38
1	6	407	A	N7-C5	-5.12	1.36	1.39
1	6	1642	G	N9-C4	-5.12	1.33	1.38
36	5	2122	G	C2-N3	-5.12	1.28	1.32
37	7	101	G	N7-C5	-5.12	1.36	1.39
37	3	102	A	C5-C6	-5.12	1.36	1.41
36	5	3108	G	N7-C5	-5.12	1.36	1.39
36	5	1289	G	C5-C4	-5.12	1.34	1.38
36	1	2607	G	N7-C5	-5.12	1.36	1.39
36	5	2282	U	C5'-C4'	-5.12	1.45	1.51
38	4	56	G	C6-N1	-5.12	1.35	1.39
36	5	2197	C	C4-C5	-5.12	1.38	1.43
36	5	2874	G	N9-C4	5.12	1.42	1.38
36	1	615	U	N1-C6	-5.12	1.33	1.38
36	1	1153	A	C5-C6	-5.12	1.36	1.41
36	1	1784	G	N3-C4	-5.12	1.31	1.35
1	6	1271	G	C8-N7	-5.12	1.27	1.30
36	5	596	C	N3-C4	-5.12	1.30	1.33
36	5	2811	A	C6-N1	-5.12	1.31	1.35
36	5	3094	A	N7-C5	-5.12	1.36	1.39
38	8	133	G	N9-C8	-5.12	1.34	1.37
36	1	2386	A	N9-C8	-5.11	1.33	1.37
1	6	1493	A	N9-C4	-5.11	1.34	1.37
36	5	883	A	N9-C4	-5.11	1.34	1.37
36	5	889	U	N1-C6	-5.11	1.33	1.38
36	5	1111	U	C2-N3	-5.11	1.34	1.37
36	5	1320	C	N1-C2	-5.11	1.35	1.40
36	5	1431	G	N7-C5	-5.11	1.36	1.39
36	5	2883	U	N3-C4	-5.11	1.33	1.38
36	5	3017	A	N9-C8	-5.11	1.33	1.37
38	8	9	A	N9-C4	-5.11	1.34	1.37
36	1	3066	U	N1-C2	-5.11	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	100	A	N9-C4	-5.11	1.34	1.37
36	5	2984	C	N1-C6	-5.11	1.34	1.37
36	5	3139	A	N3-C4	-5.11	1.31	1.34
36	1	370	U	N1-C2	-5.11	1.33	1.38
36	1	969	C	N1-C6	-5.11	1.34	1.37
36	1	1313	G	N3-C4	-5.11	1.31	1.35
36	1	2627	C	N3-C4	-5.11	1.30	1.33
36	5	856	G	N7-C5	-5.11	1.36	1.39
36	5	2357	A	N9-C8	-5.11	1.33	1.37
36	5	2983	C	N3-C4	-5.11	1.30	1.33
36	1	2324	A	N7-C5	-5.11	1.36	1.39
1	6	401	A	N7-C5	-5.11	1.36	1.39
36	5	679	U	N3-C4	-5.11	1.33	1.38
36	1	3126	C	N3-C4	-5.11	1.30	1.33
36	5	1128	U	N1-C6	-5.11	1.33	1.38
36	5	1128	U	C2-N3	-5.11	1.34	1.37
36	5	2335	G	C6-N1	-5.11	1.35	1.39
36	1	272	G	N3-C4	-5.11	1.31	1.35
1	6	160	C	N3-C4	-5.11	1.30	1.33
36	5	949	C	N1-C6	-5.11	1.34	1.37
37	7	96	U	N1-C6	-5.11	1.33	1.38
67	o1	75	ILE	CA-CB	-5.11	1.43	1.54
1	6	1457	C	N1-C2	5.10	1.45	1.40
1	2	1133	A	C5-C4	-5.10	1.35	1.38
36	1	719	U	C2-O2	5.10	1.26	1.22
36	1	900	G	N9-C4	-5.10	1.33	1.38
36	1	1752	A	N3-C4	-5.10	1.31	1.34
36	1	2888	U	N1-C2	-5.10	1.33	1.38
36	1	1059	G	C5-C4	-5.10	1.34	1.38
59	N3	4	ASN	CB-CG	5.10	1.62	1.51
36	5	1211	U	C5-C6	-5.10	1.29	1.34
1	2	1032	G	N3-C4	-5.10	1.31	1.35
36	1	943	U	C2-N3	-5.10	1.34	1.37
36	1	2425	G	C5-C4	-5.10	1.34	1.38
36	5	651	G	N1-C2	-5.10	1.33	1.37
36	5	806	A	C5-C4	-5.10	1.35	1.38
36	5	1314	C	N3-C4	-5.10	1.30	1.33
36	1	1197	A	C2-N3	-5.10	1.28	1.33
36	1	2324	A	N3-C4	-5.10	1.31	1.34
36	5	1208	U	N3-C4	-5.10	1.33	1.38
36	5	2679	A	C5-C4	-5.10	1.35	1.38
36	1	370	U	N1-C6	-5.10	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3267	A	N3-C4	-5.10	1.31	1.34
1	6	94	U	N1-C2	-5.10	1.33	1.38
36	5	347	G	P-O5'	-5.10	1.54	1.59
36	5	391	A	C5-C4	-5.10	1.35	1.38
36	5	511	G	N3-C4	-5.10	1.31	1.35
36	5	1193	A	C5-C6	-5.10	1.36	1.41
36	5	1370	G	N9-C4	-5.10	1.33	1.38
36	5	2369	G	N7-C5	-5.10	1.36	1.39
36	5	2857	C	C2-N3	-5.10	1.31	1.35
36	1	656	A	C6-N6	-5.09	1.29	1.33
36	1	2979	U	P-OP2	-5.09	1.40	1.49
36	5	1497	C	N1-C6	-5.09	1.34	1.37
36	5	2649	A	C6-N1	-5.09	1.31	1.35
36	1	2302	G	N3-C4	-5.09	1.31	1.35
36	5	378	A	N3-C4	-5.09	1.31	1.34
37	7	99	G	N3-C4	-5.09	1.31	1.35
36	5	2819	A	C6-N1	-5.09	1.31	1.35
1	2	1291	G	N3-C4	-5.09	1.31	1.35
36	1	626	U	N1-C2	-5.09	1.33	1.38
36	1	2223	A	N3-C4	-5.09	1.31	1.34
36	1	2845	A	N9-C4	5.09	1.41	1.37
36	1	3098	G	N7-C5	-5.09	1.36	1.39
36	1	3138	U	N1-C6	-5.09	1.33	1.38
1	6	998	A	N3-C4	-5.09	1.31	1.34
1	6	1606	C	N1-C6	-5.09	1.34	1.37
36	1	404	G	C5-C6	-5.09	1.37	1.42
36	1	2156	C	C2-N3	-5.09	1.31	1.35
36	5	510	G	N3-C4	-5.09	1.31	1.35
52	m6	54	TYR	CE1-CZ	-5.09	1.31	1.38
1	6	160	C	C4-N4	-5.09	1.29	1.33
36	5	559	A	C5-C6	-5.09	1.36	1.41
36	5	2946	A	C5-C6	-5.09	1.36	1.41
38	4	140	G	C2-N3	-5.08	1.28	1.32
36	5	1856	C	N1-C6	-5.08	1.34	1.37
36	5	2512	C	N1-C6	-5.08	1.34	1.37
69	o3	53	TYR	CD2-CE2	-5.08	1.31	1.39
36	1	587	U	C2-O2	-5.08	1.17	1.22
36	5	1047	A	C5-C6	-5.08	1.36	1.41
36	5	1898	G	N7-C5	5.08	1.42	1.39
36	1	725	G	N9-C8	-5.08	1.34	1.37
36	1	1884	A	N3-C4	-5.08	1.31	1.34
36	1	649	A	C6-N1	-5.08	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1144	U	C4-C5	-5.08	1.39	1.43
36	1	2312	A	C5-C4	-5.08	1.35	1.38
36	1	2636	A	N7-C5	-5.08	1.36	1.39
36	5	563	U	N1-C6	-5.08	1.33	1.38
36	5	774	G	C5-C6	-5.08	1.37	1.42
36	5	1912	U	N1-C2	-5.08	1.33	1.38
36	5	3075	G	N3-C4	-5.08	1.31	1.35
36	5	3319	U	N1-C2	5.08	1.43	1.38
36	5	393	U	N1-C2	-5.08	1.33	1.38
36	5	515	C	N3-C4	-5.08	1.30	1.33
47	m0	17	TYR	CD2-CE2	5.08	1.47	1.39
36	1	1159	A	C5-C4	-5.08	1.35	1.38
36	1	2333	C	N1-C6	-5.08	1.34	1.37
36	5	948	C	N3-C4	-5.08	1.30	1.33
36	5	1203	A	C4'-C3'	-5.08	1.47	1.52
36	5	1339	C	C2-N3	-5.08	1.31	1.35
36	5	2331	C	N1-C6	-5.08	1.34	1.37
36	5	1391	C	N1-C6	-5.07	1.34	1.37
36	5	2924	U	C4-C5	-5.07	1.39	1.43
36	1	787	G	C6-N1	-5.07	1.35	1.39
36	1	936	A	C6-N6	-5.07	1.29	1.33
36	1	744	A	C5-C6	-5.07	1.36	1.41
36	1	2727	A	C5-C6	5.07	1.45	1.41
36	5	417	A	N9-C4	-5.07	1.34	1.37
36	5	638	C	N1-C6	-5.07	1.34	1.37
36	5	1896	A	P-O5'	-5.07	1.54	1.59
36	5	3223	A	N3-C4	-5.07	1.31	1.34
36	1	820	A	N9-C4	-5.07	1.34	1.37
36	1	1047	A	N3-C4	-5.07	1.31	1.34
36	1	1136	A	N9-C8	-5.07	1.33	1.37
36	1	1308	A	C6-N6	5.07	1.38	1.33
36	1	2954	U	C4-C5	5.07	1.48	1.43
1	6	1139	A	C5-C4	-5.07	1.35	1.38
36	5	1485	G	C6-N1	-5.07	1.36	1.39
36	5	3012	A	C8-N7	-5.07	1.28	1.31
36	1	792	G	N3-C4	-5.07	1.31	1.35
36	1	1143	A	C5-C6	-5.07	1.36	1.41
38	4	4	C	N3-C4	-5.07	1.30	1.33
38	4	99	C	N1-C6	-5.07	1.34	1.37
36	5	904	A	N3-C4	-5.07	1.31	1.34
36	5	2656	A	N3-C4	-5.07	1.31	1.34
36	5	3047	U	N1-C6	-5.07	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	7	89	G	C2-N3	-5.07	1.28	1.32
40	l3	92	TYR	CE1-CZ	-5.07	1.31	1.38
1	6	109	G	N9-C4	-5.07	1.33	1.38
1	6	1681	A	N9-C4	-5.07	1.34	1.37
36	5	941	G	N7-C5	-5.07	1.36	1.39
36	5	2855	U	N1-C6	-5.07	1.33	1.38
56	n0	78	TRP	CE3-CZ3	-5.07	1.29	1.38
1	2	1299	G	C2-N3	5.06	1.36	1.32
36	1	2796	G	C2-N2	-5.06	1.29	1.34
1	6	1171	A	C6-N1	-5.06	1.32	1.35
1	6	1794	A	N9-C4	-5.06	1.34	1.37
36	5	942	U	N1-C6	-5.06	1.33	1.38
36	5	1320	C	N3-C4	-5.06	1.30	1.33
36	1	317	A	C6-N6	-5.06	1.29	1.33
36	1	815	G	N9-C8	-5.06	1.34	1.37
36	1	2937	G	C2-N3	-5.06	1.28	1.32
1	6	544	A	N9-C4	5.06	1.40	1.37
1	6	1137	A	C1'-N9	-5.06	1.39	1.46
36	1	2123	G	C5-C4	-5.06	1.34	1.38
36	5	1134	G	C2-N3	-5.06	1.28	1.32
36	5	3016	A	N9-C4	-5.06	1.34	1.37
36	5	3211	C	N1-C2	-5.06	1.35	1.40
68	o2	76	VAL	CB-CG1	-5.06	1.42	1.52
1	2	337	G	N3-C4	-5.06	1.31	1.35
36	1	680	G	C2-N3	-5.06	1.28	1.32
36	1	2368	A	N9-C4	5.06	1.40	1.37
38	4	20	U	C2-O2	-5.06	1.17	1.22
1	6	1753	A	C2'-C1'	5.06	1.58	1.53
36	5	39	A	N3-C4	-5.06	1.31	1.34
36	5	519	A	N3-C4	-5.06	1.31	1.34
36	5	1127	G	C2-N3	5.06	1.36	1.32
36	5	1404	G	C5-C6	-5.06	1.37	1.42
36	1	1522	U	N1-C6	-5.06	1.33	1.38
36	5	940	G	N1-C2	-5.06	1.33	1.37
36	5	1047	A	C6-N6	-5.06	1.29	1.33
36	5	2941	A	C6-N1	-5.06	1.32	1.35
36	1	2962	U	C2-N3	-5.06	1.34	1.37
1	6	29	U	C2-N3	-5.06	1.34	1.37
36	5	2948	C	N3-C4	-5.06	1.30	1.33
36	1	1134	G	C5-C4	-5.05	1.34	1.38
36	5	927	C	C2-O2	-5.05	1.20	1.24
48	m1	18	VAL	CA-CB	-5.05	1.44	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	555	A	N9-C4	5.05	1.40	1.37
44	17	78	GLU	CB-CG	5.05	1.61	1.52
36	1	1524	A	C5-C6	5.05	1.45	1.41
36	1	2702	A	N9-C8	-5.05	1.33	1.37
1	6	352	A	N3-C4	-5.05	1.31	1.34
36	5	585	A	C6-N1	-5.05	1.32	1.35
36	5	1001	G	N7-C5	5.05	1.42	1.39
36	5	1197	A	C5-C6	-5.05	1.36	1.41
36	5	2840	C	N1-C6	-5.05	1.34	1.37
36	5	2907	G	C6-N1	-5.05	1.36	1.39
36	5	2938	G	C5-C6	-5.05	1.37	1.42
36	1	2698	G	C5-C4	-5.05	1.34	1.38
53	M7	46	LYS	CD-CE	5.05	1.63	1.51
36	5	284	A	N3-C4	-5.05	1.31	1.34
36	5	349	A	C5-C4	-5.05	1.35	1.38
36	5	1141	C	P-O5'	-5.05	1.54	1.59
36	5	1290	A	C6-N1	-5.05	1.32	1.35
36	5	2163	C	N3-C4	-5.05	1.30	1.33
36	5	2295	A	C5-C4	-5.05	1.35	1.38
36	5	2320	A	N9-C8	-5.05	1.33	1.37
36	5	2364	G	C5-C4	-5.05	1.34	1.38
36	5	2942	C	C4-C5	5.05	1.47	1.43
37	7	68	C	N3-C4	-5.05	1.30	1.33
36	1	1116	G	N9-C8	-5.05	1.34	1.37
36	1	2818	U	N1-C2	-5.05	1.34	1.38
1	6	55	A	N9-C4	-5.05	1.34	1.37
1	6	1118	G	C2-N3	-5.05	1.28	1.32
1	6	1787	C	C2-O2	-5.05	1.20	1.24
36	5	755	A	C6-N1	-5.05	1.32	1.35
36	5	1892	G	N3-C4	-5.05	1.31	1.35
36	5	3143	C	C2-N3	5.05	1.39	1.35
41	14	117	GLU	CG-CD	5.05	1.59	1.51
36	1	583	G	N9-C8	-5.04	1.34	1.37
1	6	968	U	C2-N3	-5.04	1.34	1.37
36	5	2116	G	C2-N3	-5.04	1.28	1.32
36	1	2236	G	C8-N7	-5.04	1.27	1.30
1	6	1147	A	C6-N1	-5.04	1.32	1.35
25	d3	125	VAL	CA-CB	-5.04	1.44	1.54
36	5	648	C	N3-C4	-5.04	1.30	1.33
36	5	1156	C	C4-C5	-5.04	1.39	1.43
36	5	2863	G	C2-N3	-5.04	1.28	1.32
36	1	808	A	N7-C5	-5.04	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3045	G	C6-O6	-5.04	1.19	1.24
36	5	1317	A	C5-C6	-5.04	1.36	1.41
1	6	407	A	C5-C4	-5.04	1.35	1.38
36	5	1413	G	N9-C8	-5.04	1.34	1.37
36	5	1451	C	N1-C6	-5.04	1.34	1.37
36	1	2891	U	N1-C6	-5.04	1.33	1.38
36	1	3005	A	N9-C4	-5.04	1.34	1.37
36	1	3267	A	N7-C5	-5.04	1.36	1.39
38	8	102	U	C2-N3	-5.04	1.34	1.37
46	19	153	ASP	CB-CG	5.04	1.62	1.51
36	1	824	C	N1-C6	-5.04	1.34	1.37
36	5	1141	C	C4-C5	-5.04	1.39	1.43
36	1	2209	U	C2-N3	5.04	1.41	1.37
36	1	2980	U	N1-C2	-5.04	1.34	1.38
36	5	1202	A	C5-C6	-5.04	1.36	1.41
36	5	1473	G	C5-C4	-5.04	1.34	1.38
36	5	2276	G	N9-C4	-5.04	1.33	1.38
36	5	2318	U	N1-C2	-5.04	1.34	1.38
37	7	37	G	N3-C4	5.04	1.39	1.35
57	n1	63	VAL	CB-CG2	-5.04	1.42	1.52
36	1	1906	G	N3-C4	-5.03	1.31	1.35
36	1	2764	C	N1-C2	-5.03	1.35	1.40
1	6	1569	A	N7-C5	-5.03	1.36	1.39
36	5	2394	G	N3-C4	-5.03	1.31	1.35
36	5	2643	A	P-O5'	-5.03	1.54	1.59
36	5	2869	U	N3-C4	-5.03	1.33	1.38
36	1	935	U	C2-N3	-5.03	1.34	1.37
36	1	3318	G	N7-C5	-5.03	1.36	1.39
1	6	1136	U	N1-C2	-5.03	1.34	1.38
36	1	968	G	C2-N3	5.03	1.36	1.32
36	1	1604	G	N9-C4	5.03	1.42	1.38
1	6	1128	C	N3-C4	-5.03	1.30	1.33
36	5	437	G	O3'-P	5.03	1.67	1.61
36	5	900	G	C5-C4	-5.03	1.34	1.38
54	m8	74	GLU	CG-CD	5.03	1.59	1.51
36	1	983	A	N3-C4	-5.03	1.31	1.34
36	5	1891	A	C5-C4	-5.03	1.35	1.38
1	2	1555	A	N3-C4	-5.03	1.31	1.34
4	S2	232	GLU	CB-CG	5.03	1.61	1.52
36	1	880	G	N9-C8	-5.03	1.34	1.37
36	1	953	G	N9-C4	-5.03	1.33	1.38
36	1	1177	G	N1-C2	-5.03	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2135	U	C2-N3	-5.03	1.34	1.37
1	6	558	U	C2-N3	5.03	1.41	1.37
36	5	2311	G	N9-C4	-5.03	1.33	1.38
36	5	2880	U	O3'-P	-5.03	1.55	1.61
37	7	118	A	N3-C4	-5.03	1.31	1.34
38	8	4	C	C2-O2	-5.03	1.20	1.24
36	1	2113	A	C5-C6	5.03	1.45	1.41
1	6	1658	G	C2-N3	-5.03	1.28	1.32
37	7	61	G	C6-N1	-5.03	1.36	1.39
36	1	2785	A	C6-N1	-5.02	1.32	1.35
36	5	1923	C	C4-C5	-5.02	1.39	1.43
36	1	2850	G	C6-N1	-5.02	1.36	1.39
68	O2	41	VAL	CA-CB	-5.02	1.44	1.54
36	5	585	A	N9-C4	-5.02	1.34	1.37
36	5	2239	G	C2-N3	-5.02	1.28	1.32
36	5	2399	A	C6-N6	-5.02	1.29	1.33
36	5	3322	A	N7-C5	-5.02	1.36	1.39
36	1	505	G	N9-C4	-5.02	1.33	1.38
36	1	625	G	N3-C4	-5.02	1.31	1.35
36	1	652	G	C6-N1	-5.02	1.36	1.39
36	1	860	G	N9-C8	-5.02	1.34	1.37
36	1	2804	A	C5-C4	-5.02	1.35	1.38
36	1	3379	C	N1-C6	-5.02	1.34	1.37
36	1	1119	C	N1-C6	-5.02	1.34	1.37
1	6	160	C	C2-N3	-5.02	1.31	1.35
36	5	417	A	C5-C4	-5.02	1.35	1.38
36	5	754	G	C6-N1	-5.02	1.36	1.39
36	5	798	G	C5-C6	-5.02	1.37	1.42
36	5	3025	C	C2-N3	-5.02	1.31	1.35
36	1	2321	A	N3-C4	-5.02	1.31	1.34
36	1	3129	A	N9-C4	-5.02	1.34	1.37
36	5	876	A	C6-N6	-5.02	1.29	1.33
36	5	1190	A	N7-C5	-5.02	1.36	1.39
40	l3	5	LYS	CD-CE	5.02	1.63	1.51
1	2	47	A	N3-C4	-5.02	1.31	1.34
36	1	1204	A	N3-C4	-5.02	1.31	1.34
36	1	2924	U	C2-O2	-5.02	1.17	1.22
36	5	1914	G	N3-C4	-5.02	1.31	1.35
36	1	649	A	N9-C8	-5.01	1.33	1.37
1	6	760	A	N9-C4	-5.01	1.34	1.37
38	4	104	A	C6-N1	-5.01	1.32	1.35
71	O5	64	GLU	CB-CG	5.01	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2696	A	N3-C4	-5.01	1.31	1.34
37	7	22	A	N3-C4	-5.01	1.31	1.34
36	1	1362	G	C5-C4	-5.01	1.34	1.38
36	1	2663	G	C5-C4	-5.01	1.34	1.38
36	1	3012	A	C5-C4	-5.01	1.35	1.38
36	5	283	G	C6-N1	-5.01	1.36	1.39
36	5	1064	A	N7-C5	-5.01	1.36	1.39
36	5	2131	A	C5-C4	-5.01	1.35	1.38
36	5	2607	G	C5-C6	-5.01	1.37	1.42
36	1	1313	G	C6-O6	-5.01	1.19	1.24
36	1	1905	G	C2-N3	-5.01	1.28	1.32
36	1	2201	G	C5-C4	-5.01	1.34	1.38
36	1	2613	U	N1-C6	-5.01	1.33	1.38
36	1	2923	U	N1-C2	-5.01	1.34	1.38
36	5	1446	A	N9-C8	-5.01	1.33	1.37
36	5	2270	A	C5-C6	-5.01	1.36	1.41
36	5	2392	C	N1-C2	-5.01	1.35	1.40
36	5	3189	G	C8-N7	-5.01	1.27	1.30
36	5	3320	A	N7-C5	-5.01	1.36	1.39
1	2	1761	U	N3-C4	-5.01	1.33	1.38
36	5	511	G	C8-N7	-5.01	1.27	1.30
36	1	648	C	N3-C4	-5.01	1.30	1.33
36	1	1050	U	C5'-C4'	-5.01	1.45	1.51
36	1	3207	U	C4-C5	5.01	1.48	1.43
1	6	1732	A	N7-C5	-5.01	1.36	1.39
36	5	356	C	N3-C4	-5.01	1.30	1.33
36	5	914	A	N9-C4	-5.01	1.34	1.37
1	2	367	A	N3-C4	-5.00	1.31	1.34
1	6	971	A	C5-C6	-5.00	1.36	1.41
36	5	3048	A	N3-C4	-5.00	1.31	1.34
36	1	2300	G	N3-C4	-5.00	1.31	1.35
36	5	650	C	C4-N4	-5.00	1.29	1.33
36	5	1136	A	N9-C4	-5.00	1.34	1.37
36	5	2370	G	C5-C4	-5.00	1.34	1.38
36	1	3227	A	N7-C5	-5.00	1.36	1.39
36	5	1915	A	N7-C5	-5.00	1.36	1.39
36	5	3223	A	C6-N1	-5.00	1.32	1.35

All (22469) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	N3-C4-N9	-25.15	110.91	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	44	C	C6-N1-C2	24.27	130.01	120.30
36	5	648	C	N3-C4-C5	-23.62	112.45	121.90
36	5	884	A	N1-C6-N6	23.07	132.44	118.60
38	4	94	C	C6-N1-C2	22.99	129.50	120.30
36	5	1897	G	N1-C6-O6	21.43	132.75	119.90
36	1	2831	G	N1-C6-O6	21.37	132.72	119.90
36	5	424	G	C5-C6-O6	-21.05	115.97	128.60
36	5	1152	G	N3-C4-C5	20.71	138.95	128.60
36	5	3196	U	O5'-P-OP2	-20.22	86.43	110.70
36	5	1589	A	N1-C6-N6	19.86	130.52	118.60
36	5	40	A	O5'-P-OP1	-19.50	87.30	110.70
36	1	1308	A	O5'-P-OP2	-19.14	87.73	110.70
36	1	2726	C	N3-C4-N4	-19.14	104.60	118.00
36	5	1303	A	C5-C6-N6	-18.88	108.60	123.70
36	5	1115	G	C5-C6-O6	-18.78	117.33	128.60
36	5	1179	A	O5'-P-OP1	-18.71	88.25	110.70
37	7	49	G	N1-C6-O6	18.44	130.96	119.90
36	1	211	A	O5'-P-OP1	-18.36	88.67	110.70
36	1	3217	C	C2-N1-C1'	18.32	138.95	118.80
36	5	1149	G	N1-C6-O6	18.22	130.83	119.90
36	1	2811	A	C6-N1-C2	-18.10	107.74	118.60
36	5	632	G	O5'-P-OP2	-18.10	88.97	110.70
36	5	1897	G	C5-C6-O6	-18.09	117.75	128.60
36	5	3115	C	N1-C2-O2	-18.09	108.05	118.90
36	5	1556	C	N1-C2-O2	17.99	129.69	118.90
1	6	1579	U	O5'-P-OP1	-17.98	89.12	110.70
36	5	1115	G	N3-C4-N9	17.90	136.74	126.00
36	5	2140	U	O5'-P-OP2	-17.80	89.34	110.70
38	4	20	U	O5'-P-OP2	-17.77	89.38	110.70
36	1	2726	C	C5-C4-N4	17.72	132.61	120.20
36	5	648	C	C5-C4-N4	17.55	132.48	120.20
37	7	89	G	C5-C6-N1	-17.51	102.75	111.50
1	6	1137	A	C8-N9-C4	17.43	112.77	105.80
36	5	2937	G	O5'-P-OP2	-17.38	89.84	110.70
36	5	661	G	O5'-P-OP1	-17.38	89.85	110.70
36	1	2305	G	N1-C6-O6	-17.35	109.49	119.90
1	6	1131	A	N1-C6-N6	17.29	128.98	118.60
36	1	583	G	N1-C6-O6	-17.27	109.54	119.90
36	5	218	G	O5'-P-OP2	-17.26	89.99	110.70
36	1	1307	G	O5'-P-OP1	-17.23	90.03	110.70
36	5	1407	A	O5'-P-OP2	-17.21	90.05	110.70
36	5	3245	A	N1-C6-N6	17.18	128.91	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2315	G	O5'-P-OP1	-17.14	90.13	110.70
36	5	1303	A	N1-C6-N6	17.09	128.85	118.60
36	1	2963	C	C6-N1-C2	-16.99	113.50	120.30
36	1	2871	G	O5'-P-OP2	-16.91	90.41	110.70
36	1	2953	U	N3-C4-C5	-16.86	104.49	114.60
36	1	101	G	N1-C6-O6	16.83	130.00	119.90
36	1	2353	G	N1-C6-O6	16.77	129.96	119.90
38	4	26	U	C6-N1-C2	-16.72	110.97	121.00
37	7	89	G	N1-C6-O6	16.67	129.90	119.90
1	6	163	G	N3-C4-N9	-16.51	116.09	126.00
36	1	2941	A	O5'-P-OP2	-16.51	90.84	105.70
36	1	1371	G	O5'-P-OP2	-16.46	90.89	105.70
36	1	2811	A	N1-C2-N3	16.45	137.52	129.30
38	4	26	U	N3-C4-C5	-16.43	104.74	114.60
1	6	385	A	O5'-P-OP2	-16.37	90.97	105.70
36	5	1852	G	C5-C6-O6	-16.32	118.81	128.60
36	5	2199	G	N1-C6-O6	16.31	129.69	119.90
36	1	2942	C	C5-C6-N1	16.26	129.13	121.00
36	5	2689	A	C8-N9-C4	-16.25	99.30	105.80
36	1	2871	G	C4-C5-N7	16.15	117.26	110.80
36	5	2212	C	N1-C2-O2	16.11	128.57	118.90
36	1	1905	G	N3-C4-N9	-16.11	116.34	126.00
36	1	959	C	C6-N1-C2	16.09	126.74	120.30
36	5	2936	A	C6-N1-C2	-16.08	108.95	118.60
36	1	2623	G	N1-C6-O6	16.07	129.54	119.90
36	5	961	C	O5'-P-OP1	-16.02	91.28	105.70
36	5	884	A	C5-C6-N6	-16.02	110.89	123.70
36	5	1115	G	C6-C5-N7	-15.99	120.81	130.40
36	1	1542	G	C4-C5-N7	15.95	117.18	110.80
36	5	437	G	C8-N9-C4	-15.94	100.03	106.40
36	5	994	G	N9-C4-C5	-15.93	99.03	105.40
36	1	639	G	C2-N3-C4	-15.77	104.01	111.90
36	5	1330	A	C2-N3-C4	-15.72	102.74	110.60
36	5	3032	A	N1-C6-N6	-15.71	109.17	118.60
36	5	1373	A	N1-C6-N6	15.70	128.02	118.60
36	5	695	C	C6-N1-C2	15.64	126.56	120.30
36	1	1386	A	N1-C6-N6	-15.63	109.22	118.60
36	5	2353	G	C4-C5-N7	15.61	117.04	110.80
36	1	964	G	C5-C6-O6	-15.53	119.28	128.60
36	5	1321	G	N1-C6-O6	15.49	129.19	119.90
36	5	578	A	N1-C6-N6	-15.47	109.32	118.60
36	5	1303	A	C4-C5-N7	15.43	118.42	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1208	U	C5-C4-O4	15.41	135.15	125.90
36	1	2625	C	C6-N1-C2	15.40	126.46	120.30
36	5	994	G	C5-C6-O6	-15.31	119.41	128.60
36	1	979	U	C6-N1-C2	-15.28	111.83	121.00
36	5	2620	G	C5-C6-O6	15.25	137.75	128.60
36	1	2727	A	N9-C4-C5	15.23	111.89	105.80
36	1	1000	C	C6-N1-C2	15.19	126.38	120.30
37	3	88	G	N1-C6-O6	-15.19	110.78	119.90
36	5	1115	G	N9-C4-C5	-15.19	99.33	105.40
36	1	2726	C	C6-N1-C2	-15.18	114.23	120.30
36	1	2939	G	C4-C5-N7	-15.18	104.73	110.80
36	5	3146	G	N1-C6-O6	15.18	129.00	119.90
36	5	2803	A	O5'-P-OP2	-15.17	92.05	105.70
36	1	3325	G	C8-N9-C4	15.16	112.47	106.40
36	5	1151	U	C5-C6-N1	15.14	130.27	122.70
36	5	3146	G	C5-C6-O6	-15.12	119.53	128.60
36	1	1392	G	N1-C6-O6	-15.12	110.83	119.90
36	5	3144	G	O5'-P-OP1	-15.12	92.09	105.70
1	6	1778	G	C4-C5-N7	15.10	116.84	110.80
36	5	1897	G	C6-C5-N7	-15.08	121.35	130.40
36	1	608	A	N1-C6-N6	15.06	127.64	118.60
36	1	2379	U	O5'-P-OP2	-15.04	92.17	105.70
36	5	1604	G	N1-C6-O6	-15.04	110.88	119.90
36	5	1556	C	N3-C2-O2	-15.02	111.39	121.90
1	2	73	U	O4'-C1'-N1	14.96	120.17	108.20
36	5	330	G	C8-N9-C4	14.95	112.38	106.40
36	5	971	G	N1-C6-O6	-14.93	110.94	119.90
36	1	2609	A	O5'-P-OP2	-14.92	92.28	105.70
36	5	2638	C	C6-N1-C2	-14.91	114.34	120.30
36	5	2821	C	N1-C2-O2	14.90	127.84	118.90
36	1	1178	G	N3-C4-N9	14.89	134.94	126.00
36	5	884	A	N9-C4-C5	-14.88	99.85	105.80
36	5	1000	C	C6-N1-C2	14.88	126.25	120.30
36	5	1152	G	C2-N3-C4	-14.86	104.47	111.90
38	8	20	U	O5'-P-OP2	-14.86	92.33	105.70
36	5	2715	A	N9-C4-C5	14.85	111.74	105.80
36	5	994	G	C4-C5-N7	14.81	116.72	110.80
36	5	3245	A	C2-N3-C4	-14.80	103.20	110.60
36	5	1129	A	N1-C6-N6	14.79	127.48	118.60
36	5	2943	G	N1-C6-O6	14.78	128.77	119.90
36	5	437	G	N3-C4-C5	-14.77	121.22	128.60
36	1	2930	A	O5'-P-OP2	-14.76	92.42	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1211	U	C6-N1-C2	14.75	129.85	121.00
1	6	1778	G	C5-C6-O6	-14.68	119.79	128.60
36	5	2715	A	N1-C6-N6	-14.68	109.79	118.60
36	5	1295	G	C4-C5-N7	14.68	116.67	110.80
36	5	1589	A	C5-C6-N6	-14.66	111.97	123.70
36	1	1435	A	C8-N9-C4	-14.65	99.94	105.80
36	5	1151	U	C6-N1-C2	-14.65	112.21	121.00
1	6	1463	C	C6-N1-C2	14.64	126.16	120.30
36	1	917	A	N1-C6-N6	-14.64	109.82	118.60
36	5	1116	G	O5'-P-OP1	-14.62	92.54	105.70
36	5	2139	A	N1-C2-N3	14.62	136.61	129.30
36	5	1127	G	N3-C4-C5	-14.62	121.29	128.60
1	6	1731	A	O5'-P-OP2	-14.61	92.55	105.70
1	6	1131	A	C5-C6-N6	-14.60	112.02	123.70
36	1	2618	G	N1-C6-O6	-14.59	111.14	119.90
36	5	3096	C	C6-N1-C2	-14.56	114.48	120.30
38	8	38	U	N3-C2-O2	-14.55	112.01	122.20
36	5	818	C	C6-N1-C2	14.53	126.11	120.30
36	1	2374	C	N1-C2-O2	14.52	127.61	118.90
36	5	1115	G	N1-C6-O6	14.51	128.61	119.90
36	5	1149	G	C6-C5-N7	-14.48	121.71	130.40
36	1	2981	U	N3-C2-O2	-14.46	112.08	122.20
1	6	360	A	O5'-P-OP2	-14.44	92.70	105.70
36	1	1508	C	C6-N1-C2	-14.42	114.53	120.30
37	7	49	G	C6-C5-N7	-14.41	121.76	130.40
1	2	1195	C	N3-C2-O2	-14.39	111.83	121.90
36	5	363	G	C5-C6-O6	-14.37	119.98	128.60
1	2	1280	C	C6-N1-C2	-14.36	114.56	120.30
36	1	206	G	C8-N9-C4	14.34	112.14	106.40
36	5	101	G	O5'-P-OP2	-14.33	92.80	105.70
36	1	651	G	N3-C4-N9	14.32	134.59	126.00
36	1	3181	C	C5-C4-N4	14.32	130.23	120.20
1	6	1535	U	N3-C2-O2	-14.30	112.19	122.20
36	1	92	G	N1-C6-O6	14.30	128.48	119.90
36	5	2334	U	N3-C2-O2	-14.30	112.19	122.20
36	5	2945	G	C8-N9-C4	-14.28	100.69	106.40
36	1	3217	C	N3-C2-O2	-14.27	111.91	121.90
38	4	27	U	O5'-P-OP1	-14.25	92.88	105.70
36	1	2939	G	N3-C4-C5	-14.23	121.48	128.60
1	6	1644	C	N3-C2-O2	-14.23	111.94	121.90
36	1	2639	G	N3-C2-N2	-14.22	109.94	119.90
36	5	1897	G	C4-C5-N7	14.22	116.49	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2617	U	C4-C5-C6	14.21	128.23	119.70
36	5	2689	A	N1-C2-N3	14.21	136.41	129.30
36	5	2875	U	C4-C5-C6	14.21	128.23	119.70
36	5	1151	U	N3-C4-C5	-14.21	106.08	114.60
1	6	1108	G	C8-N9-C4	-14.19	100.72	106.40
36	1	423	A	C6-N1-C2	-14.16	110.11	118.60
36	1	1298	C	O5'-P-OP1	-14.15	92.97	105.70
36	1	1594	A	N1-C6-N6	-14.14	110.11	118.60
36	5	2312	A	N1-C6-N6	-14.14	110.11	118.60
36	5	1165	A	C8-N9-C4	-14.12	100.15	105.80
36	1	2871	G	C5-C6-O6	-14.11	120.13	128.60
36	5	1054	A	C8-N9-C4	14.09	111.44	105.80
36	5	2340	U	O5'-P-OP1	-14.09	93.02	105.70
36	5	2615	G	C5-C6-O6	-14.07	120.16	128.60
36	5	2954	U	O5'-P-OP1	-14.07	93.04	105.70
36	5	64	G	C6-C5-N7	-14.06	121.96	130.40
36	1	421	G	N1-C6-O6	-14.05	111.47	119.90
36	5	82	C	C6-N1-C2	14.02	125.91	120.30
36	1	2871	G	C5-N7-C8	-13.99	97.30	104.30
36	5	2275	A	C8-N9-C4	-13.98	100.21	105.80
38	4	18	U	O5'-P-OP1	-13.96	93.13	105.70
36	1	2409	G	C8-N9-C1'	-13.94	108.88	127.00
36	1	644	G	C5-C6-O6	13.93	136.96	128.60
36	1	2622	C	C6-N1-C2	-13.93	114.73	120.30
36	5	2703	A	C4-C5-C6	13.92	123.96	117.00
36	1	2280	A	O5'-P-OP2	13.91	127.40	110.70
36	5	2851	A	N1-C6-N6	-13.91	110.25	118.60
1	6	1753	A	N3-C4-C5	-13.91	117.06	126.80
36	1	1132	C	O5'-P-OP1	-13.90	93.19	105.70
36	5	2689	A	N1-C6-N6	-13.89	110.27	118.60
36	1	2726	C	N3-C2-O2	-13.89	112.18	121.90
36	1	366	A	C8-N9-C4	-13.88	100.25	105.80
36	5	3014	U	O5'-P-OP2	-13.87	93.22	105.70
36	1	2136	C	N3-C4-C5	-13.86	116.36	121.90
36	5	2902	A	N1-C2-N3	13.86	136.23	129.30
36	1	2727	A	N1-C6-N6	-13.86	110.28	118.60
36	5	366	A	C2-N3-C4	-13.85	103.67	110.60
36	5	424	G	N1-C6-O6	13.85	128.21	119.90
36	1	2394	G	C4-C5-N7	-13.83	105.27	110.80
36	5	884	A	C6-C5-N7	-13.81	122.63	132.30
36	5	2139	A	N1-C6-N6	-13.78	110.33	118.60
1	6	1732	A	C2-N3-C4	-13.78	103.71	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2202	C	C6-N1-C2	-13.77	114.79	120.30
36	1	1340	G	C5-C6-O6	-13.75	120.35	128.60
36	5	2816	G	N3-C4-C5	13.74	135.47	128.60
36	1	806	A	C2-N3-C4	-13.74	103.73	110.60
36	1	1178	G	N3-C4-C5	-13.74	121.73	128.60
37	7	101	G	N1-C6-O6	13.73	128.13	119.90
1	6	1742	U	O5'-P-OP2	-13.70	93.37	105.70
36	1	1406	A	N1-C6-N6	13.69	126.82	118.60
37	3	98	C	C5-C6-N1	-13.69	114.15	121.00
36	5	2689	A	N9-C4-C5	13.68	111.27	105.80
36	1	2869	U	N3-C2-O2	13.66	131.76	122.20
36	1	1111	U	C5-C6-N1	-13.66	115.87	122.70
36	5	1310	G	C5-C6-O6	-13.66	120.41	128.60
36	5	1296	C	C6-N1-C2	-13.65	114.84	120.30
37	7	84	A	C8-N9-C4	-13.65	100.34	105.80
36	5	2615	G	N1-C6-O6	13.65	128.09	119.90
36	1	40	A	N1-C6-N6	-13.63	110.42	118.60
36	5	2970	C	O5'-P-OP1	-13.62	93.44	105.70
36	1	2371	G	O5'-P-OP2	-13.62	93.44	105.70
36	5	3085	G	N1-C6-O6	-13.62	111.73	119.90
36	5	867	G	N1-C6-O6	13.61	128.07	119.90
36	5	3245	A	C5-N7-C8	-13.57	97.11	103.90
36	1	3277	U	N3-C2-O2	-13.56	112.71	122.20
36	1	2385	G	C5-C6-O6	-13.54	120.47	128.60
36	5	1156	C	C6-N1-C2	-13.52	114.89	120.30
36	5	1115	G	C4-C5-N7	13.52	116.21	110.80
36	1	645	A	C5-C6-N1	13.51	124.46	117.70
36	5	2940	A	C8-N9-C4	-13.51	100.40	105.80
1	6	1730	A	N1-C6-N6	-13.50	110.50	118.60
36	1	3092	C	C6-N1-C2	13.49	125.70	120.30
36	5	1303	A	N9-C4-C5	-13.49	100.40	105.80
1	6	1467	C	C6-N1-C2	-13.49	114.91	120.30
36	5	1896	A	N1-C6-N6	-13.49	110.51	118.60
1	6	1572	G	N1-C6-O6	13.48	127.99	119.90
1	6	1112	G	N1-C6-O6	-13.48	111.81	119.90
36	1	2363	A	N9-C4-C5	13.47	111.19	105.80
36	5	2416	U	O5'-P-OP2	-13.47	93.58	105.70
36	1	780	A	N9-C4-C5	13.45	111.18	105.80
36	1	2168	A	N1-C6-N6	-13.44	110.54	118.60
37	7	93	C	C6-N1-C2	-13.43	114.93	120.30
36	5	2278	C	N1-C2-O2	13.42	126.95	118.90
36	5	3245	A	C5-C6-N1	-13.42	110.99	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	101	G	C4-C5-N7	13.40	116.16	110.80
36	1	2356	A	C5-N7-C8	-13.40	97.20	103.90
36	5	2393	G	C6-C5-N7	-13.40	122.36	130.40
36	1	635	G	C5-C6-O6	-13.38	120.57	128.60
36	5	2298	U	N1-C2-O2	13.38	132.17	122.80
36	1	3217	C	C6-N1-C1'	-13.38	104.75	120.80
1	6	1457	C	N1-C2-O2	13.38	126.93	118.90
1	2	310	C	C6-N1-C2	-13.35	114.96	120.30
36	5	924	G	O5'-P-OP1	-13.35	93.68	105.70
36	5	1152	G	C8-N9-C1'	13.33	144.33	127.00
36	5	339	C	C6-N1-C2	13.33	125.63	120.30
36	5	2400	G	N3-C4-N9	-13.33	118.00	126.00
36	5	2393	G	C4-C5-N7	13.32	116.13	110.80
1	6	1463	C	N3-C4-C5	13.31	127.23	121.90
36	1	892	U	O5'-P-OP1	13.31	126.67	110.70
36	5	669	U	N1-C2-O2	13.30	132.11	122.80
36	1	2399	A	C5-C6-N6	-13.30	113.06	123.70
1	2	1195	C	N1-C2-O2	13.29	126.87	118.90
36	5	1327	C	O5'-P-OP2	-13.28	93.75	105.70
36	5	1901	A	C5-C6-N1	13.28	124.34	117.70
36	5	3200	G	C5-C6-N1	-13.27	104.86	111.50
36	1	1542	G	N1-C6-O6	13.27	127.86	119.90
36	1	2930	A	C5-C6-N6	-13.26	113.09	123.70
36	5	1589	A	C6-C5-N7	-13.26	123.02	132.30
36	1	1392	G	C4-C5-N7	-13.26	105.50	110.80
37	7	45	A	N1-C6-N6	-13.24	110.66	118.60
36	1	2241	U	C5-C4-O4	13.22	133.83	125.90
36	5	2353	G	C5-N7-C8	-13.21	97.70	104.30
36	1	146	U	N3-C2-O2	-13.19	112.97	122.20
36	1	942	U	N3-C4-C5	-13.18	106.69	114.60
36	1	651	G	N9-C4-C5	-13.16	100.14	105.40
1	2	1096	C	N1-C2-O2	13.15	126.79	118.90
36	1	435	C	C6-N1-C2	13.15	125.56	120.30
36	1	2605	G	C2-N3-C4	-13.15	105.32	111.90
36	1	2617	U	N1-C2-N3	13.15	122.79	114.90
36	1	1103	A	O5'-P-OP1	-13.14	93.87	105.70
36	5	2137	U	O5'-P-OP1	-13.10	93.91	105.70
36	5	2139	A	N9-C4-C5	13.10	111.04	105.80
36	5	2212	C	N3-C2-O2	-13.10	112.73	121.90
36	1	1305	U	N1-C2-N3	13.09	122.76	114.90
36	1	3179	U	O5'-P-OP1	-13.09	93.92	105.70
36	5	942	U	N3-C4-C5	-13.09	106.75	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2356	A	N7-C8-N9	13.08	120.34	113.80
36	1	633	C	C6-N1-C2	-13.08	115.07	120.30
36	5	1330	A	C8-N9-C4	13.08	111.03	105.80
36	1	2631	U	N3-C2-O2	-13.07	113.05	122.20
36	5	940	G	C5-C6-N1	13.04	118.02	111.50
37	7	92	A	N1-C6-N6	13.03	126.42	118.60
36	1	1129	A	C8-N9-C4	-13.02	100.59	105.80
36	1	697	A	C8-N9-C4	13.02	111.01	105.80
1	6	1131	A	C4-C5-N7	13.01	117.20	110.70
36	5	2329	C	C6-N1-C2	13.01	125.50	120.30
36	5	2383	C	C6-N1-C2	-13.00	115.10	120.30
1	6	160	C	N3-C4-C5	13.00	127.10	121.90
36	1	635	G	C4-C5-N7	13.00	116.00	110.80
36	1	2353	G	C6-C5-N7	-12.99	122.60	130.40
36	5	578	A	N9-C4-C5	12.97	110.99	105.80
36	5	2943	G	C6-C5-N7	-12.96	122.62	130.40
36	1	423	A	N1-C2-N3	12.95	135.77	129.30
1	6	621	A	N1-C6-N6	-12.94	110.84	118.60
36	5	2932	U	N3-C4-O4	-12.94	110.34	119.40
36	1	2880	U	C5-C4-O4	12.94	133.66	125.90
1	6	1506	G	O5'-P-OP1	-12.94	94.06	105.70
36	1	2811	A	C5-C6-N6	-12.92	113.36	123.70
36	5	669	U	N3-C2-O2	-12.90	113.17	122.20
36	1	596	C	N3-C2-O2	-12.90	112.87	121.90
36	1	2368	A	N1-C6-N6	12.89	126.33	118.60
36	1	1433	A	C6-N1-C2	-12.89	110.87	118.60
1	6	1025	A	N1-C6-N6	12.87	126.32	118.60
36	5	1303	A	O5'-P-OP1	-12.86	94.12	105.70
36	5	2942	C	C5-C4-N4	12.87	129.21	120.20
36	5	929	A	C2-N3-C4	12.86	117.03	110.60
36	5	2400	G	C8-N9-C1'	12.86	143.72	127.00
1	6	1614	A	N1-C6-N6	12.85	126.31	118.60
36	5	1165	A	N7-C8-N9	12.84	120.22	113.80
1	6	1484	G	O5'-P-OP1	-12.83	94.15	105.70
36	1	101	G	C6-C5-N7	-12.83	122.70	130.40
1	6	321	C	C6-N1-C2	-12.83	115.17	120.30
36	1	2939	G	C5-N7-C8	12.82	110.71	104.30
36	5	1295	G	C6-C5-N7	-12.82	122.70	130.40
36	5	2310	U	O5'-P-OP1	-12.82	94.16	105.70
36	5	2353	G	C8-N9-C4	-12.82	101.27	106.40
37	3	7	G	N1-C6-O6	-12.82	112.21	119.90
1	6	1100	G	C8-N9-C4	12.82	111.53	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2305	G	N9-C4-C5	12.82	110.53	105.40
36	1	3217	C	N1-C2-O2	12.81	126.58	118.90
36	5	1403	C	C6-N1-C2	12.80	125.42	120.30
36	1	780	A	N1-C6-N6	-12.79	110.92	118.60
36	1	101	G	C5-C6-O6	-12.79	120.93	128.60
36	1	2334	U	O5'-P-OP2	-12.78	94.20	105.70
36	5	1198	C	N3-C2-O2	-12.77	112.96	121.90
36	5	2897	A	N1-C6-N6	12.77	126.26	118.60
36	5	1365	G	N3-C2-N2	-12.77	110.96	119.90
36	1	2953	U	C6-N1-C2	-12.77	113.34	121.00
36	1	2980	U	N1-C2-N3	12.76	122.56	114.90
36	1	942	U	N3-C4-O4	12.75	128.33	119.40
36	1	69	C	O5'-P-OP1	-12.75	94.22	105.70
36	1	651	G	C5-C6-O6	-12.75	120.95	128.60
36	1	938	C	C6-N1-C2	-12.74	115.20	120.30
36	5	1156	C	C5-C6-N1	12.73	127.37	121.00
36	1	3181	C	C6-N1-C2	-12.73	115.21	120.30
36	5	2811	A	C6-N1-C2	-12.73	110.97	118.60
36	5	1310	G	C4-C5-N7	12.72	115.89	110.80
1	6	1470	C	C6-N1-C2	-12.70	115.22	120.30
1	6	1607	G	O5'-P-OP1	-12.70	94.27	105.70
36	5	2353	G	C5-C6-O6	-12.70	120.98	128.60
36	5	639	G	C2-N3-C4	-12.70	105.55	111.90
36	1	937	G	C4-C5-N7	12.69	115.88	110.80
36	5	911	C	C2-N3-C4	-12.68	113.56	119.90
36	5	2278	C	O5'-P-OP2	-12.68	94.29	105.70
1	2	1291	G	N7-C8-N9	12.68	119.44	113.10
1	6	163	G	C2-N3-C4	-12.68	105.56	111.90
1	6	419	G	O5'-P-OP1	-12.68	94.29	105.70
36	5	2950	G	C4-C5-N7	12.68	115.87	110.80
1	6	321	C	N3-C2-O2	-12.67	113.03	121.90
1	6	1494	C	C6-N1-C2	-12.67	115.23	120.30
36	5	2936	A	C5-C6-N1	12.65	124.02	117.70
36	5	2412	G	C8-N9-C4	-12.64	101.34	106.40
36	5	2875	U	N3-C2-O2	-12.64	113.35	122.20
36	1	2197	C	N3-C4-C5	12.63	126.95	121.90
36	1	1594	A	N9-C4-C5	12.63	110.85	105.80
36	5	2799	A	N1-C2-N3	12.63	135.61	129.30
1	6	1640	C	N1-C2-O2	12.62	126.47	118.90
36	5	2943	G	C4-C5-N7	12.62	115.85	110.80
36	5	2886	U	C5-C6-N1	-12.62	116.39	122.70
1	6	608	U	N3-C2-O2	-12.60	113.38	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	583	G	C5-C6-O6	12.59	136.16	128.60
36	1	780	A	C8-N9-C4	-12.59	100.77	105.80
36	1	1905	G	N9-C4-C5	12.59	110.44	105.40
36	5	1295	G	N1-C6-O6	12.59	127.45	119.90
36	1	1487	G	C8-N9-C4	-12.59	101.37	106.40
36	1	1556	C	N3-C2-O2	-12.58	113.09	121.90
36	1	2314	U	C5-C4-O4	-12.58	118.35	125.90
36	1	2385	G	N1-C6-O6	12.57	127.44	119.90
36	1	3075	G	N1-C6-O6	12.57	127.44	119.90
36	5	2847	A	N1-C6-N6	12.57	126.14	118.60
36	5	2611	U	N3-C4-C5	-12.56	107.06	114.60
36	1	751	A	C8-N9-C4	-12.55	100.78	105.80
36	1	2772	C	C2-N1-C1'	12.55	132.60	118.80
1	2	331	A	N1-C6-N6	-12.53	111.08	118.60
37	7	49	G	C5-C6-N1	-12.53	105.24	111.50
36	5	404	G	C5-C6-N1	-12.53	105.24	111.50
36	5	2978	U	O5'-P-OP2	-12.53	94.43	105.70
36	5	650	C	N3-C4-C5	12.52	126.91	121.90
36	5	2875	U	C6-N1-C2	-12.52	113.49	121.00
36	5	3026	G	C6-C5-N7	-12.51	122.89	130.40
37	7	44	C	N1-C2-N3	-12.51	110.44	119.20
36	5	1520	G	N3-C4-C5	-12.51	122.34	128.60
36	1	648	C	O5'-P-OP1	-12.46	94.48	105.70
36	1	2613	U	N3-C4-C5	-12.45	107.13	114.60
1	6	1640	C	C2-N1-C1'	12.45	132.50	118.80
36	1	1208	U	N1-C2-O2	12.45	131.51	122.80
36	5	2935	U	C5-C6-N1	12.44	128.92	122.70
36	1	1500	G	C4-C5-N7	12.44	115.77	110.80
36	1	3278	C	N1-C2-O2	12.43	126.36	118.90
36	1	65	A	C8-N9-C4	12.43	110.77	105.80
36	5	2705	A	N1-C6-N6	-12.43	111.14	118.60
36	5	2393	G	N1-C6-O6	12.42	127.35	119.90
36	1	3186	A	N1-C6-N6	-12.42	111.15	118.60
36	5	363	G	C6-C5-N7	-12.41	122.95	130.40
36	1	1120	A	O5'-P-OP1	-12.41	94.53	105.70
36	5	1198	C	C6-N1-C2	-12.40	115.34	120.30
36	5	1848	G	C8-N9-C4	12.40	111.36	106.40
36	1	3248	C	O5'-P-OP1	-12.40	94.54	105.70
36	1	964	G	C4-C5-N7	12.38	115.75	110.80
36	1	3093	C	N3-C4-C5	-12.38	116.95	121.90
36	5	874	U	N3-C4-C5	-12.37	107.18	114.60
36	1	3132	C	C6-N1-C2	12.36	125.25	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1424	C	N3-C4-C5	-12.36	116.96	121.90
36	5	2199	G	C6-C5-N7	-12.35	122.99	130.40
36	5	2620	G	N9-C4-C5	12.35	110.34	105.40
36	5	2947	G	C5-C6-O6	-12.34	121.19	128.60
36	1	2306	C	N1-C2-O2	12.34	126.30	118.90
36	5	2397	A	C2-N3-C4	-12.33	104.43	110.60
1	2	1212	G	N1-C6-O6	12.33	127.30	119.90
36	5	971	G	C5-C6-O6	12.33	136.00	128.60
36	5	3067	C	C5-C6-N1	-12.33	114.84	121.00
36	5	1127	G	C2-N3-C4	12.32	118.06	111.90
36	5	2119	A	N1-C6-N6	12.32	125.99	118.60
36	5	2346	C	N3-C4-C5	-12.32	116.97	121.90
36	1	2874	G	N3-C4-C5	-12.31	122.44	128.60
1	6	1191	U	N3-C2-O2	-12.31	113.58	122.20
36	1	873	C	C6-N1-C2	-12.31	115.38	120.30
36	5	2610	G	N3-C2-N2	-12.31	111.28	119.90
36	1	2827	U	C5-C4-O4	12.30	133.28	125.90
36	1	2869	U	C5-C4-O4	-12.30	118.52	125.90
36	1	2639	G	N3-C4-N9	-12.29	118.62	126.00
36	5	2707	C	N3-C4-C5	12.29	126.82	121.90
36	1	397	A	N1-C6-N6	-12.29	111.23	118.60
36	5	363	G	N1-C6-O6	12.28	127.27	119.90
36	5	940	G	N1-C6-O6	-12.28	112.53	119.90
36	5	3140	G	N1-C6-O6	12.27	127.26	119.90
36	5	1137	C	O5'-P-OP2	-12.26	94.67	105.70
36	1	2403	G	C5-C6-O6	-12.26	121.25	128.60
37	3	98	C	C2-N3-C4	-12.24	113.78	119.90
36	1	638	C	O5'-P-OP2	-12.22	94.70	105.70
36	1	2831	G	C6-C5-N7	-12.22	123.07	130.40
36	1	2359	C	N3-C4-C5	-12.20	117.02	121.90
37	7	76	A	O5'-P-OP2	-12.20	94.72	105.70
36	5	2757	U	O5'-P-OP1	-12.20	94.72	105.70
36	5	3129	A	C2-N3-C4	-12.20	104.50	110.60
36	5	942	U	N3-C4-O4	12.18	127.93	119.40
36	1	1720	U	N3-C2-O2	-12.18	113.67	122.20
36	5	802	C	N3-C4-C5	12.17	126.77	121.90
36	1	1901	A	C5-C6-N1	12.17	123.79	117.70
36	1	2380	U	C5-C6-N1	-12.17	116.61	122.70
36	5	2880	U	C5-C4-O4	12.17	133.20	125.90
1	6	1457	C	N3-C2-O2	-12.16	113.39	121.90
37	3	97	A	C8-N9-C4	12.16	110.67	105.80
36	5	3026	G	N1-C6-O6	12.16	127.20	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3067	C	C6-N1-C2	12.16	125.17	120.30
1	6	1622	G	N1-C6-O6	12.16	127.20	119.90
36	5	1166	G	C4-C5-N7	12.16	115.66	110.80
36	5	951	A	N1-C6-N6	-12.15	111.31	118.60
36	5	424	G	C4-C5-N7	12.15	115.66	110.80
36	1	3142	A	N1-C6-N6	-12.14	111.32	118.60
36	5	1883	A	N1-C2-N3	12.13	135.37	129.30
36	1	628	A	N1-C2-N3	12.12	135.36	129.30
36	5	1152	G	N3-C2-N2	-12.12	111.42	119.90
36	5	2848	G	O5'-P-OP1	-12.12	94.79	105.70
36	1	1061	A	C8-N9-C4	12.12	110.65	105.80
36	5	2263	C	C6-N1-C2	-12.11	115.46	120.30
36	5	957	C	C6-N1-C2	-12.11	115.46	120.30
36	1	1392	G	C5-C6-O6	12.10	135.86	128.60
36	5	2950	G	N1-C6-O6	12.10	127.16	119.90
36	5	3245	A	C4-C5-N7	12.10	116.75	110.70
1	6	338	C	C6-N1-C2	-12.10	115.46	120.30
36	1	2325	G	C6-C5-N7	-12.10	123.14	130.40
1	6	1753	A	C2-N3-C4	12.10	116.65	110.60
36	5	1489	A	N1-C2-N3	12.09	135.35	129.30
36	5	1879	A	O5'-P-OP1	12.08	125.19	110.70
36	5	2656	A	N1-C6-N6	-12.07	111.36	118.60
36	5	2136	C	N3-C4-C5	-12.07	117.07	121.90
1	6	1634	C	N1-C2-O2	12.06	126.14	118.90
36	1	28	C	C5-C6-N1	-12.06	114.97	121.00
36	1	1182	A	C8-N9-C4	12.06	110.62	105.80
36	1	281	G	C8-N9-C4	-12.05	101.58	106.40
36	5	2188	A	O5'-P-OP1	-12.05	94.85	105.70
36	5	50	U	N3-C2-O2	-12.05	113.76	122.20
36	1	1178	G	N3-C2-N2	12.05	128.33	119.90
36	1	28	C	C6-N1-C2	12.04	125.12	120.30
36	5	639	G	N1-C2-N3	12.04	131.13	123.90
36	5	1481	A	C8-N9-C4	-12.04	100.98	105.80
36	5	2353	G	N7-C8-N9	12.04	119.12	113.10
36	1	2377	G	N1-C6-O6	-12.02	112.69	119.90
36	1	1482	A	N1-C6-N6	12.02	125.81	118.60
36	1	2881	C	C6-N1-C2	12.02	125.11	120.30
1	6	140	A	C8-N9-C4	-12.02	100.99	105.80
36	1	2943	G	N1-C6-O6	12.01	127.11	119.90
36	1	1448	U	C5-C6-N1	-12.01	116.70	122.70
36	1	2727	A	C8-N9-C4	-12.01	101.00	105.80
36	5	2724	U	O5'-P-OP2	-12.01	94.89	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1456	C	N3-C4-C5	-12.00	117.10	121.90
36	1	1429	G	N1-C2-N2	-12.00	105.40	116.20
36	1	2199	G	N3-C4-C5	-12.00	122.60	128.60
36	1	2772	C	C6-N1-C1'	-12.00	106.40	120.80
36	1	2930	A	N1-C6-N6	12.00	125.80	118.60
36	5	1212	A	C5-N7-C8	-11.99	97.90	103.90
36	5	3125	U	C5-C4-O4	11.99	133.09	125.90
36	5	1149	G	N7-C8-N9	11.98	119.09	113.10
1	6	1535	U	N3-C4-O4	-11.98	111.02	119.40
36	1	35	A	N1-C6-N6	11.97	125.78	118.60
36	5	2816	G	N3-C4-N9	-11.97	118.81	126.00
36	5	1520	G	N3-C4-N9	11.97	133.18	126.00
36	1	1594	A	C8-N9-C4	-11.97	101.01	105.80
1	6	1535	U	C5-C4-O4	11.97	133.08	125.90
1	6	1524	A	C8-N9-C4	-11.97	101.01	105.80
36	1	1846	C	N1-C2-O2	-11.96	111.72	118.90
36	1	2871	G	N1-C6-O6	11.95	127.07	119.90
36	1	2241	U	N3-C4-C5	-11.95	107.43	114.60
36	5	2929	C	C5-C4-N4	-11.95	111.83	120.20
36	1	1542	G	C5-N7-C8	-11.95	98.33	104.30
1	6	139	C	C6-N1-C2	-11.95	115.52	120.30
1	2	1455	G	C5-C6-N1	-11.94	105.53	111.50
36	1	2363	A	O5'-P-OP1	-11.93	94.97	105.70
1	6	1137	A	N7-C8-N9	-11.93	107.84	113.80
1	6	29	U	N3-C2-O2	-11.92	113.85	122.20
36	1	2705	A	N1-C6-N6	-11.92	111.45	118.60
1	6	1121	C	O5'-P-OP2	-11.92	94.97	105.70
36	5	1901	A	C2-N3-C4	11.91	116.56	110.60
1	6	431	C	N1-C2-O2	-11.91	111.76	118.90
37	3	88	G	C8-N9-C4	-11.90	101.64	106.40
36	5	3242	G	O5'-P-OP2	-11.90	94.99	105.70
36	1	2159	U	N1-C2-O2	11.90	131.13	122.80
36	1	1333	C	O5'-P-OP2	-11.90	94.99	105.70
37	7	109	G	C4-C5-N7	11.90	115.56	110.80
36	5	2728	G	O5'-P-OP2	-11.90	94.99	105.70
1	6	321	C	N1-C2-O2	11.89	126.03	118.90
1	2	1600	A	N1-C6-N6	11.88	125.73	118.60
36	5	1906	G	N1-C6-O6	-11.88	112.77	119.90
36	5	3146	G	N9-C4-C5	-11.88	100.65	105.40
36	1	1542	G	C5-C6-O6	-11.88	121.47	128.60
38	4	26	U	C4-C5-C6	11.87	126.82	119.70
1	6	597	G	N1-C6-O6	11.86	127.02	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	827	A	C8-N9-C4	-11.86	101.06	105.80
38	4	140	G	C8-N9-C4	-11.85	101.66	106.40
36	1	2407	C	N1-C2-O2	-11.85	111.79	118.90
1	6	1418	G	C5-C6-N1	-11.84	105.58	111.50
36	5	96	G	N3-C4-C5	11.82	134.51	128.60
38	8	107	G	N1-C6-O6	11.82	126.99	119.90
36	5	1940	G	O5'-P-OP2	-11.82	95.06	105.70
36	5	994	G	C8-N9-C4	11.81	111.12	106.40
36	1	1386	A	N9-C4-C5	11.80	110.52	105.80
1	2	566	C	C6-N1-C2	11.80	125.02	120.30
36	1	2417	U	N1-C2-O2	-11.80	114.54	122.80
36	5	2117	A	N1-C2-N3	11.80	135.20	129.30
36	5	3182	G	N1-C6-O6	-11.80	112.82	119.90
36	1	806	A	C8-N9-C4	11.79	110.52	105.80
36	1	2942	C	N3-C4-N4	11.79	126.26	118.00
37	7	15	C	C6-N1-C2	-11.79	115.58	120.30
36	1	2352	A	C5-C6-N6	-11.79	114.27	123.70
36	5	1152	G	N9-C4-C5	11.79	110.12	105.40
36	5	2874	G	C8-N9-C4	-11.78	101.69	106.40
36	1	2880	U	N1-C2-N3	11.78	121.97	114.90
36	5	61	A	C5-C6-N6	11.78	133.12	123.70
36	5	1794	G	C8-N9-C4	11.78	111.11	106.40
36	5	2415	C	N3-C4-C5	-11.78	117.19	121.90
36	1	2919	A	C5-C6-N1	-11.77	111.81	117.70
36	5	2794	G	C5-C6-N1	11.77	117.39	111.50
1	6	1747	G	O5'-P-OP2	-11.77	95.11	105.70
36	1	2305	G	C5-C6-O6	11.77	135.66	128.60
36	1	2635	A	C8-N9-C4	-11.77	101.09	105.80
36	5	1379	G	N1-C2-N3	11.76	130.96	123.90
36	1	3209	A	N1-C6-N6	11.76	125.66	118.60
36	5	986	U	N3-C2-O2	-11.76	113.97	122.20
36	5	61	A	N1-C6-N6	-11.76	111.55	118.60
36	5	1852	G	C4-C5-N7	11.76	115.50	110.80
36	1	636	C	N1-C2-O2	-11.75	111.85	118.90
36	1	3004	C	N1-C2-O2	-11.75	111.85	118.90
1	6	1098	U	O5'-P-OP1	-11.75	95.12	105.70
36	5	366	A	N1-C2-N3	11.75	135.18	129.30
36	5	3166	C	C6-N1-C2	-11.75	115.60	120.30
37	7	85	G	C5-C6-O6	-11.75	121.55	128.60
36	1	3210	A	N1-C6-N6	-11.75	111.55	118.60
1	6	1663	G	O5'-P-OP2	-11.75	95.13	105.70
36	5	632	G	O5'-P-OP1	11.75	124.80	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1166	G	C5-N7-C8	-11.75	98.43	104.30
36	5	2874	G	C4-C5-C6	11.75	125.85	118.80
36	5	1310	G	C5-C6-N1	11.73	117.37	111.50
36	5	1336	U	C5-C4-O4	-11.73	118.86	125.90
36	1	2831	G	C4-C5-N7	11.73	115.49	110.80
36	1	1500	G	N9-C4-C5	-11.72	100.71	105.40
36	1	2765	C	C6-N1-C2	-11.72	115.61	120.30
1	6	967	A	N1-C6-N6	11.72	125.63	118.60
1	6	301	A	N1-C6-N6	-11.71	111.57	118.60
36	5	3140	G	C4-C5-N7	11.71	115.48	110.80
36	5	409	A	O5'-P-OP2	-11.71	95.17	105.70
36	1	3076	C	C6-N1-C2	-11.70	115.62	120.30
36	1	2374	C	N3-C2-O2	-11.69	113.72	121.90
36	1	2831	G	C5-C6-N1	-11.67	105.66	111.50
36	1	3004	C	N3-C2-O2	11.67	130.07	121.90
38	4	70	G	O5'-P-OP2	-11.66	95.20	105.70
36	5	2353	G	C6-C5-N7	-11.66	123.40	130.40
36	5	3140	G	C6-C5-N7	-11.66	123.40	130.40
36	5	2278	C	N1-C2-N3	-11.66	111.04	119.20
36	5	2976	A	C6-N1-C2	-11.66	111.61	118.60
36	1	277	G	C2-N3-C4	11.65	117.73	111.90
36	5	648	C	C2-N3-C4	11.64	125.72	119.90
36	1	2831	G	C5-C6-O6	-11.64	121.62	128.60
36	5	2363	A	C5-C6-N6	11.64	133.01	123.70
52	M6	110	PRO	C-N-CD	-11.62	95.03	120.60
1	6	163	G	N3-C2-N2	-11.62	111.77	119.90
36	5	2632	G	N9-C4-C5	-11.62	100.75	105.40
1	6	1610	G	N3-C4-N9	11.62	132.97	126.00
36	1	1143	A	C2-N3-C4	-11.62	104.79	110.60
36	1	1905	G	N3-C2-N2	-11.60	111.78	119.90
36	5	2913	C	O5'-P-OP1	-11.60	95.26	105.70
36	5	515	C	C6-N1-C2	11.59	124.94	120.30
36	5	959	C	N3-C4-C5	-11.59	117.26	121.90
36	1	2813	A	N1-C6-N6	-11.59	111.65	118.60
38	4	20	U	N1-C2-O2	-11.59	114.69	122.80
36	5	2305	G	C5-C6-O6	11.58	135.55	128.60
36	1	2623	G	C4-C5-N7	11.58	115.43	110.80
36	1	2811	A	C4-C5-C6	11.58	122.79	117.00
36	5	2874	G	N3-C4-C5	-11.58	122.81	128.60
36	5	2892	A	O5'-P-OP2	-11.57	95.28	105.70
36	5	938	C	N3-C4-C5	11.57	126.53	121.90
36	1	2305	G	N9-C4-C5	11.56	110.03	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1537	C	N3-C4-C5	-11.56	117.27	121.90
36	5	1367	G	C4-N9-C1'	11.56	141.53	126.50
36	5	2758	A	O5'-P-OP2	-11.56	95.29	105.70
37	7	85	G	N1-C6-O6	11.56	126.83	119.90
36	1	2618	G	C5-C6-O6	11.55	135.53	128.60
36	5	1372	C	C6-N1-C2	11.55	124.92	120.30
36	5	2308	C	N1-C2-O2	-11.55	111.97	118.90
36	5	1450	G	C8-N9-C4	-11.55	101.78	106.40
36	1	1493	G	N1-C6-O6	-11.55	112.97	119.90
36	5	2877	G	N3-C4-C5	-11.55	122.83	128.60
36	1	937	G	C5-C6-O6	-11.55	121.67	128.60
36	5	608	A	N1-C6-N6	11.55	125.53	118.60
36	1	2409	G	C4-N9-C1'	11.55	141.51	126.50
36	1	2877	G	N3-C4-N9	-11.54	119.07	126.00
36	5	1208	U	N3-C4-O4	-11.53	111.33	119.40
1	6	78	A	N1-C6-N6	-11.52	111.69	118.60
36	5	2665	U	C5-C4-O4	-11.52	118.99	125.90
36	1	2368	A	C5-C6-N6	-11.52	114.49	123.70
36	1	2382	G	N1-C6-O6	-11.52	112.99	119.90
36	5	2400	G	N3-C4-C5	11.52	134.36	128.60
36	1	1380	G	C2-N3-C4	-11.51	106.14	111.90
38	4	26	U	N1-C2-N3	11.51	121.81	114.90
36	5	1894	U	C5-C4-O4	-11.51	118.99	125.90
36	5	3245	A	C6-C5-N7	-11.51	124.25	132.30
36	1	612	U	C5-C6-N1	-11.50	116.95	122.70
1	6	1131	A	C6-C5-N7	-11.50	124.25	132.30
36	5	2617	U	C6-N1-C2	-11.50	114.10	121.00
1	6	385	A	N1-C6-N6	-11.50	111.70	118.60
36	5	2308	C	O5'-P-OP1	-11.49	95.35	105.70
36	1	2396	G	C8-N9-C4	-11.49	101.80	106.40
1	6	1631	A	O5'-P-OP1	-11.49	95.36	105.70
1	2	577	G	N1-C6-O6	11.48	126.79	119.90
37	3	106	U	O5'-P-OP1	-11.48	95.37	105.70
36	5	521	A	C2-N3-C4	-11.48	104.86	110.60
36	5	2875	U	N1-C2-N3	11.48	121.79	114.90
36	5	3061	G	N1-C6-O6	11.48	126.79	119.90
36	1	2869	U	N3-C4-O4	11.47	127.43	119.40
36	5	3146	G	C4-C5-N7	11.47	115.39	110.80
36	1	608	A	C5-C6-N6	-11.46	114.53	123.70
36	5	1114	U	N3-C4-C5	-11.46	107.72	114.60
36	5	2400	G	N1-C2-N2	11.45	126.51	116.20
36	1	1888	U	N3-C2-O2	-11.45	114.18	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2377	G	C5-C6-N1	11.45	117.23	111.50
36	1	1100	U	C5-C6-N1	-11.44	116.98	122.70
36	5	2173	U	O5'-P-OP2	-11.44	95.40	105.70
36	5	2411	U	C5-C4-O4	-11.44	119.03	125.90
36	1	1149	G	C4-C5-C6	11.44	125.67	118.80
36	5	2197	C	C6-N1-C2	11.44	124.88	120.30
36	5	256	G	C8-N9-C4	-11.44	101.83	106.40
36	5	1306	G	C8-N9-C4	-11.44	101.83	106.40
36	1	408	A	N1-C2-N3	11.43	135.02	129.30
36	5	330	G	N9-C4-C5	-11.43	100.83	105.40
1	6	163	G	N3-C4-C5	11.43	134.32	128.60
1	6	1773	C	N3-C4-C5	-11.43	117.33	121.90
36	1	1050	U	N3-C2-O2	-11.43	114.20	122.20
36	5	1317	A	C5-C6-N1	11.43	123.41	117.70
36	1	1152	G	N1-C6-O6	-11.41	113.05	119.90
1	6	991	G	O5'-P-OP2	-11.41	95.43	105.70
38	4	5	U	C6-N1-C2	11.41	127.85	121.00
36	5	695	C	C5-C6-N1	-11.41	115.30	121.00
36	1	1851	G	N1-C6-O6	11.41	126.74	119.90
1	6	927	C	N1-C2-O2	11.41	125.74	118.90
1	2	1773	C	C6-N1-C2	-11.40	115.74	120.30
1	2	1006	C	N1-C2-O2	11.40	125.74	118.90
36	5	2376	G	C5-N7-C8	-11.40	98.60	104.30
1	6	26	A	C5-C6-N1	11.39	123.40	117.70
36	5	2283	G	C4-C5-N7	11.39	115.36	110.80
36	5	1408	G	C6-C5-N7	-11.39	123.57	130.40
36	1	2623	G	C2-N3-C4	-11.39	106.21	111.90
36	5	884	A	C4-C5-N7	11.38	116.39	110.70
36	5	2799	A	C6-N1-C2	-11.38	111.77	118.60
36	5	2953	U	N3-C4-C5	-11.38	107.77	114.60
1	2	1457	C	O5'-P-OP2	-11.38	95.46	105.70
36	1	2625	C	N3-C4-C5	11.38	126.45	121.90
36	1	933	A	C4-C5-C6	11.37	122.69	117.00
36	5	2920	U	N3-C4-O4	-11.37	111.44	119.40
38	4	16	G	O5'-P-OP2	-11.37	95.47	105.70
36	5	1307	G	C6-C5-N7	-11.36	123.58	130.40
36	5	1108	U	N3-C2-O2	-11.36	114.25	122.20
36	1	1520	G	N1-C6-O6	11.36	126.72	119.90
36	5	1379	G	C6-C5-N7	-11.36	123.58	130.40
36	5	2726	C	C5-C4-N4	11.36	128.15	120.20
36	5	187	A	C8-N9-C4	-11.36	101.26	105.80
36	1	1542	G	C6-C5-N7	-11.36	123.59	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	633	U	N3-C2-O2	-11.35	114.26	122.20
1	2	1212	G	C6-C5-N7	-11.34	123.59	130.40
36	5	2957	G	C2-N3-C4	-11.34	106.23	111.90
37	7	44	C	N3-C2-O2	11.34	129.84	121.90
36	1	1149	G	C5-C6-N1	-11.34	105.83	111.50
37	7	105	C	C6-N1-C2	-11.34	115.77	120.30
36	1	2402	A	O4'-C1'-N9	11.33	117.27	108.20
36	1	2257	C	C2-N1-C1'	11.32	131.26	118.80
1	6	96	G	C8-N9-C4	-11.32	101.87	106.40
36	1	2930	A	C8-N9-C4	11.32	110.33	105.80
36	5	2700	G	C5-C6-N1	11.32	117.16	111.50
36	5	568	G	C5-C6-O6	-11.32	121.81	128.60
36	1	595	G	O5'-P-OP1	-11.31	95.52	105.70
36	1	2241	U	O5'-P-OP1	-11.31	95.52	105.70
36	5	1367	G	C4-C5-C6	11.30	125.58	118.80
36	1	964	G	N1-C6-O6	11.30	126.68	119.90
36	5	798	G	N1-C6-O6	11.30	126.68	119.90
36	1	2148	U	O5'-P-OP2	-11.29	95.54	105.70
36	1	1312	C	N3-C4-C5	-11.29	117.39	121.90
36	1	652	G	N3-C4-C5	-11.29	122.96	128.60
36	1	890	C	N3-C2-O2	-11.28	114.01	121.90
36	5	2944	U	N3-C2-O2	-11.28	114.31	122.20
36	5	1902	G	N1-C6-O6	11.28	126.67	119.90
36	5	630	A	C8-N9-C4	11.27	110.31	105.80
36	5	2715	A	C4-C5-N7	-11.27	105.07	110.70
36	5	437	G	N7-C8-N9	11.27	118.73	113.10
36	1	427	C	N3-C4-N4	11.26	125.88	118.00
1	6	1778	G	C5-N7-C8	-11.26	98.67	104.30
1	6	1556	A	C8-N9-C4	11.26	110.30	105.80
36	5	1585	C	C6-N1-C2	-11.26	115.80	120.30
36	5	3092	C	C5-C4-N4	-11.26	112.32	120.20
38	8	138	A	N1-C6-N6	-11.26	111.84	118.60
37	7	104	A	O5'-P-OP1	11.26	124.21	110.70
36	5	2620	G	C8-N9-C4	-11.26	101.90	106.40
36	5	1385	C	C6-N1-C2	-11.25	115.80	120.30
36	1	1198	C	O5'-P-OP1	-11.24	95.58	105.70
1	6	1108	G	O5'-P-OP2	-11.24	95.58	105.70
36	5	832	G	N1-C6-O6	-11.24	113.15	119.90
36	5	842	G	C8-N9-C4	11.24	110.90	106.40
1	6	583	C	C6-N1-C2	-11.24	115.81	120.30
36	1	198	A	C8-N9-C4	-11.23	101.31	105.80
36	5	1060	U	C5-C6-N1	-11.23	117.09	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	99	C	N1-C2-O2	11.23	125.64	118.90
36	5	2727	A	N1-C6-N6	-11.23	111.86	118.60
36	5	816	A	O5'-P-OP2	-11.22	95.60	105.70
36	5	96	G	C2-N3-C4	-11.22	106.29	111.90
36	5	1589	A	C4-C5-N7	11.21	116.31	110.70
36	1	2887	A	C8-N9-C4	-11.21	101.31	105.80
36	5	640	U	N1-C2-O2	-11.21	114.96	122.80
36	1	3176	G	N1-C6-O6	11.20	126.62	119.90
36	1	780	A	O5'-P-OP2	-11.19	95.63	105.70
36	1	3180	A	N1-C6-N6	-11.19	111.89	118.60
36	5	3140	G	C5-C6-O6	-11.19	121.89	128.60
36	5	939	U	OP1-P-OP2	-11.19	102.82	119.60
36	5	3019	U	N3-C2-O2	-11.19	114.37	122.20
36	1	1149	G	C6-C5-N7	-11.18	123.69	130.40
36	1	93	C	N1-C2-N3	-11.18	111.38	119.20
36	5	2199	G	C4-C5-C6	11.18	125.51	118.80
36	1	2197	C	C6-N1-C2	11.18	124.77	120.30
36	1	2613	U	N1-C2-N3	11.18	121.61	114.90
36	1	929	A	N1-C6-N6	11.17	125.30	118.60
36	1	1901	A	C6-N1-C2	-11.17	111.90	118.60
36	5	1199	C	O5'-P-OP2	-11.17	95.64	105.70
1	2	1273	G	O5'-P-OP1	-11.16	95.65	105.70
36	1	146	U	N1-C2-O2	11.16	130.61	122.80
36	1	1173	U	O5'-P-OP2	-11.16	95.66	105.70
36	5	3242	G	N1-C6-O6	-11.16	113.21	119.90
36	1	2623	G	C5-C6-O6	-11.15	121.91	128.60
36	5	637	C	C6-N1-C2	11.15	124.76	120.30
36	5	3012	A	C5-C6-N6	-11.15	114.78	123.70
36	1	2622	C	N3-C2-O2	-11.15	114.10	121.90
36	1	423	A	N9-C4-C5	11.15	110.26	105.80
36	1	1442	U	N3-C4-O4	11.15	127.20	119.40
36	5	3326	G	C8-N9-C4	11.15	110.86	106.40
1	2	1615	C	N1-C2-O2	11.14	125.59	118.90
37	7	45	A	N1-C2-N3	11.14	134.87	129.30
1	6	1645	G	N3-C4-N9	11.14	132.69	126.00
36	5	3144	G	N1-C2-N3	11.14	130.58	123.90
36	1	1448	U	C2-N3-C4	-11.14	120.32	127.00
36	1	2936	A	N1-C6-N6	-11.14	111.92	118.60
36	5	2402	A	N1-C2-N3	11.14	134.87	129.30
1	6	996	U	C5-C6-N1	11.13	128.27	122.70
36	1	2644	C	C5-C6-N1	-11.13	115.43	121.00
36	1	1306	G	C6-C5-N7	-11.13	123.72	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	994	G	N1-C6-O6	11.13	126.58	119.90
1	6	144	U	N3-C2-O2	-11.13	114.41	122.20
36	5	2280	A	N1-C6-N6	11.12	125.28	118.60
36	1	2818	U	O5'-P-OP2	-11.12	95.69	105.70
36	1	908	G	C8-N9-C4	-11.12	101.95	106.40
36	1	1393	A	N1-C2-N3	11.12	134.86	129.30
36	1	2168	A	N9-C4-C5	11.12	110.25	105.80
1	6	1781	A	C8-N9-C4	-11.12	101.35	105.80
36	5	2940	A	N7-C8-N9	11.12	119.36	113.80
36	1	2948	C	C6-N1-C2	-11.12	115.85	120.30
36	5	1142	G	C8-N9-C4	-11.11	101.95	106.40
36	5	2382	G	N3-C4-N9	-11.11	119.33	126.00
36	5	2931	C	N3-C4-C5	11.11	126.34	121.90
36	1	2380	U	C2-N3-C4	-11.11	120.34	127.00
36	5	2512	C	C6-N1-C2	11.11	124.74	120.30
36	1	3096	C	C6-N1-C2	-11.10	115.86	120.30
36	1	798	G	C5-N7-C8	-11.10	98.75	104.30
36	5	1527	C	C6-N1-C2	11.10	124.74	120.30
36	1	585	A	C6-N1-C2	-11.10	111.94	118.60
36	5	2346	C	N3-C4-N4	11.09	125.76	118.00
36	1	1411	C	N3-C2-O2	-11.09	114.14	121.90
36	1	806	A	N1-C2-N3	11.08	134.84	129.30
1	6	1753	A	C8-N9-C4	-11.08	101.37	105.80
38	4	5	U	C5-C6-N1	-11.08	117.16	122.70
36	5	1430	U	C5-C6-N1	-11.08	117.16	122.70
36	5	1441	G	O5'-P-OP1	-11.08	95.73	105.70
36	5	1321	G	N3-C2-N2	-11.07	112.15	119.90
37	7	88	G	C8-N9-C4	-11.07	101.97	106.40
36	5	1323	G	C8-N9-C4	-11.07	101.97	106.40
1	2	1486	G	C4-N9-C1'	11.07	140.89	126.50
36	1	89	A	N1-C2-N3	11.07	134.83	129.30
36	1	2396	G	N7-C8-N9	11.07	118.64	113.10
36	1	796	U	O5'-P-OP1	-11.07	95.74	105.70
36	5	578	A	C5-C6-N6	11.07	132.55	123.70
36	5	2886	U	N1-C2-N3	11.06	121.54	114.90
36	5	842	G	C5-C6-N1	11.06	117.03	111.50
36	1	2356	A	C8-N9-C4	-11.06	101.38	105.80
36	5	517	G	N1-C6-O6	11.06	126.54	119.90
67	o1	97	LEU	CA-CB-CG	-11.06	89.86	115.30
36	5	927	C	C5-C4-N4	-11.06	112.46	120.20
36	5	2816	G	N3-C2-N2	-11.06	112.16	119.90
36	5	3061	G	C5-C6-O6	-11.05	121.97	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3122	A	C5-N7-C8	-11.05	98.38	103.90
36	1	2399	A	N1-C6-N6	11.05	125.23	118.60
36	1	1306	G	N1-C6-O6	11.04	126.53	119.90
36	5	1292	C	C6-N1-C2	11.04	124.72	120.30
36	5	66	A	C8-N9-C4	11.04	110.22	105.80
36	5	2863	G	N3-C4-N9	-11.04	119.38	126.00
36	5	3383	G	C5-C6-O6	-11.04	121.98	128.60
36	1	1120	A	C6-N1-C2	-11.04	111.98	118.60
36	5	2895	G	N1-C2-N3	11.04	130.52	123.90
36	1	3274	A	C8-N9-C4	-11.03	101.39	105.80
36	5	928	C	O5'-P-OP2	-11.04	95.77	105.70
1	6	1777	G	C6-C5-N7	-11.03	123.78	130.40
36	5	2298	U	N3-C2-O2	-11.03	114.48	122.20
36	5	2943	G	C5-C6-O6	-11.03	121.98	128.60
1	6	576	G	N1-C6-O6	11.02	126.52	119.90
36	5	1852	G	N1-C6-O6	11.02	126.51	119.90
38	4	94	C	N3-C4-C5	11.02	126.31	121.90
36	5	638	C	C6-N1-C2	-11.02	115.89	120.30
36	1	1442	U	N3-C2-O2	11.01	129.91	122.20
36	1	1658	G	N3-C2-N2	-11.01	112.19	119.90
36	1	2187	G	C5-C6-O6	11.01	135.21	128.60
36	1	3208	G	N3-C4-N9	11.01	132.61	126.00
36	5	3393	U	C5-C6-N1	-11.01	117.19	122.70
36	5	994	G	C6-C5-N7	-11.01	123.80	130.40
36	1	220	G	C5-C6-N1	-11.01	106.00	111.50
36	1	2927	C	N3-C2-O2	11.01	129.60	121.90
36	5	933	A	O5'-P-OP2	-11.01	95.79	105.70
36	5	1307	G	N1-C6-O6	11.01	126.50	119.90
36	5	1435	A	N1-C6-N6	-11.01	112.00	118.60
36	5	2278	C	C5-C4-N4	-11.01	112.50	120.20
36	5	2879	C	N1-C2-O2	-11.01	112.30	118.90
36	5	3206	C	N3-C2-O2	-11.01	114.20	121.90
36	5	994	G	N3-C4-N9	11.00	132.60	126.00
36	1	693	A	O5'-P-OP1	-11.00	95.80	105.70
36	5	1927	G	O5'-P-OP2	-10.99	95.81	105.70
36	5	2741	C	C6-N1-C2	-10.99	115.90	120.30
36	1	2093	A	C2-N3-C4	10.99	116.10	110.60
36	1	1050	U	C5-C6-N1	-10.99	117.20	122.70
36	1	3025	C	O5'-P-OP1	-10.99	95.81	105.70
36	5	2149	A	C2-N3-C4	-10.98	105.11	110.60
36	5	2708	C	C5-C4-N4	-10.98	112.51	120.20
36	1	2727	A	C4-C5-N7	-10.98	105.21	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1139	G	N3-C4-N9	-10.98	119.41	126.00
36	5	2275	A	O5'-P-OP1	-10.98	95.82	105.70
36	1	1429	G	C8-N9-C4	10.98	110.79	106.40
36	1	2877	G	N9-C4-C5	10.98	109.79	105.40
36	5	2341	A	N1-C2-N3	10.98	134.79	129.30
36	5	2875	U	N3-C4-C5	-10.98	108.01	114.60
36	1	2199	G	N3-C4-N9	10.97	132.58	126.00
1	6	393	C	N3-C4-C5	10.97	126.29	121.90
36	5	2970	C	N3-C4-C5	-10.97	117.51	121.90
1	6	891	A	C8-N9-C4	10.97	110.19	105.80
36	5	644	G	C5-C6-O6	10.97	135.18	128.60
36	5	1149	G	C5-C6-O6	-10.97	122.02	128.60
36	5	854	G	N3-C2-N2	-10.96	112.22	119.90
36	1	2727	A	C5-C6-N6	10.96	132.47	123.70
36	1	1152	G	C5-C6-N1	10.96	116.98	111.50
36	1	35	A	C4-C5-N7	10.95	116.17	110.70
36	5	1152	G	C4-N9-C1'	-10.95	112.27	126.50
36	1	104	G	N1-C6-O6	10.94	126.47	119.90
36	5	2816	G	O5'-P-OP2	-10.94	95.85	105.70
1	6	1640	C	N3-C2-O2	-10.94	114.25	121.90
36	5	2341	A	C2-N3-C4	-10.94	105.13	110.60
36	5	2728	G	C6-C5-N7	-10.94	123.84	130.40
36	5	3140	G	C8-N9-C1'	-10.94	112.78	127.00
36	1	2363	A	C5-C6-N6	10.93	132.45	123.70
36	5	2376	G	N7-C8-N9	10.93	118.57	113.10
36	5	64	G	N7-C8-N9	10.93	118.57	113.10
36	1	585	A	N1-C2-N3	10.93	134.76	129.30
36	5	1902	G	O5'-P-OP1	-10.93	95.86	105.70
36	5	2296	A	C8-N9-C4	10.93	110.17	105.80
1	6	1637	C	N1-C2-O2	10.93	125.45	118.90
36	5	64	G	C8-N9-C4	-10.93	102.03	106.40
36	5	784	A	N1-C6-N6	10.92	125.16	118.60
36	1	2635	A	N9-C4-C5	10.92	110.17	105.80
1	6	697	C	C6-N1-C2	-10.92	115.93	120.30
36	5	3041	U	N3-C4-C5	10.92	121.15	114.60
38	8	38	U	C6-N1-C2	-10.92	114.45	121.00
36	1	25	U	N3-C4-C5	-10.91	108.05	114.60
36	5	2906	C	N3-C4-N4	10.91	125.64	118.00
36	1	2887	A	C5-C6-N1	10.91	123.16	117.70
38	4	99	C	C6-N1-C2	10.91	124.66	120.30
36	5	3146	G	C6-C5-N7	-10.91	123.85	130.40
36	1	2613	U	O5'-P-OP2	-10.90	95.89	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2661	G	C8-N9-C1'	-10.89	112.84	127.00
36	5	3091	A	C2-N3-C4	-10.89	105.15	110.60
36	5	1004	U	O5'-P-OP1	-10.89	95.90	105.70
36	5	3091	A	C6-C5-N7	-10.89	124.68	132.30
1	2	967	A	N1-C6-N6	10.88	125.13	118.60
36	5	1203	A	O5'-P-OP1	-10.88	95.90	105.70
36	1	1429	G	N1-C2-N3	10.88	130.43	123.90
36	5	1293	U	O5'-P-OP1	-10.88	95.91	105.70
36	5	2139	A	C6-N1-C2	-10.88	112.07	118.60
36	5	1178	G	N1-C6-O6	-10.88	113.37	119.90
36	5	2971	A	N1-C6-N6	-10.88	112.07	118.60
36	1	281	G	N9-C4-C5	10.87	109.75	105.40
36	1	1002	A	C8-N9-C4	10.87	110.15	105.80
36	1	2979	U	C2-N1-C1'	-10.87	104.65	117.70
36	1	423	A	C8-N9-C4	-10.87	101.45	105.80
36	5	2616	C	C6-N1-C2	-10.87	115.95	120.30
36	1	729	C	C6-N1-C2	-10.87	115.95	120.30
36	1	1178	G	C6-C5-N7	-10.86	123.88	130.40
36	5	639	G	C6-C5-N7	-10.86	123.89	130.40
36	5	2376	G	C8-N9-C4	-10.86	102.06	106.40
36	1	1116	G	C6-C5-N7	-10.86	123.89	130.40
38	4	12	A	N1-C6-N6	10.86	125.11	118.60
36	5	2811	A	N1-C6-N6	-10.86	112.09	118.60
36	1	224	C	C6-N1-C2	-10.85	115.96	120.30
36	1	691	A	C2-N3-C4	-10.85	105.17	110.60
36	5	2847	A	C2-N3-C4	-10.85	105.17	110.60
37	7	116	C	N3-C4-C5	10.85	126.24	121.90
36	1	2898	G	O5'-P-OP2	-10.85	95.94	105.70
36	1	86	G	O5'-P-OP2	-10.85	95.94	105.70
36	5	857	G	C5-C6-N1	-10.84	106.08	111.50
36	5	3065	G	C2-N3-C4	-10.84	106.48	111.90
36	1	962	A	O5'-P-OP1	-10.84	95.94	105.70
36	1	2145	A	C5-C6-N1	10.84	123.12	117.70
36	5	2700	G	N3-C4-C5	-10.84	123.18	128.60
36	5	1374	G	N3-C4-C5	10.83	134.02	128.60
36	5	2397	A	C5-N7-C8	-10.83	98.48	103.90
36	5	969	C	N1-C2-O2	-10.83	112.40	118.90
36	5	2661	G	N3-C4-N9	10.83	132.50	126.00
36	5	2877	G	N1-C2-N2	-10.83	106.45	116.20
37	7	92	A	O5'-P-OP1	-10.83	95.95	105.70
36	5	94	G	N3-C4-N9	-10.82	119.51	126.00
37	3	82	G	N1-C2-N3	10.82	130.39	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	758	U	C5-C4-O4	10.81	132.39	125.90
38	4	26	U	C5-C4-O4	10.81	132.39	125.90
1	6	1025	A	C6-C5-N7	-10.81	124.73	132.30
36	1	2400	G	N1-C6-O6	10.81	126.38	119.90
36	1	2617	U	C5-C6-N1	-10.81	117.30	122.70
36	5	1151	U	N3-C4-O4	10.81	126.97	119.40
36	1	832	G	O5'-P-OP2	-10.80	95.97	105.70
36	1	1414	G	C4-C5-N7	10.80	115.12	110.80
36	1	2385	G	C4-C5-N7	10.80	115.12	110.80
36	5	2386	A	C5-N7-C8	-10.80	98.50	103.90
36	5	3383	G	C4-C5-N7	10.80	115.12	110.80
36	1	939	U	C5-C6-N1	10.80	128.10	122.70
36	1	651	G	N1-C6-O6	10.80	126.38	119.90
36	1	1000	C	N3-C2-O2	10.80	129.46	121.90
36	5	2391	G	N1-C6-O6	-10.80	113.42	119.90
36	5	1665	C	C6-N1-C2	10.79	124.62	120.30
36	5	2278	C	C6-N1-C1'	-10.79	107.85	120.80
36	1	652	G	O5'-P-OP2	-10.78	95.99	105.70
36	5	1196	C	C5-C4-N4	10.78	127.75	120.20
36	5	2354	C	N3-C4-C5	-10.78	117.59	121.90
36	5	2927	C	N1-C2-O2	-10.78	112.43	118.90
36	5	2246	G	C8-N9-C4	-10.78	102.09	106.40
36	1	2869	U	N1-C2-O2	-10.77	115.26	122.80
38	4	32	C	N3-C4-C5	-10.77	117.59	121.90
38	4	12	A	C5-N7-C8	-10.77	98.52	103.90
36	5	2870	C	C6-N1-C2	10.77	124.61	120.30
36	5	2945	G	N7-C8-N9	10.77	118.48	113.10
36	1	979	U	N3-C2-O2	-10.76	114.67	122.20
36	1	1152	G	C2-N3-C4	10.76	117.28	111.90
36	1	2931	C	C6-N1-C2	10.76	124.60	120.30
1	6	1127	G	N1-C6-O6	10.76	126.36	119.90
1	6	1622	G	C5-C6-O6	-10.76	122.14	128.60
36	5	2278	C	O5'-P-OP1	10.76	123.61	110.70
36	1	2280	A	O5'-P-OP1	-10.76	96.02	105.70
36	5	1546	A	N1-C2-N3	10.75	134.68	129.30
36	5	189	G	N1-C6-O6	-10.75	113.45	119.90
36	5	3079	U	C5-C4-O4	10.75	132.35	125.90
38	4	4	C	C2-N3-C4	-10.75	114.53	119.90
36	5	1107	C	C4-C5-C6	10.74	122.77	117.40
36	5	1156	C	O5'-P-OP1	-10.74	96.03	105.70
36	1	1204	A	C2-N3-C4	-10.74	105.23	110.60
36	1	2655	U	C6-N1-C2	-10.74	114.56	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2363	A	N1-C6-N6	-10.74	112.16	118.60
36	5	2644	C	N1-C2-O2	-10.74	112.46	118.90
1	6	1509	C	O5'-P-OP2	-10.74	96.04	105.70
36	5	2403	G	N1-C6-O6	10.74	126.34	119.90
36	5	1373	A	C5-C6-N6	-10.73	115.11	123.70
36	5	2662	G	C8-N9-C1'	-10.73	113.05	127.00
36	1	828	A	C5-N7-C8	-10.73	98.54	103.90
36	5	3188	G	N3-C4-C5	-10.72	123.24	128.60
36	5	3307	A	N1-C6-N6	10.72	125.03	118.60
36	5	640	U	C6-N1-C2	-10.72	114.57	121.00
36	5	2870	C	C5-C6-N1	-10.72	115.64	121.00
1	2	449	C	C6-N1-C2	-10.71	116.01	120.30
36	1	36	C	N1-C2-O2	10.71	125.33	118.90
36	1	1420	C	N1-C2-O2	-10.71	112.47	118.90
36	1	101	G	N9-C4-C5	-10.71	101.11	105.40
36	1	808	A	C6-N1-C2	-10.71	112.18	118.60
1	6	431	C	N3-C4-C5	-10.71	117.62	121.90
36	5	2623	G	C8-N9-C4	10.71	110.68	106.40
36	1	2996	U	C2-N1-C1'	10.70	130.54	117.70
36	1	3217	C	C6-N1-C2	-10.71	116.02	120.30
38	4	12	A	C4-C5-N7	10.70	116.05	110.70
36	5	1321	G	C5-C6-N1	-10.70	106.15	111.50
36	1	1061	A	N7-C8-N9	-10.70	108.45	113.80
36	1	1116	G	N1-C2-N2	-10.70	106.57	116.20
36	1	651	G	C6-C5-N7	-10.70	123.98	130.40
36	1	2985	C	N1-C2-O2	-10.69	112.48	118.90
1	6	1610	G	N3-C4-C5	-10.70	123.25	128.60
36	5	1203	A	N1-C6-N6	10.69	125.02	118.60
36	5	932	U	N3-C4-C5	10.69	121.02	114.60
36	5	1590	G	C8-N9-C4	10.69	110.68	106.40
36	5	2363	A	N9-C4-C5	10.69	110.08	105.80
36	5	3096	C	N3-C4-C5	-10.69	117.62	121.90
1	6	1664	C	N3-C4-C5	-10.69	117.62	121.90
36	1	187	A	N1-C6-N6	-10.68	112.19	118.60
36	1	1151	U	N3-C4-C5	-10.68	108.19	114.60
36	5	567	G	N1-C6-O6	10.68	126.31	119.90
36	5	1310	G	C6-C5-N7	-10.68	124.00	130.40
36	5	2684	C	C6-N1-C2	-10.68	116.03	120.30
1	6	1280	C	N3-C4-C5	-10.67	117.63	121.90
36	5	1377	G	C5-C6-O6	10.67	135.00	128.60
36	5	2698	G	C8-N9-C4	10.67	110.67	106.40
37	7	15	C	C2-N1-C1'	10.67	130.54	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1047	A	O5'-P-OP2	-10.67	96.10	105.70
36	1	645	A	C8-N9-C4	-10.66	101.53	105.80
1	6	144	U	N1-C2-O2	10.66	130.26	122.80
36	5	2393	G	C5-C6-O6	-10.66	122.20	128.60
36	5	2689	A	C6-N1-C2	-10.66	112.20	118.60
36	5	2852	C	C6-N1-C2	10.66	124.57	120.30
36	5	2700	G	N1-C6-O6	-10.66	113.50	119.90
1	6	1278	G	C8-N9-C4	-10.66	102.14	106.40
36	5	3045	G	C8-N9-C4	-10.66	102.14	106.40
1	2	1615	C	N3-C2-O2	-10.66	114.44	121.90
36	5	2395	G	C4-C5-N7	10.66	115.06	110.80
36	5	3137	C	N3-C4-N4	10.66	125.46	118.00
36	1	1438	U	N1-C2-N3	10.65	121.29	114.90
36	5	796	U	N3-C2-O2	-10.65	114.74	122.20
36	5	2634	U	C5-C4-O4	-10.65	119.51	125.90
36	1	1065	A	N1-C2-N3	10.65	134.62	129.30
36	1	3142	A	C5-C6-N6	10.65	132.22	123.70
36	5	960	U	N1-C2-O2	10.65	130.26	122.80
36	5	2921	U	C6-N1-C2	10.65	127.39	121.00
36	5	3124	G	C8-N9-C4	-10.65	102.14	106.40
36	1	609	G	C6-C5-N7	-10.65	124.01	130.40
36	1	1307	G	P-O3'-C3'	10.65	132.48	119.70
36	5	1196	C	C5-C6-N1	-10.65	115.68	121.00
36	5	3078	U	C5-C4-O4	10.64	132.29	125.90
36	1	1414	G	N1-C6-O6	10.64	126.28	119.90
36	5	1050	U	C5-C6-N1	-10.64	117.38	122.70
36	1	2957	G	O5'-P-OP2	-10.63	96.13	105.70
36	5	998	A	N1-C2-N3	10.63	134.62	129.30
36	5	3182	G	C5-C6-O6	10.63	134.98	128.60
36	1	1585	C	C6-N1-C2	10.63	124.55	120.30
36	5	2942	C	N3-C4-N4	-10.62	110.56	118.00
36	1	2644	C	C2-N3-C4	-10.62	114.59	119.90
37	7	84	A	N7-C8-N9	10.62	119.11	113.80
36	1	205	C	C5-C6-N1	-10.62	115.69	121.00
36	1	2414	G	C2-N3-C4	-10.62	106.59	111.90
36	1	2707	C	C6-N1-C2	-10.62	116.05	120.30
36	1	1592	G	N3-C4-C5	-10.62	123.29	128.60
1	6	1644	C	N1-C2-O2	10.62	125.27	118.90
36	5	667	C	N3-C4-N4	-10.62	110.57	118.00
36	5	3245	A	N7-C8-N9	10.62	119.11	113.80
36	5	1176	C	C2-N1-C1'	-10.62	107.12	118.80
1	6	1758	U	O5'-P-OP2	-10.61	96.15	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2378	C	O5'-P-OP1	-10.61	96.15	105.70
36	5	857	G	C8-N9-C4	-10.61	102.16	106.40
36	1	316	U	C6-N1-C2	-10.61	114.64	121.00
36	5	2428	U	C5-C6-N1	-10.61	117.40	122.70
36	1	651	G	C8-N9-C1'	-10.60	113.22	127.00
36	1	1386	A	C5-C6-N6	10.60	132.18	123.70
36	1	1224	C	C6-N1-C2	-10.60	116.06	120.30
1	2	543	C	N1-C2-O2	10.60	125.26	118.90
1	6	142	G	C4-C5-N7	-10.60	106.56	110.80
1	6	474	A	N1-C2-N3	-10.60	124.00	129.30
36	5	2246	G	N7-C8-N9	10.60	118.40	113.10
36	5	1794	G	N3-C4-C5	10.59	133.90	128.60
36	1	890	C	N1-C2-O2	10.59	125.25	118.90
36	1	220	G	N1-C6-O6	10.59	126.25	119.90
36	1	1387	G	N1-C2-N3	10.59	130.25	123.90
1	6	139	C	N3-C2-O2	-10.59	114.49	121.90
36	5	2936	A	N3-C4-C5	-10.59	119.39	126.80
36	5	917	A	O5'-P-OP2	-10.58	96.18	105.70
36	1	1149	G	N1-C6-O6	10.58	126.25	119.90
36	5	637	C	N3-C4-C5	10.58	126.13	121.90
36	1	2811	A	C6-C5-N7	-10.58	124.90	132.30
36	5	595	G	C6-C5-N7	-10.58	124.05	130.40
36	5	1141	C	O5'-P-OP2	-10.58	96.18	105.70
36	1	2390	A	N1-C6-N6	-10.57	112.25	118.60
36	5	648	C	C6-N1-C2	-10.57	116.07	120.30
36	5	2941	A	O5'-P-OP2	-10.57	96.18	105.70
1	6	1005	A	N1-C2-N3	10.57	134.59	129.30
36	1	625	G	O5'-P-OP2	-10.57	96.19	105.70
36	5	1486	G	N3-C4-C5	10.57	133.88	128.60
1	2	377	G	N3-C4-N9	-10.56	119.66	126.00
36	5	512	U	C5-C6-N1	-10.56	117.42	122.70
36	5	1339	C	O5'-P-OP1	-10.56	96.19	105.70
36	5	3140	G	N9-C4-C5	-10.56	101.18	105.40
1	2	1291	G	C8-N9-C4	-10.56	102.18	106.40
36	1	1182	A	N1-C6-N6	10.56	124.93	118.60
36	1	818	C	N3-C4-C5	-10.55	117.68	121.90
36	1	345	G	C4-C5-C6	10.54	125.12	118.80
36	5	1292	C	N1-C2-O2	-10.54	112.58	118.90
36	5	2637	A	N1-C2-N3	10.54	134.57	129.30
36	1	1377	G	N1-C6-O6	10.54	126.22	119.90
36	5	3069	G	C4-C5-N7	10.54	115.02	110.80
38	8	133	G	C8-N9-C4	10.53	110.61	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1340	G	C5-C6-N1	10.53	116.77	111.50
36	1	1141	C	C6-N1-C2	-10.53	116.09	120.30
36	5	521	A	C8-N9-C4	-10.53	101.59	105.80
36	1	1408	G	N1-C6-O6	10.53	126.22	119.90
1	6	421	A	C8-N9-C4	10.53	110.01	105.80
36	1	394	G	N9-C4-C5	10.52	109.61	105.40
36	1	895	A	C8-N9-C4	-10.51	101.59	105.80
1	6	1296	A	O5'-P-OP1	-10.51	96.24	105.70
36	5	3227	A	N1-C6-N6	10.51	124.91	118.60
36	1	938	C	N3-C2-O2	-10.51	114.54	121.90
36	1	335	G	C8-N9-C4	-10.50	102.20	106.40
36	1	656	A	C5-C6-N1	10.50	122.95	117.70
36	1	1398	U	N1-C2-N3	10.50	121.20	114.90
36	5	874	U	N1-C2-N3	10.50	121.20	114.90
36	5	3092	C	C6-N1-C2	10.50	124.50	120.30
1	6	794	U	C2-N1-C1'	10.50	130.29	117.70
36	1	973	A	N1-C6-N6	-10.49	112.30	118.60
36	1	3018	C	C6-N1-C2	10.49	124.50	120.30
1	6	337	G	C5-N7-C8	-10.49	99.05	104.30
36	1	2408	U	C6-N1-C2	-10.49	114.70	121.00
36	1	645	A	C6-N1-C2	-10.49	112.31	118.60
36	1	1500	G	C5-C6-O6	-10.49	122.31	128.60
36	5	2715	A	O5'-P-OP1	-10.49	96.26	105.70
36	5	94	G	N3-C4-C5	10.48	133.84	128.60
36	5	3323	A	C8-N9-C4	-10.48	101.61	105.80
1	6	1426	C	C6-N1-C2	10.48	124.49	120.30
36	5	1129	A	C5-C6-N6	-10.48	115.31	123.70
36	5	3016	A	C2-N3-C4	-10.48	105.36	110.60
36	5	3061	G	N3-C4-C5	10.48	133.84	128.60
37	7	44	C	N3-C4-C5	10.48	126.09	121.90
1	6	163	G	N9-C4-C5	10.48	109.59	105.40
36	5	2934	A	N1-C6-N6	10.48	124.89	118.60
36	5	1900	A	C5-C6-N1	10.47	122.94	117.70
36	5	2762	A	O5'-P-OP1	-10.47	96.27	105.70
38	4	41	A	C6-N1-C2	-10.47	112.32	118.60
36	5	867	G	O5'-P-OP2	10.47	123.27	110.70
36	1	1495	U	N1-C2-O2	-10.47	115.47	122.80
36	1	2810	C	N3-C4-C5	-10.47	117.71	121.90
36	5	227	G	O5'-P-OP2	-10.47	96.28	105.70
36	5	293	C	N3-C4-C5	10.47	126.09	121.90
36	5	2950	G	C5-C6-O6	-10.47	122.32	128.60
36	1	2605	G	N3-C4-C5	10.46	133.83	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	998	A	N1-C6-N6	-10.46	112.32	118.60
1	6	1556	A	N1-C6-N6	10.46	124.88	118.60
36	5	1209	G	N1-C6-O6	10.47	126.18	119.90
36	5	2130	G	N3-C4-C5	10.46	133.83	128.60
1	6	972	G	N1-C6-O6	10.46	126.18	119.90
36	1	424	G	C5-C6-O6	-10.46	122.33	128.60
36	1	35	A	C5-C6-N6	-10.46	115.33	123.70
36	5	994	G	C8-N9-C1'	-10.46	113.41	127.00
36	1	1547	G	N3-C4-N9	10.46	132.27	126.00
36	1	2880	U	C6-N1-C2	-10.46	114.73	121.00
36	5	2906	C	C5-C4-N4	-10.45	112.88	120.20
36	5	283	G	C8-N9-C1'	-10.45	113.41	127.00
36	1	2692	A	C8-N9-C4	-10.45	101.62	105.80
36	1	1178	G	N1-C2-N2	-10.45	106.80	116.20
36	1	272	G	N3-C4-N9	-10.44	119.73	126.00
36	5	27	C	O5'-P-OP1	-10.45	96.30	105.70
36	5	2708	C	N1-C2-O2	-10.45	112.63	118.90
36	1	358	G	C4-C5-N7	10.44	114.98	110.80
36	5	2707	C	C6-N1-C2	10.44	124.48	120.30
36	1	663	C	O5'-P-OP1	10.44	123.23	110.70
36	1	2651	G	N1-C6-O6	10.44	126.16	119.90
36	1	3313	U	O5'-P-OP2	-10.44	96.31	105.70
38	4	20	U	N1-C2-N3	10.44	121.16	114.90
37	7	37	G	N3-C4-N9	10.44	132.26	126.00
36	5	1196	C	N3-C2-O2	-10.44	114.60	121.90
36	1	1134	G	C4-C5-N7	-10.43	106.63	110.80
36	1	1433	A	C5-C6-N1	10.43	122.92	117.70
36	5	502	U	O5'-P-OP2	-10.43	96.31	105.70
36	5	52	A	O5'-P-OP1	-10.43	96.31	105.70
36	5	192	C	C6-N1-C2	-10.43	116.13	120.30
36	5	2234	G	C8-N9-C4	10.43	110.57	106.40
36	5	3362	A	C8-N9-C4	-10.43	101.63	105.80
36	1	1048	A	N1-C6-N6	-10.42	112.35	118.60
36	1	979	U	N1-C2-N3	10.42	121.15	114.90
36	1	937	G	N1-C6-O6	10.42	126.15	119.90
36	1	2281	A	O5'-P-OP2	-10.42	96.33	105.70
36	5	2187	G	N9-C4-C5	10.42	109.57	105.40
36	5	3085	G	N7-C8-N9	-10.42	107.89	113.10
1	6	1536	G	O5'-P-OP1	-10.41	96.33	105.70
36	5	940	G	C6-C5-N7	10.41	136.65	130.40
36	5	2900	A	O5'-P-OP2	-10.41	96.33	105.70
36	1	2753	G	N1-C6-O6	-10.41	113.66	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	4	C	C6-N1-C2	-10.41	116.14	120.30
36	1	2409	G	N3-C4-N9	10.41	132.24	126.00
1	6	359	A	C4-C5-C6	-10.41	111.80	117.00
36	5	2400	G	C4-N9-C1'	-10.41	112.97	126.50
36	5	2976	A	C5-C6-N1	10.40	122.90	117.70
36	1	305	U	C5-C6-N1	-10.40	117.50	122.70
36	1	1887	A	C8-N9-C4	10.40	109.96	105.80
36	5	2353	G	N1-C6-O6	10.40	126.14	119.90
36	1	860	G	N1-C6-O6	10.40	126.14	119.90
36	5	1367	G	C8-N9-C1'	-10.40	113.48	127.00
37	7	109	G	C5-C6-O6	-10.40	122.36	128.60
1	2	1196	A	O5'-P-OP1	-10.39	96.35	105.70
1	6	905	A	N1-C6-N6	-10.39	112.36	118.60
1	6	337	G	N7-C8-N9	10.39	118.30	113.10
36	5	344	A	C8-N9-C4	-10.39	101.64	105.80
36	1	344	A	C5-N7-C8	-10.39	98.70	103.90
36	5	64	G	N1-C6-O6	10.39	126.13	119.90
36	5	2381	G	C4-C5-N7	-10.39	106.64	110.80
36	5	3210	A	N1-C6-N6	-10.39	112.36	118.60
36	1	421	G	C5-C6-N1	10.39	116.69	111.50
36	5	1861	G	O5'-P-OP2	-10.39	96.35	105.70
36	5	2927	C	N3-C2-O2	10.39	129.17	121.90
37	7	84	A	C5-N7-C8	-10.39	98.71	103.90
36	1	2363	A	C8-N9-C4	-10.39	101.65	105.80
1	6	1614	A	C2-N3-C4	-10.38	105.41	110.60
36	5	2116	G	C8-N9-C4	-10.38	102.25	106.40
36	5	2953	U	N3-C2-O2	10.38	129.47	122.20
36	1	2385	G	O5'-P-OP2	-10.38	96.36	105.70
1	6	597	G	C6-C5-N7	-10.38	124.17	130.40
36	5	3219	G	C8-N9-C4	-10.38	102.25	106.40
36	5	2953	U	N3-C4-O4	10.38	126.66	119.40
36	1	206	G	N7-C8-N9	-10.37	107.91	113.10
36	1	630	A	O5'-P-OP2	-10.37	96.36	105.70
36	1	1708	C	C6-N1-C2	10.37	124.45	120.30
36	1	2306	C	C2-N1-C1'	10.37	130.21	118.80
36	5	1931	U	C2-N1-C1'	-10.37	105.25	117.70
36	5	1379	G	N1-C2-N2	-10.37	106.87	116.20
1	2	543	C	C6-N1-C2	-10.37	116.15	120.30
36	1	404	G	C6-C5-N7	-10.37	124.18	130.40
36	5	3085	G	C5-C6-N1	10.36	116.68	111.50
1	2	14	C	C6-N1-C2	-10.36	116.16	120.30
1	2	338	C	N3-C4-C5	-10.36	117.75	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1761	U	N3-C2-O2	-10.36	114.95	122.20
36	1	1448	U	N1-C2-N3	10.36	121.12	114.90
36	5	3180	A	C2-N3-C4	-10.36	105.42	110.60
36	1	1846	C	N3-C2-O2	10.36	129.15	121.90
36	5	86	G	C5-C6-N1	10.36	116.68	111.50
36	1	425	G	N1-C6-O6	-10.35	113.69	119.90
36	1	860	G	C5-C6-O6	-10.35	122.39	128.60
36	5	2247	G	O5'-P-OP1	-10.35	96.38	105.70
36	5	2808	A	O5'-P-OP1	-10.35	96.39	105.70
36	5	2818	U	O5'-P-OP1	-10.35	96.39	105.70
36	1	2827	U	C4-C5-C6	10.35	125.91	119.70
36	5	1497	C	O5'-P-OP1	-10.35	96.39	105.70
36	5	2290	C	C6-N1-C2	10.35	124.44	120.30
36	1	644	G	N1-C6-O6	-10.34	113.69	119.90
1	6	1640	C	C6-N1-C1'	-10.34	108.39	120.80
36	5	927	C	N3-C4-N4	10.34	125.24	118.00
36	5	2305	G	C8-N9-C4	-10.33	102.27	106.40
36	5	2119	A	C6-C5-N7	-10.33	125.07	132.30
36	1	2811	A	N1-C6-N6	10.32	124.80	118.60
36	5	1367	G	C6-C5-N7	-10.32	124.21	130.40
36	5	2996	U	N1-C2-N3	-10.32	108.71	114.90
36	1	994	G	N1-C6-O6	-10.32	113.71	119.90
36	1	3181	C	N3-C4-N4	-10.32	110.78	118.00
36	5	731	U	N3-C2-O2	-10.32	114.98	122.20
36	5	922	U	C2-N1-C1'	-10.32	105.32	117.70
36	5	938	C	C4-C5-C6	-10.32	112.24	117.40
36	5	2673	A	C8-N9-C4	10.31	109.92	105.80
36	1	1195	A	C8-N9-C4	-10.31	101.68	105.80
36	1	2185	G	C6-C5-N7	-10.31	124.22	130.40
36	1	2672	G	N1-C6-O6	-10.31	113.72	119.90
36	5	2689	A	N7-C8-N9	10.31	118.95	113.80
36	5	668	G	N7-C8-N9	-10.31	107.95	113.10
36	1	2409	G	C4-C5-C6	10.30	124.98	118.80
36	1	2628	A	C8-N9-C4	-10.30	101.68	105.80
36	5	858	A	N1-C6-N6	-10.31	112.42	118.60
36	5	1592	G	C4-C5-N7	-10.30	106.68	110.80
36	1	395	A	O5'-P-OP2	-10.30	96.43	105.70
37	7	106	U	C5-C6-N1	-10.30	117.55	122.70
36	1	3273	A	C5-C6-N1	10.30	122.85	117.70
37	3	95	A	C2-N3-C4	-10.30	105.45	110.60
36	1	2831	G	N3-C4-C5	10.29	133.75	128.60
36	1	967	A	N1-C2-N3	10.29	134.45	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2947	G	C5-C6-N1	10.29	116.65	111.50
36	1	1316	C	C4-C5-C6	10.29	122.54	117.40
36	5	1163	A	O5'-P-OP2	-10.29	96.44	105.70
36	1	209	A	C2-N3-C4	-10.29	105.46	110.60
36	1	2811	A	N3-C4-C5	-10.29	119.60	126.80
36	5	1181	U	N1-C2-N3	10.29	121.07	114.90
36	1	2175	U	O5'-P-OP1	-10.28	96.45	105.70
1	6	144	U	C2-N1-C1'	10.28	130.04	117.70
36	5	3041	U	C2-N3-C4	-10.28	120.83	127.00
36	1	908	G	C4-N9-C1'	10.28	139.86	126.50
36	1	942	U	C4-C5-C6	10.28	125.87	119.70
36	1	2352	A	N1-C6-N6	10.28	124.77	118.60
36	5	860	G	C4-C5-N7	10.28	114.91	110.80
36	5	2272	G	O4'-C1'-N9	10.28	116.42	108.20
36	1	923	C	C6-N1-C2	10.27	124.41	120.30
36	5	3385	U	C5-C6-N1	-10.27	117.56	122.70
36	1	1519	G	C4-C5-N7	10.27	114.91	110.80
36	5	2117	A	C2-N3-C4	-10.27	105.47	110.60
37	7	109	G	N1-C6-O6	10.27	126.06	119.90
1	6	1730	A	N9-C4-C5	10.27	109.91	105.80
36	5	526	C	N1-C2-O2	10.27	125.06	118.90
36	5	3122	A	C8-N9-C4	-10.27	101.69	105.80
1	6	554	C	C2-N3-C4	-10.26	114.77	119.90
36	1	674	G	N1-C6-O6	10.26	126.05	119.90
36	5	806	A	C2-N3-C4	-10.26	105.47	110.60
36	5	1196	C	N3-C4-N4	-10.26	110.82	118.00
36	5	2872	A	C4-C5-C6	-10.25	111.87	117.00
36	5	787	G	C2-N3-C4	-10.25	106.78	111.90
1	6	179	A	C8-N9-C4	-10.25	101.70	105.80
36	5	3309	G	N3-C4-N9	10.25	132.15	126.00
36	1	1307	G	N9-C4-C5	10.24	109.50	105.40
38	4	4	C	N1-C2-N3	10.24	126.37	119.20
36	5	2621	G	C5-C6-N1	-10.24	106.38	111.50
36	1	808	A	C5-C6-N1	10.24	122.82	117.70
1	6	554	C	C5-C6-N1	-10.24	115.88	121.00
36	5	1379	G	C2-N3-C4	-10.24	106.78	111.90
36	5	1113	G	C2-N3-C4	-10.24	106.78	111.90
36	5	3086	A	O5'-P-OP1	-10.24	96.48	105.70
36	5	3150	A	N1-C6-N6	10.24	124.74	118.60
36	5	2620	G	N1-C6-O6	-10.24	113.76	119.90
36	1	1139	G	N3-C4-N9	-10.23	119.86	126.00
38	8	1	A	N1-C6-N6	-10.23	112.46	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2927	C	N1-C2-O2	-10.23	112.76	118.90
1	6	1148	C	C6-N1-C2	-10.23	116.21	120.30
36	5	1450	G	N7-C8-N9	10.22	118.21	113.10
36	5	2879	C	N3-C2-O2	10.22	129.06	121.90
36	5	64	G	C4-C5-C6	10.22	124.93	118.80
36	5	2646	C	O5'-P-OP2	-10.22	96.50	105.70
36	1	2379	U	O5'-P-OP1	10.22	122.96	110.70
36	5	1934	G	C8-N9-C4	10.22	110.49	106.40
36	5	2728	G	N3-C4-N9	10.22	132.13	126.00
36	1	907	G	N1-C6-O6	-10.21	113.77	119.90
36	5	1212	A	N7-C8-N9	10.21	118.91	113.80
36	5	1433	A	N1-C6-N6	10.21	124.73	118.60
36	5	1310	G	C6-N1-C2	-10.21	118.97	125.10
38	4	4	C	N3-C2-O2	-10.21	114.75	121.90
36	1	613	G	O5'-P-OP1	-10.20	96.52	105.70
1	6	1773	C	N3-C4-N4	10.20	125.14	118.00
36	5	1060	U	C2-N3-C4	-10.20	120.88	127.00
36	1	1443	G	N1-C6-O6	10.20	126.02	119.90
36	1	290	G	N3-C2-N2	-10.19	112.76	119.90
1	6	1121	C	N3-C2-O2	-10.20	114.76	121.90
36	5	637	C	C5-C4-N4	-10.19	113.06	120.20
36	5	1367	G	C5-C6-N1	-10.20	106.40	111.50
36	5	2244	A	O5'-P-OP1	-10.20	96.52	105.70
37	7	89	G	C6-N1-C2	10.20	131.22	125.10
38	4	32	C	C6-N1-C2	-10.19	116.22	120.30
36	5	1310	G	C5-N7-C8	-10.19	99.20	104.30
1	2	543	C	C2-N1-C1'	10.19	130.01	118.80
36	5	2335	G	C5-N7-C8	10.19	109.39	104.30
36	5	649	A	N1-C6-N6	10.19	124.71	118.60
36	1	635	G	C5-C6-N1	10.18	116.59	111.50
36	5	2920	U	N3-C4-C5	10.18	120.71	114.60
1	6	474	A	C4-C5-C6	-10.18	111.91	117.00
36	1	1917	C	C6-N1-C2	10.18	124.37	120.30
36	5	883	A	C6-N1-C2	-10.17	112.50	118.60
36	5	2694	A	O5'-P-OP1	-10.17	96.55	105.70
36	5	2195	C	N3-C4-N4	-10.17	110.88	118.00
1	6	1753	A	N3-C4-N9	10.17	135.53	127.40
36	1	1341	U	O5'-P-OP2	-10.17	96.55	105.70
36	5	2946	A	C2-N3-C4	-10.16	105.52	110.60
36	1	27	C	C6-N1-C2	-10.16	116.24	120.30
38	4	81	U	N3-C2-O2	-10.16	115.09	122.20
36	5	682	U	C5-C4-O4	10.16	132.00	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2335	G	N7-C8-N9	-10.16	108.02	113.10
36	1	1208	U	C2-N1-C1'	10.16	129.89	117.70
36	1	2617	U	N3-C2-O2	-10.16	115.09	122.20
36	5	940	G	C4-C5-C6	-10.16	112.70	118.80
1	6	1112	G	C5-C6-O6	10.16	134.69	128.60
36	1	1493	G	C5-C6-O6	10.15	134.69	128.60
37	7	26	C	C4-C5-C6	10.15	122.48	117.40
37	7	98	C	O5'-P-OP2	-10.15	96.56	105.70
36	1	632	G	C5-C6-O6	-10.15	122.51	128.60
36	5	1159	A	C2-N3-C4	-10.15	105.53	110.60
36	5	2187	G	C8-N9-C4	-10.15	102.34	106.40
36	5	3227	A	C2-N3-C4	-10.15	105.52	110.60
36	5	3285	C	N1-C2-O2	10.15	124.99	118.90
36	1	2308	C	C5-C6-N1	-10.15	115.93	121.00
36	5	1176	C	C6-N1-C2	10.15	124.36	120.30
36	1	967	A	C2-N3-C4	-10.15	105.53	110.60
36	1	2880	U	N3-C4-O4	-10.15	112.30	119.40
36	1	2168	A	C5-C6-N6	10.14	131.81	123.70
36	5	52	A	N1-C2-N3	10.14	134.37	129.30
36	5	578	A	C8-N9-C4	-10.14	101.74	105.80
38	4	3	A	C2-N3-C4	10.14	115.67	110.60
36	5	1149	G	C4-C5-C6	10.14	124.88	118.80
36	1	2306	C	N3-C2-O2	-10.14	114.81	121.90
36	1	1366	A	N1-C2-N3	10.13	134.37	129.30
36	1	2327	U	O5'-P-OP1	-10.13	96.58	105.70
38	4	26	U	N3-C2-O2	-10.14	115.11	122.20
36	1	2889	C	N3-C4-C5	-10.13	117.85	121.90
36	5	945	C	O5'-P-OP2	-10.13	96.58	105.70
36	5	2428	U	C6-N1-C2	10.13	127.08	121.00
1	6	1615	C	N3-C4-C5	10.13	125.95	121.90
36	1	1419	A	O5'-P-OP1	10.13	122.86	110.70
36	5	1003	A	N1-C6-N6	10.13	124.68	118.60
36	1	1001	G	O5'-P-OP1	-10.13	96.59	105.70
36	1	2946	A	N1-C2-N3	10.13	134.36	129.30
36	5	938	C	C6-N1-C2	10.13	124.35	120.30
36	5	2358	A	C8-N9-C4	10.13	109.85	105.80
1	2	1096	C	N3-C2-O2	-10.12	114.81	121.90
36	1	1192	C	N1-C2-O2	10.12	124.97	118.90
36	5	200	C	N1-C2-O2	10.12	124.97	118.90
36	5	2130	G	N3-C4-N9	-10.12	119.93	126.00
36	1	639	G	N3-C4-C5	10.12	133.66	128.60
36	1	908	G	N3-C4-C5	-10.12	123.54	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2396	G	C5-N7-C8	-10.12	99.24	104.30
1	6	105	A	O5'-P-OP1	-10.12	96.59	105.70
36	1	2942	C	C5-C4-N4	-10.12	113.12	120.20
36	5	347	G	O5'-P-OP2	-10.12	96.59	105.70
36	5	2897	A	C6-N1-C2	-10.12	112.53	118.60
1	6	1108	G	N9-C4-C5	10.11	109.44	105.40
36	1	2963	C	N3-C2-O2	-10.11	114.82	121.90
36	1	3262	U	N3-C2-O2	-10.11	115.12	122.20
36	5	1107	C	N3-C2-O2	-10.11	114.82	121.90
36	5	595	G	C4-N9-C1'	10.11	139.64	126.50
36	1	1419	A	C8-N9-C4	-10.11	101.76	105.80
36	5	2283	G	N1-C6-O6	10.11	125.96	119.90
36	1	939	U	OP1-P-OP2	-10.10	104.44	119.60
36	1	2827	U	N1-C2-N3	10.10	120.96	114.90
36	5	2393	G	N9-C4-C5	-10.10	101.36	105.40
36	5	2662	G	C4-N9-C1'	10.10	139.63	126.50
36	5	2192	C	N3-C4-C5	-10.10	117.86	121.90
36	5	1155	C	N1-C2-O2	-10.10	112.84	118.90
36	5	2168	A	N1-C6-N6	10.10	124.66	118.60
37	7	105	C	N3-C4-C5	-10.10	117.86	121.90
36	1	2726	C	N1-C2-N3	10.10	126.27	119.20
1	6	36	C	C6-N1-C2	10.09	124.34	120.30
36	5	1489	A	C4-C5-C6	10.09	122.05	117.00
1	2	378	A	N1-C6-N6	10.09	124.66	118.60
36	5	1295	G	N9-C4-C5	-10.09	101.36	105.40
36	1	2919	A	C2-N3-C4	-10.09	105.56	110.60
36	1	3094	A	O5'-P-OP1	-10.09	96.62	105.70
36	1	1166	G	N1-C6-O6	10.08	125.95	119.90
1	2	1737	G	N1-C6-O6	10.08	125.95	119.90
36	1	147	U	N3-C2-O2	-10.08	115.14	122.20
36	1	693	A	N1-C2-N3	10.08	134.34	129.30
36	1	1108	U	O5'-P-OP1	-10.08	96.63	105.70
36	5	2816	G	N1-C6-O6	10.08	125.95	119.90
36	1	897	U	N1-C2-O2	10.07	129.85	122.80
36	5	2887	A	N1-C6-N6	-10.07	112.56	118.60
1	6	1774	G	C8-N9-C4	-10.07	102.37	106.40
36	5	2189	U	O5'-P-OP1	-10.07	96.64	105.70
36	5	2897	A	C5-C6-N6	-10.07	115.64	123.70
36	1	3172	A	C6-N1-C2	-10.07	112.56	118.60
37	3	30	G	N3-C4-C5	-10.07	123.57	128.60
36	1	413	U	C5-C6-N1	-10.06	117.67	122.70
36	1	575	G	O5'-P-OP1	-10.06	96.64	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3261	C	N3-C4-C5	-10.06	117.88	121.90
36	1	606	C	N1-C2-O2	-10.06	112.86	118.90
36	1	2378	C	C6-N1-C2	10.06	124.32	120.30
36	5	2959	C	C6-N1-C2	-10.06	116.28	120.30
36	1	1443	G	C4-C5-N7	10.06	114.82	110.80
36	5	1148	G	C6-C5-N7	-10.06	124.37	130.40
1	2	75	U	N1-C2-O2	10.05	129.84	122.80
36	1	718	G	C5-N7-C8	-10.05	99.27	104.30
36	5	3333	G	O5'-P-OP2	-10.05	96.65	105.70
36	1	2637	A	N1-C6-N6	-10.05	112.57	118.60
36	5	567	G	C4-C5-N7	10.04	114.82	110.80
36	1	608	A	C6-C5-N7	-10.04	125.27	132.30
1	6	1498	G	N1-C6-O6	10.04	125.92	119.90
37	7	97	A	C6-N1-C2	-10.04	112.58	118.60
36	1	1182	A	C5-C6-N6	-10.04	115.67	123.70
38	4	18	U	C2-N1-C1'	10.04	129.75	117.70
36	5	1485	G	N1-C6-O6	-10.04	113.88	119.90
36	5	2620	G	N1-C2-N3	10.04	129.92	123.90
36	5	609	G	O5'-P-OP2	-10.03	96.67	105.70
36	1	707	U	C5-C4-O4	10.03	131.92	125.90
36	1	2824	G	C6-C5-N7	-10.03	124.38	130.40
36	5	2584	G	C8-N9-C4	-10.03	102.39	106.40
36	5	2661	G	C4-N9-C1'	10.03	139.53	126.50
36	5	3043	C	C6-N1-C2	10.03	124.31	120.30
38	8	53	A	C6-N1-C2	-10.03	112.58	118.60
36	5	1129	A	N9-C4-C5	-10.02	101.79	105.80
36	1	3100	U	C6-N1-C2	10.02	127.01	121.00
36	1	394	G	C8-N9-C4	-10.02	102.39	106.40
36	1	3092	C	C5-C6-N1	-10.02	115.99	121.00
36	1	2764	C	N3-C4-C5	-10.01	117.89	121.90
36	1	3054	U	N3-C4-C5	-10.01	108.59	114.60
36	5	1897	G	C5-N7-C8	-10.01	99.30	104.30
36	1	102	C	N1-C2-O2	10.01	124.90	118.90
36	5	2426	U	N3-C4-C5	-10.01	108.60	114.60
36	5	3144	G	N3-C4-C5	-10.00	123.60	128.60
1	2	377	G	N3-C4-C5	10.00	133.60	128.60
36	5	345	G	C8-N9-C1'	-10.00	114.00	127.00
36	5	856	G	O5'-P-OP1	-10.00	96.70	105.70
36	5	1592	G	C5-C6-N1	-10.00	106.50	111.50
36	1	641	C	C2-N3-C4	10.00	124.90	119.90
1	2	1291	G	C6-C5-N7	-9.99	124.40	130.40
36	5	345	G	N1-C6-O6	9.99	125.90	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	885	U	C5-C6-N1	-9.99	117.70	122.70
1	6	388	G	C5-C6-N1	-9.99	106.50	111.50
36	5	1429	G	C6-N1-C2	-9.99	119.10	125.10
36	5	2811	A	N1-C2-N3	9.99	134.30	129.30
36	1	1405	U	N3-C4-O4	-9.99	112.41	119.40
37	7	69	C	C6-N1-C2	9.99	124.30	120.30
36	1	2703	A	C4-C5-C6	9.99	121.99	117.00
1	6	597	G	C4-C5-N7	9.99	114.79	110.80
36	5	1336	U	N3-C4-O4	9.99	126.39	119.40
38	8	42	G	O5'-P-OP2	-9.98	96.72	105.70
36	1	2874	G	C4-N9-C1'	9.98	139.48	126.50
36	5	1128	U	N1-C2-N3	9.98	120.89	114.90
36	5	2934	A	C5-C6-N1	-9.98	112.71	117.70
36	1	211	A	N1-C6-N6	-9.97	112.62	118.60
36	1	3041	U	O5'-P-OP2	-9.97	96.72	105.70
37	3	98	C	C4-C5-C6	9.97	122.39	117.40
38	4	28	C	N3-C4-N4	9.97	124.98	118.00
36	5	1872	C	C6-N1-C2	-9.97	116.31	120.30
36	1	1178	G	C4-N9-C1'	9.97	139.46	126.50
1	6	967	A	C5-C6-N6	-9.97	115.73	123.70
36	5	1115	G	C8-N9-C1'	-9.97	114.04	127.00
36	5	1669	C	N3-C4-C5	-9.97	117.91	121.90
36	5	2610	G	N1-C2-N2	9.97	125.17	116.20
36	5	2916	U	N1-C2-O2	9.97	129.78	122.80
36	5	1152	G	C5-N7-C8	-9.97	99.32	104.30
36	1	1049	C	O5'-P-OP1	-9.96	96.73	105.70
36	5	1129	A	C4-C5-N7	9.96	115.68	110.70
36	5	2950	G	C5-N7-C8	-9.96	99.32	104.30
36	1	3344	A	C5-N7-C8	-9.96	98.92	103.90
1	6	1765	A	O5'-P-OP1	-9.96	96.73	105.70
36	5	2833	A	C6-N1-C2	-9.96	112.62	118.60
36	5	2879	C	N3-C4-N4	9.96	124.97	118.00
36	1	2241	U	C6-N1-C1'	9.96	135.14	121.20
36	1	1554	U	C5-C6-N1	9.96	127.68	122.70
1	2	1272	U	C6-N1-C2	-9.95	115.03	121.00
36	1	3142	A	N3-C4-N9	-9.96	119.44	127.40
36	5	3215	A	C8-N9-C4	9.95	109.78	105.80
36	1	345	G	C8-N9-C4	-9.95	102.42	106.40
36	1	2930	A	N9-C4-C5	-9.95	101.82	105.80
36	1	1149	G	O5'-P-OP2	-9.95	96.74	105.70
36	1	2417	U	N1-C2-N3	9.95	120.87	114.90
36	5	428	A	N1-C6-N6	9.95	124.57	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2804	A	N1-C6-N6	-9.95	112.63	118.60
36	5	3362	A	N7-C8-N9	9.95	118.78	113.80
36	5	289	A	N1-C6-N6	9.95	124.57	118.60
36	1	943	U	N1-C2-N3	9.94	120.87	114.90
36	1	1117	G	O5'-P-OP1	-9.95	96.75	105.70
36	1	3140	G	C4-C5-N7	9.94	114.78	110.80
36	5	2720	G	OP1-P-O3'	-9.94	83.32	105.20
36	5	1164	G	C5-C6-N1	9.94	116.47	111.50
36	5	2679	A	C8-N9-C4	9.94	109.78	105.80
36	5	2767	U	O5'-P-OP2	-9.94	96.75	105.70
36	5	3006	A	N1-C2-N3	9.94	134.27	129.30
36	1	220	G	C2-N3-C4	-9.94	106.93	111.90
1	6	427	C	C5-C6-N1	-9.94	116.03	121.00
36	1	2617	U	C5-C4-O4	9.94	131.86	125.90
36	1	2821	C	N3-C4-C5	-9.94	117.93	121.90
36	1	1429	G	C8-N9-C1'	-9.93	114.09	127.00
36	1	1192	C	O5'-P-OP2	-9.93	96.76	105.70
36	1	2996	U	N1-C2-O2	9.93	129.75	122.80
36	5	1149	G	C5-N7-C8	-9.93	99.33	104.30
36	5	2119	A	C4-C5-C6	9.93	121.97	117.00
1	2	1631	A	O5'-P-OP2	-9.93	96.77	105.70
36	5	286	U	C5-C6-N1	9.93	127.66	122.70
36	1	2400	G	O5'-P-OP1	-9.93	96.77	105.70
36	1	2953	U	C2-N3-C4	9.93	132.96	127.00
36	1	2997	G	C4-C5-N7	9.93	114.77	110.80
1	6	151	G	N3-C4-N9	-9.92	120.05	126.00
1	6	1535	U	N1-C2-N3	9.92	120.85	114.90
36	5	842	G	O5'-P-OP1	-9.92	96.77	105.70
36	1	2347	U	C5-C6-N1	9.92	127.66	122.70
1	6	444	C	C6-N1-C2	9.91	124.27	120.30
1	2	25	C	N1-C2-O2	-9.91	112.95	118.90
1	6	1542	G	O5'-P-OP1	-9.91	96.78	105.70
36	5	339	C	N3-C2-O2	9.91	128.84	121.90
36	5	2875	U	C5-C4-O4	9.91	131.85	125.90
36	1	1392	G	N9-C4-C5	9.91	109.36	105.40
36	5	813	G	O5'-P-OP2	-9.91	96.78	105.70
36	5	3010	U	N3-C2-O2	-9.91	115.26	122.20
38	8	107	G	C6-C5-N7	-9.91	124.45	130.40
36	1	2191	U	N3-C2-O2	-9.91	115.27	122.20
1	6	634	G	C8-N9-C4	-9.90	102.44	106.40
36	5	398	A	O5'-P-OP2	-9.90	96.79	105.70
36	1	1901	A	N1-C6-N6	-9.90	112.66	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2831	G	C2-N3-C4	-9.90	106.95	111.90
36	5	1481	A	N7-C8-N9	9.90	118.75	113.80
36	1	639	G	C5-C6-N1	-9.89	106.55	111.50
36	1	2639	G	N3-C4-C5	9.89	133.55	128.60
1	6	1787	C	C6-N1-C2	-9.89	116.34	120.30
36	5	2889	C	N1-C2-O2	9.89	124.83	118.90
36	1	334	A	C5-C6-N1	9.89	122.64	117.70
1	6	609	U	O4'-C1'-N1	-9.89	100.29	108.20
36	5	668	G	C8-N9-C4	9.89	110.36	106.40
38	4	62	C	C6-N1-C2	9.88	124.25	120.30
1	6	1131	A	C5-N7-C8	-9.88	98.96	103.90
36	5	796	U	N1-C2-O2	9.88	129.72	122.80
36	5	1793	C	C5-C4-N4	-9.88	113.28	120.20
37	3	115	G	C5-C6-O6	-9.88	122.67	128.60
38	4	38	U	C6-N1-C2	-9.88	115.07	121.00
36	5	1113	G	N3-C2-N2	-9.88	112.98	119.90
36	5	2874	G	C5-C6-N1	-9.88	106.56	111.50
1	6	1114	G	N1-C6-O6	-9.88	113.97	119.90
36	5	669	U	C2-N1-C1'	9.88	129.55	117.70
36	5	944	C	N3-C2-O2	-9.88	114.99	121.90
36	5	2155	G	C2-N3-C4	-9.88	106.96	111.90
36	1	928	C	C6-N1-C2	9.87	124.25	120.30
36	1	929	A	C5-C6-N6	-9.87	115.80	123.70
36	5	2199	G	C4-N9-C1'	9.87	139.34	126.50
36	1	2156	C	C6-N1-C2	9.87	124.25	120.30
36	5	1303	A	C8-N9-C4	9.87	109.75	105.80
36	5	1845	G	N3-C4-C5	-9.87	123.67	128.60
36	5	2940	A	C6-C5-N7	-9.87	125.39	132.30
37	3	97	A	N7-C8-N9	-9.86	108.87	113.80
36	5	1008	U	C6-N1-C2	9.86	126.92	121.00
1	6	337	G	C4-C5-N7	9.86	114.74	110.80
36	5	1399	A	N1-C6-N6	9.86	124.52	118.60
36	5	3091	A	N1-C6-N6	9.86	124.52	118.60
36	1	833	G	N1-C6-O6	-9.86	113.99	119.90
36	1	2347	U	C6-N1-C2	-9.86	115.09	121.00
36	5	2993	G	C8-N9-C4	-9.86	102.46	106.40
36	1	2960	C	C5-C6-N1	-9.85	116.07	121.00
36	1	3197	G	N3-C4-C5	9.85	133.53	128.60
36	5	521	A	C5-C6-N1	-9.85	112.77	117.70
36	5	2205	U	O4'-C1'-N1	9.85	116.08	108.20
36	1	2613	U	C4-C5-C6	9.85	125.61	119.70
1	6	1645	G	C5-C6-O6	-9.85	122.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	21	G	C8-N9-C4	-9.84	102.46	106.40
36	5	426	G	N7-C8-N9	-9.84	108.18	113.10
36	1	1552	G	N1-C6-O6	9.84	125.80	119.90
1	2	543	C	N3-C2-O2	-9.84	115.01	121.90
36	5	422	A	N1-C6-N6	-9.84	112.70	118.60
36	5	2994	A	C6-N1-C2	-9.84	112.70	118.60
36	1	397	A	C6-N1-C2	-9.84	112.70	118.60
36	1	798	G	C4-C5-N7	9.84	114.73	110.80
36	1	3277	U	N1-C2-N3	9.84	120.80	114.90
36	5	881	C	N1-C2-O2	9.84	124.80	118.90
36	5	2377	G	N1-C6-O6	-9.84	114.00	119.90
36	5	356	C	C2-N3-C4	-9.83	114.98	119.90
36	1	1170	A	N1-C6-N6	9.83	124.50	118.60
36	5	426	G	C8-N9-C4	9.83	110.33	106.40
36	5	576	C	C6-N1-C2	-9.83	116.37	120.30
1	6	797	G	N1-C6-O6	-9.83	114.00	119.90
36	5	363	G	O5'-P-OP2	9.83	122.49	110.70
36	5	644	G	C4-C5-N7	-9.83	106.87	110.80
36	5	2971	A	C2-N3-C4	9.83	115.51	110.60
36	1	609	G	N9-C4-C5	-9.82	101.47	105.40
1	6	448	C	C6-N1-C2	-9.82	116.37	120.30
1	6	1671	A	O5'-P-OP1	-9.82	96.86	105.70
38	8	38	U	C5-C4-O4	9.82	131.79	125.90
1	6	1456	C	C4-C5-C6	9.82	122.31	117.40
36	5	51	A	N1-C6-N6	9.82	124.49	118.60
36	1	41	G	N1-C6-O6	-9.82	114.01	119.90
36	5	2953	U	C2-N3-C4	9.82	132.89	127.00
36	5	216	G	N1-C6-O6	9.82	125.79	119.90
36	5	3015	G	N3-C2-N2	-9.82	113.03	119.90
36	1	609	G	N3-C4-N9	9.81	131.89	126.00
36	1	2278	C	N1-C2-O2	9.81	124.79	118.90
36	1	2697	A	C6-N1-C2	-9.81	112.71	118.60
36	1	3143	C	N1-C2-O2	9.81	124.78	118.90
36	1	3260	G	C2-N3-C4	-9.81	107.00	111.90
36	5	1429	G	N1-C2-N2	-9.81	107.37	116.20
36	5	2662	G	N3-C4-C5	-9.81	123.70	128.60
36	1	803	C	N3-C4-C5	9.81	125.82	121.90
36	1	1458	U	C6-N1-C2	9.81	126.88	121.00
36	1	1454	A	C2-N3-C4	-9.80	105.70	110.60
36	5	1487	G	C6-C5-N7	-9.80	124.52	130.40
1	6	554	C	C6-N1-C2	9.80	124.22	120.30
1	6	1201	G	N3-C4-C5	9.80	133.50	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	567	G	C6-C5-N7	-9.80	124.52	130.40
36	5	1076	C	C5-C6-N1	-9.80	116.10	121.00
1	2	334	G	C6-C5-N7	9.80	136.28	130.40
36	1	917	A	C4-C5-N7	-9.80	105.80	110.70
1	6	99	C	C6-N1-C2	9.80	124.22	120.30
36	5	2652	U	O5'-P-OP2	-9.80	96.88	105.70
36	5	3043	C	C5-C6-N1	-9.80	116.10	121.00
1	2	144	U	O4'-C1'-N1	9.79	116.04	108.20
36	1	1377	G	C5-C6-O6	-9.80	122.72	128.60
36	1	2608	G	N1-C6-O6	9.79	125.78	119.90
36	1	2934	A	C5-C6-N1	-9.80	112.80	117.70
36	5	2279	A	C4-C5-N7	9.80	115.60	110.70
36	5	803	C	C5-C4-N4	-9.79	113.34	120.20
36	1	1895	A	O5'-P-OP2	-9.79	96.89	105.70
36	5	2368	A	C4-C5-C6	9.79	121.90	117.00
36	1	67	A	C5-C6-N1	9.79	122.59	117.70
36	1	3261	C	C6-N1-C2	-9.79	116.38	120.30
1	6	960	U	N3-C2-O2	-9.79	115.35	122.20
36	5	579	G	O5'-P-OP2	-9.79	96.89	105.70
36	1	1323	G	C6-C5-N7	-9.79	124.53	130.40
38	4	3	A	C5-C6-N6	-9.79	115.87	123.70
36	5	3144	G	N3-C4-N9	9.79	131.87	126.00
36	1	311	C	N3-C4-N4	9.78	124.85	118.00
36	1	3325	G	N7-C8-N9	-9.78	108.21	113.10
36	1	2884	C	N3-C4-N4	-9.78	111.16	118.00
36	1	695	C	N3-C4-C5	9.78	125.81	121.90
36	5	1041	U	O5'-P-OP2	-9.78	96.90	105.70
36	5	2275	A	N7-C8-N9	9.78	118.69	113.80
36	5	35	A	N1-C6-N6	-9.77	112.74	118.60
36	5	805	G	C2-N3-C4	9.77	116.79	111.90
36	5	1187	C	N3-C4-C5	9.77	125.81	121.90
1	2	353	A	N1-C6-N6	9.77	124.46	118.60
36	5	3207	U	C5-C4-O4	9.77	131.76	125.90
36	1	609	G	N1-C6-O6	9.77	125.76	119.90
1	6	1480	G	C5-C6-O6	-9.77	122.74	128.60
36	5	1484	U	C2-N1-C1'	-9.77	105.98	117.70
36	5	1556	C	C2-N1-C1'	9.77	129.54	118.80
36	5	2125	A	C2-N3-C4	-9.77	105.72	110.60
36	5	3154	C	N1-C2-O2	9.77	124.76	118.90
36	1	2704	A	N1-C6-N6	-9.76	112.74	118.60
36	5	1665	C	N3-C4-C5	9.76	125.81	121.90
36	5	2943	G	C2-N3-C4	-9.76	107.02	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	624	G	O5'-P-OP2	-9.76	96.92	105.70
36	1	92	G	C6-C5-N7	-9.76	124.54	130.40
1	6	1483	A	C8-N9-C4	-9.76	101.90	105.80
36	5	1003	A	C5-C6-N6	-9.76	115.89	123.70
37	7	106	U	C6-N1-C2	9.76	126.86	121.00
36	1	2353	G	C5-C6-N1	-9.76	106.62	111.50
36	5	918	C	C4-C5-C6	9.75	122.28	117.40
36	1	427	C	N3-C4-C5	-9.75	118.00	121.90
36	1	2899	C	N1-C2-N3	9.75	126.03	119.20
1	6	407	A	N1-C6-N6	9.75	124.45	118.60
37	3	116	C	C6-N1-C2	-9.75	116.40	120.30
1	6	1541	G	O5'-P-OP1	-9.75	96.93	105.70
36	5	832	G	N3-C4-C5	-9.75	123.73	128.60
36	5	1117	G	O5'-P-OP1	-9.75	96.93	105.70
36	5	3220	G	N1-C6-O6	-9.75	114.05	119.90
36	5	3374	U	C6-N1-C2	9.75	126.85	121.00
36	1	939	U	C5-C4-O4	-9.74	120.05	125.90
36	1	2872	A	C5-C6-N6	-9.74	115.91	123.70
1	6	697	C	C5-C6-N1	9.74	125.87	121.00
36	5	2816	G	C2-N3-C4	-9.74	107.03	111.90
1	6	565	C	C2-N3-C4	-9.74	115.03	119.90
36	5	2278	C	C6-N1-C2	9.74	124.20	120.30
36	5	2796	G	O5'-P-OP1	-9.74	96.93	105.70
36	5	1841	A	O5'-P-OP1	-9.74	96.94	105.70
36	1	1887	A	C2-N3-C4	-9.74	105.73	110.60
36	1	2895	G	N3-C4-C5	-9.74	123.73	128.60
36	5	188	U	C6-N1-C2	-9.73	115.16	121.00
36	5	806	A	N3-C4-N9	-9.73	119.61	127.40
36	1	400	G	C8-N9-C4	-9.73	102.51	106.40
36	5	1085	A	O5'-P-OP1	-9.73	96.94	105.70
36	1	622	A	N1-C6-N6	9.73	124.44	118.60
36	1	1458	U	C5-C6-N1	-9.73	117.84	122.70
36	1	652	G	N3-C4-N9	9.72	131.83	126.00
1	6	927	C	N3-C2-O2	-9.72	115.09	121.90
36	5	213	A	C5-C6-N1	9.72	122.56	117.70
36	5	2827	U	O5'-P-OP2	-9.72	96.95	105.70
1	2	399	A	N1-C6-N6	-9.72	112.77	118.60
36	1	349	A	N1-C6-N6	-9.72	112.77	118.60
36	5	998	A	N1-C6-N6	-9.72	112.77	118.60
36	5	2305	G	N1-C6-O6	-9.72	114.07	119.90
36	1	218	G	N3-C4-N9	-9.72	120.17	126.00
1	6	163	G	C5-C6-N1	-9.71	106.64	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	93	C	C5-C4-N4	-9.71	113.40	120.20
36	1	342	A	C8-N9-C4	9.71	109.69	105.80
36	1	2278	C	N3-C4-C5	9.71	125.78	121.90
36	5	2632	G	C8-N9-C4	9.71	110.28	106.40
36	1	404	G	N1-C6-O6	9.71	125.73	119.90
36	1	676	G	N3-C4-C5	-9.71	123.75	128.60
36	5	1148	G	C2-N3-C4	-9.71	107.05	111.90
36	5	1290	A	C2-N3-C4	-9.71	105.75	110.60
36	5	2856	G	C5-C6-N1	-9.71	106.65	111.50
1	6	40	A	C2-N3-C4	-9.70	105.75	110.60
1	2	1199	G	O5'-P-OP1	-9.70	96.97	105.70
36	5	1303	A	C5-C6-N1	9.70	122.55	117.70
38	4	75	G	O5'-P-OP1	-9.70	96.97	105.70
36	1	2908	G	C8-N9-C4	-9.69	102.52	106.40
36	5	50	U	C2-N1-C1'	9.69	129.33	117.70
1	2	1655	A	C8-N9-C4	9.69	109.68	105.80
36	1	1367	G	N1-C6-O6	9.69	125.71	119.90
36	5	1376	C	O5'-P-OP1	-9.69	96.98	105.70
36	5	2897	A	N1-C2-N3	9.69	134.14	129.30
38	8	17	A	C8-N9-C4	9.69	109.68	105.80
36	1	2623	G	C6-C5-N7	-9.69	124.59	130.40
36	5	3122	A	N7-C8-N9	9.69	118.64	113.80
36	1	1432	C	O5'-P-OP1	-9.68	96.99	105.70
36	1	1524	A	N1-C6-N6	-9.68	112.79	118.60
36	1	1542	G	C2-N3-C4	-9.68	107.06	111.90
36	5	648	C	C4-C5-C6	9.68	122.24	117.40
36	5	3127	A	C2-N3-C4	-9.68	105.76	110.60
36	1	2874	G	C4-C5-C6	9.68	124.61	118.80
36	5	3091	A	N1-C2-N3	9.68	134.14	129.30
36	5	3179	U	C4-C5-C6	9.68	125.51	119.70
36	1	1301	A	N1-C6-N6	9.68	124.41	118.60
36	5	2624	G	C4-C5-N7	9.68	114.67	110.80
36	5	2914	G	N7-C8-N9	9.67	117.94	113.10
36	1	2325	G	N1-C6-O6	9.67	125.70	119.90
36	1	2814	G	C4-C5-N7	-9.67	106.93	110.80
36	5	1212	A	C5-C6-N1	9.67	122.53	117.70
37	7	88	G	C5-C6-N1	9.67	116.33	111.50
36	5	1603	A	C4-C5-C6	9.67	121.83	117.00
36	1	189	G	N1-C6-O6	-9.66	114.10	119.90
36	5	213	A	O5'-P-OP1	-9.66	97.00	105.70
36	1	2803	A	N1-C6-N6	-9.66	112.80	118.60
36	5	2395	G	C6-C5-N7	-9.66	124.60	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1278	G	N3-C4-C5	-9.66	123.77	128.60
36	5	2583	C	C6-N1-C2	-9.66	116.44	120.30
36	5	3063	C	C6-N1-C2	9.66	124.16	120.30
36	5	3200	G	C6-C5-N7	-9.66	124.60	130.40
36	5	1370	G	N1-C6-O6	-9.66	114.11	119.90
36	1	1364	C	N3-C4-C5	9.66	125.76	121.90
36	1	2186	U	O5'-P-OP2	-9.66	97.01	105.70
36	5	816	A	N1-C6-N6	-9.66	112.81	118.60
36	1	883	A	N1-C6-N6	-9.65	112.81	118.60
38	4	54	A	C8-N9-C4	-9.65	101.94	105.80
36	5	2871	G	O5'-P-OP2	-9.65	97.01	105.70
1	6	1792	G	N1-C6-O6	-9.65	114.11	119.90
36	1	2402	A	C5-C6-N1	9.65	122.53	117.70
1	6	1457	C	C2-N1-C1'	9.65	129.41	118.80
36	5	645	A	C8-N9-C4	-9.65	101.94	105.80
36	5	2400	G	N1-C2-N3	-9.65	118.11	123.90
36	1	2377	G	N9-C4-C5	9.65	109.26	105.40
36	1	2899	C	C6-N1-C2	-9.65	116.44	120.30
1	2	1146	G	N3-C4-C5	-9.64	123.78	128.60
36	5	1350	A	C8-N9-C4	-9.64	101.94	105.80
36	5	1372	C	C5-C6-N1	-9.64	116.18	121.00
36	1	2184	U	C5-C6-N1	9.64	127.52	122.70
36	1	2627	C	C5-C6-N1	-9.64	116.18	121.00
36	1	2831	G	C5-N7-C8	-9.64	99.48	104.30
36	5	1637	A	N1-C6-N6	-9.64	112.82	118.60
36	5	2945	G	C5-C6-O6	9.64	134.38	128.60
1	6	991	G	N3-C2-N2	-9.64	113.15	119.90
36	5	2288	G	C5-C6-O6	-9.64	122.82	128.60
36	5	2950	G	C6-C5-N7	-9.64	124.62	130.40
1	6	1583	A	N1-C6-N6	-9.64	112.82	118.60
36	5	1548	C	N1-C2-O2	-9.63	113.12	118.90
36	5	2700	G	C2-N3-C4	9.64	116.72	111.90
38	8	52	A	N1-C2-N3	9.63	134.12	129.30
36	1	636	C	N3-C4-N4	9.63	124.74	118.00
36	5	2679	A	N7-C8-N9	-9.63	108.98	113.80
36	1	793	C	N1-C2-O2	-9.63	113.12	118.90
36	1	1151	U	C5-C6-N1	9.63	127.52	122.70
36	5	2147	A	O5'-P-OP1	-9.63	97.03	105.70
36	1	826	G	C5-C6-O6	-9.62	122.83	128.60
38	4	53	A	C6-N1-C2	-9.62	112.83	118.60
36	5	650	C	C2-N3-C4	-9.62	115.09	119.90
36	1	961	C	N1-C2-O2	9.62	124.67	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	39	A	C5-C6-N1	9.62	122.51	117.70
36	1	61	A	C8-N9-C4	-9.62	101.95	105.80
36	5	1151	U	C2-N3-C4	9.62	132.77	127.00
36	5	1907	C	N1-C2-O2	-9.62	113.13	118.90
36	1	1442	U	O5'-P-OP2	9.62	122.24	110.70
1	6	1537	C	C6-N1-C2	-9.62	116.45	120.30
36	5	2971	A	C8-N9-C4	-9.62	101.95	105.80
57	n1	17	ARG	NE-CZ-NH1	9.62	125.11	120.30
36	5	3213	A	C8-N9-C4	9.62	109.65	105.80
36	1	2661	G	C4-C5-N7	9.61	114.65	110.80
36	5	345	G	C6-C5-N7	-9.62	124.63	130.40
36	1	1432	C	N1-C2-N3	9.61	125.93	119.20
36	1	2315	G	C4-C5-N7	-9.61	106.95	110.80
36	5	2111	G	N3-C4-C5	9.61	133.41	128.60
36	5	2906	C	N1-C2-O2	-9.61	113.13	118.90
36	5	3044	G	C6-C5-N7	-9.61	124.63	130.40
1	2	554	C	N1-C2-O2	9.61	124.67	118.90
36	1	1514	G	C4-N9-C1'	9.61	138.99	126.50
38	4	94	C	C5-C6-N1	-9.61	116.19	121.00
36	5	293	C	C6-N1-C2	9.61	124.14	120.30
36	1	3344	A	N7-C8-N9	9.61	118.60	113.80
36	1	1453	A	C6-N1-C2	-9.61	112.84	118.60
36	1	3273	A	N1-C6-N6	-9.61	112.84	118.60
38	4	16	G	N1-C6-O6	9.61	125.66	119.90
36	5	276	U	O5'-P-OP1	-9.61	97.06	105.70
36	5	3061	G	C8-N9-C4	9.61	110.24	106.40
1	2	1486	G	C8-N9-C1'	-9.60	114.52	127.00
36	5	2917	G	N3-C2-N2	-9.60	113.18	119.90
36	1	612	U	N1-C2-N3	9.60	120.66	114.90
36	5	1592	G	N3-C4-C5	-9.60	123.80	128.60
36	5	2719	U	N3-C2-O2	9.60	128.92	122.20
1	2	1751	C	N3-C4-C5	9.59	125.74	121.90
36	1	92	G	C4-C5-N7	9.59	114.64	110.80
36	1	793	C	C6-N1-C2	-9.59	116.46	120.30
36	1	1446	A	C8-N9-C4	-9.59	101.96	105.80
38	4	62	C	C5-C6-N1	-9.59	116.20	121.00
1	6	1602	C	C6-N1-C2	-9.59	116.46	120.30
36	5	2945	G	N9-C4-C5	9.59	109.24	105.40
36	1	952	A	C8-N9-C4	-9.59	101.96	105.80
36	1	2696	A	N1-C2-N3	-9.59	124.50	129.30
36	1	2998	U	N3-C2-O2	9.59	128.91	122.20
36	5	1289	G	N1-C6-O6	-9.59	114.15	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1778	G	C5-C6-N1	9.59	116.30	111.50
36	5	2339	C	N1-C2-O2	-9.59	113.15	118.90
36	1	812	G	N1-C2-N3	9.59	129.65	123.90
1	2	1587	A	C8-N9-C4	-9.59	101.97	105.80
36	1	96	G	C8-N9-C4	9.59	110.23	106.40
36	1	1050	U	C2-N3-C4	-9.59	121.25	127.00
1	6	1013	A	N1-C6-N6	-9.59	112.85	118.60
36	5	732	C	C6-N1-C2	-9.59	116.47	120.30
36	5	995	U	C5-C6-N1	-9.59	117.91	122.70
1	6	1457	C	C6-N1-C2	-9.58	116.47	120.30
36	1	693	A	C5-N7-C8	-9.58	99.11	103.90
36	5	878	G	N3-C4-C5	-9.58	123.81	128.60
36	5	1374	G	C4-C5-N7	9.58	114.63	110.80
36	1	1519	G	C5-N7-C8	-9.58	99.51	104.30
36	5	281	G	N1-C6-O6	-9.58	114.15	119.90
36	5	2653	C	N3-C2-O2	9.58	128.61	121.90
36	1	1196	C	C6-N1-C2	9.58	124.13	120.30
1	6	119	A	C2-N3-C4	-9.58	105.81	110.60
36	5	1872	C	N3-C2-O2	-9.58	115.19	121.90
36	5	1885	U	C6-N1-C2	-9.58	115.25	121.00
37	3	3	U	O5'-P-OP2	-9.57	97.08	105.70
36	5	2887	A	N9-C4-C5	9.57	109.63	105.80
36	5	2381	G	C5-N7-C8	9.57	109.09	104.30
36	1	495	G	N3-C4-N9	-9.57	120.26	126.00
36	5	582	G	C5-C6-O6	9.57	134.34	128.60
36	5	2420	C	C5-C6-N1	9.57	125.78	121.00
36	1	963	G	C4-C5-N7	9.57	114.63	110.80
36	5	2312	A	N9-C4-C5	9.57	109.63	105.80
36	5	1300	G	N1-C6-O6	9.56	125.64	119.90
1	2	1096	C	C2-N1-C1'	9.56	129.32	118.80
36	1	1303	A	N1-C6-N6	9.56	124.34	118.60
36	5	2155	G	C5-C6-N1	-9.56	106.72	111.50
36	5	1391	C	C6-N1-C2	9.56	124.12	120.30
36	1	2982	A	C6-N1-C2	-9.56	112.86	118.60
36	5	521	A	N1-C2-N3	9.56	134.08	129.30
36	5	1367	G	N1-C6-O6	9.56	125.64	119.90
36	5	595	G	C8-N9-C1'	-9.56	114.58	127.00
1	2	1299	G	N3-C4-C5	-9.55	123.82	128.60
36	1	2197	C	C4-C5-C6	-9.56	112.62	117.40
1	6	1473	U	O5'-P-OP1	9.55	122.17	110.70
36	5	645	A	C2-N3-C4	9.55	115.38	110.60
36	5	913	A	C6-N1-C2	-9.55	112.87	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1099	A	N1-C6-N6	9.55	124.33	118.60
36	5	3085	G	C8-N9-C4	9.55	110.22	106.40
36	5	1444	G	N3-C4-C5	-9.55	123.82	128.60
38	8	1	A	C4-C5-N7	-9.55	105.92	110.70
1	2	1757	G	N3-C4-C5	-9.55	123.83	128.60
36	1	1111	U	C6-N1-C2	9.55	126.73	121.00
36	1	2614	G	N1-C2-N2	-9.55	107.60	116.20
36	5	2283	G	C5-C6-O6	-9.55	122.87	128.60
36	5	2283	G	C5-N7-C8	-9.55	99.53	104.30
36	1	975	C	C6-N1-C2	-9.55	116.48	120.30
1	6	163	G	C8-N9-C4	-9.55	102.58	106.40
1	6	758	U	C5-C6-N1	-9.54	117.93	122.70
1	6	972	G	C6-C5-N7	-9.54	124.67	130.40
36	5	2943	G	C5-N7-C8	-9.54	99.53	104.30
36	1	428	A	N1-C6-N6	9.54	124.33	118.60
38	4	117	C	N1-C2-O2	-9.54	113.18	118.90
36	5	283	G	N3-C4-C5	-9.54	123.83	128.60
37	7	109	G	N9-C4-C5	-9.54	101.58	105.40
36	5	283	G	C4-N9-C1'	9.54	138.90	126.50
36	5	1780	G	O5'-P-OP2	-9.54	97.11	105.70
1	6	1146	G	C8-N9-C4	-9.54	102.58	106.40
1	6	1159	C	C6-N1-C2	9.54	124.11	120.30
36	5	1883	A	C2-N3-C4	-9.54	105.83	110.60
36	1	718	G	C4-C5-N7	9.54	114.61	110.80
36	1	905	U	N1-C2-O2	-9.54	116.13	122.80
36	1	2866	U	N1-C2-N3	9.53	120.62	114.90
36	5	874	U	C6-N1-C2	-9.53	115.28	121.00
36	1	2182	A	N1-C6-N6	9.53	124.32	118.60
36	1	2798	C	C6-N1-C2	-9.53	116.49	120.30
1	6	388	G	N1-C6-O6	9.53	125.62	119.90
36	5	2584	G	C4-N9-C1'	9.53	138.88	126.50
36	1	1340	G	C4-C5-N7	9.53	114.61	110.80
1	6	624	G	C4-C5-N7	9.53	114.61	110.80
36	5	396	A	C2-N3-C4	-9.53	105.84	110.60
36	1	1367	G	C5-C6-N1	-9.52	106.74	111.50
1	6	1447	C	C6-N1-C2	-9.52	116.49	120.30
36	5	3294	A	N1-C6-N6	-9.52	112.89	118.60
1	6	1729	C	C5-C6-N1	-9.52	116.24	121.00
36	1	583	G	C4-C5-N7	-9.51	106.99	110.80
36	1	2409	G	C6-C5-N7	-9.51	124.69	130.40
36	5	3091	A	C4-C5-C6	9.51	121.76	117.00
36	5	1902	G	C6-C5-N7	-9.51	124.69	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	856	G	C5-C6-O6	9.51	134.31	128.60
36	1	2374	C	O5'-P-OP2	-9.51	97.14	105.70
36	1	1173	U	N3-C2-O2	-9.51	115.54	122.20
36	1	1928	G	N3-C4-C5	9.51	133.35	128.60
36	1	1196	C	O4'-C1'-N1	-9.51	100.59	108.20
1	6	1031	U	N3-C2-O2	-9.51	115.54	122.20
36	5	2549	G	C6-C5-N7	-9.51	124.70	130.40
1	6	308	C	C2-N1-C1'	-9.50	108.35	118.80
1	2	1555	A	N1-C6-N6	-9.50	112.90	118.60
36	1	423	A	N1-C6-N6	-9.50	112.90	118.60
1	2	1277	G	C8-N9-C4	-9.50	102.60	106.40
36	1	1888	U	N1-C2-O2	9.50	129.45	122.80
37	3	36	C	C2-N1-C1'	9.50	129.25	118.80
36	1	3373	U	C6-N1-C2	9.50	126.70	121.00
1	6	1786	G	N1-C6-O6	-9.50	114.20	119.90
36	5	1498	A	N1-C6-N6	-9.50	112.90	118.60
36	5	2915	U	N3-C4-O4	9.50	126.05	119.40
36	5	1212	A	C5-C6-N6	-9.49	116.11	123.70
36	5	1408	G	C2-N3-C4	-9.49	107.15	111.90
36	5	2400	G	O4'-C1'-N9	9.49	115.80	108.20
36	5	811	U	C5-C6-N1	-9.49	117.95	122.70
36	5	1108	U	C6-N1-C2	-9.49	115.31	121.00
36	1	101	G	C5-N7-C8	-9.49	99.56	104.30
1	6	1086	A	C5-C6-N6	9.49	131.29	123.70
36	1	1122	U	N1-C2-N3	9.49	120.59	114.90
1	6	1142	A	N1-C6-N6	-9.49	112.91	118.60
36	5	879	U	N3-C2-O2	9.49	128.84	122.20
36	5	2630	C	O5'-P-OP1	-9.49	97.16	105.70
36	1	189	G	N9-C4-C5	9.49	109.19	105.40
36	1	615	U	N3-C2-O2	-9.49	115.56	122.20
36	5	3057	U	O5'-P-OP2	-9.49	97.16	105.70
36	1	937	G	C5-N7-C8	-9.48	99.56	104.30
36	1	1116	G	N3-C4-C5	-9.48	123.86	128.60
36	1	2335	G	N3-C4-C5	-9.48	123.86	128.60
36	1	929	A	OP1-P-O3'	9.48	126.06	105.20
36	1	2403	G	N1-C6-O6	9.48	125.59	119.90
36	5	1867	A	C2-N3-C4	-9.48	105.86	110.60
36	5	821	U	C6-N1-C2	-9.48	115.31	121.00
36	1	3208	G	N3-C2-N2	9.48	126.53	119.90
36	1	2824	G	N1-C6-O6	9.48	125.59	119.90
1	2	111	U	C5-C4-O4	-9.47	120.22	125.90
36	1	3181	C	N3-C2-O2	-9.47	115.27	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	680	G	O5'-P-OP2	-9.47	97.17	105.70
36	5	808	A	C6-N1-C2	-9.47	112.92	118.60
36	1	2697	A	N1-C2-N3	9.47	134.04	129.30
36	1	342	A	N9-C4-C5	-9.47	102.01	105.80
36	1	1396	C	C5-C4-N4	-9.47	113.57	120.20
1	6	1634	C	C2-N1-C1'	9.47	129.22	118.80
36	1	2333	C	C5-C6-N1	-9.47	116.27	121.00
1	6	1480	G	C4-C5-N7	9.47	114.59	110.80
36	5	2705	A	C5-C6-N1	9.47	122.43	117.70
36	5	2799	A	N9-C4-C5	9.47	109.59	105.80
36	5	2887	A	C6-N1-C2	-9.46	112.92	118.60
1	2	342	C	C5-C6-N1	-9.46	116.27	121.00
36	1	2762	A	C6-N1-C2	-9.46	112.92	118.60
36	5	2957	G	N3-C4-C5	9.46	133.33	128.60
36	1	1840	U	C2-N3-C4	-9.46	121.32	127.00
1	6	1063	U	C5-C6-N1	9.46	127.43	122.70
1	6	419	G	C5-C6-N1	9.46	116.23	111.50
36	5	3295	A	C6-N1-C2	-9.46	112.92	118.60
36	1	3118	C	O5'-P-OP1	-9.46	97.19	105.70
1	6	1729	C	C6-N1-C2	9.45	124.08	120.30
36	5	1127	G	N1-C6-O6	-9.45	114.23	119.90
36	1	2280	A	C8-N9-C4	-9.45	102.02	105.80
36	5	1429	G	N1-C2-N3	9.45	129.57	123.90
36	1	37	U	C6-N1-C2	9.45	126.67	121.00
36	1	2377	G	C8-N9-C4	-9.45	102.62	106.40
36	1	3197	G	N1-C6-O6	9.45	125.57	119.90
36	5	3054	U	N1-C2-O2	-9.45	116.19	122.80
36	1	432	G	C5-C6-N1	-9.45	106.78	111.50
36	1	857	G	C4-C5-N7	-9.45	107.02	110.80
36	1	2974	U	C5-C6-N1	9.45	127.42	122.70
36	5	891	G	C8-N9-C4	-9.45	102.62	106.40
36	5	1839	A	O5'-P-OP1	-9.45	97.20	105.70
36	5	3004	C	C5-C4-N4	-9.44	113.59	120.20
36	5	2584	G	N7-C8-N9	9.44	117.82	113.10
1	2	1615	C	C6-N1-C2	-9.44	116.52	120.30
36	5	283	G	N3-C4-N9	9.44	131.66	126.00
36	5	2991	A	C6-N1-C2	-9.44	112.94	118.60
36	1	435	C	C5-C6-N1	-9.44	116.28	121.00
36	1	798	G	O5'-P-OP1	-9.44	97.20	105.70
36	5	127	G	N1-C6-O6	9.44	125.56	119.90
36	5	278	U	N3-C2-O2	-9.44	115.59	122.20
36	1	2625	C	N1-C2-N3	-9.44	112.59	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1136	U	C5-C4-O4	-9.44	120.24	125.90
36	5	1512	U	O5'-P-OP1	-9.44	97.21	105.70
36	5	1898	G	N1-C6-O6	-9.44	114.24	119.90
36	5	3065	G	N1-C2-N3	9.44	129.56	123.90
38	4	27	U	O5'-P-OP2	9.43	122.02	110.70
1	2	967	A	N9-C4-C5	-9.43	102.03	105.80
36	5	2305	G	C4-C5-N7	-9.43	107.03	110.80
36	5	1139	G	N1-C6-O6	-9.43	114.24	119.90
36	5	3323	A	N1-C6-N6	-9.43	112.94	118.60
36	1	2729	U	O5'-P-OP1	-9.43	97.22	105.70
36	1	2823	G	N1-C2-N3	9.43	129.56	123.90
36	5	2118	C	C6-N1-C2	-9.43	116.53	120.30
36	1	1002	A	N7-C8-N9	-9.42	109.09	113.80
36	1	3010	U	C5-C6-N1	9.42	127.41	122.70
36	5	189	G	N9-C4-C5	9.42	109.17	105.40
36	5	945	C	N3-C4-C5	-9.42	118.13	121.90
36	1	2871	G	N3-C4-C5	9.42	133.31	128.60
36	1	344	A	N7-C8-N9	9.42	118.51	113.80
36	1	1180	A	N1-C6-N6	-9.42	112.95	118.60
36	5	2283	G	N9-C4-C5	-9.42	101.63	105.40
36	1	1906	G	O5'-P-OP1	-9.42	97.22	105.70
36	1	2959	C	N3-C2-O2	9.42	128.49	121.90
1	6	1086	A	N1-C6-N6	-9.42	112.95	118.60
1	6	456	A	N1-C2-N3	9.41	134.01	129.30
36	5	1847	A	N3-C4-C5	9.41	133.39	126.80
36	1	879	U	N1-C2-O2	-9.41	116.21	122.80
36	5	3377	G	C5-C6-N1	9.41	116.21	111.50
36	1	1175	C	N1-C2-O2	-9.41	113.25	118.90
36	1	2305	G	C8-N9-C4	-9.41	102.64	106.40
36	1	1930	A	C8-N9-C4	9.41	109.56	105.80
1	6	992	A	C2-N3-C4	-9.41	105.90	110.60
36	5	2395	G	N1-C6-O6	9.41	125.54	119.90
36	5	2820	A	OP1-P-O3'	-9.41	84.51	105.20
36	1	691	A	O5'-P-OP1	-9.40	97.24	105.70
1	2	334	G	C4-N9-C1'	-9.40	114.28	126.50
1	2	573	C	N3-C4-C5	-9.40	118.14	121.90
36	1	1191	U	C6-N1-C2	9.40	126.64	121.00
36	1	3193	C	C6-N1-C2	-9.40	116.54	120.30
36	5	3208	G	C4-C5-C6	9.40	124.44	118.80
37	7	15	C	O5'-P-OP2	-9.40	97.24	105.70
1	2	830	U	N1-C2-O2	9.39	129.37	122.80
36	1	1224	C	N3-C2-O2	-9.39	115.33	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2880	U	C6-N1-C1'	9.39	134.35	121.20
37	7	88	G	N3-C4-C5	-9.39	123.91	128.60
36	1	2309	A	N1-C6-N6	9.39	124.23	118.60
36	1	3137	C	N3-C4-C5	9.39	125.66	121.90
37	3	26	C	O5'-P-OP2	-9.39	97.25	105.70
36	1	1039	U	C5-C6-N1	-9.38	118.01	122.70
36	1	1157	G	C8-N9-C4	-9.38	102.65	106.40
36	1	3204	C	N3-C2-O2	-9.38	115.33	121.90
36	5	2877	G	N1-C2-N3	9.38	129.53	123.90
1	6	1768	G	C5-N7-C8	-9.38	99.61	104.30
36	1	805	G	N1-C6-O6	9.38	125.53	119.90
36	1	933	A	C8-N9-C4	-9.38	102.05	105.80
36	5	562	C	C6-N1-C2	9.38	124.05	120.30
36	5	2963	C	N1-C2-O2	-9.38	113.27	118.90
36	1	2895	G	N3-C4-N9	9.38	131.62	126.00
1	6	175	G	N1-C6-O6	9.38	125.53	119.90
1	6	1572	G	C2-N3-C4	-9.37	107.21	111.90
36	5	3182	G	N1-C2-N3	9.37	129.52	123.90
1	2	47	A	C8-N9-C4	-9.37	102.05	105.80
36	5	1895	A	C5-C6-N1	9.37	122.39	117.70
36	5	2164	A	N1-C6-N6	-9.37	112.98	118.60
36	5	2858	U	C6-N1-C2	-9.37	115.38	121.00
37	7	112	G	N1-C6-O6	-9.37	114.28	119.90
1	6	95	G	N1-C6-O6	-9.37	114.28	119.90
36	5	1046	A	O5'-P-OP2	9.37	121.94	110.70
36	1	1178	G	C4-C5-N7	9.37	114.55	110.80
36	1	1877	U	C6-N1-C2	9.37	126.62	121.00
36	5	2419	A	O5'-P-OP1	9.37	121.94	110.70
36	1	883	A	N1-C2-N3	9.37	133.98	129.30
36	1	1423	C	N3-C4-C5	-9.37	118.15	121.90
38	4	53	A	C4-C5-N7	-9.36	106.02	110.70
36	5	89	A	O5'-P-OP1	9.36	121.94	110.70
36	5	1212	A	C8-N9-C4	-9.37	102.05	105.80
36	5	2620	G	N3-C4-N9	-9.37	120.38	126.00
36	5	2874	G	C4-N9-C1'	9.36	138.67	126.50
36	5	1520	G	C4-N9-C1'	9.36	138.67	126.50
36	5	1896	A	O5'-P-OP1	-9.36	97.28	105.70
36	5	2678	A	C5-C6-N6	9.36	131.19	123.70
36	5	2699	G	C5-C6-O6	-9.36	122.98	128.60
37	7	84	A	N1-C2-N3	9.36	133.98	129.30
36	1	285	A	N1-C6-N6	9.36	124.21	118.60
36	1	2168	A	C4-C5-N7	-9.36	106.02	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	804	C	OP1-P-O3'	9.36	125.78	105.20
36	5	2886	U	C2-N3-C4	-9.36	121.39	127.00
36	1	2383	C	N1-C2-O2	-9.35	113.29	118.90
36	1	3027	A	C2-N3-C4	-9.35	105.92	110.60
36	5	959	C	C4-C5-C6	9.35	122.08	117.40
36	5	2618	G	N1-C6-O6	-9.35	114.29	119.90
36	5	1142	G	OP1-P-OP2	9.35	133.62	119.60
36	5	2914	G	C5-N7-C8	-9.35	99.63	104.30
36	5	168	U	O5'-P-OP1	-9.35	97.29	105.70
36	1	691	A	N1-C6-N6	9.35	124.21	118.60
36	1	833	G	C5-C6-O6	9.35	134.21	128.60
36	1	1208	U	C6-N1-C1'	-9.34	108.12	121.20
36	5	2281	A	O4'-C1'-N9	9.34	115.68	108.20
36	5	2816	G	C4-N9-C1'	-9.34	114.35	126.50
36	1	2759	U	N3-C2-O2	-9.34	115.66	122.20
1	2	331	A	C5-C6-N6	9.34	131.17	123.70
36	1	350	C	N1-C2-O2	9.34	124.50	118.90
36	1	1149	G	N1-C2-N3	9.34	129.50	123.90
36	1	2390	A	C5-C6-N1	9.34	122.37	117.70
36	1	2866	U	N3-C2-O2	-9.34	115.66	122.20
36	1	3199	G	O5'-P-OP1	-9.34	97.29	105.70
36	5	568	G	N3-C4-N9	9.34	131.60	126.00
36	5	3012	A	N1-C6-N6	9.34	124.20	118.60
36	1	1431	G	N7-C8-N9	-9.34	108.43	113.10
36	5	1115	G	N3-C4-C5	-9.34	123.93	128.60
1	2	1782	A	C8-N9-C4	-9.33	102.07	105.80
36	1	3383	G	N3-C4-N9	-9.33	120.40	126.00
36	5	1151	U	N3-C2-O2	-9.33	115.67	122.20
36	5	2306	C	C6-N1-C1'	-9.33	109.60	120.80
36	5	880	G	O5'-P-OP2	-9.33	97.30	105.70
37	3	25	G	N3-C4-C5	-9.33	123.94	128.60
36	1	1153	A	C2-N3-C4	-9.33	105.94	110.60
1	2	967	A	C8-N9-C4	9.32	109.53	105.80
36	1	99	A	O4'-C1'-N9	9.32	115.66	108.20
36	5	1156	C	N3-C4-N4	9.32	124.53	118.00
36	1	2943	G	C5-C6-O6	-9.32	123.01	128.60
36	5	1136	A	N1-C2-N3	9.32	133.96	129.30
36	5	2741	C	C5-C6-N1	9.32	125.66	121.00
36	1	93	C	C4-C5-C6	-9.32	112.74	117.40
36	1	1153	A	N1-C2-N3	9.32	133.96	129.30
36	5	1514	G	C6-C5-N7	-9.32	124.81	130.40
36	1	693	A	C2-N3-C4	-9.31	105.94	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2683	U	C5-C6-N1	9.31	127.36	122.70
37	7	13	A	C2-N3-C4	-9.31	105.94	110.60
36	1	366	A	N7-C8-N9	9.31	118.46	113.80
36	1	47	C	N3-C4-C5	-9.31	118.18	121.90
36	1	1157	G	C5-C6-N1	-9.31	106.84	111.50
36	1	1177	G	C4-C5-N7	9.31	114.52	110.80
36	1	2925	C	C2-N1-C1'	-9.31	108.56	118.80
36	5	575	G	C5-C6-O6	-9.31	123.01	128.60
36	5	2837	A	N7-C8-N9	-9.31	109.14	113.80
36	5	1536	G	C8-N9-C4	9.31	110.12	106.40
36	5	1907	C	N3-C4-C5	-9.31	118.18	121.90
36	5	1317	A	C6-N1-C2	-9.31	113.02	118.60
1	2	1241	G	O4'-C1'-N9	9.31	115.65	108.20
36	5	425	G	N3-C2-N2	-9.31	113.38	119.90
36	5	2991	A	N1-C6-N6	-9.31	113.02	118.60
36	5	1176	C	C5-C6-N1	-9.30	116.35	121.00
36	5	3269	U	C6-N1-C2	9.31	126.58	121.00
38	8	7	U	C5-C6-N1	-9.31	118.05	122.70
36	5	1101	G	N3-C4-N9	9.30	131.58	126.00
36	5	1322	U	O5'-P-OP1	-9.30	97.33	105.70
36	1	629	U	C5-C6-N1	-9.30	118.05	122.70
36	5	372	A	N1-C6-N6	-9.30	113.02	118.60
36	1	682	U	O5'-P-OP1	-9.30	97.33	105.70
36	5	1150	A	C6-N1-C2	-9.30	113.02	118.60
36	5	3050	U	C5-C6-N1	-9.30	118.05	122.70
37	3	98	C	O5'-P-OP2	-9.30	97.33	105.70
1	6	636	A	N1-C6-N6	-9.29	113.02	118.60
36	5	349	A	N1-C6-N6	-9.29	113.02	118.60
36	5	2403	G	C5-C6-O6	-9.29	123.02	128.60
36	5	2897	A	C4-C5-C6	9.29	121.65	117.00
52	m6	101	ARG	NE-CZ-NH1	9.29	124.95	120.30
36	1	2394	G	N1-C6-O6	-9.29	114.33	119.90
36	5	1468	A	N1-C2-N3	9.29	133.95	129.30
36	1	689	U	N1-C2-N3	-9.29	109.33	114.90
36	5	885	U	N1-C2-N3	9.29	120.47	114.90
36	1	1867	A	C2-N3-C4	-9.29	105.96	110.60
36	5	1430	U	C6-N1-C2	9.29	126.57	121.00
18	C6	40	GLU	C-N-CD	-9.28	100.17	120.60
36	1	1769	G	C8-N9-C4	-9.28	102.69	106.40
36	1	3028	G	O5'-P-OP1	-9.28	97.34	105.70
36	1	751	A	N1-C6-N6	-9.28	113.03	118.60
36	5	2728	G	N3-C4-C5	-9.28	123.96	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2147	A	O5'-P-OP1	-9.28	97.35	105.70
1	6	1639	C	N3-C4-C5	9.28	125.61	121.90
36	5	2352	A	C6-N1-C2	-9.28	113.03	118.60
1	6	1355	C	C5-C6-N1	9.28	125.64	121.00
36	5	3010	U	N1-C2-O2	9.28	129.29	122.80
1	6	1784	C	N3-C4-C5	9.28	125.61	121.90
36	5	1405	U	C5-C4-O4	9.28	131.47	125.90
36	5	3211	C	O5'-P-OP1	-9.28	97.35	105.70
36	1	660	A	N1-C6-N6	-9.28	113.03	118.60
36	1	877	C	C6-N1-C2	-9.28	116.59	120.30
36	1	1182	A	N9-C4-C5	-9.28	102.09	105.80
36	1	2850	G	N1-C6-O6	-9.28	114.33	119.90
36	5	283	G	O4'-C1'-N9	-9.28	100.78	108.20
36	5	1054	A	O5'-P-OP2	-9.28	97.35	105.70
36	1	2355	G	N1-C6-O6	9.27	125.46	119.90
36	1	1301	A	C5-C6-N6	-9.27	116.28	123.70
1	6	453	U	C2-N1-C1'	9.27	128.82	117.70
36	5	289	A	C4-C5-N7	9.27	115.34	110.70
38	8	31	G	C5-C6-O6	9.27	134.16	128.60
36	1	798	G	N7-C8-N9	9.27	117.73	113.10
36	1	1305	U	C6-N1-C2	-9.27	115.44	121.00
1	6	1700	C	N1-C2-O2	9.27	124.46	118.90
36	5	364	G	O5'-P-OP2	9.27	121.82	110.70
36	1	213	A	N1-C6-N6	9.27	124.16	118.60
36	1	1057	A	C5-C6-N1	-9.27	113.07	117.70
36	1	2953	U	N3-C4-O4	9.27	125.89	119.40
36	5	1046	A	O5'-P-OP1	-9.27	97.36	105.70
36	5	1163	A	N1-C2-N3	9.27	133.93	129.30
36	5	2376	G	C4-C5-N7	9.27	114.51	110.80
36	5	2387	A	O5'-P-OP1	-9.27	97.36	105.70
36	5	2392	C	N1-C2-O2	-9.27	113.34	118.90
36	1	2980	U	N1-C2-O2	-9.26	116.31	122.80
36	5	2794	G	C5-C6-O6	-9.26	123.04	128.60
1	6	326	G	C5-C6-N1	-9.26	106.87	111.50
36	5	2279	A	C5-N7-C8	-9.26	99.27	103.90
36	5	3036	G	C5-C6-N1	-9.26	106.87	111.50
36	5	1794	G	N7-C8-N9	-9.26	108.47	113.10
36	1	1177	G	N9-C4-C5	-9.26	101.70	105.40
69	O3	7	LEU	CA-CB-CG	-9.26	94.00	115.30
36	5	688	G	C6-C5-N7	-9.26	124.84	130.40
36	5	875	G	N3-C2-N2	-9.26	113.42	119.90
36	5	3295	A	N1-C2-N3	9.26	133.93	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1213	G	N9-C4-C5	9.26	109.10	105.40
36	5	2340	U	O5'-P-OP2	9.26	121.81	110.70
36	1	1905	G	N3-C4-C5	9.26	133.23	128.60
36	1	3202	G	C8-N9-C4	9.26	110.10	106.40
36	5	3206	C	N1-C2-O2	9.26	124.45	118.90
36	1	32	U	C6-N1-C2	9.25	126.55	121.00
36	1	2156	C	C5-C6-N1	-9.25	116.37	121.00
36	5	921	A	C8-N9-C4	-9.25	102.10	105.80
36	1	2414	G	N1-C6-O6	9.25	125.45	119.90
1	6	815	G	N3-C4-C5	9.25	133.22	128.60
36	5	2849	C	N3-C4-C5	-9.25	118.20	121.90
1	6	1139	A	C5-C6-N6	-9.25	116.30	123.70
36	5	636	C	N1-C2-O2	-9.25	113.35	118.90
36	5	1095	U	C6-N1-C2	-9.25	115.45	121.00
36	5	1375	G	N3-C4-C5	-9.24	123.98	128.60
36	5	2638	C	N3-C4-C5	-9.24	118.20	121.90
36	5	2830	G	C2-N3-C4	-9.24	107.28	111.90
36	1	1336	U	O5'-P-OP1	-9.24	97.38	105.70
36	1	2641	U	N1-C2-O2	9.24	129.27	122.80
36	1	645	A	N3-C4-C5	-9.24	120.33	126.80
36	1	801	A	N1-C6-N6	9.24	124.14	118.60
36	1	835	G	C4-C5-N7	9.24	114.49	110.80
36	1	2187	G	C8-N9-C4	-9.24	102.70	106.40
36	1	227	G	N3-C4-N9	9.23	131.54	126.00
36	1	1192	C	C2-N1-C1'	9.23	128.96	118.80
36	1	2198	A	O5'-P-OP1	-9.23	97.39	105.70
36	5	935	U	C6-N1-C2	-9.23	115.46	121.00
36	5	1286	A	C8-N9-C4	9.23	109.49	105.80
36	5	1295	G	C5-C6-O6	-9.23	123.06	128.60
36	1	693	A	N7-C8-N9	9.23	118.42	113.80
36	1	3308	C	C6-N1-C2	-9.23	116.61	120.30
36	1	952	A	N9-C4-C5	9.23	109.49	105.80
36	1	2308	C	C6-N1-C2	9.23	123.99	120.30
36	1	1408	G	C6-C5-N7	-9.23	124.86	130.40
36	1	229	G	O5'-P-OP1	-9.23	97.40	105.70
36	1	370	U	N3-C4-O4	9.23	125.86	119.40
36	1	1054	A	O5'-P-OP1	9.23	121.77	110.70
36	1	1176	C	N1-C2-O2	-9.23	113.36	118.90
36	5	2986	U	N1-C2-N3	9.23	120.44	114.90
36	1	306	A	N1-C6-N6	-9.22	113.06	118.60
36	1	720	A	O5'-P-OP1	-9.22	97.40	105.70
36	5	1142	G	O5'-P-OP1	-9.22	97.40	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2682	C	C6-N1-C2	-9.22	116.61	120.30
36	5	3046	A	N1-C6-N6	-9.22	113.06	118.60
36	5	1126	G	C5-C6-N1	-9.22	106.89	111.50
36	1	518	G	N3-C4-N9	-9.22	120.47	126.00
36	5	1307	G	C5-C6-O6	-9.22	123.07	128.60
36	5	2632	G	C5-C6-O6	-9.22	123.07	128.60
1	6	1601	G	C8-N9-C4	-9.21	102.71	106.40
36	5	395	A	C8-N9-C4	-9.21	102.11	105.80
36	1	2942	C	C6-N1-C2	-9.21	116.61	120.30
36	5	1897	G	N9-C4-C5	-9.21	101.72	105.40
36	5	1116	G	C6-C5-N7	-9.21	124.87	130.40
36	1	365	A	N1-C2-N3	9.21	133.90	129.30
36	1	757	C	O5'-P-OP2	-9.21	97.42	105.70
36	1	1103	A	O5'-P-OP2	9.20	121.75	110.70
36	5	2108	C	C5-C6-N1	-9.20	116.40	121.00
36	5	2138	A	N1-C2-N3	9.20	133.90	129.30
36	5	2300	G	O5'-P-OP2	-9.20	97.42	105.70
37	7	49	G	C5-N7-C8	-9.20	99.70	104.30
37	7	91	G	C2-N3-C4	-9.20	107.30	111.90
36	1	1077	U	C5-C6-N1	-9.20	118.10	122.70
37	7	99	G	C4-C5-N7	-9.20	107.12	110.80
36	1	2188	A	C6-N1-C2	-9.20	113.08	118.60
36	1	358	G	C5-C6-O6	-9.19	123.08	128.60
36	1	693	A	N1-C6-N6	9.19	124.12	118.60
36	5	1000	C	N3-C4-C5	9.19	125.58	121.90
36	5	1147	G	C4-C5-N7	9.20	114.48	110.80
36	5	1604	G	C5-C6-O6	9.19	134.12	128.60
36	1	839	C	C6-N1-C2	9.19	123.98	120.30
36	1	2611	U	N3-C4-C5	-9.19	109.08	114.60
36	1	1170	A	C5-C6-N6	-9.19	116.35	123.70
1	6	1100	G	N9-C4-C5	-9.19	101.72	105.40
36	5	1373	A	C6-C5-N7	-9.19	125.87	132.30
36	1	40	A	C8-N9-C4	-9.19	102.13	105.80
36	5	1881	A	C6-N1-C2	-9.18	113.09	118.60
36	5	3343	G	C4-N9-C1'	9.18	138.44	126.50
36	1	2732	G	O5'-P-OP2	-9.18	97.44	105.70
36	5	197	G	C4-C5-N7	9.18	114.47	110.80
36	5	3325	G	C8-N9-C4	9.18	110.07	106.40
36	1	3091	A	C8-N9-C4	-9.18	102.13	105.80
36	5	2212	C	C2-N1-C1'	9.18	128.90	118.80
36	5	3079	U	N1-C2-N3	9.18	120.41	114.90
36	5	1306	G	N7-C8-N9	9.18	117.69	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2887	A	C8-N9-C4	-9.18	102.13	105.80
36	1	937	G	C6-C5-N7	-9.17	124.90	130.40
36	1	1100	U	C2-N3-C4	-9.17	121.50	127.00
36	1	2323	G	C4-C5-N7	9.17	114.47	110.80
36	1	3263	G	N3-C4-N9	9.17	131.50	126.00
36	5	289	A	C5-N7-C8	-9.17	99.31	103.90
36	5	695	C	C2-N3-C4	-9.17	115.31	119.90
36	5	920	A	OP2-P-O3'	9.17	125.38	105.20
36	5	3024	A	C8-N9-C4	9.17	109.47	105.80
36	5	3147	G	N9-C4-C5	-9.17	101.73	105.40
36	1	1151	U	N3-C4-O4	9.17	125.82	119.40
36	1	2863	G	C2-N3-C4	-9.17	107.31	111.90
36	5	2972	G	OP1-P-O3'	9.17	125.37	105.20
36	5	3009	G	C8-N9-C4	-9.17	102.73	106.40
36	5	363	G	C4-C5-N7	9.17	114.47	110.80
36	5	1391	C	C5-C6-N1	-9.17	116.42	121.00
36	5	3214	U	N3-C2-O2	-9.17	115.78	122.20
36	5	2637	A	C2-N3-C4	-9.16	106.02	110.60
36	5	3200	G	N1-C6-O6	9.16	125.40	119.90
36	1	2356	A	C6-C5-N7	-9.16	125.89	132.30
36	1	3142	A	C2-N3-C4	-9.16	106.02	110.60
36	1	2988	C	N3-C2-O2	-9.16	115.49	121.90
36	1	2996	U	C6-N1-C1'	-9.16	108.38	121.20
36	5	2428	U	N1-C2-O2	-9.16	116.39	122.80
36	1	1140	G	C2-N3-C4	-9.16	107.32	111.90
1	6	1546	G	C6-C5-N7	-9.16	124.91	130.40
36	5	1211	U	C5-C6-N1	-9.16	118.12	122.70
36	5	2661	G	C6-C5-N7	-9.16	124.91	130.40
36	5	3246	G	N7-C8-N9	9.16	117.68	113.10
36	5	2715	A	C8-N9-C4	-9.16	102.14	105.80
36	1	697	A	N9-C4-C5	-9.15	102.14	105.80
36	5	1129	A	C6-C5-N7	-9.15	125.89	132.30
36	5	1473	G	N9-C4-C5	-9.15	101.74	105.40
36	1	1183	C	C6-N1-C2	9.15	123.96	120.30
36	1	439	C	C2-N1-C1'	9.15	128.87	118.80
36	1	655	C	N3-C4-C5	-9.15	118.24	121.90
1	6	1564	U	C5-C4-O4	-9.15	120.41	125.90
36	5	506	U	N1-C2-O2	-9.15	116.39	122.80
36	5	1906	G	C5-C6-N1	9.15	116.07	111.50
36	5	650	C	N1-C2-O2	-9.15	113.41	118.90
36	1	1451	C	C6-N1-C2	9.14	123.96	120.30
36	5	2841	G	N1-C6-O6	-9.14	114.41	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1751	C	C2-N3-C4	-9.14	115.33	119.90
36	1	2609	A	O5'-P-OP1	9.14	121.67	110.70
36	1	107	A	C5-N7-C8	-9.14	99.33	103.90
36	5	990	U	N3-C2-O2	-9.14	115.80	122.20
36	5	1059	G	N9-C4-C5	9.14	109.06	105.40
36	5	2346	C	N1-C2-O2	-9.14	113.42	118.90
36	5	1311	G	O5'-P-OP2	-9.14	97.48	105.70
36	1	2378	C	N3-C4-C5	9.13	125.55	121.90
36	1	2644	C	C4-C5-C6	9.13	121.97	117.40
36	1	2813	A	O5'-P-OP2	-9.14	97.48	105.70
36	1	2827	U	C5-C6-N1	-9.14	118.13	122.70
36	5	911	C	N1-C2-N3	9.14	125.59	119.20
36	1	2883	U	N3-C2-O2	-9.13	115.81	122.20
1	6	1602	C	N3-C2-O2	-9.13	115.51	121.90
36	5	3037	U	N3-C2-O2	9.13	128.59	122.20
36	1	2129	U	N3-C2-O2	-9.13	115.81	122.20
36	5	1548	C	N3-C2-O2	9.13	128.29	121.90
1	6	151	G	N3-C2-N2	-9.13	113.51	119.90
36	5	33	G	C5-C6-O6	9.13	134.08	128.60
36	5	857	G	C4-C5-C6	9.13	124.28	118.80
38	8	38	U	N1-C2-N3	9.13	120.38	114.90
36	1	3202	G	C5-C6-O6	-9.13	123.12	128.60
36	1	933	A	N3-C4-C5	-9.12	120.41	126.80
36	1	1408	G	C5-C6-O6	-9.12	123.12	128.60
1	6	1662	G	C8-N9-C4	9.12	110.05	106.40
36	1	714	G	N9-C4-C5	-9.12	101.75	105.40
36	1	860	G	C6-C5-N7	-9.12	124.93	130.40
36	1	917	A	O5'-P-OP2	-9.12	97.49	105.70
36	1	2308	C	C2-N3-C4	-9.12	115.34	119.90
1	6	7	G	O5'-P-OP2	-9.12	97.49	105.70
1	6	1274	C	C6-N1-C2	-9.12	116.65	120.30
1	6	1040	G	O5'-P-OP2	-9.12	97.49	105.70
36	5	2817	A	C2-N3-C4	9.12	115.16	110.60
36	1	3062	G	N1-C6-O6	9.12	125.37	119.90
38	4	140	G	N9-C4-C5	9.12	109.05	105.40
36	1	2138	A	N1-C6-N6	9.12	124.07	118.60
36	1	2238	G	C5-C6-N1	9.12	116.06	111.50
36	1	1851	G	C5-C6-O6	-9.11	123.13	128.60
36	5	208	C	O5'-P-OP1	-9.12	97.50	105.70
36	5	827	A	N1-C6-N6	-9.11	113.13	118.60
36	5	726	G	C8-N9-C4	-9.11	102.75	106.40
36	5	784	A	C4-C5-N7	9.11	115.26	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2315	G	O5'-P-OP2	9.11	121.63	110.70
36	1	2661	G	C5-C6-O6	-9.11	123.13	128.60
1	6	41	A	N1-C6-N6	-9.11	113.14	118.60
36	1	1414	G	N9-C4-C5	-9.11	101.76	105.40
36	1	1507	G	N9-C4-C5	-9.11	101.76	105.40
36	1	2280	A	N7-C8-N9	9.11	118.35	113.80
36	5	1213	G	N3-C2-N2	-9.11	113.53	119.90
1	6	1007	C	N3-C4-C5	9.11	125.54	121.90
36	5	1063	G	N3-C4-C5	9.11	133.15	128.60
37	7	85	G	C8-N9-C4	-9.11	102.76	106.40
36	5	2327	U	C5-C6-N1	-9.11	118.15	122.70
36	1	1418	A	O5'-P-OP1	-9.10	97.51	105.70
36	5	1188	U	N1-C2-N3	9.10	120.36	114.90
36	1	679	U	N3-C4-O4	-9.10	113.03	119.40
36	1	2422	C	C5-C4-N4	9.10	126.57	120.20
36	1	2934	A	N1-C6-N6	9.10	124.06	118.60
36	5	941	G	C5-C6-N1	9.10	116.05	111.50
36	5	1389	G	N9-C4-C5	-9.10	101.76	105.40
36	5	2737	C	N1-C2-O2	-9.10	113.44	118.90
36	5	2934	A	C6-N1-C2	9.10	124.06	118.60
36	5	3040	A	N1-C2-N3	9.10	133.85	129.30
36	5	559	A	N1-C6-N6	9.10	124.06	118.60
1	6	1005	A	C6-N1-C2	-9.10	113.14	118.60
36	5	879	U	N1-C2-O2	-9.10	116.43	122.80
36	5	2621	G	C2-N3-C4	-9.10	107.35	111.90
36	5	3136	G	C4-C5-N7	9.10	114.44	110.80
36	5	2996	U	O5'-P-OP1	9.09	121.61	110.70
36	5	3376	A	N1-C2-N3	9.09	133.85	129.30
36	1	1443	G	C6-C5-N7	-9.09	124.95	130.40
36	5	592	A	O5'-P-OP2	-9.09	97.52	105.70
36	5	1099	A	C5-C6-N6	-9.09	116.43	123.70
36	5	1116	G	C2-N3-C4	-9.09	107.36	111.90
1	6	1572	G	C5-C6-N1	-9.09	106.96	111.50
36	5	784	A	C5-C6-N6	-9.09	116.43	123.70
36	1	1466	G	C6-C5-N7	-9.09	124.95	130.40
36	5	651	G	C6-C5-N7	-9.09	124.95	130.40
36	5	2334	U	N1-C2-N3	9.09	120.35	114.90
36	5	2192	C	O5'-P-OP2	-9.08	97.53	105.70
1	2	577	G	C6-C5-N7	-9.08	124.95	130.40
1	6	266	A	O5'-P-OP1	-9.08	97.53	105.70
36	5	287	G	C8-N9-C4	-9.08	102.77	106.40
36	1	3054	U	N1-C2-N3	9.08	120.35	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	891	A	N9-C4-C5	-9.08	102.17	105.80
36	5	1211	U	N1-C2-N3	-9.08	109.45	114.90
36	5	2241	U	O5'-P-OP1	-9.08	97.53	105.70
36	5	3166	C	C5-C6-N1	9.08	125.54	121.00
1	6	972	G	C5-C6-O6	-9.07	123.16	128.60
36	5	1898	G	C2-N3-C4	9.07	116.44	111.90
36	1	1829	G	N9-C4-C5	9.07	109.03	105.40
36	5	2393	G	N3-C4-N9	9.07	131.44	126.00
36	1	1406	A	C6-C5-N7	-9.07	125.95	132.30
1	6	1361	U	C2-N1-C1'	9.07	128.58	117.70
36	5	907	G	C8-N9-C4	9.07	110.03	106.40
36	5	2656	A	N9-C4-C5	9.07	109.43	105.80
36	5	1589	A	N9-C4-C5	-9.06	102.17	105.80
36	5	3095	U	C4-C5-C6	9.06	125.14	119.70
36	5	1049	C	N3-C4-C5	-9.06	118.28	121.90
36	5	3148	U	N3-C4-O4	-9.06	113.06	119.40
36	1	2886	U	C5-C4-O4	-9.06	120.46	125.90
36	1	3144	G	C5-C6-O6	-9.06	123.16	128.60
36	5	398	A	C8-N9-C4	9.06	109.42	105.80
36	5	1894	U	N3-C4-O4	9.06	125.74	119.40
36	1	2380	U	N3-C4-C5	9.06	120.03	114.60
36	1	2659	G	C6-C5-N7	-9.06	124.97	130.40
36	1	2283	G	C5-N7-C8	-9.05	99.77	104.30
36	1	2818	U	OP2-P-O3'	9.05	125.12	105.20
1	6	1778	G	C6-C5-N7	-9.05	124.97	130.40
1	6	1784	C	C6-N1-C2	9.05	123.92	120.30
36	5	1556	C	C6-N1-C1'	-9.05	109.94	120.80
36	5	2936	A	O5'-P-OP2	9.05	121.57	110.70
1	2	470	A	C8-N9-C4	9.05	109.42	105.80
36	1	1884	A	C5-C6-N6	9.05	130.94	123.70
36	5	825	U	O5'-P-OP1	-9.05	97.55	105.70
36	5	3200	G	C2-N3-C4	-9.05	107.38	111.90
1	2	1264	G	N1-C6-O6	-9.05	114.47	119.90
36	1	640	U	N3-C4-O4	9.05	125.73	119.40
36	1	2932	U	C5-C6-N1	-9.05	118.18	122.70
1	6	1332	C	N3-C4-C5	-9.05	118.28	121.90
36	5	985	U	O5'-P-OP2	-9.05	97.56	105.70
36	5	2770	G	C8-N9-C4	-9.05	102.78	106.40
36	1	1337	A	C6-N1-C2	-9.05	113.17	118.60
36	1	2980	U	C2-N3-C4	-9.05	121.57	127.00
36	1	3049	A	C8-N9-C4	9.04	109.42	105.80
1	6	456	A	C6-N1-C2	-9.05	113.17	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1163	A	N9-C4-C5	9.04	109.42	105.80
36	5	2111	G	N3-C4-N9	-9.04	120.57	126.00
36	5	64	G	C4-N9-C1'	9.04	138.25	126.50
36	5	1428	A	N1-C2-N3	9.04	133.82	129.30
36	5	3095	U	O5'-P-OP1	-9.04	97.56	105.70
36	1	65	A	N1-C6-N6	9.04	124.02	118.60
36	1	1374	G	N3-C4-C5	-9.04	124.08	128.60
36	1	699	A	C2-N3-C4	-9.04	106.08	110.60
36	1	1829	G	C8-N9-C4	-9.04	102.78	106.40
36	1	2326	A	C2-N3-C4	-9.04	106.08	110.60
36	1	2627	C	N1-C2-O2	-9.04	113.48	118.90
1	6	1614	A	C6-C5-N7	-9.04	125.97	132.30
1	6	1747	G	C8-N9-C4	9.04	110.01	106.40
36	5	963	G	O5'-P-OP1	9.04	121.54	110.70
36	5	1107	C	C2-N3-C4	-9.04	115.38	119.90
36	1	227	G	C8-N9-C1'	-9.03	115.25	127.00
36	5	1544	G	O5'-P-OP2	-9.03	97.57	105.70
36	5	1922	A	C2-N3-C4	-9.04	106.08	110.60
36	1	719	U	C6-N1-C2	9.03	126.42	121.00
36	5	214	G	O5'-P-OP2	-9.03	97.57	105.70
36	5	1005	G	C2-N3-C4	-9.03	107.38	111.90
36	5	3335	A	O5'-P-OP2	-9.03	97.57	105.70
1	2	341	A	O5'-P-OP1	-9.03	97.57	105.70
36	1	2421	U	N3-C2-O2	-9.03	115.88	122.20
36	1	272	G	N3-C4-C5	9.03	133.11	128.60
36	5	2290	C	C2-N1-C1'	-9.03	108.87	118.80
37	3	79	A	C2-N3-C4	-9.03	106.09	110.60
36	1	2701	U	N1-C2-N3	9.02	120.31	114.90
36	1	1306	G	O5'-P-OP2	-9.02	97.58	105.70
36	5	640	U	OP2-P-O3'	9.02	125.05	105.20
36	5	1076	C	C6-N1-C2	9.02	123.91	120.30
36	5	2335	G	C4-C5-N7	-9.02	107.19	110.80
36	1	1432	C	C4-C5-C6	9.02	121.91	117.40
1	6	1367	G	C5-C6-O6	-9.02	123.19	128.60
36	5	2963	C	N3-C2-O2	9.02	128.21	121.90
36	1	2291	A	C8-N9-C4	-9.02	102.19	105.80
36	5	2924	U	C2-N1-C1'	9.02	128.52	117.70
1	2	475	A	C8-N9-C4	9.01	109.41	105.80
36	1	1552	G	C6-C5-N7	-9.01	124.99	130.40
36	5	2728	G	C4-C5-C6	9.01	124.21	118.80
36	1	1932	A	C5-C6-N1	9.01	122.21	117.70
1	6	758	U	N3-C4-O4	-9.01	113.09	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1163	A	C8-N9-C4	-9.01	102.19	105.80
36	5	2426	U	C4-C5-C6	9.01	125.11	119.70
36	1	978	G	N1-C6-O6	9.01	125.31	119.90
36	1	2814	G	N3-C2-N2	-9.01	113.59	119.90
1	2	1737	G	N3-C4-C5	9.01	133.10	128.60
36	1	644	G	C4-C5-N7	-9.01	107.20	110.80
36	1	806	A	N7-C8-N9	-9.01	109.30	113.80
1	6	1565	C	C2-N3-C4	-9.01	115.40	119.90
36	1	2400	G	C6-C5-N7	-9.01	125.00	130.40
36	5	798	G	C6-C5-N7	-9.01	125.00	130.40
36	5	3127	A	N1-C2-N3	9.01	133.80	129.30
37	3	88	G	N3-C4-C5	-9.00	124.10	128.60
36	5	2819	A	O5'-P-OP2	-9.00	97.60	105.70
38	4	103	G	N3-C4-N9	9.00	131.40	126.00
36	5	1190	A	O4'-C1'-N9	-9.00	101.00	108.20
36	1	595	G	C4-N9-C1'	9.00	138.20	126.50
36	1	1305	U	N1-C2-O2	-9.00	116.50	122.80
36	1	2979	U	N3-C4-O4	-9.00	113.10	119.40
1	6	1025	A	C4-C5-C6	9.00	121.50	117.00
36	5	507	U	C6-N1-C2	-9.00	115.60	121.00
36	1	431	U	O5'-P-OP1	-8.99	97.61	105.70
36	5	2880	U	N1-C2-O2	-8.99	116.50	122.80
36	1	3006	A	C2-N3-C4	-8.99	106.10	110.60
1	6	1191	U	N1-C2-O2	8.99	129.09	122.80
36	5	2199	G	C5-C6-O6	-8.99	123.20	128.60
36	1	964	G	C6-C5-N7	-8.99	125.01	130.40
36	1	1058	U	N3-C2-O2	-8.99	115.91	122.20
36	1	2647	A	N1-C6-N6	8.99	123.99	118.60
1	6	1191	U	C2-N1-C1'	8.99	128.48	117.70
36	5	1101	G	N3-C4-C5	-8.99	124.11	128.60
36	5	2329	C	N3-C2-O2	8.99	128.19	121.90
36	5	2626	A	C2-N3-C4	-8.99	106.11	110.60
36	1	406	G	O4'-C1'-N9	8.98	115.39	108.20
36	1	943	U	C4-C5-C6	8.98	125.09	119.70
36	1	1552	G	N3-C4-N9	8.98	131.39	126.00
1	6	420	A	C5-N7-C8	-8.98	99.41	103.90
36	1	2918	G	C5-C6-N1	8.98	115.99	111.50
1	6	1787	C	N1-C2-O2	-8.98	113.51	118.90
36	5	648	C	C6-N1-C1'	8.98	131.58	120.80
36	5	2726	C	C6-N1-C2	-8.98	116.71	120.30
36	5	2853	A	N1-C6-N6	8.98	123.99	118.60
36	5	3308	C	C2-N1-C1'	8.98	128.68	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	881	C	N1-C2-O2	8.98	124.29	118.90
36	1	1349	G	C2-N3-C4	8.98	116.39	111.90
37	3	98	C	N1-C2-O2	-8.98	113.51	118.90
1	6	1129	U	N3-C4-C5	-8.98	109.21	114.60
36	5	963	G	C5-C6-N1	8.98	115.99	111.50
36	5	2248	C	C6-N1-C2	8.98	123.89	120.30
36	5	2358	A	N3-C4-C5	8.98	133.09	126.80
36	5	677	A	C4-C5-N7	8.98	115.19	110.70
36	1	793	C	N3-C4-C5	-8.97	118.31	121.90
36	5	2288	G	N3-C4-N9	8.97	131.38	126.00
36	5	2993	G	C4-C5-N7	8.97	114.39	110.80
36	1	377	A	N1-C6-N6	8.97	123.98	118.60
36	1	3092	C	C2-N3-C4	-8.97	115.41	119.90
36	1	3202	G	N1-C6-O6	8.97	125.28	119.90
1	2	75	U	N3-C2-O2	-8.97	115.92	122.20
37	7	29	C	C5-C6-N1	-8.97	116.51	121.00
1	2	582	U	N1-C2-O2	8.97	129.08	122.80
36	1	1887	A	N1-C6-N6	8.97	123.98	118.60
1	6	578	U	C5-C6-N1	-8.97	118.22	122.70
36	5	3246	G	C8-N9-C4	-8.97	102.81	106.40
38	8	80	A	C8-N9-C4	-8.97	102.21	105.80
1	6	247	A	N1-C6-N6	8.97	123.98	118.60
36	5	3014	U	C5-C4-O4	-8.97	120.52	125.90
36	1	2399	A	C8-N9-C4	8.96	109.39	105.80
1	6	1539	G	O5'-P-OP1	-8.96	97.63	105.70
36	5	430	U	C2-N3-C4	-8.96	121.62	127.00
36	5	2761	G	C5-C6-N1	8.97	115.98	111.50
36	1	1468	A	N1-C2-N3	8.96	133.78	129.30
36	5	2624	G	C5-C6-O6	-8.96	123.22	128.60
36	5	3025	C	N3-C4-N4	-8.96	111.73	118.00
36	1	1395	G	O5'-P-OP1	8.96	121.45	110.70
36	1	1929	G	C4-C5-N7	8.96	114.38	110.80
1	6	1603	U	C5-C4-O4	-8.96	120.52	125.90
36	1	2912	G	N1-C6-O6	-8.96	114.52	119.90
36	5	1368	U	N3-C4-O4	8.96	125.67	119.40
36	5	1793	C	N3-C4-N4	8.96	124.27	118.00
36	5	1907	C	C6-N1-C2	-8.96	116.72	120.30
36	1	2943	G	C6-C5-N7	-8.96	125.03	130.40
36	5	102	C	C6-N1-C2	8.96	123.88	120.30
36	5	402	A	C4-C5-C6	8.96	121.48	117.00
36	5	591	G	C4-C5-C6	8.96	124.17	118.80
36	5	1331	U	C5-C6-N1	-8.96	118.22	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	629	U	C6-N1-C2	8.96	126.37	121.00
36	1	1307	G	C8-N9-C4	-8.95	102.82	106.40
1	6	1158	C	O5'-P-OP2	-8.96	97.64	105.70
1	6	1664	C	C4-C5-C6	8.96	121.88	117.40
40	13	196	ARG	NE-CZ-NH2	-8.95	115.82	120.30
36	1	1949	G	O5'-P-OP1	-8.95	97.65	105.70
36	5	832	G	C5-C6-O6	8.95	133.97	128.60
36	5	1212	A	C4-C5-N7	8.95	115.17	110.70
36	5	1604	G	C4-C5-N7	-8.95	107.22	110.80
36	5	2852	C	N3-C4-C5	8.95	125.48	121.90
36	1	2872	A	C5-C6-N1	8.95	122.17	117.70
36	1	2283	G	N7-C8-N9	8.95	117.57	113.10
36	1	2842	U	O5'-P-OP1	-8.95	97.65	105.70
36	1	3001	C	C5-C6-N1	-8.95	116.53	121.00
36	5	581	U	C5-C6-N1	8.95	127.17	122.70
36	5	655	C	C6-N1-C2	-8.95	116.72	120.30
36	5	3088	G	N1-C6-O6	8.95	125.27	119.90
37	7	89	G	C6-C5-N7	-8.95	125.03	130.40
37	7	117	A	C2-N3-C4	-8.95	106.13	110.60
1	6	911	U	N3-C2-O2	-8.94	115.94	122.20
36	5	2395	G	C5-C6-O6	-8.94	123.23	128.60
36	1	828	A	C4-C5-N7	8.94	115.17	110.70
36	1	1392	G	N3-C4-C5	-8.94	124.13	128.60
36	5	2887	A	OP2-P-O3'	8.94	124.87	105.20
36	1	1392	G	C5-N7-C8	8.94	108.77	104.30
36	1	2875	U	C6-N1-C2	-8.94	115.64	121.00
36	5	1615	C	N3-C2-O2	-8.94	115.64	121.90
36	5	2335	G	O5'-P-OP1	-8.94	97.66	105.70
36	1	790	U	C4-C5-C6	8.94	125.06	119.70
36	5	2640	A	N1-C6-N6	8.94	123.96	118.60
36	1	52	A	N1-C6-N6	-8.94	113.24	118.60
1	6	618	U	O5'-P-OP1	-8.94	97.66	105.70
36	5	1323	G	N1-C2-N3	8.94	129.26	123.90
36	1	419	G	C8-N9-C4	8.93	109.97	106.40
36	1	1316	C	O5'-P-OP1	-8.93	97.66	105.70
36	1	2373	A	C5-N7-C8	-8.93	99.43	103.90
36	5	511	G	N1-C2-N3	8.93	129.26	123.90
36	5	1722	U	O5'-P-OP1	-8.93	97.66	105.70
36	5	2303	A	N1-C6-N6	8.93	123.96	118.60
36	5	3140	G	C4-N9-C1'	8.93	138.11	126.50
36	1	3379	C	C6-N1-C2	8.93	123.87	120.30
1	6	1131	A	N9-C4-C5	-8.93	102.23	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2180	G	O5'-P-OP2	-8.93	97.66	105.70
36	5	2394	G	N1-C6-O6	8.93	125.26	119.90
36	1	911	C	C2-N3-C4	-8.93	115.44	119.90
36	1	1139	G	N3-C4-C5	8.92	133.06	128.60
1	6	1730	A	C8-N9-C4	-8.92	102.23	105.80
36	5	916	G	N3-C4-C5	-8.92	124.14	128.60
36	5	1195	A	N1-C2-N3	8.92	133.76	129.30
36	5	2400	G	C4-C5-C6	-8.92	113.45	118.80
36	5	2708	C	N3-C4-N4	8.92	124.25	118.00
36	1	3093	C	C6-N1-C2	-8.92	116.73	120.30
36	1	36	C	N3-C2-O2	-8.92	115.66	121.90
36	1	357	A	N1-C2-N3	8.92	133.76	129.30
36	5	1137	C	N3-C4-N4	8.92	124.24	118.00
1	2	419	G	C5-C6-O6	-8.92	123.25	128.60
36	1	2364	G	C6-N1-C2	-8.92	119.75	125.10
36	5	974	G	C6-C5-N7	-8.92	125.05	130.40
36	5	1879	A	C8-N9-C4	-8.92	102.23	105.80
36	5	3026	G	N9-C4-C5	-8.92	101.83	105.40
36	1	3217	C	N3-C4-N4	8.92	124.24	118.00
1	6	805	U	O5'-P-OP1	-8.91	97.68	105.70
36	1	33	G	C2-N3-C4	-8.91	107.44	111.90
36	1	2393	G	C6-C5-N7	-8.91	125.05	130.40
37	3	84	A	C8-N9-C4	-8.91	102.23	105.80
38	4	28	C	C5-C6-N1	8.91	125.46	121.00
36	5	3187	A	O5'-P-OP2	-8.91	97.68	105.70
36	1	1129	A	N7-C8-N9	8.91	118.25	113.80
36	1	1294	A	O5'-P-OP2	-8.91	97.68	105.70
36	5	1604	G	N9-C4-C5	8.91	108.96	105.40
36	5	2888	U	N1-C2-N3	8.91	120.25	114.90
36	1	272	G	N3-C2-N2	-8.91	113.67	119.90
36	1	2296	A	C2-N3-C4	-8.91	106.15	110.60
36	1	1429	G	N7-C8-N9	-8.91	108.65	113.10
1	6	611	U	N3-C2-O2	-8.91	115.97	122.20
1	6	1440	C	N3-C4-C5	8.91	125.46	121.90
1	6	1644	C	O5'-P-OP2	-8.91	97.68	105.70
37	7	85	G	N7-C8-N9	8.91	117.55	113.10
36	5	1407	A	N7-C8-N9	-8.91	109.35	113.80
38	4	27	U	C5-C4-O4	-8.90	120.56	125.90
36	5	2629	U	C4-C5-C6	8.90	125.04	119.70
36	5	1101	G	N1-C2-N2	-8.90	108.19	116.20
36	1	596	C	C6-N1-C2	-8.90	116.74	120.30
36	1	1116	G	OP2-P-O3'	8.90	124.78	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1622	G	C4-C5-N7	8.90	114.36	110.80
36	1	427	C	C6-N1-C2	-8.90	116.74	120.30
1	2	1594	G	O5'-P-OP1	-8.90	97.69	105.70
36	1	35	A	C5-N7-C8	-8.90	99.45	103.90
38	4	53	A	C5-N7-C8	8.90	108.35	103.90
38	8	4	C	N1-C2-O2	-8.90	113.56	118.90
37	7	93	C	N3-C2-O2	-8.89	115.67	121.90
36	1	101	G	C2-N3-C4	-8.89	107.45	111.90
46	19	168	ARG	NE-CZ-NH2	8.89	124.75	120.30
36	1	356	C	C5-C4-N4	-8.89	113.98	120.20
36	1	2387	A	C5-C6-N1	8.89	122.14	117.70
36	5	787	G	C5-C6-N1	-8.89	107.06	111.50
36	1	1498	A	C5-C6-N1	8.89	122.14	117.70
36	5	2386	A	C4-C5-N7	8.89	115.14	110.70
36	1	428	A	C5-C6-N6	-8.88	116.59	123.70
36	1	2159	U	C2-N1-C1'	8.88	128.36	117.70
36	1	3182	G	N3-C4-N9	8.89	131.33	126.00
1	2	331	A	N9-C4-C5	8.88	109.35	105.80
36	1	883	A	C6-N1-C2	-8.88	113.27	118.60
36	1	2937	G	N7-C8-N9	-8.88	108.66	113.10
36	5	371	G	N3-C4-N9	-8.88	120.67	126.00
36	1	507	U	N1-C2-O2	8.88	129.01	122.80
36	1	622	A	C4-C5-N7	8.88	115.14	110.70
36	1	3206	C	N1-C2-O2	-8.88	113.57	118.90
36	5	1550	C	C5-C6-N1	8.88	125.44	121.00
36	5	667	C	C5-C4-N4	8.88	126.41	120.20
36	1	1604	G	N3-C4-C5	-8.88	124.16	128.60
36	5	1127	G	C8-N9-C4	-8.88	102.85	106.40
36	5	1913	A	N1-C6-N6	8.88	123.93	118.60
36	1	3377	G	N1-C6-O6	-8.87	114.58	119.90
36	5	97	U	C5-C4-O4	-8.87	120.58	125.90
1	2	1200	G	N1-C6-O6	8.87	125.22	119.90
36	5	3393	U	C2-N1-C1'	-8.87	107.05	117.70
36	5	1520	G	C8-N9-C1'	-8.87	115.47	127.00
36	1	793	C	C4-C5-C6	8.87	121.83	117.40
1	6	1130	G	C5-C6-N1	8.87	115.93	111.50
36	5	974	G	N3-C4-N9	8.87	131.32	126.00
36	5	1128	U	N1-C2-O2	-8.87	116.59	122.80
36	1	2847	A	C2-N3-C4	-8.86	106.17	110.60
36	1	3135	U	C5-C6-N1	-8.87	118.27	122.70
36	5	3271	G	N1-C6-O6	8.87	125.22	119.90
1	6	332	U	N3-C2-O2	-8.86	116.00	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	942	U	C6-N1-C2	-8.86	115.68	121.00
36	1	2637	A	N9-C4-C5	8.86	109.34	105.80
36	1	2831	G	N3-C2-N2	-8.86	113.70	119.90
36	1	2939	G	N9-C4-C5	8.86	108.94	105.40
36	5	2837	A	C6-N1-C2	-8.86	113.28	118.60
1	6	209	U	N3-C4-O4	8.86	125.60	119.40
1	6	1418	G	N1-C6-O6	8.86	125.22	119.90
1	6	1634	C	N3-C2-O2	-8.86	115.70	121.90
36	5	2980	U	N3-C4-O4	-8.86	113.20	119.40
1	6	1187	U	C5-C6-N1	8.86	127.13	122.70
36	5	857	G	N1-C6-O6	8.86	125.21	119.90
1	2	577	G	C4-C5-N7	8.85	114.34	110.80
36	1	61	A	N7-C8-N9	8.85	118.23	113.80
36	1	1172	G	OP1-P-O3'	8.85	124.68	105.20
36	1	2629	U	N1-C2-O2	-8.85	116.60	122.80
36	1	1366	A	C2-N3-C4	-8.85	106.17	110.60
36	1	1414	G	C5-C6-O6	-8.85	123.29	128.60
36	1	2689	A	O5'-P-OP1	-8.85	97.73	105.70
37	7	48	U	C5-C4-O4	-8.85	120.59	125.90
36	1	344	A	C8-N9-C4	-8.85	102.26	105.80
1	6	1668	G	C2-N3-C4	-8.85	107.47	111.90
1	2	1146	G	C4-N9-C1'	8.85	138.00	126.50
36	1	2983	C	C5-C6-N1	-8.85	116.58	121.00
36	5	1905	G	N1-C6-O6	-8.85	114.59	119.90
36	5	2341	A	O5'-P-OP1	-8.85	97.74	105.70
1	2	1655	A	C4-C5-C6	-8.84	112.58	117.00
36	1	1528	G	N3-C4-C5	-8.84	124.18	128.60
36	5	1017	C	C2-N1-C1'	8.84	128.53	118.80
36	1	826	G	N1-C6-O6	8.84	125.20	119.90
36	1	3075	G	C5-C6-N1	-8.84	107.08	111.50
36	5	1148	G	N1-C2-N3	8.84	129.21	123.90
36	5	2306	C	O5'-P-OP2	-8.84	97.74	105.70
36	5	2726	C	O5'-P-OP1	8.84	121.31	110.70
36	1	407	A	C2-N3-C4	8.84	115.02	110.60
36	5	608	A	C5-C6-N6	-8.84	116.63	123.70
36	5	1151	U	C2-N1-C1'	8.84	128.31	117.70
36	5	2358	A	C2-N3-C4	-8.84	106.18	110.60
1	2	334	G	C4-C5-N7	-8.84	107.27	110.80
36	5	1165	A	C5-N7-C8	-8.84	99.48	103.90
36	1	1929	G	C5-C6-O6	-8.84	123.30	128.60
36	5	827	A	N9-C4-C5	8.84	109.33	105.80
36	5	3015	G	N1-C6-O6	8.84	125.20	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	17	C	N1-C2-O2	-8.83	113.60	118.90
1	2	1272	U	N3-C2-O2	-8.83	116.02	122.20
36	1	52	A	C5-C6-N6	8.83	130.77	123.70
36	5	1172	G	C6-C5-N7	-8.83	125.10	130.40
37	7	93	C	C2-N1-C1'	8.83	128.52	118.80
36	1	934	G	C8-N9-C4	-8.83	102.87	106.40
1	6	1295	G	N1-C6-O6	8.83	125.20	119.90
36	5	364	G	O5'-P-OP1	-8.83	97.75	105.70
36	1	1414	G	C2-N3-C4	-8.83	107.49	111.90
36	5	1582	C	C5-C6-N1	8.83	125.41	121.00
36	5	2924	U	C5-C4-O4	-8.83	120.60	125.90
1	2	21	U	N3-C4-O4	8.82	125.58	119.40
36	5	2375	G	N9-C4-C5	8.82	108.93	105.40
36	1	1201	C	C5-C4-N4	-8.82	114.02	120.20
36	1	2394	G	C5-N7-C8	8.82	108.71	104.30
36	5	2407	C	C5-C4-N4	-8.82	114.02	120.20
36	1	642	U	C5-C6-N1	8.82	127.11	122.70
36	1	2296	A	N1-C6-N6	8.82	123.89	118.60
36	5	1155	C	N3-C2-O2	8.82	128.07	121.90
36	5	791	A	N1-C6-N6	8.82	123.89	118.60
36	5	2888	U	C2-N3-C4	-8.82	121.71	127.00
36	5	3245	A	C6-N1-C2	8.82	123.89	118.60
36	1	1522	U	N3-C2-O2	-8.82	116.03	122.20
36	1	2636	A	O5'-P-OP2	8.82	121.28	110.70
36	5	1047	A	N1-C2-N3	8.82	133.71	129.30
36	5	2946	A	N1-C2-N3	8.82	133.71	129.30
1	2	820	U	C5-C6-N1	8.81	127.11	122.70
36	1	193	C	N3-C4-C5	-8.81	118.38	121.90
36	1	290	G	N1-C6-O6	8.81	125.19	119.90
36	1	1386	A	C8-N9-C4	-8.81	102.28	105.80
36	1	2714	G	N3-C4-N9	-8.81	120.71	126.00
37	3	88	G	C6-N1-C2	-8.81	119.81	125.10
36	5	2825	C	N3-C4-N4	8.81	124.17	118.00
36	1	2363	A	O5'-P-OP2	8.81	121.28	110.70
1	6	322	G	C8-N9-C4	-8.81	102.88	106.40
36	5	360	G	C4-C5-C6	8.81	124.09	118.80
36	5	1046	A	N1-C2-N3	8.81	133.71	129.30
36	5	1947	G	C5-C6-N1	8.81	115.91	111.50
38	8	44	A	N1-C6-N6	8.81	123.89	118.60
36	1	971	G	N3-C4-C5	-8.81	124.20	128.60
36	5	2346	C	N3-C2-O2	8.81	128.07	121.90
36	1	1453	A	N1-C2-N3	8.81	133.70	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2904	U	N3-C4-C5	8.81	119.88	114.60
38	8	15	G	C4-C5-N7	-8.81	107.28	110.80
36	1	507	U	N3-C2-O2	-8.80	116.04	122.20
36	5	1116	G	OP1-P-O3'	-8.81	85.83	105.20
36	5	2814	G	C5-C6-O6	-8.80	123.32	128.60
37	7	80	G	C8-N9-C4	8.80	109.92	106.40
37	3	98	C	N1-C2-N3	8.80	125.36	119.20
36	5	3208	G	N1-C2-N3	8.80	129.18	123.90
1	2	573	C	C6-N1-C2	-8.80	116.78	120.30
36	1	596	C	C4-C5-C6	8.80	121.80	117.40
36	5	216	G	C5-C6-O6	-8.80	123.32	128.60
36	5	3373	U	N1-C2-N3	8.80	120.18	114.90
1	6	315	A	C8-N9-C4	8.80	109.32	105.80
36	5	33	G	N1-C6-O6	-8.80	114.62	119.90
36	5	922	U	C5-C6-N1	-8.80	118.30	122.70
36	5	1114	U	C6-N1-C2	-8.80	115.72	121.00
36	5	2287	C	C4-C5-C6	8.80	121.80	117.40
1	2	1284	C	N1-C2-O2	-8.80	113.62	118.90
36	1	226	C	N1-C2-O2	-8.79	113.62	118.90
36	1	408	A	C6-N1-C2	-8.79	113.32	118.60
36	1	3083	G	C8-N9-C4	8.79	109.92	106.40
36	5	2132	C	N3-C2-O2	-8.79	115.74	121.90
36	5	3047	U	O5'-P-OP1	-8.79	97.78	105.70
36	5	3203	U	C5-C4-O4	8.79	131.18	125.90
1	2	144	U	C6-N1-C1'	8.79	133.51	121.20
36	1	960	U	C5-C6-N1	-8.79	118.30	122.70
36	5	2811	A	C5-C6-N1	8.79	122.09	117.70
36	5	3053	G	O5'-P-OP1	-8.79	97.79	105.70
36	5	3129	A	C8-N9-C4	-8.79	102.28	105.80
38	8	7	U	N1-C2-O2	-8.79	116.64	122.80
1	2	144	U	C5-C4-O4	8.79	131.17	125.90
36	1	414	U	C2-N3-C4	-8.79	121.73	127.00
36	5	957	C	C2-N1-C1'	8.79	128.47	118.80
37	7	27	A	N1-C6-N6	-8.79	113.33	118.60
36	1	439	C	C5-C6-N1	8.79	125.39	121.00
36	1	3050	U	N1-C2-N3	8.79	120.17	114.90
1	6	1414	U	N3-C2-O2	-8.79	116.05	122.20
1	6	1428	G	O5'-P-OP1	-8.79	97.79	105.70
36	5	2139	A	C5-C6-N6	8.79	130.73	123.70
36	5	2697	A	C5-C6-N6	-8.79	116.67	123.70
36	5	2830	G	C5-C6-O6	8.79	133.87	128.60
36	1	1116	G	N3-C2-N2	8.79	126.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2678	A	N1-C6-N6	-8.79	113.33	118.60
36	1	2797	C	N3-C4-C5	-8.79	118.39	121.90
36	5	437	G	N3-C4-N9	8.79	131.27	126.00
36	5	795	G	O5'-P-OP2	-8.79	97.79	105.70
38	8	1	A	C5-N7-C8	8.79	108.29	103.90
36	5	2305	G	N1-C2-N3	8.78	129.17	123.90
36	1	2351	U	N3-C2-O2	-8.78	116.05	122.20
36	5	2808	A	N7-C8-N9	8.78	118.19	113.80
36	5	3390	G	O5'-P-OP1	-8.78	97.80	105.70
36	5	884	A	C8-N9-C4	8.78	109.31	105.80
36	5	3041	U	C6-N1-C2	8.78	126.27	121.00
36	1	648	C	C2-N3-C4	-8.78	115.51	119.90
1	6	1700	C	C2-N1-C1'	8.78	128.45	118.80
36	5	1196	C	C4-C5-C6	8.78	121.79	117.40
36	5	2199	G	C5-C6-N1	-8.78	107.11	111.50
36	5	2373	A	N1-C6-N6	-8.78	113.33	118.60
36	5	2620	G	C2-N3-C4	-8.78	107.51	111.90
36	5	3005	A	C4-C5-C6	8.78	121.39	117.00
1	2	610	G	C8-N9-C1'	-8.77	115.59	127.00
1	2	1114	G	N3-C4-N9	8.77	131.26	126.00
1	2	334	G	N7-C8-N9	-8.77	108.71	113.10
36	1	828	A	N7-C8-N9	8.77	118.19	113.80
36	1	1187	C	C6-N1-C2	8.77	123.81	120.30
36	1	1209	G	N3-C4-N9	8.77	131.26	126.00
36	1	1433	A	C8-N9-C4	-8.77	102.29	105.80
36	5	2932	U	C2-N3-C4	-8.77	121.74	127.00
36	1	962	A	N1-C2-N3	8.77	133.69	129.30
38	4	3	A	C5-C6-N1	8.77	122.08	117.70
36	1	2289	U	C4-C5-C6	8.77	124.96	119.70
36	1	187	A	N9-C4-C5	8.77	109.31	105.80
36	1	1376	C	O5'-P-OP2	-8.77	97.81	105.70
36	5	286	U	C6-N1-C2	-8.77	115.74	121.00
36	5	990	U	N1-C2-O2	8.77	128.94	122.80
36	5	1217	A	O5'-P-OP1	8.77	121.22	110.70
36	5	2306	C	C2-N1-C1'	8.77	128.44	118.80
36	1	3245	A	C2-N3-C4	-8.76	106.22	110.60
36	5	1364	C	C6-N1-C2	-8.76	116.79	120.30
36	1	964	G	C5-N7-C8	-8.76	99.92	104.30
36	1	2642	A	C8-N9-C4	8.76	109.31	105.80
36	5	2426	U	C5-C4-O4	8.76	131.16	125.90
36	1	635	G	C6-C5-N7	-8.76	125.14	130.40
36	5	1111	U	C5-C6-N1	-8.76	118.32	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	35	A	C6-C5-N7	-8.76	126.17	132.30
36	1	2985	C	C6-N1-C2	-8.76	116.80	120.30
36	1	1880	U	C2-N3-C4	-8.76	121.75	127.00
36	1	2179	C	N3-C2-O2	-8.76	115.77	121.90
36	5	2743	A	N1-C2-N3	8.76	133.68	129.30
36	5	3039	C	N3-C4-N4	8.76	124.13	118.00
36	5	3328	G	C4-C5-N7	8.76	114.30	110.80
36	5	3362	A	C5-N7-C8	-8.76	99.52	103.90
36	1	400	G	N9-C4-C5	8.75	108.90	105.40
36	5	528	U	C6-N1-C2	-8.75	115.75	121.00
36	5	1170	A	C2-N3-C4	-8.75	106.22	110.60
1	6	1498	G	C8-N9-C1'	-8.75	115.62	127.00
36	5	3189	G	C8-N9-C4	8.75	109.90	106.40
37	7	49	G	C4-C5-C6	8.75	124.05	118.80
38	8	111	A	C8-N9-C4	8.75	109.30	105.80
1	2	507	U	N3-C2-O2	-8.75	116.07	122.20
36	1	220	G	C6-C5-N7	-8.75	125.15	130.40
36	1	1380	G	C5-C6-N1	-8.75	107.12	111.50
36	1	2827	U	O5'-P-OP2	-8.75	97.83	105.70
41	L4	182	LEU	CA-CB-CG	8.75	135.42	115.30
1	6	321	C	O5'-P-OP1	-8.75	97.83	105.70
36	5	2678	A	N1-C6-N6	-8.75	113.35	118.60
38	8	41	A	N1-C2-N3	8.75	133.67	129.30
36	1	1177	G	C5-C6-O6	-8.74	123.35	128.60
36	5	2700	G	C6-N1-C2	-8.74	119.85	125.10
36	1	57	A	N1-C2-N3	8.74	133.67	129.30
36	1	780	A	N1-C2-N3	8.74	133.67	129.30
36	1	1178	G	C8-N9-C1'	-8.74	115.63	127.00
36	5	3200	G	C4-C5-C6	8.74	124.05	118.80
36	1	3362	A	C5-N7-C8	-8.74	99.53	103.90
36	5	2307	G	O5'-P-OP2	-8.74	97.83	105.70
36	1	2918	G	N3-C4-C5	-8.74	124.23	128.60
36	1	23	A	N3-C4-C5	-8.74	120.68	126.80
36	1	397	A	C5-C6-N1	8.74	122.07	117.70
36	1	2283	G	C8-N9-C4	-8.74	102.91	106.40
36	5	3218	A	N1-C6-N6	8.74	123.84	118.60
36	1	640	U	N3-C4-C5	-8.73	109.36	114.60
36	1	971	G	N3-C4-N9	8.73	131.24	126.00
1	6	29	U	N1-C2-N3	8.73	120.14	114.90
36	1	3362	A	N7-C8-N9	8.73	118.17	113.80
36	5	630	A	N7-C8-N9	-8.73	109.43	113.80
38	8	136	G	C8-N9-C4	8.73	109.89	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2821	C	N3-C2-O2	-8.73	115.79	121.90
36	5	3140	G	N3-C4-N9	8.73	131.24	126.00
1	2	3	U	O5'-P-OP1	-8.73	97.85	105.70
1	6	142	G	C5-C6-O6	8.73	133.84	128.60
36	5	249	U	O4'-C1'-N1	8.73	115.18	108.20
36	5	2824	G	N9-C4-C5	-8.72	101.91	105.40
36	1	3096	C	N3-C4-C5	-8.72	118.41	121.90
36	1	107	A	C4-C5-N7	8.72	115.06	110.70
36	1	3172	A	C4-C5-C6	8.72	121.36	117.00
36	5	360	G	C5-C6-N1	-8.72	107.14	111.50
36	5	1165	A	N1-C2-N3	8.72	133.66	129.30
36	5	2662	G	N1-C2-N3	8.72	129.13	123.90
36	1	1134	G	N1-C2-N3	8.72	129.13	123.90
36	1	1431	G	N1-C6-O6	-8.72	114.67	119.90
38	4	111	A	C8-N9-C4	8.72	109.29	105.80
1	6	431	C	N3-C2-O2	8.72	128.00	121.90
36	5	96	G	C5-C6-N1	-8.71	107.14	111.50
36	5	1178	G	C5-C6-O6	8.71	133.83	128.60
36	5	1685	C	C6-N1-C2	8.71	123.79	120.30
36	5	2122	G	N1-C6-O6	8.71	125.13	119.90
1	6	1189	A	C8-N9-C4	8.71	109.28	105.80
38	8	4	C	N3-C4-C5	-8.71	118.42	121.90
36	5	2878	G	N3-C4-C5	-8.71	124.24	128.60
1	2	317	C	C6-N1-C2	-8.71	116.82	120.30
36	1	22	G	C2-N3-C4	-8.71	107.55	111.90
1	6	553	G	N1-C6-O6	8.71	125.12	119.90
36	5	1182	A	OP1-P-OP2	8.71	132.66	119.60
36	5	3010	U	N3-C4-O4	-8.71	113.30	119.40
36	5	1149	G	C5-C6-N1	-8.71	107.15	111.50
36	5	2937	G	N9-C4-C5	-8.70	101.92	105.40
36	5	3278	C	C2-N1-C1'	-8.71	109.22	118.80
36	1	718	G	N1-C6-O6	8.70	125.12	119.90
36	5	3144	G	C4-C5-C6	8.70	124.02	118.80
36	5	3343	G	C8-N9-C1'	-8.70	115.69	127.00
36	1	640	U	N1-C2-O2	-8.70	116.71	122.80
36	5	664	U	N3-C4-C5	-8.70	109.38	114.60
36	5	863	C	C6-N1-C2	8.70	123.78	120.30
36	1	880	G	C4-N9-C1'	-8.70	115.19	126.50
36	1	276	U	N3-C4-O4	8.70	125.49	119.40
36	1	674	G	C5-C6-N1	-8.70	107.15	111.50
36	1	3390	G	C4-N9-C1'	8.70	137.81	126.50
36	1	2353	G	C5-C6-O6	-8.69	123.38	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	808	A	C5-C6-N1	8.70	122.05	117.70
1	6	43	A	C8-N9-C4	8.69	109.28	105.80
36	5	856	G	C4-N9-C1'	8.69	137.80	126.50
36	5	1127	G	C4-C5-N7	-8.69	107.32	110.80
36	5	2126	A	C5-C6-N1	8.69	122.05	117.70
37	7	13	A	N1-C6-N6	8.69	123.81	118.60
36	1	2599	U	O5'-P-OP1	-8.69	97.88	105.70
1	6	1535	U	O5'-P-OP2	-8.69	97.88	105.70
36	5	155	G	N3-C4-N9	8.69	131.21	126.00
36	5	3199	G	C5-C6-N1	8.69	115.84	111.50
36	1	861	C	C6-N1-C2	-8.69	116.83	120.30
36	5	3036	G	O5'-P-OP2	-8.69	97.88	105.70
36	5	3383	G	N1-C6-O6	8.69	125.11	119.90
36	5	300	G	N1-C6-O6	-8.69	114.69	119.90
36	5	1149	G	O5'-P-OP2	-8.69	97.88	105.70
36	5	1202	A	C4-C5-C6	8.69	121.34	117.00
1	2	1291	G	C5-N7-C8	-8.68	99.96	104.30
36	5	1342	C	O5'-P-OP1	-8.68	97.88	105.70
36	1	102	C	O5'-P-OP1	8.68	121.12	110.70
36	5	900	G	C8-N9-C4	-8.68	102.93	106.40
36	5	1127	G	C4-N9-C1'	8.68	137.79	126.50
1	6	972	G	N3-C4-N9	8.68	131.21	126.00
36	5	2295	A	O5'-P-OP2	-8.68	97.89	105.70
36	5	3115	C	C6-N1-C1'	8.68	131.22	120.80
36	5	804	C	N3-C4-N4	8.68	124.07	118.00
36	5	2157	G	C8-N9-C4	8.68	109.87	106.40
36	5	2895	G	C6-N1-C2	-8.68	119.89	125.10
36	1	354	U	N3-C2-O2	-8.68	116.13	122.20
1	6	1029	U	C5-C4-O4	8.68	131.11	125.90
36	1	3245	A	N1-C2-N3	8.68	133.64	129.30
36	5	2428	U	N3-C2-O2	8.68	128.27	122.20
36	5	3115	C	N3-C2-O2	8.68	127.97	121.90
1	2	1073	G	C8-N9-C4	8.67	109.87	106.40
38	4	18	U	C6-N1-C2	-8.67	115.80	121.00
36	1	2195	C	O5'-P-OP1	-8.67	97.89	105.70
36	5	1337	A	N1-C6-N6	-8.67	113.40	118.60
36	5	2244	A	N7-C8-N9	-8.67	109.46	113.80
1	6	54	C	N3-C2-O2	-8.67	115.83	121.90
1	2	1146	G	C6-C5-N7	-8.67	125.20	130.40
36	1	413	U	C6-N1-C2	8.67	126.20	121.00
1	6	1474	G	C8-N9-C1'	-8.67	115.73	127.00
36	5	1173	U	N1-C2-N3	8.67	120.10	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1879	A	C5-N7-C8	-8.67	99.56	103.90
36	5	3193	C	O5'-P-OP1	-8.67	97.90	105.70
36	1	916	G	C5-C6-N1	8.67	115.83	111.50
36	1	916	G	N1-C6-O6	-8.67	114.70	119.90
36	1	2631	U	N1-C2-O2	8.67	128.87	122.80
36	1	1103	A	C2-N3-C4	8.67	114.93	110.60
36	1	1487	G	N7-C8-N9	8.67	117.43	113.10
1	6	1187	U	C6-N1-C2	-8.67	115.80	121.00
36	5	2634	U	N3-C4-C5	8.67	119.80	114.60
1	2	1190	C	C6-N1-C2	8.66	123.77	120.30
1	2	1768	G	C8-N9-C4	-8.66	102.93	106.40
1	2	353	A	C6-C5-N7	-8.66	126.24	132.30
36	1	2627	C	C2-N3-C4	-8.66	115.57	119.90
36	5	289	A	C5-C6-N6	-8.66	116.77	123.70
36	5	1130	A	N1-C2-N3	-8.66	124.97	129.30
36	1	676	G	C4-N9-C1'	8.66	137.76	126.50
36	1	2863	G	O5'-P-OP2	-8.66	97.91	105.70
36	5	595	G	N1-C2-N2	-8.66	108.41	116.20
36	5	2865	U	N1-C2-O2	8.66	128.86	122.80
36	1	205	C	C6-N1-C2	8.66	123.76	120.30
36	1	693	A	C6-C5-N7	-8.66	126.24	132.30
1	6	326	G	C6-C5-N7	-8.66	125.20	130.40
36	5	592	A	C8-N9-C4	8.66	109.26	105.80
36	5	594	U	C6-N1-C2	-8.66	115.81	121.00
36	5	1095	U	N3-C2-O2	-8.66	116.14	122.20
36	5	1196	C	N1-C2-O2	8.66	124.09	118.90
36	1	499	G	O5'-P-OP2	-8.65	97.91	105.70
36	1	1930	A	N9-C4-C5	-8.65	102.34	105.80
36	1	3045	G	N1-C2-N3	-8.65	118.71	123.90
1	6	41	A	N9-C4-C5	8.65	109.26	105.80
36	5	583	G	O5'-P-OP1	-8.65	97.91	105.70
36	5	1152	G	N1-C2-N2	8.65	123.99	116.20
38	8	8	C	C6-N1-C2	-8.65	116.84	120.30
36	1	655	C	C2-N1-C1'	8.65	128.32	118.80
36	1	2601	A	C6-N1-C2	-8.65	113.41	118.60
36	5	2715	A	C5-C6-N6	8.65	130.62	123.70
36	5	1192	C	N1-C2-O2	8.65	124.09	118.90
36	5	2940	A	C5-N7-C8	-8.65	99.58	103.90
36	5	3040	A	C8-N9-C4	8.65	109.26	105.80
36	5	3361	G	N1-C6-O6	8.65	125.09	119.90
1	6	621	A	C6-C5-N7	8.65	138.35	132.30
1	6	1208	A	C8-N9-C4	-8.65	102.34	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2246	G	C5-N7-C8	-8.65	99.98	104.30
36	5	2689	A	C5-C6-N6	8.65	130.62	123.70
36	5	2789	U	N1-C2-O2	-8.64	116.75	122.80
36	5	2871	G	C4-C5-N7	8.64	114.26	110.80
36	1	2284	C	N1-C2-O2	8.64	124.09	118.90
36	5	774	G	C4-C5-N7	8.64	114.26	110.80
36	5	1910	A	C5-C6-N6	-8.64	116.79	123.70
37	7	104	A	OP1-P-O3'	-8.64	86.18	105.20
36	1	2314	U	N3-C4-O4	8.64	125.45	119.40
36	1	3085	G	C5-C6-O6	-8.64	123.42	128.60
36	1	3201	C	C6-N1-C2	-8.64	116.84	120.30
1	6	383	G	C6-C5-N7	-8.64	125.22	130.40
36	5	424	G	C5-C6-N1	8.64	115.82	111.50
1	6	1629	G	N3-C4-C5	-8.64	124.28	128.60
36	5	1851	G	C5-N7-C8	-8.64	99.98	104.30
36	1	1116	G	C4-N9-C1'	8.64	137.73	126.50
36	1	2816	G	N1-C2-N2	-8.64	108.43	116.20
1	6	351	C	C6-N1-C2	8.64	123.75	120.30
36	5	96	G	C8-N9-C4	8.64	109.86	106.40
36	5	2285	C	C5-C6-N1	-8.64	116.68	121.00
36	5	2945	G	N1-C6-O6	-8.64	114.72	119.90
36	1	644	G	N1-C2-N3	8.63	129.08	123.90
36	1	1100	U	N1-C2-N3	8.64	120.08	114.90
36	1	1483	G	C5-C6-N1	8.63	115.82	111.50
1	6	1474	G	C4-N9-C1'	8.63	137.73	126.50
36	5	1694	U	N3-C2-O2	8.63	128.24	122.20
1	6	788	A	C8-N9-C4	8.63	109.25	105.80
38	8	21	C	N3-C4-C5	8.63	125.35	121.90
36	1	3001	C	C2-N3-C4	-8.63	115.58	119.90
36	5	2278	C	N3-C4-N4	8.63	124.04	118.00
36	5	3043	C	C2-N3-C4	-8.63	115.58	119.90
36	1	2764	C	C2-N3-C4	8.63	124.21	119.90
36	1	3049	A	N7-C8-N9	-8.63	109.49	113.80
36	5	345	G	N9-C4-C5	-8.63	101.95	105.40
36	5	2895	G	N1-C2-N2	-8.63	108.43	116.20
36	5	384	A	N1-C6-N6	8.63	123.78	118.60
36	1	41	G	C5-C6-N1	8.63	115.81	111.50
36	1	699	A	N3-C4-C5	8.63	132.84	126.80
36	1	2385	G	N9-C4-C5	-8.63	101.95	105.40
1	6	1731	A	O5'-P-OP1	8.63	121.05	110.70
1	2	1300	A	N1-C6-N6	-8.62	113.43	118.60
1	6	1729	C	C2-N3-C4	-8.62	115.59	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1310	G	N3-C4-N9	8.62	131.17	126.00
36	5	1902	G	N1-C2-N3	8.62	129.07	123.90
36	5	3185	U	C4-C5-C6	8.62	124.87	119.70
1	2	15	U	N3-C2-O2	-8.62	116.17	122.20
36	5	1178	G	N9-C4-C5	8.62	108.85	105.40
36	5	1181	U	C4-C5-C6	8.62	124.87	119.70
36	5	1514	G	N9-C4-C5	-8.62	101.95	105.40
1	2	507	U	N1-C2-O2	8.62	128.83	122.80
1	6	1491	U	P-O3'-C3'	8.62	130.04	119.70
1	6	1630	U	N3-C4-O4	8.62	125.43	119.40
36	5	2379	U	N3-C4-O4	-8.62	113.37	119.40
36	1	3374	U	C5-C6-N1	-8.62	118.39	122.70
36	5	2693	C	C2-N3-C4	-8.62	115.59	119.90
36	5	2942	C	N3-C2-O2	-8.62	115.87	121.90
36	1	1395	G	O5'-P-OP2	-8.61	97.95	105.70
36	1	2198	A	C2-N3-C4	-8.61	106.29	110.60
36	1	2386	A	O5'-P-OP1	-8.61	97.95	105.70
1	6	1478	G	C4-N9-C1'	8.61	137.70	126.50
36	5	568	G	C4-C5-N7	8.61	114.24	110.80
36	5	2812	C	O5'-P-OP2	8.61	121.03	110.70
36	5	1060	U	N3-C4-O4	-8.61	113.37	119.40
36	5	718	G	C6-C5-N7	-8.61	125.23	130.40
36	5	996	A	O5'-P-OP2	-8.61	97.95	105.70
36	5	1124	U	N3-C4-O4	-8.61	113.37	119.40
36	1	639	G	C5-N7-C8	-8.61	100.00	104.30
36	1	865	U	C5-C6-N1	-8.61	118.40	122.70
36	1	2310	U	O5'-P-OP1	-8.61	97.95	105.70
36	1	1146	C	N1-C2-N3	-8.61	113.18	119.20
1	6	856	A	N1-C6-N6	8.61	123.76	118.60
1	6	1000	C	C6-N1-C2	-8.61	116.86	120.30
36	5	1376	C	N3-C4-N4	8.61	124.02	118.00
36	5	2624	G	N1-C6-O6	8.61	125.06	119.90
36	1	1043	C	N3-C4-C5	8.60	125.34	121.90
1	6	1354	G	C8-N9-C4	-8.60	102.96	106.40
37	3	74	C	C6-N1-C2	8.60	123.74	120.30
36	5	672	A	C5-C6-N1	8.60	122.00	117.70
36	5	851	C	N3-C4-C5	8.60	125.34	121.90
1	2	1761	U	N1-C2-N3	8.60	120.06	114.90
36	1	887	G	N3-C4-N9	8.60	131.16	126.00
36	1	2629	U	N3-C4-C5	-8.60	109.44	114.60
36	1	2887	A	N7-C8-N9	8.60	118.10	113.80
38	4	103	G	N3-C4-C5	-8.60	124.30	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	344	A	N7-C8-N9	8.60	118.10	113.80
36	5	961	C	O5'-P-OP2	8.60	121.02	110.70
36	5	2244	A	N1-C6-N6	-8.60	113.44	118.60
37	7	109	G	N3-C4-C5	8.60	132.90	128.60
36	1	1061	A	C5-N7-C8	8.60	108.20	103.90
36	1	1420	C	C2-N3-C4	-8.60	115.60	119.90
36	1	3266	G	C8-N9-C4	-8.60	102.96	106.40
36	5	213	A	C6-N1-C2	-8.60	113.44	118.60
1	6	16	G	C4-C5-N7	8.59	114.24	110.80
37	7	73	C	C6-N1-C2	-8.59	116.86	120.30
36	1	691	A	C5-N7-C8	-8.59	99.60	103.90
36	1	2913	C	N3-C4-C5	-8.59	118.46	121.90
1	6	1086	A	N9-C4-C5	8.59	109.23	105.80
36	5	330	G	N1-C6-O6	8.59	125.05	119.90
36	5	1181	U	C5-C4-O4	8.59	131.06	125.90
36	1	938	C	C2-N1-C1'	8.59	128.24	118.80
1	6	1264	G	N1-C6-O6	8.59	125.05	119.90
36	1	1905	G	C8-N9-C1'	8.58	138.16	127.00
36	1	2877	G	O5'-P-OP2	-8.58	97.97	105.70
36	1	1151	U	C6-N1-C2	-8.58	115.85	121.00
36	1	2614	G	N3-C4-C5	-8.58	124.31	128.60
36	1	2904	U	N3-C4-O4	-8.58	113.39	119.40
1	6	1623	C	C5-C6-N1	8.58	125.29	121.00
36	5	301	G	N1-C6-O6	8.58	125.05	119.90
36	1	73	C	N1-C2-O2	-8.58	113.75	118.90
36	1	641	C	N1-C2-N3	-8.58	113.19	119.20
36	5	256	G	N7-C8-N9	8.58	117.39	113.10
36	5	2684	C	N3-C4-C5	-8.58	118.47	121.90
36	5	3041	U	C5-C6-N1	-8.58	118.41	122.70
1	6	1282	U	N1-C2-N3	8.58	120.05	114.90
36	5	71	A	N1-C6-N6	-8.58	113.45	118.60
36	5	2943	G	N1-C2-N3	8.58	129.05	123.90
36	5	3143	C	N3-C4-N4	8.58	124.00	118.00
36	1	2936	A	C5-C6-N1	8.58	121.99	117.70
36	5	3096	C	N1-C2-N3	8.58	125.20	119.20
36	5	665	A	C8-N9-C4	-8.57	102.37	105.80
36	5	865	U	N1-C2-O2	-8.57	116.80	122.80
36	5	906	A	N9-C4-C5	8.57	109.23	105.80
36	5	3202	G	N1-C6-O6	-8.57	114.75	119.90
1	6	575	C	C6-N1-C2	8.57	123.73	120.30
36	1	751	A	C5-C6-N1	8.57	121.98	117.70
36	1	1380	G	N3-C4-C5	8.57	132.88	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1807	G	N1-C6-O6	8.57	125.04	119.90
1	6	9	U	O5'-P-OP1	-8.57	97.99	105.70
1	6	1510	U	O5'-P-OP2	-8.57	97.99	105.70
36	5	2280	A	C5-C6-N6	-8.57	116.84	123.70
36	5	2335	G	N1-C6-O6	-8.57	114.76	119.90
36	1	65	A	N9-C4-C5	-8.57	102.37	105.80
36	1	908	G	N7-C8-N9	8.57	117.38	113.10
36	1	2330	C	N3-C4-C5	8.57	125.33	121.90
36	1	3050	U	N3-C2-O2	-8.57	116.20	122.20
1	6	1139	A	N1-C6-N6	8.57	123.74	118.60
36	5	2904	U	N1-C2-N3	8.57	120.04	114.90
48	m1	112	LEU	CA-CB-CG	8.57	135.01	115.30
36	5	2835	U	C6-N1-C2	-8.57	115.86	121.00
36	1	2314	U	C5-C6-N1	8.56	126.98	122.70
1	6	1572	G	C6-C5-N7	-8.56	125.26	130.40
1	6	1777	G	C4-C5-N7	8.56	114.22	110.80
36	5	707	U	N3-C4-C5	-8.56	109.46	114.60
36	5	2383	C	N3-C2-O2	-8.56	115.91	121.90
36	5	2695	A	N1-C6-N6	-8.56	113.46	118.60
36	1	414	U	N3-C4-C5	8.56	119.74	114.60
36	1	3273	A	C6-N1-C2	-8.56	113.46	118.60
36	1	2159	U	C6-N1-C1'	-8.56	109.22	121.20
36	5	1085	A	C6-C5-N7	-8.56	126.31	132.30
36	5	1719	G	N1-C6-O6	8.56	125.04	119.90
36	5	2195	C	N3-C4-C5	8.56	125.32	121.90
36	5	2697	A	N1-C6-N6	8.56	123.74	118.60
36	5	2848	G	C2-N3-C4	-8.56	107.62	111.90
36	5	2975	U	O5'-P-OP1	-8.56	98.00	105.70
36	5	371	G	C4-N9-C1'	-8.56	115.37	126.50
1	6	858	G	O4'-C1'-N9	8.56	115.05	108.20
1	2	1146	G	C8-N9-C4	-8.55	102.98	106.40
36	1	1442	U	N1-C2-O2	-8.56	116.81	122.80
1	6	1178	G	N3-C4-C5	-8.56	124.32	128.60
36	5	2908	G	C5-N7-C8	-8.56	100.02	104.30
36	1	326	U	N3-C4-C5	-8.55	109.47	114.60
36	5	2187	G	C5-C6-O6	8.55	133.73	128.60
37	3	88	G	N7-C8-N9	8.55	117.38	113.10
36	5	2243	A	N3-C4-C5	-8.55	120.81	126.80
36	1	719	U	N1-C2-N3	-8.55	109.77	114.90
36	1	1858	A	C2-N3-C4	8.55	114.88	110.60
36	5	1444	G	C4-C5-C6	8.55	123.93	118.80
36	5	2659	G	N1-C6-O6	8.55	125.03	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2871	G	C5-N7-C8	-8.55	100.03	104.30
1	2	610	G	C4-N9-C1'	8.55	137.61	126.50
36	1	217	U	C6-N1-C2	-8.55	115.87	121.00
36	5	1183	C	N3-C4-N4	8.55	123.98	118.00
36	5	2880	U	C2-N1-C1'	-8.55	107.44	117.70
36	1	857	G	N9-C4-C5	8.55	108.82	105.40
36	5	3085	G	OP1-P-O3'	8.55	124.00	105.20
36	1	2618	G	N9-C4-C5	8.55	108.82	105.40
36	5	713	U	N3-C2-O2	-8.55	116.22	122.20
36	5	2351	U	N1-C2-N3	8.55	120.03	114.90
36	5	2386	A	N1-C6-N6	8.55	123.73	118.60
36	1	3182	G	N1-C2-N2	-8.54	108.51	116.20
36	5	278	U	C5-C4-O4	8.54	131.03	125.90
1	2	1654	G	N3-C4-N9	8.54	131.13	126.00
1	2	1737	G	N3-C4-N9	-8.54	120.88	126.00
36	1	2939	G	OP2-P-O3'	8.54	124.00	105.20
36	1	2960	C	N3-C2-O2	-8.54	115.92	121.90
36	5	3324	C	C5-C6-N1	-8.54	116.73	121.00
36	5	3367	C	C6-N1-C2	8.54	123.72	120.30
36	1	3132	C	OP1-P-OP2	-8.54	106.79	119.60
36	5	2803	A	C5-C6-N1	-8.54	113.43	117.70
1	2	317	C	N3-C2-O2	-8.54	115.92	121.90
36	1	2640	A	N1-C2-N3	8.54	133.57	129.30
36	5	2732	G	C4-C5-N7	-8.54	107.39	110.80
36	5	3102	G	C8-N9-C4	8.54	109.81	106.40
36	1	1387	G	C6-N1-C2	-8.53	119.98	125.10
36	5	1298	C	C5-C4-N4	-8.53	114.23	120.20
36	1	2953	U	C5-C6-N1	8.53	126.97	122.70
36	5	2347	U	N3-C2-O2	-8.53	116.23	122.20
36	1	2639	G	C2-N3-C4	-8.53	107.64	111.90
36	5	1102	A	C6-N1-C2	-8.53	113.48	118.60
36	5	1131	G	N1-C6-O6	8.53	125.02	119.90
36	5	1209	G	N3-C2-N2	-8.53	113.93	119.90
36	5	2139	A	C8-N9-C4	-8.53	102.39	105.80
1	2	1114	G	N3-C4-C5	-8.53	124.34	128.60
36	1	714	G	C8-N9-C1'	-8.53	115.92	127.00
1	6	78	A	N9-C4-C5	8.53	109.21	105.80
36	5	2395	G	C5-N7-C8	-8.53	100.04	104.30
36	1	765	C	N1-C2-O2	8.52	124.01	118.90
37	3	88	G	C5-C6-O6	8.52	133.71	128.60
36	5	2379	U	C5-C4-O4	8.52	131.01	125.90
36	5	2692	A	C5-C6-N1	8.52	121.96	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	638	C	C6-N1-C2	8.52	123.71	120.30
36	1	744	A	C2-N3-C4	-8.52	106.34	110.60
1	6	1483	A	N9-C4-C5	8.52	109.21	105.80
36	5	848	A	C4-C5-C6	8.52	121.26	117.00
36	1	2312	A	C5-C6-N1	8.52	121.96	117.70
36	1	2399	A	N9-C4-C5	-8.52	102.39	105.80
36	1	2960	C	C2-N3-C4	-8.52	115.64	119.90
1	6	22	A	C8-N9-C4	-8.52	102.39	105.80
1	6	423	G	N9-C4-C5	8.52	108.81	105.40
36	5	526	C	N3-C2-O2	-8.52	115.94	121.90
36	5	2112	U	O5'-P-OP2	-8.52	98.03	105.70
36	5	2728	G	C4-N9-C1'	8.52	137.58	126.50
36	1	210	U	N3-C2-O2	-8.52	116.24	122.20
36	5	1527	C	C2-N1-C1'	-8.52	109.43	118.80
36	1	2383	C	N3-C2-O2	8.52	127.86	121.90
36	5	2853	A	C4-C5-N7	8.52	114.96	110.70
36	1	909	G	C4-C5-N7	8.52	114.21	110.80
36	1	2193	U	N1-C2-O2	-8.52	116.84	122.80
36	1	2880	U	C6-N1-C1'	8.52	133.12	121.20
36	5	662	U	C5-C4-O4	-8.52	120.79	125.90
1	2	144	U	N1-C2-N3	8.51	120.01	114.90
36	1	2231	C	C6-N1-C2	8.51	123.70	120.30
36	5	371	G	N1-C6-O6	-8.51	114.79	119.90
36	5	422	A	N1-C2-N3	8.51	133.56	129.30
36	5	1330	A	N1-C6-N6	8.51	123.71	118.60
36	5	1879	A	N7-C8-N9	8.51	118.06	113.80
36	5	2634	U	C2-N3-C4	-8.51	121.89	127.00
36	5	2702	A	C8-N9-C4	-8.51	102.39	105.80
36	5	2813	A	C2-N3-C4	-8.51	106.34	110.60
36	5	2973	G	N3-C2-N2	-8.51	113.94	119.90
36	1	2959	C	N1-C2-O2	-8.51	113.79	118.90
36	5	918	C	N3-C4-N4	8.51	123.96	118.00
36	5	2994	A	N1-C2-N3	8.51	133.56	129.30
36	1	1428	A	C2-N3-C4	-8.51	106.35	110.60
38	4	38	U	C2-N1-C1'	8.51	127.91	117.70
36	5	1786	G	C5-N7-C8	-8.51	100.05	104.30
36	1	2136	C	C4-C5-C6	8.51	121.65	117.40
36	5	646	A	N1-C2-N3	8.51	133.55	129.30
36	5	687	U	C5-C4-O4	8.51	131.00	125.90
36	5	973	A	C5-N7-C8	-8.51	99.65	103.90
36	5	2640	A	C5-C6-N6	-8.51	116.90	123.70
36	1	1551	C	N3-C4-C5	8.50	125.30	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2329	C	N3-C4-N4	8.50	123.95	118.00
36	5	2151	C	N1-C2-O2	-8.50	113.80	118.90
36	1	907	G	C5-C6-N1	8.50	115.75	111.50
36	1	971	G	C4-N9-C1'	8.50	137.55	126.50
36	1	2974	U	C6-N1-C2	-8.50	115.90	121.00
1	6	1111	G	N1-C2-N3	8.50	129.00	123.90
1	6	1566	U	C6-N1-C2	8.50	126.10	121.00
36	1	3137	C	N3-C4-N4	-8.50	112.05	118.00
36	5	2863	G	N3-C4-C5	8.50	132.85	128.60
36	5	1192	C	N3-C4-C5	-8.50	118.50	121.90
36	1	833	G	C4-C5-N7	-8.50	107.40	110.80
36	5	2205	U	C5-C6-N1	8.50	126.95	122.70
1	2	334	G	N3-C4-N9	-8.49	120.90	126.00
36	5	2354	C	N1-C2-O2	-8.49	113.80	118.90
36	5	2922	G	C8-N9-C4	-8.49	103.00	106.40
36	5	3261	C	N3-C2-O2	8.49	127.84	121.90
36	1	1877	U	C5-C6-N1	-8.49	118.45	122.70
36	5	656	A	C5-C6-N6	-8.49	116.91	123.70
36	5	2168	A	C5-C6-N6	-8.49	116.91	123.70
37	7	104	A	C2-N3-C4	-8.49	106.35	110.60
36	1	2623	G	N9-C4-C5	-8.49	102.00	105.40
37	3	36	C	N3-C2-O2	-8.49	115.96	121.90
36	5	1141	C	N3-C4-C5	8.49	125.30	121.90
36	5	1692	U	O5'-P-OP2	-8.49	98.06	105.70
36	5	2638	C	C5-C4-N4	8.49	126.14	120.20
36	5	2876	C	C4-C5-C6	-8.49	113.16	117.40
1	2	99	C	C6-N1-C2	8.49	123.69	120.30
36	1	872	U	N1-C2-N3	8.49	119.99	114.90
36	1	1304	A	C4-C5-C6	-8.49	112.76	117.00
1	6	1600	A	C2-N3-C4	-8.49	106.36	110.60
36	5	645	A	N9-C4-C5	8.49	109.19	105.80
36	5	906	A	C8-N9-C4	-8.49	102.41	105.80
36	5	1166	G	N3-C4-C5	8.49	132.84	128.60
36	5	994	G	O4'-C1'-N9	-8.49	101.41	108.20
36	5	2366	C	N1-C2-O2	-8.49	113.81	118.90
36	5	2699	G	N3-C2-N2	-8.49	113.96	119.90
36	5	2735	U	N1-C2-N3	8.49	119.99	114.90
1	2	55	A	N1-C6-N6	8.48	123.69	118.60
36	5	2382	G	C8-N9-C1'	8.48	138.03	127.00
36	5	2792	A	C8-N9-C4	-8.48	102.41	105.80
36	1	688	G	N3-C4-N9	8.48	131.09	126.00
36	1	2682	C	O5'-P-OP2	-8.48	98.06	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	728	G	C5-C6-O6	-8.48	123.51	128.60
36	5	2761	G	C6-N1-C2	-8.48	120.01	125.10
37	7	42	A	C4-C5-C6	8.48	121.24	117.00
36	1	1172	G	C8-N9-C4	-8.48	103.01	106.40
36	5	644	G	N3-C4-C5	-8.48	124.36	128.60
36	5	1195	A	C2-N3-C4	-8.48	106.36	110.60
36	5	2145	A	C2-N3-C4	-8.48	106.36	110.60
36	5	960	U	N3-C2-O2	-8.48	116.27	122.20
36	5	1417	G	C8-N9-C4	-8.48	103.01	106.40
36	5	2904	U	C2-N3-C4	-8.48	121.91	127.00
36	5	3278	C	C6-N1-C2	8.48	123.69	120.30
36	5	3308	C	C6-N1-C1'	-8.48	110.63	120.80
36	5	2304	C	N3-C2-O2	8.47	127.83	121.90
36	1	2363	A	N1-C6-N6	-8.47	113.52	118.60
36	5	921	A	N1-C2-N3	8.47	133.54	129.30
36	5	1187	C	C6-N1-C2	8.47	123.69	120.30
36	1	651	G	OP2-P-O3'	8.47	123.84	105.20
36	1	1070	U	N3-C2-O2	-8.47	116.27	122.20
36	1	2093	A	N1-C6-N6	-8.47	113.52	118.60
36	1	2605	G	OP2-P-O3'	8.47	123.84	105.20
1	2	1129	U	C5-C4-O4	8.47	130.98	125.90
36	1	3091	A	C5-N7-C8	-8.47	99.66	103.90
36	5	1337	A	C2-N3-C4	-8.47	106.36	110.60
36	5	2952	G	N1-C6-O6	8.47	124.98	119.90
36	1	2867	C	C6-N1-C2	-8.47	116.91	120.30
36	5	1332	A	C2-N3-C4	-8.47	106.37	110.60
36	5	2286	U	C5-C6-N1	-8.47	118.47	122.70
37	7	49	G	C4-C5-N7	8.47	114.19	110.80
36	1	608	A	N3-C4-N9	8.47	134.17	127.40
36	1	1006	A	N1-C6-N6	8.47	123.68	118.60
36	5	2865	U	N3-C2-O2	-8.47	116.27	122.20
1	6	541	A	N1-C6-N6	8.46	123.68	118.60
36	5	1546	A	O5'-P-OP1	-8.46	98.08	105.70
36	5	2761	G	N1-C6-O6	-8.46	114.82	119.90
36	1	2830	G	C8-N9-C4	8.46	109.78	106.40
36	5	2936	A	N1-C2-N3	8.46	133.53	129.30
36	5	3006	A	N9-C4-C5	8.46	109.18	105.80
36	5	3271	G	C6-C5-N7	-8.46	125.32	130.40
36	1	1116	G	C4-C5-C6	8.46	123.88	118.80
36	1	3091	A	N7-C8-N9	8.46	118.03	113.80
1	6	1753	A	C4-N9-C1'	8.46	141.53	126.30
36	1	3174	A	C5-C6-N1	-8.46	113.47	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	639	G	N1-C2-N2	-8.46	108.59	116.20
36	1	3277	U	C6-N1-C2	-8.46	115.93	121.00
1	2	576	G	N1-C6-O6	8.45	124.97	119.90
1	2	1280	C	C5-C6-N1	8.45	125.23	121.00
36	5	1918	C	O5'-P-OP2	-8.46	98.09	105.70
1	2	1675	C	C6-N1-C2	8.45	123.68	120.30
36	1	1720	U	N1-C2-O2	8.45	128.72	122.80
36	1	2981	U	N1-C2-N3	8.45	119.97	114.90
36	5	35	A	O5'-P-OP2	-8.45	98.09	105.70
36	5	1719	G	N3-C4-C5	8.45	132.83	128.60
1	2	144	U	C2-N1-C1'	-8.45	107.56	117.70
36	1	350	C	C2-N1-C1'	8.45	128.10	118.80
36	1	1916	U	C5-C6-N1	-8.45	118.47	122.70
36	1	3152	U	C5-C4-O4	8.45	130.97	125.90
36	5	2610	G	C5-C6-O6	-8.45	123.53	128.60
36	5	2851	A	C4-C5-N7	-8.45	106.47	110.70
36	5	3079	U	C5-C6-N1	-8.45	118.47	122.70
1	2	311	U	C6-N1-C2	-8.45	115.93	121.00
36	1	1174	G	C8-N9-C1'	-8.45	116.02	127.00
36	5	784	A	C5-N7-C8	-8.45	99.67	103.90
36	1	1437	C	N1-C2-O2	8.45	123.97	118.90
36	5	1604	G	N3-C4-C5	-8.45	124.38	128.60
36	5	1786	G	C8-N9-C4	-8.45	103.02	106.40
36	5	2986	U	N3-C4-C5	-8.45	109.53	114.60
1	2	1203	A	O5'-P-OP1	-8.45	98.10	105.70
37	7	10	C	C5-C4-N4	-8.45	114.29	120.20
37	7	56	A	N1-C6-N6	8.45	123.67	118.60
36	5	1115	G	C4-N9-C1'	8.44	137.47	126.50
1	2	1439	C	O5'-P-OP1	-8.44	98.10	105.70
36	1	342	A	N1-C6-N6	8.44	123.67	118.60
1	6	905	A	C5-C6-N6	8.44	130.45	123.70
36	5	218	G	N9-C4-C5	8.44	108.78	105.40
36	5	1345	G	C2-N3-C4	-8.44	107.68	111.90
36	5	3093	C	C5-C6-N1	-8.44	116.78	121.00
36	5	3322	A	C2-N3-C4	-8.44	106.38	110.60
38	8	138	A	N9-C4-C5	8.44	109.18	105.80
36	1	1127	G	C2-N3-C4	-8.44	107.68	111.90
36	5	2940	A	C4-C5-C6	8.44	121.22	117.00
36	5	3187	A	C8-N9-C4	8.44	109.18	105.80
36	5	2942	C	N1-C2-N3	8.44	125.11	119.20
36	5	642	U	O5'-P-OP2	-8.44	98.11	105.70
36	5	867	G	C5-C6-N1	-8.44	107.28	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3144	G	N1-C2-N2	-8.44	108.61	116.20
1	6	1759	C	N3-C4-C5	-8.43	118.53	121.90
36	1	1604	G	N1-C6-O6	-8.43	114.84	119.90
36	1	3098	G	C5-C6-N1	8.43	115.72	111.50
1	6	308	C	C5-C6-N1	-8.43	116.78	121.00
36	5	35	A	C4-C5-N7	-8.43	106.48	110.70
36	5	278	U	C6-N1-C2	-8.43	115.94	121.00
37	7	49	G	N7-C8-N9	8.43	117.32	113.10
12	C0	88	PRO	N-CA-CB	8.43	113.42	103.30
36	1	394	G	N1-C6-O6	-8.43	114.84	119.90
36	1	639	G	N1-C2-N3	8.43	128.96	123.90
38	4	4	C	C6-N1-C2	-8.43	116.93	120.30
1	6	317	C	O5'-P-OP2	-8.43	98.11	105.70
36	1	1164	G	O5'-P-OP2	-8.43	98.11	105.70
36	1	2942	C	C4-C5-C6	-8.43	113.19	117.40
1	6	636	A	N1-C2-N3	8.43	133.51	129.30
36	1	1010	G	N3-C4-C5	8.43	132.81	128.60
36	1	2679	A	N1-C6-N6	8.43	123.66	118.60
36	1	1043	C	C6-N1-C2	8.43	123.67	120.30
36	5	50	U	N1-C2-O2	8.43	128.70	122.80
36	5	784	A	C6-C5-N7	-8.43	126.40	132.30
36	1	198	A	O5'-P-OP1	-8.42	98.12	105.70
36	1	372	A	C8-N9-C4	-8.42	102.43	105.80
36	1	1164	G	N3-C2-N2	-8.42	114.00	119.90
36	1	1311	G	O5'-P-OP1	-8.42	98.12	105.70
1	6	1447	C	N3-C2-O2	-8.42	116.00	121.90
36	5	1174	G	OP1-P-OP2	8.42	132.24	119.60
36	5	1473	G	C4-C5-N7	8.42	114.17	110.80
36	5	1780	G	C8-N9-C4	-8.42	103.03	106.40
36	5	2367	A	C2-N3-C4	-8.42	106.39	110.60
36	5	3285	C	C2-N1-C1'	8.42	128.07	118.80
1	2	1127	G	C8-N9-C4	-8.42	103.03	106.40
1	6	942	G	C8-N9-C4	-8.42	103.03	106.40
36	1	635	G	C5-N7-C8	-8.42	100.09	104.30
36	1	1205	A	O5'-P-OP1	8.42	120.80	110.70
36	1	1435	A	N9-C4-C5	8.42	109.17	105.80
36	1	2860	U	O5'-P-OP1	-8.42	98.12	105.70
36	5	357	A	N1-C2-N3	8.42	133.51	129.30
36	5	2662	G	N3-C4-N9	8.42	131.05	126.00
41	14	339	LEU	CA-CB-CG	8.42	134.66	115.30
36	1	1194	G	C2-N3-C4	8.41	116.11	111.90
36	1	2159	U	N1-C2-N3	-8.41	109.85	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	973	A	C8-N9-C4	8.41	109.17	105.80
1	6	1257	U	N1-C2-O2	8.41	128.69	122.80
36	5	974	G	C5-C6-O6	-8.41	123.55	128.60
36	5	1904	C	N3-C4-C5	8.41	125.27	121.90
37	7	90	U	O5'-P-OP2	-8.41	98.13	105.70
36	1	2356	A	C4-C5-N7	8.41	114.91	110.70
36	1	3307	A	O5'-P-OP2	-8.41	98.13	105.70
1	6	1536	G	N3-C4-N9	8.41	131.05	126.00
36	5	97	U	N3-C2-O2	8.41	128.09	122.20
36	5	1139	G	N3-C4-C5	8.41	132.81	128.60
36	1	1483	G	N3-C4-C5	-8.41	124.40	128.60
36	1	2884	C	C2-N1-C1'	-8.41	109.55	118.80
36	1	2979	U	C6-N1-C1'	8.41	132.97	121.20
1	6	1172	G	N1-C6-O6	-8.41	114.85	119.90
1	6	1185	U	N3-C2-O2	-8.41	116.31	122.20
36	5	36	C	O5'-P-OP1	-8.41	98.13	105.70
36	5	2212	C	C6-N1-C1'	-8.41	110.71	120.80
36	1	2323	G	C5-C6-O6	-8.41	123.56	128.60
36	5	948	C	N3-C4-C5	8.41	125.26	121.90
36	5	2126	A	C6-N1-C2	-8.41	113.56	118.60
36	5	2886	U	C4-C5-C6	8.41	124.75	119.70
36	5	1330	A	N3-C4-C5	8.41	132.68	126.80
36	1	1884	A	N1-C6-N6	-8.40	113.56	118.60
36	1	2779	A	C2-N3-C4	-8.40	106.40	110.60
36	5	2842	U	C2-N1-C1'	8.40	127.79	117.70
36	5	645	A	C6-N1-C2	-8.40	113.56	118.60
36	5	1377	G	N9-C4-C5	8.40	108.76	105.40
36	5	1884	A	C4-C5-C6	8.40	121.20	117.00
36	5	3211	C	C6-N1-C2	8.40	123.66	120.30
36	1	3383	G	N3-C4-C5	8.40	132.80	128.60
36	5	1107	C	C5-C6-N1	-8.40	116.80	121.00
36	1	1316	C	N3-C4-N4	8.40	123.88	118.00
36	1	1429	G	N3-C4-N9	8.40	131.04	126.00
36	1	2655	U	N1-C2-N3	8.40	119.94	114.90
1	6	922	G	N1-C6-O6	8.40	124.94	119.90
36	5	971	G	N1-C2-N2	-8.40	108.64	116.20
36	5	1165	A	C2-N3-C4	-8.40	106.40	110.60
36	5	1447	G	O5'-P-OP1	-8.40	98.14	105.70
36	5	2991	A	C5-C6-N1	8.40	121.90	117.70
36	5	3374	U	C5-C6-N1	-8.40	118.50	122.70
1	2	103	A	N1-C6-N6	8.40	123.64	118.60
38	4	53	A	N9-C4-C5	8.40	109.16	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	650	C	N3-C4-N4	-8.40	112.12	118.00
36	5	1848	G	N9-C4-C5	-8.40	102.04	105.40
36	5	3329	U	C4-C5-C6	8.40	124.74	119.70
38	8	26	U	C6-N1-C2	-8.40	115.96	121.00
36	1	198	A	N9-C4-C5	8.39	109.16	105.80
36	1	981	U	C6-N1-C2	-8.39	115.96	121.00
36	1	1141	C	O5'-P-OP1	-8.39	98.14	105.70
36	1	2192	C	N3-C2-O2	-8.39	116.03	121.90
1	6	315	A	N7-C8-N9	-8.39	109.60	113.80
1	6	1626	U	C5-C6-N1	-8.39	118.50	122.70
36	5	3137	C	C5-C4-N4	-8.39	114.32	120.20
36	1	87	U	N1-C2-N3	8.39	119.93	114.90
36	1	2311	G	C6-C5-N7	-8.39	125.37	130.40
1	6	1083	G	C8-N9-C4	-8.39	103.04	106.40
1	2	1479	A	N1-C6-N6	8.39	123.63	118.60
36	1	1304	A	N1-C2-N3	-8.39	125.11	129.30
36	1	1508	C	N3-C4-C5	-8.39	118.55	121.90
36	1	3150	A	C4-C5-N7	8.39	114.89	110.70
36	1	1057	A	N1-C6-N6	8.39	123.63	118.60
1	6	1145	U	N1-C2-O2	-8.39	116.93	122.80
1	6	1456	C	O5'-P-OP2	8.39	120.76	110.70
36	5	2155	G	N1-C2-N3	8.39	128.93	123.90
36	5	2212	C	O5'-P-OP1	8.39	120.76	110.70
36	1	205	C	C4-C5-C6	8.38	121.59	117.40
36	1	938	C	OP1-P-O3'	8.38	123.64	105.20
36	5	802	C	C2-N3-C4	-8.38	115.71	119.90
36	5	1364	C	OP2-P-O3'	8.38	123.64	105.20
36	1	506	U	C4-C5-C6	8.38	124.73	119.70
36	1	2864	A	O5'-P-OP1	-8.38	98.16	105.70
36	5	188	U	N3-C2-O2	-8.38	116.33	122.20
36	5	1400	G	N3-C4-C5	-8.38	124.41	128.60
36	5	2844	C	C6-N1-C2	-8.38	116.95	120.30
36	5	3179	U	N1-C2-N3	8.38	119.93	114.90
36	5	1599	G	C8-N9-C4	8.38	109.75	106.40
36	5	3309	G	C8-N9-C1'	-8.38	116.10	127.00
1	6	41	A	C8-N9-C4	-8.38	102.45	105.80
1	6	1086	A	C8-N9-C4	-8.38	102.45	105.80
1	6	1542	G	C4-C5-N7	-8.38	107.45	110.80
36	5	3377	G	C5-C6-O6	-8.38	123.57	128.60
38	8	61	A	N1-C6-N6	-8.38	113.57	118.60
1	2	1190	C	C5-C6-N1	-8.38	116.81	121.00
36	1	424	G	C5-C6-N1	8.38	115.69	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	496	C	C5-C6-N1	8.38	125.19	121.00
36	1	585	A	C4-C5-C6	8.38	121.19	117.00
36	1	1328	C	C5-C4-N4	-8.38	114.34	120.20
36	1	2296	A	C5-C6-N1	-8.38	113.51	117.70
36	1	2378	C	O5'-P-OP2	8.38	120.75	110.70
36	1	2618	G	O5'-P-OP2	-8.38	98.16	105.70
36	1	3318	G	C4-N9-C1'	8.38	137.39	126.50
36	1	3390	G	O5'-P-OP1	-8.38	98.16	105.70
38	4	30	C	N3-C4-C5	8.38	125.25	121.90
1	6	1004	U	N1-C2-N3	8.38	119.92	114.90
36	1	1520	G	C6-C5-N7	-8.37	125.38	130.40
36	1	2872	A	O5'-P-OP2	8.37	120.75	110.70
36	1	2187	G	N9-C4-C5	8.37	108.75	105.40
36	1	2908	G	N7-C8-N9	8.37	117.29	113.10
36	1	2937	G	N3-C2-N2	-8.37	114.04	119.90
36	5	1307	G	C4-C5-N7	8.37	114.15	110.80
36	1	1432	C	N3-C4-C5	-8.37	118.55	121.90
36	5	931	C	N3-C4-C5	-8.37	118.55	121.90
36	5	2632	G	N1-C6-O6	8.37	124.92	119.90
36	1	3006	A	N1-C2-N3	8.37	133.48	129.30
36	5	1924	U	N3-C2-O2	8.37	128.06	122.20
36	5	2667	A	N1-C6-N6	-8.37	113.58	118.60
36	1	2364	G	O5'-P-OP1	-8.37	98.17	105.70
36	1	798	G	N1-C6-O6	8.36	124.92	119.90
36	1	2314	U	N1-C2-N3	-8.37	109.88	114.90
1	6	442	C	N1-C2-O2	-8.37	113.88	118.90
36	1	2874	G	C8-N9-C4	-8.36	103.05	106.40
36	5	1482	A	C5-C6-N6	-8.37	117.01	123.70
36	5	2923	U	OP1-P-O3'	8.37	123.60	105.20
37	7	84	A	C6-N1-C2	-8.37	113.58	118.60
37	7	92	A	C4-C5-N7	8.37	114.88	110.70
36	1	223	U	O5'-P-OP2	-8.36	98.17	105.70
36	1	2605	G	C5-C6-N1	-8.36	107.32	111.50
36	5	1150	A	C8-N9-C4	-8.36	102.45	105.80
36	5	2872	A	O5'-P-OP1	-8.36	98.17	105.70
37	7	35	C	C6-N1-C2	8.36	123.64	120.30
36	1	1466	G	N1-C6-O6	8.36	124.92	119.90
37	3	82	G	C6-N1-C2	-8.36	120.08	125.10
36	5	1418	A	O5'-P-OP1	-8.36	98.18	105.70
36	5	3218	A	C6-C5-N7	-8.36	126.45	132.30
36	1	229	G	C8-N9-C4	-8.36	103.06	106.40
36	1	1503	A	N1-C2-N3	8.36	133.48	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	998	A	C6-N1-C2	-8.36	113.58	118.60
38	8	27	U	O5'-P-OP1	-8.36	98.18	105.70
1	6	402	C	C2-N3-C4	-8.36	115.72	119.90
36	1	1556	C	C6-N1-C2	-8.35	116.96	120.30
36	1	1658	G	N1-C2-N2	8.35	123.72	116.20
36	1	2877	G	C8-N9-C1'	8.35	137.86	127.00
1	6	1540	G	N1-C6-O6	-8.35	114.89	119.90
36	5	433	A	N1-C6-N6	8.35	123.61	118.60
36	5	1114	U	OP2-P-O3'	8.35	123.57	105.20
36	1	2843	U	N1-C2-O2	8.35	128.64	122.80
36	1	3106	A	O5'-P-OP1	-8.35	98.19	105.70
37	3	36	C	C6-N1-C2	-8.35	116.96	120.30
36	5	867	G	C6-C5-N7	-8.35	125.39	130.40
36	5	1149	G	C8-N9-C4	-8.35	103.06	106.40
36	5	1923	C	N1-C2-O2	-8.35	113.89	118.90
37	7	58	C	O5'-P-OP2	-8.35	98.19	105.70
36	1	37	U	C5-C6-N1	-8.35	118.53	122.70
36	1	1160	C	N3-C4-C5	-8.35	118.56	121.90
36	1	2115	G	C5-C6-O6	-8.35	123.59	128.60
36	1	3216	G	C8-N9-C4	8.35	109.74	106.40
36	5	1181	U	N3-C2-O2	-8.35	116.36	122.20
36	5	3062	G	N1-C6-O6	8.35	124.91	119.90
36	1	2417	U	C2-N3-C4	-8.34	121.99	127.00
38	4	4	C	O5'-P-OP2	-8.34	98.19	105.70
1	6	1614	A	C5-N7-C8	-8.34	99.73	103.90
36	5	1847	A	N3-C4-N9	-8.34	120.72	127.40
36	1	628	A	OP2-P-O3'	8.34	123.55	105.20
36	1	1542	G	N9-C4-C5	-8.34	102.06	105.40
1	6	776	G	N1-C6-O6	8.34	124.90	119.90
1	6	1542	G	C5-N7-C8	8.34	108.47	104.30
36	5	1099	A	N9-C4-C5	-8.34	102.46	105.80
36	5	1292	C	N3-C2-O2	8.34	127.74	121.90
36	5	2703	A	C6-C5-N7	-8.34	126.46	132.30
36	5	2968	G	N3-C2-N2	-8.34	114.06	119.90
1	6	300	A	N1-C6-N6	-8.34	113.60	118.60
1	6	1112	G	N9-C4-C5	8.34	108.73	105.40
36	1	372	A	N7-C8-N9	8.34	117.97	113.80
36	1	608	A	N9-C4-C5	-8.34	102.47	105.80
36	1	651	G	C4-N9-C1'	8.34	137.34	126.50
36	1	1457	U	O5'-P-OP1	-8.34	98.20	105.70
36	1	2910	A	C2-N3-C4	-8.34	106.43	110.60
36	5	2190	U	N1-C2-N3	8.34	119.90	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2243	A	C2-N3-C4	8.34	114.77	110.60
36	1	1937	U	C5-C6-N1	-8.34	118.53	122.70
1	6	1107	G	N1-C6-O6	-8.34	114.90	119.90
36	5	595	G	N3-C2-N2	8.34	125.73	119.90
36	5	3088	G	N3-C2-N2	-8.34	114.06	119.90
36	1	719	U	O4'-C1'-N1	-8.33	101.53	108.20
36	1	2339	C	C6-N1-C2	-8.33	116.97	120.30
1	6	402	C	C5-C4-N4	-8.33	114.37	120.20
36	5	651	G	N3-C4-C5	-8.33	124.43	128.60
36	5	3144	G	O5'-P-OP2	8.33	120.70	110.70
36	5	3129	A	N3-C4-N9	-8.33	120.73	127.40
36	1	41	G	C8-N9-C1'	8.33	137.83	127.00
36	1	806	A	O5'-P-OP1	-8.33	98.20	105.70
36	1	1003	A	O5'-P-OP1	-8.33	98.20	105.70
36	1	2901	G	C4-C5-N7	-8.33	107.47	110.80
36	5	339	C	C5-C6-N1	-8.33	116.84	121.00
36	5	1834	U	N3-C4-C5	-8.33	109.60	114.60
36	5	2397	A	N1-C6-N6	8.33	123.60	118.60
38	8	53	A	C5-C6-N1	8.33	121.86	117.70
36	1	329	U	N1-C2-N3	8.33	119.90	114.90
36	1	1104	G	C8-N9-C4	-8.33	103.07	106.40
36	1	2331	C	C2-N1-C1'	8.33	127.96	118.80
36	1	2420	C	O5'-P-OP1	-8.33	98.20	105.70
36	1	2794	G	N3-C4-C5	-8.33	124.44	128.60
38	4	41	A	N3-C4-C5	-8.33	120.97	126.80
1	6	1003	A	C8-N9-C4	8.33	109.13	105.80
36	5	842	G	C4-C5-C6	-8.33	113.80	118.80
36	5	3146	G	N3-C4-N9	8.33	131.00	126.00
36	5	1319	G	C5-N7-C8	8.33	108.46	104.30
36	1	1349	G	N3-C4-C5	-8.32	124.44	128.60
36	1	1406	A	C5-C6-N6	-8.32	117.04	123.70
36	1	3219	G	O5'-P-OP2	-8.32	98.21	105.70
36	5	1422	G	C4-C5-N7	8.32	114.13	110.80
36	1	331	G	N3-C2-N2	-8.32	114.08	119.90
1	6	420	A	N1-C6-N6	8.32	123.59	118.60
36	5	2278	C	C2-N1-C1'	8.32	127.95	118.80
36	5	2902	A	C6-N1-C2	-8.32	113.61	118.60
36	5	2920	U	N3-C2-O2	-8.32	116.38	122.20
36	5	3147	G	C2-N3-C4	-8.32	107.74	111.90
38	8	133	G	N7-C8-N9	-8.32	108.94	113.10
36	1	1191	U	C5-C6-N1	-8.32	118.54	122.70
36	1	2419	A	C5-N7-C8	-8.32	99.74	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2887	A	C5-C6-N1	8.32	121.86	117.70
36	1	2139	A	N1-C2-N3	8.32	133.46	129.30
36	1	2912	G	C8-N9-C4	-8.32	103.07	106.40
36	5	961	C	C6-N1-C2	-8.32	116.97	120.30
1	2	334	G	C8-N9-C4	8.31	109.73	106.40
1	2	1077	C	C5-C6-N1	8.31	125.16	121.00
36	1	324	A	O5'-P-OP2	8.31	120.68	110.70
36	1	596	C	N1-C2-N3	8.31	125.02	119.20
36	1	2823	G	C2-N3-C4	-8.31	107.74	111.90
1	6	552	G	C5-C6-O6	-8.31	123.61	128.60
36	5	633	C	N3-C4-C5	8.31	125.23	121.90
36	5	992	A	C2-N3-C4	-8.31	106.44	110.60
36	5	3329	U	N3-C4-C5	-8.31	109.61	114.60
36	1	916	G	C6-N1-C2	-8.31	120.11	125.10
36	1	1488	G	N1-C6-O6	8.31	124.89	119.90
1	6	913	G	N1-C6-O6	8.31	124.89	119.90
1	6	1594	G	C5-C6-O6	-8.31	123.61	128.60
36	5	429	U	O5'-P-OP2	-8.31	98.22	105.70
36	5	1408	G	C4-C5-C6	8.31	123.79	118.80
36	5	2572	C	N1-C2-O2	8.31	123.89	118.90
36	1	1010	G	C8-N9-C4	8.31	109.72	106.40
36	1	2187	G	N1-C2-N3	8.31	128.88	123.90
1	6	608	U	N1-C2-O2	8.31	128.62	122.80
36	5	643	U	N1-C2-O2	8.31	128.62	122.80
36	1	2729	U	C5-C6-N1	-8.30	118.55	122.70
36	5	588	G	N3-C4-C5	-8.30	124.45	128.60
36	1	50	U	C6-N1-C2	-8.30	116.02	121.00
36	1	2895	G	C4-N9-C1'	8.30	137.29	126.50
36	5	2359	C	O5'-P-OP2	-8.30	98.23	105.70
36	1	2883	U	N1-C2-O2	8.30	128.61	122.80
1	6	983	A	C8-N9-C4	-8.30	102.48	105.80
36	5	555	U	N1-C2-O2	-8.30	116.99	122.80
36	5	639	G	C4-C5-C6	8.30	123.78	118.80
36	1	1046	A	C2-N3-C4	-8.30	106.45	110.60
36	1	2286	U	C5-C6-N1	-8.30	118.55	122.70
36	1	1446	A	N9-C4-C5	8.29	109.12	105.80
36	1	817	A	O5'-P-OP1	-8.29	98.24	105.70
36	1	943	U	O5'-P-OP1	-8.29	98.24	105.70
1	6	100	A	N1-C2-N3	8.29	133.45	129.30
1	6	765	G	N9-C4-C5	-8.29	102.08	105.40
36	5	555	U	N3-C2-O2	8.29	128.00	122.20
36	5	1085	A	C8-N9-C4	-8.29	102.48	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1139	G	C5-C6-O6	8.29	133.58	128.60
36	1	1507	G	C8-N9-C4	8.29	109.72	106.40
36	1	2185	G	N1-C6-O6	8.29	124.87	119.90
1	6	326	G	C4-C5-C6	8.29	123.77	118.80
36	5	588	G	C6-N1-C2	-8.29	120.13	125.10
36	5	636	C	C4-C5-C6	8.29	121.54	117.40
36	5	1138	U	C5-C6-N1	-8.29	118.56	122.70
36	1	1369	A	N1-C2-N3	8.29	133.44	129.30
1	6	967	A	N9-C4-C5	-8.29	102.49	105.80
1	6	1768	G	N3-C4-N9	-8.29	121.03	126.00
36	5	1212	A	C6-N1-C2	-8.29	113.63	118.60
36	1	1432	C	C6-N1-C2	-8.28	116.99	120.30
36	1	1720	U	C5-C4-O4	8.28	130.87	125.90
36	1	3209	A	C5-C6-N1	-8.28	113.56	117.70
1	6	678	A	C8-N9-C4	-8.28	102.49	105.80
36	5	3103	A	C2-N3-C4	-8.28	106.46	110.60
1	2	1082	C	C6-N1-C2	-8.28	116.99	120.30
36	1	2811	A	C5-C6-N1	8.28	121.84	117.70
36	5	367	A	C2-N3-C4	-8.28	106.46	110.60
36	5	1044	U	N1-C2-N3	8.28	119.87	114.90
36	5	1943	C	C6-N1-C2	-8.28	116.99	120.30
36	5	2626	A	N1-C2-N3	8.28	133.44	129.30
36	1	2334	U	OP1-P-O3'	8.28	123.41	105.20
36	1	2344	U	C5-C4-O4	8.28	130.87	125.90
36	1	25	U	N3-C4-O4	8.28	125.19	119.40
36	1	1840	U	N1-C2-N3	8.28	119.86	114.90
36	1	2182	A	C5-C6-N6	-8.28	117.08	123.70
1	6	106	U	C5-C4-O4	8.28	130.87	125.90
36	5	1080	A	C8-N9-C4	8.28	109.11	105.80
36	5	2136	C	C6-N1-C2	-8.28	116.99	120.30
36	5	2656	A	N1-C2-N3	8.28	133.44	129.30
36	5	1586	G	N1-C6-O6	-8.28	114.94	119.90
36	1	2241	U	C2-N1-C1'	-8.27	107.77	117.70
1	6	1420	C	N3-C2-O2	-8.27	116.11	121.90
37	3	30	G	C8-N9-C4	-8.27	103.09	106.40
36	5	3024	A	C2-N3-C4	-8.27	106.46	110.60
36	5	3055	U	C2-N3-C4	-8.27	122.04	127.00
36	5	3139	A	C6-N1-C2	-8.27	113.64	118.60
1	2	1146	G	N3-C4-N9	8.27	130.96	126.00
1	6	301	A	C5-C6-N1	8.27	121.83	117.70
1	2	1787	C	N3-C4-C5	8.27	125.21	121.90
36	1	1547	G	C6-C5-N7	-8.27	125.44	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3227	A	C4-C5-N7	8.27	114.83	110.70
36	1	2772	C	N1-C1'-C2'	8.27	124.75	114.00
36	5	647	A	C5-C6-N6	8.27	130.31	123.70
1	2	529	A	C8-N9-C4	8.27	109.11	105.80
36	5	676	G	O5'-P-OP1	-8.27	98.26	105.70
36	5	2174	G	O5'-P-OP1	-8.27	98.26	105.70
1	2	1143	A	O5'-P-OP2	-8.26	98.26	105.70
38	4	51	G	C5-C6-N1	-8.26	107.37	111.50
1	6	352	A	O5'-P-OP2	-8.26	98.26	105.70
36	5	2638	C	C5-C6-N1	8.26	125.13	121.00
36	5	3216	G	N1-C6-O6	-8.26	114.94	119.90
36	1	1412	G	C5-C6-N1	-8.26	107.37	111.50
36	1	289	A	O5'-P-OP1	-8.26	98.27	105.70
38	4	144	G	C8-N9-C4	8.26	109.70	106.40
1	6	335	U	C2-N1-C1'	8.26	127.61	117.70
36	5	2710	C	N1-C2-O2	-8.26	113.94	118.90
36	1	780	A	C5-C6-N6	8.26	130.31	123.70
38	4	40	A	C2-N3-C4	8.26	114.73	110.60
36	5	86	G	O4'-C1'-N9	8.26	114.81	108.20
36	5	1786	G	N7-C8-N9	8.26	117.23	113.10
36	5	2397	A	N3-C4-C5	8.26	132.58	126.80
37	7	24	A	N1-C6-N6	-8.26	113.64	118.60
36	1	2870	C	N3-C2-O2	8.26	127.68	121.90
37	3	26	C	N3-C2-O2	-8.26	116.12	121.90
1	6	1765	A	N1-C2-N3	8.26	133.43	129.30
36	5	209	A	C5-C6-N6	-8.26	117.09	123.70
36	1	85	A	C2-N3-C4	-8.26	106.47	110.60
36	1	2162	U	C5-C6-N1	-8.26	118.57	122.70
36	5	2136	C	N3-C4-N4	8.26	123.78	118.00
36	5	2673	A	N7-C8-N9	-8.26	109.67	113.80
36	5	3195	U	P-O3'-C3'	8.26	129.61	119.70
36	5	89	A	C2-N3-C4	-8.25	106.47	110.60
36	1	40	A	N9-C4-C5	8.25	109.10	105.80
36	1	975	C	N3-C4-C5	-8.25	118.60	121.90
37	3	97	A	N1-C6-N6	8.25	123.55	118.60
36	5	1186	G	O5'-P-OP2	-8.25	98.27	105.70
36	5	2631	U	OP2-P-O3'	8.25	123.35	105.20
36	1	1139	G	C4-N9-C1'	-8.25	115.77	126.50
36	1	693	A	O5'-P-OP2	8.25	120.60	110.70
36	1	3388	C	N3-C4-C5	8.25	125.20	121.90
36	5	1373	A	C5-N7-C8	-8.25	99.77	103.90
36	5	404	G	N1-C6-O6	8.25	124.85	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2377	G	C6-C5-N7	8.25	135.35	130.40
36	1	522	A	C2-N3-C4	-8.25	106.48	110.60
36	1	2899	C	C2-N3-C4	-8.25	115.78	119.90
1	6	922	G	C6-C5-N7	-8.25	125.45	130.40
36	1	3121	U	N3-C2-O2	-8.25	116.43	122.20
36	5	339	C	C2-N1-C1'	-8.25	109.73	118.80
36	5	2979	U	C5-C6-N1	-8.25	118.58	122.70
36	1	1127	G	OP1-P-OP2	8.24	131.97	119.60
36	1	1897	G	N7-C8-N9	8.24	117.22	113.10
36	5	868	C	N1-C2-O2	-8.24	113.95	118.90
36	1	1516	C	C4-C5-C6	8.24	121.52	117.40
36	1	2722	U	N3-C4-O4	8.24	125.17	119.40
1	6	962	C	N1-C2-O2	-8.24	113.95	118.90
1	6	1536	G	C4-N9-C1'	8.24	137.22	126.50
36	1	2120	A	N1-C6-N6	-8.24	113.66	118.60
36	1	2572	C	C6-N1-C2	-8.24	117.00	120.30
36	5	1840	U	C2-N3-C4	-8.24	122.05	127.00
37	7	88	G	C6-N1-C2	-8.24	120.15	125.10
1	2	1761	U	C6-N1-C2	-8.24	116.06	121.00
38	4	38	U	N3-C2-O2	-8.24	116.43	122.20
36	5	394	G	C4-C5-N7	-8.24	107.50	110.80
36	1	2813	A	N9-C4-C5	8.24	109.10	105.80
1	6	1143	A	N1-C6-N6	8.24	123.54	118.60
36	5	874	U	N1-C2-O2	-8.24	117.03	122.80
36	5	2197	C	C5-C4-N4	-8.24	114.43	120.20
36	1	1346	G	O5'-P-OP2	-8.24	98.29	105.70
36	1	3344	A	C2-N3-C4	-8.24	106.48	110.60
37	3	87	G	N3-C2-N2	-8.24	114.13	119.90
36	1	424	G	N3-C4-N9	8.24	130.94	126.00
1	6	1070	C	N3-C4-C5	8.24	125.19	121.90
36	5	71	A	C5-N7-C8	8.24	108.02	103.90
36	5	1373	A	C4-C5-N7	8.24	114.82	110.70
36	1	52	A	C4-C5-N7	-8.23	106.58	110.70
36	1	1313	G	N3-C4-C5	8.23	132.72	128.60
36	1	2376	G	OP1-P-OP2	8.23	131.95	119.60
36	1	3050	U	C5-C4-O4	8.23	130.84	125.90
36	1	3311	C	C6-N1-C2	8.23	123.59	120.30
36	5	433	A	C6-C5-N7	-8.23	126.54	132.30
36	5	2187	G	N1-C2-N3	8.23	128.84	123.90
36	1	227	G	C4-N9-C1'	8.23	137.20	126.50
1	6	946	U	C5-C6-N1	8.23	126.82	122.70
71	o5	36	LEU	CA-CB-CG	8.23	134.24	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	322	U	N3-C2-O2	-8.23	116.44	122.20
36	1	1166	G	C2-N3-C4	-8.23	107.78	111.90
38	4	20	U	C2-N3-C4	-8.23	122.06	127.00
1	6	1655	A	C8-N9-C4	-8.23	102.51	105.80
36	5	1593	A	O5'-P-OP2	-8.23	98.30	105.70
36	5	2303	A	C4-C5-N7	8.23	114.81	110.70
37	3	92	A	N1-C6-N6	8.23	123.54	118.60
1	6	1663	G	N3-C4-C5	8.23	132.71	128.60
36	1	357	A	C6-N1-C2	-8.22	113.67	118.60
36	1	1408	G	C4-C5-N7	8.22	114.09	110.80
36	1	304	G	N1-C6-O6	-8.22	114.97	119.90
36	1	357	A	N1-C6-N6	-8.22	113.67	118.60
36	1	676	G	N3-C4-N9	8.22	130.94	126.00
36	1	1533	U	N1-C2-N3	8.22	119.83	114.90
36	1	2772	C	O4'-C1'-N1	8.22	114.78	108.20
36	5	760	G	N1-C6-O6	8.22	124.83	119.90
1	6	473	A	N1-C6-N6	-8.22	113.67	118.60
36	5	644	G	C5-N7-C8	8.22	108.41	104.30
36	5	3387	U	C4-C5-C6	8.22	124.64	119.70
36	5	645	A	O5'-P-OP1	-8.22	98.30	105.70
36	5	707	U	C6-N1-C2	-8.22	116.07	121.00
36	5	2149	A	C8-N9-C4	8.22	109.09	105.80
36	1	40	A	C5-C6-N6	8.22	130.28	123.70
1	6	427	C	C6-N1-C2	8.22	123.59	120.30
36	1	92	G	C5-C6-O6	-8.22	123.67	128.60
36	1	2639	G	N1-C2-N2	8.22	123.60	116.20
36	1	2916	U	N1-C2-N3	-8.22	109.97	114.90
36	5	371	G	N3-C4-C5	8.22	132.71	128.60
36	5	531	G	C4-N9-C1'	8.22	137.19	126.50
36	5	3177	G	N1-C2-N2	-8.22	108.80	116.20
36	1	1136	A	C5-N7-C8	8.22	108.01	103.90
37	7	52	G	C8-N9-C4	8.22	109.69	106.40
1	6	424	C	O5'-P-OP2	-8.22	98.31	105.70
1	6	1284	C	C4-C5-C6	8.22	121.51	117.40
36	5	609	G	C6-N1-C2	8.22	130.03	125.10
36	5	2610	G	C8-N9-C1'	8.22	137.68	127.00
36	1	667	C	C2-N3-C4	8.22	124.01	119.90
36	1	780	A	C6-N1-C2	-8.21	113.67	118.60
36	1	857	G	C8-N9-C4	-8.21	103.11	106.40
36	1	3181	C	N1-C2-N3	8.21	124.95	119.20
1	6	1137	A	O4'-C1'-N9	-8.21	101.63	108.20
1	6	1409	G	O5'-P-OP1	-8.21	98.31	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2428	U	C2-N3-C4	-8.21	122.07	127.00
36	5	2656	A	C5-C6-N6	8.22	130.27	123.70
36	5	2659	G	C2-N3-C4	-8.21	107.79	111.90
1	2	515	A	C8-N9-C4	-8.21	102.52	105.80
1	2	1782	A	N7-C8-N9	8.21	117.91	113.80
1	6	1645	G	C2-N3-C4	8.21	116.01	111.90
36	5	1514	G	N3-C4-N9	8.21	130.93	126.00
36	5	1694	U	N1-C2-O2	-8.21	117.05	122.80
36	5	1874	A	C5-C6-N1	-8.21	113.59	117.70
36	5	2993	G	N7-C8-N9	8.21	117.21	113.10
36	1	375	A	N1-C6-N6	8.21	123.53	118.60
36	1	643	U	O5'-P-OP2	-8.21	98.31	105.70
1	6	1556	A	N9-C4-C5	-8.21	102.52	105.80
36	5	672	A	O5'-P-OP2	-8.21	98.31	105.70
36	5	1608	C	C2-N1-C1'	8.21	127.83	118.80
36	5	3216	G	C5-C6-N1	8.21	115.60	111.50
1	6	1000	C	N3-C2-O2	-8.21	116.16	121.90
36	5	1224	C	C6-N1-C2	-8.21	117.02	120.30
36	5	2393	G	C5-N7-C8	-8.21	100.20	104.30
36	1	1607	U	P-O3'-C3'	8.20	129.54	119.70
36	5	2632	G	C4-C5-N7	8.21	114.08	110.80
36	1	2377	G	C5-C6-N1	8.20	115.60	111.50
38	4	40	A	C8-N9-C4	-8.20	102.52	105.80
36	5	649	A	C5-C6-N6	-8.20	117.14	123.70
36	1	2879	C	N3-C4-N4	8.20	123.74	118.00
1	6	349	U	N3-C2-O2	-8.20	116.46	122.20
36	5	2908	G	N7-C8-N9	8.20	117.20	113.10
36	5	1172	G	C4-N9-C1'	8.20	137.16	126.50
36	5	1695	U	O5'-P-OP1	-8.20	98.32	105.70
36	5	2720	G	OP2-P-O3'	8.20	123.24	105.20
36	5	595	G	N3-C4-N9	8.20	130.92	126.00
36	5	1333	C	C2-N1-C1'	8.20	127.82	118.80
36	5	2105	G	C5-C6-O6	-8.20	123.68	128.60
36	5	2741	C	C2-N3-C4	8.20	124.00	119.90
36	1	2641	U	N3-C4-O4	-8.20	113.66	119.40
1	6	1540	G	C5-C6-O6	8.20	133.52	128.60
36	1	1514	G	C8-N9-C4	-8.20	103.12	106.40
36	1	2969	A	C2-N3-C4	-8.20	106.50	110.60
36	1	3307	A	O5'-P-OP1	8.20	120.53	110.70
1	6	1590	G	C5-C6-N1	8.20	115.60	111.50
36	1	1585	C	N1-C2-N3	-8.19	113.46	119.20
36	5	2400	G	C5-N7-C8	-8.20	100.20	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2662	G	C4-C5-C6	8.20	123.72	118.80
1	2	1337	A	O5'-P-OP2	-8.19	98.33	105.70
36	1	2129	U	N1-C2-O2	8.19	128.53	122.80
36	5	2280	A	C4-C5-N7	8.19	114.80	110.70
36	1	19	U	N1-C2-N3	8.19	119.81	114.90
36	1	1339	C	N1-C2-O2	-8.19	113.99	118.90
37	7	43	U	N3-C4-O4	-8.19	113.67	119.40
36	5	91	G	C4-C5-N7	8.19	114.08	110.80
36	5	864	G	N3-C4-N9	8.19	130.91	126.00
36	5	916	G	N3-C4-N9	8.19	130.91	126.00
36	1	1146	C	C2-N3-C4	8.19	123.99	119.90
36	5	2638	C	C2-N3-C4	8.19	123.99	119.90
36	5	2653	C	N1-C2-O2	-8.19	113.99	118.90
36	5	2887	A	C2-N3-C4	8.19	114.69	110.60
36	5	3208	G	C6-C5-N7	-8.19	125.49	130.40
1	6	1642	G	O5'-P-OP2	-8.19	98.33	105.70
36	5	2893	C	C2-N3-C4	8.19	123.99	119.90
36	1	2121	G	C5-C6-O6	8.18	133.51	128.60
36	5	644	G	N1-C6-O6	-8.18	114.99	119.90
36	5	2855	U	N1-C2-O2	-8.18	117.07	122.80
36	5	3209	A	O4'-C1'-N9	8.18	114.75	108.20
1	2	1654	G	N3-C4-C5	-8.18	124.51	128.60
36	1	326	U	N3-C4-O4	8.18	125.12	119.40
38	4	94	C	N1-C2-N3	-8.18	113.47	119.20
37	3	99	G	N9-C4-C5	8.18	108.67	105.40
36	5	1530	U	N3-C2-O2	8.18	127.92	122.20
36	1	622	A	C5-N7-C8	-8.18	99.81	103.90
36	1	913	A	C6-C5-N7	-8.18	126.58	132.30
36	1	929	A	C4-C5-N7	8.18	114.79	110.70
36	1	3055	U	C5-C4-O4	-8.18	120.99	125.90
69	O3	21	ARG	NE-CZ-NH1	8.18	124.39	120.30
36	5	2623	G	N9-C4-C5	-8.18	102.13	105.40
36	1	1136	A	C6-N1-C2	-8.17	113.69	118.60
36	1	1559	A	N1-C6-N6	8.17	123.50	118.60
36	1	2855	U	C5-C6-N1	-8.17	118.61	122.70
38	8	31	G	N1-C6-O6	-8.17	115.00	119.90
36	1	3135	U	C2-N3-C4	-8.17	122.10	127.00
1	6	453	U	N3-C2-O2	-8.17	116.48	122.20
36	5	585	A	OP2-P-O3'	8.17	123.18	105.20
36	5	2934	A	C4-C5-N7	8.17	114.79	110.70
36	5	2952	G	C6-C5-N7	-8.17	125.50	130.40
36	1	813	G	C4-C5-N7	8.17	114.07	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1525	G	C4-N9-C1'	8.17	137.12	126.50
1	6	453	U	N1-C2-O2	8.17	128.52	122.80
36	5	1301	A	C8-N9-C4	-8.17	102.53	105.80
36	5	1408	G	N1-C2-N3	8.17	128.80	123.90
36	5	2793	G	N3-C4-N9	-8.17	121.10	126.00
36	5	2808	A	C8-N9-C4	-8.17	102.53	105.80
36	5	3393	U	C2-N3-C4	-8.17	122.10	127.00
36	5	3268	A	O4'-C1'-N9	-8.17	101.67	108.20
36	1	276	U	O5'-P-OP1	-8.17	98.35	105.70
36	1	1487	G	N9-C4-C5	8.17	108.67	105.40
36	5	1059	G	C4-C5-N7	-8.17	107.53	110.80
36	5	1185	C	OP1-P-OP2	-8.17	107.35	119.60
36	1	2418	G	C2-N3-C4	8.16	115.98	111.90
1	2	1438	G	C2-N3-C4	-8.16	107.82	111.90
36	1	1217	A	O5'-P-OP2	-8.16	98.35	105.70
36	1	2867	C	C5-C6-N1	8.16	125.08	121.00
37	3	92	A	C5-C6-N1	-8.16	113.62	117.70
36	5	1902	G	C5-C6-O6	-8.16	123.70	128.60
36	5	2122	G	C5-C6-O6	-8.16	123.70	128.60
36	5	2854	U	N3-C2-O2	-8.16	116.48	122.20
36	1	644	G	N9-C4-C5	8.16	108.67	105.40
36	1	2764	C	C5-C6-N1	8.16	125.08	121.00
36	5	561	C	N3-C4-C5	-8.16	118.64	121.90
36	5	1408	G	C8-N9-C1'	-8.16	116.39	127.00
36	1	960	U	C2-N3-C4	-8.16	122.10	127.00
36	5	831	G	N1-C6-O6	8.16	124.80	119.90
37	7	45	A	O5'-P-OP2	-8.16	98.36	105.70
37	7	92	A	C5-N7-C8	-8.16	99.82	103.90
36	1	1425	U	C5-C6-N1	-8.16	118.62	122.70
36	1	2132	C	N1-C2-O2	-8.16	114.00	118.90
1	6	1542	G	C5-C6-O6	8.16	133.50	128.60
36	5	1495	U	N3-C2-O2	-8.16	116.49	122.20
36	1	1508	C	C4-C5-C6	8.16	121.48	117.40
36	1	2394	G	N9-C4-C5	8.16	108.66	105.40
36	5	2199	G	C8-N9-C1'	-8.16	116.40	127.00
36	5	2422	C	C5-C6-N1	-8.16	116.92	121.00
36	1	922	U	O5'-P-OP1	-8.15	98.36	105.70
36	1	1307	G	N1-C6-O6	-8.15	115.01	119.90
36	1	2828	G	N1-C6-O6	-8.15	115.01	119.90
36	1	2790	A	O5'-P-OP2	-8.15	98.36	105.70
1	6	1624	C	C6-N1-C2	8.15	123.56	120.30
36	5	423	A	C4-C5-C6	8.15	121.08	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1514	G	C8-N9-C1'	-8.15	116.40	127.00
36	1	3293	U	C2-N1-C1'	-8.15	107.92	117.70
36	5	2377	G	C4-C5-C6	-8.15	113.91	118.80
36	5	3102	G	O5'-P-OP1	-8.15	98.36	105.70
36	1	866	A	C2-N3-C4	-8.15	106.53	110.60
36	1	1442	U	C5-C4-O4	-8.15	121.01	125.90
36	5	3322	A	N1-C6-N6	8.15	123.49	118.60
36	1	2639	G	C8-N9-C4	-8.15	103.14	106.40
1	6	1278	G	C4-C5-C6	8.15	123.69	118.80
36	1	796	U	C5-C4-O4	-8.15	121.01	125.90
36	1	2639	G	C5-N7-C8	-8.15	100.23	104.30
1	6	341	A	N1-C6-N6	-8.15	113.71	118.60
36	5	2382	G	N3-C4-C5	8.15	132.67	128.60
36	5	2632	G	O5'-P-OP2	-8.15	98.37	105.70
36	1	979	U	P-O3'-C3'	8.14	129.47	119.70
36	5	971	G	N1-C2-N3	8.14	128.79	123.90
36	1	2193	U	C5-C6-N1	-8.14	118.63	122.70
1	6	1787	C	N1-C2-N3	8.14	124.90	119.20
36	5	1912	U	C6-N1-C2	8.14	125.89	121.00
36	5	2392	C	C6-N1-C2	8.14	123.56	120.30
36	1	1604	G	C4-N9-C1'	8.14	137.09	126.50
38	4	18	U	N3-C2-O2	-8.14	116.50	122.20
1	6	1668	G	N1-C6-O6	8.14	124.78	119.90
1	2	1413	U	C5-C6-N1	8.14	126.77	122.70
36	1	495	G	N3-C4-C5	8.14	132.67	128.60
1	6	971	A	C2-N3-C4	-8.14	106.53	110.60
36	1	802	C	N3-C2-O2	-8.14	116.20	121.90
36	1	904	A	C2-N3-C4	-8.14	106.53	110.60
36	1	1210	U	N3-C2-O2	-8.14	116.50	122.20
36	1	1905	G	C2-N3-C4	-8.14	107.83	111.90
36	1	2197	C	N1-C2-N3	-8.14	113.50	119.20
36	1	2760	C	O5'-P-OP2	-8.14	98.38	105.70
36	1	856	G	N3-C4-C5	-8.13	124.53	128.60
36	5	910	G	O5'-P-OP2	-8.13	98.38	105.70
36	5	920	A	C5-C6-N1	-8.13	113.63	117.70
36	5	2665	U	N3-C4-C5	8.14	119.48	114.60
36	1	1178	G	C5-C6-N1	8.13	115.57	111.50
36	1	1883	A	C8-N9-C4	8.13	109.05	105.80
1	6	554	C	N3-C4-C5	8.13	125.15	121.90
36	5	404	G	C4-C5-C6	8.13	123.68	118.80
36	1	2403	G	OP2-P-O3'	8.13	123.09	105.20
37	7	1	G	N7-C8-N9	8.13	117.17	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1321	G	C2-N3-C4	-8.13	107.83	111.90
36	1	1482	A	C5-C6-N6	-8.13	117.20	123.70
36	5	965	A	C5-C6-N6	-8.13	117.20	123.70
36	5	2824	G	C4-C5-N7	8.13	114.05	110.80
36	1	2376	G	C5-N7-C8	-8.13	100.24	104.30
36	1	2628	A	N7-C8-N9	8.13	117.86	113.80
36	1	3142	A	N9-C4-C5	8.13	109.05	105.80
36	5	2684	C	N3-C2-O2	-8.13	116.21	121.90
37	7	1	G	C4-N9-C1'	8.13	137.07	126.50
36	1	517	G	C8-N9-C4	-8.13	103.15	106.40
36	1	609	G	C5-C6-O6	-8.13	123.72	128.60
36	1	907	G	N3-C4-C5	-8.12	124.54	128.60
36	5	927	C	O5'-P-OP1	-8.13	98.39	105.70
36	5	1353	U	O4'-C1'-N1	8.12	114.70	108.20
36	5	2411	U	O5'-P-OP2	-8.12	98.39	105.70
36	5	2895	G	C6-C5-N7	-8.12	125.53	130.40
36	1	229	G	N9-C4-C5	8.12	108.65	105.40
36	1	1144	U	N3-C4-O4	8.12	125.08	119.40
36	1	2150	G	C5-C6-N1	-8.12	107.44	111.50
36	5	728	G	OP2-P-O3'	8.12	123.07	105.20
36	5	2352	A	O5'-P-OP2	-8.12	98.39	105.70
1	2	49	C	N3-C4-C5	-8.12	118.65	121.90
36	5	372	A	C5-C6-N6	8.12	130.20	123.70
36	5	1408	G	N9-C4-C5	-8.12	102.15	105.40
36	1	2332	A	N1-C6-N6	8.12	123.47	118.60
1	6	356	G	N3-C4-N9	8.12	130.87	126.00
36	5	1408	G	N1-C6-O6	8.12	124.77	119.90
36	1	639	G	N1-C6-O6	8.12	124.77	119.90
36	1	887	G	C5-C6-O6	-8.11	123.73	128.60
36	1	1448	U	N1-C2-O2	-8.12	117.12	122.80
36	1	1894	U	N1-C2-O2	-8.12	117.12	122.80
36	1	2827	U	C6-N1-C1'	8.11	132.56	121.20
1	6	251	A	N1-C6-N6	8.11	123.47	118.60
36	5	776	U	C5-C6-N1	-8.11	118.64	122.70
36	5	1330	A	N9-C4-C5	-8.11	102.56	105.80
36	5	1408	G	N1-C2-N2	-8.11	108.90	116.20
36	5	2615	G	N3-C2-N2	-8.11	114.22	119.90
36	5	2897	A	C6-C5-N7	-8.11	126.62	132.30
36	1	906	A	C8-N9-C4	-8.11	102.56	105.80
36	1	1495	U	C2-N1-C1'	-8.11	107.97	117.70
36	5	1150	A	C5-C6-N1	8.11	121.75	117.70
36	5	2991	A	N3-C4-C5	-8.11	121.12	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1537	C	C4-C5-C6	-8.11	113.35	117.40
36	1	2889	C	C2-N3-C4	8.11	123.95	119.90
1	6	1112	G	N3-C4-N9	-8.11	121.14	126.00
36	5	1370	G	C6-N1-C2	-8.11	120.23	125.10
36	1	838	G	C2-N3-C4	-8.11	107.85	111.90
36	1	2122	G	C5-N7-C8	-8.11	100.25	104.30
36	1	1898	G	C2-N3-C4	8.11	115.95	111.90
36	1	2198	A	N1-C2-N3	8.11	133.35	129.30
36	1	2874	G	N3-C4-N9	8.11	130.86	126.00
1	6	316	A	O5'-P-OP1	-8.11	98.41	105.70
1	6	1524	A	N9-C4-C5	8.10	109.04	105.80
36	5	2983	C	O5'-P-OP1	-8.10	98.41	105.70
1	2	1778	G	C2-N3-C4	8.10	115.95	111.90
36	1	419	G	C6-N1-C2	-8.10	120.24	125.10
36	1	2353	G	C4-C5-N7	8.10	114.04	110.80
36	1	2572	C	N3-C2-O2	-8.10	116.23	121.90
36	1	2756	C	C6-N1-C2	-8.10	117.06	120.30
38	4	12	A	O5'-P-OP1	-8.10	98.41	105.70
36	5	562	C	N3-C4-C5	8.10	125.14	121.90
36	5	3271	G	C8-N9-C1'	-8.10	116.46	127.00
36	5	1898	G	C6-C5-N7	8.10	135.26	130.40
36	5	881	C	C2-N3-C4	8.10	123.95	119.90
1	6	6	G	N1-C6-O6	8.10	124.76	119.90
1	6	1101	G	N1-C2-N3	8.10	128.76	123.90
36	5	1905	G	C4-C5-N7	-8.10	107.56	110.80
36	5	3314	A	N1-C2-N3	8.10	133.35	129.30
37	7	56	A	C5-N7-C8	-8.10	99.85	103.90
36	1	978	G	C5-C6-O6	-8.10	123.74	128.60
36	1	1439	U	N3-C2-O2	-8.10	116.53	122.20
36	1	3262	U	C6-N1-C2	-8.10	116.14	121.00
1	6	566	C	C5-C6-N1	-8.10	116.95	121.00
36	5	651	G	N3-C4-N9	8.10	130.86	126.00
36	5	2181	C	N3-C2-O2	8.10	127.57	121.90
36	1	591	G	N3-C4-N9	8.09	130.86	126.00
1	6	597	G	C5-C6-O6	-8.09	123.74	128.60
1	6	636	A	C5-N7-C8	8.09	107.95	103.90
46	19	129	ARG	NE-CZ-NH1	8.09	124.35	120.30
36	5	1852	G	C5-N7-C8	-8.09	100.25	104.30
36	1	292	U	C5-C6-N1	-8.09	118.66	122.70
36	5	679	U	C5-C4-O4	8.09	130.75	125.90
36	5	1148	G	C4-C5-C6	8.09	123.65	118.80
36	1	2956	A	C8-N9-C4	-8.09	102.56	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3208	G	N9-C4-C5	-8.09	102.16	105.40
37	3	91	G	C8-N9-C4	-8.09	103.16	106.40
1	6	321	C	C2-N1-C1'	8.09	127.70	118.80
36	1	2875	U	N3-C4-C5	-8.09	109.75	114.60
38	4	20	U	C5-C6-N1	-8.09	118.66	122.70
36	5	1755	C	C5-C6-N1	8.09	125.04	121.00
36	5	3050	U	C4-C5-C6	8.09	124.55	119.70
36	5	656	A	C6-N1-C2	-8.09	113.75	118.60
36	5	2698	G	N3-C4-C5	8.09	132.64	128.60
36	1	41	G	O4'-C1'-N9	8.08	114.67	108.20
36	1	2610	G	O5'-P-OP1	8.08	120.40	110.70
36	1	30	G	C5-C6-N1	8.08	115.54	111.50
36	1	57	A	C4-C5-C6	8.08	121.04	117.00
36	1	2172	A	N1-C6-N6	8.08	123.45	118.60
36	1	2624	G	N1-C6-O6	8.08	124.75	119.90
36	1	2819	A	C5-C6-N1	8.08	121.74	117.70
36	1	2827	U	N3-C4-C5	-8.08	109.75	114.60
1	6	388	G	C2-N3-C4	-8.08	107.86	111.90
1	6	1778	G	C6-N1-C2	-8.08	120.25	125.10
7	s5	92	ARG	NE-CZ-NH1	8.08	124.34	120.30
36	5	51	A	C6-C5-N7	-8.08	126.64	132.30
36	5	1386	A	C8-N9-C4	-8.08	102.57	105.80
36	5	2837	A	C8-N9-C4	8.08	109.03	105.80
36	5	3376	A	C6-N1-C2	-8.08	113.75	118.60
37	7	10	C	N1-C2-O2	8.08	123.75	118.90
1	6	1019	A	C8-N9-C4	8.08	109.03	105.80
1	6	1580	C	O5'-P-OP1	-8.08	98.43	105.70
36	5	591	G	N3-C4-N9	8.08	130.85	126.00
37	7	102	A	C4-C5-N7	8.08	114.74	110.70
36	1	399	A	C4-C5-C6	-8.08	112.96	117.00
36	1	1449	A	C2-N3-C4	8.08	114.64	110.60
1	6	583	C	C5-C6-N1	8.08	125.04	121.00
36	5	1903	U	OP1-P-OP2	-8.08	107.48	119.60
36	1	697	A	N7-C8-N9	-8.08	109.76	113.80
36	1	2606	G	N1-C2-N2	-8.08	108.93	116.20
36	1	1905	G	OP2-P-O3'	8.08	122.97	105.20
36	1	2811	A	C8-N9-C4	-8.08	102.57	105.80
36	5	651	G	C4-C5-C6	8.08	123.65	118.80
36	5	1592	G	C4-C5-C6	8.08	123.65	118.80
36	5	3387	U	N3-C4-C5	-8.08	109.75	114.60
46	19	129	ARG	NE-CZ-NH2	-8.08	116.26	120.30
36	1	264	G	C4-C5-N7	-8.07	107.57	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2605	G	N3-C4-N9	-8.07	121.16	126.00
1	6	1476	C	C6-N1-C2	-8.07	117.07	120.30
1	6	1650	U	N3-C4-O4	8.07	125.05	119.40
36	1	2702	A	O4'-C1'-N9	-8.07	101.74	108.20
1	6	1145	U	N3-C4-O4	8.07	125.05	119.40
36	5	2635	A	C8-N9-C4	-8.07	102.57	105.80
36	5	371	G	C6-C5-N7	8.07	135.24	130.40
36	5	2858	U	N3-C4-C5	-8.07	109.76	114.60
36	5	1375	G	N3-C4-N9	8.07	130.84	126.00
36	5	1434	G	C5-N7-C8	-8.07	100.27	104.30
36	5	1080	A	N7-C8-N9	-8.07	109.77	113.80
36	5	2597	U	N3-C2-O2	-8.07	116.55	122.20
1	2	1490	C	C2-N1-C1'	8.07	127.67	118.80
36	1	939	U	N3-C4-O4	8.07	125.05	119.40
36	1	1907	C	C5-C6-N1	-8.07	116.97	121.00
36	5	1120	A	N1-C2-N3	8.07	133.33	129.30
36	5	2350	C	O5'-P-OP2	-8.07	98.44	105.70
36	1	102	C	OP2-P-O3'	8.06	122.94	105.20
36	1	583	G	C6-C5-N7	8.06	135.24	130.40
1	6	779	U	N1-C2-O2	8.06	128.45	122.80
1	6	1479	A	N1-C6-N6	8.06	123.44	118.60
36	1	93	C	C5-C6-N1	8.06	125.03	121.00
36	1	421	G	N3-C4-C5	-8.06	124.57	128.60
36	1	1119	C	N3-C4-C5	-8.06	118.67	121.90
36	5	2635	A	C2-N3-C4	8.06	114.63	110.60
38	8	19	C	O5'-P-OP2	-8.06	98.44	105.70
36	1	592	A	C4-C5-N7	8.06	114.73	110.70
1	6	804	A	N1-C6-N6	8.06	123.44	118.60
36	5	860	G	C5-C6-O6	-8.06	123.76	128.60
36	5	2423	U	O5'-P-OP2	-8.06	98.44	105.70
1	2	49	C	C6-N1-C2	-8.06	117.08	120.30
1	2	1272	U	N3-C4-C5	-8.06	109.76	114.60
36	1	2289	U	N3-C2-O2	-8.06	116.56	122.20
36	1	2939	G	C6-N1-C2	-8.06	120.26	125.10
36	1	3145	C	N3-C4-C5	-8.06	118.68	121.90
1	6	765	G	C8-N9-C4	8.06	109.62	106.40
1	6	1004	U	C5-C6-N1	-8.06	118.67	122.70
1	6	1525	A	C5-C6-N1	8.06	121.73	117.70
1	6	1584	G	N1-C6-O6	8.06	124.74	119.90
1	6	1753	A	C5-C6-N1	8.06	121.73	117.70
36	1	1610	G	N1-C6-O6	8.06	124.73	119.90
36	1	2908	G	C5-N7-C8	-8.06	100.27	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3062	G	C5-C6-O6	-8.06	123.77	128.60
36	5	339	C	N1-C2-O2	-8.06	114.06	118.90
36	5	569	A	N1-C6-N6	8.06	123.43	118.60
36	5	877	C	C6-N1-C2	8.06	123.52	120.30
36	5	1099	A	C8-N9-C4	8.06	109.02	105.80
36	1	2423	U	N3-C4-C5	-8.06	109.77	114.60
36	5	430	U	C5-C6-N1	-8.05	118.67	122.70
36	5	2876	C	N3-C2-O2	-8.05	116.26	121.90
36	1	193	C	N3-C4-N4	8.05	123.64	118.00
36	1	710	A	N1-C6-N6	8.05	123.43	118.60
36	1	1333	C	N1-C2-O2	-8.05	114.07	118.90
36	1	2257	C	C6-N1-C2	-8.05	117.08	120.30
36	5	3314	A	C4-C5-C6	8.05	121.03	117.00
36	5	1148	G	C8-N9-C1'	-8.05	116.53	127.00
36	5	1148	G	N9-C4-C5	-8.05	102.18	105.40
36	5	3050	U	N1-C2-N3	8.05	119.73	114.90
36	1	2899	C	N3-C2-O2	-8.05	116.27	121.90
36	5	1910	A	N1-C6-N6	8.05	123.43	118.60
36	5	2303	A	N9-C4-C5	-8.05	102.58	105.80
36	5	2318	U	C6-N1-C2	8.05	125.83	121.00
36	1	394	G	C4-C5-N7	-8.05	107.58	110.80
36	1	1450	G	N3-C2-N2	-8.04	114.27	119.90
1	6	449	C	N1-C2-O2	8.05	123.73	118.90
36	5	3111	U	N1-C2-O2	8.05	128.43	122.80
36	1	2701	U	C4-C5-C6	8.04	124.53	119.70
36	1	2826	U	N3-C4-O4	-8.04	113.77	119.40
36	5	2309	A	N1-C2-N3	8.04	133.32	129.30
36	5	2602	G	N1-C6-O6	8.04	124.73	119.90
36	5	2828	G	OP2-P-O3'	8.04	122.90	105.20
36	5	2836	C	C4-C5-C6	8.04	121.42	117.40
37	7	5	G	C5-C6-N1	8.05	115.52	111.50
37	7	14	U	C5-C6-N1	-8.04	118.68	122.70
38	8	138	A	N1-C2-N3	8.04	133.32	129.30
1	2	577	G	C5-C6-O6	-8.04	123.78	128.60
36	1	927	C	OP2-P-O3'	8.04	122.90	105.20
36	1	609	G	C8-N9-C1'	-8.04	116.55	127.00
36	1	2696	A	O5'-P-OP2	-8.04	98.46	105.70
36	1	2979	U	O4'-C1'-N1	8.04	114.63	108.20
38	4	28	C	C6-N1-C2	-8.04	117.08	120.30
1	6	1456	C	C6-N1-C2	-8.04	117.08	120.30
36	5	877	C	N3-C4-C5	8.04	125.12	121.90
36	5	1124	U	OP2-P-O3'	8.04	122.89	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1368	U	N3-C2-O2	8.04	127.83	122.20
36	5	1374	G	C2-N3-C4	-8.04	107.88	111.90
36	5	2908	G	C8-N9-C4	-8.04	103.18	106.40
1	6	175	G	C6-C5-N7	-8.04	125.58	130.40
1	2	311	U	N3-C2-O2	-8.04	116.57	122.20
36	1	1431	G	C5-C6-N1	8.04	115.52	111.50
36	5	3024	A	N3-C4-C5	8.04	132.43	126.80
36	5	3144	G	C6-C5-N7	-8.04	125.58	130.40
36	1	2802	A	C2-N3-C4	-8.04	106.58	110.60
38	4	9	A	O5'-P-OP1	8.04	120.34	110.70
1	6	1284	C	N3-C4-C5	-8.03	118.69	121.90
36	5	645	A	C5-C6-N1	8.04	121.72	117.70
36	5	2799	A	C8-N9-C4	-8.04	102.59	105.80
36	5	3124	G	N7-C8-N9	8.04	117.12	113.10
36	1	2953	U	C4-C5-C6	8.03	124.52	119.70
36	1	70	A	C6-N1-C2	-8.03	113.78	118.60
36	1	1192	C	C2-N3-C4	8.03	123.92	119.90
36	1	1194	G	C8-N9-C4	-8.03	103.19	106.40
1	2	1584	G	C8-N9-C4	8.03	109.61	106.40
36	1	680	G	N1-C6-O6	8.03	124.72	119.90
36	1	797	U	OP1-P-OP2	8.03	131.65	119.60
36	1	88	A	C8-N9-C4	8.03	109.01	105.80
36	1	1116	G	C8-N9-C4	-8.03	103.19	106.40
36	1	1345	G	N7-C8-N9	8.03	117.11	113.10
36	5	710	A	C8-N9-C4	-8.03	102.59	105.80
36	1	2331	C	N3-C2-O2	-8.03	116.28	121.90
36	1	3288	G	N3-C4-C5	8.03	132.61	128.60
38	4	52	A	N1-C2-N3	8.03	133.31	129.30
36	5	1793	C	C6-N1-C1'	-8.03	111.17	120.80
36	5	2927	C	C5-C4-N4	-8.03	114.58	120.20
36	5	3308	C	N3-C2-O2	-8.03	116.28	121.90
36	5	3382	U	N1-C2-O2	8.03	128.42	122.80
36	1	38	U	O5'-P-OP1	-8.02	98.48	105.70
36	1	1417	G	C4-C5-N7	8.02	114.01	110.80
36	5	565	U	C5-C6-N1	-8.02	118.69	122.70
36	5	1546	A	C6-N1-C2	-8.02	113.79	118.60
36	1	669	U	O5'-P-OP2	-8.02	98.48	105.70
36	1	2112	U	P-O3'-C3'	8.02	129.33	119.70
36	1	2406	C	N3-C4-C5	-8.02	118.69	121.90
36	1	3188	G	C8-N9-C4	8.02	109.61	106.40
1	6	940	A	N1-C6-N6	-8.02	113.79	118.60
1	6	1212	G	N1-C6-O6	-8.02	115.09	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	353	G	N3-C4-N9	-8.02	121.19	126.00
36	5	2774	C	C6-N1-C2	-8.02	117.09	120.30
36	5	2757	U	N1-C2-N3	8.02	119.71	114.90
1	2	1212	G	C5-C6-O6	-8.02	123.79	128.60
36	1	2288	G	O5'-P-OP1	-8.02	98.48	105.70
36	1	2325	G	C4-C5-C6	8.02	123.61	118.80
1	6	140	A	N7-C8-N9	8.02	117.81	113.80
1	6	423	G	N3-C4-N9	-8.02	121.19	126.00
1	6	633	U	N1-C2-N3	8.02	119.71	114.90
36	5	816	A	C5-N7-C8	8.02	107.91	103.90
36	5	1152	G	O5'-P-OP1	-8.02	98.48	105.70
36	5	3227	A	C6-C5-N7	-8.02	126.69	132.30
36	1	595	G	C8-N9-C1'	-8.02	116.58	127.00
36	1	2330	C	N3-C2-O2	-8.02	116.29	121.90
36	5	2404	A	C8-N9-C4	-8.02	102.59	105.80
36	1	1500	G	C8-N9-C4	8.02	109.61	106.40
36	5	3172	A	N1-C6-N6	8.02	123.41	118.60
36	1	637	C	P-O3'-C3'	8.01	129.31	119.70
36	5	631	U	O5'-P-OP1	8.01	120.32	110.70
36	5	874	U	C4-C5-C6	8.01	124.51	119.70
36	5	2778	G	N1-C2-N2	8.01	123.41	116.20
1	6	14	C	C6-N1-C2	-8.01	117.09	120.30
36	5	1535	A	N1-C6-N6	-8.01	113.79	118.60
36	5	1894	U	C2-N3-C4	-8.01	122.19	127.00
1	2	969	C	C6-N1-C2	-8.01	117.10	120.30
1	6	1178	G	N1-C6-O6	-8.01	115.09	119.90
36	5	1128	U	C2-N3-C4	-8.01	122.19	127.00
38	8	142	C	C6-N1-C2	-8.01	117.09	120.30
36	1	356	C	N3-C4-N4	8.01	123.61	118.00
36	1	2994	A	N1-C2-N3	8.01	133.30	129.30
38	4	31	G	C8-N9-C4	8.01	109.60	106.40
36	5	1473	G	C8-N9-C4	8.01	109.60	106.40
36	5	2692	A	N1-C6-N6	-8.01	113.80	118.60
36	5	2703	A	O5'-P-OP1	-8.01	98.49	105.70
36	5	2741	C	N3-C4-C5	-8.01	118.70	121.90
36	5	3335	A	C2-N3-C4	-8.01	106.59	110.60
37	7	99	G	N9-C4-C5	8.01	108.60	105.40
36	1	2772	C	N1-C2-O2	8.01	123.70	118.90
36	1	3228	C	O5'-P-OP2	-8.01	98.49	105.70
1	6	1191	U	C6-N1-C2	-8.01	116.19	121.00
36	1	594	U	C5-C6-N1	-8.01	118.70	122.70
36	1	1313	G	N3-C4-N9	-8.01	121.20	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1453	A	C4-C5-C6	8.01	121.00	117.00
36	1	2399	A	C5-C6-N1	8.01	121.70	117.70
36	5	677	A	C5-N7-C8	-8.01	99.90	103.90
36	5	1116	G	OP1-P-OP2	8.01	131.61	119.60
36	5	1182	A	O5'-P-OP2	-8.01	98.49	105.70
36	5	1851	G	N7-C8-N9	8.01	117.10	113.10
36	5	1900	A	C5-N7-C8	-8.01	99.90	103.90
36	5	2333	C	C6-N1-C2	8.01	123.50	120.30
36	5	2334	U	C2-N3-C4	-8.01	122.20	127.00
36	1	1139	G	C8-N9-C1'	8.00	137.41	127.00
36	1	1202	A	N1-C6-N6	8.00	123.40	118.60
37	3	88	G	C5-C6-N1	8.00	115.50	111.50
1	2	615	A	N1-C6-N6	-8.00	113.80	118.60
36	1	1807	G	C5-C6-O6	-8.00	123.80	128.60
36	1	1926	C	O5'-P-OP2	-8.00	98.50	105.70
1	6	359	A	N1-C2-N3	-8.00	125.30	129.30
1	6	1498	G	C6-C5-N7	-8.00	125.60	130.40
36	5	321	C	C2-N1-C1'	8.00	127.60	118.80
36	5	935	U	C2-N1-C1'	8.00	127.30	117.70
36	5	1902	G	C8-N9-C1'	-8.00	116.60	127.00
36	5	2944	U	N1-C2-N3	8.00	119.70	114.90
36	1	1169	A	N1-C6-N6	-8.00	113.80	118.60
36	1	1180	A	N7-C8-N9	-8.00	109.80	113.80
36	1	1358	C	C6-N1-C2	-8.00	117.10	120.30
36	1	1789	G	N1-C6-O6	-8.00	115.10	119.90
36	5	507	U	N3-C4-C5	-8.00	109.80	114.60
36	5	646	A	C5-C6-N6	8.00	130.10	123.70
36	5	2863	G	C2-N3-C4	-8.00	107.90	111.90
36	1	92	G	N9-C4-C5	-8.00	102.20	105.40
1	6	1577	A	C2-N3-C4	-8.00	106.60	110.60
36	5	1010	G	C4-C5-N7	8.00	114.00	110.80
36	5	2929	C	N3-C4-C5	8.00	125.10	121.90
37	7	49	G	C5-C6-O6	-8.00	123.80	128.60
36	1	1497	C	N3-C4-C5	-7.99	118.70	121.90
36	5	1050	U	C4-C5-C6	7.99	124.50	119.70
36	5	1111	U	C6-N1-C2	7.99	125.80	121.00
36	5	3285	C	C6-N1-C1'	-7.99	111.21	120.80
38	8	4	C	N1-C2-N3	7.99	124.80	119.20
1	6	1025	A	C5-C6-N6	-7.99	117.31	123.70
36	5	2926	A	N1-C2-N3	7.99	133.30	129.30
36	1	981	U	C5-C6-N1	7.99	126.70	122.70
1	6	1445	G	N3-C4-C5	7.99	132.59	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2978	U	N3-C2-O2	-7.99	116.61	122.20
36	5	3265	C	N1-C2-O2	-7.99	114.11	118.90
36	1	1306	G	C5-N7-C8	-7.99	100.31	104.30
36	1	3260	G	C6-C5-N7	-7.99	125.61	130.40
1	6	866	G	C5-C6-O6	-7.99	123.81	128.60
1	6	1536	G	C8-N9-C1'	-7.99	116.61	127.00
36	5	1194	G	C5-N7-C8	-7.99	100.31	104.30
1	6	1614	A	C4-C5-N7	7.99	114.69	110.70
36	1	2391	G	C8-N9-C4	7.99	109.59	106.40
36	5	45	A	C2-N3-C4	-7.99	106.61	110.60
36	5	2352	A	C5-C6-N1	7.99	121.69	117.70
37	7	101	G	C5-C6-N1	-7.99	107.51	111.50
36	1	1153	A	C4-C5-C6	7.98	120.99	117.00
36	1	3172	A	O5'-P-OP2	-7.98	98.52	105.70
1	6	1768	G	N1-C6-O6	7.98	124.69	119.90
36	5	2122	G	N3-C4-C5	7.98	132.59	128.60
36	5	2793	G	N3-C4-C5	7.98	132.59	128.60
36	5	2936	A	C5-C6-N6	-7.98	117.31	123.70
36	1	936	A	N1-C2-N3	-7.98	125.31	129.30
36	5	874	U	C5-C4-O4	7.98	130.69	125.90
36	5	1344	G	N3-C2-N2	-7.98	114.31	119.90
36	5	1433	A	C4-C5-C6	7.98	120.99	117.00
36	5	1914	G	C8-N9-C4	-7.98	103.21	106.40
37	7	45	A	C5-C6-N6	7.98	130.08	123.70
36	1	2421	U	N1-C2-N3	7.98	119.69	114.90
1	6	1592	A	C2-N3-C4	-7.98	106.61	110.60
36	5	2940	A	N1-C6-N6	7.98	123.39	118.60
1	2	1761	U	C5-C4-O4	7.98	130.69	125.90
36	1	1148	G	C5-C6-N1	7.98	115.49	111.50
36	1	2780	A	C8-N9-C4	7.98	108.99	105.80
1	6	864	U	C6-N1-C2	-7.98	116.21	121.00
36	1	18	G	N3-C2-N2	-7.97	114.32	119.90
37	3	69	C	C6-N1-C2	-7.97	117.11	120.30
38	4	110	C	C6-N1-C2	7.97	123.49	120.30
1	6	1523	G	N3-C4-C5	-7.97	124.61	128.60
36	5	1613	A	O5'-P-OP2	-7.97	98.52	105.70
36	1	1177	G	N3-C4-N9	7.97	130.78	126.00
38	4	46	G	N3-C4-N9	7.97	130.78	126.00
36	5	2872	A	C6-C5-N7	7.97	137.88	132.30
37	7	10	C	C6-N1-C1'	-7.97	111.23	120.80
36	5	2351	U	N3-C2-O2	-7.97	116.62	122.20
36	1	1161	G	N3-C4-C5	-7.97	124.61	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2190	U	N1-C2-N3	7.97	119.68	114.90
36	1	2940	A	N1-C6-N6	-7.97	113.82	118.60
1	6	120	U	N1-C2-N3	7.97	119.68	114.90
1	6	431	C	C2-N1-C1'	-7.97	110.03	118.80
36	5	206	G	C2-N3-C4	7.97	115.89	111.90
36	5	728	G	C4-C5-N7	7.97	113.99	110.80
36	5	796	U	C2-N1-C1'	7.97	127.26	117.70
36	5	2166	A	C2-N3-C4	-7.97	106.61	110.60
36	5	3004	C	N1-C2-O2	-7.97	114.12	118.90
36	5	1523	U	C5-C4-O4	-7.97	121.12	125.90
36	1	349	A	N9-C4-C5	7.97	108.99	105.80
36	1	1325	U	O5'-P-OP2	-7.97	98.53	105.70
36	1	2371	G	C6-N1-C2	-7.97	120.32	125.10
36	5	957	C	N3-C4-C5	-7.97	118.71	121.90
36	5	1374	G	N3-C4-N9	-7.97	121.22	126.00
36	5	2905	U	OP2-P-O3'	7.97	122.72	105.20
36	5	3026	G	C4-C5-C6	7.97	123.58	118.80
36	1	645	A	N1-C6-N6	-7.96	113.82	118.60
36	1	714	G	C8-N9-C4	7.96	109.59	106.40
36	1	2703	A	C4-C5-N7	-7.96	106.72	110.70
36	1	3060	C	C6-N1-C2	7.96	123.48	120.30
38	4	1	A	C8-N9-C4	7.96	108.99	105.80
1	6	1604	U	C6-N1-C2	-7.96	116.22	121.00
1	6	1750	A	O5'-P-OP2	-7.96	98.53	105.70
36	5	845	G	C5-C6-O6	7.96	133.38	128.60
36	5	1147	G	C6-C5-N7	-7.96	125.62	130.40
36	5	2971	A	N9-C4-C5	7.96	108.99	105.80
38	8	122	U	C6-N1-C2	-7.96	116.22	121.00
36	1	1379	G	N1-C2-N3	7.96	128.68	123.90
36	5	2986	U	N3-C4-O4	7.96	124.97	119.40
1	2	1615	C	C2-N1-C1'	7.96	127.56	118.80
36	1	2659	G	N1-C6-O6	7.96	124.68	119.90
36	1	2811	A	C4-N9-C1'	7.96	140.63	126.30
1	6	1623	C	C6-N1-C2	-7.96	117.12	120.30
36	5	529	A	O5'-P-OP2	7.96	120.25	110.70
36	5	755	A	O5'-P-OP1	-7.96	98.53	105.70
36	5	803	C	C2-N1-C1'	7.96	127.56	118.80
36	5	2684	C	N1-C2-N3	7.96	124.77	119.20
36	5	3229	G	N3-C2-N2	7.96	125.47	119.90
38	8	31	G	C4-C5-N7	-7.96	107.61	110.80
36	1	873	C	N3-C4-N4	7.96	123.57	118.00
36	5	2644	C	N3-C4-C5	-7.96	118.72	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	57	A	C2-N3-C4	-7.96	106.62	110.60
1	6	1027	A	N1-C2-N3	7.96	133.28	129.30
36	5	3124	G	C2-N3-C4	-7.96	107.92	111.90
36	1	1505	C	OP2-P-O3'	7.96	122.70	105.20
36	1	2871	G	N7-C8-N9	7.96	117.08	113.10
36	5	1303	A	C5-N7-C8	-7.96	99.92	103.90
37	7	26	C	N3-C4-N4	7.96	123.57	118.00
1	2	453	U	C2-N1-C1'	7.96	127.25	117.70
36	5	2116	G	N7-C8-N9	7.96	117.08	113.10
36	5	3067	C	C2-N3-C4	-7.96	115.92	119.90
37	7	85	G	C5-N7-C8	-7.96	100.32	104.30
1	2	1460	A	N1-C6-N6	-7.95	113.83	118.60
36	1	2121	G	C6-C5-N7	7.95	135.17	130.40
36	1	2138	A	C4-C5-C6	7.95	120.98	117.00
1	6	1121	C	N1-C2-O2	7.95	123.67	118.90
1	6	1351	G	N1-C6-O6	-7.95	115.13	119.90
36	5	776	U	N3-C2-O2	-7.95	116.63	122.20
36	1	1313	G	C5-N7-C8	-7.95	100.33	104.30
36	1	3328	G	C5-C6-O6	-7.95	123.83	128.60
36	5	1506	A	N1-C6-N6	-7.95	113.83	118.60
36	5	2789	U	N3-C2-O2	7.95	127.77	122.20
36	1	236	G	O5'-P-OP2	-7.95	98.55	105.70
36	1	342	A	C5-C6-N1	-7.95	113.72	117.70
36	1	1725	C	N3-C4-C5	-7.95	118.72	121.90
36	5	2283	G	C8-N9-C4	7.95	109.58	106.40
37	7	40	C	C6-N1-C2	7.95	123.48	120.30
36	5	884	A	C4-C5-C6	7.95	120.97	117.00
36	5	2874	G	C4-C5-N7	-7.95	107.62	110.80
36	5	3122	A	OP2-P-O3'	7.95	122.68	105.20
36	1	719	U	N3-C2-O2	7.95	127.76	122.20
36	5	1001	G	O5'-P-OP2	7.95	120.23	110.70
1	2	342	C	C4-C5-C6	7.94	121.37	117.40
1	2	1299	G	N3-C4-N9	7.94	130.76	126.00
36	1	1115	G	O5'-P-OP2	-7.94	98.55	105.70
36	1	1145	G	O5'-P-OP2	-7.94	98.55	105.70
36	1	1412	G	C6-C5-N7	-7.94	125.63	130.40
36	1	1803	C	C6-N1-C2	7.94	123.48	120.30
52	M6	125	ARG	NE-CZ-NH1	-7.94	116.33	120.30
36	5	507	U	N3-C4-O4	7.94	124.96	119.40
36	5	2665	U	C4-C5-C6	-7.94	114.94	119.70
36	1	639	G	C6-C5-N7	-7.94	125.64	130.40
36	1	1196	C	O5'-P-OP1	-7.94	98.55	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2887	A	OP2-P-O3'	7.94	122.67	105.20
36	5	1054	A	N7-C8-N9	-7.94	109.83	113.80
36	1	645	A	O5'-P-OP1	-7.94	98.56	105.70
36	1	2422	C	N3-C4-N4	-7.94	112.44	118.00
36	1	2950	G	O4'-C1'-N9	7.94	114.55	108.20
36	1	3001	C	C6-N1-C2	7.94	123.48	120.30
1	6	789	A	N1-C6-N6	-7.94	113.84	118.60
36	5	371	G	C8-N9-C1'	7.94	137.32	127.00
65	n9	23	LYS	C-N-CD	7.94	145.07	128.40
1	2	111	U	C2-N1-C1'	7.94	127.22	117.70
36	1	1377	G	C6-C5-N7	-7.94	125.64	130.40
36	1	1907	C	C4-C5-C6	7.94	121.37	117.40
36	1	2634	U	N3-C2-O2	-7.94	116.64	122.20
36	5	798	G	C5-C6-N1	-7.94	107.53	111.50
36	5	2702	A	N1-C2-N3	7.94	133.27	129.30
36	1	86	G	O5'-P-OP1	7.94	120.22	110.70
36	1	1635	G	C6-C5-N7	-7.94	125.64	130.40
37	3	93	C	C5-C6-N1	-7.94	117.03	121.00
36	5	1130	A	C2-N3-C4	7.94	114.57	110.60
36	5	2411	U	C2-N3-C4	-7.94	122.24	127.00
36	1	104	G	C4-C5-N7	7.93	113.97	110.80
36	1	766	U	C6-N1-C2	-7.93	116.24	121.00
36	1	888	A	O5'-P-OP1	-7.93	98.56	105.70
36	1	1604	G	C8-N9-C4	-7.93	103.23	106.40
36	1	3208	G	N1-C2-N2	-7.93	109.06	116.20
36	5	595	G	C4-C5-C6	7.93	123.56	118.80
36	5	934	G	C6-C5-N7	-7.93	125.64	130.40
36	5	1049	C	C5-C6-N1	7.93	124.97	121.00
36	5	3096	C	OP2-P-O3'	7.93	122.66	105.20
36	1	860	G	C4-C5-N7	7.93	113.97	110.80
36	5	200	C	C6-N1-C1'	-7.93	111.28	120.80
1	6	1107	G	C5-C6-O6	7.93	133.36	128.60
36	1	955	U	O5'-P-OP2	-7.93	98.56	105.70
1	6	142	G	N1-C6-O6	-7.93	115.14	119.90
1	6	1572	G	O5'-P-OP2	-7.93	98.56	105.70
37	7	35	C	N3-C4-C5	7.93	125.07	121.90
36	1	2819	A	O5'-P-OP2	-7.93	98.56	105.70
36	5	776	U	C4-C5-C6	7.93	124.46	119.70
36	5	1608	C	O5'-P-OP1	-7.93	98.56	105.70
36	1	1168	U	OP2-P-O3'	7.93	122.64	105.20
36	1	1393	A	N9-C4-C5	7.93	108.97	105.80
36	5	832	G	C4-C5-N7	-7.93	107.63	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1840	U	N3-C4-C5	7.93	119.36	114.60
36	5	2893	C	O5'-P-OP1	-7.93	98.56	105.70
36	1	585	A	N9-C4-C5	7.92	108.97	105.80
36	1	1115	G	C4-N9-C1'	7.92	136.80	126.50
36	1	1725	C	C6-N1-C2	-7.92	117.13	120.30
37	3	78	U	C6-N1-C2	-7.92	116.25	121.00
1	6	1050	G	N3-C4-N9	-7.92	121.25	126.00
1	6	1524	A	N7-C8-N9	7.92	117.76	113.80
1	6	1537	C	C2-N3-C4	7.92	123.86	119.90
1	6	1604	U	N3-C4-C5	-7.92	109.84	114.60
36	5	1453	A	N1-C2-N3	7.92	133.26	129.30
36	5	3078	U	N3-C2-O2	-7.92	116.65	122.20
36	1	718	G	N3-C4-C5	7.92	132.56	128.60
1	6	405	C	C6-N1-C2	-7.92	117.13	120.30
36	5	2986	U	N1-C2-O2	-7.92	117.25	122.80
1	2	50	C	N1-C2-O2	7.92	123.65	118.90
36	1	2874	G	C8-N9-C1'	-7.92	116.70	127.00
1	6	1594	G	N1-C6-O6	7.92	124.65	119.90
36	5	920	A	C2-N3-C4	-7.92	106.64	110.60
36	5	1537	A	C5-C6-N1	-7.92	113.74	117.70
36	5	3207	U	C6-N1-C1'	7.92	132.29	121.20
36	1	838	G	N3-C4-C5	7.92	132.56	128.60
36	1	1385	C	C2-N1-C1'	-7.92	110.09	118.80
36	1	2633	U	C5-C4-O4	7.92	130.65	125.90
36	5	1136	A	C6-N1-C2	-7.92	113.85	118.60
36	5	2981	U	N1-C2-N3	7.92	119.65	114.90
36	1	1880	U	C5-C6-N1	-7.92	118.74	122.70
36	1	1149	G	C4-N9-C1'	7.92	136.79	126.50
36	1	1720	U	C6-N1-C2	-7.92	116.25	121.00
38	4	12	A	C6-C5-N7	-7.92	126.76	132.30
1	6	1002	G	N3-C4-N9	-7.92	121.25	126.00
36	5	2895	G	N3-C4-C5	-7.92	124.64	128.60
36	5	3009	G	O5'-P-OP2	-7.92	98.58	105.70
36	1	587	U	N1-C2-O2	-7.92	117.26	122.80
36	5	3115	C	C2-N1-C1'	-7.92	110.09	118.80
1	2	561	G	N1-C6-O6	7.91	124.65	119.90
36	1	913	A	N1-C6-N6	7.91	123.35	118.60
38	4	53	A	N3-C4-C5	-7.91	121.26	126.80
36	5	2746	A	C2-N3-C4	-7.91	106.64	110.60
36	5	2841	G	C5-C6-O6	7.91	133.35	128.60
36	1	877	C	N1-C2-O2	7.91	123.65	118.90
1	6	209	U	N1-C2-O2	-7.91	117.26	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	35	A	N1-C2-N3	7.91	133.26	129.30
36	5	71	A	C4-C5-N7	-7.91	106.74	110.70
36	5	2877	G	N3-C4-N9	7.91	130.75	126.00
36	1	331	G	C4-C5-N7	-7.91	107.64	110.80
36	1	1363	A	N1-C6-N6	7.91	123.35	118.60
36	1	1413	G	C8-N9-C4	7.91	109.56	106.40
1	6	1528	U	N3-C2-O2	-7.91	116.66	122.20
36	5	588	G	N3-C4-N9	7.91	130.75	126.00
36	1	224	C	C5-C6-N1	7.91	124.95	121.00
36	1	979	U	C5-C4-O4	7.91	130.65	125.90
36	1	1501	U	C2-N1-C1'	7.91	127.19	117.70
36	1	3278	C	N3-C2-O2	-7.91	116.36	121.90
36	5	1134	G	C4-C5-N7	-7.91	107.64	110.80
1	6	1753	A	C6-N1-C2	-7.91	113.86	118.60
36	5	2388	U	C6-N1-C2	7.91	125.74	121.00
36	1	2759	U	N1-C2-O2	7.91	128.33	122.80
36	5	755	A	C2-N3-C4	-7.91	106.65	110.60
36	5	1845	G	N3-C4-N9	7.91	130.74	126.00
1	6	1393	C	N3-C4-C5	-7.90	118.74	121.90
36	5	848	A	C6-C5-N7	-7.90	126.77	132.30
37	7	84	A	O5'-P-OP1	-7.90	98.59	105.70
36	1	3127	A	N1-C2-N3	7.90	133.25	129.30
36	1	3176	G	C5-C6-O6	-7.90	123.86	128.60
52	m6	28	LEU	CB-CG-CD1	-7.90	97.56	111.00
36	1	41	G	C2-N3-C4	7.90	115.85	111.90
1	6	1129	U	C5-C4-O4	7.90	130.64	125.90
36	5	714	G	O5'-P-OP1	-7.90	98.59	105.70
36	5	2199	G	N3-C2-N2	-7.90	114.37	119.90
36	5	1924	U	N1-C2-O2	-7.90	117.27	122.80
36	1	2607	G	O5'-P-OP1	-7.90	98.59	105.70
36	5	857	G	N3-C2-N2	-7.90	114.37	119.90
36	1	1371	G	C8-N9-C4	7.89	109.56	106.40
36	1	2362	C	N1-C2-O2	7.89	123.64	118.90
36	1	2661	G	N1-C6-O6	7.89	124.64	119.90
36	1	2838	A	C2-N3-C4	-7.89	106.65	110.60
36	1	2882	U	N3-C4-O4	-7.89	113.87	119.40
1	6	43	A	N9-C4-C5	-7.89	102.64	105.80
1	6	96	G	C6-C5-N7	-7.89	125.66	130.40
1	6	1158	C	C2-N1-C1'	7.89	127.48	118.80
36	5	1399	A	C5-N7-C8	-7.89	99.95	103.90
36	5	2409	G	OP1-P-OP2	7.89	131.44	119.60
36	5	3020	U	N1-C2-O2	-7.89	117.27	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3344	A	N1-C6-N6	7.89	123.33	118.60
1	6	233	C	C6-N1-C2	-7.89	117.14	120.30
1	6	415	C	N3-C4-N4	-7.89	112.48	118.00
36	5	1198	C	N1-C2-O2	7.89	123.64	118.90
36	5	1295	G	C5-N7-C8	-7.89	100.35	104.30
36	1	1608	C	C6-N1-C2	-7.89	117.14	120.30
36	1	2283	G	C4-C5-N7	7.89	113.96	110.80
36	1	2811	A	N3-C4-N9	7.89	133.71	127.40
36	1	2823	G	OP1-P-O3'	7.89	122.56	105.20
36	1	3186	A	N9-C4-C5	7.89	108.96	105.80
36	1	1120	A	N1-C2-N3	7.89	133.24	129.30
1	6	1212	G	C5-C6-N1	7.89	115.44	111.50
36	5	643	U	N3-C2-O2	-7.89	116.68	122.20
36	5	973	A	N1-C6-N6	7.89	123.33	118.60
36	5	1158	A	O5'-P-OP1	7.89	120.17	110.70
36	5	2908	G	C4-C5-N7	7.89	113.95	110.80
38	8	13	A	C8-N9-C4	7.89	108.95	105.80
1	2	1757	G	C4-N9-C1'	7.89	136.75	126.50
36	1	419	G	N7-C8-N9	-7.89	109.16	113.10
36	1	2167	A	C5-C6-N1	-7.89	113.76	117.70
36	1	3098	G	C6-N1-C2	-7.89	120.37	125.10
36	5	1325	U	C5-C6-N1	-7.89	118.76	122.70
36	5	2572	C	C2-N1-C1'	7.89	127.48	118.80
1	2	415	C	C6-N1-C2	7.88	123.45	120.30
36	1	226	C	N3-C2-O2	7.88	127.42	121.90
36	1	351	A	C2-N3-C4	-7.88	106.66	110.60
36	5	2635	A	C5-C6-N1	7.88	121.64	117.70
36	5	3044	G	N1-C6-O6	7.88	124.63	119.90
36	5	3223	A	N1-C6-N6	-7.88	113.87	118.60
38	8	119	C	C6-N1-C2	7.88	123.45	120.30
1	6	876	G	N3-C2-N2	-7.88	114.38	119.90
36	5	703	G	N1-C6-O6	7.88	124.63	119.90
36	5	1152	G	C8-N9-C4	-7.88	103.25	106.40
36	5	2400	G	C8-N9-C4	-7.88	103.25	106.40
1	6	126	A	C8-N9-C4	7.88	108.95	105.80
1	6	575	C	C5-C6-N1	-7.88	117.06	121.00
36	5	2382	G	C4-N9-C1'	-7.88	116.25	126.50
1	2	830	U	N3-C2-O2	-7.88	116.68	122.20
1	6	1090	C	N3-C4-N4	-7.88	112.48	118.00
36	1	1099	A	N1-C6-N6	7.88	123.33	118.60
36	5	1300	G	C8-N9-C4	7.88	109.55	106.40
36	5	2838	A	N1-C6-N6	-7.88	113.87	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	15	U	N1-C2-O2	7.88	128.31	122.80
36	1	751	A	N9-C4-C5	7.88	108.95	105.80
36	1	1607	U	N3-C4-O4	-7.88	113.89	119.40
36	5	585	A	OP1-P-O3'	-7.88	87.87	105.20
36	5	1386	A	C2-N3-C4	-7.88	106.66	110.60
37	7	92	A	C5-C6-N6	-7.88	117.40	123.70
1	6	1758	U	N3-C4-O4	7.88	124.91	119.40
1	6	1537	C	C6-N1-C1'	7.87	130.25	120.80
36	5	57	A	O5'-P-OP1	7.87	120.15	110.70
36	5	503	C	C5-C6-N1	-7.87	117.06	121.00
1	2	1215	C	N3-C2-O2	-7.87	116.39	121.90
36	1	1624	G	C4-C5-N7	7.87	113.95	110.80
36	5	640	U	N3-C4-O4	7.87	124.91	119.40
36	5	2852	C	N1-C2-O2	7.87	123.62	118.90
36	5	1108	U	N1-C2-N3	7.87	119.62	114.90
36	5	2123	G	N1-C6-O6	-7.87	115.18	119.90
36	5	3049	A	C5-C6-N1	-7.87	113.77	117.70
36	1	983	A	N1-C6-N6	7.87	123.32	118.60
36	1	2987	A	C2-N3-C4	7.87	114.53	110.60
36	1	3172	A	C8-N9-C4	-7.87	102.65	105.80
36	1	3319	U	C2-N1-C1'	7.87	127.14	117.70
1	6	1661	U	C5-C6-N1	-7.87	118.77	122.70
36	5	345	G	C4-N9-C1'	7.87	136.73	126.50
36	5	405	U	O5'-P-OP1	-7.87	98.62	105.70
36	5	1871	U	C5-C6-N1	7.87	126.63	122.70
36	5	2942	C	C6-N1-C1'	7.87	130.24	120.80
36	1	580	C	N3-C4-C5	7.87	125.05	121.90
1	2	551	G	N3-C4-N9	-7.87	121.28	126.00
1	2	1774	G	N3-C4-N9	7.87	130.72	126.00
36	1	1907	C	N3-C2-O2	-7.87	116.39	121.90
36	1	2944	U	O5'-P-OP2	7.87	120.14	110.70
37	3	75	G	N3-C4-N9	-7.87	121.28	126.00
36	5	2939	G	N3-C2-N2	-7.87	114.39	119.90
36	1	3246	G	C8-N9-C4	-7.86	103.25	106.40
36	5	1166	G	C5-C6-O6	-7.86	123.88	128.60
36	5	1433	A	C6-C5-N7	-7.86	126.80	132.30
36	1	1887	A	N9-C4-C5	-7.86	102.66	105.80
36	1	2762	A	C5-C6-N1	7.86	121.63	117.70
36	1	2765	C	N3-C2-O2	-7.86	116.40	121.90
36	5	795	G	N1-C6-O6	-7.86	115.18	119.90
36	1	1337	A	C5-C6-N6	-7.86	117.41	123.70
36	1	2199	G	O5'-P-OP1	-7.86	98.63	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3188	G	C2-N3-C4	7.86	115.83	111.90
1	2	1148	C	C6-N1-C2	-7.86	117.16	120.30
36	1	696	C	C5-C6-N1	7.86	124.93	121.00
36	1	2736	A	C2-N3-C4	-7.86	106.67	110.60
36	5	423	A	C6-N1-C2	-7.86	113.89	118.60
36	5	3025	C	C5-C6-N1	-7.86	117.07	121.00
1	2	18	C	C6-N1-C2	-7.86	117.16	120.30
1	2	1600	A	N9-C4-C5	-7.86	102.66	105.80
36	1	1224	C	C2-N1-C1'	7.86	127.44	118.80
36	5	788	C	C6-N1-C2	-7.86	117.16	120.30
36	1	932	U	N3-C4-C5	7.85	119.31	114.60
36	1	2664	C	C5-C6-N1	7.85	124.93	121.00
36	5	521	A	N9-C4-C5	7.85	108.94	105.80
36	1	394	G	C5-C6-O6	7.85	133.31	128.60
36	1	2572	C	C2-N1-C1'	7.85	127.44	118.80
36	1	2808	A	N1-C6-N6	7.85	123.31	118.60
36	5	2816	G	C5-C6-O6	-7.85	123.89	128.60
36	5	2857	C	N3-C2-O2	-7.85	116.40	121.90
36	1	400	G	N3-C4-N9	-7.85	121.29	126.00
36	1	3086	A	N1-C2-N3	7.85	133.22	129.30
36	5	2139	A	C4-C5-N7	-7.85	106.78	110.70
1	2	351	C	N3-C4-N4	-7.85	112.51	118.00
36	1	395	A	C8-N9-C4	-7.85	102.66	105.80
36	1	936	A	O5'-P-OP2	-7.85	98.64	105.70
36	1	1307	G	C6-N1-C2	-7.85	120.39	125.10
36	5	1931	U	C5-C6-N1	-7.85	118.78	122.70
36	5	3124	G	N3-C2-N2	-7.85	114.41	119.90
36	5	3171	U	C5-C6-N1	-7.85	118.78	122.70
1	6	1673	G	C8-N9-C4	7.84	109.54	106.40
36	5	986	U	C6-N1-C2	-7.84	116.29	121.00
36	1	906	A	C6-N1-C2	-7.84	113.89	118.60
36	1	2978	U	OP1-P-O3'	7.84	122.45	105.20
36	5	2262	A	N1-C6-N6	7.84	123.31	118.60
36	5	3144	G	C8-N9-C1'	-7.84	116.80	127.00
37	7	56	A	N7-C8-N9	7.84	117.72	113.80
36	1	350	C	C6-N1-C1'	-7.84	111.39	120.80
36	1	2147	A	C5-C6-N6	-7.84	117.43	123.70
36	1	3306	U	N3-C2-O2	-7.84	116.71	122.20
1	6	1114	G	C5-C6-O6	7.84	133.30	128.60
36	5	2122	G	C4-C5-N7	7.84	113.94	110.80
36	5	3032	A	N9-C4-C5	7.84	108.94	105.80
36	5	588	G	C5-C6-N1	7.84	115.42	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1665	C	O5'-P-OP1	-7.84	98.64	105.70
36	1	3137	C	C6-N1-C2	7.84	123.44	120.30
1	6	33	U	C5-C4-O4	-7.84	121.20	125.90
1	6	1546	G	N1-C6-O6	7.84	124.60	119.90
36	1	2997	G	C5-N7-C8	-7.83	100.38	104.30
1	6	458	G	O5'-P-OP1	7.83	120.10	110.70
1	6	1414	U	N1-C2-O2	7.83	128.28	122.80
36	5	1506	A	O5'-P-OP2	-7.83	98.65	105.70
36	5	1785	U	O5'-P-OP1	-7.83	98.65	105.70
36	5	2966	G	C5-C6-O6	7.83	133.30	128.60
36	5	679	U	N3-C4-O4	-7.83	113.92	119.40
36	5	908	G	C8-N9-C4	-7.83	103.27	106.40
36	5	2851	A	C5-C6-N6	7.83	129.97	123.70
36	1	887	G	N3-C4-C5	-7.83	124.68	128.60
36	5	75	G	O5'-P-OP1	7.83	120.10	110.70
36	5	974	G	N3-C4-C5	-7.83	124.68	128.60
36	5	1870	C	N3-C2-O2	7.83	127.38	121.90
36	5	2246	G	C4-C5-N7	7.83	113.93	110.80
38	4	109	A	C4-C5-N7	7.83	114.61	110.70
36	1	1392	G	C2-N3-C4	7.83	115.81	111.90
36	1	1905	G	C4-C5-N7	-7.83	107.67	110.80
36	1	2199	G	C4-N9-C1'	7.83	136.68	126.50
52	m6	78	ARG	NE-CZ-NH1	-7.83	116.39	120.30
1	2	1788	G	C5-C6-N1	7.83	115.41	111.50
36	1	1594	A	C6-N1-C2	-7.83	113.90	118.60
36	1	397	A	N9-C4-C5	7.83	108.93	105.80
36	1	1607	U	N3-C2-O2	-7.83	116.72	122.20
36	1	2378	C	C4-C5-C6	-7.83	113.49	117.40
1	6	151	G	N9-C4-C5	7.83	108.53	105.40
36	1	2404	A	O4'-C1'-N9	7.82	114.46	108.20
18	C6	28	LEU	CA-CB-CG	7.82	133.29	115.30
36	1	2873	U	N3-C4-O4	-7.82	113.93	119.40
36	1	3216	G	N1-C2-N3	7.82	128.59	123.90
36	1	3216	G	N9-C4-C5	-7.82	102.27	105.40
1	6	388	G	C6-C5-N7	-7.82	125.71	130.40
36	5	785	G	C8-N9-C4	-7.82	103.27	106.40
36	5	2168	A	C6-C5-N7	-7.82	126.83	132.30
36	5	2392	C	C5-C6-N1	-7.82	117.09	121.00
36	5	3229	G	N3-C4-N9	7.82	130.69	126.00
36	1	14	U	O5'-P-OP2	-7.82	98.66	105.70
36	1	2315	G	N9-C4-C5	7.82	108.53	105.40
36	1	2955	U	N3-C2-O2	-7.82	116.73	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	L3	275	ARG	NE-CZ-NH1	-7.82	116.39	120.30
1	6	1483	A	N1-C6-N6	-7.82	113.91	118.60
36	5	718	G	O4'-C1'-N9	7.82	114.46	108.20
36	5	2877	G	C4-C5-C6	7.82	123.49	118.80
1	2	1490	C	O5'-P-OP1	-7.82	98.66	105.70
36	1	506	U	OP2-P-O3'	7.82	122.40	105.20
36	1	1907	C	N1-C2-N3	7.82	124.67	119.20
36	5	1926	C	N1-C2-O2	7.82	123.59	118.90
36	5	2379	U	N1-C2-N3	7.82	119.59	114.90
36	1	1113	G	C2-N3-C4	-7.82	107.99	111.90
1	6	441	A	O5'-P-OP2	-7.82	98.67	105.70
36	5	1514	G	C4-N9-C1'	7.82	136.66	126.50
36	1	655	C	N3-C4-N4	7.81	123.47	118.00
36	1	2856	G	N3-C4-C5	7.81	132.51	128.60
36	5	667	C	C6-N1-C2	-7.81	117.17	120.30
36	5	2672	G	O5'-P-OP1	-7.81	98.67	105.70
36	5	2918	G	N1-C6-O6	-7.81	115.21	119.90
44	17	232	ARG	NE-CZ-NH2	-7.81	116.39	120.30
36	1	889	U	C4-C5-C6	7.81	124.39	119.70
36	5	3226	A	C2-N3-C4	-7.81	106.69	110.60
1	2	1085	G	N1-C6-O6	-7.81	115.21	119.90
36	1	2940	A	N3-C4-C5	-7.81	121.33	126.80
36	5	1085	A	N7-C8-N9	7.81	117.70	113.80
36	5	3193	C	C6-N1-C2	-7.81	117.18	120.30
36	1	2722	U	C6-N1-C2	-7.81	116.31	121.00
36	1	3388	C	N3-C4-N4	-7.81	112.53	118.00
1	6	65	A	C2-N3-C4	-7.81	106.70	110.60
36	5	1181	U	N3-C4-C5	-7.81	109.92	114.60
36	5	2915	U	C5-C4-O4	-7.81	121.22	125.90
36	1	877	C	N3-C2-O2	-7.81	116.44	121.90
36	5	2129	U	O5'-P-OP1	-7.81	98.67	105.70
36	1	1403	C	N3-C4-C5	7.80	125.02	121.90
36	1	2186	U	C5-C6-N1	-7.80	118.80	122.70
36	1	2409	G	N3-C4-C5	-7.80	124.70	128.60
36	5	1340	G	C8-N9-C4	-7.80	103.28	106.40
36	5	1794	G	O5'-P-OP1	-7.80	98.67	105.70
36	5	2737	C	O5'-P-OP2	-7.80	98.68	105.70
36	1	393	U	O5'-P-OP1	-7.80	98.68	105.70
36	1	650	C	N3-C4-N4	7.80	123.46	118.00
36	1	1151	U	C2-N3-C4	7.80	131.68	127.00
1	6	1271	G	C5-C6-N1	-7.80	107.60	111.50
36	5	1178	G	C8-N9-C4	-7.80	103.28	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1378	U	N3-C4-O4	7.80	124.86	119.40
36	1	3082	C	OP1-P-O3'	7.80	122.36	105.20
1	6	573	C	C5-C4-N4	-7.80	114.74	120.20
1	6	1470	C	N3-C2-O2	-7.80	116.44	121.90
36	5	183	G	C4-C5-N7	-7.80	107.68	110.80
36	5	2427	U	N3-C4-O4	-7.80	113.94	119.40
36	5	2826	U	C5-C6-N1	-7.80	118.80	122.70
1	2	6	G	N3-C4-C5	-7.80	124.70	128.60
36	1	335	G	C4-C5-N7	7.80	113.92	110.80
36	1	1329	U	N3-C2-O2	-7.80	116.74	122.20
1	6	58	U	O5'-P-OP1	-7.80	98.68	105.70
1	6	1183	A	C4-C5-C6	7.80	120.90	117.00
36	5	287	G	N7-C8-N9	7.80	117.00	113.10
36	1	279	U	OP1-P-O3'	7.79	122.35	105.20
36	1	1362	G	N7-C8-N9	-7.79	109.20	113.10
36	1	3172	A	N1-C2-N3	7.79	133.20	129.30
1	6	1127	G	C5-C6-O6	-7.79	123.92	128.60
36	5	3076	C	N3-C4-C5	-7.79	118.78	121.90
1	2	342	C	C6-N1-C2	7.79	123.42	120.30
1	2	1291	G	C4-N9-C1'	7.79	136.63	126.50
36	1	2510	U	O4'-C1'-N1	7.79	114.43	108.20
1	6	1535	U	C5-C6-N1	-7.79	118.80	122.70
36	5	115	A	N1-C6-N6	-7.79	113.92	118.60
36	5	1592	G	C2-N3-C4	7.79	115.80	111.90
36	5	2287	C	C5-C6-N1	-7.79	117.10	121.00
36	5	2926	A	C6-N1-C2	-7.79	113.92	118.60
36	5	2246	G	C5-C6-O6	-7.79	123.93	128.60
36	1	651	G	O5'-P-OP2	-7.79	98.69	105.70
65	N9	20	GLY	N-CA-C	7.79	132.57	113.10
1	2	1025	A	C4-N9-C1'	7.79	140.32	126.30
36	5	1637	A	N9-C4-C5	7.79	108.92	105.80
36	5	2302	G	OP1-P-OP2	-7.79	107.92	119.60
37	7	44	C	C5-C6-N1	-7.79	117.11	121.00
36	1	545	U	C5-C6-N1	7.79	126.59	122.70
36	1	2353	G	C2-N3-C4	-7.79	108.01	111.90
36	1	2707	C	C4-C5-C6	7.79	121.29	117.40
36	5	433	A	C2-N3-C4	-7.79	106.71	110.60
36	5	994	G	OP1-P-O3'	7.79	122.33	105.20
36	5	2362	C	N3-C4-C5	7.78	125.01	121.90
36	5	2879	C	C5-C4-N4	-7.78	114.75	120.20
36	1	416	A	C2-N3-C4	-7.78	106.71	110.60
36	1	3316	A	C5-N7-C8	-7.78	100.01	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	43	A	N1-C6-N6	7.78	123.27	118.60
1	2	1198	G	C8-N9-C4	-7.78	103.29	106.40
36	1	207	U	C5-C6-N1	7.78	126.59	122.70
36	1	636	C	C6-N1-C2	-7.78	117.19	120.30
36	1	2703	A	N3-C4-C5	-7.78	121.35	126.80
36	1	2940	A	C6-N1-C2	-7.78	113.93	118.60
36	1	2137	U	C5-C6-N1	-7.78	118.81	122.70
36	1	3055	U	C6-N1-C1'	-7.78	110.31	121.20
36	5	2302	G	C5-C6-O6	7.78	133.27	128.60
36	5	2692	A	O5'-P-OP1	-7.78	98.70	105.70
36	1	656	A	C5-C6-N6	-7.78	117.48	123.70
36	1	1422	G	N1-C6-O6	7.78	124.57	119.90
36	1	2356	A	O5'-P-OP1	7.78	120.03	110.70
1	6	351	C	C5-C4-N4	-7.78	114.75	120.20
36	5	1755	C	C4-C5-C6	-7.78	113.51	117.40
36	5	3298	C	C6-N1-C2	7.78	123.41	120.30
1	2	1654	G	N1-C2-N2	-7.78	109.20	116.20
36	1	2175	U	N1-C2-N3	7.78	119.57	114.90
36	1	3031	G	N3-C4-N9	-7.78	121.33	126.00
1	6	194	U	C2-N1-C1'	7.78	127.03	117.70
36	5	25	U	N3-C4-O4	7.78	124.84	119.40
36	5	71	A	N7-C8-N9	-7.78	109.91	113.80
36	5	131	C	C6-N1-C2	-7.78	117.19	120.30
36	5	3088	G	C5-C6-N1	-7.78	107.61	111.50
36	1	1191	U	C2-N1-C1'	-7.77	108.37	117.70
36	1	1361	U	N3-C4-O4	7.77	124.84	119.40
36	1	121	A	O5'-P-OP2	-7.77	98.70	105.70
1	6	901	G	O4'-C1'-N9	7.77	114.42	108.20
1	6	1024	U	O5'-P-OP2	-7.77	98.70	105.70
36	5	692	A	C6-C5-N7	-7.77	126.86	132.30
36	5	978	G	O5'-P-OP1	-7.77	98.70	105.70
36	5	1052	U	C5-C6-N1	7.77	126.59	122.70
1	6	1100	G	N1-C6-O6	7.77	124.56	119.90
1	2	424	C	C2-N1-C1'	7.77	127.35	118.80
36	1	1428	A	C4-C5-N7	7.77	114.58	110.70
36	1	3093	C	C4-C5-C6	7.77	121.28	117.40
36	1	3325	G	N9-C4-C5	-7.77	102.29	105.40
1	6	1648	A	C8-N9-C4	7.77	108.91	105.80
36	5	1537	A	N1-C6-N6	7.77	123.26	118.60
36	5	2608	G	OP2-P-O3'	7.77	122.30	105.20
40	l3	356	LEU	CA-CB-CG	-7.77	97.43	115.30
36	1	1126	G	N1-C6-O6	7.77	124.56	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1393	A	N1-C6-N6	-7.77	113.94	118.60
36	5	2375	G	N3-C4-N9	-7.77	121.34	126.00
1	6	1050	G	N3-C4-C5	7.77	132.48	128.60
36	5	345	G	N3-C4-N9	7.77	130.66	126.00
36	5	1318	A	N1-C2-N3	7.77	133.18	129.30
36	5	1851	G	C8-N9-C4	-7.77	103.29	106.40
36	5	3099	C	C6-N1-C2	7.77	123.41	120.30
36	1	38	U	C6-N1-C2	7.76	125.66	121.00
36	1	93	C	C6-N1-C2	7.76	123.41	120.30
1	6	553	G	C4-C5-N7	7.76	113.91	110.80
36	5	3038	U	C2-N3-C4	-7.76	122.34	127.00
36	1	422	A	C6-N1-C2	-7.76	113.94	118.60
36	1	652	G	C6-N1-C2	-7.76	120.44	125.10
36	1	2770	G	C8-N9-C4	-7.76	103.30	106.40
1	6	36	C	O5'-P-OP2	-7.76	98.71	105.70
1	6	1000	C	N1-C2-N3	7.76	124.63	119.20
36	5	776	U	N1-C2-N3	7.76	119.56	114.90
36	5	943	U	C5-C6-N1	-7.76	118.82	122.70
36	5	983	A	N1-C2-N3	7.76	133.18	129.30
36	5	2611	U	C4-C5-C6	7.76	124.36	119.70
36	5	2743	A	C2-N3-C4	-7.76	106.72	110.60
36	5	3050	U	N3-C2-O2	-7.76	116.77	122.20
36	1	697	A	C6-N1-C2	7.76	123.25	118.60
36	1	1438	U	N1-C2-O2	-7.76	117.37	122.80
36	1	2371	G	N3-C4-C5	-7.76	124.72	128.60
1	6	1029	U	O5'-P-OP2	-7.76	98.72	105.70
36	5	365	A	N1-C6-N6	7.76	123.26	118.60
36	5	1370	G	C5-C6-N1	7.76	115.38	111.50
36	5	2290	C	C5-C4-N4	7.76	125.63	120.20
36	5	3136	G	C5-C6-O6	-7.76	123.94	128.60
36	1	624	G	C6-C5-N7	-7.76	125.75	130.40
36	1	965	A	N1-C2-N3	7.76	133.18	129.30
1	6	1243	G	C4-N9-C1'	7.76	136.59	126.50
36	5	1063	G	O5'-P-OP1	-7.76	98.72	105.70
36	5	131	C	C5-C6-N1	7.76	124.88	121.00
36	5	2302	G	N1-C2-N3	7.76	128.55	123.90
36	5	2851	A	C6-C5-N7	7.76	137.73	132.30
36	1	2939	G	C4-C5-C6	7.75	123.45	118.80
36	1	277	G	N1-C2-N2	7.75	123.18	116.20
36	1	2380	U	C6-N1-C2	7.75	125.65	121.00
36	1	2708	C	C6-N1-C2	-7.75	117.20	120.30
37	3	25	G	N3-C4-N9	7.75	130.65	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	331	A	C8-N9-C4	-7.75	102.70	105.80
1	6	420	A	C4-C5-N7	7.75	114.58	110.70
1	6	1022	C	O5'-P-OP1	-7.75	98.72	105.70
36	5	2403	G	N9-C4-C5	-7.75	102.30	105.40
36	5	3245	A	N3-C4-C5	7.75	132.23	126.80
37	7	47	C	N3-C4-C5	7.75	125.00	121.90
36	1	2985	C	C6-N1-C1'	7.75	130.10	120.80
37	3	102	A	C5-N7-C8	-7.75	100.02	103.90
43	L6	159	LEU	CA-CB-CG	-7.75	97.47	115.30
1	6	1038	U	N3-C2-O2	7.75	127.63	122.20
36	5	559	A	C6-C5-N7	-7.75	126.87	132.30
36	5	2910	A	OP1-P-OP2	-7.75	107.97	119.60
36	5	2936	A	N3-C4-N9	7.75	133.60	127.40
37	7	104	A	N1-C6-N6	7.75	123.25	118.60
36	1	2703	A	N1-C2-N3	7.75	133.18	129.30
1	6	402	C	C4-C5-C6	7.75	121.28	117.40
36	5	2368	A	N1-C2-N3	7.75	133.18	129.30
1	6	1610	G	C5-C6-O6	-7.75	123.95	128.60
36	5	200	C	C2-N1-C1'	7.75	127.32	118.80
1	2	1426	C	C5-C6-N1	7.75	124.87	121.00
36	1	1344	G	C8-N9-C4	7.75	109.50	106.40
36	1	1412	G	N1-C6-O6	7.75	124.55	119.90
36	1	1414	G	C6-C5-N7	-7.75	125.75	130.40
36	1	3289	G	C8-N9-C4	-7.75	103.30	106.40
37	3	87	G	OP2-P-O3'	7.75	122.24	105.20
1	6	370	A	N1-C6-N6	-7.75	113.95	118.60
36	5	40	A	C2-N3-C4	-7.75	106.73	110.60
36	5	818	C	C5-C6-N1	-7.75	117.13	121.00
36	5	2172	A	C2-N3-C4	-7.75	106.73	110.60
36	1	3034	C	N3-C2-O2	-7.75	116.48	121.90
36	5	197	G	C5-N7-C8	-7.75	100.43	104.30
36	5	713	U	N3-C4-O4	-7.75	113.98	119.40
1	2	583	C	N1-C2-O2	-7.74	114.25	118.90
36	1	1387	G	N1-C6-O6	-7.74	115.25	119.90
36	1	2181	C	C6-N1-C2	-7.74	117.20	120.30
36	1	2778	G	N1-C6-O6	-7.74	115.25	119.90
36	5	971	G	C4-C5-N7	-7.74	107.70	110.80
36	5	1403	C	C2-N3-C4	-7.74	116.03	119.90
37	7	40	C	N3-C4-C5	7.74	125.00	121.90
36	1	269	G	N1-C6-O6	-7.74	115.25	119.90
36	1	342	A	C6-N1-C2	7.74	123.24	118.60
36	1	942	U	C2-N1-C1'	7.74	126.99	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1201	C	N3-C4-C5	7.74	125.00	121.90
36	1	3344	A	C4-C5-N7	7.74	114.57	110.70
36	1	3390	G	C6-C5-N7	-7.74	125.75	130.40
1	6	466	U	N1-C2-N3	7.74	119.55	114.90
1	6	998	A	C6-N1-C2	-7.74	113.96	118.60
1	6	1490	C	C6-N1-C2	-7.74	117.20	120.30
36	5	937	G	OP1-P-OP2	7.74	131.21	119.60
36	5	1172	G	C4-C5-C6	7.74	123.44	118.80
36	5	2674	A	N1-C6-N6	-7.74	113.96	118.60
36	5	2955	U	N1-C2-O2	-7.74	117.38	122.80
36	1	1917	C	C5-C6-N1	-7.74	117.13	121.00
36	1	2138	A	C6-C5-N7	-7.74	126.88	132.30
36	1	2387	A	C8-N9-C4	-7.74	102.70	105.80
36	5	707	U	N3-C2-O2	-7.74	116.78	122.20
36	5	919	U	O5'-P-OP1	7.74	119.99	110.70
1	2	1029	U	C2-N1-C1'	-7.74	108.42	117.70
36	1	2887	A	C5-N7-C8	-7.74	100.03	103.90
37	3	91	G	C6-C5-N7	-7.74	125.76	130.40
36	1	358	G	C5-N7-C8	-7.74	100.43	104.30
36	1	2633	U	O5'-P-OP2	7.74	119.98	110.70
1	2	1596	C	C2-N1-C1'	7.73	127.31	118.80
36	1	1475	A	C8-N9-C4	7.73	108.89	105.80
36	5	2984	C	C2-N3-C4	-7.73	116.03	119.90
36	1	2119	A	N1-C6-N6	7.73	123.24	118.60
36	1	3109	G	C2-N3-C4	7.73	115.77	111.90
1	6	47	A	O5'-P-OP1	-7.73	98.74	105.70
36	5	2644	C	C4-C5-C6	7.73	121.27	117.40
36	1	1401	A	C6-N1-C2	-7.73	113.96	118.60
36	5	899	U	C5-C6-N1	-7.73	118.84	122.70
36	1	1207	G	C4-C5-N7	7.73	113.89	110.80
1	6	1169	G	N3-C4-C5	-7.73	124.74	128.60
36	5	1473	G	N3-C2-N2	7.73	125.31	119.90
36	1	792	G	N3-C4-N9	-7.73	121.36	126.00
36	1	1180	A	N3-C4-N9	-7.72	121.22	127.40
36	1	2322	C	C6-N1-C2	-7.72	117.21	120.30
1	6	576	G	C6-C5-N7	-7.72	125.77	130.40
36	5	668	G	N1-C6-O6	-7.72	115.27	119.90
36	5	2937	G	C8-N9-C4	7.72	109.49	106.40
36	1	909	G	C5-N7-C8	-7.72	100.44	104.30
36	5	2885	C	O5'-P-OP2	-7.72	98.75	105.70
1	2	414	C	N3-C4-N4	7.72	123.41	118.00
36	1	718	G	C5-C6-O6	-7.72	123.97	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	20	U	O5'-P-OP1	7.72	119.97	110.70
36	5	2988	C	C2-N1-C1'	7.72	127.29	118.80
36	1	1323	G	O5'-P-OP1	7.72	119.96	110.70
36	1	1422	G	C6-C5-N7	-7.72	125.77	130.40
38	4	85	G	N3-C4-C5	-7.72	124.74	128.60
1	6	998	A	N9-C4-C5	7.72	108.89	105.80
36	5	788	C	C4-C5-C6	7.72	121.26	117.40
36	5	2934	A	C6-C5-N7	-7.72	126.90	132.30
36	5	267	G	N1-C6-O6	-7.72	115.27	119.90
1	2	353	A	C4-C5-C6	7.72	120.86	117.00
1	2	468	A	C8-N9-C4	7.72	108.89	105.80
36	1	3361	G	N1-C6-O6	-7.72	115.27	119.90
1	6	1645	G	N3-C4-C5	-7.72	124.74	128.60
36	5	923	C	N3-C4-C5	7.72	124.99	121.90
36	5	1139	G	C4-N9-C1'	-7.72	116.47	126.50
36	5	2295	A	C8-N9-C4	-7.72	102.71	105.80
36	5	3256	G	N1-C6-O6	7.72	124.53	119.90
36	1	2919	A	C6-N1-C2	7.71	123.23	118.60
36	1	3244	A	OP2-P-O3'	7.71	122.17	105.20
1	6	1421	A	C8-N9-C4	7.71	108.89	105.80
37	7	97	A	C5-C6-N6	-7.71	117.53	123.70
36	1	192	C	C6-N1-C2	-7.71	117.22	120.30
36	1	277	G	N9-C4-C5	7.71	108.48	105.40
36	1	3136	G	C8-N9-C4	-7.71	103.31	106.40
37	7	80	G	N7-C8-N9	-7.71	109.24	113.10
1	2	1555	A	N9-C4-C5	7.71	108.89	105.80
36	1	324	A	O5'-P-OP1	-7.71	98.76	105.70
36	1	2633	U	O5'-P-OP1	-7.71	98.76	105.70
36	5	895	A	C2-N3-C4	-7.71	106.74	110.60
36	5	1085	A	N1-C6-N6	7.71	123.23	118.60
36	5	1406	A	N1-C2-N3	7.71	133.16	129.30
36	5	2919	A	C2-N3-C4	-7.71	106.74	110.60
36	5	3374	U	N3-C4-C5	7.71	119.23	114.60
36	1	1498	A	C6-N1-C2	-7.71	113.97	118.60
36	1	2250	G	O5'-P-OP1	-7.71	98.76	105.70
36	5	324	A	O4'-C1'-N9	-7.71	102.03	108.20
36	5	1211	U	N3-C2-O2	7.71	127.60	122.20
36	5	1389	G	N3-C4-N9	7.71	130.62	126.00
36	5	1913	A	C5-C6-N6	-7.71	117.53	123.70
36	5	2678	A	C2-N3-C4	-7.71	106.75	110.60
36	1	797	U	C5-C6-N1	-7.71	118.85	122.70
36	1	1070	U	C6-N1-C2	-7.71	116.38	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1208	U	N3-C2-O2	-7.71	116.81	122.20
36	1	1422	G	C4-N9-C1'	7.71	136.52	126.50
36	5	591	G	C5-N7-C8	7.71	108.15	104.30
36	5	2584	G	N3-C4-C5	-7.71	124.75	128.60
36	1	887	G	C5-C6-N1	7.71	115.35	111.50
36	5	2287	C	C5-C4-N4	7.71	125.59	120.20
36	5	2690	G	N3-C4-C5	7.71	132.45	128.60
36	1	2298	U	O4'-C1'-N1	7.70	114.36	108.20
36	1	3042	U	C2-N1-C1'	-7.70	108.45	117.70
36	5	3383	G	N9-C4-C5	-7.70	102.32	105.40
1	2	1587	A	N7-C8-N9	7.70	117.65	113.80
36	1	971	G	C8-N9-C1'	-7.70	116.99	127.00
36	1	1115	G	C8-N9-C4	-7.70	103.32	106.40
36	1	1311	G	C5-N7-C8	7.70	108.15	104.30
36	1	1541	G	C6-C5-N7	-7.70	125.78	130.40
36	1	2814	G	N3-C4-C5	-7.70	124.75	128.60
1	2	1422	A	C8-N9-C4	7.70	108.88	105.80
36	1	2186	U	N3-C4-O4	-7.70	114.01	119.40
36	5	780	A	N1-C6-N6	-7.70	113.98	118.60
36	5	2925	C	N3-C2-O2	7.70	127.29	121.90
36	1	872	U	C4-C5-C6	7.70	124.32	119.70
36	1	2132	C	N3-C4-C5	-7.70	118.82	121.90
1	6	34	G	C8-N9-C4	7.70	109.48	106.40
1	6	48	G	C4-C5-N7	-7.70	107.72	110.80
1	6	630	A	N1-C6-N6	7.70	123.22	118.60
1	6	1124	A	C2-N3-C4	-7.70	106.75	110.60
36	5	2935	U	C2-N3-C4	7.70	131.62	127.00
36	5	3343	G	C6-C5-N7	-7.70	125.78	130.40
36	1	1137	C	N3-C4-C5	-7.70	118.82	121.90
36	5	1370	G	N9-C4-C5	7.70	108.48	105.40
36	5	2847	A	C6-C5-N7	-7.70	126.91	132.30
36	5	3309	G	N9-C4-C5	-7.70	102.32	105.40
1	2	386	G	N1-C6-O6	-7.70	115.28	119.90
1	2	1591	C	N3-C4-N4	-7.70	112.61	118.00
36	1	499	G	N3-C2-N2	-7.70	114.51	119.90
1	6	1112	G	C6-C5-N7	7.70	135.02	130.40
36	5	211	A	C8-N9-C4	7.70	108.88	105.80
37	3	17	A	C8-N9-C4	-7.69	102.72	105.80
1	6	1580	C	C6-N1-C2	7.69	123.38	120.30
38	8	35	C	N3-C2-O2	-7.69	116.51	121.90
36	1	872	U	C6-N1-C2	-7.69	116.39	121.00
36	5	2303	A	C2-N3-C4	-7.69	106.75	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2602	G	C5-C6-N1	-7.69	107.65	111.50
36	5	2925	C	N1-C2-O2	-7.69	114.28	118.90
36	5	2932	U	N3-C4-C5	7.69	119.22	114.60
36	5	3309	G	N1-C2-N2	-7.69	109.28	116.20
36	1	370	U	C5-C4-O4	-7.69	121.29	125.90
36	1	1057	A	C6-N1-C2	7.69	123.21	118.60
36	1	1323	G	N3-C4-N9	7.69	130.61	126.00
36	1	1369	A	C2-N3-C4	-7.69	106.75	110.60
36	1	1434	G	C8-N9-C4	-7.69	103.32	106.40
36	1	2335	G	N1-C6-O6	-7.69	115.29	119.90
36	1	2896	A	C4-C5-C6	7.69	120.84	117.00
36	1	3180	A	N9-C4-C5	7.69	108.88	105.80
1	6	457	G	N9-C4-C5	-7.69	102.32	105.40
36	5	2131	A	C8-N9-C4	7.69	108.88	105.80
36	5	2617	U	C5-C6-N1	7.69	126.55	122.70
36	5	2735	U	O5'-P-OP2	-7.69	98.78	105.70
36	1	2738	A	C6-N1-C2	-7.69	113.99	118.60
1	2	601	A	N1-C6-N6	7.69	123.21	118.60
36	1	796	U	N1-C2-N3	-7.69	110.29	114.90
36	1	2911	A	C8-N9-C4	7.69	108.88	105.80
1	6	402	C	N3-C4-N4	7.69	123.38	118.00
1	6	1270	G	N1-C6-O6	7.69	124.51	119.90
36	5	610	G	C8-N9-C4	-7.69	103.33	106.40
36	5	2821	C	C6-N1-C1'	-7.69	111.58	120.80
36	5	3067	C	C2-N1-C1'	-7.69	110.34	118.80
36	5	3147	G	C8-N9-C4	7.69	109.47	106.40
1	6	609	U	N1-C2-N3	7.68	119.51	114.90
36	5	640	U	C5-C6-N1	7.68	126.54	122.70
36	5	1116	G	C4-C5-C6	7.68	123.41	118.80
36	5	1441	G	O5'-P-OP2	7.68	119.92	110.70
36	5	2683	U	C4-C5-C6	-7.68	115.09	119.70
36	5	3214	U	N3-C4-O4	-7.68	114.02	119.40
36	1	744	A	N3-C4-C5	7.68	132.18	126.80
36	1	1373	A	OP2-P-O3'	7.68	122.10	105.20
36	1	1782	U	C5-C4-O4	7.68	130.51	125.90
36	5	867	G	O5'-P-OP1	-7.68	98.79	105.70
36	5	3343	G	N3-C4-N9	7.68	130.61	126.00
1	2	1006	C	C2-N1-C1'	7.68	127.25	118.80
36	1	93	C	C2-N3-C4	7.68	123.74	119.90
5	s3	198	GLY	N-CA-C	-7.68	93.90	113.10
36	5	1148	G	N1-C2-N2	-7.68	109.29	116.20
36	1	1316	C	N1-C2-N3	7.68	124.58	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2284	C	C2-N1-C1'	7.68	127.25	118.80
1	6	639	U	O5'-P-OP2	-7.68	98.79	105.70
1	6	1753	A	C4-C5-C6	7.68	120.84	117.00
36	5	425	G	N3-C4-N9	-7.68	121.39	126.00
36	5	1429	G	N3-C4-C5	-7.68	124.76	128.60
36	5	2234	G	N9-C4-C5	-7.68	102.33	105.40
36	5	2816	G	C8-N9-C1'	7.68	136.98	127.00
36	1	2813	A	N1-C2-N3	7.68	133.14	129.30
36	5	2412	G	N7-C8-N9	7.68	116.94	113.10
1	2	1179	G	N1-C6-O6	-7.68	115.29	119.90
1	6	96	G	N7-C8-N9	7.68	116.94	113.10
36	5	1165	A	C6-C5-N7	-7.68	126.93	132.30
36	5	1905	G	C6-C5-N7	7.68	135.01	130.40
36	5	2193	U	C6-N1-C1'	-7.68	110.45	121.20
36	5	2387	A	N1-C2-N3	7.68	133.14	129.30
36	1	2649	A	N1-C6-N6	7.67	123.20	118.60
36	5	2197	C	N1-C2-N3	-7.67	113.83	119.20
36	5	3093	C	N1-C2-O2	-7.67	114.30	118.90
36	1	585	A	N1-C6-N6	-7.67	114.00	118.60
36	1	2849	C	N1-C2-O2	-7.67	114.30	118.90
1	6	1355	C	C6-N1-C2	-7.67	117.23	120.30
1	6	1704	U	C2-N1-C1'	7.67	126.91	117.70
36	5	1127	G	N9-C4-C5	7.67	108.47	105.40
36	5	2813	A	C6-C5-N7	-7.67	126.93	132.30
36	1	80	G	C6-N1-C2	-7.67	120.50	125.10
36	1	1495	U	C6-N1-C1'	7.67	131.94	121.20
36	1	1783	U	N3-C2-O2	-7.67	116.83	122.20
36	5	1056	U	N3-C4-O4	-7.67	114.03	119.40
36	5	1900	A	C6-N1-C2	-7.67	114.00	118.60
36	5	2403	G	C4-C5-N7	7.67	113.87	110.80
52	m6	27	LEU	CA-CB-CG	-7.67	97.66	115.30
36	1	914	A	C5-C6-N1	7.67	121.53	117.70
36	1	953	G	N1-C6-O6	-7.67	115.30	119.90
36	1	2368	A	C4-C5-N7	7.67	114.53	110.70
36	5	647	A	OP1-P-O3'	7.67	122.07	105.20
36	5	1007	U	C6-N1-C2	7.67	125.60	121.00
36	5	1044	U	C6-N1-C2	-7.67	116.40	121.00
36	5	1518	U	N3-C4-O4	7.67	124.77	119.40
36	1	386	A	N1-C6-N6	7.66	123.20	118.60
36	5	345	G	C4-C5-C6	7.66	123.40	118.80
36	5	3377	G	C4-C5-N7	7.66	113.87	110.80
1	2	1753	A	N1-C6-N6	7.66	123.20	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	91	G	N3-C4-C5	-7.66	124.77	128.60
1	6	1643	U	C5-C6-N1	-7.66	118.87	122.70
36	5	3067	C	N3-C4-N4	-7.66	112.64	118.00
36	1	1525	G	C8-N9-C1'	-7.66	117.04	127.00
1	6	876	G	N1-C2-N2	7.66	123.09	116.20
36	5	1163	A	N1-C6-N6	-7.66	114.00	118.60
36	5	1794	G	C4-N9-C1'	-7.66	116.54	126.50
36	1	76	G	N1-C6-O6	7.66	124.50	119.90
36	1	3055	U	N3-C4-O4	7.66	124.76	119.40
1	6	339	C	N1-C2-O2	-7.66	114.31	118.90
1	6	1372	U	N3-C2-O2	-7.66	116.84	122.20
36	1	404	G	O5'-P-OP2	-7.66	98.81	105.70
36	1	2937	G	C8-N9-C4	7.66	109.46	106.40
36	5	1496	C	C6-N1-C2	-7.66	117.24	120.30
36	5	2212	C	O5'-P-OP2	-7.66	98.81	105.70
36	5	3203	U	C5-C6-N1	-7.66	118.87	122.70
1	2	377	G	C8-N9-C1'	7.66	136.95	127.00
36	1	914	A	C2-N3-C4	7.66	114.43	110.60
36	1	917	A	C6-C5-N7	7.66	137.66	132.30
36	1	1926	C	N3-C4-C5	-7.66	118.84	121.90
1	6	1525	A	C6-N1-C2	-7.66	114.01	118.60
1	6	1768	G	C8-N9-C4	-7.66	103.34	106.40
36	5	3004	C	N3-C4-N4	7.66	123.36	118.00
24	D2	104	LEU	CA-CB-CG	7.65	132.91	115.30
36	5	36	C	C6-N1-C2	-7.65	117.24	120.30
36	5	1164	G	C6-C5-N7	7.65	134.99	130.40
36	5	3271	G	C4-N9-C1'	7.65	136.45	126.50
1	2	1789	G	C8-N9-C1'	-7.65	117.05	127.00
36	1	345	G	N3-C4-C5	-7.65	124.77	128.60
36	5	371	G	C4-C5-C6	-7.65	114.21	118.80
36	5	396	A	N1-C2-N3	7.65	133.13	129.30
36	5	2614	G	N9-C4-C5	-7.65	102.34	105.40
1	2	1438	G	N3-C4-C5	7.65	132.43	128.60
36	1	1880	U	O5'-P-OP2	-7.65	98.81	105.70
36	5	1049	C	C6-N1-C2	-7.65	117.24	120.30
36	5	2969	A	N1-C2-N3	7.65	133.12	129.30
36	1	639	G	N3-C4-N9	-7.65	121.41	126.00
36	1	1872	C	N1-C2-O2	-7.65	114.31	118.90
36	5	1399	A	C2-N3-C4	-7.65	106.78	110.60
36	1	38	U	N1-C2-N3	-7.65	110.31	114.90
36	1	752	C	N3-C2-O2	-7.65	116.55	121.90
36	1	866	A	N1-C2-N3	7.65	133.12	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2872	A	N1-C2-N3	-7.65	125.48	129.30
36	5	2966	G	C5-C6-N1	-7.65	107.68	111.50
1	6	1117	U	N1-C2-O2	-7.64	117.45	122.80
36	5	2120	A	C2-N3-C4	-7.64	106.78	110.60
36	5	2191	U	C6-N1-C2	-7.64	116.41	121.00
36	5	868	C	N3-C4-N4	7.64	123.35	118.00
36	5	2391	G	C6-C5-N7	7.64	134.99	130.40
36	5	2673	A	N1-C2-N3	7.64	133.12	129.30
1	2	597	G	C6-C5-N7	-7.64	125.81	130.40
36	5	404	G	C4-N9-C1'	7.64	136.43	126.50
36	1	649	A	C5-C6-N6	7.64	129.81	123.70
36	1	650	C	C5-C4-N4	-7.64	114.85	120.20
36	1	1113	G	N3-C4-C5	7.64	132.42	128.60
36	1	3261	C	O5'-P-OP1	7.64	119.87	110.70
1	6	1740	A	N1-C2-N3	7.64	133.12	129.30
36	5	978	G	N3-C2-N2	-7.64	114.55	119.90
36	5	1175	C	N1-C2-N3	7.64	124.55	119.20
36	5	2851	A	N1-C2-N3	7.64	133.12	129.30
36	5	2924	U	C6-N1-C1'	-7.64	110.50	121.20
36	1	2351	U	C6-N1-C2	-7.64	116.42	121.00
36	1	212	G	N3-C4-C5	-7.64	124.78	128.60
36	5	677	A	C5-C6-N6	-7.64	117.59	123.70
36	5	976	U	C6-N1-C2	-7.64	116.42	121.00
36	5	1323	G	N7-C8-N9	7.64	116.92	113.10
1	2	394	C	N1-C2-O2	7.63	123.48	118.90
36	1	1444	G	C8-N9-C4	-7.63	103.35	106.40
1	6	35	U	N3-C2-O2	-7.63	116.86	122.20
36	5	3092	C	N3-C4-C5	7.63	124.95	121.90
36	1	637	C	N1-C2-O2	7.63	123.48	118.90
36	1	2385	G	C6-C5-N7	-7.63	125.82	130.40
36	1	2756	C	N1-C2-N3	7.63	124.54	119.20
36	5	366	A	OP1-P-OP2	-7.63	108.15	119.60
36	5	3044	G	OP2-P-O3'	7.63	121.99	105.20
36	1	1419	A	C6-N1-C2	-7.63	114.02	118.60
36	1	3323	A	N1-C2-N3	7.63	133.12	129.30
36	5	2352	A	N1-C2-N3	7.63	133.12	129.30
36	5	3076	C	N1-C2-O2	-7.63	114.32	118.90
1	2	382	C	C6-N1-C2	-7.63	117.25	120.30
36	1	424	G	OP1-P-O3'	7.63	121.98	105.20
36	1	1880	U	N3-C2-O2	-7.63	116.86	122.20
36	1	2229	A	N1-C6-N6	7.63	123.18	118.60
36	1	2329	C	N3-C4-C5	-7.63	118.85	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	947	G	N1-C6-O6	7.63	124.48	119.90
36	5	1903	U	O5'-P-OP2	7.63	119.85	110.70
36	5	3314	A	C6-N1-C2	-7.63	114.02	118.60
36	1	358	G	C6-C5-N7	-7.63	125.82	130.40
36	1	688	G	C6-C5-N7	-7.63	125.82	130.40
36	5	646	A	C2-N3-C4	-7.63	106.79	110.60
36	5	2524	A	O4'-C1'-N9	7.63	114.30	108.20
36	5	2854	U	C4-C5-C6	7.63	124.28	119.70
36	5	3148	U	C5-C4-O4	7.63	130.48	125.90
36	1	2418	G	OP1-P-O3'	7.62	121.97	105.20
36	5	2607	G	C6-C5-N7	-7.62	125.83	130.40
36	1	627	U	N1-C2-O2	-7.62	117.46	122.80
36	1	2213	A	OP1-P-OP2	7.62	131.03	119.60
36	5	883	A	C5-C6-N1	7.62	121.51	117.70
36	5	2297	U	C5-C6-N1	7.62	126.51	122.70
1	2	403	G	C8-N9-C4	-7.62	103.35	106.40
36	1	80	G	N3-C4-C5	-7.62	124.79	128.60
1	6	577	G	N7-C8-N9	7.62	116.91	113.10
36	5	2332	A	C2-N3-C4	7.62	114.41	110.60
36	5	2932	U	N1-C2-N3	7.62	119.47	114.90
36	5	3322	A	C4-C5-C6	7.62	120.81	117.00
36	1	209	A	C5-C6-N6	7.62	129.80	123.70
36	5	1901	A	C4-C5-C6	-7.62	113.19	117.00
1	2	438	A	N1-C6-N6	-7.62	114.03	118.60
36	1	2317	A	O5'-P-OP2	-7.62	98.84	105.70
36	1	3054	U	C4-C5-C6	7.62	124.27	119.70
1	6	402	C	C5-C6-N1	-7.62	117.19	121.00
36	5	666	A	C4-C5-N7	-7.62	106.89	110.70
36	5	709	A	N1-C6-N6	7.62	123.17	118.60
36	5	1310	G	N7-C8-N9	7.62	116.91	113.10
36	1	1434	G	C5-N7-C8	-7.62	100.49	104.30
36	1	1792	C	C6-N1-C2	-7.62	117.25	120.30
36	1	2257	C	C6-N1-C1'	-7.62	111.66	120.80
36	5	1434	G	C4-C5-N7	7.62	113.85	110.80
36	1	709	A	C5-C6-N6	-7.62	117.61	123.70
36	1	963	G	C5-N7-C8	-7.62	100.49	104.30
36	1	2827	U	C2-N1-C1'	-7.62	108.56	117.70
36	5	645	A	N3-C4-C5	-7.62	121.47	126.80
36	5	969	C	C5-C6-N1	-7.62	117.19	121.00
36	5	2322	C	N3-C4-C5	-7.62	118.85	121.90
36	5	2621	G	C6-C5-N7	-7.62	125.83	130.40
36	5	2691	A	C5-C6-N1	7.62	121.51	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2358	A	N3-C4-N9	-7.61	121.31	127.40
1	2	1148	C	N3-C2-O2	-7.61	116.57	121.90
36	1	790	U	N3-C4-C5	-7.61	110.03	114.60
36	1	408	A	N9-C4-C5	7.61	108.84	105.80
36	1	2603	G	C6-C5-N7	-7.61	125.83	130.40
36	1	2856	G	C5-C6-N1	-7.61	107.69	111.50
36	5	2727	A	C4-C5-N7	-7.61	106.89	110.70
36	5	2897	A	N3-C4-N9	7.61	133.49	127.40
1	6	1777	G	C4-N9-C1'	7.61	136.39	126.50
36	5	1062	A	C2-N3-C4	-7.61	106.80	110.60
36	1	651	G	C8-N9-C4	7.61	109.44	106.40
36	1	1344	G	O5'-P-OP2	-7.61	98.85	105.70
36	1	2329	C	O5'-P-OP1	7.61	119.83	110.70
38	4	51	G	C5-C6-O6	7.61	133.16	128.60
38	4	86	U	C2-N1-C1'	7.61	126.83	117.70
36	5	64	G	C5-C6-N1	-7.61	107.70	111.50
36	5	1195	A	C8-N9-C4	-7.61	102.76	105.80
36	5	1495	U	C2-N1-C1'	7.61	126.83	117.70
36	5	2262	A	N9-C4-C5	-7.61	102.76	105.80
36	5	3327	G	C5-C6-N1	-7.61	107.70	111.50
1	2	1541	G	N1-C6-O6	7.61	124.46	119.90
36	1	612	U	C2-N3-C4	-7.61	122.44	127.00
36	1	2332	A	N9-C4-C5	-7.61	102.76	105.80
36	1	3150	A	N1-C6-N6	7.61	123.16	118.60
1	6	100	A	C2-N3-C4	-7.61	106.80	110.60
36	1	654	C	O5'-P-OP2	-7.60	98.86	105.70
36	5	957	C	N3-C4-N4	7.60	123.32	118.00
36	5	1429	G	N3-C4-N9	7.60	130.56	126.00
36	5	2934	A	C5-N7-C8	-7.60	100.10	103.90
1	2	1462	G	C8-N9-C4	7.60	109.44	106.40
36	1	2306	C	C6-N1-C2	-7.60	117.26	120.30
36	5	512	U	N3-C4-O4	-7.60	114.08	119.40
36	5	973	A	C4-C5-N7	7.60	114.50	110.70
36	5	2938	G	C5-C6-O6	-7.60	124.04	128.60
37	7	50	U	N3-C2-O2	-7.60	116.88	122.20
1	2	1756	A	N1-C6-N6	7.60	123.16	118.60
36	1	3260	G	C5-C6-N1	-7.60	107.70	111.50
1	6	999	U	N3-C4-C5	7.60	119.16	114.60
36	5	2397	A	C4-C5-N7	7.60	114.50	110.70
36	1	240	U	C6-N1-C2	-7.60	116.44	121.00
36	1	1144	U	N1-C2-O2	-7.60	117.48	122.80
36	1	1411	C	N1-C2-O2	7.60	123.46	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	585	A	N1-C6-N6	7.60	123.16	118.60
1	6	595	G	O5'-P-OP1	-7.60	98.86	105.70
1	6	1235	C	C6-N1-C2	-7.60	117.26	120.30
36	5	1253	U	N3-C2-O2	-7.60	116.88	122.20
36	5	1500	G	N9-C4-C5	-7.60	102.36	105.40
36	5	1884	A	O5'-P-OP1	-7.60	98.86	105.70
37	7	85	G	N3-C2-N2	-7.60	114.58	119.90
36	1	798	G	C8-N9-C4	-7.60	103.36	106.40
36	1	2631	U	C5-C6-N1	-7.60	118.90	122.70
1	6	26	A	C6-N1-C2	-7.60	114.04	118.60
1	6	1542	G	N3-C4-C5	-7.60	124.80	128.60
36	5	1213	G	O5'-P-OP2	-7.60	98.86	105.70
36	5	2129	U	C5-C6-N1	7.60	126.50	122.70
36	5	2808	A	OP1-P-O3'	7.60	121.91	105.20
36	5	3144	G	C4-N9-C1'	7.60	136.38	126.50
36	1	1828	A	N1-C6-N6	7.60	123.16	118.60
36	1	3248	C	N1-C2-O2	-7.60	114.34	118.90
1	6	316	A	C4-C5-N7	7.60	114.50	110.70
36	5	1461	A	N7-C8-N9	-7.60	110.00	113.80
36	1	2659	G	C5-C6-O6	-7.59	124.04	128.60
36	5	564	G	O5'-P-OP1	-7.59	98.86	105.70
36	5	2847	A	C5-C6-N1	-7.59	113.90	117.70
38	8	30	C	O5'-P-OP2	-7.59	98.86	105.70
36	1	2635	A	N7-C8-N9	7.59	117.60	113.80
36	5	437	G	C4-C5-C6	7.59	123.36	118.80
36	5	3032	A	C5-C6-N6	7.59	129.78	123.70
1	2	378	A	C2-N3-C4	-7.59	106.81	110.60
36	1	2826	U	C5-C4-O4	7.59	130.45	125.90
36	1	3000	A	O5'-P-OP2	-7.59	98.87	105.70
36	5	943	U	N1-C2-O2	-7.59	117.48	122.80
36	5	2619	G	N1-C2-N3	7.59	128.46	123.90
37	7	94	C	N3-C4-C5	7.59	124.94	121.90
1	2	1651	A	N3-C4-C5	7.59	132.11	126.80
36	1	281	G	C2-N3-C4	7.59	115.69	111.90
36	1	931	C	C5-C4-N4	-7.59	114.89	120.20
36	1	2814	G	C6-N1-C2	-7.59	120.55	125.10
36	5	1059	G	C5-C6-O6	7.59	133.15	128.60
36	5	1934	G	N7-C8-N9	-7.59	109.31	113.10
36	5	3208	G	N3-C4-N9	7.59	130.55	126.00
1	2	825	U	C5-C6-N1	7.59	126.49	122.70
36	1	1316	C	N3-C2-O2	-7.59	116.59	121.90
52	M6	141	LEU	CB-CG-CD2	-7.59	98.10	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	35	A	C5-N7-C8	7.59	107.69	103.90
36	5	62	A	N1-C6-N6	7.59	123.15	118.60
36	5	1379	G	C8-N9-C1'	-7.59	117.14	127.00
36	1	400	G	C8-N9-C1'	7.58	136.86	127.00
36	1	1924	U	N3-C4-O4	-7.58	114.09	119.40
36	1	3099	C	N1-C2-O2	-7.58	114.35	118.90
1	6	1634	C	C6-N1-C1'	-7.58	111.70	120.80
1	6	1777	G	C5-C6-O6	-7.58	124.05	128.60
36	5	2110	G	C6-N1-C2	-7.58	120.55	125.10
36	5	2118	C	N3-C2-O2	-7.58	116.59	121.90
36	5	2830	G	C5-C6-N1	-7.58	107.71	111.50
36	1	3206	C	N3-C4-N4	7.58	123.31	118.00
36	5	1211	U	N3-C4-C5	7.58	119.15	114.60
36	5	1455	U	O5'-P-OP2	7.58	119.80	110.70
36	5	3118	C	C6-N1-C2	-7.58	117.27	120.30
1	6	1668	G	O5'-P-OP2	-7.58	98.88	105.70
36	5	398	A	N7-C8-N9	-7.58	110.01	113.80
36	1	917	A	C5-N7-C8	7.58	107.69	103.90
36	1	2175	U	C6-N1-C2	-7.58	116.45	121.00
1	6	75	U	N1-C2-O2	7.58	128.10	122.80
36	1	1404	G	C8-N9-C4	7.58	109.43	106.40
36	1	1713	G	C8-N9-C4	7.58	109.43	106.40
1	6	322	G	N7-C8-N9	7.58	116.89	113.10
1	2	377	G	C4-N9-C1'	-7.58	116.65	126.50
36	1	632	G	C5-C6-N1	7.58	115.29	111.50
36	1	2353	G	C4-C5-C6	7.58	123.34	118.80
1	6	309	C	C6-N1-C2	7.58	123.33	120.30
36	5	899	U	C2-N3-C4	-7.58	122.45	127.00
36	5	3001	C	C6-N1-C2	7.58	123.33	120.30
36	5	3099	C	C2-N1-C1'	-7.58	110.47	118.80
36	1	1690	C	N3-C2-O2	-7.57	116.60	121.90
36	1	1937	U	C6-N1-C2	7.57	125.54	121.00
36	1	2654	C	C5-C4-N4	-7.57	114.90	120.20
36	1	3132	C	C5-C6-N1	-7.57	117.21	121.00
38	4	59	A	C8-N9-C4	-7.57	102.77	105.80
1	6	876	G	C4-N9-C1'	-7.57	116.65	126.50
36	5	921	A	N9-C4-C5	7.57	108.83	105.80
36	5	1381	A	N1-C2-N3	7.57	133.09	129.30
36	5	1486	G	O5'-P-OP1	-7.57	98.88	105.70
36	5	3029	A	N3-C4-N9	-7.57	121.34	127.40
36	5	423	A	O5'-P-OP2	7.57	119.79	110.70
1	2	696	C	C6-N1-C2	-7.57	117.27	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1462	G	C4-N9-C1'	-7.57	116.66	126.50
7	s5	165	LEU	CA-CB-CG	-7.57	97.89	115.30
36	5	884	A	N3-C4-N9	7.57	133.46	127.40
37	7	75	G	C8-N9-C4	7.57	109.43	106.40
37	7	105	C	C2-N1-C1'	7.57	127.13	118.80
36	1	3276	G	C5-N7-C8	-7.57	100.52	104.30
36	5	1885	U	N3-C4-C5	-7.57	110.06	114.60
36	1	1417	G	C5-C6-O6	-7.57	124.06	128.60
36	1	1505	C	C6-N1-C2	7.57	123.33	120.30
36	1	2839	G	C8-N9-C4	-7.57	103.37	106.40
1	6	1777	G	N3-C4-N9	7.57	130.54	126.00
36	5	1335	C	C6-N1-C2	-7.57	117.27	120.30
36	5	1379	G	C4-N9-C1'	7.57	136.34	126.50
36	5	2134	G	N3-C4-C5	-7.57	124.82	128.60
36	5	3172	A	C5-C6-N6	-7.57	117.65	123.70
36	5	3288	G	O4'-C1'-N9	7.57	114.25	108.20
36	1	770	G	C8-N9-C4	-7.57	103.37	106.40
36	1	1112	A	N1-C6-N6	-7.57	114.06	118.60
36	1	2801	A	C5-C6-N6	-7.57	117.65	123.70
36	5	3124	G	C5-N7-C8	-7.57	100.52	104.30
36	5	3174	A	N7-C8-N9	7.57	117.58	113.80
36	1	1156	C	C5-C6-N1	-7.56	117.22	121.00
36	5	2193	U	C2-N1-C1'	7.56	126.78	117.70
37	7	92	A	N9-C4-C5	-7.56	102.77	105.80
1	2	332	U	C5-C6-N1	-7.56	118.92	122.70
36	1	593	C	C6-N1-C2	-7.56	117.28	120.30
38	4	14	C	O5'-P-OP2	-7.56	98.89	105.70
1	6	876	G	N3-C4-N9	-7.56	121.46	126.00
36	5	652	G	N3-C4-N9	7.56	130.54	126.00
36	5	787	G	O5'-P-OP1	-7.56	98.89	105.70
36	5	3323	A	N9-C4-C5	7.56	108.83	105.80
36	1	2312	A	C2-N3-C4	7.56	114.38	110.60
37	7	14	U	C6-N1-C2	7.56	125.54	121.00
36	1	1194	G	C5-C6-N1	7.56	115.28	111.50
36	1	1360	C	C6-N1-C2	7.56	123.32	120.30
36	1	2150	G	N1-C6-O6	7.56	124.44	119.90
36	1	2609	A	N1-C2-N3	7.56	133.08	129.30
36	5	66	A	N7-C8-N9	-7.56	110.02	113.80
36	5	720	A	N1-C6-N6	-7.56	114.06	118.60
36	5	1059	G	N1-C6-O6	-7.56	115.36	119.90
37	7	68	C	N3-C2-O2	-7.56	116.61	121.90
1	2	967	A	C5-C6-N6	-7.56	117.66	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	608	A	C4-C5-N7	7.56	114.48	110.70
36	1	2426	U	C5-C4-O4	7.56	130.44	125.90
36	5	400	G	C5-N7-C8	-7.56	100.52	104.30
36	5	2168	A	C4-C5-N7	7.56	114.48	110.70
36	5	2932	U	C5-C4-O4	7.56	130.43	125.90
38	8	12	A	N1-C6-N6	7.56	123.14	118.60
36	1	668	G	N1-C6-O6	-7.56	115.37	119.90
36	1	2813	A	C5-C6-N6	7.56	129.75	123.70
36	1	1376	C	C4-C5-C6	7.55	121.18	117.40
36	5	300	G	C5-C6-O6	7.55	133.13	128.60
36	5	320	G	OP1-P-O3'	7.55	121.82	105.20
36	1	1419	A	N3-C4-C5	-7.55	121.51	126.80
36	1	2906	C	C2-N3-C4	-7.55	116.12	119.90
36	5	692	A	N1-C6-N6	7.55	123.13	118.60
36	1	2856	G	N1-C6-O6	7.55	124.43	119.90
36	1	3085	G	N9-C4-C5	-7.55	102.38	105.40
1	6	797	G	C6-C5-N7	7.55	134.93	130.40
1	6	815	G	C4-C5-N7	7.55	113.82	110.80
1	6	1560	U	N3-C2-O2	-7.55	116.92	122.20
36	5	577	C	C2-N3-C4	-7.55	116.12	119.90
36	5	1316	C	C2-N3-C4	-7.55	116.12	119.90
36	5	1496	C	C2-N1-C1'	7.55	127.11	118.80
36	5	2624	G	C6-C5-N7	-7.55	125.87	130.40
36	5	2870	C	C2-N3-C4	-7.55	116.12	119.90
36	5	2886	U	N3-C2-O2	-7.55	116.91	122.20
37	7	93	C	N1-C2-N3	7.55	124.49	119.20
36	1	67	A	N7-C8-N9	-7.55	110.03	113.80
36	5	263	C	C6-N1-C2	7.55	123.32	120.30
36	5	400	G	N3-C4-C5	7.55	132.38	128.60
36	5	424	G	OP2-P-O3'	7.55	121.81	105.20
36	5	986	U	N1-C2-O2	7.55	128.09	122.80
36	5	1010	G	C6-C5-N7	-7.55	125.87	130.40
1	2	103	A	C5-C6-N6	-7.55	117.66	123.70
36	5	2130	G	O5'-P-OP2	-7.55	98.91	105.70
36	5	2675	C	O5'-P-OP1	-7.55	98.91	105.70
1	6	1007	C	C6-N1-C2	7.55	123.32	120.30
36	5	1632	A	C5-N7-C8	7.55	107.67	103.90
1	6	943	C	N3-C4-C5	7.54	124.92	121.90
1	6	1572	G	N3-C4-C5	7.54	132.37	128.60
36	5	1453	A	C8-N9-C4	7.54	108.82	105.80
36	5	2108	C	C4-C5-C6	7.54	121.17	117.40
37	7	29	C	N1-C2-O2	-7.54	114.37	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2647	A	C6-C5-N7	-7.54	127.02	132.30
36	1	3085	G	C8-N9-C4	7.54	109.42	106.40
36	5	591	G	C8-N9-C1'	-7.54	117.19	127.00
36	5	2121	G	C8-N9-C4	-7.54	103.38	106.40
36	5	2991	A	N9-C4-C5	7.54	108.82	105.80
38	8	33	A	O5'-P-OP2	7.54	119.75	110.70
36	1	345	G	C5-C6-N1	-7.54	107.73	111.50
1	6	358	U	N3-C2-O2	-7.54	116.92	122.20
36	5	89	A	N1-C2-N3	7.54	133.07	129.30
36	5	131	C	N1-C2-O2	7.54	123.42	118.90
36	5	2357	A	C6-N1-C2	-7.54	114.08	118.60
1	6	1484	G	C8-N9-C4	-7.54	103.38	106.40
36	5	2388	U	C5-C6-N1	-7.54	118.93	122.70
1	2	1632	C	N3-C2-O2	7.54	127.18	121.90
36	1	1501	U	N3-C4-O4	7.54	124.68	119.40
36	1	2400	G	C5-N7-C8	-7.54	100.53	104.30
36	1	2701	U	N3-C4-C5	-7.54	110.08	114.60
36	1	3272	C	N1-C2-O2	-7.54	114.38	118.90
36	5	12	A	O5'-P-OP1	-7.54	98.92	105.70
36	5	431	U	N1-C2-N3	7.54	119.42	114.90
36	5	1351	U	C6-N1-C2	-7.54	116.48	121.00
36	5	1673	G	C5-C6-O6	-7.54	124.08	128.60
36	5	1904	C	C6-N1-C2	7.54	123.32	120.30
36	5	2160	G	C5-C6-O6	-7.54	124.08	128.60
36	5	2874	G	C5-C6-O6	7.54	133.12	128.60
36	5	3012	A	C4-C5-N7	7.54	114.47	110.70
38	8	107	G	C4-C5-C6	7.54	123.32	118.80
36	1	653	A	O5'-P-OP2	-7.54	98.92	105.70
1	6	75	U	C2-N1-C1'	7.54	126.74	117.70
36	5	1306	G	C5-N7-C8	-7.54	100.53	104.30
36	5	1370	G	N1-C2-N3	7.54	128.42	123.90
36	5	1389	G	C6-C5-N7	-7.54	125.88	130.40
36	5	3343	G	N3-C4-C5	-7.54	124.83	128.60
1	2	771	A	C8-N9-C4	-7.53	102.79	105.80
36	1	721	G	C4-C5-N7	7.53	113.81	110.80
36	1	2877	G	N1-C2-N2	7.53	122.98	116.20
38	4	10	A	O5'-P-OP1	7.53	119.74	110.70
37	7	89	G	C8-N9-C1'	-7.53	117.21	127.00
36	1	1144	U	N3-C2-O2	7.53	127.47	122.20
36	5	817	A	O5'-P-OP2	7.53	119.74	110.70
36	5	1382	G	N1-C6-O6	7.53	124.42	119.90
36	5	1886	A	C5-C6-N6	7.53	129.73	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1200	G	C4-C5-C6	7.53	123.32	118.80
36	1	3018	C	OP2-P-O3'	7.53	121.77	105.20
1	6	1783	C	N1-C2-O2	-7.53	114.38	118.90
36	5	1918	C	N3-C4-C5	-7.53	118.89	121.90
36	1	968	G	N1-C2-N2	-7.53	109.42	116.20
36	1	2218	G	C8-N9-C4	7.53	109.41	106.40
36	1	3235	C	O5'-P-OP1	-7.53	98.92	105.70
36	5	330	G	N7-C8-N9	-7.53	109.33	113.10
1	2	424	C	C6-N1-C2	-7.53	117.29	120.30
1	2	1004	U	N3-C2-O2	-7.53	116.93	122.20
36	1	924	G	O4'-C1'-N9	-7.53	102.18	108.20
36	1	2994	A	C2-N3-C4	-7.53	106.84	110.60
1	6	1113	A	O5'-P-OP1	-7.53	98.92	105.70
1	6	1271	G	C8-N9-C1'	-7.53	117.21	127.00
36	5	321	C	N1-C2-O2	7.53	123.42	118.90
36	5	659	G	O5'-P-OP2	-7.53	98.92	105.70
36	5	3044	G	O5'-P-OP2	-7.53	98.92	105.70
36	1	87	U	C6-N1-C2	-7.53	116.48	121.00
36	1	1308	A	C5-C6-N1	-7.53	113.94	117.70
36	1	2843	U	C2-N1-C1'	7.53	126.73	117.70
38	4	38	U	C5-C6-N1	7.53	126.46	122.70
38	4	104	A	N9-C4-C5	7.53	108.81	105.80
36	5	787	G	N3-C2-N2	-7.53	114.63	119.90
36	5	2116	G	N3-C4-N9	-7.53	121.48	126.00
36	5	2689	A	C5-N7-C8	-7.53	100.14	103.90
36	5	3188	G	N3-C4-N9	7.53	130.51	126.00
36	1	2952	G	N3-C2-N2	-7.52	114.63	119.90
36	1	277	G	C5-C6-N1	7.52	115.26	111.50
36	1	2394	G	C5-C6-O6	7.52	133.11	128.60
36	1	2611	U	C6-N1-C2	-7.52	116.49	121.00
1	6	638	U	N1-C2-O2	-7.52	117.53	122.80
36	5	1395	G	OP2-P-O3'	7.52	121.75	105.20
36	5	3179	U	N3-C4-O4	7.52	124.67	119.40
37	7	101	G	N3-C2-N2	-7.52	114.63	119.90
36	5	61	A	C4-C5-N7	-7.52	106.94	110.70
36	5	1419	A	N1-C2-N3	7.52	133.06	129.30
36	1	1487	G	N3-C2-N2	-7.52	114.64	119.90
38	4	5	U	N3-C2-O2	7.52	127.46	122.20
36	5	214	G	N1-C2-N2	7.52	122.97	116.20
36	5	875	G	O5'-P-OP2	-7.52	98.93	105.70
36	5	1931	U	N3-C4-O4	-7.52	114.14	119.40
36	5	2661	G	N1-C2-N2	-7.52	109.43	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3037	U	C6-N1-C2	7.52	125.51	121.00
36	5	3129	A	C5-C6-N6	7.52	129.72	123.70
36	5	3296	A	C8-N9-C4	7.52	108.81	105.80
36	1	368	G	C2-N3-C4	-7.52	108.14	111.90
36	1	1120	A	C5-C6-N1	7.52	121.46	117.70
25	d3	54	LEU	CA-CB-CG	-7.52	98.01	115.30
36	5	734	C	N1-C2-O2	7.52	123.41	118.90
36	5	1159	A	N1-C2-N3	7.52	133.06	129.30
36	5	1551	C	C4-C5-C6	7.52	121.16	117.40
36	5	2151	C	C6-N1-C2	7.52	123.31	120.30
36	5	2919	A	C5-C6-N6	7.52	129.72	123.70
36	5	3061	G	C2-N3-C4	-7.52	108.14	111.90
1	6	1466	G	C5-C6-O6	-7.52	124.09	128.60
36	5	1166	G	O5'-P-OP2	-7.52	98.94	105.70
36	5	2244	A	C5-N7-C8	7.52	107.66	103.90
36	5	3049	A	N1-C6-N6	7.52	123.11	118.60
36	1	1170	A	N1-C2-N3	-7.51	125.54	129.30
36	1	1335	C	C6-N1-C2	-7.51	117.29	120.30
36	1	2199	G	C6-N1-C2	-7.51	120.59	125.10
36	1	2858	U	N3-C2-O2	-7.51	116.94	122.20
36	5	1891	A	C8-N9-C4	7.51	108.81	105.80
36	5	2130	G	N3-C2-N2	-7.51	114.64	119.90
36	5	2372	A	P-O3'-C3'	7.51	128.72	119.70
36	1	983	A	C5-C6-N1	-7.51	113.94	117.70
1	6	1108	G	N7-C8-N9	7.51	116.86	113.10
36	5	369	A	C8-N9-C4	-7.51	102.80	105.80
36	5	3079	U	C4-C5-C6	7.51	124.21	119.70
36	1	1482	A	C4-C5-N7	7.51	114.46	110.70
36	1	3031	G	C4-N9-C1'	-7.51	116.73	126.50
37	3	6	C	C5-C4-N4	-7.51	114.94	120.20
38	4	61	A	O5'-P-OP1	-7.51	98.94	105.70
1	6	600	U	C5-C4-O4	-7.51	121.39	125.90
36	5	115	A	C5-C6-N6	7.51	129.71	123.70
36	5	1523	U	C5-C6-N1	7.51	126.46	122.70
36	5	3029	A	N3-C4-C5	7.51	132.06	126.80
36	5	3308	C	C4-C5-C6	7.51	121.16	117.40
1	2	883	C	C5-C6-N1	7.51	124.75	121.00
36	1	293	C	C5-C6-N1	-7.51	117.25	121.00
36	1	611	A	O5'-P-OP2	-7.51	98.94	105.70
36	1	1381	A	C2-N3-C4	-7.51	106.84	110.60
36	1	2289	U	O5'-P-OP1	-7.51	98.94	105.70
36	1	3217	C	N3-C4-C5	-7.51	118.90	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	922	U	N3-C2-O2	7.51	127.46	122.20
36	5	2263	C	C5-C6-N1	7.51	124.75	121.00
36	5	2973	G	C5-C6-N1	-7.51	107.75	111.50
1	6	1323	C	O5'-P-OP1	-7.51	98.94	105.70
1	6	1525	A	N1-C6-N6	-7.51	114.09	118.60
36	5	110	G	N3-C4-N9	7.51	130.50	126.00
36	1	935	U	O5'-P-OP1	-7.51	98.94	105.70
36	1	1116	G	OP1-P-O3'	-7.51	88.69	105.20
36	1	2424	A	C5-C6-N1	-7.51	113.95	117.70
38	4	125	U	O4'-C1'-N1	7.51	114.21	108.20
1	6	1614	A	O4'-C1'-N9	7.51	114.20	108.20
36	5	56	G	C8-N9-C4	7.51	109.40	106.40
36	5	659	G	C8-N9-C4	-7.51	103.40	106.40
1	2	110	U	N1-C2-O2	-7.50	117.55	122.80
36	1	856	G	C4-C5-N7	-7.50	107.80	110.80
36	1	917	A	N9-C4-C5	7.50	108.80	105.80
1	6	1498	G	C4-N9-C1'	7.50	136.25	126.50
36	5	976	U	N3-C2-O2	-7.50	116.95	122.20
36	5	1892	G	N1-C2-N3	7.50	128.40	123.90
36	5	2839	G	N1-C6-O6	-7.50	115.40	119.90
37	7	88	G	N9-C4-C5	7.50	108.40	105.40
37	7	89	G	C4-C5-C6	7.50	123.30	118.80
1	2	1127	G	N1-C2-N3	7.50	128.40	123.90
1	2	1773	C	C5-C6-N1	7.50	124.75	121.00
36	1	335	G	C5-N7-C8	-7.50	100.55	104.30
36	1	1602	A	O5'-P-OP1	-7.50	98.95	105.70
36	1	2127	U	C5-C6-N1	7.50	126.45	122.70
36	1	2979	U	C5-C4-O4	7.50	130.40	125.90
36	1	2993	G	C8-N9-C1'	-7.50	117.25	127.00
1	6	917	U	C6-N1-C2	-7.50	116.50	121.00
36	5	895	A	N1-C2-N3	7.50	133.05	129.30
36	5	1310	G	N3-C4-C5	-7.50	124.85	128.60
1	2	632	U	N3-C2-O2	-7.50	116.95	122.20
36	1	2298	U	O5'-P-OP2	-7.50	98.95	105.70
1	6	1769	U	O5'-P-OP2	-7.50	98.95	105.70
36	1	614	C	C6-N1-C2	-7.50	117.30	120.30
36	1	2359	C	N1-C2-O2	-7.50	114.40	118.90
1	6	797	G	C5-C6-N1	7.50	115.25	111.50
1	6	1518	C	N3-C4-C5	7.50	124.90	121.90
36	5	659	G	N7-C8-N9	7.50	116.85	113.10
36	5	871	U	N1-C2-O2	7.50	128.05	122.80
36	5	1001	G	N1-C6-O6	-7.50	115.40	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1887	A	C6-N1-C2	-7.50	114.10	118.60
36	1	1053	A	O5'-P-OP2	-7.50	98.95	105.70
36	1	2824	G	C5-C6-N1	-7.50	107.75	111.50
1	6	98	U	C4-C5-C6	7.50	124.20	119.70
38	8	80	A	C2-N3-C4	7.50	114.35	110.60
36	5	1006	A	C6-N1-C2	-7.50	114.10	118.60
36	5	1330	A	N7-C8-N9	-7.50	110.05	113.80
36	1	2113	A	N1-C6-N6	-7.49	114.10	118.60
36	1	3390	G	C8-N9-C1'	-7.49	117.26	127.00
1	6	301	A	N9-C4-C5	7.49	108.80	105.80
1	6	1592	A	C8-N9-C4	-7.49	102.80	105.80
1	6	1796	C	C2-N1-C1'	7.49	127.04	118.80
36	5	35	A	N9-C4-C5	7.49	108.80	105.80
36	5	3393	U	N3-C4-O4	-7.49	114.16	119.40
1	2	1150	G	N9-C4-C5	7.49	108.40	105.40
1	2	1749	A	C2-N3-C4	-7.49	106.85	110.60
36	1	3151	U	C5-C4-O4	7.49	130.40	125.90
36	5	935	U	C5-C6-N1	7.49	126.45	122.70
36	5	2155	G	C4-C5-C6	7.49	123.30	118.80
36	1	376	G	C4-C5-N7	-7.49	107.80	110.80
36	1	892	U	O5'-P-OP2	-7.49	98.96	105.70
36	1	962	A	C4-C5-C6	7.49	120.75	117.00
37	3	75	G	C2-N3-C4	-7.49	108.15	111.90
36	5	264	G	N3-C4-N9	7.49	130.49	126.00
36	5	667	C	N3-C2-O2	-7.49	116.66	121.90
36	5	696	C	N3-C2-O2	-7.49	116.66	121.90
36	5	1115	G	N1-C2-N2	-7.49	109.46	116.20
36	5	1594	A	N1-C2-N3	7.49	133.05	129.30
36	1	2916	U	N1-C2-O2	7.49	128.04	122.80
1	6	139	C	N1-C2-N3	7.49	124.44	119.20
1	6	561	G	C8-N9-C4	-7.49	103.40	106.40
36	5	1451	C	C6-N1-C2	-7.49	117.31	120.30
36	5	2421	U	N1-C2-N3	7.49	119.39	114.90
36	5	2877	G	C4-N9-C1'	7.49	136.24	126.50
37	7	21	G	N3-C2-N2	-7.49	114.66	119.90
36	5	1170	A	N1-C2-N3	7.49	133.04	129.30
36	5	1482	A	C5-C6-N1	7.49	121.44	117.70
36	5	2910	A	N1-C2-N3	-7.49	125.56	129.30
36	1	1143	A	N1-C2-N3	7.49	133.04	129.30
36	1	1174	G	C4-N9-C1'	7.49	136.23	126.50
36	1	1307	G	C2'-C3'-O3'	7.49	125.97	109.50
36	1	2614	G	N1-C2-N3	7.49	128.39	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1165	A	C4-C5-C6	7.49	120.74	117.00
36	5	1435	A	N9-C4-C5	7.49	108.79	105.80
36	5	2375	G	C8-N9-C4	-7.49	103.41	106.40
36	5	3214	U	N1-C2-N3	7.49	119.39	114.90
37	7	112	G	N3-C4-C5	-7.49	124.86	128.60
1	6	548	G	N1-C6-O6	7.48	124.39	119.90
36	5	1484	U	C6-N1-C1'	7.48	131.68	121.20
37	7	75	G	C2-N3-C4	-7.48	108.16	111.90
1	2	421	A	C8-N9-C4	7.48	108.79	105.80
1	2	1420	C	N1-C2-O2	7.48	123.39	118.90
1	2	1433	G	N3-C4-N9	7.48	130.49	126.00
36	1	148	G	C6-C5-N7	-7.48	125.91	130.40
36	5	1175	C	O5'-P-OP1	-7.48	98.97	105.70
36	5	2566	C	C6-N1-C2	-7.48	117.31	120.30
36	5	3376	A	C8-N9-C4	-7.48	102.81	105.80
36	1	50	U	N3-C4-C5	-7.48	110.11	114.60
36	1	612	U	C4-C5-C6	7.48	124.19	119.70
36	1	1791	C	C2-N1-C1'	-7.48	110.57	118.80
36	1	2186	U	O5'-P-OP1	7.48	119.68	110.70
1	6	1651	A	C5-N7-C8	-7.48	100.16	103.90
36	5	911	C	N3-C2-O2	-7.48	116.66	121.90
36	5	941	G	C6-N1-C2	-7.48	120.61	125.10
36	1	2628	A	C4-C5-C6	7.48	120.74	117.00
36	5	2727	A	O5'-P-OP1	-7.48	98.97	105.70
52	m6	141	LEU	CB-CG-CD2	-7.48	98.28	111.00
36	1	1483	G	N3-C4-N9	7.48	130.49	126.00
36	1	1881	A	N1-C2-N3	7.48	133.04	129.30
1	6	432	G	N3-C4-C5	-7.48	124.86	128.60
1	6	608	U	N3-C4-O4	-7.48	114.17	119.40
1	6	1197	C	C6-N1-C2	7.48	123.29	120.30
29	d7	7	LEU	CA-CB-CG	-7.48	98.10	115.30
36	5	232	G	N3-C4-N9	-7.48	121.51	126.00
36	5	976	U	N1-C2-N3	7.48	119.39	114.90
36	5	998	A	C4-C5-N7	-7.48	106.96	110.70
36	5	1013	G	N1-C6-O6	-7.48	115.41	119.90
36	5	1407	A	C8-N9-C4	7.48	108.79	105.80
36	1	3326	G	N7-C8-N9	-7.48	109.36	113.10
1	2	334	G	N3-C2-N2	-7.47	114.67	119.90
1	2	1125	A	N1-C6-N6	-7.47	114.12	118.60
36	1	939	U	OP2-P-O3'	7.47	121.64	105.20
38	4	104	A	N3-C4-N9	-7.47	121.42	127.40
1	6	1330	G	C5-C6-N1	-7.47	107.76	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2690	G	N3-C2-N2	-7.47	114.67	119.90
38	8	76	C	N3-C4-C5	-7.47	118.91	121.90
1	2	373	G	C8-N9-C4	-7.47	103.41	106.40
36	1	512	U	N3-C4-C5	-7.47	110.12	114.60
36	1	1435	A	N7-C8-N9	7.47	117.54	113.80
36	1	1547	G	N1-C2-N2	-7.47	109.47	116.20
36	1	2400	G	OP2-P-O3'	7.47	121.64	105.20
36	5	889	U	C5-C6-N1	-7.47	118.96	122.70
36	5	2829	U	OP1-P-O3'	-7.47	88.76	105.20
1	6	636	A	C4-C5-N7	-7.47	106.97	110.70
36	1	281	G	N1-C6-O6	-7.47	115.42	119.90
36	1	1898	G	N1-C6-O6	-7.47	115.42	119.90
36	1	2263	C	O5'-P-OP2	-7.47	98.98	105.70
36	1	2837	A	C2-N3-C4	-7.47	106.87	110.60
36	1	2940	A	C8-N9-C4	-7.47	102.81	105.80
36	1	3222	U	C5-C4-O4	7.47	130.38	125.90
1	6	264	G	C5-C6-O6	-7.47	124.12	128.60
36	5	227	G	C4-C5-N7	-7.47	107.81	110.80
37	7	45	A	N9-C4-C5	7.47	108.79	105.80
36	1	148	G	N3-C4-N9	7.47	130.48	126.00
38	4	12	A	N7-C8-N9	7.47	117.53	113.80
1	2	360	A	C4-C5-N7	7.47	114.43	110.70
36	1	2283	G	N1-C6-O6	7.47	124.38	119.90
36	1	2930	A	N7-C8-N9	-7.47	110.07	113.80
36	5	421	G	N3-C4-C5	-7.47	124.87	128.60
36	5	2286	U	C2-N3-C4	-7.47	122.52	127.00
36	1	1362	G	N3-C4-N9	-7.46	121.52	126.00
36	1	3157	U	N3-C4-O4	-7.46	114.17	119.40
36	5	1374	G	C5-N7-C8	-7.46	100.57	104.30
36	1	823	C	N1-C2-O2	-7.46	114.42	118.90
36	1	2172	A	C5-C6-N6	-7.46	117.73	123.70
36	1	2647	A	C4-C5-C6	7.46	120.73	117.00
36	5	1338	C	N1-C2-O2	-7.46	114.42	118.90
36	1	3305	A	C8-N9-C4	-7.46	102.81	105.80
36	1	3393	U	N1-C2-O2	-7.46	117.58	122.80
36	5	2698	G	N7-C8-N9	-7.46	109.37	113.10
37	7	42	A	C6-N1-C2	-7.46	114.12	118.60
36	1	1490	A	N1-C2-N3	7.46	133.03	129.30
1	6	905	A	N9-C4-C5	7.46	108.78	105.80
36	5	405	U	N1-C2-N3	-7.46	110.42	114.90
36	1	1064	A	N1-C6-N6	-7.46	114.12	118.60
36	1	2662	G	O5'-P-OP2	-7.46	98.99	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2785	A	N1-C2-N3	7.46	133.03	129.30
1	6	1146	G	N7-C8-N9	7.46	116.83	113.10
36	5	520	U	N1-C2-O2	7.46	128.02	122.80
36	5	636	C	N3-C4-C5	-7.46	118.92	121.90
36	5	3052	G	N3-C2-N2	7.46	125.12	119.90
37	7	97	A	C4-C5-C6	7.46	120.73	117.00
36	1	523	A	C8-N9-C4	7.46	108.78	105.80
36	1	3316	A	C4-C5-N7	7.46	114.43	110.70
1	6	565	C	N3-C4-C5	7.46	124.88	121.90
36	5	1498	A	N1-C2-N3	7.46	133.03	129.30
36	5	1740	U	C5-C6-N1	-7.46	118.97	122.70
36	5	2313	A	C6-N1-C2	-7.46	114.13	118.60
37	7	38	U	C5-C4-O4	-7.46	121.43	125.90
36	1	1210	U	C5-C4-O4	7.46	130.37	125.90
36	5	595	G	C5-C6-N1	-7.46	107.77	111.50
37	7	56	A	O5'-P-OP2	7.46	119.65	110.70
36	1	1867	A	N1-C2-N3	7.45	133.03	129.30
36	1	2400	G	C4-C5-N7	7.45	113.78	110.80
36	1	2606	G	N7-C8-N9	7.45	116.83	113.10
36	1	2826	U	C2-N1-C1'	-7.45	108.75	117.70
36	5	330	G	C5-C6-O6	-7.45	124.13	128.60
36	5	512	U	C5-C4-O4	7.45	130.37	125.90
36	5	798	G	C2-N3-C4	-7.45	108.17	111.90
36	1	939	U	N1-C2-O2	-7.45	117.58	122.80
1	6	1278	G	C4-N9-C1'	7.45	136.19	126.50
36	5	718	G	C4-N9-C1'	7.45	136.19	126.50
36	1	316	U	N3-C4-C5	-7.45	110.13	114.60
36	1	2239	G	N1-C6-O6	-7.45	115.43	119.90
1	6	1664	C	O5'-P-OP1	-7.45	98.99	105.70
36	5	1203	A	C4-C5-N7	7.45	114.42	110.70
57	n1	17	ARG	NE-CZ-NH2	-7.45	116.58	120.30
36	1	2610	G	N1-C6-O6	7.45	124.37	119.90
36	5	1737	U	N1-C2-O2	-7.45	117.59	122.80
36	5	1881	A	C5-C6-N6	-7.45	117.74	123.70
36	5	2895	G	C4-N9-C1'	7.45	136.18	126.50
36	1	2168	A	N1-C2-N3	7.45	133.02	129.30
36	5	507	U	N3-C2-O2	-7.45	116.99	122.20
36	1	1377	G	N9-C4-C5	-7.45	102.42	105.40
36	1	3209	A	N9-C4-C5	-7.45	102.82	105.80
36	1	312	C	C6-N1-C2	7.44	123.28	120.30
36	1	1007	U	C6-N1-C2	7.44	125.47	121.00
36	1	1512	U	O5'-P-OP1	-7.44	99.00	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2984	C	N3-C2-O2	-7.44	116.69	121.90
36	5	699	A	C8-N9-C4	-7.44	102.82	105.80
36	5	2297	U	C6-N1-C2	-7.44	116.53	121.00
36	5	2327	U	O5'-P-OP2	-7.44	99.00	105.70
36	1	925	A	O5'-P-OP2	7.44	119.63	110.70
36	1	1136	A	N7-C8-N9	-7.44	110.08	113.80
36	1	1499	C	N3-C4-N4	7.44	123.21	118.00
36	1	2572	C	N1-C2-O2	7.44	123.36	118.90
1	6	1498	G	N3-C4-N9	7.44	130.46	126.00
1	6	1653	C	C6-N1-C2	7.44	123.28	120.30
36	5	591	G	N3-C4-C5	-7.44	124.88	128.60
36	5	2524	A	C5-N7-C8	-7.44	100.18	103.90
36	5	2995	A	C8-N9-C4	7.44	108.78	105.80
36	1	1702	U	N3-C2-O2	7.44	127.41	122.20
36	1	2589	G	C6-C5-N7	-7.44	125.94	130.40
36	1	1863	G	C5-C6-O6	-7.44	124.14	128.60
36	1	2956	A	C6-C5-N7	-7.44	127.09	132.30
36	5	863	C	O5'-P-OP1	-7.44	99.01	105.70
36	5	1045	C	O5'-P-OP1	-7.44	99.01	105.70
36	5	1200	A	N1-C6-N6	7.44	123.06	118.60
36	1	345	G	C6-C5-N7	-7.44	125.94	130.40
1	6	922	G	C4-N9-C1'	7.44	136.17	126.50
36	1	382	U	N1-C2-O2	-7.43	117.60	122.80
36	1	414	U	C5-C6-N1	-7.43	118.98	122.70
36	1	1546	A	C8-N9-C4	-7.43	102.83	105.80
36	1	2824	G	N9-C4-C5	-7.43	102.43	105.40
36	1	2892	A	C6-N1-C2	-7.43	114.14	118.60
36	1	2909	U	C6-N1-C2	7.43	125.46	121.00
36	1	3034	C	O5'-P-OP2	-7.43	99.01	105.70
37	3	102	A	C4-C5-N7	7.43	114.42	110.70
38	4	110	C	C2-N1-C1'	-7.43	110.62	118.80
1	6	1534	G	O4'-C1'-N9	7.43	114.15	108.20
36	5	523	A	C2-N3-C4	-7.43	106.88	110.60
36	5	669	U	C6-N1-C1'	-7.43	110.79	121.20
36	5	851	C	C5-C4-N4	-7.43	115.00	120.20
36	5	1665	C	N3-C4-N4	-7.43	112.80	118.00
38	8	12	A	C5-C6-N6	-7.43	117.75	123.70
36	1	2941	A	C2-N3-C4	7.43	114.32	110.60
36	1	3153	U	C5-C4-O4	7.43	130.36	125.90
36	5	2282	U	C6-N1-C2	7.43	125.46	121.00
36	5	2728	G	C8-N9-C1'	-7.43	117.34	127.00
36	5	2901	G	O5'-P-OP2	-7.43	99.01	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1750	A	N1-C2-N3	7.43	133.02	129.30
36	1	3263	G	C8-N9-C1'	-7.43	117.34	127.00
36	5	2190	U	C5-C4-O4	7.43	130.36	125.90
1	2	414	C	C5-C6-N1	7.43	124.72	121.00
36	1	806	A	N3-C4-C5	7.43	132.00	126.80
36	1	1180	A	N9-C4-C5	7.43	108.77	105.80
36	5	1838	G	N1-C6-O6	7.43	124.36	119.90
36	5	2675	C	N3-C4-C5	7.43	124.87	121.90
36	1	38	U	N3-C2-O2	7.43	127.40	122.20
36	1	1936	A	N1-C6-N6	-7.43	114.14	118.60
36	1	2375	G	C2-N3-C4	-7.43	108.19	111.90
36	1	2738	A	C8-N9-C4	-7.43	102.83	105.80
36	5	522	A	C8-N9-C4	7.43	108.77	105.80
36	5	1407	A	O5'-P-OP1	7.43	119.61	110.70
36	5	1919	G	C6-C5-N7	-7.43	125.94	130.40
1	2	1108	G	N1-C6-O6	-7.43	115.44	119.90
1	6	1033	C	O5'-P-OP1	-7.43	99.02	105.70
1	6	1272	U	N1-C2-N3	7.43	119.36	114.90
36	5	329	U	N1-C2-O2	7.43	128.00	122.80
36	5	1477	A	C6-N1-C2	-7.43	114.14	118.60
37	7	43	U	C5-C4-O4	7.43	130.36	125.90
57	n1	10	ARG	NE-CZ-NH1	7.43	124.01	120.30
36	1	1317	A	C5-N7-C8	-7.42	100.19	103.90
36	1	2623	G	N3-C4-C5	7.42	132.31	128.60
1	6	384	G	C8-N9-C4	-7.42	103.43	106.40
36	5	1480	G	C8-N9-C4	7.42	109.37	106.40
36	5	2907	G	N1-C2-N3	7.42	128.35	123.90
36	5	3154	C	N3-C2-O2	-7.42	116.70	121.90
36	5	3346	U	N1-C2-O2	7.42	128.00	122.80
36	1	1117	G	C5-C6-O6	-7.42	124.15	128.60
36	1	1578	C	C2-N1-C1'	7.42	126.97	118.80
36	5	216	G	O5'-P-OP1	-7.42	99.02	105.70
36	5	578	A	C4-C5-N7	-7.42	106.99	110.70
36	5	1185	C	C5-C6-N1	-7.42	117.29	121.00
36	5	2375	G	O5'-P-OP1	-7.42	99.02	105.70
36	1	41	G	C8-N9-C4	-7.42	103.43	106.40
36	1	406	G	N1-C6-O6	-7.42	115.45	119.90
36	1	933	A	C4-N9-C1'	7.42	139.66	126.30
36	1	1897	G	C8-N9-C4	-7.42	103.43	106.40
36	1	2632	G	O5'-P-OP2	-7.42	99.02	105.70
36	1	2995	A	C8-N9-C4	7.42	108.77	105.80
36	1	3139	A	C8-N9-C4	-7.42	102.83	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1011	A	C8-N9-C4	-7.42	102.83	105.80
36	5	3218	A	C4-C5-C6	7.42	120.71	117.00
76	q0	102	ARG	NE-CZ-NH1	-7.42	116.59	120.30
36	1	585	A	C4-C5-N7	-7.42	106.99	110.70
36	5	514	G	O5'-P-OP1	7.42	119.60	110.70
36	5	959	C	N1-C2-N3	7.42	124.39	119.20
36	5	3069	G	C5-N7-C8	-7.42	100.59	104.30
37	7	13	A	C6-C5-N7	-7.42	127.11	132.30
1	2	1782	A	C2-N3-C4	-7.42	106.89	110.60
36	1	227	G	N3-C4-C5	-7.42	124.89	128.60
36	5	511	G	C2-N3-C4	-7.42	108.19	111.90
36	5	787	G	C8-N9-C4	7.42	109.37	106.40
36	5	2327	U	OP2-P-O3'	7.42	121.52	105.20
36	1	2777	G	C8-N9-C4	-7.42	103.43	106.40
1	6	1139	A	C5-N7-C8	-7.42	100.19	103.90
36	5	577	C	N3-C4-C5	7.42	124.87	121.90
36	5	1047	A	C6-N1-C2	-7.42	114.15	118.60
36	5	1604	G	C2-N3-C4	7.42	115.61	111.90
36	1	1955	U	C5-C6-N1	7.42	126.41	122.70
1	6	330	G	N1-C6-O6	7.42	124.35	119.90
36	5	1894	U	N1-C2-O2	-7.42	117.61	122.80
36	5	2613	U	N3-C4-O4	7.42	124.59	119.40
36	5	2957	G	N1-C6-O6	7.42	124.35	119.90
36	1	231	G	C5-C6-O6	-7.41	124.15	128.60
36	1	2849	C	N3-C4-C5	-7.41	118.94	121.90
1	6	866	G	N1-C6-O6	7.41	124.35	119.90
36	5	437	G	C4-N9-C1'	7.41	136.14	126.50
36	5	919	U	O5'-P-OP2	-7.41	99.03	105.70
36	5	1453	A	C6-N1-C2	-7.41	114.15	118.60
36	5	2414	G	C5-C6-N1	-7.41	107.79	111.50
36	1	2179	C	N3-C4-C5	-7.41	118.94	121.90
1	6	142	G	N9-C4-C5	7.41	108.36	105.40
40	l3	266	ARG	NE-CZ-NH2	7.41	124.01	120.30
1	2	1757	G	N3-C4-N9	7.41	130.45	126.00
36	1	425	G	N1-C2-N2	-7.41	109.53	116.20
36	1	793	C	N3-C4-N4	7.41	123.19	118.00
36	1	2918	G	N3-C4-N9	7.41	130.45	126.00
36	5	696	C	N1-C2-O2	7.41	123.35	118.90
36	5	1863	G	C5-C6-N1	7.41	115.20	111.50
36	5	2661	G	N9-C4-C5	-7.41	102.44	105.40
36	1	818	C	C4-C5-C6	7.41	121.10	117.40
36	1	1124	U	N3-C2-O2	-7.41	117.02	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2288	G	C8-N9-C1'	-7.41	117.37	127.00
36	1	2614	G	N3-C4-N9	7.41	130.44	126.00
36	5	1283	C	C6-N1-C2	7.41	123.26	120.30
36	5	1383	G	C5-C6-N1	-7.41	107.80	111.50
36	1	2364	G	C5-C6-N1	7.41	115.20	111.50
36	5	406	G	N3-C4-N9	-7.41	121.56	126.00
36	5	3262	U	N1-C2-N3	7.41	119.34	114.90
37	7	49	G	C2-N3-C4	-7.41	108.20	111.90
1	2	1572	G	N9-C4-C5	-7.41	102.44	105.40
36	1	662	U	C5-C6-N1	-7.41	119.00	122.70
36	1	697	A	N1-C2-N3	-7.41	125.60	129.30
36	1	1136	A	N1-C2-N3	7.41	133.00	129.30
36	1	3266	G	N1-C2-N3	7.41	128.34	123.90
37	3	85	G	N1-C6-O6	7.41	124.34	119.90
1	6	1480	G	N1-C6-O6	7.41	124.34	119.90
36	5	517	G	C6-C5-N7	-7.41	125.96	130.40
36	5	640	U	N3-C4-C5	-7.41	110.16	114.60
36	5	2643	A	C8-N9-C4	7.41	108.76	105.80
36	5	2715	A	OP2-P-O3'	7.41	121.49	105.20
36	5	422	A	C6-N1-C2	-7.40	114.16	118.60
36	5	1201	C	C2-N3-C4	7.40	123.60	119.90
36	5	1486	G	C4-N9-C1'	-7.40	116.88	126.50
36	1	2705	A	OP1-P-OP2	-7.40	108.50	119.60
36	1	2856	G	C8-N9-C4	7.40	109.36	106.40
1	6	1542	G	N1-C6-O6	-7.40	115.46	119.90
36	5	1344	G	C2-N3-C4	-7.40	108.20	111.90
36	1	1113	G	OP2-P-O3'	7.40	121.48	105.20
36	1	1380	G	N1-C6-O6	7.40	124.34	119.90
36	1	2981	U	C6-N1-C2	-7.40	116.56	121.00
1	6	922	G	C5-C6-O6	-7.40	124.16	128.60
1	6	950	C	C6-N1-C2	-7.40	117.34	120.30
36	5	41	G	C8-N9-C4	-7.40	103.44	106.40
36	5	1332	A	C8-N9-C4	7.40	108.76	105.80
36	5	1364	C	OP1-P-O3'	-7.40	88.93	105.20
36	5	1847	A	C2-N3-C4	-7.40	106.90	110.60
36	5	2288	G	N1-C6-O6	7.40	124.34	119.90
36	5	2937	G	O5'-P-OP1	7.40	119.58	110.70
1	2	19	A	N1-C6-N6	7.40	123.04	118.60
1	2	348	U	O5'-P-OP2	-7.40	99.04	105.70
36	1	2160	G	C8-N9-C4	7.40	109.36	106.40
36	1	2606	G	C6-N1-C2	-7.40	120.66	125.10
36	5	806	A	N3-C4-C5	7.40	131.98	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2948	C	C6-N1-C2	-7.40	117.34	120.30
36	5	3125	U	N3-C4-O4	-7.40	114.22	119.40
36	1	38	U	C2-N1-C1'	-7.39	108.83	117.70
36	5	1715	A	OP1-P-O3'	7.39	121.47	105.20
36	1	1131	G	C5-C6-O6	-7.39	124.17	128.60
36	1	1329	U	P-O3'-C3'	7.39	128.57	119.70
36	1	1928	G	C2-N3-C4	-7.39	108.20	111.90
36	1	2756	C	N1-C2-O2	-7.39	114.46	118.90
36	1	3050	U	C4-C5-C6	7.39	124.14	119.70
36	5	1324	U	O5'-P-OP2	-7.39	99.05	105.70
36	1	2121	G	N1-C6-O6	-7.39	115.47	119.90
1	6	695	U	N3-C2-O2	-7.39	117.03	122.20
36	5	871	U	N3-C2-O2	-7.39	117.03	122.20
36	1	351	A	C8-N9-C4	7.39	108.75	105.80
36	1	396	A	C6-N1-C2	-7.39	114.17	118.60
36	1	1001	G	N1-C6-O6	7.39	124.33	119.90
36	1	1372	C	C6-N1-C2	7.39	123.26	120.30
37	3	88	G	N1-C2-N3	7.39	128.33	123.90
39	L2	25	GLY	N-CA-C	-7.39	94.62	113.10
36	5	657	A	C5-C6-N1	7.39	121.39	117.70
36	5	858	A	N9-C4-C5	7.39	108.76	105.80
36	5	1926	C	N3-C2-O2	-7.39	116.73	121.90
36	5	2302	G	N1-C6-O6	-7.39	115.47	119.90
1	2	415	C	C5-C6-N1	-7.39	117.31	121.00
36	1	714	G	C6-C5-N7	-7.39	125.97	130.40
36	1	1792	C	C4-C5-C6	7.39	121.09	117.40
36	5	2428	U	C2-N1-C1'	-7.39	108.83	117.70
36	5	1148	G	N3-C4-N9	7.39	130.43	126.00
36	5	1438	U	N1-C2-N3	7.39	119.33	114.90
36	1	213	A	C4-C5-N7	7.38	114.39	110.70
36	1	2879	C	N3-C2-O2	7.38	127.07	121.90
1	6	1465	C	N3-C4-C5	-7.38	118.95	121.90
36	5	1113	G	C5-C6-N1	-7.38	107.81	111.50
36	5	3004	C	N3-C2-O2	7.38	127.07	121.90
36	1	2309	A	C6-C5-N7	-7.38	127.13	132.30
36	5	388	G	N3-C2-N2	-7.38	114.73	119.90
36	5	1422	G	C6-C5-N7	-7.38	125.97	130.40
1	2	310	C	N3-C4-C5	-7.38	118.95	121.90
1	2	458	G	N3-C4-C5	7.38	132.29	128.60
36	5	93	C	N1-C2-O2	7.38	123.33	118.90
36	5	1399	A	C4-C5-N7	7.38	114.39	110.70
36	5	2191	U	C5-C4-O4	7.38	130.33	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2243	A	C6-N1-C2	-7.38	114.17	118.60
1	2	1006	C	N3-C2-O2	-7.38	116.73	121.90
1	2	1436	A	C8-N9-C4	7.38	108.75	105.80
1	2	1748	G	C2-N3-C4	-7.38	108.21	111.90
36	1	1103	A	N1-C6-N6	-7.38	114.17	118.60
36	1	2904	U	C5-C6-N1	-7.38	119.01	122.70
1	6	425	A	N1-C6-N6	-7.38	114.17	118.60
1	6	1029	U	C2-N1-C1'	-7.38	108.84	117.70
36	1	523	A	O5'-P-OP2	-7.38	99.06	105.70
36	1	567	G	C8-N9-C4	-7.38	103.45	106.40
36	1	2139	A	N1-C6-N6	7.38	123.03	118.60
36	1	2153	U	C6-N1-C2	-7.38	116.57	121.00
36	1	2378	C	N3-C2-O2	7.38	127.06	121.90
36	1	2403	G	C4-C5-N7	7.38	113.75	110.80
36	1	2614	G	O5'-P-OP2	-7.38	99.06	105.70
36	1	2964	G	O5'-P-OP2	-7.38	99.06	105.70
36	1	3390	G	N1-C6-O6	7.38	124.33	119.90
1	6	480	G	C4-N9-C1'	7.38	136.09	126.50
36	5	1083	G	N1-C6-O6	-7.38	115.47	119.90
36	5	1345	G	C5-C6-N1	-7.38	107.81	111.50
36	5	2700	G	N3-C4-N9	7.38	130.43	126.00
36	1	885	U	C6-N1-C2	7.38	125.43	121.00
36	1	2331	C	N1-C2-O2	7.38	123.33	118.90
36	1	3003	G	C5-C6-O6	-7.38	124.17	128.60
1	6	1135	U	C5-C6-N1	-7.38	119.01	122.70
36	5	1085	A	C5-N7-C8	-7.38	100.21	103.90
1	2	1558	U	C2-N1-C1'	7.38	126.55	117.70
36	1	1408	G	N9-C4-C5	-7.38	102.45	105.40
36	1	1433	A	N1-C2-N3	7.38	132.99	129.30
1	6	1209	C	O5'-P-OP1	-7.38	99.06	105.70
36	5	2190	U	C4-C5-C6	7.38	124.12	119.70
36	5	2848	G	N3-C4-N9	-7.38	121.58	126.00
36	5	3329	U	C6-N1-C2	-7.38	116.58	121.00
37	7	103	A	OP2-P-O3'	7.38	121.42	105.20
36	1	105	C	C2-N3-C4	-7.37	116.21	119.90
36	1	1884	A	C2-N3-C4	-7.37	106.91	110.60
36	1	2238	G	C2-N3-C4	7.37	115.59	111.90
36	5	2132	C	O5'-P-OP2	-7.37	99.06	105.70
37	3	82	G	C6-C5-N7	-7.37	125.98	130.40
1	6	1091	A	O4'-C1'-N9	7.37	114.10	108.20
36	5	333	G	C8-N9-C4	7.37	109.35	106.40
36	5	377	A	N1-C6-N6	-7.37	114.18	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	880	G	O4'-C1'-N9	7.37	114.10	108.20
36	5	965	A	N1-C6-N6	7.37	123.02	118.60
37	7	109	G	C5-N7-C8	-7.37	100.61	104.30
1	2	1177	C	C6-N1-C2	7.37	123.25	120.30
36	1	718	G	N7-C8-N9	7.37	116.78	113.10
36	1	2413	A	C2-N3-C4	-7.37	106.92	110.60
36	5	979	U	C5-C4-O4	7.37	130.32	125.90
36	1	2379	U	N1-C2-N3	7.37	119.32	114.90
1	6	78	A	C5-C6-N6	7.37	129.59	123.70
36	5	395	A	O5'-P-OP2	-7.37	99.07	105.70
36	5	1017	C	C5-C6-N1	7.37	124.68	121.00
36	5	1403	C	C5-C6-N1	-7.37	117.31	121.00
36	5	1878	G	C2-N3-C4	7.37	115.58	111.90
36	1	1371	G	N7-C8-N9	-7.37	109.42	113.10
36	5	2838	A	C6-N1-C2	-7.37	114.18	118.60
36	1	416	A	C5-C6-N1	-7.36	114.02	117.70
36	1	2144	A	O4'-C1'-N9	7.36	114.09	108.20
37	3	115	G	C4-C5-N7	7.36	113.75	110.80
1	6	1109	G	O5'-P-OP1	-7.36	99.07	105.70
36	5	582	G	N1-C6-O6	-7.36	115.48	119.90
36	5	651	G	C4-N9-C1'	7.36	136.07	126.50
36	5	1101	G	N3-C2-N2	7.36	125.05	119.90
36	5	2694	A	O5'-P-OP2	7.36	119.54	110.70
36	5	3085	G	C6-C5-N7	7.36	134.82	130.40
36	1	1375	G	O5'-P-OP2	-7.36	99.07	105.70
36	1	1429	G	C5-N7-C8	7.36	107.98	104.30
36	5	673	U	N1-C2-O2	-7.36	117.65	122.80
36	1	802	C	C2-N3-C4	-7.36	116.22	119.90
36	1	1328	C	N3-C4-N4	7.36	123.15	118.00
36	1	2165	G	C6-C5-N7	-7.36	125.98	130.40
36	1	3107	U	C2-N1-C1'	-7.36	108.87	117.70
36	5	424	G	N9-C4-C5	-7.36	102.46	105.40
36	5	864	G	N1-C2-N2	-7.36	109.58	116.20
36	5	941	G	OP1-P-O3'	7.36	121.39	105.20
36	5	3036	G	O5'-P-OP1	7.36	119.53	110.70
1	2	398	G	N3-C4-C5	-7.36	124.92	128.60
36	1	750	G	O5'-P-OP2	-7.36	99.08	105.70
1	6	1758	U	C5-C6-N1	7.36	126.38	122.70
36	5	1897	G	N7-C8-N9	7.36	116.78	113.10
36	1	233	C	C2-N3-C4	-7.36	116.22	119.90
36	5	253	A	O4'-C1'-N9	7.36	114.09	108.20
36	5	1417	G	N3-C4-C5	-7.36	124.92	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	113	U	C6-N1-C2	-7.36	116.58	121.00
36	1	62	A	N1-C6-N6	7.36	123.01	118.60
36	1	386	A	C4-C5-C6	7.36	120.68	117.00
36	1	628	A	C2-N3-C4	-7.36	106.92	110.60
36	1	2813	A	C4-C5-N7	-7.36	107.02	110.70
36	5	869	G	N1-C2-N3	7.36	128.31	123.90
36	5	1131	G	C5-C6-N1	-7.36	107.82	111.50
36	5	3022	G	O4'-C1'-N9	7.36	114.08	108.20
36	1	1192	C	C5-C6-N1	7.35	124.68	121.00
1	6	1313	A	C5-N7-C8	-7.35	100.22	103.90
1	6	1412	G	N1-C6-O6	-7.35	115.49	119.90
1	6	1572	G	C5-N7-C8	-7.35	100.62	104.30
36	5	937	G	O5'-P-OP2	-7.35	99.08	105.70
36	5	2936	A	C2-N3-C4	7.35	114.28	110.60
36	1	2520	A	C5-N7-C8	-7.35	100.22	103.90
1	6	1787	C	O5'-P-OP1	-7.35	99.08	105.70
36	5	2726	C	N3-C4-N4	-7.35	112.85	118.00
36	1	1116	G	N7-C8-N9	7.35	116.78	113.10
36	1	1725	C	C4-C5-C6	7.35	121.08	117.40
36	5	723	U	N3-C2-O2	-7.35	117.05	122.20
36	1	788	C	C5-C6-N1	-7.35	117.33	121.00
36	1	790	U	C5-C4-O4	7.35	130.31	125.90
36	1	1424	C	N3-C4-N4	7.35	123.14	118.00
36	1	3106	A	N1-C6-N6	-7.35	114.19	118.60
36	5	718	G	C8-N9-C1'	-7.35	117.44	127.00
36	5	1437	C	C6-N1-C2	-7.35	117.36	120.30
36	5	1550	C	C6-N1-C2	-7.35	117.36	120.30
36	5	2363	A	C8-N9-C4	-7.35	102.86	105.80
36	5	3050	U	C2-N3-C4	-7.35	122.59	127.00
37	7	97	A	N1-C2-N3	7.35	132.97	129.30
36	1	1376	C	N3-C4-C5	-7.35	118.96	121.90
36	1	2122	G	C4-C5-C6	-7.35	114.39	118.80
36	5	1450	G	C4-N9-C1'	7.35	136.05	126.50
1	2	1172	G	O5'-P-OP1	-7.35	99.09	105.70
36	1	627	U	N3-C2-O2	7.35	127.34	122.20
36	1	2353	G	N9-C4-C5	-7.35	102.46	105.40
38	4	5	U	C2-N1-C1'	-7.35	108.89	117.70
36	5	1714	A	C8-N9-C4	7.35	108.74	105.80
1	2	1654	G	C8-N9-C1'	-7.34	117.45	127.00
36	1	835	G	C5-C6-O6	-7.34	124.19	128.60
1	6	578	U	O4'-C1'-N1	7.34	114.08	108.20
36	5	1332	A	O5'-P-OP1	-7.34	99.09	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2996	U	C2-N3-C4	7.34	131.41	127.00
36	5	3003	G	C4-C5-C6	-7.34	114.39	118.80
36	1	25	U	N1-C2-O2	-7.34	117.66	122.80
36	1	721	G	C5-C6-O6	-7.34	124.19	128.60
36	1	908	G	C6-N1-C2	-7.34	120.69	125.10
36	1	1311	G	C4-C5-N7	-7.34	107.86	110.80
37	7	84	A	N9-C4-C5	7.34	108.74	105.80
1	6	378	A	N1-C6-N6	-7.34	114.19	118.60
1	6	1002	G	C8-N9-C1'	7.34	136.54	127.00
1	6	1124	A	C4-C5-N7	7.34	114.37	110.70
1	6	1512	G	C6-C5-N7	-7.34	126.00	130.40
36	5	614	C	N3-C4-C5	7.34	124.84	121.90
36	5	1477	A	N1-C6-N6	-7.34	114.19	118.60
1	2	1141	G	C5-C6-O6	-7.34	124.20	128.60
36	1	73	C	N3-C4-C5	-7.34	118.96	121.90
36	1	1791	C	C6-N1-C1'	7.34	129.61	120.80
36	1	2193	U	C2-N3-C4	-7.34	122.60	127.00
36	1	2300	G	C5-C6-N1	-7.34	107.83	111.50
36	1	2984	C	C6-N1-C2	-7.34	117.36	120.30
1	6	440	U	C5-C6-N1	-7.34	119.03	122.70
36	5	515	C	N3-C4-C5	7.34	124.84	121.90
36	5	1147	G	N9-C4-C5	-7.34	102.46	105.40
36	5	3080	G	C5-C6-N1	7.34	115.17	111.50
36	1	2363	A	C5-C6-N1	-7.34	114.03	117.70
36	1	421	G	N3-C2-N2	7.34	125.03	119.90
36	1	496	C	C6-N1-C2	-7.34	117.36	120.30
37	3	88	G	N9-C4-C5	7.34	108.33	105.40
1	6	1474	G	N1-C6-O6	7.34	124.30	119.90
36	5	1709	C	C6-N1-C2	7.34	123.23	120.30
36	1	1851	G	N3-C2-N2	-7.33	114.77	119.90
37	3	115	G	C5-C6-N1	7.33	115.17	111.50
36	5	2282	U	N3-C4-C5	7.33	119.00	114.60
1	2	420	A	N1-C6-N6	7.33	123.00	118.60
36	1	649	A	C4-C5-N7	-7.33	107.03	110.70
1	6	389	G	C4-C5-N7	7.33	113.73	110.80
1	6	432	G	N3-C4-N9	7.33	130.40	126.00
1	6	868	G	N1-C6-O6	7.33	124.30	119.90
36	5	330	G	N3-C4-C5	7.33	132.27	128.60
36	5	421	G	N1-C2-N3	7.33	128.30	123.90
36	5	731	U	N1-C2-N3	7.33	119.30	114.90
36	5	1444	G	C6-C5-N7	-7.33	126.00	130.40
36	5	1601	U	N3-C2-O2	-7.33	117.07	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2294	U	N3-C4-O4	-7.33	114.27	119.40
36	5	2610	G	N3-C4-N9	-7.33	121.60	126.00
1	2	1602	C	C6-N1-C2	-7.33	117.37	120.30
36	1	3134	A	C8-N9-C4	-7.33	102.87	105.80
36	5	2873	U	N3-C4-C5	-7.33	110.20	114.60
36	1	2733	A	C5-C6-N1	7.33	121.36	117.70
36	5	1138	U	C4-C5-C6	7.33	124.10	119.70
36	1	424	G	C6-N1-C2	-7.33	120.70	125.10
36	1	652	G	C5-N7-C8	7.33	107.96	104.30
36	1	654	C	C5-C6-N1	-7.33	117.33	121.00
36	1	883	A	N9-C4-C5	7.33	108.73	105.80
36	1	1495	U	C5-C4-O4	7.33	130.30	125.90
36	1	2624	G	C4-C5-N7	7.33	113.73	110.80
36	5	27	C	C6-N1-C2	-7.33	117.37	120.30
36	5	530	G	O5'-P-OP1	-7.33	99.11	105.70
36	5	973	A	C5-C6-N6	-7.33	117.84	123.70
36	5	2817	A	N9-C4-C5	7.33	108.73	105.80
36	5	3025	C	C5-C4-N4	7.33	125.33	120.20
38	8	139	U	N3-C4-O4	-7.33	114.27	119.40
36	1	2311	G	C8-N9-C4	-7.33	103.47	106.40
36	1	3211	C	OP1-P-O3'	7.33	121.32	105.20
1	6	1749	A	N1-C2-N3	7.33	132.96	129.30
36	5	1085	A	C2-N3-C4	-7.33	106.94	110.60
36	1	1321	G	C5-C6-O6	-7.33	124.20	128.60
4	s2	229	LEU	CA-CB-CG	7.33	132.15	115.30
36	1	3174	A	C6-N1-C2	7.32	122.99	118.60
1	6	1002	G	C4-N9-C1'	-7.32	116.98	126.50
36	5	2130	G	C4-N9-C1'	-7.32	116.98	126.50
36	1	1632	A	C8-N9-C4	-7.32	102.87	105.80
36	1	1880	U	N1-C2-N3	7.32	119.29	114.90
36	1	2651	G	C6-C5-N7	-7.32	126.01	130.40
36	5	909	G	C5-C6-N1	-7.32	107.84	111.50
1	2	287	G	O4'-C1'-N9	7.32	114.06	108.20
36	1	2841	G	N3-C4-C5	-7.32	124.94	128.60
36	1	2981	U	N1-C2-O2	7.32	127.92	122.80
1	6	289	U	C6-N1-C2	-7.32	116.61	121.00
1	6	1058	U	P-O3'-C3'	7.32	128.49	119.70
1	6	1101	G	N3-C4-C5	-7.32	124.94	128.60
36	5	1213	G	N1-C2-N3	7.32	128.29	123.90
36	5	3182	G	C4-C5-N7	-7.32	107.87	110.80
1	2	598	U	C5-C6-N1	7.32	126.36	122.70
36	1	2664	C	C4-C5-C6	-7.32	113.74	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	52	A	N1-C2-N3	7.32	132.96	129.30
36	1	519	A	C5-N7-C8	-7.32	100.24	103.90
1	6	27	U	C6-N1-C2	-7.32	116.61	121.00
1	6	565	C	C6-N1-C2	7.32	123.23	120.30
1	6	794	U	C6-N1-C2	-7.32	116.61	121.00
36	5	760	G	C8-N9-C4	7.32	109.33	106.40
36	5	1408	G	C5-C6-N1	-7.32	107.84	111.50
36	5	3028	G	N1-C2-N2	-7.32	109.61	116.20
1	2	1572	G	C4-C5-N7	7.32	113.73	110.80
36	1	2241	U	N1-C2-N3	7.32	119.29	114.90
36	5	183	G	N3-C4-C5	-7.32	124.94	128.60
36	5	926	A	N1-C6-N6	-7.32	114.21	118.60
37	7	99	G	C6-C5-N7	7.32	134.79	130.40
1	6	1408	G	C2-N3-C4	-7.31	108.24	111.90
36	5	640	U	N1-C2-N3	7.31	119.29	114.90
36	5	1298	C	N3-C4-N4	7.31	123.12	118.00
36	1	707	U	N3-C4-C5	-7.31	110.21	114.60
36	1	909	G	C6-C5-N7	-7.31	126.01	130.40
36	1	2691	A	N1-C6-N6	-7.31	114.21	118.60
36	1	2707	C	N3-C4-C5	-7.31	118.97	121.90
36	1	2955	U	OP2-P-O3'	7.31	121.29	105.20
1	6	313	U	N1-C2-N3	7.31	119.29	114.90
36	5	1589	A	C4-C5-C6	7.31	120.66	117.00
36	5	2876	C	C5-C6-N1	7.31	124.66	121.00
36	5	2938	G	C4-C5-N7	7.31	113.72	110.80
37	7	84	A	OP1-P-O3'	7.31	121.29	105.20
36	1	3122	A	N1-C2-N3	-7.31	125.64	129.30
36	5	2817	A	C8-N9-C4	-7.31	102.88	105.80
38	8	2	A	C8-N9-C4	-7.31	102.88	105.80
1	2	1651	A	C6-N1-C2	7.31	122.98	118.60
36	5	421	G	C4-N9-C1'	7.31	136.00	126.50
36	5	1368	U	C5-C4-O4	-7.31	121.51	125.90
36	5	1411	C	N3-C2-O2	-7.31	116.78	121.90
36	5	2288	G	C8-N9-C1'	-7.31	117.50	127.00
36	5	2611	U	N3-C4-O4	7.31	124.52	119.40
36	5	2778	G	N3-C2-N2	-7.31	114.78	119.90
37	7	76	A	N7-C8-N9	-7.31	110.14	113.80
36	1	601	U	N1-C2-O2	7.31	127.92	122.80
36	1	1319	G	N1-C6-O6	-7.31	115.52	119.90
36	1	1406	A	C4-C5-N7	7.31	114.35	110.70
36	1	2610	G	C6-C5-N7	-7.31	126.02	130.40
36	1	2934	A	C6-N1-C2	7.31	122.98	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	93	C	N1-C2-N3	-7.31	114.08	119.20
36	5	2151	C	C2-N1-C1'	-7.31	110.76	118.80
36	5	2833	A	C5-C6-N1	7.31	121.35	117.70
36	5	2965	U	N3-C2-O2	7.31	127.31	122.20
36	1	693	A	C5-C6-N1	-7.30	114.05	117.70
36	1	1192	C	C6-N1-C1'	-7.30	112.03	120.80
36	1	1592	G	C4-N9-C1'	7.30	136.00	126.50
36	1	2382	G	C5-C6-N1	7.30	115.15	111.50
36	1	2803	A	C5-C6-N1	7.30	121.35	117.70
36	1	3326	G	C8-N9-C4	7.30	109.32	106.40
38	4	20	U	OP2-P-O3'	7.30	121.27	105.20
36	5	1010	G	N1-C6-O6	7.30	124.28	119.90
36	5	1443	G	N7-C8-N9	7.30	116.75	113.10
36	5	2754	G	C5-C6-N1	7.30	115.15	111.50
36	5	2993	G	C5-N7-C8	-7.30	100.65	104.30
36	5	3294	A	N9-C4-C5	7.30	108.72	105.80
36	1	1122	U	N3-C2-O2	-7.30	117.09	122.20
36	5	941	G	O5'-P-OP2	-7.30	99.13	105.70
36	5	1277	C	C6-N1-C2	-7.30	117.38	120.30
36	5	2130	G	N1-C2-N2	7.30	122.77	116.20
36	1	813	G	C2-N3-C4	-7.30	108.25	111.90
36	1	3197	G	C2-N3-C4	-7.30	108.25	111.90
1	6	324	U	N3-C2-O2	7.30	127.31	122.20
1	6	634	G	N9-C4-C5	7.30	108.32	105.40
1	6	1557	U	N3-C2-O2	-7.30	117.09	122.20
1	6	1616	G	OP2-P-O3'	7.30	121.26	105.20
1	2	793	A	C8-N9-C4	-7.30	102.88	105.80
36	1	92	G	C5-C6-N1	-7.30	107.85	111.50
36	1	1150	A	N1-C6-N6	-7.30	114.22	118.60
36	1	1420	C	OP2-P-O3'	7.30	121.26	105.20
36	1	1556	C	C5-C4-N4	7.30	125.31	120.20
36	1	2644	C	N1-C2-N3	7.30	124.31	119.20
36	5	1357	G	C8-N9-C4	-7.30	103.48	106.40
36	5	1473	G	C5-C6-O6	-7.30	124.22	128.60
36	5	2108	C	C5-C4-N4	7.30	125.31	120.20
36	5	2869	U	O5'-P-OP1	-7.30	99.13	105.70
36	5	3092	C	C6-N1-C1'	-7.30	112.04	120.80
1	2	49	C	N3-C4-N4	7.30	123.11	118.00
36	1	2651	G	O5'-P-OP1	-7.30	99.13	105.70
1	6	1636	C	O5'-P-OP1	-7.30	99.13	105.70
36	5	2126	A	N3-C4-C5	-7.30	121.69	126.80
36	5	3036	G	N1-C2-N3	7.30	128.28	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3131	U	C5-C6-N1	-7.30	119.05	122.70
1	2	572	C	N1-C2-O2	-7.30	114.52	118.90
36	1	908	G	C6-C5-N7	-7.30	126.02	130.40
36	1	2634	U	C2-N1-C1'	7.30	126.45	117.70
36	5	1319	G	C4-C5-N7	-7.30	107.88	110.80
36	5	2835	U	N1-C2-N3	7.30	119.28	114.90
36	5	3148	U	C5-C6-N1	-7.30	119.05	122.70
36	1	659	G	OP2-P-O3'	7.29	121.25	105.20
36	1	2897	A	C5-C6-N1	7.29	121.35	117.70
1	6	1093	A	N1-C6-N6	-7.29	114.22	118.60
36	5	688	G	N1-C6-O6	7.29	124.28	119.90
1	6	1214	U	N3-C4-O4	7.29	124.51	119.40
36	5	1938	U	C5-C6-N1	-7.29	119.05	122.70
36	1	691	A	C4-C5-N7	7.29	114.35	110.70
1	6	326	G	N1-C6-O6	7.29	124.28	119.90
1	6	995	A	C5-C6-N1	7.29	121.35	117.70
36	5	3214	U	C5-C4-O4	7.29	130.28	125.90
36	1	1176	C	C2-N3-C4	-7.29	116.25	119.90
36	5	1142	G	N7-C8-N9	7.29	116.75	113.10
36	5	2979	U	C2-N1-C1'	-7.29	108.95	117.70
1	2	1460	A	C5-C6-N6	7.29	129.53	123.70
36	1	2895	G	N1-C2-N2	-7.29	109.64	116.20
36	1	1111	U	C2-N3-C4	-7.29	122.63	127.00
36	1	3084	C	C6-N1-C2	-7.29	117.39	120.30
1	6	3	U	C6-N1-C2	7.29	125.37	121.00
1	6	1618	C	N1-C2-O2	7.29	123.27	118.90
36	5	1120	A	C2-N3-C4	-7.29	106.96	110.60
41	14	244	LEU	CA-CB-CG	-7.29	98.54	115.30
1	2	1363	U	C2-N1-C1'	7.29	126.44	117.70
36	1	2956	A	OP1-P-OP2	-7.29	108.67	119.60
36	1	3182	G	N9-C4-C5	-7.29	102.49	105.40
36	1	3252	G	C8-N9-C4	7.29	109.31	106.40
36	5	607	A	N1-C2-N3	7.29	132.94	129.30
36	5	1008	U	N1-C2-N3	-7.29	110.53	114.90
36	5	1850	A	C8-N9-C4	7.29	108.71	105.80
36	5	2826	U	N1-C2-N3	7.29	119.27	114.90
36	1	1330	A	O5'-P-OP1	-7.28	99.14	105.70
36	1	1410	U	O5'-P-OP1	7.28	119.44	110.70
36	1	3046	A	N1-C6-N6	7.28	122.97	118.60
1	6	862	A	C5-C6-N1	7.28	121.34	117.70
36	5	531	G	C8-N9-C1'	-7.28	117.53	127.00
36	5	1178	G	N1-C2-N3	7.28	128.27	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2715	A	C6-N1-C2	-7.28	114.23	118.60
36	1	223	U	O5'-P-OP1	7.28	119.44	110.70
36	1	1520	G	N9-C4-C5	-7.28	102.49	105.40
36	1	1594	A	N3-C4-C5	-7.28	121.70	126.80
36	5	900	G	N9-C4-C5	7.28	108.31	105.40
36	5	3013	U	OP2-P-O3'	7.28	121.22	105.20
36	1	966	U	C6-N1-C2	-7.28	116.63	121.00
36	1	2821	C	C5-C6-N1	7.28	124.64	121.00
1	6	1543	A	N1-C2-N3	7.28	132.94	129.30
1	2	1109	G	C4-C5-N7	7.28	113.71	110.80
36	1	89	A	C6-N1-C2	-7.28	114.23	118.60
36	1	1402	C	C5-C6-N1	-7.28	117.36	121.00
36	1	936	A	C4-N9-C1'	-7.28	113.20	126.30
36	1	1209	G	N3-C4-C5	-7.28	124.96	128.60
36	1	2238	G	N1-C2-N3	-7.28	119.53	123.90
36	1	3216	G	C8-N9-C1'	-7.28	117.54	127.00
1	6	1787	C	N3-C4-C5	-7.28	118.99	121.90
1	2	360	A	C5-N7-C8	-7.28	100.26	103.90
36	1	903	U	N1-C2-N3	7.28	119.27	114.90
1	6	1308	G	O5'-P-OP2	-7.28	99.15	105.70
36	5	631	U	N3-C4-O4	7.28	124.49	119.40
36	5	2808	A	C5-N7-C8	-7.28	100.26	103.90
1	2	1245	G	C2-N3-C4	7.27	115.54	111.90
1	2	1463	C	C6-N1-C2	7.27	123.21	120.30
36	1	1364	C	OP2-P-O3'	7.27	121.20	105.20
36	1	2715	A	O5'-P-OP1	-7.27	99.15	105.70
36	1	3263	G	C4-N9-C1'	7.27	135.96	126.50
1	6	1478	G	C8-N9-C1'	-7.27	117.54	127.00
36	5	187	A	N7-C8-N9	7.27	117.44	113.80
36	5	567	G	C5-N7-C8	-7.27	100.66	104.30
36	5	2991	A	C2-N3-C4	7.27	114.24	110.60
36	5	3373	U	N1-C2-O2	-7.27	117.71	122.80
36	1	833	G	N9-C4-C5	7.27	108.31	105.40
36	5	2952	G	C5-C6-O6	-7.27	124.24	128.60
36	1	427	C	C5-C6-N1	7.27	124.64	121.00
36	1	1393	A	C6-N1-C2	-7.27	114.24	118.60
36	1	2311	G	N7-C8-N9	7.27	116.73	113.10
36	1	2968	G	OP1-P-OP2	-7.27	108.70	119.60
36	1	3197	G	N3-C4-N9	-7.27	121.64	126.00
1	6	526	A	C2-N3-C4	-7.27	106.97	110.60
36	5	406	G	N3-C4-C5	7.27	132.24	128.60
36	5	1365	G	N1-C2-N3	7.27	128.26	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1870	C	N3-C4-N4	7.27	123.09	118.00
36	5	2135	U	O5'-P-OP2	-7.27	99.16	105.70
36	5	2874	G	N7-C8-N9	7.27	116.73	113.10
36	5	3196	U	O5'-P-OP1	7.27	119.42	110.70
36	1	2376	G	C8-N9-C4	-7.27	103.49	106.40
38	4	19	C	C4-C5-C6	7.27	121.03	117.40
36	5	771	A	C8-N9-C4	7.27	108.71	105.80
36	5	1136	A	C4-C5-C6	7.27	120.63	117.00
36	5	1444	G	C4-N9-C1'	7.27	135.95	126.50
36	5	2312	A	C5-C6-N6	7.27	129.51	123.70
36	5	2401	A	O4'-C1'-N9	7.27	114.01	108.20
36	1	948	C	N3-C4-C5	-7.27	118.99	121.90
36	5	404	G	C6-C5-N7	-7.27	126.04	130.40
36	1	787	G	N3-C4-C5	-7.26	124.97	128.60
1	6	606	A	O5'-P-OP1	-7.26	99.16	105.70
1	6	1083	G	N7-C8-N9	7.26	116.73	113.10
36	5	217	U	OP1-P-O3'	7.26	121.18	105.20
36	5	905	U	O5'-P-OP1	-7.26	99.16	105.70
36	5	1143	A	O5'-P-OP1	-7.26	99.16	105.70
36	5	1160	C	O5'-P-OP2	-7.26	99.16	105.70
36	5	1918	C	C4-C5-C6	7.26	121.03	117.40
36	5	2726	C	N3-C4-C5	-7.26	119.00	121.90
36	1	1125	U	C6-N1-C2	-7.26	116.64	121.00
36	5	3217	C	C5-C6-N1	-7.26	117.37	121.00
36	1	1429	G	O4'-C1'-N9	-7.26	102.39	108.20
36	5	396	A	N1-C6-N6	-7.26	114.24	118.60
36	5	3081	C	C6-N1-C2	7.26	123.20	120.30
36	5	3245	A	O5'-P-OP2	7.26	119.41	110.70
40	l3	196	ARG	NE-CZ-NH1	7.26	123.93	120.30
46	l9	184	LYS	CD-CE-NZ	7.26	128.40	111.70
36	1	537	A	C2-N3-C4	-7.26	106.97	110.60
1	6	925	G	C8-N9-C4	-7.26	103.50	106.40
1	6	1002	G	O5'-P-OP1	-7.26	99.17	105.70
36	5	2409	G	N1-C6-O6	7.26	124.26	119.90
19	C7	85	VAL	C-N-CD	-7.26	104.63	120.60
36	1	1361	U	N1-C2-O2	-7.26	117.72	122.80
1	6	1271	G	C6-C5-N7	-7.26	126.05	130.40
1	6	1465	C	C4-C5-C6	7.26	121.03	117.40
1	6	1552	U	C5-C6-N1	7.26	126.33	122.70
36	5	1302	A	N9-C4-C5	7.26	108.70	105.80
36	5	2856	G	N1-C6-O6	7.26	124.25	119.90
36	5	2911	A	C6-N1-C2	-7.26	114.25	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3054	U	C6-N1-C1'	7.26	131.36	121.20
36	1	656	A	C6-N1-C2	-7.26	114.25	118.60
36	1	1514	G	N3-C4-C5	-7.26	124.97	128.60
36	1	1870	C	C6-N1-C2	7.26	123.20	120.30
1	6	1019	A	N7-C8-N9	-7.26	110.17	113.80
36	5	61	A	N9-C4-C5	7.26	108.70	105.80
36	5	132	C	N3-C4-C5	-7.26	119.00	121.90
36	5	298	U	O5'-P-OP2	-7.26	99.17	105.70
36	5	521	A	N3-C4-N9	-7.26	121.59	127.40
36	5	1043	C	C6-N1-C2	7.26	123.20	120.30
36	1	2196	C	N3-C4-C5	7.25	124.80	121.90
36	1	2748	A	C2-N3-C4	-7.25	106.97	110.60
36	1	2939	G	C4-N9-C1'	7.25	135.93	126.50
1	6	1139	A	C2-N3-C4	7.25	114.23	110.60
36	1	45	A	C5-N7-C8	-7.25	100.27	103.90
36	1	944	C	N1-C2-O2	-7.25	114.55	118.90
36	1	1482	A	C5-N7-C8	-7.25	100.27	103.90
36	1	2326	A	N1-C2-N3	7.25	132.93	129.30
36	1	3181	C	N3-C4-C5	-7.25	119.00	121.90
38	4	53	A	C2-N3-C4	7.25	114.23	110.60
1	6	1639	C	C5-C4-N4	-7.25	115.12	120.20
36	5	2764	C	C4-C5-C6	-7.25	113.77	117.40
36	1	57	A	C5-C6-N1	-7.25	114.08	117.70
36	1	348	A	C2-N3-C4	-7.25	106.97	110.60
36	1	828	A	C8-N9-C4	-7.25	102.90	105.80
36	1	952	A	N3-C4-N9	-7.25	121.60	127.40
1	6	419	G	C5-C6-O6	-7.25	124.25	128.60
1	6	616	G	C8-N9-C4	-7.25	103.50	106.40
36	5	2629	U	C5-C6-N1	-7.25	119.08	122.70
36	5	3326	G	N9-C4-C5	-7.25	102.50	105.40
36	1	344	A	N3-C4-N9	-7.25	121.60	127.40
36	1	578	A	OP1-P-OP2	7.25	130.47	119.60
36	1	978	G	N3-C4-C5	7.25	132.22	128.60
36	5	925	A	O5'-P-OP1	-7.25	99.17	105.70
36	1	878	G	N9-C4-C5	7.25	108.30	105.40
36	1	2918	G	C5-C6-O6	-7.25	124.25	128.60
1	6	1672	G	O5'-P-OP2	-7.25	99.18	105.70
36	5	356	C	N1-C2-N3	7.25	124.28	119.20
36	5	934	G	C4-C5-N7	7.25	113.70	110.80
36	5	1478	C	C4-C5-C6	-7.25	113.78	117.40
36	5	3337	G	C6-C5-N7	-7.25	126.05	130.40
1	2	1291	G	N1-C2-N3	7.25	128.25	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1292	C	C6-N1-C2	7.25	123.20	120.30
36	1	1306	G	N7-C8-N9	7.25	116.72	113.10
36	1	1365	G	OP1-P-OP2	-7.25	108.73	119.60
36	1	2788	C	O5'-P-OP1	-7.25	99.18	105.70
1	6	1547	A	C2-N3-C4	-7.25	106.98	110.60
36	5	888	A	N1-C2-N3	7.25	132.92	129.30
36	5	2765	C	C6-N1-C2	-7.25	117.40	120.30
36	5	2972	G	C8-N9-C4	7.25	109.30	106.40
36	5	3180	A	C8-N9-C4	7.25	108.70	105.80
37	7	15	C	N3-C4-C5	-7.25	119.00	121.90
36	1	2851	A	O4'-C1'-N9	7.25	114.00	108.20
36	1	3076	C	C5-C6-N1	7.25	124.62	121.00
36	5	610	G	N1-C6-O6	-7.25	115.55	119.90
36	5	1049	C	C2-N3-C4	7.25	123.52	119.90
36	5	1164	G	N9-C4-C5	7.25	108.30	105.40
36	5	3235	C	C6-N1-C2	7.25	123.20	120.30
36	1	794	U	O5'-P-OP2	-7.24	99.18	105.70
36	1	3328	G	C4-C5-N7	7.24	113.70	110.80
36	5	878	G	C8-N9-C4	-7.24	103.50	106.40
36	5	916	G	O5'-P-OP1	-7.24	99.18	105.70
36	5	1845	G	C6-N1-C2	-7.24	120.75	125.10
36	5	3142	A	N1-C2-N3	7.24	132.92	129.30
36	1	904	A	N1-C2-N3	7.24	132.92	129.30
36	1	949	C	N3-C4-C5	-7.24	119.00	121.90
36	5	1389	G	C5-C6-O6	-7.24	124.25	128.60
36	5	2993	G	O5'-P-OP1	-7.24	99.18	105.70
36	1	1102	A	C2-N3-C4	-7.24	106.98	110.60
36	1	1316	C	N3-C4-C5	-7.24	119.00	121.90
36	1	1547	G	C8-N9-C1'	-7.24	117.59	127.00
1	6	1539	G	O4'-C1'-N9	-7.24	102.41	108.20
36	5	801	A	O4'-C1'-N9	-7.24	102.41	108.20
36	5	1385	C	C5-C6-N1	7.24	124.62	121.00
36	5	2283	G	N3-C4-C5	7.24	132.22	128.60
36	5	2929	C	N3-C4-N4	7.24	123.07	118.00
36	1	206	G	N9-C4-C5	-7.24	102.50	105.40
36	1	853	G	N1-C6-O6	-7.24	115.56	119.90
36	1	1466	G	N3-C4-N9	7.24	130.34	126.00
36	1	2838	A	N1-C2-N3	7.24	132.92	129.30
36	5	972	A	C8-N9-C4	-7.24	102.90	105.80
36	1	105	C	N3-C4-C5	7.24	124.80	121.90
36	1	215	G	C8-N9-C4	-7.24	103.50	106.40
36	1	2801	A	N1-C6-N6	7.24	122.94	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	65	G	OP2-P-O3'	7.24	121.12	105.20
36	1	636	C	C5-C4-N4	-7.24	115.13	120.20
36	1	937	G	C2-N3-C4	-7.24	108.28	111.90
36	1	2983	C	N3-C4-N4	-7.24	112.94	118.00
36	1	3216	G	N1-C6-O6	7.23	124.24	119.90
36	1	67	A	N1-C6-N6	-7.23	114.26	118.60
36	1	1794	G	C4-C5-N7	-7.23	107.91	110.80
36	5	41	G	C5-N7-C8	-7.23	100.68	104.30
36	5	992	A	C5-C6-N1	-7.23	114.08	117.70
36	5	3119	U	C6-N1-C2	-7.23	116.66	121.00
38	8	107	G	C5-C6-O6	-7.23	124.26	128.60
36	1	1435	A	O5'-P-OP1	-7.23	99.19	105.70
1	6	1099	U	N3-C2-O2	-7.23	117.14	122.20
36	5	1517	G	C2-N3-C4	-7.23	108.28	111.90
36	5	3330	A	N3-C4-C5	-7.23	121.74	126.80
36	1	2847	A	N1-C6-N6	7.23	122.94	118.60
1	6	448	C	N1-C2-O2	-7.23	114.56	118.90
36	5	641	C	C2-N3-C4	-7.23	116.28	119.90
36	5	1765	U	C6-N1-C2	-7.23	116.66	121.00
37	7	102	A	C5-C6-N6	-7.23	117.92	123.70
36	1	2300	G	C2-N3-C4	-7.23	108.29	111.90
36	1	2345	A	O5'-P-OP2	-7.23	99.20	105.70
36	1	2877	G	N3-C2-N2	-7.23	114.84	119.90
36	5	613	G	C2-N3-C4	-7.23	108.29	111.90
36	5	2396	G	N1-C6-O6	-7.23	115.56	119.90
36	5	2850	G	N7-C8-N9	-7.23	109.49	113.10
36	5	3232	G	O5'-P-OP1	7.23	119.37	110.70
36	1	1321	G	O5'-P-OP2	-7.23	99.20	105.70
38	4	109	A	C5-C6-N6	-7.23	117.92	123.70
36	1	875	G	N1-C2-N3	7.22	128.24	123.90
36	1	954	U	OP2-P-O3'	7.22	121.09	105.20
36	1	973	A	N3-C4-N9	-7.22	121.62	127.40
36	1	2647	A	C5-C6-N6	-7.22	117.92	123.70
36	1	2799	A	C8-N9-C4	-7.22	102.91	105.80
36	1	517	G	N7-C8-N9	7.22	116.71	113.10
36	1	2257	C	O4'-C1'-N1	7.22	113.98	108.20
36	1	2394	G	C6-C5-N7	7.22	134.73	130.40
36	1	2606	G	C8-N9-C4	-7.22	103.51	106.40
1	6	511	A	C8-N9-C4	7.22	108.69	105.80
1	6	752	A	N9-C4-C5	-7.22	102.91	105.80
1	6	1596	C	C6-N1-C2	7.22	123.19	120.30
36	5	2617	U	N1-C2-N3	7.22	119.23	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2887	A	N3-C4-C5	-7.22	121.74	126.80
1	2	111	U	C6-N1-C1'	-7.22	111.09	121.20
36	1	3046	A	C5-C6-N6	-7.22	117.92	123.70
36	5	560	G	N9-C4-C5	7.22	108.29	105.40
36	5	2916	U	N3-C4-C5	7.22	118.93	114.60
1	2	1272	U	C5-C4-O4	7.22	130.23	125.90
36	1	1137	C	C2-N1-C1'	7.22	126.74	118.80
36	1	1651	U	OP1-P-OP2	-7.22	108.77	119.60
36	1	2661	G	N9-C4-C5	-7.22	102.51	105.40
36	1	3262	U	N1-C2-N3	7.22	119.23	114.90
36	5	751	A	O5'-P-OP2	-7.22	99.20	105.70
36	5	1156	C	C2-N1-C1'	7.22	126.74	118.80
36	5	1389	G	C4-C5-N7	7.22	113.69	110.80
36	1	701	G	C5-C6-N1	-7.22	107.89	111.50
36	1	1152	G	N3-C4-C5	-7.22	124.99	128.60
1	6	16	G	C5-C6-O6	-7.22	124.27	128.60
1	6	884	A	N1-C6-N6	7.22	122.93	118.60
36	5	3103	A	N1-C2-N3	7.22	132.91	129.30
36	1	1312	C	C2-N3-C4	7.22	123.51	119.90
1	6	144	U	O5'-P-OP1	-7.22	99.20	105.70
1	6	1426	C	N3-C2-O2	7.22	126.95	121.90
36	5	2847	A	C4-C5-N7	7.22	114.31	110.70
1	2	18	C	N3-C4-N4	7.21	123.05	118.00
36	1	81	C	N3-C4-C5	-7.21	119.01	121.90
36	1	89	A	C4-C5-C6	7.21	120.61	117.00
36	1	594	U	C4-C5-C6	7.21	124.03	119.70
38	4	16	G	C6-C5-N7	-7.21	126.07	130.40
1	6	393	C	C4-C5-C6	-7.21	113.79	117.40
36	5	217	U	N1-C2-N3	7.21	119.23	114.90
36	5	869	G	C2-N3-C4	-7.21	108.29	111.90
36	5	942	U	C4-C5-C6	7.21	124.03	119.70
36	5	1786	G	C4-C5-N7	7.21	113.69	110.80
36	5	2735	U	C6-N1-C2	-7.21	116.67	121.00
36	5	2757	U	N3-C2-O2	-7.21	117.15	122.20
36	1	39	A	C5-C6-N6	-7.21	117.93	123.70
36	1	2982	A	C5-C6-N6	-7.21	117.93	123.70
1	6	919	A	N1-C6-N6	7.21	122.93	118.60
36	5	856	G	N3-C4-C5	-7.21	124.99	128.60
36	5	1379	G	N3-C4-N9	7.21	130.33	126.00
36	5	3060	C	C5-C4-N4	-7.21	115.15	120.20
37	7	22	A	N1-C2-N3	7.21	132.91	129.30
1	2	1270	G	C8-N9-C4	-7.21	103.52	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	751	A	N7-C8-N9	7.21	117.41	113.80
36	1	856	G	N1-C6-O6	-7.21	115.57	119.90
36	1	908	G	C8-N9-C1'	-7.21	117.62	127.00
36	1	2760	C	N1-C2-O2	-7.21	114.57	118.90
36	1	2870	C	C6-N1-C2	7.21	123.19	120.30
36	5	2864	A	O5'-P-OP2	7.21	119.35	110.70
36	1	1305	U	N3-C4-C5	-7.21	110.27	114.60
36	1	2704	A	N9-C4-C5	7.21	108.68	105.80
36	5	2237	C	C6-N1-C2	-7.21	117.42	120.30
36	5	2284	C	O5'-P-OP2	7.21	119.35	110.70
1	2	116	U	N3-C2-O2	-7.21	117.16	122.20
36	1	221	A	O5'-P-OP2	-7.21	99.21	105.70
36	1	721	G	N1-C6-O6	7.21	124.22	119.90
36	1	953	G	C8-N9-C4	7.21	109.28	106.40
36	1	962	A	C6-N1-C2	-7.21	114.27	118.60
36	1	1491	A	C4-C5-C6	7.21	120.61	117.00
36	1	3201	C	O5'-P-OP1	-7.21	99.21	105.70
36	1	3208	G	C5-C6-N1	7.21	115.10	111.50
15	c3	149	LEU	CA-CB-CG	7.21	131.88	115.30
36	5	2401	A	C5-C6-N1	-7.21	114.10	117.70
36	5	2728	G	OP1-P-OP2	7.21	130.41	119.60
36	5	3175	U	C5-C4-O4	7.21	130.23	125.90
36	1	1398	U	C5-C6-N1	-7.21	119.10	122.70
36	1	2872	A	C2-N3-C4	7.21	114.20	110.60
1	6	313	U	C4-C5-C6	7.21	124.02	119.70
1	6	1074	G	C5-C6-N1	-7.21	107.90	111.50
36	5	2298	U	OP1-P-OP2	7.21	130.41	119.60
36	5	2390	A	OP1-P-OP2	7.21	130.41	119.60
36	1	705	A	C8-N9-C4	7.21	108.68	105.80
1	6	797	G	C8-N9-C4	7.21	109.28	106.40
36	1	439	C	C6-N1-C1'	-7.20	112.16	120.80
36	1	1834	U	C2-N1-C1'	-7.20	109.06	117.70
36	1	2291	A	N7-C8-N9	7.20	117.40	113.80
36	1	2346	C	N3-C4-C5	-7.20	119.02	121.90
36	5	1162	U	O5'-P-OP2	-7.20	99.22	105.70
36	5	1165	A	O5'-P-OP1	-7.20	99.22	105.70
36	5	2710	C	N3-C2-O2	7.20	126.94	121.90
1	2	610	G	N3-C4-N9	7.20	130.32	126.00
1	6	980	G	N9-C4-C5	-7.20	102.52	105.40
36	5	55	G	C6-C5-N7	-7.20	126.08	130.40
36	5	1308	A	N1-C2-N3	-7.20	125.70	129.30
1	2	1565	C	N1-C2-O2	-7.20	114.58	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	628	A	C6-N1-C2	-7.20	114.28	118.60
36	5	2403	G	C6-C5-N7	-7.20	126.08	130.40
36	5	2853	A	N9-C4-C5	-7.20	102.92	105.80
36	5	2967	A	N1-C2-N3	7.20	132.90	129.30
36	5	3062	G	C5-C6-O6	-7.20	124.28	128.60
38	8	138	A	C6-N1-C2	-7.20	114.28	118.60
1	2	1279	C	C6-N1-C2	-7.20	117.42	120.30
36	1	1876	U	C2-N1-C1'	7.20	126.34	117.70
36	1	2646	C	O5'-P-OP2	-7.20	99.22	105.70
38	4	44	A	C8-N9-C4	-7.20	102.92	105.80
1	6	1271	G	C4-N9-C1'	7.20	135.86	126.50
36	5	35	A	C5-C6-N6	7.20	129.46	123.70
36	5	96	G	N3-C4-N9	-7.20	121.68	126.00
36	5	1327	C	C2-N3-C4	-7.20	116.30	119.90
36	5	1378	U	N3-C2-O2	7.20	127.24	122.20
36	5	1923	C	C6-N1-C2	-7.20	117.42	120.30
36	5	2757	U	C6-N1-C2	-7.20	116.68	121.00
36	5	3390	G	C5-C6-N1	-7.20	107.90	111.50
36	1	635	G	C6-N1-C2	-7.20	120.78	125.10
36	1	1307	G	O5'-P-OP2	-7.20	99.22	105.70
36	1	2963	C	C2-N1-C1'	7.20	126.72	118.80
1	6	858	G	C4-N9-C1'	7.20	135.86	126.50
36	5	1102	A	N1-C2-N3	7.20	132.90	129.30
36	5	1422	G	C5-N7-C8	-7.20	100.70	104.30
36	1	416	A	C4-C5-C6	7.20	120.60	117.00
36	1	1456	A	N1-C6-N6	-7.20	114.28	118.60
36	1	1547	G	N3-C2-N2	7.20	124.94	119.90
36	1	1549	U	N1-C2-O2	-7.20	117.76	122.80
36	1	2923	U	C2-N1-C1'	-7.20	109.07	117.70
1	6	431	C	C6-N1-C1'	7.20	129.44	120.80
36	5	1478	C	N3-C2-O2	7.19	126.94	121.90
36	5	2391	G	N7-C8-N9	-7.19	109.50	113.10
37	7	37	G	C6-C5-N7	-7.19	126.08	130.40
1	2	1594	G	C5-C6-O6	-7.19	124.28	128.60
36	1	1049	C	N3-C4-C5	7.19	124.78	121.90
36	1	1225	A	C8-N9-C4	7.19	108.68	105.80
1	6	1368	G	N9-C4-C5	-7.19	102.52	105.40
36	5	1884	A	N1-C2-N3	7.19	132.90	129.30
36	5	3219	G	C5-C6-N1	7.19	115.10	111.50
1	2	1462	G	N3-C4-C5	7.19	132.19	128.60
36	1	1431	G	C5-N7-C8	7.19	107.89	104.30
36	1	2940	A	C2-N3-C4	7.19	114.20	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	23	U	N3-C4-C5	-7.19	110.29	114.60
1	6	294	C	C4-C5-C6	7.19	121.00	117.40
36	5	1598	G	C5-C6-N1	7.19	115.09	111.50
36	5	2549	G	N1-C6-O6	7.19	124.21	119.90
36	5	2670	G	N1-C6-O6	7.19	124.21	119.90
36	5	3322	A	C5-C6-N1	-7.19	114.11	117.70
36	1	1442	U	C5-C6-N1	7.19	126.29	122.70
36	5	1114	U	N1-C2-O2	-7.19	117.77	122.80
36	5	3177	G	N1-C6-O6	-7.19	115.59	119.90
36	1	425	G	OP1-P-OP2	-7.19	108.82	119.60
36	1	3220	G	N1-C6-O6	-7.19	115.59	119.90
1	6	1572	G	C4-C5-N7	7.19	113.67	110.80
36	5	520	U	N3-C2-O2	-7.19	117.17	122.20
36	5	864	G	N3-C2-N2	7.19	124.93	119.90
36	5	3221	C	N3-C2-O2	-7.19	116.87	121.90
36	1	3086	A	C4-C5-C6	7.19	120.59	117.00
36	5	95	A	N3-C4-C5	7.19	131.83	126.80
36	5	646	A	N1-C6-N6	-7.19	114.29	118.60
36	5	2396	G	C6-N1-C2	-7.19	120.79	125.10
1	2	1745	G	C5-C6-N1	7.18	115.09	111.50
36	1	688	G	N3-C4-C5	-7.18	125.01	128.60
36	1	1397	C	C2-N3-C4	-7.18	116.31	119.90
36	1	1411	C	OP1-P-O3'	7.18	121.00	105.20
36	5	2690	G	N3-C4-N9	-7.18	121.69	126.00
36	1	421	G	N1-C2-N2	-7.18	109.74	116.20
36	1	1104	G	O5'-P-OP1	-7.18	99.24	105.70
36	1	1881	A	C6-N1-C2	-7.18	114.29	118.60
36	1	2400	G	C5-C6-N1	-7.18	107.91	111.50
36	1	2979	U	N1-C1'-C2'	7.18	123.34	114.00
1	6	1111	G	C6-N1-C2	-7.18	120.79	125.10
1	6	1478	G	C6-C5-N7	-7.18	126.09	130.40
36	5	1107	C	N1-C2-N3	7.18	124.23	119.20
36	5	2817	A	N3-C4-C5	-7.18	121.77	126.80
36	1	2108	C	C6-N1-C2	7.18	123.17	120.30
36	1	3144	G	OP2-P-O3'	7.18	121.00	105.20
36	5	1291	A	N1-C6-N6	-7.18	114.29	118.60
36	1	615	U	N1-C2-N3	7.18	119.21	114.90
36	1	709	A	C8-N9-C4	7.18	108.67	105.80
36	1	1411	C	N3-C4-C5	7.18	124.77	121.90
36	1	2914	G	C5-C6-N1	-7.18	107.91	111.50
1	6	1375	A	C2-N3-C4	-7.18	107.01	110.60
36	5	935	U	O5'-P-OP2	-7.18	99.24	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2115	G	C5-C6-O6	-7.18	124.29	128.60
36	5	3320	A	C4-C5-C6	7.18	120.59	117.00
36	1	751	A	C6-N1-C2	-7.18	114.29	118.60
36	1	3256	G	N1-C6-O6	7.18	124.21	119.90
36	5	426	G	C5-C6-N1	7.18	115.09	111.50
36	5	1048	A	C8-N9-C4	-7.18	102.93	105.80
36	5	1196	C	O4'-C1'-N1	7.18	113.94	108.20
36	5	1332	A	N1-C2-N3	7.18	132.89	129.30
36	5	2386	A	C6-C5-N7	-7.18	127.28	132.30
36	1	999	G	C5-C6-O6	-7.18	124.29	128.60
36	1	1552	G	N9-C4-C5	-7.18	102.53	105.40
36	5	2816	G	N1-C2-N2	7.18	122.66	116.20
36	5	2897	A	C8-N9-C1'	-7.18	114.78	127.70
1	2	1085	G	N3-C2-N2	7.17	124.92	119.90
36	1	696	C	C4-C5-C6	-7.17	113.81	117.40
36	1	952	A	C2-N3-C4	-7.17	107.01	110.60
36	1	1157	G	C2-N3-C4	-7.17	108.31	111.90
36	1	1400	G	C4-C5-C6	7.17	123.11	118.80
1	6	977	A	N1-C6-N6	7.17	122.91	118.60
36	5	321	C	C6-N1-C1'	-7.17	112.19	120.80
36	5	331	G	N1-C6-O6	7.17	124.20	119.90
36	5	425	G	N9-C4-C5	7.17	108.27	105.40
36	5	691	A	N1-C6-N6	-7.17	114.30	118.60
38	8	101	U	N1-C2-N3	7.17	119.20	114.90
36	1	838	G	C5-C6-N1	-7.17	107.91	111.50
36	1	2841	G	N3-C4-N9	7.17	130.30	126.00
1	6	275	C	C6-N1-C2	-7.17	117.43	120.30
1	6	1123	C	C5-C4-N4	-7.17	115.18	120.20
1	6	1201	G	N3-C4-N9	-7.17	121.70	126.00
36	5	3332	U	N1-C2-O2	-7.17	117.78	122.80
36	1	2225	U	O5'-P-OP2	-7.17	99.25	105.70
1	6	397	A	C2-N3-C4	-7.17	107.01	110.60
1	6	583	C	N3-C4-C5	-7.17	119.03	121.90
1	6	1605	G	OP2-P-O3'	7.17	120.98	105.20
1	6	1780	G	N3-C4-N9	7.17	130.30	126.00
36	5	403	C	N1-C2-O2	-7.17	114.60	118.90
36	5	519	A	C4-C5-C6	7.17	120.58	117.00
36	5	1061	A	C5-C6-N1	7.17	121.28	117.70
36	5	1293	U	O5'-P-OP2	7.17	119.31	110.70
36	5	1433	A	C5-C6-N6	-7.17	117.96	123.70
36	5	2207	A	C2-N3-C4	-7.17	107.01	110.60
36	1	287	G	C6-C5-N7	-7.17	126.10	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	725	G	C8-N9-C4	7.17	109.27	106.40
36	1	2185	G	N9-C4-C5	-7.17	102.53	105.40
36	1	2931	C	C5-C6-N1	-7.17	117.42	121.00
1	6	48	G	C5-C6-O6	7.17	132.90	128.60
1	6	595	G	C8-N9-C4	-7.17	103.53	106.40
1	6	595	G	N7-C8-N9	7.17	116.68	113.10
36	5	1443	G	C8-N9-C4	-7.17	103.53	106.40
36	5	1452	A	O5'-P-OP1	-7.17	99.25	105.70
37	7	75	G	C5-C6-N1	-7.17	107.92	111.50
36	1	385	A	N1-C6-N6	-7.17	114.30	118.60
36	1	838	G	N1-C6-O6	7.17	124.20	119.90
36	1	2803	A	C6-N1-C2	-7.17	114.30	118.60
1	6	460	A	C8-N9-C4	-7.17	102.93	105.80
1	6	1610	G	C6-C5-N7	-7.17	126.10	130.40
36	1	313	A	N1-C6-N6	7.17	122.90	118.60
36	1	660	A	C8-N9-C4	-7.17	102.93	105.80
36	5	507	U	N1-C2-N3	7.17	119.20	114.90
36	5	1590	G	N7-C8-N9	-7.17	109.52	113.10
36	5	3366	G	C8-N9-C4	-7.17	103.53	106.40
36	1	1552	G	C5-C6-O6	-7.16	124.30	128.60
36	1	2799	A	C2-N3-C4	-7.16	107.02	110.60
1	6	175	G	N9-C4-C5	-7.16	102.53	105.40
1	6	611	U	C2-N1-C1'	7.16	126.30	117.70
1	6	788	A	N7-C8-N9	-7.16	110.22	113.80
36	5	1148	G	N1-C6-O6	7.16	124.20	119.90
36	5	1408	G	C4-N9-C1'	7.16	135.81	126.50
36	5	1592	G	C4-N9-C1'	7.16	135.81	126.50
36	5	3115	C	C2-N3-C4	-7.16	116.32	119.90
36	5	3220	G	C5-C6-O6	7.16	132.90	128.60
36	5	3303	G	N9-C4-C5	7.16	108.27	105.40
37	7	37	G	N3-C4-C5	-7.16	125.02	128.60
36	1	3100	U	N1-C2-N3	-7.16	110.60	114.90
1	6	389	G	C5-C6-O6	-7.16	124.30	128.60
36	5	1906	G	N1-C2-N2	-7.16	109.75	116.20
36	5	2917	G	O5'-P-OP2	-7.16	99.25	105.70
1	2	577	G	C5-N7-C8	-7.16	100.72	104.30
1	2	1454	G	N7-C8-N9	-7.16	109.52	113.10
36	1	1482	A	C6-C5-N7	-7.16	127.29	132.30
36	1	2315	G	C8-N9-C4	-7.16	103.54	106.40
36	1	2398	A	C5-N7-C8	7.16	107.48	103.90
1	6	1023	A	C8-N9-C4	-7.16	102.94	105.80
1	6	1340	U	N3-C4-O4	-7.16	114.39	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	517	G	C2-N3-C4	-7.16	108.32	111.90
36	5	675	C	C5-C6-N1	7.16	124.58	121.00
36	5	1367	G	N3-C4-C5	-7.16	125.02	128.60
36	5	1922	A	C8-N9-C4	7.16	108.66	105.80
36	5	2742	C	O5'-P-OP2	-7.16	99.26	105.70
1	2	554	C	N3-C2-O2	-7.16	116.89	121.90
36	1	1592	G	C4-C5-N7	-7.16	107.94	110.80
36	1	2981	U	O5'-P-OP2	-7.16	99.26	105.70
1	6	342	C	N3-C4-C5	-7.16	119.04	121.90
36	5	2110	G	C5-C6-N1	7.16	115.08	111.50
36	5	2150	G	C8-N9-C4	-7.16	103.54	106.40
36	5	2419	A	OP1-P-OP2	-7.16	108.86	119.60
36	5	2664	C	C5-C4-N4	-7.16	115.19	120.20
36	5	2896	A	N1-C6-N6	7.16	122.89	118.60
36	1	640	U	N3-C2-O2	7.16	127.21	122.20
36	1	1166	G	C8-N9-C4	7.16	109.26	106.40
36	1	426	G	C8-N9-C4	7.16	109.26	106.40
36	1	1365	G	C8-N9-C4	-7.16	103.54	106.40
36	1	1547	G	N9-C4-C5	-7.16	102.54	105.40
36	1	1607	U	N1-C2-O2	7.16	127.81	122.80
37	3	25	G	C4-N9-C1'	7.16	135.80	126.50
1	6	119	A	N1-C2-N3	7.16	132.88	129.30
36	5	2964	G	N1-C6-O6	-7.16	115.61	119.90
36	1	1508	C	N1-C2-N3	7.15	124.21	119.20
36	1	2887	A	C2-N3-C4	7.15	114.18	110.60
36	1	3319	U	N1-C2-O2	7.15	127.81	122.80
36	5	3308	C	O5'-P-OP2	-7.15	99.26	105.70
36	1	643	U	N3-C4-O4	7.15	124.41	119.40
36	1	1191	U	N3-C2-O2	7.15	127.21	122.20
36	1	1337	A	C5-C6-N1	7.15	121.28	117.70
36	1	3383	G	N3-C2-N2	-7.15	114.89	119.90
1	6	337	G	C8-N9-C4	-7.15	103.54	106.40
1	6	630	A	C6-C5-N7	-7.15	127.29	132.30
36	5	1203	A	C6-C5-N7	-7.15	127.29	132.30
36	1	301	G	C8-N9-C4	-7.15	103.54	106.40
36	1	2179	C	N1-C2-O2	7.15	123.19	118.90
36	1	2211	U	O5'-P-OP1	-7.15	99.26	105.70
36	1	2368	A	C2-N3-C4	7.15	114.17	110.60
1	6	1012	U	N3-C2-O2	-7.15	117.19	122.20
36	5	1159	A	N1-C6-N6	7.15	122.89	118.60
1	6	1112	G	C4-C5-N7	-7.15	107.94	110.80
36	1	2839	G	N7-C8-N9	7.15	116.67	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	49	C	OP1-P-OP2	-7.15	108.88	119.60
1	6	423	G	N1-C2-N2	7.15	122.63	116.20
1	6	1660	A	N1-C2-N3	7.15	132.87	129.30
36	5	1052	U	C2-N3-C4	7.15	131.29	127.00
65	n9	54	LEU	CA-CB-CG	-7.15	98.86	115.30
36	5	725	G	N1-C6-O6	-7.15	115.61	119.90
36	5	1411	C	O5'-P-OP1	7.15	119.28	110.70
36	1	2419	A	N1-C6-N6	7.14	122.89	118.60
38	4	56	G	N3-C4-C5	-7.14	125.03	128.60
1	6	879	G	N9-C4-C5	-7.14	102.54	105.40
36	5	2830	G	N3-C4-N9	-7.14	121.71	126.00
36	5	3044	G	C5-C6-N1	-7.14	107.93	111.50
52	m6	101	ARG	NE-CZ-NH2	-7.14	116.73	120.30
1	2	1426	C	C5-C4-N4	-7.14	115.20	120.20
36	1	982	C	N3-C2-O2	-7.14	116.90	121.90
36	1	1431	G	C2-N3-C4	7.14	115.47	111.90
36	5	1902	G	C4-N9-C1'	7.14	135.79	126.50
36	1	680	G	C5-C6-N1	-7.14	107.93	111.50
1	6	1171	A	N1-C6-N6	-7.14	114.31	118.60
1	6	1490	C	O5'-P-OP1	-7.14	99.27	105.70
36	5	3098	G	C6-N1-C2	-7.14	120.81	125.10
36	1	146	U	C2-N1-C1'	7.14	126.27	117.70
36	1	2187	G	C5-C6-N1	-7.14	107.93	111.50
36	1	2407	C	N3-C4-N4	7.14	123.00	118.00
36	1	2952	G	C5-C6-N1	-7.14	107.93	111.50
1	6	371	G	N1-C6-O6	7.14	124.18	119.90
1	6	1007	C	N3-C4-N4	-7.14	113.00	118.00
36	5	957	C	OP1-P-O3'	7.14	120.91	105.20
36	5	2850	G	C8-N9-C4	7.14	109.26	106.40
36	5	3322	A	N1-C2-N3	7.14	132.87	129.30
37	3	89	G	N7-C8-N9	-7.14	109.53	113.10
1	6	246	G	C8-N9-C4	-7.14	103.55	106.40
36	5	1149	G	N3-C2-N2	-7.14	114.90	119.90
36	5	3078	U	N1-C2-N3	7.14	119.18	114.90
36	1	607	A	C4-C5-C6	7.14	120.57	117.00
36	1	3269	U	P-O3'-C3'	7.14	128.26	119.70
36	1	3387	U	N1-C2-O2	-7.14	117.81	122.80
36	5	606	C	C6-N1-C2	-7.14	117.44	120.30
36	5	922	U	N1-C2-O2	-7.14	117.80	122.80
36	5	1838	G	N9-C4-C5	-7.14	102.55	105.40
36	5	1944	U	N3-C4-O4	7.14	124.40	119.40
1	2	1631	A	N9-C4-C5	7.13	108.65	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	609	G	C4-C5-N7	7.13	113.65	110.80
36	1	2664	C	C5-C4-N4	-7.13	115.20	120.20
36	1	2939	G	N1-C6-O6	-7.13	115.62	119.90
1	6	51	A	N1-C2-N3	7.13	132.87	129.30
36	5	2858	U	N3-C2-O2	-7.13	117.21	122.20
36	1	934	G	N7-C8-N9	7.13	116.67	113.10
36	1	1865	A	C2-N3-C4	-7.13	107.03	110.60
1	6	1566	U	C5-C6-N1	-7.13	119.13	122.70
36	5	866	A	C8-N9-C4	7.13	108.65	105.80
1	2	1728	A	C6-N1-C2	-7.13	114.32	118.60
36	1	1299	U	N1-C2-O2	-7.13	117.81	122.80
37	3	7	G	C5-C6-O6	7.13	132.88	128.60
36	5	1902	G	N3-C4-N9	7.13	130.28	126.00
36	5	2768	U	N3-C4-O4	-7.13	114.41	119.40
1	2	334	G	N3-C4-C5	7.13	132.16	128.60
1	2	1486	G	C6-C5-N7	-7.13	126.12	130.40
1	2	1623	C	O5'-P-OP1	-7.13	99.28	105.70
36	1	3245	A	OP1-P-OP2	-7.13	108.91	119.60
1	6	3	U	N3-C4-C5	7.13	118.88	114.60
36	5	1139	G	C8-N9-C1'	7.13	136.27	127.00
1	2	993	A	N1-C6-N6	7.13	122.88	118.60
36	1	591	G	N3-C4-C5	-7.13	125.04	128.60
36	1	2606	G	C4-N9-C1'	7.13	135.76	126.50
1	6	1304	G	C8-N9-C4	7.13	109.25	106.40
36	5	1102	A	N9-C4-C5	7.13	108.65	105.80
36	5	1130	A	C4-C5-C6	-7.13	113.44	117.00
36	5	1176	C	N3-C4-N4	-7.13	113.01	118.00
36	5	2380	U	N1-C2-O2	-7.13	117.81	122.80
36	5	2979	U	C6-N1-C2	7.13	125.28	121.00
1	2	566	C	C5-C6-N1	-7.12	117.44	121.00
36	1	973	A	C5-C6-N6	7.12	129.40	123.70
36	1	1398	U	C5-C4-O4	7.12	130.18	125.90
36	5	41	G	N7-C8-N9	7.12	116.66	113.10
36	5	2334	U	C4-C5-C6	7.12	123.97	119.70
36	5	3093	C	C4-C5-C6	7.12	120.96	117.40
1	2	1029	U	C5-C4-O4	7.12	130.18	125.90
36	1	1614	C	N3-C2-O2	-7.12	116.91	121.90
36	1	2192	C	C6-N1-C2	-7.12	117.45	120.30
36	1	2415	C	O5'-P-OP2	-7.12	99.29	105.70
36	1	2802	A	N1-C2-N3	7.12	132.86	129.30
1	6	1	U	N3-C2-O2	-7.12	117.21	122.20
1	6	57	G	C4-N9-C1'	7.12	135.76	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3177	G	C5-C6-O6	7.12	132.87	128.60
36	1	145	G	N1-C6-O6	7.12	124.17	119.90
1	6	19	A	N1-C6-N6	7.12	122.87	118.60
1	6	1124	A	C5-N7-C8	-7.12	100.34	103.90
1	6	1586	A	N1-C6-N6	-7.12	114.33	118.60
36	5	774	G	N9-C4-C5	-7.12	102.55	105.40
36	5	1160	C	N1-C2-O2	-7.12	114.63	118.90
36	5	1172	G	N1-C6-O6	7.12	124.17	119.90
36	5	2784	G	N1-C6-O6	7.12	124.17	119.90
36	5	3043	C	N3-C4-C5	7.12	124.75	121.90
36	5	3304	U	N3-C4-O4	7.12	124.39	119.40
37	7	37	G	C4-N9-C1'	7.12	135.76	126.50
37	3	6	C	N3-C4-C5	7.12	124.75	121.90
1	6	142	G	C6-C5-N7	7.12	134.67	130.40
36	1	346	C	C6-N1-C2	-7.12	117.45	120.30
36	1	1317	A	O5'-P-OP1	-7.12	99.29	105.70
36	1	2521	U	C5-C6-N1	-7.12	119.14	122.70
38	4	24	G	C8-N9-C1'	-7.12	117.75	127.00
36	5	1782	U	C6-N1-C2	-7.12	116.73	121.00
36	1	942	U	C6-N1-C2	-7.12	116.73	121.00
1	6	337	G	C6-C5-N7	-7.12	126.13	130.40
1	6	1271	G	C4-C5-C6	7.12	123.07	118.80
36	5	1379	G	C4-C5-C6	7.12	123.07	118.80
36	1	93	C	N3-C4-N4	7.12	122.98	118.00
36	1	2830	G	N3-C4-C5	7.12	132.16	128.60
1	6	1003	A	N1-C6-N6	7.12	122.87	118.60
36	5	641	C	N3-C4-C5	7.12	124.75	121.90
36	5	1316	C	N1-C2-N3	7.12	124.18	119.20
36	5	2693	C	N3-C4-C5	7.12	124.75	121.90
37	7	117	A	N1-C2-N3	7.12	132.86	129.30
1	2	552	G	C4-C5-N7	7.11	113.65	110.80
36	1	917	A	C5-C6-N6	7.11	129.39	123.70
36	1	1179	A	C8-N9-C4	7.11	108.64	105.80
36	1	1581	C	N3-C4-C5	-7.11	119.06	121.90
36	5	1665	C	OP2-P-O3'	7.11	120.85	105.20
36	5	1680	G	C8-N9-C1'	-7.11	117.75	127.00
1	2	1272	U	N1-C2-N3	7.11	119.17	114.90
36	1	2950	G	C8-N9-C4	-7.11	103.56	106.40
36	5	1673	G	N1-C6-O6	7.11	124.17	119.90
36	5	3026	G	C2-N3-C4	-7.11	108.34	111.90
36	1	95	A	C5-C6-N6	7.11	129.39	123.70
36	1	721	G	C5-N7-C8	-7.11	100.74	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	784	A	C2-N3-C4	-7.11	107.05	110.60
36	1	2873	U	N3-C2-O2	-7.11	117.22	122.20
1	6	1628	U	N3-C2-O2	-7.11	117.22	122.20
36	5	816	A	C4-C5-N7	-7.11	107.14	110.70
36	5	1148	G	C4-N9-C1'	7.11	135.74	126.50
36	5	2280	A	N9-C4-C5	-7.11	102.96	105.80
36	5	2770	G	N7-C8-N9	7.11	116.66	113.10
36	5	3366	G	N3-C4-C5	-7.11	125.05	128.60
36	1	3050	U	N3-C4-C5	-7.11	110.33	114.60
1	6	415	C	C5-C4-N4	7.11	125.18	120.20
1	6	1418	G	C6-C5-N7	-7.11	126.14	130.40
36	5	1405	U	C6-N1-C1'	7.11	131.15	121.20
36	5	1514	G	C4-C5-N7	7.11	113.64	110.80
36	5	3120	C	N3-C2-O2	-7.11	116.92	121.90
36	1	2131	A	N1-C2-N3	7.11	132.85	129.30
36	1	2772	C	C3'-C2'-C1'	-7.11	95.81	101.50
36	1	2940	A	C5-C6-N1	7.11	121.25	117.70
38	4	2	A	C8-N9-C4	-7.11	102.96	105.80
38	4	9	A	C8-N9-C4	7.11	108.64	105.80
36	5	1194	G	N7-C8-N9	7.11	116.65	113.10
38	8	99	C	C6-N1-C1'	-7.11	112.27	120.80
1	2	620	A	N1-C6-N6	-7.11	114.34	118.60
1	2	1127	G	N9-C4-C5	7.11	108.24	105.40
36	1	345	G	C4-N9-C1'	7.11	135.74	126.50
36	1	2846	U	N3-C2-O2	-7.11	117.23	122.20
1	6	982	U	N3-C4-O4	-7.11	114.43	119.40
1	6	1480	G	C6-C5-N7	-7.11	126.14	130.40
36	5	687	U	N3-C4-O4	-7.11	114.43	119.40
36	5	752	C	N3-C4-C5	-7.11	119.06	121.90
36	5	1194	G	C4-C5-N7	7.11	113.64	110.80
1	2	419	G	C4-C5-N7	7.10	113.64	110.80
36	1	1165	A	N9-C4-C5	7.10	108.64	105.80
36	1	2638	C	C6-N1-C2	-7.10	117.46	120.30
36	1	2875	U	C5-C6-N1	7.10	126.25	122.70
36	1	3029	A	C2-N3-C4	-7.10	107.05	110.60
1	6	963	A	N1-C6-N6	7.10	122.86	118.60
36	5	2706	G	N1-C6-O6	-7.10	115.64	119.90
36	5	2863	G	C8-N9-C4	-7.10	103.56	106.40
1	2	350	U	C5-C4-O4	7.10	130.16	125.90
36	1	108	A	N9-C4-C5	-7.10	102.96	105.80
36	1	1773	C	C6-N1-C2	7.10	123.14	120.30
36	1	3215	A	C8-N9-C4	7.10	108.64	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	948	C	C2-N3-C4	-7.10	116.35	119.90
36	5	1177	G	C6-N1-C2	-7.10	120.84	125.10
36	5	2592	G	N1-C6-O6	7.10	124.16	119.90
36	1	2922	G	OP1-P-O3'	7.10	120.82	105.20
36	1	2953	U	OP1-P-OP2	-7.10	108.95	119.60
1	6	410	A	C6-N1-C2	-7.10	114.34	118.60
36	5	3232	G	N3-C4-C5	7.10	132.15	128.60
36	1	2661	G	C5-N7-C8	-7.10	100.75	104.30
1	6	811	A	C4-C5-C6	7.10	120.55	117.00
36	5	521	A	N7-C8-N9	7.10	117.35	113.80
36	5	973	A	N7-C8-N9	7.10	117.35	113.80
36	5	1481	A	C6-C5-N7	-7.10	127.33	132.30
36	5	2180	G	C8-N9-C4	7.10	109.24	106.40
36	1	861	C	N3-C4-C5	-7.10	119.06	121.90
52	M6	27	LEU	CB-CG-CD1	-7.10	98.94	111.00
1	6	1477	G	C2-N3-C4	7.10	115.45	111.90
36	1	321	C	C6-N1-C2	-7.09	117.46	120.30
36	1	1007	U	N1-C2-N3	-7.09	110.64	114.90
36	1	1843	C	C6-N1-C2	-7.09	117.46	120.30
1	6	1655	A	C2-N3-C4	-7.09	107.05	110.60
37	7	13	A	O5'-P-OP1	-7.09	99.31	105.70
36	1	183	G	N3-C4-C5	-7.09	125.05	128.60
36	1	2704	A	C5-C6-N6	7.09	129.37	123.70
36	5	1100	U	C5-C6-N1	-7.09	119.15	122.70
1	2	909	U	C5-C6-N1	-7.09	119.15	122.70
36	1	589	A	N1-C6-N6	-7.09	114.34	118.60
36	1	1728	G	C4-N9-C1'	7.09	135.72	126.50
36	1	2641	U	N3-C2-O2	-7.09	117.24	122.20
1	6	811	A	C6-C5-N7	-7.09	127.33	132.30
36	5	396	A	N7-C8-N9	-7.09	110.25	113.80
36	5	944	C	N1-C2-O2	7.09	123.16	118.90
38	8	47	C	N3-C2-O2	-7.09	116.94	121.90
1	2	1025	A	C4-C5-C6	7.09	120.55	117.00
1	2	1200	G	C4-N9-C1'	7.09	135.72	126.50
36	1	2618	G	N1-C2-N3	7.09	128.15	123.90
36	1	2624	G	C6-C5-N7	-7.09	126.15	130.40
1	6	1106	U	C5-C6-N1	7.09	126.25	122.70
36	5	728	G	N1-C6-O6	7.09	124.15	119.90
36	5	1367	G	N3-C4-N9	7.09	130.25	126.00
36	1	1511	U	C5-C6-N1	-7.09	119.16	122.70
36	1	3226	A	N1-C6-N6	-7.09	114.35	118.60
36	5	1492	G	C2-N3-C4	-7.09	108.36	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1898	G	C5-C6-N1	7.09	115.04	111.50
1	2	1241	G	C4-N9-C1'	7.09	135.71	126.50
36	1	872	U	N3-C4-O4	7.09	124.36	119.40
36	1	1094	U	O4'-C1'-N1	7.09	113.87	108.20
36	1	2919	A	N3-C4-C5	7.09	131.76	126.80
36	1	2919	A	O5'-P-OP2	-7.09	99.32	105.70
1	6	1176	G	N9-C4-C5	-7.09	102.56	105.40
36	5	1131	G	O5'-P-OP2	-7.09	99.32	105.70
36	5	1400	G	C8-N9-C4	-7.09	103.57	106.40
36	5	2268	U	N3-C4-O4	-7.09	114.44	119.40
36	5	2864	A	O5'-P-OP1	-7.09	99.32	105.70
36	5	2886	U	O5'-P-OP2	-7.09	99.32	105.70
36	5	3125	U	C2-N1-C1'	-7.09	109.20	117.70
36	5	913	A	N1-C2-N3	7.08	132.84	129.30
36	5	2294	U	C5-C4-O4	7.08	130.15	125.90
36	1	499	G	N3-C4-N9	-7.08	121.75	126.00
36	1	1155	C	C2-N3-C4	-7.08	116.36	119.90
1	6	396	G	N9-C4-C5	7.08	108.23	105.40
1	6	902	G	N1-C6-O6	7.08	124.15	119.90
1	6	1041	G	C2-N3-C4	-7.08	108.36	111.90
15	c3	42	ARG	NE-CZ-NH1	7.08	123.84	120.30
36	5	1299	U	O5'-P-OP2	-7.08	99.33	105.70
36	5	2172	A	C6-C5-N7	-7.08	127.34	132.30
36	5	2337	C	N3-C2-O2	-7.08	116.94	121.90
36	5	2385	G	C2-N3-C4	-7.08	108.36	111.90
36	5	3227	A	N9-C4-C5	-7.08	102.97	105.80
37	7	116	C	C4-C5-C6	-7.08	113.86	117.40
36	1	2641	U	N3-C4-C5	7.08	118.85	114.60
1	6	1150	G	C5-C6-O6	-7.08	124.35	128.60
1	6	1193	A	C8-N9-C4	-7.08	102.97	105.80
36	5	927	C	C6-N1-C2	-7.08	117.47	120.30
36	5	1471	U	C4-C5-C6	7.08	123.95	119.70
36	5	1865	A	N1-C6-N6	7.08	122.85	118.60
36	5	2791	G	N3-C2-N2	-7.08	114.94	119.90
38	8	94	C	C6-N1-C2	7.08	123.13	120.30
36	1	2326	A	N3-C4-N9	-7.08	121.74	127.40
36	5	856	G	C8-N9-C1'	-7.08	117.80	127.00
36	5	1010	G	C5-C6-O6	-7.08	124.35	128.60
36	1	22	G	N1-C2-N3	7.08	128.15	123.90
36	1	396	A	N1-C2-N3	7.08	132.84	129.30
36	1	972	A	C2-N3-C4	-7.08	107.06	110.60
36	1	1511	U	N3-C4-O4	-7.08	114.44	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3142	A	N7-C8-N9	-7.08	110.26	113.80
38	4	24	G	N1-C2-N3	7.08	128.15	123.90
1	6	156	A	C8-N9-C4	7.08	108.63	105.80
1	6	923	A	N1-C6-N6	-7.08	114.35	118.60
1	6	1295	G	C5-C6-O6	-7.08	124.35	128.60
1	6	1730	A	C6-N1-C2	-7.08	114.35	118.60
36	5	1924	U	O5'-P-OP2	-7.08	99.33	105.70
36	5	3006	A	C8-N9-C4	-7.08	102.97	105.80
36	5	3208	G	C8-N9-C1'	-7.08	117.80	127.00
1	2	615	A	C2-N3-C4	7.08	114.14	110.60
1	2	1484	G	N1-C6-O6	-7.08	115.65	119.90
36	1	1466	G	C4-C5-N7	7.08	113.63	110.80
1	6	1512	G	C5-C6-O6	-7.08	124.35	128.60
36	5	1198	C	C2-N1-C1'	7.08	126.58	118.80
36	5	1365	G	N3-C4-N9	-7.08	121.75	126.00
36	1	628	A	C4-C5-C6	7.08	120.54	117.00
36	1	821	U	N3-C2-O2	-7.08	117.25	122.20
36	1	2606	G	N3-C4-C5	-7.08	125.06	128.60
36	1	3330	A	C4-C5-N7	-7.08	107.16	110.70
37	3	91	G	N7-C8-N9	7.08	116.64	113.10
1	6	356	G	C2-N3-C4	7.08	115.44	111.90
36	5	504	A	C2-N3-C4	-7.08	107.06	110.60
36	5	1115	G	N3-C2-N2	7.08	124.85	119.90
36	5	2293	C	C5-C4-N4	-7.08	115.25	120.20
37	7	101	G	C5-C6-O6	-7.08	124.36	128.60
36	1	705	A	OP1-P-O3'	7.07	120.76	105.20
36	1	1514	G	C8-N9-C1'	-7.07	117.81	127.00
37	3	103	A	N1-C6-N6	-7.07	114.36	118.60
1	6	1420	C	N1-C2-O2	7.07	123.14	118.90
1	6	1583	A	C5-C6-N6	7.07	129.36	123.70
1	6	1781	A	C4-C5-C6	7.07	120.54	117.00
36	5	326	U	N3-C4-C5	-7.07	110.36	114.60
36	5	1113	G	OP2-P-O3'	7.07	120.76	105.20
36	5	1147	G	N1-C2-N2	-7.07	109.83	116.20
36	1	1906	G	N1-C6-O6	7.07	124.14	119.90
37	3	88	G	O5'-P-OP1	-7.07	99.33	105.70
1	2	597	G	N1-C6-O6	7.07	124.14	119.90
36	1	2862	U	OP1-P-OP2	-7.07	109.00	119.60
36	1	2993	G	N3-C4-N9	7.07	130.24	126.00
38	4	15	G	C8-N9-C4	-7.07	103.57	106.40
43	L6	154	LEU	CB-CG-CD1	-7.07	98.98	111.00
1	6	1145	U	O5'-P-OP2	-7.07	99.34	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	610	G	N9-C4-C5	7.07	108.23	105.40
36	5	2387	A	C6-N1-C2	-7.07	114.36	118.60
36	5	3024	A	O5'-P-OP1	-7.07	99.34	105.70
36	5	3202	G	N9-C4-C5	7.07	108.23	105.40
36	1	1308	A	C6-N1-C2	7.07	122.84	118.60
36	1	2956	A	C5-N7-C8	-7.07	100.36	103.90
1	6	325	G	C2-N3-C4	-7.07	108.37	111.90
36	5	891	G	N7-C8-N9	7.07	116.63	113.10
36	5	1101	G	C6-N1-C2	-7.07	120.86	125.10
36	5	2301	U	N3-C4-C5	-7.07	110.36	114.60
36	1	680	G	C8-N9-C4	7.07	109.23	106.40
36	1	1380	G	O5'-P-OP1	7.07	119.18	110.70
36	1	2772	C	N3-C4-N4	7.07	122.95	118.00
1	6	1645	G	N9-C4-C5	-7.07	102.57	105.40
36	5	574	U	OP2-P-O3'	7.07	120.75	105.20
36	5	1902	G	N9-C4-C5	-7.07	102.57	105.40
36	5	2661	G	N3-C4-C5	-7.07	125.07	128.60
36	5	2973	G	OP1-P-OP2	-7.07	109.00	119.60
36	1	218	G	C8-N9-C1'	7.07	136.18	127.00
36	1	970	A	N9-C1'-C2'	-7.07	104.23	112.00
36	1	1362	G	C8-N9-C4	7.07	109.23	106.40
36	1	1633	C	C5-C6-N1	7.07	124.53	121.00
36	1	3307	A	N1-C6-N6	7.07	122.84	118.60
1	6	407	A	C5-C6-N6	-7.07	118.05	123.70
1	6	480	G	C8-N9-C1'	-7.07	117.82	127.00
1	6	1272	U	N3-C4-C5	-7.07	110.36	114.60
36	5	60	A	N1-C6-N6	7.07	122.84	118.60
36	5	422	A	O4'-C1'-N9	-7.07	102.55	108.20
36	5	1838	G	C6-C5-N7	-7.07	126.16	130.40
36	1	93	C	N3-C2-O2	7.06	126.84	121.90
36	1	1884	A	N3-C4-N9	-7.06	121.75	127.40
36	1	2818	U	N3-C2-O2	7.06	127.14	122.20
36	5	756	U	N1-C2-N3	7.06	119.14	114.90
36	5	1151	U	N1-C2-O2	7.06	127.75	122.80
36	1	2408	U	N1-C2-N3	7.06	119.14	114.90
36	1	2427	U	N3-C4-C5	7.06	118.84	114.60
36	1	2877	G	C4-N9-C1'	-7.06	117.32	126.50
36	1	3045	G	C2-N3-C4	7.06	115.43	111.90
37	3	99	G	N3-C4-N9	-7.06	121.76	126.00
1	6	325	G	C8-N9-C4	7.06	109.22	106.40
36	5	2750	U	N3-C2-O2	-7.06	117.26	122.20
36	5	2796	G	N3-C4-N9	7.06	130.24	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	70	A	C8-N9-C4	-7.06	102.98	105.80
36	5	2777	G	C4-C5-N7	-7.06	107.98	110.80
36	1	895	A	N7-C8-N9	7.06	117.33	113.80
36	1	2745	G	N3-C4-C5	-7.06	125.07	128.60
1	6	1447	C	C2-N1-C1'	7.06	126.56	118.80
36	5	383	G	N7-C8-N9	-7.06	109.57	113.10
36	5	811	U	C2-N3-C4	-7.06	122.77	127.00
36	5	1537	A	C4-C5-C6	7.06	120.53	117.00
36	5	2645	G	N3-C2-N2	-7.06	114.96	119.90
36	1	154	U	O5'-P-OP1	-7.06	99.35	105.70
36	1	593	C	N3-C2-O2	-7.06	116.96	121.90
36	1	2715	A	C8-N9-C4	-7.06	102.98	105.80
37	3	82	G	C8-N9-C4	-7.06	103.58	106.40
36	5	1205	A	N7-C8-N9	-7.06	110.27	113.80
36	5	1774	C	C6-N1-C2	7.06	123.12	120.30
36	5	2623	G	C8-N9-C1'	-7.06	117.83	127.00
36	5	3366	G	C6-C5-N7	-7.06	126.17	130.40
36	1	2213	A	O5'-P-OP1	-7.06	99.35	105.70
36	1	3179	U	C5-C6-N1	-7.06	119.17	122.70
36	5	2183	A	C2-N3-C4	-7.06	107.07	110.60
36	1	358	G	N1-C6-O6	7.05	124.13	119.90
36	1	3049	A	C5-N7-C8	7.05	107.43	103.90
36	5	750	G	O5'-P-OP2	-7.05	99.35	105.70
36	5	1443	G	C5-N7-C8	-7.05	100.77	104.30
36	5	1733	G	C6-C5-N7	-7.05	126.17	130.40
36	5	2194	G	N3-C4-C5	-7.05	125.07	128.60
36	5	2400	G	C4-C5-N7	7.05	113.62	110.80
36	5	2659	G	C8-N9-C4	7.05	109.22	106.40
36	5	2856	G	C8-N9-C4	-7.05	103.58	106.40
36	5	1142	G	C4-C5-N7	7.05	113.62	110.80
36	1	27	C	N3-C2-O2	-7.05	116.96	121.90
36	1	3383	G	N1-C2-N2	7.05	122.55	116.20
37	3	58	C	N3-C4-C5	7.05	124.72	121.90
38	4	17	A	N1-C6-N6	7.05	122.83	118.60
38	4	31	G	N7-C8-N9	-7.05	109.57	113.10
1	6	1781	A	N7-C8-N9	7.05	117.33	113.80
36	5	760	G	N9-C4-C5	-7.05	102.58	105.40
36	5	2764	C	OP1-P-OP2	-7.05	109.02	119.60
37	7	105	C	C5-C6-N1	7.05	124.53	121.00
1	2	1127	G	C2-N3-C4	-7.05	108.38	111.90
36	1	45	A	N3-C4-N9	-7.05	121.76	127.40
36	1	3320	A	N1-C2-N3	7.05	132.82	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	672	A	C6-N1-C2	-7.05	114.37	118.60
36	5	709	A	C5-C6-N6	-7.05	118.06	123.70
36	5	927	C	C5-C6-N1	7.05	124.53	121.00
36	5	1597	C	C6-N1-C2	-7.05	117.48	120.30
36	5	2827	U	N1-C2-N3	-7.05	110.67	114.90
36	1	879	U	N3-C2-O2	7.05	127.13	122.20
36	1	2131	A	C6-N1-C2	-7.05	114.37	118.60
1	6	34	G	N3-C4-C5	7.05	132.12	128.60
1	6	1673	G	C4-C5-N7	7.05	113.62	110.80
1	2	1453	G	O5'-P-OP1	-7.05	99.36	105.70
36	1	41	G	N9-C4-C5	7.05	108.22	105.40
36	1	194	U	O5'-P-OP1	-7.05	99.36	105.70
36	1	655	C	C6-N1-C2	-7.05	117.48	120.30
36	1	1284	C	C6-N1-C2	-7.05	117.48	120.30
36	1	1363	A	C5-C6-N6	-7.05	118.06	123.70
36	1	2870	C	C2-N1-C1'	-7.05	111.05	118.80
1	6	1537	C	N1-C2-O2	-7.05	114.67	118.90
36	5	1327	C	N3-C4-C5	7.05	124.72	121.90
36	5	2215	A	C8-N9-C4	7.05	108.62	105.80
36	1	1446	A	C6-N1-C2	-7.04	114.37	118.60
1	6	120	U	C5-C4-O4	7.04	130.13	125.90
37	7	59	U	O5'-P-OP2	-7.04	99.36	105.70
36	1	662	U	OP2-P-O3'	7.04	120.69	105.20
36	1	2712	U	C6-N1-C2	7.04	125.23	121.00
1	6	93	A	N1-C6-N6	-7.04	114.37	118.60
1	6	1201	G	C4-N9-C1'	-7.04	117.34	126.50
36	5	1300	G	C8-N9-C1'	-7.04	117.84	127.00
36	5	1172	G	C8-N9-C4	-7.04	103.58	106.40
36	5	2625	C	N1-C2-O2	-7.04	114.67	118.90
1	2	378	A	C6-C5-N7	-7.04	127.37	132.30
36	5	1323	G	N3-C4-C5	-7.04	125.08	128.60
1	2	351	C	C5-C6-N1	-7.04	117.48	121.00
1	2	1454	G	C8-N9-C4	7.04	109.22	106.40
36	1	671	U	OP2-P-O3'	7.04	120.68	105.20
36	5	155	G	N3-C2-N2	7.04	124.83	119.90
36	5	521	A	C5-C6-N6	7.04	129.33	123.70
36	5	2357	A	N1-C2-N3	7.04	132.82	129.30
36	5	2370	G	C2-N3-C4	-7.04	108.38	111.90
37	7	107	C	O5'-P-OP1	7.04	119.14	110.70
1	6	1158	C	N3-C4-N4	7.04	122.93	118.00
36	5	1483	G	C6-C5-N7	-7.04	126.18	130.40
36	1	23	A	C4-C5-C6	7.04	120.52	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	399	A	N1-C2-N3	-7.04	125.78	129.30
36	1	2339	C	C2-N1-C1'	7.04	126.54	118.80
36	1	2393	G	C4-C5-N7	7.04	113.61	110.80
36	5	808	A	N1-C6-N6	-7.04	114.38	118.60
36	5	1152	G	C5-C6-N1	-7.04	107.98	111.50
36	1	821	U	C6-N1-C2	-7.03	116.78	121.00
1	6	621	A	C5-C6-N6	7.03	129.33	123.70
1	6	1297	G	O5'-P-OP1	-7.03	99.37	105.70
1	6	1332	C	C4-C5-C6	7.03	120.92	117.40
36	5	653	A	N1-C6-N6	7.03	122.82	118.60
38	8	45	C	O5'-P-OP1	-7.03	99.37	105.70
36	5	1506	A	O5'-P-OP1	7.03	119.14	110.70
36	5	2140	U	C4-C5-C6	7.03	123.92	119.70
36	5	2362	C	N1-C2-O2	7.03	123.12	118.90
36	1	256	G	N1-C6-O6	-7.03	115.68	119.90
36	1	385	A	C8-N9-C4	-7.03	102.99	105.80
36	1	688	G	C4-N9-C1'	7.03	135.64	126.50
36	1	709	A	N1-C6-N6	7.03	122.82	118.60
38	4	54	A	N9-C4-C5	7.03	108.61	105.80
36	5	228	U	N3-C2-O2	-7.03	117.28	122.20
36	5	1092	C	C6-N1-C2	-7.03	117.49	120.30
36	5	2524	A	C4-C5-N7	7.03	114.22	110.70
36	5	2947	G	OP1-P-O3'	7.03	120.67	105.20
1	2	21	U	C2-N1-C1'	7.03	126.14	117.70
36	1	50	U	N1-C2-N3	7.03	119.12	114.90
36	1	2760	C	C2-N1-C1'	-7.03	111.07	118.80
1	6	771	A	C2-N3-C4	7.03	114.11	110.60
36	5	2125	A	N1-C2-N3	7.03	132.81	129.30
36	5	2351	U	O5'-P-OP2	-7.03	99.37	105.70
36	5	2713	U	C5-C6-N1	7.03	126.21	122.70
36	1	2601	A	O5'-P-OP2	-7.03	99.38	105.70
36	1	3327	G	C4-C5-N7	-7.03	107.99	110.80
38	4	99	C	N3-C4-C5	7.03	124.71	121.90
4	s2	61	LEU	CA-CB-CG	-7.03	99.14	115.30
36	5	1213	G	C4-C5-N7	-7.03	107.99	110.80
36	5	1848	G	N7-C8-N9	-7.03	109.59	113.10
36	5	2828	G	OP1-P-O3'	-7.03	89.74	105.20
36	5	2837	A	C5-C6-N1	7.03	121.21	117.70
36	1	2400	G	N7-C8-N9	7.03	116.61	113.10
36	1	3276	G	N7-C8-N9	7.03	116.61	113.10
1	6	29	U	C4-C5-C6	7.03	123.92	119.70
36	5	1465	A	N1-C6-N6	7.03	122.81	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	n3	48	ARG	NE-CZ-NH1	7.03	123.81	120.30
1	2	1218	G	O4'-C1'-N9	7.02	113.82	108.20
36	1	1076	C	C6-N1-C2	7.02	123.11	120.30
36	1	1164	G	N3-C4-N9	-7.02	121.79	126.00
36	1	1422	G	C8-N9-C1'	-7.02	117.87	127.00
36	1	1592	G	C4-C5-C6	7.02	123.02	118.80
36	1	2912	G	C5-C6-O6	7.02	132.81	128.60
36	5	787	G	N7-C8-N9	-7.02	109.59	113.10
36	5	2724	U	O5'-P-OP1	7.02	119.13	110.70
1	2	318	U	C5-C6-N1	-7.02	119.19	122.70
36	1	325	A	C5-C6-N1	7.02	121.21	117.70
36	1	625	G	C5-C6-N1	-7.02	107.99	111.50
36	1	2145	A	C5-C6-N6	-7.02	118.08	123.70
36	1	3344	A	C6-C5-N7	-7.02	127.38	132.30
48	M1	112	LEU	CA-CB-CG	7.02	131.45	115.30
36	5	424	G	C6-N1-C2	-7.02	120.89	125.10
36	5	784	A	N7-C8-N9	7.02	117.31	113.80
36	5	979	U	C6-N1-C2	-7.02	116.79	121.00
36	5	31	C	N3-C2-O2	-7.02	116.98	121.90
36	5	858	A	N3-C4-C5	-7.02	121.89	126.80
37	7	50	U	N1-C2-O2	7.02	127.72	122.80
1	2	1025	A	C8-N9-C1'	-7.02	115.07	127.70
1	2	1165	G	N3-C4-N9	7.02	130.21	126.00
1	6	158	U	C2-N1-C1'	7.02	126.12	117.70
1	6	1047	G	N3-C4-C5	-7.02	125.09	128.60
36	5	676	G	C8-N9-C4	-7.02	103.59	106.40
36	5	3107	U	OP2-P-O3'	7.02	120.64	105.20
36	1	1374	G	N3-C4-N9	7.02	130.21	126.00
36	1	2381	G	C5-C6-O6	-7.02	124.39	128.60
36	1	2606	G	N1-C2-N3	7.02	128.11	123.90
1	6	335	U	N3-C2-O2	-7.02	117.29	122.20
1	6	1030	A	C2-N3-C4	-7.02	107.09	110.60
36	5	1003	A	C4-C5-N7	7.02	114.21	110.70
36	5	3174	A	C8-N9-C4	-7.02	102.99	105.80
36	5	3261	C	C6-N1-C2	7.02	123.11	120.30
36	1	293	C	C6-N1-C2	7.02	123.11	120.30
36	1	826	G	C4-C5-N7	7.02	113.61	110.80
36	5	210	U	C5-C6-N1	-7.02	119.19	122.70
36	5	1108	U	N3-C4-C5	-7.02	110.39	114.60
36	5	1896	A	C5-C6-N6	7.02	129.31	123.70
1	2	574	G	N1-C6-O6	-7.01	115.69	119.90
1	2	1600	A	C6-C5-N7	-7.01	127.39	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	815	G	C8-N9-C4	-7.01	103.59	106.40
36	1	1443	G	O5'-P-OP2	7.01	119.12	110.70
36	1	1488	G	C5-C6-O6	-7.01	124.39	128.60
36	1	1587	A	N1-C6-N6	-7.01	114.39	118.60
36	1	2363	A	C4-C5-N7	-7.01	107.19	110.70
1	6	1050	G	C2-N3-C4	-7.01	108.39	111.90
1	6	1600	A	O4'-C1'-N9	7.01	113.81	108.20
36	5	1762	C	C6-N1-C2	-7.01	117.49	120.30
36	5	2733	A	N1-C6-N6	7.01	122.81	118.60
36	1	1924	U	C5-C6-N1	-7.01	119.19	122.70
36	5	436	A	N1-C2-N3	7.01	132.81	129.30
36	5	960	U	OP2-P-O3'	7.01	120.63	105.20
1	2	373	G	C4-N9-C1'	7.01	135.62	126.50
1	2	513	U	C6-N1-C2	-7.01	116.79	121.00
1	2	1774	G	N3-C4-C5	-7.01	125.09	128.60
36	1	212	G	C4-N9-C1'	7.01	135.62	126.50
36	1	917	A	C2-N3-C4	7.01	114.11	110.60
36	1	1905	G	C4-N9-C1'	-7.01	117.39	126.50
36	1	2277	C	C4-C5-C6	7.01	120.91	117.40
36	1	2844	C	C6-N1-C2	7.01	123.11	120.30
36	1	2893	C	O5'-P-OP2	-7.01	99.39	105.70
36	1	2940	A	N9-C4-C5	7.01	108.61	105.80
36	1	3373	U	C5-C6-N1	-7.01	119.19	122.70
1	6	464	A	N1-C6-N6	7.01	122.81	118.60
36	5	586	C	N3-C4-C5	-7.01	119.09	121.90
36	5	1127	G	N3-C4-N9	7.01	130.21	126.00
36	5	1604	G	C5-C6-N1	7.01	115.00	111.50
36	5	2549	G	C4-N9-C1'	7.01	135.62	126.50
36	5	2963	C	C4-C5-C6	-7.01	113.89	117.40
36	5	3119	U	O5'-P-OP2	-7.01	99.39	105.70
59	n3	120	LYS	CD-CE-NZ	7.01	127.83	111.70
1	2	104	A	C2-N3-C4	7.01	114.11	110.60
36	1	218	G	N9-C4-C5	7.01	108.20	105.40
36	1	1106	G	O5'-P-OP1	7.01	119.11	110.70
36	1	1433	A	N3-C4-C5	-7.01	121.89	126.80
36	1	2192	C	C4-C5-C6	7.01	120.90	117.40
36	1	2392	C	C6-N1-C2	7.01	123.10	120.30
1	6	810	G	O5'-P-OP2	-7.01	99.39	105.70
36	5	15	C	N3-C4-C5	7.01	124.70	121.90
36	5	1444	G	N3-C4-N9	7.01	130.21	126.00
37	7	26	C	N3-C4-C5	-7.01	119.10	121.90
38	8	4	C	O5'-P-OP2	-7.01	99.39	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1537	C	C5-C6-N1	7.01	124.50	121.00
52	M6	78	ARG	NE-CZ-NH1	7.01	123.80	120.30
1	6	13	C	N3-C2-O2	-7.01	117.00	121.90
1	6	619	A	N1-C6-N6	-7.01	114.39	118.60
1	2	1526	A	C8-N9-C4	7.01	108.60	105.80
1	6	864	U	N3-C4-C5	-7.01	110.40	114.60
36	5	858	A	C6-N1-C2	-7.01	114.40	118.60
36	5	3122	A	C4-C5-N7	7.01	114.20	110.70
1	2	1782	A	C5-C6-N1	-7.00	114.20	117.70
36	1	2323	G	C6-C5-N7	-7.00	126.20	130.40
1	6	884	A	N9-C4-C5	-7.00	103.00	105.80
36	5	1116	G	OP2-P-O3'	7.00	120.61	105.20
1	2	18	C	C5-C6-N1	7.00	124.50	121.00
1	2	1486	G	N3-C4-N9	7.00	130.20	126.00
36	1	2363	A	N3-C4-N9	-7.00	121.80	127.40
1	6	264	G	C8-N9-C4	7.00	109.20	106.40
36	5	613	G	N3-C4-C5	7.00	132.10	128.60
36	5	2244	A	C8-N9-C4	7.00	108.60	105.80
36	5	2280	A	C5-N7-C8	-7.00	100.40	103.90
36	5	2371	G	C5-C6-O6	-7.00	124.40	128.60
1	2	378	A	N9-C4-C5	-7.00	103.00	105.80
36	1	644	G	C2-N3-C4	-7.00	108.40	111.90
1	6	1034	C	C6-N1-C2	-7.00	117.50	120.30
36	5	528	U	N3-C4-C5	-7.00	110.40	114.60
36	5	1142	G	C5-N7-C8	-7.00	100.80	104.30
36	5	1407	A	C5-N7-C8	7.00	107.40	103.90
36	5	2412	G	C6-C5-N7	-7.00	126.20	130.40
36	5	2662	G	C5-N7-C8	7.00	107.80	104.30
36	5	2666	C	C6-N1-C2	7.00	123.10	120.30
36	5	3244	A	O4'-C1'-N9	-7.00	102.60	108.20
36	1	1172	G	N3-C4-C5	-7.00	125.10	128.60
36	1	2241	U	N1-C2-O2	-7.00	117.90	122.80
1	6	1362	U	C6-N1-C2	-7.00	116.80	121.00
36	1	105	C	C6-N1-C2	7.00	123.10	120.30
36	1	108	A	C8-N9-C4	7.00	108.60	105.80
36	1	589	A	C4-C5-N7	-7.00	107.20	110.70
36	1	1833	G	C5-C6-N1	-7.00	108.00	111.50
36	1	2779	A	N1-C2-N3	7.00	132.80	129.30
36	1	2804	A	C5-C6-N1	7.00	121.20	117.70
36	1	3376	A	N1-C6-N6	-7.00	114.40	118.60
37	3	89	G	C8-N9-C4	7.00	109.20	106.40
1	6	686	C	C6-N1-C2	-7.00	117.50	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	789	A	C6-N1-C2	-7.00	114.40	118.60
36	5	2969	A	C2-N3-C4	-7.00	107.10	110.60
36	5	3124	G	N3-C4-N9	-7.00	121.80	126.00
36	5	3362	A	O4'-C1'-N9	7.00	113.80	108.20
37	7	44	C	C2-N1-C1'	-7.00	111.10	118.80
36	1	537	A	N3-C4-C5	7.00	131.70	126.80
36	1	942	U	N3-C2-O2	-7.00	117.30	122.20
36	1	2885	C	N3-C4-N4	7.00	122.90	118.00
36	5	639	G	C8-N9-C1'	-7.00	117.91	127.00
36	5	940	G	C4-N9-C1'	-7.00	117.40	126.50
36	5	1192	C	C2-N3-C4	7.00	123.40	119.90
36	5	2661	G	C4-C5-C6	7.00	123.00	118.80
36	5	3335	A	N1-C2-N3	7.00	132.80	129.30
36	1	104	G	C5-C6-O6	-7.00	124.40	128.60
36	1	1306	G	C4-C5-N7	7.00	113.60	110.80
36	1	2274	U	N3-C4-O4	-7.00	114.50	119.40
36	5	422	A	N9-C4-C5	7.00	108.60	105.80
36	5	1303	A	C4-C5-C6	-7.00	113.50	117.00
1	2	162	A	C2-N3-C4	6.99	114.10	110.60
1	6	533	U	O5'-P-OP1	-6.99	99.41	105.70
1	6	600	U	N3-C4-O4	6.99	124.30	119.40
1	6	1653	C	N1-C2-O2	6.99	123.10	118.90
36	5	278	U	N1-C2-N3	6.99	119.10	114.90
36	5	1682	U	O5'-P-OP1	-6.99	99.41	105.70
36	5	2902	A	C2-N3-C4	-6.99	107.10	110.60
36	5	3207	U	C2-N1-C1'	-6.99	109.31	117.70
1	6	421	A	N9-C4-C5	-6.99	103.00	105.80
36	5	1499	C	N1-C2-O2	-6.99	114.70	118.90
36	5	2552	C	C6-N1-C2	6.99	123.10	120.30
36	5	2689	A	N3-C4-N9	-6.99	121.81	127.40
36	1	947	G	C5-C6-O6	6.99	132.79	128.60
36	1	2243	A	C4-C5-C6	6.99	120.50	117.00
36	1	2377	G	OP1-P-OP2	-6.99	109.11	119.60
36	1	2918	G	C6-N1-C2	-6.99	120.91	125.10
37	3	115	G	N9-C4-C5	-6.99	102.60	105.40
1	6	1132	A	N7-C8-N9	-6.99	110.31	113.80
36	5	2902	A	N9-C4-C5	6.99	108.60	105.80
36	5	3079	U	N3-C2-O2	-6.99	117.31	122.20
36	5	3315	G	N7-C8-N9	6.99	116.59	113.10
1	2	411	C	C6-N1-C2	6.99	123.10	120.30
1	2	581	U	C2-N1-C1'	6.99	126.08	117.70
36	1	864	G	N3-C2-N2	6.99	124.79	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	O2	115	LEU	CA-CB-CG	-6.99	99.23	115.30
1	6	316	A	N1-C6-N6	6.99	122.79	118.60
1	6	411	C	N3-C4-C5	-6.99	119.11	121.90
36	5	400	G	N3-C4-N9	-6.99	121.81	126.00
36	5	728	G	N9-C4-C5	-6.99	102.60	105.40
1	2	1737	G	C2-N3-C4	-6.99	108.41	111.90
36	1	2657	A	N1-C6-N6	-6.99	114.41	118.60
36	5	228	U	N1-C2-O2	6.99	127.69	122.80
36	5	497	C	C6-N1-C2	-6.99	117.50	120.30
36	5	1802	C	C6-N1-C2	-6.99	117.50	120.30
1	2	555	A	C8-N9-C4	-6.99	103.01	105.80
36	1	372	A	C6-C5-N7	-6.99	127.41	132.30
36	1	2999	U	C5-C6-N1	-6.99	119.21	122.70
36	1	3009	G	C6-C5-N7	-6.99	126.21	130.40
1	6	1504	G	C2-N3-C4	-6.99	108.41	111.90
36	5	774	G	C5-C6-O6	-6.99	124.41	128.60
36	5	1461	A	C8-N9-C4	6.99	108.59	105.80
36	5	920	A	OP1-P-OP2	-6.98	109.12	119.60
36	5	2601	A	C8-N9-C4	6.98	108.59	105.80
1	2	401	A	C8-N9-C4	6.98	108.59	105.80
36	1	1382	G	OP2-P-O3'	6.98	120.56	105.20
36	1	2550	U	N3-C2-O2	-6.98	117.31	122.20
37	3	82	G	N3-C4-C5	-6.98	125.11	128.60
1	6	758	U	O5'-P-OP1	-6.98	99.42	105.70
1	6	1138	A	C6-N1-C2	6.98	122.79	118.60
36	5	932	U	C2-N3-C4	-6.98	122.81	127.00
36	5	989	A	C5-C6-N6	-6.98	118.11	123.70
36	5	1119	C	O5'-P-OP2	-6.98	99.42	105.70
36	5	3366	G	C4-N9-C1'	6.98	135.58	126.50
38	8	15	G	N7-C8-N9	-6.98	109.61	113.10
36	1	62	A	C6-N1-C2	6.98	122.79	118.60
36	1	2611	U	C4-C5-C6	6.98	123.89	119.70
44	L7	108	LEU	CA-CB-CG	-6.98	99.24	115.30
1	6	1027	A	C2-N3-C4	-6.98	107.11	110.60
36	5	291	C	N3-C4-N4	-6.98	113.11	118.00
36	5	296	A	C8-N9-C4	-6.98	103.01	105.80
36	5	421	G	C8-N9-C1'	-6.98	117.92	127.00
36	5	1213	G	C8-N9-C4	-6.98	103.61	106.40
36	5	1453	A	N7-C8-N9	-6.98	110.31	113.80
36	5	1455	U	N3-C4-O4	6.98	124.29	119.40
36	1	3278	C	O5'-P-OP1	-6.98	99.42	105.70
1	6	607	G	C8-N9-C4	-6.98	103.61	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1599	C	N3-C2-O2	-6.98	117.02	121.90
36	5	1317	A	C5-C6-N6	-6.98	118.12	123.70
36	5	2396	G	C5-C6-N1	6.98	114.99	111.50
1	2	332	U	N3-C4-O4	-6.98	114.52	119.40
1	2	1127	G	C5-C6-N1	-6.98	108.01	111.50
36	1	104	G	C6-C5-N7	-6.98	126.21	130.40
36	1	1323	G	C5-C6-O6	-6.98	124.41	128.60
36	1	1895	A	O5'-P-OP1	6.98	119.07	110.70
36	1	3197	G	N3-C2-N2	-6.98	115.02	119.90
1	6	382	C	N1-C2-O2	-6.98	114.71	118.90
1	6	423	G	N3-C2-N2	-6.98	115.02	119.90
36	5	61	A	N1-C2-N3	6.98	132.79	129.30
36	5	1892	G	C6-N1-C2	-6.98	120.91	125.10
36	5	3020	U	N3-C2-O2	6.98	127.08	122.20
36	1	365	A	C8-N9-C4	-6.98	103.01	105.80
1	6	1480	G	C5-N7-C8	-6.98	100.81	104.30
36	5	804	C	C4-C5-C6	6.98	120.89	117.40
36	5	1615	C	N3-C4-N4	-6.98	113.12	118.00
36	5	2656	A	C4-C5-N7	-6.98	107.21	110.70
36	1	311	C	C5-C4-N4	-6.97	115.32	120.20
36	1	733	G	C4-C5-N7	6.97	113.59	110.80
36	5	198	A	C8-N9-C4	-6.97	103.01	105.80
36	5	432	G	C5-C6-N1	-6.97	108.01	111.50
36	5	1113	G	N1-C2-N3	6.97	128.09	123.90
36	5	1716	U	P-O3'-C3'	6.97	128.07	119.70
36	1	2117	A	C6-N1-C2	-6.97	114.42	118.60
36	1	2340	U	C5-C4-O4	-6.97	121.72	125.90
38	4	18	U	O5'-P-OP2	6.97	119.07	110.70
1	6	610	G	C8-N9-C1'	-6.97	117.94	127.00
36	5	937	G	N3-C2-N2	6.97	124.78	119.90
36	5	2853	A	C5-C6-N6	-6.97	118.12	123.70
36	5	3003	G	C5-C6-N1	6.97	114.99	111.50
36	1	24	G	C8-N9-C4	6.97	109.19	106.40
36	5	2650	U	O5'-P-OP2	-6.97	99.43	105.70
1	2	1206	U	N3-C4-C5	-6.97	110.42	114.60
36	1	4	U	N3-C4-O4	-6.97	114.52	119.40
36	1	87	U	N3-C2-O2	-6.97	117.32	122.20
36	1	2895	G	C8-N9-C1'	-6.97	117.94	127.00
36	1	3107	U	OP2-P-O3'	6.97	120.53	105.20
37	3	85	G	O5'-P-OP2	-6.97	99.43	105.70
36	5	851	C	C6-N1-C2	6.97	123.09	120.30
36	5	1502	C	N3-C4-C5	6.97	124.69	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2850	G	C5-N7-C8	6.97	107.78	104.30
36	5	2855	U	N1-C2-N3	6.97	119.08	114.90
1	2	1789	G	C4-N9-C1'	6.97	135.56	126.50
36	1	702	C	N1-C2-O2	6.97	123.08	118.90
36	1	860	G	N9-C4-C5	-6.97	102.61	105.40
36	1	1311	G	N7-C8-N9	-6.97	109.62	113.10
36	5	424	G	C6-C5-N7	-6.97	126.22	130.40
36	5	2194	G	N1-C2-N3	6.97	128.08	123.90
36	5	3392	U	N3-C2-O2	-6.97	117.32	122.20
1	2	639	U	N1-C2-O2	6.97	127.68	122.80
36	1	1477	A	C5-C6-N1	6.97	121.18	117.70
36	1	2655	U	N3-C4-C5	-6.97	110.42	114.60
1	6	371	G	C6-C5-N7	-6.97	126.22	130.40
36	5	1184	A	C4-C5-C6	-6.97	113.52	117.00
1	6	1026	A	O5'-P-OP1	-6.96	99.43	105.70
36	5	1115	G	C4-C5-C6	6.96	122.98	118.80
37	7	67	G	C5-C6-N1	-6.96	108.02	111.50
38	8	15	G	C5-C6-O6	6.96	132.78	128.60
1	2	419	G	N1-C6-O6	6.96	124.08	119.90
36	5	1318	A	C8-N9-C4	6.96	108.58	105.80
36	5	2922	G	OP1-P-O3'	6.96	120.52	105.20
1	2	1625	C	C2-N1-C1'	-6.96	111.14	118.80
36	1	913	A	C4-C5-C6	6.96	120.48	117.00
1	6	400	A	N1-C6-N6	6.96	122.78	118.60
1	6	1396	U	C5-C4-O4	6.96	130.08	125.90
1	6	1671	A	N1-C2-N3	6.96	132.78	129.30
36	5	515	C	N3-C4-N4	-6.96	113.13	118.00
36	5	1004	U	C6-N1-C2	-6.96	116.82	121.00
36	5	1300	G	C5-C6-N1	-6.96	108.02	111.50
40	13	5	LYS	CD-CE-NZ	6.96	127.71	111.70
36	1	14	U	N3-C2-O2	-6.96	117.33	122.20
36	1	394	G	C2-N3-C4	6.96	115.38	111.90
36	1	495	G	C2-N3-C4	-6.96	108.42	111.90
36	1	3271	G	N3-C2-N2	6.96	124.77	119.90
1	6	1730	A	N1-C2-N3	6.96	132.78	129.30
36	5	1065	A	O5'-P-OP1	-6.96	99.44	105.70
36	5	2662	G	C6-N1-C2	-6.96	120.92	125.10
36	5	2714	G	OP1-P-O3'	6.96	120.51	105.20
36	5	3005	A	C6-C5-N7	-6.96	127.43	132.30
1	2	377	G	N3-C2-N2	-6.96	115.03	119.90
1	2	1147	A	C8-N9-C4	-6.96	103.02	105.80
36	1	63	A	N1-C6-N6	6.96	122.78	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	197	G	O5'-P-OP1	-6.96	99.44	105.70
36	1	1544	G	O5'-P-OP2	-6.96	99.44	105.70
36	1	1665	C	C6-N1-C2	6.96	123.08	120.30
36	1	2720	G	OP2-P-O3'	6.96	120.51	105.20
36	1	3083	G	N7-C8-N9	-6.96	109.62	113.10
1	6	609	U	C5-C6-N1	-6.96	119.22	122.70
36	5	3129	A	OP2-P-O3'	6.96	120.51	105.20
36	1	1920	U	N1-C2-N3	6.96	119.07	114.90
36	1	3009	G	C2-N3-C4	-6.96	108.42	111.90
1	6	175	G	C5-C6-O6	-6.96	124.43	128.60
1	6	578	U	C2-N1-C1'	-6.96	109.35	117.70
1	6	1354	G	N7-C8-N9	6.96	116.58	113.10
1	6	1525	A	N9-C4-C5	6.96	108.58	105.80
1	6	1663	G	O5'-P-OP1	6.96	119.05	110.70
1	6	1730	A	C5-C6-N6	6.96	129.27	123.70
36	5	940	G	C2-N3-C4	6.96	115.38	111.90
36	5	1544	G	N1-C2-N3	6.96	128.07	123.90
36	5	2698	G	N1-C6-O6	6.96	124.07	119.90
36	5	2988	C	N3-C4-N4	6.96	122.87	118.00
36	5	3172	A	C8-N9-C4	6.96	108.58	105.80
36	5	3295	A	N1-C6-N6	-6.96	114.43	118.60
1	2	1143	A	C4-C5-C6	-6.96	113.52	117.00
36	1	339	C	N1-C2-N3	6.96	124.07	119.20
36	1	754	G	C8-N9-C4	6.96	109.18	106.40
36	1	1898	G	C5-C6-N1	6.95	114.98	111.50
36	1	2866	U	N3-C4-O4	-6.95	114.53	119.40
36	1	2881	C	C2-N1-C1'	-6.95	111.15	118.80
36	1	2997	G	C6-C5-N7	-6.95	126.23	130.40
1	6	392	G	C5-C6-O6	-6.95	124.43	128.60
1	6	1448	G	O5'-P-OP2	-6.95	99.44	105.70
1	6	1527	C	O5'-P-OP2	-6.95	99.44	105.70
36	5	2391	G	C4-C5-N7	-6.95	108.02	110.80
37	7	46	A	C5-C6-N1	6.95	121.18	117.70
3	s1	115	ARG	NE-CZ-NH1	6.95	123.78	120.30
36	5	2743	A	C6-N1-C2	-6.95	114.43	118.60
37	7	45	A	O5'-P-OP1	6.95	119.04	110.70
36	1	61	A	C5-N7-C8	-6.95	100.42	103.90
36	1	1936	A	C5-C6-N1	6.95	121.17	117.70
1	6	789	A	N9-C4-C5	6.95	108.58	105.80
1	6	1484	G	N1-C6-O6	-6.95	115.73	119.90
36	5	375	A	OP1-P-O3'	6.95	120.49	105.20
36	5	2204	C	C6-N1-C2	-6.95	117.52	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	133	G	N3-C4-C5	6.95	132.08	128.60
36	1	215	G	O5'-P-OP2	-6.95	99.45	105.70
36	1	1399	A	C5-C6-N1	-6.95	114.23	117.70
36	1	2299	A	C8-N9-C4	-6.95	103.02	105.80
36	1	2935	U	N3-C4-C5	-6.95	110.43	114.60
1	6	1074	G	C2-N3-C4	-6.95	108.42	111.90
1	6	1622	G	C6-C5-N7	-6.95	126.23	130.40
36	5	553	U	N3-C2-O2	-6.95	117.34	122.20
36	5	2279	A	N1-C6-N6	6.95	122.77	118.60
36	5	2851	A	N7-C8-N9	-6.95	110.33	113.80
36	5	3197	G	N1-C6-O6	6.95	124.07	119.90
36	1	208	C	C5-C4-N4	-6.95	115.34	120.20
36	1	1155	C	OP1-P-O3'	6.95	120.48	105.20
36	1	1213	G	C5-C6-O6	-6.95	124.43	128.60
36	5	2722	U	P-O3'-C3'	6.95	128.04	119.70
1	2	458	G	N3-C4-N9	-6.95	121.83	126.00
38	4	104	A	N1-C6-N6	-6.95	114.43	118.60
1	6	58	U	C6-N1-C2	-6.95	116.83	121.00
1	6	942	G	N9-C4-C5	6.95	108.18	105.40
1	6	971	A	N3-C4-C5	6.95	131.66	126.80
36	5	910	G	N3-C4-C5	6.95	132.07	128.60
36	5	969	C	N1-C2-N3	6.95	124.06	119.20
36	5	3084	C	OP2-P-O3'	6.95	120.48	105.20
36	1	1396	C	N3-C4-N4	6.94	122.86	118.00
1	6	1498	G	N9-C4-C5	-6.94	102.62	105.40
36	5	1135	A	O5'-P-OP2	-6.94	99.45	105.70
36	5	2764	C	C5-C6-N1	6.94	124.47	121.00
36	1	225	C	C2-N1-C1'	6.94	126.44	118.80
36	1	699	A	N3-C4-N9	-6.94	121.85	127.40
36	1	963	G	N9-C4-C5	-6.94	102.62	105.40
36	1	2306	C	C6-N1-C1'	-6.94	112.47	120.80
36	5	2937	G	C5-C6-O6	-6.94	124.43	128.60
36	5	3136	G	N1-C6-O6	6.94	124.07	119.90
38	8	100	U	C2-N1-C1'	6.94	126.03	117.70
1	2	515	A	N7-C8-N9	6.94	117.27	113.80
1	2	990	C	C6-N1-C2	-6.94	117.52	120.30
36	1	39	A	C5-N7-C8	-6.94	100.43	103.90
36	1	889	U	C5-C6-N1	-6.94	119.23	122.70
36	1	1355	A	N1-C6-N6	6.94	122.76	118.60
36	1	1893	A	N1-C2-N3	6.94	132.77	129.30
36	1	2423	U	C5-C6-N1	6.94	126.17	122.70
36	5	1342	C	OP1-P-OP2	6.94	130.01	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1498	A	N9-C4-C5	6.94	108.58	105.80
36	1	404	G	N9-C4-C5	-6.94	102.62	105.40
36	1	2182	A	O5'-P-OP2	6.94	119.03	110.70
36	1	2983	C	C5-C4-N4	6.94	125.06	120.20
36	1	3230	G	N3-C4-N9	-6.94	121.84	126.00
36	1	3305	A	C4-C5-C6	6.94	120.47	117.00
1	6	1586	A	C5-C6-N1	6.94	121.17	117.70
36	5	951	A	N9-C4-C5	6.94	108.58	105.80
37	3	79	A	C5-C6-N1	-6.94	114.23	117.70
1	6	752	A	N1-C6-N6	6.94	122.76	118.60
36	5	197	G	N7-C8-N9	6.94	116.57	113.10
36	5	3366	G	C4-C5-C6	6.94	122.96	118.80
1	2	1572	G	N1-C6-O6	6.94	124.06	119.90
36	1	1127	G	N1-C2-N3	6.94	128.06	123.90
36	1	1783	U	C5-C4-O4	6.94	130.06	125.90
36	1	2627	C	N1-C2-N3	6.94	124.06	119.20
36	1	3362	A	C8-N9-C4	-6.94	103.03	105.80
36	5	1386	A	N7-C8-N9	6.94	117.27	113.80
1	2	1186	U	C5-C4-O4	6.93	130.06	125.90
1	2	1558	U	N1-C2-O2	6.93	127.65	122.80
1	2	1610	G	N3-C4-N9	6.93	130.16	126.00
36	1	26	A	C8-N9-C4	-6.93	103.03	105.80
36	1	112	U	C5-C6-N1	-6.93	119.23	122.70
36	1	594	U	C5-C4-O4	6.93	130.06	125.90
36	1	712	G	C8-N9-C4	6.93	109.17	106.40
36	1	2880	U	N3-C2-O2	-6.93	117.35	122.20
36	1	2974	U	N1-C2-O2	-6.93	117.95	122.80
36	1	3085	G	C4-C5-N7	6.93	113.57	110.80
53	M7	138	LYS	CD-CE-NZ	6.93	127.65	111.70
36	5	2244	A	C5-C6-N1	6.93	121.17	117.70
37	7	67	G	N1-C6-O6	6.93	124.06	119.90
36	1	53	G	C8-N9-C1'	-6.93	117.99	127.00
36	1	873	C	N1-C2-O2	-6.93	114.74	118.90
36	1	1443	G	N9-C4-C5	-6.93	102.63	105.40
36	1	2698	G	N1-C6-O6	6.93	124.06	119.90
1	6	1025	A	C2-N3-C4	-6.93	107.13	110.60
36	5	1899	G	C8-N9-C4	6.93	109.17	106.40
36	5	2613	U	C6-N1-C2	-6.93	116.84	121.00
36	5	2706	G	C5-C6-N1	6.93	114.97	111.50
36	5	3052	G	N1-C2-N2	-6.93	109.96	116.20
37	7	25	G	C5-C6-N1	6.93	114.97	111.50
38	8	80	A	N7-C8-N9	6.93	117.27	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	921	A	C6-N1-C2	-6.93	114.44	118.60
36	5	927	C	C2-N1-C1'	6.93	126.42	118.80
36	5	1060	U	N1-C2-N3	6.93	119.06	114.90
36	5	1582	C	C5-C4-N4	-6.93	115.35	120.20
36	5	2164	A	N9-C4-C5	6.93	108.57	105.80
36	5	2375	G	N1-C2-N3	6.93	128.06	123.90
36	5	2984	C	N1-C2-N3	6.93	124.05	119.20
38	8	47	C	N3-C4-N4	-6.93	113.15	118.00
36	1	700	C	C2-N1-C1'	-6.93	111.18	118.80
36	1	865	U	N3-C4-O4	-6.93	114.55	119.40
38	4	39	G	C5-C6-O6	-6.93	124.44	128.60
36	5	817	A	OP2-P-O3'	6.93	120.45	105.20
36	5	2677	G	N1-C6-O6	6.93	124.06	119.90
36	1	369	A	C8-N9-C4	-6.93	103.03	105.80
36	1	1204	A	N1-C2-N3	6.93	132.76	129.30
36	1	2405	C	N3-C4-C5	-6.93	119.13	121.90
1	2	1217	A	C5-N7-C8	-6.93	100.44	103.90
1	2	1558	U	C6-N1-C1'	-6.93	111.50	121.20
36	5	718	G	C4-C5-N7	6.93	113.57	110.80
36	5	2905	U	C5-C6-N1	-6.93	119.24	122.70
36	5	2930	A	O4'-C1'-N9	6.93	113.74	108.20
36	1	1313	G	C4-C5-N7	6.92	113.57	110.80
36	1	3178	A	C2-N3-C4	-6.92	107.14	110.60
75	O9	13	MET	CB-CG-SD	-6.92	91.62	112.40
1	6	553	G	C5-C6-O6	-6.92	124.45	128.60
1	6	876	G	C8-N9-C1'	6.92	136.00	127.00
36	5	1332	A	N1-C6-N6	6.92	122.75	118.60
36	5	2368	A	C8-N9-C4	-6.92	103.03	105.80
36	5	3337	G	O5'-P-OP2	-6.92	99.47	105.70
1	2	1631	A	C8-N9-C4	-6.92	103.03	105.80
36	1	978	G	C8-N9-C4	6.92	109.17	106.40
36	5	3052	G	OP2-P-O3'	6.92	120.43	105.20
36	1	1667	A	C8-N9-C4	-6.92	103.03	105.80
36	1	2775	U	N3-C4-O4	-6.92	114.56	119.40
38	4	10	A	C5-N7-C8	6.92	107.36	103.90
1	6	1108	G	N1-C6-O6	-6.92	115.75	119.90
36	5	421	G	C6-N1-C2	-6.92	120.95	125.10
36	5	779	G	C8-N9-C4	-6.92	103.63	106.40
36	5	821	U	N3-C4-C5	-6.92	110.45	114.60
36	5	1046	A	N9-C4-C5	6.92	108.57	105.80
36	1	2322	C	C5-C6-N1	6.92	124.46	121.00
38	4	30	C	C6-N1-C2	6.92	123.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	138	A	C4-C5-N7	-6.92	107.24	110.70
36	1	386	A	C6-C5-N7	-6.92	127.46	132.30
36	1	953	G	C6-C5-N7	6.92	134.55	130.40
1	6	410	A	N1-C2-N3	6.92	132.76	129.30
1	6	1350	U	C5-C6-N1	-6.92	119.24	122.70
1	6	1673	G	N9-C4-C5	-6.92	102.63	105.40
1	6	1774	G	N3-C2-N2	-6.92	115.06	119.90
36	5	2939	G	N1-C6-O6	6.92	124.05	119.90
37	7	56	A	C6-C5-N7	-6.92	127.46	132.30
37	7	68	C	N1-C2-N3	6.92	124.04	119.20
37	7	104	A	O5'-P-OP2	-6.92	99.47	105.70
1	2	48	G	C8-N9-C4	-6.92	103.63	106.40
36	1	75	G	N1-C6-O6	6.92	124.05	119.90
36	1	802	C	N1-C2-N3	6.92	124.04	119.20
36	1	1365	G	N7-C8-N9	6.92	116.56	113.10
36	1	2635	A	C5-C6-N6	6.92	129.23	123.70
36	1	3013	U	O5'-P-OP2	-6.92	99.48	105.70
36	5	2354	C	C6-N1-C2	-6.92	117.53	120.30
36	5	3188	G	C5-C6-N1	6.92	114.96	111.50
36	1	2941	A	OP1-P-O3'	6.92	120.41	105.20
36	1	2964	G	C2-N3-C4	-6.92	108.44	111.90
36	5	1160	C	OP2-P-O3'	6.92	120.41	105.20
36	5	3346	U	C2-N1-C1'	6.92	126.00	117.70
1	2	1152	A	C8-N9-C4	6.91	108.56	105.80
36	1	512	U	N3-C4-O4	6.91	124.24	119.40
36	1	885	U	OP1-P-O3'	6.91	120.41	105.20
36	1	1134	G	N9-C4-C5	6.91	108.17	105.40
36	1	1170	A	C4-C5-N7	6.91	114.16	110.70
36	1	1670	C	N1-C2-O2	-6.91	114.75	118.90
36	1	3319	U	C6-N1-C1'	-6.91	111.52	121.20
1	6	144	U	C6-N1-C1'	-6.91	111.52	121.20
1	6	1572	G	N3-C2-N2	-6.91	115.06	119.90
1	6	1604	U	N3-C4-O4	6.91	124.24	119.40
36	5	364	G	N1-C2-N2	-6.91	109.98	116.20
36	5	726	G	N7-C8-N9	6.91	116.56	113.10
36	5	1321	G	C4-C5-C6	6.91	122.95	118.80
36	5	2636	A	N1-C2-N3	6.91	132.76	129.30
36	1	3266	G	N7-C8-N9	6.91	116.56	113.10
37	3	82	G	N1-C2-N2	-6.91	109.98	116.20
36	5	968	G	C8-N9-C4	6.91	109.17	106.40
36	5	1508	C	C6-N1-C2	-6.91	117.53	120.30
36	1	2884	C	N3-C4-C5	6.91	124.66	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3203	U	N3-C4-C5	-6.91	110.45	114.60
36	5	1582	C	C4-C5-C6	-6.91	113.94	117.40
1	2	551	G	C5-C6-N1	-6.91	108.05	111.50
36	1	233	C	C5-C6-N1	-6.91	117.55	121.00
36	1	601	U	N3-C2-O2	-6.91	117.36	122.20
36	1	1432	C	N3-C2-O2	-6.91	117.06	121.90
36	1	2808	A	O4'-C1'-N9	-6.91	102.67	108.20
1	6	448	C	C6-N1-C1'	6.91	129.09	120.80
1	6	461	G	N3-C4-N9	6.91	130.15	126.00
1	6	549	G	N1-C6-O6	6.91	124.05	119.90
36	5	805	G	N3-C4-N9	6.91	130.15	126.00
36	5	1205	A	C2-N3-C4	-6.91	107.15	110.60
36	5	1886	A	N9-C4-C5	6.91	108.56	105.80
36	5	2225	U	N3-C2-O2	-6.91	117.36	122.20
36	5	3246	G	C5-N7-C8	-6.91	100.85	104.30
36	5	3389	U	C5-C6-N1	6.91	126.16	122.70
37	7	2	G	C5-C6-O6	6.91	132.75	128.60
36	1	2961	G	N1-C2-N2	-6.91	109.98	116.20
36	5	1076	C	C2-N3-C4	-6.91	116.45	119.90
36	5	1834	U	C4-C5-C6	6.91	123.84	119.70
36	5	2116	G	N3-C2-N2	-6.91	115.06	119.90
36	5	2729	U	C5-C4-O4	6.91	130.04	125.90
36	5	3010	U	C5-C4-O4	6.91	130.04	125.90
36	1	199	A	O4'-C1'-N9	6.91	113.72	108.20
36	1	1190	A	C2-N3-C4	6.91	114.05	110.60
36	1	1317	A	N7-C8-N9	6.91	117.25	113.80
36	1	1880	U	O5'-P-OP1	6.91	118.99	110.70
36	1	2839	G	C5-N7-C8	-6.91	100.85	104.30
36	1	2932	U	N3-C4-O4	-6.91	114.57	119.40
36	5	32	U	N3-C2-O2	-6.91	117.37	122.20
36	5	56	G	N7-C8-N9	-6.91	109.65	113.10
36	5	65	A	P-O3'-C3'	6.91	127.99	119.70
36	5	2288	G	C4-C5-N7	6.91	113.56	110.80
1	2	1339	C	N3-C4-C5	6.90	124.66	121.90
36	1	2210	G	N1-C6-O6	-6.90	115.76	119.90
36	1	2326	A	C5-N7-C8	-6.90	100.45	103.90
1	6	55	A	N1-C6-N6	-6.90	114.46	118.60
1	6	427	C	N3-C4-N4	-6.90	113.17	118.00
36	5	584	G	N7-C8-N9	6.90	116.55	113.10
36	5	2524	A	N7-C8-N9	6.90	117.25	113.80
36	5	3315	G	N1-C2-N2	-6.90	109.99	116.20
37	7	56	A	C2-N3-C4	-6.90	107.15	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1208	A	C2-N3-C4	-6.90	107.15	110.60
1	2	1214	U	N3-C2-O2	-6.90	117.37	122.20
36	1	2802	A	OP2-P-O3'	6.90	120.38	105.20
36	5	2906	C	N3-C2-O2	6.90	126.73	121.90
38	8	15	G	N1-C6-O6	-6.90	115.76	119.90
1	2	1579	U	N1-C2-O2	6.90	127.63	122.80
36	5	3096	C	OP1-P-O3'	-6.90	90.02	105.20
1	2	1745	G	C8-N9-C4	6.90	109.16	106.40
36	1	640	U	OP1-P-OP2	-6.90	109.25	119.60
36	1	2296	A	O5'-P-OP1	-6.90	99.49	105.70
36	1	2857	C	C6-N1-C2	-6.90	117.54	120.30
36	1	2994	A	C4-C5-C6	6.90	120.45	117.00
36	1	3137	C	C2-N1-C1'	-6.90	111.21	118.80
1	6	1535	U	C2-N3-C4	-6.90	122.86	127.00
36	5	139	G	O5'-P-OP1	-6.90	99.49	105.70
1	2	60	U	C5-C6-N1	6.90	126.15	122.70
36	1	345	G	N1-C6-O6	6.90	124.04	119.90
36	1	1530	U	C6-N1-C2	6.90	125.14	121.00
1	6	1207	C	P-O3'-C3'	6.90	127.97	119.70
36	5	1040	A	C8-N9-C4	6.90	108.56	105.80
36	5	3298	C	C5-C6-N1	-6.90	117.55	121.00
36	1	183	G	N3-C4-N9	6.89	130.14	126.00
36	1	803	C	C5-C4-N4	-6.89	115.37	120.20
36	1	1166	G	N9-C4-C5	-6.89	102.64	105.40
36	1	1658	G	N9-C4-C5	6.89	108.16	105.40
36	1	1920	U	C6-N1-C2	-6.89	116.86	121.00
36	1	2380	U	N3-C4-O4	-6.89	114.57	119.40
1	6	107	C	N3-C4-C5	-6.89	119.14	121.90
36	5	1439	U	N1-C2-O2	-6.89	117.97	122.80
36	5	1725	C	N3-C4-N4	6.89	122.83	118.00
1	2	1541	G	C6-C5-N7	-6.89	126.27	130.40
36	1	622	A	N9-C4-C5	-6.89	103.04	105.80
36	1	949	C	C4-C5-C6	6.89	120.85	117.40
36	1	2605	G	N1-C6-O6	6.89	124.03	119.90
36	1	2946	A	C8-N9-C4	-6.89	103.04	105.80
36	5	2821	C	C2-N1-C1'	6.89	126.38	118.80
36	5	2878	G	C8-N9-C4	-6.89	103.64	106.40
36	5	3063	C	C5-C6-N1	-6.89	117.55	121.00
36	1	1556	C	N1-C2-N3	6.89	124.02	119.20
36	1	2236	G	C6-C5-N7	-6.89	126.27	130.40
73	O7	5	THR	C-N-CD	6.89	142.87	128.40
1	6	816	G	C8-N9-C4	6.89	109.16	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1486	G	N3-C4-N9	-6.89	121.87	126.00
36	5	2898	G	OP2-P-O3'	6.89	120.36	105.20
36	1	1365	G	C5-N7-C8	-6.89	100.86	104.30
36	1	1885	U	C5-C6-N1	-6.89	119.25	122.70
36	5	2161	G	N3-C4-C5	-6.89	125.16	128.60
36	5	2386	A	N7-C8-N9	6.89	117.25	113.80
36	5	2870	C	N3-C4-C5	6.89	124.66	121.90
36	5	2934	A	C2-N3-C4	-6.89	107.16	110.60
1	2	507	U	C2-N1-C1'	6.89	125.97	117.70
36	1	2787	G	C5-C6-O6	-6.89	124.47	128.60
36	1	2993	G	C4-N9-C1'	6.89	135.45	126.50
38	4	17	A	OP2-P-O3'	6.89	120.35	105.20
36	5	2403	G	O5'-P-OP2	-6.89	99.50	105.70
36	5	2614	G	C4-C5-N7	6.89	113.56	110.80
36	5	2926	A	C4-C5-C6	6.89	120.44	117.00
36	1	285	A	C5-C6-N6	-6.89	118.19	123.70
36	1	574	U	N1-C2-O2	-6.89	117.98	122.80
36	1	1893	A	O5'-P-OP2	-6.89	99.50	105.70
36	1	3361	G	N3-C4-C5	-6.89	125.16	128.60
1	6	542	A	C8-N9-C4	-6.89	103.05	105.80
36	5	1381	A	O5'-P-OP2	6.89	118.97	110.70
36	5	2247	G	N1-C2-N2	-6.89	110.00	116.20
36	5	2977	G	C5-N7-C8	-6.89	100.86	104.30
1	2	1498	G	C8-N9-C1'	-6.88	118.05	127.00
38	4	46	G	C4-N9-C1'	6.88	135.45	126.50
36	5	744	A	N1-C6-N6	6.88	122.73	118.60
36	5	874	U	C6-N1-C1'	6.88	130.84	121.20
36	5	1355	A	C5-C6-N6	6.88	129.21	123.70
36	5	2851	A	N9-C4-C5	6.88	108.55	105.80
36	1	41	G	N1-C2-N3	-6.88	119.77	123.90
36	1	2957	G	C5-N7-C8	-6.88	100.86	104.30
1	6	1241	G	C6-C5-N7	-6.88	126.27	130.40
36	5	1272	C	C6-N1-C2	-6.88	117.55	120.30
36	1	284	A	C4-C5-C6	6.88	120.44	117.00
36	1	750	G	OP2-P-O3'	6.88	120.34	105.20
1	6	1086	A	N3-C4-N9	-6.88	121.89	127.40
36	5	1311	G	C4-C5-C6	6.88	122.93	118.80
36	5	1422	G	N1-C6-O6	6.88	124.03	119.90
36	5	2966	G	N1-C2-N3	6.88	128.03	123.90
36	5	3148	U	N3-C2-O2	-6.88	117.38	122.20
37	7	1	G	N3-C4-N9	6.88	130.13	126.00
37	7	69	C	C5-C4-N4	-6.88	115.38	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	N0	115	ARG	NE-CZ-NH1	6.88	123.74	120.30
36	5	724	U	N1-C2-N3	6.88	119.03	114.90
36	5	1206	G	N3-C4-C5	-6.88	125.16	128.60
36	5	2274	U	N3-C2-O2	6.88	127.02	122.20
36	1	272	G	C4-N9-C1'	-6.88	117.56	126.50
36	1	3374	U	C6-N1-C2	6.88	125.13	121.00
1	6	54	C	C2-N3-C4	-6.88	116.46	119.90
1	6	1028	C	C2-N3-C4	-6.88	116.46	119.90
36	5	349	A	N9-C4-C5	6.88	108.55	105.80
36	5	569	A	C5-C6-N6	-6.88	118.20	123.70
36	5	2673	A	C5-N7-C8	6.88	107.34	103.90
36	5	2828	G	C5-C6-N1	6.88	114.94	111.50
1	2	51	A	C8-N9-C4	6.88	108.55	105.80
36	1	33	G	N3-C4-N9	-6.88	121.87	126.00
38	4	27	U	C5-C6-N1	6.88	126.14	122.70
36	5	842	G	N7-C8-N9	-6.88	109.66	113.10
36	5	1239	C	C5-C6-N1	6.88	124.44	121.00
37	7	10	C	C2-N1-C1'	6.88	126.36	118.80
37	7	47	C	C2-N3-C4	-6.88	116.46	119.90
36	1	1148	G	C4-C5-N7	6.88	113.55	110.80
36	5	718	G	N1-C6-O6	6.88	124.03	119.90
1	2	1358	G	C8-N9-C4	6.87	109.15	106.40
36	1	131	C	C6-N1-C2	-6.87	117.55	120.30
36	1	655	C	N3-C2-O2	-6.87	117.09	121.90
36	1	1157	G	OP2-P-O3'	6.87	120.32	105.20
36	1	2196	C	C6-N1-C2	6.87	123.05	120.30
36	1	2934	A	C2-N3-C4	-6.87	107.16	110.60
1	6	403	G	N3-C2-N2	-6.87	115.09	119.90
36	5	404	G	C8-N9-C1'	-6.87	118.06	127.00
36	5	689	U	OP2-P-O3'	6.87	120.32	105.20
36	5	1005	G	N3-C4-C5	6.87	132.04	128.60
36	5	1178	G	OP1-P-OP2	6.87	129.91	119.60
36	5	2135	U	N1-C2-O2	6.87	127.61	122.80
36	5	2392	C	N3-C2-O2	6.87	126.71	121.90
36	5	2410	U	C4-C5-C6	-6.87	115.58	119.70
36	5	2613	U	N1-C2-N3	6.87	119.02	114.90
1	2	1200	G	C6-C5-N7	-6.87	126.28	130.40
36	1	1337	A	N1-C2-N3	6.87	132.74	129.30
36	1	1345	G	C6-C5-N7	-6.87	126.28	130.40
36	1	1407	A	C5-C6-N1	6.87	121.14	117.70
36	1	1501	U	C5-C6-N1	6.87	126.14	122.70
36	1	2824	G	C8-N9-C1'	-6.87	118.07	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1197	C	O5'-P-OP2	-6.87	99.52	105.70
36	5	2919	A	N1-C6-N6	-6.87	114.48	118.60
36	5	2955	U	N3-C4-O4	6.87	124.21	119.40
37	7	101	G	C2-N3-C4	-6.87	108.47	111.90
37	7	102	A	N9-C4-C5	-6.87	103.05	105.80
36	1	48	A	N1-C2-N3	6.87	132.74	129.30
38	4	53	A	O5'-P-OP2	-6.87	99.52	105.70
1	6	779	U	N3-C2-O2	-6.87	117.39	122.20
36	5	2855	U	C4-C5-C6	6.87	123.82	119.70
1	2	111	U	N3-C4-O4	6.87	124.21	119.40
36	1	84	U	C5-C6-N1	-6.87	119.27	122.70
36	1	1154	A	C8-N9-C4	-6.87	103.05	105.80
36	1	1177	G	N1-C6-O6	6.87	124.02	119.90
36	1	1449	A	C8-N9-C4	-6.87	103.05	105.80
36	1	1661	G	N1-C2-N2	-6.87	110.02	116.20
36	5	1045	C	C2-N3-C4	-6.87	116.47	119.90
36	5	1931	U	C5-C4-O4	6.87	130.02	125.90
36	5	3197	G	N3-C2-N2	-6.87	115.09	119.90
36	5	3212	C	C2-N1-C1'	-6.87	111.24	118.80
36	1	3031	G	N3-C4-C5	6.87	132.03	128.60
1	6	746	A	C6-C5-N7	-6.87	127.49	132.30
1	6	1346	A	O4'-C1'-N9	6.87	113.69	108.20
36	5	1364	C	N3-C2-O2	-6.87	117.09	121.90
1	2	1135	U	C5-C4-O4	6.87	130.02	125.90
36	5	2617	U	N3-C4-C5	-6.87	110.48	114.60
36	5	2633	U	N3-C4-C5	-6.87	110.48	114.60
36	1	707	U	C4-C5-C6	6.86	123.82	119.70
36	1	907	G	N3-C4-N9	6.86	130.12	126.00
36	5	1199	C	C4-C5-C6	6.86	120.83	117.40
38	8	38	U	N1-C2-O2	6.86	127.60	122.80
36	1	223	U	N3-C4-O4	-6.86	114.60	119.40
36	1	2240	G	C5-C6-N1	-6.86	108.07	111.50
1	6	1546	G	N3-C4-N9	6.86	130.12	126.00
36	5	189	G	C5-C6-O6	6.86	132.72	128.60
36	5	1508	C	N3-C4-C5	-6.86	119.16	121.90
36	5	2637	A	C6-N1-C2	-6.86	114.48	118.60
36	5	3322	A	C6-C5-N7	-6.86	127.50	132.30
1	2	1150	G	C8-N9-C4	-6.86	103.66	106.40
36	1	112	U	O4'-C1'-N1	6.86	113.69	108.20
36	1	1493	G	N3-C4-N9	-6.86	121.88	126.00
36	1	2613	U	N3-C4-O4	6.86	124.20	119.40
38	4	4	C	C2-N1-C1'	6.86	126.35	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	359	A	C4-N9-C1'	-6.86	113.95	126.30
1	6	1735	U	N1-C2-N3	6.86	119.02	114.90
1	2	1271	G	C8-N9-C4	6.86	109.14	106.40
36	1	2787	G	C4-C5-N7	6.86	113.54	110.80
1	6	1282	U	C6-N1-C2	-6.86	116.88	121.00
36	5	1510	G	O5'-P-OP1	-6.86	99.53	105.70
36	5	2756	C	N3-C4-C5	6.86	124.64	121.90
36	5	3040	A	N7-C8-N9	-6.86	110.37	113.80
36	5	342	A	C2-N3-C4	6.86	114.03	110.60
36	5	432	G	N1-C6-O6	6.86	124.01	119.90
36	5	712	G	C5-C6-O6	-6.86	124.48	128.60
36	5	2190	U	N3-C4-C5	-6.86	110.48	114.60
36	5	2276	G	N1-C6-O6	-6.86	115.78	119.90
36	1	2112	U	O5'-P-OP2	-6.86	99.53	105.70
36	1	2304	C	C6-N1-C2	6.86	123.04	120.30
36	1	2368	A	O5'-P-OP1	6.86	118.93	110.70
36	1	2812	C	O5'-P-OP2	6.86	118.93	110.70
36	5	1126	G	N1-C6-O6	6.86	124.01	119.90
36	5	3013	U	C2-N1-C1'	6.86	125.93	117.70
36	5	3219	G	N1-C6-O6	-6.86	115.79	119.90
1	6	569	C	N3-C2-O2	-6.85	117.10	121.90
1	6	1512	G	N1-C6-O6	6.85	124.01	119.90
36	1	881	C	N3-C2-O2	-6.85	117.10	121.90
36	1	1886	A	C5-N7-C8	-6.85	100.47	103.90
1	6	160	C	C6-N1-C2	6.85	123.04	120.30
36	5	1101	G	C5-C6-N1	6.85	114.93	111.50
36	5	1192	C	C4-C5-C6	6.85	120.83	117.40
36	5	2330	C	C2-N1-C1'	6.85	126.34	118.80
36	1	2278	C	C4-C5-C6	-6.85	113.97	117.40
36	1	2418	G	N3-C4-C5	-6.85	125.17	128.60
36	5	962	A	C2-N3-C4	-6.85	107.17	110.60
36	5	3129	A	N9-C4-C5	6.85	108.54	105.80
36	5	3226	A	C5-C6-N6	6.85	129.18	123.70
38	8	2	A	C5-N7-C8	-6.85	100.47	103.90
1	2	1212	G	C4-C5-N7	6.85	113.54	110.80
36	1	1224	C	N1-C2-O2	6.85	123.01	118.90
36	1	2608	G	C5-C6-O6	-6.85	124.49	128.60
36	1	3256	G	C6-C5-N7	-6.85	126.29	130.40
1	6	797	G	C4-N9-C1'	-6.85	117.59	126.50
36	5	407	A	O4'-C1'-N9	-6.85	102.72	108.20
36	5	1794	G	N3-C4-N9	-6.85	121.89	126.00
36	5	2285	C	N3-C2-O2	-6.85	117.11	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2404	A	C5-C6-N6	6.85	129.18	123.70
36	5	3201	C	N3-C4-C5	-6.85	119.16	121.90
1	2	1515	A	N1-C6-N6	-6.85	114.49	118.60
36	1	102	C	C6-N1-C1'	-6.85	112.58	120.80
36	1	3117	C	C6-N1-C2	-6.85	117.56	120.30
1	6	1110	G	C4-N9-C1'	6.85	135.40	126.50
1	6	1274	C	N3-C4-C5	-6.85	119.16	121.90
36	5	913	A	C4-C5-N7	-6.85	107.28	110.70
36	5	1150	A	C5-N7-C8	-6.85	100.48	103.90
36	5	1485	G	N3-C2-N2	6.85	124.69	119.90
36	5	2290	C	C5-C6-N1	-6.85	117.58	121.00
36	5	2296	A	N9-C4-C5	-6.85	103.06	105.80
36	5	2830	G	N1-C2-N3	6.85	128.01	123.90
36	5	2921	U	C5-C6-N1	-6.85	119.28	122.70
1	2	111	U	N1-C2-N3	-6.85	110.79	114.90
1	2	433	C	C6-N1-C2	6.85	123.04	120.30
1	2	1517	U	N3-C4-C5	-6.85	110.49	114.60
36	1	1436	U	OP1-P-OP2	-6.85	109.33	119.60
36	1	2315	G	C5-C6-N1	-6.85	108.08	111.50
36	1	2887	A	C6-N1-C2	-6.85	114.49	118.60
36	1	3055	U	C6-N1-C2	6.85	125.11	121.00
36	5	345	G	C8-N9-C4	6.85	109.14	106.40
36	5	1139	G	OP2-P-O3'	6.85	120.26	105.20
1	2	119	A	C8-N9-C4	6.84	108.54	105.80
36	1	952	A	N1-C6-N6	-6.84	114.49	118.60
36	1	1209	G	C8-N9-C1'	-6.84	118.10	127.00
36	1	1282	G	C5-C6-O6	-6.84	124.49	128.60
36	1	1525	G	O5'-P-OP2	-6.84	99.54	105.70
36	1	2179	C	OP2-P-O3'	6.84	120.26	105.20
36	1	2964	G	OP1-P-OP2	6.84	129.87	119.60
1	6	1168	U	C5-C6-N1	6.84	126.12	122.70
36	5	1376	C	C5-C6-N1	6.84	124.42	121.00
36	5	2914	G	C8-N9-C4	-6.84	103.66	106.40
36	5	3045	G	N7-C8-N9	6.84	116.52	113.10
36	5	3099	C	N1-C2-O2	-6.84	114.79	118.90
36	5	3218	A	N1-C2-N3	6.84	132.72	129.30
36	1	1001	G	O5'-P-OP2	6.84	118.91	110.70
36	1	1547	G	N3-C4-C5	-6.84	125.18	128.60
1	6	27	U	O5'-P-OP2	-6.84	99.54	105.70
36	5	3174	A	C5-N7-C8	-6.84	100.48	103.90
1	2	1000	C	C2-N1-C1'	6.84	126.33	118.80
1	2	1757	G	N1-C6-O6	-6.84	115.80	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1431	G	C8-N9-C4	6.84	109.14	106.40
36	1	1446	A	N1-C2-N3	6.84	132.72	129.30
36	1	1534	A	C6-C5-N7	-6.84	127.51	132.30
36	5	223	U	N1-C2-N3	6.84	119.00	114.90
36	5	1340	G	N7-C8-N9	6.84	116.52	113.10
1	2	307	G	C5-C6-N1	6.84	114.92	111.50
36	1	50	U	N3-C2-O2	-6.84	117.41	122.20
36	1	1366	A	C6-C5-N7	-6.84	127.51	132.30
36	1	2669	G	N3-C4-N9	-6.84	121.90	126.00
36	1	2697	A	O5'-P-OP1	-6.84	99.54	105.70
36	5	192	C	N3-C2-O2	-6.84	117.11	121.90
36	5	845	G	N3-C2-N2	6.84	124.69	119.90
36	5	1900	A	C8-N9-C4	-6.84	103.06	105.80
36	5	2727	A	C5-N7-C8	6.84	107.32	103.90
36	5	3367	C	C2-N1-C1'	-6.84	111.28	118.80
36	5	3388	C	C6-N1-C2	6.84	123.04	120.30
1	2	1426	C	C4-C5-C6	-6.84	113.98	117.40
36	1	1168	U	O5'-P-OP2	6.84	118.91	110.70
1	6	1539	G	C8-N9-C1'	-6.84	118.11	127.00
1	6	1644	C	C4-C5-C6	6.84	120.82	117.40
36	5	1402	C	O5'-P-OP1	-6.84	99.55	105.70
36	5	2420	C	O5'-P-OP1	-6.84	99.55	105.70
1	2	29	U	C5-C6-N1	-6.84	119.28	122.70
36	1	335	G	N7-C8-N9	6.84	116.52	113.10
36	1	385	A	N9-C4-C5	6.84	108.53	105.80
36	1	688	G	C5-C6-O6	-6.84	124.50	128.60
36	1	878	G	C4-C5-N7	-6.84	108.07	110.80
36	1	1125	U	N1-C2-N3	6.84	119.00	114.90
37	3	36	C	N1-C2-O2	6.84	123.00	118.90
37	3	50	U	C2-N1-C1'	6.84	125.90	117.70
1	6	1527	C	N1-C2-O2	-6.84	114.80	118.90
36	5	802	C	C6-N1-C2	6.84	123.03	120.30
36	5	920	A	C5-N7-C8	-6.84	100.48	103.90
36	5	1784	G	N3-C4-N9	6.84	130.10	126.00
36	5	2256	A	C8-N9-C4	6.84	108.53	105.80
36	5	3054	U	C2-N1-C1'	-6.84	109.50	117.70
1	2	1274	C	N1-C2-O2	6.83	123.00	118.90
1	2	1481	C	C6-N1-C2	-6.83	117.57	120.30
1	2	1610	G	N3-C4-C5	-6.83	125.18	128.60
36	1	1046	A	C4-C5-N7	6.83	114.12	110.70
38	4	12	A	C5-C6-N6	-6.83	118.23	123.70
1	2	1270	G	C4-N9-C1'	6.83	135.38	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1537	C	C5-C4-N4	-6.83	115.42	120.20
36	1	184	U	C5-C6-N1	-6.83	119.28	122.70
36	1	2951	G	C5-C6-O6	6.83	132.70	128.60
36	1	3305	A	OP2-P-O3'	6.83	120.23	105.20
36	5	201	A	C8-N9-C4	6.83	108.53	105.80
36	5	1333	C	C6-N1-C2	-6.83	117.57	120.30
36	1	1084	A	O5'-P-OP1	-6.83	99.55	105.70
36	1	2861	U	N3-C2-O2	-6.83	117.42	122.20
36	1	3112	G	C8-N9-C4	6.83	109.13	106.40
1	6	371	G	C4-N9-C1'	6.83	135.38	126.50
1	6	1111	G	C8-N9-C4	-6.83	103.67	106.40
1	6	1111	G	N3-C4-C5	-6.83	125.18	128.60
36	5	969	C	C4-C5-C6	6.83	120.82	117.40
36	5	3038	U	N3-C4-C5	6.83	118.70	114.60
36	5	3171	U	N3-C4-O4	-6.83	114.62	119.40
38	8	8	C	C5-C6-N1	6.83	124.42	121.00
36	1	3081	C	N3-C2-O2	-6.83	117.12	121.90
37	3	7	G	C5-C6-N1	6.83	114.92	111.50
1	6	1000	C	C4-C5-C6	6.83	120.81	117.40
36	5	501	A	N1-C6-N6	-6.83	114.50	118.60
1	2	334	G	C8-N9-C1'	6.83	135.88	127.00
36	1	911	C	N3-C4-C5	6.83	124.63	121.90
36	1	1293	U	N3-C4-C5	6.83	118.70	114.60
36	1	1365	G	C4-C5-N7	6.83	113.53	110.80
36	1	2289	U	C2-N1-C1'	6.83	125.89	117.70
36	1	3052	G	O5'-P-OP2	6.83	118.89	110.70
38	4	3	A	C6-N1-C2	-6.83	114.50	118.60
38	4	18	U	N3-C4-C5	-6.83	110.50	114.60
1	6	338	C	C5-C6-N1	6.83	124.41	121.00
36	5	810	A	N1-C6-N6	6.83	122.70	118.60
36	5	857	G	C6-C5-N7	-6.83	126.30	130.40
36	5	3115	C	N1-C2-N3	6.83	123.98	119.20
1	2	600	U	C6-N1-C2	-6.83	116.90	121.00
1	6	1490	C	C5-C6-N1	6.83	124.41	121.00
36	5	3111	U	C2-N1-C1'	6.83	125.89	117.70
36	1	908	G	N3-C4-N9	6.82	130.09	126.00
36	1	2238	G	C4-C5-C6	-6.82	114.71	118.80
36	1	2419	A	C4-C5-N7	6.82	114.11	110.70
36	1	2738	A	C5-N7-C8	-6.82	100.49	103.90
1	6	1117	U	N3-C2-O2	6.82	126.98	122.20
36	5	648	C	OP1-P-O3'	6.82	120.21	105.20
37	7	102	A	C8-N9-C4	6.82	108.53	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1116	G	N3-C4-N9	6.82	130.09	126.00
38	4	57	C	OP2-P-O3'	6.82	120.21	105.20
36	5	2845	A	N7-C8-N9	6.82	117.21	113.80
1	2	994	G	C4-C5-N7	-6.82	108.07	110.80
36	1	1049	C	C5-C4-N4	-6.82	115.42	120.20
36	1	1472	U	C6-N1-C2	6.82	125.09	121.00
36	1	2863	G	N1-C2-N2	-6.82	110.06	116.20
36	1	2930	A	C5-C6-N1	6.82	121.11	117.70
1	6	385	A	C5-C6-N6	6.82	129.16	123.70
1	6	402	C	OP1-P-OP2	-6.82	109.37	119.60
1	6	1700	C	C6-N1-C1'	-6.82	112.61	120.80
36	5	1006	A	N1-C2-N3	6.82	132.71	129.30
36	5	3036	G	C5-C6-O6	6.82	132.69	128.60
36	5	3390	G	O5'-P-OP2	6.82	118.88	110.70
36	5	227	G	C5-N7-C8	6.82	107.71	104.30
36	5	1376	C	C2-N1-C1'	6.82	126.30	118.80
36	5	2161	G	N3-C2-N2	-6.82	115.13	119.90
36	5	2720	G	N3-C4-N9	6.82	130.09	126.00
36	5	3026	G	C4-C5-N7	6.82	113.53	110.80
36	1	14	U	C6-N1-C2	-6.82	116.91	121.00
36	1	392	G	N7-C8-N9	6.82	116.51	113.10
36	1	644	G	N1-C2-N2	-6.82	110.06	116.20
36	1	1146	C	C6-N1-C2	6.82	123.03	120.30
36	1	1362	G	N3-C4-C5	6.82	132.01	128.60
36	1	2122	G	C8-N9-C1'	6.82	135.86	127.00
36	1	2414	G	N3-C4-C5	6.82	132.01	128.60
1	6	811	A	N1-C6-N6	6.82	122.69	118.60
1	6	1768	G	N7-C8-N9	6.82	116.51	113.10
36	5	192	C	O5'-P-OP2	-6.82	99.56	105.70
36	5	400	G	C4-C5-N7	6.82	113.53	110.80
36	5	531	G	N3-C4-N9	6.82	130.09	126.00
36	5	998	A	N9-C4-C5	6.82	108.53	105.80
36	5	1348	U	N1-C2-O2	6.82	127.57	122.80
36	5	1551	C	N3-C4-C5	-6.82	119.17	121.90
36	5	2182	A	O5'-P-OP1	-6.82	99.56	105.70
36	5	2922	G	C5-N7-C8	-6.82	100.89	104.30
36	1	1466	G	C5-C6-O6	-6.82	124.51	128.60
36	1	2658	G	N3-C4-N9	6.82	130.09	126.00
36	1	3087	A	N1-C2-N3	6.82	132.71	129.30
36	1	3204	C	N1-C2-O2	6.82	122.99	118.90
1	6	1090	C	N3-C4-C5	6.82	124.63	121.90
36	5	1439	U	N3-C2-O2	6.82	126.97	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2178	A	C5-C6-N1	6.82	121.11	117.70
36	5	3024	A	O5'-P-OP2	6.82	118.88	110.70
36	1	1442	U	O5'-P-OP1	-6.81	99.57	105.70
36	1	2167	A	N1-C6-N6	6.81	122.69	118.60
36	1	2830	G	C4-N9-C1'	-6.81	117.64	126.50
1	6	751	G	C8-N9-C4	6.81	109.13	106.40
36	5	1554	U	N1-C2-N3	-6.81	110.81	114.90
36	5	1917	C	N3-C4-C5	6.81	124.63	121.90
1	2	17	C	C2-N3-C4	-6.81	116.49	119.90
36	1	583	G	C5-N7-C8	6.81	107.71	104.30
36	1	1713	G	C4-N9-C1'	-6.81	117.64	126.50
36	1	2664	C	N3-C4-C5	6.81	124.62	121.90
1	6	1622	G	N9-C4-C5	-6.81	102.67	105.40
36	5	2306	C	N1-C2-O2	6.81	122.99	118.90
36	5	3136	G	C5-N7-C8	-6.81	100.89	104.30
36	1	798	G	C5-C6-O6	-6.81	124.51	128.60
36	1	2303	A	N9-C4-C5	6.81	108.52	105.80
36	1	2629	U	C4-C5-C6	6.81	123.79	119.70
1	6	396	G	C5-C6-O6	6.81	132.69	128.60
36	5	3046	A	N9-C4-C5	6.81	108.52	105.80
36	1	1122	U	C6-N1-C2	-6.81	116.91	121.00
36	1	2918	G	C2-N3-C4	6.81	115.31	111.90
1	6	1038	U	C5-C4-O4	-6.81	121.81	125.90
36	5	1293	U	N1-C2-O2	-6.81	118.03	122.80
36	5	1344	G	N3-C4-N9	-6.81	121.91	126.00
36	1	213	A	C5-N7-C8	-6.81	100.50	103.90
36	1	273	A	C8-N9-C4	6.81	108.52	105.80
36	1	305	U	C2-N3-C4	-6.81	122.92	127.00
36	1	392	G	C8-N9-C4	-6.81	103.68	106.40
1	6	1271	G	N1-C6-O6	6.81	123.98	119.90
36	5	94	G	C2-N3-C4	-6.81	108.50	111.90
36	5	978	G	N1-C2-N2	6.81	122.33	116.20
36	5	1220	U	C2-N3-C4	-6.81	122.92	127.00
36	5	1293	U	C2-N3-C4	-6.81	122.92	127.00
36	5	2325	G	N1-C6-O6	6.81	123.98	119.90
36	5	2573	G	C5-C6-O6	-6.81	124.52	128.60
36	1	67	A	C2-N3-C4	6.81	114.00	110.60
36	1	375	A	C4-C5-N7	6.81	114.10	110.70
36	5	2316	G	N1-C2-N2	-6.81	110.08	116.20
36	1	344	A	OP2-P-O3'	6.80	120.17	105.20
36	1	865	U	C2-N1-C1'	-6.80	109.53	117.70
36	1	2669	G	C4-C5-N7	-6.80	108.08	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2967	A	C5-C6-N6	-6.80	118.26	123.70
36	1	2983	C	C4-C5-C6	6.80	120.80	117.40
37	3	93	C	C2-N3-C4	-6.80	116.50	119.90
38	4	24	G	C4-N9-C1'	6.80	135.35	126.50
38	4	55	U	C6-N1-C2	-6.80	116.92	121.00
36	5	835	G	O4'-C1'-N9	6.80	113.64	108.20
36	5	1604	G	C6-N1-C2	-6.80	121.02	125.10
36	5	2608	G	N1-C6-O6	6.80	123.98	119.90
36	1	1408	G	N3-C4-N9	6.80	130.08	126.00
1	2	1423	U	N3-C2-O2	-6.80	117.44	122.20
36	1	1045	C	N1-C2-O2	-6.80	114.82	118.90
36	1	1551	C	N1-C2-O2	-6.80	114.82	118.90
36	1	3326	G	C5-N7-C8	6.80	107.70	104.30
1	6	621	A	N9-C4-C5	6.80	108.52	105.80
1	6	1679	G	N3-C4-C5	-6.80	125.20	128.60
36	5	34	A	C8-N9-C4	-6.80	103.08	105.80
36	5	1847	A	C6-N1-C2	6.80	122.68	118.60
36	5	2129	U	C6-N1-C2	-6.80	116.92	121.00
36	1	983	A	O4'-C1'-N9	-6.80	102.76	108.20
36	1	1483	G	C2-N3-C4	6.80	115.30	111.90
36	1	1507	G	C4-C5-N7	6.80	113.52	110.80
36	1	1894	U	C2-N1-C1'	-6.80	109.54	117.70
36	1	2199	G	N7-C8-N9	6.80	116.50	113.10
36	1	2773	C	C6-N1-C2	6.80	123.02	120.30
1	6	1093	A	C5-C6-N1	6.80	121.10	117.70
36	5	608	A	N3-C4-N9	6.80	132.84	127.40
36	5	1473	G	N1-C2-N2	-6.80	110.08	116.20
37	7	113	C	O5'-P-OP1	-6.80	99.58	105.70
1	2	1007	C	C6-N1-C2	6.80	123.02	120.30
36	1	939	U	C5'-C4'-O4'	6.80	117.26	109.10
36	1	1522	U	N1-C2-O2	6.80	127.56	122.80
38	4	40	A	N7-C8-N9	6.80	117.20	113.80
36	5	428	A	OP2-P-O3'	6.80	120.16	105.20
36	5	531	G	C6-C5-N7	-6.80	126.32	130.40
36	5	2334	U	C2-N1-C1'	6.80	125.86	117.70
36	5	2833	A	N1-C2-N3	6.80	132.70	129.30
36	1	1523	U	N1-C2-O2	6.80	127.56	122.80
36	1	2777	G	N9-C4-C5	6.80	108.12	105.40
36	5	1155	C	OP1-P-OP2	6.80	129.79	119.60
36	5	1158	A	N7-C8-N9	-6.80	110.40	113.80
36	5	3164	C	C5-C4-N4	-6.80	115.44	120.20
36	1	1373	A	OP1-P-O3'	-6.79	90.25	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1505	C	C5-C6-N1	-6.79	117.60	121.00
36	5	2397	A	N1-C2-N3	6.79	132.70	129.30
38	8	66	A	C5-C6-N1	-6.79	114.30	117.70
36	1	197	G	C4-C5-N7	6.79	113.52	110.80
36	1	353	G	N1-C6-O6	-6.79	115.82	119.90
1	6	1006	C	C2-N3-C4	-6.79	116.50	119.90
36	5	2341	A	C6-N1-C2	-6.79	114.52	118.60
36	5	2754	G	N3-C4-N9	6.79	130.08	126.00
36	5	2895	G	C4-C5-C6	6.79	122.88	118.80
36	5	2935	U	C4-C5-C6	-6.79	115.62	119.70
36	5	3045	G	C2-N3-C4	-6.79	108.50	111.90
1	2	377	G	N1-C2-N2	6.79	122.31	116.20
36	1	349	A	C8-N9-C4	-6.79	103.08	105.80
36	1	2622	C	C2-N1-C1'	6.79	126.27	118.80
36	1	3090	U	O5'-P-OP2	-6.79	99.59	105.70
38	4	63	G	O5'-P-OP2	-6.79	99.59	105.70
1	6	1206	U	N3-C4-O4	6.79	124.15	119.40
36	5	129	U	C6-N1-C2	-6.79	116.93	121.00
36	5	425	G	N1-C2-N3	6.79	127.97	123.90
36	5	1296	C	N1-C2-N3	6.79	123.95	119.20
38	8	15	G	C5-N7-C8	6.79	107.70	104.30
36	1	2871	G	C4-C5-C6	-6.79	114.73	118.80
36	1	2922	G	C5-C6-N1	6.79	114.89	111.50
36	1	3271	G	O5'-P-OP1	6.79	118.85	110.70
36	5	1142	G	O5'-P-OP2	-6.79	99.59	105.70
36	5	1664	G	OP2-P-O3'	6.79	120.14	105.20
1	2	157	A	C8-N9-C4	6.79	108.52	105.80
36	1	696	C	O4'-C1'-N1	6.79	113.63	108.20
36	1	2828	G	C5-C6-O6	6.79	132.67	128.60
36	1	3083	G	O5'-P-OP2	-6.79	99.59	105.70
1	6	1086	A	C2-N3-C4	-6.79	107.21	110.60
1	6	1503	A	O5'-P-OP1	-6.79	99.59	105.70
36	5	315	C	C6-N1-C2	6.79	123.02	120.30
36	5	1126	G	C4-C5-C6	6.79	122.87	118.80
36	1	940	G	C5-C6-N1	6.79	114.89	111.50
38	4	10	A	O5'-P-OP2	-6.79	99.59	105.70
40	L3	244	ARG	NE-CZ-NH2	-6.79	116.91	120.30
36	5	2895	G	N3-C4-N9	6.79	130.07	126.00
36	1	366	A	C4-C5-C6	6.79	120.39	117.00
36	1	1052	U	N3-C4-O4	-6.79	114.65	119.40
36	1	2651	G	C5-C6-O6	-6.79	124.53	128.60
1	6	759	U	N3-C2-O2	-6.79	117.45	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1668	G	N3-C2-N2	-6.79	115.15	119.90
36	5	1367	G	O5'-P-OP1	-6.79	99.59	105.70
36	5	1468	A	C2-N3-C4	-6.79	107.21	110.60
36	5	2763	U	OP2-P-O3'	6.79	120.13	105.20
1	2	582	U	N3-C2-O2	-6.78	117.45	122.20
36	1	1594	A	C5-C6-N6	6.78	129.13	123.70
1	6	396	G	N1-C6-O6	-6.78	115.83	119.90
36	5	608	A	C6-C5-N7	-6.78	127.55	132.30
36	5	1669	C	C6-N1-C2	-6.78	117.59	120.30
36	5	2188	A	C8-N9-C4	6.78	108.51	105.80
37	7	99	G	N1-C6-O6	-6.78	115.83	119.90
38	8	28	C	N3-C4-N4	6.78	122.75	118.00
36	1	697	A	C4-C5-C6	-6.78	113.61	117.00
36	1	813	G	C5-N7-C8	-6.78	100.91	104.30
36	1	3104	U	O5'-P-OP1	-6.78	99.60	105.70
1	6	1528	U	C5-C6-N1	-6.78	119.31	122.70
36	5	857	G	N9-C4-C5	6.78	108.11	105.40
36	5	1060	U	N3-C4-C5	6.78	118.67	114.60
36	5	1498	A	C8-N9-C4	-6.78	103.09	105.80
36	5	2752	U	N3-C4-C5	6.78	118.67	114.60
1	2	1658	G	O5'-P-OP1	-6.78	99.60	105.70
36	1	50	U	C4-C5-C6	6.78	123.77	119.70
36	1	121	A	C8-N9-C4	6.78	108.51	105.80
36	1	637	C	N3-C2-O2	-6.78	117.15	121.90
1	6	555	A	C8-N9-C4	-6.78	103.09	105.80
1	6	1580	C	C2-N1-C1'	-6.78	111.34	118.80
36	5	1914	G	N1-C6-O6	-6.78	115.83	119.90
36	5	2285	C	C4-C5-C6	6.78	120.79	117.40
36	5	3246	G	OP1-P-OP2	-6.78	109.43	119.60
36	5	3312	U	C6-N1-C2	6.78	125.07	121.00
36	1	2107	A	N1-C2-N3	6.78	132.69	129.30
36	1	2156	C	C2-N3-C4	-6.78	116.51	119.90
36	1	2738	A	C5-C6-N1	6.78	121.09	117.70
37	3	7	G	C6-C5-N7	6.78	134.47	130.40
36	5	2890	A	N9-C4-C5	6.78	108.51	105.80
1	2	1212	G	C4-C5-C6	6.78	122.87	118.80
36	1	344	A	O5'-P-OP1	-6.78	99.60	105.70
36	1	714	G	C4-C5-N7	6.78	113.51	110.80
36	1	2102	U	C6-N1-C2	6.78	125.07	121.00
36	1	2121	G	N3-C4-N9	-6.78	121.93	126.00
36	1	3309	G	N9-C1'-C2'	-6.78	104.55	112.00
1	6	1639	C	C4-C5-C6	-6.78	114.01	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1670	G	N3-C4-C5	-6.78	125.21	128.60
1	6	1747	G	C2-N3-C4	-6.78	108.51	111.90
36	5	62	A	C5-N7-C8	-6.78	100.51	103.90
36	5	187	A	N9-C4-C5	6.78	108.51	105.80
36	5	517	G	C5-C6-O6	-6.78	124.53	128.60
36	5	787	G	C5-N7-C8	6.78	107.69	104.30
36	5	1150	A	N7-C8-N9	6.78	117.19	113.80
36	5	1316	C	C5-C6-N1	-6.78	117.61	121.00
1	2	1412	G	N3-C4-N9	-6.78	121.93	126.00
36	1	222	A	OP2-P-O3'	6.78	120.10	105.20
36	1	2199	G	C8-N9-C4	-6.78	103.69	106.40
1	6	576	G	C5-C6-O6	-6.78	124.53	128.60
36	5	298	U	C5-C6-N1	6.78	126.09	122.70
36	5	833	G	O5'-P-OP2	-6.78	99.60	105.70
36	5	2993	G	C6-C5-N7	-6.78	126.33	130.40
36	1	691	A	N3-C4-C5	6.77	131.54	126.80
36	1	2557	A	N1-C6-N6	-6.77	114.53	118.60
36	1	2894	C	O5'-P-OP2	-6.77	99.60	105.70
1	6	1696	G	P-O3'-C3'	6.77	127.83	119.70
36	5	3275	U	C5-C6-N1	6.77	126.09	122.70
1	2	390	G	N3-C4-N9	-6.77	121.94	126.00
36	1	220	G	C4-C5-C6	6.77	122.86	118.80
37	3	38	U	O5'-P-OP2	-6.77	99.60	105.70
1	6	996	U	N3-C4-O4	6.77	124.14	119.40
36	5	860	G	N9-C4-C5	-6.77	102.69	105.40
36	5	891	G	N9-C4-C5	6.77	108.11	105.40
36	5	1525	G	C4-N9-C1'	6.77	135.31	126.50
36	5	1870	C	N1-C2-O2	-6.77	114.84	118.90
36	5	2796	G	C8-N9-C4	6.77	109.11	106.40
36	5	2957	G	N9-C1'-C2'	-6.77	104.55	112.00
36	5	2980	U	C5-C4-O4	6.77	129.96	125.90
38	8	17	A	N9-C4-C5	-6.77	103.09	105.80
38	8	48	A	N1-C2-N3	-6.77	125.91	129.30
1	6	315	A	C5-N7-C8	6.77	107.29	103.90
1	6	1418	G	C2-N3-C4	-6.77	108.51	111.90
36	5	1905	G	C5-N7-C8	6.77	107.69	104.30
1	2	568	G	N1-C6-O6	-6.77	115.84	119.90
36	1	689	U	C5-C4-O4	-6.77	121.84	125.90
36	1	1878	G	N3-C2-N2	-6.77	115.16	119.90
36	1	2122	G	C5-C6-N1	6.77	114.89	111.50
1	6	466	U	C6-N1-C2	-6.77	116.94	121.00
36	5	744	A	C4-C5-N7	6.77	114.08	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	860	G	N1-C6-O6	6.77	123.96	119.90
36	5	2522	G	N1-C6-O6	6.77	123.96	119.90
36	1	1440	G	OP2-P-O3'	6.77	120.09	105.20
36	1	3285	C	C6-N1-C2	6.77	123.01	120.30
36	1	3306	U	C2-N1-C1'	6.77	125.82	117.70
1	6	1393	C	C6-N1-C2	-6.77	117.59	120.30
36	5	1122	U	N1-C2-N3	6.77	118.96	114.90
36	5	1282	G	N3-C4-C5	6.77	131.98	128.60
36	5	2132	C	C6-N1-C2	-6.77	117.59	120.30
36	5	2824	G	N3-C2-N2	6.77	124.64	119.90
36	1	683	U	C5-C6-N1	-6.77	119.32	122.70
36	1	2956	A	N1-C6-N6	6.77	122.66	118.60
36	1	3184	A	C8-N9-C4	-6.77	103.09	105.80
1	6	506	A	C8-N9-C4	-6.77	103.09	105.80
1	6	1087	A	N1-C6-N6	-6.77	114.54	118.60
36	5	1461	A	N1-C6-N6	-6.77	114.54	118.60
36	5	1481	A	C4-C5-C6	6.77	120.38	117.00
36	5	2584	G	OP2-P-O3'	6.77	120.08	105.20
37	7	102	A	C5-N7-C8	-6.77	100.52	103.90
36	1	802	C	N3-C4-N4	-6.76	113.27	118.00
36	1	1177	G	C6-C5-N7	-6.76	126.34	130.40
36	1	3263	G	N3-C4-C5	-6.76	125.22	128.60
36	5	1236	G	N3-C4-N9	6.76	130.06	126.00
36	5	1861	G	N1-C2-N2	-6.76	110.11	116.20
36	5	2872	A	N1-C6-N6	-6.76	114.54	118.60
37	7	15	C	N3-C2-O2	-6.76	117.17	121.90
36	1	96	G	N3-C4-C5	6.76	131.98	128.60
36	5	567	G	C5-C6-N1	-6.76	108.12	111.50
36	5	1149	G	C4-N9-C1'	6.76	135.29	126.50
36	5	1536	G	C2-N3-C4	-6.76	108.52	111.90
36	5	2371	G	N1-C6-O6	6.76	123.96	119.90
36	5	3271	G	N3-C4-N9	6.76	130.06	126.00
36	1	432	G	C2-N3-C4	-6.76	108.52	111.90
36	1	1114	U	OP1-P-O3'	6.76	120.07	105.20
36	1	1151	U	OP1-P-OP2	-6.76	109.46	119.60
36	1	3318	G	C4-C5-N7	6.76	113.50	110.80
1	6	543	C	N3-C4-N4	-6.76	113.27	118.00
1	6	1156	C	C6-N1-C2	-6.76	117.59	120.30
1	6	1470	C	C2-N1-C1'	6.76	126.24	118.80
36	5	155	G	C5-C6-N1	6.76	114.88	111.50
36	5	1490	A	N9-C4-C5	6.76	108.50	105.80
36	5	2341	A	C8-N9-C4	6.76	108.50	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2610	G	C8-N9-C4	-6.76	103.69	106.40
36	5	3075	G	C5-C6-N1	-6.76	108.12	111.50
36	1	1527	C	C5-C6-N1	6.76	124.38	121.00
36	1	2333	C	N3-C4-N4	-6.76	113.27	118.00
36	1	2730	G	N1-C6-O6	6.76	123.96	119.90
1	6	420	A	N7-C8-N9	6.76	117.18	113.80
1	6	1272	U	C6-N1-C2	-6.76	116.94	121.00
36	5	38	U	C6-N1-C2	6.76	125.06	121.00
36	5	1399	A	N3-C4-C5	6.76	131.53	126.80
36	5	1868	G	C4-C5-N7	6.76	113.50	110.80
36	5	2873	U	C4-C5-C6	6.76	123.76	119.70
1	2	1737	G	C5-C6-N1	-6.76	108.12	111.50
36	1	676	G	C8-N9-C4	-6.76	103.70	106.40
36	1	2967	A	N1-C6-N6	6.76	122.66	118.60
36	5	3194	C	N3-C4-N4	6.76	122.73	118.00
1	2	1631	A	N3-C4-N9	-6.76	121.99	127.40
36	1	616	G	N9-C4-C5	-6.76	102.70	105.40
36	1	660	A	C5-C6-N6	6.76	129.11	123.70
36	1	664	U	N3-C4-C5	-6.76	110.55	114.60
36	1	2888	U	O5'-P-OP1	-6.76	99.62	105.70
1	6	1650	U	N3-C4-C5	-6.76	110.55	114.60
12	c0	83	PRO	N-CA-CB	6.76	111.41	103.30
36	5	209	A	N1-C6-N6	6.76	122.65	118.60
36	5	1366	A	C5-C6-N6	-6.76	118.29	123.70
36	5	1845	G	OP1-P-O3'	6.76	120.06	105.20
36	1	691	A	C6-C5-N7	-6.75	127.57	132.30
36	1	2411	U	C2-N3-C4	-6.75	122.95	127.00
36	1	3316	A	N3-C4-C5	6.75	131.53	126.80
36	5	97	U	N3-C4-O4	6.75	124.13	119.40
36	5	808	A	N9-C4-C5	6.75	108.50	105.80
36	5	2288	G	C4-N9-C1'	6.75	135.28	126.50
36	1	668	G	OP1-P-OP2	6.75	129.73	119.60
36	1	1858	A	N3-C4-N9	6.75	132.80	127.40
36	1	2847	A	N3-C4-C5	6.75	131.53	126.80
36	1	3305	A	N3-C4-C5	-6.75	122.07	126.80
36	5	713	U	C2-N3-C4	-6.75	122.95	127.00
36	5	3092	C	N3-C4-N4	6.75	122.73	118.00
36	1	2305	G	C2-N3-C4	6.75	115.28	111.90
38	4	46	G	C6-C5-N7	-6.75	126.35	130.40
1	6	1100	G	C5-C6-O6	-6.75	124.55	128.60
36	5	306	A	O5'-P-OP1	6.75	118.80	110.70
36	5	421	G	N3-C4-N9	6.75	130.05	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	560	G	C4-C5-N7	-6.75	108.10	110.80
36	5	803	C	N3-C4-C5	6.75	124.60	121.90
36	5	832	G	C5-N7-C8	6.75	107.68	104.30
36	5	1162	U	N1-C2-N3	6.75	118.95	114.90
1	6	316	A	C5-N7-C8	-6.75	100.53	103.90
1	6	1409	G	N3-C4-N9	6.75	130.05	126.00
1	6	1546	G	C4-N9-C1'	6.75	135.27	126.50
36	5	52	A	C2-N3-C4	-6.75	107.22	110.60
36	5	2421	U	C5-C6-N1	-6.75	119.33	122.70
36	1	3122	A	C5-N7-C8	-6.75	100.53	103.90
1	6	1368	G	C4-C5-N7	6.75	113.50	110.80
36	5	897	U	N1-C2-O2	-6.75	118.08	122.80
36	5	3329	U	N1-C2-N3	6.75	118.95	114.90
36	1	1393	A	C4-C5-C6	6.75	120.37	117.00
36	1	2241	U	C4-C5-C6	6.75	123.75	119.70
1	6	635	A	N1-C6-N6	-6.75	114.55	118.60
36	5	2796	G	N9-C4-C5	-6.75	102.70	105.40
1	2	1418	G	C4-C5-N7	6.74	113.50	110.80
36	1	1920	U	C4-C5-C6	6.74	123.75	119.70
36	1	2413	A	C5-N7-C8	-6.74	100.53	103.90
1	6	312	A	C8-N9-C4	-6.74	103.10	105.80
36	5	155	G	N9-C4-C5	-6.74	102.70	105.40
36	5	956	U	N1-C2-O2	-6.74	118.08	122.80
36	5	1868	G	C6-C5-N7	-6.74	126.35	130.40
36	5	2620	G	C4-C5-N7	-6.74	108.10	110.80
36	5	2940	A	C6-N1-C2	-6.74	114.55	118.60
1	2	1486	G	N3-C4-C5	-6.74	125.23	128.60
36	1	54	C	C6-N1-C2	6.74	123.00	120.30
36	1	2395	G	N7-C8-N9	6.74	116.47	113.10
37	3	78	U	N3-C4-O4	6.74	124.12	119.40
36	1	649	A	N1-C6-N6	-6.74	114.56	118.60
36	1	2303	A	C8-N9-C4	-6.74	103.10	105.80
36	1	2917	G	N7-C8-N9	-6.74	109.73	113.10
36	1	3208	G	N3-C4-C5	-6.74	125.23	128.60
36	5	91	G	C5-C6-O6	-6.74	124.56	128.60
36	5	1422	G	N7-C8-N9	6.74	116.47	113.10
36	5	2658	G	O5'-P-OP2	-6.74	99.63	105.70
1	2	1011	G	C8-N9-C4	-6.74	103.70	106.40
1	2	1195	C	C2-N1-C1'	6.74	126.21	118.80
36	1	334	A	C2-N3-C4	6.74	113.97	110.60
36	1	2199	G	C5-C6-N1	6.74	114.87	111.50
36	1	2816	G	N3-C2-N2	6.74	124.62	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	761	G	C5-C6-O6	6.74	132.64	128.60
1	6	960	U	N1-C2-O2	6.74	127.52	122.80
36	5	866	A	N1-C6-N6	6.74	122.64	118.60
36	5	1051	U	O5'-P-OP1	-6.74	99.64	105.70
36	5	2358	A	N7-C8-N9	-6.74	110.43	113.80
36	5	2389	C	C5-C4-N4	-6.74	115.48	120.20
36	1	52	A	C5-N7-C8	6.74	107.27	103.90
36	1	1929	G	N9-C4-C5	-6.74	102.71	105.40
36	1	1951	C	N1-C2-O2	6.74	122.94	118.90
36	1	2193	U	C2-N1-C1'	-6.74	109.62	117.70
37	3	7	G	N9-C4-C5	6.74	108.09	105.40
1	6	11	A	N1-C6-N6	-6.74	114.56	118.60
1	6	357	G	N1-C6-O6	6.74	123.94	119.90
1	6	630	A	C4-C5-C6	6.74	120.37	117.00
1	6	1111	G	N1-C2-N2	-6.74	110.14	116.20
36	5	266	A	N1-C6-N6	6.74	122.64	118.60
36	5	1400	G	N3-C4-N9	6.74	130.04	126.00
36	5	1546	A	N9-C4-C5	6.74	108.50	105.80
36	5	2420	C	OP1-P-O3'	6.74	120.02	105.20
36	5	2942	C	C6-N1-C2	-6.74	117.61	120.30
36	5	3091	A	C5-N7-C8	-6.74	100.53	103.90
37	7	111	U	C4-C5-C6	6.74	123.74	119.70
36	1	1190	A	C8-N9-C4	-6.73	103.11	105.80
36	1	3137	C	C5-C6-N1	-6.73	117.63	121.00
1	6	800	U	N1-C2-O2	-6.73	118.09	122.80
36	5	2339	C	C5-C4-N4	-6.73	115.49	120.20
1	2	1140	G	N1-C6-O6	6.73	123.94	119.90
36	1	3053	G	C5-C6-N1	-6.73	108.13	111.50
1	6	383	G	C4-C5-N7	6.73	113.49	110.80
1	6	1477	G	C5-C6-N1	6.73	114.87	111.50
36	5	1139	G	C6-C5-N7	6.73	134.44	130.40
36	5	1793	C	C2-N1-C1'	6.73	126.20	118.80
36	5	2243	A	C4-C5-N7	-6.73	107.33	110.70
36	5	2623	G	N7-C8-N9	-6.73	109.73	113.10
37	7	121	U	C2-N1-C1'	6.73	125.78	117.70
38	8	111	A	N9-C4-C5	-6.73	103.11	105.80
1	2	1728	A	N1-C6-N6	-6.73	114.56	118.60
36	1	352	A	O4'-C1'-N9	6.73	113.58	108.20
36	1	787	G	C4-N9-C1'	6.73	135.25	126.50
1	6	1535	U	OP2-P-O3'	6.73	120.01	105.20
36	5	424	G	O5'-P-OP2	-6.73	99.64	105.70
36	5	2335	G	C2-N3-C4	6.73	115.27	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	76	A	C5-N7-C8	6.73	107.27	103.90
36	1	642	U	N3-C4-C5	-6.73	110.56	114.60
36	1	1049	C	C2-N3-C4	-6.73	116.53	119.90
1	6	597	G	C5-N7-C8	-6.73	100.94	104.30
36	5	2159	U	N1-C2-O2	6.73	127.51	122.80
36	5	2282	U	O5'-P-OP1	-6.73	99.64	105.70
1	2	261	U	N1-C2-O2	6.73	127.51	122.80
36	1	651	G	C4-C5-C6	6.73	122.84	118.80
36	1	2402	A	C6-N1-C2	-6.73	114.56	118.60
36	1	2627	C	OP1-P-OP2	-6.73	109.51	119.60
36	1	3251	U	C5-C6-N1	-6.73	119.34	122.70
36	1	3318	G	C8-N9-C1'	-6.73	118.25	127.00
37	3	52	G	C8-N9-C4	-6.73	103.71	106.40
1	6	209	U	N3-C2-O2	6.73	126.91	122.20
1	6	1774	G	N9-C4-C5	6.73	108.09	105.40
36	5	996	A	OP2-P-O3'	6.73	120.00	105.20
36	5	2168	A	C5-N7-C8	-6.73	100.54	103.90
36	5	2888	U	C5-C6-N1	-6.73	119.34	122.70
1	2	432	G	N1-C6-O6	-6.73	115.86	119.90
36	1	108	A	N1-C6-N6	6.73	122.64	118.60
36	1	329	U	C4-C5-C6	6.73	123.73	119.70
1	6	1651	A	C2-N3-C4	-6.73	107.24	110.60
36	5	2409	G	O5'-P-OP2	-6.73	99.65	105.70
36	1	1594	A	C4-C5-N7	-6.72	107.34	110.70
36	1	2113	A	C5-C6-N6	6.72	129.08	123.70
36	5	877	C	C5-C4-N4	-6.72	115.49	120.20
36	5	1126	G	C6-C5-N7	-6.72	126.36	130.40
36	5	1897	G	N3-C4-N9	6.72	130.03	126.00
36	5	2614	G	N3-C4-N9	6.72	130.03	126.00
36	5	2961	G	C4-N9-C1'	6.72	135.24	126.50
47	m0	182	LEU	CA-CB-CG	-6.72	99.83	115.30
36	1	1167	U	N1-C2-N3	6.72	118.93	114.90
36	1	1930	A	N1-C6-N6	6.72	122.63	118.60
36	1	2937	G	C6-C5-N7	6.72	134.43	130.40
37	3	118	A	N1-C6-N6	-6.72	114.57	118.60
1	6	326	G	C4-N9-C1'	6.72	135.24	126.50
1	6	608	U	C6-N1-C2	-6.72	116.97	121.00
1	6	1145	U	N3-C2-O2	6.72	126.91	122.20
36	5	1500	G	C8-N9-C4	6.72	109.09	106.40
36	5	1548	C	C5-C6-N1	6.72	124.36	121.00
37	7	37	G	N9-C4-C5	-6.72	102.71	105.40
36	1	1307	G	N1-C2-N3	6.72	127.93	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	648	C	OP1-P-OP2	6.72	129.68	119.60
36	1	693	A	C8-N9-C4	-6.72	103.11	105.80
36	1	2190	U	C4-C5-C6	6.72	123.73	119.70
1	6	923	A	N9-C4-C5	6.72	108.49	105.80
1	6	1013	A	N9-C4-C5	6.72	108.49	105.80
36	5	649	A	N9-C4-C5	-6.72	103.11	105.80
36	5	1592	G	C5-N7-C8	6.72	107.66	104.30
36	5	2618	G	O5'-P-OP2	-6.72	99.65	105.70
36	5	2699	G	C5-C6-N1	6.72	114.86	111.50
36	5	3315	G	C6-C5-N7	-6.72	126.37	130.40
1	2	1555	A	C5-C6-N6	6.72	129.07	123.70
36	1	1147	G	O5'-P-OP2	6.72	118.76	110.70
1	6	310	C	O5'-P-OP1	-6.72	99.65	105.70
1	6	1028	C	C5-C6-N1	-6.72	117.64	121.00
1	6	1527	C	C2-N1-C1'	-6.72	111.41	118.80
36	5	1671	C	N3-C4-C5	-6.72	119.21	121.90
37	7	51	A	C8-N9-C4	-6.72	103.11	105.80
1	2	75	U	C2-N1-C1'	6.72	125.76	117.70
1	2	1632	C	N1-C2-O2	-6.72	114.87	118.90
36	1	1097	G	O5'-P-OP2	-6.72	99.66	105.70
36	1	1901	A	C2-N3-C4	6.72	113.96	110.60
36	1	2288	G	N3-C4-N9	6.72	130.03	126.00
36	1	2692	A	N7-C8-N9	6.72	117.16	113.80
36	1	3180	A	N3-C4-N9	-6.72	122.03	127.40
1	6	33	U	N3-C4-O4	6.72	124.10	119.40
1	6	825	U	N3-C2-O2	6.72	126.90	122.20
1	6	1171	A	C8-N9-C4	-6.72	103.11	105.80
36	5	578	A	N1-C2-N3	6.72	132.66	129.30
36	5	2373	A	O5'-P-OP2	6.72	118.76	110.70
36	1	305	U	N3-C4-O4	-6.71	114.70	119.40
36	1	779	G	OP2-P-O3'	6.71	119.97	105.20
36	1	2184	U	N3-C4-O4	6.71	124.10	119.40
36	5	1210	U	C5-C4-O4	6.71	129.93	125.90
36	5	2893	C	N3-C2-O2	6.71	126.60	121.90
36	5	2930	A	OP2-P-O3'	6.71	119.97	105.20
36	1	39	A	C4-C5-C6	-6.71	113.64	117.00
36	1	2344	U	C2-N1-C1'	-6.71	109.64	117.70
36	1	3331	U	O5'-P-OP2	-6.71	99.66	105.70
36	5	428	A	C5-C6-N6	-6.71	118.33	123.70
1	2	1197	C	O5'-P-OP2	-6.71	99.66	105.70
36	1	27	C	N1-C2-N3	6.71	123.90	119.20
36	1	1459	C	N3-C2-O2	-6.71	117.20	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2704	A	N1-C2-N3	6.71	132.66	129.30
1	6	163	G	N1-C2-N3	6.71	127.93	123.90
1	6	1773	C	C6-N1-C2	-6.71	117.62	120.30
36	5	609	G	C5-C6-N1	-6.71	108.14	111.50
36	5	657	A	OP1-P-OP2	-6.71	109.53	119.60
36	5	3215	A	N9-C4-C5	-6.71	103.12	105.80
1	2	1324	G	N1-C2-N2	6.71	122.24	116.20
36	1	677	A	N7-C8-N9	-6.71	110.44	113.80
36	1	3101	G	C5-C6-N1	6.71	114.86	111.50
36	1	1792	C	N3-C2-O2	-6.71	117.20	121.90
36	1	2174	G	C6-C5-N7	-6.71	126.37	130.40
36	1	2393	G	N1-C6-O6	6.71	123.92	119.90
1	6	1476	C	N3-C4-C5	-6.71	119.22	121.90
36	5	1788	C	N1-C2-O2	-6.71	114.87	118.90
36	5	2364	G	C5-C6-O6	-6.71	124.58	128.60
37	7	82	G	C5-C6-O6	-6.71	124.58	128.60
37	7	85	G	C4-C5-N7	6.71	113.48	110.80
36	1	662	U	OP1-P-O3'	-6.71	90.44	105.20
36	1	2119	A	C5-C6-N6	-6.71	118.33	123.70
1	6	917	U	N3-C4-C5	-6.71	110.58	114.60
1	6	1418	G	O5'-P-OP2	6.71	118.75	110.70
36	5	1156	C	C5-C4-N4	-6.71	115.51	120.20
36	5	3032	A	C5-C6-N1	6.71	121.05	117.70
36	1	1124	U	C6-N1-C2	-6.71	116.98	121.00
36	1	2933	A	C5-C6-N6	-6.71	118.34	123.70
1	6	610	G	C4-N9-C1'	6.71	135.22	126.50
36	5	27	C	OP1-P-OP2	6.71	129.66	119.60
36	5	1612	A	C4-C5-C6	6.71	120.35	117.00
36	5	2291	A	C5-N7-C8	-6.71	100.55	103.90
36	1	123	A	N1-C6-N6	-6.70	114.58	118.60
36	1	2368	A	N9-C4-C5	-6.70	103.12	105.80
1	6	35	U	C5-C4-O4	6.70	129.92	125.90
36	5	248	U	C5-C6-N1	6.70	126.05	122.70
36	5	2756	C	C2-N3-C4	-6.70	116.55	119.90
36	1	1109	U	C2-N1-C1'	6.70	125.74	117.70
36	1	1269	U	N1-C2-O2	6.70	127.49	122.80
36	5	697	A	C8-N9-C4	6.70	108.48	105.80
36	5	974	G	C6-N1-C2	-6.70	121.08	125.10
36	5	1319	G	N3-C2-N2	-6.70	115.21	119.90
36	5	1433	A	O4'-C1'-N9	-6.70	102.84	108.20
36	5	2796	G	N3-C2-N2	6.70	124.59	119.90
36	5	3219	G	N7-C8-N9	6.70	116.45	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	322	U	N1-C2-O2	6.70	127.49	122.80
36	1	518	G	N3-C4-C5	6.70	131.95	128.60
36	1	651	G	N3-C4-C5	-6.70	125.25	128.60
36	1	2889	C	C6-N1-C2	6.70	122.98	120.30
38	4	30	C	C2-N3-C4	-6.70	116.55	119.90
1	6	1573	A	C6-N1-C2	-6.70	114.58	118.60
36	5	1209	G	C5-C6-N1	-6.70	108.15	111.50
36	5	2116	G	C5-N7-C8	-6.70	100.95	104.30
1	2	89	G	N3-C4-C5	6.70	131.95	128.60
36	1	796	U	N3-C2-O2	6.70	126.89	122.20
36	1	1065	A	N9-C4-C5	6.70	108.48	105.80
36	1	1269	U	C2-N1-C1'	6.70	125.74	117.70
36	1	2998	U	N1-C2-O2	-6.70	118.11	122.80
36	5	900	G	N3-C4-C5	-6.70	125.25	128.60
36	5	2187	G	N3-C4-N9	-6.70	121.98	126.00
36	5	2290	C	N3-C4-N4	-6.70	113.31	118.00
36	5	3292	A	O5'-P-OP2	-6.70	99.67	105.70
36	1	2847	A	C4-C5-N7	6.70	114.05	110.70
36	5	629	U	C5-C4-O4	6.70	129.92	125.90
36	5	3005	A	N1-C6-N6	6.70	122.62	118.60
36	1	583	G	O5'-P-OP1	-6.70	99.67	105.70
36	1	1137	C	OP2-P-O3'	6.70	119.93	105.20
36	1	1695	U	C5-C6-N1	-6.70	119.35	122.70
36	1	2305	G	C5-C6-N1	6.70	114.85	111.50
37	3	79	A	N3-C4-C5	6.70	131.49	126.80
36	5	3026	G	C5-C6-N1	-6.70	108.15	111.50
36	5	3089	C	N3-C4-N4	6.70	122.69	118.00
36	1	1419	A	N7-C8-N9	6.69	117.15	113.80
36	1	1520	G	C5-C6-N1	-6.69	108.15	111.50
36	1	1522	U	C5-C6-N1	-6.69	119.35	122.70
36	5	973	A	C6-C5-N7	-6.69	127.61	132.30
36	5	2893	C	N1-C2-N3	-6.69	114.51	119.20
36	1	1046	A	O4'-C1'-N9	-6.69	102.85	108.20
36	1	1326	A	O5'-P-OP1	6.69	118.73	110.70
1	6	1150	G	N1-C6-O6	6.69	123.92	119.90
36	5	362	U	N1-C2-N3	6.69	118.92	114.90
36	5	1323	G	O5'-P-OP1	6.69	118.73	110.70
36	5	2120	A	C5-C6-N1	-6.69	114.35	117.70
36	5	2735	U	N3-C2-O2	-6.69	117.52	122.20
36	1	1490	A	C8-N9-C4	-6.69	103.12	105.80
36	1	1906	G	C5-C6-O6	-6.69	124.59	128.60
36	1	2210	G	C6-C5-N7	6.69	134.41	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2641	U	O5'-P-OP1	6.69	118.73	110.70
38	4	51	G	C2-N3-C4	-6.69	108.56	111.90
1	6	1472	C	C2-N3-C4	-6.69	116.56	119.90
36	5	264	G	N3-C4-C5	-6.69	125.25	128.60
36	5	1113	G	N3-C4-N9	-6.69	121.99	126.00
36	5	2278	C	C2-N3-C4	6.69	123.25	119.90
36	5	2285	C	C2-N3-C4	-6.69	116.56	119.90
1	2	12	U	N1-C2-O2	-6.69	118.12	122.80
1	2	424	C	C5-C6-N1	6.69	124.34	121.00
36	1	372	A	O5'-P-OP2	-6.69	99.68	105.70
36	1	796	U	C4-C5-C6	-6.69	115.69	119.70
36	1	1323	G	N1-C6-O6	6.69	123.91	119.90
36	1	3032	A	N1-C6-N6	-6.69	114.59	118.60
1	6	1288	G	C8-N9-C4	6.69	109.08	106.40
1	6	1517	U	O5'-P-OP2	-6.69	99.68	105.70
1	6	1582	U	O5'-P-OP1	-6.69	99.68	105.70
1	6	1619	C	N1-C2-O2	6.69	122.91	118.90
36	1	2743	A	C8-N9-C4	6.69	108.47	105.80
1	6	1456	C	C5-C4-N4	6.69	124.88	120.20
12	c0	97	PRO	N-CA-CB	6.69	111.33	103.30
36	5	1038	C	C6-N1-C2	-6.69	117.62	120.30
36	5	1073	U	N3-C4-O4	-6.69	114.72	119.40
36	5	1096	U	C5-C4-O4	-6.69	121.89	125.90
36	5	2652	U	N3-C4-O4	6.69	124.08	119.40
37	7	29	C	C4-C5-C6	6.69	120.74	117.40
1	2	1789	G	O4'-C1'-N9	-6.69	102.85	108.20
1	6	1735	U	N3-C2-O2	-6.68	117.52	122.20
36	5	2291	A	N3-C4-C5	6.68	131.48	126.80
36	5	3031	G	O5'-P-OP2	-6.68	99.68	105.70
36	1	350	C	N3-C2-O2	-6.68	117.22	121.90
36	1	580	C	N1-C2-O2	-6.68	114.89	118.90
36	1	957	C	O5'-P-OP2	-6.68	99.69	105.70
36	1	998	A	C5-C6-N6	-6.68	118.35	123.70
36	1	1311	G	C5-C6-N1	-6.68	108.16	111.50
36	1	3144	G	N1-C6-O6	6.68	123.91	119.90
36	1	3295	A	C8-N9-C4	-6.68	103.13	105.80
37	3	92	A	C6-N1-C2	6.68	122.61	118.60
38	4	34	U	C5-C6-N1	-6.68	119.36	122.70
1	6	1055	U	C6-N1-C2	-6.68	116.99	121.00
1	6	1654	G	N3-C2-N2	-6.68	115.22	119.90
36	1	1434	G	N7-C8-N9	6.68	116.44	113.10
36	1	2641	U	C5-C6-N1	-6.68	119.36	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	745	C	N3-C4-N4	6.68	122.68	118.00
36	5	952	A	N3-C4-N9	-6.68	122.06	127.40
36	5	2995	A	O5'-P-OP2	-6.68	99.69	105.70
36	1	406	G	C5-C6-O6	6.68	132.61	128.60
36	1	705	A	N1-C6-N6	6.68	122.61	118.60
36	1	1908	A	C4-C5-C6	6.68	120.34	117.00
36	1	2946	A	N7-C8-N9	6.68	117.14	113.80
1	6	6	G	C5-C6-O6	-6.68	124.59	128.60
1	6	98	U	N3-C4-C5	-6.68	110.59	114.60
1	6	1189	A	N7-C8-N9	-6.68	110.46	113.80
1	6	1226	A	C8-N9-C4	-6.68	103.13	105.80
36	5	1838	G	N3-C4-N9	6.68	130.01	126.00
36	5	2363	A	N3-C4-N9	-6.68	122.06	127.40
36	5	2898	G	C4-C5-N7	-6.68	108.13	110.80
38	4	109	A	N9-C4-C5	-6.68	103.13	105.80
36	5	581	U	C6-N1-C2	-6.68	116.99	121.00
36	5	947	G	C8-N9-C1'	-6.68	118.32	127.00
36	5	1144	U	C5-C6-N1	-6.68	119.36	122.70
36	1	1605	A	P-O3'-C3'	6.68	127.71	119.70
1	6	29	U	C5-C4-O4	6.68	129.91	125.90
1	6	577	G	C5-N7-C8	-6.68	100.96	104.30
36	5	269	G	C4-C5-N7	6.68	113.47	110.80
36	5	504	A	N1-C6-N6	6.68	122.61	118.60
36	5	845	G	N1-C2-N2	-6.68	110.19	116.20
36	5	1770	G	C8-N9-C1'	-6.68	118.32	127.00
37	7	65	G	N1-C6-O6	6.68	123.91	119.90
36	5	182	U	C5-C4-O4	6.67	129.91	125.90
36	5	1108	U	C5-C4-O4	6.67	129.91	125.90
36	5	3041	U	N3-C4-O4	-6.67	114.73	119.40
37	7	104	A	N3-C4-C5	6.67	131.47	126.80
36	1	189	G	C5-C6-O6	6.67	132.60	128.60
36	5	706	A	C8-N9-C4	6.67	108.47	105.80
36	5	2369	G	C5-C6-O6	-6.67	124.60	128.60
1	2	1096	C	C6-N1-C2	-6.67	117.63	120.30
36	1	966	U	N3-C2-O2	-6.67	117.53	122.20
36	1	1499	C	OP1-P-OP2	-6.67	109.59	119.60
1	6	40	A	N1-C2-N3	6.67	132.64	129.30
1	6	1778	G	N1-C6-O6	6.67	123.90	119.90
36	5	878	G	N3-C4-N9	6.67	130.00	126.00
36	5	2706	G	C6-N1-C2	-6.67	121.10	125.10
37	7	37	G	C8-N9-C1'	-6.67	118.33	127.00
1	2	934	C	C2-N1-C1'	6.67	126.14	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	798	G	C6-C5-N7	-6.67	126.40	130.40
36	1	2611	U	N1-C2-N3	6.67	118.90	114.90
54	M8	178	ARG	NE-CZ-NH1	-6.67	116.97	120.30
1	6	678	A	P-O3'-C3'	6.67	127.70	119.70
36	5	913	A	N1-C6-N6	-6.67	114.60	118.60
36	5	3057	U	N1-C2-O2	6.67	127.47	122.80
36	5	3195	U	N3-C4-O4	6.67	124.07	119.40
36	1	2207	A	C2-N3-C4	6.67	113.93	110.60
36	1	2386	A	C6-N1-C2	-6.67	114.60	118.60
36	1	2609	A	OP2-P-O3'	-6.67	90.53	105.20
1	6	294	C	N3-C4-C5	-6.67	119.23	121.90
1	6	606	A	N1-C6-N6	6.67	122.60	118.60
1	6	1172	G	C4-C5-N7	-6.67	108.13	110.80
1	6	1732	A	N3-C4-C5	6.67	131.47	126.80
36	5	1199	C	N3-C4-N4	6.67	122.67	118.00
36	5	1326	A	OP2-P-O3'	6.67	119.87	105.20
36	5	1330	A	N1-C2-N3	6.67	132.63	129.30
36	5	2715	A	C5-N7-C8	6.67	107.23	103.90
36	5	3309	G	C6-N1-C2	-6.67	121.10	125.10
1	2	240	U	C5-C6-N1	6.67	126.03	122.70
36	1	689	U	C6-N1-C2	6.67	125.00	121.00
36	1	1624	G	C5-C6-O6	-6.67	124.60	128.60
36	1	2147	A	C5-C6-N1	6.67	121.03	117.70
36	1	2299	A	N1-C6-N6	6.67	122.60	118.60
36	1	2314	U	N3-C2-O2	6.67	126.87	122.20
36	1	2395	G	C8-N9-C4	-6.67	103.73	106.40
36	1	2821	C	C2-N3-C4	6.67	123.23	119.90
36	1	2883	U	C5-C6-N1	6.67	126.03	122.70
37	3	61	G	O5'-P-OP1	-6.67	99.70	105.70
1	6	1324	G	C8-N9-C4	-6.67	103.73	106.40
36	5	210	U	N3-C4-O4	-6.67	114.73	119.40
36	5	3327	G	N1-C6-O6	6.67	123.90	119.90
1	2	98	U	C5-C6-N1	6.67	126.03	122.70
36	1	1152	G	O5'-P-OP1	-6.67	99.70	105.70
36	1	1257	C	C6-N1-C2	-6.67	117.63	120.30
1	6	970	A	O5'-P-OP1	-6.67	99.70	105.70
1	6	1780	G	C8-N9-C1'	-6.67	118.34	127.00
1	2	1659	A	N1-C6-N6	-6.66	114.60	118.60
36	1	23	A	C6-N1-C2	-6.66	114.60	118.60
36	1	587	U	C5-C4-O4	-6.66	121.90	125.90
36	1	641	C	C5-C6-N1	6.66	124.33	121.00
36	1	1141	C	C2-N1-C1'	6.66	126.13	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2323	G	N9-C4-C5	-6.66	102.73	105.40
36	1	3293	U	O4'-C1'-N1	6.66	113.53	108.20
1	6	1550	A	C5-N7-C8	-6.66	100.57	103.90
36	5	283	G	C5-C6-N1	6.66	114.83	111.50
36	5	1492	G	O5'-P-OP1	-6.66	99.70	105.70
36	5	2165	G	N3-C4-N9	6.66	130.00	126.00
36	5	2914	G	C4-C5-N7	6.66	113.47	110.80
36	5	3270	U	N1-C2-O2	6.66	127.47	122.80
1	2	311	U	N1-C2-N3	6.66	118.90	114.90
36	1	872	U	N3-C4-C5	-6.66	110.60	114.60
37	7	118	A	O5'-P-OP2	-6.66	99.70	105.70
1	2	375	U	C5-C6-N1	-6.66	119.37	122.70
36	1	353	G	C5-C6-O6	6.66	132.60	128.60
36	1	499	G	N9-C4-C5	6.66	108.06	105.40
36	1	1482	A	N9-C4-C5	-6.66	103.14	105.80
36	1	3216	G	N3-C4-N9	6.66	130.00	126.00
1	6	1732	A	N1-C2-N3	6.66	132.63	129.30
36	5	809	G	C5-C6-N1	-6.66	108.17	111.50
36	5	2648	G	OP1-P-O3'	6.66	119.85	105.20
36	5	2732	G	N9-C4-C5	6.66	108.06	105.40
36	5	3213	A	N7-C8-N9	-6.66	110.47	113.80
36	1	349	A	C5-C6-N6	6.66	129.03	123.70
36	1	1311	G	N1-C6-O6	6.66	123.89	119.90
36	5	619	A	C8-N9-C4	6.66	108.46	105.80
36	5	1545	A	C8-N9-C4	-6.66	103.14	105.80
36	5	3208	G	C4-N9-C1'	6.66	135.16	126.50
36	5	790	U	C5-C6-N1	-6.66	119.37	122.70
38	8	111	A	N1-C6-N6	6.66	122.59	118.60
1	2	240	U	OP2-P-O3'	6.66	119.84	105.20
36	1	147	U	N1-C2-N3	6.66	118.89	114.90
36	1	1726	C	N3-C4-C5	-6.66	119.24	121.90
36	1	2153	U	O5'-P-OP2	-6.66	99.71	105.70
36	1	2904	U	C6-N1-C2	6.66	124.99	121.00
1	6	1095	U	O5'-P-OP1	-6.66	99.71	105.70
1	6	1538	U	O5'-P-OP2	-6.66	99.71	105.70
36	5	749	C	O5'-P-OP1	-6.66	99.71	105.70
36	5	1112	A	C4-C5-C6	6.66	120.33	117.00
36	5	1289	G	N7-C8-N9	-6.66	109.77	113.10
36	5	1900	A	N7-C8-N9	6.66	117.13	113.80
36	5	1907	C	C4-C5-C6	6.66	120.73	117.40
36	5	2362	C	N3-C2-O2	-6.66	117.24	121.90
37	7	75	G	N3-C4-C5	6.66	131.93	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	112	U	C4-C5-C6	6.65	123.69	119.70
36	1	1197	A	C4-C5-N7	6.65	114.03	110.70
36	1	2374	C	O5'-P-OP1	6.65	118.69	110.70
36	5	282	G	C5-C6-N1	-6.65	108.17	111.50
36	5	1157	G	N3-C2-N2	-6.65	115.24	119.90
36	5	2130	G	N1-C6-O6	6.65	123.89	119.90
36	1	699	A	O5'-P-OP1	-6.65	99.71	105.70
36	1	716	A	C8-N9-C4	6.65	108.46	105.80
36	1	871	U	C5-C6-N1	-6.65	119.37	122.70
36	1	1150	A	OP1-P-OP2	-6.65	109.62	119.60
36	1	2305	G	C6-C5-N7	6.65	134.39	130.40
36	1	2818	U	C5'-C4'-O4'	-6.65	101.12	109.10
38	4	13	A	O4'-C1'-N9	6.65	113.52	108.20
36	5	1120	A	C8-N9-C4	-6.65	103.14	105.80
36	5	1861	G	N1-C2-N3	6.65	127.89	123.90
36	5	2914	G	C6-C5-N7	-6.65	126.41	130.40
36	5	3099	C	C5-C6-N1	-6.65	117.67	121.00
36	5	3303	G	N3-C4-N9	-6.65	122.01	126.00
1	2	1550	A	N1-C6-N6	6.65	122.59	118.60
36	1	21	G	N1-C6-O6	-6.65	115.91	119.90
36	1	910	G	O5'-P-OP2	-6.65	99.71	105.70
36	1	1393	A	C5-C6-N6	6.65	129.02	123.70
1	6	1763	A	C6-N1-C2	-6.65	114.61	118.60
36	5	907	G	N9-C4-C5	-6.65	102.74	105.40
36	5	1120	A	N9-C4-C5	6.65	108.46	105.80
36	5	1148	G	C5-C6-N1	-6.65	108.17	111.50
36	5	2344	U	O5'-P-OP2	-6.65	99.71	105.70
36	5	2596	U	C2-N1-C1'	6.65	125.68	117.70
36	1	1114	U	N3-C2-O2	-6.65	117.55	122.20
36	1	2618	G	C8-N9-C4	-6.65	103.74	106.40
36	1	2794	G	N1-C6-O6	-6.65	115.91	119.90
1	6	65	A	C8-N9-C4	6.65	108.46	105.80
36	5	1195	A	C5-N7-C8	-6.65	100.58	103.90
36	1	438	A	N1-C6-N6	6.65	122.59	118.60
36	1	2620	G	N1-C2-N3	6.65	127.89	123.90
37	3	91	G	N1-C2-N3	6.65	127.89	123.90
1	6	1278	G	N9-C4-C5	6.65	108.06	105.40
36	5	773	G	C8-N9-C4	-6.65	103.74	106.40
36	5	1292	C	O4'-C1'-N1	-6.65	102.88	108.20
36	5	2334	U	N1-C2-O2	6.65	127.45	122.80
36	5	2767	U	N1-C2-N3	6.65	118.89	114.90
36	5	2916	U	N3-C4-O4	-6.65	114.75	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	765	G	O4'-C1'-N9	-6.65	102.88	108.20
1	2	1029	U	O4'-C1'-N1	6.65	113.52	108.20
36	1	286	U	C6-N1-C2	-6.65	117.01	121.00
36	1	3150	A	C5-N7-C8	-6.65	100.58	103.90
1	6	794	U	C5-C6-N1	6.65	126.02	122.70
1	6	1147	A	N1-C2-N3	6.65	132.62	129.30
7	s5	92	ARG	NE-CZ-NH2	-6.65	116.98	120.30
36	5	2550	U	C5-C4-O4	6.65	129.89	125.90
36	1	1405	U	N1-C2-N3	6.64	118.89	114.90
36	1	1552	G	C4-C5-C6	6.64	122.79	118.80
37	3	56	A	C8-N9-C4	6.64	108.46	105.80
38	4	97	A	N1-C2-N3	6.64	132.62	129.30
1	6	752	A	C8-N9-C4	6.64	108.46	105.80
36	5	732	C	N3-C2-O2	-6.64	117.25	121.90
36	5	1322	U	N1-C2-O2	-6.64	118.15	122.80
36	5	1403	C	C5-C4-N4	-6.64	115.55	120.20
36	5	2155	G	C6-C5-N7	-6.64	126.41	130.40
36	5	2420	C	N3-C4-N4	6.64	122.65	118.00
36	5	3115	C	O5'-P-OP1	-6.64	99.72	105.70
36	1	277	G	N1-C2-N3	-6.64	119.92	123.90
36	1	901	G	C6-C5-N7	6.64	134.38	130.40
36	1	2703	A	O4'-C1'-N9	-6.64	102.89	108.20
36	1	2877	G	O4'-C1'-N9	6.64	113.51	108.20
1	6	1640	C	N3-C4-C5	6.64	124.56	121.90
36	5	189	G	C4-C5-N7	-6.64	108.14	110.80
36	5	328	U	N1-C2-O2	6.64	127.45	122.80
36	5	860	G	C6-C5-N7	-6.64	126.42	130.40
36	5	1465	A	C6-C5-N7	-6.64	127.65	132.30
36	5	2694	A	C8-N9-C4	6.64	108.46	105.80
36	1	372	A	C5-N7-C8	-6.64	100.58	103.90
36	1	864	G	N3-C4-N9	6.64	129.98	126.00
36	1	3367	C	N3-C4-C5	6.64	124.56	121.90
36	5	827	A	N7-C8-N9	6.64	117.12	113.80
36	5	951	A	C5-C6-N6	6.64	129.01	123.70
36	5	1592	G	C5-C6-O6	6.64	132.59	128.60
36	1	2865	U	C5-C6-N1	-6.64	119.38	122.70
1	6	35	U	N1-C2-N3	6.64	118.88	114.90
1	6	1473	U	N3-C4-O4	-6.64	114.75	119.40
36	1	676	G	C8-N9-C1'	-6.64	118.37	127.00
36	1	2631	U	C2-N3-C4	-6.64	123.02	127.00
36	1	3322	A	C8-N9-C4	6.64	108.45	105.80
38	8	13	A	N9-C4-C5	-6.64	103.14	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	874	U	O5'-P-OP2	6.64	118.66	110.70
36	1	1414	G	N3-C4-C5	6.64	131.92	128.60
36	1	1449	A	N9-C4-C5	6.64	108.45	105.80
36	1	1908	A	N1-C2-N3	6.64	132.62	129.30
36	1	2746	A	C4-C5-C6	-6.64	113.68	117.00
36	1	2896	A	N1-C6-N6	6.64	122.58	118.60
36	1	3139	A	O5'-P-OP1	-6.64	99.73	105.70
36	5	2235	C	C6-N1-C2	-6.64	117.64	120.30
36	1	2093	A	N3-C4-C5	-6.63	122.16	126.80
36	1	2196	C	N3-C4-N4	-6.63	113.36	118.00
1	6	1631	A	N1-C2-N3	-6.63	125.98	129.30
36	5	1137	C	C4-C5-C6	6.63	120.72	117.40
36	5	1166	G	N1-C6-O6	6.63	123.88	119.90
36	1	834	U	C2-N1-C1'	-6.63	109.74	117.70
36	5	848	A	N1-C6-N6	6.63	122.58	118.60
36	1	198	A	N7-C8-N9	6.63	117.11	113.80
36	1	1713	G	N3-C4-C5	6.63	131.92	128.60
1	6	777	C	C5-C4-N4	-6.63	115.56	120.20
1	6	1392	U	C6-N1-C2	6.63	124.98	121.00
36	5	358	G	N9-C1'-C2'	-6.63	104.70	112.00
36	5	633	C	C6-N1-C2	6.63	122.95	120.30
36	5	1185	C	C2-N3-C4	-6.63	116.58	119.90
36	1	880	G	C8-N9-C1'	6.63	135.62	127.00
36	1	3266	G	C5-C6-O6	6.63	132.58	128.60
1	6	1642	G	C5-C6-N1	6.63	114.81	111.50
36	5	917	A	N3-C4-N9	-6.63	122.10	127.40
36	5	1144	U	C6-N1-C2	6.63	124.98	121.00
36	5	2824	G	N1-C2-N2	-6.63	110.23	116.20
36	1	337	G	C5-C6-O6	-6.63	124.62	128.60
36	1	945	C	C4-C5-C6	6.63	120.71	117.40
36	1	1556	C	N1-C2-O2	6.63	122.88	118.90
36	1	3142	A	N3-C4-C5	6.63	131.44	126.80
36	5	110	G	N3-C4-C5	-6.63	125.29	128.60
36	5	2401	A	N7-C8-N9	6.63	117.11	113.80
37	7	93	C	O5'-P-OP1	6.63	118.65	110.70
1	2	1750	A	C2-N3-C4	-6.63	107.29	110.60
36	1	2190	U	N3-C4-C5	-6.63	110.62	114.60
37	3	84	A	O5'-P-OP2	6.63	118.65	110.70
1	6	397	A	N1-C6-N6	6.63	122.58	118.60
36	5	664	U	C6-N1-C2	-6.63	117.02	121.00
36	5	730	C	C4-C5-C6	6.63	120.71	117.40
36	5	1709	C	C5-C6-N1	-6.63	117.69	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2237	C	N3-C4-C5	-6.63	119.25	121.90
36	5	2313	A	N1-C2-N3	6.63	132.61	129.30
36	5	3012	A	C5-C6-N1	6.63	121.01	117.70
36	5	3099	C	OP1-P-OP2	6.63	129.54	119.60
36	1	2807	U	N3-C4-O4	6.62	124.04	119.40
36	1	3256	G	C4-N9-C1'	6.62	135.11	126.50
1	6	1142	A	N9-C4-C5	6.62	108.45	105.80
36	5	1394	A	C5-C6-N6	-6.62	118.40	123.70
38	8	115	C	C6-N1-C2	6.62	122.95	120.30
36	1	1329	U	OP1-P-OP2	6.62	129.54	119.60
36	1	1366	A	C6-N1-C2	-6.62	114.63	118.60
36	1	3226	A	N9-C4-C5	6.62	108.45	105.80
36	5	831	G	N3-C4-C5	6.62	131.91	128.60
36	5	963	G	N1-C6-O6	-6.62	115.92	119.90
36	5	3110	C	O5'-P-OP1	-6.62	99.74	105.70
37	7	42	A	N3-C4-C5	-6.62	122.16	126.80
36	1	188	U	N3-C4-O4	6.62	124.03	119.40
36	1	496	C	C4-C5-C6	-6.62	114.09	117.40
36	1	586	C	N3-C4-N4	6.62	122.64	118.00
36	1	1139	G	C2-N3-C4	-6.62	108.59	111.90
36	1	1503	A	C2-N3-C4	-6.62	107.29	110.60
36	1	3009	G	C4-C5-N7	6.62	113.45	110.80
1	6	1454	G	N1-C6-O6	6.62	123.87	119.90
1	6	1637	C	C6-N1-C2	6.62	122.95	120.30
36	5	1096	U	C6-N1-C2	6.62	124.97	121.00
36	5	2573	G	N1-C6-O6	6.62	123.87	119.90
36	5	3098	G	N1-C6-O6	-6.62	115.93	119.90
36	5	3111	U	N3-C2-O2	-6.62	117.56	122.20
36	1	2777	G	N3-C4-N9	-6.62	122.03	126.00
1	6	420	A	C6-C5-N7	-6.62	127.67	132.30
1	6	1602	C	OP1-P-OP2	-6.62	109.67	119.60
36	5	2702	A	O5'-P-OP1	-6.62	99.74	105.70
36	5	2829	U	C5-C4-O4	-6.62	121.93	125.90
36	5	2995	A	C2-N3-C4	-6.62	107.29	110.60
36	5	3218	A	C4-N9-C1'	6.62	138.22	126.30
1	2	1103	U	N3-C4-O4	-6.62	114.77	119.40
1	2	1589	C	N3-C4-C5	6.62	124.55	121.90
36	1	1168	U	N3-C2-O2	-6.62	117.57	122.20
1	6	934	C	C5-C4-N4	6.62	124.83	120.20
36	5	937	G	O5'-P-OP1	-6.62	99.74	105.70
36	5	1055	A	C5-N7-C8	6.62	107.21	103.90
36	5	2386	A	C8-N9-C4	-6.62	103.15	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1374	C	C6-N1-C2	6.62	122.95	120.30
36	1	925	A	C4-C5-C6	6.62	120.31	117.00
36	1	2403	G	C8-N9-C4	-6.62	103.75	106.40
37	3	88	G	N1-C2-N2	-6.62	110.25	116.20
1	6	382	C	N3-C2-O2	6.62	126.53	121.90
1	6	584	C	C4-C5-C6	6.62	120.71	117.40
36	5	1872	C	N1-C2-N3	6.62	123.83	119.20
36	1	592	A	C5-N7-C8	-6.62	100.59	103.90
36	1	609	G	O5'-P-OP2	-6.62	99.75	105.70
36	1	928	C	N3-C2-O2	6.62	126.53	121.90
36	1	2384	A	C4-C5-C6	6.62	120.31	117.00
36	1	2720	G	C4-C5-N7	6.62	113.45	110.80
36	1	3327	G	C5-C6-N1	-6.62	108.19	111.50
1	6	1135	U	N3-C2-O2	-6.62	117.57	122.20
1	6	1235	C	C5-C6-N1	6.62	124.31	121.00
36	5	568	G	N9-C4-C5	-6.62	102.75	105.40
36	5	890	C	C4-C5-C6	6.62	120.71	117.40
36	5	1190	A	C8-N9-C1'	-6.62	115.79	127.70
36	5	3304	U	N3-C4-C5	-6.62	110.63	114.60
1	2	470	A	N7-C8-N9	-6.61	110.49	113.80
1	2	1386	G	C8-N9-C4	6.61	109.05	106.40
36	1	2633	U	N1-C2-O2	-6.61	118.17	122.80
36	1	3070	A	N1-C2-N3	6.61	132.61	129.30
36	5	2713	U	N3-C4-O4	6.61	124.03	119.40
36	5	2829	U	OP2-P-O3'	6.61	119.75	105.20
37	7	101	G	C6-C5-N7	-6.61	126.43	130.40
36	1	2669	G	C5-C6-O6	6.61	132.57	128.60
36	1	2955	U	N1-C2-O2	6.61	127.43	122.80
1	6	310	C	C5-C6-N1	6.61	124.31	121.00
1	6	1599	C	N1-C2-O2	6.61	122.87	118.90
36	5	3346	U	N3-C2-O2	-6.61	117.57	122.20
1	2	1004	U	C5-C4-O4	6.61	129.87	125.90
36	1	264	G	C5-N7-C8	6.61	107.61	104.30
36	1	3051	U	C5-C6-N1	6.61	126.00	122.70
37	3	97	A	C5-N7-C8	6.61	107.20	103.90
1	6	301	A	C2-N3-C4	6.61	113.91	110.60
1	6	1169	G	N1-C2-N2	-6.61	110.25	116.20
36	5	2312	A	C6-C5-N7	6.61	136.93	132.30
36	1	2598	G	C2-N3-C4	6.61	115.20	111.90
70	O4	51	LEU	CA-CB-CG	6.61	130.50	115.30
36	5	404	G	C2-N3-C4	-6.61	108.60	111.90
36	5	945	C	C4-C5-C6	6.61	120.70	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2699	G	N1-C2-N2	6.61	122.15	116.20
36	5	2848	G	N3-C4-C5	6.61	131.91	128.60
38	8	24	G	N1-C6-O6	-6.61	115.94	119.90
1	2	1274	C	C2-N1-C1'	6.61	126.07	118.80
1	6	1041	G	N3-C2-N2	-6.61	115.28	119.90
1	6	1452	U	N3-C4-O4	6.61	124.03	119.40
1	6	1766	A	N1-C6-N6	6.61	122.56	118.60
36	5	214	G	C4-N9-C1'	-6.61	117.91	126.50
36	5	424	G	C5-N7-C8	-6.61	101.00	104.30
36	5	821	U	C5-C6-N1	6.61	126.00	122.70
36	5	1513	G	C5-C6-O6	-6.61	124.64	128.60
36	5	2896	A	C8-N9-C4	6.61	108.44	105.80
1	2	1747	G	N1-C6-O6	-6.61	115.94	119.90
36	1	978	G	N1-C2-N2	6.61	122.14	116.20
36	1	1508	C	N3-C2-O2	-6.61	117.28	121.90
36	1	3130	A	C2-N3-C4	-6.61	107.30	110.60
1	6	1001	A	OP1-P-O3'	6.61	119.73	105.20
36	5	1373	A	N7-C8-N9	6.61	117.10	113.80
36	5	2192	C	N3-C4-N4	6.61	122.62	118.00
36	5	2404	A	N9-C4-C5	6.61	108.44	105.80
36	5	2630	C	N3-C4-C5	6.61	124.54	121.90
36	5	3044	G	C2-N3-C4	-6.61	108.60	111.90
1	2	453	U	C5-C6-N1	6.60	126.00	122.70
36	1	414	U	N3-C4-O4	-6.60	114.78	119.40
36	1	2999	U	N3-C4-O4	-6.60	114.78	119.40
36	5	127	G	N3-C2-N2	-6.60	115.28	119.90
36	1	55	G	N3-C4-N9	6.60	129.96	126.00
36	1	982	C	N1-C2-O2	6.60	122.86	118.90
40	L3	233	TRP	CA-CB-CG	-6.60	101.16	113.70
1	6	149	C	C5-C6-N1	-6.60	117.70	121.00
1	6	440	U	N1-C2-O2	-6.60	118.18	122.80
37	7	37	G	C5-C6-O6	-6.60	124.64	128.60
36	1	1020	G	C5-C6-O6	-6.60	124.64	128.60
36	1	3087	A	C4-C5-C6	6.60	120.30	117.00
36	5	363	G	O5'-P-OP1	-6.60	99.76	105.70
36	5	2629	U	N3-C4-C5	-6.60	110.64	114.60
36	5	3036	G	C2-N3-C4	-6.60	108.60	111.90
1	2	550	A	C8-N9-C4	-6.60	103.16	105.80
36	1	345	G	N7-C8-N9	6.60	116.40	113.10
36	1	608	A	C4-N9-C1'	6.60	138.18	126.30
36	1	1761	C	C6-N1-C2	6.60	122.94	120.30
38	4	34	U	N1-C2-N3	6.60	118.86	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	104	A	N1-C6-N6	6.60	122.56	118.60
36	5	314	U	C5-C4-O4	6.60	129.86	125.90
36	5	416	A	N3-C4-C5	6.60	131.42	126.80
36	5	1490	A	N1-C6-N6	-6.60	114.64	118.60
36	5	1931	U	C6-N1-C1'	6.60	130.44	121.20
36	5	2656	A	C6-N1-C2	-6.60	114.64	118.60
36	5	3102	G	C2-N3-C4	-6.60	108.60	111.90
1	2	360	A	N1-C6-N6	6.60	122.56	118.60
36	1	70	A	N1-C2-N3	6.60	132.60	129.30
36	1	338	A	C6-N1-C2	-6.60	114.64	118.60
36	1	2284	C	C6-N1-C1'	-6.60	112.88	120.80
36	1	2375	G	N1-C2-N3	6.60	127.86	123.90
36	1	2644	C	N1-C2-O2	-6.60	114.94	118.90
36	5	1834	U	N1-C2-O2	-6.60	118.18	122.80
36	5	2099	A	C8-N9-C4	-6.60	103.16	105.80
36	5	2414	G	C2-N3-C4	-6.60	108.60	111.90
36	5	2719	U	N1-C2-O2	-6.60	118.18	122.80
36	5	3177	G	N1-C2-N3	6.60	127.86	123.90
36	1	384	A	C8-N9-C4	-6.60	103.16	105.80
36	1	973	A	C2-N3-C4	-6.60	107.30	110.60
36	1	2862	U	C6-N1-C2	6.60	124.96	121.00
36	5	805	G	C5-C6-N1	6.60	114.80	111.50
36	5	1206	G	N3-C4-N9	6.60	129.96	126.00
36	5	1440	G	OP2-P-O3'	6.60	119.71	105.20
36	1	504	A	C6-N1-C2	-6.59	114.64	118.60
36	1	1196	C	C6-N1-C1'	-6.59	112.89	120.80
36	1	2696	A	C2-N3-C4	6.59	113.90	110.60
36	1	2894	C	C6-N1-C2	6.59	122.94	120.30
36	1	2897	A	O4'-C1'-N9	6.59	113.47	108.20
1	6	1728	A	N1-C6-N6	6.59	122.56	118.60
36	5	346	C	N3-C2-O2	-6.59	117.28	121.90
36	5	388	G	N9-C4-C5	6.59	108.04	105.40
36	5	1093	A	C8-N9-C4	-6.59	103.16	105.80
36	5	1113	G	N1-C6-O6	6.59	123.86	119.90
36	5	1293	U	C5-C6-N1	-6.59	119.40	122.70
36	5	1393	A	N1-C2-N3	6.59	132.60	129.30
36	5	1401	A	C6-N1-C2	-6.59	114.64	118.60
36	5	1406	A	C4-C5-C6	6.59	120.30	117.00
36	5	1699	A	C8-N9-C4	6.59	108.44	105.80
36	5	3172	A	N9-C4-C5	-6.59	103.16	105.80
36	5	3361	G	C6-C5-N7	-6.59	126.44	130.40
36	1	727	G	O5'-P-OP1	-6.59	99.77	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3375	A	N1-C6-N6	-6.59	114.64	118.60
36	5	1005	G	N3-C4-N9	-6.59	122.04	126.00
36	5	2614	G	N1-C2-N2	-6.59	110.27	116.20
36	1	815	G	N9-C4-C5	6.59	108.04	105.40
1	6	1645	G	C5-C6-N1	6.59	114.80	111.50
36	5	1203	A	C2-N3-C4	-6.59	107.31	110.60
1	2	1751	C	C5-C6-N1	-6.59	117.71	121.00
36	1	92	G	C2-N3-C4	-6.59	108.61	111.90
36	1	1020	G	N9-C4-C5	-6.59	102.76	105.40
38	4	50	C	C6-N1-C2	6.59	122.94	120.30
36	5	867	G	C5-C6-O6	-6.59	124.65	128.60
36	5	902	G	N3-C4-C5	6.59	131.90	128.60
36	5	1436	U	N1-C2-O2	6.59	127.41	122.80
36	5	2249	G	C8-N9-C4	-6.59	103.76	106.40
36	5	2746	A	OP2-P-O3'	6.59	119.70	105.20
36	5	2911	A	N9-C4-C5	6.59	108.44	105.80
36	1	961	C	C5-C6-N1	6.59	124.29	121.00
36	1	1544	G	N1-C6-O6	6.59	123.85	119.90
36	1	2869	U	C5-C6-N1	6.59	125.99	122.70
1	6	876	G	N3-C4-C5	6.59	131.89	128.60
36	5	233	C	C2-N1-C1'	-6.59	111.55	118.80
36	5	2383	C	N1-C2-O2	6.59	122.85	118.90
36	5	3026	G	C5-C6-O6	-6.59	124.65	128.60
1	2	1345	A	C2-N3-C4	-6.59	107.31	110.60
36	1	1885	U	C4-C5-C6	6.59	123.65	119.70
38	4	16	G	C5-C6-O6	-6.59	124.65	128.60
55	M9	129	GLY	N-CA-C	-6.59	96.63	113.10
1	6	575	C	O5'-P-OP1	-6.59	99.77	105.70
1	6	858	G	N7-C8-N9	6.59	116.39	113.10
1	6	1149	G	N1-C2-N3	6.59	127.85	123.90
36	5	937	G	N1-C6-O6	-6.59	115.95	119.90
36	5	1849	C	N1-C2-O2	-6.59	114.95	118.90
36	1	211	A	O5'-P-OP2	6.58	118.60	110.70
36	1	1524	A	C4-C5-N7	-6.58	107.41	110.70
36	1	1665	C	C2-N1-C1'	-6.58	111.56	118.80
36	1	2357	A	C8-N9-C4	-6.58	103.17	105.80
36	1	2983	C	C2-N3-C4	-6.58	116.61	119.90
36	1	3362	A	O4'-C1'-N9	6.58	113.47	108.20
38	8	99	C	C6-N1-C2	6.58	122.93	120.30
1	2	694	U	C2-N1-C1'	6.58	125.60	117.70
1	2	1177	C	N3-C2-O2	6.58	126.51	121.90
36	1	662	U	C6-N1-C2	6.58	124.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	103	A	C5-N7-C8	-6.58	100.61	103.90
1	6	1196	A	C8-N9-C4	-6.58	103.17	105.80
1	6	1614	A	C5-C6-N1	-6.58	114.41	117.70
36	5	884	A	OP1-P-O3'	6.58	119.68	105.20
36	5	968	G	N3-C4-N9	6.58	129.95	126.00
36	5	1883	A	C4-C5-C6	6.58	120.29	117.00
38	8	66	A	C4-C5-C6	6.58	120.29	117.00
1	2	618	U	O5'-P-OP1	-6.58	99.78	105.70
36	1	65	A	OP1-P-O3'	6.58	119.68	105.20
36	1	357	A	N9-C4-C5	6.58	108.43	105.80
36	1	1169	A	C8-N9-C4	-6.58	103.17	105.80
36	1	1656	A	C8-N9-C4	6.58	108.43	105.80
36	1	1869	C	N3-C4-C5	-6.58	119.27	121.90
36	1	2238	G	C6-C5-N7	6.58	134.35	130.40
36	1	2651	G	N9-C4-C5	-6.58	102.77	105.40
1	6	60	U	N1-C2-O2	6.58	127.41	122.80
36	5	924	G	C5-C6-N1	-6.58	108.21	111.50
36	5	2122	G	C5-N7-C8	-6.58	101.01	104.30
44	17	83	LEU	CA-CB-CG	6.58	130.44	115.30
36	1	3280	U	O4'-C1'-N1	6.58	113.46	108.20
36	1	3375	A	C5'-C4'-O4'	-6.58	101.20	109.10
38	4	46	G	C8-N9-C1'	-6.58	118.45	127.00
36	5	101	G	O5'-P-OP1	6.58	118.60	110.70
36	5	1603	A	C5-N7-C8	6.58	107.19	103.90
36	5	1847	A	C4-C5-C6	-6.58	113.71	117.00
36	5	2894	C	C2-N3-C4	-6.58	116.61	119.90
36	5	2950	G	N9-C4-C5	-6.58	102.77	105.40
1	2	1271	G	N3-C4-C5	6.58	131.89	128.60
1	2	1758	U	N1-C2-O2	6.58	127.41	122.80
36	1	324	A	OP2-P-O3'	6.58	119.67	105.20
36	1	1429	G	N9-C4-C5	-6.58	102.77	105.40
36	1	1488	G	C6-C5-N7	-6.58	126.45	130.40
36	1	2257	C	N3-C2-O2	-6.58	117.30	121.90
36	1	2395	G	C5-N7-C8	-6.58	101.01	104.30
36	1	3322	A	N1-C6-N6	6.58	122.55	118.60
1	6	423	G	C8-N9-C1'	6.58	135.55	127.00
1	6	1141	G	C5-C6-O6	-6.58	124.65	128.60
36	5	210	U	C6-N1-C2	6.58	124.95	121.00
36	5	792	G	N1-C6-O6	-6.58	115.95	119.90
36	1	909	G	N7-C8-N9	6.58	116.39	113.10
36	1	2597	U	N1-C2-O2	-6.58	118.20	122.80
36	5	643	U	C2-N1-C1'	6.58	125.59	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3188	G	C6-N1-C2	-6.58	121.15	125.10
36	1	1505	C	C2-N1-C1'	-6.58	111.57	118.80
37	3	32	U	N3-C4-O4	6.58	124.00	119.40
38	4	30	C	C5-C6-N1	-6.58	117.71	121.00
36	5	1530	U	N1-C2-N3	-6.58	110.95	114.90
36	5	2393	G	C8-N9-C1'	-6.58	118.45	127.00
36	5	2899	C	C2-N3-C4	-6.58	116.61	119.90
36	1	102	C	N3-C2-O2	-6.57	117.30	121.90
36	1	196	G	N7-C8-N9	-6.57	109.81	113.10
36	1	1515	A	N1-C6-N6	6.57	122.54	118.60
36	1	1755	C	C6-N1-C2	-6.57	117.67	120.30
36	1	2614	G	C6-C5-N7	-6.57	126.46	130.40
36	1	2981	U	C2-N1-C1'	6.57	125.59	117.70
36	1	3277	U	C5-C4-O4	6.57	129.84	125.90
41	L4	259	ASP	CB-CG-OD1	-6.57	112.38	118.30
36	5	1915	A	C8-N9-C4	-6.57	103.17	105.80
36	5	2392	C	C2-N3-C4	-6.57	116.61	119.90
38	8	139	U	C2-N3-C4	-6.57	123.06	127.00
36	1	240	U	C5-C6-N1	6.57	125.99	122.70
36	1	632	G	N3-C4-N9	6.57	129.94	126.00
36	1	2241	U	C6-N1-C2	-6.57	117.06	121.00
36	5	1321	G	C5-C6-O6	-6.57	124.66	128.60
36	1	358	G	C2-N3-C4	-6.57	108.61	111.90
36	1	2176	U	N3-C4-O4	6.57	124.00	119.40
36	1	2867	C	C4-C5-C6	-6.57	114.11	117.40
36	1	2956	A	N7-C8-N9	6.57	117.08	113.80
1	6	555	A	N1-C6-N6	-6.57	114.66	118.60
1	6	770	A	O5'-P-OP2	-6.57	99.79	105.70
1	6	972	G	C8-N9-C1'	-6.57	118.46	127.00
36	5	514	G	C6-N1-C2	-6.57	121.16	125.10
36	5	866	A	C5-C6-N6	-6.57	118.44	123.70
36	5	2615	G	C8-N9-C4	6.57	109.03	106.40
36	1	187	A	C8-N9-C4	-6.57	103.17	105.80
36	1	1130	A	N1-C6-N6	-6.57	114.66	118.60
36	1	1305	U	C5-C4-O4	6.57	129.84	125.90
36	1	3182	G	N1-C2-N3	6.57	127.84	123.90
36	1	3270	U	C6-N1-C2	6.57	124.94	121.00
36	5	397	A	C5-N7-C8	6.57	107.19	103.90
36	5	1198	C	OP1-P-OP2	-6.57	109.75	119.60
36	5	2395	G	O5'-P-OP1	6.57	118.58	110.70
36	1	760	G	N3-C4-N9	-6.57	122.06	126.00
36	1	1431	G	N3-C4-N9	6.57	129.94	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1607	U	C5-C6-N1	-6.57	119.42	122.70
36	1	3378	C	O5'-P-OP1	-6.57	99.79	105.70
1	6	435	C	OP1-P-OP2	6.57	129.45	119.60
36	5	1199	C	N3-C4-C5	-6.57	119.27	121.90
36	5	1450	G	N3-C4-C5	-6.57	125.32	128.60
36	5	2417	U	N1-C2-O2	-6.57	118.20	122.80
36	5	2522	G	C5-C6-O6	-6.57	124.66	128.60
36	5	3189	G	OP1-P-OP2	-6.57	109.75	119.60
1	2	628	G	C5-C6-N1	-6.57	108.22	111.50
36	1	1156	C	C2-N3-C4	-6.57	116.62	119.90
36	1	1411	C	C6-N1-C2	-6.57	117.67	120.30
36	1	2516	U	C5-C4-O4	6.57	129.84	125.90
36	1	2818	U	C5-C4-O4	-6.57	121.96	125.90
38	4	19	C	C5-C6-N1	-6.57	117.72	121.00
44	L7	100	ARG	NE-CZ-NH2	-6.57	117.02	120.30
1	6	452	A	C8-N9-C4	6.57	108.43	105.80
1	6	616	G	N7-C8-N9	6.57	116.38	113.10
36	5	1476	G	C4-C5-N7	6.57	113.43	110.80
36	1	1353	U	O4'-C1'-N1	6.56	113.45	108.20
36	1	1905	G	N1-C2-N2	6.56	122.11	116.20
36	1	2269	U	N3-C2-O2	-6.56	117.61	122.20
36	5	2188	A	C4-C5-C6	6.56	120.28	117.00
36	1	1154	A	N9-C4-C5	6.56	108.42	105.80
36	1	2637	A	O4'-C1'-N9	6.56	113.45	108.20
1	6	328	A	O5'-P-OP2	-6.56	99.79	105.70
1	6	1008	G	C5-C6-O6	-6.56	124.66	128.60
1	6	1649	G	O5'-P-OP2	-6.56	99.79	105.70
36	5	511	G	N1-C2-N2	-6.56	110.29	116.20
36	5	2922	G	N7-C8-N9	6.56	116.38	113.10
37	7	45	A	C6-N1-C2	-6.56	114.66	118.60
1	2	1466	G	C5-N7-C8	-6.56	101.02	104.30
36	1	2296	A	O5'-P-OP2	6.56	118.57	110.70
36	1	2911	A	N7-C8-N9	-6.56	110.52	113.80
36	1	3231	U	C5-C4-O4	6.56	129.84	125.90
36	1	3372	A	C5-N7-C8	6.56	107.18	103.90
36	5	3194	C	C4-C5-C6	6.56	120.68	117.40
36	1	156	G	N3-C4-N9	6.56	129.94	126.00
36	1	2982	A	C8-N9-C4	6.56	108.42	105.80
36	5	162	G	N1-C6-O6	-6.56	115.96	119.90
36	5	1581	C	N1-C2-O2	6.56	122.83	118.90
36	5	2371	G	N3-C4-N9	6.56	129.94	126.00
36	5	3082	C	N3-C4-C5	6.56	124.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	905	U	C6-N1-C1'	6.56	130.38	121.20
36	1	1152	G	N1-C2-N3	-6.56	119.97	123.90
36	1	1316	C	C2-N3-C4	-6.56	116.62	119.90
36	1	2627	C	OP2-P-O3'	6.56	119.63	105.20
38	4	28	C	N1-C2-O2	-6.56	114.97	118.90
1	6	1110	G	C4-C5-C6	6.56	122.73	118.80
1	6	1566	U	C2-N1-C1'	-6.56	109.83	117.70
36	5	1526	U	N1-C2-O2	-6.56	118.21	122.80
37	7	82	G	C5-C6-N1	6.56	114.78	111.50
37	7	87	G	N3-C2-N2	-6.56	115.31	119.90
1	2	758	U	N3-C2-O2	-6.56	117.61	122.20
36	1	556	U	N3-C2-O2	6.56	126.79	122.20
36	1	1916	U	N1-C2-N3	6.56	118.83	114.90
1	6	969	C	O5'-P-OP1	6.56	118.57	110.70
36	5	1317	A	C8-N9-C4	-6.56	103.18	105.80
36	5	3038	U	C5-C6-N1	-6.56	119.42	122.70
37	7	65	G	N3-C2-N2	-6.56	115.31	119.90
1	2	1096	C	C6-N1-C1'	-6.55	112.93	120.80
1	2	1363	U	N3-C2-O2	-6.55	117.61	122.20
36	1	761	A	C5-N7-C8	-6.55	100.62	103.90
36	1	1330	A	C2-N3-C4	-6.55	107.32	110.60
36	1	1345	G	C8-N9-C4	-6.55	103.78	106.40
36	1	1553	U	C4-C5-C6	6.55	123.63	119.70
36	1	1704	A	C2-N3-C4	-6.55	107.32	110.60
36	1	2315	G	C4-C5-C6	6.55	122.73	118.80
36	1	2343	C	N1-C2-O2	6.55	122.83	118.90
36	1	2409	G	N1-C6-O6	6.55	123.83	119.90
38	4	55	U	N3-C2-O2	-6.55	117.61	122.20
1	6	440	U	O5'-P-OP2	-6.55	99.80	105.70
1	6	444	C	N3-C2-O2	6.55	126.49	121.90
36	5	425	G	C2-N3-C4	-6.55	108.62	111.90
36	5	502	U	O5'-P-OP1	6.55	118.57	110.70
36	5	3209	A	C8-N9-C4	-6.55	103.18	105.80
1	2	320	U	N1-C2-O2	6.55	127.39	122.80
36	1	1858	A	N3-C4-C5	-6.55	122.21	126.80
1	6	1257	U	N3-C2-O2	-6.55	117.61	122.20
36	5	569	A	O5'-P-OP2	-6.55	99.80	105.70
36	5	750	G	OP1-P-O3'	6.55	119.62	105.20
36	1	968	G	N3-C2-N2	6.55	124.49	119.90
36	1	1296	C	C6-N1-C2	-6.55	117.68	120.30
36	1	2778	G	N1-C2-N2	-6.55	110.30	116.20
36	1	2885	C	C5-C4-N4	-6.55	115.61	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2931	C	O5'-P-OP2	-6.55	99.81	105.70
36	1	2959	C	C6-N1-C2	6.55	122.92	120.30
41	L4	182	LEU	CB-CG-CD2	-6.55	99.86	111.00
1	6	301	A	C6-C5-N7	6.55	136.89	132.30
1	6	776	G	C5-C6-O6	-6.55	124.67	128.60
36	5	1116	G	N1-C2-N3	6.55	127.83	123.90
36	5	3061	G	N9-C4-C5	-6.55	102.78	105.40
38	8	44	A	C5-C6-N6	-6.55	118.46	123.70
36	1	909	G	C8-N9-C4	-6.55	103.78	106.40
36	1	1331	U	O5'-P-OP2	-6.55	99.81	105.70
36	1	1546	A	N7-C8-N9	6.55	117.07	113.80
36	5	848	A	C8-N9-C4	-6.55	103.18	105.80
36	5	1041	U	N1-C2-O2	-6.55	118.22	122.80
36	5	1459	C	C6-N1-C2	6.55	122.92	120.30
36	5	1542	G	N7-C8-N9	6.55	116.38	113.10
36	5	2163	C	C6-N1-C2	-6.55	117.68	120.30
36	5	2305	G	N3-C2-N2	-6.55	115.32	119.90
36	5	2388	U	N3-C4-O4	6.55	123.98	119.40
36	5	3217	C	C6-N1-C2	6.55	122.92	120.30
38	8	8	C	N3-C4-N4	6.55	122.58	118.00
1	6	1186	U	N3-C4-O4	-6.55	114.82	119.40
36	5	1889	G	C4-C5-N7	6.55	113.42	110.80
1	2	346	G	N3-C4-N9	-6.55	122.07	126.00
1	2	1484	G	N1-C2-N3	6.55	127.83	123.90
36	1	1305	U	C6-N1-C1'	6.55	130.37	121.20
36	1	2827	U	N1-C2-O2	-6.55	118.22	122.80
36	1	2961	G	N1-C2-N3	6.55	127.83	123.90
36	5	592	A	N1-C2-N3	-6.55	126.03	129.30
36	5	1329	U	P-O3'-C3'	6.55	127.56	119.70
36	5	1894	U	C5-C6-N1	-6.55	119.43	122.70
36	5	2172	A	C4-C5-C6	6.55	120.27	117.00
36	5	2682	C	O5'-P-OP1	6.55	118.56	110.70
36	5	3337	G	N3-C4-N9	6.55	129.93	126.00
36	1	55	G	N9-C4-C5	-6.54	102.78	105.40
36	5	827	A	C6-N1-C2	-6.54	114.67	118.60
36	5	877	C	N1-C2-O2	6.54	122.83	118.90
36	1	790	U	C5-C6-N1	-6.54	119.43	122.70
36	1	3180	A	C5-C6-N6	6.54	128.94	123.70
36	1	3307	A	C5-C6-N6	-6.54	118.47	123.70
1	6	16	G	C5-N7-C8	-6.54	101.03	104.30
1	6	936	G	C8-N9-C4	-6.54	103.78	106.40
1	6	1498	G	C4-C5-C6	6.54	122.73	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1056	U	N3-C2-O2	-6.54	117.62	122.20
36	5	2801	A	C5-N7-C8	-6.54	100.63	103.90
36	5	2883	U	C5-C6-N1	-6.54	119.43	122.70
36	1	2872	A	OP2-P-O3'	6.54	119.59	105.20
1	6	429	G	OP2-P-O3'	6.54	119.59	105.20
1	6	1621	U	N3-C2-O2	6.54	126.78	122.20
36	5	3243	A	O4'-C1'-N9	-6.54	102.97	108.20
37	7	28	C	C4-C5-C6	6.54	120.67	117.40
36	1	202	G	O5'-P-OP1	-6.54	99.81	105.70
36	1	1853	U	C5-C6-N1	6.54	125.97	122.70
1	6	1246	C	N1-C2-O2	6.54	122.82	118.90
1	2	262	U	O5'-P-OP2	-6.54	99.82	105.70
36	1	832	G	C8-N9-C4	6.54	109.02	106.40
36	1	2188	A	OP2-P-O3'	6.54	119.59	105.20
1	6	54	C	N1-C2-N3	6.54	123.78	119.20
36	5	656	A	C5-C6-N1	6.54	120.97	117.70
36	5	2902	A	C4-C5-C6	6.54	120.27	117.00
1	2	6	G	C5-C6-N1	6.54	114.77	111.50
36	1	703	G	N3-C4-N9	-6.54	122.08	126.00
36	1	3308	C	N3-C4-N4	-6.54	113.42	118.00
36	5	2130	G	C5-C6-O6	-6.54	124.68	128.60
1	2	47	A	N7-C8-N9	6.54	117.07	113.80
1	2	976	G	N1-C6-O6	-6.54	115.98	119.90
1	2	1201	G	C4-C5-N7	-6.54	108.19	110.80
1	2	1749	A	N1-C2-N3	6.54	132.57	129.30
36	1	23	A	C2-N3-C4	6.54	113.87	110.60
36	1	3361	G	C8-N9-C4	-6.54	103.79	106.40
1	6	998	A	N1-C2-N3	6.54	132.57	129.30
1	6	1645	G	N3-C2-N2	6.54	124.47	119.90
36	5	503	C	C2-N3-C4	-6.54	116.63	119.90
36	5	1175	C	C2-N3-C4	-6.54	116.63	119.90
36	5	1200	A	C5-C6-N6	-6.54	118.47	123.70
36	5	3057	U	C2-N1-C1'	6.54	125.54	117.70
1	2	1413	U	C2-N1-C1'	6.53	125.54	117.70
36	1	1136	A	C4-C5-N7	-6.53	107.43	110.70
36	1	1879	A	O5'-P-OP1	6.53	118.54	110.70
54	M8	138	LEU	CA-CB-CG	6.53	130.33	115.30
1	6	1132	A	C8-N9-C4	6.53	108.41	105.80
1	6	1641	C	C2-N3-C4	-6.53	116.63	119.90
36	5	27	C	N3-C4-C5	-6.53	119.29	121.90
36	5	1429	G	C8-N9-C1'	-6.53	118.51	127.00
36	5	1473	G	N3-C4-N9	6.53	129.92	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3337	G	C4-N9-C1'	6.53	134.99	126.50
37	7	93	C	C5-C4-N4	-6.53	115.63	120.20
38	8	136	G	OP1-P-OP2	-6.53	109.80	119.60
38	8	144	G	N3-C4-C5	-6.53	125.33	128.60
1	2	1086	A	N1-C6-N6	-6.53	114.68	118.60
36	1	1338	C	C4-C5-C6	-6.53	114.13	117.40
36	5	760	G	C2-N3-C4	-6.53	108.63	111.90
36	5	795	G	C5-C6-O6	6.53	132.52	128.60
37	7	38	U	C5-C6-N1	6.53	125.97	122.70
1	2	1029	U	C6-N1-C1'	6.53	130.34	121.20
1	2	1435	G	N3-C4-C5	-6.53	125.33	128.60
1	2	1789	G	N3-C4-N9	6.53	129.92	126.00
36	1	596	C	C2-N3-C4	-6.53	116.64	119.90
36	1	619	A	N1-C6-N6	6.53	122.52	118.60
36	1	1127	G	N3-C4-C5	6.53	131.87	128.60
36	1	1633	C	C6-N1-C2	-6.53	117.69	120.30
36	1	2276	G	N1-C6-O6	-6.53	115.98	119.90
36	1	2327	U	C6-N1-C2	6.53	124.92	121.00
36	1	2799	A	N1-C6-N6	-6.53	114.68	118.60
1	6	1027	A	C4-C5-C6	6.53	120.27	117.00
36	5	673	U	N1-C2-N3	6.53	118.82	114.90
36	5	2342	U	OP2-P-O3'	6.53	119.56	105.20
36	5	2864	A	OP2-P-O3'	6.53	119.57	105.20
38	8	93	U	C5-C6-N1	-6.53	119.44	122.70
36	1	3209	A	C6-C5-N7	-6.53	127.73	132.30
1	6	1034	C	N1-C2-O2	-6.53	114.98	118.90
36	5	720	A	C8-N9-C4	-6.53	103.19	105.80
36	5	2300	G	OP1-P-O3'	6.53	119.56	105.20
36	5	2699	G	C6-N1-C2	-6.53	121.18	125.10
36	1	659	G	N3-C4-C5	-6.53	125.34	128.60
36	1	693	A	C4-C5-C6	6.53	120.26	117.00
36	1	835	G	N9-C4-C5	-6.53	102.79	105.40
36	1	2153	U	N1-C2-N3	6.53	118.82	114.90
36	5	2136	C	C4-C5-C6	6.53	120.66	117.40
36	5	2614	G	C6-C5-N7	-6.53	126.48	130.40
36	5	3040	A	C2-N3-C4	-6.53	107.34	110.60
36	1	421	G	C6-N1-C2	-6.53	121.19	125.10
36	1	571	U	N1-C2-N3	6.53	118.81	114.90
36	1	1311	G	C8-N9-C4	6.53	109.01	106.40
36	5	1124	U	N3-C4-C5	6.53	118.52	114.60
36	5	2706	G	N3-C4-C5	-6.53	125.34	128.60
36	5	2869	U	OP2-P-O3'	6.53	119.56	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2943	G	N7-C8-N9	6.53	116.36	113.10
36	5	3055	U	N3-C4-C5	6.53	118.52	114.60
37	7	1	G	C8-N9-C4	-6.53	103.79	106.40
37	7	59	U	N1-C2-N3	6.53	118.82	114.90
36	1	1602	A	C8-N9-C4	6.52	108.41	105.80
36	1	1907	C	O5'-P-OP2	-6.52	99.83	105.70
36	1	3109	G	N3-C4-C5	-6.52	125.34	128.60
1	6	351	C	C6-N1-C1'	-6.52	112.97	120.80
1	6	1598	U	N1-C2-O2	6.52	127.37	122.80
1	6	1609	U	C2-N1-C1'	-6.52	109.87	117.70
36	5	1485	G	N1-C2-N2	-6.52	110.33	116.20
36	1	47	C	N1-C2-O2	-6.52	114.99	118.90
36	1	897	U	N3-C2-O2	-6.52	117.63	122.20
36	1	2178	A	C8-N9-C4	6.52	108.41	105.80
36	1	2370	G	N1-C6-O6	-6.52	115.99	119.90
36	1	2384	A	C5-N7-C8	6.52	107.16	103.90
1	6	552	G	N1-C6-O6	6.52	123.81	119.90
36	5	131	C	N3-C2-O2	-6.52	117.33	121.90
36	5	1166	G	O5'-P-OP1	6.52	118.53	110.70
36	5	2108	C	C6-N1-C2	6.52	122.91	120.30
36	5	2376	G	C6-C5-N7	-6.52	126.49	130.40
36	5	2761	G	C4-C5-N7	-6.52	108.19	110.80
6	S4	20	LEU	CA-CB-CG	-6.52	100.30	115.30
36	1	2424	A	C2-N3-C4	-6.52	107.34	110.60
36	5	788	C	N3-C4-C5	-6.52	119.29	121.90
36	5	2825	C	OP2-P-O3'	6.52	119.55	105.20
37	7	52	G	N7-C8-N9	-6.52	109.84	113.10
36	1	979	U	O5'-P-OP1	6.52	118.52	110.70
36	1	1754	G	N1-C6-O6	6.52	123.81	119.90
36	1	2199	G	C2-N3-C4	6.52	115.16	111.90
36	1	2336	U	N3-C2-O2	-6.52	117.64	122.20
36	1	2344	U	C5-C6-N1	-6.52	119.44	122.70
1	6	154	G	C5-C6-O6	-6.52	124.69	128.60
1	6	466	U	N3-C4-C5	-6.52	110.69	114.60
1	6	1142	A	C6-N1-C2	-6.52	114.69	118.60
1	6	1533	C	N3-C4-C5	6.52	124.51	121.90
1	6	1748	G	O5'-P-OP1	6.52	118.52	110.70
30	d8	16	LEU	CA-CB-CG	-6.52	100.31	115.30
36	5	214	G	C8-N9-C4	6.52	109.01	106.40
36	5	2181	C	N1-C2-O2	-6.52	114.99	118.90
36	5	2313	A	OP1-P-OP2	-6.52	109.82	119.60
36	5	2418	G	C5-C6-N1	-6.52	108.24	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2982	A	C8-N9-C4	6.52	108.41	105.80
1	2	1390	U	O4'-C1'-N1	6.52	113.41	108.20
36	1	776	U	C4-C5-C6	6.52	123.61	119.70
36	1	1899	G	C8-N9-C4	-6.52	103.79	106.40
38	4	73	U	N1-C2-O2	6.52	127.36	122.80
1	6	397	A	N9-C4-C5	-6.52	103.19	105.80
1	6	608	U	C5-C4-O4	6.52	129.81	125.90
1	6	1409	G	C4-N9-C1'	6.52	134.97	126.50
1	6	1485	C	N1-C2-O2	-6.52	114.99	118.90
36	5	526	C	N3-C4-C5	6.52	124.51	121.90
36	5	1011	A	C4-C5-C6	6.52	120.26	117.00
36	5	1017	C	C6-N1-C2	-6.52	117.69	120.30
36	5	2117	A	C6-N1-C2	-6.52	114.69	118.60
36	5	3350	C	C6-N1-C2	-6.52	117.69	120.30
36	5	3383	G	C5-N7-C8	-6.52	101.04	104.30
36	1	961	C	C2-N1-C1'	6.52	125.97	118.80
36	1	1854	C	C4-C5-C6	6.52	120.66	117.40
36	1	2209	U	C5-C6-N1	6.52	125.96	122.70
36	1	3031	G	N3-C2-N2	-6.52	115.34	119.90
36	5	2125	A	C8-N9-C4	6.52	108.41	105.80
36	5	2797	C	C4-C5-C6	6.52	120.66	117.40
36	5	2876	C	N1-C2-O2	6.52	122.81	118.90
36	5	3229	G	C8-N9-C1'	-6.52	118.53	127.00
36	1	420	G	O5'-P-OP2	-6.51	99.84	105.70
36	1	1472	U	C5-C6-N1	-6.51	119.44	122.70
36	1	2168	A	C6-C5-N7	6.51	136.86	132.30
36	1	2847	A	N9-C4-C5	-6.51	103.19	105.80
1	6	754	A	C5-C6-N6	-6.51	118.49	123.70
36	5	2624	G	C5-N7-C8	-6.51	101.04	104.30
36	5	2715	A	C6-C5-N7	6.51	136.86	132.30
36	1	518	G	N3-C2-N2	-6.51	115.34	119.90
36	1	2423	U	C6-N1-C2	-6.51	117.09	121.00
1	6	68	A	C5-N7-C8	-6.51	100.64	103.90
1	6	1673	G	N3-C4-C5	6.51	131.86	128.60
36	5	999	G	C2-N3-C4	6.51	115.16	111.90
36	5	1658	G	N1-C2-N3	6.51	127.81	123.90
36	5	2645	G	C5-C6-O6	-6.51	124.69	128.60
36	1	731	U	C4-C5-C6	6.51	123.61	119.70
36	1	736	A	N1-C6-N6	-6.51	114.69	118.60
36	1	3091	A	O5'-P-OP2	-6.51	99.84	105.70
36	5	651	G	C8-N9-C1'	-6.51	118.54	127.00
36	5	1112	A	OP1-P-O3'	6.51	119.53	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1909	A	C4-C5-C6	-6.51	113.74	117.00
36	5	3164	C	O4'-C1'-N1	6.51	113.41	108.20
36	5	3316	A	OP1-P-O3'	6.51	119.53	105.20
36	1	997	A	C6-N1-C2	-6.51	114.69	118.60
36	1	2105	G	C5-C6-O6	-6.51	124.69	128.60
36	1	3054	U	C5-C4-O4	6.51	129.81	125.90
52	M6	33	ILE	CG1-CB-CG2	-6.51	97.08	111.40
1	6	913	G	N7-C8-N9	6.51	116.36	113.10
1	6	1536	G	C6-C5-N7	-6.51	126.49	130.40
36	5	388	G	C4-C5-N7	-6.51	108.20	110.80
36	5	642	U	N1-C1'-C2'	-6.51	104.84	112.00
36	1	2167	A	C2-N3-C4	-6.51	107.35	110.60
36	1	2871	G	C8-N9-C1'	6.51	135.46	127.00
1	6	165	G	C6-C5-N7	-6.51	126.50	130.40
36	5	1164	G	N1-C6-O6	-6.51	116.00	119.90
36	5	1209	G	N1-C2-N2	6.51	122.06	116.20
36	1	2677	G	C4-C5-N7	6.51	113.40	110.80
1	6	334	G	C8-N9-C4	-6.51	103.80	106.40
1	6	967	A	C4-C5-N7	6.51	113.95	110.70
36	5	650	C	C2-N1-C1'	-6.51	111.64	118.80
36	5	1010	G	C5-N7-C8	-6.51	101.05	104.30
36	5	1050	U	C5-C4-O4	6.51	129.80	125.90
36	5	2431	C	N3-C4-C5	6.51	124.50	121.90
1	2	1553	G	C8-N9-C4	6.50	109.00	106.40
36	1	2799	A	N1-C2-N3	6.50	132.55	129.30
1	6	1149	G	C2-N3-C4	-6.50	108.65	111.90
36	5	1353	U	C6-N1-C2	-6.50	117.10	121.00
1	2	1673	G	C6-C5-N7	-6.50	126.50	130.40
1	2	1773	C	N3-C4-C5	-6.50	119.30	121.90
36	1	930	U	N1-C2-O2	-6.50	118.25	122.80
36	1	1444	G	N9-C4-C5	6.50	108.00	105.40
36	1	2325	G	C5-C6-O6	-6.50	124.70	128.60
36	1	3295	A	C2-N3-C4	-6.50	107.35	110.60
37	3	75	G	N9-C4-C5	6.50	108.00	105.40
1	6	90	C	C6-N1-C2	-6.50	117.70	120.30
1	6	1128	C	OP2-P-O3'	6.50	119.51	105.20
36	5	1149	G	C4-C5-N7	6.50	113.40	110.80
36	5	1220	U	N3-C2-O2	-6.50	117.65	122.20
36	5	1372	C	C2-N3-C4	-6.50	116.65	119.90
36	5	3274	A	OP1-P-O3'	-6.50	90.89	105.20
36	5	3308	C	N1-C2-O2	6.50	122.80	118.90
37	7	43	U	C5-C6-N1	-6.50	119.45	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	33	A	O5'-P-OP1	-6.50	99.85	105.70
1	2	575	C	N3-C4-C5	6.50	124.50	121.90
1	2	1302	U	C6-N1-C2	6.50	124.90	121.00
36	1	643	U	O5'-P-OP1	6.50	118.50	110.70
36	1	2143	A	C5-C6-N6	-6.50	118.50	123.70
36	1	2511	A	C8-N9-C4	6.50	108.40	105.80
36	1	2982	A	C5-C6-N1	6.50	120.95	117.70
1	6	1471	A	C8-N9-C4	-6.50	103.20	105.80
1	6	1600	A	C5-N7-C8	-6.50	100.65	103.90
1	6	1658	G	N3-C4-C5	6.50	131.85	128.60
36	5	920	A	C4-C5-N7	6.50	113.95	110.70
36	5	2613	U	C4-C5-C6	6.50	123.60	119.70
36	5	3166	C	C2-N3-C4	6.50	123.15	119.90
36	1	3182	G	C8-N9-C4	6.50	109.00	106.40
36	5	74	G	C4-C5-N7	6.50	113.40	110.80
36	5	269	G	N3-C4-C5	6.50	131.85	128.60
36	5	322	U	C6-N1-C2	6.50	124.90	121.00
36	5	1765	U	C5-C6-N1	6.50	125.95	122.70
36	5	1887	A	N1-C2-N3	6.50	132.55	129.30
1	2	1291	G	C4-C5-C6	6.50	122.70	118.80
36	1	33	G	N9-C1'-C2'	-6.50	104.85	112.00
36	1	2714	G	N3-C4-C5	6.50	131.85	128.60
36	1	2746	A	N1-C6-N6	-6.50	114.70	118.60
1	6	1487	A	N1-C6-N6	6.50	122.50	118.60
36	5	824	C	N3-C4-C5	-6.50	119.30	121.90
36	5	2330	C	C6-N1-C2	-6.50	117.70	120.30
36	5	2391	G	C5-C6-O6	6.50	132.50	128.60
36	5	2584	G	C8-N9-C1'	-6.50	118.55	127.00
36	5	2623	G	N3-C4-N9	6.50	129.90	126.00
38	8	122	U	N3-C2-O2	-6.50	117.65	122.20
1	2	19	A	C5-N7-C8	-6.50	100.65	103.90
1	2	1654	G	C4-N9-C1'	6.50	134.94	126.50
36	1	1902	G	C5-C6-O6	6.50	132.50	128.60
36	1	2355	G	C6-C5-N7	-6.50	126.50	130.40
1	6	1160	A	N1-C6-N6	-6.50	114.70	118.60
36	5	115	A	N9-C4-C5	6.50	108.40	105.80
36	5	371	G	C5-C6-O6	6.50	132.50	128.60
36	5	783	A	C4-C5-N7	6.50	113.95	110.70
36	5	1379	G	N9-C4-C5	-6.50	102.80	105.40
36	5	2367	A	N1-C2-N3	6.50	132.55	129.30
36	5	2400	G	N3-C2-N2	-6.50	115.35	119.90
36	5	3179	U	N3-C4-C5	-6.50	110.70	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	45	C	N3-C4-C5	6.50	124.50	121.90
38	8	138	A	C5-C6-N6	6.50	128.90	123.70
36	1	2191	U	C5-C4-O4	6.50	129.80	125.90
38	4	38	U	N3-C4-O4	6.50	123.95	119.40
1	6	797	G	N7-C8-N9	-6.50	109.85	113.10
36	5	1507	G	C4-C5-N7	6.50	113.40	110.80
36	5	1695	U	O5'-P-OP2	6.50	118.49	110.70
36	5	3125	U	C6-N1-C1'	6.50	130.29	121.20
36	1	681	U	N3-C4-O4	6.49	123.95	119.40
36	1	2179	C	C2-N1-C1'	6.49	125.94	118.80
36	1	2935	U	O5'-P-OP2	-6.49	99.86	105.70
36	1	3256	G	C8-N9-C1'	-6.49	118.56	127.00
1	6	1582	U	C2-N1-C1'	6.49	125.49	117.70
36	5	1852	G	C6-C5-N7	-6.49	126.50	130.40
36	5	3069	G	C6-C5-N7	-6.49	126.50	130.40
1	2	1655	A	N3-C4-C5	6.49	131.34	126.80
36	1	608	A	C4-C5-C6	6.49	120.25	117.00
36	1	636	C	C4-C5-C6	6.49	120.65	117.40
36	1	3147	G	C6-N1-C2	-6.49	121.20	125.10
1	6	634	G	C2-N3-C4	6.49	115.15	111.90
36	5	1496	C	N3-C2-O2	-6.49	117.36	121.90
36	5	1634	G	N3-C4-C5	-6.49	125.35	128.60
36	1	316	U	C5-C6-N1	6.49	125.94	122.70
36	1	426	G	O5'-P-OP1	-6.49	99.86	105.70
36	1	1171	G	N1-C2-N3	6.49	127.79	123.90
36	1	2810	C	C2-N3-C4	6.49	123.14	119.90
36	1	2937	G	C4-N9-C1'	-6.49	118.06	126.50
36	1	3144	G	C4-C5-N7	6.49	113.40	110.80
38	4	28	C	C5-C4-N4	-6.49	115.66	120.20
1	6	96	G	C4-C5-C6	6.49	122.69	118.80
1	6	955	A	O5'-P-OP2	-6.49	99.86	105.70
1	6	1406	A	N1-C6-N6	-6.49	114.70	118.60
36	5	2110	G	N3-C4-C5	-6.49	125.36	128.60
36	5	2703	A	N3-C4-C5	-6.49	122.26	126.80
36	5	2896	A	C2-N3-C4	-6.49	107.36	110.60
44	17	151	ARG	NE-CZ-NH1	-6.49	117.06	120.30
1	2	627	C	C2-N1-C1'	6.49	125.94	118.80
1	2	1206	U	C4-C5-C6	6.49	123.59	119.70
36	1	231	G	N1-C6-O6	6.49	123.79	119.90
36	1	1795	U	C2-N1-C1'	-6.49	109.91	117.70
36	1	3131	U	OP2-P-O3'	6.49	119.47	105.20
36	1	3269	U	O5'-P-OP2	-6.49	99.86	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	989	A	C5-C6-N1	6.49	120.94	117.70
36	5	1284	C	O5'-P-OP1	-6.49	99.86	105.70
36	5	2312	A	C4-C5-N7	-6.49	107.46	110.70
18	C6	40	GLU	C-N-CA	6.49	149.24	122.00
1	6	349	U	N1-C2-O2	6.49	127.34	122.80
1	6	1546	G	C8-N9-C1'	-6.49	118.57	127.00
36	5	2772	C	OP1-P-O3'	-6.49	90.93	105.20
36	5	2937	G	N1-C6-O6	6.49	123.79	119.90
36	1	317	A	N1-C6-N6	-6.49	114.71	118.60
36	1	2368	A	N3-C4-N9	6.49	132.59	127.40
36	1	3186	A	C6-N1-C2	-6.49	114.71	118.60
36	1	3372	A	C4-C5-N7	-6.49	107.46	110.70
1	6	930	A	N1-C6-N6	-6.49	114.71	118.60
36	5	2125	A	C5-C6-N1	-6.49	114.46	117.70
36	5	2618	G	N3-C4-C5	-6.49	125.36	128.60
36	5	3026	G	N3-C4-N9	6.49	129.89	126.00
36	5	3208	G	N1-C2-N2	-6.49	110.36	116.20
36	5	3335	A	C4-C5-C6	6.49	120.24	117.00
36	1	1120	A	N3-C4-C5	-6.48	122.26	126.80
36	1	1920	U	O5'-P-OP2	-6.48	99.86	105.70
36	1	2302	G	N1-C6-O6	-6.48	116.01	119.90
36	1	2836	C	OP2-P-O3'	6.48	119.46	105.20
36	5	344	A	O5'-P-OP1	-6.48	99.86	105.70
36	5	1377	G	C4-C5-N7	-6.48	108.21	110.80
1	2	1113	A	O4'-C1'-N9	6.48	113.39	108.20
1	2	1643	U	C2-N3-C4	-6.48	123.11	127.00
36	1	635	G	OP1-P-OP2	6.48	129.32	119.60
36	1	875	G	C5-C6-N1	-6.48	108.26	111.50
36	1	2925	C	C6-N1-C1'	6.48	128.58	120.80
36	1	3277	U	C4-C5-C6	6.48	123.59	119.70
38	4	53	A	O5'-P-OP1	6.48	118.48	110.70
1	6	1546	G	C4-C5-C6	6.48	122.69	118.80
1	6	1650	U	C4-C5-C6	6.48	123.59	119.70
36	5	399	A	C8-N9-C4	-6.48	103.21	105.80
36	5	610	G	N3-C4-C5	-6.48	125.36	128.60
36	5	2395	G	N1-C2-N3	6.48	127.79	123.90
36	5	2434	U	C5-C4-O4	6.48	129.79	125.90
36	5	3136	G	C6-C5-N7	-6.48	126.51	130.40
38	8	102	U	N1-C2-O2	6.48	127.34	122.80
1	2	548	G	C8-N9-C4	-6.48	103.81	106.40
1	2	968	U	N3-C2-O2	-6.48	117.66	122.20
36	1	45	A	C8-N9-C4	-6.48	103.21	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2895	G	C6-C5-N7	-6.48	126.51	130.40
36	1	3086	A	C6-N1-C2	-6.48	114.71	118.60
36	5	1405	U	C2-N1-C1'	-6.48	109.92	117.70
36	5	1405	U	N1-C2-N3	6.48	118.79	114.90
36	5	3381	U	C5-C6-N1	-6.48	119.46	122.70
36	1	647	A	C4-C5-C6	6.48	120.24	117.00
36	1	969	C	C4-C5-C6	6.48	120.64	117.40
36	5	1114	U	N1-C2-N3	6.48	118.79	114.90
36	5	1597	C	C5-C6-N1	6.48	124.24	121.00
36	5	1620	U	N3-C2-O2	-6.48	117.67	122.20
1	2	930	A	N1-C6-N6	-6.48	114.71	118.60
36	1	419	G	C5-N7-C8	6.48	107.54	104.30
36	1	1297	C	C6-N1-C2	-6.48	117.71	120.30
36	1	1344	G	C4-N9-C1'	-6.48	118.08	126.50
36	1	2875	U	N3-C4-O4	6.48	123.93	119.40
1	6	1759	C	C4-C5-C6	6.48	120.64	117.40
36	5	2364	G	C6-C5-N7	-6.48	126.51	130.40
36	5	2621	G	O5'-P-OP1	6.48	118.47	110.70
36	5	2693	C	C5-C6-N1	-6.48	117.76	121.00
36	5	3078	U	C6-N1-C2	-6.48	117.11	121.00
37	7	113	C	C5-C6-N1	-6.48	117.76	121.00
70	o4	78	GLY	N-CA-C	-6.48	96.91	113.10
1	2	555	A	C6-N1-C2	-6.48	114.72	118.60
36	1	344	A	C2-N3-C4	-6.48	107.36	110.60
1	6	1473	U	C5-C6-N1	-6.48	119.46	122.70
36	5	1350	A	N7-C8-N9	6.48	117.04	113.80
36	5	2794	G	O5'-P-OP1	-6.48	99.87	105.70
1	2	1142	A	N1-C6-N6	-6.47	114.72	118.60
36	1	113	C	N3-C2-O2	6.47	126.43	121.90
36	1	953	G	N3-C4-C5	6.47	131.84	128.60
36	1	2274	U	N3-C2-O2	-6.47	117.67	122.20
36	1	2627	C	C4-C5-C6	6.47	120.64	117.40
36	1	2922	G	C6-N1-C2	-6.47	121.22	125.10
1	6	359	A	C8-N9-C1'	6.47	139.35	127.70
1	6	1616	G	C8-N9-C4	-6.47	103.81	106.40
17	c5	124	THR	C-N-CD	-6.47	106.36	120.60
36	5	1101	G	N1-C6-O6	-6.47	116.02	119.90
36	5	1289	G	C5-C6-N1	6.47	114.74	111.50
36	5	1507	G	C6-C5-N7	-6.47	126.52	130.40
36	5	2829	U	N3-C2-O2	6.47	126.73	122.20
36	5	3254	G	C5-C6-N1	-6.47	108.26	111.50
1	2	331	A	C4-C5-N7	-6.47	107.46	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	969	C	N3-C2-O2	-6.47	117.37	121.90
1	2	1273	G	OP1-P-O3'	6.47	119.44	105.20
36	1	715	A	O4'-C1'-N9	6.47	113.38	108.20
36	1	2185	G	C4-C5-C6	6.47	122.68	118.80
36	1	2368	A	OP2-P-O3'	6.47	119.44	105.20
36	1	2619	G	C5-C6-N1	6.47	114.74	111.50
36	1	3031	G	C6-C5-N7	6.47	134.28	130.40
36	5	558	U	C5-C6-N1	-6.47	119.46	122.70
36	5	1487	G	C4-C5-C6	6.47	122.68	118.80
36	5	1846	C	OP1-P-OP2	-6.47	109.89	119.60
36	5	2793	G	C8-N9-C1'	6.47	135.41	127.00
36	5	2864	A	N9-C4-C5	-6.47	103.21	105.80
36	5	3015	G	N3-C4-C5	6.47	131.84	128.60
36	1	427	C	C2-N1-C1'	6.47	125.92	118.80
36	1	818	C	OP1-P-OP2	-6.47	109.89	119.60
36	1	1695	U	N1-C2-O2	6.47	127.33	122.80
36	5	1239	C	C2-N1-C1'	6.47	125.92	118.80
36	5	1387	G	OP1-P-OP2	6.47	129.31	119.60
36	5	2199	G	N3-C4-N9	6.47	129.88	126.00
36	1	1050	U	N1-C2-O2	6.47	127.33	122.80
36	1	1161	G	N3-C4-N9	6.47	129.88	126.00
36	1	2814	G	N9-C4-C5	6.47	107.99	105.40
38	4	33	A	O5'-P-OP2	6.47	118.46	110.70
1	6	120	U	C6-N1-C2	-6.47	117.12	121.00
1	6	973	A	N7-C8-N9	-6.47	110.56	113.80
1	6	1630	U	OP1-P-O3'	6.47	119.43	105.20
1	6	1668	G	O5'-P-OP1	6.47	118.46	110.70
36	5	2303	A	C5-N7-C8	-6.47	100.67	103.90
36	5	2363	A	C4-C5-N7	-6.47	107.47	110.70
36	5	2401	A	C8-N9-C4	-6.47	103.21	105.80
36	5	2609	A	N1-C6-N6	6.47	122.48	118.60
36	5	2659	G	N9-C4-C5	-6.47	102.81	105.40
36	5	3307	A	N9-C4-C5	-6.47	103.21	105.80
36	1	614	C	O4'-C1'-N1	6.47	113.37	108.20
36	1	857	G	C5-C6-N1	-6.47	108.27	111.50
36	1	3009	G	N1-C6-O6	6.47	123.78	119.90
36	1	3176	G	C6-C5-N7	-6.47	126.52	130.40
1	6	1223	A	C8-N9-C4	-6.47	103.21	105.80
1	6	1547	A	C5-N7-C8	-6.47	100.67	103.90
1	6	1765	A	N1-C6-N6	-6.47	114.72	118.60
36	5	2186	U	N3-C2-O2	-6.47	117.67	122.20
37	7	84	A	O5'-P-OP2	6.47	118.46	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	377	A	C5-C6-N6	-6.47	118.53	123.70
36	1	935	U	N3-C2-O2	-6.47	117.67	122.20
36	1	1170	A	N9-C4-C5	-6.47	103.21	105.80
36	1	2933	A	N1-C6-N6	6.47	122.48	118.60
36	1	3172	A	N3-C4-C5	-6.47	122.27	126.80
37	3	89	G	C5-C6-O6	-6.47	124.72	128.60
1	6	1029	U	C5-C6-N1	-6.47	119.47	122.70
36	5	136	G	N1-C6-O6	6.47	123.78	119.90
36	5	868	C	N3-C2-O2	6.47	126.43	121.90
36	5	922	U	C5-C4-O4	6.47	129.78	125.90
36	5	2911	A	N1-C2-N3	6.47	132.53	129.30
36	5	2954	U	OP1-P-O3'	6.47	119.42	105.20
37	7	1	G	N3-C4-C5	-6.47	125.37	128.60
38	8	115	C	C5-C6-N1	-6.47	117.77	121.00
36	1	217	U	C5-C6-N1	6.46	125.93	122.70
36	1	1180	A	C5-C6-N6	6.46	128.87	123.70
36	1	1798	A	N1-C2-N3	6.46	132.53	129.30
36	1	1858	A	C5-C6-N1	6.46	120.93	117.70
36	1	3142	A	C6-C5-N7	6.46	136.82	132.30
36	5	1038	C	N3-C2-O2	-6.46	117.38	121.90
36	5	3126	C	O5'-P-OP2	-6.46	99.88	105.70
36	1	9	U	C5-C6-N1	-6.46	119.47	122.70
36	1	906	A	N3-C4-C5	-6.46	122.28	126.80
36	1	1380	G	O5'-P-OP2	-6.46	99.88	105.70
36	1	2172	A	C4-C5-N7	6.46	113.93	110.70
36	5	2849	C	OP2-P-O3'	6.46	119.42	105.20
36	1	1142	G	C4-C5-N7	6.46	113.39	110.80
1	6	163	G	C8-N9-C1'	6.46	135.40	127.00
36	5	1152	G	N1-C6-O6	6.46	123.78	119.90
36	5	2248	C	C2-N1-C1'	-6.46	111.69	118.80
52	m6	4	GLU	N-CA-C	-6.46	93.56	111.00
1	6	1380	U	N3-C4-O4	6.46	123.92	119.40
36	5	1851	G	C4-C5-N7	6.46	113.38	110.80
36	5	3030	G	C8-N9-C4	6.46	108.98	106.40
1	2	1200	G	N3-C4-C5	-6.46	125.37	128.60
36	1	95	A	N1-C6-N6	-6.46	114.72	118.60
36	1	662	U	C6-N1-C1'	-6.46	112.16	121.20
36	1	953	G	C4-C5-C6	-6.46	114.92	118.80
36	1	1794	G	C5-N7-C8	6.46	107.53	104.30
36	1	2399	A	C6-N1-C2	-6.46	114.72	118.60
36	1	2402	A	N1-C6-N6	-6.46	114.72	118.60
36	1	3040	A	C4-C5-N7	-6.46	107.47	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3270	U	C5-C6-N1	-6.46	119.47	122.70
1	6	1157	A	C8-N9-C4	-6.46	103.22	105.80
1	6	1523	G	N3-C4-N9	6.46	129.88	126.00
1	6	1537	C	OP1-P-OP2	-6.46	109.91	119.60
36	5	559	A	C4-C5-C6	6.46	120.23	117.00
36	5	777	U	O5'-P-OP1	-6.46	99.89	105.70
36	5	1947	G	N3-C4-N9	6.46	129.88	126.00
36	1	1182	A	O5'-P-OP1	-6.46	99.89	105.70
36	1	1306	G	C4-C5-C6	6.46	122.67	118.80
36	1	1547	G	C4-N9-C1'	6.46	134.89	126.50
1	6	58	U	O5'-P-OP2	6.46	118.45	110.70
1	6	1048	G	C8-N9-C4	6.46	108.98	106.40
1	6	1403	C	C5-C6-N1	-6.46	117.77	121.00
1	6	1792	G	C5-C6-N1	6.46	114.73	111.50
36	5	609	G	N1-C6-O6	6.46	123.77	119.90
36	5	651	G	N1-C2-N2	-6.46	110.39	116.20
36	5	1137	C	C2-N1-C1'	6.46	125.90	118.80
36	5	1158	A	C8-N9-C4	6.46	108.38	105.80
36	5	1377	G	N1-C6-O6	-6.46	116.03	119.90
36	5	2880	U	N3-C4-O4	-6.46	114.88	119.40
36	5	3077	A	C2-N3-C4	-6.46	107.37	110.60
36	5	3136	G	N9-C4-C5	-6.46	102.82	105.40
38	8	52	A	C6-N1-C2	-6.46	114.73	118.60
1	2	579	A	C5-C6-N1	6.46	120.93	117.70
37	3	99	G	C6-C5-N7	6.46	134.27	130.40
1	6	170	U	N3-C2-O2	-6.46	117.68	122.20
36	5	1183	C	C5-C4-N4	-6.46	115.68	120.20
36	5	1953	G	C8-N9-C4	6.46	108.98	106.40
36	5	2173	U	OP2-P-O3'	6.46	119.40	105.20
36	5	2945	G	O4'-C1'-N9	6.46	113.36	108.20
36	5	3379	C	C6-N1-C2	6.46	122.88	120.30
1	2	1281	G	O5'-P-OP1	-6.45	99.89	105.70
36	1	1920	U	N3-C2-O2	-6.45	117.68	122.20
36	1	2289	U	N1-C2-N3	6.45	118.77	114.90
36	1	2352	A	C5-C6-N1	6.45	120.93	117.70
36	1	2405	C	C4-C5-C6	6.45	120.63	117.40
1	6	1765	A	C2-N3-C4	-6.45	107.37	110.60
36	5	92	G	N9-C4-C5	-6.45	102.82	105.40
36	5	608	A	C4-C5-C6	6.45	120.23	117.00
36	5	1484	U	N3-C2-O2	6.45	126.72	122.20
36	5	2395	G	C2-N3-C4	-6.45	108.67	111.90
36	5	2940	A	C5-C6-N6	-6.45	118.54	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1650	U	N1-C2-O2	-6.45	118.28	122.80
36	5	752	C	C4-C5-C6	6.45	120.63	117.40
36	5	822	G	C6-C5-N7	-6.45	126.53	130.40
36	5	888	A	C2-N3-C4	-6.45	107.37	110.60
36	5	1910	A	C6-C5-N7	-6.45	127.78	132.30
36	1	222	A	O5'-P-OP2	-6.45	99.89	105.70
36	1	970	A	OP2-P-O3'	6.45	119.39	105.20
36	1	2315	G	N3-C2-N2	-6.45	115.39	119.90
36	1	2720	G	C5-C6-O6	-6.45	124.73	128.60
36	1	3180	A	C2-N3-C4	-6.45	107.38	110.60
36	1	3391	A	OP1-P-OP2	6.45	129.28	119.60
36	5	923	C	C2-N3-C4	-6.45	116.67	119.90
36	5	1867	A	N1-C2-N3	6.45	132.53	129.30
36	5	2955	U	OP2-P-O3'	6.45	119.39	105.20
36	1	2641	U	C6-N1-C2	6.45	124.87	121.00
36	1	3123	A	C5-C6-N1	6.45	120.92	117.70
57	N1	20	ARG	NE-CZ-NH1	-6.45	117.08	120.30
1	6	1201	G	C8-N9-C4	6.45	108.98	106.40
36	5	1172	G	N1-C2-N3	6.45	127.77	123.90
36	5	1175	C	OP1-P-OP2	6.45	129.27	119.60
36	5	2119	A	C5-C6-N6	-6.45	118.54	123.70
36	5	2874	G	C6-C5-N7	-6.45	126.53	130.40
36	5	3150	A	C6-C5-N7	-6.45	127.79	132.30
37	7	115	G	C5-C6-N1	6.45	114.72	111.50
36	1	2978	U	N1-C2-N3	6.45	118.77	114.90
36	1	3202	G	N9-C4-C5	-6.45	102.82	105.40
36	5	346	C	OP2-P-O3'	6.45	119.38	105.20
36	5	2308	C	N3-C2-O2	6.45	126.41	121.90
36	1	1834	U	N1-C2-O2	-6.45	118.29	122.80
36	1	2339	C	O5'-P-OP2	-6.45	99.90	105.70
36	1	2351	U	N1-C2-N3	6.45	118.77	114.90
36	1	2794	G	C2-N3-C4	6.45	115.12	111.90
1	6	21	U	C4-C5-C6	6.45	123.57	119.70
1	6	179	A	N3-C4-C5	-6.45	122.29	126.80
36	5	61	A	C2-N3-C4	-6.45	107.38	110.60
36	5	851	C	N1-C2-N3	-6.45	114.69	119.20
36	5	1114	U	C5-C4-O4	6.45	129.77	125.90
36	5	2689	A	O4'-C1'-N9	6.45	113.36	108.20
36	5	3269	U	N3-C2-O2	6.45	126.71	122.20
1	2	424	C	N1-C2-O2	6.44	122.77	118.90
1	2	1670	G	C4-C5-C6	6.44	122.67	118.80
36	1	1440	G	C2-N3-C4	-6.44	108.68	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	36	C	N1-C2-N3	-6.44	114.69	119.20
1	6	1331	A	N9-C4-C5	6.44	108.38	105.80
36	5	1437	C	C2-N1-C1'	6.44	125.89	118.80
36	5	2358	A	C4-N9-C1'	-6.44	114.70	126.30
36	5	2420	C	C5-C4-N4	-6.44	115.69	120.20
36	1	1602	A	N7-C8-N9	-6.44	110.58	113.80
36	1	2174	G	C4-C5-N7	6.44	113.38	110.80
36	1	2403	G	C6-C5-N7	-6.44	126.53	130.40
36	1	2840	C	C4-C5-C6	6.44	120.62	117.40
1	6	1272	U	C4-C5-C6	6.44	123.56	119.70
36	5	890	C	C6-N1-C1'	-6.44	113.07	120.80
36	5	1680	G	C4-N9-C1'	6.44	134.88	126.50
36	5	2354	C	C6-N1-C1'	6.44	128.53	120.80
36	5	2988	C	C6-N1-C1'	-6.44	113.07	120.80
36	5	3280	U	N3-C4-C5	6.44	118.47	114.60
1	2	402	C	OP1-P-OP2	-6.44	109.94	119.60
1	6	1099	U	C2-N1-C1'	6.44	125.43	117.70
36	5	423	A	C6-C5-N7	-6.44	127.79	132.30
36	5	938	C	N1-C2-N3	-6.44	114.69	119.20
36	5	947	G	C6-C5-N7	-6.44	126.53	130.40
36	5	1386	A	C5-N7-C8	-6.44	100.68	103.90
36	5	2235	C	N3-C4-C5	-6.44	119.32	121.90
36	5	2856	G	C6-C5-N7	-6.44	126.54	130.40
36	5	3041	U	O5'-P-OP2	-6.44	99.90	105.70
36	5	3081	C	N3-C2-O2	6.44	126.41	121.90
36	5	3271	G	N9-C4-C5	-6.44	102.82	105.40
38	8	109	A	O5'-P-OP2	-6.44	99.90	105.70
36	1	371	G	N1-C6-O6	-6.44	116.04	119.90
36	1	1853	U	C6-N1-C2	-6.44	117.14	121.00
36	5	1857	C	O5'-P-OP2	-6.44	99.91	105.70
36	1	148	G	N3-C4-C5	-6.44	125.38	128.60
36	1	1166	G	C6-C5-N7	-6.44	126.54	130.40
38	4	103	G	C4-N9-C1'	6.44	134.87	126.50
1	6	26	A	C5-C6-N6	-6.44	118.55	123.70
36	5	682	U	C2-N1-C1'	-6.44	109.97	117.70
36	5	1435	A	C8-N9-C4	-6.44	103.22	105.80
36	5	2666	C	O5'-P-OP2	-6.44	99.91	105.70
38	8	12	A	N3-C4-N9	6.44	132.55	127.40
1	6	1037	C	C4-C5-C6	6.44	120.62	117.40
36	5	953	G	N1-C6-O6	-6.44	116.04	119.90
36	5	1666	G	N1-C6-O6	6.44	123.76	119.90
1	2	1757	G	C8-N9-C1'	-6.43	118.64	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1534	A	C5-N7-C8	-6.43	100.68	103.90
36	1	2620	G	N3-C2-N2	-6.43	115.40	119.90
36	1	2804	A	C6-N1-C2	-6.43	114.74	118.60
36	1	2812	C	OP1-P-O3'	6.43	119.36	105.20
1	6	297	U	C6-N1-C2	-6.43	117.14	121.00
1	6	797	G	C4-C5-C6	-6.43	114.94	118.80
36	5	40	A	OP1-P-OP2	6.43	129.25	119.60
36	5	994	G	N7-C8-N9	-6.43	109.88	113.10
36	5	1470	U	C5-C6-N1	6.43	125.92	122.70
36	5	1607	U	N3-C4-C5	-6.43	110.74	114.60
36	5	2384	A	C2-N3-C4	6.43	113.82	110.60
1	2	1302	U	C5-C4-O4	-6.43	122.04	125.90
36	1	747	A	O5'-P-OP1	-6.43	99.91	105.70
36	1	2406	C	O5'-P-OP2	-6.43	99.91	105.70
1	6	57	G	N3-C4-C5	-6.43	125.38	128.60
1	6	1138	A	C8-N9-C4	6.43	108.37	105.80
1	6	1796	C	C6-N1-C1'	-6.43	113.08	120.80
36	5	353	G	N3-C4-C5	6.43	131.82	128.60
36	5	503	C	C4-C5-C6	6.43	120.62	117.40
36	5	1124	U	N3-C2-O2	-6.43	117.70	122.20
36	5	1881	A	N1-C2-N3	6.43	132.52	129.30
36	1	595	G	N3-C4-C5	-6.43	125.39	128.60
36	1	2238	G	C8-N9-C1'	6.43	135.36	127.00
36	1	3288	G	N3-C4-N9	-6.43	122.14	126.00
1	6	1408	G	C5-C6-N1	-6.43	108.28	111.50
36	5	1653	G	N3-C4-N9	-6.43	122.14	126.00
36	5	1654	A	N1-C6-N6	-6.43	114.74	118.60
36	5	2754	G	C6-N1-C2	-6.43	121.24	125.10
36	5	3315	G	C8-N9-C4	-6.43	103.83	106.40
36	5	3385	U	C4-C5-C6	6.43	123.56	119.70
36	1	1328	C	N3-C2-O2	6.43	126.40	121.90
36	1	1484	U	P-O3'-C3'	6.43	127.42	119.70
36	1	2917	G	C5-N7-C8	6.43	107.51	104.30
36	1	3214	U	C6-N1-C2	-6.43	117.14	121.00
1	6	1414	U	C2-N1-C1'	6.43	125.42	117.70
36	5	607	A	C6-N1-C2	-6.43	114.74	118.60
36	5	728	G	C6-C5-N7	-6.43	126.54	130.40
36	5	742	G	N3-C4-C5	-6.43	125.39	128.60
36	5	1127	G	C4-C5-C6	6.43	122.66	118.80
36	5	1219	C	C6-N1-C2	6.43	122.87	120.30
36	5	3085	G	C5-N7-C8	6.43	107.52	104.30
37	7	57	G	C5-C6-N1	6.43	114.72	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	82	U	N1-C2-O2	6.43	127.30	122.80
1	2	1141	G	C8-N9-C4	6.43	108.97	106.40
36	1	224	C	N3-C4-N4	6.43	122.50	118.00
36	1	2811	A	N7-C8-N9	6.43	117.01	113.80
1	6	1122	G	N3-C4-N9	6.43	129.86	126.00
36	5	1043	C	C5-C6-N1	-6.43	117.79	121.00
36	5	1103	A	O5'-P-OP1	6.43	118.41	110.70
36	5	3332	U	C2-N1-C1'	-6.43	109.99	117.70
36	1	2681	U	N3-C2-O2	-6.43	117.70	122.20
36	1	2714	G	C8-N9-C1'	6.43	135.35	127.00
36	1	3221	C	C6-N1-C2	-6.43	117.73	120.30
1	6	43	A	C5-C6-N6	-6.43	118.56	123.70
1	6	1172	G	C6-C5-N7	6.43	134.26	130.40
36	5	644	G	N9-C4-C5	6.43	107.97	105.40
36	5	3030	G	N7-C8-N9	-6.43	109.89	113.10
36	1	365	A	N9-C4-C5	6.42	108.37	105.80
36	1	870	G	C4-C5-N7	-6.42	108.23	110.80
36	1	936	A	C4-C5-C6	-6.42	113.79	117.00
36	1	1107	C	C5-C4-N4	-6.42	115.70	120.20
36	1	2433	U	C2-N1-C1'	6.42	125.41	117.70
36	1	2962	U	N1-C2-O2	6.42	127.30	122.80
38	4	74	U	C5-C4-O4	-6.42	122.05	125.90
1	6	1512	G	C4-C5-N7	6.42	113.37	110.80
1	6	1727	G	C8-N9-C4	6.42	108.97	106.40
1	6	1777	G	N1-C6-O6	6.42	123.75	119.90
36	5	512	U	C2-N1-C1'	-6.42	109.99	117.70
36	5	523	A	N1-C2-N3	6.42	132.51	129.30
36	5	1608	C	C6-N1-C1'	-6.42	113.09	120.80
36	5	1917	C	O5'-P-OP1	6.42	118.41	110.70
36	5	2288	G	C6-C5-N7	-6.42	126.55	130.40
36	5	2855	U	C5-C6-N1	-6.42	119.49	122.70
36	1	360	G	C8-N9-C4	-6.42	103.83	106.40
36	1	1222	G	C8-N9-C4	6.42	108.97	106.40
36	1	2377	G	C6-N1-C2	-6.42	121.25	125.10
1	6	1140	G	N3-C4-N9	6.42	129.85	126.00
36	5	788	C	N1-C2-O2	-6.42	115.05	118.90
36	5	1284	C	C6-N1-C2	-6.42	117.73	120.30
1	2	1729	C	O5'-P-OP2	-6.42	99.92	105.70
36	1	664	U	N3-C4-O4	6.42	123.89	119.40
36	1	1204	A	N3-C4-N9	-6.42	122.26	127.40
36	1	1357	G	C6-C5-N7	-6.42	126.55	130.40
36	1	2634	U	C4-C5-C6	6.42	123.55	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2672	G	C5-C6-N1	6.42	114.71	111.50
1	6	78	A	C8-N9-C4	-6.42	103.23	105.80
1	6	781	U	C2-N1-C1'	6.42	125.41	117.70
1	6	1070	C	C6-N1-C2	6.42	122.87	120.30
1	6	1142	A	C5-C6-N1	6.42	120.91	117.70
36	5	586	C	C6-N1-C2	-6.42	117.73	120.30
36	5	1603	A	C8-N9-C1'	-6.42	116.14	127.70
36	5	1792	C	O5'-P-OP1	-6.42	99.92	105.70
36	5	2916	U	OP1-P-O3'	6.42	119.33	105.20
36	1	880	G	N3-C4-C5	6.42	131.81	128.60
36	1	2154	U	N1-C2-O2	-6.42	118.31	122.80
36	1	2659	G	C4-C5-N7	6.42	113.37	110.80
38	4	98	U	C4-C5-C6	6.42	123.55	119.70
1	6	913	G	C6-C5-N7	-6.42	126.55	130.40
36	5	420	G	C5-C6-N1	-6.42	108.29	111.50
36	5	2382	G	N9-C4-C5	6.42	107.97	105.40
36	5	2856	G	C4-C5-C6	6.42	122.65	118.80
36	5	3074	G	C8-N9-C4	6.42	108.97	106.40
37	7	13	A	C5-N7-C8	-6.42	100.69	103.90
38	8	15	G	N1-C2-N3	6.42	127.75	123.90
36	1	712	G	N7-C8-N9	-6.42	109.89	113.10
36	1	1140	G	C6-C5-N7	-6.42	126.55	130.40
36	1	1534	A	N1-C6-N6	6.42	122.45	118.60
36	1	2162	U	C2-N3-C4	-6.42	123.15	127.00
36	1	3079	U	C5-C4-O4	6.42	129.75	125.90
1	6	999	U	C5-C4-O4	-6.42	122.05	125.90
1	6	1127	G	N9-C4-C5	-6.42	102.83	105.40
1	6	1610	G	OP1-P-OP2	6.42	129.23	119.60
36	5	675	C	N3-C4-N4	6.42	122.49	118.00
36	5	1507	G	O4'-C1'-N9	-6.42	103.06	108.20
36	5	2355	G	C4-C5-N7	6.42	113.37	110.80
36	5	3187	A	N7-C8-N9	-6.42	110.59	113.80
36	5	3310	A	C6-C5-N7	-6.42	127.81	132.30
37	7	9	C	C5-C6-N1	6.42	124.21	121.00
37	7	85	G	C6-C5-N7	-6.42	126.55	130.40
36	1	650	C	O4'-C1'-N1	-6.42	103.07	108.20
36	1	1059	G	O5'-P-OP1	-6.42	99.93	105.70
1	6	1633	A	C2-N3-C4	-6.42	107.39	110.60
2	s0	146	LEU	CA-CB-CG	6.42	130.06	115.30
36	5	968	G	N9-C4-C5	-6.42	102.83	105.40
36	5	2285	C	N3-C4-N4	-6.42	113.51	118.00
36	5	2728	G	O4'-C1'-N9	6.42	113.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1436	A	O5'-P-OP1	-6.42	99.93	105.70
1	2	1550	A	C4-C5-N7	6.42	113.91	110.70
36	1	1377	G	C8-N9-C4	6.42	108.97	106.40
36	5	2242	A	N1-C2-N3	6.42	132.51	129.30
36	5	3053	G	C4-C5-N7	-6.42	108.23	110.80
36	1	663	C	N1-C2-O2	-6.41	115.05	118.90
36	1	675	C	N3-C2-O2	-6.41	117.41	121.90
36	1	965	A	C6-N1-C2	-6.41	114.75	118.60
36	1	1392	G	C6-C5-N7	6.41	134.25	130.40
36	1	2156	C	N3-C4-C5	6.41	124.47	121.90
36	1	2372	A	N3-C4-C5	-6.41	122.31	126.80
36	1	3110	C	O5'-P-OP2	6.41	118.40	110.70
1	6	72	A	C2-N3-C4	6.41	113.81	110.60
1	6	469	C	N1-C2-O2	6.41	122.75	118.90
1	6	761	G	C4-C5-N7	-6.41	108.23	110.80
1	6	943	C	C4-C5-C6	-6.41	114.19	117.40
36	5	974	G	C4-N9-C1'	6.41	134.84	126.50
36	5	3337	G	N3-C4-C5	-6.41	125.39	128.60
36	1	376	G	N9-C4-C5	6.41	107.97	105.40
36	1	645	A	N9-C4-C5	6.41	108.36	105.80
1	6	1753	A	N7-C8-N9	6.41	117.01	113.80
36	5	827	A	C5-C6-N1	6.41	120.91	117.70
1	2	1119	G	N1-C2-N3	6.41	127.75	123.90
35	SM	167	PRO	N-CA-CB	6.41	110.99	103.30
36	1	691	A	C5-C6-N1	-6.41	114.50	117.70
36	1	962	A	N9-C4-C5	6.41	108.36	105.80
36	1	1493	G	C6-C5-N7	6.41	134.25	130.40
36	1	1867	A	N1-C6-N6	6.41	122.45	118.60
36	1	2406	C	N3-C4-N4	6.41	122.49	118.00
37	3	82	G	C4-N9-C1'	6.41	134.84	126.50
1	6	340	U	N3-C4-C5	-6.41	110.75	114.60
1	6	1116	A	C6-C5-N7	-6.41	127.81	132.30
36	5	56	G	N1-C6-O6	-6.41	116.05	119.90
36	5	350	C	C2-N1-C1'	6.41	125.85	118.80
36	5	1658	G	C8-N9-C4	-6.41	103.84	106.40
36	5	2166	A	C8-N9-C4	6.41	108.36	105.80
36	5	2426	U	N1-C2-N3	6.41	118.75	114.90
36	5	3332	U	OP2-P-O3'	6.41	119.31	105.20
37	7	97	A	N3-C4-C5	-6.41	122.31	126.80
36	1	978	G	C4-N9-C1'	-6.41	118.17	126.50
36	1	2270	A	C4-C5-N7	6.41	113.90	110.70
36	5	1146	C	C5-C4-N4	-6.41	115.72	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1300	G	C4-C5-C6	6.41	122.64	118.80
36	5	1654	A	C4-C5-N7	-6.41	107.50	110.70
36	5	2149	A	N7-C8-N9	-6.41	110.59	113.80
36	5	3092	C	O5'-P-OP2	-6.41	99.93	105.70
1	2	1399	C	N1-C2-O2	6.41	122.74	118.90
1	2	1579	U	N3-C2-O2	-6.41	117.72	122.20
36	1	1716	U	P-O3'-C3'	6.41	127.39	119.70
1	6	1148	C	N3-C4-N4	-6.41	113.52	118.00
1	2	756	A	C8-N9-C4	-6.41	103.24	105.80
1	2	1011	G	N3-C4-C5	-6.41	125.40	128.60
36	1	674	G	OP1-P-OP2	-6.41	109.99	119.60
36	1	1377	G	C4-C5-N7	6.41	113.36	110.80
1	6	794	U	N1-C1'-C2'	6.41	122.33	114.00
1	6	1449	U	N3-C4-C5	-6.41	110.76	114.60
36	5	2621	G	N1-C6-O6	6.41	123.74	119.90
57	n1	151	LEU	CB-CG-CD2	-6.41	100.11	111.00
36	1	2381	G	N1-C2-N3	6.40	127.74	123.90
1	6	617	U	C6-N1-C2	-6.40	117.16	121.00
36	5	384	A	C6-C5-N7	-6.40	127.82	132.30
36	5	994	G	OP2-P-O3'	-6.40	91.11	105.20
36	5	3268	A	N1-C2-N3	6.40	132.50	129.30
36	5	3329	U	N3-C2-O2	-6.40	117.72	122.20
47	m0	90	ARG	NE-CZ-NH1	-6.40	117.10	120.30
1	2	344	A	C8-N9-C4	6.40	108.36	105.80
36	1	293	C	C4-C5-C6	6.40	120.60	117.40
36	1	577	C	C4-C5-C6	6.40	120.60	117.40
36	1	2285	C	C6-N1-C2	6.40	122.86	120.30
36	1	2517	U	OP1-P-O3'	6.40	119.29	105.20
1	6	808	U	N3-C4-C5	-6.40	110.76	114.60
36	5	2645	G	C6-N1-C2	-6.40	121.26	125.10
36	5	3390	G	C2-N3-C4	-6.40	108.70	111.90
37	7	39	C	C2-N1-C1'	6.40	125.84	118.80
37	7	73	C	O5'-P-OP1	-6.40	99.94	105.70
1	2	298	C	C4-C5-C6	-6.40	114.20	117.40
1	2	1245	G	N3-C4-C5	-6.40	125.40	128.60
36	1	573	C	C5-C6-N1	-6.40	117.80	121.00
36	1	637	C	C5'-C4'-O4'	-6.40	101.42	109.10
36	1	1499	C	O5'-P-OP1	6.40	118.38	110.70
36	1	2851	A	C5-C6-N1	-6.40	114.50	117.70
36	1	2941	A	O4'-C1'-N9	-6.40	103.08	108.20
36	1	3060	C	N3-C4-C5	6.40	124.46	121.90
37	3	55	A	C4-C5-C6	6.40	120.20	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	2	A	C8-N9-C4	-6.40	103.24	105.80
1	6	1000	C	C2-N3-C4	-6.40	116.70	119.90
36	5	1487	G	C4-N9-C1'	6.40	134.82	126.50
36	5	1882	G	C5-N7-C8	-6.40	101.10	104.30
36	5	2288	G	N9-C4-C5	-6.40	102.84	105.40
36	5	2818	U	OP2-P-O3'	6.40	119.28	105.20
36	5	2923	U	C5-C4-O4	-6.40	122.06	125.90
36	5	3011	A	N1-C6-N6	6.40	122.44	118.60
38	4	24	G	C4-C5-C6	6.40	122.64	118.80
1	6	1182	U	N3-C2-O2	-6.40	117.72	122.20
36	5	826	G	C8-N9-C4	6.40	108.96	106.40
36	5	3009	G	O4'-C1'-N9	6.40	113.32	108.20
38	8	1	A	N9-C4-C5	6.40	108.36	105.80
1	2	206	A	C2-N3-C4	-6.40	107.40	110.60
36	1	120	G	N3-C4-C5	-6.40	125.40	128.60
36	1	1121	U	C5-C6-N1	-6.40	119.50	122.70
36	1	1212	A	C5-C6-N1	6.40	120.90	117.70
1	6	389	G	N1-C2-N2	6.40	121.96	116.20
1	6	864	U	N1-C2-N3	6.40	118.74	114.90
1	6	1139	A	C4-C5-N7	6.40	113.90	110.70
1	6	1303	U	C2-N1-C1'	-6.40	110.02	117.70
1	6	1523	G	C4-N9-C1'	6.40	134.82	126.50
1	6	1655	A	N7-C8-N9	6.40	117.00	113.80
36	5	1848	G	C5-C6-O6	-6.40	124.76	128.60
1	2	994	G	C5-N7-C8	6.40	107.50	104.30
49	M3	172	LEU	CA-CB-CG	-6.40	100.59	115.30
36	5	423	A	N3-C4-C5	-6.40	122.32	126.80
36	5	658	G	O5'-P-OP1	-6.40	99.94	105.70
36	5	1443	G	N3-C4-N9	-6.40	122.16	126.00
36	5	2931	C	N1-C2-N3	-6.40	114.72	119.20
1	2	1600	A	C5-C6-N6	-6.39	118.58	123.70
36	1	416	A	N1-C6-N6	6.39	122.44	118.60
36	1	869	G	C8-N9-C4	6.39	108.96	106.40
36	1	1001	G	N9-C4-C5	-6.39	102.84	105.40
36	1	1349	G	N3-C4-N9	6.39	129.84	126.00
36	1	2843	U	N3-C2-O2	-6.39	117.72	122.20
38	4	26	U	C2-N3-C4	6.39	130.84	127.00
1	6	136	C	C2-N1-C1'	6.39	125.83	118.80
1	6	267	U	N3-C4-C5	-6.39	110.76	114.60
1	6	437	A	C8-N9-C4	6.39	108.36	105.80
1	6	583	C	C2-N3-C4	6.39	123.10	119.90
36	5	1939	G	N1-C2-N2	-6.39	110.44	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2978	U	OP1-P-O3'	6.39	119.27	105.20
1	2	827	C	C6-N1-C2	-6.39	117.74	120.30
36	1	513	G	O5'-P-OP1	6.39	118.37	110.70
36	1	1367	G	N3-C2-N2	-6.39	115.42	119.90
36	1	2904	U	C2-N3-C4	-6.39	123.17	127.00
36	1	3331	U	C5-C4-O4	6.39	129.74	125.90
38	4	55	U	N3-C4-C5	-6.39	110.77	114.60
36	5	1203	A	C5-C6-N6	-6.39	118.59	123.70
36	5	1933	A	N1-C2-N3	6.39	132.50	129.30
36	5	2115	G	O4'-C1'-N9	-6.39	103.09	108.20
36	5	2737	C	OP1-P-OP2	6.39	129.19	119.60
1	6	147	A	C5-N7-C8	-6.39	100.70	103.90
1	6	330	G	O5'-P-OP1	-6.39	99.95	105.70
1	6	440	U	C2-N1-C1'	-6.39	110.03	117.70
36	5	1510	G	C8-N9-C4	-6.39	103.84	106.40
36	5	2842	U	C5-C6-N1	6.39	125.90	122.70
36	5	2977	G	C4-C5-N7	6.39	113.36	110.80
36	5	3056	U	O5'-P-OP2	6.39	118.37	110.70
36	1	32	U	C5-C4-O4	-6.39	122.07	125.90
36	1	521	A	OP2-P-O3'	6.39	119.26	105.20
36	1	1320	C	N1-C2-N3	6.39	123.67	119.20
36	1	3354	U	O5'-P-OP2	-6.39	99.95	105.70
1	6	815	G	C5-N7-C8	-6.39	101.11	104.30
1	6	1168	U	N3-C4-O4	6.39	123.87	119.40
36	5	378	A	C2-N3-C4	-6.39	107.41	110.60
36	5	1376	C	C2-N3-C4	6.39	123.09	119.90
36	5	1446	A	OP1-P-O3'	6.39	119.26	105.20
36	5	1450	G	C5-N7-C8	-6.39	101.11	104.30
36	5	2374	C	C6-N1-C2	6.39	122.86	120.30
36	5	2891	U	N3-C2-O2	-6.39	117.73	122.20
36	5	3073	A	N1-C2-N3	6.39	132.50	129.30
1	2	163	G	C4-N9-C1'	6.39	134.80	126.50
1	2	1466	G	C4-C5-N7	6.39	113.36	110.80
1	2	1728	A	C5-C6-N1	6.39	120.89	117.70
36	1	585	A	O5'-P-OP2	-6.39	99.95	105.70
36	5	222	A	N1-C6-N6	-6.39	114.77	118.60
36	5	2186	U	C4-C5-C6	6.39	123.53	119.70
68	o2	128	LEU	CA-CB-CG	6.39	129.99	115.30
1	2	317	C	C2-N1-C1'	6.39	125.83	118.80
1	2	1774	G	C4-N9-C1'	6.39	134.80	126.50
36	1	342	A	C2-N3-C4	-6.39	107.41	110.60
36	1	1422	G	C4-C5-C6	6.39	122.63	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	54	A	O5'-P-OP1	-6.39	99.95	105.70
1	6	121	U	C2-N1-C1'	6.39	125.36	117.70
1	6	371	G	C8-N9-C1'	-6.39	118.70	127.00
36	5	364	G	N3-C2-N2	6.39	124.37	119.90
36	5	793	C	OP2-P-O3'	6.39	119.25	105.20
36	5	938	C	OP1-P-O3'	6.39	119.25	105.20
36	5	1486	G	C8-N9-C4	6.39	108.95	106.40
36	5	2239	G	N1-C6-O6	6.39	123.73	119.90
36	1	39	A	C4-C5-N7	6.38	113.89	110.70
36	1	1926	C	C6-N1-C2	-6.38	117.75	120.30
1	6	1280	C	C6-N1-C2	-6.38	117.75	120.30
1	6	1777	G	C8-N9-C4	-6.38	103.85	106.40
36	5	359	U	O5'-P-OP2	6.38	118.36	110.70
36	5	590	G	C6-C5-N7	6.38	134.23	130.40
36	5	1005	G	C5-C6-N1	-6.38	108.31	111.50
36	5	2846	U	C5-C6-N1	6.38	125.89	122.70
36	5	2916	U	N1-C2-N3	-6.38	111.07	114.90
36	5	3382	U	C5-C6-N1	6.38	125.89	122.70
36	1	1635	G	N3-C4-N9	6.38	129.83	126.00
36	1	3206	C	N3-C4-C5	-6.38	119.35	121.90
36	1	3253	G	N1-C2-N2	6.38	121.94	116.20
36	1	3375	A	N9-C4-C5	6.38	108.35	105.80
1	6	318	U	N1-C2-O2	-6.38	118.33	122.80
1	6	1027	A	C5-C6-N1	-6.38	114.51	117.70
36	5	1835	A	C8-N9-C4	-6.38	103.25	105.80
36	5	2925	C	OP1-P-OP2	-6.38	110.03	119.60
36	1	311	C	C5-C6-N1	6.38	124.19	121.00
36	1	797	U	C6-N1-C2	6.38	124.83	121.00
36	1	901	G	C2-N3-C4	6.38	115.09	111.90
36	1	2705	A	C5-C6-N1	6.38	120.89	117.70
36	1	2863	G	C5-C6-O6	6.38	132.43	128.60
1	6	275	C	C2-N1-C1'	6.38	125.82	118.80
1	6	394	C	N1-C2-O2	6.38	122.73	118.90
36	5	39	A	C2-N3-C4	-6.38	107.41	110.60
36	5	642	U	C5-C6-N1	-6.38	119.51	122.70
38	8	26	U	N1-C2-N3	6.38	118.73	114.90
36	1	516	A	OP2-P-O3'	6.38	119.24	105.20
36	1	1307	G	C8-N9-C1'	6.38	135.29	127.00
1	6	474	A	C4-C5-N7	6.38	113.89	110.70
1	6	1785	U	N3-C4-O4	6.38	123.87	119.40
36	5	499	G	O5'-P-OP1	-6.38	99.96	105.70
36	5	590	G	N1-C6-O6	-6.38	116.07	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2606	G	O4'-C1'-N9	-6.38	103.10	108.20
37	7	39	C	C6-N1-C1'	-6.38	113.14	120.80
36	1	407	A	N3-C4-C5	-6.38	122.33	126.80
36	1	1410	U	C6-N1-C2	-6.38	117.17	121.00
36	1	2713	U	C6-N1-C2	6.38	124.83	121.00
36	1	2958	A	N1-C6-N6	-6.38	114.77	118.60
36	5	423	A	C4-N9-C1'	6.38	137.78	126.30
36	5	744	A	N9-C4-C5	-6.38	103.25	105.80
36	5	1885	U	N1-C2-N3	6.38	118.73	114.90
36	1	585	A	N3-C4-C5	-6.38	122.34	126.80
36	1	589	A	C2-N3-C4	6.38	113.79	110.60
36	1	700	C	N3-C2-O2	6.38	126.36	121.90
36	1	1951	C	C2-N1-C1'	6.38	125.81	118.80
36	1	2419	A	O5'-P-OP1	-6.38	99.96	105.70
36	1	2956	A	N1-C2-N3	6.38	132.49	129.30
38	4	40	A	C5-C6-N1	6.38	120.89	117.70
38	4	104	A	C5-C6-N6	6.38	128.80	123.70
1	6	1655	A	C5-N7-C8	-6.38	100.71	103.90
36	5	639	G	C4-N9-C1'	6.38	134.79	126.50
36	1	28	C	C4-C5-C6	6.38	120.59	117.40
1	6	1116	A	C4-C5-C6	6.38	120.19	117.00
1	6	1158	C	C6-N1-C1'	-6.38	113.15	120.80
36	5	227	G	C5-C6-O6	6.38	132.43	128.60
36	5	635	G	OP1-P-OP2	6.38	129.16	119.60
36	5	902	G	N3-C4-N9	-6.38	122.17	126.00
36	1	655	C	N1-C2-O2	6.37	122.72	118.90
36	1	1084	A	C8-N9-C4	-6.37	103.25	105.80
36	1	2992	U	N3-C4-O4	6.37	123.86	119.40
36	1	3187	A	N1-C6-N6	-6.37	114.78	118.60
1	6	474	A	C5-C6-N6	-6.37	118.60	123.70
36	5	573	C	N3-C4-C5	6.37	124.45	121.90
36	5	806	A	N9-C4-C5	6.37	108.35	105.80
36	5	1495	U	C4-C5-C6	6.37	123.52	119.70
36	5	2355	G	N7-C8-N9	6.37	116.29	113.10
36	5	2957	G	C4-C5-N7	6.37	113.35	110.80
36	5	3264	G	C5-C6-O6	6.37	132.42	128.60
38	8	31	G	C5-N7-C8	6.37	107.49	104.30
1	2	111	U	C5-C6-N1	6.37	125.89	122.70
1	2	310	C	C4-C5-C6	6.37	120.59	117.40
1	2	1489	U	C6-N1-C2	-6.37	117.18	121.00
36	1	99	A	N1-C6-N6	-6.37	114.78	118.60
36	1	629	U	OP2-P-O3'	6.37	119.22	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	998	A	N1-C6-N6	6.37	122.42	118.60
36	1	1631	C	N3-C2-O2	-6.37	117.44	121.90
1	6	323	A	C8-N9-C4	-6.37	103.25	105.80
36	5	51	A	C4-C5-N7	6.37	113.89	110.70
36	5	647	A	N9-C4-C5	6.37	108.35	105.80
36	1	1096	U	P-O3'-C3'	6.37	127.34	119.70
36	5	242	C	C6-N1-C2	-6.37	117.75	120.30
36	5	851	C	C4-C5-C6	-6.37	114.22	117.40
36	5	2996	U	N1-C2-O2	6.37	127.26	122.80
36	5	3343	G	C4-C5-C6	6.37	122.62	118.80
36	1	631	U	C4-C5-C6	6.37	123.52	119.70
36	1	3267	A	N1-C2-N3	6.37	132.48	129.30
1	6	824	G	C4-N9-C1'	6.37	134.78	126.50
36	5	3218	A	C8-N9-C1'	-6.37	116.24	127.70
36	5	3332	U	C6-N1-C1'	6.37	130.12	121.20
38	8	1	A	C5-C6-N6	6.37	128.79	123.70
1	2	942	G	N1-C6-O6	-6.37	116.08	119.90
36	1	795	G	OP2-P-O3'	6.37	119.21	105.20
36	1	2663	G	N1-C6-O6	-6.37	116.08	119.90
37	3	82	G	C4-C5-C6	6.37	122.62	118.80
1	6	750	U	N3-C2-O2	6.37	126.66	122.20
36	5	2370	G	C5-C6-O6	6.37	132.42	128.60
36	5	2675	C	N1-C2-O2	6.37	122.72	118.90
36	5	3208	G	N3-C4-C5	-6.37	125.42	128.60
36	1	590	G	C2-N3-C4	-6.37	108.72	111.90
36	1	1149	G	N7-C8-N9	6.37	116.28	113.10
36	1	1907	C	C5-C4-N4	6.37	124.66	120.20
36	1	2655	U	N1-C2-O2	-6.37	118.34	122.80
36	1	3100	U	N3-C2-O2	6.37	126.66	122.20
1	6	98	U	N1-C2-N3	6.37	118.72	114.90
1	6	1663	G	C4-N9-C1'	-6.37	118.22	126.50
36	5	353	G	C8-N9-C1'	6.37	135.28	127.00
36	5	524	U	O5'-P-OP2	-6.37	99.97	105.70
36	5	920	A	C6-C5-N7	-6.37	127.84	132.30
36	5	1379	G	C4-C5-N7	6.37	113.35	110.80
36	5	2221	G	N3-C4-C5	6.37	131.78	128.60
36	1	166	C	N1-C2-O2	6.36	122.72	118.90
36	1	2427	U	C6-N1-C2	6.36	124.82	121.00
36	1	2825	C	C5-C4-N4	-6.36	115.75	120.20
36	1	3208	G	C8-N9-C1'	-6.36	118.73	127.00
36	1	3274	A	N7-C8-N9	6.36	116.98	113.80
1	6	957	G	N3-C2-N2	-6.36	115.44	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1244	A	C8-N9-C4	-6.36	103.25	105.80
36	5	132	C	C6-N1-C2	-6.36	117.75	120.30
36	5	367	A	N3-C4-N9	-6.36	122.31	127.40
36	5	894	G	N9-C4-C5	6.36	107.95	105.40
36	5	1843	C	C6-N1-C2	-6.36	117.75	120.30
36	5	1902	G	C4-C5-C6	6.36	122.62	118.80
36	5	1909	A	N1-C6-N6	-6.36	114.78	118.60
36	5	2892	A	N1-C2-N3	6.36	132.48	129.30
36	1	2804	A	N9-C4-C5	6.36	108.34	105.80
36	1	3125	U	C5-C4-O4	6.36	129.72	125.90
1	6	1768	G	C4-C5-N7	6.36	113.34	110.80
36	5	675	C	N1-C2-O2	-6.36	115.08	118.90
36	5	2161	G	C4-C5-N7	-6.36	108.25	110.80
1	2	316	A	C8-N9-C4	6.36	108.34	105.80
36	1	1296	C	O5'-P-OP2	-6.36	99.97	105.70
36	1	1551	C	N3-C2-O2	6.36	126.35	121.90
36	1	2407	C	N3-C2-O2	6.36	126.35	121.90
1	6	21	U	N3-C2-O2	-6.36	117.75	122.20
1	6	1758	U	C2-N1-C1'	6.36	125.33	117.70
1	6	1768	G	N3-C4-C5	6.36	131.78	128.60
36	5	425	G	C4-C5-N7	-6.36	108.25	110.80
36	5	3127	A	O5'-P-OP2	-6.36	99.97	105.70
38	8	55	U	C6-N1-C2	-6.36	117.18	121.00
36	1	76	G	N3-C2-N2	-6.36	115.45	119.90
36	1	851	C	C5-C6-N1	6.36	124.18	121.00
36	5	726	G	C6-C5-N7	-6.36	126.58	130.40
36	5	2258	U	N3-C2-O2	-6.36	117.75	122.20
37	7	82	G	C4-C5-N7	6.36	113.34	110.80
1	2	1006	C	C6-N1-C1'	-6.36	113.17	120.80
36	1	355	A	OP1-P-O3'	6.36	119.19	105.20
36	1	2425	G	N9-C4-C5	6.36	107.94	105.40
36	1	3263	G	C6-C5-N7	-6.36	126.58	130.40
38	4	41	A	N1-C2-N3	6.36	132.48	129.30
1	6	609	U	C4-C5-C6	6.36	123.52	119.70
1	6	1556	A	N3-C4-C5	6.36	131.25	126.80
36	5	536	U	N1-C2-O2	6.36	127.25	122.80
36	5	659	G	C5-N7-C8	-6.36	101.12	104.30
36	5	687	U	C5-C6-N1	-6.36	119.52	122.70
36	5	1396	C	O5'-P-OP2	-6.36	99.98	105.70
36	5	2823	G	N1-C6-O6	6.36	123.72	119.90
36	5	2865	U	N3-C4-O4	-6.36	114.95	119.40
36	5	3039	C	N1-C2-O2	-6.36	115.08	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3202	G	C4-C5-N7	-6.36	108.26	110.80
1	2	512	A	C8-N9-C4	-6.36	103.26	105.80
36	1	1929	G	C6-C5-N7	-6.36	126.59	130.40
36	1	2859	U	C5-C6-N1	-6.36	119.52	122.70
36	1	2963	C	N1-C2-N3	6.36	123.65	119.20
1	6	1145	U	N3-C4-C5	-6.36	110.79	114.60
36	5	1376	C	N3-C4-C5	-6.36	119.36	121.90
36	5	2284	C	C6-N1-C2	-6.36	117.76	120.30
36	5	2929	C	C4-C5-C6	-6.36	114.22	117.40
36	5	3308	C	N3-C4-N4	6.36	122.45	118.00
61	n5	133	LEU	CA-CB-CG	6.36	129.92	115.30
36	1	1773	C	C5-C6-N1	-6.35	117.82	121.00
36	1	2409	G	C6-N1-C2	-6.35	121.29	125.10
36	1	3368	U	C2-N1-C1'	-6.35	110.08	117.70
1	6	695	U	N1-C2-N3	6.35	118.71	114.90
36	5	213	A	C5-C6-N6	-6.35	118.62	123.70
36	5	1929	G	N3-C4-N9	-6.35	122.19	126.00
36	5	3216	G	C6-N1-C2	-6.35	121.29	125.10
1	2	1146	G	C5-C6-O6	-6.35	124.79	128.60
1	2	1299	G	C4-N9-C1'	6.35	134.76	126.50
36	1	656	A	C2-N3-C4	6.35	113.78	110.60
36	1	797	U	C2-N3-C4	-6.35	123.19	127.00
36	1	3318	G	N7-C8-N9	6.35	116.28	113.10
1	6	1659	A	N1-C2-N3	6.35	132.48	129.30
36	5	367	A	C5-C6-N6	6.35	128.78	123.70
36	5	594	U	C2-N1-C1'	6.35	125.32	117.70
36	5	1331	U	C2-N3-C4	-6.35	123.19	127.00
36	5	1599	G	N7-C8-N9	-6.35	109.92	113.10
36	5	1719	G	C2-N3-C4	-6.35	108.72	111.90
36	5	2610	G	C4-N9-C1'	-6.35	118.24	126.50
37	7	44	C	C5-C4-N4	-6.35	115.75	120.20
36	1	929	A	N9-C4-C5	-6.35	103.26	105.80
36	5	298	U	N3-C4-O4	6.35	123.85	119.40
36	5	954	U	C5-C6-N1	-6.35	119.52	122.70
36	5	1733	G	O5'-P-OP2	-6.35	99.98	105.70
36	5	3025	C	C2-N1-C1'	-6.35	111.81	118.80
36	5	3329	U	C5-C4-O4	6.35	129.71	125.90
1	2	1611	A	C2-N3-C4	-6.35	107.43	110.60
36	1	225	C	C6-N1-C2	-6.35	117.76	120.30
36	1	2352	A	N9-C4-C5	-6.35	103.26	105.80
36	5	1892	G	C6-C5-N7	-6.35	126.59	130.40
36	5	3195	U	O4'-C1'-N1	6.35	113.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	172	G	N3-C4-N9	6.35	129.81	126.00
36	1	404	G	C8-N9-C1'	-6.35	118.75	127.00
36	1	1138	U	N3-C2-O2	-6.35	117.76	122.20
36	1	1713	G	C6-C5-N7	6.35	134.21	130.40
36	1	2109	U	N3-C4-C5	-6.35	110.79	114.60
36	1	2877	G	C6-C5-N7	6.35	134.21	130.40
38	4	58	G	C8-N9-C4	-6.35	103.86	106.40
1	6	422	G	O5'-P-OP2	-6.35	99.99	105.70
1	6	1479	A	C5-C6-N6	-6.35	118.62	123.70
36	5	104	G	C5-C6-O6	-6.35	124.79	128.60
36	5	2373	A	N9-C4-C5	6.35	108.34	105.80
36	5	2957	G	C5-N7-C8	-6.35	101.13	104.30
36	1	1883	A	N7-C8-N9	-6.35	110.63	113.80
36	1	3210	A	C5-C6-N1	6.35	120.87	117.70
1	2	1600	A	C4-C5-N7	6.34	113.87	110.70
36	1	657	A	C4-C5-N7	6.34	113.87	110.70
36	1	1554	U	N1-C2-N3	-6.34	111.09	114.90
36	1	1592	G	N3-C4-N9	6.34	129.81	126.00
36	1	1911	A	O5'-P-OP2	-6.34	99.99	105.70
36	1	2287	C	N3-C2-O2	-6.34	117.46	121.90
36	1	2605	G	C6-C5-N7	-6.34	126.59	130.40
36	1	2789	U	N1-C2-N3	6.34	118.71	114.90
36	1	2814	G	C5-N7-C8	6.34	107.47	104.30
38	4	28	C	N3-C4-C5	-6.34	119.36	121.90
1	6	45	U	C5-C4-O4	-6.34	122.09	125.90
1	6	891	A	N1-C6-N6	6.34	122.41	118.60
1	6	1347	U	C5-C4-O4	6.34	129.71	125.90
1	6	1603	U	C5-C6-N1	6.34	125.87	122.70
36	5	1311	G	C5-C6-N1	-6.34	108.33	111.50
37	7	74	C	C6-N1-C2	6.34	122.84	120.30
36	1	132	C	N3-C4-C5	-6.34	119.36	121.90
36	1	2385	G	C8-N9-C4	6.34	108.94	106.40
36	5	935	U	C5-C4-O4	-6.34	122.09	125.90
36	5	2705	A	C6-N1-C2	-6.34	114.79	118.60
36	5	3269	U	N1-C2-N3	-6.34	111.09	114.90
36	1	1306	G	C5-C6-O6	-6.34	124.80	128.60
36	1	3267	A	C4-C5-C6	6.34	120.17	117.00
36	5	96	G	O4'-C1'-N9	-6.34	103.13	108.20
36	5	1532	C	N1-C2-O2	-6.34	115.09	118.90
36	5	1822	C	N3-C4-C5	-6.34	119.36	121.90
1	2	95	G	N1-C6-O6	-6.34	116.10	119.90
1	2	191	C	N1-C2-O2	-6.34	115.10	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	187	A	C5-C6-N6	6.34	128.77	123.70
36	1	1846	C	O5'-P-OP2	-6.34	100.00	105.70
36	1	2311	G	N1-C6-O6	6.34	123.70	119.90
36	1	3043	C	C5-C4-N4	-6.34	115.76	120.20
1	6	330	G	N3-C2-N2	-6.34	115.46	119.90
1	6	1148	C	N1-C2-N3	6.34	123.64	119.20
36	5	426	G	C5-N7-C8	6.34	107.47	104.30
36	5	568	G	N1-C6-O6	6.34	123.70	119.90
36	5	2126	A	C5-C6-N6	-6.34	118.63	123.70
36	5	2977	G	C5-C6-O6	-6.34	124.80	128.60
38	8	21	C	C4-C5-C6	-6.34	114.23	117.40
36	1	145	G	C8-N9-C4	-6.34	103.86	106.40
36	5	2185	G	N3-C2-N2	-6.34	115.46	119.90
36	5	2988	C	C2-N3-C4	-6.34	116.73	119.90
1	2	576	G	C5-C6-O6	-6.34	124.80	128.60
1	2	1786	G	N9-C4-C5	6.34	107.94	105.40
36	1	423	A	OP1-P-OP2	6.34	129.10	119.60
36	1	2355	G	C2-N3-C4	-6.34	108.73	111.90
36	1	3255	U	C2-N1-C1'	-6.34	110.10	117.70
1	6	1178	G	N3-C4-N9	6.34	129.80	126.00
1	6	1662	G	O5'-P-OP1	6.34	118.30	110.70
36	5	1852	G	C5-C6-N1	6.34	114.67	111.50
36	5	2386	A	C5-C6-N6	-6.34	118.63	123.70
36	5	3262	U	C6-N1-C2	-6.34	117.20	121.00
36	1	2300	G	N1-C2-N3	6.33	127.70	123.90
1	6	1440	C	C6-N1-C2	6.33	122.83	120.30
36	5	3295	A	C5-C6-N1	6.33	120.87	117.70
36	1	272	G	C2-N3-C4	-6.33	108.73	111.90
36	1	1359	C	N1-C2-O2	-6.33	115.10	118.90
36	1	1952	G	C8-N9-C4	-6.33	103.87	106.40
38	4	85	G	C8-N9-C4	-6.33	103.87	106.40
1	6	461	G	N3-C4-C5	-6.33	125.43	128.60
1	6	1023	A	N9-C4-C5	6.33	108.33	105.80
1	6	1425	A	C2-N3-C4	-6.33	107.43	110.60
1	6	1610	G	C2-N3-C4	6.33	115.07	111.90
1	6	1697	G	N3-C4-N9	6.33	129.80	126.00
36	5	1391	C	C2-N3-C4	-6.33	116.73	119.90
36	5	1514	G	N3-C2-N2	6.33	124.33	119.90
36	5	2922	G	OP1-P-OP2	-6.33	110.10	119.60
1	2	315	A	O4'-C1'-N9	6.33	113.27	108.20
36	1	19	U	N1-C2-O2	-6.33	118.37	122.80
36	1	67	A	C6-N1-C2	-6.33	114.80	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	326	U	O5'-P-OP2	-6.33	100.00	105.70
36	1	677	A	C2-N3-C4	6.33	113.77	110.60
36	1	1439	U	OP1-P-O3'	6.33	119.13	105.20
36	1	1887	A	C5-C6-N1	-6.33	114.53	117.70
1	6	462	G	O5'-P-OP1	-6.33	100.00	105.70
1	6	1774	G	N7-C8-N9	6.33	116.27	113.10
36	5	46	U	OP2-P-O3'	6.33	119.13	105.20
36	5	90	C	C6-N1-C2	-6.33	117.77	120.30
36	5	708	G	N3-C4-N9	6.33	129.80	126.00
36	5	1138	U	N1-C2-N3	6.33	118.70	114.90
36	5	1432	C	OP1-P-O3'	6.33	119.13	105.20
36	5	2116	G	N1-C6-O6	6.33	123.70	119.90
36	5	2275	A	N9-C4-C5	6.33	108.33	105.80
36	5	2319	U	N1-C2-O2	6.33	127.23	122.80
36	5	2772	C	P-O3'-C3'	6.33	127.30	119.70
36	5	3055	U	C5-C6-N1	-6.33	119.53	122.70
36	1	1552	G	C8-N9-C1'	-6.33	118.77	127.00
36	1	1928	G	N3-C4-N9	-6.33	122.20	126.00
38	4	81	U	N1-C2-O2	6.33	127.23	122.80
1	6	623	A	O5'-P-OP1	-6.33	100.00	105.70
36	5	990	U	C2-N1-C1'	6.33	125.30	117.70
36	5	3045	G	N9-C4-C5	6.33	107.93	105.40
70	o4	4	ARG	NE-CZ-NH2	-6.33	117.14	120.30
1	2	1786	G	N3-C4-N9	-6.33	122.20	126.00
36	1	311	C	C6-N1-C2	-6.33	117.77	120.30
36	1	397	A	N1-C2-N3	6.33	132.47	129.30
36	1	783	A	N1-C6-N6	6.33	122.40	118.60
36	1	939	U	C6-N1-C2	-6.33	117.20	121.00
36	1	2188	A	C5-C6-N1	6.33	120.86	117.70
36	1	2229	A	C4-C5-N7	6.33	113.86	110.70
36	1	2550	U	C6-N1-C2	-6.33	117.20	121.00
36	1	2881	C	N1-C2-N3	-6.33	114.77	119.20
36	5	64	G	N3-C4-C5	-6.33	125.44	128.60
36	5	360	G	N1-C2-N3	6.33	127.70	123.90
36	5	383	G	N1-C6-O6	-6.33	116.10	119.90
36	5	1485	G	C5-C6-O6	6.33	132.40	128.60
36	5	3143	C	OP1-P-O3'	6.33	119.12	105.20
36	1	2962	U	C4-C5-C6	-6.33	115.90	119.70
36	5	962	A	C8-N9-C4	-6.33	103.27	105.80
36	5	1443	G	OP1-P-O3'	6.33	119.12	105.20
36	5	2884	C	N1-C2-O2	-6.33	115.10	118.90
36	5	3303	G	C5-C6-O6	6.33	132.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	611	A	O5'-P-OP1	6.33	118.29	110.70
36	1	1519	G	N1-C6-O6	6.33	123.70	119.90
36	1	2820	A	C4-C5-C6	-6.33	113.84	117.00
1	6	286	C	N3-C4-C5	6.33	124.43	121.90
36	5	1011	A	N1-C2-N3	6.33	132.46	129.30
36	5	1101	G	C8-N9-C1'	-6.33	118.78	127.00
36	5	1899	G	N7-C8-N9	-6.33	109.94	113.10
36	5	2871	G	OP1-P-O3'	6.33	119.11	105.20
36	1	706	A	O5'-P-OP1	-6.32	100.01	105.70
36	1	2329	C	O5'-P-OP2	-6.32	100.01	105.70
36	1	2396	G	N9-C4-C5	6.32	107.93	105.40
36	1	2796	G	N1-C6-O6	-6.32	116.11	119.90
38	4	18	U	N1-C2-O2	6.32	127.23	122.80
36	5	413	U	N3-C2-O2	6.32	126.63	122.20
36	5	714	G	OP1-P-O3'	-6.32	91.29	105.20
36	5	2584	G	N3-C4-N9	6.32	129.79	126.00
36	5	3015	G	C2-N3-C4	-6.32	108.74	111.90
36	5	3088	G	C4-C5-C6	6.32	122.59	118.80
38	4	144	G	N7-C8-N9	-6.32	109.94	113.10
36	5	2727	A	OP1-P-OP2	6.32	129.08	119.60
36	5	2849	C	N1-C2-O2	-6.32	115.11	118.90
1	2	6	G	C8-N9-C4	-6.32	103.87	106.40
36	1	560	G	C2-N3-C4	6.32	115.06	111.90
36	1	2661	G	C6-C5-N7	-6.32	126.61	130.40
36	1	2816	G	C4-C5-C6	6.32	122.59	118.80
71	O5	21	LEU	CA-CB-CG	6.32	129.84	115.30
1	6	778	G	N1-C6-O6	-6.32	116.11	119.90
1	6	904	G	N1-C6-O6	-6.32	116.11	119.90
1	6	1304	G	N7-C8-N9	-6.32	109.94	113.10
36	5	1004	U	C5-C6-N1	6.32	125.86	122.70
36	5	1177	G	N1-C2-N3	6.32	127.69	123.90
36	5	1892	G	C2-N3-C4	-6.32	108.74	111.90
36	5	2416	U	N1-C2-N3	6.32	118.69	114.90
38	8	93	U	C2-N1-C1'	-6.32	110.12	117.70
36	1	2421	U	C2-N3-C4	-6.32	123.21	127.00
36	1	2640	A	O4'-C1'-N9	-6.32	103.14	108.20
36	1	2899	C	N3-C4-N4	-6.32	113.58	118.00
37	3	33	U	C5-C4-O4	-6.32	122.11	125.90
1	6	1600	A	C4-C5-N7	6.32	113.86	110.70
36	5	978	G	N3-C4-N9	-6.32	122.21	126.00
36	5	1177	G	N1-C6-O6	-6.32	116.11	119.90
36	5	1366	A	N1-C6-N6	6.32	122.39	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1548	C	C6-N1-C2	-6.32	117.77	120.30
36	5	2412	G	C4-N9-C1'	6.32	134.72	126.50
36	5	3330	A	C2-N3-C4	6.32	113.76	110.60
36	5	3362	A	O5'-P-OP2	-6.32	100.01	105.70
1	2	1435	G	N3-C4-N9	6.32	129.79	126.00
36	1	905	U	N1-C2-N3	6.32	118.69	114.90
36	1	1303	A	C8-N9-C4	6.32	108.33	105.80
36	1	3130	A	C8-N9-C4	-6.32	103.27	105.80
56	N0	82	ASP	CB-CG-OD2	-6.32	112.61	118.30
36	5	832	G	N3-C4-N9	6.32	129.79	126.00
36	5	2836	C	N3-C4-C5	-6.32	119.37	121.90
36	5	2931	C	C6-N1-C2	6.32	122.83	120.30
1	2	144	U	N3-C4-O4	-6.32	114.98	119.40
1	2	390	G	N3-C2-N2	-6.32	115.48	119.90
1	2	399	A	C4-C5-N7	-6.32	107.54	110.70
36	1	1576	G	N3-C4-C5	-6.32	125.44	128.60
36	1	1876	U	C6-N1-C2	-6.32	117.21	121.00
36	1	2272	G	N1-C2-N3	6.32	127.69	123.90
36	1	2285	C	C2-N1-C1'	-6.32	111.85	118.80
36	1	2833	A	N1-C2-N3	6.32	132.46	129.30
36	1	2863	G	N1-C2-N3	6.32	127.69	123.90
36	1	2958	A	N9-C4-C5	6.32	108.33	105.80
36	1	3007	U	C2-N3-C4	-6.32	123.21	127.00
36	1	3273	A	N9-C4-C5	6.32	108.33	105.80
1	6	417	A	N1-C2-N3	6.32	132.46	129.30
1	6	569	C	C2-N3-C4	-6.32	116.74	119.90
36	5	1099	A	C4-C5-N7	6.32	113.86	110.70
36	5	2662	G	N1-C2-N2	-6.32	110.52	116.20
37	7	29	C	C2-N3-C4	-6.32	116.74	119.90
40	l3	4	ARG	NE-CZ-NH1	6.32	123.46	120.30
1	2	574	G	C5-N7-C8	6.31	107.46	104.30
36	1	424	G	N3-C4-C5	-6.31	125.44	128.60
36	1	2375	G	O4'-C1'-N9	6.31	113.25	108.20
38	4	91	C	N3-C4-C5	-6.31	119.38	121.90
1	6	1498	G	C5-C6-O6	-6.31	124.81	128.60
36	5	606	C	N1-C2-O2	-6.31	115.11	118.90
36	5	1236	G	C8-N9-C1'	-6.31	118.79	127.00
1	2	1466	G	N7-C8-N9	6.31	116.26	113.10
36	1	189	G	O5'-P-OP2	-6.31	100.02	105.70
36	1	360	G	N9-C4-C5	6.31	107.92	105.40
36	1	2617	U	C6-N1-C2	-6.31	117.21	121.00
1	6	298	C	C5-C4-N4	-6.31	115.78	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	291	C	N3-C4-C5	6.31	124.42	121.90
36	5	433	A	C5-N7-C8	-6.31	100.74	103.90
36	5	1102	A	C8-N9-C4	-6.31	103.28	105.80
36	5	1860	G	N1-C6-O6	-6.31	116.11	119.90
1	2	767	U	C5-C4-O4	6.31	129.69	125.90
36	5	1748	G	C4-C5-N7	6.31	113.32	110.80
36	5	2325	G	C6-C5-N7	-6.31	126.61	130.40
36	5	2422	C	C2-N1-C1'	-6.31	111.86	118.80
36	5	2876	C	C6-N1-C2	-6.31	117.78	120.30
1	2	1673	G	N3-C4-C5	-6.31	125.44	128.60
36	1	696	C	C6-N1-C2	-6.31	117.78	120.30
36	1	2388	U	OP2-P-O3'	6.31	119.08	105.20
36	1	3092	C	O5'-P-OP1	-6.31	100.02	105.70
36	1	3269	U	N1-C2-N3	6.31	118.69	114.90
36	5	1926	C	N3-C4-C5	6.31	124.42	121.90
36	5	2812	C	N3-C4-C5	6.31	124.42	121.90
36	5	2830	G	C4-C5-N7	-6.31	108.28	110.80
36	5	2982	A	N1-C6-N6	6.31	122.39	118.60
68	o2	45	ARG	NE-CZ-NH1	-6.31	117.14	120.30
1	2	1177	C	N3-C4-N4	6.31	122.42	118.00
1	2	1255	G	N9-C4-C5	6.31	107.92	105.40
1	2	1655	A	N7-C8-N9	-6.31	110.65	113.80
36	1	705	A	N9-C4-C5	-6.31	103.28	105.80
36	1	1589	A	C6-N1-C2	-6.31	114.82	118.60
36	1	1758	G	O5'-P-OP2	-6.31	100.02	105.70
36	1	2332	A	C2-N3-C4	-6.31	107.45	110.60
36	1	2696	A	C4-C5-C6	-6.31	113.85	117.00
36	1	2891	U	N3-C4-O4	6.31	123.82	119.40
36	1	3060	C	N1-C2-O2	6.31	122.68	118.90
1	6	1491	U	OP1-P-O3'	6.31	119.08	105.20
1	6	1592	A	N3-C4-N9	-6.31	122.36	127.40
1	6	1780	G	C2-N3-C4	6.31	115.05	111.90
36	5	926	A	C5-C6-N6	6.31	128.75	123.70
36	5	1632	A	C4-C5-N7	-6.31	107.55	110.70
36	5	2105	G	N1-C6-O6	6.31	123.68	119.90
36	1	1413	G	N9-C4-C5	-6.31	102.88	105.40
36	5	1468	A	C6-N1-C2	-6.31	114.82	118.60
36	5	2666	C	C5-C4-N4	-6.31	115.79	120.20
36	5	3131	U	C6-N1-C2	6.31	124.78	121.00
1	2	399	A	N9-C4-C5	6.30	108.32	105.80
36	1	1955	U	C6-N1-C2	-6.30	117.22	121.00
36	1	2616	C	N3-C4-C5	-6.30	119.38	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3361	G	C5-C6-O6	6.30	132.38	128.60
38	4	32	C	N3-C2-O2	-6.30	117.49	121.90
1	6	194	U	C5-C6-N1	6.30	125.85	122.70
1	6	1293	U	C5-C6-N1	-6.30	119.55	122.70
36	5	39	A	N3-C4-N9	-6.30	122.36	127.40
36	5	82	C	C5-C6-N1	-6.30	117.85	121.00
36	5	842	G	C4-N9-C1'	-6.30	118.30	126.50
36	5	987	U	N3-C4-C5	-6.30	110.82	114.60
36	5	1190	A	C4-N9-C1'	6.30	137.65	126.30
36	5	1840	U	OP2-P-O3'	6.30	119.07	105.20
36	5	2718	U	N3-C2-O2	-6.30	117.79	122.20
36	1	23	A	C8-N9-C4	-6.30	103.28	105.80
36	1	590	G	C8-N9-C4	6.30	108.92	106.40
36	1	1307	G	C4-C5-N7	-6.30	108.28	110.80
36	5	1157	G	OP2-P-O3'	6.30	119.07	105.20
36	5	1375	G	C2-N3-C4	6.30	115.05	111.90
36	5	2221	G	N3-C4-N9	-6.30	122.22	126.00
36	5	3189	G	N1-C2-N3	6.30	127.68	123.90
1	2	1177	C	C5-C4-N4	-6.30	115.79	120.20
1	2	1336	A	C8-N9-C4	6.30	108.32	105.80
1	2	1795	U	N3-C2-O2	-6.30	117.79	122.20
36	1	404	G	C4-C5-C6	6.30	122.58	118.80
36	1	1477	A	C6-N1-C2	-6.30	114.82	118.60
36	1	1689	U	O5'-P-OP1	-6.30	100.03	105.70
36	1	1926	C	N3-C2-O2	-6.30	117.49	121.90
37	3	93	C	N3-C4-C5	6.30	124.42	121.90
1	6	621	A	C4-C5-C6	-6.30	113.85	117.00
1	6	1395	G	N1-C6-O6	6.30	123.68	119.90
36	5	226	C	N1-C2-O2	6.30	122.68	118.90
36	5	2884	C	C6-N1-C2	6.30	122.82	120.30
36	5	3229	G	C4-N9-C1'	6.30	134.69	126.50
36	5	3309	G	N3-C4-C5	-6.30	125.45	128.60
36	1	335	G	O5'-P-OP2	6.30	118.26	110.70
36	1	498	A	C5-C6-N6	-6.30	118.66	123.70
36	1	589	A	C5-N7-C8	6.30	107.05	103.90
36	1	616	G	N1-C6-O6	6.30	123.68	119.90
36	1	796	U	C5-C6-N1	6.30	125.85	122.70
36	1	834	U	C6-N1-C2	6.30	124.78	121.00
36	1	1095	U	O5'-P-OP2	-6.30	100.03	105.70
36	1	1865	A	C5-C6-N1	-6.30	114.55	117.70
36	1	2315	G	N1-C2-N3	6.30	127.68	123.90
1	6	163	G	N7-C8-N9	6.30	116.25	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	714	G	N1-C6-O6	6.30	123.68	119.90
36	5	2346	C	C2-N3-C4	6.30	123.05	119.90
36	5	2911	A	C8-N9-C4	-6.30	103.28	105.80
36	5	3053	G	O5'-P-OP2	6.30	118.26	110.70
36	5	3173	G	N1-C6-O6	-6.30	116.12	119.90
36	5	3220	G	N9-C4-C5	6.30	107.92	105.40
36	1	686	G	N9-C4-C5	6.30	107.92	105.40
36	1	1269	U	N3-C2-O2	-6.30	117.79	122.20
36	1	2860	U	N1-C2-N3	-6.30	111.12	114.90
1	6	1517	U	N1-C2-N3	6.30	118.68	114.90
36	5	1329	U	N1-C1'-C2'	-6.30	105.07	112.00
36	5	2702	A	N7-C8-N9	6.30	116.95	113.80
36	1	25	U	N3-C2-O2	6.30	126.61	122.20
36	1	62	A	OP2-P-O3'	6.30	119.05	105.20
36	1	416	A	N1-C2-N3	6.30	132.45	129.30
36	1	793	C	N1-C2-N3	6.30	123.61	119.20
36	1	1046	A	N1-C6-N6	6.30	122.38	118.60
36	1	1297	C	O5'-P-OP1	-6.30	100.03	105.70
36	1	1635	G	C4-N9-C1'	6.30	134.68	126.50
36	1	2941	A	C5-C6-N6	-6.30	118.66	123.70
1	6	794	U	C6-N1-C1'	-6.30	112.39	121.20
1	6	1354	G	C4-C5-N7	6.30	113.32	110.80
1	6	1642	G	C4-C5-N7	6.30	113.32	110.80
36	5	1589	A	N3-C4-N9	6.30	132.44	127.40
36	5	2205	U	C2-N1-C1'	6.30	125.26	117.70
36	5	3129	A	C5-C6-N1	-6.30	114.55	117.70
37	7	52	G	O5'-P-OP1	-6.30	100.03	105.70
36	1	3087	A	C6-N1-C2	-6.29	114.82	118.60
1	6	1527	C	C5-C6-N1	-6.29	117.85	121.00
36	5	43	A	C5-N7-C8	-6.29	100.75	103.90
36	5	500	C	N3-C4-C5	-6.29	119.38	121.90
36	5	3117	C	N1-C2-O2	6.29	122.68	118.90
36	5	3303	G	C8-N9-C4	-6.29	103.88	106.40
36	1	375	A	N9-C4-C5	-6.29	103.28	105.80
36	1	608	A	C8-N9-C1'	-6.29	116.37	127.70
36	1	803	C	C2-N1-C1'	6.29	125.72	118.80
36	1	1043	C	C2-N3-C4	-6.29	116.75	119.90
36	1	2172	A	C5-N7-C8	-6.29	100.75	103.90
36	1	2365	C	C6-N1-C2	6.29	122.82	120.30
36	1	2410	U	OP2-P-O3'	6.29	119.05	105.20
1	6	1028	C	C4-C5-C6	6.29	120.55	117.40
1	6	1183	A	O5'-P-OP1	-6.29	100.03	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1546	G	N1-C2-N3	6.29	127.68	123.90
36	5	129	U	N1-C2-N3	6.29	118.68	114.90
36	5	1163	A	C5-C6-N6	6.29	128.74	123.70
36	5	1906	G	C6-N1-C2	-6.29	121.32	125.10
36	1	659	G	O5'-P-OP2	-6.29	100.04	105.70
36	1	2549	G	C4-C5-N7	-6.29	108.28	110.80
36	1	2880	U	O4'-C1'-N1	6.29	113.23	108.20
36	1	2901	G	C5-C6-O6	6.29	132.38	128.60
1	6	1106	U	C6-N1-C2	-6.29	117.22	121.00
36	5	2387	A	C5-N7-C8	-6.29	100.75	103.90
36	1	2566	C	C6-N1-C2	-6.29	117.78	120.30
36	5	2335	G	C8-N9-C1'	-6.29	118.82	127.00
36	5	3172	A	O5'-P-OP2	-6.29	100.04	105.70
1	2	1771	U	C6-N1-C2	6.29	124.77	121.00
36	1	880	G	C8-N9-C4	6.29	108.92	106.40
36	1	1334	U	N1-C2-O2	-6.29	118.40	122.80
36	1	2280	A	C6-C5-N7	-6.29	127.90	132.30
1	6	1150	G	C4-C5-N7	6.29	113.32	110.80
1	6	1564	U	C6-N1-C2	6.29	124.77	121.00
36	5	229	G	C8-N9-C4	-6.29	103.89	106.40
36	5	421	G	N1-C2-N2	-6.29	110.54	116.20
36	5	580	C	C4-C5-C6	6.29	120.54	117.40
36	5	644	G	C8-N9-C4	-6.29	103.89	106.40
36	5	2365	C	C5-C6-N1	-6.29	117.86	121.00
36	5	2670	G	N3-C2-N2	-6.29	115.50	119.90
1	2	1210	C	C5-C6-N1	6.29	124.14	121.00
36	1	3066	U	C5-C6-N1	-6.29	119.56	122.70
36	1	3117	C	N3-C2-O2	-6.29	117.50	121.90
36	5	363	G	C4-C5-C6	6.29	122.57	118.80
36	5	1201	C	C5-C6-N1	6.29	124.14	121.00
36	5	3062	G	C4-C5-N7	6.29	113.31	110.80
36	5	3289	G	N9-C1'-C2'	-6.29	105.08	112.00
36	1	1095	U	O4'-C1'-N1	-6.29	103.17	108.20
36	1	2182	A	C6-C5-N7	-6.29	127.90	132.30
1	6	338	C	N3-C4-C5	-6.29	119.39	121.90
36	5	356	C	C5-C6-N1	-6.29	117.86	121.00
36	5	630	A	C5-C6-N1	-6.29	114.56	117.70
36	5	808	A	C2-N3-C4	6.29	113.74	110.60
36	5	2835	U	N3-C4-C5	-6.29	110.83	114.60
36	5	3029	A	C2-N3-C4	-6.29	107.46	110.60
36	1	81	C	C6-N1-C2	-6.28	117.79	120.30
36	1	1201	C	C6-N1-C2	6.28	122.81	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2122	G	C8-N9-C4	-6.28	103.89	106.40
36	1	2177	G	N1-C6-O6	-6.28	116.13	119.90
36	1	2609	A	OP1-P-O3'	6.28	119.02	105.20
36	1	3190	C	N3-C4-C5	6.28	124.41	121.90
36	1	3197	G	C5-C6-O6	-6.28	124.83	128.60
1	6	308	C	O4'-C1'-N1	-6.28	103.17	108.20
1	6	392	G	N3-C2-N2	-6.28	115.50	119.90
36	5	864	G	OP1-P-OP2	-6.28	110.17	119.60
36	5	1480	G	N9-C4-C5	-6.28	102.89	105.40
36	5	2279	A	N9-C4-C5	-6.28	103.29	105.80
37	7	80	G	C5-N7-C8	6.28	107.44	104.30
1	2	1665	U	N1-C2-N3	6.28	118.67	114.90
36	1	1180	A	C4-N9-C1'	-6.28	114.99	126.30
36	1	2192	C	N1-C2-N3	6.28	123.60	119.20
36	1	2856	G	C2-N3-C4	-6.28	108.76	111.90
36	1	3054	U	C6-N1-C2	-6.28	117.23	121.00
36	1	3368	U	C5-C4-O4	6.28	129.67	125.90
1	6	1565	C	N3-C4-C5	6.28	124.41	121.90
36	5	1916	U	N3-C2-O2	-6.28	117.80	122.20
36	5	2549	G	C4-C5-C6	6.28	122.57	118.80
36	5	2796	G	C8-N9-C1'	-6.28	118.83	127.00
36	5	3383	G	C6-C5-N7	-6.28	126.63	130.40
1	2	620	A	C5-C6-N6	6.28	128.72	123.70
1	2	1008	G	N1-C6-O6	6.28	123.67	119.90
36	1	419	G	N1-C2-N3	6.28	127.67	123.90
36	1	616	G	C8-N9-C4	6.28	108.91	106.40
36	1	2360	C	OP2-P-O3'	6.28	119.02	105.20
36	1	2944	U	OP1-P-OP2	-6.28	110.18	119.60
36	1	3309	G	O5'-P-OP1	-6.28	100.05	105.70
1	6	1148	C	C5-C4-N4	6.28	124.60	120.20
1	6	1524	A	N1-C2-N3	6.28	132.44	129.30
36	5	376	G	N3-C4-C5	-6.28	125.46	128.60
36	5	1138	U	C5-C4-O4	6.28	129.67	125.90
36	5	1772	U	C5-C6-N1	-6.28	119.56	122.70
36	5	2371	G	C8-N9-C1'	-6.28	118.84	127.00
36	5	2399	A	C5-N7-C8	-6.28	100.76	103.90
36	5	2611	U	OP2-P-O3'	6.28	119.02	105.20
36	5	2613	U	N3-C4-C5	-6.28	110.83	114.60
36	5	2865	U	OP2-P-O3'	6.28	119.02	105.20
37	7	99	G	N3-C2-N2	-6.28	115.50	119.90
36	1	1514	G	N7-C8-N9	6.28	116.24	113.10
36	5	2309	A	O5'-P-OP2	-6.28	100.05	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2644	C	N1-C2-N3	6.28	123.59	119.20
36	5	2687	G	C6-C5-N7	-6.28	126.63	130.40
36	5	3335	A	O4'-C1'-N9	-6.28	103.18	108.20
36	1	219	A	O5'-P-OP1	-6.28	100.05	105.70
36	1	615	U	C4-C5-C6	6.28	123.47	119.70
36	1	1437	C	N3-C2-O2	-6.28	117.51	121.90
36	1	2121	G	C4-N9-C1'	-6.28	118.34	126.50
36	1	2207	A	O4'-C1'-N9	6.28	113.22	108.20
36	1	2874	G	C4-C5-N7	-6.28	108.29	110.80
36	1	2910	A	N1-C2-N3	6.28	132.44	129.30
36	5	787	G	C4-C5-N7	-6.28	108.29	110.80
36	5	857	G	N7-C8-N9	6.28	116.24	113.10
36	5	1429	G	C4-N9-C1'	6.28	134.66	126.50
36	5	1737	U	N3-C2-O2	6.28	126.59	122.20
36	5	1922	A	O5'-P-OP2	-6.28	100.05	105.70
36	5	2433	U	N1-C2-O2	6.28	127.19	122.80
36	5	2669	G	O5'-P-OP1	6.28	118.23	110.70
37	7	42	A	O5'-P-OP2	6.28	118.23	110.70
36	1	1101	G	N9-C4-C5	6.28	107.91	105.40
36	1	1758	G	N1-C6-O6	-6.28	116.13	119.90
36	1	2313	A	OP1-P-OP2	-6.28	110.19	119.60
36	1	3100	U	N3-C4-C5	6.28	118.36	114.60
1	6	1027	A	C5-C6-N6	6.28	128.72	123.70
1	6	1698	G	N1-C6-O6	-6.28	116.14	119.90
36	5	803	C	C6-N1-C1'	-6.28	113.27	120.80
36	5	804	C	C5-C4-N4	-6.28	115.81	120.20
36	5	1133	A	C8-N9-C4	-6.28	103.29	105.80
36	5	1241	U	C5-C6-N1	6.28	125.84	122.70
36	5	2140	U	N3-C4-C5	-6.28	110.83	114.60
36	5	2316	G	N1-C2-N3	6.28	127.67	123.90
36	5	2377	G	C2-N3-C4	6.28	115.04	111.90
36	5	2640	A	C8-N9-C4	6.28	108.31	105.80
1	6	1150	G	C6-C5-N7	-6.27	126.64	130.40
36	1	413	U	C2-N3-C4	-6.27	123.24	127.00
36	1	807	A	OP1-P-O3'	6.27	119.00	105.20
36	1	1466	G	N9-C4-C5	-6.27	102.89	105.40
1	6	1748	G	OP2-P-O3'	6.27	119.00	105.20
36	5	105	C	C6-N1-C2	6.27	122.81	120.30
36	5	405	U	C4-C5-C6	-6.27	115.94	119.70
36	5	2815	G	C5-C6-N1	-6.27	108.36	111.50
36	1	1058	U	N1-C2-O2	6.27	127.19	122.80
36	1	1134	G	C5-N7-C8	6.27	107.44	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1420	C	N1-C2-N3	6.27	123.59	119.20
36	1	2145	A	C6-N1-C2	-6.27	114.84	118.60
1	6	1278	G	N7-C8-N9	6.27	116.24	113.10
36	5	1046	A	N1-C6-N6	-6.27	114.84	118.60
36	5	2689	A	C2-N3-C4	-6.27	107.47	110.60
36	5	3022	G	C8-N9-C4	6.27	108.91	106.40
1	2	50	C	N3-C2-O2	-6.27	117.51	121.90
36	1	648	C	C4-C5-C6	6.27	120.53	117.40
36	1	2287	C	C2-N1-C1'	6.27	125.70	118.80
1	6	140	A	N9-C4-C5	6.27	108.31	105.80
36	5	202	G	N1-C6-O6	-6.27	116.14	119.90
36	5	902	G	C8-N9-C1'	6.27	135.15	127.00
36	5	1345	G	N1-C6-O6	6.27	123.66	119.90
36	5	2515	A	N1-C6-N6	-6.27	114.84	118.60
36	5	3132	C	C2-N3-C4	-6.27	116.77	119.90
37	7	28	C	C5-C6-N1	-6.27	117.87	121.00
44	17	179	LEU	CA-CB-CG	6.27	129.72	115.30
1	2	1140	G	C6-C5-N7	-6.27	126.64	130.40
36	1	389	A	C2-N3-C4	-6.27	107.47	110.60
36	1	521	A	O5'-P-OP1	-6.27	100.06	105.70
36	1	1528	G	C8-N9-C4	-6.27	103.89	106.40
36	1	2384	A	C4-C5-N7	-6.27	107.57	110.70
36	1	2399	A	N3-C4-N9	6.27	132.41	127.40
36	1	2410	U	N1-C2-O2	-6.27	118.41	122.80
1	6	616	G	C5-N7-C8	-6.27	101.17	104.30
1	6	1504	G	C5-C6-N1	-6.27	108.37	111.50
36	5	497	C	N1-C2-O2	-6.27	115.14	118.90
36	5	676	G	N7-C8-N9	6.27	116.23	113.10
36	5	891	G	C5-N7-C8	-6.27	101.17	104.30
36	5	2105	G	O5'-P-OP1	-6.27	100.06	105.70
36	1	1516	C	N3-C4-C5	-6.27	119.39	121.90
36	5	819	U	N3-C4-C5	-6.27	110.84	114.60
36	5	2277	C	C2-N3-C4	-6.27	116.77	119.90
36	5	2717	U	N1-C2-O2	-6.27	118.41	122.80
36	1	905	U	N3-C4-C5	-6.26	110.84	114.60
36	1	2215	A	C8-N9-C4	6.26	108.31	105.80
36	1	3271	G	N3-C4-C5	-6.26	125.47	128.60
1	6	1013	A	C5-C6-N1	6.26	120.83	117.70
1	6	1113	A	C5-C6-N1	6.26	120.83	117.70
1	6	1663	G	C8-N9-C4	6.26	108.91	106.40
36	5	1333	C	C4-C5-C6	6.26	120.53	117.40
36	5	1343	A	C2-N3-C4	-6.26	107.47	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2246	G	C6-C5-N7	-6.26	126.64	130.40
36	5	2897	A	C4-N9-C1'	6.26	137.57	126.30
36	1	34	A	C5-N7-C8	-6.26	100.77	103.90
1	2	734	A	OP1-P-O3'	6.26	118.98	105.20
1	2	1050	G	N3-C4-C5	6.26	131.73	128.60
1	2	1419	G	N1-C6-O6	6.26	123.66	119.90
36	1	854	G	N3-C2-N2	-6.26	115.52	119.90
36	1	936	A	N1-C6-N6	-6.26	114.84	118.60
36	1	977	C	C6-N1-C2	-6.26	117.80	120.30
36	1	1432	C	OP2-P-O3'	6.26	118.97	105.20
36	1	2908	G	C4-C5-N7	6.26	113.30	110.80
1	6	400	A	OP2-P-O3'	6.26	118.98	105.20
36	5	297	G	C6-C5-N7	-6.26	126.64	130.40
36	5	2157	G	N9-C4-C5	-6.26	102.89	105.40
36	5	2371	G	C6-C5-N7	-6.26	126.64	130.40
1	2	444	C	C6-N1-C2	6.26	122.80	120.30
36	1	2799	A	N9-C4-C5	6.26	108.30	105.80
36	1	2927	C	C2-N1-C1'	-6.26	111.92	118.80
38	4	53	A	N1-C2-N3	6.26	132.43	129.30
1	6	577	G	C8-N9-C4	-6.26	103.90	106.40
1	6	1491	U	C5-C6-N1	6.26	125.83	122.70
21	c9	68	ARG	NE-CZ-NH1	-6.26	117.17	120.30
36	5	1321	G	C6-C5-N7	-6.26	126.64	130.40
36	5	2427	U	C2-N1-C1'	-6.26	110.19	117.70
36	5	2762	A	C2-N3-C4	-6.26	107.47	110.60
1	2	1132	A	N1-C6-N6	-6.26	114.84	118.60
36	1	1416	C	N1-C2-O2	-6.26	115.14	118.90
36	1	1796	G	O5'-P-OP2	-6.26	100.07	105.70
36	5	1172	G	C8-N9-C1'	-6.26	118.86	127.00
36	5	1347	U	N1-C2-O2	-6.26	118.42	122.80
36	5	2242	A	C6-N1-C2	-6.26	114.84	118.60
1	2	734	A	P-O3'-C3'	6.26	127.21	119.70
36	1	1126	G	C6-C5-N7	-6.26	126.65	130.40
36	1	2823	G	OP2-P-O3'	-6.26	91.43	105.20
36	5	1162	U	C2-N3-C4	-6.26	123.25	127.00
36	5	1766	G	C4-N9-C1'	6.26	134.63	126.50
36	5	2838	A	O5'-P-OP1	6.26	118.21	110.70
36	5	3045	G	O5'-P-OP1	-6.26	100.07	105.70
1	2	1324	G	N3-C4-N9	-6.25	122.25	126.00
36	1	884	A	C2-N3-C4	6.25	113.73	110.60
36	1	2799	A	O5'-P-OP2	-6.25	100.07	105.70
36	1	2909	U	C5-C6-N1	-6.25	119.57	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	320	U	C5-C4-O4	6.25	129.65	125.90
1	6	1770	U	N1-C2-N3	-6.25	111.15	114.90
36	5	1471	U	C5-C6-N1	-6.25	119.57	122.70
36	5	2170	U	N1-C2-N3	6.25	118.65	114.90
36	5	2900	A	C2-N3-C4	-6.25	107.47	110.60
1	2	376	C	C4-C5-C6	6.25	120.53	117.40
1	2	1591	C	C6-N1-C2	-6.25	117.80	120.30
36	1	431	U	OP1-P-OP2	6.25	128.98	119.60
36	1	609	G	C4-N9-C1'	6.25	134.63	126.50
36	1	934	G	C4-C5-N7	6.25	113.30	110.80
36	1	1344	G	N3-C4-C5	6.25	131.73	128.60
36	1	1554	U	N3-C4-O4	6.25	123.78	119.40
36	1	2753	G	C5-C6-O6	6.25	132.35	128.60
1	6	103	A	C4-C5-N7	6.25	113.83	110.70
1	6	1789	G	C4-N9-C1'	6.25	134.63	126.50
36	5	2395	G	O5'-P-OP2	-6.25	100.07	105.70
36	5	2825	C	C5-C6-N1	6.25	124.13	121.00
36	5	3342	A	C5-C6-N6	-6.25	118.70	123.70
38	8	107	G	C8-N9-C4	-6.25	103.90	106.40
36	1	1165	A	C8-N9-C4	-6.25	103.30	105.80
36	1	2516	U	N1-C2-N3	6.25	118.65	114.90
36	1	2549	G	N1-C6-O6	-6.25	116.15	119.90
36	1	2996	U	N1-C2-N3	-6.25	111.15	114.90
36	1	3050	U	OP1-P-O3'	6.25	118.95	105.20
36	1	3063	C	N3-C2-O2	-6.25	117.52	121.90
1	6	48	G	N9-C4-C5	6.25	107.90	105.40
1	6	1601	G	N1-C6-O6	-6.25	116.15	119.90
36	5	566	G	N1-C2-N2	-6.25	110.57	116.20
36	5	1305	U	C6-N1-C2	6.25	124.75	121.00
36	5	1365	G	C2-N3-C4	-6.25	108.77	111.90
36	5	2420	C	C6-N1-C2	-6.25	117.80	120.30
36	5	3128	G	N1-C2-N3	6.25	127.65	123.90
36	5	3380	U	C5-C4-O4	6.25	129.65	125.90
36	1	400	G	N1-C6-O6	-6.25	116.15	119.90
36	1	415	G	C2-N3-C4	-6.25	108.78	111.90
36	1	552	G	C8-N9-C4	-6.25	103.90	106.40
36	1	780	A	C4-C5-N7	-6.25	107.58	110.70
36	1	2694	A	N1-C6-N6	-6.25	114.85	118.60
36	1	2813	A	C6-N1-C2	-6.25	114.85	118.60
36	1	3216	G	C6-C5-N7	-6.25	126.65	130.40
1	6	389	G	C5-N7-C8	-6.25	101.17	104.30
36	5	707	U	C5-C4-O4	6.25	129.65	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1332	A	C6-C5-N7	-6.25	127.92	132.30
36	5	1375	G	C4-N9-C1'	6.25	134.62	126.50
36	5	2126	A	N3-C4-N9	6.25	132.40	127.40
36	5	3065	G	N3-C4-C5	6.25	131.72	128.60
36	5	3127	A	C8-N9-C4	-6.25	103.30	105.80
1	2	1737	G	C5-N7-C8	-6.25	101.18	104.30
36	1	1399	A	C2-N3-C4	-6.25	107.48	110.60
36	1	1715	A	N1-C6-N6	6.25	122.35	118.60
36	1	2648	G	C5-C6-N1	6.25	114.62	111.50
1	6	1180	C	C6-N1-C2	-6.25	117.80	120.30
1	6	1245	G	C8-N9-C4	-6.25	103.90	106.40
36	5	1332	A	C4-C5-C6	6.25	120.12	117.00
36	5	1456	A	OP2-P-O3'	6.25	118.95	105.20
36	5	2434	U	N3-C2-O2	-6.25	117.83	122.20
37	7	53	U	N1-C2-O2	-6.25	118.43	122.80
40	l3	342	LEU	CA-CB-CG	-6.25	100.93	115.30
36	1	283	G	C4-C5-N7	6.25	113.30	110.80
36	1	912	G	C4-C5-N7	-6.25	108.30	110.80
36	1	1316	C	C2-N1-C1'	6.25	125.67	118.80
36	1	2212	C	N3-C4-C5	6.25	124.40	121.90
36	1	2807	U	C6-N1-C2	-6.25	117.25	121.00
36	1	2895	G	C4-C5-C6	6.25	122.55	118.80
36	1	3050	U	C6-N1-C2	-6.25	117.25	121.00
38	4	145	U	C5-C6-N1	-6.25	119.58	122.70
1	6	1286	U	C4-C5-C6	6.25	123.45	119.70
36	5	94	G	C4-N9-C1'	-6.25	118.38	126.50
36	5	2111	G	N1-C6-O6	6.25	123.65	119.90
36	5	2863	G	C8-N9-C1'	6.25	135.12	127.00
36	5	3157	U	C2-N1-C1'	6.25	125.20	117.70
36	5	3157	U	N1-C2-O2	6.25	127.17	122.80
36	1	359	U	N1-C2-N3	6.25	118.65	114.90
36	1	1003	A	C8-N9-C4	-6.25	103.30	105.80
36	1	2380	U	C2-N1-C1'	-6.25	110.21	117.70
73	O7	65	ARG	NE-CZ-NH1	6.25	123.42	120.30
36	5	798	G	C4-C5-C6	6.25	122.55	118.80
36	5	994	G	C4-N9-C1'	6.25	134.62	126.50
36	5	1537	A	C6-C5-N7	-6.25	127.93	132.30
36	5	2702	A	C4-C5-C6	6.25	120.12	117.00
36	5	3054	U	C5-C4-O4	6.25	129.65	125.90
36	5	3342	A	N1-C6-N6	6.25	122.35	118.60
36	1	350	C	N3-C4-C5	-6.24	119.40	121.90
36	1	911	C	C5-C6-N1	-6.24	117.88	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	964	G	N7-C8-N9	6.24	116.22	113.10
36	1	1346	G	OP2-P-O3'	6.24	118.94	105.20
36	1	2601	A	N9-C4-C5	6.24	108.30	105.80
36	5	894	G	N3-C4-N9	-6.24	122.25	126.00
36	5	907	G	N7-C8-N9	-6.24	109.98	113.10
36	5	1535	A	O5'-P-OP1	-6.24	100.08	105.70
36	5	2370	G	N3-C4-N9	-6.24	122.25	126.00
36	5	3203	U	N3-C4-O4	-6.24	115.03	119.40
36	5	3324	C	C4-C5-C6	6.24	120.52	117.40
1	2	115	G	N9-C4-C5	-6.24	102.90	105.40
36	5	364	G	C6-C5-N7	-6.24	126.66	130.40
36	5	1168	U	C4-C5-C6	-6.24	115.95	119.70
1	2	1375	A	C8-N9-C4	6.24	108.30	105.80
36	1	120	G	N3-C4-N9	6.24	129.74	126.00
36	1	676	G	C6-C5-N7	-6.24	126.66	130.40
36	1	1157	G	N7-C8-N9	6.24	116.22	113.10
36	1	2926	A	N1-C2-N3	6.24	132.42	129.30
1	6	1303	U	N1-C2-O2	-6.24	118.43	122.80
36	5	590	G	N3-C4-N9	-6.24	122.26	126.00
36	5	961	C	C2-N1-C1'	6.24	125.66	118.80
36	5	3134	A	N1-C2-N3	6.24	132.42	129.30
36	5	3309	G	C4-N9-C1'	6.24	134.61	126.50
36	1	632	G	N9-C4-C5	-6.24	102.91	105.40
36	1	810	A	N1-C6-N6	-6.24	114.86	118.60
37	3	42	A	C2-N3-C4	-6.24	107.48	110.60
1	6	389	G	N1-C2-N3	-6.24	120.16	123.90
1	6	425	A	OP2-P-O3'	6.24	118.93	105.20
1	6	611	U	N3-C4-C5	-6.24	110.86	114.60
36	5	1304	A	C5-C6-N1	6.24	120.82	117.70
1	2	1775	U	O5'-P-OP2	-6.24	100.09	105.70
36	1	1500	G	C4-C5-C6	-6.24	115.06	118.80
36	5	1408	G	N3-C4-N9	6.24	129.74	126.00
38	8	66	A	N1-C2-N3	6.24	132.42	129.30
1	2	309	C	N1-C2-O2	-6.24	115.16	118.90
36	1	1312	C	N3-C4-N4	6.24	122.36	118.00
36	1	3060	C	C5-C6-N1	-6.24	117.88	121.00
1	6	788	A	N1-C2-N3	6.24	132.42	129.30
1	6	1147	A	O5'-P-OP1	-6.24	100.09	105.70
36	5	71	A	C5-C6-N6	6.24	128.69	123.70
36	5	675	C	N3-C2-O2	6.24	126.27	121.90
36	1	21	G	N7-C8-N9	6.23	116.22	113.10
36	5	717	C	C5-C4-N4	-6.23	115.84	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	944	C	N3-C4-N4	-6.23	113.64	118.00
36	5	2156	C	N3-C4-C5	-6.23	119.41	121.90
36	5	2965	U	C5-C6-N1	6.23	125.82	122.70
1	2	1539	G	O4'-C1'-N9	-6.23	103.21	108.20
1	2	1742	U	C6-N1-C2	-6.23	117.26	121.00
36	1	1141	C	N3-C2-O2	-6.23	117.54	121.90
36	1	1149	G	C8-N9-C1'	-6.23	118.90	127.00
36	1	1888	U	C2-N1-C1'	6.23	125.18	117.70
36	1	2521	U	N3-C4-O4	-6.23	115.04	119.40
36	1	2966	G	O5'-P-OP2	-6.23	100.09	105.70
37	3	77	G	C8-N9-C4	6.23	108.89	106.40
37	3	93	C	C6-N1-C2	6.23	122.79	120.30
37	3	95	A	C5-C6-N1	-6.23	114.58	117.70
1	6	308	C	C6-N1-C2	6.23	122.79	120.30
1	6	396	G	C4-C5-N7	-6.23	108.31	110.80
1	6	710	U	C2-N1-C1'	6.23	125.18	117.70
1	6	751	G	C5-C6-O6	-6.23	124.86	128.60
36	5	431	U	N3-C2-O2	-6.23	117.84	122.20
36	5	1338	C	N3-C2-O2	6.23	126.26	121.90
36	5	3096	C	C4-C5-C6	6.23	120.52	117.40
36	1	885	U	C2-N3-C4	-6.23	123.26	127.00
36	1	1101	G	C4-C5-N7	-6.23	108.31	110.80
36	1	1220	U	C6-N1-C2	-6.23	117.26	121.00
1	6	415	C	C2-N1-C1'	-6.23	111.95	118.80
1	6	1085	G	C8-N9-C4	6.23	108.89	106.40
1	6	1563	C	N1-C2-O2	6.23	122.64	118.90
1	6	1580	C	C5-C6-N1	-6.23	117.88	121.00
36	5	192	C	C2-N1-C1'	6.23	125.65	118.80
36	5	816	A	N9-C4-C5	6.23	108.29	105.80
36	5	980	A	C8-N9-C4	6.23	108.29	105.80
36	5	1654	A	C5-N7-C8	6.23	107.02	103.90
36	5	1719	G	N3-C2-N2	-6.23	115.54	119.90
36	5	2246	G	N1-C6-O6	6.23	123.64	119.90
36	5	2549	G	N7-C8-N9	6.23	116.22	113.10
37	7	105	C	C2-N3-C4	6.23	123.02	119.90
1	2	1541	G	C5-C6-N1	-6.23	108.39	111.50
36	1	1173	U	N1-C2-O2	6.23	127.16	122.80
36	1	2850	G	C5-C6-N1	6.23	114.61	111.50
36	1	3330	A	OP2-P-O3'	6.23	118.90	105.20
1	6	1509	C	N3-C2-O2	-6.23	117.54	121.90
36	5	637	C	C6-N1-C1'	-6.23	113.33	120.80
36	5	2793	G	N3-C2-N2	-6.23	115.54	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	810	G	C6-C5-N7	-6.23	126.66	130.40
36	1	722	G	N3-C4-C5	-6.23	125.49	128.60
36	1	2365	C	C5-C6-N1	-6.23	117.89	121.00
36	1	2420	C	C2-N3-C4	-6.23	116.79	119.90
36	1	2821	C	N1-C2-O2	6.23	122.64	118.90
36	1	3244	A	N1-C2-N3	6.23	132.41	129.30
38	4	4	C	C4-C5-C6	6.23	120.51	117.40
1	6	1550	A	C4-C5-C6	-6.23	113.89	117.00
36	5	856	G	N1-C6-O6	-6.23	116.16	119.90
36	5	1186	G	C8-N9-C4	-6.23	103.91	106.40
36	5	2684	C	C4-C5-C6	6.23	120.51	117.40
36	5	2921	U	N3-C2-O2	6.23	126.56	122.20
36	1	209	A	N3-C4-N9	-6.23	122.42	127.40
36	1	936	A	O5'-P-OP1	6.23	118.17	110.70
36	1	1171	G	N1-C6-O6	-6.23	116.16	119.90
36	1	1408	G	C5-N7-C8	-6.23	101.19	104.30
36	1	2158	A	N1-C6-N6	-6.23	114.86	118.60
36	1	2837	A	N1-C2-N3	6.23	132.41	129.30
36	5	1375	G	C8-N9-C4	-6.23	103.91	106.40
36	5	2397	A	N3-C4-N9	-6.23	122.42	127.40
1	2	240	U	C2-N1-C1'	6.22	125.17	117.70
1	2	1297	G	N9-C1'-C2'	-6.22	105.15	112.00
36	1	1663	C	N3-C4-C5	6.22	124.39	121.90
36	1	2122	G	N7-C8-N9	6.22	116.21	113.10
36	1	2409	G	C8-N9-C4	6.22	108.89	106.40
36	1	2411	U	N1-C2-O2	-6.22	118.44	122.80
36	1	2909	U	N3-C4-C5	6.22	118.33	114.60
38	4	54	A	C4-C5-C6	6.22	120.11	117.00
1	6	617	U	C2-N1-C1'	6.22	125.17	117.70
1	6	1670	G	C4-C5-C6	6.22	122.53	118.80
36	5	359	U	O5'-P-OP1	-6.22	100.10	105.70
36	5	1578	C	C2-N1-C1'	6.22	125.65	118.80
36	5	2803	A	C2-N3-C4	-6.22	107.49	110.60
36	1	404	G	C5-C6-O6	-6.22	124.87	128.60
36	1	2280	A	C5-N7-C8	-6.22	100.79	103.90
36	1	2414	G	C5-C6-N1	-6.22	108.39	111.50
36	1	2831	G	N1-C2-N2	6.22	121.80	116.20
36	1	2981	U	OP2-P-O3'	6.22	118.89	105.20
1	6	1295	G	N3-C2-N2	-6.22	115.54	119.90
1	6	1361	U	C5-C6-N1	6.22	125.81	122.70
36	5	43	A	C2-N3-C4	-6.22	107.49	110.60
36	5	2135	U	N3-C4-O4	-6.22	115.04	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2733	A	C8-N9-C4	6.22	108.29	105.80
36	5	2837	A	N1-C2-N3	6.22	132.41	129.30
36	5	2871	G	N7-C8-N9	6.22	116.21	113.10
36	5	3122	A	N3-C4-N9	-6.22	122.42	127.40
37	7	111	U	N1-C2-N3	6.22	118.63	114.90
1	2	1430	U	N1-C2-N3	6.22	118.63	114.90
36	1	2431	C	C6-N1-C2	-6.22	117.81	120.30
36	1	2764	C	C6-N1-C2	-6.22	117.81	120.30
36	1	2881	C	N3-C4-C5	6.22	124.39	121.90
1	6	1744	A	C5-C6-N1	6.22	120.81	117.70
36	5	724	U	N3-C4-C5	-6.22	110.87	114.60
36	1	14	U	N1-C2-N3	6.22	118.63	114.90
36	1	582	G	N1-C6-O6	-6.22	116.17	119.90
36	1	2315	G	C5-C6-O6	6.22	132.33	128.60
1	6	298	C	C5-C6-N1	6.22	124.11	121.00
36	5	948	C	O5'-P-OP2	-6.22	100.10	105.70
36	5	1366	A	N1-C2-N3	6.22	132.41	129.30
36	5	2874	G	N9-C4-C5	6.22	107.89	105.40
36	5	2967	A	OP2-P-O3'	6.22	118.88	105.20
36	5	3301	U	C6-N1-C2	6.22	124.73	121.00
36	1	2374	C	C2-N1-C1'	6.22	125.64	118.80
36	1	3269	U	C4-C5-C6	6.22	123.43	119.70
36	5	530	G	C5-C6-N1	6.22	114.61	111.50
36	5	2895	G	C8-N9-C1'	-6.22	118.92	127.00
36	5	3139	A	C5-C6-N1	6.22	120.81	117.70
38	8	80	A	N3-C4-C5	-6.22	122.45	126.80
1	2	759	U	C2-N1-C1'	-6.22	110.24	117.70
1	2	883	C	C6-N1-C2	-6.22	117.81	120.30
36	1	357	A	C5-C6-N1	6.22	120.81	117.70
36	1	366	A	C6-C5-N7	-6.22	127.95	132.30
36	1	747	A	C8-N9-C4	-6.22	103.31	105.80
36	1	964	G	OP1-P-O3'	-6.22	91.52	105.20
36	1	2173	U	C6-N1-C2	-6.22	117.27	121.00
36	1	2331	C	C6-N1-C1'	-6.22	113.34	120.80
36	1	2949	U	C5-C6-N1	-6.22	119.59	122.70
36	1	3195	U	N1-C2-N3	-6.22	111.17	114.90
1	6	1117	U	N3-C4-O4	6.22	123.75	119.40
36	5	1055	A	OP1-P-O3'	6.22	118.88	105.20
36	5	1373	A	N9-C4-C5	-6.22	103.31	105.80
36	5	1810	A	N9-C4-C5	-6.22	103.31	105.80
36	5	3166	C	C2-N1-C1'	6.22	125.64	118.80
36	5	3272	C	C5-C4-N4	6.22	124.55	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3274	A	N1-C2-N3	-6.22	126.19	129.30
36	5	3391	A	OP2-P-O3'	6.22	118.88	105.20
1	2	1002	G	N1-C2-N2	-6.21	110.61	116.20
36	1	651	G	C6-N1-C2	-6.21	121.37	125.10
37	3	84	A	N7-C8-N9	6.21	116.91	113.80
1	6	158	U	N3-C2-O2	-6.21	117.85	122.20
1	6	170	U	C6-N1-C2	-6.21	117.27	121.00
36	5	580	C	N3-C4-C5	-6.21	119.41	121.90
36	5	1003	A	N9-C4-C5	-6.21	103.31	105.80
36	5	1377	G	C8-N9-C4	-6.21	103.91	106.40
36	5	2245	C	N3-C4-C5	-6.21	119.41	121.90
36	5	2368	A	C5-C6-N1	-6.21	114.59	117.70
36	5	3057	U	O5'-P-OP1	6.21	118.16	110.70
36	5	3310	A	C4-C5-C6	6.21	120.11	117.00
36	1	632	G	C4-C5-N7	6.21	113.28	110.80
36	1	2953	U	C5-C4-O4	6.21	129.63	125.90
39	L2	191	LEU	CA-CB-CG	-6.21	101.01	115.30
1	6	324	U	N1-C2-O2	-6.21	118.45	122.80
1	2	1420	C	N3-C2-O2	-6.21	117.55	121.90
36	1	669	U	N3-C4-O4	6.21	123.75	119.40
36	1	1169	A	N9-C4-C5	6.21	108.28	105.80
36	1	1330	A	N3-C4-C5	6.21	131.15	126.80
36	1	1549	U	OP2-P-O3'	6.21	118.86	105.20
36	1	1658	G	N3-C4-N9	-6.21	122.27	126.00
36	1	2978	U	N1-C1'-C2'	6.21	122.08	114.00
36	1	2983	C	O4'-C1'-N1	6.21	113.17	108.20
37	3	25	G	C6-N1-C2	-6.21	121.37	125.10
1	6	1477	G	N7-C8-N9	-6.21	109.99	113.10
36	5	526	C	C6-N1-C2	6.21	122.78	120.30
36	5	1772	U	C2-N1-C1'	-6.21	110.25	117.70
36	5	3129	A	O4'-C1'-N9	6.21	113.17	108.20
36	5	3391	A	OP1-P-O3'	-6.21	91.54	105.20
1	2	332	U	N3-C4-C5	6.21	118.33	114.60
36	1	52	A	N9-C4-C5	6.21	108.28	105.80
77	Q1	14	LYS	CD-CE-NZ	6.21	125.98	111.70
1	6	848	C	C6-N1-C2	-6.21	117.82	120.30
36	5	920	A	N1-C6-N6	6.21	122.33	118.60
36	5	1176	C	O4'-C1'-N1	6.21	113.17	108.20
36	5	1306	G	N9-C4-C5	6.21	107.88	105.40
36	5	2755	C	N3-C4-N4	6.21	122.35	118.00
1	2	571	G	N3-C4-N9	-6.21	122.28	126.00
1	2	936	G	N3-C4-C5	-6.21	125.50	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	297	G	C5-C6-N1	6.21	114.60	111.50
36	1	406	G	O5'-P-OP2	-6.21	100.11	105.70
36	1	1131	G	N1-C6-O6	6.21	123.63	119.90
36	1	3252	G	N7-C8-N9	-6.21	110.00	113.10
1	6	1019	A	C5-N7-C8	6.21	107.00	103.90
1	6	1159	C	C5-C6-N1	-6.21	117.90	121.00
1	6	1620	C	N3-C4-N4	6.21	122.35	118.00
36	5	523	A	C5-C6-N6	6.21	128.67	123.70
36	5	808	A	N3-C4-C5	-6.21	122.45	126.80
36	5	1368	U	N1-C2-O2	-6.21	118.45	122.80
36	5	2360	C	N3-C2-O2	6.21	126.25	121.90
1	2	1123	C	N3-C4-N4	6.21	122.34	118.00
1	2	1498	G	N3-C4-N9	6.21	129.72	126.00
1	2	1752	U	C5-C6-N1	-6.21	119.60	122.70
1	2	1780	G	N1-C6-O6	6.21	123.62	119.90
36	1	2640	A	C2-N3-C4	-6.21	107.50	110.60
36	1	2818	U	O4'-C1'-N1	-6.21	103.23	108.20
36	1	2963	C	N3-C4-C5	-6.21	119.42	121.90
1	6	57	G	C6-C5-N7	-6.21	126.68	130.40
1	6	972	G	C4-N9-C1'	6.21	134.57	126.50
36	5	1127	G	C8-N9-C1'	-6.21	118.93	127.00
36	5	1297	C	N3-C4-C5	6.21	124.38	121.90
36	5	2745	G	C5-C6-N1	6.21	114.60	111.50
36	5	2776	C	C5-C6-N1	6.21	124.10	121.00
36	5	3320	A	O5'-P-OP1	-6.21	100.11	105.70
36	1	887	G	C6-N1-C2	-6.21	121.38	125.10
36	1	2982	A	N1-C2-N3	6.21	132.40	129.30
36	5	404	G	OP1-P-OP2	6.21	128.91	119.60
36	5	922	U	C4-C5-C6	6.21	123.42	119.70
36	5	2253	G	C4-N9-C1'	6.21	134.57	126.50
36	5	2690	G	C5-N7-C8	-6.21	101.20	104.30
1	2	115	G	C2-N3-C4	-6.20	108.80	111.90
1	2	458	G	C2-N3-C4	-6.20	108.80	111.90
36	1	935	U	N1-C2-N3	6.20	118.62	114.90
36	1	1443	G	C5-C6-O6	-6.20	124.88	128.60
36	1	2695	A	O5'-P-OP1	-6.20	100.12	105.70
36	1	3182	G	C6-N1-C2	-6.20	121.38	125.10
1	6	1527	C	C6-N1-C2	6.20	122.78	120.30
1	6	1747	G	O5'-P-OP1	6.20	118.14	110.70
36	5	799	G	C5-N7-C8	-6.20	101.20	104.30
36	5	2132	C	N1-C2-N3	6.20	123.54	119.20
36	5	2917	G	N1-C2-N3	6.20	127.62	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2933	A	N1-C2-N3	6.20	132.40	129.30
36	1	212	G	OP2-P-O3'	6.20	118.84	105.20
36	1	2277	C	N3-C4-C5	-6.20	119.42	121.90
1	6	601	A	O5'-P-OP2	-6.20	100.12	105.70
1	6	1651	A	C4-C5-N7	6.20	113.80	110.70
36	5	1303	A	O4'-C1'-N9	-6.20	103.24	108.20
36	1	402	A	O5'-P-OP1	-6.20	100.12	105.70
36	1	563	U	N3-C2-O2	-6.20	117.86	122.20
36	1	2161	G	C5-C6-O6	-6.20	124.88	128.60
36	1	3133	C	O5'-P-OP2	-6.20	100.12	105.70
37	3	114	U	N1-C2-O2	6.20	127.14	122.80
1	6	751	G	N3-C4-C5	6.20	131.70	128.60
36	5	2247	G	N1-C6-O6	-6.20	116.18	119.90
36	5	2651	G	N1-C6-O6	6.20	123.62	119.90
37	7	102	A	N1-C6-N6	6.20	122.32	118.60
1	2	1668	G	C5-C6-N1	-6.20	108.40	111.50
36	1	1004	U	OP1-P-OP2	6.20	128.90	119.60
36	1	1301	A	N9-C4-C5	-6.20	103.32	105.80
36	5	363	G	OP1-P-O3'	6.20	118.84	105.20
36	5	2412	G	N3-C4-C5	-6.20	125.50	128.60
1	2	17	C	C2-N1-C1'	-6.20	111.98	118.80
36	1	826	G	C6-C5-N7	-6.20	126.68	130.40
1	6	558	U	N1-C2-N3	-6.20	111.18	114.90
36	5	875	G	N1-C2-N2	6.20	121.78	116.20
36	5	1115	G	OP1-P-OP2	-6.20	110.31	119.60
36	5	2670	G	OP2-P-O3'	6.20	118.83	105.20
36	5	3298	C	C4-C5-C6	6.20	120.50	117.40
1	2	126	A	C2-N3-C4	-6.20	107.50	110.60
1	2	795	U	N3-C2-O2	-6.20	117.86	122.20
1	2	1212	G	N7-C8-N9	6.20	116.20	113.10
36	1	681	U	OP2-P-O3'	6.20	118.83	105.20
36	1	960	U	OP2-P-O3'	6.20	118.83	105.20
36	1	1399	A	O5'-P-OP2	6.20	118.14	110.70
38	4	111	A	N7-C8-N9	-6.20	110.70	113.80
1	6	427	C	C2-N3-C4	-6.20	116.80	119.90
36	5	136	G	C5-C6-O6	-6.20	124.88	128.60
36	5	642	U	C6-N1-C2	6.20	124.72	121.00
36	5	1380	G	C8-N9-C1'	-6.20	118.95	127.00
36	5	1654	A	C6-N1-C2	-6.20	114.88	118.60
36	5	2111	G	C5-C6-N1	-6.20	108.40	111.50
36	5	2295	A	C2-N3-C4	6.20	113.70	110.60
36	5	3166	C	N1-C2-O2	6.20	122.62	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	65	A	N1-C6-N6	-6.20	114.88	118.60
36	5	3016	A	C8-N9-C4	-6.19	103.32	105.80
1	2	261	U	C2-N1-C1'	6.19	125.13	117.70
36	1	1423	C	C4-C5-C6	6.19	120.50	117.40
36	1	1526	U	N1-C2-O2	6.19	127.14	122.80
36	1	1762	C	C6-N1-C2	-6.19	117.82	120.30
36	1	2390	A	C6-N1-C2	-6.19	114.88	118.60
36	5	101	G	C5-C6-O6	-6.19	124.89	128.60
36	5	402	A	C8-N9-C4	-6.19	103.32	105.80
36	5	420	G	N3-C4-N9	-6.19	122.28	126.00
36	5	1317	A	C5-N7-C8	-6.19	100.80	103.90
36	5	2698	G	N3-C2-N2	-6.19	115.56	119.90
36	5	3119	U	N1-C2-N3	6.19	118.62	114.90
36	5	3209	A	N7-C8-N9	6.19	116.90	113.80
1	2	552	G	C5-N7-C8	-6.19	101.20	104.30
36	1	33	G	N3-C4-C5	6.19	131.69	128.60
36	1	277	G	C6-C5-N7	6.19	134.11	130.40
36	1	1850	A	C4-C5-C6	6.19	120.09	117.00
36	1	1929	G	C6-N1-C2	-6.19	121.39	125.10
36	1	2243	A	C6-C5-N7	-6.19	127.97	132.30
36	1	2381	G	C5-N7-C8	-6.19	101.20	104.30
36	1	2637	A	C6-N1-C2	-6.19	114.89	118.60
1	6	360	A	C8-N9-C4	6.19	108.28	105.80
1	6	1020	A	C8-N9-C4	-6.19	103.32	105.80
36	5	1613	A	C8-N9-C4	-6.19	103.32	105.80
36	5	2243	A	N9-C4-C5	6.19	108.28	105.80
36	5	2403	G	O5'-P-OP1	6.19	118.13	110.70
36	5	2414	G	N1-C2-N3	6.19	127.61	123.90
36	5	3254	G	C2-N3-C4	-6.19	108.81	111.90
1	2	875	G	N3-C4-N9	6.19	129.71	126.00
36	1	1351	U	C5-C6-N1	6.19	125.80	122.70
36	1	1411	C	C2-N3-C4	-6.19	116.81	119.90
1	6	1542	G	N1-C2-N2	-6.19	110.63	116.20
36	5	610	G	C5-C6-O6	6.19	132.31	128.60
36	5	1044	U	N1-C2-O2	-6.19	118.47	122.80
1	2	1572	G	C5-C6-O6	-6.19	124.89	128.60
36	1	1852	G	C5-C6-N1	-6.19	108.41	111.50
36	1	2402	A	C8-N9-C4	-6.19	103.33	105.80
36	1	2419	A	N7-C8-N9	6.19	116.89	113.80
36	1	2982	A	N3-C4-N9	6.19	132.35	127.40
36	1	2983	C	N1-C2-N3	6.19	123.53	119.20
36	1	3333	G	C8-N9-C4	6.19	108.88	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	565	U	O5'-P-OP1	6.19	118.12	110.70
36	5	1386	A	N3-C4-N9	-6.19	122.45	127.40
36	5	1395	G	C5-C6-N1	-6.19	108.41	111.50
36	5	1403	C	OP1-P-O3'	6.19	118.81	105.20
36	5	1483	G	OP1-P-O3'	6.19	118.81	105.20
36	5	1653	G	N3-C2-N2	-6.19	115.57	119.90
36	5	2339	C	N3-C2-O2	6.19	126.23	121.90
36	5	2703	A	C4-N9-C1'	6.19	137.44	126.30
37	7	65	G	C5-C6-O6	-6.19	124.89	128.60
38	8	20	U	C4-C5-C6	6.19	123.41	119.70
36	1	1114	U	N1-C2-O2	6.19	127.13	122.80
36	1	2187	G	N1-C2-N2	-6.19	110.63	116.20
38	4	85	G	N3-C4-N9	6.19	129.71	126.00
1	6	558	U	N1-C2-O2	6.19	127.13	122.80
36	5	3209	A	N9-C1'-C2'	6.19	122.04	114.00
59	n3	88	ARG	NE-CZ-NH2	-6.19	117.21	120.30
36	1	104	G	N9-C1'-C2'	-6.18	105.20	112.00
36	1	508	U	O5'-P-OP2	-6.18	100.14	105.70
36	1	1724	U	N1-C2-N3	6.18	118.61	114.90
36	1	2288	G	C4-N9-C1'	6.18	134.54	126.50
36	1	2362	C	OP1-P-O3'	6.18	118.80	105.20
1	6	39	A	C6-N1-C2	-6.18	114.89	118.60
1	6	68	A	N1-C6-N6	6.18	122.31	118.60
36	5	782	U	C5-C4-O4	-6.18	122.19	125.90
36	5	1085	A	N1-C2-N3	6.18	132.39	129.30
36	5	1258	U	C5-C4-O4	6.18	129.61	125.90
36	5	1878	G	C4-N9-C1'	6.18	134.54	126.50
36	5	2856	G	C2-N3-C4	-6.18	108.81	111.90
36	5	3022	G	OP2-P-O3'	6.18	118.81	105.20
36	5	3104	U	C5-C4-O4	-6.18	122.19	125.90
36	5	3189	G	C8-N9-C1'	-6.18	118.96	127.00
1	2	875	G	N3-C4-C5	-6.18	125.51	128.60
1	2	1092	A	N7-C8-N9	6.18	116.89	113.80
1	2	1215	C	O5'-P-OP2	-6.18	100.14	105.70
36	1	435	C	C2-N3-C4	-6.18	116.81	119.90
36	1	637	C	N3-C4-C5	6.18	124.37	121.90
36	1	683	U	C2-N3-C4	-6.18	123.29	127.00
36	1	917	A	C5-C6-N1	6.18	120.79	117.70
36	1	2271	A	C2-N3-C4	-6.18	107.51	110.60
36	1	2678	A	C2-N3-C4	6.18	113.69	110.60
36	1	3009	G	C5-N7-C8	-6.18	101.21	104.30
36	1	3362	A	C4-C5-N7	6.18	113.79	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	293	U	C5-C6-N1	-6.18	119.61	122.70
36	5	2556	C	N3-C2-O2	-6.18	117.57	121.90
36	5	2917	G	N3-C4-N9	-6.18	122.29	126.00
36	1	3172	A	C6-C5-N7	-6.18	127.97	132.30
1	6	624	G	C5-C6-O6	-6.18	124.89	128.60
36	5	1770	G	N3-C4-N9	6.18	129.71	126.00
36	5	1778	G	C8-N9-C4	6.18	108.87	106.40
36	5	2138	A	C5-C6-N1	-6.18	114.61	117.70
36	5	3391	A	C2-N3-C4	-6.18	107.51	110.60
1	2	632	U	N1-C2-O2	6.18	127.12	122.80
1	2	758	U	C5-C4-O4	6.18	129.61	125.90
1	2	1083	G	N9-C4-C5	-6.18	102.93	105.40
36	1	223	U	C5-C4-O4	6.18	129.61	125.90
36	1	1157	G	N1-C2-N3	6.18	127.61	123.90
36	1	1874	A	C4-C5-C6	6.18	120.09	117.00
36	1	2174	G	N7-C8-N9	6.18	116.19	113.10
36	1	2398	A	C6-N1-C2	-6.18	114.89	118.60
36	1	2617	U	N3-C4-C5	-6.18	110.89	114.60
36	1	2800	G	O5'-P-OP1	6.18	118.12	110.70
1	6	385	A	N9-C4-C5	6.18	108.27	105.80
36	5	363	G	C6-N1-C2	-6.18	121.39	125.10
36	5	568	G	C6-C5-N7	-6.18	126.69	130.40
36	5	1040	A	O5'-P-OP2	6.18	118.12	110.70
36	5	1476	G	N9-C4-C5	-6.18	102.93	105.40
38	4	42	G	O5'-P-OP1	6.18	118.11	110.70
1	6	1070	C	N3-C4-N4	-6.18	113.67	118.00
36	5	987	U	O5'-P-OP2	-6.18	100.14	105.70
36	5	1520	G	C4-C5-C6	6.18	122.51	118.80
36	5	2379	U	O5'-P-OP2	-6.18	100.14	105.70
36	5	2825	C	C5-C4-N4	-6.18	115.88	120.20
36	1	404	G	OP1-P-OP2	6.18	128.86	119.60
36	1	2261	G	N3-C4-N9	6.18	129.71	126.00
36	1	2678	A	C5-C6-N1	6.18	120.79	117.70
36	1	3308	C	OP2-P-O3'	6.18	118.79	105.20
1	6	1100	G	O5'-P-OP1	-6.18	100.14	105.70
1	6	1627	U	N3-C4-O4	6.18	123.72	119.40
36	5	1138	U	N3-C2-O2	-6.18	117.88	122.20
36	5	1313	G	N1-C6-O6	6.18	123.61	119.90
36	5	3089	C	C5-C6-N1	6.18	124.09	121.00
1	2	1789	G	C6-C5-N7	-6.17	126.70	130.40
36	1	290	G	N1-C2-N2	6.17	121.76	116.20
36	1	1098	A	C5-C6-N1	6.17	120.79	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1119	C	O5'-P-OP1	6.17	118.11	110.70
36	1	2637	A	C4-C5-N7	-6.17	107.61	110.70
36	1	2868	U	OP2-P-O3'	6.17	118.78	105.20
36	1	3217	C	C5-C6-N1	6.17	124.09	121.00
34	sR	59	ARG	NE-CZ-NH1	6.17	123.39	120.30
36	5	44	U	C5-C6-N1	6.17	125.79	122.70
36	5	283	G	C2-N3-C4	6.17	114.99	111.90
36	5	2116	G	C5-C6-N1	-6.17	108.41	111.50
36	5	2126	A	C2-N3-C4	6.17	113.69	110.60
36	5	2814	G	C8-N9-C4	6.17	108.87	106.40
36	1	835	G	N1-C6-O6	6.17	123.60	119.90
36	1	2639	G	N7-C8-N9	6.17	116.19	113.10
1	6	103	A	P-O3'-C3'	6.17	127.11	119.70
1	6	1199	G	C2-N3-C4	-6.17	108.81	111.90
1	6	1451	C	C6-N1-C2	6.17	122.77	120.30
36	5	685	G	N1-C2-N2	-6.17	110.64	116.20
1	2	1198	G	N7-C8-N9	6.17	116.19	113.10
1	2	1214	U	C5-C4-O4	6.17	129.60	125.90
36	1	1743	G	C4-N9-C1'	-6.17	118.48	126.50
36	1	1789	G	C5-C6-N1	6.17	114.59	111.50
36	1	1894	U	C6-N1-C1'	6.17	129.84	121.20
36	1	1924	U	C5-C4-O4	6.17	129.60	125.90
36	1	2335	G	C2-N3-C4	6.17	114.99	111.90
36	1	2925	C	C6-N1-C2	6.17	122.77	120.30
36	5	2657	A	N1-C6-N6	-6.17	114.90	118.60
36	5	2661	G	OP1-P-O3'	6.17	118.78	105.20
36	5	2842	U	C6-N1-C1'	-6.17	112.56	121.20
38	8	22	U	C5-C6-N1	-6.17	119.61	122.70
1	2	1654	G	N3-C2-N2	6.17	124.22	119.90
36	1	651	G	N1-C2-N3	6.17	127.60	123.90
36	1	2753	G	N3-C4-C5	-6.17	125.52	128.60
36	1	2959	C	P-O3'-C3'	-6.17	112.30	119.70
1	6	170	U	N1-C2-O2	6.17	127.12	122.80
1	6	1626	U	C6-N1-C2	6.17	124.70	121.00
36	5	1802	C	C5-C6-N1	6.17	124.08	121.00
36	5	2131	A	N7-C8-N9	-6.17	110.72	113.80
36	5	3120	C	N3-C4-C5	6.17	124.37	121.90
1	2	1418	G	C6-C5-N7	-6.17	126.70	130.40
36	1	1000	C	N1-C2-N3	-6.17	114.88	119.20
36	1	1627	U	O5'-P-OP1	-6.17	100.15	105.70
36	1	2659	G	C8-N9-C1'	-6.17	118.98	127.00
36	1	2817	A	C4-C5-N7	-6.17	107.61	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3007	U	N1-C2-N3	6.17	118.60	114.90
37	3	85	G	C5-C6-O6	-6.17	124.90	128.60
38	4	41	A	C4-C5-C6	6.17	120.08	117.00
1	6	377	G	C8-N9-C4	-6.17	103.93	106.40
1	6	469	C	C6-N1-C2	6.17	122.77	120.30
1	6	1474	G	C6-C5-N7	-6.17	126.70	130.40
36	5	50	U	C6-N1-C1'	-6.17	112.56	121.20
36	5	757	C	N3-C4-N4	6.17	122.32	118.00
36	5	890	C	OP1-P-O3'	6.17	118.77	105.20
36	5	1000	C	N1-C2-N3	-6.17	114.88	119.20
36	5	1441	G	N3-C2-N2	-6.17	115.58	119.90
36	5	2567	C	N1-C2-O2	6.17	122.60	118.90
36	5	2653	C	C4-C5-C6	-6.17	114.32	117.40
37	3	78	U	N1-C2-N3	6.17	118.60	114.90
1	6	65	A	N3-C4-C5	6.17	131.12	126.80
1	6	573	C	N3-C4-C5	6.17	124.37	121.90
1	6	636	A	N7-C8-N9	-6.17	110.72	113.80
1	6	781	U	C5-C6-N1	6.17	125.78	122.70
1	6	1700	C	C5-C6-N1	6.17	124.08	121.00
36	5	218	G	C5-C6-O6	6.17	132.30	128.60
36	5	638	C	N3-C2-O2	-6.17	117.58	121.90
36	5	832	G	C4-N9-C1'	6.17	134.52	126.50
36	5	1913	A	C6-C5-N7	-6.17	127.98	132.30
36	5	3003	G	C4-N9-C1'	-6.17	118.48	126.50
1	2	111	U	N1-C2-O2	6.17	127.12	122.80
1	2	1274	C	N3-C2-O2	-6.17	117.58	121.90
36	1	2373	A	C2-N3-C4	-6.17	107.52	110.60
36	1	2776	C	C6-N1-C2	6.17	122.77	120.30
1	6	764	U	C4-C5-C6	6.17	123.40	119.70
38	8	4	C	C4-C5-C6	6.17	120.48	117.40
1	2	390	G	N9-C4-C5	6.16	107.86	105.40
36	1	314	U	C5-C6-N1	-6.16	119.62	122.70
36	1	399	A	C5-C6-N1	6.16	120.78	117.70
36	1	835	G	C5-N7-C8	-6.16	101.22	104.30
36	1	936	A	C8-N9-C1'	6.16	138.79	127.70
36	1	942	U	N1-C2-N3	6.16	118.60	114.90
36	1	1115	G	C8-N9-C1'	-6.16	118.99	127.00
36	1	1702	U	N1-C2-O2	-6.16	118.49	122.80
1	6	761	G	N1-C6-O6	-6.16	116.20	119.90
36	5	1224	C	N3-C4-C5	-6.16	119.43	121.90
36	5	2652	U	C5-C4-O4	-6.16	122.20	125.90
36	5	3107	U	C5-C4-O4	-6.16	122.20	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1430	U	C5-C4-O4	6.16	129.60	125.90
36	1	1076	C	C6-N1-C1'	-6.16	113.41	120.80
36	1	1119	C	N1-C2-O2	-6.16	115.20	118.90
36	1	1386	A	N3-C4-N9	-6.16	122.47	127.40
38	4	34	U	C5-C4-O4	6.16	129.60	125.90
38	4	49	G	N1-C6-O6	6.16	123.60	119.90
36	5	660	A	C4-C5-C6	6.16	120.08	117.00
36	5	1896	A	C6-C5-N7	6.16	136.61	132.30
36	5	3296	A	N9-C4-C5	-6.16	103.33	105.80
1	6	142	G	C5-N7-C8	6.16	107.38	104.30
1	6	1143	A	C4-C5-C6	6.16	120.08	117.00
1	6	1777	G	N3-C4-C5	-6.16	125.52	128.60
36	5	506	U	N3-C2-O2	6.16	126.51	122.20
36	5	523	A	N3-C4-N9	-6.16	122.47	127.40
36	5	666	A	C5-N7-C8	6.16	106.98	103.90
36	5	880	G	N3-C4-N9	-6.16	122.30	126.00
36	5	1220	U	C6-N1-C1'	-6.16	112.58	121.20
38	8	99	C	N3-C2-O2	-6.16	117.59	121.90
1	2	110	U	N3-C2-O2	6.16	126.51	122.20
1	2	1757	G	N1-C2-N2	-6.16	110.66	116.20
36	1	815	G	N3-C2-N2	-6.16	115.59	119.90
36	1	1006	A	N9-C4-C5	-6.16	103.34	105.80
36	1	2240	G	OP1-P-O3'	6.16	118.75	105.20
36	1	2374	C	C6-N1-C1'	-6.16	113.41	120.80
36	1	2376	G	N7-C8-N9	6.16	116.18	113.10
36	1	2882	U	N3-C2-O2	-6.16	117.89	122.20
36	1	3318	G	C5-N7-C8	-6.16	101.22	104.30
37	3	69	C	C5-C6-N1	6.16	124.08	121.00
1	6	1025	A	N1-C2-N3	6.16	132.38	129.30
36	5	888	A	C6-N1-C2	-6.16	114.91	118.60
36	5	1157	G	C4-C5-N7	-6.16	108.34	110.80
36	5	1901	A	C5-C6-N6	-6.16	118.77	123.70
36	5	2915	U	O5'-P-OP1	6.16	118.09	110.70
37	7	89	G	C4-N9-C1'	6.16	134.50	126.50
36	1	622	A	C5-C6-N6	-6.16	118.77	123.70
36	1	3095	U	O5'-P-OP2	6.16	118.09	110.70
38	4	98	U	N1-C2-N3	6.16	118.59	114.90
1	6	1024	U	P-O3'-C3'	6.16	127.09	119.70
36	5	1180	A	C6-N1-C2	-6.16	114.91	118.60
36	5	1779	C	C6-N1-C2	-6.16	117.84	120.30
1	2	1146	G	C8-N9-C1'	-6.16	119.00	127.00
36	1	75	G	N9-C4-C5	-6.16	102.94	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	834	U	N3-C4-O4	-6.16	115.09	119.40
36	1	902	G	C4-C5-N7	6.16	113.26	110.80
36	1	2800	G	O5'-P-OP2	-6.16	100.16	105.70
36	1	2811	A	C8-N9-C1'	-6.16	116.62	127.70
36	1	2939	G	N1-C2-N3	6.16	127.59	123.90
1	6	50	C	C6-N1-C2	6.16	122.76	120.30
1	6	891	A	C5-C6-N6	-6.16	118.78	123.70
1	6	1800	A	N1-C6-N6	6.16	122.29	118.60
36	5	979	U	N1-C2-N3	6.16	118.59	114.90
36	5	2282	U	OP2-P-O3'	6.16	118.74	105.20
36	5	2743	A	O5'-P-OP2	-6.16	100.16	105.70
36	5	2950	G	O4'-C1'-N9	6.16	113.12	108.20
36	5	3068	U	N1-C2-N3	6.16	118.59	114.90
36	5	3173	G	C5-C6-O6	6.16	132.29	128.60
36	5	3325	G	N7-C8-N9	-6.16	110.02	113.10
1	6	1025	A	C5-N7-C8	-6.15	100.82	103.90
1	6	1765	A	C5-C6-N6	6.15	128.62	123.70
1	6	1780	G	N1-C2-N3	-6.15	120.21	123.90
36	5	3098	G	C5-C6-N1	6.15	114.58	111.50
36	5	3278	C	N1-C2-O2	-6.15	115.21	118.90
1	2	1155	G	C8-N9-C4	6.15	108.86	106.40
1	2	1774	G	C6-C5-N7	-6.15	126.71	130.40
36	1	964	G	OP2-P-O3'	6.15	118.74	105.20
36	1	1155	C	N3-C4-C5	6.15	124.36	121.90
36	1	1374	G	C6-C5-N7	-6.15	126.71	130.40
36	1	2335	G	C4-N9-C1'	6.15	134.50	126.50
1	6	922	G	N7-C8-N9	6.15	116.18	113.10
1	6	943	C	C5-C4-N4	-6.15	115.89	120.20
36	5	940	G	C8-N9-C1'	6.15	135.00	127.00
36	5	1085	A	C4-C5-N7	6.15	113.78	110.70
36	5	2107	A	C8-N9-C4	-6.15	103.34	105.80
36	5	2327	U	C6-N1-C2	6.15	124.69	121.00
1	2	1778	G	C5-C6-N1	6.15	114.58	111.50
36	1	423	A	C5-C6-N1	6.15	120.78	117.70
36	1	643	U	N3-C4-C5	-6.15	110.91	114.60
36	1	998	A	OP2-P-O3'	6.15	118.73	105.20
36	1	1116	G	C8-N9-C1'	-6.15	119.00	127.00
36	1	2250	G	N1-C6-O6	-6.15	116.21	119.90
36	1	3344	A	C5-C6-N1	-6.15	114.62	117.70
1	6	1383	G	N3-C4-C5	-6.15	125.52	128.60
1	6	1645	G	C4-C5-N7	6.15	113.26	110.80
36	5	70	A	N7-C8-N9	6.15	116.88	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	330	G	C4-C5-N7	6.15	113.26	110.80
36	5	1369	A	C5-N7-C8	-6.15	100.83	103.90
36	5	2393	G	C4-N9-C1'	6.15	134.50	126.50
36	5	3392	U	N1-C2-O2	6.15	127.11	122.80
1	6	1630	U	C5-C6-N1	6.15	125.77	122.70
36	5	3242	G	C5-C6-N1	6.15	114.57	111.50
38	8	87	G	N3-C4-N9	6.15	129.69	126.00
1	2	1280	C	N3-C4-C5	-6.15	119.44	121.90
36	1	206	G	N9-C1'-C2'	-6.15	105.24	112.00
36	1	612	U	N3-C2-O2	-6.15	117.90	122.20
36	1	638	C	C5-C6-N1	-6.15	117.93	121.00
36	1	1724	U	C5-C6-N1	-6.15	119.63	122.70
36	1	2394	G	N7-C8-N9	-6.15	110.03	113.10
36	1	2601	A	N1-C2-N3	6.15	132.37	129.30
37	3	25	G	C8-N9-C1'	-6.15	119.01	127.00
36	5	48	A	N1-C6-N6	-6.15	114.91	118.60
36	5	2851	A	C6-N1-C2	-6.15	114.91	118.60
36	1	3209	A	O5'-P-OP2	-6.15	100.17	105.70
1	6	457	G	N3-C4-N9	6.15	129.69	126.00
36	5	630	A	C2-N3-C4	-6.15	107.53	110.60
36	5	688	G	N7-C8-N9	6.15	116.17	113.10
36	5	1322	U	N3-C4-O4	6.15	123.70	119.40
36	5	2847	A	N3-C4-C5	6.15	131.10	126.80
36	5	3242	G	N3-C2-N2	6.15	124.20	119.90
36	1	372	A	C5-C6-N6	-6.14	118.78	123.70
36	1	619	A	P-O3'-C3'	6.14	127.07	119.70
36	1	1477	A	C5-C6-N6	-6.14	118.78	123.70
36	1	3313	U	C6-N1-C2	6.14	124.69	121.00
36	5	1008	U	C5-C6-N1	-6.14	119.63	122.70
36	5	2199	G	N7-C8-N9	6.14	116.17	113.10
36	5	2586	G	C4-N9-C1'	-6.14	118.51	126.50
36	5	2596	U	N3-C2-O2	-6.14	117.90	122.20
37	7	60	G	C8-N9-C4	-6.14	103.94	106.40
1	2	79	C	O4'-C1'-N1	6.14	113.11	108.20
36	1	710	A	N9-C4-C5	-6.14	103.34	105.80
36	1	897	U	C6-N1-C1'	-6.14	112.60	121.20
36	1	1003	A	N7-C8-N9	6.14	116.87	113.80
36	1	1039	U	C6-N1-C2	6.14	124.69	121.00
36	1	2121	G	C4-C5-N7	-6.14	108.34	110.80
36	1	2964	G	N1-C6-O6	6.14	123.59	119.90
57	N1	151	LEU	CA-CB-CG	-6.14	101.17	115.30
1	6	308	C	C6-N1-C1'	6.14	128.17	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	526	A	C5-C6-N1	-6.14	114.63	117.70
1	6	1003	A	C2-N3-C4	-6.14	107.53	110.60
1	6	1770	U	C6-N1-C2	6.14	124.69	121.00
36	5	2838	A	C4-C5-N7	-6.14	107.63	110.70
36	5	3315	G	C5-N7-C8	-6.14	101.23	104.30
36	1	2330	C	C2-N3-C4	-6.14	116.83	119.90
36	1	3094	A	C2-N3-C4	6.14	113.67	110.60
38	4	18	U	N3-C4-O4	6.14	123.70	119.40
1	6	999	U	C4-C5-C6	-6.14	116.02	119.70
73	o7	32	LYS	CD-CE-NZ	6.14	125.83	111.70
1	2	983	A	C2-N3-C4	6.14	113.67	110.60
1	2	1295	G	C5-C6-O6	-6.14	124.92	128.60
36	1	45	A	N7-C8-N9	6.14	116.87	113.80
36	1	875	G	C2-N3-C4	-6.14	108.83	111.90
36	1	1176	C	OP1-P-OP2	-6.14	110.39	119.60
36	1	1908	A	C6-C5-N7	-6.14	128.00	132.30
36	1	2311	G	C4-C5-N7	6.14	113.26	110.80
1	6	250	C	C2-N1-C1'	6.14	125.55	118.80
1	6	610	G	N3-C4-N9	6.14	129.68	126.00
36	5	660	A	N1-C2-N3	6.14	132.37	129.30
36	5	949	C	C4-C5-C6	6.14	120.47	117.40
36	5	1332	A	O4'-C1'-N9	-6.14	103.29	108.20
36	5	2159	U	O4'-C1'-N1	6.14	113.11	108.20
36	1	1104	G	N9-C4-C5	6.14	107.86	105.40
37	3	13	A	O5'-P-OP2	-6.14	100.18	105.70
38	4	32	C	OP2-P-O3'	6.14	118.70	105.20
36	5	3044	G	P-O3'-C3'	6.14	127.07	119.70
36	1	1545	A	N1-C6-N6	6.14	122.28	118.60
36	1	1695	U	N3-C2-O2	-6.14	117.91	122.20
36	1	2359	C	C4-C5-C6	6.14	120.47	117.40
36	1	3153	U	N3-C4-O4	-6.14	115.11	119.40
36	1	3230	G	N3-C2-N2	-6.14	115.61	119.90
1	6	1123	C	N3-C4-N4	6.14	122.30	118.00
1	6	1439	C	C5-C4-N4	-6.14	115.91	120.20
36	5	559	A	C5-C6-N6	-6.14	118.79	123.70
36	5	2297	U	N3-C4-C5	-6.14	110.92	114.60
36	5	2777	G	C6-C5-N7	6.14	134.08	130.40
36	5	2816	G	OP1-P-OP2	6.14	128.81	119.60
38	8	144	G	N3-C4-N9	6.14	129.68	126.00
1	2	1082	C	OP2-P-O3'	6.13	118.69	105.20
36	1	85	A	C5-C6-N1	-6.13	114.63	117.70
36	1	978	G	N1-C2-N3	-6.13	120.22	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2120	A	C6-N1-C2	-6.13	114.92	118.60
36	1	2352	A	C4-C5-N7	6.13	113.77	110.70
1	6	16	G	N1-C6-O6	6.13	123.58	119.90
1	6	425	A	C8-N9-C4	-6.13	103.35	105.80
1	6	1071	U	N3-C4-C5	-6.13	110.92	114.60
36	5	2601	A	C5-C6-N1	6.13	120.77	117.70
36	5	2782	U	N3-C2-O2	6.13	126.50	122.20
1	2	163	G	O4'-C1'-N9	6.13	113.11	108.20
1	2	1583	A	N1-C6-N6	-6.13	114.92	118.60
1	2	1631	A	N1-C6-N6	-6.13	114.92	118.60
36	1	754	G	N1-C6-O6	6.13	123.58	119.90
36	1	2246	G	OP1-P-O3'	6.13	118.69	105.20
36	1	3306	U	O5'-P-OP2	-6.13	100.18	105.70
1	6	1743	U	C5-C6-N1	-6.13	119.63	122.70
36	5	947	G	N1-C2-N3	6.13	127.58	123.90
36	5	1040	A	N7-C8-N9	-6.13	110.73	113.80
36	5	1843	C	N3-C4-N4	6.13	122.29	118.00
36	1	908	G	O4'-C1'-N9	-6.13	103.30	108.20
36	1	1808	G	C5-C6-O6	6.13	132.28	128.60
36	1	2649	A	C6-C5-N7	-6.13	128.01	132.30
1	6	1013	A	C6-C5-N7	6.13	136.59	132.30
1	6	1587	A	N1-C6-N6	6.13	122.28	118.60
36	5	842	G	N9-C4-C5	-6.13	102.95	105.40
36	5	1755	C	C2-N3-C4	6.13	122.97	119.90
67	o1	42	LEU	CA-CB-CG	-6.13	101.20	115.30
36	1	616	G	C5-C6-O6	-6.13	124.92	128.60
36	1	2095	G	N1-C6-O6	6.13	123.58	119.90
36	1	3361	G	N9-C4-C5	6.13	107.85	105.40
1	6	1025	A	C4-C5-N7	6.13	113.77	110.70
36	5	183	G	C4-C5-C6	6.13	122.48	118.80
36	5	1598	G	N1-C6-O6	-6.13	116.22	119.90
36	5	2932	U	C2-N1-C1'	-6.13	110.34	117.70
1	2	298	C	N3-C2-O2	6.13	126.19	121.90
36	1	1112	A	C6-N1-C2	-6.13	114.92	118.60
36	1	2706	G	C8-N9-C1'	-6.13	119.03	127.00
36	1	3230	G	N9-C4-C5	6.13	107.85	105.40
44	L7	215	GLY	N-CA-C	-6.13	97.78	113.10
1	6	418	G	O5'-P-OP1	-6.13	100.19	105.70
1	6	620	A	OP2-P-O3'	6.13	118.68	105.20
25	d3	121	ARG	NE-CZ-NH1	-6.13	117.24	120.30
36	5	54	C	C6-N1-C2	-6.13	117.85	120.30
36	5	911	C	C5-C6-N1	-6.13	117.94	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2215	A	O5'-P-OP2	-6.13	100.18	105.70
36	5	3102	G	N9-C4-C5	-6.13	102.95	105.40
36	5	3373	U	C5-C6-N1	-6.13	119.64	122.70
1	2	1764	C	N3-C4-C5	6.13	124.35	121.90
36	1	14	U	C4-C5-C6	6.13	123.38	119.70
36	1	2311	G	C5-N7-C8	-6.13	101.24	104.30
36	1	2762	A	C5-C6-N6	-6.13	118.80	123.70
36	1	2922	G	N1-C2-N2	-6.13	110.69	116.20
1	6	474	A	C8-N9-C4	6.13	108.25	105.80
36	5	351	A	C5-C6-N1	6.13	120.76	117.70
36	5	922	U	C6-N1-C1'	6.13	129.78	121.20
36	5	1688	U	N3-C4-O4	-6.13	115.11	119.40
36	5	2869	U	O5'-P-OP2	6.13	118.05	110.70
36	1	429	U	N1-C2-O2	6.12	127.09	122.80
36	1	2671	A	O5'-P-OP2	-6.12	100.19	105.70
71	O5	28	LEU	CA-CB-CG	6.12	129.39	115.30
1	6	40	A	C8-N9-C4	6.12	108.25	105.80
1	6	187	G	P-O3'-C3'	6.12	127.05	119.70
1	6	402	C	C6-N1-C1'	-6.12	113.45	120.80
1	6	1536	G	N3-C2-N2	6.12	124.19	119.90
36	5	1860	G	C8-N9-C4	-6.12	103.95	106.40
36	1	2111	G	N1-C6-O6	-6.12	116.23	119.90
36	1	2174	G	N1-C6-O6	6.12	123.57	119.90
38	4	98	U	N3-C4-C5	-6.12	110.93	114.60
1	6	1007	C	C5-C6-N1	-6.12	117.94	121.00
36	5	372	A	N9-C4-C5	6.12	108.25	105.80
36	5	394	G	C5-N7-C8	6.12	107.36	104.30
36	5	1620	U	O5'-P-OP2	-6.12	100.19	105.70
36	5	2987	A	C8-N9-C4	6.12	108.25	105.80
38	8	15	G	OP1-P-O3'	6.12	118.67	105.20
36	1	194	U	C6-N1-C2	-6.12	117.33	121.00
36	1	697	A	N3-C4-C5	6.12	131.09	126.80
36	1	1048	A	C6-C5-N7	6.12	136.59	132.30
36	1	2817	A	N1-C2-N3	6.12	132.36	129.30
36	1	2934	A	N9-C4-C5	-6.12	103.35	105.80
1	6	1610	G	C4-N9-C1'	6.12	134.46	126.50
36	5	64	G	N3-C4-N9	6.12	129.67	126.00
36	5	885	U	N1-C2-O2	-6.12	118.52	122.80
36	5	982	C	C4-C5-C6	-6.12	114.34	117.40
36	5	1929	G	C5-C6-N1	-6.12	108.44	111.50
36	5	3132	C	C4-C5-C6	6.12	120.46	117.40
36	5	3315	G	C4-C5-N7	6.12	113.25	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	549	G	N3-C2-N2	-6.12	115.62	119.90
36	5	281	G	C5-C6-O6	6.12	132.27	128.60
36	5	2377	G	O5'-P-OP2	-6.12	100.19	105.70
36	1	919	U	O5'-P-OP2	-6.12	100.19	105.70
36	1	1438	U	O5'-P-OP2	-6.12	100.19	105.70
36	1	1594	A	C5-C6-N1	6.12	120.76	117.70
36	1	2824	G	C4-N9-C1'	6.12	134.45	126.50
1	6	43	A	OP1-P-OP2	6.12	128.78	119.60
36	5	76	G	O5'-P-OP1	-6.12	100.19	105.70
36	5	349	A	C2-N3-C4	6.12	113.66	110.60
36	5	647	A	N1-C6-N6	-6.12	114.93	118.60
36	5	837	A	OP2-P-O3'	6.12	118.66	105.20
36	5	1164	G	C8-N9-C1'	6.12	134.95	127.00
36	5	1302	A	OP1-P-OP2	-6.12	110.42	119.60
36	5	1475	A	O5'-P-OP2	-6.12	100.19	105.70
36	5	1846	C	N3-C4-C5	6.12	124.35	121.90
38	8	3	A	O5'-P-OP1	-6.12	100.19	105.70
1	2	1464	G	C6-C5-N7	-6.12	126.73	130.40
36	1	657	A	C5-N7-C8	-6.12	100.84	103.90
36	1	1330	A	O5'-P-OP2	-6.12	100.19	105.70
36	1	1798	A	C2-N3-C4	-6.12	107.54	110.60
36	1	2826	U	C6-N1-C1'	6.12	129.76	121.20
36	5	584	G	C8-N9-C4	-6.12	103.95	106.40
36	5	1120	A	OP2-P-O3'	6.12	118.66	105.20
36	5	2247	G	N3-C2-N2	6.12	124.18	119.90
1	2	610	G	C6-C5-N7	-6.12	126.73	130.40
36	1	1521	G	C4-N9-C1'	-6.12	118.55	126.50
36	1	1819	U	C5-C6-N1	6.12	125.76	122.70
36	1	1929	G	N3-C4-N9	6.12	129.67	126.00
36	1	2966	G	C2-N3-C4	-6.12	108.84	111.90
36	1	3120	C	C6-N1-C2	6.12	122.75	120.30
42	L5	24	ARG	NE-CZ-NH1	-6.12	117.24	120.30
64	N8	56	VAL	CB-CA-C	-6.12	99.78	111.40
36	5	890	C	C2-N1-C1'	6.12	125.53	118.80
36	5	1477	A	N1-C2-N3	6.12	132.36	129.30
36	5	2379	U	N3-C2-O2	-6.12	117.92	122.20
36	5	3208	G	C2-N3-C4	-6.12	108.84	111.90
36	1	1306	G	C8-N9-C4	-6.11	103.95	106.40
36	1	1895	A	C8-N9-C4	6.11	108.25	105.80
36	1	1896	A	OP2-P-O3'	6.11	118.65	105.20
36	1	1937	U	C2-N1-C1'	-6.11	110.36	117.70
36	1	2420	C	N3-C4-C5	6.11	124.35	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3261	C	N1-C2-O2	-6.11	115.23	118.90
36	5	523	A	C5-C6-N1	-6.11	114.64	117.70
36	5	902	G	O5'-P-OP1	-6.11	100.20	105.70
36	5	976	U	O5'-P-OP2	-6.11	100.20	105.70
36	5	1681	U	N1-C2-N3	6.11	118.57	114.90
36	5	1884	A	N1-C6-N6	6.11	122.27	118.60
36	5	3063	C	N3-C4-C5	6.11	124.34	121.90
1	2	1523	G	C4-C5-N7	6.11	113.25	110.80
36	1	624	G	C4-C5-C6	6.11	122.47	118.80
36	1	660	A	N9-C4-C5	6.11	108.25	105.80
36	1	869	G	C6-N1-C2	-6.11	121.43	125.10
36	1	1394	A	N1-C6-N6	6.11	122.27	118.60
36	1	2980	U	OP1-P-O3'	6.11	118.65	105.20
36	1	3269	U	N3-C2-O2	-6.11	117.92	122.20
1	6	789	A	C8-N9-C4	-6.11	103.36	105.80
36	5	183	G	N1-C2-N3	6.11	127.57	123.90
36	5	3185	U	N3-C4-C5	-6.11	110.93	114.60
36	1	27	C	C4-C5-C6	6.11	120.46	117.40
36	1	401	U	N3-C2-O2	-6.11	117.92	122.20
36	1	2295	A	C8-N9-C4	-6.11	103.36	105.80
68	O2	8	LYS	CD-CE-NZ	6.11	125.75	111.70
1	6	753	A	C8-N9-C4	6.11	108.24	105.80
36	5	1296	C	O5'-P-OP1	6.11	118.03	110.70
36	5	1357	G	N7-C8-N9	6.11	116.16	113.10
36	5	2593	A	P-O3'-C3'	6.11	127.03	119.70
36	5	3019	U	N1-C2-N3	6.11	118.57	114.90
36	5	3053	G	C5-C6-N1	-6.11	108.44	111.50
1	2	389	G	C8-N9-C4	-6.11	103.96	106.40
1	2	1774	G	C8-N9-C1'	-6.11	119.06	127.00
36	1	1208	U	C5-C6-N1	6.11	125.75	122.70
36	1	2138	A	C5-C6-N6	-6.11	118.81	123.70
36	1	2185	G	C8-N9-C1'	-6.11	119.06	127.00
1	6	877	G	C8-N9-C4	6.11	108.84	106.40
1	6	1212	G	C2-N3-C4	6.11	114.95	111.90
1	6	1791	A	C8-N9-C4	6.11	108.24	105.80
36	5	306	A	O5'-P-OP2	-6.11	100.20	105.70
36	5	502	U	C6-N1-C2	6.11	124.67	121.00
36	5	921	A	C4-C5-C6	6.11	120.06	117.00
36	5	2572	C	C6-N1-C1'	-6.11	113.47	120.80
37	7	107	C	C6-N1-C2	6.11	122.74	120.30
1	2	323	A	O5'-P-OP2	-6.11	100.20	105.70
36	1	1112	A	C5-C6-N1	6.11	120.75	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1385	C	C6-N1-C1'	6.11	128.13	120.80
36	1	1524	A	N9-C4-C5	6.11	108.24	105.80
36	1	1818	U	N3-C2-O2	-6.11	117.92	122.20
36	1	2333	C	OP2-P-O3'	6.11	118.64	105.20
36	1	2881	C	N3-C2-O2	6.11	126.18	121.90
40	L3	270	ARG	NE-CZ-NH1	-6.11	117.25	120.30
1	6	750	U	N1-C2-O2	-6.11	118.53	122.80
1	6	1704	U	C5-C6-N1	6.11	125.75	122.70
7	s5	118	LEU	CA-CB-CG	-6.11	101.25	115.30
36	5	731	U	N3-C4-O4	-6.11	115.12	119.40
36	5	2640	A	N9-C4-C5	-6.11	103.36	105.80
36	5	2969	A	C4-C5-C6	6.11	120.05	117.00
1	2	260	U	C2-N1-C1'	6.11	125.03	117.70
36	1	1097	G	C6-C5-N7	-6.11	126.74	130.40
36	5	197	G	O5'-P-OP2	6.11	118.03	110.70
36	5	708	G	C6-C5-N7	-6.11	126.74	130.40
36	5	1370	G	C8-N9-C4	-6.11	103.96	106.40
36	5	2383	C	C2-N1-C1'	6.11	125.52	118.80
36	5	2896	A	N9-C4-C5	-6.11	103.36	105.80
36	1	521	A	O5'-P-OP2	6.10	118.02	110.70
36	5	922	U	C6-N1-C2	6.10	124.66	121.00
36	5	2877	G	C5-C6-O6	6.10	132.26	128.60
36	5	2943	G	O4'-C1'-N9	-6.10	103.32	108.20
36	5	2944	U	C4-C5-C6	6.10	123.36	119.70
36	5	3303	G	N1-C6-O6	-6.10	116.24	119.90
1	2	155	U	O4'-C1'-N1	6.10	113.08	108.20
1	2	577	G	N7-C8-N9	6.10	116.15	113.10
36	1	183	G	N1-C2-N2	-6.10	110.71	116.20
36	1	642	U	C2-N3-C4	6.10	130.66	127.00
36	1	652	G	N1-C6-O6	-6.10	116.24	119.90
36	1	918	C	N3-C4-C5	6.10	124.34	121.90
36	1	1400	G	OP2-P-O3'	6.10	118.62	105.20
36	1	2706	G	C4-N9-C1'	6.10	134.43	126.50
1	6	1463	C	C4-C5-C6	-6.10	114.35	117.40
1	6	1557	U	C5-C4-O4	6.10	129.56	125.90
1	6	1575	G	C4-N9-C1'	-6.10	118.57	126.50
36	5	1916	U	C5-C4-O4	6.10	129.56	125.90
36	5	2777	G	N7-C8-N9	-6.10	110.05	113.10
36	5	2898	G	N1-C2-N3	6.10	127.56	123.90
37	7	83	U	C6-N1-C2	-6.10	117.34	121.00
1	2	1148	C	C4-C5-C6	6.10	120.45	117.40
36	1	766	U	C5-C6-N1	6.10	125.75	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2701	U	N1-C2-O2	-6.10	118.53	122.80
36	1	3369	G	C4-N9-C1'	6.10	134.43	126.50
1	6	98	U	C5-C6-N1	-6.10	119.65	122.70
1	6	678	A	N7-C8-N9	6.10	116.85	113.80
1	6	1442	U	N3-C2-O2	-6.10	117.93	122.20
36	5	2414	G	C6-C5-N7	-6.10	126.74	130.40
25	D3	45	GLY	N-CA-C	-6.10	97.85	113.10
36	1	557	A	C2-N3-C4	-6.10	107.55	110.60
36	1	1197	A	C5-N7-C8	-6.10	100.85	103.90
36	1	2296	A	C6-C5-N7	-6.10	128.03	132.30
36	1	2325	G	C4-C5-N7	6.10	113.24	110.80
36	1	2900	A	N1-C6-N6	-6.10	114.94	118.60
36	1	2957	G	C4-C5-N7	6.10	113.24	110.80
36	1	3318	G	C6-C5-N7	-6.10	126.74	130.40
1	6	460	A	N7-C8-N9	6.10	116.85	113.80
36	5	513	G	C5-C6-N1	6.10	114.55	111.50
36	5	1205	A	C8-N9-C4	6.10	108.24	105.80
36	5	1637	A	C4-C5-N7	-6.10	107.65	110.70
36	5	2813	A	C4-C5-N7	6.10	113.75	110.70
36	5	2837	A	C5-N7-C8	6.10	106.95	103.90
37	7	1	G	C8-N9-C1'	-6.10	119.07	127.00
1	2	992	A	N1-C6-N6	6.10	122.26	118.60
36	1	102	C	OP1-P-OP2	-6.10	110.45	119.60
36	1	404	G	C4-C5-N7	6.10	113.24	110.80
36	1	2875	U	C2-N3-C4	6.10	130.66	127.00
36	1	2937	G	N3-C4-N9	-6.10	122.34	126.00
36	1	3120	C	C2-N1-C1'	-6.10	112.09	118.80
38	4	113	U	C5-C4-O4	6.10	129.56	125.90
1	6	1418	G	C4-C5-C6	6.10	122.46	118.80
1	6	1644	C	C5-C6-N1	-6.10	117.95	121.00
36	5	720	A	N9-C4-C5	6.10	108.24	105.80
36	5	1176	C	C6-N1-C1'	6.10	128.12	120.80
36	5	2145	A	C6-C5-N7	-6.10	128.03	132.30
1	2	19	A	C5-C6-N6	-6.10	118.82	123.70
1	2	25	C	N1-C2-N3	6.10	123.47	119.20
36	1	657	A	C5-C6-N6	-6.10	118.82	123.70
36	1	2374	C	C4-C5-C6	6.10	120.45	117.40
1	6	1002	G	N3-C4-C5	6.10	131.65	128.60
36	5	218	G	C8-N9-C4	-6.10	103.96	106.40
36	5	2769	A	C8-N9-C4	-6.10	103.36	105.80
36	1	1172	G	N7-C8-N9	6.09	116.15	113.10
36	1	1514	G	C6-C5-N7	-6.09	126.74	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2148	U	OP1-P-OP2	6.09	128.74	119.60
36	1	2866	U	C5-C4-O4	6.09	129.56	125.90
36	1	3232	G	C5-C6-N1	-6.09	108.45	111.50
37	3	104	A	C4-C5-N7	-6.09	107.65	110.70
44	L7	131	GLU	C-N-CD	6.09	141.20	128.40
1	6	1	U	N1-C2-O2	6.09	127.07	122.80
1	6	1243	G	N3-C4-C5	-6.09	125.55	128.60
1	6	1556	A	C5-C6-N6	-6.09	118.82	123.70
36	5	890	C	N1-C2-O2	6.09	122.56	118.90
36	5	960	U	OP1-P-O3'	-6.09	91.79	105.20
36	5	1433	A	OP1-P-OP2	-6.09	110.46	119.60
36	5	2355	G	C5-N7-C8	-6.09	101.25	104.30
36	5	2370	G	C5-C6-N1	-6.09	108.45	111.50
36	5	2794	G	C6-N1-C2	-6.09	121.44	125.10
36	5	2824	G	C5-N7-C8	-6.09	101.25	104.30
36	5	3067	C	N3-C4-C5	6.09	124.34	121.90
37	7	91	G	N1-C2-N2	-6.09	110.72	116.20
38	8	126	A	N1-C6-N6	-6.09	114.94	118.60
36	1	3061	G	C4-C5-N7	6.09	113.24	110.80
36	5	95	A	C2-N3-C4	-6.09	107.55	110.60
36	5	648	C	C2-N1-C1'	-6.09	112.10	118.80
36	5	1405	U	N1-C2-O2	-6.09	118.53	122.80
36	5	2945	G	C4-N9-C1'	6.09	134.42	126.50
36	5	3276	G	O5'-P-OP2	6.09	118.01	110.70
1	2	1029	U	C5-C6-N1	-6.09	119.65	122.70
1	2	1599	C	N3-C2-O2	-6.09	117.64	121.90
36	1	157	A	C6-N1-C2	-6.09	114.94	118.60
36	1	364	G	C5-N7-C8	-6.09	101.25	104.30
36	1	1374	G	C6-N1-C2	-6.09	121.44	125.10
36	1	1453	A	O5'-P-OP2	-6.09	100.22	105.70
36	1	3126	C	O5'-P-OP2	-6.09	100.22	105.70
1	6	922	G	C8-N9-C1'	-6.09	119.08	127.00
1	6	1362	U	N3-C2-O2	-6.09	117.94	122.20
1	6	1547	A	N3-C4-C5	6.09	131.06	126.80
36	5	504	A	C8-N9-C4	6.09	108.24	105.80
36	5	830	A	C2-N3-C4	-6.09	107.55	110.60
36	5	850	U	N3-C2-O2	6.09	126.46	122.20
36	5	943	U	N1-C2-N3	6.09	118.56	114.90
36	5	1113	G	N3-C4-C5	6.09	131.65	128.60
36	5	3019	U	N1-C2-O2	6.09	127.06	122.80
1	2	334	G	C5-N7-C8	6.09	107.34	104.30
1	2	1252	C	C6-N1-C2	6.09	122.74	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	278	U	N1-C2-N3	6.09	118.55	114.90
36	1	803	C	N3-C2-O2	-6.09	117.64	121.90
36	1	963	G	N1-C2-N2	-6.09	110.72	116.20
36	1	1098	A	C6-N1-C2	-6.09	114.95	118.60
36	1	1164	G	N1-C2-N2	6.09	121.68	116.20
36	1	1207	G	C5-N7-C8	-6.09	101.25	104.30
36	1	1301	A	O5'-P-OP1	-6.09	100.22	105.70
36	1	1329	U	OP1-P-O3'	6.09	118.59	105.20
36	1	1452	A	O5'-P-OP1	-6.09	100.22	105.70
36	1	1526	U	C6-N1-C1'	-6.09	112.67	121.20
36	1	2609	A	C4-C5-C6	6.09	120.05	117.00
36	1	3031	G	C8-N9-C1'	6.09	134.92	127.00
1	6	1026	A	OP2-P-O3'	6.09	118.60	105.20
1	6	1576	A	N1-C6-N6	6.09	122.25	118.60
1	6	1765	A	N9-C4-C5	6.09	108.24	105.80
36	5	333	G	OP2-P-O3'	6.09	118.60	105.20
36	5	1606	U	C5-C6-N1	-6.09	119.66	122.70
36	5	2347	U	C5-C4-O4	6.09	129.55	125.90
36	5	2682	C	OP1-P-OP2	-6.09	110.47	119.60
36	5	2881	C	O5'-P-OP2	6.09	118.01	110.70
36	5	3323	A	C6-N1-C2	-6.09	114.95	118.60
38	8	87	G	N3-C4-C5	-6.09	125.56	128.60
1	2	1784	C	C6-N1-C2	-6.09	117.86	120.30
36	1	789	A	O5'-P-OP2	-6.09	100.22	105.70
36	1	2175	U	C4-C5-C6	6.09	123.35	119.70
36	1	2652	U	N1-C2-O2	-6.09	118.54	122.80
50	M4	121	MET	CB-CG-SD	-6.09	94.14	112.40
1	6	1485	C	N3-C2-O2	6.09	126.16	121.90
36	5	2381	G	N7-C8-N9	-6.09	110.06	113.10
36	5	289	A	C6-C5-N7	-6.09	128.04	132.30
36	5	1798	A	N1-C6-N6	6.09	122.25	118.60
36	5	2845	A	C5-N7-C8	-6.09	100.86	103.90
36	5	2920	U	N1-C2-O2	6.09	127.06	122.80
36	1	1521	G	C8-N9-C1'	6.08	134.91	127.00
36	1	2376	G	C5-C6-N1	6.08	114.54	111.50
36	1	3053	G	N1-C2-N3	6.08	127.55	123.90
36	1	3147	G	N1-C6-O6	-6.08	116.25	119.90
36	1	3270	U	O5'-P-OP1	-6.08	100.22	105.70
38	4	42	G	OP1-P-OP2	-6.08	110.47	119.60
1	6	1106	U	N3-C4-O4	6.08	123.66	119.40
1	6	1513	G	C4-C5-C6	6.08	122.45	118.80
36	5	796	U	C5-C6-N1	6.08	125.74	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2861	U	N1-C2-N3	-6.08	111.25	114.90
1	2	880	C	N3-C4-C5	-6.08	119.47	121.90
1	2	1670	G	N3-C4-C5	-6.08	125.56	128.60
36	1	25	U	C4-C5-C6	6.08	123.35	119.70
36	1	503	C	O4'-C1'-N1	6.08	113.07	108.20
36	1	1429	G	N3-C2-N2	6.08	124.16	119.90
36	1	1542	G	N3-C4-C5	6.08	131.64	128.60
36	1	3243	A	N1-C2-N3	-6.08	126.26	129.30
1	6	115	G	C2-N3-C4	-6.08	108.86	111.90
1	6	1178	G	C8-N9-C1'	-6.08	119.09	127.00
1	6	1324	G	N7-C8-N9	6.08	116.14	113.10
36	5	217	U	N3-C2-O2	-6.08	117.94	122.20
36	5	1420	C	C2-N1-C1'	-6.08	112.11	118.80
36	5	2859	U	N3-C4-O4	-6.08	115.14	119.40
36	5	3046	A	C6-N1-C2	-6.08	114.95	118.60
1	2	730	G	C4-N9-C1'	6.08	134.41	126.50
36	1	383	G	N1-C6-O6	-6.08	116.25	119.90
36	1	1379	G	C2-N3-C4	-6.08	108.86	111.90
36	1	1399	A	N3-C4-N9	-6.08	122.53	127.40
38	4	40	A	N3-C4-C5	-6.08	122.54	126.80
1	6	1128	C	N1-C2-O2	-6.08	115.25	118.90
1	6	1176	G	N1-C6-O6	6.08	123.55	119.90
1	6	1534	G	N1-C2-N2	6.08	121.67	116.20
36	5	776	U	C5-C4-O4	6.08	129.55	125.90
36	5	963	G	OP1-P-OP2	-6.08	110.48	119.60
36	5	1260	A	C8-N9-C4	-6.08	103.37	105.80
36	5	1489	A	C4-N9-C1'	6.08	137.25	126.30
36	5	2628	A	C8-N9-C4	-6.08	103.37	105.80
36	5	2799	A	N1-C6-N6	-6.08	114.95	118.60
36	5	2932	U	C5-C6-N1	-6.08	119.66	122.70
44	17	100	ARG	NE-CZ-NH2	-6.08	117.26	120.30
36	1	372	A	N1-C6-N6	6.08	122.25	118.60
36	1	2910	A	C5-C6-N6	6.08	128.56	123.70
36	1	3142	A	C4-C5-N7	-6.08	107.66	110.70
38	4	13	A	N1-C2-N3	6.08	132.34	129.30
38	4	98	U	N3-C4-O4	6.08	123.66	119.40
36	5	1922	A	N3-C4-C5	6.08	131.06	126.80
36	5	2709	C	N3-C4-N4	6.08	122.26	118.00
1	2	1541	G	C4-C5-C6	6.08	122.45	118.80
36	1	1210	U	C5-C6-N1	-6.08	119.66	122.70
36	1	1858	A	C5-C6-N6	-6.08	118.84	123.70
36	1	2541	U	P-O3'-C3'	6.08	126.99	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2846	U	C2-N1-C1'	6.08	125.00	117.70
79	Q3	23	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	6	597	G	N9-C4-C5	-6.08	102.97	105.40
1	6	611	U	N3-C4-O4	6.08	123.65	119.40
1	6	858	G	C6-C5-N7	-6.08	126.75	130.40
1	6	1038	U	N3-C4-O4	6.08	123.66	119.40
1	6	1495	C	O5'-P-OP1	-6.08	100.23	105.70
36	5	675	C	C5-C4-N4	-6.08	115.94	120.20
36	5	2408	U	N3-C4-O4	6.08	123.65	119.40
36	5	3032	A	C6-C5-N7	6.08	136.56	132.30
37	7	118	A	N1-C2-N3	6.08	132.34	129.30
36	1	226	C	C2-N1-C1'	-6.08	112.11	118.80
36	1	3102	G	N1-C6-O6	-6.08	116.25	119.90
36	1	3266	G	C4-C5-C6	6.08	122.45	118.80
36	5	396	A	N3-C4-N9	-6.08	122.54	127.40
36	5	552	G	N3-C2-N2	-6.08	115.65	119.90
36	5	934	G	C5-N7-C8	-6.08	101.26	104.30
36	5	2727	A	C5-C6-N6	6.08	128.56	123.70
1	2	420	A	C5-C6-N6	-6.08	118.84	123.70
1	2	1277	G	N7-C8-N9	6.08	116.14	113.10
36	1	9	U	C6-N1-C2	6.08	124.65	121.00
36	1	1509	A	N9-C4-C5	-6.08	103.37	105.80
36	1	2743	A	N7-C8-N9	-6.08	110.76	113.80
36	1	2820	A	N3-C4-N9	-6.08	122.54	127.40
38	4	30	C	N3-C4-N4	-6.08	113.75	118.00
79	Q3	29	LEU	CA-CB-CG	-6.08	101.33	115.30
1	6	457	G	C6-C5-N7	-6.08	126.75	130.40
36	5	501	A	C6-N1-C2	-6.08	114.95	118.60
36	5	511	G	C5-C6-N1	-6.08	108.46	111.50
36	5	639	G	N1-C6-O6	6.08	123.55	119.90
36	5	688	G	C8-N9-C4	-6.08	103.97	106.40
36	5	822	G	C4-N9-C1'	6.08	134.40	126.50
36	5	1848	G	OP1-P-OP2	6.08	128.72	119.60
36	5	2434	U	C4-C5-C6	6.08	123.34	119.70
36	5	2672	G	OP1-P-OP2	6.08	128.71	119.60
1	2	1200	G	C5-C6-O6	-6.07	124.96	128.60
36	1	625	G	N7-C8-N9	-6.07	110.06	113.10
36	1	648	C	C2-N1-C1'	6.07	125.48	118.80
36	1	1478	C	N3-C4-C5	-6.07	119.47	121.90
36	5	234	G	O5'-P-OP2	-6.07	100.23	105.70
36	5	1056	U	N1-C2-O2	6.07	127.05	122.80
36	5	1382	G	C4-C5-N7	6.07	113.23	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1914	G	N9-C4-C5	6.07	107.83	105.40
77	q1	17	ARG	NE-CZ-NH1	-6.07	117.26	120.30
1	2	360	A	C6-N1-C2	6.07	122.24	118.60
36	1	30	G	C4-C5-C6	-6.07	115.16	118.80
36	1	2978	U	C6-N1-C2	-6.07	117.36	121.00
36	1	3156	U	C6-N1-C2	6.07	124.64	121.00
36	5	713	U	C5-C6-N1	-6.07	119.66	122.70
36	5	3310	A	C2-N3-C4	-6.07	107.56	110.60
1	2	167	U	C6-N1-C2	6.07	124.64	121.00
1	2	1112	G	N1-C6-O6	6.07	123.54	119.90
1	2	1191	U	N1-C2-N3	6.07	118.54	114.90
36	1	926	A	C4-C5-N7	6.07	113.74	110.70
36	1	3349	C	N1-C2-O2	6.07	122.54	118.90
1	6	1006	C	C5-C6-N1	-6.07	117.97	121.00
1	6	1199	G	O5'-P-OP2	-6.07	100.24	105.70
36	5	723	U	N1-C2-N3	6.07	118.54	114.90
36	5	854	G	N1-C2-N2	6.07	121.66	116.20
36	5	1385	C	N3-C4-C5	-6.07	119.47	121.90
36	5	1599	G	OP1-P-O3'	6.07	118.55	105.20
36	5	1807	G	C8-N9-C4	6.07	108.83	106.40
36	5	1873	U	C6-N1-C2	-6.07	117.36	121.00
36	5	2760	C	O5'-P-OP2	-6.07	100.24	105.70
37	7	9	C	OP1-P-OP2	-6.07	110.49	119.60
36	1	2622	C	N1-C2-N3	6.07	123.45	119.20
1	6	593	U	C6-N1-C2	-6.07	117.36	121.00
36	5	2413	A	O5'-P-OP2	6.07	117.98	110.70
36	5	2866	U	N3-C2-O2	-6.07	117.95	122.20
36	5	2947	G	C4-C5-N7	6.07	113.23	110.80
36	5	3044	G	C4-C5-C6	6.07	122.44	118.80
1	2	1647	U	N3-C2-O2	-6.07	117.95	122.20
36	1	80	G	OP2-P-O3'	6.07	118.55	105.20
36	1	1526	U	C2-N1-C1'	6.07	124.98	117.70
1	6	359	A	C6-C5-N7	6.07	136.55	132.30
1	6	457	G	N1-C6-O6	6.07	123.54	119.90
1	6	1759	C	N3-C4-N4	6.07	122.25	118.00
36	5	95	A	N3-C4-N9	-6.07	122.55	127.40
36	5	1389	G	O5'-P-OP2	6.07	117.98	110.70
36	5	2920	U	C2-N3-C4	-6.07	123.36	127.00
36	5	3105	U	OP1-P-O3'	-6.07	91.85	105.20
36	5	3272	C	N1-C2-N3	6.07	123.45	119.20
1	2	191	C	C2-N1-C1'	-6.07	112.13	118.80
1	2	1354	G	C8-N9-C4	-6.07	103.97	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	368	G	N1-C2-N3	6.07	127.54	123.90
36	1	981	U	N3-C4-C5	-6.07	110.96	114.60
36	1	2427	U	N3-C4-O4	-6.07	115.15	119.40
36	1	3011	A	N3-C4-N9	-6.07	122.55	127.40
36	1	3260	G	C4-C5-C6	6.07	122.44	118.80
36	1	3388	C	N1-C2-O2	6.07	122.54	118.90
69	O3	21	ARG	NE-CZ-NH2	-6.07	117.27	120.30
36	5	1423	C	C6-N1-C2	-6.07	117.87	120.30
36	5	2173	U	C6-N1-C2	-6.07	117.36	121.00
36	5	2428	U	N3-C4-C5	6.07	118.24	114.60
36	1	681	U	C2-N1-C1'	6.06	124.98	117.70
36	1	1439	U	OP2-P-O3'	-6.06	91.86	105.20
36	5	1177	G	C8-N9-C1'	-6.06	119.12	127.00
36	5	1236	G	C4-N9-C1'	6.06	134.38	126.50
36	5	1430	U	C2-N3-C4	-6.06	123.36	127.00
36	1	24	G	C5-C6-N1	-6.06	108.47	111.50
36	1	805	G	C5-C6-N1	-6.06	108.47	111.50
36	1	1519	G	N3-C4-C5	6.06	131.63	128.60
36	1	2755	C	N3-C4-C5	6.06	124.33	121.90
36	1	3059	G	C8-N9-C4	6.06	108.83	106.40
36	1	3184	A	C5-C6-N1	6.06	120.73	117.70
1	6	1	U	C6-N1-C2	-6.06	117.36	121.00
1	6	1031	U	C5-C4-O4	6.06	129.54	125.90
1	6	1121	C	C2-N1-C1'	6.06	125.47	118.80
1	6	1303	U	N3-C2-O2	6.06	126.44	122.20
1	6	1409	G	C8-N9-C1'	-6.06	119.12	127.00
36	5	712	G	C5-C6-N1	6.06	114.53	111.50
36	5	911	C	C4-C5-C6	6.06	120.43	117.40
36	5	1164	G	N3-C2-N2	-6.06	115.66	119.90
36	5	1448	U	C2-N3-C4	-6.06	123.36	127.00
36	5	1632	A	N7-C8-N9	-6.06	110.77	113.80
36	5	1719	G	N3-C4-N9	-6.06	122.36	126.00
36	5	2431	C	C4-C5-C6	-6.06	114.37	117.40
36	5	3040	A	O5'-P-OP1	-6.06	100.24	105.70
36	5	3143	C	C5-C6-N1	6.06	124.03	121.00
36	1	1439	U	C2-N1-C1'	6.06	124.97	117.70
36	1	3112	G	OP1-P-O3'	6.06	118.53	105.20
36	5	2195	C	N3-C2-O2	-6.06	117.66	121.90
42	l5	15	ARG	NE-CZ-NH1	-6.06	117.27	120.30
1	2	967	A	C4-C5-N7	6.06	113.73	110.70
1	2	1438	G	C8-N9-C4	6.06	108.82	106.40
36	1	317	A	C8-N9-C4	-6.06	103.38	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1838	G	N1-C2-N3	6.06	127.54	123.90
36	1	3007	U	C5-C6-N1	-6.06	119.67	122.70
1	6	310	C	C5-C4-N4	-6.06	115.96	120.20
1	6	1000	C	C5-C4-N4	6.06	124.44	120.20
36	5	376	G	C4-C5-C6	6.06	122.44	118.80
36	5	865	U	N1-C2-N3	6.06	118.53	114.90
36	5	972	A	N9-C4-C5	6.06	108.22	105.80
36	5	1620	U	N1-C2-O2	6.06	127.04	122.80
36	5	1793	C	O4'-C1'-N1	-6.06	103.35	108.20
36	5	1830	G	OP1-P-O3'	6.06	118.53	105.20
36	5	3026	G	C8-N9-C1'	-6.06	119.12	127.00
1	2	1456	C	C6-N1-C2	-6.06	117.88	120.30
36	1	1209	G	N1-C2-N2	-6.06	110.75	116.20
37	3	92	A	C5-N7-C8	-6.06	100.87	103.90
1	6	1031	U	N1-C2-N3	6.06	118.53	114.90
1	6	1679	G	C8-N9-C4	-6.06	103.98	106.40
36	5	881	C	C2-N1-C1'	6.06	125.46	118.80
36	5	3304	U	C4-C5-C6	6.06	123.33	119.70
1	2	6	G	N3-C4-N9	6.06	129.63	126.00
36	1	2698	G	C5-C6-O6	-6.06	124.97	128.60
36	5	1879	A	O5'-P-OP2	-6.06	100.25	105.70
36	5	2200	U	N1-C2-N3	6.06	118.53	114.90
36	5	2381	G	O5'-P-OP1	6.06	117.97	110.70
36	5	2418	G	C8-N9-C4	6.06	108.82	106.40
37	7	28	C	C2-N3-C4	-6.06	116.87	119.90
1	2	163	G	C8-N9-C4	-6.05	103.98	106.40
36	1	78	U	O5'-P-OP2	6.05	117.97	110.70
36	1	1050	U	OP2-P-O3'	6.05	118.52	105.20
36	1	1153	A	C6-C5-N7	-6.05	128.06	132.30
36	1	1428	A	C5-N7-C8	-6.05	100.87	103.90
36	1	1939	G	N1-C2-N2	-6.05	110.75	116.20
36	1	2639	G	N9-C4-C5	6.05	107.82	105.40
36	1	2936	A	C4-C5-C6	-6.05	113.97	117.00
36	1	3226	A	N1-C2-N3	6.05	132.33	129.30
38	4	89	A	C8-N9-C4	6.05	108.22	105.80
1	6	764	U	N3-C4-C5	-6.05	110.97	114.60
36	5	355	A	N1-C2-N3	6.05	132.33	129.30
36	5	1518	U	C4-C5-C6	6.05	123.33	119.70
36	5	2839	G	C6-C5-N7	6.05	134.03	130.40
36	5	3171	U	OP2-P-O3'	6.05	118.52	105.20
37	7	97	A	C5-C6-N1	6.05	120.73	117.70
1	2	579	A	N1-C6-N6	-6.05	114.97	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	966	U	C6-N1-C2	-6.05	117.37	121.00
1	2	386	G	C5-C6-O6	6.05	132.23	128.60
1	2	1417	A	C8-N9-C4	6.05	108.22	105.80
1	2	1550	A	C5-N7-C8	-6.05	100.87	103.90
1	2	1749	A	O5'-P-OP1	-6.05	100.25	105.70
36	1	787	G	C4-C5-C6	6.05	122.43	118.80
36	1	1417	G	C5-N7-C8	-6.05	101.27	104.30
36	1	1835	A	O4'-C1'-N9	-6.05	103.36	108.20
36	1	2958	A	C8-N9-C4	-6.05	103.38	105.80
36	1	3032	A	C4-C5-N7	-6.05	107.67	110.70
37	3	36	C	C6-N1-C1'	-6.05	113.54	120.80
1	6	901	G	N1-C2-N3	-6.05	120.27	123.90
1	6	1340	U	C5-C4-O4	6.05	129.53	125.90
36	5	285	A	C8-N9-C4	-6.05	103.38	105.80
36	5	354	U	C6-N1-C1'	-6.05	112.73	121.20
36	5	2756	C	C2-N1-C1'	6.05	125.46	118.80
36	5	2942	C	C2-N1-C1'	-6.05	112.14	118.80
1	2	1455	G	C5-C6-O6	6.05	132.23	128.60
36	1	1180	A	C4-C5-N7	-6.05	107.68	110.70
36	1	2115	G	N1-C6-O6	6.05	123.53	119.90
1	6	555	A	N9-C4-C5	6.05	108.22	105.80
1	6	891	A	N7-C8-N9	-6.05	110.78	113.80
1	6	1207	C	C6-N1-C1'	-6.05	113.54	120.80
1	6	1615	C	C2-N3-C4	-6.05	116.88	119.90
36	5	42	C	C2-N1-C1'	6.05	125.45	118.80
36	5	196	G	C8-N9-C4	-6.05	103.98	106.40
36	5	752	C	OP1-P-O3'	6.05	118.51	105.20
36	5	3001	C	N3-C4-C5	6.05	124.32	121.90
36	5	3307	A	C2-N3-C4	-6.05	107.58	110.60
36	1	583	G	N7-C8-N9	-6.05	110.08	113.10
36	1	688	G	C8-N9-C1'	-6.05	119.14	127.00
36	1	865	U	C5-C4-O4	6.05	129.53	125.90
36	1	2278	C	OP1-P-O3'	6.05	118.50	105.20
55	M9	103	ARG	NE-CZ-NH1	-6.05	117.28	120.30
1	6	1746	A	OP1-P-OP2	-6.05	110.53	119.60
36	5	630	A	C5-N7-C8	6.05	106.92	103.90
36	5	690	A	C8-N9-C4	6.05	108.22	105.80
36	5	2647	A	C2-N3-C4	-6.05	107.58	110.60
1	2	61	A	N1-C6-N6	6.05	122.23	118.60
1	2	1777	G	C8-N9-C4	-6.05	103.98	106.40
36	1	99	A	C5-C6-N6	6.05	128.54	123.70
36	1	430	U	C2-N3-C4	-6.05	123.37	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	674	G	C6-C5-N7	-6.05	126.77	130.40
36	1	722	G	N3-C4-N9	6.05	129.63	126.00
36	1	2160	G	C2-N3-C4	-6.05	108.88	111.90
1	6	407	A	C6-C5-N7	-6.05	128.07	132.30
1	6	1136	U	O5'-P-OP2	6.05	117.96	110.70
1	6	1200	G	OP1-P-O3'	6.05	118.50	105.20
1	6	1523	G	C6-N1-C2	-6.05	121.47	125.10
36	5	788	C	OP2-P-O3'	6.05	118.50	105.20
36	5	935	U	N3-C4-O4	6.05	123.63	119.40
36	5	982	C	C5-C4-N4	-6.05	115.97	120.20
36	5	1186	G	OP1-P-OP2	6.05	128.67	119.60
36	5	1525	G	C8-N9-C1'	-6.05	119.14	127.00
36	5	3307	A	N1-C2-N3	6.05	132.32	129.30
37	7	89	G	N9-C4-C5	-6.05	102.98	105.40
66	o0	104	LEU	CA-CB-CG	6.05	129.21	115.30
36	1	100	A	C4-C5-C6	6.04	120.02	117.00
36	1	358	G	N9-C4-C5	-6.04	102.98	105.40
36	1	729	C	N1-C2-N3	6.04	123.43	119.20
36	1	1389	G	O5'-P-OP1	-6.04	100.26	105.70
36	5	2827	U	C6-N1-C2	6.04	124.63	121.00
36	5	3215	A	O4'-C1'-N9	-6.04	103.36	108.20
36	1	1179	A	N7-C8-N9	-6.04	110.78	113.80
36	1	1204	A	N3-C4-C5	6.04	131.03	126.80
36	1	1429	G	C4-N9-C1'	6.04	134.36	126.50
36	1	2223	A	N1-C2-N3	6.04	132.32	129.30
36	1	2679	A	O4'-C1'-N9	6.04	113.04	108.20
36	1	2813	A	C5-N7-C8	6.04	106.92	103.90
37	3	7	G	C4-C5-N7	-6.04	108.38	110.80
1	6	948	G	N9-C4-C5	-6.04	102.98	105.40
36	5	63	A	C4-C5-C6	6.04	120.02	117.00
36	5	297	G	C4-N9-C1'	6.04	134.35	126.50
36	5	646	A	O5'-P-OP1	-6.04	100.26	105.70
36	5	971	G	C6-N1-C2	-6.04	121.47	125.10
36	5	1434	G	N7-C8-N9	6.04	116.12	113.10
36	5	1884	A	C6-C5-N7	-6.04	128.07	132.30
38	8	2	A	C2-N3-C4	-6.04	107.58	110.60
36	1	1502	C	C6-N1-C2	-6.04	117.88	120.30
36	1	1548	C	C5-C4-N4	-6.04	115.97	120.20
1	6	800	U	N1-C2-N3	6.04	118.53	114.90
36	5	355	A	C5-C6-N1	-6.04	114.68	117.70
36	5	1333	C	N3-C4-N4	6.04	122.23	118.00
36	5	1856	C	N3-C4-N4	6.04	122.23	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3002	C	C5-C4-N4	-6.04	115.97	120.20
36	5	3207	U	O4'-C1'-N1	6.04	113.03	108.20
36	5	3232	G	N1-C6-O6	6.04	123.53	119.90
1	2	1456	C	O4'-C1'-N1	6.04	113.03	108.20
36	1	151	A	C8-N9-C4	-6.04	103.38	105.80
36	1	2906	C	O5'-P-OP1	-6.04	100.26	105.70
1	6	16	G	O5'-P-OP2	-6.04	100.26	105.70
1	6	542	A	N1-C2-N3	6.04	132.32	129.30
36	5	963	G	C6-N1-C2	-6.04	121.48	125.10
36	5	1465	A	N1-C2-N3	6.04	132.32	129.30
1	2	307	G	N1-C6-O6	-6.04	116.28	119.90
36	1	75	G	O5'-P-OP1	6.04	117.95	110.70
36	1	589	A	N7-C8-N9	-6.04	110.78	113.80
36	1	641	C	C4-C5-C6	-6.04	114.38	117.40
36	1	1195	A	N9-C4-C5	6.04	108.22	105.80
36	1	1323	G	C8-N9-C1'	-6.04	119.15	127.00
36	1	1482	A	N7-C8-N9	6.04	116.82	113.80
36	1	3363	U	N3-C2-O2	-6.04	117.97	122.20
38	4	38	U	N3-C4-C5	-6.04	110.98	114.60
36	5	1323	G	O5'-P-OP2	-6.04	100.27	105.70
36	5	2641	U	N3-C2-O2	-6.04	117.97	122.20
36	5	2919	A	N3-C4-N9	-6.04	122.57	127.40
36	5	3036	G	C4-C5-N7	-6.04	108.38	110.80
36	1	2234	G	C8-N9-C4	6.04	108.81	106.40
36	1	2753	G	C4-C5-N7	-6.04	108.39	110.80
36	1	2770	G	OP2-P-O3'	6.04	118.48	105.20
36	5	774	G	C6-C5-N7	-6.04	126.78	130.40
36	5	1777	U	O5'-P-OP1	-6.04	100.27	105.70
38	8	113	U	N3-C4-C5	-6.04	110.98	114.60
36	1	1414	G	C5-N7-C8	-6.04	101.28	104.30
36	1	2818	U	P-O3'-C3'	6.04	126.94	119.70
36	1	3075	G	C2-N3-C4	-6.04	108.88	111.90
37	3	26	C	N1-C2-O2	6.04	122.52	118.90
49	M3	21	ARG	NE-CZ-NH2	-6.04	117.28	120.30
1	6	319	U	P-O3'-C3'	-6.04	112.46	119.70
14	c2	58	LEU	CA-CB-CG	6.04	129.18	115.30
36	5	1465	A	N7-C8-N9	6.04	116.82	113.80
36	5	1535	A	C5-C6-N1	6.04	120.72	117.70
36	5	3159	C	C2-N3-C4	-6.04	116.88	119.90
1	2	360	A	N3-C4-C5	6.03	131.02	126.80
1	2	1002	G	N3-C4-N9	6.03	129.62	126.00
1	2	1757	G	C6-N1-C2	-6.03	121.48	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	156	G	C8-N9-C1'	-6.03	119.16	127.00
36	1	645	A	O5'-P-OP2	6.03	117.94	110.70
36	1	1084	A	N7-C8-N9	6.03	116.82	113.80
36	1	1388	U	C5-C6-N1	-6.03	119.68	122.70
36	1	2409	G	N9-C4-C5	-6.03	102.99	105.40
36	1	2555	G	C8-N9-C4	6.03	108.81	106.40
36	1	2626	A	O4'-C1'-N9	-6.03	103.37	108.20
36	1	2772	C	C2-N3-C4	6.03	122.92	119.90
1	6	1698	G	P-O3'-C3'	6.03	126.94	119.70
34	sR	274	LEU	CA-CB-CG	-6.03	101.42	115.30
36	5	592	A	N9-C4-C5	-6.03	103.39	105.80
36	5	922	U	O5'-P-OP1	-6.03	100.27	105.70
36	5	2426	U	C6-N1-C2	-6.03	117.38	121.00
36	5	2646	C	O5'-P-OP1	6.03	117.94	110.70
36	5	3091	A	N7-C8-N9	6.03	116.82	113.80
36	5	433	A	C4-C5-C6	6.03	120.02	117.00
36	5	3242	G	C5-C6-O6	6.03	132.22	128.60
37	7	25	G	N1-C6-O6	-6.03	116.28	119.90
36	1	1142	G	C5-N7-C8	-6.03	101.28	104.30
36	1	1385	C	N3-C4-N4	-6.03	113.78	118.00
36	1	1450	G	C5-N7-C8	-6.03	101.28	104.30
36	1	1520	G	C4-C5-N7	6.03	113.21	110.80
36	1	2174	G	OP1-P-O3'	6.03	118.47	105.20
36	1	2714	G	C8-N9-C4	-6.03	103.99	106.40
36	1	2834	G	N1-C2-N3	6.03	127.52	123.90
36	1	3103	A	N1-C6-N6	-6.03	114.98	118.60
1	6	103	A	C6-C5-N7	-6.03	128.08	132.30
1	6	176	C	C2-N1-C1'	6.03	125.43	118.80
1	6	880	C	N3-C2-O2	-6.03	117.68	121.90
1	6	1601	G	N7-C8-N9	6.03	116.12	113.10
1	6	1773	C	C2-N3-C4	6.03	122.92	119.90
36	5	39	A	N1-C6-N6	-6.03	114.98	118.60
36	5	588	G	C8-N9-C1'	-6.03	119.16	127.00
36	5	1670	C	N1-C2-O2	6.03	122.52	118.90
36	5	2185	G	N1-C2-N3	6.03	127.52	123.90
36	5	2908	G	C6-C5-N7	-6.03	126.78	130.40
36	5	3362	A	C6-C5-N7	-6.03	128.08	132.30
1	2	1186	U	N3-C4-O4	-6.03	115.18	119.40
36	1	227	G	C4-C5-C6	6.03	122.42	118.80
36	1	2602	G	N1-C6-O6	-6.03	116.28	119.90
36	1	2635	A	N1-C2-N3	6.03	132.31	129.30
1	6	1552	U	N3-C4-O4	6.03	123.62	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1439	U	C5-C4-O4	-6.03	122.28	125.90
36	1	1166	G	C5-C6-N1	-6.03	108.49	111.50
36	1	2891	U	N3-C2-O2	6.03	126.42	122.20
36	1	2943	G	OP1-P-O3'	6.03	118.46	105.20
36	1	2971	A	N1-C6-N6	6.03	122.22	118.60
1	6	1300	A	C5-C6-N6	-6.03	118.88	123.70
36	5	1303	A	C6-C5-N7	-6.03	128.08	132.30
36	1	96	G	C2-N3-C4	-6.03	108.89	111.90
36	1	3028	G	O5'-P-OP2	6.03	117.93	110.70
1	6	1311	U	N1-C2-N3	6.03	118.52	114.90
36	5	1751	G	C8-N9-C4	6.03	108.81	106.40
36	5	2243	A	N1-C6-N6	-6.03	114.98	118.60
36	5	2952	G	C8-N9-C1'	-6.03	119.17	127.00
1	2	316	A	C2-N3-C4	-6.02	107.59	110.60
1	2	566	C	N3-C2-O2	6.02	126.12	121.90
36	1	375	A	C5-N7-C8	-6.02	100.89	103.90
36	1	2352	A	C6-N1-C2	-6.02	114.98	118.60
36	5	3215	A	N7-C8-N9	-6.02	110.79	113.80
1	2	373	G	N3-C4-C5	-6.02	125.59	128.60
1	2	1423	U	C2-N1-C1'	6.02	124.93	117.70
1	2	1744	A	N1-C2-N3	6.02	132.31	129.30
36	1	269	G	C5-C6-O6	6.02	132.21	128.60
36	1	373	A	N1-C2-N3	6.02	132.31	129.30
36	1	652	G	C2-N3-C4	6.02	114.91	111.90
36	1	1323	G	C4-N9-C1'	6.02	134.33	126.50
36	1	2757	U	O4'-C1'-N1	6.02	113.02	108.20
36	1	2824	G	C4-C5-C6	6.02	122.41	118.80
36	1	3044	G	N3-C4-N9	-6.02	122.39	126.00
36	1	3295	A	N1-C2-N3	6.02	132.31	129.30
1	6	194	U	N1-C2-O2	6.02	127.02	122.80
1	6	627	C	N3-C4-C5	6.02	124.31	121.90
1	6	1474	G	C4-C5-C6	6.02	122.41	118.80
36	5	1188	U	N1-C2-O2	-6.02	118.58	122.80
36	5	3073	A	C6-N1-C2	-6.02	114.99	118.60
1	2	987	G	N3-C4-N9	6.02	129.61	126.00
1	2	1203	A	C8-N9-C4	-6.02	103.39	105.80
1	6	1610	G	C6-N1-C2	-6.02	121.49	125.10
1	2	790	U	O5'-P-OP2	-6.02	100.28	105.70
1	2	993	A	C5-C6-N6	-6.02	118.88	123.70
36	1	218	G	N3-C4-C5	6.02	131.61	128.60
36	1	580	C	C2-N1-C1'	-6.02	112.18	118.80
36	1	2276	G	O5'-P-OP2	-6.02	100.28	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2281	A	O4'-C1'-N9	6.02	113.02	108.20
36	1	2414	G	N1-C2-N3	6.02	127.51	123.90
36	1	2956	A	C2-N3-C4	-6.02	107.59	110.60
36	5	966	U	C5-C6-N1	6.02	125.71	122.70
36	5	1188	U	C4-C5-C6	6.02	123.31	119.70
36	5	1220	U	C2-N1-C1'	6.02	124.92	117.70
36	5	1447	G	O4'-C1'-N9	6.02	113.02	108.20
36	5	2952	G	C4-C5-C6	6.02	122.41	118.80
36	5	2990	G	C2-N3-C4	6.02	114.91	111.90
37	7	59	U	N3-C2-O2	-6.02	117.99	122.20
1	2	787	G	C8-N9-C4	-6.02	103.99	106.40
36	1	652	G	C5-C6-N1	6.02	114.51	111.50
36	1	2857	C	N3-C4-C5	-6.02	119.49	121.90
36	1	2979	U	OP1-P-O3'	-6.02	91.96	105.20
36	5	1675	G	N3-C4-N9	6.02	129.61	126.00
36	5	2620	G	C5-C6-N1	-6.02	108.49	111.50
36	5	2626	A	C8-N9-C4	6.02	108.21	105.80
36	5	2877	G	C8-N9-C1'	-6.02	119.18	127.00
36	5	3243	A	O5'-P-OP2	6.02	117.92	110.70
36	1	2248	C	OP1-P-O3'	6.02	118.44	105.20
1	6	1592	A	N1-C2-N3	6.02	132.31	129.30
36	5	396	A	C8-N9-C4	6.02	108.21	105.80
36	5	1171	G	N1-C2-N2	6.02	121.61	116.20
36	5	1668	G	C8-N9-C4	-6.02	103.99	106.40
52	m6	14	HIS	CB-CA-C	-6.02	98.37	110.40
1	2	417	A	P-O3'-C3'	6.01	126.92	119.70
1	2	1471	A	O5'-P-OP1	-6.01	100.29	105.70
36	1	592	A	C5-C6-N6	-6.01	118.89	123.70
36	1	1466	G	C8-N9-C1'	-6.01	119.18	127.00
36	1	2805	G	C5-C6-N1	6.01	114.51	111.50
36	1	2924	U	N1-C2-N3	6.01	118.51	114.90
1	6	798	C	N3-C4-C5	6.01	124.31	121.90
1	6	972	G	N9-C4-C5	-6.01	103.00	105.40
1	6	1090	C	N3-C2-O2	-6.01	117.69	121.90
36	5	1001	G	N3-C2-N2	6.01	124.11	119.90
36	5	2151	C	N3-C2-O2	6.01	126.11	121.90
36	5	2647	A	N9-C1'-C2'	-6.01	105.38	112.00
36	5	2914	G	C5-C6-N1	-6.01	108.49	111.50
36	1	1796	G	C4-C5-N7	-6.01	108.39	110.80
36	1	2923	U	C6-N1-C1'	6.01	129.62	121.20
37	3	45	A	O5'-P-OP2	-6.01	100.29	105.70
1	6	1114	G	C2-N3-C4	6.01	114.91	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	361	A	C4-C5-C6	6.01	120.01	117.00
36	5	1503	A	C8-N9-C4	6.01	108.20	105.80
1	2	1620	C	O5'-P-OP1	-6.01	100.29	105.70
36	1	218	G	C4-N9-C1'	-6.01	118.69	126.50
36	1	812	G	N1-C2-N2	-6.01	110.79	116.20
36	1	1005	G	N1-C2-N3	6.01	127.51	123.90
36	1	1137	C	N1-C2-O2	6.01	122.51	118.90
36	1	1180	A	C2-N3-C4	-6.01	107.59	110.60
36	1	1461	A	N1-C6-N6	6.01	122.21	118.60
36	1	1525	G	N3-C4-N9	6.01	129.61	126.00
36	1	1617	G	C8-N9-C4	6.01	108.81	106.40
36	1	2201	G	N3-C4-C5	-6.01	125.59	128.60
36	1	2349	U	N3-C2-O2	6.01	126.41	122.20
36	1	2414	G	N3-C4-N9	-6.01	122.39	126.00
36	1	3259	U	C6-N1-C2	-6.01	117.39	121.00
36	1	3344	A	O4'-C1'-N9	6.01	113.01	108.20
1	6	1243	G	C8-N9-C1'	-6.01	119.18	127.00
1	6	1422	A	O5'-P-OP1	-6.01	100.29	105.70
36	5	188	U	C2-N1-C1'	6.01	124.92	117.70
36	5	1005	G	N1-C2-N3	6.01	127.51	123.90
36	5	1149	G	O5'-P-OP1	6.01	117.92	110.70
36	5	1367	G	OP2-P-O3'	6.01	118.42	105.20
36	5	2654	C	C5-C6-N1	6.01	124.01	121.00
36	5	2947	G	N1-C2-N2	6.01	121.61	116.20
36	5	3373	U	C4-C5-C6	6.01	123.31	119.70
37	7	106	U	N3-C4-O4	-6.01	115.19	119.40
1	2	1146	G	N7-C8-N9	6.01	116.11	113.10
1	2	1217	A	N7-C8-N9	6.01	116.80	113.80
1	2	1765	A	N1-C6-N6	-6.01	115.00	118.60
36	1	1339	C	C6-N1-C1'	6.01	128.01	120.80
36	1	2287	C	OP2-P-O3'	6.01	118.42	105.20
37	3	8	G	N3-C4-N9	-6.01	122.39	126.00
1	6	102	U	OP1-P-O3'	6.01	118.42	105.20
1	6	1003	A	N3-C4-C5	6.01	131.01	126.80
1	6	1126	G	OP1-P-OP2	-6.01	110.59	119.60
1	6	1564	U	C2-N3-C4	-6.01	123.39	127.00
36	5	581	U	N3-C4-O4	6.01	123.61	119.40
36	5	1224	C	C5-C4-N4	6.01	124.41	120.20
36	5	1514	G	N1-C6-O6	6.01	123.51	119.90
36	5	1882	G	C8-N9-C4	-6.01	104.00	106.40
36	5	2686	A	C6-N1-C2	-6.01	115.00	118.60
36	5	2882	U	OP1-P-O3'	6.01	118.42	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3232	G	C4-C5-N7	6.01	113.20	110.80
36	5	3283	U	N3-C4-O4	6.01	123.61	119.40
36	1	2720	G	O5'-P-OP2	-6.01	100.29	105.70
36	1	2847	A	C5-N7-C8	-6.01	100.90	103.90
36	1	3185	U	N3-C4-O4	6.01	123.61	119.40
36	1	3316	A	C4-C5-C6	-6.01	114.00	117.00
1	6	288	A	O5'-P-OP1	-6.01	100.29	105.70
36	5	1017	C	N1-C2-O2	6.01	122.50	118.90
36	5	1061	A	C6-N1-C2	-6.01	115.00	118.60
36	5	2296	A	N3-C4-N9	6.01	132.21	127.40
43	16	175	LYS	CD-CE-NZ	6.01	125.52	111.70
1	2	1112	G	O5'-P-OP1	6.01	117.91	110.70
1	2	1197	C	C5-C6-N1	6.01	124.00	121.00
36	1	76	G	C4-C5-C6	6.01	122.40	118.80
36	1	934	G	C4-N9-C1'	6.01	134.31	126.50
36	1	1379	G	C8-N9-C1'	-6.01	119.19	127.00
36	1	3079	U	C2-N1-C1'	-6.01	110.49	117.70
36	1	3112	G	N7-C8-N9	-6.01	110.10	113.10
36	1	3186	A	C5-C6-N6	6.01	128.50	123.70
48	M1	30	LEU	CA-CB-CG	6.01	129.11	115.30
36	5	834	U	C5-C4-O4	6.01	129.50	125.90
36	5	2147	A	C5-C6-N6	-6.01	118.89	123.70
36	5	2573	G	C6-C5-N7	-6.01	126.80	130.40
36	5	3147	G	C6-C5-N7	-6.01	126.80	130.40
36	5	3328	G	C5-C6-N1	6.01	114.50	111.50
36	1	41	G	N3-C4-N9	-6.00	122.40	126.00
36	1	318	A	C5-N7-C8	-6.00	100.90	103.90
36	1	1500	G	C5-C6-N1	6.00	114.50	111.50
36	1	2431	C	N3-C2-O2	-6.00	117.70	121.90
36	5	1000	C	O5'-P-OP2	-6.00	100.30	105.70
36	5	3314	A	N1-C6-N6	6.00	122.20	118.60
36	1	1419	A	N1-C2-N3	6.00	132.30	129.30
36	1	2693	C	C6-N1-C2	6.00	122.70	120.30
36	1	2824	G	C4-C5-N7	6.00	113.20	110.80
36	1	3126	C	C4-C5-C6	6.00	120.40	117.40
1	6	356	G	C5-C6-O6	-6.00	125.00	128.60
1	6	867	G	N1-C6-O6	-6.00	116.30	119.90
1	6	1740	A	C4-C5-C6	6.00	120.00	117.00
36	5	3059	G	N1-C6-O6	-6.00	116.30	119.90
1	2	158	U	P-O3'-C3'	6.00	126.90	119.70
36	1	2202	C	N3-C2-O2	-6.00	117.70	121.90
36	1	2677	G	C5-N7-C8	-6.00	101.30	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2809	C	N1-C2-O2	-6.00	115.30	118.90
36	1	2863	G	C8-N9-C4	6.00	108.80	106.40
36	1	3320	A	C8-N9-C4	-6.00	103.40	105.80
37	3	25	G	N1-C2-N2	-6.00	110.80	116.20
1	6	884	A	C4-C5-N7	6.00	113.70	110.70
1	6	1478	G	N7-C8-N9	6.00	116.10	113.10
20	c8	131	LEU	CA-CB-CG	-6.00	101.50	115.30
36	5	102	C	C5-C6-N1	-6.00	118.00	121.00
36	5	1452	A	OP1-P-OP2	6.00	128.60	119.60
36	5	2243	A	C5-N7-C8	6.00	106.90	103.90
36	5	3173	G	N1-C2-N2	-6.00	110.80	116.20
37	7	29	C	C6-N1-C2	6.00	122.70	120.30
38	8	44	A	C6-C5-N7	-6.00	128.10	132.30
1	2	160	C	O5'-P-OP1	-6.00	100.30	105.70
1	2	1651	A	C5-C6-N1	-6.00	114.70	117.70
36	5	282	G	C2-N3-C4	-6.00	108.90	111.90
36	5	3045	G	N1-C2-N3	6.00	127.50	123.90
36	5	3307	A	C6-C5-N7	-6.00	128.10	132.30
38	8	116	G	C6-C5-N7	-6.00	126.80	130.40
1	2	1668	G	C8-N9-C4	6.00	108.80	106.40
36	1	59	G	C6-C5-N7	-6.00	126.80	130.40
36	1	425	G	C5-C6-O6	6.00	132.20	128.60
36	1	869	G	N1-C2-N3	6.00	127.50	123.90
36	5	596	C	C6-N1-C1'	6.00	128.00	120.80
36	5	1180	A	O4'-C1'-N9	-6.00	103.40	108.20
36	5	2635	A	N7-C8-N9	6.00	116.80	113.80
36	5	2715	A	N3-C4-C5	-6.00	122.60	126.80
36	5	3315	G	C6-N1-C2	-6.00	121.50	125.10
36	1	92	G	C5-N7-C8	-6.00	101.30	104.30
36	1	1820	U	P-O3'-C3'	6.00	126.89	119.70
36	1	2334	U	OP1-P-OP2	6.00	128.59	119.60
36	1	2754	G	N1-C2-N2	-6.00	110.80	116.20
36	1	2842	U	O5'-P-OP2	6.00	117.90	110.70
36	1	3305	A	C6-N1-C2	-6.00	115.00	118.60
1	6	1288	G	N7-C8-N9	-6.00	110.10	113.10
36	5	350	C	C5-C6-N1	6.00	124.00	121.00
36	5	518	G	C5-C6-O6	-6.00	125.00	128.60
36	5	588	G	C4-N9-C1'	6.00	134.29	126.50
36	5	595	G	N7-C8-N9	6.00	116.10	113.10
36	5	1783	U	N1-C2-N3	6.00	118.50	114.90
36	5	1793	C	N3-C2-O2	6.00	126.10	121.90
36	5	2164	A	C5-C6-N6	6.00	128.50	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2391	G	OP1-P-OP2	6.00	128.59	119.60
36	5	3088	G	C2-N3-C4	-6.00	108.90	111.90
36	5	3374	U	C2-N3-C4	-6.00	123.40	127.00
36	1	41	G	C4-N9-C1'	-6.00	118.71	126.50
36	1	1468	A	C2-N3-C4	-6.00	107.60	110.60
36	1	1838	G	C8-N9-C1'	-6.00	119.21	127.00
1	6	389	G	N1-C6-O6	6.00	123.50	119.90
9	s7	64	VAL	C-N-CD	6.00	140.99	128.40
36	5	1847	A	C4-N9-C1'	-6.00	115.51	126.30
36	5	2603	G	C6-C5-N7	-6.00	126.80	130.40
36	5	3185	U	N3-C4-O4	6.00	123.60	119.40
1	2	178	U	N3-C4-O4	5.99	123.60	119.40
1	2	1051	G	P-O3'-C3'	5.99	126.89	119.70
36	1	211	A	C5-C6-N6	5.99	128.50	123.70
36	1	624	G	N1-C2-N2	-5.99	110.81	116.20
36	1	1387	G	N3-C4-C5	-5.99	125.60	128.60
1	6	921	U	O5'-P-OP1	5.99	117.89	110.70
1	6	1504	G	N1-C2-N3	5.99	127.50	123.90
1	6	1778	G	N7-C8-N9	5.99	116.10	113.10
36	5	67	A	N1-C6-N6	-5.99	115.00	118.60
36	5	214	G	C6-C5-N7	5.99	134.00	130.40
36	5	586	C	C4-C5-C6	5.99	120.40	117.40
36	5	632	G	C4-N9-C1'	5.99	134.29	126.50
36	5	710	A	N7-C8-N9	5.99	116.80	113.80
36	5	980	A	C5-C6-N1	5.99	120.70	117.70
36	5	2145	A	N1-C2-N3	5.99	132.30	129.30
36	5	2305	G	N3-C4-N9	-5.99	122.40	126.00
36	5	2872	A	O4'-C1'-N9	-5.99	103.41	108.20
36	5	3003	G	C6-C5-N7	5.99	134.00	130.40
1	2	620	A	N3-C4-N9	-5.99	122.61	127.40
36	1	28	C	C2-N1-C1'	-5.99	112.21	118.80
36	1	935	U	C2-N1-C1'	5.99	124.89	117.70
36	1	1323	G	N1-C2-N3	5.99	127.50	123.90
36	1	3270	U	C2-N1-C1'	-5.99	110.51	117.70
37	3	112	G	N1-C6-O6	-5.99	116.31	119.90
1	6	307	G	N1-C2-N3	5.99	127.50	123.90
36	5	1305	U	C5-C6-N1	-5.99	119.70	122.70
36	5	1366	A	C6-N1-C2	-5.99	115.00	118.60
36	5	2129	U	OP1-P-OP2	5.99	128.59	119.60
36	5	2195	C	C5-C6-N1	-5.99	118.00	121.00
1	2	425	A	C5-C6-N1	5.99	120.70	117.70
36	1	182	U	O4'-C1'-N1	5.99	112.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	213	A	N9-C4-C5	-5.99	103.40	105.80
36	1	278	U	C5-C4-O4	5.99	129.49	125.90
36	1	500	C	C4-C5-C6	5.99	120.39	117.40
36	1	1460	A	C6-N1-C2	-5.99	115.01	118.60
36	1	2229	A	C5-C6-N6	-5.99	118.91	123.70
36	1	2618	G	C4-C5-N7	-5.99	108.40	110.80
36	1	2801	A	C4-C5-N7	5.99	113.69	110.70
1	6	179	A	N7-C8-N9	5.99	116.80	113.80
1	6	1047	G	N3-C4-N9	5.99	129.59	126.00
36	5	983	A	C2-N3-C4	-5.99	107.61	110.60
36	5	1137	C	N3-C4-C5	-5.99	119.50	121.90
36	5	1323	G	C6-N1-C2	-5.99	121.50	125.10
36	5	2247	G	O5'-P-OP2	5.99	117.89	110.70
36	5	2377	G	C8-N9-C1'	5.99	134.79	127.00
36	5	2937	G	C4-C5-N7	5.99	113.20	110.80
36	5	3078	U	N1-C1'-C2'	-5.99	105.41	112.00
36	5	3091	A	O5'-P-OP2	-5.99	100.31	105.70
36	1	102	C	C2-N1-C1'	5.99	125.39	118.80
36	1	667	C	N3-C4-C5	-5.99	119.50	121.90
36	1	1115	G	N3-C4-C5	-5.99	125.61	128.60
36	1	1529	A	C5-C6-N6	5.99	128.49	123.70
36	1	1877	U	N3-C4-C5	5.99	118.19	114.60
36	1	2185	G	N3-C4-N9	5.99	129.59	126.00
36	1	2727	A	N1-C2-N3	5.99	132.29	129.30
36	1	2866	U	C6-N1-C2	-5.99	117.41	121.00
36	1	3328	G	C6-C5-N7	-5.99	126.81	130.40
1	6	952	A	O5'-P-OP2	-5.99	100.31	105.70
36	5	292	U	N3-C2-O2	5.99	126.39	122.20
36	5	575	G	C6-N1-C2	-5.99	121.51	125.10
36	5	666	A	C4-C5-C6	5.99	119.99	117.00
36	5	697	A	N7-C8-N9	-5.99	110.81	113.80
41	14	141	ARG	NE-CZ-NH2	-5.99	117.31	120.30
1	2	534	A	C8-N9-C4	5.99	108.19	105.80
36	1	272	G	C8-N9-C1'	5.99	134.78	127.00
36	1	654	C	C2-N3-C4	-5.99	116.91	119.90
36	1	719	U	P-O3'-C3'	-5.99	112.52	119.70
1	6	323	A	C5-N7-C8	-5.99	100.91	103.90
1	6	417	A	C8-N9-C4	-5.99	103.41	105.80
36	5	1002	A	C2-N3-C4	-5.99	107.61	110.60
36	5	2678	A	N3-C4-N9	-5.99	122.61	127.40
1	2	555	A	N1-C6-N6	-5.99	115.01	118.60
36	1	375	A	O5'-P-OP2	-5.99	100.31	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	867	G	C4-N9-C1'	5.99	134.28	126.50
36	1	1338	C	N3-C4-C5	5.99	124.29	121.90
36	1	1431	G	N3-C4-C5	-5.99	125.61	128.60
36	1	1725	C	N1-C2-N3	5.99	123.39	119.20
36	1	2287	C	C2-N3-C4	-5.99	116.91	119.90
36	1	2652	U	N3-C2-O2	5.99	126.39	122.20
36	1	3163	A	N1-C6-N6	5.99	122.19	118.60
36	1	3393	U	N3-C2-O2	5.99	126.39	122.20
1	6	405	C	OP2-P-O3'	5.99	118.37	105.20
36	5	863	C	OP1-P-OP2	5.99	128.58	119.60
36	5	910	G	C5-N7-C8	-5.99	101.31	104.30
36	5	1942	U	N3-C2-O2	-5.99	118.01	122.20
36	1	712	G	C4-C5-N7	-5.98	108.41	110.80
36	1	1453	A	N3-C4-C5	-5.98	122.61	126.80
36	1	1553	U	N1-C2-N3	5.98	118.49	114.90
36	1	2728	G	C8-N9-C4	-5.98	104.01	106.40
37	3	58	C	N1-C2-O2	5.98	122.49	118.90
36	5	1465	A	C8-N9-C4	-5.98	103.41	105.80
36	5	2606	G	N3-C4-N9	-5.98	122.41	126.00
1	2	340	U	O5'-P-OP1	-5.98	100.31	105.70
36	1	145	G	C5-C6-O6	-5.98	125.01	128.60
36	1	398	A	C4-C5-C6	-5.98	114.01	117.00
36	1	639	G	C4-C5-N7	5.98	113.19	110.80
36	1	790	U	N1-C2-O2	-5.98	118.61	122.80
36	1	2238	G	C4-N9-C1'	-5.98	118.72	126.50
36	1	2856	G	OP2-P-O3'	5.98	118.36	105.20
36	1	2946	A	C4-C5-C6	5.98	119.99	117.00
1	6	1185	U	N1-C2-O2	5.98	126.99	122.80
1	6	1478	G	N1-C2-N2	-5.98	110.82	116.20
36	5	108	A	N1-C6-N6	-5.98	115.01	118.60
36	5	802	C	C5-C6-N1	-5.98	118.01	121.00
36	5	986	U	OP2-P-O3'	5.98	118.36	105.20
36	5	1358	C	C6-N1-C2	5.98	122.69	120.30
36	5	2872	A	C2-N3-C4	5.98	113.59	110.60
36	5	2988	C	C4-C5-C6	5.98	120.39	117.40
36	5	3176	G	N1-C2-N3	5.98	127.49	123.90
38	8	53	A	N1-C2-N3	5.98	132.29	129.30
1	2	598	U	N3-C4-O4	5.98	123.59	119.40
36	1	50	U	C2-N1-C1'	5.98	124.88	117.70
36	1	354	U	N1-C2-O2	5.98	126.99	122.80
36	1	364	G	O5'-P-OP1	-5.98	100.32	105.70
36	1	1050	U	O5'-P-OP1	-5.98	100.32	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1149	G	OP1-P-O3'	5.98	118.36	105.20
36	1	1208	U	C4-C5-C6	-5.98	116.11	119.70
36	1	1380	G	C8-N9-C4	5.98	108.79	106.40
36	1	1791	C	N1-C2-O2	-5.98	115.31	118.90
36	1	2526	C	C6-N1-C2	-5.98	117.91	120.30
36	1	2674	A	C8-N9-C4	-5.98	103.41	105.80
1	6	795	U	N3-C2-O2	-5.98	118.01	122.20
1	6	923	A	C8-N9-C4	-5.98	103.41	105.80
1	6	1558	U	O5'-P-OP1	-5.98	100.32	105.70
1	6	1615	C	C2-N1-C1'	-5.98	112.22	118.80
36	5	638	C	N1-C2-N3	5.98	123.39	119.20
36	5	921	A	OP2-P-O3'	5.98	118.36	105.20
36	5	2842	U	C5-C4-O4	-5.98	122.31	125.90
36	5	3132	C	C5-C6-N1	-5.98	118.01	121.00
36	5	3330	A	C4-C5-C6	5.98	119.99	117.00
37	7	80	G	N1-C2-N3	5.98	127.49	123.90
52	m6	58	LEU	CA-CB-CG	5.98	129.06	115.30
1	2	467	G	N1-C6-O6	-5.98	116.31	119.90
36	1	983	A	C4-C5-C6	5.98	119.99	117.00
36	1	2295	A	N9-C4-C5	5.98	108.19	105.80
36	1	3047	U	N3-C2-O2	-5.98	118.02	122.20
36	5	64	G	OP2-P-O3'	5.98	118.36	105.20
36	5	1502	C	C5-C4-N4	-5.98	116.02	120.20
36	5	2234	G	N7-C8-N9	-5.98	110.11	113.10
36	5	2542	U	O4'-C1'-N1	5.98	112.98	108.20
1	2	590	C	C5-C6-N1	5.98	123.99	121.00
1	2	870	C	N3-C2-O2	5.98	126.08	121.90
1	2	1086	A	C8-N9-C4	-5.98	103.41	105.80
36	1	699	A	C4-N9-C1'	-5.98	115.54	126.30
36	1	783	A	N9-C4-C5	-5.98	103.41	105.80
36	1	1111	U	N3-C4-C5	5.98	118.19	114.60
36	1	1749	A	C8-N9-C4	-5.98	103.41	105.80
36	1	2697	A	C5-C6-N1	5.98	120.69	117.70
36	1	2893	C	N3-C2-O2	-5.98	117.72	121.90
1	6	331	A	C4-C5-C6	5.98	119.99	117.00
1	6	569	C	N3-C4-C5	5.98	124.29	121.90
1	6	879	G	C4-C5-N7	5.98	113.19	110.80
36	5	182	U	O4'-C1'-N1	5.98	112.98	108.20
36	5	223	U	C5-C4-O4	5.98	129.49	125.90
36	5	531	G	N3-C4-C5	-5.98	125.61	128.60
36	5	900	G	O5'-P-OP2	-5.98	100.32	105.70
36	5	1277	C	C2-N1-C1'	5.98	125.38	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1770	G	N9-C4-C5	-5.98	103.01	105.40
36	5	2402	A	C6-N1-C2	-5.98	115.01	118.60
36	5	2805	G	C8-N9-C4	-5.98	104.01	106.40
36	5	3138	U	N3-C2-O2	5.98	126.38	122.20
36	5	3282	U	N1-C2-O2	5.98	126.98	122.80
36	1	1136	A	C8-N9-C4	5.98	108.19	105.80
36	1	2291	A	C4-C5-C6	5.98	119.99	117.00
36	1	3067	C	C6-N1-C2	5.98	122.69	120.30
1	6	1031	U	N3-C4-O4	-5.98	115.22	119.40
1	6	1381	U	O5'-P-OP1	-5.98	100.32	105.70
36	5	1122	U	N3-C2-O2	-5.98	118.02	122.20
37	7	56	A	C8-N9-C4	-5.98	103.41	105.80
76	q0	79	GLU	C-N-CD	-5.98	107.45	120.60
1	2	1128	C	N1-C2-O2	-5.97	115.32	118.90
1	2	1428	G	O5'-P-OP1	-5.97	100.32	105.70
36	1	827	A	N1-C6-N6	-5.97	115.02	118.60
64	N8	133	LEU	CA-CB-CG	5.97	129.04	115.30
70	O4	10	ARG	NE-CZ-NH1	-5.97	117.31	120.30
36	5	789	A	N1-C6-N6	-5.97	115.02	118.60
36	5	793	C	N1-C2-O2	-5.97	115.31	118.90
36	5	909	G	C4-C5-C6	5.97	122.39	118.80
36	5	1198	C	N1-C2-N3	5.97	123.38	119.20
36	5	2977	G	C8-N9-C4	-5.97	104.01	106.40
36	5	2977	G	N1-C6-O6	5.97	123.48	119.90
37	7	57	G	C4-C5-N7	5.97	113.19	110.80
68	o2	41	VAL	CB-CA-C	-5.97	100.05	111.40
1	2	820	U	C6-N1-C2	-5.97	117.42	121.00
36	1	2893	C	C5-C6-N1	-5.97	118.01	121.00
36	1	2901	G	N1-C6-O6	-5.97	116.32	119.90
1	6	1631	A	N1-C6-N6	5.97	122.18	118.60
1	6	1656	U	C5-C4-O4	-5.97	122.32	125.90
1	6	1794	A	C8-N9-C4	5.97	108.19	105.80
36	5	651	G	N1-C2-N3	5.97	127.48	123.90
36	5	2790	A	C8-N9-C4	5.97	108.19	105.80
36	5	182	U	C6-N1-C1'	5.97	129.56	121.20
36	5	2844	C	N3-C4-C5	-5.97	119.51	121.90
36	5	2932	U	C6-N1-C1'	5.97	129.56	121.20
1	2	1086	A	C2-N3-C4	5.97	113.58	110.60
36	1	19	U	C6-N1-C2	-5.97	117.42	121.00
36	1	497	C	N1-C2-O2	-5.97	115.32	118.90
36	1	813	G	N1-C2-N3	5.97	127.48	123.90
36	1	1121	U	O5'-P-OP2	-5.97	100.33	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1387	G	N1-C2-N2	-5.97	110.83	116.20
36	1	2705	A	C6-C5-N7	5.97	136.48	132.30
37	3	74	C	N1-C2-O2	5.97	122.48	118.90
1	6	432	G	C2-N3-C4	5.97	114.89	111.90
1	6	1331	A	C8-N9-C4	-5.97	103.41	105.80
1	6	1440	C	C4-C5-C6	-5.97	114.42	117.40
36	5	388	G	C8-N9-C4	-5.97	104.01	106.40
36	5	918	C	N3-C4-C5	-5.97	119.51	121.90
36	5	1044	U	C6-N1-C1'	5.97	129.56	121.20
36	5	1077	U	C6-N1-C2	5.97	124.58	121.00
36	5	2948	C	C2-N1-C1'	5.97	125.37	118.80
36	5	3294	A	C8-N9-C4	-5.97	103.41	105.80
56	n0	82	ASP	CB-CG-OD1	-5.97	112.93	118.30
1	2	1445	G	O4'-C1'-N9	5.97	112.97	108.20
36	1	344	A	N3-C4-C5	5.97	130.98	126.80
37	3	99	G	C4-C5-N7	-5.97	108.41	110.80
38	4	17	A	C4-C5-C6	5.97	119.98	117.00
36	5	515	C	O4'-C1'-N1	-5.97	103.43	108.20
36	5	698	U	N1-C2-O2	-5.97	118.62	122.80
36	5	1753	G	N7-C8-N9	-5.97	110.12	113.10
36	5	2362	C	O5'-P-OP1	-5.97	100.33	105.70
36	5	2601	A	C5-C6-N6	-5.97	118.92	123.70
37	7	3	U	C5-C6-N1	-5.97	119.72	122.70
1	2	1486	G	C5-C6-O6	-5.97	125.02	128.60
1	2	1546	G	N3-C4-C5	-5.97	125.62	128.60
1	2	1638	G	C8-N9-C4	-5.97	104.01	106.40
36	1	1726	C	C6-N1-C2	-5.97	117.91	120.30
36	1	2110	G	N3-C4-C5	-5.97	125.62	128.60
36	1	2408	U	C4-C5-C6	5.97	123.28	119.70
36	1	2792	A	O5'-P-OP1	5.97	117.86	110.70
36	1	2991	A	O5'-P-OP1	-5.97	100.33	105.70
38	4	125	U	N1-C2-O2	5.97	126.98	122.80
41	L4	190	GLY	N-CA-C	5.97	128.02	113.10
1	6	356	G	N3-C4-C5	-5.97	125.62	128.60
1	6	746	A	C4-C5-C6	5.97	119.98	117.00
1	6	984	G	C8-N9-C4	5.97	108.79	106.40
36	5	393	U	C5-C6-N1	5.97	125.68	122.70
36	5	668	G	C5-N7-C8	5.97	107.28	104.30
36	5	936	A	C2-N3-C4	-5.97	107.62	110.60
36	5	1481	A	N1-C2-N3	5.97	132.28	129.30
36	5	2416	U	N3-C2-O2	-5.97	118.02	122.20
36	5	3071	U	O5'-P-OP2	-5.97	100.33	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3090	U	O5'-P-OP2	-5.97	100.33	105.70
1	2	43	A	C8-N9-C4	-5.96	103.42	105.80
1	2	1031	U	OP2-P-O3'	5.96	118.32	105.20
1	2	1284	C	C2-N1-C1'	-5.96	112.24	118.80
36	1	50	U	N3-C4-O4	5.96	123.58	119.40
36	1	2823	G	N3-C4-N9	-5.96	122.42	126.00
36	1	3010	U	C4-C5-C6	-5.96	116.12	119.70
1	6	1305	U	N1-C2-O2	-5.96	118.62	122.80
1	6	1521	G	C5-C6-N1	5.96	114.48	111.50
36	5	360	G	C4-C5-N7	-5.96	108.41	110.80
36	5	1339	C	C4-C5-C6	-5.96	114.42	117.40
36	5	2199	G	N3-C4-C5	-5.96	125.62	128.60
36	5	2303	A	C6-C5-N7	-5.96	128.12	132.30
36	5	2864	A	O4'-C1'-N9	-5.96	103.43	108.20
36	1	98	G	C6-N1-C2	-5.96	121.52	125.10
36	1	1054	A	OP1-P-OP2	-5.96	110.66	119.60
36	1	1374	G	C8-N9-C4	-5.96	104.02	106.40
36	1	3363	U	OP1-P-O3'	5.96	118.32	105.20
1	6	41	A	C5-C6-N6	5.96	128.47	123.70
36	5	2840	C	N1-C2-O2	5.96	122.48	118.90
1	2	1241	G	N7-C8-N9	5.96	116.08	113.10
36	1	2166	A	OP2-P-O3'	5.96	118.31	105.20
36	1	3010	U	C6-N1-C2	-5.96	117.42	121.00
36	1	3093	C	O4'-C1'-N1	5.96	112.97	108.20
1	6	922	G	N3-C4-N9	5.96	129.58	126.00
36	5	568	G	C5-C6-N1	5.96	114.48	111.50
36	5	688	G	C4-C5-C6	5.96	122.38	118.80
36	5	773	G	N7-C8-N9	5.96	116.08	113.10
36	5	961	C	N3-C2-O2	-5.96	117.73	121.90
36	5	1178	G	C6-N1-C2	-5.96	121.52	125.10
36	5	1289	G	C6-N1-C2	-5.96	121.52	125.10
36	5	1429	G	C6-C5-N7	-5.96	126.82	130.40
36	5	1853	U	N3-C2-O2	5.96	126.37	122.20
36	5	2973	G	N1-C6-O6	5.96	123.48	119.90
36	5	3118	C	N3-C4-C5	-5.96	119.52	121.90
36	5	3315	G	N3-C4-C5	-5.96	125.62	128.60
36	1	96	G	N7-C8-N9	-5.96	110.12	113.10
37	3	65	G	O4'-C1'-N9	-5.96	103.43	108.20
1	6	877	G	N9-C1'-C2'	-5.96	105.44	112.00
1	6	962	C	N3-C2-O2	5.96	126.07	121.90
1	6	1331	A	N1-C6-N6	-5.96	115.02	118.60
1	6	1337	A	N3-C4-C5	5.96	130.97	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1774	G	O5'-P-OP1	-5.96	100.34	105.70
35	sM	167	PRO	N-CA-CB	5.96	110.45	103.30
36	5	2671	A	N1-C6-N6	5.96	122.18	118.60
36	5	3275	U	N1-C2-O2	5.96	126.97	122.80
36	1	23	A	O5'-P-OP1	5.96	117.85	110.70
36	1	1354	G	N9-C4-C5	-5.96	103.02	105.40
1	6	1123	C	N1-C2-O2	-5.96	115.33	118.90
1	6	1592	A	N9-C4-C5	5.96	108.18	105.80
36	5	939	U	OP2-P-O3'	5.96	118.31	105.20
36	5	1207	G	N9-C4-C5	-5.96	103.02	105.40
36	5	1327	C	N3-C4-N4	-5.96	113.83	118.00
36	5	2618	G	C6-N1-C2	-5.96	121.53	125.10
36	5	2624	G	N7-C8-N9	5.96	116.08	113.10
36	1	1619	A	C4-C5-C6	-5.96	114.02	117.00
36	1	1697	A	C8-N9-C4	-5.96	103.42	105.80
36	1	2886	U	N1-C2-O2	-5.96	118.63	122.80
36	1	3189	G	C2-N3-C4	5.96	114.88	111.90
1	6	971	A	N1-C6-N6	5.96	122.17	118.60
1	6	1020	A	N1-C6-N6	-5.96	115.03	118.60
36	5	2317	A	O5'-P-OP1	5.96	117.85	110.70
1	2	376	C	N3-C4-C5	-5.96	119.52	121.90
1	2	763	G	N1-C6-O6	5.96	123.47	119.90
1	2	1672	G	C8-N9-C4	5.96	108.78	106.40
36	1	1323	G	N1-C2-N2	-5.96	110.84	116.20
36	1	1519	G	N7-C8-N9	5.96	116.08	113.10
36	5	1620	U	C6-N1-C2	-5.96	117.43	121.00
1	2	17	C	N3-C4-C5	5.95	124.28	121.90
1	2	575	C	C4-C5-C6	-5.95	114.42	117.40
1	2	1180	C	C6-N1-C2	-5.95	117.92	120.30
36	1	231	G	N9-C4-C5	-5.95	103.02	105.40
36	1	293	C	N1-C2-O2	-5.95	115.33	118.90
36	1	651	G	C4-C5-N7	5.95	113.18	110.80
36	1	943	U	OP1-P-O3'	5.95	118.30	105.20
36	1	2315	G	N3-C4-C5	-5.95	125.62	128.60
36	1	2410	U	C6-N1-C2	-5.95	117.43	121.00
36	1	2694	A	OP1-P-OP2	5.95	128.53	119.60
36	1	3031	G	N1-C2-N2	5.95	121.56	116.20
1	6	322	G	C6-C5-N7	-5.95	126.83	130.40
1	6	419	G	C4-C5-C6	-5.95	115.23	118.80
36	5	383	G	C8-N9-C4	5.95	108.78	106.40
36	5	1927	G	O5'-P-OP1	5.95	117.84	110.70
36	5	2160	G	N1-C6-O6	5.95	123.47	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	133	G	C4-N9-C1'	-5.95	118.76	126.50
36	1	1050	U	N1-C2-N3	5.95	118.47	114.90
36	1	1405	U	C5-C4-O4	5.95	129.47	125.90
36	1	1440	G	C4-C5-N7	5.95	113.18	110.80
36	1	2801	A	O5'-P-OP2	-5.95	100.34	105.70
36	5	1080	A	C5-N7-C8	5.95	106.88	103.90
37	7	99	G	N7-C8-N9	-5.95	110.12	113.10
38	8	13	A	O5'-P-OP2	-5.95	100.34	105.70
36	1	354	U	C2-N1-C1'	5.95	124.84	117.70
36	1	761	A	C4-C5-N7	5.95	113.68	110.70
36	1	2376	G	OP2-P-O3'	5.95	118.29	105.20
36	1	2910	A	C8-N9-C4	-5.95	103.42	105.80
36	1	2939	G	N3-C4-N9	5.95	129.57	126.00
1	6	584	C	C5-C6-N1	-5.95	118.03	121.00
1	6	1594	G	C8-N9-C4	5.95	108.78	106.40
28	d6	51	ARG	NE-CZ-NH2	5.95	123.28	120.30
36	5	235	A	N3-C4-N9	-5.95	122.64	127.40
36	5	256	G	C6-C5-N7	-5.95	126.83	130.40
36	5	1139	G	N9-C4-C5	5.95	107.78	105.40
36	5	2889	C	C4-C5-C6	-5.95	114.42	117.40
36	5	3143	C	N3-C4-C5	-5.95	119.52	121.90
38	8	85	G	N1-C6-O6	5.95	123.47	119.90
36	1	287	G	C4-N9-C1'	5.95	134.23	126.50
36	1	1390	A	C5-C6-N6	-5.95	118.94	123.70
36	1	1501	U	C5-C4-O4	-5.95	122.33	125.90
36	1	2418	G	N1-C6-O6	-5.95	116.33	119.90
36	1	3034	C	N1-C2-O2	5.95	122.47	118.90
36	1	3227	A	OP2-P-O3'	5.95	118.29	105.20
73	O7	11	ARG	NE-CZ-NH1	-5.95	117.33	120.30
36	5	345	G	O5'-P-OP1	-5.95	100.35	105.70
36	5	1505	C	OP2-P-O3'	5.95	118.29	105.20
36	5	3015	G	C8-N9-C4	5.95	108.78	106.40
36	5	3393	U	N1-C2-O2	-5.95	118.64	122.80
36	1	2997	G	C5-C6-O6	-5.95	125.03	128.60
1	6	1103	U	C5-C6-N1	-5.95	119.73	122.70
1	6	1747	G	N9-C4-C5	-5.95	103.02	105.40
36	5	591	G	N7-C8-N9	-5.95	110.13	113.10
36	5	961	C	N3-C4-C5	-5.95	119.52	121.90
1	2	1514	U	N1-C2-O2	5.95	126.96	122.80
1	2	1793	G	N3-C4-C5	-5.95	125.63	128.60
36	1	1171	G	C6-N1-C2	-5.95	121.53	125.10
36	1	1635	G	C4-C5-C6	5.95	122.37	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2290	C	C6-N1-C2	5.95	122.68	120.30
36	1	3322	A	N9-C4-C5	-5.95	103.42	105.80
1	6	624	G	C5-N7-C8	-5.95	101.33	104.30
1	6	778	G	C5-C6-N1	5.95	114.47	111.50
1	6	1542	G	N7-C8-N9	-5.95	110.13	113.10
1	6	1547	A	C4-C5-N7	5.95	113.67	110.70
36	5	112	U	O4'-C1'-N1	5.95	112.96	108.20
36	5	369	A	N7-C8-N9	5.95	116.77	113.80
36	5	844	G	N9-C1'-C2'	-5.95	105.46	112.00
36	5	1483	G	N1-C6-O6	5.95	123.47	119.90
36	5	1489	A	C2-N3-C4	-5.95	107.63	110.60
36	5	2370	G	N9-C4-C5	5.95	107.78	105.40
38	8	14	C	N1-C2-O2	-5.95	115.33	118.90
38	8	139	U	N1-C2-N3	5.95	118.47	114.90
36	1	2642	A	N7-C8-N9	-5.94	110.83	113.80
36	5	875	G	OP1-P-OP2	5.94	128.51	119.60
36	5	1737	U	N3-C4-O4	5.94	123.56	119.40
1	2	386	G	OP1-P-O3'	5.94	118.27	105.20
1	2	1198	G	O5'-P-OP1	-5.94	100.35	105.70
36	1	407	A	C8-N9-C1'	-5.94	117.00	127.70
64	N8	42	ARG	NE-CZ-NH2	-5.94	117.33	120.30
1	6	798	C	C6-N1-C2	5.94	122.68	120.30
1	6	1025	A	OP1-P-OP2	-5.94	110.69	119.60
1	6	1420	C	N3-C4-C5	-5.94	119.52	121.90
36	5	2335	G	C5-C6-O6	5.94	132.16	128.60
38	8	21	C	C6-N1-C2	-5.94	117.92	120.30
1	2	26	A	C5-N7-C8	-5.94	100.93	103.90
36	1	1887	A	N7-C8-N9	-5.94	110.83	113.80
36	1	1901	A	N9-C4-C5	5.94	108.18	105.80
36	1	2518	C	N1-C2-O2	-5.94	115.34	118.90
36	1	3006	A	C5-C6-N1	-5.94	114.73	117.70
36	1	3193	C	N3-C4-N4	5.94	122.16	118.00
1	6	1063	U	N3-C4-O4	5.94	123.56	119.40
1	6	1138	A	N3-C4-C5	5.94	130.96	126.80
1	6	1277	G	C6-C5-N7	-5.94	126.84	130.40
1	6	1550	A	C5-C6-N1	5.94	120.67	117.70
36	5	36	C	O5'-P-OP2	5.94	117.83	110.70
36	5	132	C	C4-C5-C6	5.94	120.37	117.40
36	5	299	G	O5'-P-OP1	-5.94	100.35	105.70
36	5	395	A	N7-C8-N9	5.94	116.77	113.80
36	5	514	G	C5-C6-N1	5.94	114.47	111.50
36	5	858	A	C8-N9-C4	-5.94	103.42	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1017	C	C6-N1-C1'	-5.94	113.67	120.80
36	5	1181	U	C5-C6-N1	-5.94	119.73	122.70
36	5	2279	A	C5-C6-N6	-5.94	118.95	123.70
36	5	3309	G	N1-C2-N3	5.94	127.47	123.90
36	1	1544	G	N9-C4-C5	-5.94	103.02	105.40
36	1	1838	G	C4-C5-C6	5.94	122.36	118.80
36	1	2305	G	C4-C5-N7	-5.94	108.42	110.80
36	1	2371	G	C4-C5-C6	5.94	122.36	118.80
1	6	948	G	N1-C6-O6	5.94	123.46	119.90
1	6	1668	G	N1-C2-N3	5.94	127.46	123.90
36	5	2397	A	C6-C5-N7	-5.94	128.14	132.30
36	5	2522	G	N9-C4-C5	-5.94	103.03	105.40
1	2	55	A	C5-C6-N6	-5.94	118.95	123.70
1	2	346	G	C5-C6-O6	5.94	132.16	128.60
36	1	913	A	C5-C6-N6	-5.94	118.95	123.70
36	1	1386	A	C6-C5-N7	5.94	136.46	132.30
36	5	1095	U	C5-C6-N1	5.94	125.67	122.70
36	5	1310	G	C8-N9-C4	-5.94	104.03	106.40
36	5	2121	G	N7-C8-N9	5.94	116.07	113.10
36	5	2167	A	N9-C4-C5	5.94	108.17	105.80
36	5	2897	A	N3-C4-C5	-5.94	122.64	126.80
36	1	1443	G	C5-N7-C8	-5.94	101.33	104.30
1	6	542	A	P-O3'-C3'	5.94	126.82	119.70
1	6	631	G	N1-C6-O6	5.94	123.46	119.90
1	6	1563	C	N3-C4-C5	5.94	124.27	121.90
36	5	713	U	N1-C2-N3	5.94	118.46	114.90
36	5	1079	A	O5'-P-OP1	-5.94	100.36	105.70
36	5	2627	C	O4'-C1'-N1	-5.94	103.45	108.20
36	5	3102	G	N1-C2-N3	5.94	127.46	123.90
1	2	104	A	N3-C4-C5	-5.93	122.65	126.80
1	2	552	G	C6-C5-N7	-5.93	126.84	130.40
36	1	212	G	C4-C5-C6	5.93	122.36	118.80
36	1	287	G	C4-C5-C6	5.93	122.36	118.80
36	1	533	A	OP2-P-O3'	5.93	118.25	105.20
36	1	1133	A	C5-C6-N6	-5.93	118.95	123.70
36	1	1213	G	N1-C6-O6	5.93	123.46	119.90
36	1	1909	A	N3-C4-N9	-5.93	122.65	127.40
36	1	3384	U	O5'-P-OP1	-5.93	100.36	105.70
1	6	796	A	C8-N9-C4	5.93	108.17	105.80
1	6	1172	G	C5-N7-C8	5.93	107.27	104.30
1	6	1520	U	N3-C2-O2	5.93	126.36	122.20
36	5	898	U	C2-N3-C4	-5.93	123.44	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1083	G	C5-C6-N1	5.93	114.47	111.50
36	5	2892	A	C2-N3-C4	-5.93	107.63	110.60
36	5	2945	G	C5-N7-C8	-5.93	101.33	104.30
36	5	3024	A	N3-C4-N9	-5.93	122.65	127.40
36	5	3039	C	C5-C4-N4	-5.93	116.05	120.20
1	2	404	G	C5-C6-N1	5.93	114.47	111.50
1	2	1119	G	N1-C2-N2	-5.93	110.86	116.20
36	1	94	G	C5-C6-O6	-5.93	125.04	128.60
36	1	96	G	N3-C2-N2	-5.93	115.75	119.90
36	1	1545	A	C6-C5-N7	-5.93	128.15	132.30
36	1	2518	C	N3-C4-C5	-5.93	119.53	121.90
36	1	3208	G	C8-N9-C4	5.93	108.77	106.40
1	6	325	G	OP2-P-O3'	5.93	118.25	105.20
1	6	370	A	C4-C5-N7	-5.93	107.73	110.70
1	6	466	U	C4-C5-C6	5.93	123.26	119.70
36	5	1476	G	N1-C6-O6	5.93	123.46	119.90
36	5	1905	G	C5-C6-O6	5.93	132.16	128.60
36	5	2397	A	C5-C6-N1	-5.93	114.73	117.70
36	5	2786	G	N1-C2-N3	5.93	127.46	123.90
36	5	3328	G	C5-C6-O6	-5.93	125.04	128.60
37	7	5	G	C8-N9-C4	5.93	108.77	106.40
38	8	5	U	N3-C4-O4	5.93	123.55	119.40
1	2	1436	A	N9-C4-C5	-5.93	103.43	105.80
36	1	518	G	N1-C2-N2	5.93	121.54	116.20
36	1	1449	A	N3-C4-C5	-5.93	122.65	126.80
36	1	1550	C	N3-C2-O2	-5.93	117.75	121.90
36	1	2387	A	C6-N1-C2	-5.93	115.04	118.60
1	6	363	G	N3-C4-N9	5.93	129.56	126.00
1	6	908	U	N1-C2-O2	5.93	126.95	122.80
1	6	1504	G	N1-C2-N2	-5.93	110.86	116.20
1	6	1660	A	C4-C5-C6	5.93	119.97	117.00
36	5	377	A	N9-C4-C5	5.93	108.17	105.80
36	5	787	G	N3-C4-C5	5.93	131.56	128.60
36	5	998	A	C5-C6-N6	5.93	128.44	123.70
36	1	218	G	O5'-P-OP1	-5.93	100.36	105.70
36	1	273	A	N7-C8-N9	-5.93	110.83	113.80
36	1	979	U	O5'-P-OP2	-5.93	100.36	105.70
36	1	1446	A	N7-C8-N9	5.93	116.77	113.80
36	1	2443	A	N1-C6-N6	5.93	122.16	118.60
36	1	3093	C	C6-N1-C1'	5.93	127.92	120.80
61	N5	34	LEU	CA-CB-CG	5.93	128.94	115.30
1	6	66	U	P-O3'-C3'	5.93	126.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	619	A	N9-C4-C5	5.93	108.17	105.80
1	6	1282	U	N1-C2-O2	-5.93	118.65	122.80
36	5	23	A	N1-C6-N6	5.93	122.16	118.60
36	5	823	C	C6-N1-C2	5.93	122.67	120.30
36	5	1542	G	C8-N9-C4	-5.93	104.03	106.40
36	5	2831	G	C5-C6-N1	-5.93	108.54	111.50
36	5	3068	U	N3-C2-O2	-5.93	118.05	122.20
37	7	106	U	N3-C4-C5	5.93	118.16	114.60
1	2	152	U	N3-C4-O4	-5.93	115.25	119.40
36	1	2209	U	N1-C2-N3	-5.93	111.34	114.90
36	1	2703	A	C5-N7-C8	5.93	106.86	103.90
38	4	56	G	N3-C4-N9	5.93	129.56	126.00
1	6	317	C	C6-N1-C2	5.93	122.67	120.30
1	6	610	G	N3-C4-C5	-5.93	125.64	128.60
36	5	1573	G	N1-C6-O6	-5.93	116.34	119.90
1	2	1561	U	C2-N1-C1'	5.93	124.81	117.70
36	1	887	G	C5-N7-C8	5.93	107.26	104.30
36	1	1405	U	N3-C2-O2	-5.93	118.05	122.20
36	1	2199	G	C5-C6-O6	-5.93	125.04	128.60
36	1	2337	C	N3-C4-N4	-5.93	113.85	118.00
36	1	2622	C	N1-C2-O2	5.93	122.46	118.90
36	1	2707	C	C2-N1-C1'	5.93	125.32	118.80
38	4	150	G	N3-C4-N9	5.93	129.56	126.00
1	6	25	C	C6-N1-C2	5.93	122.67	120.30
1	6	1100	G	C2-N3-C4	-5.93	108.94	111.90
1	6	1372	U	C6-N1-C2	-5.93	117.44	121.00
1	6	1398	U	C5-C4-O4	5.93	129.46	125.90
25	d3	73	ARG	NE-CZ-NH1	-5.93	117.34	120.30
36	5	1140	G	N1-C6-O6	-5.93	116.34	119.90
36	5	1672	U	C2-N1-C1'	-5.93	110.59	117.70
36	5	2122	G	O5'-P-OP2	-5.93	100.37	105.70
36	5	3204	C	C2-N3-C4	-5.93	116.94	119.90
36	1	227	G	C6-C5-N7	-5.92	126.85	130.40
36	1	870	G	OP2-P-O3'	5.92	118.23	105.20
36	1	934	G	C5-N7-C8	-5.92	101.34	104.30
1	6	17	C	C6-N1-C2	-5.92	117.93	120.30
1	6	89	G	N3-C2-N2	-5.92	115.75	119.90
1	6	326	G	C8-N9-C1'	-5.92	119.30	127.00
36	5	787	G	N1-C6-O6	5.92	123.45	119.90
36	5	941	G	N1-C6-O6	-5.92	116.34	119.90
36	5	1313	G	C6-C5-N7	-5.92	126.84	130.40
36	5	2421	U	C2-N3-C4	-5.92	123.44	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2766	U	O5'-P-OP2	-5.92	100.37	105.70
36	5	2768	U	C5-C6-N1	-5.92	119.74	122.70
36	5	2839	G	C5-C6-O6	5.92	132.16	128.60
37	7	95	A	N1-C6-N6	5.92	122.16	118.60
64	n8	73	LEU	CA-CB-CG	5.92	128.93	115.30
1	2	730	G	C8-N9-C4	-5.92	104.03	106.40
36	1	197	G	OP2-P-O3'	5.92	118.23	105.20
1	6	397	A	C4-C5-N7	5.92	113.66	110.70
1	6	1284	C	N3-C4-N4	5.92	122.15	118.00
36	5	944	C	C5-C4-N4	5.92	124.35	120.20
36	5	3210	A	N1-C2-N3	5.92	132.26	129.30
1	2	21	U	C5-C4-O4	-5.92	122.35	125.90
36	1	943	U	OP1-P-OP2	5.92	128.48	119.60
36	1	2198	A	P-O5'-C5'	-5.92	111.42	120.90
36	1	2603	G	N1-C6-O6	5.92	123.45	119.90
36	1	2718	U	C5-C4-O4	-5.92	122.35	125.90
37	3	92	A	N3-C4-C5	5.92	130.94	126.80
1	6	209	U	C5-C4-O4	-5.92	122.35	125.90
1	6	964	U	C6-N1-C2	5.92	124.55	121.00
1	6	1121	C	C6-N1-C2	-5.92	117.93	120.30
1	6	1781	A	C6-C5-N7	-5.92	128.16	132.30
36	5	568	G	N3-C4-C5	-5.92	125.64	128.60
36	5	608	A	N9-C4-C5	-5.92	103.43	105.80
36	5	695	C	C6-N1-C1'	-5.92	113.69	120.80
36	5	940	G	OP2-P-O3'	5.92	118.23	105.20
36	5	1321	G	N1-C2-N2	5.92	121.53	116.20
36	5	1724	U	O4'-C1'-N1	5.92	112.94	108.20
36	5	2327	U	C2-N3-C4	-5.92	123.45	127.00
36	5	2872	A	C5-C6-N1	5.92	120.66	117.70
36	5	3029	A	C5-N7-C8	-5.92	100.94	103.90
36	1	591	G	C4-C5-C6	5.92	122.35	118.80
36	1	2650	U	C5-C4-O4	5.92	129.45	125.90
36	1	2663	G	C5-C6-N1	5.92	114.46	111.50
38	4	97	A	C6-N1-C2	-5.92	115.05	118.60
51	M5	73	ARG	NE-CZ-NH1	-5.92	117.34	120.30
1	6	109	G	O5'-P-OP1	5.92	117.80	110.70
36	5	155	G	C8-N9-C4	5.92	108.77	106.40
36	5	654	C	N3-C4-C5	-5.92	119.53	121.90
36	5	854	G	N3-C4-N9	-5.92	122.45	126.00
36	1	402	A	C6-C5-N7	-5.92	128.16	132.30
36	1	1937	U	N3-C4-O4	-5.92	115.26	119.40
37	3	102	A	C5-C6-N6	-5.92	118.97	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	946	U	C6-N1-C2	-5.92	117.45	121.00
1	6	1214	U	C5-C4-O4	-5.92	122.35	125.90
1	6	1750	A	C4-C5-C6	5.92	119.96	117.00
36	5	567	G	C2-N3-C4	-5.92	108.94	111.90
36	5	1014	U	N1-C2-O2	5.92	126.94	122.80
36	5	2108	C	N3-C4-C5	-5.92	119.53	121.90
36	5	2402	A	C2-N3-C4	-5.92	107.64	110.60
36	5	2797	C	N3-C4-C5	-5.92	119.53	121.90
36	5	3124	G	N1-C2-N3	5.92	127.45	123.90
36	5	3393	U	C6-N1-C1'	5.92	129.49	121.20
38	8	97	A	N1-C2-N3	5.92	132.26	129.30
45	l8	48	ARG	NE-CZ-NH1	-5.92	117.34	120.30
62	n6	126	LEU	CA-CB-CG	5.92	128.91	115.30
1	2	19	A	C4-C5-N7	5.92	113.66	110.70
1	2	542	A	N1-C2-N3	5.92	132.26	129.30
1	2	637	C	C2-N3-C4	5.92	122.86	119.90
36	1	1093	A	N1-C6-N6	-5.92	115.05	118.60
36	1	3336	A	C8-N9-C4	-5.92	103.43	105.80
37	3	56	A	N3-C4-C5	5.92	130.94	126.80
1	6	43	A	N1-C6-N6	5.92	122.15	118.60
1	6	298	C	N1-C2-O2	5.92	122.45	118.90
36	5	585	A	O5'-P-OP2	-5.92	100.37	105.70
36	5	1832	C	N1-C2-O2	-5.92	115.35	118.90
36	5	2225	U	C6-N1-C2	-5.92	117.45	121.00
36	5	2517	U	OP1-P-O3'	5.92	118.21	105.20
36	5	2624	G	N3-C4-N9	5.92	129.55	126.00
36	5	3061	G	C4-C5-N7	5.92	113.17	110.80
36	5	3323	A	N7-C8-N9	5.92	116.76	113.80
39	l2	237	LEU	CA-CB-CG	-5.92	101.69	115.30
36	1	281	G	O4'-C1'-N9	5.92	112.93	108.20
36	1	2797	C	C4-C5-C6	5.92	120.36	117.40
36	5	1487	G	C8-N9-C4	-5.92	104.03	106.40
36	5	2140	U	N3-C2-O2	-5.92	118.06	122.20
1	2	1556	A	N1-C6-N6	-5.91	115.05	118.60
36	1	967	A	C4-C5-C6	5.91	119.96	117.00
36	1	1386	A	C4-C5-N7	-5.91	107.74	110.70
36	1	1560	G	O5'-P-OP2	-5.91	100.38	105.70
36	1	1728	G	C4-C5-C6	5.91	122.35	118.80
36	1	2762	A	N3-C4-C5	-5.91	122.66	126.80
36	1	2937	G	N1-C2-N2	5.91	121.52	116.20
36	1	3147	G	N7-C8-N9	-5.91	110.14	113.10
1	6	1117	U	O5'-P-OP2	-5.91	100.38	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1548	G	C8-N9-C4	5.91	108.77	106.40
1	6	1572	G	C5-C6-O6	-5.91	125.05	128.60
36	5	781	G	C8-N9-C4	-5.91	104.03	106.40
36	5	1073	U	N1-C2-O2	5.91	126.94	122.80
36	5	1195	A	N7-C8-N9	5.91	116.76	113.80
36	5	1344	G	N3-C4-C5	5.91	131.56	128.60
36	5	1383	G	C4-C5-C6	5.91	122.35	118.80
36	5	1465	A	C5-C6-N6	-5.91	118.97	123.70
36	5	2146	C	O5'-P-OP2	-5.91	100.38	105.70
36	5	2903	A	O5'-P-OP1	5.91	117.80	110.70
37	7	25	G	C6-N1-C2	-5.91	121.55	125.10
38	8	102	U	N3-C2-O2	-5.91	118.06	122.20
36	1	1323	G	C4-C5-C6	5.91	122.35	118.80
36	1	3020	U	C5-C6-N1	5.91	125.66	122.70
1	6	799	A	C2-N3-C4	-5.91	107.64	110.60
36	5	365	A	C6-C5-N7	-5.91	128.16	132.30
36	5	1302	A	C8-N9-C4	-5.91	103.44	105.80
36	5	2851	A	C5-N7-C8	5.91	106.86	103.90
36	5	3331	U	N3-C4-O4	5.91	123.54	119.40
1	2	1641	C	C5-C6-N1	-5.91	118.05	121.00
36	1	372	A	C6-N1-C2	-5.91	115.05	118.60
36	1	714	G	C4-N9-C1'	5.91	134.19	126.50
36	1	874	U	OP1-P-OP2	-5.91	110.73	119.60
36	1	1463	U	N1-C2-N3	5.91	118.45	114.90
36	1	2174	G	C8-N9-C4	-5.91	104.03	106.40
36	1	2303	A	C6-N1-C2	-5.91	115.05	118.60
36	1	2355	G	C5-C6-N1	-5.91	108.54	111.50
36	1	2722	U	C2-N1-C1'	5.91	124.79	117.70
36	1	3219	G	C8-N9-C1'	-5.91	119.31	127.00
37	3	17	A	N9-C4-C5	5.91	108.16	105.80
1	6	50	C	OP1-P-OP2	-5.91	110.73	119.60
1	6	1484	G	C2-N3-C4	5.91	114.86	111.90
36	5	51	A	C5-N7-C8	-5.91	100.94	103.90
36	5	660	A	C5-N7-C8	5.91	106.86	103.90
36	5	938	C	N3-C2-O2	5.91	126.04	121.90
36	5	2409	G	C6-C5-N7	-5.91	126.85	130.40
36	5	2548	C	C6-N1-C2	-5.91	117.94	120.30
36	5	2674	A	N7-C8-N9	-5.91	110.84	113.80
36	5	2920	U	C4-C5-C6	-5.91	116.15	119.70
36	1	189	G	C6-N1-C2	-5.91	121.55	125.10
36	1	225	C	N3-C2-O2	-5.91	117.77	121.90
36	1	405	U	N3-C4-C5	-5.91	111.06	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	633	C	N3-C2-O2	-5.91	117.76	121.90
36	1	1099	A	C4-C5-C6	5.91	119.95	117.00
36	1	1111	U	N3-C4-O4	-5.91	115.27	119.40
36	1	1378	U	C5-C4-O4	-5.91	122.36	125.90
36	1	1419	A	C5'-C4'-O4'	5.91	116.19	109.10
1	6	1180	C	N3-C4-N4	5.91	122.14	118.00
1	6	1264	G	N3-C4-C5	5.91	131.55	128.60
1	6	1542	G	N1-C2-N3	5.91	127.44	123.90
36	5	61	A	C5-N7-C8	5.91	106.86	103.90
36	5	1126	G	C2-N3-C4	-5.91	108.95	111.90
36	5	2978	U	O5'-P-OP1	5.91	117.79	110.70
37	7	60	G	O4'-C1'-N9	5.91	112.93	108.20
38	8	1	A	N3-C4-C5	-5.91	122.66	126.80
36	1	366	A	N9-C4-C5	5.91	108.16	105.80
36	1	1909	A	N3-C4-C5	5.91	130.94	126.80
36	1	2908	G	C5-C6-O6	-5.91	125.06	128.60
1	6	1753	A	C8-N9-C1'	-5.91	117.07	127.70
36	5	848	A	N7-C8-N9	5.91	116.75	113.80
1	2	1432	U	O4'-C1'-N1	5.91	112.92	108.20
1	2	1591	C	C5-C4-N4	5.91	124.33	120.20
1	2	1613	U	N3-C2-O2	-5.91	118.07	122.20
36	1	511	G	C5-C6-O6	-5.91	125.06	128.60
36	1	595	G	C4-C5-C6	5.91	122.34	118.80
36	1	595	G	N3-C4-N9	5.91	129.54	126.00
36	1	856	G	N1-C2-N2	-5.91	110.88	116.20
36	1	932	U	N3-C4-O4	-5.91	115.27	119.40
36	1	1157	G	C4-C5-C6	5.91	122.34	118.80
36	1	2443	A	C5-C6-N6	-5.91	118.97	123.70
36	1	2560	C	C6-N1-C2	-5.91	117.94	120.30
1	6	175	G	C8-N9-C1'	-5.91	119.32	127.00
1	6	603	U	O5'-P-OP1	-5.91	100.39	105.70
1	6	971	A	C4-C5-N7	5.91	113.65	110.70
1	6	1389	C	C6-N1-C2	-5.91	117.94	120.30
1	6	1645	G	N1-C2-N3	-5.91	120.36	123.90
36	5	94	G	C8-N9-C1'	5.91	134.68	127.00
36	5	1372	C	O5'-P-OP1	5.91	117.79	110.70
36	5	1653	G	C4-C5-N7	-5.91	108.44	110.80
36	5	2953	U	N1-C2-O2	-5.91	118.67	122.80
36	5	3260	G	N1-C2-N3	5.91	127.44	123.90
1	2	280	U	P-O3'-C3'	5.90	126.78	119.70
36	1	1525	G	N3-C4-C5	-5.90	125.65	128.60
36	1	1755	C	C5-C6-N1	5.90	123.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2731	U	OP2-P-O3'	5.90	118.19	105.20
36	1	3295	A	N1-C6-N6	-5.90	115.06	118.60
1	2	332	U	C6-N1-C2	5.90	124.54	121.00
1	2	1789	G	N1-C6-O6	5.90	123.44	119.90
36	1	375	A	C5-C6-N6	-5.90	118.98	123.70
36	1	517	G	C5-N7-C8	-5.90	101.35	104.30
36	1	989	A	C4-C5-C6	-5.90	114.05	117.00
36	1	1065	A	N1-C6-N6	-5.90	115.06	118.60
36	1	1147	G	C6-N1-C2	-5.90	121.56	125.10
36	1	1510	G	N3-C4-C5	-5.90	125.65	128.60
36	1	1789	G	C2-N3-C4	5.90	114.85	111.90
36	1	1900	A	C8-N9-C4	5.90	108.16	105.80
36	1	2623	G	C5-C6-N1	-5.90	108.55	111.50
36	1	2669	G	C6-C5-N7	5.90	133.94	130.40
38	4	53	A	N1-C6-N6	-5.90	115.06	118.60
52	M6	58	LEU	CA-CB-CG	5.90	128.87	115.30
1	6	310	C	N1-C2-N3	-5.90	115.07	119.20
1	6	576	G	C4-C5-C6	5.90	122.34	118.80
1	6	1518	C	O5'-P-OP1	-5.90	100.39	105.70
36	5	952	A	C5-C6-N6	5.90	128.42	123.70
36	5	1343	A	O5'-P-OP2	-5.90	100.39	105.70
36	5	2197	C	N3-C4-C5	5.90	124.26	121.90
36	5	2397	A	N7-C8-N9	5.90	116.75	113.80
36	5	2618	G	OP1-P-OP2	5.90	128.46	119.60
1	2	766	U	N1-C2-O2	5.90	126.93	122.80
36	1	53	G	C4-N9-C1'	5.90	134.17	126.50
36	1	146	U	C6-N1-C2	-5.90	117.46	121.00
36	1	1311	G	N3-C2-N2	-5.90	115.77	119.90
36	1	1718	G	N3-C4-N9	-5.90	122.46	126.00
36	1	2646	C	O5'-P-OP1	5.90	117.78	110.70
1	6	295	A	C8-N9-C4	5.90	108.16	105.80
1	6	453	U	C5-C6-N1	5.90	125.65	122.70
36	5	770	G	C8-N9-C4	-5.90	104.04	106.40
36	5	975	C	N1-C2-O2	-5.90	115.36	118.90
36	5	1322	U	C5-C4-O4	-5.90	122.36	125.90
36	5	1389	G	N1-C2-N2	-5.90	110.89	116.20
36	5	1395	G	O5'-P-OP1	-5.90	100.39	105.70
36	5	2165	G	C5-C6-O6	-5.90	125.06	128.60
36	5	2826	U	C2-N3-C4	-5.90	123.46	127.00
36	5	3117	C	C2-N1-C1'	5.90	125.29	118.80
1	2	937	C	C6-N1-C2	-5.90	117.94	120.30
1	2	1539	G	N1-C6-O6	5.90	123.44	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2392	C	N3-C4-C5	5.90	124.26	121.90
36	1	2794	G	C8-N9-C4	-5.90	104.04	106.40
36	1	2939	G	C2-N3-C4	5.90	114.85	111.90
37	3	2	G	O5'-P-OP1	-5.90	100.39	105.70
36	5	613	G	N3-C4-N9	-5.90	122.46	126.00
36	5	923	C	C5-C6-N1	-5.90	118.05	121.00
36	5	2549	G	C8-N9-C4	-5.90	104.04	106.40
36	5	2922	G	N9-C4-C5	5.90	107.76	105.40
36	5	3314	A	C6-C5-N7	-5.90	128.17	132.30
1	2	1768	G	N3-C4-C5	-5.90	125.65	128.60
36	1	105	C	C5-C6-N1	-5.90	118.05	121.00
36	1	613	G	C4-C5-N7	5.90	113.16	110.80
36	1	2949	U	C4-C5-C6	5.90	123.24	119.70
36	1	3177	G	C5-C6-N1	5.90	114.45	111.50
36	1	3285	C	N1-C2-O2	5.90	122.44	118.90
38	4	56	G	N1-C2-N2	-5.90	110.89	116.20
1	6	1130	G	C6-N1-C2	-5.90	121.56	125.10
36	5	290	G	O5'-P-OP1	-5.90	100.39	105.70
36	5	1307	G	O4'-C1'-N9	5.90	112.92	108.20
36	5	3219	G	N9-C4-C5	5.90	107.76	105.40
47	m0	156	ARG	NE-CZ-NH1	5.90	123.25	120.30
1	2	1409	G	N1-C6-O6	5.90	123.44	119.90
36	1	609	G	C8-N9-C4	5.90	108.76	106.40
36	1	1381	A	N1-C2-N3	5.90	132.25	129.30
38	4	109	A	C5-N7-C8	-5.90	100.95	103.90
1	6	154	G	C4-C5-N7	5.90	113.16	110.80
1	6	919	A	C5-C6-N6	-5.90	118.98	123.70
36	5	658	G	C6-C5-N7	-5.90	126.86	130.40
36	5	1379	G	O4'-C1'-N9	-5.90	103.48	108.20
36	5	1712	G	C5-C6-O6	5.90	132.14	128.60
36	5	1905	G	N7-C8-N9	-5.90	110.15	113.10
36	5	2285	C	C5-C4-N4	5.90	124.33	120.20
38	8	38	U	N3-C4-O4	-5.90	115.27	119.40
1	2	972	G	N1-C6-O6	5.89	123.44	119.90
1	2	1582	U	C5-C4-O4	-5.89	122.36	125.90
36	1	839	C	N3-C4-C5	5.89	124.26	121.90
36	1	1077	U	C2-N3-C4	-5.89	123.46	127.00
36	1	1362	G	C6-C5-N7	5.89	133.94	130.40
36	1	2165	G	N1-C6-O6	5.89	123.44	119.90
36	1	2372	A	N3-C4-N9	5.89	132.12	127.40
36	1	2619	G	OP1-P-O3'	5.89	118.17	105.20
36	1	3213	A	C6-C5-N7	-5.89	128.17	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1789	G	C8-N9-C1'	-5.89	119.34	127.00
36	5	52	A	OP1-P-OP2	5.89	128.44	119.60
36	5	695	C	N3-C4-C5	5.89	124.26	121.90
36	5	1319	G	N7-C8-N9	-5.89	110.15	113.10
36	5	2264	U	OP1-P-OP2	-5.89	110.76	119.60
1	2	311	U	C2-N1-C1'	5.89	124.77	117.70
36	1	415	G	C6-C5-N7	-5.89	126.86	130.40
36	1	421	G	C2-N3-C4	5.89	114.85	111.90
36	1	1005	G	C6-C5-N7	5.89	133.94	130.40
36	1	2093	A	C5-C6-N1	5.89	120.65	117.70
52	M6	78	ARG	NE-CZ-NH2	-5.89	117.35	120.30
1	6	371	G	C5-C6-N1	-5.89	108.55	111.50
1	6	1622	G	C5-N7-C8	-5.89	101.35	104.30
36	5	632	G	N3-C4-N9	5.89	129.53	126.00
36	5	1404	G	C4-C5-N7	5.89	113.16	110.80
36	5	1886	A	N1-C6-N6	-5.89	115.06	118.60
36	5	2827	U	C2-N3-C4	5.89	130.54	127.00
36	5	3344	A	N1-C6-N6	-5.89	115.06	118.60
36	1	1005	G	C5-C6-O6	5.89	132.13	128.60
36	1	2238	G	N1-C2-N2	5.89	121.50	116.20
36	1	2721	A	N7-C8-N9	5.89	116.75	113.80
36	1	2860	U	N1-C2-O2	5.89	126.92	122.80
1	6	1463	C	C2-N1-C1'	-5.89	112.32	118.80
1	6	1673	G	C5-C6-O6	-5.89	125.06	128.60
36	5	939	U	O5'-P-OP1	5.89	117.77	110.70
36	5	1120	A	OP1-P-O3'	-5.89	92.24	105.20
36	5	1166	G	N7-C8-N9	5.89	116.05	113.10
36	5	1475	A	N1-C2-N3	5.89	132.25	129.30
1	2	1389	C	N1-C2-O2	5.89	122.43	118.90
36	1	27	C	OP1-P-OP2	5.89	128.44	119.60
36	1	754	G	N3-C4-C5	5.89	131.54	128.60
36	1	1423	C	C6-N1-C2	-5.89	117.94	120.30
36	1	2371	G	C4-N9-C1'	5.89	134.16	126.50
36	1	2979	U	OP2-P-O3'	5.89	118.16	105.20
1	6	301	A	C6-N1-C2	-5.89	115.07	118.60
1	6	565	C	C5-C6-N1	-5.89	118.06	121.00
1	6	1395	G	C5-C6-O6	-5.89	125.07	128.60
36	5	783	A	C5-C6-N6	-5.89	118.99	123.70
36	5	812	G	N1-C2-N3	5.89	127.43	123.90
36	5	852	U	N1-C2-O2	5.89	126.92	122.80
36	5	1114	U	C2-N3-C4	5.89	130.53	127.00
36	5	2149	A	N3-C4-C5	5.89	130.92	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2316	G	C5-C6-O6	5.89	132.13	128.60
36	5	2616	C	N1-C2-N3	5.89	123.32	119.20
36	5	3200	G	N7-C8-N9	5.89	116.04	113.10
72	o6	45	ARG	NE-CZ-NH1	5.89	123.25	120.30
1	2	103	A	C6-C5-N7	-5.89	128.18	132.30
36	1	780	A	N7-C8-N9	5.89	116.74	113.80
36	1	1304	A	N1-C6-N6	-5.89	115.07	118.60
1	6	22	A	N7-C8-N9	5.89	116.74	113.80
1	6	156	A	C2-N3-C4	-5.89	107.66	110.60
36	5	2287	C	N1-C2-N3	5.89	123.32	119.20
36	5	2688	U	C5-C4-O4	-5.89	122.37	125.90
36	5	2927	C	N3-C4-C5	5.89	124.25	121.90
1	2	1598	U	N1-C2-O2	-5.89	118.68	122.80
36	1	290	G	C5-C6-O6	-5.89	125.07	128.60
36	1	1728	G	C8-N9-C1'	-5.89	119.35	127.00
36	1	2651	G	C8-N9-C4	5.89	108.75	106.40
36	1	3088	G	C5-N7-C8	5.89	107.24	104.30
36	1	3260	G	N1-C2-N3	5.89	127.43	123.90
1	6	95	G	C5-C6-O6	5.89	132.13	128.60
1	6	545	A	N1-C6-N6	-5.89	115.07	118.60
36	5	2247	G	C5-C6-N1	5.89	114.44	111.50
36	5	2282	U	P-O5'-C5'	-5.89	111.48	120.90
36	5	3380	U	N3-C4-C5	-5.89	111.07	114.60
38	8	2	A	N7-C8-N9	5.89	116.74	113.80
1	2	449	C	C6-N1-C1'	5.88	127.86	120.80
1	2	1015	U	C5-C6-N1	-5.88	119.76	122.70
1	2	1503	A	N1-C6-N6	5.88	122.13	118.60
1	2	1671	A	C8-N9-C4	5.88	108.15	105.80
1	2	1793	G	N3-C4-N9	5.88	129.53	126.00
36	1	197	G	C6-C5-N7	-5.88	126.87	130.40
36	1	610	G	C6-C5-N7	-5.88	126.87	130.40
36	1	1794	G	N7-C8-N9	-5.88	110.16	113.10
37	3	30	G	N3-C4-N9	5.88	129.53	126.00
1	6	1671	A	N9-C4-C5	5.88	108.15	105.80
36	5	647	A	C5-C6-N1	-5.88	114.76	117.70
36	5	820	A	N1-C2-N3	5.88	132.24	129.30
36	5	971	G	C5-N7-C8	5.88	107.24	104.30
36	5	1154	A	N9-C4-C5	5.88	108.15	105.80
36	5	2971	A	C5-C6-N6	5.88	128.41	123.70
1	2	1739	C	C6-N1-C2	5.88	122.65	120.30
36	1	2866	U	C2-N3-C4	-5.88	123.47	127.00
37	3	30	G	OP1-P-O3'	5.88	118.14	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1316	C	C4-C5-C6	5.88	120.34	117.40
36	5	1839	A	O5'-P-OP2	5.88	117.76	110.70
36	5	1906	G	O5'-P-OP2	-5.88	100.41	105.70
36	5	2832	C	O5'-P-OP1	-5.88	100.41	105.70
36	5	2977	G	C6-C5-N7	-5.88	126.87	130.40
1	2	1431	C	C6-N1-C1'	-5.88	113.74	120.80
36	1	419	G	N1-C2-N2	-5.88	110.91	116.20
36	1	601	U	C2-N1-C1'	5.88	124.76	117.70
36	1	669	U	C5-C4-O4	-5.88	122.37	125.90
36	1	2102	U	C5-C6-N1	-5.88	119.76	122.70
36	1	2554	A	N1-C6-N6	-5.88	115.07	118.60
36	1	2829	U	C5-C4-O4	5.88	129.43	125.90
1	6	926	A	C2-N3-C4	-5.88	107.66	110.60
1	6	972	G	C4-C5-C6	5.88	122.33	118.80
1	6	1110	G	C6-C5-N7	-5.88	126.87	130.40
36	5	2518	C	C5-C4-N4	-5.88	116.08	120.20
36	5	3062	G	C6-C5-N7	-5.88	126.87	130.40
36	5	3188	G	C4-N9-C1'	5.88	134.15	126.50
36	5	3228	C	P-O3'-C3'	5.88	126.76	119.70
36	1	1604	G	C8-N9-C1'	-5.88	119.36	127.00
36	1	2633	U	N3-C4-C5	-5.88	111.07	114.60
36	5	2403	G	OP1-P-O3'	5.88	118.14	105.20
36	5	2630	C	N1-C2-O2	5.88	122.43	118.90
36	5	3309	G	OP1-P-OP2	-5.88	110.78	119.60
1	2	392	G	C5-C6-O6	-5.88	125.07	128.60
36	1	941	G	C5-N7-C8	5.88	107.24	104.30
36	1	1313	G	C2-N3-C4	-5.88	108.96	111.90
36	1	1385	C	N1-C2-O2	-5.88	115.37	118.90
36	1	1592	G	C8-N9-C1'	-5.88	119.36	127.00
36	1	2820	A	OP1-P-OP2	-5.88	110.78	119.60
36	1	3353	G	OP2-P-O3'	5.88	118.13	105.20
1	6	34	G	C2-N3-C4	-5.88	108.96	111.90
1	6	670	U	N3-C2-O2	-5.88	118.08	122.20
1	6	1786	G	OP2-P-O3'	5.88	118.13	105.20
36	5	294	U	C2-N1-C1'	-5.88	110.64	117.70
36	5	978	G	C8-N9-C1'	5.88	134.64	127.00
36	5	1875	G	N3-C4-C5	5.88	131.54	128.60
36	5	3003	G	N1-C6-O6	-5.88	116.37	119.90
1	2	1498	G	C4-N9-C1'	5.88	134.14	126.50
36	1	609	G	C4-C5-C6	5.88	122.33	118.80
36	1	1443	G	C2-N3-C4	-5.88	108.96	111.90
36	1	1499	C	C2-N3-C4	5.88	122.84	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	755	A	C6-C5-N7	-5.88	128.19	132.30
1	6	1445	G	N1-C6-O6	5.88	123.43	119.90
36	5	68	C	C5-C6-N1	5.88	123.94	121.00
36	5	1286	A	N7-C8-N9	-5.88	110.86	113.80
36	5	1304	A	C6-N1-C2	-5.88	115.07	118.60
36	5	1322	U	O5'-P-OP2	5.88	117.75	110.70
36	5	1729	A	O4'-C1'-N9	-5.88	103.50	108.20
36	5	2201	G	C8-N9-C4	5.88	108.75	106.40
36	5	2792	A	N7-C8-N9	5.88	116.74	113.80
36	5	3197	G	OP1-P-OP2	-5.88	110.79	119.60
1	2	1651	A	C2-N3-C4	-5.88	107.66	110.60
36	1	624	G	N3-C4-N9	5.88	129.53	126.00
36	1	2132	C	O5'-P-OP2	-5.88	100.41	105.70
36	1	2984	C	N1-C2-N3	5.88	123.31	119.20
36	1	3210	A	N9-C4-C5	5.88	108.15	105.80
36	1	3295	A	C5-C6-N6	5.88	128.40	123.70
37	3	117	A	C2-N3-C4	-5.88	107.66	110.60
38	4	41	A	C5-C6-N1	5.88	120.64	117.70
36	5	1906	G	O4'-C1'-N9	-5.88	103.50	108.20
36	5	2877	G	N3-C2-N2	5.88	124.01	119.90
36	5	3060	C	N3-C4-N4	5.88	122.11	118.00
1	2	1358	G	N7-C8-N9	-5.87	110.16	113.10
1	2	1430	U	N3-C4-C5	-5.87	111.08	114.60
36	1	727	G	C6-N1-C2	-5.87	121.58	125.10
36	1	1446	A	C4-C5-C6	5.87	119.94	117.00
36	1	1610	G	C5-C6-N1	-5.87	108.56	111.50
36	1	2366	C	N3-C4-C5	5.87	124.25	121.90
36	1	2960	C	N1-C2-N3	5.87	123.31	119.20
36	1	3056	U	N3-C2-O2	5.87	126.31	122.20
1	6	440	U	N1-C2-N3	5.87	118.42	114.90
1	6	1002	G	C5-C6-N1	5.87	114.44	111.50
1	6	1786	G	C5-C6-O6	5.87	132.12	128.60
36	5	339	C	O5'-P-OP2	-5.87	100.41	105.70
36	5	656	A	N1-C6-N6	5.87	122.12	118.60
36	5	2642	A	N1-C6-N6	5.87	122.12	118.60
36	5	3150	A	N9-C4-C5	-5.87	103.45	105.80
1	2	25	C	C2-N3-C4	-5.87	116.96	119.90
1	2	191	C	C6-N1-C1'	5.87	127.84	120.80
1	2	1290	U	O4'-C1'-N1	5.87	112.90	108.20
36	1	715	A	C5-N7-C8	-5.87	100.96	103.90
36	1	1065	A	C6-N1-C2	-5.87	115.08	118.60
36	1	1296	C	O5'-P-OP1	5.87	117.75	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2384	A	N3-C4-C5	-5.87	122.69	126.80
36	1	2738	A	N7-C8-N9	5.87	116.73	113.80
36	1	3388	C	N3-C2-O2	-5.87	117.79	121.90
1	6	1615	C	N1-C2-O2	-5.87	115.38	118.90
36	5	1143	A	C5-N7-C8	-5.87	100.96	103.90
36	5	3330	A	N3-C4-N9	5.87	132.10	127.40
36	5	3361	G	C5-C6-O6	-5.87	125.08	128.60
36	1	670	C	C6-N1-C2	5.87	122.65	120.30
36	1	916	G	N9-C4-C5	5.87	107.75	105.40
36	1	1345	G	C5-N7-C8	-5.87	101.36	104.30
1	6	1125	A	OP1-P-OP2	5.87	128.41	119.60
4	s2	233	GLN	C-N-CD	5.87	140.73	128.40
13	c1	5	LEU	CA-CB-CG	5.87	128.80	115.30
36	5	101	G	N1-C6-O6	5.87	123.42	119.90
36	5	1345	G	N3-C4-C5	5.87	131.53	128.60
36	5	2407	C	C5-C6-N1	5.87	123.94	121.00
1	2	548	G	N7-C8-N9	5.87	116.03	113.10
1	2	797	G	N3-C4-C5	5.87	131.53	128.60
36	1	129	U	N3-C4-O4	5.87	123.51	119.40
36	1	1405	U	N3-C4-C5	5.87	118.12	114.60
36	1	1466	G	C4-N9-C1'	5.87	134.13	126.50
36	1	2614	G	C6-N1-C2	-5.87	121.58	125.10
36	1	2729	U	C6-N1-C2	5.87	124.52	121.00
36	1	3143	C	C6-N1-C1'	-5.87	113.76	120.80
1	6	297	U	C5-C6-N1	5.87	125.63	122.70
1	6	773	C	O5'-P-OP2	-5.87	100.42	105.70
1	6	887	A	C5-C6-N1	-5.87	114.77	117.70
1	6	1567	U	C2-N1-C1'	5.87	124.74	117.70
1	6	1637	C	O4'-C1'-N1	-5.87	103.50	108.20
36	5	882	A	P-O3'-C3'	5.87	126.74	119.70
36	5	1313	G	C2-N3-C4	5.87	114.83	111.90
36	5	1615	C	C5-C4-N4	5.87	124.31	120.20
36	5	2917	G	C5-N7-C8	-5.87	101.36	104.30
36	5	3146	G	C8-N9-C1'	-5.87	119.37	127.00
36	1	2793	G	C8-N9-C4	-5.87	104.05	106.40
36	1	3134	A	N7-C8-N9	5.87	116.73	113.80
36	5	2103	U	N3-C2-O2	-5.87	118.09	122.20
36	5	3269	U	C5-C6-N1	-5.87	119.77	122.70
1	2	311	U	C4-C5-C6	5.87	123.22	119.70
36	1	28	C	C2-N3-C4	-5.87	116.97	119.90
36	1	301	G	N9-C4-C5	5.87	107.75	105.40
36	1	1100	U	N3-C2-O2	-5.87	118.09	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1304	A	N3-C4-N9	-5.87	122.71	127.40
36	1	1551	C	C2-N1-C1'	-5.87	112.35	118.80
36	1	1824	U	C6-N1-C2	-5.87	117.48	121.00
36	1	2216	G	C5-C6-O6	-5.87	125.08	128.60
36	1	2398	A	C4-C5-C6	5.87	119.93	117.00
36	1	2761	G	O5'-P-OP2	-5.87	100.42	105.70
36	1	2938	G	N1-C6-O6	5.87	123.42	119.90
36	1	3083	G	C5-C6-O6	-5.87	125.08	128.60
51	M5	116	LEU	CA-CB-CG	-5.87	101.81	115.30
70	O4	8	ARG	NE-CZ-NH2	-5.87	117.37	120.30
1	6	913	G	C8-N9-C4	-5.87	104.05	106.40
1	6	1746	A	N3-C4-N9	-5.87	122.71	127.40
36	5	1500	G	N1-C6-O6	5.87	123.42	119.90
36	5	3139	A	N1-C2-N3	5.87	132.23	129.30
37	7	10	C	N3-C4-C5	5.87	124.25	121.90
1	2	353	A	C2-N3-C4	-5.86	107.67	110.60
1	2	1010	C	C2-N1-C1'	-5.86	112.35	118.80
1	2	1324	G	N3-C2-N2	-5.86	115.80	119.90
1	2	1433	G	N3-C4-C5	-5.86	125.67	128.60
1	2	1656	U	N3-C4-O4	5.86	123.50	119.40
36	1	97	U	C2-N3-C4	-5.86	123.48	127.00
36	1	1191	U	N3-C4-C5	5.86	118.12	114.60
36	1	1411	C	N3-C4-N4	-5.86	113.89	118.00
36	1	1907	C	C2-N3-C4	-5.86	116.97	119.90
36	1	2614	G	N3-C2-N2	5.86	124.00	119.90
36	1	2794	G	C4-C5-N7	-5.86	108.45	110.80
36	1	3103	A	C5-C6-N1	5.86	120.63	117.70
1	6	154	G	N1-C6-O6	5.86	123.42	119.90
1	6	351	C	C4-C5-C6	-5.86	114.47	117.40
1	6	589	C	N1-C2-O2	-5.86	115.38	118.90
1	6	1642	G	C4-C5-C6	-5.86	115.28	118.80
1	6	1746	A	C5-C6-N6	5.86	128.39	123.70
36	5	112	U	C6-N1-C2	-5.86	117.48	121.00
36	5	717	C	C2-N1-C1'	5.86	125.25	118.80
36	5	959	C	O4'-C1'-N1	5.86	112.89	108.20
36	5	1048	A	N9-C4-C5	5.86	108.14	105.80
36	5	1118	C	OP1-P-OP2	-5.86	110.81	119.60
36	5	1590	G	O4'-C1'-N9	-5.86	103.51	108.20
36	5	1834	U	N1-C2-N3	5.86	118.42	114.90
36	5	1881	A	C6-C5-N7	-5.86	128.19	132.30
36	5	2367	A	OP1-P-OP2	5.86	128.39	119.60
36	5	2991	A	C4-C5-N7	-5.86	107.77	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3058	U	C5-C4-O4	5.86	129.42	125.90
36	5	3150	A	C4-C5-N7	5.86	113.63	110.70
37	7	84	A	C6-C5-N7	-5.86	128.19	132.30
37	7	95	A	C6-C5-N7	-5.86	128.20	132.30
1	2	978	A	C2-N3-C4	5.86	113.53	110.60
36	1	2181	C	N3-C2-O2	-5.86	117.80	121.90
36	1	2778	G	N1-C2-N3	5.86	127.42	123.90
36	5	1668	G	C6-C5-N7	-5.86	126.88	130.40
1	2	543	C	C6-N1-C1'	-5.86	113.77	120.80
1	2	704	C	N1-C2-O2	5.86	122.42	118.90
36	1	48	A	N9-C4-C5	5.86	108.14	105.80
36	1	62	A	C5-C6-N1	-5.86	114.77	117.70
36	1	648	C	N1-C2-N3	5.86	123.30	119.20
36	1	929	A	C6-C5-N7	-5.86	128.20	132.30
36	1	2143	A	N1-C6-N6	5.86	122.12	118.60
36	1	2370	G	C5-C6-O6	5.86	132.12	128.60
36	1	2768	U	O5'-P-OP2	-5.86	100.43	105.70
36	1	3383	G	C4-N9-C1'	-5.86	118.88	126.50
1	6	96	G	C4-N9-C1'	5.86	134.12	126.50
1	6	575	C	C2-N3-C4	-5.86	116.97	119.90
1	6	1130	G	C2-N3-C4	5.86	114.83	111.90
1	6	1390	U	O4'-C1'-N1	5.86	112.89	108.20
1	6	1502	G	O5'-P-OP2	-5.86	100.43	105.70
36	5	820	A	C6-N1-C2	-5.86	115.08	118.60
36	5	856	G	C8-N9-C4	-5.86	104.06	106.40
36	5	1518	U	OP2-P-O3'	5.86	118.09	105.20
36	5	2130	G	C8-N9-C1'	5.86	134.62	127.00
36	5	2657	A	C5-C6-N1	5.86	120.63	117.70
36	5	3393	U	N1-C2-N3	5.86	118.42	114.90
38	8	19	C	N3-C2-O2	-5.86	117.80	121.90
1	2	379	U	N1-C2-O2	5.86	126.90	122.80
36	1	19	U	C5-C4-O4	5.86	129.41	125.90
36	1	677	A	C8-N9-C4	5.86	108.14	105.80
36	1	1550	C	N1-C2-O2	5.86	122.42	118.90
36	1	2779	A	N1-C6-N6	5.86	122.12	118.60
36	5	787	G	C4-C5-C6	5.86	122.32	118.80
36	5	1134	G	N9-C4-C5	5.86	107.74	105.40
36	5	2734	A	OP1-P-OP2	-5.86	110.81	119.60
36	1	731	U	N3-C4-C5	-5.86	111.08	114.60
36	1	1105	A	C8-N9-C4	5.86	108.14	105.80
36	1	2756	C	C2-N3-C4	-5.86	116.97	119.90
36	1	3184	A	C6-N1-C2	-5.86	115.08	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	3	78	U	C2-N1-C1'	5.86	124.73	117.70
36	5	2247	G	C8-N9-C4	5.86	108.74	106.40
36	5	2912	G	N1-C2-N3	5.86	127.41	123.90
1	2	361	C	N1-C2-O2	-5.86	115.39	118.90
1	2	804	A	C5-C6-N1	-5.86	114.77	117.70
1	2	991	G	N1-C6-O6	-5.86	116.39	119.90
1	2	993	A	C6-C5-N7	-5.86	128.20	132.30
1	2	1780	G	C6-C5-N7	-5.86	126.89	130.40
36	1	232	G	C4-C5-N7	-5.86	108.46	110.80
36	1	1403	C	OP1-P-O3'	5.86	118.08	105.20
36	1	1453	A	N3-C4-N9	5.86	132.09	127.40
36	1	3120	C	O5'-P-OP2	-5.86	100.43	105.70
37	3	29	C	N3-C2-O2	-5.86	117.80	121.90
37	3	89	G	N1-C6-O6	5.86	123.41	119.90
38	4	12	A	N1-C2-N3	-5.86	126.37	129.30
38	4	52	A	O5'-P-OP1	-5.86	100.43	105.70
36	5	1150	A	O5'-P-OP1	5.86	117.73	110.70
36	5	2691	A	C5-C6-N6	-5.86	119.02	123.70
36	5	2867	C	O5'-P-OP1	-5.86	100.43	105.70
1	2	159	U	OP1-P-OP2	-5.85	110.82	119.60
1	2	475	A	N7-C8-N9	-5.85	110.87	113.80
36	1	1115	G	N7-C8-N9	5.85	116.03	113.10
36	1	2119	A	C5-N7-C8	-5.85	100.97	103.90
36	1	2608	G	C6-C5-N7	-5.85	126.89	130.40
36	1	2832	C	C6-N1-C2	5.85	122.64	120.30
36	1	3124	G	C8-N9-C4	-5.85	104.06	106.40
1	6	553	G	N9-C4-C5	-5.85	103.06	105.40
1	6	670	U	N1-C2-O2	5.85	126.90	122.80
36	5	591	G	OP1-P-O3'	5.85	118.08	105.20
36	5	805	G	C8-N9-C4	5.85	108.74	106.40
36	5	1470	U	C2-N1-C1'	5.85	124.72	117.70
36	5	2378	C	OP1-P-OP2	-5.85	110.82	119.60
36	5	2607	G	C4-C5-C6	5.85	122.31	118.80
1	2	162	A	N3-C4-C5	-5.85	122.70	126.80
1	2	361	C	C6-N1-C1'	5.85	127.82	120.80
36	1	1165	A	N1-C2-N3	5.85	132.23	129.30
36	1	1554	U	C5-C4-O4	-5.85	122.39	125.90
37	3	98	C	C2-N1-C1'	-5.85	112.36	118.80
1	6	1178	G	C4-N9-C1'	5.85	134.11	126.50
1	6	1466	G	C4-C5-N7	5.85	113.14	110.80
36	5	780	A	N9-C4-C5	5.85	108.14	105.80
36	5	1435	A	C5-C6-N1	5.85	120.63	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2117	A	N1-C6-N6	-5.85	115.09	118.60
36	5	2329	C	C5-C4-N4	-5.85	116.10	120.20
36	5	2863	G	C5-N7-C8	-5.85	101.37	104.30
36	5	3245	A	N9-C4-C5	-5.85	103.46	105.80
36	5	3384	U	N3-C2-O2	5.85	126.30	122.20
1	2	1619	C	C6-N1-C2	-5.85	117.96	120.30
23	D1	78	LEU	CA-CB-CG	5.85	128.76	115.30
36	1	1135	A	C8-N9-C4	-5.85	103.46	105.80
36	1	3260	G	C8-N9-C1'	-5.85	119.39	127.00
36	5	41	G	O5'-P-OP2	-5.85	100.43	105.70
36	5	2628	A	C2-N3-C4	-5.85	107.67	110.60
37	7	91	G	N3-C4-C5	5.85	131.53	128.60
1	2	144	U	C5-C6-N1	-5.85	119.78	122.70
36	1	1052	U	N3-C4-C5	5.85	118.11	114.60
36	1	1293	U	C2-N3-C4	-5.85	123.49	127.00
36	1	1581	C	C6-N1-C2	-5.85	117.96	120.30
36	1	1588	A	C4-C5-N7	-5.85	107.78	110.70
36	1	1829	G	N1-C6-O6	-5.85	116.39	119.90
36	1	2186	U	C5-C4-O4	5.85	129.41	125.90
36	1	2751	G	C8-N9-C1'	5.85	134.60	127.00
37	3	25	G	C5-C6-N1	5.85	114.42	111.50
1	6	805	U	O5'-P-OP2	5.85	117.72	110.70
1	6	1061	A	N1-C6-N6	5.85	122.11	118.60
1	6	1185	U	C2-N1-C1'	5.85	124.72	117.70
36	5	594	U	C5-C6-N1	5.85	125.62	122.70
36	5	1121	U	OP1-P-OP2	5.85	128.37	119.60
36	5	2339	C	N3-C4-N4	5.85	122.09	118.00
36	5	2611	U	O5'-P-OP2	-5.85	100.44	105.70
36	5	2621	G	N1-C2-N3	5.85	127.41	123.90
36	5	2874	G	C8-N9-C1'	-5.85	119.40	127.00
36	5	3096	C	N3-C2-O2	-5.85	117.81	121.90
37	7	22	A	C8-N9-C4	-5.85	103.46	105.80
1	2	987	G	N3-C4-C5	-5.85	125.68	128.60
36	1	642	U	C6-N1-C2	-5.85	117.49	121.00
36	1	752	C	N3-C4-N4	-5.85	113.91	118.00
36	1	894	G	N9-C4-C5	5.85	107.74	105.40
36	1	1288	U	C5-C6-N1	-5.85	119.78	122.70
36	1	1905	G	C8-N9-C4	-5.85	104.06	106.40
36	1	1927	G	N9-C4-C5	-5.85	103.06	105.40
37	3	25	G	N1-C6-O6	-5.85	116.39	119.90
1	6	396	G	C8-N9-C4	-5.85	104.06	106.40
1	6	634	G	N1-C6-O6	-5.85	116.39	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1164	G	C4-C5-C6	-5.85	115.29	118.80
36	5	1170	A	O5'-P-OP1	-5.85	100.44	105.70
36	5	2808	A	C6-N1-C2	5.85	122.11	118.60
36	5	3094	A	O5'-P-OP1	-5.85	100.44	105.70
36	1	195	U	N3-C4-C5	-5.85	111.09	114.60
36	1	752	C	N3-C4-C5	5.85	124.24	121.90
36	1	2190	U	OP2-P-O3'	5.85	118.06	105.20
1	6	903	U	N3-C2-O2	5.85	126.29	122.20
36	5	3110	C	O5'-P-OP2	5.85	117.72	110.70
36	1	730	C	N3-C2-O2	-5.84	117.81	121.90
36	1	915	A	OP1-P-OP2	5.84	128.37	119.60
36	1	1164	G	C5-C6-N1	5.84	114.42	111.50
36	1	2274	U	N3-C4-C5	5.84	118.11	114.60
36	1	2332	A	C4-C5-N7	5.84	113.62	110.70
36	1	3100	U	C2-N1-C1'	-5.84	110.69	117.70
36	1	3288	G	N1-C2-N3	-5.84	120.39	123.90
1	6	939	A	N1-C2-N3	5.84	132.22	129.30
1	6	1504	G	C5-C6-O6	5.84	132.11	128.60
36	5	780	A	O5'-P-OP2	-5.84	100.44	105.70
36	5	1654	A	N1-C2-N3	5.84	132.22	129.30
36	5	2584	G	C6-C5-N7	-5.84	126.89	130.40
36	5	2920	U	O5'-P-OP1	-5.84	100.44	105.70
37	7	45	A	C4-C5-N7	-5.84	107.78	110.70
36	1	652	G	C8-N9-C1'	-5.84	119.40	127.00
1	6	370	A	C5-C6-N6	5.84	128.37	123.70
36	5	77	A	OP2-P-O3'	5.84	118.05	105.20
36	5	298	U	C6-N1-C2	-5.84	117.49	121.00
36	5	1194	G	C5-C6-N1	5.84	114.42	111.50
36	5	3202	G	C6-C5-N7	5.84	133.91	130.40
1	2	1030	A	C6-C5-N7	-5.84	128.21	132.30
36	1	439	C	C2-N3-C4	5.84	122.82	119.90
36	1	697	A	C4-N9-C1'	-5.84	115.79	126.30
36	1	1195	A	N3-C4-C5	-5.84	122.71	126.80
36	1	1436	U	O4'-C1'-N1	5.84	112.87	108.20
36	1	1883	A	N3-C4-C5	5.84	130.89	126.80
36	1	2425	G	C8-N9-C4	-5.84	104.06	106.40
36	1	2721	A	C5-N7-C8	-5.84	100.98	103.90
36	1	2901	G	N9-C4-C5	5.84	107.74	105.40
1	6	1732	A	C5-C6-N1	-5.84	114.78	117.70
36	5	206	G	N3-C4-C5	-5.84	125.68	128.60
36	5	567	G	N7-C8-N9	5.84	116.02	113.10
36	5	1193	A	C2-N3-C4	-5.84	107.68	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1550	C	C2-N3-C4	5.84	122.82	119.90
36	5	1868	G	N9-C4-C5	-5.84	103.06	105.40
36	5	1922	A	N7-C8-N9	-5.84	110.88	113.80
36	5	3015	G	C5-C6-O6	-5.84	125.09	128.60
36	5	3266	G	N3-C4-N9	-5.84	122.50	126.00
37	7	13	A	C4-C5-N7	5.84	113.62	110.70
37	7	46	A	OP2-P-O3'	5.84	118.05	105.20
1	2	1094	G	C8-N9-C4	5.84	108.74	106.40
1	2	1486	G	O4'-C1'-N9	5.84	112.87	108.20
1	2	1547	A	N1-C6-N6	-5.84	115.10	118.60
1	2	1751	C	N3-C4-N4	-5.84	113.91	118.00
36	1	59	G	P-O3'-C3'	5.84	126.71	119.70
36	1	383	G	C5-N7-C8	5.84	107.22	104.30
36	1	427	C	C5-C4-N4	-5.84	116.11	120.20
36	1	794	U	C5-C6-N1	-5.84	119.78	122.70
36	1	936	A	N3-C4-C5	5.84	130.89	126.80
36	1	1195	A	C4-C5-C6	5.84	119.92	117.00
36	1	2922	G	C4-C5-N7	5.84	113.14	110.80
1	6	522	U	C2-N1-C1'	-5.84	110.69	117.70
1	6	636	A	C6-N1-C2	-5.84	115.10	118.60
1	6	637	C	C2-N1-C1'	5.84	125.22	118.80
1	6	1031	U	C5-C6-N1	-5.84	119.78	122.70
1	6	1206	U	N3-C4-C5	-5.84	111.10	114.60
1	6	1560	U	N1-C2-O2	5.84	126.89	122.80
36	5	194	U	N3-C2-O2	-5.84	118.11	122.20
36	5	397	A	C4-C5-C6	5.84	119.92	117.00
36	5	2243	A	C5-C6-N1	5.84	120.62	117.70
36	5	2982	A	N9-C4-C5	-5.84	103.46	105.80
36	5	3226	A	N1-C2-N3	5.84	132.22	129.30
36	5	3242	G	N1-C2-N2	-5.84	110.94	116.20
36	1	369	A	N1-C2-N3	5.84	132.22	129.30
36	1	2952	G	C4-C5-N7	-5.84	108.47	110.80
38	4	25	G	O5'-P-OP2	-5.84	100.45	105.70
1	6	128	U	C2-N1-C1'	-5.84	110.69	117.70
1	6	300	A	C5-C6-N1	5.84	120.62	117.70
1	6	448	C	O4'-C1'-N1	5.84	112.87	108.20
1	6	937	C	C6-N1-C2	-5.84	117.97	120.30
36	5	888	A	C6-C5-N7	-5.84	128.21	132.30
36	5	1225	A	C8-N9-C4	5.84	108.14	105.80
36	5	1686	U	N3-C4-O4	5.84	123.49	119.40
36	1	381	U	O5'-P-OP1	-5.84	100.45	105.70
36	1	404	G	C2-N3-C4	-5.84	108.98	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2881	C	O5'-P-OP1	-5.84	100.45	105.70
36	1	3370	A	C8-N9-C4	-5.84	103.47	105.80
1	6	1494	C	N3-C2-O2	-5.84	117.81	121.90
36	5	691	A	C8-N9-C4	-5.84	103.47	105.80
36	5	2134	G	C4-N9-C1'	5.84	134.09	126.50
36	5	2727	A	N9-C4-C5	5.84	108.14	105.80
36	5	2863	G	N9-C4-C5	5.84	107.73	105.40
37	7	31	U	O5'-P-OP2	5.84	117.70	110.70
36	1	621	A	N7-C8-N9	5.83	116.72	113.80
36	1	1006	A	C6-C5-N7	-5.83	128.22	132.30
36	1	1552	G	C4-N9-C1'	5.83	134.09	126.50
36	1	2172	A	C2-N3-C4	-5.83	107.68	110.60
36	5	637	C	N1-C2-N3	-5.83	115.12	119.20
36	5	1167	U	N1-C2-N3	-5.83	111.40	114.90
36	5	2144	A	O5'-P-OP1	-5.83	100.45	105.70
1	2	435	C	N3-C4-C5	5.83	124.23	121.90
36	1	292	U	C6-N1-C2	5.83	124.50	121.00
36	1	2884	C	C6-N1-C1'	5.83	127.80	120.80
36	1	3271	G	C2-N3-C4	5.83	114.82	111.90
38	4	34	U	O4'-C1'-N1	5.83	112.87	108.20
36	5	18	G	N7-C8-N9	5.83	116.02	113.10
36	5	1085	A	C4-C5-C6	5.83	119.92	117.00
36	5	1147	G	C2-N3-C4	-5.83	108.98	111.90
36	5	1784	G	C5-C6-O6	-5.83	125.10	128.60
36	5	2667	A	C5-C6-N6	5.83	128.37	123.70
36	5	2852	C	C2-N3-C4	-5.83	116.98	119.90
36	5	2967	A	C6-N1-C2	-5.83	115.10	118.60
1	2	1589	C	N3-C4-N4	-5.83	113.92	118.00
36	1	107	A	C5-C6-N6	-5.83	119.03	123.70
36	1	934	G	N3-C4-C5	-5.83	125.68	128.60
36	1	1210	U	N3-C4-O4	-5.83	115.32	119.40
36	1	1543	G	C5-N7-C8	-5.83	101.39	104.30
36	1	1624	G	C5-N7-C8	-5.83	101.38	104.30
36	1	2884	C	C6-N1-C2	5.83	122.63	120.30
1	6	307	G	N1-C2-N2	-5.83	110.95	116.20
36	5	1158	A	O5'-P-OP2	-5.83	100.45	105.70
36	5	1301	A	N9-C4-C5	5.83	108.13	105.80
36	5	2169	G	O5'-P-OP2	5.83	117.70	110.70
37	7	94	C	C2-N3-C4	-5.83	116.98	119.90
1	2	361	C	C2-N1-C1'	-5.83	112.39	118.80
36	1	1020	G	N1-C6-O6	5.83	123.40	119.90
36	1	1078	U	O5'-P-OP2	-5.83	100.45	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	883	C	OP1-P-OP2	-5.83	110.86	119.60
36	5	1190	A	C6-C5-N7	-5.83	128.22	132.30
36	5	1396	C	OP2-P-O3'	5.83	118.03	105.20
36	5	2205	U	N1-C2-O2	5.83	126.88	122.80
36	5	2223	A	C8-N9-C4	-5.83	103.47	105.80
37	7	121	U	N1-C2-O2	5.83	126.88	122.80
1	2	611	U	C2-N1-C1'	5.83	124.69	117.70
36	1	1045	C	OP2-P-O3'	5.83	118.02	105.20
36	1	1070	U	N1-C2-O2	5.83	126.88	122.80
36	1	1858	A	C6-N1-C2	-5.83	115.10	118.60
62	N6	83	ASP	CB-CG-OD2	5.83	123.55	118.30
1	6	175	G	N3-C4-N9	5.83	129.50	126.00
1	6	1070	C	C2-N1-C1'	-5.83	112.39	118.80
1	6	1378	U	C5-C6-N1	-5.83	119.79	122.70
1	6	1583	A	C6-C5-N7	5.83	136.38	132.30
1	6	1600	A	N9-C1'-C2'	5.83	121.58	114.00
36	5	62	A	C5-C6-N1	-5.83	114.79	117.70
36	5	671	U	OP2-P-O3'	5.83	118.02	105.20
36	5	1480	G	C4-C5-N7	5.83	113.13	110.80
36	5	2426	U	N3-C2-O2	-5.83	118.12	122.20
36	5	2813	A	N1-C6-N6	5.83	122.10	118.60
1	2	49	C	C5-C6-N1	5.83	123.91	121.00
36	1	1449	A	OP1-P-O3'	-5.83	92.38	105.20
36	1	2820	A	C5-N7-C8	-5.83	100.99	103.90
36	1	3086	A	C4-C5-N7	-5.83	107.79	110.70
36	5	430	U	N3-C4-C5	5.83	118.10	114.60
36	5	3049	A	C5-N7-C8	-5.83	100.99	103.90
1	2	720	G	OP1-P-O3'	5.83	118.02	105.20
36	1	39	A	O5'-P-OP1	5.83	117.69	110.70
36	1	86	G	C6-N1-C2	-5.83	121.60	125.10
36	1	306	A	C5-C6-N1	5.83	120.61	117.70
36	1	882	A	N1-C6-N6	-5.83	115.10	118.60
36	1	1594	A	N1-C2-N3	5.83	132.21	129.30
36	1	1849	C	N1-C2-N3	5.83	123.28	119.20
36	1	1939	G	C8-N9-C1'	-5.83	119.43	127.00
1	6	21	U	N3-C4-C5	-5.83	111.11	114.60
1	6	474	A	N1-C6-N6	5.83	122.09	118.60
1	6	744	U	C6-N1-C2	-5.83	117.50	121.00
1	6	827	C	C6-N1-C1'	5.83	127.79	120.80
1	6	1165	G	N1-C2-N3	5.83	127.40	123.90
1	6	1493	A	N3-C4-N9	-5.83	122.74	127.40
1	6	1535	U	N1-C2-O2	5.83	126.88	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1629	G	C6-N1-C2	-5.83	121.60	125.10
36	5	620	U	N1-C2-O2	5.83	126.88	122.80
36	5	782	U	N3-C4-C5	5.83	118.10	114.60
36	5	813	G	C5-C6-N1	-5.83	108.59	111.50
36	5	1310	G	C4-N9-C1'	5.83	134.07	126.50
36	5	2340	U	C6-N1-C2	-5.83	117.50	121.00
36	5	3047	U	N3-C4-C5	-5.83	111.11	114.60
36	5	3140	G	N9-C1'-C2'	-5.83	105.59	112.00
38	8	7	U	N3-C2-O2	5.83	126.28	122.20
1	2	1786	G	C4-C5-N7	-5.82	108.47	110.80
36	1	287	G	N1-C6-O6	5.82	123.39	119.90
36	1	415	G	N1-C2-N3	5.82	127.39	123.90
36	1	2906	C	N1-C2-O2	-5.82	115.41	118.90
1	6	1286	U	N1-C2-N3	5.82	118.39	114.90
36	5	1164	G	N3-C4-N9	-5.82	122.51	126.00
36	5	1379	G	C6-N1-C2	-5.82	121.61	125.10
36	5	1404	G	C5-N7-C8	-5.82	101.39	104.30
36	5	1443	G	C2-N3-C4	-5.82	108.99	111.90
36	5	1514	G	N1-C2-N2	-5.82	110.96	116.20
36	5	2204	C	N3-C4-C5	-5.82	119.57	121.90
36	5	2717	U	N1-C2-N3	5.82	118.39	114.90
36	5	3034	C	N3-C4-N4	5.82	122.08	118.00
36	5	3310	A	N1-C2-N3	5.82	132.21	129.30
37	7	93	C	N3-C4-N4	5.82	122.08	118.00
38	8	136	G	N9-C4-C5	-5.82	103.07	105.40
36	1	2326	A	O5'-P-OP1	-5.82	100.46	105.70
1	6	880	C	C4-C5-C6	5.82	120.31	117.40
36	5	1224	C	N3-C2-O2	-5.82	117.82	121.90
1	2	1044	U	C5-C4-O4	5.82	129.39	125.90
36	1	377	A	N9-C4-C5	-5.82	103.47	105.80
36	1	651	G	N1-C2-N2	-5.82	110.96	116.20
36	1	940	G	N1-C6-O6	-5.82	116.41	119.90
36	1	2418	G	N3-C2-N2	5.82	123.97	119.90
36	1	2625	C	N1-C2-O2	5.82	122.39	118.90
36	1	2704	A	C4-C5-N7	-5.82	107.79	110.70
1	6	308	C	N3-C4-N4	-5.82	113.93	118.00
1	6	1542	G	C8-N9-C1'	-5.82	119.43	127.00
36	5	51	A	C5-C6-N6	-5.82	119.04	123.70
36	5	2351	U	C6-N1-C2	-5.82	117.51	121.00
36	1	283	G	C5-C6-O6	-5.82	125.11	128.60
36	1	2406	C	C6-N1-C2	-5.82	117.97	120.30
1	6	948	G	C5-C6-O6	-5.82	125.11	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1171	A	OP1-P-OP2	-5.82	110.87	119.60
1	6	1537	C	N3-C2-O2	5.82	125.97	121.90
36	5	437	G	C6-C5-N7	-5.82	126.91	130.40
36	5	722	G	C8-N9-C1'	5.82	134.56	127.00
36	5	1050	U	N1-C2-N3	5.82	118.39	114.90
36	5	1584	U	C5-C4-O4	-5.82	122.41	125.90
36	5	1829	G	N1-C6-O6	-5.82	116.41	119.90
73	o7	65	ARG	NE-CZ-NH2	-5.82	117.39	120.30
36	1	302	U	C5-C6-N1	-5.82	119.79	122.70
36	1	860	G	N3-C4-N9	5.82	129.49	126.00
36	1	1458	U	N3-C4-O4	-5.82	115.33	119.40
36	1	1610	G	C6-C5-N7	-5.82	126.91	130.40
36	1	1840	U	C5-C6-N1	-5.82	119.79	122.70
36	1	1905	G	O4'-C1'-N9	5.82	112.85	108.20
36	1	2415	C	C2-N3-C4	-5.82	116.99	119.90
36	1	3192	U	C2-N1-C1'	5.82	124.68	117.70
38	4	39	G	C6-N1-C2	-5.82	121.61	125.10
38	4	41	A	C2-N3-C4	5.82	113.51	110.60
36	5	237	G	N3-C4-C5	-5.82	125.69	128.60
36	5	528	U	C5-C6-N1	5.82	125.61	122.70
36	5	2377	G	C4-N9-C1'	-5.82	118.94	126.50
36	5	2934	A	N3-C4-C5	5.82	130.87	126.80
36	5	2966	G	C2-N3-C4	-5.82	108.99	111.90
36	5	3377	G	C5-N7-C8	-5.82	101.39	104.30
37	7	1	G	C6-C5-N7	-5.82	126.91	130.40
37	7	15	C	C6-N1-C1'	-5.82	113.82	120.80
38	8	99	C	N3-C4-C5	5.82	124.23	121.90
1	2	1463	C	N3-C4-C5	5.82	124.23	121.90
36	1	680	G	C2-N3-C4	-5.82	108.99	111.90
36	1	1377	G	C8-N9-C1'	-5.82	119.44	127.00
36	1	1424	C	N1-C2-O2	-5.82	115.41	118.90
36	1	1733	G	N1-C6-O6	5.82	123.39	119.90
36	1	2134	G	N1-C6-O6	5.82	123.39	119.90
36	1	3071	U	C2-N1-C1'	-5.82	110.72	117.70
1	6	106	U	C6-N1-C2	-5.82	117.51	121.00
1	6	585	A	N9-C4-C5	-5.82	103.47	105.80
36	5	1909	A	C5-C6-N1	5.82	120.61	117.70
36	5	2600	C	C6-N1-C2	-5.82	117.97	120.30
36	1	1103	A	C6-C5-N7	5.81	136.37	132.30
36	1	1292	C	N3-C4-C5	5.81	124.22	121.90
1	6	13	C	N1-C2-O2	5.81	122.39	118.90
1	6	23	G	N3-C2-N2	-5.81	115.83	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	170	U	C5-C6-N1	5.81	125.61	122.70
1	6	1283	U	N3-C4-O4	-5.81	115.33	119.40
1	6	1366	U	N3-C4-O4	5.81	123.47	119.40
1	6	1637	C	N1-C2-N3	-5.81	115.13	119.20
36	5	433	A	N7-C8-N9	5.81	116.71	113.80
36	5	1056	U	O4'-C1'-N1	5.81	112.85	108.20
36	5	3330	A	C5-N7-C8	5.81	106.81	103.90
36	1	35	A	O5'-P-OP2	-5.81	100.47	105.70
36	1	67	A	C5-N7-C8	5.81	106.81	103.90
36	1	399	A	O5'-P-OP1	5.81	117.67	110.70
36	1	878	G	N1-C6-O6	-5.81	116.41	119.90
36	1	1792	C	N1-C2-N3	5.81	123.27	119.20
1	6	273	G	C6-C5-N7	-5.81	126.91	130.40
1	6	621	A	C4-C5-N7	-5.81	107.79	110.70
1	6	897	C	C6-N1-C2	5.81	122.62	120.30
1	6	1592	A	N1-C6-N6	-5.81	115.11	118.60
36	5	1272	C	C5-C6-N1	5.81	123.91	121.00
36	5	1585	C	O5'-P-OP1	-5.81	100.47	105.70
36	5	2174	G	N1-C6-O6	5.81	123.39	119.90
36	5	2270	A	C4-C5-N7	5.81	113.61	110.70
36	5	2309	A	C2-N3-C4	-5.81	107.69	110.60
37	7	107	C	C5-C6-N1	-5.81	118.09	121.00
36	1	1323	G	C4-C5-N7	5.81	113.12	110.80
1	6	177	U	C5-C4-O4	-5.81	122.41	125.90
1	6	626	U	N1-C2-N3	5.81	118.39	114.90
36	5	899	U	N3-C2-O2	-5.81	118.13	122.20
36	5	2626	A	O4'-C1'-N9	-5.81	103.55	108.20
1	2	1000	C	C6-N1-C1'	-5.81	113.83	120.80
1	2	1490	C	N1-C2-O2	5.81	122.39	118.90
36	1	274	G	OP1-P-O3'	5.81	117.98	105.20
36	1	650	C	O5'-P-OP2	5.81	117.67	110.70
36	1	996	A	OP2-P-O3'	5.81	117.98	105.20
36	1	1838	G	N1-C6-O6	5.81	123.39	119.90
36	1	2423	U	C2-N3-C4	5.81	130.49	127.00
36	1	2940	A	C4-C5-N7	-5.81	107.80	110.70
38	4	28	C	N3-C2-O2	5.81	125.97	121.90
1	6	992	A	N3-C4-C5	5.81	130.87	126.80
36	5	512	U	N1-C2-N3	5.81	118.39	114.90
36	5	1205	A	N1-C2-N3	5.81	132.21	129.30
41	14	340	GLY	N-CA-C	-5.81	98.58	113.10
1	2	331	A	N1-C2-N3	5.81	132.20	129.30
36	1	189	G	C8-N9-C4	-5.81	104.08	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1104	G	N3-C2-N2	-5.81	115.83	119.90
36	1	1368	U	C4-C5-C6	5.81	123.19	119.70
36	1	1829	G	OP2-P-O3'	5.81	117.97	105.20
36	1	1898	G	N3-C4-C5	-5.81	125.70	128.60
38	4	56	G	N1-C2-N3	5.81	127.39	123.90
38	4	86	U	C6-N1-C1'	-5.81	113.07	121.20
1	6	586	G	N9-C4-C5	5.81	107.72	105.40
1	6	595	G	C6-C5-N7	-5.81	126.92	130.40
1	6	1598	U	C2-N1-C1'	5.81	124.67	117.70
36	5	85	A	C5-C6-N1	-5.81	114.80	117.70
36	5	500	C	C6-N1-C2	-5.81	117.98	120.30
36	5	502	U	OP1-P-OP2	-5.81	110.89	119.60
36	5	517	G	N1-C2-N3	5.81	127.38	123.90
36	5	688	G	C5-C6-O6	-5.81	125.12	128.60
36	5	928	C	C4-C5-C6	5.81	120.30	117.40
36	5	1612	A	C5-C6-N1	-5.81	114.80	117.70
36	5	2639	G	C5-C6-N1	-5.81	108.60	111.50
36	5	2835	U	N1-C2-O2	-5.81	118.73	122.80
36	5	3287	U	N3-C2-O2	-5.81	118.14	122.20
59	n3	34	LEU	CA-CB-CG	-5.81	101.94	115.30
36	1	938	C	C5-C6-N1	5.81	123.90	121.00
1	6	426	G	N1-C2-N3	5.81	127.38	123.90
1	6	558	U	P-O3'-C3'	5.81	126.67	119.70
36	5	228	U	C2-N1-C1'	5.81	124.67	117.70
36	5	1051	U	OP1-P-OP2	5.81	128.31	119.60
36	5	1601	U	N1-C2-O2	5.81	126.86	122.80
1	2	362	G	N3-C2-N2	-5.80	115.84	119.90
1	2	1490	C	C6-N1-C2	-5.80	117.98	120.30
36	1	1182	A	C4-C5-N7	5.80	113.60	110.70
36	1	2196	C	C2-N1-C1'	-5.80	112.41	118.80
36	1	2835	U	OP2-P-O3'	5.80	117.97	105.20
36	1	3245	A	O5'-P-OP1	5.80	117.67	110.70
37	3	99	G	N3-C2-N2	-5.80	115.84	119.90
38	4	113	U	C5-C6-N1	-5.80	119.80	122.70
1	6	1219	A	N1-C6-N6	5.80	122.08	118.60
1	6	1402	G	N3-C4-C5	-5.80	125.70	128.60
1	6	1472	C	N3-C4-N4	-5.80	113.94	118.00
36	5	185	C	C6-N1-C2	5.80	122.62	120.30
36	5	227	G	N7-C8-N9	-5.80	110.20	113.10
36	5	1481	A	C5-N7-C8	-5.80	101.00	103.90
36	5	2847	A	N9-C4-C5	-5.80	103.48	105.80
36	5	3097	C	N3-C4-C5	-5.80	119.58	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	29	U	N1-C2-O2	-5.80	118.74	122.80
1	6	1206	U	C6-N1-C2	-5.80	117.52	121.00
1	2	1201	G	N7-C8-N9	-5.80	110.20	113.10
36	1	620	U	P-O3'-C3'	5.80	126.66	119.70
36	1	634	C	OP2-P-O3'	5.80	117.97	105.20
36	1	2803	A	N9-C4-C5	5.80	108.12	105.80
36	1	2883	U	N3-C4-C5	-5.80	111.12	114.60
37	3	45	A	N1-C6-N6	-5.80	115.12	118.60
38	4	116	G	C5-C6-N1	5.80	114.40	111.50
1	6	11	A	N7-C8-N9	-5.80	110.90	113.80
1	6	758	U	C2-N1-C1'	-5.80	110.74	117.70
36	5	1185	C	C6-N1-C2	5.80	122.62	120.30
36	5	2312	A	C8-N9-C4	-5.80	103.48	105.80
36	5	2823	G	N3-C2-N2	-5.80	115.84	119.90
38	8	44	A	C4-C5-N7	5.80	113.60	110.70
42	15	131	LEU	CB-CG-CD2	-5.80	101.14	111.00
36	1	93	C	C6-N1-C1'	-5.80	113.84	120.80
36	1	148	G	C4-N9-C1'	5.80	134.04	126.50
36	1	1495	U	C4-C5-C6	5.80	123.18	119.70
36	1	2113	A	C6-C5-N7	5.80	136.36	132.30
36	1	2648	G	OP1-P-O3'	5.80	117.96	105.20
36	5	573	C	C6-N1-C2	5.80	122.62	120.30
36	5	775	A	O5'-P-OP1	-5.80	100.48	105.70
36	5	1383	G	N3-C2-N2	-5.80	115.84	119.90
36	5	1582	C	C6-N1-C2	-5.80	117.98	120.30
36	5	2186	U	C5-C4-O4	5.80	129.38	125.90
36	5	2247	G	N3-C4-N9	5.80	129.48	126.00
36	5	2761	G	N3-C4-C5	-5.80	125.70	128.60
37	7	36	C	N3-C2-O2	5.80	125.96	121.90
38	8	31	G	C8-N9-C4	5.80	108.72	106.40
1	2	39	A	O4'-C1'-N9	5.80	112.84	108.20
1	2	1196	A	O5'-P-OP2	5.80	117.66	110.70
36	5	614	C	C6-N1-C2	5.80	122.62	120.30
36	5	652	G	C5-C6-N1	5.80	114.40	111.50
36	1	209	A	O5'-P-OP2	-5.80	100.48	105.70
36	1	1458	U	N3-C4-C5	5.80	118.08	114.60
36	1	1499	C	N3-C4-C5	-5.80	119.58	121.90
36	1	2175	U	C6-N1-C1'	5.80	129.31	121.20
36	1	2652	U	C2-N1-C1'	-5.80	110.75	117.70
36	1	2943	G	O5'-P-OP1	5.80	117.66	110.70
36	1	3110	C	C6-N1-C2	-5.80	117.98	120.30
37	3	87	G	O4'-C1'-N9	-5.80	103.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	392	G	OP2-P-O3'	5.80	117.95	105.20
1	6	1000	C	N3-C4-N4	-5.80	113.94	118.00
36	5	280	U	N1-C2-O2	5.80	126.86	122.80
36	5	798	G	OP1-P-OP2	-5.80	110.91	119.60
36	5	934	G	N1-C6-O6	5.80	123.38	119.90
36	5	1118	C	N1-C2-O2	-5.80	115.42	118.90
36	5	1131	G	OP1-P-OP2	5.80	128.29	119.60
36	5	1173	U	C2-N3-C4	-5.80	123.52	127.00
36	1	897	U	C2-N1-C1'	5.79	124.65	117.70
36	1	1439	U	N1-C2-O2	5.79	126.86	122.80
36	1	1514	G	C4-C5-C6	5.79	122.28	118.80
36	1	2859	U	C4-C5-C6	5.79	123.18	119.70
36	1	3383	G	C8-N9-C1'	5.79	134.53	127.00
1	6	42	G	O5'-P-OP1	-5.79	100.48	105.70
1	6	407	A	N9-C4-C5	-5.79	103.48	105.80
1	6	1662	G	N7-C8-N9	-5.79	110.20	113.10
36	5	86	G	O5'-P-OP1	5.79	117.65	110.70
36	5	238	A	N1-C6-N6	5.79	122.08	118.60
36	5	928	C	OP2-P-O3'	-5.79	92.45	105.20
36	5	2273	G	C8-N9-C1'	5.79	134.53	127.00
36	1	283	G	C5-N7-C8	-5.79	101.40	104.30
36	1	567	G	N3-C4-C5	-5.79	125.70	128.60
36	1	1621	A	C5-N7-C8	5.79	106.80	103.90
36	1	2738	A	C5-C6-N6	-5.79	119.06	123.70
36	1	3109	G	N3-C4-N9	5.79	129.48	126.00
1	6	96	G	N1-C6-O6	5.79	123.38	119.90
1	6	1769	U	C4-C5-C6	5.79	123.18	119.70
9	s7	131	PHE	C-N-CD	5.79	140.57	128.40
36	5	1588	A	C2-N3-C4	-5.79	107.70	110.60
36	5	1764	U	O4'-C1'-N1	5.79	112.83	108.20
43	l6	46	ARG	NE-CZ-NH2	-5.79	117.40	120.30
53	m7	131	ARG	NE-CZ-NH2	-5.79	117.40	120.30
36	1	907	G	C5-N7-C8	5.79	107.20	104.30
36	1	1549	U	O5'-P-OP2	-5.79	100.49	105.70
36	1	1927	G	C4-C5-N7	5.79	113.12	110.80
36	1	2613	U	N1-C2-O2	-5.79	118.75	122.80
36	1	2649	A	C5-C6-N6	-5.79	119.07	123.70
1	6	264	G	N1-C6-O6	5.79	123.38	119.90
1	6	1002	G	C4-C5-C6	-5.79	115.33	118.80
1	6	1058	U	OP1-P-O3'	5.79	117.94	105.20
1	6	1186	U	O5'-P-OP2	-5.79	100.49	105.70
36	5	64	G	C5-N7-C8	-5.79	101.41	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	286	U	N3-C4-O4	5.79	123.45	119.40
36	5	741	U	N3-C4-C5	-5.79	111.12	114.60
36	5	1323	G	N3-C2-N2	-5.79	115.85	119.90
36	5	2399	A	O4'-C1'-N9	5.79	112.83	108.20
36	5	2404	A	N7-C8-N9	5.79	116.70	113.80
36	5	2610	G	N9-C4-C5	5.79	107.72	105.40
36	5	2662	G	C4-C5-N7	-5.79	108.48	110.80
36	5	2952	G	N3-C4-N9	5.79	129.47	126.00
1	2	1345	A	C5-C6-N1	-5.79	114.81	117.70
36	1	692	A	OP1-P-O3'	5.79	117.94	105.20
36	1	1319	G	C5-C6-N1	5.79	114.39	111.50
36	1	2614	G	C4-N9-C1'	5.79	134.03	126.50
36	1	2823	G	C5-C6-O6	5.79	132.07	128.60
38	4	73	U	N3-C4-C5	5.79	118.07	114.60
1	6	75	U	C6-N1-C1'	-5.79	113.09	121.20
1	6	996	U	C2-N3-C4	5.79	130.47	127.00
36	5	1046	A	C4-C5-N7	-5.79	107.81	110.70
36	5	2696	A	C8-N9-C4	-5.79	103.48	105.80
37	7	15	C	N3-C4-N4	5.79	122.05	118.00
46	19	168	ARG	NE-CZ-NH1	-5.79	117.41	120.30
47	m0	17	TYR	CA-CB-CG	5.79	124.40	113.40
1	2	1322	A	N1-C6-N6	-5.79	115.13	118.60
36	1	396	A	OP2-P-O3'	5.79	117.93	105.20
36	1	1101	G	N3-C4-N9	-5.79	122.53	126.00
36	1	2875	U	P-O3'-C3'	-5.79	112.75	119.70
36	1	2973	G	P-O3'-C3'	-5.79	112.75	119.70
36	1	3139	A	N7-C8-N9	5.79	116.69	113.80
1	6	104	A	C6-C5-N7	-5.79	128.25	132.30
1	6	1375	A	N3-C4-C5	5.79	130.85	126.80
1	6	1469	A	N1-C6-N6	-5.79	115.13	118.60
36	5	54	C	OP1-P-OP2	-5.79	110.92	119.60
36	5	984	G	N3-C2-N2	-5.79	115.85	119.90
36	5	1516	C	C5-C4-N4	-5.79	116.15	120.20
36	5	1850	A	N7-C8-N9	-5.79	110.91	113.80
36	5	2161	G	C2-N3-C4	5.79	114.79	111.90
36	5	2296	A	OP1-P-O3'	5.79	117.93	105.20
36	5	3014	U	C5-C6-N1	-5.79	119.81	122.70
1	2	1200	G	N3-C4-N9	5.79	129.47	126.00
36	1	535	G	N3-C4-C5	-5.79	125.71	128.60
36	5	601	U	C2-N1-C1'	5.79	124.64	117.70
36	5	684	G	N3-C4-C5	5.79	131.49	128.60
36	5	1192	C	N1-C1'-C2'	-5.79	105.63	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	317	C	N3-C4-C5	-5.79	119.59	121.90
1	2	586	G	N1-C6-O6	5.79	123.37	119.90
36	1	276	U	N3-C4-C5	-5.79	111.13	114.60
36	1	290	G	OP2-P-O3'	5.79	117.93	105.20
36	1	1116	G	N1-C2-N3	5.79	127.37	123.90
36	1	1379	G	C5-C6-N1	-5.79	108.61	111.50
36	1	1413	G	C5-C6-O6	-5.79	125.13	128.60
36	1	1851	G	N1-C2-N2	5.79	121.41	116.20
36	1	2127	U	N3-C2-O2	5.79	126.25	122.20
36	1	2166	A	C5-C6-N1	5.79	120.59	117.70
36	1	2751	G	N3-C4-N9	-5.79	122.53	126.00
1	6	23	G	N9-C4-C5	5.79	107.71	105.40
1	6	474	A	C4-N9-C1'	-5.79	115.89	126.30
1	6	600	U	OP2-P-O3'	5.79	117.93	105.20
1	6	1449	U	C2-N3-C4	5.79	130.47	127.00
1	6	1676	U	C6-N1-C2	5.79	124.47	121.00
1	6	1768	G	C8-N9-C1'	5.79	134.52	127.00
36	5	1293	U	N3-C2-O2	5.79	126.25	122.20
36	5	1301	A	N1-C2-N3	5.79	132.19	129.30
36	5	2399	A	OP2-P-O3'	5.79	117.93	105.20
1	2	1788	G	N1-C6-O6	-5.78	116.43	119.90
36	1	383	G	N1-C2-N2	-5.78	110.99	116.20
36	1	676	G	N7-C8-N9	5.78	115.99	113.10
36	1	933	A	C2-N3-C4	5.78	113.49	110.60
36	1	1520	G	C5-C6-O6	-5.78	125.13	128.60
36	1	1769	G	N3-C2-N2	-5.78	115.85	119.90
36	1	2371	G	OP2-P-O3'	5.78	117.92	105.20
38	4	73	U	N3-C2-O2	-5.78	118.15	122.20
1	6	375	U	C2-N1-C1'	-5.78	110.76	117.70
1	6	606	A	C5-C6-N6	-5.78	119.07	123.70
1	6	1033	C	N3-C2-O2	-5.78	117.85	121.90
36	5	1455	U	OP2-P-O3'	5.78	117.92	105.20
36	5	2834	G	C8-N9-C4	5.78	108.71	106.40
36	5	3212	C	C5-C6-N1	-5.78	118.11	121.00
1	2	608	U	N3-C2-O2	-5.78	118.15	122.20
36	1	211	A	N3-C4-N9	-5.78	122.77	127.40
36	1	1156	C	C4-C5-C6	5.78	120.29	117.40
36	1	1929	G	C5-C6-N1	5.78	114.39	111.50
36	1	3276	G	C8-N9-C4	-5.78	104.09	106.40
38	4	55	U	O5'-P-OP1	-5.78	100.50	105.70
1	6	377	G	N9-C4-C5	5.78	107.71	105.40
36	5	928	C	O4'-C1'-N1	5.78	112.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	932	U	OP1-P-OP2	-5.78	110.93	119.60
36	5	1288	U	N3-C2-O2	-5.78	118.15	122.20
36	5	1831	U	N3-C4-O4	5.78	123.45	119.40
1	2	1284	C	C6-N1-C1'	5.78	127.74	120.80
1	2	1654	G	O5'-P-OP2	-5.78	100.50	105.70
36	1	649	A	C5-N7-C8	5.78	106.79	103.90
36	1	1650	G	C8-N9-C4	5.78	108.71	106.40
36	1	2760	C	N3-C2-O2	5.78	125.95	121.90
36	1	2987	A	N1-C2-N3	-5.78	126.41	129.30
1	6	208	U	C5-C6-N1	5.78	125.59	122.70
36	5	1003	A	O5'-P-OP1	-5.78	100.50	105.70
36	5	1041	U	O5'-P-OP1	5.78	117.64	110.70
36	5	1478	C	C5-C6-N1	5.78	123.89	121.00
36	5	2873	U	C5-C4-O4	5.78	129.37	125.90
36	5	3016	A	N3-C4-N9	-5.78	122.78	127.40
36	5	3035	A	C2-N3-C4	-5.78	107.71	110.60
40	l3	21	ARG	NE-CZ-NH2	-5.78	117.41	120.30
36	1	91	G	N3-C4-N9	5.78	129.47	126.00
36	1	810	A	C8-N9-C4	-5.78	103.49	105.80
62	N6	27	ARG	NE-CZ-NH1	-5.78	117.41	120.30
1	6	1085	G	C8-N9-C1'	-5.78	119.49	127.00
36	5	1420	C	C5-C4-N4	5.78	124.25	120.20
36	5	2612	U	C2-N3-C4	-5.78	123.53	127.00
36	5	2621	G	C4-C5-C6	5.78	122.27	118.80
1	2	562	G	N1-C2-N3	5.78	127.37	123.90
1	2	1412	G	N3-C4-C5	5.78	131.49	128.60
1	2	1471	A	O5'-P-OP2	5.78	117.63	110.70
36	1	59	G	C4-C5-N7	5.78	113.11	110.80
36	1	812	G	C4-C5-C6	5.78	122.27	118.80
36	1	1174	G	N3-C4-N9	5.78	129.47	126.00
36	1	1338	C	O5'-P-OP2	-5.78	100.50	105.70
36	1	1762	C	O4'-C1'-N1	5.78	112.82	108.20
36	1	2182	A	C4-C5-N7	5.78	113.59	110.70
36	1	2191	U	N3-C4-C5	-5.78	111.13	114.60
36	1	3038	U	N3-C4-C5	-5.78	111.13	114.60
38	4	34	U	C2-N1-C1'	-5.78	110.77	117.70
78	Q2	88	CYS	CA-CB-SG	-5.78	103.60	114.00
36	5	50	U	OP1-P-O3'	5.78	117.91	105.20
36	5	820	A	O5'-P-OP2	-5.78	100.50	105.70
36	5	1369	A	N1-C6-N6	5.78	122.07	118.60
36	5	1482	A	N9-C4-C5	-5.78	103.49	105.80
36	5	1595	U	C5-C4-O4	-5.78	122.43	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	176	C	C5-C6-N1	5.78	123.89	121.00
1	2	553	G	N1-C6-O6	5.78	123.37	119.90
1	2	610	G	N3-C4-C5	-5.78	125.71	128.60
36	1	1379	G	C4-N9-C1'	5.78	134.01	126.50
36	1	1690	C	N1-C2-O2	5.78	122.37	118.90
36	1	2655	U	C5-C6-N1	5.78	125.59	122.70
36	1	2916	U	N3-C4-C5	5.78	118.07	114.60
52	M6	101	ARG	NE-CZ-NH2	-5.78	117.41	120.30
1	6	1301	U	N3-C4-O4	5.78	123.44	119.40
1	6	1581	C	N3-C2-O2	-5.78	117.86	121.90
1	6	1609	U	N1-C2-O2	-5.78	118.76	122.80
1	6	1698	G	C5-C6-O6	5.78	132.06	128.60
36	5	96	G	N1-C6-O6	5.78	123.36	119.90
36	5	803	C	N3-C4-N4	5.78	122.04	118.00
36	5	2858	U	N3-C4-O4	5.78	123.44	119.40
36	5	2947	G	OP2-P-O3'	-5.78	92.49	105.20
36	5	3043	C	OP2-P-O3'	5.78	117.91	105.20
36	1	335	G	C8-N9-C1'	5.77	134.51	127.00
36	1	2339	C	C5-C6-N1	5.77	123.89	121.00
36	1	2354	C	N1-C2-O2	-5.77	115.44	118.90
36	1	2685	C	N3-C4-C5	-5.77	119.59	121.90
36	1	3330	A	N9-C4-C5	5.77	108.11	105.80
1	6	457	G	C4-C5-N7	5.77	113.11	110.80
36	5	591	G	C6-C5-N7	-5.77	126.94	130.40
36	5	629	U	N3-C4-C5	-5.77	111.14	114.60
36	5	966	U	C5-C4-O4	-5.77	122.44	125.90
36	5	2852	C	C5-C6-N1	-5.77	118.11	121.00
1	2	322	G	O4'-C1'-N9	-5.77	103.58	108.20
36	1	1442	U	OP1-P-OP2	-5.77	110.94	119.60
36	1	2391	G	N7-C8-N9	-5.77	110.21	113.10
36	1	2948	C	N3-C4-C5	-5.77	119.59	121.90
36	1	3150	A	N3-C4-C5	5.77	130.84	126.80
1	6	458	G	C4-C5-N7	-5.77	108.49	110.80
1	6	1093	A	C8-N9-C4	-5.77	103.49	105.80
36	5	1116	G	N1-C6-O6	5.77	123.36	119.90
36	5	1490	A	C8-N9-C4	-5.77	103.49	105.80
36	5	2286	U	N3-C4-O4	-5.77	115.36	119.40
36	5	3030	G	N1-C2-N3	-5.77	120.44	123.90
36	5	3080	G	C5-N7-C8	-5.77	101.41	104.30
36	1	636	C	N1-C2-N3	5.77	123.24	119.20
36	1	1207	G	O5'-P-OP1	-5.77	100.51	105.70
36	1	2617	U	C2-N3-C4	-5.77	123.54	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3152	U	C2-N1-C1'	-5.77	110.77	117.70
1	6	1604	U	C5-C6-N1	5.77	125.59	122.70
36	5	576	C	OP2-P-O3'	5.77	117.90	105.20
1	2	597	G	C4-C5-N7	5.77	113.11	110.80
1	2	1663	G	O5'-P-OP2	-5.77	100.51	105.70
36	1	894	G	C8-N9-C4	-5.77	104.09	106.40
36	1	1874	A	C8-N9-C4	-5.77	103.49	105.80
36	1	2182	A	C5-N7-C8	-5.77	101.02	103.90
36	1	2386	A	N1-C2-N3	5.77	132.19	129.30
36	1	2723	U	C5-C6-N1	-5.77	119.82	122.70
36	1	3206	C	N3-C2-O2	5.77	125.94	121.90
36	1	3363	U	N1-C2-O2	5.77	126.84	122.80
1	6	464	A	O5'-P-OP1	-5.77	100.51	105.70
36	5	1477	A	C5-C6-N1	5.77	120.58	117.70
36	5	3016	A	C5-N7-C8	-5.77	101.02	103.90
36	5	3051	U	C5-C6-N1	-5.77	119.81	122.70
36	5	3380	U	C6-N1-C1'	5.77	129.28	121.20
1	2	964	U	N1-C2-O2	5.77	126.84	122.80
1	2	1128	C	C5-C6-N1	-5.77	118.12	121.00
36	1	76	G	C5-C6-N1	-5.77	108.62	111.50
36	1	512	U	N1-C2-O2	-5.77	118.76	122.80
36	1	637	C	C2-N1-C1'	5.77	125.14	118.80
36	1	1192	C	N1-C2-N3	-5.77	115.16	119.20
36	1	1810	A	C2-N3-C4	-5.77	107.72	110.60
36	1	2131	A	N1-C6-N6	-5.77	115.14	118.60
52	M6	84	LEU	CB-CG-CD2	-5.77	101.20	111.00
1	6	25	C	N3-C4-C5	5.77	124.21	121.90
1	6	247	A	C6-C5-N7	-5.77	128.26	132.30
1	6	811	A	C4-N9-C1'	5.77	136.68	126.30
1	6	1541	G	O5'-P-OP2	5.77	117.62	110.70
36	5	423	A	OP1-P-OP2	-5.77	110.95	119.60
36	5	700	C	N1-C2-O2	5.77	122.36	118.90
36	5	1307	G	C4-C5-C6	5.77	122.26	118.80
36	5	2190	U	C6-N1-C2	-5.77	117.54	121.00
36	5	2431	C	N1-C2-O2	5.77	122.36	118.90
36	5	2852	C	C6-N1-C1'	-5.77	113.88	120.80
36	5	3350	C	N3-C4-C5	-5.77	119.59	121.90
37	7	56	A	C4-C5-N7	5.77	113.58	110.70
62	n6	87	LYS	CD-CE-NZ	5.77	124.97	111.70
36	1	193	C	N1-C2-O2	-5.77	115.44	118.90
36	1	939	U	N3-C2-O2	5.77	126.24	122.20
36	1	1629	U	O5'-P-OP2	-5.77	100.51	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1824	U	N3-C2-O2	-5.77	118.16	122.20
36	1	2794	G	C5-C6-N1	5.77	114.38	111.50
1	6	1326	A	N1-C6-N6	5.77	122.06	118.60
36	5	682	U	C6-N1-C1'	5.77	129.27	121.20
36	5	1886	A	O5'-P-OP2	-5.77	100.51	105.70
36	5	2782	U	N1-C2-O2	-5.77	118.76	122.80
1	2	1389	C	N3-C2-O2	-5.76	117.86	121.90
36	1	803	C	N1-C2-O2	5.76	122.36	118.90
36	1	1142	G	OP1-P-OP2	5.76	128.25	119.60
36	1	1331	U	C2-N3-C4	-5.76	123.54	127.00
36	1	1903	U	OP1-P-O3'	5.76	117.88	105.20
36	1	2748	A	N3-C4-C5	5.76	130.84	126.80
36	1	2816	G	C6-C5-N7	-5.76	126.94	130.40
36	1	3015	G	C8-N9-C4	5.76	108.71	106.40
36	1	3167	A	N1-C6-N6	5.76	122.06	118.60
1	6	354	C	C5-C6-N1	5.76	123.88	121.00
1	6	1571	C	N1-C2-O2	-5.76	115.44	118.90
1	6	1584	G	N9-C4-C5	-5.76	103.09	105.40
36	5	232	G	C8-N9-C1'	5.76	134.49	127.00
36	5	864	G	N3-C4-C5	-5.76	125.72	128.60
36	5	1578	C	C6-N1-C1'	-5.76	113.88	120.80
36	5	3022	G	OP1-P-O3'	-5.76	92.52	105.20
36	5	3260	G	N3-C4-C5	-5.76	125.72	128.60
36	1	1419	A	C4-C5-C6	5.76	119.88	117.00
36	1	2659	G	N9-C4-C5	-5.76	103.09	105.40
36	1	2917	G	C4-C5-N7	-5.76	108.50	110.80
36	1	2988	C	N1-C2-O2	5.76	122.36	118.90
1	6	932	U	N3-C2-O2	-5.76	118.17	122.20
36	5	2407	C	N3-C4-N4	5.76	122.03	118.00
36	5	2838	A	N1-C2-N3	5.76	132.18	129.30
36	5	2926	A	C6-C5-N7	-5.76	128.27	132.30
36	5	2986	U	C6-N1-C2	-5.76	117.54	121.00
36	5	3014	U	O5'-P-OP1	5.76	117.61	110.70
36	1	325	A	C6-N1-C2	-5.76	115.14	118.60
36	1	423	A	C4-C5-C6	5.76	119.88	117.00
36	1	1103	A	C5-N7-C8	5.76	106.78	103.90
36	1	1401	A	C5-C6-N6	-5.76	119.09	123.70
36	1	1507	G	N1-C2-N2	-5.76	111.01	116.20
36	1	1906	G	C4-C5-N7	5.76	113.11	110.80
36	1	3065	G	C8-N9-C4	-5.76	104.09	106.40
36	1	3230	G	C8-N9-C1'	5.76	134.49	127.00
1	6	384	G	N7-C8-N9	5.76	115.98	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	432	G	N3-C2-N2	5.76	123.93	119.90
1	6	1122	G	C5-C6-O6	-5.76	125.14	128.60
1	6	1124	A	N3-C4-C5	5.76	130.83	126.80
36	5	18	G	C8-N9-C4	-5.76	104.09	106.40
36	5	64	G	C4-C5-N7	5.76	113.10	110.80
36	5	210	U	N3-C4-C5	5.76	118.06	114.60
36	5	344	A	C5-N7-C8	-5.76	101.02	103.90
36	5	1902	G	O4'-C1'-N9	-5.76	103.59	108.20
36	5	3174	A	C4-C5-N7	5.76	113.58	110.70
36	5	3325	G	N1-C6-O6	-5.76	116.44	119.90
1	2	116	U	N1-C2-N3	5.76	118.36	114.90
36	1	867	G	C6-C5-N7	-5.76	126.94	130.40
36	1	929	A	C5-N7-C8	-5.76	101.02	103.90
36	1	1891	A	C2-N3-C4	-5.76	107.72	110.60
36	1	2730	G	C2-N3-C4	-5.76	109.02	111.90
36	1	3008	A	O5'-P-OP1	5.76	117.61	110.70
1	6	289	U	N1-C2-N3	5.76	118.36	114.90
1	6	1104	U	O5'-P-OP2	-5.76	100.52	105.70
1	6	1408	G	N1-C2-N3	5.76	127.36	123.90
1	6	1655	A	C6-C5-N7	-5.76	128.27	132.30
36	5	397	A	C4-C5-N7	-5.76	107.82	110.70
36	5	1475	A	C6-N1-C2	-5.76	115.14	118.60
36	5	1666	G	C8-N9-C4	5.76	108.70	106.40
36	5	1906	G	N3-C4-N9	5.76	129.46	126.00
38	8	90	U	N1-C2-O2	5.76	126.83	122.80
36	1	710	A	C5-C6-N6	-5.76	119.09	123.70
36	1	3293	U	N3-C2-O2	5.76	126.23	122.20
1	6	890	C	N3-C2-O2	-5.76	117.87	121.90
36	5	1853	U	N1-C2-O2	-5.76	118.77	122.80
36	5	2690	G	N1-C2-N2	5.76	121.38	116.20
36	5	3279	A	N9-C1'-C2'	-5.76	105.67	112.00
36	5	3289	G	C8-N9-C4	-5.76	104.10	106.40
1	2	1200	G	N3-C2-N2	-5.76	115.87	119.90
1	2	1614	A	N1-C6-N6	5.76	122.05	118.60
36	1	792	G	O5'-P-OP1	-5.76	100.52	105.70
36	1	1441	G	C5-C6-N1	5.76	114.38	111.50
36	1	2308	C	N1-C2-O2	-5.76	115.45	118.90
36	1	3191	G	C5-C6-N1	-5.76	108.62	111.50
1	6	415	C	C6-N1-C1'	5.76	127.71	120.80
36	5	866	A	N9-C4-C5	-5.76	103.50	105.80
36	5	1293	U	C2-N1-C1'	-5.76	110.79	117.70
36	5	1615	C	N1-C2-N3	5.76	123.23	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2678	A	N1-C2-N3	5.76	132.18	129.30
36	5	2979	U	N3-C4-O4	-5.76	115.37	119.40
37	7	106	U	C2-N3-C4	-5.76	123.55	127.00
59	n3	88	ARG	NE-CZ-NH1	5.76	123.18	120.30
36	1	1548	C	C5-C6-N1	5.75	123.88	121.00
36	1	2321	A	N3-C4-N9	-5.75	122.80	127.40
36	1	3013	U	O5'-P-OP1	5.75	117.61	110.70
36	1	744	A	C8-N9-C4	5.75	108.10	105.80
36	1	1661	G	N3-C4-N9	5.75	129.45	126.00
36	1	2119	A	C4-C5-N7	5.75	113.58	110.70
36	1	2173	U	N3-C4-C5	-5.75	111.15	114.60
36	1	2700	G	N3-C4-N9	5.75	129.45	126.00
36	1	2745	G	N3-C4-N9	5.75	129.45	126.00
1	6	558	U	C5-C6-N1	5.75	125.58	122.70
1	6	1139	A	N1-C2-N3	-5.75	126.42	129.30
1	6	1466	G	N1-C6-O6	5.75	123.35	119.90
36	5	576	C	C2-N1-C1'	5.75	125.13	118.80
36	5	694	C	N3-C4-N4	-5.75	113.97	118.00
36	5	821	U	N1-C2-N3	5.75	118.35	114.90
36	5	1603	A	C4-N9-C1'	5.75	136.66	126.30
36	5	3023	U	N3-C2-O2	5.75	126.23	122.20
36	5	3086	A	C5-C6-N1	-5.75	114.82	117.70
1	2	389	G	N7-C8-N9	5.75	115.97	113.10
36	1	423	A	N7-C8-N9	5.75	116.68	113.80
36	1	870	G	N7-C8-N9	-5.75	110.22	113.10
36	1	1131	G	C2-N3-C4	5.75	114.78	111.90
36	1	1554	U	C2-N1-C1'	5.75	124.60	117.70
36	1	2550	U	C5-C4-O4	5.75	129.35	125.90
36	1	2706	G	N3-C4-N9	5.75	129.45	126.00
36	1	3010	U	N1-C2-O2	-5.75	118.77	122.80
36	1	3118	C	C2-N1-C1'	5.75	125.13	118.80
37	3	117	A	C8-N9-C4	5.75	108.10	105.80
1	6	303	U	OP2-P-O3'	5.75	117.85	105.20
1	6	566	C	C6-N1-C2	5.75	122.60	120.30
1	6	1354	G	C5-N7-C8	-5.75	101.42	104.30
1	6	1564	U	C5-C6-N1	-5.75	119.82	122.70
1	6	1654	G	O5'-P-OP1	5.75	117.60	110.70
1	6	1760	G	C5-C6-N1	5.75	114.38	111.50
36	5	95	A	C5-N7-C8	-5.75	101.02	103.90
36	5	552	G	OP1-P-O3'	5.75	117.85	105.20
36	5	1370	G	N3-C4-N9	-5.75	122.55	126.00
36	5	1428	A	C2-N3-C4	-5.75	107.72	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1637	A	C6-N1-C2	-5.75	115.15	118.60
36	5	3166	C	N3-C4-C5	-5.75	119.60	121.90
37	7	54	U	C6-N1-C1'	5.75	129.25	121.20
37	3	81	U	N3-C4-C5	5.75	118.05	114.60
36	5	581	U	C2-N3-C4	5.75	130.45	127.00
36	5	2801	A	N7-C8-N9	5.75	116.67	113.80
36	1	229	G	N1-C6-O6	-5.75	116.45	119.90
36	1	317	A	C6-N1-C2	-5.75	115.15	118.60
36	1	628	A	N9-C4-C5	5.75	108.10	105.80
36	1	1425	U	O5'-P-OP1	-5.75	100.53	105.70
36	1	2144	A	OP1-P-O3'	5.75	117.85	105.20
36	1	2376	G	N9-C4-C5	5.75	107.70	105.40
36	1	2886	U	N3-C4-O4	5.75	123.42	119.40
36	1	3246	G	O5'-P-OP2	-5.75	100.53	105.70
36	1	3266	G	N3-C4-C5	-5.75	125.73	128.60
1	6	1743	U	OP1-P-OP2	5.75	128.22	119.60
36	5	68	C	C4-C5-C6	-5.75	114.53	117.40
36	5	154	U	O4'-C1'-N1	5.75	112.80	108.20
36	5	2834	G	N7-C8-N9	-5.75	110.23	113.10
36	5	3332	U	C5-C4-O4	5.75	129.35	125.90
1	2	401	A	N9-C4-C5	-5.75	103.50	105.80
36	1	39	A	C6-N1-C2	-5.75	115.15	118.60
36	1	936	A	O4'-C1'-N9	5.75	112.80	108.20
36	1	2631	U	OP2-P-O3'	5.75	117.84	105.20
36	5	952	A	N3-C4-C5	5.75	130.82	126.80
36	5	2209	U	OP1-P-O3'	5.75	117.84	105.20
36	5	2898	G	C5-N7-C8	5.75	107.17	104.30
37	7	73	C	O4'-C1'-N1	5.75	112.80	108.20
36	1	2298	U	N1-C2-O2	-5.75	118.78	122.80
36	1	2648	G	N3-C4-N9	5.75	129.45	126.00
36	1	3266	G	C4-N9-C1'	5.75	133.97	126.50
1	6	991	G	O5'-P-OP1	5.75	117.59	110.70
36	5	896	A	O5'-P-OP2	-5.75	100.53	105.70
36	5	3107	U	N3-C4-O4	5.75	123.42	119.40
37	7	12	U	OP1-P-OP2	-5.75	110.98	119.60
36	1	95	A	N3-C4-N9	-5.74	122.81	127.40
36	1	807	A	O4'-C1'-N9	5.74	112.79	108.20
36	1	2185	G	C4-C5-N7	5.74	113.10	110.80
36	1	2643	A	O5'-P-OP1	-5.74	100.53	105.70
1	6	576	G	N7-C8-N9	5.74	115.97	113.10
1	6	880	C	C2-N1-C1'	5.74	125.12	118.80
36	5	23	A	C5-C6-N6	-5.74	119.11	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	554	A	C8-N9-C4	-5.74	103.50	105.80
36	5	801	A	C2-N3-C4	-5.74	107.73	110.60
36	5	946	U	N1-C2-N3	5.74	118.35	114.90
36	5	1164	G	C4-N9-C1'	-5.74	119.03	126.50
36	5	1482	A	C6-N1-C2	-5.74	115.15	118.60
36	5	1861	G	C5-C6-O6	5.74	132.05	128.60
36	5	1863	G	C8-N9-C4	5.74	108.70	106.40
36	5	3184	A	N3-C4-C5	5.74	130.82	126.80
36	5	3200	G	N1-C2-N3	5.74	127.35	123.90
37	7	13	A	N7-C8-N9	5.74	116.67	113.80
37	7	37	G	C4-C5-N7	5.74	113.10	110.80
36	1	1137	C	C6-N1-C1'	-5.74	113.91	120.80
1	6	516	G	C5-N7-C8	-5.74	101.43	104.30
36	5	1690	C	N3-C2-O2	5.74	125.92	121.90
1	2	576	G	C5-N7-C8	-5.74	101.43	104.30
1	2	1142	A	C5-C6-N6	5.74	128.29	123.70
36	1	98	G	O5'-P-OP2	-5.74	100.53	105.70
36	1	2266	U	N3-C4-C5	5.74	118.04	114.60
1	6	1494	C	N1-C2-N3	5.74	123.22	119.20
36	5	1204	A	N1-C6-N6	5.74	122.05	118.60
36	5	2187	G	O5'-P-OP1	-5.74	100.53	105.70
36	5	2363	A	C5-C6-N1	-5.74	114.83	117.70
36	5	2741	C	C2-N1-C1'	5.74	125.11	118.80
37	7	59	U	O5'-P-OP1	5.74	117.59	110.70
36	1	2199	G	C8-N9-C1'	-5.74	119.54	127.00
36	1	2339	C	N3-C2-O2	-5.74	117.88	121.90
36	1	2762	A	C2-N3-C4	5.74	113.47	110.60
36	1	2879	C	N3-C4-C5	-5.74	119.60	121.90
1	6	30	G	C2-N3-C4	-5.74	109.03	111.90
1	6	1644	C	N3-C4-N4	-5.74	113.98	118.00
36	5	42	C	C6-N1-C1'	-5.74	113.91	120.80
36	5	962	A	O5'-P-OP1	-5.74	100.54	105.70
36	5	1197	A	C4-C5-C6	5.74	119.87	117.00
36	5	1873	U	C5-C6-N1	5.74	125.57	122.70
36	5	2122	G	C2-N3-C4	-5.74	109.03	111.90
36	5	2714	G	C8-N9-C4	-5.74	104.11	106.40
36	5	2995	A	N7-C8-N9	-5.74	110.93	113.80
37	7	83	U	N1-C2-N3	5.74	118.34	114.90
37	7	99	G	N3-C4-N9	-5.74	122.56	126.00
38	8	107	G	N7-C8-N9	5.74	115.97	113.10
36	1	30	G	C5-N7-C8	-5.74	101.43	104.30
36	1	909	G	C5-C6-O6	-5.74	125.16	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1469	C	C2-N3-C4	-5.74	117.03	119.90
36	1	2765	C	N1-C2-N3	5.74	123.22	119.20
1	6	1513	G	C6-C5-N7	-5.74	126.96	130.40
36	5	335	G	N3-C2-N2	-5.74	115.88	119.90
36	5	350	C	C5-C4-N4	-5.74	116.18	120.20
36	5	808	A	C8-N9-C4	-5.74	103.50	105.80
36	5	910	G	N3-C4-N9	-5.74	122.56	126.00
1	2	1751	C	N3-C2-O2	-5.74	117.89	121.90
36	1	1433	A	N7-C8-N9	5.74	116.67	113.80
36	1	2772	C	C5-C6-N1	5.74	123.87	121.00
36	1	2895	G	N1-C2-N3	5.74	127.34	123.90
36	1	3390	G	C4-C5-C6	5.74	122.24	118.80
43	L6	174	LEU	CB-CG-CD2	-5.74	101.25	111.00
1	6	1219	A	N9-C4-C5	-5.74	103.51	105.80
36	5	512	U	N3-C2-O2	-5.74	118.19	122.20
36	5	1495	U	OP1-P-O3'	5.74	117.82	105.20
36	5	1653	G	C4-N9-C1'	-5.74	119.04	126.50
36	5	1769	G	N3-C2-N2	-5.74	115.89	119.90
36	5	2776	C	C4-C5-C6	-5.74	114.53	117.40
36	5	2825	C	N3-C2-O2	5.74	125.92	121.90
36	1	1400	G	N1-C6-O6	5.73	123.34	119.90
36	1	1446	A	N1-C6-N6	-5.73	115.16	118.60
36	1	1522	U	O4'-C1'-N1	5.73	112.79	108.20
64	N8	42	ARG	NE-CZ-NH1	5.73	123.17	120.30
1	6	385	A	C4-C5-N7	-5.73	107.83	110.70
1	6	619	A	OP2-P-O3'	5.73	117.81	105.20
1	6	1035	G	C4-N9-C1'	-5.73	119.05	126.50
36	5	1150	A	O5'-P-OP2	-5.73	100.54	105.70
36	5	1487	G	N1-C6-O6	5.73	123.34	119.90
1	2	1127	G	C5-C6-O6	5.73	132.04	128.60
1	2	1647	U	C6-N1-C2	-5.73	117.56	121.00
36	1	517	G	C5-C6-O6	5.73	132.04	128.60
36	1	1305	U	C4-C5-C6	5.73	123.14	119.70
36	1	2240	G	C2-N3-C4	-5.73	109.03	111.90
36	1	2372	A	C5-N7-C8	5.73	106.77	103.90
36	1	2381	G	C4-C5-N7	5.73	113.09	110.80
36	1	2389	C	N1-C2-N3	5.73	123.21	119.20
36	1	2516	U	N3-C4-O4	-5.73	115.39	119.40
36	1	2872	A	O5'-P-OP1	-5.73	100.54	105.70
38	4	109	A	OP2-P-O3'	5.73	117.81	105.20
1	6	33	U	C2-N1-C1'	5.73	124.58	117.70
36	5	423	A	C8-N9-C1'	-5.73	117.38	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	782	U	C6-N1-C2	5.73	124.44	121.00
36	5	886	C	N1-C2-N3	-5.73	115.19	119.20
36	5	2195	C	C2-N3-C4	-5.73	117.03	119.90
36	5	2288	G	N3-C4-C5	-5.73	125.73	128.60
36	5	2596	U	N1-C2-O2	5.73	126.81	122.80
36	5	3309	G	C5-C6-N1	5.73	114.37	111.50
39	12	248	GLY	N-CA-C	5.73	127.43	113.10
1	2	1733	C	N3-C4-C5	-5.73	119.61	121.90
36	1	851	C	C6-N1-C2	-5.73	118.01	120.30
36	1	921	A	OP2-P-O3'	5.73	117.81	105.20
36	1	1301	A	C4-C5-N7	5.73	113.57	110.70
36	1	1407	A	N1-C6-N6	-5.73	115.16	118.60
36	1	1525	G	C6-C5-N7	-5.73	126.96	130.40
36	1	2188	A	N1-C2-N3	5.73	132.16	129.30
36	1	3055	U	C2-N1-C1'	5.73	124.58	117.70
38	4	3	A	N1-C6-N6	5.73	122.04	118.60
1	6	97	C	N3-C4-C5	-5.73	119.61	121.90
1	6	449	C	N3-C2-O2	-5.73	117.89	121.90
1	6	781	U	C6-N1-C2	-5.73	117.56	121.00
36	5	370	U	C5-C4-O4	-5.73	122.46	125.90
36	5	512	U	C2-N3-C4	-5.73	123.56	127.00
36	5	618	C	C6-N1-C2	-5.73	118.01	120.30
36	5	694	C	C2-N3-C4	-5.73	117.03	119.90
36	5	1073	U	N3-C2-O2	-5.73	118.19	122.20
36	5	1290	A	C6-C5-N7	-5.73	128.29	132.30
36	5	1914	G	N7-C8-N9	5.73	115.97	113.10
1	2	192	U	O4'-C1'-N1	5.73	112.78	108.20
36	1	1365	G	N1-C6-O6	5.73	123.34	119.90
36	1	1450	G	OP1-P-OP2	5.73	128.19	119.60
36	1	1495	U	N3-C2-O2	5.73	126.21	122.20
36	1	2299	A	C5-C6-N6	-5.73	119.12	123.70
36	1	2337	C	C6-N1-C2	5.73	122.59	120.30
36	1	2736	A	N1-C2-N3	5.73	132.16	129.30
36	1	2939	G	C5-C6-O6	5.73	132.04	128.60
36	5	952	A	C6-N1-C2	5.73	122.04	118.60
36	5	3081	C	C2-N1-C1'	-5.73	112.50	118.80
36	5	3099	C	N3-C2-O2	5.73	125.91	121.90
1	2	1431	C	C6-N1-C2	5.73	122.59	120.30
36	1	734	C	C5-C6-N1	5.73	123.86	121.00
36	1	1852	G	C4-C5-C6	5.73	122.24	118.80
36	1	3336	A	C4-C5-C6	5.73	119.86	117.00
1	6	939	A	C6-N1-C2	-5.73	115.16	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	385	A	C2-N3-C4	-5.73	107.74	110.60
36	5	858	A	C2-N3-C4	5.73	113.46	110.60
36	5	942	U	C5-C6-N1	5.73	125.56	122.70
36	5	1132	C	OP2-P-O3'	5.73	117.80	105.20
36	5	2404	A	C4-C5-N7	-5.73	107.84	110.70
37	7	33	U	N3-C4-C5	5.73	118.04	114.60
36	1	1422	G	O4'-C1'-N9	-5.73	103.62	108.20
36	1	2408	U	N3-C4-C5	-5.73	111.16	114.60
36	1	2939	G	C8-N9-C1'	-5.73	119.56	127.00
36	1	3306	U	C2-N3-C4	-5.73	123.56	127.00
38	4	1	A	N7-C8-N9	-5.73	110.94	113.80
1	6	151	G	N1-C2-N2	5.73	121.35	116.20
1	6	1769	U	N3-C4-C5	-5.73	111.16	114.60
36	5	632	G	C8-N9-C1'	-5.73	119.56	127.00
36	5	1112	A	C6-C5-N7	-5.73	128.29	132.30
1	2	1477	G	C8-N9-C4	-5.72	104.11	106.40
36	1	2636	A	C5-N7-C8	-5.72	101.04	103.90
36	1	3044	G	N3-C4-C5	5.72	131.46	128.60
37	3	88	G	C4-N9-C1'	5.72	133.94	126.50
38	4	27	U	N1-C2-O2	5.72	126.81	122.80
76	Q0	122	ARG	NE-CZ-NH1	5.72	123.16	120.30
1	6	344	A	C8-N9-C4	5.72	108.09	105.80
1	6	421	A	N1-C6-N6	5.72	122.03	118.60
36	5	1206	G	C8-N9-C1'	-5.72	119.56	127.00
36	5	2177	G	C5-C6-N1	5.72	114.36	111.50
36	5	2295	A	C5-C6-N1	5.72	120.56	117.70
1	2	393	C	N1-C2-O2	5.72	122.33	118.90
1	2	756	A	N7-C8-N9	5.72	116.66	113.80
1	2	1267	G	N3-C2-N2	-5.72	115.89	119.90
1	2	1584	G	C4-N9-C1'	-5.72	119.06	126.50
36	1	1529	A	N1-C6-N6	-5.72	115.17	118.60
36	1	1878	G	N1-C6-O6	5.72	123.33	119.90
36	1	1916	U	C2-N3-C4	-5.72	123.57	127.00
36	1	2703	A	C6-N1-C2	-5.72	115.17	118.60
36	1	3045	G	C5-C6-N1	5.72	114.36	111.50
1	6	29	U	OP2-P-O3'	5.72	117.79	105.20
1	6	545	A	N9-C4-C5	5.72	108.09	105.80
1	6	1185	U	C6-N1-C2	-5.72	117.57	121.00
36	5	25	U	N3-C4-C5	-5.72	111.17	114.60
36	5	776	U	C2-N3-C4	-5.72	123.57	127.00
36	5	1216	C	C2-N3-C4	-5.72	117.04	119.90
36	5	1302	A	O5'-P-OP2	5.72	117.57	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1476	G	C6-C5-N7	-5.72	126.97	130.40
36	5	1476	G	O5'-P-OP2	-5.72	100.55	105.70
36	5	1545	A	N7-C8-N9	5.72	116.66	113.80
36	5	2957	G	C6-C5-N7	-5.72	126.97	130.40
36	5	3142	A	C4-C5-N7	-5.72	107.84	110.70
36	5	3217	C	C4-C5-C6	5.72	120.26	117.40
37	7	16	U	C5-C6-N1	-5.72	119.84	122.70
37	7	21	G	N9-C4-C5	5.72	107.69	105.40
38	8	139	U	N3-C4-C5	5.72	118.03	114.60
1	2	21	U	C5-C6-N1	5.72	125.56	122.70
36	1	2278	C	O5'-P-OP2	-5.72	100.55	105.70
36	1	2704	A	OP1-P-O3'	5.72	117.79	105.20
36	1	3079	U	C6-N1-C1'	5.72	129.21	121.20
36	5	395	A	N9-C4-C5	5.72	108.09	105.80
36	5	1939	G	N3-C2-N2	5.72	123.91	119.90
37	7	5	G	C6-N1-C2	-5.72	121.67	125.10
36	1	89	A	C2-N3-C4	-5.72	107.74	110.60
36	1	562	C	C6-N1-C2	5.72	122.59	120.30
36	1	691	A	N7-C8-N9	5.72	116.66	113.80
36	1	898	U	N3-C2-O2	-5.72	118.20	122.20
36	1	914	A	N3-C4-C5	-5.72	122.80	126.80
36	1	1112	A	N3-C4-C5	-5.72	122.80	126.80
36	1	1525	G	N1-C2-N3	5.72	127.33	123.90
36	1	1783	U	C4-C5-C6	5.72	123.13	119.70
36	1	2624	G	C5-C6-O6	-5.72	125.17	128.60
36	1	2770	G	N7-C8-N9	5.72	115.96	113.10
36	1	2942	C	N3-C2-O2	5.72	125.90	121.90
1	6	1114	G	N3-C4-C5	-5.72	125.74	128.60
1	6	1533	C	N1-C2-O2	5.72	122.33	118.90
1	6	1575	G	C8-N9-C1'	5.72	134.44	127.00
36	5	942	U	N1-C2-N3	5.72	118.33	114.90
36	5	2330	C	C5-C6-N1	5.72	123.86	121.00
36	5	2703	A	N1-C6-N6	5.72	122.03	118.60
36	5	3223	A	N9-C4-C5	5.72	108.09	105.80
1	2	1120	U	N1-C2-N3	5.72	118.33	114.90
36	1	277	G	N3-C4-C5	-5.72	125.74	128.60
36	1	1117	G	C8-N9-C4	5.72	108.69	106.40
36	1	2414	G	N3-C2-N2	-5.72	115.90	119.90
1	6	597	G	C2-N3-C4	-5.72	109.04	111.90
1	6	1340	U	O5'-P-OP1	5.72	117.56	110.70
1	6	1392	U	C2-N1-C1'	-5.72	110.84	117.70
36	5	144	A	N1-C6-N6	-5.72	115.17	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1840	U	C5-C6-N1	-5.72	119.84	122.70
36	5	2421	U	N1-C2-O2	-5.72	118.80	122.80
1	2	611	U	N3-C4-O4	5.72	123.40	119.40
1	2	1423	U	C6-N1-C2	-5.72	117.57	121.00
36	1	590	G	OP2-P-O3'	5.72	117.78	105.20
36	1	1328	C	N1-C2-O2	-5.72	115.47	118.90
36	1	1713	G	N7-C8-N9	-5.72	110.24	113.10
36	1	2333	C	C2-N3-C4	-5.72	117.04	119.90
36	1	2572	C	O4'-C1'-N1	5.72	112.77	108.20
36	1	3369	G	C8-N9-C4	-5.72	104.11	106.40
1	6	313	U	C5-C6-N1	-5.72	119.84	122.70
1	6	748	U	N1-C2-O2	5.72	126.80	122.80
1	6	988	A	OP1-P-O3'	5.72	117.78	105.20
36	5	429	U	C6-N1-C2	5.72	124.43	121.00
36	5	883	A	O5'-P-OP1	-5.72	100.56	105.70
36	5	1890	U	N3-C4-C5	-5.72	111.17	114.60
36	5	2640	A	C2-N3-C4	-5.72	107.74	110.60
36	5	2695	A	N9-C4-C5	5.72	108.09	105.80
36	5	2758	A	C5-C6-N1	-5.72	114.84	117.70
37	7	33	U	O5'-P-OP1	-5.72	100.56	105.70
38	8	17	A	N7-C8-N9	-5.72	110.94	113.80
38	8	110	C	N1-C2-O2	5.72	122.33	118.90
40	l3	282	ILE	CG1-CB-CG2	-5.72	98.82	111.40
1	2	1290	U	N3-C2-O2	-5.71	118.20	122.20
1	2	1493	A	O4'-C1'-N9	5.71	112.77	108.20
36	1	743	C	C5-C4-N4	5.71	124.20	120.20
36	1	873	C	C5-C4-N4	-5.71	116.20	120.20
36	1	2692	A	N9-C4-C5	5.71	108.09	105.80
36	1	2840	C	N3-C2-O2	-5.71	117.90	121.90
36	1	3175	U	N1-C2-O2	5.71	126.80	122.80
1	6	27	U	N3-C4-C5	-5.71	111.17	114.60
1	6	558	U	C2-N1-C1'	5.71	124.56	117.70
1	6	1648	A	N1-C6-N6	5.71	122.03	118.60
36	5	272	G	C4-N9-C1'	-5.71	119.07	126.50
36	5	883	A	N9-C4-C5	5.71	108.09	105.80
36	5	1665	C	C5-C6-N1	-5.71	118.14	121.00
36	5	2160	G	N1-C2-N2	5.71	121.34	116.20
36	5	2330	C	N3-C4-C5	-5.71	119.61	121.90
36	5	2588	U	N3-C4-C5	-5.71	111.17	114.60
36	5	2630	C	N3-C2-O2	-5.71	117.90	121.90
36	5	2715	A	N1-C2-N3	5.71	132.16	129.30
36	5	2835	U	N3-C4-O4	5.71	123.40	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2993	G	C5-C6-O6	-5.71	125.17	128.60
38	8	20	U	O5'-P-OP1	5.71	117.56	110.70
36	1	274	G	O5'-P-OP1	5.71	117.56	110.70
36	1	980	A	OP1-P-OP2	-5.71	111.03	119.60
36	1	3213	A	C5-N7-C8	-5.71	101.04	103.90
38	4	115	C	C6-N1-C2	5.71	122.58	120.30
1	6	1243	G	C6-C5-N7	-5.71	126.97	130.40
1	6	1744	A	C8-N9-C4	5.71	108.08	105.80
36	5	307	A	N1-C6-N6	-5.71	115.17	118.60
36	5	1119	C	OP1-P-O3'	-5.71	92.63	105.20
36	5	1698	C	C6-N1-C2	-5.71	118.02	120.30
36	5	2191	U	N3-C2-O2	-5.71	118.20	122.20
1	2	931	C	C2-N3-C4	5.71	122.76	119.90
36	1	573	C	N3-C4-N4	-5.71	114.00	118.00
36	1	2433	U	N1-C2-O2	5.71	126.80	122.80
36	1	3298	C	C6-N1-C2	5.71	122.58	120.30
43	L6	29	LYS	CD-CE-NZ	5.71	124.84	111.70
1	6	51	A	O4'-C1'-N9	-5.71	103.63	108.20
1	6	983	A	N7-C8-N9	5.71	116.66	113.80
1	6	1572	G	N7-C8-N9	5.71	115.95	113.10
1	6	1647	U	O5'-P-OP1	5.71	117.55	110.70
36	5	97	U	OP2-P-O3'	5.71	117.77	105.20
36	5	395	A	C5-C6-N1	-5.71	114.84	117.70
36	5	1683	A	C2-N3-C4	-5.71	107.74	110.60
36	5	3091	A	C4-C5-N7	5.71	113.56	110.70
37	7	37	G	N3-C2-N2	5.71	123.90	119.90
36	1	212	G	C8-N9-C1'	-5.71	119.58	127.00
36	1	2910	A	OP2-P-O3'	5.71	117.76	105.20
38	4	103	G	C8-N9-C1'	-5.71	119.58	127.00
36	5	1195	A	N9-C4-C5	5.71	108.08	105.80
36	5	2674	A	C8-N9-C4	5.71	108.08	105.80
36	5	2988	C	N3-C2-O2	-5.71	117.90	121.90
36	5	3121	U	OP1-P-O3'	5.71	117.76	105.20
36	5	3167	A	C8-N9-C4	-5.71	103.52	105.80
36	5	3175	U	N1-C2-N3	5.71	118.33	114.90
1	2	1280	C	O5'-P-OP2	5.71	117.55	110.70
1	2	1572	G	C6-C5-N7	-5.71	126.97	130.40
36	1	639	G	OP1-P-O3'	5.71	117.76	105.20
36	1	700	C	C6-N1-C1'	5.71	127.65	120.80
36	1	1152	G	N3-C4-N9	5.71	129.43	126.00
36	1	1176	C	N3-C4-C5	5.71	124.18	121.90
36	1	1374	G	C5-C6-N1	5.71	114.35	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1650	G	N9-C4-C5	-5.71	103.12	105.40
36	1	2697	A	P-O3'-C3'	-5.71	112.85	119.70
36	1	2703	A	C4-N9-C1'	5.71	136.57	126.30
1	6	176	C	N1-C2-O2	5.71	122.33	118.90
1	6	1269	U	C6-N1-C2	-5.71	117.58	121.00
1	6	1337	A	N3-C4-N9	-5.71	122.83	127.40
1	6	1477	G	N1-C2-N3	-5.71	120.47	123.90
36	5	398	A	O4'-C1'-N9	-5.71	103.63	108.20
36	5	1079	A	N1-C6-N6	-5.71	115.17	118.60
36	5	1313	G	C5-C6-O6	-5.71	125.17	128.60
36	5	1592	G	C8-N9-C1'	-5.71	119.58	127.00
36	5	1680	G	C6-C5-N7	-5.71	126.97	130.40
36	5	2988	C	C5-C4-N4	-5.71	116.20	120.20
36	5	3019	U	C4-C5-C6	5.71	123.12	119.70
38	8	2	A	C4-C5-N7	5.71	113.55	110.70
1	2	1004	U	C6-N1-C2	-5.71	117.58	121.00
36	1	1521	G	N3-C4-C5	5.71	131.45	128.60
36	1	1830	G	O5'-P-OP1	-5.71	100.56	105.70
36	1	2416	U	C5-C4-O4	-5.71	122.48	125.90
36	1	2650	U	C6-N1-C2	-5.71	117.58	121.00
36	1	2703	A	C8-N9-C4	-5.71	103.52	105.80
36	1	2800	G	C5-N7-C8	-5.71	101.45	104.30
36	1	2964	G	C4-C5-C6	5.71	122.22	118.80
38	4	10	A	N7-C8-N9	-5.71	110.95	113.80
1	6	1178	G	C4-C5-N7	-5.71	108.52	110.80
1	6	1391	A	C6-N1-C2	-5.71	115.18	118.60
1	6	1663	G	N3-C4-N9	-5.71	122.58	126.00
8	s6	165	GLY	N-CA-C	-5.71	98.83	113.10
36	5	126	U	O5'-P-OP2	-5.71	100.56	105.70
36	5	692	A	C4-C5-C6	5.71	119.85	117.00
36	5	1848	G	O5'-P-OP2	-5.71	100.56	105.70
36	5	2343	C	N1-C2-N3	5.71	123.19	119.20
1	2	1022	C	N3-C4-N4	-5.71	114.01	118.00
1	2	1412	G	C8-N9-C1'	5.71	134.42	127.00
36	1	48	A	C8-N9-C4	-5.71	103.52	105.80
36	1	639	G	N7-C8-N9	5.71	115.95	113.10
37	3	110	G	C8-N9-C4	5.71	108.68	106.40
1	6	432	G	C8-N9-C1'	-5.71	119.58	127.00
1	6	1127	G	C4-C5-N7	5.71	113.08	110.80
1	6	1539	G	C4-N9-C1'	5.71	133.92	126.50
36	5	1114	U	C6-N1-C1'	5.71	129.19	121.20
36	5	2774	C	O5'-P-OP1	-5.71	100.56	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2887	A	O4'-C1'-N9	-5.71	103.64	108.20
1	2	987	G	C2-N3-C4	5.70	114.75	111.90
1	2	1140	G	C5-C6-N1	-5.70	108.65	111.50
36	1	425	G	N3-C2-N2	5.70	123.89	119.90
36	1	862	U	N3-C4-O4	5.70	123.39	119.40
36	1	2299	A	C2-N3-C4	5.70	113.45	110.60
36	1	3174	A	N1-C6-N6	5.70	122.02	118.60
38	4	109	A	C4-C5-C6	-5.70	114.15	117.00
44	L7	177	GLY	N-CA-C	-5.70	98.84	113.10
1	6	1337	A	C4-N9-C1'	-5.70	116.03	126.30
1	6	1361	U	N3-C2-O2	-5.70	118.21	122.20
36	5	1793	C	C6-N1-C2	5.70	122.58	120.30
36	5	1942	U	O5'-P-OP1	-5.70	100.57	105.70
36	5	3130	A	N1-C6-N6	5.70	122.02	118.60
36	5	3333	G	C5-N7-C8	5.70	107.15	104.30
36	1	281	G	OP1-P-O3'	5.70	117.75	105.20
36	1	959	C	N1-C2-N3	-5.70	115.21	119.20
1	2	419	G	C6-C5-N7	-5.70	126.98	130.40
1	2	573	C	C4-C5-C6	5.70	120.25	117.40
36	1	649	A	N9-C4-C5	5.70	108.08	105.80
36	1	744	A	N3-C4-N9	-5.70	122.84	127.40
36	1	994	G	C5-C6-O6	5.70	132.02	128.60
36	1	1867	A	C4-C5-C6	5.70	119.85	117.00
36	1	1916	U	C4-C5-C6	5.70	123.12	119.70
36	1	2159	U	C5-C6-N1	5.70	125.55	122.70
36	1	2247	G	N1-C6-O6	5.70	123.32	119.90
36	1	3178	A	C5-C6-N1	-5.70	114.85	117.70
1	6	1442	U	C5-C4-O4	5.70	129.32	125.90
1	6	1600	A	N1-C2-N3	5.70	132.15	129.30
36	5	687	U	C2-N1-C1'	-5.70	110.86	117.70
36	5	805	G	N3-C4-C5	-5.70	125.75	128.60
36	5	890	C	N3-C2-O2	-5.70	117.91	121.90
36	5	978	G	C5-C6-O6	-5.70	125.18	128.60
36	5	1403	C	C6-N1-C1'	-5.70	113.96	120.80
36	5	3159	C	C5-C6-N1	-5.70	118.15	121.00
38	8	56	G	N1-C6-O6	5.70	123.32	119.90
1	2	1083	G	C8-N9-C4	5.70	108.68	106.40
1	2	1431	C	C5-C4-N4	-5.70	116.21	120.20
36	1	26	A	N7-C8-N9	5.70	116.65	113.80
36	1	801	A	C4-C5-N7	5.70	113.55	110.70
36	1	919	U	N3-C4-C5	5.70	118.02	114.60
36	1	1149	G	P-O3'-C3'	5.70	126.54	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1336	U	OP2-P-O3'	5.70	117.74	105.20
36	1	2354	C	N3-C4-C5	-5.70	119.62	121.90
36	1	3328	G	C5-N7-C8	-5.70	101.45	104.30
38	4	54	A	N7-C8-N9	5.70	116.65	113.80
64	N8	59	ARG	NE-CZ-NH1	-5.70	117.45	120.30
1	6	596	C	C2-N1-C1'	-5.70	112.53	118.80
1	6	881	A	O5'-P-OP1	-5.70	100.57	105.70
1	6	1782	A	N7-C8-N9	5.70	116.65	113.80
36	5	115	A	N1-C2-N3	5.70	132.15	129.30
36	5	582	G	N3-C4-N9	-5.70	122.58	126.00
36	5	2417	U	N3-C2-O2	5.70	126.19	122.20
36	5	2654	C	O5'-P-OP1	-5.70	100.57	105.70
36	5	2779	A	O5'-P-OP2	-5.70	100.57	105.70
36	5	2947	G	N3-C2-N2	-5.70	115.91	119.90
1	2	745	U	O5'-P-OP2	-5.70	100.57	105.70
36	1	682	U	C5-C4-O4	5.70	129.32	125.90
36	1	1724	U	C2-N3-C4	-5.70	123.58	127.00
36	1	1869	C	C2-N3-C4	5.70	122.75	119.90
36	1	2310	U	OP1-P-OP2	5.70	128.15	119.60
1	6	417	A	N3-C4-C5	-5.70	122.81	126.80
1	6	718	U	N1-C2-O2	5.70	126.79	122.80
1	6	1504	G	C6-C5-N7	-5.70	126.98	130.40
1	6	1625	C	C6-N1-C2	5.70	122.58	120.30
1	6	1796	C	N1-C2-O2	5.70	122.32	118.90
36	5	1845	G	C4-C5-C6	5.70	122.22	118.80
36	5	2273	G	N9-C4-C5	5.70	107.68	105.40
1	2	576	G	N3-C2-N2	-5.70	115.91	119.90
1	2	1595	U	O4'-C1'-N1	5.70	112.76	108.20
36	1	112	U	N1-C2-N3	5.70	118.32	114.90
36	1	283	G	OP1-P-O3'	5.70	117.73	105.20
36	1	515	C	C2-N1-C1'	5.70	125.06	118.80
36	1	973	A	N1-C2-N3	5.70	132.15	129.30
36	1	1108	U	OP1-P-OP2	5.70	128.14	119.60
36	1	1396	C	N1-C2-N3	-5.70	115.21	119.20
36	1	1465	A	C4-N9-C1'	-5.70	116.05	126.30
36	1	1556	C	C4-C5-C6	5.70	120.25	117.40
36	1	3362	A	C6-C5-N7	-5.70	128.31	132.30
1	6	30	G	N1-C2-N3	5.70	127.32	123.90
1	6	956	C	C6-N1-C2	5.70	122.58	120.30
1	6	959	U	N3-C2-O2	5.70	126.19	122.20
36	5	182	U	N3-C4-C5	-5.70	111.18	114.60
36	5	1000	C	N3-C2-O2	5.70	125.89	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1270	A	N1-C6-N6	-5.70	115.18	118.60
36	5	2155	G	N1-C6-O6	5.70	123.32	119.90
36	5	2838	A	C5-N7-C8	5.70	106.75	103.90
36	5	2880	U	N3-C2-O2	5.70	126.19	122.20
37	7	26	C	C2-N1-C1'	5.70	125.06	118.80
48	m1	37	LEU	CA-CB-CG	-5.70	102.20	115.30
73	o7	65	ARG	NE-CZ-NH1	5.70	123.15	120.30
36	1	1454	A	N1-C2-N3	5.69	132.15	129.30
36	1	2292	U	N1-C2-N3	5.69	118.32	114.90
1	6	1122	G	C6-C5-N7	-5.69	126.98	130.40
1	2	1006	C	OP1-P-OP2	-5.69	111.06	119.60
36	1	205	C	C2-N3-C4	-5.69	117.05	119.90
36	1	1405	U	C2-N3-C4	-5.69	123.58	127.00
36	1	1542	G	N7-C8-N9	5.69	115.95	113.10
36	1	1849	C	C2-N3-C4	-5.69	117.05	119.90
36	1	2138	A	OP1-P-OP2	5.69	128.14	119.60
36	1	2179	C	C6-N1-C2	-5.69	118.02	120.30
36	1	2323	G	OP1-P-OP2	-5.69	111.06	119.60
36	1	2707	C	N1-C2-N3	5.69	123.19	119.20
36	1	3020	U	C6-N1-C2	-5.69	117.58	121.00
36	1	3223	A	C2-N3-C4	5.69	113.45	110.60
36	1	3300	U	C6-N1-C1'	-5.69	113.23	121.20
37	3	79	A	N1-C6-N6	5.69	122.02	118.60
1	6	34	G	N7-C8-N9	-5.69	110.25	113.10
1	6	123	G	N1-C6-O6	5.69	123.32	119.90
1	6	1662	G	N9-C4-C5	-5.69	103.12	105.40
1	6	1697	G	N3-C4-C5	-5.69	125.75	128.60
36	5	323	A	O5'-P-OP1	-5.69	100.58	105.70
36	5	666	A	N1-C2-N3	5.69	132.15	129.30
36	5	1132	C	C6-N1-C2	5.69	122.58	120.30
36	5	1815	U	P-O3'-C3'	5.69	126.53	119.70
36	5	2201	G	C8-N9-C1'	-5.69	119.60	127.00
36	5	2698	G	C4-N9-C1'	-5.69	119.10	126.50
36	5	2733	A	C5-C6-N6	-5.69	119.15	123.70
1	2	1241	G	C6-C5-N7	-5.69	126.99	130.40
1	2	1780	G	O4'-C1'-N9	-5.69	103.65	108.20
36	1	178	U	C5-C6-N1	5.69	125.55	122.70
36	1	277	G	C4-C5-N7	-5.69	108.52	110.80
36	1	1795	U	O4'-C1'-N1	5.69	112.75	108.20
37	3	110	G	C5-C6-N1	5.69	114.34	111.50
1	6	57	G	C8-N9-C1'	-5.69	119.60	127.00
1	6	1575	G	N1-C6-O6	-5.69	116.49	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	384	A	C2-N3-C4	-5.69	107.75	110.60
36	5	570	A	C8-N9-C4	5.69	108.08	105.80
36	5	642	U	C2-N3-C4	-5.69	123.59	127.00
36	5	660	A	N1-C6-N6	-5.69	115.19	118.60
36	5	1082	U	N1-C2-O2	5.69	126.78	122.80
36	5	1172	G	N3-C4-C5	-5.69	125.75	128.60
36	5	2111	G	C6-N1-C2	5.69	128.51	125.10
36	5	2732	G	N3-C2-N2	-5.69	115.92	119.90
36	5	2914	G	O5'-P-OP2	-5.69	100.58	105.70
36	5	3173	G	C4-N9-C1'	5.69	133.90	126.50
38	8	55	U	N3-C4-O4	5.69	123.38	119.40
36	1	276	U	C6-N1-C2	-5.69	117.59	121.00
36	1	434	U	C5-C4-O4	5.69	129.31	125.90
36	1	1929	G	C5-N7-C8	-5.69	101.45	104.30
36	1	2394	G	C6-N1-C2	-5.69	121.69	125.10
36	1	2647	A	N3-C4-C5	-5.69	122.82	126.80
36	5	2842	U	N3-C4-O4	5.69	123.38	119.40
36	5	3124	G	N9-C4-C5	5.69	107.67	105.40
36	1	227	G	C5-C6-O6	-5.69	125.19	128.60
36	1	398	A	N1-C2-N3	-5.69	126.46	129.30
36	1	794	U	OP2-P-O3'	5.69	117.71	105.20
36	1	835	G	C6-C5-N7	-5.69	126.99	130.40
36	1	855	U	C5-C4-O4	-5.69	122.49	125.90
36	1	985	U	N1-C2-N3	5.69	118.31	114.90
36	1	1838	G	C6-C5-N7	-5.69	126.99	130.40
36	1	1886	A	O5'-P-OP2	-5.69	100.58	105.70
36	1	2943	G	C4-C5-N7	5.69	113.08	110.80
36	1	3150	A	N9-C4-C5	-5.69	103.53	105.80
36	1	3240	C	N1-C2-O2	-5.69	115.49	118.90
36	1	3320	A	N7-C8-N9	5.69	116.64	113.80
38	4	18	U	OP1-P-OP2	-5.69	111.07	119.60
36	5	102	C	C2-N1-C1'	-5.69	112.54	118.80
36	5	1897	G	C4-N9-C1'	5.69	133.89	126.50
36	5	2441	A	N7-C8-N9	5.69	116.64	113.80
36	5	3027	A	N1-C6-N6	5.69	122.01	118.60
36	5	3285	C	N3-C2-O2	-5.69	117.92	121.90
36	5	3309	G	C8-N9-C4	5.69	108.67	106.40
1	2	822	U	C5-C6-N1	5.69	125.54	122.70
36	1	943	U	N1-C2-O2	-5.69	118.82	122.80
36	1	1191	U	C2-N3-C4	-5.69	123.59	127.00
36	1	3244	A	C2-N3-C4	-5.69	107.76	110.60
36	1	3288	G	C4-C5-N7	5.69	113.07	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	901	G	C5-C6-O6	-5.69	125.19	128.60
1	6	983	A	O5'-P-OP2	-5.69	100.58	105.70
36	5	546	C	C6-N1-C2	-5.69	118.03	120.30
36	5	1013	G	N9-C4-C5	5.69	107.67	105.40
36	5	1129	A	C5-N7-C8	-5.69	101.06	103.90
36	5	1215	U	O5'-P-OP2	-5.69	100.58	105.70
36	5	1673	G	C4-C5-N7	5.69	113.08	110.80
36	5	1833	G	O5'-P-OP2	-5.69	100.58	105.70
36	5	1886	A	C4-C5-N7	-5.69	107.86	110.70
36	1	595	G	N1-C2-N2	-5.68	111.08	116.20
36	1	1208	U	C5-C4-O4	-5.68	122.49	125.90
36	1	1340	G	OP2-P-O3'	5.68	117.71	105.20
36	1	1524	A	C5-N7-C8	5.68	106.74	103.90
36	1	1607	U	OP1-P-O3'	5.68	117.70	105.20
36	1	2175	U	C5-C4-O4	5.68	129.31	125.90
36	1	2206	G	N9-C4-C5	-5.68	103.13	105.40
36	1	2990	G	C5-C6-O6	-5.68	125.19	128.60
36	1	3134	A	OP2-P-O3'	5.68	117.71	105.20
1	6	1169	G	N3-C4-N9	5.68	129.41	126.00
3	s1	207	LEU	CB-CG-CD2	-5.68	101.34	111.00
36	5	790	U	C2-N3-C4	-5.68	123.59	127.00
36	5	1947	G	C6-N1-C2	-5.68	121.69	125.10
36	5	2381	G	OP1-P-O3'	5.68	117.71	105.20
36	5	3182	G	N1-C2-N2	-5.68	111.08	116.20
36	5	3197	G	C5-C6-O6	-5.68	125.19	128.60
36	1	277	G	C8-N9-C4	-5.68	104.13	106.40
36	1	701	G	C4-C5-C6	5.68	122.21	118.80
36	1	1161	G	C6-N1-C2	-5.68	121.69	125.10
36	1	2257	C	N1-C2-O2	5.68	122.31	118.90
36	1	2809	C	N3-C4-C5	-5.68	119.63	121.90
36	1	2882	U	O5'-P-OP1	5.68	117.52	110.70
36	1	2884	C	C5-C4-N4	5.68	124.18	120.20
36	1	3107	U	C5-C4-O4	5.68	129.31	125.90
36	1	3306	U	N3-C4-C5	5.68	118.01	114.60
38	4	117	C	N3-C2-O2	5.68	125.88	121.90
1	6	25	C	N1-C2-O2	5.68	122.31	118.90
1	6	1320	U	C2-N1-C1'	5.68	124.52	117.70
36	5	64	G	C8-N9-C1'	-5.68	119.61	127.00
36	5	437	G	C2-N3-C4	5.68	114.74	111.90
36	5	746	A	C2-N3-C4	-5.68	107.76	110.60
36	5	890	C	O5'-P-OP2	-5.68	100.58	105.70
36	5	1147	G	C5-N7-C8	-5.68	101.46	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1755	C	N1-C2-N3	-5.68	115.22	119.20
36	5	1848	G	O5'-P-OP1	-5.68	100.59	105.70
36	5	2151	C	C5-C6-N1	-5.68	118.16	121.00
36	5	3269	U	N1-C1'-C2'	-5.68	105.75	112.00
41	14	194	TYR	CA-CB-CG	5.68	124.20	113.40
19	C7	46	LEU	CA-CB-CG	5.68	128.37	115.30
36	1	959	C	C5-C6-N1	-5.68	118.16	121.00
36	1	1320	C	N3-C4-N4	-5.68	114.02	118.00
36	1	1435	A	O5'-P-OP2	5.68	117.52	110.70
36	1	1541	G	C4-C5-N7	5.68	113.07	110.80
20	c8	116	LEU	CB-CG-CD2	-5.68	101.34	111.00
36	5	984	G	C5-C6-O6	-5.68	125.19	128.60
36	5	1171	G	N9-C4-C5	5.68	107.67	105.40
1	2	909	U	C2-N1-C1'	-5.68	110.89	117.70
1	2	1092	A	C8-N9-C4	-5.68	103.53	105.80
1	2	1302	U	N1-C2-N3	-5.68	111.49	114.90
1	2	1553	G	C4-N9-C1'	-5.68	119.12	126.50
36	1	705	A	C5-C6-N6	-5.68	119.16	123.70
36	1	957	C	C2-N3-C4	-5.68	117.06	119.90
36	1	2313	A	O5'-P-OP2	5.68	117.52	110.70
36	1	3238	G	C5-C6-O6	5.68	132.01	128.60
38	4	35	C	N1-C2-O2	-5.68	115.49	118.90
38	4	110	C	C5-C6-N1	-5.68	118.16	121.00
1	6	637	C	C6-N1-C1'	-5.68	113.98	120.80
1	6	1038	U	N1-C2-O2	-5.68	118.82	122.80
36	5	227	G	OP1-P-OP2	5.68	128.12	119.60
36	5	423	A	N3-C4-N9	5.68	131.94	127.40
36	5	1208	U	N3-C2-O2	-5.68	118.22	122.20
36	5	1339	C	N1-C2-O2	5.68	122.31	118.90
36	5	1537	A	C2-N3-C4	-5.68	107.76	110.60
36	5	1554	U	N1-C2-O2	5.68	126.78	122.80
36	5	1890	U	C2-N3-C4	5.68	130.41	127.00
36	5	2557	A	N1-C6-N6	-5.68	115.19	118.60
36	5	2961	G	C8-N9-C1'	-5.68	119.62	127.00
36	5	3095	U	OP1-P-O3'	5.68	117.69	105.20
36	5	3271	G	C5-C6-N1	-5.68	108.66	111.50
1	2	1080	U	N3-C4-C5	-5.68	111.19	114.60
1	2	1782	A	C5-C6-N6	5.68	128.24	123.70
36	1	580	C	N3-C2-O2	5.68	125.88	121.90
36	1	729	C	N3-C4-C5	-5.68	119.63	121.90
36	1	1314	C	N3-C4-N4	5.68	121.97	118.00
1	6	408	C	C2-N1-C1'	-5.68	112.56	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	418	G	C4-N9-C1'	5.68	133.88	126.50
36	5	842	G	C6-C5-N7	5.68	133.81	130.40
36	5	905	U	C5-C6-N1	-5.68	119.86	122.70
36	1	361	A	C5-C6-N6	-5.68	119.16	123.70
36	1	732	C	N1-C2-O2	5.68	122.31	118.90
36	1	979	U	C5-C6-N1	5.68	125.54	122.70
36	1	1049	C	N1-C2-O2	-5.68	115.49	118.90
36	1	2244	A	C6-N1-C2	-5.68	115.19	118.60
36	1	2914	G	C5-C6-O6	5.68	132.01	128.60
36	1	3018	C	C5-C6-N1	-5.68	118.16	121.00
36	1	3291	G	N1-C2-N2	5.68	121.31	116.20
38	4	109	A	N1-C6-N6	5.68	122.01	118.60
1	6	11	A	C5-C6-N6	5.68	128.24	123.70
1	6	1774	G	N1-C2-N3	5.68	127.31	123.90
10	s8	90	LEU	CA-CB-CG	-5.68	102.25	115.30
36	5	1933	A	C2-N3-C4	-5.68	107.76	110.60
36	5	3097	C	N3-C4-N4	5.68	121.97	118.00
1	2	401	A	OP2-P-O3'	5.67	117.68	105.20
1	2	776	G	C8-N9-C4	5.67	108.67	106.40
1	2	1594	G	N1-C6-O6	5.67	123.31	119.90
36	1	968	G	N3-C4-N9	5.67	129.41	126.00
36	1	1150	A	O5'-P-OP1	5.67	117.51	110.70
36	1	1213	G	C4-C5-N7	5.67	113.07	110.80
36	1	3304	U	C2-N3-C4	-5.67	123.59	127.00
38	4	102	U	O5'-P-OP2	-5.67	100.59	105.70
1	6	108	A	N1-C6-N6	5.67	122.00	118.60
36	5	43	A	C4-C5-N7	5.67	113.54	110.70
36	5	234	G	N7-C8-N9	5.67	115.94	113.10
36	5	637	C	O5'-P-OP2	-5.67	100.59	105.70
36	5	935	U	N1-C2-N3	5.67	118.31	114.90
36	5	1306	G	N3-C4-N9	-5.67	122.59	126.00
36	5	1444	G	C8-N9-C1'	-5.67	119.62	127.00
36	5	2144	A	C2-N3-C4	5.67	113.44	110.60
36	5	2847	A	C5-N7-C8	-5.67	101.06	103.90
37	7	60	G	N7-C8-N9	5.67	115.94	113.10
36	1	131	C	C5-C6-N1	5.67	123.84	121.00
36	1	1713	G	N3-C4-N9	-5.67	122.60	126.00
36	1	1902	G	C5-C6-N1	-5.67	108.66	111.50
36	1	2598	G	C8-N9-C4	-5.67	104.13	106.40
36	1	3261	C	N3-C4-N4	5.67	121.97	118.00
1	6	901	G	C2-N3-C4	5.67	114.74	111.90
36	5	3230	G	N3-C4-C5	-5.67	125.76	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	197	G	N1-C2-N2	-5.67	111.10	116.20
36	1	938	C	N1-C2-O2	5.67	122.30	118.90
36	1	1454	A	N1-C6-N6	5.67	122.00	118.60
36	1	1460	A	C5-C6-N1	5.67	120.54	117.70
36	1	2699	G	N3-C4-C5	5.67	131.44	128.60
1	6	395	U	C6-N1-C2	-5.67	117.60	121.00
1	6	577	G	N1-C6-O6	5.67	123.30	119.90
36	5	88	A	C5-C6-N6	-5.67	119.16	123.70
36	5	2138	A	C2-N3-C4	-5.67	107.76	110.60
36	5	2948	C	N3-C2-O2	-5.67	117.93	121.90
36	5	3057	U	N3-C2-O2	-5.67	118.23	122.20
42	l5	248	ARG	NE-CZ-NH1	5.67	123.14	120.30
54	m8	11	LYS	CD-CE-NZ	5.67	124.74	111.70
37	3	84	A	OP1-P-OP2	-5.67	111.09	119.60
1	6	103	A	N7-C8-N9	5.67	116.64	113.80
36	5	967	A	C8-N9-C4	-5.67	103.53	105.80
36	5	2836	C	C5-C6-N1	-5.67	118.17	121.00
1	2	240	U	P-O3'-C3'	5.67	126.50	119.70
36	1	42	C	C2-N3-C4	-5.67	117.06	119.90
36	1	840	C	N3-C4-C5	5.67	124.17	121.90
36	1	886	C	C6-N1-C2	-5.67	118.03	120.30
36	1	945	C	N3-C4-C5	-5.67	119.63	121.90
36	1	1463	U	C4-C5-C6	5.67	123.10	119.70
36	1	2814	G	N1-C2-N3	5.67	127.30	123.90
36	1	3104	U	N1-C1'-C2'	-5.67	105.77	112.00
41	L4	156	LEU	CA-CB-CG	5.67	128.34	115.30
1	6	176	C	C6-N1-C1'	-5.67	114.00	120.80
1	6	755	A	C4-C5-N7	5.67	113.53	110.70
1	6	777	C	C4-C5-C6	-5.67	114.57	117.40
36	5	1203	A	N9-C4-C5	-5.67	103.53	105.80
36	5	1913	A	C4-C5-N7	5.67	113.53	110.70
36	5	2427	U	C5-C4-O4	5.67	129.30	125.90
1	2	48	G	N7-C8-N9	5.67	115.93	113.10
1	2	581	U	N3-C4-O4	5.67	123.37	119.40
1	2	1682	U	O4'-C1'-N1	5.67	112.73	108.20
36	1	317	A	N1-C2-N3	5.67	132.13	129.30
36	1	775	A	C2-N3-C4	5.67	113.43	110.60
36	1	879	U	O5'-P-OP2	-5.67	100.60	105.70
36	1	901	G	N1-C2-N2	5.67	121.30	116.20
36	1	1549	U	N3-C2-O2	5.67	126.17	122.20
36	1	1553	U	C5-C6-N1	-5.67	119.87	122.70
36	1	2909	U	C2-N3-C4	-5.67	123.60	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3240	C	C2-N1-C1'	-5.67	112.57	118.80
1	6	757	A	N3-C4-N9	-5.67	122.87	127.40
1	6	1504	G	C4-C5-C6	5.67	122.20	118.80
36	5	1361	U	C5-C6-N1	-5.67	119.87	122.70
36	5	1780	G	N7-C8-N9	5.67	115.93	113.10
36	5	3307	A	C5-C6-N6	-5.67	119.17	123.70
36	1	1377	G	N3-C4-N9	5.67	129.40	126.00
36	1	2831	G	N9-C4-C5	-5.67	103.13	105.40
1	6	1409	G	N3-C4-C5	-5.67	125.77	128.60
36	5	404	G	O5'-P-OP2	-5.67	100.60	105.70
36	5	989	A	C8-N9-C4	5.67	108.07	105.80
1	2	1791	A	C8-N9-C4	5.66	108.06	105.80
36	1	106	A	C8-N9-C4	5.66	108.06	105.80
36	1	370	U	C2-N1-C1'	5.66	124.50	117.70
36	1	633	C	C5-C6-N1	5.66	123.83	121.00
36	1	937	G	N9-C4-C5	-5.66	103.13	105.40
36	1	1182	A	N7-C8-N9	-5.66	110.97	113.80
36	1	1321	G	N1-C2-N2	5.66	121.30	116.20
36	1	2335	G	C8-N9-C4	-5.66	104.14	106.40
36	1	2639	G	N1-C6-O6	5.66	123.30	119.90
36	1	3053	G	C2-N3-C4	-5.66	109.07	111.90
36	1	3266	G	N1-C2-N2	-5.66	111.10	116.20
38	4	52	A	C2-N3-C4	-5.66	107.77	110.60
1	6	1110	G	C8-N9-C1'	-5.66	119.64	127.00
36	5	2280	A	OP2-P-O3'	5.66	117.66	105.20
36	5	2286	U	N1-C2-N3	5.66	118.30	114.90
36	5	2992	U	O5'-P-OP2	-5.66	100.60	105.70
36	1	1048	A	OP1-P-O3'	5.66	117.66	105.20
36	1	1507	G	N3-C2-N2	5.66	123.86	119.90
36	1	1940	G	N1-C6-O6	-5.66	116.50	119.90
36	1	2939	G	N3-C2-N2	-5.66	115.94	119.90
36	1	3135	U	C4-C5-C6	5.66	123.10	119.70
1	6	1172	G	C5-C6-O6	5.66	132.00	128.60
1	6	1536	G	N3-C4-C5	-5.66	125.77	128.60
36	5	637	C	N1-C2-O2	5.66	122.30	118.90
36	5	832	G	C8-N9-C1'	-5.66	119.64	127.00
36	5	2422	C	OP2-P-O3'	5.66	117.66	105.20
36	5	2811	A	N9-C4-C5	5.66	108.06	105.80
36	5	2910	A	C8-N9-C4	5.66	108.06	105.80
36	5	2943	G	O5'-P-OP1	5.66	117.49	110.70
38	8	55	U	C2-N1-C1'	5.66	124.50	117.70
1	2	360	A	N1-C2-N3	-5.66	126.47	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	569	C	C6-N1-C2	5.66	122.56	120.30
1	2	1363	U	N1-C2-O2	5.66	126.76	122.80
36	1	919	U	N3-C4-O4	-5.66	115.44	119.40
36	1	1333	C	C2-N3-C4	-5.66	117.07	119.90
36	1	1467	A	C5-C6-N1	5.66	120.53	117.70
36	1	2278	C	C6-N1-C2	5.66	122.56	120.30
36	1	2298	U	N1-C2-N3	5.66	118.30	114.90
36	1	2316	G	C5-C6-N1	-5.66	108.67	111.50
36	1	2769	A	C2-N3-C4	-5.66	107.77	110.60
1	6	1604	U	C2-N1-C1'	5.66	124.49	117.70
1	6	1636	C	C6-N1-C2	5.66	122.56	120.30
36	5	395	A	C5-C6-N6	5.66	128.23	123.70
36	5	618	C	N3-C2-O2	-5.66	117.94	121.90
36	5	974	G	C4-C5-N7	5.66	113.06	110.80
36	5	3291	G	N1-C6-O6	-5.66	116.50	119.90
37	7	85	G	N1-C2-N2	5.66	121.29	116.20
1	2	1037	C	C5-C6-N1	5.66	123.83	121.00
36	1	404	G	O4'-C1'-N9	-5.66	103.67	108.20
36	1	659	G	N1-C6-O6	-5.66	116.50	119.90
36	1	807	A	C4-C5-N7	5.66	113.53	110.70
36	1	1359	C	N3-C2-O2	5.66	125.86	121.90
36	1	1765	U	C5-C4-O4	5.66	129.29	125.90
36	1	2296	A	C6-N1-C2	5.66	122.00	118.60
36	1	2685	C	C5-C4-N4	5.66	124.16	120.20
1	6	316	A	C5-C6-N6	-5.66	119.17	123.70
1	6	330	G	C2-N3-C4	-5.66	109.07	111.90
1	6	1119	G	N1-C2-N3	5.66	127.30	123.90
1	6	1362	U	C5-C6-N1	5.66	125.53	122.70
36	5	894	G	N3-C2-N2	-5.66	115.94	119.90
36	5	2112	U	N1-C2-N3	5.66	118.30	114.90
36	5	2816	G	C8-N9-C4	5.66	108.66	106.40
36	5	3150	A	C5-C6-N6	-5.66	119.17	123.70
36	5	3182	G	O5'-P-OP1	5.66	117.49	110.70
69	o3	49	ILE	CG1-CB-CG2	-5.66	98.95	111.40
36	1	699	A	C4-C5-C6	-5.66	114.17	117.00
36	1	2300	G	C4-C5-C6	5.66	122.19	118.80
36	1	2323	G	N3-C4-N9	5.66	129.39	126.00
38	4	17	A	C6-C5-N7	-5.66	128.34	132.30
1	6	1115	U	N1-C2-O2	5.66	126.76	122.80
36	5	1399	A	C5-C6-N6	-5.66	119.17	123.70
36	5	1603	A	N3-C4-N9	5.66	131.93	127.40
36	5	2236	G	C4-N9-C1'	5.66	133.85	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2763	U	N3-C2-O2	5.66	126.16	122.20
36	5	2921	U	O4'-C1'-N1	-5.66	103.67	108.20
1	2	1282	U	C5-C6-N1	-5.66	119.87	122.70
36	1	225	C	N3-C4-C5	-5.66	119.64	121.90
36	1	272	G	O5'-P-OP1	-5.66	100.61	105.70
36	1	303	G	C5-C6-N1	5.66	114.33	111.50
36	1	680	G	N7-C8-N9	-5.66	110.27	113.10
36	1	871	U	C2-N1-C1'	-5.66	110.91	117.70
36	1	1306	G	C5-C6-N1	-5.66	108.67	111.50
36	1	1513	G	C4-C5-N7	5.66	113.06	110.80
36	1	2391	G	OP2-P-O3'	5.66	117.64	105.20
36	1	2556	C	C5-C4-N4	5.66	124.16	120.20
36	1	2893	C	OP1-P-OP2	5.66	128.08	119.60
36	1	3015	G	OP2-P-O3'	5.66	117.64	105.20
1	6	1422	A	N1-C6-N6	-5.66	115.21	118.60
1	6	1521	G	C6-N1-C2	-5.66	121.71	125.10
1	6	1777	G	C8-N9-C1'	-5.66	119.65	127.00
36	5	804	C	O5'-P-OP1	-5.66	100.61	105.70
36	5	963	G	N3-C4-C5	-5.66	125.77	128.60
36	5	1215	U	N3-C2-O2	5.66	126.16	122.20
36	5	1518	U	N1-C2-N3	5.66	118.29	114.90
36	5	2150	G	C6-C5-N7	-5.66	127.01	130.40
36	5	2524	A	N1-C6-N6	5.66	121.99	118.60
36	5	2850	G	N3-C4-N9	5.66	129.39	126.00
36	5	3146	G	O4'-C1'-N9	-5.66	103.68	108.20
38	8	2	A	N1-C2-N3	5.66	132.13	129.30
38	8	70	G	C5-C6-O6	5.66	131.99	128.60
77	q1	15	ARG	NE-CZ-NH1	-5.66	117.47	120.30
36	1	810	A	N1-C2-N3	5.65	132.13	129.30
36	1	2754	G	N3-C2-N2	5.65	123.86	119.90
36	5	2856	G	N3-C2-N2	-5.65	115.94	119.90
1	2	625	C	N1-C2-O2	5.65	122.29	118.90
1	2	1002	G	N3-C4-C5	-5.65	125.77	128.60
1	2	1589	C	N3-C2-O2	-5.65	117.94	121.90
36	1	591	G	C8-N9-C1'	-5.65	119.65	127.00
36	1	1154	A	P-O3'-C3'	-5.65	112.92	119.70
36	1	1370	G	C8-N9-C1'	5.65	134.35	127.00
36	1	1470	U	O5'-P-OP1	-5.65	100.61	105.70
36	1	2191	U	N1-C2-N3	5.65	118.29	114.90
1	6	144	U	C5-C6-N1	5.65	125.53	122.70
1	6	1270	G	C5-C6-O6	-5.65	125.21	128.60
36	5	993	G	N9-C4-C5	5.65	107.66	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1455	U	C5-C4-O4	-5.65	122.51	125.90
36	5	2381	G	N3-C2-N2	-5.65	115.94	119.90
36	5	3053	G	C5-C6-O6	5.65	131.99	128.60
36	5	3394	U	C6-N1-C2	-5.65	117.61	121.00
36	1	1061	A	C4-C5-N7	-5.65	107.88	110.70
36	1	2119	A	C6-C5-N7	-5.65	128.34	132.30
36	1	2237	C	C2-N3-C4	-5.65	117.07	119.90
36	1	2675	C	C6-N1-C2	5.65	122.56	120.30
1	6	337	G	N1-C2-N3	-5.65	120.51	123.90
1	6	453	U	C6-N1-C1'	-5.65	113.29	121.20
1	6	575	C	N3-C4-C5	5.65	124.16	121.90
1	6	1644	C	C5-C4-N4	5.65	124.16	120.20
1	6	1780	G	C4-N9-C1'	5.65	133.84	126.50
36	5	850	U	C5-C4-O4	-5.65	122.51	125.90
36	5	916	G	C6-N1-C2	-5.65	121.71	125.10
36	5	1902	G	C2-N3-C4	-5.65	109.08	111.90
36	5	2175	U	C5-C6-N1	-5.65	119.88	122.70
36	5	2377	G	N3-C4-N9	-5.65	122.61	126.00
36	5	2387	A	C6-C5-N7	-5.65	128.34	132.30
36	5	3142	A	O5'-P-OP2	5.65	117.48	110.70
37	7	88	G	C2-N3-C4	5.65	114.72	111.90
1	2	1788	G	C4-C5-C6	-5.65	115.41	118.80
6	S4	38	LEU	CA-CB-CG	5.65	128.29	115.30
36	1	1316	C	C5-C6-N1	-5.65	118.18	121.00
36	1	1927	G	N1-C2-N2	-5.65	111.12	116.20
36	1	2371	G	N1-C2-N3	5.65	127.29	123.90
36	1	2711	C	N1-C2-O2	-5.65	115.51	118.90
36	5	405	U	C5-C4-O4	-5.65	122.51	125.90
36	5	2831	G	C4-N9-C1'	5.65	133.84	126.50
36	5	2923	U	N3-C4-O4	5.65	123.35	119.40
36	5	3029	A	OP1-P-O3'	5.65	117.63	105.20
76	q0	106	ARG	NE-CZ-NH1	-5.65	117.47	120.30
36	1	1310	G	N3-C4-N9	-5.65	122.61	126.00
36	1	2610	G	N7-C8-N9	5.65	115.92	113.10
36	1	2666	C	C2-N3-C4	5.65	122.72	119.90
36	1	2864	A	N3-C4-N9	-5.65	122.88	127.40
56	N0	24	LEU	CA-CB-CG	5.65	128.29	115.30
1	6	692	C	C6-N1-C2	5.65	122.56	120.30
36	5	424	G	OP1-P-O3'	-5.65	92.78	105.20
36	5	954	U	C4-C5-C6	5.65	123.09	119.70
36	5	1784	G	N3-C4-C5	-5.65	125.78	128.60
36	5	2833	A	N7-C8-N9	-5.65	110.98	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2859	U	C5-C6-N1	-5.65	119.88	122.70
36	5	2924	U	N3-C4-O4	5.65	123.35	119.40
36	5	3249	C	C5-C6-N1	-5.65	118.18	121.00
36	1	1530	U	OP2-P-O3'	5.65	117.62	105.20
36	1	1871	U	O5'-P-OP2	5.65	117.48	110.70
36	1	1947	G	C4-C5-N7	5.65	113.06	110.80
1	6	718	U	N3-C2-O2	-5.65	118.25	122.20
36	5	677	A	N1-C6-N6	5.65	121.99	118.60
36	5	1792	C	OP1-P-OP2	5.65	128.07	119.60
36	5	2936	A	C4-C5-C6	5.65	119.82	117.00
1	2	1121	C	N3-C2-O2	-5.64	117.95	121.90
36	1	86	G	C5-C6-O6	-5.64	125.21	128.60
36	1	1194	G	N3-C4-C5	-5.64	125.78	128.60
1	6	94	U	N3-C2-O2	5.64	126.15	122.20
1	6	112	A	N9-C4-C5	-5.64	103.54	105.80
1	6	474	A	C6-N1-C2	5.64	121.99	118.60
1	6	1569	A	O4'-C1'-N9	-5.64	103.68	108.20
1	6	1654	G	O5'-P-OP2	-5.64	100.62	105.70
36	5	182	U	N1-C2-N3	5.64	118.29	114.90
36	5	326	U	N3-C2-O2	-5.64	118.25	122.20
36	5	1337	A	N3-C4-N9	-5.64	122.88	127.40
36	5	2973	G	N1-C2-N2	5.64	121.28	116.20
36	5	3128	G	OP1-P-OP2	-5.64	111.13	119.60
1	2	322	G	O5'-P-OP1	-5.64	100.62	105.70
1	2	1163	A	C2-N3-C4	-5.64	107.78	110.60
36	1	962	A	C8-N9-C4	-5.64	103.54	105.80
36	1	2113	A	N9-C4-C5	5.64	108.06	105.80
36	1	2348	A	C2-N3-C4	-5.64	107.78	110.60
36	1	2914	G	N9-C4-C5	5.64	107.66	105.40
36	1	3119	U	O5'-P-OP1	-5.64	100.62	105.70
1	6	151	G	N3-C4-C5	5.64	131.42	128.60
1	6	474	A	N3-C4-C5	5.64	130.75	126.80
1	6	598	U	C5-C4-O4	-5.64	122.51	125.90
1	6	827	C	N1-C2-O2	-5.64	115.51	118.90
1	6	1060	U	N1-C2-O2	5.64	126.75	122.80
36	5	718	G	N9-C4-C5	-5.64	103.14	105.40
36	5	1653	G	C8-N9-C1'	5.64	134.34	127.00
1	2	1272	U	C4-C5-C6	5.64	123.08	119.70
36	1	178	U	C6-N1-C2	-5.64	117.62	121.00
36	1	1404	G	N1-C2-N2	-5.64	111.12	116.20
36	1	1511	U	C2-N3-C4	-5.64	123.62	127.00
1	6	351	C	OP1-P-O3'	5.64	117.61	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	827	C	C2-N1-C1'	-5.64	112.59	118.80
1	6	1780	G	N9-C4-C5	-5.64	103.14	105.40
36	5	1137	C	C5-C4-N4	-5.64	116.25	120.20
36	5	1900	A	C5-C6-N6	-5.64	119.19	123.70
36	5	2578	U	N1-C2-O2	5.64	126.75	122.80
36	5	2644	C	OP2-P-O3'	5.64	117.61	105.20
38	8	7	U	O5'-P-OP1	-5.64	100.62	105.70
1	2	822	U	C2-N1-C1'	5.64	124.47	117.70
1	2	891	A	C8-N9-C4	5.64	108.06	105.80
1	2	1486	G	N7-C8-N9	5.64	115.92	113.10
36	1	636	C	OP1-P-O3'	5.64	117.61	105.20
36	1	1295	G	N3-C2-N2	5.64	123.85	119.90
36	1	1587	A	N9-C4-C5	5.64	108.06	105.80
36	1	1786	G	OP2-P-O3'	5.64	117.61	105.20
36	1	2232	A	N1-C6-N6	5.64	121.98	118.60
36	1	2277	C	N3-C2-O2	-5.64	117.95	121.90
36	1	2921	U	C2-N1-C1'	5.64	124.47	117.70
1	6	419	G	C4-C5-N7	5.64	113.06	110.80
1	6	1782	A	C8-N9-C4	-5.64	103.54	105.80
36	5	416	A	OP2-P-O3'	5.64	117.61	105.20
36	5	995	U	N3-C2-O2	-5.64	118.25	122.20
36	5	1877	U	C5-C4-O4	5.64	129.28	125.90
36	5	3226	A	N3-C4-N9	-5.64	122.89	127.40
37	7	81	U	N3-C2-O2	-5.64	118.25	122.20
37	7	95	A	C4-C5-C6	5.64	119.82	117.00
59	n3	70	ARG	NE-CZ-NH2	-5.64	117.48	120.30
36	1	1205	A	N1-C6-N6	5.64	121.98	118.60
36	1	2101	C	P-O3'-C3'	5.64	126.47	119.70
36	1	2272	G	C2-N3-C4	-5.64	109.08	111.90
36	1	2343	C	C2-N1-C1'	5.64	125.00	118.80
36	5	2393	G	N3-C2-N2	5.64	123.85	119.90
1	2	1484	G	C5-C6-O6	5.64	131.98	128.60
36	1	348	A	OP1-P-O3'	5.64	117.60	105.20
36	1	611	A	C8-N9-C4	5.64	108.06	105.80
36	1	683	U	N1-C2-O2	-5.64	118.85	122.80
36	1	1362	G	C4-N9-C1'	-5.64	119.17	126.50
36	1	1527	C	O5'-P-OP1	-5.64	100.63	105.70
36	1	1855	U	OP1-P-O3'	5.64	117.60	105.20
36	1	2174	G	C5-N7-C8	-5.64	101.48	104.30
36	1	2309	A	C5-C6-N6	-5.64	119.19	123.70
36	1	2352	A	C6-C5-N7	-5.64	128.35	132.30
36	1	2872	A	C8-N9-C4	5.64	108.06	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2897	A	C6-N1-C2	-5.64	115.22	118.60
1	6	965	U	N3-C2-O2	-5.64	118.25	122.20
1	6	1169	G	C5-C6-O6	5.64	131.98	128.60
1	6	1457	C	C6-N1-C1'	-5.64	114.03	120.80
1	6	1656	U	C6-N1-C2	5.64	124.38	121.00
20	c8	116	LEU	CA-CB-CG	5.64	128.26	115.30
36	5	874	U	O4'-C1'-N1	5.64	112.71	108.20
36	5	2140	U	C6-N1-C2	-5.64	117.62	121.00
36	5	2303	A	C5-C6-N6	-5.64	119.19	123.70
36	5	3037	U	O5'-P-OP2	-5.64	100.63	105.70
36	5	3181	C	N3-C4-C5	-5.64	119.64	121.90
36	5	3195	U	OP1-P-O3'	5.64	117.60	105.20
40	l3	246	LEU	CA-CB-CG	-5.64	102.34	115.30
62	n6	30	LEU	CA-CB-CG	5.64	128.26	115.30
1	2	65	A	C8-N9-C4	-5.63	103.55	105.80
1	2	378	A	C5-C6-N1	-5.63	114.88	117.70
1	2	449	C	N3-C4-N4	-5.63	114.06	118.00
1	2	825	U	N3-C4-O4	5.63	123.34	119.40
36	1	44	U	C5-C6-N1	-5.63	119.88	122.70
36	1	883	A	C2-N3-C4	-5.63	107.78	110.60
36	1	938	C	N1-C2-N3	5.63	123.14	119.20
36	1	1010	G	N9-C4-C5	-5.63	103.15	105.40
36	1	1947	G	N1-C6-O6	5.63	123.28	119.90
36	1	2157	G	O5'-P-OP2	-5.63	100.63	105.70
36	1	2694	A	O5'-P-OP1	-5.63	100.63	105.70
36	1	2964	G	C6-C5-N7	-5.63	127.02	130.40
36	1	3207	U	N1-C2-N3	5.63	118.28	114.90
37	3	92	A	C4-C5-N7	5.63	113.52	110.70
38	4	81	U	C2-N1-C1'	5.63	124.46	117.70
67	O1	55	LEU	CA-CB-CG	5.63	128.26	115.30
1	6	250	C	C5-C6-N1	5.63	123.82	121.00
1	6	1658	G	N3-C4-N9	-5.63	122.62	126.00
1	6	1676	U	C5-C6-N1	-5.63	119.88	122.70
36	5	714	G	C8-N9-C1'	-5.63	119.67	127.00
36	5	969	C	C2-N3-C4	-5.63	117.08	119.90
36	5	2825	C	OP1-P-O3'	-5.63	92.80	105.20
36	5	3337	G	O5'-P-OP1	5.63	117.46	110.70
38	8	65	A	C8-N9-C4	-5.63	103.55	105.80
40	l3	62	ARG	NE-CZ-NH2	-5.63	117.48	120.30
1	2	73	U	P-O3'-C3'	5.63	126.46	119.70
1	2	119	A	N7-C8-N9	-5.63	110.98	113.80
1	2	463	U	N1-C2-N3	5.63	118.28	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	422	A	C8-N9-C4	-5.63	103.55	105.80
36	1	1363	A	N9-C4-C5	-5.63	103.55	105.80
36	1	2727	A	C5-N7-C8	5.63	106.72	103.90
1	6	318	U	N3-C4-O4	5.63	123.34	119.40
36	5	592	A	C4-C5-C6	-5.63	114.18	117.00
36	5	1369	A	N7-C8-N9	5.63	116.62	113.80
37	7	108	A	OP2-P-O3'	5.63	117.59	105.20
38	8	33	A	OP2-P-O3'	5.63	117.59	105.20
47	m0	3	ARG	NE-CZ-NH1	5.63	123.12	120.30
36	1	918	C	N3-C4-N4	-5.63	114.06	118.00
36	1	1086	C	O5'-P-OP2	-5.63	100.63	105.70
36	1	1383	G	C8-N9-C4	-5.63	104.15	106.40
36	1	2139	A	C6-C5-N7	-5.63	128.36	132.30
36	1	2924	U	N1-C2-O2	-5.63	118.86	122.80
36	1	3196	U	N3-C4-O4	-5.63	115.46	119.40
1	6	163	G	C5-N7-C8	-5.63	101.48	104.30
1	6	800	U	C6-N1-C1'	5.63	129.09	121.20
1	6	862	A	N1-C6-N6	-5.63	115.22	118.60
1	6	1324	G	C2-N3-C4	-5.63	109.08	111.90
36	5	589	A	N9-C4-C5	5.63	108.05	105.80
36	5	965	A	N3-C4-N9	5.63	131.91	127.40
36	5	2325	G	C2-N3-C4	-5.63	109.08	111.90
36	5	3312	U	N3-C4-C5	5.63	117.98	114.60
36	5	3327	G	N3-C2-N2	-5.63	115.96	119.90
38	8	23	U	C6-N1-C2	5.63	124.38	121.00
54	m8	49	LEU	CA-CB-CG	5.63	128.25	115.30
1	2	404	G	N1-C6-O6	-5.63	116.52	119.90
36	1	95	A	N9-C4-C5	5.63	108.05	105.80
36	1	2135	U	N3-C2-O2	-5.63	118.26	122.20
1	6	787	G	N1-C6-O6	-5.63	116.52	119.90
1	6	982	U	N3-C4-C5	5.63	117.98	114.60
36	5	794	U	C5-C6-N1	5.63	125.52	122.70
36	5	1397	C	C4-C5-C6	5.63	120.22	117.40
36	5	1847	A	C5-C6-N6	5.63	128.20	123.70
36	5	2647	A	C5-N7-C8	-5.63	101.08	103.90
1	2	352	A	C6-N1-C2	-5.63	115.22	118.60
36	1	85	A	C8-N9-C4	-5.63	103.55	105.80
36	1	196	G	N1-C6-O6	-5.63	116.52	119.90
36	1	1315	U	C5-C6-N1	-5.63	119.89	122.70
36	1	1838	G	OP1-P-O3'	5.63	117.58	105.20
36	1	1911	A	C8-N9-C4	-5.63	103.55	105.80
36	1	2830	G	N3-C4-N9	-5.63	122.62	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2914	G	C8-N9-C4	-5.63	104.15	106.40
36	1	3309	G	C2-N3-C4	-5.63	109.09	111.90
38	4	27	U	C4-C5-C6	-5.63	116.32	119.70
1	6	972	G	N3-C4-C5	-5.63	125.79	128.60
1	6	1623	C	N3-C4-N4	5.63	121.94	118.00
36	5	569	A	C4-C5-N7	5.63	113.52	110.70
36	5	1880	U	C5-C4-O4	-5.63	122.52	125.90
36	5	2208	A	C4-C5-N7	5.63	113.51	110.70
36	5	2343	C	C2-N3-C4	-5.63	117.08	119.90
37	7	20	A	OP1-P-OP2	-5.63	111.16	119.60
37	7	88	G	OP2-P-O3'	5.63	117.58	105.20
1	2	182	A	N7-C8-N9	5.63	116.61	113.80
36	1	517	G	O5'-P-OP1	-5.63	100.64	105.70
36	1	1361	U	C5-C4-O4	-5.63	122.53	125.90
36	1	2204	C	C2-N1-C1'	5.63	124.99	118.80
36	1	2635	A	C4-C5-C6	5.63	119.81	117.00
36	1	3260	G	C4-N9-C1'	5.63	133.81	126.50
36	1	3264	G	C4-N9-C1'	5.63	133.81	126.50
41	L4	244	LEU	CA-CB-CG	5.63	128.24	115.30
44	L7	90	LYS	CD-CE-NZ	5.63	124.64	111.70
1	6	1101	G	N3-C4-N9	5.63	129.38	126.00
1	6	1396	U	C6-N1-C2	-5.63	117.62	121.00
13	c1	63	LEU	CA-CB-CG	-5.63	102.36	115.30
36	5	591	G	C5-C6-N1	-5.63	108.69	111.50
36	5	2706	G	O5'-P-OP1	-5.63	100.64	105.70
36	5	2999	U	O5'-P-OP1	-5.63	100.64	105.70
37	7	88	G	N1-C6-O6	-5.63	116.53	119.90
38	8	22	U	C2-N3-C4	-5.63	123.62	127.00
36	1	1095	U	C5-C6-N1	5.62	125.51	122.70
36	1	1521	G	O4'-C1'-N9	5.62	112.70	108.20
36	1	2210	G	C4-N9-C1'	-5.62	119.19	126.50
1	6	332	U	N1-C2-O2	5.62	126.74	122.80
1	6	1569	A	C4-C5-C6	5.62	119.81	117.00
1	6	1660	A	OP2-P-O3'	5.62	117.58	105.20
1	2	797	G	N3-C4-N9	-5.62	122.63	126.00
36	1	34	A	OP2-P-O3'	5.62	117.57	105.20
36	1	813	G	C6-C5-N7	-5.62	127.03	130.40
36	1	861	C	N1-C2-N3	5.62	123.14	119.20
36	1	1059	G	C8-N9-C4	5.62	108.65	106.40
36	1	1110	U	C6-N1-C2	5.62	124.37	121.00
36	1	1379	G	O4'-C1'-N9	-5.62	103.70	108.20
36	1	1635	G	C8-N9-C1'	-5.62	119.69	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1651	U	O4'-C1'-N1	5.62	112.70	108.20
36	5	368	G	N1-C2-N3	5.62	127.27	123.90
36	5	612	U	N1-C2-O2	-5.62	118.86	122.80
36	5	1860	G	N9-C4-C5	5.62	107.65	105.40
36	5	2262	A	C4-C5-N7	5.62	113.51	110.70
36	5	2335	G	C8-N9-C4	5.62	108.65	106.40
36	5	2354	C	N3-C2-O2	5.62	125.84	121.90
36	5	2728	G	C8-N9-C4	-5.62	104.15	106.40
36	5	2860	U	N1-C2-O2	5.62	126.74	122.80
36	5	2881	C	C2-N1-C1'	-5.62	112.61	118.80
36	5	2931	C	OP1-P-O3'	5.62	117.57	105.20
36	5	3184	A	C4-C5-N7	5.62	113.51	110.70
43	l6	20	LYS	CD-CE-NZ	5.62	124.63	111.70
1	2	567	A	C8-N9-C4	5.62	108.05	105.80
36	1	308	A	O5'-P-OP1	5.62	117.45	110.70
36	1	1020	G	C4-C5-N7	5.62	113.05	110.80
36	1	1856	C	N1-C2-O2	5.62	122.27	118.90
36	1	2267	C	O5'-P-OP2	5.62	117.45	110.70
36	1	2554	A	C8-N9-C4	5.62	108.05	105.80
36	1	3375	A	N1-C2-N3	5.62	132.11	129.30
38	4	44	A	N7-C8-N9	5.62	116.61	113.80
1	6	611	U	C4-C5-C6	5.62	123.07	119.70
36	5	191	U	O5'-P-OP1	5.62	117.45	110.70
36	5	1411	C	C2-N3-C4	-5.62	117.09	119.90
36	5	1598	G	N3-C4-C5	-5.62	125.79	128.60
36	5	3044	G	N7-C8-N9	5.62	115.91	113.10
36	5	3207	U	N1-C2-N3	5.62	118.27	114.90
36	5	3295	A	N9-C4-C5	5.62	108.05	105.80
36	1	1436	U	N3-C2-O2	-5.62	118.27	122.20
1	6	107	C	N1-C2-N3	5.62	123.13	119.20
36	5	868	C	O5'-P-OP2	5.62	117.44	110.70
36	5	1216	C	C5-C4-N4	-5.62	116.27	120.20
36	5	1498	A	C5-C6-N6	5.62	128.20	123.70
36	5	2514	U	C6-N1-C1'	5.62	129.07	121.20
36	5	3379	C	C5-C6-N1	-5.62	118.19	121.00
1	2	30	G	C4-C5-N7	5.62	113.05	110.80
1	2	551	G	N3-C4-C5	5.62	131.41	128.60
1	2	555	A	N9-C4-C5	5.62	108.05	105.80
36	1	299	G	C4-C5-N7	5.62	113.05	110.80
36	1	647	A	N1-C2-N3	5.62	132.11	129.30
36	1	754	G	N9-C4-C5	-5.62	103.15	105.40
36	1	830	A	C2-N3-C4	-5.62	107.79	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	996	A	C5-C6-N6	-5.62	119.20	123.70
36	1	3017	A	OP2-P-O3'	5.62	117.56	105.20
36	1	3186	A	C8-N9-C4	-5.62	103.55	105.80
38	4	99	C	C5-C4-N4	-5.62	116.27	120.20
1	6	313	U	C5-C4-O4	5.62	129.27	125.90
1	6	1089	U	C5-C6-N1	5.62	125.51	122.70
36	5	649	A	C6-C5-N7	-5.62	128.37	132.30
36	5	718	G	C5-C6-O6	-5.62	125.23	128.60
36	5	1410	U	O5'-P-OP1	5.62	117.44	110.70
36	5	2865	U	C5-C4-O4	5.62	129.27	125.90
36	5	2867	C	O4'-C1'-N1	5.62	112.69	108.20
37	7	5	G	N1-C6-O6	-5.62	116.53	119.90
1	2	529	A	N7-C8-N9	-5.62	110.99	113.80
36	1	412	G	C8-N9-C4	-5.62	104.15	106.40
36	1	651	G	O5'-P-OP1	5.62	117.44	110.70
36	1	1000	C	C5-C4-N4	-5.62	116.27	120.20
36	1	1174	G	N3-C2-N2	5.62	123.83	119.90
1	6	786	C	N3-C2-O2	-5.62	117.97	121.90
36	5	769	G	N3-C4-C5	5.62	131.41	128.60
36	5	1340	G	C5-N7-C8	-5.62	101.49	104.30
36	5	1491	A	N1-C2-N3	5.62	132.11	129.30
36	5	2626	A	N1-C6-N6	5.62	121.97	118.60
36	5	3127	A	OP2-P-O3'	5.62	117.56	105.20
38	8	42	G	O5'-P-OP1	5.62	117.44	110.70
1	2	1080	U	C6-N1-C2	-5.62	117.63	121.00
36	1	387	A	C5-N7-C8	-5.62	101.09	103.90
36	1	414	U	N3-C2-O2	-5.62	118.27	122.20
36	1	1048	A	C2-N3-C4	5.62	113.41	110.60
36	1	1386	A	C8-N9-C1'	5.62	137.81	127.70
36	1	2323	G	O5'-P-OP1	5.62	117.44	110.70
36	1	3119	U	C6-N1-C2	-5.62	117.63	121.00
36	1	3186	A	N1-C2-N3	5.62	132.11	129.30
1	6	31	C	N3-C4-C5	-5.62	119.65	121.90
1	6	1443	U	N1-C2-O2	5.62	126.73	122.80
1	6	1576	A	C8-N9-C4	5.62	108.05	105.80
36	5	526	C	C6-N1-C1'	-5.62	114.06	120.80
36	5	639	G	OP1-P-O3'	5.62	117.55	105.20
36	5	966	U	N3-C4-O4	5.62	123.33	119.40
36	5	1475	A	N1-C6-N6	-5.62	115.23	118.60
36	5	2514	U	C6-N1-C2	-5.62	117.63	121.00
36	5	2620	G	N7-C8-N9	5.62	115.91	113.10
36	5	2659	G	C5-C6-O6	-5.62	125.23	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3164	C	C6-N1-C1'	-5.62	114.06	120.80
36	5	3184	A	OP2-P-O3'	5.62	117.56	105.20
36	1	873	C	N1-C2-N3	5.61	123.13	119.20
36	1	1364	C	C6-N1-C2	5.61	122.55	120.30
36	1	1443	G	OP1-P-O3'	5.61	117.55	105.20
36	1	2740	A	C5-C6-N1	5.61	120.51	117.70
36	1	3372	A	N7-C8-N9	-5.61	110.99	113.80
1	6	1168	U	C6-N1-C2	-5.61	117.63	121.00
1	6	1592	A	C5-C6-N6	5.61	128.19	123.70
36	5	297	G	N3-C4-N9	5.61	129.37	126.00
36	5	1365	G	N9-C4-C5	5.61	107.65	105.40
36	5	1505	C	N1-C2-O2	-5.61	115.53	118.90
36	5	1924	U	C2-N1-C1'	-5.61	110.96	117.70
36	5	2825	C	C2-N3-C4	5.61	122.71	119.90
1	2	458	G	C5-C6-N1	-5.61	108.69	111.50
36	1	675	C	C6-N1-C2	-5.61	118.06	120.30
36	1	861	C	N3-C2-O2	-5.61	117.97	121.90
36	1	3054	U	C6-N1-C1'	5.61	129.06	121.20
36	1	3216	G	N1-C2-N2	-5.61	111.15	116.20
36	5	636	C	N3-C4-N4	5.61	121.93	118.00
36	5	831	G	C8-N9-C4	5.61	108.64	106.40
36	5	1733	G	N1-C6-O6	5.61	123.27	119.90
36	1	29	C	N3-C4-N4	5.61	121.93	118.00
36	1	334	A	C4-C5-C6	-5.61	114.19	117.00
36	1	1056	U	N1-C2-N3	5.61	118.27	114.90
36	1	2272	G	N1-C6-O6	5.61	123.27	119.90
36	1	2808	A	C8-N9-C1'	-5.61	117.60	127.70
36	1	2893	C	O5'-P-OP1	-5.61	100.65	105.70
36	1	3040	A	C5-N7-C8	5.61	106.70	103.90
1	6	23	G	N3-C4-N9	-5.61	122.63	126.00
1	6	430	G	N3-C4-C5	-5.61	125.80	128.60
1	6	993	A	C2-N3-C4	-5.61	107.79	110.60
1	6	1650	U	P-O3'-C3'	-5.61	112.97	119.70
36	5	408	A	N1-C2-N3	5.61	132.10	129.30
36	5	1138	U	C2-N3-C4	-5.61	123.63	127.00
36	5	2938	G	C6-C5-N7	-5.61	127.03	130.40
36	1	231	G	C8-N9-C4	5.61	108.64	106.40
36	1	299	G	C5-C6-O6	-5.61	125.23	128.60
1	6	865	A	C5-C6-N1	5.61	120.50	117.70
1	6	1117	U	N3-C4-C5	-5.61	111.23	114.60
1	6	1186	U	N3-C4-C5	5.61	117.97	114.60
36	5	1634	G	N3-C4-N9	5.61	129.37	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1661	G	C8-N9-C4	5.61	108.64	106.40
36	1	637	C	O5'-P-OP1	-5.61	100.65	105.70
36	1	709	A	N7-C8-N9	-5.61	111.00	113.80
36	1	973	A	C6-C5-N7	5.61	136.22	132.30
36	1	1893	A	C6-C5-N7	-5.61	128.38	132.30
36	1	1927	G	N3-C2-N2	5.61	123.83	119.90
36	1	2193	U	N1-C2-N3	5.61	118.27	114.90
36	1	2675	C	N3-C2-O2	5.61	125.83	121.90
36	1	3114	A	C4-C5-C6	5.61	119.80	117.00
1	6	457	G	C5-C6-O6	-5.61	125.24	128.60
1	6	1118	G	O5'-P-OP2	-5.61	100.65	105.70
1	6	1775	U	C5-C6-N1	-5.61	119.90	122.70
36	5	365	A	C5-C6-N6	-5.61	119.21	123.70
36	5	2208	A	C6-C5-N7	-5.61	128.37	132.30
36	5	2304	C	C5-C6-N1	5.61	123.80	121.00
36	5	2391	G	C5-N7-C8	5.61	107.10	104.30
36	5	2817	A	C6-N1-C2	-5.61	115.23	118.60
36	5	2918	G	C5-C6-N1	5.61	114.30	111.50
38	8	105	A	N1-C6-N6	5.61	121.96	118.60
1	2	982	U	OP2-P-O3'	5.61	117.53	105.20
36	1	238	A	C8-N9-C4	-5.61	103.56	105.80
36	1	973	A	C4-N9-C1'	-5.61	116.21	126.30
36	1	1220	U	N1-C2-N3	5.61	118.26	114.90
36	1	1307	G	O4'-C1'-N9	-5.61	103.72	108.20
36	1	2874	G	C5-C6-O6	5.61	131.96	128.60
1	6	746	A	C8-N9-C4	-5.61	103.56	105.80
36	5	189	G	C6-N1-C2	-5.61	121.74	125.10
36	5	199	A	O4'-C1'-N9	5.61	112.68	108.20
36	5	276	U	C5-C4-O4	-5.61	122.54	125.90
36	5	567	G	N9-C4-C5	-5.61	103.16	105.40
36	5	2389	C	N3-C4-C5	5.61	124.14	121.90
36	5	3129	A	N3-C4-C5	5.61	130.72	126.80
36	5	3272	C	C4-C5-C6	5.61	120.20	117.40
36	1	870	G	N3-C4-N9	-5.60	122.64	126.00
36	1	1064	A	C6-C5-N7	5.60	136.22	132.30
36	1	1851	G	C4-C5-N7	5.60	113.04	110.80
36	1	1922	A	C5-C6-N6	-5.60	119.22	123.70
1	6	211	U	O5'-P-OP2	-5.60	100.66	105.70
36	5	632	G	N3-C4-C5	-5.60	125.80	128.60
36	5	702	C	C6-N1-C2	-5.60	118.06	120.30
36	5	883	A	N1-C6-N6	-5.60	115.24	118.60
36	5	998	A	C5-N7-C8	5.60	106.70	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2601	A	N7-C8-N9	-5.60	111.00	113.80
1	2	1217	A	C4-C5-N7	5.60	113.50	110.70
36	1	621	A	C8-N9-C4	-5.60	103.56	105.80
36	1	2139	A	C2-N3-C4	-5.60	107.80	110.60
36	1	2611	U	N3-C2-O2	-5.60	118.28	122.20
36	1	2831	G	N7-C8-N9	5.60	115.90	113.10
36	1	2932	U	C2-N1-C1'	-5.60	110.98	117.70
36	1	3135	U	N1-C2-N3	5.60	118.26	114.90
36	1	3340	G	C8-N9-C4	-5.60	104.16	106.40
37	3	33	U	C2-N1-C1'	5.60	124.42	117.70
38	4	82	U	P-O3'-C3'	5.60	126.42	119.70
1	6	381	C	N3-C4-C5	5.60	124.14	121.90
1	6	1277	G	C4-C5-N7	5.60	113.04	110.80
1	6	1658	G	C2-N3-C4	-5.60	109.10	111.90
36	5	1400	G	N7-C8-N9	5.60	115.90	113.10
36	5	1592	G	N9-C4-C5	5.60	107.64	105.40
36	5	1910	A	C4-C5-N7	5.60	113.50	110.70
36	5	2202	C	N1-C2-O2	-5.60	115.54	118.90
36	5	2413	A	C8-N9-C4	-5.60	103.56	105.80
36	5	2572	C	N3-C2-O2	-5.60	117.98	121.90
36	5	2610	G	N1-C6-O6	5.60	123.26	119.90
36	5	3093	C	C2-N3-C4	-5.60	117.10	119.90
36	5	3245	A	C8-N9-C4	-5.60	103.56	105.80
38	8	5	U	N3-C2-O2	5.60	126.12	122.20
38	8	26	U	C5-C4-O4	5.60	129.26	125.90
1	2	628	G	N1-C6-O6	5.60	123.26	119.90
36	1	595	G	C6-C5-N7	-5.60	127.04	130.40
36	1	623	U	C6-N1-C2	-5.60	117.64	121.00
36	1	2893	C	C4-C5-C6	5.60	120.20	117.40
36	1	3075	G	N3-C2-N2	-5.60	115.98	119.90
36	1	3324	C	C5-C4-N4	5.60	124.12	120.20
1	6	383	G	N1-C6-O6	5.60	123.26	119.90
1	6	1700	C	C2-N3-C4	5.60	122.70	119.90
36	5	2677	G	C5-C6-O6	-5.60	125.24	128.60
36	1	823	C	N3-C2-O2	5.60	125.82	121.90
36	1	973	A	N9-C4-C5	5.60	108.04	105.80
36	1	1127	G	N3-C4-N9	-5.60	122.64	126.00
36	1	2216	G	C5-C6-N1	5.60	114.30	111.50
36	1	2775	U	C2-N1-C1'	-5.60	110.98	117.70
36	1	3006	A	N9-C4-C5	5.60	108.04	105.80
1	6	391	A	C5-C6-N1	-5.60	114.90	117.70
1	6	540	G	C4-N9-C1'	-5.60	119.22	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	956	C	C5-C6-N1	-5.60	118.20	121.00
1	6	969	C	C5-C4-N4	-5.60	116.28	120.20
1	6	1424	A	O5'-P-OP1	5.60	117.42	110.70
36	5	883	A	N1-C2-N3	5.60	132.10	129.30
36	5	913	A	N3-C4-C5	-5.60	122.88	126.80
36	5	1320	C	N3-C4-C5	-5.60	119.66	121.90
36	5	1403	C	O4'-C1'-N1	-5.60	103.72	108.20
36	5	2362	C	OP1-P-O3'	5.60	117.52	105.20
36	5	2394	G	C5-C6-N1	-5.60	108.70	111.50
36	5	2890	A	C5-C6-N6	5.60	128.18	123.70
36	5	3213	A	N9-C4-C5	-5.60	103.56	105.80
1	2	1080	U	C5-C4-O4	5.60	129.26	125.90
36	1	233	C	OP1-P-OP2	5.60	128.00	119.60
36	1	885	U	O5'-P-OP1	-5.60	100.66	105.70
36	1	950	G	N3-C2-N2	-5.60	115.98	119.90
36	1	1402	C	C4-C5-C6	5.60	120.20	117.40
36	1	2304	C	C5-C6-N1	-5.60	118.20	121.00
36	1	2556	C	N3-C4-N4	-5.60	114.08	118.00
36	1	2839	G	OP2-P-O3'	5.60	117.52	105.20
1	6	1106	U	C2-N1-C1'	5.60	124.42	117.70
1	6	1576	A	N9-C4-C5	-5.60	103.56	105.80
1	6	1777	G	N7-C8-N9	5.60	115.90	113.10
18	c6	30	LYS	CD-CE-NZ	5.60	124.57	111.70
20	c8	115	ARG	NE-CZ-NH1	-5.60	117.50	120.30
36	5	1238	C	P-O3'-C3'	5.60	126.42	119.70
36	5	1476	G	C8-N9-C4	5.60	108.64	106.40
36	5	1498	A	C6-N1-C2	-5.60	115.24	118.60
36	5	2380	U	N1-C2-N3	5.60	118.26	114.90
36	5	2418	G	C4-C5-C6	5.60	122.16	118.80
36	5	2600	C	C5-C6-N1	5.60	123.80	121.00
36	5	3061	G	N3-C2-N2	-5.60	115.98	119.90
36	5	3176	G	C4-N9-C1'	5.60	133.78	126.50
37	7	113	C	C4-C5-C6	5.60	120.20	117.40
1	2	1727	G	OP1-P-OP2	5.60	127.99	119.60
1	6	1167	G	C6-C5-N7	-5.60	127.04	130.40
36	5	34	A	C4-C5-C6	5.60	119.80	117.00
36	5	429	U	C5-C6-N1	-5.60	119.90	122.70
36	5	698	U	OP2-P-O3'	5.60	117.51	105.20
36	5	1810	A	N1-C6-N6	5.60	121.96	118.60
36	5	2208	A	N7-C8-N9	5.60	116.60	113.80
36	5	2754	G	N3-C4-C5	-5.60	125.80	128.60
1	2	1137	A	C4-C5-C6	-5.59	114.20	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1466	G	C8-N9-C4	-5.59	104.16	106.40
36	1	693	A	C4-C5-N7	5.59	113.50	110.70
36	1	2820	A	N3-C4-C5	5.59	130.72	126.80
36	1	3042	U	C6-N1-C1'	5.59	129.03	121.20
36	1	3163	A	C4-C5-N7	5.59	113.50	110.70
1	6	867	G	C6-C5-N7	5.59	133.76	130.40
36	5	404	G	O4'-C1'-N9	-5.59	103.72	108.20
36	5	647	A	C8-N9-C4	-5.59	103.56	105.80
36	5	1301	A	C4-C5-C6	5.59	119.80	117.00
36	5	1848	G	O4'-C1'-N9	-5.59	103.72	108.20
36	5	2197	C	N3-C2-O2	5.59	125.82	121.90
36	5	2392	C	P-O3'-C3'	5.59	126.41	119.70
36	5	2400	G	N9-C4-C5	5.59	107.64	105.40
36	1	1792	C	C2-N1-C1'	5.59	124.95	118.80
1	6	1668	G	C5-C6-O6	-5.59	125.24	128.60
36	5	1318	A	N7-C8-N9	-5.59	111.00	113.80
36	5	1603	A	N3-C4-C5	-5.59	122.89	126.80
36	5	2263	C	N3-C4-C5	-5.59	119.66	121.90
36	5	2889	C	C6-N1-C2	5.59	122.54	120.30
37	7	75	G	N7-C8-N9	-5.59	110.30	113.10
1	2	1385	G	C8-N9-C4	5.59	108.64	106.40
36	1	47	C	N3-C4-N4	5.59	121.91	118.00
36	1	523	A	O4'-C1'-N9	-5.59	103.73	108.20
36	1	857	G	C5-C6-O6	5.59	131.96	128.60
36	1	865	U	C6-N1-C2	5.59	124.36	121.00
36	1	2433	U	N3-C2-O2	-5.59	118.29	122.20
1	6	1101	G	C6-N1-C2	-5.59	121.75	125.10
1	6	1123	C	N3-C2-O2	5.59	125.81	121.90
1	6	1243	G	C4-C5-C6	5.59	122.16	118.80
1	6	1361	U	C6-N1-C1'	-5.59	113.37	121.20
1	6	1642	G	C5-N7-C8	-5.59	101.50	104.30
36	5	214	G	N1-C2-N3	-5.59	120.55	123.90
36	5	362	U	C6-N1-C2	-5.59	117.64	121.00
36	5	590	G	C4-C5-N7	-5.59	108.56	110.80
36	5	1127	G	C6-N1-C2	-5.59	121.75	125.10
36	5	1355	A	C5-C6-N1	-5.59	114.90	117.70
36	5	1527	C	N3-C2-O2	5.59	125.81	121.90
37	7	90	U	N3-C4-O4	5.59	123.31	119.40
36	1	369	A	C6-N1-C2	-5.59	115.25	118.60
36	1	2324	A	N1-C6-N6	5.59	121.95	118.60
36	1	3132	C	O5'-P-OP2	5.59	117.41	110.70
36	1	3140	G	C5-N7-C8	-5.59	101.51	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3366	G	N3-C4-C5	-5.59	125.81	128.60
38	4	43	A	OP1-P-OP2	-5.59	111.22	119.60
1	6	408	C	O5'-P-OP1	5.59	117.41	110.70
1	6	1470	C	O5'-P-OP1	-5.59	100.67	105.70
36	5	1058	U	C6-N1-C2	5.59	124.35	121.00
36	5	1184	A	OP2-P-O3'	5.59	117.50	105.20
36	5	1293	U	N3-C4-C5	5.59	117.95	114.60
36	5	2295	A	OP1-P-OP2	5.59	127.98	119.60
36	5	3065	G	N1-C2-N2	-5.59	111.17	116.20
36	5	3192	U	N1-C2-O2	-5.59	118.89	122.80
1	6	1002	G	C6-C5-N7	5.59	133.75	130.40
36	5	697	A	C5-N7-C8	5.59	106.69	103.90
36	5	717	C	C6-N1-C1'	-5.59	114.09	120.80
36	5	835	G	N9-C4-C5	5.59	107.64	105.40
36	5	1376	C	OP1-P-OP2	5.59	127.98	119.60
36	5	1573	G	C5-C6-O6	5.59	131.95	128.60
36	5	2219	A	C8-N9-C4	5.59	108.03	105.80
1	2	22	A	N1-C6-N6	-5.59	115.25	118.60
36	1	820	A	N1-C6-N6	-5.59	115.25	118.60
36	1	1292	C	N3-C2-O2	5.59	125.81	121.90
36	1	1371	G	C5-N7-C8	5.59	107.09	104.30
36	1	2733	A	OP1-P-OP2	-5.59	111.22	119.60
36	1	3136	G	N7-C8-N9	5.59	115.89	113.10
36	1	3330	A	C5-N7-C8	5.59	106.69	103.90
1	6	574	G	C8-N9-C4	5.59	108.63	106.40
1	6	1207	C	C6-N1-C2	5.59	122.53	120.30
36	5	78	U	N3-C4-O4	5.59	123.31	119.40
36	5	953	G	C8-N9-C4	5.59	108.64	106.40
36	5	1186	G	C6-C5-N7	-5.59	127.05	130.40
36	5	1513	G	C6-C5-N7	-5.59	127.05	130.40
36	5	2848	G	C5-C6-N1	-5.59	108.71	111.50
36	5	2856	G	N7-C8-N9	5.59	115.89	113.10
36	5	3056	U	O4'-C1'-N1	-5.59	103.73	108.20
38	8	156	U	C2-N1-C1'	5.59	124.41	117.70
36	1	281	G	N7-C8-N9	5.58	115.89	113.10
36	1	1345	G	C4-C5-N7	5.58	113.03	110.80
36	1	2275	A	C5-N7-C8	-5.58	101.11	103.90
36	1	2299	A	OP1-P-O3'	5.58	117.49	105.20
36	1	2348	A	OP2-P-O3'	5.58	117.49	105.20
1	6	398	G	C2-N3-C4	5.58	114.69	111.90
1	6	1565	C	N1-C2-N3	5.58	123.11	119.20
36	5	421	G	C6-C5-N7	-5.58	127.05	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1871	U	C2-N1-C1'	5.58	124.40	117.70
36	5	2679	A	C5-N7-C8	5.58	106.69	103.90
1	2	441	A	N1-C6-N6	-5.58	115.25	118.60
36	1	685	G	N3-C2-N2	5.58	123.81	119.90
36	1	1163	A	C8-N9-C4	5.58	108.03	105.80
36	1	1188	U	N3-C2-O2	-5.58	118.29	122.20
36	1	1495	U	N1-C2-N3	5.58	118.25	114.90
36	1	2371	G	N1-C6-O6	-5.58	116.55	119.90
36	1	2634	U	C6-N1-C1'	-5.58	113.38	121.20
36	1	2821	C	N3-C4-N4	5.58	121.91	118.00
1	6	1550	A	C4-C5-N7	5.58	113.49	110.70
36	5	971	G	OP2-P-O3'	5.58	117.48	105.20
36	5	1239	C	O5'-P-OP2	-5.58	100.67	105.70
36	5	2663	G	C6-N1-C2	-5.58	121.75	125.10
36	5	3301	U	N3-C2-O2	5.58	126.11	122.20
37	7	22	A	N9-C4-C5	5.58	108.03	105.80
37	7	111	U	N3-C4-C5	-5.58	111.25	114.60
38	8	73	U	N3-C2-O2	-5.58	118.29	122.20
1	2	993	A	C4-C5-N7	5.58	113.49	110.70
36	1	80	G	C5-C6-N1	5.58	114.29	111.50
36	1	209	A	N1-C2-N3	5.58	132.09	129.30
36	1	676	G	C4-C5-C6	5.58	122.15	118.80
36	1	722	G	C4-N9-C1'	5.58	133.76	126.50
36	1	926	A	C4-C5-C6	-5.58	114.21	117.00
36	1	2952	G	N3-C4-N9	-5.58	122.65	126.00
1	6	87	C	C6-N1-C2	-5.58	118.07	120.30
36	5	638	C	N3-C4-C5	-5.58	119.67	121.90
36	5	1186	G	C4-C5-N7	5.58	113.03	110.80
36	5	2248	C	N3-C2-O2	5.58	125.81	121.90
36	5	2296	A	N7-C8-N9	-5.58	111.01	113.80
1	2	95	G	C5-C6-O6	5.58	131.95	128.60
1	2	598	U	C6-N1-C2	-5.58	117.65	121.00
1	2	807	A	C5-C6-N6	-5.58	119.24	123.70
1	2	1209	C	N3-C4-C5	5.58	124.13	121.90
36	1	2284	C	C2-N3-C4	5.58	122.69	119.90
36	1	2374	C	C5-C6-N1	-5.58	118.21	121.00
36	5	80	G	OP2-P-O3'	5.58	117.48	105.20
36	5	217	U	C5-C4-O4	5.58	129.25	125.90
36	5	232	G	C4-N9-C1'	-5.58	119.25	126.50
36	5	726	G	C4-N9-C1'	5.58	133.75	126.50
36	5	954	U	C5-C4-O4	5.58	129.25	125.90
36	5	1896	A	C4-C5-C6	-5.58	114.21	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2609	A	O5'-P-OP2	-5.58	100.68	105.70
36	5	2883	U	C5-C4-O4	5.58	129.25	125.90
36	1	323	A	N1-C6-N6	-5.58	115.25	118.60
36	1	897	U	O5'-P-OP2	-5.58	100.68	105.70
36	1	1511	U	C5-C4-O4	5.58	129.25	125.90
36	1	2199	G	N1-C2-N2	-5.58	111.18	116.20
36	1	2276	G	C4-C5-N7	-5.58	108.57	110.80
36	1	2424	A	OP1-P-O3'	5.58	117.47	105.20
37	3	72	A	O5'-P-OP1	-5.58	100.68	105.70
38	4	104	A	C8-N9-C4	-5.58	103.57	105.80
1	6	39	A	C4-C5-C6	5.58	119.79	117.00
36	5	1370	G	N3-C2-N2	-5.58	116.00	119.90
36	5	2356	A	N1-C6-N6	-5.58	115.25	118.60
36	5	2401	A	C6-N1-C2	5.58	121.95	118.60
36	5	2411	U	N1-C2-O2	-5.58	118.89	122.80
36	5	3061	G	N9-C1'-C2'	-5.58	105.86	112.00
36	1	1367	G	C6-C5-N7	-5.58	127.05	130.40
36	1	2185	G	C2-N3-C4	-5.58	109.11	111.90
1	6	34	G	C5-C6-O6	5.58	131.95	128.60
1	6	1409	G	N1-C6-O6	5.58	123.25	119.90
36	5	240	U	C5-C4-O4	5.58	129.25	125.90
36	5	295	A	O4'-C1'-N9	-5.58	103.74	108.20
36	5	917	A	N3-C4-C5	5.58	130.70	126.80
36	5	2835	U	C4-C5-C6	5.58	123.05	119.70
38	8	57	C	C5-C6-N1	-5.58	118.21	121.00
1	2	825	U	C6-N1-C2	-5.58	117.66	121.00
36	1	108	A	C5-C6-N6	-5.58	119.24	123.70
36	1	657	A	N7-C8-N9	5.58	116.59	113.80
36	1	1453	A	C8-N9-C1'	-5.58	117.67	127.70
36	1	2713	U	C5-C4-O4	-5.58	122.55	125.90
1	6	413	U	N1-C2-N3	5.58	118.25	114.90
1	6	1136	U	C6-N1-C2	5.58	124.34	121.00
36	5	2801	A	C4-C5-N7	5.58	113.49	110.70
36	5	3173	G	O5'-P-OP2	-5.58	100.68	105.70
56	n0	128	GLU	OE1-CD-OE2	-5.58	116.61	123.30
1	2	100	A	C6-N1-C2	-5.57	115.25	118.60
36	1	6	A	N7-C8-N9	5.57	116.59	113.80
36	1	339	C	N3-C2-O2	-5.57	118.00	121.90
36	1	2954	U	N1-C2-N3	-5.57	111.56	114.90
54	M8	159	LYS	CD-CE-NZ	5.57	124.52	111.70
1	6	565	C	C5-C4-N4	-5.57	116.30	120.20
1	6	1601	G	C5-C6-N1	5.57	114.29	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1727	G	N7-C8-N9	-5.57	110.31	113.10
36	5	20	A	C6-N1-C2	-5.57	115.26	118.60
36	5	192	C	N1-C2-O2	5.57	122.24	118.90
36	5	355	A	C2-N3-C4	-5.57	107.81	110.60
36	5	1426	C	C5-C6-N1	-5.57	118.21	121.00
36	5	1476	G	C8-N9-C1'	-5.57	119.75	127.00
36	5	2899	C	N3-C2-O2	-5.57	118.00	121.90
36	5	2951	G	C5-N7-C8	-5.57	101.51	104.30
37	7	15	C	C5-C6-N1	5.57	123.79	121.00
61	n5	40	LEU	CB-CG-CD2	5.57	120.47	111.00
36	1	366	A	N1-C2-N3	5.57	132.09	129.30
36	1	1180	A	C6-C5-N7	5.57	136.20	132.30
36	1	3259	U	N3-C4-C5	-5.57	111.26	114.60
38	4	13	A	C8-N9-C4	-5.57	103.57	105.80
53	M7	3	ARG	NE-CZ-NH2	-5.57	117.51	120.30
1	6	251	A	C6-C5-N7	-5.57	128.40	132.30
1	6	454	U	C5-C6-N1	-5.57	119.91	122.70
1	6	1139	A	C6-C5-N7	-5.57	128.40	132.30
1	6	1464	G	OP2-P-O3'	5.57	117.46	105.20
36	5	1766	G	N7-C8-N9	5.57	115.89	113.10
36	5	2155	G	C4-N9-C1'	5.57	133.74	126.50
36	5	3143	C	C2-N3-C4	5.57	122.69	119.90
1	2	372	G	N1-C2-N2	-5.57	111.19	116.20
1	2	994	G	N7-C8-N9	-5.57	110.31	113.10
36	1	806	A	N3-C4-N9	-5.57	122.94	127.40
36	1	1304	A	C6-C5-N7	5.57	136.20	132.30
36	1	1646	G	C4-N9-C1'	-5.57	119.26	126.50
36	1	2127	U	OP1-P-O3'	5.57	117.45	105.20
36	1	2437	G	N1-C6-O6	5.57	123.24	119.90
72	O6	45	ARG	NE-CZ-NH1	5.57	123.08	120.30
1	6	623	A	N1-C6-N6	-5.57	115.26	118.60
36	5	872	U	C5-C4-O4	-5.57	122.56	125.90
37	7	2	G	N1-C6-O6	-5.57	116.56	119.90
36	1	44	U	C4-C5-C6	5.57	123.04	119.70
36	1	192	C	N3-C2-O2	-5.57	118.00	121.90
36	1	709	A	N3-C4-N9	5.57	131.85	127.40
36	1	792	G	C8-N9-C4	-5.57	104.17	106.40
36	1	1656	A	N1-C2-N3	5.57	132.08	129.30
36	1	3009	G	N3-C4-C5	5.57	131.38	128.60
38	4	9	A	O5'-P-OP2	-5.57	100.69	105.70
40	L3	232	ARG	NE-CZ-NH1	-5.57	117.52	120.30
1	6	423	G	C8-N9-C4	-5.57	104.17	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	354	U	C5-C4-O4	-5.57	122.56	125.90
36	5	1040	A	C2-N3-C4	-5.57	107.81	110.60
36	5	1191	U	N1-C2-N3	5.57	118.24	114.90
36	5	1193	A	C5-C6-N1	-5.57	114.92	117.70
36	5	3161	C	C6-N1-C2	-5.57	118.07	120.30
36	5	3367	C	N3-C4-C5	5.57	124.13	121.90
1	2	36	C	N3-C2-O2	5.57	125.80	121.90
1	2	468	A	N9-C4-C5	-5.57	103.57	105.80
1	2	1245	G	N1-C6-O6	-5.57	116.56	119.90
1	2	1670	G	N1-C2-N3	5.57	127.24	123.90
36	1	216	G	C4-C5-N7	5.57	113.03	110.80
36	1	589	A	C6-C5-N7	5.57	136.20	132.30
36	1	923	C	N1-C2-O2	5.57	122.24	118.90
36	1	1408	G	N7-C8-N9	5.57	115.88	113.10
36	1	1850	A	C8-N9-C4	-5.57	103.57	105.80
36	1	2960	C	N3-C4-N4	-5.57	114.10	118.00
36	1	3055	U	O4'-C1'-N1	-5.57	103.75	108.20
38	4	16	G	C4-C5-N7	5.57	113.03	110.80
1	6	160	C	C4-C5-C6	-5.57	114.62	117.40
1	6	297	U	N3-C2-O2	-5.57	118.30	122.20
1	6	1036	A	C2-N3-C4	-5.57	107.82	110.60
36	5	234	G	C8-N9-C4	-5.57	104.17	106.40
36	5	297	G	C4-C5-N7	5.57	113.03	110.80
36	5	1295	G	N3-C4-N9	5.57	129.34	126.00
36	5	1300	G	C6-C5-N7	-5.57	127.06	130.40
36	5	1665	C	OP1-P-O3'	-5.57	92.95	105.20
36	5	2755	C	C5-C4-N4	-5.57	116.30	120.20
36	5	2772	C	N3-C4-C5	-5.57	119.67	121.90
36	5	3227	A	C5-C6-N1	-5.57	114.92	117.70
1	2	1201	G	C5-C6-O6	5.57	131.94	128.60
36	1	53	G	N3-C4-C5	-5.57	125.82	128.60
36	1	351	A	N3-C4-C5	5.57	130.70	126.80
36	1	804	C	C2-N3-C4	-5.57	117.12	119.90
36	1	1255	C	C2-N1-C1'	5.57	124.92	118.80
36	1	2113	A	C4-C5-N7	-5.57	107.92	110.70
36	1	2626	A	N9-C4-C5	5.57	108.03	105.80
36	1	3080	G	C8-N9-C4	5.57	108.63	106.40
36	1	3093	C	N1-C2-N3	5.57	123.10	119.20
37	3	89	G	O5'-P-OP2	-5.57	100.69	105.70
1	6	175	G	C4-C5-N7	5.57	113.03	110.80
1	6	418	G	OP1-P-O3'	5.57	117.44	105.20
1	6	992	A	C5-N7-C8	-5.57	101.12	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1243	G	C8-N9-C4	-5.57	104.17	106.40
36	5	771	A	N7-C8-N9	-5.57	111.02	113.80
36	5	1146	C	N1-C2-N3	-5.57	115.30	119.20
36	5	2307	G	OP2-P-O3'	5.57	117.44	105.20
36	5	3028	G	C6-C5-N7	-5.57	127.06	130.40
36	5	3035	A	N1-C2-N3	5.57	132.08	129.30
36	5	3138	U	N1-C2-O2	-5.57	118.91	122.80
1	2	191	C	O4'-C1'-N1	5.56	112.65	108.20
36	1	1355	A	P-O3'-C3'	5.56	126.38	119.70
36	1	1365	G	C6-C5-N7	-5.56	127.06	130.40
1	6	1101	G	N1-C2-N2	-5.56	111.19	116.20
36	5	2325	G	C4-C5-C6	5.56	122.14	118.80
36	5	2359	C	OP1-P-O3'	5.56	117.44	105.20
1	2	320	U	C4-C5-C6	-5.56	116.36	119.70
1	2	1279	C	N3-C2-O2	-5.56	118.01	121.90
1	2	1452	U	C6-N1-C2	-5.56	117.66	121.00
36	1	351	A	C5-C6-N1	-5.56	114.92	117.70
36	1	517	G	N9-C4-C5	5.56	107.62	105.40
36	1	625	G	N3-C2-N2	-5.56	116.01	119.90
36	1	684	G	C5-C6-O6	-5.56	125.26	128.60
36	1	1773	C	C2-N1-C1'	-5.56	112.68	118.80
36	1	1908	A	C8-N9-C4	-5.56	103.58	105.80
36	1	2167	A	OP2-P-O3'	5.56	117.44	105.20
36	1	2337	C	N3-C4-C5	5.56	124.12	121.90
36	1	2403	G	N3-C4-N9	5.56	129.34	126.00
36	1	2883	U	OP1-P-OP2	-5.56	111.26	119.60
36	1	3056	U	N1-C2-O2	-5.56	118.91	122.80
36	1	3143	C	N3-C2-O2	-5.56	118.01	121.90
1	6	1025	A	O5'-P-OP2	5.56	117.37	110.70
1	6	1343	U	C6-N1-C2	5.56	124.34	121.00
1	6	1598	U	C5-C4-O4	-5.56	122.56	125.90
1	6	1786	G	N9-C4-C5	5.56	107.62	105.40
36	5	1496	C	N1-C2-O2	5.56	122.24	118.90
36	5	1875	G	C2-N3-C4	-5.56	109.12	111.90
36	5	2986	U	C4-C5-C6	5.56	123.04	119.70
36	5	3195	U	N1-C2-N3	-5.56	111.56	114.90
36	5	3212	C	C6-N1-C2	5.56	122.53	120.30
36	1	1149	G	C2-N3-C4	-5.56	109.12	111.90
36	1	1295	G	N3-C4-C5	-5.56	125.82	128.60
36	1	1353	U	N1-C2-O2	5.56	126.69	122.80
1	6	930	A	N9-C4-C5	5.56	108.02	105.80
1	6	1024	U	N1-C2-O2	-5.56	118.91	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1536	G	N9-C4-C5	-5.56	103.18	105.40
36	5	634	C	C6-N1-C2	-5.56	118.08	120.30
36	5	1084	A	C5-C6-N1	5.56	120.48	117.70
36	5	1584	U	C6-N1-C2	5.56	124.34	121.00
36	5	2289	U	N3-C2-O2	-5.56	118.31	122.20
36	5	2800	G	N3-C4-C5	-5.56	125.82	128.60
36	5	2872	A	C4-N9-C1'	-5.56	116.29	126.30
38	8	7	U	C4-C5-C6	5.56	123.04	119.70
1	2	250	C	C2-N1-C1'	5.56	124.92	118.80
1	2	1539	G	C4-C5-N7	5.56	113.02	110.80
36	1	219	A	OP1-P-OP2	5.56	127.94	119.60
36	1	317	A	C5-C6-N1	5.56	120.48	117.70
36	1	583	G	C5-C6-N1	5.56	114.28	111.50
36	1	1402	C	C2-N3-C4	-5.56	117.12	119.90
36	1	2394	G	OP1-P-OP2	5.56	127.94	119.60
36	1	2940	A	O5'-P-OP2	-5.56	100.70	105.70
36	1	3307	A	C4-C5-N7	5.56	113.48	110.70
36	5	406	G	N1-C2-N3	5.56	127.23	123.90
36	5	1178	G	N1-C2-N2	-5.56	111.20	116.20
36	5	1879	A	C2-N3-C4	-5.56	107.82	110.60
36	5	1897	G	C4-C5-C6	5.56	122.14	118.80
36	5	2293	C	N3-C4-N4	5.56	121.89	118.00
36	5	3249	C	C6-N1-C2	5.56	122.52	120.30
38	8	109	A	O5'-P-OP1	5.56	117.37	110.70
40	l3	19	ARG	NE-CZ-NH1	5.56	123.08	120.30
36	1	924	G	C2-N3-C4	5.56	114.68	111.90
36	1	1368	U	C6-N1-C1'	-5.56	113.42	121.20
36	1	1524	A	C6-C5-N7	5.56	136.19	132.30
36	1	2997	G	N7-C8-N9	5.56	115.88	113.10
36	1	3175	U	N3-C2-O2	-5.56	118.31	122.20
1	6	29	U	C5-C6-N1	-5.56	119.92	122.70
1	6	103	A	C8-N9-C4	-5.56	103.58	105.80
1	6	1243	G	N3-C4-N9	5.56	129.33	126.00
36	5	879	U	O5'-P-OP2	-5.56	100.70	105.70
36	5	2160	G	N3-C2-N2	-5.56	116.01	119.90
36	5	2208	A	N1-C6-N6	5.56	121.93	118.60
36	5	2556	C	C6-N1-C2	-5.56	118.08	120.30
36	5	2666	C	C6-N1-C1'	-5.56	114.13	120.80
36	5	2741	C	O5'-P-OP2	5.56	117.37	110.70
38	8	116	G	C4-N9-C1'	5.56	133.72	126.50
38	8	136	G	O5'-P-OP1	5.56	117.37	110.70
1	2	1245	G	C5-C6-N1	5.56	114.28	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1438	U	C4-C5-C6	5.56	123.03	119.70
36	1	2699	G	N3-C2-N2	-5.56	116.01	119.90
1	6	1650	U	O5'-P-OP1	5.56	117.37	110.70
17	c5	43	ARG	NE-CZ-NH1	5.56	123.08	120.30
36	5	699	A	N7-C8-N9	5.56	116.58	113.80
36	5	2710	C	C5-C4-N4	-5.56	116.31	120.20
37	7	54	U	C2-N1-C1'	-5.56	111.03	117.70
1	2	30	G	N1-C6-O6	5.55	123.23	119.90
1	2	993	A	C8-N9-C4	-5.55	103.58	105.80
1	2	1462	G	C6-C5-N7	5.55	133.73	130.40
1	2	1583	A	C5-C6-N6	5.55	128.14	123.70
36	1	31	C	N3-C4-C5	-5.55	119.68	121.90
36	1	1542	G	N1-C2-N3	5.55	127.23	123.90
36	1	1634	G	C8-N9-C4	-5.55	104.18	106.40
36	1	1656	A	N7-C8-N9	-5.55	111.02	113.80
36	1	2120	A	C5-N7-C8	5.55	106.68	103.90
36	1	2167	A	C6-C5-N7	-5.55	128.41	132.30
1	6	1008	G	C4-C5-N7	5.55	113.02	110.80
36	5	735	A	N1-C6-N6	5.55	121.93	118.60
36	5	1500	G	C5-C6-O6	-5.55	125.27	128.60
36	5	3246	G	OP1-P-O3'	5.55	117.42	105.20
36	1	209	A	C5-C6-N1	-5.55	114.92	117.70
36	1	506	U	N3-C4-C5	-5.55	111.27	114.60
36	1	1617	G	C2-N3-C4	-5.55	109.12	111.90
36	5	1102	A	N3-C4-C5	-5.55	122.91	126.80
36	5	1527	C	C5-C6-N1	-5.55	118.22	121.00
36	5	2524	A	N9-C1'-C2'	5.55	121.22	114.00
36	5	2756	C	C6-N1-C1'	-5.55	114.14	120.80
1	2	870	C	N1-C2-O2	-5.55	115.57	118.90
36	1	495	G	C4-N9-C1'	-5.55	119.28	126.50
36	1	1160	C	C2-N3-C4	5.55	122.68	119.90
36	1	3305	A	C5-C6-N1	5.55	120.48	117.70
1	6	158	U	N3-C4-O4	5.55	123.29	119.40
1	6	1041	G	N1-C6-O6	5.55	123.23	119.90
1	6	1641	C	C6-N1-C2	5.55	122.52	120.30
1	6	1768	G	N3-C2-N2	-5.55	116.01	119.90
36	5	55	G	N1-C6-O6	5.55	123.23	119.90
36	5	394	G	OP1-P-OP2	5.55	127.93	119.60
36	5	650	C	C6-N1-C1'	5.55	127.46	120.80
36	5	746	A	OP2-P-O3'	5.55	117.41	105.20
36	5	835	G	C4-C5-N7	-5.55	108.58	110.80
36	5	988	U	C2-N3-C4	-5.55	123.67	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1155	C	C5-C4-N4	-5.55	116.31	120.20
36	5	1175	C	C6-N1-C2	-5.55	118.08	120.30
36	5	1465	A	C5-N7-C8	-5.55	101.12	103.90
36	5	1620	U	C2-N1-C1'	5.55	124.36	117.70
36	5	1835	A	O5'-P-OP1	-5.55	100.70	105.70
36	5	2388	U	C5-C4-O4	-5.55	122.57	125.90
36	5	3061	G	N7-C8-N9	-5.55	110.33	113.10
40	l3	328	ILE	C-N-CD	5.55	140.06	128.40
69	o3	45	LEU	CA-CB-CG	-5.55	102.53	115.30
1	2	429	G	C6-C5-N7	-5.55	127.07	130.40
1	2	747	C	N1-C2-O2	5.55	122.23	118.90
1	2	1768	G	N7-C8-N9	5.55	115.88	113.10
36	1	399	A	OP1-P-OP2	-5.55	111.28	119.60
36	1	407	A	O5'-P-OP1	-5.55	100.71	105.70
36	1	638	C	C2-N3-C4	-5.55	117.12	119.90
36	1	1367	G	C4-N9-C1'	5.55	133.72	126.50
38	4	2	A	N7-C8-N9	5.55	116.58	113.80
1	6	408	C	C5-C6-N1	-5.55	118.22	121.00
1	6	1431	C	C6-N1-C2	5.55	122.52	120.30
1	6	1513	G	C8-N9-C4	-5.55	104.18	106.40
36	5	717	C	N1-C2-O2	5.55	122.23	118.90
36	5	1211	U	C2-N1-C1'	-5.55	111.04	117.70
36	5	1585	C	C5-C6-N1	5.55	123.78	121.00
36	5	2877	G	C6-C5-N7	-5.55	127.07	130.40
36	5	2995	A	N3-C4-C5	5.55	130.68	126.80
68	o2	4	LEU	C-N-CD	5.55	140.06	128.40
1	2	1179	G	C5-C6-N1	5.55	114.27	111.50
36	1	329	U	C5-C6-N1	-5.55	119.93	122.70
36	1	613	G	N7-C8-N9	5.55	115.87	113.10
36	1	1906	G	C6-C5-N7	-5.55	127.07	130.40
36	1	3152	U	N3-C4-O4	-5.55	115.52	119.40
1	6	119	A	C5-C6-N1	-5.55	114.93	117.70
1	6	758	U	N1-C2-N3	5.55	118.23	114.90
1	6	1279	C	O5'-P-OP2	-5.55	100.71	105.70
1	6	1641	C	C5-C6-N1	-5.55	118.23	121.00
36	5	742	G	N3-C4-N9	5.55	129.33	126.00
1	2	1782	A	N9-C4-C5	5.55	108.02	105.80
36	1	689	U	C4-C5-C6	-5.55	116.37	119.70
36	1	1085	A	OP2-P-O3'	5.55	117.40	105.20
36	1	1149	G	C8-N9-C4	-5.55	104.18	106.40
36	1	1305	U	OP2-P-O3'	5.55	117.40	105.20
36	1	1453	A	C4-N9-C1'	5.55	136.28	126.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1716	U	OP1-P-O3'	5.55	117.40	105.20
36	1	1933	A	C5-N7-C8	-5.55	101.13	103.90
36	1	2993	G	C6-C5-N7	-5.55	127.07	130.40
1	6	50	C	O5'-P-OP2	5.55	117.36	110.70
1	6	372	G	C4-C5-N7	-5.55	108.58	110.80
1	6	948	G	C4-C5-N7	5.55	113.02	110.80
1	6	1696	G	OP1-P-O3'	5.55	117.40	105.20
36	5	1212	A	C6-C5-N7	-5.55	128.42	132.30
36	5	1852	G	N7-C8-N9	5.55	115.87	113.10
36	5	2134	G	C8-N9-C1'	-5.55	119.79	127.00
36	5	3012	A	C6-N1-C2	-5.55	115.27	118.60
36	5	3189	G	C6-N1-C2	-5.55	121.77	125.10
36	1	3137	C	P-O3'-C3'	-5.54	113.05	119.70
1	6	610	G	O4'-C1'-N9	5.54	112.64	108.20
1	6	759	U	N1-C2-O2	5.54	126.68	122.80
36	5	439	C	C4-C5-C6	5.54	120.17	117.40
36	5	1159	A	OP2-P-O3'	5.54	117.40	105.20
36	5	1598	G	N3-C2-N2	5.54	123.78	119.90
36	5	1714	A	C2-N3-C4	-5.54	107.83	110.60
36	5	3296	A	O4'-C1'-N9	-5.54	103.76	108.20
38	8	107	G	C4-N9-C1'	5.54	133.71	126.50
1	2	756	A	C5-N7-C8	-5.54	101.13	103.90
1	2	1412	G	C4-N9-C1'	-5.54	119.29	126.50
36	1	315	C	C6-N1-C2	-5.54	118.08	120.30
36	1	586	C	C5-C4-N4	-5.54	116.32	120.20
36	1	1559	A	C5-N7-C8	-5.54	101.13	103.90
36	1	1701	C	C6-N1-C2	5.54	122.52	120.30
36	1	1804	A	N1-C2-N3	5.54	132.07	129.30
36	1	2270	A	C5-N7-C8	-5.54	101.13	103.90
36	1	2714	G	C5-N7-C8	-5.54	101.53	104.30
36	1	2930	A	N3-C4-N9	5.54	131.84	127.40
36	1	2958	A	OP2-P-O3'	5.54	117.40	105.20
57	N1	12	ARG	NE-CZ-NH1	-5.54	117.53	120.30
1	6	596	C	N3-C4-C5	5.54	124.12	121.90
1	6	1183	A	N1-C2-N3	5.54	132.07	129.30
1	6	1200	G	C5-C6-N1	-5.54	108.73	111.50
1	6	1424	A	OP1-P-O3'	5.54	117.40	105.20
1	6	1514	U	C5-C6-N1	-5.54	119.93	122.70
36	5	211	A	N7-C8-N9	-5.54	111.03	113.80
36	5	588	G	C6-C5-N7	-5.54	127.07	130.40
36	5	635	G	O5'-P-OP1	-5.54	100.71	105.70
36	5	849	C	C6-N1-C2	5.54	122.52	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	958	C	OP2-P-O3'	5.54	117.40	105.20
36	5	1064	A	C5-N7-C8	-5.54	101.13	103.90
36	5	1079	A	OP1-P-OP2	5.54	127.92	119.60
36	5	1160	C	C5-C6-N1	-5.54	118.23	121.00
36	5	1323	G	C4-C5-C6	5.54	122.13	118.80
36	5	2208	A	C8-N9-C4	-5.54	103.58	105.80
36	5	3376	A	C4-C5-C6	5.54	119.77	117.00
1	2	399	A	C5-C6-N6	5.54	128.13	123.70
1	2	1033	C	N3-C2-O2	-5.54	118.02	121.90
1	2	1135	U	C2-N1-C1'	-5.54	111.05	117.70
36	1	55	G	N1-C6-O6	5.54	123.22	119.90
36	1	111	C	C5-C6-N1	5.54	123.77	121.00
36	1	294	U	C5-C6-N1	5.54	125.47	122.70
36	1	856	G	N9-C4-C5	5.54	107.62	105.40
36	1	890	C	C2-N1-C1'	5.54	124.90	118.80
36	1	994	G	C5-C6-N1	5.54	114.27	111.50
36	1	1326	A	C2-N3-C4	5.54	113.37	110.60
36	1	2700	G	N9-C4-C5	-5.54	103.18	105.40
36	1	2823	G	N9-C4-C5	5.54	107.62	105.40
36	1	2859	U	OP2-P-O3'	5.54	117.39	105.20
36	1	3006	A	N3-C4-N9	-5.54	122.97	127.40
38	4	82	U	C6-N1-C2	-5.54	117.67	121.00
1	6	57	G	N3-C4-N9	5.54	129.32	126.00
1	6	865	A	C6-N1-C2	-5.54	115.28	118.60
36	5	182	U	C6-N1-C2	-5.54	117.67	121.00
36	5	209	A	C6-N1-C2	-5.54	115.28	118.60
36	5	351	A	N1-C2-N3	-5.54	126.53	129.30
36	5	1306	G	O5'-P-OP2	-5.54	100.71	105.70
36	5	3030	G	C6-C5-N7	5.54	133.72	130.40
36	1	1309	U	N1-C2-N3	5.54	118.22	114.90
36	1	1315	U	OP1-P-O3'	5.54	117.39	105.20
62	N6	111	LEU	CA-CB-CG	-5.54	102.56	115.30
1	6	611	U	OP1-P-OP2	-5.54	111.29	119.60
1	6	902	G	C5-C6-N1	-5.54	108.73	111.50
1	6	969	C	N3-C4-N4	5.54	121.88	118.00
1	6	1192	C	C6-N1-C2	-5.54	118.08	120.30
36	5	1903	U	N3-C4-O4	5.54	123.28	119.40
36	5	2208	A	C5-N7-C8	-5.54	101.13	103.90
36	5	3191	G	N3-C4-C5	5.54	131.37	128.60
1	2	1657	U	OP2-P-O3'	5.54	117.39	105.20
36	1	209	A	N1-C6-N6	-5.54	115.28	118.60
36	1	700	C	N1-C2-O2	-5.54	115.58	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	717	C	O5'-P-OP2	-5.54	100.72	105.70
36	1	857	G	N3-C2-N2	-5.54	116.02	119.90
36	1	1438	U	C2-N3-C4	-5.54	123.68	127.00
36	1	1500	G	C4-N9-C1'	-5.54	119.30	126.50
36	1	3112	G	N3-C4-N9	5.54	129.32	126.00
36	1	3220	G	N3-C4-C5	-5.54	125.83	128.60
36	1	3295	A	N9-C4-C5	5.54	108.02	105.80
38	4	101	U	N3-C2-O2	-5.54	118.32	122.20
1	6	553	G	C6-C5-N7	-5.54	127.08	130.40
1	6	746	A	N1-C6-N6	5.54	121.92	118.60
36	5	430	U	OP2-P-O3'	5.54	117.38	105.20
36	5	705	A	OP1-P-O3'	5.54	117.39	105.20
36	5	864	G	C8-N9-C1'	-5.54	119.80	127.00
36	5	916	G	OP2-P-O3'	5.54	117.39	105.20
36	5	1260	A	N7-C8-N9	5.54	116.57	113.80
36	5	2419	A	N9-C4-C5	5.54	108.02	105.80
36	5	2676	A	C8-N9-C4	-5.54	103.58	105.80
36	5	3054	U	N3-C4-C5	-5.54	111.28	114.60
36	5	3259	U	C4-C5-C6	-5.54	116.38	119.70
36	5	3314	A	C5-C6-N6	-5.54	119.27	123.70
36	5	3335	A	C6-C5-N7	-5.54	128.42	132.30
1	2	586	G	C5-C6-O6	-5.54	125.28	128.60
1	2	1568	C	P-O3'-C3'	5.54	126.34	119.70
36	1	1310	G	C5-N7-C8	-5.54	101.53	104.30
36	1	1928	G	O5'-P-OP2	-5.54	100.72	105.70
36	1	2639	G	C8-N9-C1'	5.54	134.20	127.00
1	6	1282	U	N3-C4-C5	-5.54	111.28	114.60
1	6	1621	U	C6-N1-C2	5.54	124.32	121.00
36	5	1737	U	C5-C4-O4	-5.54	122.58	125.90
36	5	3313	U	N3-C2-O2	5.54	126.08	122.20
1	2	686	C	C6-N1-C2	-5.54	118.09	120.30
1	2	1561	U	N3-C2-O2	-5.54	118.33	122.20
36	1	329	U	N3-C2-O2	-5.54	118.33	122.20
36	1	1005	G	N9-C4-C5	5.54	107.61	105.40
36	1	1149	G	N3-C4-C5	-5.54	125.83	128.60
36	1	1577	G	N3-C4-C5	-5.54	125.83	128.60
1	6	911	U	N1-C2-O2	5.54	126.67	122.80
1	6	1375	A	C8-N9-C4	5.54	108.01	105.80
36	5	266	A	C6-C5-N7	-5.54	128.43	132.30
36	5	1045	C	O5'-P-OP2	5.54	117.34	110.70
36	5	1064	A	N7-C8-N9	5.54	116.57	113.80
36	5	2166	A	N3-C4-C5	5.54	130.68	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2277	C	N1-C2-N3	5.54	123.08	119.20
36	5	2347	U	N1-C2-O2	5.54	126.67	122.80
36	5	2349	U	OP1-P-O3'	5.54	117.38	105.20
36	5	2399	A	C8-N9-C4	-5.54	103.59	105.80
36	5	2709	C	C5-C4-N4	-5.54	116.33	120.20
36	5	2996	U	C6-N1-C2	5.54	124.32	121.00
62	n6	57	LEU	CA-CB-CG	5.54	128.03	115.30
1	2	1787	C	C6-N1-C2	5.53	122.51	120.30
36	1	2727	A	O5'-P-OP1	-5.53	100.72	105.70
47	M0	139	ARG	NE-CZ-NH1	5.53	123.07	120.30
1	6	1763	A	N1-C6-N6	-5.53	115.28	118.60
36	5	407	A	C6-N1-C2	-5.53	115.28	118.60
36	5	418	A	C2-N3-C4	5.53	113.37	110.60
36	5	1681	U	N3-C4-C5	-5.53	111.28	114.60
36	5	1741	A	N1-C6-N6	-5.53	115.28	118.60
36	5	2375	G	C8-N9-C1'	5.53	134.19	127.00
36	5	3052	G	C4-C5-N7	5.53	113.01	110.80
36	5	3315	G	N3-C4-N9	5.53	129.32	126.00
36	1	703	G	N3-C4-C5	5.53	131.37	128.60
36	1	1897	G	C6-C5-N7	-5.53	127.08	130.40
1	6	1527	C	N3-C4-C5	5.53	124.11	121.90
1	6	1529	C	O5'-P-OP2	-5.53	100.72	105.70
36	5	2530	G	C6-C5-N7	-5.53	127.08	130.40
36	5	2640	A	C4-C5-N7	5.53	113.47	110.70
36	1	154	U	C2-N1-C1'	-5.53	111.06	117.70
36	1	731	U	N3-C4-O4	5.53	123.27	119.40
36	1	2556	C	C6-N1-C2	-5.53	118.09	120.30
36	1	2780	A	N9-C4-C5	-5.53	103.59	105.80
36	1	3179	U	C6-N1-C2	5.53	124.32	121.00
1	6	76	A	O4'-C1'-N9	5.53	112.62	108.20
1	6	313	U	N3-C2-O2	-5.53	118.33	122.20
36	5	324	A	C8-N9-C1'	-5.53	117.75	127.70
36	5	692	A	C5-N7-C8	-5.53	101.14	103.90
36	5	971	G	C8-N9-C4	5.53	108.61	106.40
36	5	1431	G	C5-C6-N1	5.53	114.27	111.50
36	5	1470	U	C5-C4-O4	-5.53	122.58	125.90
36	5	1603	A	C5-C6-N1	-5.53	114.93	117.70
36	5	1916	U	O5'-P-OP1	-5.53	100.72	105.70
36	5	2404	A	N1-C6-N6	-5.53	115.28	118.60
36	5	2441	A	N1-C6-N6	5.53	121.92	118.60
36	5	2917	G	P-O3'-C3'	5.53	126.34	119.70
38	8	2	A	C6-C5-N7	-5.53	128.43	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	793	A	N7-C8-N9	5.53	116.56	113.80
36	1	2279	A	O5'-P-OP2	-5.53	100.72	105.70
1	6	1782	A	C5-C6-N1	-5.53	114.94	117.70
36	5	55	G	C4-C5-C6	5.53	122.12	118.80
36	5	356	C	C4-C5-C6	5.53	120.17	117.40
36	5	858	A	C4-C5-N7	-5.53	107.94	110.70
1	2	436	A	N1-C6-N6	5.53	121.92	118.60
1	2	1422	A	N9-C4-C5	-5.53	103.59	105.80
1	2	1492	A	N1-C6-N6	-5.53	115.28	118.60
36	1	832	G	N9-C4-C5	-5.53	103.19	105.40
36	1	1104	G	OP2-P-O3'	5.53	117.36	105.20
36	1	1148	G	C5-C6-O6	-5.53	125.28	128.60
36	1	1371	G	O5'-P-OP1	5.53	117.33	110.70
36	1	2138	A	N3-C4-N9	5.53	131.82	127.40
36	1	2165	G	C4-C5-C6	5.53	122.12	118.80
36	1	2891	U	C5-C4-O4	-5.53	122.58	125.90
1	6	109	G	C5-C6-N1	-5.53	108.74	111.50
1	6	1647	U	O5'-P-OP2	-5.53	100.72	105.70
36	5	913	A	N9-C4-C5	5.53	108.01	105.80
36	5	2615	G	C2-N3-C4	-5.53	109.14	111.90
36	1	1245	A	C8-N9-C4	-5.53	103.59	105.80
36	1	1332	A	C6-C5-N7	-5.53	128.43	132.30
36	1	1528	G	N3-C4-N9	5.53	129.32	126.00
36	1	1547	G	C4-C5-C6	5.53	122.11	118.80
36	1	1672	U	C5-C4-O4	5.53	129.22	125.90
36	1	1775	G	C5-C6-O6	5.53	131.91	128.60
36	1	3102	G	OP1-P-O3'	5.53	117.36	105.20
36	1	3204	C	O5'-P-OP2	-5.53	100.73	105.70
36	1	3232	G	C6-C5-N7	-5.53	127.08	130.40
1	6	1177	C	C6-N1-C2	5.53	122.51	120.30
36	5	44	U	C6-N1-C2	-5.53	117.69	121.00
36	5	345	G	C5-C6-N1	-5.53	108.74	111.50
36	5	1615	C	C6-N1-C2	-5.53	118.09	120.30
36	5	3203	U	N3-C2-O2	-5.53	118.33	122.20
37	7	27	A	C8-N9-C4	-5.53	103.59	105.80
36	1	324	A	N7-C8-N9	5.52	116.56	113.80
36	1	904	A	N3-C4-N9	-5.52	122.98	127.40
36	1	2606	G	N1-C6-O6	-5.52	116.58	119.90
36	1	2849	C	C6-N1-C1'	5.52	127.43	120.80
36	1	3258	U	C5-C4-O4	-5.52	122.59	125.90
1	6	303	U	C5-C4-O4	5.52	129.21	125.90
1	6	549	G	C5-C6-N1	-5.52	108.74	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	195	U	N3-C4-O4	-5.52	115.53	119.40
36	5	996	A	OP1-P-O3'	-5.52	93.05	105.20
36	5	2667	A	O5'-P-OP1	-5.52	100.73	105.70
1	2	28	A	C5-C6-N1	5.52	120.46	117.70
1	2	951	A	C8-N9-C4	5.52	108.01	105.80
36	1	64	G	O5'-P-OP1	-5.52	100.73	105.70
36	1	293	C	C2-N1-C1'	-5.52	112.72	118.80
36	1	402	A	C8-N9-C4	-5.52	103.59	105.80
36	1	613	G	C6-C5-N7	-5.52	127.09	130.40
36	1	1828	A	C6-C5-N7	-5.52	128.43	132.30
36	1	2874	G	C6-C5-N7	-5.52	127.09	130.40
1	6	476	U	C6-N1-C2	-5.52	117.69	121.00
1	6	1298	U	C2-N1-C1'	5.52	124.33	117.70
1	6	1610	G	N3-C2-N2	5.52	123.77	119.90
1	6	1614	A	C5-C6-N6	-5.52	119.28	123.70
1	6	1624	C	N3-C4-N4	-5.52	114.13	118.00
36	5	192	C	C5-C6-N1	5.52	123.76	121.00
36	5	846	A	N1-C6-N6	-5.52	115.29	118.60
36	5	902	G	C4-N9-C1'	-5.52	119.32	126.50
36	5	1258	U	C6-N1-C2	-5.52	117.69	121.00
36	5	1372	C	N1-C2-O2	-5.52	115.59	118.90
36	5	2335	G	N3-C4-C5	-5.52	125.84	128.60
36	5	2723	U	N3-C2-O2	-5.52	118.33	122.20
1	2	1776	A	N1-C2-N3	-5.52	126.54	129.30
36	1	1541	G	C4-N9-C1'	5.52	133.68	126.50
36	1	3389	U	N1-C2-N3	-5.52	111.59	114.90
53	M7	73	GLY	N-CA-C	-5.52	99.30	113.10
1	6	1521	G	N3-C4-N9	5.52	129.31	126.00
36	5	1145	G	C8-N9-C1'	-5.52	119.82	127.00
36	5	3061	G	OP2-P-O3'	5.52	117.35	105.20
36	5	3389	U	OP1-P-OP2	-5.52	111.32	119.60
1	2	55	A	N9-C4-C5	-5.52	103.59	105.80
1	2	1085	G	N1-C2-N2	-5.52	111.23	116.20
36	1	2298	U	N3-C4-O4	-5.52	115.54	119.40
36	1	2514	U	O5'-P-OP1	-5.52	100.73	105.70
36	1	2895	G	C6-N1-C2	-5.52	121.79	125.10
36	1	3022	G	N1-C6-O6	5.52	123.21	119.90
44	L7	83	LEU	CA-CB-CG	5.52	127.99	115.30
51	M5	105	ARG	NE-CZ-NH1	-5.52	117.54	120.30
1	6	154	G	N9-C4-C5	-5.52	103.19	105.40
1	6	307	G	C8-N9-C1'	-5.52	119.83	127.00
1	6	776	G	C8-N9-C4	5.52	108.61	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	964	U	C5-C6-N1	-5.52	119.94	122.70
1	6	1058	U	C5-C4-O4	5.52	129.21	125.90
1	6	1178	G	C5-N7-C8	5.52	107.06	104.30
1	6	1367	G	N1-C6-O6	5.52	123.21	119.90
1	6	1591	C	N1-C2-O2	-5.52	115.59	118.90
1	6	1642	G	OP2-P-O3'	5.52	117.34	105.20
1	6	1671	A	N1-C6-N6	-5.52	115.29	118.60
36	5	786	A	C5-N7-C8	-5.52	101.14	103.90
36	5	1045	C	OP1-P-O3'	-5.52	93.06	105.20
36	5	1206	G	C4-N9-C1'	5.52	133.68	126.50
36	5	1380	G	C8-N9-C4	5.52	108.61	106.40
36	5	3042	U	N3-C4-C5	5.52	117.91	114.60
76	q0	121	LEU	CB-CG-CD2	-5.52	101.62	111.00
1	2	72	A	C8-N9-C4	5.52	108.01	105.80
1	2	597	G	C8-N9-C4	-5.52	104.19	106.40
1	2	1277	G	N9-C4-C5	5.52	107.61	105.40
1	2	1425	A	O5'-P-OP1	5.52	117.32	110.70
36	1	915	A	C5-N7-C8	-5.52	101.14	103.90
36	1	1385	C	C5-C4-N4	5.52	124.06	120.20
36	1	1400	G	N3-C4-C5	-5.52	125.84	128.60
36	1	1453	A	O5'-P-OP1	5.52	117.32	110.70
36	1	1841	A	N1-C6-N6	-5.52	115.29	118.60
36	1	2320	A	OP2-P-O3'	5.52	117.34	105.20
36	1	2810	C	C5-C4-N4	5.52	124.06	120.20
36	1	2872	A	N1-C6-N6	5.52	121.91	118.60
36	1	2944	U	O5'-P-OP1	-5.52	100.73	105.70
36	1	3225	C	N3-C2-O2	-5.52	118.04	121.90
37	3	121	U	N3-C2-O2	-5.52	118.34	122.20
1	6	1	U	C2-N1-C1'	5.52	124.32	117.70
1	6	335	U	C6-N1-C2	-5.52	117.69	121.00
1	6	1487	A	C4-C5-C6	5.52	119.76	117.00
36	5	85	A	C2-N3-C4	-5.52	107.84	110.60
36	5	590	G	N9-C4-C5	5.52	107.61	105.40
36	5	1920	U	C5-C4-O4	5.52	129.21	125.90
36	5	3015	G	N3-C4-N9	-5.52	122.69	126.00
36	5	3377	G	C4-C5-C6	-5.52	115.49	118.80
1	2	552	G	N7-C8-N9	5.52	115.86	113.10
36	1	787	G	C8-N9-C4	-5.52	104.19	106.40
36	1	836	A	N1-C6-N6	-5.52	115.29	118.60
36	1	1909	A	C2-N3-C4	-5.52	107.84	110.60
1	6	1278	G	C4-C5-N7	-5.52	108.59	110.80
36	5	802	C	N3-C4-N4	-5.52	114.14	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1332	A	N9-C4-C5	-5.52	103.59	105.80
36	5	1383	G	C8-N9-C4	-5.52	104.19	106.40
36	5	1901	A	C6-N1-C2	-5.52	115.29	118.60
36	5	2838	A	N7-C8-N9	-5.52	111.04	113.80
36	5	3037	U	N1-C2-O2	-5.52	118.94	122.80
1	2	77	U	O4'-C1'-N1	-5.51	103.79	108.20
1	2	514	G	C6-C5-N7	5.51	133.71	130.40
1	2	1596	C	C5-C6-N1	5.51	123.76	121.00
1	2	1750	A	C4-C5-C6	5.51	119.76	117.00
36	1	304	G	C8-N9-C4	-5.51	104.19	106.40
36	1	783	A	C8-N9-C4	5.51	108.01	105.80
36	1	1310	G	C5-C6-N1	5.51	114.26	111.50
36	1	1624	G	C6-C5-N7	-5.51	127.09	130.40
36	1	1893	A	N1-C6-N6	5.51	121.91	118.60
36	1	2159	U	C5-C4-O4	-5.51	122.59	125.90
36	1	2428	U	C5-C6-N1	-5.51	119.94	122.70
36	1	3042	U	C5-C4-O4	5.51	129.21	125.90
1	6	532	U	N1-C2-N3	5.51	118.21	114.90
1	6	1682	U	C5-C6-N1	5.51	125.46	122.70
36	5	54	C	N1-C2-N3	5.51	123.06	119.20
36	5	1055	A	C4-C5-N7	-5.51	107.94	110.70
36	5	1364	C	N1-C2-O2	5.51	122.21	118.90
36	5	2320	A	N1-C2-N3	5.51	132.06	129.30
36	5	2387	A	C8-N9-C4	-5.51	103.59	105.80
36	5	3089	C	N3-C4-C5	-5.51	119.69	121.90
36	1	655	C	C6-N1-C1'	-5.51	114.19	120.80
36	1	686	G	OP1-P-OP2	-5.51	111.33	119.60
36	1	1046	A	N9-C4-C5	-5.51	103.59	105.80
36	1	1133	A	N1-C6-N6	5.51	121.91	118.60
36	5	264	G	C4-N9-C1'	5.51	133.67	126.50
37	7	55	A	OP1-P-OP2	5.51	127.87	119.60
1	2	1130	G	O5'-P-OP1	-5.51	100.74	105.70
1	2	1215	C	N1-C2-O2	5.51	122.21	118.90
36	1	407	A	N3-C4-N9	5.51	131.81	127.40
36	1	754	G	C2-N3-C4	-5.51	109.14	111.90
36	1	1372	C	N3-C4-C5	-5.51	119.69	121.90
36	1	1516	C	OP1-P-OP2	5.51	127.87	119.60
36	1	1526	U	O5'-P-OP2	-5.51	100.74	105.70
36	1	1584	U	N3-C2-O2	5.51	126.06	122.20
36	1	2291	A	N9-C4-C5	5.51	108.00	105.80
36	1	2693	C	N3-C4-C5	5.51	124.11	121.90
36	1	2864	A	C5-N7-C8	-5.51	101.14	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3263	G	C5-C6-O6	-5.51	125.29	128.60
36	1	3394	U	N1-C2-N3	5.51	118.21	114.90
38	4	18	U	C4-C5-C6	5.51	123.01	119.70
38	4	62	C	N1-C2-O2	5.51	122.21	118.90
1	6	922	G	C4-C5-N7	5.51	113.00	110.80
1	6	1295	G	N3-C4-C5	5.51	131.35	128.60
1	6	1584	G	C5-C6-O6	-5.51	125.29	128.60
36	5	256	G	C4-C5-C6	5.51	122.11	118.80
36	5	974	G	C8-N9-C1'	-5.51	119.84	127.00
36	5	1304	A	C5-C6-N6	-5.51	119.29	123.70
36	5	1499	C	N1-C2-N3	5.51	123.06	119.20
36	5	2134	G	N3-C4-N9	5.51	129.31	126.00
36	5	2659	G	C6-C5-N7	-5.51	127.09	130.40
36	5	2673	A	C4-C5-N7	-5.51	107.94	110.70
36	5	3384	U	N3-C4-O4	5.51	123.26	119.40
38	8	102	U	C2-N1-C1'	5.51	124.31	117.70
1	2	1077	C	C6-N1-C2	-5.51	118.10	120.30
36	1	97	U	N1-C2-O2	-5.51	118.94	122.80
36	1	260	C	C5-C6-N1	5.51	123.75	121.00
36	1	580	C	N3-C4-N4	-5.51	114.14	118.00
36	1	775	A	N3-C4-C5	-5.51	122.94	126.80
36	1	1195	A	N7-C8-N9	5.51	116.56	113.80
36	1	3144	G	OP1-P-O3'	-5.51	93.08	105.20
1	6	51	A	C4-C5-C6	5.51	119.75	117.00
1	6	633	U	C4-C5-C6	5.51	123.01	119.70
1	6	1165	G	C8-N9-C1'	-5.51	119.84	127.00
1	6	1615	C	C6-N1-C2	5.51	122.50	120.30
1	6	1670	G	C4-N9-C1'	5.51	133.66	126.50
36	5	365	A	OP1-P-O3'	5.51	117.32	105.20
36	5	967	A	C5-N7-C8	-5.51	101.14	103.90
36	5	1585	C	N3-C2-O2	-5.51	118.04	121.90
36	5	2125	A	N1-C6-N6	5.51	121.91	118.60
36	5	2247	G	C6-N1-C2	-5.51	121.79	125.10
36	5	2249	G	C3'-C2'-C1'	-5.51	97.09	101.50
36	5	2621	G	OP1-P-OP2	-5.51	111.34	119.60
36	5	2676	A	C2-N3-C4	-5.51	107.84	110.60
36	5	3271	G	C4-C5-C6	5.51	122.11	118.80
36	5	3334	U	OP2-P-O3'	5.51	117.32	105.20
36	5	3381	U	C6-N1-C2	5.51	124.31	121.00
38	8	107	G	C5-C6-N1	-5.51	108.75	111.50
36	1	271	C	N1-C2-O2	5.51	122.20	118.90
36	1	1209	G	C4-N9-C1'	5.51	133.66	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2807	U	C5-C6-N1	5.51	125.45	122.70
37	3	85	G	C6-C5-N7	-5.51	127.09	130.40
1	6	904	G	C5-C6-O6	5.51	131.91	128.60
1	6	1610	G	C5-C6-N1	5.51	114.25	111.50
36	5	43	A	C5-C6-N6	-5.51	119.29	123.70
36	5	1050	U	C2-N3-C4	-5.51	123.69	127.00
36	5	1907	C	N1-C2-N3	5.51	123.06	119.20
36	5	2275	A	C4-C5-C6	5.51	119.75	117.00
36	5	2727	A	N7-C8-N9	-5.51	111.05	113.80
36	5	2770	G	C5-C6-O6	-5.51	125.30	128.60
1	2	945	U	N1-C2-O2	5.51	126.65	122.80
36	1	953	G	N7-C8-N9	-5.51	110.35	113.10
36	1	1113	G	C4-C5-N7	5.51	113.00	110.80
36	1	1134	G	N3-C2-N2	-5.51	116.05	119.90
36	1	1294	A	O5'-P-OP1	5.51	117.31	110.70
1	6	402	C	C6-N1-C2	5.51	122.50	120.30
1	6	755	A	N1-C6-N6	5.51	121.90	118.60
36	5	692	A	N7-C8-N9	5.51	116.55	113.80
36	5	832	G	C2-N3-C4	5.51	114.65	111.90
36	5	2112	U	P-O3'-C3'	5.51	126.31	119.70
36	5	2175	U	C2-N1-C1'	-5.51	111.09	117.70
36	5	2720	G	N3-C4-C5	-5.51	125.85	128.60
36	5	2944	U	O5'-P-OP1	-5.51	100.74	105.70
37	7	26	C	C6-N1-C2	-5.51	118.10	120.30
37	7	108	A	N1-C2-N3	5.51	132.05	129.30
52	m6	49	ARG	NE-CZ-NH1	-5.51	117.55	120.30
1	2	582	U	C2-N1-C1'	5.50	124.31	117.70
36	1	109	A	OP1-P-O3'	5.50	117.31	105.20
36	1	355	A	O5'-P-OP1	-5.50	100.75	105.70
36	1	1136	A	C4-C5-C6	5.50	119.75	117.00
36	1	3153	U	N3-C2-O2	-5.50	118.35	122.20
36	1	3224	G	C4-C5-N7	-5.50	108.60	110.80
36	5	783	A	N1-C6-N6	5.50	121.90	118.60
36	5	1895	A	C6-N1-C2	-5.50	115.30	118.60
36	5	1947	G	N3-C2-N2	5.50	123.75	119.90
36	5	3254	G	C8-N9-C4	5.50	108.60	106.40
1	2	347	G	C8-N9-C4	-5.50	104.20	106.40
36	1	372	A	C4-C5-C6	5.50	119.75	117.00
36	1	403	C	O5'-P-OP2	-5.50	100.75	105.70
36	1	757	C	N3-C4-N4	5.50	121.85	118.00
36	1	2364	G	N3-C4-C5	-5.50	125.85	128.60
36	1	3240	C	O5'-P-OP2	-5.50	100.75	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	4	C	N3-C4-C5	5.50	124.10	121.90
1	6	576	G	N3-C2-N2	-5.50	116.05	119.90
1	6	1100	G	N7-C8-N9	-5.50	110.35	113.10
1	6	1472	C	N3-C4-C5	5.50	124.10	121.90
1	6	1609	U	N3-C4-O4	-5.50	115.55	119.40
36	5	127	G	C5-C6-O6	-5.50	125.30	128.60
36	5	531	G	C4-C5-C6	5.50	122.10	118.80
36	5	857	G	C2-N3-C4	-5.50	109.15	111.90
36	5	1112	A	C8-N9-C1'	-5.50	117.79	127.70
36	5	1133	A	N7-C8-N9	5.50	116.55	113.80
36	5	1535	A	N7-C8-N9	-5.50	111.05	113.80
36	5	2524	A	C6-C5-N7	-5.50	128.45	132.30
36	5	2855	U	C2-N3-C4	-5.50	123.70	127.00
36	1	325	A	OP2-P-O3'	5.50	117.30	105.20
36	1	883	A	C5-C6-N1	5.50	120.45	117.70
36	1	1517	G	C4-C5-N7	5.50	113.00	110.80
36	1	2300	G	O5'-P-OP2	5.50	117.30	110.70
36	1	2330	C	N3-C4-N4	-5.50	114.15	118.00
36	1	2915	U	OP1-P-OP2	5.50	127.85	119.60
36	1	3081	C	C2-N3-C4	-5.50	117.15	119.90
36	1	3197	G	C4-N9-C1'	-5.50	119.35	126.50
38	4	90	U	C6-N1-C2	5.50	124.30	121.00
1	6	347	G	C4-C5-N7	5.50	113.00	110.80
1	6	1746	A	N9-C4-C5	5.50	108.00	105.80
36	5	570	A	C2-N3-C4	-5.50	107.85	110.60
36	5	709	A	C6-C5-N7	-5.50	128.45	132.30
36	5	1953	G	C4-N9-C1'	-5.50	119.35	126.50
36	5	3002	C	N3-C4-N4	5.50	121.85	118.00
36	5	3092	C	C4-C5-C6	-5.50	114.65	117.40
36	5	3255	U	C5-C4-O4	5.50	129.20	125.90
37	7	38	U	C4-C5-C6	-5.50	116.40	119.70
1	2	408	C	O5'-P-OP1	5.50	117.30	110.70
36	1	657	A	C8-N9-C4	-5.50	103.60	105.80
41	L4	187	LEU	CA-CB-CG	5.50	127.95	115.30
36	5	54	C	N3-C2-O2	-5.50	118.05	121.90
36	5	961	C	C5-C6-N1	5.50	123.75	121.00
36	5	2760	C	C6-N1-C2	5.50	122.50	120.30
36	5	3313	U	OP1-P-OP2	5.50	127.85	119.60
1	2	99	C	C2-N1-C1'	-5.50	112.75	118.80
23	D1	79	LEU	CA-CB-CG	5.50	127.95	115.30
36	1	242	C	N1-C1'-C2'	-5.50	105.95	112.00
36	1	667	C	O5'-P-OP2	-5.50	100.75	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	815	G	N1-C2-N2	5.50	121.15	116.20
36	1	904	A	C8-N9-C4	-5.50	103.60	105.80
36	1	1107	C	C6-N1-C2	5.50	122.50	120.30
36	1	1202	A	C6-C5-N7	-5.50	128.45	132.30
36	1	1365	G	N1-C2-N3	5.50	127.20	123.90
36	1	1752	A	N1-C2-N3	5.50	132.05	129.30
36	1	1839	A	N1-C6-N6	-5.50	115.30	118.60
36	1	2394	G	N3-C4-C5	-5.50	125.85	128.60
36	1	2865	U	OP2-P-O3'	5.50	117.30	105.20
37	3	49	G	N3-C4-N9	5.50	129.30	126.00
37	3	91	G	C2-N3-C4	-5.50	109.15	111.90
1	6	578	U	C4-C5-C6	5.50	123.00	119.70
1	6	981	U	N1-C2-N3	5.50	118.20	114.90
1	6	991	G	N9-C4-C5	5.50	107.60	105.40
1	6	1629	G	OP2-P-O3'	5.50	117.30	105.20
36	5	313	A	O5'-P-OP1	-5.50	100.75	105.70
36	5	2874	G	N3-C4-N9	5.50	129.30	126.00
36	5	2940	A	N1-C2-N3	5.50	132.05	129.30
1	2	535	A	C8-N9-C4	-5.50	103.60	105.80
1	2	1050	G	N1-C6-O6	5.50	123.20	119.90
36	1	393	U	C5-C6-N1	5.50	125.45	122.70
36	1	407	A	OP1-P-OP2	5.50	127.85	119.60
36	1	685	G	N1-C2-N2	-5.50	111.25	116.20
36	1	896	A	C8-N9-C4	-5.50	103.60	105.80
36	1	1315	U	C4-C5-C6	5.50	123.00	119.70
36	1	1424	C	C4-C5-C6	5.50	120.15	117.40
36	1	1558	A	O5'-P-OP2	-5.50	100.75	105.70
36	1	1634	G	C5-C6-O6	-5.50	125.30	128.60
36	1	2205	U	N1-C2-O2	5.50	126.65	122.80
36	1	3027	A	N1-C2-N3	5.50	132.05	129.30
36	1	3046	A	C6-C5-N7	-5.50	128.45	132.30
62	N6	126	LEU	CA-CB-CG	5.50	127.94	115.30
11	s9	3	ARG	NE-CZ-NH2	5.50	123.05	120.30
36	5	294	U	N3-C4-O4	-5.50	115.55	119.40
36	5	433	A	C4-C5-N7	5.50	113.45	110.70
36	5	1041	U	N3-C2-O2	5.50	126.05	122.20
36	5	1213	G	C6-N1-C2	-5.50	121.80	125.10
36	5	3080	G	C4-C5-N7	5.50	113.00	110.80
37	7	112	G	C5-C6-O6	5.50	131.90	128.60
36	1	2204	C	C6-N1-C1'	-5.50	114.21	120.80
36	1	2399	A	C4-C5-N7	5.50	113.45	110.70
36	1	2943	G	C8-N9-C1'	-5.50	119.86	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3064	U	C6-N1-C1'	5.50	128.89	121.20
36	1	3291	G	N3-C2-N2	-5.50	116.05	119.90
38	4	140	G	N3-C2-N2	-5.50	116.05	119.90
1	6	45	U	O5'-P-OP2	-5.50	100.75	105.70
1	6	857	U	N3-C2-O2	5.50	126.05	122.20
1	6	946	U	C2-N1-C1'	5.50	124.29	117.70
36	5	578	A	C6-C5-N7	5.50	136.15	132.30
36	5	1726	C	C6-N1-C2	5.50	122.50	120.30
36	5	1838	G	C8-N9-C4	5.50	108.60	106.40
36	5	3030	G	N1-C2-N2	5.50	121.15	116.20
1	2	255	U	C6-N1-C2	-5.49	117.70	121.00
1	2	1539	G	C5-C6-O6	-5.49	125.30	128.60
36	1	624	G	C4-N9-C1'	5.49	133.64	126.50
36	1	1060	U	N3-C4-O4	-5.49	115.56	119.40
36	1	1736	G	C5-N7-C8	-5.49	101.55	104.30
36	1	1799	A	C2-N3-C4	-5.49	107.85	110.60
36	1	1923	C	O5'-P-OP1	-5.49	100.76	105.70
36	1	2286	U	C5-C4-O4	5.49	129.20	125.90
36	1	3089	C	N1-C2-N3	5.49	123.05	119.20
1	6	432	G	C4-N9-C1'	5.49	133.64	126.50
1	6	972	G	C4-C5-N7	5.49	113.00	110.80
1	6	1143	A	C6-C5-N7	-5.49	128.46	132.30
1	6	1630	U	C6-N1-C2	-5.49	117.70	121.00
36	5	196	G	OP1-P-O3'	5.49	117.29	105.20
36	5	388	G	C5-C6-O6	5.49	131.90	128.60
36	5	1318	A	C6-N1-C2	-5.49	115.30	118.60
36	5	2794	G	C4-N9-C1'	-5.49	119.36	126.50
36	5	2952	G	C4-N9-C1'	5.49	133.64	126.50
36	5	3328	G	N9-C4-C5	-5.49	103.20	105.40
37	7	97	A	N3-C4-N9	5.49	131.79	127.40
36	1	907	G	O4'-C1'-N9	5.49	112.59	108.20
36	1	1709	C	N3-C4-C5	-5.49	119.70	121.90
36	1	1887	A	C6-C5-N7	-5.49	128.46	132.30
36	1	3082	C	OP1-P-OP2	-5.49	111.36	119.60
1	6	16	G	O5'-P-OP1	5.49	117.29	110.70
1	6	567	A	O5'-P-OP2	-5.49	100.76	105.70
36	5	509	U	C6-N1-C2	5.49	124.30	121.00
36	5	890	C	O5'-P-OP1	5.49	117.29	110.70
36	5	1336	U	C5-C6-N1	5.49	125.45	122.70
36	5	2682	C	N3-C4-C5	-5.49	119.70	121.90
36	5	2687	G	N3-C4-N9	5.49	129.29	126.00
1	2	310	C	N3-C2-O2	-5.49	118.06	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1073	G	N7-C8-N9	-5.49	110.36	113.10
1	2	1462	G	N7-C8-N9	-5.49	110.36	113.10
36	1	3152	U	C6-N1-C1'	5.49	128.89	121.20
37	3	41	G	O4'-C1'-N9	5.49	112.59	108.20
37	3	91	G	C4-N9-C1'	5.49	133.64	126.50
1	6	23	G	C5-C6-N1	-5.49	108.75	111.50
36	5	1042	U	C6-N1-C2	5.49	124.30	121.00
36	5	1264	G	N1-C6-O6	-5.49	116.61	119.90
36	5	1350	A	N1-C6-N6	-5.49	115.31	118.60
36	5	1883	A	C6-N1-C2	-5.49	115.31	118.60
36	5	2320	A	C2-N3-C4	-5.49	107.86	110.60
36	5	2361	A	C5-C6-N1	5.49	120.45	117.70
36	5	2915	U	O5'-P-OP2	-5.49	100.76	105.70
36	5	2952	G	N9-C4-C5	-5.49	103.20	105.40
36	5	3062	G	N9-C4-C5	-5.49	103.20	105.40
1	2	238	U	O4'-C1'-N1	5.49	112.59	108.20
1	2	619	A	OP2-P-O3'	5.49	117.28	105.20
36	1	1295	G	C4-N9-C1'	5.49	133.63	126.50
36	1	1475	A	N1-C6-N6	5.49	121.89	118.60
36	1	1751	G	N9-C4-C5	5.49	107.59	105.40
38	4	43	A	C2-N3-C4	5.49	113.34	110.60
63	N7	51	LEU	CA-CB-CG	-5.49	102.67	115.30
1	6	21	U	N1-C2-N3	5.49	118.19	114.90
1	6	93	A	C5-C6-N1	5.49	120.44	117.70
1	6	435	C	N1-C2-O2	5.49	122.19	118.90
1	6	602	U	OP2-P-O3'	5.49	117.27	105.20
1	6	980	G	C8-N9-C4	5.49	108.59	106.40
1	6	1447	C	N1-C2-O2	5.49	122.19	118.90
36	5	653	A	N9-C4-C5	-5.49	103.60	105.80
36	5	1202	A	C6-C5-N7	-5.49	128.46	132.30
37	7	33	U	C2-N3-C4	-5.49	123.71	127.00
36	1	399	A	C4-C5-N7	5.49	113.44	110.70
36	1	655	C	O5'-P-OP1	5.49	117.28	110.70
36	1	908	G	C4-C5-C6	5.49	122.09	118.80
36	1	3013	U	C6-N1-C2	5.49	124.29	121.00
1	6	425	A	N9-C4-C5	5.49	108.00	105.80
1	6	1283	U	C5-C4-O4	5.49	129.19	125.90
1	6	1564	U	N3-C4-C5	5.49	117.89	114.60
36	5	39	A	N1-C2-N3	5.49	132.04	129.30
36	5	52	A	C6-N1-C2	-5.49	115.31	118.60
36	5	830	A	N1-C2-N3	5.49	132.04	129.30
36	5	2167	A	C8-N9-C4	-5.49	103.61	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	115	G	OP2-P-O3'	5.49	117.27	105.20
38	8	10	A	N7-C8-N9	-5.49	111.06	113.80
1	2	311	U	N3-C4-C5	-5.49	111.31	114.60
1	2	1608	U	C6-N1-C2	-5.49	117.71	121.00
1	2	1752	U	C6-N1-C2	5.49	124.29	121.00
36	1	113	C	N3-C4-N4	5.49	121.84	118.00
36	1	404	G	C4-N9-C1'	5.49	133.63	126.50
36	1	1050	U	C4-C5-C6	5.49	122.99	119.70
36	1	1321	G	N1-C6-O6	5.49	123.19	119.90
36	1	2610	G	N1-C2-N3	5.49	127.19	123.90
36	1	3222	U	N3-C4-O4	-5.49	115.56	119.40
36	1	3276	G	C4-C5-N7	5.49	112.99	110.80
36	1	3329	U	O5'-P-OP1	-5.49	100.76	105.70
38	4	52	A	N1-C6-N6	-5.49	115.31	118.60
38	4	73	U	N3-C4-O4	-5.49	115.56	119.40
1	6	1039	A	C5-N7-C8	-5.49	101.16	103.90
1	6	1192	C	N3-C4-N4	5.49	121.84	118.00
36	5	406	G	C2-N3-C4	-5.49	109.16	111.90
36	5	667	C	N1-C2-O2	5.49	122.19	118.90
36	5	1668	G	N1-C6-O6	5.49	123.19	119.90
36	5	2957	G	N3-C4-N9	-5.49	122.71	126.00
1	2	1720	G	N1-C6-O6	5.48	123.19	119.90
36	1	1893	A	C2-N3-C4	-5.48	107.86	110.60
36	5	2163	C	N3-C2-O2	-5.48	118.06	121.90
1	2	1004	U	N1-C2-N3	5.48	118.19	114.90
1	2	1201	G	C5-N7-C8	5.48	107.04	104.30
36	1	52	A	O5'-P-OP1	-5.48	100.77	105.70
36	1	125	C	C6-N1-C2	5.48	122.49	120.30
36	1	932	U	C2-N3-C4	-5.48	123.71	127.00
36	1	1177	G	P-O3'-C3'	5.48	126.28	119.70
36	1	1334	U	O5'-P-OP2	-5.48	100.77	105.70
36	1	1367	G	C8-N9-C4	-5.48	104.21	106.40
36	1	1500	G	N1-C6-O6	5.48	123.19	119.90
1	6	561	G	N7-C8-N9	5.48	115.84	113.10
1	6	804	A	C5-C6-N6	-5.48	119.31	123.70
1	6	858	G	C8-N9-C1'	-5.48	119.87	127.00
1	6	1100	G	C4-C5-N7	5.48	112.99	110.80
36	5	768	C	C5-C6-N1	5.48	123.74	121.00
36	5	867	G	C4-C5-C6	5.48	122.09	118.80
36	5	943	U	C4-C5-C6	5.48	122.99	119.70
36	5	1155	C	C5-C6-N1	5.48	123.74	121.00
36	5	1215	U	N3-C4-O4	5.48	123.24	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1860	G	O4'-C1'-N9	5.48	112.59	108.20
36	5	1863	G	N1-C6-O6	-5.48	116.61	119.90
36	5	2396	G	N9-C4-C5	5.48	107.59	105.40
1	2	1029	U	N3-C4-O4	-5.48	115.56	119.40
36	1	628	A	OP1-P-O3'	-5.48	93.14	105.20
36	1	641	C	C6-N1-C2	5.48	122.49	120.30
36	1	651	G	O4'-C1'-N9	-5.48	103.82	108.20
36	1	1205	A	O5'-P-OP2	-5.48	100.77	105.70
36	1	2877	G	OP1-P-OP2	5.48	127.82	119.60
37	3	103	A	OP2-P-O3'	5.48	117.26	105.20
1	6	1656	U	N3-C4-O4	5.48	123.24	119.40
1	2	336	G	N1-C6-O6	5.48	123.19	119.90
36	1	362	U	C2-N1-C1'	-5.48	111.13	117.70
36	1	929	A	N1-C2-N3	-5.48	126.56	129.30
36	1	1153	A	N1-C6-N6	5.48	121.89	118.60
36	1	2095	G	C6-C5-N7	-5.48	127.11	130.40
36	1	2870	C	P-O3'-C3'	5.48	126.27	119.70
1	6	1625	C	N3-C2-O2	5.48	125.74	121.90
36	5	2318	U	N1-C2-N3	-5.48	111.61	114.90
1	2	581	U	C5-C6-N1	5.48	125.44	122.70
36	1	805	G	C6-C5-N7	-5.48	127.11	130.40
36	1	943	U	N3-C4-C5	-5.48	111.31	114.60
36	1	1429	G	C4-C5-C6	5.48	122.09	118.80
36	1	1521	G	N3-C4-N9	-5.48	122.71	126.00
36	1	1618	G	N9-C4-C5	5.48	107.59	105.40
36	1	2520	A	C4-C5-N7	5.48	113.44	110.70
38	4	41	A	N3-C4-N9	5.48	131.78	127.40
1	6	757	A	C2-N3-C4	-5.48	107.86	110.60
1	6	1509	C	C2-N3-C4	-5.48	117.16	119.90
36	5	419	G	N3-C4-C5	-5.48	125.86	128.60
36	5	595	G	N3-C4-C5	-5.48	125.86	128.60
36	5	1816	A	C2-N3-C4	5.48	113.34	110.60
36	5	3114	A	N3-C4-C5	5.48	130.63	126.80
36	5	3225	C	N3-C4-N4	5.48	121.83	118.00
1	2	287	G	N9-C1'-C2'	-5.48	105.98	112.00
1	2	1108	G	C5-C6-N1	5.48	114.24	111.50
1	2	1173	C	N3-C2-O2	-5.48	118.07	121.90
1	2	1303	U	C2-N1-C1'	-5.48	111.13	117.70
36	1	419	G	N3-C4-N9	5.48	129.28	126.00
36	1	815	G	C4-C5-N7	-5.48	108.61	110.80
36	1	2127	U	O5'-P-OP2	5.48	117.27	110.70
36	1	2229	A	C5-N7-C8	-5.48	101.16	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	157	A	N1-C6-N6	-5.48	115.31	118.60
1	2	378	A	C4-C5-N7	5.47	113.44	110.70
1	2	1656	U	N3-C2-O2	5.47	126.03	122.20
36	1	73	C	O4'-C1'-N1	-5.47	103.82	108.20
36	1	353	G	N3-C4-N9	-5.47	122.72	126.00
36	1	2164	A	C8-N9-C4	-5.47	103.61	105.80
36	1	2243	A	N1-C6-N6	5.47	121.89	118.60
36	1	2419	A	C5-C6-N6	-5.47	119.32	123.70
36	1	2634	U	N3-C4-O4	5.47	123.23	119.40
37	3	109	G	C4-N9-C1'	-5.47	119.38	126.50
1	6	989	U	N3-C2-O2	-5.47	118.37	122.20
1	6	1226	A	N3-C4-C5	-5.47	122.97	126.80
36	5	217	U	N3-C4-O4	-5.47	115.57	119.40
36	5	1847	A	O5'-P-OP2	-5.47	100.77	105.70
1	2	1266	U	OP1-P-O3'	5.47	117.24	105.20
36	1	1374	G	C5-C6-O6	-5.47	125.32	128.60
36	1	1448	U	C4-C5-C6	5.47	122.98	119.70
36	1	1525	G	N1-C2-N2	-5.47	111.27	116.20
36	1	1665	C	N3-C2-O2	5.47	125.73	121.90
37	3	75	G	N1-C2-N3	5.47	127.18	123.90
40	L3	117	ARG	NE-CZ-NH1	5.47	123.04	120.30
1	6	52	U	C2-N1-C1'	5.47	124.27	117.70
1	6	639	U	O4'-C1'-N1	5.47	112.58	108.20
36	5	183	G	N9-C4-C5	5.47	107.59	105.40
36	5	617	G	C8-N9-C4	5.47	108.59	106.40
36	5	1082	U	C2-N1-C1'	5.47	124.27	117.70
36	5	1318	A	OP2-P-O3'	5.47	117.24	105.20
36	5	1896	A	N9-C4-C5	5.47	107.99	105.80
36	5	3074	G	O5'-P-OP1	-5.47	100.78	105.70
52	m6	138	LEU	CB-CG-CD2	-5.47	101.70	111.00
1	2	574	G	C4-C5-N7	-5.47	108.61	110.80
1	2	1329	A	N9-C4-C5	-5.47	103.61	105.80
36	1	788	C	C4-C5-C6	5.47	120.14	117.40
36	1	1070	U	C5-C4-O4	5.47	129.18	125.90
1	6	546	U	N1-C2-N3	5.47	118.18	114.90
36	5	712	G	C2-N3-C4	5.47	114.64	111.90
36	5	1489	A	C6-N1-C2	-5.47	115.32	118.60
36	5	2287	C	N3-C4-N4	-5.47	114.17	118.00
36	5	2860	U	C6-N1-C2	5.47	124.28	121.00
1	2	1744	A	O5'-P-OP1	-5.47	100.78	105.70
36	1	933	A	N3-C4-N9	5.47	131.78	127.40
36	1	1046	A	C6-C5-N7	-5.47	128.47	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1303	A	OP1-P-O3'	5.47	117.23	105.20
36	1	1523	U	O4'-C1'-N1	5.47	112.58	108.20
36	1	2586	G	N3-C4-C5	-5.47	125.86	128.60
36	1	2624	G	C4-N9-C1'	5.47	133.61	126.50
36	1	3321	C	O5'-P-OP1	5.47	117.26	110.70
36	1	3393	U	C2-N1-C1'	-5.47	111.14	117.70
1	6	57	G	N7-C8-N9	5.47	115.83	113.10
1	6	325	G	N1-C2-N3	5.47	127.18	123.90
1	6	1148	C	N3-C2-O2	-5.47	118.07	121.90
1	6	1228	G	C4-N9-C1'	5.47	133.61	126.50
36	5	1881	A	C5-C6-N1	5.47	120.44	117.70
36	5	2351	U	C2-N3-C4	-5.47	123.72	127.00
36	5	2374	C	OP2-P-O3'	5.47	117.23	105.20
36	5	3315	G	N1-C2-N3	5.47	127.18	123.90
38	8	12	A	C6-C5-N7	-5.47	128.47	132.30
1	2	1030	A	N1-C6-N6	5.47	121.88	118.60
36	1	881	C	OP1-P-O3'	5.47	117.23	105.20
36	1	3323	A	C4-C5-C6	5.47	119.73	117.00
38	4	13	A	C2-N3-C4	-5.47	107.87	110.60
1	6	331	A	O5'-P-OP2	-5.47	100.78	105.70
1	6	388	G	N1-C2-N3	5.47	127.18	123.90
1	6	554	C	N1-C2-O2	-5.47	115.62	118.90
1	6	1361	U	N1-C2-O2	5.47	126.63	122.80
36	5	1668	G	N7-C8-N9	5.47	115.83	113.10
36	5	2518	C	N3-C2-O2	5.47	125.73	121.90
36	5	3117	C	N3-C2-O2	-5.47	118.07	121.90
1	2	1044	U	N1-C2-N3	5.47	118.18	114.90
1	2	1773	C	N1-C2-O2	-5.47	115.62	118.90
36	1	1005	G	C4-C5-N7	-5.47	108.61	110.80
36	1	2627	C	C2-N1-C1'	-5.47	112.79	118.80
36	1	2844	C	N3-C4-C5	5.47	124.09	121.90
36	1	3269	U	C5-C4-O4	5.47	129.18	125.90
38	4	77	A	C2-N3-C4	-5.47	107.87	110.60
1	6	420	A	C8-N9-C4	-5.47	103.61	105.80
1	6	1245	G	N3-C4-C5	-5.47	125.87	128.60
36	5	543	C	C6-N1-C2	-5.47	118.11	120.30
36	5	591	G	C4-N9-C1'	5.47	133.61	126.50
36	5	1173	U	C5-C6-N1	-5.47	119.97	122.70
36	5	1889	G	C5-C6-O6	-5.47	125.32	128.60
36	5	2106	A	C8-N9-C4	-5.47	103.61	105.80
36	5	2265	C	N3-C4-C5	-5.47	119.71	121.90
36	5	2377	G	N1-C2-N3	-5.47	120.62	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2386	A	C2-N3-C4	-5.47	107.87	110.60
36	5	2722	U	C6-N1-C2	-5.47	117.72	121.00
36	5	2923	U	OP2-P-O3'	-5.47	93.17	105.20
36	5	3128	G	OP2-P-O3'	5.47	117.23	105.20
36	5	3181	C	C5-C4-N4	5.47	124.03	120.20
1	2	233	C	C6-N1-C2	-5.46	118.11	120.30
36	1	320	G	C4-C5-N7	5.46	112.99	110.80
36	1	1002	A	C4-C5-C6	-5.46	114.27	117.00
36	1	1346	G	N3-C2-N2	-5.46	116.08	119.90
36	1	1905	G	C5-C6-N1	-5.46	108.77	111.50
36	1	2286	U	C4-C5-C6	5.46	122.98	119.70
36	1	2886	U	N3-C2-O2	5.46	126.03	122.20
36	1	3142	A	C4-N9-C1'	-5.46	116.47	126.30
36	1	3261	C	C5-C6-N1	5.46	123.73	121.00
1	6	440	U	C2-N3-C4	-5.46	123.72	127.00
1	6	874	C	N1-C2-O2	5.46	122.18	118.90
1	6	903	U	N3-C4-O4	5.46	123.22	119.40
36	5	801	A	C5-C6-N1	-5.46	114.97	117.70
36	5	987	U	N1-C2-N3	5.46	118.18	114.90
36	5	2347	U	C4-C5-C6	5.46	122.98	119.70
37	7	25	G	N3-C4-C5	-5.46	125.87	128.60
38	8	17	A	N1-C6-N6	5.46	121.88	118.60
36	1	936	A	C8-N9-C4	5.46	107.98	105.80
36	1	2163	C	N3-C4-C5	5.46	124.08	121.90
36	1	2368	A	C6-C5-N7	-5.46	128.48	132.30
36	1	2655	U	C6-N1-C1'	5.46	128.85	121.20
36	1	3288	G	C5-N7-C8	-5.46	101.57	104.30
36	5	235	A	N3-C4-C5	5.46	130.62	126.80
36	5	651	G	OP2-P-O3'	5.46	117.22	105.20
36	5	1656	A	N1-C2-N3	5.46	132.03	129.30
36	5	1929	G	C2-N3-C4	-5.46	109.17	111.90
68	o2	27	ARG	NE-CZ-NH1	-5.46	117.57	120.30
1	2	622	A	C2-N3-C4	5.46	113.33	110.60
36	1	38	U	O5'-P-OP2	5.46	117.25	110.70
36	1	94	G	N1-C6-O6	5.46	123.18	119.90
36	1	416	A	C6-C5-N7	-5.46	128.48	132.30
36	1	695	C	C2-N3-C4	-5.46	117.17	119.90
36	1	907	G	N3-C2-N2	5.46	123.72	119.90
36	1	1099	A	C8-N9-C4	5.46	107.98	105.80
36	1	2149	A	N1-C6-N6	-5.46	115.32	118.60
36	1	2423	U	N3-C4-O4	5.46	123.22	119.40
36	1	2652	U	OP2-P-O3'	5.46	117.22	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2684	C	C6-N1-C2	-5.46	118.11	120.30
36	1	2964	G	C5-C6-N1	-5.46	108.77	111.50
36	1	3375	A	P-O3'-C3'	5.46	126.25	119.70
1	6	635	A	C5-C6-N6	5.46	128.07	123.70
1	6	858	G	C8-N9-C4	-5.46	104.22	106.40
1	6	865	A	C8-N9-C4	-5.46	103.61	105.80
1	6	980	G	N1-C6-O6	5.46	123.18	119.90
1	6	1126	G	N3-C2-N2	-5.46	116.08	119.90
1	6	1467	C	C5-C6-N1	5.46	123.73	121.00
1	6	1796	C	N3-C2-O2	-5.46	118.08	121.90
36	5	595	G	N9-C4-C5	-5.46	103.22	105.40
36	5	702	C	C5-C6-N1	5.46	123.73	121.00
36	5	1043	C	C2-N3-C4	-5.46	117.17	119.90
36	5	1489	A	C8-N9-C1'	-5.46	117.87	127.70
36	5	1691	U	C6-N1-C2	-5.46	117.72	121.00
36	5	2190	U	OP2-P-O3'	5.46	117.21	105.20
36	5	2199	G	C8-N9-C4	-5.46	104.22	106.40
36	5	2365	C	C4-C5-C6	5.46	120.13	117.40
1	2	100	A	N1-C6-N6	-5.46	115.32	118.60
36	1	115	A	O4'-C1'-N9	-5.46	103.83	108.20
36	1	1869	C	N3-C2-O2	5.46	125.72	121.90
36	1	2239	G	N3-C2-N2	5.46	123.72	119.90
36	1	2990	G	N3-C4-N9	5.46	129.28	126.00
36	1	3173	G	C4-N9-C1'	5.46	133.60	126.50
1	6	885	G	OP1-P-O3'	5.46	117.21	105.20
36	5	342	A	N3-C4-N9	5.46	131.77	127.40
36	5	356	C	N1-C2-O2	-5.46	115.62	118.90
36	5	1095	U	C2-N1-C1'	5.46	124.25	117.70
36	5	1881	A	O4'-C1'-N9	-5.46	103.83	108.20
36	5	2664	C	N3-C4-C5	5.46	124.08	121.90
36	5	3095	U	C5-C6-N1	-5.46	119.97	122.70
36	1	128	G	N1-C6-O6	5.46	123.17	119.90
36	1	622	A	N1-C2-N3	-5.46	126.57	129.30
36	1	1196	C	N1-C2-N3	-5.46	115.38	119.20
36	1	3242	G	C2-N3-C4	-5.46	109.17	111.90
40	L3	284	ARG	NE-CZ-NH1	5.46	123.03	120.30
61	N5	115	ARG	NE-CZ-NH1	5.46	123.03	120.30
1	6	165	G	C4-C5-C6	5.46	122.08	118.80
1	6	1454	G	C6-C5-N7	-5.46	127.12	130.40
36	5	1431	G	N3-C4-N9	5.46	129.28	126.00
36	5	1752	A	O5'-P-OP1	-5.46	100.79	105.70
36	5	1884	A	C6-N1-C2	-5.46	115.33	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2300	G	C4-C5-N7	5.46	112.98	110.80
36	5	2374	C	C6-N1-C1'	-5.46	114.25	120.80
36	5	2624	G	N9-C4-C5	-5.46	103.22	105.40
36	5	2729	U	C5-C6-N1	-5.46	119.97	122.70
37	7	87	G	C8-N9-C1'	-5.46	119.90	127.00
1	2	314	C	OP1-P-O3'	5.46	117.20	105.20
1	2	783	G	N9-C4-C5	-5.46	103.22	105.40
36	1	429	U	OP2-P-O3'	5.46	117.20	105.20
36	1	875	G	N3-C2-N2	-5.46	116.08	119.90
36	1	1444	G	N3-C4-C5	-5.46	125.87	128.60
36	1	3008	A	OP1-P-OP2	-5.46	111.41	119.60
36	1	3145	C	N1-C2-O2	-5.46	115.63	118.90
37	3	56	A	C4-C5-C6	-5.46	114.27	117.00
38	4	33	A	O5'-P-OP1	-5.46	100.79	105.70
38	4	46	G	N3-C4-C5	-5.46	125.87	128.60
38	4	81	U	C6-N1-C2	-5.46	117.73	121.00
38	4	83	C	N3-C4-C5	-5.46	119.72	121.90
36	5	53	G	N1-C6-O6	-5.46	116.63	119.90
36	5	528	U	N3-C4-O4	5.46	123.22	119.40
36	5	936	A	O5'-P-OP1	5.46	117.25	110.70
36	5	1280	C	C6-N1-C2	5.46	122.48	120.30
36	5	2370	G	C8-N9-C4	-5.46	104.22	106.40
36	1	1103	A	C4-C5-N7	-5.46	107.97	110.70
36	1	1147	G	N1-C2-N3	5.46	127.17	123.90
36	1	1431	G	C8-N9-C1'	-5.46	119.91	127.00
36	1	1893	A	C5-N7-C8	-5.46	101.17	103.90
1	6	411	C	C6-N1-C2	-5.46	118.12	120.30
36	5	1452	A	N1-C2-N3	5.46	132.03	129.30
36	5	3142	A	N1-C6-N6	-5.46	115.33	118.60
1	2	275	C	C5-C6-N1	5.45	123.73	121.00
1	2	1112	G	OP1-P-OP2	-5.45	111.42	119.60
14	C2	103	LEU	CA-CB-CG	5.45	127.84	115.30
36	1	275	U	OP1-P-OP2	-5.45	111.42	119.60
36	1	515	C	N3-C4-C5	-5.45	119.72	121.90
36	1	613	G	C5-N7-C8	-5.45	101.57	104.30
36	1	951	A	C8-N9-C4	5.45	107.98	105.80
36	1	1082	U	N3-C2-O2	-5.45	118.38	122.20
36	1	1456	A	O4'-C1'-N9	-5.45	103.84	108.20
36	1	1524	A	C5-C6-N1	5.45	120.43	117.70
36	1	1553	U	N1-C2-O2	-5.45	118.98	122.80
36	1	3122	A	C4-C5-N7	5.45	113.43	110.70
1	6	322	G	O4'-C1'-N9	-5.45	103.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	761	G	N9-C4-C5	5.45	107.58	105.40
1	6	1178	G	C5-C6-O6	5.45	131.87	128.60
1	6	1772	C	C4-C5-C6	5.45	120.13	117.40
36	5	110	G	C4-N9-C1'	5.45	133.59	126.50
36	5	1389	G	C8-N9-C4	5.45	108.58	106.40
36	5	1551	C	O4'-C1'-N1	5.45	112.56	108.20
36	5	2119	A	C2-N3-C4	-5.45	107.87	110.60
36	5	2274	U	N3-C4-O4	5.45	123.22	119.40
37	7	106	U	OP1-P-OP2	5.45	127.78	119.60
1	2	770	A	O5'-P-OP2	-5.45	100.79	105.70
36	1	1618	G	C4-C5-N7	-5.45	108.62	110.80
36	1	1795	U	N1-C2-O2	-5.45	118.98	122.80
36	1	3304	U	OP1-P-OP2	5.45	127.78	119.60
36	1	3320	A	C5-N7-C8	-5.45	101.17	103.90
1	6	1100	G	N3-C4-C5	5.45	131.33	128.60
36	5	1522	U	C2-N1-C1'	-5.45	111.16	117.70
36	5	1652	G	N1-C6-O6	5.45	123.17	119.90
36	5	2907	G	C6-N1-C2	-5.45	121.83	125.10
37	7	17	A	C6-N1-C2	-5.45	115.33	118.60
1	2	27	U	N1-C2-O2	5.45	126.61	122.80
36	1	10	C	C6-N1-C2	5.45	122.48	120.30
36	1	80	G	C8-N9-C4	-5.45	104.22	106.40
36	1	518	G	N9-C4-C5	5.45	107.58	105.40
36	1	828	A	N1-C6-N6	5.45	121.87	118.60
36	1	906	A	C5-C6-N1	5.45	120.42	117.70
36	1	944	C	C2-N3-C4	-5.45	117.17	119.90
36	1	1330	A	OP2-P-O3'	5.45	117.19	105.20
36	1	1545	A	C4-C5-C6	5.45	119.73	117.00
36	1	2197	C	N3-C2-O2	5.45	125.72	121.90
36	1	2339	C	N1-C2-O2	5.45	122.17	118.90
36	1	3189	G	N3-C4-N9	5.45	129.27	126.00
36	1	3242	G	O5'-P-OP2	-5.45	100.80	105.70
36	1	3304	U	N1-C2-N3	5.45	118.17	114.90
52	M6	99	LEU	CA-CB-CG	-5.45	102.76	115.30
1	6	55	A	C5-C6-N6	5.45	128.06	123.70
1	6	217	A	P-O3'-C3'	5.45	126.24	119.70
1	6	1774	G	OP2-P-O3'	5.45	117.19	105.20
36	5	1313	G	N3-C4-C5	-5.45	125.87	128.60
36	5	1397	C	C2-N1-C1'	5.45	124.80	118.80
36	5	2372	A	N3-C4-N9	5.45	131.76	127.40
36	5	2828	G	O5'-P-OP2	5.45	117.24	110.70
36	5	2918	G	N7-C8-N9	-5.45	110.38	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3060	C	N3-C2-O2	5.45	125.72	121.90
1	2	755	A	C4-C5-N7	-5.45	107.98	110.70
1	2	1104	U	N3-C2-O2	5.45	126.01	122.20
36	1	1178	G	C6-N1-C2	-5.45	121.83	125.10
36	1	1367	G	C4-C5-C6	5.45	122.07	118.80
36	1	2824	G	C2-N3-C4	-5.45	109.18	111.90
36	1	3189	G	N3-C4-C5	-5.45	125.88	128.60
37	3	115	G	C8-N9-C4	5.45	108.58	106.40
1	6	3	U	C5-C6-N1	-5.45	119.98	122.70
1	6	760	A	C2-N3-C4	-5.45	107.88	110.60
1	6	1583	A	N9-C4-C5	5.45	107.98	105.80
36	5	81	C	C5-C6-N1	-5.45	118.28	121.00
36	5	957	C	N3-C2-O2	-5.45	118.09	121.90
36	5	2908	G	OP1-P-O3'	-5.45	93.21	105.20
36	5	3100	U	N3-C4-C5	5.45	117.87	114.60
36	5	3243	A	N1-C6-N6	5.45	121.87	118.60
36	1	2332	A	C5-C6-N6	-5.45	119.34	123.70
1	6	52	U	C6-N1-C2	-5.45	117.73	121.00
36	5	1362	G	C5-C6-O6	-5.45	125.33	128.60
36	5	1383	G	N1-C6-O6	5.45	123.17	119.90
36	5	2735	U	O5'-P-OP1	5.45	117.24	110.70
1	2	728	U	C2-N1-C1'	5.45	124.23	117.70
1	2	1427	A	C2-N3-C4	5.45	113.32	110.60
36	1	236	G	N1-C6-O6	-5.45	116.63	119.90
36	1	1412	G	OP1-P-OP2	-5.45	111.43	119.60
36	1	1527	C	N3-C2-O2	5.45	125.71	121.90
36	1	2247	G	O5'-P-OP1	-5.45	100.80	105.70
36	1	2916	U	C5-C4-O4	-5.45	122.63	125.90
36	1	2991	A	O5'-P-OP2	5.45	117.23	110.70
36	1	3022	G	O4'-C1'-N9	5.45	112.56	108.20
36	1	3114	A	N1-C2-N3	5.45	132.02	129.30
36	1	3318	G	N9-C1'-C2'	-5.45	106.01	112.00
38	4	63	G	N1-C2-N3	5.45	127.17	123.90
1	6	417	A	OP2-P-O3'	5.45	117.18	105.20
1	6	574	G	N7-C8-N9	-5.45	110.38	113.10
1	6	777	C	C5-C6-N1	5.45	123.72	121.00
1	6	1004	U	C4-C5-C6	5.45	122.97	119.70
36	5	96	G	C6-N1-C2	5.45	128.37	125.10
36	5	212	G	N3-C4-C5	-5.45	125.88	128.60
36	5	947	G	C4-N9-C1'	5.45	133.58	126.50
36	5	1400	G	C6-C5-N7	-5.45	127.13	130.40
36	5	2728	G	N7-C8-N9	5.45	115.82	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3390	G	N1-C2-N3	5.45	127.17	123.90
37	7	93	C	C2-N3-C4	-5.45	117.18	119.90
38	8	101	U	N3-C2-O2	-5.45	118.39	122.20
50	m4	38	ILE	CG1-CB-CG2	-5.45	99.42	111.40
1	2	43	A	N1-C6-N6	-5.44	115.33	118.60
36	1	329	U	C2-N3-C4	-5.44	123.73	127.00
36	1	587	U	N3-C2-O2	5.44	126.01	122.20
36	1	592	A	O5'-P-OP2	-5.44	100.80	105.70
36	1	696	C	P-O3'-C3'	5.44	126.23	119.70
36	1	1099	A	C5-C6-N6	-5.44	119.34	123.70
36	1	2235	C	N1-C2-O2	-5.44	115.63	118.90
36	1	2356	A	N1-C6-N6	5.44	121.87	118.60
36	5	817	A	C8-N9-C4	-5.44	103.62	105.80
36	5	2354	C	C2-N3-C4	5.44	122.62	119.90
36	1	573	C	O5'-P-OP2	-5.44	100.80	105.70
36	1	994	G	OP1-P-O3'	5.44	117.17	105.20
36	1	1621	A	N7-C8-N9	-5.44	111.08	113.80
36	1	3312	U	C5-C6-N1	5.44	125.42	122.70
1	6	417	A	C4-C5-C6	5.44	119.72	117.00
1	6	1070	C	C2-N3-C4	-5.44	117.18	119.90
1	6	1772	C	C5-C6-N1	-5.44	118.28	121.00
36	5	1343	A	C8-N9-C4	5.44	107.98	105.80
36	5	2208	A	O4'-C1'-N9	5.44	112.56	108.20
36	5	2285	C	N1-C2-N3	5.44	123.01	119.20
36	5	3061	G	N1-C2-N2	5.44	121.10	116.20
36	5	3290	G	C4-N9-C1'	5.44	133.57	126.50
1	2	1241	G	C8-N9-C1'	-5.44	119.93	127.00
1	2	1255	G	C4-C5-N7	-5.44	108.62	110.80
36	1	361	A	C6-N1-C2	-5.44	115.34	118.60
36	1	679	U	C5-C4-O4	5.44	129.16	125.90
36	1	1296	C	N3-C4-C5	5.44	124.08	121.90
36	1	2799	A	C5-C6-N6	5.44	128.05	123.70
36	1	2882	U	N1-C2-N3	5.44	118.17	114.90
1	6	1376	C	C2-N1-C1'	-5.44	112.82	118.80
36	5	62	A	N7-C8-N9	5.44	116.52	113.80
36	5	515	C	C5-C6-N1	-5.44	118.28	121.00
36	5	521	A	O5'-P-OP1	-5.44	100.80	105.70
36	5	677	A	C5-C6-N1	5.44	120.42	117.70
36	5	1040	A	N9-C1'-C2'	-5.44	106.02	112.00
36	5	1174	G	O5'-P-OP2	-5.44	100.80	105.70
36	5	1672	U	C5-C6-N1	-5.44	119.98	122.70
36	5	2584	G	O4'-C1'-N9	-5.44	103.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2978	U	N1-C2-N3	5.44	118.16	114.90
36	5	3153	U	C2-N1-C1'	5.44	124.23	117.70
36	5	3324	C	C6-N1-C2	5.44	122.48	120.30
37	7	68	C	O5'-P-OP1	-5.44	100.80	105.70
37	7	80	G	C8-N9-C1'	-5.44	119.93	127.00
38	8	31	G	N7-C8-N9	-5.44	110.38	113.10
62	n6	6	LEU	CA-CB-CG	-5.44	102.79	115.30
36	1	404	G	N3-C4-N9	5.44	129.26	126.00
36	1	504	A	C5-C6-N1	5.44	120.42	117.70
36	1	2121	G	C8-N9-C1'	5.44	134.07	127.00
36	1	2163	C	C5-C6-N1	-5.44	118.28	121.00
36	1	2210	G	C8-N9-C1'	5.44	134.07	127.00
36	1	2341	A	C8-N9-C4	5.44	107.97	105.80
1	6	361	C	N3-C2-O2	-5.44	118.09	121.90
1	6	613	G	C5-C6-O6	-5.44	125.34	128.60
36	5	507	U	C4-C5-C6	5.44	122.96	119.70
36	5	3147	G	N1-C2-N2	-5.44	111.31	116.20
40	l3	14	LEU	CB-CG-CD2	-5.44	101.75	111.00
1	2	1625	C	C5-C6-N1	-5.44	118.28	121.00
36	1	91	G	C4-N9-C1'	5.44	133.57	126.50
36	1	142	C	OP1-P-OP2	5.44	127.75	119.60
36	1	839	C	C5-C4-N4	-5.44	116.39	120.20
36	1	1762	C	N1-C2-O2	5.44	122.16	118.90
1	6	1309	C	C4-C5-C6	5.44	120.12	117.40
36	5	33	G	N9-C4-C5	5.44	107.58	105.40
36	5	694	C	C5-C6-N1	-5.44	118.28	121.00
36	5	878	G	C2-N3-C4	5.44	114.62	111.90
36	5	949	C	C5-C6-N1	-5.44	118.28	121.00
36	5	1195	A	C6-N1-C2	-5.44	115.34	118.60
36	5	1329	U	N1-C2-O2	-5.44	118.99	122.80
36	5	1439	U	N3-C4-C5	5.44	117.86	114.60
36	5	3030	G	OP2-P-O3'	5.44	117.16	105.20
36	5	3340	G	C8-N9-C4	-5.44	104.22	106.40
50	m4	66	THR	C-N-CD	5.44	139.82	128.40
1	2	1136	U	C2-N1-C1'	-5.44	111.18	117.70
36	1	1146	C	N3-C2-O2	5.44	125.70	121.90
1	6	1277	G	C5-C6-O6	-5.44	125.34	128.60
36	5	379	C	C2-N1-C1'	5.44	124.78	118.80
36	5	572	A	C4-C5-C6	5.44	119.72	117.00
36	5	1220	U	O4'-C1'-N1	-5.44	103.85	108.20
36	5	1877	U	N3-C4-C5	-5.44	111.34	114.60
36	5	2761	G	N9-C4-C5	5.44	107.58	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	39	G	C8-N9-C1'	-5.44	119.93	127.00
47	m0	76	MET	CG-SD-CE	-5.44	91.50	100.20
1	2	839	U	C6-N1-C2	-5.43	117.74	121.00
1	2	1414	U	O4'-C1'-N1	5.43	112.55	108.20
36	1	304	G	N9-C4-C5	5.43	107.57	105.40
36	1	1056	U	O5'-P-OP2	-5.43	100.81	105.70
36	1	1128	U	C2-N3-C4	-5.43	123.74	127.00
36	1	1199	C	N1-C2-N3	5.43	123.00	119.20
36	1	1520	G	C8-N9-C1'	-5.43	119.94	127.00
36	1	1543	G	C4-C5-N7	5.43	112.97	110.80
36	1	3276	G	N3-C4-C5	5.43	131.32	128.60
1	6	151	G	C8-N9-C1'	5.43	134.06	127.00
1	6	310	C	N3-C4-N4	5.43	121.80	118.00
1	6	953	G	C8-N9-C4	5.43	108.57	106.40
1	6	970	A	C5-C6-N6	-5.43	119.35	123.70
1	6	1177	C	N1-C2-O2	-5.43	115.64	118.90
1	6	1536	G	N1-C2-N2	-5.43	111.31	116.20
1	6	1629	G	N1-C6-O6	-5.43	116.64	119.90
36	5	574	U	OP1-P-O3'	-5.43	93.25	105.20
36	5	720	A	OP1-P-OP2	5.43	127.75	119.60
36	5	1391	C	C6-N1-C1'	-5.43	114.28	120.80
36	5	2371	G	N9-C4-C5	-5.43	103.23	105.40
37	7	79	A	OP1-P-OP2	5.43	127.75	119.60
38	8	99	C	C2-N1-C1'	5.43	124.78	118.80
1	2	1165	G	N9-C4-C5	-5.43	103.23	105.40
1	2	1479	A	N9-C4-C5	-5.43	103.63	105.80
36	1	537	A	C8-N9-C4	5.43	107.97	105.80
36	1	624	G	C8-N9-C1'	-5.43	119.94	127.00
36	1	746	A	OP2-P-O3'	5.43	117.15	105.20
36	1	804	C	C4-C5-C6	5.43	120.12	117.40
36	1	1148	G	C4-N9-C1'	-5.43	119.44	126.50
36	1	1308	A	C5-N7-C8	-5.43	101.18	103.90
36	1	1892	G	C4-C5-N7	-5.43	108.63	110.80
36	1	2118	C	C4-C5-C6	-5.43	114.68	117.40
36	1	2899	C	C5-C4-N4	5.43	124.00	120.20
38	4	112	U	N3-C2-O2	5.43	126.00	122.20
1	6	272	U	P-O3'-C3'	5.43	126.22	119.70
36	5	232	G	N9-C4-C5	5.43	107.57	105.40
36	5	353	G	OP1-P-OP2	5.43	127.75	119.60
36	5	401	U	C6-N1-C2	-5.43	117.74	121.00
36	5	884	A	C5-N7-C8	-5.43	101.18	103.90
36	5	1195	A	N3-C4-N9	-5.43	123.05	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1307	G	C6-N1-C2	-5.43	121.84	125.10
36	5	1415	U	OP1-P-O3'	5.43	117.15	105.20
36	5	1748	G	C6-C5-N7	-5.43	127.14	130.40
36	5	2262	A	OP2-P-O3'	5.43	117.15	105.20
36	1	1120	A	N1-C6-N6	-5.43	115.34	118.60
36	1	3022	G	C5-C6-O6	-5.43	125.34	128.60
36	5	437	G	N1-C2-N2	-5.43	111.31	116.20
36	5	617	G	N9-C4-C5	-5.43	103.23	105.40
36	5	2155	G	OP1-P-O3'	-5.43	93.25	105.20
36	5	2194	G	C4-N9-C1'	5.43	133.56	126.50
36	5	2618	G	C5-C6-O6	5.43	131.86	128.60
36	5	3194	C	N3-C2-O2	-5.43	118.10	121.90
37	7	111	U	N3-C4-O4	5.43	123.20	119.40
1	2	429	G	C8-N9-C4	-5.43	104.23	106.40
36	1	1748	G	O5'-P-OP1	-5.43	100.81	105.70
36	1	2907	G	OP2-P-O3'	5.43	117.15	105.20
36	1	3326	G	N1-C6-O6	-5.43	116.64	119.90
1	6	1586	A	C6-N1-C2	-5.43	115.34	118.60
36	5	352	A	N3-C4-C5	5.43	130.60	126.80
36	5	967	A	N7-C8-N9	5.43	116.52	113.80
36	5	1171	G	N3-C2-N2	-5.43	116.10	119.90
36	5	1361	U	OP2-P-O3'	5.43	117.14	105.20
36	5	1445	U	N1-C2-O2	-5.43	119.00	122.80
36	5	1906	G	N3-C2-N2	5.43	123.70	119.90
36	5	2656	A	C8-N9-C4	-5.43	103.63	105.80
36	5	2794	G	C4-C5-C6	-5.43	115.54	118.80
1	2	931	C	C5-C6-N1	5.43	123.71	121.00
36	1	233	C	N1-C2-O2	-5.43	115.64	118.90
36	1	2382	G	C5-C6-O6	5.43	131.86	128.60
36	1	2621	G	O5'-P-OP1	5.43	117.21	110.70
36	1	2705	A	O4'-C1'-N9	-5.43	103.86	108.20
36	1	2808	A	C4-N9-C1'	5.43	136.07	126.30
1	6	1504	G	C4-N9-C1'	5.43	133.56	126.50
1	6	1535	U	C4-C5-C6	5.43	122.96	119.70
36	5	2833	A	C8-N9-C4	5.43	107.97	105.80
36	5	2939	G	N1-C2-N2	5.43	121.08	116.20
36	5	3333	G	N7-C8-N9	-5.43	110.39	113.10
36	1	570	A	OP2-P-O3'	5.43	117.14	105.20
36	1	1140	G	N1-C2-N3	5.43	127.16	123.90
36	1	2240	G	C4-C5-C6	5.43	122.06	118.80
36	1	2751	G	OP1-P-OP2	5.43	127.74	119.60
36	1	2798	C	C5-C6-N1	5.43	123.71	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3168	A	O5'-P-OP2	-5.43	100.81	105.70
1	6	41	A	C4-C5-N7	-5.43	107.99	110.70
36	5	1115	G	C6-N1-C2	-5.43	121.84	125.10
36	5	2422	C	C4-C5-C6	5.43	120.11	117.40
36	5	2793	G	N1-C6-O6	5.43	123.16	119.90
36	5	2970	C	C4-C5-C6	5.43	120.11	117.40
36	5	3202	G	C5-C6-O6	5.43	131.85	128.60
37	7	112	G	C6-N1-C2	-5.43	121.84	125.10
38	8	111	A	C4-C5-N7	5.43	113.41	110.70
36	1	204	A	OP2-P-O3'	5.42	117.13	105.20
36	1	220	G	N3-C4-C5	5.42	131.31	128.60
36	1	2185	G	C4-N9-C1'	5.42	133.55	126.50
36	1	2963	C	C5-C6-N1	5.42	123.71	121.00
38	4	42	G	C8-N9-C4	5.42	108.57	106.40
1	6	1029	U	C6-N1-C1'	5.42	128.79	121.20
36	5	30	G	C5-N7-C8	-5.42	101.59	104.30
36	5	118	U	O5'-P-OP2	5.42	117.21	110.70
36	5	840	C	O5'-P-OP1	-5.42	100.82	105.70
36	5	903	U	C5-C4-O4	5.42	129.16	125.90
36	5	1107	C	C2-N1-C1'	5.42	124.77	118.80
36	5	1335	C	N3-C4-N4	5.42	121.80	118.00
36	5	1346	G	OP2-P-O3'	5.42	117.13	105.20
38	8	94	C	N3-C2-O2	5.42	125.70	121.90
1	2	1373	C	C2-N1-C1'	5.42	124.77	118.80
1	2	1789	G	N9-C4-C5	-5.42	103.23	105.40
36	1	1834	U	N3-C2-O2	5.42	126.00	122.20
36	5	1313	G	C8-N9-C4	-5.42	104.23	106.40
36	5	2727	A	C6-C5-N7	5.42	136.10	132.30
36	5	2777	G	C5-N7-C8	5.42	107.01	104.30
36	1	183	G	C4-N9-C1'	5.42	133.55	126.50
36	1	714	G	N1-C2-N2	-5.42	111.32	116.20
36	1	970	A	C6-N1-C2	-5.42	115.35	118.60
36	1	1167	U	C5-C6-N1	-5.42	119.99	122.70
36	1	1468	A	OP1-P-OP2	5.42	127.73	119.60
36	1	1601	U	C5-C6-N1	5.42	125.41	122.70
36	1	1826	C	N1-C2-O2	5.42	122.15	118.90
36	1	1877	U	C2-N3-C4	-5.42	123.75	127.00
36	1	2187	G	C2-N3-C4	-5.42	109.19	111.90
36	1	2691	A	C4-C5-N7	-5.42	107.99	110.70
36	1	2805	G	OP1-P-O3'	5.42	117.13	105.20
36	1	3026	G	C4-C5-C6	5.42	122.05	118.80
36	1	3278	C	C2-N1-C1'	5.42	124.76	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	57	C	N3-C2-O2	-5.42	118.11	121.90
1	6	35	U	N3-C4-O4	-5.42	115.61	119.40
17	c5	95	GLY	N-CA-C	-5.42	99.54	113.10
36	5	1177	G	O4'-C1'-N9	5.42	112.54	108.20
36	5	1209	G	C4-C5-C6	5.42	122.05	118.80
36	5	1782	U	N3-C4-O4	5.42	123.19	119.40
36	5	1861	G	N3-C4-C5	-5.42	125.89	128.60
36	5	2715	A	C2-N3-C4	5.42	113.31	110.60
36	5	2915	U	C2-N1-C1'	5.42	124.20	117.70
36	5	3100	U	C2-N3-C4	-5.42	123.75	127.00
36	5	3108	G	N1-C6-O6	5.42	123.15	119.90
1	2	1356	U	C5-C4-O4	5.42	129.15	125.90
1	2	1501	C	C5-C4-N4	-5.42	116.41	120.20
36	1	151	A	C4-C5-C6	5.42	119.71	117.00
36	1	2120	A	C5-C6-N1	5.42	120.41	117.70
36	1	2302	G	C8-N9-C4	-5.42	104.23	106.40
38	4	24	G	O5'-P-OP1	-5.42	100.82	105.70
1	6	1753	A	O5'-P-OP1	-5.42	100.82	105.70
21	c9	57	ARG	NE-CZ-NH1	5.42	123.01	120.30
36	5	635	G	C4-C5-N7	-5.42	108.63	110.80
36	5	1678	G	N7-C8-N9	5.42	115.81	113.10
36	5	2110	G	N3-C4-N9	5.42	129.25	126.00
36	5	2850	G	N1-C2-N2	-5.42	111.32	116.20
36	5	2976	A	C2-N3-C4	5.42	113.31	110.60
36	5	3268	A	C2-N3-C4	-5.42	107.89	110.60
37	7	101	G	N3-C4-C5	5.42	131.31	128.60
36	1	373	A	C4-C5-C6	5.42	119.71	117.00
36	1	379	C	O5'-P-OP2	-5.42	100.82	105.70
36	1	593	C	N3-C4-C5	-5.42	119.73	121.90
36	1	1481	A	C5-N7-C8	-5.42	101.19	103.90
36	1	1834	U	C6-N1-C1'	5.42	128.78	121.20
1	6	609	U	N3-C2-O2	-5.42	118.41	122.20
1	6	943	C	C6-N1-C2	5.42	122.47	120.30
36	5	601	U	C5-C6-N1	5.42	125.41	122.70
36	5	1163	A	C4-C5-C6	5.42	119.71	117.00
36	5	1897	G	N3-C2-N2	-5.42	116.11	119.90
36	5	2329	C	N1-C2-O2	-5.42	115.65	118.90
36	5	2752	U	C6-N1-C2	5.42	124.25	121.00
36	5	3229	G	N1-C2-N2	-5.42	111.32	116.20
36	5	3319	U	N3-C2-O2	-5.42	118.41	122.20
37	7	68	C	C6-N1-C2	-5.42	118.13	120.30
44	17	98	LYS	C-N-CD	5.42	139.78	128.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	100	A	N1-C6-N6	5.42	121.85	118.60
36	1	1000	C	N1-C2-O2	-5.42	115.65	118.90
36	1	1498	A	N1-C6-N6	-5.42	115.35	118.60
36	1	2187	G	C4-C5-C6	5.42	122.05	118.80
1	6	1138	A	C5-C6-N1	-5.42	114.99	117.70
1	6	1174	C	N1-C2-O2	5.42	122.15	118.90
36	5	349	A	C4-C5-N7	-5.42	107.99	110.70
36	5	575	G	N1-C6-O6	5.42	123.15	119.90
36	5	937	G	C5-C6-N1	5.42	114.21	111.50
36	5	1470	U	N3-C4-O4	5.42	123.19	119.40
36	5	1740	U	C6-N1-C2	5.42	124.25	121.00
36	5	2324	A	C6-N1-C2	5.42	121.85	118.60
36	5	2541	U	P-O3'-C3'	5.42	126.20	119.70
36	5	3261	C	N1-C2-O2	-5.42	115.65	118.90
38	8	132	G	N3-C4-N9	-5.42	122.75	126.00
36	1	684	G	N1-C6-O6	5.42	123.15	119.90
36	1	761	A	N1-C6-N6	5.42	121.85	118.60
36	1	908	G	C5-C6-N1	5.42	114.21	111.50
36	1	3110	C	N1-C2-O2	5.42	122.15	118.90
37	3	30	G	C4-N9-C1'	5.42	133.54	126.50
1	6	1327	C	O5'-P-OP2	-5.42	100.83	105.70
1	6	1633	A	C5-C6-N1	-5.42	114.99	117.70
36	5	1011	A	N7-C8-N9	5.42	116.51	113.80
36	5	2799	A	C4-C5-C6	5.42	119.71	117.00
36	5	2858	U	O5'-P-OP1	5.42	117.20	110.70
37	7	82	G	C6-N1-C2	-5.42	121.85	125.10
1	2	1785	U	N3-C2-O2	-5.41	118.41	122.20
36	1	299	G	N1-C6-O6	5.41	123.15	119.90
36	1	686	G	O4'-C1'-N9	5.41	112.53	108.20
36	1	975	C	N3-C4-N4	5.41	121.79	118.00
36	1	1203	A	N1-C6-N6	5.41	121.85	118.60
36	1	1314	C	C2-N1-C1'	5.41	124.75	118.80
36	1	1784	G	O5'-P-OP2	-5.41	100.83	105.70
36	1	2202	C	C2-N1-C1'	5.41	124.75	118.80
36	1	2628	A	C4-N9-C1'	5.41	136.04	126.30
36	1	2651	G	C2-N3-C4	-5.41	109.19	111.90
36	1	3216	G	C2-N3-C4	-5.41	109.19	111.90
38	4	24	G	C6-C5-N7	-5.41	127.15	130.40
1	6	370	A	C5-N7-C8	5.41	106.61	103.90
1	6	1111	G	C6-C5-N7	-5.41	127.15	130.40
1	6	1273	G	O4'-C1'-N9	5.41	112.53	108.20
36	5	282	G	C6-N1-C2	5.41	128.35	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1550	C	OP1-P-O3'	5.41	117.11	105.20
36	5	2265	C	N3-C4-N4	5.41	121.79	118.00
36	5	2360	C	C5-C6-N1	5.41	123.71	121.00
36	5	2600	C	C2-N1-C1'	5.41	124.76	118.80
36	5	2681	U	OP1-P-O3'	5.41	117.11	105.20
36	5	2944	U	C2-N1-C1'	5.41	124.20	117.70
36	5	3120	C	C2-N3-C4	-5.41	117.19	119.90
36	5	3229	G	C6-C5-N7	-5.41	127.15	130.40
37	7	82	G	N3-C4-C5	-5.41	125.89	128.60
1	2	1215	C	C6-N1-C2	-5.41	118.14	120.30
36	1	790	U	N1-C2-N3	5.41	118.15	114.90
36	1	2301	U	C6-N1-C2	-5.41	117.75	121.00
59	N3	63	LYS	CD-CE-NZ	5.41	124.15	111.70
1	6	1025	A	N7-C8-N9	5.41	116.51	113.80
1	6	1039	A	N7-C8-N9	5.41	116.51	113.80
1	6	1436	A	N1-C6-N6	5.41	121.85	118.60
36	5	631	U	O5'-P-OP2	-5.41	100.83	105.70
36	5	1316	C	N1-C2-O2	-5.41	115.65	118.90
36	5	1604	G	C4-N9-C1'	5.41	133.54	126.50
36	5	1653	G	C6-C5-N7	5.41	133.65	130.40
36	5	2868	U	N1-C2-O2	5.41	126.59	122.80
36	5	3189	G	N7-C8-N9	-5.41	110.39	113.10
36	5	3228	C	C4-C5-C6	5.41	120.11	117.40
1	2	250	C	N1-C2-O2	5.41	122.15	118.90
1	2	317	C	C4-C5-C6	5.41	120.11	117.40
1	2	1077	C	C2-N3-C4	5.41	122.61	119.90
1	2	1255	G	N1-C6-O6	-5.41	116.65	119.90
36	1	806	A	O4'-C1'-N9	-5.41	103.87	108.20
36	1	867	G	C8-N9-C1'	-5.41	119.97	127.00
36	1	943	U	C5-C6-N1	-5.41	120.00	122.70
36	1	1311	G	C4-C5-C6	5.41	122.05	118.80
36	1	1516	C	C6-N1-C2	-5.41	118.14	120.30
36	1	2289	U	C5-C6-N1	-5.41	120.00	122.70
36	1	2853	A	C4-C5-N7	5.41	113.41	110.70
36	1	3127	A	C6-N1-C2	-5.41	115.35	118.60
1	6	158	U	P-O3'-C3'	5.41	126.19	119.70
1	6	1116	A	N1-C2-N3	5.41	132.00	129.30
1	6	1137	A	C5-N7-C8	5.41	106.61	103.90
1	6	1200	G	C2-N3-C4	-5.41	109.19	111.90
1	6	1300	A	N1-C6-N6	5.41	121.85	118.60
36	5	875	G	C4-N9-C1'	-5.41	119.47	126.50
36	5	1147	G	C5-C6-O6	-5.41	125.35	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1313	G	C4-N9-C1'	5.41	133.53	126.50
36	5	1709	C	C2-N1-C1'	-5.41	112.85	118.80
36	5	2221	G	C2-N3-C4	-5.41	109.19	111.90
36	5	2411	U	N3-C4-C5	5.41	117.85	114.60
36	5	3046	A	C5-C6-N1	5.41	120.41	117.70
36	5	3246	G	C4-C5-N7	5.41	112.96	110.80
38	8	20	U	N1-C2-N3	5.41	118.15	114.90
1	2	566	C	C2-N1-C1'	-5.41	112.85	118.80
1	2	1793	G	OP1-P-O3'	5.41	117.10	105.20
36	1	667	C	C5-C4-N4	5.41	123.99	120.20
36	1	688	G	C6-N1-C2	-5.41	121.86	125.10
36	1	1395	G	OP2-P-O3'	5.41	117.10	105.20
36	1	1660	C	C5-C4-N4	-5.41	116.41	120.20
38	4	64	U	N3-C2-O2	-5.41	118.41	122.20
1	6	44	U	C2-N3-C4	-5.41	123.75	127.00
1	6	585	A	C5-C6-N6	-5.41	119.37	123.70
1	6	1529	C	O5'-P-OP1	5.41	117.19	110.70
1	6	1537	C	C5-C4-N4	5.41	123.99	120.20
36	5	677	A	O5'-P-OP2	5.41	117.19	110.70
36	5	1163	A	OP1-P-OP2	5.41	127.71	119.60
36	5	1402	C	C5-C6-N1	-5.41	118.30	121.00
36	5	1569	U	O4'-C1'-N1	5.41	112.53	108.20
36	5	3278	C	C5-C6-N1	-5.41	118.30	121.00
52	m6	140	LYS	CD-CE-NZ	5.41	124.14	111.70
1	2	370	A	C4-C5-N7	-5.41	108.00	110.70
1	2	1745	G	N9-C4-C5	-5.41	103.24	105.40
36	1	428	A	C5-N7-C8	-5.41	101.20	103.90
36	1	1213	G	C5-N7-C8	-5.41	101.60	104.30
36	1	1293	U	O5'-P-OP1	-5.41	100.83	105.70
36	1	2883	U	C2-N3-C4	5.41	130.24	127.00
37	3	30	G	N1-C6-O6	-5.41	116.66	119.90
1	6	1274	C	C5-C6-N1	5.41	123.70	121.00
36	5	391	A	C5-C6-N1	5.41	120.40	117.70
36	5	1134	G	C5-C6-O6	5.41	131.84	128.60
36	5	2653	C	C2-N1-C1'	-5.41	112.85	118.80
36	5	3338	C	N3-C4-C5	5.41	124.06	121.90
1	2	1780	G	C5-C6-N1	-5.41	108.80	111.50
36	1	23	A	N3-C4-N9	5.41	131.72	127.40
36	1	32	U	N3-C4-C5	5.41	117.84	114.60
36	1	42	C	C2-N1-C1'	5.41	124.75	118.80
36	1	99	A	C8-N9-C1'	5.41	137.43	127.70
36	1	1176	C	OP1-P-O3'	5.41	117.09	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1576	G	N3-C4-N9	5.41	129.24	126.00
36	1	2146	C	C6-N1-C2	-5.41	118.14	120.30
36	1	2281	A	P-O3'-C3'	-5.41	113.21	119.70
36	1	2623	G	C5-N7-C8	-5.41	101.60	104.30
36	1	2637	A	C5-C6-N6	5.41	128.02	123.70
36	1	2873	U	C5-C4-O4	5.41	129.14	125.90
36	1	3275	U	C5-C6-N1	5.41	125.40	122.70
1	6	695	U	C6-N1-C2	-5.41	117.76	121.00
1	6	1118	G	C8-N9-C4	5.41	108.56	106.40
1	6	1313	A	N7-C8-N9	5.41	116.50	113.80
1	6	1747	G	C5-C6-N1	-5.41	108.80	111.50
36	5	950	G	C4-C5-N7	5.41	112.96	110.80
36	5	973	A	C8-N9-C4	-5.41	103.64	105.80
36	5	1348	U	N3-C2-O2	-5.41	118.42	122.20
36	5	3119	U	N1-C2-O2	-5.41	119.02	122.80
36	5	3375	A	C6-N1-C2	-5.41	115.36	118.60
37	7	53	U	N3-C4-C5	-5.41	111.36	114.60
36	5	896	A	OP2-P-O3'	5.40	117.09	105.20
36	5	1606	U	O5'-P-OP1	-5.40	100.84	105.70
37	7	49	G	N9-C4-C5	-5.40	103.24	105.40
66	o0	86	ARG	NE-CZ-NH1	-5.40	117.60	120.30
1	2	120	U	C6-N1-C2	-5.40	117.76	121.00
36	1	246	U	C5-C4-O4	-5.40	122.66	125.90
36	1	1431	G	N3-C2-N2	5.40	123.68	119.90
36	1	2283	G	C5-C6-O6	-5.40	125.36	128.60
36	1	2688	U	C6-N1-C2	5.40	124.24	121.00
36	1	2860	U	C2'-C3'-O3'	5.40	122.34	113.70
36	1	2986	U	N3-C2-O2	5.40	125.98	122.20
37	3	26	C	C2-N3-C4	-5.40	117.20	119.90
38	4	80	A	P-O3'-C3'	5.40	126.18	119.70
36	5	322	U	C5-C4-O4	-5.40	122.66	125.90
36	5	345	G	C5-C6-O6	-5.40	125.36	128.60
36	5	699	A	N9-C4-C5	5.40	107.96	105.80
36	5	707	U	O5'-P-OP1	-5.40	100.84	105.70
36	5	1200	A	OP1-P-OP2	5.40	127.70	119.60
36	5	1344	G	N1-C2-N3	5.40	127.14	123.90
36	5	1681	U	C4-C5-C6	5.40	122.94	119.70
36	5	1772	U	C4-C5-C6	5.40	122.94	119.70
36	5	2142	A	C2-N3-C4	5.40	113.30	110.60
36	5	2858	U	C5-C6-N1	5.40	125.40	122.70
1	2	572	C	N3-C2-O2	5.40	125.68	121.90
1	2	865	A	N1-C2-N3	5.40	132.00	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	929	A	N1-C6-N6	-5.40	115.36	118.60
1	2	1282	U	C2-N3-C4	-5.40	123.76	127.00
1	2	1306	C	C5-C6-N1	5.40	123.70	121.00
36	1	622	A	N3-C4-C5	5.40	130.58	126.80
36	1	2433	U	N3-C4-O4	5.40	123.18	119.40
36	1	3028	G	C5-C6-O6	-5.40	125.36	128.60
1	6	65	A	C5-C6-N1	-5.40	115.00	117.70
1	6	561	G	N3-C4-C5	-5.40	125.90	128.60
1	6	858	G	C5-N7-C8	-5.40	101.60	104.30
1	6	884	A	C5-C6-N6	-5.40	119.38	123.70
1	6	1516	A	C5-C6-N1	5.40	120.40	117.70
36	5	1177	G	C5-C6-N1	5.40	114.20	111.50
36	5	1290	A	C4-C5-N7	5.40	113.40	110.70
36	5	1643	A	C8-N9-C4	-5.40	103.64	105.80
36	5	1837	U	N3-C2-O2	5.40	125.98	122.20
36	5	2255	A	C4-C5-N7	5.40	113.40	110.70
36	5	2376	G	C5-C6-N1	5.40	114.20	111.50
36	5	2609	A	N9-C4-C5	-5.40	103.64	105.80
36	5	2796	G	OP1-P-OP2	5.40	127.70	119.60
36	5	2836	C	N3-C2-O2	-5.40	118.12	121.90
36	5	2983	C	C6-N1-C2	-5.40	118.14	120.30
36	5	3036	G	C4-C5-C6	5.40	122.04	118.80
38	8	10	A	C8-N9-C4	5.40	107.96	105.80
1	2	260	U	C6-N1-C1'	-5.40	113.64	121.20
1	2	1665	U	N1-C2-O2	-5.40	119.02	122.80
36	1	788	C	C6-N1-C2	5.40	122.46	120.30
36	1	1342	C	C6-N1-C2	5.40	122.46	120.30
36	1	2325	G	N3-C4-N9	5.40	129.24	126.00
37	3	75	G	N3-C2-N2	-5.40	116.12	119.90
36	5	632	G	C4-C5-C6	5.40	122.04	118.80
38	8	70	G	C4-C5-N7	-5.40	108.64	110.80
1	2	1200	G	C8-N9-C1'	-5.40	119.98	127.00
1	2	1299	G	C8-N9-C4	-5.40	104.24	106.40
1	2	1455	G	C8-N9-C1'	-5.40	119.98	127.00
1	2	1601	G	O5'-P-OP2	-5.40	100.84	105.70
36	1	674	G	C2-N3-C4	-5.40	109.20	111.90
36	1	721	G	N7-C8-N9	5.40	115.80	113.10
36	1	1372	C	OP2-P-O3'	5.40	117.08	105.20
36	1	1807	G	C4-C5-N7	5.40	112.96	110.80
36	1	2365	C	C2-N3-C4	-5.40	117.20	119.90
36	1	2703	A	N9-C4-C5	5.40	107.96	105.80
36	1	2730	G	C5-C6-N1	-5.40	108.80	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3145	C	N3-C4-N4	5.40	121.78	118.00
36	1	3202	G	N7-C8-N9	-5.40	110.40	113.10
36	1	3221	C	O5'-P-OP2	5.40	117.18	110.70
1	6	58	U	C5-C6-N1	5.40	125.40	122.70
1	6	794	U	N3-C2-O2	-5.40	118.42	122.20
1	6	1097	U	P-O3'-C3'	5.40	126.18	119.70
36	5	57	A	N1-C2-N3	5.40	132.00	129.30
36	5	1100	U	C2-N3-C4	-5.40	123.76	127.00
36	5	1834	U	N3-C4-O4	5.40	123.18	119.40
36	5	2574	G	C5-C6-O6	-5.40	125.36	128.60
36	5	3264	G	C4-C5-N7	-5.40	108.64	110.80
37	7	9	C	C6-N1-C2	-5.40	118.14	120.30
1	2	176	C	C6-N1-C2	-5.40	118.14	120.30
36	1	421	G	C5-C6-O6	5.40	131.84	128.60
36	1	498	A	N1-C6-N6	5.40	121.84	118.60
36	1	2998	U	N3-C4-O4	5.40	123.18	119.40
36	5	1838	G	C8-N9-C1'	-5.40	119.98	127.00
1	2	847	A	N1-C6-N6	5.39	121.84	118.60
36	1	209	A	OP1-P-OP2	5.39	127.69	119.60
36	1	917	A	N3-C4-C5	-5.39	123.02	126.80
36	1	1523	U	C5-C6-N1	5.39	125.40	122.70
36	1	1928	G	O5'-P-OP1	5.39	117.17	110.70
36	1	3063	C	C4-C5-C6	5.39	120.10	117.40
38	4	110	C	N3-C4-N4	-5.39	114.22	118.00
1	6	717	C	C2-N1-C1'	5.39	124.73	118.80
1	6	958	U	C4-C5-C6	5.39	122.94	119.70
1	6	1471	A	N7-C8-N9	5.39	116.50	113.80
1	6	1478	G	N3-C4-N9	5.39	129.24	126.00
36	5	52	A	C4-C5-C6	5.39	119.70	117.00
36	5	344	A	N9-C4-C5	5.39	107.96	105.80
36	5	908	G	N1-C6-O6	-5.39	116.66	119.90
36	5	960	U	C2-N1-C1'	5.39	124.17	117.70
36	5	1763	U	N3-C2-O2	-5.39	118.42	122.20
36	5	2868	U	C5-C6-N1	5.39	125.40	122.70
36	5	3226	A	N9-C4-C5	5.39	107.96	105.80
1	2	115	G	C4-C5-N7	5.39	112.96	110.80
1	2	1418	G	N1-C6-O6	5.39	123.14	119.90
5	S3	109	LEU	CA-CB-CG	-5.39	102.89	115.30
36	1	1079	A	C6-N1-C2	-5.39	115.36	118.60
36	1	1135	A	C5-N7-C8	-5.39	101.20	103.90
36	1	2591	A	C8-N9-C4	-5.39	103.64	105.80
36	1	2638	C	N3-C2-O2	-5.39	118.12	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2785	A	C6-N1-C2	-5.39	115.36	118.60
36	1	2809	C	N3-C2-O2	5.39	125.67	121.90
36	1	2871	G	C4-N9-C1'	-5.39	119.49	126.50
36	1	2932	U	C5-C4-O4	5.39	129.14	125.90
36	1	3188	G	N7-C8-N9	-5.39	110.40	113.10
1	6	1318	G	C4-C5-N7	5.39	112.96	110.80
1	6	1546	G	C5-C6-O6	-5.39	125.36	128.60
36	5	652	G	N9-C4-C5	-5.39	103.24	105.40
36	5	3286	G	N9-C4-C5	-5.39	103.24	105.40
37	7	26	C	N3-C2-O2	-5.39	118.12	121.90
36	1	1121	U	C4-C5-C6	5.39	122.94	119.70
36	1	1184	A	C5-C6-N1	-5.39	115.00	117.70
36	1	1190	A	N3-C4-C5	-5.39	123.03	126.80
36	1	2870	C	N1-C2-N3	-5.39	115.43	119.20
37	3	8	G	N9-C4-C5	5.39	107.56	105.40
1	6	1588	G	N3-C2-N2	-5.39	116.13	119.90
36	5	314	U	OP1-P-OP2	5.39	127.69	119.60
36	5	2147	A	N9-C4-C5	-5.39	103.64	105.80
36	5	2812	C	N3-C4-N4	-5.39	114.23	118.00
37	7	87	G	O4'-C1'-N9	-5.39	103.89	108.20
1	2	424	C	N3-C2-O2	-5.39	118.13	121.90
1	2	730	G	N7-C8-N9	5.39	115.80	113.10
1	2	1140	G	N7-C8-N9	5.39	115.80	113.10
1	2	1596	C	N1-C2-O2	5.39	122.13	118.90
36	1	45	A	N9-C4-C5	5.39	107.96	105.80
36	1	1493	G	N9-C4-C5	5.39	107.56	105.40
36	1	1507	G	OP2-P-O3'	5.39	117.06	105.20
36	1	1516	C	N1-C2-O2	-5.39	115.67	118.90
36	1	2303	A	N1-C2-N3	5.39	132.00	129.30
36	1	2412	G	O5'-P-OP2	-5.39	100.85	105.70
36	1	2593	A	O4'-C1'-N9	-5.39	103.89	108.20
36	1	3124	G	N7-C8-N9	5.39	115.80	113.10
1	6	1619	C	C2-N1-C1'	5.39	124.73	118.80
36	5	298	U	C2-N1-C1'	5.39	124.17	117.70
36	5	366	A	C8-N9-C4	5.39	107.96	105.80
36	5	541	U	N3-C2-O2	5.39	125.97	122.20
36	5	1139	G	C2-N3-C4	-5.39	109.21	111.90
36	5	1709	C	C2-N3-C4	-5.39	117.20	119.90
36	5	2323	G	N3-C2-N2	-5.39	116.13	119.90
36	5	2863	G	N7-C8-N9	5.39	115.80	113.10
36	5	2918	G	C6-N1-C2	-5.39	121.87	125.10
36	5	3264	G	C5-C6-N1	-5.39	108.81	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3320	A	N1-C2-N3	5.39	132.00	129.30
1	2	425	A	C8-N9-C4	-5.39	103.64	105.80
36	1	1010	G	C2-N3-C4	-5.39	109.21	111.90
36	1	2415	C	N3-C4-C5	5.39	124.06	121.90
36	1	2785	A	C2-N3-C4	-5.39	107.91	110.60
1	6	185	U	C2-N1-C1'	5.39	124.17	117.70
1	6	660	G	C8-N9-C4	-5.39	104.25	106.40
1	6	1415	U	N1-C2-O2	5.39	126.57	122.80
36	5	1614	C	N1-C2-O2	5.39	122.13	118.90
36	5	2690	G	O5'-P-OP1	-5.39	100.85	105.70
1	2	1270	G	C6-C5-N7	-5.39	127.17	130.40
1	2	1273	G	C4-C5-N7	5.39	112.95	110.80
36	1	168	U	C5-C4-O4	5.39	129.13	125.90
36	1	946	U	C6-N1-C1'	-5.39	113.66	121.20
36	1	1514	G	N1-C2-N3	5.39	127.13	123.90
36	1	2935	U	C2-N3-C4	5.39	130.23	127.00
38	4	140	G	N7-C8-N9	5.39	115.79	113.10
58	N2	89	LEU	CA-CB-CG	5.39	127.69	115.30
1	6	523	G	C5-C6-O6	-5.39	125.37	128.60
1	6	1488	G	C5-N7-C8	5.39	106.99	104.30
36	5	226	C	C6-N1-C2	5.39	122.45	120.30
36	5	953	G	C4-C5-C6	-5.39	115.57	118.80
36	5	1822	C	C4-C5-C6	5.39	120.09	117.40
36	5	2304	C	N1-C2-N3	-5.39	115.43	119.20
36	5	2688	U	C2-N3-C4	-5.39	123.77	127.00
36	5	3377	G	OP2-P-O3'	5.39	117.05	105.20
36	5	3391	A	C5-C6-N6	5.39	128.01	123.70
37	7	87	G	N1-C6-O6	5.39	123.13	119.90
56	n0	167	ARG	C-N-CA	-5.39	99.38	122.00
1	2	275	C	C6-N1-C2	-5.38	118.15	120.30
1	2	1612	U	C6-N1-C2	-5.38	117.77	121.00
1	2	1615	C	C5-C6-N1	5.38	123.69	121.00
36	1	300	G	N1-C6-O6	-5.38	116.67	119.90
36	1	901	G	C5-C6-N1	5.38	114.19	111.50
36	1	1172	G	C4-N9-C1'	5.38	133.50	126.50
36	1	1300	G	N3-C4-N9	5.38	129.23	126.00
36	1	1406	A	C4-C5-C6	5.38	119.69	117.00
36	1	1897	G	N3-C4-C5	-5.38	125.91	128.60
36	1	2403	G	N7-C8-N9	5.38	115.79	113.10
36	1	3049	A	O5'-P-OP2	5.38	117.16	110.70
1	6	616	G	C4-C5-N7	5.38	112.95	110.80
1	6	1001	A	N3-C4-N9	5.38	131.71	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1171	A	N9-C4-C5	5.38	107.95	105.80
36	5	772	U	N3-C4-O4	5.38	123.17	119.40
36	5	984	G	N1-C6-O6	5.38	123.13	119.90
36	5	1320	C	OP1-P-O3'	-5.38	93.35	105.20
36	5	1858	A	N9-C4-C5	-5.38	103.65	105.80
36	5	2253	G	C8-N9-C1'	-5.38	120.00	127.00
36	5	2965	U	N3-C4-O4	5.38	123.17	119.40
36	5	3028	G	N1-C2-N3	5.38	127.13	123.90
36	5	3315	G	C5-C6-N1	5.38	114.19	111.50
36	1	1346	G	O5'-P-OP1	5.38	117.16	110.70
36	1	1385	C	C5-C6-N1	-5.38	118.31	121.00
36	1	2234	G	N7-C8-N9	-5.38	110.41	113.10
36	1	2956	A	C4-C5-C6	5.38	119.69	117.00
1	6	75	U	N3-C2-O2	-5.38	118.43	122.20
1	6	420	A	OP1-P-OP2	-5.38	111.53	119.60
1	6	1177	C	N3-C4-N4	5.38	121.77	118.00
36	5	162	G	N7-C8-N9	-5.38	110.41	113.10
36	5	1043	C	C2-N1-C1'	-5.38	112.88	118.80
36	5	1353	U	OP1-P-OP2	-5.38	111.53	119.60
36	5	2114	C	OP1-P-OP2	5.38	127.67	119.60
36	5	2364	G	C6-N1-C2	-5.38	121.87	125.10
36	5	2864	A	C8-N9-C4	5.38	107.95	105.80
36	1	624	G	N1-C6-O6	5.38	123.13	119.90
36	1	862	U	C6-N1-C1'	-5.38	113.67	121.20
36	1	958	C	N3-C4-N4	5.38	121.77	118.00
36	1	1203	A	C2-N3-C4	-5.38	107.91	110.60
36	1	1355	A	N3-C4-C5	5.38	130.57	126.80
36	1	1581	C	N1-C2-O2	5.38	122.13	118.90
36	1	1667	A	N7-C8-N9	5.38	116.49	113.80
36	1	2329	C	C4-C5-C6	5.38	120.09	117.40
75	O9	46	ARG	NE-CZ-NH1	5.38	122.99	120.30
1	6	101	U	N3-C4-O4	-5.38	115.63	119.40
1	6	387	A	C4-C5-N7	-5.38	108.01	110.70
1	6	1311	U	N1-C2-O2	-5.38	119.03	122.80
36	5	518	G	N1-C6-O6	5.38	123.13	119.90
36	5	617	G	O5'-P-OP2	5.38	117.16	110.70
36	5	1158	A	C5-N7-C8	5.38	106.59	103.90
36	5	1166	G	N3-C4-N9	-5.38	122.77	126.00
36	5	1389	G	N1-C6-O6	5.38	123.13	119.90
36	5	1397	C	N3-C4-C5	-5.38	119.75	121.90
36	5	1414	G	C8-N9-C4	-5.38	104.25	106.40
36	5	1757	A	C5-C6-N1	-5.38	115.01	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2391	G	C8-N9-C4	5.38	108.55	106.40
1	2	145	A	C8-N9-C4	-5.38	103.65	105.80
1	2	1346	A	N7-C8-N9	5.38	116.49	113.80
36	1	193	C	N3-C2-O2	5.38	125.67	121.90
36	1	1886	A	C4-C5-C6	-5.38	114.31	117.00
36	1	2410	U	C5-C6-N1	5.38	125.39	122.70
36	1	3052	G	N3-C2-N2	-5.38	116.13	119.90
36	1	3097	C	O5'-P-OP1	-5.38	100.86	105.70
37	3	50	U	N3-C2-O2	-5.38	118.43	122.20
1	6	1513	G	C4-N9-C1'	5.38	133.49	126.50
36	5	796	U	C6-N1-C2	-5.38	117.77	121.00
36	5	1172	G	N7-C8-N9	5.38	115.79	113.10
36	5	1889	G	O5'-P-OP2	-5.38	100.86	105.70
36	5	2294	U	C6-N1-C2	5.38	124.23	121.00
36	5	3015	G	N1-C2-N2	5.38	121.04	116.20
36	5	3044	G	C5-N7-C8	-5.38	101.61	104.30
36	5	3157	U	C6-N1-C1'	-5.38	113.67	121.20
36	5	3318	G	O5'-P-OP1	-5.38	100.86	105.70
37	7	50	U	C2-N1-C1'	5.38	124.16	117.70
1	2	75	U	C6-N1-C1'	-5.38	113.67	121.20
1	2	1596	C	C6-N1-C2	-5.38	118.15	120.30
36	1	891	G	N3-C4-N9	-5.38	122.77	126.00
36	1	1137	C	O5'-P-OP2	-5.38	100.86	105.70
36	1	2120	A	C4-C5-N7	-5.38	108.01	110.70
36	1	2371	G	C8-N9-C1'	-5.38	120.01	127.00
36	1	2598	G	N3-C4-C5	-5.38	125.91	128.60
36	1	2669	G	N3-C4-C5	5.38	131.29	128.60
36	1	2901	G	N3-C4-C5	-5.38	125.91	128.60
36	1	2962	U	N1-C2-N3	-5.38	111.67	114.90
36	1	3098	G	N3-C4-N9	5.38	129.23	126.00
36	1	3230	G	N1-C2-N2	5.38	121.04	116.20
36	5	526	C	C5-C6-N1	-5.38	118.31	121.00
36	5	1364	C	P-O3'-C3'	5.38	126.15	119.70
36	5	1640	G	C8-N9-C4	-5.38	104.25	106.40
36	5	2692	A	C8-N9-C4	-5.38	103.65	105.80
36	5	2752	U	C2-N1-C1'	-5.38	111.25	117.70
36	5	2966	G	C4-C5-N7	-5.38	108.65	110.80
36	5	3180	A	N7-C8-N9	-5.38	111.11	113.80
46	19	38	LEU	CB-CG-CD2	-5.38	101.86	111.00
1	2	472	U	O4'-C1'-N1	5.38	112.50	108.20
1	2	1490	C	C6-N1-C1'	-5.38	114.35	120.80
36	1	659	G	OP1-P-O3'	-5.38	93.37	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1751	G	C6-C5-N7	5.38	133.62	130.40
36	1	1844	C	O5'-P-OP1	-5.38	100.86	105.70
36	1	2632	G	OP1-P-O3'	5.38	117.03	105.20
36	1	3202	G	N3-C4-C5	5.38	131.29	128.60
38	4	3	A	N3-C4-N9	5.38	131.70	127.40
1	6	397	A	C8-N9-C4	5.38	107.95	105.80
1	6	433	C	C6-N1-C1'	-5.38	114.35	120.80
1	6	619	A	O4'-C1'-N9	5.38	112.50	108.20
36	5	656	A	C6-C5-N7	-5.38	128.54	132.30
36	5	658	G	C4-C5-N7	5.38	112.95	110.80
36	5	1208	U	C6-N1-C1'	5.38	128.73	121.20
36	5	1466	G	C5-C6-O6	-5.38	125.37	128.60
36	5	1517	G	N3-C4-C5	5.38	131.29	128.60
36	5	2841	G	C4-C5-N7	-5.38	108.65	110.80
36	5	2955	U	C6-N1-C2	-5.38	117.77	121.00
36	5	2984	C	OP2-P-O3'	5.38	117.03	105.20
36	5	3069	G	N9-C4-C5	-5.38	103.25	105.40
1	2	1109	G	C5-N7-C8	-5.38	101.61	104.30
38	4	27	U	C2-N1-C1'	5.38	124.15	117.70
36	5	1112	A	C4-N9-C1'	5.38	135.97	126.30
36	5	2979	U	OP2-P-O3'	5.38	117.03	105.20
1	2	548	G	C5-C6-O6	-5.37	125.38	128.60
1	2	1466	G	C5-C6-O6	-5.37	125.38	128.60
36	1	186	U	C4-C5-C6	-5.37	116.48	119.70
36	1	411	U	N3-C4-C5	-5.37	111.38	114.60
36	1	892	U	N1-C2-O2	5.37	126.56	122.80
36	1	1506	A	C8-N9-C4	-5.37	103.65	105.80
36	1	1559	A	N7-C8-N9	5.37	116.49	113.80
36	1	1784	G	N3-C4-N9	-5.37	122.78	126.00
36	1	1884	A	N9-C4-C5	5.37	107.95	105.80
36	1	1899	G	N7-C8-N9	5.37	115.79	113.10
36	1	2366	C	O5'-P-OP2	-5.37	100.86	105.70
36	1	2843	U	C5-C4-O4	-5.37	122.68	125.90
37	3	107	C	N3-C4-C5	5.37	124.05	121.90
60	N4	80	ARG	C-N-CA	5.37	144.56	122.00
1	6	1282	U	C4-C5-C6	5.37	122.92	119.70
36	5	522	A	O5'-P-OP2	-5.37	100.86	105.70
36	5	2708	C	C2-N3-C4	-5.37	117.21	119.90
36	5	2710	C	N3-C4-N4	5.37	121.76	118.00
36	5	2759	U	O4'-C1'-N1	-5.37	103.90	108.20
36	5	3120	C	N1-C2-O2	5.37	122.12	118.90
55	m9	62	ARG	NE-CZ-NH1	5.37	122.99	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	60	U	N1-C2-O2	5.37	126.56	122.80
1	2	1299	G	C2-N3-C4	5.37	114.58	111.90
1	2	1589	C	C2-N3-C4	-5.37	117.21	119.90
1	2	1752	U	O5'-P-OP2	-5.37	100.87	105.70
36	1	347	G	C8-N9-C4	5.37	108.55	106.40
36	1	757	C	O5'-P-OP1	5.37	117.15	110.70
36	1	960	U	P-O3'-C3'	5.37	126.14	119.70
36	1	1119	C	C4-C5-C6	5.37	120.09	117.40
36	1	1172	G	C6-N1-C2	-5.37	121.88	125.10
36	1	1478	C	C4-C5-C6	5.37	120.09	117.40
36	1	2293	C	C5-C6-N1	5.37	123.69	121.00
36	1	3237	U	N3-C2-O2	-5.37	118.44	122.20
36	1	3240	C	C2-N3-C4	-5.37	117.21	119.90
1	6	430	G	N1-C2-N2	-5.37	111.37	116.20
1	6	1335	U	C5-C4-O4	5.37	129.12	125.90
36	5	118	U	O5'-P-OP1	-5.37	100.87	105.70
36	5	785	G	N7-C8-N9	5.37	115.78	113.10
36	5	842	G	N1-C6-O6	-5.37	116.68	119.90
36	5	1671	C	C6-N1-C2	-5.37	118.15	120.30
36	5	2172	A	C8-N9-C4	-5.37	103.65	105.80
36	5	2759	U	C2-N1-C1'	5.37	124.14	117.70
36	5	2801	A	C5-C6-N6	-5.37	119.40	123.70
36	5	3072	C	N3-C4-N4	5.37	121.76	118.00
1	2	536	C	C5-C6-N1	5.37	123.69	121.00
36	1	55	G	C5-C6-O6	-5.37	125.38	128.60
36	1	300	G	C8-N9-C1'	5.37	133.98	127.00
36	1	1416	C	C2-N1-C1'	-5.37	112.89	118.80
36	1	2339	C	O4'-C1'-N1	-5.37	103.90	108.20
36	1	2598	G	C5-C6-O6	-5.37	125.38	128.60
36	1	2855	U	N1-C2-N3	5.37	118.12	114.90
36	1	3001	C	N3-C4-C5	5.37	124.05	121.90
36	5	1770	G	C4-N9-C1'	5.37	133.48	126.50
36	5	2643	A	N7-C8-N9	-5.37	111.11	113.80
36	5	2976	A	C5-C6-N6	-5.37	119.40	123.70
1	2	1306	C	C6-N1-C2	-5.37	118.15	120.30
36	1	803	C	C6-N1-C1'	-5.37	114.36	120.80
36	1	2195	C	N1-C2-O2	-5.37	115.68	118.90
36	1	2216	G	C8-N9-C4	-5.37	104.25	106.40
36	1	2353	G	C8-N9-C1'	-5.37	120.02	127.00
37	3	107	C	N3-C4-N4	-5.37	114.24	118.00
1	6	331	A	N7-C8-N9	5.37	116.48	113.80
1	6	356	G	C5-C6-N1	5.37	114.18	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1101	G	C4-N9-C1'	5.37	133.48	126.50
1	6	1673	G	N7-C8-N9	-5.37	110.42	113.10
29	d7	41	LEU	CA-CB-CG	5.37	127.65	115.30
36	5	235	A	C2-N3-C4	-5.37	107.92	110.60
36	5	366	A	C5-C6-N1	-5.37	115.02	117.70
36	5	800	G	O4'-C1'-N9	-5.37	103.91	108.20
36	5	816	A	C5-C6-N6	5.37	127.99	123.70
36	5	1077	U	N3-C2-O2	5.37	125.96	122.20
36	5	2101	C	N1-C2-O2	5.37	122.12	118.90
36	5	2294	U	N1-C2-O2	5.37	126.56	122.80
36	5	2702	A	N9-C4-C5	5.37	107.95	105.80
36	5	2789	U	C2-N1-C1'	-5.37	111.26	117.70
1	2	1661	U	OP2-P-O3'	5.37	117.01	105.20
36	1	1401	A	C8-N9-C1'	-5.37	118.04	127.70
36	1	3093	C	N1-C2-O2	-5.37	115.68	118.90
36	1	3246	G	N7-C8-N9	5.37	115.78	113.10
1	6	61	A	C4-C5-C6	5.37	119.68	117.00
1	6	1727	G	C4-C5-N7	-5.37	108.65	110.80
36	5	1316	C	OP1-P-O3'	5.37	117.01	105.20
36	5	1891	A	N7-C8-N9	-5.37	111.12	113.80
36	5	2925	C	O5'-P-OP2	5.37	117.14	110.70
36	5	3326	G	C8-N9-C1'	-5.37	120.02	127.00
54	m8	179	ARG	NE-CZ-NH2	-5.37	117.62	120.30
36	1	347	G	N9-C4-C5	-5.37	103.25	105.40
36	1	372	A	N1-C2-N3	5.37	131.98	129.30
36	1	709	A	N9-C4-C5	-5.37	103.65	105.80
36	1	733	G	C5-N7-C8	-5.37	101.62	104.30
36	1	741	U	N3-C2-O2	5.37	125.96	122.20
36	1	856	G	C4-N9-C1'	5.37	133.47	126.50
36	1	1114	U	C2-N3-C4	5.37	130.22	127.00
36	1	2207	A	N3-C4-C5	-5.37	123.04	126.80
36	1	2516	U	C5-C6-N1	-5.37	120.02	122.70
36	1	3150	A	C2-N3-C4	-5.37	107.92	110.60
36	1	3241	G	N1-C6-O6	-5.37	116.68	119.90
36	1	3325	G	N9-C1'-C2'	-5.37	106.10	112.00
1	6	31	C	O5'-P-OP1	5.37	117.14	110.70
1	6	899	G	C8-N9-C4	5.37	108.55	106.40
1	6	1241	G	C4-C5-N7	5.37	112.95	110.80
1	6	1646	C	C4-C5-C6	5.37	120.08	117.40
36	5	1450	G	N1-C2-N3	5.37	127.12	123.90
36	5	1734	G	N1-C6-O6	-5.37	116.68	119.90
36	5	1794	G	OP1-P-OP2	5.37	127.65	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2878	G	OP1-P-O3'	5.37	117.00	105.20
36	5	2940	A	C4-C5-N7	5.37	113.38	110.70
36	5	2960	C	P-O3'-C3'	5.37	126.14	119.70
37	7	34	C	O4'-C1'-N1	5.37	112.49	108.20
38	8	45	C	C6-N1-C2	5.37	122.45	120.30
1	2	694	U	N1-C2-O2	5.36	126.56	122.80
1	2	755	A	N1-C6-N6	-5.36	115.38	118.60
1	2	959	U	N1-C2-O2	5.36	126.56	122.80
1	2	1291	G	N1-C2-N2	-5.36	111.37	116.20
1	2	1584	G	N3-C4-C5	5.36	131.28	128.60
36	1	2135	U	O5'-P-OP2	-5.36	100.87	105.70
36	1	2190	U	N1-C2-O2	-5.36	119.05	122.80
36	1	3209	A	C4-C5-C6	5.36	119.68	117.00
36	1	3253	G	N3-C4-C5	5.36	131.28	128.60
36	1	3284	G	N9-C4-C5	5.36	107.55	105.40
36	1	3308	C	N3-C2-O2	-5.36	118.15	121.90
37	3	111	U	C6-N1-C2	-5.36	117.78	121.00
1	6	323	A	N7-C8-N9	5.36	116.48	113.80
1	6	1111	G	N3-C4-N9	5.36	129.22	126.00
1	6	1285	U	C5-C6-N1	5.36	125.38	122.70
1	6	1583	A	C4-C5-N7	-5.36	108.02	110.70
1	6	1665	U	C2-N1-C1'	-5.36	111.26	117.70
36	5	183	G	C5-C6-O6	5.36	131.82	128.60
36	5	324	A	C4-N9-C1'	5.36	135.96	126.30
36	5	1376	C	C6-N1-C1'	-5.36	114.36	120.80
36	5	1858	A	C8-N9-C1'	-5.36	118.05	127.70
36	5	1916	U	C5-C6-N1	-5.36	120.02	122.70
36	5	2289	U	C5-C6-N1	-5.36	120.02	122.70
36	5	3077	A	N3-C4-N9	-5.36	123.11	127.40
36	5	3293	U	O5'-P-OP1	-5.36	100.87	105.70
36	5	3294	A	C6-N1-C2	-5.36	115.38	118.60
36	5	3307	A	C8-N9-C4	5.36	107.94	105.80
1	2	1010	C	C6-N1-C1'	5.36	127.23	120.80
1	2	1753	A	C5-C6-N6	-5.36	119.41	123.70
36	1	1208	U	N1-C2-N3	-5.36	111.68	114.90
36	1	1589	A	O4'-C1'-N9	-5.36	103.91	108.20
36	1	3305	A	OP1-P-O3'	-5.36	93.40	105.20
38	4	32	C	C4-C5-C6	5.36	120.08	117.40
36	5	201	A	N1-C6-N6	5.36	121.82	118.60
36	5	685	G	N9-C4-C5	-5.36	103.25	105.40
36	5	881	C	C5-C6-N1	5.36	123.68	121.00
36	5	979	U	C6-N1-C1'	5.36	128.71	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2907	G	OP2-P-O3'	5.36	117.00	105.20
56	n0	166	LYS	CD-CE-NZ	5.36	124.03	111.70
1	2	402	C	C4-C5-C6	5.36	120.08	117.40
1	2	428	A	O4'-C1'-N9	5.36	112.49	108.20
36	1	217	U	N3-C4-C5	-5.36	111.38	114.60
36	1	383	G	N3-C4-N9	5.36	129.22	126.00
36	1	1481	A	C6-C5-N7	-5.36	128.55	132.30
36	1	1646	G	N3-C4-C5	5.36	131.28	128.60
36	1	1670	C	N3-C4-C5	5.36	124.04	121.90
36	1	3151	U	N3-C4-O4	-5.36	115.65	119.40
36	1	3394	U	C6-N1-C2	-5.36	117.78	121.00
38	4	101	U	C2-N1-C1'	5.36	124.13	117.70
1	6	1516	A	O4'-C1'-N9	5.36	112.49	108.20
1	6	1657	U	N1-C2-O2	5.36	126.55	122.80
36	5	58	G	C5-C6-N1	-5.36	108.82	111.50
36	5	545	U	N1-C2-N3	-5.36	111.68	114.90
36	5	860	G	N1-C2-N3	-5.36	120.68	123.90
36	5	875	G	N9-C1'-C2'	-5.36	106.10	112.00
36	5	1130	A	C5-C6-N1	5.36	120.38	117.70
36	5	1542	G	C5-N7-C8	-5.36	101.62	104.30
36	5	2338	C	C6-N1-C2	-5.36	118.16	120.30
36	5	2597	U	C5-C4-O4	5.36	129.12	125.90
36	5	2617	U	N3-C2-O2	-5.36	118.45	122.20
36	5	2900	A	OP2-P-O3'	5.36	116.99	105.20
1	2	360	A	N9-C4-C5	-5.36	103.66	105.80
1	2	551	G	N3-C2-N2	-5.36	116.15	119.90
36	1	1578	C	C5-C6-N1	5.36	123.68	121.00
36	1	2941	A	N3-C4-N9	5.36	131.69	127.40
1	6	683	C	N1-C2-O2	5.36	122.12	118.90
1	6	1060	U	N3-C2-O2	-5.36	118.45	122.20
1	6	1609	U	N3-C2-O2	5.36	125.95	122.20
36	5	657	A	C2-N3-C4	5.36	113.28	110.60
36	5	784	A	N9-C4-C5	-5.36	103.66	105.80
36	5	1590	G	N9-C4-C5	-5.36	103.26	105.40
36	5	2165	G	N3-C4-C5	-5.36	125.92	128.60
36	5	2850	G	C6-N1-C2	-5.36	121.89	125.10
36	5	2945	G	N3-C4-C5	-5.36	125.92	128.60
37	7	90	U	C2-N1-C1'	5.36	124.13	117.70
1	2	614	C	C6-N1-C2	-5.36	118.16	120.30
36	1	324	A	C8-N9-C4	-5.36	103.66	105.80
36	1	923	C	C5-C6-N1	-5.36	118.32	121.00
36	1	1310	G	C8-N9-C4	-5.36	104.26	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1929	G	N1-C2-N2	-5.36	111.38	116.20
49	M3	110	ASP	CB-CG-OD1	-5.36	113.48	118.30
1	6	796	A	O5'-P-OP2	-5.36	100.88	105.70
1	6	1167	G	C8-N9-C1'	-5.36	120.03	127.00
36	5	38	U	N1-C2-N3	-5.36	111.69	114.90
36	5	413	U	C6-N1-C2	5.36	124.22	121.00
36	5	1160	C	C2-N1-C1'	-5.36	112.91	118.80
36	5	1292	C	C2-N3-C4	-5.36	117.22	119.90
36	5	1888	U	OP2-P-O3'	5.36	116.98	105.20
36	5	2120	A	N1-C6-N6	5.36	121.81	118.60
36	5	2135	U	N3-C2-O2	-5.36	118.45	122.20
36	5	2143	A	OP1-P-O3'	5.36	116.99	105.20
36	5	2399	A	C8-N9-C1'	5.36	137.34	127.70
36	5	2751	G	C8-N9-C4	-5.36	104.26	106.40
36	5	2974	U	C5-C6-N1	-5.36	120.02	122.70
36	5	3269	U	P-O3'-C3'	5.36	126.13	119.70
36	1	211	A	C6-C5-N7	5.36	136.05	132.30
36	1	606	C	N3-C4-C5	-5.36	119.76	121.90
36	1	988	U	C5-C6-N1	-5.36	120.02	122.70
36	1	1148	G	C8-N9-C1'	5.36	133.96	127.00
36	1	1764	U	P-O3'-C3'	5.36	126.13	119.70
36	1	2269	U	N1-C2-N3	5.36	118.11	114.90
36	1	2415	C	C5-C6-N1	-5.36	118.32	121.00
36	1	3051	U	C6-N1-C2	-5.36	117.79	121.00
36	1	3180	A	N1-C2-N3	5.36	131.98	129.30
36	1	3313	U	O5'-P-OP1	5.36	117.13	110.70
38	4	39	G	C5-C6-N1	5.36	114.18	111.50
1	6	797	G	N3-C4-C5	5.36	131.28	128.60
1	6	1473	U	C2-N3-C4	-5.36	123.79	127.00
1	6	1548	G	N7-C8-N9	-5.36	110.42	113.10
1	6	1638	G	C8-N9-C4	-5.36	104.26	106.40
36	5	146	U	N1-C2-O2	5.36	126.55	122.80
36	5	1413	G	C8-N9-C4	5.36	108.54	106.40
36	5	1436	U	N3-C2-O2	-5.36	118.45	122.20
36	5	1881	A	N1-C6-N6	5.36	121.81	118.60
36	5	2209	U	C2-N1-C1'	-5.36	111.27	117.70
36	5	2283	G	O5'-P-OP1	-5.36	100.88	105.70
36	5	2325	G	C5-C6-N1	-5.36	108.82	111.50
36	5	2388	U	OP1-P-OP2	-5.36	111.57	119.60
36	5	3178	A	O5'-P-OP2	-5.36	100.88	105.70
38	8	13	A	O5'-P-OP1	5.36	117.13	110.70
1	2	600	U	N1-C2-O2	-5.35	119.05	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1183	A	C4-C5-C6	-5.35	114.32	117.00
12	C0	15	LEU	CA-CB-CG	-5.35	102.99	115.30
36	1	316	U	N3-C4-O4	5.35	123.15	119.40
36	1	997	A	C5-C6-N1	5.35	120.38	117.70
36	1	1324	U	C5-C6-N1	-5.35	120.02	122.70
36	1	1646	G	C8-N9-C4	5.35	108.54	106.40
36	1	2754	G	N9-C4-C5	-5.35	103.26	105.40
36	1	2791	G	C8-N9-C4	-5.35	104.26	106.40
36	1	3182	G	N3-C2-N2	5.35	123.65	119.90
1	6	998	A	C4-C5-N7	-5.35	108.02	110.70
36	5	1838	G	C5-C6-O6	-5.35	125.39	128.60
36	5	2676	A	C5-N7-C8	-5.35	101.22	103.90
1	2	1010	C	N1-C2-O2	-5.35	115.69	118.90
1	2	1237	G	C4-C5-N7	-5.35	108.66	110.80
36	1	619	A	N9-C4-C5	-5.35	103.66	105.80
36	1	915	A	N7-C8-N9	5.35	116.48	113.80
36	1	1140	G	N9-C4-C5	-5.35	103.26	105.40
36	1	2134	G	C5-C6-N1	-5.35	108.82	111.50
36	1	2371	G	C5-N7-C8	5.35	106.98	104.30
36	1	2376	G	N1-C6-O6	-5.35	116.69	119.90
36	1	2619	G	C2-N3-C4	5.35	114.58	111.90
36	1	2966	G	C6-C5-N7	-5.35	127.19	130.40
36	1	3032	A	C5-C6-N6	5.35	127.98	123.70
36	1	3096	C	C5-C6-N1	5.35	123.68	121.00
1	6	42	G	C4-C5-N7	5.35	112.94	110.80
1	6	104	A	C5-C6-N6	-5.35	119.42	123.70
1	6	151	G	C5-C6-N1	-5.35	108.82	111.50
1	6	1001	A	C2-N3-C4	5.35	113.28	110.60
36	5	2745	G	N3-C4-N9	5.35	129.21	126.00
36	5	2794	G	OP1-P-OP2	5.35	127.63	119.60
76	q0	108	THR	N-CA-C	-5.35	96.55	111.00
1	2	864	U	N3-C2-O2	-5.35	118.45	122.20
36	1	182	U	C2-N1-C1'	-5.35	111.28	117.70
36	1	2988	C	N3-C4-N4	-5.35	114.25	118.00
36	1	3306	U	C6-N1-C1'	-5.35	113.71	121.20
1	6	1027	A	N9-C4-C5	5.35	107.94	105.80
36	5	2623	G	P-O3'-C3'	-5.35	113.28	119.70
37	7	32	U	O5'-P-OP2	-5.35	100.88	105.70
1	2	399	A	C5-N7-C8	5.35	106.58	103.90
1	2	612	U	O5'-P-OP1	5.35	117.12	110.70
1	2	978	A	C8-N9-C4	-5.35	103.66	105.80
1	2	1673	G	N3-C4-N9	5.35	129.21	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	135	C	C6-N1-C2	-5.35	118.16	120.30
36	1	933	A	OP1-P-OP2	5.35	127.62	119.60
36	1	1180	A	C8-N9-C1'	5.35	137.33	127.70
36	1	1417	G	N3-C4-C5	5.35	131.28	128.60
36	1	1440	G	N1-C2-N2	-5.35	111.39	116.20
36	1	3278	C	C6-N1-C1'	-5.35	114.38	120.80
38	4	54	A	C6-N1-C2	-5.35	115.39	118.60
1	6	185	U	C6-N1-C1'	-5.35	113.71	121.20
1	6	592	A	C2-N3-C4	5.35	113.28	110.60
36	5	865	U	OP1-P-OP2	-5.35	111.58	119.60
36	5	2713	U	C2-N3-C4	5.35	130.21	127.00
36	5	2981	U	C4-C5-C6	5.35	122.91	119.70
36	5	3020	U	C5-C4-O4	-5.35	122.69	125.90
37	7	51	A	N7-C8-N9	5.35	116.47	113.80
1	2	1455	G	C4-C5-C6	5.35	122.01	118.80
1	2	1758	U	C2-N1-C1'	5.35	124.12	117.70
36	1	213	A	O5'-P-OP1	-5.35	100.89	105.70
36	1	407	A	C5-C6-N1	5.35	120.37	117.70
36	1	1163	A	C5-C6-N6	-5.35	119.42	123.70
36	1	2139	A	C4-C5-C6	5.35	119.67	117.00
36	1	2382	G	N1-C2-N2	-5.35	111.39	116.20
1	6	609	U	C2-N3-C4	-5.35	123.79	127.00
36	5	57	A	O5'-P-OP2	-5.35	100.89	105.70
36	5	188	U	C5-C6-N1	5.35	125.37	122.70
36	5	1147	G	N3-C2-N2	5.35	123.64	119.90
36	5	1164	G	N1-C2-N2	5.35	121.01	116.20
36	5	1428	A	OP1-P-O3'	5.35	116.96	105.20
36	5	1476	G	C5-C6-O6	-5.35	125.39	128.60
36	5	1532	C	C4-C5-C6	5.35	120.07	117.40
36	5	2322	C	C4-C5-C6	5.35	120.07	117.40
36	5	3309	G	N9-C1'-C2'	-5.35	106.12	112.00
37	7	48	U	N3-C4-O4	5.35	123.14	119.40
39	12	200	ARG	NE-CZ-NH2	5.35	122.97	120.30
36	1	815	G	N3-C4-C5	-5.35	125.93	128.60
36	1	2301	U	C5-C6-N1	5.35	125.37	122.70
36	1	2517	U	N3-C2-O2	-5.35	118.46	122.20
36	1	2934	A	OP1-P-OP2	5.35	127.62	119.60
1	6	593	U	N3-C2-O2	-5.35	118.46	122.20
1	6	1665	U	C4-C5-C6	5.35	122.91	119.70
36	5	1134	G	N1-C2-N3	5.35	127.11	123.90
36	5	1159	A	C6-C5-N7	-5.35	128.56	132.30
36	5	2430	A	C4-C5-C6	5.35	119.67	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2838	A	C6-C5-N7	5.35	136.04	132.30
36	5	3310	A	C6-N1-C2	-5.35	115.39	118.60
36	1	65	A	N7-C8-N9	-5.34	111.13	113.80
36	1	1366	A	C4-C5-C6	5.34	119.67	117.00
36	1	2199	G	C6-C5-N7	-5.34	127.19	130.40
36	1	3030	G	N3-C4-C5	5.34	131.27	128.60
38	4	1	A	C4-C5-C6	-5.34	114.33	117.00
59	N3	17	LEU	CA-CB-CG	-5.34	103.01	115.30
1	6	115	G	C6-C5-N7	-5.34	127.19	130.40
1	6	124	A	N1-C6-N6	5.34	121.81	118.60
1	6	385	A	C6-C5-N7	5.34	136.04	132.30
1	6	553	G	N3-C4-C5	5.34	131.27	128.60
1	6	996	U	C2-N1-C1'	5.34	124.11	117.70
1	6	1021	C	N3-C4-C5	5.34	124.04	121.90
1	6	1619	C	C5-C6-N1	5.34	123.67	121.00
36	5	127	G	N1-C2-N2	5.34	121.01	116.20
36	5	845	G	C4-C5-N7	-5.34	108.66	110.80
36	5	1307	G	N1-C2-N3	5.34	127.11	123.90
36	5	1348	U	N3-C4-O4	5.34	123.14	119.40
36	5	1417	G	N1-C6-O6	-5.34	116.69	119.90
36	5	1861	G	C4-N9-C1'	5.34	133.45	126.50
36	5	2187	G	C4-C5-N7	-5.34	108.66	110.80
36	5	2188	A	N1-C2-N3	5.34	131.97	129.30
36	5	2796	G	N1-C2-N3	-5.34	120.69	123.90
36	5	2966	G	C4-C5-C6	5.34	122.01	118.80
36	5	3000	A	OP1-P-O3'	-5.34	93.44	105.20
36	5	3143	C	C6-N1-C2	-5.34	118.16	120.30
36	1	582	G	C5-C6-O6	5.34	131.81	128.60
36	1	596	C	N1-C2-O2	5.34	122.11	118.90
36	1	2244	A	C8-N9-C4	-5.34	103.66	105.80
1	6	308	C	C5-C4-N4	5.34	123.94	120.20
36	5	799	G	O5'-P-OP1	-5.34	100.89	105.70
36	5	1723	A	OP2-P-O3'	5.34	116.95	105.20
36	5	1886	A	N1-C2-N3	5.34	131.97	129.30
36	5	3377	G	O5'-P-OP2	-5.34	100.89	105.70
38	8	2	A	OP1-P-OP2	-5.34	111.59	119.60
1	2	975	C	C6-N1-C2	-5.34	118.16	120.30
1	2	1240	U	C5-C6-N1	-5.34	120.03	122.70
1	2	1389	C	C2-N1-C1'	5.34	124.68	118.80
36	1	48	A	O4'-C1'-N9	5.34	112.47	108.20
36	1	254	A	N1-C6-N6	-5.34	115.39	118.60
36	1	419	G	C5-C6-N1	5.34	114.17	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	420	G	C8-N9-C1'	-5.34	120.06	127.00
36	1	1102	A	N1-C2-N3	5.34	131.97	129.30
36	1	1581	C	C2-N3-C4	5.34	122.57	119.90
36	1	2100	A	N9-C1'-C2'	-5.34	106.12	112.00
38	4	56	G	C6-N1-C2	-5.34	121.89	125.10
1	6	1683	C	N1-C2-O2	5.34	122.11	118.90
36	5	183	G	C5-N7-C8	5.34	106.97	104.30
36	5	639	G	C5-C6-N1	-5.34	108.83	111.50
36	5	644	G	C4-N9-C1'	5.34	133.44	126.50
36	5	1064	A	O4'-C1'-N9	-5.34	103.93	108.20
36	5	1517	G	N1-C6-O6	5.34	123.10	119.90
36	5	2434	U	OP1-P-O3'	5.34	116.95	105.20
36	5	3028	G	N3-C4-N9	5.34	129.21	126.00
36	5	3047	U	C4-C5-C6	5.34	122.91	119.70
38	8	110	C	N3-C4-C5	5.34	124.04	121.90
1	2	1270	G	C4-C5-C6	5.34	122.00	118.80
36	1	21	G	N9-C4-C5	5.34	107.54	105.40
36	1	715	A	N7-C8-N9	5.34	116.47	113.80
36	1	1284	C	C2-N1-C1'	5.34	124.67	118.80
36	1	1799	A	N1-C2-N3	5.34	131.97	129.30
36	1	2388	U	C5-C6-N1	-5.34	120.03	122.70
36	1	2603	G	C5-C6-N1	-5.34	108.83	111.50
36	1	2896	A	N1-C2-N3	5.34	131.97	129.30
36	1	3221	C	N3-C4-C5	-5.34	119.76	121.90
36	1	3232	G	C4-C5-C6	5.34	122.00	118.80
37	3	109	G	C8-N9-C1'	5.34	133.94	127.00
1	6	26	A	OP2-P-O3'	5.34	116.95	105.20
1	6	1074	G	N1-C6-O6	5.34	123.10	119.90
1	6	1672	G	C5-C6-N1	5.34	114.17	111.50
36	5	92	G	C4-C5-N7	5.34	112.94	110.80
36	5	218	G	C4-C5-N7	-5.34	108.66	110.80
36	5	725	G	N1-C2-N2	-5.34	111.39	116.20
36	5	1164	G	C6-N1-C2	-5.34	121.90	125.10
36	5	1202	A	N1-C6-N6	5.34	121.80	118.60
36	5	1317	A	C4-C5-N7	5.34	113.37	110.70
36	5	2254	U	OP1-P-O3'	5.34	116.95	105.20
36	5	2420	C	C2-N1-C1'	5.34	124.67	118.80
36	5	2917	G	C8-N9-C4	-5.34	104.26	106.40
36	5	3061	G	C4-N9-C1'	-5.34	119.56	126.50
1	2	1342	C	C5-C6-N1	5.34	123.67	121.00
1	6	1489	U	N3-C2-O2	-5.34	118.46	122.20
36	5	2420	C	C4-C5-C6	-5.34	114.73	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3237	U	N1-C2-O2	-5.34	119.06	122.80
36	5	3324	C	C2-N3-C4	-5.34	117.23	119.90
52	m6	51	LYS	CD-CE-NZ	5.34	123.98	111.70
1	2	17	C	C6-N1-C1'	5.34	127.20	120.80
1	2	1123	C	C2-N3-C4	5.34	122.57	119.90
1	2	1568	C	N3-C4-N4	-5.34	114.26	118.00
36	1	812	G	O5'-P-OP2	-5.34	100.90	105.70
36	1	933	A	C6-C5-N7	-5.34	128.56	132.30
36	1	1152	G	N3-C2-N2	5.34	123.64	119.90
36	1	1377	G	N1-C2-N3	5.34	127.10	123.90
36	1	3034	C	OP1-P-O3'	5.34	116.94	105.20
36	1	3075	G	C6-C5-N7	-5.34	127.20	130.40
38	4	53	A	N7-C8-N9	-5.34	111.13	113.80
41	L4	101	ALA	C-N-CD	-5.34	108.86	120.60
1	6	57	G	N1-C2-N3	5.34	127.10	123.90
1	6	420	A	C5-C6-N6	-5.34	119.43	123.70
1	6	1157	A	N9-C4-C5	5.34	107.93	105.80
1	6	1426	C	N1-C2-N3	-5.34	115.46	119.20
36	5	35	A	C6-N1-C2	-5.34	115.40	118.60
36	5	529	A	OP1-P-OP2	-5.34	111.60	119.60
36	5	1054	A	N9-C4-C5	-5.34	103.67	105.80
36	5	2174	G	C8-N9-C4	5.34	108.53	106.40
36	5	2824	G	N3-C4-N9	5.34	129.20	126.00
38	8	93	U	N3-C4-O4	-5.34	115.67	119.40
1	2	980	G	C8-N9-C4	5.33	108.53	106.40
1	2	1537	C	N1-C2-N3	-5.33	115.47	119.20
36	1	73	C	C6-N1-C2	-5.33	118.17	120.30
36	1	3321	C	N3-C4-C5	-5.33	119.77	121.90
1	6	17	C	N3-C4-N4	5.33	121.73	118.00
36	5	860	G	C5-N7-C8	-5.33	101.63	104.30
36	5	987	U	C4-C5-C6	5.33	122.90	119.70
36	5	1363	A	C5-N7-C8	5.33	106.57	103.90
36	5	2891	U	N1-C2-O2	5.33	126.53	122.80
1	2	332	U	C2-N3-C4	-5.33	123.80	127.00
1	2	1436	A	N1-C6-N6	5.33	121.80	118.60
1	2	1558	U	C5-C4-O4	-5.33	122.70	125.90
36	1	30	G	C4-C5-N7	5.33	112.93	110.80
36	1	411	U	N1-C2-O2	-5.33	119.07	122.80
36	1	428	A	C2-N3-C4	5.33	113.27	110.60
36	1	925	A	N1-C6-N6	5.33	121.80	118.60
36	1	1544	G	C5-C6-O6	-5.33	125.40	128.60
36	1	1952	G	OP2-P-O3'	5.33	116.94	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2722	U	OP1-P-OP2	-5.33	111.60	119.60
36	1	3088	G	C4-C5-N7	-5.33	108.67	110.80
36	1	3312	U	N1-C2-O2	-5.33	119.07	122.80
36	1	3316	A	OP2-P-O3'	5.33	116.94	105.20
54	M8	111	ARG	NE-CZ-NH1	-5.33	117.63	120.30
1	6	172	C	O5'-P-OP1	-5.33	100.90	105.70
1	6	1070	C	C5-C6-N1	-5.33	118.33	121.00
1	6	1598	U	C6-N1-C1'	-5.33	113.73	121.20
36	5	274	G	C6-C5-N7	5.33	133.60	130.40
36	5	281	G	N1-C2-N3	5.33	127.10	123.90
36	5	1891	A	N1-C6-N6	5.33	121.80	118.60
36	5	2118	C	C2-N1-C1'	5.33	124.67	118.80
36	5	2966	G	O5'-P-OP1	5.33	117.10	110.70
36	5	3120	C	C2-N1-C1'	5.33	124.67	118.80
1	2	763	G	C5-C6-O6	-5.33	125.40	128.60
1	2	1102	G	C5-C6-O6	-5.33	125.40	128.60
1	2	1109	G	C6-C5-N7	-5.33	127.20	130.40
1	2	1148	C	N1-C2-N3	5.33	122.93	119.20
36	1	882	A	C5-C6-N6	5.33	127.97	123.70
36	1	1065	A	O5'-P-OP1	-5.33	100.90	105.70
36	1	1168	U	OP1-P-OP2	-5.33	111.60	119.60
36	1	2284	C	N3-C4-C5	-5.33	119.77	121.90
36	1	2889	C	O5'-P-OP2	5.33	117.10	110.70
36	1	2953	U	N3-C2-O2	-5.33	118.47	122.20
36	1	3140	G	N9-C4-C5	-5.33	103.27	105.40
1	6	825	U	C5-C4-O4	-5.33	122.70	125.90
1	6	934	C	N3-C4-N4	-5.33	114.27	118.00
36	5	281	G	C6-N1-C2	-5.33	121.90	125.10
36	5	1337	A	N3-C4-C5	5.33	130.53	126.80
36	5	1420	C	OP2-P-O3'	5.33	116.93	105.20
36	5	3278	C	N3-C2-O2	5.33	125.63	121.90
1	2	422	G	O4'-C1'-N9	-5.33	103.94	108.20
1	2	1108	G	C6-C5-N7	5.33	133.60	130.40
36	1	1488	G	C4-C5-N7	5.33	112.93	110.80
1	6	1142	A	C8-N9-C4	-5.33	103.67	105.80
36	5	416	A	C4-C5-C6	-5.33	114.33	117.00
36	5	851	C	N3-C2-O2	5.33	125.63	121.90
36	5	1062	A	O5'-P-OP1	5.33	117.10	110.70
36	5	1332	A	OP1-P-O3'	5.33	116.93	105.20
36	5	1333	C	N3-C4-C5	-5.33	119.77	121.90
36	5	1889	G	OP1-P-OP2	-5.33	111.61	119.60
36	5	3079	U	N3-C4-O4	-5.33	115.67	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	260	U	C5-C4-O4	-5.33	122.70	125.90
36	1	89	A	O5'-P-OP1	5.33	117.09	110.70
36	1	697	A	OP1-P-OP2	5.33	127.59	119.60
36	1	1320	C	C2-N3-C4	-5.33	117.24	119.90
36	1	1437	C	C2-N1-C1'	5.33	124.66	118.80
36	1	1643	A	C8-N9-C4	5.33	107.93	105.80
36	1	2828	G	N3-C4-C5	-5.33	125.94	128.60
36	1	3361	G	C4-C5-N7	-5.33	108.67	110.80
1	6	16	G	C6-C5-N7	-5.33	127.20	130.40
1	6	372	G	C5-C6-O6	5.33	131.80	128.60
1	6	1129	U	C6-N1-C1'	5.33	128.66	121.20
1	6	1264	G	C5-C6-O6	-5.33	125.40	128.60
1	6	1569	A	C4-N9-C1'	5.33	135.89	126.30
36	5	538	G	C6-C5-N7	-5.33	127.20	130.40
36	5	1124	U	C4-C5-C6	-5.33	116.50	119.70
36	5	1339	C	N3-C4-C5	5.33	124.03	121.90
36	5	1486	G	C8-N9-C1'	5.33	133.93	127.00
36	5	2149	A	C5-C6-N1	-5.33	115.04	117.70
36	5	2187	G	N7-C8-N9	5.33	115.76	113.10
1	2	548	G	N1-C6-O6	5.33	123.10	119.90
36	1	278	U	OP1-P-OP2	-5.33	111.61	119.60
36	1	1548	C	N3-C4-N4	5.33	121.73	118.00
36	1	2643	A	C4-C5-C6	-5.33	114.34	117.00
1	6	2	A	N9-C4-C5	5.33	107.93	105.80
1	6	1665	U	OP2-P-O3'	5.33	116.92	105.20
36	5	1207	G	C4-C5-N7	5.33	112.93	110.80
36	5	2663	G	C5-C6-N1	5.33	114.16	111.50
36	5	2918	G	N1-C2-N3	5.33	127.10	123.90
1	2	1606	C	O5'-P-OP2	-5.33	100.91	105.70
36	1	644	G	C5-N7-C8	5.33	106.96	104.30
36	1	876	A	C6-N1-C2	-5.33	115.41	118.60
36	1	975	C	N1-C2-O2	-5.33	115.70	118.90
36	1	1428	A	OP1-P-OP2	5.33	127.59	119.60
36	1	1517	G	C5-C6-N1	5.33	114.16	111.50
36	1	1544	G	C4-C5-N7	5.33	112.93	110.80
36	1	1585	C	N3-C2-O2	5.33	125.63	121.90
36	1	2305	G	OP2-P-O3'	5.33	116.92	105.20
36	1	2705	A	N9-C4-C5	5.33	107.93	105.80
36	1	3362	A	N1-C6-N6	5.33	121.80	118.60
38	4	10	A	N1-C6-N6	-5.33	115.41	118.60
38	4	34	U	C6-N1-C1'	5.33	128.66	121.20
1	6	48	G	OP2-P-O3'	5.33	116.92	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	403	G	OP1-P-O3'	5.33	116.92	105.20
1	6	1180	C	C5-C6-N1	5.33	123.66	121.00
1	6	1521	G	C5-C6-O6	-5.33	125.40	128.60
1	6	1543	A	C2-N3-C4	-5.33	107.94	110.60
1	6	1569	A	C6-C5-N7	-5.33	128.57	132.30
36	5	374	A	C8-N9-C4	-5.33	103.67	105.80
36	5	746	A	N1-C2-N3	5.33	131.96	129.30
36	5	1168	U	N3-C4-C5	5.33	117.80	114.60
36	5	1277	C	C5-C6-N1	5.33	123.66	121.00
36	5	1323	G	C6-C5-N7	-5.33	127.20	130.40
36	5	2312	A	C5-C6-N1	5.33	120.36	117.70
38	8	51	G	N1-C2-N3	5.33	127.09	123.90
1	2	41	A	C8-N9-C4	-5.32	103.67	105.80
36	1	679	U	N3-C4-C5	5.32	117.79	114.60
36	1	946	U	N3-C4-O4	5.32	123.13	119.40
36	1	1506	A	C2-N3-C4	-5.32	107.94	110.60
36	1	2321	A	C6-N1-C2	5.32	121.79	118.60
36	1	2802	A	C6-N1-C2	-5.32	115.41	118.60
36	1	2817	A	C6-N1-C2	-5.32	115.41	118.60
36	1	3293	U	C6-N1-C1'	5.32	128.65	121.20
1	6	580	A	C2-N3-C4	5.32	113.26	110.60
1	6	1777	G	C4-C5-C6	5.32	121.99	118.80
36	5	349	A	C6-N1-C2	-5.32	115.41	118.60
36	5	1420	C	OP1-P-O3'	-5.32	93.49	105.20
36	5	1487	G	N7-C8-N9	5.32	115.76	113.10
36	5	2207	A	N9-C4-C5	-5.32	103.67	105.80
36	5	3242	G	N3-C4-C5	-5.32	125.94	128.60
38	8	8	C	N3-C4-C5	-5.32	119.77	121.90
38	8	115	C	C2-N3-C4	-5.32	117.24	119.90
38	8	116	G	C8-N9-C4	-5.32	104.27	106.40
36	1	2234	G	C4-C5-N7	-5.32	108.67	110.80
36	1	2341	A	N7-C8-N9	-5.32	111.14	113.80
36	1	3052	G	O5'-P-OP1	-5.32	100.91	105.70
37	3	97	A	N9-C4-C5	-5.32	103.67	105.80
1	6	1146	G	N1-C6-O6	-5.32	116.71	119.90
36	5	731	U	C2-N3-C4	-5.32	123.81	127.00
36	5	1319	G	N1-C2-N2	5.32	120.99	116.20
36	5	1761	C	N1-C2-O2	5.32	122.09	118.90
36	5	2938	G	C5-C6-N1	5.32	114.16	111.50
36	5	3143	C	C5-C4-N4	-5.32	116.47	120.20
38	8	77	A	C8-N9-C4	5.32	107.93	105.80
1	2	100	A	C5-C6-N1	5.32	120.36	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	576	G	N7-C8-N9	5.32	115.76	113.10
36	1	865	U	C2-N3-C4	-5.32	123.81	127.00
36	1	1043	C	C5-C6-N1	-5.32	118.34	121.00
36	1	1498	A	OP2-P-O3'	5.32	116.91	105.20
36	1	2778	G	C6-N1-C2	-5.32	121.91	125.10
36	1	2966	G	C5-C6-N1	-5.32	108.84	111.50
36	1	3360	C	C5-C6-N1	5.32	123.66	121.00
1	6	68	A	C4-C5-N7	5.32	113.36	110.70
1	6	777	C	N1-C2-O2	5.32	122.09	118.90
1	6	1273	G	OP1-P-OP2	-5.32	111.62	119.60
1	6	1665	U	C5-C6-N1	-5.32	120.04	122.70
36	5	396	A	N3-C4-C5	5.32	130.52	126.80
36	5	929	A	C5-C6-N1	5.32	120.36	117.70
36	5	1510	G	C4-C5-N7	5.32	112.93	110.80
36	5	2371	G	C4-N9-C1'	5.32	133.42	126.50
36	5	2556	C	O4'-C1'-N1	5.32	112.46	108.20
36	5	2622	C	C5-C4-N4	5.32	123.92	120.20
36	5	2723	U	C2-N1-C1'	5.32	124.08	117.70
36	5	2754	G	C8-N9-C4	5.32	108.53	106.40
36	5	2803	A	C6-N1-C2	5.32	121.79	118.60
36	5	2819	A	C2-N3-C4	5.32	113.26	110.60
36	5	3362	A	C4-C5-N7	5.32	113.36	110.70
1	2	1264	G	N9-C4-C5	5.32	107.53	105.40
36	1	53	G	C4-C5-C6	5.32	121.99	118.80
36	1	1947	G	C6-C5-N7	-5.32	127.21	130.40
36	1	3265	C	C5-C6-N1	-5.32	118.34	121.00
36	1	3322	A	C2-N3-C4	-5.32	107.94	110.60
37	3	30	G	C6-N1-C2	-5.32	121.91	125.10
38	4	110	C	C5-C4-N4	5.32	123.92	120.20
1	6	757	A	N3-C4-C5	5.32	130.52	126.80
36	5	965	A	N3-C4-C5	-5.32	123.08	126.80
36	5	1081	U	C5-C6-N1	5.32	125.36	122.70
1	2	347	G	N1-C2-N3	5.32	127.09	123.90
1	2	1307	U	C5-C4-O4	5.32	129.09	125.90
36	1	232	G	N3-C4-C5	-5.32	125.94	128.60
36	1	584	G	OP1-P-O3'	5.32	116.90	105.20
36	1	628	A	C8-N9-C4	-5.32	103.67	105.80
36	1	1473	G	C8-N9-C4	5.32	108.53	106.40
36	1	1476	G	C8-N9-C1'	-5.32	120.09	127.00
36	1	2420	C	O5'-P-OP2	5.32	117.08	110.70
36	1	3040	A	C4-C5-C6	5.32	119.66	117.00
38	4	34	U	C4-C5-C6	5.32	122.89	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1020	A	N9-C4-C5	5.32	107.93	105.80
1	6	1083	G	C4-N9-C1'	5.32	133.41	126.50
1	6	1119	G	C6-N1-C2	-5.32	121.91	125.10
1	6	1336	A	C8-N9-C4	5.32	107.93	105.80
36	5	504	A	N9-C4-C5	-5.32	103.67	105.80
36	5	1094	U	C5-C6-N1	5.32	125.36	122.70
36	5	1348	U	O5'-P-OP2	5.32	117.08	110.70
36	5	1589	A	C5-N7-C8	-5.32	101.24	103.90
36	5	1832	C	C5-C4-N4	-5.32	116.48	120.20
36	5	2311	G	C2-N3-C4	-5.32	109.24	111.90
36	5	3124	G	C6-C5-N7	-5.32	127.21	130.40
37	7	21	G	OP1-P-O3'	5.32	116.90	105.20
37	7	46	A	C5-C6-N6	-5.32	119.45	123.70
37	7	65	G	C5-N7-C8	-5.32	101.64	104.30
38	8	108	C	O5'-P-OP2	-5.32	100.92	105.70
1	2	936	G	C8-N9-C4	-5.32	104.27	106.40
1	2	1573	A	P-O3'-C3'	5.32	126.08	119.70
1	2	1599	C	C6-N1-C2	-5.32	118.17	120.30
1	2	1764	C	N1-C2-O2	5.32	122.09	118.90
36	1	747	A	C4-C5-C6	-5.32	114.34	117.00
36	1	792	G	C2-N3-C4	-5.32	109.24	111.90
36	1	1794	G	C8-N9-C4	5.32	108.53	106.40
36	1	1906	G	N9-C4-C5	-5.32	103.27	105.40
36	1	2231	C	C5-C6-N1	-5.32	118.34	121.00
36	1	2373	A	N7-C8-N9	5.32	116.46	113.80
36	1	2389	C	C2-N3-C4	-5.32	117.24	119.90
36	1	2554	A	O4'-C1'-N9	-5.32	103.95	108.20
36	1	2843	U	C6-N1-C1'	-5.32	113.76	121.20
36	1	2937	G	N3-C4-C5	5.32	131.26	128.60
37	3	10	C	C6-N1-C2	5.32	122.43	120.30
37	3	26	C	C5-C6-N1	-5.32	118.34	121.00
38	4	139	U	N1-C2-O2	5.32	126.52	122.80
1	6	454	U	N3-C2-O2	-5.32	118.48	122.20
1	6	1662	G	O5'-P-OP2	-5.32	100.92	105.70
36	5	40	A	N3-C4-C5	5.32	130.52	126.80
36	5	74	G	O5'-P-OP1	-5.32	100.92	105.70
36	5	525	C	OP2-P-O3'	5.32	116.89	105.20
36	5	601	U	N3-C4-O4	5.32	123.12	119.40
36	5	677	A	C4-C5-C6	-5.32	114.34	117.00
36	5	813	G	O5'-P-OP1	5.32	117.08	110.70
36	5	1248	C	C6-N1-C2	-5.32	118.17	120.30
36	5	2236	G	N3-C4-C5	-5.32	125.94	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2317	A	N9-C4-C5	5.32	107.93	105.80
36	5	2670	G	OP1-P-O3'	-5.32	93.50	105.20
36	5	3080	G	C5-C6-O6	-5.32	125.41	128.60
36	5	3227	A	OP2-P-O3'	5.32	116.90	105.20
37	7	24	A	N9-C4-C5	5.32	107.93	105.80
1	2	318	U	N1-C2-O2	-5.31	119.08	122.80
36	1	408	A	C4-C5-N7	-5.31	108.04	110.70
36	1	1178	G	N9-C4-C5	-5.31	103.27	105.40
36	1	2233	A	N9-C4-C5	5.31	107.93	105.80
38	4	36	G	C4-C5-N7	5.31	112.93	110.80
36	5	399	A	C2-N3-C4	5.31	113.26	110.60
36	5	788	C	N1-C2-N3	5.31	122.92	119.20
36	5	2674	A	O5'-P-OP1	-5.31	100.92	105.70
36	5	2904	U	OP2-P-O3'	5.31	116.89	105.20
1	2	615	A	N9-C4-C5	5.31	107.92	105.80
1	2	1086	A	N9-C4-C5	5.31	107.92	105.80
36	1	1736	G	N7-C8-N9	5.31	115.76	113.10
36	1	2370	G	C5-N7-C8	5.31	106.96	104.30
36	1	3180	A	C8-N9-C4	-5.31	103.67	105.80
36	1	3294	A	N1-C6-N6	-5.31	115.41	118.60
1	6	187	G	OP1-P-O3'	5.31	116.89	105.20
1	6	1001	A	C5-C6-N6	-5.31	119.45	123.70
1	6	1367	G	OP2-P-O3'	5.31	116.89	105.20
36	5	40	A	N3-C4-N9	-5.31	123.15	127.40
36	5	188	U	N1-C2-N3	5.31	118.09	114.90
36	5	947	G	C5-C6-O6	-5.31	125.41	128.60
36	5	1422	G	C2-N3-C4	-5.31	109.24	111.90
36	5	2275	A	O4'-C1'-N9	5.31	112.45	108.20
36	5	2647	A	N1-C2-N3	5.31	131.96	129.30
36	5	2857	C	N1-C2-O2	5.31	122.09	118.90
36	5	3164	C	N3-C4-C5	5.31	124.03	121.90
36	5	3313	U	N3-C4-C5	-5.31	111.41	114.60
37	7	40	C	C5-C4-N4	-5.31	116.48	120.20
1	2	357	G	O5'-P-OP2	5.31	117.07	110.70
36	1	650	C	N1-C2-O2	-5.31	115.71	118.90
36	1	2761	G	N1-C6-O6	-5.31	116.71	119.90
36	1	2963	C	O5'-P-OP2	-5.31	100.92	105.70
36	1	3219	G	N9-C4-C5	-5.31	103.28	105.40
1	6	79	C	C6-N1-C2	5.31	122.42	120.30
36	5	30	G	N7-C8-N9	5.31	115.76	113.10
36	5	230	U	C5-C4-O4	5.31	129.09	125.90
36	5	1637	A	C8-N9-C4	-5.31	103.68	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	65	G	N3-C4-C5	5.31	131.26	128.60
1	2	806	A	C5-C6-N1	5.31	120.36	117.70
1	2	913	G	P-O3'-C3'	5.31	126.07	119.70
1	2	1146	G	C4-C5-C6	5.31	121.99	118.80
36	1	378	A	C8-N9-C4	5.31	107.92	105.80
36	1	1207	G	O5'-P-OP2	5.31	117.07	110.70
36	1	1386	A	N1-C2-N3	5.31	131.96	129.30
36	1	1419	A	O4'-C1'-N9	5.31	112.45	108.20
36	1	1529	A	N9-C4-C5	5.31	107.92	105.80
36	1	1594	A	C2-N3-C4	5.31	113.25	110.60
1	6	1082	C	C4-C5-C6	5.31	120.06	117.40
1	6	1097	U	N1-C2-N3	5.31	118.08	114.90
1	6	1357	A	C8-N9-C4	5.31	107.92	105.80
1	6	1614	A	N7-C8-N9	5.31	116.45	113.80
36	5	97	U	N1-C2-O2	-5.31	119.08	122.80
36	5	689	U	OP1-P-O3'	-5.31	93.52	105.20
36	5	1085	A	C5-C6-N1	-5.31	115.05	117.70
36	5	2411	U	N3-C4-O4	5.31	123.12	119.40
36	5	2745	G	C4-C5-N7	5.31	112.92	110.80
1	2	514	G	C4-N9-C1'	-5.31	119.60	126.50
1	2	1200	G	C8-N9-C4	-5.31	104.28	106.40
1	2	1418	G	C5-C6-O6	-5.31	125.42	128.60
1	2	1764	C	O5'-P-OP1	-5.31	100.92	105.70
36	1	287	G	OP1-P-O3'	5.31	116.88	105.20
36	1	325	A	O5'-P-OP1	-5.31	100.92	105.70
36	1	1118	C	C6-N1-C2	-5.31	118.18	120.30
36	1	1314	C	N3-C4-C5	-5.31	119.78	121.90
36	1	2202	C	C5-C6-N1	5.31	123.65	121.00
36	1	2266	U	C4-C5-C6	-5.31	116.52	119.70
36	1	2648	G	N3-C4-C5	-5.31	125.95	128.60
36	1	2654	C	N3-C4-N4	5.31	121.72	118.00
1	6	90	C	N1-C2-N3	5.31	122.92	119.20
1	6	340	U	N3-C4-O4	5.31	123.11	119.40
1	6	440	U	OP1-P-OP2	5.31	127.56	119.60
1	6	1122	G	N1-C6-O6	5.31	123.08	119.90
1	6	1524	A	C6-N1-C2	-5.31	115.42	118.60
1	6	1631	A	OP1-P-O3'	5.31	116.88	105.20
1	6	1650	U	N1-C2-N3	5.31	118.08	114.90
36	5	217	U	C5-C6-N1	-5.31	120.05	122.70
36	5	326	U	OP2-P-O3'	5.31	116.88	105.20
36	5	957	C	C5-C6-N1	5.31	123.65	121.00
36	5	983	A	C8-N9-C4	5.31	107.92	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2344	U	C4-C5-C6	5.31	122.88	119.70
36	5	3044	G	C4-C5-N7	5.31	112.92	110.80
36	5	3326	G	N3-C2-N2	5.31	123.62	119.90
36	5	3386	G	N9-C4-C5	5.31	107.52	105.40
1	2	654	C	C6-N1-C2	-5.31	118.18	120.30
36	1	1465	A	C8-N9-C4	5.31	107.92	105.80
36	1	3141	A	C5-N7-C8	-5.31	101.25	103.90
1	6	151	G	C4-C5-N7	-5.31	108.68	110.80
1	6	1030	A	C8-N9-C4	5.31	107.92	105.80
36	5	1867	A	N3-C4-N9	-5.31	123.16	127.40
36	5	2933	A	N9-C4-C5	5.31	107.92	105.80
1	2	22	A	C2-N3-C4	5.30	113.25	110.60
36	1	379	C	N1-C2-O2	-5.30	115.72	118.90
36	1	2333	C	C4-C5-C6	5.30	120.05	117.40
36	1	2776	C	C6-N1-C1'	-5.30	114.43	120.80
1	6	765	G	O4'-C1'-N9	-5.30	103.96	108.20
1	6	784	C	O5'-P-OP1	-5.30	100.92	105.70
1	6	1136	U	N3-C4-C5	5.30	117.78	114.60
1	6	1337	A	C8-N9-C1'	5.30	137.25	127.70
1	6	1484	G	N9-C4-C5	5.30	107.52	105.40
36	5	383	G	C5-C6-O6	5.30	131.78	128.60
36	5	2677	G	C6-C5-N7	-5.30	127.22	130.40
37	7	87	G	O5'-P-OP1	-5.30	100.93	105.70
36	1	225	C	N1-C2-O2	5.30	122.08	118.90
36	1	1344	G	O5'-P-OP1	5.30	117.06	110.70
36	1	1409	G	C4-C5-N7	5.30	112.92	110.80
36	1	1554	U	C2-N3-C4	5.30	130.18	127.00
36	1	1670	C	C2-N3-C4	-5.30	117.25	119.90
36	1	2161	G	N1-C6-O6	5.30	123.08	119.90
36	1	3263	G	N9-C4-C5	-5.30	103.28	105.40
36	5	1163	A	C6-N1-C2	-5.30	115.42	118.60
78	q2	93	LEU	CB-CG-CD2	-5.30	101.98	111.00
1	2	469	C	O5'-P-OP2	-5.30	100.93	105.70
1	2	966	A	N1-C2-N3	5.30	131.95	129.30
36	1	132	C	C6-N1-C2	-5.30	118.18	120.30
36	1	643	U	C5-C6-N1	5.30	125.35	122.70
36	1	933	A	C8-N9-C1'	-5.30	118.16	127.70
36	1	1709	C	C6-N1-C2	-5.30	118.18	120.30
36	1	2398	A	N7-C8-N9	-5.30	111.15	113.80
68	O2	47	ARG	NE-CZ-NH1	5.30	122.95	120.30
73	O7	65	ARG	NE-CZ-NH2	-5.30	117.65	120.30
1	6	509	G	O5'-P-OP1	-5.30	100.93	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	989	U	N1-C2-O2	5.30	126.51	122.80
1	6	1374	C	N3-C4-C5	-5.30	119.78	121.90
36	5	41	G	C8-N9-C1'	5.30	133.89	127.00
36	5	535	G	O4'-C1'-N9	-5.30	103.96	108.20
36	5	560	G	N3-C2-N2	-5.30	116.19	119.90
36	5	1171	G	C8-N9-C4	-5.30	104.28	106.40
36	5	1183	C	C2-N1-C1'	5.30	124.63	118.80
36	5	2333	C	C5-C6-N1	-5.30	118.35	121.00
36	5	2615	G	N9-C4-C5	-5.30	103.28	105.40
36	5	2649	A	C4-C5-N7	5.30	113.35	110.70
36	5	2727	A	C6-N1-C2	-5.30	115.42	118.60
36	5	3180	A	N3-C4-C5	5.30	130.51	126.80
36	5	3382	U	N3-C2-O2	-5.30	118.49	122.20
1	2	630	A	O4'-C1'-N9	-5.30	103.96	108.20
1	2	1250	U	P-O3'-C3'	5.30	126.06	119.70
36	1	145	G	N7-C8-N9	5.30	115.75	113.10
36	1	402	A	C4-C5-N7	5.30	113.35	110.70
36	1	970	A	C5-C6-N1	5.30	120.35	117.70
36	1	1145	G	N9-C4-C5	5.30	107.52	105.40
36	1	1463	U	C5-C6-N1	-5.30	120.05	122.70
36	1	2147	A	C6-N1-C2	-5.30	115.42	118.60
36	1	2659	G	C4-N9-C1'	5.30	133.39	126.50
36	1	2896	A	C6-C5-N7	-5.30	128.59	132.30
38	4	94	C	C2-N1-C1'	-5.30	112.97	118.80
38	4	125	U	C2-N1-C1'	5.30	124.06	117.70
6	s4	167	GLY	N-CA-C	-5.30	99.85	113.10
36	5	673	U	C4-C5-C6	5.30	122.88	119.70
36	5	1411	C	N1-C2-O2	5.30	122.08	118.90
36	5	1603	A	O5'-P-OP1	5.30	117.06	110.70
36	5	2197	C	C6-N1-C1'	-5.30	114.44	120.80
36	5	3026	G	N1-C2-N2	-5.30	111.43	116.20
36	5	3189	G	N1-C2-N2	-5.30	111.43	116.20
37	7	32	U	C5-C4-O4	-5.30	122.72	125.90
37	7	42	A	C4-N9-C1'	5.30	135.84	126.30
1	2	551	G	C2-N3-C4	-5.30	109.25	111.90
36	1	1201	C	N1-C2-N3	-5.30	115.49	119.20
36	5	1295	G	N3-C2-N2	5.30	123.61	119.90
36	5	2776	C	C6-N1-C1'	-5.30	114.44	120.80
36	5	3127	A	C6-N1-C2	-5.30	115.42	118.60
36	5	3130	A	C5-C6-N6	-5.30	119.46	123.70
36	5	3137	C	C2-N1-C1'	5.30	124.63	118.80
1	2	350	U	N1-C2-O2	-5.30	119.09	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	630	A	C2-N3-C4	-5.30	107.95	110.60
36	1	904	A	N9-C4-C5	5.30	107.92	105.80
36	1	967	A	C6-N1-C2	-5.30	115.42	118.60
36	1	1463	U	N3-C2-O2	-5.30	118.49	122.20
36	1	1534	A	C2-N3-C4	-5.30	107.95	110.60
36	1	2209	U	C2-N3-C4	5.30	130.18	127.00
36	1	2316	G	C4-C5-C6	5.30	121.98	118.80
36	1	2931	C	N1-C1'-C2'	-5.30	106.17	112.00
36	1	2932	U	OP1-P-OP2	5.30	127.55	119.60
36	1	3186	A	C5-C6-N1	5.30	120.35	117.70
1	6	1209	C	N1-C2-O2	-5.30	115.72	118.90
36	5	422	A	C5-C6-N6	5.30	127.94	123.70
36	5	513	G	C6-N1-C2	-5.30	121.92	125.10
36	5	854	G	N1-C6-O6	5.30	123.08	119.90
36	5	1101	G	C4-N9-C1'	5.30	133.39	126.50
36	5	1199	C	C2-N1-C1'	5.30	124.63	118.80
36	5	1199	C	C6-N1-C1'	-5.30	114.44	120.80
36	5	1616	U	N3-C4-C5	-5.30	111.42	114.60
36	5	1838	G	C4-C5-C6	5.30	121.98	118.80
36	5	2530	G	N1-C6-O6	5.30	123.08	119.90
36	5	2557	A	N1-C2-N3	5.30	131.95	129.30
36	5	2573	G	C4-C5-N7	5.30	112.92	110.80
36	5	3044	G	N1-C2-N3	5.30	127.08	123.90
1	2	969	C	OP2-P-O3'	5.29	116.85	105.20
1	2	1316	G	N1-C6-O6	-5.29	116.72	119.90
36	1	422	A	O4'-C1'-N9	-5.29	103.96	108.20
36	1	1364	C	C2-N3-C4	-5.29	117.25	119.90
36	1	1791	C	O4'-C1'-N1	5.29	112.44	108.20
36	1	2899	C	C4-C5-C6	5.29	120.05	117.40
1	6	417	A	P-O3'-C3'	5.29	126.05	119.70
36	5	1055	A	N7-C8-N9	-5.29	111.15	113.80
36	5	2948	C	C5-C6-N1	5.29	123.65	121.00
1	2	1775	U	OP2-P-O3'	5.29	116.85	105.20
36	1	856	G	N1-C2-N3	5.29	127.08	123.90
36	1	1461	A	C2-N3-C4	-5.29	107.95	110.60
36	1	1709	C	C4-C5-C6	5.29	120.05	117.40
36	1	1909	A	OP1-P-OP2	-5.29	111.66	119.60
36	1	2353	G	C4-N9-C1'	5.29	133.38	126.50
1	6	21	U	C2-N1-C1'	5.29	124.05	117.70
1	6	594	A	C6-N1-C2	-5.29	115.42	118.60
1	6	980	G	C4-C5-N7	5.29	112.92	110.80
36	5	800	G	C5-C6-N1	5.29	114.15	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1507	G	OP2-P-O3'	5.29	116.85	105.20
36	5	1605	A	C2-N3-C4	-5.29	107.95	110.60
36	5	1911	A	C4-C5-C6	5.29	119.65	117.00
36	5	2583	C	C5-C6-N1	5.29	123.65	121.00
1	2	1206	U	C6-N1-C2	-5.29	117.83	121.00
36	1	731	U	N1-C2-N3	5.29	118.08	114.90
36	1	1583	A	C5-C6-N6	5.29	127.93	123.70
36	1	2157	G	N3-C4-N9	5.29	129.18	126.00
36	1	2172	A	N9-C4-C5	-5.29	103.68	105.80
36	1	2404	A	N3-C4-N9	5.29	131.63	127.40
36	1	2610	G	C8-N9-C4	-5.29	104.28	106.40
36	1	2761	G	C4-C5-N7	-5.29	108.68	110.80
36	1	3116	G	C4-N9-C1'	5.29	133.38	126.50
36	1	3157	U	N3-C4-C5	5.29	117.77	114.60
36	1	3174	A	N9-C4-C5	-5.29	103.68	105.80
38	4	118	C	N3-C4-N4	5.29	121.70	118.00
1	6	374	U	OP1-P-OP2	5.29	127.54	119.60
1	6	789	A	N3-C4-C5	-5.29	123.09	126.80
1	6	1174	C	C2-N1-C1'	5.29	124.62	118.80
36	5	326	U	C2-N1-C1'	5.29	124.05	117.70
36	5	673	U	C6-N1-C1'	5.29	128.61	121.20
36	5	909	G	C4-N9-C1'	5.29	133.38	126.50
36	5	1155	C	O5'-P-OP1	-5.29	100.94	105.70
36	5	1312	C	N3-C4-N4	5.29	121.70	118.00
36	5	3060	C	O5'-P-OP1	-5.29	100.94	105.70
36	1	2890	A	N3-C4-C5	-5.29	123.10	126.80
36	1	3272	C	N3-C2-O2	5.29	125.60	121.90
1	6	566	C	C2-N3-C4	-5.29	117.25	119.90
1	6	1746	A	O5'-P-OP2	5.29	117.05	110.70
36	5	831	G	C5-C6-N1	-5.29	108.86	111.50
36	5	1444	G	C8-N9-C4	-5.29	104.28	106.40
36	5	1594	A	C6-N1-C2	-5.29	115.43	118.60
36	5	2833	A	O5'-P-OP1	5.29	117.05	110.70
1	2	1044	U	C6-N1-C2	-5.29	117.83	121.00
36	1	104	G	N3-C4-C5	5.29	131.25	128.60
36	1	623	U	C5-C4-O4	5.29	129.07	125.90
36	1	1202	A	C5-C6-N6	-5.29	119.47	123.70
59	N3	87	ARG	NE-CZ-NH2	-5.29	117.66	120.30
1	6	30	G	N1-C6-O6	5.29	123.07	119.90
1	6	430	G	N1-C2-N3	5.29	127.07	123.90
1	6	1534	G	N1-C2-N3	-5.29	120.73	123.90
36	5	591	G	C8-N9-C4	5.29	108.52	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	591	G	N1-C2-N3	5.29	127.07	123.90
36	5	722	G	C4-N9-C1'	-5.29	119.62	126.50
36	5	1414	G	C5-N7-C8	-5.29	101.66	104.30
36	5	1660	C	O5'-P-OP1	-5.29	100.94	105.70
36	5	2418	G	OP2-P-O3'	-5.29	93.56	105.20
36	5	2765	C	C5-C6-N1	5.29	123.64	121.00
36	5	2870	C	C2-N1-C1'	-5.29	112.98	118.80
77	q1	11	ARG	NE-CZ-NH2	-5.29	117.66	120.30
36	1	279	U	OP2-P-O3'	-5.29	93.57	105.20
36	1	1393	A	C4-C5-N7	-5.29	108.06	110.70
36	1	1769	G	N7-C8-N9	5.29	115.74	113.10
36	1	1836	C	N3-C4-C5	-5.29	119.78	121.90
1	6	968	U	C2-N3-C4	-5.29	123.83	127.00
36	5	433	A	C8-N9-C4	-5.29	103.69	105.80
36	5	2361	A	OP2-P-O3'	5.29	116.83	105.20
1	2	1756	A	C5-C6-N6	-5.29	119.47	123.70
36	1	176	G	C8-N9-C4	-5.29	104.29	106.40
36	1	2309	A	C4-C5-C6	5.29	119.64	117.00
36	1	3093	C	OP1-P-O3'	5.29	116.83	105.20
36	1	3193	C	N3-C4-C5	-5.29	119.79	121.90
1	6	393	C	C6-N1-C2	5.29	122.41	120.30
1	6	1079	U	C2-N1-C1'	-5.29	111.36	117.70
1	6	1169	G	C4-N9-C1'	5.29	133.37	126.50
36	5	792	G	C6-C5-N7	5.29	133.57	130.40
36	5	896	A	N1-C2-N3	-5.29	126.66	129.30
36	5	1437	C	O5'-P-OP1	-5.29	100.94	105.70
36	5	2301	U	C5-C4-O4	5.29	129.07	125.90
36	5	2801	A	C6-C5-N7	-5.29	128.60	132.30
36	5	2840	C	N3-C2-O2	-5.29	118.20	121.90
36	5	3362	A	C4-N9-C1'	5.29	135.81	126.30
1	2	430	G	C6-C5-N7	-5.28	127.23	130.40
1	2	1311	U	N3-C4-C5	5.28	117.77	114.60
1	2	1499	G	N3-C4-N9	5.28	129.17	126.00
36	1	399	A	O5'-P-OP2	-5.28	100.94	105.70
36	1	418	A	C5-C6-N1	5.28	120.34	117.70
36	1	650	C	O5'-P-OP1	-5.28	100.95	105.70
36	1	670	C	C5-C6-N1	-5.28	118.36	121.00
36	1	1064	A	C5-C6-N6	5.28	127.93	123.70
36	1	1905	G	C5-C6-O6	5.28	131.77	128.60
36	1	2278	C	N1-C2-N3	-5.28	115.50	119.20
36	1	2434	U	C2-N1-C1'	5.28	124.04	117.70
36	1	2610	G	C2-N3-C4	-5.28	109.26	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2662	G	C6-C5-N7	-5.28	127.23	130.40
1	6	756	A	C5-N7-C8	-5.28	101.26	103.90
1	6	959	U	OP2-P-O3'	5.28	116.83	105.20
1	6	1129	U	C6-N1-C2	-5.28	117.83	121.00
36	5	633	C	N3-C2-O2	5.28	125.60	121.90
36	5	641	C	N1-C2-O2	-5.28	115.73	118.90
36	5	888	A	C4-C5-C6	5.28	119.64	117.00
36	5	1882	G	N7-C8-N9	5.28	115.74	113.10
36	5	1912	U	N1-C2-N3	-5.28	111.73	114.90
36	5	1919	G	C2-N3-C4	-5.28	109.26	111.90
36	5	2320	A	C4-C5-C6	5.28	119.64	117.00
37	7	65	G	OP1-P-O3'	-5.28	93.58	105.20
50	m4	135	LEU	CA-CB-CG	5.28	127.45	115.30
1	2	247	A	C4-C5-C6	5.28	119.64	117.00
1	6	40	A	N1-C6-N6	5.28	121.77	118.60
1	6	1142	A	N1-C2-N3	5.28	131.94	129.30
36	5	342	A	N3-C4-C5	-5.28	123.10	126.80
36	5	972	A	N1-C2-N3	5.28	131.94	129.30
36	5	2209	U	C5-C6-N1	-5.28	120.06	122.70
36	5	2414	G	C4-C5-C6	5.28	121.97	118.80
36	5	2696	A	OP2-P-O3'	5.28	116.82	105.20
36	5	3018	C	N3-C4-C5	-5.28	119.79	121.90
37	7	48	U	C6-N1-C1'	-5.28	113.81	121.20
36	1	193	C	C5-C6-N1	5.28	123.64	121.00
36	1	569	A	C2-N3-C4	5.28	113.24	110.60
36	1	1102	A	C8-N9-C4	5.28	107.91	105.80
36	1	1175	C	N3-C2-O2	5.28	125.60	121.90
36	1	1886	A	N1-C6-N6	-5.28	115.43	118.60
36	1	2182	A	C6-N1-C2	-5.28	115.43	118.60
36	1	2210	G	C5-C6-O6	5.28	131.77	128.60
36	1	2276	G	C6-C5-N7	5.28	133.57	130.40
36	1	2803	A	C6-C5-N7	5.28	136.00	132.30
36	1	3328	G	N7-C8-N9	5.28	115.74	113.10
1	6	516	G	N7-C8-N9	5.28	115.74	113.10
1	6	752	A	C5-C6-N6	-5.28	119.48	123.70
1	6	825	U	N3-C4-O4	5.28	123.10	119.40
1	6	1059	U	N1-C2-N3	-5.28	111.73	114.90
1	6	1070	C	O5'-P-OP2	-5.28	100.95	105.70
1	6	1790	A	N1-C6-N6	5.28	121.77	118.60
36	5	594	U	N3-C2-O2	-5.28	118.50	122.20
36	5	889	U	OP2-P-O3'	5.28	116.82	105.20
36	5	969	C	N3-C4-C5	-5.28	119.79	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1192	C	C2-N1-C1'	5.28	124.61	118.80
36	5	2236	G	O5'-P-OP1	-5.28	100.95	105.70
36	5	2713	U	C6-N1-C2	-5.28	117.83	121.00
36	5	2985	C	OP1-P-OP2	-5.28	111.68	119.60
37	7	53	U	N3-C4-O4	5.28	123.10	119.40
1	2	604	A	C2-N3-C4	5.28	113.24	110.60
1	2	1212	G	C4-N9-C1'	5.28	133.36	126.50
36	1	1541	G	N7-C8-N9	5.28	115.74	113.10
1	6	1112	G	C6-N1-C2	-5.28	121.93	125.10
1	6	1789	G	C4-C5-C6	5.28	121.97	118.80
36	5	271	C	O4'-C1'-N1	5.28	112.42	108.20
36	5	2286	U	OP1-P-O3'	5.28	116.81	105.20
36	5	2743	A	C4-C5-C6	5.28	119.64	117.00
36	5	3229	G	N3-C4-C5	-5.28	125.96	128.60
36	5	3234	A	O5'-P-OP1	5.28	117.03	110.70
36	5	3286	G	N3-C4-N9	5.28	129.17	126.00
1	2	104	A	O4'-C1'-N9	5.28	112.42	108.20
1	2	431	C	C2-N3-C4	5.28	122.54	119.90
36	1	287	G	N3-C4-C5	-5.28	125.96	128.60
36	1	1121	U	O5'-P-OP1	5.28	117.03	110.70
36	1	1320	C	C5-C6-N1	-5.28	118.36	121.00
36	1	1399	A	C5-C6-N6	5.28	127.92	123.70
36	1	3217	C	N1-C1'-C2'	5.28	120.86	114.00
1	6	17	C	C2-N1-C1'	5.28	124.61	118.80
36	5	627	U	N1-C2-O2	-5.28	119.11	122.80
36	5	822	G	C8-N9-C1'	-5.28	120.14	127.00
36	5	2148	U	C6-N1-C2	5.28	124.17	121.00
36	5	3045	G	C5-C6-O6	5.28	131.77	128.60
36	5	3187	A	C2-N3-C4	-5.28	107.96	110.60
36	1	67	A	C6-C5-N7	5.28	135.99	132.30
36	1	1533	U	C4-C5-C6	5.28	122.87	119.70
36	1	1634	G	C4-C5-N7	5.28	112.91	110.80
68	O2	66	LEU	CB-CG-CD2	-5.28	102.03	111.00
1	6	337	G	C4-N9-C1'	5.28	133.36	126.50
1	6	1576	A	C5-C6-N6	-5.28	119.48	123.70
36	5	933	A	OP1-P-OP2	5.28	127.51	119.60
36	5	959	C	C6-N1-C1'	5.28	127.13	120.80
36	5	977	C	C6-N1-C2	-5.28	118.19	120.30
36	5	2127	U	N1-C2-N3	5.28	118.06	114.90
36	5	2279	A	C2-N3-C4	-5.28	107.96	110.60
36	5	2284	C	O5'-P-OP1	-5.28	100.95	105.70
36	5	2988	C	O5'-P-OP2	-5.28	100.95	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3085	G	C4-C5-C6	-5.28	115.64	118.80
36	5	3122	A	N3-C4-C5	5.28	130.49	126.80
36	5	3123	A	O5'-P-OP2	-5.28	100.95	105.70
38	8	90	U	C6-N1-C1'	-5.28	113.81	121.20
40	13	300	ARG	NE-CZ-NH2	-5.28	117.66	120.30
36	1	1323	G	N3-C4-C5	-5.27	125.96	128.60
36	1	1820	U	N3-C2-O2	-5.27	118.51	122.20
36	1	2250	G	N1-C2-N2	-5.27	111.45	116.20
36	1	2417	U	OP2-P-O3'	5.27	116.80	105.20
1	6	397	A	N3-C4-C5	5.27	130.49	126.80
1	6	1601	G	N9-C4-C5	5.27	107.51	105.40
36	5	806	A	C5-C6-N6	5.27	127.92	123.70
36	5	1164	G	C5'-C4'-O4'	-5.27	102.77	109.10
36	5	2145	A	C4-C5-C6	5.27	119.64	117.00
1	2	5	U	O5'-P-OP1	5.27	117.03	110.70
1	2	449	C	N1-C2-N3	5.27	122.89	119.20
1	2	1673	G	C4-N9-C1'	5.27	133.35	126.50
36	1	191	U	C2-N1-C1'	5.27	124.03	117.70
36	1	964	G	C8-N9-C4	-5.27	104.29	106.40
36	1	1841	A	O5'-P-OP2	-5.27	100.95	105.70
36	1	2421	U	C5-C6-N1	-5.27	120.06	122.70
36	1	2554	A	N7-C8-N9	-5.27	111.16	113.80
36	1	2864	A	OP2-P-O3'	5.27	116.80	105.20
36	1	2938	G	C5-C6-O6	-5.27	125.44	128.60
38	4	7	U	OP2-P-O3'	5.27	116.80	105.20
1	6	298	C	C2-N1-C1'	5.27	124.60	118.80
1	6	637	C	C5-C4-N4	-5.27	116.51	120.20
36	5	27	C	C2-N3-C4	5.27	122.54	119.90
36	5	365	A	C2-N3-C4	-5.27	107.96	110.60
36	5	656	A	C5-N7-C8	-5.27	101.26	103.90
36	5	1934	G	N9-C4-C5	-5.27	103.29	105.40
36	5	2251	G	N1-C2-N2	-5.27	111.45	116.20
36	5	2726	C	O4'-C1'-N1	5.27	112.42	108.20
36	5	3083	G	N3-C4-C5	5.27	131.24	128.60
37	7	104	A	C5-C6-N1	-5.27	115.06	117.70
37	7	118	A	OP2-P-O3'	5.27	116.80	105.20
38	8	45	C	C2-N3-C4	-5.27	117.26	119.90
1	2	61	A	C4-C5-N7	5.27	113.34	110.70
1	2	1655	A	C4-N9-C1'	-5.27	116.81	126.30
36	1	1134	G	C6-N1-C2	-5.27	121.94	125.10
36	1	2824	G	N3-C4-N9	5.27	129.16	126.00
36	1	2978	U	N3-C2-O2	-5.27	118.51	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	410	A	C6-C5-N7	-5.27	128.61	132.30
1	6	452	A	N1-C2-N3	5.27	131.94	129.30
36	5	52	A	C4-C5-N7	-5.27	108.06	110.70
36	5	590	G	N3-C2-N2	-5.27	116.21	119.90
37	7	109	G	N9-C1'-C2'	-5.27	106.20	112.00
1	2	5	U	C2-N1-C1'	5.27	124.02	117.70
1	2	1002	G	N3-C2-N2	5.27	123.59	119.90
36	1	197	G	C5-N7-C8	-5.27	101.67	104.30
36	1	306	A	C6-N1-C2	-5.27	115.44	118.60
36	1	500	C	N1-C2-O2	-5.27	115.74	118.90
36	1	652	G	N7-C8-N9	-5.27	110.47	113.10
36	1	2323	G	N1-C6-O6	5.27	123.06	119.90
36	1	2631	U	N1-C2-N3	5.27	118.06	114.90
36	1	2660	G	N1-C2-N2	-5.27	111.46	116.20
36	1	2842	U	C2-N1-C1'	5.27	124.02	117.70
36	1	2944	U	N3-C4-C5	5.27	117.76	114.60
38	4	54	A	N1-C2-N3	5.27	131.94	129.30
1	6	112	A	N1-C6-N6	5.27	121.76	118.60
1	6	542	A	N1-C6-N6	-5.27	115.44	118.60
1	6	634	G	N3-C4-C5	-5.27	125.97	128.60
1	6	1198	G	O5'-P-OP1	-5.27	100.96	105.70
36	5	1289	G	C5-N7-C8	5.27	106.94	104.30
36	5	2187	G	N1-C6-O6	-5.27	116.74	119.90
36	5	2653	C	N3-C4-C5	5.27	124.01	121.90
38	8	149	A	C8-N9-C4	-5.27	103.69	105.80
1	2	49	C	C2-N3-C4	5.27	122.53	119.90
1	2	414	C	C6-N1-C2	-5.27	118.19	120.30
1	2	469	C	O5'-P-OP1	5.27	117.02	110.70
1	2	543	C	C5-C6-N1	5.27	123.63	121.00
1	2	1030	A	C5-N7-C8	-5.27	101.27	103.90
36	1	210	U	C6-N1-C2	-5.27	117.84	121.00
36	1	337	G	N1-C2-N3	-5.27	120.74	123.90
36	1	525	C	C5-C6-N1	-5.27	118.37	121.00
36	1	1323	G	C6-N1-C2	-5.27	121.94	125.10
36	1	1545	A	N1-C2-N3	5.27	131.93	129.30
36	1	3288	G	N1-C2-N2	5.27	120.94	116.20
1	6	246	G	N7-C8-N9	5.27	115.73	113.10
1	6	991	G	N3-C4-N9	-5.27	122.84	126.00
1	6	1005	A	N1-C6-N6	-5.27	115.44	118.60
1	6	1180	C	C2-N1-C1'	5.27	124.59	118.80
1	6	1717	G	N1-C6-O6	5.27	123.06	119.90
36	5	394	G	N3-C2-N2	-5.27	116.21	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	888	A	N1-C6-N6	5.27	121.76	118.60
36	5	1653	G	N9-C4-C5	5.27	107.51	105.40
36	5	1885	U	C4-C5-C6	5.27	122.86	119.70
36	5	1947	G	C4-C5-N7	5.27	112.91	110.80
36	5	2755	C	C2-N3-C4	-5.27	117.27	119.90
37	7	69	C	N1-C2-N3	-5.27	115.51	119.20
38	8	24	G	C6-C5-N7	5.27	133.56	130.40
36	1	1143	A	C4-C5-C6	5.27	119.63	117.00
36	1	2174	G	C5-C6-O6	-5.27	125.44	128.60
36	1	2395	G	C4-C5-N7	5.27	112.91	110.80
37	3	67	G	OP2-P-O3'	5.27	116.79	105.20
1	6	880	C	N3-C4-C5	-5.27	119.79	121.90
36	5	968	G	C5-C6-O6	-5.27	125.44	128.60
36	5	2139	A	OP1-P-O3'	5.27	116.78	105.20
36	5	2786	G	C2-N3-C4	-5.27	109.27	111.90
36	5	3172	A	C6-C5-N7	-5.27	128.61	132.30
1	2	535	A	N7-C8-N9	5.26	116.43	113.80
1	2	576	G	C2-N3-C4	-5.26	109.27	111.90
1	2	915	A	N7-C8-N9	5.26	116.43	113.80
36	1	367	A	C8-N9-C4	5.26	107.91	105.80
36	1	2630	C	N3-C4-C5	5.26	124.01	121.90
36	1	3375	A	OP1-P-O3'	5.26	116.78	105.20
1	6	147	A	N7-C8-N9	5.26	116.43	113.80
1	6	608	U	OP1-P-O3'	5.26	116.78	105.20
36	5	1461	A	C5-C6-N1	5.26	120.33	117.70
36	5	1461	A	N9-C1'-C2'	-5.26	106.21	112.00
36	5	1881	A	C4-C5-C6	5.26	119.63	117.00
36	5	2402	A	OP1-P-O3'	5.26	116.78	105.20
38	8	138	A	C5-N7-C8	5.26	106.53	103.90
1	2	1565	C	N3-C2-O2	5.26	125.58	121.90
36	1	2202	C	N3-C4-C5	-5.26	119.80	121.90
38	4	101	U	O5'-P-OP2	-5.26	100.96	105.70
41	L4	150	LEU	CA-CB-CG	5.26	127.41	115.30
1	6	704	C	C6-N1-C2	-5.26	118.19	120.30
36	5	294	U	O4'-C1'-N1	5.26	112.41	108.20
36	5	372	A	C8-N9-C4	-5.26	103.69	105.80
1	2	1127	G	N3-C4-N9	-5.26	122.84	126.00
1	2	1462	G	N3-C4-N9	-5.26	122.84	126.00
36	1	53	G	C5-N7-C8	5.26	106.93	104.30
36	1	377	A	C6-C5-N7	-5.26	128.62	132.30
36	1	438	A	N9-C4-C5	-5.26	103.70	105.80
36	1	1195	A	O4'-C1'-N9	5.26	112.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1320	C	C5-C4-N4	5.26	123.88	120.20
36	1	1401	A	C6-C5-N7	-5.26	128.62	132.30
36	1	1796	G	OP1-P-O3'	5.26	116.78	105.20
36	1	2313	A	OP2-P-O3'	5.26	116.78	105.20
36	1	3277	U	N1-C2-O2	5.26	126.48	122.80
36	5	569	A	C8-N9-C4	5.26	107.91	105.80
36	5	870	G	C4-C5-N7	5.26	112.91	110.80
36	5	966	U	C2-N1-C1'	5.26	124.01	117.70
36	5	1554	U	C6-N1-C1'	-5.26	113.83	121.20
36	5	1766	G	C8-N9-C4	-5.26	104.30	106.40
38	8	107	G	N3-C2-N2	-5.26	116.22	119.90
1	2	1161	C	N3-C2-O2	5.26	125.58	121.90
1	2	1673	G	C8-N9-C4	-5.26	104.30	106.40
36	1	227	G	O5'-P-OP2	-5.26	100.97	105.70
36	1	305	U	C2-N1-C1'	-5.26	111.39	117.70
36	1	1308	A	N3-C4-C5	5.26	130.48	126.80
36	1	1690	C	P-O3'-C3'	-5.26	113.39	119.70
36	1	1838	G	C2-N3-C4	-5.26	109.27	111.90
36	1	1911	A	C5-C6-N1	5.26	120.33	117.70
36	1	3045	G	C8-N9-C4	-5.26	104.30	106.40
38	4	56	G	C8-N9-C1'	-5.26	120.16	127.00
1	6	341	A	O4'-C1'-N9	5.26	112.41	108.20
1	6	795	U	C5-C4-O4	5.26	129.06	125.90
36	5	1051	U	C2-N1-C1'	-5.26	111.39	117.70
36	5	1058	U	C5-C4-O4	-5.26	122.74	125.90
36	5	1126	G	N1-C2-N3	5.26	127.06	123.90
36	5	1208	U	C5-C6-N1	-5.26	120.07	122.70
36	5	2958	A	C6-N1-C2	-5.26	115.44	118.60
36	5	3054	U	N1-C2-N3	5.26	118.06	114.90
36	5	3242	G	C5-N7-C8	5.26	106.93	104.30
38	8	16	G	C5-C6-N1	-5.26	108.87	111.50
36	1	1222	G	N9-C4-C5	-5.26	103.30	105.40
1	6	1035	G	N7-C8-N9	-5.26	110.47	113.10
36	5	854	G	C2-N3-C4	-5.26	109.27	111.90
36	5	2376	G	C6-N1-C2	-5.26	121.94	125.10
36	5	2855	U	N3-C4-O4	5.26	123.08	119.40
40	13	4	ARG	NE-CZ-NH2	-5.26	117.67	120.30
1	2	533	U	OP1-P-OP2	-5.26	111.72	119.60
1	2	1150	G	N3-C4-N9	-5.26	122.85	126.00
36	1	30	G	C8-N9-C1'	5.26	133.83	127.00
36	1	385	A	C5-C6-N6	5.26	127.91	123.70
36	1	428	A	C4-C5-N7	5.26	113.33	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1224	C	N3-C4-C5	-5.26	119.80	121.90
36	1	1540	U	N3-C4-O4	5.26	123.08	119.40
36	1	1715	A	OP1-P-O3'	5.26	116.76	105.20
36	1	1775	G	C4-C5-N7	-5.26	108.70	110.80
36	1	1820	U	N1-C2-O2	5.26	126.48	122.80
36	1	2280	A	C4-C5-C6	5.26	119.63	117.00
36	1	2817	A	N1-C6-N6	-5.26	115.45	118.60
36	1	2893	C	C5-C4-N4	5.26	123.88	120.20
36	1	3044	G	C5-N7-C8	-5.26	101.67	104.30
36	1	3106	A	OP1-P-OP2	5.26	127.49	119.60
36	1	3276	G	C2-N3-C4	-5.26	109.27	111.90
37	3	103	A	N9-C4-C5	5.26	107.90	105.80
54	M8	22	ASP	CB-CG-OD2	5.26	123.03	118.30
77	Q1	13	LEU	CA-CB-CG	5.26	127.39	115.30
1	6	214	G	N3-C4-C5	5.26	131.23	128.60
1	6	415	C	C5-C6-N1	-5.26	118.37	121.00
1	6	1338	C	C5-C4-N4	-5.26	116.52	120.20
8	s6	32	ILE	CB-CA-C	-5.26	101.09	111.60
36	5	609	G	OP1-P-OP2	5.26	127.48	119.60
36	5	992	A	C8-N9-C4	-5.26	103.70	105.80
36	5	1311	G	C4-N9-C1'	5.26	133.33	126.50
36	5	1796	G	N3-C4-C5	-5.26	125.97	128.60
36	5	2253	G	O4'-C1'-N9	-5.26	104.00	108.20
36	5	2282	U	C5-C6-N1	-5.26	120.07	122.70
36	5	2354	C	OP1-P-OP2	5.26	127.49	119.60
36	5	2552	C	N1-C2-O2	5.26	122.05	118.90
36	5	3102	G	O5'-P-OP2	5.26	117.01	110.70
36	5	3112	G	N3-C4-C5	-5.26	125.97	128.60
37	7	14	U	OP1-P-OP2	5.26	127.48	119.60
38	8	12	A	C4-C5-N7	5.26	113.33	110.70
1	2	18	C	C5-C4-N4	-5.25	116.52	120.20
1	2	766	U	N3-C2-O2	-5.25	118.52	122.20
36	1	1534	A	C4-C5-N7	5.25	113.33	110.70
36	1	2828	G	C4-N9-C1'	5.25	133.33	126.50
36	1	2854	U	C5-C6-N1	-5.25	120.07	122.70
36	1	3256	G	O4'-C1'-N9	-5.25	104.00	108.20
1	6	294	C	C5-C6-N1	-5.25	118.37	121.00
1	6	430	G	C6-N1-C2	-5.25	121.95	125.10
36	5	794	U	OP1-P-O3'	5.25	116.76	105.20
36	5	806	A	C5-N7-C8	-5.25	101.27	103.90
36	5	1542	G	N1-C2-N3	5.25	127.05	123.90
36	5	1877	U	C4-C5-C6	5.25	122.85	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	429	G	N7-C8-N9	5.25	115.73	113.10
36	1	148	G	N1-C2-N2	-5.25	111.47	116.20
36	1	928	C	C2-N1-C1'	-5.25	113.02	118.80
36	1	942	U	OP1-P-OP2	-5.25	111.72	119.60
36	1	1905	G	C6-C5-N7	5.25	133.55	130.40
36	1	2384	A	C2-N3-C4	5.25	113.23	110.60
36	1	2649	A	O5'-P-OP1	-5.25	100.97	105.70
36	1	2912	G	N9-C4-C5	5.25	107.50	105.40
1	6	107	C	N3-C4-N4	5.25	121.68	118.00
1	6	811	A	C8-N9-C4	-5.25	103.70	105.80
1	6	1671	A	C6-N1-C2	-5.25	115.45	118.60
36	5	71	A	C8-N9-C4	5.25	107.90	105.80
36	5	729	C	C6-N1-C2	-5.25	118.20	120.30
36	5	749	C	C6-N1-C2	-5.25	118.20	120.30
36	5	1185	C	N1-C2-O2	-5.25	115.75	118.90
36	5	1783	U	O5'-P-OP2	-5.25	100.97	105.70
36	5	2901	G	OP1-P-OP2	-5.25	111.72	119.60
36	5	2944	U	C6-N1-C2	-5.25	117.85	121.00
36	5	3200	G	C4-N9-C1'	5.25	133.33	126.50
36	5	3312	U	C5-C6-N1	-5.25	120.07	122.70
36	1	385	A	N3-C4-N9	-5.25	123.20	127.40
36	1	592	A	N1-C6-N6	5.25	121.75	118.60
36	1	1124	U	N1-C2-N3	5.25	118.05	114.90
36	1	1927	G	N3-C4-N9	5.25	129.15	126.00
36	1	2701	U	N3-C4-O4	5.25	123.08	119.40
36	1	3106	A	N9-C4-C5	5.25	107.90	105.80
37	3	118	A	O5'-P-OP2	-5.25	100.97	105.70
38	4	41	A	C8-N9-C4	-5.25	103.70	105.80
1	6	120	U	OP2-P-O3'	5.25	116.75	105.20
36	5	907	G	C5-C6-O6	-5.25	125.45	128.60
36	5	1053	A	OP2-P-O3'	5.25	116.75	105.20
36	5	1154	A	C6-N1-C2	-5.25	115.45	118.60
36	5	1282	G	C2-N3-C4	-5.25	109.27	111.90
36	5	2748	A	C2-N3-C4	-5.25	107.97	110.60
36	5	3058	U	C2-N3-C4	5.25	130.15	127.00
36	5	3060	C	N1-C2-O2	-5.25	115.75	118.90
36	5	3378	C	N3-C4-C5	5.25	124.00	121.90
38	8	12	A	OP2-P-O3'	5.25	116.75	105.20
1	2	11	A	C6-N1-C2	-5.25	115.45	118.60
1	2	346	G	N3-C4-C5	5.25	131.22	128.60
36	1	2755	C	C2-N3-C4	-5.25	117.28	119.90
38	4	111	A	N1-C2-N3	-5.25	126.67	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1452	U	C5-C4-O4	-5.25	122.75	125.90
1	6	1609	U	C6-N1-C1'	5.25	128.55	121.20
36	5	959	C	OP1-P-OP2	-5.25	111.72	119.60
36	5	1716	U	OP1-P-O3'	5.25	116.75	105.20
36	5	2302	G	N1-C2-N2	-5.25	111.47	116.20
36	5	3065	G	C5-C6-N1	-5.25	108.88	111.50
1	2	338	C	C6-N1-C2	-5.25	118.20	120.30
1	2	362	G	N1-C6-O6	5.25	123.05	119.90
36	1	107	A	C4-C5-C6	-5.25	114.38	117.00
36	1	321	C	N3-C4-C5	-5.25	119.80	121.90
36	1	342	A	N3-C4-C5	5.25	130.47	126.80
36	1	996	A	N3-C4-N9	5.25	131.60	127.40
36	1	1115	G	O4'-C1'-N9	-5.25	104.00	108.20
36	1	2184	U	C2-N1-C1'	5.25	124.00	117.70
36	1	2238	G	N1-C6-O6	-5.25	116.75	119.90
36	1	2714	G	C2-N3-C4	-5.25	109.28	111.90
36	1	2760	C	C6-N1-C1'	5.25	127.10	120.80
36	1	3248	C	O5'-P-OP2	5.25	117.00	110.70
36	1	3308	C	C5-C4-N4	5.25	123.88	120.20
1	6	1137	A	N9-C4-C5	-5.25	103.70	105.80
1	6	1704	U	N1-C2-O2	5.25	126.47	122.80
36	5	201	A	C2-N3-C4	-5.25	107.98	110.60
36	5	229	G	C5-N7-C8	-5.25	101.67	104.30
36	5	1152	G	P-O3'-C3'	5.25	126.00	119.70
36	5	1525	G	N3-C4-C5	-5.25	125.98	128.60
36	5	1871	U	C5-C4-O4	-5.25	122.75	125.90
36	5	2357	A	N1-C6-N6	-5.25	115.45	118.60
38	8	14	C	N3-C4-C5	-5.25	119.80	121.90
1	2	601	A	C4-C5-C6	5.25	119.62	117.00
1	2	1027	A	C8-N9-C4	-5.25	103.70	105.80
1	2	1266	U	N3-C2-O2	5.25	125.87	122.20
36	1	403	C	N1-C2-N3	5.25	122.87	119.20
36	1	558	U	O5'-P-OP2	-5.25	100.98	105.70
36	1	906	A	C4-C5-C6	5.25	119.62	117.00
36	1	1153	A	C8-N9-C1'	-5.25	118.26	127.70
36	1	1524	A	C2-N3-C4	5.25	113.22	110.60
36	1	2127	U	C4-C5-C6	-5.25	116.55	119.70
36	1	2865	U	C4-C5-C6	5.25	122.85	119.70
36	1	3310	A	C5-N7-C8	-5.25	101.28	103.90
36	1	3395	G	O5'-P-OP2	-5.25	100.98	105.70
38	4	104	A	O5'-P-OP2	5.25	117.00	110.70
40	L3	146	ARG	NE-CZ-NH1	5.25	122.92	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	360	A	C2-N3-C4	-5.25	107.98	110.60
1	6	1155	G	N1-C6-O6	5.25	123.05	119.90
1	6	1551	U	N1-C2-O2	-5.25	119.13	122.80
1	6	1614	A	N9-C4-C5	-5.25	103.70	105.80
36	5	351	A	C2-N3-C4	5.25	113.22	110.60
36	5	962	A	N7-C8-N9	5.25	116.42	113.80
36	5	1191	U	C5-C4-O4	5.25	129.05	125.90
36	5	1329	U	C5-C4-O4	-5.25	122.75	125.90
36	5	1398	U	N3-C2-O2	-5.25	118.53	122.20
36	5	2243	A	C4-C5-C6	5.25	119.62	117.00
36	5	2394	G	C4-C5-N7	5.25	112.90	110.80
36	5	2620	G	N1-C2-N2	-5.25	111.48	116.20
36	5	2768	U	C2-N1-C1'	-5.25	111.41	117.70
36	5	2886	U	OP1-P-OP2	5.25	127.47	119.60
38	8	66	A	C2-N3-C4	-5.25	107.98	110.60
58	n2	50	LEU	CA-CB-CG	5.25	127.37	115.30
1	2	615	A	N3-C4-C5	-5.25	123.13	126.80
1	2	1201	G	C8-N9-C4	5.25	108.50	106.40
36	1	166	C	N3-C2-O2	-5.25	118.23	121.90
36	1	625	G	C8-N9-C4	5.25	108.50	106.40
36	1	1060	U	N1-C2-N3	5.25	118.05	114.90
36	1	1367	G	N7-C8-N9	5.25	115.72	113.10
36	1	1881	A	OP2-P-O3'	5.25	116.74	105.20
36	1	2343	C	C6-N1-C1'	-5.25	114.50	120.80
36	1	2882	U	C5-C4-O4	5.25	129.05	125.90
36	5	347	G	OP1-P-O3'	5.25	116.74	105.20
36	5	928	C	OP1-P-O3'	5.25	116.74	105.20
36	5	1536	G	C5-C6-N1	-5.25	108.88	111.50
37	7	10	C	C6-N1-C2	5.25	122.40	120.30
1	2	350	U	C6-N1-C1'	5.24	128.54	121.20
36	1	24	G	N7-C8-N9	-5.24	110.48	113.10
36	1	58	G	OP1-P-OP2	-5.24	111.73	119.60
36	1	1939	G	N1-C2-N3	5.24	127.05	123.90
36	1	3263	G	N3-C2-N2	5.24	123.57	119.90
37	3	17	A	N1-C2-N3	5.24	131.92	129.30
1	6	62	A	N1-C6-N6	-5.24	115.45	118.60
1	6	533	U	C5-C6-N1	-5.24	120.08	122.70
1	6	555	A	C5-C6-N1	5.24	120.32	117.70
1	6	560	U	N3-C4-O4	5.24	123.07	119.40
1	6	1077	C	C6-N1-C2	5.24	122.40	120.30
1	6	1298	U	N1-C2-O2	5.24	126.47	122.80
1	6	1420	C	C4-C5-C6	5.24	120.02	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1512	G	N9-C4-C5	-5.24	103.30	105.40
36	5	590	G	C5-C6-O6	5.24	131.75	128.60
36	5	656	A	C4-C5-N7	5.24	113.32	110.70
36	5	918	C	C5-C4-N4	-5.24	116.53	120.20
36	5	1658	G	C4-C5-C6	5.24	121.95	118.80
36	5	2989	U	OP1-P-O3'	5.24	116.74	105.20
36	5	3196	U	C2-N1-C1'	-5.24	111.41	117.70
1	2	414	C	C5-C4-N4	-5.24	116.53	120.20
1	2	1071	U	N3-C4-C5	-5.24	111.45	114.60
36	1	809	G	OP1-P-O3'	5.24	116.73	105.20
36	1	2396	G	O5'-P-OP2	-5.24	100.98	105.70
1	6	797	G	N3-C4-N9	-5.24	122.86	126.00
1	6	1753	A	O5'-P-OP2	5.24	116.99	110.70
36	5	387	A	N1-C6-N6	-5.24	115.45	118.60
36	5	1290	A	N1-C6-N6	5.24	121.75	118.60
36	5	2186	U	N3-C4-C5	-5.24	111.45	114.60
36	5	2276	G	C5-C6-O6	5.24	131.75	128.60
36	5	3146	G	C8-N9-C4	5.24	108.50	106.40
1	2	696	C	N3-C2-O2	-5.24	118.23	121.90
1	2	1291	G	C4-C5-N7	5.24	112.90	110.80
1	2	1462	G	C8-N9-C1'	5.24	133.81	127.00
36	1	1456	A	N9-C4-C5	5.24	107.90	105.80
36	1	1543	G	N7-C8-N9	5.24	115.72	113.10
36	1	1566	A	C8-N9-C4	-5.24	103.70	105.80
37	3	15	C	C6-N1-C2	5.24	122.40	120.30
38	4	139	U	N3-C2-O2	-5.24	118.53	122.20
1	6	68	A	N7-C8-N9	5.24	116.42	113.80
1	6	555	A	C2-N3-C4	5.24	113.22	110.60
1	6	996	U	C6-N1-C2	-5.24	117.86	121.00
1	6	1445	G	N3-C4-N9	-5.24	122.86	126.00
36	5	396	A	C5-C6-N6	5.24	127.89	123.70
36	5	398	A	OP1-P-O3'	5.24	116.73	105.20
36	5	813	G	N3-C2-N2	-5.24	116.23	119.90
36	5	1715	A	O4'-C1'-N9	-5.24	104.01	108.20
36	5	2900	A	C6-C5-N7	-5.24	128.63	132.30
1	2	1101	G	N1-C6-O6	-5.24	116.76	119.90
1	2	1464	G	N7-C8-N9	5.24	115.72	113.10
36	1	577	C	C5-C6-N1	-5.24	118.38	121.00
36	1	966	U	N3-C4-O4	5.24	123.07	119.40
36	1	1400	G	C6-C5-N7	-5.24	127.26	130.40
36	1	1559	A	C4-C5-N7	5.24	113.32	110.70
36	1	1924	U	N3-C2-O2	-5.24	118.53	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2157	G	C4-C5-C6	5.24	121.94	118.80
37	3	79	A	C6-N1-C2	5.24	121.74	118.60
52	M6	149	TYR	N-CA-C	5.24	125.15	111.00
1	6	1035	G	C8-N9-C4	5.24	108.50	106.40
1	6	1041	G	N1-C2-N3	5.24	127.04	123.90
1	6	1794	A	OP1-P-O3'	5.24	116.73	105.20
36	5	373	A	C8-N9-C4	-5.24	103.70	105.80
36	5	990	U	O5'-P-OP1	5.24	116.99	110.70
36	5	1113	G	O5'-P-OP2	5.24	116.99	110.70
36	5	1598	G	N3-C4-N9	5.24	129.14	126.00
36	5	1927	G	N9-C4-C5	-5.24	103.30	105.40
36	5	1947	G	C5-C6-O6	-5.24	125.46	128.60
36	5	2793	G	N1-C2-N2	5.24	120.92	116.20
36	5	2943	G	O5'-P-OP2	-5.24	100.98	105.70
36	5	3369	G	N1-C2-N3	5.24	127.04	123.90
37	7	1	G	C5-N7-C8	-5.24	101.68	104.30
37	7	38	U	N3-C4-C5	5.24	117.74	114.60
51	m5	67	ARG	N-CA-C	5.24	125.15	111.00
1	2	73	U	OP1-P-O3'	5.24	116.72	105.20
36	1	495	G	N3-C2-N2	-5.24	116.23	119.90
36	1	3330	A	N3-C4-C5	-5.24	123.13	126.80
1	6	617	U	N3-C4-O4	5.24	123.07	119.40
1	6	1269	U	C2-N1-C1'	5.24	123.98	117.70
36	5	947	G	C4-C5-C6	5.24	121.94	118.80
36	5	996	A	O5'-P-OP1	5.24	116.98	110.70
36	5	1693	C	C6-N1-C2	5.24	122.39	120.30
36	5	1711	C	C6-N1-C2	5.24	122.39	120.30
36	5	2404	A	P-O3'-C3'	-5.24	113.42	119.70
36	5	2751	G	O5'-P-OP2	5.24	116.98	110.70
1	2	347	G	N7-C8-N9	5.24	115.72	113.10
1	2	403	G	N9-C4-C5	5.24	107.49	105.40
36	1	625	G	C4-C5-N7	-5.24	108.71	110.80
36	1	2335	G	O5'-P-OP1	-5.24	100.99	105.70
36	1	2600	C	C2-N1-C1'	5.24	124.56	118.80
36	1	2740	A	C5-N7-C8	-5.24	101.28	103.90
36	1	2922	G	OP2-P-O3'	-5.24	93.68	105.20
36	1	2987	A	N1-C6-N6	5.24	121.74	118.60
36	1	3117	C	N1-C2-O2	5.24	122.04	118.90
36	1	3250	U	N1-C2-O2	5.24	126.46	122.80
37	3	52	G	P-O3'-C3'	5.24	125.98	119.70
37	3	79	A	C5-N7-C8	-5.24	101.28	103.90
1	6	395	U	OP2-P-O3'	5.24	116.72	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1149	G	N3-C2-N2	-5.24	116.23	119.90
1	6	1604	U	C2-N3-C4	5.24	130.14	127.00
36	5	3325	G	N3-C2-N2	5.24	123.56	119.90
36	5	3343	G	N1-C2-N2	-5.24	111.49	116.20
37	7	7	G	N3-C2-N2	-5.24	116.23	119.90
1	2	571	G	N3-C4-C5	5.23	131.22	128.60
1	2	1127	G	N7-C8-N9	5.23	115.72	113.10
1	2	1643	U	C5-C6-N1	-5.23	120.08	122.70
36	1	1845	G	N3-C2-N2	-5.23	116.24	119.90
36	1	2860	U	C2-N3-C4	5.23	130.14	127.00
37	3	55	A	C8-N9-C4	-5.23	103.71	105.80
1	6	633	U	C5-C6-N1	-5.23	120.08	122.70
36	5	1466	G	C4-C5-N7	5.23	112.89	110.80
36	5	2291	A	P-O3'-C3'	-5.23	113.42	119.70
37	7	101	G	C4-C5-N7	5.23	112.89	110.80
1	2	62	A	N1-C6-N6	5.23	121.74	118.60
1	2	89	G	N3-C4-N9	-5.23	122.86	126.00
1	2	453	U	C6-N1-C2	-5.23	117.86	121.00
36	1	41	G	C4-C5-C6	-5.23	115.66	118.80
36	1	622	A	C6-N1-C2	5.23	121.74	118.60
36	1	1216	C	C6-N1-C2	-5.23	118.21	120.30
36	1	1430	U	C5-C4-O4	-5.23	122.76	125.90
36	1	1459	C	N1-C2-O2	5.23	122.04	118.90
36	1	2218	G	N9-C4-C5	-5.23	103.31	105.40
36	1	2312	A	C4-C5-C6	-5.23	114.38	117.00
36	1	2598	G	C4-C5-N7	5.23	112.89	110.80
36	1	2803	A	C4-C5-N7	-5.23	108.08	110.70
36	1	2969	A	N3-C4-C5	5.23	130.46	126.80
37	3	101	G	N3-C4-C5	5.23	131.22	128.60
38	4	148	G	C4-C5-N7	5.23	112.89	110.80
1	6	1409	G	O5'-P-OP2	5.23	116.98	110.70
36	5	533	A	C2-N3-C4	5.23	113.22	110.60
36	5	1407	A	N1-C6-N6	-5.23	115.46	118.60
36	5	3019	U	C6-N1-C2	-5.23	117.86	121.00
1	2	440	U	N3-C2-O2	5.23	125.86	122.20
1	2	555	A	N3-C4-C5	-5.23	123.14	126.80
1	2	1438	G	N1-C6-O6	5.23	123.04	119.90
36	1	45	A	C2-N3-C4	-5.23	107.98	110.60
36	1	2348	A	N1-C2-N3	5.23	131.91	129.30
36	1	2420	C	N3-C2-O2	-5.23	118.24	121.90
36	1	2979	U	O5'-P-OP2	-5.23	100.99	105.70
1	6	1403	C	C6-N1-C2	5.23	122.39	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	784	A	OP2-P-O3'	5.23	116.71	105.20
36	5	915	A	N3-C4-C5	-5.23	123.14	126.80
36	5	1518	U	N3-C4-C5	-5.23	111.46	114.60
36	5	1939	G	OP2-P-O3'	5.23	116.71	105.20
36	5	2230	C	C6-N1-C2	5.23	122.39	120.30
36	5	2411	U	O5'-P-OP1	5.23	116.98	110.70
36	5	2622	C	N3-C4-C5	-5.23	119.81	121.90
36	5	2678	A	OP2-P-O3'	5.23	116.71	105.20
36	5	3016	A	O5'-P-OP2	-5.23	100.99	105.70
36	5	3044	G	C8-N9-C4	-5.23	104.31	106.40
36	5	3083	G	C5-C6-O6	-5.23	125.46	128.60
1	6	768	C	N3-C2-O2	5.23	125.56	121.90
1	6	1753	A	C4-C5-N7	-5.23	108.08	110.70
36	5	297	G	C8-N9-C1'	-5.23	120.20	127.00
36	5	1127	G	C5-C6-O6	5.23	131.74	128.60
36	5	2280	A	O5'-P-OP2	-5.23	100.99	105.70
36	5	3387	U	N3-C4-O4	5.23	123.06	119.40
1	2	849	C	N3-C4-C5	-5.23	119.81	121.90
36	1	207	U	C2-N3-C4	5.23	130.14	127.00
36	1	1606	U	O5'-P-OP1	-5.23	101.00	105.70
36	1	1775	G	C5-C6-N1	-5.23	108.89	111.50
36	1	2391	G	C2-N3-C4	-5.23	109.29	111.90
37	3	117	A	N1-C6-N6	5.23	121.74	118.60
38	4	113	U	C4-C5-C6	5.23	122.84	119.70
1	6	1750	A	C5-C6-N1	-5.23	115.09	117.70
36	5	89	A	C5-C6-N6	5.23	127.88	123.70
36	5	962	A	N1-C2-N3	5.23	131.91	129.30
36	5	1220	U	N3-C4-C5	5.23	117.74	114.60
36	5	3171	U	C2-N3-C4	-5.23	123.86	127.00
36	5	3247	G	N3-C4-N9	5.23	129.14	126.00
39	12	9	ARG	NE-CZ-NH2	-5.23	117.69	120.30
1	2	570	A	N1-C6-N6	5.23	121.74	118.60
36	1	402	A	C5-N7-C8	-5.23	101.29	103.90
36	1	425	G	C5-C6-N1	5.23	114.11	111.50
36	1	1728	G	C6-C5-N7	-5.23	127.27	130.40
36	1	2629	U	C6-N1-C2	-5.23	117.86	121.00
36	1	3079	U	O5'-P-OP2	5.23	116.97	110.70
38	4	90	U	O4'-C1'-N1	-5.23	104.02	108.20
36	5	101	G	OP2-P-O3'	5.23	116.70	105.20
36	5	596	C	O5'-P-OP1	-5.23	101.00	105.70
36	5	641	C	OP1-P-O3'	5.23	116.70	105.20
36	5	1217	A	O5'-P-OP2	-5.23	101.00	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2254	U	C6-N1-C2	5.23	124.14	121.00
1	2	830	U	C2-N1-C1'	5.22	123.97	117.70
1	2	1134	C	C4-C5-C6	5.22	120.01	117.40
36	1	342	A	OP1-P-O3'	5.22	116.69	105.20
36	1	2651	G	C8-N9-C1'	-5.22	120.21	127.00
36	1	2908	G	C6-C5-N7	-5.22	127.27	130.40
36	1	3106	A	C5-C6-N6	5.22	127.88	123.70
36	1	3308	C	N1-C2-N3	5.22	122.86	119.20
42	L5	21	ARG	NE-CZ-NH2	-5.22	117.69	120.30
1	6	312	A	N9-C4-C5	5.22	107.89	105.80
1	6	453	U	C6-N1-C2	-5.22	117.86	121.00
1	6	625	C	OP2-P-O3'	5.22	116.69	105.20
1	6	1280	C	N1-C2-O2	-5.22	115.77	118.90
1	6	1523	G	C6-C5-N7	-5.22	127.27	130.40
25	d3	57	LEU	CA-CB-CG	-5.22	103.28	115.30
36	5	880	G	N9-C4-C5	5.22	107.49	105.40
36	5	1530	U	N3-C4-O4	5.22	123.06	119.40
36	5	1942	U	C6-N1-C2	-5.22	117.86	121.00
36	5	2248	C	C5-C6-N1	-5.22	118.39	121.00
36	5	2661	G	N3-C2-N2	5.22	123.56	119.90
36	5	2922	G	N1-C2-N3	5.22	127.03	123.90
36	5	3391	A	C5-C6-N1	-5.22	115.09	117.70
59	n3	17	LEU	CA-CB-CG	-5.22	103.29	115.30
36	1	2145	A	C4-C5-N7	5.22	113.31	110.70
36	1	2378	C	C5-C4-N4	-5.22	116.54	120.20
1	6	452	A	N7-C8-N9	-5.22	111.19	113.80
36	5	649	A	N3-C4-N9	5.22	131.58	127.40
36	5	2280	A	C6-C5-N7	-5.22	128.65	132.30
36	5	3026	G	N1-C2-N3	5.22	127.03	123.90
36	5	3290	G	N7-C8-N9	5.22	115.71	113.10
37	7	98	C	C4-C5-C6	5.22	120.01	117.40
1	2	468	A	N7-C8-N9	-5.22	111.19	113.80
36	1	368	G	N1-C2-N2	-5.22	111.50	116.20
36	1	1317	A	C8-N9-C4	-5.22	103.71	105.80
36	1	1578	C	C6-N1-C1'	-5.22	114.53	120.80
36	1	2648	G	C5-C6-O6	-5.22	125.47	128.60
36	1	2828	G	C8-N9-C4	-5.22	104.31	106.40
1	6	393	C	N3-C4-N4	-5.22	114.34	118.00
1	6	1469	A	C5-C6-N1	5.22	120.31	117.70
36	5	1401	A	C5-C6-N1	5.22	120.31	117.70
36	5	2200	U	N3-C2-O2	-5.22	118.55	122.20
1	2	810	G	N7-C8-N9	5.22	115.71	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1241	G	C4-C5-N7	5.22	112.89	110.80
36	1	1171	G	C6-C5-N7	5.22	133.53	130.40
36	1	2912	G	O5'-P-OP1	-5.22	101.00	105.70
36	1	2980	U	C6-N1-C2	-5.22	117.87	121.00
36	1	3080	G	C5-C6-N1	5.22	114.11	111.50
38	4	60	U	C2-N1-C1'	-5.22	111.44	117.70
1	6	11	A	C8-N9-C4	5.22	107.89	105.80
1	6	969	C	C2-N1-C1'	5.22	124.54	118.80
1	6	1413	U	OP2-P-O3'	5.22	116.68	105.20
1	6	1489	U	N3-C4-O4	-5.22	115.75	119.40
1	6	1764	C	C2-N3-C4	-5.22	117.29	119.90
36	5	162	G	C5-C6-N1	5.22	114.11	111.50
36	5	1046	A	C5-C6-N6	5.22	127.88	123.70
36	5	1159	A	N3-C4-C5	5.22	130.45	126.80
36	5	2802	A	O4'-C1'-N9	5.22	112.38	108.20
37	7	53	U	C4-C5-C6	5.22	122.83	119.70
37	7	68	C	C5-C4-N4	5.22	123.85	120.20
36	1	1488	G	N7-C8-N9	5.22	115.71	113.10
36	1	2194	G	OP2-P-O3'	5.22	116.68	105.20
36	1	2198	A	C5-C6-N6	5.22	127.87	123.70
36	1	2326	A	N3-C4-C5	5.22	130.45	126.80
36	1	2522	G	C4-N9-C1'	5.22	133.28	126.50
36	1	2699	G	C5-C6-O6	-5.22	125.47	128.60
36	1	2753	G	C2-N3-C4	5.22	114.51	111.90
37	3	90	U	OP2-P-O3'	5.22	116.68	105.20
36	5	390	G	OP2-P-O3'	5.22	116.68	105.20
36	5	1193	A	OP2-P-O3'	5.22	116.68	105.20
36	5	1222	G	N3-C4-C5	-5.22	125.99	128.60
67	o1	64	VAL	CB-CA-C	-5.22	101.49	111.40
1	2	352	A	O4'-C1'-N9	-5.22	104.03	108.20
1	2	397	A	C8-N9-C4	5.22	107.89	105.80
1	2	1764	C	C6-N1-C2	5.22	122.39	120.30
36	1	315	C	C2-N3-C4	5.22	122.51	119.90
36	1	1155	C	C6-N1-C2	5.22	122.39	120.30
36	1	2283	G	N3-C2-N2	-5.22	116.25	119.90
36	1	2678	A	C6-N1-C2	-5.22	115.47	118.60
36	1	2716	U	OP2-P-O3'	5.22	116.68	105.20
37	3	63	A	C8-N9-C4	5.22	107.89	105.80
38	4	145	U	C6-N1-C2	5.22	124.13	121.00
1	6	6	G	C6-C5-N7	-5.22	127.27	130.40
1	6	144	U	C6-N1-C2	-5.22	117.87	121.00
1	6	144	U	O4'-C1'-N1	5.22	112.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	538	A	N1-C6-N6	5.22	121.73	118.60
1	6	1247	U	N1-C2-O2	5.22	126.45	122.80
1	6	1522	U	OP1-P-OP2	5.22	127.42	119.60
1	6	1700	C	P-O3'-C3'	5.22	125.96	119.70
36	5	810	A	C6-C5-N7	-5.22	128.65	132.30
36	5	1329	U	OP1-P-O3'	5.22	116.68	105.20
36	5	1520	G	C2-N3-C4	5.22	114.51	111.90
36	5	1931	U	C6-N1-C2	5.22	124.13	121.00
36	5	2674	A	C6-C5-N7	5.22	135.95	132.30
36	5	2703	A	C8-N9-C1'	-5.22	118.31	127.70
36	5	2705	A	N9-C4-C5	5.22	107.89	105.80
36	5	2768	U	C2-N3-C4	-5.22	123.87	127.00
36	5	3006	A	C6-N1-C2	-5.22	115.47	118.60
36	5	3227	A	C5-N7-C8	-5.22	101.29	103.90
37	7	102	A	C4-C5-C6	-5.22	114.39	117.00
38	8	38	U	C2-N1-C1'	5.22	123.96	117.70
1	2	546	U	OP2-P-O3'	5.21	116.67	105.20
1	2	1596	C	C6-N1-C1'	-5.21	114.54	120.80
36	1	85	A	N3-C4-N9	-5.21	123.23	127.40
36	1	331	G	O4'-C1'-N9	-5.21	104.03	108.20
36	1	1065	A	C2-N3-C4	-5.21	107.99	110.60
36	1	1233	G	C8-N9-C4	-5.21	104.31	106.40
36	1	2368	A	C5-N7-C8	-5.21	101.29	103.90
36	1	2424	A	N3-C4-N9	-5.21	123.23	127.40
36	1	2713	U	C6-N1-C1'	-5.21	113.90	121.20
36	1	3221	C	O5'-P-OP1	-5.21	101.01	105.70
41	L4	327	LEU	CA-CB-CG	5.21	127.29	115.30
1	6	109	G	C8-N9-C4	5.21	108.49	106.40
1	6	347	G	C5-C6-O6	-5.21	125.47	128.60
1	6	1004	U	C2-N3-C4	-5.21	123.87	127.00
1	6	1431	C	N1-C2-O2	5.21	122.03	118.90
36	5	642	U	C2-N1-C1'	-5.21	111.44	117.70
36	5	858	A	C5-C6-N1	5.21	120.31	117.70
36	5	1007	U	O5'-P-OP2	5.21	116.96	110.70
36	5	1125	U	O5'-P-OP1	-5.21	101.01	105.70
36	5	2944	U	C2-N3-C4	-5.21	123.87	127.00
1	2	1114	G	C2-N3-C4	5.21	114.51	111.90
1	2	1789	G	C5-C6-O6	-5.21	125.47	128.60
36	5	647	A	C2-N3-C4	-5.21	107.99	110.60
36	5	2815	G	N1-C6-O6	5.21	123.03	119.90
37	7	97	A	N1-C6-N6	5.21	121.73	118.60
1	2	162	A	C8-N9-C4	-5.21	103.72	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1594	G	N7-C8-N9	5.21	115.70	113.10
36	1	504	A	N1-C2-N3	5.21	131.91	129.30
36	1	742	G	C8-N9-C4	-5.21	104.31	106.40
36	1	1307	G	N3-C2-N2	-5.21	116.25	119.90
36	1	1355	A	C6-N1-C2	5.21	121.73	118.60
36	1	2650	U	N3-C2-O2	-5.21	118.55	122.20
36	1	2750	U	N3-C2-O2	-5.21	118.55	122.20
36	1	2957	G	C8-N9-C4	-5.21	104.31	106.40
1	6	128	U	O4'-C1'-N1	5.21	112.37	108.20
1	6	179	A	C4-C5-C6	5.21	119.61	117.00
1	6	247	A	C2-N3-C4	-5.21	107.99	110.60
1	6	473	A	C5-N7-C8	5.21	106.51	103.90
1	6	639	U	C4-C5-C6	-5.21	116.57	119.70
1	6	972	G	N1-C2-N3	5.21	127.03	123.90
1	6	1134	C	C4-C5-C6	5.21	120.01	117.40
3	s1	233	GLY	N-CA-C	5.21	126.13	113.10
36	5	1176	C	N3-C4-C5	5.21	123.98	121.90
36	5	3124	G	N1-C6-O6	5.21	123.03	119.90
38	8	48	A	C4-C5-C6	-5.21	114.39	117.00
36	1	645	A	N1-C2-N3	5.21	131.91	129.30
36	1	697	A	N9-C1'-C2'	-5.21	106.27	112.00
36	1	1316	C	OP1-P-OP2	5.21	127.42	119.60
36	1	2137	U	C4-C5-C6	5.21	122.83	119.70
36	1	2183	A	C6-N1-C2	-5.21	115.47	118.60
36	1	2407	C	N3-C4-C5	-5.21	119.82	121.90
1	6	1139	A	N7-C8-N9	5.21	116.41	113.80
1	6	1366	U	C6-N1-C2	5.21	124.13	121.00
36	5	2322	C	N3-C2-O2	-5.21	118.25	121.90
37	7	21	G	N3-C4-N9	-5.21	122.87	126.00
1	2	98	U	N3-C4-O4	5.21	123.05	119.40
1	2	536	C	C2-N1-C1'	5.21	124.53	118.80
1	2	949	C	C5-C6-N1	5.21	123.60	121.00
1	2	1773	C	N3-C4-N4	5.21	121.65	118.00
36	1	276	U	N1-C2-O2	-5.21	119.15	122.80
36	1	652	G	C4-C5-N7	-5.21	108.72	110.80
36	1	979	U	C6-N1-C1'	5.21	128.49	121.20
36	1	1175	C	OP1-P-OP2	5.21	127.41	119.60
36	1	1787	A	C8-N9-C4	5.21	107.88	105.80
36	1	2407	C	C4-C5-C6	5.21	120.00	117.40
38	4	55	U	OP2-P-O3'	5.21	116.66	105.20
38	4	103	G	C6-C5-N7	-5.21	127.27	130.40
56	N0	144	LEU	CA-CB-CG	-5.21	103.32	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	751	G	C4-N9-C1'	-5.21	119.73	126.50
1	6	1276	U	OP1-P-OP2	-5.21	111.79	119.60
1	6	1475	A	C2-N3-C4	-5.21	108.00	110.60
1	6	1556	A	C2-N3-C4	-5.21	108.00	110.60
36	5	514	G	O4'-C1'-N9	5.21	112.37	108.20
36	5	3218	A	C2-N3-C4	-5.21	108.00	110.60
1	2	333	A	C6-N1-C2	-5.21	115.48	118.60
1	2	777	C	N1-C2-O2	5.21	122.02	118.90
36	1	330	G	N3-C4-C5	-5.21	126.00	128.60
36	1	402	A	C5-C6-N1	5.21	120.30	117.70
36	1	1525	G	C6-N1-C2	-5.21	121.98	125.10
36	1	1760	A	N1-C6-N6	-5.21	115.48	118.60
36	1	2243	A	C6-N1-C2	-5.21	115.48	118.60
36	1	2647	A	N3-C4-N9	5.21	131.56	127.40
36	1	2871	G	N9-C4-C5	-5.21	103.32	105.40
36	1	2941	A	N1-C6-N6	5.21	121.72	118.60
36	1	2946	A	C6-N1-C2	-5.21	115.48	118.60
36	1	2985	C	C2-N1-C1'	-5.21	113.07	118.80
36	1	3127	A	N9-C4-C5	5.21	107.88	105.80
38	4	2	A	C2-N3-C4	-5.21	108.00	110.60
1	6	799	A	N1-C2-N3	5.21	131.90	129.30
1	6	905	A	C4-C5-N7	-5.21	108.10	110.70
1	6	1116	A	C8-N9-C4	-5.21	103.72	105.80
1	6	1501	C	OP2-P-O3'	5.21	116.65	105.20
36	5	277	G	N1-C2-N3	5.21	127.02	123.90
36	5	514	G	O5'-P-OP2	-5.21	101.01	105.70
36	5	519	A	C6-N1-C2	-5.21	115.48	118.60
36	5	531	G	N1-C2-N3	5.21	127.02	123.90
36	5	2116	G	N9-C4-C5	5.21	107.48	105.40
36	5	2137	U	O5'-P-OP2	5.21	116.95	110.70
36	5	2522	G	C8-N9-C4	5.21	108.48	106.40
36	5	2978	U	O4'-C1'-N1	5.21	112.36	108.20
36	5	3039	C	N3-C4-C5	-5.21	119.82	121.90
48	m1	166	LYS	N-CA-C	-5.21	96.94	111.00
1	2	1027	A	N1-C6-N6	-5.21	115.48	118.60
1	2	1757	G	C5-C6-N1	5.21	114.10	111.50
36	1	1329	U	N1-C2-N3	5.21	118.02	114.90
36	1	3085	G	C5-C6-N1	5.21	114.10	111.50
36	1	3390	G	N3-C4-N9	5.21	129.12	126.00
1	6	980	G	C6-C5-N7	-5.21	127.28	130.40
36	5	41	G	N1-C6-O6	-5.21	116.78	119.90
36	5	1019	G	N3-C4-C5	5.21	131.20	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1692	U	N3-C4-C5	5.21	117.72	114.60
36	5	1870	C	N3-C4-C5	-5.21	119.82	121.90
1	2	1022	C	N3-C2-O2	-5.20	118.26	121.90
1	2	1610	G	C6-C5-N7	-5.20	127.28	130.40
36	1	305	U	C5-C4-O4	5.20	129.02	125.90
36	1	495	G	C8-N9-C1'	5.20	133.76	127.00
36	1	894	G	N3-C4-C5	-5.20	126.00	128.60
36	1	2191	U	N1-C2-O2	5.20	126.44	122.80
36	1	2875	U	C4-C5-C6	5.20	122.82	119.70
36	1	3173	G	C8-N9-C1'	-5.20	120.24	127.00
36	1	3372	A	N1-C6-N6	-5.20	115.48	118.60
38	4	53	A	C4-C5-C6	5.20	119.60	117.00
1	6	12	U	C5-C4-O4	-5.20	122.78	125.90
1	6	1372	U	N1-C2-N3	5.20	118.02	114.90
36	5	421	G	C4-C5-C6	5.20	121.92	118.80
36	5	913	A	C5-N7-C8	5.20	106.50	103.90
36	5	1489	A	C6-C5-N7	-5.20	128.66	132.30
36	5	1508	C	C4-C5-C6	5.20	120.00	117.40
36	5	1517	G	N1-C2-N3	5.20	127.02	123.90
36	5	2147	A	N1-C6-N6	5.20	121.72	118.60
36	5	2433	U	N3-C2-O2	-5.20	118.56	122.20
36	5	2702	A	OP1-P-O3'	5.20	116.65	105.20
36	5	2767	U	N3-C2-O2	-5.20	118.56	122.20
56	n0	170	THR	C-N-CA	-5.20	108.69	121.70
1	2	435	C	C6-N1-C2	5.20	122.38	120.30
36	1	2971	A	N7-C8-N9	5.20	116.40	113.80
38	4	18	U	C5-C6-N1	5.20	125.30	122.70
1	6	176	C	C2-N3-C4	5.20	122.50	119.90
1	6	1638	G	O5'-P-OP2	-5.20	101.02	105.70
36	5	62	A	C4-C5-N7	5.20	113.30	110.70
36	5	974	G	N1-C6-O6	5.20	123.02	119.90
36	5	995	U	C6-N1-C2	5.20	124.12	121.00
36	5	1520	G	C5-C6-O6	-5.20	125.48	128.60
36	5	1836	C	OP2-P-O3'	5.20	116.64	105.20
36	5	2178	A	C6-N1-C2	-5.20	115.48	118.60
36	5	2713	U	N3-C4-C5	-5.20	111.48	114.60
1	2	465	G	C8-N9-C4	-5.20	104.32	106.40
1	2	625	C	C2-N3-C4	5.20	122.50	119.90
1	2	897	C	C2-N1-C1'	5.20	124.52	118.80
1	2	1092	A	O4'-C1'-N9	5.20	112.36	108.20
36	1	113	C	O5'-P-OP1	-5.20	101.02	105.70
36	1	1005	G	N3-C4-N9	-5.20	122.88	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1401	A	N1-C6-N6	5.20	121.72	118.60
36	1	2396	G	OP1-P-O3'	5.20	116.64	105.20
36	1	2893	C	N3-C4-N4	-5.20	114.36	118.00
36	1	3039	C	OP2-P-O3'	5.20	116.64	105.20
36	1	3075	G	C5-C6-O6	-5.20	125.48	128.60
36	1	3142	A	N1-C2-N3	5.20	131.90	129.30
36	1	3262	U	OP1-P-OP2	-5.20	111.80	119.60
1	6	1588	G	C4-C5-N7	-5.20	108.72	110.80
1	6	1758	U	C6-N1-C2	-5.20	117.88	121.00
4	s2	233	GLN	C-N-CA	-5.20	100.16	122.00
36	5	52	A	C5-C6-N6	5.20	127.86	123.70
36	5	209	A	N9-C4-C5	-5.20	103.72	105.80
36	5	514	G	N1-C2-N3	5.20	127.02	123.90
36	5	534	U	N1-C2-O2	5.20	126.44	122.80
36	5	1331	U	C4-C5-C6	5.20	122.82	119.70
36	5	1907	C	C6-N1-C1'	5.20	127.04	120.80
36	5	2125	A	O4'-C1'-N9	-5.20	104.04	108.20
36	5	2262	A	O5'-P-OP2	-5.20	101.02	105.70
36	5	2549	G	C8-N9-C1'	-5.20	120.24	127.00
36	5	2607	G	C8-N9-C1'	-5.20	120.24	127.00
36	5	2857	C	N3-C4-N4	-5.20	114.36	118.00
65	n9	20	GLY	N-CA-C	5.20	126.10	113.10
1	2	1215	C	N3-C4-N4	-5.20	114.36	118.00
36	1	891	G	C8-N9-C1'	5.20	133.76	127.00
36	1	1480	G	N3-C4-C5	5.20	131.20	128.60
36	1	1761	C	N3-C4-C5	5.20	123.98	121.90
36	1	2287	C	C6-N1-C1'	-5.20	114.56	120.80
36	1	2362	C	N3-C2-O2	-5.20	118.26	121.90
36	1	2700	G	C8-N9-C1'	-5.20	120.24	127.00
36	1	2703	A	C8-N9-C1'	-5.20	118.34	127.70
36	1	2757	U	N1-C2-N3	5.20	118.02	114.90
36	1	2800	G	C4-C5-N7	5.20	112.88	110.80
36	1	3040	A	N1-C2-N3	5.20	131.90	129.30
1	6	611	U	N1-C2-O2	5.20	126.44	122.80
36	5	1084	A	C5-C6-N6	-5.20	119.54	123.70
36	5	1944	U	C5-C6-N1	5.20	125.30	122.70
36	5	2646	C	C2-N3-C4	-5.20	117.30	119.90
36	5	2845	A	C8-N9-C4	-5.20	103.72	105.80
36	5	3126	C	C6-N1-C2	5.20	122.38	120.30
37	7	68	C	C2-N3-C4	-5.20	117.30	119.90
47	m0	204	GLY	N-CA-C	5.20	126.10	113.10
64	n8	46	ASP	CB-CG-OD1	5.20	122.98	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	318	A	N3-C4-C5	5.20	130.44	126.80
79	Q3	49	ARG	NE-CZ-NH2	-5.20	117.70	120.30
1	6	624	G	N1-C2-N3	-5.20	120.78	123.90
36	5	73	C	C5-C6-N1	-5.20	118.40	121.00
36	5	1839	A	OP1-P-O3'	5.20	116.63	105.20
36	5	2361	A	P-O3'-C3'	5.20	125.94	119.70
36	5	2938	G	C5-N7-C8	-5.20	101.70	104.30
36	5	2982	A	N1-C2-N3	-5.20	126.70	129.30
36	1	1155	C	C5-C6-N1	-5.20	118.40	121.00
36	1	1164	G	C5-C6-O6	-5.20	125.48	128.60
36	1	2817	A	C5-N7-C8	5.20	106.50	103.90
1	6	13	C	C6-N1-C2	-5.20	118.22	120.30
1	6	233	C	C5-C6-N1	5.20	123.60	121.00
1	6	1383	G	N3-C4-N9	5.20	129.12	126.00
1	6	1582	U	C6-N1-C1'	-5.20	113.92	121.20
1	6	1745	G	C6-C5-N7	-5.20	127.28	130.40
36	5	794	U	N3-C4-C5	-5.20	111.48	114.60
36	5	1506	A	N9-C4-C5	5.20	107.88	105.80
36	5	1554	U	C2-N1-C1'	5.20	123.94	117.70
36	5	2166	A	N9-C4-C5	-5.20	103.72	105.80
36	5	2940	A	N3-C4-C5	-5.20	123.16	126.80
36	5	2952	G	OP1-P-O3'	-5.20	93.77	105.20
36	5	3319	U	C6-N1-C2	-5.20	117.88	121.00
1	2	1082	C	N3-C2-O2	-5.19	118.26	121.90
36	1	2925	C	N1-C2-O2	-5.19	115.78	118.90
1	6	341	A	C5-C6-N1	5.19	120.30	117.70
1	6	1582	U	C5-C4-O4	-5.19	122.78	125.90
1	6	1715	G	C4-C5-N7	5.19	112.88	110.80
36	5	1854	C	N3-C4-C5	-5.19	119.82	121.90
36	5	3129	A	N7-C8-N9	5.19	116.40	113.80
1	2	381	C	O5'-P-OP1	-5.19	101.03	105.70
1	2	1192	C	C2-N1-C1'	-5.19	113.09	118.80
1	2	1658	G	C4-C5-N7	5.19	112.88	110.80
36	1	43	A	N9-C4-C5	5.19	107.88	105.80
36	1	100	A	C6-C5-N7	-5.19	128.66	132.30
36	1	107	A	N7-C8-N9	5.19	116.40	113.80
36	1	363	G	C6-N1-C2	-5.19	121.98	125.10
36	1	1116	G	O5'-P-OP1	-5.19	101.03	105.70
36	1	1555	U	N3-C2-O2	5.19	125.83	122.20
36	1	1878	G	N1-C2-N2	5.19	120.87	116.20
36	1	2352	A	N3-C4-N9	5.19	131.55	127.40
36	1	2970	C	OP1-P-OP2	5.19	127.39	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3318	G	C8-N9-C4	-5.19	104.32	106.40
1	6	752	A	C2-N3-C4	-5.19	108.00	110.60
1	6	860	U	C4-C5-C6	5.19	122.81	119.70
1	6	883	C	C5-C6-N1	5.19	123.60	121.00
1	6	1484	G	N3-C4-C5	-5.19	126.00	128.60
1	6	1523	G	C8-N9-C1'	-5.19	120.25	127.00
1	6	1547	A	C4-C5-C6	-5.19	114.40	117.00
36	5	362	U	N3-C2-O2	-5.19	118.57	122.20
36	5	428	A	C6-C5-N7	-5.19	128.66	132.30
36	5	657	A	OP2-P-O3'	5.19	116.62	105.20
36	5	1142	G	C6-C5-N7	-5.19	127.28	130.40
36	5	1158	A	N1-C6-N6	-5.19	115.48	118.60
36	5	1192	C	N3-C4-N4	5.19	121.64	118.00
36	5	1820	U	C6-N1-C2	-5.19	117.88	121.00
36	5	1904	C	C2-N3-C4	-5.19	117.30	119.90
36	5	2189	U	N1-C2-N3	-5.19	111.78	114.90
36	5	2793	G	C4-N9-C1'	-5.19	119.75	126.50
36	5	3172	A	C4-C5-N7	5.19	113.30	110.70
36	1	411	U	N3-C2-O2	5.19	125.83	122.20
36	1	1099	A	N9-C4-C5	-5.19	103.72	105.80
36	1	1186	G	N1-C6-O6	-5.19	116.78	119.90
36	1	1736	G	C4-C5-N7	5.19	112.88	110.80
36	1	2957	G	C4-C5-C6	-5.19	115.69	118.80
36	1	3034	C	O5'-P-OP1	5.19	116.93	110.70
37	3	40	C	C5-C4-N4	-5.19	116.57	120.20
40	L3	25	ILE	CB-CA-C	-5.19	101.22	111.60
51	M5	12	ARG	NE-CZ-NH1	-5.19	117.70	120.30
57	N1	83	ARG	NE-CZ-NH2	-5.19	117.70	120.30
1	6	559	C	OP1-P-OP2	-5.19	111.81	119.60
1	6	1027	A	C4-C5-N7	-5.19	108.10	110.70
1	6	1673	G	C4-C5-C6	-5.19	115.69	118.80
36	5	872	U	O5'-P-OP1	5.19	116.93	110.70
36	5	1115	G	C8-N9-C4	5.19	108.48	106.40
36	5	1719	G	C5-C6-O6	-5.19	125.49	128.60
36	5	2210	G	C8-N9-C4	-5.19	104.32	106.40
36	5	2337	C	O5'-P-OP2	-5.19	101.03	105.70
36	5	2697	A	N9-C4-C5	-5.19	103.72	105.80
38	8	26	U	N3-C2-O2	-5.19	118.57	122.20
1	2	1205	C	C6-N1-C2	5.19	122.38	120.30
36	1	1097	G	N1-C6-O6	5.19	123.01	119.90
36	1	2244	A	C5-C6-N1	5.19	120.30	117.70
36	1	2610	G	C5-C6-O6	-5.19	125.49	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3174	A	O4'-C1'-N9	5.19	112.35	108.20
37	3	52	G	O5'-P-OP2	-5.19	101.03	105.70
1	6	811	A	N3-C4-C5	-5.19	123.17	126.80
36	5	338	A	N9-C4-C5	5.19	107.88	105.80
36	5	1777	U	O5'-P-OP2	5.19	116.93	110.70
36	5	1790	G	C8-N9-C1'	-5.19	120.25	127.00
36	5	2628	A	N1-C2-N3	5.19	131.90	129.30
36	5	3137	C	O5'-P-OP2	-5.19	101.03	105.70
1	2	1297	G	C8-N9-C4	5.19	108.47	106.40
1	2	1462	G	C4-C5-C6	-5.19	115.69	118.80
36	1	316	U	N3-C2-O2	-5.19	118.57	122.20
36	1	585	A	C5-N7-C8	5.19	106.49	103.90
36	1	1172	G	OP2-P-O3'	-5.19	93.79	105.20
36	1	2932	U	C2-N3-C4	-5.19	123.89	127.00
36	1	3169	U	P-O3'-C3'	5.19	125.92	119.70
1	6	3	U	N1-C2-O2	5.19	126.43	122.80
1	6	331	A	N3-C4-C5	-5.19	123.17	126.80
1	6	556	A	C2-N3-C4	-5.19	108.01	110.60
36	5	537	A	N1-C6-N6	5.19	121.71	118.60
36	5	1121	U	N3-C4-C5	5.19	117.71	114.60
36	5	2877	G	C6-N1-C2	-5.19	121.99	125.10
36	5	2967	A	N9-C4-C5	5.19	107.88	105.80
37	7	116	C	C5-C4-N4	-5.19	116.57	120.20
36	1	13	A	C6-C5-N7	-5.19	128.67	132.30
36	1	773	G	C8-N9-C4	-5.19	104.33	106.40
36	1	792	G	N9-C4-C5	5.19	107.47	105.40
36	1	2243	A	C4-N9-C1'	5.19	135.63	126.30
36	1	2917	G	C8-N9-C4	5.19	108.47	106.40
36	1	3119	U	N3-C4-C5	-5.19	111.49	114.60
1	6	565	C	N3-C2-O2	-5.19	118.27	121.90
36	5	1320	C	C4-C5-C6	5.19	119.99	117.40
36	5	3028	G	N9-C4-C5	-5.19	103.33	105.40
36	5	3366	G	N7-C8-N9	5.19	115.69	113.10
1	2	1771	U	C5-C6-N1	-5.18	120.11	122.70
1	2	1776	A	OP1-P-O3'	5.18	116.61	105.20
11	S9	109	LEU	CA-CB-CG	5.18	127.22	115.30
36	1	207	U	C4-C5-C6	-5.18	116.59	119.70
36	1	335	G	O4'-C1'-N9	5.18	112.35	108.20
36	1	637	C	N3-C4-N4	-5.18	114.37	118.00
36	1	686	G	C8-N9-C1'	5.18	133.74	127.00
36	1	1717	U	C5-C6-N1	-5.18	120.11	122.70
36	1	2116	G	C4-C5-N7	-5.18	108.73	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	M5	113	LEU	CA-CB-CG	5.18	127.23	115.30
1	6	1093	A	C2-N3-C4	5.18	113.19	110.60
36	5	519	A	N1-C2-N3	5.18	131.89	129.30
36	5	631	U	OP2-P-O3'	5.18	116.61	105.20
36	5	876	A	OP1-P-O3'	-5.18	93.79	105.20
36	5	1535	A	C6-C5-N7	5.18	135.93	132.30
36	5	1827	C	C6-N1-C2	-5.18	118.23	120.30
36	5	2224	A	C5-C6-N1	5.18	120.29	117.70
36	5	2283	G	C4-C5-C6	-5.18	115.69	118.80
36	5	2614	G	N3-C2-N2	5.18	123.53	119.90
36	5	2696	A	N9-C4-C5	5.18	107.87	105.80
36	5	2784	G	C5-C6-O6	-5.18	125.49	128.60
36	5	2841	G	N9-C4-C5	5.18	107.47	105.40
36	5	3145	C	C4-C5-C6	5.18	119.99	117.40
37	7	58	C	C5-C6-N1	5.18	123.59	121.00
38	8	156	U	C5-C6-N1	5.18	125.29	122.70
52	m6	170	LYS	CD-CE-NZ	5.18	123.62	111.70
1	2	994	G	C8-N9-C4	5.18	108.47	106.40
1	2	1210	C	N3-C2-O2	5.18	125.53	121.90
1	2	1455	G	C4-C5-N7	-5.18	108.73	110.80
36	1	318	A	C4-C5-N7	5.18	113.29	110.70
36	1	624	G	N1-C2-N3	5.18	127.01	123.90
36	1	837	A	C2-N3-C4	-5.18	108.01	110.60
36	1	1057	A	C6-C5-N7	-5.18	128.67	132.30
36	1	2332	A	O5'-P-OP2	-5.18	101.03	105.70
36	1	2396	G	OP1-P-OP2	5.18	127.37	119.60
36	1	2751	G	C4-N9-C1'	-5.18	119.76	126.50
36	1	3320	A	C2-N3-C4	-5.18	108.01	110.60
38	4	36	G	C5-C6-O6	-5.18	125.49	128.60
1	6	1010	C	N1-C2-O2	-5.18	115.79	118.90
1	6	1442	U	C6-N1-C2	-5.18	117.89	121.00
36	5	373	A	N1-C2-N3	5.18	131.89	129.30
36	5	408	A	N9-C4-C5	5.18	107.87	105.80
36	5	893	C	N3-C4-N4	5.18	121.63	118.00
36	5	1063	G	N3-C4-N9	-5.18	122.89	126.00
36	5	1093	A	N1-C2-N3	5.18	131.89	129.30
36	5	1223	A	O5'-P-OP1	-5.18	101.04	105.70
36	5	1592	G	OP2-P-O3'	5.18	116.60	105.20
36	5	2329	C	N3-C4-N4	5.18	121.63	118.00
36	5	2741	C	N1-C2-O2	5.18	122.01	118.90
1	2	1191	U	C6-N1-C2	-5.18	117.89	121.00
1	2	1458	G	C8-N9-C1'	-5.18	120.27	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	308	A	N1-C6-N6	-5.18	115.49	118.60
36	1	1379	G	P-O3'-C3'	-5.18	113.48	119.70
36	1	1475	A	N9-C4-C5	-5.18	103.73	105.80
36	1	2321	A	OP1-P-OP2	-5.18	111.83	119.60
36	1	2720	G	N9-C4-C5	-5.18	103.33	105.40
37	3	93	C	N3-C2-O2	-5.18	118.27	121.90
38	4	141	C	C2-N1-C1'	5.18	124.50	118.80
1	6	64	U	N1-C2-O2	5.18	126.43	122.80
1	6	617	U	OP2-P-O3'	5.18	116.60	105.20
36	5	816	A	N7-C8-N9	-5.18	111.21	113.80
36	5	1347	U	N3-C4-C5	-5.18	111.49	114.60
36	5	3248	C	N3-C4-C5	-5.18	119.83	121.90
38	8	79	A	C4-C5-C6	-5.18	114.41	117.00
1	2	262	U	C4-C5-C6	5.18	122.81	119.70
1	2	1589	C	C5-C6-N1	-5.18	118.41	121.00
36	1	4	U	C4-C5-C6	-5.18	116.59	119.70
36	1	555	U	C2-N1-C1'	5.18	123.92	117.70
36	1	1095	U	O5'-P-OP1	5.18	116.92	110.70
36	1	1157	G	C6-C5-N7	-5.18	127.29	130.40
36	1	2157	G	C8-N9-C1'	-5.18	120.27	127.00
36	1	3031	G	N7-C8-N9	-5.18	110.51	113.10
37	3	65	G	C8-N9-C4	5.18	108.47	106.40
1	6	106	U	N3-C4-O4	-5.18	115.78	119.40
1	6	581	U	C2-N1-C1'	-5.18	111.48	117.70
1	6	1470	C	P-O3'-C3'	5.18	125.92	119.70
1	6	1510	U	N1-C2-N3	5.18	118.01	114.90
1	6	1603	U	C4-C5-C6	-5.18	116.59	119.70
36	5	939	U	C6-N1-C2	-5.18	117.89	121.00
36	5	1917	C	C4-C5-C6	-5.18	114.81	117.40
36	5	2101	C	N3-C2-O2	-5.18	118.27	121.90
36	5	2210	G	N7-C8-N9	5.18	115.69	113.10
36	5	2248	C	OP1-P-O3'	5.18	116.60	105.20
1	2	1291	G	N1-C6-O6	5.18	123.01	119.90
36	1	582	G	N3-C4-N9	-5.18	122.89	126.00
36	1	1166	G	N1-C2-N3	5.18	127.01	123.90
36	1	2130	G	N3-C2-N2	-5.18	116.28	119.90
1	6	357	G	C6-C5-N7	-5.18	127.29	130.40
36	5	1898	G	C4-C5-C6	-5.18	115.69	118.80
1	2	163	G	N3-C4-C5	-5.18	126.01	128.60
1	2	1136	U	C6-N1-C1'	5.18	128.45	121.20
1	2	1212	G	C5-C6-N1	-5.18	108.91	111.50
1	2	1521	G	C4-C5-N7	-5.18	108.73	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	311	C	N3-C4-C5	-5.18	119.83	121.90
36	1	514	G	OP1-P-OP2	-5.18	111.83	119.60
36	1	1335	C	O5'-P-OP1	5.18	116.91	110.70
36	1	1469	C	C4-C5-C6	5.18	119.99	117.40
36	1	1895	A	C5-N7-C8	5.18	106.49	103.90
36	1	2363	A	N7-C8-N9	5.18	116.39	113.80
36	1	2872	A	N3-C4-N9	5.18	131.54	127.40
44	L7	163	LEU	CA-CB-CG	-5.18	103.40	115.30
1	6	858	G	C4-C5-N7	5.18	112.87	110.80
1	6	877	G	N7-C8-N9	-5.18	110.51	113.10
1	6	1657	U	OP1-P-O3'	5.18	116.59	105.20
36	5	63	A	C5-C6-N1	-5.18	115.11	117.70
36	5	152	U	C5-C6-N1	-5.18	120.11	122.70
36	5	508	U	C4-C5-C6	5.18	122.81	119.70
36	5	1087	G	N3-C4-N9	-5.18	122.89	126.00
36	5	1096	U	C5-C6-N1	-5.18	120.11	122.70
36	5	1348	U	C5-C4-O4	-5.18	122.79	125.90
36	5	2260	U	OP2-P-O3'	5.18	116.59	105.20
36	5	2375	G	C2-N3-C4	-5.18	109.31	111.90
36	5	3210	A	C6-N1-C2	-5.18	115.49	118.60
36	5	3243	A	C8-N9-C4	5.18	107.87	105.80
36	5	3304	U	O5'-P-OP2	-5.18	101.04	105.70
38	8	87	G	N1-C2-N2	-5.18	111.54	116.20
38	8	107	G	N1-C2-N3	5.18	127.01	123.90
1	2	615	A	C4-C5-N7	-5.17	108.11	110.70
1	2	1426	C	N3-C4-N4	5.17	121.62	118.00
36	1	113	C	N1-C2-O2	-5.17	115.80	118.90
36	1	291	C	N1-C2-O2	-5.17	115.80	118.90
36	1	301	G	N7-C8-N9	5.17	115.69	113.10
36	1	335	G	C5-C6-O6	-5.17	125.50	128.60
36	1	869	G	N7-C8-N9	-5.17	110.51	113.10
36	1	961	C	N3-C2-O2	-5.17	118.28	121.90
36	1	1437	C	C6-N1-C1'	-5.17	114.59	120.80
36	1	2115	G	C4-C5-N7	5.17	112.87	110.80
36	1	2537	U	P-O3'-C3'	5.17	125.91	119.70
36	1	2589	G	N1-C2-N3	5.17	127.00	123.90
36	1	2936	A	C6-C5-N7	5.17	135.92	132.30
36	1	3071	U	C5-C6-N1	-5.17	120.11	122.70
37	3	95	A	N1-C6-N6	5.17	121.70	118.60
1	6	885	G	N1-C6-O6	5.17	123.00	119.90
36	5	45	A	N1-C2-N3	5.17	131.89	129.30
36	5	437	G	N9-C4-C5	5.17	107.47	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	692	A	C4-C5-N7	5.17	113.29	110.70
36	5	1011	A	C6-C5-N7	-5.17	128.68	132.30
36	5	1187	C	C5-C4-N4	-5.17	116.58	120.20
36	5	2661	G	N1-C2-N3	5.17	127.00	123.90
36	5	2684	C	O5'-P-OP1	5.17	116.91	110.70
36	5	2708	C	N3-C2-O2	5.17	125.52	121.90
36	5	2918	G	C5-N7-C8	5.17	106.89	104.30
36	5	2922	G	N1-C6-O6	-5.17	116.80	119.90
37	7	5	G	N7-C8-N9	-5.17	110.51	113.10
1	2	376	C	O5'-P-OP1	-5.17	101.04	105.70
36	1	1198	C	O4'-C1'-N1	5.17	112.34	108.20
36	1	1215	U	C5-C6-N1	-5.17	120.11	122.70
36	1	2642	A	C2-N3-C4	-5.17	108.01	110.60
36	1	3266	G	N9-C4-C5	5.17	107.47	105.40
36	5	1606	U	N1-C2-O2	-5.17	119.18	122.80
37	7	35	C	C2-N3-C4	-5.17	117.31	119.90
1	2	822	U	C6-N1-C2	-5.17	117.90	121.00
1	2	830	U	C6-N1-C1'	-5.17	113.96	121.20
1	2	1046	G	C8-N9-C4	-5.17	104.33	106.40
36	1	42	C	C4-C5-C6	5.17	119.99	117.40
36	1	971	G	N1-C2-N2	-5.17	111.55	116.20
36	1	1282	G	N1-C6-O6	5.17	123.00	119.90
36	1	1829	G	C4-C5-N7	-5.17	108.73	110.80
36	1	2348	A	C8-N9-C4	5.17	107.87	105.80
1	6	1476	C	N3-C4-N4	5.17	121.62	118.00
1	6	1624	C	N3-C4-C5	5.17	123.97	121.90
36	5	915	A	C4-C5-C6	5.17	119.59	117.00
36	5	952	A	C4-C5-C6	-5.17	114.41	117.00
36	5	1333	C	C6-N1-C1'	-5.17	114.59	120.80
36	5	1431	G	C8-N9-C4	5.17	108.47	106.40
36	5	1491	A	C4-C5-C6	5.17	119.58	117.00
36	5	2237	C	O5'-P-OP2	-5.17	101.05	105.70
36	5	2599	U	N3-C4-C5	-5.17	111.50	114.60
36	5	2717	U	C2-N3-C4	-5.17	123.90	127.00
36	5	3173	G	N3-C2-N2	5.17	123.52	119.90
37	7	52	G	OP1-P-O3'	5.17	116.58	105.20
36	1	104	G	C5-N7-C8	-5.17	101.72	104.30
36	1	1077	U	C4-C5-C6	5.17	122.80	119.70
1	6	7	G	C6-C5-N7	-5.17	127.30	130.40
1	6	474	A	N9-C4-C5	-5.17	103.73	105.80
1	6	811	A	C5-C6-N6	-5.17	119.56	123.70
1	6	967	A	N3-C4-N9	5.17	131.54	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1202	A	C4-C5-C6	5.17	119.58	117.00
36	5	1867	A	C5-C6-N6	5.17	127.84	123.70
36	5	2309	A	C5-C6-N1	-5.17	115.11	117.70
1	2	619	A	N7-C8-N9	-5.17	111.22	113.80
36	1	973	A	C8-N9-C1'	5.17	137.00	127.70
36	1	1171	G	N3-C2-N2	-5.17	116.28	119.90
36	1	1202	A	C4-C5-N7	5.17	113.28	110.70
36	1	1583	A	N9-C4-C5	5.17	107.87	105.80
36	1	1897	G	C5-N7-C8	-5.17	101.72	104.30
36	1	2985	C	N1-C2-N3	5.17	122.82	119.20
36	1	3177	G	C5-C6-O6	-5.17	125.50	128.60
1	6	576	G	C8-N9-C4	-5.17	104.33	106.40
1	6	973	A	OP1-P-O3'	5.17	116.57	105.20
22	d0	63	LEU	CA-CB-CG	-5.17	103.41	115.30
36	5	71	A	C6-C5-N7	5.17	135.92	132.30
36	5	353	G	C4-N9-C1'	-5.17	119.78	126.50
36	5	872	U	N3-C4-O4	5.17	123.02	119.40
36	5	885	U	C4-C5-C6	5.17	122.80	119.70
36	5	925	A	N1-C6-N6	5.17	121.70	118.60
36	5	1186	G	N7-C8-N9	5.17	115.69	113.10
36	5	1397	C	N3-C4-N4	5.17	121.62	118.00
36	5	2124	G	OP2-P-O3'	5.17	116.57	105.20
36	5	2313	A	N9-C4-C5	5.17	107.87	105.80
36	5	2597	U	N1-C2-O2	5.17	126.42	122.80
36	5	2851	A	OP2-P-O3'	5.17	116.57	105.20
36	5	3065	G	N3-C4-N9	-5.17	122.90	126.00
36	5	3280	U	C6-N1-C2	5.17	124.10	121.00
37	7	54	U	C5-C4-O4	5.17	129.00	125.90
1	2	6	G	C2-N3-C4	5.17	114.48	111.90
1	2	1561	U	N1-C2-O2	5.17	126.42	122.80
36	1	192	C	N3-C4-C5	-5.17	119.83	121.90
36	1	1340	G	C5-N7-C8	-5.17	101.72	104.30
36	1	1670	C	C2-N1-C1'	-5.17	113.12	118.80
36	1	2377	G	C5-C6-O6	5.17	131.70	128.60
36	1	2633	U	N1-C2-N3	5.17	118.00	114.90
36	1	2990	G	N3-C4-C5	-5.17	126.02	128.60
36	1	3226	A	C5-C6-N6	5.17	127.83	123.70
1	6	331	A	C6-N1-C2	-5.17	115.50	118.60
1	6	608	U	N1-C2-N3	5.17	118.00	114.90
1	6	1556	A	C4-C5-N7	5.17	113.28	110.70
36	5	216	G	C6-C5-N7	-5.17	127.30	130.40
36	5	323	A	P-O3'-C3'	-5.17	113.50	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	799	G	N1-C6-O6	5.17	123.00	119.90
36	5	814	U	OP1-P-OP2	-5.17	111.85	119.60
36	5	955	U	N3-C2-O2	5.17	125.82	122.20
36	5	2271	A	C5-C6-N6	-5.17	119.57	123.70
36	5	2831	G	C4-C5-C6	5.17	121.90	118.80
1	2	982	U	OP1-P-O3'	-5.17	93.84	105.20
36	1	149	U	C5-C6-N1	5.17	125.28	122.70
36	1	870	G	C6-C5-N7	5.17	133.50	130.40
36	1	882	A	N1-C2-N3	-5.17	126.72	129.30
36	1	1426	C	N3-C4-C5	-5.17	119.83	121.90
36	1	2522	G	N9-C1'-C2'	5.17	120.71	114.00
36	1	3158	G	N1-C6-O6	5.17	123.00	119.90
61	N5	78	ASP	CB-CG-OD1	5.17	122.95	118.30
1	6	96	G	N3-C4-C5	-5.17	126.02	128.60
1	6	1304	G	C6-C5-N7	5.17	133.50	130.40
1	6	1574	G	N1-C6-O6	5.17	123.00	119.90
36	5	1111	U	N3-C4-C5	5.17	117.70	114.60
36	5	1330	A	OP1-P-OP2	5.17	127.35	119.60
36	5	3255	U	N3-C4-C5	-5.17	111.50	114.60
37	7	65	G	N3-C4-N9	-5.17	122.90	126.00
37	7	75	G	O4'-C1'-N9	-5.17	104.07	108.20
1	2	555	A	N1-C2-N3	5.16	131.88	129.30
4	S2	235	LEU	CA-CB-CG	5.16	127.18	115.30
36	1	4	U	N3-C4-C5	5.16	117.70	114.60
36	1	105	C	O5'-P-OP2	-5.16	101.05	105.70
36	1	403	C	N3-C2-O2	-5.16	118.29	121.90
36	1	624	G	C5-C6-N1	-5.16	108.92	111.50
36	1	714	G	N3-C4-N9	5.16	129.10	126.00
36	1	856	G	C8-N9-C4	-5.16	104.33	106.40
36	1	1490	A	N9-C4-C5	5.16	107.86	105.80
36	1	1847	A	N1-C2-N3	5.16	131.88	129.30
36	1	2373	A	N3-C4-C5	5.16	130.41	126.80
36	1	2389	C	N1-C2-O2	-5.16	115.80	118.90
36	1	2649	A	C5-N7-C8	-5.16	101.32	103.90
1	6	297	U	C2-N1-C1'	5.16	123.89	117.70
36	5	290	G	C8-N9-C4	-5.16	104.33	106.40
36	5	774	G	C8-N9-C1'	-5.16	120.29	127.00
36	5	810	A	C5-N7-C8	-5.16	101.32	103.90
36	5	2193	U	O4'-C1'-N1	-5.16	104.07	108.20
36	5	2914	G	N1-C6-O6	5.16	123.00	119.90
36	5	3114	A	N1-C2-N3	-5.16	126.72	129.30
38	8	102	U	C6-N1-C1'	-5.16	113.97	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	255	U	C5-C6-N1	5.16	125.28	122.70
1	2	390	G	N1-C2-N2	5.16	120.85	116.20
1	2	1679	G	N1-C6-O6	-5.16	116.80	119.90
36	1	11	A	C2-N3-C4	-5.16	108.02	110.60
36	1	201	A	C8-N9-C4	5.16	107.86	105.80
36	1	634	C	O5'-P-OP1	-5.16	101.05	105.70
36	1	1690	C	OP1-P-O3'	5.16	116.56	105.20
36	1	1707	A	O5'-P-OP2	5.16	116.89	110.70
36	1	2280	A	OP2-P-O3'	5.16	116.56	105.20
36	5	406	G	C5-N7-C8	-5.16	101.72	104.30
36	5	1080	A	P-O3'-C3'	5.16	125.89	119.70
36	5	1204	A	OP1-P-O3'	-5.16	93.84	105.20
36	5	2611	U	C2-N3-C4	5.16	130.10	127.00
36	5	2727	A	C2-N3-C4	5.16	113.18	110.60
36	5	3367	C	N3-C4-N4	-5.16	114.39	118.00
1	2	620	A	N9-C4-C5	5.16	107.86	105.80
36	1	172	G	N3-C4-C5	-5.16	126.02	128.60
36	1	1134	G	C5-C6-O6	5.16	131.70	128.60
36	1	2249	G	C4-C5-N7	-5.16	108.74	110.80
36	1	2417	U	C4-C5-C6	5.16	122.80	119.70
37	3	7	G	C6-N1-C2	-5.16	122.00	125.10
38	4	15	G	O5'-P-OP1	-5.16	101.06	105.70
1	6	60	U	C5-C6-N1	5.16	125.28	122.70
1	6	147	A	C4-C5-N7	5.16	113.28	110.70
1	6	925	G	N7-C8-N9	5.16	115.68	113.10
1	6	1226	A	C2-N3-C4	5.16	113.18	110.60
1	6	1634	C	OP1-P-O3'	5.16	116.55	105.20
36	5	965	A	C6-N1-C2	-5.16	115.50	118.60
36	5	1317	A	N7-C8-N9	5.16	116.38	113.80
36	5	1420	C	C6-N1-C1'	5.16	126.99	120.80
36	5	2301	U	C2-N3-C4	5.16	130.10	127.00
36	5	2388	U	C4-C5-C6	5.16	122.80	119.70
36	5	2690	G	OP2-P-O3'	5.16	116.56	105.20
36	5	3049	A	C6-C5-N7	-5.16	128.69	132.30
36	5	3102	G	N1-C6-O6	5.16	123.00	119.90
36	5	3315	G	C4-N9-C1'	5.16	133.21	126.50
1	2	937	C	C5-C6-N1	5.16	123.58	121.00
1	2	1235	C	O5'-P-OP1	-5.16	101.06	105.70
1	2	1634	C	C6-N1-C2	-5.16	118.24	120.30
1	2	1757	G	OP2-P-O3'	5.16	116.55	105.20
35	SM	134	ASP	CB-CG-OD2	5.16	122.94	118.30
36	1	37	U	C2-N1-C1'	-5.16	111.51	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	99	A	C4-N9-C1'	-5.16	117.02	126.30
36	1	720	A	C6-N1-C2	-5.16	115.50	118.60
36	1	760	G	N3-C4-C5	5.16	131.18	128.60
36	1	1461	A	O5'-P-OP2	-5.16	101.06	105.70
36	1	2409	G	C5-C6-O6	-5.16	125.50	128.60
38	4	15	G	C6-N1-C2	-5.16	122.00	125.10
49	M3	7	LEU	C-N-CD	5.16	139.23	128.40
1	6	109	G	N3-C4-C5	5.16	131.18	128.60
1	6	610	G	C6-N1-C2	-5.16	122.00	125.10
1	6	1746	A	N1-C6-N6	-5.16	115.50	118.60
36	5	707	U	C2-N3-C4	5.16	130.09	127.00
36	5	1686	U	C2-N1-C1'	5.16	123.89	117.70
36	5	1778	G	N7-C8-N9	-5.16	110.52	113.10
36	5	3323	A	C5-C6-N1	5.16	120.28	117.70
36	1	14	U	C2-N1-C1'	5.16	123.89	117.70
36	1	996	A	C2-N3-C4	5.16	113.18	110.60
1	6	903	U	N1-C2-O2	-5.16	119.19	122.80
1	6	958	U	C5-C6-N1	-5.16	120.12	122.70
1	6	1361	U	C6-N1-C2	-5.16	117.91	121.00
1	6	1745	G	N3-C4-N9	5.16	129.09	126.00
36	5	2391	G	C5-C6-N1	5.16	114.08	111.50
36	5	2415	C	N3-C4-N4	5.16	121.61	118.00
1	2	1342	C	C6-N1-C2	-5.16	118.24	120.30
1	2	1431	C	O4'-C1'-N1	-5.16	104.08	108.20
36	1	195	U	OP1-P-O3'	5.16	116.54	105.20
36	1	366	A	C6-N1-C2	-5.16	115.51	118.60
36	1	807	A	C5-C6-N6	-5.16	119.58	123.70
36	1	1196	C	OP1-P-O3'	5.16	116.54	105.20
36	1	1435	A	P-O3'-C3'	5.16	125.89	119.70
36	1	2396	G	N3-C4-N9	-5.16	122.91	126.00
36	1	2620	G	OP1-P-O3'	5.16	116.54	105.20
36	1	2628	A	C6-C5-N7	-5.16	128.69	132.30
36	1	2754	G	C8-N9-C4	5.16	108.46	106.40
36	1	2968	G	C5-C6-N1	5.16	114.08	111.50
36	1	3054	U	O4'-C1'-N1	5.16	112.32	108.20
37	3	17	A	C6-N1-C2	-5.16	115.51	118.60
1	6	43	A	N3-C4-N9	5.16	131.52	127.40
1	6	296	U	N3-C2-O2	-5.16	118.59	122.20
1	6	756	A	N7-C8-N9	5.16	116.38	113.80
36	5	969	C	OP1-P-O3'	5.16	116.54	105.20
36	5	1092	C	O4'-C1'-N1	5.16	112.32	108.20
36	5	2119	A	C4-N9-C1'	5.16	135.58	126.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2255	A	C5-C6-N6	-5.16	119.58	123.70
36	5	2364	G	C4-C5-N7	5.16	112.86	110.80
36	5	2643	A	O5'-P-OP1	-5.16	101.06	105.70
36	5	2652	U	OP1-P-OP2	5.16	127.33	119.60
36	5	2664	C	C2-N3-C4	-5.16	117.32	119.90
36	5	2719	U	C2-N1-C1'	-5.16	111.51	117.70
36	5	3275	U	N1-C2-N3	-5.16	111.81	114.90
37	7	24	A	C5-C6-N1	5.16	120.28	117.70
37	7	99	G	C5-N7-C8	5.16	106.88	104.30
1	2	77	U	C5-C4-O4	-5.15	122.81	125.90
36	1	905	U	C2-N1-C1'	-5.15	111.52	117.70
36	1	1213	G	C6-C5-N7	-5.15	127.31	130.40
36	1	1895	A	N7-C8-N9	-5.15	111.22	113.80
36	1	2295	A	C5-C6-N6	5.15	127.82	123.70
37	3	41	G	C8-N9-C1'	-5.15	120.30	127.00
36	5	86	G	C2-N3-C4	5.15	114.48	111.90
36	5	183	G	C8-N9-C4	-5.15	104.34	106.40
36	5	1194	G	C8-N9-C4	-5.15	104.34	106.40
36	5	2899	C	C5-C6-N1	-5.15	118.42	121.00
1	2	1206	U	N3-C2-O2	-5.15	118.59	122.20
36	1	196	G	C5-N7-C8	5.15	106.88	104.30
36	1	295	A	C8-N9-C4	-5.15	103.74	105.80
36	1	1001	G	C5-C6-O6	-5.15	125.51	128.60
36	1	1173	U	C5-C6-N1	-5.15	120.12	122.70
36	1	1375	G	C6-N1-C2	-5.15	122.01	125.10
36	1	1795	U	C5-C6-N1	-5.15	120.12	122.70
36	1	2110	G	C4-N9-C1'	5.15	133.20	126.50
36	1	2713	U	N3-C4-O4	5.15	123.01	119.40
36	1	3318	G	C3'-C2'-C1'	5.15	105.62	101.50
1	6	1777	G	OP2-P-O3'	5.15	116.54	105.20
36	5	326	U	C6-N1-C2	-5.15	117.91	121.00
36	5	432	G	N3-C2-N2	-5.15	116.29	119.90
36	5	1003	A	C6-C5-N7	-5.15	128.69	132.30
36	5	1193	A	C4-C5-C6	5.15	119.58	117.00
36	5	1348	U	O4'-C1'-N1	5.15	112.32	108.20
36	5	2159	U	OP1-P-O3'	5.15	116.53	105.20
36	5	2306	C	OP2-P-O3'	5.15	116.53	105.20
36	5	3298	C	C5-C4-N4	5.15	123.81	120.20
1	2	47	A	C6-N1-C2	-5.15	115.51	118.60
1	2	1517	U	N3-C4-O4	5.15	123.00	119.40
36	1	59	G	N1-C6-O6	5.15	122.99	119.90
36	1	223	U	C2-N1-C1'	-5.15	111.52	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	499	G	N1-C2-N2	5.15	120.83	116.20
36	1	669	U	C5-C6-N1	-5.15	120.12	122.70
36	1	902	G	C5-N7-C8	-5.15	101.72	104.30
36	1	1010	G	N1-C6-O6	5.15	122.99	119.90
36	1	1082	U	C6-N1-C2	-5.15	117.91	121.00
36	1	1334	U	N3-C4-C5	-5.15	111.51	114.60
36	1	1369	A	C4-C5-C6	5.15	119.58	117.00
36	1	1546	A	C5-N7-C8	-5.15	101.33	103.90
36	1	1752	A	C2-N3-C4	-5.15	108.03	110.60
36	1	1913	A	N1-C6-N6	5.15	121.69	118.60
36	1	2364	G	N1-C6-O6	-5.15	116.81	119.90
36	1	2805	G	C2-N3-C4	5.15	114.47	111.90
36	1	2830	G	N7-C8-N9	-5.15	110.52	113.10
36	1	3196	U	C5-C4-O4	5.15	128.99	125.90
38	4	119	C	N3-C2-O2	5.15	125.50	121.90
1	6	110	U	O5'-P-OP1	-5.15	101.06	105.70
1	6	516	G	C8-N9-C4	-5.15	104.34	106.40
36	5	875	G	N3-C4-N9	-5.15	122.91	126.00
36	5	906	A	OP1-P-OP2	5.15	127.33	119.60
36	5	1060	U	N3-C2-O2	-5.15	118.59	122.20
36	5	2353	G	P-O3'-C3'	-5.15	113.52	119.70
36	5	2671	A	C2-N3-C4	-5.15	108.03	110.60
36	5	2813	A	N1-C2-N3	5.15	131.88	129.30
37	7	65	G	N1-C2-N2	5.15	120.83	116.20
38	8	136	G	N7-C8-N9	-5.15	110.52	113.10
1	2	561	G	C5-C6-O6	-5.15	125.51	128.60
1	2	904	G	C8-N9-C1'	-5.15	120.31	127.00
4	S2	58	LEU	CA-CB-CG	5.15	127.14	115.30
36	1	337	G	C2-N3-C4	5.15	114.47	111.90
36	1	995	U	N1-C2-N3	5.15	117.99	114.90
36	1	1076	C	C5-C6-N1	-5.15	118.43	121.00
1	6	254	A	O5'-P-OP1	5.15	116.88	110.70
1	6	334	G	N9-C4-C5	5.15	107.46	105.40
1	6	1321	A	OP1-P-O3'	5.15	116.53	105.20
36	5	921	A	N1-C6-N6	-5.15	115.51	118.60
36	5	1582	C	O4'-C1'-N1	5.15	112.32	108.20
36	5	2914	G	OP1-P-OP2	5.15	127.32	119.60
36	5	3089	C	C2-N3-C4	5.15	122.47	119.90
1	2	1052	U	C2-N1-C1'	5.15	123.88	117.70
36	1	1114	U	N3-C4-C5	-5.15	111.51	114.60
36	1	1144	U	C5-C6-N1	5.15	125.27	122.70
36	1	1151	U	C2-N1-C1'	5.15	123.88	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1833	G	C4-C5-N7	-5.15	108.74	110.80
36	1	3268	A	O4'-C1'-N9	-5.15	104.08	108.20
37	3	52	G	N7-C8-N9	5.15	115.67	113.10
1	6	1428	G	N3-C4-N9	-5.15	122.91	126.00
1	6	1456	C	N1-C2-N3	5.15	122.80	119.20
36	5	769	G	C5-C6-O6	-5.15	125.51	128.60
36	5	886	C	C4-C5-C6	-5.15	114.83	117.40
36	5	1124	U	O4'-C1'-N1	5.15	112.32	108.20
36	5	1192	C	C6-N1-C2	-5.15	118.24	120.30
36	5	1300	G	N9-C4-C5	-5.15	103.34	105.40
36	5	1916	U	N1-C2-O2	5.15	126.40	122.80
36	5	2291	A	C6-N1-C2	5.15	121.69	118.60
36	5	2409	G	N9-C4-C5	-5.15	103.34	105.40
36	5	2670	G	C5-C6-O6	-5.15	125.51	128.60
36	5	2758	A	C8-N9-C4	5.15	107.86	105.80
36	5	2866	U	N1-C2-O2	5.15	126.40	122.80
36	1	591	G	C4-N9-C1'	5.15	133.19	126.50
36	1	810	A	C5-C6-N6	5.15	127.82	123.70
36	1	1360	C	N3-C2-O2	5.15	125.50	121.90
36	1	3009	G	C5-C6-O6	-5.15	125.51	128.60
36	5	916	G	C5-C6-N1	5.15	114.07	111.50
36	5	1095	U	N1-C2-O2	5.15	126.40	122.80
36	5	1734	G	N7-C8-N9	-5.15	110.53	113.10
36	5	3095	U	N1-C2-N3	5.15	117.99	114.90
36	5	3289	G	C3'-C2'-C1'	-5.15	97.38	101.50
1	2	1081	A	O4'-C1'-N9	5.14	112.31	108.20
1	2	1195	C	C4-C5-C6	5.14	119.97	117.40
1	2	1486	G	C4-C5-C6	5.14	121.89	118.80
1	2	1555	A	C8-N9-C4	-5.14	103.74	105.80
36	1	891	G	N3-C4-C5	5.14	131.17	128.60
36	1	931	C	C2-N3-C4	-5.14	117.33	119.90
36	1	936	A	N3-C4-N9	-5.14	123.28	127.40
36	1	1475	A	C5-C6-N6	-5.14	119.58	123.70
36	1	2328	U	N3-C4-O4	-5.14	115.80	119.40
36	1	2930	A	C4-C5-N7	5.14	113.27	110.70
36	1	3005	A	N9-C4-C5	5.14	107.86	105.80
36	1	3289	G	N7-C8-N9	5.14	115.67	113.10
1	6	619	A	N1-C2-N3	-5.14	126.73	129.30
36	5	41	G	N3-C4-N9	-5.14	122.91	126.00
36	5	186	U	N1-C2-O2	5.14	126.40	122.80
36	5	588	G	C5-C6-O6	-5.14	125.51	128.60
36	5	974	G	C4-C5-C6	5.14	121.89	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1215	U	C5-C4-O4	-5.14	122.81	125.90
36	5	1733	G	C8-N9-C1'	-5.14	120.31	127.00
36	5	2278	C	C4-C5-C6	-5.14	114.83	117.40
37	7	95	A	N1-C2-N3	5.14	131.87	129.30
1	2	993	A	N7-C8-N9	5.14	116.37	113.80
1	2	1144	U	C5-C4-O4	-5.14	122.81	125.90
36	1	692	A	C8-N9-C4	-5.14	103.74	105.80
36	1	827	A	C5-C6-N1	5.14	120.27	117.70
36	1	2517	U	N1-C2-O2	5.14	126.40	122.80
36	1	2745	G	O4'-C1'-N9	5.14	112.31	108.20
37	3	118	A	O5'-P-OP1	5.14	116.87	110.70
1	6	316	A	OP1-P-OP2	5.14	127.31	119.60
36	5	312	C	C5-C4-N4	5.14	123.80	120.20
36	5	510	G	C5-C6-N1	5.14	114.07	111.50
36	5	635	G	O5'-P-OP2	-5.14	101.07	105.70
36	5	960	U	C4-C5-C6	5.14	122.78	119.70
36	5	1431	G	OP2-P-O3'	5.14	116.52	105.20
36	5	1473	G	C6-C5-N7	-5.14	127.31	130.40
36	5	2678	A	C4-C5-N7	-5.14	108.13	110.70
36	5	2765	C	C2-N1-C1'	5.14	124.46	118.80
36	5	2788	C	C4-C5-C6	5.14	119.97	117.40
37	7	82	G	N3-C4-N9	5.14	129.09	126.00
38	8	13	A	C6-N1-C2	5.14	121.69	118.60
1	2	628	G	C6-N1-C2	5.14	128.19	125.10
36	1	893	C	C2-N1-C1'	5.14	124.45	118.80
36	1	969	C	N3-C4-C5	-5.14	119.84	121.90
36	1	1779	C	N3-C2-O2	-5.14	118.30	121.90
36	1	2117	A	C5-C6-N6	-5.14	119.59	123.70
36	5	76	G	N3-C4-C5	-5.14	126.03	128.60
36	5	109	A	C2-N3-C4	-5.14	108.03	110.60
36	5	707	U	OP2-P-O3'	5.14	116.51	105.20
36	5	3365	U	OP2-P-O3'	5.14	116.51	105.20
37	7	109	G	C8-N9-C4	5.14	108.46	106.40
1	2	261	U	C6-N1-C1'	-5.14	114.01	121.20
1	2	1291	G	C2-N3-C4	-5.14	109.33	111.90
36	1	18	G	N3-C4-N9	-5.14	122.92	126.00
36	1	216	G	N1-C6-O6	5.14	122.98	119.90
36	1	1145	G	C8-N9-C4	-5.14	104.34	106.40
36	1	1428	A	N3-C4-C5	5.14	130.40	126.80
36	1	1922	A	C5-C6-N1	5.14	120.27	117.70
36	1	2274	U	C2-N3-C4	-5.14	123.92	127.00
36	1	2558	U	C5-C6-N1	-5.14	120.13	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2698	G	C8-N9-C4	5.14	108.46	106.40
36	1	2754	G	C4-C5-N7	5.14	112.86	110.80
36	1	2990	G	C6-N1-C2	-5.14	122.02	125.10
38	4	46	G	N9-C4-C5	-5.14	103.34	105.40
1	6	1780	G	C5-C6-O6	-5.14	125.52	128.60
36	5	517	G	C5-C6-N1	-5.14	108.93	111.50
36	5	632	G	C6-C5-N7	-5.14	127.32	130.40
36	5	794	U	C6-N1-C2	-5.14	117.92	121.00
36	5	864	G	OP2-P-O3'	5.14	116.51	105.20
36	5	980	A	C4-C5-C6	-5.14	114.43	117.00
36	5	1208	U	N1-C2-N3	5.14	117.98	114.90
36	5	1520	G	C6-C5-N7	-5.14	127.32	130.40
36	5	1543	G	C8-N9-C4	-5.14	104.34	106.40
36	5	2165	G	C4-N9-C1'	5.14	133.18	126.50
36	5	2334	U	C5-C6-N1	-5.14	120.13	122.70
36	5	2926	A	N1-C6-N6	5.14	121.68	118.60
36	5	2980	U	C2-N1-C1'	-5.14	111.53	117.70
36	5	3110	C	N3-C4-C5	5.14	123.96	121.90
36	5	3176	G	C6-C5-N7	-5.14	127.32	130.40
36	5	3367	C	N3-C2-O2	5.14	125.50	121.90
38	8	61	A	C5-C6-N6	5.14	127.81	123.70
57	n1	152	ALA	C-N-CD	5.14	139.19	128.40
1	2	339	C	OP2-P-O3'	5.14	116.50	105.20
1	2	934	C	C6-N1-C1'	-5.14	114.63	120.80
1	2	1130	G	OP2-P-O3'	5.14	116.50	105.20
36	1	587	U	N3-C4-O4	5.14	123.00	119.40
36	1	1929	G	O5'-P-OP2	-5.14	101.08	105.70
36	1	3094	A	O5'-P-OP2	5.14	116.87	110.70
1	6	157	A	C2-N3-C4	-5.14	108.03	110.60
1	6	361	C	C5-C6-N1	-5.14	118.43	121.00
1	6	788	A	C5-N7-C8	5.14	106.47	103.90
1	6	1132	A	C5-N7-C8	5.14	106.47	103.90
1	6	1176	G	C8-N9-C4	5.14	108.45	106.40
36	5	1161	G	N1-C6-O6	-5.14	116.82	119.90
36	5	1929	G	N9-C4-C5	5.14	107.45	105.40
36	5	2281	A	C8-N9-C4	5.14	107.86	105.80
1	2	349	U	C6-N1-C2	5.14	124.08	121.00
1	2	1605	G	C8-N9-C4	-5.14	104.35	106.40
1	2	1748	G	N1-C2-N3	5.14	126.98	123.90
36	1	440	A	C8-N9-C4	-5.14	103.75	105.80
36	1	595	G	O5'-P-OP2	5.14	116.86	110.70
36	1	1048	A	C5-C6-N1	5.14	120.27	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1306	G	OP2-P-O3'	5.14	116.50	105.20
36	1	1330	A	C8-N9-C4	5.14	107.85	105.80
36	1	1578	C	C6-N1-C2	-5.14	118.25	120.30
36	1	2520	A	N7-C8-N9	5.14	116.37	113.80
36	1	2658	G	N9-C4-C5	-5.14	103.35	105.40
36	1	3186	A	C4-C5-N7	-5.14	108.13	110.70
1	6	337	G	N3-C2-N2	5.14	123.50	119.90
1	6	456	A	O4'-C1'-N9	-5.14	104.09	108.20
1	6	1201	G	C8-N9-C1'	5.14	133.68	127.00
1	6	1733	C	C5-C6-N1	-5.14	118.43	121.00
36	5	70	A	C4-N9-C1'	5.14	135.54	126.30
36	5	191	U	N3-C2-O2	5.14	125.80	122.20
36	5	1119	C	C2-N3-C4	-5.14	117.33	119.90
36	5	1173	U	C5-C4-O4	5.14	128.98	125.90
36	5	2729	U	C2-N1-C1'	-5.14	111.54	117.70
36	5	2959	C	N1-C2-N3	5.14	122.80	119.20
36	5	2990	G	N3-C4-C5	-5.14	126.03	128.60
36	5	3047	U	N3-C4-O4	5.14	123.00	119.40
36	5	3343	G	N1-C2-N3	5.14	126.98	123.90
37	7	107	C	OP2-P-O3'	5.14	116.50	105.20
78	q2	97	LYS	CD-CE-NZ	5.14	123.51	111.70
1	2	458	G	N3-C2-N2	-5.13	116.31	119.90
1	2	1386	G	C4-N9-C1'	-5.13	119.83	126.50
36	1	65	A	C5-C6-N6	-5.13	119.59	123.70
36	1	297	G	C6-N1-C2	-5.13	122.02	125.10
36	1	674	G	N3-C2-N2	-5.13	116.31	119.90
36	1	1317	A	C4-C5-N7	5.13	113.27	110.70
36	1	1328	C	O5'-P-OP1	-5.13	101.08	105.70
36	1	1390	A	N1-C6-N6	5.13	121.68	118.60
36	1	1469	C	C5-C6-N1	-5.13	118.43	121.00
36	1	1913	A	C5-N7-C8	-5.13	101.33	103.90
36	1	2593	A	P-O3'-C3'	5.13	125.86	119.70
36	1	2787	G	C5-N7-C8	-5.13	101.73	104.30
36	1	2863	G	O5'-P-OP1	5.13	116.86	110.70
36	1	2883	U	C2-N1-C1'	5.13	123.86	117.70
36	1	2943	G	C4-C5-C6	5.13	121.88	118.80
36	1	3125	U	N3-C4-O4	-5.13	115.81	119.40
36	1	3215	A	C6-N1-C2	-5.13	115.52	118.60
1	6	580	A	C5-C6-N1	5.13	120.27	117.70
1	6	860	U	N1-C2-O2	-5.13	119.20	122.80
36	5	233	C	C6-N1-C1'	5.13	126.96	120.80
36	5	760	G	N3-C4-C5	5.13	131.17	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1146	C	C6-N1-C2	5.13	122.35	120.30
36	5	1587	A	C8-N9-C4	5.13	107.85	105.80
36	5	1782	U	C2-N1-C1'	5.13	123.86	117.70
36	5	2236	G	N3-C4-N9	5.13	129.08	126.00
36	5	3229	G	N9-C4-C5	-5.13	103.35	105.40
36	5	3330	A	C4-N9-C1'	5.13	135.54	126.30
1	2	610	G	C5-C6-O6	-5.13	125.52	128.60
1	2	1299	G	C4-C5-C6	5.13	121.88	118.80
36	1	229	G	N3-C2-N2	-5.13	116.31	119.90
36	1	707	U	N3-C2-O2	-5.13	118.61	122.20
36	1	1288	U	C4-C5-C6	5.13	122.78	119.70
36	1	2638	C	N1-C2-O2	5.13	121.98	118.90
1	6	270	C	C5-C6-N1	5.13	123.57	121.00
36	5	3214	U	C2-N3-C4	-5.13	123.92	127.00
1	2	315	A	N1-C2-N3	-5.13	126.73	129.30
1	2	328	A	C8-N9-C4	-5.13	103.75	105.80
1	2	1639	C	N3-C4-N4	-5.13	114.41	118.00
1	2	1772	C	N3-C4-C5	5.13	123.95	121.90
36	1	357	A	C8-N9-C4	-5.13	103.75	105.80
36	1	947	G	N1-C2-N3	5.13	126.98	123.90
36	1	1443	G	OP2-P-O3'	-5.13	93.91	105.20
36	1	2154	U	C5-C4-O4	-5.13	122.82	125.90
36	1	2155	G	N1-C2-N2	-5.13	111.58	116.20
36	1	2934	A	C6-C5-N7	-5.13	128.71	132.30
36	1	2942	C	N1-C2-O2	-5.13	115.82	118.90
36	1	2976	A	OP1-P-OP2	-5.13	111.90	119.60
36	1	3259	U	C2-N1-C1'	5.13	123.86	117.70
36	1	3353	G	P-O3'-C3'	5.13	125.86	119.70
38	4	8	C	C5-C4-N4	-5.13	116.61	120.20
48	M1	12	LEU	CA-CB-CG	5.13	127.10	115.30
1	6	5	U	OP2-P-O3'	5.13	116.49	105.20
1	6	112	A	C4-C5-N7	5.13	113.27	110.70
1	6	327	U	O5'-P-OP2	-5.13	101.08	105.70
1	6	613	G	C8-N9-C4	-5.13	104.35	106.40
1	6	759	U	C6-N1-C2	-5.13	117.92	121.00
36	5	507	U	O4'-C1'-N1	5.13	112.31	108.20
36	5	582	G	N9-C4-C5	5.13	107.45	105.40
36	5	1523	U	C2-N1-C1'	5.13	123.86	117.70
36	5	1847	A	C8-N9-C4	5.13	107.85	105.80
36	5	2806	U	N3-C4-C5	5.13	117.68	114.60
37	7	120	C	C6-N1-C2	5.13	122.35	120.30
38	8	91	C	C6-N1-C2	-5.13	118.25	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1037	C	C5-C4-N4	-5.13	116.61	120.20
36	1	959	C	N3-C2-O2	5.13	125.49	121.90
1	6	149	C	C2-N1-C1'	-5.13	113.16	118.80
1	6	897	C	C2-N1-C1'	-5.13	113.16	118.80
36	5	230	U	N1-C2-N3	5.13	117.98	114.90
36	5	705	A	N1-C6-N6	-5.13	115.52	118.60
36	5	1878	G	N1-C2-N3	-5.13	120.82	123.90
36	5	3009	G	C2-N3-C4	-5.13	109.33	111.90
36	5	3052	G	C5'-C4'-O4'	5.13	115.26	109.10
36	5	3380	U	C2-N3-C4	5.13	130.08	127.00
36	1	213	A	C5-C6-N6	-5.13	119.60	123.70
36	1	341	G	C8-N9-C4	-5.13	104.35	106.40
36	1	432	G	C4-C5-C6	5.13	121.88	118.80
36	1	968	G	C6-N1-C2	-5.13	122.02	125.10
36	1	1112	A	C8-N9-C4	-5.13	103.75	105.80
36	1	1357	G	C4-C5-C6	5.13	121.88	118.80
36	1	1422	G	C5-C6-N1	-5.13	108.94	111.50
36	1	1550	C	N3-C4-C5	-5.13	119.85	121.90
36	1	2239	G	N1-C2-N2	-5.13	111.58	116.20
36	1	2610	G	C4-C5-C6	5.13	121.88	118.80
1	6	480	G	N3-C4-N9	5.13	129.08	126.00
1	6	800	U	C6-N1-C2	-5.13	117.92	121.00
1	6	824	G	C8-N9-C4	-5.13	104.35	106.40
1	6	1280	C	C2-N3-C4	5.13	122.46	119.90
1	6	1407	U	C5-C6-N1	-5.13	120.14	122.70
1	6	1513	G	N3-C4-C5	-5.13	126.04	128.60
36	5	210	U	C2-N3-C4	-5.13	123.92	127.00
36	5	932	U	N3-C4-O4	-5.13	115.81	119.40
36	5	1058	U	OP2-P-O3'	5.13	116.48	105.20
36	5	1081	U	N1-C2-O2	5.13	126.39	122.80
36	5	1198	C	OP1-P-O3'	5.13	116.48	105.20
36	5	1788	C	N3-C2-O2	5.13	125.49	121.90
36	5	2260	U	N3-C2-O2	-5.13	118.61	122.20
36	5	2518	C	N3-C4-N4	5.13	121.59	118.00
36	5	2933	A	O5'-P-OP1	-5.13	101.08	105.70
36	5	3254	G	N1-C2-N3	5.13	126.98	123.90
37	7	32	U	N3-C4-O4	5.13	122.99	119.40
1	2	458	G	C8-N9-C4	5.13	108.45	106.40
36	1	15	C	OP1-P-OP2	-5.13	111.91	119.60
36	1	297	G	N3-C4-N9	5.13	129.08	126.00
36	1	422	A	N1-C2-N3	5.13	131.86	129.30
36	1	741	U	N3-C4-C5	-5.13	111.52	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	944	C	C4-C5-C6	5.13	119.96	117.40
36	1	963	G	C6-C5-N7	-5.13	127.32	130.40
36	1	1404	G	OP1-P-O3'	5.13	116.48	105.20
36	1	1446	A	OP2-P-O3'	5.13	116.48	105.20
36	1	2995	A	C2-N3-C4	-5.13	108.04	110.60
36	1	3086	A	C5-N7-C8	5.13	106.46	103.90
36	1	3099	C	C5-C4-N4	-5.13	116.61	120.20
36	1	3105	U	N3-C4-O4	-5.13	115.81	119.40
37	3	112	G	C6-C5-N7	5.13	133.48	130.40
38	4	25	G	C4-C5-N7	-5.13	108.75	110.80
1	6	595	G	C5-N7-C8	-5.13	101.74	104.30
1	6	1387	G	C5-C6-O6	5.13	131.68	128.60
1	6	1606	C	O5'-P-OP2	-5.13	101.09	105.70
36	5	33	G	C4-C5-N7	-5.13	108.75	110.80
36	5	101	G	C4-C5-N7	5.13	112.85	110.80
36	5	790	U	C6-N1-C2	5.13	124.08	121.00
36	5	1117	G	OP2-P-O3'	5.13	116.48	105.20
36	5	1225	A	C6-N1-C2	-5.13	115.52	118.60
36	5	1344	G	OP2-P-O3'	5.13	116.48	105.20
36	5	1376	C	C5-C4-N4	-5.13	116.61	120.20
36	5	1586	G	C5-C6-O6	5.13	131.68	128.60
36	5	3035	A	N1-C6-N6	5.13	121.67	118.60
36	5	3205	G	N3-C2-N2	5.13	123.49	119.90
36	1	1163	A	C2-N3-C4	-5.12	108.04	110.60
36	1	1712	G	C8-N9-C4	-5.12	104.35	106.40
36	1	2356	A	N1-C2-N3	5.12	131.86	129.30
36	1	2943	G	C4-N9-C1'	5.12	133.16	126.50
78	Q2	8	ARG	NE-CZ-NH1	5.12	122.86	120.30
1	6	312	A	N1-C6-N6	-5.12	115.53	118.60
1	6	1383	G	C4-N9-C1'	5.12	133.16	126.50
36	5	684	G	N9-C1'-C2'	-5.12	106.36	112.00
36	5	878	G	N7-C8-N9	5.12	115.66	113.10
36	5	1299	U	N3-C4-O4	5.12	122.99	119.40
36	5	1753	G	C8-N9-C4	5.12	108.45	106.40
36	5	2608	G	C5-C6-O6	-5.12	125.53	128.60
48	m1	12	LEU	CA-CB-CG	5.12	127.09	115.30
1	2	1467	C	N3-C2-O2	-5.12	118.31	121.90
36	1	32	U	C2-N3-C4	-5.12	123.93	127.00
36	1	389	A	C6-C5-N7	-5.12	128.71	132.30
36	1	670	C	O5'-P-OP2	5.12	116.85	110.70
36	1	813	G	N1-C6-O6	5.12	122.97	119.90
36	1	2395	G	O4'-C1'-N9	-5.12	104.10	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	324	U	C2-N1-C1'	-5.12	111.55	117.70
1	6	607	G	C4-C5-C6	5.12	121.87	118.80
1	6	742	U	C2-N1-C1'	5.12	123.85	117.70
36	5	25	U	C4-C5-C6	5.12	122.77	119.70
36	5	54	C	C4-C5-C6	5.12	119.96	117.40
36	5	524	U	N3-C4-C5	5.12	117.67	114.60
36	5	2372	A	C8-N9-C1'	-5.12	118.48	127.70
36	5	2614	G	C8-N9-C1'	-5.12	120.34	127.00
36	5	2838	A	C5-C6-N1	5.12	120.26	117.70
36	5	2928	C	C5-C4-N4	-5.12	116.61	120.20
36	5	3123	A	N1-C6-N6	5.12	121.67	118.60
37	7	111	U	C2-N1-C1'	5.12	123.85	117.70
1	2	1076	A	C2-N3-C4	-5.12	108.04	110.60
36	1	1345	G	C4-N9-C1'	5.12	133.16	126.50
36	1	1501	U	C6-N1-C1'	-5.12	114.03	121.20
36	1	1599	G	N1-C2-N3	5.12	126.97	123.90
36	1	2847	A	C8-N9-C4	5.12	107.85	105.80
36	1	2978	U	C4-C5-C6	5.12	122.77	119.70
36	1	3129	A	C2-N3-C4	-5.12	108.04	110.60
1	6	401	A	OP2-P-O3'	5.12	116.47	105.20
1	6	1283	U	N1-C2-N3	5.12	117.97	114.90
1	6	1457	C	O5'-P-OP2	-5.12	101.09	105.70
1	6	1518	C	N3-C2-O2	-5.12	118.32	121.90
1	6	1704	U	C6-N1-C1'	-5.12	114.03	121.20
36	5	432	G	OP2-P-O3'	5.12	116.47	105.20
36	5	686	G	O4'-C1'-N9	5.12	112.30	108.20
36	5	688	G	C4-N9-C1'	5.12	133.16	126.50
36	5	1492	G	N1-C2-N3	5.12	126.97	123.90
36	5	1664	G	N1-C6-O6	-5.12	116.83	119.90
36	5	2195	C	C5-C4-N4	5.12	123.78	120.20
36	5	2284	C	OP1-P-O3'	5.12	116.47	105.20
36	5	3140	G	C8-N9-C4	5.12	108.45	106.40
37	7	8	G	N3-C4-C5	-5.12	126.04	128.60
36	1	1434	G	N9-C4-C5	5.12	107.45	105.40
36	1	3126	C	C5-C6-N1	-5.12	118.44	121.00
1	6	646	C	C5-C6-N1	5.12	123.56	121.00
36	5	957	C	C4-C5-C6	5.12	119.96	117.40
36	5	1226	G	C4-C5-N7	-5.12	108.75	110.80
36	5	1325	U	C6-N1-C2	5.12	124.07	121.00
36	5	1415	U	N1-C2-O2	-5.12	119.22	122.80
36	5	2171	G	P-O3'-C3'	-5.12	113.56	119.70
36	5	3306	U	C2-N1-C1'	5.12	123.84	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3320	A	OP1-P-OP2	5.12	127.28	119.60
38	8	90	U	C2-N1-C1'	5.12	123.84	117.70
1	2	950	C	N3-C4-N4	5.12	121.58	118.00
1	2	1131	A	OP2-P-O3'	5.12	116.46	105.20
1	2	1756	A	C6-C5-N7	-5.12	128.72	132.30
36	1	383	G	N3-C2-N2	5.12	123.48	119.90
36	1	419	G	C4-C5-N7	-5.12	108.75	110.80
36	1	654	C	N3-C2-O2	-5.12	118.32	121.90
36	1	792	G	N3-C4-C5	5.12	131.16	128.60
36	1	890	C	N3-C4-C5	5.12	123.95	121.90
36	1	1149	G	N1-C2-N2	-5.12	111.59	116.20
36	1	1355	A	C5-C6-N1	-5.12	115.14	117.70
36	1	1363	A	C4-C5-N7	5.12	113.26	110.70
36	1	2316	G	OP1-P-O3'	5.12	116.46	105.20
36	1	2382	G	O5'-P-OP1	5.12	116.84	110.70
36	1	2872	A	P-O3'-C3'	5.12	125.84	119.70
36	1	3241	G	C5-C6-N1	5.12	114.06	111.50
37	3	104	A	N9-C4-C5	5.12	107.85	105.80
1	6	62	A	N9-C4-C5	5.12	107.85	105.80
1	6	341	A	N9-C4-C5	5.12	107.85	105.80
1	6	596	C	N3-C2-O2	5.12	125.48	121.90
36	5	320	G	N9-C1'-C2'	-5.12	106.37	112.00
36	5	1013	G	C4-C5-N7	-5.12	108.75	110.80
36	5	1484	U	C5-C4-O4	5.12	128.97	125.90
36	5	2875	U	O4'-C1'-N1	5.12	112.29	108.20
36	5	2910	A	OP2-P-O3'	5.12	116.46	105.20
36	5	3044	G	O5'-P-OP1	5.12	116.84	110.70
36	5	3150	A	C5-N7-C8	-5.12	101.34	103.90
37	7	18	C	C6-N1-C2	5.12	122.35	120.30
10	S8	9	HIS	N-CA-C	-5.12	97.19	111.00
36	1	1417	G	C5-C6-N1	5.12	114.06	111.50
36	1	2653	C	C2-N1-C1'	5.12	124.43	118.80
1	6	130	C	N1-C2-O2	5.12	121.97	118.90
1	6	1644	C	N1-C2-N3	5.12	122.78	119.20
36	5	566	G	N3-C2-N2	5.12	123.48	119.90
36	5	867	G	C8-N9-C1'	-5.12	120.35	127.00
36	5	2586	G	C8-N9-C1'	5.12	133.65	127.00
36	5	2819	A	OP2-P-O3'	5.12	116.46	105.20
36	5	2994	A	C4-C5-C6	5.12	119.56	117.00
1	2	5	U	C5-C6-N1	5.12	125.26	122.70
36	1	81	C	C4-C5-C6	5.12	119.96	117.40
36	1	809	G	O5'-P-OP1	5.12	116.84	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	876	A	C4-N9-C1'	5.12	135.51	126.30
36	1	1103	A	C8-N9-C4	5.12	107.85	105.80
36	1	2330	C	C6-N1-C2	-5.12	118.25	120.30
36	1	2698	G	N7-C8-N9	-5.12	110.54	113.10
36	1	2865	U	OP1-P-OP2	-5.12	111.93	119.60
36	1	3088	G	OP1-P-O3'	-5.12	93.95	105.20
36	1	3276	G	N3-C4-N9	-5.12	122.93	126.00
1	6	105	A	OP1-P-OP2	5.12	127.27	119.60
1	6	555	A	N3-C4-C5	-5.12	123.22	126.80
1	6	572	C	C6-N1-C2	5.12	122.35	120.30
1	6	1600	A	N1-C6-N6	5.12	121.67	118.60
36	5	267	G	C2-N3-C4	5.12	114.46	111.90
36	5	283	G	N1-C6-O6	-5.12	116.83	119.90
36	5	1057	A	C2-N3-C4	-5.12	108.04	110.60
36	5	1159	A	C5-N7-C8	-5.12	101.34	103.90
36	5	1350	A	N9-C4-C5	5.12	107.85	105.80
36	5	2608	G	OP1-P-O3'	-5.12	93.94	105.20
36	5	2855	U	O4'-C1'-N1	-5.12	104.11	108.20
38	8	101	U	C5-C6-N1	-5.12	120.14	122.70
1	2	1199	G	O4'-C1'-N9	5.11	112.29	108.20
36	1	348	A	N3-C4-C5	5.11	130.38	126.80
36	1	649	A	N7-C8-N9	-5.11	111.24	113.80
36	1	1138	U	C2-N3-C4	-5.11	123.93	127.00
36	1	1513	G	C6-C5-N7	-5.11	127.33	130.40
36	1	1620	U	C2-N1-C1'	5.11	123.84	117.70
36	1	1774	C	C6-N1-C2	5.11	122.35	120.30
36	1	1815	U	P-O3'-C3'	5.11	125.84	119.70
36	1	2364	G	N1-C2-N2	-5.11	111.60	116.20
36	1	2387	A	N7-C8-N9	5.11	116.36	113.80
36	1	3330	A	N1-C6-N6	-5.11	115.53	118.60
38	4	126	A	O5'-P-OP1	-5.11	101.10	105.70
1	6	302	U	P-O3'-C3'	-5.11	113.56	119.70
1	6	1140	G	OP2-P-O3'	5.11	116.45	105.20
1	6	1432	U	N3-C2-O2	-5.11	118.62	122.20
36	5	137	G	N3-C2-N2	-5.11	116.32	119.90
36	5	747	A	O5'-P-OP1	5.11	116.83	110.70
36	5	834	U	N1-C2-N3	5.11	117.97	114.90
36	5	2615	G	OP2-P-O3'	5.11	116.45	105.20
36	5	2829	U	N3-C4-O4	5.11	122.98	119.40
38	8	110	C	O5'-P-OP2	-5.11	101.10	105.70
1	2	766	U	C2-N1-C1'	5.11	123.83	117.70
1	2	1766	A	O4'-C1'-N9	5.11	112.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	78	U	O5'-P-OP1	-5.11	101.10	105.70
36	1	864	G	C8-N9-C1'	-5.11	120.35	127.00
36	1	997	A	OP2-P-O3'	5.11	116.45	105.20
36	1	1460	A	N1-C6-N6	-5.11	115.53	118.60
36	1	2177	G	N1-C2-N2	-5.11	111.60	116.20
36	1	2275	A	C8-N9-C4	-5.11	103.75	105.80
36	1	2589	G	C4-N9-C1'	5.11	133.15	126.50
38	4	98	U	N3-C2-O2	-5.11	118.62	122.20
36	5	1100	U	C2-N1-C1'	-5.11	111.57	117.70
36	5	2422	C	C2-N3-C4	-5.11	117.34	119.90
37	7	100	C	N1-C2-O2	-5.11	115.83	118.90
1	2	861	U	N3-C2-O2	5.11	125.78	122.20
1	2	1240	U	O5'-P-OP2	-5.11	101.10	105.70
36	1	44	U	OP2-P-O3'	5.11	116.44	105.20
36	1	76	G	OP1-P-O3'	5.11	116.44	105.20
36	1	223	U	C5-C6-N1	-5.11	120.14	122.70
36	1	351	A	O4'-C1'-N9	-5.11	104.11	108.20
36	1	1116	G	C5-N7-C8	-5.11	101.75	104.30
36	1	1124	U	C5-C6-N1	5.11	125.25	122.70
36	1	1430	U	N3-C4-O4	5.11	122.98	119.40
36	1	2122	G	N3-C4-N9	-5.11	122.93	126.00
36	1	2357	A	N7-C8-N9	5.11	116.36	113.80
1	6	1630	U	C5-C4-O4	-5.11	122.83	125.90
36	5	576	C	N1-C2-N3	5.11	122.78	119.20
36	5	728	G	N9-C1'-C2'	-5.11	106.38	112.00
36	5	1115	G	C5-C6-N1	5.11	114.06	111.50
36	5	1790	G	C5-C6-N1	-5.11	108.94	111.50
36	5	2282	U	C2-N3-C4	-5.11	123.93	127.00
36	5	2950	G	N7-C8-N9	5.11	115.66	113.10
36	1	708	G	N3-C4-C5	-5.11	126.05	128.60
36	1	714	G	C2-N3-C4	-5.11	109.35	111.90
36	1	840	C	C2-N1-C1'	-5.11	113.18	118.80
36	1	1060	U	C2-N3-C4	-5.11	123.94	127.00
36	1	1744	G	C2-N3-C4	-5.11	109.35	111.90
36	1	2178	A	OP2-P-O3'	5.11	116.44	105.20
36	1	2894	C	N1-C2-O2	5.11	121.97	118.90
38	4	94	C	N1-C2-O2	5.11	121.97	118.90
1	6	247	A	N9-C4-C5	-5.11	103.76	105.80
36	5	3024	A	C6-N1-C2	5.11	121.67	118.60
38	8	32	C	C6-N1-C2	5.11	122.34	120.30
44	17	45	LEU	CB-CG-CD1	5.11	119.69	111.00
55	m9	62	ARG	NE-CZ-NH2	-5.11	117.75	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	587	C	C6-N1-C2	-5.11	118.26	120.30
36	1	1743	G	C6-C5-N7	5.11	133.47	130.40
36	1	2105	G	C4-C5-N7	5.11	112.84	110.80
36	1	2415	C	N3-C4-N4	-5.11	114.42	118.00
36	1	2864	A	C2-N3-C4	-5.11	108.05	110.60
36	1	2881	C	C5-C6-N1	-5.11	118.45	121.00
36	1	2895	G	OP1-P-OP2	-5.11	111.94	119.60
36	1	3248	C	N3-C2-O2	5.11	125.47	121.90
70	O4	30	LEU	CA-CB-CG	-5.11	103.55	115.30
1	6	204	G	C4-N9-C1'	5.11	133.14	126.50
1	6	474	A	C5-N7-C8	-5.11	101.35	103.90
1	6	566	C	C4-C5-C6	5.11	119.95	117.40
1	6	603	U	N1-C2-N3	5.11	117.96	114.90
36	5	532	A	C2-N3-C4	-5.11	108.05	110.60
36	5	731	U	C5-C4-O4	5.11	128.96	125.90
36	5	1160	C	C2-N3-C4	-5.11	117.35	119.90
36	5	1202	A	C8-N9-C1'	-5.11	118.51	127.70
36	5	1287	A	C4-C5-C6	5.11	119.55	117.00
36	5	1546	A	O5'-P-OP2	5.11	116.83	110.70
36	5	2185	G	C5-N7-C8	-5.11	101.75	104.30
36	5	2364	G	C8-N9-C4	-5.11	104.36	106.40
36	5	3149	G	O5'-P-OP2	-5.11	101.10	105.70
37	7	90	U	C5-C4-O4	-5.11	122.83	125.90
1	2	1776	A	C5-C6-N1	5.11	120.25	117.70
36	1	240	U	N3-C4-C5	-5.11	111.54	114.60
36	1	500	C	C5-C6-N1	-5.11	118.45	121.00
36	1	796	U	N3-C4-C5	5.11	117.66	114.60
36	1	1577	G	C8-N9-C4	-5.11	104.36	106.40
36	1	2876	C	N3-C4-C5	-5.11	119.86	121.90
40	L3	150	ARG	NE-CZ-NH1	-5.11	117.75	120.30
1	6	204	G	N1-C6-O6	5.11	122.96	119.90
1	6	340	U	C4-C5-C6	5.11	122.76	119.70
1	6	1454	G	C5-C6-O6	-5.11	125.54	128.60
1	6	1610	G	N1-C2-N2	-5.11	111.61	116.20
36	5	1764	U	N3-C2-O2	-5.11	118.63	122.20
36	5	1810	A	C4-C5-N7	5.11	113.25	110.70
36	5	1854	C	C4-C5-C6	5.11	119.95	117.40
36	5	2125	A	N3-C4-C5	5.11	130.37	126.80
36	5	2258	U	N1-C2-O2	5.11	126.37	122.80
36	1	197	G	C2-N3-C4	-5.10	109.35	111.90
36	1	319	A	N1-C6-N6	-5.10	115.54	118.60
36	1	952	A	N1-C2-N3	5.10	131.85	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1412	G	C4-C5-N7	5.10	112.84	110.80
36	1	1456	A	C5-C6-N6	5.10	127.78	123.70
36	1	2370	G	C4-C5-N7	-5.10	108.76	110.80
1	6	1421	A	N7-C8-N9	-5.10	111.25	113.80
36	5	43	A	O4'-C1'-N9	5.10	112.28	108.20
36	5	274	G	C8-N9-C4	5.10	108.44	106.40
36	5	1911	A	N1-C2-N3	5.10	131.85	129.30
36	5	2420	C	O5'-P-OP2	5.10	116.83	110.70
36	5	2863	G	N3-C2-N2	-5.10	116.33	119.90
37	7	1	G	C4-C5-N7	5.10	112.84	110.80
37	7	77	G	OP1-P-O3'	5.10	116.43	105.20
38	8	5	U	N1-C2-O2	-5.10	119.23	122.80
1	2	144	U	C4-C5-C6	5.10	122.76	119.70
1	2	351	C	C2-N1-C1'	-5.10	113.19	118.80
1	2	1758	U	N3-C2-O2	-5.10	118.63	122.20
36	1	287	G	N7-C8-N9	5.10	115.65	113.10
36	1	379	C	O5'-P-OP1	5.10	116.82	110.70
36	1	407	A	O4'-C1'-N9	-5.10	104.12	108.20
36	1	876	A	N1-C2-N3	5.10	131.85	129.30
36	1	877	C	OP2-P-O3'	5.10	116.43	105.20
36	1	953	G	N3-C4-N9	-5.10	122.94	126.00
36	1	1166	G	N9-C1'-C2'	-5.10	106.39	112.00
36	1	1909	A	O5'-P-OP2	5.10	116.82	110.70
36	1	2771	U	C5-C6-N1	5.10	125.25	122.70
36	1	2772	C	N1-C2-N3	-5.10	115.63	119.20
36	1	2808	A	C6-C5-N7	-5.10	128.73	132.30
36	1	2837	A	O4'-C1'-N9	-5.10	104.12	108.20
1	6	104	A	C8-N9-C4	-5.10	103.76	105.80
1	6	539	G	O4'-C1'-N9	-5.10	104.12	108.20
1	6	594	A	C5-C6-N1	5.10	120.25	117.70
1	6	761	G	N3-C4-C5	-5.10	126.05	128.60
1	6	1477	G	C8-N9-C4	5.10	108.44	106.40
11	s9	3	ARG	NE-CZ-NH1	-5.10	117.75	120.30
36	5	305	U	C4-C5-C6	5.10	122.76	119.70
36	5	946	U	N3-C4-O4	5.10	122.97	119.40
36	5	1208	U	C2-N1-C1'	-5.10	111.58	117.70
36	5	2409	G	C4-C5-C6	5.10	121.86	118.80
36	5	2657	A	OP1-P-O3'	5.10	116.43	105.20
36	5	2917	G	N9-C4-C5	5.10	107.44	105.40
36	5	3089	C	N3-C2-O2	5.10	125.47	121.90
1	2	1165	G	C8-N9-C1'	-5.10	120.37	127.00
1	2	1241	G	C8-N9-C4	-5.10	104.36	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1550	C	OP1-P-OP2	-5.10	111.95	119.60
36	1	2371	G	C4-C5-N7	-5.10	108.76	110.80
36	1	3057	U	N1-C2-N3	5.10	117.96	114.90
36	1	3209	A	C8-N9-C1'	-5.10	118.52	127.70
1	6	85	A	C5-N7-C8	-5.10	101.35	103.90
1	6	576	G	C5-C6-N1	-5.10	108.95	111.50
1	6	1631	A	C4-C5-N7	5.10	113.25	110.70
36	5	501	A	OP2-P-O3'	5.10	116.42	105.20
36	5	675	C	OP1-P-OP2	-5.10	111.95	119.60
36	5	1045	C	O4'-C1'-N1	-5.10	104.12	108.20
36	5	2834	G	N1-C6-O6	-5.10	116.84	119.90
36	1	612	U	OP1-P-O3'	5.10	116.42	105.20
36	1	1599	G	C2-N3-C4	-5.10	109.35	111.90
36	1	2177	G	C8-N9-C4	-5.10	104.36	106.40
36	1	2324	A	O4'-C1'-N9	-5.10	104.12	108.20
36	1	2748	A	C8-N9-C4	5.10	107.84	105.80
36	1	2843	U	C5-C6-N1	5.10	125.25	122.70
36	1	2925	C	O4'-C1'-N1	5.10	112.28	108.20
1	6	1031	U	O5'-P-OP1	-5.10	101.11	105.70
36	5	229	G	N7-C8-N9	5.10	115.65	113.10
36	5	363	G	N3-C4-N9	5.10	129.06	126.00
36	5	811	U	C4-C5-C6	5.10	122.76	119.70
36	5	1119	C	C5-C6-N1	-5.10	118.45	121.00
36	5	1122	U	C2-N1-C1'	5.10	123.82	117.70
36	5	1134	G	N3-C2-N2	-5.10	116.33	119.90
36	5	1154	A	C4-C5-C6	5.10	119.55	117.00
36	5	1371	G	C6-N1-C2	-5.10	122.04	125.10
36	5	1471	U	C5-C4-O4	5.10	128.96	125.90
36	5	2407	C	N3-C4-C5	5.10	123.94	121.90
36	5	3024	A	C4-N9-C1'	-5.10	117.12	126.30
38	8	31	G	N1-C2-N2	-5.10	111.61	116.20
1	2	315	A	C2-N3-C4	5.10	113.15	110.60
1	2	985	G	N3-C4-C5	-5.10	126.05	128.60
36	1	353	G	N7-C8-N9	-5.10	110.55	113.10
36	1	1515	A	C8-N9-C4	5.10	107.84	105.80
36	1	2292	U	O5'-P-OP1	-5.10	101.11	105.70
36	1	3107	U	N1-C1'-C2'	-5.10	106.39	112.00
36	1	3395	G	OP1-P-OP2	5.10	127.25	119.60
1	6	55	A	N9-C4-C5	5.10	107.84	105.80
1	6	425	A	C5-C6-N1	5.10	120.25	117.70
36	5	209	A	C5-C6-N1	5.10	120.25	117.70
36	5	984	G	C4-C5-C6	5.10	121.86	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	993	G	O5'-P-OP2	-5.10	101.11	105.70
36	5	1204	A	N3-C4-C5	5.10	130.37	126.80
36	5	2247	G	C8-N9-C1'	-5.10	120.37	127.00
36	5	3011	A	C8-N9-C4	5.10	107.84	105.80
36	5	3336	A	C5-N7-C8	-5.10	101.35	103.90
46	19	166	ARG	NE-CZ-NH1	5.10	122.85	120.30
1	2	1264	G	C5-C6-O6	5.10	131.66	128.60
36	1	2714	G	N9-C4-C5	5.10	107.44	105.40
40	L3	43	LEU	CA-CB-CG	5.10	127.02	115.30
1	6	128	U	C5-C6-N1	-5.10	120.15	122.70
1	6	473	A	C4-C5-N7	-5.10	108.15	110.70
1	6	697	C	N3-C4-C5	-5.10	119.86	121.90
36	5	559	A	C5-N7-C8	-5.10	101.35	103.90
36	5	1929	G	N7-C8-N9	5.10	115.65	113.10
36	5	2099	A	O4'-C1'-N9	5.10	112.28	108.20
36	5	2765	C	C5-C4-N4	-5.10	116.63	120.20
36	1	318	A	O5'-P-OP1	-5.09	101.11	105.70
36	1	407	A	C4-N9-C1'	5.09	135.47	126.30
36	1	991	G	N1-C2-N3	5.09	126.96	123.90
36	1	1332	A	C6-N1-C2	-5.09	115.54	118.60
36	1	1883	A	C2-N3-C4	-5.09	108.05	110.60
36	1	2300	G	C5-C6-O6	5.09	131.66	128.60
36	1	3063	C	OP2-P-O3'	5.09	116.41	105.20
36	1	3377	G	C5-C6-O6	5.09	131.66	128.60
1	6	908	U	N3-C2-O2	-5.09	118.63	122.20
1	6	963	A	N9-C4-C5	-5.09	103.76	105.80
1	6	1643	U	C4-C5-C6	5.09	122.76	119.70
20	c8	135	GLY	N-CA-C	5.09	125.84	113.10
36	5	155	G	N3-C4-C5	-5.09	126.05	128.60
36	5	286	U	C2-N1-C1'	5.09	123.81	117.70
36	5	661	G	C8-N9-C4	-5.09	104.36	106.40
36	5	1177	G	N3-C4-C5	-5.09	126.05	128.60
36	5	1322	U	N3-C2-O2	5.09	125.77	122.20
36	5	1637	A	C5-C6-N6	5.09	127.78	123.70
36	5	1685	C	C5-C6-N1	-5.09	118.45	121.00
36	5	2866	U	C6-N1-C2	-5.09	117.94	121.00
36	5	2976	A	N3-C4-C5	-5.09	123.23	126.80
36	5	3124	G	O5'-P-OP2	-5.09	101.11	105.70
36	5	3166	C	N3-C2-O2	-5.09	118.33	121.90
48	m1	94	ARG	NE-CZ-NH1	5.09	122.85	120.30
1	2	196	G	O4'-C1'-N9	5.09	112.27	108.20
1	2	441	A	C8-N9-C4	-5.09	103.76	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	828	A	C6-C5-N7	-5.09	128.74	132.30
36	1	947	G	C4-C5-N7	-5.09	108.76	110.80
36	1	1364	C	N1-C2-O2	5.09	121.96	118.90
36	1	2858	U	C2-N1-C1'	5.09	123.81	117.70
37	3	95	A	OP1-P-OP2	-5.09	111.96	119.60
1	6	214	G	C4-N9-C1'	-5.09	119.88	126.50
1	6	1537	C	C2-N1-C1'	-5.09	113.20	118.80
1	6	1663	G	N7-C8-N9	-5.09	110.55	113.10
36	5	1073	U	N3-C4-C5	5.09	117.66	114.60
36	5	2968	G	N1-C2-N3	5.09	126.96	123.90
1	2	45	U	C5-C4-O4	5.09	128.95	125.90
1	2	947	U	C2-N1-C1'	-5.09	111.59	117.70
1	2	970	A	OP2-P-O3'	5.09	116.40	105.20
1	2	1746	A	OP1-P-O3'	5.09	116.40	105.20
1	2	1796	C	N3-C4-C5	-5.09	119.86	121.90
36	1	42	C	C5-C4-N4	-5.09	116.64	120.20
36	1	71	A	O5'-P-OP2	5.09	116.81	110.70
36	1	2417	U	C5-C6-N1	-5.09	120.15	122.70
36	1	2656	A	OP1-P-OP2	5.09	127.24	119.60
36	1	2816	G	N1-C2-N3	5.09	126.95	123.90
61	N5	115	ARG	NE-CZ-NH2	-5.09	117.75	120.30
1	6	112	A	C5-C6-N6	-5.09	119.63	123.70
1	6	1387	G	C4-C5-N7	-5.09	108.76	110.80
1	6	1571	C	C4-C5-C6	5.09	119.95	117.40
1	6	1760	G	N1-C6-O6	-5.09	116.84	119.90
36	5	23	A	C5-N7-C8	-5.09	101.35	103.90
36	5	650	C	C5-C6-N1	-5.09	118.45	121.00
36	5	1061	A	O4'-C1'-N9	5.09	112.27	108.20
36	5	1063	G	C2-N3-C4	-5.09	109.36	111.90
36	5	1914	G	C5-N7-C8	-5.09	101.75	104.30
36	5	2245	C	C4-C5-C6	5.09	119.95	117.40
36	5	2746	A	C5-C6-N6	5.09	127.77	123.70
36	5	2835	U	OP2-P-O3'	5.09	116.40	105.20
36	5	2848	G	C5-N7-C8	-5.09	101.75	104.30
36	5	3145	C	O5'-P-OP2	-5.09	101.12	105.70
1	2	1071	U	C5-C4-O4	5.09	128.95	125.90
36	1	992	A	C4-C5-C6	-5.09	114.45	117.00
36	1	1189	C	N1-C2-O2	-5.09	115.85	118.90
36	1	1461	A	C5-C6-N6	-5.09	119.63	123.70
36	1	2738	A	O5'-P-OP2	-5.09	101.12	105.70
36	1	2895	G	N7-C8-N9	5.09	115.64	113.10
36	1	3300	U	C2-N1-C1'	5.09	123.81	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	52	A	P-O3'-C3'	-5.09	113.59	119.70
1	6	286	C	C5-C4-N4	-5.09	116.64	120.20
1	6	369	A	N1-C6-N6	5.09	121.65	118.60
1	6	977	A	C6-C5-N7	-5.09	128.74	132.30
1	6	1173	C	N3-C4-C5	5.09	123.94	121.90
1	6	1284	C	O5'-P-OP2	-5.09	101.12	105.70
36	5	155	G	C2-N3-C4	5.09	114.44	111.90
36	5	770	G	O5'-P-OP2	5.09	116.81	110.70
36	5	1448	U	N3-C2-O2	-5.09	118.64	122.20
36	5	1578	C	N1-C2-O2	5.09	121.95	118.90
36	5	1582	C	N3-C4-C5	5.09	123.94	121.90
36	5	1760	A	C5-C6-N6	5.09	127.77	123.70
36	5	2678	A	N9-C4-C5	5.09	107.84	105.80
36	5	3266	G	N9-C4-C5	5.09	107.44	105.40
37	7	105	C	N3-C2-O2	-5.09	118.34	121.90
36	1	661	G	OP1-P-OP2	5.09	127.23	119.60
36	1	2383	C	N3-C4-N4	5.09	121.56	118.00
36	1	3213	A	C8-N9-C4	-5.09	103.77	105.80
38	4	129	C	OP2-P-O3'	5.09	116.39	105.20
1	6	409	C	C6-N1-C2	-5.09	118.27	120.30
1	6	783	G	C8-N9-C1'	-5.09	120.39	127.00
36	5	1889	G	C5-N7-C8	-5.09	101.76	104.30
36	5	2947	G	C2-N3-C4	5.09	114.44	111.90
1	2	350	U	C2-N1-C1'	-5.09	111.60	117.70
1	2	1274	C	OP1-P-O3'	-5.09	94.01	105.20
1	2	1427	A	N3-C4-C5	-5.09	123.24	126.80
36	1	823	C	O5'-P-OP1	5.09	116.80	110.70
36	1	980	A	C4-C5-C6	5.09	119.54	117.00
36	1	1628	C	C6-N1-C2	-5.09	118.27	120.30
36	1	1661	G	N1-C2-N3	5.09	126.95	123.90
36	1	1704	A	C5-C6-N1	-5.09	115.16	117.70
36	1	2297	U	C2-N3-C4	-5.09	123.95	127.00
36	1	2579	G	N1-C6-O6	-5.09	116.85	119.90
36	1	2819	A	C4-C5-C6	-5.09	114.46	117.00
36	1	2986	U	N3-C4-O4	5.09	122.96	119.40
1	6	555	A	C6-N1-C2	-5.09	115.55	118.60
1	6	586	G	C4-C5-N7	-5.09	108.77	110.80
1	6	927	C	C2-N1-C1'	5.09	124.40	118.80
1	6	1515	A	O4'-C1'-N9	-5.09	104.13	108.20
1	6	1516	A	C6-N1-C2	-5.09	115.55	118.60
1	6	1602	C	N1-C2-N3	5.09	122.76	119.20
36	5	577	C	N3-C4-N4	-5.09	114.44	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	614	C	C4-C5-C6	-5.09	114.86	117.40
36	5	619	A	O4'-C1'-N9	-5.09	104.13	108.20
36	5	684	G	C4-N9-C1'	-5.09	119.89	126.50
36	5	819	U	C2-N3-C4	5.09	130.05	127.00
36	5	825	U	C2-N1-C1'	-5.09	111.60	117.70
36	5	872	U	OP1-P-OP2	-5.09	111.97	119.60
36	5	919	U	N1-C2-O2	-5.09	119.24	122.80
36	5	1922	A	N3-C4-N9	-5.09	123.33	127.40
36	5	2654	C	C4-C5-C6	-5.09	114.86	117.40
37	7	87	G	C5-C6-O6	-5.09	125.55	128.60
1	2	21	U	C6-N1-C1'	-5.08	114.08	121.20
36	1	300	G	N3-C4-N9	-5.08	122.95	126.00
36	1	1743	G	C8-N9-C1'	5.08	133.61	127.00
36	1	2625	C	C4-C5-C6	-5.08	114.86	117.40
36	1	2953	U	C2-N1-C1'	5.08	123.80	117.70
36	1	3064	U	N3-C2-O2	5.08	125.76	122.20
62	N6	7	ASP	CB-CG-OD1	-5.08	113.72	118.30
1	6	1624	C	C5-C6-N1	-5.08	118.46	121.00
36	5	110	G	C6-C5-N7	-5.08	127.35	130.40
36	5	956	U	OP1-P-OP2	5.08	127.23	119.60
36	5	1658	G	N3-C4-C5	-5.08	126.06	128.60
36	5	2337	C	N1-C2-N3	5.08	122.76	119.20
36	1	28	C	O5'-P-OP2	-5.08	101.12	105.70
36	1	98	G	C5-C6-N1	5.08	114.04	111.50
36	1	211	A	C4-N9-C1'	-5.08	117.15	126.30
36	1	1180	A	N1-C2-N3	5.08	131.84	129.30
36	1	1374	G	O5'-P-OP2	-5.08	101.12	105.70
36	1	2211	U	C6-N1-C2	-5.08	117.95	121.00
36	1	3213	A	N7-C8-N9	5.08	116.34	113.80
41	L4	230	VAL	CB-CA-C	-5.08	101.74	111.40
1	6	905	A	O4'-C1'-N9	5.08	112.27	108.20
1	6	1627	U	N3-C4-C5	-5.08	111.55	114.60
36	5	1480	G	C5-C6-O6	-5.08	125.55	128.60
36	5	1900	A	C2-N3-C4	5.08	113.14	110.60
36	5	2102	U	C6-N1-C2	-5.08	117.95	121.00
36	5	2142	A	O4'-C1'-N9	-5.08	104.13	108.20
36	5	2327	U	OP1-P-O3'	-5.08	94.02	105.20
36	5	2331	C	N3-C4-C5	-5.08	119.87	121.90
36	5	2633	U	C4-C5-C6	5.08	122.75	119.70
36	5	3140	G	C5-N7-C8	-5.08	101.76	104.30
38	8	54	A	C5-N7-C8	-5.08	101.36	103.90
38	8	116	G	N7-C8-N9	5.08	115.64	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1235	C	N1-C2-O2	-5.08	115.85	118.90
36	1	429	U	N3-C2-O2	-5.08	118.64	122.20
36	1	495	G	C5-C6-O6	5.08	131.65	128.60
36	1	1209	G	C6-N1-C2	-5.08	122.05	125.10
36	1	2187	G	N1-C6-O6	-5.08	116.85	119.90
36	1	2349	U	OP2-P-O3'	5.08	116.38	105.20
36	1	2933	A	C4-C5-N7	5.08	113.24	110.70
36	1	3272	C	C4-C5-C6	5.08	119.94	117.40
38	4	59	A	N9-C4-C5	5.08	107.83	105.80
38	4	117	C	C2-N1-C1'	-5.08	113.21	118.80
1	6	400	A	C4-C5-C6	5.08	119.54	117.00
1	6	571	G	OP1-P-OP2	-5.08	111.98	119.60
1	6	1192	C	C5-C4-N4	-5.08	116.64	120.20
36	5	867	G	C4-N9-C1'	5.08	133.11	126.50
36	5	1618	G	O5'-P-OP2	-5.08	101.13	105.70
36	5	2418	G	C8-N9-C1'	-5.08	120.39	127.00
36	5	2419	A	C8-N9-C4	-5.08	103.77	105.80
36	5	2850	G	N1-C6-O6	-5.08	116.85	119.90
36	5	3189	G	N3-C4-N9	5.08	129.05	126.00
1	2	423	G	C2-N3-C4	5.08	114.44	111.90
36	1	83	U	O5'-P-OP2	-5.08	101.13	105.70
36	1	1524	A	C6-N1-C2	-5.08	115.55	118.60
36	1	2347	U	C2-N3-C4	5.08	130.05	127.00
36	5	89	A	N1-C6-N6	-5.08	115.55	118.60
36	5	631	U	C5-C4-O4	-5.08	122.85	125.90
36	5	647	A	OP1-P-OP2	-5.08	111.98	119.60
36	5	952	A	N1-C6-N6	-5.08	115.55	118.60
36	5	1086	C	N3-C4-C5	-5.08	119.87	121.90
36	5	1163	A	C2-N3-C4	-5.08	108.06	110.60
36	5	1920	U	N1-C2-N3	5.08	117.95	114.90
36	5	2119	A	N1-C2-N3	5.08	131.84	129.30
36	5	3042	U	C2-N3-C4	-5.08	123.95	127.00
1	2	534	A	C4-C5-C6	-5.08	114.46	117.00
1	2	1610	G	C4-C5-C6	5.08	121.85	118.80
36	1	326	U	C2-N1-C1'	5.08	123.79	117.70
36	1	335	G	N3-C4-N9	-5.08	122.95	126.00
36	1	410	U	N3-C4-O4	-5.08	115.84	119.40
36	1	583	G	N1-C2-N2	-5.08	111.63	116.20
36	1	636	C	O5'-P-OP2	5.08	116.79	110.70
36	1	831	G	C5-C6-O6	-5.08	125.55	128.60
36	1	945	C	C2-N1-C1'	5.08	124.39	118.80
36	1	2403	G	O3'-P-O5'	-5.08	94.35	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2701	U	C6-N1-C2	-5.08	117.95	121.00
36	1	3319	U	N3-C2-O2	-5.08	118.64	122.20
1	6	803	A	C8-N9-C4	-5.08	103.77	105.80
1	6	1052	U	O5'-P-OP1	-5.08	101.13	105.70
1	6	1570	A	N9-C1'-C2'	-5.08	106.41	112.00
1	6	1651	A	N7-C8-N9	5.08	116.34	113.80
36	5	409	A	O4'-C1'-N9	5.08	112.26	108.20
36	5	864	G	N9-C4-C5	-5.08	103.37	105.40
36	5	1045	C	OP2-P-O3'	5.08	116.37	105.20
36	5	1365	G	N1-C2-N2	5.08	120.77	116.20
36	5	1377	G	C5-C6-N1	-5.08	108.96	111.50
36	5	1394	A	N1-C6-N6	5.08	121.65	118.60
36	5	1486	G	C2-N3-C4	-5.08	109.36	111.90
36	5	2813	A	C5-N7-C8	-5.08	101.36	103.90
36	5	2854	U	N3-C4-C5	-5.08	111.55	114.60
36	5	2937	G	N3-C4-N9	5.08	129.05	126.00
36	5	3164	C	C6-N1-C2	5.08	122.33	120.30
37	7	13	A	C8-N9-C4	-5.08	103.77	105.80
36	1	752	C	C2-N3-C4	-5.08	117.36	119.90
36	1	3270	U	N3-C4-O4	-5.08	115.85	119.40
1	6	402	C	N3-C2-O2	-5.08	118.35	121.90
1	6	1079	U	N3-C2-O2	5.08	125.75	122.20
36	5	208	C	N1-C2-O2	-5.08	115.85	118.90
36	5	425	G	OP2-P-O3'	5.08	116.37	105.20
36	5	650	C	N1-C2-N3	5.08	122.75	119.20
36	5	1929	G	N1-C2-N3	5.08	126.95	123.90
37	7	30	G	N1-C2-N3	5.08	126.95	123.90
38	8	41	A	C2-N3-C4	-5.08	108.06	110.60
1	2	1102	G	C4-C5-N7	5.08	112.83	110.80
1	2	1324	G	C8-N9-C1'	5.08	133.60	127.00
1	2	1520	U	C5-C4-O4	-5.08	122.86	125.90
1	2	1582	U	C2-N1-C1'	5.08	123.79	117.70
36	1	25	U	C2-N3-C4	5.08	130.04	127.00
36	1	964	G	C5-C6-N1	5.08	114.04	111.50
36	1	1303	A	N1-C2-N3	5.08	131.84	129.30
36	1	1520	G	OP2-P-O3'	5.08	116.36	105.20
36	1	2957	G	N7-C8-N9	5.08	115.64	113.10
36	1	3006	A	C4-C5-C6	5.08	119.54	117.00
36	1	3075	G	N3-C4-C5	5.08	131.14	128.60
1	6	62	A	C4-C5-N7	-5.08	108.16	110.70
1	6	246	G	N3-C4-C5	-5.08	126.06	128.60
1	6	305	C	C6-N1-C2	5.08	122.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	930	A	C6-N1-C2	-5.08	115.55	118.60
1	6	1575	G	C4-C5-C6	-5.08	115.75	118.80
1	6	1785	U	O5'-P-OP2	5.08	116.79	110.70
36	5	303	G	N3-C4-C5	-5.08	126.06	128.60
36	5	561	C	C4-C5-C6	5.08	119.94	117.40
36	5	1335	C	C5-C6-N1	5.08	123.54	121.00
36	5	2863	G	C5-C6-N1	-5.08	108.96	111.50
36	5	3012	A	N9-C4-C5	-5.08	103.77	105.80
36	5	3207	U	N3-C4-O4	-5.08	115.85	119.40
38	8	70	G	N1-C6-O6	-5.08	116.86	119.90
1	2	985	G	N3-C4-N9	5.07	129.04	126.00
36	1	35	A	N9-C4-C5	-5.07	103.77	105.80
36	1	63	A	N1-C2-N3	-5.07	126.76	129.30
36	1	515	C	C6-N1-C1'	-5.07	114.71	120.80
36	1	921	A	O4'-C1'-N9	-5.07	104.14	108.20
36	1	1938	U	N3-C2-O2	5.07	125.75	122.20
36	1	2171	G	C4-C5-N7	-5.07	108.77	110.80
36	1	2184	U	C5-C4-O4	-5.07	122.86	125.90
36	1	2604	U	C4-C5-C6	5.07	122.75	119.70
36	1	2879	C	C6-N1-C2	5.07	122.33	120.30
38	4	62	C	N3-C2-O2	-5.07	118.35	121.90
38	4	85	G	N3-C2-N2	5.07	123.45	119.90
1	6	953	G	N9-C4-C5	-5.07	103.37	105.40
1	6	1071	U	OP1-P-OP2	5.07	127.21	119.60
1	6	1418	G	C6-N1-C2	5.07	128.14	125.10
1	6	1629	G	N3-C4-N9	5.07	129.04	126.00
1	6	1716	C	C6-N1-C2	5.07	122.33	120.30
36	5	49	A	C8-N9-C4	5.07	107.83	105.80
36	5	188	U	N3-C4-O4	5.07	122.95	119.40
36	5	1008	U	N3-C2-O2	5.07	125.75	122.20
36	5	1530	U	C5-C4-O4	-5.07	122.86	125.90
36	5	1652	G	O5'-P-OP1	5.07	116.79	110.70
36	5	1733	G	C4-N9-C1'	5.07	133.09	126.50
36	5	1866	C	C6-N1-C2	-5.07	118.27	120.30
36	5	2150	G	C4-C5-C6	5.07	121.84	118.80
36	5	2858	U	C4-C5-C6	5.07	122.74	119.70
36	5	2859	U	C2-N1-C1'	-5.07	111.61	117.70
36	5	3323	A	N3-C4-C5	-5.07	123.25	126.80
36	1	871	U	N1-C2-O2	-5.07	119.25	122.80
36	1	1190	A	N9-C4-C5	5.07	107.83	105.80
36	1	1471	U	C5-C6-N1	-5.07	120.16	122.70
36	1	1939	G	N3-C4-N9	5.07	129.04	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1951	C	C5-C6-N1	5.07	123.54	121.00
36	1	2686	A	N7-C8-N9	5.07	116.34	113.80
44	L7	202	LEU	CA-CB-CG	-5.07	103.64	115.30
1	6	1584	G	C4-C5-N7	5.07	112.83	110.80
36	5	367	A	N9-C4-C5	5.07	107.83	105.80
36	5	1066	G	O5'-P-OP2	5.07	116.79	110.70
36	5	1363	A	C4-C5-N7	-5.07	108.16	110.70
36	5	1892	G	N1-C2-N2	-5.07	111.64	116.20
36	5	2650	U	N1-C2-N3	5.07	117.94	114.90
36	5	2688	U	C4-C5-C6	5.07	122.74	119.70
29	D7	41	LEU	CA-CB-CG	5.07	126.96	115.30
36	1	369	A	N9-C4-C5	5.07	107.83	105.80
36	1	813	G	C5-C6-O6	-5.07	125.56	128.60
36	1	896	A	C6-N1-C2	-5.07	115.56	118.60
36	1	1100	U	C4-C5-C6	5.07	122.74	119.70
36	1	1423	C	N3-C2-O2	-5.07	118.35	121.90
36	1	1534	A	N7-C8-N9	5.07	116.33	113.80
36	1	1760	A	C8-N9-C4	-5.07	103.77	105.80
36	1	1791	C	N3-C4-N4	-5.07	114.45	118.00
36	1	2858	U	N1-C2-O2	5.07	126.35	122.80
36	1	3296	A	C8-N9-C4	5.07	107.83	105.80
38	4	21	C	C6-N1-C2	5.07	122.33	120.30
75	O9	6	SER	N-CA-C	-5.07	97.31	111.00
1	6	342	C	C4-C5-C6	5.07	119.94	117.40
1	6	410	A	C5-C6-N6	-5.07	119.64	123.70
1	6	457	G	C8-N9-C4	5.07	108.43	106.40
1	6	628	G	N9-C4-C5	-5.07	103.37	105.40
1	6	967	A	C8-N9-C4	5.07	107.83	105.80
1	6	1003	A	N9-C4-C5	-5.07	103.77	105.80
1	6	1508	U	C4-C5-C6	5.07	122.74	119.70
1	6	1791	A	O5'-P-OP1	5.07	116.78	110.70
36	5	182	U	C4-C5-C6	5.07	122.74	119.70
36	5	804	C	N1-C1'-C2'	-5.07	106.42	112.00
36	5	1041	U	C6-N1-C2	5.07	124.04	121.00
36	5	1078	U	OP1-P-OP2	-5.07	112.00	119.60
36	5	1607	U	N3-C4-O4	5.07	122.95	119.40
36	5	1897	G	C8-N9-C1'	-5.07	120.41	127.00
36	5	2737	C	C2-N3-C4	-5.07	117.36	119.90
36	5	2793	G	C5-N7-C8	-5.07	101.77	104.30
36	5	3082	C	C5-C4-N4	-5.07	116.65	120.20
36	5	3094	A	OP2-P-O3'	5.07	116.35	105.20
36	1	683	U	C6-N1-C2	5.07	124.04	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2248	C	C6-N1-C2	5.07	122.33	120.30
36	1	3141	A	C4-C5-N7	5.07	113.23	110.70
1	6	1194	A	C4-C5-C6	5.07	119.53	117.00
36	5	1724	U	N1-C2-O2	-5.07	119.25	122.80
36	5	2255	A	C5-C6-N1	5.07	120.23	117.70
36	5	3184	A	C2-N3-C4	-5.07	108.06	110.60
1	2	18	C	C2-N1-C1'	5.07	124.37	118.80
1	2	30	G	C5-C6-O6	-5.07	125.56	128.60
1	2	440	U	N1-C2-O2	-5.07	119.25	122.80
1	2	880	C	C6-N1-C2	-5.07	118.27	120.30
1	2	1358	G	C4-N9-C1'	-5.07	119.91	126.50
36	1	637	C	C6-N1-C1'	-5.07	114.72	120.80
36	1	960	U	C6-N1-C2	5.07	124.04	121.00
36	1	1184	A	C2-N3-C4	-5.07	108.07	110.60
36	1	1417	G	O4'-C1'-N9	-5.07	104.14	108.20
36	1	1708	C	C2-N1-C1'	-5.07	113.23	118.80
36	1	2433	U	C5-C6-N1	5.07	125.23	122.70
36	1	2636	A	N9-C4-C5	5.07	107.83	105.80
36	1	3193	C	C5-C6-N1	5.07	123.53	121.00
55	M9	44	LEU	CA-CB-CG	5.07	126.96	115.30
1	6	136	C	C6-N1-C1'	-5.07	114.72	120.80
1	6	1169	G	N1-C2-N3	5.07	126.94	123.90
1	6	1582	U	O4'-C1'-N1	5.07	112.25	108.20
1	6	1730	A	C5-C6-N1	5.07	120.23	117.70
1	6	1766	A	C6-C5-N7	-5.07	128.75	132.30
24	d2	57	ARG	NE-CZ-NH2	-5.07	117.77	120.30
36	5	674	G	C5-C6-N1	5.07	114.03	111.50
36	5	1111	U	C2-N1-C1'	-5.07	111.62	117.70
36	5	1225	A	N7-C8-N9	-5.07	111.27	113.80
36	5	1303	A	N3-C4-C5	5.07	130.35	126.80
36	5	1433	A	N7-C8-N9	5.07	116.33	113.80
36	5	1443	G	N3-C2-N2	-5.07	116.35	119.90
36	5	1604	G	C8-N9-C4	-5.07	104.37	106.40
36	5	1654	A	N7-C8-N9	-5.07	111.27	113.80
36	5	1791	C	N3-C4-N4	5.07	121.55	118.00
36	5	2238	G	C4-C5-N7	5.07	112.83	110.80
36	5	2416	U	C5-C4-O4	5.07	128.94	125.90
36	5	2801	A	N1-C6-N6	5.07	121.64	118.60
36	5	3083	G	C4-C5-N7	5.07	112.83	110.80
36	5	3117	C	C6-N1-C1'	-5.07	114.72	120.80
36	5	3394	U	C5-C4-O4	5.07	128.94	125.90
37	7	8	G	N1-C2-N3	5.07	126.94	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	C7	73	LEU	CA-CB-CG	5.07	126.95	115.30
36	1	347	G	N3-C2-N2	5.07	123.45	119.90
36	1	605	U	N1-C2-N3	5.07	117.94	114.90
36	1	688	G	N7-C8-N9	5.07	115.63	113.10
36	1	1150	A	C5-C6-N6	5.07	127.75	123.70
36	1	1511	U	N1-C2-N3	5.07	117.94	114.90
36	1	1656	A	OP1-P-OP2	5.07	127.20	119.60
36	1	1774	C	C5-C4-N4	-5.07	116.66	120.20
36	1	1843	C	C5-C6-N1	5.07	123.53	121.00
36	1	2114	C	O5'-P-OP1	5.07	116.78	110.70
36	1	2879	C	C5-C4-N4	-5.07	116.66	120.20
36	1	3094	A	C8-N9-C4	-5.07	103.77	105.80
36	1	3304	U	C2-N1-C1'	5.07	123.78	117.70
1	6	71	A	C8-N9-C4	-5.07	103.77	105.80
1	6	119	A	O5'-P-OP1	-5.07	101.14	105.70
1	6	1596	C	C6-N1-C1'	-5.07	114.72	120.80
36	5	1332	A	C6-N1-C2	-5.07	115.56	118.60
36	5	1356	U	C5-C6-N1	5.07	125.23	122.70
36	5	2365	C	C6-N1-C2	5.07	122.33	120.30
36	5	2756	C	N3-C2-O2	-5.07	118.35	121.90
36	5	2864	A	C4-C5-N7	5.07	113.23	110.70
1	2	360	A	C4-C5-C6	-5.06	114.47	117.00
1	2	964	U	C6-N1-C1'	-5.06	114.11	121.20
36	1	803	C	C2-N3-C4	-5.06	117.37	119.90
36	1	877	C	OP1-P-OP2	-5.06	112.00	119.60
36	1	932	U	O4'-C1'-N1	5.06	112.25	108.20
36	1	1632	A	N7-C8-N9	5.06	116.33	113.80
36	1	1728	G	N3-C4-C5	-5.06	126.07	128.60
36	1	2946	A	C5'-C4'-O4'	5.06	115.18	109.10
1	6	596	C	N1-C2-O2	-5.06	115.86	118.90
1	6	984	G	N7-C8-N9	-5.06	110.57	113.10
1	6	1733	C	C6-N1-C2	5.06	122.33	120.30
36	5	668	G	C6-C5-N7	5.06	133.44	130.40
36	5	2375	G	O4'-C1'-N9	5.06	112.25	108.20
1	2	1165	G	C8-N9-C4	5.06	108.42	106.40
1	2	1220	C	C6-N1-C2	-5.06	118.28	120.30
1	2	1550	A	C6-C5-N7	-5.06	128.76	132.30
36	1	67	A	C8-N9-C4	5.06	107.83	105.80
36	1	267	G	C8-N9-C1'	5.06	133.58	127.00
36	1	513	G	C5-C6-N1	-5.06	108.97	111.50
36	1	1142	G	O5'-P-OP2	-5.06	101.14	105.70
36	1	1863	G	C4-C5-N7	5.06	112.83	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2280	A	C5'-C4'-O4'	5.06	115.17	109.10
36	1	2519	A	C8-N9-C4	-5.06	103.78	105.80
36	1	2882	U	O4'-C1'-N1	5.06	112.25	108.20
1	6	250	C	C6-N1-C1'	-5.06	114.72	120.80
1	6	253	A	C4-C5-C6	-5.06	114.47	117.00
1	6	957	G	C5-C6-O6	-5.06	125.56	128.60
1	6	1301	U	C5-C4-O4	-5.06	122.86	125.90
1	6	1304	G	C4-C5-N7	-5.06	108.78	110.80
1	6	1717	G	C5-C6-O6	-5.06	125.56	128.60
1	6	1732	A	N3-C4-N9	-5.06	123.35	127.40
36	5	303	G	N3-C4-N9	5.06	129.04	126.00
36	5	340	C	N1-C2-O2	-5.06	115.86	118.90
36	5	652	G	N3-C2-N2	5.06	123.44	119.90
36	5	682	U	N3-C4-C5	-5.06	111.56	114.60
36	5	683	U	N3-C4-O4	5.06	122.94	119.40
36	5	832	G	P-O3'-C3'	-5.06	113.62	119.70
36	5	835	G	C6-C5-N7	5.06	133.44	130.40
36	5	1048	A	N1-C2-N3	5.06	131.83	129.30
36	5	1382	G	C5-C6-O6	-5.06	125.56	128.60
36	5	1447	G	N3-C4-C5	5.06	131.13	128.60
36	5	1484	U	N1-C2-O2	-5.06	119.26	122.80
36	5	1947	G	N1-C2-N2	-5.06	111.64	116.20
36	5	2119	A	N9-C4-C5	-5.06	103.78	105.80
36	5	2379	U	O5'-P-OP1	5.06	116.78	110.70
36	5	2905	U	OP1-P-OP2	-5.06	112.01	119.60
37	7	76	A	C8-N9-C4	5.06	107.83	105.80
36	1	73	C	N3-C4-N4	5.06	121.54	118.00
36	1	876	A	C4-C5-C6	5.06	119.53	117.00
36	1	1166	G	C5-C6-O6	-5.06	125.56	128.60
46	L9	23	ARG	NE-CZ-NH1	5.06	122.83	120.30
1	6	139	C	P-O3'-C3'	5.06	125.77	119.70
1	6	342	C	N3-C4-N4	5.06	121.54	118.00
36	5	1127	G	C5-C6-N1	5.06	114.03	111.50
36	5	1869	C	N3-C4-C5	-5.06	119.88	121.90
36	5	1871	U	N3-C4-O4	5.06	122.94	119.40
36	1	592	A	O5'-P-OP1	-5.06	101.15	105.70
36	1	686	G	C8-N9-C4	-5.06	104.38	106.40
36	1	954	U	N3-C2-O2	5.06	125.74	122.20
36	1	1176	C	N3-C2-O2	5.06	125.44	121.90
36	1	1319	G	N3-C2-N2	5.06	123.44	119.90
36	1	1380	G	N3-C4-N9	-5.06	122.96	126.00
36	1	1911	A	C6-N1-C2	-5.06	115.56	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	158	U	N1-C2-N3	5.06	117.94	114.90
1	6	301	A	C4-C5-N7	-5.06	108.17	110.70
1	6	440	U	P-O3'-C3'	5.06	125.77	119.70
1	6	557	G	C3'-C2'-C1'	5.06	105.55	101.50
1	6	814	A	O5'-P-OP2	-5.06	101.15	105.70
1	6	1113	A	C6-N1-C2	-5.06	115.56	118.60
1	6	1165	G	OP2-P-O3'	5.06	116.33	105.20
1	6	1640	C	C5-C4-N4	-5.06	116.66	120.20
36	5	1209	G	C6-C5-N7	-5.06	127.36	130.40
36	5	1307	G	C5-N7-C8	-5.06	101.77	104.30
36	5	2303	A	N3-C4-C5	5.06	130.34	126.80
36	5	2801	A	O5'-P-OP1	-5.06	101.15	105.70
36	5	2899	C	N1-C2-N3	5.06	122.74	119.20
1	2	1595	U	OP1-P-O3'	5.06	116.33	105.20
1	2	1645	G	N1-C6-O6	-5.06	116.86	119.90
36	1	41	G	C6-C5-N7	5.06	133.43	130.40
36	1	63	A	N9-C4-C5	-5.06	103.78	105.80
36	1	77	A	OP2-P-O3'	5.06	116.33	105.20
36	1	193	C	C2-N3-C4	5.06	122.43	119.90
36	1	213	A	N9-C1'-C2'	-5.06	106.44	112.00
36	1	364	G	C4-C5-N7	5.06	112.82	110.80
36	1	571	U	C6-N1-C2	-5.06	117.97	121.00
36	1	663	C	O5'-P-OP2	-5.06	101.15	105.70
36	1	1512	U	OP1-P-O3'	-5.06	94.07	105.20
36	1	1774	C	C6-N1-C1'	-5.06	114.73	120.80
36	1	1796	G	N9-C4-C5	5.06	107.42	105.40
36	1	1876	U	N1-C2-N3	5.06	117.94	114.90
36	1	1906	G	C8-N9-C4	5.06	108.42	106.40
36	1	2723	U	N1-C2-N3	5.06	117.93	114.90
36	1	2825	C	N3-C4-N4	5.06	121.54	118.00
38	4	21	C	N3-C4-C5	5.06	123.92	121.90
1	6	627	C	C6-N1-C2	5.06	122.32	120.30
36	5	209	A	C8-N9-C4	5.06	107.82	105.80
36	5	564	G	C4-N9-C1'	5.06	133.08	126.50
36	5	658	G	C5-N7-C8	-5.06	101.77	104.30
36	5	785	G	N9-C4-C5	5.06	107.42	105.40
36	5	1173	U	O5'-P-OP2	-5.06	101.15	105.70
36	5	1293	U	C6-N1-C2	5.06	124.03	121.00
36	5	1302	A	OP2-P-O3'	5.06	116.33	105.20
36	5	1311	G	C6-C5-N7	-5.06	127.36	130.40
36	5	1381	A	C4-C5-C6	5.06	119.53	117.00
36	5	1746	U	C5-C6-N1	5.06	125.23	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1879	A	OP1-P-OP2	-5.06	112.01	119.60
36	5	2349	U	C2-N1-C1'	5.06	123.77	117.70
36	5	3059	G	C5-C6-N1	5.06	114.03	111.50
36	5	3077	A	N3-C4-C5	5.06	130.34	126.80
36	1	912	G	N1-C2-N3	5.06	126.93	123.90
36	1	952	A	N7-C8-N9	5.06	116.33	113.80
36	1	1295	G	OP1-P-OP2	5.06	127.18	119.60
36	1	1328	C	C5-C6-N1	5.06	123.53	121.00
36	1	1458	U	C2-N3-C4	-5.06	123.97	127.00
36	1	1509	A	N1-C6-N6	5.06	121.63	118.60
36	1	1926	C	C4-C5-C6	5.06	119.93	117.40
36	1	2227	C	P-O3'-C3'	5.06	125.77	119.70
36	1	3316	A	N1-C6-N6	5.06	121.63	118.60
37	3	37	G	N9-C4-C5	-5.06	103.38	105.40
36	5	206	G	O5'-P-OP1	-5.06	101.15	105.70
36	5	735	A	C5-C6-N1	-5.06	115.17	117.70
36	5	2945	G	OP1-P-O3'	5.06	116.32	105.20
38	8	41	A	OP2-P-O3'	5.06	116.32	105.20
36	1	147	U	C4-C5-C6	5.05	122.73	119.70
36	1	291	C	C6-N1-C1'	5.05	126.86	120.80
36	1	733	G	C6-C5-N7	-5.05	127.37	130.40
36	1	917	A	C5'-C4'-O4'	5.05	115.17	109.10
36	1	1129	A	C5-N7-C8	-5.05	101.37	103.90
36	1	1947	G	C5-C6-O6	-5.05	125.57	128.60
36	1	2373	A	N3-C4-N9	-5.05	123.36	127.40
36	1	2660	G	C2-N3-C4	-5.05	109.37	111.90
36	1	2808	A	N9-C4-C5	-5.05	103.78	105.80
36	1	2855	U	C4-C5-C6	5.05	122.73	119.70
36	1	3121	U	OP1-P-O3'	5.05	116.32	105.20
1	6	159	U	N3-C2-O2	5.05	125.74	122.20
1	6	754	A	C5-C6-N1	5.05	120.23	117.70
1	6	829	A	P-O3'-C3'	5.05	125.77	119.70
18	c6	116	LEU	N-CA-C	5.05	124.65	111.00
36	5	366	A	C4-C5-C6	5.05	119.53	117.00
36	5	415	G	C4-C5-N7	5.05	112.82	110.80
36	5	816	A	O5'-P-OP1	5.05	116.77	110.70
36	5	1044	U	O5'-P-OP2	-5.05	101.15	105.70
36	5	1918	C	O4'-C1'-N1	5.05	112.24	108.20
36	5	2645	G	C5-C6-N1	5.05	114.03	111.50
36	5	2735	U	C4-C5-C6	5.05	122.73	119.70
36	5	2948	C	C4-C5-C6	-5.05	114.87	117.40
36	5	2953	U	N1-C2-N3	-5.05	111.87	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3041	U	OP1-P-OP2	5.05	127.18	119.60
38	8	38	U	C4-C5-C6	5.05	122.73	119.70
1	2	453	U	N1-C2-O2	5.05	126.34	122.80
36	1	182	U	C6-N1-C1'	5.05	128.27	121.20
36	1	1025	A	C8-N9-C4	-5.05	103.78	105.80
36	1	1461	A	C4-C5-N7	5.05	113.23	110.70
1	6	425	A	C4-C5-C6	-5.05	114.47	117.00
1	6	1001	A	N3-C4-C5	-5.05	123.26	126.80
1	6	1171	A	C5-C6-N6	5.05	127.74	123.70
1	6	1286	U	C5-C6-N1	-5.05	120.17	122.70
36	5	694	C	N3-C4-C5	5.05	123.92	121.90
36	5	955	U	OP2-P-O3'	5.05	116.32	105.20
36	5	2875	U	O5'-P-OP2	-5.05	101.15	105.70
40	l3	240	ARG	CG-CD-NE	-5.05	101.19	111.80
1	2	370	A	N1-C6-N6	-5.05	115.57	118.60
1	2	771	A	N7-C8-N9	5.05	116.33	113.80
1	2	1363	U	O4'-C1'-N1	5.05	112.24	108.20
36	1	198	A	C4-C5-C6	5.05	119.53	117.00
36	1	1002	A	C6-C5-N7	5.05	135.84	132.30
36	1	1205	A	C5-C6-N6	-5.05	119.66	123.70
36	1	1670	C	N3-C2-O2	5.05	125.44	121.90
36	1	1682	U	O5'-P-OP1	-5.05	101.15	105.70
36	1	1839	A	N1-C2-N3	5.05	131.83	129.30
36	1	2891	U	N1-C2-O2	-5.05	119.26	122.80
36	1	2920	U	OP2-P-O3'	5.05	116.31	105.20
36	1	3325	G	C5-N7-C8	5.05	106.83	104.30
37	3	3	U	OP1-P-OP2	5.05	127.18	119.60
41	L4	325	LEU	CA-CB-CG	-5.05	103.68	115.30
1	6	153	G	O5'-P-OP2	5.05	116.76	110.70
36	5	93	C	C6-N1-C2	5.05	122.32	120.30
36	5	197	G	C6-N1-C2	5.05	128.13	125.10
36	5	386	A	C5-N7-C8	5.05	106.43	103.90
36	5	1196	C	C2-N1-C1'	-5.05	113.24	118.80
36	5	1888	U	N1-C1'-C2'	-5.05	106.44	112.00
36	5	2161	G	O5'-P-OP2	5.05	116.76	110.70
36	5	2304	C	C5-C4-N4	-5.05	116.66	120.20
36	5	2964	G	C5-C6-O6	5.05	131.63	128.60
36	5	3054	U	N3-C2-O2	5.05	125.74	122.20
36	5	3331	U	O5'-P-OP1	-5.05	101.15	105.70
1	2	862	A	C8-N9-C4	5.05	107.82	105.80
36	1	64	G	OP2-P-O3'	5.05	116.31	105.20
36	1	151	A	C6-C5-N7	-5.05	128.76	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	694	C	N3-C4-C5	5.05	123.92	121.90
36	1	931	C	C6-N1-C2	-5.05	118.28	120.30
36	1	1381	A	C5-C6-N1	-5.05	115.17	117.70
36	1	1724	U	N3-C2-O2	-5.05	118.67	122.20
36	1	2249	G	C5-C6-O6	5.05	131.63	128.60
36	1	2309	A	C4-C5-N7	5.05	113.22	110.70
36	1	2969	A	N3-C4-N9	-5.05	123.36	127.40
36	1	3209	A	C6-N1-C2	5.05	121.63	118.60
36	1	3271	G	N1-C6-O6	-5.05	116.87	119.90
1	6	19	A	C4-C5-C6	5.05	119.53	117.00
1	6	66	U	OP1-P-O3'	5.05	116.31	105.20
1	6	176	C	C5-C6-N1	5.05	123.52	121.00
1	6	357	G	C5-C6-O6	-5.05	125.57	128.60
1	6	1017	U	OP1-P-O3'	5.05	116.31	105.20
1	6	1115	U	N3-C4-C5	5.05	117.63	114.60
36	5	350	C	N1-C2-O2	5.05	121.93	118.90
36	5	589	A	C4-C5-C6	5.05	119.53	117.00
36	5	985	U	O5'-P-OP1	5.05	116.76	110.70
36	5	2585	G	C2-N3-C4	5.05	114.42	111.90
36	5	3134	A	C6-N1-C2	-5.05	115.57	118.60
37	7	2	G	C4-C5-N7	-5.05	108.78	110.80
51	m5	38	ARG	NE-CZ-NH1	-5.05	117.78	120.30
36	1	1429	G	C5-C6-N1	-5.05	108.98	111.50
36	1	3101	G	C5-C6-O6	-5.05	125.57	128.60
36	1	3341	U	C5-C4-O4	5.05	128.93	125.90
38	4	10	A	C4-C5-N7	-5.05	108.18	110.70
1	6	784	C	N3-C4-C5	-5.05	119.88	121.90
1	6	1169	G	N1-C6-O6	-5.05	116.87	119.90
36	5	1170	A	C5-C6-N1	-5.05	115.18	117.70
36	5	1519	G	C5-C6-O6	-5.05	125.57	128.60
36	5	1836	C	C6-N1-C2	-5.05	118.28	120.30
1	2	61	A	C5-N7-C8	-5.05	101.38	103.90
1	2	581	U	C6-N1-C1'	-5.05	114.14	121.20
1	2	1355	C	C6-N1-C2	-5.05	118.28	120.30
1	2	1517	U	C4-C5-C6	5.05	122.73	119.70
36	1	589	A	C5-C6-N1	5.05	120.22	117.70
36	1	2361	A	N7-C8-N9	-5.05	111.28	113.80
36	1	2513	U	P-O3'-C3'	5.05	125.76	119.70
36	1	2877	G	N3-C4-C5	5.05	131.12	128.60
1	6	687	G	N3-C2-N2	-5.05	116.37	119.90
1	6	1007	C	C2-N3-C4	-5.05	117.38	119.90
1	6	1438	G	C4-C5-N7	5.05	112.82	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	578	A	N3-C4-N9	-5.05	123.36	127.40
36	5	591	G	N1-C2-N2	-5.05	111.66	116.20
36	5	716	A	OP2-P-O3'	5.05	116.30	105.20
36	5	1634	G	C4-N9-C1'	5.05	133.06	126.50
36	5	1791	C	C5-C4-N4	-5.05	116.67	120.20
36	5	2225	U	C2-N1-C1'	5.05	123.76	117.70
36	1	842	G	C4-C5-C6	5.04	121.83	118.80
36	1	1552	G	N3-C4-C5	-5.04	126.08	128.60
36	1	2379	U	OP2-P-O3'	5.04	116.30	105.20
1	6	102	U	C2-N3-C4	-5.04	123.97	127.00
1	6	558	U	C6-N1-C1'	-5.04	114.14	121.20
1	6	1001	A	C4-N9-C1'	5.04	135.38	126.30
1	6	1746	A	C6-C5-N7	5.04	135.83	132.30
36	5	567	G	C5-C6-O6	-5.04	125.57	128.60
36	5	2206	G	C8-N9-C4	5.04	108.42	106.40
36	5	3147	G	N1-C6-O6	5.04	122.93	119.90
1	2	401	A	C5-C6-N6	-5.04	119.67	123.70
1	2	1268	G	N1-C6-O6	-5.04	116.87	119.90
36	1	313	A	C5-C6-N6	-5.04	119.66	123.70
36	1	694	C	C2-N3-C4	-5.04	117.38	119.90
36	1	889	U	N3-C4-C5	-5.04	111.57	114.60
36	1	968	G	C8-N9-C1'	-5.04	120.44	127.00
36	1	1199	C	C4-C5-C6	5.04	119.92	117.40
36	1	1636	U	C6-N1-C2	-5.04	117.97	121.00
36	1	2302	G	N3-C4-C5	-5.04	126.08	128.60
36	1	2310	U	N3-C2-O2	-5.04	118.67	122.20
36	1	2406	C	C5-C6-N1	5.04	123.52	121.00
1	6	179	A	N9-C4-C5	5.04	107.82	105.80
36	5	777	U	OP1-P-OP2	5.04	127.17	119.60
36	5	1057	A	C8-N9-C4	5.04	107.82	105.80
36	5	1308	A	C4-C5-C6	-5.04	114.48	117.00
36	5	1336	U	N1-C2-O2	-5.04	119.27	122.80
36	5	1400	G	C4-N9-C1'	5.04	133.06	126.50
36	5	2140	U	N3-C4-O4	5.04	122.93	119.40
1	2	402	C	N3-C4-N4	5.04	121.53	118.00
1	2	775	G	C6-C5-N7	-5.04	127.38	130.40
1	2	1010	C	O5'-P-OP1	5.04	116.75	110.70
1	2	1015	U	C5-C4-O4	5.04	128.93	125.90
36	1	166	C	C6-N1-C2	-5.04	118.28	120.30
36	1	349	A	C4-C5-N7	-5.04	108.18	110.70
36	1	690	A	N1-C6-N6	-5.04	115.58	118.60
36	1	769	G	OP1-P-OP2	5.04	127.16	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1146	C	N3-C4-N4	5.04	121.53	118.00
36	1	2127	U	N1-C2-N3	-5.04	111.88	114.90
36	1	2342	U	C5-C6-N1	-5.04	120.18	122.70
36	1	2555	G	C2-N3-C4	-5.04	109.38	111.90
36	1	2699	G	N1-C2-N2	5.04	120.74	116.20
36	1	2805	G	N1-C6-O6	-5.04	116.88	119.90
36	1	2916	U	OP2-P-O3'	5.04	116.29	105.20
36	1	3128	G	OP2-P-O3'	5.04	116.29	105.20
37	3	50	U	C5-C6-N1	5.04	125.22	122.70
1	6	1367	G	N3-C4-N9	5.04	129.03	126.00
1	6	1542	G	N3-C4-N9	5.04	129.03	126.00
1	6	1652	C	C6-N1-C2	-5.04	118.28	120.30
36	5	516	A	C5-C6-N6	-5.04	119.67	123.70
36	5	647	A	N1-C2-N3	5.04	131.82	129.30
36	5	751	A	C5-C6-N1	5.04	120.22	117.70
36	5	1112	A	N1-C6-N6	5.04	121.62	118.60
36	5	2958	A	N1-C2-N3	5.04	131.82	129.30
36	5	3286	G	C5-C6-O6	-5.04	125.58	128.60
38	8	85	G	C5-C6-O6	-5.04	125.58	128.60
36	1	506	U	N1-C2-N3	5.04	117.92	114.90
36	1	1198	C	N3-C4-C5	-5.04	119.88	121.90
1	6	1751	C	C6-N1-C2	5.04	122.32	120.30
36	5	89	A	O5'-P-OP2	-5.04	101.16	105.70
36	5	1425	U	C2-N3-C4	-5.04	123.98	127.00
36	5	1545	A	C6-C5-N7	-5.04	128.77	132.30
36	5	2135	U	C5-C6-N1	-5.04	120.18	122.70
36	5	2347	U	OP2-P-O3'	5.04	116.29	105.20
1	2	152	U	N1-C2-O2	5.04	126.33	122.80
1	2	1583	A	C4-C5-N7	-5.04	108.18	110.70
36	1	211	A	C2-N3-C4	-5.04	108.08	110.60
36	1	677	A	N1-C2-N3	-5.04	126.78	129.30
36	1	695	C	N1-C2-O2	5.04	121.92	118.90
36	1	1939	G	C4-N9-C1'	5.04	133.05	126.50
36	1	2381	G	C6-N1-C2	-5.04	122.08	125.10
36	1	2635	A	N1-C6-N6	-5.04	115.58	118.60
36	1	2829	U	N1-C2-N3	5.04	117.92	114.90
1	6	448	C	N1-C2-N3	5.04	122.73	119.20
1	6	635	A	OP2-P-O3'	5.04	116.29	105.20
1	6	1108	G	N3-C4-N9	-5.04	122.98	126.00
1	6	1188	G	N1-C6-O6	-5.04	116.88	119.90
1	6	1773	C	C5-C6-N1	5.04	123.52	121.00
36	5	1191	U	N1-C2-O2	-5.04	119.27	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1382	G	N3-C4-C5	5.04	131.12	128.60
36	5	2191	U	N1-C2-N3	5.04	117.92	114.90
36	5	2598	G	C6-C5-N7	-5.04	127.38	130.40
36	5	2841	G	N3-C4-C5	-5.04	126.08	128.60
36	5	3086	A	O5'-P-OP2	5.04	116.75	110.70
36	5	3131	U	N3-C4-O4	-5.04	115.87	119.40
53	m7	67	ILE	CG1-CB-CG2	-5.04	100.31	111.40
1	2	298	C	C6-N1-C2	5.04	122.31	120.30
1	2	1636	C	C5-C6-N1	5.04	123.52	121.00
36	1	709	A	N9-C1'-C2'	-5.04	106.46	112.00
36	1	804	C	N3-C2-O2	-5.04	118.37	121.90
36	1	1157	G	N3-C2-N2	-5.04	116.37	119.90
36	1	1708	C	C5-C6-N1	-5.04	118.48	121.00
1	6	1007	C	C2-N1-C1'	-5.04	113.26	118.80
36	5	3	U	N3-C2-O2	-5.04	118.67	122.20
36	5	1114	U	C5-C6-N1	5.04	125.22	122.70
36	5	1137	C	C6-N1-C1'	-5.04	114.76	120.80
36	5	1345	G	C6-C5-N7	-5.04	127.38	130.40
36	5	1377	G	N3-C4-N9	-5.04	122.98	126.00
36	5	2853	A	C8-N9-C4	5.04	107.81	105.80
36	5	3013	U	N1-C2-O2	5.04	126.33	122.80
36	5	3317	U	N3-C4-O4	-5.04	115.87	119.40
1	2	915	A	C5-N7-C8	-5.04	101.38	103.90
1	2	1146	G	C4-C5-N7	5.04	112.81	110.80
1	2	1339	C	P-O3'-C3'	5.04	125.74	119.70
1	2	1583	A	N9-C4-C5	5.04	107.81	105.80
36	1	227	G	C6-N1-C2	-5.04	122.08	125.10
36	1	642	U	N3-C4-O4	5.04	122.92	119.40
36	1	955	U	C5-C6-N1	-5.04	120.18	122.70
36	1	1043	C	C2-N1-C1'	-5.04	113.26	118.80
36	1	1435	A	N3-C4-C5	-5.04	123.28	126.80
36	1	1497	C	C2-N3-C4	5.04	122.42	119.90
38	4	38	U	N1-C2-O2	5.04	126.33	122.80
1	6	194	U	C6-N1-C1'	-5.04	114.15	121.20
1	6	769	A	N1-C6-N6	5.04	121.62	118.60
1	6	1021	C	OP1-P-O3'	5.04	116.28	105.20
1	6	1387	G	N3-C4-C5	-5.04	126.08	128.60
36	5	503	C	N1-C2-O2	-5.04	115.88	118.90
36	5	640	U	N3-C2-O2	5.04	125.72	122.20
36	5	806	A	C5-C6-N1	-5.04	115.18	117.70
36	5	1431	G	C8-N9-C1'	-5.04	120.45	127.00
36	5	1478	C	C2-N3-C4	5.04	122.42	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1675	G	N3-C2-N2	5.04	123.42	119.90
36	5	2601	A	C2-N3-C4	5.04	113.12	110.60
36	5	3086	A	C8-N9-C4	5.04	107.81	105.80
36	5	3241	G	C8-N9-C4	5.04	108.41	106.40
38	8	7	U	OP1-P-OP2	5.04	127.15	119.60
1	2	115	G	N1-C2-N2	-5.03	111.67	116.20
1	2	597	G	O5'-P-OP2	5.03	116.74	110.70
1	2	1083	G	N3-C4-N9	5.03	129.02	126.00
1	2	1747	G	C5-C6-O6	5.03	131.62	128.60
36	1	74	G	C8-N9-C4	-5.03	104.39	106.40
36	1	591	G	OP1-P-O3'	5.03	116.27	105.20
36	1	779	G	P-O3'-C3'	5.03	125.74	119.70
36	1	1527	C	N1-C2-O2	-5.03	115.88	118.90
36	1	1544	G	C8-N9-C4	5.03	108.41	106.40
36	1	2195	C	C5-C4-N4	-5.03	116.68	120.20
36	1	2829	U	N3-C4-C5	-5.03	111.58	114.60
36	1	3101	G	C2-N3-C4	5.03	114.42	111.90
36	1	3214	U	N1-C2-N3	5.03	117.92	114.90
36	1	3344	A	C8-N9-C4	-5.03	103.79	105.80
1	6	327	U	OP2-P-O3'	5.03	116.27	105.20
1	6	750	U	C2-N1-C1'	-5.03	111.66	117.70
1	6	1241	G	C8-N9-C4	-5.03	104.39	106.40
36	5	1131	G	C6-C5-N7	-5.03	127.38	130.40
36	5	1209	G	C8-N9-C4	-5.03	104.39	106.40
36	5	1513	G	N1-C6-O6	5.03	122.92	119.90
36	5	1606	U	C4-C5-C6	5.03	122.72	119.70
36	5	1886	A	C4-C5-C6	5.03	119.52	117.00
36	5	2320	A	N1-C6-N6	5.03	121.62	118.60
36	5	2861	U	N3-C4-O4	5.03	122.92	119.40
36	5	2979	U	C2-N3-C4	-5.03	123.98	127.00
36	5	3012	A	C6-C5-N7	-5.03	128.78	132.30
36	5	3095	U	N3-C4-C5	-5.03	111.58	114.60
36	5	3237	U	N3-C2-O2	5.03	125.72	122.20
38	8	12	A	C2-N3-C4	5.03	113.12	110.60
1	2	351	C	C5-C4-N4	5.03	123.72	120.20
1	2	398	G	C4-N9-C1'	5.03	133.04	126.50
36	1	862	U	C2-N1-C1'	5.03	123.74	117.70
36	1	962	A	C2-N3-C4	-5.03	108.08	110.60
36	1	1786	G	C5-C6-O6	-5.03	125.58	128.60
36	1	2294	U	O5'-P-OP2	-5.03	101.17	105.70
36	1	2585	G	N3-C4-C5	-5.03	126.08	128.60
36	1	2710	C	C5-C4-N4	-5.03	116.68	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2902	A	N7-C8-N9	-5.03	111.28	113.80
1	6	167	U	N3-C2-O2	5.03	125.72	122.20
1	6	764	U	N1-C2-N3	5.03	117.92	114.90
36	5	2703	A	N1-C2-N3	5.03	131.82	129.30
36	5	3324	C	OP1-P-O3'	-5.03	94.13	105.20
37	7	41	G	C5-C6-N1	-5.03	108.98	111.50
37	7	50	U	C6-N1-C2	-5.03	117.98	121.00
1	2	106	U	O5'-P-OP1	-5.03	101.17	105.70
1	2	429	G	N1-C6-O6	5.03	122.92	119.90
1	2	595	G	C4-C5-N7	-5.03	108.79	110.80
1	2	1408	G	C8-N9-C1'	5.03	133.54	127.00
1	2	1730	A	OP2-P-O3'	5.03	116.27	105.20
36	1	287	G	C8-N9-C4	-5.03	104.39	106.40
36	1	377	A	C4-C5-N7	5.03	113.22	110.70
36	1	626	U	N1-C2-O2	-5.03	119.28	122.80
36	1	635	G	N9-C4-C5	-5.03	103.39	105.40
36	1	697	A	O5'-P-OP1	-5.03	101.17	105.70
36	1	985	U	O5'-P-OP1	-5.03	101.17	105.70
36	1	1293	U	C6-N1-C2	5.03	124.02	121.00
36	1	3141	A	C2-N3-C4	-5.03	108.08	110.60
36	1	3244	A	C4-C5-C6	5.03	119.52	117.00
1	6	480	G	C6-C5-N7	-5.03	127.38	130.40
1	6	945	U	C5-C6-N1	-5.03	120.19	122.70
1	6	1248	C	N1-C2-O2	5.03	121.92	118.90
1	6	1786	G	C6-C5-N7	5.03	133.42	130.40
36	5	148	G	N1-C6-O6	5.03	122.92	119.90
36	5	645	A	O4'-C1'-N9	-5.03	104.18	108.20
36	5	769	G	O5'-P-OP1	-5.03	101.17	105.70
36	5	816	A	N3-C4-C5	-5.03	123.28	126.80
36	5	1863	G	C6-N1-C2	-5.03	122.08	125.10
36	5	2271	A	N1-C6-N6	5.03	121.62	118.60
36	5	3179	U	O4'-C1'-N1	-5.03	104.17	108.20
37	7	30	G	N9-C1'-C2'	-5.03	106.47	112.00
37	7	107	C	N3-C4-N4	-5.03	114.48	118.00
1	2	934	C	N1-C2-O2	5.03	121.92	118.90
36	1	715	A	C8-N9-C4	-5.03	103.79	105.80
36	1	1834	U	C5-C6-N1	-5.03	120.19	122.70
36	1	2326	A	N9-C4-C5	5.03	107.81	105.80
36	1	2635	A	C5-C6-N1	-5.03	115.19	117.70
36	1	2944	U	C4-C5-C6	-5.03	116.68	119.70
36	5	433	A	OP2-P-O3'	5.03	116.26	105.20
36	5	2814	G	N9-C4-C5	-5.03	103.39	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2904	U	C5-C6-N1	-5.03	120.19	122.70
37	7	121	U	N3-C2-O2	-5.03	118.68	122.20
1	2	553	G	C5-C6-N1	-5.03	108.99	111.50
1	2	1027	A	N9-C4-C5	5.03	107.81	105.80
1	2	1299	G	N3-C2-N2	5.03	123.42	119.90
1	2	1332	C	N1-C2-O2	5.03	121.92	118.90
36	1	26	A	N1-C6-N6	5.03	121.62	118.60
36	1	158	G	C2-N3-C4	-5.03	109.39	111.90
36	1	392	G	C5-N7-C8	-5.03	101.79	104.30
36	1	927	C	OP1-P-O3'	-5.03	94.14	105.20
36	1	2134	G	C8-N9-C1'	-5.03	120.46	127.00
36	1	2157	G	N3-C4-C5	-5.03	126.09	128.60
36	1	2521	U	N3-C4-C5	5.03	117.62	114.60
36	1	3121	U	N1-C2-N3	5.03	117.92	114.90
1	6	906	A	C4-C5-C6	-5.03	114.49	117.00
1	6	977	A	C5-N7-C8	-5.03	101.39	103.90
1	6	1412	G	N3-C4-N9	-5.03	122.98	126.00
1	6	1664	C	N3-C4-N4	5.03	121.52	118.00
1	6	1745	G	N3-C4-C5	-5.03	126.09	128.60
19	c7	100	LEU	CA-CB-CG	5.03	126.86	115.30
36	5	1133	A	C6-C5-N7	-5.03	128.78	132.30
36	5	1175	C	N1-C2-O2	-5.03	115.88	118.90
36	5	1190	A	C5-C6-N6	-5.03	119.68	123.70
36	5	1206	G	C6-N1-C2	-5.03	122.08	125.10
36	5	1224	C	O5'-P-OP1	-5.03	101.17	105.70
36	5	1348	U	C5'-C4'-O4'	5.03	115.13	109.10
36	5	1690	C	N3-C4-C5	-5.03	119.89	121.90
36	5	2643	A	C4-C5-C6	-5.03	114.49	117.00
36	5	3006	A	C5-C6-N6	5.03	127.72	123.70
1	2	370	A	C5-N7-C8	5.03	106.41	103.90
1	2	1757	G	O4'-C1'-N9	-5.03	104.18	108.20
36	1	369	A	N3-C4-C5	-5.03	123.28	126.80
36	1	525	C	C6-N1-C2	5.03	122.31	120.30
36	1	593	C	N1-C2-O2	5.03	121.92	118.90
36	1	1838	G	C4-N9-C1'	5.03	133.03	126.50
36	1	2314	U	O5'-P-OP1	5.03	116.73	110.70
36	1	2796	G	OP1-P-OP2	5.03	127.14	119.60
36	1	2902	A	C4-C5-N7	-5.03	108.19	110.70
36	1	2956	A	C4-C5-N7	5.03	113.21	110.70
36	1	3134	A	C6-N1-C2	-5.03	115.58	118.60
36	1	3276	G	O4'-C1'-N9	-5.03	104.18	108.20
1	6	395	U	N3-C4-C5	-5.03	111.58	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	579	A	P-O3'-C3'	5.03	125.73	119.70
1	6	607	G	C5-C6-O6	5.03	131.62	128.60
1	6	1218	G	C4-N9-C1'	-5.03	119.97	126.50
1	6	1478	G	N3-C2-N2	5.03	123.42	119.90
1	6	1493	A	N3-C4-C5	5.03	130.32	126.80
1	6	1661	U	C6-N1-C2	5.03	124.02	121.00
36	5	416	A	C5-N7-C8	-5.03	101.39	103.90
36	5	986	U	N1-C2-N3	5.03	117.92	114.90
36	5	1065	A	C2-N3-C4	-5.03	108.09	110.60
36	5	2954	U	C6-N1-C2	5.03	124.02	121.00
36	5	3006	A	C4-C5-N7	-5.03	108.19	110.70
38	8	87	G	C4-N9-C1'	5.03	133.03	126.50
1	2	1321	A	N1-C6-N6	-5.02	115.59	118.60
36	1	269	G	C8-N9-C1'	5.02	133.53	127.00
36	1	326	U	C4-C5-C6	5.02	122.72	119.70
36	1	567	G	N9-C4-C5	5.02	107.41	105.40
36	1	699	A	C8-N9-C1'	5.02	136.74	127.70
36	1	849	C	OP2-P-O3'	5.02	116.25	105.20
36	5	180	C	N1-C2-O2	5.02	121.91	118.90
36	5	857	G	N1-C2-N3	5.02	126.91	123.90
1	2	1419	G	C8-N9-C1'	-5.02	120.47	127.00
36	1	209	A	N9-C4-C5	5.02	107.81	105.80
36	1	401	U	N1-C2-O2	5.02	126.32	122.80
36	1	605	U	N3-C2-O2	-5.02	118.68	122.20
36	1	1453	A	C6-C5-N7	-5.02	128.78	132.30
36	1	1819	U	C2-N1-C1'	5.02	123.73	117.70
36	1	2520	A	N1-C6-N6	5.02	121.61	118.60
36	1	3240	C	C5-C6-N1	-5.02	118.49	121.00
37	3	3	U	OP1-P-O3'	5.02	116.25	105.20
37	3	49	G	O4'-C1'-N9	5.02	112.22	108.20
36	5	819	U	N3-C2-O2	5.02	125.72	122.20
36	5	1165	A	N9-C4-C5	5.02	107.81	105.80
36	5	1519	G	N3-C2-N2	-5.02	116.38	119.90
36	5	1617	G	N1-C6-O6	5.02	122.91	119.90
36	5	1704	A	O5'-P-OP1	-5.02	101.18	105.70
36	5	3098	G	N1-C2-N2	-5.02	111.68	116.20
36	5	3220	G	O5'-P-OP2	-5.02	101.18	105.70
37	7	121	U	O4'-C1'-N1	-5.02	104.18	108.20
1	2	1189	A	C8-N9-C4	5.02	107.81	105.80
1	2	1455	G	C5-N7-C8	5.02	106.81	104.30
36	1	625	G	C5-N7-C8	5.02	106.81	104.30
36	1	1362	G	OP2-P-O3'	5.02	116.25	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3003	G	C5-C6-N1	5.02	114.01	111.50
38	4	86	U	N3-C4-O4	5.02	122.92	119.40
38	4	108	C	OP2-P-O3'	5.02	116.25	105.20
41	L4	244	LEU	CB-CG-CD2	-5.02	102.47	111.00
1	6	396	G	N3-C4-C5	-5.02	126.09	128.60
1	6	553	G	N1-C2-N3	-5.02	120.89	123.90
1	6	1093	A	N9-C4-C5	5.02	107.81	105.80
36	5	1886	A	C5-C6-N1	-5.02	115.19	117.70
36	5	2123	G	C5-C6-O6	5.02	131.61	128.60
36	5	2995	A	N1-C6-N6	5.02	121.61	118.60
1	2	401	A	N1-C6-N6	5.02	121.61	118.60
1	2	449	C	O4'-C1'-N1	5.02	112.22	108.20
1	2	608	U	C5-C4-O4	5.02	128.91	125.90
1	2	823	G	C5-C6-N1	5.02	114.01	111.50
1	2	1373	C	N3-C4-C5	-5.02	119.89	121.90
1	2	1670	G	C4-N9-C1'	5.02	133.03	126.50
36	1	211	A	C4-C5-C6	-5.02	114.49	117.00
36	1	224	C	OP1-P-OP2	-5.02	112.07	119.60
36	1	596	C	C5-C6-N1	-5.02	118.49	121.00
36	1	757	C	C4-C5-C6	5.02	119.91	117.40
36	1	973	A	N3-C4-C5	5.02	130.31	126.80
36	1	1322	U	N3-C4-C5	-5.02	111.59	114.60
36	1	1338	C	C5-C6-N1	5.02	123.51	121.00
36	1	1449	A	N1-C6-N6	-5.02	115.59	118.60
36	1	1518	U	C4-C5-C6	5.02	122.71	119.70
36	1	1795	U	O5'-P-OP1	-5.02	101.18	105.70
36	1	3103	A	C6-N1-C2	-5.02	115.59	118.60
36	1	3134	A	C5-C6-N1	5.02	120.21	117.70
36	1	3160	U	N3-C2-O2	-5.02	118.69	122.20
36	1	3245	A	C5-C6-N1	-5.02	115.19	117.70
37	3	97	A	C5-C6-N1	-5.02	115.19	117.70
1	6	455	C	O4'-C1'-N1	-5.02	104.18	108.20
1	6	586	G	C5-C6-O6	5.02	131.61	128.60
1	6	676	G	O4'-C1'-N9	5.02	112.22	108.20
36	5	45	A	C5-N7-C8	-5.02	101.39	103.90
36	5	201	A	O4'-C1'-N9	-5.02	104.18	108.20
36	5	326	U	N1-C2-O2	5.02	126.31	122.80
36	5	929	A	C8-N9-C4	5.02	107.81	105.80
36	5	1007	U	N1-C2-N3	-5.02	111.89	114.90
36	5	1311	G	N1-C6-O6	5.02	122.91	119.90
36	5	1312	C	N3-C2-O2	5.02	125.41	121.90
36	5	2114	C	N3-C4-N4	5.02	121.51	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2404	A	C2-N3-C4	5.02	113.11	110.60
36	5	2668	U	N3-C4-O4	5.02	122.91	119.40
36	5	2858	U	N1-C2-N3	5.02	117.91	114.90
38	8	108	C	OP2-P-O3'	5.02	116.24	105.20
1	2	73	U	C1'-O4'-C4'	-5.02	105.89	109.90
1	2	963	A	N1-C2-N3	-5.02	126.79	129.30
36	1	22	G	N3-C4-N9	-5.02	122.99	126.00
36	1	158	G	C5-C6-N1	-5.02	108.99	111.50
36	1	769	G	O5'-P-OP1	-5.02	101.19	105.70
36	1	1109	U	OP1-P-OP2	5.02	127.12	119.60
36	1	1259	A	N1-C6-N6	-5.02	115.59	118.60
36	1	1492	G	C8-N9-C4	-5.02	104.39	106.40
36	1	1849	C	O5'-P-OP1	-5.02	101.19	105.70
36	1	3098	G	O5'-P-OP2	-5.02	101.18	105.70
36	1	3126	C	C5-C4-N4	5.02	123.71	120.20
36	1	3280	U	C4-C5-C6	-5.02	116.69	119.70
37	3	85	G	C4-C5-N7	5.02	112.81	110.80
36	5	858	A	N1-C2-N3	5.02	131.81	129.30
36	5	1130	A	C5-N7-C8	-5.02	101.39	103.90
36	5	3068	U	C4-C5-C6	5.02	122.71	119.70
36	5	3094	A	C2-N3-C4	-5.02	108.09	110.60
1	2	57	G	N1-C2-N3	5.02	126.91	123.90
1	2	990	C	C5-C6-N1	5.02	123.51	121.00
36	1	1377	G	C2-N3-C4	-5.02	109.39	111.90
36	1	1764	U	C6-N1-C2	5.02	124.01	121.00
36	1	1849	C	C4-C5-C6	5.02	119.91	117.40
36	1	2326	A	N1-C6-N6	-5.02	115.59	118.60
36	1	2775	U	C5-C4-O4	5.02	128.91	125.90
1	6	1063	U	C5-C4-O4	-5.02	122.89	125.90
36	5	868	C	N3-C4-C5	-5.02	119.89	121.90
36	5	1320	C	OP2-P-O3'	5.02	116.23	105.20
36	5	1446	A	N1-C6-N6	-5.02	115.59	118.60
36	5	1725	C	N3-C4-C5	-5.02	119.89	121.90
36	5	2382	G	C4-C5-C6	-5.02	115.79	118.80
36	5	2805	G	C5-C6-N1	-5.02	108.99	111.50
1	2	337	G	OP1-P-O3'	5.01	116.23	105.20
1	2	794	U	C5-C6-N1	5.01	125.21	122.70
1	2	1200	G	N7-C8-N9	5.01	115.61	113.10
36	1	801	A	N9-C4-C5	-5.01	103.80	105.80
36	1	1167	U	C2-N3-C4	-5.01	123.99	127.00
36	1	1400	G	C8-N9-C1'	-5.01	120.48	127.00
36	1	1410	U	C5-C6-N1	5.01	125.21	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1474	A	OP1-P-OP2	-5.01	112.08	119.60
36	1	1933	A	C8-N9-C4	-5.01	103.79	105.80
36	1	2971	A	C2-N3-C4	5.01	113.11	110.60
36	1	3163	A	N9-C1'-C2'	-5.01	106.48	112.00
36	1	3382	U	N1-C2-O2	5.01	126.31	122.80
62	N6	53	ASP	CB-CG-OD1	-5.01	113.79	118.30
1	6	407	A	C8-N9-C4	5.01	107.81	105.80
1	6	565	C	C6-N1-C1'	-5.01	114.78	120.80
1	6	1077	C	N3-C4-C5	5.01	123.91	121.90
36	5	12	A	O5'-P-OP2	5.01	116.72	110.70
36	5	1246	G	N1-C6-O6	5.01	122.91	119.90
36	5	1513	G	OP1-P-O3'	5.01	116.23	105.20
36	5	2194	G	N1-C2-N2	-5.01	111.69	116.20
36	5	2401	A	OP2-P-O3'	5.01	116.23	105.20
36	5	2894	C	OP1-P-OP2	5.01	127.12	119.60
36	5	3326	G	N7-C8-N9	-5.01	110.59	113.10
46	19	34	LEU	CA-CB-CG	-5.01	103.77	115.30
1	2	1617	U	C2-N1-C1'	-5.01	111.69	117.70
36	1	156	G	C4-N9-C1'	5.01	133.02	126.50
36	1	772	U	C6-N1-C2	5.01	124.01	121.00
36	1	961	C	C2-N3-C4	5.01	122.41	119.90
36	1	1295	G	N1-C2-N2	-5.01	111.69	116.20
36	1	1353	U	C5-C4-O4	-5.01	122.89	125.90
36	1	2801	A	C5-N7-C8	-5.01	101.39	103.90
36	1	3370	A	N7-C8-N9	5.01	116.31	113.80
38	4	99	C	N1-C2-N3	-5.01	115.69	119.20
1	6	1202	A	N3-C4-C5	-5.01	123.29	126.80
1	6	1743	U	C4-C5-C6	5.01	122.71	119.70
36	5	936	A	N1-C2-N3	5.01	131.81	129.30
36	5	2763	U	N1-C2-O2	-5.01	119.29	122.80
1	2	626	U	N1-C2-N3	5.01	117.91	114.90
1	2	849	C	C2-N3-C4	5.01	122.41	119.90
36	1	275	U	C5-C4-O4	-5.01	122.89	125.90
36	1	347	G	N1-C2-N2	-5.01	111.69	116.20
36	1	1310	G	C6-N1-C2	-5.01	122.09	125.10
36	1	1485	G	C4-C5-N7	5.01	112.81	110.80
36	1	1759	C	C6-N1-C2	-5.01	118.30	120.30
36	1	2636	A	N3-C4-N9	-5.01	123.39	127.40
36	1	3288	G	O4'-C1'-N9	5.01	112.21	108.20
36	1	3325	G	N1-C2-N2	-5.01	111.69	116.20
37	3	37	G	N1-C6-O6	5.01	122.91	119.90
1	6	682	C	N1-C2-O2	-5.01	115.89	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	782	U	N1-C2-O2	5.01	126.31	122.80
1	6	862	A	P-O3'-C3'	5.01	125.71	119.70
1	6	1180	C	O5'-P-OP1	-5.01	101.19	105.70
1	6	1246	C	N3-C2-O2	-5.01	118.39	121.90
36	5	252	U	C5-C6-N1	5.01	125.20	122.70
36	5	668	G	C5-C6-O6	5.01	131.61	128.60
36	5	908	G	N7-C8-N9	5.01	115.61	113.10
36	5	1214	U	OP2-P-O3'	5.01	116.23	105.20
36	5	2252	A	N1-C6-N6	-5.01	115.59	118.60
36	5	2594	C	C2-N1-C1'	5.01	124.31	118.80
36	5	2609	A	C5-C6-N6	-5.01	119.69	123.70
36	5	2703	A	C5-C6-N1	-5.01	115.19	117.70
36	5	2704	A	OP1-P-OP2	5.01	127.12	119.60
36	5	2991	A	C8-N9-C4	-5.01	103.80	105.80
36	5	3226	A	N1-C6-N6	-5.01	115.59	118.60
36	5	3378	C	C6-N1-C1'	-5.01	114.79	120.80
37	7	114	U	N3-C4-O4	5.01	122.91	119.40
38	8	30	C	N3-C2-O2	-5.01	118.39	121.90
1	2	334	G	N1-C2-N2	5.01	120.71	116.20
1	2	571	G	C8-N9-C1'	5.01	133.51	127.00
1	2	909	U	C6-N1-C2	5.01	124.01	121.00
1	2	1112	G	C4-C5-N7	5.01	112.80	110.80
1	2	1199	G	N3-C2-N2	-5.01	116.39	119.90
36	1	394	G	O4'-C1'-N9	5.01	112.21	108.20
36	1	1299	U	C5-C4-O4	-5.01	122.89	125.90
36	1	1322	U	C5-C6-N1	-5.01	120.19	122.70
36	1	1390	A	C5-N7-C8	-5.01	101.39	103.90
36	1	2166	A	C4-C5-C6	-5.01	114.50	117.00
36	1	2773	C	C5-C4-N4	-5.01	116.69	120.20
36	1	2824	G	C5-N7-C8	-5.01	101.80	104.30
36	1	3137	C	C2-N3-C4	-5.01	117.39	119.90
1	6	547	U	N3-C4-O4	-5.01	115.89	119.40
1	6	1592	A	C5-N7-C8	-5.01	101.39	103.90
36	5	998	A	C4-C5-C6	5.01	119.50	117.00
36	5	1056	U	N3-C4-C5	5.01	117.61	114.60
36	5	2193	U	N1-C2-O2	5.01	126.31	122.80
36	5	2371	G	O4'-C1'-N9	-5.01	104.19	108.20
36	5	2897	A	N9-C4-C5	-5.01	103.80	105.80
36	5	2905	U	C2-N3-C4	-5.01	124.00	127.00
36	5	3297	U	C5-C6-N1	5.01	125.20	122.70
1	2	1517	U	N1-C2-O2	-5.01	119.30	122.80
36	1	2621	G	N1-C2-N3	5.01	126.91	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	35	C	N3-C2-O2	5.01	125.41	121.90
38	4	68	G	N3-C2-N2	-5.01	116.39	119.90
56	N0	115	ARG	NE-CZ-NH2	-5.01	117.80	120.30
1	6	626	U	C6-N1-C2	-5.01	118.00	121.00
1	6	1565	C	C5-C6-N1	-5.01	118.50	121.00
36	5	431	U	C5-C4-O4	5.01	128.91	125.90
36	5	569	A	OP1-P-OP2	5.01	127.11	119.60
36	5	1236	G	N3-C4-C5	-5.01	126.10	128.60
36	5	1399	A	C6-C5-N7	-5.01	128.79	132.30
36	5	1613	A	C6-N1-C2	-5.01	115.59	118.60
36	5	1681	U	N1-C2-O2	-5.01	119.30	122.80
36	5	1807	G	C8-N9-C1'	-5.01	120.49	127.00
36	5	2837	A	N1-C6-N6	-5.01	115.59	118.60
1	2	561	G	N3-C2-N2	-5.01	116.40	119.90
1	2	875	G	C4-N9-C1'	5.01	133.01	126.50
36	1	167	U	C5-C4-O4	5.01	128.90	125.90
36	1	499	G	C8-N9-C4	-5.01	104.40	106.40
36	1	2579	G	N3-C4-C5	-5.01	126.10	128.60
36	1	2767	U	O5'-P-OP2	-5.01	101.19	105.70
36	1	2887	A	N9-C4-C5	5.01	107.80	105.80
36	1	3252	G	C4-N9-C1'	-5.01	119.99	126.50
37	3	49	G	N3-C4-C5	-5.01	126.10	128.60
1	6	448	C	N3-C4-C5	-5.01	119.90	121.90
1	6	1740	A	C5-C6-N1	-5.01	115.20	117.70
36	5	994	G	C5-C6-N1	5.01	114.00	111.50
36	5	994	G	N3-C2-N2	5.01	123.41	119.90
36	5	1525	G	N3-C4-N9	5.01	129.00	126.00
36	5	1620	U	C5-C6-N1	5.01	125.20	122.70
36	5	2611	U	C6-N1-C2	-5.01	118.00	121.00
36	5	2960	C	N1-C2-N3	5.01	122.70	119.20
36	1	1738	C	N3-C4-N4	-5.00	114.50	118.00
36	1	2110	G	N3-C4-N9	5.00	129.00	126.00
36	1	2126	A	C5-C6-N1	5.00	120.20	117.70
36	5	1013	G	C5-C6-O6	5.00	131.60	128.60
36	5	1256	G	C8-N9-C4	5.00	108.40	106.40
38	8	76	C	C4-C5-C6	5.00	119.90	117.40
1	2	351	C	C6-N1-C2	5.00	122.30	120.30
1	2	1674	C	O5'-P-OP1	-5.00	101.20	105.70
36	1	228	U	O5'-P-OP1	-5.00	101.20	105.70
36	1	734	C	N1-C2-O2	5.00	121.90	118.90
36	1	974	G	C5-C6-N1	5.00	114.00	111.50
36	1	1099	A	C8-N9-C1'	-5.00	118.69	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1507	G	O5'-P-OP1	-5.00	101.20	105.70
36	1	1736	G	C8-N9-C4	-5.00	104.40	106.40
36	1	1808	G	N9-C4-C5	5.00	107.40	105.40
36	1	2210	G	N3-C4-N9	-5.00	123.00	126.00
1	6	260	U	N1-C2-N3	-5.00	111.90	114.90
1	6	424	C	C4-C5-C6	-5.00	114.90	117.40
1	6	1678	A	N1-C6-N6	5.00	121.60	118.60
36	5	1257	C	C2-N1-C1'	-5.00	113.30	118.80
36	5	1311	G	C8-N9-C1'	-5.00	120.49	127.00
36	5	1853	U	C5-C6-N1	-5.00	120.20	122.70
36	5	2642	A	OP2-P-O3'	5.00	116.21	105.20
36	5	3009	G	N9-C4-C5	5.00	107.40	105.40
38	8	21	C	O4'-C1'-N1	5.00	112.20	108.20
1	2	320	U	C5-C6-N1	5.00	125.20	122.70
36	1	23	A	C4-N9-C1'	5.00	135.30	126.30
36	1	148	G	C8-N9-C1'	-5.00	120.50	127.00
36	1	851	C	C2-N1-C1'	5.00	124.30	118.80
36	1	2287	C	N1-C2-N3	5.00	122.70	119.20
36	1	2297	U	N1-C2-N3	5.00	117.90	114.90
36	1	2354	C	C6-N1-C2	-5.00	118.30	120.30
36	1	2382	G	N3-C2-N2	5.00	123.40	119.90
1	6	415	C	O4'-C1'-N1	5.00	112.20	108.20
1	6	556	A	C5-C6-N1	-5.00	115.20	117.70
1	6	622	A	O4'-C1'-N9	-5.00	104.20	108.20
1	6	1439	C	N3-C2-O2	5.00	125.40	121.90
1	6	1584	G	C8-N9-C4	5.00	108.40	106.40
36	5	885	U	C6-N1-C2	-5.00	118.00	121.00
36	5	974	G	N1-C2-N2	-5.00	111.70	116.20
36	5	1117	G	O4'-C1'-N9	-5.00	104.20	108.20
36	5	1134	G	C5-N7-C8	5.00	106.80	104.30
36	5	1295	G	C8-N9-C1'	-5.00	120.50	127.00
36	5	1699	A	N9-C4-C5	-5.00	103.80	105.80
36	5	2288	G	C6-N1-C2	-5.00	122.10	125.10
36	5	2392	C	N3-C4-C5	5.00	123.90	121.90
36	5	2654	C	OP1-P-O3'	5.00	116.20	105.20
36	5	2759	U	C6-N1-C1'	-5.00	114.20	121.20
36	5	3093	C	N1-C2-N3	5.00	122.70	119.20
36	5	3333	G	C4-C5-N7	-5.00	108.80	110.80
36	5	3337	G	C8-N9-C1'	-5.00	120.50	127.00
38	8	73	U	N1-C2-O2	5.00	126.30	122.80

There are no chirality outliers.

All (130) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
12	C0	26	ASP	Peptide
12	C0	87	VAL	Peptide
16	C4	38	THR	Peptide
18	C6	113	ASP	Peptide
19	C7	85	VAL	Peptide
23	D1	11	LEU	Peptide
24	D2	98	GLN	Peptide
25	D3	143	PRO	Peptide
25	D3	2	GLY	Peptide
26	D4	60	PHE	Peptide
27	D5	94	LYS	Peptide
28	D6	97	PRO	Peptide
33	E1	105	TYR	Peptide
33	E1	146	SER	Peptide
40	L3	204	ALA	Peptide
40	L3	346	THR	Peptide
40	L3	41	VAL	Peptide
41	L4	129	THR	Peptide
41	L4	13	GLY	Peptide
41	L4	131	VAL	Peptide
41	L4	174	ALA	Peptide
41	L4	83	GLY	Peptide
42	L5	58	LYS	Peptide
43	L6	89	THR	Peptide
43	L6	97	ASN	Peptide
44	L7	37	ASN	Peptide
44	L7	92	ILE	Peptide
47	M0	196	PHE	Peptide
47	M0	217	PHE	Peptide
52	M6	110	PRO	Peptide
52	M6	111	PRO	Peptide
53	M7	55	GLN	Peptide
57	N1	16	GLN	Peptide
63	N7	23	VAL	Peptide
63	N7	6	LYS	Peptide
64	N8	116	GLY	Peptide
64	N8	55	LYS	Peptide
64	N8	83	PRO	Peptide
64	N8	95	SER	Peptide
65	N9	20	GLY	Peptide
65	N9	25	LYS	Peptide
69	O3	29	LEU	Peptide

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Mol	Chain	Res	Type	Group
69	O3	90	PRO	Peptide
70	O4	22	VAL	Peptide
70	O4	71	THR	Peptide
72	O6	2	THR	Peptide
2	S0	29	VAL	Peptide
2	S0	6	THR	Peptide
5	S3	144	ALA	Peptide
5	S3	42	THR	Peptide
11	S9	15	PRO	Peptide
11	S9	92	LYS	Peptide
35	SM	89	ARG	Peptide
15	c3	140	LYS	Peptide
17	c5	8	LYS	Peptide
18	c6	115	THR	Peptide
18	c6	140	LYS	Peptide
18	c6	41	PRO	Peptide
19	c7	103	ASP	Peptide
19	c7	87	GLU	Peptide
20	c8	63	GLN	Peptide
21	c9	141	GLU	Peptide
22	d0	70	THR	Peptide
24	d2	120	HIS	Peptide
24	d2	58	SER	Peptide
26	d4	123	LYS	Peptide
26	d4	29	HIS	Peptide
27	d5	83	LEU	Peptide
28	d6	10	ARG	Peptide
80	e0	2	ALA	Peptide
80	e0	6	GLY	Peptide
81	e1	146	SER	Peptide
39	l2	141	PRO	Peptide
39	l2	215	ASN	Peptide
40	l3	139	GLN	Peptide
40	l3	234	GLY	Peptide
40	l3	262	TRP	Peptide
40	l3	27	ALA	Peptide
40	l3	346	THR	Peptide
41	l4	132	ALA	Peptide
41	l4	352	ALA	Peptide
42	l5	133	GLU	Peptide
42	l5	258	LYS	Peptide
42	l5	270	LYS	Peptide

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Mol	Chain	Res	Type	Group
43	l6	31	ARG	Peptide
44	l7	129	LEU	Peptide
44	l7	157	ASN	Peptide
44	l7	226	GLY	Peptide
45	l8	98	ARG	Peptide
47	m0	111	LEU	Peptide
48	m1	8	PRO	Peptide
82	m2	29	UNK	Peptide
82	m2	36	UNK	Peptide
82	m2	85	UNK	Peptide
49	m3	138	VAL	Peptide
49	m3	148	ALA	Peptide
52	m6	182	ASN	Peptide
52	m6	89	SER	Peptide
53	m7	123	PRO	Peptide
53	m7	55	GLN	Peptide
54	m8	185	LYS	Peptide
56	n0	133	ALA	Peptide
56	n0	3	HIS	Peptide
57	n1	147	VAL	Peptide
60	n4	77	LYS	Peptide
61	n5	57	LEU	Peptide
64	n8	23	GLY	Peptide
64	n8	66	ALA	Peptide
65	n9	19	ASN	Peptide
67	o1	23	VAL	Peptide
68	o2	126	LEU	Peptide
68	o2	15	LYS	Peptide
70	o4	33	GLN	Peptide
70	o4	46	ASP	Peptide
83	p0	101	VAL	Peptide
76	q0	78	ILE	Peptide
2	s0	5	ALA	Peptide
2	s0	72	ASP	Peptide
3	s1	130	SER	Peptide
3	s1	131	ASP	Peptide
3	s1	200	ALA	Peptide
5	s3	203	PRO	Peptide
5	s3	53	THR	Peptide
6	s4	159	THR	Peptide
6	s4	219	VAL	Peptide
7	s5	36	ALA	Peptide

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Mol	Chain	Res	Type	Group
7	s5	44	ASN	Peptide
7	s5	99	MET	Peptide
9	s7	130	VAL	Peptide
11	s9	89	ASP	Peptide

5.2 Close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	2	37283	0	18756	1861	1
1	6	38149	0	19193	1847	0
2	S0	1577	0	1567	285	0
2	s0	1583	0	1578	0	0
3	S1	1709	0	1784	250	0
3	s1	1722	0	1793	0	0
4	S2	1635	0	1723	294	0
4	s2	1635	0	1723	0	0
5	S3	1734	0	1817	255	0
5	s3	1734	0	1817	0	0
6	S4	2068	0	2154	301	0
6	s4	2068	0	2154	0	0
7	S5	1609	0	1675	285	0
7	s5	1609	0	1675	0	0
8	S6	1799	0	1879	249	0
8	s6	1755	0	1846	0	0
9	S7	1481	0	1572	204	0
9	s7	1491	0	1578	0	0
10	S8	1489	0	1525	248	0
10	s8	1489	0	1525	0	0
11	S9	1494	0	1573	265	0
11	s9	1494	0	1573	0	0
12	C0	773	0	729	130	0
12	c0	762	0	699	0	0
13	C1	1214	0	1259	170	0
13	c1	1168	0	1231	0	0
14	C2	892	0	891	121	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
14	c2	892	0	891	0	0
15	C3	1192	0	1255	184	0
15	c3	1192	0	1255	0	0
16	C4	891	0	883	189	0
16	c4	949	0	985	0	0
17	C5	977	0	1002	193	0
17	c5	1039	0	1050	0	0
18	C6	1105	0	1166	215	0
18	c6	1111	0	1171	0	0
19	C7	926	0	930	152	0
19	c7	906	0	909	0	0
20	C8	1192	0	1222	227	0
20	c8	1192	0	1222	0	0
21	C9	1112	0	1124	199	0
21	c9	1112	0	1124	0	0
22	D0	855	0	917	149	0
22	d0	882	0	939	0	1
23	D1	684	0	672	140	0
23	d1	684	0	672	0	0
24	D2	1021	0	1060	148	0
24	d2	1021	0	1060	0	0
25	D3	1121	0	1196	190	0
25	d3	1121	0	1196	0	0
26	D4	1073	0	1132	180	0
26	d4	1073	0	1132	0	0
27	D5	563	0	603	94	0
27	d5	558	0	598	0	0
28	D6	769	0	815	167	0
28	d6	769	0	814	0	0
29	D7	610	0	632	87	0
29	d7	610	0	632	0	0
30	D8	497	0	535	65	0
30	d8	497	0	535	0	0
31	D9	442	0	428	83	0
31	d9	442	0	428	0	0
32	E0	475	0	525	71	0
33	E1	566	0	601	93	0
34	SR	2441	0	2397	334	0
34	sR	2442	0	2392	0	2
35	SM	1104	0	996	156	0
35	sM	679	0	603	0	0
36	1	67355	0	33811	2977	1

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
36	5	67376	0	33824	2966	0
37	3	2579	0	1304	98	0
37	7	2579	0	1302	119	0
38	4	3353	0	1695	182	0
38	8	3353	0	1695	176	0
39	L2	1914	0	1981	336	0
39	l2	1912	0	1976	0	0
40	L3	3075	0	3142	507	0
40	l3	3075	0	3142	0	0
41	L4	2748	0	2859	484	0
41	l4	2748	0	2859	0	0
42	L5	2375	0	2325	406	0
42	l5	2359	0	2311	0	0
43	L6	1239	0	1326	196	0
43	l6	1248	0	1339	0	0
44	L7	1784	0	1862	321	0
44	l7	1791	0	1869	0	0
45	L8	1804	0	1877	278	0
45	l8	1763	0	1819	0	0
46	L9	1518	0	1587	271	0
46	l9	1518	0	1587	0	0
47	M0	1705	0	1736	322	0
47	m0	1722	0	1755	0	0
48	M1	1353	0	1383	221	0
48	m1	1353	0	1383	0	0
49	M3	1543	0	1608	268	0
49	m3	1548	0	1613	0	0
50	M4	1053	0	1149	190	0
50	m4	1059	0	1154	0	0
51	M5	1720	0	1779	279	0
51	m5	1720	0	1779	0	0
52	M6	1555	0	1659	285	0
52	m6	1555	0	1659	0	0
53	M7	1420	0	1437	228	0
53	m7	1227	0	1236	0	0
54	M8	1441	0	1543	236	0
54	m8	1441	0	1543	0	0
55	M9	1521	0	1617	258	0
55	m9	1521	0	1617	0	0
56	N0	1445	0	1487	224	0
56	n0	1445	0	1487	0	0
57	N1	1276	0	1323	232	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	n1	1276	0	1323	0	0
58	N2	796	0	812	104	0
58	n2	778	0	791	0	0
59	N3	1003	0	1048	144	0
59	n3	1003	0	1048	0	0
60	N4	699	0	640	90	0
60	n4	1038	0	1071	0	0
61	N5	964	0	1025	145	0
61	n5	959	0	1023	0	0
62	N6	993	0	1081	174	0
62	n6	993	0	1081	0	0
63	N7	1092	0	1155	166	0
63	n7	1092	0	1155	0	0
64	N8	1173	0	1215	231	0
64	n8	1173	0	1215	0	0
65	N9	462	0	491	81	0
65	n9	462	0	491	0	0
66	O0	743	0	797	113	0
66	o0	767	0	816	0	0
67	O1	876	0	912	142	0
67	o1	883	0	918	0	0
68	O2	1020	0	1090	157	0
68	o2	1020	0	1090	0	0
69	O3	850	0	880	153	0
69	o3	850	0	880	0	0
70	O4	880	0	945	171	0
70	o4	880	0	945	0	0
71	O5	969	0	1078	177	0
71	o5	965	0	1067	0	0
72	O6	771	0	849	155	0
72	o6	770	0	846	0	0
73	O7	681	0	684	117	0
73	o7	681	0	685	0	0
74	O8	612	0	682	93	0
74	o8	608	0	671	0	0
75	O9	436	0	475	86	0
75	o9	436	0	475	0	0
76	Q0	417	0	456	91	0
76	q0	417	0	456	0	0
77	Q1	233	0	284	44	0
77	q1	233	0	284	0	0
78	Q2	847	0	916	135	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
78	q2	847	0	914	0	0
79	Q3	694	0	734	134	0
79	q3	694	0	734	0	0
80	e0	491	0	542	0	0
81	e1	608	0	656	0	0
82	m2	750	0	175	0	0
83	p0	1076	0	1040	0	0
84	p1	235	0	51	0	0
85	p2	230	0	52	0	0
86	1	468	0	0	0	0
86	2	124	0	0	0	0
86	3	14	0	0	0	0
86	4	23	0	0	0	0
86	5	499	0	0	0	0
86	6	150	0	0	0	0
86	7	15	0	0	0	0
86	8	17	0	0	0	0
86	D3	1	0	0	0	0
86	D4	1	0	0	0	0
86	L2	2	0	0	0	0
86	L3	2	0	0	0	0
86	L4	2	0	0	0	0
86	L5	1	0	0	0	0
86	L6	2	0	0	0	0
86	L7	2	0	0	0	0
86	L8	1	0	0	0	0
86	M0	3	0	0	0	0
86	M1	1	0	0	0	0
86	M3	2	0	0	0	0
86	M5	2	0	0	0	0
86	M6	1	0	0	0	0
86	M7	5	0	0	0	0
86	M9	1	0	0	0	0
86	N0	1	0	0	0	0
86	N3	2	0	0	0	0
86	N5	2	0	0	0	0
86	N6	1	0	0	0	0
86	N8	4	0	0	0	0
86	N9	1	0	0	0	0
86	O1	1	0	0	0	0
86	O2	1	0	0	0	0
86	O3	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
86	O5	1	0	0	0	0
86	O7	1	0	0	0	0
86	S2	2	0	0	0	0
86	S8	1	0	0	0	0
86	SM	1	0	0	0	0
86	c7	1	0	0	0	0
86	c8	1	0	0	0	0
86	d3	1	0	0	0	0
86	d6	1	0	0	0	0
86	l2	1	0	0	0	0
86	l3	6	0	0	0	0
86	l4	1	0	0	0	0
86	l5	3	0	0	0	0
86	l7	2	0	0	0	0
86	l9	1	0	0	0	0
86	m0	1	0	0	0	0
86	m1	1	0	0	0	0
86	m4	1	0	0	0	0
86	m5	2	0	0	0	0
86	m6	3	0	0	0	0
86	m7	4	0	0	0	0
86	n3	1	0	0	0	0
86	n4	1	0	0	0	0
86	n8	2	0	0	0	0
86	n9	2	0	0	0	0
86	o0	1	0	0	0	0
86	o1	1	0	0	0	0
86	o2	1	0	0	0	0
86	o3	2	0	0	0	0
86	o4	1	0	0	0	0
86	q0	2	0	0	0	0
86	q1	1	0	0	0	0
86	q3	2	0	0	0	0
86	s1	1	0	0	0	0
86	s2	1	0	0	0	0
86	s8	2	0	0	0	0
87	1	2429	0	0	266	1
87	2	1099	0	0	117	0
87	3	77	0	0	5	0
87	4	119	0	0	10	0
87	5	2471	0	0	263	0
87	6	1134	0	0	132	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
87	7	77	0	0	4	0
87	8	126	0	0	13	0
87	C3	7	0	0	1	0
87	C5	7	0	0	5	0
87	C8	7	0	0	0	0
87	D3	7	0	0	0	0
87	D9	7	0	0	0	0
87	L3	21	0	0	1	0
87	L4	7	0	0	0	0
87	M0	7	0	0	0	0
87	M5	7	0	0	2	0
87	M6	7	0	0	0	0
87	M7	7	0	0	1	0
87	M9	14	0	0	2	0
87	N9	7	0	0	0	0
87	O1	7	0	0	6	0
87	O2	7	0	0	0	0
87	O3	7	0	0	1	0
87	O7	14	0	0	3	0
87	Q2	7	0	0	3	0
87	S8	7	0	0	1	0
87	SR	7	0	0	0	0
87	c3	7	0	0	0	0
87	c5	7	0	0	0	0
87	c8	7	0	0	0	0
87	d4	7	0	0	0	0
87	d9	7	0	0	0	0
87	l3	14	0	0	0	0
87	l4	14	0	0	0	0
87	l5	28	0	0	0	0
87	l9	7	0	0	0	0
87	m0	14	0	0	0	0
87	m1	7	0	0	0	0
87	m4	7	0	0	0	0
87	m5	7	0	0	0	0
87	m7	7	0	0	0	0
87	m9	7	0	0	0	0
87	n3	7	0	0	0	0
87	n9	7	0	0	0	0
87	o3	7	0	0	0	0
87	o7	7	0	0	0	0
87	o9	7	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
87	q1	7	0	0	0	0
87	q2	7	0	0	0	0
87	s1	7	0	0	0	0
87	s8	7	0	0	0	0
87	sR	7	0	0	0	0
88	2	34	0	40	9	0
89	D6	1	0	0	0	0
89	D7	1	0	0	0	0
89	D9	1	0	0	0	0
89	E1	1	0	0	0	0
89	O7	1	0	0	1	0
89	Q0	1	0	0	1	0
89	Q2	1	0	0	2	0
89	Q3	1	0	0	0	0
89	d6	1	0	0	0	0
89	d7	1	0	0	0	0
89	d9	1	0	0	0	0
89	e1	1	0	0	0	0
89	o7	1	0	0	0	0
89	q0	1	0	0	0	0
89	q2	1	0	0	0	0
89	q3	1	0	0	0	0
All	All	411095	0	297211	21971	3

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 32.

All (21971) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:D3:63:GLN:CB	25:D3:63:GLN:CG	1.55	1.57
78:Q2:17:CYS:SG	78:Q2:17:CYS:CB	2.08	1.40
1:2:1754:A:HO2'	32:E0:2:ALA:N	1.52	1.08
78:Q2:17:CYS:SG	78:Q2:77:CYS:HB3	2.80	1.07
36:1:883:A:H5'	53:M7:133:HIS:HA	1.35	1.07
40:L3:227:GLU:HG2	40:L3:270:ARG:HD3	1.32	1.06
56:N0:115:ARG:NH1	36:5:1295:G:O2'	296.14	1.04
78:Q2:17:CYS:CB	89:Q2:501:ZN:ZN	1.37	1.04
41:L4:52:VAL:HG11	41:L4:99:MET:HE3	1.38	1.03
27:D5:43:ASP:HB2	27:D5:46:LYS:HB2	3.29	1.02
38:8:157:U:H3'	38:8:158:U:H3'	1.42	1.02
20:C8:123:ARG:HG3	20:C8:133:VAL:HG21	1.40	1.02
36:1:640:U:OP1	64:N8:21:ARG:NH2	1.93	1.02

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:L8:101:THR:HG23	45:L8:104:GLU:H	1.23	1.02
40:L3:10:ARG:HH22	40:L3:263:SER:HB2	1.22	1.01
36:5:3194:C:O2	36:5:3197:G:N2	1.91	1.01
51:M5:84:PRO:HA	51:M5:87:GLN:HG3	1.41	1.01
67:O1:11:GLU:HG2	67:O1:74:ARG:HB2	2.08	1.01
1:6:1799:U:H4'	1:6:1800:A:H2'	1.40	1.01
46:L9:16:VAL:HG12	46:L9:29:GLY:HA3	1.43	1.01
53:M7:138:LYS:NZ	36:5:2356:A:OP1	148.39	1.00
11:S9:3:ARG:NH1	1:6:40:A:OP1	372.26	1.00
1:6:25:C:N4	1:6:380:U:O4	1.95	1.00
28:D6:26:CYS:HB3	28:D6:77:CYS:SG	2.01	0.99
11:S9:113:VAL:HG12	11:S9:119:ALA:HB2	3.89	0.99
1:6:454:U:H5''	1:6:455:C:H5	1.25	0.99
47:M0:3:ARG:NH2	36:5:2854:U:OP2	290.73	0.99
36:5:1661:G:O6	87:5:3915:OHX:N3	1.94	0.98
1:6:1579:U:OP1	87:6:2189:OHX:N4	1.97	0.98
44:L7:158:LYS:HZ2	44:L7:159:GLN:H	3.38	0.98
45:L8:137:ASN:HB3	51:M5:2:GLY:HA2	1.45	0.98
13:C1:37:ASN:HA	13:C1:44:THR:HG21	1.42	0.98
41:L4:271:LYS:NZ	36:5:695:C:OP1	104.88	0.97
43:L6:64:LEU:HD11	43:L6:76:LEU:HD23	1.45	0.97
36:1:807:A:H61	36:1:934:G:H22	1.12	0.97
19:C7:47:ARG:NH1	19:C7:48:ASN:OD1	2.84	0.97
52:M6:18:ARG:NH2	36:5:1318:A:OP1	277.84	0.97
36:1:838:G:O6	79:Q3:4:ARG:NH2	1.98	0.97
42:L5:22:ARG:NH1	42:L5:28:THR:OG1	5.43	0.97
36:1:360:G:N2	36:1:814:U:O2	1.97	0.96
15:C3:76:LYS:HA	15:C3:81:ALA:HB2	2.16	0.96
36:1:1233:G:H22	36:1:1255:C:H42	1.09	0.96
19:C7:26:LEU:HD11	19:C7:62:GLN:HG3	5.45	0.96
50:M4:55:ARG:NH2	50:M4:76:ALA:O	1.98	0.96
7:S5:33:VAL:HA	7:S5:37:GLN:HE22	4.97	0.96
46:L9:124:ARG:HG2	46:L9:164:ILE:HD12	4.61	0.95
4:S2:205:ARG:HB3	4:S2:205:ARG:HH11	1.30	0.95
44:L7:25:GLN:HG2	44:L7:29:GLU:HB2	1.46	0.95
76:Q0:122:ARG:HH11	76:Q0:122:ARG:HG3	1.32	0.95
6:S4:9:LEU:HB2	6:S4:30:ARG:HB2	2.02	0.95
36:1:3087:A:OP1	87:1:4180:OHX:N1	1.98	0.95
61:N5:111:ASN:HB2	61:N5:123:TYR:HB2	3.09	0.95
36:1:562:C:OP2	50:M4:77:ARG:NH1	2.00	0.94
1:2:406:U:H2'	1:2:407:A:H8	1.30	0.94
41:L4:64:SER:HA	41:L4:75:PRO:HA	1.49	0.94

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1108:U:H2'	36:1:1109:U:H6	1.29	0.94
42:L5:154:THR:HG23	42:L5:157:ALA:HB2	4.15	0.94
36:5:1383:G:O6	87:5:3932:OHX:N2	2.00	0.94
19:C7:27:ASP:O	19:C7:31:ASN:ND2	2.00	0.94
47:M0:208:ASN:HB3	47:M0:211:ARG:HH11	5.75	0.94
7:S5:94:THR:HG22	7:S5:114:ILE:HG13	1.78	0.94
54:M8:40:THR:O	54:M8:42:ALA:N	2.01	0.94
36:1:1024:G:N2	36:1:1027:A:N7	2.16	0.94
5:S3:178:ARG:HE	5:S3:178:ARG:H	1.14	0.94
15:C3:101:HIS:O	15:C3:105:ASN:ND2	1.99	0.94
71:O5:101:THR:OG1	71:O5:102:GLU:N	2.81	0.94
47:M0:190:VAL:HG13	47:M0:197:VAL:HG21	2.67	0.94
44:L7:217:PRO:O	87:5:3997:OHX:N6	259.84	0.94
76:Q0:99:CYS:SG	89:Q0:500:ZN:ZN	1.56	0.93
10:S8:100:ALA:HB3	10:S8:169:ILE:HG13	3.66	0.93
1:2:1773:C:OP2	77:Q1:2:ARG:NH1	2.01	0.93
8:S6:7:TYR:HE1	8:S6:125:THR:HA	2.71	0.93
44:L7:232:ARG:HG3	44:L7:235:PHE:HB2	3.40	0.93
42:L5:41:LYS:NZ	57:N1:32:LYS:O	2.69	0.93
36:5:1665:C:H42	36:5:1784:G:H1	1.14	0.93
17:C5:115:TYR:OH	1:6:1556:A:OP1	386.35	0.93
36:1:1639:C:OP2	70:O4:74:ARG:NH2	2.02	0.93
67:O1:23:VAL:O	67:O1:28:ARG:NH1	2.02	0.93
5:S3:107:PHE:O	5:S3:111:ASN:ND2	2.02	0.93
47:M0:21:ARG:NH1	47:M0:22:TYR:OH	3.15	0.93
1:2:1529:C:OP1	7:S5:112:ARG:NH1	2.01	0.93
36:1:1234:G:H1	36:1:1254:C:H42	1.17	0.92
1:2:916:U:H3	16:C4:41:ARG:HH22	1.01	0.92
68:O2:22:SER:HA	68:O2:28:VAL:HB	2.11	0.92
55:M9:60:LYS:NZ	36:5:1672:U:OP2	170.68	0.92
5:S3:38:GLU:HG2	5:S3:49:ILE:HD13	1.48	0.92
2:S0:180:GLU:HA	2:S0:183:ARG:HB2	2.10	0.92
40:L3:21:ARG:HG2	40:L3:269:GLN:HG2	1.51	0.92
20:C8:36:LYS:HG2	20:C8:105:VAL:HG21	8.00	0.92
1:2:181:A:H2'	1:2:182:A:C8	2.04	0.92
7:S5:40:ILE:HG23	7:S5:42:LEU:HG	4.93	0.92
54:M8:66:ARG:NH2	36:5:744:A:OP1	167.43	0.92
1:6:1203:A:OP2	87:6:2135:OHX:N1	2.02	0.92
1:6:754:A:N6	1:6:793:A:N7	2.17	0.92
36:1:2389:C:H42	36:1:2990:G:H1	1.17	0.92
36:1:1334:U:O2'	44:L7:151:ARG:NH2	2.03	0.92
1:6:1698:G:N2	1:6:1699:G:N7	2.18	0.92

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2652:U:H4'	78:Q2:89:LYS:HE2	1.51	0.92
48:M1:94:ARG:O	48:M1:96:PHE:N	2.01	0.92
51:M5:125:SER:HB3	36:5:2433:U:H1'	159.96	0.92
1:2:1597:A:OP1	31:D9:19:ARG:NH2	2.02	0.92
36:1:847:A:H2'	36:1:848:A:H8	1.34	0.92
41:L4:122:THR:HG22	41:L4:235:LEU:HB2	1.79	0.92
4:S2:142:GLY:HA2	4:S2:151:PRO:HB3	1.52	0.92
1:6:976:G:H1	1:6:1023:A:HO2'	1.16	0.91
36:1:1898:G:OP2	87:1:3932:OHX:N4	2.03	0.91
36:1:624:G:OP2	87:1:4130:OHX:N3	2.03	0.91
21:C9:105:LEU:HD13	21:C9:122:ARG:HD3	2.08	0.91
66:O0:29:SER:HA	66:O0:32:LYS:HD3	1.51	0.91
36:1:2859:U:O2'	87:1:3868:OHX:N3	2.03	0.91
68:O2:100:ILE:O	68:O2:105:ARG:NH1	2.03	0.91
1:6:1073:G:H2'	1:6:1074:G:H5''	1.53	0.91
31:D9:24:CYS:HB3	31:D9:42:CYS:SG	2.87	0.91
11:S9:41:GLU:OE1	11:S9:126:ARG:NH2	2.03	0.91
55:M9:35:ALA:O	55:M9:37:SER:N	3.46	0.91
71:O5:10:ARG:NH1	71:O5:60:GLU:OE1	2.02	0.91
1:2:916:U:H3	16:C4:41:ARG:NH2	1.69	0.91
1:2:1483:A:H2'	1:2:1484:G:H8	1.34	0.91
46:L9:28:VAL:HG12	46:L9:33:THR:HB	5.39	0.91
47:M0:191:LYS:NZ	47:M0:212:GLU:OE2	2.02	0.91
63:N7:24:VAL:HG21	63:N7:87:LEU:HD23	3.99	0.91
36:1:2179:C:OP1	39:L2:132:ASN:ND2	2.04	0.91
1:2:1229:G:O2'	1:2:1255:G:N2	2.04	0.91
40:L3:60:LEU:HD11	40:L3:62:ARG:HB2	1.52	0.91
1:6:1595:U:H3	1:6:1600:A:H2	1.18	0.91
67:O1:82:GLU:OE2	87:5:3969:OHX:N5	115.36	0.91
1:6:1010:C:OP2	87:6:2177:OHX:N3	2.03	0.91
18:C6:22:VAL:HG22	18:C6:65:ILE:HG23	4.19	0.91
11:S9:163:PRO:O	11:S9:165:GLY:N	2.04	0.91
36:1:2443:A:N6	36:1:2504:U:O4	2.03	0.90
1:6:542:A:H1'	1:6:543:C:H5'	1.52	0.90
52:M6:84:LEU:O	52:M6:86:GLY:N	2.03	0.90
1:2:264:G:N7	87:2:2034:OHX:N1	2.19	0.90
36:1:2895:G:O2'	76:Q0:100:TYR:O	1.88	0.90
46:L9:49:ASN:O	46:L9:51:GLN:N	2.05	0.90
1:6:1112:G:N2	1:6:1133:A:N7	2.19	0.90
6:S4:195:ILE:HG22	6:S4:196:VAL:H	3.20	0.90
36:1:2355:G:H4'	53:M7:139:TYR:CE2	2.06	0.90
10:S8:184:LEU:HB3	10:S8:189:LEU:HD13	2.49	0.90

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:N0:90:MET:HG2	36:5:1213:G:H4'	319.34	0.90
40:L3:120:LYS:HE2	36:5:3000:A:H5''	202.18	0.90
1:6:74:U:O2	87:6:2199:OHX:N2	2.05	0.90
50:M4:38:ILE:HA	50:M4:44:VAL:HG12	4.02	0.90
36:1:3182:G:OP1	52:M6:160:ARG:NH2	2.04	0.90
18:C6:143:ARG:NH1	1:6:1191:U:OP2	348.26	0.90
36:1:1129:A:OP1	47:M0:13:LYS:NZ	2.05	0.90
44:L7:79:ALA:HB2	57:N1:138:SER:H	1.34	0.90
36:5:3242:G:H5'	36:5:3245:A:H8	1.36	0.90
61:N5:114:VAL:HB	75:O9:10:LYS:HZ1	3.53	0.90
60:N4:49:ILE:O	60:N4:52:THR:OG1	1.94	0.90
51:M5:99:ARG:HD3	51:M5:167:THR:HB	1.52	0.89
36:5:1231:A:H5''	36:5:1232:C:H5'	1.52	0.89
1:2:1424:A:H1'	4:S2:92:ALA:HB1	1.52	0.89
36:1:2640:A:OP1	57:N1:55:LYS:NZ	2.04	0.89
4:S2:60:SER:OG	23:D1:15:ARG:NH2	4.02	0.89
59:N3:23:MET:HG2	59:N3:36:ILE:HD11	3.10	0.89
43:L6:51:ARG:NH1	50:M4:114:ASP:OD2	2.06	0.89
27:D5:59:TYR:HE2	27:D5:61:SER:HB3	1.35	0.89
1:2:658:C:N3	1:2:676:G:N1	2.19	0.89
1:2:1621:U:H2'	1:2:1622:G:C8	2.07	0.89
36:1:2661:G:H1	36:1:2709:C:H42	1.16	0.89
9:S7:60:ILE:HD11	9:S7:90:VAL:HG22	4.05	0.89
36:5:3170:A:N1	36:5:3280:U:N3	2.20	0.89
69:O3:59:VAL:O	69:O3:61:GLY:N	2.49	0.89
1:2:569:C:H2'	1:2:570:A:H8	1.38	0.89
75:O9:19:GLN:NE2	38:8:53:A:OP1	90.24	0.89
25:D3:79:ASN:HD22	25:D3:81:LYS:HB2	1.38	0.89
36:1:2881:C:H42	36:1:2943:G:H1	1.20	0.89
42:L5:260:PHE:HE2	37:7:121:U:H5'	321.91	0.89
23:D1:15:ARG:NH1	23:D1:33:GLN:OE1	2.05	0.89
40:L3:147:GLU:OE2	40:L3:150:ARG:NH1	2.89	0.89
1:6:83:G:N7	87:6:2102:OHX:N1	2.20	0.89
5:S3:223:LYS:HD3	34:SR:193:ILE:HD13	7.31	0.89
36:5:2273:G:O6	87:5:4193:OHX:N5	2.06	0.89
42:L5:8:LYS:NZ	36:5:2687:G:OP1	310.87	0.89
52:M6:121:PRO:HA	52:M6:124:LEU:HD23	2.63	0.89
44:L7:222:HIS:ND1	44:L7:224:ILE:HG13	1.87	0.89
36:1:31:C:OP2	51:M5:188:ARG:NH2	2.06	0.89
1:2:1641:C:H42	1:2:1760:G:H1	1.20	0.88
10:S8:61:GLU:HG2	10:S8:62:THR:HG23	4.32	0.88
1:2:895:G:O2'	16:C4:38:THR:N	2.06	0.88

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:655:C:H2'	36:5:656:A:H8	1.37	0.88
36:1:1722:U:OP1	55:M9:100:ARG:NH1	2.05	0.88
36:1:1949:G:OP1	55:M9:104:ARG:NH1	2.05	0.88
50:M4:14:LEU:H	50:M4:19:ARG:HH11	1.19	0.88
29:D7:55:THR:OG1	29:D7:56:CYS:N	2.02	0.88
40:L3:76:VAL:HA	40:L3:326:GLY:H	1.38	0.88
1:6:67:A:O2'	1:6:69:G:OP1	1.91	0.88
36:5:742:G:N7	87:5:3998:OHX:N4	2.21	0.88
62:N6:36:SER:O	62:N6:39:LEU:N	2.05	0.88
41:L4:16:THR:HG22	41:L4:18:ASN:H	1.36	0.88
36:5:343:U:OP2	87:5:3920:OHX:N3	2.06	0.88
36:5:2818:U:H6	36:5:2818:U:H5'	1.38	0.88
72:O6:70:ARG:HH11	72:O6:84:LYS:HG2	1.38	0.88
40:L3:81:THR:HG23	40:L3:205:VAL:HG21	4.02	0.88
36:1:3155:U:H3'	36:1:3156:U:H4'	1.55	0.88
11:S9:88:GLU:O	11:S9:91:LYS:NZ	2.07	0.88
6:S4:49:ARG:NH1	1:6:448:C:OP2	379.69	0.88
39:L2:45:VAL:HB	39:L2:61:VAL:HG22	1.56	0.88
1:2:902:G:OP1	16:C4:90:ARG:NH1	2.07	0.88
40:L3:59:ASP:OD2	40:L3:357:LYS:NZ	2.35	0.88
34:SR:82:SER:OG	34:SR:92:TRP:NE1	3.00	0.88
47:M0:78:THR:OG1	47:M0:79:VAL:N	3.31	0.88
21:C9:57:ARG:NH1	1:6:1479:A:OP1	391.64	0.88
36:1:3140:G:OP1	40:L3:20:LYS:NZ	2.05	0.88
58:N2:56:VAL:HG22	58:N2:65:VAL:HG22	1.53	0.88
49:M3:165:SER:O	49:M3:167:PHE:N	2.05	0.88
1:6:151:G:H1	1:6:163:G:H1	1.22	0.88
36:1:2409:G:H1	36:1:2812:C:H42	1.17	0.88
66:O0:95:ALA:HB2	66:O0:100:ILE:HD11	1.56	0.88
4:S2:170:ILE:HB	4:S2:197:TYR:HB2	1.54	0.88
1:2:1483:A:H2'	1:2:1484:G:C8	2.08	0.88
36:5:511:G:H1	36:5:580:C:H42	1.21	0.88
36:1:2338:C:OP1	40:L3:236:LYS:NZ	2.05	0.88
52:M6:195:ALA:O	52:M6:197:LEU:N	2.76	0.88
3:S1:144:ARG:HB3	3:S1:208:GLN:HG2	3.49	0.88
36:1:2125:A:N6	36:1:2328:U:O4	2.06	0.88
78:Q2:54:THR:O	78:Q2:54:THR:OG1	3.00	0.88
72:O6:77:LEU:O	36:5:272:G:N2	145.05	0.88
22:D0:69:LYS:HG3	22:D0:78:THR:HB	3.30	0.88
21:C9:61:VAL:HG21	21:C9:104:VAL:HG11	1.56	0.87
16:C4:29:HIS:HB3	16:C4:41:ARG:HG3	1.54	0.87
36:5:1249:G:H2'	36:5:1250:G:H8	1.38	0.87

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:130:SER:HB3	39:L2:174:ARG:HH21	1.38	0.87
38:4:95:G:OP2	73:O7:72:ARG:NH1	2.07	0.87
36:1:208:C:OP2	41:L4:163:LYS:NZ	2.08	0.87
1:2:1575:G:H2'	1:2:1576:A:C8	2.08	0.87
70:O4:47:CYS:SG	70:O4:48:GLY:N	2.43	0.87
9:S7:143:LEU:HD11	9:S7:149:ILE:HG13	1.56	0.87
4:S2:119:LYS:HZ2	1:6:1291:G:H5'	405.24	0.87
36:1:1170:A:OP2	87:1:3959:OHX:N5	2.08	0.87
1:6:1207:C:H42	1:6:1456:C:H5	1.19	0.87
43:L6:172:HIS:HD1	69:O3:44:TYR:HH	0.88	0.87
46:L9:18:VAL:HB	46:L9:27:VAL:HG22	2.15	0.87
36:5:3054:U:O4	87:5:4167:OHX:N4	2.08	0.87
1:6:1280:C:H2'	1:6:1281:G:H8	1.37	0.87
70:O4:74:ARG:NH2	36:5:1639:C:OP2	199.02	0.87
1:6:1702:A:H5'	1:6:1703:C:H5	1.36	0.87
1:6:140:A:N6	1:6:281:G:OP1	2.08	0.87
10:S8:50:GLY:O	10:S8:52:ASN:ND2	2.08	0.87
16:C4:54:GLU:OE1	1:6:901:G:N2	282.61	0.87
36:5:346:C:N4	36:5:349:A:OP2	2.07	0.87
40:L3:43:LEU:HG	40:L3:181:ILE:HG21	2.92	0.87
1:2:1291:G:H21	1:2:1324:G:H22	1.19	0.87
1:6:36:C:N4	1:6:472:U:O4	2.08	0.87
22:D0:105:GLN:HA	22:D0:108:ILE:HD13	6.99	0.87
64:N8:147:LEU:HD13	72:O6:7:ILE:HD11	5.63	0.87
36:1:863:C:OP1	87:1:3883:OHX:N5	2.08	0.87
36:1:3181:C:O2'	52:M6:164:SER:OG	1.85	0.87
16:C4:26:THR:HG21	16:C4:97:GLY:HA3	2.00	0.87
36:5:3164:C:N4	36:5:3286:G:O6	2.06	0.87
70:O4:5:VAL:HG22	70:O4:6:THR:H	1.38	0.87
1:6:1636:C:H4'	1:6:1637:C:H5''	1.57	0.87
8:S6:87:ARG:NH1	1:6:159:U:O2'	321.68	0.87
41:L4:197:ARG:NH1	36:5:1381:A:OP1	110.06	0.86
64:N8:40:HIS:O	36:5:964:G:N2	186.71	0.86
1:6:454:U:H5''	1:6:455:C:C5	2.10	0.86
47:M0:174:THR:HG23	47:M0:176:LEU:H	1.39	0.86
36:5:812:G:N7	87:5:4039:OHX:N2	2.22	0.86
59:N3:48:ARG:HG3	59:N3:48:ARG:HH11	2.27	0.86
34:SR:7:LEU:HG	34:SR:315:VAL:HG13	3.85	0.86
1:2:1796:C:OP2	28:D6:5:ARG:NH1	2.08	0.86
67:O1:44:MET:HB2	67:O1:46:THR:HG22	1.57	0.86
72:O6:58:ILE:HG22	72:O6:90:MET:HG3	2.87	0.86
36:1:2218:G:H2'	36:1:2219:A:C8	2.11	0.86

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:S6:164:LYS:HD2	8:S6:167:LYS:HB3	2.46	0.86
36:1:501:A:H2'	36:1:502:U:C6	2.10	0.86
53:M7:108:ASP:O	53:M7:110:THR:N	3.30	0.86
36:5:2284:C:O2	87:5:4174:OHX:N1	2.08	0.86
1:2:1515:A:O2'	1:2:1517:U:OP2	1.94	0.86
41:L4:152:VAL:HG22	41:L4:172:VAL:HG21	1.55	0.86
1:2:1143:A:O2'	1:2:1300:A:N1	2.09	0.86
56:N0:44:PHE:O	56:N0:46:GLN:N	3.63	0.86
36:5:2233:A:OP2	87:5:3957:OHX:N5	2.09	0.86
1:2:160:C:O2'	8:S6:95:LYS:NZ	2.07	0.86
36:1:345:G:OP1	36:1:1429:G:N2	2.08	0.86
1:2:25:C:O2	87:2:2084:OHX:N3	2.09	0.86
64:N8:12:ARG:NH2	36:5:661:G:OP2	152.66	0.86
36:1:3393:U:H2'	36:1:3394:U:H6	1.39	0.86
11:S9:146:PHE:HZ	1:6:765:G:C6	430.10	0.86
17:C5:40:ARG:O	17:C5:43:ARG:N	3.86	0.86
52:M6:119:VAL:HB	52:M6:124:LEU:HD21	2.73	0.86
52:M6:85:ARG:HH11	52:M6:90:HIS:CE1	2.73	0.86
1:2:1684:U:H2'	1:2:1685:G:H8	1.40	0.86
36:1:3276:G:O6	53:M7:171:ARG:NH1	2.07	0.86
36:5:835:G:O2'	36:5:857:G:N2	2.08	0.86
36:1:1009:A:O3'	47:M0:39:LYS:NZ	2.08	0.85
10:S8:39:GLY:N	10:S8:60:ILE:O	2.07	0.85
52:M6:181:ALA:O	52:M6:183:ALA:N	2.08	0.85
40:L3:299:ASP:OD1	40:L3:301:THR:OG1	1.93	0.85
36:1:979:U:H1'	36:1:980:A:C8	2.11	0.85
19:C7:10:LYS:NZ	1:6:1401:A:O3'	407.27	0.85
36:1:1456:A:N7	67:O1:26:LYS:NZ	2.24	0.85
48:M1:109:HIS:HD2	48:M1:114:ILE:HG21	5.55	0.85
72:O6:70:ARG:HG3	72:O6:87:VAL:HG21	3.54	0.85
40:L3:106:TRP:O	40:L3:137:TYR:OH	1.94	0.85
36:5:1806:A:OP2	87:5:4019:OHX:N5	2.08	0.85
1:2:747:C:H4'	24:D2:80:ASN:HD21	1.41	0.85
70:O4:46:ASP:OD2	70:O4:88:ARG:NH2	4.20	0.85
1:2:149:C:O2'	8:S6:132:ARG:NH1	2.10	0.85
49:M3:54:LEU:N	49:M3:94:GLY:O	3.32	0.85
57:N1:129:LYS:HD3	36:5:1097:G:H5''	249.10	0.85
1:6:653:C:N4	1:6:677:G:O6	2.07	0.85
58:N2:42:LYS:NZ	36:5:1686:U:OP1	175.73	0.85
36:5:1365:G:OP2	87:5:4024:OHX:N3	2.10	0.85
49:M3:69:VAL:HB	49:M3:149:GLN:HE22	1.42	0.85
21:C9:16:ASN:OD1	21:C9:56:LYS:NZ	2.10	0.85

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:868:G:H1	1:6:960:U:H3	1.23	0.85
47:M0:47:PRO:HD2	47:M0:141:LYS:HA	1.59	0.85
7:S5:51:VAL:HG13	7:S5:131:GLN:HB2	1.58	0.85
1:2:1420:C:OP1	31:D9:54:LYS:NZ	2.08	0.85
69:O3:75:HIS:HB3	69:O3:80:VAL:HB	1.59	0.85
49:M3:166:ALA:HB1	64:N8:147:LEU:HD21	1.58	0.85
13:C1:99:ARG:NH1	25:D3:7:ARG:O	2.10	0.85
36:5:1565:G:N1	36:5:1574:C:N3	2.24	0.85
36:5:754:G:H2'	36:5:755:A:H8	1.42	0.85
36:1:3338:C:O2	36:1:3366:G:N2	2.10	0.85
8:S6:214:LYS:O	8:S6:218:GLU:N	4.32	0.85
11:S9:110:GLN:HE22	11:S9:126:ARG:HG2	2.82	0.85
5:S3:177:MET:HG3	5:S3:178:ARG:HG2	5.99	0.85
1:2:1575:G:H2'	1:2:1576:A:H8	1.41	0.85
44:L7:47:ARG:NH1	44:L7:183:ASP:OD2	2.10	0.84
21:C9:115:GLU:OE1	21:C9:123:ARG:NH1	4.14	0.84
55:M9:47:ASN:ND2	36:5:1765:U:O4	96.91	0.84
1:2:1291:G:H22	1:2:1324:G:H1	1.20	0.84
36:1:1483:G:O6	70:O4:4:ARG:NH2	2.10	0.84
1:2:572:C:H5'	25:D3:109:ARG:HH12	1.39	0.84
9:S7:30:SER:HB2	9:S7:34:LEU:HB2	1.85	0.84
40:L3:53:MET:HG2	40:L3:77:THR:HG22	2.09	0.84
64:N8:3:SER:O	64:N8:6:THR:HG22	2.16	0.84
39:L2:4:VAL:HG13	39:L2:8:GLN:HE21	3.11	0.84
40:L3:95:THR:O	40:L3:97:ARG:N	2.10	0.84
64:N8:34:MET:HB2	36:5:96:G:OP2	159.69	0.84
78:Q2:17:CYS:SG	89:Q2:501:ZN:ZN	1.64	0.84
36:5:3035:A:OP2	87:5:4046:OHX:N5	2.10	0.84
19:C7:82:ASP:O	19:C7:83:GLN:NE2	2.10	0.84
41:L4:44:LYS:HB3	41:L4:47:ARG:HH11	1.93	0.84
36:5:114:A:N6	36:5:154:U:O2	2.11	0.84
33:E1:98:VAL:HG21	1:6:1252:C:H41	434.88	0.84
37:7:13:A:OP1	37:7:111:U:O2'	1.94	0.84
26:D4:27:VAL:HG11	26:D4:35:VAL:HG21	3.70	0.84
44:L7:228:SER:HA	44:L7:232:ARG:HH22	3.11	0.84
2:S0:13:ASP:HA	2:S0:16:LEU:HD12	3.39	0.84
11:S9:102:GLU:OE2	11:S9:102:GLU:N	2.48	0.84
26:D4:99:LYS:HD3	26:D4:101:GLU:HB2	1.56	0.84
64:N8:126:LYS:HB3	64:N8:148:ILE:HD13	2.36	0.84
39:L2:30:ARG:O	39:L2:163:ARG:NH2	2.11	0.84
57:N1:90:ASN:HD22	36:5:2736:A:H1'	222.25	0.84
1:6:479:C:O2	1:6:510:G:N2	2.10	0.84

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:S3:141:LYS:NZ	1:6:1275:A:N3	389.98	0.84
36:5:272:G:O6	36:5:293:C:N4	2.07	0.84
1:6:485:A:N6	1:6:502:U:O4	2.09	0.84
1:2:583:C:OP1	87:2:2026:OHX:N3	2.11	0.84
53:M7:17:ALA:HB2	53:M7:98:ALA:HB2	1.57	0.84
47:M0:161:GLY:O	47:M0:163:GLN:NE2	2.70	0.84
45:L8:67:ILE:O	45:L8:236:GLY:N	2.11	0.84
35:SM:72:ARG:HH22	1:6:1461:C:P	327.88	0.84
36:1:1748:G:OP2	74:O8:42:LYS:NZ	2.10	0.84
61:N5:56:ARG:NH2	38:8:135:G:OP2	79.99	0.84
1:6:1081:A:H2	1:6:1082:C:H41	1.26	0.84
11:S9:154:LYS:O	11:S9:155:HIS:ND1	4.34	0.84
7:S5:37:GLN:HG2	18:C6:53:LEU:HD13	2.34	0.84
1:2:985:G:O6	87:2:2024:OHX:N4	2.11	0.84
8:S6:11:GLY:HA3	8:S6:129:VAL:HG22	1.57	0.84
79:Q3:9:GLY:O	79:Q3:11:THR:N	2.86	0.84
36:1:2400:G:H5''	36:1:2401:A:OP2	1.76	0.84
1:6:445:A:H2'	1:6:446:A:H8	1.42	0.83
21:C9:73:VAL:O	21:C9:77:ASN:ND2	2.52	0.83
43:L6:89:THR:HG21	50:M4:115:PHE:HB2	1.59	0.83
24:D2:23:ARG:NH1	24:D2:65:LEU:O	2.11	0.83
71:O5:78:LYS:HA	71:O5:81:ARG:HD3	2.99	0.83
1:2:1158:C:H42	1:2:1163:A:H61	1.19	0.83
1:2:1481:C:O2'	1:2:1482:C:O5'	1.96	0.83
1:2:1772:C:H5''	77:Q1:2:ARG:HD2	1.59	0.83
39:L2:96:LEU:O	79:Q3:87:ARG:NH1	2.54	0.83
35:SM:55:SER:OG	35:SM:56:GLY:N	2.09	0.83
1:6:649:U:H3	1:6:685:A:H61	1.24	0.83
36:1:3243:A:H4'	40:L3:95:THR:HG22	1.60	0.83
43:L6:31:ARG:O	43:L6:33:SER:N	2.99	0.83
46:L9:101:VAL:HG22	46:L9:114:VAL:HG22	1.90	0.83
50:M4:80:THR:HG21	36:5:560:G:H5'	355.14	0.83
36:1:3259:U:H6	36:1:3259:U:H5'	1.44	0.83
36:1:366:A:OP1	41:L4:95:ARG:NH2	2.12	0.83
41:L4:161:LYS:NZ	36:5:209:A:OP1	75.68	0.83
1:2:844:A:H2'	1:2:845:G:H8	1.44	0.83
1:2:788:A:OP2	6:S4:108:ARG:NH1	2.11	0.83
55:M9:88:ARG:HG3	55:M9:88:ARG:HH11	3.12	0.83
36:1:1818:U:H3'	36:1:1819:U:H5''	1.59	0.83
28:D6:19:LYS:NZ	1:6:944:A:OP2	295.12	0.83
42:L5:270:LYS:O	42:L5:271:LYS:NZ	7.91	0.83
1:2:406:U:H2'	1:2:407:A:C8	2.13	0.83

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1169:G:N1	1:2:1575:G:OP2	2.10	0.83
73:O7:65:ARG:HH11	73:O7:65:ARG:HG3	1.44	0.83
46:L9:94:TYR:CD2	46:L9:98:PRO:HA	2.32	0.83
1:6:1266:U:H2'	1:6:1267:G:C8	2.14	0.83
1:2:1083:G:H1	1:2:1090:C:H42	1.21	0.83
36:1:1317:A:OP1	87:1:4062:OHX:N2	2.12	0.83
42:L5:237:GLU:O	42:L5:241:THR:OG1	1.95	0.83
16:C4:67:VAL:O	16:C4:71:CYS:N	2.11	0.83
4:S2:56:ILE:HA	4:S2:61:LEU:HD12	4.24	0.83
36:1:2444:C:H42	36:1:2503:G:H21	1.24	0.83
76:Q0:84:ALA:HA	76:Q0:87:SER:HB2	1.60	0.83
1:2:559:C:H42	1:2:586:G:H1	1.27	0.83
1:2:1203:A:OP2	87:2:2111:OHX:N5	2.12	0.83
1:2:1570:A:O2'	20:C8:144:ARG:NH2	2.12	0.83
36:1:76:G:H5''	49:M3:73:ARG:HB2	1.61	0.83
36:1:3138:U:H2'	36:1:3139:A:H5''	1.60	0.83
1:2:1351:G:O6	1:2:1374:C:N4	2.11	0.83
27:D5:83:LEU:HD22	27:D5:88:ILE:HD12	1.59	0.83
28:D6:10:ARG:NE	1:6:1795:U:O2	328.27	0.83
36:1:1196:C:O2	87:1:3993:OHX:N2	2.12	0.83
7:S5:185:ARG:HH12	1:6:1572:G:H1'	328.35	0.83
87:1:4180:OHX:N1	40:L3:364:LYS:O	2.12	0.83
35:SM:73:SER:OG	35:SM:74:LYS:NZ	4.65	0.83
18:C6:90:VAL:HG21	18:C6:117:LEU:HD11	1.60	0.83
8:S6:57:ASP:HA	8:S6:106:LEU:HA	1.60	0.83
36:5:2874:G:H22	36:5:2979:U:H3	1.27	0.83
36:1:1945:A:H2'	36:1:1946:A:H8	1.44	0.83
42:L5:107:ARG:HH22	42:L5:120:LYS:HA	1.44	0.83
36:1:847:A:H2'	36:1:848:A:C8	2.14	0.83
42:L5:265:TYR:OH	37:7:121:U:OP2	313.36	0.83
53:M7:31:GLU:OE2	53:M7:61:ARG:N	2.57	0.83
36:5:2697:A:H2'	36:5:2698:G:C8	2.12	0.83
36:5:2255:A:H5'	36:5:2261:G:H22	1.43	0.83
7:S5:35:GLN:O	7:S5:37:GLN:N	3.69	0.82
8:S6:48:TYR:OH	8:S6:119:GLN:O	3.22	0.82
39:L2:177:LYS:HB2	79:Q3:29:LEU:HD22	3.91	0.82
73:O7:66:TYR:O	73:O7:68:LYS:N	3.02	0.82
36:1:129:U:O4	87:1:3891:OHX:N5	2.11	0.82
36:1:2181:C:OP1	39:L2:192:LYS:NZ	2.11	0.82
10:S8:37:LYS:NZ	10:S8:95:THR:OG1	2.36	0.82
15:C3:103:GLU:O	15:C3:106:ARG:NH2	2.11	0.82
62:N6:2:ALA:N	36:5:213:A:OP1	81.55	0.82

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1165:A:N6	36:1:1334:U:O4	2.11	0.82
1:2:1113:A:H5''	77:Q1:6:ARG:HH22	1.45	0.82
1:2:181:A:H2'	1:2:182:A:H8	1.40	0.82
39:L2:108:PRO:O	39:L2:111:THR:OG1	2.36	0.82
49:M3:2:ALA:HB1	64:N8:33:GLY:H	1.43	0.82
76:Q0:77:ILE:HG23	76:Q0:78:ILE:HG22	2.70	0.82
36:1:86:G:O2'	36:1:98:G:O6	1.97	0.82
45:L8:99:PRO:HG2	45:L8:190:VAL:HG13	4.56	0.82
1:2:1034:C:HO2'	24:D2:2:THR:N	1.77	0.82
25:D3:74:VAL:HG21	25:D3:104:LEU:HD11	1.60	0.82
36:1:2894:C:OP2	46:L9:168:ARG:NH1	2.13	0.82
1:2:1594:G:H5'	31:D9:33:LYS:HE3	1.61	0.82
8:S6:162:VAL:O	8:S6:169:TYR:N	2.11	0.82
1:2:147:A:OP2	1:2:166:C:N4	2.09	0.82
7:S5:73:THR:HG21	18:C6:114:ARG:HE	5.35	0.82
74:O8:42:LYS:HG3	74:O8:55:VAL:HG22	1.62	0.82
36:1:2094:C:H2'	36:1:2095:G:H8	1.43	0.82
1:2:79:C:H1'	8:S6:174:LYS:HD3	1.60	0.82
1:2:591:A:H2'	1:2:592:A:C8	2.14	0.82
36:5:3192:U:O4	87:5:4139:OHX:N6	2.13	0.82
48:M1:171:VAL:HG13	48:M1:172:LEU:H	1.44	0.82
36:5:3128:G:OP2	87:5:4154:OHX:N3	2.12	0.82
36:1:2251:G:O6	36:1:2265:C:N4	2.12	0.82
5:S3:209:ILE:O	19:C7:20:TYR:OH	1.98	0.82
1:2:1684:U:H2'	1:2:1685:G:C8	2.14	0.82
42:L5:177:GLU:O	42:L5:179:ARG:N	2.11	0.82
40:L3:41:VAL:HA	40:L3:185:GLY:HA3	1.95	0.82
13:C1:101:GLU:OE2	25:D3:16:ARG:NH2	2.51	0.82
41:L4:50:TYR:HD2	41:L4:50:TYR:H	3.17	0.82
19:C7:35:CYS:HA	19:C7:38:ILE:HG22	1.62	0.82
5:S3:40:ARG:HB2	5:S3:47:GLU:HB2	1.86	0.82
50:M4:128:ARG:NH2	36:5:3214:U:OP2	281.85	0.82
34:SR:216:LYS:HA	34:SR:239:GLU:HG3	1.72	0.82
8:S6:13:GLN:OE1	1:6:151:G:N2	311.32	0.82
6:S4:148:ARG:NH1	8:S6:201:GLN:OE1	2.11	0.82
36:1:799:G:O6	87:1:3981:OHX:N5	2.12	0.82
36:5:1487:G:H1	36:5:1855:U:H3	1.28	0.82
36:5:968:G:H2'	36:5:969:C:C6	2.15	0.82
1:2:283:U:H5''	8:S6:188:ARG:HD3	1.62	0.82
36:1:2808:A:O2'	87:1:3878:OHX:N3	2.12	0.82
8:S6:142:ARG:HA	8:S6:147:LEU:HD12	1.97	0.82
36:1:1790:G:O6	87:1:4167:OHX:N4	2.13	0.82

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1221:A:N6	1:6:1262:U:O4	2.13	0.82
36:1:1234:G:N2	36:1:1254:C:N3	2.27	0.82
55:M9:35:ALA:HB1	55:M9:41:ILE:HG12	4.87	0.82
4:S2:132:ALA:O	4:S2:135:SER:OG	1.96	0.82
24:D2:8:ALA:HB2	24:D2:74:VAL:HG11	3.40	0.82
1:2:812:A:OP1	1:2:858:G:N2	2.13	0.82
17:C5:81:ARG:NH1	17:C5:97:TYR:O	2.12	0.82
53:M7:33:ALA:O	53:M7:35:ALA:N	3.62	0.82
11:S9:81:VAL:O	11:S9:84:GLY:N	2.13	0.82
27:D5:98:GLN:NE2	27:D5:99:ALA:O	2.27	0.82
42:L5:84:PRO:O	42:L5:86:TYR:N	2.12	0.82
1:2:1500:C:OP1	21:C9:122:ARG:NH2	2.13	0.82
34:SR:115:ILE:HD11	34:SR:119:ALA:HA	2.39	0.82
62:N6:36:SER:OG	62:N6:106:ILE:O	1.97	0.82
78:Q2:14:GLY:O	78:Q2:16:THR:N	2.11	0.82
36:5:171:G:N1	36:5:248:U:O2	2.13	0.82
37:3:113:C:H2'	37:3:114:U:O4'	1.79	0.82
36:1:643:U:O2'	36:1:1153:A:N1	2.13	0.82
36:5:2897:A:O2'	36:5:2898:G:O5'	1.97	0.82
6:S4:100:ARG:NH2	6:S4:121:TYR:O	2.13	0.81
36:5:2308:C:O2	87:5:4233:OHX:N1	2.13	0.81
36:1:1953:G:O6	36:1:2094:C:N4	2.13	0.81
36:1:3376:A:OP2	87:1:3907:OHX:N5	2.13	0.81
36:5:3317:U:O2'	36:5:3318:G:OP2	1.98	0.81
36:1:1014:U:H2'	36:1:1015:U:H5''	1.60	0.81
32:E0:13:LYS:NZ	1:6:566:C:O2	376.64	0.81
28:D6:4:LYS:HD3	28:D6:5:ARG:HH21	4.30	0.81
19:C7:5:ARG:NH1	1:6:1402:G:OP2	409.40	0.81
7:S5:23:VAL:O	7:S5:34:GLN:NE2	2.13	0.81
34:SR:238:ASP:OD2	34:SR:258:THR:OG1	2.88	0.81
53:M7:111:LYS:O	53:M7:153:LYS:N	2.59	0.81
43:L6:35:VAL:O	43:L6:38:THR:OG1	1.98	0.81
13:C1:40:LEU:HD22	1:6:246:G:C2	326.38	0.81
10:S8:5:ARG:NH1	10:S8:29:LEU:O	2.12	0.81
53:M7:32:THR:HG21	53:M7:87:SER:HB3	1.61	0.81
27:D5:65:LEU:HB3	27:D5:71:ILE:HD13	1.61	0.81
50:M4:77:ARG:HG3	36:5:561:C:OP1	349.57	0.81
21:C9:53:TRP:HH2	21:C9:100:ILE:HD12	2.58	0.81
16:C4:115:ILE:HG21	28:D6:44:ILE:HG21	7.93	0.81
36:1:3020:U:O4	87:1:3988:OHX:N4	2.13	0.81
56:N0:26:ARG:HH11	57:N1:150:THR:HG21	2.46	0.81
7:S5:74:ALA:O	18:C6:122:ARG:NH2	2.13	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:SR:238:ASP:HB2	34:SR:256:THR:HB	3.37	0.81
36:1:501:A:H2'	36:1:502:U:H6	1.45	0.81
43:L6:48:ARG:NH2	36:5:3276:G:O2'	240.79	0.81
51:M5:136:ASP:OD2	51:M5:138:GLN:NE2	2.13	0.81
1:6:938:G:N7	87:6:2110:OHX:N3	2.28	0.81
43:L6:18:LEU:H	43:L6:18:LEU:HD22	1.45	0.81
42:L5:132:THR:HG21	42:L5:170:GLY:HA2	2.22	0.81
36:1:2841:G:N2	36:1:2846:U:OP1	2.13	0.81
1:2:703:G:H2'	1:2:704:C:H5'	1.62	0.81
44:L7:222:HIS:O	44:L7:225:GLN:N	2.69	0.81
36:1:2157:G:N2	36:1:2177:G:O2'	2.12	0.81
37:7:91:G:H2'	37:7:92:A:H8	1.46	0.81
44:L7:88:ARG:HD2	44:L7:90:LYS:O	2.98	0.81
36:1:301:G:H1	36:1:314:U:H3	1.25	0.81
36:1:1709:C:OP1	70:O4:83:ASN:ND2	2.12	0.81
36:1:2409:G:N2	36:1:2812:C:N3	2.27	0.81
52:M6:167:TYR:OH	52:M6:171:LYS:NZ	2.13	0.81
48:M1:23:VAL:O	48:M1:25:GLU:N	2.13	0.81
34:SR:156:VAL:HA	34:SR:169:ILE:HG22	1.77	0.81
36:5:2970:C:H4'	36:5:2971:A:C6	2.14	0.81
20:C8:75:ASN:N	20:C8:75:ASN:OD1	2.89	0.81
67:O1:31:ARG:HB3	67:O1:31:ARG:HH11	1.46	0.81
50:M4:19:ARG:HD3	50:M4:69:THR:HG22	1.62	0.81
42:L5:260:PHE:HB2	42:L5:265:TYR:CE2	3.15	0.81
36:1:31:C:O2	36:1:53:G:N2	2.13	0.81
70:O4:106:LYS:HA	70:O4:109:THR:HB	1.63	0.81
48:M1:49:LYS:HB3	48:M1:62:ASN:HA	1.63	0.81
1:2:220:A:H5''	1:2:832:U:H1'	1.62	0.81
1:2:740:A:H2'	1:2:741:C:H5''	1.63	0.81
7:S5:200:ASN:HB3	7:S5:208:SER:HB2	3.58	0.81
2:S0:36:TYR:OH	2:S0:56:LYS:NZ	2.13	0.81
62:N6:32:SER:HA	62:N6:49:PRO:HA	2.82	0.81
1:6:415:C:O2	1:6:418:G:N1	2.12	0.81
73:O7:64:MET:HB3	73:O7:68:LYS:HB3	4.55	0.81
36:5:1700:G:N2	36:5:1745:C:O2	2.14	0.81
63:N7:69:LYS:NZ	36:5:1633:C:OP2	192.41	0.81
36:1:655:C:H2'	36:1:656:A:H8	1.45	0.81
1:6:1451:C:H2'	1:6:1452:U:C6	2.16	0.81
39:L2:9:ARG:NH1	36:5:912:G:OP2	178.76	0.81
36:1:1942:U:HO2'	36:1:3345:G:HO2'	1.25	0.81
36:1:1049:C:H2'	36:1:1050:U:H6	1.46	0.81
36:5:550:A:H2'	36:5:551:A:C8	2.15	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:D1:24:ILE:HD13	23:D1:31:SER:HB2	3.31	0.81
76:Q0:109:ASN:N	76:Q0:109:ASN:OD1	3.29	0.81
42:L5:107:ARG:O	42:L5:111:GLN:N	2.77	0.81
17:C5:69:GLU:OE1	17:C5:70:ASN:ND2	8.15	0.81
68:O2:105:ARG:NH2	36:5:1412:G:OP1	146.31	0.81
36:5:1712:G:N2	36:5:1732:U:O4	2.13	0.81
17:C5:122:THR:HG22	1:6:1558:U:H3	367.38	0.81
44:L7:24:GLU:O	44:L7:26:VAL:N	2.12	0.81
36:1:2771:U:O2'	36:1:2772:C:O4'	1.98	0.81
36:5:130:A:N6	36:5:138:U:O4	2.10	0.81
42:L5:58:LYS:NZ	37:7:49:G:O2'	302.70	0.81
26:D4:56:SER:O	26:D4:74:LEU:N	2.26	0.81
34:SR:200:ASN:ND2	34:SR:240:VAL:O	2.14	0.81
49:M3:2:ALA:N	64:N8:33:GLY:O	4.80	0.81
36:1:835:G:O2'	36:1:857:G:N2	2.14	0.81
4:S2:165:VAL:HA	4:S2:202:GLY:HA3	2.21	0.81
18:C6:13:LYS:HG3	18:C6:14:LYS:HG3	7.69	0.81
36:1:2274:U:OP2	87:1:3966:OHX:N4	2.14	0.81
36:5:3052:G:N7	87:5:4167:OHX:N3	2.28	0.80
36:1:1038:C:H4'	42:L5:5:LYS:HE3	1.61	0.80
47:M0:68:ALA:HB2	47:M0:158:LYS:HB2	1.64	0.80
1:6:449:C:O2	1:6:457:G:N2	2.12	0.80
21:C9:14:PHE:HZ	21:C9:132:LEU:HD12	5.08	0.80
48:M1:109:HIS:CD2	48:M1:114:ILE:HG21	4.65	0.80
8:S6:139:ASN:HA	8:S6:142:ARG:HB2	1.63	0.80
36:1:1658:G:O6	36:1:1791:C:N4	2.14	0.80
37:7:91:G:H2'	37:7:92:A:C8	2.16	0.80
36:5:438:A:H2'	36:5:494:G:H21	1.46	0.80
36:1:3085:G:OP1	60:N4:34:SER:OG	1.97	0.80
36:5:2717:U:OP1	87:5:4063:OHX:N3	2.14	0.80
1:2:36:C:N4	1:2:472:U:O4	2.14	0.80
41:L4:328:ASN:ND2	41:L4:329:PRO:O	7.25	0.80
36:1:156:G:OP2	72:O6:27:SER:OG	1.97	0.80
1:6:1699:G:H22	1:6:1701:A:H3'	1.47	0.80
49:M3:56:PRO:HG3	49:M3:74:GLY:O	1.82	0.80
40:L3:152:LYS:HG2	40:L3:192:VAL:HG11	2.12	0.80
70:O4:8:ARG:HG2	70:O4:8:ARG:HH11	1.45	0.80
25:D3:68:ILE:HD12	32:E0:10:ARG:HH22	1.47	0.80
36:5:2987:A:H2'	36:5:2988:C:C6	2.14	0.80
36:5:1170:A:OP2	87:5:3997:OHX:N4	2.13	0.80
55:M9:172:ARG:NH1	1:6:852:C:OP1	320.84	0.80
67:O1:46:THR:OG1	67:O1:47:ASP:N	2.10	0.80

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
63:N7:17:ARG:O	63:N7:19:ALA:N	2.12	0.80
68:O2:78:ASN:HA	68:O2:108:ILE:HD11	1.63	0.80
56:N0:6:GLU:OE1	56:N0:99:ARG:NH2	3.33	0.80
64:N8:91:LEU:HA	64:N8:121:VAL:HG21	1.69	0.80
36:5:1579:C:H2'	36:5:1580:A:H8	1.46	0.80
36:5:1580:A:O2'	36:5:1581:C:OP2	1.98	0.80
52:M6:73:PHE:CD2	52:M6:78:ARG:HG2	3.61	0.80
67:O1:13:THR:HG22	67:O1:72:ARG:NH1	1.96	0.80
36:1:1383:G:O6	87:1:3881:OHX:N3	2.15	0.80
41:L4:20:LEU:HD11	41:L4:252:GLU:HG3	1.61	0.80
49:M3:79:GLU:OE2	49:M3:103:ASN:ND2	3.57	0.80
4:S2:43:ARG:NH1	4:S2:247:ALA:O	3.88	0.80
1:2:511:A:N6	1:2:539:G:O6	2.13	0.80
36:1:2623:G:H1	36:1:2644:C:H42	1.29	0.80
41:L4:300:ARG:O	54:M8:39:ARG:NH1	2.14	0.80
1:2:354:C:H5''	10:S8:16:ALA:HB2	1.64	0.80
1:6:827:C:N4	1:6:845:G:O6	2.13	0.80
47:M0:175:ASN:OD1	47:M0:176:LEU:N	4.93	0.80
1:2:325:G:OP1	13:C1:134:THR:OG1	1.98	0.80
23:D1:72:LEU:O	23:D1:75:ASN:ND2	2.14	0.80
2:S0:76:ILE:HG23	2:S0:98:ILE:HB	1.64	0.80
37:7:40:C:H5''	37:7:41:G:OP2	1.81	0.80
52:M6:142:SER:O	52:M6:145:VAL:N	2.15	0.80
67:O1:72:ARG:NH2	67:O1:104:LEU:HB2	3.47	0.80
17:C5:87:PRO:HA	17:C5:90:ILE:HG13	1.64	0.80
36:5:1657:C:O2'	36:5:1797:A:OP2	1.99	0.80
25:D3:75:GLN:NE2	25:D3:80:GLY:O	3.95	0.80
41:L4:195:ARG:NH2	36:5:341:G:N7	110.58	0.80
55:M9:6:THR:HG23	55:M9:9:ARG:HH21	1.45	0.80
14:C2:29:LYS:HG3	14:C2:100:TRP:HD1	1.45	0.80
27:D5:41:ILE:HG23	27:D5:42:LEU:H	1.46	0.80
53:M7:122:ALA:HB3	53:M7:143:PRO:HB2	2.98	0.80
28:D6:79:ILE:HD11	1:6:1795:U:H5'	334.00	0.80
47:M0:46:PHE:HD1	47:M0:140:THR:HA	1.46	0.80
63:N7:16:GLY:O	63:N7:18:TYR:N	2.77	0.80
36:1:132:C:H2'	36:1:133:U:H5''	1.64	0.80
36:5:863:C:OP1	87:5:3912:OHX:N3	2.14	0.80
28:D6:10:ARG:HH22	28:D6:36:ILE:HG13	3.05	0.80
36:1:67:A:OP2	87:1:3911:OHX:N6	2.14	0.80
14:C2:42:ALA:HB3	14:C2:122:VAL:HB	1.62	0.80
48:M1:52:TYR:HA	48:M1:61:ARG:HB2	2.87	0.80
39:L2:224:THR:HG21	36:5:2201:G:H21	221.87	0.80

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S2:173:PRO:HG2	11:S9:57:ARG:HD2	1.64	0.80
36:1:821:U:O2'	36:1:912:G:OP1	1.99	0.80
36:5:975:C:H2'	36:5:976:U:H6	1.45	0.80
15:C3:20:ARG:HG3	15:C3:20:ARG:HH11	4.48	0.80
36:1:2687:G:O6	87:1:3900:OHX:N5	2.14	0.80
1:2:1433:G:H2'	1:2:1434:U:C6	2.17	0.80
64:N8:21:ARG:NH2	36:5:640:U:OP1	182.96	0.79
53:M7:52:LEU:HD11	53:M7:88:VAL:HG11	2.25	0.79
15:C3:88:LEU:HA	15:C3:91:LEU:HD12	1.62	0.79
6:S4:229:GLY:HA3	6:S4:234:PRO:HA	3.23	0.79
1:2:997:G:O6	1:2:1007:C:N4	2.15	0.79
13:C1:8:GLN:HE22	13:C1:14:GLN:HB2	3.41	0.79
1:2:435:C:H2'	1:2:436:A:C8	2.16	0.79
10:S8:62:THR:HG22	10:S8:77:ARG:HA	1.64	0.79
36:1:1733:G:OP2	87:1:3916:OHX:N6	2.15	0.79
29:D7:28:PRO:HB3	1:6:959:U:H5'	349.97	0.79
44:L7:27:ALA:HA	44:L7:30:ARG:HB3	1.63	0.79
36:5:847:A:H2'	36:5:848:A:C8	2.18	0.79
49:M3:140:SER:HG	49:M3:143:ALA:H	1.29	0.79
5:S3:69:LEU:HA	5:S3:72:LEU:HD12	1.64	0.79
58:N2:14:THR:HG23	58:N2:66:VAL:HG22	2.29	0.79
22:D0:58:LEU:HD12	22:D0:88:LYS:HD2	1.85	0.79
61:N5:58:ASP:OD1	71:O5:25:LYS:NZ	3.86	0.79
48:M1:60:ARG:O	48:M1:63:GLU:HB2	1.81	0.79
40:L3:332:ARG:HH11	40:L3:333:LYS:HD2	2.44	0.79
36:1:2158:A:H4'	36:1:2159:U:H5''	1.64	0.79
59:N3:123:ALA:O	59:N3:125:LEU:N	2.98	0.79
36:5:3338:C:O2	36:5:3366:G:N2	2.15	0.79
45:L8:36:ILE:O	45:L8:38:GLN:N	2.14	0.79
47:M0:55:ASN:O	47:M0:131:ILE:HD13	3.14	0.79
1:2:1473:U:O2'	7:S5:103:ASN:ND2	2.15	0.79
7:S5:41:LYS:O	7:S5:41:LYS:NZ	3.13	0.79
31:D9:24:CYS:O	31:D9:25:SER:OG	1.99	0.79
40:L3:19:ARG:NH2	36:5:3045:G:OP1	233.63	0.79
63:N7:46:ILE:HD11	63:N7:49:TYR:HA	2.02	0.79
72:O6:9:ILE:HD13	72:O6:10:GLY:H	4.58	0.79
64:N8:126:LYS:HB3	64:N8:148:ILE:HG21	1.62	0.79
42:L5:43:LYS:NZ	36:5:1078:U:OP1	230.17	0.79
36:5:1409:G:N7	87:5:4157:OHX:N6	2.31	0.79
15:C3:99:ARG:O	15:C3:103:GLU:N	2.12	0.79
2:S0:139:VAL:HG23	4:S2:62:PRO:HG3	1.64	0.79
25:D3:50:LYS:NZ	25:D3:101:GLU:OE1	4.07	0.79

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:3066:U:O4	87:5:4100:OHX:N4	2.16	0.79
36:1:1678:G:OP2	58:N2:77:LYS:NZ	2.15	0.79
41:L4:234:ASN:HD21	41:L4:236:LEU:HD12	1.46	0.79
87:2:2039:OHX:N1	25:D3:64:PRO:O	2.16	0.79
1:2:478:A:O2'	11:S9:124:HIS:ND1	2.04	0.79
1:2:1585:U:H3	1:2:1611:A:H2	1.31	0.79
34:SR:20:VAL:O	34:SR:291:SER:OG	2.00	0.79
1:6:1150:G:O6	87:6:2119:OHX:N5	2.14	0.79
36:5:778:U:O4	87:5:4081:OHX:N1	2.15	0.79
1:2:214:G:N7	87:2:2116:OHX:N1	2.29	0.79
1:2:207:U:O2	10:S8:178:ARG:NH1	2.14	0.79
40:L3:328:ILE:HG12	40:L3:329:PRO:HD2	1.64	0.79
47:M0:157:TYR:CD1	36:5:2836:C:H4'	311.92	0.79
17:C5:52:LYS:HG3	17:C5:53:PRO:HD3	1.63	0.79
38:4:16:G:O6	87:4:224:OHX:N3	2.16	0.79
35:SM:68:ARG:O	35:SM:70:ASN:N	2.16	0.79
18:C6:94:GLN:OE1	18:C6:102:LYS:NZ	2.15	0.79
1:6:58:U:O2'	1:6:451:A:N3	2.15	0.79
44:L7:139:PRO:HA	44:L7:237:ASN:HD21	1.47	0.79
36:1:1677:G:N1	36:1:1691:U:O2	2.12	0.79
14:C2:140:PHE:O	14:C2:142:GLN:N	2.16	0.79
36:1:2688:U:OP1	42:L5:12:TYR:OH	2.01	0.79
54:M8:100:THR:HG22	54:M8:120:GLU:HB3	2.77	0.79
2:S0:133:ILE:H	2:S0:133:ILE:HD12	1.48	0.79
36:5:71:A:C2	36:5:2778:G:H1'	2.18	0.79
36:5:974:G:N2	36:5:1107:C:O2	2.16	0.79
38:8:16:G:O6	87:8:218:OHX:N6	2.16	0.79
53:M7:88:VAL:O	53:M7:92:GLN:HG2	1.81	0.79
10:S8:84:HIS:CE1	10:S8:86:SER:HB2	2.25	0.79
7:S5:162:VAL:HB	30:D8:45:LYS:HB3	1.63	0.79
46:L9:120:ASP:OD1	46:L9:124:ARG:NH2	2.92	0.79
17:C5:22:LEU:HA	17:C5:25:LEU:HD12	1.93	0.79
62:N6:27:ARG:HA	62:N6:30:LEU:HD12	1.64	0.79
36:5:2808:A:H4'	36:5:2809:C:H5''	1.65	0.79
1:6:186:C:N4	1:6:199:G:O6	2.16	0.79
36:5:2209:U:H4'	36:5:2210:G:OP1	1.82	0.79
56:N0:5:LYS:HB2	56:N0:7:TYR:CE2	2.18	0.79
36:1:1404:G:H5''	68:O2:64:LYS:HE3	1.65	0.79
13:C1:72:THR:HG22	13:C1:124:THR:HG23	3.08	0.79
56:N0:77:VAL:HG11	56:N0:106:LEU:HG	2.04	0.78
39:L2:3:ARG:HD3	36:5:911:C:H42	178.56	0.78
36:1:2251:G:N1	36:1:2265:C:N3	2.28	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:185:GLY:O	6:S4:224:ASN:ND2	3.69	0.78
69:O3:53:TYR:CE1	69:O3:65:ARG:HB2	2.54	0.78
9:S7:25:VAL:HA	9:S7:28:GLU:HB2	1.74	0.78
22:D0:34:LEU:HD21	22:D0:89:ARG:HD2	4.21	0.78
12:C0:50:THR:HG22	12:C0:55:VAL:HG22	1.65	0.78
20:C8:91:ASP:OD1	20:C8:92:ILE:N	2.55	0.78
15:C3:89:TYR:OH	15:C3:93:LYS:NZ	5.19	0.78
62:N6:61:GLY:O	62:N6:63:LYS:N	3.12	0.78
56:N0:66:GLU:OE2	56:N0:73:LYS:NZ	2.16	0.78
10:S8:36:THR:HG21	10:S8:173:PRO:HB2	1.83	0.78
1:6:1542:G:N2	1:6:1569:A:OP2	2.17	0.78
36:1:410:U:O4	87:1:4055:OHX:N2	2.16	0.78
60:N4:15:PRO:O	60:N4:17:ARG:N	2.15	0.78
34:SR:79:TYR:HB3	34:SR:91:LEU:HD11	1.84	0.78
39:L2:152:SER:OG	39:L2:153:GLY:N	2.15	0.78
36:1:2512:C:N4	36:1:2593:A:OP2	2.15	0.78
24:D2:35:ILE:HD13	24:D2:38:LEU:HD12	1.64	0.78
54:M8:115:VAL:HA	54:M8:119:GLY:H	2.07	0.78
1:6:815:G:H5'	1:6:815:G:H8	1.49	0.78
31:D9:19:ARG:NH2	1:6:1597:A:OP1	407.20	0.78
14:C2:97:LEU:HA	14:C2:100:TRP:HE3	1.47	0.78
57:N1:130:ARG:O	36:5:1098:A:O2'	257.04	0.78
70:O4:37:LYS:NZ	36:5:1591:G:OP1	159.52	0.78
36:5:3349:C:H42	36:5:3356:G:H1	1.31	0.78
36:5:2869:U:H5''	36:5:2870:C:OP2	1.83	0.78
25:D3:68:ILE:HG22	25:D3:70:LYS:HZ2	1.48	0.78
1:2:1754:A:C6	88:2:2181:GET:H21	2.18	0.78
87:1:3959:OHX:N3	44:L7:217:PRO:O	2.16	0.78
36:1:1233:G:N2	36:1:1255:C:H42	1.82	0.78
50:M4:72:LEU:HD11	50:M4:81:VAL:HG22	1.65	0.78
5:S3:75:LYS:HB3	12:C0:22:VAL:HG22	3.00	0.78
15:C3:121:ARG:O	15:C3:124:ARG:N	3.79	0.78
2:S0:17:LEU:HA	2:S0:172:LEU:HD11	1.65	0.78
61:N5:71:THR:HG21	36:5:1603:A:H61	90.65	0.78
36:1:2503:G:H1'	36:1:2504:U:H5	1.48	0.78
1:2:1622:G:H2'	1:2:1623:C:H6	1.48	0.78
9:S7:162:ILE:HG22	9:S7:165:LYS:HD2	4.22	0.78
54:M8:100:THR:HG23	54:M8:120:GLU:HB3	1.64	0.78
36:1:1544:G:O6	87:1:4056:OHX:N4	2.17	0.78
6:S4:146:THR:HG21	1:6:123:G:H21	340.45	0.78
35:SM:102:THR:OG1	35:SM:103:LYS:N	2.16	0.78
33:E1:140:TYR:HE1	33:E1:146:SER:HA	3.37	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:E0:55:ARG:NH2	1:6:558:U:OP2	416.90	0.78
28:D6:44:ILE:HG13	28:D6:66:LYS:HA	1.66	0.78
49:M3:63:VAL:HG22	36:5:72:C:H5'	113.48	0.78
17:C5:85:ILE:HG22	17:C5:112:LEU:HD23	1.63	0.78
36:1:2603:G:O6	87:1:3867:OHX:N2	2.16	0.78
25:D3:137:LYS:O	25:D3:139:LYS:N	4.71	0.78
59:N3:28:ASN:HD21	59:N3:112:SER:H	1.31	0.78
1:2:984:G:O6	1:2:1017:U:N3	2.17	0.78
63:N7:27:LYS:HB3	63:N7:42:LEU:HB2	2.95	0.78
23:D1:28:ASP:O	23:D1:31:SER:OG	2.01	0.78
36:5:1870:C:O2	36:5:3066:U:O2'	2.02	0.78
38:8:62:C:O2	87:8:225:OHX:N1	2.17	0.78
20:C8:40:ARG:HH11	20:C8:40:ARG:HG2	1.88	0.78
15:C3:115:LEU:HD22	15:C3:119:GLU:HG3	1.65	0.78
70:O4:82:ALA:O	70:O4:85:VAL:N	2.35	0.78
52:M6:73:PHE:HD2	52:M6:78:ARG:HG2	4.20	0.78
45:L8:33:ASN:O	45:L8:35:GLY:N	3.69	0.78
36:1:2533:G:O6	36:1:2546:C:N4	2.16	0.78
1:6:1477:G:H2'	1:6:1478:G:C8	2.19	0.78
37:7:112:G:OP2	87:7:221:OHX:N2	2.17	0.78
36:5:90:C:H2'	36:5:91:G:H5'	1.64	0.78
5:S3:28:GLU:OE1	5:S3:65:ARG:NH2	2.11	0.78
34:SR:56:VAL:HG12	34:SR:57:PRO:HD2	3.10	0.78
36:5:2970:C:H4'	36:5:2971:A:N6	1.99	0.78
31:D9:26:SER:O	31:D9:28:THR:N	2.16	0.78
36:1:2534:G:O6	87:1:3996:OHX:N6	2.17	0.78
36:5:731:U:H2'	36:5:732:C:H6	1.48	0.78
36:1:3254:G:O6	87:1:4054:OHX:N5	2.17	0.78
36:1:3302:U:H3	36:1:3312:U:H3	1.28	0.78
1:6:665:U:N3	1:6:668:C:O2	2.16	0.78
10:S8:188:GLU:OE2	13:C1:15:LYS:NZ	2.61	0.78
41:L4:190:GLY:O	41:L4:193:LYS:NZ	3.06	0.78
8:S6:7:TYR:CE1	8:S6:125:THR:HA	3.12	0.78
9:S7:143:LEU:HD12	9:S7:147:ASN:HB2	1.66	0.78
36:1:76:G:O2'	49:M3:100:ARG:NH1	2.16	0.78
40:L3:30:LYS:NZ	36:5:3138:U:OP2	240.67	0.78
25:D3:110:LYS:HD2	25:D3:112:LYS:HE3	6.27	0.78
1:2:1789:G:OP2	16:C4:132:ARG:NH2	2.15	0.78
36:1:250:U:H5''	36:1:251:G:H5''	1.66	0.78
36:5:1674:G:N2	36:5:1773:C:O2	2.14	0.78
36:1:216:G:H4'	62:N6:19:TYR:CE2	2.19	0.78
36:1:2261:G:H21	36:1:2262:A:H61	1.33	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D6:79:ILE:HA	28:D6:84:VAL:HG11	1.66	0.77
10:S8:34:ALA:HB2	10:S8:174:GLY:HA3	1.65	0.77
10:S8:69:SER:OG	10:S8:185:GLU:OE2	2.02	0.77
18:C6:21:HIS:HB2	18:C6:66:ARG:HG3	1.66	0.77
1:2:894:U:H2'	1:2:895:G:H8	1.49	0.77
1:2:895:G:HO2'	16:C4:38:THR:H	1.31	0.77
16:C4:70:LYS:O	16:C4:74:VAL:N	3.20	0.77
66:O0:101:LEU:H	66:O0:101:LEU:HD22	4.48	0.77
48:M1:44:THR:O	37:7:39:C:O2'	300.13	0.77
49:M3:140:SER:OG	49:M3:143:ALA:N	2.15	0.77
1:6:1477:G:H2'	1:6:1478:G:H8	1.48	0.77
36:1:249:U:O2	36:1:250:U:N3	2.17	0.77
19:C7:33:ARG:NH2	34:SR:109:ASP:OD1	2.78	0.77
36:1:3108:G:O6	36:1:3126:C:N4	2.17	0.77
54:M8:30:VAL:O	54:M8:34:THR:HG22	1.83	0.77
12:C0:21:VAL:HB	12:C0:66:TYR:HB2	2.60	0.77
20:C8:91:ASP:HB3	20:C8:95:GLY:H	1.49	0.77
20:C8:141:THR:OG1	20:C8:142:GLY:N	3.47	0.77
35:SM:72:ARG:NH1	1:6:1460:A:O2'	324.47	0.77
76:Q0:77:ILE:HG22	76:Q0:78:ILE:HG22	1.66	0.77
69:O3:72:THR:HG23	69:O3:83:ALA:HA	1.80	0.77
36:5:22:G:H1'	38:8:104:A:N3	1.99	0.77
3:S1:147:ALA:O	3:S1:148:ASN:ND2	2.18	0.77
57:N1:51:GLY:HA3	57:N1:92:ARG:HG3	2.63	0.77
36:1:3272:C:H5'	43:L6:78:ARG:HB2	1.65	0.77
5:S3:167:PHE:HA	5:S3:190:ARG:HE	2.39	0.77
68:O2:101:SER:HA	68:O2:125:ARG:HH21	4.14	0.77
35:SM:72:ARG:NH2	1:6:1461:C:OP1	327.34	0.77
39:L2:43:GLY:N	39:L2:88:ILE:O	2.69	0.77
46:L9:93:VAL:HG22	76:Q0:82:LEU:HD12	4.16	0.77
23:D1:3:ASN:ND2	23:D1:7:GLN:O	2.17	0.77
36:5:1715:A:H4'	36:5:1716:U:OP1	1.85	0.77
36:5:3264:G:O6	87:5:4115:OHX:N2	2.17	0.77
13:C1:73:GLY:HA3	13:C1:88:ARG:HG3	4.13	0.77
1:2:513:U:OP1	11:S9:133:HIS:NE2	2.12	0.77
36:1:3272:C:OP2	43:L6:78:ARG:NH1	2.17	0.77
79:Q3:4:ARG:NH1	36:5:837:A:OP2	236.54	0.77
36:1:2705:A:OP2	87:1:3870:OHX:N1	2.17	0.77
15:C3:88:LEU:HD22	15:C3:92:ILE:HD11	3.25	0.77
3:S1:34:ALA:HB3	3:S1:41:ARG:HA	1.67	0.77
41:L4:361:HIS:CD2	41:L4:362:ASP:H	3.73	0.77
36:1:1481:A:O2'	36:1:1858:A:N3	2.14	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:371:G:N2	1:6:613:G:O6	2.15	0.77
1:2:1349:G:O6	1:2:1376:C:N4	2.16	0.77
7:S5:144:GLU:HA	7:S5:161:ASP:HA	1.66	0.77
17:C5:111:MET:HG2	20:C8:119:ILE:HD11	5.77	0.77
55:M9:7:GLN:NE2	55:M9:35:ALA:O	2.17	0.77
34:SR:36:ALA:HB2	34:SR:42:LEU:HD23	2.41	0.77
36:1:73:C:C2	72:O6:15:LYS:HG2	2.19	0.77
36:1:860:G:OP1	79:Q3:17:ARG:NH1	2.17	0.77
52:M6:55:HIS:O	52:M6:58:LEU:N	2.18	0.77
41:L4:338:LYS:O	41:L4:340:GLY:N	2.16	0.77
38:8:59:A:H4'	38:8:60:U:H5''	1.66	0.77
63:N7:54:THR:H	63:N7:57:HIS:CD2	3.15	0.77
1:6:1293:U:O4	1:6:1322:A:N6	2.18	0.77
1:2:9:U:O4	87:2:2155:OHX:N6	2.18	0.77
70:O4:87:GLU:OE1	70:O4:91:ARG:NH1	2.84	0.77
36:5:3197:G:H2'	36:5:3198:U:H5''	1.66	0.77
2:S0:121:VAL:O	2:S0:144:ILE:N	2.16	0.77
1:2:1459:C:H42	20:C8:139:LYS:HE2	1.49	0.77
8:S6:98:ARG:NH2	8:S6:101:ILE:O	3.06	0.77
49:M3:119:TYR:HE1	71:O5:118:ILE:HD11	4.18	0.77
39:L2:181:LYS:NZ	36:5:860:G:OP2	211.47	0.77
1:6:1734:U:H2'	1:6:1735:U:H6	1.50	0.77
8:S6:28:PHE:HZ	8:S6:104:PRO:HB3	1.50	0.77
57:N1:70:SER:OG	36:5:2737:C:OP1	233.08	0.77
41:L4:99:MET:HE3	41:L4:103:THR:H	2.87	0.77
51:M5:80:THR:HG21	51:M5:87:GLN:HA	1.67	0.77
47:M0:170:LYS:HA	47:M0:177:ASP:HA	1.65	0.77
73:O7:18:LEU:HA	73:O7:25:ARG:H	1.50	0.77
42:L5:61:ILE:HD13	42:L5:79:TYR:HE1	2.73	0.77
5:S3:42:THR:OG1	5:S3:44:THR:O	5.79	0.77
36:1:410:U:O4	87:1:4055:OHX:N5	2.18	0.77
40:L3:95:THR:HG22	36:5:3243:A:H4'	256.96	0.77
60:N4:33:ASN:OD1	60:N4:36:SER:OG	2.01	0.77
1:6:1413:U:H4'	1:6:1414:U:OP2	1.84	0.77
64:N8:57:GLY:O	36:5:2787:G:H4'	161.45	0.77
47:M0:156:ARG:HH11	47:M0:156:ARG:HG3	3.75	0.77
36:1:2852:C:N3	47:M0:158:LYS:NZ	2.33	0.77
54:M8:18:ALA:HA	54:M8:53:PHE:CE1	2.83	0.77
26:D4:41:ARG:HB3	26:D4:52:LYS:HG3	1.65	0.77
71:O5:31:LEU:HB3	71:O5:44:ILE:HD12	1.81	0.77
1:2:591:A:H2'	1:2:592:A:H8	1.48	0.77
4:S2:129:ILE:HA	4:S2:132:ALA:HB3	1.66	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1615:C:H2'	36:5:1616:U:H6	1.48	0.77
1:2:800:U:H2'	1:2:801:G:H8	1.50	0.77
36:1:1556:C:O2'	87:1:3913:OHX:N2	2.18	0.77
36:5:1194:G:OP1	87:5:4009:OHX:N6	2.18	0.77
1:6:57:G:O6	1:6:90:C:N4	2.16	0.77
1:2:538:A:H5'	1:2:543:C:H42	1.50	0.77
47:M0:32:ARG:HH11	47:M0:32:ARG:HA	1.50	0.77
41:L4:329:PRO:O	41:L4:331:ALA:N	3.44	0.77
45:L8:136:LEU:O	45:L8:140:VAL:HG23	2.03	0.77
13:C1:45:PRO:HG3	13:C1:115:PHE:HE2	3.99	0.77
36:5:3327:G:O6	87:5:3953:OHX:N1	2.18	0.77
2:S0:13:ASP:OD1	2:S0:179:ARG:NH2	3.45	0.77
43:L6:172:HIS:ND1	69:O3:44:TYR:OH	2.05	0.77
39:L2:211:HIS:O	39:L2:213:GLY:N	3.59	0.77
36:1:2248:C:OP2	87:1:3882:OHX:N3	2.17	0.77
33:E1:108:VAL:HB	33:E1:114:VAL:HG22	1.67	0.77
36:1:1365:G:OP2	87:1:3968:OHX:N6	2.17	0.77
57:N1:119:ALA:O	57:N1:122:GLN:N	2.17	0.77
36:1:964:G:OP1	87:1:3965:OHX:N2	2.18	0.77
45:L8:137:ASN:OD1	51:M5:3:ALA:N	5.19	0.77
1:2:1592:A:H2'	1:2:1593:A:H8	1.49	0.77
36:1:155:G:H5''	36:1:156:G:C8	2.20	0.77
1:2:1127:G:OP1	77:Q1:11:ARG:NH2	2.18	0.77
71:O5:85:THR:HB	71:O5:88:LEU:HB2	1.66	0.77
13:C1:7:VAL:O	13:C1:9:SER:N	3.61	0.77
73:O7:39:TYR:CD2	73:O7:40:PRO:HA	2.20	0.77
16:C4:92:LYS:HD2	16:C4:121:VAL:HG22	5.16	0.77
45:L8:50:VAL:HA	61:N5:30:ALA:HB1	4.53	0.77
71:O5:84:LYS:O	73:O7:73:ARG:NH2	3.40	0.76
40:L3:303:LYS:HD2	40:L3:361:THR:HG21	2.16	0.76
71:O5:81:ARG:NH2	36:5:18:G:OP1	76.86	0.76
56:N0:50:LYS:NZ	37:7:76:A:O2'	303.12	0.76
36:5:1618:G:N2	36:5:1826:C:O2	2.15	0.76
11:S9:149:ARG:HD2	1:6:765:G:N7	427.40	0.76
47:M0:87:LEU:HD23	47:M0:138:VAL:HG23	5.54	0.76
47:M0:46:PHE:CD1	47:M0:140:THR:HA	2.19	0.76
41:L4:208:VAL:HG12	41:L4:230:VAL:HG22	1.67	0.76
42:L5:148:ILE:HD11	42:L5:159:VAL:HG11	1.67	0.76
42:L5:106:ALA:HA	42:L5:171:LEU:HD11	1.65	0.76
69:O3:73:ARG:HD3	69:O3:82:ARG:HD2	1.66	0.76
9:S7:51:VAL:HG23	9:S7:53:GLY:H	2.02	0.76
37:3:30:G:N2	37:3:47:C:O2	2.18	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:L8:78:PHE:O	45:L8:80:TYR:N	2.17	0.76
36:5:2939:G:C2'	36:5:2940:A:H5'	2.15	0.76
36:5:621:A:H2'	36:5:622:A:C8	2.20	0.76
19:C7:115:LEU:HD13	19:C7:116:LYS:H	1.49	0.76
36:1:2683:U:H2'	36:1:2684:C:C6	2.20	0.76
40:L3:245:GLY:HA3	40:L3:248:LYS:NZ	2.01	0.76
68:O2:81:ASP:O	68:O2:84:THR:OG1	2.02	0.76
18:C6:114:ARG:H	18:C6:116:LEU:HD22	1.50	0.76
36:1:2244:A:OP1	39:L2:243:THR:OG1	2.04	0.76
2:S0:130:ALA:HA	2:S0:133:ILE:HD13	1.68	0.76
36:1:581:U:O4	87:1:4171:OHX:N4	2.18	0.76
1:6:1156:C:OP1	87:6:2171:OHX:N1	2.19	0.76
36:1:1276:U:OP1	87:1:4083:OHX:N4	2.18	0.76
24:D2:71:LYS:NZ	1:6:1099:U:OP1	374.19	0.76
36:5:2297:U:H2'	36:5:2299:A:N7	2.00	0.76
36:5:1724:U:H1'	36:5:1725:C:C6	2.20	0.76
1:2:58:U:O2'	1:2:451:A:N3	2.17	0.76
30:D8:11:LYS:HB3	30:D8:31:GLU:HG2	1.66	0.76
68:O2:40:SER:O	68:O2:43:ARG:N	2.18	0.76
73:O7:87:SER:O	87:O7:103:OHX:N3	2.18	0.76
52:M6:160:ARG:NH2	36:5:3182:G:OP1	280.91	0.76
1:6:149:C:H42	1:6:165:G:H1	1.31	0.76
36:5:3019:U:O4	87:5:3981:OHX:N2	2.18	0.76
71:O5:30:GLU:O	71:O5:33:VAL:N	2.18	0.76
36:5:980:A:H2'	36:5:981:U:C2	2.20	0.76
43:L6:150:LYS:HE3	43:L6:156:LYS:HD2	5.28	0.76
38:8:9:A:H2'	38:8:10:A:C8	2.21	0.76
36:1:2305:G:N2	36:1:2305:G:OP2	2.17	0.76
36:5:1023:C:H42	36:5:1029:G:H1	1.30	0.76
6:S4:60:GLU:OE1	26:D4:20:ARG:NH1	2.18	0.76
1:6:1451:C:H2'	1:6:1452:U:H6	1.48	0.76
36:1:1493:G:O6	75:O9:2:ALA:HB2	1.86	0.76
59:N3:22:ILE:HG12	59:N3:35:TYR:HB2	1.66	0.76
36:1:3239:G:O6	87:1:3969:OHX:N6	2.19	0.76
36:1:1565:G:N2	36:1:1574:C:O2	2.19	0.76
78:Q2:46:LYS:HE3	36:5:92:G:OP1	163.43	0.76
16:C4:115:ILE:HB	28:D6:65:PRO:HG3	6.79	0.76
36:5:1440:G:N7	87:5:3959:OHX:N6	2.33	0.76
36:1:1765:U:OP2	55:M9:39:ASN:ND2	2.17	0.76
24:D2:104:LEU:HB3	24:D2:125:ILE:HA	1.66	0.76
36:5:1097:G:N3	36:5:1097:G:H2'	2.00	0.76
39:L2:181:LYS:HB2	36:5:860:G:C6	212.19	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S0:129:ASP:O	2:S0:132:ALA:N	2.17	0.76
20:C8:8:GLN:O	20:C8:10:SER:N	3.75	0.76
1:2:766:U:O2	1:2:770:A:N6	2.18	0.76
38:4:125:U:O2'	38:4:126:A:OP1	2.03	0.76
36:1:1752:A:OP2	87:1:4046:OHX:N5	2.19	0.76
1:6:692:C:H2'	1:6:693:U:C6	2.21	0.76
19:C7:7:LYS:N	1:6:1316:G:OP1	410.36	0.76
1:2:1369:U:O4	87:2:2095:OHX:N5	2.19	0.76
30:D8:27:GLN:OE1	30:D8:64:ARG:NH1	5.65	0.76
17:C5:44:ARG:HH21	17:C5:52:LYS:HZ1	1.33	0.76
63:N7:87:LEU:HB2	63:N7:127:ASN:ND2	2.01	0.76
36:5:1238:C:O2'	36:5:1239:C:OP1	2.03	0.76
36:5:1564:U:H2'	36:5:1565:G:C8	2.21	0.76
65:N9:37:PRO:HB2	36:5:2738:A:H4'	209.11	0.76
5:S3:114:ALA:HB3	5:S3:117:ARG:HB2	1.68	0.76
1:6:1700:C:O2'	1:6:1701:A:OP1	2.02	0.76
48:M1:90:GLN:HG2	48:M1:170:ASP:HB2	2.40	0.76
36:5:2211:U:OP2	87:5:4217:OHX:N1	2.18	0.76
74:O8:42:LYS:HD2	74:O8:44:LYS:HE2	1.67	0.76
1:6:882:U:H2'	1:6:883:C:H6	1.51	0.76
16:C4:60:ALA:HB1	16:C4:101:ALA:HB2	2.12	0.76
11:S9:54:ARG:NE	1:6:1:U:O4	392.80	0.76
37:3:4:U:H2'	37:3:5:G:H8	1.50	0.76
1:2:195:G:O6	10:S8:141:ARG:NH2	2.19	0.76
42:L5:115:LEU:HD22	42:L5:115:LEU:H	1.51	0.76
40:L3:212:ASN:O	40:L3:281:LYS:NZ	2.19	0.76
53:M7:126:ARG:HA	53:M7:140:GLU:HG2	2.90	0.76
11:S9:63:ASP:HB3	11:S9:66:ASP:HB2	1.68	0.76
21:C9:97:SER:OG	1:6:1504:G:OP1	394.08	0.76
74:O8:26:LYS:NZ	36:5:1751:G:OP1	128.71	0.76
36:1:2278:C:OP1	87:1:3958:OHX:N3	2.19	0.76
78:Q2:71:ARG:NH2	78:Q2:80:ARG:HD3	4.94	0.76
25:D3:19:ARG:HG3	25:D3:23:ARG:HG2	1.65	0.76
36:5:394:G:H22	36:5:397:A:H5'	1.51	0.76
28:D6:33:ASP:OD1	28:D6:34:LYS:N	2.20	0.75
1:6:1564:U:H2'	1:6:1565:C:C6	2.20	0.75
63:N7:14:VAL:HG22	70:O4:86:LYS:HA	1.67	0.75
43:L6:172:HIS:CE1	69:O3:44:TYR:HH	2.01	0.75
42:L5:270:LYS:HD2	42:L5:272:TYR:HB2	9.48	0.75
36:5:2311:G:OP2	87:5:4193:OHX:N1	2.19	0.75
36:1:980:A:H2'	36:1:981:U:C2	2.21	0.75
38:8:42:G:N1	38:8:102:U:O2	2.17	0.75

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:S3:113:LEU:HD22	5:S3:114:ALA:H	1.51	0.75
39:L2:172:GLY:HA3	79:Q3:68:ALA:H	3.97	0.75
79:Q3:49:ARG:HD2	79:Q3:50:GLY:H	3.77	0.75
1:2:1140:G:OP2	87:2:2065:OHX:N6	2.19	0.75
10:S8:18:ARG:NH1	1:6:105:A:OP1	304.07	0.75
51:M5:9:GLU:OE1	51:M5:12:ARG:NH1	2.59	0.75
36:5:2620:G:O6	87:5:4237:OHX:N4	2.18	0.75
36:5:3326:G:H2'	36:5:3327:G:H8	1.52	0.75
15:C3:105:ASN:O	15:C3:107:LYS:N	2.87	0.75
26:D4:121:THR:OG1	1:6:149:C:OP1	335.79	0.75
34:SR:224:ASN:OD1	34:SR:227:ALA:N	2.43	0.75
36:1:1952:G:H5'	36:1:1953:G:OP2	1.86	0.75
34:SR:64:HIS:ND1	34:SR:86:ASP:OD2	2.20	0.75
72:O6:63:ASN:O	72:O6:65:GLY:N	4.73	0.75
36:1:743:C:O2	54:M8:141:ARG:HD2	1.85	0.75
36:1:3136:G:OP2	87:1:4097:OHX:N6	2.18	0.75
36:1:271:C:O2	72:O6:82:ARG:NH2	2.19	0.75
40:L3:165:GLN:OE1	40:L3:167:ARG:NH2	3.31	0.75
36:5:707:U:O2	36:5:712:G:N1	2.18	0.75
51:M5:109:ARG:NH1	38:8:141:C:OP1	120.11	0.75
8:S6:139:ASN:HA	8:S6:142:ARG:HG3	3.85	0.75
36:5:189:G:O6	36:5:205:C:N4	2.18	0.75
40:L3:2:SER:N	36:5:2940:A:N7	237.36	0.75
36:5:2268:U:O4	36:5:2272:G:N1	2.16	0.75
36:1:1224:C:O2	36:1:3116:G:N2	2.19	0.75
1:2:1230:A:H2'	1:2:1258:U:H5	1.51	0.75
44:L7:184:LEU:HD11	44:L7:202:LEU:HD21	1.67	0.75
16:C4:31:THR:HB	16:C4:38:THR:HA	1.67	0.75
39:L2:174:ARG:NH2	36:5:2179:C:O3'	212.35	0.75
26:D4:61:ARG:NH2	1:6:530:C:O2	409.35	0.75
57:N1:28:SER:OG	37:7:9:C:OP1	267.72	0.75
42:L5:40:HIS:CE1	57:N1:69:LYS:HA	2.43	0.75
36:5:1013:G:O6	36:5:1036:A:N6	2.18	0.75
78:Q2:48:SER:O	87:Q2:502:OHX:N3	4.22	0.75
42:L5:166:ALA:HB1	42:L5:171:LEU:HD12	1.67	0.75
23:D1:51:VAL:HG21	23:D1:78:LEU:HD11	1.69	0.75
2:S0:58:VAL:O	2:S0:62:ARG:N	2.19	0.75
20:C8:36:LYS:HB2	20:C8:102:ALA:HA	1.67	0.75
36:1:1791:C:H2'	36:1:1792:C:C6	2.21	0.75
36:5:1877:U:OP2	87:5:3952:OHX:N1	2.20	0.75
72:O6:25:LYS:HB2	72:O6:28:TYR:CD2	3.11	0.75
39:L2:117:GLU:OE2	39:L2:121:GLY:N	2.18	0.75

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:M7:98:ALA:HA	53:M7:101:ASN:HB2	2.78	0.75
1:6:652:G:N2	1:6:682:C:O2	2.18	0.75
36:1:1889:G:H5'	40:L3:245:GLY:HA2	1.69	0.75
1:2:190:C:N4	1:2:196:G:O6	2.20	0.75
38:4:9:A:H2'	38:4:10:A:C8	2.22	0.75
36:1:1369:A:OP1	64:N8:21:ARG:NH1	2.18	0.75
36:1:1233:G:H22	36:1:1255:C:N4	1.85	0.75
7:S5:187:ILE:HD13	27:D5:66:VAL:HG11	1.68	0.75
17:C5:115:TYR:N	17:C5:118:GLU:OE1	2.16	0.75
14:C2:43:ARG:HA	14:C2:121:VAL:HG12	3.02	0.75
42:L5:265:TYR:O	42:L5:269:SER:HB3	4.50	0.75
24:D2:67:GLY:O	24:D2:69:LEU:N	3.33	0.75
36:1:3139:A:OP1	40:L3:274:SER:HB2	1.87	0.75
36:5:2181:C:H2'	36:5:2182:A:H8	1.52	0.75
36:5:1404:G:O6	87:5:4084:OHX:N3	2.20	0.75
36:5:2151:C:N4	36:5:2185:G:O6	2.20	0.75
57:N1:23:GLY:N	36:5:2701:U:OP1	269.96	0.75
53:M7:36:ILE:O	53:M7:38:GLY:N	2.19	0.75
1:6:927:C:H2'	1:6:928:U:H6	1.50	0.75
36:1:1874:A:OP2	55:M9:21:LYS:NZ	2.19	0.75
1:2:1459:C:OP1	20:C8:126:ARG:NH2	2.19	0.75
35:SM:64:LYS:O	35:SM:66:ALA:N	2.31	0.75
50:M4:40:ASP:OD1	50:M4:42:LYS:N	2.54	0.75
26:D4:91:LEU:HD13	26:D4:96:LEU:HB2	4.66	0.75
1:6:1159:C:N3	87:6:2142:OHX:N5	2.33	0.75
36:1:519:A:N6	56:N0:65:ASN:O	2.19	0.75
1:2:1445:G:C6	33:E1:91:ILE:HB	2.22	0.75
68:O2:103:LYS:O	68:O2:106:VAL:HG12	1.86	0.75
53:M7:29:THR:HA	53:M7:32:THR:HG22	1.69	0.75
11:S9:133:HIS:NE2	1:6:513:U:OP1	447.55	0.75
36:1:685:G:N2	36:1:695:C:O2	2.20	0.75
30:D8:42:ARG:HH12	30:D8:61:ARG:HE	7.32	0.75
4:S2:205:ARG:HB3	4:S2:205:ARG:NH1	2.01	0.75
1:6:1280:C:H2'	1:6:1281:G:C8	2.20	0.75
16:C4:99:GLN:NE2	28:D6:44:ILE:O	3.97	0.75
49:M3:79:GLU:OE1	49:M3:101:ARG:NH2	2.62	0.75
36:1:1658:G:H2'	36:1:1659:U:H6	1.52	0.75
36:5:1952:G:H1	36:5:2094:C:H42	1.32	0.75
36:1:1204:A:H2	36:1:2834:G:N3	1.85	0.75
62:N6:74:TYR:OH	38:8:75:G:OP2	61.74	0.75
41:L4:49:ALA:O	38:8:27:U:O2'	105.83	0.75
36:5:300:G:O6	87:5:4186:OHX:N2	2.19	0.75

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:SR:319:ASN:N	34:SR:319:ASN:OD1	2.18	0.75
70:O4:38:LEU:HD23	70:O4:39:ALA:H	5.65	0.75
36:1:2442:G:H22	36:1:2505:U:H3	1.32	0.75
6:S4:57:ASN:HB3	6:S4:60:GLU:H	1.52	0.74
36:5:3328:G:N2	36:5:3378:C:O2	2.16	0.74
15:C3:88:LEU:O	15:C3:91:LEU:N	2.91	0.74
1:2:899:G:H1	1:2:910:C:H42	1.33	0.74
36:1:3045:G:O3'	40:L3:275:ARG:NH1	2.20	0.74
9:S7:53:GLY:O	9:S7:55:LYS:N	4.11	0.74
1:2:992:A:O2'	1:2:1785:U:O2	2.01	0.74
1:2:1291:G:H2'	1:2:1292:G:H8	1.50	0.74
51:M5:138:GLN:HA	51:M5:143:ARG:HD2	1.69	0.74
36:5:2697:A:H2'	36:5:2698:G:H8	1.49	0.74
64:N8:94:ALA:HA	64:N8:121:VAL:HG13	1.68	0.74
2:S0:28:ASN:O	2:S0:150:ASP:HB3	7.01	0.74
36:5:2444:C:H42	36:5:2503:G:H1	1.33	0.74
38:4:63:G:N2	38:4:98:U:O2	2.17	0.74
22:D0:51:VAL:HG22	22:D0:94:GLU:H	4.40	0.74
56:N0:88:HIS:N	56:N0:88:HIS:CD2	2.88	0.74
11:S9:89:ASP:N	11:S9:89:ASP:OD2	2.20	0.74
44:L7:107:ARG:HH12	44:L7:200:ASN:HA	1.53	0.74
5:S3:192:PRO:HB2	5:S3:201:ALA:HA	1.69	0.74
7:S5:128:ASN:O	7:S5:131:GLN:N	2.56	0.74
7:S5:49:GLU:HA	7:S5:65:ARG:HH12	5.23	0.74
6:S4:221:ARG:HD3	1:6:752:A:O2'	360.87	0.74
36:1:2226:U:H2'	36:1:2227:C:H6	1.50	0.74
36:1:1062:A:O2'	57:N1:108:ARG:NH1	2.19	0.74
1:2:386:G:OP1	10:S8:25:ARG:NH2	2.20	0.74
1:6:386:G:O2'	1:6:387:A:H5'	1.87	0.74
41:L4:293:SER:OG	41:L4:294:GLU:N	4.56	0.74
37:3:4:U:H2'	37:3:5:G:C8	2.22	0.74
61:N5:42:ARG:HD2	36:5:14:U:H1'	101.88	0.74
36:1:2284:C:N4	36:1:2308:C:OP2	2.20	0.74
40:L3:262:TRP:CG	40:L3:263:SER:N	3.03	0.74
47:M0:177:ASP:HB3	47:M0:179:PRO:HD2	3.46	0.74
41:L4:140:HIS:NE2	41:L4:246:ARG:HG2	3.56	0.74
20:C8:35:ILE:HB	20:C8:38:VAL:HG13	5.01	0.74
55:M9:105:LEU:HD12	55:M9:138:LEU:HD13	7.89	0.74
1:6:1649:G:N7	87:6:2114:OHX:N2	2.35	0.74
18:C6:82:ARG:HH22	18:C6:114:ARG:HB2	2.11	0.74
36:5:380:U:H2'	36:5:381:U:O4'	1.87	0.74
73:O7:21:ARG:NH2	73:O7:41:ALA:O	2.21	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:57:G:O6	87:2:2046:OHX:N3	2.19	0.74
36:5:979:U:O2'	36:5:980:A:N7	2.19	0.74
49:M3:182:ILE:HG22	49:M3:186:ARG:HG3	2.98	0.74
62:N6:3:LYS:NZ	62:N6:5:SER:O	2.63	0.74
36:1:1180:A:H5''	69:O3:77:ASN:HB2	1.69	0.74
1:6:515:A:H2'	1:6:516:G:O4'	1.87	0.74
36:5:2568:C:O2'	36:5:2569:A:O5'	2.04	0.74
2:S0:70:PRO:O	2:S0:95:ALA:N	2.20	0.74
68:O2:6:HIS:O	68:O2:6:HIS:ND1	2.20	0.74
36:1:2389:C:N4	36:1:2990:G:H1	1.86	0.74
36:1:1878:G:OP1	87:1:3928:OHX:N4	2.20	0.74
12:C0:3:MET:HE1	12:C0:41:TYR:HB3	2.79	0.74
34:SR:112:SER:OG	34:SR:155:ARG:NH1	5.05	0.74
44:L7:225:GLN:NE2	37:7:97:A:O4'	276.43	0.74
36:5:2211:U:O4	87:5:3957:OHX:N4	2.21	0.74
54:M8:123:THR:OG1	54:M8:125:ASP:OD2	2.05	0.74
36:1:1443:G:O6	87:1:3977:OHX:N3	2.20	0.74
44:L7:47:ARG:O	44:L7:50:ALA:N	3.12	0.74
36:1:562:C:H2'	36:1:563:U:H6	1.51	0.74
17:C5:18:ARG:HH11	20:C8:90:ASN:HD21	4.96	0.74
34:SR:37:SER:OG	34:SR:38:ARG:N	2.44	0.74
36:1:2808:A:H4'	36:1:2809:C:O5'	1.88	0.74
36:5:2101:C:H2'	36:5:2102:U:H6	1.51	0.74
42:L5:238:ASP:O	42:L5:242:SER:OG	4.78	0.74
1:2:1591:C:H2'	1:2:1592:A:H8	1.51	0.74
36:5:207:U:H3	36:5:222:A:H61	1.35	0.74
38:8:10:A:H2'	38:8:11:C:C6	2.22	0.74
36:1:2991:A:O2'	36:1:3308:C:N4	2.20	0.74
62:N6:89:LYS:HE3	62:N6:91:ASN:HD21	4.52	0.74
45:L8:247:ASP:O	45:L8:251:LYS:HB2	1.88	0.74
67:O1:76:SER:HB3	67:O1:78:LYS:HE3	1.70	0.74
1:2:373:G:N7	87:2:2159:OHX:N6	2.34	0.74
36:5:2168:A:C6	36:5:2170:U:H1'	2.22	0.74
48:M1:83:GLY:HA2	48:M1:86:VAL:HG23	1.68	0.74
63:N7:127:ASN:O	63:N7:129:TRP:N	2.21	0.74
55:M9:43:LYS:NZ	36:5:1765:U:H5'	91.50	0.74
36:1:282:G:H5''	36:1:283:G:OP1	1.88	0.74
36:1:336:A:OP2	62:N6:9:SER:OG	2.05	0.74
36:5:1696:A:OP2	36:5:1749:A:N6	2.21	0.74
42:L5:68:THR:HG22	42:L5:70:THR:H	1.52	0.74
3:S1:115:ARG:HG3	3:S1:115:ARG:HH11	4.28	0.74
36:1:1808:G:OP2	63:N7:133:LYS:NZ	2.17	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
59:N3:54:LEU:HD21	59:N3:119:GLY:HA3	3.49	0.74
1:6:546:U:H2'	1:6:547:U:H6	1.51	0.74
44:L7:88:ARG:NH1	44:L7:91:GLY:O	2.21	0.74
15:C3:15:ALA:O	1:6:959:U:H5''	349.78	0.74
77:Q1:13:LEU:O	77:Q1:16:LYS:N	3.10	0.74
40:L3:232:ARG:NH1	40:L3:269:GLN:O	2.24	0.74
14:C2:66:VAL:HG11	14:C2:71:ILE:HG21	1.70	0.74
49:M3:89:TYR:O	49:M3:92:THR:N	2.22	0.74
1:6:1266:U:H2'	1:6:1267:G:H8	1.51	0.74
4:S2:163:GLY:O	4:S2:165:VAL:N	4.83	0.74
36:5:1554:U:H1'	36:5:1555:U:H5''	1.67	0.74
1:6:815:G:C8	1:6:815:G:H5'	2.22	0.74
25:D3:107:PHE:CD2	25:D3:114:LYS:HB2	2.23	0.74
42:L5:95:TRP:HZ3	42:L5:156:GLY:O	9.12	0.74
47:M0:188:GLY:HA3	47:M0:216:TYR:HD1	1.52	0.74
36:1:2255:A:N7	36:1:2259:A:N6	2.35	0.74
46:L9:20:ILE:HG13	50:M4:7:VAL:HG22	1.70	0.74
53:M7:139:TYR:CE2	36:5:2355:G:H4'	147.93	0.74
41:L4:6:VAL:N	41:L4:20:LEU:O	2.98	0.74
43:L6:39:VAL:O	43:L6:40:LEU:HD23	1.88	0.74
18:C6:133:GLY:HA3	18:C6:136:SER:HB3	3.22	0.74
12:C0:46:LEU:O	12:C0:50:THR:N	2.17	0.74
17:C5:18:ARG:HD3	20:C8:90:ASN:HD21	4.25	0.74
48:M1:109:HIS:HD2	48:M1:123:PHE:H	1.36	0.74
1:2:1186:U:O4	1:2:1200:G:N2	2.20	0.74
40:L3:296:THR:H	40:L3:299:ASP:HB3	1.52	0.74
36:5:3165:A:H61	36:5:3285:C:H42	1.35	0.74
9:S7:38:LEU:HD23	9:S7:41:LEU:HD12	1.70	0.74
22:D0:57:ARG:HA	22:D0:89:ARG:HG3	1.69	0.74
36:1:830:A:H2'	36:1:831:G:O4'	1.87	0.74
70:O4:89:ILE:HG22	70:O4:90:ILE:HD13	1.69	0.74
3:S1:175:GLU:OE2	3:S1:187:LYS:NZ	4.43	0.74
41:L4:289:ILE:O	41:L4:292:SER:HB3	1.88	0.74
63:N7:70:PRO:HG3	63:N7:115:LYS:HB2	1.78	0.74
38:8:148:G:H2'	38:8:149:A:H8	1.53	0.74
1:2:10:G:N1	1:2:1144:U:O2	2.16	0.74
36:1:23:A:OP1	87:1:3871:OHX:N5	2.20	0.74
36:1:3066:U:O4	87:1:4133:OHX:N5	2.21	0.74
1:2:1580:C:H2'	1:2:1581:C:C6	2.22	0.73
67:O1:41:LYS:HG3	67:O1:47:ASP:H	3.59	0.73
2:S0:175:TYR:HD2	2:S0:176:LEU:HD23	1.53	0.73
34:SR:122:ILE:HB	34:SR:134:TRP:HB2	1.68	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
62:N6:91:ASN:O	62:N6:93:ALA:N	2.21	0.73
78:Q2:58:PHE:HD1	78:Q2:59:HIS:N	1.85	0.73
55:M9:66:HIS:O	55:M9:69:SER:N	2.21	0.73
54:M8:28:LEU:O	54:M8:31:LYS:N	2.21	0.73
1:6:65:A:O3'	1:6:66:U:H3'	1.88	0.73
36:5:3287:U:H2'	36:5:3288:G:H5'	1.70	0.73
49:M3:48:PRO:HD2	71:O5:115:LYS:HD3	1.69	0.73
46:L9:94:TYR:CE2	46:L9:98:PRO:HA	2.22	0.73
25:D3:24:TRP:HE3	25:D3:30:LYS:HD2	1.52	0.73
1:2:1234:A:H4'	33:E1:146:SER:HB3	1.69	0.73
36:5:422:A:C2	36:5:2363:A:H4'	2.23	0.73
36:1:1835:A:H5'	36:1:1835:A:H8	1.53	0.73
36:5:2372:A:H5''	36:5:2373:A:C5'	2.17	0.73
45:L8:70:LYS:NZ	36:5:2437:G:OP1	176.66	0.73
35:SM:123:ALA:HA	35:SM:126:ASP:HB2	1.70	0.73
47:M0:76:MET:HE1	47:M0:148:VAL:HA	4.77	0.73
1:2:1592:A:H2'	1:2:1593:A:C8	2.23	0.73
1:2:1450:U:H2'	1:2:1451:C:C6	2.23	0.73
6:S4:71:LYS:HG3	6:S4:91:THR:HB	4.63	0.73
42:L5:43:LYS:O	42:L5:46:THR:HB	1.87	0.73
33:E1:136:LYS:O	33:E1:138:ARG:N	2.21	0.73
16:C4:87:GLY:HA2	16:C4:92:LYS:HA	1.68	0.73
1:6:482:U:H3	1:6:505:A:H61	1.33	0.73
48:M1:28:ASP:HA	48:M1:31:THR:HG23	4.49	0.73
56:N0:155:ARG:HD3	56:N0:172:TYR:CG	4.77	0.73
51:M5:149:ASN:OD1	87:M5:303:OHX:N2	2.21	0.73
36:5:2432:A:N6	36:5:2597:U:O4	2.17	0.73
36:1:2255:A:N6	36:1:2260:U:O2	2.19	0.73
7:S5:143:ARG:NH1	7:S5:218:GLU:OE2	3.25	0.73
61:N5:110:VAL:O	61:N5:111:ASN:ND2	2.20	0.73
42:L5:64:ILE:HG22	42:L5:75:LEU:HB3	1.69	0.73
2:S0:122:ILE:HA	2:S0:144:ILE:HB	1.70	0.73
63:N7:14:VAL:HG23	70:O4:89:ILE:HG21	1.70	0.73
6:S4:195:ILE:HA	6:S4:210:ILE:HD13	4.64	0.73
36:1:283:G:OP2	36:1:285:A:O2'	2.05	0.73
36:5:2169:G:O6	87:5:3949:OHX:N5	2.21	0.73
36:1:3095:U:H2'	36:1:3096:C:H6	1.53	0.73
9:S7:109:VAL:HG22	9:S7:110:GLN:HB2	5.12	0.73
1:2:1412:G:H21	19:C7:3:ARG:HH22	1.33	0.73
36:5:2775:U:H2'	36:5:2776:C:H6	1.53	0.73
15:C3:23:PRO:O	15:C3:25:TRP:N	2.19	0.73
20:C8:61:LEU:HB3	20:C8:66:LEU:HD21	3.16	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:D1:36:VAL:O	23:D1:51:VAL:N	3.47	0.73
20:C8:36:LYS:HG2	20:C8:105:VAL:CG2	8.22	0.73
79:Q3:56:THR:HG22	79:Q3:63:THR:HG23	1.70	0.73
71:O5:87:ALA:HA	71:O5:90:ARG:HG2	1.69	0.73
1:2:1106:U:H2'	1:2:1107:G:H8	1.51	0.73
15:C3:83:GLU:HG3	15:C3:84:ILE:HD13	3.57	0.73
25:D3:79:ASN:ND2	25:D3:81:LYS:HB2	2.02	0.73
18:C6:135:ARG:NH1	1:6:1583:A:OP1	383.40	0.73
18:C6:37:THR:O	18:C6:45:ARG:NH1	2.21	0.73
42:L5:76:ALA:HB3	42:L5:109:THR:HG22	2.20	0.73
1:2:866:G:H5''	15:C3:3:ARG:H	1.52	0.73
39:L2:146:THR:OG1	39:L2:160:SER:OG	3.55	0.73
39:L2:79:ASN:HD21	39:L2:114:SER:HB3	2.35	0.73
46:L9:134:ILE:HG12	46:L9:146:LEU:HD23	1.70	0.73
2:S0:134:LYS:O	2:S0:137:SER:OG	2.94	0.73
1:6:1514:U:H5''	1:6:1515:A:O4'	1.89	0.73
36:1:1054:A:H5''	36:1:2637:A:N6	2.04	0.73
21:C9:25:GLN:HG3	21:C9:27:LYS:HG3	4.01	0.73
36:1:1901:A:H5''	36:1:1902:G:OP2	1.87	0.73
1:6:404:G:H2'	1:6:405:C:H6	1.52	0.73
1:2:442:C:H2'	1:2:443:C:H6	1.51	0.73
1:6:1475:A:H2'	1:6:1476:C:O4'	1.88	0.73
36:5:1261:G:O2'	36:5:1278:A:N1	2.22	0.73
52:M6:8:VAL:HB	52:M6:117:ARG:HB3	2.51	0.73
54:M8:185:LYS:NZ	36:5:779:G:OP1	179.52	0.73
36:1:2898:G:H5''	36:1:2899:C:H5'	1.69	0.73
1:2:1237:G:O6	1:2:1248:C:N4	2.16	0.73
1:2:1235:C:H2'	33:E1:138:ARG:HH21	1.53	0.73
64:N8:29:PRO:O	64:N8:31:GLY:N	2.20	0.73
36:1:1160:C:OP1	54:M8:2:GLY:N	2.21	0.73
37:7:3:U:H2'	37:7:4:U:H6	1.52	0.73
36:1:3252:G:N7	87:1:4162:OHX:N2	2.37	0.73
11:S9:90:LYS:HB3	11:S9:95:TYR:HB3	3.64	0.73
11:S9:174:ARG:HA	11:S9:174:ARG:HE	1.54	0.73
47:M0:11:TYR:O	47:M0:13:LYS:N	2.86	0.73
40:L3:296:THR:HG22	40:L3:298:PHE:H	1.59	0.73
10:S8:117:TYR:CD1	10:S8:150:ALA:HB2	2.23	0.73
1:2:487:G:H1	1:2:500:C:H42	1.35	0.73
69:O3:18:ARG:HD3	36:5:1178:G:H5'	239.21	0.73
36:1:168:U:H2'	36:1:169:U:C5	2.23	0.73
1:2:1294:G:O6	87:2:2077:OHX:N4	2.22	0.73
36:1:1342:C:H2'	36:1:1343:A:H8	1.53	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2997:G:H1'	36:5:3396:U:H5'	1.71	0.73
40:L3:211:GLN:NE2	40:L3:283:TYR:O	2.21	0.73
11:S9:149:ARG:O	11:S9:151:ASP:N	2.22	0.73
11:S9:85:VAL:HG13	11:S9:103:ASP:HB3	1.71	0.73
36:1:1381:A:H5''	41:L4:197:ARG:HH11	1.52	0.73
7:S5:185:ARG:NH1	1:6:1572:G:H1'	329.05	0.73
36:1:2746:A:H2	42:L5:146:LEU:HB3	1.54	0.73
70:O4:88:ARG:NH1	36:5:2556:C:OP1	198.50	0.73
36:5:1249:G:H2'	36:5:1250:G:C8	2.22	0.73
36:5:938:C:O2	36:5:2813:A:O2'	2.06	0.73
36:1:1687:U:H5''	36:1:1688:U:H5'	1.71	0.73
35:SM:36:ASP:HB2	48:M1:61:ARG:HD3	3.90	0.73
56:N0:5:LYS:HB2	56:N0:7:TYR:HE2	1.51	0.73
1:2:1508:U:O4	87:2:2031:OHX:N5	2.22	0.73
36:5:734:C:H2'	36:5:735:A:C8	2.24	0.73
36:1:517:G:P	44:L7:60:ARG:HH22	2.12	0.73
43:L6:148:GLU:OE1	43:L6:151:LYS:NZ	4.69	0.73
38:4:5:U:H2'	38:4:6:U:C6	2.23	0.73
36:1:1116:G:N2	36:1:2817:A:O4'	2.21	0.73
36:1:8:C:H2'	36:1:9:U:O4'	1.88	0.73
7:S5:41:LYS:HB3	7:S5:41:LYS:NZ	3.47	0.73
36:1:2881:C:N4	36:1:2943:G:H1	1.87	0.73
34:SR:70:ASP:HB3	34:SR:112:SER:HA	1.70	0.73
4:S2:87:GLN:HG2	4:S2:96:THR:HB	3.93	0.73
36:5:3085:G:H5''	36:5:3086:A:OP1	1.89	0.73
22:D0:103:ILE:HA	22:D0:106:ILE:HG22	2.83	0.73
38:8:10:A:H2'	38:8:11:C:H6	1.54	0.73
54:M8:8:LYS:NZ	36:5:971:G:OP1	197.94	0.73
36:1:2726:C:O2'	36:1:2727:A:H2'	1.88	0.73
34:SR:132:LYS:NZ	34:SR:143:THR:OG1	2.21	0.73
47:M0:19:LYS:HG3	47:M0:26:VAL:HG11	1.71	0.73
1:2:142:G:H1	1:2:173:A:H2	1.35	0.73
36:1:3275:U:H5''	69:O3:68:TRP:HZ2	1.53	0.73
26:D4:104:SER:OG	26:D4:105:ARG:N	2.18	0.72
72:O6:44:VAL:O	72:O6:48:ALA:N	2.53	0.72
36:1:3049:A:OP2	87:1:4180:OHX:N3	2.21	0.72
1:6:895:G:H1	1:6:917:U:H3	1.36	0.72
68:O2:105:ARG:HD3	68:O2:124:GLY:HA3	2.19	0.72
36:1:2227:C:OP1	78:Q2:32:LYS:NZ	2.15	0.72
4:S2:175:GLY:HA3	11:S9:53:ARG:HH22	1.54	0.72
9:S7:14:THR:OG1	9:S7:15:GLU:N	2.22	0.72
36:5:621:A:H2'	36:5:622:A:H8	1.53	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:E1:92:LYS:O	33:E1:93:HIS:ND1	3.36	0.72
54:M8:90:ASP:O	54:M8:92:ARG:N	2.22	0.72
6:S4:246:LEU:HD12	6:S4:246:LEU:H	1.53	0.72
65:N9:8:THR:OG1	65:N9:9:ALA:N	2.49	0.72
8:S6:23:ARG:O	8:S6:26:VAL:HG23	2.28	0.72
28:D6:12:LYS:NZ	1:6:1029:U:OP2	320.90	0.72
51:M5:185:ALA:HB3	51:M5:190:THR:HG23	1.69	0.72
20:C8:6:GLN:HG3	27:D5:44:GLN:HB2	7.22	0.72
41:L4:47:ARG:NH2	41:L4:109:TRP:HA	3.57	0.72
7:S5:190:ILE:H	7:S5:190:ILE:HD13	2.64	0.72
5:S3:28:GLU:HG3	5:S3:29:LEU:HG	1.71	0.72
1:2:868:G:O6	87:2:2032:OHX:N6	2.22	0.72
17:C5:126:VAL:HG13	17:C5:127:ARG:H	2.02	0.72
20:C8:145:ARG:H	35:SM:72:ARG:HH21	9.41	0.72
69:O3:73:ARG:HD3	69:O3:82:ARG:HH11	1.53	0.72
34:SR:154:VAL:O	34:SR:155:ARG:NH1	2.22	0.72
36:5:1554:U:H2'	36:5:1581:C:H2'	1.69	0.72
50:M4:94:TRP:CE2	50:M4:100:ALA:HB2	2.24	0.72
50:M4:104:ALA:HA	50:M4:107:GLU:HB2	1.69	0.72
1:2:531:C:OP2	87:2:2070:OHX:N4	2.22	0.72
36:1:2908:G:O6	87:1:3874:OHX:N4	2.22	0.72
42:L5:183:TRP:CH2	42:L5:188:GLU:HA	2.23	0.72
41:L4:327:LEU:HA	44:L7:166:ASN:HD21	1.52	0.72
6:S4:54:TYR:O	26:D4:15:ASN:ND2	3.35	0.72
43:L6:31:ARG:NH1	69:O3:107:ILE:O	2.22	0.72
19:C7:26:LEU:HD13	19:C7:59:LYS:HG3	1.70	0.72
79:Q3:4:ARG:NH2	36:5:838:G:O6	235.17	0.72
41:L4:144:LYS:HD3	41:L4:144:LYS:H	5.20	0.72
42:L5:56:THR:O	42:L5:58:LYS:N	2.36	0.72
2:S0:132:ALA:HB3	2:S0:133:ILE:HD12	1.71	0.72
25:D3:29:TYR:CZ	25:D3:33:LEU:HD11	2.25	0.72
54:M8:2:GLY:N	36:5:1160:C:OP1	223.69	0.72
36:1:1492:G:O3'	75:O9:48:LYS:NZ	2.22	0.72
36:1:1585:C:H2'	36:1:1586:G:H8	1.54	0.72
1:2:134:U:OP1	1:2:136:C:N4	2.21	0.72
36:1:1546:A:H4'	51:M5:101:THR:HG21	1.70	0.72
43:L6:26:ARG:NH1	36:5:503:C:OP1	257.27	0.72
12:C0:48:SER:HA	12:C0:51:SER:HB2	3.90	0.72
55:M9:98:ARG:NH1	55:M9:130:ASN:OD1	5.90	0.72
36:5:998:A:O2'	37:7:103:A:N3	2.21	0.72
6:S4:129:VAL:HG12	6:S4:156:VAL:HG22	2.09	0.72
79:Q3:73:THR:HG22	79:Q3:75:ALA:H	4.80	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:M6:194:LEU:HB3	52:M6:199:TYR:HB2	1.71	0.72
36:1:3277:U:O4	53:M7:172:GLN:NE2	2.22	0.72
8:S6:24:ILE:O	8:S6:26:VAL:N	2.21	0.72
36:1:764:U:O4	87:1:3963:OHX:N5	2.22	0.72
36:1:2206:G:H1	36:1:2237:C:H42	1.37	0.72
56:N0:49:HIS:O	56:N0:51:VAL:N	3.39	0.72
1:6:1297:G:N2	1:6:1300:A:OP2	2.19	0.72
36:1:2320:A:OP2	87:1:4209:OHX:N5	2.22	0.72
36:5:93:C:H4'	36:5:94:G:H5''	1.72	0.72
53:M7:28:ASN:O	53:M7:32:THR:HG22	1.88	0.72
36:1:2853:A:O3'	47:M0:64:ALA:HB2	1.89	0.72
6:S4:9:LEU:HD12	6:S4:30:ARG:HA	1.71	0.72
41:L4:25:VAL:O	41:L4:27:SER:N	2.22	0.72
1:2:1202:A:OP1	87:2:2111:OHX:N1	2.21	0.72
6:S4:220:THR:OG1	6:S4:221:ARG:N	3.10	0.72
48:M1:11:ASP:O	48:M1:12:LEU:HB2	1.88	0.72
63:N7:33:SER:OG	63:N7:34:LYS:N	3.98	0.72
68:O2:97:ALA:HB3	68:O2:100:ILE:HG12	2.01	0.72
79:Q3:26:VAL:HG13	79:Q3:30:GLU:HG3	2.65	0.72
37:3:22:A:H2'	37:3:23:A:C8	2.24	0.72
62:N6:56:VAL:HG23	62:N6:106:ILE:HA	1.70	0.72
40:L3:169:THR:O	40:L3:171:LEU:N	2.40	0.72
72:O6:90:MET:O	72:O6:92:ASN:N	3.26	0.72
10:S8:178:ARG:NH1	1:6:207:U:O2	287.58	0.72
36:1:1204:A:N6	36:1:1300:G:O2'	2.21	0.72
40:L3:250:ALA:HB3	36:5:2880:U:O2	224.28	0.72
36:5:192:C:O2	36:5:203:G:N2	2.15	0.72
7:S5:146:THR:O	30:D8:45:LYS:NZ	2.23	0.72
36:1:3325:G:H5''	67:O1:103:GLY:HA2	1.71	0.72
8:S6:64:LYS:HB2	8:S6:97:VAL:HG21	3.55	0.72
36:1:1804:A:H2'	36:1:1805:C:C6	2.25	0.72
45:L8:55:TYR:CE2	45:L8:56:VAL:HG23	2.24	0.72
25:D3:23:ARG:HD2	25:D3:26:GLU:OE1	2.12	0.72
36:1:2445:A:H61	36:1:2502:A:H2	1.36	0.72
9:S7:136:VAL:N	9:S7:153:LEU:O	3.66	0.72
45:L8:246:MET:HA	45:L8:249:ARG:HB3	1.71	0.72
1:2:397:A:H5''	10:S8:47:ARG:NH1	2.05	0.72
30:D8:10:ALA:HB1	30:D8:30:VAL:HB	1.71	0.72
30:D8:12:VAL:HG22	30:D8:28:VAL:HG21	3.74	0.72
42:L5:146:LEU:HB3	36:5:2746:A:H2	258.96	0.72
1:2:1120:U:O2	1:2:1127:G:N2	2.21	0.72
3:S1:129:THR:HA	3:S1:177:GLN:HA	1.71	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S0:140:ASN:ND2	4:S2:60:SER:O	2.21	0.72
17:C5:126:VAL:O	17:C5:127:ARG:HB2	2.52	0.72
36:5:3243:A:HO2'	36:5:3244:A:H8	1.38	0.72
45:L8:97:TYR:OH	45:L8:204:ARG:N	2.20	0.72
30:D8:36:THR:OG1	30:D8:37:SER:N	2.22	0.72
25:D3:56:LYS:HZ2	25:D3:97:ASP:H	1.37	0.72
1:2:50:C:N4	1:2:424:C:O2	2.21	0.72
36:1:272:G:OP2	87:1:4030:OHX:N3	2.23	0.72
1:2:899:G:O2'	1:2:915:A:N1	2.23	0.72
23:D1:74:GLN:HG3	23:D1:79:LEU:HB2	3.65	0.72
29:D7:67:THR:OG1	29:D7:70:LYS:O	2.08	0.72
36:5:1764:U:H3'	36:5:1765:U:H5''	1.72	0.72
35:SM:68:ARG:NH2	1:6:1460:A:OP2	332.71	0.72
37:3:13:A:O2'	42:L5:24:ARG:NH1	2.21	0.72
36:1:1881:A:H2'	36:1:1882:G:H8	1.55	0.72
5:S3:57:ASP:N	5:S3:57:ASP:OD1	2.23	0.72
87:1:3917:OHX:N5	51:M5:204:LYS:O	2.21	0.72
52:M6:27:LEU:HD22	52:M6:101:ARG:HB2	1.71	0.72
78:Q2:10:THR:OG1	78:Q2:11:TYR:N	2.21	0.72
45:L8:101:THR:HG22	45:L8:104:GLU:OE2	1.90	0.72
36:1:2356:A:H5'	53:M7:138:LYS:HE3	1.72	0.72
19:C7:55:THR:O	19:C7:58:MET:HB2	1.89	0.72
12:C0:58:GLN:OE1	12:C0:59:PHE:N	2.18	0.72
3:S1:229:MET:HA	3:S1:232:HIS:CE1	2.24	0.72
4:S2:119:LYS:NZ	1:6:1291:G:H5'	406.04	0.72
16:C4:88:GLY:H	16:C4:120:PRO:HG2	1.55	0.72
1:2:140:A:N6	1:2:281:G:OP1	2.22	0.72
36:5:261:U:H2'	36:5:262:U:C6	2.24	0.72
39:L2:70:ARG:HH21	39:L2:72:ARG:HD3	1.54	0.72
19:C7:35:CYS:O	19:C7:39:ALA:N	2.22	0.72
21:C9:109:GLU:HG3	21:C9:115:GLU:HA	1.71	0.72
5:S3:64:ARG:HG2	5:S3:65:ARG:H	4.68	0.72
15:C3:6:SER:OG	15:C3:8:GLY:N	2.17	0.72
2:S0:136:ALA:HA	2:S0:141:ILE:HD12	1.71	0.72
50:M4:14:LEU:N	50:M4:19:ARG:HH11	1.88	0.72
1:6:73:U:H2'	1:6:74:U:C6	2.23	0.72
57:N1:57:TYR:OH	36:5:2724:U:OP1	223.66	0.72
36:5:2818:U:C6	36:5:2818:U:H5'	2.25	0.72
46:L9:129:ARG:HG2	46:L9:129:ARG:HH11	4.44	0.72
40:L3:194:TRP:O	40:L3:198:HIS:ND1	2.17	0.72
1:2:1511:U:H2'	1:2:1512:G:C8	2.25	0.72
40:L3:187:SER:OG	40:L3:188:ILE:HD12	1.90	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:986:U:OP1	44:L7:98:LYS:NZ	2.16	0.72
41:L4:39:PHE:O	41:L4:42:VAL:N	2.83	0.71
42:L5:120:LYS:O	42:L5:248:ARG:NH2	3.26	0.71
1:2:1252:C:H2'	1:2:1253:U:C6	2.24	0.71
16:C4:54:GLU:CD	1:6:901:G:H22	282.68	0.71
36:5:655:C:H2'	36:5:656:A:C8	2.23	0.71
62:N6:47:ALA:O	62:N6:122:LYS:NZ	2.15	0.71
36:5:3043:C:N4	36:5:3098:G:O6	2.18	0.71
57:N1:100:LYS:HB3	36:5:990:U:H4'	259.24	0.71
36:1:2233:A:OP2	87:1:4043:OHX:N5	2.23	0.71
36:5:197:G:C8	36:5:395:A:H1'	2.25	0.71
1:6:759:U:OP1	87:6:2184:OHX:N2	2.23	0.71
36:5:1192:C:H5	87:5:4086:OHX:N6	1.88	0.71
36:1:3026:G:O6	87:1:3940:OHX:N4	2.22	0.71
1:2:1795:U:H3'	28:D6:5:ARG:HH12	1.53	0.71
41:L4:39:PHE:CE2	41:L4:43:ASN:HB2	2.54	0.71
61:N5:110:VAL:HG22	61:N5:124:VAL:HG22	3.54	0.71
1:2:1549:C:P	17:C5:39:ALA:H	2.13	0.71
17:C5:108:ARG:H	17:C5:111:MET:HG3	1.56	0.71
1:2:1178:G:O6	1:2:1461:C:N4	2.18	0.71
59:N3:87:ARG:HH22	59:N3:137:VAL:HG22	2.54	0.71
9:S7:60:ILE:HD12	9:S7:92:PHE:CZ	2.25	0.71
29:D7:62:ILE:HG13	29:D7:63:LEU:H	1.55	0.71
52:M6:188:SER:O	52:M6:191:ALA:N	3.43	0.71
58:N2:51:GLY:O	58:N2:52:ASN:ND2	2.18	0.71
36:5:286:U:H2'	36:5:287:G:H8	1.54	0.71
1:2:778:G:H2'	1:2:779:U:H2'	1.72	0.71
42:L5:12:TYR:OH	36:5:2688:U:OP1	300.10	0.71
36:1:3299:A:H61	36:1:3315:G:H1	1.37	0.71
36:5:2533:G:N2	36:5:2546:C:O2	2.23	0.71
69:O3:86:ARG:HH22	36:5:498:A:H5'	216.91	0.71
69:O3:90:PRO:O	69:O3:92:LYS:N	2.22	0.71
1:6:1621:U:H2'	1:6:1622:G:H8	1.55	0.71
1:2:318:U:O4	87:2:2125:OHX:N5	2.22	0.71
65:N9:50:THR:OG1	65:N9:51:ALA:N	3.41	0.71
28:D6:58:VAL:HG22	28:D6:59:TYR:H	4.26	0.71
1:6:453:U:O4	87:6:2066:OHX:N4	2.23	0.71
36:5:2996:U:OP1	36:5:2996:U:H4'	1.90	0.71
1:2:45:U:O4	1:2:434:G:N2	2.23	0.71
36:5:1497:C:H2'	36:5:1498:A:H8	1.52	0.71
36:5:2836:C:H5	36:5:2852:C:H42	1.35	0.71
10:S8:185:GLU:HA	10:S8:189:LEU:HD22	1.72	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:C7:49:LYS:HA	1:6:1389:C:H4'	422.25	0.71
15:C3:72:MET:HE2	1:6:962:C:H5''	317.15	0.71
36:1:2374:C:N4	36:1:2941:A:C4	2.58	0.71
1:6:143:G:O6	1:6:172:C:N4	2.18	0.71
49:M3:113:VAL:O	49:M3:117:LYS:N	3.06	0.71
61:N5:60:TYR:HD2	71:O5:25:LYS:HB3	1.54	0.71
70:O4:52:GLN:HG3	36:5:1738:C:H1'	193.31	0.71
36:1:1802:C:O2'	70:O4:59:PRO:O	2.04	0.71
36:1:2726:C:OP1	87:1:4123:OHX:N3	2.24	0.71
62:N6:126:LEU:HB2	71:O5:71:LYS:HD2	47.20	0.71
36:5:1790:G:H2'	36:5:1791:C:H6	1.54	0.71
7:S5:82:PHE:CZ	30:D8:49:ARG:HD2	4.65	0.71
17:C5:18:ARG:HH11	20:C8:90:ASN:ND2	4.44	0.71
28:D6:51:ARG:HG2	28:D6:51:ARG:HH21	2.37	0.71
4:S2:140:ARG:HH22	4:S2:228:ASN:HD21	1.39	0.71
6:S4:192:ILE:HG13	6:S4:243:GLY:HA3	1.74	0.71
36:5:3165:A:H2'	36:5:3166:C:H6	1.55	0.71
24:D2:47:ILE:HG22	24:D2:65:LEU:HB3	1.73	0.71
1:2:1511:U:H2'	1:2:1512:G:H8	1.53	0.71
36:1:1585:C:H2'	36:1:1586:G:C8	2.25	0.71
36:1:3143:C:O2'	87:1:3901:OHX:N2	2.23	0.71
36:5:1522:U:H4'	36:5:1523:U:OP2	1.90	0.71
36:1:1814:A:OP1	87:1:4088:OHX:N2	2.23	0.71
36:5:1817:G:OP1	87:5:4175:OHX:N1	2.23	0.71
36:5:1630:U:O4'	36:5:1813:A:N6	2.23	0.71
3:S1:56:SER:OG	3:S1:58:SER:OG	5.81	0.71
36:5:1930:A:O2'	87:5:3923:OHX:N3	2.23	0.71
36:1:1230:G:H1	36:1:1279:C:H42	1.37	0.71
5:S3:164:VAL:O	5:S3:168:ILE:HG23	4.59	0.71
18:C6:58:ASP:O	18:C6:60:PHE:N	2.21	0.71
5:S3:105:MET:HG2	5:S3:122:VAL:HG21	1.73	0.71
36:1:409:A:OP2	87:1:4055:OHX:N5	2.23	0.71
2:S0:11:PRO:HA	2:S0:14:ALA:HB3	1.71	0.71
4:S2:65:GLU:HB2	4:S2:68:ILE:HG13	2.29	0.71
63:N7:136:PHE:CZ	70:O4:89:ILE:HG12	5.03	0.71
50:M4:14:LEU:H	50:M4:19:ARG:NH1	1.89	0.71
36:5:2278:C:H2'	36:5:2279:A:H5''	1.70	0.71
36:1:2218:G:H2'	36:1:2219:A:H8	1.52	0.71
26:D4:8:ARG:HH12	26:D4:68:LYS:HE3	1.56	0.71
69:O3:70:LYS:NZ	36:5:586:C:OP2	236.65	0.71
79:Q3:49:ARG:HB2	79:Q3:55:TRP:CZ3	2.26	0.71
1:2:533:U:H4'	26:D4:33:ALA:HB2	1.71	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1790:G:H2'	36:5:1791:C:C6	2.25	0.71
36:5:1818:U:H2'	36:5:1819:U:H6	1.55	0.71
54:M8:178:ARG:HD3	64:N8:50:PRO:HB2	3.25	0.71
1:2:523:G:O2'	1:2:529:A:N6	2.23	0.71
36:5:2531:C:H3'	36:5:2532:U:H5	1.56	0.71
37:7:86:U:O2	87:7:219:OHX:N4	2.23	0.71
10:S8:82:VAL:HG21	10:S8:103:GLN:HG3	1.72	0.71
19:C7:17:ILE:HG23	19:C7:58:MET:HE1	1.73	0.71
20:C8:33:THR:HA	20:C8:38:VAL:HG22	5.40	0.71
18:C6:95:LYS:HG2	18:C6:96:TYR:CZ	5.76	0.71
46:L9:178:GLY:HA3	46:L9:180:TYR:CZ	3.11	0.71
47:M0:76:MET:HE3	47:M0:148:VAL:HG13	1.71	0.71
1:2:1580:C:H4'	18:C6:137:ARG:HB2	1.73	0.71
42:L5:50:ARG:HD3	42:L5:65:ILE:HB	1.71	0.71
42:L5:79:TYR:O	42:L5:82:GLU:HG3	2.46	0.71
48:M1:132:ASN:HA	48:M1:154:THR:HG21	1.73	0.71
48:M1:9:MET:O	48:M1:11:ASP:N	3.53	0.71
52:M6:84:LEU:O	52:M6:87:MET:N	2.33	0.71
34:SR:84:SER:OG	34:SR:85:TRP:N	2.22	0.71
52:M6:28:LEU:HD11	52:M6:88:VAL:HG22	2.62	0.71
1:2:1514:U:H5'	1:2:1515:A:N3	2.06	0.71
36:1:980:A:H2'	36:1:981:U:N1	2.06	0.71
56:N0:50:LYS:HG2	37:7:77:G:O5'	304.56	0.71
36:1:267:G:O4'	51:M5:50:ARG:HD2	1.90	0.71
1:6:1339:C:O2'	1:6:1341:A:N7	2.23	0.71
1:6:697:C:H2'	1:6:698:U:H6	1.54	0.71
27:D5:49:ARG:O	27:D5:53:GLU:HB2	2.47	0.71
36:5:2768:U:H2'	36:5:2769:A:H8	1.55	0.71
87:1:4198:OHX:N2	87:O1:202:OHX:N5	2.38	0.71
41:L4:316:ASN:OD1	41:L4:318:LEU:N	3.54	0.71
24:D2:22:LYS:HG3	29:D7:3:LEU:HA	1.71	0.71
36:1:33:G:O2'	36:1:51:A:N6	2.24	0.71
5:S3:168:ILE:HB	5:S3:189:MET:HB2	5.70	0.71
36:5:357:A:N6	36:5:362:U:O4	2.15	0.71
12:C0:16:PHE:HD2	12:C0:76:LEU:HB2	1.53	0.71
17:C5:43:ARG:NH2	1:6:1552:U:OP2	403.09	0.71
73:O7:70:VAL:HA	73:O7:73:ARG:HG3	2.34	0.71
6:S4:68:ARG:HD3	6:S4:76:VAL:HG11	1.71	0.71
18:C6:113:ASP:HA	18:C6:116:LEU:HD12	5.78	0.71
1:2:1291:G:O5'	1:2:1291:G:H8	1.74	0.71
1:6:676:G:H2'	1:6:677:G:H8	1.55	0.71
39:L2:3:ARG:HD3	36:5:911:C:N4	178.19	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1945:A:H2'	36:1:1946:A:C8	2.25	0.71
36:5:1024:G:N2	36:5:1026:A:OP2	2.23	0.71
49:M3:6:ASN:O	54:M8:164:ARG:NH1	3.61	0.71
36:5:2533:G:H2'	36:5:2534:G:C8	2.26	0.71
27:D5:93:SER:OG	27:D5:94:LYS:N	2.24	0.71
64:N8:92:LYS:O	64:N8:93:SER:HB3	1.90	0.71
18:C6:83:GLN:HE22	18:C6:119:ALA:HA	1.70	0.71
36:5:196:G:N2	36:5:198:A:H3'	2.05	0.71
36:1:735:A:H2'	36:1:736:A:H8	1.55	0.71
1:2:459:G:OP1	26:D4:109:LYS:NZ	2.24	0.71
44:L7:44:ILE:HG12	44:L7:180:SER:HB3	1.73	0.71
36:5:185:C:H2'	36:5:186:U:H6	1.55	0.71
36:1:3037:U:H2'	36:1:3038:U:H6	1.56	0.71
43:L6:149:ILE:HG23	43:L6:155:LEU:HD13	2.48	0.71
40:L3:113:GLU:HG2	40:L3:176:ALA:HB2	3.76	0.71
8:S6:67:VAL:HG21	8:S6:99:GLY:HA2	2.36	0.71
33:E1:103:LEU:HD23	33:E1:105:TYR:HD2	2.90	0.71
8:S6:20:ASP:HB3	8:S6:23:ARG:HG3	4.03	0.71
10:S8:7:SER:HB2	1:6:336:G:H21	299.42	0.71
36:1:239:G:O2'	36:1:240:U:OP1	2.08	0.71
36:5:667:C:H2'	36:5:667:C:O2	1.91	0.71
36:5:953:G:H2'	36:5:1117:G:H5''	1.73	0.71
1:6:1385:G:N7	87:6:2126:OHX:N6	2.38	0.71
36:5:673:U:H2'	36:5:674:G:H8	1.54	0.71
56:N0:169:SER:OG	56:N0:170:THR:N	3.31	0.71
41:L4:50:TYR:CD1	36:5:339:C:H4'	115.03	0.71
35:SM:72:ARG:NH1	1:6:1460:A:O3'	326.61	0.71
1:2:1622:G:H2'	1:2:1623:C:C6	2.25	0.71
72:O6:45:ARG:NH2	72:O6:54:GLU:OE1	2.23	0.71
8:S6:159:ARG:NH2	1:6:79:C:OP1	349.75	0.71
32:E0:51:ASN:HB3	32:E0:53:LYS:HG2	6.96	0.71
15:C3:29:SER:HB3	15:C3:32:SER:HB3	5.64	0.71
53:M7:70:THR:HG23	53:M7:72:GLN:H	1.55	0.71
8:S6:78:THR:HG22	8:S6:79:LYS:HD3	4.50	0.71
58:N2:39:ASP:O	58:N2:40:HIS:ND1	2.24	0.71
1:6:1727:G:O6	87:6:2152:OHX:N6	2.24	0.71
25:D3:96:VAL:HG12	25:D3:127:VAL:HG21	4.22	0.70
1:2:1757:G:H21	36:1:2255:A:H1'	1.55	0.70
1:6:1273:G:H4'	1:6:1274:C:H3'	1.71	0.70
48:M1:81:GLU:O	48:M1:84:LEU:N	3.02	0.70
68:O2:21:HIS:CE1	68:O2:24:ARG:HD2	2.63	0.70
23:D1:11:LEU:HD12	23:D1:12:TYR:HB3	1.73	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:C8:141:THR:HG21	1:6:1174:C:OP2	353.28	0.70
57:N1:63:VAL:H	57:N1:75:ILE:HD13	1.55	0.70
41:L4:53:SER:OG	41:L4:53:SER:O	3.00	0.70
36:1:3123:A:O2'	46:L9:40:HIS:ND1	2.23	0.70
49:M3:9:ILE:HD11	64:N8:45:MET:HE1	1.72	0.70
58:N2:22:PRO:HB3	58:N2:93:ILE:HG21	1.73	0.70
36:5:2662:G:N2	36:5:2708:C:O2	2.20	0.70
36:1:2831:G:N2	36:1:2857:C:O2	2.22	0.70
44:L7:145:ARG:HA	44:L7:185:ILE:HD13	2.66	0.70
1:2:270:C:O2	1:2:285:G:N2	2.17	0.70
37:3:7:G:H5'	42:L5:33:ARG:HD2	1.72	0.70
1:2:649:U:O2'	1:2:650:U:O5'	2.07	0.70
1:2:1795:U:H5'	28:D6:79:ILE:HD11	1.73	0.70
1:2:542:A:H2'	1:2:543:C:H5'	1.73	0.70
1:2:248:U:OP1	87:2:2093:OHX:N6	2.24	0.70
1:6:1309:C:H2'	1:6:1310:U:H6	1.56	0.70
44:L7:25:GLN:H	44:L7:28:ALA:HB3	1.54	0.70
61:N5:131:ASP:OD2	61:N5:132:ALA:N	2.23	0.70
42:L5:124:GLU:O	42:L5:126:GLU:N	2.20	0.70
19:C7:108:ASP:HA	19:C7:111:LYS:HB2	3.95	0.70
1:6:1584:G:N2	1:6:1611:A:OP2	2.21	0.70
39:L2:5:ILE:HG22	39:L2:208:ASP:O	1.91	0.70
11:S9:65:LYS:HA	11:S9:70:LEU:HD21	1.72	0.70
36:5:173:G:HO2'	36:5:174:C:H6	1.37	0.70
22:D0:87:HIS:ND1	1:6:1383:G:OP1	442.11	0.70
54:M8:109:GLY:HA2	54:M8:112:ALA:HB3	2.85	0.70
62:N6:79:ALA:HB1	62:N6:98:ASN:HB3	2.65	0.70
1:6:269:G:H2'	1:6:270:C:H6	1.56	0.70
8:S6:14:LYS:HB3	8:S6:16:PHE:HE2	2.89	0.70
36:5:1222:G:H8	36:5:1222:G:OP2	1.74	0.70
36:5:920:A:H3'	36:5:922:U:C5	2.26	0.70
61:N5:80:ASN:O	61:N5:125:ARG:HG2	3.41	0.70
16:C4:32:ASP:N	16:C4:37:GLU:O	2.25	0.70
23:D1:79:LEU:HD22	23:D1:82:VAL:HG21	1.73	0.70
2:S0:162:CYS:SG	2:S0:163:ASN:N	2.64	0.70
36:5:1184:A:OP2	87:5:4092:OHX:N6	2.24	0.70
34:SR:101:GLN:OE1	34:SR:102:ARG:N	3.53	0.70
40:L3:286:GLY:HA3	40:L3:321:PHE:CE2	2.26	0.70
40:L3:81:THR:HG22	40:L3:321:PHE:HA	4.27	0.70
36:1:3023:U:H2'	36:1:3024:A:C8	2.26	0.70
1:2:590:C:OP1	32:E0:43:ARG:NH1	2.24	0.70
38:4:79:A:H2'	38:4:80:A:H1'	1.74	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:M0:207:GLU:O	47:M0:209:ASN:N	2.24	0.70
36:1:1554:U:H4'	36:1:1555:U:OP1	1.90	0.70
53:M7:32:THR:HG21	53:M7:87:SER:CB	2.22	0.70
10:S8:42:ARG:HG2	10:S8:58:LEU:HB2	5.52	0.70
1:2:1479:A:H2'	1:2:1480:G:H8	1.57	0.70
4:S2:99:LYS:HA	4:S2:117:THR:HA	2.06	0.70
1:2:177:U:O3'	8:S6:191:ARG:NH1	2.25	0.70
36:1:2310:U:OP1	87:1:4137:OHX:N2	2.23	0.70
36:1:2534:G:O6	87:1:3996:OHX:N4	2.25	0.70
3:S1:148:ASN:OD1	1:6:1066:C:O2'	349.15	0.70
63:N7:53:VAL:HA	63:N7:57:HIS:CD2	2.26	0.70
1:2:516:G:OP2	87:2:2070:OHX:N6	2.24	0.70
1:6:1028:C:N4	1:6:1792:G:O6	2.19	0.70
36:1:3288:G:O2'	36:1:3289:G:OP2	2.10	0.70
36:5:1085:A:H8	36:5:1085:A:H5''	1.56	0.70
10:S8:8:ARG:NH2	10:S8:19:ALA:O	2.23	0.70
1:6:1114:G:O2'	1:6:1130:G:O6	2.10	0.70
55:M9:182:ASP:O	55:M9:184:LEU:N	3.10	0.70
78:Q2:77:CYS:O	78:Q2:79:THR:N	2.23	0.70
44:L7:173:LEU:HB3	44:L7:178:ILE:HB	2.60	0.70
43:L6:30:LEU:HD13	43:L6:34:LEU:HD13	1.72	0.70
1:2:1555:A:H5''	17:C5:44:ARG:HD3	1.73	0.70
15:C3:99:ARG:NH2	15:C3:119:GLU:OE1	2.24	0.70
3:S1:130:SER:OG	3:S1:180:THR:N	4.41	0.70
35:SM:68:ARG:HD3	1:6:1460:A:P	335.89	0.70
36:1:3141:A:C2	36:1:3144:G:H1'	2.25	0.70
48:M1:70:THR:N	37:7:39:C:O2	306.75	0.70
1:6:1220:C:H2'	1:6:1221:A:H8	1.55	0.70
76:Q0:103:LEU:HD13	76:Q0:110:CYS:HA	2.72	0.70
10:S8:113:PHE:HD1	10:S8:121:LEU:HD21	3.68	0.70
36:5:873:C:H5''	36:5:874:U:O5'	1.91	0.70
10:S8:43:ILE:HG13	10:S8:57:ALA:HA	3.43	0.70
1:6:38:C:H2'	1:6:39:A:H5'	1.72	0.70
36:1:383:G:N2	36:1:386:A:OP2	2.18	0.70
25:D3:35:GLY:O	25:D3:37:ALA:N	2.24	0.70
53:M7:138:LYS:NZ	53:M7:140:GLU:HB2	3.23	0.70
53:M7:52:LEU:H	53:M7:52:LEU:HD12	3.21	0.70
41:L4:179:LEU:HD22	41:L4:183:LYS:HG2	1.74	0.70
41:L4:209:TYR:CE2	41:L4:229:ASN:HB2	2.67	0.70
8:S6:119:GLN:OE1	8:S6:120:GLU:N	4.41	0.70
1:2:1173:C:OP1	20:C8:132:ARG:NH1	2.25	0.70
57:N1:54:HIS:CE1	57:N1:55:LYS:HB3	2.27	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:L8:156:ASP:HB2	45:L8:183:LYS:NZ	2.69	0.70
11:S9:28:LEU:HD11	32:E0:39:LEU:HB3	1.74	0.70
64:N8:82:ILE:HG22	64:N8:87:ARG:HG3	3.13	0.70
22:D0:30:LYS:HB3	22:D0:33:GLN:NE2	2.05	0.70
36:5:3121:U:H1'	36:5:3122:A:H5''	1.73	0.70
61:N5:42:ARG:HG3	36:5:15:C:H5''	103.00	0.70
1:2:422:G:OP1	87:2:2042:OHX:N6	2.24	0.70
36:1:735:A:H2'	36:1:736:A:C8	2.26	0.70
27:D5:54:VAL:HA	27:D5:57:TYR:CD1	2.42	0.70
68:O2:39:ASP:O	68:O2:41:VAL:N	2.24	0.70
36:5:3191:G:O6	87:5:4139:OHX:N6	2.24	0.70
19:C7:62:GLN:HB3	19:C7:63:LYS:HD2	1.71	0.70
1:2:1586:A:H3'	1:2:1587:A:H8	1.57	0.70
42:L5:61:ILE:HD13	42:L5:79:TYR:CE1	3.55	0.70
4:S2:156:THR:HG21	4:S2:224:PHE:CD1	2.26	0.70
20:C8:138:THR:OG1	1:6:1459:C:OP2	349.76	0.70
69:O3:75:HIS:CE1	69:O3:82:ARG:HH21	2.09	0.70
36:1:2661:G:H1	36:1:2709:C:N4	1.89	0.70
42:L5:260:PHE:CE2	37:7:121:U:H5'	321.78	0.70
36:5:1239:C:H42	36:5:1249:G:H1	1.38	0.70
61:N5:60:TYR:CD2	71:O5:25:LYS:HB3	2.27	0.70
18:C6:16:ALA:HB2	18:C6:72:GLY:HA3	2.22	0.70
36:1:385:A:H2'	36:1:386:A:C8	2.26	0.70
1:2:1233:G:OP2	87:2:2152:OHX:N5	2.24	0.70
49:M3:12:ASN:OD1	49:M3:12:ASN:N	2.48	0.70
1:6:1398:U:H3'	1:6:1399:C:H4'	1.73	0.70
40:L3:92:TYR:OH	40:L3:180:GLU:OE1	2.10	0.70
1:6:1219:A:H62	1:6:1264:G:H21	1.40	0.70
46:L9:47:LYS:HE3	46:L9:50:ASN:HA	3.05	0.70
28:D6:87:ARG:NH2	28:D6:94:ASN:O	2.25	0.70
11:S9:117:GLY:O	11:S9:119:ALA:N	2.36	0.70
6:S4:57:ASN:CB	6:S4:60:GLU:H	2.04	0.70
17:C5:42:ARG:NH2	1:6:1550:A:OP2	392.93	0.70
52:M6:84:LEU:C	52:M6:86:GLY:H	1.94	0.70
11:S9:65:LYS:HA	11:S9:70:LEU:HD11	1.92	0.70
37:3:49:G:N7	42:L5:58:LYS:HG3	2.05	0.70
25:D3:92:CYS:HA	25:D3:95:PHE:CD2	2.26	0.70
53:M7:62:ARG:HG2	53:M7:63:PHE:CD1	2.26	0.70
58:N2:37:LEU:O	58:N2:41:ILE:HG13	1.92	0.70
47:M0:210:ILE:HG23	47:M0:217:PHE:CD2	2.27	0.70
41:L4:48:GLN:NE2	36:5:337:G:O4'	97.01	0.70
36:1:556:U:H5'	36:1:557:A:C2	2.27	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:D0:28:SER:OG	22:D0:29:THR:N	2.23	0.70
1:2:1559:A:C6	20:C8:134:ARG:HD2	2.26	0.70
1:6:489:C:O2'	1:6:490:C:O4'	2.10	0.70
36:1:5:G:N2	38:4:154:C:O2	2.18	0.70
53:M7:3:ARG:HG2	53:M7:3:ARG:HH21	4.31	0.70
36:1:3281:U:H2'	36:1:3282:U:C6	2.26	0.70
27:D5:41:ILE:HG13	27:D5:42:LEU:HG	1.72	0.70
27:D5:43:ASP:O	27:D5:46:LYS:N	2.25	0.70
7:S5:30:PRO:HB2	7:S5:33:VAL:HB	1.74	0.70
46:L9:137:SER:HB2	46:L9:143:GLU:HB3	1.80	0.70
31:D9:24:CYS:SG	31:D9:25:SER:N	2.64	0.70
48:M1:95:ASN:N	48:M1:95:ASN:OD1	3.04	0.70
55:M9:6:THR:O	55:M9:8:LYS:N	3.89	0.70
50:M4:20:VAL:HG23	50:M4:66:THR:OG1	3.89	0.70
5:S3:222:VAL:HG11	34:SR:229:LYS:HA	1.74	0.70
49:M3:122:LYS:NZ	71:O5:119:LYS:O	3.86	0.70
1:6:488:G:O2'	1:6:500:C:N4	2.25	0.70
53:M7:116:HIS:HB3	53:M7:149:VAL:HB	1.74	0.70
49:M3:2:ALA:HB1	64:N8:33:GLY:N	2.07	0.70
42:L5:43:LYS:O	42:L5:46:THR:OG1	2.96	0.70
42:L5:39:GLN:OE1	42:L5:40:HIS:N	2.25	0.70
55:M9:64:ARG:O	55:M9:67:ALA:N	3.79	0.70
71:O5:13:SER:H	71:O5:16:GLN:HB2	3.03	0.70
9:S7:99:LEU:HD12	9:S7:116:ARG:HG2	3.00	0.70
9:S7:96:ARG:CZ	9:S7:124:LYS:HB3	2.21	0.70
1:6:1354:G:H5'	1:6:1355:C:OP2	1.92	0.70
54:M8:86:THR:HB	54:M8:105:ARG:HB2	3.25	0.70
1:2:823:G:O2'	1:2:824:G:O4'	2.09	0.70
53:M7:29:THR:HG22	53:M7:87:SER:OG	1.92	0.70
36:1:1114:U:OP2	87:1:3965:OHX:N4	2.25	0.70
1:2:1539:G:H5'	1:2:1539:G:H8	1.56	0.70
3:S1:101:HIS:HA	3:S1:217:LEU:HD22	2.05	0.70
36:1:1722:U:H5'	55:M9:100:ARG:HD3	1.74	0.70
68:O2:76:VAL:HG13	68:O2:81:ASP:HB2	4.68	0.70
9:S7:131:PHE:O	9:S7:133:THR:N	2.25	0.70
1:2:1001:A:H2'	1:2:1002:G:C8	2.27	0.70
1:2:926:A:H1'	1:2:988:A:N1	2.07	0.70
72:O6:88:GLU:O	72:O6:91:ASN:N	2.25	0.70
36:5:3366:G:H2'	36:5:3367:C:C6	2.27	0.70
54:M8:115:VAL:O	54:M8:118:GLY:N	2.44	0.70
8:S6:18:ILE:HD12	8:S6:24:ILE:HG12	1.74	0.70
1:6:358:U:H5''	1:6:359:A:OP1	1.92	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:L8:121:SER:O	45:L8:124:ASP:N	4.82	0.70
36:5:3154:C:C6	36:5:3156:U:H5'	2.27	0.70
87:1:3993:OHX:N5	37:3:86:U:O2	2.25	0.69
44:L7:40:LYS:HA	44:L7:43:ILE:HD12	3.04	0.69
36:1:2704:A:OP2	87:1:3870:OHX:N2	2.25	0.69
1:2:1593:A:H2'	1:2:1594:G:C8	2.27	0.69
34:SR:16:HIS:HB3	34:SR:308:ASN:HB3	1.72	0.69
41:L4:82:THR:OG1	41:L4:83:GLY:N	3.83	0.69
1:2:1573:A:H4'	1:2:1574:G:H5'	1.74	0.69
48:M1:24:GLY:HA2	48:M1:65:ILE:HG23	2.12	0.69
29:D7:37:CYS:O	29:D7:39:GLY:N	2.29	0.69
36:5:2318:U:O4	87:5:3992:OHX:N6	2.25	0.69
36:1:1349:G:H2'	36:1:1350:A:C4	2.27	0.69
1:2:656:G:O2'	1:2:657:U:O4'	2.10	0.69
36:1:2255:A:H5'	36:1:2261:G:H22	1.57	0.69
1:6:980:G:O6	87:6:2059:OHX:N1	2.25	0.69
47:M0:29:SER:OG	47:M0:31:ILE:N	2.25	0.69
44:L7:158:LYS:HZ2	44:L7:158:LYS:HB3	4.41	0.69
41:L4:126:ILE:HD11	41:L4:233:LEU:HD13	2.32	0.69
41:L4:138:ARG:HH21	41:L4:240:PRO:HB2	2.29	0.69
46:L9:102:ASN:HA	46:L9:136:PHE:HZ	1.57	0.69
36:5:1633:C:H2'	36:5:1634:G:H8	1.57	0.69
1:6:1696:G:H2'	1:6:1698:G:O6	1.92	0.69
68:O2:121:ASN:ND2	68:O2:121:ASN:O	3.37	0.69
9:S7:20:VAL:HG21	9:S7:46:ILE:HD12	3.72	0.69
36:1:3174:A:OP1	69:O3:97:SER:OG	2.08	0.69
49:M3:73:ARG:HD2	36:5:76:G:H3'	80.68	0.69
36:5:939:U:O2'	36:5:2402:A:N1	2.25	0.69
71:O5:78:LYS:HA	71:O5:81:ARG:HB2	1.74	0.69
71:O5:28:LEU:HA	71:O5:31:LEU:HB2	1.73	0.69
1:2:705:U:H2'	1:2:706:A:C8	2.27	0.69
36:1:2534:G:N2	36:1:2535:A:N7	2.40	0.69
69:O3:88:ASN:HB2	36:5:429:U:H5'	215.19	0.69
36:5:2359:C:H2'	36:5:2360:C:C6	2.27	0.69
40:L3:288:GLY:O	40:L3:290:ASP:N	2.24	0.69
1:2:1078:C:H2'	1:2:1079:U:C6	2.27	0.69
34:SR:159:ASN:O	34:SR:161:LYS:N	5.01	0.69
1:2:444:C:N4	1:2:459:G:OP2	2.25	0.69
6:S4:11:ARG:O	6:S4:12:LEU:HB2	1.96	0.69
26:D4:12:VAL:HG22	26:D4:23:PHE:HB3	1.73	0.69
50:M4:73:PRO:HD2	50:M4:76:ALA:HB2	1.72	0.69
17:C5:17:TYR:HE1	17:C5:18:ARG:HE	1.39	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1213:G:O2'	1:6:1244:A:N6	2.25	0.69
44:L7:73:GLY:O	57:N1:143:THR:HG22	1.93	0.69
36:5:1573:G:C6	36:5:1574:C:H1'	2.27	0.69
39:L2:213:GLY:HA3	36:5:2967:A:OP1	207.73	0.69
4:S2:49:LYS:O	4:S2:50:ILE:HG13	1.93	0.69
56:N0:66:GLU:HG2	56:N0:98:SER:HA	3.34	0.69
36:1:1145:G:H5'	68:O2:46:PHE:CE1	2.27	0.69
24:D2:94:LEU:HD11	24:D2:102:VAL:HG23	1.72	0.69
14:C2:136:ILE:HA	14:C2:139:HIS:HB3	2.37	0.69
1:2:304:U:H2'	1:2:305:C:H6	1.57	0.69
1:2:291:G:H2'	1:2:292:U:C6	2.27	0.69
55:M9:128:LYS:NZ	36:5:1721:U:O4	231.31	0.69
1:2:973:A:H2'	1:2:974:A:H8	1.56	0.69
9:S7:154:LEU:HD21	9:S7:183:PHE:HD1	1.57	0.69
1:2:144:U:HO2'	1:2:145:A:H8	1.40	0.69
47:M0:166:ILE:HG22	47:M0:167:LEU:H	2.59	0.69
36:1:2730:G:OP2	87:1:3910:OHX:N1	2.26	0.69
11:S9:29:LYS:HA	32:E0:40:TYR:CE2	2.27	0.69
36:5:2659:G:O6	87:5:3903:OHX:N4	2.25	0.69
46:L9:49:ASN:ND2	46:L9:49:ASN:O	2.25	0.69
45:L8:65:LEU:HD12	51:M5:25:VAL:HG22	4.02	0.69
19:C7:45:ARG:HH21	1:6:1331:A:H5''	415.02	0.69
20:C8:53:ASP:HB3	20:C8:56:LYS:HD2	1.72	0.69
3:S1:37:THR:HG21	3:S1:185:THR:HB	3.13	0.69
1:2:1070:C:O2'	29:D7:17:ARG:O	2.10	0.69
1:2:1255:G:O2'	14:C2:47:GLU:OE1	2.10	0.69
59:N3:118:VAL:O	59:N3:137:VAL:N	2.26	0.69
34:SR:214:ALA:HB2	34:SR:220:ILE:HA	1.73	0.69
39:L2:245:LEU:HD12	39:L2:246:LEU:H	2.29	0.69
1:2:1383:G:OP1	22:D0:89:ARG:NH1	2.26	0.69
1:2:91:G:H2'	1:2:92:A:H8	1.55	0.69
25:D3:22:ASN:HB3	1:6:609:U:H5	336.37	0.69
53:M7:69:ARG:NH1	36:5:2389:C:H1'	190.18	0.69
3:S1:196:GLU:HA	3:S1:199:ASN:HB2	1.74	0.69
22:D0:15:GLN:O	22:D0:16:GLN:HB2	2.60	0.69
36:1:1740:U:H1'	36:1:1741:A:H2	1.58	0.69
40:L3:347:SER:O	40:L3:348:ARG:HG2	4.97	0.69
36:1:2883:U:P	40:L3:10:ARG:HH21	2.15	0.69
46:L9:20:ILE:HD13	46:L9:25:VAL:HG22	4.62	0.69
7:S5:61:TYR:HE1	7:S5:165:LEU:HD22	1.57	0.69
15:C3:55:ARG:HD3	29:D7:47:PHE:CG	2.27	0.69
1:2:975:C:OP1	15:C3:112:LYS:NZ	2.24	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:28:GLU:HB3	3:S1:48:VAL:HB	1.75	0.69
4:S2:63:VAL:HG13	4:S2:68:ILE:HD12	2.17	0.69
48:M1:96:PHE:CD1	48:M1:160:VAL:HG22	2.90	0.69
8:S6:153:VAL:O	8:S6:155:ASP:N	2.25	0.69
18:C6:47:LYS:HE2	18:C6:114:ARG:HH22	1.57	0.69
34:SR:42:LEU:HD21	34:SR:82:SER:HB3	1.97	0.69
40:L3:117:ARG:NH2	40:L3:176:ALA:O	2.50	0.69
22:D0:21:LYS:HA	22:D0:94:GLU:HG2	1.75	0.69
57:N1:25:VAL:HG11	57:N1:48:ILE:HD11	4.12	0.69
44:L7:173:LEU:O	44:L7:178:ILE:HB	1.93	0.69
51:M5:5:LYS:HB3	72:O6:36:ARG:NH1	2.60	0.69
10:S8:62:THR:HA	10:S8:76:THR:O	2.88	0.69
36:5:358:G:H5'	36:5:359:U:OP2	1.92	0.69
1:2:1533:C:H4'	1:2:1539:G:N1	2.06	0.69
1:2:1120:U:H3	1:2:1127:G:H1	1.41	0.69
1:2:894:U:H2'	1:2:895:G:C8	2.27	0.69
62:N6:41:ALA:O	62:N6:125:LYS:NZ	4.39	0.69
4:S2:94:GLN:HE22	4:S2:96:THR:HG22	6.66	0.69
49:M3:75:PHE:O	49:M3:79:GLU:HB2	1.92	0.69
24:D2:23:ARG:O	24:D2:65:LEU:N	2.89	0.69
38:4:36:G:OP2	71:O5:86:ARG:HB2	1.93	0.69
46:L9:116:ASN:O	46:L9:119:GLY:N	2.73	0.69
36:5:2181:C:H2'	36:5:2182:A:C8	2.27	0.69
67:O1:13:THR:HG22	67:O1:72:ARG:HH11	1.57	0.69
1:2:327:U:O2'	13:C1:10:GLU:HG2	1.93	0.69
24:D2:16:ASN:O	24:D2:20:THR:OG1	2.10	0.69
1:2:383:G:N7	87:2:2130:OHX:N4	2.41	0.69
22:D0:53:LYS:HB2	22:D0:92:ASP:HB2	2.50	0.69
1:6:1736:G:H2'	1:6:1737:G:H8	1.58	0.69
53:M7:102:ALA:HB1	53:M7:107:LEU:HB2	2.32	0.69
19:C7:36:ASP:N	19:C7:36:ASP:OD2	2.24	0.69
46:L9:34:LEU:HD11	46:L9:149:ASN:HB3	1.74	0.69
36:5:1519:G:H2'	36:5:1520:G:H8	1.57	0.69
1:6:85:A:OP1	87:6:2195:OHX:N4	2.25	0.69
19:C7:52:GLY:O	19:C7:55:THR:OG1	3.63	0.69
2:S0:55:GLU:OE2	23:D1:80:LYS:N	2.22	0.69
66:O0:33:SER:OG	66:O0:34:LEU:N	2.24	0.69
1:2:871:G:O2'	29:D7:67:THR:O	2.08	0.69
59:N3:80:ARG:HB2	59:N3:99:ALA:HB3	2.38	0.69
36:5:2248:C:OP2	87:5:3973:OHX:N6	2.26	0.69
49:M3:161:ASP:HB2	64:N8:144:VAL:HG12	2.03	0.69
48:M1:143:ARG:NH2	37:7:5:G:OP1	292.82	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:246:LEU:HD13	6:S4:251:GLU:HG2	1.85	0.69
1:6:250:C:H2'	1:6:251:A:C8	2.28	0.69
1:6:1153:G:N7	87:6:2140:OHX:N2	2.40	0.69
44:L7:96:PRO:O	44:L7:99:PRO:HD2	2.17	0.69
36:5:2236:G:OP1	87:5:4243:OHX:N3	2.25	0.69
5:S3:158:ILE:H	5:S3:158:ILE:HD13	1.71	0.69
36:5:801:A:O2'	87:5:4023:OHX:N1	2.25	0.69
32:E0:18:THR:HG21	1:6:584:C:H1'	390.15	0.69
1:6:545:A:N6	1:6:594:A:O4'	2.26	0.69
43:L6:78:ARG:HG3	43:L6:78:ARG:HH11	1.57	0.69
19:C7:31:ASN:HD22	19:C7:55:THR:HG23	1.57	0.69
18:C6:55:VAL:HG22	18:C6:59:LYS:HE3	1.73	0.69
12:C0:12:HIS:NE2	12:C0:49:LEU:HD21	3.49	0.69
12:C0:56:LYS:HB3	12:C0:67:THR:HG23	6.84	0.69
1:2:979:A:N3	1:2:1775:U:O2'	2.25	0.69
1:2:626:U:H2'	1:2:627:C:H6	1.57	0.69
43:L6:172:HIS:HB3	69:O3:43:PHE:CD2	2.28	0.69
34:SR:200:ASN:N	34:SR:200:ASN:OD1	2.26	0.69
34:SR:226:ALA:O	34:SR:228:LYS:NZ	4.50	0.69
34:SR:288:HIS:CE1	34:SR:290:VAL:HG12	3.85	0.69
44:L7:222:HIS:O	44:L7:224:ILE:N	2.96	0.69
39:L2:83:HIS:CE1	39:L2:86:GLN:HB2	3.36	0.69
40:L3:116:ARG:NH2	40:L3:174:LYS:HD3	2.08	0.69
49:M3:164:GLU:O	64:N8:139:ARG:NH2	5.53	0.69
52:M6:24:ALA:O	52:M6:28:LEU:HD12	2.29	0.69
52:M6:8:VAL:HA	52:M6:34:VAL:HG13	2.05	0.69
1:6:1765:A:OP1	87:6:2131:OHX:N6	2.25	0.69
36:5:928:C:H2'	36:5:929:A:C8	2.26	0.69
39:L2:209:HIS:HD2	39:L2:211:HIS:HB2	1.56	0.69
1:6:531:C:H2'	1:6:532:U:H5'	1.75	0.69
27:D5:85:LYS:HG3	27:D5:86:GLU:N	2.07	0.69
39:L2:192:LYS:HD3	39:L2:193:ARG:HH22	3.24	0.69
24:D2:72:CYS:HB3	24:D2:129:VAL:HG13	1.75	0.69
70:O4:57:LEU:HD12	70:O4:61:GLN:HB3	3.25	0.69
36:5:1790:G:O6	87:5:4192:OHX:N4	2.25	0.69
36:5:1209:G:H2'	36:5:1210:U:O4'	1.93	0.69
1:2:836:U:H2'	1:2:837:G:H8	1.57	0.69
8:S6:161:GLU:HG3	8:S6:170:THR:HG22	7.30	0.69
36:5:128:G:O6	87:5:3928:OHX:N4	2.26	0.69
1:6:604:A:OP2	87:6:2156:OHX:N4	2.25	0.69
36:5:668:G:OP1	87:5:4136:OHX:N1	2.26	0.69
1:2:381:C:OP1	11:S9:2:PRO:HB3	1.93	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:L8:144:GLU:OE1	72:O6:36:ARG:NH2	2.25	0.69
50:M4:55:ARG:HD3	56:N0:70:THR:OG1	2.97	0.69
2:S0:74:VAL:HG23	2:S0:118:PRO:HB3	1.74	0.69
1:2:658:C:O2	1:2:676:G:N2	2.17	0.69
1:2:1621:U:H2'	1:2:1622:G:H8	1.57	0.69
34:SR:255:ALA:HB2	34:SR:292:LEU:HD21	2.97	0.69
39:L2:156:LYS:NZ	36:5:2157:G:O2'	205.73	0.69
49:M3:50:PRO:HG3	71:O5:118:ILE:HD11	1.73	0.69
64:N8:149:ALA:HB3	72:O6:15:LYS:HB2	3.05	0.69
51:M5:143:ARG:NH2	71:O5:91:ALA:O	3.38	0.69
39:L2:6:ARG:HH12	39:L2:199:THR:H	1.41	0.69
54:M8:167:SER:HB3	54:M8:172:PHE:CE1	4.79	0.69
52:M6:72:HIS:O	52:M6:74:ARG:NH1	2.70	0.69
36:1:2767:U:OP2	87:1:4131:OHX:N2	2.25	0.69
45:L8:78:PHE:C	45:L8:80:TYR:H	1.96	0.69
1:2:324:U:OP1	13:C1:133:LYS:NZ	2.23	0.69
36:5:3305:A:H2'	36:5:3306:U:H6	1.58	0.69
1:6:1353:U:N3	1:6:1372:U:O4	2.18	0.69
1:2:453:U:O4	87:2:2038:OHX:N5	2.26	0.69
44:L7:66:LYS:O	44:L7:68:ASP:N	3.75	0.69
36:1:2255:A:OP1	87:1:3934:OHX:N3	2.26	0.69
36:1:2836:C:H5	36:1:2852:C:H42	1.38	0.69
26:D4:21:LYS:HB2	26:D4:75:VAL:HB	4.71	0.69
21:C9:15:ILE:HD11	21:C9:63:ARG:HD2	2.94	0.69
3:S1:180:THR:HG22	3:S1:181:LEU:HD13	1.75	0.69
3:S1:67:GLU:HA	3:S1:85:LYS:HA	3.08	0.69
3:S1:65:VAL:HG12	3:S1:87:ARG:HA	1.73	0.69
52:M6:110:PRO:O	52:M6:113:ASP:N	5.43	0.69
38:4:36:G:C8	71:O5:86:ARG:HG3	2.27	0.69
36:1:25:U:O4	87:1:3871:OHX:N3	2.26	0.69
53:M7:131:ARG:HH11	53:M7:131:ARG:HG3	1.58	0.69
45:L8:71:VAL:N	45:L8:234:GLY:O	2.50	0.69
34:SR:93:ASP:HB3	34:SR:96:THR:HG22	1.74	0.69
41:L4:215:ILE:HG23	41:L4:216:VAL:HG23	5.32	0.69
1:2:698:U:O4	87:2:2097:OHX:N3	2.26	0.69
36:1:1702:U:N3	36:1:1743:G:O6	2.19	0.69
78:Q2:3:ASN:HA	78:Q2:92:GLU:O	1.93	0.68
36:1:2836:C:H4'	47:M0:157:TYR:CE2	2.28	0.68
19:C7:25:THR:HG21	19:C7:30:THR:HB	5.16	0.68
7:S5:176:THR:OG1	7:S5:177:ILE:N	2.25	0.68
12:C0:54:TYR:O	12:C0:69:THR:N	2.71	0.68
64:N8:66:ALA:HB1	64:N8:69:TRP:HB2	4.02	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:85:G:N1	62:N6:112:ASP:OD2	2.21	0.68
1:2:658:C:N4	1:2:676:G:O6	2.26	0.68
34:SR:13:LEU:HB2	34:SR:310:ILE:HB	1.74	0.68
3:S1:109:LYS:O	3:S1:112:SER:OG	3.75	0.68
1:6:1268:G:N2	1:6:1441:C:O2	2.18	0.68
22:D0:20:ILE:HD11	22:D0:95:ALA:H	1.57	0.68
39:L2:70:ARG:NH2	36:5:2522:G:O6	175.04	0.68
87:1:4198:OHX:N4	87:O1:202:OHX:N1	2.41	0.68
3:S1:195:LYS:O	3:S1:199:ASN:N	2.25	0.68
1:2:836:U:H2'	1:2:837:G:C8	2.27	0.68
36:5:2603:G:O6	87:5:3899:OHX:N1	2.26	0.68
36:5:2396:G:O6	36:5:2984:C:N4	2.19	0.68
36:5:2399:A:H2'	36:5:2400:G:O4'	1.93	0.68
36:1:2563:G:H5''	45:L8:27:THR:HG23	1.74	0.68
1:2:1641:C:N4	1:2:1760:G:H1	1.90	0.68
41:L4:50:TYR:CD2	41:L4:109:TRP:HH2	2.53	0.68
18:C6:36:ILE:O	18:C6:39:VAL:HG23	2.87	0.68
7:S5:89:ILE:HD12	7:S5:90:ILE:H	1.69	0.68
2:S0:41:ARG:HH11	2:S0:45:VAL:HG21	1.58	0.68
55:M9:38:ARG:HA	55:M9:41:ILE:HG22	1.74	0.68
17:C5:123:TYR:OH	20:C8:126:ARG:NH1	2.26	0.68
50:M4:42:LYS:NZ	36:5:1186:G:OP2	307.38	0.68
50:M4:38:ILE:O	56:N0:95:ARG:NH2	2.24	0.68
43:L6:170:LYS:O	43:L6:172:HIS:N	2.49	0.68
38:8:52:A:C2	38:8:53:A:H1'	2.28	0.68
34:SR:101:GLN:NE2	34:SR:137:LYS:O	3.09	0.68
36:5:353:G:O2'	36:5:354:U:OP2	2.11	0.68
36:1:3024:A:H5''	36:1:3025:C:OP2	1.93	0.68
71:O5:49:LYS:NZ	38:8:64:U:H5'	46.19	0.68
71:O5:48:ARG:HA	71:O5:51:ILE:HD12	3.52	0.68
36:5:174:C:N4	36:5:244:G:H1	1.91	0.68
52:M6:73:PHE:CD1	52:M6:78:ARG:HG2	2.28	0.68
11:S9:53:ARG:NH2	11:S9:97:LEU:O	2.26	0.68
36:1:15:C:OP1	61:N5:42:ARG:NH2	2.27	0.68
87:1:4198:OHX:N2	87:O1:202:OHX:N1	2.42	0.68
1:6:647:G:N2	1:6:687:G:H22	1.91	0.68
60:N4:88:ASP:O	60:N4:91:LYS:N	6.23	0.68
55:M9:150:GLN:HA	55:M9:153:LYS:HB3	2.91	0.68
39:L2:115:ASN:O	39:L2:115:ASN:ND2	2.26	0.68
3:S1:125:VAL:HG11	3:S1:173:THR:HG23	1.73	0.68
23:D1:60:ARG:HA	23:D1:65:SER:HB2	2.64	0.68
28:D6:77:CYS:O	28:D6:81:ALA:N	3.59	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:S9:119:ALA:O	11:S9:124:HIS:ND1	4.99	0.68
1:2:116:U:H2'	1:2:117:U:C6	2.28	0.68
36:1:738:A:H2'	36:1:739:G:C8	2.28	0.68
41:L4:233:LEU:HD22	41:L4:238:LEU:HD11	4.39	0.68
54:M8:18:ALA:HB1	54:M8:19:PRO:HD2	1.93	0.68
18:C6:60:PHE:HA	18:C6:63:ILE:HD11	1.90	0.68
7:S5:162:VAL:HG22	7:S5:167:ARG:HG3	1.76	0.68
1:2:1550:A:P	17:C5:42:ARG:HH22	2.17	0.68
48:M1:162:TRP:CZ2	48:M1:166:LYS:HD2	2.29	0.68
1:6:868:G:N2	1:6:960:U:O2	2.23	0.68
59:N3:120:LYS:H	59:N3:137:VAL:CG2	3.33	0.68
43:L6:153:PRO:O	43:L6:154:LEU:HB2	1.92	0.68
36:5:1238:C:H2'	36:5:1239:C:O4'	1.93	0.68
36:1:17:G:H4'	71:O5:75:TYR:HE1	1.58	0.68
36:5:864:G:OP2	87:5:3912:OHX:N4	2.26	0.68
36:5:3154:C:C5	36:5:3156:U:H3'	2.27	0.68
9:S7:138:LYS:HB3	24:D2:54:ASP:HB3	4.76	0.68
66:O0:15:ALA:O	66:O0:19:LYS:HG2	1.92	0.68
70:O4:71:THR:HG22	70:O4:77:GLY:HA3	1.75	0.68
44:L7:95:ILE:HD12	44:L7:133:TYR:CE1	2.85	0.68
26:D4:104:SER:HB3	26:D4:107:GLN:HB2	1.75	0.68
1:2:513:U:H2'	1:2:514:G:C8	2.29	0.68
36:1:970:A:OP1	65:N9:18:ARG:NE	2.26	0.68
42:L5:79:TYR:HB2	42:L5:81:HIS:CE1	2.28	0.68
17:C5:65:LEU:O	87:C5:201:OHX:N1	2.25	0.68
17:C5:28:MET:O	17:C5:29:SER:HB3	1.94	0.68
55:M9:104:ARG:NH1	36:5:1949:G:OP1	218.93	0.68
40:L3:296:THR:HG22	40:L3:298:PHE:N	2.08	0.68
40:L3:294:GLY:H	40:L3:304:THR:HA	1.58	0.68
34:SR:38:ARG:HG2	34:SR:67:ILE:HG23	1.74	0.68
34:SR:84:SER:O	34:SR:110:VAL:N	2.26	0.68
3:S1:83:LYS:NZ	16:C4:116:GLU:OE2	2.18	0.68
52:M6:110:PRO:O	52:M6:112:TYR:N	3.52	0.68
17:C5:122:THR:CG2	1:6:1558:U:H3	366.87	0.68
41:L4:289:ILE:O	41:L4:295:ILE:HD12	1.92	0.68
1:2:800:U:H2'	1:2:801:G:C8	2.29	0.68
1:2:1559:A:H4'	1:2:1559:A:OP1	1.93	0.68
34:SR:117:LYS:HG2	34:SR:118:LYS:H	1.59	0.68
1:6:5:U:H2'	1:6:6:G:H8	1.59	0.68
55:M9:120:TYR:O	55:M9:122:VAL:N	2.27	0.68
6:S4:137:PRO:HG2	6:S4:150:PRO:HD2	1.74	0.68
1:2:39:A:O2'	1:2:40:A:OP2	2.11	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:55:A:H1'	1:2:426:G:N2	2.07	0.68
1:2:933:A:H2	1:2:944:A:H61	1.41	0.68
11:S9:139:GLN:NE2	11:S9:140:ILE:O	2.23	0.68
7:S5:33:VAL:O	7:S5:35:GLN:N	2.69	0.68
42:L5:196:ARG:O	42:L5:199:ILE:N	3.00	0.68
19:C7:108:ASP:O	19:C7:112:SER:OG	2.06	0.68
2:S0:62:ARG:HD3	23:D1:37:ALA:HB3	4.93	0.68
4:S2:88:LYS:HB3	4:S2:95:ARG:HB2	1.73	0.68
36:1:978:G:O2'	36:1:979:U:O2	2.11	0.68
71:O5:34:GLN:OE1	71:O5:38:ARG:NH2	5.60	0.68
45:L8:33:ASN:HB3	45:L8:38:GLN:HG3	2.23	0.68
36:1:2766:U:O4	87:1:4037:OHX:N2	2.26	0.68
1:2:488:G:N2	1:2:500:C:O2	2.26	0.68
58:N2:17:VAL:HG12	58:N2:19:VAL:HG13	1.74	0.68
1:6:1691:A:H2'	1:6:1692:G:C8	2.28	0.68
4:S2:168:ARG:NE	1:6:1098:U:OP2	383.90	0.68
74:O8:43:PHE:CE2	74:O8:56:ILE:HD12	5.12	0.68
36:5:1544:G:N7	87:5:4196:OHX:N5	2.42	0.68
39:L2:14:SER:OG	39:L2:15:ILE:N	2.38	0.68
41:L4:140:HIS:CE1	41:L4:246:ARG:HG2	4.24	0.68
42:L5:85:ARG:NH2	42:L5:250:ASP:OD1	2.26	0.68
1:6:1458:G:H5''	1:6:1459:C:OP2	1.94	0.68
56:N0:90:MET:CG	36:5:1213:G:H4'	318.54	0.68
56:N0:141:LYS:HA	56:N0:144:LEU:HD12	1.75	0.68
43:L6:176:PHE:H	50:M4:117:ARG:NH2	5.02	0.68
34:SR:16:HIS:ND1	34:SR:39:ASP:OD2	2.27	0.68
49:M3:74:GLY:HA3	49:M3:98:ASP:HB3	1.75	0.68
36:5:3358:U:H2'	36:5:3359:A:H8	1.59	0.68
55:M9:93:VAL:O	55:M9:97:ARG:HG3	1.93	0.68
41:L4:347:THR:HG21	44:L7:64:GLN:HE22	1.59	0.68
59:N3:15:LEU:HB3	59:N3:51:ALA:HB1	1.76	0.68
36:1:2120:A:OP2	87:1:4008:OHX:N2	2.27	0.68
1:6:1015:U:OP1	87:6:2059:OHX:N3	2.26	0.68
10:S8:167:ALA:HA	10:S8:184:LEU:H	1.59	0.68
43:L6:56:LYS:HG2	43:L6:57:HIS:H	2.89	0.68
5:S3:204:ASP:OD1	1:6:1330:G:N2	419.66	0.68
1:2:312:A:H4'	1:2:313:U:H5''	1.74	0.68
16:C4:43:THR:HG23	16:C4:46:MET:HG3	2.76	0.68
3:S1:70:LEU:HD21	3:S1:79:HIS:CD2	2.27	0.68
2:S0:185:ARG:H	23:D1:44:ARG:HA	1.58	0.68
34:SR:67:ILE:HB	34:SR:85:TRP:CD1	2.29	0.68
52:M6:121:PRO:O	52:M6:124:LEU:N	3.74	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1486:G:O6	87:1:3976:OHX:N5	2.26	0.68
49:M3:59:ARG:NH2	49:M3:67:ARG:O	3.75	0.68
36:5:754:G:H2'	36:5:755:A:C8	2.27	0.68
36:1:1804:A:H2'	36:1:1805:C:H6	1.57	0.68
70:O4:41:ARG:HA	70:O4:56:THR:HG22	1.74	0.68
60:N4:31:PHE:HZ	60:N4:40:PHE:CD1	2.16	0.68
2:S0:126:PRO:HA	2:S0:133:ILE:HD11	2.30	0.68
36:1:1342:C:H2'	36:1:1343:A:C8	2.28	0.68
14:C2:30:VAL:HB	14:C2:132:GLU:HG3	3.14	0.68
52:M6:46:GLU:HB3	52:M6:134:LYS:HD3	2.63	0.68
36:1:1439:U:H2'	36:1:1440:G:C8	2.28	0.68
5:S3:92:GLN:OE1	5:S3:92:GLN:N	3.87	0.68
1:2:839:U:H2'	1:2:840:U:H5'	1.76	0.68
36:5:3195:U:H1'	36:5:3196:U:OP1	1.94	0.68
1:2:474:A:OP2	11:S9:44:ARG:NH1	2.19	0.68
1:2:397:A:H5''	10:S8:47:ARG:HH11	1.58	0.68
10:S8:114:GLU:HG2	10:S8:120:THR:HA	1.76	0.68
15:C3:16:ILE:HD12	1:6:959:U:H4'	345.67	0.68
49:M3:65:TYR:OH	36:5:700:C:OP1	108.87	0.68
49:M3:99:HIS:H	49:M3:99:HIS:CD2	2.28	0.68
2:S0:142:PRO:HG3	23:D1:32:VAL:HG13	1.75	0.68
20:C8:144:ARG:O	35:SM:68:ARG:NH2	2.26	0.68
6:S4:100:ARG:HH12	6:S4:118:GLU:HG2	1.59	0.68
36:1:1321:G:H5''	56:N0:117:ARG:HH22	1.59	0.68
59:N3:120:LYS:H	59:N3:137:VAL:HG23	2.69	0.68
34:SR:293:ALA:HB3	34:SR:302:PHE:HB2	1.75	0.68
52:M6:125:ARG:O	52:M6:127:LEU:N	2.27	0.68
1:2:1001:A:H2'	1:2:1002:G:H8	1.58	0.68
1:2:1080:U:H3	1:2:1091:A:H2	1.41	0.68
1:2:1237:G:N1	1:2:1248:C:N3	2.34	0.68
57:N1:119:ALA:O	57:N1:121:ALA:N	2.27	0.68
50:M4:32:LEU:HD11	50:M4:94:TRP:CD1	2.28	0.68
1:2:524:U:N3	1:2:527:A:OP2	2.24	0.68
13:C1:130:PRO:O	1:6:336:G:H5'	298.71	0.68
41:L4:351:PRO:HA	44:L7:71:ALA:HA	2.28	0.68
36:1:1211:U:H2'	36:1:1212:A:C8	2.28	0.68
36:1:960:U:O2'	36:1:961:C:H5'	1.94	0.68
12:C0:87:VAL:O	12:C0:90:THR:N	5.71	0.68
41:L4:311:HIS:CD2	44:L7:162:PRO:HG2	2.46	0.68
49:M3:64:LYS:HG3	64:N8:69:TRP:CD1	2.29	0.68
4:S2:225:LEU:HD12	24:D2:68:ARG:HA	4.00	0.68
37:3:40:C:H5'	48:M1:43:GLN:HG2	1.76	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1629:U:O3'	63:N7:115:LYS:NZ	2.27	0.68
34:SR:8:VAL:HG23	34:SR:316:MET:HG3	1.76	0.68
87:5:3987:OHX:N6	38:8:111:A:O2'	2.26	0.68
36:5:2514:U:H6	36:5:2514:U:OP1	1.77	0.68
49:M3:180:ARG:NE	49:M3:184:GLU:OE1	4.04	0.68
68:O2:13:HIS:HD2	68:O2:15:LYS:H	1.42	0.68
36:1:651:G:O2'	36:1:1435:A:OP1	2.12	0.68
36:1:2376:G:H2'	36:1:2377:G:C8	2.28	0.68
36:5:651:G:O2'	36:5:1435:A:OP1	2.12	0.68
7:S5:216:GLU:OE2	7:S5:219:ARG:NH2	3.46	0.68
32:E0:14:VAL:O	32:E0:17:GLN:N	3.21	0.68
36:5:1306:G:O2'	36:5:1307:G:H5''	1.93	0.68
47:M0:142:ASP:OD1	47:M0:178:ARG:NH2	2.41	0.68
44:L7:160:ARG:HD2	44:L7:203:TRP:CE2	2.29	0.68
17:C5:14:THR:OG1	17:C5:21:ASP:HB3	1.94	0.68
1:6:868:G:O6	87:6:2062:OHX:N1	2.26	0.68
4:S2:53:ILE:HD11	4:S2:73:LEU:HB2	1.74	0.68
71:O5:62:GLN:O	71:O5:66:VAL:HG23	1.94	0.68
50:M4:88:ALA:O	50:M4:93:LYS:NZ	4.37	0.68
34:SR:29:GLN:HG3	34:SR:32:LEU:HD22	2.58	0.68
1:2:1783:C:H2'	1:2:1784:C:H6	1.59	0.68
36:1:18:G:OP2	61:N5:46:TYR:OH	2.08	0.68
87:2:2031:OHX:N6	87:2:2146:OHX:N5	2.42	0.68
1:2:1235:C:H5'	33:E1:146:SER:HB2	1.73	0.68
49:M3:6:ASN:OD1	54:M8:164:ARG:HD2	1.94	0.68
30:D8:18:ARG:NE	1:6:1616:G:O2'	359.72	0.68
36:1:1238:C:N4	36:1:1245:A:OP2	2.27	0.68
11:S9:153:GLU:HA	11:S9:156:ILE:HD11	1.76	0.67
45:L8:238:LEU:HB3	45:L8:243:GLN:HG2	1.75	0.67
73:O7:25:ARG:HG3	75:O9:51:ILE:HD12	1.74	0.67
21:C9:14:PHE:CZ	21:C9:132:LEU:HD12	5.93	0.67
15:C3:55:ARG:NH1	15:C3:56:ASP:OD1	3.13	0.67
77:Q1:2:ARG:NH1	1:6:1773:C:OP2	309.59	0.67
36:5:1665:C:N4	36:5:1784:G:H1	1.89	0.67
36:1:1603:A:H61	61:N5:71:THR:HG21	1.59	0.67
1:2:1460:A:O3'	35:SM:72:ARG:NH2	2.27	0.67
3:S1:144:ARG:HG2	3:S1:206:PRO:HB3	2.26	0.67
1:2:1291:G:N2	1:2:1324:G:H1	1.91	0.67
26:D4:117:LYS:HG2	1:6:159:U:H5'	332.63	0.67
45:L8:193:LYS:HB3	36:5:7:C:H5''	121.54	0.67
51:M5:38:ARG:HG2	51:M5:62:TYR:CE2	2.29	0.67
26:D4:52:LYS:O	26:D4:54:ALA:N	3.01	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1265:G:N7	87:6:2201:OHX:N4	2.42	0.67
10:S8:16:ALA:HB2	1:6:354:C:H5'	296.13	0.67
13:C1:6:THR:OG1	13:C1:7:VAL:N	2.26	0.67
87:1:3871:OHX:N1	73:O7:46:SER:OG	2.26	0.67
5:S3:132:LYS:O	5:S3:156:PHE:N	2.52	0.67
36:5:1348:U:O2'	36:5:1350:A:OP2	2.12	0.67
45:L8:150:LEU:HD21	45:L8:218:ILE:HD13	2.95	0.67
39:L2:20:THR:OG1	39:L2:20:THR:O	2.08	0.67
40:L3:56:ILE:HD13	40:L3:76:VAL:HG21	1.75	0.67
16:C4:127:ARG:HD3	1:6:990:C:O2'	282.01	0.67
36:1:2836:C:H4'	47:M0:157:TYR:CD2	2.29	0.67
47:M0:76:MET:CE	47:M0:148:VAL:HA	3.81	0.67
6:S4:46:VAL:HA	6:S4:50:ASN:HB2	2.66	0.67
39:L2:42:ARG:HD2	39:L2:87:PHE:HD1	1.58	0.67
49:M3:126:PHE:O	71:O5:114:ARG:NH2	2.52	0.67
36:5:712:G:H2'	36:5:713:U:C6	2.29	0.67
11:S9:65:LYS:HZ2	1:6:650:U:H5'	421.16	0.67
8:S6:148:SER:O	8:S6:150:GLU:N	2.25	0.67
10:S8:138:ASN:HB3	10:S8:142:LYS:HE3	1.76	0.67
34:SR:195:HIS:NE2	34:SR:213:SER:OG	4.29	0.67
21:C9:42:GLY:O	21:C9:84:LYS:HB2	1.94	0.67
36:1:2261:G:O2'	36:1:2263:C:N4	2.26	0.67
36:1:1846:C:C4	53:M7:136:ILE:HD11	2.30	0.67
11:S9:27:GLU:HB3	11:S9:39:LYS:HD2	1.76	0.67
36:1:1381:A:OP1	41:L4:197:ARG:NH1	2.27	0.67
68:O2:105:ARG:NH1	68:O2:125:ARG:HD2	2.08	0.67
40:L3:299:ASP:OD2	40:L3:303:LYS:NZ	3.55	0.67
41:L4:220:ARG:NH1	36:5:211:A:OP1	75.79	0.67
72:O6:90:MET:C	72:O6:92:ASN:H	3.03	0.67
1:2:844:A:H2'	1:2:845:G:C8	2.28	0.67
1:6:1266:U:O4	87:6:2201:OHX:N6	2.28	0.67
10:S8:146:ARG:NH2	1:6:186:C:OP1	275.55	0.67
87:2:2031:OHX:N6	87:2:2146:OHX:N2	2.42	0.67
57:N1:13:TYR:O	87:5:3906:OHX:N4	261.81	0.67
62:N6:113:LYS:HB2	38:8:84:C:H1'	20.98	0.67
5:S3:128:GLU:O	5:S3:130:GLY:N	2.26	0.67
25:D3:64:PRO:O	87:6:2164:OHX:N2	360.89	0.67
26:D4:12:VAL:HG23	26:D4:23:PHE:HB3	3.25	0.67
1:2:333:A:OP1	10:S8:31:ARG:NH2	2.27	0.67
41:L4:77:VAL:HB	41:L4:85:SER:HA	1.74	0.67
15:C3:86:GLU:HA	15:C3:89:TYR:HB3	1.75	0.67
66:O0:30:THR:HG21	66:O0:89:VAL:HG22	1.76	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
66:O0:13:LYS:HB3	66:O0:100:ILE:CG2	2.25	0.67
25:D3:11:SER:O	25:D3:15:LEU:HD12	3.52	0.67
87:5:4102:OHX:N5	38:8:140:G:O6	2.27	0.67
76:Q0:128:LYS:HE2	36:5:2900:A:H5'	340.90	0.67
1:2:828:U:N3	1:2:829:A:N7	2.43	0.67
25:D3:92:CYS:HA	25:D3:95:PHE:HD2	1.58	0.67
46:L9:8:GLN:HB2	46:L9:55:VAL:HG23	1.76	0.67
36:5:1049:C:H2'	36:5:1050:U:H6	1.58	0.67
15:C3:26:PHE:CE1	15:C3:28:LEU:HD13	4.77	0.67
41:L4:347:THR:OG1	36:5:520:U:O4	319.79	0.67
20:C8:19:ASN:ND2	35:SM:11:ASP:O	2.26	0.67
36:1:1064:A:H62	36:1:1096:U:H3	1.41	0.67
1:6:235:G:H2'	1:6:236:A:H8	1.59	0.67
11:S9:164:PHE:HE2	1:6:512:A:H4'	454.49	0.67
6:S4:56:LEU:HB2	6:S4:60:GLU:HG3	4.33	0.67
41:L4:232:SER:OG	41:L4:233:LEU:N	2.45	0.67
1:2:1385:G:N7	87:2:2132:OHX:N3	2.42	0.67
3:S1:97:LEU:HD13	3:S1:98:THR:H	1.59	0.67
63:N7:22:LYS:HE2	63:N7:134:LEU:HB2	1.75	0.67
34:SR:59:ARG:NH1	34:SR:95:ALA:O	2.28	0.67
39:L2:149:ARG:HH21	39:L2:252:THR:HG23	1.59	0.67
36:1:2226:U:H2'	36:1:2227:C:C6	2.29	0.67
78:Q2:35:LEU:HD23	78:Q2:35:LEU:H	1.58	0.67
4:S2:186:LYS:HA	4:S2:189:GLN:HB2	3.07	0.67
36:5:3085:G:OP2	87:5:3901:OHX:N1	2.27	0.67
36:5:3358:U:H2'	36:5:3359:A:C8	2.29	0.67
1:2:1:U:O4	11:S9:54:ARG:HG3	1.94	0.67
1:6:250:C:H2'	1:6:251:A:H8	1.58	0.67
40:L3:123:TYR:CZ	40:L3:124:LYS:HG3	2.29	0.67
61:N5:49:LYS:NZ	61:N5:53:HIS:HB2	4.79	0.67
1:2:922:G:H2'	1:2:923:A:C8	2.29	0.67
47:M0:208:ASN:HB3	47:M0:211:ARG:NH1	6.00	0.67
41:L4:138:ARG:HG3	41:L4:244:LEU:O	1.93	0.67
42:L5:86:TYR:CG	42:L5:247:ILE:HG13	3.00	0.67
42:L5:90:HIS:HB3	42:L5:226:TYR:CE1	2.29	0.67
17:C5:18:ARG:HG2	20:C8:92:ILE:HA	2.65	0.67
17:C5:22:LEU:O	17:C5:25:LEU:HB2	2.46	0.67
23:D1:51:VAL:HG11	23:D1:78:LEU:HD21	2.29	0.67
55:M9:46:LYS:O	55:M9:48:GLY:N	4.56	0.67
39:L2:79:ASN:ND2	39:L2:166:ILE:O	2.27	0.67
51:M5:157:LYS:NZ	36:5:58:G:OP1	85.05	0.67
49:M3:104:ARG:HG3	72:O6:22:PRO:HD3	1.76	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S2:243:TYR:HB3	4:S2:246:GLU:HG3	1.84	0.67
49:M3:52:ASP:OD1	49:M3:52:ASP:N	2.73	0.67
23:D1:87:ARG:O	29:D7:14:SER:OG	2.51	0.67
1:2:1041:G:H2'	1:2:1042:G:C8	2.29	0.67
36:5:1488:G:H5''	36:5:1838:G:O6	1.94	0.67
36:5:2507:C:O2'	36:5:2508:U:OP1	2.12	0.67
20:C8:88:ARG:NH1	20:C8:112:ASP:OD2	3.29	0.67
36:5:3326:G:H2'	36:5:3327:G:C8	2.30	0.67
55:M9:23:TRP:HB3	55:M9:51:VAL:HG22	1.74	0.67
2:S0:9:LEU:HD22	2:S0:10:THR:H	1.60	0.67
55:M9:105:LEU:HD13	55:M9:135:LYS:HD2	1.77	0.67
57:N1:82:ASN:HB3	65:N9:16:ALA:HB1	3.43	0.67
43:L6:166:LYS:NZ	36:5:3214:U:H6	274.25	0.67
29:D7:56:CYS:HB2	29:D7:61:THR:HG22	1.76	0.67
8:S6:2:LYS:HB3	8:S6:108:VAL:HG23	1.75	0.67
53:M7:168:LEU:HD22	53:M7:176:ILE:HD11	1.76	0.67
51:M5:43:THR:OG1	51:M5:131:GLU:OE2	2.11	0.67
36:1:3383:G:N2	67:O1:105:GLN:OE1	2.27	0.67
36:5:975:C:H2'	36:5:976:U:C6	2.29	0.67
36:1:1488:G:H1	36:1:1854:C:H42	1.41	0.67
36:1:169:U:HO2'	36:1:170:G:H8	1.41	0.67
36:1:1064:A:H4'	36:1:1065:A:O5'	1.93	0.67
72:O6:35:ASN:HA	72:O6:38:LYS:HD3	2.62	0.67
62:N6:88:GLU:HG3	62:N6:94:SER:OG	3.08	0.67
75:O9:26:TRP:HA	75:O9:29:LEU:HD23	3.27	0.67
20:C8:140:THR:O	20:C8:143:ARG:HD3	2.88	0.67
1:6:219:A:HO2'	1:6:220:A:H8	1.39	0.67
1:2:377:G:O6	87:2:2078:OHX:N5	2.28	0.67
9:S7:173:TYR:CE2	9:S7:177:THR:HG21	2.30	0.67
25:D3:42:PRO:HA	25:D3:81:LYS:HD2	1.77	0.67
36:1:3090:U:OP1	40:L3:270:ARG:NH2	2.28	0.67
53:M7:25:SER:O	53:M7:29:THR:HG23	1.94	0.67
47:M0:48:LEU:HD22	47:M0:49:CYS:H	1.59	0.67
45:L8:162:LEU:HD23	51:M5:7:LEU:HD21	1.77	0.67
26:D4:20:ARG:HD2	26:D4:74:LEU:HD22	2.62	0.67
1:6:1171:A:O2'	1:6:1570:A:O2'	2.01	0.67
61:N5:126:LEU:HD11	61:N5:132:ALA:HB2	3.15	0.67
23:D1:69:LEU:O	23:D1:73:ALA:N	2.48	0.67
36:1:2818:U:H6	36:1:2818:U:H5'	1.59	0.67
4:S2:96:THR:OG1	4:S2:97:ARG:N	3.99	0.67
36:1:3151:U:OP2	40:L3:132:LYS:NZ	2.28	0.67
52:M6:179:ALA:O	52:M6:183:ALA:HB2	1.95	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1083:G:H1	1:2:1090:C:N4	1.93	0.67
36:1:147:U:O2'	51:M5:41:ARG:NH1	2.27	0.67
60:N4:33:ASN:OD1	60:N4:36:SER:N	3.03	0.67
87:5:4016:OHX:N6	87:5:4211:OHX:N2	2.43	0.67
25:D3:19:ARG:HH11	1:6:609:U:H6	339.87	0.67
49:M3:179:PHE:O	49:M3:183:ARG:HD2	4.80	0.67
36:5:2941:A:H5''	36:5:2943:G:H4'	1.77	0.67
36:5:3305:A:H2'	36:5:3306:U:C6	2.29	0.67
9:S7:35:LYS:HG2	9:S7:36:ALA:H	1.60	0.67
64:N8:6:THR:OG1	64:N8:8:THR:HG23	2.45	0.67
18:C6:21:HIS:HB2	18:C6:23:LYS:NZ	9.55	0.67
7:S5:132:VAL:HA	7:S5:135:ASP:HB2	1.76	0.67
7:S5:62:VAL:HG13	7:S5:89:ILE:HG21	1.75	0.67
15:C3:11:ILE:O	15:C3:13:SER:N	4.69	0.67
73:O7:53:ALA:HA	73:O7:56:ARG:HB2	1.77	0.67
36:5:835:G:N2	36:5:857:G:H1'	2.10	0.67
25:D3:7:ARG:HD3	1:6:1102:G:OP2	350.10	0.67
13:C1:99:ARG:HB2	25:D3:9:LEU:O	1.95	0.67
36:5:1801:U:H2'	36:5:1802:C:H6	1.60	0.67
87:2:2031:OHX:N4	87:2:2146:OHX:N1	2.43	0.67
25:D3:22:ASN:HB3	1:6:609:U:C5	337.07	0.67
36:5:1523:U:OP2	36:5:1604:G:O2'	2.10	0.67
23:D1:56:SER:HB3	23:D1:59:VAL:HG23	4.06	0.67
8:S6:211:LEU:O	8:S6:215:ARG:HB2	1.95	0.67
34:SR:24:ALA:HB2	34:SR:72:THR:HA	2.44	0.67
58:N2:20:SER:OG	58:N2:21:SER:N	2.28	0.67
36:5:951:A:OP2	36:5:1367:G:N2	2.26	0.67
78:Q2:66:LYS:HG2	36:5:2793:G:H5''	209.90	0.67
4:S2:83:ILE:HG12	4:S2:100:ALA:HB2	1.75	0.67
36:5:2895:G:N2	36:5:2906:C:O2	2.26	0.67
36:1:1366:A:C2	36:1:1367:G:C4	2.83	0.67
13:C1:136:ARG:NE	1:6:304:U:OP1	310.16	0.67
67:O1:79:ARG:HA	67:O1:89:LEU:HD12	1.76	0.67
66:O0:43:ILE:HD11	66:O0:92:ILE:HG12	1.76	0.67
55:M9:43:LYS:HE2	36:5:1765:U:C5	90.95	0.67
36:5:511:G:N2	36:5:580:C:N3	2.39	0.67
71:O5:23:ASP:O	71:O5:27:GLU:N	2.79	0.67
22:D0:106:ILE:HG23	22:D0:107:THR:HG23	1.76	0.67
40:L3:245:GLY:HA3	40:L3:248:LYS:HZ1	1.59	0.67
36:1:1815:U:O2'	36:1:1816:A:OP2	2.13	0.67
36:1:3164:C:O2'	36:1:3165:A:H8	1.77	0.67
36:5:2439:A:OP1	36:5:2439:A:H4'	1.95	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2794:G:N7	87:1:3935:OHX:N2	2.43	0.67
51:M5:94:TYR:CE2	51:M5:96:ARG:HB3	2.30	0.67
53:M7:178:ALA:HA	53:M7:181:ARG:HB3	1.77	0.67
39:L2:49:VAL:N	39:L2:58:LEU:O	2.26	0.67
39:L2:200:ARG:HH21	39:L2:200:ARG:HG3	4.30	0.67
1:2:1754:A:O2'	32:E0:2:ALA:N	2.28	0.66
75:O9:43:ASN:OD1	75:O9:44:TRP:N	2.81	0.66
11:S9:151:ASP:OD1	11:S9:152:SER:N	5.01	0.66
42:L5:63:GLN:HB3	42:L5:65:ILE:HD11	2.41	0.66
17:C5:15:HIS:CD2	17:C5:109:PRO:HB2	2.79	0.66
6:S4:141:THR:O	6:S4:143:ASP:N	2.28	0.66
56:N0:137:ARG:HG2	56:N0:139:TYR:CE1	2.30	0.66
59:N3:87:ARG:HH22	59:N3:137:VAL:CG2	2.17	0.66
39:L2:117:GLU:HB2	39:L2:162:ALA:HB1	2.57	0.66
6:S4:19:LEU:HD13	1:6:788:A:H2'	390.28	0.66
36:1:3377:G:O6	87:1:4035:OHX:N4	2.27	0.66
45:L8:36:ILE:HG22	45:L8:37:GLY:H	1.58	0.66
9:S7:103:SER:OG	9:S7:104:ARG:N	2.23	0.66
45:L8:129:PRO:HB3	36:5:121:A:C2	101.58	0.66
9:S7:124:LYS:NZ	9:S7:127:GLU:OE1	2.27	0.66
64:N8:16:SER:HA	36:5:942:U:C4	170.87	0.66
73:O7:19:CYS:SG	89:O7:101:ZN:ZN	1.83	0.66
54:M8:176:ARG:HG3	36:5:2763:U:H5'	181.78	0.66
50:M4:26:GLY:N	50:M4:29:ALA:HB2	2.10	0.66
45:L8:48:ARG:NH2	36:5:2526:C:O2	184.41	0.66
46:L9:29:GLY:O	46:L9:32:GLY:N	2.29	0.66
36:5:1519:G:H2'	36:5:1520:G:C8	2.31	0.66
1:2:477:A:H2'	1:2:478:A:H8	1.61	0.66
41:L4:152:VAL:CG2	41:L4:172:VAL:HG21	2.25	0.66
41:L4:138:ARG:NH2	41:L4:240:PRO:HB2	2.55	0.66
17:C5:15:HIS:HD2	17:C5:109:PRO:HB2	2.88	0.66
49:M3:128:ARG:NH2	71:O5:109:ILE:O	2.27	0.66
16:C4:105:LEU:HA	16:C4:108:SER:HB3	1.77	0.66
4:S2:179:VAL:HG23	4:S2:196:VAL:O	4.43	0.66
1:2:1423:U:H5''	5:S3:151:LYS:HE3	1.77	0.66
9:S7:50:ASP:HA	9:S7:56:LYS:HA	1.77	0.66
41:L4:161:LYS:NZ	36:5:210:U:OP2	77.16	0.66
36:5:917:A:OP2	87:5:4208:OHX:N1	2.29	0.66
61:N5:57:LEU:H	61:N5:61:LYS:HD2	4.81	0.66
22:D0:31:VAL:HG23	22:D0:32:LYS:HD2	5.50	0.66
22:D0:44:ASN:HA	22:D0:47:GLN:HB3	3.21	0.66
1:6:274:G:H2'	1:6:275:C:H6	1.59	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1815:U:H1'	36:5:1816:A:O5'	1.95	0.66
9:S7:67:LEU:O	9:S7:71:HIS:ND1	2.29	0.66
1:2:7:G:H1	1:2:17:C:H42	1.43	0.66
36:1:12:A:OP1	87:1:4202:OHX:N6	2.28	0.66
36:1:3317:U:H4'	36:1:3318:G:O5'	1.93	0.66
49:M3:129:ASN:HD22	49:M3:131:LYS:HE3	1.61	0.66
25:D3:131:SER:HB2	1:6:30:G:H4'	371.82	0.66
25:D3:68:ILE:HG22	25:D3:70:LYS:NZ	2.10	0.66
21:C9:38:LYS:O	21:C9:39:THR:OG1	2.13	0.66
21:C9:77:ASN:HB3	21:C9:96:ALA:H	1.61	0.66
3:S1:33:LYS:HB3	3:S1:97:LEU:HD22	1.77	0.66
2:S0:195:TRP:NE1	2:S0:197:ILE:HB	2.34	0.66
36:1:1764:U:H3'	36:1:1765:U:H5''	1.76	0.66
1:2:1453:G:H21	17:C5:99:GLY:HA2	1.59	0.66
6:S4:177:ALA:O	6:S4:179:LYS:N	4.38	0.66
50:M4:19:ARG:HA	50:M4:69:THR:HG22	2.26	0.66
1:6:529:A:H2'	1:6:530:C:H6	1.61	0.66
1:6:485:A:N6	1:6:486:G:N3	2.43	0.66
1:2:139:C:H4'	1:2:140:A:O5'	1.94	0.66
1:6:1621:U:H2'	1:6:1622:G:C8	2.29	0.66
36:1:540:U:H2'	36:1:541:U:C6	2.29	0.66
1:2:1095:U:O2	24:D2:12:ASN:ND2	2.28	0.66
38:4:79:A:H5''	71:O5:43:LYS:NZ	2.10	0.66
36:1:429:U:H5'	69:O3:88:ASN:HB2	1.76	0.66
44:L7:95:ILE:HD12	44:L7:133:TYR:HE1	2.40	0.66
64:N8:14:HIS:O	64:N8:16:SER:N	2.28	0.66
6:S4:159:THR:HB	6:S4:227:VAL:HG23	1.77	0.66
1:6:1433:G:H2'	1:6:1434:U:C6	2.31	0.66
40:L3:109:HIS:N	40:L3:200:GLU:OE2	3.18	0.66
45:L8:91:PHE:CZ	45:L8:185:ARG:HB3	3.40	0.66
36:5:1782:U:H2'	36:5:1783:U:C6	2.30	0.66
1:2:1370:U:O4	87:2:2121:OHX:N1	2.28	0.66
25:D3:130:VAL:O	25:D3:131:SER:HB3	2.54	0.66
47:M0:85:PHE:HA	47:M0:140:THR:HG22	1.76	0.66
44:L7:212:GLY:N	36:5:1168:U:OP1	259.48	0.66
72:O6:44:VAL:HG12	72:O6:48:ALA:HB2	3.31	0.66
49:M3:35:ARG:NH1	36:5:685:G:OP1	82.67	0.66
19:C7:15:ALA:HA	19:C7:18:GLU:HB2	1.77	0.66
46:L9:124:ARG:NH1	46:L9:164:ILE:O	2.29	0.66
1:6:1275:A:H8	1:6:1275:A:OP2	1.78	0.66
17:C5:30:THR:O	17:C5:34:VAL:HG13	1.96	0.66
17:C5:33:PHE:CD1	17:C5:36:LEU:HD21	3.89	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:E1:126:CYS:HB3	33:E1:130:VAL:HG21	3.26	0.66
43:L6:7:PRO:O	43:L6:9:TRP:N	3.28	0.66
62:N6:57:LEU:HD23	62:N6:67:GLU:HG3	2.13	0.66
53:M7:4:TYR:OH	53:M7:16:SER:OG	3.56	0.66
36:5:2897:A:HO2'	36:5:2898:G:P	2.17	0.66
1:2:1508:U:O4	87:2:2031:OHX:N6	2.28	0.66
1:2:1665:U:O4	87:2:2136:OHX:N4	2.28	0.66
1:2:484:C:N4	1:2:503:G:H22	1.93	0.66
5:S3:10:LYS:O	5:S3:13:ALA:N	2.67	0.66
61:N5:68:THR:OG1	61:N5:68:THR:O	2.11	0.66
36:1:3353:G:H4'	36:1:3354:U:OP2	1.94	0.66
46:L9:20:ILE:HG23	46:L9:25:VAL:HG13	1.77	0.66
28:D6:7:SER:HB3	1:6:1796:C:H6	339.90	0.66
1:2:478:A:HO2'	11:S9:124:HIS:HD1	0.66	0.66
27:D5:38:HIS:HE1	27:D5:70:LYS:HD3	1.59	0.66
42:L5:252:ALA:O	42:L5:253:PHE:HB3	1.95	0.66
3:S1:69:CYS:SG	3:S1:70:LEU:N	2.68	0.66
36:1:1632:A:H2'	36:1:1633:C:C6	2.30	0.66
8:S6:57:ASP:O	8:S6:59:GLN:N	3.94	0.66
1:2:273:G:H1	1:2:283:U:H3	1.43	0.66
4:S2:107:SER:O	4:S2:192:GLY:HA3	2.76	0.66
1:6:387:A:OP2	1:6:387:A:H8	1.78	0.66
41:L4:299:ILE:HG22	41:L4:300:ARG:O	2.59	0.66
1:6:973:A:H2'	1:6:974:A:H8	1.61	0.66
36:5:1110:U:H2'	36:5:1111:U:C6	2.30	0.66
38:4:79:A:H5''	71:O5:43:LYS:HZ2	1.60	0.66
36:1:520:U:O4	41:L4:347:THR:HB	1.95	0.66
68:O2:19:ARG:HH22	36:5:1433:A:P	165.36	0.66
36:1:1596:C:O2	36:1:1611:G:N2	2.24	0.66
8:S6:84:TYR:OH	8:S6:91:GLU:O	2.11	0.66
38:4:75:G:OP2	75:O9:31:THR:OG1	2.12	0.66
47:M0:170:LYS:HE3	47:M0:176:LEU:N	6.50	0.66
1:6:15:U:H2'	1:6:16:G:O4'	1.95	0.66
73:O7:80:THR:O	38:8:95:G:N2	37.18	0.66
40:L3:66:LYS:NZ	59:N3:120:LYS:HE2	2.10	0.66
1:2:987:G:N2	1:2:1013:A:OP1	2.27	0.66
70:O4:108:GLN:O	70:O4:110:GLU:N	2.28	0.66
3:S1:81:PHE:HD2	3:S1:82:ARG:HG3	2.05	0.66
4:S2:89:GLN:HA	4:S2:94:GLN:HA	2.38	0.66
36:5:3288:G:OP2	36:5:3288:G:H2'	1.95	0.66
53:M7:112:LEU:HG	53:M7:150:VAL:HB	2.74	0.66
36:5:64:G:N2	36:5:322:U:H2'	2.11	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:D2:105:THR:HG22	1:6:804:A:N3	365.14	0.66
45:L8:94:PHE:CE2	45:L8:200:LEU:HG	2.30	0.66
54:M8:21:SER:OG	36:5:673:U:OP1	150.34	0.66
68:O2:44:ARG:NH1	36:5:1145:G:OP1	207.86	0.66
3:S1:165:ARG:O	3:S1:169:SER:OG	2.12	0.66
41:L4:304:GLN:O	41:L4:306:THR:N	2.89	0.66
1:2:891:A:H2'	1:2:892:A:H8	1.61	0.66
71:O5:79:ASP:N	71:O5:79:ASP:OD1	3.20	0.66
41:L4:207:VAL:O	41:L4:227:THR:HA	2.71	0.66
40:L3:227:GLU:HG3	40:L3:270:ARG:HD3	2.84	0.66
40:L3:233:TRP:HE1	40:L3:266:ARG:H	3.21	0.66
28:D6:23:CYS:SG	28:D6:74:CYS:N	3.50	0.66
54:M8:64:VAL:HB	54:M8:88:THR:O	2.46	0.66
49:M3:100:ARG:NH1	36:5:76:G:O2'	83.83	0.66
8:S6:78:THR:HG22	8:S6:79:LYS:H	1.59	0.66
1:2:793:A:H5''	1:2:794:U:C6	2.31	0.66
1:6:1095:U:O4	87:6:2187:OHX:N2	2.29	0.66
36:1:503:C:H42	36:1:588:G:H1	1.44	0.66
36:1:495:G:H22	36:1:619:A:H1'	1.61	0.66
58:N2:59:ASP:OD1	58:N2:61:THR:OG1	2.14	0.66
24:D2:5:SER:O	24:D2:7:LEU:N	3.30	0.66
36:5:3391:A:N3	36:5:3391:A:H2'	2.10	0.66
11:S9:157:ASP:OD1	11:S9:158:PHE:N	4.30	0.66
44:L7:159:GLN:O	44:L7:160:ARG:HB3	1.96	0.66
1:2:1532:U:OP2	27:D5:77:ARG:NH1	2.28	0.66
18:C6:36:ILE:O	18:C6:38:LEU:N	2.89	0.66
7:S5:124:LEU:HD21	27:D5:59:TYR:HB2	1.77	0.66
12:C0:24:LYS:O	12:C0:26:ASP:N	2.48	0.66
20:C8:94:ASP:OD2	20:C8:96:LYS:N	3.15	0.66
48:M1:80:LEU:HD12	48:M1:167:TYR:OH	2.44	0.66
1:6:1747:G:O6	87:6:2132:OHX:N5	2.28	0.66
70:O4:46:ASP:OD1	70:O4:80:ARG:NH1	2.21	0.66
43:L6:51:ARG:NH1	43:L6:163:PHE:HB2	2.83	0.66
9:S7:164:TYR:O	9:S7:166:LEU:N	3.09	0.66
36:1:2818:U:H6	36:1:2818:U:C5'	2.09	0.66
37:3:75:G:O2'	37:3:104:A:N6	2.28	0.66
36:1:2157:G:N2	36:1:2178:A:OP2	2.22	0.66
46:L9:128:VAL:HG22	46:L9:134:ILE:HD12	1.78	0.66
47:M0:4:ARG:NH2	47:M0:99:ILE:HG22	6.12	0.66
56:N0:82:ASP:HB3	56:N0:87:THR:HB	1.78	0.66
62:N6:5:SER:OG	62:N6:6:LEU:N	2.22	0.66
1:2:275:C:O2	1:2:276:C:N4	2.29	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3170:A:H61	36:1:3280:U:H3	1.43	0.66
18:C6:31:VAL:HG22	18:C6:67:VAL:HB	4.12	0.66
36:5:2676:A:H4'	36:5:2677:G:O5'	1.95	0.66
36:1:2528:G:N7	87:1:4182:OHX:N3	2.44	0.66
63:N7:62:VAL:O	63:N7:66:THR:OG1	2.61	0.66
2:S0:200:ASP:HA	2:S0:203:PHE:CD1	2.79	0.66
1:6:718:U:H5'	1:6:719:U:H5	1.60	0.66
36:1:3278:C:H2'	36:1:3278:C:O2	1.94	0.66
11:S9:107:ARG:NH2	11:S9:148:VAL:O	2.22	0.66
10:S8:40:ALA:H	10:S8:61:GLU:HB3	1.59	0.66
36:1:1108:U:H2'	36:1:1109:U:C6	2.21	0.66
1:6:1599:C:O2	87:6:2135:OHX:N2	2.28	0.66
3:S1:36:SER:HB3	3:S1:231:LEU:HB3	1.77	0.66
4:S2:73:LEU:O	4:S2:76:LEU:HD22	2.29	0.66
62:N6:31:LEU:O	62:N6:50:ILE:HG22	2.72	0.66
36:5:3091:A:N3	36:5:3093:C:O2'	2.27	0.66
59:N3:87:ARG:HH22	59:N3:137:VAL:HG23	1.61	0.66
69:O3:52:VAL:HG21	69:O3:99:ARG:NH1	2.25	0.66
39:L2:102:LEU:HD12	39:L2:166:ILE:HD11	1.77	0.66
3:S1:107:THR:O	3:S1:109:LYS:N	2.74	0.66
36:5:855:U:H2'	36:5:856:G:H8	1.59	0.66
52:M6:182:ASN:OD1	52:M6:186:ALA:HB2	6.68	0.66
36:1:17:G:H4'	71:O5:75:TYR:CE1	2.30	0.66
36:1:1658:G:H2'	36:1:1659:U:C6	2.31	0.66
1:2:1:U:C4	11:S9:54:ARG:HG3	2.31	0.66
36:1:994:G:N2	36:1:995:U:O4	2.28	0.66
40:L3:159:ARG:HB3	40:L3:182:GLN:HA	1.78	0.66
1:2:452:A:OP2	87:2:2038:OHX:N5	2.29	0.66
39:L2:10:LYS:HA	39:L2:16:PHE:CD2	2.49	0.66
1:2:1331:A:N6	5:S3:160:SER:OG	2.29	0.66
8:S6:43:ASP:O	8:S6:46:LYS:N	2.29	0.66
87:5:3937:OHX:N1	87:5:4228:OHX:N3	2.44	0.66
47:M0:36:LEU:HD12	47:M0:87:LEU:HB3	2.24	0.66
41:L4:334:PHE:HA	41:L4:339:LEU:HG	1.78	0.66
7:S5:163:SER:HB3	30:D8:46:GLY:HA3	2.34	0.66
7:S5:50:GLU:O	7:S5:65:ARG:NH2	2.28	0.66
22:D0:63:LEU:HB3	31:D9:34:TYR:CE2	2.30	0.66
42:L5:269:SER:O	42:L5:272:TYR:N	2.28	0.66
34:SR:89:LEU:HG	34:SR:110:VAL:HG11	1.78	0.66
36:1:591:G:N2	36:1:612:U:OP1	2.27	0.66
52:M6:85:ARG:HD3	52:M6:90:HIS:CD2	2.31	0.66
64:N8:103:ASP:O	64:N8:106:ALA:N	2.28	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1947:G:H1	36:1:2101:C:N4	1.94	0.66
64:N8:78:LEU:O	64:N8:80:THR:N	2.38	0.66
36:5:2372:A:H5''	36:5:2373:A:H5'	1.77	0.66
50:M4:97:SER:O	50:M4:99:TRP:N	3.00	0.66
46:L9:188:THR:O	46:L9:188:THR:OG1	2.12	0.66
36:5:1845:G:H3'	36:5:1846:C:H5'	1.78	0.66
36:1:1208:U:C4	76:Q0:108:THR:HG21	2.31	0.65
46:L9:189:GLU:C	46:L9:191:LEU:H	2.00	0.65
78:Q2:50:PHE:O	87:Q2:502:OHX:N1	5.05	0.65
47:M0:176:LEU:HD11	47:M0:199:PHE:HE1	1.59	0.65
13:C1:45:PRO:HG3	13:C1:115:PHE:CE2	4.06	0.65
36:1:1348:U:C5	54:M8:31:LYS:HE3	2.30	0.65
43:L6:2:SER:N	36:5:1385:C:HO2'	137.14	0.65
54:M8:50:LYS:O	54:M8:53:PHE:N	2.26	0.65
19:C7:57:LEU:O	19:C7:61:ILE:HG13	1.96	0.65
20:C8:32:LEU:O	20:C8:35:ILE:HD12	2.39	0.65
46:L9:166:ARG:HD2	46:L9:168:ARG:HH12	8.20	0.65
1:2:972:G:O2'	36:1:847:A:N1	2.30	0.65
1:6:1702:A:H5'	1:6:1703:C:C5	2.26	0.65
50:M4:89:ALA:HB1	50:M4:92:GLU:OE2	1.95	0.65
40:L3:292:ALA:HB1	40:L3:295:ALA:HB3	1.78	0.65
9:S7:132:PRO:O	9:S7:133:THR:OG1	4.81	0.65
36:5:2307:G:O6	87:5:3980:OHX:N1	2.29	0.65
52:M6:126:VAL:HG22	52:M6:127:LEU:HD23	1.76	0.65
36:1:939:U:O2'	36:1:2402:A:N1	2.30	0.65
1:2:1080:U:O2'	1:2:1081:A:H5'	1.96	0.65
54:M8:151:ARG:O	54:M8:153:PHE:N	2.29	0.65
36:1:3107:U:P	76:Q0:112:LYS:HE3	2.35	0.65
2:S0:106:SER:O	2:S0:115:PHE:HA	2.91	0.65
39:L2:68:LYS:HD3	39:L2:70:ARG:HH21	6.74	0.65
47:M0:50:VAL:HG23	47:M0:167:LEU:HD23	1.77	0.65
49:M3:131:LYS:H	49:M3:131:LYS:HE2	1.61	0.65
1:2:396:G:N1	1:2:399:A:OP2	2.29	0.65
1:6:1240:U:O4	87:6:2101:OHX:N5	2.29	0.65
47:M0:60:LEU:O	47:M0:127:ALA:N	2.62	0.65
36:1:1259:A:N6	36:1:1260:A:N1	2.43	0.65
36:1:2107:A:H2	36:1:3344:A:C8	2.13	0.65
53:M7:138:LYS:HZ3	53:M7:140:GLU:HB2	3.47	0.65
11:S9:89:ASP:C	11:S9:91:LYS:H	1.99	0.65
36:5:1168:U:O2'	36:5:1169:A:H5'	1.97	0.65
10:S8:166:TYR:O	10:S8:184:LEU:HB2	3.11	0.65
42:L5:211:LEU:O	42:L5:214:ASP:N	3.15	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:C9:57:ARG:HH21	21:C9:80:TYR:HB3	1.60	0.65
21:C9:5:SER:OG	21:C9:6:VAL:N	2.33	0.65
16:C4:103:ARG:HE	28:D6:52:ASP:HB2	6.25	0.65
66:O0:30:THR:HG22	66:O0:91:SER:HB3	3.65	0.65
71:O5:7:TYR:O	71:O5:10:ARG:N	2.28	0.65
56:N0:137:ARG:HG2	56:N0:139:TYR:CZ	2.49	0.65
57:N1:57:TYR:HA	57:N1:60:LYS:HD3	1.77	0.65
73:O7:52:LYS:HD2	73:O7:56:ARG:HH21	1.61	0.65
41:L4:156:LEU:HD23	41:L4:159:ILE:HD12	3.65	0.65
9:S7:178:GLY:O	1:6:641:G:O2'	394.49	0.65
1:6:882:U:H2'	1:6:883:C:C6	2.31	0.65
56:N0:83:SER:OG	56:N0:86:GLY:O	2.13	0.65
36:1:3068:U:OP2	55:M9:59:SER:OG	2.13	0.65
55:M9:66:HIS:O	55:M9:68:GLN:N	2.29	0.65
36:5:2604:U:H2'	36:5:2605:G:O4'	1.97	0.65
36:5:2305:G:N2	36:5:2305:G:OP2	2.29	0.65
35:SM:81:THR:O	35:SM:81:THR:OG1	2.10	0.65
26:D4:63:GLN:HG3	26:D4:64:PHE:N	2.20	0.65
40:L3:76:VAL:HG11	40:L3:323:MET:HE3	2.64	0.65
46:L9:12:VAL:HG12	46:L9:16:VAL:HG23	1.79	0.65
47:M0:80:SER:HB3	47:M0:147:VAL:HG11	2.04	0.65
44:L7:89:ILE:HG12	44:L7:134:VAL:HA	1.79	0.65
19:C7:31:ASN:ND2	19:C7:55:THR:HG23	2.12	0.65
19:C7:6:THR:OG1	19:C7:7:LYS:N	2.27	0.65
5:S3:162:GLN:OE1	5:S3:165:ASN:ND2	2.83	0.65
17:C5:26:LEU:O	17:C5:28:MET:N	4.23	0.65
63:N7:87:LEU:HB2	63:N7:127:ASN:HD21	1.60	0.65
66:O0:58:TYR:OH	70:O4:97:GLU:OE2	2.13	0.65
37:3:73:C:O2	56:N0:13:ARG:NH1	2.29	0.65
34:SR:38:ARG:HA	34:SR:67:ILE:HG23	1.78	0.65
1:2:992:A:OP1	87:2:2035:OHX:N2	2.29	0.65
36:5:1237:G:H22	36:5:1251:A:H2	1.43	0.65
36:1:1688:U:H2'	36:1:1689:U:C6	2.30	0.65
36:1:289:A:H2'	36:1:290:G:H8	1.61	0.65
49:M3:75:PHE:O	49:M3:76:THR:OG1	2.14	0.65
39:L2:36:GLU:OE1	39:L2:163:ARG:NH1	2.29	0.65
36:1:2429:G:OP2	87:1:3986:OHX:N4	2.28	0.65
64:N8:74:ASN:HB3	64:N8:76:ASP:H	1.59	0.65
36:1:1488:G:N2	36:1:1854:C:N3	2.44	0.65
36:5:335:G:C2	36:5:336:A:H1'	2.31	0.65
51:M5:190:THR:O	51:M5:194:GLN:HG2	1.95	0.65
65:N9:50:THR:HG22	36:5:1073:U:H1'	205.77	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:269:G:H2'	1:6:270:C:C6	2.30	0.65
36:5:2207:A:N6	36:5:2236:G:H1	1.95	0.65
1:2:1311:U:O2'	1:2:1313:A:N7	2.22	0.65
2:S0:143:VAL:N	2:S0:157:ASP:OD1	2.25	0.65
18:C6:73:GLY:O	18:C6:75:VAL:N	3.67	0.65
1:2:1285:U:O2'	1:2:1286:U:OP1	2.12	0.65
53:M7:29:THR:HA	53:M7:32:THR:CG2	2.25	0.65
11:S9:134:ILE:HD13	11:S9:141:VAL:H	4.30	0.65
47:M0:156:ARG:NH1	47:M0:163:GLN:O	2.89	0.65
45:L8:239:GLY:O	45:L8:241:LYS:N	2.29	0.65
18:C6:101:SER:O	18:C6:105:LEU:N	2.29	0.65
21:C9:134:ARG:HD2	21:C9:135:ILE:HG23	1.77	0.65
5:S3:94:ARG:HH21	35:SM:134:ASP:HB2	1.59	0.65
1:2:864:U:H5	29:D7:22:LYS:HG2	1.61	0.65
2:S0:36:TYR:OH	2:S0:56:LYS:HE3	2.91	0.65
4:S2:140:ARG:HB3	4:S2:221:THR:HB	3.20	0.65
63:N7:15:ARG:HD2	63:N7:79:HIS:NE2	2.11	0.65
70:O4:44:CYS:HB2	70:O4:81:CYS:HB3	3.21	0.65
57:N1:44:ALA:HB2	57:N1:53:PRO:HG2	1.78	0.65
57:N1:15:PHE:CE2	57:N1:44:ALA:HB3	2.32	0.65
60:N4:4:GLU:HG2	60:N4:30:ARG:HD3	1.78	0.65
1:2:991:G:OP2	87:2:2131:OHX:N1	2.28	0.65
52:M6:110:PRO:HD2	52:M6:111:PRO:HD2	5.14	0.65
49:M3:74:GLY:O	49:M3:101:ARG:NH1	2.29	0.65
64:N8:77:LYS:O	64:N8:79:TRP:N	2.79	0.65
44:L7:81:HIS:ND1	44:L7:138:TYR:CG	3.04	0.65
87:1:4198:OHX:N6	87:O1:202:OHX:N5	2.44	0.65
40:L3:3:HIS:O	40:L3:3:HIS:ND1	3.50	0.65
36:1:494:G:O2'	36:1:495:G:OP2	2.11	0.65
36:1:678:G:O6	87:1:3973:OHX:N4	2.29	0.65
36:1:2918:G:H2'	36:1:2919:A:H8	1.62	0.65
34:SR:278:PHE:CD1	34:SR:286:GLU:HG2	5.02	0.65
36:5:3283:U:H2'	36:5:3284:G:C8	2.32	0.65
7:S5:92:ARG:HG2	7:S5:92:ARG:HH11	3.06	0.65
21:C9:57:ARG:HH11	21:C9:57:ARG:HB2	1.76	0.65
77:Q1:22:ALA:O	77:Q1:24:SER:N	2.29	0.65
1:2:1228:G:H3'	1:2:1229:G:C8	2.31	0.65
56:N0:144:LEU:HB3	36:5:534:U:C5	346.75	0.65
36:5:3246:G:O6	87:5:4212:OHX:N5	2.30	0.65
59:N3:87:ARG:HH12	59:N3:137:VAL:HG11	3.41	0.65
69:O3:45:LEU:HD23	69:O3:71:VAL:HG12	2.03	0.65
69:O3:49:ILE:HD11	69:O3:71:VAL:HG23	1.77	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:53:A:H2'	38:4:54:A:H8	1.61	0.65
39:L2:215:ASN:HB2	36:5:2968:G:N7	216.29	0.65
38:8:107:G:H5''	38:8:138:A:H5'	1.79	0.65
36:1:2768:U:OP2	87:1:4131:OHX:N6	2.29	0.65
56:N0:87:THR:C	56:N0:88:HIS:CD2	3.14	0.65
36:5:2662:G:O6	87:5:3894:OHX:N3	2.29	0.65
1:2:853:G:N7	55:M9:173:ARG:NH2	2.44	0.65
75:O9:26:TRP:HZ3	75:O9:30:ARG:HD3	2.60	0.65
1:6:1324:G:N7	87:6:2108:OHX:N2	2.43	0.65
24:D2:73:GLY:HA3	24:D2:128:PHE:CE1	2.30	0.65
52:M6:65:ASN:OD1	52:M6:67:THR:N	2.24	0.65
36:5:1552:G:OP2	87:5:4001:OHX:N6	2.28	0.65
36:1:254:A:H2'	36:1:255:A:C8	2.32	0.65
36:5:2442:G:N2	36:5:2506:U:O4	2.29	0.65
1:2:929:A:C8	16:C4:123:SER:HA	2.32	0.65
1:2:542:A:C8	1:2:543:C:H3'	2.32	0.65
1:6:538:A:C8	1:6:543:C:N4	2.64	0.65
6:S4:49:ARG:O	6:S4:53:LYS:HA	1.97	0.65
10:S8:34:ALA:HB1	10:S8:36:THR:HG22	1.76	0.65
41:L4:269:SER:O	41:L4:270:SER:OG	2.12	0.65
17:C5:52:LYS:HE3	17:C5:54:ALA:HB3	9.15	0.65
36:1:316:U:O2'	72:O6:30:LYS:NZ	2.22	0.65
3:S1:180:THR:HG22	3:S1:181:LEU:H	1.62	0.65
20:C8:145:ARG:HD3	35:SM:68:ARG:HH22	3.71	0.65
6:S4:36:HIS:CE1	6:S4:86:PHE:H	4.41	0.65
42:L5:270:LYS:HE2	42:L5:272:TYR:O	10.50	0.65
1:2:1013:A:H2'	1:2:1014:G:O4'	1.97	0.65
39:L2:205:ASN:HB3	39:L2:206:PRO:HD2	1.78	0.65
38:4:41:A:H61	38:4:103:G:C2'	2.09	0.65
40:L3:35:ASP:OD2	40:L3:37:ARG:HD2	1.96	0.65
1:2:734:A:H5''	1:2:735:C:OP1	1.96	0.65
36:1:1582:C:H3'	36:1:1582:C:P	2.37	0.65
54:M8:86:THR:HG22	54:M8:105:ARG:HB2	1.78	0.65
40:L3:350:ALA:O	40:L3:351:LEU:HB2	1.97	0.65
1:6:647:G:O6	87:6:2172:OHX:N1	2.30	0.65
45:L8:210:ALA:HA	45:L8:213:LYS:HE3	5.08	0.65
36:1:966:U:N3	36:1:967:A:N7	2.45	0.65
36:1:269:G:O6	87:1:4078:OHX:N3	2.30	0.65
36:1:2907:G:OP1	87:1:4144:OHX:N4	2.30	0.65
1:6:1013:A:H2'	1:6:1014:G:O4'	1.97	0.65
11:S9:125:ALA:HA	11:S9:128:LEU:HD12	3.96	0.65
11:S9:9:SER:O	1:6:471:A:O2'	391.36	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:M0:3:ARG:CZ	47:M0:63:GLU:HG3	2.46	0.65
45:L8:172:LYS:HZ2	72:O6:39:PHE:HE1	1.43	0.65
27:D5:77:ARG:NH2	1:6:1534:G:N7	349.86	0.65
7:S5:57:SER:HA	30:D8:53:ILE:HB	2.22	0.65
1:2:1430:U:O4'	22:D0:72:ASN:ND2	2.30	0.65
5:S3:103:GLU:HA	5:S3:106:LYS:HB3	2.51	0.65
1:6:950:C:H2'	1:6:951:A:C8	2.31	0.65
2:S0:76:ILE:HB	2:S0:123:VAL:HG22	2.73	0.65
36:1:348:A:H1'	36:1:352:A:C2	2.32	0.65
36:1:2103:U:H2'	36:1:2104:A:C8	2.32	0.65
36:1:2926:A:O2'	36:1:2927:C:H5'	1.96	0.65
75:O9:27:ILE:HA	75:O9:30:ARG:HG3	2.11	0.65
36:1:1347:U:H4'	41:L4:305:ALA:HB2	1.79	0.65
36:1:495:G:N2	36:1:619:A:H1'	2.10	0.65
36:1:254:A:H2'	36:1:255:A:H8	1.60	0.65
36:1:2606:G:OP1	39:L2:233:GLN:NE2	2.29	0.65
36:1:675:C:O2'	36:1:679:U:OP1	2.12	0.65
36:5:2329:C:H2'	36:5:2330:C:H6	1.61	0.65
36:5:709:A:H8	36:5:709:A:O5'	1.80	0.65
36:5:993:G:C4	36:5:2637:A:C2	2.85	0.65
67:O1:74:ARG:NH1	67:O1:109:VAL:HG21	2.12	0.65
11:S9:135:ALA:HB1	11:S9:139:GLN:O	1.96	0.65
36:1:2836:C:H5	36:1:2852:C:N4	1.95	0.65
51:M5:31:ARG:NH1	51:M5:124:ASP:OD1	2.30	0.65
1:6:821:U:O4	1:6:851:U:N3	2.15	0.65
16:C4:84:ARG:NH2	16:C4:86:THR:O	4.61	0.65
4:S2:137:ILE:HG12	4:S2:138:PRO:HD2	1.78	0.65
36:1:1637:A:OP2	63:N7:73:LYS:NZ	2.29	0.65
44:L7:80:GLN:HB2	57:N1:136:ARG:H	3.42	0.65
36:1:2401:A:O3'	41:L4:68:GLY:HA2	1.95	0.65
1:6:649:U:H3	1:6:685:A:N6	1.94	0.65
2:S0:119:ARG:HH21	4:S2:240:LEU:HD23	2.58	0.65
2:S0:126:PRO:HG2	2:S0:152:PRO:HD2	1.78	0.65
1:2:802:G:O2'	24:D2:107:SER:OG	2.08	0.65
63:N7:51:LEU:HB2	63:N7:65:ARG:HD3	1.79	0.65
57:N1:118:GLU:OE2	57:N1:122:GLN:NE2	6.99	0.65
58:N2:37:LEU:HB3	58:N2:41:ILE:HD11	1.78	0.65
53:M7:3:ARG:HD2	36:5:398:A:H5'	124.19	0.65
40:L3:347:SER:O	40:L3:349:LYS:N	2.30	0.65
14:C2:134:SER:HA	14:C2:137:MET:HB3	1.79	0.65
36:1:49:A:OP1	49:M3:16:LYS:NZ	2.30	0.65
15:C3:42:ARG:HH21	15:C3:80:LEU:HD21	1.61	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1182:A:H2'	36:5:1183:C:H6	1.62	0.65
1:2:162:A:H2'	1:2:163:G:N3	2.11	0.65
43:L6:22:ARG:HD3	36:5:608:A:C6	243.37	0.65
25:D3:69:ARG:NH1	25:D3:116:ASP:OD1	3.43	0.65
53:M7:47:TYR:O	53:M7:50:GLN:N	2.64	0.65
41:L4:140:HIS:HA	41:L4:177:ASP:OD1	1.97	0.65
21:C9:32:GLY:H	21:C9:34:VAL:HG12	1.62	0.65
66:O0:39:SER:C	66:O0:40:LYS:HD2	2.17	0.65
5:S3:222:VAL:HG23	34:SR:192:PHE:HA	1.77	0.65
52:M6:14:HIS:CE1	52:M6:119:VAL:HG12	2.32	0.65
62:N6:39:LEU:HD13	62:N6:43:TYR:HE2	1.65	0.65
36:5:3160:U:H3	36:5:3290:G:H1	1.44	0.65
57:N1:109:VAL:HG13	36:5:1063:G:C6	246.41	0.65
26:D4:60:PHE:O	1:6:523:G:H5'	412.58	0.65
1:2:336:G:N2	1:2:338:C:H5'	2.12	0.65
22:D0:30:LYS:HB3	22:D0:33:GLN:HE21	1.61	0.65
36:5:1613:A:H2'	36:5:1614:C:C6	2.31	0.65
36:1:1634:G:OP1	63:N7:107:ARG:NH1	2.30	0.65
63:N7:104:PRO:O	63:N7:106:GLN:N	2.29	0.65
39:L2:234:LYS:NZ	36:5:2162:U:OP1	195.34	0.65
1:6:432:G:C6	1:6:433:C:C4	2.85	0.65
66:O0:74:ASN:ND2	66:O0:86:ARG:HG3	3.86	0.65
36:1:2582:C:H2'	36:1:2583:C:C6	2.31	0.65
25:D3:52:ILE:HD12	25:D3:75:GLN:HB3	4.35	0.65
36:1:1466:G:O6	87:1:3879:OHX:N4	2.29	0.65
36:5:1170:A:OP2	87:5:3997:OHX:N6	2.30	0.65
41:L4:314:LYS:HG3	44:L7:162:PRO:HB3	1.79	0.65
44:L7:116:PHE:CZ	44:L7:144:ILE:HG23	3.02	0.65
10:S8:122:GLY:H	10:S8:157:GLU:HG3	1.62	0.65
12:C0:71:GLU:OE2	12:C0:71:GLU:N	2.29	0.65
17:C5:30:THR:HG23	17:C5:86:VAL:HG21	1.77	0.65
22:D0:67:THR:OG1	22:D0:68:ARG:N	4.49	0.65
36:1:155:G:H5''	36:1:156:G:N7	2.12	0.65
14:C2:63:VAL:HG11	14:C2:94:ALA:HB2	1.77	0.65
8:S6:164:LYS:HB3	8:S6:167:LYS:H	1.61	0.65
56:N0:26:ARG:HD3	57:N1:150:THR:HG22	4.73	0.65
36:1:2734:A:OP1	87:1:4006:OHX:N3	2.30	0.65
52:M6:156:LEU:HD13	36:5:3243:A:C8	265.09	0.65
76:Q0:97:ARG:HB2	76:Q0:120:GLN:O	2.59	0.65
10:S8:56:ARG:HH22	1:6:332:U:P	286.60	0.65
48:M1:54:VAL:O	48:M1:56:THR:N	2.29	0.65
70:O4:60:ARG:HA	36:5:1802:C:O2'	155.56	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:M1:138:VAL:O	48:M1:140:ARG:N	2.30	0.65
1:6:826:U:O4	87:6:2070:OHX:N3	2.30	0.65
87:2:2031:OHX:N4	87:2:2146:OHX:N2	2.45	0.65
36:1:1826:C:H2'	36:1:1827:C:C6	2.31	0.65
42:L5:290:ILE:O	42:L5:293:LEU:N	3.57	0.65
47:M0:206:LEU:O	47:M0:210:ILE:HG13	1.97	0.65
71:O5:19:SER:HA	71:O5:22:VAL:HG23	3.13	0.65
9:S7:99:LEU:HD23	9:S7:100:PRO:HD2	1.79	0.65
1:6:833:U:O4	87:6:2105:OHX:N5	2.29	0.65
36:1:1035:G:H2'	36:1:1036:A:H8	1.62	0.65
36:1:2701:U:OP1	57:N1:22:HIS:HB3	1.97	0.65
49:M3:38:ALA:HA	49:M3:41:THR:HB	1.77	0.65
36:1:1624:G:O2'	36:1:1643:A:N1	2.21	0.65
20:C8:135:GLY:HA3	1:6:1559:A:H5''	366.04	0.65
1:6:1151:A:H4'	1:6:1766:A:N7	2.12	0.65
11:S9:152:SER:O	11:S9:154:LYS:N	2.30	0.64
36:5:2851:A:H2'	36:5:2852:C:C6	2.31	0.64
1:2:1529:C:H2'	1:2:1530:C:C6	2.32	0.64
20:C8:62:THR:OG1	20:C8:64:GLU:HB2	4.44	0.64
21:C9:70:GLN:H	21:C9:70:GLN:HE21	2.14	0.64
16:C4:84:ARG:HA	16:C4:119:THR:HG22	1.79	0.64
36:1:2754:G:OP2	87:1:4006:OHX:N6	2.31	0.64
18:C6:120:ASP:OD1	18:C6:121:SER:N	2.30	0.64
3:S1:144:ARG:CB	3:S1:208:GLN:HG2	4.12	0.64
40:L3:116:ARG:HG2	40:L3:175:LYS:HA	2.38	0.64
40:L3:139:GLN:C	40:L3:141:GLY:H	2.01	0.64
26:D4:8:ARG:NH1	26:D4:26:ASP:OD1	2.30	0.64
1:6:485:A:C5	1:6:486:G:H1'	2.32	0.64
79:Q3:20:SER:O	79:Q3:23:ARG:N	2.30	0.64
41:L4:296:GLN:HA	41:L4:299:ILE:HG12	1.79	0.64
41:L4:301:PRO:O	54:M8:39:ARG:NH1	3.88	0.64
36:5:372:A:H2'	36:5:373:A:H8	1.62	0.64
36:5:160:G:H2'	36:5:161:G:O4'	1.96	0.64
36:1:1230:G:H1	36:1:1279:C:N4	1.94	0.64
36:5:594:U:C5'	36:5:609:G:H1	2.10	0.64
36:1:1580:A:H1'	36:1:1581:C:H5	1.61	0.64
7:S5:150:GLY:O	7:S5:152:GLY:N	4.04	0.64
36:1:671:U:H3	36:1:791:A:H61	1.43	0.64
41:L4:205:PRO:HG2	41:L4:225:VAL:HG22	4.00	0.64
36:1:2741:C:H4'	78:Q2:19:LYS:HA	1.79	0.64
25:D3:57:LEU:O	25:D3:71:CYS:N	2.22	0.64
32:E0:28:LYS:NZ	1:6:542:A:N1	427.56	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:L4:329:PRO:HG2	44:L7:45:LEU:HD23	5.21	0.64
10:S8:168:CYS:HB3	10:S8:182:TYR:CE2	3.07	0.64
7:S5:90:ILE:O	7:S5:94:THR:HG23	2.64	0.64
61:N5:94:GLN:O	61:N5:97:LYS:HB3	2.77	0.64
31:D9:33:LYS:O	31:D9:35:GLY:N	2.29	0.64
16:C4:99:GLN:O	16:C4:102:LEU:N	3.11	0.64
4:S2:56:ILE:HG22	4:S2:61:LEU:HB2	3.34	0.64
55:M9:6:THR:HG23	55:M9:9:ARG:NH2	2.12	0.64
34:SR:81:LEU:HG	34:SR:91:LEU:HD13	2.60	0.64
49:M3:124:ILE:HD13	71:O5:117:ALA:H	1.62	0.64
9:S7:30:SER:HB3	9:S7:34:LEU:HD12	1.80	0.64
39:L2:183:GLY:O	39:L2:186:PHE:N	2.29	0.64
73:O7:63:ARG:HD3	73:O7:65:ARG:HD3	1.78	0.64
39:L2:193:ARG:NH2	36:5:2181:C:OP1	196.58	0.64
37:3:40:C:O2'	48:M1:72:ARG:HG3	1.97	0.64
36:1:2273:G:N2	36:1:2311:G:H2'	2.12	0.64
2:S0:101:ARG:HH21	1:6:1320:U:H3'	399.12	0.64
36:1:679:U:H2'	36:1:680:G:H8	1.61	0.64
4:S2:161:LYS:HB2	4:S2:166:THR:HB	2.10	0.64
36:5:1068:C:H2'	36:5:1069:C:C6	2.31	0.64
36:5:1901:A:H5''	36:5:1902:G:OP2	1.98	0.64
59:N3:9:THR:OG1	59:N3:10:LYS:N	2.27	0.64
54:M8:71:LEU:HD22	54:M8:99:THR:HG21	1.77	0.64
41:L4:3:ARG:HH11	41:L4:22:LEU:HB3	1.61	0.64
66:O0:54:SER:O	66:O0:57:GLU:HB2	1.97	0.64
4:S2:139:ILE:HD11	4:S2:218:ILE:HB	1.80	0.64
36:1:2258:U:H2'	36:1:2259:A:O4'	1.97	0.64
1:2:40:A:OP1	11:S9:3:ARG:NH1	2.31	0.64
47:M0:170:LYS:NZ	57:N1:159:PHE:HB2	2.12	0.64
26:D4:20:ARG:HH11	26:D4:22:GLN:NE2	4.34	0.64
73:O7:18:LEU:HD11	75:O9:51:ILE:HG22	2.56	0.64
1:2:1542:G:H22	1:2:1568:C:H1'	1.62	0.64
18:C6:52:LEU:HD22	18:C6:60:PHE:CZ	3.18	0.64
7:S5:97:LEU:O	7:S5:99:MET:N	2.30	0.64
42:L5:105:ILE:O	42:L5:109:THR:HG23	1.98	0.64
1:2:1438:G:H2'	1:2:1439:C:C6	2.32	0.64
12:C0:13:GLN:NE2	12:C0:17:GLN:OE1	6.70	0.64
71:O5:7:TYR:O	71:O5:9:LEU:N	2.30	0.64
18:C6:113:ASP:OD2	18:C6:115:THR:N	2.30	0.64
34:SR:248:ASN:ND2	34:SR:297:ASP:O	2.29	0.64
36:1:3151:U:H4'	36:1:3294:A:H1'	1.78	0.64
45:L8:159:PRO:HB3	51:M5:26:ARG:HH12	5.13	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:130:A:H2'	36:5:131:C:C6	2.32	0.64
67:O1:72:ARG:O	67:O1:96:VAL:HG22	1.97	0.64
87:5:4016:OHX:N5	87:5:4211:OHX:N1	2.45	0.64
38:8:25:G:H2'	38:8:26:U:O4'	1.97	0.64
55:M9:70:LYS:O	55:M9:73:GLY:N	2.25	0.64
36:5:2880:U:H2'	36:5:2881:C:H6	1.62	0.64
9:S7:111:LYS:HB3	9:S7:113:PRO:HD3	1.79	0.64
1:6:138:A:N6	1:6:266:A:H61	1.95	0.64
36:5:3253:G:O6	87:5:4232:OHX:N1	2.31	0.64
39:L2:173:GLY:O	39:L2:176:ASP:HB2	3.20	0.64
64:N8:131:SER:HB3	64:N8:134:ALA:HB2	1.79	0.64
5:S3:124:ARG:HD3	35:SM:124:GLN:HA	1.79	0.64
36:1:2883:U:OP1	40:L3:10:ARG:NH2	2.29	0.64
40:L3:230:THR:HA	40:L3:235:THR:HG22	1.80	0.64
44:L7:86:VAL:HG13	44:L7:134:VAL:HG21	1.78	0.64
13:C1:33:ARG:HH11	13:C1:61:THR:HG21	3.63	0.64
41:L4:74:ILE:HG22	41:L4:75:PRO:HD2	1.77	0.64
7:S5:59:VAL:O	7:S5:61:TYR:N	3.05	0.64
21:C9:5:SER:N	21:C9:8:ASP:OD1	2.30	0.64
34:SR:206:PRO:HG2	34:SR:247:PRO:HA	1.79	0.64
52:M6:39:GLU:HG2	52:M6:40:GLU:HG2	1.78	0.64
1:2:888:U:H2'	1:2:889:U:H6	1.61	0.64
3:S1:144:ARG:HB3	3:S1:208:GLN:HB3	1.79	0.64
78:Q2:40:LYS:NZ	78:Q2:44:ASP:OD1	2.30	0.64
1:2:1291:G:N2	1:2:1324:G:H22	1.95	0.64
36:1:2219:A:H2'	36:1:2220:A:C8	2.31	0.64
53:M7:108:ASP:O	53:M7:111:LYS:N	3.11	0.64
1:2:583:C:H2'	1:2:584:C:H6	1.62	0.64
36:5:249:U:O2'	36:5:250:U:OP2	2.15	0.64
16:C4:132:ARG:NE	1:6:1788:G:N7	297.66	0.64
36:5:372:A:H2'	36:5:373:A:C8	2.32	0.64
1:6:336:G:OP2	87:6:2160:OHX:N4	2.31	0.64
44:L7:145:ARG:HA	44:L7:185:ILE:HD11	1.79	0.64
75:O9:23:LEU:HD22	75:O9:24:PRO:HD2	1.80	0.64
64:N8:47:LYS:HE2	64:N8:48:TYR:CZ	3.10	0.64
36:5:1897:G:N2	36:5:2338:C:O2	2.30	0.64
36:5:904:A:H2'	36:5:905:U:H6	1.63	0.64
58:N2:29:ASP:OD2	58:N2:32:SER:N	3.30	0.64
36:1:2674:A:H5''	48:M1:105:GLY:HA3	1.78	0.64
6:S4:131:LEU:HD13	6:S4:135:GLY:HA2	2.82	0.64
36:1:2655:U:H5'	78:Q2:3:ASN:O	1.97	0.64
46:L9:47:LYS:HE3	46:L9:50:ASN:H	1.62	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
64:N8:22:ILE:HG13	36:5:1114:U:OP1	187.67	0.64
41:L4:330:TYR:CE1	44:L7:49:ALA:HB2	2.32	0.64
13:C1:134:THR:O	13:C1:136:ARG:HD2	2.57	0.64
1:2:249:U:OP1	13:C1:34:TRP:NE1	2.25	0.64
52:M6:130:LYS:HG3	52:M6:131:PRO:N	4.05	0.64
30:D8:12:VAL:HA	30:D8:30:VAL:HG12	2.11	0.64
5:S3:42:THR:OG1	5:S3:45:LYS:O	4.41	0.64
49:M3:64:LYS:HG3	64:N8:69:TRP:CG	2.32	0.64
3:S1:129:THR:HG23	3:S1:135:LEU:HD12	6.21	0.64
36:5:741:U:H2'	36:5:742:G:O4'	1.98	0.64
26:D4:62:THR:HA	26:D4:69:SER:HA	1.94	0.64
36:1:860:G:O4'	39:L2:181:LYS:NZ	2.30	0.64
36:1:2644:C:C2	47:M0:116:ARG:HD3	2.32	0.64
11:S9:49:LEU:HA	11:S9:52:ILE:HD12	1.77	0.64
36:1:1403:C:H42	36:1:1408:G:H1	1.44	0.64
36:5:1695:U:O2'	36:5:1749:A:N1	2.30	0.64
1:2:1105:C:N4	25:D3:4:GLY:HA2	2.13	0.64
65:N9:28:LYS:HD2	65:N9:29:TYR:H	1.88	0.64
8:S6:10:ASN:HB3	8:S6:128:THR:HA	2.26	0.64
1:2:940:A:H2'	1:2:941:A:H8	1.63	0.64
9:S7:98:ILE:HG12	9:S7:121:VAL:HG21	2.02	0.64
40:L3:199:PHE:C	40:L3:201:LYS:H	2.31	0.64
38:8:130:C:H2'	38:8:131:A:H8	1.60	0.64
36:1:1240:A:H61	36:1:1244:A:H5''	1.63	0.64
36:5:1944:U:H2'	36:5:1945:A:C8	2.32	0.64
13:C1:119:VAL:HG12	13:C1:120:GLY:H	2.14	0.64
1:6:1305:U:OP2	1:6:1306:C:N4	2.29	0.64
25:D3:90:ASP:OD2	25:D3:91:GLY:N	2.30	0.64
1:6:1011:G:OP2	87:6:2125:OHX:N3	2.31	0.64
28:D6:37:LYS:HG2	28:D6:72:HIS:CD2	2.89	0.64
41:L4:254:ALA:O	41:L4:257:LYS:N	2.95	0.64
41:L4:44:LYS:HB3	41:L4:47:ARG:NH1	2.31	0.64
18:C6:29:ILE:HG23	18:C6:65:ILE:HB	1.78	0.64
7:S5:158:GLN:HG2	30:D8:66:LEU:HD21	1.78	0.64
38:4:45:C:H2'	38:4:46:G:C8	2.33	0.64
17:C5:25:LEU:HA	17:C5:28:MET:SD	2.37	0.64
1:2:1773:C:H2'	1:2:1774:G:C8	2.33	0.64
36:1:406:G:H1'	38:4:16:G:N2	2.13	0.64
2:S0:10:THR:OG1	2:S0:13:ASP:OD2	2.16	0.64
2:S0:180:GLU:O	2:S0:184:LEU:N	3.32	0.64
6:S4:118:GLU:O	6:S4:120:SER:N	2.30	0.64
43:L6:154:LEU:HD23	43:L6:157:GLN:HB2	4.42	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:C6:106:LYS:O	18:C6:108:ALA:N	2.55	0.64
36:1:2177:G:HO2'	36:1:2178:A:P	2.20	0.64
36:1:209:A:H4'	36:1:211:A:C8	2.32	0.64
51:M5:112:ASN:OD1	38:8:141:C:O2'	103.95	0.64
41:L4:302:ALA:HB2	54:M8:39:ARG:HH12	2.36	0.64
62:N6:100:HIS:ND1	62:N6:102:SER:HB3	3.45	0.64
36:5:299:G:N7	87:5:4184:OHX:N1	2.45	0.64
36:1:1178:G:O6	69:O3:20:LYS:NZ	2.27	0.64
11:S9:26:ALA:O	11:S9:30:LEU:N	2.30	0.64
1:6:138:A:H61	1:6:266:A:H61	1.46	0.64
36:1:2696:A:H2'	36:1:2697:A:C8	2.32	0.64
66:O0:74:ASN:OD1	66:O0:75:ASN:ND2	2.30	0.64
36:5:2564:G:N2	36:5:2577:C:O2	2.30	0.64
33:E1:139:LEU:HD13	33:E1:152:ALA:H	1.63	0.64
1:6:1108:G:OP2	87:6:2180:OHX:N2	2.30	0.64
41:L4:41:SER:OG	41:L4:111:VAL:HG11	2.62	0.64
36:5:2412:G:N2	36:5:2810:C:O2	2.26	0.64
1:6:53:G:H2'	1:6:54:C:O4'	1.98	0.64
36:1:1103:A:N3	36:1:1103:A:H2'	2.13	0.64
44:L7:160:ARG:HB2	44:L7:203:TRP:CE3	2.33	0.64
36:1:1389:G:N2	36:1:1390:A:N1	2.45	0.64
7:S5:68:ILE:HD13	7:S5:69:PHE:H	5.11	0.64
62:N6:30:LEU:O	62:N6:32:SER:N	2.26	0.64
35:SM:73:SER:OG	35:SM:74:LYS:HD2	1.98	0.64
56:N0:117:ARG:NH2	36:5:1321:G:O3'	283.70	0.64
18:C6:54:LEU:HD12	18:C6:108:ALA:HB1	1.79	0.64
34:SR:178:VAL:HB	34:SR:192:PHE:HB2	2.54	0.64
34:SR:74:THR:O	34:SR:77:GLY:N	2.79	0.64
40:L3:139:GLN:O	40:L3:142:ALA:N	2.31	0.64
26:D4:2:SER:OG	26:D4:2:SER:O	2.15	0.64
45:L8:190:VAL:O	45:L8:191:ASN:HB2	1.98	0.64
9:S7:24:PHE:O	9:S7:27:LEU:N	2.84	0.64
36:5:1596:C:H2'	36:5:1597:C:C6	2.32	0.64
36:5:1390:A:H4'	36:5:1391:C:H5''	1.78	0.64
87:1:4198:OHX:N6	87:O1:202:OHX:N3	2.46	0.64
36:1:1145:G:OP1	68:O2:44:ARG:NH1	2.31	0.64
1:2:1098:U:P	4:S2:168:ARG:HH21	2.20	0.64
4:S2:169:LEU:HD23	4:S2:198:THR:HG22	2.15	0.64
36:1:1095:U:H4'	36:1:1096:U:H5''	1.80	0.64
49:M3:157:ARG:HG2	49:M3:158:ALA:H	1.63	0.64
49:M3:158:ALA:O	64:N8:124:ILE:HD11	2.18	0.64
36:5:1622:U:H2'	36:5:1623:G:C8	2.32	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:919:U:OP1	36:1:2138:A:N6	2.30	0.64
36:5:3089:C:H2'	36:5:3090:U:O4'	1.98	0.64
1:2:1546:G:OP1	20:C8:127:HIS:NE2	2.29	0.64
47:M0:48:LEU:HD22	47:M0:49:CYS:N	2.13	0.64
26:D4:49:LYS:N	26:D4:49:LYS:HD3	2.97	0.64
41:L4:209:TYR:OH	41:L4:229:ASN:HB2	1.97	0.64
18:C6:127:LYS:HE3	18:C6:131:GLY:O	4.17	0.64
27:D5:59:TYR:CE2	27:D5:61:SER:HB3	2.26	0.64
62:N6:24:SER:OG	62:N6:75:ARG:NH1	3.20	0.64
50:M4:42:LYS:O	50:M4:60:LEU:HB2	2.44	0.64
56:N0:44:PHE:C	56:N0:46:GLN:H	3.26	0.64
59:N3:36:ILE:HG23	59:N3:58:VAL:HG21	2.33	0.64
9:S7:59:ALA:HA	9:S7:91:ILE:HG22	1.79	0.64
34:SR:243:LEU:HD22	34:SR:252:LEU:HD11	2.88	0.64
36:1:2318:U:O4	87:1:4039:OHX:N2	2.31	0.64
1:2:732:G:O2'	1:2:733:A:O4'	2.15	0.64
36:5:410:U:O4	87:5:4097:OHX:N1	2.31	0.64
36:1:3122:A:N1	46:L9:70:THR:HG21	2.12	0.64
36:1:2896:A:P	76:Q0:102:ARG:HH21	2.21	0.64
76:Q0:93:LYS:HA	76:Q0:105:PRO:HB3	1.78	0.64
36:1:2738:A:H4'	65:N9:37:PRO:HB2	1.80	0.64
29:D7:15:GLU:OE2	29:D7:24:LEU:N	2.27	0.64
47:M0:201:SER:OG	47:M0:203:LYS:N	2.45	0.64
36:5:688:G:H8	36:5:688:G:O5'	1.81	0.64
65:N9:11:ASN:O	65:N9:11:ASN:ND2	2.77	0.64
36:1:524:U:O4	36:1:568:G:N2	2.29	0.64
87:5:3900:OHX:N2	38:8:2:A:OP2	2.30	0.64
45:L8:239:GLY:O	45:L8:242:ALA:N	2.25	0.64
19:C7:20:TYR:CE1	19:C7:38:ILE:HD11	2.33	0.64
1:2:1528:U:H5'	7:S5:108:LEU:HD12	1.79	0.64
46:L9:117:PHE:O	46:L9:120:ASP:HB2	2.24	0.64
61:N5:98:ALA:O	61:N5:102:LEU:N	2.62	0.64
61:N5:105:VAL:HG13	61:N5:130:TYR:CG	2.33	0.64
1:2:1202:A:OP2	87:2:2111:OHX:N2	2.31	0.64
1:2:955:A:H4'	1:2:1073:G:O2'	1.97	0.64
49:M3:64:LYS:HD3	49:M3:65:TYR:CE1	3.93	0.64
71:O5:101:THR:HG1	71:O5:102:GLU:H	3.86	0.64
1:2:917:U:H5''	16:C4:20:TYR:HE2	1.63	0.64
31:D9:5:ASN:O	31:D9:7:TRP:N	2.31	0.64
34:SR:29:GLN:HB2	34:SR:32:LEU:HB2	4.75	0.64
39:L2:42:ARG:HD2	39:L2:87:PHE:CD2	4.47	0.64
79:Q3:46:THR:HB	79:Q3:58:SER:HB2	1.79	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:S6:102:VAL:HG13	8:S6:106:LEU:HD12	1.79	0.64
64:N8:36:GLY:N	36:5:40:A:OP2	173.98	0.64
49:M3:56:PRO:HG2	49:M3:72:GLY:HA3	1.80	0.64
8:S6:199:GLN:O	8:S6:202:ARG:N	2.31	0.64
36:5:1878:G:O2'	36:5:1879:A:OP1	2.08	0.64
54:M8:90:ASP:C	54:M8:92:ARG:H	2.01	0.64
45:L8:97:TYR:O	45:L8:132:VAL:HG12	1.98	0.64
38:8:70:G:O2'	38:8:87:G:N2	2.31	0.64
34:SR:5:GLU:HA	34:SR:317:THR:HA	3.38	0.64
63:N7:10:VAL:O	63:N7:83:THR:HB	3.65	0.64
36:5:383:G:O6	87:5:4121:OHX:N1	2.31	0.64
36:5:1014:U:H2'	36:5:1015:U:H5'	1.80	0.64
1:6:1120:U:H2'	1:6:1121:C:H6	1.63	0.64
11:S9:74:ASN:HA	11:S9:77:ILE:HD12	3.07	0.64
1:6:1160:A:H2'	1:6:1161:C:H6	1.62	0.64
26:D4:56:SER:HB3	26:D4:74:LEU:HB2	2.26	0.64
10:S8:82:VAL:HG13	10:S8:101:ILE:HG22	5.56	0.64
5:S3:168:ILE:HD12	5:S3:168:ILE:O	1.97	0.64
4:S2:203:LYS:HD3	4:S2:206:THR:HG23	2.60	0.64
61:N5:113:LEU:HD23	61:N5:123:TYR:HE2	3.05	0.64
40:L3:221:THR:HG22	40:L3:273:HIS:O	5.16	0.64
5:S3:137:VAL:HG22	5:S3:151:LYS:HG3	3.67	0.64
34:SR:78:ALA:O	34:SR:94:VAL:N	2.31	0.64
1:2:1012:U:H5''	39:L2:248:GLY:HA2	1.80	0.64
40:L3:83:PRO:HB3	40:L3:202:THR:CG2	2.27	0.64
4:S2:80:VAL:HB	4:S2:102:VAL:HG22	3.88	0.64
36:5:541:U:O4	87:5:4008:OHX:N3	2.31	0.64
36:1:2310:U:O4	87:1:3966:OHX:N2	2.31	0.64
54:M8:153:PHE:O	54:M8:161:LYS:HG2	4.77	0.64
40:L3:28:ARG:HH21	40:L3:30:LYS:HE2	1.63	0.64
38:4:23:U:OP2	62:N6:16:ARG:NE	2.20	0.64
46:L9:67:ALA:HA	46:L9:70:THR:HG23	1.78	0.64
1:6:1418:G:O6	87:6:2051:OHX:N4	2.31	0.64
36:1:1489:A:C6	36:1:1854:C:N4	2.66	0.64
36:1:2703:A:H62	42:L5:23:ARG:HG2	1.61	0.64
1:6:189:C:H42	1:6:197:A:H2	1.46	0.64
36:5:373:A:N1	36:5:394:G:H4'	2.12	0.64
69:O3:13:HIS:HA	69:O3:30:ILE:HD13	2.73	0.64
87:1:4198:OHX:N4	87:O1:202:OHX:N3	2.46	0.64
1:2:111:U:H1'	1:2:304:U:C2	2.33	0.64
55:M9:149:ALA:O	55:M9:153:LYS:N	2.40	0.64
1:2:1616:G:H2'	1:2:1617:U:O4'	1.96	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3340:G:O6	87:1:4051:OHX:N4	2.31	0.64
54:M8:94:PHE:CE2	64:N8:119:PRO:HD3	2.33	0.64
47:M0:215:GLU:OE1	47:M0:215:GLU:N	4.19	0.64
36:5:325:A:H5''	36:5:326:U:OP2	1.97	0.64
41:L4:38:VAL:O	41:L4:42:VAL:HG23	2.18	0.63
36:5:1313:G:O2'	36:5:1318:A:N1	2.29	0.63
20:C8:62:THR:O	20:C8:65:GLU:N	3.01	0.63
46:L9:92:TYR:CD1	46:L9:142:ASP:HB3	4.66	0.63
75:O9:10:LYS:NZ	36:5:1833:G:OP1	103.63	0.63
35:SM:34:LYS:NZ	36:1:2707:C:OP1	2.30	0.63
5:S3:104:SER:OG	5:S3:105:MET:N	2.26	0.63
3:S1:137:ILE:HD11	3:S1:172:LEU:HD22	1.98	0.63
23:D1:41:GLU:O	23:D1:44:ARG:NH2	6.31	0.63
23:D1:35:ASN:HB3	23:D1:50:TYR:CD2	4.63	0.63
6:S4:180:LEU:HD22	6:S4:181:VAL:H	1.63	0.63
34:SR:22:SER:OG	34:SR:69:GLN:O	3.85	0.63
36:1:2424:A:H8	36:1:2424:A:O5'	1.81	0.63
40:L3:111:SER:HB3	40:L3:114:VAL:HG23	1.78	0.63
36:1:612:U:H2'	36:1:613:G:H8	1.62	0.63
36:5:835:G:C2	36:5:857:G:N3	2.66	0.63
33:E1:98:VAL:HG21	1:6:1252:C:N4	434.92	0.63
2:S0:126:PRO:HB2	2:S0:152:PRO:HB2	3.82	0.63
36:1:3120:C:H3'	76:Q0:111:ARG:HH21	1.62	0.63
36:5:1454:A:N6	36:5:1879:A:O2'	2.31	0.63
36:1:1340:G:H2'	36:1:1341:U:C6	2.33	0.63
65:N9:50:THR:O	65:N9:53:ALA:N	3.88	0.63
38:4:79:A:O3'	38:4:80:A:H4'	1.97	0.63
19:C7:36:ASP:N	19:C7:36:ASP:OD1	3.89	0.63
57:N1:12:ARG:NH1	57:N1:13:TYR:OH	3.16	0.63
40:L3:123:TYR:CE2	40:L3:124:LYS:HG3	2.33	0.63
57:N1:45:ASN:H	57:N1:95:HIS:CE1	2.16	0.63
16:C4:13:VAL:N	16:C4:77:THR:OG1	2.89	0.63
33:E1:82:LYS:O	33:E1:84:VAL:N	4.95	0.63
1:6:841:U:H2'	1:6:842:C:C6	2.33	0.63
10:S8:154:SER:O	10:S8:156:VAL:N	2.30	0.63
45:L8:53:PRO:HG3	61:N5:32:PHE:HD2	1.62	0.63
60:N4:25:ASP:OD2	60:N4:25:ASP:N	4.08	0.63
36:1:1197:A:N3	36:1:1197:A:H2'	2.11	0.63
44:L7:101:LYS:NZ	36:5:983:A:O3'	229.56	0.63
36:5:140:C:H2'	36:5:141:C:C6	2.32	0.63
32:E0:16:SER:OG	32:E0:16:SER:O	2.12	0.63
36:1:1899:G:O2'	36:1:2334:U:O4	2.15	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2334:U:C2'	36:1:2335:G:H5'	2.29	0.63
11:S9:77:ILE:HD11	11:S9:93:LEU:HD13	4.30	0.63
36:5:2836:C:H5	36:5:2852:C:N4	1.95	0.63
5:S3:170:THR:HG22	5:S3:187:LYS:HA	5.48	0.63
55:M9:23:TRP:CE3	55:M9:51:VAL:HG23	4.13	0.63
17:C5:40:ARG:NH1	1:6:1556:A:O2'	385.43	0.63
31:D9:22:ARG:NH2	31:D9:36:LEU:O	3.32	0.63
8:S6:121:LEU:H	8:S6:125:THR:HB	2.74	0.63
16:C4:18:ARG:HG2	16:C4:82:LYS:HB2	1.78	0.63
48:M1:92:ARG:O	48:M1:95:ASN:HB2	1.96	0.63
6:S4:36:HIS:CG	6:S4:85:GLY:HA3	3.46	0.63
36:1:2374:C:H5	36:1:2941:A:C2	2.15	0.63
1:2:924:A:O2'	1:2:987:G:OP1	2.13	0.63
39:L2:152:SER:N	36:5:2157:G:O6	217.78	0.63
39:L2:142:ASP:O	39:L2:144:ASN:N	3.51	0.63
36:1:1481:A:H61	70:O4:2:ALA:HB1	1.63	0.63
40:L3:132:LYS:NZ	36:5:3292:A:O3'	207.75	0.63
52:M6:178:VAL:O	52:M6:181:ALA:N	3.50	0.63
36:5:2205:U:HO2'	36:5:2205:U:H6	1.46	0.63
36:5:171:G:O6	36:5:247:C:N4	2.32	0.63
1:6:1453:G:H2'	1:6:1454:G:H8	1.63	0.63
36:1:2274:U:OP2	36:1:2311:G:N2	2.27	0.63
22:D0:44:ASN:HD21	22:D0:103:ILE:HD11	4.32	0.63
36:5:1715:A:C8	36:5:1717:U:H5''	2.33	0.63
8:S6:78:THR:HG23	8:S6:92:ARG:HG2	2.19	0.63
1:2:109:G:C6	1:2:110:U:N3	2.67	0.63
2:S0:157:ASP:OD2	23:D1:60:ARG:NH2	2.26	0.63
36:5:256:G:H2'	36:5:257:U:H6	1.63	0.63
1:2:162:A:H3'	1:2:163:G:H21	1.63	0.63
1:6:1136:U:O2'	1:6:1137:A:H5'	1.98	0.63
35:SM:89:ARG:O	35:SM:91:THR:N	2.31	0.63
78:Q2:15:LYS:HD3	78:Q2:15:LYS:H	1.63	0.63
36:1:3306:U:H2'	36:1:3307:A:H5''	1.79	0.63
36:1:2884:C:H42	36:1:2938:G:H1	1.44	0.63
1:2:1649:G:N7	87:2:2051:OHX:N1	2.45	0.63
46:L9:26:LYS:HG3	46:L9:35:THR:HG22	2.71	0.63
28:D6:69:ASN:ND2	28:D6:71:LEU:HD21	4.01	0.63
47:M0:193:ASP:HB3	47:M0:196:PHE:O	3.41	0.63
36:1:1334:U:OP1	44:L7:206:LYS:HE3	1.98	0.63
10:S8:110:ARG:NH1	10:S8:114:GLU:OE2	2.32	0.63
20:C8:40:ARG:HB3	21:C9:45:MET:SD	2.38	0.63
7:S5:65:ARG:HE	7:S5:65:ARG:HA	5.24	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3325:G:O6	87:1:3936:OHX:N1	2.31	0.63
42:L5:227:LEU:O	42:L5:230:ASP:N	3.07	0.63
5:S3:177:MET:HG3	5:S3:178:ARG:H	4.57	0.63
6:S4:73:ASP:OD1	6:S4:89:VAL:N	2.22	0.63
56:N0:91:TYR:O	56:N0:137:ARG:NH1	2.31	0.63
43:L6:176:PHE:H	50:M4:117:ARG:HH22	4.87	0.63
36:1:3214:U:OP2	50:M4:128:ARG:NH2	2.32	0.63
69:O3:71:VAL:HG13	69:O3:81:VAL:HG11	1.79	0.63
69:O3:49:ILE:HA	69:O3:99:ARG:O	2.34	0.63
18:C6:99:GLU:HG2	34:SR:57:PRO:HB2	3.08	0.63
36:1:916:G:C6	39:L2:207:VAL:HG11	2.34	0.63
47:M0:101:LYS:O	47:M0:102:MET:HB3	1.98	0.63
56:N0:154:HIS:HA	56:N0:170:THR:HB	1.79	0.63
58:N2:37:LEU:HD12	58:N2:41:ILE:HD11	5.12	0.63
36:1:395:A:H5''	36:1:396:A:OP2	1.99	0.63
1:2:856:A:N6	9:S7:96:ARG:HB3	2.13	0.63
24:D2:82:LYS:O	24:D2:84:GLY:N	2.25	0.63
43:L6:69:PHE:CZ	36:5:3267:A:H2'	260.65	0.63
36:1:719:U:H5''	36:1:719:U:C6	2.34	0.63
1:6:1285:U:O2'	1:6:1286:U:OP1	2.14	0.63
36:1:1297:C:H2'	36:1:1298:C:H6	1.63	0.63
1:6:388:G:H1	1:6:409:C:H42	1.46	0.63
36:1:3358:U:H2'	36:1:3359:A:O4'	1.99	0.63
40:L3:229:VAL:HG22	40:L3:233:TRP:HD1	2.30	0.63
46:L9:47:LYS:NZ	50:M4:5:SER:O	4.92	0.63
41:L4:64:SER:OG	41:L4:65:TRP:N	2.29	0.63
1:2:1158:C:N4	1:2:1163:A:H61	1.95	0.63
20:C8:60:GLU:HG3	20:C8:61:LEU:HD23	1.79	0.63
7:S5:63:GLN:HB3	7:S5:88:PRO:HA	2.09	0.63
55:M9:25:ASP:OD1	55:M9:25:ASP:N	2.31	0.63
61:N5:121:LYS:HD3	61:N5:123:TYR:CE2	2.33	0.63
16:C4:30:VAL:HG13	16:C4:39:ILE:HG13	1.80	0.63
2:S0:184:LEU:HD12	23:D1:45:ALA:HB2	2.36	0.63
66:O0:24:THR:HG22	66:O0:93:LEU:HD11	2.87	0.63
70:O4:80:ARG:HG3	70:O4:88:ARG:HH21	3.02	0.63
38:4:65:A:O3'	71:O5:10:ARG:NH2	2.32	0.63
62:N6:40:ARG:HG3	62:N6:45:ILE:O	1.99	0.63
43:L6:165:LEU:HD22	43:L6:169:ASP:HB3	1.80	0.63
51:M5:170:LYS:HZ3	36:5:288:C:P	122.87	0.63
46:L9:129:ARG:CG	46:L9:129:ARG:HH11	3.91	0.63
70:O4:16:ARG:HB3	70:O4:37:LYS:HD3	1.79	0.63
36:1:1933:A:OP2	87:1:3885:OHX:N6	2.31	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:103:TYR:HE2	6:S4:184:THR:HG22	3.14	0.63
59:N3:63:LYS:NZ	36:5:2295:A:OP1	270.96	0.63
36:5:2775:U:H2'	36:5:2776:C:C6	2.33	0.63
36:5:2533:G:H2'	36:5:2534:G:H8	1.61	0.63
61:N5:117:ASN:OD1	61:N5:119:THR:HG23	3.40	0.63
34:SR:161:LYS:HB3	34:SR:164:ASP:HB3	1.80	0.63
40:L3:347:SER:HB3	40:L3:350:ALA:HB3	2.20	0.63
36:5:2160:G:H2'	36:5:2161:G:C8	2.32	0.63
54:M8:179:ARG:O	54:M8:181:SER:N	2.60	0.63
36:1:1240:A:H61	36:1:1244:A:C5'	2.11	0.63
49:M3:18:TRP:O	49:M3:20:GLU:N	3.02	0.63
1:2:1776:A:H2'	1:2:1777:G:C8	2.34	0.63
36:1:2538:U:O2'	36:1:2541:U:N3	2.30	0.63
29:D7:43:ILE:H	29:D7:43:ILE:HD13	4.31	0.63
1:2:344:A:H2'	1:2:345:U:C6	2.34	0.63
78:Q2:46:LYS:NZ	36:5:44:U:O2	165.05	0.63
11:S9:31:ALA:HA	11:S9:36:LEU:HB2	4.84	0.63
13:C1:22:ASN:OD1	13:C1:24:LYS:N	2.97	0.63
36:1:738:A:H2'	36:1:739:G:H8	1.63	0.63
27:D5:71:ILE:HG23	27:D5:73:GLY:H	6.86	0.63
46:L9:100:ASN:HD21	46:L9:102:ASN:HD21	1.47	0.63
42:L5:54:ARG:NH1	42:L5:147:ASP:O	2.65	0.63
1:2:1429:G:H1'	22:D0:74:GLU:HG2	1.81	0.63
1:2:1553:G:O6	17:C5:43:ARG:NH1	2.31	0.63
12:C0:46:LEU:HA	12:C0:49:LEU:HB2	1.79	0.63
17:C5:67:ALA:O	17:C5:69:GLU:N	2.27	0.63
20:C8:132:ARG:NH2	1:6:1173:C:OP1	344.03	0.63
34:SR:74:THR:HG22	34:SR:115:ILE:HD13	3.63	0.63
49:M3:165:SER:C	49:M3:167:PHE:H	2.00	0.63
8:S6:73:ILE:HD12	8:S6:75:LEU:HD21	2.23	0.63
36:1:73:C:C2	49:M3:59:ARG:HD3	2.34	0.63
36:5:1772:U:H5''	36:5:1773:C:H5'	1.80	0.63
10:S8:9:HIS:O	10:S8:10:LYS:HB2	1.98	0.63
45:L8:182:GLY:HA3	45:L8:185:ARG:HB2	3.96	0.63
68:O2:91:THR:HB	68:O2:92:TYR:HD2	3.03	0.63
15:C3:85:PRO:HG2	15:C3:129:TYR:CE2	2.74	0.63
36:1:2626:A:H5'	36:1:2627:C:H5''	1.80	0.63
36:1:3060:C:O2	36:1:3332:U:O2'	2.17	0.63
36:1:2718:U:H2'	36:1:2719:U:C6	2.34	0.63
36:5:2584:G:H3'	36:5:2585:G:H4'	1.80	0.63
50:M4:37:GLU:HG2	56:N0:72:VAL:HG21	2.76	0.63
1:2:1758:U:O4	88:2:2181:GET:N12	2.32	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:227:GLU:HG3	40:L3:270:ARG:CD	3.78	0.63
11:S9:39:LYS:HE3	1:6:592:A:OP1	410.08	0.63
47:M0:3:ARG:NH1	47:M0:63:GLU:HG3	2.14	0.63
36:1:2514:U:H5'	45:L8:68:ARG:HG3	1.81	0.63
43:L6:43:LEU:HD11	43:L6:85:ILE:HG13	2.11	0.63
67:O1:103:GLY:HA2	36:5:3325:G:H5''	178.67	0.63
67:O1:60:TRP:O	67:O1:62:ARG:N	2.31	0.63
1:2:1555:A:OP2	17:C5:47:ARG:NH2	2.31	0.63
36:1:268:A:H4'	36:1:270:U:H1'	1.80	0.63
47:M0:23:ASN:HD21	47:M0:96:VAL:HG21	2.14	0.63
36:1:1671:C:OP1	55:M9:60:LYS:NZ	2.32	0.63
40:L3:275:ARG:NH1	36:5:3045:G:O3'	234.81	0.63
68:O2:75:LEU:HD22	68:O2:95:GLU:O	3.56	0.63
62:N6:56:VAL:HG11	62:N6:104:LEU:HD13	1.80	0.63
8:S6:98:ARG:HD3	8:S6:99:GLY:N	2.41	0.63
64:N8:26:ARG:NH1	36:5:938:C:H5''	180.69	0.63
36:1:2131:A:N6	79:Q3:18:TYR:HA	2.14	0.63
36:1:1803:C:H2'	36:1:1804:A:H8	1.64	0.63
47:M0:99:ILE:HD13	47:M0:101:LYS:HB2	2.98	0.63
51:M5:35:VAL:HA	51:M5:65:ARG:HD3	1.81	0.63
76:Q0:103:LEU:HD22	76:Q0:104:PRO:HD2	1.79	0.63
1:2:1294:G:O2'	1:2:1321:A:N1	2.27	0.63
65:N9:41:ARG:O	65:N9:43:HIS:N	4.11	0.63
1:2:860:U:O4'	9:S7:114:ARG:NH1	2.32	0.63
36:1:1158:A:O5'	36:1:1158:A:H8	1.82	0.63
36:1:1094:U:O2'	36:1:1095:U:O5'	2.13	0.63
36:1:2802:A:C8	78:Q2:56:PRO:HB3	2.33	0.63
42:L5:277:LEU:HB3	42:L5:281:GLU:OE2	3.46	0.63
17:C5:83:MET:HB3	17:C5:116:LEU:HD12	2.62	0.63
79:Q3:81:SER:HA	79:Q3:84:ARG:HB2	1.81	0.63
75:O9:8:ARG:NH2	38:8:112:U:OP2	111.83	0.63
1:2:1746:A:H2'	1:2:1747:G:O4'	1.98	0.63
36:1:2741:C:HO2'	78:Q2:20:HIS:HD1	1.45	0.63
26:D4:84:LYS:HB3	26:D4:85:PHE:HD2	5.99	0.63
19:C7:51:ALA:O	19:C7:55:THR:OG1	2.38	0.63
1:2:1365:C:O2'	18:C6:30:LYS:NZ	2.26	0.63
42:L5:85:ARG:NH1	42:L5:86:TYR:OH	2.32	0.63
40:L3:358:TRP:CH2	60:N4:15:PRO:HD2	2.33	0.63
50:M4:122:VAL:O	50:M4:126:GLN:HG3	1.98	0.63
1:2:1290:U:H2'	1:2:1291:G:N7	2.14	0.63
52:M6:112:TYR:O	52:M6:115:LYS:N	2.89	0.63
8:S6:198:ALA:O	8:S6:202:ARG:HG3	2.59	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:M8:35:PHE:HA	54:M8:38:ARG:NH2	2.14	0.63
22:D0:96:PRO:O	22:D0:100:VAL:HG23	3.50	0.63
36:1:3120:C:HO2'	36:1:3121:U:H6	1.46	0.63
57:N1:118:GLU:O	57:N1:122:GLN:HB2	1.99	0.63
36:5:2397:A:H8	36:5:2941:A:N1	1.97	0.63
53:M7:105:LYS:HB3	53:M7:107:LEU:HD22	3.71	0.63
55:M9:115:ILE:HD12	55:M9:142:ILE:HD13	1.80	0.63
73:O7:29:VAL:O	73:O7:32:LYS:HG2	2.18	0.63
1:2:891:A:H2'	1:2:892:A:C8	2.33	0.63
18:C6:73:GLY:O	18:C6:76:SER:N	3.16	0.63
36:1:153:U:O3'	36:1:158:G:H4'	1.98	0.63
37:3:87:G:N2	37:3:95:A:C4	2.66	0.63
36:1:2574:G:H2'	36:1:2575:G:H8	1.62	0.63
36:5:2137:U:C2	36:5:2141:U:H5	2.17	0.63
8:S6:186:ARG:O	8:S6:190:GLN:HG2	1.99	0.63
47:M0:174:THR:HA	47:M0:196:PHE:HE2	2.11	0.63
44:L7:151:ARG:NH1	44:L7:244:ASN:O	3.50	0.63
44:L7:179:LEU:O	44:L7:180:SER:HB3	2.44	0.63
41:L4:74:ILE:HG21	41:L4:93:MET:HE1	1.79	0.63
1:2:1591:C:H2'	1:2:1592:A:C8	2.33	0.63
15:C3:114:ARG:O	15:C3:118:ILE:HG13	2.46	0.63
15:C3:46:THR:H	15:C3:49:GLN:HB2	1.64	0.63
36:1:700:C:OP1	49:M3:65:TYR:OH	2.13	0.63
1:2:913:G:O2'	1:2:914:G:O5'	2.12	0.63
55:M9:35:ALA:HB2	55:M9:44:LEU:HD21	1.79	0.63
34:SR:197:SER:HB2	34:SR:216:LYS:HB3	2.74	0.63
79:Q3:56:THR:HA	79:Q3:63:THR:HA	2.00	0.63
1:2:1290:U:H2'	1:2:1291:G:C8	2.34	0.63
1:2:1145:U:O2'	4:S2:89:GLN:O	2.10	0.63
49:M3:47:ALA:HB1	49:M3:48:PRO:HD2	1.80	0.63
36:1:286:U:H2'	36:1:287:G:H8	1.62	0.63
36:1:58:G:OP1	51:M5:157:LYS:NZ	2.32	0.63
1:6:607:G:H5'	1:6:613:G:N2	2.14	0.63
36:5:2373:A:N3	36:5:2824:G:O2'	2.31	0.63
34:SR:96:THR:CG2	34:SR:98:GLU:HB3	3.05	0.63
74:O8:65:LEU:HD23	74:O8:68:SER:HB2	1.81	0.63
36:1:1035:G:H2'	36:1:1036:A:C8	2.34	0.63
42:L5:279:LYS:HG2	42:L5:282:ARG:CZ	2.28	0.63
42:L5:233:ALA:O	42:L5:235:SER:N	2.31	0.63
36:1:742:G:N7	87:1:3975:OHX:N1	2.47	0.63
36:5:441:U:H2'	36:5:442:G:C8	2.34	0.63
62:N6:82:VAL:O	62:N6:84:LYS:N	3.38	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:259:C:H2'	36:1:260:C:C6	2.34	0.63
39:L2:240:ALA:HA	36:5:2154:U:O3'	217.91	0.63
45:L8:41:GLN:HG3	45:L8:42:PRO:HD2	2.17	0.63
45:L8:101:THR:HG23	45:L8:103:ALA:HB3	1.80	0.63
47:M0:148:VAL:O	47:M0:151:GLY:N	2.31	0.63
10:S8:36:THR:HA	10:S8:58:LEU:HA	1.80	0.63
19:C7:50:ILE:O	19:C7:53:TYR:N	3.42	0.63
7:S5:43:PHE:CG	7:S5:44:ASN:N	2.95	0.63
21:C9:102:ARG:NH2	1:6:1502:G:O6	406.63	0.63
28:D6:60:PRO:C	28:D6:62:TYR:H	2.02	0.63
3:S1:77:GLU:OE1	16:C4:114:ARG:NH2	2.77	0.63
68:O2:24:ARG:NH1	68:O2:25:TYR:OH	2.32	0.63
23:D1:71:ARG:O	23:D1:75:ASN:HB3	1.98	0.63
2:S0:60:ALA:HA	2:S0:63:ILE:HD12	2.45	0.63
55:M9:99:LEU:HD11	55:M9:103:ARG:HH21	1.64	0.63
55:M9:99:LEU:HA	55:M9:102:LEU:HD12	3.28	0.63
36:1:2827:U:O4	87:1:3868:OHX:N6	2.32	0.63
72:O6:56:ARG:NH2	72:O6:76:ARG:HH11	1.97	0.63
3:S1:141:ALA:HA	3:S1:209:ASN:O	5.20	0.63
64:N8:128:ARG:HG2	72:O6:8:ALA:HB2	1.81	0.63
26:D4:10:ARG:HD2	1:6:778:G:O6	428.63	0.63
38:4:129:C:H2'	38:4:130:C:H6	1.63	0.63
36:1:2735:U:H2'	36:1:2736:A:H8	1.62	0.63
56:N0:171:PHE:HE2	36:5:3205:G:C6	316.46	0.63
1:6:260:U:H3'	1:6:261:U:H5''	1.81	0.63
34:SR:96:THR:HG23	34:SR:98:GLU:HB3	2.95	0.63
66:O0:74:ASN:ND2	66:O0:86:ARG:HD3	2.13	0.63
36:1:330:G:OP2	87:1:4042:OHX:N2	2.32	0.63
56:N0:2:ALA:HB3	56:N0:32:SER:HB3	1.81	0.63
8:S6:32:ILE:HA	8:S6:52:ILE:HG22	1.78	0.63
1:2:472:U:OP1	11:S9:11:THR:N	2.32	0.62
47:M0:43:VAL:HG21	47:M0:197:VAL:HB	1.81	0.62
45:L8:140:VAL:O	45:L8:144:GLU:HG3	1.98	0.62
1:6:210:A:H2'	1:6:211:U:C6	2.33	0.62
1:6:1310:U:H1'	1:6:1316:G:N2	2.14	0.62
19:C7:58:MET:HA	19:C7:61:ILE:HD12	1.80	0.62
73:O7:24:ARG:HH12	36:5:362:U:H5	120.30	0.62
55:M9:159:ALA:HB1	55:M9:163:ARG:HH22	6.54	0.62
1:6:1564:U:H2'	1:6:1565:C:H6	1.63	0.62
30:D8:12:VAL:HG11	30:D8:50:GLU:HA	2.07	0.62
36:1:1722:U:H5''	55:M9:99:LEU:HD12	1.81	0.62
20:C8:138:THR:HB	1:6:1459:C:H2'	345.76	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:N1:78:LYS:O	57:N1:85:LEU:N	2.89	0.62
51:M5:113:LEU:O	51:M5:114:ARG:HD3	1.98	0.62
64:N8:115:LYS:NZ	36:5:782:U:O3'	152.54	0.62
52:M6:47:PHE:CD1	52:M6:47:PHE:C	2.72	0.62
22:D0:25:THR:HG22	22:D0:27:THR:HG22	1.81	0.62
22:D0:34:LEU:O	22:D0:36:ASN:N	3.34	0.62
22:D0:57:ARG:HG3	22:D0:89:ARG:CZ	2.58	0.62
49:M3:175:SER:O	49:M3:178:LYS:N	2.32	0.62
5:S3:123:VAL:HG13	5:S3:134:CYS:SG	2.39	0.62
36:5:2792:A:N7	87:5:3985:OHX:N4	2.46	0.62
36:1:2386:A:OP1	87:1:4024:OHX:N2	2.31	0.62
51:M5:72:LYS:HD3	36:5:2166:A:O3'	157.47	0.62
1:6:86:A:H2'	1:6:87:C:H6	1.65	0.62
1:2:446:A:H5''	6:S4:57:ASN:OD1	1.99	0.62
41:L4:138:ARG:HD2	41:L4:245:GLY:O	1.98	0.62
41:L4:29:PRO:O	41:L4:124:SER:OG	2.27	0.62
43:L6:30:LEU:HD11	43:L6:57:HIS:CG	3.26	0.62
73:O7:14:LYS:HD2	75:O9:51:ILE:HD11	1.81	0.62
20:C8:27:LYS:O	20:C8:31:ALA:N	2.71	0.62
1:2:1438:G:H2'	1:2:1439:C:H6	1.64	0.62
21:C9:63:ARG:NH1	1:6:1481:C:OP2	405.65	0.62
15:C3:46:THR:OG1	15:C3:49:GLN:NE2	5.06	0.62
64:N8:64:GLN:O	64:N8:66:ALA:N	2.31	0.62
54:M8:108:ALA:O	54:M8:110:ALA:N	3.33	0.62
60:N4:56:ARG:HB3	60:N4:61:LYS:HB2	1.82	0.62
57:N1:9:SER:O	57:N1:55:LYS:HE3	3.54	0.62
42:L5:266:ALA:HA	37:7:1:G:C4	315.10	0.62
1:2:77:U:OP2	87:2:2150:OHX:N2	2.31	0.62
72:O6:60:LEU:HD12	72:O6:69:ALA:HA	1.79	0.62
3:S1:206:PRO:O	3:S1:207:LEU:HB2	1.99	0.62
1:2:1682:U:O2'	1:2:1683:C:OP2	2.14	0.62
1:6:780:A:H3'	1:6:781:U:H5'	1.81	0.62
10:S8:26:LYS:HG2	10:S8:29:LEU:HD13	4.70	0.62
36:1:595:G:H1	36:1:609:G:H5''	1.63	0.62
22:D0:32:LYS:O	22:D0:36:ASN:HB2	1.99	0.62
36:1:190:U:O4	62:N6:103:LYS:NZ	2.24	0.62
41:L4:320:ASN:HB3	41:L4:323:VAL:HG13	3.31	0.62
1:2:711:U:H1'	1:2:712:G:H5'	1.81	0.62
1:6:877:G:H5'	1:6:937:C:H1'	1.80	0.62
70:O4:66:SER:O	70:O4:69:HIS:HB2	3.35	0.62
59:N3:5:GLY:O	59:N3:7:GLN:NE2	6.94	0.62
1:6:1714:A:H2'	1:6:1715:G:O4'	2.00	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1314:U:OP1	87:6:2191:OHX:N1	2.32	0.62
25:D3:63:GLN:HA	25:D3:65:ASN:N	2.14	0.62
1:2:38:C:H2'	1:2:39:A:H5'	1.81	0.62
36:1:1430:U:H2'	64:N8:9:ARG:NH2	2.14	0.62
41:L4:180:LYS:HA	36:5:1386:A:N3	119.75	0.62
1:2:1539:G:C8	1:2:1539:G:H5'	2.33	0.62
46:L9:161:LEU:O	46:L9:163:GLN:N	2.33	0.62
42:L5:85:ARG:HH12	42:L5:253:PHE:H	1.46	0.62
42:L5:99:TYR:OH	42:L5:168:ASP:OD2	2.15	0.62
1:6:1202:A:OP1	87:6:2135:OHX:N2	2.31	0.62
17:C5:30:THR:O	17:C5:33:PHE:HB3	2.40	0.62
5:S3:58:VAL:O	5:S3:60:GLY:N	3.68	0.62
15:C3:124:ARG:O	15:C3:127:ARG:HB3	3.05	0.62
3:S1:86:LEU:HB3	3:S1:98:THR:OG1	2.00	0.62
48:M1:152:HIS:HE1	37:7:55:A:N3	326.28	0.62
70:O4:85:VAL:HG13	70:O4:88:ARG:HG3	1.80	0.62
43:L6:13:GLU:OE2	68:O2:89:THR:N	4.04	0.62
14:C2:59:LEU:HA	14:C2:87:PRO:HB2	2.03	0.62
35:SM:68:ARG:C	35:SM:70:ASN:H	2.02	0.62
50:M4:38:ILE:HD11	56:N0:150:PHE:HE2	1.64	0.62
60:N4:50:ALA:HB3	36:5:3333:G:O2'	219.87	0.62
9:S7:157:LYS:O	9:S7:159:VAL:N	2.73	0.62
34:SR:89:LEU:HB2	34:SR:103:PHE:HB2	2.63	0.62
57:N1:39:ILE:HG13	57:N1:102:ARG:HD2	6.01	0.62
36:1:3024:A:H3'	36:1:3025:C:H6	1.64	0.62
46:L9:98:PRO:HD2	46:L9:116:ASN:HD22	4.88	0.62
40:L3:39:LYS:HB2	40:L3:40:PRO:HD2	3.03	0.62
13:C1:72:THR:HG22	13:C1:124:THR:HA	1.81	0.62
87:2:2031:OHX:N3	87:2:2146:OHX:N5	2.47	0.62
33:E1:135:HIS:HB2	33:E1:138:ARG:HB2	1.80	0.62
36:1:249:U:H1'	36:1:250:U:O2	1.99	0.62
36:1:3119:U:OP2	87:1:3892:OHX:N4	2.32	0.62
36:5:335:G:N2	36:5:336:A:H1'	2.14	0.62
37:7:3:U:H2'	37:7:4:U:C6	2.32	0.62
1:2:138:A:C6	1:2:142:G:H1'	2.34	0.62
36:5:2531:C:H3'	36:5:2532:U:C5	2.32	0.62
74:O8:39:ARG:HH12	74:O8:63:LYS:HE2	9.42	0.62
74:O8:65:LEU:HA	74:O8:68:SER:OG	2.00	0.62
36:1:1269:U:OP1	36:1:1273:A:N6	2.31	0.62
36:5:1782:U:H2'	36:5:1783:U:H6	1.64	0.62
54:M8:175:ALA:HA	54:M8:179:ARG:HD2	4.05	0.62
49:M3:151:ALA:O	49:M3:153:ASP:N	4.34	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:74:U:O2	87:4:229:OHX:N3	2.32	0.62
36:1:90:C:OP1	64:N8:59:ARG:NH1	2.32	0.62
1:2:887:A:H1'	16:C4:122:PRO:HB3	1.80	0.62
26:D4:86:GLU:OE2	26:D4:90:ARG:NH1	2.63	0.62
1:6:736:C:H2'	1:6:737:A:H8	1.63	0.62
36:5:1582:C:H3'	36:5:1582:C:H6	1.64	0.62
10:S8:2:GLY:N	1:6:392:G:OP1	291.07	0.62
36:1:2965:U:H5''	36:1:2966:G:OP2	1.98	0.62
73:O7:12:HIS:O	73:O7:12:HIS:ND1	2.30	0.62
47:M0:174:THR:OG1	47:M0:175:ASN:O	6.23	0.62
10:S8:69:SER:HB3	13:C1:20:PHE:HZ	1.63	0.62
18:C6:51:PRO:HA	18:C6:109:PHE:HE1	1.63	0.62
42:L5:109:THR:HA	42:L5:112:LYS:HG2	1.81	0.62
16:C4:46:MET:O	16:C4:48:VAL:N	2.28	0.62
16:C4:82:LYS:HB3	16:C4:118:VAL:HG11	1.82	0.62
62:N6:118:LEU:O	62:N6:121:ARG:N	2.53	0.62
6:S4:86:PHE:O	6:S4:87:MET:HB2	1.98	0.62
60:N4:23:ARG:HG2	60:N4:24:GLY:H	2.95	0.62
36:1:289:A:H2'	36:1:290:G:C8	2.33	0.62
38:8:15:G:C6	38:8:16:G:N1	2.67	0.62
36:5:2939:G:H2'	36:5:2940:A:H5'	1.80	0.62
87:M5:303:OHX:N4	71:O5:97:ALA:O	5.82	0.62
36:1:1340:G:H2'	36:1:1341:U:H6	1.65	0.62
27:D5:92:ILE:HG13	27:D5:100:ILE:HG22	2.77	0.62
13:C1:138:ASN:O	13:C1:140:VAL:HG23	5.78	0.62
36:5:822:G:H1	36:5:903:U:H3	1.48	0.62
1:2:939:A:H2'	1:2:940:A:C8	2.34	0.62
21:C9:138:GLN:O	21:C9:141:GLU:HG3	5.42	0.62
44:L7:120:THR:OG1	44:L7:121:LYS:N	2.30	0.62
13:C1:74:THR:O	13:C1:74:THR:OG1	3.42	0.62
36:1:781:G:N7	87:1:3941:OHX:N5	2.47	0.62
36:5:1246:G:O2'	36:5:1264:G:OP2	2.16	0.62
36:1:325:A:H5''	36:1:326:U:OP2	1.98	0.62
36:5:3056:U:OP2	87:5:3936:OHX:N2	2.32	0.62
36:1:664:U:H2'	36:1:665:A:C8	2.35	0.62
1:6:471:A:OP2	87:6:2107:OHX:N5	2.33	0.62
13:C1:17:PRO:HG3	13:C1:63:LEU:HD21	1.81	0.62
54:M8:30:VAL:O	54:M8:34:THR:HG23	3.06	0.62
20:C8:63:GLN:HA	20:C8:66:LEU:HG	5.21	0.62
67:O1:30:PRO:O	67:O1:32:ALA:N	2.33	0.62
42:L5:107:ARG:NH2	42:L5:120:LYS:HA	2.13	0.62
17:C5:44:ARG:HE	17:C5:52:LYS:HZ2	1.45	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
68:O2:40:SER:O	68:O2:42:VAL:N	2.32	0.62
55:M9:100:ARG:O	55:M9:104:ARG:HB2	2.00	0.62
63:N7:22:LYS:NZ	63:N7:132:SER:OG	6.25	0.62
17:C5:129:GLY:HA3	35:SM:74:LYS:HG2	4.12	0.62
6:S4:114:ILE:HD12	6:S4:118:GLU:HG2	2.79	0.62
59:N3:84:SER:HA	59:N3:94:TYR:HB3	2.22	0.62
9:S7:51:VAL:HG11	9:S7:168:SER:HA	1.81	0.62
34:SR:69:GLN:N	34:SR:83:ALA:O	2.32	0.62
41:L4:16:THR:HG22	41:L4:18:ASN:N	2.13	0.62
66:O0:13:LYS:HE3	66:O0:103:THR:HG21	1.80	0.62
36:1:2218:G:N2	36:1:2227:C:O2	2.32	0.62
36:1:75:G:OP1	49:M3:58:VAL:HG22	1.99	0.62
38:8:58:G:H5''	38:8:98:U:O2	2.00	0.62
37:7:36:C:H2'	37:7:37:G:C8	2.33	0.62
15:C3:138:ASN:O	15:C3:140:LYS:N	3.39	0.62
36:5:3065:G:O6	87:5:4100:OHX:N6	2.32	0.62
87:5:4016:OHX:N3	87:5:4211:OHX:N4	2.48	0.62
2:S0:110:TYR:O	2:S0:112:THR:N	2.71	0.62
36:5:979:U:H1'	36:5:980:A:C8	2.33	0.62
51:M5:8:GLU:HG3	51:M5:50:ARG:HH12	4.10	0.62
36:1:1224:C:N3	36:1:3116:G:N1	2.46	0.62
36:5:236:G:C2	36:5:237:G:H1'	2.34	0.62
53:M7:62:ARG:O	53:M7:64:ASN:N	2.33	0.62
25:D3:107:PHE:CE1	25:D3:123:LYS:HB3	2.34	0.62
36:1:517:G:N2	36:1:574:U:O2	2.32	0.62
55:M9:119:LEU:O	55:M9:123:LEU:HG	1.98	0.62
45:L8:81:THR:O	45:L8:222:PHE:HZ	3.96	0.62
20:C8:135:GLY:CA	1:6:1559:A:H5''	365.09	0.62
68:O2:91:THR:HG22	68:O2:92:TYR:CD2	2.35	0.62
1:6:241:U:H2'	1:6:242:U:C6	2.34	0.62
13:C1:27:THR:HG21	13:C1:29:LYS:HZ2	1.64	0.62
1:2:1748:G:O6	87:2:2105:OHX:N4	2.32	0.62
36:1:1195:A:HO2'	36:1:1196:C:H5	1.45	0.62
36:5:1385:C:H5''	36:5:1386:A:H5''	1.82	0.62
18:C6:63:ILE:HD12	18:C6:65:ILE:HD11	2.90	0.62
7:S5:56:ALA:HA	7:S5:59:VAL:HG22	4.75	0.62
67:O1:33:VAL:O	67:O1:35:GLU:N	2.91	0.62
42:L5:243:ALA:O	42:L5:247:ILE:HD12	2.48	0.62
19:C7:104:ASN:O	19:C7:106:THR:N	3.23	0.62
36:1:1874:A:H3'	55:M9:20:ARG:HD2	1.81	0.62
1:2:1484:G:N2	1:2:1485:C:N3	2.47	0.62
72:O6:51:SER:H	72:O6:54:GLU:HB2	1.65	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:N1:100:LYS:O	57:N1:103:GLN:N	2.33	0.62
57:N1:26:HIS:ND1	37:7:10:C:OP2	271.32	0.62
71:O5:54:VAL:O	71:O5:58:ILE:HG13	2.79	0.62
47:M0:100:ASN:HD21	47:M0:118:ALA:HA	2.40	0.62
1:6:1508:U:H2'	1:6:1509:C:C6	2.35	0.62
36:1:2948:C:O2'	40:L3:242:THR:HA	1.99	0.62
36:1:1807:G:C6	36:1:1808:G:N1	2.67	0.62
1:2:280:U:O2'	1:2:281:G:OP2	2.17	0.62
34:SR:161:LYS:HE3	34:SR:164:ASP:CB	2.30	0.62
55:M9:123:LEU:O	55:M9:127:SER:OG	2.47	0.62
36:5:595:G:H1	36:5:609:G:H5''	1.62	0.62
49:M3:21:ARG:HB3	51:M5:196:THR:HG23	1.80	0.62
36:1:36:C:OP2	51:M5:83:LYS:NZ	2.32	0.62
36:1:1497:C:H2'	36:1:1498:A:C8	2.34	0.62
36:1:2111:G:H8	36:1:2111:G:H5'	1.65	0.62
22:D0:118:VAL:HG22	22:D0:119:ALA:H	1.65	0.62
13:C1:78:THR:HA	13:C1:84:ILE:HG22	1.82	0.62
36:1:1916:U:H2'	36:1:1917:C:C6	2.35	0.62
36:1:2656:A:H4'	78:Q2:98:LYS:HD2	1.82	0.62
36:1:1449:A:C2	36:1:2356:A:C4	2.88	0.62
75:O9:43:ASN:CG	75:O9:46:ARG:HG3	2.20	0.62
7:S5:205:SER:C	7:S5:207:THR:H	2.39	0.62
5:S3:179:GLN:NE2	1:6:1438:G:O2'	394.32	0.62
22:D0:67:THR:HB	1:6:1199:G:O6	402.12	0.62
1:2:872:G:N2	1:2:956:C:O2	2.32	0.62
23:D1:74:GLN:O	23:D1:77:GLY:N	2.96	0.62
63:N7:4:PHE:HB2	63:N7:9:LYS:HE3	3.74	0.62
1:2:1588:G:N2	1:2:1608:U:O2	2.32	0.62
8:S6:176:GLN:HG2	1:6:169:A:H5''	328.01	0.62
29:D7:59:CYS:O	29:D7:61:THR:N	2.67	0.62
1:6:151:G:N2	1:6:163:G:N2	2.48	0.62
36:1:1685:C:H2'	36:1:1686:U:C6	2.35	0.62
45:L8:156:ASP:O	45:L8:183:LYS:NZ	5.40	0.62
36:5:1801:U:H2'	36:5:1802:C:C6	2.34	0.62
22:D0:87:HIS:HB3	22:D0:89:ARG:NH1	2.14	0.62
87:5:4016:OHX:N5	87:5:4211:OHX:N2	2.47	0.62
2:S0:109:ASN:O	2:S0:112:THR:HG22	2.00	0.62
36:1:2683:U:H2'	36:1:2684:C:H6	1.64	0.62
1:6:196:G:O2'	1:6:197:A:O4'	2.14	0.62
53:M7:27:LYS:HB3	53:M7:63:PHE:HB3	1.81	0.62
61:N5:38:LEU:HD12	38:8:147:U:H4'	122.50	0.62
36:1:539:C:H2'	36:1:540:U:C6	2.35	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:697:C:H2'	1:6:698:U:C6	2.35	0.62
55:M9:109:TYR:OH	36:5:2093:A:N1	237.37	0.62
38:8:82:U:O2	38:8:87:G:H4'	2.00	0.62
36:1:2105:G:O2'	36:1:2106:A:H5'	2.00	0.62
1:6:707:A:H2'	1:6:708:C:O4'	2.00	0.62
1:2:867:G:H21	15:C3:87:ASP:HB3	1.64	0.62
36:5:3131:U:H2'	36:5:3131:U:O2	1.98	0.62
25:D3:103:LEU:HD13	25:D3:126:LYS:HG3	3.85	0.62
53:M7:88:VAL:O	53:M7:92:GLN:HG3	3.04	0.62
11:S9:81:VAL:HG13	11:S9:86:LEU:O	2.49	0.62
1:6:119:A:H1'	1:6:397:A:C5	2.34	0.62
10:S8:84:HIS:HE1	10:S8:86:SER:HB2	1.62	0.62
41:L4:191:LYS:HG3	41:L4:194:TYR:CE2	4.21	0.62
43:L6:43:LEU:HD13	69:O3:102:LEU:HB2	1.80	0.62
1:2:1542:G:N2	1:2:1568:C:H1'	2.14	0.62
4:S2:203:LYS:O	4:S2:205:ARG:N	3.03	0.62
38:4:45:C:H2'	38:4:46:G:H8	1.64	0.62
61:N5:127:THR:OG1	61:N5:129:ASP:HB2	2.24	0.62
17:C5:12:PHE:CG	17:C5:13:LYS:N	2.68	0.62
17:C5:19:GLY:N	20:C8:93:THR:O	2.33	0.62
17:C5:67:ALA:C	17:C5:69:GLU:H	2.03	0.62
1:2:1459:C:N4	20:C8:139:LYS:HG3	2.15	0.62
6:S4:157:ASN:HD21	6:S4:222:LEU:HD11	5.55	0.62
56:N0:92:LYS:HE3	56:N0:110:MET:SD	3.37	0.62
1:2:66:U:C5	8:S6:173:PRO:HG3	2.35	0.62
36:1:2131:A:H61	79:Q3:18:TYR:HA	1.65	0.62
1:2:585:A:H2'	1:2:586:G:C8	2.34	0.62
13:C1:90:TYR:OH	1:6:307:G:OP1	325.38	0.62
64:N8:83:PRO:O	64:N8:85:ASP:N	2.31	0.62
42:L5:34:LYS:HA	57:N1:27:LEU:HD11	2.32	0.62
36:5:190:U:O2'	36:5:191:U:OP2	2.15	0.62
1:6:274:G:H2'	1:6:275:C:C6	2.35	0.62
56:N0:82:ASP:N	56:N0:82:ASP:OD2	2.33	0.62
42:L5:33:ARG:NH1	37:7:7:G:OP1	271.03	0.62
36:1:3164:C:O2'	36:1:3165:A:OP2	2.13	0.62
36:1:383:G:N2	36:1:385:A:H3'	2.15	0.62
39:L2:229:ALA:HB3	39:L2:234:LYS:HG3	1.82	0.62
8:S6:52:ILE:HG23	8:S6:109:LEU:HD11	4.37	0.62
1:6:391:A:H2'	1:6:392:G:O4'	1.98	0.62
36:1:3098:G:H5''	40:L3:278:ILE:HD11	1.81	0.62
61:N5:137:ASN:HB3	61:N5:142:ILE:HD11	1.81	0.62
14:C2:74:LEU:HD21	33:E1:106:TYR:HB3	3.82	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S2:128:GLY:O	4:S2:131:ILE:N	2.96	0.62
66:O0:76:GLU:OE1	66:O0:76:GLU:N	2.32	0.62
36:1:3078:U:H4'	36:1:3079:U:O5'	1.99	0.62
36:1:108:A:O2'	36:1:109:A:H2'	2.00	0.62
36:1:2655:U:H1'	36:1:2656:A:C2	2.34	0.62
36:1:1467:A:O2'	36:1:1469:C:OP1	2.18	0.62
64:N8:4:ARG:NH2	36:5:1427:U:OP2	135.43	0.62
18:C6:28:LEU:O	18:C6:65:ILE:N	2.25	0.62
20:C8:41:ARG:HD3	1:6:1565:C:OP1	369.94	0.62
21:C9:50:ALA:HA	21:C9:53:TRP:HD1	3.37	0.62
1:6:1701:A:H3'	1:6:1702:A:H5''	1.80	0.62
70:O4:79:SER:HB3	70:O4:80:ARG:HE	3.30	0.62
68:O2:119:VAL:O	68:O2:122:PRO:HD3	3.90	0.62
69:O3:49:ILE:HG22	69:O3:85:PHE:HE1	2.74	0.62
36:5:2274:U:OP2	87:5:3980:OHX:N5	2.33	0.62
52:M6:110:PRO:O	52:M6:111:PRO:C	3.97	0.62
49:M3:46:ILE:HG12	49:M3:49:ARG:NH1	5.49	0.62
58:N2:50:LEU:HB3	58:N2:54:VAL:HG23	1.82	0.62
74:O8:44:LYS:NZ	36:5:1751:G:O6	128.94	0.62
36:1:2314:U:O2'	36:1:2315:G:OP1	2.17	0.62
2:S0:30:GLN:NE2	2:S0:151:SER:O	9.75	0.62
36:5:90:C:C2'	36:5:91:G:H5'	2.29	0.62
47:M0:93:PRO:HB2	47:M0:125:LEU:HB2	3.90	0.62
54:M8:89:ASP:HB2	54:M8:109:GLY:HA3	1.81	0.62
45:L8:132:VAL:HG21	45:L8:198:ALA:HB1	1.81	0.62
36:5:1421:G:C2	36:5:1422:G:C8	2.88	0.62
1:2:358:U:O2'	1:2:360:A:OP1	2.15	0.62
36:5:3134:A:OP1	87:5:3921:OHX:N5	2.33	0.62
7:S5:153:GLY:C	7:S5:155:ALA:H	3.57	0.62
51:M5:10:LEU:O	51:M5:10:LEU:HD22	2.00	0.62
87:5:4028:OHX:N1	87:5:4075:OHX:N2	2.48	0.62
49:M3:13:HIS:CD2	36:5:86:G:C6	134.86	0.62
3:S1:158:SER:O	3:S1:161:ILE:N	2.33	0.62
36:5:324:A:H8	36:5:324:A:O5'	1.83	0.62
58:N2:103:TYR:OH	36:5:1677:G:OP2	146.81	0.62
36:1:391:A:C5	36:1:392:G:C8	2.87	0.62
76:Q0:119:ASN:O	76:Q0:121:LEU:N	2.33	0.62
7:S5:166:ARG:NH2	1:6:1164:G:OP1	345.16	0.62
6:S4:7:LYS:NZ	1:6:119:A:H61	341.40	0.62
43:L6:39:VAL:O	43:L6:87:THR:OG1	3.70	0.62
1:6:1171:A:HO2'	1:6:1570:A:HO2'	1.31	0.62
7:S5:192:GLU:OE2	27:D5:63:SER:OG	2.86	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S5:51:VAL:HG22	7:S5:131:GLN:HB2	3.06	0.62
42:L5:237:GLU:O	42:L5:241:THR:N	2.89	0.62
17:C5:86:VAL:HG23	17:C5:88:GLU:H	2.51	0.62
16:C4:21:ALA:HA	16:C4:26:THR:HG22	1.80	0.62
1:2:180:A:H2'	1:2:181:A:O4'	2.00	0.62
73:O7:72:ARG:C	73:O7:74:PHE:H	3.03	0.62
1:2:1588:G:H1	1:2:1608:U:H3	1.47	0.62
41:L4:359:LEU:HD23	41:L4:360:LYS:HG2	1.82	0.62
72:O6:57:LEU:HD21	72:O6:73:ALA:HB2	1.81	0.62
36:5:3165:A:H61	36:5:3285:C:N4	1.97	0.62
36:5:1648:A:N6	36:5:1807:G:O2'	2.32	0.62
71:O5:92:LEU:HB3	71:O5:96:GLU:O	2.00	0.62
38:4:103:G:O6	87:4:227:OHX:N4	2.33	0.62
37:7:36:C:H2'	37:7:37:G:H8	1.65	0.62
48:M1:59:ILE:HB	48:M1:65:ILE:HD11	2.54	0.62
48:M1:48:SER:N	48:M1:66:ALA:O	2.31	0.62
5:S3:6:SER:HB3	5:S3:9:ARG:HB2	2.41	0.62
1:2:1235:C:H2'	33:E1:138:ARG:NH2	2.15	0.62
38:4:124:G:OP2	87:4:234:OHX:N4	2.33	0.62
36:1:768:C:OP1	49:M3:186:ARG:NH2	2.31	0.62
42:L5:68:THR:HB	42:L5:71:GLY:O	2.00	0.62
36:1:1227:C:H5'	36:1:1228:C:OP2	2.00	0.62
42:L5:285:ARG:NH1	37:7:62:U:O3'	341.29	0.62
28:D6:91:ASP:OD1	28:D6:91:ASP:N	2.33	0.62
1:2:1305:U:OP2	1:2:1306:C:N4	2.33	0.62
36:1:600:G:N7	87:1:4094:OHX:N1	2.48	0.62
49:M3:192:GLU:O	49:M3:194:GLU:N	2.33	0.62
51:M5:68:ARG:NH2	36:5:292:U:OP2	148.71	0.62
10:S8:147:ALA:C	10:S8:149:SER:H	2.24	0.62
1:2:818:C:N4	1:2:819:G:O6	2.33	0.62
1:6:816:G:OP1	87:6:2146:OHX:N3	2.33	0.62
25:D3:51:GLY:HA2	25:D3:77:ILE:HD12	4.42	0.61
1:2:463:U:H2'	1:2:464:A:C8	2.34	0.61
44:L7:239:LEU:O	44:L7:242:SER:OG	4.20	0.61
1:2:93:A:H1'	6:S4:3:ARG:O	2.00	0.61
41:L4:63:GLU:O	41:L4:76:ARG:N	2.30	0.61
36:1:3375:A:H5'	36:1:3375:A:C8	2.35	0.61
67:O1:44:MET:O	67:O1:46:THR:N	3.41	0.61
1:2:1199:G:C5	31:D9:40:ARG:HD3	2.34	0.61
1:6:1202:A:O2'	1:6:1205:C:N4	2.33	0.61
20:C8:114:GLU:HA	20:C8:117:LYS:HB2	1.82	0.61
23:D1:9:VAL:HG22	23:D1:10:GLU:H	1.64	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
62:N6:28:ARG:HB2	62:N6:75:ARG:CZ	3.23	0.61
41:L4:354:VAL:O	41:L4:358:THR:HG23	3.10	0.61
57:N1:83:ARG:NH1	57:N1:85:LEU:HD21	2.15	0.61
69:O3:75:HIS:HE1	69:O3:82:ARG:HH21	1.46	0.61
8:S6:136:LYS:HZ3	1:6:65:A:P	337.43	0.61
26:D4:118:ILE:HG22	26:D4:119:PHE:H	1.65	0.61
39:L2:136:ILE:HD12	39:L2:136:ILE:H	1.65	0.61
39:L2:96:LEU:HD21	39:L2:107:VAL:HG12	4.76	0.61
66:O0:98:SER:OG	66:O0:100:ILE:HG23	1.99	0.61
8:S6:57:ASP:OD1	8:S6:72:ARG:NH1	2.88	0.61
36:5:2916:U:O2'	36:5:2917:G:H5'	2.00	0.61
59:N3:48:ARG:HG3	59:N3:48:ARG:NH1	2.69	0.61
71:O5:93:THR:OG1	71:O5:96:GLU:OE1	4.92	0.61
1:6:500:C:O2'	1:6:501:U:O4'	2.18	0.61
1:2:788:A:OP1	6:S4:106:LYS:NZ	2.33	0.61
76:Q0:77:ILE:HG23	76:Q0:78:ILE:H	3.92	0.61
13:C1:40:LEU:HB3	13:C1:42:PHE:HE2	3.64	0.61
31:D9:26:SER:C	31:D9:28:THR:H	2.04	0.61
1:2:1498:G:OP2	21:C9:74:GLY:HA3	2.00	0.61
24:D2:36:LYS:HB3	24:D2:110:ILE:HD12	2.55	0.61
38:4:121:U:O2'	38:4:122:U:H5'	1.99	0.61
42:L5:115:LEU:O	42:L5:117:GLU:N	4.69	0.61
42:L5:44:TYR:HA	57:N1:33:VAL:HG11	3.37	0.61
1:6:219:A:C6	1:6:843:U:H1'	2.35	0.61
87:5:3937:OHX:N2	87:5:4228:OHX:N6	2.48	0.61
36:1:1243:G:N2	36:1:1244:A:N7	2.48	0.61
3:S1:157:GLN:O	3:S1:161:ILE:HD12	5.43	0.61
1:6:1368:G:O6	87:6:2089:OHX:N1	2.32	0.61
43:L6:68:PRO:HG3	43:L6:145:LEU:HD12	2.73	0.61
1:2:71:A:C6	1:2:72:A:C5	2.88	0.61
74:O8:32:ASN:O	74:O8:32:ASN:ND2	2.31	0.61
36:5:1378:U:O2'	36:5:1379:G:H5'	1.99	0.61
19:C7:71:PHE:CE2	19:C7:74:GLN:HB2	5.11	0.61
1:2:278:U:O2	1:2:279:G:N1	2.33	0.61
21:C9:85:SER:C	21:C9:87:GLY:H	2.02	0.61
6:S4:79:ASP:O	6:S4:81:THR:N	3.06	0.61
47:M0:208:ASN:CB	47:M0:211:ARG:HH11	6.07	0.61
36:1:1115:G:O6	87:1:3965:OHX:N6	2.33	0.61
49:M3:31:LYS:HB3	49:M3:35:ARG:HH21	1.66	0.61
30:D8:16:LEU:HG	30:D8:28:VAL:HA	1.81	0.61
7:S5:205:SER:O	7:S5:205:SER:OG	2.65	0.61
23:D1:83:TRP:HH2	23:D1:85:TYR:HD2	1.98	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:531:G:N2	36:5:532:A:N3	2.48	0.61
18:C6:82:ARG:HH12	18:C6:115:THR:HB	5.21	0.61
39:L2:79:ASN:H	39:L2:82:VAL:HG11	3.21	0.61
39:L2:83:HIS:HB2	79:Q3:63:THR:O	1.99	0.61
49:M3:93:ILE:HG22	49:M3:94:GLY:H	4.55	0.61
36:5:1565:G:N2	36:5:1566:A:H1'	2.14	0.61
48:M1:26:SER:OG	48:M1:63:GLU:OE2	2.18	0.61
20:C8:45:LEU:HD11	20:C8:49:LYS:HE3	2.16	0.61
22:D0:36:ASN:HA	22:D0:39:SER:HB3	3.61	0.61
1:6:193:U:C2	1:6:195:G:H1'	2.35	0.61
87:1:4183:OHX:N1	53:M7:62:ARG:O	2.32	0.61
71:O5:13:SER:OG	71:O5:15:GLU:N	2.33	0.61
57:N1:12:ARG:HD2	57:N1:13:TYR:CE2	2.35	0.61
36:1:1347:U:H5''	41:L4:303:GLY:H	1.64	0.61
36:1:1307:G:C2	36:1:1308:A:C2	2.88	0.61
36:1:2714:G:H2'	36:1:2751:G:H21	1.65	0.61
36:1:3103:A:OP2	87:1:4166:OHX:N1	2.33	0.61
2:S0:206:ASP:H	2:S0:207:PRO:HA	5.15	0.61
1:6:580:A:O2'	1:6:582:U:OP1	2.17	0.61
34:SR:51:ASP:HB2	34:SR:52:GLN:NE2	2.15	0.61
67:O1:11:GLU:OE2	67:O1:74:ARG:NH2	2.65	0.61
26:D4:109:LYS:NZ	1:6:459:G:OP1	357.96	0.61
28:D6:69:ASN:HD21	28:D6:71:LEU:HD21	3.92	0.61
41:L4:283:THR:HB	41:L4:285:ASP:H	1.66	0.61
5:S3:190:ARG:HH11	5:S3:190:ARG:HG2	1.65	0.61
1:2:1472:C:H4'	1:2:1473:U:H5'	1.82	0.61
1:2:1278:G:H2'	1:2:1279:C:O4'	2.00	0.61
40:L3:334:ARG:O	40:L3:336:VAL:HG23	2.00	0.61
36:1:1949:G:C2	36:1:1950:U:C2	2.89	0.61
36:1:2859:U:H4'	36:1:2860:U:OP1	1.99	0.61
36:1:437:G:H2'	36:1:438:A:O4'	1.99	0.61
14:C2:91:VAL:HG22	14:C2:92:ALA:H	4.02	0.61
44:L7:79:ALA:CB	57:N1:137:GLU:HA	2.30	0.61
36:5:3242:G:H5'	36:5:3245:A:C8	2.28	0.61
59:N3:17:LEU:O	59:N3:52:ALA:N	2.41	0.61
8:S6:141:ILE:HD12	8:S6:153:VAL:HG11	1.83	0.61
9:S7:147:ASN:OD1	9:S7:147:ASN:N	2.37	0.61
1:2:1512:G:H2'	1:2:1513:G:C8	2.34	0.61
36:1:1672:U:OP1	55:M9:64:ARG:NE	2.33	0.61
1:2:946:U:OP1	3:S1:165:ARG:NH2	2.33	0.61
23:D1:66:ASP:O	23:D1:68:SER:N	3.80	0.61
1:2:710:U:H2'	1:2:711:U:H5'	1.82	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1563:C:O2	36:1:1577:G:N2	2.25	0.61
74:O8:32:ASN:ND2	74:O8:35:GLY:H	4.68	0.61
1:6:108:A:OP2	87:6:2095:OHX:N4	2.33	0.61
36:1:1820:U:O2'	36:1:1821:U:OP2	2.18	0.61
1:2:603:U:H2'	1:2:604:A:H8	1.65	0.61
44:L7:174:GLY:C	44:L7:176:TYR:H	2.04	0.61
36:1:27:C:O2'	36:1:327:A:N3	2.31	0.61
36:1:2717:U:OP1	87:1:3983:OHX:N6	2.33	0.61
1:6:200:A:H2'	1:6:201:G:O4'	1.99	0.61
1:6:1768:G:O3'	87:6:2149:OHX:N2	2.32	0.61
14:C2:55:GLY:HA2	14:C2:85:LYS:HD3	2.88	0.61
36:1:61:A:H2'	36:1:62:A:O4'	2.00	0.61
36:1:2656:A:O2'	36:1:2657:A:H5''	2.00	0.61
53:M7:23:ARG:HE	53:M7:125:GLN:HG3	1.86	0.61
1:2:442:C:H2'	1:2:443:C:C6	2.33	0.61
6:S4:57:ASN:HB3	1:6:446:A:H5''	385.27	0.61
10:S8:189:LEU:O	10:S8:193:LEU:HG	3.27	0.61
27:D5:89:ILE:HB	27:D5:101:TYR:CD1	2.36	0.61
7:S5:113:ILE:HD13	7:S5:190:ILE:HG13	3.41	0.61
48:M1:108:GLU:HG2	48:M1:122:ILE:HG21	2.41	0.61
5:S3:141:LYS:HD3	5:S3:179:GLN:HG3	1.81	0.61
24:D2:51:GLU:HB3	29:D7:8:LEU:HD21	4.15	0.61
2:S0:74:VAL:HG22	2:S0:96:THR:HG23	2.10	0.61
55:M9:104:ARG:CZ	55:M9:104:ARG:HB3	2.31	0.61
44:L7:80:GLN:HG3	57:N1:136:ARG:H	1.63	0.61
72:O6:56:ARG:O	72:O6:60:LEU:HB2	1.99	0.61
79:Q3:44:LYS:O	79:Q3:46:THR:OG1	2.33	0.61
1:6:151:G:H22	1:6:163:G:N2	1.98	0.61
36:5:286:U:H2'	36:5:287:G:C8	2.35	0.61
38:8:137:C:OP2	87:8:234:OHX:N4	2.33	0.61
51:M5:159:ARG:HA	51:M5:162:ARG:HH21	2.50	0.61
1:6:387:A:H5''	1:6:389:G:OP2	2.01	0.61
70:O4:8:ARG:NH1	70:O4:8:ARG:HG2	2.14	0.61
64:N8:74:ASN:ND2	64:N8:115:LYS:HB2	2.15	0.61
4:S2:50:ILE:HD11	4:S2:239:PRO:HB2	1.82	0.61
1:6:315:A:O2'	87:6:2165:OHX:N1	2.33	0.61
1:2:58:U:H3	1:2:89:G:H1	1.49	0.61
15:C3:22:ALA:HB1	15:C3:23:PRO:HA	1.82	0.61
36:5:1135:A:C2	36:5:1136:A:C8	2.88	0.61
15:C3:30:SER:OG	15:C3:31:GLU:N	4.41	0.61
36:1:3164:C:H1'	36:1:3165:A:H5'	1.82	0.61
1:2:973:A:H2'	1:2:974:A:C8	2.35	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:707:A:H2'	1:2:708:C:H5''	1.80	0.61
50:M4:37:GLU:HB3	56:N0:72:VAL:HG21	1.81	0.61
36:5:2561:A:HO2'	36:5:2562:A:H8	1.47	0.61
41:L4:264:SER:OG	41:L4:267:VAL:N	2.32	0.61
42:L5:15:ARG:NE	36:5:1003:A:O4'	292.83	0.61
50:M4:49:PRO:O	50:M4:52:GLY:N	2.32	0.61
36:5:3376:A:OP2	87:5:3930:OHX:N4	2.32	0.61
24:D2:9:ASP:OD1	1:6:1036:A:H1'	357.99	0.61
40:L3:224:HIS:HB2	40:L3:270:ARG:HG2	1.81	0.61
1:2:1545:A:H2'	1:2:1546:G:H8	1.66	0.61
11:S9:110:GLN:NE2	11:S9:126:ARG:HG2	2.74	0.61
47:M0:66:GLU:CD	47:M0:69:ARG:HH21	2.04	0.61
1:6:1160:A:H2'	1:6:1161:C:C6	2.36	0.61
50:M4:72:LEU:HD21	50:M4:81:VAL:HA	1.82	0.61
1:6:1542:G:N2	1:6:1568:C:H1'	2.15	0.61
12:C0:70:GLU:O	12:C0:73:VAL:HB	2.00	0.61
5:S3:70:THR:HG23	5:S3:86:LEU:HD13	3.82	0.61
3:S1:27:LYS:NZ	3:S1:48:VAL:O	2.28	0.61
70:O4:97:GLU:O	70:O4:99:LYS:N	2.34	0.61
60:N4:56:ARG:O	60:N4:58:HIS:N	3.81	0.61
69:O3:73:ARG:CD	69:O3:82:ARG:HD2	2.30	0.61
39:L2:3:ARG:HG2	39:L2:4:VAL:H	1.64	0.61
25:D3:24:TRP:HZ3	25:D3:34:LEU:HD21	1.65	0.61
51:M5:8:GLU:HG3	51:M5:50:ARG:NH1	4.24	0.61
36:5:1944:U:H2'	36:5:1945:A:H8	1.64	0.61
36:5:140:C:H2'	36:5:141:C:H6	1.65	0.61
1:6:1690:G:H1	1:6:1711:C:H42	1.47	0.61
49:M3:70:ARG:HD2	49:M3:71:ALA:O	2.00	0.61
1:6:1576:A:H2'	1:6:1577:A:O4'	1.99	0.61
46:L9:176:LEU:HD22	76:Q0:86:ALA:HB1	4.46	0.61
36:5:2436:U:O4	87:5:4227:OHX:N4	2.34	0.61
5:S3:116:ARG:HG3	35:SM:111:GLY:HA3	1.83	0.61
64:N8:21:ARG:HD2	36:5:1369:A:H5'	185.62	0.61
11:S9:126:ARG:NH1	1:6:475:A:OP2	423.29	0.61
44:L7:219:LYS:HE2	36:5:1169:A:H4'	252.58	0.61
6:S4:61:VAL:O	6:S4:64:ILE:HB	2.01	0.61
54:M8:33:TYR:O	54:M8:37:ALA:N	3.12	0.61
1:6:1170:G:C6	1:6:1574:G:C5	2.88	0.61
7:S5:200:ASN:O	7:S5:205:SER:HB3	4.02	0.61
72:O6:28:TYR:C	72:O6:30:LYS:H	2.04	0.61
77:Q1:3:ALA:HB3	1:6:1773:C:OP1	312.22	0.61
1:2:919:A:H5'	16:C4:18:ARG:HH12	1.65	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1142:A:H5''	28:D6:2:PRO:HG3	1.81	0.61
36:5:675:C:O2'	36:5:679:U:OP1	2.19	0.61
54:M8:82:VAL:HG12	54:M8:139:ILE:HG23	2.76	0.61
36:1:1636:U:H5''	63:N7:73:LYS:HZ2	1.66	0.61
1:2:1050:G:OP1	29:D7:70:LYS:NZ	2.23	0.61
55:M9:19:LYS:C	55:M9:21:LYS:H	2.04	0.61
55:M9:4:LEU:HD22	55:M9:33:ALA:HB2	2.93	0.61
56:N0:10:ILE:HG12	56:N0:26:ARG:HB2	2.08	0.61
52:M6:121:PRO:HA	52:M6:124:LEU:HD22	1.81	0.61
62:N6:35:LEU:HD22	62:N6:106:ILE:HD12	1.82	0.61
39:L2:111:THR:HB	39:L2:136:ILE:HD13	1.82	0.61
36:5:3285:C:H3'	36:5:3286:G:H5''	1.81	0.61
36:1:1098:A:P	57:N1:108:ARG:HH22	2.23	0.61
36:5:2261:G:O6	87:5:3943:OHX:N5	2.34	0.61
36:1:147:U:O4	45:L8:183:LYS:NZ	2.30	0.61
36:5:3382:U:O2'	36:5:3383:G:O5'	2.13	0.61
36:1:2736:A:O2'	57:N1:68:THR:HG21	1.99	0.61
36:1:387:A:H2'	36:1:388:G:H8	1.65	0.61
1:2:839:U:C2'	1:2:840:U:H5'	2.31	0.61
22:D0:118:VAL:HG13	22:D0:119:ALA:H	2.41	0.61
43:L6:24:ALA:N	36:5:607:A:OP1	247.01	0.61
36:1:1154:A:H5''	36:1:1155:C:H5	1.64	0.61
36:1:2280:A:H5''	36:1:2281:A:OP2	2.01	0.61
36:5:2682:C:O2'	36:5:2683:U:OP1	2.16	0.61
1:2:1658:G:O6	87:2:2103:OHX:N5	2.33	0.61
1:2:38:C:C2'	1:2:39:A:H5'	2.30	0.61
28:D6:31:PRO:O	28:D6:34:LYS:N	2.34	0.61
1:6:454:U:OP1	1:6:455:C:N4	2.25	0.61
44:L7:228:SER:HA	44:L7:232:ARG:NH2	2.90	0.61
10:S8:167:ALA:HA	10:S8:184:LEU:N	2.14	0.61
10:S8:60:ILE:HD13	10:S8:179:CYS:HB2	3.03	0.61
41:L4:181:VAL:HG21	41:L4:224:GLY:HA3	1.86	0.61
41:L4:42:VAL:HA	41:L4:45:ASN:HD22	1.66	0.61
43:L6:133:GLU:O	43:L6:137:ASP:HB2	2.92	0.61
36:1:1313:G:O2'	36:1:1318:A:N1	2.28	0.61
21:C9:32:GLY:N	21:C9:34:VAL:HG12	2.16	0.61
21:C9:49:ASP:OD1	21:C9:51:GLU:HB2	6.53	0.61
33:E1:124:PRO:O	33:E1:126:CYS:N	2.68	0.61
3:S1:103:MET:O	3:S1:214:LYS:HA	2.55	0.61
70:O4:100:ILE:HA	70:O4:103:LYS:HG2	1.82	0.61
1:2:1186:U:OP1	1:2:1456:C:O2'	2.18	0.61
69:O3:73:ARG:CG	69:O3:82:ARG:HD2	2.31	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:S7:91:ILE:HD12	9:S7:92:PHE:H	3.22	0.61
36:1:2374:C:C5	36:1:2941:A:C6	2.89	0.61
42:L5:270:LYS:C	42:L5:272:TYR:H	3.05	0.61
34:SR:44:SER:OG	34:SR:59:ARG:N	2.94	0.61
36:5:2275:A:C2	36:5:2312:A:C4	2.88	0.61
1:2:25:C:O2'	1:2:366:A:O2'	2.16	0.61
58:N2:49:ASN:O	58:N2:51:GLY:N	3.26	0.61
26:D4:5:VAL:HG22	26:D4:32:ARG:HH22	1.65	0.61
36:5:18:G:N2	38:8:142:C:C2	2.69	0.61
36:1:1051:U:H4'	57:N1:19:PHE:CD2	2.36	0.61
22:D0:44:ASN:HD22	22:D0:102:ARG:HH21	7.29	0.61
36:5:562:C:H2'	36:5:563:U:H6	1.65	0.61
1:2:805:U:O2'	24:D2:78:ARG:NH1	2.34	0.61
36:1:417:A:H2'	36:1:418:A:C8	2.35	0.61
47:M0:210:ILE:HA	47:M0:217:PHE:CE2	2.46	0.61
74:O8:58:ASP:HB3	74:O8:61:LYS:CD	5.03	0.61
21:C9:42:GLY:HA2	21:C9:84:LYS:HE2	2.16	0.61
36:1:1093:A:O2'	36:1:1094:U:O5'	2.17	0.61
36:5:1064:A:H4'	36:5:1065:A:O5'	1.99	0.61
43:L6:46:ARG:HG3	43:L6:47:PHE:CD1	2.36	0.61
36:1:706:A:H4'	36:1:781:G:O2'	2.01	0.61
37:7:106:U:H2'	37:7:107:C:O4'	2.00	0.61
65:N9:31:SER:OG	65:N9:33:LYS:HB2	2.95	0.61
36:5:2931:C:H2'	36:5:2932:U:O4'	2.00	0.61
1:6:1070:C:H2'	1:6:1071:U:O4'	2.01	0.61
38:4:106:C:H5'	38:4:108:C:OP2	2.00	0.61
36:1:3176:G:N2	36:1:3212:C:O2	2.23	0.61
36:1:1080:A:OP2	42:L5:140:ARG:NH2	2.34	0.61
1:2:1276:U:O5'	5:S3:147:ALA:HB2	2.00	0.61
57:N1:6:GLY:HA3	36:5:2631:U:OP1	237.02	0.61
47:M0:3:ARG:HH22	36:5:2854:U:P	291.68	0.61
36:1:561:C:H2'	36:1:562:C:C6	2.36	0.61
18:C6:8:GLN:OE1	18:C6:21:HIS:ND1	4.46	0.61
7:S5:36:ALA:O	7:S5:39:GLU:N	2.32	0.61
20:C8:125:ILE:HD11	35:SM:57:ASN:HB3	3.11	0.61
21:C9:127:ASN:HA	21:C9:130:ARG:HH11	7.44	0.61
48:M1:82:ARG:HG2	48:M1:112:LEU:HB2	1.83	0.61
5:S3:94:ARG:NE	5:S3:125:TYR:OH	2.34	0.61
5:S3:42:THR:O	5:S3:44:THR:N	3.77	0.61
3:S1:30:PHE:HD1	3:S1:96:LEU:HD22	1.66	0.61
54:M8:138:LEU:HD13	54:M8:140:LEU:HD21	1.83	0.61
54:M8:63:SER:OG	54:M8:64:VAL:N	2.30	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:754:A:OP1	1:6:754:A:H4'	2.01	0.61
4:S2:152:HIS:CD2	4:S2:153:SER:H	2.18	0.61
36:5:1875:G:H2'	36:5:1876:U:C6	2.36	0.61
57:N1:83:ARG:HH11	57:N1:85:LEU:HD21	1.66	0.61
60:N4:20:LEU:HD12	60:N4:30:ARG:HG2	2.34	0.61
64:N8:111:LYS:HA	64:N8:129:PHE:O	2.41	0.61
53:M7:173:ARG:HA	53:M7:176:ILE:HD12	1.83	0.61
36:1:2314:U:HO2'	36:1:2315:G:P	2.24	0.61
13:C1:6:THR:HB	13:C1:9:SER:HB3	1.83	0.61
64:N8:60:TYR:CD2	64:N8:63:LYS:HD2	2.35	0.61
40:L3:239:PRO:O	40:L3:242:THR:HG22	4.40	0.61
36:5:1470:U:OP1	87:5:3952:OHX:N6	2.34	0.61
38:4:5:U:H2'	38:4:6:U:H6	1.63	0.61
1:2:531:C:H2'	1:2:532:U:H5''	1.82	0.61
58:N2:31:ALA:HA	58:N2:58:GLU:OE1	2.01	0.61
1:6:1672:G:N7	87:6:2064:OHX:N4	2.48	0.61
1:2:304:U:H2'	1:2:305:C:C6	2.35	0.61
1:6:647:G:H22	1:6:687:G:H1	1.47	0.61
5:S3:10:LYS:O	5:S3:14:ASP:N	2.50	0.61
1:6:1018:U:H2'	1:6:1019:A:C8	2.34	0.61
36:1:2111:G:O6	36:1:3333:G:H3'	2.00	0.61
13:C1:78:THR:HG22	13:C1:84:ILE:HG21	1.82	0.61
43:L6:92:SER:OG	43:L6:93:VAL:N	2.31	0.61
36:5:2370:G:N7	87:5:3904:OHX:N6	2.48	0.61
36:1:1394:A:H2'	36:1:1395:G:O4'	2.01	0.61
36:1:2113:A:OP2	87:1:3960:OHX:N1	2.34	0.61
34:SR:10:ARG:HG3	34:SR:314:GLN:HB2	5.20	0.61
36:1:2369:G:H2'	36:1:2370:G:C8	2.36	0.61
36:5:871:U:H2'	36:5:872:U:O4'	2.01	0.61
1:6:1688:U:H2'	1:6:1689:A:H8	1.66	0.61
47:M0:37:GLY:O	47:M0:39:LYS:N	2.33	0.61
41:L4:179:LEU:HD13	36:5:1386:A:N6	120.79	0.61
41:L4:44:LYS:O	41:L4:47:ARG:HD3	2.00	0.61
1:6:1318:G:H5''	1:6:1318:G:H8	1.66	0.61
40:L3:363:SER:OG	40:L3:364:LYS:N	2.77	0.61
1:2:1672:G:N7	87:2:2044:OHX:N5	2.49	0.61
36:1:2689:A:C8	36:1:2702:A:N6	2.69	0.61
1:2:953:G:OP2	15:C3:94:LYS:NZ	2.31	0.61
1:6:1762:A:C2	1:6:1763:A:C8	2.88	0.61
1:2:899:G:H1	1:2:910:C:N4	1.98	0.61
16:C4:102:LEU:HD22	16:C4:105:LEU:HD11	1.83	0.61
16:C4:32:ASP:O	16:C4:35:GLY:N	2.33	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D6:51:ARG:NH2	28:D6:51:ARG:HG2	2.90	0.61
3:S1:27:LYS:HD2	3:S1:47:LEU:HB3	1.83	0.61
59:N3:92:PHE:CE1	36:5:3051:U:H1'	245.36	0.61
54:M8:85:GLY:O	54:M8:104:LEU:HB2	2.00	0.61
66:O0:42:ILE:HG22	66:O0:91:SER:HA	1.83	0.61
79:Q3:29:LEU:HD23	79:Q3:69:TYR:CG	4.39	0.61
1:6:1231:U:O5'	1:6:1259:U:H1'	2.00	0.61
1:6:1451:C:O2'	1:6:1452:U:H5'	2.01	0.61
18:C6:115:THR:HG21	18:C6:120:ASP:HB2	1.82	0.61
57:N1:102:ARG:O	57:N1:105:PHE:N	2.43	0.61
51:M5:153:ASP:OD2	51:M5:154:PRO:HD2	2.00	0.61
38:4:104:A:H3'	38:4:105:A:H5''	1.82	0.61
48:M1:15:GLU:HB3	48:M1:130:VAL:HG13	1.83	0.61
40:L3:37:ARG:HG3	40:L3:185:GLY:O	2.00	0.61
8:S6:195:VAL:O	8:S6:198:ALA:N	2.74	0.61
36:5:3119:U:H2'	36:5:3121:U:OP1	2.00	0.61
36:1:1699:A:OP1	87:1:4178:OHX:N1	2.34	0.61
10:S8:136:SER:HB3	10:S8:139:ALA:HB3	2.58	0.61
79:Q3:49:ARG:HB2	79:Q3:55:TRP:CH2	2.36	0.61
23:D1:65:SER:O	23:D1:68:SER:N	2.34	0.61
36:5:252:U:H4'	36:5:253:A:H5'	1.83	0.61
36:1:790:U:H2'	36:1:791:A:O4'	2.01	0.61
36:5:1901:A:O2'	36:5:2918:G:OP1	2.16	0.61
74:O8:32:ASN:HB3	74:O8:38:PHE:HD2	1.66	0.61
36:1:2714:G:H2'	36:1:2751:G:N2	2.16	0.61
45:L8:112:GLU:O	45:L8:116:VAL:N	2.32	0.61
54:M8:54:LEU:HD13	54:M8:58:ASN:HB3	1.83	0.61
36:5:24:G:H2'	36:5:25:U:O4'	2.01	0.61
36:5:24:G:OP2	87:5:3902:OHX:N6	2.34	0.61
21:C9:129:GLN:NE2	1:6:1358:G:H1'	432.73	0.61
2:S0:21:ASN:HB3	2:S0:24:LEU:HD22	2.75	0.61
36:1:3348:G:H22	36:1:3357:U:H3	1.49	0.61
36:5:1499:C:H2'	36:5:1500:G:H8	1.64	0.61
65:N9:14:ARG:NH1	65:N9:18:ARG:HD3	2.16	0.61
44:L7:143:THR:HG22	44:L7:241:LYS:HD2	1.83	0.61
45:L8:63:LYS:O	45:L8:66:SER:N	2.36	0.61
41:L4:194:TYR:O	41:L4:195:ARG:HG3	2.00	0.61
1:2:1163:A:N3	1:2:1613:U:O2'	2.32	0.61
1:2:1357:A:H61	1:2:1366:U:H3	1.49	0.61
7:S5:44:ASN:HB2	7:S5:46:TRP:CZ3	2.36	0.61
1:2:1552:U:H1'	1:2:1598:U:H4'	1.81	0.61
29:D7:50:ALA:O	29:D7:52:THR:N	2.34	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:317:A:OP2	72:O6:30:LYS:NZ	2.33	0.61
23:D1:36:VAL:HB	23:D1:51:VAL:HB	2.81	0.61
2:S0:172:LEU:HD22	2:S0:176:LEU:HD11	1.83	0.61
40:L3:221:THR:HG23	40:L3:273:HIS:H	4.24	0.61
54:M8:83:VAL:HG12	54:M8:85:GLY:H	1.70	0.61
56:N0:80:ARG:HB3	56:N0:122:HIS:HB2	1.83	0.61
70:O4:102:LYS:HE3	36:5:2551:U:OP1	228.64	0.61
1:2:1291:G:H2'	1:2:1292:G:C8	2.34	0.61
72:O6:45:ARG:HH22	72:O6:54:GLU:CD	2.03	0.61
52:M6:179:ALA:O	52:M6:182:ASN:ND2	7.31	0.61
57:N1:129:LYS:HD3	36:5:1097:G:C5'	249.06	0.61
36:1:1686:U:OP1	58:N2:42:LYS:NZ	2.26	0.61
58:N2:50:LEU:HD23	58:N2:54:VAL:HB	5.65	0.61
54:M8:185:LYS:HD3	54:M8:186:VAL:HG23	2.19	0.61
4:S2:149:GLY:HA2	23:D1:3:ASN:HD22	7.95	0.61
42:L5:55:PHE:CZ	42:L5:158:ARG:HG3	2.36	0.61
36:5:2537:U:O2'	36:5:2538:U:O4'	2.09	0.61
9:S7:110:GLN:HG2	1:6:811:A:N7	338.96	0.61
36:5:970:A:H2'	36:5:971:G:H8	1.65	0.61
36:5:2440:G:H2'	36:5:2441:A:C8	2.36	0.61
36:1:1560:G:H2'	36:1:1561:G:H5'	1.83	0.61
36:5:2584:G:H4'	36:5:2584:G:OP1	2.01	0.61
36:1:1519:G:H2'	36:1:1520:G:H8	1.64	0.61
1:2:605:A:OP2	1:2:606:A:O2'	2.15	0.61
26:D4:80:ALA:HA	26:D4:83:LYS:HB2	2.42	0.61
36:5:1018:G:H2'	36:5:1019:G:O4'	2.01	0.61
36:5:412:G:C6	36:5:413:U:C4	2.88	0.61
40:L3:10:ARG:NH2	40:L3:263:SER:HB2	2.05	0.60
1:6:992:A:OP1	87:6:2057:OHX:N1	2.34	0.60
44:L7:51:TYR:HB3	44:L7:55:TYR:HE2	3.02	0.60
1:6:782:U:O2'	1:6:783:G:OP2	2.19	0.60
6:S4:7:LYS:HZ3	1:6:119:A:H61	340.69	0.60
87:1:4079:OHX:N1	72:O6:28:TYR:O	2.34	0.60
1:2:902:G:N2	1:2:907:A:OP2	2.34	0.60
3:S1:30:PHE:CZ	3:S1:94:LYS:HA	2.35	0.60
36:5:1438:U:H2'	36:5:1439:U:C6	2.36	0.60
68:O2:25:TYR:O	68:O2:28:VAL:HG23	3.14	0.60
23:D1:12:TYR:CZ	23:D1:14:PRO:HG3	2.34	0.60
2:S0:195:TRP:CE2	2:S0:197:ILE:HB	2.61	0.60
4:S2:140:ARG:NH2	4:S2:228:ASN:HD21	1.98	0.60
40:L3:220:VAL:O	40:L3:334:ARG:NH1	2.33	0.60
66:O0:49:PRO:HG2	66:O0:52:ARG:HB3	2.72	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:SR:260:ILE:HB	34:SR:274:LEU:HD12	2.77	0.60
56:N0:166:LYS:HG3	56:N0:167:ARG:O	5.83	0.60
39:L2:148:VAL:N	39:L2:156:LYS:O	3.18	0.60
40:L3:162:VAL:HG21	40:L3:181:ILE:HD12	2.63	0.60
36:1:73:C:N3	49:M3:59:ARG:NH1	2.48	0.60
1:6:633:U:HO2'	1:6:1102:G:HO2'	1.45	0.60
36:1:3024:A:H3'	36:1:3025:C:C6	2.35	0.60
1:6:649:U:H2'	1:6:650:U:H5	1.66	0.60
45:L8:195:SER:OG	45:L8:197:VAL:O	2.40	0.60
36:5:2971:A:H5''	36:5:2972:G:C5'	2.31	0.60
48:M1:139:THR:HG22	48:M1:147:THR:HA	1.83	0.60
36:5:3083:G:H2'	36:5:3084:C:O4'	2.00	0.60
1:6:1494:C:H2'	1:6:1495:C:C6	2.36	0.60
36:5:839:C:H1'	36:5:1724:U:OP1	2.01	0.60
1:2:1231:U:H4'	1:2:1258:U:H6	1.66	0.60
36:1:336:A:H5''	36:1:336:A:H8	1.66	0.60
15:C3:83:GLU:HG3	15:C3:84:ILE:H	3.07	0.60
43:L6:148:GLU:HA	43:L6:151:LYS:HD2	1.82	0.60
36:5:1815:U:O2'	36:5:1816:A:OP2	2.19	0.60
36:1:3163:A:H2'	36:1:3164:C:H5'	1.82	0.60
36:1:1439:U:H2'	36:1:1440:G:H8	1.66	0.60
36:5:1667:A:H2'	36:5:1668:G:C8	2.36	0.60
1:2:600:U:OP2	25:D3:108:GLY:HA2	2.01	0.60
37:3:95:A:C2	37:3:96:U:C2	2.89	0.60
6:S4:77:ARG:HD2	6:S4:82:TYR:CD1	5.13	0.60
36:5:600:G:N7	87:5:4120:OHX:N2	2.49	0.60
1:6:517:U:O4	87:6:2106:OHX:N4	2.34	0.60
78:Q2:8:ARG:HH11	78:Q2:8:ARG:HG2	1.64	0.60
36:1:2544:U:H2'	36:1:2545:C:C6	2.36	0.60
36:5:307:A:H61	36:5:2782:U:H3	1.46	0.60
59:N3:30:GLY:HA3	59:N3:66:LYS:HD2	2.96	0.60
64:N8:21:ARG:NH1	36:5:1369:A:OP1	184.29	0.60
16:C4:131:GLY:O	16:C4:133:ARG:N	3.28	0.60
1:2:544:A:H5''	1:2:545:A:OP2	2.00	0.60
11:S9:109:LEU:HD21	11:S9:134:ILE:HD11	1.83	0.60
47:M0:36:LEU:O	47:M0:87:LEU:N	2.33	0.60
36:5:685:G:N2	36:5:696:C:C2	2.69	0.60
41:L4:39:PHE:HE2	41:L4:43:ASN:HB2	2.15	0.60
19:C7:60:ARG:NH1	1:6:1401:A:OP1	410.79	0.60
1:2:1530:C:OP1	27:D5:95:HIS:HB2	2.01	0.60
42:L5:151:GLN:OE1	42:L5:152:ARG:N	2.34	0.60
1:6:794:U:H4'	1:6:795:U:OP2	1.99	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:M1:90:GLN:HB3	48:M1:172:LEU:HD11	1.83	0.60
70:O4:85:VAL:O	70:O4:89:ILE:HG13	2.88	0.60
68:O2:87:MET:O	68:O2:88:HIS:ND1	2.33	0.60
55:M9:14:VAL:O	55:M9:16:GLY:N	2.35	0.60
36:5:231:G:O6	87:5:4128:OHX:N4	2.34	0.60
36:1:3001:C:P	40:L3:120:LYS:HZ1	2.23	0.60
18:C6:113:ASP:HA	18:C6:116:LEU:HB2	3.37	0.60
35:SM:30:THR:O	36:1:2666:C:H5''	2.00	0.60
9:S7:143:LEU:O	24:D2:42:GLN:NE2	2.73	0.60
64:N8:30:GLY:HA2	36:5:40:A:C6	179.58	0.60
36:1:286:U:H2'	36:1:287:G:C8	2.37	0.60
39:L2:202:VAL:HB	39:L2:211:HIS:HB3	1.83	0.60
36:5:1745:C:H2'	36:5:1746:U:C6	2.37	0.60
36:5:1861:G:OP2	87:5:3991:OHX:N2	2.35	0.60
1:6:404:G:H2'	1:6:405:C:C6	2.34	0.60
69:O3:21:ARG:HG3	69:O3:21:ARG:HH11	1.65	0.60
36:1:1352:A:H4'	36:1:1353:U:OP1	2.00	0.60
36:5:2359:C:H2'	36:5:2360:C:H6	1.66	0.60
36:1:1740:U:H1'	36:1:1741:A:C2	2.37	0.60
22:D0:53:LYS:CB	22:D0:92:ASP:HB2	3.23	0.60
36:1:1268:G:N2	36:1:1269:U:O4	2.24	0.60
9:S7:150:GLN:HB3	9:S7:181:ILE:HD12	1.82	0.60
36:1:2138:A:C5	73:O7:3:LYS:HB3	2.36	0.60
36:1:1491:A:N6	36:1:1837:U:O4	2.18	0.60
61:N5:73:MET:HE1	61:N5:142:ILE:HA	1.83	0.60
3:S1:32:ILE:HB	3:S1:43:VAL:HB	1.82	0.60
1:2:1031:U:H4'	1:2:1032:G:OP2	2.01	0.60
45:L8:89:GLU:HG3	45:L8:92:LYS:HD2	1.82	0.60
47:M0:112:GLN:C	47:M0:114:GLY:H	4.78	0.60
12:C0:32:HIS:CD2	12:C0:33:GLU:H	4.72	0.60
1:2:237:C:H5''	1:2:238:U:H5'	1.83	0.60
36:1:3218:A:H5''	36:1:3219:G:C5	2.36	0.60
36:1:1194:G:OP1	87:1:3964:OHX:N1	2.34	0.60
21:C9:2:PRO:O	1:6:1360:A:O2'	429.88	0.60
47:M0:89:VAL:HG13	47:M0:136:PHE:HE1	1.76	0.60
47:M0:139:ARG:HD2	47:M0:173:PHE:CE2	3.25	0.60
44:L7:127:LEU:HA	44:L7:130:ILE:HG12	1.82	0.60
41:L4:280:ILE:HD12	54:M8:29:LEU:HD12	2.83	0.60
1:6:1533:C:H4'	1:6:1539:G:N1	2.16	0.60
1:2:391:A:H2'	1:2:392:G:H8	1.67	0.60
17:C5:114:HIS:ND1	17:C5:118:GLU:OE2	2.34	0.60
20:C8:114:GLU:O	20:C8:118:LYS:N	3.18	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:70:LEU:HB3	3:S1:79:HIS:HB2	6.31	0.60
2:S0:175:TYR:HE1	2:S0:197:ILE:HG22	1.65	0.60
40:L3:269:GLN:NE2	40:L3:271:GLY:O	2.34	0.60
61:N5:71:THR:HA	61:N5:74:LYS:HB2	3.52	0.60
62:N6:40:ARG:O	62:N6:44:GLY:N	2.41	0.60
14:C2:67:THR:O	14:C2:69:ALA:N	2.27	0.60
42:L5:256:THR:OG1	42:L5:258:LYS:NZ	2.34	0.60
1:2:150:U:OP1	26:D4:123:LYS:HE2	2.02	0.60
41:L4:219:LEU:O	41:L4:221:ASN:N	2.34	0.60
8:S6:57:ASP:HB3	8:S6:106:LEU:HD23	1.83	0.60
72:O6:62:ARG:HH12	72:O6:98:ARG:HH11	1.47	0.60
36:1:2225:U:H2'	36:1:2226:U:C6	2.35	0.60
53:M7:109:ALA:HA	53:M7:112:LEU:HD22	1.82	0.60
36:1:3023:U:H2'	36:1:3024:A:H8	1.62	0.60
6:S4:106:LYS:HB2	6:S4:108:ARG:HG3	4.26	0.60
36:5:409:A:OP2	87:5:4097:OHX:N3	2.34	0.60
1:2:1236:A:O4'	33:E1:138:ARG:NH2	2.34	0.60
32:E0:55:ARG:HB3	32:E0:58:PRO:HG3	1.81	0.60
57:N1:118:GLU:O	57:N1:122:GLN:NE2	5.47	0.60
20:C8:8:GLN:C	20:C8:10:SER:H	2.81	0.60
79:Q3:49:ARG:HD3	79:Q3:51:ALA:O	2.55	0.60
10:S8:12:SER:OG	10:S8:13:ALA:N	2.33	0.60
36:1:966:U:C2	36:1:967:A:N7	2.69	0.60
36:1:679:U:H2'	36:1:680:G:C8	2.36	0.60
36:5:2435:G:N2	36:5:2436:U:O2	2.34	0.60
36:1:1316:C:OP1	52:M6:129:LEU:HD12	2.01	0.60
11:S9:108:ARG:O	11:S9:111:THR:OG1	2.19	0.60
1:6:1351:G:C6	1:6:1375:A:C2	2.88	0.60
30:D8:13:ILE:HD11	30:D8:31:GLU:HB2	3.15	0.60
61:N5:91:ASN:O	61:N5:95:ILE:HG13	2.02	0.60
12:C0:15:LEU:O	12:C0:19:GLY:N	2.34	0.60
8:S6:12:SER:HB2	8:S6:124:LEU:HD12	1.82	0.60
2:S0:184:LEU:HD11	23:D1:39:VAL:HG12	1.83	0.60
1:2:1300:A:H5''	4:S2:86:VAL:HG11	1.81	0.60
36:5:3010:U:O2'	36:5:3011:A:H2'	2.01	0.60
38:4:82:U:OP1	71:O5:5:LYS:NZ	2.34	0.60
40:L3:60:LEU:HD23	40:L3:67:PHE:HB3	1.82	0.60
1:2:1460:A:C5	35:SM:76:VAL:HG13	2.36	0.60
31:D9:6:VAL:O	31:D9:8:PHE:N	4.90	0.60
56:N0:14:LEU:HG	56:N0:56:GLY:HA2	2.86	0.60
69:O3:29:LEU:HD22	69:O3:75:HIS:CD2	2.36	0.60
9:S7:166:LEU:O	9:S7:168:SER:N	2.35	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:C6:115:THR:HB	18:C6:118:ILE:O	2.01	0.60
36:1:499:G:H2'	36:1:500:C:C6	2.37	0.60
24:D2:79:PHE:H	24:D2:125:ILE:HG22	1.65	0.60
36:1:76:G:H3'	49:M3:73:ARG:HG3	1.81	0.60
51:M5:57:GLN:HB3	51:M5:139:HIS:CE1	2.37	0.60
39:L2:5:ILE:HD11	39:L2:232:GLY:HA2	2.16	0.60
61:N5:56:ARG:O	61:N5:61:LYS:HD2	2.02	0.60
36:5:2130:G:N2	36:5:2132:C:OP1	2.34	0.60
76:Q0:97:ARG:HG3	76:Q0:120:GLN:O	2.01	0.60
1:6:846:G:H2'	1:6:847:A:C8	2.36	0.60
1:2:1512:G:H2'	1:2:1513:G:H8	1.67	0.60
19:C7:33:ARG:HH21	34:SR:109:ASP:CG	2.59	0.60
38:4:10:A:H2'	38:4:11:C:H6	1.65	0.60
36:5:119:U:H4'	36:5:120:G:H5''	1.83	0.60
87:5:3937:OHX:N2	87:5:4228:OHX:N4	2.48	0.60
74:O8:31:LEU:HA	74:O8:37:PRO:HA	1.84	0.60
36:5:2823:G:O6	87:5:3948:OHX:N4	2.34	0.60
1:6:792:U:OP1	87:6:2200:OHX:N4	2.34	0.60
1:2:1335:U:H2'	1:2:1336:A:H8	1.66	0.60
36:1:1235:U:H3	36:1:1263:A:H62	1.49	0.60
3:S1:154:SER:O	3:S1:154:SER:OG	2.15	0.60
25:D3:102:VAL:HG12	25:D3:127:VAL:HG12	1.83	0.60
36:5:2712:U:H2'	36:5:2713:U:H6	1.66	0.60
40:L3:77:THR:HG23	40:L3:326:GLY:O	2.84	0.60
11:S9:126:ARG:O	11:S9:130:THR:HG22	2.00	0.60
19:C7:15:ALA:O	19:C7:19:ARG:HG2	2.00	0.60
1:6:1470:C:O2'	1:6:1471:A:OP1	2.15	0.60
67:O1:12:TYR:HA	67:O1:106:THR:HG22	1.82	0.60
1:6:1427:A:O2'	1:6:1428:G:OP1	2.18	0.60
1:6:1438:G:H2'	1:6:1439:C:O4'	2.00	0.60
5:S3:55:THR:HG21	5:S3:90:ARG:HG2	2.50	0.60
77:Q1:24:SER:O	77:Q1:25:LYS:HB2	4.40	0.60
1:6:1142:A:N6	1:6:1143:A:N1	2.49	0.60
40:L3:62:ARG:HG2	40:L3:62:ARG:O	3.42	0.60
36:5:3245:A:H2	36:5:3246:G:C4	2.20	0.60
60:N4:50:ALA:HA	60:N4:55:PHE:CE1	2.51	0.60
40:L3:291:GLU:OE1	40:L3:292:ALA:N	2.28	0.60
18:C6:102:LYS:O	18:C6:106:LYS:N	2.97	0.60
39:L2:249:SER:OG	39:L2:250:GLN:N	2.35	0.60
1:2:1325:A:OP2	19:C7:11:ARG:NH1	2.34	0.60
53:M7:168:LEU:HD13	53:M7:173:ARG:HG2	1.83	0.60
36:1:1063:G:C6	57:N1:109:VAL:HG22	2.36	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
60:N4:39:LEU:O	60:N4:42:GLN:N	2.34	0.60
64:N8:74:ASN:CG	64:N8:115:LYS:HB2	2.21	0.60
49:M3:140:SER:OG	49:M3:142:ALA:N	2.48	0.60
44:L7:139:PRO:CA	44:L7:237:ASN:HD21	2.15	0.60
36:1:250:U:H5	36:1:251:G:N7	1.98	0.60
1:6:1734:U:H2'	1:6:1735:U:C6	2.35	0.60
36:5:2719:U:O2'	36:5:2720:G:O5'	2.19	0.60
10:S8:72:ILE:HD12	10:S8:74:LYS:HD3	1.82	0.60
36:5:2101:C:O2'	36:5:2102:U:OP1	2.19	0.60
36:5:2880:U:H2'	36:5:2881:C:C6	2.36	0.60
52:M6:92:THR:OG1	52:M6:95:GLY:N	2.41	0.60
15:C3:26:PHE:CE2	15:C3:28:LEU:HB2	2.37	0.60
44:L7:93:ASN:O	44:L7:94:LYS:HG2	4.62	0.60
87:5:3937:OHX:N5	87:5:4228:OHX:N6	2.50	0.60
54:M8:69:ARG:O	54:M8:72:LYS:N	2.32	0.60
21:C9:20:SER:OG	21:C9:24:ARG:NH2	6.74	0.60
73:O7:2:GLY:O	73:O7:7:SER:HB3	2.12	0.60
59:N3:26:ALA:O	59:N3:115:THR:N	2.30	0.60
36:1:3301:U:O4	87:1:3897:OHX:N5	2.35	0.60
36:1:1621:A:H61	36:1:1823:A:H61	1.49	0.60
68:O2:104:ASN:O	68:O2:107:VAL:HG12	4.73	0.60
36:5:3026:G:O6	87:5:3935:OHX:N6	2.34	0.60
47:M0:35:ASP:OD1	47:M0:88:ARG:HG3	2.00	0.60
1:6:1579:U:H2'	1:6:1580:C:C6	2.35	0.60
65:N9:14:ARG:HH21	65:N9:18:ARG:HD3	3.72	0.60
1:2:398:G:OP2	10:S8:47:ARG:NH1	2.22	0.60
42:L5:227:LEU:O	42:L5:229:ASP:N	2.80	0.60
20:C8:115:ARG:O	20:C8:119:ILE:HG12	2.02	0.60
24:D2:57:ARG:NH2	29:D7:26:GLN:OE1	3.50	0.60
36:1:156:G:P	72:O6:27:SER:OG	2.59	0.60
1:2:902:G:H2'	1:2:903:U:C6	2.35	0.60
3:S1:97:LEU:HD13	3:S1:232:HIS:CG	5.38	0.60
19:C7:107:SER:O	19:C7:111:LYS:N	3.78	0.60
2:S0:15:GLN:HA	2:S0:18:LEU:HD12	1.83	0.60
1:2:129:U:N3	1:2:177:U:O4	2.34	0.60
63:N7:15:ARG:HH21	70:O4:83:ASN:HB3	4.15	0.60
59:N3:11:PHE:CD1	59:N3:88:ARG:HD2	2.37	0.60
64:N8:43:ILE:HD13	64:N8:43:ILE:H	1.67	0.60
43:L6:152:THR:OG1	43:L6:155:LEU:HB2	2.88	0.60
34:SR:216:LYS:O	34:SR:218:GLY:N	2.34	0.60
1:2:987:G:C2	39:L2:249:SER:HB2	2.37	0.60
39:L2:147:ARG:HH12	39:L2:155:LYS:HE2	4.88	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:211:A:O4'	36:5:229:G:H1'	2.01	0.60
52:M6:110:PRO:HA	52:M6:113:ASP:OD2	2.02	0.60
57:N1:102:ARG:HG2	57:N1:106:LEU:HD11	3.98	0.60
49:M3:113:VAL:O	49:M3:116:LEU:N	2.99	0.60
26:D4:8:ARG:HH11	26:D4:28:LEU:HG	1.65	0.60
36:1:2131:A:H61	79:Q3:18:TYR:H	1.50	0.60
38:4:104:A:C8	38:4:105:A:C8	2.90	0.60
70:O4:61:GLN:O	70:O4:63:ALA:N	2.85	0.60
2:S0:72:ASP:OD1	4:S2:40:LYS:HE2	2.02	0.60
36:1:2550:U:C6	45:L8:37:GLY:HA3	2.37	0.60
58:N2:90:ARG:C	58:N2:92:TRP:H	2.34	0.60
42:L5:55:PHE:CE2	42:L5:158:ARG:HG3	2.36	0.60
39:L2:57:PRO:HG2	39:L2:78:ALA:HB3	3.41	0.60
69:O3:21:ARG:HH11	69:O3:21:ARG:CG	2.15	0.60
45:L8:97:TYR:HE1	45:L8:130:TYR:HB3	1.66	0.60
52:M6:98:ALA:HA	52:M6:101:ARG:HH11	2.10	0.60
4:S2:199:GLN:O	4:S2:200:SER:HB3	2.01	0.60
9:S7:170:GLN:HA	9:S7:181:ILE:HG22	1.84	0.60
36:5:3238:G:H8	36:5:3238:G:H5''	1.65	0.60
15:C3:42:ARG:HG2	15:C3:42:ARG:HH11	4.36	0.60
36:1:772:U:H2'	36:1:773:G:C8	2.37	0.60
1:2:874:C:OP1	3:S1:159:SER:OG	2.17	0.60
87:1:3971:OHX:N4	55:M9:87:ALA:O	2.34	0.60
1:6:1466:G:H2'	1:6:1467:C:H6	1.66	0.60
36:1:2571:U:O2'	36:1:2572:C:O2	2.19	0.60
36:1:2116:G:N3	36:1:2116:G:H5''	2.17	0.60
36:5:966:U:N3	36:5:967:A:N7	2.49	0.60
36:5:3193:C:H1'	36:5:3200:G:N2	2.17	0.60
28:D6:30:ILE:HD13	28:D6:74:CYS:HA	2.61	0.60
1:2:545:A:N6	1:2:594:A:O5'	2.32	0.60
36:1:1010:G:C6	36:1:1011:A:N7	2.69	0.60
1:6:1161:C:H2'	1:6:1162:C:C6	2.37	0.60
41:L4:330:TYR:O	41:L4:333:VAL:HG13	3.08	0.60
10:S8:167:ALA:HB1	10:S8:182:TYR:O	2.33	0.60
36:1:1348:U:H5	54:M8:31:LYS:HE3	1.66	0.60
36:1:936:A:H2'	36:1:938:C:C4	2.37	0.60
1:6:1388:A:H4'	1:6:1389:C:O5'	2.00	0.60
18:C6:28:LEU:HD11	18:C6:30:LYS:HD2	4.91	0.60
7:S5:116:HIS:HE2	27:D5:95:HIS:CD2	2.20	0.60
42:L5:194:LEU:O	42:L5:197:SER:HB3	2.67	0.60
1:2:1252:C:H2'	1:2:1253:U:H6	1.67	0.60
16:C4:19:ILE:HG12	16:C4:28:VAL:HG22	1.83	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:30:PHE:CE2	3:S1:94:LYS:HA	2.37	0.60
36:1:1632:A:H2'	36:1:1633:C:H6	1.67	0.60
63:N7:36:HIS:CD2	63:N7:74:VAL:HG11	3.75	0.60
68:O2:121:ASN:OD1	68:O2:121:ASN:N	2.35	0.60
62:N6:112:ASP:HB3	62:N6:115:ARG:HB2	4.79	0.60
1:2:1183:A:N6	1:2:1184:A:N1	2.49	0.60
20:C8:145:ARG:HB2	35:SM:68:ARG:NH2	2.16	0.60
20:C8:145:ARG:H	35:SM:72:ARG:NH2	8.96	0.60
36:1:2503:G:H1'	36:1:2504:U:C5	2.34	0.60
44:L7:79:ALA:HB2	57:N1:137:GLU:HA	1.82	0.60
57:N1:63:VAL:HG12	57:N1:64:VAL:N	2.44	0.60
8:S6:179:VAL:HG21	1:6:140:A:H1'	327.70	0.60
52:M6:42:ASN:OD1	52:M6:125:ARG:NH1	2.96	0.60
40:L3:81:THR:CG2	40:L3:205:VAL:HG21	3.08	0.60
49:M3:167:PHE:CD1	64:N8:132:LYS:HG3	4.30	0.60
50:M4:109:ARG:HH22	36:5:3211:C:P	295.56	0.60
36:5:856:G:N1	36:5:857:G:N2	2.50	0.60
36:1:2148:U:H6	36:1:2148:U:OP2	1.84	0.60
71:O5:89:ARG:HG2	71:O5:89:ARG:HH11	1.67	0.60
36:1:2898:G:H5''	36:1:2899:C:C5'	2.31	0.60
67:O1:10:ARG:HG2	67:O1:108:VAL:HG22	1.84	0.60
10:S8:150:ALA:O	10:S8:152:ILE:N	2.33	0.60
36:1:2896:A:OP2	76:Q0:102:ARG:NH2	2.32	0.60
36:5:2196:C:O2'	36:5:2270:A:N3	2.30	0.60
50:M4:46:ILE:HD13	50:M4:58:ILE:HG21	1.82	0.60
1:2:329:G:H1	1:2:339:C:H42	1.50	0.60
2:S0:81:PHE:HE2	2:S0:167:LYS:H	1.50	0.60
19:C7:70:SER:HA	19:C7:74:GLN:OE1	2.01	0.60
36:5:2371:G:O6	87:5:3904:OHX:N6	2.34	0.60
36:1:306:A:C2	36:1:307:A:C8	2.89	0.60
1:2:481:A:H2'	1:2:482:U:O4'	2.01	0.60
73:O7:31:LYS:O	73:O7:33:THR:HG23	2.02	0.60
36:5:3146:G:H2'	36:5:3147:G:H8	1.66	0.60
1:2:115:G:OP1	1:2:115:G:H8	1.84	0.60
1:2:933:A:OP1	28:D6:70:LYS:NZ	2.34	0.60
11:S9:109:LEU:HD13	11:S9:129:ILE:HD13	2.01	0.60
47:M0:35:ASP:HB3	47:M0:86:HIS:HE2	1.66	0.60
7:S5:34:GLN:HA	7:S5:37:GLN:OE1	2.02	0.60
21:C9:29:GLU:OE1	21:C9:110:LYS:NZ	2.30	0.60
21:C9:61:VAL:HG12	21:C9:65:ILE:HD11	3.09	0.60
3:S1:172:LEU:O	3:S1:176:VAL:HG23	2.45	0.60
1:2:12:U:H2'	1:2:13:C:C6	2.36	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S0:142:PRO:HG3	23:D1:32:VAL:HG22	3.23	0.60
59:N3:80:ARG:NE	59:N3:97:ASP:OD2	2.34	0.60
34:SR:212:ALA:HB2	34:SR:222:LEU:HD13	3.11	0.60
34:SR:91:LEU:O	34:SR:100:TYR:N	2.30	0.60
40:L3:105:VAL:HG11	40:L3:148:LEU:HD13	1.88	0.60
36:1:285:A:H3'	36:1:285:A:H8	1.65	0.60
48:M1:102:PHE:O	48:M1:129:VAL:HG13	5.16	0.60
40:L3:34:LYS:HG2	40:L3:35:ASP:N	2.16	0.60
1:6:1261:G:N2	1:6:1262:U:O2	2.35	0.60
1:2:1433:G:H2'	1:2:1434:U:H6	1.66	0.60
57:N1:19:PHE:CE1	57:N1:20:ARG:HG2	2.37	0.60
36:1:1051:U:H4'	57:N1:19:PHE:CE2	2.37	0.60
31:D9:56:ARG:HG3	1:6:1418:G:O2'	406.24	0.60
10:S8:142:LYS:NZ	1:6:187:G:OP2	272.37	0.60
40:L3:187:SER:HB3	40:L3:190:GLU:HG3	2.08	0.60
69:O3:13:HIS:NE2	69:O3:28:SER:OG	2.34	0.60
40:L3:92:TYR:CE1	40:L3:159:ARG:HD2	2.37	0.60
36:1:394:G:N2	36:1:396:A:H3'	2.17	0.60
9:S7:35:LYS:O	9:S7:37:GLU:N	2.30	0.60
36:1:1596:C:H2'	36:1:1597:C:C6	2.37	0.60
13:C1:74:THR:HB	13:C1:122:ILE:HD13	4.56	0.60
1:2:1381:U:H4'	22:D0:59:PRO:HG3	1.84	0.60
36:1:3003:G:OP2	40:L3:26:ARG:NH2	2.34	0.60
1:6:921:U:O4	87:6:2186:OHX:N3	2.35	0.60
46:L9:151:VAL:O	46:L9:152:GLU:C	2.88	0.60
66:O0:22:LYS:HD3	66:O0:94:GLU:HB2	1.84	0.60
11:S9:124:HIS:CE1	11:S9:128:LEU:HD11	4.20	0.60
5:S3:202:LEU:O	5:S3:204:ASP:N	2.99	0.60
7:S5:59:VAL:C	7:S5:61:TYR:H	2.33	0.60
36:1:1460:A:H5'	67:O1:51:LEU:O	2.02	0.60
1:6:1202:A:OP1	87:6:2135:OHX:N1	2.35	0.60
55:M9:19:LYS:O	55:M9:21:LYS:N	2.34	0.60
38:4:69:U:OP2	87:O7:103:OHX:N3	2.35	0.60
35:SM:66:ALA:O	35:SM:70:ASN:HB2	2.02	0.60
6:S4:65:LEU:O	6:S4:67:GLN:N	2.34	0.60
44:L7:77:VAL:HG23	57:N1:139:ARG:HG2	1.84	0.60
57:N1:15:PHE:HE2	57:N1:44:ALA:HB3	1.66	0.60
36:5:2279:A:H2'	36:5:2288:G:O6	2.02	0.60
36:5:2310:U:OP1	87:5:4193:OHX:N4	2.34	0.60
35:SM:30:THR:OG1	35:SM:30:THR:O	2.16	0.60
51:M5:135:VAL:HG13	51:M5:142:ILE:HG12	2.77	0.60
36:5:1572:U:HO2'	36:5:1573:G:H8	1.50	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
71:O5:41:LEU:O	71:O5:44:ILE:HG22	2.22	0.60
36:1:2897:A:OP2	76:Q0:124:LYS:NZ	2.31	0.60
36:5:1375:G:N3	36:5:1407:A:H2	1.99	0.60
36:5:2661:G:H2'	36:5:2662:G:H8	1.66	0.60
36:1:3163:A:N6	36:1:3164:C:H41	1.99	0.60
74:O8:62:ALA:O	74:O8:66:ILE:HG13	2.02	0.60
25:D3:108:GLY:HA2	1:6:600:U:OP2	358.33	0.60
49:M3:16:LYS:O	49:M3:17:HIS:HB2	4.69	0.60
40:L3:199:PHE:O	40:L3:201:LYS:N	2.78	0.60
40:L3:125:SER:OG	40:L3:126:LYS:N	3.12	0.60
3:S1:122:GLU:HG2	3:S1:140:ILE:HG13	1.82	0.60
10:S8:147:ALA:O	10:S8:149:SER:N	2.69	0.60
54:M8:54:LEU:HB3	54:M8:58:ASN:HB2	1.83	0.60
36:5:2715:A:C2	36:5:2753:G:C6	2.90	0.60
36:5:1643:A:O2'	36:5:1644:C:O5'	2.19	0.60
36:5:2431:C:H42	36:5:2598:G:H1	1.47	0.60
32:E0:15:LYS:NZ	1:6:585:A:OP1	388.28	0.60
11:S9:134:ILE:HG12	11:S9:135:ALA:N	2.16	0.60
47:M0:72:ALA:O	47:M0:76:MET:HG2	4.05	0.60
44:L7:134:VAL:O	44:L7:229:PHE:HA	2.49	0.60
44:L7:89:ILE:HD11	44:L7:135:ALA:H	1.67	0.60
36:1:1157:G:OP2	44:L7:90:LYS:NZ	2.34	0.60
41:L4:281:ILE:HG13	41:L4:282:SER:N	2.17	0.60
20:C8:23:ASP:OD1	20:C8:25:ASN:N	4.80	0.60
7:S5:140:THR:HG22	7:S5:211:ILE:HD13	1.84	0.60
7:S5:205:SER:O	7:S5:207:THR:N	2.88	0.60
7:S5:64:VAL:HG12	7:S5:65:ARG:HD3	1.84	0.60
75:O9:10:LYS:HD3	36:5:1833:G:H5''	106.83	0.60
31:D9:36:LEU:HD12	31:D9:37:ASN:N	2.17	0.60
77:Q1:11:ARG:HH21	1:6:1127:G:P	292.78	0.60
63:N7:48:ARG:HB3	63:N7:69:LYS:HB3	2.05	0.60
28:D6:2:PRO:HB3	1:6:1142:A:H5''	347.63	0.60
1:2:66:U:O2	8:S6:160:ARG:NE	2.21	0.60
18:C6:82:ARG:NH2	18:C6:114:ARG:HB2	2.76	0.60
79:Q3:75:ALA:O	79:Q3:78:THR:N	2.35	0.60
40:L3:117:ARG:NH2	40:L3:175:LYS:HG2	3.01	0.60
8:S6:75:LEU:O	8:S6:94:ARG:HD3	2.02	0.60
26:D4:8:ARG:NH1	26:D4:28:LEU:HG	2.17	0.60
26:D4:29:HIS:CE1	26:D4:34:ASN:H	2.20	0.60
71:O5:75:TYR:CE1	36:5:17:G:H4'	81.44	0.60
38:8:45:C:O2'	38:8:46:G:O5'	2.12	0.60
36:5:1611:G:H2'	36:5:1612:A:H8	1.65	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1808:G:O6	87:1:3982:OHX:N3	2.35	0.60
50:M4:98:SER:O	50:M4:102:LYS:HB2	2.02	0.60
27:D5:53:GLU:O	27:D5:56:THR:N	6.08	0.60
9:S7:100:PRO:O	9:S7:112:ARG:NE	3.35	0.60
74:O8:43:PHE:HB2	74:O8:54:LEU:HB3	2.46	0.60
62:N6:88:GLU:HA	62:N6:94:SER:HB3	4.14	0.60
36:1:1577:G:H2'	36:1:1578:C:O4'	2.02	0.60
36:5:1276:U:OP2	87:5:4002:OHX:N1	2.35	0.60
79:Q3:45:LYS:HB3	79:Q3:45:LYS:NZ	2.17	0.60
1:2:1392:U:H2'	1:2:1393:C:C6	2.37	0.60
36:5:1070:U:C2'	36:5:1071:U:H5'	2.31	0.60
1:6:1526:A:O5'	1:6:1526:A:H8	1.84	0.60
6:S4:23:LEU:HD13	11:S9:4:ALA:HB3	1.82	0.60
37:3:27:A:P	42:L5:57:ASN:H	2.25	0.60
8:S6:200:ALA:O	8:S6:203:GLU:HB2	2.16	0.60
39:L2:29:LEU:O	39:L2:123:ARG:NH2	2.34	0.60
1:2:1757:G:H2'	36:1:2255:A:O2'	2.00	0.59
53:M7:48:LEU:HD13	53:M7:88:VAL:HG13	3.51	0.59
28:D6:10:ARG:NE	1:6:1797:A:OP2	330.04	0.59
47:M0:68:ALA:HB1	47:M0:155:ALA:HB1	3.37	0.59
36:1:1008:U:O2'	47:M0:35:ASP:OD2	2.17	0.59
13:C1:53:TYR:OH	13:C1:58:CYS:SG	2.56	0.59
10:S8:42:ARG:HB3	10:S8:59:ARG:HB2	2.09	0.59
41:L4:280:ILE:HD11	54:M8:23:ASN:HD21	3.38	0.59
5:S3:166:ASP:O	5:S3:190:ARG:NH2	4.07	0.59
36:1:530:G:N7	87:1:3921:OHX:N6	2.50	0.59
16:C4:38:THR:N	1:6:895:G:O2'	260.70	0.59
63:N7:126:LYS:O	63:N7:127:ASN:HB2	2.02	0.59
20:C8:145:ARG:HB2	35:SM:72:ARG:HE	5.01	0.59
7:S5:73:THR:HG23	18:C6:114:ARG:HD2	1.83	0.59
39:L2:148:VAL:O	39:L2:156:LYS:N	3.39	0.59
40:L3:166:ILE:HD11	40:L3:173:GLN:HB3	1.84	0.59
52:M6:26:GLN:HG3	52:M6:31:GLN:HB3	4.65	0.59
36:5:2808:A:H4'	36:5:2809:C:C5'	2.32	0.59
39:L2:201:GLY:O	39:L2:204:MET:HG3	2.02	0.59
26:D4:37:LYS:NZ	1:6:523:G:OP2	412.96	0.59
45:L8:163:VAL:HG22	45:L8:166:LEU:HD12	3.02	0.59
13:C1:40:LEU:HB3	13:C1:42:PHE:CE2	4.15	0.59
36:1:1049:C:H2'	36:1:1050:U:C6	2.33	0.59
36:5:1709:C:O2'	36:5:1710:C:O5'	2.16	0.59
36:1:523:A:O2'	56:N0:69:PRO:HD2	2.02	0.59
70:O4:10:ARG:HD2	75:O9:4:GLN:OE1	2.02	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2444:C:N4	36:5:2503:G:H1	1.98	0.59
36:5:2572:C:O2'	36:5:2573:G:OP2	2.17	0.59
1:2:10:G:H2'	1:2:11:A:C8	2.37	0.59
36:1:25:U:O4	87:1:3871:OHX:N4	2.34	0.59
78:Q2:59:HIS:O	78:Q2:61:LYS:N	2.35	0.59
47:M0:124:GLY:O	47:M0:125:LEU:HD23	2.02	0.59
74:O8:11:PHE:HD1	74:O8:12:LEU:HD22	3.59	0.59
1:6:217:A:C8	1:6:218:A:C8	2.90	0.59
36:5:3391:A:C2	36:5:3392:U:C6	2.90	0.59
87:5:3937:OHX:N5	87:5:4228:OHX:N3	2.49	0.59
36:1:2107:A:C2	36:1:3344:A:H8	2.20	0.59
1:2:1196:A:H4'	1:2:1197:C:H5''	1.84	0.59
79:Q3:38:ASP:OD1	79:Q3:45:LYS:HG2	5.22	0.59
36:5:510:G:O6	87:5:4018:OHX:N2	2.35	0.59
36:1:873:C:H5''	36:1:874:U:H4'	1.83	0.59
36:5:1269:U:O2'	36:5:1271:A:N7	2.29	0.59
1:6:1431:C:H1'	1:6:1437:U:O4	2.02	0.59
47:M0:98:ARG:HG3	47:M0:98:ARG:HH11	1.65	0.59
36:1:3040:A:OP1	59:N3:12:ARG:N	2.35	0.59
36:1:3335:A:C2	36:1:3336:A:C4	2.90	0.59
12:C0:84:GLU:O	35:SM:155:LEU:N	8.50	0.59
45:L8:105:LYS:O	45:L8:109:LEU:HG	2.02	0.59
1:2:1561:U:OP1	87:2:2179:OHX:N3	2.35	0.59
25:D3:98:GLU:O	25:D3:100:ASP:N	2.34	0.59
28:D6:82:ARG:HB2	28:D6:85:ARG:NH2	9.46	0.59
1:6:1160:A:O5'	87:6:2189:OHX:N2	2.35	0.59
44:L7:132:PRO:HA	44:L7:229:PHE:CG	2.37	0.59
19:C7:19:ARG:HG3	19:C7:20:TYR:CE1	2.36	0.59
7:S5:94:THR:HA	7:S5:97:LEU:HD12	4.33	0.59
42:L5:205:SER:HB3	42:L5:236:LEU:HD23	1.83	0.59
1:6:1429:G:H2'	1:6:1430:U:C6	2.37	0.59
20:C8:90:ASN:O	20:C8:95:GLY:HA2	2.02	0.59
31:D9:38:ILE:HG22	31:D9:42:CYS:HB3	3.28	0.59
5:S3:65:ARG:HH12	12:C0:56:LYS:NZ	2.00	0.59
20:C8:125:ILE:HA	35:SM:61:ILE:HG22	1.84	0.59
15:C3:13:SER:OG	87:6:2062:OHX:N2	338.66	0.59
3:S1:36:SER:OG	3:S1:231:LEU:O	4.74	0.59
38:4:15:G:C6	38:4:16:G:N1	2.70	0.59
23:D1:73:ALA:HB3	23:D1:79:LEU:HD12	1.85	0.59
2:S0:198:MET:SD	2:S0:199:PRO:HD2	2.71	0.59
36:5:676:G:O2'	36:5:678:G:O2'	2.16	0.59
4:S2:142:GLY:O	4:S2:153:SER:N	2.63	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:195:ILE:O	6:S4:196:VAL:HG23	4.17	0.59
49:M3:59:ARG:NH1	36:5:73:C:N3	94.92	0.59
39:L2:204:MET:HG2	36:5:914:A:C2	195.23	0.59
1:2:583:C:H2'	1:2:584:C:C6	2.37	0.59
1:2:558:U:O2'	1:2:559:C:O5'	2.14	0.59
38:4:3:A:H2'	38:4:4:C:H6	1.68	0.59
49:M3:155:GLU:HG2	64:N8:90:TYR:OH	3.91	0.59
4:S2:44:LEU:HD22	4:S2:243:TYR:HB2	4.17	0.59
22:D0:45:ALA:HB1	22:D0:50:LEU:HD12	1.83	0.59
36:1:2207:A:H2'	36:1:2208:A:H8	1.66	0.59
36:1:3074:G:OP1	87:1:4038:OHX:N1	2.34	0.59
36:1:1536:G:N2	36:1:1586:G:H1'	2.16	0.59
36:5:196:G:H22	36:5:198:A:H3'	1.66	0.59
1:6:235:G:H2'	1:6:236:A:C8	2.37	0.59
63:N7:83:THR:HG23	63:N7:85:TYR:H	1.67	0.59
36:5:499:G:H2'	36:5:500:C:H6	1.65	0.59
45:L8:135:GLY:O	45:L8:139:VAL:HG23	2.62	0.59
34:SR:245:PHE:HD1	34:SR:251:TRP:O	3.19	0.59
1:6:578:U:O2	87:6:2159:OHX:N3	2.34	0.59
36:1:2395:G:H5''	40:L3:255:TRP:CD1	2.37	0.59
1:2:1754:A:C5	88:2:2181:GET:H21	2.37	0.59
27:D5:47:TYR:CE2	27:D5:51:LEU:HD11	3.47	0.59
11:S9:76:LEU:O	11:S9:80:LEU:N	2.85	0.59
1:6:93:A:C6	1:6:398:G:C6	2.91	0.59
41:L4:209:TYR:CZ	41:L4:229:ASN:HB2	2.36	0.59
54:M8:43:PRO:HD2	36:5:729:C:OP1	191.88	0.59
54:M8:43:PRO:O	54:M8:45:ASN:N	2.35	0.59
43:L6:54:TYR:CE2	43:L6:63:LEU:HD22	2.37	0.59
73:O7:18:LEU:HA	73:O7:25:ARG:N	2.15	0.59
7:S5:135:ASP:O	7:S5:139:ASN:HB2	2.48	0.59
42:L5:148:ILE:CG2	42:L5:151:GLN:HB3	4.13	0.59
77:Q1:11:ARG:NH2	1:6:1127:G:OP1	293.60	0.59
4:S2:130:ILE:O	4:S2:134:LEU:HD23	2.02	0.59
48:M1:149:GLY:O	48:M1:153:LYS:HD2	5.15	0.59
36:1:1636:U:H5''	63:N7:73:LYS:NZ	2.16	0.59
55:M9:43:LYS:O	55:M9:47:ASN:N	3.08	0.59
73:O7:72:ARG:O	73:O7:74:PHE:N	3.23	0.59
14:C2:62:LEU:HD11	14:C2:72:ILE:HG23	1.83	0.59
42:L5:261:THR:OG1	42:L5:263:GLU:HB2	2.02	0.59
34:SR:35:SER:O	34:SR:43:ILE:N	2.30	0.59
36:5:511:G:H1	36:5:580:C:N4	1.97	0.59
40:L3:113:GLU:HB3	40:L3:176:ALA:HB2	1.84	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2219:A:H2'	36:1:2220:A:H8	1.66	0.59
49:M3:104:ARG:HG3	72:O6:22:PRO:HG2	4.15	0.59
36:5:2898:G:H5''	36:5:2899:C:H5'	1.83	0.59
1:2:827:C:H2'	1:2:828:U:C6	2.37	0.59
1:6:828:U:H1'	1:6:845:G:H22	1.66	0.59
1:6:106:U:H2'	1:6:107:C:O4'	2.03	0.59
36:1:1327:C:O3'	69:O3:76:GLY:HA2	2.02	0.59
55:M9:61:SER:OG	55:M9:62:ARG:N	3.28	0.59
36:1:168:U:H2'	36:1:169:U:H5	1.66	0.59
36:1:539:C:H2'	36:1:540:U:H6	1.66	0.59
36:1:2108:C:H1'	36:1:3344:A:C8	2.36	0.59
36:1:677:A:H4'	36:1:678:G:O5'	2.02	0.59
17:C5:60:LEU:HD21	17:C5:92:SER:HB3	1.84	0.59
1:6:1311:U:O2	1:6:1315:U:C2	2.54	0.59
44:L7:136:TYR:O	44:L7:231:ASN:HA	2.02	0.59
36:5:825:U:O4	87:5:3958:OHX:N2	2.36	0.59
57:N1:8:ARG:HG3	36:5:2757:U:H4'	239.32	0.59
43:L6:160:SER:OG	43:L6:161:ALA:N	2.72	0.59
36:5:2319:U:HO2'	36:5:2320:A:H8	1.47	0.59
63:N7:64:LYS:O	63:N7:67:LYS:HG2	2.02	0.59
36:5:3389:U:H6	36:5:3389:U:OP2	1.86	0.59
76:Q0:99:CYS:HB3	76:Q0:114:LYS:HD3	1.83	0.59
36:1:2359:C:H2'	36:1:2360:C:C6	2.37	0.59
36:5:2358:A:O5'	36:5:2358:A:H8	1.85	0.59
53:M7:41:LEU:O	53:M7:44:ALA:HB3	2.02	0.59
36:1:115:A:O2'	51:M5:5:LYS:NZ	2.36	0.59
41:L4:235:LEU:O	41:L4:239:ALA:HB3	2.01	0.59
1:6:1473:U:H4'	1:6:1474:G:OP2	2.01	0.59
21:C9:125:SER:OG	21:C9:126:GLU:N	2.98	0.59
72:O6:25:LYS:HB2	72:O6:28:TYR:HD2	2.20	0.59
1:2:975:C:H5''	15:C3:109:LYS:HE2	1.85	0.59
4:S2:54:GLU:O	4:S2:58:LEU:HB2	2.95	0.59
48:M1:100:GLY:HA3	48:M1:154:THR:O	2.02	0.59
48:M1:160:VAL:HG13	48:M1:171:VAL:HG21	5.09	0.59
63:N7:46:ILE:HG12	63:N7:49:TYR:CE1	2.38	0.59
36:1:1764:U:H5''	55:M9:43:LYS:NZ	2.17	0.59
40:L3:67:PHE:CE2	59:N3:88:ARG:HB2	2.37	0.59
35:SM:78:ASP:O	35:SM:80:ALA:N	3.19	0.59
4:S2:90:THR:C	4:S2:92:ALA:H	2.04	0.59
36:1:2661:G:H2'	36:1:2662:G:H8	1.66	0.59
56:N0:31:ALA:HB1	56:N0:36:ILE:HG22	2.42	0.59
36:1:353:G:N7	73:O7:55:ARG:HD3	2.17	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2821:C:H42	36:5:2869:U:H3	1.49	0.59
36:1:3122:A:H1'	46:L9:63:LYS:NZ	2.17	0.59
36:1:3122:A:O2'	46:L9:63:LYS:HD2	2.02	0.59
24:D2:71:LYS:NZ	1:6:1099:U:H5''	373.10	0.59
62:N6:89:LYS:N	62:N6:93:ALA:O	3.15	0.59
36:1:24:G:H2'	36:1:25:U:O4'	2.02	0.59
2:S0:108:THR:HG23	2:S0:135:GLU:HG2	3.99	0.59
36:1:953:G:H2'	36:1:1117:G:H5''	1.85	0.59
36:5:2881:C:H2'	36:5:2882:U:C6	2.37	0.59
1:2:527:A:OP1	87:2:2053:OHX:N4	2.35	0.59
8:S6:14:LYS:HD2	8:S6:123:GLY:HA3	1.85	0.59
10:S8:89:GLU:O	10:S8:93:THR:OG1	2.15	0.59
59:N3:10:LYS:NZ	59:N3:53:SER:OG	2.30	0.59
1:6:983:A:H2'	1:6:984:G:H8	1.67	0.59
38:8:130:C:H2'	38:8:131:A:C8	2.36	0.59
8:S6:3:LEU:HD22	8:S6:111:LEU:HD11	2.35	0.59
36:5:3393:U:H2'	36:5:3394:U:H6	1.67	0.59
42:L5:140:ARG:HB2	42:L5:140:ARG:HH21	2.43	0.59
1:6:1041:G:H2'	1:6:1042:G:C8	2.37	0.59
40:L3:115:LYS:O	40:L3:118:PHE:HD1	3.29	0.59
51:M5:106:VAL:HG21	51:M5:132:VAL:HG21	1.84	0.59
51:M5:117:ASN:HD21	51:M5:166:ALA:HB2	2.68	0.59
20:C8:78:HIS:HB2	20:C8:79:TYR:CD2	2.38	0.59
25:D3:57:LEU:HD22	32:E0:4:VAL:HG12	2.79	0.59
53:M7:125:GLN:HA	53:M7:125:GLN:HE21	2.33	0.59
44:L7:155:LYS:HB2	44:L7:203:TRP:CE3	2.37	0.59
36:1:1430:U:O4	64:N8:3:SER:OG	2.13	0.59
12:C0:72:GLY:O	12:C0:74:GLU:N	3.10	0.59
17:C5:43:ARG:NH1	1:6:1553:G:O6	397.38	0.59
48:M1:89:TYR:HB3	48:M1:169:ALA:CB	2.32	0.59
15:C3:89:TYR:CE2	15:C3:93:LYS:HD2	3.54	0.59
36:5:1639:C:O2'	36:5:1640:G:H5'	2.02	0.59
2:S0:6:THR:HA	2:S0:8:ASP:OD1	2.02	0.59
1:2:1174:C:OP2	20:C8:141:THR:HG21	2.02	0.59
6:S4:229:GLY:HA2	6:S4:235:TYR:HE2	1.67	0.59
40:L3:296:THR:HG21	40:L3:357:LYS:O	2.44	0.59
50:M4:126:GLN:NE2	36:5:3261:C:OP1	296.02	0.59
69:O3:6:ARG:HD2	69:O3:8:TYR:O	3.61	0.59
9:S7:56:LYS:HD2	9:S7:88:ARG:NH2	2.18	0.59
40:L3:81:THR:HG23	40:L3:81:THR:O	3.36	0.59
3:S1:191:GLU:HB2	3:S1:194:ASN:CG	2.22	0.59
1:6:778:G:O2'	1:6:779:U:H5'	2.01	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:3:28:C:O3'	48:M1:135:GLY:HA2	2.02	0.59
48:M1:137:ARG:NH1	37:7:28:C:OP1	301.61	0.59
64:N8:90:TYR:CG	64:N8:100:PRO:HG3	2.38	0.59
49:M3:183:ARG:HA	49:M3:186:ARG:HB2	2.59	0.59
55:M9:90:PRO:HG2	55:M9:93:VAL:HG21	3.46	0.59
1:6:1397:U:C5	1:6:1399:C:C2	2.90	0.59
36:1:2700:G:O2'	57:N1:47:SER:HA	2.02	0.59
36:1:1020:G:O6	36:1:1032:C:N4	2.29	0.59
36:5:1336:U:H2'	36:5:1337:A:H8	1.68	0.59
1:2:1111:G:OP2	87:2:2164:OHX:N3	2.35	0.59
1:6:11:A:C2'	1:6:12:U:H5'	2.32	0.59
38:8:132:G:H2'	38:8:133:G:H8	1.68	0.59
39:L2:67:TYR:CD2	39:L2:67:TYR:N	3.26	0.59
57:N1:114:ALA:O	57:N1:117:ALA:N	3.80	0.59
38:4:150:G:OP2	61:N5:25:LYS:NZ	2.26	0.59
44:L7:142:SER:O	44:L7:146:GLN:HG3	2.14	0.59
37:7:15:C:H1'	37:7:66:A:C2	2.38	0.59
47:M0:135:ILE:HG21	47:M0:159:PHE:CE2	2.67	0.59
41:L4:38:VAL:HG11	41:L4:118:LYS:HA	2.51	0.59
41:L4:157:GLU:OE2	41:L4:211:GLU:N	2.36	0.59
67:O1:29:ALA:HB3	67:O1:64:VAL:HG12	3.93	0.59
42:L5:109:THR:OG1	42:L5:110:LEU:N	2.33	0.59
42:L5:84:PRO:C	42:L5:86:TYR:H	2.06	0.59
28:D6:62:TYR:HE2	28:D6:65:PRO:HD3	2.77	0.59
2:S0:177:LEU:O	2:S0:181:VAL:HG13	4.01	0.59
1:2:127:G:H21	1:2:178:U:H1'	1.67	0.59
1:2:1449:U:H2'	1:2:1450:U:C6	2.38	0.59
6:S4:100:ARG:NH1	6:S4:118:GLU:OE1	2.34	0.59
41:L4:361:HIS:CG	41:L4:362:ASP:N	3.08	0.59
1:2:168:A:OP1	8:S6:137:ARG:HB2	2.01	0.59
34:SR:306:THR:C	34:SR:308:ASN:H	2.05	0.59
34:SR:33:LEU:HB2	34:SR:47:LEU:HD11	1.84	0.59
62:N6:4:GLN:HB3	36:5:229:G:H5''	68.15	0.59
36:5:3290:G:O6	87:5:4096:OHX:N5	2.35	0.59
36:1:2916:U:H2'	36:1:2917:G:H8	1.68	0.59
40:L3:138:ALA:O	40:L3:140:ASP:N	2.36	0.59
49:M3:103:ASN:HD22	49:M3:109:PHE:HB2	2.86	0.59
26:D4:5:VAL:HG22	26:D4:32:ARG:HH12	1.67	0.59
1:2:741:C:O2'	1:2:742:U:O4'	2.18	0.59
10:S8:116:HIS:O	10:S8:146:ARG:NH1	3.52	0.59
63:N7:104:PRO:O	63:N7:107:ARG:N	2.35	0.59
55:M9:59:SER:O	55:M9:59:SER:OG	2.20	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1072:G:H2'	36:5:1073:U:H6	1.66	0.59
36:1:546:C:H5'	36:1:547:G:H5'	1.85	0.59
1:6:1340:U:H4'	1:6:1341:A:H5''	1.85	0.59
36:5:167:U:H2'	36:5:168:U:C6	2.38	0.59
36:5:2105:G:H2'	36:5:2106:A:H8	1.67	0.59
3:S1:93:GLY:O	3:S1:95:ASN:N	2.73	0.59
36:1:341:G:OP2	41:L4:191:LYS:NZ	2.35	0.59
64:N8:4:ARG:HG2	64:N8:5:PHE:CE1	2.37	0.59
1:2:1338:C:H1'	1:2:1410:A:C4	2.38	0.59
1:6:1394:G:C6	1:6:1405:G:C6	2.90	0.59
1:2:1586:A:H3'	1:2:1587:A:C8	2.37	0.59
7:S5:61:TYR:CE2	7:S5:164:PRO:HG2	2.82	0.59
42:L5:196:ARG:NH2	42:L5:237:GLU:OE2	2.33	0.59
17:C5:108:ARG:O	17:C5:111:MET:N	2.72	0.59
1:6:869:A:H2'	1:6:870:C:O4'	2.03	0.59
71:O5:101:THR:HG23	71:O5:104:GLN:HB2	1.85	0.59
1:2:895:G:H1	1:2:917:U:H3	1.50	0.59
3:S1:228:LEU:O	3:S1:231:LEU:HB3	6.26	0.59
63:N7:38:PHE:CE2	63:N7:40:HIS:HB3	2.74	0.59
62:N6:45:ILE:HD12	62:N6:119:ILE:HG23	1.83	0.59
35:SM:64:LYS:C	35:SM:66:ALA:H	2.45	0.59
50:M4:84:LYS:NZ	36:5:560:G:OP1	359.66	0.59
41:L4:361:HIS:CG	41:L4:362:ASP:H	3.04	0.59
34:SR:35:SER:OG	34:SR:43:ILE:HB	2.03	0.59
39:L2:114:SER:HB2	39:L2:169:ILE:HD12	1.83	0.59
61:N5:39:LYS:HG3	36:5:13:A:H4'	118.24	0.59
40:L3:95:THR:OG1	40:L3:98:GLY:O	2.20	0.59
1:2:734:A:O2'	1:2:735:C:H5'	2.03	0.59
39:L2:224:THR:HG22	39:L2:237:LEU:HB2	1.83	0.59
22:D0:31:VAL:HA	22:D0:34:LEU:HB3	2.12	0.59
76:Q0:104:PRO:HB2	76:Q0:107:ALA:HB2	1.85	0.59
36:1:1618:G:H4'	38:4:129:C:H1'	1.85	0.59
36:1:1826:C:H2'	36:1:1827:C:H6	1.66	0.59
39:L2:48:ILE:HD11	79:Q3:54:ILE:HG23	1.85	0.59
36:5:300:G:H2'	36:5:301:G:H8	1.66	0.59
48:M1:28:ASP:OD2	48:M1:32:ARG:NH2	6.21	0.59
36:1:1560:G:C2'	36:1:1561:G:H5'	2.32	0.59
38:4:109:A:C2	38:4:114:G:C6	2.89	0.59
1:2:489:C:H42	1:2:497:G:H22	1.49	0.59
1:2:1407:U:H2'	1:2:1408:G:O4'	2.02	0.59
36:1:634:C:O2'	68:O2:47:ARG:HD2	2.03	0.59
59:N3:75:PRO:HD2	59:N3:103:ALA:O	3.31	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:202:G:N7	87:1:3945:OHX:N4	2.49	0.59
11:S9:143:ILE:HG12	1:6:768:C:C2	418.01	0.59
47:M0:154:ARG:NH2	36:5:2838:A:OP1	329.04	0.59
47:M0:156:ARG:HH11	47:M0:156:ARG:CG	3.78	0.59
1:6:445:A:H2'	1:6:446:A:C8	2.32	0.59
1:2:1339:C:O2'	1:2:1341:A:N7	2.35	0.59
36:1:566:G:H2'	36:1:567:G:H8	1.66	0.59
1:2:902:G:H1	16:C4:51:ASP:CG	2.06	0.59
63:N7:73:LYS:HZ1	36:5:1637:A:P	209.42	0.59
70:O4:103:LYS:O	70:O4:107:GLU:HG3	3.28	0.59
35:SM:74:LYS:HD2	35:SM:74:LYS:H	1.67	0.59
6:S4:181:VAL:HG21	6:S4:195:ILE:HG13	1.84	0.59
6:S4:98:ASN:OD1	6:S4:116:ASP:HA	3.68	0.59
50:M4:90:VAL:O	50:M4:93:LYS:N	2.60	0.59
9:S7:164:TYR:CZ	9:S7:165:LYS:HG2	2.38	0.59
9:S7:56:LYS:HB2	9:S7:88:ARG:HH11	2.26	0.59
3:S1:197:ILE:O	3:S1:201:THR:OG1	2.13	0.59
58:N2:42:LYS:HG2	58:N2:46:ALA:HA	4.24	0.59
26:D4:29:HIS:CE1	26:D4:68:LYS:H	3.22	0.59
40:L3:41:VAL:HA	40:L3:185:GLY:CA	2.54	0.59
64:N8:75:LEU:O	64:N8:77:LYS:N	3.23	0.59
87:2:2036:OHX:N2	10:S8:17:LYS:O	2.36	0.59
78:Q2:28:TYR:HE1	78:Q2:30:ALA:HA	3.34	0.59
42:L5:95:TRP:CZ2	42:L5:181:PRO:HD3	3.67	0.59
36:1:3095:U:H2'	36:1:3096:C:C6	2.37	0.59
36:5:1110:U:O4	87:5:3986:OHX:N4	2.36	0.59
36:5:1816:A:H2'	36:5:1816:A:N3	2.17	0.59
1:2:303:U:O2'	1:2:304:U:H5'	2.03	0.59
36:1:3317:U:O2'	87:1:4023:OHX:N3	2.36	0.59
36:1:1597:C:H2'	36:1:1598:G:C8	2.37	0.59
87:5:3937:OHX:N1	87:5:4228:OHX:N4	2.50	0.59
36:1:1240:A:H3'	36:1:1241:U:H5'	1.85	0.59
36:1:1535:A:OP2	87:1:3876:OHX:N1	2.36	0.59
37:3:62:U:O3'	42:L5:285:ARG:NH1	2.36	0.59
8:S6:200:ALA:HA	8:S6:203:GLU:HG3	1.85	0.59
7:S5:133:VAL:HG22	7:S5:198:LEU:HD13	1.90	0.59
20:C8:50:ALA:C	20:C8:52:VAL:H	3.66	0.59
49:M3:57:VAL:HG12	49:M3:112:ASN:HD21	4.03	0.59
28:D6:19:LYS:HG3	28:D6:20:PRO:HD2	1.83	0.59
7:S5:124:LEU:O	7:S5:125:THR:OG1	2.20	0.59
36:1:1473:G:OP1	55:M9:23:TRP:HA	2.02	0.59
22:D0:63:LEU:HD22	31:D9:34:TYR:CZ	3.10	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:S3:54:ARG:HA	5:S3:90:ARG:HH22	1.68	0.59
15:C3:101:HIS:ND1	1:6:951:A:H1'	283.47	0.59
72:O6:26:ILE:O	72:O6:28:TYR:N	2.35	0.59
23:D1:25:LYS:HG2	23:D1:26:ALA:H	4.49	0.59
6:S4:121:TYR:HA	6:S4:163:ASP:O	3.70	0.59
6:S4:180:LEU:N	6:S4:229:GLY:O	2.30	0.59
36:5:3245:A:C2	36:5:3246:G:C2	2.91	0.59
43:L6:51:ARG:HH12	43:L6:163:PHE:HB2	2.87	0.59
1:2:569:C:H2'	1:2:570:A:C8	2.29	0.59
40:L3:116:ARG:HD2	40:L3:122:TRP:CG	2.37	0.59
40:L3:165:GLN:HB2	40:L3:168:LYS:HG3	5.71	0.59
36:1:1486:G:H21	70:O4:6:THR:HG22	1.68	0.59
34:SR:299:GLN:NE2	34:SR:315:VAL:O	2.35	0.59
40:L3:144:ILE:HG22	40:L3:148:LEU:HD22	2.94	0.59
69:O3:60:ARG:HD2	36:5:3275:U:C6	218.79	0.59
36:1:290:G:H4'	51:M5:69:GLY:O	2.02	0.59
39:L2:202:VAL:HG22	39:L2:217:GLN:HG2	2.87	0.59
1:6:529:A:H2'	1:6:530:C:C6	2.37	0.59
39:L2:30:ARG:NH2	39:L2:41:ILE:HG21	3.25	0.59
54:M8:171:LYS:HE2	36:5:89:A:OP2	146.09	0.59
13:C1:40:LEU:HD13	1:6:246:G:N3	329.83	0.59
48:M1:22:SER:HA	48:M1:66:ALA:HB1	2.44	0.59
36:1:2618:G:O4'	65:N9:3:LYS:NZ	2.35	0.59
1:6:355:G:OP1	87:6:2071:OHX:N5	2.35	0.59
24:D2:78:ARG:O	24:D2:124:LYS:HD3	2.03	0.59
38:4:126:A:O2'	38:4:128:U:OP2	2.20	0.59
68:O2:103:LYS:O	68:O2:106:VAL:HG22	5.14	0.59
62:N6:90:VAL:C	62:N6:92:GLY:H	2.06	0.59
62:N6:120:GLN:NE2	62:N6:126:LEU:HA	9.01	0.59
45:L8:119:GLY:C	45:L8:121:SER:H	2.06	0.59
36:5:1460:A:H2'	36:5:1461:A:O4'	2.03	0.59
24:D2:26:LEU:HD11	24:D2:60:LYS:HB3	5.76	0.59
36:5:595:G:C8	36:5:609:G:C6	2.90	0.59
87:5:4028:OHX:N1	87:5:4075:OHX:N4	2.51	0.59
14:C2:57:ALA:HB3	14:C2:85:LYS:HE2	1.84	0.59
1:2:482:U:H2'	1:2:483:A:H8	1.68	0.59
36:1:1207:G:N7	87:1:4061:OHX:N2	2.50	0.59
5:S3:22:ASN:O	5:S3:26:THR:N	2.85	0.59
36:5:723:U:H2'	36:5:724:U:H5'	1.85	0.59
36:1:1131:G:C2	36:1:2373:A:C4	2.91	0.59
36:5:2819:A:H2'	36:5:2820:A:H5'	1.84	0.59
43:L6:107:ALA:O	43:L6:109:GLU:HG3	3.86	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2869:U:H5''	36:1:2870:C:OP2	2.03	0.59
40:L3:256:HIS:HA	40:L3:257:PRO:C	2.28	0.59
1:6:329:G:H2'	1:6:330:G:H8	1.67	0.59
43:L6:131:LYS:HG2	43:L6:133:GLU:H	1.68	0.59
1:2:1158:C:OP2	87:2:2173:OHX:N5	2.35	0.59
48:M1:86:VAL:C	48:M1:88:GLU:H	2.06	0.59
16:C4:81:VAL:H	16:C4:115:ILE:HG22	1.68	0.59
16:C4:81:VAL:HG13	16:C4:115:ILE:HG21	1.84	0.59
3:S1:179:SER:HB3	3:S1:183:GLN:HB2	1.84	0.59
4:S2:140:ARG:HH12	4:S2:229:LEU:HD11	5.36	0.59
54:M8:44:PHE:HD1	54:M8:139:ILE:HD11	3.39	0.59
68:O2:96:ILE:H	68:O2:121:ASN:HD21	1.50	0.59
50:M4:19:ARG:HB3	50:M4:35:ILE:HG13	3.52	0.59
1:6:72:A:H2'	1:6:73:U:H1'	1.85	0.59
41:L4:359:LEU:HA	56:N0:8:GLN:OE1	2.37	0.59
59:N3:93:LEU:H	59:N3:93:LEU:HD23	1.98	0.59
36:5:3170:A:C2	36:5:3281:U:C2	2.91	0.59
42:L5:270:LYS:HB3	37:7:1:G:O2'	322.77	0.59
39:L2:97:ASN:HA	79:Q3:87:ARG:HH12	2.81	0.59
49:M3:90:ALA:HA	49:M3:93:ILE:HD12	5.18	0.59
45:L8:156:ASP:HB2	45:L8:183:LYS:HZ1	3.39	0.59
36:5:1709:C:H2'	36:5:1710:C:C6	2.37	0.59
36:5:437:G:H2'	36:5:438:A:C1'	2.33	0.59
64:N8:96:LYS:O	64:N8:98:THR:N	2.36	0.59
59:N3:125:LEU:HB3	59:N3:126:TRP:CD1	2.37	0.59
36:5:776:U:H5	36:5:2719:U:O2	1.86	0.59
36:5:197:G:N2	36:5:372:A:C8	2.70	0.59
1:2:1230:A:H2'	1:2:1258:U:C5	2.36	0.59
36:1:3308:C:O2	53:M7:69:ARG:HD3	2.03	0.59
36:1:1278:A:O2'	36:1:1279:C:O5'	2.14	0.59
55:M9:180:LYS:HG2	55:M9:184:LEU:HD12	3.75	0.59
34:SR:165:ASP:O	34:SR:166:SER:HB2	3.94	0.59
1:2:17:C:O2'	1:2:1137:A:N1	2.33	0.59
36:5:595:G:H22	36:5:609:G:H5''	1.68	0.59
36:5:595:G:N1	36:5:609:G:H5''	2.17	0.59
3:S1:157:GLN:O	3:S1:159:SER:N	2.36	0.59
74:O8:32:ASN:HD22	74:O8:35:GLY:H	4.37	0.59
17:C5:77:ARG:HA	17:C5:95:GLY:HA3	1.84	0.59
36:5:717:C:H2'	36:5:718:G:O4'	2.01	0.59
36:1:535:G:O2'	36:1:554:A:N6	2.35	0.59
37:7:109:G:O5'	37:7:109:G:H8	1.85	0.59
36:1:2209:U:O2'	36:1:2210:G:OP1	2.21	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1122:G:N7	87:6:2167:OHX:N6	2.50	0.59
51:M5:73:ARG:NH1	51:M5:88:GLY:O	2.65	0.58
53:M7:122:ALA:HB3	53:M7:143:PRO:C	2.23	0.58
36:1:2852:C:H5'	36:1:2853:A:OP2	2.03	0.58
47:M0:150:GLU:HG3	47:M0:154:ARG:HE	1.67	0.58
1:6:1474:G:N2	1:6:1475:A:N3	2.51	0.58
17:C5:106:GLU:HG2	17:C5:108:ARG:HH12	1.68	0.58
48:M1:109:HIS:O	48:M1:112:LEU:HD22	3.88	0.58
5:S3:68:GLU:HB3	5:S3:72:LEU:HD12	3.87	0.58
3:S1:30:PHE:HB3	3:S1:96:LEU:HD22	2.87	0.58
1:6:1139:A:C5	1:6:1140:G:C8	2.91	0.58
4:S2:76:LEU:HD23	4:S2:133:LYS:HE2	1.85	0.58
63:N7:43:VAL:O	63:N7:72:ILE:HA	2.02	0.58
66:O0:31:VAL:O	66:O0:35:ARG:HG3	2.03	0.58
55:M9:15:VAL:HG12	55:M9:17:VAL:HG23	1.84	0.58
11:S9:163:PRO:HD3	11:S9:169:PRO:O	2.03	0.58
49:M3:168:ARG:NH1	49:M3:172:LEU:HD11	2.36	0.58
36:1:1485:G:OP2	87:1:4154:OHX:N1	2.36	0.58
36:5:1364:C:H2'	36:5:1365:G:H8	1.68	0.58
71:O5:28:LEU:HB3	71:O5:47:VAL:HG21	1.85	0.58
76:Q0:127:LEU:HD23	76:Q0:128:LYS:H	1.68	0.58
13:C1:40:LEU:HD13	1:6:246:G:C4	330.73	0.58
48:M1:61:ARG:O	48:M1:62:ASN:HB2	2.18	0.58
36:1:855:U:H2'	36:1:856:G:O4'	2.03	0.58
40:L3:30:LYS:O	87:5:4101:OHX:N1	249.79	0.58
38:8:9:A:H2'	38:8:10:A:H8	1.68	0.58
40:L3:31:ALA:O	40:L3:339:ARG:NH1	3.02	0.58
36:1:3298:C:H2'	36:1:3299:A:O4'	2.03	0.58
52:M6:89:SER:O	52:M6:92:THR:HG23	2.03	0.58
44:L7:93:ASN:OD1	44:L7:93:ASN:N	2.35	0.58
44:L7:93:ASN:O	44:L7:94:LYS:HB2	2.02	0.58
9:S7:173:TYR:HE1	9:S7:179:LYS:HB2	1.99	0.58
36:1:3362:A:H3'	36:1:3363:U:H6	1.68	0.58
36:1:13:A:H5'	36:1:14:U:OP2	2.02	0.58
49:M3:162:ASN:N	49:M3:162:ASN:OD1	2.23	0.58
36:5:47:C:O5'	36:5:47:C:H6	1.86	0.58
57:N1:2:GLY:N	36:5:2626:A:OP1	234.39	0.58
1:6:990:C:OP2	87:6:2125:OHX:N2	2.37	0.58
27:D5:66:VAL:HA	27:D5:71:ILE:HG22	5.71	0.58
46:L9:91:ARG:HH21	46:L9:91:ARG:HG3	1.68	0.58
42:L5:110:LEU:HD13	42:L5:171:LEU:HD23	1.86	0.58
42:L5:82:GLU:O	42:L5:85:ARG:HB3	2.58	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1429:G:H1'	22:D0:74:GLU:CD	2.24	0.58
5:S3:60:GLY:HA3	5:S3:65:ARG:H	1.68	0.58
36:1:71:A:OP2	64:N8:64:GLN:NE2	2.36	0.58
36:1:655:C:H2'	36:1:656:A:C8	2.33	0.58
36:1:1719:G:H2'	36:1:1720:U:O4'	2.02	0.58
70:O4:81:CYS:O	70:O4:81:CYS:SG	2.77	0.58
6:S4:88:ASP:HA	6:S4:122:LYS:HZ2	2.69	0.58
1:6:74:U:N3	1:6:76:A:H5''	2.18	0.58
34:SR:302:PHE:HE1	34:SR:312:VAL:HG13	5.24	0.58
34:SR:73:LEU:HD23	34:SR:79:TYR:O	2.93	0.58
36:1:2818:U:C6	36:1:2818:U:H5'	2.38	0.58
40:L3:83:PRO:O	40:L3:165:GLN:HG3	2.03	0.58
1:6:414:C:H2'	1:6:415:C:O4'	2.03	0.58
36:5:855:U:H2'	36:5:856:G:C8	2.37	0.58
44:L7:139:PRO:HA	44:L7:237:ASN:ND2	2.16	0.58
63:N7:54:THR:O	63:N7:57:HIS:HB2	2.03	0.58
36:1:2767:U:O2'	78:Q2:30:ALA:O	2.20	0.58
51:M5:12:ARG:HG2	36:5:268:A:C4	126.91	0.58
36:5:2768:U:O2'	36:5:2769:A:O5'	2.18	0.58
58:N2:89:LEU:O	58:N2:93:ILE:HG13	2.04	0.58
22:D0:52:LYS:HD2	1:6:1345:A:P	469.54	0.58
4:S2:169:LEU:CD2	4:S2:198:THR:HG22	2.33	0.58
74:O8:64:LYS:HG3	74:O8:65:LEU:N	5.54	0.58
36:5:2906:C:H2'	36:5:2907:G:O4'	2.03	0.58
36:5:1851:G:OP1	87:5:4034:OHX:N5	2.35	0.58
2:S0:21:ASN:HB3	2:S0:24:LEU:HB2	2.96	0.58
36:5:2228:A:H2'	36:5:2229:A:H8	1.68	0.58
1:2:1421:A:H5'	5:S3:159:HIS:O	2.02	0.58
36:5:2981:U:C2'	36:5:2982:A:H5'	2.33	0.58
46:L9:150:SER:OG	46:L9:153:ASP:HB2	2.87	0.58
36:5:719:U:H6	36:5:719:U:H5''	1.68	0.58
6:S4:21:ASP:OD2	6:S4:21:ASP:N	2.36	0.58
20:C8:84:TRP:HA	20:C8:89:GLN:OE1	2.03	0.58
36:5:2344:U:H2'	36:5:2345:A:C8	2.38	0.58
1:6:492:A:H2'	1:6:493:U:H5''	1.85	0.58
36:1:2334:U:O2'	36:1:2335:G:H5'	2.04	0.58
36:1:3198:U:H1'	46:L9:21:LYS:HB2	1.85	0.58
46:L9:9:GLN:HB3	46:L9:52:LEU:HD21	2.40	0.58
75:O9:45:ARG:NH2	36:5:1841:A:O2'	127.23	0.58
47:M0:61:SER:HB2	47:M0:63:GLU:HG2	1.86	0.58
44:L7:219:LYS:O	44:L7:228:SER:HB2	2.80	0.58
41:L4:209:TYR:HE1	36:5:689:U:O4	89.20	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:L6:80:ASN:O	43:L6:82:ARG:N	3.02	0.58
1:2:1339:C:O2'	1:2:1340:U:OP1	2.21	0.58
1:6:820:U:O2'	1:6:821:U:H5''	2.03	0.58
46:L9:100:ASN:OD1	46:L9:101:VAL:N	2.36	0.58
1:2:912:U:H4'	1:2:913:G:H8	1.68	0.58
16:C4:45:GLY:HA2	16:C4:54:GLU:HG3	1.84	0.58
2:S0:7:PHE:HE1	23:D1:39:VAL:HG21	5.17	0.58
63:N7:81:LEU:HD12	70:O4:93:PHE:CD2	2.38	0.58
70:O4:98:GLN:O	70:O4:98:GLN:NE2	2.35	0.58
36:5:1764:U:C4	36:5:1765:U:H1'	2.38	0.58
9:S7:86:GLN:HG2	9:S7:87:ASP:H	1.67	0.58
36:5:3279:A:N6	36:5:3280:U:C4	2.72	0.58
8:S6:64:LYS:HB2	8:S6:97:VAL:CG2	3.98	0.58
51:M5:58:GLY:O	51:M5:135:VAL:HA	3.58	0.58
51:M5:135:VAL:HG11	51:M5:151:ILE:HG21	1.86	0.58
51:M5:140:LYS:O	51:M5:144:ARG:HD2	2.03	0.58
1:6:1092:A:O2'	1:6:1093:A:H3'	2.02	0.58
36:1:2190:U:H2'	36:1:2191:U:O4'	2.03	0.58
48:M1:41:SER:C	48:M1:43:GLN:H	2.35	0.58
87:2:2031:OHX:N3	87:2:2146:OHX:N1	2.50	0.58
36:1:1806:A:H2'	36:1:1807:G:O4'	2.03	0.58
6:S4:254:ARG:HH11	6:S4:254:ARG:HB3	4.85	0.58
44:L7:92:ILE:HG22	44:L7:93:ASN:HB3	1.85	0.58
55:M9:116:ASP:O	55:M9:118:HIS:N	3.40	0.58
2:S0:32:HIS:O	2:S0:32:HIS:ND1	2.36	0.58
36:1:253:A:H2'	36:1:254:A:O4'	2.03	0.58
13:C1:109:VAL:HG23	13:C1:137:PHE:C	2.48	0.58
1:6:1715:G:C6	1:6:1716:C:N4	2.71	0.58
51:M5:97:SER:OG	51:M5:98:LEU:N	2.36	0.58
14:C2:55:GLY:N	35:SM:172:VAL:O	2.36	0.58
1:6:1688:U:H2'	1:6:1689:A:C8	2.38	0.58
37:7:15:C:C2	37:7:66:A:N1	2.71	0.58
36:5:241:G:H2'	36:5:242:C:C6	2.38	0.58
6:S4:213:SER:O	6:S4:214:LEU:HD12	2.03	0.58
33:E1:134:ASN:H	1:6:1251:U:H4'	442.51	0.58
1:2:759:U:H2'	1:2:760:A:H8	1.68	0.58
36:1:1409:G:O2'	36:1:1410:U:H5'	2.02	0.58
36:5:2953:U:H2'	36:5:2954:U:H2'	1.84	0.58
1:6:550:A:OP2	87:6:2053:OHX:N2	2.36	0.58
1:2:1354:G:C2	1:2:1372:U:C4	2.91	0.58
1:6:565:C:C2	87:6:2164:OHX:N4	2.71	0.58
1:2:434:G:H5'	25:D3:78:LYS:HB3	1.85	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3187:A:H5''	50:M4:8:LYS:HD2	1.84	0.58
36:5:2164:A:H61	36:5:2170:U:H3	1.50	0.58
72:O6:36:ARG:O	72:O6:40:VAL:HG23	2.22	0.58
18:C6:127:LYS:NZ	18:C6:131:GLY:O	2.30	0.58
30:D8:8:THR:HB	30:D8:56:LEU:HB2	1.85	0.58
46:L9:163:GLN:O	46:L9:166:ARG:HG3	2.69	0.58
36:1:2689:A:N7	36:1:2702:A:C6	2.72	0.58
22:D0:74:GLU:HG2	1:6:1429:G:H1'	378.69	0.58
12:C0:24:LYS:HB2	12:C0:63:TYR:CE1	2.86	0.58
3:S1:34:ALA:HA	3:S1:98:THR:HG22	1.85	0.58
6:S4:194:THR:O	6:S4:210:ILE:HG23	5.37	0.58
53:M7:177:ALA:O	53:M7:179:GLN:N	2.36	0.58
57:N1:104:GLU:HG3	57:N1:105:PHE:N	2.29	0.58
24:D2:77:PRO:HG3	25:D3:7:ARG:HG3	1.83	0.58
24:D2:18:GLU:HG2	24:D2:65:LEU:HG	2.26	0.58
10:S8:29:LEU:HD12	1:6:400:A:N6	295.49	0.58
1:2:736:C:H42	1:2:737:A:H62	1.52	0.58
9:S7:21:ALA:HA	9:S7:24:PHE:HD2	3.35	0.58
36:1:2437:G:N2	36:1:2511:A:H1'	2.19	0.58
34:SR:108:SER:OG	34:SR:127:ARG:HB2	2.03	0.58
36:1:1629:U:C6	63:N7:112:LYS:HG2	2.38	0.58
38:4:79:A:H2'	38:4:80:A:C1'	2.32	0.58
1:6:260:U:H3'	1:6:261:U:C5'	2.32	0.58
42:L5:279:LYS:HG2	42:L5:282:ARG:NH2	2.19	0.58
1:2:819:G:H4'	1:2:820:U:OP1	2.01	0.58
37:3:27:A:OP2	42:L5:57:ASN:HB2	2.02	0.58
1:6:644:C:N4	1:6:690:G:H1	2.01	0.58
72:O6:4:LYS:HE2	72:O6:14:GLY:HA3	1.86	0.58
36:1:333:G:N2	36:1:334:A:H1'	2.17	0.58
36:5:999:G:H2'	36:5:1000:C:C6	2.37	0.58
38:4:157:U:H5'	38:4:158:U:OP2	2.03	0.58
42:L5:134:ALA:HB2	42:L5:141:PRO:HD3	2.83	0.58
25:D3:127:VAL:O	25:D3:130:VAL:HG22	2.37	0.58
3:S1:152:ARG:HB3	1:6:1799:U:H3	339.50	0.58
47:M0:191:LYS:O	47:M0:197:VAL:HG22	2.02	0.58
6:S4:4:GLY:HA3	1:6:93:A:O2'	329.95	0.58
36:5:1424:C:H2'	36:5:1425:U:O4'	2.03	0.58
41:L4:262:TRP:CH2	41:L4:271:LYS:HE3	2.65	0.58
1:2:1474:G:H2'	1:2:1475:A:C8	2.38	0.58
18:C6:27:GLY:HA2	18:C6:60:PHE:O	3.20	0.58
18:C6:28:LEU:HD12	18:C6:64:ASP:HB3	1.84	0.58
7:S5:58:LEU:HD22	7:S5:168:VAL:HG23	1.84	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S5:83:ARG:HA	7:S5:86:GLN:OE1	5.47	0.58
61:N5:105:VAL:HA	61:N5:130:TYR:CE2	2.38	0.58
17:C5:22:LEU:HD23	17:C5:23:GLU:H	4.88	0.58
15:C3:91:LEU:HB3	15:C3:122:ILE:HG12	2.15	0.58
16:C4:41:ARG:NH2	1:6:916:U:O4	264.64	0.58
16:C4:16:VAL:O	16:C4:30:VAL:HG23	2.04	0.58
16:C4:50:ALA:O	16:C4:52:ARG:N	2.36	0.58
2:S0:124:THR:HG22	2:S0:174:TRP:HE1	2.49	0.58
4:S2:54:GLU:HA	4:S2:57:PHE:HD2	1.68	0.58
4:S2:58:LEU:HA	23:D1:12:TYR:HE1	2.05	0.58
70:O4:99:LYS:HG2	70:O4:103:LYS:HE3	1.86	0.58
35:SM:72:ARG:NH2	1:6:1461:C:P	328.02	0.58
66:O0:11:ASN:O	66:O0:14:LEU:N	4.20	0.58
8:S6:73:ILE:HB	8:S6:75:LEU:HD21	3.64	0.58
40:L3:88:GLY:O	40:L3:161:LEU:N	2.36	0.58
40:L3:36:ASP:OD1	40:L3:39:LYS:HG2	3.69	0.58
35:SM:51:ARG:NH1	36:1:2677:G:H1'	2.19	0.58
64:N8:78:LEU:C	64:N8:80:THR:H	2.40	0.58
36:5:221:A:C4	36:5:224:C:C4	2.91	0.58
1:2:1258:U:OP1	12:C0:1:MET:N	2.28	0.58
36:1:3074:G:H2'	36:1:3075:G:H8	1.69	0.58
44:L7:60:ARG:HA	44:L7:63:ILE:HG13	1.86	0.58
65:N9:46:ALA:HB2	36:5:1074:U:H1'	208.39	0.58
19:C7:67:ARG:NH1	1:6:1398:U:O2'	405.32	0.58
45:L8:121:SER:O	45:L8:123:GLN:N	2.81	0.58
6:S4:151:ASP:O	6:S4:154:ILE:HB	3.09	0.58
6:S4:160:VAL:HA	6:S4:172:PHE:HA	2.40	0.58
51:M5:96:ARG:NH2	51:M5:104:GLU:OE1	3.75	0.58
36:1:1580:A:H5'	36:1:2522:G:N7	2.18	0.58
42:L5:279:LYS:NZ	42:L5:282:ARG:HH12	3.75	0.58
1:2:1044:U:H3	1:2:1074:G:H1	1.51	0.58
36:1:709:A:H8	36:1:709:A:O5'	1.86	0.58
37:7:79:A:N6	37:7:101:G:O2'	2.36	0.58
36:5:2734:A:OP1	87:5:4041:OHX:N6	2.37	0.58
78:Q2:10:THR:HG22	78:Q2:23:HIS:CE1	3.27	0.58
40:L3:230:THR:HB	40:L3:247:ARG:NH1	3.25	0.58
46:L9:28:VAL:HG12	46:L9:33:THR:CB	5.72	0.58
53:M7:138:LYS:HD2	53:M7:140:GLU:HB2	1.84	0.58
28:D6:22:ARG:NH2	28:D6:27:SER:O	4.61	0.58
11:S9:152:SER:C	11:S9:154:LYS:H	2.07	0.58
36:5:2851:A:H2'	36:5:2852:C:H6	1.68	0.58
47:M0:175:ASN:CG	47:M0:176:LEU:H	4.86	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:L7:91:GLY:HA2	44:L7:111:ILE:HD12	1.86	0.58
43:L6:56:LYS:HG2	43:L6:57:HIS:N	3.01	0.58
5:S3:162:GLN:N	5:S3:163:PRO:HD2	2.25	0.58
18:C6:38:LEU:O	18:C6:45:ARG:NE	2.37	0.58
42:L5:50:ARG:NH2	42:L5:147:ASP:OD2	2.37	0.58
42:L5:60:ILE:HB	42:L5:80:SER:HB3	1.84	0.58
1:2:1502:G:O6	21:C9:102:ARG:NH2	2.37	0.58
36:1:299:G:N7	87:1:4079:OHX:N2	2.52	0.58
3:S1:129:THR:HB	3:S1:180:THR:HA	1.84	0.58
41:L4:91:GLY:HA3	41:L4:94:CYS:SG	2.44	0.58
1:6:1696:G:N2	1:6:1704:U:O2	2.36	0.58
68:O2:105:ARG:NH1	68:O2:125:ARG:HD3	3.22	0.58
56:N0:141:LYS:O	56:N0:143:PHE:N	2.79	0.58
59:N3:89:ASP:OD1	59:N3:91:VAL:HG22	2.04	0.58
1:2:168:A:H2'	1:2:169:A:C8	2.38	0.58
39:L2:89:TYR:CZ	36:5:2551:U:C2	223.24	0.58
52:M6:113:ASP:OD2	52:M6:114:LYS:N	3.75	0.58
49:M3:106:GLN:N	72:O6:20:MET:HG3	2.17	0.58
36:5:437:G:H2'	36:5:438:A:H1'	1.86	0.58
36:1:2534:G:O6	87:1:3996:OHX:N2	2.37	0.58
87:5:4016:OHX:N3	87:5:4211:OHX:N1	2.51	0.58
68:O2:63:THR:HA	68:O2:66:LEU:HD12	2.11	0.58
36:5:1064:A:H5''	36:5:1066:G:C8	2.39	0.58
36:1:1941:C:H1'	36:1:3362:A:C8	2.38	0.58
36:5:1623:G:C2	36:5:1823:A:C2	2.91	0.58
10:S8:153:GLU:HB3	10:S8:156:VAL:H	4.69	0.58
36:5:1264:G:N2	36:5:1265:U:O4	2.37	0.58
36:5:2218:G:H2'	36:5:2219:A:H8	1.67	0.58
36:5:2228:A:H2'	36:5:2229:A:C8	2.39	0.58
1:6:493:U:H5	1:6:496:G:N2	2.01	0.58
6:S4:94:ALA:HB1	26:D4:16:PRO:HB2	1.85	0.58
36:5:3360:C:C2'	36:5:3361:G:H5'	2.32	0.58
1:6:1257:U:O2'	1:6:1258:U:O4'	2.20	0.58
36:5:653:A:OP1	87:5:3977:OHX:N2	2.37	0.58
36:5:2245:C:H2'	36:5:2246:G:O4'	2.04	0.58
36:1:279:U:H2'	36:1:280:U:C6	2.38	0.58
11:S9:146:PHE:O	11:S9:147:MET:HB2	2.24	0.58
11:S9:155:HIS:O	11:S9:157:ASP:N	2.36	0.58
36:1:113:C:OP1	51:M5:147:ARG:NE	2.37	0.58
41:L4:123:ALA:O	41:L4:126:ILE:HB	2.03	0.58
43:L6:58:LEU:HD21	43:L6:64:LEU:HB2	1.85	0.58
36:1:526:C:H2'	36:1:527:A:O4'	2.03	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:L5:211:LEU:O	42:L5:213:ASP:N	2.81	0.58
42:L5:32:GLN:O	42:L5:36:LEU:HD12	2.03	0.58
5:S3:177:MET:CG	5:S3:178:ARG:H	3.84	0.58
68:O2:85:LEU:HB2	68:O2:117:ILE:HD13	2.14	0.58
1:2:1589:C:H2'	1:2:1590:G:C8	2.38	0.58
40:L3:72:VAL:HG12	59:N3:88:ARG:O	2.45	0.58
56:N0:91:TYR:OH	56:N0:93:GLU:OE2	2.21	0.58
1:2:1291:G:OP1	4:S2:97:ARG:NH2	2.35	0.58
1:2:1683:C:O2'	1:2:1684:U:O5'	2.19	0.58
51:M5:93:LYS:NZ	36:5:2600:C:OP1	154.82	0.58
51:M5:174:ILE:HG21	36:5:63:A:H5''	102.30	0.58
36:1:2402:A:OP2	87:1:4086:OHX:N6	2.36	0.58
40:L3:183:LEU:HD23	40:L3:191:LYS:HB3	1.84	0.58
36:5:438:A:H2'	36:5:494:G:N2	2.15	0.58
52:M6:51:LYS:HD2	52:M6:144:SER:OG	4.36	0.58
54:M8:122:ILE:HG23	54:M8:126:GLN:HB2	1.85	0.58
1:6:1494:C:H2'	1:6:1495:C:H6	1.67	0.58
36:1:1054:A:H5''	36:1:2637:A:H61	1.67	0.58
36:1:550:A:N1	36:1:551:A:N6	2.51	0.58
36:1:33:G:H1'	36:1:52:A:H61	1.69	0.58
1:2:639:U:O2'	1:2:640:U:OP2	2.19	0.58
36:1:1210:U:OP1	46:L9:62:ARG:NH1	2.36	0.58
36:5:126:U:H2'	36:5:127:G:O4'	2.04	0.58
36:1:1441:G:O6	87:1:3926:OHX:N1	2.37	0.58
36:5:1552:G:H5''	36:5:1553:U:OP2	2.03	0.58
1:2:1637:C:N1	35:SM:90:ALA:HA	2.19	0.58
34:SR:50:ASP:O	34:SR:52:GLN:N	2.36	0.58
36:5:241:G:N2	36:5:242:C:C2	2.72	0.58
42:L5:119:TYR:CD1	42:L5:141:PRO:HB3	2.38	0.58
36:5:2801:A:O2'	36:5:2802:A:H2'	2.04	0.58
36:1:83:U:H2'	36:1:84:U:O4'	2.02	0.58
1:6:892:A:H2'	1:6:893:U:O4'	2.03	0.58
1:6:628:G:H8	1:6:628:G:O5'	1.86	0.58
64:N8:117:ARG:HG3	36:5:716:A:N7	151.87	0.58
36:1:1071:U:O2'	36:1:1072:G:OP2	2.21	0.58
36:5:5:G:C6	38:8:155:A:C2	2.92	0.58
42:L5:222:LEU:HD23	42:L5:222:LEU:H	1.69	0.58
1:2:448:C:OP1	6:S4:28:ALA:HA	2.04	0.58
28:D6:90:GLU:HB3	28:D6:93:LYS:NZ	5.26	0.58
44:L7:65:ALA:HB1	44:L7:76:TYR:CD1	3.37	0.58
28:D6:23:CYS:HB3	28:D6:26:CYS:HB2	5.51	0.58
51:M5:27:VAL:HB	51:M5:122:ASN:ND2	2.18	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1367:G:C2	1:2:1368:G:C8	2.91	0.58
7:S5:25:LEU:HB2	18:C6:27:GLY:HA3	1.86	0.58
1:6:1503:A:H2'	1:6:1504:G:O4'	2.04	0.58
23:D1:83:TRP:HH2	23:D1:85:TYR:CD2	2.90	0.58
55:M9:4:LEU:HB3	55:M9:7:GLN:HB2	1.86	0.58
41:L4:354:VAL:O	41:L4:358:THR:OG1	2.17	0.58
42:L5:270:LYS:HG3	42:L5:273:ARG:N	6.94	0.58
39:L2:42:ARG:HD2	39:L2:87:PHE:CD1	2.38	0.58
36:1:3178:A:C2	52:M6:115:LYS:HG2	2.38	0.58
49:M3:123:ILE:HG22	71:O5:118:ILE:HA	1.85	0.58
51:M5:60:VAL:O	51:M5:61:ILE:HD13	3.20	0.58
36:1:3141:A:N1	36:1:3144:G:H1'	2.18	0.58
76:Q0:77:ILE:HG23	76:Q0:78:ILE:N	3.61	0.58
44:L7:27:ALA:O	44:L7:31:ALA:N	2.31	0.58
36:1:3120:C:O2'	36:1:3121:U:H6	1.85	0.58
74:O8:51:LEU:N	36:5:1613:A:OP1	133.67	0.58
1:6:195:G:H2'	1:6:196:G:H5''	1.85	0.58
1:2:823:G:O2'	1:2:824:G:O5'	2.22	0.58
1:6:1107:G:C5	1:6:1108:G:C6	2.92	0.58
36:1:2138:A:C8	73:O7:3:LYS:HG2	2.39	0.58
36:1:761:A:C6	36:1:771:A:H1'	2.39	0.58
36:5:274:G:O6	87:5:4060:OHX:N1	2.37	0.58
28:D6:90:GLU:O	28:D6:93:LYS:HB2	2.04	0.58
67:O1:98:VAL:HG13	67:O1:100:SER:N	2.18	0.58
16:C4:112:ILE:HG22	16:C4:113:GLY:H	2.11	0.58
1:2:1121:C:H2'	1:2:1122:G:C8	2.38	0.58
45:L8:177:TYR:HE2	45:L8:223:ALA:HA	1.78	0.58
36:5:1345:G:N7	87:5:4061:OHX:N5	2.51	0.58
34:SR:49:GLY:HA2	34:SR:54:PHE:CE1	4.54	0.58
25:D3:43:PHE:HZ	25:D3:104:LEU:HB2	3.00	0.58
28:D6:10:ARG:NH2	28:D6:35:ALA:O	4.51	0.58
11:S9:110:GLN:HA	11:S9:129:ILE:CD1	2.33	0.58
11:S9:136:VAL:HG22	11:S9:156:ILE:HG23	2.54	0.58
47:M0:86:HIS:HB3	47:M0:139:ARG:HG2	1.85	0.58
44:L7:184:LEU:O	44:L7:186:HIS:N	2.36	0.58
18:C6:4:VAL:HG11	18:C6:23:LYS:HB2	5.58	0.58
7:S5:113:ILE:HG23	7:S5:191:ALA:HB2	1.84	0.58
7:S5:142:PRO:HG3	7:S5:214:LYS:HB2	3.88	0.58
42:L5:53:VAL:HG21	42:L5:162:ALA:HB1	1.85	0.58
15:C3:88:LEU:HG	15:C3:125:LEU:HD13	3.45	0.58
68:O2:26:HIS:HB2	36:5:655:C:OP1	163.70	0.58
23:D1:83:TRP:CH2	23:D1:85:TYR:HD2	2.63	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:C8:18:LEU:O	20:C8:20:THR:N	3.08	0.58
63:N7:4:PHE:CZ	66:O0:35:ARG:HA	2.39	0.58
68:O2:83:GLU:O	68:O2:86:THR:OG1	2.22	0.58
1:2:1460:A:H5'	1:2:1461:C:OP2	2.04	0.58
36:1:3259:U:C6	36:1:3259:U:H5'	2.33	0.58
34:SR:255:ALA:HA	34:SR:260:ILE:HA	3.15	0.58
40:L3:169:THR:HG23	40:L3:169:THR:O	2.91	0.58
4:S2:88:LYS:NZ	1:6:1302:U:OP2	385.19	0.58
1:6:1767:G:OP1	1:6:1770:U:H4'	2.03	0.58
72:O6:88:GLU:O	72:O6:90:MET:N	2.37	0.58
76:Q0:80:PRO:O	76:Q0:82:LEU:N	4.48	0.58
39:L2:64:ARG:HH12	45:L8:38:GLN:HA	3.08	0.58
42:L5:220:SER:O	42:L5:220:SER:OG	4.74	0.58
22:D0:24:ILE:HG23	22:D0:116:VAL:HG22	1.85	0.58
34:SR:108:SER:OG	34:SR:109:ASP:N	2.37	0.58
10:S8:12:SER:HA	10:S8:18:ARG:HH12	1.67	0.58
54:M8:141:ARG:HD3	36:5:743:C:O2	175.56	0.58
55:M9:67:ALA:O	55:M9:71:ARG:HG2	2.04	0.58
45:L8:132:VAL:HG23	45:L8:199:ALA:H	1.69	0.58
1:6:696:C:H4'	1:6:697:C:C6	2.39	0.58
13:C1:131:ILE:HB	13:C1:135:VAL:HG12	2.65	0.58
15:C3:62:GLN:HB2	15:C3:65:VAL:HB	1.86	0.58
44:L7:64:GLN:HA	44:L7:67:ARG:HG3	3.49	0.58
1:2:484:C:H42	1:2:504:U:H3	1.50	0.58
4:S2:187:LEU:HD21	4:S2:218:ILE:HD11	1.86	0.58
42:L5:274:GLN:OE1	37:7:60:G:N2	333.08	0.58
10:S8:32:GLN:NE2	1:6:1675:C:O2	271.71	0.58
36:5:2136:C:O2'	36:5:2137:U:H5'	2.04	0.58
36:1:665:A:H1'	49:M3:14:PHE:CE1	2.39	0.58
37:7:70:U:C2	37:7:71:G:C8	2.91	0.58
36:5:1352:A:H4'	36:5:1353:U:OP1	2.03	0.58
1:2:122:U:O4	87:2:2049:OHX:N3	2.36	0.58
36:1:2810:C:H2'	36:1:2811:A:H5'	1.85	0.58
30:D8:5:THR:O	30:D8:7:VAL:N	3.18	0.58
34:SR:273:ASP:OD1	34:SR:275:ARG:NH1	2.37	0.58
36:1:2253:G:H1	36:1:2263:C:H42	1.52	0.58
1:2:1474:G:H2'	1:2:1475:A:H8	1.69	0.58
20:C8:42:TYR:N	1:6:1566:U:OP1	359.87	0.58
7:S5:38:THR:HG21	18:C6:57:LEU:HG	3.16	0.58
7:S5:36:ALA:O	7:S5:38:THR:N	2.37	0.58
1:2:1560:U:O2'	87:2:2111:OHX:N3	2.36	0.58
5:S3:98:ALA:CB	5:S3:171:ALA:H	3.18	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
64:N8:64:GLN:HB2	64:N8:67:HIS:NE2	2.19	0.58
72:O6:30:LYS:HE3	36:5:266:A:H2'	102.63	0.58
16:C4:71:CYS:O	16:C4:75:GLY:N	3.78	0.58
19:C7:106:THR:HA	19:C7:109:LEU:HB3	3.14	0.58
23:D1:18:SER:O	23:D1:72:LEU:HD11	3.71	0.58
4:S2:137:ILE:HG13	4:S2:138:PRO:HD2	3.34	0.58
63:N7:3:LYS:HG2	66:O0:35:ARG:O	3.43	0.58
1:2:1186:U:OP2	1:2:1456:C:H1'	2.04	0.58
36:1:3000:A:O3'	40:L3:120:LYS:NZ	2.37	0.58
56:N0:14:LEU:O	56:N0:16:THR:HG22	2.04	0.58
36:5:3224:G:O6	87:5:3994:OHX:N6	2.37	0.58
34:SR:214:ALA:HB1	34:SR:240:VAL:HB	2.86	0.58
40:L3:46:PHE:CE2	40:L3:205:VAL:HG22	3.54	0.58
36:5:38:U:OP1	36:5:935:U:O2'	2.20	0.58
36:5:3275:U:O2'	36:5:3276:G:N1	2.37	0.58
51:M5:54:LYS:O	51:M5:56:LYS:N	2.36	0.58
72:O6:21:THR:OG1	72:O6:21:THR:O	2.47	0.58
46:L9:94:TYR:CD1	46:L9:94:TYR:N	2.71	0.58
70:O4:41:ARG:HE	70:O4:56:THR:HG21	2.50	0.58
36:5:3084:C:H3'	36:5:3085:G:H8	1.69	0.58
36:1:733:G:O5'	36:1:733:G:H8	1.86	0.58
1:2:339:C:OP2	10:S8:10:LYS:NZ	2.37	0.58
1:2:712:G:N2	1:2:726:C:O2'	2.36	0.58
36:1:686:G:OP2	49:M3:39:ARG:NH2	2.37	0.58
37:3:61:G:H2'	37:3:62:U:H6	1.69	0.58
1:2:763:G:N2	1:2:773:C:O2	2.37	0.58
49:M3:57:VAL:HG12	49:M3:112:ASN:ND2	4.73	0.58
40:L3:17:LEU:HG	40:L3:18:PRO:HA	1.85	0.58
52:M6:61:ALA:HA	52:M6:70:PRO:HD2	2.35	0.58
36:1:3379:C:H4'	40:L3:315:GLY:HA2	1.86	0.58
36:5:436:A:C2	36:5:624:G:C2	2.91	0.58
36:1:2267:C:H2'	36:1:2268:U:O4'	2.04	0.58
35:SM:43:ASP:O	35:SM:46:LYS:HB3	2.04	0.58
36:5:2578:U:OP1	87:5:4125:OHX:N4	2.37	0.58
1:6:595:G:OP2	87:6:2107:OHX:N6	2.37	0.57
44:L7:210:PRO:HA	44:L7:242:SER:O	2.87	0.57
45:L8:245:LYS:HE3	45:L8:246:MET:HB3	1.86	0.57
6:S4:57:ASN:HD22	6:S4:60:GLU:HG3	1.69	0.57
46:L9:102:ASN:HA	46:L9:136:PHE:CZ	2.38	0.57
36:5:1475:A:H2'	36:5:1476:G:H5'	1.85	0.57
49:M3:64:LYS:HA	64:N8:69:TRP:CE3	2.59	0.57
1:6:1746:A:OP2	87:6:2132:OHX:N1	2.37	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:S6:116:LYS:NZ	8:S6:120:GLU:OE2	2.29	0.57
16:C4:103:ARG:CZ	28:D6:49:ALA:HA	4.91	0.57
4:S2:53:ILE:HG23	4:S2:56:ILE:HD12	1.86	0.57
4:S2:59:HIS:HB2	4:S2:61:LEU:HD11	3.18	0.57
63:N7:22:LYS:HG3	63:N7:49:TYR:OH	2.08	0.57
57:N1:72:VAL:CG2	57:N1:74:VAL:HG23	2.34	0.57
59:N3:87:ARG:HH12	59:N3:137:VAL:HG21	1.69	0.57
72:O6:81:THR:HB	72:O6:84:LYS:NZ	4.37	0.57
16:C4:125:SER:OG	16:C4:126:THR:N	2.35	0.57
39:L2:80:GLU:HB2	39:L2:170:ALA:HA	1.85	0.57
36:1:2409:G:H1	36:1:2812:C:N4	1.97	0.57
40:L3:117:ARG:NH1	40:L3:175:LYS:HD3	2.19	0.57
1:6:36:C:H2'	1:6:37:U:O4'	2.03	0.57
8:S6:56:ASN:ND2	8:S6:60:GLY:O	2.28	0.57
72:O6:86:LYS:HD3	72:O6:89:GLU:OE2	3.46	0.57
1:6:676:G:H2'	1:6:677:G:C8	2.39	0.57
36:1:1696:A:H2'	36:1:1697:A:C8	2.39	0.57
23:D1:17:CYS:HB2	23:D1:24:ILE:HD11	1.86	0.57
59:N3:39:VAL:O	59:N3:42:SER:HB3	2.02	0.57
1:6:1513:G:O2'	1:6:1515:A:H1'	2.03	0.57
1:6:642:G:N2	1:6:692:C:O2	2.29	0.57
38:4:10:A:H2'	38:4:11:C:C6	2.39	0.57
33:E1:91:ILE:HG12	33:E1:92:LYS:H	2.49	0.57
36:5:2997:G:O2'	36:5:3396:U:OP1	2.19	0.57
6:S4:158:ASP:OD2	6:S4:174:LYS:NZ	2.28	0.57
24:D2:53:ILE:HG12	24:D2:60:LYS:HB2	1.86	0.57
36:1:1095:U:O2	57:N1:128:LEU:N	2.37	0.57
48:M1:125:MET:SD	48:M1:127:PHE:HE1	3.01	0.57
49:M3:157:ARG:HG2	49:M3:158:ALA:N	2.19	0.57
35:SM:88:ARG:NH2	35:SM:89:ARG:HA	2.19	0.57
37:3:60:G:C2	37:3:61:G:C8	2.91	0.57
1:6:1715:G:O6	1:6:1716:C:N4	2.37	0.57
61:N5:137:ASN:HA	61:N5:141:TYR:H	1.68	0.57
5:S3:116:ARG:HH11	5:S3:116:ARG:HG3	3.73	0.57
36:1:85:A:O2'	87:1:4139:OHX:N6	2.36	0.57
37:3:77:G:HO2'	37:3:78:U:P	2.27	0.57
1:2:1057:U:H3	1:2:1061:A:H2	1.50	0.57
1:6:836:U:H2'	1:6:837:G:C8	2.39	0.57
36:1:193:C:H2'	36:1:194:U:C6	2.38	0.57
41:L4:342:LYS:O	41:L4:342:LYS:HG3	4.44	0.57
36:5:1482:A:H4'	36:5:1483:G:OP2	2.03	0.57
36:5:792:G:H2'	36:5:793:C:C6	2.38	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1306:G:C5	52:M6:62:THR:HA	2.39	0.57
53:M7:36:ILE:O	53:M7:39:TRP:CD1	2.94	0.57
53:M7:41:LEU:O	53:M7:45:GLN:HG3	2.03	0.57
41:L4:192:GLY:O	41:L4:195:ARG:N	2.71	0.57
56:N0:70:THR:O	56:N0:70:THR:OG1	3.03	0.57
21:C9:70:GLN:N	21:C9:70:GLN:HE21	2.77	0.57
42:L5:63:GLN:HB2	42:L5:65:ILE:HD11	1.86	0.57
12:C0:69:THR:OG1	12:C0:71:GLU:OE2	2.21	0.57
17:C5:44:ARG:HH21	17:C5:52:LYS:NZ	1.99	0.57
31:D9:22:ARG:NE	31:D9:36:LEU:O	2.35	0.57
23:D1:15:ARG:O	23:D1:16:LYS:HE3	2.04	0.57
6:S4:105:VAL:HG13	6:S4:243:GLY:HA2	1.86	0.57
36:1:2640:A:H2'	36:1:2641:U:C6	2.40	0.57
36:5:2192:C:O2'	36:5:2312:A:N1	2.23	0.57
72:O6:79:SER:HB3	72:O6:82:ARG:CG	6.01	0.57
1:2:1000:C:C5	1:2:1003:A:H2'	2.39	0.57
1:2:1470:C:C2	1:2:1573:A:N7	2.72	0.57
40:L3:83:PRO:HB3	40:L3:202:THR:HG23	1.86	0.57
8:S6:70:PRO:HD3	8:S6:101:ILE:HD12	2.54	0.57
58:N2:43:VAL:O	58:N2:45:GLY:N	2.87	0.57
26:D4:35:VAL:HG11	26:D4:40:LEU:HD21	1.86	0.57
36:1:1696:A:C2	36:1:1697:A:C5	2.92	0.57
46:L9:129:ARG:HG2	46:L9:129:ARG:NH1	4.57	0.57
32:E0:49:LEU:HD12	32:E0:51:ASN:H	1.69	0.57
36:1:1489:A:OP1	70:O4:10:ARG:HD3	2.04	0.57
1:6:190:C:N4	1:6:196:G:O6	2.37	0.57
36:1:2946:A:H5''	36:1:2947:G:H5'	1.85	0.57
42:L5:68:THR:HG22	42:L5:70:THR:N	2.19	0.57
50:M4:22:LEU:HD23	50:M4:99:TRP:CZ2	3.57	0.57
8:S6:79:LYS:HD3	8:S6:79:LYS:H	4.48	0.57
1:6:1736:G:H2'	1:6:1737:G:C8	2.38	0.57
36:1:1782:U:H2'	36:1:1783:U:O4'	2.04	0.57
36:5:593:C:O2'	36:5:594:U:OP1	2.20	0.57
36:1:610:G:C8	41:L4:312:VAL:HG21	2.39	0.57
36:1:2621:G:C2'	36:1:2622:C:H5'	2.34	0.57
36:5:1152:G:H22	36:5:1200:A:H61	1.51	0.57
36:5:1882:G:H2'	36:5:1883:A:H8	1.70	0.57
1:2:1545:A:H2'	1:2:1546:G:C8	2.38	0.57
13:C1:44:THR:O	13:C1:44:THR:OG1	2.21	0.57
10:S8:191:PHE:O	10:S8:194:ARG:HB3	2.92	0.57
41:L4:23:PRO:HD3	41:L4:255:PHE:CE1	2.39	0.57
19:C7:25:THR:OG1	19:C7:27:ASP:N	3.46	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:D8:42:ARG:HE	30:D8:56:LEU:HD13	6.38	0.57
42:L5:152:ARG:O	42:L5:154:THR:HG22	4.70	0.57
31:D9:38:ILE:HB	31:D9:43:PHE:HB2	3.22	0.57
15:C3:99:ARG:O	15:C3:103:GLU:HG2	2.03	0.57
63:N7:135:ARG:NE	36:5:2556:C:O2'	200.03	0.57
55:M9:133:LYS:HE2	55:M9:134:HIS:CE1	5.71	0.57
63:N7:89:VAL:HG11	63:N7:93:LYS:HE3	1.85	0.57
62:N6:49:PRO:O	62:N6:115:ARG:NH2	2.37	0.57
38:4:52:A:N1	75:O9:35:ILE:HD13	2.19	0.57
34:SR:260:ILE:HB	34:SR:274:LEU:HB2	1.86	0.57
1:2:1537:C:N3	87:2:2154:OHX:N3	2.52	0.57
72:O6:5:THR:OG1	72:O6:7:ILE:HG12	2.03	0.57
51:M5:143:ARG:HH21	71:O5:92:LEU:HD23	1.68	0.57
26:D4:8:ARG:O	26:D4:10:ARG:HG3	2.04	0.57
36:5:2696:A:H2'	36:5:2697:A:C8	2.38	0.57
76:Q0:90:ASN:N	76:Q0:90:ASN:OD1	2.52	0.57
34:SR:116:ASP:OD2	34:SR:120:SER:N	2.37	0.57
37:7:52:G:O2'	37:7:53:U:H5'	2.04	0.57
14:C2:88:LEU:H	14:C2:140:PHE:HE1	1.87	0.57
1:6:1382:A:HO2'	1:6:1383:G:H8	1.51	0.57
51:M5:35:VAL:O	51:M5:64:VAL:HA	2.03	0.57
6:S4:146:THR:HG21	1:6:123:G:N2	339.84	0.57
1:6:315:A:C2	1:6:353:A:C5	2.92	0.57
36:5:582:G:O6	87:5:4211:OHX:N5	2.36	0.57
53:M7:69:ARG:HD3	36:5:3308:C:O2	186.53	0.57
42:L5:128:GLU:HG3	42:L5:192:PRO:HB3	5.47	0.57
45:L8:28:HIS:O	36:5:2563:G:H5'	207.46	0.57
45:L8:218:ILE:O	45:L8:221:ASN:N	3.03	0.57
36:5:1366:A:C2	36:5:1367:G:C4	2.92	0.57
31:D9:41:GLN:HG2	1:6:1433:G:C8	398.19	0.57
36:5:3216:G:N1	36:5:3259:U:OP1	2.30	0.57
40:L3:126:LYS:HB2	36:5:3295:A:OP2	195.02	0.57
36:1:533:A:C8	36:1:535:G:C8	2.92	0.57
36:1:559:A:H2'	36:1:560:G:O5'	2.05	0.57
33:E1:117:LEU:O	33:E1:118:ARG:HB2	2.02	0.57
36:5:1585:C:H5"	38:8:109:A:O2'	2.03	0.57
62:N6:55:GLU:HB3	62:N6:107:THR:OG1	2.24	0.57
1:2:130:C:O2'	1:2:131:C:OP1	2.21	0.57
42:L5:3:PHE:O	42:L5:6:ASP:N	2.34	0.57
21:C9:133:ASP:OD2	21:C9:133:ASP:N	2.56	0.57
36:1:1925:U:O2	79:Q3:19:GLY:HA2	2.04	0.57
1:2:1734:U:H2'	1:2:1735:U:O4'	2.04	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:S9:77:ILE:O	11:S9:81:VAL:HG23	2.13	0.57
11:S9:81:VAL:HG22	11:S9:86:LEU:HD23	1.85	0.57
36:5:359:U:C2	36:5:920:A:C6	2.93	0.57
18:C6:58:ASP:OD2	18:C6:59:LYS:N	2.36	0.57
7:S5:93:LEU:HD23	7:S5:172:ILE:HG23	3.93	0.57
36:1:973:A:OP1	54:M8:12:ARG:NH1	2.37	0.57
42:L5:123:GLU:HA	42:L5:248:ARG:NH1	2.19	0.57
21:C9:104:VAL:O	21:C9:108:LEU:N	3.28	0.57
5:S3:55:THR:O	5:S3:59:LEU:N	2.65	0.57
36:1:1709:C:H2'	36:1:1710:C:C6	2.38	0.57
1:6:1255:G:O2'	1:6:1256:A:O5'	2.17	0.57
17:C5:127:ARG:NH2	35:SM:65:THR:OG1	3.41	0.57
36:1:2722:U:H4'	57:N1:88:ARG:HB2	1.86	0.57
40:L3:296:THR:CG2	40:L3:298:PHE:H	2.42	0.57
9:S7:93:LEU:HD21	9:S7:129:LEU:HD23	1.97	0.57
8:S6:132:ARG:O	1:6:68:A:N6	331.30	0.57
18:C6:95:LYS:HG2	18:C6:96:TYR:CE1	5.83	0.57
34:SR:301:LEU:HB3	34:SR:313:TRP:HB2	2.48	0.57
29:D7:61:THR:OG1	29:D7:62:ILE:N	2.88	0.57
64:N8:103:ASP:HA	64:N8:126:LYS:HB2	2.09	0.57
1:2:595:G:H2'	1:2:596:C:C6	2.39	0.57
40:L3:41:VAL:HG11	40:L3:194:TRP:CG	2.39	0.57
60:N4:37:ALA:O	60:N4:41:LYS:HG3	2.04	0.57
60:N4:31:PHE:CZ	60:N4:40:PHE:CD1	2.92	0.57
1:6:1346:A:C2	1:6:1371:A:C4	2.92	0.57
33:E1:149:LYS:N	33:E1:149:LYS:HE3	5.39	0.57
87:5:4016:OHX:N6	87:5:4211:OHX:N4	2.53	0.57
45:L8:26:LEU:HD13	63:N7:53:VAL:HG11	1.86	0.57
30:D8:22:ARG:HD2	1:6:1619:C:C2	342.34	0.57
36:1:550:A:N6	36:1:551:A:H62	2.01	0.57
40:L3:159:ARG:HG2	40:L3:182:GLN:HA	3.45	0.57
36:1:3170:A:C2'	36:1:3171:U:H5'	2.34	0.57
40:L3:347:SER:C	40:L3:349:LYS:H	2.89	0.57
74:O8:63:LYS:HA	74:O8:66:ILE:HG13	2.73	0.57
44:L7:136:TYR:CZ	44:L7:231:ASN:HB2	2.42	0.57
36:1:577:C:OP1	44:L7:142:SER:OG	2.19	0.57
6:S4:214:LEU:HD13	6:S4:244:ILE:HG21	1.85	0.57
1:2:1354:G:N3	1:2:1372:U:N3	2.52	0.57
36:5:891:G:C6	36:5:892:U:C4	2.92	0.57
3:S1:219:LYS:HZ1	79:Q3:92:ALA:H	12.91	0.57
51:M5:37:HIS:CE1	51:M5:63:ARG:HB3	2.40	0.57
1:6:1680:G:O6	87:6:2196:OHX:N4	2.37	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:186:U:H5''	36:1:187:A:OP2	2.04	0.57
36:5:92:G:H5'	36:5:93:C:O5'	2.04	0.57
3:S1:152:ARG:HB3	1:6:1799:U:N3	339.31	0.57
47:M0:86:HIS:ND1	47:M0:139:ARG:HD3	2.41	0.57
44:L7:154:GLY:O	44:L7:160:ARG:HA	2.03	0.57
45:L8:68:ARG:O	45:L8:69:LEU:HB3	4.73	0.57
1:6:1582:U:C4	1:6:1614:A:C8	2.93	0.57
5:S3:53:THR:O	5:S3:90:ARG:NH2	2.38	0.57
2:S0:185:ARG:HG3	23:D1:45:ALA:HB3	1.86	0.57
63:N7:3:LYS:HE3	66:O0:36:GLN:HG3	1.85	0.57
36:5:1317:A:C4	36:5:1319:G:N7	2.72	0.57
52:M6:36:VAL:HG11	52:M6:108:ILE:HG23	1.87	0.57
36:5:3224:G:N7	87:5:3994:OHX:N6	2.52	0.57
39:L2:97:ASN:HA	79:Q3:87:ARG:NH1	3.18	0.57
3:S1:107:THR:N	16:C4:116:GLU:OE1	3.29	0.57
49:M3:90:ALA:HB1	49:M3:95:ILE:HD12	1.86	0.57
51:M5:169:LYS:HG2	51:M5:172:ARG:HH12	1.69	0.57
1:6:1220:C:H2'	1:6:1221:A:C8	2.37	0.57
40:L3:152:LYS:CG	40:L3:192:VAL:HG11	3.06	0.57
4:S2:238:SER:OG	4:S2:238:SER:O	3.61	0.57
58:N2:90:ARG:O	58:N2:92:TRP:N	2.34	0.57
22:D0:26:LEU:HD23	22:D0:114:VAL:HG13	1.85	0.57
25:D3:29:TYR:CE2	25:D3:33:LEU:HD11	2.39	0.57
42:L5:40:HIS:ND1	57:N1:69:LYS:HA	2.32	0.57
61:N5:38:LEU:HD22	61:N5:40:LEU:HD22	5.13	0.57
36:5:160:G:N2	36:5:262:U:C2	2.73	0.57
87:6:2064:OHX:N1	87:6:2152:OHX:N4	2.52	0.57
36:1:3165:A:O2'	36:1:3166:C:O4'	2.19	0.57
1:6:1263:G:H2'	1:6:1264:G:O4'	2.03	0.57
36:1:3169:U:H2'	36:1:3170:A:O4'	2.04	0.57
44:L7:64:GLN:HA	44:L7:67:ARG:HD2	1.86	0.57
5:S3:11:LEU:HD12	22:D0:86:ILE:HD13	1.85	0.57
15:C3:42:ARG:HH11	15:C3:42:ARG:CG	3.94	0.57
36:1:721:G:C2	36:1:722:G:C8	2.93	0.57
36:5:2681:U:C2'	36:5:2682:C:H5'	2.34	0.57
1:6:644:C:H42	1:6:690:G:H1	1.50	0.57
36:1:2810:C:C2'	36:1:2811:A:H5'	2.34	0.57
33:E1:109:ASP:O	33:E1:111:GLU:N	2.37	0.57
1:2:76:A:H2'	1:2:80:A:H62	1.69	0.57
73:O7:58:THR:O	73:O7:61:THR:HG23	2.05	0.57
36:5:308:A:H5'	36:5:2223:A:O2'	2.05	0.57
36:1:2895:G:N2	36:1:2906:C:O2	2.38	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:C8:87:ASN:OD1	20:C8:88:ARG:N	2.38	0.57
36:5:2987:A:H2'	36:5:2988:C:H6	1.64	0.57
52:M6:62:THR:HA	36:5:1306:G:C6	234.08	0.57
36:1:2352:A:H2'	36:1:2353:G:C8	2.39	0.57
1:6:478:A:C2	1:6:479:C:C2	2.93	0.57
47:M0:46:PHE:HB3	47:M0:140:THR:HA	1.85	0.57
36:1:1171:G:N7	87:1:3959:OHX:N2	2.52	0.57
44:L7:144:ILE:O	44:L7:148:VAL:HG23	2.23	0.57
51:M5:31:ARG:HB2	51:M5:129:TYR:OH	2.04	0.57
1:2:1534:G:OP2	27:D5:74:SER:OG	2.22	0.57
67:O1:31:ARG:O	67:O1:35:GLU:HB2	2.05	0.57
12:C0:46:LEU:O	12:C0:50:THR:HG23	2.23	0.57
17:C5:33:PHE:O	17:C5:35:LYS:N	2.58	0.57
21:C9:31:PRO:HB2	21:C9:33:TYR:CE1	3.35	0.57
77:Q1:5:TRP:CG	1:6:1783:C:H5	301.70	0.57
3:S1:62:LYS:O	3:S1:64:ARG:N	2.38	0.57
23:D1:40:ASP:HB3	23:D1:46:ILE:HD11	2.02	0.57
4:S2:226:THR:HB	4:S2:228:ASN:HD22	6.65	0.57
63:N7:17:ARG:NH2	63:N7:18:TYR:OH	2.38	0.57
36:5:1414:G:O6	87:5:4142:OHX:N1	2.37	0.57
39:L2:174:ARG:HA	79:Q3:69:TYR:CE2	2.94	0.57
40:L3:62:ARG:O	40:L3:68:HIS:HB2	2.89	0.57
1:2:1174:C:H42	1:2:1465:C:N4	2.03	0.57
7:S5:76:ARG:HD3	18:C6:122:ARG:NH2	2.61	0.57
1:6:415:C:O2'	1:6:418:G:O6	2.19	0.57
71:O5:21:LEU:HD21	71:O5:55:LEU:HG	1.87	0.57
36:5:2255:A:H5'	36:5:2261:G:N2	2.19	0.57
25:D3:20:ARG:O	25:D3:24:TRP:CD1	2.58	0.57
46:L9:170:LYS:O	46:L9:172:ILE:HG22	2.49	0.57
10:S8:25:ARG:O	10:S8:28:GLU:HG2	2.54	0.57
1:6:1208:A:N1	1:6:1455:G:N2	2.53	0.57
36:5:3057:U:O2'	36:5:3059:G:OP1	2.21	0.57
38:8:15:G:OP2	87:8:218:OHX:N3	2.38	0.57
1:2:187:G:H1'	1:2:199:G:H22	1.69	0.57
1:6:190:C:H1'	1:6:191:C:H5'	1.86	0.57
50:M4:65:LEU:HD11	56:N0:152:LEU:HD12	2.19	0.57
69:O3:19:SER:OG	69:O3:20:LYS:N	4.09	0.57
65:N9:4:SER:O	65:N9:5:LYS:O	2.21	0.57
41:L4:317:PRO:O	41:L4:319:LYS:N	2.38	0.57
15:C3:30:SER:O	15:C3:34:ILE:HG13	3.10	0.57
15:C3:67:THR:O	15:C3:69:ASN:N	2.37	0.57
1:6:736:C:H2'	1:6:737:A:C8	2.40	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:874:U:OP1	40:L3:241:LYS:HG3	2.04	0.57
54:M8:147:ARG:NH2	36:5:670:C:OP1	164.27	0.57
79:Q3:39:CYS:SG	79:Q3:42:CYS:N	3.55	0.57
1:2:47:A:N7	1:2:98:U:O2'	2.36	0.57
32:E0:20:LYS:HD2	32:E0:21:VAL:H	4.48	0.57
36:1:1454:A:H5"	36:1:1455:U:H5'	1.86	0.57
51:M5:76:PRO:O	51:M5:78:GLY:N	2.80	0.57
25:D3:90:ASP:HB2	1:6:568:G:H4'	374.82	0.57
52:M6:59:ARG:NH1	36:5:1307:G:OP1	254.34	0.57
36:1:2167:A:H8	36:1:2167:A:O5'	1.87	0.57
75:O9:43:ASN:OD1	75:O9:45:ARG:N	2.60	0.57
28:D6:79:ILE:CA	28:D6:84:VAL:HG11	2.33	0.57
36:1:2851:A:H2'	36:1:2852:C:C6	2.39	0.57
44:L7:169:ILE:O	44:L7:172:ASN:N	2.94	0.57
6:S4:31:PRO:HB2	6:S4:38:LEU:HD22	1.86	0.57
41:L4:33:ASP:O	41:L4:36:HIS:N	2.37	0.57
1:2:1358:G:H2'	1:2:1359:C:C6	2.40	0.57
7:S5:128:ASN:O	7:S5:130:ILE:N	2.90	0.57
7:S5:34:GLN:O	7:S5:38:THR:OG1	3.27	0.57
42:L5:106:ALA:HA	42:L5:171:LEU:HD12	3.13	0.57
42:L5:104:LEU:HD11	42:L5:108:ARG:NH2	2.20	0.57
17:C5:15:HIS:ND1	17:C5:16:SER:N	3.96	0.57
5:S3:136:VAL:HG22	5:S3:186:VAL:HG13	1.86	0.57
1:2:312:A:C2	1:2:314:C:H2'	2.39	0.57
3:S1:35:PRO:HG3	3:S1:98:THR:O	2.04	0.57
54:M8:88:THR:HA	54:M8:107:THR:CG2	2.35	0.57
36:1:624:G:O6	87:1:4163:OHX:N5	2.38	0.57
63:N7:29:HIS:ND1	63:N7:40:HIS:NE2	2.71	0.57
66:O0:70:PHE:O	66:O0:72:GLY:N	2.37	0.57
73:O7:72:ARG:NH1	38:8:95:G:OP2	51.34	0.57
1:2:1524:A:H2'	1:2:1525:A:C8	2.40	0.57
79:Q3:32:GLN:HB3	79:Q3:69:TYR:O	2.04	0.57
4:S2:90:THR:N	4:S2:93:GLY:O	2.32	0.57
26:D4:122:GLY:C	26:D4:124:ARG:N	2.90	0.57
48:M1:38:GLU:HG3	48:M1:43:GLN:O	2.04	0.57
11:S9:53:ARG:HB3	11:S9:53:ARG:NH2	3.59	0.57
42:L5:215:ASP:O	42:L5:217:GLU:N	4.37	0.57
22:D0:20:ILE:HG13	22:D0:96:PRO:HA	2.65	0.57
1:2:91:G:H2'	1:2:92:A:C8	2.37	0.57
10:S8:138:ASN:HA	10:S8:141:ARG:HD3	3.18	0.57
36:5:182:U:H2'	36:5:183:G:C8	2.40	0.57
52:M6:172:ARG:HD2	36:5:3190:C:H5"	306.99	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1052:U:H5''	36:1:1053:A:OP2	2.05	0.57
36:5:513:G:H2'	36:5:514:G:O4'	2.04	0.57
27:D5:56:THR:H	27:D5:103:ARG:HE	1.50	0.57
36:5:1622:U:H2'	36:5:1623:G:H8	1.70	0.57
62:N6:71:SER:N	62:N6:83:ASP:H	2.72	0.57
36:5:999:G:C6	36:5:1000:C:N4	2.73	0.57
21:C9:68:ARG:HD3	1:6:1523:G:O6	418.37	0.57
1:2:1054:U:H2'	1:2:1055:U:H6	1.70	0.57
36:5:2123:G:N7	87:5:4094:OHX:N1	2.52	0.57
36:5:831:G:O6	87:5:3919:OHX:N2	2.37	0.57
39:L2:220:GLY:O	39:L2:221:LYS:HG3	2.05	0.57
36:1:795:G:O6	87:1:3895:OHX:N3	2.38	0.57
36:1:923:C:H42	36:1:926:A:H1'	1.68	0.57
1:2:372:G:H1'	1:2:612:U:O2	2.04	0.57
78:Q2:12:CYS:SG	78:Q2:74:CYS:CB	2.93	0.57
40:L3:235:THR:O	40:L3:235:THR:HG22	3.07	0.57
51:M5:79:ALA:HB1	51:M5:81:TYR:CE1	2.63	0.57
1:6:88:U:H2'	1:6:89:G:H8	1.69	0.57
45:L8:61:GLN:HA	45:L8:64:ILE:HB	1.86	0.57
10:S8:39:GLY:HA2	10:S8:61:GLU:HB3	1.86	0.57
41:L4:193:LYS:O	41:L4:198:ARG:HG2	3.83	0.57
7:S5:43:PHE:HB3	7:S5:46:TRP:H	2.36	0.57
5:S3:29:LEU:O	5:S3:31:GLU:N	3.56	0.57
3:S1:34:ALA:N	3:S1:41:ARG:O	2.23	0.57
1:2:1068:C:H2'	1:2:1069:A:C8	2.39	0.57
1:2:1449:U:O4	87:2:2029:OHX:N1	2.37	0.57
6:S4:163:ASP:HB3	6:S4:166:SER:O	2.05	0.57
43:L6:154:LEU:O	43:L6:157:GLN:N	2.38	0.57
44:L7:224:ILE:HG22	56:N0:36:ILE:HD13	1.86	0.57
36:5:368:G:OP2	87:5:3920:OHX:N4	2.37	0.57
36:1:2554:A:H5''	39:L2:87:PHE:CE2	2.40	0.57
40:L3:167:ARG:C	40:L3:169:THR:H	2.08	0.57
49:M3:50:PRO:HB3	49:M3:138:VAL:O	2.30	0.57
62:N6:2:ALA:N	36:5:212:G:OP2	78.16	0.57
36:1:609:G:H4'	36:1:609:G:OP1	2.05	0.57
60:N4:6:ASP:HB3	60:N4:10:GLY:H	1.70	0.57
37:3:36:C:O2'	37:3:37:G:H5'	2.04	0.57
1:6:1498:G:H1	1:6:1509:C:H42	1.53	0.57
38:4:124:G:OP2	87:4:234:OHX:N2	2.38	0.57
42:L5:287:ALA:HA	42:L5:290:ILE:HD11	1.85	0.57
22:D0:37:VAL:HG21	22:D0:112:VAL:HG21	3.79	0.57
18:C6:77:GLN:O	18:C6:81:ILE:HG23	2.04	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:C5:56:PHE:HD1	17:C5:57:MET:HG2	1.69	0.57
1:6:1314:U:O2'	1:6:1315:U:OP2	2.23	0.57
36:5:2431:C:N4	36:5:2598:G:H1	2.03	0.57
49:M3:57:VAL:HG23	49:M3:147:ILE:HG23	4.93	0.57
3:S1:134:VAL:HB	3:S1:219:LYS:H	4.01	0.57
49:M3:169:THR:O	49:M3:173:ALA:N	2.56	0.57
78:Q2:68:VAL:O	78:Q2:85:LEU:HB2	3.80	0.57
1:2:20:G:H5'	1:2:571:G:C8	2.39	0.57
67:O1:5:LYS:O	67:O1:6:ASP:HB2	2.04	0.57
14:C2:103:LEU:HG	14:C2:116:VAL:HG13	4.73	0.57
32:E0:7:SER:C	32:E0:9:ALA:H	3.49	0.57
36:1:578:A:H5''	36:1:579:G:O5'	2.05	0.57
20:C8:110:ARG:HA	20:C8:113:LEU:HD12	4.04	0.57
11:S9:118:LEU:HD23	11:S9:158:PHE:CE1	2.85	0.57
44:L7:216:VAL:HG23	44:L7:217:PRO:N	2.19	0.57
45:L8:240:ASN:O	45:L8:243:GLN:N	3.86	0.57
51:M5:16:SER:O	51:M5:18:VAL:N	3.15	0.57
41:L4:34:ILE:O	41:L4:38:VAL:HG23	2.05	0.57
43:L6:55:LEU:HD12	43:L6:64:LEU:HD12	2.47	0.57
36:1:2663:G:H5'	42:L5:152:ARG:HD3	1.85	0.57
71:O5:50:SER:O	71:O5:53:CYS:N	2.72	0.57
17:C5:130:ARG:CZ	35:SM:74:LYS:HD3	2.35	0.57
36:1:2723:U:H5'	57:N1:88:ARG:O	2.03	0.57
66:O0:99:ASP:HB2	66:O0:103:THR:HG23	3.47	0.57
40:L3:47:LEU:HG	40:L3:335:ILE:HD11	2.22	0.57
13:C1:97:TYR:CE1	25:D3:15:LEU:HB3	2.39	0.57
26:D4:27:VAL:HG12	26:D4:29:HIS:CD2	3.47	0.57
1:6:384:G:C6	1:6:385:A:C6	2.93	0.57
36:5:2717:U:O2'	36:5:2718:U:H5'	2.05	0.57
64:N8:133:LEU:HD11	64:N8:137:LYS:HZ1	1.70	0.57
47:M0:4:ARG:NH1	36:5:2828:G:O2'	263.77	0.57
1:6:822:U:H2'	1:6:823:G:H5''	1.86	0.57
36:5:847:A:C6	36:5:848:A:C6	2.92	0.57
14:C2:77:GLY:HA3	33:E1:108:VAL:HG11	4.69	0.57
62:N6:9:SER:OG	36:5:336:A:OP2	80.10	0.57
8:S6:76:LEU:HD22	8:S6:92:ARG:HB3	1.87	0.57
11:S9:29:LYS:HG2	32:E0:44:PHE:CZ	4.16	0.57
1:2:946:U:H5''	3:S1:165:ARG:NH2	2.20	0.57
5:S3:128:GLU:C	5:S3:130:GLY:H	2.08	0.57
9:S7:67:LEU:HD11	9:S7:94:ALA:HB2	1.87	0.57
36:5:904:A:H2'	36:5:905:U:C6	2.38	0.57
36:5:3393:U:O2'	36:5:3394:U:O4'	2.23	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2681:U:H2'	36:5:2682:C:H5'	1.85	0.57
3:S1:145:LYS:HG2	3:S1:154:SER:HB3	1.86	0.57
51:M5:36:ILE:HG12	51:M5:106:VAL:HG12	4.61	0.57
40:L3:257:PRO:HD2	40:L3:261:MET:HE3	1.85	0.57
36:5:179:C:H2'	36:5:180:C:C6	2.40	0.57
1:6:1085:G:O6	87:6:2054:OHX:N3	2.37	0.57
36:1:1501:U:O5'	36:1:1501:U:H6	1.88	0.57
60:N4:63:ILE:O	60:N4:65:GLU:N	3.03	0.57
78:Q2:98:LYS:HE3	36:5:2656:A:H4'	250.54	0.57
1:6:538:A:C4	1:6:543:C:H5	2.22	0.57
47:M0:150:GLU:OE2	47:M0:153:ARG:NE	2.31	0.57
36:1:2586:G:N7	45:L8:241:LYS:HB2	2.20	0.57
1:6:340:U:H2'	1:6:341:A:C8	2.39	0.57
6:S4:31:PRO:HG2	6:S4:38:LEU:HD12	3.95	0.57
36:1:404:G:H1	38:4:19:C:H42	1.52	0.57
41:L4:35:VAL:O	41:L4:38:VAL:N	3.45	0.57
43:L6:56:LYS:H	43:L6:64:LEU:HB3	2.55	0.57
1:2:1528:U:OP1	7:S5:109:LYS:HG2	2.05	0.57
46:L9:92:TYR:CG	46:L9:142:ASP:HB3	3.70	0.57
36:1:3375:A:H5'	36:1:3375:A:H8	1.70	0.57
17:C5:51:SER:OG	17:C5:53:PRO:HD2	6.54	0.57
51:M5:46:ASP:N	51:M5:46:ASP:OD2	2.28	0.57
77:Q1:2:ARG:HB3	77:Q1:5:TRP:CD1	2.39	0.57
2:S0:139:VAL:O	2:S0:141:ILE:N	2.38	0.57
4:S2:63:VAL:HG11	4:S2:69:ILE:HG23	1.86	0.57
54:M8:114:ILE:HG21	54:M8:121:CYS:SG	3.12	0.57
36:1:1603:A:OP1	55:M9:38:ARG:NH1	2.38	0.57
1:6:1207:C:N4	1:6:1456:C:H5	1.95	0.57
50:M4:20:VAL:HG13	50:M4:68:LEU:O	2.05	0.57
36:1:1127:G:H2'	36:1:1129:A:OP2	2.05	0.57
4:S2:90:THR:O	4:S2:92:ALA:N	2.37	0.57
43:L6:164:SER:O	43:L6:166:LYS:NZ	2.38	0.57
34:SR:294:TRP:CZ3	34:SR:301:LEU:HB2	2.39	0.57
52:M6:38:ALA:HA	52:M6:41:LEU:HD22	1.85	0.57
1:2:992:A:H2	1:2:1012:U:H3	1.53	0.57
39:L2:43:GLY:O	39:L2:88:ILE:N	2.54	0.57
52:M6:26:GLN:O	52:M6:31:GLN:HB3	2.23	0.57
36:1:3393:U:H2'	36:1:3394:U:C6	2.29	0.57
39:L2:62:VAL:HA	39:L2:73:GLU:HA	2.40	0.57
1:6:1079:U:C4	1:6:1080:U:C4	2.92	0.57
40:L3:274:SER:OG	36:5:3139:A:OP1	229.65	0.57
8:S6:193:LEU:O	8:S6:196:ARG:HB3	2.04	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
70:O4:61:GLN:HA	70:O4:64:THR:HG23	1.87	0.57
41:L4:286:VAL:O	41:L4:289:ILE:N	2.38	0.57
36:5:528:U:H2'	36:5:529:A:C8	2.40	0.57
25:D3:23:ARG:HB3	25:D3:29:TYR:CE1	2.40	0.57
36:1:1795:U:OP1	39:L2:191:LEU:HD22	2.05	0.57
36:1:1223:A:C6	36:1:1224:C:C5	2.93	0.57
53:M7:66:SER:O	53:M7:67:ILE:O	3.53	0.57
1:2:409:C:C2'	1:2:410:A:H5'	2.35	0.57
36:5:160:G:N2	36:5:261:U:O2	2.37	0.57
1:2:112:A:N6	1:2:113:U:O4	2.37	0.57
36:5:789:A:H2'	36:5:790:U:C6	2.40	0.57
15:C3:62:GLN:HG3	15:C3:65:VAL:HG22	5.47	0.57
1:2:639:U:P	9:S7:117:THR:HG1	2.28	0.57
40:L3:347:SER:HB3	40:L3:350:ALA:H	3.05	0.57
1:2:1637:C:N3	35:SM:93:ARG:HG3	2.20	0.57
1:2:1648:A:H2'	1:2:1649:G:C8	2.40	0.57
57:N1:6:GLY:HA3	36:5:2631:U:P	236.97	0.57
65:N9:12:GLN:NE2	36:5:954:U:H1'	212.83	0.57
1:6:1041:G:OP1	87:6:2181:OHX:N4	2.38	0.57
9:S7:77:LEU:HD22	9:S7:81:LEU:HD11	2.03	0.57
2:S0:69:ASN:OD1	2:S0:69:ASN:N	3.03	0.57
58:N2:82:LYS:HE2	36:5:1682:U:O2	159.06	0.57
7:S5:210:ALA:HA	7:S5:213:LYS:HB2	2.77	0.57
36:1:2261:G:N3	36:1:2262:A:N6	2.52	0.56
46:L9:186:PHE:N	46:L9:186:PHE:CD2	2.78	0.56
53:M7:23:ARG:NE	53:M7:125:GLN:HG3	2.67	0.56
1:2:1798:U:C5	28:D6:38:ARG:NH2	2.74	0.56
47:M0:152:LEU:O	47:M0:155:ALA:N	3.38	0.56
41:L4:154:THR:HG22	41:L4:157:GLU:HG3	3.53	0.56
54:M8:41:ASP:OD1	54:M8:42:ALA:N	2.38	0.56
1:6:1573:A:H8	1:6:1573:A:O5'	1.88	0.56
36:1:973:A:H2'	36:1:974:G:O4'	2.05	0.56
20:C8:125:ILE:HD11	35:SM:57:ASN:ND2	2.20	0.56
5:S3:94:ARG:NH2	35:SM:134:ASP:O	6.28	0.56
36:5:699:A:H2'	36:5:700:C:O4'	2.05	0.56
4:S2:108:ASN:OD1	4:S2:141:ARG:NH1	3.83	0.56
1:6:751:G:H2'	1:6:752:A:H8	1.70	0.56
4:S2:153:SER:OG	4:S2:195:ASP:O	2.19	0.56
36:1:1729:A:N6	66:O0:49:PRO:HD3	2.19	0.56
66:O0:42:ILE:CG1	66:O0:67:VAL:HG22	3.10	0.56
39:L2:174:ARG:HA	79:Q3:69:TYR:HE2	2.38	0.56
56:N0:133:ALA:N	56:N0:135:VAL:HG23	4.30	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:N0:42:TRP:O	56:N0:46:GLN:HB2	3.75	0.56
59:N3:79:VAL:HB	59:N3:118:VAL:HG13	2.42	0.56
38:4:53:A:H2'	38:4:54:A:C8	2.39	0.56
34:SR:33:LEU:HB3	34:SR:45:TRP:HB2	1.87	0.56
41:L4:84:ARG:HB2	36:5:365:A:H4'	123.60	0.56
41:L4:159:ILE:HG22	41:L4:161:LYS:H	1.69	0.56
49:M3:170:LEU:HD11	64:N8:147:LEU:HD21	3.96	0.56
70:O4:37:LYS:HE3	70:O4:58:ARG:HH12	1.69	0.56
56:N0:28:ARG:HH11	56:N0:99:ARG:NE	2.03	0.56
59:N3:57:MET:HE3	59:N3:126:TRP:CH2	5.90	0.56
2:S0:129:ASP:N	2:S0:129:ASP:OD1	2.37	0.56
36:5:312:C:H1'	36:5:2778:G:N2	2.20	0.56
36:5:406:G:N2	38:8:16:G:C4	2.73	0.56
1:6:804:A:C2	1:6:805:U:C2	2.93	0.56
36:1:582:G:O6	87:1:4171:OHX:N2	2.38	0.56
36:5:980:A:H2'	36:5:981:U:N1	2.20	0.56
58:N2:80:THR:HG21	58:N2:95:PHE:HD2	5.81	0.56
29:D7:11:THR:OG1	29:D7:14:SER:OG	2.22	0.56
36:5:687:U:H2'	36:5:688:G:C8	2.40	0.56
70:O4:65:VAL:HG13	70:O4:69:HIS:ND1	2.20	0.56
36:5:2651:G:C4	36:5:2796:G:C2	2.93	0.56
18:C6:9:THR:HG21	18:C6:87:LYS:O	2.45	0.56
9:S7:7:LYS:HE3	9:S7:7:LYS:HA	5.96	0.56
52:M6:3:VAL:HG13	52:M6:4:GLU:OE1	2.05	0.56
8:S6:55:GLY:O	8:S6:63:MET:HG3	2.05	0.56
41:L4:52:VAL:HG12	41:L4:103:THR:OG1	2.04	0.56
1:6:86:A:OP2	87:6:2195:OHX:N1	2.38	0.56
47:M0:72:ALA:HB2	47:M0:155:ALA:HB2	1.86	0.56
44:L7:168:ILE:O	44:L7:172:ASN:ND2	2.38	0.56
44:L7:184:LEU:CD1	44:L7:202:LEU:HD21	2.34	0.56
51:M5:24:ARG:HA	51:M5:27:VAL:HG12	1.87	0.56
51:M5:21:PHE:O	51:M5:25:VAL:HG23	2.05	0.56
36:1:1431:G:OP2	64:N8:9:ARG:NH2	2.28	0.56
43:L6:86:ALA:H	69:O3:107:ILE:HG22	4.76	0.56
1:2:1388:A:C5	1:2:1411:A:C6	2.93	0.56
73:O7:10:LYS:HB2	36:5:818:C:H5''	155.22	0.56
20:C8:57:ARG:NH1	1:6:1534:G:OP1	342.70	0.56
7:S5:71:ALA:HB3	7:S5:111:VAL:HG13	1.87	0.56
46:L9:143:GLU:O	46:L9:144:ILE:O	4.83	0.56
1:2:1274:C:C5	35:SM:96:ARG:HG2	2.40	0.56
36:1:301:G:H2'	36:1:302:U:O4'	2.05	0.56
1:2:624:G:C6	1:2:625:C:C4	2.93	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
70:O4:21:LYS:HB2	70:O4:35:VAL:HG22	1.86	0.56
36:1:1432:C:O2'	36:1:1433:A:H5''	2.05	0.56
36:5:654:C:H42	36:5:1441:G:H1	1.52	0.56
23:D1:42:GLU:O	23:D1:44:ARG:N	3.52	0.56
4:S2:53:ILE:O	4:S2:56:ILE:N	2.39	0.56
70:O4:81:CYS:C	70:O4:84:CYS:HB2	3.06	0.56
71:O5:66:VAL:HA	71:O5:69:LEU:CD2	2.35	0.56
79:Q3:29:LEU:HD12	79:Q3:29:LEU:H	3.22	0.56
36:1:3037:U:H2'	36:1:3038:U:C6	2.38	0.56
57:N1:82:ASN:OD1	57:N1:82:ASN:N	2.70	0.56
18:C6:120:ASP:O	18:C6:122:ARG:N	4.30	0.56
36:5:2407:C:O2	36:5:2818:U:N3	2.23	0.56
36:1:2177:G:O2'	36:1:2178:A:OP2	2.23	0.56
39:L2:143:GLU:HB3	39:L2:145:LYS:HE2	4.51	0.56
39:L2:45:VAL:HA	39:L2:61:VAL:HA	1.86	0.56
87:1:3976:OHX:N1	87:1:4154:OHX:N2	2.54	0.56
1:6:417:A:O5'	1:6:417:A:H8	1.88	0.56
8:S6:108:VAL:HG11	1:6:153:G:O2'	304.49	0.56
26:D4:27:VAL:O	26:D4:68:LYS:HA	2.70	0.56
57:N1:90:ASN:ND2	36:5:2736:A:H1'	222.14	0.56
36:5:1752:A:OP2	87:5:4074:OHX:N3	2.39	0.56
36:1:215:G:H5'	62:N6:12:ARG:HG3	1.88	0.56
1:2:588:U:H2'	1:2:589:C:C6	2.40	0.56
36:5:1946:A:N6	36:5:1947:G:O6	2.38	0.56
48:M1:28:ASP:O	48:M1:32:ARG:HG3	2.04	0.56
57:N1:14:MET:SD	57:N1:58:GLN:HG2	2.44	0.56
34:SR:133:VAL:O	34:SR:141:LEU:N	2.85	0.56
36:1:3170:A:H2'	36:1:3171:U:H5'	1.87	0.56
24:D2:28:ARG:HG2	24:D2:29:PRO:HG3	2.92	0.56
36:1:1064:A:H5''	36:1:1066:G:O4'	2.06	0.56
61:N5:49:LYS:HZ2	61:N5:53:HIS:HB2	5.14	0.56
36:5:256:G:H2'	36:5:257:U:C6	2.40	0.56
36:5:1852:G:C6	36:5:1853:U:C4	2.93	0.56
37:3:61:G:OP1	42:L5:276:LYS:NZ	2.24	0.56
42:L5:280:GLU:N	42:L5:280:GLU:OE2	4.22	0.56
1:6:496:G:N7	1:6:497:G:N2	2.53	0.56
36:5:1243:G:H3'	36:5:1244:A:H5''	1.87	0.56
1:6:367:A:H2'	1:6:368:U:O4'	2.05	0.56
1:6:1192:C:H2'	1:6:1193:A:C8	2.39	0.56
70:O4:3:GLN:NE2	70:O4:30:LEU:O	4.28	0.56
16:C4:11:SER:OG	16:C4:12:GLN:NE2	7.01	0.56
36:5:27:C:O2'	36:5:327:A:N3	2.35	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:310:C:H2'	1:6:311:U:H6	1.70	0.56
32:E0:15:LYS:O	32:E0:17:GLN:N	2.37	0.56
36:1:2254:U:H2'	36:1:2261:G:N2	2.19	0.56
1:2:462:G:N7	87:2:2143:OHX:N1	2.54	0.56
1:2:1797:A:N6	28:D6:84:VAL:O	2.30	0.56
47:M0:38:LYS:HB3	47:M0:41:ALA:HB2	1.87	0.56
36:1:598:A:OP1	44:L7:41:ARG:NH1	2.38	0.56
44:L7:116:PHE:HB2	44:L7:199:ASN:OD1	2.05	0.56
44:L7:214:TRP:CE2	44:L7:219:LYS:HD3	5.21	0.56
13:C1:48:ALA:HA	13:C1:53:TYR:HE2	1.70	0.56
1:2:397:A:O3'	10:S8:50:GLY:HA2	2.06	0.56
41:L4:226:GLU:OE1	41:L4:237:GLN:NE2	2.37	0.56
41:L4:25:VAL:C	41:L4:27:SER:H	2.09	0.56
41:L4:31:ARG:HB3	41:L4:34:ILE:HG13	2.25	0.56
41:L4:80:GLY:HA2	41:L4:85:SER:OG	3.55	0.56
50:M4:77:ARG:O	50:M4:81:VAL:HG23	2.05	0.56
7:S5:122:ASN:HB2	7:S5:129:PRO:HD3	1.87	0.56
1:6:1469:A:H2'	1:6:1470:C:C6	2.41	0.56
7:S5:92:ARG:HH11	7:S5:92:ARG:CG	3.35	0.56
67:O1:29:ALA:HB3	67:O1:30:PRO:HD3	1.99	0.56
1:2:1548:G:OP1	17:C5:18:ARG:NH1	2.37	0.56
22:D0:63:LEU:HB3	31:D9:34:TYR:HE2	1.68	0.56
31:D9:27:HIS:CD2	31:D9:27:HIS:H	2.22	0.56
1:2:868:G:H1	1:2:960:U:H3	1.53	0.56
68:O2:20:HIS:O	68:O2:21:HIS:HB2	2.04	0.56
2:S0:49:ASN:HB3	2:S0:52:LYS:HE2	1.87	0.56
61:N5:71:THR:HG21	36:5:1603:A:N6	91.48	0.56
36:5:185:C:H2'	36:5:186:U:C6	2.37	0.56
11:S9:168:ARG:HH21	11:S9:174:ARG:NH1	9.47	0.56
40:L3:102:LEU:HD21	40:L3:150:ARG:HD3	1.85	0.56
1:6:76:A:H3'	87:6:2199:OHX:N1	2.20	0.56
62:N6:43:TYR:O	62:N6:125:LYS:N	2.32	0.56
62:N6:36:SER:O	62:N6:38:GLU:N	2.60	0.56
72:O6:74:LYS:HD2	72:O6:80:PHE:CD2	2.40	0.56
39:L2:250:GLN:CD	39:L2:251:LYS:H	4.81	0.56
39:L2:82:VAL:HA	39:L2:86:GLN:OE1	2.76	0.56
36:5:1234:G:OP2	36:5:1235:U:H3'	2.04	0.56
64:N8:129:PHE:CZ	72:O6:9:ILE:HB	5.53	0.56
1:6:158:U:O2'	1:6:160:C:OP2	2.15	0.56
40:L3:141:GLY:O	40:L3:143:GLY:N	2.83	0.56
36:5:1646:G:O2'	36:5:1647:A:OP2	2.17	0.56
36:5:64:G:H22	36:5:322:U:H2'	1.71	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:3:ARG:HB2	39:L2:207:VAL:HG23	1.85	0.56
39:L2:6:ARG:O	39:L2:8:GLN:N	2.37	0.56
36:1:3006:A:C2	36:1:3141:A:C4	2.93	0.56
1:6:1038:U:H5''	1:6:1039:A:OP2	2.04	0.56
1:6:649:U:H2'	1:6:650:U:C5	2.41	0.56
1:6:1446:A:O2'	1:6:1448:G:N7	2.32	0.56
36:1:1946:A:H2'	36:1:1947:G:C8	2.40	0.56
40:L3:41:VAL:CA	40:L3:185:GLY:HA3	2.53	0.56
41:L4:142:VAL:HB	41:L4:145:ILE:HG12	1.87	0.56
24:D2:37:PHE:CE2	24:D2:103:ILE:HD11	3.91	0.56
36:1:644:G:H2'	36:1:2372:A:N7	2.21	0.56
1:6:389:G:C6	1:6:390:G:C5	2.93	0.56
70:O4:8:ARG:HB2	70:O4:34:HIS:NE2	2.20	0.56
56:N0:30:PHE:CE1	56:N0:103:VAL:HG21	2.40	0.56
1:6:844:A:O5'	1:6:844:A:H8	1.88	0.56
36:1:944:C:H4'	68:O2:33:ARG:NH1	2.20	0.56
9:S7:14:THR:HG23	9:S7:17:GLU:H	1.70	0.56
22:D0:31:VAL:O	22:D0:35:GLU:N	2.85	0.56
2:S0:110:TYR:CE2	4:S2:64:LYS:HB3	3.31	0.56
42:L5:113:LEU:C	42:L5:115:LEU:H	3.24	0.56
53:M7:67:ILE:HD12	53:M7:82:ARG:CZ	3.74	0.56
36:5:300:G:H2'	36:5:301:G:C8	2.41	0.56
38:4:62:C:O2	87:4:231:OHX:N5	2.38	0.56
44:L7:60:ARG:NH2	36:5:516:A:O3'	305.47	0.56
44:L7:98:LYS:HG2	44:L7:129:LEU:HD21	1.85	0.56
58:N2:33:TYR:CE2	58:N2:63:VAL:HG21	3.46	0.56
36:1:1554:U:O5'	36:1:1554:U:H6	1.88	0.56
11:S9:29:LYS:HA	32:E0:40:TYR:HE2	1.69	0.56
5:S3:119:ALA:O	5:S3:123:VAL:HG23	2.22	0.56
54:M8:157:PRO:C	54:M8:159:LYS:H	2.90	0.56
1:6:1240:U:O2	1:6:1242:A:H5''	2.05	0.56
36:1:671:U:H2'	36:1:672:A:C8	2.39	0.56
4:S2:109:GLY:HA2	4:S2:139:ILE:HG22	2.75	0.56
1:6:1283:U:C2	1:6:1284:C:H5	2.23	0.56
36:5:2137:U:C6	36:5:2141:U:O4	2.58	0.56
62:N6:83:ASP:O	62:N6:84:LYS:HB2	2.05	0.56
87:5:4028:OHX:N5	87:5:4075:OHX:N6	2.54	0.56
34:SR:246:SER:HB3	34:SR:251:TRP:HB2	3.97	0.56
36:1:531:G:N2	36:1:532:A:C4	2.74	0.56
36:1:1681:U:H2'	36:1:1682:U:O4'	2.05	0.56
36:5:1748:G:O6	87:5:4180:OHX:N4	2.37	0.56
36:1:2396:G:OP1	36:1:2397:A:H4'	2.05	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
70:O4:32:ALA:O	70:O4:33:GLN:HB2	2.06	0.56
36:5:2259:A:H2'	36:5:2260:U:H6	1.70	0.56
3:S1:146:GLN:O	3:S1:149:GLN:N	2.96	0.56
33:E1:95:HIS:CG	33:E1:96:LYS:H	2.23	0.56
48:M1:117:ASP:O	48:M1:119:SER:N	2.39	0.56
36:5:574:U:H2'	36:5:575:G:H8	1.70	0.56
21:C9:52:GLY:HA3	21:C9:55:TYR:HD2	3.05	0.56
36:1:2862:U:H2'	36:1:2863:G:O4'	2.06	0.56
46:L9:186:PHE:N	46:L9:186:PHE:HD2	2.55	0.56
28:D6:74:CYS:SG	28:D6:77:CYS:N	2.78	0.56
44:L7:107:ARG:HE	44:L7:204:PRO:HG3	1.69	0.56
51:M5:122:ASN:OD1	51:M5:123:GLN:N	2.38	0.56
51:M5:18:VAL:HG13	51:M5:19:LEU:H	1.70	0.56
41:L4:251:THR:O	41:L4:254:ALA:HB3	2.05	0.56
54:M8:45:ASN:O	54:M8:48:VAL:N	2.48	0.56
43:L6:40:LEU:HD13	43:L6:84:VAL:HG21	1.87	0.56
4:S2:205:ARG:NH2	1:6:7:G:N7	370.86	0.56
67:O1:15:ASN:O	67:O1:19:ARG:HG3	2.36	0.56
1:2:1593:A:H2'	1:2:1594:G:H8	1.67	0.56
17:C5:20:VAL:HG12	17:C5:24:LYS:HB3	5.60	0.56
1:2:1277:G:H4'	5:S3:183:GLY:H	1.69	0.56
68:O2:20:HIS:CG	68:O2:42:VAL:HG21	2.91	0.56
19:C7:105:GLN:O	19:C7:109:LEU:N	3.31	0.56
4:S2:207:LEU:O	4:S2:209:ASN:N	2.38	0.56
40:L3:13:HIS:HB3	40:L3:16:PHE:HD1	3.27	0.56
36:1:1719:G:N7	55:M9:121:HIS:HE1	2.02	0.56
68:O2:86:THR:HG23	68:O2:115:LEU:HB3	1.87	0.56
14:C2:42:ALA:N	14:C2:122:VAL:O	2.66	0.56
17:C5:127:ARG:O	17:C5:130:ARG:NH1	5.69	0.56
6:S4:36:HIS:CD2	6:S4:85:GLY:HA3	3.24	0.56
6:S4:67:GLN:HB3	6:S4:69:HIS:NE2	5.08	0.56
69:O3:43:PHE:HD2	69:O3:44:TYR:CD2	2.24	0.56
18:C6:94:GLN:HA	18:C6:102:LYS:HD2	1.87	0.56
40:L3:286:GLY:O	40:L3:320:ASP:HA	4.83	0.56
39:L2:113:VAL:HG12	39:L2:166:ILE:HA	1.87	0.56
41:L4:159:ILE:HD12	41:L4:165:ALA:HA	1.87	0.56
8:S6:64:LYS:HD2	8:S6:97:VAL:HG21	2.57	0.56
36:5:2232:A:H2'	36:5:2233:A:O4'	2.04	0.56
52:M6:85:ARG:HD2	52:M6:90:HIS:CE1	3.08	0.56
57:N1:130:ARG:HD3	36:5:1098:A:OP2	254.72	0.56
36:1:285:A:H3'	36:1:285:A:C8	2.40	0.56
36:5:28:C:O2'	36:5:29:C:O5'	2.24	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1081:A:N3	1:6:1082:C:H5	2.03	0.56
1:6:385:A:H2'	1:6:386:G:C8	2.40	0.56
36:5:2971:A:H5''	36:5:2972:G:H5'	1.87	0.56
36:1:1128:U:OP1	47:M0:4:ARG:NH2	2.33	0.56
2:S0:128:SER:HB3	2:S0:129:ASP:OD1	3.39	0.56
1:6:804:A:C6	1:6:805:U:C4	2.94	0.56
59:N3:54:LEU:HB2	59:N3:81:GLN:HG3	1.88	0.56
69:O3:20:LYS:NZ	36:5:1178:G:O6	243.43	0.56
13:C1:56:LYS:HG3	13:C1:57:LYS:HG3	2.17	0.56
58:N2:33:TYR:OH	58:N2:80:THR:OG1	5.10	0.56
1:6:138:A:H2'	1:6:139:C:H5'	1.87	0.56
36:1:2795:U:O2	36:1:2800:G:O2'	2.12	0.56
39:L2:200:ARG:CG	39:L2:200:ARG:HH21	3.48	0.56
1:6:1240:U:C2	1:6:1242:A:H5''	2.40	0.56
57:N1:17:ARG:HG2	57:N1:17:ARG:HH11	3.50	0.56
48:M1:37:LEU:HD12	48:M1:67:VAL:HG23	1.87	0.56
37:3:87:G:H21	56:N0:119:ARG:HH21	1.52	0.56
36:1:1498:A:O2'	36:1:1499:C:H5'	2.05	0.56
56:N0:34:GLU:O	56:N0:38:LYS:HG3	2.05	0.56
54:M8:60:PRO:HG3	54:M8:144:ARG:HG2	1.86	0.56
34:SR:217:ASP:O	34:SR:219:GLU:HG2	2.05	0.56
6:S4:170:THR:O	6:S4:171:ASP:HB2	3.22	0.56
36:5:1494:U:C2	36:5:1835:A:C2	2.94	0.56
38:4:113:U:H5''	75:O9:7:PHE:HB3	1.87	0.56
36:5:665:A:H2'	36:5:666:A:H8	1.70	0.56
36:5:1259:A:N6	36:5:1260:A:N1	2.53	0.56
1:6:1003:A:H4'	1:6:1004:U:O5'	2.05	0.56
36:1:3241:G:C4	36:1:3245:A:C2	2.93	0.56
41:L4:103:THR:HG22	41:L4:107:ARG:NH2	3.07	0.56
41:L4:98:ARG:HD2	41:L4:99:MET:O	2.05	0.56
1:2:1546:G:OP1	20:C8:123:ARG:NH1	2.38	0.56
26:D4:18:LEU:HB2	26:D4:20:ARG:HG2	3.71	0.56
1:6:1535:U:O2'	1:6:1536:G:O5'	2.23	0.56
7:S5:112:ARG:HD2	18:C6:43:ILE:HD12	3.96	0.56
36:1:3380:U:H2'	36:1:3381:U:C6	2.40	0.56
42:L5:212:ALA:HB2	42:L5:219:PHE:CD2	6.31	0.56
28:D6:51:ARG:NH2	30:D8:60:GLU:OE1	6.75	0.56
3:S1:229:MET:O	3:S1:232:HIS:N	3.17	0.56
23:D1:86:SER:HB2	29:D7:6:ASP:HB3	4.94	0.56
20:C8:18:LEU:HD12	20:C8:102:ALA:HB2	4.37	0.56
43:L6:7:PRO:C	43:L6:9:TRP:H	2.78	0.56
1:6:1232:U:H2'	1:6:1233:G:O4'	2.06	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:229:GLY:HA2	6:S4:235:TYR:CE2	2.41	0.56
56:N0:138:GLN:O	56:N0:140:VAL:N	2.39	0.56
34:SR:67:ILE:HD12	34:SR:85:TRP:CD2	2.40	0.56
40:L3:81:THR:HG22	40:L3:321:PHE:CA	5.07	0.56
26:D4:124:ARG:O	26:D4:127:LYS:N	3.54	0.56
8:S6:58:LYS:HB2	8:S6:59:GLN:NE2	2.20	0.56
51:M5:172:ARG:HH11	36:5:30:G:P	108.18	0.56
26:D4:59:GLY:O	26:D4:60:PHE:HB2	2.05	0.56
36:5:391:A:C5	36:5:392:G:C8	2.93	0.56
46:L9:103:ILE:HG22	46:L9:103:ILE:O	2.64	0.56
24:D2:11:LEU:HD12	24:D2:74:VAL:HB	1.87	0.56
1:2:827:C:H2'	1:2:828:U:H6	1.70	0.56
48:M1:143:ARG:HG2	48:M1:144:CYS:SG	2.46	0.56
64:N8:90:TYR:CD1	64:N8:100:PRO:HD3	4.33	0.56
36:5:1554:U:C2'	36:5:1581:C:H2'	2.35	0.56
36:5:3004:C:N3	36:5:3144:G:N2	2.53	0.56
1:2:1497:U:OP2	87:2:2031:OHX:N1	2.38	0.56
36:1:200:C:OP1	62:N6:60:ARG:NH1	2.39	0.56
24:D2:15:ASN:HD21	24:D2:71:LYS:HA	1.70	0.56
38:4:122:U:H2'	38:4:123:G:H8	1.71	0.56
3:S1:115:ARG:O	3:S1:118:GLN:HG2	2.23	0.56
15:C3:65:VAL:HG23	15:C3:66:ILE:HG23	6.90	0.56
36:1:1240:A:H3'	36:1:1241:U:C5'	2.35	0.56
1:6:907:A:N1	1:6:1008:G:H1'	2.21	0.56
87:5:4028:OHX:N3	87:5:4075:OHX:N6	2.54	0.56
34:SR:50:ASP:HB2	34:SR:53:LYS:O	3.30	0.56
78:Q2:63:LYS:NZ	36:5:2761:G:N7	211.79	0.56
1:2:833:U:O4	87:2:2037:OHX:N1	2.38	0.56
36:5:1534:A:OP1	87:5:3918:OHX:N1	2.39	0.56
36:5:2947:G:OP2	36:5:2947:G:H4'	2.04	0.56
36:1:2942:C:H6	36:1:2942:C:O5'	1.88	0.56
36:1:3269:U:H5'	36:1:3269:U:O2	2.05	0.56
64:N8:18:GLY:O	36:5:1370:G:H5''	174.88	0.56
36:1:1293:U:O2'	36:1:1294:A:H5'	2.06	0.56
11:S9:83:VAL:HG23	11:S9:85:VAL:HG23	1.87	0.56
44:L7:39:GLU:OE1	44:L7:43:ILE:HD11	8.24	0.56
54:M8:23:ASN:O	54:M8:26:LEU:N	2.43	0.56
20:C8:28:ILE:HD12	20:C8:28:ILE:H	5.12	0.56
7:S5:110:ALA:O	7:S5:113:ILE:N	2.38	0.56
23:D1:74:GLN:CG	23:D1:79:LEU:HB2	3.73	0.56
2:S0:124:THR:HG23	2:S0:174:TRP:HE1	1.71	0.56
36:1:3145:C:H2'	36:1:3146:G:H8	1.69	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:N0:26:ARG:NH1	57:N1:150:THR:HG21	3.08	0.56
36:1:2224:A:OP1	72:O6:74:LYS:NZ	2.35	0.56
72:O6:57:LEU:O	72:O6:61:ILE:HG13	2.05	0.56
40:L3:236:LYS:NZ	36:5:2340:U:OP1	234.52	0.56
1:6:416:A:H4'	1:6:417:A:OP2	2.05	0.56
36:5:1364:C:H2'	36:5:1365:G:C8	2.40	0.56
74:O8:44:LYS:HG2	74:O8:53:THR:HB	1.86	0.56
36:1:2148:U:O2'	39:L2:182:ALA:HB2	2.05	0.56
46:L9:172:ILE:HG13	46:L9:172:ILE:O	3.79	0.56
36:5:2209:U:C2	36:5:2210:G:C8	2.94	0.56
36:1:1870:C:O2	36:1:3066:U:O2'	2.21	0.56
36:1:3275:U:H5''	69:O3:68:TRP:CZ2	2.38	0.56
54:M8:109:GLY:O	54:M8:112:ALA:HB3	2.06	0.56
29:D7:2:VAL:O	29:D7:3:LEU:HB2	2.65	0.56
22:D0:109:GLU:HG3	22:D0:110:PRO:HD2	1.87	0.56
45:L8:178:ALA:HA	45:L8:222:PHE:CD2	2.40	0.56
36:1:2649:A:O2'	36:1:2650:U:H5'	2.05	0.56
1:6:1236:A:H3'	1:6:1237:G:H8	1.71	0.56
1:6:1685:G:O6	1:6:1716:C:N4	2.38	0.56
65:N9:23:LYS:O	65:N9:25:LYS:N	2.38	0.56
36:5:385:A:C2	36:5:386:A:C4	2.93	0.56
36:1:827:A:H2'	36:1:828:A:C8	2.41	0.56
36:1:184:U:H2'	36:1:185:C:H6	1.70	0.56
1:2:568:G:O5'	25:D3:90:ASP:HA	2.06	0.56
36:1:950:G:N7	36:1:1367:G:C6	2.74	0.56
36:1:2352:A:C6	36:1:2353:G:C6	2.93	0.56
1:6:427:C:C4	1:6:428:A:N7	2.74	0.56
11:S9:129:ILE:HG12	11:S9:134:ILE:HD12	1.88	0.56
36:1:1040:A:N3	47:M0:198:LYS:NZ	2.43	0.56
41:L4:333:VAL:HG22	41:L4:337:GLU:HG3	1.87	0.56
6:S4:57:ASN:HB2	6:S4:60:GLU:HB2	1.87	0.56
10:S8:168:CYS:SG	10:S8:169:ILE:N	2.79	0.56
19:C7:20:TYR:CD1	19:C7:38:ILE:HD11	2.40	0.56
36:1:561:C:OP1	50:M4:77:ARG:HG3	2.06	0.56
7:S5:81:ARG:HD2	1:6:1615:C:H2'	373.49	0.56
18:C6:101:SER:O	18:C6:101:SER:OG	3.91	0.56
18:C6:21:HIS:HB2	18:C6:23:LYS:HZ1	9.98	0.56
20:C8:26:ILE:HG13	20:C8:31:ALA:HB2	2.75	0.56
7:S5:123:VAL:HG11	27:D5:59:TYR:HB2	4.75	0.56
7:S5:190:ILE:H	7:S5:190:ILE:CD1	3.08	0.56
67:O1:36:ILE:O	67:O1:39:PHE:N	2.39	0.56
42:L5:83:LEU:O	42:L5:87:GLY:N	3.12	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
66:O0:44:ILE:O	66:O0:70:PHE:HB3	2.68	0.56
1:2:1207:C:H42	1:2:1456:C:N4	2.03	0.56
6:S4:157:ASN:ND2	6:S4:222:LEU:HD21	3.80	0.56
50:M4:38:ILE:HD11	56:N0:150:PHE:CE2	2.41	0.56
52:M6:118:VAL:HG23	56:N0:164:SER:O	2.06	0.56
41:L4:55:LYS:HD2	41:L4:59:GLN:NE2	4.68	0.56
1:2:888:U:H2'	1:2:889:U:C6	2.41	0.56
36:5:3288:G:O2'	36:5:3289:G:P	2.64	0.56
51:M5:163:GLY:O	51:M5:172:ARG:NH1	2.38	0.56
40:L3:95:THR:C	40:L3:97:ARG:H	2.01	0.56
36:5:3017:A:C5	36:5:3018:C:C5	2.93	0.56
1:2:782:U:H4'	1:2:783:G:H5''	1.87	0.56
42:L5:155:THR:HB	42:L5:179:ARG:HD3	1.87	0.56
36:1:1803:C:H2'	36:1:1804:A:C8	2.41	0.56
60:N4:6:ASP:HA	60:N4:13:ILE:HD11	2.02	0.56
1:6:1489:U:H2'	1:6:1514:U:O4	2.06	0.56
22:D0:39:SER:HA	22:D0:42:VAL:HG12	1.87	0.56
1:2:1216:C:C5	1:2:1444:A:C2	2.94	0.56
55:M9:62:ARG:HH11	55:M9:62:ARG:HB2	3.43	0.56
36:5:1556:C:H3'	36:5:1557:A:H5''	1.88	0.56
72:O6:33:ALA:HB1	72:O6:38:LYS:HD2	1.88	0.56
39:L2:58:LEU:HD23	39:L2:77:ILE:HA	1.87	0.56
50:M4:39:ILE:HB	50:M4:43:LYS:O	2.05	0.56
61:N5:133:LEU:O	61:N5:136:ALA:HB3	2.56	0.56
1:2:72:A:C2	1:2:73:U:N3	2.73	0.56
36:1:2369:G:H2'	36:1:2370:G:O4'	2.04	0.56
36:1:511:G:H2'	36:1:512:U:C6	2.41	0.56
44:L7:57:THR:O	44:L7:61:ASN:ND2	4.10	0.56
36:5:419:G:O3'	36:5:420:G:OP2	2.24	0.56
36:1:304:G:H5'	36:1:304:G:N3	2.21	0.56
56:N0:113:ARG:NH2	36:5:1187:C:OP1	311.19	0.56
36:1:625:G:OP1	87:1:4045:OHX:N1	2.38	0.56
52:M6:22:VAL:HG21	52:M6:120:VAL:HG11	2.04	0.56
36:5:794:U:O5'	36:5:794:U:H6	1.88	0.56
36:1:1728:G:C4	66:O0:85:PHE:CE1	2.93	0.56
36:1:2228:A:H2'	36:1:2229:A:C8	2.41	0.56
20:C8:35:ILE:HB	20:C8:38:VAL:CG1	4.44	0.56
7:S5:124:LEU:HD11	27:D5:59:TYR:HD1	1.71	0.56
7:S5:139:ASN:OD1	7:S5:203:LYS:HA	2.05	0.56
7:S5:149:VAL:HG12	7:S5:158:GLN:H	2.06	0.56
76:Q0:122:ARG:CG	76:Q0:122:ARG:HH11	2.12	0.56
2:S0:145:ALA:HB3	2:S0:159:ALA:HA	1.87	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:M8:108:ALA:C	54:M8:110:ALA:H	3.30	0.56
36:1:1733:G:H2'	36:1:1734:G:H8	1.71	0.56
35:SM:80:ALA:HB1	1:6:1178:G:N2	335.01	0.56
57:N1:40:VAL:HG21	57:N1:96:ILE:HG23	1.86	0.56
36:5:269:G:N2	36:5:295:A:OP2	2.33	0.56
36:1:2422:C:O5'	78:Q2:52:GLY:HA2	2.06	0.56
1:6:158:U:O2'	1:6:159:U:H3'	2.06	0.56
51:M5:57:GLN:HG2	38:8:143:U:O3'	97.82	0.56
51:M5:183:THR:O	51:M5:183:THR:OG1	3.05	0.56
36:5:916:G:N7	36:5:924:G:C5	2.74	0.56
26:D4:42:GLU:HG3	26:D4:52:LYS:HE3	2.53	0.56
46:L9:94:TYR:N	46:L9:94:TYR:HD1	2.03	0.56
37:7:26:C:O2	37:7:57:G:N1	2.39	0.56
1:6:973:A:H2'	1:6:974:A:C8	2.40	0.56
10:S8:150:ALA:C	10:S8:152:ILE:H	2.09	0.56
9:S7:14:THR:O	9:S7:18:LEU:HG	2.05	0.56
36:1:2234:G:HO2'	36:1:2603:G:HO2'	1.52	0.56
1:6:1477:G:C6	1:6:1478:G:C6	2.94	0.56
59:N3:71:LYS:NZ	36:5:2293:C:OP2	279.92	0.56
63:N7:103:GLN:HB2	63:N7:106:GLN:OE1	4.24	0.56
58:N2:33:TYR:CE1	58:N2:37:LEU:HD11	2.41	0.56
1:2:126:A:N1	1:2:292:U:H1'	2.20	0.56
53:M7:11:PRO:O	53:M7:14:SER:N	3.57	0.56
36:5:1838:G:H4'	36:5:1839:A:N3	2.21	0.56
36:1:1940:G:O6	36:1:2107:A:N6	2.38	0.56
52:M6:65:ASN:OD1	52:M6:67:THR:HB	3.22	0.56
43:L6:47:PHE:O	43:L6:50:LYS:HB2	2.06	0.56
36:5:1019:G:H2'	36:5:1020:G:C8	2.40	0.56
36:1:949:C:OP1	54:M8:10:HIS:ND1	2.39	0.56
36:1:1119:C:H2'	36:1:1120:A:H8	1.71	0.56
45:L8:203:VAL:HG13	45:L8:207:ASP:HB2	2.19	0.56
36:5:1445:U:H5''	36:5:1446:A:OP2	2.04	0.56
36:1:908:G:C6	36:1:925:A:C8	2.93	0.56
36:1:1148:G:OP2	87:1:4165:OHX:N4	2.39	0.56
36:5:2885:C:C2'	36:5:2886:U:H5'	2.36	0.56
28:D6:10:ARG:HG3	28:D6:34:LYS:HG2	3.87	0.56
45:L8:236:GLY:O	45:L8:237:ILE:HB	4.62	0.56
13:C1:53:TYR:CD1	13:C1:113:PRO:HG2	2.41	0.56
26:D4:49:LYS:H	26:D4:49:LYS:HD3	2.70	0.56
43:L6:42:LEU:HD23	43:L6:42:LEU:N	3.26	0.56
49:M3:99:HIS:HB2	36:5:156:G:O4'	77.79	0.56
49:M3:64:LYS:HE3	64:N8:69:TRP:CD1	3.08	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1772:C:C5'	77:Q1:2:ARG:HD2	2.34	0.56
19:C7:106:THR:O	19:C7:109:LEU:HB3	2.05	0.56
54:M8:101:VAL:HB	54:M8:106:PHE:HZ	1.70	0.56
39:L2:130:SER:O	39:L2:130:SER:OG	3.17	0.56
11:S9:168:ARG:HD2	11:S9:169:PRO:O	6.35	0.56
1:6:1133:A:N3	1:6:1650:U:O2'	2.38	0.56
59:N3:93:LEU:O	59:N3:94:TYR:HB3	2.73	0.56
37:7:119:U:H2'	37:7:120:C:C6	2.41	0.56
36:1:31:C:H2'	36:1:32:U:C6	2.41	0.56
40:L3:163:HIS:HB3	40:L3:178:LEU:HD12	1.87	0.56
72:O6:54:GLU:O	72:O6:58:ILE:HG23	2.33	0.56
36:1:860:G:OP1	79:Q3:18:TYR:OH	2.22	0.56
46:L9:156:GLN:HE21	46:L9:160:ASP:CG	2.10	0.56
36:5:213:A:H2'	36:5:214:G:O4'	2.06	0.56
36:5:89:A:H61	36:5:97:U:H3	1.54	0.56
37:7:90:U:H2'	37:7:90:U:O2	2.05	0.56
36:5:2142:A:H4'	36:5:2143:A:O5'	2.06	0.56
36:1:705:A:N6	64:N8:74:ASN:HD21	2.04	0.56
54:M8:38:ARG:HG2	54:M8:39:ARG:HG2	1.88	0.56
45:L8:50:VAL:HG22	45:L8:52:TRP:CE2	2.41	0.56
39:L2:48:ILE:HA	39:L2:59:ALA:HA	1.87	0.56
36:5:645:A:C5'	36:5:2372:A:H62	2.19	0.56
65:N9:5:LYS:NZ	36:5:1135:A:OP2	227.82	0.56
58:N2:23:THR:OG1	58:N2:28:PHE:HB3	3.96	0.56
9:S7:152:VAL:HG23	9:S7:182:VAL:O	2.05	0.56
6:S4:136:VAL:HG13	6:S4:149:TYR:CE1	2.41	0.56
4:S2:168:ARG:HD2	1:6:1097:U:H6	380.42	0.56
36:1:2376:G:C6	36:1:2377:G:O6	2.58	0.56
45:L8:150:LEU:HD22	45:L8:151:VAL:H	1.71	0.56
36:1:3221:C:O2	36:1:3264:G:N2	2.38	0.56
1:2:599:A:H4'	25:D3:106:GLY:O	2.06	0.56
87:5:3900:OHX:N5	38:8:1:A:OP1	2.39	0.56
38:8:81:U:H3	38:8:83:C:H5	1.53	0.56
1:2:1008:G:P	16:C4:135:ARG:HE	2.29	0.56
1:6:1466:G:H2'	1:6:1467:C:C6	2.40	0.56
36:1:2267:C:C4	36:1:2268:U:C2	2.93	0.56
1:6:321:C:O3'	87:6:2111:OHX:N5	2.39	0.56
1:2:1535:U:O2'	1:2:1536:G:N3	2.33	0.56
59:N3:104:ASN:OD1	59:N3:106:LYS:N	2.37	0.56
1:2:1364:G:H8	1:2:1364:G:O5'	1.89	0.56
13:C1:123:VAL:HG22	13:C1:142:VAL:HG22	4.00	0.56
1:2:192:U:O2'	1:2:193:U:O5'	2.22	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3199:G:C2	36:1:3200:G:C8	2.94	0.56
46:L9:25:VAL:HG23	46:L9:36:LYS:O	2.05	0.56
36:5:1498:A:C2	36:5:1499:C:C2	2.94	0.56
28:D6:37:LYS:HG2	28:D6:72:HIS:HD2	2.01	0.56
28:D6:87:ARG:HB2	28:D6:92:ARG:HG2	1.87	0.56
11:S9:63:ASP:O	11:S9:69:ARG:HD3	2.06	0.56
44:L7:160:ARG:HD2	44:L7:203:TRP:CG	2.84	0.56
10:S8:50:GLY:HA2	1:6:397:A:H4'	314.80	0.56
41:L4:146:PRO:HG2	41:L4:150:LEU:HD21	2.38	0.56
1:2:1384:A:H2'	1:2:1385:G:O4'	2.05	0.56
1:2:813:U:H5'	15:C3:76:LYS:HD3	1.86	0.56
27:D5:60:VAL:HA	27:D5:64:VAL:HG21	2.43	0.56
7:S5:57:SER:O	7:S5:59:VAL:N	2.33	0.56
7:S5:68:ILE:HD12	7:S5:70:VAL:O	2.06	0.56
46:L9:90:MET:HG3	46:L9:181:VAL:HA	4.28	0.56
42:L5:211:LEU:HD22	42:L5:219:PHE:HB2	4.39	0.56
1:2:1553:G:O2'	1:2:1555:A:N7	2.35	0.56
17:C5:44:ARG:NH2	17:C5:82:ASN:O	3.30	0.56
55:M9:99:LEU:HD11	55:M9:103:ARG:NH2	2.21	0.56
50:M4:85:TRP:CD1	50:M4:90:VAL:HG13	2.41	0.56
50:M4:92:GLU:O	50:M4:95:ALA:HB3	2.36	0.56
69:O3:9:VAL:HG21	69:O3:44:TYR:HE1	2.70	0.56
8:S6:136:LYS:NZ	1:6:65:A:O5'	336.91	0.56
34:SR:19:TRP:O	34:SR:21:THR:HG23	2.06	0.56
1:2:1347:U:C2	1:2:1517:U:C5	2.94	0.56
1:2:365:G:C2	1:2:366:A:C8	2.94	0.56
36:1:3294:A:H5''	36:1:3294:A:H8	1.71	0.56
52:M6:183:ALA:O	52:M6:186:ALA:N	3.90	0.56
36:5:1161:G:H1'	36:5:1365:G:N2	2.21	0.56
51:M5:150:TRP:O	51:M5:152:CYS:N	2.39	0.56
39:L2:242:ARG:NH2	36:5:2241:U:O3'	236.30	0.56
70:O4:61:GLN:O	70:O4:64:THR:N	2.71	0.56
60:N4:42:GLN:HB3	60:N4:44:LYS:HE3	1.88	0.56
4:S2:40:LYS:HG2	4:S2:247:ALA:HB1	3.08	0.56
45:L8:32:LYS:O	36:5:2549:G:N2	207.64	0.56
1:6:33:U:O4	87:6:2092:OHX:N4	2.39	0.56
62:N6:19:TYR:CE2	36:5:216:G:H4'	73.08	0.56
1:2:195:G:H2'	1:2:196:G:H5'	1.87	0.56
57:N1:68:THR:HG23	57:N1:69:LYS:N	2.80	0.56
1:2:1294:G:H4'	2:S0:108:THR:HB	1.88	0.56
34:SR:135:THR:N	34:SR:139:GLN:O	2.28	0.56
1:2:533:U:C4'	26:D4:33:ALA:HB2	2.36	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:C1:132:SER:HB3	13:C1:135:VAL:HB	3.73	0.56
61:N5:49:LYS:O	61:N5:51:VAL:N	2.37	0.56
1:2:484:C:N4	1:2:504:U:H3	2.04	0.56
47:M0:201:SER:OG	47:M0:202:LYS:N	2.38	0.56
36:5:323:A:H2'	36:5:324:A:C8	2.41	0.56
19:C7:71:PHE:CE1	19:C7:73:LEU:HD22	2.40	0.56
34:SR:52:GLN:HG2	34:SR:53:LYS:H	1.71	0.56
36:5:1033:U:H2'	36:5:1034:U:H5'	1.88	0.56
1:2:1360:A:H4'	21:C9:3:GLY:H	1.70	0.56
36:5:179:C:H2'	36:5:180:C:H6	1.71	0.56
36:5:1054:A:OP1	87:5:4080:OHX:N4	2.39	0.56
73:O7:47:TYR:HB3	73:O7:49:TRP:NE1	2.20	0.56
36:1:1798:A:H2'	36:1:1799:A:C8	2.41	0.56
59:N3:13:ILE:HG12	59:N3:85:TRP:CD1	5.15	0.56
51:M5:181:ASN:OD1	36:5:100:A:H4'	116.45	0.56
65:N9:45:HIS:CE1	36:5:1075:A:C4	196.35	0.56
6:S4:240:LYS:CD	6:S4:240:LYS:H	2.17	0.56
36:1:3233:C:H2'	36:1:3234:A:C8	2.42	0.56
1:2:641:G:H2'	1:2:642:G:H8	1.71	0.56
36:1:1838:G:H5''	36:1:1839:A:OP1	2.06	0.56
44:L7:173:LEU:HG	44:L7:178:ILE:HD12	3.03	0.55
10:S8:76:THR:HB	10:S8:105:ASP:HB2	1.87	0.55
41:L4:11:LEU:HD23	41:L4:11:LEU:N	2.21	0.55
43:L6:85:ILE:HG23	69:O3:107:ILE:HG21	3.69	0.55
42:L5:86:TYR:CD1	42:L5:247:ILE:HG13	2.85	0.55
21:C9:28:LEU:HD13	21:C9:30:VAL:HG13	1.88	0.55
1:2:917:U:H5''	16:C4:20:TYR:CE2	2.41	0.55
28:D6:60:PRO:O	28:D6:62:TYR:N	2.38	0.55
1:6:754:A:N6	1:6:793:A:H62	2.04	0.55
48:M1:92:ARG:HH21	48:M1:173:ASP:CG	2.09	0.55
1:6:874:C:OP1	87:6:2060:OHX:N1	2.40	0.55
52:M6:159:LYS:O	52:M6:162:VAL:HB	2.86	0.55
69:O3:49:ILE:HG13	69:O3:100:ILE:HG13	1.88	0.55
8:S6:136:LYS:HG3	8:S6:173:PRO:HB3	1.88	0.55
34:SR:34:LEU:HD12	34:SR:43:ILE:O	2.60	0.55
52:M6:39:GLU:HG2	52:M6:39:GLU:O	3.03	0.55
36:1:1485:G:C2	70:O4:4:ARG:NH1	2.74	0.55
49:M3:85:LEU:HD13	49:M3:120:GLN:OE1	2.06	0.55
51:M5:121:VAL:HG11	51:M5:131:GLU:HG3	1.88	0.55
76:Q0:78:ILE:HG23	76:Q0:83:LYS:HD2	3.67	0.55
36:1:595:G:C8	36:1:609:G:C6	2.94	0.55
37:7:57:G:H3'	37:7:58:C:H6	1.70	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:L4:284:SER:O	41:L4:286:VAL:N	3.27	0.55
22:D0:24:ILE:HG12	22:D0:116:VAL:HG13	1.88	0.55
36:1:2207:A:H2'	36:1:2208:A:C8	2.42	0.55
34:SR:149:ASP:HB3	34:SR:174:ASN:HB2	1.88	0.55
1:6:1414:U:O2'	1:6:1416:G:OP2	2.14	0.55
78:Q2:31:GLY:O	78:Q2:33:ALA:N	2.39	0.55
56:N0:50:LYS:NZ	37:7:76:A:N3	300.46	0.55
36:5:2363:A:C6	36:5:2364:G:C6	2.94	0.55
47:M0:19:LYS:HE3	47:M0:26:VAL:HG13	1.86	0.55
8:S6:26:VAL:HG21	8:S6:40:ALA:HB1	1.87	0.55
49:M3:9:ILE:HG13	64:N8:49:HIS:NE2	3.54	0.55
1:6:702:G:N7	87:6:2103:OHX:N4	2.53	0.55
71:O5:14:LYS:HB3	71:O5:15:GLU:OE1	8.87	0.55
74:O8:11:PHE:O	74:O8:15:THR:HG23	2.44	0.55
36:1:3343:G:C4	36:1:3361:G:N2	2.74	0.55
36:1:608:A:C4	43:L6:22:ARG:NH1	2.75	0.55
36:1:2582:C:OP2	87:1:4147:OHX:N6	2.39	0.55
36:5:3216:G:O6	36:5:3259:U:H2'	2.06	0.55
36:1:1148:G:H2'	36:1:1149:G:H5'	1.87	0.55
36:5:604:G:N7	87:5:4163:OHX:N2	2.54	0.55
38:4:26:U:H2'	38:4:27:U:C6	2.41	0.55
10:S8:11:ARG:NH1	10:S8:15:GLY:O	2.54	0.55
5:S3:35:SER:OG	5:S3:51:ARG:NH2	4.27	0.55
1:2:879:G:H2'	1:2:880:C:O4'	2.06	0.55
3:S1:167:VAL:O	3:S1:171:ILE:N	2.86	0.55
39:L2:51:ASP:HB3	39:L2:54:ARG:HB3	1.88	0.55
25:D3:59:ILE:O	25:D3:69:ARG:N	2.31	0.55
20:C8:2:SER:O	20:C8:2:SER:OG	4.08	0.55
1:2:426:G:N2	1:2:459:G:O2'	2.31	0.55
47:M0:36:LEU:HD13	47:M0:87:LEU:HD13	1.88	0.55
44:L7:206:LYS:HD3	36:5:1334:U:OP1	233.18	0.55
44:L7:51:TYR:CD1	44:L7:186:HIS:CD2	3.59	0.55
26:D4:20:ARG:HA	26:D4:76:TYR:HA	2.02	0.55
1:2:1671:A:H2'	1:2:1672:G:O4'	2.07	0.55
2:S0:140:ASN:ND2	4:S2:62:PRO:HD3	4.39	0.55
68:O2:96:ILE:N	68:O2:121:ASN:HD21	2.04	0.55
38:4:66:A:H2'	38:4:67:U:C6	2.40	0.55
1:6:1450:U:H2'	1:6:1451:C:C6	2.40	0.55
56:N0:148:LEU:HD12	56:N0:149:LYS:N	2.21	0.55
59:N3:80:ARG:HH12	59:N3:116:GLY:HA3	3.27	0.55
59:N3:24:ASN:O	59:N3:99:ALA:HA	2.05	0.55
40:L3:358:TRP:CZ3	60:N4:15:PRO:HD2	2.41	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:S6:138:ALA:O	8:S6:141:ILE:N	3.05	0.55
79:Q3:59:CYS:O	79:Q3:61:LYS:HG2	6.38	0.55
36:1:2607:G:H2'	36:1:2608:G:H8	1.70	0.55
52:M6:8:VAL:HA	52:M6:34:VAL:O	2.06	0.55
51:M5:170:LYS:C	51:M5:172:ARG:H	2.10	0.55
51:M5:42:PRO:HG3	51:M5:61:ILE:HG13	2.62	0.55
36:1:89:A:OP2	54:M8:171:LYS:NZ	2.32	0.55
34:SR:116:ASP:HA	34:SR:156:VAL:HG11	2.88	0.55
22:D0:44:ASN:ND2	22:D0:103:ILE:HD11	4.20	0.55
36:1:581:U:C4	87:1:4171:OHX:N4	2.74	0.55
36:1:2908:G:N7	87:1:3874:OHX:N4	2.53	0.55
2:S0:143:VAL:HG23	23:D1:60:ARG:HH22	1.71	0.55
36:5:595:G:H2'	36:5:596:C:C6	2.40	0.55
1:6:491:C:H42	1:6:497:G:H21	1.54	0.55
36:5:703:G:O2'	36:5:787:G:H4'	2.07	0.55
53:M7:20:SER:HB3	53:M7:21:TYR:CD2	2.42	0.55
36:1:3291:G:O2'	36:1:3292:A:H5'	2.07	0.55
36:5:3362:A:H2'	36:5:3363:U:O4'	2.06	0.55
36:1:3046:A:H2'	36:1:3047:U:O4'	2.05	0.55
36:1:1484:U:O5'	36:1:1484:U:H6	1.89	0.55
1:2:884:A:O5'	1:2:884:A:H8	1.90	0.55
68:O2:59:SER:OG	36:5:1405:U:OP2	185.98	0.55
36:1:1507:G:H1'	53:M7:139:TYR:CE1	2.41	0.55
6:S4:11:ARG:HH11	6:S4:20:LEU:HB3	2.85	0.55
1:6:991:G:OP2	87:6:2177:OHX:N2	2.39	0.55
44:L7:48:ASN:HA	44:L7:51:TYR:HD2	2.85	0.55
41:L4:188:ARG:HD2	41:L4:193:LYS:H	3.89	0.55
43:L6:76:LEU:HD11	43:L6:141:VAL:HG21	2.70	0.55
1:2:1475:A:H2'	1:2:1476:C:H6	1.71	0.55
1:2:1539:G:H1	20:C8:27:LYS:HD2	1.71	0.55
36:5:1475:A:C2'	36:5:1476:G:H5'	2.37	0.55
1:2:1273:G:N7	1:2:1430:U:H3'	2.22	0.55
17:C5:18:ARG:NH1	1:6:1548:G:OP1	372.99	0.55
20:C8:91:ASP:CG	20:C8:94:ASP:HB3	4.90	0.55
48:M1:108:GLU:HA	48:M1:122:ILE:HG23	2.33	0.55
23:D1:33:GLN:HG3	23:D1:53:TYR:O	2.70	0.55
23:D1:85:TYR:CE1	29:D7:6:ASP:HB2	2.75	0.55
4:S2:152:HIS:O	4:S2:194:GLU:HB3	5.01	0.55
68:O2:111:ARG:NH1	68:O2:115:LEU:HD21	2.20	0.55
36:5:1764:U:C5	36:5:1765:U:H1'	2.42	0.55
79:Q3:28:LYS:O	79:Q3:32:GLN:HG3	3.35	0.55
14:C2:119:SER:OG	14:C2:120:VAL:N	2.39	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:C5:128:HIS:HD2	35:SM:71:ASN:HD22	3.78	0.55
6:S4:71:LYS:HB2	6:S4:76:VAL:HA	1.88	0.55
9:S7:129:LEU:HD21	9:S7:172:VAL:HG11	1.88	0.55
1:6:147:A:C6	1:6:148:A:C2	2.94	0.55
34:SR:21:THR:HA	34:SR:290:VAL:HG23	1.88	0.55
72:O6:80:PHE:O	72:O6:83:ALA:HB3	2.87	0.55
36:1:3210:A:H5'	50:M4:109:ARG:HH12	1.72	0.55
50:M4:108:ARG:HH21	52:M6:197:LEU:HA	2.22	0.55
8:S6:74:LYS:O	8:S6:75:LEU:HD23	2.07	0.55
79:Q3:13:LYS:HE3	79:Q3:14:TYR:CZ	2.40	0.55
1:6:680:U:C2	1:6:682:C:N4	2.75	0.55
71:O5:47:VAL:O	71:O5:51:ILE:HG13	2.37	0.55
71:O5:21:LEU:HD11	71:O5:55:LEU:HD21	3.40	0.55
1:2:1085:G:N7	87:2:2028:OHX:N2	2.54	0.55
36:1:645:A:C6	36:1:2372:A:C2	2.94	0.55
43:L6:17:ALA:O	36:5:591:G:O2'	211.77	0.55
36:1:705:A:H62	64:N8:74:ASN:HD21	1.54	0.55
64:N8:82:ILE:CG2	64:N8:87:ARG:HG3	3.55	0.55
87:5:3968:OHX:N3	87:5:4237:OHX:N5	2.54	0.55
36:5:2197:C:C5	36:5:2242:A:C5	2.94	0.55
70:O4:38:LEU:HD22	70:O4:38:LEU:H	1.70	0.55
1:2:142:G:N3	1:2:142:G:H2'	2.21	0.55
56:N0:41:TYR:CE2	56:N0:45:LEU:HD23	3.59	0.55
22:D0:37:VAL:O	22:D0:41:ILE:HG13	5.40	0.55
29:D7:23:THR:OG1	29:D7:24:LEU:N	2.38	0.55
36:1:426:G:OP1	68:O2:15:LYS:NZ	2.38	0.55
1:6:982:U:O4	1:6:983:A:N6	2.39	0.55
64:N8:131:SER:HB3	64:N8:134:ALA:CB	2.53	0.55
12:C0:29:GLN:OE1	12:C0:39:ASN:ND2	2.38	0.55
36:1:1531:C:O5'	36:1:1531:C:H6	1.88	0.55
3:S1:23:PRO:HB3	3:S1:26:ARG:HH22	3.10	0.55
87:5:4050:OHX:N5	87:5:4194:OHX:N6	2.54	0.55
1:2:1114:G:O2'	1:2:1130:G:O6	2.19	0.55
1:2:1765:A:OP1	87:2:2092:OHX:N5	2.40	0.55
6:S4:253:ASP:O	6:S4:256:ARG:N	2.99	0.55
17:C5:75:PRO:HA	17:C5:93:VAL:HB	1.96	0.55
1:6:363:G:OP1	87:6:2116:OHX:N1	2.40	0.55
51:M5:105:ARG:HG2	51:M5:108:ARG:HH22	1.70	0.55
36:1:1397:C:C2'	36:1:1398:U:H5'	2.35	0.55
45:L8:58:VAL:HG11	51:M5:33:LYS:HE2	3.28	0.55
40:L3:14:LEU:HD13	40:L3:262:TRP:CH2	3.01	0.55
36:5:3198:U:H4'	36:5:3199:G:OP2	2.04	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:M7:125:GLN:HB2	53:M7:141:SER:HB2	3.72	0.55
26:D4:103:ALA:HB1	26:D4:107:GLN:OE1	3.64	0.55
28:D6:34:LYS:O	28:D6:35:ALA:HB3	4.46	0.55
47:M0:46:PHE:HB3	47:M0:140:THR:O	2.74	0.55
36:1:728:G:OP1	87:1:4101:OHX:N5	2.40	0.55
43:L6:97:ASN:O	43:L6:99:GLU:HG3	2.06	0.55
5:S3:211:PRO:HG3	19:C7:20:TYR:CE1	3.14	0.55
42:L5:64:ILE:HD13	42:L5:105:ILE:HD12	1.87	0.55
5:S3:61:GLU:HB2	5:S3:64:ARG:HB3	3.72	0.55
16:C4:103:ARG:HE	28:D6:52:ASP:CB	6.64	0.55
48:M1:133:ARG:HD2	48:M1:152:HIS:O	2.07	0.55
55:M9:134:HIS:CE1	55:M9:137:ALA:HB2	2.42	0.55
20:C8:145:ARG:HG2	35:SM:72:ARG:HH21	9.93	0.55
36:5:559:A:H2'	36:5:560:G:O5'	2.07	0.55
40:L3:58:ARG:HA	40:L3:357:LYS:HB2	3.15	0.55
43:L6:146:ILE:HG22	43:L6:147:ALA:N	2.21	0.55
42:L5:262:LYS:O	42:L5:264:GLN:N	2.39	0.55
8:S6:177:ARG:NH2	1:6:143:G:N7	311.26	0.55
34:SR:305:TYR:CD2	34:SR:311:ARG:HG3	3.73	0.55
3:S1:113:MET:HE3	3:S1:211:HIS:NE2	3.14	0.55
70:O4:5:VAL:HG22	70:O4:6:THR:N	2.15	0.55
36:5:835:G:H22	36:5:857:G:H1'	1.70	0.55
36:5:2144:A:H1'	36:5:2281:A:N6	2.22	0.55
60:N4:6:ASP:HB3	60:N4:11:ALA:H	2.61	0.55
4:S2:145:GLY:O	4:S2:147:ASN:N	5.22	0.55
42:L5:55:PHE:CZ	42:L5:158:ARG:HB3	4.95	0.55
22:D0:102:ARG:HG3	22:D0:103:ILE:N	4.37	0.55
1:6:1529:C:H2'	1:6:1530:C:C6	2.41	0.55
46:L9:8:GLN:OE1	46:L9:72:LYS:HD3	2.06	0.55
53:M7:67:ILE:HG23	53:M7:82:ARG:CZ	4.52	0.55
36:1:1180:A:H61	36:1:1325:U:H3	1.53	0.55
50:M4:97:SER:O	50:M4:100:ALA:N	3.22	0.55
8:S6:76:LEU:CD1	1:6:1673:G:H5'	289.02	0.55
1:6:217:A:O2'	1:6:218:A:O5'	2.24	0.55
1:6:219:A:H2'	1:6:831:U:O2	2.06	0.55
36:1:1243:G:HO2'	36:1:1271:A:HO2'	1.54	0.55
22:D0:119:ALA:C	22:D0:121:ASN:H	2.09	0.55
36:5:2631:U:H2'	36:5:2632:G:H8	1.70	0.55
12:C0:77:ARG:NH2	12:C0:84:GLU:O	4.78	0.55
36:1:1069:C:H2'	36:1:1070:U:H6	1.70	0.55
36:5:34:A:H2'	36:5:35:A:O4'	2.06	0.55
87:1:4108:OHX:N4	65:N9:6:ASN:OD1	2.40	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2955:U:C2	36:5:2956:A:C8	2.95	0.55
59:N3:33:ASN:HB2	59:N3:64:LYS:H	4.95	0.55
46:L9:23:ARG:NH2	46:L9:42:ASP:OD2	3.96	0.55
36:5:94:G:H2'	36:5:95:A:C8	2.41	0.55
28:D6:23:CYS:SG	28:D6:73:TYR:HA	2.93	0.55
1:6:475:A:C6	1:6:476:U:C2	2.94	0.55
47:M0:170:LYS:HZ3	57:N1:159:PHE:HB2	1.70	0.55
41:L4:118:LYS:O	41:L4:122:THR:HG23	2.83	0.55
19:C7:60:ARG:O	19:C7:63:LYS:N	2.38	0.55
20:C8:22:VAL:HG12	20:C8:23:ASP:O	2.32	0.55
20:C8:40:ARG:NH1	20:C8:40:ARG:HG2	2.42	0.55
7:S5:107:LYS:O	7:S5:111:VAL:HG23	2.06	0.55
42:L5:213:ASP:HB3	42:L5:214:ASP:OD2	5.42	0.55
1:2:1429:G:H1'	22:D0:74:GLU:CG	2.36	0.55
1:2:579:A:N7	5:S3:178:ARG:HD3	2.21	0.55
36:5:658:G:OP1	87:8:227:OHX:N5	2.40	0.55
2:S0:124:THR:O	2:S0:146:LEU:HB2	3.17	0.55
54:M8:44:PHE:CD1	54:M8:139:ILE:HD11	3.69	0.55
1:6:1699:G:N2	1:6:1701:A:H3'	2.20	0.55
1:2:1483:A:H4'	18:C6:71:GLY:HA2	1.89	0.55
50:M4:115:PHE:CE1	50:M4:119:GLN:NE2	3.05	0.55
34:SR:16:HIS:NE2	34:SR:43:ILE:HG13	3.26	0.55
1:2:1011:G:OP2	87:2:2090:OHX:N5	2.40	0.55
36:5:8:C:H1'	38:8:152:G:N2	2.22	0.55
51:M5:170:LYS:HD3	51:M5:170:LYS:C	4.78	0.55
24:D2:66:ASN:OD1	24:D2:67:GLY:N	2.33	0.55
64:N8:114:GLY:O	64:N8:137:LYS:HE3	5.89	0.55
1:6:845:G:H2'	1:6:846:G:H8	1.72	0.55
2:S0:102:PHE:O	2:S0:103:THR:HB	2.24	0.55
1:2:201:G:N2	1:2:202:A:N3	2.54	0.55
36:5:236:G:H2'	36:5:237:G:O4'	2.07	0.55
36:1:1870:C:H1'	36:1:3066:U:O2'	2.06	0.55
45:L8:138:HIS:CE1	36:5:119:U:C2	102.25	0.55
36:1:733:G:O2'	36:1:735:A:N6	2.35	0.55
9:S7:154:LEU:HD11	9:S7:183:PHE:HD1	3.58	0.55
1:2:1311:U:H1'	1:2:1315:U:O2	2.06	0.55
1:2:739:G:O6	87:2:2097:OHX:N4	2.39	0.55
36:5:822:G:H2'	36:5:823:C:C6	2.41	0.55
1:2:1305:U:O4'	1:2:1314:U:N3	2.39	0.55
36:1:1079:A:H4'	42:L5:140:ARG:O	2.07	0.55
36:1:1412:G:H2'	36:1:1413:G:H8	1.71	0.55
36:1:278:U:H2'	36:1:279:U:C6	2.41	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
56:N0:131:LYS:HB2	56:N0:134:ASP:OD2	2.06	0.55
36:5:2378:C:H2'	36:5:2379:U:H6	1.72	0.55
2:S0:154:GLU:O	2:S0:156:VAL:HG12	5.22	0.55
36:5:2115:G:O5'	36:5:2115:G:H8	1.90	0.55
36:1:900:G:H1'	36:1:1589:A:N6	2.22	0.55
7:S5:100:ASN:O	7:S5:102:ARG:N	2.40	0.55
1:6:129:U:OP2	1:6:129:U:H2'	2.07	0.55
1:2:46:A:N6	1:2:433:C:H4'	2.22	0.55
1:6:567:A:H2'	1:6:568:G:O4'	2.07	0.55
53:M7:130:TYR:CD1	53:M7:130:TYR:N	2.74	0.55
28:D6:79:ILE:HD13	28:D6:84:VAL:HG21	1.89	0.55
44:L7:158:LYS:NZ	44:L7:159:GLN:H	2.58	0.55
6:S4:57:ASN:CB	1:6:446:A:H5''	386.14	0.55
41:L4:139:GLY:O	41:L4:180:LYS:HE2	6.08	0.55
1:2:1566:U:H4'	20:C8:37:GLY:O	2.07	0.55
7:S5:205:SER:O	7:S5:207:THR:HG23	2.20	0.55
36:1:1027:A:C5	36:1:1029:G:H1'	2.41	0.55
31:D9:14:TYR:HE1	1:6:1553:G:H4'	407.02	0.55
21:C9:49:ASP:HB3	21:C9:53:TRP:HB3	1.89	0.55
15:C3:148:ALA:O	15:C3:150:VAL:N	3.91	0.55
16:C4:34:SER:O	16:C4:36:LYS:N	2.32	0.55
16:C4:99:GLN:OE1	28:D6:46:GLU:HB3	4.64	0.55
3:S1:61:LEU:O	3:S1:63:GLY:N	2.40	0.55
48:M1:100:GLY:HA3	48:M1:154:THR:OG1	2.78	0.55
63:N7:76:ASN:O	63:N7:79:HIS:HB2	2.52	0.55
55:M9:38:ARG:HH21	36:5:1603:A:P	110.81	0.55
55:M9:31:GLU:O	55:M9:34:GLN:HB2	2.36	0.55
79:Q3:33:GLN:HG3	79:Q3:34:HIS:CD2	2.41	0.55
1:6:1227:A:C8	1:6:1256:A:N6	2.74	0.55
36:5:3170:A:N6	36:5:3171:U:O4	2.38	0.55
1:6:82:U:H2'	1:6:83:G:O4'	2.06	0.55
18:C6:103:ASN:O	18:C6:107:LYS:N	3.68	0.55
66:O0:99:ASP:O	66:O0:102:THR:N	3.36	0.55
36:5:579:G:O2'	36:5:580:C:H5'	2.06	0.55
57:N1:103:GLN:HA	57:N1:106:LEU:HD12	5.90	0.55
36:5:1572:U:O2'	36:5:1573:G:H8	1.89	0.55
40:L3:37:ARG:O	40:L3:186:GLY:HA2	2.14	0.55
1:2:811:A:C2	1:2:858:G:H1'	2.42	0.55
64:N8:80:THR:C	64:N8:82:ILE:H	2.10	0.55
50:M4:99:TRP:CD1	50:M4:103:ILE:HD11	3.20	0.55
15:C3:28:LEU:O	15:C3:32:SER:OG	4.42	0.55
74:O8:54:LEU:HD21	74:O8:56:ILE:HD11	1.88	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1780:G:N2	36:5:1781:C:C2	2.75	0.55
36:1:3220:G:C5	36:1:3266:G:C2	2.95	0.55
1:6:221:A:H5''	1:6:833:U:H1'	1.89	0.55
8:S6:50:PHE:CD2	8:S6:111:LEU:HD22	4.58	0.55
1:2:1334:U:H2'	1:2:1335:U:C6	2.41	0.55
1:2:763:G:H8	1:2:763:G:O5'	1.90	0.55
36:1:511:G:C6	36:1:512:U:C4	2.95	0.55
1:2:1060:U:H2'	1:2:1061:A:O4'	2.07	0.55
46:L9:44:THR:HG22	36:5:3186:A:C2	327.04	0.55
11:S9:40:LYS:HA	11:S9:43:TYR:CD2	2.40	0.55
36:1:1161:G:O3'	68:O2:54:LYS:HE3	2.06	0.55
36:1:2609:A:C4	36:1:2610:G:C8	2.95	0.55
15:C3:35:GLU:O	15:C3:39:LYS:N	3.44	0.55
10:S8:65:PHE:HA	10:S8:181:GLY:O	2.06	0.55
25:D3:63:GLN:HA	25:D3:65:ASN:H	1.71	0.55
36:5:2712:U:H2'	36:5:2713:U:C6	2.41	0.55
36:5:2659:G:H4'	36:5:2751:G:O2'	2.06	0.55
78:Q2:21:THR:HG21	78:Q2:76:LYS:HD2	5.70	0.55
78:Q2:9:LYS:HA	78:Q2:21:THR:O	2.07	0.55
25:D3:69:ARG:NH1	25:D3:116:ASP:OD2	2.40	0.55
76:Q0:99:CYS:SG	76:Q0:115:CYS:SG	3.04	0.55
51:M5:84:PRO:HD2	36:5:44:U:OP1	165.89	0.55
53:M7:125:GLN:O	53:M7:140:GLU:HB3	4.50	0.55
47:M0:208:ASN:HA	47:M0:211:ARG:HG2	3.74	0.55
36:5:1114:U:OP2	87:5:4003:OHX:N5	2.40	0.55
65:N9:14:ARG:HH12	36:5:952:A:P	208.81	0.55
45:L8:242:ALA:HA	45:L8:245:LYS:HB3	2.93	0.55
13:C1:60:PHE:N	13:C1:60:PHE:CD2	3.96	0.55
26:D4:12:VAL:HG23	26:D4:23:PHE:CB	3.84	0.55
36:1:728:G:H5''	54:M8:43:PRO:HB3	1.89	0.55
38:4:21:C:N4	38:4:22:U:O4	2.40	0.55
5:S3:206:VAL:HG22	19:C7:41:ILE:HG23	3.52	0.55
73:O7:25:ARG:HE	75:O9:51:ILE:HD11	1.69	0.55
18:C6:6:SER:HB3	18:C6:23:LYS:HA	1.89	0.55
21:C9:118:PRO:O	21:C9:120:GLY:N	2.39	0.55
36:1:3088:G:H2'	36:1:3089:C:C6	2.42	0.55
21:C9:77:ASN:HA	21:C9:96:ALA:HB3	1.87	0.55
15:C3:56:ASP:O	29:D7:46:VAL:HA	2.07	0.55
16:C4:102:LEU:HD11	28:D6:53:LEU:HD21	2.56	0.55
36:5:1441:G:O6	87:5:3959:OHX:N2	2.39	0.55
23:D1:25:LYS:HD2	23:D1:27:ASP:OD2	3.94	0.55
54:M8:135:GLN:CD	54:M8:135:GLN:H	2.21	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
63:N7:95:VAL:HG23	63:N7:96:VAL:HG23	5.74	0.55
68:O2:120:THR:O	68:O2:122:PRO:HD3	2.07	0.55
55:M9:7:GLN:HE21	55:M9:35:ALA:HB3	1.95	0.55
36:5:1317:A:C2	36:5:1319:G:C6	2.94	0.55
18:C6:115:THR:HA	18:C6:118:ILE:HG23	1.87	0.55
34:SR:22:SER:OG	34:SR:70:ASP:HA	2.23	0.55
34:SR:220:ILE:HD13	34:SR:243:LEU:HD21	2.92	0.55
39:L2:42:ARG:HG3	39:L2:89:TYR:CE1	2.53	0.55
52:M6:193:GLN:O	52:M6:196:ALA:HB3	2.07	0.55
36:5:3163:A:C6	36:5:3164:C:N4	2.75	0.55
58:N2:12:ALA:HB2	58:N2:68:THR:HG22	5.68	0.55
26:D4:101:GLU:CD	26:D4:102:LYS:HE2	2.27	0.55
71:O5:42:PRO:O	71:O5:45:LYS:N	2.27	0.55
36:1:3139:A:H8	36:1:3139:A:C5'	2.20	0.55
17:C5:90:ILE:HD11	17:C5:112:LEU:HD21	1.88	0.55
57:N1:20:ARG:O	57:N1:21:LYS:HG2	2.06	0.55
36:5:738:A:H2'	36:5:739:G:H8	1.71	0.55
78:Q2:71:ARG:HH21	78:Q2:80:ARG:HD3	4.64	0.55
10:S8:12:SER:OG	10:S8:14:THR:N	2.40	0.55
36:1:1538:G:OP2	87:1:4134:OHX:N4	2.40	0.55
1:2:50:C:H1'	1:2:430:G:H22	1.71	0.55
36:5:1659:U:H3	36:5:1790:G:H1	1.54	0.55
58:N2:28:PHE:O	58:N2:30:PRO:HD3	2.30	0.55
42:L5:294:ALA:C	42:L5:296:GLN:H	2.10	0.55
1:2:1065:A:H4'	3:S1:205:PHE:CD2	2.42	0.55
1:6:432:G:C5	1:6:433:C:C4	2.95	0.55
1:2:5:U:OP2	4:S2:204:THR:OG1	2.25	0.55
37:3:16:U:O4	37:3:17:A:N6	2.40	0.55
44:L7:123:THR:O	44:L7:126:LEU:HB2	2.07	0.55
1:2:1334:U:H2'	1:2:1335:U:H6	1.71	0.55
59:N3:75:PRO:HB2	59:N3:103:ALA:O	2.05	0.55
59:N3:13:ILE:HD13	59:N3:14:SER:N	5.65	0.55
36:5:601:U:H2'	36:5:602:A:O4'	2.06	0.55
36:5:2730:G:N3	36:5:2799:A:C2	2.75	0.55
36:5:2667:A:C2	36:5:2690:G:C4	2.95	0.55
2:S0:114:SER:O	2:S0:116:LYS:HG2	2.07	0.55
36:1:2886:U:C6	36:1:2911:A:N7	2.75	0.55
25:D3:141:GLU:OE1	25:D3:144:ARG:NH1	14.89	0.55
59:N3:121:GLU:N	59:N3:121:GLU:OE1	3.35	0.55
36:1:1317:A:C2	36:1:1319:G:C6	2.95	0.55
46:L9:84:LYS:O	46:L9:187:ILE:HB	2.07	0.55
46:L9:17:THR:HG21	50:M4:3:THR:O	2.32	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D6:38:ARG:HH11	28:D6:38:ARG:HG3	1.72	0.55
47:M0:34:TYR:HB3	47:M0:89:VAL:HB	1.88	0.55
44:L7:157:ASN:O	44:L7:159:GLN:HG2	2.47	0.55
45:L8:165:PHE:HZ	51:M5:3:ALA:HB1	1.71	0.55
5:S3:167:PHE:CE1	5:S3:192:PRO:HB3	2.42	0.55
36:5:359:U:O2	36:5:920:A:N6	2.40	0.55
36:1:1234:G:H1	36:1:1254:C:N4	1.97	0.55
1:2:1479:A:H2'	1:2:1480:G:C8	2.39	0.55
1:2:1609:U:H2'	1:2:1610:G:O4'	2.07	0.55
17:C5:18:ARG:HG2	20:C8:90:ASN:O	2.06	0.55
5:S3:141:LYS:HE3	5:S3:179:GLN:OE1	5.96	0.55
1:2:1274:C:H41	35:SM:95:SER:HA	1.70	0.55
1:2:977:A:N6	1:2:1025:A:C8	2.75	0.55
1:6:915:A:OP1	87:6:2075:OHX:N6	2.40	0.55
48:M1:11:ASP:O	48:M1:12:LEU:HB3	3.29	0.55
1:2:1229:G:HO2'	1:2:1255:G:H22	1.49	0.55
36:5:1319:G:C6	36:5:1320:C:C4	2.95	0.55
50:M4:121:MET:CE	36:5:3214:U:H2'	277.85	0.55
9:S7:165:LYS:O	9:S7:168:SER:OG	2.21	0.55
34:SR:43:ILE:HG22	34:SR:44:SER:O	3.03	0.55
52:M6:76:PRO:HB3	52:M6:138:LEU:HG	1.89	0.55
40:L3:114:VAL:HG13	40:L3:163:HIS:CG	3.33	0.55
26:D4:114:ARG:O	26:D4:117:LYS:HB2	3.11	0.55
36:5:856:G:C6	36:5:857:G:C2	2.94	0.55
49:M3:69:VAL:HB	49:M3:149:GLN:NE2	2.19	0.55
72:O6:15:LYS:HG2	36:5:73:C:C5	97.95	0.55
13:C1:99:ARG:HD3	25:D3:8:GLY:O	2.84	0.55
38:4:135:G:OP2	61:N5:56:ARG:NH2	2.39	0.55
36:1:2193:U:O2	36:1:2315:G:N2	2.40	0.55
1:2:775:G:H1	1:2:785:U:H3	1.55	0.55
36:5:214:G:O6	36:5:226:C:N4	2.25	0.55
70:O4:57:LEU:HD12	70:O4:61:GLN:CB	3.37	0.55
1:2:1558:U:N3	17:C5:122:THR:OG1	2.38	0.55
36:5:3084:C:OP2	87:5:3901:OHX:N3	2.40	0.55
70:O4:8:ARG:CG	70:O4:8:ARG:HH11	2.17	0.55
1:2:214:G:O6	87:2:2116:OHX:N5	2.40	0.55
6:S4:128:LYS:O	6:S4:140:VAL:HG23	2.07	0.55
36:5:1877:U:H5''	36:5:1878:G:H5'	1.88	0.55
1:2:1219:A:O2'	12:C0:48:SER:HA	2.07	0.55
10:S8:8:ARG:NH2	10:S8:21:PHE:HB3	2.21	0.55
34:SR:161:LYS:HE3	34:SR:164:ASP:HB3	1.88	0.55
6:S4:155:LYS:HZ1	1:6:244:A:P	342.40	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
55:M9:117:LYS:O	55:M9:120:TYR:HB3	2.10	0.55
36:1:1670:C:H4'	36:1:1860:G:OP1	2.07	0.55
51:M5:94:TYR:CE2	51:M5:96:ARG:HB2	3.00	0.55
36:5:3283:U:H2'	36:5:3284:G:H8	1.71	0.55
13:C1:75:VAL:HA	13:C1:86:ILE:HG22	1.88	0.55
22:D0:117:VAL:HG12	22:D0:118:VAL:HG12	6.35	0.55
61:N5:69:SER:H	61:N5:72:ALA:HB3	2.62	0.55
1:6:1435:G:H4'	1:6:1436:A:H5'	1.88	0.55
36:1:1716:U:O2'	36:1:1717:U:H4'	2.07	0.55
39:L2:238:ILE:N	39:L2:238:ILE:HD12	2.22	0.55
36:1:2114:C:OP1	36:1:2114:C:H4'	2.06	0.55
36:5:1501:U:H6	36:5:1501:U:O5'	1.90	0.55
36:1:1220:U:H4'	36:1:1221:A:H5''	1.89	0.55
25:D3:96:VAL:HG13	25:D3:127:VAL:HG11	1.89	0.55
36:1:2716:U:O2'	78:Q2:10:THR:OG1	2.05	0.55
40:L3:229:VAL:CG1	40:L3:235:THR:HG21	2.70	0.55
46:L9:49:ASN:C	46:L9:51:GLN:H	2.06	0.55
36:1:2355:G:H4'	53:M7:139:TYR:CD2	2.41	0.55
36:1:2355:G:OP1	53:M7:141:SER:HB3	2.06	0.55
32:E0:28:LYS:HE3	32:E0:31:LYS:HE3	3.62	0.55
27:D5:61:SER:H	27:D5:64:VAL:CG2	2.68	0.55
7:S5:43:PHE:H	7:S5:46:TRP:H	1.83	0.55
42:L5:146:LEU:HB3	36:5:2746:A:C2	259.22	0.55
12:C0:13:GLN:O	12:C0:16:PHE:N	3.16	0.55
12:C0:38:LYS:HB2	12:C0:41:TYR:CD1	2.41	0.55
23:D1:11:LEU:HD12	23:D1:12:TYR:N	3.46	0.55
54:M8:106:PHE:HB3	54:M8:110:ALA:HB3	4.71	0.55
55:M9:106:LEU:HD13	55:M9:138:LEU:HD11	2.71	0.55
70:O4:81:CYS:O	70:O4:84:CYS:HB2	3.80	0.55
59:N3:96:GLU:HB2	60:N4:21:PHE:HE1	3.28	0.55
34:SR:18:GLY:N	34:SR:308:ASN:OD1	3.85	0.55
36:5:2314:U:O4	87:5:3973:OHX:N5	2.39	0.55
52:M6:121:PRO:HG3	56:N0:164:SER:HB3	1.89	0.55
52:M6:121:PRO:CA	52:M6:124:LEU:HD23	3.51	0.55
39:L2:114:SER:O	39:L2:116:VAL:N	3.32	0.55
39:L2:134:VAL:HG23	39:L2:149:ARG:O	4.77	0.55
36:5:3159:C:H2'	36:5:3160:U:H6	1.71	0.55
1:6:1146:G:C6	1:6:1147:A:C6	2.95	0.55
36:1:3004:C:O2'	36:1:3005:A:H5'	2.07	0.55
36:1:2315:G:C2	36:1:2316:G:N7	2.74	0.55
35:SM:25:ILE:HG12	37:3:39:C:H5'	1.89	0.55
35:SM:25:ILE:HG22	48:M1:46:VAL:HB	1.89	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:595:G:H2'	36:1:596:C:H6	1.71	0.55
41:L4:234:ASN:OD1	36:5:693:A:H4'	105.78	0.55
44:L7:137:GLY:O	44:L7:139:PRO:HD3	2.33	0.55
36:5:1049:C:C2	36:5:1050:U:C5	2.95	0.55
87:6:2064:OHX:N2	87:6:2152:OHX:N6	2.55	0.55
55:M9:143:ILE:C	55:M9:145:ALA:H	2.63	0.55
73:O7:22:CYS:HB3	73:O7:37:CYS:HB3	3.43	0.55
38:8:81:U:H1'	38:8:82:U:H5''	1.88	0.55
78:Q2:38:GLN:NE2	78:Q2:38:GLN:HA	2.37	0.55
44:L7:121:LYS:HB2	57:N1:133:ALA:HB3	1.89	0.55
14:C2:49:THR:HB	33:E1:106:TYR:HE1	3.25	0.55
43:L6:142:ASP:O	43:L6:145:LEU:N	3.80	0.55
74:O8:32:ASN:ND2	74:O8:34:ALA:HB3	5.40	0.55
54:M8:79:LYS:HG2	54:M8:136:ASN:OD1	2.07	0.55
39:L2:29:LEU:HB2	39:L2:123:ARG:HA	1.88	0.55
46:L9:150:SER:HG	46:L9:153:ASP:H	1.49	0.55
36:1:898:U:C4	36:1:899:U:C5	2.95	0.55
1:6:1167:G:H1	1:6:1578:U:H3	1.54	0.55
40:L3:71:GLU:OE1	60:N4:1:MET:HB2	2.07	0.55
36:1:906:A:OP1	87:1:3999:OHX:N1	2.39	0.55
25:D3:126:LYS:HB3	25:D3:131:SER:N	2.22	0.55
25:D3:68:ILE:O	25:D3:70:LYS:NZ	2.40	0.55
36:1:1319:G:C6	36:1:1320:C:N4	2.75	0.55
41:L4:98:ARG:HB3	41:L4:98:ARG:CZ	3.17	0.55
28:D6:94:ASN:HD21	28:D6:96:ALA:HB3	2.05	0.55
47:M0:171:TRP:O	47:M0:174:THR:HG22	2.07	0.55
45:L8:61:GLN:HB2	51:M5:28:TRP:HH2	2.39	0.55
1:6:1317:C:H2'	1:6:1318:G:O4'	2.07	0.55
1:6:1317:C:O2'	1:6:1400:A:N3	2.31	0.55
1:2:1474:G:O2'	1:2:1475:A:O5'	2.18	0.55
18:C6:36:ILE:C	18:C6:38:LEU:H	2.23	0.55
7:S5:34:GLN:HG2	18:C6:57:LEU:CD1	2.37	0.55
7:S5:189:THR:O	7:S5:193:THR:HG23	2.69	0.55
1:2:1280:C:H2'	1:2:1281:G:C8	2.42	0.55
67:O1:20:LEU:O	67:O1:23:VAL:HG23	2.92	0.55
4:S2:140:ARG:NH1	23:D1:10:GLU:OE1	7.23	0.55
36:1:2651:G:H5''	36:1:2652:U:O4'	2.07	0.55
11:S9:171:ARG:HH11	11:S9:174:ARG:HB3	4.07	0.55
57:N1:54:HIS:O	57:N1:56:PHE:N	2.41	0.55
57:N1:82:ASN:HA	65:N9:21:ILE:HD13	1.89	0.55
18:C6:47:LYS:HZ3	18:C6:50:GLU:CD	2.10	0.55
36:1:31:C:H2'	36:1:32:U:H6	1.71	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:L4:59:GLN:OE1	73:O7:55:ARG:NH2	2.86	0.55
40:L3:166:ILE:HG21	40:L3:174:LYS:O	2.07	0.55
36:5:990:U:O4	87:5:4179:OHX:N6	2.40	0.55
49:M3:117:LYS:O	49:M3:121:SER:OG	2.24	0.55
25:D3:27:ASN:O	25:D3:30:LYS:N	3.03	0.55
36:5:549:U:H2'	36:5:550:A:C8	2.42	0.55
36:1:595:G:N1	36:1:609:G:H5''	2.21	0.55
4:S2:144:TRP:CE2	4:S2:173:PRO:HG3	2.42	0.55
4:S2:175:GLY:O	11:S9:53:ARG:NE	4.36	0.55
22:D0:96:PRO:O	22:D0:99:ILE:HG12	6.11	0.55
36:1:523:A:H2'	36:1:523:A:N3	2.21	0.55
36:1:1852:G:C6	36:1:1853:U:C4	2.95	0.55
36:1:830:A:OP1	87:1:4010:OHX:N4	2.40	0.55
36:1:1673:G:N2	36:1:1775:G:H1'	2.22	0.55
1:6:1264:G:H8	1:6:1264:G:O5'	1.90	0.55
1:6:142:G:H5'	1:6:142:G:N3	2.23	0.55
9:S7:138:LYS:O	9:S7:139:ARG:NE	2.32	0.55
74:O8:10:GLN:HG2	74:O8:13:GLU:OE1	4.89	0.55
36:1:1783:U:H2'	36:1:1784:G:C8	2.42	0.55
21:C9:40:SER:O	21:C9:42:GLY:N	2.40	0.55
36:5:595:G:N2	36:5:609:G:H5''	2.22	0.55
1:6:1690:G:O6	1:6:1711:C:N4	2.40	0.55
1:2:1029:U:O2'	1:2:1031:U:OP2	2.21	0.55
36:5:2819:A:C2'	36:5:2820:A:H5'	2.37	0.55
36:1:1879:A:H4'	36:1:1880:U:OP2	2.06	0.55
45:L8:93:LEU:HD21	45:L8:211:LEU:HD23	5.80	0.55
36:5:3341:U:H5''	36:5:3342:A:OP2	2.07	0.55
87:1:3972:OHX:N3	87:1:4155:OHX:N1	2.55	0.55
11:S9:13:SER:HB3	11:S9:47:PHE:CD1	2.42	0.55
1:2:491:C:H42	1:2:496:G:H1	1.55	0.55
36:1:1077:U:OP1	65:N9:38:LYS:HE2	2.07	0.55
74:O8:47:GLY:C	74:O8:49:SER:H	2.09	0.55
36:1:175:C:H42	36:1:243:G:H1	1.54	0.55
67:O1:84:ASP:N	67:O1:84:ASP:OD1	2.38	0.55
1:2:577:G:H3'	1:2:577:G:C8	2.42	0.55
38:8:49:G:O6	38:8:76:C:N4	2.33	0.55
14:C2:95:LYS:HA	14:C2:117:GLY:HA2	3.26	0.55
40:L3:212:ASN:OD1	40:L3:354:VAL:N	3.29	0.54
36:5:3194:C:O2'	36:5:3195:U:H2'	2.07	0.54
75:O9:44:TRP:CE2	75:O9:45:ARG:HG2	5.17	0.54
16:C4:127:ARG:HB2	28:D6:22:ARG:HH12	1.71	0.54
28:D6:28:LYS:HG3	28:D6:29:SER:H	1.72	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:S9:146:PHE:CZ	1:6:765:G:C6	430.02	0.54
47:M0:160:PRO:HB3	36:5:2854:U:O3'	289.98	0.54
44:L7:52:GLN:HA	44:L7:55:TYR:HD2	2.46	0.54
10:S8:38:ILE:HD11	10:S8:81:VAL:HG23	1.89	0.54
36:1:739:G:H2'	36:1:740:G:H8	1.72	0.54
7:S5:81:ARG:O	7:S5:81:ARG:HG2	3.86	0.54
36:1:3325:G:H1	36:1:3381:U:H3	1.55	0.54
61:N5:105:VAL:HG22	61:N5:130:TYR:CD1	4.90	0.54
21:C9:15:ILE:O	21:C9:19:ALA:N	2.30	0.54
36:1:846:A:H2'	36:1:847:A:O4'	2.07	0.54
2:S0:25:GLY:HA3	2:S0:46:HIS:HB2	1.88	0.54
4:S2:213:ALA:O	4:S2:216:VAL:HG23	4.19	0.54
54:M8:81:VAL:HG13	54:M8:101:VAL:HG13	1.90	0.54
62:N6:51:ARG:NH1	38:8:71:A:OP2	33.84	0.54
71:O5:66:VAL:HA	71:O5:69:LEU:HD23	1.89	0.54
6:S4:121:TYR:OH	6:S4:235:TYR:O	2.66	0.54
36:5:3181:C:H2'	36:5:3182:G:C8	2.41	0.54
59:N3:120:LYS:N	59:N3:137:VAL:HG23	3.50	0.54
59:N3:58:VAL:HG23	59:N3:59:MET:N	2.77	0.54
9:S7:74:GLN:HG2	9:S7:131:PHE:HD2	5.38	0.54
36:5:511:G:C2	36:5:512:U:C2	2.95	0.54
36:1:863:C:H2'	36:1:864:G:O4'	2.07	0.54
36:1:3028:G:H2'	36:1:3029:A:C8	2.42	0.54
38:8:140:G:H2'	38:8:141:C:O4'	2.07	0.54
4:S2:44:LEU:HD21	4:S2:246:GLU:O	2.07	0.54
4:S2:43:ARG:O	4:S2:45:VAL:N	2.40	0.54
1:6:1515:A:H5''	1:6:1516:A:OP2	2.06	0.54
25:D3:139:LYS:NZ	1:6:32:U:OP1	392.48	0.54
1:2:90:C:H2'	1:2:91:G:C8	2.43	0.54
36:5:1528:G:O2'	36:5:1588:A:N3	2.33	0.54
42:L5:180:PHE:HB3	42:L5:195:LEU:HD13	1.89	0.54
50:M4:94:TRP:CZ2	50:M4:100:ALA:HB2	2.42	0.54
50:M4:24:LYS:HG2	50:M4:62:GLN:O	2.06	0.54
36:5:648:C:H4'	36:5:2397:A:C2	2.42	0.54
24:D2:114:GLU:O	24:D2:117:ARG:HB3	2.72	0.54
36:5:1667:A:H2'	36:5:1668:G:H8	1.72	0.54
36:1:1939:G:C6	36:1:1940:G:C5	2.95	0.54
48:M1:21:ILE:HG13	48:M1:37:LEU:HD11	1.89	0.54
46:L9:151:VAL:HG23	46:L9:152:GLU:H	3.04	0.54
36:1:511:G:H2'	36:1:512:U:H6	1.71	0.54
36:1:2764:C:H5''	64:N8:55:LYS:HG3	1.89	0.54
1:6:1004:U:H3'	1:6:1005:A:H5''	1.89	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1546:A:N6	36:5:1547:G:C2	2.75	0.54
36:5:2390:A:H2'	36:5:2391:G:O4'	2.07	0.54
36:1:2270:A:C6	36:1:2271:A:C6	2.95	0.54
36:1:1651:U:H5''	39:L2:71:LEU:HD22	1.88	0.54
52:M6:170:LYS:O	52:M6:173:ALA:HB3	2.06	0.54
1:6:577:G:H3'	1:6:577:G:H8	1.70	0.54
78:Q2:83:LEU:HD23	78:Q2:84:THR:H	1.85	0.54
36:5:2173:U:H5''	36:5:2174:G:O5'	2.07	0.54
40:L3:56:ILE:HD11	40:L3:359:ILE:HD13	1.89	0.54
26:D4:105:ARG:HH11	26:D4:109:LYS:HE2	1.71	0.54
11:S9:121:SER:O	11:S9:123:HIS:N	2.39	0.54
11:S9:124:HIS:NE2	11:S9:128:LEU:HD21	2.58	0.54
47:M0:160:PRO:HD3	36:5:2854:U:H4'	294.45	0.54
43:L6:31:ARG:NH2	43:L6:81:ALA:O	2.60	0.54
18:C6:131:GLY:HA3	18:C6:136:SER:O	2.06	0.54
20:C8:65:GLU:O	20:C8:68:ARG:N	2.39	0.54
75:O9:13:MET:O	75:O9:16:ALA:HB3	2.98	0.54
21:C9:30:VAL:HG12	21:C9:54:PHE:CD2	4.08	0.54
1:6:958:U:O2'	1:6:960:U:OP2	2.24	0.54
36:1:1638:A:H5''	36:1:1639:C:OP2	2.06	0.54
3:S1:24:PHE:HA	3:S1:27:LYS:HG3	3.80	0.54
2:S0:163:ASN:O	2:S0:165:ARG:N	2.85	0.54
2:S0:195:TRP:HE1	2:S0:197:ILE:HD12	4.54	0.54
4:S2:170:ILE:O	4:S2:196:VAL:HG23	2.64	0.54
63:N7:36:HIS:H	63:N7:37:PRO:HD3	4.19	0.54
36:5:1764:U:H3'	36:5:1765:U:C5'	2.36	0.54
1:2:1450:U:HO2'	31:D9:8:PHE:HD1	1.55	0.54
6:S4:98:ASN:HB2	6:S4:114:ILE:O	2.06	0.54
37:7:119:U:H2'	37:7:120:C:H6	1.71	0.54
36:1:1480:G:H21	36:1:1872:C:H5	1.55	0.54
1:2:1517:U:OP2	1:2:1518:C:N4	2.33	0.54
49:M3:75:PHE:H	49:M3:97:VAL:HA	2.00	0.54
36:1:2428:U:O2'	36:1:2429:G:H5'	2.07	0.54
6:S4:187:ARG:O	6:S4:189:LEU:N	2.39	0.54
9:S7:6:ALA:HB1	9:S7:9:LEU:HD12	1.89	0.54
22:D0:50:LEU:HD22	22:D0:95:ALA:HA	1.89	0.54
87:1:4003:OHX:N6	87:1:4171:OHX:N1	2.56	0.54
36:1:1614:C:H2'	36:1:1615:C:H6	1.72	0.54
5:S3:113:LEU:HD11	5:S3:117:ARG:HD2	1.89	0.54
1:2:421:A:H2'	1:2:422:G:H5'	1.89	0.54
1:2:275:C:H2'	1:2:276:C:C5	2.43	0.54
36:1:2697:A:H2'	36:1:2698:G:C8	2.41	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1845:G:N1	36:5:1849:C:O2'	2.40	0.54
45:L8:41:GLN:OE1	45:L8:41:GLN:N	2.40	0.54
61:N5:137:ASN:HA	61:N5:140:GLY:HA2	2.16	0.54
87:5:4028:OHX:N5	87:5:4075:OHX:N2	2.55	0.54
1:2:482:U:H3	1:2:505:A:N6	2.05	0.54
36:1:871:U:H2'	36:1:872:U:O4'	2.07	0.54
59:N3:75:PRO:HG2	59:N3:105:PRO:HD3	1.89	0.54
87:1:4151:OHX:N4	37:3:102:A:OP1	2.39	0.54
74:O8:77:ARG:O	74:O8:78:LEU:HB2	2.08	0.54
36:5:1907:C:C5	36:5:1908:A:C5	2.96	0.54
1:2:1201:G:N2	1:2:1599:C:H2'	2.22	0.54
44:L7:193:PRO:HB2	44:L7:194:HIS:CD2	2.42	0.54
36:5:833:G:N2	36:5:834:U:H1'	2.22	0.54
36:5:722:G:N7	87:5:4007:OHX:N3	2.55	0.54
53:M7:52:LEU:CD1	53:M7:88:VAL:HG11	2.57	0.54
11:S9:109:LEU:HB3	11:S9:146:PHE:HB3	1.89	0.54
64:N8:22:ILE:O	64:N8:24:LYS:HE2	2.51	0.54
44:L7:39:GLU:O	44:L7:41:ARG:N	2.97	0.54
51:M5:2:GLY:HA3	36:5:116:A:OP2	106.29	0.54
10:S8:184:LEU:O	10:S8:189:LEU:HD22	2.35	0.54
41:L4:120:TYR:O	41:L4:124:SER:HB2	2.07	0.54
41:L4:180:LYS:O	41:L4:184:SER:HB3	3.05	0.54
54:M8:26:LEU:O	54:M8:30:VAL:HG23	2.07	0.54
43:L6:56:LYS:NZ	43:L6:101:PHE:O	3.10	0.54
5:S3:164:VAL:HG13	5:S3:168:ILE:HD11	1.88	0.54
20:C8:64:GLU:HB3	20:C8:68:ARG:HH12	5.25	0.54
7:S5:63:GLN:NE2	7:S5:88:PRO:HG3	2.23	0.54
46:L9:90:MET:HE3	46:L9:181:VAL:HG22	1.90	0.54
5:S3:177:MET:HB3	5:S3:180:GLY:O	3.76	0.54
24:D2:30:SER:N	24:D2:59:GLY:O	4.14	0.54
23:D1:83:TRP:CH2	23:D1:85:TYR:CD2	3.50	0.54
2:S0:56:LYS:HD2	2:S0:158:VAL:HG23	1.90	0.54
63:N7:82:PRO:HD2	66:O0:59:TYR:OH	2.07	0.54
1:6:1458:G:C2	1:6:1459:C:C4	2.95	0.54
35:SM:83:LYS:HG2	35:SM:84:LYS:H	4.65	0.54
34:SR:295:SER:HB2	34:SR:302:PHE:HE2	1.73	0.54
36:1:2414:G:C2	36:1:2807:U:O2	2.61	0.54
39:L2:83:HIS:CD2	39:L2:86:GLN:HG3	2.42	0.54
64:N8:111:LYS:HG3	64:N8:129:PHE:HB2	1.89	0.54
49:M3:75:PHE:HA	49:M3:101:ARG:HH12	2.07	0.54
38:8:58:G:H2'	38:8:99:C:O2'	2.08	0.54
13:C1:101:GLU:HG3	13:C1:103:ARG:HD2	4.72	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1015:U:O2'	36:1:1017:C:OP2	2.22	0.54
34:SR:116:ASP:OD1	34:SR:120:SER:OG	2.23	0.54
39:L2:224:THR:O	39:L2:224:THR:OG1	2.59	0.54
32:E0:53:LYS:HD3	32:E0:55:ARG:HD2	8.59	0.54
62:N6:16:ARG:NH1	36:5:216:G:OP1	84.86	0.54
42:L5:40:HIS:CD2	42:L5:42:ALA:HB3	2.41	0.54
1:6:703:G:H2'	1:6:704:C:O4'	2.07	0.54
58:N2:23:THR:O	58:N2:26:GLY:N	3.15	0.54
74:O8:39:ARG:NH1	74:O8:63:LYS:HE2	9.99	0.54
2:S0:200:ASP:O	2:S0:203:PHE:HB2	2.40	0.54
36:1:1297:C:H2'	36:1:1298:C:C6	2.41	0.54
70:O4:65:VAL:HG22	70:O4:66:SER:H	3.34	0.54
36:5:2936:A:H2'	36:5:2937:G:C8	2.43	0.54
1:2:1535:U:H1'	1:2:1536:G:C2	2.42	0.54
46:L9:59:ASN:HB2	50:M4:41:GLN:NE2	2.23	0.54
36:1:371:G:O6	87:1:4179:OHX:N4	2.40	0.54
55:M9:86:GLU:OE2	55:M9:91:SER:N	2.33	0.54
36:5:849:C:H2'	36:5:850:U:C6	2.42	0.54
37:7:24:A:O5'	37:7:24:A:H8	1.90	0.54
36:5:2520:A:H2'	36:5:2521:U:C6	2.42	0.54
1:2:1643:U:C5	1:2:1644:C:C5	2.95	0.54
32:E0:2:ALA:O	32:E0:4:VAL:HG22	2.08	0.54
40:L3:212:ASN:HB3	40:L3:281:LYS:HZ2	2.80	0.54
46:L9:79:ILE:O	46:L9:82:VAL:HG12	2.07	0.54
28:D6:18:VAL:HG11	28:D6:33:ASP:HB3	3.63	0.54
28:D6:30:ILE:HD11	28:D6:34:LYS:O	2.08	0.54
28:D6:37:LYS:O	28:D6:38:ARG:NH1	2.41	0.54
28:D6:40:ALA:HB3	28:D6:69:ASN:HB3	3.01	0.54
44:L7:186:HIS:O	44:L7:190:THR:HG23	2.07	0.54
26:D4:14:SER:HA	26:D4:21:LYS:HE3	1.90	0.54
6:S4:57:ASN:HB2	6:S4:60:GLU:HG3	1.89	0.54
41:L4:177:ASP:O	41:L4:180:LYS:N	2.25	0.54
41:L4:262:TRP:CZ3	41:L4:271:LYS:HE3	2.85	0.54
36:1:361:A:OP1	73:O7:24:ARG:NH1	2.41	0.54
18:C6:29:ILE:HA	18:C6:65:ILE:O	2.07	0.54
1:2:1480:G:H4'	21:C9:11:ALA:CB	2.37	0.54
7:S5:40:ILE:O	7:S5:42:LEU:N	2.76	0.54
44:L7:28:ALA:O	44:L7:32:ALA:N	3.76	0.54
67:O1:60:TRP:CZ3	67:O1:64:VAL:HG13	4.24	0.54
21:C9:108:LEU:HB3	21:C9:114:VAL:HG22	5.65	0.54
5:S3:31:GLU:HG2	5:S3:107:PHE:CE1	3.97	0.54
36:5:113:C:H3'	36:5:154:U:O4	2.08	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:310:C:O2'	1:2:311:U:H5'	2.07	0.54
3:S1:103:MET:H	3:S1:215:VAL:HG13	1.72	0.54
40:L3:223:GLY:HA2	40:L3:271:GLY:HA3	2.47	0.54
17:C5:126:VAL:HG13	35:SM:71:ASN:HD21	2.34	0.54
6:S4:208:VAL:HG11	6:S4:225:VAL:HG21	2.91	0.54
59:N3:17:LEU:HD21	59:N3:98:ASN:OD1	2.17	0.54
34:SR:122:ILE:HG13	34:SR:136:ILE:HG22	1.88	0.54
34:SR:263:PHE:N	34:SR:263:PHE:HD2	2.05	0.54
56:N0:43:TYR:OH	37:7:96:U:OP1	295.18	0.54
73:O7:53:ALA:HB2	73:O7:56:ARG:NH1	2.23	0.54
36:1:1480:G:N2	36:1:1872:C:H5	2.06	0.54
40:L3:139:GLN:O	40:L3:141:GLY:N	2.40	0.54
36:5:61:A:N6	36:5:62:A:C2	2.75	0.54
39:L2:119:LYS:HB2	39:L2:122:ASP:HB3	1.89	0.54
79:Q3:17:ARG:HB3	79:Q3:18:TYR:CE1	2.56	0.54
36:1:3139:A:H8	36:1:3139:A:H5''	1.72	0.54
70:O4:58:ARG:HG3	70:O4:59:PRO:HD2	2.42	0.54
44:L7:33:ARG:HH12	44:L7:34:LYS:HE2	3.92	0.54
46:L9:37:ASN:OD1	46:L9:38:LEU:N	2.40	0.54
75:O9:4:GLN:HG2	36:5:1588:A:C6	125.94	0.54
56:N0:171:PHE:CE2	36:5:3205:G:C6	315.63	0.54
50:M4:23:ILE:HD13	50:M4:63:VAL:HG22	1.89	0.54
50:M4:21:VAL:HG22	50:M4:33:ALA:O	2.07	0.54
21:C9:18:TYR:O	21:C9:22:LEU:HD22	2.08	0.54
36:5:259:C:H2'	36:5:260:C:C6	2.43	0.54
15:C3:26:PHE:CZ	15:C3:28:LEU:HB2	2.42	0.54
37:3:64:A:H5''	47:M0:206:LEU:H	1.73	0.54
1:6:219:A:O2'	1:6:220:A:H8	1.89	0.54
36:1:256:G:N7	87:1:4158:OHX:N4	2.55	0.54
36:1:3300:U:H5''	36:1:3301:U:OP2	2.07	0.54
17:C5:77:ARG:HG2	17:C5:102:PHE:CG	2.42	0.54
36:1:3242:G:C2	36:1:3245:A:C8	2.95	0.54
87:5:4050:OHX:N1	87:5:4194:OHX:N2	2.56	0.54
36:1:242:C:O2'	36:1:243:G:H8	1.90	0.54
35:SM:97:THR:HG22	35:SM:99:LYS:CG	2.38	0.54
36:1:865:U:C5	36:1:866:A:N7	2.75	0.54
1:6:1660:A:H2'	1:6:1661:U:C6	2.42	0.54
1:2:553:G:C6	1:2:554:C:N3	2.75	0.54
1:6:29:U:H2'	1:6:30:G:C8	2.43	0.54
25:D3:70:LYS:HD3	25:D3:93:LEU:HD22	1.88	0.54
40:L3:53:MET:HB3	40:L3:76:VAL:O	2.07	0.54
20:C8:88:ARG:NH1	20:C8:112:ASP:OD1	2.41	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:37:U:H2'	1:2:38:C:O4'	2.07	0.54
11:S9:124:HIS:ND1	11:S9:128:LEU:HD11	4.50	0.54
44:L7:47:ARG:HB3	44:L7:51:TYR:CE2	3.41	0.54
44:L7:119:VAL:HG12	57:N1:135:PRO:HG3	1.90	0.54
10:S8:106:ALA:HB2	10:S8:165:LEU:HG	1.89	0.54
36:1:1420:C:O2'	36:1:1421:G:O5'	2.24	0.54
41:L4:151:VAL:HG13	41:L4:250:TRP:O	2.90	0.54
49:M3:31:LYS:HG3	38:8:30:C:OP1	85.71	0.54
5:S3:168:ILE:HD11	5:S3:187:LYS:HE3	6.27	0.54
7:S5:62:VAL:HG12	7:S5:64:VAL:HG22	4.43	0.54
61:N5:62:VAL:HG12	61:N5:63:ILE:N	2.22	0.54
1:2:1281:G:O3'	22:D0:76:SER:OG	2.26	0.54
1:2:1550:A:OP1	17:C5:42:ARG:NH2	2.41	0.54
20:C8:91:ASP:OD1	20:C8:93:THR:N	2.41	0.54
21:C9:128:GLY:O	21:C9:132:LEU:N	2.40	0.54
3:S1:185:THR:HG22	3:S1:189:ILE:HD11	1.90	0.54
3:S1:65:VAL:HG23	3:S1:86:LEU:O	5.01	0.54
68:O2:122:PRO:O	68:O2:123:LYS:HB2	4.73	0.54
62:N6:32:SER:CA	62:N6:49:PRO:HA	3.45	0.54
6:S4:166:SER:O	6:S4:168:LYS:HG2	4.75	0.54
50:M4:113:THR:HB	50:M4:116:GLU:H	4.44	0.54
34:SR:122:ILE:O	34:SR:134:TRP:N	2.36	0.54
44:L7:222:HIS:CE1	44:L7:224:ILE:HG13	2.41	0.54
1:2:1010:C:OP2	87:2:2131:OHX:N6	2.41	0.54
1:2:889:U:H2'	1:2:890:C:C6	2.42	0.54
36:1:2916:U:H1'	59:N3:44:SER:HB3	1.88	0.54
45:L8:190:VAL:HB	45:L8:192:GLN:HG2	5.45	0.54
48:M1:38:GLU:C	48:M1:40:LEU:H	2.10	0.54
4:S2:44:LEU:HA	4:S2:47:ALA:HB3	1.90	0.54
36:1:3165:A:H2'	36:1:3166:C:C6	2.42	0.54
40:L3:92:TYR:HB2	40:L3:157:VAL:HG22	3.53	0.54
1:2:263:C:H4'	1:2:292:U:H5'	1.89	0.54
24:D2:117:ARG:HB2	24:D2:117:ARG:NH1	5.54	0.54
55:M9:143:ILE:O	55:M9:145:ALA:N	2.78	0.54
1:6:720:G:OP2	1:6:720:G:N2	2.27	0.54
1:2:23:G:H21	1:2:368:U:H5'	1.73	0.54
57:N1:17:ARG:CG	57:N1:17:ARG:HH11	2.72	0.54
45:L8:53:PRO:HG3	61:N5:32:PHE:CD2	2.42	0.54
36:5:2681:U:O5'	36:5:2681:U:H6	1.89	0.54
39:L2:67:TYR:HD1	36:5:2524:A:C2	183.07	0.54
37:7:15:C:H1'	37:7:66:A:H2	1.72	0.54
6:S4:213:SER:O	6:S4:213:SER:OG	2.22	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:95:THR:HG22	26:D4:16:PRO:HG2	1.90	0.54
38:8:155:A:H2'	38:8:156:U:O4'	2.07	0.54
52:M6:3:VAL:O	52:M6:4:GLU:HB2	4.39	0.54
6:S4:253:ASP:O	6:S4:257:ALA:N	2.40	0.54
26:D4:89:TYR:CE1	1:6:525:A:H5''	396.32	0.54
26:D4:89:TYR:O	26:D4:92:VAL:HG22	5.27	0.54
36:5:2765:C:H2'	36:5:2766:U:H6	1.72	0.54
36:5:1934:G:O6	87:5:3911:OHX:N2	2.40	0.54
1:2:253:A:H2'	1:2:254:A:C8	2.42	0.54
36:1:518:G:N2	36:1:518:G:OP2	2.39	0.54
59:N3:74:MET:CE	59:N3:102:ILE:HD12	2.38	0.54
1:6:953:G:H2'	1:6:954:G:H8	1.72	0.54
78:Q2:12:CYS:HB3	78:Q2:17:CYS:HB3	1.89	0.54
78:Q2:23:HIS:HA	78:Q2:73:GLU:O	2.06	0.54
78:Q2:12:CYS:SG	78:Q2:79:THR:OG1	2.64	0.54
40:L3:227:GLU:CG	40:L3:270:ARG:HD3	2.21	0.54
36:1:1894:U:O2'	36:1:3054:U:OP1	2.19	0.54
36:1:2166:A:H4'	51:M5:72:LYS:HD3	1.90	0.54
67:O1:9:THR:O	67:O1:109:VAL:HB	2.99	0.54
1:2:463:U:H2'	1:2:464:A:H8	1.71	0.54
47:M0:160:PRO:HD3	36:5:2854:U:C5'	294.04	0.54
47:M0:175:ASN:HB3	47:M0:176:LEU:HD23	2.12	0.54
72:O6:40:VAL:O	72:O6:44:VAL:HG23	2.08	0.54
10:S8:168:CYS:HB3	10:S8:182:TYR:CZ	2.42	0.54
36:1:1381:A:H2'	36:1:1382:G:H8	1.73	0.54
41:L4:120:TYR:HD1	41:L4:120:TYR:O	2.21	0.54
41:L4:30:ILE:N	54:M8:25:TYR:OH	2.77	0.54
54:M8:22:ASP:HA	54:M8:27:LYS:HE3	3.25	0.54
1:2:1165:G:O6	1:2:1166:A:N6	2.40	0.54
1:2:1477:G:O2'	21:C9:47:PRO:HA	2.08	0.54
1:2:1533:C:H4'	1:2:1539:G:C6	2.42	0.54
67:O1:55:LEU:HD21	67:O1:73:LEU:HD23	1.90	0.54
61:N5:105:VAL:HG12	61:N5:106:ASP:O	2.07	0.54
47:M0:20:SER:OG	47:M0:22:TYR:N	2.35	0.54
1:2:907:A:C2	1:2:908:U:C2	2.96	0.54
2:S0:7:PHE:CZ	23:D1:43:GLY:HA2	3.17	0.54
63:N7:23:VAL:HG12	63:N7:45:GLY:CA	2.37	0.54
66:O0:29:SER:O	66:O0:32:LYS:HB2	2.07	0.54
55:M9:6:THR:O	55:M9:9:ARG:N	3.89	0.54
71:O5:5:LYS:HD2	71:O5:8:GLU:CD	5.08	0.54
59:N3:80:ARG:HH11	59:N3:80:ARG:HG3	1.72	0.54
39:L2:98:VAL:HG13	39:L2:167:GLY:HA3	2.21	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3174:A:H2'	36:1:3175:U:H5'	1.88	0.54
49:M3:49:ARG:HG2	49:M3:50:PRO:HD3	1.90	0.54
57:N1:103:GLN:O	57:N1:107:GLU:HB2	2.77	0.54
36:5:705:A:H4'	36:5:706:A:OP1	2.06	0.54
1:6:650:U:H2'	1:6:651:G:H5'	1.88	0.54
13:C1:101:GLU:OE1	13:C1:103:ARG:NE	3.59	0.54
41:L4:145:ILE:HD13	41:L4:247:PHE:HE1	1.72	0.54
36:5:2134:G:C2	36:5:2135:U:C6	2.95	0.54
42:L5:58:LYS:HD2	42:L5:93:THR:OG1	2.08	0.54
36:1:2618:G:N3	65:N9:3:LYS:NZ	2.53	0.54
69:O3:53:TYR:CZ	69:O3:65:ARG:HB2	2.45	0.54
63:N7:54:THR:HG22	63:N7:57:HIS:CE1	2.76	0.54
36:1:1889:G:H2'	36:1:1890:U:C6	2.43	0.54
36:1:2948:C:O2'	36:1:2949:U:H5'	2.07	0.54
36:1:734:C:H2'	36:1:735:A:O4'	2.07	0.54
1:6:1727:G:H2'	1:6:1728:A:C8	2.43	0.54
36:5:1845:G:C6	36:5:1849:C:C6	2.96	0.54
36:5:608:A:H5''	36:5:609:G:OP2	2.08	0.54
36:1:3358:U:H2'	36:1:3359:A:C1'	2.38	0.54
49:M3:18:TRP:CG	49:M3:19:GLN:N	3.22	0.54
1:6:892:A:C6	1:6:893:U:C4	2.96	0.54
48:M1:117:ASP:C	48:M1:119:SER:H	2.10	0.54
7:S5:157:ARG:HB2	7:S5:224:ASN:ND2	4.06	0.54
36:5:1164:G:H2'	36:5:1165:A:H8	1.71	0.54
38:4:1:A:OP1	87:4:225:OHX:N2	2.41	0.54
36:5:1491:A:HO2'	36:5:1843:C:HO2'	1.56	0.54
88:2:2181:GET:H832	88:2:2181:GET:H933	1.88	0.54
11:S9:114:TYR:HA	11:S9:119:ALA:HB3	3.06	0.54
36:1:1362:G:H4'	44:L7:159:GLN:O	2.08	0.54
44:L7:89:ILE:HG22	44:L7:219:LYS:HZ3	1.73	0.54
1:2:1480:G:H4'	21:C9:11:ALA:HB1	1.90	0.54
7:S5:144:GLU:HA	7:S5:162:VAL:HG13	3.30	0.54
7:S5:61:TYR:CE1	7:S5:165:LEU:HD22	2.41	0.54
5:S3:61:GLU:HB2	5:S3:64:ARG:HE	3.48	0.54
64:N8:67:HIS:H	64:N8:67:HIS:CD2	2.24	0.54
1:2:624:G:C2	1:2:625:C:C2	2.96	0.54
2:S0:124:THR:O	2:S0:146:LEU:HB3	2.07	0.54
38:4:65:A:C5	38:4:66:A:C8	2.96	0.54
73:O7:82:SER:HA	38:8:95:G:O2'	37.21	0.54
1:6:72:A:H2'	1:6:73:U:C1'	2.38	0.54
56:N0:9:VAL:O	56:N0:26:ARG:HA	2.43	0.54
34:SR:234:LEU:HD23	34:SR:263:PHE:CD1	3.47	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:M6:42:ASN:OD1	52:M6:125:ARG:HD3	2.27	0.54
66:O0:10:ILE:O	66:O0:14:LEU:HB2	4.60	0.54
53:M7:169:THR:O	53:M7:173:ARG:HG3	2.07	0.54
53:M7:175:ARG:O	53:M7:179:GLN:HB2	2.08	0.54
36:5:2897:A:O2'	36:5:2898:G:H3'	2.08	0.54
64:N8:73:LEU:HB2	64:N8:109:TYR:CD2	2.42	0.54
9:S7:14:THR:HG22	9:S7:17:GLU:HB2	1.90	0.54
76:Q0:110:CYS:SG	76:Q0:111:ARG:N	2.81	0.54
36:1:1890:U:C2	36:1:1891:A:C8	2.95	0.54
1:2:1259:U:H2'	1:2:1260:U:H6	1.73	0.54
1:2:322:G:O4'	1:2:323:A:H8	1.91	0.54
68:O2:10:VAL:HG13	68:O2:11:LYS:N	2.22	0.54
75:O9:26:TRP:O	75:O9:28:ARG:N	2.41	0.54
62:N6:77:LYS:HD3	75:O9:31:THR:HG21	1.90	0.54
10:S8:89:GLU:CD	10:S8:92:ARG:HH21	2.11	0.54
63:N7:10:VAL:O	63:N7:83:THR:HG22	2.07	0.54
43:L6:46:ARG:HG2	43:L6:47:PHE:CE2	3.37	0.54
36:1:1498:A:H2'	36:1:1499:C:C6	2.43	0.54
36:1:93:C:C2	64:N8:55:LYS:NZ	2.76	0.54
73:O7:58:THR:O	73:O7:61:THR:OG1	3.26	0.54
36:1:3159:C:O2'	36:1:3395:G:N2	2.40	0.54
45:L8:184:ALA:O	45:L8:188:THR:HG23	4.28	0.54
21:C9:4:VAL:HG21	21:C9:140:LEU:HD21	4.94	0.54
36:5:3053:G:O6	87:5:4167:OHX:N4	2.41	0.54
36:5:1499:C:H2'	36:5:1500:G:C8	2.42	0.54
1:6:53:G:H1	1:6:427:C:H42	1.55	0.54
26:D4:104:SER:N	26:D4:107:GLN:OE1	3.38	0.54
47:M0:150:GLU:CG	47:M0:154:ARG:HE	2.20	0.54
44:L7:150:LYS:HG2	44:L7:151:ARG:HG3	3.18	0.54
44:L7:152:GLY:C	44:L7:153:PHE:HD2	2.11	0.54
44:L7:160:ARG:HD2	44:L7:203:TRP:CD1	2.66	0.54
51:M5:27:VAL:HB	51:M5:122:ASN:HD21	1.73	0.54
36:5:1382:G:N1	36:5:1425:U:O2	2.40	0.54
41:L4:157:GLU:HG3	41:L4:251:THR:HG21	1.89	0.54
43:L6:78:ARG:HG3	43:L6:78:ARG:NH1	2.23	0.54
36:5:362:U:H2'	36:5:362:U:O2	2.08	0.54
20:C8:14:ILE:H	20:C8:24:GLY:HA3	1.73	0.54
7:S5:164:PRO:HG3	30:D8:52:ASP:HB3	1.88	0.54
67:O1:54:GLU:HA	67:O1:57:GLN:HG3	1.89	0.54
36:1:2747:A:OP1	42:L5:176:SER:OG	2.25	0.54
42:L5:80:SER:O	42:L5:83:LEU:HG	3.01	0.54
1:2:1500:C:H2'	1:2:1501:C:C6	2.43	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:D0:70:THR:HG23	1:6:1280:C:O2'	388.17	0.54
48:M1:110:ILE:HG22	48:M1:114:ILE:HG22	3.12	0.54
5:S3:108:LYS:O	5:S3:111:ASN:N	2.96	0.54
16:C4:84:ARG:HB3	16:C4:118:VAL:HG23	4.00	0.54
2:S0:49:ASN:OD1	2:S0:52:LYS:HG3	2.07	0.54
2:S0:60:ALA:O	2:S0:64:ILE:HG13	2.08	0.54
63:N7:27:LYS:HD3	63:N7:97:SER:HA	3.47	0.54
71:O5:62:GLN:HA	71:O5:65:ALA:HB3	1.90	0.54
73:O7:72:ARG:HA	73:O7:75:LYS:HB3	2.48	0.54
1:2:1525:A:H5'	21:C9:93:HIS:HB2	1.90	0.54
11:S9:174:ARG:HA	11:S9:174:ARG:NE	2.22	0.54
6:S4:157:ASN:CG	6:S4:222:LEU:HD21	3.51	0.54
9:S7:50:ASP:OD1	9:S7:50:ASP:N	2.41	0.54
1:2:1584:G:H5''	18:C6:122:ARG:HG2	1.89	0.54
34:SR:236:ALA:O	34:SR:261:LYS:NZ	3.24	0.54
1:2:1015:U:H5''	1:2:1016:C:OP2	2.07	0.54
36:1:3180:A:H5'	52:M6:116:LYS:HB2	1.89	0.54
36:1:1176:C:OP1	52:M6:25:LYS:HE3	2.08	0.54
49:M3:84:GLY:O	49:M3:85:LEU:HB3	2.06	0.54
36:1:2151:C:O2'	36:1:2243:A:N1	2.35	0.54
26:D4:36:SER:O	26:D4:40:LEU:HG	2.54	0.54
79:Q3:20:SER:O	79:Q3:22:LEU:N	2.40	0.54
71:O5:21:LEU:O	71:O5:24:LEU:N	2.74	0.54
24:D2:2:THR:HG23	1:6:967:A:H4'	332.02	0.54
17:C5:79:HIS:O	17:C5:81:ARG:N	2.40	0.54
55:M9:173:ARG:HH21	55:M9:177:VAL:CG2	8.97	0.54
34:SR:161:LYS:O	34:SR:161:LYS:HG2	2.08	0.54
36:1:1209:G:C6	36:1:1210:U:C4	2.96	0.54
74:O8:8:ILE:O	74:O8:11:PHE:HB3	2.34	0.54
59:N3:15:LEU:HD13	59:N3:51:ALA:HB3	1.90	0.54
13:C1:27:THR:HG22	1:6:838:G:H4'	281.55	0.54
36:5:2929:C:C2	36:5:2930:A:C8	2.96	0.54
46:L9:151:VAL:O	46:L9:154:VAL:N	3.63	0.54
36:5:899:U:O4	87:5:3958:OHX:N5	2.40	0.54
33:E1:118:ARG:H	33:E1:118:ARG:HH11	2.48	0.54
54:M8:57:ILE:HD13	54:M8:147:ARG:NE	2.22	0.54
36:5:420:G:OP1	36:5:420:G:OP2	2.26	0.54
36:1:1715:A:H4'	36:1:1716:U:OP1	2.06	0.54
1:2:297:U:H2'	1:2:298:C:C6	2.43	0.54
36:1:2134:G:C2	36:1:2135:U:C6	2.96	0.54
1:2:1182:U:H4'	17:C5:124:THR:OG1	2.08	0.54
87:5:4006:OHX:N6	87:5:4195:OHX:N2	2.56	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:D2:40:VAL:HA	24:D2:43:LYS:HG2	4.08	0.54
1:2:1653:C:N4	1:2:1654:G:C6	2.76	0.54
25:D3:54:LEU:O	25:D3:98:GLU:HG2	2.69	0.54
36:1:1508:C:OP1	53:M7:127:ARG:NH2	2.41	0.54
45:L8:141:ALA:O	45:L8:145:ASN:ND2	2.41	0.54
36:5:685:G:C2	36:5:696:C:N3	2.76	0.54
41:L4:209:TYR:HD2	41:L4:211:GLU:N	2.06	0.54
41:L4:25:VAL:C	41:L4:27:SER:N	2.61	0.54
36:1:1256:G:O6	36:1:1261:G:N2	2.40	0.54
1:2:1164:G:C2	1:2:1165:G:C5	2.96	0.54
55:M9:25:ASP:C	55:M9:27:ASN:H	2.11	0.54
42:L5:205:SER:OG	42:L5:206:GLN:N	2.40	0.54
31:D9:44:ARG:HA	31:D9:47:ALA:HB2	1.89	0.54
2:S0:179:ARG:O	2:S0:183:ARG:N	2.53	0.54
2:S0:185:ARG:HG3	23:D1:47:PRO:HD3	1.89	0.54
48:M1:172:LEU:O	48:M1:173:ASP:HB2	2.53	0.54
55:M9:100:ARG:O	55:M9:103:ARG:HB3	2.08	0.54
70:O4:97:GLU:C	70:O4:99:LYS:H	2.10	0.54
55:M9:14:VAL:HG11	55:M9:42:ARG:HD3	1.89	0.54
1:2:1183:A:N3	1:2:1210:C:O2'	2.34	0.54
56:N0:135:VAL:O	56:N0:141:LYS:NZ	3.23	0.54
44:L7:75:TYR:HB2	57:N1:141:VAL:CG2	3.67	0.54
59:N3:79:VAL:HG22	59:N3:99:ALA:O	2.27	0.54
39:L2:84:THR:HB	36:5:2554:A:C2	209.11	0.54
36:1:209:A:OP1	41:L4:161:LYS:NZ	2.41	0.54
61:N5:58:ASP:O	61:N5:61:LYS:N	2.41	0.54
76:Q0:80:PRO:O	76:Q0:83:LYS:N	4.29	0.54
1:2:595:G:OP2	87:2:2076:OHX:N3	2.41	0.54
36:1:1791:C:H2'	36:1:1792:C:C5	2.43	0.54
36:1:595:G:H2'	36:1:596:C:C6	2.42	0.54
67:O1:13:THR:HG21	67:O1:104:LEU:HB2	1.90	0.54
37:7:47:C:H2'	37:7:48:U:H6	1.73	0.54
70:O4:87:GLU:OE1	70:O4:91:ARG:NH2	2.39	0.54
36:5:1618:G:N2	36:5:1827:C:C2	2.76	0.54
42:L5:40:HIS:CE1	57:N1:69:LYS:HB2	2.43	0.54
50:M4:100:ALA:HA	50:M4:103:ILE:HG13	2.69	0.54
55:M9:90:PRO:HG2	55:M9:93:VAL:CG2	3.88	0.54
55:M9:128:LYS:NZ	36:5:1723:A:OP1	229.82	0.54
48:M1:30:LEU:HD21	48:M1:67:VAL:HG13	1.90	0.54
1:2:1431:C:H5'	1:2:1431:C:H6	1.72	0.54
1:2:763:G:C6	1:2:764:U:C4	2.96	0.54
36:5:2606:G:N3	36:5:2606:G:H2'	2.23	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2325:G:C2	36:5:2326:A:C8	2.96	0.54
36:1:1471:U:H2'	36:1:1472:U:C6	2.42	0.54
1:2:42:G:O6	87:2:2040:OHX:N4	2.40	0.54
78:Q2:12:CYS:SG	78:Q2:74:CYS:HB2	2.48	0.54
36:1:3051:U:H5''	60:N4:18:GLY:H	1.73	0.54
46:L9:29:GLY:O	46:L9:31:ARG:N	2.81	0.54
36:1:94:G:OP2	64:N8:54:GLY:N	2.38	0.54
36:1:1841:A:H2	75:O9:45:ARG:HH12	1.56	0.54
1:6:590:C:H2'	1:6:591:A:C8	2.43	0.54
44:L7:207:LEU:O	36:5:1334:U:H5''	241.25	0.54
44:L7:169:ILE:O	44:L7:173:LEU:N	2.51	0.54
41:L4:44:LYS:CB	41:L4:47:ARG:HH11	2.70	0.54
36:1:562:C:H2'	36:1:563:U:C6	2.39	0.54
27:D5:71:ILE:HG21	27:D5:76:ALA:HB2	3.54	0.54
36:1:1107:C:H2'	36:1:1108:U:H6	1.73	0.54
42:L5:64:ILE:CG2	42:L5:75:LEU:HB3	2.38	0.54
12:C0:50:THR:HA	12:C0:55:VAL:O	2.07	0.54
17:C5:69:GLU:HA	87:C5:201:OHX:N5	6.11	0.54
17:C5:89:MET:O	17:C5:107:ILE:HD11	6.95	0.54
21:C9:14:PHE:O	21:C9:17:ALA:HB3	2.08	0.54
70:O4:19:LYS:NZ	36:5:1784:G:O3'	168.27	0.54
1:2:905:A:H2'	1:2:906:A:O4'	2.07	0.54
28:D6:51:ARG:NH1	30:D8:60:GLU:HG2	3.94	0.54
2:S0:183:ARG:HG3	2:S0:188:LEU:HD12	4.15	0.54
54:M8:66:ARG:HH21	36:5:744:A:P	169.24	0.54
36:1:621:A:O2'	87:1:4163:OHX:N1	2.40	0.54
20:C8:126:ARG:NH2	20:C8:131:LEU:HD22	5.49	0.54
6:S4:115:THR:HG23	6:S4:118:GLU:H	1.73	0.54
56:N0:16:THR:HG23	56:N0:19:VAL:HB	1.90	0.54
43:L6:154:LEU:HA	43:L6:157:GLN:OE1	2.07	0.54
43:L6:168:GLY:O	43:L6:170:LYS:HG3	4.11	0.54
50:M4:113:THR:HG22	50:M4:114:ASP:N	4.74	0.54
1:6:1146:G:C5	1:6:1147:A:C5	2.96	0.54
58:N2:49:ASN:C	58:N2:51:GLY:H	2.59	0.54
36:5:2599:U:H2'	36:5:2600:C:C6	2.43	0.54
36:5:3243:A:O2'	36:5:3244:A:H8	1.90	0.54
38:8:138:A:C2	38:8:139:U:C2	2.95	0.54
71:O5:34:GLN:HG2	71:O5:38:ARG:HH21	6.22	0.54
1:6:913:G:H8	36:5:2205:U:N3	2.06	0.54
48:M1:43:GLN:OE1	48:M1:71:VAL:HG13	2.08	0.54
49:M3:144:THR:O	49:M3:146:PRO:HD3	3.31	0.54
68:O2:33:ARG:NH1	36:5:944:C:H4'	162.04	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S0:30:GLN:HG2	2:S0:150:ASP:HA	6.18	0.54
6:S4:103:TYR:CE2	6:S4:184:THR:HG22	3.80	0.54
5:S3:9:ARG:HH22	1:6:1514:U:H5	437.95	0.54
36:1:2592:G:HO2'	36:1:2593:A:H8	1.56	0.54
1:6:613:G:H4'	1:6:614:C:OP1	2.08	0.54
1:6:1418:G:O6	87:6:2051:OHX:N6	2.41	0.54
56:N0:88:HIS:HD2	56:N0:88:HIS:N	2.86	0.54
36:5:645:A:H5'	36:5:2372:A:H62	1.72	0.54
36:1:3091:A:H2'	36:1:3094:A:N7	2.23	0.54
8:S6:1:MET:N	8:S6:1:MET:HE3	5.15	0.54
45:L8:199:ALA:C	45:L8:200:LEU:HG	3.74	0.54
1:2:525:A:C6	1:2:526:A:C6	2.96	0.54
1:6:373:G:H21	1:6:604:A:P	2.30	0.54
44:L7:66:LYS:O	44:L7:67:ARG:C	3.29	0.54
24:D2:113:HIS:O	24:D2:117:ARG:N	2.40	0.54
1:2:1617:U:H2'	1:2:1618:C:H6	1.73	0.54
36:5:1845:G:N2	36:5:1851:G:C4	2.76	0.54
18:C6:11:GLY:HA3	18:C6:80:ALA:O	2.08	0.54
57:N1:45:ASN:OD1	57:N1:47:SER:OG	2.25	0.54
38:8:82:U:O2'	38:8:87:G:H5'	2.08	0.54
36:1:2625:C:O2'	36:1:2626:A:OP2	2.22	0.54
8:S6:53:SER:OG	8:S6:110:ALA:O	3.04	0.54
3:S1:156:ALA:HB3	3:S1:161:ILE:HD11	2.40	0.54
19:C7:71:PHE:CD1	19:C7:73:LEU:HB3	2.43	0.54
36:1:1693:C:HO2'	36:1:1772:U:HO2'	1.51	0.54
36:1:242:C:O2'	36:1:243:G:O5'	2.26	0.54
36:1:3273:A:C2	36:1:3274:A:C4	2.96	0.54
13:C1:2:SER:O	13:C1:3:THR:OG1	5.00	0.54
36:5:2291:A:C5	36:5:2292:U:C5	2.96	0.54
15:C3:130:ARG:HG2	15:C3:137:PRO:HA	2.59	0.54
36:1:2099:A:C5	36:1:2100:A:C2	2.96	0.54
1:2:234:G:C6	1:2:235:G:H1'	2.42	0.54
1:6:462:G:C6	1:6:463:U:C4	2.96	0.53
11:S9:142:ASN:O	11:S9:144:PRO:HD3	2.98	0.53
11:S9:81:VAL:O	11:S9:83:VAL:N	2.41	0.53
11:S9:87:SER:OG	11:S9:88:GLU:N	3.79	0.53
44:L7:86:VAL:CG1	44:L7:134:VAL:HG21	2.38	0.53
1:6:116:U:H2'	1:6:117:U:C6	2.42	0.53
26:D4:20:ARG:HD3	26:D4:76:TYR:CZ	2.43	0.53
36:1:1387:G:C2	36:1:1388:U:C5	2.96	0.53
41:L4:25:VAL:HG13	41:L4:276:LEU:HD21	3.17	0.53
41:L4:50:TYR:HD2	41:L4:109:TRP:HH2	2.54	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S5:99:MET:HG3	7:S5:180:ARG:NH2	3.70	0.53
67:O1:17:HIS:O	67:O1:19:ARG:N	3.17	0.53
67:O1:36:ILE:HD12	67:O1:59:ILE:HD11	1.88	0.53
1:6:1429:G:C5	1:6:1430:U:C4	2.96	0.53
5:S3:20:GLU:OE2	5:S3:76:ARG:NE	3.37	0.53
5:S3:20:GLU:O	5:S3:23:GLU:N	2.41	0.53
15:C3:46:THR:H	15:C3:49:GLN:CD	2.89	0.53
4:S2:207:LEU:O	4:S2:210:THR:N	2.41	0.53
55:M9:101:VAL:HA	55:M9:104:ARG:NH1	2.23	0.53
36:1:1720:U:P	55:M9:110:ARG:HH12	2.31	0.53
63:N7:41:ALA:O	63:N7:43:VAL:HG13	3.89	0.53
55:M9:4:LEU:O	55:M9:7:GLN:HG2	4.76	0.53
20:C8:132:ARG:HG3	20:C8:138:THR:HG21	1.90	0.53
17:C5:130:ARG:NH1	35:SM:71:ASN:OD1	2.41	0.53
1:6:72:A:H3'	1:6:73:U:O4'	2.08	0.53
1:2:86:A:N3	1:2:147:A:H2	2.06	0.53
18:C6:97:VAL:HG12	18:C6:98:ASP:N	2.83	0.53
34:SR:224:ASN:HB3	34:SR:229:LYS:O	2.08	0.53
36:1:2667:A:N6	36:1:2687:G:H1'	2.23	0.53
36:1:364:G:OP1	41:L4:60:THR:HG23	2.08	0.53
1:2:1167:G:C2	1:2:1168:U:C2	2.96	0.53
36:1:1483:G:C8	36:1:1485:G:C8	2.97	0.53
36:5:1805:C:H2'	36:5:1806:A:C8	2.43	0.53
46:L9:96:HIS:C	46:L9:96:HIS:ND1	2.89	0.53
33:E1:98:VAL:HG13	33:E1:99:LYS:N	2.23	0.53
1:6:679:U:H2'	1:6:680:U:O4'	2.09	0.53
39:L2:179:LEU:HD12	39:L2:185:ALA:HA	5.90	0.53
1:2:29:U:H2'	1:2:30:G:C8	2.43	0.53
36:1:2307:G:O2'	36:1:2310:U:OP2	2.27	0.53
61:N5:33:ARG:HG2	36:5:1580:A:H61	149.37	0.53
32:E0:55:ARG:CB	32:E0:58:PRO:HG3	2.38	0.53
36:1:1493:G:HO2'	36:1:1494:U:H5	1.52	0.53
55:M9:62:ARG:CZ	55:M9:62:ARG:HB2	2.38	0.53
55:M9:68:GLN:HA	55:M9:71:ARG:NH1	4.97	0.53
36:5:3189:G:H2'	36:5:3190:C:H6	1.73	0.53
54:M8:164:ARG:NH2	36:5:1110:U:OP1	168.37	0.53
45:L8:97:TYR:HB3	45:L8:131:ALA:HA	1.90	0.53
1:2:346:G:O6	87:2:2125:OHX:N5	2.41	0.53
36:1:1742:U:O4	87:1:4092:OHX:N6	2.42	0.53
1:6:5:U:H2'	1:6:6:G:C8	2.40	0.53
45:L8:221:ASN:OD1	45:L8:225:LYS:NZ	6.52	0.53
36:5:3041:U:O2'	36:5:3042:U:H5'	2.08	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:3041:U:H2'	36:5:3042:U:C6	2.43	0.53
36:5:3216:G:C4	36:5:3259:U:C4	2.96	0.53
36:1:772:U:H2'	36:1:773:G:H8	1.71	0.53
74:O8:32:ASN:HB3	74:O8:38:PHE:CD2	2.43	0.53
40:L3:101:SER:HB2	36:5:3147:G:O4'	238.91	0.53
36:5:665:A:H2'	36:5:666:A:C8	2.43	0.53
1:2:1150:G:N2	1:2:1768:G:H2'	2.23	0.53
51:M5:105:ARG:NH1	36:5:1547:G:OP2	131.32	0.53
36:1:1589:A:C5	70:O4:13:TYR:CE2	2.96	0.53
1:6:1660:A:H2'	1:6:1661:U:H6	1.72	0.53
36:5:1934:G:N7	87:5:3911:OHX:N2	2.55	0.53
21:C9:137:ALA:HA	21:C9:140:LEU:HD23	6.46	0.53
15:C3:70:LYS:O	15:C3:74:ILE:HG13	2.08	0.53
6:S4:15:PRO:HD2	6:S4:18:TRP:CE3	2.62	0.53
12:C0:25:LYS:HD2	12:C0:27:PHE:CZ	2.44	0.53
32:E0:29:LYS:HZ1	32:E0:35:TYR:HE2	7.03	0.53
55:M9:165:LYS:NZ	1:6:850:A:H4'	304.41	0.53
11:S9:175:ARG:HD3	11:S9:179:ARG:CZ	2.38	0.53
36:1:2322:C:O5'	36:1:2322:C:H6	1.92	0.53
1:6:561:G:H2'	1:6:562:G:H5'	1.90	0.53
18:C6:127:LYS:HD2	18:C6:132:LYS:O	2.08	0.53
20:C8:13:HIS:HB3	20:C8:25:ASN:OD1	3.35	0.53
30:D8:31:GLU:O	30:D8:33:LEU:N	4.25	0.53
61:N5:59:SER:HA	61:N5:62:VAL:HB	2.44	0.53
42:L5:240:TYR:O	42:L5:243:ALA:N	2.41	0.53
21:C9:6:VAL:HB	21:C9:14:PHE:CE1	2.43	0.53
1:2:1199:G:C4	31:D9:40:ARG:HD3	2.43	0.53
5:S3:94:ARG:O	5:S3:101:GLN:NE2	3.49	0.53
5:S3:178:ARG:HE	5:S3:178:ARG:N	1.96	0.53
5:S3:64:ARG:O	5:S3:68:GLU:HG3	2.08	0.53
47:M0:20:SER:O	47:M0:24:ARG:HG2	2.08	0.53
54:M8:134:GLY:N	54:M8:135:GLN:OE1	2.52	0.53
63:N7:81:LEU:HD12	70:O4:93:PHE:CE2	2.44	0.53
68:O2:124:GLY:O	68:O2:126:LEU:N	2.70	0.53
17:C5:126:VAL:HG13	17:C5:127:ARG:N	2.57	0.53
36:5:3182:G:H2'	36:5:3183:A:O4'	2.08	0.53
56:N0:8:GLN:HB2	56:N0:64:ILE:HD11	2.23	0.53
36:1:1167:U:P	69:O3:73:ARG:HH22	2.31	0.53
66:O0:13:LYS:O	66:O0:17:VAL:HG23	2.08	0.53
4:S2:98:PHE:O	4:S2:118:ALA:N	2.89	0.53
8:S6:67:VAL:O	8:S6:68:LEU:HB2	2.06	0.53
36:1:2219:A:O2'	36:1:2220:A:H5'	2.08	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:211:HIS:C	39:L2:213:GLY:H	4.21	0.53
45:L8:160:ILE:O	45:L8:164:VAL:HG13	2.10	0.53
37:3:31:U:H4'	42:L5:218:ARG:NH2	2.24	0.53
1:2:1497:U:C2	1:2:1498:G:C8	2.95	0.53
45:L8:50:VAL:HG22	45:L8:52:TRP:CD2	2.66	0.53
36:1:1851:G:H5''	36:1:1852:G:OP2	2.08	0.53
75:O9:2:ALA:O	75:O9:4:GLN:N	3.34	0.53
38:4:121:U:H2'	38:4:122:U:C6	2.43	0.53
36:5:377:A:N1	36:5:400:G:N7	2.56	0.53
9:S7:110:GLN:NE2	1:6:811:A:C4	335.45	0.53
1:2:532:U:H2'	1:2:533:U:O4'	2.07	0.53
42:L5:187:THR:HG23	42:L5:189:GLU:HB2	1.89	0.53
3:S1:195:LYS:HA	3:S1:198:GLU:HB3	1.90	0.53
34:SR:117:LYS:HG2	34:SR:118:LYS:N	2.22	0.53
75:O9:26:TRP:CZ3	75:O9:30:ARG:HD3	3.20	0.53
1:2:7:G:H1	1:2:17:C:N4	2.05	0.53
40:L3:109:HIS:HD1	40:L3:109:HIS:H	2.26	0.53
36:5:1781:C:H2'	36:5:1782:U:C6	2.43	0.53
41:L4:112:LYS:HG3	51:M5:202:TYR:HB3	1.89	0.53
36:1:2574:G:H2'	36:1:2575:G:C8	2.43	0.53
1:2:505:A:N3	1:2:505:A:H2'	2.23	0.53
36:5:416:A:H61	38:8:7:U:H3	1.55	0.53
39:L2:54:ARG:HH11	39:L2:54:ARG:HG3	2.19	0.53
87:1:3972:OHX:N6	87:1:4155:OHX:N4	2.57	0.53
38:8:74:U:O2	87:8:224:OHX:N5	2.41	0.53
36:5:725:G:N2	36:5:746:A:C4	2.76	0.53
40:L3:380:MET:HE3	36:5:3369:G:N1	224.68	0.53
68:O2:61:LYS:HB2	68:O2:61:LYS:NZ	2.45	0.53
36:1:378:A:OP2	87:1:4173:OHX:N3	2.41	0.53
8:S6:180:THR:OG1	8:S6:182:GLN:N	2.41	0.53
36:1:2775:U:H2'	36:1:2776:C:C6	2.43	0.53
47:M0:55:ASN:C	47:M0:131:ILE:HG23	3.73	0.53
41:L4:283:THR:HB	41:L4:285:ASP:N	2.22	0.53
41:L4:282:SER:OG	41:L4:283:THR:N	2.41	0.53
1:2:1475:A:H61	1:2:1532:U:H3	1.54	0.53
7:S5:189:THR:OG1	7:S5:191:ALA:HB3	3.69	0.53
67:O1:77:ARG:HD2	67:O1:89:LEU:HD23	2.47	0.53
42:L5:242:SER:OG	42:L5:243:ALA:N	2.41	0.53
21:C9:73:VAL:HG21	21:C9:102:ARG:HG3	1.90	0.53
5:S3:177:MET:HG3	5:S3:178:ARG:N	4.80	0.53
36:1:156:G:O2'	36:1:157:A:H4'	2.09	0.53
3:S1:127:VAL:HG22	3:S1:128:LYS:H	1.73	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:15:G:C6	38:4:16:G:C2	2.96	0.53
2:S0:4:PRO:HB3	2:S0:6:THR:HG23	8.21	0.53
63:N7:82:PRO:HB2	66:O0:62:LEU:CD1	2.38	0.53
68:O2:78:ASN:OD1	68:O2:78:ASN:N	2.37	0.53
55:M9:37:SER:OG	55:M9:38:ARG:N	2.41	0.53
1:6:1229:G:O2'	1:6:1255:G:N2	2.38	0.53
14:C2:28:LEU:HD22	14:C2:32:LEU:HG	1.90	0.53
14:C2:75:VAL:O	14:C2:79:ALA:N	3.08	0.53
11:S9:168:ARG:HD3	11:S9:174:ARG:NE	8.10	0.53
36:5:3245:A:H2	36:5:3246:G:C2	2.26	0.53
36:5:3242:G:C5'	36:5:3245:A:H8	2.14	0.53
9:S7:131:PHE:HB3	9:S7:132:PRO:HD3	1.90	0.53
9:S7:155:ASP:OD2	9:S7:157:LYS:HE2	2.08	0.53
42:L5:262:LYS:O	42:L5:265:TYR:N	2.41	0.53
18:C6:122:ARG:HG2	1:6:1584:G:H5''	395.32	0.53
34:SR:13:LEU:HD13	34:SR:45:TRP:CD2	2.44	0.53
34:SR:293:ALA:N	34:SR:302:PHE:O	2.33	0.53
8:S6:5:ILE:O	8:S6:13:GLN:HA	2.74	0.53
36:1:2338:C:H1'	59:N3:49:LEU:HD12	1.90	0.53
52:M6:190:VAL:O	52:M6:194:LEU:HD12	2.08	0.53
64:N8:28:HIS:CD2	36:5:936:A:OP1	161.26	0.53
57:N1:101:CYS:HB3	36:5:990:U:O4'	254.03	0.53
49:M3:74:GLY:HA3	49:M3:98:ASP:HB2	2.68	0.53
36:1:1813:A:OP1	36:1:1817:G:O2'	2.20	0.53
76:Q0:125:LYS:NZ	36:5:2898:G:O6	328.98	0.53
1:2:740:A:C2'	1:2:741:C:H5''	2.36	0.53
40:L3:152:LYS:HD3	40:L3:189:SER:HA	2.09	0.53
36:1:1919:G:N7	87:1:4013:OHX:N5	2.55	0.53
34:SR:149:ASP:CG	34:SR:150:TRP:H	3.02	0.53
36:1:1488:G:H1	36:1:1854:C:N4	2.04	0.53
62:N6:5:SER:OG	62:N6:7:ASP:N	2.35	0.53
55:M9:89:LEU:HD12	55:M9:90:PRO:HD2	2.61	0.53
65:N9:50:THR:O	65:N9:54:LEU:HB2	2.07	0.53
15:C3:65:VAL:O	15:C3:67:THR:N	4.34	0.53
36:1:384:A:C5	36:1:1465:A:C2	2.96	0.53
18:C6:140:LYS:HD3	18:C6:142:TYR:CZ	3.41	0.53
36:1:2521:U:C2'	36:1:2522:G:H5'	2.38	0.53
36:5:3218:A:H5''	36:5:3219:G:C5	2.43	0.53
1:6:1425:A:O5'	1:6:1425:A:H8	1.91	0.53
1:2:887:A:C1'	16:C4:122:PRO:HB3	2.38	0.53
59:N3:26:ALA:O	59:N3:115:THR:HG23	3.74	0.53
39:L2:67:TYR:HD2	39:L2:67:TYR:N	3.08	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1057:U:H1'	1:2:1058:U:H2'	1.90	0.53
36:5:420:G:O5'	36:5:420:G:OP2	2.26	0.53
36:1:1220:U:H5''	36:1:1222:G:O4'	2.08	0.53
1:2:577:G:H3'	1:2:577:G:H8	1.72	0.53
62:N6:73:VAL:HG22	62:N6:80:VAL:HG22	1.90	0.53
18:C6:126:PRO:O	18:C6:128:LYS:NZ	2.27	0.53
1:2:212:U:OP2	87:2:2096:OHX:N2	2.41	0.53
36:1:3041:U:H2'	36:1:3042:U:C6	2.43	0.53
1:6:755:A:O2'	1:6:756:A:H5''	2.09	0.53
40:L3:240:ARG:NH1	40:L3:240:ARG:HG2	2.22	0.53
36:1:1829:G:H5''	36:1:1830:G:OP1	2.09	0.53
11:S9:182:GLU:HG3	11:S9:183:ALA:H	2.12	0.53
11:S9:182:GLU:O	11:S9:184:SER:N	3.75	0.53
36:1:3051:U:C2	36:1:3052:G:C8	2.96	0.53
51:M5:73:ARG:NH1	51:M5:92:LEU:HD21	2.24	0.53
1:6:546:U:H2'	1:6:547:U:C6	2.37	0.53
11:S9:89:ASP:HB2	11:S9:90:LYS:HE2	1.90	0.53
20:C8:28:ILE:HD13	20:C8:54:LEU:HA	6.81	0.53
21:C9:70:GLN:N	21:C9:70:GLN:NE2	3.05	0.53
5:S3:76:ARG:HD2	5:S3:77:PHE:CE2	5.04	0.53
1:2:950:C:H4'	15:C3:104:ARG:HH22	1.73	0.53
29:D7:19:HIS:CE1	29:D7:21:LEU:HG	2.44	0.53
28:D6:44:ILE:HB	28:D6:65:PRO:HG2	5.64	0.53
4:S2:224:PHE:HZ	24:D2:95:PRO:HG3	3.26	0.53
4:S2:69:ILE:HD11	4:S2:133:LYS:HB3	1.95	0.53
1:6:1050:G:H1	1:6:1068:C:H42	1.57	0.53
1:6:871:G:C2	1:6:957:G:N3	2.77	0.53
38:4:81:U:H1'	38:4:82:U:H3'	1.90	0.53
62:N6:111:LEU:HD23	62:N6:116:LYS:HG3	3.37	0.53
71:O5:61:GLN:O	71:O5:65:ALA:N	2.42	0.53
14:C2:62:LEU:HA	14:C2:120:VAL:HA	2.38	0.53
56:N0:148:LEU:HD22	56:N0:149:LYS:N	5.23	0.53
1:6:76:A:H2'	87:6:2199:OHX:N2	2.23	0.53
59:N3:23:MET:HB2	59:N3:98:ASN:O	2.08	0.53
9:S7:155:ASP:CG	9:S7:156:SER:H	2.11	0.53
66:O0:13:LYS:HB3	66:O0:100:ILE:HG22	1.91	0.53
49:M3:123:ILE:H	49:M3:123:ILE:HD13	4.49	0.53
36:5:62:A:H2'	36:5:63:A:C8	2.43	0.53
51:M5:151:ILE:O	51:M5:151:ILE:HG12	4.09	0.53
36:5:778:U:O2'	36:5:779:G:H5'	2.09	0.53
39:L2:187:HIS:CE1	36:5:1794:G:N1	195.33	0.53
79:Q3:18:TYR:HA	36:5:2131:A:N6	225.96	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:104:ASP:HB2	6:S4:108:ARG:H	2.67	0.53
71:O5:30:GLU:O	71:O5:32:LYS:N	2.41	0.53
73:O7:65:ARG:HG3	73:O7:65:ARG:NH1	2.13	0.53
1:2:1090:C:H2'	1:2:1091:A:H5''	1.90	0.53
1:2:220:A:C2	1:2:842:C:H1'	2.43	0.53
64:N8:79:TRP:HZ3	64:N8:87:ARG:HG2	4.75	0.53
1:6:354:C:H2'	1:6:355:G:O4'	2.08	0.53
4:S2:149:GLY:CA	23:D1:3:ASN:HD22	8.29	0.53
6:S4:185:GLY:N	6:S4:189:LEU:HD13	2.75	0.53
36:1:2208:A:N1	87:1:4043:OHX:N2	2.56	0.53
36:5:1024:G:H3'	36:5:1024:G:N3	2.23	0.53
36:1:1615:C:H2'	36:1:1616:U:C6	2.43	0.53
22:D0:51:VAL:HG22	22:D0:94:GLU:N	4.93	0.53
36:5:3189:G:H2'	36:5:3190:C:O4'	2.08	0.53
36:1:1095:U:H4'	36:1:1096:U:C5'	2.38	0.53
36:1:674:G:H2'	36:1:675:C:O4'	2.08	0.53
42:L5:279:LYS:HE3	42:L5:282:ARG:NH1	2.22	0.53
1:2:1306:C:H2'	1:2:1306:C:OP2	2.08	0.53
36:1:872:U:H2'	36:1:873:C:C6	2.44	0.53
1:2:372:G:H1'	1:2:612:U:C2	2.44	0.53
36:1:1364:C:O2'	54:M8:9:GLN:OE1	2.23	0.53
36:1:1126:G:OP2	47:M0:14:ASN:ND2	2.42	0.53
1:2:223:U:H2'	1:2:224:C:C6	2.43	0.53
36:5:279:U:H2'	36:5:280:U:C6	2.44	0.53
56:N0:74:ASN:O	56:N0:129:ILE:N	2.40	0.53
66:O0:60:ALA:HB1	66:O0:65:THR:HG22	1.89	0.53
1:6:278:U:H2'	1:6:278:U:OP2	2.08	0.53
1:2:1728:A:H2'	1:2:1729:C:O4'	2.09	0.53
36:5:2623:G:C4	36:5:2624:G:C8	2.97	0.53
28:D6:70:LYS:HE2	28:D6:72:HIS:NE2	5.37	0.53
1:6:540:G:O2'	1:6:542:A:OP2	2.27	0.53
36:1:696:C:OP1	41:L4:272:VAL:N	2.22	0.53
41:L4:122:THR:CG2	41:L4:235:LEU:HB2	2.38	0.53
1:2:1401:A:OP1	19:C7:60:ARG:NH1	2.40	0.53
7:S5:112:ARG:NH2	18:C6:43:ILE:HG23	2.24	0.53
7:S5:37:GLN:HB3	18:C6:53:LEU:HB3	4.10	0.53
20:C8:46:VAL:HG21	20:C8:73:MET:HG2	1.89	0.53
27:D5:89:ILE:HB	27:D5:101:TYR:CG	2.44	0.53
7:S5:140:THR:HA	7:S5:214:LYS:HD2	1.91	0.53
31:D9:14:TYR:HD2	31:D9:14:TYR:O	3.10	0.53
5:S3:98:ALA:O	5:S3:100:ALA:N	2.41	0.53
15:C3:94:LYS:O	15:C3:98:VAL:HG23	2.09	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:100:PHE:HB3	3:S1:181:LEU:HD13	5.27	0.53
3:S1:78:ASP:O	3:S1:79:HIS:ND1	2.41	0.53
2:S0:82:GLY:O	2:S0:86:VAL:HG13	2.16	0.53
20:C8:105:VAL:HG22	20:C8:106:GLU:N	4.34	0.53
1:6:752:A:H2'	1:6:753:A:C8	2.44	0.53
48:M1:151:SER:O	48:M1:152:HIS:HB2	2.58	0.53
63:N7:5:LEU:HD22	63:N7:25:ILE:CD1	2.39	0.53
40:L3:66:LYS:HZ3	59:N3:120:LYS:HE2	1.74	0.53
42:L5:270:LYS:HD3	37:7:2:G:H4'	321.29	0.53
34:SR:224:ASN:ND2	34:SR:226:ALA:HB3	4.06	0.53
49:M3:165:SER:HB3	49:M3:168:ARG:HG2	4.41	0.53
52:M6:171:LYS:O	52:M6:175:THR:HG23	3.02	0.53
36:1:612:U:H2'	36:1:613:G:C8	2.41	0.53
36:5:1805:C:H2'	36:5:1806:A:H8	1.73	0.53
51:M5:56:LYS:HE3	51:M5:142:ILE:HD12	1.89	0.53
36:1:645:A:C6	36:1:649:A:C8	2.96	0.53
34:SR:156:VAL:HG22	34:SR:169:ILE:HG22	1.90	0.53
36:1:609:G:C6	41:L4:308:LYS:HD3	2.43	0.53
36:5:1581:C:OP2	36:5:1581:C:H4'	2.07	0.53
47:M0:100:ASN:ND2	47:M0:118:ALA:O	2.42	0.53
49:M3:140:SER:OG	49:M3:141:ALA:N	3.16	0.53
54:M8:115:VAL:O	54:M8:117:ALA:N	2.42	0.53
62:N6:103:LYS:HE3	36:5:217:U:O2	80.57	0.53
62:N6:59:VAL:HG23	62:N6:60:ARG:HG2	6.61	0.53
46:L9:155:SER:O	46:L9:158:ALA:HB3	2.11	0.53
1:6:189:C:N4	1:6:197:A:H2	2.06	0.53
50:M4:97:SER:O	50:M4:98:SER:C	2.80	0.53
52:M6:96:LYS:O	52:M6:99:LEU:N	2.76	0.53
23:D1:64:GLU:OE1	29:D7:2:VAL:HG13	2.25	0.53
64:N8:93:SER:OG	64:N8:93:SER:O	2.26	0.53
36:5:2705:A:OP2	87:5:3894:OHX:N2	2.41	0.53
1:6:373:G:N2	1:6:603:U:O3'	2.42	0.53
36:1:1743:G:H2'	36:1:1744:G:H8	1.73	0.53
64:N8:14:HIS:ND1	64:N8:14:HIS:N	2.83	0.53
45:L8:181:LYS:HD3	38:8:154:C:H5''	148.56	0.53
36:5:2763:U:C2'	36:5:2764:C:H5'	2.38	0.53
1:6:1238:A:O2'	1:6:1239:U:OP1	2.27	0.53
36:5:993:G:C5	36:5:2637:A:C2	2.96	0.53
49:M3:21:ARG:NH1	51:M5:191:TRP:CH2	3.43	0.53
17:C5:60:LEU:HD21	17:C5:92:SER:CB	2.39	0.53
1:2:1008:G:OP1	16:C4:135:ARG:NE	2.41	0.53
36:5:2319:U:O2'	36:5:2320:A:C8	2.58	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
65:N9:45:HIS:CE1	36:5:1075:A:C5	195.33	0.53
53:M7:21:TYR:N	53:M7:21:TYR:CD2	2.77	0.53
36:1:274:G:H2'	36:1:275:U:O4'	2.09	0.53
36:1:2989:U:H2'	36:1:2990:G:O4'	2.09	0.53
36:5:3200:G:H2'	36:5:3201:C:O4'	2.07	0.53
47:M0:140:THR:OG1	47:M0:144:ASN:HB3	2.09	0.53
41:L4:328:ASN:ND2	41:L4:328:ASN:O	4.04	0.53
44:L7:160:ARG:HB2	44:L7:203:TRP:CZ3	2.43	0.53
36:1:112:U:O2'	36:1:113:C:H5''	2.09	0.53
1:6:340:U:H2'	1:6:341:A:H8	1.73	0.53
1:6:93:A:H4'	1:6:94:U:OP2	2.06	0.53
13:C1:22:ASN:HB3	13:C1:25:VAL:HG23	3.09	0.53
19:C7:32:LYS:NZ	1:6:1388:A:OP2	435.70	0.53
36:1:526:C:OP2	87:1:4095:OHX:N5	2.42	0.53
1:2:1533:C:N4	1:2:1534:G:O6	2.41	0.53
18:C6:131:GLY:HA2	18:C6:138:PHE:CD1	2.42	0.53
36:1:976:U:H2'	36:1:977:C:O4'	2.08	0.53
42:L5:253:PHE:CZ	42:L5:255:PRO:HB3	2.44	0.53
21:C9:28:LEU:O	21:C9:29:GLU:HB2	2.43	0.53
5:S3:143:ARG:HB2	5:S3:148:LYS:NZ	11.56	0.53
15:C3:88:LEU:O	15:C3:89:TYR:C	2.78	0.53
1:2:310:C:C5	1:2:311:U:H5	2.26	0.53
23:D1:50:TYR:HB2	23:D1:52:THR:HG22	2.06	0.53
1:6:751:G:H2'	1:6:752:A:C8	2.44	0.53
50:M4:20:VAL:HG11	50:M4:90:VAL:CG1	4.76	0.53
56:N0:12:ARG:HB3	56:N0:24:LEU:HD23	1.90	0.53
57:N1:7:TYR:OH	57:N1:54:HIS:HB2	2.66	0.53
38:4:52:A:O3'	75:O9:19:GLN:HG2	2.09	0.53
34:SR:239:GLU:HG2	34:SR:241:PHE:CE1	3.02	0.53
34:SR:255:ALA:HB2	34:SR:292:LEU:HD23	1.89	0.53
34:SR:32:LEU:HD21	34:SR:94:VAL:HG11	2.69	0.53
36:5:2962:U:OP1	87:5:3973:OHX:N4	2.42	0.53
36:5:347:G:C6	36:5:348:A:C6	2.97	0.53
72:O6:56:ARG:HG2	72:O6:60:LEU:HD13	8.81	0.53
79:Q3:56:THR:HG22	79:Q3:63:THR:CG2	2.38	0.53
4:S2:97:ARG:HB2	4:S2:118:ALA:O	2.09	0.53
1:2:161:U:OP2	8:S6:87:ARG:NH2	2.40	0.53
51:M5:15:GLN:HB3	72:O6:51:SER:HB2	1.89	0.53
49:M3:124:ILE:HG23	49:M3:124:ILE:O	3.41	0.53
51:M5:172:ARG:HB3	51:M5:174:ILE:HG12	2.24	0.53
22:D0:27:THR:O	22:D0:113:ASP:HB3	2.08	0.53
36:1:221:A:N6	62:N6:103:LYS:HZ1	2.07	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1881:A:H2'	36:1:1882:G:C8	2.41	0.53
36:1:2830:G:H2'	36:1:2831:G:H8	1.73	0.53
36:1:3170:A:C6	36:1:3171:U:C4	2.97	0.53
41:L4:92:ASN:OD1	36:5:803:C:O2'	147.75	0.53
45:L8:53:PRO:HD3	61:N5:32:PHE:CG	3.68	0.53
36:1:3057:U:O2'	36:1:3059:G:OP1	2.27	0.53
36:5:1582:C:H3'	36:5:1582:C:C6	2.43	0.53
51:M5:66:VAL:CG2	51:M5:98:LEU:HD12	2.38	0.53
1:6:1360:A:H2'	1:6:1361:U:O4'	2.09	0.53
6:S4:22:LYS:HB3	6:S4:23:LEU:HD22	1.89	0.53
49:M3:57:VAL:HG23	49:M3:147:ILE:HD13	3.94	0.53
34:SR:272:ASP:OD1	34:SR:273:ASP:N	3.11	0.53
14:C2:103:LEU:HD23	14:C2:115:VAL:HA	2.67	0.53
53:M7:20:SER:HB3	53:M7:21:TYR:HD2	1.72	0.53
36:5:1517:G:O2'	36:5:1518:U:H5'	2.09	0.53
40:L3:170:PRO:HG2	40:L3:314:TYR:CE1	2.78	0.53
1:2:717:C:H2'	1:2:718:U:H5"	1.91	0.53
50:M4:134:ALA:O	50:M4:136:ALA:N	2.42	0.53
1:6:802:G:C6	1:6:803:A:C6	2.96	0.53
40:L3:383:LEU:O	40:L3:386:ASP:HB2	2.09	0.53
13:C1:35:TYR:CD2	13:C1:49:ILE:HG12	2.91	0.53
36:1:2407:C:H6	36:1:2407:C:O5'	1.92	0.53
36:5:769:G:C6	36:5:770:G:C6	2.96	0.53
6:S4:199:GLU:HB3	6:S4:207:LEU:HB2	4.66	0.53
38:4:145:U:H2'	38:4:146:U:C6	2.44	0.53
1:2:1177:C:O3'	1:2:1189:A:N6	2.42	0.53
36:1:1571:A:H2'	36:1:1572:U:O4'	2.09	0.53
36:1:2419:A:H1'	36:1:2804:A:O4'	2.09	0.53
36:1:2741:C:O2'	78:Q2:20:HIS:ND1	2.33	0.53
46:L9:81:GLY:HA2	46:L9:85:GLY:H	2.91	0.53
1:2:538:A:H5'	1:2:543:C:N4	2.20	0.53
11:S9:121:SER:O	11:S9:124:HIS:N	2.65	0.53
47:M0:46:PHE:HB3	47:M0:140:THR:CA	2.38	0.53
44:L7:40:LYS:HD2	44:L7:170:GLU:OE1	3.95	0.53
44:L7:235:PHE:CD2	44:L7:235:PHE:N	3.73	0.53
45:L8:64:ILE:HG22	45:L8:65:LEU:N	2.22	0.53
10:S8:192:TYR:O	10:S8:196:LEU:HB2	2.17	0.53
41:L4:237:GLN:HG2	41:L4:246:ARG:NH2	4.11	0.53
5:S3:164:VAL:O	5:S3:168:ILE:HG13	2.08	0.53
52:M6:130:LYS:O	52:M6:133:ARG:HG2	2.08	0.53
20:C8:41:ARG:CD	21:C9:46:PRO:HD3	2.39	0.53
7:S5:145:ASP:O	7:S5:160:VAL:N	2.29	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
67:O1:68:GLU:HG3	67:O1:69:TYR:H	1.74	0.53
61:N5:96:LYS:HE3	61:N5:107:VAL:HB	2.86	0.53
42:L5:53:VAL:O	42:L5:54:ARG:NH1	2.38	0.53
5:S3:101:GLN:OE1	5:S3:122:VAL:HG13	2.72	0.53
5:S3:102:ALA:O	5:S3:105:MET:HB2	2.67	0.53
1:2:908:U:H2'	1:2:909:U:H5'	1.90	0.53
3:S1:185:THR:O	3:S1:189:ILE:HG13	2.09	0.53
23:D1:74:GLN:HB2	23:D1:79:LEU:HB2	1.90	0.53
2:S0:40:ALA:HA	2:S0:46:HIS:HA	2.92	0.53
4:S2:108:ASN:HA	4:S2:141:ARG:HH11	1.73	0.53
38:4:70:G:H5''	62:N6:28:ARG:CZ	2.38	0.53
62:N6:27:ARG:CZ	62:N6:78:PHE:CE2	2.92	0.53
1:6:1184:A:H3'	1:6:1185:U:H5''	1.90	0.53
50:M4:14:LEU:HB2	50:M4:16:GLU:OE1	2.08	0.53
56:N0:138:GLN:C	56:N0:140:VAL:H	2.10	0.53
56:N0:27:MET:SD	56:N0:44:PHE:HB2	2.77	0.53
60:N4:50:ALA:HA	60:N4:55:PHE:CD1	2.59	0.53
36:1:2807:U:O2'	36:1:2808:A:H5''	2.09	0.53
1:2:990:C:H2'	1:2:991:G:O4'	2.09	0.53
39:L2:250:GLN:NE2	39:L2:251:LYS:HB2	7.39	0.53
79:Q3:74:ALA:O	79:Q3:77:ALA:HB3	2.08	0.53
36:1:2183:A:O2'	39:L2:235:ALA:HA	2.08	0.53
41:L4:67:THR:OG1	41:L4:68:GLY:N	2.39	0.53
1:2:1348:A:H2'	1:2:1349:G:O4'	2.09	0.53
36:5:1825:G:O2'	36:5:1826:C:H5'	2.09	0.53
36:5:776:U:H5	36:5:2719:U:C2	2.27	0.53
11:S9:54:ARG:CZ	11:S9:55:ALA:HA	2.38	0.53
36:5:1792:C:H2'	36:5:1795:U:O4	2.08	0.53
34:SR:64:HIS:CD2	34:SR:68:VAL:HG22	2.44	0.53
1:6:514:G:O2'	1:6:515:A:O5'	2.25	0.53
42:L5:156:GLY:HA2	42:L5:181:PRO:HG3	1.89	0.53
56:N0:171:PHE:CE2	36:5:3205:G:C5	315.09	0.53
58:N2:34:ALA:HA	58:N2:37:LEU:HD13	1.89	0.53
36:5:1722:U:C4	36:5:1723:A:N7	2.77	0.53
36:5:3063:C:H2'	36:5:3064:U:C6	2.43	0.53
41:L4:92:ASN:O	36:5:659:G:H4'	140.92	0.53
45:L8:81:THR:OG1	45:L8:181:LYS:HB2	2.93	0.53
36:1:255:A:O2'	36:1:256:G:H5'	2.09	0.53
3:S1:114:VAL:HG11	1:6:930:A:O2'	308.75	0.53
37:3:87:G:N1	37:3:95:A:C6	2.76	0.53
36:1:3134:A:OP1	87:1:3902:OHX:N4	2.42	0.53
1:2:1111:G:H1	1:2:1134:C:H42	1.57	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:192:U:HO2'	1:2:193:U:P	2.32	0.53
21:C9:4:VAL:HG11	21:C9:137:ALA:HB2	1.90	0.53
36:1:2796:G:H4'	36:1:2798:C:C6	2.44	0.53
1:2:1596:C:OP1	31:D9:16:LYS:HG2	2.09	0.53
36:1:2366:C:H5'	40:L3:259:HIS:CE1	2.44	0.53
26:D4:77:ASN:O	26:D4:78:SER:HB3	3.20	0.53
36:5:145:G:O6	87:5:4013:OHX:N5	2.42	0.53
1:6:553:G:C6	1:6:554:C:N4	2.77	0.53
1:2:1642:G:O6	88:2:2181:GET:H231	2.08	0.53
36:5:1307:G:C2	36:5:1308:A:C2	2.97	0.53
36:5:3199:G:C2	36:5:3200:G:C8	2.97	0.53
11:S9:116:LEU:O	11:S9:118:LEU:HD12	2.55	0.53
51:M5:5:LYS:HB3	72:O6:36:ARG:HH11	2.38	0.53
26:D4:21:LYS:HB2	26:D4:75:VAL:HG13	1.90	0.53
43:L6:58:LEU:O	43:L6:60:ASP:N	2.42	0.53
73:O7:17:THR:O	73:O7:25:ARG:HA	2.08	0.53
27:D5:71:ILE:HG23	27:D5:75:LEU:HD12	1.89	0.53
27:D5:73:GLY:HA2	27:D5:76:ALA:HB3	2.47	0.53
7:S5:121:ILE:HG21	7:S5:129:PRO:HA	3.00	0.53
42:L5:226:TYR:HE1	42:L5:236:LEU:HD11	6.22	0.53
42:L5:85:ARG:HH22	42:L5:252:ALA:HB3	1.73	0.53
1:2:1602:C:H2'	1:2:1603:U:O4'	2.09	0.53
17:C5:119:PHE:HA	35:SM:57:ASN:ND2	2.24	0.53
17:C5:33:PHE:O	17:C5:36:LEU:HD22	3.85	0.53
2:S0:57:LEU:HD11	2:S0:173:ILE:HG23	1.89	0.53
2:S0:89:PHE:HE2	2:S0:177:LEU:HD13	1.74	0.53
59:N3:86:ARG:NH1	59:N3:90:GLY:HA2	2.24	0.53
68:O2:82:LEU:HD22	68:O2:117:ILE:HD12	1.90	0.53
55:M9:41:ILE:HA	55:M9:44:LEU:HD22	1.90	0.53
6:S4:125:LYS:HB2	6:S4:226:PHE:CE2	2.43	0.53
50:M4:50:LYS:NZ	50:M4:91:CYS:HB2	2.24	0.53
56:N0:80:ARG:HB2	56:N0:124:LEU:HD11	1.90	0.53
34:SR:212:ALA:HA	34:SR:221:MET:O	2.36	0.53
36:5:354:U:H3	36:5:365:A:H62	1.55	0.53
72:O6:82:ARG:O	72:O6:85:ALA:HB3	3.32	0.53
39:L2:112:ILE:HG13	39:L2:135:ILE:HG23	1.90	0.53
8:S6:13:GLN:CD	1:6:151:G:H21	311.96	0.53
66:O0:17:VAL:HG21	66:O0:100:ILE:HD13	3.27	0.53
3:S1:144:ARG:HG2	3:S1:207:LEU:H	1.74	0.53
36:1:3178:A:H5'	52:M6:5:PRO:HD2	1.91	0.53
71:O5:112:PRO:O	71:O5:114:ARG:HG2	2.54	0.53
38:8:116:G:N2	38:8:137:C:O2	2.42	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1270:G:H1'	1:6:1447:C:O2	2.08	0.53
76:Q0:124:LYS:O	76:Q0:126:LYS:NZ	2.78	0.53
1:2:703:G:C2'	1:2:704:C:H5'	2.38	0.53
1:2:1558:U:H3	17:C5:122:THR:HG1	1.54	0.53
36:1:595:G:C8	36:1:609:G:C5	2.97	0.53
36:1:836:A:OP2	36:1:856:G:N2	2.41	0.53
9:S7:25:VAL:O	9:S7:29:ASN:N	2.48	0.53
1:2:1512:G:C6	1:2:1513:G:C6	2.97	0.53
54:M8:115:VAL:C	54:M8:117:ALA:H	2.11	0.53
73:O7:21:ARG:HH11	73:O7:44:THR:HG23	1.74	0.53
36:1:1613:A:H2'	36:1:1614:C:H6	1.73	0.53
42:L5:23:ARG:NH2	36:5:2703:A:OP2	283.57	0.53
38:8:26:U:H2'	38:8:27:U:C6	2.43	0.53
56:N0:82:ASP:HB3	56:N0:87:THR:HA	1.91	0.53
36:1:1492:G:O2'	75:O9:48:LYS:NZ	2.41	0.53
27:D5:93:SER:HB3	27:D5:100:ILE:HG22	1.91	0.53
38:4:155:A:H2'	38:4:156:U:O4'	2.08	0.53
36:5:1207:G:N2	36:5:1209:G:C5	2.77	0.53
75:O9:30:ARG:HB2	75:O9:33:ASN:HB2	1.91	0.53
36:1:718:G:C2	36:1:721:G:H1'	2.44	0.53
36:1:776:U:C5	36:1:2719:U:O2	2.62	0.53
42:L5:278:SER:O	42:L5:281:GLU:HB2	2.09	0.53
1:6:1724:U:O2'	1:6:1725:U:H5'	2.09	0.53
34:SR:52:GLN:HG2	34:SR:53:LYS:N	2.36	0.53
33:E1:118:ARG:HG3	33:E1:134:ASN:ND2	7.93	0.53
87:5:4050:OHX:N1	87:5:4194:OHX:N4	2.56	0.53
1:6:127:G:H4'	1:6:128:U:OP2	2.09	0.53
59:N3:74:MET:HE3	59:N3:102:ILE:HD12	1.90	0.53
50:M4:133:LYS:HD2	36:5:3227:A:O2'	302.62	0.53
36:5:3228:C:H4'	36:5:3229:G:O5'	2.09	0.53
36:5:3027:A:H2'	36:5:3028:G:O4'	2.09	0.53
34:SR:128:ASP:O	34:SR:130:THR:HG23	2.09	0.53
36:1:2118:C:H5''	36:1:2119:A:OP2	2.09	0.53
7:S5:20:PHE:CE2	7:S5:22:PRO:HG3	3.00	0.53
1:6:434:G:N2	1:6:436:A:H3'	2.23	0.53
36:5:893:C:O5'	36:5:893:C:H6	1.92	0.53
1:2:431:C:H3'	1:2:432:G:H8	1.74	0.53
28:D6:26:CYS:CB	28:D6:77:CYS:SG	2.77	0.53
11:S9:66:ASP:O	11:S9:68:LYS:N	2.77	0.53
65:N9:14:ARG:NH2	65:N9:18:ARG:HH11	3.79	0.53
1:6:448:C:H2'	1:6:449:C:C6	2.44	0.53
1:2:1330:G:N1	5:S3:204:ASP:OD1	2.38	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:S3:206:VAL:HG22	19:C7:41:ILE:HG12	1.90	0.53
19:C7:66:VAL:O	19:C7:68:GLY:N	3.29	0.53
36:5:818:C:N3	36:5:920:A:H5'	2.24	0.53
55:M9:168:ALA:C	55:M9:170:ARG:H	2.12	0.53
1:2:1475:A:H2'	1:2:1476:C:C6	2.44	0.53
30:D8:11:LYS:HA	30:D8:53:ILE:HA	3.23	0.53
21:C9:58:ALA:HB1	21:C9:108:LEU:HD21	1.91	0.53
5:S3:65:ARG:O	5:S3:68:GLU:HB2	2.11	0.53
2:S0:52:LYS:O	2:S0:55:GLU:N	3.68	0.53
4:S2:106:ASP:CG	4:S2:108:ASN:H	2.13	0.53
40:L3:221:THR:CG2	40:L3:273:HIS:H	3.31	0.53
48:M1:14:ILE:HD12	48:M1:14:ILE:H	1.74	0.53
63:N7:13:VAL:HA	63:N7:80:LEU:HD23	1.89	0.53
63:N7:23:VAL:HG12	63:N7:45:GLY:HA3	1.93	0.53
55:M9:20:ARG:HG2	36:5:1875:G:OP2	136.29	0.53
14:C2:89:ILE:HG12	14:C2:90:LYS:H	1.73	0.53
1:2:1184:A:O3'	1:2:1185:U:H4'	2.09	0.53
34:SR:263:PHE:N	34:SR:263:PHE:CD2	2.76	0.53
52:M6:12:LYS:HA	52:M6:40:GLU:O	2.09	0.53
36:1:31:C:N3	36:1:53:G:N1	2.36	0.53
51:M5:188:ARG:NH2	36:5:31:C:OP2	121.25	0.53
39:L2:108:PRO:HG2	79:Q3:86:LEU:HD22	2.16	0.53
49:M3:49:ARG:O	49:M3:137:GLN:NE2	2.42	0.53
36:1:289:A:C2	51:M5:93:LYS:HG3	2.44	0.53
36:1:3027:A:H2'	36:1:3028:G:C8	2.43	0.53
1:2:1101:G:N2	24:D2:2:THR:O	2.42	0.53
42:L5:155:THR:HG23	37:7:36:C:H4'	270.65	0.53
24:D2:8:ALA:CB	24:D2:74:VAL:HG11	3.33	0.53
10:S8:5:ARG:NH1	1:6:332:U:O2'	298.56	0.53
36:5:1710:C:H2'	36:5:1711:C:H6	1.74	0.53
41:L4:295:ILE:HD12	54:M8:132:PRO:HG3	5.67	0.53
22:D0:99:ILE:HA	22:D0:102:ARG:HB3	2.46	0.53
36:5:2152:A:C6	36:5:2185:G:C6	2.97	0.53
50:M4:22:LEU:HB3	50:M4:64:VAL:HG13	2.35	0.53
36:1:1814:A:H4'	36:1:1815:U:H5'	1.90	0.53
10:S8:21:PHE:O	10:S8:22:ARG:HG3	2.09	0.53
36:1:397:A:H5''	36:1:398:A:H3'	1.91	0.53
9:S7:127:GLU:HA	9:S7:135:ILE:HD11	2.84	0.53
36:1:2730:G:H4'	54:M8:184:PHE:CD1	2.43	0.53
1:2:1311:U:H1'	1:2:1315:U:C2	2.44	0.53
2:S0:81:PHE:HB3	2:S0:170:ILE:HD13	1.90	0.53
36:1:966:U:C2	36:1:967:A:C8	2.97	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1182:A:H2'	36:5:1183:C:C6	2.42	0.53
66:O0:74:ASN:HD22	66:O0:86:ARG:HG3	3.45	0.53
36:1:1244:A:O2'	36:1:1249:G:O6	2.17	0.53
37:3:26:C:H5''	37:3:27:A:OP2	2.09	0.53
21:C9:89:ARG:HG3	21:C9:89:ARG:HH11	3.67	0.53
3:S1:146:GLN:HB3	3:S1:149:GLN:OE1	2.09	0.53
36:1:3046:A:C5	36:1:3047:U:C5	2.96	0.53
17:C5:75:PRO:HD3	17:C5:93:VAL:HG11	3.94	0.53
1:6:1496:U:H4'	1:6:1519:U:O2'	2.09	0.53
34:SR:179:LYS:HD3	34:SR:188:ILE:HD13	4.66	0.53
6:S4:258:GLN:O	6:S4:260:GLY:N	4.87	0.53
6:S4:37:LYS:HB2	6:S4:40:GLU:HG3	2.30	0.53
36:1:2569:A:H8	36:1:2569:A:OP2	1.91	0.53
36:1:379:C:H2'	36:1:380:U:H6	1.74	0.53
1:2:720:G:H1'	1:2:721:U:H5''	1.91	0.53
1:2:287:G:O2'	1:2:288:A:P	2.67	0.53
46:L9:80:THR:O	46:L9:84:LYS:N	2.87	0.53
36:1:2356:A:C2	36:1:2357:A:C8	2.96	0.53
47:M0:46:PHE:HB3	47:M0:140:THR:C	2.53	0.53
1:6:398:G:H2'	1:6:399:A:H5'	1.91	0.53
10:S8:104:ILE:O	10:S8:164:ARG:HA	5.18	0.53
41:L4:39:PHE:CG	41:L4:242:ALA:HB2	2.79	0.53
43:L6:30:LEU:HD11	43:L6:57:HIS:CD2	3.78	0.53
43:L6:85:ILE:HG23	69:O3:107:ILE:HB	1.91	0.53
1:2:1337:A:H5'	1:2:1338:C:OP2	2.09	0.53
19:C7:5:ARG:O	19:C7:10:LYS:HE3	2.99	0.53
1:6:1504:G:C6	1:6:1505:A:C6	2.96	0.53
17:C5:43:ARG:CG	17:C5:43:ARG:HH11	3.36	0.53
22:D0:69:LYS:HE3	22:D0:80:GLU:HG3	6.49	0.53
1:2:955:A:H2'	1:2:956:C:O4'	2.08	0.53
36:5:70:A:O5'	36:5:101:G:O2'	2.23	0.53
2:S0:123:VAL:O	2:S0:146:LEU:HB2	2.09	0.53
4:S2:99:LYS:HG3	4:S2:117:THR:HG22	1.91	0.53
4:S2:227:PRO:O	4:S2:229:LEU:N	2.68	0.53
40:L3:221:THR:HB	40:L3:273:HIS:H	1.74	0.53
62:N6:28:ARG:HB2	62:N6:75:ARG:NH2	2.50	0.53
1:2:1178:G:H2'	1:2:1179:G:O4'	2.08	0.53
59:N3:24:ASN:N	59:N3:98:ASN:O	2.26	0.53
43:L6:89:THR:HG21	50:M4:115:PHE:CB	2.35	0.53
8:S6:176:GLN:HG2	1:6:169:A:C5'	327.88	0.53
52:M6:12:LYS:O	56:N0:167:ARG:NH2	2.41	0.53
36:1:230:U:H2'	36:1:231:G:O4'	2.09	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1168:U:OP1	87:2:2117:OHX:N2	2.42	0.53
1:2:632:U:H2'	1:2:633:U:O4'	2.09	0.53
1:6:488:G:H2'	1:6:498:G:O6	2.08	0.53
46:L9:129:ARG:O	46:L9:132:VAL:HG12	5.74	0.53
1:2:273:G:N2	1:2:283:U:O2	2.34	0.53
76:Q0:124:LYS:NZ	36:5:2897:A:OP2	324.71	0.53
13:C1:40:LEU:HD22	1:6:246:G:N2	325.40	0.53
1:2:386:G:P	10:S8:25:ARG:HH22	2.33	0.53
20:C8:76:PRO:O	20:C8:81:ILE:HB	2.69	0.53
41:L4:294:GLU:O	41:L4:297:SER:N	2.38	0.53
1:6:636:A:C2	1:6:861:U:C2	2.97	0.53
49:M3:140:SER:HG	49:M3:143:ALA:N	2.01	0.53
37:7:30:G:N2	37:7:48:U:C2	2.77	0.53
5:S3:6:SER:HA	1:6:1514:U:H1'	441.21	0.53
42:L5:69:ILE:HD12	57:N1:28:SER:HB2	1.91	0.53
46:L9:72:LYS:O	46:L9:76:ASP:HB2	2.09	0.53
36:1:1809:A:H2'	36:1:1810:A:O4'	2.08	0.53
36:1:1753:G:C4	36:1:1754:G:C8	2.96	0.53
45:L8:94:PHE:CZ	45:L8:200:LEU:HG	2.44	0.53
61:N5:117:ASN:HA	75:O9:14:ALA:HB1	2.69	0.53
13:C1:83:THR:HA	13:C1:110:HIS:HA	1.90	0.53
22:D0:38:SER:O	22:D0:41:ILE:N	3.14	0.53
1:2:809:A:C6	1:2:810:G:C6	2.97	0.53
34:SR:161:LYS:HE3	34:SR:164:ASP:HB2	1.90	0.53
24:D2:28:ARG:HG2	24:D2:28:ARG:HH11	1.73	0.53
1:2:1287:A:N6	1:2:1329:A:H5'	2.23	0.53
1:2:1329:A:H8	1:2:1329:A:O5'	1.90	0.53
36:1:2674:A:H2'	36:1:2675:C:C6	2.44	0.53
8:S6:10:ASN:ND2	8:S6:127:THR:O	2.35	0.53
1:2:344:A:H2'	1:2:345:U:H6	1.73	0.53
36:1:1148:G:C2	36:1:1156:C:C2	2.97	0.53
39:L2:128:ARG:NH1	36:5:2177:G:OP2	195.91	0.53
36:1:1863:G:N1	36:1:1866:C:OP2	2.35	0.53
36:1:3372:A:C6	36:1:3373:U:C4	2.97	0.53
36:1:430:U:N3	36:1:630:A:C2	2.76	0.53
48:M1:75:LYS:O	48:M1:78:GLU:HB2	2.08	0.53
37:3:11:A:O2'	37:3:12:U:H3'	2.08	0.53
46:L9:147:SER:HB2	46:L9:187:ILE:HD11	2.06	0.52
36:5:729:C:O5'	36:5:729:C:H6	1.92	0.52
36:1:694:C:OP2	41:L4:118:LYS:HE2	2.08	0.52
41:L4:36:HIS:O	41:L4:40:THR:HG23	2.10	0.52
1:2:1389:C:OP2	19:C7:45:ARG:HG3	2.08	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:M6:16:VAL:HG12	52:M6:17:GLY:N	2.24	0.52
36:5:920:A:H3'	36:5:922:U:H5	1.72	0.52
1:2:1166:A:H5''	7:S5:101:GLY:H	1.74	0.52
42:L5:246:ALA:O	42:L5:249:ALA:HB3	2.18	0.52
48:M1:33:ALA:HB2	48:M1:123:PHE:CE1	2.45	0.52
1:2:950:C:H4'	15:C3:104:ARG:NH2	2.24	0.52
1:2:959:U:C4	29:D7:32:PHE:HE2	2.28	0.52
36:1:156:G:C5	49:M3:99:HIS:CE1	2.97	0.52
77:Q1:6:ARG:O	77:Q1:10:THR:HG23	2.32	0.52
63:N7:21:LYS:NZ	63:N7:47:GLU:O	2.38	0.52
47:M0:12:GLN:HB3	47:M0:128:ARG:NH2	2.24	0.52
1:2:1298:U:O2'	4:S2:212:LYS:NZ	2.38	0.52
1:2:1298:U:O3'	4:S2:212:LYS:NZ	2.43	0.52
2:S0:7:PHE:HZ	23:D1:43:GLY:HA2	2.98	0.52
2:S0:172:LEU:O	2:S0:175:TYR:HB3	2.37	0.52
54:M8:83:VAL:C	54:M8:85:GLY:H	2.51	0.52
55:M9:46:LYS:C	55:M9:48:GLY:H	3.44	0.52
69:O3:41:ALA:O	69:O3:43:PHE:N	2.42	0.52
9:S7:58:LEU:HG	9:S7:88:ARG:HB3	1.90	0.52
1:6:140:A:OP2	1:6:140:A:H4'	2.09	0.52
1:6:147:A:N6	1:6:148:A:N1	2.56	0.52
18:C6:99:GLU:O	18:C6:102:LYS:N	3.15	0.52
39:L2:145:LYS:O	39:L2:146:THR:OG1	2.20	0.52
3:S1:109:LYS:HA	3:S1:112:SER:HB3	1.90	0.52
1:6:1079:U:H2'	1:6:1080:U:C6	2.44	0.52
1:2:843:U:H2'	1:2:844:A:C8	2.44	0.52
1:6:1270:G:H1	1:6:1440:C:N4	2.07	0.52
1:2:1092:A:H5'	87:2:2175:OHX:N1	2.25	0.52
36:1:2103:U:H2'	36:1:2104:A:H8	1.72	0.52
24:D2:2:THR:O	24:D2:4:SER:OG	4.45	0.52
40:L3:379:PHE:HE2	60:N4:11:ALA:HA	1.75	0.52
36:5:1579:C:H2'	36:5:1580:A:C8	2.36	0.52
41:L4:302:ALA:HB2	54:M8:39:ARG:CZ	2.40	0.52
2:S0:129:ASP:O	2:S0:131:GLN:N	2.42	0.52
1:2:576:G:OP2	35:SM:102:THR:HG21	2.08	0.52
46:L9:45:PHE:CE1	46:L9:55:VAL:HG13	3.27	0.52
59:N3:35:TYR:CD2	59:N3:63:LYS:HD3	2.44	0.52
36:1:1565:G:N2	36:1:1566:A:H1'	2.23	0.52
5:S3:113:LEU:CD1	5:S3:117:ARG:HB3	2.40	0.52
34:SR:40:LYS:HA	34:SR:68:VAL:HG23	1.90	0.52
36:1:996:A:C2	36:1:1054:A:C4	2.97	0.52
68:O2:41:VAL:HG12	68:O2:46:PHE:HB2	6.65	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:154:ILE:HG12	6:S4:172:PHE:CD2	2.44	0.52
36:5:2207:A:H62	36:5:2236:G:H1	1.55	0.52
41:L4:215:ILE:O	41:L4:218:ALA:HB3	2.09	0.52
4:S2:157:LYS:HA	4:S2:169:LEU:O	2.28	0.52
39:L2:229:ALA:HB1	39:L2:233:GLN:HB3	1.90	0.52
1:2:1637:C:C2	35:SM:90:ALA:HA	2.44	0.52
44:L7:121:LYS:O	44:L7:124:LEU:N	2.41	0.52
36:1:1519:G:H8	36:1:1519:G:H5'	1.73	0.52
36:1:2144:A:C4	36:1:2281:A:C6	2.97	0.52
35:SM:43:ASP:OD2	35:SM:46:LYS:N	2.41	0.52
36:1:1077:U:O2'	36:1:1078:U:H5'	2.09	0.52
44:L7:191:VAL:HA	44:L7:195:PHE:CD2	2.67	0.52
36:5:1204:A:H2	36:5:2834:G:N3	2.06	0.52
1:6:730:G:N7	87:6:2104:OHX:N3	2.57	0.52
36:1:496:C:H6	36:1:496:C:H3'	1.74	0.52
36:1:2786:G:N7	87:1:4041:OHX:N1	2.56	0.52
48:M1:17:LEU:HD21	48:M1:19:LEU:HD21	2.27	0.52
1:6:569:C:H2'	1:6:570:A:O4'	2.10	0.52
36:1:1887:A:H4'	40:L3:227:GLU:HA	1.90	0.52
45:L8:101:THR:CG2	45:L8:103:ALA:HB3	2.39	0.52
40:L3:264:VAL:HG23	40:L3:265:ALA:N	2.46	0.52
36:1:2352:A:H2'	36:1:2353:G:H8	1.75	0.52
1:2:458:G:OP2	26:D4:105:ARG:NH2	2.37	0.52
11:S9:123:HIS:ND1	32:E0:37:ARG:CZ	3.33	0.52
11:S9:143:ILE:HG22	11:S9:145:SER:H	2.90	0.52
36:5:1332:A:H2'	36:5:1333:C:C6	2.44	0.52
44:L7:178:ILE:HA	44:L7:183:ASP:HB3	2.02	0.52
54:M8:26:LEU:O	54:M8:28:LEU:N	3.07	0.52
43:L6:40:LEU:HB2	43:L6:52:VAL:HG12	1.92	0.52
43:L6:53:VAL:O	43:L6:65:ILE:HB	2.09	0.52
19:C7:4:VAL:HG13	1:6:1402:G:H5'	401.26	0.52
18:C6:137:ARG:HH11	18:C6:137:ARG:HG3	2.27	0.52
30:D8:65:ARG:HG3	30:D8:66:LEU:N	2.24	0.52
12:C0:49:LEU:O	12:C0:52:LYS:HG2	2.10	0.52
21:C9:105:LEU:O	21:C9:109:GLU:HG3	5.85	0.52
1:2:1118:G:O6	87:2:2148:OHX:N1	2.42	0.52
16:C4:83:ILE:HG22	16:C4:117:ASP:HA	3.37	0.52
3:S1:137:ILE:CD1	3:S1:172:LEU:HD22	2.72	0.52
40:L3:221:THR:O	40:L3:272:TYR:HA	2.25	0.52
55:M9:7:GLN:HA	55:M9:10:LEU:HB2	3.08	0.52
34:SR:305:TYR:CD2	34:SR:311:ARG:HD2	2.44	0.52
52:M6:126:VAL:C	52:M6:127:LEU:HD23	2.29	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:143:GLU:O	39:L2:145:LYS:HG2	2.09	0.52
41:L4:158:SER:HA	41:L4:213:ASN:O	2.40	0.52
46:L9:75:VAL:HA	46:L9:78:MET:HE1	1.91	0.52
40:L3:122:TRP:O	40:L3:127:LYS:HE3	3.57	0.52
1:2:1132:A:OP1	25:D3:30:LYS:HE3	2.10	0.52
36:1:643:U:H2'	36:1:644:G:O4'	2.09	0.52
2:S0:148:ASP:OD1	2:S0:149:LEU:N	2.42	0.52
36:5:1106:G:C5	36:5:1107:C:C5	2.97	0.52
36:1:1544:G:OP1	51:M5:127:TYR:OH	2.22	0.52
36:5:1674:G:C2	36:5:1774:C:N3	2.77	0.52
38:4:129:C:O2'	38:4:130:C:H5'	2.09	0.52
68:O2:63:THR:O	68:O2:66:LEU:HB2	2.08	0.52
36:5:2376:G:H2'	36:5:2377:G:C8	2.44	0.52
45:L8:128:LYS:HG2	45:L8:129:PRO:HD2	3.49	0.52
1:2:323:A:OP2	10:S8:10:LYS:HG3	2.09	0.52
36:5:673:U:H2'	36:5:674:G:C8	2.39	0.52
48:M1:142:LYS:HE3	36:5:2664:C:OP2	283.34	0.52
42:L5:48:LYS:HZ1	36:5:2749:G:P	242.00	0.52
36:1:1302:A:N7	36:1:2857:C:O2'	2.38	0.52
1:6:269:G:C6	1:6:287:G:C2	2.97	0.52
68:O2:46:PHE:CE2	36:5:1145:G:H5'	208.95	0.52
36:1:1562:C:O2'	36:1:1563:C:O5'	2.22	0.52
16:C4:77:THR:O	16:C4:110:LEU:HD22	3.62	0.52
10:S8:153:GLU:HG2	10:S8:155:SER:OG	5.40	0.52
37:7:62:U:O2'	37:7:63:A:H5'	2.09	0.52
41:L4:263:GLY:HA2	41:L4:267:VAL:HG13	5.23	0.52
1:6:1230:A:N6	1:6:1257:U:H3	2.07	0.52
1:2:1151:A:H4'	1:2:1766:A:N7	2.25	0.52
1:2:288:A:H2'	1:2:289:U:C6	2.44	0.52
36:5:163:C:H2'	36:5:164:A:C8	2.44	0.52
36:1:1246:G:OP1	36:1:1246:G:H8	1.92	0.52
69:O3:16:TYR:CG	69:O3:25:PRO:HA	2.87	0.52
1:6:425:A:H8	1:6:425:A:H5'	1.73	0.52
13:C1:69:LYS:NZ	1:6:797:G:H4'	334.54	0.52
12:C0:80:LEU:O	12:C0:82:LEU:N	2.42	0.52
37:7:67:G:C6	37:7:68:C:C4	2.97	0.52
1:2:435:C:H2'	1:2:436:A:H8	1.69	0.52
36:1:2261:G:H21	36:1:2262:A:N6	2.04	0.52
1:2:1564:U:H2'	1:2:1565:C:C6	2.44	0.52
36:5:1307:G:O2'	36:5:1308:A:N7	2.36	0.52
36:5:3195:U:O2'	36:5:3196:U:H5'	2.09	0.52
46:L9:84:LYS:HE2	46:L9:189:GLU:HG3	10.33	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:S9:123:HIS:O	11:S9:127:VAL:HG23	2.09	0.52
11:S9:86:LEU:HD13	11:S9:99:LEU:HD11	4.68	0.52
47:M0:78:THR:OG1	47:M0:79:VAL:HG23	3.01	0.52
43:L6:84:VAL:O	69:O3:105:SER:OG	2.28	0.52
1:2:1586:A:H1'	1:2:1611:A:N6	2.25	0.52
20:C8:46:VAL:HG12	20:C8:69:ILE:HG23	1.90	0.52
20:C8:61:LEU:HB3	20:C8:66:LEU:HG	1.91	0.52
67:O1:29:ALA:O	67:O1:32:ALA:HB3	2.10	0.52
61:N5:114:VAL:HB	75:O9:10:LYS:NZ	3.99	0.52
1:6:1429:G:C6	1:6:1430:U:C4	2.98	0.52
17:C5:67:ALA:O	87:C5:201:OHX:N2	2.42	0.52
31:D9:33:LYS:HG2	31:D9:34:TYR:CD2	5.50	0.52
48:M1:110:ILE:O	48:M1:112:LEU:N	2.69	0.52
36:1:68:C:N4	36:1:315:C:O5'	2.41	0.52
47:M0:16:PRO:O	47:M0:18:PRO:HD3	2.09	0.52
36:1:408:A:O2'	36:1:409:A:H5'	2.09	0.52
1:2:12:U:H3	1:2:1142:A:H61	1.55	0.52
55:M9:134:HIS:ND1	55:M9:136:ARG:HB3	2.24	0.52
55:M9:17:VAL:HG13	55:M9:18:GLY:O	5.45	0.52
1:2:1451:C:H2'	1:2:1452:U:H6	1.74	0.52
1:6:1132:A:H2'	1:6:1133:A:H8	1.73	0.52
36:1:3188:G:H2'	36:1:3189:G:H8	1.75	0.52
36:1:2728:G:O6	57:N1:78:LYS:HE3	2.09	0.52
36:5:3261:C:H2'	36:5:3262:U:H6	1.73	0.52
69:O3:41:ALA:O	69:O3:44:TYR:N	2.42	0.52
39:L2:96:LEU:HD23	79:Q3:83:ILE:HG23	1.91	0.52
1:2:158:U:O2'	1:2:159:U:H3'	2.09	0.52
36:5:1806:A:H2'	36:5:1807:G:O4'	2.09	0.52
79:Q3:11:THR:HG23	79:Q3:14:TYR:HD2	1.75	0.52
1:2:546:U:H2'	1:2:547:U:O4'	2.09	0.52
11:S9:28:LEU:HD12	32:E0:43:ARG:HD2	4.63	0.52
70:O4:52:GLN:HE21	36:5:1738:C:C1'	194.34	0.52
64:N8:133:LEU:HD11	64:N8:137:LYS:NZ	2.24	0.52
52:M6:73:PHE:HD1	36:5:3007:U:H5'	246.99	0.52
1:2:1433:G:C2	1:2:1434:U:C4	2.98	0.52
36:1:3121:U:O2	36:1:3122:A:C8	2.62	0.52
1:2:90:C:H2'	1:2:91:G:H8	1.73	0.52
36:5:981:U:H2'	36:5:982:C:H6	1.75	0.52
36:1:1493:G:C6	75:O9:2:ALA:HB2	2.44	0.52
59:N3:35:TYR:CD2	59:N3:63:LYS:HE2	3.44	0.52
1:2:770:A:OP2	87:2:2138:OHX:N6	2.42	0.52
36:5:1597:C:H42	36:5:1610:G:H1	1.57	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:S8:138:ASN:HA	10:S8:141:ARG:CD	2.62	0.52
53:M7:64:ASN:C	53:M7:64:ASN:OD1	2.48	0.52
36:5:1052:U:O2	37:7:103:A:O2'	2.26	0.52
36:5:2882:U:H2'	36:5:2883:U:C6	2.43	0.52
36:5:2881:C:H2'	36:5:2882:U:H6	1.74	0.52
1:6:699:U:O4	87:6:2078:OHX:N1	2.43	0.52
53:M7:3:ARG:NH2	53:M7:3:ARG:HG2	4.56	0.52
36:1:3170:A:C2	36:1:3281:U:C2	2.98	0.52
9:S7:117:THR:O	9:S7:120:ALA:N	2.75	0.52
6:S4:137:PRO:O	6:S4:149:TYR:N	3.04	0.52
4:S2:157:LYS:NZ	4:S2:168:ARG:HH12	2.06	0.52
36:1:2800:G:H5''	36:1:2801:A:OP1	2.09	0.52
1:2:892:A:H2'	1:2:893:U:C6	2.45	0.52
36:1:3264:G:H2'	36:1:3265:C:O4'	2.09	0.52
19:C7:86:PRO:HG2	19:C7:88:VAL:HA	9.81	0.52
43:L6:19:LYS:HG2	36:5:593:C:OP2	221.30	0.52
4:S2:161:LYS:CB	4:S2:166:THR:HB	2.78	0.52
1:6:18:C:C4	1:6:19:A:N7	2.77	0.52
35:SM:90:ALA:O	35:SM:91:THR:OG1	2.26	0.52
36:5:3216:G:H5''	36:5:3219:G:N2	2.23	0.52
43:L6:69:PHE:HA	43:L6:74:VAL:H	1.87	0.52
49:M3:61:PRO:HD2	49:M3:70:ARG:HH21	2.89	0.52
54:M8:70:ALA:HA	54:M8:73:GLN:HE21	1.75	0.52
37:3:77:G:O2'	37:3:78:U:OP2	2.23	0.52
26:D4:92:VAL:HG22	26:D4:97:ALA:O	2.09	0.52
8:S6:213:ALA:O	8:S6:217:SER:N	3.88	0.52
79:Q3:53:GLY:O	79:Q3:66:GLY:N	2.53	0.52
36:5:625:G:N2	36:5:1401:A:OP1	2.43	0.52
2:S0:88:LYS:HE2	2:S0:201:LEU:HD21	3.39	0.52
36:1:2562:A:C2	45:L8:31:PRO:HD3	2.45	0.52
36:5:3271:G:H8	36:5:3271:G:O5'	1.93	0.52
24:D2:97:ARG:HH11	24:D2:97:ARG:HG2	4.45	0.52
39:L2:223:SER:OG	39:L2:223:SER:O	2.34	0.52
36:5:2612:U:H6	36:5:2612:U:O5'	1.92	0.52
1:6:587:C:H2'	1:6:588:U:O4'	2.08	0.52
36:1:2123:G:N7	87:1:4199:OHX:N2	2.57	0.52
49:M3:25:HIS:O	51:M5:201:ARG:HD2	2.09	0.52
1:6:42:G:N7	87:6:2068:OHX:N5	2.58	0.52
55:M9:171:ASP:O	55:M9:174:ALA:N	3.28	0.52
25:D3:68:ILE:HD12	32:E0:10:ARG:NH2	2.21	0.52
36:1:1317:A:H3'	36:1:1317:A:OP2	2.10	0.52
36:5:1888:U:C4	36:5:1889:G:C8	2.97	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:M7:48:LEU:HD12	53:M7:92:GLN:HG2	5.06	0.52
44:L7:206:LYS:O	36:5:1334:U:H5''	240.81	0.52
87:5:4087:OHX:N4	87:7:219:OHX:N1	2.58	0.52
44:L7:210:PRO:HG3	44:L7:239:LEU:HD21	1.92	0.52
1:2:1410:A:H2'	1:2:1411:A:O4'	2.09	0.52
5:S3:167:PHE:HA	5:S3:190:ARG:NE	2.68	0.52
18:C6:4:VAL:HG12	18:C6:5:PRO:HD2	1.92	0.52
18:C6:22:VAL:CG2	18:C6:65:ILE:HG23	5.08	0.52
30:D8:10:ALA:HB3	30:D8:54:LEU:HB3	1.91	0.52
36:5:3108:G:C2	36:5:3127:A:C2	2.97	0.52
38:4:58:G:N2	38:4:59:A:N1	2.46	0.52
1:6:1429:G:H2'	1:6:1430:U:H6	1.74	0.52
12:C0:54:TYR:H	12:C0:71:GLU:CG	2.38	0.52
12:C0:61:TRP:CD2	31:D9:23:VAL:HG22	3.10	0.52
31:D9:31:ILE:HG22	31:D9:36:LEU:HD11	1.90	0.52
48:M1:81:GLU:OE1	48:M1:167:TYR:HE2	1.92	0.52
15:C3:93:LYS:HE2	15:C3:150:VAL:HG11	1.92	0.52
63:N7:128:GLN:O	63:N7:132:SER:OG	2.26	0.52
63:N7:76:ASN:OD1	63:N7:77:TYR:N	2.78	0.52
70:O4:101:VAL:O	70:O4:104:VAL:HG12	2.09	0.52
1:2:1209:C:H6	1:2:1209:C:O5'	1.93	0.52
20:C8:145:ARG:HG2	35:SM:72:ARG:NH2	9.67	0.52
6:S4:124:GLY:HA2	6:S4:142:HIS:CE1	2.44	0.52
6:S4:141:THR:C	6:S4:143:ASP:H	2.12	0.52
9:S7:164:TYR:CE1	9:S7:165:LYS:HG2	2.44	0.52
18:C6:115:THR:O	18:C6:117:LEU:N	2.42	0.52
52:M6:45:GLY:O	52:M6:136:THR:OG1	2.27	0.52
36:5:365:A:H2'	36:5:366:A:C8	2.45	0.52
52:M6:195:ALA:O	52:M6:198:GLY:N	2.69	0.52
3:S1:105:PHE:HZ	3:S1:211:HIS:HD1	3.71	0.52
36:5:1063:G:H2'	36:5:1097:G:N2	2.25	0.52
51:M5:59:PHE:CE2	51:M5:142:ILE:HD11	3.48	0.52
13:C1:93:TYR:HB2	13:C1:100:TYR:CE1	2.44	0.52
1:2:32:U:H5'	1:2:547:U:OP1	2.09	0.52
1:2:730:G:H21	1:2:731:C:H5''	1.74	0.52
36:5:437:G:O5'	36:5:437:G:H8	1.92	0.52
4:S2:239:PRO:HA	4:S2:242:ILE:HB	3.10	0.52
1:6:846:G:H2'	1:6:847:A:H8	1.72	0.52
9:S7:23:ALA:O	9:S7:27:LEU:HG	2.09	0.52
1:2:1237:G:N2	1:2:1248:C:O2	2.36	0.52
38:4:121:U:H2'	38:4:122:U:H6	1.74	0.52
37:3:5:G:OP1	42:L5:27:LYS:NZ	2.39	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:233:C:H2'	36:5:234:G:O4'	2.09	0.52
70:O4:38:LEU:N	70:O4:38:LEU:HD22	2.24	0.52
1:2:274:G:C2	1:2:275:C:H1'	2.44	0.52
1:2:685:A:O2'	1:2:686:C:OP1	2.26	0.52
36:1:1780:G:H2'	36:1:1781:C:H6	1.74	0.52
36:5:2763:U:H2'	36:5:2764:C:H5'	1.91	0.52
36:1:2538:U:H4'	36:1:2539:C:OP2	2.09	0.52
1:2:1335:U:H2'	1:2:1336:A:C8	2.44	0.52
20:C8:72:ILE:HG12	20:C8:79:TYR:CD2	4.49	0.52
36:5:515:C:H42	36:5:575:G:H1	1.57	0.52
36:5:1228:C:H1'	36:5:1282:G:N2	2.24	0.52
61:N5:69:SER:O	61:N5:70:GLU:C	3.03	0.52
1:6:577:G:H3'	1:6:577:G:C8	2.43	0.52
1:2:206:A:OP2	87:2:2101:OHX:N5	2.43	0.52
15:C3:113:PHE:O	15:C3:116:ILE:N	2.42	0.52
16:C4:63:ALA:O	16:C4:65:GLN:N	2.39	0.52
1:6:253:A:H2'	1:6:254:A:H8	1.73	0.52
59:N3:25:CYS:HB3	59:N3:32:ARG:O	2.09	0.52
36:5:2591:A:O2'	36:5:2592:G:H5'	2.10	0.52
56:N0:75:PHE:HB2	56:N0:94:ILE:O	2.39	0.52
1:6:660:G:H2'	1:6:661:A:H4'	1.92	0.52
1:2:1725:U:O2	1:2:1725:U:H2'	2.09	0.52
42:L5:136:GLU:H	42:L5:136:GLU:CD	5.07	0.52
9:S7:39:ARG:CZ	55:M9:189:ALA:HB2	6.50	0.52
49:M3:132:ALA:O	49:M3:134:GLU:N	2.97	0.52
36:1:2355:G:H5''	53:M7:140:GLU:O	2.09	0.52
36:5:1520:G:C2'	36:5:1521:G:H5'	2.40	0.52
1:2:443:C:P	26:D4:105:ARG:HB2	2.50	0.52
1:2:478:A:C4'	11:S9:127:VAL:HG21	2.39	0.52
1:6:328:A:H2'	1:6:329:G:H8	1.75	0.52
19:C7:59:LYS:NZ	1:6:1392:U:OP1	425.04	0.52
52:M6:133:ARG:HD2	36:5:1315:U:O2'	292.75	0.52
42:L5:200:PHE:O	42:L5:240:TYR:HD2	2.46	0.52
42:L5:65:ILE:HG22	42:L5:66:SER:O	2.41	0.52
55:M9:137:ALA:HA	55:M9:140:GLU:HB2	2.75	0.52
70:O4:44:CYS:SG	70:O4:81:CYS:HB3	2.49	0.52
1:6:1045:C:C2	1:6:1074:G:C2	2.97	0.52
36:5:2249:G:C8	36:5:2249:G:H3'	2.43	0.52
62:N6:39:LEU:HD13	62:N6:43:TYR:CE2	2.43	0.52
52:M6:85:ARG:HD2	52:M6:90:HIS:ND1	2.97	0.52
36:1:2152:A:O2'	36:1:2243:A:O2'	2.16	0.52
26:D4:101:GLU:OE2	26:D4:102:LYS:HE2	2.09	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2276:G:C5	36:1:2277:C:C5	2.97	0.52
36:1:2278:C:C2	36:1:2307:G:N2	2.78	0.52
60:N4:31:PHE:CG	60:N4:37:ALA:HB2	2.44	0.52
52:M6:55:HIS:O	52:M6:56:ASP:C	2.48	0.52
54:M8:130:ARG:C	54:M8:132:PRO:HD3	2.30	0.52
11:S9:53:ARG:HB3	11:S9:53:ARG:CZ	2.94	0.52
59:N3:77:ILE:HD13	59:N3:126:TRP:CE2	2.45	0.52
42:L5:217:GLU:O	42:L5:220:SER:OG	2.21	0.52
1:6:1497:U:C2	1:6:1498:G:C8	2.98	0.52
36:1:250:U:C5	36:1:251:G:N7	2.76	0.52
36:5:223:U:OP1	36:5:225:C:N4	2.38	0.52
46:L9:69:ARG:HD3	46:L9:72:LYS:HD3	3.38	0.52
36:5:2767:U:O4	87:5:4113:OHX:N3	2.42	0.52
36:1:375:A:OP2	62:N6:89:LYS:HE3	2.10	0.52
55:M9:68:GLN:HA	55:M9:71:ARG:HH12	5.67	0.52
15:C3:26:PHE:HZ	15:C3:28:LEU:HD12	1.74	0.52
1:2:1790:A:O2'	1:2:1791:A:H5'	2.10	0.52
23:D1:56:SER:OG	23:D1:59:VAL:HG23	2.10	0.52
30:D8:18:ARG:HG3	30:D8:26:THR:HG23	4.44	0.52
36:5:595:G:H2'	36:5:596:C:H6	1.73	0.52
36:1:1576:G:N7	36:1:1577:G:C5	2.78	0.52
36:1:1576:G:H2'	36:1:1577:G:O4'	2.08	0.52
38:8:83:C:H4'	38:8:85:G:C2	2.45	0.52
29:D7:34:ASP:OD1	29:D7:34:ASP:N	2.42	0.52
36:5:2137:U:C2	36:5:2141:U:C5	2.97	0.52
64:N8:59:ARG:NH2	78:Q2:38:GLN:OE1	2.73	0.52
41:L4:264:SER:OG	41:L4:267:VAL:HG12	3.93	0.52
38:4:108:C:H2'	38:4:109:A:O4'	2.09	0.52
12:C0:29:GLN:HB3	12:C0:39:ASN:HB3	3.41	0.52
36:5:588:G:H4'	36:5:589:A:C4	2.45	0.52
44:L7:136:TYR:CE2	44:L7:231:ASN:HB2	2.91	0.52
87:1:3972:OHX:N5	87:1:4155:OHX:N2	2.58	0.52
36:5:721:G:C2	36:5:722:G:C8	2.98	0.52
1:2:231:U:O2'	1:2:232:U:H5''	2.10	0.52
76:Q0:109:ASN:HB3	76:Q0:119:ASN:HA	4.26	0.52
36:1:1103:A:OP2	36:1:1103:A:H4'	2.09	0.52
41:L4:330:TYR:CZ	44:L7:49:ALA:HA	2.60	0.52
36:1:116:A:OP1	51:M5:5:LYS:HB2	2.09	0.52
1:2:116:U:O2	1:2:333:A:H2	1.93	0.52
10:S8:38:ILE:HD13	10:S8:80:GLY:HA2	2.43	0.52
41:L4:47:ARG:NH1	41:L4:109:TRP:O	2.42	0.52
41:L4:141:ARG:N	41:L4:177:ASP:OD1	3.11	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:L4:181:VAL:O	41:L4:182:LEU:HB2	2.10	0.52
41:L4:24:ALA:O	41:L4:26:PHE:N	3.18	0.52
1:2:1338:C:N4	1:2:1339:C:H41	2.06	0.52
1:2:1388:A:N7	1:2:1411:A:N6	2.58	0.52
1:6:1308:G:O6	1:6:1317:C:N4	2.41	0.52
1:6:1318:G:C8	1:6:1318:G:H5''	2.44	0.52
19:C7:2:GLY:O	19:C7:4:VAL:HG23	4.22	0.52
36:1:359:U:O2'	73:O7:16:HIS:ND1	2.38	0.52
42:L5:36:LEU:HD23	36:5:2748:A:N3	255.99	0.52
1:2:1502:G:C2	1:2:1504:G:OP2	2.63	0.52
12:C0:21:VAL:HB	12:C0:66:TYR:CB	3.39	0.52
17:C5:40:ARG:O	17:C5:42:ARG:N	3.90	0.52
5:S3:64:ARG:HA	5:S3:67:ASN:HB2	3.86	0.52
16:C4:45:GLY:HA3	1:6:900:A:P	279.34	0.52
36:5:3045:G:N2	36:5:3097:C:C2	2.78	0.52
59:N3:86:ARG:HD3	36:5:3095:U:OP1	254.74	0.52
55:M9:101:VAL:HG22	55:M9:104:ARG:NH1	2.25	0.52
63:N7:78:ASN:OD1	66:O0:35:ARG:NH1	2.42	0.52
68:O2:120:THR:HG1	68:O2:121:ASN:N	2.07	0.52
73:O7:72:ARG:C	73:O7:74:PHE:N	3.14	0.52
14:C2:89:ILE:HG12	14:C2:90:LYS:N	2.24	0.52
11:S9:171:ARG:NH2	1:6:535:A:OP1	451.27	0.52
11:S9:171:ARG:CZ	11:S9:174:ARG:HD3	5.43	0.52
57:N1:74:VAL:N	57:N1:89:LEU:O	2.86	0.52
8:S6:153:VAL:O	8:S6:156:PHE:N	2.37	0.52
34:SR:233:THR:C	34:SR:234:LEU:HD12	3.03	0.52
34:SR:274:LEU:HD13	34:SR:313:TRP:CD2	2.44	0.52
36:1:2554:A:N6	79:Q3:62:LYS:HD3	2.25	0.52
64:N8:147:LEU:HB3	72:O6:7:ILE:HG13	6.04	0.52
36:1:1857:C:C4	36:1:1858:A:C6	2.98	0.52
1:2:1347:U:H3	22:D0:58:LEU:HD11	1.74	0.52
51:M5:38:ARG:HD3	51:M5:39:ALA:N	2.25	0.52
39:L2:3:ARG:HG2	39:L2:4:VAL:N	2.24	0.52
36:1:3006:A:OP1	52:M6:149:TYR:HE2	1.93	0.52
36:1:3024:A:H5'	46:L9:96:HIS:CD2	2.45	0.52
17:C5:103:ASN:ND2	35:SM:56:GLY:HA2	2.91	0.52
71:O5:49:LYS:HZ3	38:8:64:U:H5'	45.98	0.52
17:C5:81:ARG:HH12	17:C5:120:SER:HB3	2.19	0.52
36:5:172:G:C6	36:5:247:C:C4	2.97	0.52
36:1:3386:G:H5'	67:O1:10:ARG:NH2	2.23	0.52
54:M8:130:ARG:O	54:M8:132:PRO:HD3	2.10	0.52
22:D0:100:VAL:O	22:D0:104:THR:HG23	2.74	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1248:C:H2'	1:2:1249:U:H6	1.73	0.52
36:1:3126:C:O2'	36:1:3127:A:H5'	2.09	0.52
5:S3:113:LEU:HD12	5:S3:117:ARG:HD3	4.97	0.52
38:4:139:U:H2'	38:4:140:G:H8	1.75	0.52
1:2:524:U:H1'	1:2:527:A:N7	2.25	0.52
1:2:112:A:C6	1:2:113:U:C4	2.98	0.52
1:2:319:U:H1'	1:2:323:A:C5	2.44	0.52
10:S8:10:LYS:HG2	13:C1:133:LYS:HE2	3.62	0.52
36:1:1599:G:H1	36:1:1608:C:H42	1.58	0.52
1:2:1637:C:C4	35:SM:93:ARG:HG3	2.44	0.52
36:1:2281:A:N3	36:1:2974:U:O2'	2.38	0.52
2:S0:20:ALA:O	2:S0:21:ASN:HB2	2.08	0.52
36:1:1305:U:C6	40:L3:257:PRO:HG3	2.44	0.52
44:L7:57:THR:OG1	44:L7:58:ALA:N	2.42	0.52
87:5:4061:OHX:N5	87:5:4138:OHX:N2	2.57	0.52
1:2:253:A:H2'	1:2:254:A:H8	1.74	0.52
21:C9:137:ALA:O	21:C9:140:LEU:HB2	3.78	0.52
6:S4:15:PRO:HD2	6:S4:18:TRP:CZ3	2.99	0.52
36:5:164:A:H8	36:5:164:A:O5'	1.93	0.52
1:2:411:C:N4	1:2:412:A:C6	2.77	0.52
76:Q0:92:ASP:N	76:Q0:92:ASP:OD1	2.43	0.52
36:1:2093:A:H3'	36:1:2093:A:N3	2.24	0.52
1:6:1642:G:N7	87:6:2050:OHX:N5	2.57	0.52
1:2:1755:A:OP1	25:D3:63:GLN:HB3	2.09	0.52
36:1:1320:C:O2	56:N0:115:ARG:NH2	2.42	0.52
11:S9:109:LEU:O	11:S9:113:VAL:HB	2.10	0.52
47:M0:68:ALA:O	47:M0:136:PHE:HE2	2.20	0.52
43:L6:78:ARG:NH1	36:5:3272:C:OP2	248.21	0.52
1:2:1368:G:OP1	21:C9:69:LYS:NZ	2.34	0.52
7:S5:121:ILE:HD11	7:S5:195:ALA:HA	2.05	0.52
46:L9:124:ARG:HG2	46:L9:164:ILE:HG23	4.67	0.52
67:O1:16:LEU:HD12	67:O1:19:ARG:HB2	3.33	0.52
75:O9:5:LYS:HG2	75:O9:13:MET:HE3	1.92	0.52
1:2:1499:G:C6	1:2:1500:C:C4	2.98	0.52
5:S3:29:LEU:HD21	5:S3:58:VAL:HG13	5.67	0.52
1:2:953:G:H2'	1:2:954:G:H8	1.74	0.52
36:1:317:A:O2'	36:1:318:A:H5'	2.10	0.52
8:S6:120:GLU:HG3	8:S6:125:THR:HG22	4.36	0.52
54:M8:134:GLY:O	54:M8:137:THR:HG23	2.88	0.52
55:M9:102:LEU:O	55:M9:106:LEU:HB2	2.29	0.52
62:N6:27:ARG:CZ	62:N6:78:PHE:HE2	2.22	0.52
9:S7:164:TYR:C	9:S7:166:LEU:H	2.76	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:S7:46:ILE:HG23	9:S7:59:ALA:O	2.10	0.52
9:S7:56:LYS:HB2	9:S7:88:ARG:NH1	2.25	0.52
52:M6:39:GLU:HG2	52:M6:40:GLU:N	2.24	0.52
1:6:1291:G:N2	1:6:1291:G:OP2	2.41	0.52
4:S2:118:ALA:CB	4:S2:124:ALA:HB2	2.91	0.52
36:1:1176:C:H2'	36:1:1177:G:N2	2.24	0.52
51:M5:170:LYS:O	51:M5:172:ARG:N	2.42	0.52
36:1:56:G:H4'	51:M5:158:HIS:HB2	1.92	0.52
1:2:559:C:N4	1:2:586:G:H1	2.02	0.52
40:L3:196:ARG:C	40:L3:198:HIS:H	2.33	0.52
1:2:400:A:H5''	10:S8:25:ARG:HA	1.90	0.52
70:O4:16:ARG:CZ	70:O4:16:ARG:HB3	4.21	0.52
36:1:2770:G:C2'	36:1:2771:U:H5'	2.40	0.52
64:N8:98:THR:OG1	64:N8:98:THR:O	3.25	0.52
57:N1:19:PHE:CD1	57:N1:20:ARG:HG2	2.44	0.52
2:S0:26:ALA:HB2	2:S0:148:ASP:OD2	3.37	0.52
1:2:803:A:C4	9:S7:104:ARG:HG3	2.44	0.52
1:2:1236:A:C4	1:2:1237:G:C8	2.97	0.52
36:5:2299:A:OP2	87:5:3955:OHX:N1	2.43	0.52
1:6:639:U:H1'	1:6:640:U:C5	2.45	0.52
1:2:190:C:O2'	1:2:191:C:OP2	2.25	0.52
50:M4:97:SER:H	50:M4:101:LYS:HD2	6.76	0.52
9:S7:96:ARG:HB3	1:6:856:A:N6	364.10	0.52
73:O7:3:LYS:HE3	36:5:2138:A:C8	172.91	0.52
35:SM:88:ARG:HH22	35:SM:89:ARG:HD3	1.75	0.52
1:2:61:A:O2'	1:2:62:A:H5'	2.10	0.52
1:6:1313:A:H2'	1:6:1315:U:H5'	1.92	0.52
36:5:3295:A:H2'	36:5:3296:A:C8	2.44	0.52
42:L5:140:ARG:O	36:5:1079:A:H4'	236.84	0.52
46:L9:86:TYR:CE2	46:L9:151:VAL:HG22	2.43	0.52
36:5:1070:U:C4	36:5:1071:U:C4	2.97	0.52
35:SM:47:ALA:HB2	36:1:2678:A:C8	2.45	0.52
48:M1:115:LYS:HB2	48:M1:115:LYS:NZ	2.24	0.52
87:5:4006:OHX:N4	87:5:4195:OHX:N2	2.57	0.52
36:1:126:U:H2'	36:1:127:G:O4'	2.09	0.52
36:1:1914:G:O2'	55:M9:82:LYS:O	2.28	0.52
59:N3:46:LEU:O	59:N3:47:ASN:HB2	2.09	0.52
36:1:3010:U:H3'	36:1:3010:U:C6	2.44	0.52
25:D3:103:LEU:HD22	25:D3:104:LEU:N	2.25	0.52
20:C8:4:VAL:HG11	27:D5:82:HIS:ND1	4.20	0.52
67:O1:9:THR:HB	67:O1:109:VAL:HB	1.92	0.52
53:M7:122:ALA:HB3	53:M7:143:PRO:O	2.10	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D6:5:ARG:HH12	1:6:1795:U:H3'	337.36	0.52
1:6:454:U:O2'	1:6:455:C:H5'	2.10	0.52
44:L7:128:LYS:O	44:L7:130:ILE:N	2.43	0.52
45:L8:233:TRP:HZ2	51:M5:17:ASP:OD2	1.92	0.52
10:S8:159:GLN:HE22	10:S8:166:TYR:HB2	2.60	0.52
10:S8:39:GLY:O	10:S8:61:GLU:HB3	3.92	0.52
36:1:1381:A:H5''	41:L4:197:ARG:NH1	2.24	0.52
7:S5:145:ASP:CA	7:S5:221:ALA:HB2	2.39	0.52
7:S5:163:SER:HB2	30:D8:46:GLY:HA3	1.92	0.52
7:S5:169:ASN:ND2	1:6:1613:U:OP1	361.12	0.52
7:S5:173:ALA:O	7:S5:177:ILE:HD12	2.68	0.52
7:S5:42:LEU:HB2	7:S5:45:LYS:HD2	4.84	0.52
20:C8:90:ASN:ND2	20:C8:90:ASN:O	4.83	0.52
21:C9:14:PHE:HD2	21:C9:15:ILE:HG13	4.50	0.52
5:S3:55:THR:CG2	5:S3:90:ARG:HG2	2.85	0.52
16:C4:26:THR:O	16:C4:44:GLY:N	2.37	0.52
16:C4:50:ALA:HB3	16:C4:53:ASP:HB2	1.91	0.52
3:S1:60:ALA:HB3	3:S1:61:LEU:HD13	1.91	0.52
41:L4:94:CYS:HB3	36:5:1438:U:H4'	141.32	0.52
68:O2:24:ARG:HD3	68:O2:25:TYR:CZ	3.17	0.52
2:S0:52:LYS:HD2	23:D1:82:VAL:HA	1.92	0.52
2:S0:55:GLU:HG2	23:D1:79:LEU:HD23	1.97	0.52
4:S2:127:ALA:HA	4:S2:130:ILE:HB	2.49	0.52
36:1:1729:A:H5''	66:O0:27:TYR:HB3	1.92	0.52
70:O4:80:ARG:NH2	36:5:1652:G:O4'	187.12	0.52
38:4:69:U:H3	38:4:89:A:H61	1.56	0.52
14:C2:72:ILE:HG22	14:C2:76:GLU:OE1	2.09	0.52
6:S4:194:THR:O	6:S4:195:ILE:HB	2.10	0.52
8:S6:173:PRO:HG3	1:6:66:U:C5	333.63	0.52
34:SR:44:SER:OG	34:SR:58:VAL:HG13	5.73	0.52
52:M6:12:LYS:NZ	36:5:3184:A:OP2	292.56	0.52
1:6:413:U:H2'	1:6:414:C:C6	2.45	0.52
36:5:2812:C:O2'	36:5:2813:A:H5'	2.09	0.52
36:1:3043:C:P	59:N3:48:ARG:HH22	2.32	0.52
72:O6:51:SER:O	72:O6:54:GLU:N	2.43	0.52
36:5:1804:A:H2'	36:5:1805:C:C6	2.45	0.52
39:L2:5:ILE:HG13	39:L2:7:ASN:OD1	2.49	0.52
36:1:2131:A:H61	79:Q3:18:TYR:N	2.07	0.52
71:O5:85:THR:O	71:O5:86:ARG:C	2.48	0.52
55:M9:88:ARG:HG3	55:M9:88:ARG:NH1	3.77	0.52
71:O5:49:LYS:NZ	38:8:63:G:O2'	48.50	0.52
36:1:1947:G:H1	36:1:2101:C:H42	1.56	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S2:126:ARG:HA	4:S2:129:ILE:HD12	3.65	0.52
43:L6:18:LEU:CD2	43:L6:18:LEU:H	2.18	0.52
42:L5:56:THR:OG1	42:L5:59:ASP:O	2.22	0.52
4:S2:238:SER:O	4:S2:241:ASP:N	2.64	0.52
13:C1:6:THR:O	13:C1:8:GLN:N	2.37	0.52
1:2:1488:G:H5'	1:2:1489:U:OP1	2.09	0.52
42:L5:38:THR:HG22	57:N1:30:TYR:HB3	1.92	0.52
2:S0:101:ARG:NH2	1:6:1320:U:H3'	399.79	0.52
1:6:1321:A:H4'	1:6:1322:A:O5'	2.10	0.52
34:SR:140:CYS:SG	34:SR:141:LEU:N	3.57	0.52
36:1:120:G:O6	45:L8:128:LYS:HB2	2.09	0.52
36:5:3155:U:HO2'	36:5:3156:U:H6	1.58	0.52
1:2:1065:A:H4'	3:S1:205:PHE:CE2	2.44	0.52
1:2:922:G:H2'	1:2:923:A:H8	1.73	0.52
33:E1:120:GLU:HA	33:E1:131:PHE:HA	1.92	0.52
1:6:1042:G:H1	1:6:1076:A:H61	1.58	0.52
36:5:1883:A:C2	36:5:1884:A:C4	2.98	0.52
32:E0:20:LYS:NZ	32:E0:21:VAL:H	2.07	0.52
1:2:564:G:O2'	1:2:577:G:H4'	2.10	0.52
3:S1:170:GLU:O	3:S1:174:LYS:HE3	2.10	0.52
36:5:2922:G:N7	87:5:4146:OHX:N2	2.57	0.52
16:C4:15:GLY:H	16:C4:79:VAL:HA	1.75	0.52
36:5:51:A:H2'	36:5:52:A:H8	1.75	0.52
36:5:927:C:O5'	36:5:927:C:H6	1.92	0.52
1:6:1483:A:H2'	1:6:1484:G:C8	2.45	0.52
36:1:3351:U:H4'	36:1:3352:U:OP1	2.09	0.52
1:2:432:G:C2	1:2:433:C:C2	2.98	0.52
1:2:565:C:O2	87:2:2039:OHX:N5	2.43	0.52
1:2:567:A:P	32:E0:10:ARG:HH21	2.32	0.52
1:6:1799:U:H4'	1:6:1800:A:C2'	2.27	0.52
53:M7:130:TYR:HD1	53:M7:130:TYR:N	2.07	0.52
53:M7:52:LEU:HD11	53:M7:88:VAL:CG1	2.77	0.52
53:M7:24:VAL:HG12	53:M7:86:LYS:HG2	5.00	0.52
1:2:542:A:H8	1:2:543:C:H3'	1.73	0.52
36:1:599:C:OP1	41:L4:332:LYS:NZ	2.37	0.52
7:S5:68:ILE:HD13	7:S5:69:PHE:N	5.09	0.52
46:L9:137:SER:HB2	46:L9:143:GLU:CB	2.65	0.52
75:O9:10:LYS:O	75:O9:13:MET:HB2	2.08	0.52
12:C0:15:LEU:HD11	12:C0:46:LEU:HD21	5.60	0.52
21:C9:132:LEU:O	21:C9:135:ILE:HG13	2.09	0.52
21:C9:76:LEU:HD22	21:C9:80:TYR:CE2	2.45	0.52
5:S3:175:VAL:HG12	5:S3:184:ILE:HG12	1.91	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1113:A:H5''	77:Q1:6:ARG:NH2	2.20	0.52
3:S1:33:LYS:O	3:S1:98:THR:OG1	5.10	0.52
38:4:14:C:H5''	38:4:15:G:OP2	2.10	0.52
54:M8:81:VAL:HG22	54:M8:101:VAL:HG22	4.70	0.52
1:6:753:A:H2'	1:6:754:A:O4'	2.10	0.52
73:O7:72:ARG:O	73:O7:75:LYS:N	3.03	0.52
14:C2:124:LYS:O	14:C2:126:TRP:N	2.43	0.52
40:L3:68:HIS:CD2	40:L3:69:LYS:HD3	5.31	0.52
1:2:1209:C:N4	1:2:1210:C:N4	2.58	0.52
1:2:1460:A:C4	17:C5:128:HIS:CD2	2.97	0.52
35:SM:70:ASN:O	35:SM:72:ARG:N	2.43	0.52
1:6:1132:A:H2'	1:6:1133:A:C8	2.45	0.52
36:5:3181:C:H2'	36:5:3182:G:H8	1.75	0.52
34:SR:59:ARG:HB2	34:SR:61:PHE:CE2	2.45	0.52
34:SR:90:ARG:HD3	34:SR:99:THR:OG1	2.10	0.52
3:S1:81:PHE:CD1	3:S1:109:LYS:HG2	2.95	0.52
36:5:1646:G:H1'	36:5:1808:G:N2	2.25	0.52
49:M3:119:TYR:O	49:M3:122:LYS:N	2.61	0.52
51:M5:176:LYS:HE2	36:5:66:A:H1'	98.31	0.52
51:M5:143:ARG:NH2	71:O5:92:LEU:HD23	2.45	0.52
39:L2:6:ARG:C	39:L2:8:GLN:H	2.13	0.52
37:7:110:G:C6	37:7:111:U:C4	2.98	0.52
39:L2:117:GLU:HG2	39:L2:124:GLY:H	1.74	0.52
36:5:2255:A:O2'	36:5:2256:A:OP2	2.26	0.52
36:1:801:A:O2'	87:1:3981:OHX:N2	2.43	0.52
1:2:400:A:H8	10:S8:24:LYS:O	1.91	0.52
1:6:1454:G:N2	1:6:1455:G:H1'	2.25	0.52
36:1:856:G:C6	36:1:857:G:N1	2.77	0.52
36:1:2273:G:O6	87:1:4137:OHX:N5	2.42	0.52
36:5:2827:U:O2	36:5:2827:U:H2'	2.10	0.52
46:L9:8:GLN:NE2	46:L9:69:ARG:HG2	2.88	0.52
36:5:202:G:N2	36:5:203:G:N3	2.57	0.52
55:M9:173:ARG:HH21	55:M9:177:VAL:HG21	8.62	0.52
36:5:874:U:H3	36:5:2978:U:H5''	1.74	0.52
45:L8:180:VAL:HG13	45:L8:186:LEU:HD11	3.06	0.52
36:1:671:U:H3	36:1:791:A:N6	2.08	0.52
49:M3:36:ARG:NH1	36:5:687:U:H5	76.13	0.52
1:6:1169:G:H1'	1:6:1576:A:H61	1.74	0.52
73:O7:27:PHE:HE1	73:O7:33:THR:HA	2.13	0.52
21:C9:89:ARG:NH1	21:C9:89:ARG:HG3	3.98	0.52
1:2:1044:U:O2	1:2:1074:G:N2	2.42	0.52
36:5:1240:A:O2'	36:5:1241:U:H5'	2.10	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1119:C:H2'	36:1:1120:A:C8	2.44	0.52
52:M6:173:ALA:O	52:M6:176:LYS:HB3	2.80	0.52
36:5:2591:A:C2'	36:5:2592:G:H5'	2.40	0.52
1:2:1205:C:H2'	31:D9:17:GLY:HA3	1.92	0.52
36:1:1328:C:H2'	36:1:1329:U:C6	2.45	0.52
1:2:408:C:O2'	1:2:1732:A:H4'	2.09	0.52
36:1:2547:A:H2'	36:1:2548:C:H5'	1.91	0.52
1:6:1105:C:H2'	1:6:1106:U:C6	2.45	0.52
36:5:828:A:O2'	36:5:829:U:H5'	2.10	0.52
36:5:1911:A:H2	36:5:2122:G:C8	2.28	0.52
1:6:585:A:H2'	1:6:586:G:C8	2.44	0.52
40:L3:56:ILE:HG12	40:L3:356:LEU:HD22	1.92	0.52
52:M6:59:ARG:NH1	36:5:1307:G:P	253.55	0.52
36:1:3187:A:OP1	46:L9:23:ARG:HG3	2.09	0.52
46:L9:26:LYS:HB2	36:5:3198:U:C4	327.50	0.52
53:M7:137:ASN:HD21	36:5:2357:A:H5''	154.93	0.52
87:6:2125:OHX:N6	87:6:2177:OHX:N5	2.58	0.52
47:M0:42:THR:HG23	47:M0:45:GLU:HG3	4.47	0.52
47:M0:36:LEU:CD1	47:M0:87:LEU:HB3	2.83	0.52
44:L7:235:PHE:HD2	44:L7:235:PHE:N	3.91	0.52
7:S5:132:VAL:HG13	7:S5:202:ALA:HB2	1.92	0.52
46:L9:91:ARG:HG3	46:L9:91:ARG:HH11	4.66	0.52
67:O1:73:LEU:HD13	67:O1:93:VAL:HG11	3.83	0.52
75:O9:9:ILE:O	75:O9:11:GLN:N	2.44	0.52
36:1:2746:A:H2'	36:1:2747:A:O4'	2.10	0.52
42:L5:83:LEU:HB3	42:L5:88:ILE:HB	1.92	0.52
12:C0:12:HIS:CD2	12:C0:49:LEU:HD11	4.34	0.52
48:M1:81:GLU:O	48:M1:83:GLY:N	2.69	0.52
5:S3:58:VAL:O	5:S3:66:ILE:HG12	2.10	0.52
23:D1:51:VAL:HG12	23:D1:53:TYR:HE1	3.10	0.52
66:O0:30:THR:HA	66:O0:33:SER:HB3	2.51	0.52
66:O0:55:GLU:HG3	70:O4:90:ILE:HG21	2.62	0.52
70:O4:99:LYS:O	70:O4:103:LYS:HG2	2.10	0.52
55:M9:5:ARG:CZ	55:M9:5:ARG:HB2	3.77	0.52
36:1:1603:A:N6	61:N5:71:THR:HG21	2.24	0.52
38:4:52:A:H4'	75:O9:19:GLN:HA	1.91	0.52
40:L3:114:VAL:O	40:L3:117:ARG:HB3	2.10	0.52
52:M6:112:TYR:O	52:M6:114:LYS:N	3.19	0.52
52:M6:164:SER:O	52:M6:167:TYR:HB3	2.09	0.52
40:L3:142:ALA:O	40:L3:145:GLU:N	3.34	0.52
25:D3:6:PRO:HD2	25:D3:15:LEU:HD21	1.92	0.52
39:L2:245:LEU:HD12	39:L2:246:LEU:N	2.38	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:531:C:C2'	1:6:532:U:H5'	2.40	0.52
26:D4:67:GLY:O	26:D4:68:LYS:HB2	2.54	0.52
71:O5:29:ALA:O	71:O5:33:VAL:HG23	2.13	0.52
36:5:2203:U:H2'	36:5:2204:C:C6	2.45	0.52
1:2:830:U:C2	1:2:831:U:C5	2.98	0.52
36:1:3084:C:OP2	87:1:3887:OHX:N5	2.43	0.52
11:S9:48:GLN:O	11:S9:52:ILE:HG13	2.09	0.52
36:1:944:C:OP1	68:O2:33:ARG:NH1	2.31	0.52
10:S8:117:TYR:HD1	10:S8:150:ALA:HB2	2.16	0.52
9:S7:9:LEU:HD13	9:S7:21:ALA:HB2	5.16	0.52
1:6:1043:A:C5	1:6:1044:U:C4	2.97	0.52
36:5:1725:C:H2'	36:5:1726:C:H6	1.75	0.52
36:1:1699:A:H2'	36:1:1700:G:H8	1.75	0.52
36:1:2703:A:H8	36:1:2703:A:O5'	1.92	0.52
36:1:3251:U:H2'	36:1:3252:G:O4'	2.09	0.52
36:5:161:G:H5'	36:5:162:G:OP2	2.10	0.52
65:N9:50:THR:HG21	36:5:1072:G:H21	207.38	0.52
8:S6:79:LYS:N	8:S6:79:LYS:HD3	4.83	0.52
87:6:2064:OHX:N5	87:6:2152:OHX:N3	2.57	0.52
1:6:1398:U:H3'	1:6:1399:C:C4'	2.39	0.52
1:2:1308:G:H22	1:2:1318:G:H1'	1.75	0.52
24:D2:53:ILE:HG13	24:D2:54:ASP:N	2.24	0.52
9:S7:173:TYR:HA	9:S7:176:LEU:HD12	3.48	0.52
36:1:3220:G:O2'	36:1:3221:C:H5'	2.10	0.52
40:L3:86:VAL:HG12	40:L3:199:PHE:HA	1.91	0.52
36:5:3266:G:C6	36:5:3267:A:C6	2.97	0.52
36:1:718:G:OP2	36:1:718:G:H8	1.93	0.52
59:N3:66:LYS:O	59:N3:68:GLU:N	2.43	0.52
36:5:425:G:N2	36:5:635:G:H1'	2.25	0.52
36:1:2373:A:H3'	36:1:2373:A:OP2	2.09	0.52
36:5:2345:A:O2'	36:5:2346:C:H5'	2.08	0.52
1:6:491:C:N4	1:6:497:G:H21	2.08	0.52
21:C9:52:GLY:HA2	21:C9:55:TYR:CE2	2.45	0.52
36:5:2422:C:H2'	36:5:2423:U:C6	2.44	0.52
1:2:1222:C:H2'	1:2:1223:A:H8	1.75	0.52
36:1:2198:A:C8	36:1:2270:A:H1'	2.45	0.52
36:5:1908:A:N6	36:5:1909:A:C6	2.78	0.52
36:1:3321:C:C4	36:1:3322:A:N7	2.78	0.52
1:2:51:A:H2'	1:2:51:A:N3	2.25	0.52
24:D2:13:ALA:O	24:D2:25:VAL:HG11	2.09	0.52
36:1:137:G:H2'	36:1:138:U:C6	2.45	0.52
36:5:1093:A:N3	36:5:1096:U:N3	2.57	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1569:U:H5'	36:5:1570:U:H6	1.75	0.52
36:5:1757:A:C2	36:5:1769:G:C2	2.97	0.52
36:1:3012:A:H2'	36:1:3012:A:N3	2.25	0.52
5:S3:216:PRO:HG2	5:S3:217:ILE:HG13	1.92	0.52
25:D3:54:LEU:CD1	25:D3:82:LYS:HD3	5.29	0.51
36:1:1319:G:C4	36:1:1320:C:C5	2.98	0.51
36:1:3191:G:C4	36:1:3202:G:N2	2.78	0.51
46:L9:12:VAL:HB	46:L9:51:GLN:HA	1.92	0.51
53:M7:129:THR:HG22	53:M7:139:TYR:HB2	5.59	0.51
44:L7:184:LEU:C	44:L7:186:HIS:H	2.12	0.51
41:L4:24:ALA:O	41:L4:27:SER:N	2.62	0.51
1:6:1309:C:H2'	1:6:1310:U:C6	2.41	0.51
7:S5:84:LYS:HE3	7:S5:92:ARG:HH12	1.75	0.51
67:O1:19:ARG:NH1	36:5:3324:C:OP1	173.82	0.51
21:C9:111:ILE:HG23	21:C9:113:ILE:HG12	1.92	0.51
15:C3:3:ARG:NH1	15:C3:10:GLY:O	4.91	0.51
15:C3:88:LEU:O	15:C3:91:LEU:HB2	2.10	0.51
3:S1:65:VAL:O	16:C4:34:SER:HA	2.09	0.51
3:S1:76:SER:OG	3:S1:78:ASP:HB2	4.84	0.51
66:O0:33:SER:OG	66:O0:39:SER:HB2	2.09	0.51
66:O0:43:ILE:HG22	66:O0:70:PHE:HB2	1.92	0.51
66:O0:58:TYR:O	66:O0:61:MET:HG3	2.62	0.51
40:L3:68:HIS:O	40:L3:69:LYS:HB2	3.36	0.51
1:6:1458:G:N2	1:6:1459:C:C2	2.78	0.51
56:N0:79:VAL:HG21	56:N0:106:LEU:HD21	1.91	0.51
9:S7:51:VAL:HG12	9:S7:171:ALA:HB3	1.92	0.51
34:SR:205:SER:O	34:SR:207:ASP:N	2.42	0.51
34:SR:22:SER:HB3	34:SR:36:ALA:HB3	1.91	0.51
34:SR:85:TRP:N	34:SR:85:TRP:CD1	2.76	0.51
72:O6:9:ILE:HD13	72:O6:10:GLY:N	4.76	0.51
52:M6:116:LYS:HG3	52:M6:117:ARG:N	2.52	0.51
36:1:1857:C:H3'	36:1:1858:A:C8	2.45	0.51
36:5:811:U:H2'	36:5:812:G:C8	2.45	0.51
36:5:2211:U:H5	36:5:2234:G:O6	1.93	0.51
40:L3:135:ALA:O	40:L3:138:ALA:N	4.20	0.51
51:M5:38:ARG:NH2	51:M5:60:VAL:HG22	2.26	0.51
24:D2:67:GLY:C	24:D2:69:LEU:H	2.55	0.51
1:2:736:C:H42	1:2:737:A:N6	2.08	0.51
36:5:2971:A:H3'	36:5:2971:A:N3	2.25	0.51
64:N8:80:THR:O	64:N8:82:ILE:N	2.43	0.51
36:5:1081:U:HO2'	36:5:1082:U:C5'	2.23	0.51
9:S7:9:LEU:HD21	9:S7:17:GLU:HB3	2.75	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1344:A:O2'	1:2:1345:A:OP1	2.23	0.51
36:5:1827:C:H2'	36:5:1828:A:C8	2.45	0.51
5:S3:113:LEU:HD13	5:S3:117:ARG:HB3	1.92	0.51
10:S8:138:ASN:CB	10:S8:142:LYS:HE3	2.39	0.51
87:1:4183:OHX:N1	53:M7:62:ARG:HG3	2.25	0.51
36:1:218:G:O6	62:N6:62:SER:HB2	2.10	0.51
36:1:1536:G:C4	36:1:1537:A:C8	2.99	0.51
58:N2:19:VAL:HG12	58:N2:105:LEU:HD13	1.93	0.51
36:1:385:A:C6	36:1:386:A:C6	2.98	0.51
48:M1:21:ILE:HG12	48:M1:125:MET:HG2	1.92	0.51
34:SR:10:ARG:HA	34:SR:10:ARG:NE	2.24	0.51
1:2:1074:G:O6	87:2:2128:OHX:N6	2.42	0.51
36:1:279:U:H2'	36:1:280:U:H6	1.75	0.51
36:1:92:G:OP2	36:1:93:C:H5''	2.10	0.51
1:6:1680:G:H8	1:6:1680:G:OP2	1.93	0.51
36:5:2608:G:C2	36:5:2609:A:C8	2.98	0.51
36:1:1567:U:H1'	36:1:1571:A:N1	2.25	0.51
1:6:1606:C:H2'	1:6:1607:G:C8	2.45	0.51
40:L3:254:ALA:O	36:5:2394:G:H4'	220.71	0.51
41:L4:110:ASN:N	41:L4:110:ASN:OD1	3.16	0.51
9:S7:32:PRO:HG2	9:S7:33:GLU:OE2	3.34	0.51
1:6:1491:U:H5'	1:6:1492:A:OP1	2.10	0.51
36:1:1392:G:O2'	36:1:1417:G:N2	2.37	0.51
46:L9:47:LYS:HB2	50:M4:7:VAL:CG2	3.66	0.51
53:M7:32:THR:HA	53:M7:58:ILE:HG21	2.01	0.51
26:D4:105:ARG:HD2	1:6:443:C:H3'	372.25	0.51
26:D4:104:SER:O	26:D4:108:ARG:HG3	5.04	0.51
11:S9:69:ARG:O	11:S9:73:GLY:HA3	2.10	0.51
11:S9:90:LYS:HB2	11:S9:95:TYR:CD1	2.45	0.51
44:L7:158:LYS:NZ	36:5:1362:G:H1'	214.94	0.51
45:L8:249:ARG:O	45:L8:253:SER:HB2	2.11	0.51
1:6:330:G:C2	1:6:331:A:C4	2.98	0.51
6:S4:49:ARG:HD2	6:S4:57:ASN:O	2.10	0.51
10:S8:34:ALA:CB	10:S8:174:GLY:HA3	2.38	0.51
10:S8:99:ALA:HB3	1:6:329:G:H5'	271.22	0.51
52:M6:130:LYS:HA	36:5:1316:C:C5	298.35	0.51
20:C8:24:GLY:C	20:C8:26:ILE:H	2.74	0.51
30:D8:16:LEU:HB2	30:D8:27:GLN:HB3	1.92	0.51
46:L9:90:MET:HE2	46:L9:179:ILE:HG22	1.93	0.51
36:5:3379:C:H2'	36:5:3380:U:O4'	2.10	0.51
36:1:1048:A:H2'	47:M0:22:TYR:CZ	2.46	0.51
3:S1:35:PRO:HD2	3:S1:38:PHE:CE2	2.45	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:84:ILE:HG22	3:S1:86:LEU:HD22	1.91	0.51
24:D2:70:ASN:HB2	24:D2:130:TYR:HD2	1.77	0.51
55:M9:43:LYS:HZ2	36:5:1765:U:H5'	91.88	0.51
17:C5:130:ARG:HH12	35:SM:71:ASN:HA	1.75	0.51
36:1:1213:G:O2'	56:N0:90:MET:HG3	2.10	0.51
50:M4:20:VAL:O	50:M4:66:THR:HG23	2.10	0.51
35:SM:31:SER:OG	36:1:2667:A:OP1	2.19	0.51
1:2:1006:C:H4'	16:C4:136:ARG:HH12	1.76	0.51
39:L2:98:VAL:HA	39:L2:166:ILE:HB	1.92	0.51
39:L2:155:LYS:NZ	39:L2:253:GLN:O	2.43	0.51
66:O0:100:ILE:HG13	66:O0:101:LEU:HD13	6.85	0.51
36:1:2340:U:OP1	40:L3:236:LYS:HE3	2.10	0.51
36:5:3290:G:N7	87:5:4096:OHX:N5	2.58	0.51
36:1:1481:A:H2'	36:1:1481:A:N3	2.24	0.51
58:N2:67:SER:OG	58:N2:69:ALA:O	2.27	0.51
36:1:3030:G:N7	87:1:4072:OHX:N6	2.58	0.51
38:4:41:A:O2'	73:O7:59:THR:HG22	2.10	0.51
1:2:729:G:C2	1:2:730:G:H8	2.28	0.51
59:N3:3:GLY:O	59:N3:6:ALA:HB3	2.09	0.51
1:2:1238:A:C2	1:2:1248:C:C2	2.98	0.51
78:Q2:28:TYR:HD2	78:Q2:69:VAL:HG11	1.74	0.51
36:5:776:U:C4	36:5:2738:A:C2	2.97	0.51
36:1:119:U:H5'	36:1:121:A:OP1	2.10	0.51
36:1:1815:U:HO2'	36:1:1816:A:P	2.32	0.51
36:5:195:U:H2'	36:5:196:G:C8	2.44	0.51
1:6:1026:A:C2	1:6:1792:G:C4	2.99	0.51
9:S7:125:ILE:O	9:S7:128:ASP:N	2.44	0.51
73:O7:26:SER:HB3	73:O7:35:SER:OG	2.52	0.51
36:1:568:G:N7	87:1:3944:OHX:N4	2.59	0.51
10:S8:154:SER:O	10:S8:158:SER:HB3	3.75	0.51
1:2:61:A:H8	1:2:269:G:HO2'	1.55	0.51
14:C2:57:ALA:HB3	14:C2:85:LYS:CE	2.40	0.51
36:5:2673:A:H61	36:5:2681:U:H3	1.57	0.51
36:5:1021:G:H22	36:5:1032:C:H1'	1.75	0.51
36:5:1335:C:H2'	36:5:1336:U:C6	2.45	0.51
36:5:2678:A:C5	36:5:2679:A:C5	2.98	0.51
36:1:1454:A:C5'	36:1:1455:U:H5'	2.39	0.51
1:2:833:U:OP2	87:2:2141:OHX:N4	2.43	0.51
5:S3:35:SER:HB3	5:S3:51:ARG:HB2	3.87	0.51
36:1:1547:G:OP1	51:M5:108:ARG:NH2	2.43	0.51
36:1:2995:A:H2'	36:1:2996:U:H5''	1.93	0.51
36:5:1502:C:OP2	87:5:3908:OHX:N3	2.43	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:530:G:N7	87:5:3944:OHX:N6	2.57	0.51
36:1:2589:G:H5''	36:1:2589:G:H8	1.74	0.51
37:7:11:A:H2'	37:7:12:U:H5''	1.93	0.51
36:1:999:G:O2'	36:1:1000:C:H5'	2.10	0.51
36:1:792:G:O6	87:1:4152:OHX:N4	2.43	0.51
36:1:3228:C:H5''	50:M4:137:LYS:HZ3	1.75	0.51
73:O7:84:SER:O	73:O7:85:LYS:HB2	2.10	0.51
36:1:3374:U:OP2	67:O1:70:ARG:NH2	2.43	0.51
1:2:1641:C:N3	1:2:1760:G:N2	2.49	0.51
40:L3:53:MET:HE2	40:L3:77:THR:HG23	1.92	0.51
36:5:3197:G:C2'	36:5:3198:U:H5''	2.39	0.51
1:6:427:C:O2'	87:6:2183:OHX:N3	2.43	0.51
1:2:765:G:O2'	11:S9:149:ARG:NH2	2.42	0.51
41:L4:179:LEU:O	41:L4:179:LEU:HD22	2.10	0.51
1:2:1339:C:H6	1:2:1339:C:H5''	1.75	0.51
67:O1:12:TYR:CD2	67:O1:75:ILE:HD12	3.11	0.51
67:O1:33:VAL:HG13	67:O1:51:LEU:HD11	1.92	0.51
61:N5:67:ILE:HG13	61:N5:83:VAL:HG12	2.94	0.51
42:L5:148:ILE:HG23	42:L5:151:GLN:HB3	3.61	0.51
42:L5:212:ALA:HB2	42:L5:219:PHE:CG	5.70	0.51
5:S3:100:ALA:O	5:S3:104:SER:N	3.35	0.51
5:S3:31:GLU:HA	5:S3:107:PHE:CZ	3.05	0.51
29:D7:28:PRO:HB3	1:6:959:U:C5'	349.29	0.51
72:O6:25:LYS:HB2	72:O6:28:TYR:CE2	4.15	0.51
23:D1:71:ARG:HE	29:D7:4:VAL:HG11	2.19	0.51
2:S0:41:ARG:HE	2:S0:45:VAL:CG2	2.52	0.51
2:S0:63:ILE:HG23	23:D1:35:ASN:O	2.20	0.51
4:S2:35:TRP:NE1	4:S2:37:PRO:HA	2.98	0.51
56:N0:23:LYS:O	56:N0:24:LEU:HB2	2.11	0.51
4:S2:90:THR:OG1	4:S2:91:ARG:N	3.65	0.51
36:5:3224:G:N1	36:5:3262:U:C4	2.78	0.51
1:2:67:A:O3'	1:2:68:A:H3'	2.10	0.51
1:6:1588:G:N2	1:6:1589:C:H1'	2.24	0.51
34:SR:74:THR:HG21	34:SR:79:TYR:CD2	2.45	0.51
34:SR:84:SER:O	34:SR:110:VAL:HG23	2.10	0.51
39:L2:42:ARG:HG3	39:L2:89:TYR:CD1	2.45	0.51
36:5:1646:G:H1'	36:5:1808:G:H22	1.74	0.51
51:M5:172:ARG:NH1	36:5:29:C:O3'	106.20	0.51
1:6:486:G:H22	1:6:501:U:H3	1.56	0.51
46:L9:156:GLN:HG3	46:L9:160:ASP:OD2	2.09	0.51
36:1:1952:G:H3'	36:1:1953:G:H5''	1.92	0.51
36:5:173:G:O2'	36:5:174:C:O5'	2.29	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1735:G:N2	36:5:1736:G:H1'	2.25	0.51
36:5:1376:C:O4'	36:5:1407:A:C2	2.63	0.51
54:M8:161:LYS:O	54:M8:162:ALA:HB3	2.11	0.51
42:L5:158:ARG:HD2	37:7:47:C:OP2	285.31	0.51
22:D0:30:LYS:HD2	22:D0:111:GLY:HA3	4.16	0.51
1:2:295:A:O2'	6:S4:140:VAL:HG11	2.09	0.51
19:C7:33:ARG:HG3	34:SR:127:ARG:NH1	2.25	0.51
36:1:2896:A:OP1	76:Q0:102:ARG:NE	2.35	0.51
63:N7:57:HIS:CE1	63:N7:65:ARG:HH21	3.60	0.51
2:S0:110:TYR:HA	2:S0:115:PHE:CE1	2.83	0.51
1:6:1334:U:C4	1:6:1335:U:C4	2.97	0.51
53:M7:67:ILE:HG22	53:M7:68:GLY:N	2.98	0.51
25:D3:107:PHE:CE2	25:D3:114:LYS:HB2	2.44	0.51
39:L2:70:ARG:NH2	39:L2:72:ARG:HD3	2.24	0.51
1:6:1622:G:C6	1:6:1623:C:C4	2.98	0.51
55:M9:143:ILE:HG22	55:M9:144:GLN:N	2.27	0.51
45:L8:81:THR:OG1	45:L8:82:LEU:N	3.49	0.51
9:S7:177:THR:HB	9:S7:179:LYS:HE3	3.97	0.51
38:8:83:C:H4'	38:8:85:G:N3	2.25	0.51
1:6:1284:C:O2	1:6:1286:U:N3	2.42	0.51
36:5:1267:U:H2'	36:5:1268:G:O4'	2.10	0.51
6:S4:94:ALA:O	6:S4:96:ASN:N	2.37	0.51
36:1:826:G:N2	36:1:827:A:H1'	2.25	0.51
1:2:494:U:O2'	1:2:495:C:O5'	2.25	0.51
24:D2:24:GLN:HA	24:D2:63:VAL:O	2.47	0.51
1:6:1628:U:H2'	1:6:1629:G:C8	2.46	0.51
36:5:752:C:H2'	36:5:753:C:H6	1.76	0.51
31:D9:4:GLU:HG2	31:D9:4:GLU:O	5.13	0.51
20:C8:2:SER:OG	20:C8:3:LEU:N	2.44	0.51
40:L3:229:VAL:HG13	40:L3:235:THR:HG21	2.15	0.51
1:2:932:U:H5'	1:2:933:A:C8	2.45	0.51
87:6:2125:OHX:N4	87:6:2177:OHX:N1	2.59	0.51
47:M0:141:LYS:O	47:M0:144:ASN:N	2.92	0.51
44:L7:90:LYS:HG3	44:L7:91:GLY:N	2.24	0.51
72:O6:44:VAL:O	72:O6:47:ILE:N	2.62	0.51
13:C1:19:ILE:HG13	13:C1:34:TRP:HB2	3.15	0.51
26:D4:12:VAL:HA	26:D4:23:PHE:HB3	2.59	0.51
10:S8:82:VAL:HG12	10:S8:102:VAL:HA	5.54	0.51
36:5:1383:G:H2'	36:5:1384:U:H6	1.75	0.51
19:C7:26:LEU:HD13	19:C7:59:LYS:HA	2.54	0.51
36:5:3074:G:OP1	87:5:4114:OHX:N4	2.44	0.51
67:O1:17:HIS:CG	67:O1:69:TYR:HD1	2.29	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:699:A:H2'	36:1:700:C:O4'	2.11	0.51
1:2:1297:G:N2	1:2:1300:A:OP2	2.42	0.51
2:S0:147:THR:O	2:S0:162:CYS:N	2.43	0.51
4:S2:105:GLY:HA3	4:S2:110:HIS:O	3.26	0.51
4:S2:134:LEU:O	4:S2:136:VAL:N	2.43	0.51
9:S7:141:ARG:HG3	9:S7:141:ARG:HH11	1.74	0.51
48:M1:12:LEU:HD12	48:M1:131:MET:HE3	1.92	0.51
4:S2:152:HIS:HB2	4:S2:194:GLU:HB3	3.85	0.51
63:N7:33:SER:HB3	63:N7:36:HIS:HB2	3.30	0.51
62:N6:28:ARG:HB2	62:N6:75:ARG:HH21	1.75	0.51
6:S4:141:THR:OG1	6:S4:143:ASP:OD2	2.22	0.51
60:N4:9:SER:HA	60:N4:52:THR:HG22	2.97	0.51
60:N4:21:PHE:CZ	60:N4:23:ARG:HG3	2.93	0.51
1:6:145:A:C2	1:6:146:U:C2	2.98	0.51
34:SR:264:SER:O	34:SR:268:GLN:HA	2.11	0.51
34:SR:23:LEU:HD11	34:SR:304:GLY:N	2.25	0.51
44:L7:222:HIS:C	44:L7:224:ILE:N	2.94	0.51
56:N0:40:ARG:NH1	37:7:97:A:OP1	291.32	0.51
65:N9:2:ALA:HB2	36:5:2818:U:O5'	214.19	0.51
66:O0:13:LYS:HB3	66:O0:100:ILE:HG23	1.92	0.51
52:M6:181:ALA:C	52:M6:183:ALA:H	2.09	0.51
57:N1:105:PHE:O	57:N1:109:VAL:HG23	2.70	0.51
36:5:65:A:H4'	36:5:66:A:O5'	2.10	0.51
49:M3:100:ARG:NH1	36:5:77:A:H5'	84.47	0.51
51:M5:179:LYS:O	36:5:286:U:O2'	124.87	0.51
13:C1:95:PRO:O	13:C1:97:TYR:N	2.43	0.51
36:1:1812:G:O3'	36:1:1817:G:O2'	2.29	0.51
38:4:4:C:H5'	53:M7:61:ARG:O	2.11	0.51
36:5:3318:G:H5''	36:5:3319:U:OP2	2.10	0.51
36:1:2278:C:H2'	36:1:2279:A:H5''	1.93	0.51
36:1:2286:U:O4	36:1:2288:G:H1'	2.11	0.51
36:1:3377:G:H21	40:L3:332:ARG:HH21	1.59	0.51
22:D0:87:HIS:HB3	22:D0:89:ARG:HH11	1.73	0.51
36:1:3110:C:C2	36:1:3111:U:C6	2.98	0.51
78:Q2:26:THR:OG1	78:Q2:71:ARG:HD2	2.10	0.51
36:1:744:A:H1'	54:M8:141:ARG:HD3	1.92	0.51
50:M4:94:TRP:O	50:M4:97:SER:OG	2.22	0.51
54:M8:65:SER:OG	54:M8:90:ASP:OD2	2.21	0.51
36:5:3154:C:O2	36:5:3154:C:H2'	2.09	0.51
34:SR:182:ASN:N	34:SR:187:GLN:O	2.36	0.51
1:2:711:U:H4'	1:2:712:G:OP1	2.10	0.51
1:6:217:A:H1'	1:6:218:A:OP1	2.11	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1160:A:O2'	1:2:1161:C:O5'	2.27	0.51
36:5:1845:G:C5	36:5:1849:C:C5	2.99	0.51
54:M8:71:LEU:HD22	54:M8:77:ALA:HA	1.93	0.51
3:S1:158:SER:OG	1:6:876:G:OP2	310.15	0.51
2:S0:206:ASP:H	2:S0:207:PRO:CA	4.78	0.51
36:1:1394:A:OP1	68:O2:98:HIS:NE2	2.29	0.51
73:O7:28:HIS:CG	73:O7:31:LYS:HB2	2.46	0.51
36:1:873:C:H5''	36:1:874:U:O5'	2.11	0.51
36:1:1591:G:O6	36:1:1592:G:N1	2.43	0.51
51:M5:91:GLU:OE2	36:5:277:G:H5'	161.27	0.51
1:2:51:A:C2	1:2:52:U:C2	2.99	0.51
1:6:130:C:C4	1:6:131:C:C4	2.98	0.51
1:6:1695:G:H21	1:6:1706:C:N4	2.08	0.51
69:O3:11:GLY:O	69:O3:98:VAL:N	2.67	0.51
1:6:611:U:C4	1:6:612:U:C4	2.99	0.51
12:C0:10:LYS:NZ	12:C0:36:ASP:HB3	3.27	0.51
36:5:1936:A:H5''	36:5:1937:U:OP2	2.10	0.51
1:2:1600:A:H4'	1:2:1601:G:OP1	2.11	0.51
51:M5:88:GLY:HA2	78:Q2:50:PHE:CE1	2.63	0.51
47:M0:39:LYS:HZ3	47:M0:39:LYS:HB2	1.76	0.51
47:M0:75:TYR:CD2	47:M0:79:VAL:HG21	2.68	0.51
36:5:1344:G:N2	36:5:1361:U:C2	2.79	0.51
72:O6:43:LEU:CD1	72:O6:47:ILE:HD11	2.40	0.51
6:S4:49:ARG:HD3	6:S4:56:LEU:O	4.91	0.51
43:L6:130:ILE:HG22	43:L6:131:LYS:O	2.10	0.51
69:O3:105:SER:OG	69:O3:106:ASN:N	3.09	0.51
19:C7:14:LYS:HG3	19:C7:69:ILE:HG22	2.43	0.51
41:L4:77:VAL:HB	41:L4:86:GLY:H	2.31	0.51
7:S5:123:VAL:HG13	27:D5:102:THR:HG23	3.39	0.51
42:L5:61:ILE:HG23	42:L5:79:TYR:CE1	2.46	0.51
20:C8:90:ASN:ND2	20:C8:91:ASP:O	6.93	0.51
36:1:268:A:H5'	36:1:318:A:C2	2.45	0.51
36:5:156:G:O2'	36:5:157:A:H4'	2.11	0.51
3:S1:214:LYS:NZ	1:6:886:U:OP1	285.71	0.51
68:O2:38:ILE:HA	68:O2:43:ARG:HH21	2.37	0.51
1:6:1140:G:OP2	87:6:2076:OHX:N1	2.44	0.51
40:L3:21:ARG:HD3	40:L3:269:GLN:OE1	2.20	0.51
70:O4:89:ILE:HG22	70:O4:90:ILE:N	2.25	0.51
1:2:1069:A:H2'	1:2:1070:C:O4'	2.10	0.51
36:1:1603:A:H5''	36:1:1604:G:OP2	2.10	0.51
14:C2:97:LEU:HB3	14:C2:118:ALA:HB3	2.00	0.51
17:C5:130:ARG:HD2	17:C5:130:ARG:N	3.03	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2722:U:H4'	57:N1:88:ARG:CB	2.40	0.51
40:L3:298:PHE:CD2	40:L3:357:LYS:HG2	4.32	0.51
18:C6:99:GLU:OE1	34:SR:60:SER:OG	4.00	0.51
1:2:927:C:H1'	16:C4:125:SER:OG	2.10	0.51
49:M3:168:ARG:CZ	49:M3:172:LEU:HD11	2.40	0.51
52:M6:188:SER:OG	52:M6:190:VAL:HG13	2.10	0.51
1:2:1169:G:C6	1:2:1574:G:H2'	2.46	0.51
87:1:3976:OHX:N5	87:1:4154:OHX:N6	2.58	0.51
1:6:1265:G:N7	87:6:2201:OHX:N6	2.58	0.51
40:L3:38:SER:OG	40:L3:39:LYS:HE3	2.11	0.51
20:C8:45:LEU:HD23	20:C8:81:ILE:HG23	1.92	0.51
52:M6:73:PHE:CD1	36:5:3007:U:H5'	246.15	0.51
36:5:3383:G:H2'	36:5:3384:U:C6	2.46	0.51
40:L3:332:ARG:HG2	40:L3:333:LYS:HD2	2.77	0.51
33:E1:144:CYS:O	33:E1:146:SER:N	2.80	0.51
57:N1:27:LEU:C	57:N1:29:THR:H	2.12	0.51
46:L9:7:GLU:HA	46:L9:68:LEU:HD11	2.32	0.51
42:L5:21:ARG:O	42:L5:25:GLU:HG3	2.10	0.51
57:N1:68:THR:CG2	57:N1:71:SER:HB2	2.39	0.51
15:C3:83:GLU:HG3	15:C3:84:ILE:HG23	1.91	0.51
21:C9:22:LEU:O	21:C9:25:GLN:HB3	2.10	0.51
62:N6:126:LEU:CB	71:O5:71:LYS:HD2	47.20	0.51
36:5:1816:A:C2'	36:5:1817:G:H5''	2.41	0.51
1:2:301:A:H2'	1:2:302:U:C6	2.46	0.51
1:2:323:A:C6	1:2:324:U:O4	2.63	0.51
87:6:2064:OHX:N5	87:6:2152:OHX:N6	2.58	0.51
1:2:639:U:OP1	9:S7:117:THR:OG1	2.27	0.51
74:O8:27:ILE:HD12	74:O8:41:THR:HG22	2.44	0.51
1:2:15:U:H2'	1:2:16:G:O4'	2.10	0.51
1:2:1370:U:H1'	1:2:1371:A:OP2	2.10	0.51
13:C1:109:VAL:HG21	13:C1:125:VAL:CG1	2.59	0.51
1:2:102:U:C5	1:2:360:A:C6	2.98	0.51
36:5:3100:U:O2	36:5:3101:G:C8	2.63	0.51
1:2:773:C:OP1	6:S4:22:LYS:N	2.33	0.51
57:N1:112:ASN:HA	57:N1:115:LYS:HD2	1.92	0.51
36:5:425:G:O6	36:5:634:C:N4	2.37	0.51
1:2:1353:U:H2'	1:2:1354:G:O4'	2.11	0.51
17:C5:64:LYS:HG3	17:C5:73:PRO:HG3	1.93	0.51
36:5:2765:C:H2'	36:5:2766:U:C6	2.46	0.51
1:6:1695:G:H21	1:6:1706:C:H41	1.58	0.51
36:1:130:A:H2'	36:1:131:C:C6	2.46	0.51
6:S4:58:GLY:H	1:6:447:U:P	382.40	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:139:HIS:O	39:L2:141:PRO:HD3	2.10	0.51
69:O3:47:LYS:HA	69:O3:104:PRO:HD2	2.05	0.51
35:SM:125:ALA:HA	35:SM:128:ALA:HB3	3.18	0.51
15:C3:54:LEU:HD13	15:C3:60:VAL:HG11	3.06	0.51
25:D3:44:GLY:H	25:D3:78:LYS:NZ	3.49	0.51
1:2:477:A:OP1	32:E0:31:LYS:HG2	2.10	0.51
47:M0:144:ASN:O	47:M0:147:VAL:HB	2.10	0.51
47:M0:38:LYS:CG	47:M0:41:ALA:HB2	3.67	0.51
47:M0:61:SER:OG	47:M0:63:GLU:HG2	3.39	0.51
1:6:1163:A:H2'	1:6:1164:G:O4'	2.11	0.51
26:D4:15:ASN:HD22	26:D4:22:GLN:NE2	2.58	0.51
10:S8:55:TYR:N	10:S8:175:GLN:O	2.41	0.51
36:1:681:U:O4	41:L4:118:LYS:NZ	2.23	0.51
27:D5:39:ALA:HB1	27:D5:71:ILE:C	2.31	0.51
7:S5:25:LEU:N	7:S5:25:LEU:HD13	2.66	0.51
75:O9:5:LYS:HD3	75:O9:13:MET:CE	4.30	0.51
12:C0:12:HIS:HA	12:C0:15:LEU:HD12	6.39	0.51
12:C0:54:TYR:H	12:C0:71:GLU:HG2	1.95	0.51
22:D0:63:LEU:HD22	31:D9:34:TYR:CE1	3.72	0.51
1:2:911:U:O2'	1:2:915:A:H1'	2.10	0.51
2:S0:139:VAL:O	2:S0:141:ILE:HG13	2.09	0.51
2:S0:61:ALA:HA	2:S0:64:ILE:HD12	2.88	0.51
48:M1:96:PHE:HZ	48:M1:163:PHE:CD2	2.63	0.51
4:S2:152:HIS:H	4:S2:152:HIS:CD2	2.29	0.51
63:N7:25:ILE:HG23	63:N7:43:VAL:HG12	4.37	0.51
63:N7:95:VAL:HG23	63:N7:96:VAL:CG2	6.56	0.51
68:O2:75:LEU:HD23	68:O2:95:GLU:O	2.10	0.51
36:1:1762:C:H2'	36:1:1763:U:O4'	2.10	0.51
39:L2:177:LYS:HD3	79:Q3:69:TYR:CE1	2.60	0.51
14:C2:60:VAL:HG13	14:C2:122:VAL:HG22	1.93	0.51
6:S4:179:LYS:O	6:S4:194:THR:HA	2.77	0.51
50:M4:88:ALA:O	50:M4:89:ALA:HB3	2.42	0.51
57:N1:42:ILE:HD11	57:N1:74:VAL:HG11	1.90	0.51
69:O3:49:ILE:HG22	69:O3:85:PHE:CE1	3.51	0.51
43:L6:165:LEU:HD12	69:O3:8:TYR:N	4.02	0.51
36:5:3170:A:C6	36:5:3171:U:C4	2.98	0.51
34:SR:191:ASP:HB2	34:SR:193:ILE:HD12	6.07	0.51
24:D2:49:GLU:O	24:D2:64:GLN:HB2	3.33	0.51
8:S6:73:ILE:HB	8:S6:75:LEU:CD2	4.11	0.51
72:O6:89:GLU:O	72:O6:93:ILE:N	2.41	0.51
36:1:2148:U:H5''	39:L2:196:TRP:CE2	2.45	0.51
46:L9:156:GLN:NE2	46:L9:156:GLN:O	2.43	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:L9:94:TYR:HE2	46:L9:98:PRO:HA	1.69	0.51
36:5:122:A:H4'	36:5:123:A:O5'	2.11	0.51
36:1:2902:A:OP1	36:1:3032:A:H1'	2.11	0.51
42:L5:132:THR:HG21	42:L5:170:GLY:CA	2.55	0.51
36:1:1804:A:H5'	70:O4:70:LYS:HB3	1.92	0.51
37:7:26:C:H2'	37:7:27:A:O4'	2.10	0.51
41:L4:302:ALA:HB2	54:M8:39:ARG:NH1	2.26	0.51
36:5:845:G:O2'	36:5:847:A:N7	2.25	0.51
45:L8:33:ASN:HA	36:5:2549:G:N2	209.78	0.51
36:1:3056:U:C2	67:O1:25:PHE:CE2	2.98	0.51
53:M7:57:ALA:HB2	53:M7:83:TRP:NE1	2.61	0.51
36:1:1536:G:C6	36:1:1537:A:N7	2.78	0.51
58:N2:98:THR:OG1	58:N2:104:ARG:HG2	2.11	0.51
41:L4:351:PRO:HG2	36:5:520:U:OP1	327.59	0.51
41:L4:212:ASP:OD1	41:L4:216:VAL:HG22	2.11	0.51
23:D1:30:ALA:O	23:D1:60:ARG:HD3	3.31	0.51
68:O2:11:LYS:O	68:O2:13:HIS:N	2.44	0.51
9:S7:67:LEU:HG	9:S7:94:ALA:HB2	2.85	0.51
36:1:1597:C:H2'	36:1:1598:G:H8	1.74	0.51
1:2:792:U:O2'	1:2:793:A:H5'	2.10	0.51
17:C5:59:LYS:NZ	1:6:1240:U:O4	401.46	0.51
1:2:930:A:OP1	28:D6:32:LYS:NZ	2.43	0.51
34:SR:5:GLU:HG3	34:SR:317:THR:HG23	6.61	0.51
36:1:665:A:H1'	49:M3:14:PHE:CZ	2.46	0.51
36:1:3097:C:O2'	36:1:3098:G:H5'	2.11	0.51
1:2:71:A:N1	1:2:72:A:C6	2.78	0.51
1:2:885:G:H2'	1:2:886:U:C6	2.45	0.51
36:1:1591:G:C5	36:1:1592:G:C5	2.98	0.51
65:N9:23:LYS:HD2	65:N9:24:PRO:HG3	4.76	0.51
51:M5:108:ARG:HG3	51:M5:108:ARG:HH11	1.76	0.51
1:6:525:A:C6	1:6:526:A:C6	2.99	0.51
36:5:435:C:O2	36:5:625:G:N1	2.43	0.51
78:Q2:105:GLN:HB2	78:Q2:106:PHE:CD1	2.45	0.51
36:5:2347:U:C4	36:5:2348:A:C6	2.98	0.51
4:S2:77:GLN:HB2	4:S2:190:LEU:HD21	4.16	0.51
36:5:521:A:C5	36:5:572:A:C2	2.98	0.51
32:E0:56:MET:O	32:E0:56:MET:HG3	2.11	0.51
35:SM:131:ILE:C	35:SM:133:GLU:H	3.83	0.51
1:6:1518:C:OP2	87:6:2148:OHX:N1	2.44	0.51
36:1:293:C:H2'	36:1:294:U:O4'	2.10	0.51
36:1:2356:A:H5'	53:M7:138:LYS:CE	2.38	0.51
47:M0:84:ALA:O	47:M0:144:ASN:ND2	2.44	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:210:A:C2	1:6:211:U:C2	2.99	0.51
1:6:302:U:C4	1:6:303:U:C5	2.99	0.51
10:S8:76:THR:HG22	10:S8:108:PRO:HG2	1.91	0.51
36:1:1390:A:N6	36:1:1418:A:O2'	2.43	0.51
36:1:404:G:H2'	36:1:405:U:O4'	2.10	0.51
41:L4:281:ILE:HG22	54:M8:25:TYR:HB3	1.93	0.51
1:6:1605:G:H8	1:6:1605:G:H5''	1.74	0.51
7:S5:145:ASP:CG	7:S5:146:THR:H	2.14	0.51
42:L5:243:ALA:O	42:L5:246:ALA:HB3	2.10	0.51
42:L5:78:ALA:HA	42:L5:82:GLU:OE2	2.10	0.51
1:2:1549:C:OP2	17:C5:39:ALA:N	2.35	0.51
1:6:1200:G:H4'	1:6:1201:G:C5'	2.41	0.51
21:C9:108:LEU:O	21:C9:111:ILE:HG22	2.11	0.51
21:C9:130:ARG:O	21:C9:134:ARG:HB2	3.11	0.51
15:C3:91:LEU:O	15:C3:94:LYS:N	2.42	0.51
36:1:70:A:N1	36:1:313:A:O2'	2.36	0.51
1:2:978:A:H2'	1:2:979:A:O4'	2.10	0.51
16:C4:43:THR:OG1	1:6:900:A:OP1	279.32	0.51
1:6:927:C:H2'	1:6:928:U:C6	2.39	0.51
40:L3:21:ARG:HG3	36:5:2991:A:OP1	210.30	0.51
63:N7:73:LYS:HD2	63:N7:74:VAL:O	2.47	0.51
62:N6:24:SER:O	62:N6:27:ARG:HB2	2.25	0.51
71:O5:64:GLU:O	71:O5:68:GLN:N	4.16	0.51
35:SM:70:ASN:C	35:SM:72:ARG:H	2.13	0.51
56:N0:58:ILE:O	56:N0:60:SER:N	2.43	0.51
57:N1:65:TYR:CZ	57:N1:88:ARG:HG3	2.45	0.51
36:1:3213:A:N6	36:1:3214:U:C4	2.79	0.51
56:N0:33:ASN:N	56:N0:33:ASN:OD1	3.43	0.51
3:S1:193:ILE:O	3:S1:197:ILE:HG12	2.10	0.51
22:D0:105:GLN:HA	22:D0:108:ILE:CD1	6.92	0.51
8:S6:102:VAL:HG13	8:S6:106:LEU:CD1	2.41	0.51
24:D2:79:PHE:N	24:D2:125:ILE:HG22	2.24	0.51
36:1:282:G:H5''	36:1:283:G:P	2.50	0.51
1:6:1441:C:H2'	1:6:1442:U:C6	2.46	0.51
46:L9:171:ASP:HA	36:5:2899:C:C5	322.93	0.51
36:1:1046:A:C6	36:1:1049:C:C2	2.99	0.51
36:5:1591:G:H4'	36:5:1656:A:OP1	2.10	0.51
8:S6:28:PHE:CZ	8:S6:104:PRO:HB3	2.42	0.51
16:C4:87:GLY:HA2	16:C4:92:LYS:CA	2.39	0.51
42:L5:21:ARG:HG2	42:L5:25:GLU:CD	2.31	0.51
50:M4:24:LYS:HB2	50:M4:62:GLN:C	5.35	0.51
47:M0:19:LYS:CG	47:M0:26:VAL:HG11	2.40	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:699:U:H2'	1:6:700:C:C6	2.46	0.51
36:5:2660:G:H2'	36:5:2661:G:H8	1.75	0.51
36:1:1582:C:H3'	36:1:1582:C:OP2	2.11	0.51
60:N4:91:LYS:C	60:N4:94:ARG:H	2.14	0.51
55:M9:116:ASP:OD2	55:M9:119:LEU:HB2	2.11	0.51
41:L4:100:PHE:CZ	41:L4:101:ALA:HB2	2.46	0.51
65:N9:28:LYS:HB2	36:5:1065:A:C4	213.68	0.51
1:2:1665:U:O2	1:2:1737:G:C2	2.63	0.51
36:1:2108:C:O2'	36:1:3362:A:N6	2.43	0.51
43:L6:22:ARG:NH1	36:5:608:A:C2	241.82	0.51
48:M1:107:ASP:N	48:M1:107:ASP:OD1	2.35	0.51
75:O9:8:ARG:HH21	38:8:112:U:P	112.72	0.51
37:3:76:A:O3'	37:3:77:G:H4'	2.11	0.51
1:2:1535:U:O2'	1:2:1536:G:O4'	2.29	0.51
3:S1:23:PRO:HB3	3:S1:26:ARG:NH2	2.65	0.51
36:5:2667:A:C2	36:5:2690:G:H2'	2.45	0.51
12:C0:27:PHE:CD2	12:C0:27:PHE:N	2.79	0.51
36:5:764:U:O2'	36:5:765:C:H2'	2.09	0.51
36:1:968:G:H2'	36:1:969:C:C6	2.46	0.51
36:1:890:C:H2'	36:1:891:G:H8	1.75	0.51
36:1:1557:A:H3'	36:1:1558:A:H5''	1.92	0.51
32:E0:47:VAL:HG22	32:E0:48:THR:H	1.75	0.51
1:6:674:C:H2'	1:6:675:U:C6	2.46	0.51
1:6:1778:G:N1	1:6:1779:U:C4	2.79	0.51
42:L5:91:GLY:C	42:L5:94:ASN:HD21	2.13	0.51
36:1:2392:C:O2'	40:L3:266:ARG:NH2	2.44	0.51
36:1:2356:A:OP1	53:M7:138:LYS:HD2	2.11	0.51
28:D6:36:ILE:HG22	28:D6:73:TYR:HD2	4.82	0.51
28:D6:5:ARG:HD2	28:D6:8:ASN:O	2.09	0.51
6:S4:3:ARG:O	1:6:93:A:H1'	326.49	0.51
10:S8:114:GLU:CG	10:S8:120:THR:HA	2.41	0.51
41:L4:206:LEU:HD23	41:L4:226:GLU:HB3	1.93	0.51
41:L4:39:PHE:CD1	41:L4:242:ALA:HB2	3.05	0.51
19:C7:15:ALA:O	19:C7:19:ARG:HG3	3.48	0.51
1:6:1472:C:H41	1:6:1536:G:H1	1.59	0.51
1:6:1570:A:O5'	1:6:1570:A:H8	1.93	0.51
1:6:1571:C:O5'	1:6:1571:C:H6	1.94	0.51
30:D8:11:LYS:N	30:D8:31:GLU:O	2.30	0.51
7:S5:81:ARG:HD3	7:S5:82:PHE:CE2	2.46	0.51
46:L9:161:LEU:O	46:L9:164:ILE:HG22	2.11	0.51
42:L5:106:ALA:HA	42:L5:171:LEU:CD1	2.52	0.51
42:L5:99:TYR:CD1	42:L5:199:ILE:HG23	2.46	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:C0:9:ASN:O	12:C0:13:GLN:N	2.36	0.51
21:C9:123:ARG:HG2	21:C9:124:ILE:N	2.35	0.51
5:S3:79:TYR:CD1	5:S3:84:ILE:HB	3.58	0.51
64:N8:64:GLN:HE21	36:5:101:G:H8	117.55	0.51
77:Q1:1:MET:HB2	1:6:1783:C:OP2	309.91	0.51
77:Q1:6:ARG:CZ	77:Q1:6:ARG:HB3	5.71	0.51
3:S1:129:THR:HG23	3:S1:176:VAL:HG12	1.92	0.51
23:D1:67:ASP:HA	23:D1:70:ASN:ND2	2.25	0.51
9:S7:140:VAL:HB	24:D2:52:TYR:HB3	2.27	0.51
2:S0:180:GLU:O	2:S0:184:LEU:HB2	2.11	0.51
2:S0:63:ILE:HG12	23:D1:36:VAL:HG22	1.93	0.51
4:S2:184:VAL:HG22	4:S2:211:LEU:HD23	1.92	0.51
4:S2:60:SER:OG	23:D1:26:ALA:HA	2.10	0.51
40:L3:21:ARG:HG2	40:L3:269:GLN:CG	2.34	0.51
36:1:3045:G:O2'	40:L3:275:ARG:HD2	2.10	0.51
48:M1:9:MET:C	48:M1:11:ASP:H	2.43	0.51
48:M1:95:ASN:HB3	48:M1:103:GLY:O	3.03	0.51
63:N7:29:HIS:ND1	63:N7:40:HIS:CE1	3.89	0.51
1:2:1178:G:N2	35:SM:80:ALA:HB1	2.25	0.51
69:O3:39:GLN:OE1	69:O3:39:GLN:N	2.44	0.51
34:SR:216:LYS:C	34:SR:218:GLY:H	2.13	0.51
36:5:2275:A:C2	36:5:2312:A:C5	2.98	0.51
56:N0:33:ASN:OD1	56:N0:36:ILE:HB	3.37	0.51
73:O7:52:LYS:HG3	73:O7:55:ARG:HD2	1.92	0.51
36:5:3159:C:H2'	36:5:3160:U:O4'	2.11	0.51
52:M6:85:ARG:NH1	36:5:2382:G:OP1	238.85	0.51
49:M3:100:ARG:NE	36:5:66:A:OP2	85.37	0.51
36:5:916:G:N7	36:5:924:G:C6	2.79	0.51
54:M8:170:ARG:HD2	64:N8:56:VAL:O	2.11	0.51
8:S6:199:GLN:O	8:S6:201:GLN:N	2.44	0.51
64:N8:90:TYR:HD1	64:N8:100:PRO:HD3	4.32	0.51
36:5:3006:A:C2	36:5:3141:A:C4	2.99	0.51
36:1:1404:G:O3'	68:O2:64:LYS:NZ	2.37	0.51
24:D2:36:LYS:O	24:D2:39:GLN:HB2	2.34	0.51
6:S4:140:VAL:HG12	6:S4:146:THR:HG22	5.73	0.51
34:SR:174:ASN:OD1	34:SR:174:ASN:N	3.63	0.51
50:M4:62:GLN:HB2	50:M4:63:VAL:HG23	1.93	0.51
39:L2:70:ARG:NH1	39:L2:72:ARG:HE	6.09	0.51
36:5:802:C:N3	36:5:803:C:C5	2.79	0.51
36:1:1940:G:N2	36:1:3362:A:C8	2.79	0.51
36:1:674:G:O2'	41:L4:116:ASN:OD1	2.25	0.51
66:O0:57:GLU:OE1	66:O0:69:TYR:OH	2.27	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:C1:122:ILE:H	13:C1:144:ALA:HB3	1.76	0.51
36:1:797:U:O2'	36:1:798:G:H5'	2.11	0.51
1:2:73:U:O2	1:2:74:U:H5'	2.11	0.51
19:C7:71:PHE:CZ	19:C7:74:GLN:HB2	5.44	0.51
36:1:1821:U:C2	70:O4:67:LYS:HB2	2.45	0.51
42:L5:140:ARG:NH2	36:5:1080:A:OP2	229.38	0.51
1:2:380:U:C5	11:S9:5:PRO:HB3	2.46	0.51
36:1:873:C:H4'	36:1:874:U:OP2	2.09	0.51
1:6:690:G:C2	1:6:691:C:C4	2.98	0.51
32:E0:20:LYS:HZ3	32:E0:21:VAL:H	1.59	0.51
36:1:184:U:H2'	36:1:185:C:C6	2.46	0.51
36:5:54:C:O2'	36:5:1547:G:H1'	2.10	0.51
21:C9:4:VAL:HG21	21:C9:140:LEU:CD2	5.25	0.51
36:1:126:U:H5'	51:M5:141:ALA:HB2	1.92	0.51
1:6:1752:U:C4	1:6:1753:A:N6	2.78	0.51
48:M1:174:LYS:HD3	36:5:1016:C:N4	359.38	0.51
36:5:2656:A:C4	36:5:2658:G:N7	2.78	0.51
87:6:2125:OHX:N4	87:6:2177:OHX:N3	2.59	0.51
1:2:936:G:O6	28:D6:15:ARG:HG3	2.11	0.51
28:D6:5:ARG:O	28:D6:8:ASN:N	3.70	0.51
28:D6:94:ASN:HD21	28:D6:96:ALA:CB	3.00	0.51
47:M0:208:ASN:O	47:M0:212:GLU:HB2	2.11	0.51
47:M0:85:PHE:CB	47:M0:140:THR:HG22	2.89	0.51
26:D4:79:VAL:O	26:D4:82:ALA:HB3	2.48	0.51
10:S8:172:ARG:C	10:S8:174:GLY:N	2.97	0.51
36:1:339:C:OP1	41:L4:195:ARG:NH1	2.44	0.51
69:O3:103:TYR:HA	69:O3:105:SER:N	2.36	0.51
19:C7:57:LEU:HD23	19:C7:60:ARG:HD3	1.92	0.51
36:1:1233:G:N1	36:1:1234:G:O6	2.44	0.51
7:S5:34:GLN:HG2	18:C6:57:LEU:HD13	1.93	0.51
20:C8:15:LEU:HD23	20:C8:22:VAL:O	3.56	0.51
3:S1:70:LEU:HD11	3:S1:79:HIS:HB3	1.93	0.51
68:O2:24:ARG:HD3	68:O2:25:TYR:CE2	2.46	0.51
23:D1:40:ASP:OD1	23:D1:44:ARG:HB2	2.49	0.51
2:S0:185:ARG:HB2	23:D1:45:ALA:HB3	1.92	0.51
24:D2:41:MET:O	24:D2:45:GLY:N	2.44	0.51
20:C8:105:VAL:CG2	20:C8:106:GLU:N	4.51	0.51
1:6:1699:G:C2'	1:6:1700:C:H5'	2.41	0.51
63:N7:79:HIS:O	63:N7:80:LEU:HD23	2.64	0.51
1:6:1073:G:C2'	1:6:1074:G:H5''	2.35	0.51
55:M9:7:GLN:N	55:M9:7:GLN:OE1	2.43	0.51
56:N0:24:LEU:HD13	57:N1:148:PRO:HG3	1.92	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2724:U:OP1	57:N1:57:TYR:OH	2.25	0.51
40:L3:299:ASP:O	40:L3:301:THR:N	2.41	0.51
62:N6:61:GLY:O	62:N6:64:LYS:HB2	2.10	0.51
66:O0:99:ASP:N	66:O0:99:ASP:OD2	2.90	0.51
4:S2:118:ALA:HB3	4:S2:124:ALA:HB2	1.99	0.51
57:N1:101:CYS:HB3	36:5:990:U:C1'	253.43	0.51
51:M5:59:PHE:HE2	51:M5:142:ILE:HD11	3.15	0.51
1:2:633:U:O2'	1:2:1102:G:O2'	2.28	0.51
39:L2:30:ARG:HG2	39:L2:74:GLU:HG2	1.93	0.51
74:O8:42:LYS:NZ	36:5:1750:A:OP2	139.26	0.51
79:Q3:9:GLY:O	79:Q3:12:GLY:N	3.03	0.51
25:D3:17:VAL:HG22	25:D3:20:ARG:NH2	2.69	0.51
64:N8:96:LYS:HD2	64:N8:97:GLU:OE1	2.11	0.51
1:2:861:U:O2'	24:D2:56:HIS:O	2.28	0.51
10:S8:137:LYS:CE	1:6:191:C:H42	264.34	0.51
1:2:1259:U:H2'	1:2:1260:U:C6	2.46	0.51
53:M7:64:ASN:OD1	53:M7:80:LYS:NZ	2.41	0.51
38:8:148:G:H2'	38:8:149:A:C8	2.40	0.51
69:O3:21:ARG:HG3	69:O3:21:ARG:NH1	2.22	0.51
54:M8:65:SER:HB3	54:M8:90:ASP:HB3	2.76	0.51
36:5:2996:U:OP1	36:5:2996:U:C4'	2.58	0.51
54:M8:178:ARG:HG2	64:N8:50:PRO:HB2	1.93	0.51
54:M8:21:SER:HG	36:5:673:U:P	149.60	0.51
1:6:251:A:H5''	1:6:252:U:OP2	2.11	0.51
1:2:708:C:C2	1:2:709:C:H5	2.29	0.51
36:1:3222:U:O2'	36:1:3223:A:H5'	2.11	0.51
10:S8:92:ARG:NH2	36:1:2107:A:H4'	2.25	0.51
49:M3:153:ASP:OD1	49:M3:157:ARG:NH2	2.44	0.51
38:8:80:A:H2	38:8:83:C:H41	1.59	0.51
37:3:17:A:OP1	42:L5:2:ALA:HB2	2.11	0.51
8:S6:216:LEU:HD11	1:6:241:U:H5'	336.93	0.51
40:L3:216:ASP:HB3	40:L3:278:ILE:HA	1.92	0.51
33:E1:106:TYR:O	33:E1:107:LYS:HB2	2.10	0.51
1:2:604:A:H2'	1:2:605:A:O4'	2.11	0.51
1:2:763:G:N2	1:2:773:C:C2	2.78	0.51
1:2:763:G:N2	1:2:773:C:N3	2.58	0.51
36:1:670:C:P	54:M8:147:ARG:HH21	2.33	0.51
36:5:770:G:O6	87:5:4091:OHX:N6	2.44	0.51
1:2:289:U:H2'	1:2:290:G:O4'	2.11	0.51
44:L7:84:VAL:HG23	44:L7:117:VAL:HB	2.81	0.51
1:2:869:A:H2'	1:2:870:C:O4'	2.10	0.51
10:S8:87:ASN:HB3	10:S8:90:LEU:HD11	1.92	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:68:VAL:HG22	3:S1:72:ASP:OD1	2.11	0.51
13:C1:46:LYS:O	13:C1:50:GLU:N	2.41	0.51
1:6:1682:U:H6	1:6:1682:U:H5''	1.75	0.51
1:2:1526:A:H5''	1:2:1527:C:OP2	2.11	0.51
13:C1:59:PRO:HB3	13:C1:66:ILE:HD11	2.92	0.51
36:5:142:C:H2'	36:5:143:G:O4'	2.11	0.51
36:1:1294:A:O2'	36:1:1295:G:H5''	2.11	0.51
11:S9:127:VAL:O	11:S9:131:GLN:HB2	2.41	0.51
41:L4:334:PHE:CE1	36:5:578:A:C5	278.21	0.51
36:5:2523:A:O2'	36:5:2587:U:H1'	2.11	0.51
6:S4:52:LEU:HD13	6:S4:54:TYR:CE2	2.46	0.51
36:1:1383:G:H4'	41:L4:240:PRO:O	2.11	0.51
54:M8:36:LEU:HB3	54:M8:45:ASN:OD1	2.11	0.51
64:N8:6:THR:HG23	64:N8:9:ARG:HG2	2.77	0.51
1:6:1406:A:H2'	1:6:1407:U:C6	2.46	0.51
5:S3:161:GLY:H	1:6:1331:A:N6	415.02	0.51
18:C6:5:PRO:HG2	18:C6:24:ALA:HB2	2.80	0.51
18:C6:25:GLY:HA3	18:C6:64:ASP:CG	2.31	0.51
30:D8:44:VAL:HG21	30:D8:48:VAL:CG2	2.68	0.51
7:S5:48:PHE:CG	7:S5:67:PRO:HB3	2.46	0.51
46:L9:117:PHE:HD2	46:L9:124:ARG:NH2	2.08	0.51
67:O1:54:GLU:N	67:O1:54:GLU:OE2	2.54	0.51
61:N5:103:TYR:O	61:N5:105:VAL:HG23	2.11	0.51
61:N5:127:THR:O	61:N5:130:TYR:N	2.44	0.51
1:2:1280:C:H2'	1:2:1281:G:H8	1.76	0.51
20:C8:114:GLU:O	20:C8:118:LYS:HD2	2.11	0.51
22:D0:82:TYR:HB3	31:D9:52:PHE:HB3	1.93	0.51
1:2:1253:U:H4'	33:E1:143:LYS:N	2.25	0.51
36:1:315:C:N4	36:1:316:U:O4	2.44	0.51
71:O5:100:VAL:HG12	71:O5:105:ARG:HE	5.73	0.51
72:O6:30:LYS:HD3	36:5:316:U:O2'	102.72	0.51
77:Q1:21:ARG:NH1	1:6:1654:G:OP1	281.40	0.51
3:S1:223:PHE:CE2	3:S1:228:LEU:HD22	2.46	0.51
55:M9:124:TYR:CE2	36:5:1720:U:C4	234.61	0.51
1:2:1049:U:H5''	29:D7:70:LYS:HG3	1.92	0.51
1:2:1212:G:H8	1:2:1212:G:H5''	1.75	0.51
59:N3:36:ILE:HG23	59:N3:58:VAL:CG2	2.87	0.51
60:N4:14:TYR:HB3	60:N4:15:PRO:CD	2.53	0.51
69:O3:73:ARG:HD3	69:O3:82:ARG:NH1	2.22	0.51
34:SR:178:VAL:HG12	34:SR:192:PHE:HB2	1.91	0.51
36:1:2687:G:OP1	42:L5:8:LYS:HE3	2.11	0.51
72:O6:67:LYS:HA	72:O6:70:ARG:HH12	5.89	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:M6:194:LEU:O	52:M6:199:TYR:N	2.34	0.51
57:N1:100:LYS:O	57:N1:102:ARG:N	2.44	0.51
51:M5:150:TRP:CZ3	51:M5:151:ILE:HG12	2.45	0.51
1:2:778:G:N7	1:2:780:A:H5'	2.26	0.51
36:1:2190:U:C5	36:1:2191:U:C5	2.99	0.51
6:S4:104:ASP:HB2	6:S4:108:ARG:O	2.26	0.51
36:5:2155:G:H2'	36:5:2156:C:O4'	2.10	0.51
39:L2:239:ALA:HB3	36:5:2155:G:H4'	209.39	0.51
36:5:137:G:C6	36:5:138:U:C4	2.99	0.51
36:1:2961:G:C6	36:1:2962:U:C4	2.99	0.51
40:L3:379:PHE:CD1	40:L3:379:PHE:C	2.84	0.51
64:N8:75:LEU:HA	64:N8:78:LEU:HB2	1.93	0.51
11:S9:49:LEU:HD11	11:S9:53:ARG:HD3	1.93	0.51
22:D0:24:ILE:HA	22:D0:115:GLU:O	3.39	0.51
1:2:1446:A:C8	1:2:1448:G:C5	2.99	0.51
36:1:2767:U:O2'	36:1:2768:U:H5'	2.12	0.51
37:3:13:A:OP1	37:3:111:U:O2'	2.28	0.51
36:1:412:G:C6	36:1:413:U:C4	2.99	0.51
36:5:2573:G:N7	87:5:4189:OHX:N6	2.59	0.51
67:O1:7:VAL:HG12	67:O1:7:VAL:O	2.11	0.51
36:5:2997:G:C1'	36:5:3396:U:H5'	2.41	0.51
45:L8:94:PHE:O	45:L8:97:TYR:N	2.98	0.51
36:5:160:G:H1	36:5:261:U:H3	1.59	0.51
36:1:3165:A:H61	36:1:3285:C:H42	1.58	0.51
36:1:1350:A:H2'	36:1:1351:U:H3'	1.92	0.51
1:6:1625:C:H2'	1:6:1626:U:C6	2.46	0.51
36:1:1743:G:H2'	36:1:1744:G:C8	2.46	0.51
55:M9:120:TYR:C	55:M9:122:VAL:H	2.15	0.51
1:6:1098:U:C6	1:6:1098:U:H5''	2.46	0.51
36:5:1348:U:H5''	36:5:1355:A:H61	1.76	0.51
36:1:2697:A:C2	36:1:2698:G:C5	2.98	0.51
36:1:1576:G:N7	36:1:1577:G:C6	2.79	0.51
33:E1:139:LEU:HD13	33:E1:152:ALA:N	2.26	0.51
36:1:3267:A:H2'	43:L6:69:PHE:CZ	2.45	0.51
36:1:2626:A:OP2	36:1:2628:A:N6	2.43	0.51
36:5:2584:G:H5'	36:5:2585:G:OP2	2.11	0.51
26:D4:86:GLU:OE1	26:D4:90:ARG:HD2	2.19	0.51
36:5:273:A:N7	87:5:4060:OHX:N3	2.59	0.51
17:C5:77:ARG:NH1	36:1:1025:A:O4'	2.44	0.51
38:8:109:A:H2'	38:8:110:C:H5'	1.92	0.51
36:5:895:A:C6	36:5:897:U:N3	2.79	0.51
37:3:112:G:OP2	87:3:220:OHX:N1	2.44	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1659:A:H8	1:6:1659:A:O5'	1.94	0.51
36:1:2928:C:H6	36:1:2928:C:H5''	1.76	0.51
36:5:1537:A:H2	36:5:1584:U:H3	1.59	0.51
1:2:1761:U:O2'	1:2:1762:A:OP2	2.24	0.50
53:M7:124:LYS:HD2	53:M7:140:GLU:OE1	2.11	0.50
28:D6:38:ARG:NH1	28:D6:83:ILE:HG22	5.41	0.50
1:6:477:A:C5	1:6:538:A:N6	2.79	0.50
1:2:544:A:H4'	32:E0:28:LYS:HZ1	1.75	0.50
47:M0:176:LEU:HD11	47:M0:199:PHE:CE1	2.44	0.50
36:1:115:A:O5'	36:1:115:A:H8	1.94	0.50
45:L8:145:ASN:O	45:L8:147:LYS:HG3	2.12	0.50
45:L8:73:PRO:O	45:L8:75:ILE:N	3.80	0.50
68:O2:99:ASN:ND2	36:5:1388:U:O2'	132.81	0.50
1:6:1534:G:H4'	1:6:1536:G:O6	2.11	0.50
18:C6:39:VAL:HG21	18:C6:48:VAL:HG11	1.92	0.50
7:S5:103:ASN:OD1	1:6:1473:U:O2'	357.50	0.50
36:5:2745:G:N2	36:5:2748:A:OP2	2.44	0.50
1:2:1274:C:H4'	1:2:1275:A:O5'	2.11	0.50
12:C0:55:VAL:HA	12:C0:69:THR:HG23	1.93	0.50
17:C5:118:GLU:HB2	17:C5:119:PHE:CE2	2.46	0.50
17:C5:37:ALA:HB1	17:C5:41:VAL:HG21	2.30	0.50
5:S3:101:GLN:HB2	5:S3:186:VAL:HG11	3.28	0.50
1:2:1128:C:H2'	1:2:1129:U:O4'	2.11	0.50
47:M0:20:SER:HG	47:M0:22:TYR:H	1.59	0.50
16:C4:41:ARG:O	16:C4:42:VAL:HG22	2.11	0.50
16:C4:43:THR:O	16:C4:46:MET:HB2	3.56	0.50
36:5:656:A:C2	36:5:657:A:C4	2.99	0.50
36:5:677:A:N3	36:5:678:G:H1'	2.27	0.50
6:S4:186:GLY:HA3	1:6:753:A:OP1	368.88	0.50
29:D7:70:LYS:NZ	1:6:1050:G:OP1	353.35	0.50
6:S4:163:ASP:O	6:S4:165:ALA:N	2.42	0.50
56:N0:137:ARG:HD3	36:5:1213:G:OP1	325.65	0.50
57:N1:75:ILE:O	57:N1:75:ILE:HG22	4.92	0.50
36:1:346:C:C2	36:1:348:A:N7	2.79	0.50
39:L2:42:ARG:HA	39:L2:88:ILE:O	2.36	0.50
79:Q3:77:ALA:O	79:Q3:80:ARG:HB2	2.10	0.50
41:L4:219:LEU:O	41:L4:220:ARG:C	2.48	0.50
36:1:3043:C:OP2	59:N3:48:ARG:NH2	2.37	0.50
72:O6:62:ARG:HH12	72:O6:98:ARG:NH1	2.09	0.50
1:2:25:C:HO2'	1:2:366:A:HO2'	1.55	0.50
51:M5:170:LYS:O	51:M5:173:GLY:N	2.33	0.50
13:C1:91:LEU:HD23	13:C1:102:LYS:HA	3.63	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:SM:55:SER:O	35:SM:59:GLY:N	2.44	0.50
1:6:1270:G:H1	1:6:1440:C:H42	1.59	0.50
1:6:913:G:C8	36:5:2205:U:N3	2.79	0.50
45:L8:156:ASP:OD2	45:L8:156:ASP:N	2.49	0.50
36:1:3085:G:OP2	87:1:3887:OHX:N2	2.44	0.50
41:L4:295:ILE:O	41:L4:299:ILE:HG12	2.12	0.50
36:1:2932:U:P	59:N3:40:LYS:HD3	2.50	0.50
36:5:3263:G:C2	36:5:3264:G:C8	2.99	0.50
36:1:1616:U:H2'	36:1:1617:G:H8	1.76	0.50
42:L5:182:GLY:O	42:L5:190:ILE:HD12	3.16	0.50
1:2:424:C:O2	1:2:424:C:H2'	2.11	0.50
36:5:2856:G:H2'	36:5:2857:C:H6	1.76	0.50
71:O5:15:GLU:C	71:O5:18:ALA:H	3.25	0.50
1:6:647:G:H22	1:6:687:G:H22	1.58	0.50
36:1:3343:G:H21	36:1:3362:A:H2	1.58	0.50
13:C1:75:VAL:HG12	13:C1:120:GLY:H	1.76	0.50
22:D0:117:VAL:O	22:D0:118:VAL:HB	2.11	0.50
6:S4:43:PRO:HA	6:S4:82:TYR:O	2.09	0.50
36:1:1308:A:OP2	36:1:1308:A:C8	2.64	0.50
1:2:1266:U:H2'	1:2:1267:G:C8	2.45	0.50
1:2:380:U:H5	11:S9:5:PRO:HB3	1.76	0.50
12:C0:77:ARG:NH2	12:C0:86:ILE:H	2.09	0.50
51:M5:102:ALA:O	51:M5:106:VAL:HG22	2.11	0.50
36:5:2121:G:H2'	36:5:2122:G:C5'	2.40	0.50
9:S7:33:GLU:H	9:S7:33:GLU:CD	2.14	0.50
38:8:68:G:C6	38:8:69:U:C4	2.99	0.50
37:3:100:C:P	56:N0:52:LYS:HZ1	2.35	0.50
1:2:1443:U:O4	87:2:2133:OHX:N6	2.44	0.50
36:5:430:U:OP2	87:5:3979:OHX:N5	2.44	0.50
55:M9:151:ARG:O	55:M9:155:LEU:HD22	2.11	0.50
54:M8:20:LYS:CG	36:5:672:A:H5'	158.68	0.50
76:Q0:114:LYS:HG2	76:Q0:115:CYS:N	2.25	0.50
40:L3:266:ARG:NH2	36:5:2392:C:O2'	209.27	0.50
53:M7:138:LYS:HD3	53:M7:140:GLU:CD	2.31	0.50
1:6:591:A:H2'	1:6:592:A:C8	2.46	0.50
26:D4:12:VAL:HG22	26:D4:23:PHE:CB	2.41	0.50
41:L4:153:SER:OG	41:L4:154:THR:N	2.44	0.50
41:L4:38:VAL:HG21	41:L4:121:ALA:HB2	1.93	0.50
5:S3:163:PRO:HA	5:S3:166:ASP:HB2	2.87	0.50
1:2:1165:G:C6	1:2:1166:A:N6	2.79	0.50
42:L5:148:ILE:HD12	42:L5:159:VAL:HG21	3.93	0.50
1:6:1481:C:O2'	1:6:1482:C:O5'	2.23	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:C4:51:ASP:O	16:C4:54:GLU:HB2	2.11	0.50
3:S1:86:LEU:HD12	3:S1:98:THR:HG23	1.93	0.50
41:L4:89:ALA:O	41:L4:91:GLY:N	2.43	0.50
4:S2:137:ILE:HD11	23:D1:27:ASP:OD1	2.10	0.50
23:D1:85:TYR:CD1	29:D7:6:ASP:HB2	2.70	0.50
2:S0:12:GLU:O	2:S0:16:LEU:HG	3.81	0.50
1:2:178:U:P	8:S6:191:ARG:HH12	2.35	0.50
36:5:678:G:H2'	36:5:679:U:H6	1.75	0.50
70:O4:82:ALA:C	70:O4:84:CYS:N	2.62	0.50
68:O2:82:LEU:O	68:O2:82:LEU:HD22	2.33	0.50
36:1:1600:U:OP2	87:M9:202:OHX:N5	2.44	0.50
62:N6:118:LEU:HD13	62:N6:121:ARG:NH1	4.45	0.50
1:2:1226:A:O2'	1:2:1227:A:OP1	2.27	0.50
14:C2:123:VAL:HG12	14:C2:126:TRP:HB3	1.93	0.50
1:6:1595:U:N3	1:6:1600:A:H2	1.98	0.50
36:1:3147:G:H4'	40:L3:102:LEU:O	2.10	0.50
36:1:3182:G:H2'	36:1:3183:A:O4'	2.11	0.50
59:N3:87:ARG:NH2	59:N3:93:LEU:HD11	2.26	0.50
69:O3:37:THR:HG1	69:O3:39:GLN:H	1.59	0.50
34:SR:170:ILE:HG21	34:SR:211:ILE:HD11	1.93	0.50
34:SR:63:GLY:HA3	34:SR:92:TRP:HH2	3.15	0.50
52:M6:12:LYS:HG2	52:M6:40:GLU:CB	5.64	0.50
4:S2:96:THR:O	4:S2:96:THR:OG1	2.24	0.50
1:6:523:G:O2'	1:6:529:A:N6	2.44	0.50
26:D4:35:VAL:HG13	26:D4:36:SER:H	1.77	0.50
74:O8:28:ASN:HB2	74:O8:40:GLN:HB3	2.08	0.50
54:M8:170:ARG:O	54:M8:171:LYS:HG2	2.10	0.50
48:M1:16:LYS:HB3	48:M1:72:ARG:HD3	1.93	0.50
1:2:336:G:H21	1:2:338:C:H5'	1.75	0.50
64:N8:73:LEU:HB2	64:N8:109:TYR:CE2	2.46	0.50
1:6:1508:U:O4	87:6:2058:OHX:N4	2.44	0.50
9:S7:104:ARG:HG2	1:6:742:U:H1'	353.37	0.50
36:5:739:G:O6	87:5:3961:OHX:N6	2.43	0.50
46:L9:63:LYS:O	46:L9:66:ALA:HB3	2.10	0.50
45:L8:78:PHE:O	45:L8:79:GLN:HB3	2.54	0.50
24:D2:71:LYS:HZ2	1:6:1099:U:H5''	373.78	0.50
53:M7:27:LYS:HG2	53:M7:63:PHE:CD2	2.46	0.50
36:1:1861:G:H4'	55:M9:63:THR:OG1	2.11	0.50
36:1:1835:A:H5'	36:1:1835:A:C8	2.41	0.50
50:M4:21:VAL:HB	50:M4:63:VAL:HG13	1.92	0.50
56:N0:155:ARG:HH11	56:N0:157:GLN:NE2	3.76	0.50
42:L5:178:ASN:HA	42:L5:183:TRP:CG	2.49	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2830:G:H2'	36:1:2831:G:C8	2.45	0.50
42:L5:294:ALA:O	42:L5:296:GLN:N	2.43	0.50
36:5:1085:A:H5''	36:5:1085:A:C8	2.43	0.50
36:5:1084:A:H5''	36:5:1085:A:OP2	2.12	0.50
25:D3:38:PHE:CD1	1:6:359:A:H1'	331.44	0.50
34:SR:166:SER:OG	34:SR:184:ASN:HB3	7.99	0.50
36:5:2329:C:H2'	36:5:2330:C:C6	2.46	0.50
36:5:3298:C:H2'	36:5:3299:A:O4'	2.11	0.50
61:N5:73:MET:O	61:N5:77:GLU:N	2.38	0.50
5:S3:139:SER:O	5:S3:182:LEU:HB3	2.11	0.50
78:Q2:22:GLN:HB3	78:Q2:75:VAL:CG2	2.41	0.50
36:1:873:C:C5'	36:1:874:U:H4'	2.41	0.50
40:L3:110:LEU:O	40:L3:115:LYS:HD2	2.11	0.50
1:2:1363:U:O2'	1:2:1364:G:H5'	2.11	0.50
36:1:999:G:C6	36:1:1000:C:N4	2.79	0.50
38:8:47:C:H1'	38:8:61:A:H2'	1.93	0.50
36:5:2387:A:OP2	87:5:4014:OHX:N4	2.45	0.50
36:1:1648:A:H2'	36:1:1649:U:O4'	2.11	0.50
25:D3:42:PRO:O	25:D3:76:LEU:HD12	2.83	0.50
25:D3:69:ARG:HD3	25:D3:117:ILE:HG12	4.01	0.50
36:5:3048:A:C5	36:5:3090:U:C5	3.00	0.50
40:L3:53:MET:HG2	40:L3:77:THR:CG2	2.52	0.50
26:D4:104:SER:OG	26:D4:107:GLN:N	3.48	0.50
28:D6:20:PRO:HB3	28:D6:29:SER:OG	2.10	0.50
28:D6:68:TYR:N	28:D6:68:TYR:CD2	2.80	0.50
36:5:1661:G:H2'	36:5:1662:G:C8	2.46	0.50
44:L7:214:TRP:CD2	44:L7:219:LYS:HD3	5.27	0.50
44:L7:44:ILE:HD11	44:L7:179:LEU:O	2.11	0.50
45:L8:66:SER:HG	51:M5:21:PHE:HZ	1.59	0.50
45:L8:172:LYS:NZ	72:O6:39:PHE:HE1	2.08	0.50
72:O6:43:LEU:HD13	72:O6:47:ILE:HD11	1.93	0.50
36:1:340:C:H2'	36:1:341:G:O4'	2.11	0.50
41:L4:173:GLY:O	41:L4:175:HIS:N	2.43	0.50
1:6:819:G:O2'	1:6:821:U:OP2	2.29	0.50
20:C8:61:LEU:CD2	20:C8:65:GLU:HB2	5.62	0.50
40:L3:385:LYS:NZ	36:5:3328:G:OP1	207.48	0.50
42:L5:111:GLN:HA	42:L5:116:ASP:HB2	1.92	0.50
1:6:1428:G:C2	1:6:1429:G:C8	2.99	0.50
21:C9:117:SER:HB2	21:C9:123:ARG:CB	2.41	0.50
21:C9:50:ALA:HA	21:C9:53:TRP:CD1	4.00	0.50
71:O5:105:ARG:O	71:O5:109:ILE:HG13	2.11	0.50
77:Q1:21:ARG:HD2	1:6:1653:C:O3'	283.48	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:41:ARG:HH21	3:S1:97:LEU:HD11	1.76	0.50
4:S2:35:TRP:HE1	4:S2:37:PRO:HA	2.66	0.50
40:L3:269:GLN:O	40:L3:269:GLN:HG3	2.10	0.50
55:M9:101:VAL:O	55:M9:104:ARG:N	3.00	0.50
36:1:437:G:O2'	36:1:438:A:H5'	2.11	0.50
6:S4:180:LEU:CD2	6:S4:181:VAL:H	2.23	0.50
36:1:3146:G:C2'	36:1:3147:G:H5'	2.42	0.50
36:1:3189:G:H2'	36:1:3190:C:C6	2.46	0.50
69:O3:44:TYR:N	69:O3:44:TYR:CD2	2.92	0.50
69:O3:73:ARG:HG2	69:O3:82:ARG:HD2	1.93	0.50
42:L5:257:GLU:C	42:L5:258:LYS:HD3	4.84	0.50
37:3:22:A:H1'	42:L5:272:TYR:CZ	2.47	0.50
34:SR:289:ALA:HA	34:SR:305:TYR:HA	1.93	0.50
34:SR:303:ALA:N	34:SR:311:ARG:O	2.41	0.50
56:N0:167:ARG:HG3	56:N0:168:PRO:HD2	1.94	0.50
41:L4:219:LEU:O	41:L4:222:VAL:HG12	2.11	0.50
8:S6:69:LEU:O	8:S6:99:GLY:HA3	2.11	0.50
24:D2:81:VAL:HG21	24:D2:125:ILE:HB	2.36	0.50
24:D2:89:TRP:O	24:D2:93:LEU:HD22	2.11	0.50
57:N1:104:GLU:OE2	57:N1:108:ARG:HD3	3.29	0.50
49:M3:78:ALA:O	49:M3:82:ALA:N	2.44	0.50
36:5:2966:G:H2'	36:5:2967:A:C8	2.47	0.50
1:2:826:U:H2'	1:2:827:C:C6	2.46	0.50
48:M1:137:ARG:HG2	37:7:28:C:H5''	307.14	0.50
36:1:2618:G:OP1	47:M0:116:ARG:HG3	2.11	0.50
59:N3:6:ALA:HB2	59:N3:126:TRP:CH2	2.81	0.50
2:S0:26:ALA:HB1	2:S0:29:VAL:HG13	1.92	0.50
1:2:1490:C:H5	1:2:1492:A:C4	2.29	0.50
32:E0:49:LEU:H	32:E0:49:LEU:HD22	4.94	0.50
62:N6:101:PRO:O	62:N6:103:LYS:N	2.81	0.50
34:SR:109:ASP:HB2	34:SR:127:ARG:HB2	3.58	0.50
36:5:3223:A:C5	36:5:3263:G:C6	3.00	0.50
2:S0:101:ARG:HG3	2:S0:102:PHE:N	2.26	0.50
56:N0:155:ARG:HG2	56:N0:172:TYR:H	4.19	0.50
36:1:120:G:P	45:L8:133:LYS:HZ1	2.34	0.50
1:2:50:C:H1'	1:2:430:G:N2	2.26	0.50
1:6:452:A:O2'	1:6:453:U:O4'	2.26	0.50
1:2:301:A:H2'	1:2:302:U:H6	1.76	0.50
13:C1:57:LYS:HE2	13:C1:131:ILE:HG23	1.92	0.50
55:M9:144:GLN:O	55:M9:147:ALA:HB3	2.11	0.50
36:1:660:A:H2	36:1:941:G:N3	2.09	0.50
57:N1:17:ARG:HD3	57:N1:22:HIS:ND1	4.28	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:985:G:C2	1:6:986:G:H1'	2.45	0.50
49:M3:39:ARG:NH2	36:5:686:G:OP2	75.05	0.50
79:Q3:81:SER:HB3	79:Q3:84:ARG:NH2	8.21	0.50
1:2:74:U:H1'	1:2:75:U:H5''	1.93	0.50
1:6:1431:C:O2	1:6:1437:U:N3	2.39	0.50
44:L7:65:ALA:HB1	44:L7:76:TYR:CE1	3.04	0.50
36:5:1152:G:C8	36:5:1152:G:O5'	2.65	0.50
36:5:327:A:H2'	36:5:328:U:H6	1.77	0.50
36:1:1825:G:OP1	74:O8:49:SER:OG	2.27	0.50
40:L3:240:ARG:HG2	40:L3:240:ARG:HH11	1.76	0.50
69:O3:24:ASN:HD21	69:O3:27:VAL:HG23	1.77	0.50
36:1:3148:U:O4	87:1:4107:OHX:N2	2.44	0.50
36:1:2612:U:H2'	36:1:2613:U:O4'	2.11	0.50
41:L4:353:ALA:O	41:L4:356:THR:N	2.42	0.50
37:3:58:C:H2'	37:3:59:U:O4'	2.11	0.50
36:1:703:G:C6	36:1:704:U:C4	3.00	0.50
36:1:922:U:O2	36:1:922:U:H3'	2.11	0.50
22:D0:85:ARG:HD2	31:D9:55:PHE:HE2	1.75	0.50
8:S6:31:ARG:N	8:S6:34:GLN:OE1	3.14	0.50
40:L3:53:MET:HE2	40:L3:77:THR:HG21	2.49	0.50
36:5:1888:U:H2'	36:5:1889:G:O4'	2.10	0.50
11:S9:64:GLU:HA	11:S9:69:ARG:HD3	2.11	0.50
47:M0:52:LEU:O	47:M0:135:ILE:N	2.37	0.50
47:M0:85:PHE:HA	47:M0:139:ARG:O	2.65	0.50
65:N9:14:ARG:HH21	65:N9:18:ARG:CD	4.37	0.50
87:1:4032:OHX:N4	87:1:4044:OHX:N3	2.60	0.50
6:S4:57:ASN:HB3	6:S4:59:ARG:N	2.27	0.50
41:L4:77:VAL:HG23	41:L4:87:GLN:O	2.11	0.50
1:2:1357:A:N6	1:2:1366:U:H3	2.10	0.50
27:D5:39:ALA:O	27:D5:72:GLY:N	2.42	0.50
12:C0:50:THR:HG21	12:C0:57:THR:OG1	2.12	0.50
18:C6:129:PHE:CD2	22:D0:79:TRP:HB2	3.39	0.50
33:E1:121:CYS:HB2	33:E1:141:CYS:SG	2.52	0.50
48:M1:82:ARG:CG	48:M1:112:LEU:HB2	2.41	0.50
1:2:956:C:H2'	1:2:957:G:H8	1.76	0.50
4:S2:207:LEU:HD11	4:S2:211:LEU:HD12	4.55	0.50
55:M9:136:ARG:O	55:M9:140:GLU:HG3	2.11	0.50
63:N7:9:LYS:HB3	63:N7:25:ILE:HD11	4.20	0.50
68:O2:96:ILE:HB	68:O2:121:ASN:ND2	2.26	0.50
36:1:1874:A:OP1	55:M9:17:VAL:HG12	2.12	0.50
62:N6:127:GLU:HA	71:O5:68:GLN:OE1	49.46	0.50
6:S4:120:SER:O	6:S4:164:LEU:HB2	2.26	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:535:G:C2	36:5:555:U:C2	3.00	0.50
50:M4:50:LYS:HD2	50:M4:82:SER:OG	5.15	0.50
56:N0:14:LEU:HD23	56:N0:15:PRO:HD2	1.92	0.50
43:L6:166:LYS:O	43:L6:169:ASP:HB2	2.11	0.50
50:M4:115:PHE:HE1	50:M4:119:GLN:NE2	3.53	0.50
69:O3:43:PHE:HD2	69:O3:44:TYR:CE2	2.28	0.50
41:L4:82:THR:OG1	41:L4:84:ARG:N	4.03	0.50
72:O6:70:ARG:HD3	72:O6:84:LYS:HG2	1.93	0.50
51:M5:150:TRP:CH2	51:M5:151:ILE:HG12	2.46	0.50
51:M5:38:ARG:HH22	51:M5:60:VAL:HG22	1.75	0.50
36:5:1573:G:N1	36:5:1574:C:O2'	2.42	0.50
26:D4:40:LEU:O	26:D4:44:LEU:HB2	2.34	0.50
45:L8:195:SER:O	45:L8:197:VAL:N	2.35	0.50
48:M1:46:VAL:HG22	48:M1:68:HIS:CE1	2.63	0.50
8:S6:139:ASN:HA	8:S6:142:ARG:CG	3.33	0.50
60:N4:6:ASP:OD1	60:N4:31:PHE:HA	2.12	0.50
36:5:3004:C:O2'	36:5:3005:A:H5'	2.11	0.50
15:C3:20:ARG:HE	1:6:862:A:P	353.83	0.50
54:M8:123:THR:OG1	54:M8:126:GLN:HG3	2.10	0.50
76:Q0:103:LEU:CD1	76:Q0:110:CYS:HA	3.05	0.50
45:L8:79:GLN:HG2	45:L8:80:TYR:CD2	4.27	0.50
87:1:4003:OHX:N3	87:1:4171:OHX:N5	2.59	0.50
79:Q3:51:ALA:H	36:5:1795:U:H3	207.59	0.50
36:5:2542:U:C2	36:5:2543:U:C4	3.00	0.50
1:6:505:A:N1	1:6:507:U:N3	2.60	0.50
21:C9:25:GLN:CG	21:C9:27:LYS:HG3	4.84	0.50
36:5:674:G:C6	36:5:789:A:N1	2.79	0.50
25:D3:38:PHE:CE1	1:6:359:A:H1'	332.42	0.50
36:5:1464:G:N2	36:5:1466:G:H3'	2.26	0.50
36:1:1273:A:HO2'	36:1:1274:A:P	2.34	0.50
36:1:2698:G:O2'	57:N1:12:ARG:HG3	2.12	0.50
1:2:1160:A:H2'	1:2:1161:C:C6	2.46	0.50
1:6:1238:A:OP2	87:6:2101:OHX:N1	2.45	0.50
49:M3:18:TRP:CE2	49:M3:19:GLN:HG2	3.16	0.50
36:1:3060:C:H1'	36:1:3332:U:H1'	1.94	0.50
37:3:61:G:OP1	42:L5:276:LYS:HG2	2.12	0.50
36:5:1270:A:H2'	36:5:1271:A:O4'	2.12	0.50
36:5:1045:C:H6	36:5:1045:C:H5''	1.75	0.50
51:M5:63:ARG:HA	51:M5:130:PHE:O	2.31	0.50
36:1:1844:C:O2	73:O7:9:GLY:HA2	2.11	0.50
36:5:850:U:H2'	36:5:851:C:C6	2.46	0.50
1:6:729:G:N7	87:6:2104:OHX:N5	2.59	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2612:U:H2'	36:5:2613:U:O4'	2.12	0.50
36:5:330:G:OP2	87:5:4044:OHX:N1	2.45	0.50
38:8:120:C:H2'	38:8:121:U:O4'	2.11	0.50
36:1:2646:C:H5'	47:M0:119:TRP:CD2	2.46	0.50
75:O9:42:ARG:CZ	75:O9:42:ARG:HB3	2.40	0.50
1:6:1363:U:H3'	1:6:1364:G:C8	2.46	0.50
36:1:803:C:C2	36:1:804:C:C5	3.00	0.50
1:2:1251:U:H4'	33:E1:133:ALA:HB1	1.94	0.50
7:S5:66:GLN:CD	7:S5:66:GLN:H	2.15	0.50
38:4:77:A:O5'	38:4:77:A:H8	1.94	0.50
36:5:869:G:H3'	36:5:870:G:C8	2.46	0.50
40:L3:50:LYS:HE2	40:L3:330:GLY:O	2.11	0.50
36:1:754:G:C2	36:1:779:G:N3	2.79	0.50
36:1:3082:C:H2'	36:1:3083:G:C8	2.46	0.50
36:1:2253:G:N2	36:1:2264:U:C2	2.79	0.50
36:5:1520:G:H2'	36:5:1521:G:H5'	1.93	0.50
47:M0:56:GLU:C	47:M0:131:ILE:HG12	4.45	0.50
47:M0:74:LYS:O	47:M0:78:THR:HG23	2.67	0.50
44:L7:165:ASP:H	44:L7:168:ILE:CD1	4.14	0.50
44:L7:151:ARG:HD2	44:L7:244:ASN:OD1	2.27	0.50
45:L8:77:GLN:HE22	45:L8:167:PRO:HG2	4.15	0.50
45:L8:240:ASN:O	45:L8:242:ALA:N	3.62	0.50
1:6:341:A:H2'	1:6:342:C:C6	2.46	0.50
26:D4:84:LYS:HD3	26:D4:85:PHE:HE2	5.14	0.50
36:1:564:G:H2'	36:1:565:U:O4'	2.12	0.50
1:6:1535:U:H1'	1:6:1536:G:C2	2.47	0.50
20:C8:25:ASN:N	20:C8:25:ASN:OD1	3.23	0.50
27:D5:39:ALA:HB3	27:D5:71:ILE:HD12	6.72	0.50
42:L5:214:ASP:OD2	42:L5:214:ASP:N	3.22	0.50
17:C5:17:TYR:O	17:C5:19:GLY:N	4.06	0.50
21:C9:6:VAL:HG22	21:C9:66:TYR:CE1	2.61	0.50
22:D0:82:TYR:OH	31:D9:44:ARG:HD2	4.72	0.50
5:S3:102:ALA:O	5:S3:104:SER:N	2.44	0.50
5:S3:28:GLU:OE2	12:C0:56:LYS:NZ	3.80	0.50
36:5:1784:G:H2'	36:5:1785:U:O4'	2.12	0.50
3:S1:168:ILE:O	3:S1:172:LEU:HG	2.12	0.50
3:S1:62:LYS:HD2	3:S1:91:VAL:HB	1.93	0.50
19:C7:105:GLN:O	19:C7:108:ASP:N	3.96	0.50
2:S0:11:PRO:HA	2:S0:14:ALA:CB	2.41	0.50
2:S0:5:ALA:O	2:S0:8:ASP:HB2	5.18	0.50
4:S2:133:LYS:HA	4:S2:136:VAL:HG23	2.56	0.50
1:2:128:U:OP1	1:2:178:U:H5	1.94	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:M8:107:THR:HA	36:5:676:G:OP2	135.12	0.50
36:1:1709:C:H2'	36:1:1710:C:H6	1.77	0.50
55:M9:38:ARG:O	55:M9:41:ILE:N	3.40	0.50
38:4:65:A:C2	38:4:96:A:C5	3.00	0.50
1:2:1227:A:H2	14:C2:43:ARG:HG3	1.77	0.50
40:L3:72:VAL:HA	59:N3:88:ARG:O	2.12	0.50
1:2:1458:G:H3'	1:2:1459:C:C5	2.47	0.50
6:S4:117:GLU:O	6:S4:119:ALA:N	3.22	0.50
1:6:72:A:H5'	1:6:73:U:OP2	2.11	0.50
56:N0:26:ARG:HH11	57:N1:150:THR:CG2	2.97	0.50
57:N1:85:LEU:HD12	36:5:2728:G:C8	209.75	0.50
36:5:3261:C:H2'	36:5:3262:U:C6	2.47	0.50
69:O3:42:GLN:HA	69:O3:45:LEU:HG	1.94	0.50
52:M6:127:LEU:N	52:M6:127:LEU:HD23	2.26	0.50
51:M5:44:ARG:HH12	36:5:269:G:P	124.65	0.50
79:Q3:47:VAL:HG22	79:Q3:57:CYS:HB2	1.93	0.50
58:N2:55:THR:OG1	58:N2:66:VAL:HB	3.11	0.50
66:O0:100:ILE:HD12	66:O0:101:LEU:HB2	1.94	0.50
1:2:158:U:H1'	1:2:159:U:OP1	2.11	0.50
40:L3:136:LYS:O	40:L3:139:GLN:HG3	2.12	0.50
49:M3:87:ALA:O	49:M3:90:ALA:N	2.44	0.50
45:L8:156:ASP:CG	45:L8:183:LYS:HG2	3.24	0.50
40:L3:41:VAL:HA	40:L3:185:GLY:H	1.76	0.50
24:D2:101:TYR:HB2	24:D2:129:VAL:HG23	2.64	0.50
36:5:172:G:C6	36:5:247:C:N4	2.79	0.50
46:L9:170:LYS:HE3	36:5:2902:A:OP1	318.28	0.50
1:2:702:G:O6	1:2:737:A:N6	2.44	0.50
52:M6:35:VAL:HB	52:M6:104:VAL:HG22	1.93	0.50
17:C5:87:PRO:O	17:C5:90:ILE:HG13	3.13	0.50
10:S8:151:LYS:HZ3	10:S8:152:ILE:HD12	1.75	0.50
36:5:733:G:H5''	36:5:734:C:OP2	2.12	0.50
74:O8:17:ARG:HH22	36:5:1824:U:H4'	138.27	0.50
24:D2:15:ASN:ND2	24:D2:71:LYS:HA	2.27	0.50
68:O2:66:LEU:HD22	68:O2:70:GLY:O	2.73	0.50
55:M9:93:VAL:O	55:M9:94:VAL:C	2.67	0.50
36:5:2427:U:O2	36:5:2603:G:C2	2.64	0.50
34:SR:167:VAL:HG23	34:SR:183:LEU:HB2	5.96	0.50
74:O8:41:THR:HG21	74:O8:62:ALA:HB1	2.33	0.50
36:1:1666:G:C4	36:1:1784:G:N2	2.80	0.50
36:1:2697:A:C2	36:1:2698:G:C6	2.99	0.50
20:C8:16:ARG:NH2	20:C8:21:ASN:OD1	2.40	0.50
1:2:484:C:H41	1:2:503:G:H22	1.58	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:721:U:O2'	1:6:722:G:O4'	2.30	0.50
36:1:2107:A:C2	36:1:3344:A:C8	2.95	0.50
57:N1:17:ARG:HG2	57:N1:22:HIS:CG	2.46	0.50
48:M1:37:LEU:HD12	48:M1:67:VAL:HG13	5.23	0.50
36:1:1520:G:N2	36:1:1521:G:N3	2.59	0.50
36:5:2755:C:O2'	36:5:2756:C:H5'	2.10	0.50
20:C8:78:HIS:HB2	20:C8:79:TYR:HD2	1.75	0.50
36:1:559:A:OP1	36:1:559:A:H4'	2.12	0.50
87:5:4050:OHX:N3	87:5:4194:OHX:N4	2.59	0.50
36:5:763:G:H2'	36:5:764:U:C6	2.47	0.50
36:1:1539:A:C4	36:1:1583:A:C2	3.00	0.50
42:L5:143:LYS:HA	42:L5:172:TYR:HB3	1.93	0.50
36:1:777:U:O4	87:1:4005:OHX:N2	2.44	0.50
36:1:422:A:C2	36:1:2363:A:H4'	2.47	0.50
62:N6:86:THR:HG22	62:N6:96:PRO:HA	2.83	0.50
1:6:939:A:H2'	1:6:940:A:O4'	2.12	0.50
36:1:104:G:H4'	36:1:698:U:O2	2.11	0.50
51:M5:197:LEU:HG	51:M5:199:LEU:HG	1.94	0.50
1:6:28:A:H2'	1:6:29:U:O4'	2.11	0.50
76:Q0:96:CYS:HA	76:Q0:121:LEU:CD2	2.93	0.50
56:N0:115:ARG:HH11	36:5:1295:G:HO2'	297.25	0.50
36:1:1847:A:C5	53:M7:130:TYR:CD2	2.99	0.50
11:S9:87:SER:HB3	11:S9:90:LYS:HB2	6.01	0.50
47:M0:89:VAL:HG22	47:M0:136:PHE:CE1	2.87	0.50
55:M9:166:ASN:OD1	55:M9:170:ARG:NH2	2.95	0.50
20:C8:28:ILE:O	20:C8:32:LEU:HD12	2.11	0.50
36:5:1472:U:C2	36:5:1473:G:C8	3.00	0.50
36:1:317:A:C2	36:1:318:A:C4	2.99	0.50
16:C4:29:HIS:CB	16:C4:41:ARG:HG3	2.36	0.50
4:S2:106:ASP:OD1	4:S2:108:ASN:N	2.41	0.50
1:6:793:A:H3'	1:6:794:U:H5'	1.93	0.50
63:N7:75:VAL:HG21	63:N7:80:LEU:HD21	2.41	0.50
63:N7:15:ARG:HD2	63:N7:79:HIS:CD2	2.47	0.50
71:O5:6:ALA:O	71:O5:9:LEU:HB2	2.12	0.50
14:C2:97:LEU:HA	14:C2:100:TRP:CE3	2.37	0.50
50:M4:20:VAL:HG23	50:M4:66:THR:HG1	3.95	0.50
18:C6:143:ARG:HH12	35:SM:84:LYS:HG3	1.77	0.50
36:5:3091:A:C4	36:5:3094:A:C8	2.98	0.50
9:S7:16:LEU:O	9:S7:20:VAL:HG23	2.12	0.50
9:S7:58:LEU:HB2	9:S7:90:VAL:HG22	1.92	0.50
1:2:1584:G:C8	18:C6:122:ARG:HB3	2.47	0.50
34:SR:240:VAL:HA	34:SR:255:ALA:O	2.11	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
72:O6:60:LEU:HD22	72:O6:64:SER:HB3	1.93	0.50
40:L3:162:VAL:O	40:L3:178:LEU:HD12	2.37	0.50
1:6:1146:G:C6	1:6:1147:A:C5	3.00	0.50
8:S6:67:VAL:HG12	8:S6:73:ILE:HD11	2.85	0.50
22:D0:58:LEU:HD12	22:D0:88:LYS:CD	2.41	0.50
58:N2:50:LEU:O	58:N2:52:ASN:N	2.45	0.50
36:5:288:C:H2'	36:5:289:A:C8	2.46	0.50
51:M5:57:GLN:HB3	38:8:143:U:H4'	94.55	0.50
33:E1:100:LEU:HD12	33:E1:102:VAL:HA	7.60	0.50
36:5:2130:G:OP1	87:5:4182:OHX:N5	2.45	0.50
36:5:2255:A:OP2	36:5:2261:G:N1	2.40	0.50
1:2:284:G:N7	8:S6:188:ARG:NH1	2.60	0.50
36:5:2959:C:C2'	36:5:2960:C:H5'	2.42	0.50
48:M1:139:THR:HG22	48:M1:146:GLY:O	2.12	0.50
56:N0:30:PHE:CD1	56:N0:103:VAL:HG21	2.46	0.50
1:6:103:A:OP1	87:6:2071:OHX:N4	2.45	0.50
45:L8:37:GLY:HA3	36:5:2550:U:C6	211.40	0.50
63:N7:54:THR:H	63:N7:57:HIS:HB2	1.75	0.50
10:S8:70:GLU:HB3	10:S8:112:TRP:CH2	4.23	0.50
1:2:609:U:C4	25:D3:26:GLU:HG3	2.46	0.50
36:1:412:G:OP1	53:M7:62:ARG:NH1	2.44	0.50
1:2:1147:A:O2'	1:2:1635:A:H2'	2.11	0.50
50:M4:58:ILE:HD11	50:M4:62:GLN:HG3	2.77	0.50
36:5:970:A:H2'	36:5:971:G:C8	2.46	0.50
42:L5:188:GLU:O	42:L5:188:GLU:HG3	2.12	0.50
36:5:2530:G:H2'	36:5:2531:C:H5'	1.94	0.50
36:1:3220:G:C5	36:1:3266:G:N2	2.79	0.50
18:C6:81:ILE:O	18:C6:84:ALA:N	3.35	0.50
36:5:3282:U:H5'	36:5:3283:U:OP2	2.12	0.50
36:5:2505:U:H2'	36:5:2506:U:C5	2.47	0.50
15:C3:132:VAL:O	15:C3:134:VAL:HG12	3.21	0.50
17:C5:57:MET:O	17:C5:60:LEU:N	3.92	0.50
87:5:4028:OHX:N3	87:5:4075:OHX:N4	2.59	0.50
1:2:1074:G:O2'	1:2:1075:C:H5'	2.11	0.50
49:M3:25:HIS:CD2	51:M5:200:TRP:CD2	3.00	0.50
36:1:1000:C:C5	36:1:1045:C:C5	3.00	0.50
47:M0:53:VAL:HG12	47:M0:54:SER:O	3.53	0.50
6:S4:10:LYS:O	6:S4:13:ALA:N	2.41	0.50
1:2:1629:G:C5	1:2:1630:U:C5	2.99	0.50
40:L3:4:ARG:HH11	40:L3:4:ARG:CB	3.92	0.50
1:2:1519:U:H3'	1:2:1520:U:H2'	1.93	0.50
1:6:273:G:H8	1:6:273:G:O5'	1.94	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2875:U:O2	36:5:2875:U:H2'	2.10	0.50
1:2:361:C:H5'	1:2:361:C:H6	1.76	0.50
5:S3:95:GLY:HA3	5:S3:129:SER:OG	2.29	0.50
1:2:1739:C:H2'	1:2:1740:A:O4'	2.11	0.50
36:1:3050:U:H2'	36:1:3051:U:H6	1.76	0.50
40:L3:10:ARG:HD3	40:L3:11:HIS:O	2.11	0.50
46:L9:17:THR:HG22	50:M4:5:SER:N	4.56	0.50
36:5:1498:A:C6	36:5:1499:C:C4	2.99	0.50
53:M7:23:ARG:O	53:M7:86:LYS:NZ	2.58	0.50
1:2:935:U:O2'	1:2:936:G:H5'	2.12	0.50
36:1:1038:C:N3	36:1:1039:U:C5	2.80	0.50
47:M0:31:ILE:HB	47:M0:66:GLU:HB2	1.94	0.50
36:5:1343:A:C2	36:5:1362:G:C2	2.99	0.50
10:S8:164:ARG:O	10:S8:165:LEU:HD23	2.26	0.50
73:O7:15:SER:HG	36:5:817:A:H8	140.82	0.50
1:2:1581:C:O2'	1:2:1582:U:H5'	2.11	0.50
1:6:1541:G:C6	1:6:1542:G:N1	2.80	0.50
30:D8:11:LYS:HD3	30:D8:33:LEU:HD21	1.91	0.50
30:D8:42:ARG:NH1	30:D8:61:ARG:HE	7.23	0.50
36:5:1456:A:N1	36:5:1476:G:O2'	2.35	0.50
42:L5:108:ARG:O	42:L5:111:GLN:HB3	2.12	0.50
5:S3:79:TYR:CD2	5:S3:84:ILE:HG21	2.46	0.50
1:2:1274:C:C4	35:SM:96:ARG:HG2	2.47	0.50
1:2:1118:G:H2'	1:2:1119:G:H8	1.77	0.50
16:C4:102:LEU:HD22	16:C4:102:LEU:O	3.43	0.50
16:C4:24:ASN:O	16:C4:25:ASP:HB2	2.11	0.50
4:S2:228:ASN:HD22	23:D1:1:MET:HA	1.77	0.50
1:2:178:U:O2'	1:2:179:A:OP2	2.27	0.50
14:C2:69:ALA:HA	14:C2:71:ILE:HG23	2.49	0.50
40:L3:65:SER:C	40:L3:67:PHE:N	2.76	0.50
1:2:1459:C:C4	20:C8:139:LYS:HG3	2.46	0.50
56:N0:12:ARG:HG3	56:N0:13:ARG:O	2.12	0.50
60:N4:53:VAL:O	60:N4:57:LYS:HB2	3.28	0.50
40:L3:57:VAL:O	40:L3:357:LYS:HB2	2.12	0.50
69:O3:44:TYR:O	69:O3:71:VAL:HG11	2.12	0.50
9:S7:155:ASP:OD2	9:S7:156:SER:N	2.44	0.50
1:2:1006:C:OP1	87:2:2035:OHX:N5	2.45	0.50
46:L9:27:VAL:HG21	46:L9:78:MET:HE3	2.95	0.50
52:M6:181:ALA:O	52:M6:184:THR:HG22	2.11	0.50
49:M3:48:PRO:HB2	71:O5:117:ALA:HB2	1.94	0.50
49:M3:113:VAL:O	49:M3:116:LEU:HB2	2.12	0.50
36:5:3036:G:O6	87:5:4046:OHX:N1	2.43	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:580:A:C6	1:2:583:C:N3	2.80	0.50
38:4:64:U:P	71:O5:49:LYS:HZ3	2.35	0.50
38:8:41:A:H61	38:8:103:G:H1'	1.76	0.50
4:S2:189:GLN:O	4:S2:192:GLY:N	2.38	0.50
41:L4:290:ILE:HD12	54:M8:35:PHE:CD2	4.51	0.50
46:L9:40:HIS:ND1	36:5:3124:G:H5'	312.16	0.50
5:S3:113:LEU:HD21	5:S3:117:ARG:NE	2.27	0.50
1:6:104:A:H2	1:6:106:U:O4	1.94	0.50
36:5:3189:G:C5	36:5:3190:C:C5	2.99	0.50
47:M0:125:LEU:N	47:M0:125:LEU:HD23	2.98	0.50
45:L8:97:TYR:CE1	45:L8:130:TYR:HB3	2.46	0.50
69:O3:93:THR:O	69:O3:95:GLY:N	2.45	0.50
61:N5:116:PRO:HG3	36:5:1522:U:C5	100.79	0.50
1:2:526:A:C6	1:2:527:A:C5	2.99	0.50
1:2:526:A:H2'	1:2:527:A:O4'	2.12	0.50
41:L4:216:VAL:HG23	41:L4:217:LYS:N	2.27	0.50
1:2:726:C:H2'	1:2:727:U:C4	2.47	0.50
36:1:2630:C:C4	36:1:2649:A:C2	3.00	0.50
36:5:1666:G:H2'	36:5:1667:A:C8	2.47	0.50
36:1:593:C:C4	36:1:594:U:C5	3.00	0.50
49:M3:188:ARG:NE	49:M3:192:GLU:OE2	7.62	0.50
44:L7:231:ASN:OD1	44:L7:233:GLU:HG2	2.46	0.50
24:D2:40:VAL:HG13	24:D2:43:LYS:HE2	1.94	0.50
8:S6:182:GLN:O	8:S6:182:GLN:HG3	2.12	0.50
36:1:1055:A:H4'	37:3:100:C:O2	2.12	0.50
1:6:91:G:H2'	1:6:92:A:C8	2.46	0.50
14:C2:81:ASP:O	14:C2:83:GLU:N	3.04	0.50
1:2:1778:G:C2	1:2:1779:U:C4	2.99	0.50
56:N0:47:LYS:O	56:N0:48:LEU:HD23	2.12	0.50
20:C8:48:LYS:HD3	21:C9:35:ASP:OD2	2.12	0.50
36:5:1009:A:C2	36:5:1042:U:O2	2.65	0.50
37:3:91:G:C6	37:3:92:A:C6	3.00	0.50
1:6:539:G:H8	1:6:539:G:H5''	1.77	0.50
36:1:3071:U:H2'	36:1:3072:C:C6	2.46	0.50
36:5:92:G:OP2	36:5:93:C:H5''	2.12	0.50
47:M0:157:TYR:CE1	36:5:2836:C:H4'	312.47	0.50
47:M0:83:ASP:O	47:M0:85:PHE:N	2.37	0.50
36:1:597:G:C4	36:1:598:A:C8	3.00	0.50
6:S4:57:ASN:HB2	6:S4:60:GLU:CB	2.42	0.50
36:1:339:C:P	41:L4:195:ARG:NH1	2.85	0.50
41:L4:11:LEU:HD11	41:L4:155:ASP:HB2	3.34	0.50
41:L4:179:LEU:HA	41:L4:182:LEU:HD22	1.92	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:L6:56:LYS:NZ	43:L6:99:GLU:O	2.74	0.50
18:C6:137:ARG:HG3	18:C6:137:ARG:NH1	2.69	0.50
7:S5:143:ARG:HA	7:S5:167:ARG:HD3	1.99	0.50
7:S5:51:VAL:O	7:S5:65:ARG:NH2	2.44	0.50
44:L7:25:GLN:N	44:L7:28:ALA:HB3	2.24	0.50
36:1:3087:A:OP2	87:1:4180:OHX:N5	2.44	0.50
3:S1:97:LEU:CD1	3:S1:98:THR:H	2.24	0.50
2:S0:140:ASN:HD21	4:S2:60:SER:HB3	1.76	0.50
48:M1:7:ASN:OD1	48:M1:10:ARG:HD2	2.11	0.50
55:M9:102:LEU:HB3	55:M9:138:LEU:HD12	3.85	0.50
70:O4:85:VAL:HG13	70:O4:88:ARG:CG	2.42	0.50
36:1:1603:A:P	55:M9:38:ARG:NH1	2.85	0.50
21:C9:94:ILE:HG23	21:C9:95:ASP:O	2.11	0.50
56:N0:111:ALA:HA	56:N0:116:ALA:H	2.37	0.50
44:L7:79:ALA:HB2	57:N1:138:SER:N	2.15	0.50
57:N1:38:ASP:OD2	57:N1:98:HIS:HE1	5.51	0.50
18:C6:79:TYR:HA	18:C6:82:ARG:HD3	1.93	0.50
29:D7:56:CYS:HB3	29:D7:59:CYS:O	2.12	0.50
1:2:926:A:H5''	1:2:1016:C:O2'	2.11	0.50
39:L2:103:PRO:C	39:L2:105:GLY:H	2.15	0.50
78:Q2:47:GLN:CD	78:Q2:54:THR:HG23	2.62	0.50
26:D4:131:ARG:NH2	1:6:153:G:OP2	323.24	0.50
36:5:2599:U:H2'	36:5:2600:C:H6	1.76	0.50
36:5:58:G:H1'	36:5:61:A:H5'	1.92	0.50
39:L2:205:ASN:O	39:L2:208:ASP:N	2.56	0.50
26:D4:27:VAL:HG12	26:D4:29:HIS:HD2	2.69	0.50
53:M7:2:ALA:HB1	53:M7:4:TYR:CE2	2.47	0.50
36:5:170:G:H1'	36:5:250:U:O2	2.11	0.50
18:C6:15:SER:OG	18:C6:72:GLY:N	4.71	0.50
36:5:845:G:N2	36:5:848:A:OP2	2.44	0.50
36:5:846:A:C2	36:5:847:A:H1'	2.47	0.50
38:8:15:G:H8	38:8:15:G:O5'	1.95	0.50
22:D0:101:LYS:O	22:D0:104:THR:OG1	2.30	0.50
36:5:1714:A:H4'	36:5:1715:A:OP2	2.11	0.50
10:S8:138:ASN:HA	10:S8:141:ARG:HD2	1.93	0.50
36:1:15:C:O2'	61:N5:40:LEU:HD23	2.11	0.50
70:O4:25:THR:HB	70:O4:26:PRO:HD2	1.93	0.50
25:D3:114:LYS:O	25:D3:114:LYS:HG2	4.10	0.50
36:1:1495:U:H5	36:1:1835:A:C2	2.29	0.50
36:5:2857:C:O2'	36:5:2858:U:H5'	2.11	0.50
58:N2:36:TYR:O	58:N2:40:HIS:ND1	2.97	0.50
36:5:2602:G:O6	87:5:3899:OHX:N1	2.45	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1273:A:O2'	36:1:1274:A:OP1	2.24	0.50
45:L8:178:ALA:HA	45:L8:222:PHE:CE2	2.66	0.50
36:1:1259:A:N6	36:1:1260:A:C6	2.79	0.50
49:M3:18:TRP:O	49:M3:21:ARG:N	3.38	0.50
36:5:1000:C:C2	36:5:1045:C:N4	2.80	0.50
36:1:3241:G:C5	36:1:3245:A:C2	3.00	0.50
36:5:276:U:H2'	36:5:277:G:C8	2.47	0.50
1:2:629:U:H1'	1:2:971:A:N1	2.27	0.50
1:2:164:A:H2'	1:2:165:G:O4'	2.12	0.50
1:2:1755:A:C8	1:2:1755:A:H3'	2.47	0.50
20:C8:109:LEU:O	20:C8:112:ASP:N	3.07	0.50
36:5:1889:G:N3	36:5:1889:G:H2'	2.27	0.50
1:2:478:A:O4'	11:S9:127:VAL:HG21	2.11	0.50
36:1:1336:U:OP2	87:1:4044:OHX:N4	2.45	0.50
87:1:4032:OHX:N6	87:1:4044:OHX:N3	2.60	0.50
45:L8:241:LYS:HB2	36:5:2586:G:N7	184.69	0.50
51:M5:22:LEU:O	51:M5:25:VAL:N	3.44	0.50
45:L8:165:PHE:CZ	51:M5:3:ALA:HB1	2.47	0.50
5:S3:206:VAL:HG11	19:C7:12:ALA:HB2	1.94	0.50
36:1:1255:C:H2'	36:1:1256:G:O4'	2.11	0.50
36:1:565:U:H2'	36:1:566:G:C8	2.46	0.50
1:2:1369:U:OP1	21:C9:119:LYS:NZ	2.44	0.50
18:C6:127:LYS:HA	18:C6:134:ALA:HA	1.93	0.50
36:1:3088:G:H5'	40:L3:313:HIS:HE1	1.76	0.50
67:O1:30:PRO:O	67:O1:33:VAL:N	2.45	0.50
61:N5:96:LYS:HG3	61:N5:107:VAL:HG11	1.94	0.50
42:L5:154:THR:CG2	42:L5:157:ALA:HB2	4.50	0.50
15:C3:46:THR:OG1	15:C3:49:GLN:N	2.26	0.50
29:D7:19:HIS:HB3	29:D7:22:LYS:HB2	1.94	0.50
8:S6:12:SER:HB2	8:S6:124:LEU:HA	1.93	0.50
16:C4:50:ALA:O	16:C4:51:ASP:HB2	3.48	0.50
16:C4:18:ARG:HG3	16:C4:82:LYS:HB3	4.49	0.50
16:C4:84:ARG:NH1	16:C4:85:ALA:O	2.45	0.50
2:S0:140:ASN:HD22	4:S2:62:PRO:HD3	4.93	0.50
2:S0:41:ARG:HE	2:S0:45:VAL:HG21	2.25	0.50
4:S2:226:THR:OG1	4:S2:228:ASN:HB2	5.64	0.50
36:1:2653:C:OP2	78:Q2:88:CYS:HA	2.12	0.50
36:5:1635:G:N2	36:5:1637:A:H3'	2.26	0.50
55:M9:99:LEU:HD22	55:M9:103:ARG:HG3	6.56	0.50
35:SM:65:THR:HA	35:SM:70:ASN:HD21	2.62	0.50
1:2:1461:C:H1'	35:SM:76:VAL:HG11	1.93	0.50
36:1:1174:G:H21	52:M6:87:MET:HE2	1.77	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1648:A:H2'	1:6:1649:G:H8	1.77	0.50
6:S4:124:GLY:HA2	6:S4:142:HIS:HE1	1.86	0.50
6:S4:176:ASP:HB2	6:S4:179:LYS:HD2	1.93	0.50
6:S4:195:ILE:HG22	6:S4:196:VAL:N	2.81	0.50
50:M4:85:TRP:CD1	50:M4:85:TRP:C	3.00	0.50
36:5:3245:A:H2	36:5:3246:G:N3	2.10	0.50
40:L3:301:THR:O	40:L3:303:LYS:N	3.41	0.50
34:SR:81:LEU:HB3	34:SR:113:VAL:HG21	1.93	0.50
34:SR:36:ALA:HA	34:SR:42:LEU:HA	1.94	0.50
41:L4:60:THR:HG22	41:L4:61:SER:N	2.63	0.50
26:D4:126:ALA:O	26:D4:129:VAL:HB	3.71	0.50
36:5:1233:G:O2'	36:5:1234:G:H5'	2.12	0.50
1:2:1469:A:H2'	1:2:1470:C:O4'	2.12	0.50
40:L3:164:THR:HG23	40:L3:177:HIS:HB2	1.93	0.50
1:6:1764:C:C4	1:6:1767:G:C4	2.99	0.50
70:O4:76:TYR:HD1	36:5:1805:C:HO2'	190.43	0.50
36:5:282:G:H2'	36:5:286:U:H5'	1.94	0.50
51:M5:136:ASP:OD2	51:M5:138:GLN:HG2	2.68	0.50
51:M5:57:GLN:OE1	36:5:144:A:H1'	96.17	0.50
33:E1:98:VAL:HG22	33:E1:100:LEU:HD13	1.94	0.50
1:2:31:C:N4	1:2:32:U:O4	2.45	0.50
1:2:332:U:N3	1:2:335:U:OP2	2.37	0.50
70:O4:59:PRO:O	36:5:1802:C:O2'	157.77	0.50
14:C2:77:GLY:HA2	14:C2:80:ASN:HB2	1.93	0.50
36:1:1573:G:N1	36:1:1574:C:H1'	2.27	0.50
36:5:1596:C:H2'	36:5:1597:C:H6	1.73	0.50
5:S3:113:LEU:HD22	5:S3:114:ALA:N	2.23	0.50
1:6:1:U:O2	1:6:369:A:C8	2.65	0.50
78:Q2:71:ARG:HG3	78:Q2:80:ARG:HD3	1.94	0.50
1:6:609:U:H2'	1:6:609:U:O2	2.11	0.50
1:2:1040:G:H1	1:2:1078:C:H42	1.59	0.50
1:6:250:C:H5'	1:6:250:C:H6	1.77	0.50
1:2:839:U:C4	1:2:840:U:C5	2.99	0.50
1:6:1616:G:H2'	1:6:1617:U:O4'	2.12	0.50
52:M6:65:ASN:OD1	52:M6:66:LYS:N	2.45	0.50
1:6:983:A:N1	1:6:1019:A:C6	2.80	0.50
36:1:1587:A:C2	36:1:1590:G:C8	3.00	0.50
19:C7:76:GLU:HB3	19:C7:79:GLU:HB2	1.93	0.50
17:C5:77:ARG:HB3	17:C5:102:PHE:CD1	2.78	0.50
55:M9:56:THR:OG1	36:5:1873:U:OP1	148.71	0.50
1:6:23:G:C6	1:6:24:U:C4	3.00	0.50
64:N8:61:PHE:O	64:N8:62:HIS:HB3	2.29	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:L7:147:LEU:HD13	44:L7:205:PHE:CE1	4.18	0.50
1:6:206:A:H1'	1:6:262:U:C2	2.47	0.50
36:5:1741:A:H2'	36:5:1742:U:O4'	2.12	0.50
37:7:108:A:O5'	37:7:108:A:H8	1.95	0.50
45:L8:84:ARG:NH1	45:L8:84:ARG:HB3	2.27	0.50
36:5:623:U:O4	87:5:4117:OHX:N6	2.45	0.50
43:L6:75:PRO:HD2	43:L6:77:ARG:HD2	3.94	0.50
52:M6:62:THR:HG21	52:M6:68:ARG:HG3	2.10	0.49
53:M7:127:ARG:O	53:M7:139:TYR:N	2.61	0.49
53:M7:44:ALA:O	53:M7:48:LEU:HB2	3.88	0.49
28:D6:35:ALA:O	28:D6:36:ILE:HG22	2.12	0.49
11:S9:135:ALA:HA	11:S9:139:GLN:O	3.25	0.49
11:S9:37:LYS:HG3	11:S9:38:ASN:N	2.26	0.49
47:M0:48:LEU:HD23	47:M0:178:ARG:HH12	2.43	0.49
87:5:4087:OHX:N6	87:7:219:OHX:N3	2.59	0.49
26:D4:76:TYR:CE2	26:D4:85:PHE:HB2	2.47	0.49
1:2:1389:C:H4'	19:C7:49:LYS:HA	1.94	0.49
19:C7:60:ARG:NH2	19:C7:66:VAL:HG13	2.26	0.49
5:S3:189:MET:HG3	5:S3:189:MET:O	3.18	0.49
21:C9:45:MET:SD	21:C9:46:PRO:HD3	4.80	0.49
46:L9:101:VAL:CG2	46:L9:114:VAL:HG22	2.87	0.49
12:C0:35:ILE:HG21	12:C0:42:VAL:HG21	5.24	0.49
33:E1:132:LEU:HD22	33:E1:141:CYS:HB2	3.09	0.49
1:2:625:C:N3	1:2:626:U:C4	2.80	0.49
1:6:619:A:N3	1:6:1141:G:H1'	2.26	0.49
2:S0:13:ASP:O	2:S0:16:LEU:N	2.69	0.49
2:S0:7:PHE:HE2	2:S0:183:ARG:HE	1.59	0.49
2:S0:182:LEU:O	2:S0:186:GLY:HA3	2.12	0.49
63:N7:134:LEU:HD22	63:N7:135:ARG:N	2.26	0.49
63:N7:23:VAL:HB	63:N7:43:VAL:HB	1.94	0.49
66:O0:27:TYR:CD1	66:O0:52:ARG:HD3	2.86	0.49
68:O2:82:LEU:HD11	68:O2:112:ALA:HB2	2.63	0.49
71:O5:7:TYR:C	71:O5:9:LEU:N	2.66	0.49
71:O5:82:ALA:HB1	71:O5:84:LYS:HD2	2.73	0.49
14:C2:52:LEU:HB3	14:C2:78:LEU:HB3	1.94	0.49
1:6:1213:G:HO2'	1:6:1244:A:H62	1.55	0.49
6:S4:47:PHE:CD2	6:S4:90:ILE:HD12	2.47	0.49
56:N0:44:PHE:HE1	56:N0:122:HIS:ND1	3.34	0.49
9:S7:164:TYR:CZ	9:S7:165:LYS:HE2	3.08	0.49
1:2:990:C:O3'	16:C4:129:LYS:HA	2.12	0.49
16:C4:136:ARG:NH1	16:C4:136:ARG:HG3	2.27	0.49
39:L2:108:PRO:HG2	79:Q3:86:LEU:HD13	1.94	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
66:O0:17:VAL:HG22	66:O0:100:ILE:HG12	1.94	0.49
87:1:3976:OHX:N3	87:1:4154:OHX:N4	2.60	0.49
8:S6:69:LEU:N	8:S6:69:LEU:HD22	2.27	0.49
53:M7:169:THR:OG1	53:M7:172:GLN:HG3	2.12	0.49
1:6:747:C:H2'	1:6:748:U:C6	2.47	0.49
57:N1:102:ARG:HH11	57:N1:102:ARG:HG3	1.76	0.49
1:6:629:U:C4	1:6:630:A:N7	2.80	0.49
36:1:2183:A:H5''	39:L2:7:ASN:HB2	1.94	0.49
26:D4:60:PHE:CE1	26:D4:71:GLY:HA3	2.94	0.49
1:6:1268:G:H1'	1:6:1448:G:H5''	1.94	0.49
17:C5:96:ILE:O	17:C5:120:SER:OG	2.19	0.49
36:5:1736:G:C6	36:5:1737:U:C4	3.01	0.49
36:1:2309:A:N3	36:1:2961:G:O2'	2.39	0.49
34:SR:129:LYS:HG2	34:SR:149:ASP:O	2.12	0.49
36:1:3106:A:H2'	36:1:3107:U:O4'	2.12	0.49
1:6:1294:G:C2	1:6:1322:A:C5	2.99	0.49
10:S8:142:LYS:NZ	1:6:187:G:N7	275.90	0.49
36:1:1794:G:O2'	36:1:1795:U:H5'	2.12	0.49
40:L3:339:ARG:NH1	40:L3:342:LEU:HD21	2.27	0.49
38:4:143:U:H2'	38:4:144:G:O4'	2.10	0.49
36:5:3205:G:H2'	36:5:3206:C:C5	2.47	0.49
36:1:3299:A:N6	36:1:3315:G:H1	2.07	0.49
1:2:1219:A:N6	1:2:1264:G:O2'	2.43	0.49
36:1:2206:G:H1	36:1:2237:C:N4	2.06	0.49
58:N2:33:TYR:CE1	58:N2:37:LEU:HD21	3.92	0.49
36:1:3284:G:C6	36:1:3285:C:C4	3.00	0.49
36:1:1351:U:O2'	36:1:1352:A:H5'	2.12	0.49
36:5:128:G:C2	36:5:129:U:C2	3.00	0.49
21:C9:42:GLY:HA2	21:C9:84:LYS:HB2	2.67	0.49
36:1:1094:U:H1'	36:1:1096:U:H2'	1.94	0.49
36:5:1346:G:C2	36:5:1359:C:C2	3.00	0.49
36:5:3042:U:OP2	36:5:3092:C:N4	2.44	0.49
36:5:592:A:C6	36:5:593:C:C4	3.00	0.49
36:1:877:C:H1'	36:1:882:A:N6	2.27	0.49
16:C4:13:VAL:HG23	16:C4:77:THR:HG23	5.47	0.49
36:1:602:A:H2'	36:1:603:A:C8	2.46	0.49
36:5:1087:G:N7	87:5:4106:OHX:N4	2.59	0.49
1:6:969:C:H4'	1:6:1104:U:O2'	2.11	0.49
36:5:575:G:N1	36:5:576:C:C4	2.80	0.49
53:M7:20:SER:C	53:M7:21:TYR:HD2	2.15	0.49
36:5:3227:A:H2'	36:5:3228:C:H5'	1.95	0.49
36:5:763:G:C4	36:5:764:U:C5	3.00	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1570:U:O2	36:1:1571:A:H1'	2.12	0.49
37:3:100:C:OP2	56:N0:52:LYS:NZ	2.44	0.49
34:SR:173:GLY:O	34:SR:176:LYS:N	4.28	0.49
1:2:535:A:C2	1:2:536:C:H1'	2.47	0.49
36:1:3115:C:O2	87:1:4025:OHX:N1	2.44	0.49
36:1:1655:G:P	70:O4:40:THR:HG1	2.35	0.49
1:2:26:A:C4	1:2:27:U:C5	3.00	0.49
36:1:2579:G:O6	87:1:3927:OHX:N2	2.45	0.49
1:6:109:G:H2'	1:6:110:U:O4'	2.12	0.49
68:O2:4:LEU:HD22	68:O2:90:LYS:O	4.20	0.49
45:L8:107:GLU:O	45:L8:111:LYS:HG3	2.12	0.49
9:S7:5:GLN:HE22	9:S7:22:GLN:HA	6.66	0.49
36:5:3192:U:H2'	36:5:3193:C:C6	2.46	0.49
46:L9:49:ASN:OD1	46:L9:51:GLN:N	5.11	0.49
51:M5:75:VAL:O	36:5:2166:A:H5'	157.16	0.49
53:M7:46:LYS:O	53:M7:50:GLN:HB2	2.73	0.49
28:D6:7:SER:OG	28:D6:7:SER:O	2.98	0.49
11:S9:109:LEU:O	11:S9:112:GLN:N	4.01	0.49
44:L7:165:ASP:H	44:L7:168:ILE:HD11	4.10	0.49
1:6:116:U:H2'	1:6:117:U:H6	1.77	0.49
6:S4:54:TYR:O	26:D4:22:GLN:NE2	2.66	0.49
41:L4:261:VAL:HG12	41:L4:262:TRP:CD1	2.54	0.49
54:M8:50:LYS:O	54:M8:52:LEU:N	2.45	0.49
1:2:1165:G:C6	1:2:1166:A:C6	3.00	0.49
1:6:1536:G:C2	1:6:1538:U:C2	2.99	0.49
7:S5:90:ILE:HD11	7:S5:130:ILE:HG13	1.94	0.49
67:O1:53:PRO:O	67:O1:57:GLN:N	2.45	0.49
36:1:2689:A:C8	36:1:2702:A:C6	3.00	0.49
12:C0:61:TRP:CD1	31:D9:23:VAL:HG13	2.47	0.49
5:S3:179:GLN:OE1	5:S3:180:GLY:N	5.41	0.49
15:C3:118:ILE:O	15:C3:121:ARG:N	2.85	0.49
71:O5:101:THR:HG23	71:O5:104:GLN:CB	2.42	0.49
16:C4:30:VAL:O	16:C4:39:ILE:N	2.42	0.49
4:S2:60:SER:HB2	23:D1:15:ARG:NH2	2.27	0.49
68:O2:111:ARG:O	68:O2:114:ALA:HB3	2.12	0.49
71:O5:7:TYR:C	71:O5:9:LEU:H	2.16	0.49
17:C5:127:ARG:O	17:C5:128:HIS:HB2	3.80	0.49
6:S4:142:HIS:CG	6:S4:143:ASP:N	3.42	0.49
35:SM:83:LYS:HE3	1:6:1190:C:N3	341.70	0.49
7:S5:73:THR:HG23	18:C6:114:ARG:HB3	4.56	0.49
52:M6:136:THR:HG22	52:M6:137:THR:N	3.24	0.49
36:5:354:U:H5"	36:5:355:A:OP2	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:136:ILE:HD12	39:L2:136:ILE:N	2.27	0.49
36:5:706:A:H8	36:5:706:A:O5'	1.95	0.49
36:1:2131:A:H61	79:Q3:18:TYR:CA	2.25	0.49
36:1:2277:C:H5'	36:1:2317:A:H4'	1.93	0.49
41:L4:67:THR:OG1	36:5:2402:A:H2'	174.02	0.49
46:L9:115:ARG:O	46:L9:116:ASN:HB2	3.54	0.49
48:M1:18:VAL:HG22	48:M1:70:THR:HA	1.93	0.49
43:L6:18:LEU:N	43:L6:18:LEU:HD22	2.21	0.49
35:SM:40:PRO:HG2	35:SM:41:SER:H	2.04	0.49
40:L3:379:PHE:HD1	40:L3:379:PHE:C	2.15	0.49
4:S2:55:GLU:OE1	4:S2:239:PRO:HD3	4.36	0.49
56:N0:71:LYS:O	56:N0:73:LYS:HG3	2.12	0.49
46:L9:38:LEU:O	46:L9:40:HIS:N	2.45	0.49
78:Q2:33:ALA:HA	36:5:2767:U:OP1	184.11	0.49
36:1:1854:C:O2'	36:1:1855:U:H5'	2.11	0.49
36:1:2738:A:H2'	36:1:2739:A:H8	1.76	0.49
36:1:2703:A:OP2	42:L5:23:ARG:NH1	2.43	0.49
36:1:1325:U:H5''	36:1:1325:U:H6	1.77	0.49
1:2:649:U:HO2'	1:2:650:U:P	2.34	0.49
14:C2:27:ALA:HB1	14:C2:132:GLU:HB2	1.94	0.49
41:L4:350:LYS:O	44:L7:71:ALA:HB2	2.12	0.49
24:D2:28:ARG:HG2	24:D2:29:PRO:HB3	1.94	0.49
73:O7:22:CYS:SG	73:O7:37:CYS:SG	3.78	0.49
36:1:440:A:OP1	36:1:494:G:H1'	2.11	0.49
36:1:1560:G:C2	36:1:1580:A:C2	3.00	0.49
36:1:583:G:C6	36:1:584:G:N7	2.81	0.49
36:1:665:A:N6	36:1:666:A:N6	2.60	0.49
1:6:905:A:H2'	1:6:906:A:O4'	2.11	0.49
57:N1:112:ASN:O	57:N1:115:LYS:HB2	2.11	0.49
36:5:2911:A:C2	36:5:2936:A:N6	2.80	0.49
36:5:2378:C:H2'	36:5:2379:U:C6	2.47	0.49
36:5:1908:A:H8	36:5:1908:A:O5'	1.95	0.49
59:N3:74:MET:SD	59:N3:102:ILE:HG21	5.26	0.49
78:Q2:105:GLN:O	78:Q2:106:PHE:HB2	2.11	0.49
1:6:1031:U:H4'	1:6:1032:G:OP2	2.11	0.49
1:6:1234:A:OP2	1:6:1245:G:O2'	2.31	0.49
36:5:2964:G:N7	87:5:3978:OHX:N6	2.59	0.49
36:1:2820:A:C8	36:1:2821:C:H5	2.29	0.49
61:N5:135:ILE:HG12	61:N5:135:ILE:O	4.03	0.49
37:3:56:A:O2'	48:M1:148:VAL:HG22	2.12	0.49
36:1:2781:U:H2'	36:1:2782:U:O4'	2.12	0.49
1:2:434:G:OP1	25:D3:78:LYS:HA	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:D3:57:LEU:N	25:D3:71:CYS:O	3.83	0.49
40:L3:212:ASN:HB3	40:L3:281:LYS:NZ	3.36	0.49
76:Q0:115:CYS:SG	76:Q0:118:THR:HG22	2.80	0.49
46:L9:84:LYS:HD3	46:L9:186:PHE:CE1	4.02	0.49
46:L9:47:LYS:HG3	46:L9:48:VAL:N	2.28	0.49
11:S9:140:ILE:HG13	26:D4:65:GLY:HA3	1.94	0.49
36:5:952:A:N3	36:5:1114:U:O2'	2.42	0.49
13:C1:18:HIS:O	87:6:2130:OHX:N3	292.66	0.49
6:S4:50:ASN:O	6:S4:53:LYS:HD3	2.12	0.49
1:2:1532:U:O4	1:2:1533:C:N4	2.45	0.49
7:S5:57:SER:O	7:S5:59:VAL:HG23	2.12	0.49
55:M9:23:TRP:HE3	55:M9:51:VAL:HG23	3.56	0.49
67:O1:30:PRO:C	67:O1:32:ALA:N	2.66	0.49
67:O1:58:ALA:HA	67:O1:61:LYS:HB2	2.43	0.49
67:O1:75:ILE:HG12	67:O1:93:VAL:HG13	2.94	0.49
42:L5:123:GLU:HA	42:L5:248:ARG:HH12	1.77	0.49
12:C0:72:GLY:O	12:C0:75:TYR:N	2.45	0.49
20:C8:120:ARG:NH2	35:SM:58:GLU:OE2	2.99	0.49
20:C8:91:ASP:CG	20:C8:92:ILE:H	2.53	0.49
1:6:869:A:H61	1:6:958:U:H3	1.61	0.49
3:S1:180:THR:HG23	3:S1:183:GLN:NE2	9.57	0.49
1:6:795:U:C4	1:6:796:A:C5	3.00	0.49
48:M1:91:LEU:HD12	48:M1:163:PHE:CE2	2.47	0.49
36:1:226:C:H4'	62:N6:29:VAL:HG12	1.94	0.49
40:L3:65:SER:C	40:L3:67:PHE:H	2.39	0.49
36:1:1130:A:N7	36:1:1132:C:C2	2.80	0.49
57:N1:86:GLU:OE1	57:N1:88:ARG:NH1	3.27	0.49
7:S5:76:ARG:NH2	18:C6:120:ASP:OD1	3.67	0.49
52:M6:14:HIS:HE1	52:M6:119:VAL:HG12	1.77	0.49
52:M6:38:ALA:O	52:M6:41:LEU:HD22	3.19	0.49
36:1:353:G:O2'	36:1:364:G:O6	2.20	0.49
72:O6:68:ARG:O	72:O6:71:LYS:HG3	6.37	0.49
40:L3:205:VAL:HG11	40:L3:322:ILE:HD11	1.93	0.49
1:2:1005:A:H2'	1:2:1006:C:H6	1.77	0.49
40:L3:43:LEU:CD1	40:L3:43:LEU:H	2.24	0.49
36:1:2225:U:O2'	36:1:2226:U:H5'	2.13	0.49
40:L3:137:TYR:CE1	40:L3:144:ILE:HD12	2.48	0.49
49:M3:138:VAL:HB	71:O5:118:ILE:HB	1.95	0.49
36:5:63:A:C2'	36:5:64:G:H5'	2.42	0.49
36:1:2184:U:H2'	36:1:2185:G:O4'	2.12	0.49
36:5:924:G:C5	36:5:2809:C:H1'	2.47	0.49
71:O5:49:LYS:HZ1	38:8:64:U:H5'	46.50	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:386:G:N3	1:2:425:A:H2	2.10	0.49
35:SM:39:PRO:HB2	35:SM:40:PRO:HD2	2.74	0.49
52:M6:54:TYR:HE2	52:M6:58:LEU:HD22	2.26	0.49
23:D1:2:GLU:CD	23:D1:6:GLY:HA2	3.37	0.49
36:5:1403:C:C2	36:5:1409:G:C2	3.01	0.49
37:3:46:A:OP1	42:L5:158:ARG:HG2	2.12	0.49
5:S3:6:SER:HB3	5:S3:9:ARG:HD3	2.70	0.49
36:1:2593:A:H4'	36:1:2594:C:O5'	2.12	0.49
24:D2:105:THR:HG21	1:6:805:U:O4'	363.51	0.49
36:5:3264:G:N2	36:5:3265:C:H1'	2.28	0.49
1:6:1294:G:O6	87:6:2073:OHX:N5	2.44	0.49
59:N3:35:TYR:N	59:N3:60:ALA:HB1	2.27	0.49
36:5:1556:C:C5	36:5:2169:G:C4	3.00	0.49
69:O3:50:ALA:HB2	69:O3:68:TRP:CE3	3.30	0.49
36:1:544:C:H1'	36:1:548:G:H22	1.77	0.49
36:5:1816:A:O2'	36:5:1817:G:H5''	2.11	0.49
54:M8:178:ARG:HG2	64:N8:51:GLY:HA3	3.13	0.49
58:N2:22:PRO:O	58:N2:28:PHE:HB3	2.12	0.49
1:6:1028:C:N3	1:6:1792:G:N1	2.58	0.49
36:5:2117:A:C8	36:5:3064:U:O2	2.65	0.49
5:S3:150:MET:HB3	5:S3:152:PHE:HE2	1.77	0.49
36:5:2440:G:N2	36:5:2508:U:O2	2.46	0.49
1:6:984:G:H2'	1:6:985:G:H8	1.75	0.49
42:L5:278:SER:OG	42:L5:280:GLU:HB2	3.59	0.49
78:Q2:38:GLN:HE21	78:Q2:38:GLN:HA	1.96	0.49
36:5:3295:A:H2'	36:5:3296:A:H8	1.77	0.49
36:5:719:U:C6	36:5:719:U:H5''	2.47	0.49
1:2:1061:A:H2'	1:2:1062:A:H5'	1.94	0.49
78:Q2:63:LYS:HD2	36:5:2796:G:O6	218.82	0.49
52:M6:174:PHE:O	52:M6:176:LYS:N	2.64	0.49
87:5:4006:OHX:N4	87:5:4195:OHX:N1	2.60	0.49
9:S7:69:GLY:HA2	9:S7:72:LYS:HD2	1.93	0.49
53:M7:26:PHE:HE1	53:M7:121:GLN:HG2	1.77	0.49
1:6:749:U:H1'	1:6:801:G:C2	2.47	0.49
1:2:506:A:H4'	1:2:507:U:OP1	2.12	0.49
1:6:813:U:H4'	1:6:814:A:OP2	2.10	0.49
74:O8:73:LEU:O	74:O8:73:LEU:HD23	4.06	0.49
27:D5:51:LEU:HD12	27:D5:51:LEU:H	2.05	0.49
53:M7:139:TYR:CZ	36:5:2355:G:H4'	147.22	0.49
47:M0:48:LEU:O	47:M0:139:ARG:HA	2.47	0.49
1:6:1162:C:H5''	1:6:1163:A:OP2	2.13	0.49
36:1:1103:A:N6	36:1:1363:A:HO2'	2.11	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:93:A:H4'	1:2:94:U:OP2	2.11	0.49
1:6:214:G:N7	87:6:2155:OHX:N4	2.61	0.49
10:S8:98:LYS:HB3	1:6:329:G:H5''	274.27	0.49
36:1:1381:A:H2'	36:1:1382:G:C8	2.47	0.49
1:6:1330:G:O5'	1:6:1330:G:H8	1.95	0.49
7:S5:120:ILE:HG23	27:D5:59:TYR:HE1	1.77	0.49
7:S5:120:ILE:O	7:S5:124:LEU:HG	2.12	0.49
61:N5:59:SER:HB3	61:N5:102:LEU:HD21	2.21	0.49
75:O9:5:LYS:HG2	75:O9:13:MET:CE	2.42	0.49
36:1:973:A:P	54:M8:12:ARG:HH12	2.35	0.49
12:C0:61:TRP:CG	31:D9:23:VAL:HG13	2.47	0.49
17:C5:119:PHE:HE1	20:C8:119:ILE:HG22	1.77	0.49
20:C8:91:ASP:OD1	20:C8:94:ASP:HB3	5.23	0.49
21:C9:97:SER:OG	21:C9:100:ILE:HB	2.12	0.49
15:C3:105:ASN:HD22	1:6:879:G:H1'	277.39	0.49
1:2:624:G:C8	1:2:1027:A:C6	3.00	0.49
1:2:357:G:N7	87:2:2060:OHX:N3	2.60	0.49
77:Q1:5:TRP:CG	1:6:1783:C:C5	301.36	0.49
70:O4:21:LYS:HD2	70:O4:23:VAL:HG23	1.94	0.49
3:S1:181:LEU:O	3:S1:185:THR:OG1	2.48	0.49
3:S1:34:ALA:HA	3:S1:98:THR:OG1	4.95	0.49
2:S0:195:TRP:HD1	2:S0:196:SER:N	2.17	0.49
48:M1:133:ARG:HH22	48:M1:158:ASP:CG	2.15	0.49
68:O2:105:ARG:O	68:O2:109:LEU:HB2	2.12	0.49
36:1:1601:U:OP1	55:M9:42:ARG:NH2	2.45	0.49
36:5:1186:G:H8	36:5:1186:G:H5''	1.77	0.49
36:5:559:A:H3'	36:5:559:A:C8	2.47	0.49
43:L6:154:LEU:O	43:L6:158:TYR:N	2.43	0.49
34:SR:192:PHE:HD1	34:SR:223:TRP:CE3	2.37	0.49
39:L2:113:VAL:HG23	39:L2:134:VAL:HG13	4.79	0.49
1:2:150:U:H2'	1:2:151:G:O4'	2.12	0.49
64:N8:128:ARG:HB3	64:N8:129:PHE:CE2	2.47	0.49
36:5:3286:G:H2'	36:5:3287:U:C6	2.48	0.49
8:S6:58:LYS:C	8:S6:60:GLY:H	2.16	0.49
36:5:3175:U:H3	36:5:3277:U:H3	1.61	0.49
70:O4:76:TYR:HD1	36:5:1805:C:O2'	189.73	0.49
1:2:747:C:C4'	24:D2:80:ASN:HD21	2.19	0.49
40:L3:97:ARG:NH2	36:5:3244:A:C4	248.90	0.49
64:N8:126:LYS:HB3	64:N8:148:ILE:CG2	2.38	0.49
6:S4:104:ASP:HB3	6:S4:106:LYS:H	2.69	0.49
38:4:3:A:H2'	38:4:4:C:C6	2.47	0.49
70:O4:41:ARG:O	70:O4:43:LYS:HG2	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
70:O4:57:LEU:HG	70:O4:62:TYR:CE1	3.57	0.49
59:N3:123:ALA:C	59:N3:125:LEU:N	2.90	0.49
36:5:3066:U:H6	36:5:3066:U:O5'	1.95	0.49
54:M8:122:ILE:CG2	54:M8:126:GLN:HB2	2.42	0.49
2:S0:110:TYR:CD1	2:S0:111:ILE:HD13	2.47	0.49
36:1:2950:G:C5	36:1:2979:U:C4	3.00	0.49
25:D3:33:LEU:HD23	25:D3:33:LEU:N	2.96	0.49
10:S8:12:SER:HA	10:S8:18:ARG:NH1	2.26	0.49
2:S0:70:PRO:HD2	2:S0:71:GLU:OE2	4.08	0.49
36:1:3075:G:C2	36:1:3076:C:C2	3.01	0.49
15:C3:25:TRP:HE3	15:C3:25:TRP:O	1.95	0.49
1:2:486:G:N2	1:2:502:U:C2	2.81	0.49
39:L2:70:ARG:HH11	39:L2:72:ARG:HE	6.52	0.49
36:5:1815:U:HO2'	36:5:1816:A:P	2.35	0.49
13:C1:129:ARG:O	13:C1:131:ILE:N	3.22	0.49
15:C3:34:ILE:O	15:C3:38:VAL:HG23	2.12	0.49
10:S8:57:ALA:HB2	10:S8:177:GLY:HA2	1.93	0.49
36:1:537:A:O2'	36:1:558:U:N3	2.45	0.49
71:O5:12:LYS:HB3	71:O5:16:GLN:HB2	2.72	0.49
9:S7:154:LEU:HD11	9:S7:183:PHE:CD1	4.24	0.49
1:2:714:G:H1	1:2:724:C:N4	2.10	0.49
36:1:2800:G:O6	64:N8:42:ARG:NH2	2.38	0.49
36:1:1939:G:H2'	36:1:1940:G:O4'	2.12	0.49
36:1:679:U:H3	36:1:701:G:H1	1.60	0.49
1:2:269:G:N7	8:S6:186:ARG:NH2	2.60	0.49
36:1:771:A:C6	36:1:772:U:C2	3.01	0.49
73:O7:28:HIS:HB3	73:O7:31:LYS:HG3	4.80	0.49
67:O1:98:VAL:HG13	67:O1:100:SER:H	1.78	0.49
37:3:79:A:C2	37:3:102:A:C4	3.00	0.49
78:Q2:25:VAL:CG1	78:Q2:70:LEU:HD22	3.32	0.49
45:L8:211:LEU:O	45:L8:215:VAL:HG23	2.12	0.49
36:5:2608:G:N3	36:5:2609:A:C8	2.80	0.49
1:2:1362:U:O2'	1:2:1363:U:H5''	2.13	0.49
36:1:1222:G:HO2'	36:1:1285:G:H1	1.60	0.49
1:6:803:A:H8	1:6:803:A:OP2	1.96	0.49
69:O3:47:LYS:HD2	69:O3:104:PRO:HD2	1.94	0.49
16:C4:107:ARG:C	16:C4:109:GLY:H	2.34	0.49
62:N6:53:ASP:HB3	62:N6:110:HIS:HB2	1.95	0.49
1:2:694:U:H3'	1:2:695:U:C5	2.47	0.49
1:6:265:A:C2	1:6:267:U:C4	3.00	0.49
50:M4:48:GLY:HA3	50:M4:53:VAL:HG13	2.25	0.49
66:O0:104:LEU:HD12	66:O0:105:ALA:N	2.27	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:4:U:H6	36:5:4:U:O5'	1.96	0.49
36:1:2960:C:OP1	87:1:4001:OHX:N3	2.45	0.49
32:E0:10:ARG:HD2	1:6:566:C:O2'	366.73	0.49
40:L3:224:HIS:HB2	40:L3:270:ARG:O	2.17	0.49
67:O1:11:GLU:HA	67:O1:74:ARG:HA	1.99	0.49
1:2:473:A:H5''	1:2:474:A:OP2	2.12	0.49
11:S9:88:GLU:HA	11:S9:91:LYS:HE3	1.95	0.49
36:5:1661:G:C2	36:5:1789:G:C2	3.01	0.49
87:1:3959:OHX:N6	44:L7:217:PRO:O	2.45	0.49
41:L4:311:HIS:CE1	41:L4:314:LYS:HA	2.59	0.49
44:L7:210:PRO:HD3	44:L7:243:MET:HE2	1.95	0.49
36:1:115:A:O2'	36:1:116:A:OP1	2.26	0.49
26:D4:20:ARG:HB3	26:D4:76:TYR:CD2	2.49	0.49
26:D4:20:ARG:HD2	26:D4:74:LEU:HB3	1.95	0.49
41:L4:141:ARG:HB2	41:L4:177:ASP:HA	2.94	0.49
1:6:1406:A:H2'	1:6:1407:U:H6	1.78	0.49
19:C7:26:LEU:HD21	19:C7:62:GLN:HE21	3.92	0.49
36:1:813:G:N2	36:1:814:U:C2	2.81	0.49
18:C6:36:ILE:O	18:C6:36:ILE:HG12	2.12	0.49
7:S5:101:GLY:O	7:S5:103:ASN:N	3.43	0.49
42:L5:236:LEU:O	42:L5:239:ILE:HB	2.13	0.49
12:C0:8:ARG:HG3	12:C0:12:HIS:CE1	2.62	0.49
12:C0:16:PHE:CE1	12:C0:73:VAL:HG12	6.28	0.49
12:C0:76:LEU:HD13	12:C0:76:LEU:H	1.78	0.49
17:C5:45:PHE:CZ	17:C5:84:ILE:HG13	2.48	0.49
22:D0:69:LYS:HA	31:D9:44:ARG:NH1	2.48	0.49
48:M1:106:ILE:HD11	48:M1:108:GLU:O	2.13	0.49
5:S3:29:LEU:HD21	5:S3:65:ARG:HH21	1.77	0.49
36:1:407:A:C4	36:1:408:A:C8	3.01	0.49
2:S0:56:LYS:O	2:S0:59:LEU:N	2.44	0.49
4:S2:76:LEU:HD12	4:S2:105:GLY:HA2	2.36	0.49
4:S2:223:GLY:O	4:S2:225:LEU:N	2.46	0.49
4:S2:76:LEU:HB2	4:S2:105:GLY:CA	5.71	0.49
1:2:128:U:OP1	1:2:178:U:C5	2.66	0.49
36:5:2652:U:C5	36:5:2653:C:C4	2.99	0.49
14:C2:44:GLY:HA2	14:C2:120:VAL:O	4.09	0.49
1:6:1600:A:H4'	1:6:1601:G:OP1	2.13	0.49
57:N1:34:TYR:CE1	57:N1:98:HIS:CD2	4.12	0.49
59:N3:80:ARG:NH1	59:N3:116:GLY:HA3	3.35	0.49
42:L5:269:SER:HA	37:7:22:A:C2	324.99	0.49
1:6:1586:A:H2'	1:6:1587:A:C8	2.48	0.49
18:C6:93:HIS:HB2	18:C6:102:LYS:HB2	1.95	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:207:U:H5''	36:1:208:C:OP2	2.12	0.49
41:L4:165:ALA:HB1	41:L4:219:LEU:HD21	1.94	0.49
36:5:3178:A:H5''	36:5:3179:U:OP1	2.13	0.49
52:M6:34:VAL:HG11	52:M6:112:TYR:HE1	1.77	0.49
1:6:414:C:C4	1:6:415:C:C5	3.00	0.49
24:D2:125:ILE:HG12	24:D2:126:LEU:N	2.28	0.49
57:N1:102:ARG:CG	57:N1:102:ARG:HH11	2.26	0.49
36:1:2148:U:H5'	39:L2:197:PRO:HB3	1.93	0.49
39:L2:192:LYS:HD3	39:L2:193:ARG:NH2	3.82	0.49
45:L8:156:ASP:HB2	45:L8:183:LYS:HZ2	2.61	0.49
4:S2:185:LYS:HD3	4:S2:189:GLN:HE22	3.18	0.49
23:D1:17:CYS:O	23:D1:21:ASN:N	2.41	0.49
60:N4:8:PHE:CE1	60:N4:39:LEU:HB3	4.05	0.49
36:1:705:A:C6	64:N8:113:LEU:HD13	2.47	0.49
9:S7:24:PHE:HE1	9:S7:38:LEU:HD21	1.78	0.49
33:E1:149:LYS:HE3	33:E1:149:LYS:H	5.18	0.49
42:L5:34:LYS:O	42:L5:38:THR:OG1	3.07	0.49
78:Q2:28:TYR:HE1	78:Q2:30:ALA:CA	3.43	0.49
36:5:1613:A:C2	36:5:1614:C:C2	3.00	0.49
36:1:1613:A:H2'	36:1:1614:C:C6	2.47	0.49
36:1:1224:C:H2'	36:1:1224:C:O2	2.12	0.49
36:1:3204:C:O2'	36:1:3205:G:H5'	2.12	0.49
36:5:1556:C:O2'	87:5:3949:OHX:N1	2.45	0.49
36:1:550:A:H61	36:1:551:A:H62	1.60	0.49
15:C3:32:SER:OG	15:C3:33:VAL:N	4.10	0.49
36:5:2661:G:O2'	36:5:2662:G:H5'	2.12	0.49
36:1:2164:A:C6	36:1:2171:G:C6	3.01	0.49
1:2:1317:C:H2'	1:2:1318:G:O4'	2.13	0.49
64:N8:44:ASN:ND2	64:N8:44:ASN:C	3.77	0.49
36:5:594:U:H5''	36:5:609:G:H1	1.76	0.49
13:C1:75:VAL:HG12	13:C1:120:GLY:N	2.27	0.49
1:6:18:C:C2	1:6:19:A:C8	3.01	0.49
36:1:2720:G:C2	36:1:2721:A:C8	3.00	0.49
36:1:2144:A:C4	36:1:2281:A:N6	2.81	0.49
1:2:1030:A:H4'	1:2:1031:U:OP2	2.13	0.49
57:N1:111:ALA:O	57:N1:115:LYS:HG3	2.13	0.49
36:1:1131:G:N2	36:1:2373:A:C5	2.80	0.49
36:5:2404:A:N3	36:5:2405:C:H5'	2.28	0.49
36:1:279:U:O2'	36:1:280:U:H5'	2.12	0.49
40:L3:310:GLY:O	40:L3:311:PHE:C	2.50	0.49
1:6:1166:A:H2'	1:6:1167:G:O4'	2.13	0.49
12:C0:27:PHE:O	12:C0:28:ASN:HB2	2.11	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S0:84:ARG:NH1	2:S0:201:LEU:O	2.46	0.49
47:M0:182:LEU:O	47:M0:183:LYS:C	2.81	0.49
36:1:1123:U:H2'	36:1:1124:U:H5'	1.93	0.49
36:1:1868:G:C6	36:1:1869:C:C4	3.01	0.49
20:C8:11:PHE:CZ	20:C8:59:GLY:HA3	4.24	0.49
1:6:480:G:C4	1:6:509:G:N2	2.80	0.49
36:1:3217:C:C2	53:M7:182:ILE:HG23	2.48	0.49
36:1:3224:G:N7	87:1:3894:OHX:N3	2.60	0.49
4:S2:146:THR:O	4:S2:148:LEU:N	3.42	0.49
1:2:1680:G:C2	1:2:1720:G:C2	3.00	0.49
36:1:2163:C:O2'	39:L2:11:GLY:HA3	2.12	0.49
37:7:114:U:H2'	37:7:115:G:H8	1.76	0.49
36:1:2356:A:O2'	53:M7:137:ASN:HB3	2.13	0.49
1:6:590:C:H2'	1:6:591:A:H8	1.77	0.49
42:L5:4:GLN:O	42:L5:5:LYS:HB2	4.36	0.49
44:L7:134:VAL:HG23	44:L7:135:ALA:N	2.28	0.49
44:L7:239:LEU:O	44:L7:242:SER:N	2.45	0.49
1:6:328:A:H2'	1:6:329:G:C8	2.47	0.49
64:N8:9:ARG:NH2	36:5:1431:G:N7	148.80	0.49
19:C7:60:ARG:HH22	1:6:1400:A:H4'	409.00	0.49
18:C6:27:GLY:HA2	18:C6:63:ILE:O	2.12	0.49
5:S3:72:LEU:HD22	12:C0:65:TYR:HB3	1.94	0.49
12:C0:76:LEU:N	12:C0:76:LEU:HD13	2.28	0.49
31:D9:30:LEU:HD22	31:D9:37:ASN:HA	3.72	0.49
48:M1:166:LYS:HD2	48:M1:167:TYR:CE1	4.76	0.49
16:C4:44:GLY:HA3	16:C4:59:ALA:HB1	3.06	0.49
24:D2:70:ASN:HB2	24:D2:130:TYR:CD2	2.59	0.49
2:S0:22:THR:HG22	2:S0:169:SER:HA	3.73	0.49
4:S2:72:LEU:HD12	4:S2:72:LEU:HA	1.62	0.49
1:2:1183:A:C6	1:2:1184:A:N1	2.80	0.49
1:6:1173:C:O5'	1:6:1173:C:H6	1.95	0.49
11:S9:168:ARG:HD3	11:S9:174:ARG:HD2	6.16	0.49
69:O3:71:VAL:HG13	69:O3:81:VAL:CG1	2.50	0.49
34:SR:17:ASN:N	34:SR:39:ASP:OD2	3.44	0.49
34:SR:42:LEU:HB2	34:SR:61:PHE:HB2	2.40	0.49
34:SR:83:ALA:HB2	34:SR:113:VAL:HB	2.17	0.49
29:D7:62:ILE:O	29:D7:63:LEU:HB2	2.13	0.49
41:L4:82:THR:HG21	36:5:364:G:O2'	124.13	0.49
79:Q3:82:THR:O	79:Q3:86:LEU:HD12	3.83	0.49
36:1:3180:A:H2'	52:M6:167:TYR:HE1	1.77	0.49
39:L2:186:PHE:CE2	36:5:896:A:H4'	192.41	0.49
71:O5:24:LEU:HD12	71:O5:54:VAL:HG21	2.29	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:40:PRO:C	40:L3:185:GLY:HA3	2.33	0.49
76:Q0:127:LEU:HD23	76:Q0:128:LYS:N	2.27	0.49
56:N0:28:ARG:HH11	56:N0:99:ARG:NH2	3.28	0.49
67:O1:72:ARG:HG2	67:O1:96:VAL:HG22	3.31	0.49
4:S2:44:LEU:HD21	4:S2:247:ALA:HB2	3.47	0.49
41:L4:298:ALA:HB1	54:M8:133:LYS:HZ2	2.62	0.49
15:C3:20:ARG:NE	1:6:862:A:OP1	355.38	0.49
59:N3:39:VAL:HG12	59:N3:40:LYS:N	2.93	0.49
36:1:2207:A:O2'	36:1:2208:A:H5'	2.13	0.49
76:Q0:95:VAL:HA	76:Q0:101:ALA:O	2.13	0.49
36:5:582:G:C2	36:5:583:G:C8	3.00	0.49
36:1:3056:U:OP2	87:1:3937:OHX:N3	2.45	0.49
36:1:1616:U:H2'	36:1:1617:G:C8	2.47	0.49
36:5:776:U:C4	36:5:2720:G:C4	3.01	0.49
10:S8:115:ALA:O	10:S8:143:TRP:NE1	2.44	0.49
40:L3:32:PHE:HB3	40:L3:33:PRO:HD2	2.37	0.49
1:2:1146:G:C6	1:2:1147:A:C6	3.00	0.49
50:M4:23:ILE:HD11	50:M4:46:ILE:HD12	1.93	0.49
36:5:202:G:C2	36:5:203:G:C4	3.01	0.49
36:1:121:A:C2	45:L8:129:PRO:HG3	2.48	0.49
11:S9:8:TYR:O	87:6:2184:OHX:N4	383.70	0.49
1:6:1341:A:H5'	1:6:1342:C:OP2	2.12	0.49
1:6:271:A:H5'	1:6:272:U:P	2.53	0.49
36:1:3163:A:C2'	36:1:3164:C:H5'	2.42	0.49
1:6:1354:G:C6	1:6:1355:C:C4	3.01	0.49
36:5:3156:U:O2'	36:5:3157:U:O4'	2.31	0.49
1:2:892:A:C6	1:2:893:U:C4	3.00	0.49
36:1:619:A:H4'	36:1:620:U:O4'	2.13	0.49
36:1:3062:G:C2	36:1:3063:C:C5	3.00	0.49
1:6:1687:U:H3	1:6:1714:A:H61	1.60	0.49
36:5:1265:U:H5''	36:5:1266:G:OP2	2.13	0.49
70:O4:67:LYS:HG3	36:5:1821:U:N3	168.44	0.49
1:6:1169:G:H1'	1:6:1576:A:N6	2.28	0.49
42:L5:140:ARG:HB2	42:L5:140:ARG:NH2	2.77	0.49
36:5:2405:C:O2	36:5:2819:A:N1	2.45	0.49
36:1:1305:U:N1	40:L3:257:PRO:HG3	2.28	0.49
44:L7:61:ASN:O	44:L7:65:ALA:HB2	2.71	0.49
60:N4:62:GLY:C	60:N4:63:ILE:HG13	4.72	0.49
36:5:1939:G:H2'	36:5:1940:G:O4'	2.12	0.49
36:1:241:G:C4	36:1:242:C:C5	3.00	0.49
1:6:524:U:O2'	1:6:526:A:N7	2.37	0.49
1:6:1778:G:C2	1:6:1779:U:C5	3.01	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:M7:26:PHE:C	53:M7:26:PHE:CD2	2.85	0.49
37:3:33:U:H2'	37:3:34:C:O4'	2.13	0.49
71:O5:52:ALA:O	71:O5:56:THR:N	2.35	0.49
9:S7:137:GLY:HA2	15:C3:18:TYR:CE2	3.26	0.49
36:1:2387:A:N6	36:1:2993:G:C2	2.81	0.49
36:5:1395:G:H2'	36:5:1396:C:O4'	2.12	0.49
13:C1:21:ASN:N	13:C1:21:ASN:OD1	3.49	0.49
41:L4:148:ILE:HA	41:L4:149:PRO:C	2.45	0.49
27:D5:43:ASP:CB	27:D5:46:LYS:H	4.12	0.49
28:D6:26:CYS:HB3	28:D6:28:LYS:HB2	5.37	0.49
1:2:479:C:O2	1:2:510:G:N2	2.45	0.49
11:S9:112:GLN:HG2	11:S9:148:VAL:HG21	3.91	0.49
44:L7:151:ARG:NH2	36:5:1334:U:O2'	241.89	0.49
13:C1:60:PHE:O	13:C1:61:THR:HG23	2.84	0.49
41:L4:36:HIS:HE1	36:5:1426:C:OP1	136.18	0.49
1:6:1403:C:H2'	1:6:1404:C:H6	1.77	0.49
42:L5:22:ARG:O	42:L5:28:THR:N	2.45	0.49
50:M4:34:ALA:O	50:M4:36:VAL:HG23	3.10	0.49
20:C8:41:ARG:HD2	21:C9:46:PRO:HD3	1.93	0.49
18:C6:38:LEU:HD22	21:C9:10:ALA:HB2	2.42	0.49
30:D8:19:THR:HG21	30:D8:65:ARG:HA	2.05	0.49
7:S5:43:PHE:H	7:S5:46:TRP:N	2.67	0.49
36:1:3375:A:O2'	36:1:3378:C:H5'	2.12	0.49
17:C5:47:ARG:NH2	1:6:1555:A:OP2	402.78	0.49
17:C5:106:GLU:HG2	17:C5:108:ARG:NH1	2.27	0.49
5:S3:105:MET:O	5:S3:108:LYS:HB2	2.82	0.49
5:S3:98:ALA:O	5:S3:101:GLN:N	2.46	0.49
1:6:964:U:O4'	1:6:965:U:C2	2.66	0.49
15:C3:2:GLY:N	1:6:866:G:OP1	333.11	0.49
1:2:864:U:C5	29:D7:22:LYS:HG2	2.45	0.49
64:N8:64:GLN:NE2	36:5:101:G:H8	117.06	0.49
1:6:1746:A:H2'	1:6:1747:G:O4'	2.13	0.49
16:C4:84:ARG:O	16:C4:84:ARG:HG3	4.55	0.49
28:D6:45:VAL:O	28:D6:49:ALA:HB3	5.24	0.49
4:S2:76:LEU:HB2	4:S2:105:GLY:C	5.46	0.49
48:M1:132:ASN:HA	48:M1:154:THR:CG2	2.40	0.49
63:N7:95:VAL:HG21	63:N7:113:VAL:HB	1.94	0.49
68:O2:89:THR:HG22	68:O2:117:ILE:HG12	1.94	0.49
68:O2:81:ASP:OD1	68:O2:81:ASP:N	3.00	0.49
6:S4:129:VAL:HG12	6:S4:156:VAL:CG2	2.43	0.49
6:S4:228:ILE:O	6:S4:235:TYR:HD2	2.02	0.49
56:N0:139:TYR:CD2	56:N0:140:VAL:HG23	2.57	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
60:N4:56:ARG:O	60:N4:59:HIS:N	3.50	0.49
42:L5:256:THR:HA	42:L5:257:GLU:OE1	7.95	0.49
1:2:147:A:H2'	1:2:148:A:O4'	2.13	0.49
18:C6:91:ALA:O	18:C6:94:GLN:HB3	3.20	0.49
36:5:353:G:HO2'	36:5:354:U:P	2.34	0.49
1:2:989:U:H2'	1:2:990:C:C6	2.46	0.49
72:O6:5:THR:HG23	72:O6:12:ASN:C	2.33	0.49
36:5:3160:U:C2	36:5:3291:G:N2	2.81	0.49
49:M3:69:VAL:N	49:M3:149:GLN:OE1	3.53	0.49
49:M3:97:VAL:HG12	49:M3:98:ASP:H	2.33	0.49
1:2:968:U:H5''	1:2:1033:C:O2'	2.13	0.49
39:L2:204:MET:HE3	39:L2:209:HIS:HB2	1.94	0.49
39:L2:117:GLU:OE1	39:L2:163:ARG:NE	2.44	0.49
39:L2:30:ARG:HB2	39:L2:36:GLU:OE2	2.12	0.49
39:L2:242:ARG:NH1	39:L2:243:THR:O	2.90	0.49
1:2:702:G:O2'	1:2:703:G:O4'	2.24	0.49
36:5:1745:C:H2'	36:5:1746:U:H6	1.78	0.49
70:O4:58:ARG:CG	70:O4:58:ARG:HH11	3.00	0.49
36:1:3111:U:H5'	46:L9:155:SER:OG	2.13	0.49
46:L9:69:ARG:O	46:L9:69:ARG:HD2	3.34	0.49
1:6:1320:U:O2	1:6:1322:A:H5'	2.12	0.49
38:4:129:C:H2'	38:4:130:C:C6	2.46	0.49
10:S8:112:TRP:O	10:S8:115:ALA:N	3.21	0.49
78:Q2:71:ARG:HD3	78:Q2:72:LEU:O	6.91	0.49
50:M4:32:LEU:HD21	50:M4:94:TRP:CE2	2.46	0.49
1:2:486:G:C2	1:2:487:G:C4	3.00	0.49
1:2:134:U:H2'	1:2:135:A:O4'	2.13	0.49
36:5:2374:C:N4	36:5:2941:A:C4	2.81	0.49
36:1:239:G:N7	87:1:4034:OHX:N4	2.60	0.49
58:N2:58:GLU:HB2	58:N2:63:VAL:HG12	5.76	0.49
71:O5:15:GLU:O	71:O5:18:ALA:N	3.15	0.49
41:L4:347:THR:HG21	44:L7:64:GLN:NE2	2.25	0.49
45:L8:81:THR:HG23	45:L8:82:LEU:O	2.12	0.49
1:6:224:C:H2'	1:6:225:A:H8	1.78	0.49
36:1:620:U:C4	36:1:622:A:C6	3.00	0.49
36:5:596:C:H2'	36:5:597:G:O4'	2.13	0.49
36:5:1014:U:C2'	36:5:1015:U:H5'	2.42	0.49
36:1:717:C:H6	36:1:717:C:O5'	1.96	0.49
36:5:504:A:C2	36:5:588:G:C2	3.00	0.49
1:2:1405:G:C2	1:2:1406:A:C4	3.01	0.49
45:L8:143:ILE:HG23	45:L8:175:VAL:HG21	5.17	0.49
36:1:1148:G:C2'	36:1:1149:G:H5'	2.42	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:491:C:C2'	1:2:492:A:H5'	2.43	0.49
36:5:2391:G:N3	36:5:2391:G:H2'	2.28	0.49
36:5:2121:G:H2'	36:5:2122:G:H5'	1.95	0.49
1:6:1778:G:C2	1:6:1779:U:C4	3.00	0.49
1:6:1051:G:H4'	1:6:1052:U:OP1	2.12	0.49
87:8:220:OHX:N2	87:8:229:OHX:N1	2.60	0.49
36:1:435:C:H6	36:1:435:C:O5'	1.96	0.49
1:6:1643:U:C5	1:6:1644:C:C5	3.00	0.49
40:L3:129:ALA:O	36:5:3150:A:H5'	212.30	0.49
36:5:110:G:C6	36:5:111:C:C2	3.00	0.49
36:5:683:U:H2'	36:5:684:G:O4'	2.12	0.49
29:D7:31:TYR:O	29:D7:48:SER:OG	2.86	0.49
1:2:33:U:O4	87:2:2056:OHX:N3	2.45	0.49
1:6:52:U:OP2	87:6:2072:OHX:N3	2.46	0.49
78:Q2:11:TYR:HE2	78:Q2:18:ARG:C	2.55	0.49
40:L3:270:ARG:NH2	36:5:3090:U:OP1	218.90	0.49
27:D5:51:LEU:HD12	27:D5:51:LEU:N	2.59	0.49
46:L9:23:ARG:NH2	46:L9:42:ASP:H	2.11	0.49
46:L9:80:THR:O	46:L9:83:THR:N	2.85	0.49
11:S9:172:VAL:HG13	1:6:512:A:OP2	455.78	0.49
36:5:2852:C:H5''	36:5:2853:A:OP2	2.12	0.49
47:M0:142:ASP:CG	47:M0:178:ARG:HH22	2.14	0.49
10:S8:106:ALA:HB1	10:S8:160:PHE:CE1	2.47	0.49
41:L4:118:LYS:O	41:L4:121:ALA:HB3	2.13	0.49
41:L4:192:GLY:O	41:L4:194:TYR:N	3.28	0.49
1:2:1388:A:OP2	19:C7:32:LYS:NZ	2.44	0.49
19:C7:19:ARG:HG3	19:C7:20:TYR:CD1	2.47	0.49
36:1:812:G:O6	87:1:3984:OHX:N1	2.46	0.49
20:C8:42:TYR:CE1	20:C8:99:HIS:CD2	3.98	0.49
20:C8:70:VAL:O	20:C8:74:GLN:HG3	4.32	0.49
67:O1:46:THR:O	67:O1:48:ASP:N	4.80	0.49
42:L5:160:PHE:O	42:L5:163:LEU:HB3	2.52	0.49
42:L5:205:SER:O	42:L5:209:GLU:HG3	2.84	0.49
17:C5:34:VAL:HG11	17:C5:45:PHE:CD2	3.33	0.49
21:C9:34:VAL:HG13	21:C9:53:TRP:HE1	4.97	0.49
21:C9:57:ARG:NH2	21:C9:80:TYR:CG	3.32	0.49
16:C4:31:THR:OG1	16:C4:32:ASP:N	2.43	0.49
2:S0:86:VAL:HG12	2:S0:174:TRP:CE2	2.47	0.49
4:S2:99:LYS:HD3	4:S2:208:GLU:OE1	2.13	0.49
37:7:55:A:H2'	37:7:56:A:O4'	2.13	0.49
36:1:1709:C:C2	36:1:1736:G:C2	3.00	0.49
62:N6:52:ARG:NH1	38:8:71:A:O2'	35.30	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:8:94:C:O2'	38:8:95:G:H5''	2.13	0.49
59:N3:80:ARG:HG3	59:N3:80:ARG:NH1	2.28	0.49
34:SR:69:GLN:HG2	34:SR:111:MET:SD	3.10	0.49
36:1:366:A:H5''	36:1:367:A:OP2	2.13	0.49
41:L4:156:LEU:O	41:L4:158:SER:N	2.69	0.49
1:2:1289:U:C4	1:2:1290:U:C5	3.01	0.49
8:S6:56:ASN:H	8:S6:108:VAL:HG23	5.79	0.49
8:S6:57:ASP:C	8:S6:59:GLN:H	4.64	0.49
40:L3:136:LYS:HB2	40:L3:144:ILE:HD11	3.52	0.49
36:5:3276:G:H4'	36:5:3277:U:OP1	2.12	0.49
71:O5:118:ILE:O	71:O5:119:LYS:HB3	2.13	0.49
36:1:285:A:C8	36:1:285:A:C3'	2.96	0.49
51:M5:180:PHE:HB3	51:M5:183:THR:HG23	3.21	0.49
36:5:705:A:C2	36:5:714:G:N3	2.81	0.49
26:D4:60:PHE:HA	26:D4:70:VAL:O	2.27	0.49
38:8:138:A:H2'	38:8:139:U:C6	2.47	0.49
73:O7:64:MET:O	73:O7:68:LYS:HD2	2.84	0.49
1:6:1268:G:C2	1:6:1270:G:N7	2.80	0.49
1:6:912:U:O5'	1:6:913:G:H5'	2.13	0.49
36:1:215:G:OP1	62:N6:12:ARG:HD2	2.12	0.49
40:L3:41:VAL:HG21	40:L3:191:LYS:HA	2.86	0.49
36:1:2676:A:H4'	36:1:2677:G:O5'	2.12	0.49
55:M9:92:GLN:O	55:M9:95:TRP:HB3	2.35	0.49
44:L7:81:HIS:ND1	44:L7:138:TYR:CD1	3.41	0.49
76:Q0:111:ARG:HG3	76:Q0:112:LYS:HD2	4.85	0.49
36:1:1391:C:C2	68:O2:103:LYS:HD2	2.48	0.49
2:S0:71:GLU:CD	2:S0:71:GLU:H	2.16	0.49
62:N6:90:VAL:HG23	62:N6:91:ASN:H	1.89	0.49
36:5:1790:G:H2'	36:5:1791:C:O4'	2.12	0.49
58:N2:93:ILE:HG22	58:N2:106:ALA:O	2.13	0.49
1:2:648:G:C4	1:2:687:G:N2	2.81	0.49
36:1:3164:C:O2'	36:1:3165:A:C8	2.63	0.49
55:M9:129:GLY:O	55:M9:131:ALA:N	5.08	0.49
58:N2:100:THR:O	58:N2:101:ASN:HB2	2.38	0.49
34:SR:50:ASP:OD2	34:SR:53:LYS:NZ	2.38	0.49
46:L9:86:TYR:CD2	46:L9:151:VAL:HG13	2.95	0.49
45:L8:148:ALA:HB3	45:L8:175:VAL:HG11	2.11	0.49
21:C9:23:GLN:HG3	21:C9:55:TYR:CE2	4.82	0.49
36:5:3354:U:H4'	36:5:3355:U:O5'	2.13	0.49
36:1:1246:G:H2'	36:1:1247:U:O4'	2.12	0.49
36:5:1452:A:H1'	36:5:2347:U:O5'	2.12	0.49
68:O2:3:SER:HB3	68:O2:71:HIS:NE2	2.28	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1609:U:C5	1:6:1610:G:C5	3.00	0.49
1:2:862:A:C2	1:2:963:A:C4	3.00	0.49
1:2:1664:C:OP1	87:2:2176:OHX:N4	2.46	0.49
36:5:1212:A:C2	36:5:1294:A:C2	3.01	0.49
6:S4:200:ARG:O	6:S4:201:HIS:HB2	2.12	0.49
36:1:3248:C:O5'	36:1:3248:C:H6	1.95	0.49
36:1:3191:G:C4	36:1:3192:U:C6	3.01	0.49
36:5:1497:C:H2'	36:5:1498:A:C8	2.41	0.49
75:O9:45:ARG:NH1	36:5:1848:G:H5'	129.40	0.49
53:M7:44:ALA:O	53:M7:47:TYR:HB3	2.12	0.49
75:O9:44:TRP:CZ2	75:O9:45:ARG:HG2	4.98	0.49
1:6:88:U:H2'	1:6:89:G:C8	2.47	0.49
1:2:1795:U:O4	28:D6:9:GLY:HA2	2.12	0.49
1:2:931:C:OP1	28:D6:70:LYS:NZ	2.30	0.49
47:M0:38:LYS:HG2	47:M0:41:ALA:HB2	4.20	0.49
10:S8:27:PHE:CE2	1:6:301:A:H5''	313.82	0.49
1:6:301:A:H2'	1:6:302:U:C6	2.47	0.49
41:L4:272:VAL:HG23	36:5:696:C:OP1	98.38	0.49
1:6:1470:C:H2'	1:6:1573:A:H62	1.78	0.49
46:L9:90:MET:HB3	46:L9:181:VAL:HA	1.95	0.49
55:M9:27:ASN:C	55:M9:29:THR:H	2.15	0.49
36:1:2663:G:H2'	36:1:2664:C:C6	2.48	0.49
17:C5:25:LEU:O	17:C5:28:MET:HE2	4.01	0.49
5:S3:97:SER:O	5:S3:100:ALA:HB3	2.11	0.49
1:2:310:C:C2'	1:2:311:U:H5'	2.43	0.49
36:5:1631:C:H42	36:5:1811:G:H1	1.61	0.49
1:2:919:A:H4'	16:C4:35:GLY:HA3	1.95	0.49
16:C4:16:VAL:HG22	16:C4:32:ASP:O	2.93	0.49
16:C4:25:ASP:OD1	16:C4:26:THR:N	3.23	0.49
16:C4:66:ASP:O	16:C4:69:ALA:HB3	4.93	0.49
23:D1:35:ASN:OD1	23:D1:52:THR:HB	2.27	0.49
2:S0:180:GLU:CD	2:S0:183:ARG:HD3	2.32	0.49
40:L3:220:VAL:HG12	40:L3:272:TYR:HA	2.70	0.49
40:L3:219:ALA:HB2	40:L3:336:VAL:HG22	2.42	0.49
48:M1:6:GLN:OE1	48:M1:7:ASN:ND2	2.45	0.49
70:O4:46:ASP:H	70:O4:80:ARG:HD2	1.78	0.49
62:N6:51:ARG:HB3	62:N6:115:ARG:HH12	1.78	0.49
1:2:1185:U:C4	1:2:1458:G:H1'	2.48	0.49
40:L3:296:THR:HG21	40:L3:357:LYS:C	2.68	0.49
36:1:2661:G:O2'	36:1:2662:G:H5'	2.13	0.49
1:2:78:A:C8	8:S6:154:ARG:HG3	2.47	0.49
36:5:2407:C:H1'	36:5:2818:U:C2	2.48	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:87:PHE:O	39:L2:88:ILE:HD13	2.92	0.49
52:M6:195:ALA:O	52:M6:196:ALA:C	2.60	0.49
52:M6:113:ASP:OD2	52:M6:113:ASP:N	2.46	0.49
36:5:3288:G:C4	36:5:3289:G:C8	3.00	0.49
38:4:116:G:C2	38:4:117:C:C2	3.00	0.49
39:L2:181:LYS:O	39:L2:183:GLY:N	3.23	0.49
1:6:914:G:C8	1:6:914:G:H5'	2.47	0.49
41:L4:144:LYS:HG2	41:L4:145:ILE:H	5.68	0.49
64:N8:74:ASN:HB3	64:N8:76:ASP:HB2	2.42	0.49
42:L5:14:SER:C	42:L5:16:PHE:H	2.47	0.49
24:D2:35:ILE:O	24:D2:39:GLN:HG3	2.12	0.49
36:1:1594:A:OP1	70:O4:36:LYS:NZ	2.29	0.49
1:6:640:U:C2	1:6:641:G:C8	3.01	0.49
1:6:194:U:O2	1:6:195:G:O2'	2.31	0.49
1:2:1139:A:H2'	1:2:1140:G:O4'	2.11	0.49
1:6:481:A:H2'	1:6:482:U:H6	1.78	0.49
56:N0:171:PHE:O	56:N0:172:TYR:C	4.07	0.49
36:5:2660:G:H2'	36:5:2661:G:C8	2.48	0.49
1:6:38:C:C2'	1:6:39:A:H5'	2.42	0.49
1:2:1078:C:H2'	1:2:1079:U:H6	1.78	0.49
14:C2:132:GLU:HA	14:C2:135:MET:HB2	2.22	0.49
36:1:1209:G:C5	36:1:1210:U:C4	3.01	0.49
1:6:686:C:H2'	1:6:687:G:C8	2.48	0.49
68:O2:12:LYS:O	68:O2:13:HIS:HB2	2.12	0.49
8:S6:46:LYS:O	8:S6:117:GLY:HA3	2.13	0.49
36:1:876:A:H2'	36:1:877:C:H5'	1.94	0.49
1:2:1776:A:C6	1:2:1777:G:C6	3.01	0.49
1:2:928:U:H4'	16:C4:124:ASP:OD1	2.13	0.49
49:M3:11:LYS:HD3	36:5:86:G:O2'	142.83	0.49
38:4:109:A:C2	38:4:114:G:C5	3.00	0.49
36:5:2631:U:H2'	36:5:2632:G:C8	2.46	0.49
1:2:482:U:H3	1:2:505:A:H62	1.61	0.49
8:S6:200:ALA:HA	8:S6:203:GLU:CG	2.43	0.49
36:1:1131:G:C4	36:1:2373:A:C2	3.01	0.49
36:5:2176:U:C2'	36:5:2177:G:H5'	2.42	0.49
36:1:241:G:H2'	36:1:242:C:C6	2.47	0.49
37:7:113:C:H2'	37:7:114:U:O4'	2.11	0.49
1:2:1579:U:O2'	18:C6:139:GLN:HA	2.13	0.49
41:L4:164:GLU:O	41:L4:167:ALA:HB3	2.61	0.49
36:1:971:G:H2'	36:1:972:A:O4'	2.13	0.49
49:M3:10:LEU:HD23	54:M8:166:LEU:HD11	1.95	0.49
1:6:1720:G:O6	87:6:2098:OHX:N4	2.46	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:567:G:O6	87:5:4126:OHX:N2	2.46	0.49
1:2:241:U:H5'	1:2:242:U:OP2	2.13	0.49
1:6:1349:G:N3	1:6:1379:C:N4	2.59	0.49
47:M0:92:HIS:HB2	47:M0:94:PHE:CE2	2.48	0.49
66:O0:78:GLY:HA2	66:O0:81:VAL:HG22	1.94	0.49
1:2:1193:A:H4'	1:2:1194:A:OP2	2.11	0.49
36:1:1186:G:N3	56:N0:112:ALA:HB1	2.28	0.49
36:5:887:G:H2'	36:5:888:A:C8	2.47	0.49
20:C8:6:GLN:HE21	27:D5:44:GLN:H	8.40	0.49
36:5:1112:A:H5''	36:5:1113:G:OP2	2.13	0.49
26:D4:112:LYS:O	26:D4:116:LYS:HG3	4.26	0.49
28:D6:38:ARG:HG3	28:D6:38:ARG:NH1	2.28	0.49
28:D6:79:ILE:HA	28:D6:84:VAL:HG21	1.95	0.49
11:S9:134:ILE:HA	11:S9:158:PHE:HA	1.95	0.49
44:L7:170:GLU:O	44:L7:172:ASN:N	2.45	0.49
1:6:445:A:N3	1:6:446:A:C8	2.81	0.49
26:D4:20:ARG:HE	26:D4:22:GLN:HE21	5.12	0.49
41:L4:181:VAL:HG11	41:L4:224:GLY:HA3	2.37	0.49
36:1:359:U:O4	36:1:360:G:C6	2.66	0.49
36:5:817:A:H4'	36:5:818:C:OP2	2.13	0.49
73:O7:25:ARG:HG3	75:O9:50:ASN:O	4.43	0.49
50:M4:72:LEU:HD22	50:M4:73:PRO:HD2	2.21	0.49
7:S5:162:VAL:HA	30:D8:45:LYS:H	2.04	0.49
7:S5:63:GLN:OE1	7:S5:64:VAL:N	2.46	0.49
67:O1:50:ARG:HD2	67:O1:90:PHE:CE2	3.03	0.49
17:C5:89:MET:C	17:C5:107:ILE:HD11	7.59	0.49
21:C9:102:ARG:O	21:C9:106:GLN:HG3	3.31	0.49
1:2:952:A:OP1	15:C3:94:LYS:HE2	2.13	0.49
72:O6:28:TYR:C	72:O6:30:LYS:N	2.67	0.49
2:S0:124:THR:HA	2:S0:146:LEU:HG	3.90	0.49
2:S0:41:ARG:HB2	2:S0:45:VAL:HB	3.32	0.49
20:C8:36:LYS:HB3	20:C8:102:ALA:O	3.73	0.49
63:N7:46:ILE:HG13	63:N7:46:ILE:O	2.11	0.49
70:O4:46:ASP:OD2	70:O4:80:ARG:HD2	3.87	0.49
36:1:438:A:OP1	68:O2:118:LYS:NZ	2.29	0.49
55:M9:14:VAL:O	55:M9:15:VAL:C	2.52	0.49
1:6:1451:C:H2'	1:6:1452:U:C5	2.48	0.49
6:S4:166:SER:OG	6:S4:168:LYS:HG2	2.13	0.49
8:S6:163:THR:HA	8:S6:168:THR:HA	1.95	0.49
43:L6:154:LEU:HD23	43:L6:157:GLN:CB	5.19	0.49
1:2:1622:G:C4	1:2:1623:C:C5	3.00	0.49
8:S6:137:ARG:O	8:S6:141:ILE:HG13	2.34	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:SR:63:GLY:HA3	34:SR:90:ARG:NH1	2.27	0.49
1:2:1290:U:OP1	4:S2:95:ARG:HD3	2.12	0.49
52:M6:28:LEU:H	52:M6:28:LEU:HD12	1.76	0.49
36:5:713:U:O2'	36:5:754:G:OP1	2.21	0.49
36:5:2649:A:C2'	36:5:2650:U:H5'	2.43	0.49
45:L8:157:VAL:HG21	45:L8:163:VAL:HG11	1.95	0.49
40:L3:160:VAL:HB	40:L3:183:LEU:HD13	1.95	0.49
40:L3:194:TRP:CE2	40:L3:198:HIS:CE1	3.11	0.49
36:1:856:G:OP1	55:M9:92:GLN:NE2	2.44	0.49
36:5:2111:G:H4'	36:5:2112:U:OP2	2.12	0.49
36:5:782:U:H2'	36:5:783:A:O4'	2.13	0.49
2:S0:131:GLN:O	2:S0:134:LYS:N	3.75	0.49
37:3:47:C:H2'	37:3:48:U:H6	1.78	0.49
1:2:1383:G:H1'	22:D0:57:ARG:HH22	1.78	0.49
36:5:584:G:O6	87:5:4016:OHX:N1	2.46	0.49
36:5:1525:G:N2	36:5:1615:C:C2	2.81	0.49
36:5:1617:G:H1	36:5:1827:C:H42	1.61	0.49
87:1:4097:OHX:N2	40:L3:31:ALA:HB2	2.28	0.49
65:N9:7:HIS:CG	65:N9:8:THR:N	2.80	0.49
36:5:1192:C:H6	36:5:1192:C:H5'	1.78	0.49
1:6:1409:G:N2	1:6:1412:G:OP2	2.46	0.49
36:5:1943:C:H2'	36:5:1944:U:H6	1.77	0.49
1:6:1107:G:C6	1:6:1108:G:C6	3.01	0.49
60:N4:25:ASP:OD1	60:N4:25:ASP:N	2.46	0.49
74:O8:32:ASN:H	74:O8:37:PRO:HA	1.78	0.49
36:5:501:A:H2'	36:5:502:U:C6	2.47	0.49
8:S6:182:GLN:HA	8:S6:182:GLN:HE21	4.51	0.49
36:1:2880:U:OP1	59:N3:47:ASN:ND2	2.46	0.49
70:O4:9:ARG:O	70:O4:11:ASN:N	2.74	0.49
26:D4:50:ALA:O	26:D4:51:GLU:HB3	2.13	0.49
36:5:2107:A:H2'	36:5:2108:C:O4'	2.13	0.49
36:1:1056:U:C4	36:1:1057:A:C8	3.01	0.49
36:1:1372:C:C2'	36:1:1373:A:H5'	2.43	0.49
1:2:1414:U:O2'	1:2:1416:G:OP2	2.21	0.49
1:2:414:C:O2	1:2:419:G:N2	2.32	0.49
36:1:1344:G:H2'	36:1:1345:G:H5''	1.95	0.49
37:3:19:C:O2'	37:3:20:A:H5'	2.12	0.49
36:1:2598:G:H5''	36:1:2599:U:OP2	2.13	0.49
25:D3:74:VAL:HG23	25:D3:83:VAL:O	2.13	0.48
36:1:3053:G:N2	36:1:3090:U:H1'	2.28	0.48
40:L3:283:TYR:CE1	40:L3:354:VAL:HG11	4.25	0.48
36:1:1444:G:H1	36:1:2359:C:H42	1.61	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:E0:36:LYS:HZ3	1:6:593:U:H5	412.62	0.48
47:M0:171:TRP:O	47:M0:174:THR:HG23	3.58	0.48
49:M3:29:ALA:O	49:M3:31:LYS:N	2.47	0.48
41:L4:31:ARG:HD3	54:M8:23:ASN:OD1	3.00	0.48
1:2:1402:G:C2	1:2:1403:C:C2	3.01	0.48
19:C7:66:VAL:HB	19:C7:69:ILE:HD11	1.95	0.48
1:2:1472:C:H5'	1:2:1474:G:O4'	2.12	0.48
1:6:1540:G:C6	1:6:1541:G:C4	3.01	0.48
1:6:1547:A:H61	1:6:1564:U:H3	1.61	0.48
18:C6:39:VAL:HG12	18:C6:41:PRO:HD2	3.16	0.48
20:C8:26:ILE:HG13	20:C8:31:ALA:CB	3.60	0.48
7:S5:51:VAL:HG21	7:S5:130:ILE:HG23	3.88	0.48
7:S5:208:SER:HB3	7:S5:211:ILE:HG12	3.78	0.48
1:2:1548:G:H2'	1:2:1549:C:C6	2.48	0.48
17:C5:86:VAL:O	17:C5:89:MET:HG3	2.13	0.48
1:6:1783:C:H2'	1:6:1784:C:C6	2.48	0.48
1:2:1142:A:H2'	1:2:1143:A:O4'	2.12	0.48
2:S0:56:LYS:NZ	2:S0:159:ALA:O	2.36	0.48
70:O4:98:GLN:OE1	70:O4:101:VAL:HG11	2.13	0.48
38:4:73:U:P	62:N6:75:ARG:HD2	2.53	0.48
33:E1:97:LYS:HE3	1:6:1231:U:C4	439.55	0.48
60:N4:24:GLY:C	60:N4:26:SER:H	2.15	0.48
1:2:66:U:O3'	8:S6:171:LYS:HE2	2.13	0.48
34:SR:211:ILE:HG22	34:SR:223:TRP:HD1	1.78	0.48
36:5:2190:U:O2'	36:5:2191:U:H5'	2.12	0.48
52:M6:124:LEU:HD12	52:M6:124:LEU:HA	1.66	0.48
40:L3:305:ILE:HG21	40:L3:321:PHE:CE2	4.82	0.48
40:L3:285:VAL:HG13	40:L3:322:ILE:HD13	4.29	0.48
79:Q3:44:LYS:O	79:Q3:46:THR:N	2.62	0.48
39:L2:112:ILE:HD11	79:Q3:79:VAL:CG1	5.47	0.48
36:1:2422:C:H42	36:1:2608:G:H1	1.61	0.48
36:1:208:C:H2'	36:1:209:A:O4'	2.13	0.48
52:M6:26:GLN:HG2	52:M6:33:ILE:HD11	4.66	0.48
87:1:3976:OHX:N3	87:1:4154:OHX:N6	2.60	0.48
36:1:498:A:H2'	36:1:499:G:C8	2.48	0.48
52:M6:181:ALA:C	52:M6:183:ALA:N	2.66	0.48
36:1:981:U:C6	36:1:981:U:H3'	2.48	0.48
57:N1:130:ARG:NH2	36:5:988:U:O2	254.24	0.48
39:L2:204:MET:H	39:L2:204:MET:HG2	1.33	0.48
1:6:486:G:H4'	1:6:486:G:OP1	2.13	0.48
53:M7:16:SER:HB2	53:M7:149:VAL:HG22	1.94	0.48
74:O8:40:GLN:HE21	74:O8:55:VAL:HG11	2.34	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:107:G:C2	38:4:116:G:C5	3.01	0.48
36:1:2402:A:C2	36:1:2871:G:C5	3.01	0.48
23:D1:2:GLU:HG3	23:D1:7:GLN:O	5.81	0.48
2:S0:126:PRO:HG2	2:S0:152:PRO:CD	2.42	0.48
64:N8:60:TYR:CE2	64:N8:63:LYS:HG3	3.77	0.48
9:S7:4:PRO:HB2	9:S7:25:VAL:HG11	3.44	0.48
1:2:1488:G:H5'	1:2:1489:U:P	2.53	0.48
1:2:1490:C:C5	1:2:1492:A:C4	3.01	0.48
22:D0:104:THR:HG22	22:D0:116:VAL:HG21	2.10	0.48
38:4:123:G:C6	38:4:131:A:C6	3.01	0.48
21:C9:18:TYR:O	21:C9:21:PHE:HB3	2.51	0.48
61:N5:115:ARG:NH1	61:N5:119:THR:OG1	2.45	0.48
25:D3:38:PHE:HD1	1:6:359:A:N3	329.66	0.48
1:2:1040:G:H1	1:2:1078:C:N4	2.12	0.48
74:O8:14:LEU:O	74:O8:20:VAL:HG21	2.13	0.48
57:N1:12:ARG:HD2	57:N1:13:TYR:CZ	2.48	0.48
49:M3:129:ASN:HB3	49:M3:131:LYS:HE2	1.95	0.48
36:1:619:A:H5''	36:1:620:U:OP1	2.13	0.48
1:6:1236:A:H3'	1:6:1237:G:C8	2.48	0.48
1:6:432:G:C5	1:6:433:C:C5	3.01	0.48
36:5:2584:G:C8	36:5:2584:G:H5''	2.48	0.48
42:L5:278:SER:N	42:L5:281:GLU:OE2	2.46	0.48
61:N5:77:GLU:HG3	61:N5:133:LEU:HD23	1.95	0.48
11:S9:33:GLU:HB2	11:S9:34:PHE:CD2	2.48	0.48
36:5:3146:G:H2'	36:5:3147:G:C8	2.47	0.48
1:6:12:U:H2'	1:6:13:C:C6	2.48	0.48
40:L3:261:MET:SD	52:M6:64:PHE:HA	2.68	0.48
14:C2:98:GLY:HA3	14:C2:103:LEU:HD21	1.95	0.48
36:5:1241:U:O2'	36:5:1242:G:O5'	2.28	0.48
36:5:3341:U:N3	36:5:3355:U:C2	2.78	0.48
1:2:1765:A:C8	1:2:1768:G:N2	2.81	0.48
46:L9:44:THR:HG22	36:5:3186:A:H2	327.94	0.48
1:6:204:G:C4	1:6:264:G:N2	2.81	0.48
1:6:291:G:H2'	1:6:292:U:C6	2.48	0.48
1:2:232:U:H4'	1:2:233:C:OP2	2.11	0.48
36:5:1093:A:OP1	36:5:1093:A:H4'	2.12	0.48
38:8:68:G:N1	38:8:69:U:C2	2.81	0.48
22:D0:97:VAL:HG22	22:D0:98:GLN:N	3.40	0.48
49:M3:177:LYS:HB2	72:O6:11:LEU:HD22	1.94	0.48
36:1:1541:G:C6	36:1:1542:G:H1'	2.48	0.48
1:2:81:G:C6	1:2:82:U:N3	2.81	0.48
6:S4:252:ARG:HA	6:S4:255:ARG:HG3	3.40	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:8:113:U:H3'	38:8:113:U:O2	2.13	0.48
34:SR:262:VAL:O	34:SR:270:LEU:HD12	2.19	0.48
27:D5:43:ASP:HB2	27:D5:46:LYS:HD2	1.95	0.48
36:1:3199:G:H2'	36:1:3200:G:H8	1.77	0.48
46:L9:31:ARG:NH1	46:L9:187:ILE:HD12	2.28	0.48
46:L9:47:LYS:HZ3	50:M4:4:ASP:HB3	2.72	0.48
53:M7:127:ARG:NH2	36:5:1508:C:OP1	138.24	0.48
44:L7:51:TYR:C	44:L7:53:LYS:N	2.93	0.48
44:L7:51:TYR:O	44:L7:53:LYS:N	2.87	0.48
72:O6:36:ARG:HG3	72:O6:40:VAL:HG23	1.94	0.48
1:2:249:U:H3'	1:2:250:C:H5'	1.96	0.48
1:2:398:G:P	10:S8:47:ARG:HH12	2.33	0.48
36:1:341:G:O2'	38:4:22:U:O4	2.31	0.48
36:5:1383:G:H2'	36:5:1384:U:C6	2.47	0.48
41:L4:152:VAL:HG12	41:L4:153:SER:O	2.13	0.48
19:C7:51:ALA:HA	19:C7:54:THR:HG23	1.94	0.48
36:1:1318:A:OP1	52:M6:18:ARG:NH2	2.37	0.48
20:C8:61:LEU:HD22	20:C8:65:GLU:HB2	4.99	0.48
7:S5:124:LEU:HD11	27:D5:59:TYR:CD1	2.47	0.48
7:S5:49:GLU:O	7:S5:50:GLU:HB2	2.35	0.48
61:N5:102:LEU:HB2	61:N5:103:TYR:CD2	2.48	0.48
42:L5:237:GLU:HG3	42:L5:241:THR:OG1	4.08	0.48
21:C9:122:ARG:NH2	1:6:1500:C:OP1	419.69	0.48
12:C0:60:SER:O	12:C0:62:GLN:N	2.45	0.48
17:C5:105:VAL:HG12	17:C5:106:GLU:O	2.55	0.48
21:C9:122:ARG:NH1	1:6:1499:G:OP1	421.36	0.48
21:C9:15:ILE:CD1	21:C9:63:ARG:HD2	3.36	0.48
5:S3:56:GLN:HB2	5:S3:90:ARG:HH12	1.78	0.48
36:1:155:G:O2'	72:O6:27:SER:HB3	2.12	0.48
77:Q1:17:ARG:O	77:Q1:21:ARG:HB2	2.13	0.48
36:1:656:A:C2	36:1:657:A:C4	3.00	0.48
2:S0:17:LEU:O	2:S0:22:THR:HG23	4.44	0.48
54:M8:138:LEU:HD22	54:M8:139:ILE:N	4.31	0.48
36:1:1721:U:H5	55:M9:103:ARG:NH1	2.10	0.48
55:M9:35:ALA:O	55:M9:40:ALA:HB3	4.70	0.48
1:2:1211:A:H2'	1:2:1212:G:O4'	2.13	0.48
6:S4:125:LYS:HE2	6:S4:157:ASN:HA	1.94	0.48
6:S4:42:LEU:HB2	6:S4:109:PHE:HD2	1.78	0.48
64:N8:43:ILE:HG13	36:5:2727:A:C2	191.69	0.48
60:N4:4:GLU:HG2	60:N4:30:ARG:CD	2.41	0.48
1:2:68:A:O2'	1:2:69:G:OP2	2.23	0.48
40:L3:286:GLY:HA3	40:L3:321:PHE:CZ	2.92	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
79:Q3:36:ARG:HG2	79:Q3:48:LYS:HD2	1.95	0.48
36:5:293:C:H2'	36:5:294:U:O4'	2.14	0.48
36:1:3180:A:C4	52:M6:167:TYR:CE1	3.01	0.48
87:1:3976:OHX:N1	87:1:4154:OHX:N4	2.61	0.48
1:6:158:U:OP2	1:6:158:U:H6	1.96	0.48
24:D2:89:TRP:O	24:D2:93:LEU:HD23	3.00	0.48
49:M3:103:ASN:O	72:O6:22:PRO:HG3	4.21	0.48
39:L2:204:MET:CE	39:L2:209:HIS:HB2	2.43	0.48
33:E1:98:VAL:O	33:E1:99:LYS:HG3	2.13	0.48
46:L9:156:GLN:O	46:L9:160:ASP:N	2.71	0.48
1:2:79:C:OP1	8:S6:159:ARG:NH2	2.38	0.48
36:1:2897:A:H2'	36:1:2899:C:H5''	1.94	0.48
36:5:494:G:H2'	36:5:495:G:O4'	2.13	0.48
60:N4:13:ILE:HG12	60:N4:32:GLN:HB2	1.94	0.48
64:N8:79:TRP:CZ3	64:N8:87:ARG:HG2	4.81	0.48
22:D0:103:ILE:HA	22:D0:106:ILE:CG2	3.38	0.48
19:C7:33:ARG:NH2	34:SR:109:ASP:CG	3.39	0.48
36:1:3109:G:C2	36:1:3110:C:C6	3.01	0.48
36:1:3124:G:H5'	46:L9:40:HIS:ND1	2.27	0.48
36:5:2903:A:H2'	36:5:2904:U:O4'	2.12	0.48
36:1:2738:A:H2'	36:1:2739:A:C8	2.48	0.48
36:1:1629:U:O4	63:N7:111:LYS:HD2	2.12	0.48
36:1:1536:G:C5	36:1:1537:A:C8	3.01	0.48
36:1:763:G:H3'	36:1:764:U:C5	2.48	0.48
39:L2:65:ASP:HB2	39:L2:72:ARG:HG2	3.53	0.48
36:1:550:A:N1	36:1:551:A:C6	2.81	0.48
13:C1:57:LYS:O	13:C1:110:HIS:CE1	2.66	0.48
47:M0:210:ILE:HD13	47:M0:217:PHE:CD2	4.02	0.48
74:O8:65:LEU:O	74:O8:68:SER:HB2	2.13	0.48
64:N8:44:ASN:O	64:N8:47:LYS:O	2.44	0.48
39:L2:176:ASP:OD1	1:6:984:G:H5''	233.62	0.48
1:2:1648:A:H2'	1:2:1649:G:H8	1.79	0.48
21:C9:23:GLN:HG2	21:C9:55:TYR:CD1	2.47	0.48
36:5:2608:G:H2'	36:5:2609:A:H8	1.78	0.48
59:N3:104:ASN:O	59:N3:107:GLY:N	2.34	0.48
1:6:100:A:O5'	1:6:100:A:H8	1.95	0.48
36:1:2589:G:C6	36:1:2590:A:N7	2.82	0.48
1:2:361:C:H2'	1:2:362:G:C8	2.48	0.48
1:2:1673:G:O5'	1:2:1673:G:H8	1.96	0.48
1:2:882:U:H2'	1:2:883:C:C6	2.47	0.48
36:5:3256:G:H2'	36:5:3257:C:O4'	2.13	0.48
35:SM:112:ASP:C	35:SM:114:LYS:H	2.17	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:243:G:O5'	1:2:243:G:H8	1.96	0.48
36:1:1849:C:H5'	36:1:1849:C:H6	1.77	0.48
45:L8:54:GLU:O	45:L8:57:ARG:N	2.45	0.48
25:D3:57:LEU:HD23	25:D3:57:LEU:HA	2.12	0.48
40:L3:247:ARG:HD3	36:5:1888:U:OP1	210.37	0.48
67:O1:11:GLU:HG2	67:O1:74:ARG:CB	2.44	0.48
53:M7:53:ASP:O	87:M7:206:OHX:N3	2.46	0.48
1:2:756:A:H2'	6:S4:12:LEU:HD12	1.96	0.48
1:2:876:G:H1'	1:2:944:A:O4'	2.13	0.48
28:D6:10:ARG:HB2	28:D6:34:LYS:HA	1.94	0.48
28:D6:3:LYS:HE2	28:D6:6:ALA:HA	1.96	0.48
11:S9:11:THR:HB	11:S9:44:ARG:HG3	3.40	0.48
1:6:302:U:H2'	1:6:302:U:O2	2.12	0.48
10:S8:66:SER:O	10:S8:183:ILE:N	2.41	0.48
41:L4:23:PRO:HG2	41:L4:258:LEU:HD23	1.95	0.48
41:L4:280:ILE:HD11	54:M8:23:ASN:ND2	3.68	0.48
41:L4:42:VAL:HA	41:L4:45:ASN:ND2	2.28	0.48
49:M3:31:LYS:O	49:M3:35:ARG:HB2	2.68	0.48
1:2:1158:C:H42	1:2:1163:A:N6	2.00	0.48
1:2:1357:A:C2	1:2:1358:G:C4	3.01	0.48
18:C6:49:TYR:HB3	18:C6:53:LEU:HD11	1.96	0.48
31:D9:33:LYS:O	31:D9:36:LEU:HG	2.12	0.48
1:2:954:G:C2	1:2:955:A:C4	3.01	0.48
2:S0:49:ASN:ND2	2:S0:52:LYS:HG2	4.88	0.48
36:1:1601:U:P	55:M9:42:ARG:HH22	2.36	0.48
14:C2:67:THR:HB	1:6:1228:G:N7	459.96	0.48
36:5:3225:C:H2'	36:5:3226:A:C8	2.49	0.48
9:S7:162:ILE:HB	9:S7:169:PHE:HE2	1.79	0.48
8:S6:140:ASN:O	8:S6:144:PHE:HB2	3.13	0.48
34:SR:42:LEU:HB2	34:SR:61:PHE:CD2	3.83	0.48
44:L7:224:ILE:HA	56:N0:36:ILE:HD11	3.02	0.48
41:L4:8:VAL:HB	41:L4:16:THR:HG21	4.24	0.48
3:S1:107:THR:O	3:S1:108:ASP:C	2.94	0.48
1:6:1290:U:H2'	1:6:1291:G:N3	2.28	0.48
36:5:3275:U:O2'	36:5:3276:G:C2	2.65	0.48
49:M3:67:ARG:NH1	64:N8:108:GLY:HA2	2.29	0.48
49:M3:104:ARG:CG	72:O6:22:PRO:HD3	2.43	0.48
36:5:914:A:H5'	36:5:915:A:N7	2.28	0.48
36:1:96:G:H5'	49:M3:15:ARG:NH2	2.29	0.48
26:D4:41:ARG:HD3	26:D4:94:TYR:CE1	4.32	0.48
61:N5:43:ALA:N	36:5:16:A:OP1	96.77	0.48
38:4:104:A:H3'	38:4:105:A:C5'	2.43	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
73:O7:59:THR:HB	38:8:41:A:O2'	89.37	0.48
45:L8:161:GLU:O	45:L8:163:VAL:N	3.37	0.48
1:2:29:U:H2'	1:2:30:G:H8	1.77	0.48
25:D3:24:TRP:HZ3	25:D3:34:LEU:CD2	2.26	0.48
1:6:1261:G:O2'	1:6:1262:U:O5'	2.25	0.48
46:L9:169:ASN:O	46:L9:170:LYS:HG2	2.13	0.48
36:1:2279:A:H2'	36:1:2288:G:O6	2.13	0.48
64:N8:99:ALA:HB1	64:N8:100:PRO:HD2	2.79	0.48
36:5:1409:G:O2'	36:5:1410:U:H5'	2.14	0.48
68:O2:33:ARG:HH11	36:5:944:C:H4'	162.27	0.48
34:SR:198:ASN:O	34:SR:215:GLY:HA3	2.14	0.48
38:8:59:A:N1	38:8:100:U:H1'	2.28	0.48
36:1:2703:A:O5'	36:1:2703:A:C8	2.66	0.48
56:N0:87:THR:C	56:N0:88:HIS:CG	2.86	0.48
55:M9:62:ARG:O	55:M9:64:ARG:N	3.61	0.48
54:M8:89:ASP:OD1	54:M8:90:ASP:N	2.47	0.48
42:L5:187:THR:HB	42:L5:189:GLU:H	3.98	0.48
36:5:1052:U:H5''	36:5:1053:A:OP2	2.14	0.48
65:N9:46:ALA:O	65:N9:50:THR:HG23	3.02	0.48
36:1:33:G:H1'	36:1:52:A:N6	2.29	0.48
10:S8:7:SER:HA	1:6:338:C:H5'	295.13	0.48
10:S8:9:HIS:O	10:S8:10:LYS:CB	2.60	0.48
1:2:656:G:O6	1:2:678:A:H2'	2.13	0.48
11:S9:26:ALA:O	11:S9:30:LEU:HD12	4.39	0.48
36:5:129:U:O4	87:5:3928:OHX:N4	2.46	0.48
55:M9:123:LEU:HD23	55:M9:126:GLU:OE1	4.99	0.48
1:6:224:C:H6	1:6:224:C:O5'	1.96	0.48
1:6:772:G:C6	1:6:773:C:N4	2.81	0.48
36:1:3058:U:H5'	36:1:3059:G:OP1	2.13	0.48
8:S6:3:LEU:CD2	8:S6:109:LEU:HB3	2.43	0.48
36:5:1265:U:H3	36:5:1276:U:H3	1.61	0.48
36:1:34:A:H2'	36:1:35:A:C8	2.47	0.48
74:O8:32:ASN:C	74:O8:32:ASN:HD22	2.16	0.48
17:C5:64:LYS:HA	17:C5:73:PRO:HB3	1.95	0.48
36:1:825:U:O4	87:1:3938:OHX:N1	2.46	0.48
1:6:1277:G:C4	1:6:1436:A:C2	3.01	0.48
1:2:1417:A:O3'	18:C6:128:LYS:HE3	2.13	0.48
36:5:763:G:H2'	36:5:764:U:H6	1.78	0.48
6:S4:199:GLU:H	6:S4:199:GLU:HG3	1.40	0.48
55:M9:171:ASP:O	55:M9:175:GLN:N	3.18	0.48
37:7:11:A:C2'	37:7:12:U:H5''	2.42	0.48
36:5:869:G:H3'	36:5:870:G:H8	1.78	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:7:GLU:O	40:L3:8:ALA:HB2	2.13	0.48
40:L3:375:GLU:O	40:L3:378:ALA:HB3	2.13	0.48
59:N3:129:VAL:O	59:N3:133:SER:OG	2.16	0.48
1:6:552:G:C6	1:6:553:G:C6	3.01	0.48
53:M7:29:THR:OG1	53:M7:119:VAL:HG21	2.13	0.48
1:2:460:A:N3	1:2:460:A:H2'	2.28	0.48
11:S9:36:LEU:HD13	11:S9:41:GLU:HB2	1.95	0.48
42:L5:5:LYS:HD3	42:L5:5:LYS:HA	3.53	0.48
47:M0:43:VAL:HG12	47:M0:171:TRP:HE1	1.79	0.48
36:1:1363:A:OP1	44:L7:160:ARG:HD3	2.14	0.48
87:1:3993:OHX:N4	87:3:222:OHX:N1	2.61	0.48
44:L7:83:LEU:HA	44:L7:119:VAL:HG23	3.16	0.48
6:S4:64:ILE:HG12	26:D4:18:LEU:HD21	4.12	0.48
26:D4:20:ARG:NH2	26:D4:76:TYR:OH	2.45	0.48
41:L4:35:VAL:HG12	41:L4:36:HIS:N	2.59	0.48
64:N8:4:ARG:NH1	64:N8:5:PHE:CZ	2.81	0.48
18:C6:58:ASP:C	18:C6:60:PHE:H	2.16	0.48
61:N5:82:LEU:HD12	61:N5:126:LEU:HD21	2.81	0.48
21:C9:28:LEU:HD23	21:C9:111:ILE:HD11	6.95	0.48
5:S3:105:MET:O	5:S3:109:LEU:HG	3.28	0.48
15:C3:94:LYS:O	15:C3:96:VAL:N	2.47	0.48
1:2:905:A:O5'	1:2:905:A:H8	1.96	0.48
16:C4:82:LYS:CB	16:C4:118:VAL:HG11	2.44	0.48
66:O0:41:LEU:HD22	66:O0:42:ILE:N	2.29	0.48
66:O0:43:ILE:O	66:O0:90:VAL:N	3.16	0.48
66:O0:27:TYR:HD1	66:O0:52:ARG:HD3	2.52	0.48
68:O2:82:LEU:HD11	68:O2:112:ALA:HA	1.95	0.48
40:L3:67:PHE:HA	40:L3:70:ARG:HG3	5.63	0.48
6:S4:142:HIS:C	6:S4:144:GLY:H	3.26	0.48
6:S4:226:PHE:O	6:S4:228:ILE:HG23	4.15	0.48
42:L5:264:GLN:O	42:L5:267:ALA:N	3.04	0.48
18:C6:50:GLU:HG2	18:C6:112:TYR:HE1	3.37	0.48
34:SR:89:LEU:HB2	34:SR:103:PHE:CD2	2.64	0.48
5:S3:225:TYR:OH	34:SR:191:ASP:OD2	3.92	0.48
34:SR:153:GLN:HG2	34:SR:202:LEU:HD23	1.96	0.48
34:SR:302:PHE:CE1	34:SR:312:VAL:HG13	5.55	0.48
36:5:2249:G:OP1	87:5:4193:OHX:N6	2.47	0.48
52:M6:121:PRO:O	52:M6:124:LEU:HB2	2.88	0.48
52:M6:138:LEU:O	52:M6:138:LEU:HD12	2.13	0.48
36:5:352:A:H5'	36:5:354:U:H1'	1.95	0.48
72:O6:62:ARG:HH12	72:O6:98:ARG:CZ	3.00	0.48
51:M5:138:GLN:CA	51:M5:143:ARG:HD2	2.42	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:971:A:H5''	1:6:972:G:OP2	2.14	0.48
36:5:916:G:H4'	36:5:917:A:O5'	2.13	0.48
53:M7:16:SER:OG	53:M7:17:ALA:N	2.45	0.48
61:N5:46:TYR:HB2	71:O5:76:GLN:O	4.28	0.48
46:L9:159:ALA:O	46:L9:160:ASP:C	2.59	0.48
45:L8:153:ILE:HG22	45:L8:179:ILE:HG23	1.95	0.48
13:C1:103:ARG:NH1	1:6:307:G:OP1	328.10	0.48
41:L4:145:ILE:HG13	41:L4:145:ILE:O	2.12	0.48
1:6:1261:G:C2	1:6:1262:U:C2	3.01	0.48
4:S2:49:LYS:HD2	4:S2:243:TYR:CE1	4.79	0.48
45:L8:36:ILE:C	45:L8:38:GLN:H	2.15	0.48
58:N2:81:LYS:HG2	58:N2:90:ARG:NH1	2.27	0.48
36:5:2688:U:H4'	36:5:2689:A:O4'	2.13	0.48
36:5:404:G:H2'	36:5:405:U:O4'	2.13	0.48
36:5:731:U:H2'	36:5:732:C:C6	2.38	0.48
62:N6:100:HIS:CD2	36:5:217:U:H4'	71.82	0.48
1:6:315:A:O3'	1:6:316:A:H4'	2.12	0.48
36:5:267:G:C6	36:5:319:A:N7	2.81	0.48
36:1:417:A:H2'	36:1:418:A:H8	1.77	0.48
36:1:1585:C:O2'	36:1:1586:G:H5'	2.14	0.48
45:L8:94:PHE:HE2	45:L8:199:ALA:HA	2.84	0.48
39:L2:65:ASP:OD2	39:L2:68:LYS:N	2.47	0.48
39:L2:70:ARG:HE	39:L2:72:ARG:HD3	1.78	0.48
1:6:1620:C:C4	1:6:1621:U:C5	3.01	0.48
36:1:3164:C:N4	36:1:3286:G:C6	2.82	0.48
53:M7:11:PRO:HG2	53:M7:12:ALA:H	2.76	0.48
53:M7:131:ARG:NH1	53:M7:131:ARG:HG3	2.26	0.48
36:5:651:G:C6	36:5:652:G:C6	3.02	0.48
1:6:717:C:O2'	1:6:718:U:H4'	2.13	0.48
52:M6:67:THR:HG21	87:5:3975:OHX:N1	223.82	0.48
66:O0:74:ASN:O	66:O0:86:ARG:HB2	2.52	0.48
37:3:16:U:O2'	37:3:17:A:H5'	2.12	0.48
28:D6:88:SER:OG	28:D6:91:ASP:HB2	4.95	0.48
37:7:70:U:H2'	37:7:71:G:H8	1.78	0.48
1:2:885:G:OP1	3:S1:136:ARG:NH1	2.47	0.48
78:Q2:70:LEU:HG	78:Q2:85:LEU:HD21	1.94	0.48
18:C6:9:THR:HG21	18:C6:88:GLY:HA2	1.95	0.48
41:L4:106:TRP:HD1	36:5:664:U:H4'	124.26	0.48
39:L2:2:GLY:HA3	36:5:2608:G:OP1	183.11	0.48
1:6:526:A:O5'	1:6:526:A:H8	1.97	0.48
50:M4:133:LYS:O	50:M4:135:LEU:N	3.65	0.48
1:2:720:G:H2'	1:2:720:G:OP2	2.13	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2322:C:C2'	36:5:2323:G:H5'	2.43	0.48
34:SR:144:LEU:HD21	34:SR:186:PHE:HB3	1.94	0.48
36:5:1310:G:O6	87:5:4021:OHX:N4	2.46	0.48
2:S0:31:VAL:HG12	2:S0:33:GLN:H	1.77	0.48
40:L3:54:THR:O	40:L3:76:VAL:HG22	2.67	0.48
28:D6:75:VAL:HA	28:D6:78:ALA:HB3	1.96	0.48
1:2:510:G:H8	1:2:510:G:OP2	1.97	0.48
11:S9:80:LEU:HB3	11:S9:86:LEU:HB2	3.59	0.48
11:S9:92:LYS:HB2	11:S9:95:TYR:HD2	10.10	0.48
47:M0:140:THR:OG1	47:M0:141:LYS:O	2.31	0.48
47:M0:73:ASN:HA	47:M0:76:MET:HB2	2.72	0.48
44:L7:88:ARG:NE	44:L7:103:LEU:HD13	2.28	0.48
1:6:119:A:N3	1:6:397:A:C6	2.80	0.48
1:6:95:G:H5'	1:6:96:G:OP2	2.14	0.48
13:C1:33:ARG:HG2	13:C1:34:TRP:H	3.30	0.48
41:L4:251:THR:O	41:L4:254:ALA:N	2.90	0.48
41:L4:25:VAL:CG2	41:L4:262:TRP:HB2	3.14	0.48
43:L6:137:ASP:O	43:L6:141:VAL:HG23	2.13	0.48
19:C7:25:THR:O	19:C7:31:ASN:ND2	2.38	0.48
1:2:1614:A:OP2	7:S5:84:LYS:NZ	2.29	0.48
20:C8:24:GLY:O	20:C8:26:ILE:HG23	2.13	0.48
20:C8:42:TYR:CE2	20:C8:46:VAL:HG21	3.28	0.48
7:S5:43:PHE:HE2	7:S5:118:LEU:CD1	3.42	0.48
76:Q0:122:ARG:O	76:Q0:122:ARG:HG3	3.17	0.48
87:2:2044:OHX:N1	87:2:2099:OHX:N3	2.61	0.48
42:L5:196:ARG:O	42:L5:197:SER:C	2.77	0.48
42:L5:83:LEU:N	42:L5:84:PRO:HD2	2.64	0.48
17:C5:65:LEU:O	87:C5:201:OHX:N2	4.78	0.48
48:M1:80:LEU:HD12	48:M1:167:TYR:CZ	2.64	0.48
5:S3:102:ALA:N	5:S3:186:VAL:HG21	3.31	0.48
3:S1:48:VAL:HG21	3:S1:61:LEU:HD21	3.50	0.48
36:1:407:A:N3	36:1:408:A:C8	2.81	0.48
23:D1:10:GLU:CD	23:D1:11:LEU:HG	2.33	0.48
4:S2:140:ARG:NH1	4:S2:229:LEU:HD11	5.03	0.48
4:S2:224:PHE:O	4:S2:226:THR:HG23	2.13	0.48
48:M1:150:ASN:C	48:M1:151:SER:O	4.28	0.48
66:O0:43:ILE:CG2	66:O0:70:PHE:HB2	2.76	0.48
1:2:1050:G:N1	1:2:1051:G:C6	2.81	0.48
14:C2:123:VAL:CG1	14:C2:126:TRP:HB3	2.43	0.48
1:2:1544:U:H4'	20:C8:132:ARG:NH2	2.28	0.48
1:2:1211:A:H1'	17:C5:99:GLY:O	2.13	0.48
36:5:531:G:N2	36:5:532:A:C2	2.81	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:M4:13:ARG:C	50:M4:14:LEU:HD23	2.33	0.48
56:N0:53:LYS:C	56:N0:55:SER:H	2.61	0.48
43:L6:155:LEU:O	43:L6:158:TYR:HB3	2.81	0.48
43:L6:170:LYS:O	43:L6:173:MET:N	2.46	0.48
43:L6:164:SER:OG	69:O3:4:SER:HB2	3.35	0.48
75:O9:35:ILE:HD11	38:8:53:A:C2	83.54	0.48
37:7:22:A:H5''	37:7:23:A:OP2	2.14	0.48
18:C6:94:GLN:O	18:C6:94:GLN:NE2	4.03	0.48
34:SR:80:ALA:O	34:SR:91:LEU:HD12	2.39	0.48
36:5:2191:U:H2'	36:5:2192:C:C6	2.49	0.48
52:M6:12:LYS:HG2	52:M6:40:GLU:HB2	5.18	0.48
41:L4:59:GLN:HB3	73:O7:52:LYS:NZ	4.14	0.48
40:L3:81:THR:HG22	40:L3:81:THR:O	2.14	0.48
39:L2:83:HIS:NE2	39:L2:86:GLN:HG3	2.28	0.48
36:1:770:G:N7	87:1:4093:OHX:N6	2.62	0.48
50:M4:123:LEU:HD13	52:M6:194:LEU:HG	1.96	0.48
72:O6:97:SER:HB3	72:O6:98:ARG:HD2	1.95	0.48
72:O6:98:ARG:HD2	72:O6:98:ARG:H	1.78	0.48
40:L3:144:ILE:O	40:L3:148:LEU:HB2	2.45	0.48
36:5:1341:U:H2'	36:5:1342:C:C6	2.49	0.48
49:M3:74:GLY:CA	49:M3:98:ASP:HB3	2.42	0.48
79:Q3:11:THR:HG21	79:Q3:23:ARG:HB3	1.95	0.48
38:4:38:U:O4	71:O5:81:ARG:HG2	2.13	0.48
36:5:150:A:H2'	36:5:151:A:H5'	1.95	0.48
45:L8:160:ILE:HD13	45:L8:164:VAL:CG1	5.87	0.48
25:D3:24:TRP:CE3	25:D3:30:LYS:HD2	2.41	0.48
48:M1:57:PHE:N	48:M1:57:PHE:CD1	2.94	0.48
36:5:1699:A:O2'	36:5:1700:G:H5'	2.14	0.48
36:1:2549:G:C2	45:L8:35:GLY:HA3	2.49	0.48
1:2:804:A:N7	24:D2:107:SER:HA	2.29	0.48
36:5:1692:U:O4	36:5:1693:C:N4	2.47	0.48
1:2:1344:A:C2	1:2:1345:A:C5	3.01	0.48
1:6:275:C:N4	1:6:276:C:N4	2.62	0.48
79:Q3:50:GLY:O	79:Q3:51:ALA:HB3	2.12	0.48
42:L5:180:PHE:O	42:L5:181:PRO:C	2.52	0.48
56:N0:171:PHE:HE2	36:5:3205:G:C5	315.91	0.48
42:L5:184:ASP:HB3	42:L5:187:THR:HG1	4.96	0.48
36:1:549:U:OP2	36:1:549:U:H6	1.96	0.48
29:D7:3:LEU:HA	29:D7:3:LEU:HD22	2.12	0.48
13:C1:129:ARG:O	13:C1:131:ILE:HG13	4.21	0.48
36:1:537:A:H2'	36:1:538:G:O4'	2.14	0.48
36:1:3279:A:C6	36:1:3280:U:C4	3.02	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:C2:27:ALA:O	14:C2:132:GLU:HG3	2.13	0.48
6:S4:154:ILE:O	6:S4:155:LYS:HE2	2.13	0.48
36:5:128:G:H2'	36:5:129:U:O4'	2.14	0.48
1:2:1316:G:H2'	1:2:1317:C:C6	2.49	0.48
74:O8:10:GLN:HA	74:O8:13:GLU:CD	3.77	0.48
20:C8:16:ARG:CD	20:C8:19:ASN:HA	4.43	0.48
75:O9:23:LEU:HD13	75:O9:24:PRO:O	2.13	0.48
36:5:256:G:C4	36:5:257:U:C5	3.02	0.48
54:M8:176:ARG:NH1	64:N8:46:ASP:OD2	2.46	0.48
18:C6:31:VAL:HG13	18:C6:67:VAL:HG13	1.96	0.48
45:L8:213:LYS:O	45:L8:217:THR:HG22	5.63	0.48
36:1:1579:C:N3	36:1:1580:A:N6	2.62	0.48
36:1:1244:A:N6	36:1:1271:A:OP2	2.47	0.48
38:8:80:A:N3	38:8:82:U:O4	2.46	0.48
35:SM:88:ARG:O	35:SM:89:ARG:HG2	2.13	0.48
22:D0:117:VAL:HG22	22:D0:118:VAL:N	2.28	0.48
14:C2:46:ARG:NH2	1:6:1253:U:OP2	454.10	0.48
40:L3:255:TRP:CD1	36:5:2395:G:H5''	216.38	0.48
78:Q2:70:LEU:HD11	78:Q2:85:LEU:HD11	1.95	0.48
14:C2:103:LEU:HG	14:C2:116:VAL:HG23	1.94	0.48
36:1:2532:U:H3	36:1:2547:A:H61	1.61	0.48
36:5:1705:U:H2'	36:5:1706:C:H5'	1.95	0.48
26:D4:57:VAL:HA	26:D4:73:GLY:HA2	1.97	0.48
36:5:1149:G:O6	87:5:4205:OHX:N3	2.46	0.48
5:S3:46:THR:N	5:S3:83:THR:O	3.70	0.48
36:5:318:A:OP1	87:5:3950:OHX:N3	2.46	0.48
36:1:662:U:H5''	36:1:663:C:OP2	2.13	0.48
38:4:17:A:C5	38:4:18:U:C5	3.01	0.48
40:L3:56:ILE:HG12	40:L3:323:MET:HE1	3.27	0.48
36:1:1304:A:C4	36:1:2939:G:H1'	2.48	0.48
53:M7:136:ILE:HA	53:M7:136:ILE:HD13	3.87	0.48
28:D6:78:ALA:HA	28:D6:83:ILE:HG13	8.44	0.48
11:S9:77:ILE:HG23	11:S9:86:LEU:HD23	3.31	0.48
44:L7:210:PRO:HG2	44:L7:214:TRP:CD2	2.49	0.48
41:L4:230:VAL:HG21	41:L4:254:ALA:HA	1.96	0.48
19:C7:10:LYS:HD3	19:C7:53:TYR:CE1	2.49	0.48
52:M6:133:ARG:NE	36:5:1189:C:N4	294.67	0.48
41:L4:80:GLY:O	36:5:357:A:H1'	129.89	0.48
36:5:524:U:H2'	36:5:525:C:H5'	1.95	0.48
7:S5:41:LYS:HE2	7:S5:69:PHE:CE1	5.68	0.48
40:L3:312:VAL:O	40:L3:313:HIS:HB2	2.13	0.48
67:O1:30:PRO:HD3	67:O1:64:VAL:HG12	4.80	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:59:A:H5''	38:4:61:A:C8	2.48	0.48
87:2:2044:OHX:N1	87:2:2099:OHX:N5	2.61	0.48
17:C5:24:LYS:O	17:C5:28:MET:HB2	2.60	0.48
48:M1:85:LYS:HA	48:M1:89:TYR:CE2	2.62	0.48
5:S3:64:ARG:NH2	5:S3:65:ARG:HB2	7.66	0.48
1:2:625:C:H5''	1:2:626:U:OP2	2.14	0.48
36:5:1634:G:C6	36:5:1640:G:C6	3.02	0.48
16:C4:52:ARG:HG2	16:C4:53:ASP:N	2.29	0.48
28:D6:49:ALA:O	28:D6:51:ARG:N	3.24	0.48
5:S3:40:ARG:HD2	5:S3:49:ILE:HD11	1.96	0.48
4:S2:56:ILE:O	4:S2:60:SER:N	3.17	0.48
63:N7:3:LYS:HE3	63:N7:5:LEU:HB2	6.01	0.48
62:N6:48:LEU:HD22	62:N6:49:PRO:HD2	3.49	0.48
17:C5:129:GLY:CA	35:SM:74:LYS:HG2	4.70	0.48
1:6:1650:U:H2'	1:6:1651:A:C8	2.48	0.48
6:S4:125:LYS:HB3	6:S4:142:HIS:HB3	1.94	0.48
50:M4:19:ARG:HD2	50:M4:66:THR:O	2.13	0.48
52:M6:108:ILE:CG2	52:M6:160:ARG:NH1	4.60	0.48
56:N0:44:PHE:C	56:N0:46:GLN:N	3.36	0.48
56:N0:78:TRP:CE3	56:N0:125:LYS:HG2	2.49	0.48
56:N0:89:ASN:OD1	57:N1:155:PRO:HB3	2.13	0.48
34:SR:83:ALA:HB1	34:SR:110:VAL:HB	1.94	0.48
35:SM:31:SER:OG	35:SM:32:SER:N	2.47	0.48
36:5:344:A:H2'	36:5:345:G:H5'	1.95	0.48
39:L2:129:ALA:O	39:L2:131:GLY:N	2.85	0.48
39:L2:84:THR:HG23	79:Q3:63:THR:HB	2.31	0.48
3:S1:141:ALA:HB1	3:S1:207:LEU:HD23	1.96	0.48
78:Q2:52:GLY:O	78:Q2:54:THR:HG22	2.47	0.48
40:L3:166:ILE:HD13	40:L3:173:GLN:HG2	2.65	0.48
49:M3:174:ARG:NH1	72:O6:9:ILE:HD13	2.29	0.48
8:S6:69:LEU:HD13	8:S6:69:LEU:HA	1.60	0.48
8:S6:71:THR:O	8:S6:98:ARG:HG2	2.14	0.48
36:1:2382:G:OP1	52:M6:85:ARG:NH1	2.46	0.48
52:M6:183:ALA:HA	52:M6:186:ALA:HB3	4.23	0.48
36:1:990:U:H4'	57:N1:100:LYS:HB3	1.95	0.48
36:5:28:C:C2	36:5:29:C:C5	3.02	0.48
1:6:630:A:H5''	1:6:631:G:OP2	2.14	0.48
39:L2:202:VAL:HG21	39:L2:218:HIS:N	2.89	0.48
36:5:380:U:C2	36:5:390:G:C2	3.02	0.48
36:5:392:G:C2	36:5:393:U:C6	3.02	0.48
36:1:2190:U:C4	36:1:2191:U:C4	3.01	0.48
79:Q3:17:ARG:HB3	79:Q3:18:TYR:CD1	2.48	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:49:G:O3'	71:O5:35:LYS:NZ	2.46	0.48
36:1:1947:G:N2	36:1:2101:C:N3	2.50	0.48
36:1:1659:U:C2	36:1:1660:C:C5	3.01	0.48
36:5:750:G:H1	36:5:783:A:H2	1.61	0.48
36:5:3383:G:H2'	36:5:3384:U:H6	1.79	0.48
67:O1:72:ARG:HG2	67:O1:96:VAL:CG2	3.19	0.48
1:6:823:G:C8	1:6:824:G:C8	3.01	0.48
22:D0:44:ASN:HD22	22:D0:102:ARG:NH2	6.49	0.48
24:D2:36:LYS:HA	24:D2:36:LYS:HD2	2.82	0.48
74:O8:17:ARG:NE	74:O8:19:ASP:OD2	3.61	0.48
36:1:2344:U:H4'	36:1:3056:U:C5	2.49	0.48
36:1:1851:G:H8	36:1:1851:G:O5'	1.96	0.48
75:O9:4:GLN:HG2	36:5:1588:A:C5	127.19	0.48
10:S8:136:SER:O	10:S8:140:GLU:N	2.42	0.48
36:1:1795:U:C5	79:Q3:51:ALA:HA	2.48	0.48
36:5:2196:C:C2	36:5:2242:A:C6	3.01	0.48
36:5:181:U:H1'	36:5:236:G:N2	2.27	0.48
36:1:2669:G:N7	87:1:4069:OHX:N4	2.62	0.48
36:5:202:G:N2	36:5:203:G:C4	2.82	0.48
36:1:117:U:H1'	36:1:119:U:C5	2.49	0.48
36:1:121:A:C6	45:L8:129:PRO:HG3	2.48	0.48
36:5:1072:G:H2'	36:5:1073:U:C6	2.46	0.48
36:5:1659:U:H2'	36:5:1660:C:C6	2.49	0.48
1:6:1026:A:H4'	1:6:1028:C:C5	2.48	0.48
68:O2:19:ARG:HB2	68:O2:31:ASN:O	3.73	0.48
57:N1:17:ARG:HH11	57:N1:17:ARG:HB3	4.20	0.48
1:6:772:G:H2'	1:6:773:C:C6	2.49	0.48
53:M7:74:LYS:HE2	36:5:3298:C:OP1	185.04	0.48
3:S1:120:LEU:HD21	3:S1:122:GLU:HG3	2.67	0.48
54:M8:76:ALA:O	54:M8:78:ASN:N	2.47	0.48
34:SR:250:TYR:O	34:SR:251:TRP:HD1	1.97	0.48
33:E1:118:ARG:HG3	33:E1:134:ASN:HD21	8.52	0.48
6:S4:94:ALA:HB3	26:D4:17:LEU:HD23	3.98	0.48
33:E1:111:GLU:HA	33:E1:112:GLY:HA2	1.57	0.48
70:O4:13:TYR:CE2	36:5:1589:A:C5	151.43	0.48
50:M4:135:LEU:O	50:M4:136:ALA:HB2	2.37	0.48
2:S0:88:LYS:O	2:S0:91:ALA:HB3	2.59	0.48
36:5:572:A:C5	36:5:573:C:C5	3.02	0.48
36:5:421:G:C8	36:5:2365:C:C6	3.01	0.48
36:5:2206:G:N2	36:5:2238:G:H1'	2.28	0.48
36:1:895:A:C2	36:1:897:U:C5	3.02	0.48
14:C2:37:VAL:HG12	14:C2:38:HIS:CE1	2.48	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:201:A:O5'	36:5:201:A:C8	2.67	0.48
57:N1:76:ILE:HA	57:N1:76:ILE:HD13	1.64	0.48
10:S8:187:GLU:O	10:S8:190:ALA:HB3	2.13	0.48
25:D3:43:PHE:CE2	25:D3:48:HIS:HA	2.48	0.48
36:5:3053:G:N1	36:5:3090:U:O2	2.47	0.48
76:Q0:96:CYS:HA	76:Q0:121:LEU:HD23	2.23	0.48
20:C8:87:ASN:ND2	20:C8:100:THR:HG23	6.19	0.48
36:5:2171:G:O6	87:5:4242:OHX:N2	2.47	0.48
53:M7:37:ASN:OD1	53:M7:117:ILE:HG22	3.26	0.48
1:2:40:A:H62	1:2:467:G:H21	1.60	0.48
36:5:1196:C:H2'	36:5:1196:C:OP2	2.14	0.48
45:L8:245:LYS:HD2	45:L8:249:ARG:CZ	2.43	0.48
6:S4:29:PRO:O	6:S4:31:PRO:HD3	2.13	0.48
41:L4:190:GLY:C	41:L4:192:GLY:H	2.16	0.48
19:C7:24:LEU:HD21	19:C7:34:LEU:HD22	1.96	0.48
1:2:1567:U:H2'	1:2:1568:C:H5'	1.94	0.48
7:S5:214:LYS:HE2	7:S5:218:GLU:OE1	2.92	0.48
67:O1:54:GLU:O	67:O1:57:GLN:HB2	2.14	0.48
21:C9:125:SER:OG	21:C9:127:ASN:N	3.29	0.48
5:S3:44:THR:HB	5:S3:45:LYS:NZ	2.29	0.48
72:O6:27:SER:OG	36:5:156:G:P	88.46	0.48
15:C3:109:LYS:O	15:C3:112:LYS:HB3	2.14	0.48
36:5:1633:C:H2'	36:5:1634:G:C8	2.45	0.48
1:6:919:A:H2'	1:6:920:U:C6	2.49	0.48
19:C7:104:ASN:ND2	19:C7:105:GLN:OE1	5.72	0.48
2:S0:63:ILE:HG22	2:S0:120:LEU:HD21	1.95	0.48
20:C8:18:LEU:O	20:C8:20:THR:HG23	3.26	0.48
63:N7:33:SER:N	63:N7:36:HIS:O	2.58	0.48
62:N6:51:ARG:HG3	62:N6:52:ARG:N	2.25	0.48
62:N6:27:ARG:NH1	62:N6:75:ARG:O	2.44	0.48
14:C2:63:VAL:HG22	14:C2:119:SER:O	4.16	0.48
14:C2:66:VAL:O	14:C2:67:THR:OG1	2.28	0.48
36:1:3038:U:C2	36:1:3039:C:C6	3.02	0.48
6:S4:91:THR:HG23	6:S4:98:ASN:ND2	4.39	0.48
56:N0:138:GLN:HA	56:N0:141:LYS:HG3	2.62	0.48
57:N1:80:VAL:O	57:N1:82:ASN:N	2.47	0.48
40:L3:58:ARG:NH1	40:L3:352:GLU:OE1	2.46	0.48
59:N3:93:LEU:HB2	60:N4:20:LEU:HD22	1.96	0.48
43:L6:170:LYS:O	43:L6:173:MET:HG2	3.96	0.48
37:3:120:C:H2'	42:L5:265:TYR:CE1	2.48	0.48
8:S6:160:ARG:HA	60:N4:85:ALA:HA	1.96	0.48
8:S6:173:PRO:HA	1:6:66:U:O5'	339.63	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:C6:120:ASP:C	18:C6:122:ARG:H	3.22	0.48
36:5:2191:U:H2'	36:5:2192:C:O4'	2.13	0.48
29:D7:59:CYS:SG	29:D7:61:THR:HB	2.54	0.48
36:1:365:A:C2	36:1:366:A:C4	3.01	0.48
66:O0:9:SER:O	66:O0:13:LYS:HG3	2.12	0.48
1:6:36:C:H2'	1:6:37:U:C6	2.49	0.48
8:S6:70:PRO:HB3	8:S6:101:ILE:HB	2.54	0.48
36:5:1646:G:HO2'	36:5:1647:A:P	2.35	0.48
1:2:747:C:O3'	24:D2:80:ASN:ND2	2.46	0.48
36:1:73:C:N3	72:O6:15:LYS:HE2	2.28	0.48
39:L2:206:PRO:HD3	39:L2:213:GLY:CA	2.43	0.48
71:O5:89:ARG:HD2	38:8:38:U:C4	68.06	0.48
36:5:151:A:H2'	36:5:152:U:O4'	2.14	0.48
46:L9:173:ARG:HB2	76:Q0:127:LEU:HD12	1.96	0.48
1:2:733:A:HO2'	1:2:735:C:H5	1.61	0.48
35:SM:51:ARG:CZ	35:SM:52:PRO:HD2	6.41	0.48
1:6:808:U:H2'	1:6:809:A:C8	2.49	0.48
36:1:596:C:OP1	44:L7:33:ARG:NH1	2.47	0.48
36:1:2159:U:H6	36:1:2159:U:HO2'	1.62	0.48
37:3:31:U:O2'	37:3:32:U:H5'	2.14	0.48
36:1:2509:U:C2'	36:1:2510:U:H5'	2.44	0.48
36:5:1614:C:H2'	36:5:1615:C:C6	2.48	0.48
10:S8:138:ASN:O	10:S8:141:ARG:N	2.47	0.48
1:2:1225:U:O2	1:2:1230:A:H4'	2.14	0.48
38:4:11:C:H1'	53:M7:6:ALA:HB2	1.95	0.48
36:5:2511:A:C5	36:5:2512:C:C5	3.02	0.48
50:M4:24:LYS:HB2	50:M4:62:GLN:O	4.41	0.48
1:6:700:C:H2'	1:6:701:U:O4'	2.13	0.48
23:D1:64:GLU:HG3	29:D7:3:LEU:HD23	1.96	0.48
36:5:643:U:O4	36:5:644:G:C6	2.66	0.48
5:S3:134:CYS:SG	5:S3:135:GLU:N	3.60	0.48
36:1:1668:G:C5	36:1:1669:C:C5	3.02	0.48
36:5:1845:G:H1	36:5:1849:C:HO2'	1.56	0.48
13:C1:119:VAL:O	13:C1:121:ASP:N	3.10	0.48
49:M3:157:ARG:HH11	64:N8:124:ILE:HD12	4.60	0.48
45:L8:34:PHE:CZ	45:L8:42:PRO:HD3	3.56	0.48
36:1:1490:A:C2	36:1:1491:A:H1'	2.49	0.48
36:1:1412:G:C5	36:1:1413:G:N7	2.81	0.48
38:8:132:G:H2'	38:8:133:G:C8	2.46	0.48
6:S4:95:THR:O	6:S4:97:GLU:HG3	3.45	0.48
36:5:907:G:O5'	36:5:909:G:H1'	2.14	0.48
1:2:948:G:H2'	1:2:949:C:C6	2.49	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:3355:U:H2'	36:5:3355:U:OP1	2.14	0.48
1:2:534:A:H2'	1:2:535:A:H8	1.78	0.48
9:S7:137:GLY:HA2	15:C3:18:TYR:CZ	2.53	0.48
1:2:413:U:H2'	1:2:414:C:C6	2.48	0.48
36:5:1919:G:N7	87:5:4067:OHX:N4	2.62	0.48
36:5:2867:C:O2'	36:5:2868:U:H5'	2.14	0.48
36:1:2290:C:H2'	36:1:2291:A:O4'	2.13	0.48
6:S4:211:LYS:NZ	6:S4:211:LYS:HB2	2.28	0.48
9:S7:44:LYS:HB3	9:S7:44:LYS:HE2	1.58	0.48
50:M4:15:VAL:O	50:M4:15:VAL:HG22	2.22	0.48
65:N9:59:LYS:HB2	65:N9:59:LYS:HE3	5.36	0.48
54:M8:84:VAL:HG12	54:M8:84:VAL:O	2.19	0.48
25:D3:103:LEU:HD12	25:D3:125:VAL:HB	1.95	0.48
36:1:1466:G:H2'	36:1:1467:A:H5'	1.94	0.48
11:S9:96:VAL:O	11:S9:99:LEU:HB2	2.35	0.48
36:1:1196:C:H1'	87:1:3993:OHX:N2	2.28	0.48
1:6:211:U:H2'	1:6:212:U:H6	1.77	0.48
36:5:685:G:C2	36:5:696:C:C2	3.02	0.48
41:L4:170:LYS:HE3	41:L4:175:HIS:CE1	5.71	0.48
41:L4:179:LEU:HA	41:L4:182:LEU:CD2	2.44	0.48
41:L4:192:GLY:O	41:L4:195:ARG:HG3	4.08	0.48
41:L4:21:PRO:O	41:L4:23:PRO:HD3	2.90	0.48
41:L4:33:ASP:O	41:L4:37:THR:HG23	2.13	0.48
36:1:907:G:H3'	87:1:3984:OHX:N2	2.29	0.48
73:O7:25:ARG:HE	75:O9:51:ILE:HG13	2.44	0.48
1:6:1567:U:H2'	1:6:1568:C:H5'	1.96	0.48
20:C8:41:ARG:HH12	21:C9:38:LYS:HG3	1.78	0.48
36:1:1460:A:C2	36:1:1461:A:C4	3.02	0.48
36:1:1473:G:H5'	55:M9:23:TRP:CD1	2.49	0.48
67:O1:14:ILE:HG13	67:O1:19:ARG:NH1	2.29	0.48
61:N5:67:ILE:HD12	61:N5:121:LYS:HG3	1.96	0.48
36:1:2663:G:H2'	36:1:2664:C:O4'	2.14	0.48
17:C5:16:SER:HB2	17:C5:20:VAL:H	1.79	0.48
21:C9:76:LEU:HD22	21:C9:80:TYR:HE2	1.78	0.48
31:D9:33:LYS:C	31:D9:35:GLY:H	2.17	0.48
5:S3:72:LEU:HG	12:C0:20:VAL:HG11	1.96	0.48
1:2:872:G:H2'	1:2:873:U:O4'	2.13	0.48
36:1:268:A:C4'	36:1:270:U:H1'	2.43	0.48
72:O6:27:SER:C	72:O6:29:LYS:H	3.84	0.48
1:6:1639:C:O2	1:6:1763:A:N1	2.47	0.48
1:6:1762:A:O2'	1:6:1783:C:H5'	2.14	0.48
16:C4:25:ASP:HA	16:C4:54:GLU:O	2.14	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
62:N6:40:ARG:NH2	62:N6:46:LYS:HG3	2.72	0.48
1:6:1255:G:HO2'	1:6:1256:A:P	2.35	0.48
1:2:1178:G:C4	1:2:1462:G:C6	3.02	0.48
1:2:1467:C:H2'	1:2:1468:U:O4'	2.14	0.48
56:N0:92:LYS:NZ	56:N0:109:ASP:OD2	2.37	0.48
36:1:3189:G:C2	36:1:3190:C:C2	3.01	0.48
69:O3:49:ILE:CG1	69:O3:100:ILE:HG13	2.65	0.48
36:5:2278:C:C2	36:5:2307:G:N2	2.82	0.48
52:M6:76:PRO:HG3	52:M6:139:GLY:HA2	2.28	0.48
72:O6:72:VAL:O	72:O6:76:ARG:HB2	3.25	0.48
39:L2:149:ARG:HA	39:L2:155:LYS:HA	3.15	0.48
58:N2:53:ALA:O	58:N2:68:THR:HG22	2.14	0.48
36:1:285:A:H5''	36:1:286:U:P	2.53	0.48
49:M3:79:GLU:HA	49:M3:113:VAL:CG2	2.44	0.48
37:7:110:G:C5	37:7:111:U:C4	3.01	0.48
61:N5:56:ARG:HH21	38:8:134:G:H5''	79.00	0.48
36:1:1817:G:H2'	36:1:1818:U:O4'	2.14	0.48
36:1:3138:U:C2'	36:1:3139:A:H5''	2.35	0.48
36:5:123:A:C6	36:5:150:A:C5	3.02	0.48
25:D3:13:ARG:O	25:D3:17:VAL:HB	2.14	0.48
1:2:332:U:OP2	10:S8:56:ARG:NH2	2.38	0.48
36:5:3141:A:N6	36:5:3144:G:C2	2.82	0.48
36:5:2827:U:H1'	36:5:2828:G:N7	2.28	0.48
59:N3:125:LEU:HA	59:N3:125:LEU:HD12	1.58	0.48
37:3:68:C:OP1	42:L5:14:SER:OG	2.17	0.48
1:2:804:A:C2	1:2:805:U:C2	3.02	0.48
40:L3:28:ARG:HH21	40:L3:30:LYS:CE	2.27	0.48
36:1:1891:A:H2'	36:1:1891:A:N3	2.29	0.48
38:4:122:U:C2	38:4:123:G:C8	3.02	0.48
38:4:139:U:H2'	38:4:140:G:C8	2.48	0.48
61:N5:117:ASN:O	75:O9:18:LYS:HE2	2.14	0.48
54:M8:21:SER:OG	36:5:673:U:P	150.13	0.48
1:2:1767:G:OP2	1:2:1770:U:O2'	2.27	0.48
1:2:851:U:H2'	1:2:852:C:C6	2.49	0.48
23:D1:56:SER:OG	23:D1:57:GLY:N	3.98	0.48
74:O8:58:ASP:HB3	74:O8:61:LYS:HD3	5.27	0.48
65:N9:28:LYS:C	65:N9:29:TYR:HD1	3.09	0.48
1:2:43:A:C8	1:2:378:A:C2	3.01	0.48
78:Q2:65:THR:O	78:Q2:66:LYS:HG3	2.71	0.48
54:M8:156:GLY:HA2	64:N8:47:LYS:HB2	1.96	0.48
36:5:3392:U:H2'	36:5:3392:U:O2	2.13	0.48
2:S0:168:HIS:HB3	2:S0:203:PHE:CZ	2.76	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2541:U:H1'	36:1:2542:U:OP2	2.14	0.48
3:S1:120:LEU:HD23	3:S1:121:ILE:N	2.48	0.48
74:O8:32:ASN:N	74:O8:36:LYS:O	2.43	0.48
59:N3:30:GLY:O	59:N3:66:LYS:HG3	3.25	0.48
59:N3:4:ASN:HB3	59:N3:105:PRO:O	2.14	0.48
36:5:1241:U:C6	36:5:1243:G:OP2	2.67	0.48
36:5:665:A:N6	36:5:666:A:N6	2.62	0.48
36:1:304:G:C2	64:N8:62:HIS:CD2	3.02	0.48
56:N0:131:LYS:O	56:N0:134:ASP:HB2	2.13	0.48
87:5:4006:OHX:N6	87:5:4195:OHX:N5	2.62	0.48
36:1:1567:U:H5	36:1:1568:U:C2	2.32	0.48
36:1:130:A:C5	36:1:131:C:C4	3.01	0.48
1:6:480:G:C4	1:6:509:G:C2	3.01	0.48
1:2:241:U:H2'	1:2:242:U:C6	2.49	0.48
24:D2:108:ALA:HB3	24:D2:111:MET:HE1	2.92	0.48
11:S9:78:ARG:HG3	11:S9:79:ARG:N	2.39	0.48
40:L3:204:ALA:O	40:L3:207:SER:OG	2.99	0.48
36:1:1619:A:H2'	36:1:1619:A:N3	2.27	0.48
66:O0:83:LYS:N	66:O0:83:LYS:HD2	2.26	0.48
36:5:1679:A:C2	36:5:1680:G:C8	3.02	0.48
25:D3:51:GLY:CA	25:D3:77:ILE:HD12	4.95	0.48
32:E0:15:LYS:C	32:E0:17:GLN:H	2.16	0.48
40:L3:53:MET:HE3	36:5:3048:A:H5'	233.67	0.48
20:C8:107:SER:O	20:C8:110:ARG:N	2.98	0.48
46:L9:48:VAL:HG21	46:L9:52:LEU:HD13	4.24	0.48
36:1:1466:G:C6	36:1:1511:U:C5	3.01	0.48
28:D6:9:GLY:HA2	1:6:1795:U:O4	328.11	0.48
28:D6:10:ARG:CB	28:D6:34:LYS:HA	2.44	0.48
11:S9:107:ARG:O	11:S9:147:MET:HA	2.13	0.48
11:S9:139:GLN:OE1	11:S9:140:ILE:N	4.58	0.48
47:M0:89:VAL:HG13	47:M0:136:PHE:CE1	2.65	0.48
36:1:1195:A:O2'	36:1:1196:C:H5	1.96	0.48
6:S4:45:ILE:HB	6:S4:80:THR:HG22	1.94	0.48
41:L4:119:ARG:O	41:L4:122:THR:N	2.76	0.48
52:M6:128:ARG:HD2	52:M6:128:ARG:HA	3.25	0.48
1:6:1532:U:H2'	1:6:1533:C:H6	1.78	0.48
20:C8:12:GLN:NE2	20:C8:14:ILE:O	4.40	0.48
67:O1:55:LEU:O	67:O1:58:ALA:N	2.43	0.48
38:4:56:G:H2'	38:4:57:C:C6	2.49	0.48
5:S3:179:GLN:O	1:6:1438:G:H5''	400.20	0.48
77:Q1:11:ARG:O	77:Q1:15:ARG:HG3	5.19	0.48
1:6:899:G:N2	1:6:910:C:O2	2.32	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:918:U:H2'	1:6:919:A:C8	2.49	0.48
48:M1:12:LEU:C	48:M1:12:LEU:HD13	3.24	0.48
4:S2:153:SER:OG	4:S2:172:ALA:N	2.58	0.48
36:1:1720:U:OP2	55:M9:110:ARG:NH1	2.47	0.48
36:5:1875:G:H2'	36:5:1876:U:H6	1.78	0.48
62:N6:22:ALA:O	62:N6:27:ARG:NE	2.87	0.48
1:2:1456:C:H5''	1:2:1457:C:H5''	1.96	0.48
35:SM:68:ARG:C	35:SM:70:ASN:N	2.67	0.48
56:N0:26:ARG:HD3	57:N1:150:THR:CG2	3.80	0.48
36:5:1256:G:C2	36:5:1257:C:C2	3.02	0.48
42:L5:269:SER:OG	42:L5:270:LYS:N	4.57	0.48
34:SR:13:LEU:HD12	34:SR:310:ILE:HG21	1.96	0.48
72:O6:76:ARG:HE	72:O6:76:ARG:HA	1.78	0.48
16:C4:136:ARG:HH11	16:C4:136:ARG:HG3	1.78	0.48
3:S1:175:GLU:HG2	3:S1:193:ILE:HG23	3.28	0.48
3:S1:83:LYS:HZ2	3:S1:106:THR:HA	5.60	0.48
41:L4:161:LYS:HG2	36:5:210:U:OP2	78.62	0.48
52:M6:111:PRO:HG2	52:M6:112:TYR:CD2	3.13	0.48
36:5:938:C:OP1	36:5:962:A:O2'	2.32	0.48
1:2:1682:U:H1'	1:2:1683:C:H5'	1.95	0.48
36:5:281:G:C6	36:5:282:G:C6	3.02	0.48
49:M3:73:ARG:HB3	49:M3:98:ASP:OD2	2.96	0.48
26:D4:60:PHE:CD1	26:D4:71:GLY:HA3	2.79	0.48
36:1:1751:G:H5'	74:O8:26:LYS:NZ	2.29	0.48
48:M1:101:ASN:HB2	48:M1:129:VAL:O	2.13	0.48
35:SM:25:ILE:HG22	48:M1:46:VAL:HA	1.95	0.48
1:2:741:C:O2	9:S7:107:ARG:NH1	2.47	0.48
36:1:2923:U:C4	36:1:2924:U:O4	2.67	0.48
6:S4:140:VAL:HG11	1:6:295:A:O2'	342.43	0.48
36:1:2232:A:OP2	87:1:4043:OHX:N5	2.46	0.48
2:S0:112:THR:HG23	2:S0:115:PHE:HB2	1.95	0.48
36:5:1611:G:H2'	36:5:1612:A:C8	2.48	0.48
62:N6:90:VAL:O	62:N6:92:GLY:N	2.38	0.48
36:1:419:G:N2	38:4:5:U:C2	2.82	0.48
42:L5:187:THR:O	42:L5:188:GLU:HB2	4.28	0.48
40:L3:187:SER:O	40:L3:190:GLU:N	2.75	0.48
1:2:850:A:C6	1:2:851:U:C4	3.02	0.48
6:S4:160:VAL:HG13	6:S4:169:ILE:HG23	1.96	0.48
6:S4:172:PHE:C	6:S4:173:ILE:HD12	4.05	0.48
34:SR:117:LYS:NZ	34:SR:167:VAL:HG22	2.28	0.48
36:1:840:C:H2'	36:1:841:A:C8	2.49	0.48
65:N9:28:LYS:N	36:5:1065:A:N1	211.98	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:D0:61:LYS:N	22:D0:86:ILE:O	2.85	0.48
1:2:752:A:N6	1:2:753:A:N1	2.61	0.48
36:1:1579:C:H2'	36:1:1580:A:C8	2.48	0.48
10:S8:2:GLY:N	1:6:1729:C:O2'	288.72	0.48
1:2:71:A:H2'	1:2:72:A:O4'	2.14	0.48
36:1:2280:A:H5''	36:1:2281:A:P	2.54	0.48
12:C0:29:GLN:HB3	12:C0:39:ASN:CB	3.12	0.48
36:5:590:G:C2	36:5:610:G:H2'	2.48	0.48
10:S8:170:SER:OG	10:S8:181:GLY:HA2	2.49	0.48
13:C1:3:THR:HA	13:C1:81:HIS:NE2	2.29	0.48
1:6:1105:C:H2'	1:6:1106:U:H6	1.79	0.48
36:5:26:A:C4	36:5:330:G:C8	3.02	0.48
36:1:692:A:C4	36:1:693:A:C8	3.01	0.48
36:5:1287:A:C2	36:5:1288:U:C6	3.02	0.48
36:1:2838:A:N6	36:1:2839:G:N3	2.61	0.48
53:M7:89:LYS:HD3	53:M7:89:LYS:HA	4.48	0.48
36:1:2561:A:H2'	36:1:2561:A:OP1	2.14	0.48
38:8:32:C:O2'	38:8:33:A:H5'	2.14	0.48
33:E1:83:LYS:NZ	1:6:1210:C:H5''	366.51	0.48
25:D3:52:ILE:HG13	25:D3:77:ILE:HD11	4.16	0.48
36:5:2656:A:C8	36:5:2658:G:C8	3.02	0.48
1:6:89:G:C2	1:6:90:C:C2	3.01	0.48
6:S4:12:LEU:HD13	6:S4:12:LEU:HA	1.79	0.48
11:S9:146:PHE:CZ	1:6:765:G:N1	430.07	0.48
11:S9:126:ARG:O	11:S9:130:THR:HG23	3.29	0.48
36:1:2526:C:O2'	45:L8:241:LYS:NZ	2.40	0.48
6:S4:49:ARG:CB	6:S4:55:ALA:HB3	2.87	0.48
10:S8:101:ILE:HA	10:S8:101:ILE:HD13	2.41	0.48
43:L6:79:VAL:HG22	43:L6:80:ASN:H	2.02	0.48
19:C7:14:LYS:HG3	19:C7:69:ILE:CG2	2.85	0.48
21:C9:109:GLU:HG3	21:C9:114:VAL:O	2.13	0.48
48:M1:162:TRP:CZ2	48:M1:166:LYS:HE3	4.11	0.48
48:M1:80:LEU:O	48:M1:80:LEU:HD22	2.14	0.48
5:S3:45:LYS:HD2	5:S3:85:VAL:HG21	3.19	0.48
8:S6:7:TYR:CE2	8:S6:9:VAL:HB	2.72	0.48
16:C4:24:ASN:ND2	1:6:903:U:OP2	291.32	0.48
28:D6:43:ASN:HB3	28:D6:45:VAL:HG22	4.27	0.48
23:D1:72:LEU:HD23	23:D1:72:LEU:HA	2.03	0.48
2:S0:52:LYS:HD2	23:D1:82:VAL:CA	2.44	0.48
4:S2:54:GLU:HA	4:S2:57:PHE:CD2	2.49	0.48
4:S2:142:GLY:CA	4:S2:151:PRO:HB3	2.35	0.48
66:O0:34:LEU:HD23	66:O0:59:TYR:HB3	2.12	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:87:G:OP2	71:O5:5:LYS:HE2	2.13	0.48
1:6:1227:A:H4'	1:6:1228:G:H5'	1.95	0.48
20:C8:145:ARG:HB2	35:SM:68:ARG:HH21	1.77	0.48
9:S7:55:LYS:HE3	9:S7:87:ASP:OD1	3.98	0.48
42:L5:270:LYS:HE2	42:L5:273:ARG:HH22	1.78	0.48
34:SR:89:LEU:CG	34:SR:110:VAL:HG11	2.44	0.48
34:SR:238:ASP:HB3	34:SR:257:ALA:HB3	2.54	0.48
36:5:2969:A:OP2	87:5:3907:OHX:N6	2.46	0.48
52:M6:121:PRO:O	52:M6:123:ALA:N	3.39	0.48
72:O6:73:ALA:O	72:O6:76:ARG:HB3	2.78	0.48
40:L3:167:ARG:HD3	40:L3:167:ARG:H	1.78	0.48
1:6:632:U:H2'	1:6:633:U:O4'	2.14	0.48
36:5:388:G:H2'	36:5:389:A:O4'	2.14	0.48
38:8:138:A:H2'	38:8:139:U:H6	1.79	0.48
71:O5:59:ASN:O	71:O5:63:ARG:HG2	4.25	0.48
46:L9:128:VAL:HG22	46:L9:134:ILE:CD1	2.43	0.48
1:2:1084:A:H2'	1:2:1085:G:O4'	2.14	0.48
39:L2:226:SER:HA	36:5:2202:C:H5''	208.46	0.48
39:L2:189:TYR:HA	39:L2:192:LYS:HG3	1.96	0.48
36:5:147:U:H4'	36:5:148:G:OP2	2.14	0.48
44:L7:30:ARG:HA	44:L7:33:ARG:HH21	1.78	0.48
48:M1:135:GLY:O	48:M1:138:VAL:HG23	2.93	0.48
47:M0:4:ARG:HA	47:M0:5:PRO:HD3	2.26	0.48
41:L4:299:ILE:HG23	54:M8:39:ARG:HB3	2.59	0.48
37:3:47:C:H4'	42:L5:204:VAL:HG22	1.95	0.48
5:S3:5:ILE:HG22	5:S3:6:SER:O	2.14	0.48
25:D3:95:PHE:CD1	25:D3:135:LEU:HD13	2.49	0.48
16:C4:88:GLY:N	16:C4:120:PRO:HG2	2.28	0.48
19:C7:115:LEU:CD1	19:C7:116:LYS:H	2.23	0.48
36:1:1888:U:H2'	36:1:1889:G:O4'	2.13	0.48
36:1:3238:G:O6	87:1:3969:OHX:N4	2.47	0.48
36:5:400:G:H4'	36:5:401:U:H5''	1.95	0.48
36:5:2620:G:C6	36:5:2621:G:C5	3.02	0.48
36:1:1217:A:H61	36:1:1288:U:H3	1.61	0.48
36:5:2376:G:O2'	36:5:2377:G:H5'	2.14	0.48
36:5:3187:A:C2	36:5:3188:G:H1'	2.49	0.48
36:1:167:U:N3	36:1:168:U:C4	2.82	0.48
36:5:946:U:H2'	36:5:947:G:H8	1.79	0.48
58:N2:98:THR:HG21	58:N2:104:ARG:HE	4.09	0.48
36:1:537:A:C2	36:1:557:A:C8	3.02	0.48
74:O8:5:ILE:HG13	74:O8:6:THR:H	4.55	0.48
45:L8:90:THR:HA	45:L8:214:LEU:HD21	1.94	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1941:C:H1'	36:1:3362:A:H8	1.79	0.48
59:N3:53:SER:OG	59:N3:56:ASP:OD2	2.97	0.48
1:6:1018:U:H2'	1:6:1019:A:H8	1.77	0.48
36:1:2574:G:OP1	87:1:4210:OHX:N5	2.47	0.48
36:5:2137:U:C6	36:5:2141:U:C4	3.02	0.48
1:2:358:U:H5''	1:2:359:A:OP1	2.13	0.48
36:1:873:C:H5''	36:1:874:U:C4'	2.44	0.48
5:S3:19:ALA:O	5:S3:22:ASN:HB3	2.14	0.48
36:1:535:G:HO2'	36:1:554:A:N6	2.12	0.48
60:N4:63:ILE:C	60:N4:65:GLU:H	2.96	0.48
48:M1:117:ASP:OD2	48:M1:119:SER:HB3	4.35	0.48
36:1:1148:G:C6	36:1:1149:G:C5	3.02	0.48
9:S7:39:ARG:NH1	55:M9:188:ASP:O	2.47	0.48
1:6:1753:A:O5'	1:6:1753:A:H8	1.97	0.48
1:2:1527:C:H5'	7:S5:106:LYS:HE2	1.96	0.48
66:O0:82:GLY:C	66:O0:83:LYS:HD2	2.34	0.48
36:1:1021:G:H1	36:1:1031:C:H42	1.61	0.48
36:5:618:C:H2'	36:5:619:A:N7	2.29	0.48
1:6:10:G:C5	1:6:1633:A:C2	3.01	0.48
36:5:2762:A:H1'	36:5:2800:G:C6	2.49	0.48
42:L5:9:SER:OG	42:L5:10:SER:N	2.41	0.48
1:2:347:G:C6	1:2:348:U:C5	3.02	0.48
36:1:63:A:H2'	36:1:64:G:O4'	2.14	0.48
1:2:920:U:H5''	1:2:921:U:OP2	2.14	0.48
36:1:1110:U:H2'	36:1:1111:U:C6	2.49	0.48
1:2:434:G:N7	87:2:2048:OHX:N4	2.61	0.47
32:E0:13:LYS:HD3	32:E0:17:GLN:CD	4.12	0.47
36:5:3048:A:C6	36:5:3090:U:C5	3.01	0.47
1:2:876:G:H2'	1:2:936:G:N2	2.29	0.47
11:S9:39:LYS:HB2	1:6:593:U:OP2	409.02	0.47
47:M0:140:THR:HG21	47:M0:148:VAL:CG2	3.32	0.47
51:M5:22:LEU:O	51:M5:24:ARG:N	3.58	0.47
1:2:119:A:H1'	1:2:397:A:C4	2.49	0.47
13:C1:55:ASP:HB2	13:C1:82:ARG:HH12	2.66	0.47
10:S8:102:VAL:HG22	10:S8:167:ALA:O	2.14	0.47
10:S8:193:LEU:O	10:S8:194:ARG:C	2.69	0.47
36:1:1381:A:C2	36:1:1426:C:C2	3.02	0.47
41:L4:174:ALA:HB1	41:L4:178:LEU:HD11	1.95	0.47
41:L4:9:HIS:O	41:L4:153:SER:N	2.82	0.47
19:C7:51:ALA:O	19:C7:54:THR:N	2.47	0.47
36:1:562:C:O2'	36:1:563:U:H5'	2.14	0.47
18:C6:28:LEU:HB3	18:C6:64:ASP:OD2	4.32	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:C8:23:ASP:HB3	20:C8:26:ILE:HD13	2.74	0.47
27:D5:80:LEU:HD22	27:D5:101:TYR:CD2	3.28	0.47
30:D8:42:ARG:HH11	30:D8:56:LEU:HD22	1.79	0.47
7:S5:164:PRO:HG2	7:S5:165:LEU:H	1.79	0.47
7:S5:61:TYR:HE2	7:S5:164:PRO:HG2	2.71	0.47
7:S5:25:LEU:O	7:S5:26:ALA:C	3.51	0.47
38:4:46:G:C2	38:4:58:G:C6	3.01	0.47
75:O9:9:ILE:O	75:O9:10:LYS:C	2.52	0.47
36:1:2663:G:C5'	42:L5:152:ARG:HD3	2.44	0.47
42:L5:64:ILE:CD1	42:L5:109:THR:HG21	4.52	0.47
1:6:1427:A:HO2'	1:6:1428:G:P	2.36	0.47
1:2:626:U:H2'	1:2:627:C:C6	2.43	0.47
3:S1:65:VAL:HB	3:S1:87:ARG:HA	3.56	0.47
2:S0:60:ALA:O	2:S0:64:ILE:N	2.33	0.47
36:1:1733:G:H2'	36:1:1734:G:C8	2.48	0.47
40:L3:62:ARG:O	40:L3:63:PRO:C	2.72	0.47
50:M4:13:ARG:HD3	50:M4:66:THR:O	2.82	0.47
56:N0:138:GLN:C	56:N0:140:VAL:N	2.67	0.47
9:S7:133:THR:HG22	9:S7:159:VAL:HA	2.55	0.47
9:S7:58:LEU:N	9:S7:89:HIS:O	2.45	0.47
34:SR:112:SER:HB2	34:SR:153:GLN:HA	1.95	0.47
34:SR:211:ILE:HD12	34:SR:225:LEU:HB2	1.95	0.47
40:L3:117:ARG:C	40:L3:119:TYR:H	2.18	0.47
72:O6:91:ASN:HA	72:O6:94:ILE:HB	3.10	0.47
36:5:835:G:HO2'	36:5:857:G:N2	2.10	0.47
52:M6:182:ASN:CG	52:M6:183:ALA:N	5.05	0.47
49:M3:42:ARG:NH2	49:M3:51:LEU:HD23	5.06	0.47
49:M3:119:TYR:CE1	71:O5:118:ILE:HD11	5.01	0.47
36:5:1097:G:N3	36:5:1097:G:C2'	2.74	0.47
36:5:916:G:C5	36:5:924:G:C5	3.02	0.47
39:L2:6:ARG:HH12	39:L2:199:THR:N	2.08	0.47
24:D2:23:ARG:C	24:D2:65:LEU:HB2	5.80	0.47
1:2:1091:A:OP1	87:2:2175:OHX:N3	2.47	0.47
27:D5:85:LYS:HG3	27:D5:86:GLU:H	1.99	0.47
53:M7:33:ALA:C	53:M7:35:ALA:N	3.37	0.47
42:L5:56:THR:O	42:L5:59:ASP:N	4.67	0.47
64:N8:133:LEU:HD12	36:5:715:A:OP1	147.58	0.47
15:C3:140:LYS:HE2	36:5:847:A:OP1	284.33	0.47
40:L3:332:ARG:HH11	40:L3:333:LYS:CD	2.89	0.47
36:5:583:G:N7	87:5:4016:OHX:N5	2.63	0.47
74:O8:50:SER:HA	36:5:1613:A:OP1	133.49	0.47
36:1:2169:G:O6	87:1:3913:OHX:N4	2.47	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1889:G:OP1	40:L3:246:LEU:N	2.47	0.47
1:2:1138:A:H2'	1:2:1139:A:H8	1.79	0.47
36:1:1299:U:H2'	36:1:1300:G:C8	2.49	0.47
36:1:3206:C:H2'	50:M4:99:TRP:CZ2	2.48	0.47
36:1:3094:A:H2'	36:1:3095:U:C6	2.49	0.47
2:S0:135:GLU:HA	2:S0:138:TYR:HD2	2.60	0.47
41:L4:320:ASN:OD1	41:L4:323:VAL:HG12	2.14	0.47
41:L4:321:LYS:C	41:L4:323:VAL:H	2.17	0.47
42:L5:286:VAL:O	42:L5:290:ILE:HG12	2.14	0.47
36:1:384:A:N6	36:1:385:A:C6	2.82	0.47
64:N8:47:LYS:HE2	64:N8:48:TYR:OH	3.50	0.47
1:2:1346:A:O2'	1:2:1371:A:N6	2.47	0.47
1:6:1722:A:OP2	87:6:2096:OHX:N1	2.47	0.47
8:S6:111:LEU:HD12	8:S6:111:LEU:H	3.93	0.47
44:L7:174:GLY:C	44:L7:176:TYR:N	2.66	0.47
44:L7:174:GLY:HA2	44:L7:177:GLY:O	2.14	0.47
36:5:2561:A:O2'	36:5:2562:A:H8	1.96	0.47
36:5:504:A:H1'	36:5:611:A:OP1	2.14	0.47
47:M0:98:ARG:HD2	47:M0:120:GLY:O	2.13	0.47
1:2:498:G:C5	1:2:499:U:O4	2.66	0.47
36:5:723:U:C2'	36:5:724:U:H5'	2.43	0.47
6:S4:198:LYS:HA	6:S4:207:LEU:O	2.53	0.47
6:S4:37:LYS:HB2	6:S4:40:GLU:CG	2.44	0.47
49:M3:28:GLN:OE1	51:M5:201:ARG:NH1	2.93	0.47
1:2:361:C:H2'	1:2:362:G:H8	1.78	0.47
68:O2:3:SER:OG	68:O2:69:SER:O	2.23	0.47
37:7:72:A:O2'	37:7:74:C:OP1	2.23	0.47
46:L9:1:MET:O	46:L9:2:LYS:C	2.76	0.47
1:6:1745:G:O6	87:6:2082:OHX:N4	2.48	0.47
15:C3:36:GLN:HA	15:C3:36:GLN:HE21	2.44	0.47
40:L3:206:ASP:N	40:L3:206:ASP:OD1	2.46	0.47
36:5:875:G:C2'	36:5:876:A:H5'	2.44	0.47
25:D3:68:ILE:HB	25:D3:70:LYS:HZ1	2.72	0.47
36:1:3199:G:N3	36:1:3200:G:C8	2.82	0.47
50:M4:6:ILE:HA	50:M4:6:ILE:HD13	2.67	0.47
36:1:3199:G:H5''	50:M4:6:ILE:HG21	1.96	0.47
51:M5:72:LYS:O	51:M5:73:ARG:C	2.53	0.47
87:6:2125:OHX:N6	87:6:2177:OHX:N3	2.63	0.47
28:D6:3:LYS:NZ	28:D6:8:ASN:OD1	4.10	0.47
1:6:542:A:O2'	1:6:543:C:H3'	2.15	0.47
1:6:592:A:H2'	1:6:593:U:O4'	2.15	0.47
36:1:1039:U:H2'	36:1:1040:A:C8	2.49	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:M0:155:ALA:C	47:M0:157:TYR:H	2.37	0.47
13:C1:33:ARG:NH1	13:C1:53:TYR:O	2.25	0.47
10:S8:69:SER:O	10:S8:71:GLY:N	4.76	0.47
36:1:1386:A:C5	41:L4:183:LYS:HG3	2.48	0.47
64:N8:3:SER:HB3	36:5:1428:A:C8	136.04	0.47
73:O7:17:THR:C	73:O7:25:ARG:HA	2.34	0.47
50:M4:36:VAL:HG11	50:M4:55:ARG:NH2	2.29	0.47
17:C5:22:LEU:HD23	17:C5:23:GLU:N	4.78	0.47
48:M1:83:GLY:HA2	48:M1:86:VAL:CG2	2.43	0.47
67:O1:23:VAL:O	67:O1:28:ARG:HD2	3.49	0.47
36:1:1047:A:H2'	36:1:1048:A:C8	2.49	0.47
47:M0:23:ASN:ND2	47:M0:96:VAL:HG21	2.59	0.47
1:6:894:U:H2'	1:6:895:G:C8	2.48	0.47
16:C4:35:GLY:O	16:C4:37:GLU:N	2.48	0.47
16:C4:99:GLN:CD	28:D6:46:GLU:HB3	5.31	0.47
3:S1:181:LEU:HD13	3:S1:181:LEU:H	1.79	0.47
4:S2:57:PHE:CE1	4:S2:138:PRO:HD3	2.62	0.47
6:S4:206:ASP:O	6:S4:221:ARG:HA	2.14	0.47
36:1:1874:A:H5''	55:M9:18:GLY:HA3	1.95	0.47
38:4:72:A:OP2	62:N6:52:ARG:HB2	2.15	0.47
36:1:3038:U:O3'	40:L3:65:SER:HB2	2.14	0.47
11:S9:171:ARG:NE	11:S9:171:ARG:HA	2.59	0.47
52:M6:108:ILE:HG12	52:M6:108:ILE:O	4.66	0.47
75:O9:21:ARG:HD2	38:8:52:A:O5'	82.88	0.47
72:O6:68:ARG:O	72:O6:72:VAL:HG23	4.32	0.47
39:L2:118:GLU:HG3	39:L2:126:LEU:HD21	2.44	0.47
72:O6:90:MET:C	72:O6:92:ASN:N	3.08	0.47
36:1:1687:U:H1'	58:N2:75:TYR:CZ	2.48	0.47
36:5:282:G:H5''	36:5:283:G:OP1	2.14	0.47
51:M5:57:GLN:HB3	51:M5:139:HIS:HE1	2.09	0.47
39:L2:3:ARG:CG	39:L2:4:VAL:H	2.26	0.47
45:L8:134:TYR:CD2	45:L8:134:TYR:N	2.82	0.47
36:5:3103:A:OP2	87:5:4154:OHX:N4	2.48	0.47
42:L5:153:THR:HG23	42:L5:179:ARG:HD2	3.77	0.47
40:L3:39:LYS:CB	40:L3:40:PRO:HD2	2.96	0.47
36:1:1803:C:H4'	70:O4:62:TYR:O	2.13	0.47
36:5:130:A:H2'	36:5:131:C:H6	1.76	0.47
37:7:57:G:H3'	37:7:58:C:C6	2.49	0.47
36:5:735:A:C4	36:5:736:A:C8	3.02	0.47
34:SR:109:ASP:OD2	34:SR:127:ARG:NH1	3.21	0.47
36:1:1645:U:H2'	36:1:1646:G:H5'	1.96	0.47
74:O8:45:VAL:O	74:O8:51:LEU:HD12	2.14	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:S8:138:ASN:HA	10:S8:141:ARG:HB2	2.44	0.47
53:M7:62:ARG:HG2	53:M7:63:PHE:N	2.50	0.47
49:M3:178:LYS:HD3	49:M3:179:PHE:CE2	2.48	0.47
34:SR:135:THR:HG22	34:SR:141:LEU:HD21	1.95	0.47
1:2:445:A:H1'	1:2:525:A:OP1	2.14	0.47
1:6:701:U:H2'	1:6:702:G:H8	1.80	0.47
58:N2:17:VAL:O	58:N2:63:VAL:HG22	5.35	0.47
40:L3:345:ASN:CG	40:L3:347:SER:HB2	2.35	0.47
55:M9:109:TYR:O	55:M9:115:ILE:N	2.46	0.47
1:6:1408:G:H2'	1:6:1409:G:O4'	2.13	0.47
1:2:929:A:C6	1:2:930:A:C5	3.02	0.47
36:1:1197:A:C2'	36:1:1197:A:N3	2.77	0.47
36:1:1190:A:H2'	36:1:1190:A:N3	2.29	0.47
36:5:611:A:C2	36:5:612:U:C2	3.03	0.47
1:2:1353:U:C4	1:2:1354:G:N7	2.82	0.47
87:5:4061:OHX:N3	87:5:4138:OHX:N4	2.62	0.47
36:1:1364:C:O2	54:M8:10:HIS:NE2	2.30	0.47
36:1:2270:A:N6	36:1:2271:A:N6	2.61	0.47
15:C3:54:LEU:HD23	15:C3:54:LEU:HA	1.85	0.47
32:E0:56:MET:HE3	32:E0:56:MET:HB2	2.24	0.47
75:O9:22:PRO:HD3	75:O9:41:ARG:NH2	2.94	0.47
1:2:1651:A:C2	1:2:1750:A:C2	3.02	0.47
44:L7:208:SER:OG	44:L7:209:ASN:N	2.47	0.47
36:5:3301:U:H2'	36:5:3302:U:C6	2.50	0.47
36:5:1703:U:N3	36:5:1740:U:O2	2.47	0.47
52:M6:163:SER:O	52:M6:166:GLU:HB2	2.14	0.47
36:5:1729:A:O5'	36:5:1729:A:H8	1.96	0.47
74:O8:69:LEU:HA	74:O8:69:LEU:HD13	1.46	0.47
25:D3:63:GLN:HG2	25:D3:64:PRO:HA	1.96	0.47
46:L9:189:GLU:C	46:L9:191:LEU:N	2.66	0.47
1:2:461:G:OP1	11:S9:2:PRO:HD2	2.14	0.47
28:D6:30:ILE:HG13	28:D6:31:PRO:HD2	1.95	0.47
28:D6:5:ARG:NH2	1:6:1793:G:O2'	334.72	0.47
47:M0:153:ARG:HG2	47:M0:156:ARG:HD2	5.67	0.47
47:M0:191:LYS:HB3	47:M0:213:PHE:CE2	2.49	0.47
47:M0:86:HIS:CD2	47:M0:87:LEU:N	2.81	0.47
13:C1:54:ILE:HG23	13:C1:55:ASP:N	2.29	0.47
10:S8:100:ALA:O	10:S8:101:ILE:HB	4.65	0.47
10:S8:54:LYS:HD3	10:S8:175:GLN:HB3	3.17	0.47
36:1:1420:C:OP1	38:4:20:U:H5''	2.13	0.47
43:L6:56:LYS:NZ	43:L6:99:GLU:HA	2.29	0.47
5:S3:162:GLN:OE1	5:S3:165:ASN:HB2	2.14	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1350:U:O3'	18:C6:66:ARG:NH2	2.47	0.47
20:C8:54:LEU:C	20:C8:56:LYS:H	2.77	0.47
30:D8:14:LYS:O	30:D8:28:VAL:HG22	2.14	0.47
7:S5:117:THR:O	7:S5:121:ILE:HG12	3.56	0.47
7:S5:52:GLU:N	7:S5:131:GLN:OE1	2.51	0.47
55:M9:25:ASP:O	55:M9:27:ASN:N	2.46	0.47
67:O1:46:THR:OG1	67:O1:90:PHE:O	4.43	0.47
12:C0:15:LEU:HD22	12:C0:68:LEU:HD13	5.01	0.47
12:C0:68:LEU:HD23	12:C0:73:VAL:HG13	5.42	0.47
17:C5:68:PRO:O	87:C5:201:OHX:N1	7.85	0.47
47:M0:17:TYR:HD1	47:M0:96:VAL:HB	1.79	0.47
28:D6:51:ARG:CG	28:D6:51:ARG:HH21	2.87	0.47
3:S1:38:PHE:CD1	3:S1:73:LEU:HG	6.19	0.47
36:1:406:G:N3	38:4:16:G:C2	2.83	0.47
2:S0:165:ARG:HA	2:S0:165:ARG:NH1	2.29	0.47
66:O0:44:ILE:HG23	66:O0:89:VAL:HG23	5.14	0.47
36:1:181:U:H2'	36:1:182:U:O4'	2.14	0.47
62:N6:118:LEU:HA	62:N6:121:ARG:NH1	2.29	0.47
1:2:1206:U:C4	1:2:1207:C:N3	2.83	0.47
35:SM:65:THR:HA	35:SM:70:ASN:ND2	2.92	0.47
47:M0:10:ARG:O	47:M0:59:GLN:HG3	4.33	0.47
56:N0:12:ARG:NH1	57:N1:141:VAL:HB	2.30	0.47
44:L7:75:TYR:HB2	57:N1:141:VAL:HG23	4.41	0.47
60:N4:9:SER:O	60:N4:53:VAL:HG23	2.57	0.47
34:SR:103:PHE:CD2	34:SR:103:PHE:N	2.90	0.47
36:5:2278:C:C2'	36:5:2279:A:H5''	2.40	0.47
72:O6:81:THR:HA	72:O6:84:LYS:HG3	4.36	0.47
26:D4:122:GLY:O	26:D4:125:LEU:N	2.47	0.47
41:L4:162:THR:O	41:L4:163:LYS:C	2.53	0.47
36:5:3163:A:N1	36:5:3288:G:C6	2.82	0.47
59:N3:44:SER:OG	36:5:2916:U:H1'	263.75	0.47
40:L3:139:GLN:C	40:L3:141:GLY:N	2.67	0.47
36:5:835:G:C2	36:5:857:G:C4	3.03	0.47
49:M3:46:ILE:O	49:M3:49:ARG:HB2	2.14	0.47
26:D4:8:ARG:HH12	26:D4:68:LYS:CE	2.23	0.47
74:O8:40:GLN:HE21	74:O8:55:VAL:CG1	3.00	0.47
36:1:837:A:OP1	79:Q3:5:THR:OG1	2.32	0.47
38:4:100:U:H5''	38:4:101:U:OP2	2.13	0.47
73:O7:64:MET:HB3	73:O7:68:LYS:HG3	1.96	0.47
46:L9:129:ARG:NH2	46:L9:160:ASP:OD2	2.47	0.47
37:3:39:C:O2'	48:M1:43:GLN:HB3	2.13	0.47
24:D2:44:HIS:CE1	24:D2:101:TYR:CZ	3.10	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:3141:A:C6	36:5:3144:G:C4	3.02	0.47
4:S2:39:THR:O	4:S2:43:ARG:HD2	4.37	0.47
41:L4:300:ARG:NH2	54:M8:38:ARG:O	3.04	0.47
1:6:846:G:C2	1:6:847:A:C4	3.03	0.47
36:1:523:A:N6	36:1:570:A:C2	2.83	0.47
36:1:2592:G:O2'	36:1:2593:A:H8	1.96	0.47
24:D2:105:THR:HG23	24:D2:110:ILE:HG13	1.96	0.47
46:L9:41:ILE:O	46:L9:43:VAL:HG12	3.69	0.47
63:N7:52:LYS:O	63:N7:65:ARG:HD2	2.14	0.47
2:S0:109:ASN:HD21	2:S0:111:ILE:HG22	1.79	0.47
1:6:194:U:H2'	1:6:194:U:O2	2.13	0.47
36:5:2185:G:C5	36:5:2186:U:C5	3.02	0.47
36:1:2833:A:C2	36:1:2834:G:C8	3.03	0.47
36:5:2510:U:O2'	36:5:2511:A:H5''	2.14	0.47
36:5:2943:G:H2'	36:5:2944:U:O4'	2.13	0.47
45:L8:129:PRO:HD2	36:5:120:G:C8	98.31	0.47
13:C1:83:THR:HA	13:C1:111:VAL:HG12	3.24	0.47
41:L4:48:GLN:OE1	36:5:691:A:N6	93.47	0.47
47:M0:51:HIS:N	47:M0:166:ILE:O	3.40	0.47
41:L4:214:GLY:O	41:L4:216:VAL:N	2.47	0.47
34:SR:195:HIS:CE1	34:SR:213:SER:HG	2.96	0.47
18:C6:69:VAL:HG11	18:C6:77:GLN:HB3	1.95	0.47
36:1:1517:G:H2'	36:1:1518:U:C6	2.49	0.47
45:L8:116:VAL:HG12	45:L8:117:ALA:N	2.29	0.47
36:1:1121:U:H2'	36:1:1122:U:O4'	2.13	0.47
17:C5:76:VAL:O	17:C5:95:GLY:N	2.54	0.47
39:L2:27:ALA:HB3	39:L2:128:ARG:HH21	1.78	0.47
36:5:767:U:H1'	36:5:768:C:C6	2.49	0.47
36:1:2117:A:H2'	36:1:2118:C:O4'	2.13	0.47
1:6:800:U:H2'	1:6:801:G:C8	2.49	0.47
36:5:421:G:N7	36:5:2365:C:C6	2.82	0.47
1:2:317:C:O2	1:2:347:G:N2	2.41	0.47
2:S0:189:VAL:HG22	2:S0:190:ASP:H	1.79	0.47
46:L9:112:ILE:N	46:L9:126:VAL:O	2.72	0.47
40:L3:55:THR:HG23	36:5:3049:A:N3	245.91	0.47
36:5:866:A:H5''	36:5:867:G:OP2	2.14	0.47
36:5:3352:U:O3'	87:5:4224:OHX:N1	2.47	0.47
25:D3:74:VAL:O	25:D3:83:VAL:N	2.33	0.47
36:5:2659:G:C2	36:5:2712:U:O2	2.67	0.47
20:C8:127:HIS:O	20:C8:130:GLY:N	3.01	0.47
36:1:639:G:O2'	36:1:640:U:H5'	2.15	0.47
47:M0:52:LEU:HA	47:M0:52:LEU:HD23	1.69	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
87:L1:3959:OHX:N3	44:L7:217:PRO:HA	2.30	0.47
45:L8:238:LEU:HA	45:L8:238:LEU:HD12	1.63	0.47
1:2:333:A:OP2	10:S8:54:LYS:NZ	2.37	0.47
26:D4:18:LEU:HD13	26:D4:20:ARG:NH1	2.29	0.47
6:S4:45:ILE:HD11	6:S4:49:ARG:HH21	1.79	0.47
41:L4:36:HIS:CE1	36:5:1426:C:OP1	136.51	0.47
64:N8:3:SER:OG	64:N8:4:ARG:N	2.47	0.47
19:C7:35:CYS:CA	19:C7:38:ILE:HG22	2.40	0.47
42:L5:22:ARG:NH1	42:L5:28:THR:HG1	5.54	0.47
18:C6:21:HIS:HB2	18:C6:23:LYS:HZ3	9.22	0.47
30:D8:33:LEU:O	30:D8:35:ASP:N	2.47	0.47
7:S5:43:PHE:N	7:S5:46:TRP:O	3.02	0.47
44:L7:25:GLN:HA	44:L7:29:GLU:H	1.80	0.47
44:L7:25:GLN:CG	44:L7:29:GLU:HB2	2.32	0.47
1:2:1204:A:C8	1:2:1555:A:N1	2.82	0.47
31:D9:14:TYR:HE2	1:6:1204:A:C6	402.37	0.47
36:1:155:G:H1'	72:O6:26:ILE:HD13	1.96	0.47
42:L5:41:LYS:HD3	42:L5:41:LYS:HA	3.32	0.47
47:M0:95:HIS:C	47:M0:95:HIS:CD2	2.87	0.47
1:6:889:U:H1'	1:6:988:A:O2'	2.14	0.47
16:C4:29:HIS:CD2	16:C4:29:HIS:C	3.83	0.47
3:S1:41:ARG:NH2	3:S1:97:LEU:HD21	2.29	0.47
4:S2:65:GLU:HB2	4:S2:68:ILE:CG1	3.06	0.47
4:S2:35:TRP:CZ2	4:S2:67:GLN:HB2	2.49	0.47
40:L3:13:HIS:CE1	36:5:3011:A:C8	249.34	0.47
1:6:1699:G:H1	1:6:1701:A:H3'	1.79	0.47
48:M1:10:ARG:HH11	48:M1:133:ARG:HH21	2.67	0.47
4:S2:152:HIS:ND1	4:S2:195:ASP:OD2	2.41	0.47
63:N7:13:VAL:HB	63:N7:18:TYR:O	2.31	0.47
63:N7:72:ILE:H	63:N7:72:ILE:HD13	4.27	0.47
70:O4:88:ARG:O	70:O4:88:ARG:HG3	2.15	0.47
55:M9:18:GLY:O	55:M9:20:ARG:N	2.74	0.47
62:N6:115:ARG:O	62:N6:119:ILE:HG13	2.14	0.47
73:O7:75:LYS:HD3	73:O7:76:ASN:OD1	2.15	0.47
36:5:532:A:H2	36:5:560:G:H22	1.61	0.47
69:O3:59:VAL:C	69:O3:61:GLY:H	2.36	0.47
1:6:149:C:N4	1:6:165:G:H1	2.07	0.47
34:SR:228:LYS:O	34:SR:229:LYS:HG3	2.14	0.47
40:L3:81:THR:HB	40:L3:321:PHE:HA	1.97	0.47
40:L3:49:TYR:C	40:L3:79:VAL:HG23	2.47	0.47
1:2:1005:A:H2'	1:2:1006:C:O4'	2.15	0.47
39:L2:89:TYR:HB2	39:L2:100:ASN:ND2	3.78	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:44:ILE:HD12	39:L2:46:LYS:HE2	5.13	0.47
70:O4:106:LYS:O	70:O4:110:GLU:N	2.38	0.47
79:Q3:87:ARG:O	79:Q3:91:GLU:HG2	2.26	0.47
1:6:151:G:H2'	1:6:152:U:C6	2.50	0.47
52:M6:25:LYS:HA	52:M6:28:LEU:CD1	2.44	0.47
36:5:3286:G:H2'	36:5:3287:U:H6	1.79	0.47
8:S6:58:LYS:HG2	8:S6:105:ASP:O	2.15	0.47
36:5:1062:A:C2	36:5:1098:A:C5	3.03	0.47
36:1:990:U:H4'	57:N1:100:LYS:CB	2.45	0.47
36:1:3005:A:H5''	52:M6:149:TYR:OH	2.14	0.47
26:D4:24:VAL:HG13	26:D4:71:GLY:O	3.11	0.47
11:S9:102:GLU:O	11:S9:106:GLU:HB2	2.93	0.47
76:Q0:77:ILE:O	76:Q0:78:ILE:HB	2.15	0.47
45:L8:161:GLU:O	45:L8:164:VAL:HG22	2.44	0.47
40:L3:183:LEU:HB3	40:L3:191:LYS:HD3	1.96	0.47
36:1:2680:A:C2	48:M1:24:GLY:HA3	2.50	0.47
44:L7:24:GLU:C	44:L7:26:VAL:H	2.12	0.47
40:L3:332:ARG:O	40:L3:333:LYS:HB2	2.14	0.47
36:1:2932:U:O2	36:1:2934:A:C8	2.66	0.47
6:S4:146:THR:HG21	1:6:123:G:N3	341.43	0.47
36:1:2234:G:H8	36:1:2234:G:O5'	1.97	0.47
63:N7:54:THR:OG1	63:N7:56:LYS:NZ	2.48	0.47
63:N7:51:LEU:HB3	63:N7:65:ARG:HH11	1.80	0.47
40:L3:238:LEU:HB3	40:L3:242:THR:HG21	2.47	0.47
36:1:1588:A:C6	75:O9:4:GLN:HG3	2.50	0.47
1:2:195:G:C2'	1:2:196:G:H5'	2.45	0.47
78:Q2:71:ARG:CZ	78:Q2:80:ARG:HD3	4.34	0.47
25:D3:22:ASN:O	1:6:609:U:C5	337.25	0.47
40:L3:339:ARG:NH1	40:L3:342:LEU:HD11	2.68	0.47
69:O3:76:GLY:HA2	36:5:1327:C:O2'	258.56	0.47
63:N7:115:LYS:O	63:N7:119:GLU:HG3	2.14	0.47
78:Q2:58:PHE:CD1	78:Q2:59:HIS:N	2.75	0.47
36:5:2768:U:H2'	36:5:2769:A:C8	2.44	0.47
62:N6:98:ASN:N	62:N6:98:ASN:OD1	3.60	0.47
1:6:922:G:C2'	1:6:923:A:H5'	2.44	0.47
45:L8:71:VAL:HG22	45:L8:76:ALA:HB2	1.94	0.47
55:M9:142:ILE:O	55:M9:145:ALA:HB3	3.04	0.47
74:O8:11:PHE:CZ	74:O8:43:PHE:HB3	2.73	0.47
5:S3:8:LYS:O	5:S3:10:LYS:N	2.79	0.47
36:5:3167:A:C2	36:5:3284:G:N3	2.82	0.47
3:S1:110:LEU:O	3:S1:114:VAL:HG23	2.15	0.47
49:M3:16:LYS:O	36:5:48:A:OP2	135.24	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:773:C:H4'	1:6:774:A:OP1	2.13	0.47
36:5:3294:A:H2'	36:5:3295:A:O4'	2.15	0.47
3:S1:122:GLU:HG2	3:S1:140:ILE:HD13	3.74	0.47
36:1:328:U:O4	87:4:228:OHX:N2	2.47	0.47
36:1:1411:C:C2'	36:1:1412:G:H5'	2.44	0.47
1:2:482:U:H2'	1:2:483:A:C8	2.48	0.47
36:5:504:A:C4	36:5:588:G:N2	2.82	0.47
1:6:578:U:H4'	1:6:579:A:H5'	1.95	0.47
36:5:2319:U:O2'	36:5:2320:A:H8	1.95	0.47
36:1:2209:U:HO2'	36:1:2210:G:P	2.38	0.47
33:E1:118:ARG:HD2	33:E1:118:ARG:N	2.64	0.47
1:2:1353:U:H2'	1:2:1354:G:H8	1.80	0.47
16:C4:106:ALA:HA	16:C4:112:ILE:HD11	3.28	0.47
36:1:2678:A:N6	36:1:2679:A:C6	2.83	0.47
41:L4:312:VAL:HG21	36:5:610:G:C8	223.32	0.47
36:5:1940:G:N2	36:5:3362:A:H8	2.12	0.47
87:5:4050:OHX:N5	87:5:4194:OHX:N2	2.62	0.47
44:L7:192:GLY:O	44:L7:194:HIS:N	3.10	0.47
7:S5:147:THR:O	7:S5:157:ARG:HA	3.65	0.47
12:C0:25:LYS:HD2	12:C0:27:PHE:HZ	1.79	0.47
36:1:381:U:H2'	36:1:382:U:C6	2.48	0.47
1:6:1054:U:H2'	1:6:1055:U:H6	1.78	0.47
16:C4:93:THR:HA	16:C4:94:PRO:HD2	1.45	0.47
1:2:341:A:C5	1:2:342:C:C4	3.03	0.47
49:M3:110:ASP:OD1	49:M3:110:ASP:N	2.40	0.47
59:N3:67:PRO:C	59:N3:69:LEU:H	2.17	0.47
1:2:1754:A:H1'	32:E0:2:ALA:HB2	1.95	0.47
1:2:512:A:OP2	11:S9:172:VAL:HG13	2.15	0.47
1:6:595:G:C6	1:6:596:C:C4	3.01	0.47
47:M0:61:SER:HA	47:M0:126:ALA:HA	2.70	0.47
47:M0:75:TYR:CE2	47:M0:79:VAL:HG21	2.49	0.47
1:6:1579:U:OP2	87:6:2189:OHX:N6	2.48	0.47
45:L8:62:LYS:NZ	51:M5:29:GLU:OE2	4.25	0.47
13:C1:20:PHE:CE1	13:C1:22:ASN:HB2	2.50	0.47
6:S4:7:LYS:HD2	6:S4:7:LYS:HA	1.69	0.47
36:1:739:G:N3	36:1:740:G:C8	2.83	0.47
19:C7:43:SER:HB3	19:C7:46:LEU:HB2	2.64	0.47
1:6:852:C:H2'	1:6:853:G:C8	2.49	0.47
7:S5:177:ILE:O	7:S5:181:GLU:HB2	2.84	0.47
7:S5:45:LYS:HD3	7:S5:45:LYS:HA	1.43	0.47
36:1:3088:G:H2'	36:1:3089:C:H6	1.77	0.47
67:O1:79:ARG:H	67:O1:79:ARG:NE	2.11	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
61:N5:86:VAL:HG21	61:N5:122:ALA:HB2	2.91	0.47
1:2:1726:G:N7	87:2:2099:OHX:N4	2.62	0.47
42:L5:111:GLN:HA	42:L5:116:ASP:HB3	3.24	0.47
17:C5:13:LYS:HB3	17:C5:22:LEU:HD11	11.87	0.47
21:C9:105:LEU:O	21:C9:107:ALA:N	2.48	0.47
1:2:1018:U:O4	1:2:1019:A:N6	2.48	0.47
1:2:624:G:C5	1:2:976:G:N2	2.82	0.47
36:5:1810:A:H2'	36:5:1811:G:O4'	2.14	0.47
1:2:899:G:N2	1:2:910:C:N3	2.53	0.47
68:O2:37:GLY:O	68:O2:40:SER:HB2	4.21	0.47
23:D1:77:GLY:O	23:D1:78:LEU:HD13	5.06	0.47
2:S0:45:VAL:HG12	2:S0:46:HIS:H	1.80	0.47
4:S2:184:VAL:HG22	4:S2:211:LEU:CD2	2.45	0.47
36:5:679:U:H1'	36:5:788:C:H1'	1.94	0.47
63:N7:125:GLY:O	63:N7:128:GLN:HB2	2.14	0.47
14:C2:56:GLU:HB3	14:C2:124:LYS:HG2	1.97	0.47
36:5:559:A:H3'	36:5:559:A:H8	1.79	0.47
40:L3:296:THR:HG22	40:L3:299:ASP:N	2.98	0.47
59:N3:37:ILE:HG13	59:N3:59:MET:O	3.39	0.47
69:O3:45:LEU:HD23	69:O3:71:VAL:CG1	2.45	0.47
69:O3:49:ILE:HG12	69:O3:100:ILE:HG13	2.62	0.47
18:C6:113:ASP:CA	18:C6:116:LEU:HD12	6.67	0.47
79:Q3:76:ALA:O	79:Q3:80:ARG:HB2	3.30	0.47
3:S1:210:ILE:C	3:S1:211:HIS:CD2	3.75	0.47
1:6:36:C:H2'	1:6:37:U:H6	1.79	0.47
72:O6:94:ILE:O	72:O6:98:ARG:HD2	3.34	0.47
36:1:499:G:H2'	36:1:500:C:H6	1.78	0.47
36:1:979:U:C2	36:1:980:A:C4	3.02	0.47
71:O5:94:LYS:N	36:5:135:C:O2	56.32	0.47
51:M5:140:LYS:HA	51:M5:143:ARG:HB2	1.97	0.47
1:2:1102:G:OP2	25:D3:7:ARG:NH1	2.47	0.47
19:C7:82:ASP:O	19:C7:83:GLN:HB2	2.14	0.47
36:5:2129:U:H5''	87:5:4182:OHX:N1	2.30	0.47
39:L2:181:LYS:HB2	36:5:860:G:O6	212.30	0.47
36:1:2180:G:C6	36:1:2181:C:N4	2.82	0.47
40:L3:196:ARG:O	40:L3:198:HIS:N	2.74	0.47
25:D3:14:LYS:O	25:D3:18:HIS:HB2	2.15	0.47
36:5:244:G:H2'	36:5:245:U:C6	2.50	0.47
36:1:2847:A:C2	36:1:2898:G:H2'	2.49	0.47
1:2:828:U:C2	1:2:829:A:N7	2.83	0.47
36:1:856:G:C6	36:1:857:G:C2	3.02	0.47
78:Q2:13:LYS:HE2	36:5:2717:U:H4'	199.53	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
67:O1:102:LYS:O	67:O1:104:LEU:HG	3.77	0.47
36:5:3337:G:H2'	36:5:3338:C:O4'	2.15	0.47
1:2:1236:A:C8	33:E1:138:ARG:NH2	2.77	0.47
36:1:2533:G:H2'	36:1:2534:G:O4'	2.13	0.47
36:1:2535:A:H2'	36:1:2536:A:O4'	2.14	0.47
36:5:22:G:C5	36:5:23:A:C8	3.02	0.47
16:C4:88:GLY:O	16:C4:92:LYS:NZ	5.21	0.47
45:L8:78:PHE:C	45:L8:80:TYR:N	2.65	0.47
36:1:1853:U:P	87:1:4033:OHX:N3	2.87	0.47
35:SM:118:SER:O	35:SM:122:GLU:HG3	2.14	0.47
10:S8:113:PHE:CD1	10:S8:121:LEU:HD21	3.45	0.47
36:5:2149:A:H62	36:5:2187:G:N2	2.13	0.47
36:1:3308:C:N3	53:M7:69:ARG:NH1	2.63	0.47
54:M8:65:SER:HB2	54:M8:93:ILE:HG13	5.04	0.47
36:5:1302:A:OP1	87:5:4086:OHX:N3	2.48	0.47
1:2:528:U:H2'	1:2:529:A:O4'	2.15	0.47
38:4:79:A:C3'	38:4:80:A:H4'	2.44	0.47
9:S7:99:LEU:N	9:S7:116:ARG:O	2.47	0.47
1:6:1344:A:H2'	1:6:1345:A:C8	2.50	0.47
24:D2:26:LEU:HD12	29:D7:7:LEU:HD22	1.96	0.47
1:6:228:G:H1	1:6:236:A:H61	1.61	0.47
36:1:3220:G:N7	36:1:3266:G:N2	2.62	0.47
36:1:1625:A:H5'	36:1:1643:A:N6	2.29	0.47
36:5:2772:C:H4'	36:5:2773:C:O5'	2.14	0.47
1:6:706:A:H2'	1:6:707:A:O4'	2.14	0.47
5:S3:140:GLY:HA3	5:S3:182:LEU:HB3	1.97	0.47
1:2:1394:G:C2	1:2:1405:G:C2	3.02	0.47
7:S5:136:ALA:HB1	7:S5:175:LEU:HD21	3.18	0.47
49:M3:57:VAL:HB	49:M3:112:ASN:HD21	1.80	0.47
60:N4:63:ILE:HD12	60:N4:64:THR:H	5.29	0.47
36:5:1259:A:H5''	36:5:1260:A:OP2	2.15	0.47
1:2:495:C:H3'	1:2:496:G:O4'	2.15	0.47
16:C4:63:ALA:C	16:C4:65:GLN:H	2.17	0.47
36:1:1373:A:OP2	64:N8:7:LYS:NZ	2.47	0.47
36:1:794:U:OP1	64:N8:7:LYS:HB2	2.15	0.47
1:2:1414:U:H3'	1:2:1415:U:H5''	1.97	0.47
56:N0:4:PHE:O	56:N0:100:VAL:HG11	3.02	0.47
8:S6:194:LYS:HD2	1:6:178:U:O4	326.43	0.47
36:1:2890:A:N1	36:1:2913:C:N3	2.62	0.47
47:M0:65:LEU:HA	47:M0:65:LEU:HD23	1.47	0.47
44:L7:236:ILE:HA	44:L7:236:ILE:HD12	1.67	0.47
1:6:9:U:O4	87:6:2151:OHX:N3	2.47	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:432:G:N3	1:2:432:G:H2'	2.30	0.47
1:2:1641:C:C5	88:2:2181:GET:H931	2.49	0.47
20:C8:5:VAL:HA	20:C8:6:GLN:OE1	6.23	0.47
46:L9:12:VAL:HG22	46:L9:79:ILE:HD11	2.98	0.47
1:6:542:A:OP1	1:6:544:A:C4	2.67	0.47
47:M0:88:ARG:HD2	47:M0:173:PHE:CE2	2.49	0.47
47:M0:42:THR:OG1	47:M0:43:VAL:N	2.84	0.47
44:L7:83:LEU:HD21	44:L7:116:PHE:HD1	1.98	0.47
10:S8:58:LEU:O	10:S8:59:ARG:HB2	2.13	0.47
36:1:1427:U:OP2	64:N8:4:ARG:NH2	2.44	0.47
19:C7:45:ARG:NH2	1:6:1331:A:OP1	412.34	0.47
19:C7:35:CYS:HB2	19:C7:47:ARG:HD3	1.95	0.47
5:S3:96:LEU:O	5:S3:188:ILE:HD13	4.13	0.47
36:1:812:G:C2	36:1:929:A:C2	3.03	0.47
18:C6:21:HIS:HD2	18:C6:66:ARG:HG2	5.16	0.47
18:C6:38:LEU:O	18:C6:40:GLU:N	2.48	0.47
76:Q0:122:ARG:NH1	76:Q0:122:ARG:HG3	2.10	0.47
5:S3:45:LYS:HG2	5:S3:82:GLY:O	2.13	0.47
64:N8:66:ALA:HA	64:N8:69:TRP:N	3.74	0.47
1:6:894:U:C2	1:6:919:A:C2	3.03	0.47
16:C4:23:PHE:CE2	16:C4:95:GLY:HA2	4.06	0.47
23:D1:53:TYR:CD1	23:D1:53:TYR:N	3.34	0.47
4:S2:162:CYS:O	4:S2:164:SER:N	2.47	0.47
14:C2:90:LYS:HB3	14:C2:91:VAL:H	1.62	0.47
1:2:1458:G:N3	1:2:1458:G:H2'	2.28	0.47
36:1:2631:U:OP1	36:1:2757:U:O2'	2.25	0.47
44:L7:224:ILE:HG23	56:N0:36:ILE:HG13	3.88	0.47
72:O6:79:SER:OG	72:O6:81:THR:HG23	6.30	0.47
39:L2:152:SER:OG	39:L2:154:ALA:N	2.44	0.47
36:1:770:G:OP1	49:M3:171:ARG:NH2	2.47	0.47
35:SM:115:LYS:O	35:SM:117:LEU:N	2.48	0.47
8:S6:70:PRO:C	8:S6:98:ARG:HH11	2.16	0.47
64:N8:27:LYS:O	64:N8:28:HIS:HB2	4.56	0.47
36:5:928:C:H2'	36:5:929:A:H8	1.75	0.47
36:5:835:G:HO2'	36:5:836:A:P	2.38	0.47
36:1:1098:A:O5'	57:N1:129:LYS:HB3	2.13	0.47
49:M3:58:VAL:O	49:M3:69:VAL:HG22	2.43	0.47
51:M5:170:LYS:C	51:M5:172:ARG:N	2.68	0.47
13:C1:97:TYR:O	13:C1:99:ARG:HG2	2.13	0.47
1:6:1081:A:N1	1:6:1091:A:C2	2.82	0.47
36:5:2131:A:N6	36:5:2132:C:O2	2.46	0.47
38:8:41:A:C8	38:8:42:G:C8	3.03	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:C1:101:GLU:OE1	25:D3:13:ARG:NH2	3.69	0.47
46:L9:172:ILE:HG13	76:Q0:90:ASN:HB3	2.98	0.47
48:M1:23:VAL:HG12	48:M1:24:GLY:N	4.50	0.47
36:5:438:A:C8	36:5:439:C:C5	3.02	0.47
4:S2:40:LYS:HA	4:S2:43:ARG:HD3	4.66	0.47
1:6:1381:U:C2'	1:6:1382:A:H5'	2.45	0.47
22:D0:42:VAL:HG21	22:D0:55:PRO:HD3	1.96	0.47
1:2:450:U:H2'	1:2:451:A:C8	2.50	0.47
1:2:200:A:H2'	1:2:201:G:H8	1.79	0.47
25:D3:19:ARG:O	25:D3:23:ARG:N	2.48	0.47
36:1:1288:U:H2'	36:1:1289:G:H8	1.79	0.47
36:5:2149:A:H62	36:5:2187:G:H21	1.62	0.47
42:L5:68:THR:CG2	42:L5:70:THR:H	2.25	0.47
36:1:517:G:O5'	44:L7:60:ARG:NH2	2.44	0.47
11:S9:7:THR:OG1	11:S9:8:TYR:N	2.46	0.47
64:N8:49:HIS:O	64:N8:50:PRO:C	2.50	0.47
15:C3:33:VAL:HG11	15:C3:66:ILE:HD11	4.44	0.47
38:4:152:G:C6	38:4:153:U:C2	3.02	0.47
1:2:1065:A:H2'	1:2:1066:C:O4'	2.14	0.47
23:D1:65:SER:O	23:D1:68:SER:HB2	2.14	0.47
36:1:841:A:H1'	55:M9:129:GLY:HA3	1.96	0.47
36:1:2376:G:N1	36:1:2377:G:C6	2.82	0.47
7:S5:216:GLU:O	7:S5:220:VAL:HG23	2.13	0.47
36:1:1665:C:H2'	36:1:1666:G:H8	1.80	0.47
8:S6:215:ARG:HD3	8:S6:215:ARG:HA	1.75	0.47
5:S3:13:ALA:HA	5:S3:16:VAL:HB	1.97	0.47
36:1:3220:G:C2'	36:1:3221:C:H5'	2.45	0.47
36:1:2108:C:H1'	36:1:3344:A:H8	1.79	0.47
36:1:3343:G:H2'	36:1:3361:G:N2	2.30	0.47
10:S8:92:ARG:O	10:S8:92:ARG:HG3	3.18	0.47
36:1:3102:G:H21	36:1:3103:A:H1'	1.80	0.47
36:1:2370:G:C6	36:1:2371:G:C6	3.02	0.47
36:5:1643:A:H4'	36:5:1822:C:H5'	1.97	0.47
36:5:1089:G:C4	36:5:1090:G:C8	3.03	0.47
1:2:1561:U:C2'	1:2:1562:G:H5'	2.44	0.47
36:5:999:G:O2'	36:5:1000:C:H5'	2.13	0.47
36:5:2199:G:H1	36:5:2245:C:H42	1.62	0.47
1:2:130:C:HO2'	1:2:131:C:P	2.38	0.47
54:M8:60:PRO:HA	54:M8:61:PRO:HD2	2.01	0.47
36:1:1843:C:O2'	36:1:1844:C:H5'	2.14	0.47
46:L9:58:HIS:HB2	36:5:3186:A:N6	322.20	0.47
69:O3:47:LYS:NZ	69:O3:104:PRO:O	4.44	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:26:A:C2	36:5:330:G:C5	3.02	0.47
53:M7:26:PHE:C	53:M7:26:PHE:HD2	2.18	0.47
20:C8:11:PHE:CD2	20:C8:11:PHE:C	3.54	0.47
34:SR:88:THR:HG22	34:SR:104:VAL:HG13	5.34	0.47
1:2:750:U:H2'	1:2:751:G:O4'	2.15	0.47
36:5:41:G:N2	36:5:2803:A:N7	2.62	0.47
6:S4:62:LYS:HG3	6:S4:66:MET:HE3	3.79	0.47
36:5:3372:A:C6	36:5:3373:U:C4	3.02	0.47
4:S2:234:PRO:O	4:S2:235:LEU:HB3	2.15	0.47
25:D3:78:LYS:HG2	25:D3:79:ASN:N	3.93	0.47
25:D3:53:VAL:HG23	25:D3:100:ASP:O	2.15	0.47
36:1:2988:C:H2'	36:1:2989:U:C6	2.50	0.47
46:L9:89:LYS:HG2	46:L9:145:VAL:HG22	2.46	0.47
36:5:3197:G:C2	36:5:3199:G:C5	3.03	0.47
36:1:1846:C:N3	53:M7:136:ILE:HD11	2.30	0.47
1:2:473:A:N6	1:2:474:A:C2	2.83	0.47
1:2:540:G:C2	1:2:542:A:H2	2.32	0.47
47:M0:208:ASN:HB2	47:M0:211:ARG:HD2	2.76	0.47
47:M0:38:LYS:HD3	47:M0:83:ASP:OD1	4.99	0.47
47:M0:86:HIS:CD2	47:M0:87:LEU:H	2.33	0.47
36:1:1114:U:C2'	36:1:1115:G:H5'	2.45	0.47
44:L7:218:ARG:NH1	37:7:86:U:O2'	258.28	0.47
44:L7:155:LYS:HB2	44:L7:203:TRP:CZ3	2.49	0.47
44:L7:51:TYR:HB3	44:L7:55:TYR:CE2	3.07	0.47
45:L8:63:LYS:O	45:L8:67:ILE:N	3.30	0.47
10:S8:174:GLY:HA3	1:6:331:A:OP2	277.07	0.47
10:S8:40:ALA:O	10:S8:59:ARG:HB3	2.58	0.47
41:L4:174:ALA:O	41:L4:175:HIS:C	2.68	0.47
54:M8:26:LEU:C	54:M8:28:LEU:N	3.10	0.47
41:L4:26:PHE:HZ	41:L4:250:TRP:CZ2	2.31	0.47
43:L6:80:ASN:OD1	43:L6:81:ALA:HB3	4.00	0.47
1:2:1566:U:OP1	20:C8:42:TYR:HB2	2.14	0.47
7:S5:203:LYS:O	7:S5:205:SER:N	3.80	0.47
7:S5:44:ASN:N	7:S5:44:ASN:HD22	2.13	0.47
1:2:1477:G:H1	1:2:1530:C:H42	1.61	0.47
18:C6:25:GLY:H	18:C6:63:ILE:HA	1.80	0.47
20:C8:26:ILE:HG12	20:C8:31:ALA:HB2	1.96	0.47
27:D5:90:LYS:O	27:D5:101:TYR:HA	2.14	0.47
46:L9:90:MET:O	46:L9:144:ILE:N	2.40	0.47
67:O1:89:LEU:HA	67:O1:89:LEU:HD12	1.59	0.47
35:SM:34:LYS:HA	35:SM:34:LYS:HD3	4.22	0.47
12:C0:56:LYS:N	12:C0:67:THR:O	2.96	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:C5:10:ARG:O	17:C5:12:PHE:HD2	6.00	0.47
48:M1:110:ILE:C	48:M1:112:LEU:H	2.47	0.47
1:2:1500:C:H2'	1:2:1501:C:H6	1.79	0.47
1:2:1553:G:N2	1:2:1556:A:OP2	2.46	0.47
21:C9:108:LEU:HB3	21:C9:114:VAL:CG2	5.31	0.47
21:C9:57:ARG:O	21:C9:61:VAL:HG23	2.40	0.47
5:S3:77:PHE:HB2	5:S3:79:TYR:HD2	3.00	0.47
77:Q1:13:LEU:HD22	77:Q1:17:ARG:NH1	4.39	0.47
42:L5:41:LYS:HG2	57:N1:93:VAL:HG11	1.96	0.47
16:C4:28:VAL:HG11	16:C4:64:ALA:HA	3.19	0.47
3:S1:133:TYR:CD1	3:S1:221:PRO:HD2	2.50	0.47
23:D1:74:GLN:C	23:D1:77:GLY:H	2.87	0.47
2:S0:52:LYS:O	2:S0:53:THR:C	2.96	0.47
23:D1:1:MET:HG3	23:D1:9:VAL:O	2.15	0.47
2:S0:60:ALA:CB	2:S0:160:ILE:HD11	3.95	0.47
4:S2:116:LYS:HG2	4:S2:127:ALA:HB3	1.97	0.47
4:S2:68:ILE:O	4:S2:72:LEU:HD22	2.15	0.47
48:M1:159:THR:O	48:M1:163:PHE:N	2.46	0.47
63:N7:75:VAL:HG11	63:N7:80:LEU:HD11	2.91	0.47
63:N7:87:LEU:HD12	63:N7:88:ASP:N	2.29	0.47
43:L6:4:GLN:HG3	68:O2:74:PHE:HE2	1.79	0.47
55:M9:101:VAL:HA	55:M9:104:ARG:HH12	2.17	0.47
63:N7:27:LYS:HG2	63:N7:42:LEU:HD22	2.01	0.47
66:O0:41:LEU:O	66:O0:92:ILE:HB	2.13	0.47
55:M9:17:VAL:HG12	55:M9:18:GLY:H	1.78	0.47
55:M9:4:LEU:HG	36:5:1471:U:O2'	112.21	0.47
73:O7:74:PHE:O	73:O7:77:GLY:N	2.47	0.47
1:2:1483:A:C5	1:2:1484:G:N7	2.82	0.47
14:C2:127:GLY:H	35:SM:168:GLU:CB	5.31	0.47
1:2:1454:G:N2	1:2:1455:G:H1'	2.29	0.47
1:2:1171:A:O2'	1:2:1570:A:H2'	2.15	0.47
6:S4:142:HIS:CD2	6:S4:143:ASP:N	3.71	0.47
6:S4:157:ASN:ND2	6:S4:222:LEU:HD11	5.28	0.47
56:N0:133:ALA:HB2	56:N0:141:LYS:HZ1	3.95	0.47
57:N1:78:LYS:HG3	57:N1:79:MET:N	2.87	0.47
60:N4:2:LYS:HG2	60:N4:3:VAL:O	2.52	0.47
59:N3:84:SER:HA	59:N3:93:LEU:O	2.15	0.47
36:5:3225:C:H2'	36:5:3226:A:H8	1.78	0.47
69:O3:69:GLY:HA3	69:O3:85:PHE:HA	2.27	0.47
9:S7:131:PHE:HB3	9:S7:132:PRO:CD	2.45	0.47
9:S7:91:ILE:HD11	9:S7:129:LEU:O	2.14	0.47
42:L5:256:THR:HG21	37:7:120:C:P	300.79	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:C6:47:LYS:CE	18:C6:114:ARG:HH22	2.26	0.47
29:D7:62:ILE:HG12	29:D7:74:SER:OG	2.15	0.47
62:N6:38:GLU:HG2	62:N6:39:LEU:HD23	1.96	0.47
36:1:2818:U:H5'	65:N9:2:ALA:HB2	1.97	0.47
40:L3:205:VAL:O	40:L3:208:VAL:HG23	3.90	0.47
41:L4:55:LYS:HB3	41:L4:59:GLN:HE21	7.30	0.47
36:1:2818:U:C6	36:1:2818:U:C5'	2.93	0.47
39:L2:105:GLY:HA3	39:L2:160:SER:HB3	4.30	0.47
3:S1:82:ARG:NH1	3:S1:191:GLU:HG3	5.28	0.47
40:L3:167:ARG:HH11	40:L3:167:ARG:HG3	1.79	0.47
4:S2:87:GLN:CG	4:S2:96:THR:HB	3.76	0.47
40:L3:177:HIS:CG	40:L3:335:ILE:HD13	2.50	0.47
36:1:1856:C:C4	36:1:1857:C:C5	3.02	0.47
8:S6:68:LEU:HA	8:S6:68:LEU:HD13	1.90	0.47
72:O6:62:ARG:HH22	72:O6:98:ARG:HH12	1.63	0.47
57:N1:101:CYS:SG	57:N1:102:ARG:N	2.88	0.47
49:M3:80:VAL:HA	49:M3:116:LEU:HD12	3.79	0.47
1:6:631:G:C2	1:6:632:U:C2	3.02	0.47
36:1:3141:A:C6	36:1:3144:G:C4	3.03	0.47
36:5:3033:A:OP2	87:5:3981:OHX:N5	2.47	0.47
53:M7:101:ASN:ND2	36:5:389:A:H4'	119.67	0.47
79:Q3:11:THR:HG23	79:Q3:14:TYR:CD2	2.50	0.47
71:O5:74:LYS:HB3	71:O5:75:TYR:CD2	2.49	0.47
1:2:586:G:C6	1:2:587:C:C4	3.03	0.47
1:2:634:G:C2	1:2:966:A:C6	3.03	0.47
1:2:729:G:N3	1:2:729:G:H2'	2.29	0.47
35:SM:51:ARG:NH1	35:SM:52:PRO:HD2	7.66	0.47
36:1:2770:G:H2'	36:1:2771:U:H5'	1.97	0.47
36:5:438:A:C8	36:5:439:C:H5	2.33	0.47
60:N4:34:SER:O	60:N4:37:ALA:N	2.48	0.47
36:5:1580:A:HO2'	36:5:1581:C:P	2.35	0.47
67:O1:102:LYS:HA	67:O1:102:LYS:NZ	3.41	0.47
52:M6:47:PHE:HE2	52:M6:141:LEU:HA	3.03	0.47
4:S2:173:PRO:HG2	4:S2:176:SER:OG	3.99	0.47
36:5:1403:C:C2	36:5:1409:G:N2	2.82	0.47
37:3:35:C:N4	37:3:45:A:C2	2.82	0.47
1:6:1370:U:O3'	1:6:1371:A:H4'	2.14	0.47
22:D0:24:ILE:HG23	22:D0:116:VAL:HG13	2.68	0.47
22:D0:32:LYS:HB3	22:D0:33:GLN:OE1	2.14	0.47
1:2:804:A:N3	24:D2:105:THR:HG22	2.30	0.47
34:SR:127:ARG:C	34:SR:129:LYS:H	2.18	0.47
36:5:1193:A:H2'	36:5:1194:G:O4'	2.14	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:C4:87:GLY:HA3	16:C4:120:PRO:HG2	2.68	0.47
1:2:91:G:C4	1:2:92:A:C8	3.03	0.47
36:1:1488:G:H2'	36:1:1489:A:H8	1.80	0.47
1:2:200:A:H2'	1:2:201:G:C8	2.48	0.47
39:L2:171:GLY:O	79:Q3:68:ALA:HB2	2.26	0.47
36:1:19:U:H3	38:4:140:G:H1	1.62	0.47
3:S1:115:ARG:NH1	3:S1:115:ARG:HG3	4.75	0.47
55:M9:62:ARG:NH2	36:5:3068:U:OP2	171.96	0.47
36:5:3203:U:H2'	36:5:3204:C:C6	2.50	0.47
1:6:811:A:HO2'	1:6:858:G:H8	1.62	0.47
36:1:953:G:C8	36:1:1117:G:C8	3.02	0.47
56:N0:41:TYR:O	56:N0:45:LEU:HB2	2.18	0.47
52:M6:95:GLY:O	52:M6:98:ALA:HB3	2.87	0.47
36:5:1659:U:O4	87:5:4192:OHX:N4	2.47	0.47
54:M8:178:ARG:HA	54:M8:178:ARG:HD3	1.65	0.47
36:1:505:G:OP1	41:L4:320:ASN:ND2	2.37	0.47
1:6:701:U:H2'	1:6:702:G:C8	2.50	0.47
24:D2:12:ASN:O	24:D2:16:ASN:N	2.78	0.47
36:5:195:U:H2'	36:5:196:G:H8	1.80	0.47
1:2:112:A:H61	1:2:301:A:N6	2.13	0.47
36:1:731:U:H2'	36:1:732:C:H6	1.80	0.47
13:C1:110:HIS:HB2	13:C1:135:VAL:HG11	1.97	0.47
13:C1:57:LYS:HE2	13:C1:131:ILE:HD12	1.96	0.47
15:C3:34:ILE:HG13	15:C3:67:THR:HG21	1.96	0.47
58:N2:28:PHE:CZ	58:N2:33:TYR:HB2	3.34	0.47
36:5:2661:G:N2	36:5:2709:C:O2	2.47	0.47
42:L5:289:LYS:O	42:L5:292:ALA:HB3	3.50	0.47
36:1:398:A:C5	53:M7:3:ARG:NH2	2.82	0.47
9:S7:182:VAL:HG12	9:S7:183:PHE:H	1.92	0.47
1:2:145:A:O2'	1:2:146:U:O5'	2.29	0.47
36:1:880:G:OP2	53:M7:131:ARG:HD2	2.14	0.47
6:S4:132:GLY:N	6:S4:136:VAL:O	2.41	0.47
1:6:1692:G:H2'	1:6:1693:A:C8	2.50	0.47
52:M6:46:GLU:HB3	52:M6:134:LYS:HE3	1.97	0.47
36:1:650:C:O2'	36:1:651:G:H5'	2.15	0.47
36:1:1273:A:H2'	36:1:1274:A:C8	2.50	0.47
1:6:218:A:H2'	1:6:219:A:H5''	1.97	0.47
40:L3:3:HIS:C	40:L3:3:HIS:ND1	3.15	0.47
41:L4:305:ALA:HA	36:5:1347:U:O4'	196.61	0.47
36:5:592:A:C5	36:5:593:C:C4	3.02	0.47
36:1:1270:A:C2	36:1:1271:A:H1'	2.49	0.47
36:1:718:G:C8	36:1:718:G:OP2	2.67	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:C5:56:PHE:CD1	17:C5:57:MET:HG2	2.49	0.47
17:C5:83:MET:HB3	17:C5:116:LEU:CD1	3.31	0.47
1:6:1685:G:C2	1:6:1717:G:C4	3.03	0.47
1:2:874:C:H2'	1:2:875:G:C8	2.50	0.47
36:1:603:A:H2'	36:1:604:G:O4'	2.15	0.47
19:C7:71:PHE:HE1	19:C7:73:LEU:HD22	1.76	0.47
36:1:3101:G:H2'	36:1:3102:G:H8	1.79	0.47
36:1:1412:G:C4	36:1:1413:G:C8	3.03	0.47
36:5:1032:C:H5'	36:5:1033:U:OP2	2.15	0.47
59:N3:30:GLY:HA3	59:N3:66:LYS:CD	3.60	0.47
36:1:1621:A:H2'	36:1:1622:U:C6	2.50	0.47
45:L8:106:LYS:HE2	45:L8:106:LYS:C	2.34	0.47
1:6:1041:G:N2	1:6:1042:G:C2	2.83	0.47
36:5:2218:G:H2'	36:5:2219:A:C8	2.49	0.47
6:S4:95:THR:HB	26:D4:16:PRO:HG2	3.80	0.47
1:2:1061:A:H3'	1:2:1062:A:C2	2.49	0.47
41:L4:342:LYS:HE2	44:L7:56:GLU:OE2	2.90	0.47
36:1:795:G:C2'	36:1:796:U:H5'	2.44	0.47
1:6:1111:G:C2	1:6:1135:U:C2	3.03	0.47
36:1:826:G:C4	36:1:827:A:C8	3.02	0.47
36:5:2885:C:H2'	36:5:2886:U:H5'	1.96	0.47
62:N6:76:LEU:HB2	38:8:74:U:OP2	56.96	0.47
74:O8:25:VAL:HB	74:O8:77:ARG:HA	1.96	0.47
36:1:2117:A:H1'	36:1:3077:A:H2	1.80	0.47
1:2:268:C:H42	1:2:287:G:H1	1.62	0.47
36:1:802:C:C2'	36:1:803:C:H5'	2.44	0.47
87:8:220:OHX:N5	87:8:229:OHX:N3	2.62	0.47
36:1:1056:U:C4	36:1:1057:A:N7	2.82	0.47
36:1:1110:U:O4	87:1:3979:OHX:N5	2.48	0.47
44:L7:208:SER:OG	36:5:1166:G:N2	244.01	0.47
36:5:867:G:C6	36:5:868:C:C4	3.02	0.47
36:1:850:U:H2'	36:1:851:C:H6	1.80	0.47
1:2:1214:U:C4	1:2:1215:C:C4	3.03	0.47
49:M3:60:ALA:H	36:5:75:G:H5'	92.02	0.47
1:2:416:A:H4'	1:2:417:A:OP2	2.13	0.47
1:2:170:U:OP1	1:2:267:U:O2'	2.24	0.47
42:L5:131:LEU:HA	42:L5:131:LEU:HD13	3.87	0.47
36:5:1142:G:O5'	36:5:1142:G:H8	1.98	0.47
67:O1:97:LEU:HD23	67:O1:97:LEU:HA	2.28	0.47
36:5:1776:G:N2	36:5:1777:U:C2	2.83	0.47
36:1:1003:A:C6	36:1:1004:U:C4	3.03	0.47
15:C3:40:TYR:CZ	15:C3:53:LEU:HD21	2.49	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:431:C:H6	1:6:431:C:O5'	1.98	0.47
36:1:819:U:H2'	36:1:820:A:C8	2.50	0.47
36:5:2220:A:H2'	36:5:2221:G:O4'	2.13	0.47
46:L9:12:VAL:O	46:L9:51:GLN:HA	2.14	0.47
64:N8:54:GLY:N	36:5:94:G:OP2	170.16	0.47
53:M7:127:ARG:HB2	53:M7:127:ARG:HH11	1.80	0.47
53:M7:36:ILE:O	53:M7:39:TRP:N	2.40	0.47
53:M7:85:ALA:C	53:M7:87:SER:N	3.09	0.47
1:6:55:A:H1'	1:6:426:G:N2	2.29	0.47
44:L7:160:ARG:HB2	44:L7:203:TRP:CD2	2.49	0.47
36:1:695:C:OP1	41:L4:271:LYS:NZ	2.34	0.47
41:L4:50:TYR:CE2	41:L4:109:TRP:HH2	2.84	0.47
54:M8:24:VAL:HG23	54:M8:25:TYR:HD2	7.71	0.47
1:2:1533:C:H5''	1:2:1534:G:OP2	2.15	0.47
18:C6:35:PRO:HG2	18:C6:38:LEU:HG	1.97	0.47
27:D5:40:VAL:O	27:D5:75:LEU:HD11	2.93	0.47
30:D8:25:VAL:HG11	30:D8:66:LEU:HD12	1.96	0.47
7:S5:190:ILE:HG12	7:S5:191:ALA:H	3.89	0.47
7:S5:195:ALA:O	7:S5:197:GLU:N	2.48	0.47
67:O1:56:ASN:O	67:O1:59:ILE:N	3.64	0.47
61:N5:95:ILE:O	61:N5:99:VAL:HG23	2.96	0.47
1:2:1672:G:H8	1:2:1672:G:O5'	1.97	0.47
36:1:1024:G:N2	36:1:1026:A:C8	2.82	0.47
1:2:1281:G:OP1	22:D0:78:THR:OG1	2.30	0.47
12:C0:70:GLU:H	12:C0:70:GLU:HG2	1.39	0.47
31:D9:14:TYR:CE1	1:6:1553:G:H4'	406.52	0.47
36:1:313:A:C6	36:1:314:U:C4	3.02	0.47
36:1:316:U:O2'	72:O6:30:LYS:HD2	2.15	0.47
28:D6:44:ILE:CB	28:D6:65:PRO:HG2	5.72	0.47
3:S1:29:TRP:CZ2	3:S1:47:LEU:HD23	6.08	0.47
3:S1:38:PHE:HA	3:S1:74:GLN:HE22	4.16	0.47
2:S0:4:PRO:HD3	2:S0:62:ARG:HH22	1.80	0.47
2:S0:86:VAL:HG12	2:S0:174:TRP:CZ2	2.49	0.47
1:2:1300:A:C5'	4:S2:86:VAL:HG11	2.44	0.47
36:5:678:G:C4	36:5:679:U:C5	3.03	0.47
54:M8:67:ILE:O	54:M8:68:ALA:C	3.02	0.47
1:6:794:U:H2'	1:6:794:U:OP2	2.14	0.47
4:S2:143:TYR:CE1	4:S2:151:PRO:HG3	2.52	0.47
63:N7:136:PHE:HB2	70:O4:88:ARG:HG3	4.00	0.47
55:M9:46:LYS:NZ	36:5:1766:G:OP2	98.48	0.47
1:6:1595:U:N3	1:6:1600:A:C2	2.73	0.47
36:5:559:A:C3'	36:5:559:A:C8	2.98	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:S6:163:THR:OG1	8:S6:164:LYS:N	2.46	0.47
8:S6:167:LYS:HG3	8:S6:168:THR:N	4.16	0.47
56:N0:11:GLY:HA2	56:N0:59:VAL:HG23	1.97	0.47
26:D4:123:LYS:HA	26:D4:126:ALA:HB3	1.97	0.47
36:5:1236:G:H3'	36:5:1237:G:C5'	2.45	0.47
1:2:1170:G:H1'	1:2:1574:G:H1'	1.96	0.47
36:5:3158:G:H2'	36:5:3159:C:H5'	1.96	0.47
87:1:3976:OHX:N5	87:1:4154:OHX:N2	2.63	0.47
59:N3:48:ARG:NH2	36:5:3043:C:OP2	251.74	0.47
40:L3:106:TRP:CH2	40:L3:161:LEU:HD22	5.69	0.47
36:1:2243:A:N7	39:L2:245:LEU:HD22	2.30	0.47
39:L2:4:VAL:HG13	39:L2:8:GLN:NE2	3.00	0.47
36:1:3005:A:H5'	40:L3:98:GLY:HA3	1.97	0.47
39:L2:187:HIS:ND1	39:L2:190:ARG:NH2	2.63	0.47
36:5:2697:A:C2	36:5:2698:G:C5	3.02	0.47
25:D3:24:TRP:CZ3	25:D3:30:LYS:HG3	2.77	0.47
1:2:386:G:C6	1:2:387:A:N6	2.83	0.47
1:6:389:G:O6	1:6:408:C:N4	2.43	0.47
10:S8:5:ARG:HG3	10:S8:28:GLU:O	2.37	0.47
36:5:3082:C:O2'	36:5:3083:G:H5'	2.15	0.47
36:5:782:U:O4	36:5:783:A:C6	2.67	0.47
64:N8:123:VAL:H	64:N8:143:GLY:HA2	2.84	0.47
36:5:206:G:C4	36:5:207:U:C5	3.03	0.47
36:5:3121:U:C1'	36:5:3122:A:H5''	2.42	0.47
46:L9:7:GLU:HA	46:L9:55:VAL:O	2.14	0.47
79:Q3:55:TRP:O	79:Q3:64:VAL:N	2.34	0.47
36:1:3135:U:H2'	36:1:3136:G:O4'	2.15	0.47
36:5:181:U:C4	36:5:182:U:C5	3.02	0.47
33:E1:91:ILE:HD12	1:6:1445:G:N7	389.18	0.47
56:N0:82:ASP:HB3	56:N0:87:THR:CB	2.45	0.47
36:1:15:C:N4	36:1:16:A:H62	2.12	0.47
42:L5:181:PRO:HD2	42:L5:195:LEU:HD13	3.72	0.47
36:1:3390:G:C2	36:1:3391:A:C8	3.03	0.47
36:1:383:G:N7	87:1:4091:OHX:N6	2.63	0.47
36:1:3281:U:H2'	36:1:3282:U:H6	1.78	0.47
9:S7:154:LEU:HD21	9:S7:183:PHE:CD1	2.42	0.47
36:5:128:G:H2'	36:5:129:U:C6	2.50	0.47
36:1:2563:G:H5'	45:L8:28:HIS:O	2.14	0.47
1:2:599:A:C6	1:2:600:U:N3	2.83	0.47
57:N1:17:ARG:HB2	57:N1:22:HIS:CE1	3.33	0.47
36:1:1166:G:O5'	36:1:1166:G:H8	1.98	0.47
42:L5:276:LYS:HE3	42:L5:276:LYS:HB2	3.77	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:725:G:OP2	87:1:3975:OHX:N6	2.48	0.47
36:1:260:C:H6	36:1:260:C:O5'	1.97	0.47
73:O7:11:ARG:HE	73:O7:11:ARG:HB3	1.16	0.47
36:1:3101:G:H2'	36:1:3102:G:C8	2.49	0.47
12:C0:31:LYS:O	12:C0:39:ASN:HB2	5.55	0.47
36:5:1345:G:C2	36:5:1360:C:C2	3.03	0.47
36:5:2580:A:O2'	87:5:4125:OHX:N1	2.48	0.47
36:5:1881:A:C2	36:5:1882:G:C8	3.03	0.47
1:6:1134:C:H2'	1:6:1135:U:C6	2.49	0.47
36:1:1715:A:C8	36:1:1717:U:O4'	2.68	0.47
38:8:74:U:O2'	38:8:76:C:OP2	2.24	0.47
40:L3:6:TYR:HB2	59:N3:46:LEU:HD22	1.97	0.47
36:1:819:U:H2'	36:1:820:A:H8	1.79	0.47
3:S1:20:VAL:O	3:S1:21:VAL:HG13	2.39	0.47
36:5:614:C:H2'	36:5:615:U:H6	1.80	0.47
36:5:3112:G:O6	36:5:3120:C:H5''	2.14	0.47
63:N7:114:VAL:O	63:N7:117:ALA:HB3	2.15	0.47
64:N8:70:LYS:N	64:N8:71:PRO:HD3	2.45	0.47
36:5:2694:A:H5''	36:5:2695:A:OP2	2.14	0.47
36:1:688:G:O5'	36:1:688:G:H8	1.97	0.47
19:C7:119:LEU:H	19:C7:119:LEU:HD12	1.79	0.47
36:5:104:G:O2'	36:5:698:U:O2	2.26	0.47
69:O3:56:SER:O	69:O3:63:LYS:HD3	4.31	0.47
25:D3:93:LEU:O	25:D3:96:VAL:HG23	2.15	0.47
1:2:1757:G:OP2	88:2:2181:GET:H222	2.15	0.47
36:1:1444:G:H1	36:1:2359:C:N4	2.12	0.47
36:1:2357:A:C6	36:1:2983:C:H5	2.33	0.47
1:2:54:C:O2'	1:2:459:G:N7	2.44	0.47
1:2:1795:U:O2'	1:2:1797:A:N7	2.43	0.47
1:2:542:A:H5''	1:2:544:A:N7	2.30	0.47
11:S9:135:ALA:O	11:S9:156:ILE:HA	2.33	0.47
11:S9:73:GLY:O	11:S9:77:ILE:HG13	2.15	0.47
47:M0:149:VAL:HG12	47:M0:150:GLU:N	2.29	0.47
44:L7:55:TYR:CE2	44:L7:141:TYR:CE2	3.03	0.47
44:L7:189:ILE:HG23	44:L7:190:THR:HG23	2.64	0.47
1:6:328:A:N1	1:6:341:A:C6	2.83	0.47
13:C1:16:GLN:OE1	13:C1:34:TRP:N	3.14	0.47
36:1:934:G:C4	36:1:935:U:C5	3.02	0.47
5:S3:209:ILE:HG22	19:C7:38:ILE:O	2.15	0.47
17:C5:108:ARG:O	17:C5:111:MET:HG3	2.32	0.47
1:6:962:C:N4	1:6:963:A:N1	2.63	0.47
3:S1:176:VAL:C	3:S1:178:GLY:H	2.17	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:35:PRO:HD2	3:S1:38:PHE:HE2	1.80	0.47
2:S0:184:LEU:HD13	23:D1:43:GLY:O	3.81	0.47
2:S0:179:ARG:O	2:S0:182:LEU:HB2	2.27	0.47
54:M8:66:ARG:HB2	54:M8:66:ARG:HH11	1.79	0.47
4:S2:152:HIS:HD2	4:S2:152:HIS:H	1.62	0.47
4:S2:152:HIS:HE1	4:S2:174:ARG:HG2	4.51	0.47
68:O2:101:SER:OG	68:O2:102:ALA:N	2.46	0.47
42:L5:268:GLU:HG3	42:L5:269:SER:N	3.68	0.47
8:S6:138:ALA:HB1	8:S6:153:VAL:HG11	6.07	0.47
34:SR:59:ARG:HG3	34:SR:59:ARG:HH11	3.30	0.47
36:5:2968:G:C2	36:5:2969:A:C8	3.03	0.47
87:5:3973:OHX:N2	87:5:4193:OHX:N1	2.62	0.47
62:N6:61:GLY:C	62:N6:63:LYS:H	2.97	0.47
39:L2:131:GLY:H	39:L2:169:ILE:HG22	1.80	0.47
49:M3:164:GLU:O	49:M3:166:ALA:N	2.48	0.47
64:N8:129:PHE:CE1	72:O6:9:ILE:HB	5.10	0.47
52:M6:85:ARG:HD3	52:M6:90:HIS:CG	2.50	0.47
1:2:1102:G:OP1	24:D2:76:SER:OG	2.25	0.47
39:L2:207:VAL:HG21	36:5:916:G:C2	183.09	0.47
39:L2:8:GLN:OE1	39:L2:232:GLY:HA3	3.14	0.47
74:O8:24:THR:HG23	74:O8:44:LYS:HB2	2.91	0.47
51:M5:156:HIS:HA	51:M5:162:ARG:HH22	2.66	0.47
71:O5:46:THR:O	71:O5:49:LYS:HB2	5.45	0.47
41:L4:145:ILE:HD13	41:L4:247:PHE:CE1	2.48	0.47
4:S2:79:GLU:O	4:S2:102:VAL:HG22	2.15	0.47
36:1:2847:A:OP1	76:Q0:97:ARG:NH2	2.47	0.47
48:M1:50:ALA:HB2	48:M1:65:ILE:HD12	2.54	0.47
37:7:26:C:C4	37:7:27:A:C5	3.02	0.47
36:1:2274:U:O2'	36:1:2275:A:H5'	2.15	0.47
36:1:2961:G:C5	36:1:2962:U:C5	3.03	0.47
60:N4:8:PHE:CD2	60:N4:40:PHE:HB2	2.50	0.47
45:L8:37:GLY:HA3	36:5:2550:U:C5	210.76	0.47
42:L5:46:THR:HA	42:L5:47:PRO:HD3	2.49	0.47
36:5:2689:A:N3	36:5:2689:A:H2'	2.30	0.47
5:S3:9:ARG:HH12	1:6:1490:C:C5'	436.88	0.47
36:5:1693:C:HO2'	36:5:1772:U:HO2'	1.63	0.47
46:L9:70:THR:HG21	36:5:3122:A:N1	324.93	0.47
36:5:1615:C:H2'	36:5:1616:U:C6	2.38	0.47
36:1:1287:A:C5	36:1:1288:U:C5	3.03	0.47
38:4:97:A:C2	38:4:98:U:C2	3.03	0.47
1:2:621:A:N3	1:2:1107:G:H1'	2.29	0.47
36:1:1340:G:H4'	68:O2:55:ILE:CD1	2.45	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:250:ALA:HB3	36:5:2880:U:H1'	224.56	0.47
36:5:2857:C:H2'	36:5:2857:C:O2	2.13	0.47
8:S6:78:THR:HG22	8:S6:79:LYS:N	2.29	0.47
40:L3:92:TYR:HA	40:L3:100:ARG:O	2.55	0.47
36:1:1780:G:H2'	36:1:1781:C:C6	2.49	0.47
1:6:835:U:OP1	87:6:2209:OHX:N1	2.48	0.47
36:5:1346:G:C6	36:5:1347:U:C4	3.02	0.47
66:O0:75:ASN:HD21	79:Q3:43:GLY:HA3	1.80	0.47
48:M1:125:MET:SD	48:M1:127:PHE:CE1	3.60	0.47
43:L6:69:PHE:CE1	36:5:3268:A:C4	259.28	0.47
43:L6:47:PHE:CD1	43:L6:74:VAL:HG22	3.71	0.47
3:S1:119:THR:HG21	3:S1:156:ALA:HB3	1.96	0.47
51:M5:68:ARG:HA	51:M5:98:LEU:HD21	4.25	0.47
1:6:1357:A:H2'	1:6:1358:G:C8	2.50	0.47
2:S0:21:ASN:O	2:S0:24:LEU:N	3.15	0.47
11:S9:34:PHE:HD1	11:S9:111:THR:HG21	2.76	0.47
57:N1:114:ALA:O	57:N1:115:LYS:C	2.81	0.47
36:1:511:G:C5	36:1:512:U:C5	3.03	0.47
40:L3:260:VAL:O	52:M6:64:PHE:HB2	2.14	0.47
36:5:2955:U:H2'	36:5:2956:A:O4'	2.15	0.47
87:1:4194:OHX:N4	43:L6:129:GLU:HA	2.30	0.47
36:1:692:A:H2'	36:1:693:A:H8	1.80	0.47
36:1:945:C:C2	36:1:946:U:C5	3.03	0.47
15:C3:151:ASN:O	87:C3:201:OHX:N6	2.80	0.47
36:5:177:U:O4	36:5:239:G:N2	2.48	0.47
36:1:1414:G:C5	36:1:1415:U:C5	3.03	0.47
55:M9:111:ASP:C	55:M9:113:GLY:H	3.49	0.47
43:L6:175:LYS:NZ	50:M4:111:ALA:HA	4.51	0.47
65:N9:42:ASN:O	65:N9:42:ASN:ND2	2.48	0.47
10:S8:64:ASN:HB3	10:S8:180:ASP:OD1	2.19	0.47
1:2:374:U:H2'	1:2:375:U:O4'	2.15	0.47
8:S6:204:ALA:C	8:S6:206:ALA:H	2.18	0.47
36:5:2658:G:OP2	87:5:3903:OHX:N1	2.47	0.47
1:2:1757:G:N2	36:1:2255:A:N3	2.63	0.47
27:D5:41:ILE:HG23	27:D5:42:LEU:N	2.23	0.47
36:5:3200:G:O6	87:5:4139:OHX:N5	2.47	0.47
46:L9:89:LYS:HZ2	46:L9:191:LEU:HG	15.55	0.47
36:1:1470:U:O2'	36:1:1512:U:H4'	2.15	0.47
1:2:540:G:C2	1:2:542:A:C2	3.03	0.47
1:6:31:C:O2'	1:6:547:U:H5"	2.15	0.47
44:L7:127:LEU:O	44:L7:130:ILE:HG22	6.46	0.47
45:L8:69:LEU:HD11	51:M5:24:ARG:NH2	3.72	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:M5:16:SER:HB2	72:O6:48:ALA:HB1	1.96	0.47
1:2:93:A:O2'	6:S4:4:GLY:HA3	2.15	0.47
36:5:1393:A:O2'	36:5:1419:A:C2	2.68	0.47
1:6:1405:G:C6	1:6:1406:A:C5	3.03	0.47
19:C7:60:ARG:O	19:C7:63:LYS:HB3	4.52	0.47
27:D5:39:ALA:HB1	27:D5:72:GLY:N	2.30	0.47
27:D5:95:HIS:ND1	27:D5:96:SER:N	3.13	0.47
30:D8:42:ARG:NH2	30:D8:58:GLU:O	6.12	0.47
1:2:1611:A:O2'	7:S5:95:ASN:O	2.25	0.47
67:O1:19:ARG:HD3	67:O1:35:GLU:HG3	1.97	0.47
1:6:1640:C:H1'	1:6:1763:A:C6	2.49	0.47
16:C4:35:GLY:C	16:C4:36:LYS:O	4.18	0.47
28:D6:53:LEU:O	28:D6:55:GLU:N	2.48	0.47
16:C4:117:ASP:HB2	28:D6:67:THR:HG21	1.97	0.47
19:C7:84:TYR:CG	19:C7:85:VAL:N	2.83	0.47
23:D1:46:ILE:H	23:D1:46:ILE:HD12	5.00	0.47
4:S2:184:VAL:O	4:S2:188:LEU:HB2	2.15	0.47
20:C8:18:LEU:C	20:C8:20:THR:H	2.54	0.47
66:O0:29:SER:OG	66:O0:30:THR:N	3.28	0.47
70:O4:78:GLY:O	70:O4:80:ARG:N	4.99	0.47
36:5:1477:A:O2'	36:5:1478:C:H5'	2.14	0.47
14:C2:52:LEU:HD11	14:C2:60:VAL:HG21	3.06	0.47
36:1:1174:G:H21	52:M6:87:MET:CE	2.28	0.47
6:S4:65:LEU:O	6:S4:68:ARG:N	2.48	0.47
69:O3:8:TYR:CE2	69:O3:99:ARG:HG2	2.84	0.47
5:S3:222:VAL:CG1	34:SR:229:LYS:HA	2.43	0.47
34:SR:67:ILE:HB	34:SR:85:TRP:CG	2.50	0.47
62:N6:37:LYS:N	62:N6:37:LYS:HD3	2.37	0.47
72:O6:67:LYS:HG3	72:O6:68:ARG:N	4.60	0.47
66:O0:9:SER:HB3	66:O0:12:GLN:HB3	1.97	0.47
36:1:2607:G:C4	36:1:2608:G:C8	3.02	0.47
1:2:159:U:C6	26:D4:117:LYS:HD3	2.49	0.47
64:N8:32:ARG:HD2	36:5:38:U:H4'	158.05	0.47
36:1:3043:C:O2'	36:1:3044:G:H5'	2.15	0.47
40:L3:130:PHE:CE1	36:5:3149:G:H4'	222.45	0.47
40:L3:135:ALA:C	40:L3:138:ALA:H	4.12	0.47
58:N2:51:GLY:O	58:N2:53:ALA:N	2.95	0.47
36:1:1687:U:H1'	58:N2:75:TYR:CE2	2.50	0.47
25:D3:7:ARG:HG3	1:6:1103:U:OP2	346.04	0.47
36:5:754:G:C6	36:5:779:G:C6	3.02	0.47
36:5:3032:A:N6	36:5:3033:A:C6	2.83	0.47
71:O5:78:LYS:NZ	38:8:38:U:OP2	81.82	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:8:43:A:H2'	38:8:44:A:O4'	2.14	0.47
36:1:87:U:OP1	54:M8:167:SER:HB2	2.15	0.47
36:1:645:A:C5	36:1:2372:A:C2	3.03	0.47
60:N4:31:PHE:CZ	60:N4:40:PHE:HD1	2.33	0.47
4:S2:238:SER:HA	4:S2:239:PRO:HD2	2.48	0.47
36:1:1404:G:N2	36:1:1408:G:C4	2.83	0.47
32:E0:50:VAL:HG12	32:E0:53:LYS:O	2.15	0.47
25:D3:95:PHE:CD1	25:D3:135:LEU:HB3	2.49	0.47
36:1:2533:G:H3'	36:1:2534:G:H8	1.79	0.47
62:N6:60:ARG:HB2	62:N6:103:LYS:HB3	1.97	0.47
46:L9:41:ILE:HG21	46:L9:71:VAL:HG21	1.97	0.47
36:5:2884:C:O2	36:5:2939:G:C2	2.68	0.47
36:1:1614:C:H2'	36:1:1615:C:C6	2.50	0.47
36:1:767:U:H4'	49:M3:186:ARG:NH1	2.30	0.47
68:O2:6:HIS:HB2	68:O2:7:PRO:HD2	2.26	0.47
36:1:994:G:H22	36:1:1053:A:H2'	1.79	0.47
36:1:1117:G:OP1	65:N9:4:SER:HB2	2.14	0.47
36:1:956:U:H6	36:1:956:U:O5'	1.98	0.47
44:L7:182:ASP:O	44:L7:185:ILE:HG22	2.15	0.47
36:1:3166:C:H2'	36:1:3167:A:O4'	2.15	0.47
36:1:1245:A:H62	36:1:1272:C:H4'	1.80	0.47
1:2:754:A:N1	1:2:793:A:H2'	2.29	0.47
24:D2:5:SER:O	24:D2:6:VAL:HG12	5.26	0.47
41:L4:3:ARG:HA	41:L4:4:PRO:HD2	1.37	0.47
61:N5:136:ALA:O	61:N5:139:ILE:HG23	2.15	0.47
2:S0:23:HIS:NE2	2:S0:24:LEU:HD13	3.69	0.47
42:L5:134:ALA:HB2	42:L5:141:PRO:CD	3.36	0.47
36:1:2764:C:O5'	36:1:2764:C:H6	1.97	0.47
1:2:1125:A:C5	1:2:1126:G:H1'	2.50	0.47
65:N9:23:LYS:HA	65:N9:23:LYS:HD3	3.76	0.47
38:8:4:C:N4	38:8:5:U:O4	2.48	0.47
87:1:3972:OHX:N5	87:1:4155:OHX:N1	2.63	0.47
36:1:3372:A:C5	36:1:3373:U:C5	3.03	0.47
10:S8:87:ASN:O	10:S8:90:LEU:HG	2.15	0.47
22:D0:62:VAL:HG22	22:D0:85:ARG:HG3	1.97	0.47
1:6:56:U:O4	1:6:92:A:H4'	2.15	0.47
1:2:1154:G:N2	1:2:1625:C:C2	2.83	0.47
36:1:3293:U:OP2	36:1:3293:U:H6	1.98	0.47
41:L4:325:LEU:HD23	41:L4:325:LEU:HA	2.11	0.47
37:3:101:G:H8	37:3:101:G:O5'	1.98	0.47
1:2:236:A:OP2	1:2:236:A:H8	1.98	0.47
4:S2:66:PHE:CD2	4:S2:66:PHE:C	3.34	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:881:C:O2	36:5:881:C:H2'	2.15	0.47
40:L3:94:GLU:OE1	52:M6:155:LYS:NZ	3.95	0.47
36:1:2122:G:C6	36:1:2332:A:C2	3.03	0.47
1:2:1471:A:C8	1:2:1540:G:H1'	2.49	0.47
36:1:2955:U:C2	36:1:2956:A:C8	3.03	0.47
1:2:635:A:C4	1:2:636:A:C8	3.03	0.47
40:L3:153:LYS:HD3	40:L3:154:TYR:CZ	2.50	0.47
36:1:1203:A:N3	36:1:2855:U:O2'	2.38	0.47
1:2:654:C:H2'	1:2:655:G:H5''	1.97	0.47
36:1:2261:G:O6	87:1:3934:OHX:N4	2.48	0.46
36:1:2895:G:C2	36:1:2907:G:C4	3.03	0.46
36:5:1496:C:P	36:5:1514:G:H5''	2.55	0.46
87:6:2125:OHX:N2	87:6:2177:OHX:N1	2.63	0.46
11:S9:134:ILE:HD12	11:S9:134:ILE:N	4.79	0.46
47:M0:197:VAL:HG22	47:M0:198:LYS:N	3.26	0.46
44:L7:102:VAL:HG12	44:L7:130:ILE:HD12	3.73	0.46
44:L7:170:GLU:C	44:L7:172:ASN:H	2.19	0.46
13:C1:55:ASP:OD2	13:C1:58:CYS:HB2	2.14	0.46
19:C7:26:LEU:HD13	19:C7:59:LYS:CG	2.60	0.46
19:C7:34:LEU:O	19:C7:34:LEU:HD22	4.68	0.46
52:M6:17:GLY:HA3	36:5:1313:G:O3'	267.46	0.46
73:O7:17:THR:HG22	73:O7:18:LEU:HD12	1.96	0.46
1:2:1609:U:C2'	1:2:1610:G:H5'	2.45	0.46
1:6:1542:G:H22	1:6:1568:C:H1'	1.79	0.46
7:S5:121:ILE:HA	7:S5:199:ILE:HD11	1.96	0.46
46:L9:91:ARG:HG2	46:L9:143:GLU:HA	1.95	0.46
36:1:3378:C:O2'	40:L3:312:VAL:HA	2.15	0.46
67:O1:56:ASN:O	67:O1:58:ALA:N	3.12	0.46
61:N5:92:LYS:HG2	61:N5:110:VAL:HG12	3.77	0.46
61:N5:113:LEU:CD2	61:N5:123:TYR:HE2	3.25	0.46
36:1:1108:U:C2	36:1:1109:U:C6	3.03	0.46
1:6:1203:A:C4	1:6:1556:A:C2	3.02	0.46
12:C0:54:TYR:HA	12:C0:72:GLY:N	2.30	0.46
15:C3:55:ARG:HG2	29:D7:32:PHE:HZ	3.93	0.46
1:2:312:A:C4	1:2:314:C:C5	3.03	0.46
1:6:16:G:H2'	1:6:17:C:C6	2.49	0.46
2:S0:7:PHE:HE1	23:D1:43:GLY:HA2	1.80	0.46
2:S0:60:ALA:HB1	2:S0:144:ILE:HD12	1.96	0.46
66:O0:26:GLY:O	66:O0:30:THR:HG23	2.19	0.46
36:1:1874:A:O5'	55:M9:20:ARG:HD3	2.15	0.46
38:4:85:G:O6	62:N6:112:ASP:HB3	2.15	0.46
62:N6:109:LEU:HB2	62:N6:111:LEU:HD11	1.97	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:C2:62:LEU:HA	14:C2:119:SER:O	2.14	0.46
14:C2:62:LEU:HD11	14:C2:90:LYS:HE3	4.67	0.46
1:2:1178:G:C2	1:2:1462:G:C5	3.03	0.46
1:2:1180:C:HO2'	17:C5:128:HIS:CE1	2.33	0.46
1:6:1459:C:H4'	1:6:1460:A:OP1	2.14	0.46
11:S9:167:ALA:O	11:S9:168:ARG:HB2	2.15	0.46
56:N0:133:ALA:HA	56:N0:135:VAL:H	3.75	0.46
44:L7:74:SER:HB3	57:N1:141:VAL:O	2.41	0.46
36:5:3242:G:H21	36:5:3245:A:H5''	1.80	0.46
40:L3:296:THR:HG22	40:L3:299:ASP:H	2.36	0.46
40:L3:296:THR:N	40:L3:299:ASP:HB3	2.25	0.46
59:N3:96:GLU:HB2	60:N4:21:PHE:CE1	4.19	0.46
42:L5:259:LYS:HB3	42:L5:259:LYS:HE3	1.67	0.46
1:2:86:A:H5''	26:D4:119:PHE:CE2	2.49	0.46
34:SR:218:GLY:O	34:SR:236:ALA:N	2.85	0.46
34:SR:290:VAL:HG22	34:SR:304:GLY:O	3.76	0.46
34:SR:45:TRP:HA	34:SR:57:PRO:HA	1.97	0.46
36:5:2310:U:H6	36:5:2310:U:O5'	1.98	0.46
72:O6:70:ARG:HD3	72:O6:84:LYS:CG	2.45	0.46
36:1:3209:A:OP2	56:N0:161:LYS:HD2	2.16	0.46
78:Q2:43:TYR:O	78:Q2:44:ASP:C	2.53	0.46
1:2:1170:G:H2'	1:2:1170:G:N3	2.31	0.46
8:S6:57:ASP:OD2	8:S6:61:PHE:N	3.45	0.46
72:O6:90:MET:O	72:O6:94:ILE:HG13	2.15	0.46
49:M3:74:GLY:CA	49:M3:98:ASP:HB2	3.49	0.46
51:M5:184:LYS:O	51:M5:184:LYS:HG2	2.15	0.46
1:6:629:U:H1'	1:6:971:A:N1	2.30	0.46
39:L2:6:ARG:NH2	39:L2:199:THR:O	2.41	0.46
52:M6:156:LEU:HD23	52:M6:156:LEU:N	2.29	0.46
26:D4:37:LYS:HA	26:D4:40:LEU:HB2	3.57	0.46
39:L2:73:GLU:HG2	39:L2:74:GLU:N	3.04	0.46
36:1:28:C:H42	36:1:56:G:H1	1.62	0.46
51:M5:113:LEU:HD11	38:8:142:C:H5'	104.22	0.46
27:D5:86:GLU:O	27:D5:88:ILE:N	3.98	0.46
36:5:2255:A:HO2'	36:5:2256:A:P	2.37	0.46
36:5:2203:U:O2	36:5:2240:G:C2	2.68	0.46
36:5:89:A:C6	36:5:98:G:N2	2.83	0.46
36:1:2275:A:C2	36:1:2312:A:C4	3.03	0.46
67:O1:105:GLN:OE1	36:5:3384:U:H1'	174.51	0.46
41:L4:299:ILE:HG22	41:L4:300:ARG:N	2.35	0.46
54:M8:38:ARG:NH1	54:M8:38:ARG:HB2	2.29	0.46
6:S4:187:ARG:HH11	6:S4:245:LYS:NZ	2.12	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1477:G:C5	1:6:1478:G:C5	3.03	0.46
1:6:1303:U:C5	1:6:1304:G:C5	3.03	0.46
36:1:2948:C:H1'	40:L3:242:THR:HG22	1.97	0.46
87:1:4003:OHX:N6	87:1:4171:OHX:N5	2.63	0.46
36:5:979:U:H1'	36:5:980:A:N9	2.31	0.46
36:5:1027:A:N7	36:5:1029:G:C2	2.83	0.46
1:2:197:A:H61	10:S8:138:ASN:ND2	2.12	0.46
1:2:409:C:H2'	1:2:410:A:H5'	1.97	0.46
1:6:402:C:O2	1:6:405:C:N4	2.47	0.46
36:1:8:C:H6	36:1:8:C:O5'	1.98	0.46
52:M6:99:LEU:O	52:M6:101:ARG:N	3.28	0.46
15:C3:29:SER:O	15:C3:33:VAL:HG23	4.64	0.46
42:L5:289:LYS:HB3	47:M0:206:LEU:HD21	1.97	0.46
45:L8:151:VAL:O	45:L8:178:ALA:N	2.64	0.46
1:6:224:C:H2'	1:6:225:A:C8	2.50	0.46
18:C6:19:VAL:O	18:C6:67:VAL:HA	2.14	0.46
36:5:1542:G:N2	36:5:1543:G:C4	2.83	0.46
1:6:985:G:C6	1:6:986:G:C4	3.03	0.46
36:5:1252:A:N6	36:5:1264:G:OP1	2.45	0.46
12:C0:33:GLU:H	12:C0:33:GLU:CD	2.19	0.46
38:4:31:G:C5	38:4:32:C:C5	3.03	0.46
40:L3:255:TRP:O	40:L3:255:TRP:HD1	1.98	0.46
17:C5:95:GLY:O	17:C5:102:PHE:HD1	1.98	0.46
36:1:559:A:C2'	36:1:560:G:O5'	2.63	0.46
36:5:2259:A:C8	36:5:2260:U:C5	3.03	0.46
55:M9:80:LYS:HE3	36:5:1940:G:OP1	205.50	0.46
36:1:175:C:N4	36:1:243:G:H1	2.13	0.46
36:5:2291:A:H2'	36:5:2292:U:H6	1.79	0.46
36:1:379:C:H2'	36:1:380:U:C6	2.49	0.46
4:S2:103:VAL:HA	4:S2:112:GLY:O	2.60	0.46
1:2:1662:G:C2	1:2:1740:A:C2	3.03	0.46
74:O8:23:ALA:HB2	74:O8:73:LEU:HD21	1.97	0.46
43:L6:136:GLU:OE2	43:L6:139:LYS:HE3	2.14	0.46
9:S7:43:PHE:HB2	9:S7:61:PHE:O	2.15	0.46
1:2:209:U:H2'	1:2:210:A:C8	2.50	0.46
36:1:2097:U:O2'	36:1:2098:C:H5'	2.16	0.46
6:S4:183:VAL:HG11	6:S4:188:ASN:HB2	3.83	0.46
11:S9:138:LYS:HD2	11:S9:160:PRO:HG2	4.59	0.46
1:2:1175:U:H5''	1:2:1176:G:OP2	2.15	0.46
39:L2:37:ARG:O	39:L2:92:LYS:HD2	4.94	0.46
43:L6:20:LYS:NZ	43:L6:20:LYS:HA	3.36	0.46
36:5:1770:G:C2	36:5:1771:C:C5	3.03	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:SM:139:GLU:HG2	35:SM:140:ASP:N	2.29	0.46
59:N3:27:ASP:OD2	59:N3:29:SER:OG	2.33	0.46
25:D3:54:LEU:HB2	25:D3:73:ARG:HB3	3.29	0.46
78:Q2:77:CYS:SG	78:Q2:77:CYS:O	2.73	0.46
36:1:2988:C:H1'	40:L3:266:ARG:HH12	1.80	0.46
53:M7:23:ARG:NH2	53:M7:125:GLN:HB3	2.30	0.46
26:D4:113:ASN:HD22	1:6:54:C:H5''	348.31	0.46
1:2:381:C:P	11:S9:2:PRO:HB3	2.55	0.46
1:6:542:A:OP1	1:6:542:A:H3'	2.15	0.46
41:L4:330:TYR:HE2	44:L7:52:GLN:HG2	1.80	0.46
45:L8:142:LEU:O	45:L8:145:ASN:N	2.49	0.46
26:D4:20:ARG:CB	26:D4:76:TYR:HA	2.45	0.46
10:S8:107:THR:OG1	10:S8:108:PRO:HD3	2.15	0.46
41:L4:93:MET:HE2	41:L4:93:MET:H	4.01	0.46
55:M9:176:ARG:HD3	55:M9:176:ARG:HA	1.55	0.46
1:2:1369:U:O4	87:2:2095:OHX:N6	2.48	0.46
18:C6:66:ARG:NH1	18:C6:68:ARG:HG2	2.30	0.46
20:C8:62:THR:N	20:C8:65:GLU:OE1	2.84	0.46
7:S5:64:VAL:O	7:S5:65:ARG:HB2	2.14	0.46
61:N5:63:ILE:HD11	61:N5:84:PHE:CG	4.14	0.46
17:C5:37:ALA:HB1	17:C5:38:PRO:HD2	1.96	0.46
5:S3:106:LYS:C	5:S3:108:LYS:H	3.12	0.46
5:S3:101:GLN:HB3	5:S3:122:VAL:HG11	2.49	0.46
5:S3:98:ALA:HB3	5:S3:171:ALA:H	3.18	0.46
1:2:915:A:OP2	1:2:916:U:H5	1.97	0.46
16:C4:18:ARG:HA	16:C4:82:LYS:H	1.81	0.46
16:C4:99:GLN:HB3	28:D6:46:GLU:OE1	2.16	0.46
2:S0:60:ALA:HB3	2:S0:160:ILE:HD11	3.26	0.46
4:S2:115:ILE:HD13	4:S2:208:GLU:OE1	3.55	0.46
36:5:3045:G:H2'	36:5:3046:A:O4'	2.15	0.46
54:M8:67:ILE:HG23	54:M8:81:VAL:HG21	4.51	0.46
14:C2:54:ARG:HG2	14:C2:56:GLU:CD	2.35	0.46
17:C5:123:TYR:CD1	17:C5:123:TYR:N	2.82	0.46
36:1:1213:G:H8	36:1:1213:G:H5''	1.81	0.46
36:5:3181:C:C2'	36:5:3182:G:H5'	2.46	0.46
50:M4:117:ARG:O	50:M4:120:VAL:HB	2.25	0.46
42:L5:271:LYS:HA	42:L5:271:LYS:HD3	4.30	0.46
1:2:66:U:H5'	8:S6:173:PRO:HA	1.96	0.46
18:C6:54:LEU:HD21	18:C6:112:TYR:CE1	4.89	0.46
1:2:926:A:H2	16:C4:125:SER:HG	1.61	0.46
79:Q3:73:THR:HB	79:Q3:76:ALA:H	4.82	0.46
58:N2:15:PHE:HB2	58:N2:65:VAL:HG23	4.06	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:3163:A:O5'	36:5:3163:A:H8	1.98	0.46
64:N8:28:HIS:ND1	64:N8:32:ARG:HG3	3.90	0.46
24:D2:86:ILE:O	24:D2:89:TRP:N	3.15	0.46
1:6:654:C:O2'	1:6:655:G:O4'	2.26	0.46
51:M5:38:ARG:HD3	51:M5:62:TYR:CE2	4.51	0.46
51:M5:93:LYS:HD3	51:M5:93:LYS:HA	1.74	0.46
1:6:633:U:H3	1:6:966:A:H61	1.62	0.46
1:6:634:G:C4	1:6:966:A:C2	3.04	0.46
36:5:754:G:N1	36:5:779:G:C4	2.83	0.46
39:L2:245:LEU:O	39:L2:247:ARG:N	2.47	0.46
1:6:651:G:H4'	1:6:652:G:OP1	2.15	0.46
38:4:50:C:OP1	71:O5:35:LYS:NZ	2.42	0.46
73:O7:63:ARG:HB3	73:O7:65:ARG:HG2	1.97	0.46
1:6:1441:C:H2'	1:6:1442:U:H6	1.80	0.46
10:S8:25:ARG:NH2	1:6:386:G:OP2	316.03	0.46
36:5:2961:G:N2	36:5:2972:G:C4	2.84	0.46
36:1:1653:G:H4'	70:O4:43:LYS:O	2.15	0.46
36:5:1656:A:O2'	87:5:4172:OHX:N2	2.48	0.46
70:O4:41:ARG:HA	70:O4:56:THR:CG2	2.44	0.46
70:O4:42:PRO:C	70:O4:43:LYS:HG2	2.62	0.46
36:1:705:A:N1	36:1:714:G:H2'	2.30	0.46
64:N8:133:LEU:HD11	64:N8:137:LYS:HE2	3.87	0.46
36:5:2616:C:H2'	36:5:2617:U:H5'	1.96	0.46
41:L4:296:GLN:HA	41:L4:299:ILE:CG1	2.43	0.46
1:2:356:G:OP2	87:2:2036:OHX:N6	2.48	0.46
23:D1:2:GLU:HB3	23:D1:3:ASN:H	1.44	0.46
37:7:47:C:H2'	37:7:48:U:C6	2.50	0.46
36:5:2815:G:O5'	36:5:2815:G:H8	1.97	0.46
63:N7:54:THR:O	63:N7:57:HIS:N	2.34	0.46
2:S0:104:PRO:HB2	1:6:1322:A:O2'	404.87	0.46
36:1:1493:G:O2'	36:1:1494:U:H5	1.97	0.46
36:1:1223:A:C6	36:1:1224:C:H5	2.33	0.46
48:M1:31:THR:O	48:M1:34:SER:HB3	2.16	0.46
11:S9:7:THR:HG21	1:6:758:U:OP1	383.15	0.46
64:N8:45:MET:HE2	64:N8:45:MET:HB3	1.81	0.46
13:C1:128:CYS:O	13:C1:129:ARG:HB3	4.50	0.46
42:L5:294:ALA:CB	47:M0:217:PHE:HB3	2.45	0.46
44:L7:96:PRO:HA	44:L7:97:PRO:HD2	1.91	0.46
1:2:1319:A:C2	1:2:1320:U:H1'	2.50	0.46
4:S2:157:LYS:HD2	4:S2:168:ARG:CZ	2.46	0.46
4:S2:169:LEU:HA	4:S2:169:LEU:HD23	1.74	0.46
47:M0:129:VAL:HG13	47:M0:133:GLN:HG3	2.55	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:M6:67:THR:O	52:M6:71:PHE:CZ	2.68	0.46
36:1:1580:A:C1'	36:1:1581:C:H5	2.27	0.46
36:5:2412:G:C2'	36:5:2413:A:O5'	2.63	0.46
1:6:1724:U:O4	87:6:2096:OHX:N5	2.48	0.46
36:1:761:A:N1	36:1:771:A:H1'	2.29	0.46
36:1:601:U:H2'	36:1:602:A:O4'	2.15	0.46
41:L4:259:ASP:O	41:L4:267:VAL:HG11	4.83	0.46
1:2:1360:A:H4'	21:C9:2:PRO:N	2.30	0.46
36:5:241:G:H2'	36:5:242:C:H6	1.80	0.46
36:1:1409:G:O6	87:1:4065:OHX:N3	2.48	0.46
36:5:2259:A:C5	36:5:2260:U:C5	3.02	0.46
36:1:3046:A:C4	36:1:3047:U:C6	3.03	0.46
8:S6:180:THR:O	8:S6:184:LEU:HD12	4.66	0.46
51:M5:203:ARG:HH11	51:M5:203:ARG:HG3	2.69	0.46
36:5:1010:G:N2	36:5:1041:U:O2	2.48	0.46
16:C4:91:THR:O	16:C4:93:THR:N	2.90	0.46
1:6:258:C:O2'	1:6:259:U:H5'	2.15	0.46
1:2:245:U:O2'	1:2:247:A:N6	2.48	0.46
62:N6:11:ASP:OD2	62:N6:13:ARG:N	2.78	0.46
8:S6:35:GLU:HA	8:S6:51:LYS:HA	2.50	0.46
36:1:2876:C:H1'	36:1:2952:G:N2	2.29	0.46
36:1:1018:G:H8	36:1:1018:G:OP2	1.97	0.46
1:2:1655:A:N3	36:1:2302:G:H1'	2.30	0.46
51:M5:73:ARG:HB3	51:M5:89:VAL:HG22	3.80	0.46
36:1:1841:A:C6	36:1:1848:G:C6	3.04	0.46
36:1:1449:A:C2	36:1:2356:A:C5	3.04	0.46
53:M7:32:THR:CG2	53:M7:87:SER:HB3	2.38	0.46
1:6:462:G:C6	1:6:463:U:C5	3.04	0.46
28:D6:5:ARG:NH1	1:6:1795:U:H3'	337.27	0.46
11:S9:150:LEU:O	11:S9:153:GLU:HB2	2.43	0.46
11:S9:66:ASP:O	11:S9:69:ARG:N	2.51	0.46
87:1:4032:OHX:N4	87:1:4044:OHX:N1	2.63	0.46
44:L7:132:PRO:HA	44:L7:229:PHE:CD1	2.50	0.46
45:L8:140:VAL:HG21	51:M5:3:ALA:HB2	1.97	0.46
1:6:212:U:H2'	1:6:213:A:H8	1.80	0.46
1:6:333:A:C2	1:6:334:G:C2	3.04	0.46
36:1:1421:G:C2	36:1:1422:G:C5	3.03	0.46
41:L4:169:LEU:O	41:L4:172:VAL:HG12	2.16	0.46
41:L4:237:GLN:C	41:L4:239:ALA:H	2.18	0.46
36:1:3268:A:O2'	43:L6:130:ILE:HD11	2.16	0.46
43:L6:65:ILE:HG12	43:L6:79:VAL:HG12	4.94	0.46
43:L6:40:LEU:HB3	43:L6:84:VAL:CG2	2.45	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:L6:96:VAL:O	43:L6:98:VAL:HB	2.15	0.46
52:M6:18:ARG:CZ	52:M6:128:ARG:HH12	3.71	0.46
36:5:357:A:H2'	36:5:358:G:O4'	2.15	0.46
36:5:815:G:O3'	36:5:920:A:N6	2.49	0.46
1:2:1357:A:N7	1:2:1367:G:N1	2.64	0.46
1:6:1613:U:C4	1:6:1614:A:C2	3.03	0.46
7:S5:41:LYS:HE3	7:S5:41:LYS:HB3	1.78	0.46
36:1:3087:A:P	87:1:4180:OHX:N5	2.88	0.46
61:N5:91:ASN:N	61:N5:91:ASN:OD1	2.48	0.46
5:S3:65:ARG:HH12	12:C0:56:LYS:HZ1	1.64	0.46
17:C5:17:TYR:H	17:C5:25:LEU:HD11	2.57	0.46
17:C5:119:PHE:HE1	20:C8:119:ILE:CG2	2.29	0.46
1:2:955:A:H5''	15:C3:10:GLY:HA3	1.97	0.46
1:6:951:A:C2	1:6:952:A:C8	3.04	0.46
36:1:67:A:P	87:1:3911:OHX:N6	2.88	0.46
77:Q1:8:LYS:HE3	1:6:1777:G:O6	290.58	0.46
3:S1:85:LYS:HB2	3:S1:101:HIS:O	3.02	0.46
3:S1:35:PRO:HG3	3:S1:99:ASN:HA	2.71	0.46
36:1:658:G:H3'	36:1:659:G:H8	1.80	0.46
23:D1:32:VAL:HG12	23:D1:55:LEU:HB2	3.07	0.46
23:D1:8:LEU:HD22	23:D1:9:VAL:N	2.30	0.46
4:S2:35:TRP:HB3	4:S2:46:LYS:HE3	1.97	0.46
1:2:179:A:N6	1:2:180:A:C6	2.84	0.46
55:M9:21:LYS:HE3	36:5:1874:A:OP2	141.65	0.46
55:M9:43:LYS:HA	55:M9:46:LYS:HG2	1.97	0.46
38:4:65:A:C4	38:4:66:A:C8	3.04	0.46
1:2:1228:G:H3'	1:2:1229:G:H8	1.76	0.46
1:6:1132:A:H2	1:6:1651:A:O2'	1.98	0.46
36:5:1319:G:C6	36:5:1320:C:N4	2.84	0.46
46:L9:4:ILE:N	56:N0:142:GLN:OE1	2.95	0.46
56:N0:27:MET:HE1	57:N1:153:PRO:HD3	1.97	0.46
43:L6:163:PHE:CD1	43:L6:163:PHE:C	2.89	0.46
69:O3:45:LEU:HA	69:O3:71:VAL:HG12	1.97	0.46
9:S7:48:GLU:OE1	9:S7:56:LYS:NZ	3.12	0.46
42:L5:256:THR:HB	42:L5:257:GLU:H	3.10	0.46
1:6:70:C:O2	1:6:81:G:N2	2.26	0.46
36:5:2274:U:O2'	36:5:2275:A:H5'	2.15	0.46
36:5:2309:A:H4'	87:5:4193:OHX:N4	2.31	0.46
52:M6:124:LEU:HB2	52:M6:127:LEU:HD12	4.01	0.46
29:D7:35:VAL:HG21	29:D7:63:LEU:HD21	1.98	0.46
41:L4:15:ALA:O	41:L4:16:THR:HB	4.30	0.46
1:2:1325:A:C2	1:2:1326:A:C5	3.03	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:M6:25:LYS:HA	52:M6:28:LEU:HD12	1.97	0.46
51:M5:174:ILE:H	51:M5:174:ILE:HG12	1.45	0.46
24:D2:76:SER:OG	1:6:1102:G:OP1	351.86	0.46
36:1:3029:A:C5	36:1:3030:G:H1'	2.50	0.46
36:5:390:G:C6	36:5:391:A:C4	3.04	0.46
38:4:38:U:N3	71:O5:89:ARG:HD2	2.31	0.46
11:S9:65:LYS:NZ	1:6:650:U:H5'	421.31	0.46
42:L5:179:ARG:HA	42:L5:179:ARG:HD3	1.74	0.46
46:L9:173:ARG:C	76:Q0:127:LEU:HD12	2.35	0.46
36:1:431:U:H5''	69:O3:65:ARG:NH1	2.29	0.46
1:2:1497:U:C4	1:2:1511:U:O2	2.69	0.46
34:SR:148:ASN:O	34:SR:149:ASP:HB2	3.99	0.46
1:2:1344:A:N1	1:2:1345:A:C6	2.83	0.46
36:1:2767:U:O4	87:1:4037:OHX:N6	2.47	0.46
36:1:2767:U:O3'	78:Q2:31:GLY:HA3	2.16	0.46
36:1:10:C:H1'	45:L8:55:TYR:CD1	2.50	0.46
36:1:1488:G:N1	36:1:1855:U:C4	2.83	0.46
38:4:124:G:H1	38:4:129:C:H42	1.62	0.46
36:5:1610:G:H2'	36:5:1611:G:C8	2.50	0.46
78:Q2:72:LEU:N	78:Q2:72:LEU:HD23	2.84	0.46
33:E1:92:LYS:H	33:E1:92:LYS:HG2	4.52	0.46
50:M4:102:LYS:HE3	50:M4:102:LYS:HB2	1.80	0.46
36:5:2776:C:O2	36:5:2776:C:H2'	2.16	0.46
1:2:520:A:H2	1:2:532:U:H3	1.62	0.46
36:1:1277:C:O2'	36:1:1278:A:H8	1.98	0.46
58:N2:19:VAL:O	58:N2:22:PRO:HD2	2.57	0.46
36:5:2663:G:H2'	36:5:2664:C:O4'	2.15	0.46
36:1:3284:G:C6	36:1:3285:C:N4	2.82	0.46
29:D7:7:LEU:O	29:D7:10:PRO:HD3	2.16	0.46
39:L2:14:SER:O	39:L2:17:THR:HG23	2.16	0.46
45:L8:150:LEU:HD22	45:L8:151:VAL:N	2.30	0.46
73:O7:26:SER:O	73:O7:34:CYS:HA	2.15	0.46
1:2:395:U:H2'	1:2:396:G:O4'	2.15	0.46
36:5:442:G:C2	36:5:443:G:H1'	2.50	0.46
36:1:1499:C:H2'	36:1:1500:G:H8	1.80	0.46
54:M8:69:ARG:HA	54:M8:72:LYS:HG3	1.97	0.46
36:5:1087:G:O6	87:5:4106:OHX:N6	2.48	0.46
42:L5:119:TYR:OH	42:L5:141:PRO:HD3	2.87	0.46
36:5:816:A:H61	36:5:910:G:H21	1.63	0.46
14:C2:103:LEU:HG	14:C2:116:VAL:CG2	2.46	0.46
6:S4:199:GLU:OE2	6:S4:209:HIS:CE1	2.68	0.46
1:6:1484:G:C2	1:6:1485:C:C4	3.02	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:C8:44:ASN:HD21	20:C8:48:LYS:HE3	3.88	0.46
36:5:1481:A:H2'	36:5:1858:A:N3	2.31	0.46
36:1:309:U:H3	36:1:2780:A:H61	1.64	0.46
1:6:1058:U:H4'	1:6:1059:U:OP1	2.16	0.46
57:N1:126:VAL:HG23	57:N1:127:GLN:H	1.80	0.46
87:5:3996:OHX:N4	87:5:4187:OHX:N3	2.63	0.46
36:1:2765:C:O3'	78:Q2:39:GLY:HA3	2.15	0.46
40:L3:218:ILE:HG12	40:L3:276:THR:HG23	1.97	0.46
36:5:2184:U:H5''	36:5:2184:U:H6	1.80	0.46
29:D7:29:ARG:HH11	29:D7:29:ARG:HG3	2.08	0.46
36:5:3148:U:O2	36:5:3148:U:H2'	2.15	0.46
36:1:748:U:O2'	36:1:749:C:H5'	2.15	0.46
36:5:3106:A:H2'	36:5:3107:U:O4'	2.15	0.46
25:D3:75:GLN:HG3	25:D3:82:LYS:HD3	1.97	0.46
36:1:2655:U:OP2	78:Q2:2:VAL:HA	2.16	0.46
46:L9:26:LYS:HB2	46:L9:35:THR:HG22	1.97	0.46
67:O1:9:THR:HG21	67:O1:74:ARG:HD3	1.97	0.46
53:M7:127:ARG:HD2	36:5:1505:C:OP1	128.91	0.46
1:6:40:A:C2	1:6:469:C:C6	3.03	0.46
47:M0:36:LEU:HD21	47:M0:69:ARG:HD3	1.97	0.46
47:M0:77:THR:O	47:M0:78:THR:C	3.01	0.46
1:6:1579:U:P	87:6:2189:OHX:N3	2.88	0.46
44:L7:108:LEU:HD21	44:L7:115:THR:HG23	2.12	0.46
36:1:2526:C:OP1	39:L2:38:HIS:HE1	1.98	0.46
13:C1:58:CYS:HB3	13:C1:61:THR:OG1	2.96	0.46
41:L4:237:GLN:O	41:L4:246:ARG:HG3	2.16	0.46
41:L4:39:PHE:HE2	41:L4:43:ASN:HD22	2.83	0.46
64:N8:3:SER:O	64:N8:5:PHE:N	2.49	0.46
18:C6:135:ARG:O	18:C6:137:ARG:NE	2.46	0.46
21:C9:38:LYS:HD3	21:C9:43:ASN:O	2.16	0.46
7:S5:205:SER:C	7:S5:207:THR:N	2.86	0.46
46:L9:92:TYR:CE1	46:L9:101:VAL:HG21	2.50	0.46
42:L5:159:VAL:HG13	42:L5:160:PHE:N	2.66	0.46
42:L5:227:LEU:HD12	42:L5:227:LEU:HA	2.39	0.46
1:6:1552:U:H2'	1:6:1553:G:C8	2.50	0.46
12:C0:54:TYR:N	12:C0:71:GLU:OE1	4.04	0.46
33:E1:123:ASN:O	33:E1:126:CYS:HB2	3.01	0.46
35:SM:134:ASP:O	35:SM:134:ASP:OD1	2.33	0.46
51:M5:49:ARG:NH2	36:5:115:A:OP1	100.96	0.46
1:2:897:C:O2'	1:2:914:G:N2	2.48	0.46
16:C4:114:ARG:HA	28:D6:62:TYR:OH	2.15	0.46
28:D6:62:TYR:CG	28:D6:63:ALA:N	3.01	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:84:ILE:HD13	3:S1:84:ILE:HA	4.31	0.46
5:S3:47:GLU:HG2	5:S3:87:TYR:HE2	4.26	0.46
29:D7:67:THR:OG1	29:D7:69:GLY:O	2.34	0.46
38:4:72:A:H4'	62:N6:75:ARG:NH1	2.30	0.46
1:6:1226:A:HO2'	1:6:1256:A:H61	1.63	0.46
14:C2:43:ARG:O	14:C2:47:GLU:HB2	2.15	0.46
14:C2:50:LYS:O	14:C2:54:ARG:HB3	2.15	0.46
14:C2:69:ALA:C	14:C2:71:ILE:H	2.16	0.46
1:2:1229:G:OP1	33:E1:101:ALA:HA	2.16	0.46
50:M4:20:VAL:HG22	50:M4:68:LEU:O	3.34	0.46
36:5:1232:C:N4	36:5:1262:G:OP2	2.49	0.46
57:N1:53:PRO:HB3	57:N1:91:LEU:HD22	3.10	0.46
1:2:1155:G:N2	1:2:1624:C:C2	2.84	0.46
9:S7:165:LYS:HB3	9:S7:169:PHE:CZ	2.50	0.46
9:S7:46:ILE:HA	9:S7:59:ALA:O	2.81	0.46
18:C6:106:LYS:C	18:C6:108:ALA:H	2.43	0.46
34:SR:236:ALA:HB2	34:SR:263:PHE:HZ	1.79	0.46
36:1:347:G:N2	36:1:353:G:C4	2.84	0.46
39:L2:107:VAL:HG11	39:L2:111:THR:HG21	2.89	0.46
4:S2:121:VAL:HG11	35:SM:117:LEU:HA	1.96	0.46
36:5:3285:C:H3'	36:5:3286:G:C5'	2.45	0.46
1:6:1764:C:C5	1:6:1767:G:C4	3.03	0.46
49:M3:104:ARG:C	72:O6:20:MET:HB2	2.36	0.46
51:M5:171:SER:O	36:5:288:C:H4'	123.49	0.46
13:C1:99:ARG:HB3	25:D3:9:LEU:HD13	1.98	0.46
36:1:3141:A:C4	36:1:3144:G:C8	3.03	0.46
53:M7:17:ALA:HB3	53:M7:148:LEU:HG	1.97	0.46
39:L2:183:GLY:O	39:L2:186:PHE:HB3	2.16	0.46
39:L2:186:PHE:HB2	39:L2:196:TRP:CZ3	3.19	0.46
38:8:106:C:H4'	38:8:107:G:O5'	2.16	0.46
61:N5:44:PRO:O	61:N5:45:LYS:HB2	4.33	0.46
1:2:634:G:N2	1:2:966:A:C5	2.83	0.46
36:5:173:G:C2	36:5:174:C:C2	3.03	0.46
1:2:704:C:H4'	1:2:705:U:OP1	2.16	0.46
20:C8:47:CYS:C	20:C8:49:LYS:H	2.52	0.46
36:1:1049:C:C2	36:1:1050:U:C5	3.03	0.46
36:1:2288:G:C4	36:1:2289:U:C5	3.03	0.46
1:6:355:G:P	87:6:2071:OHX:N5	2.89	0.46
36:5:847:A:H2'	36:5:848:A:H8	1.76	0.46
68:O2:64:LYS:O	68:O2:65:PHE:HB2	2.53	0.46
9:S7:13:PRO:HB3	9:S7:14:THR:HB	1.97	0.46
1:6:1489:U:C2'	1:6:1490:C:OP1	2.63	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1489:U:H2'	1:6:1490:C:OP1	2.16	0.46
36:1:3112:G:O6	36:1:3120:C:H5''	2.15	0.46
68:O2:103:LYS:HD3	36:5:1391:C:C2	126.97	0.46
36:1:2398:A:H2'	36:1:2399:A:H8	1.80	0.46
36:1:1629:U:H6	63:N7:112:LYS:HG2	1.79	0.46
36:1:517:G:H8	36:1:517:G:H5''	1.80	0.46
42:L5:183:TRP:HD1	42:L5:190:ILE:HB	6.75	0.46
36:1:985:U:O3'	44:L7:98:LYS:HD2	2.15	0.46
13:C1:111:VAL:HG23	13:C1:139:VAL:HB	1.97	0.46
1:6:270:C:C4	1:6:271:A:N7	2.84	0.46
2:S0:200:ASP:OD1	19:C7:88:VAL:HG13	5.33	0.46
54:M8:179:ARG:O	54:M8:180:ARG:C	2.74	0.46
15:C3:131:THR:HG22	15:C3:132:VAL:HG13	2.82	0.46
36:1:1307:G:OP1	52:M6:60:LYS:NZ	2.48	0.46
12:C0:32:HIS:HB2	12:C0:33:GLU:OE1	2.16	0.46
20:C8:72:ILE:HG12	20:C8:79:TYR:CG	3.54	0.46
36:5:419:G:O3'	36:5:420:G:O5'	2.29	0.46
1:2:880:C:O2	1:2:948:G:N1	2.46	0.46
1:2:1177:C:C4'	1:2:1189:A:H61	2.28	0.46
36:1:430:U:C4	36:1:630:A:C2	3.04	0.46
54:M8:16:ARG:NH2	54:M8:20:LYS:HB2	2.86	0.46
37:3:59:U:OP2	87:3:219:OHX:N3	2.49	0.46
22:D0:85:ARG:HD2	31:D9:55:PHE:CE2	2.50	0.46
62:N6:95:VAL:HG22	62:N6:96:PRO:HD2	5.37	0.46
1:2:694:U:O2	1:2:694:U:H2'	2.15	0.46
1:2:1680:G:O6	87:2:2110:OHX:N5	2.49	0.46
70:O4:9:ARG:HD2	36:5:1527:C:H4'	138.19	0.46
1:2:245:U:HO2'	1:2:247:A:N6	2.13	0.46
6:S4:241:GLY:C	6:S4:242:LYS:HD2	2.35	0.46
64:N8:37:GLY:HA2	64:N8:41:HIS:HB2	2.92	0.46
64:N8:101:VAL:C	64:N8:102:ILE:HG12	3.40	0.46
1:2:1505:A:C5	1:2:1506:G:H1'	2.49	0.46
1:2:1505:A:N7	1:2:1506:G:H1'	2.30	0.46
1:6:1189:A:C2	1:6:1194:A:N3	2.84	0.46
39:L2:150:LEU:HD23	39:L2:150:LEU:HA	2.02	0.46
36:1:4:U:H6	36:1:4:U:O5'	1.99	0.46
39:L2:109:GLU:H	39:L2:109:GLU:HG2	1.50	0.46
5:S3:74:GLN:HE22	5:S3:81:PRO:HG3	1.80	0.46
36:1:1101:G:C2'	36:1:1102:A:H5'	2.46	0.46
28:D6:22:ARG:HA	28:D6:28:LYS:O	2.16	0.46
28:D6:8:ASN:HB3	28:D6:9:GLY:H	1.59	0.46
11:S9:121:SER:C	11:S9:123:HIS:H	2.18	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:M0:178:ARG:N	47:M0:179:PRO:HD2	2.41	0.46
44:L7:218:ARG:HH12	36:5:1171:G:P	254.63	0.46
45:L8:66:SER:OG	51:M5:21:PHE:HZ	1.98	0.46
36:1:730:C:N3	36:1:739:G:N2	2.46	0.46
41:L4:11:LEU:HD21	41:L4:153:SER:HB3	1.98	0.46
41:L4:150:LEU:HD12	41:L4:249:ILE:HG12	1.98	0.46
41:L4:23:PRO:HD3	41:L4:255:PHE:HE1	1.78	0.46
41:L4:50:TYR:CE2	41:L4:109:TRP:CH2	3.34	0.46
49:M3:29:ALA:C	49:M3:31:LYS:H	2.18	0.46
36:1:566:G:H2'	36:1:567:G:C8	2.50	0.46
20:C8:99:HIS:NE2	20:C8:101:LEU:HD21	2.30	0.46
21:C9:37:VAL:O	21:C9:46:PRO:HB3	2.27	0.46
27:D5:95:HIS:CG	27:D5:96:SER:N	2.78	0.46
7:S5:179:ALA:HB2	7:S5:194:LEU:HD23	4.55	0.46
7:S5:26:ALA:O	7:S5:27:THR:C	2.53	0.46
7:S5:36:ALA:O	7:S5:37:GLN:HG3	5.13	0.46
36:1:2705:A:H3'	36:1:2706:G:N7	2.29	0.46
36:1:1027:A:N6	36:1:1029:G:N3	2.64	0.46
20:C8:121:ALA:O	20:C8:125:ILE:HG13	2.16	0.46
21:C9:130:ARG:HG2	21:C9:131:ASP:N	3.97	0.46
48:M1:85:LYS:HA	48:M1:89:TYR:HE2	2.50	0.46
1:2:1072:C:H3'	1:2:1073:G:H8	1.80	0.46
15:C3:12:SER:O	1:6:958:U:C5	335.28	0.46
24:D2:55:ASP:OD2	24:D2:59:GLY:HA2	2.75	0.46
36:5:699:A:H2'	36:5:700:C:C6	2.51	0.46
47:M0:16:PRO:HD3	47:M0:128:ARG:CZ	2.46	0.46
16:C4:19:ILE:O	16:C4:84:ARG:N	2.49	0.46
28:D6:42:ARG:O	28:D6:67:THR:N	3.35	0.46
2:S0:14:ALA:O	2:S0:18:LEU:HG	2.16	0.46
4:S2:179:VAL:O	4:S2:179:VAL:HG12	2.15	0.46
38:4:82:U:O2	38:4:83:C:C5	2.68	0.46
6:S4:222:LEU:HA	6:S4:225:VAL:HG23	1.97	0.46
50:M4:35:ILE:HG22	50:M4:44:VAL:HB	3.52	0.46
60:N4:52:THR:OG1	60:N4:55:PHE:HB3	3.40	0.46
57:N1:74:VAL:O	57:N1:89:LEU:HB2	2.14	0.46
57:N1:89:LEU:HD23	57:N1:91:LEU:HD11	2.68	0.46
40:L3:57:VAL:HG21	60:N4:15:PRO:HG2	2.05	0.46
60:N4:3:VAL:HG11	60:N4:12:LYS:HB3	1.97	0.46
9:S7:133:THR:CG2	9:S7:159:VAL:HA	3.02	0.46
38:8:52:A:C2	38:8:53:A:C1'	2.98	0.46
42:L5:270:LYS:C	42:L5:272:TYR:N	3.24	0.46
37:7:82:G:C6	37:7:99:G:C6	3.04	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:116:VAL:HG22	39:L2:126:LEU:HB2	1.98	0.46
70:O4:105:VAL:O	70:O4:108:GLN:HB2	2.15	0.46
79:Q3:79:VAL:O	79:Q3:82:THR:N	3.43	0.46
58:N2:14:THR:HA	58:N2:65:VAL:O	2.16	0.46
50:M4:106:ARG:HD3	36:5:3209:A:C5	294.38	0.46
1:6:153:G:H2'	1:6:154:G:C8	2.50	0.46
36:5:963:G:N2	36:5:964:G:H1'	2.31	0.46
59:N3:48:ARG:HH22	36:5:3043:C:P	251.51	0.46
36:1:979:U:O2'	36:1:980:A:OP2	2.31	0.46
24:D2:104:LEU:HD22	24:D2:125:ILE:HA	5.26	0.46
36:1:1685:C:H2'	36:1:1686:U:H6	1.77	0.46
36:5:8:C:O2	38:8:152:G:C2	2.69	0.46
36:1:2400:G:OP1	87:1:4086:OHX:N2	2.48	0.46
1:2:558:U:HO2'	1:2:559:C:P	2.37	0.46
48:M1:15:GLU:HG2	48:M1:16:LYS:HG2	1.96	0.46
4:S2:104:VAL:HG22	4:S2:132:ALA:HB1	2.07	0.46
36:5:2960:C:OP1	87:5:3967:OHX:N5	2.48	0.46
36:5:1563:C:O2	36:5:1577:G:N2	2.48	0.46
52:M6:142:SER:O	52:M6:143:THR:C	2.66	0.46
52:M6:47:PHE:CE2	52:M6:141:LEU:HA	3.51	0.46
36:5:1105:A:H2'	36:5:1106:G:O4'	2.16	0.46
10:S8:116:HIS:HB3	10:S8:117:TYR:CD2	3.90	0.46
1:2:1488:G:N2	1:2:1495:C:O2	2.33	0.46
36:5:2821:C:N4	36:5:2869:U:H3	2.12	0.46
2:S0:102:PHE:HZ	2:S0:107:PHE:CZ	3.98	0.46
78:Q2:28:TYR:CD1	78:Q2:29:LYS:N	3.02	0.46
36:1:2767:U:OP1	78:Q2:33:ALA:O	2.34	0.46
36:1:1556:C:O2	36:1:1556:C:O4'	2.33	0.46
36:5:1029:G:H2'	36:5:1030:A:H8	1.81	0.46
79:Q3:51:ALA:HB3	79:Q3:54:ILE:HD11	4.53	0.46
87:1:4183:OHX:N2	53:M7:65:SER:HB3	2.30	0.46
63:N7:109:GLU:HA	63:N7:112:LYS:HD2	2.93	0.46
36:5:2437:G:C6	36:5:2511:A:C6	3.03	0.46
1:6:402:C:O2'	1:6:403:G:H5'	2.16	0.46
1:2:485:A:H2'	1:2:486:G:O4'	2.15	0.46
6:S4:246:LEU:HD13	6:S4:251:GLU:CG	2.44	0.46
36:5:1817:G:HO2'	36:5:1818:U:H6	1.62	0.46
15:C3:66:ILE:HG23	15:C3:67:THR:H	1.81	0.46
36:1:3162:C:O2	36:1:3289:G:N2	2.49	0.46
9:S7:114:ARG:HB2	9:S7:114:ARG:HH11	1.80	0.46
53:M7:10:ASN:OD1	53:M7:13:LYS:HB2	3.11	0.46
6:S4:126:VAL:HG13	6:S4:158:ASP:O	3.66	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:D2:119:LYS:HG2	1:6:687:G:H5''	392.98	0.46
55:M9:150:GLN:HA	55:M9:153:LYS:CB	3.86	0.46
24:D2:60:LYS:HE3	29:D7:24:LEU:O	2.43	0.46
36:5:802:C:C2	36:5:803:C:C5	3.04	0.46
45:L8:87:ALA:O	45:L8:90:THR:N	2.47	0.46
41:L4:4:PRO:O	41:L4:5:GLN:HB2	2.29	0.46
42:L5:282:ARG:HA	42:L5:285:ARG:HB2	3.24	0.46
79:Q3:84:ARG:O	79:Q3:88:GLU:HG3	2.16	0.46
3:S1:159:SER:O	3:S1:161:ILE:N	3.97	0.46
12:C0:33:GLU:OE1	12:C0:33:GLU:N	2.48	0.46
36:1:2823:G:O6	87:1:3905:OHX:N4	2.48	0.46
36:5:1240:A:H2	36:5:1248:C:H41	1.63	0.46
1:6:526:A:H2'	1:6:527:A:O5'	2.15	0.46
1:6:130:C:O2'	1:6:137:U:N3	2.49	0.46
1:6:1176:G:C6	1:6:1463:C:N4	2.81	0.46
36:1:1112:A:H2'	36:1:1113:G:O4'	2.15	0.46
36:5:1509:A:N6	36:5:1510:G:N1	2.64	0.46
34:SR:12:THR:HB	34:SR:309:VAL:HG11	3.28	0.46
6:S4:247:SER:OG	6:S4:250:GLU:HG3	2.16	0.46
1:6:713:A:C2	1:6:714:G:H1'	2.51	0.46
36:1:2828:G:H2'	36:1:2829:U:O5'	2.16	0.46
1:6:182:A:H2'	1:6:183:U:C6	2.50	0.46
36:1:1713:G:O6	66:O0:28:LYS:HD2	2.16	0.46
35:SM:116:GLU:OE1	35:SM:120:GLU:HG3	2.15	0.46
64:N8:135:GLU:O	64:N8:138:ILE:HB	2.58	0.46
53:M7:95:LEU:HD23	53:M7:95:LEU:HA	1.58	0.46
37:3:97:A:H8	37:3:97:A:O5'	1.99	0.46
36:5:774:G:C2'	36:5:775:A:H5'	2.45	0.46
27:D5:47:TYR:CZ	27:D5:51:LEU:HD11	3.14	0.46
40:L3:11:HIS:ND1	40:L3:234:GLY:O	2.42	0.46
36:5:2166:A:H2'	36:5:2167:A:C8	2.50	0.46
47:M0:56:GLU:HG3	47:M0:161:GLY:HA3	3.05	0.46
36:1:112:U:C2	36:1:320:G:C2	3.03	0.46
1:6:298:C:C4	1:6:299:A:C8	3.04	0.46
1:6:339:C:O2'	1:6:340:U:H5'	2.16	0.46
1:6:326:G:N2	1:6:342:C:O2	2.48	0.46
10:S8:85:PRO:HB3	13:C1:11:ARG:C	2.36	0.46
10:S8:49:ARG:HH22	1:6:399:A:P	315.61	0.46
52:M6:133:ARG:NE	36:5:1316:C:OP2	295.24	0.46
1:6:852:C:H2'	1:6:853:G:H8	1.81	0.46
1:2:1587:A:OP1	18:C6:136:SER:HB2	2.16	0.46
1:6:1474:G:N2	1:6:1475:A:C2	2.84	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:C8:67:GLU:O	20:C8:70:VAL:HB	2.69	0.46
7:S5:82:PHE:CE1	30:D8:49:ARG:HD2	4.35	0.46
7:S5:120:ILE:HD13	7:S5:192:GLU:HA	3.19	0.46
67:O1:62:ARG:O	67:O1:63:GLY:O	3.06	0.46
42:L5:106:ALA:O	42:L5:110:LEU:HB2	2.21	0.46
42:L5:159:VAL:HG13	42:L5:160:PHE:CD1	2.50	0.46
42:L5:53:VAL:HG11	42:L5:159:VAL:HG23	2.86	0.46
17:C5:67:ALA:C	17:C5:69:GLU:N	2.69	0.46
21:C9:31:PRO:HD2	21:C9:54:PHE:CZ	3.95	0.46
1:2:1017:U:H2'	1:2:1018:U:C6	2.51	0.46
15:C3:56:ASP:OD1	29:D7:52:THR:OG1	2.33	0.46
36:1:268:A:H3'	36:1:268:A:OP1	2.16	0.46
36:1:314:U:C2	36:1:315:C:C6	3.04	0.46
1:6:918:U:H2'	1:6:919:A:H8	1.80	0.46
2:S0:67:ILE:HG13	2:S0:120:LEU:HD22	1.98	0.46
54:M8:87:VAL:O	54:M8:107:THR:HG23	3.23	0.46
4:S2:143:TYR:OH	4:S2:150:GLN:HA	2.16	0.46
63:N7:25:ILE:HA	63:N7:43:VAL:HG12	1.98	0.46
63:N7:75:VAL:CG1	63:N7:80:LEU:HD11	3.34	0.46
66:O0:27:TYR:O	66:O0:31:VAL:HG23	2.33	0.46
68:O2:118:LYS:HG2	68:O2:119:VAL:H	1.81	0.46
35:SM:68:ARG:HD3	1:6:1460:A:OP2	335.92	0.46
17:C5:123:TYR:H	17:C5:123:TYR:HD1	1.64	0.46
6:S4:121:TYR:HA	6:S4:164:LEU:HD23	1.97	0.46
36:5:559:A:H4'	36:5:559:A:OP1	2.14	0.46
40:L3:294:GLY:N	40:L3:303:LYS:O	2.48	0.46
43:L6:166:LYS:HZ2	36:5:3214:U:H6	273.68	0.46
8:S6:176:GLN:HG3	8:S6:177:ARG:N	2.53	0.46
1:6:1585:U:H2'	1:6:1586:A:H8	1.80	0.46
18:C6:50:GLU:O	18:C6:54:LEU:HB2	3.33	0.46
7:S5:73:THR:O	7:S5:75:GLY:N	2.63	0.46
34:SR:82:SER:O	34:SR:89:LEU:HD23	2.16	0.46
36:5:3211:C:H2'	36:5:3212:C:O4'	2.15	0.46
52:M6:188:SER:O	52:M6:189:ASP:C	2.89	0.46
40:L3:84:VAL:CG2	40:L3:162:VAL:HB	3.11	0.46
40:L3:133:TYR:O	40:L3:136:LYS:HG3	2.46	0.46
24:D2:125:ILE:HG12	24:D2:126:LEU:H	1.79	0.46
49:M3:122:LYS:HE2	71:O5:120:ALA:HA	5.87	0.46
49:M3:89:TYR:O	49:M3:92:THR:OG1	2.25	0.46
51:M5:150:TRP:O	51:M5:153:ASP:HB2	2.84	0.46
39:L2:41:ILE:HG22	39:L2:90:ALA:O	3.06	0.46
53:M7:17:ALA:CB	53:M7:98:ALA:HB2	2.43	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1752:A:OP2	87:5:4074:OHX:N6	2.49	0.46
36:1:2402:A:OP1	41:L4:70:ALA:HA	2.15	0.46
46:L9:104:VAL:HG23	46:L9:111:PHE:CB	2.45	0.46
46:L9:157:ASN:O	46:L9:160:ASP:HB2	2.16	0.46
46:L9:98:PRO:HD2	46:L9:116:ASN:ND2	4.04	0.46
36:1:2154:U:H5''	39:L2:242:ARG:O	2.15	0.46
45:L8:152:LEU:O	45:L8:197:VAL:HA	2.48	0.46
36:5:3057:U:H5'	36:5:3086:A:H61	1.81	0.46
36:1:1403:C:N4	36:1:1408:G:H1	2.13	0.46
21:C9:75:LYS:HG3	21:C9:75:LYS:HZ3	1.44	0.46
36:5:189:G:C2	36:5:191:U:C4	3.04	0.46
36:5:221:A:C6	36:5:224:C:C2	3.04	0.46
46:L9:64:HIS:O	46:L9:67:ALA:HB3	2.15	0.46
73:O7:21:ARG:NE	73:O7:39:TYR:HB2	3.07	0.46
1:2:1099:U:OP1	24:D2:71:LYS:NZ	2.47	0.46
1:2:450:U:H2'	1:2:451:A:H8	1.80	0.46
10:S8:137:LYS:O	10:S8:140:GLU:N	2.95	0.46
51:M5:9:GLU:HG3	51:M5:9:GLU:O	2.21	0.46
38:4:60:U:C4	38:4:98:U:H4'	2.50	0.46
1:2:1634:C:H3'	1:2:1635:A:H5'	1.97	0.46
36:1:516:A:O3'	44:L7:60:ARG:NH2	2.48	0.46
36:5:259:C:OP2	36:5:259:C:C6	2.69	0.46
1:6:1622:G:C5	1:6:1623:C:C5	3.03	0.46
9:S7:122:HIS:O	9:S7:125:ILE:HB	2.52	0.46
6:S4:126:VAL:HG13	6:S4:126:VAL:O	2.15	0.46
4:S2:158:THR:O	4:S2:168:ARG:HA	2.15	0.46
4:S2:167:VAL:HG21	4:S2:214:ALA:HA	3.47	0.46
74:O8:41:THR:OG1	74:O8:43:PHE:CE2	2.68	0.46
74:O8:59:ALA:HA	74:O8:62:ALA:HB3	1.98	0.46
45:L8:221:ASN:HA	45:L8:225:LYS:CE	4.28	0.46
62:N6:113:LYS:CB	38:8:84:C:H1'	21.44	0.46
36:1:1066:G:C6	36:1:1067:U:N3	2.83	0.46
36:1:2794:G:H1'	36:1:2795:U:C6	2.51	0.46
36:1:2790:A:OP2	54:M8:181:SER:HB3	2.15	0.46
43:L6:22:ARG:HD3	36:5:608:A:N6	243.55	0.46
35:SM:88:ARG:HG2	35:SM:91:THR:HB	1.97	0.46
51:M5:83:LYS:H	51:M5:83:LYS:HD3	4.15	0.46
36:5:306:A:N6	36:5:2784:G:C2	2.84	0.46
1:6:689:G:C4	1:6:690:G:C8	3.03	0.46
35:SM:43:ASP:H	36:5:2678:A:H2	310.11	0.46
36:5:664:U:H2'	36:5:665:A:C8	2.50	0.46
36:5:1534:A:H62	36:5:1586:G:H2'	1.80	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1839:A:C6	36:1:1843:C:C6	3.03	0.46
17:C5:74:ALA:HA	17:C5:75:PRO:HD2	2.81	0.46
36:1:2995:A:C2'	36:1:2996:U:H5''	2.46	0.46
36:1:1655:G:P	70:O4:40:THR:OG1	2.73	0.46
36:1:2975:U:OP1	87:1:4110:OHX:N6	2.49	0.46
7:S5:223:SER:C	7:S5:225:ARG:H	3.62	0.46
51:M5:116:LEU:HD23	51:M5:133:ILE:HD11	1.97	0.46
36:5:2921:U:H2'	36:5:2923:U:OP2	2.15	0.46
36:1:161:G:N7	87:1:4195:OHX:N6	2.63	0.46
39:L2:24:GLN:H	39:L2:24:GLN:HG2	2.11	0.46
57:N1:151:LEU:HD23	57:N1:151:LEU:HA	2.04	0.46
13:C1:30:ARG:H	13:C1:30:ARG:HG2	3.37	0.46
1:2:1642:G:N7	88:2:2181:GET:O43	2.46	0.46
20:C8:6:GLN:O	27:D5:42:LEU:HD13	2.15	0.46
36:1:1841:A:N6	36:1:1848:G:N1	2.64	0.46
47:M0:139:ARG:HD2	47:M0:173:PHE:CZ	3.10	0.46
36:5:1196:C:N3	87:5:4087:OHX:N2	2.63	0.46
44:L7:153:PHE:CE2	44:L7:160:ARG:NH2	3.89	0.46
36:1:368:G:O6	36:1:369:A:N6	2.43	0.46
36:1:729:C:H2'	36:1:730:C:H6	1.79	0.46
43:L6:65:ILE:O	43:L6:76:LEU:HA	2.36	0.46
1:6:1308:G:C6	1:6:1309:C:C4	3.04	0.46
5:S3:162:GLN:O	5:S3:164:VAL:N	2.51	0.46
55:M9:154:ALA:O	55:M9:156:ASN:N	3.96	0.46
55:M9:168:ALA:HB1	55:M9:172:ARG:CZ	2.46	0.46
7:S5:190:ILE:O	7:S5:194:LEU:HB2	2.24	0.46
7:S5:40:ILE:HD11	7:S5:47:SER:CB	2.46	0.46
42:L5:206:GLN:HG2	42:L5:210:GLU:OE2	4.21	0.46
1:6:1504:G:H5''	1:6:1505:A:OP2	2.15	0.46
15:C3:47:PRO:CG	15:C3:72:MET:HG3	6.06	0.46
3:S1:131:ASP:CG	3:S1:180:THR:HB	4.94	0.46
36:1:659:G:H2'	36:1:1432:C:H42	1.80	0.46
38:4:15:G:O6	38:4:16:G:N1	2.48	0.46
38:4:16:G:H8	38:4:16:G:OP2	1.99	0.46
68:O2:25:TYR:HB3	68:O2:27:ARG:HE	4.72	0.46
1:6:1140:G:C2	1:6:1141:G:C8	3.04	0.46
1:6:1142:A:C6	1:6:1143:A:C2	3.03	0.46
4:S2:207:LEU:HB3	4:S2:208:GLU:H	1.34	0.46
4:S2:56:ILE:CG2	4:S2:61:LEU:HB2	3.50	0.46
4:S2:99:LYS:HB2	4:S2:117:THR:HB	2.09	0.46
63:N7:136:PHE:CE1	70:O4:89:ILE:HG12	5.68	0.46
55:M9:11:ALA:O	55:M9:15:VAL:HG23	2.55	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:70:G:O6	87:O7:103:OHX:N4	2.48	0.46
14:C2:66:VAL:HG23	14:C2:72:ILE:HD11	1.97	0.46
67:O1:82:GLU:O	67:O1:83:GLU:C	2.95	0.46
1:6:71:A:H2'	1:6:72:A:C4'	2.45	0.46
56:N0:24:LEU:CD1	57:N1:148:PRO:HG3	2.45	0.46
60:N4:49:ILE:HA	60:N4:49:ILE:HD13	2.05	0.46
1:2:1623:C:H2'	1:2:1624:C:C6	2.51	0.46
9:S7:169:PHE:O	9:S7:171:ALA:N	3.68	0.46
9:S7:89:HIS:HE2	9:S7:164:TYR:HD1	1.64	0.46
34:SR:43:ILE:HD13	34:SR:60:SER:HA	1.97	0.46
1:2:986:G:N2	1:2:1015:U:H5	2.13	0.46
39:L2:84:THR:HG23	79:Q3:63:THR:H	1.80	0.46
36:5:3176:G:H1	36:5:3212:C:H42	1.62	0.46
8:S6:71:THR:HB	8:S6:72:ARG:H	1.53	0.46
36:5:2234:G:H2'	36:5:2235:C:O4'	2.16	0.46
53:M7:170:SER:HA	53:M7:173:ARG:NH2	2.31	0.46
36:5:1804:A:H2'	36:5:1805:C:H6	1.81	0.46
49:M3:46:ILE:HD12	49:M3:46:ILE:HA	1.81	0.46
49:M3:58:VAL:HG13	49:M3:59:ARG:O	2.16	0.46
36:5:1573:G:H1	36:5:1574:C:HO2'	1.56	0.46
1:2:780:A:C8	26:D4:10:ARG:HG2	2.50	0.46
26:D4:36:SER:HA	1:6:521:A:O3'	424.53	0.46
26:D4:36:SER:OG	26:D4:37:LYS:N	3.67	0.46
79:Q3:17:ARG:HD2	79:Q3:18:TYR:CZ	2.50	0.46
38:4:103:G:C6	38:4:105:A:C6	3.03	0.46
76:Q0:80:PRO:HB2	76:Q0:81:SER:H	3.38	0.46
36:1:2095:G:C2	36:1:2096:A:C4	3.04	0.46
25:D3:12:ALA:O	25:D3:16:ARG:HG3	2.15	0.46
8:S6:143:LYS:HA	8:S6:143:LYS:HD2	2.08	0.46
13:C1:8:GLN:HE22	13:C1:14:GLN:CB	4.21	0.46
36:5:1078:U:O2	36:5:1082:U:C2	2.69	0.46
37:3:35:C:C5	37:3:36:C:C5	3.04	0.46
9:S7:104:ARG:NH1	1:6:745:U:O4	352.23	0.46
36:5:2814:G:O2'	36:5:2815:G:H5'	2.16	0.46
36:1:216:G:H4'	62:N6:19:TYR:CZ	2.50	0.46
36:1:1556:C:OP1	36:1:1556:C:H4'	2.16	0.46
36:1:2344:U:H2'	36:1:2345:A:H8	1.80	0.46
1:6:187:G:C6	1:6:197:A:N6	2.84	0.46
40:L3:342:LEU:HD23	40:L3:342:LEU:HA	2.93	0.46
36:1:1225:A:H1'	36:1:3116:G:N2	2.31	0.46
36:5:335:G:C2	36:5:336:A:C1'	2.98	0.46
36:1:1870:C:H4'	36:1:3076:C:O2	2.15	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1105:C:H2'	1:2:1106:U:C6	2.51	0.46
1:2:515:A:OP2	87:2:2070:OHX:N3	2.49	0.46
39:L2:70:ARG:NH1	39:L2:72:ARG:HH21	7.97	0.46
1:2:526:A:N6	1:2:527:A:C6	2.84	0.46
24:D2:12:ASN:O	24:D2:16:ASN:HB2	2.76	0.46
15:C3:66:ILE:HG12	15:C3:67:THR:HG23	1.97	0.46
36:5:1443:G:C6	36:5:1444:G:C6	3.04	0.46
34:SR:182:ASN:OD1	34:SR:185:GLN:N	2.38	0.46
1:2:109:G:C6	1:2:110:U:C4	3.04	0.46
22:D0:52:LYS:HD2	1:6:1345:A:OP1	469.80	0.46
1:2:452:A:H3'	1:2:453:U:C5	2.51	0.46
36:5:2513:U:H1'	36:5:2514:U:C6	2.51	0.46
5:S3:150:MET:HB3	5:S3:152:PHE:CE2	2.51	0.46
9:S7:35:LYS:C	9:S7:37:GLU:H	2.18	0.46
36:5:168:U:H2'	36:5:169:U:C6	2.50	0.46
65:N9:11:ASN:O	65:N9:11:ASN:CG	2.60	0.46
35:SM:89:ARG:N	35:SM:91:THR:OG1	2.48	0.46
29:D7:34:ASP:O	29:D7:79:PHE:HA	2.37	0.46
51:M5:66:VAL:HG21	51:M5:98:LEU:HB3	2.26	0.46
1:2:1333:C:H2'	1:2:1334:U:C6	2.51	0.46
1:6:1122:G:N2	1:6:1125:A:OP2	2.48	0.46
36:5:1880:U:H2'	36:5:1881:A:H8	1.81	0.46
36:1:1839:A:C5	36:1:1843:C:C4	3.04	0.46
1:2:1114:G:O2'	1:2:1115:U:OP2	2.34	0.46
1:2:1222:C:H2'	1:2:1223:A:C8	2.49	0.46
38:4:146:U:O5'	38:4:146:U:H6	1.99	0.46
35:SM:133:GLU:HG2	35:SM:133:GLU:O	2.15	0.46
40:L3:4:ARG:HD3	40:L3:7:GLU:HA	1.98	0.46
36:1:1056:U:C5	36:1:1057:A:N7	2.83	0.46
36:5:1530:U:HO2'	38:8:114:G:HO2'	1.45	0.46
36:1:1250:G:H2'	36:1:1251:A:H8	1.80	0.46
36:1:2889:C:C4	36:1:2936:A:C8	3.03	0.46
59:N3:34:LEU:HA	59:N3:34:LEU:HD23	2.04	0.46
1:6:563:U:C4	1:6:564:G:C6	3.03	0.46
47:M0:168:SER:HA	47:M0:169:LYS:HE3	5.87	0.46
1:6:553:G:C5	1:6:554:C:C4	3.04	0.46
36:1:2741:C:HO2'	78:Q2:20:HIS:CE1	2.31	0.46
78:Q2:77:CYS:O	78:Q2:79:THR:HG23	2.84	0.46
46:L9:49:ASN:ND2	46:L9:51:GLN:OE1	2.56	0.46
36:5:2165:G:N2	36:5:2170:U:C4	2.83	0.46
78:Q2:48:SER:OG	78:Q2:49:GLY:N	3.41	0.46
53:M7:51:VAL:HG12	53:M7:52:LEU:N	3.10	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:55:A:OP2	26:D4:113:ASN:ND2	2.49	0.46
47:M0:144:ASN:O	47:M0:147:VAL:N	3.46	0.46
47:M0:170:LYS:HE3	47:M0:176:LEU:H	7.09	0.46
36:1:598:A:H1'	41:L4:322:GLN:HE22	1.81	0.46
41:L4:337:GLU:O	41:L4:339:LEU:HD23	2.16	0.46
44:L7:148:VAL:O	44:L7:152:GLY:N	2.49	0.46
45:L8:165:PHE:HZ	51:M5:3:ALA:CB	2.28	0.46
10:S8:172:ARG:HG2	1:6:330:G:P	278.14	0.46
10:S8:27:PHE:HB3	10:S8:49:ARG:NH2	3.72	0.46
36:5:340:C:O2'	36:5:341:G:H5'	2.15	0.46
43:L6:80:ASN:HB2	36:5:3272:C:O2	249.47	0.46
43:L6:97:ASN:O	43:L6:98:VAL:HG12	3.63	0.46
41:L4:74:ILE:HD11	41:L4:93:MET:HE3	5.10	0.46
73:O7:16:HIS:HB2	73:O7:25:ARG:O	3.22	0.46
55:M9:154:ALA:O	55:M9:157:GLU:N	4.06	0.46
1:2:1164:G:H2'	1:2:1165:G:H8	1.80	0.46
7:S5:94:THR:HG22	7:S5:114:ILE:CD1	2.46	0.46
7:S5:190:ILE:C	7:S5:192:GLU:H	2.18	0.46
7:S5:195:ALA:O	7:S5:199:ILE:HG13	2.65	0.46
61:N5:79:GLY:HA3	61:N5:81:ILE:HD12	1.98	0.46
61:N5:67:ILE:HB	61:N5:83:VAL:HG12	2.09	0.46
36:1:1029:G:C6	36:1:1030:A:N6	2.84	0.46
1:2:1277:G:H4'	5:S3:183:GLY:N	2.31	0.46
1:2:1556:A:C5	1:2:1560:U:C2	3.04	0.46
1:6:1200:G:H4'	1:6:1201:G:H5''	1.96	0.46
5:S3:109:LEU:O	5:S3:177:MET:HE1	3.24	0.46
5:S3:55:THR:HA	5:S3:58:VAL:HG23	1.98	0.46
15:C3:89:TYR:CE2	15:C3:150:VAL:HG22	2.51	0.46
36:1:266:A:N6	72:O6:30:LYS:HA	2.31	0.46
49:M3:99:HIS:ND1	36:5:156:G:C8	80.58	0.46
28:D6:44:ILE:CG2	28:D6:65:PRO:HG2	6.13	0.46
48:M1:9:MET:HB3	48:M1:10:ARG:H	4.53	0.46
48:M1:160:VAL:CG1	48:M1:164:LYS:HD2	2.45	0.46
55:M9:125:LYS:NZ	36:5:1720:U:O4	240.94	0.46
55:M9:5:ARG:O	55:M9:8:LYS:HB3	2.16	0.46
62:N6:112:ASP:HB3	62:N6:114:ASP:H	1.81	0.46
1:2:264:G:O6	87:2:2034:OHX:N4	2.49	0.46
6:S4:234:PRO:HG2	6:S4:238:LEU:HG	1.97	0.46
36:5:1317:A:OP1	87:5:4092:OHX:N1	2.49	0.46
40:L3:91:GLY:O	40:L3:102:LEU:N	2.88	0.46
57:N1:9:SER:O	57:N1:11:THR:HG23	2.80	0.46
36:5:3091:A:C5	36:5:3094:A:C8	3.03	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
59:N3:24:ASN:O	59:N3:100:GLY:N	2.37	0.46
69:O3:15:SER:HB3	69:O3:29:LEU:CD1	2.46	0.46
1:6:148:A:C8	1:6:149:C:C6	3.03	0.46
34:SR:234:LEU:HD21	34:SR:268:GLN:HE21	1.81	0.46
52:M6:125:ARG:C	52:M6:127:LEU:N	2.69	0.46
73:O7:52:LYS:HG2	73:O7:56:ARG:NH2	2.99	0.46
39:L2:42:ARG:HD2	39:L2:87:PHE:CE2	5.04	0.46
79:Q3:36:ARG:HA	79:Q3:48:LYS:HG3	1.97	0.46
36:1:3180:A:C5	52:M6:114:LYS:HB3	2.50	0.46
36:5:3286:G:H2'	36:5:3287:U:O4'	2.15	0.46
8:S6:64:LYS:HB3	8:S6:67:VAL:HG22	3.17	0.46
52:M6:179:ALA:C	52:M6:182:ASN:HD22	6.54	0.46
71:O5:93:THR:HB	36:5:135:C:H1'	58.68	0.46
51:M5:180:PHE:O	51:M5:184:LYS:HB3	3.04	0.46
37:3:9:C:OP1	57:N1:26:HIS:HB2	2.16	0.46
1:2:783:G:C2	1:2:784:C:C2	3.04	0.46
1:2:562:G:N2	1:2:584:C:C6	2.84	0.46
39:L2:186:PHE:HD2	39:L2:187:HIS:N	2.14	0.46
1:2:1081:A:OP2	1:2:1081:A:H2'	2.15	0.46
48:M1:101:ASN:HB3	48:M1:130:VAL:HA	2.86	0.46
8:S6:147:LEU:O	8:S6:148:SER:OG	2.26	0.46
53:M7:33:ALA:C	53:M7:35:ALA:H	3.00	0.46
44:L7:30:ARG:HE	44:L7:34:LYS:CE	4.66	0.46
52:M6:141:LEU:O	52:M6:141:LEU:HD12	2.16	0.46
52:M6:141:LEU:O	52:M6:144:SER:HB3	2.16	0.46
4:S2:43:ARG:C	4:S2:45:VAL:H	2.18	0.46
36:1:1934:G:N7	87:1:3885:OHX:N2	2.64	0.46
36:1:2931:C:H2'	36:1:2932:U:O4'	2.15	0.46
2:S0:28:ASN:OD1	2:S0:28:ASN:N	4.50	0.46
1:6:1370:U:H4'	1:6:1371:A:H4'	1.97	0.46
1:6:1382:A:O2'	1:6:1383:G:H5''	2.16	0.46
1:2:1489:U:O5'	5:S3:9:ARG:NH1	2.49	0.46
36:5:207:U:H2'	36:5:208:C:C6	2.51	0.46
74:O8:46:ARG:HH21	74:O8:50:SER:C	2.19	0.46
36:1:1556:C:O2	36:1:1556:C:H5''	2.15	0.46
36:5:1609:C:N4	36:5:1610:G:O6	2.49	0.46
36:5:2270:A:N1	36:5:2271:A:C2	2.84	0.46
1:2:1146:G:C2	1:2:1633:A:C5	3.03	0.46
1:2:1144:U:O2'	1:2:1301:U:H4'	2.15	0.46
65:N9:46:ALA:C	65:N9:47:LEU:HD23	2.36	0.46
49:M3:9:ILE:CD1	64:N8:45:MET:HE1	2.43	0.46
44:L7:94:LYS:HA	36:5:1139:G:O3'	232.40	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1098:U:H6	1:6:1098:U:H5''	1.80	0.46
45:L8:180:VAL:HG22	45:L8:181:LYS:N	2.30	0.46
36:1:3316:A:N1	36:1:3389:U:C2	2.83	0.46
36:1:123:A:H3'	36:1:124:U:H5'	1.97	0.46
48:M1:47:GLN:HG2	48:M1:67:VAL:HG12	1.97	0.46
1:6:18:C:C4'	1:6:1137:A:N6	2.78	0.46
17:C5:56:PHE:CE1	17:C5:83:MET:SD	3.54	0.46
1:2:887:A:O2'	16:C4:122:PRO:HG3	2.16	0.46
36:1:3176:G:H1'	69:O3:3:GLU:CD	2.36	0.46
37:3:26:C:H2'	37:3:27:A:O4'	2.16	0.46
47:M0:98:ARG:HG3	47:M0:98:ARG:NH1	2.31	0.46
7:S5:133:VAL:O	7:S5:137:ILE:HG12	2.16	0.46
1:6:891:A:H2'	1:6:892:A:C8	2.51	0.46
1:2:121:U:H2'	1:2:122:U:O4'	2.16	0.46
70:O4:13:TYR:CD2	36:5:1589:A:C4	152.53	0.46
35:SM:97:THR:O	35:SM:99:LYS:HG2	2.16	0.46
44:L7:118:LYS:HB2	44:L7:195:PHE:CE1	2.97	0.46
36:5:1490:A:H3'	36:5:1491:A:H8	1.81	0.46
36:1:2130:G:C6	36:1:2323:G:C6	3.04	0.46
59:N3:45:ARG:HG3	59:N3:46:LEU:N	3.08	0.46
16:C4:15:GLY:C	16:C4:79:VAL:HG23	2.36	0.46
36:1:2363:A:C6	36:1:2364:G:C6	3.04	0.46
54:M8:165:ILE:HD12	54:M8:166:LEU:H	4.85	0.46
36:5:317:A:H2'	36:5:318:A:C8	2.50	0.46
36:5:59:G:H2'	38:8:33:A:O2'	2.15	0.46
36:5:1166:G:N7	87:5:3895:OHX:N5	2.64	0.46
36:5:74:G:C6	36:5:75:G:N7	2.84	0.46
57:N1:126:VAL:O	57:N1:127:GLN:HB2	3.17	0.46
33:E1:88:PRO:HA	33:E1:89:LYS:HA	4.76	0.46
67:O1:40:ALA:O	67:O1:42:LEU:N	3.00	0.46
68:O2:34:LYS:HD2	68:O2:52:GLN:NE2	2.31	0.46
1:6:1326:A:O5'	1:6:1326:A:H8	1.98	0.46
1:6:1663:G:C5	1:6:1664:C:C5	3.03	0.46
5:S3:212:LYS:HB2	5:S3:212:LYS:NZ	4.17	0.46
36:1:2595:A:H5''	36:1:2595:A:N3	2.30	0.46
42:L5:150:LEU:HD23	42:L5:150:LEU:HA	1.78	0.46
36:1:2553:U:O2	36:1:2553:U:H2'	2.15	0.46
6:S4:39:ARG:HH11	6:S4:39:ARG:HG2	3.85	0.46
1:2:1632:C:O2'	1:2:1638:G:O2'	2.32	0.46
36:1:2404:A:N3	36:1:2405:C:H5'	2.31	0.46
36:1:390:G:H8	36:1:390:G:H5''	1.81	0.46
1:2:45:U:H3'	1:2:46:A:H5''	1.97	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:M5:73:ARG:HG2	51:M5:75:VAL:HG13	1.97	0.46
36:1:1467:A:C6	36:1:1511:U:C2	3.04	0.46
36:1:1847:A:O2'	36:1:1848:G:H5''	2.15	0.46
53:M7:48:LEU:HD22	53:M7:48:LEU:HA	2.49	0.46
11:S9:38:ASN:ND2	1:6:594:A:OP2	409.23	0.46
11:S9:114:TYR:O	11:S9:116:LEU:N	3.40	0.46
36:1:2851:A:H2'	36:1:2852:C:H6	1.81	0.46
36:5:2523:A:C2	36:5:2587:U:C4	3.03	0.46
36:1:740:G:N3	36:1:740:G:H2'	2.31	0.46
43:L6:58:LEU:C	43:L6:60:ASP:H	2.19	0.46
43:L6:86:ALA:H	69:O3:107:ILE:C	2.18	0.46
1:2:1475:A:H2'	1:2:1476:C:O4'	2.15	0.46
20:C8:26:ILE:HG13	20:C8:27:LYS:N	2.31	0.46
7:S5:27:THR:HA	7:S5:28:PRO:HD2	2.18	0.46
7:S5:41:LYS:HE3	7:S5:67:PRO:HG2	1.98	0.46
1:6:1203:A:H2'	1:6:1204:A:H5'	1.98	0.46
12:C0:69:THR:O	12:C0:73:VAL:HG23	2.16	0.46
36:5:112:U:HO2'	36:5:113:C:P	2.39	0.46
36:1:2651:G:H4'	36:1:2652:U:OP2	2.16	0.46
36:1:2652:U:C4	36:1:2759:U:O2	2.69	0.46
63:N7:29:HIS:HB2	63:N7:40:HIS:NE2	2.31	0.46
1:6:871:G:C2	1:6:872:G:C2	3.04	0.46
1:6:871:G:N2	1:6:957:G:H1'	2.31	0.46
62:N6:24:SER:O	62:N6:25:SER:C	2.74	0.46
1:2:1206:U:C5	1:2:1207:C:C2	3.04	0.46
35:SM:72:ARG:HA	35:SM:72:ARG:HD3	2.96	0.46
35:SM:73:SER:OG	35:SM:74:LYS:N	2.49	0.46
6:S4:109:PHE:HD1	6:S4:109:PHE:HA	1.58	0.46
60:N4:53:VAL:HB	60:N4:54:LEU:HD12	1.97	0.46
36:1:2723:U:H2'	36:1:2724:U:C6	2.51	0.46
57:N1:57:TYR:CG	57:N1:89:LEU:HD21	2.51	0.46
9:S7:49:ILE:HG21	9:S7:175:LYS:HG3	4.84	0.46
8:S6:140:ASN:ND2	1:6:168:A:OP1	316.91	0.46
1:6:66:U:H1'	1:6:67:A:OP1	2.15	0.46
34:SR:155:ARG:O	34:SR:170:ILE:HG12	2.16	0.46
34:SR:38:ARG:HG2	34:SR:67:ILE:CG2	2.43	0.46
36:5:2314:U:OP2	36:5:2314:U:H4'	2.16	0.46
62:N6:56:VAL:O	62:N6:67:GLU:HB3	3.01	0.46
36:1:209:A:C4	41:L4:162:THR:HG21	2.51	0.46
36:1:3151:U:H4'	36:1:3294:A:C1'	2.46	0.46
46:L9:129:ARG:NH2	46:L9:156:GLN:HG2	3.04	0.46
36:1:1944:U:H2'	36:1:1945:A:O4'	2.16	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:L8:153:ILE:HD11	45:L8:166:LEU:HB2	1.97	0.46
11:S9:28:LEU:O	11:S9:28:LEU:HD22	2.80	0.46
48:M1:101:ASN:HB2	48:M1:128:TYR:HE1	4.66	0.46
48:M1:60:ARG:O	48:M1:61:ARG:C	2.94	0.46
36:5:2972:G:C2	36:5:2973:G:C8	3.04	0.46
36:1:2273:G:H22	36:1:2311:G:H2'	1.81	0.46
36:5:3059:G:C6	36:5:3060:C:N4	2.84	0.46
64:N8:74:ASN:HD22	64:N8:115:LYS:N	2.14	0.46
47:M0:100:ASN:O	47:M0:101:LYS:HB3	4.84	0.46
54:M8:148:GLU:OE1	54:M8:152:HIS:NE2	2.49	0.46
36:5:405:U:H2'	36:5:406:G:H5'	1.98	0.46
6:S4:128:LYS:HD3	6:S4:130:GLN:OE1	2.86	0.46
1:2:1234:A:O2'	33:E1:146:SER:HA	2.16	0.46
1:2:197:A:O3'	1:2:198:A:H8	1.99	0.46
36:5:183:G:H1	36:5:233:C:H42	1.64	0.46
3:S1:115:ARG:HH11	3:S1:115:ARG:CG	3.99	0.46
36:1:1495:U:H5	36:1:1835:A:N1	2.13	0.46
50:M4:32:LEU:HD21	50:M4:94:TRP:CD2	2.50	0.46
54:M8:93:ILE:HG23	36:5:784:A:C6	151.79	0.46
36:1:544:C:O2'	36:1:548:G:N2	2.48	0.46
36:5:1818:U:O2'	36:5:1819:U:H5'	2.16	0.46
1:2:523:G:H21	1:2:529:A:H8	1.57	0.46
1:2:300:A:C2	1:2:301:A:C4	3.04	0.46
36:5:2663:G:N2	36:5:2708:C:C2	2.84	0.46
1:2:685:A:H2'	1:2:686:C:C6	2.50	0.46
36:1:3284:G:OP1	87:1:4148:OHX:N6	2.49	0.46
55:M9:109:TYR:N	55:M9:109:TYR:CD1	2.84	0.46
36:1:425:G:O2'	36:1:426:G:H5'	2.15	0.46
1:6:234:G:H2'	1:6:235:G:O4'	2.15	0.46
54:M8:157:PRO:O	54:M8:158:HIS:HB2	2.16	0.46
18:C6:77:GLN:O	18:C6:81:ILE:HG12	3.26	0.46
36:5:1182:A:C4	36:5:1183:C:C5	3.03	0.46
5:S3:124:ARG:NH2	35:SM:124:GLN:HB2	2.31	0.46
38:8:85:G:H3'	38:8:85:G:H8	1.81	0.46
36:5:2772:C:H6	36:5:2772:C:OP2	1.99	0.46
1:2:1776:A:C2	1:2:1786:G:C6	3.03	0.46
15:C3:134:VAL:O	15:C3:135:LEU:HD23	2.15	0.46
37:3:16:U:C2'	37:3:17:A:H5'	2.46	0.46
36:5:3133:C:H2'	36:5:3134:A:O4'	2.15	0.46
1:2:1111:G:H1	1:2:1134:C:N4	2.14	0.46
1:2:1111:G:C6	1:2:1112:G:C4	3.03	0.46
36:5:2259:A:H2'	36:5:2260:U:C6	2.49	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3241:G:H5''	36:1:3242:G:OP2	2.16	0.46
36:1:898:U:C5	36:1:899:U:C5	3.04	0.46
44:L7:118:LYS:HG3	44:L7:191:VAL:HG11	1.97	0.46
1:2:552:G:C6	1:2:553:G:C6	3.04	0.46
36:5:2606:G:N7	87:5:4168:OHX:N3	2.64	0.46
36:5:767:U:H4'	36:5:768:C:OP1	2.15	0.46
1:6:1235:C:OP2	1:6:1245:G:H8	1.98	0.46
36:1:2838:A:C6	36:1:2839:G:H1'	2.50	0.46
36:1:945:C:H2'	36:1:946:U:C6	2.51	0.46
47:M0:9:TYR:CG	47:M0:97:LEU:HD13	2.51	0.46
36:1:1141:C:H2'	36:1:1142:G:O4'	2.15	0.46
36:5:2574:G:H2'	36:5:2575:G:H8	1.80	0.46
1:2:351:C:H3'	1:2:352:A:H5'	1.97	0.46
49:M3:107:GLU:OE1	72:O6:17:VAL:HG13	4.89	0.46
1:2:1486:G:H8	1:2:1486:G:H2'	1.58	0.46
36:1:2282:U:H6	36:1:2282:U:OP2	1.98	0.46
36:1:1530:U:H6	36:1:1530:U:O5'	1.99	0.46
1:2:434:G:N2	1:2:436:A:H3'	2.30	0.46
1:2:1757:G:C2	1:2:1758:U:C6	3.04	0.46
40:L3:53:MET:SD	36:5:3048:A:H5'	234.75	0.46
20:C8:6:GLN:HE21	27:D5:44:GLN:N	8.88	0.46
40:L3:234:GLY:O	40:L3:235:THR:O	3.76	0.46
46:L9:19:SER:C	46:L9:20:ILE:HG12	2.36	0.46
36:1:1444:G:C6	36:1:1445:U:C2	3.04	0.46
36:5:2357:A:H2'	36:5:2358:A:C8	2.50	0.46
6:S4:11:ARG:H	6:S4:27:TYR:HA	1.81	0.46
28:D6:82:ARG:O	28:D6:84:VAL:HG12	2.15	0.46
1:6:477:A:C5	1:6:538:A:C6	3.03	0.46
11:S9:27:GLU:O	11:S9:31:ALA:N	2.42	0.46
11:S9:86:LEU:HD12	11:S9:95:TYR:HB3	1.97	0.46
47:M0:63:GLU:H	47:M0:63:GLU:CD	2.40	0.46
44:L7:210:PRO:HD3	44:L7:243:MET:CE	2.46	0.46
1:6:210:A:H2'	1:6:211:U:H6	1.79	0.46
1:6:299:A:H4'	1:6:299:A:OP1	2.15	0.46
36:1:1422:G:C5	36:1:1423:C:C5	3.04	0.46
36:5:1382:G:C2	36:5:1425:U:O2	2.69	0.46
41:L4:141:ARG:HB2	41:L4:177:ASP:CA	3.36	0.46
41:L4:274:TYR:CG	41:L4:275:THR:N	3.02	0.46
64:N8:8:THR:HG21	36:5:662:U:OP1	150.31	0.46
43:L6:141:VAL:O	43:L6:143:LYS:N	3.04	0.46
43:L6:60:ASP:O	43:L6:61:ASN:HB2	2.16	0.46
1:6:1402:G:C6	1:6:1403:C:C4	3.04	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:S3:190:ARG:NH2	5:S3:195:SER:OG	2.48	0.46
18:C6:28:LEU:HD22	18:C6:30:LYS:HD2	1.97	0.46
30:D8:11:LYS:HG3	30:D8:12:VAL:O	3.36	0.46
7:S5:186:ASN:ND2	7:S5:187:ILE:H	5.16	0.46
36:1:1460:A:C6	36:1:1473:G:C6	3.04	0.46
61:N5:108:LEU:HD12	61:N5:125:ARG:HD3	1.98	0.46
1:2:1553:G:N2	1:2:1555:A:H3'	2.31	0.46
12:C0:23:ALA:O	12:C0:24:LYS:HB3	4.46	0.46
33:E1:141:CYS:SG	33:E1:143:LYS:HB3	3.34	0.46
5:S3:84:ILE:HG12	5:S3:85:VAL:N	2.88	0.46
1:2:951:A:C2	1:2:952:A:C8	3.04	0.46
15:C3:61:THR:HB	1:6:959:U:O2	349.21	0.46
1:6:975:C:H2'	1:6:976:G:O4'	2.16	0.46
36:5:1631:C:C2	36:5:1645:U:C5	3.03	0.46
47:M0:24:ARG:HH11	47:M0:24:ARG:HG3	1.81	0.46
1:6:915:A:C5	1:6:916:U:C4	3.04	0.46
2:S0:142:PRO:HB3	23:D1:34:ILE:HD11	1.98	0.46
2:S0:145:ALA:O	2:S0:160:ILE:N	2.42	0.46
2:S0:146:LEU:HB3	2:S0:162:CYS:SG	6.09	0.46
2:S0:175:TYR:O	2:S0:179:ARG:N	2.47	0.46
4:S2:211:LEU:O	4:S2:213:ALA:N	2.49	0.46
4:S2:65:GLU:O	4:S2:68:ILE:N	2.48	0.46
1:6:1697:G:OP1	1:6:1705:C:N4	2.43	0.46
48:M1:152:HIS:O	48:M1:153:LYS:HG2	4.81	0.46
63:N7:29:HIS:CD2	63:N7:42:LEU:HD13	3.96	0.46
68:O2:122:PRO:HD2	68:O2:123:LYS:H	1.81	0.46
1:6:1185:U:C6	1:6:1458:G:C8	3.04	0.46
20:C8:139:LYS:HB2	1:6:1458:G:OP2	353.73	0.46
69:O3:44:TYR:HD1	69:O3:100:ILE:HG21	2.77	0.46
69:O3:39:GLN:O	69:O3:41:ALA:N	3.18	0.46
9:S7:164:TYR:C	9:S7:166:LEU:N	3.08	0.46
39:L2:103:PRO:C	39:L2:105:GLY:N	2.69	0.46
36:5:579:G:C2	36:5:580:C:C2	3.04	0.46
36:1:2124:G:N2	36:1:2125:A:C4	2.84	0.46
36:5:2211:U:H5	36:5:2234:G:C6	2.34	0.46
40:L3:137:TYR:O	40:L3:141:GLY:N	2.49	0.46
36:5:3276:G:OP2	36:5:3276:G:H2'	2.15	0.46
51:M5:172:ARG:HD2	36:5:30:G:O5'	111.16	0.46
51:M5:93:LYS:HG3	36:5:289:A:C2	145.39	0.46
38:8:106:C:C5	38:8:138:A:C5	3.04	0.46
71:O5:45:LYS:O	71:O5:49:LYS:HG2	4.70	0.46
76:Q0:84:ALA:HA	76:Q0:87:SER:CB	2.39	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:88:A:H2'	36:5:89:A:O4'	2.15	0.46
36:5:150:A:C6	36:5:151:A:C5	3.04	0.46
36:5:3103:A:N1	36:5:3104:U:C2	2.84	0.46
10:S8:56:ARG:NH2	1:6:332:U:P	286.03	0.46
48:M1:57:PHE:HB3	36:5:2680:A:C2	309.24	0.46
48:M1:52:TYR:N	48:M1:52:TYR:CD1	2.84	0.46
36:5:2143:A:O2'	36:5:2144:A:H5'	2.16	0.46
36:5:3383:G:O2'	36:5:3384:U:H5'	2.16	0.46
36:1:2618:G:O5'	65:N9:3:LYS:NZ	2.49	0.46
68:O2:33:ARG:NH2	36:5:1408:G:OP1	159.98	0.46
33:E1:148:TYR:C	33:E1:149:LYS:HG3	3.25	0.46
36:5:221:A:C5	36:5:224:C:N3	2.83	0.46
36:1:1888:U:C4	36:1:1889:G:C8	3.03	0.46
36:5:1595:U:H1'	36:5:1596:C:C6	2.51	0.46
36:5:2719:U:HO2'	36:5:2720:G:C4'	2.28	0.46
36:5:2619:G:H2'	36:5:2620:G:O4'	2.16	0.46
53:M7:27:LYS:HB3	53:M7:63:PHE:CB	2.46	0.46
36:5:3205:G:H2'	36:5:3206:C:C4	2.51	0.46
36:1:170:G:C2	36:1:171:G:C4	3.04	0.46
36:1:1928:G:N2	36:1:2320:A:O2'	2.44	0.46
1:6:1623:C:H2'	1:6:1624:C:C6	2.51	0.46
36:1:543:C:C4	36:1:544:C:C2	3.03	0.46
1:2:322:G:O4'	1:2:323:A:C8	2.68	0.46
36:5:667:C:O2	36:5:667:C:C2'	2.63	0.46
36:5:2660:G:O3'	36:5:2749:G:N2	2.48	0.46
10:S8:20:GLN:NE2	10:S8:22:ARG:O	2.49	0.46
36:1:384:A:N6	36:1:385:A:N1	2.64	0.46
47:M0:167:LEU:H	47:M0:167:LEU:CD2	4.10	0.46
36:1:1741:A:C6	36:1:1742:U:C2	3.04	0.46
36:5:2428:U:O2	36:5:2602:G:C2	2.69	0.46
45:L8:82:LEU:HD23	45:L8:87:ALA:HB2	1.98	0.46
36:1:2793:G:O6	87:1:3935:OHX:N5	2.48	0.46
1:2:1286:U:H2'	1:2:1287:A:C8	2.51	0.46
49:M3:40:ALA:O	49:M3:43:ALA:HB3	2.74	0.46
36:1:717:C:C5	36:1:718:G:C6	3.04	0.46
56:N0:1:MET:HE3	56:N0:32:SER:HB3	1.97	0.46
33:E1:131:PHE:N	33:E1:131:PHE:CD1	3.62	0.46
36:1:109:A:N3	36:1:110:G:H1'	2.31	0.46
70:O4:67:LYS:HB2	36:5:1821:U:C2	165.81	0.46
36:1:2824:G:O6	87:1:3905:OHX:N4	2.49	0.46
36:5:416:A:N6	36:5:417:A:C6	2.84	0.46
36:1:899:U:O2'	36:1:900:G:H5'	2.16	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3186:A:N1	46:L9:58:HIS:HB2	2.31	0.46
59:N3:74:MET:SD	59:N3:102:ILE:HD13	4.57	0.46
36:1:891:G:C6	36:1:892:U:C4	3.03	0.46
38:8:68:G:C6	38:8:69:U:N3	2.84	0.46
14:C2:81:ASP:HA	14:C2:82:PRO:HD3	1.45	0.46
1:2:82:U:H2'	1:2:83:G:O4'	2.16	0.46
1:6:181:A:H2'	1:6:182:A:O4'	2.16	0.46
53:M7:75:GLU:HG2	53:M7:76:PHE:CD1	2.51	0.46
45:L8:228:GLU:OE2	45:L8:231:LYS:HD2	2.16	0.46
36:5:3161:C:H2'	36:5:3162:C:C6	2.50	0.46
57:N1:147:VAL:HG12	57:N1:147:VAL:O	3.63	0.46
1:6:1327:C:H6	1:6:1327:C:O5'	1.99	0.46
10:S8:88:ASN:H	10:S8:88:ASN:ND2	2.14	0.46
36:1:1199:C:H4'	36:1:1200:A:O5'	2.15	0.46
25:D3:75:GLN:HG3	25:D3:82:LYS:CD	2.47	0.45
78:Q2:98:LYS:HG3	36:5:2656:A:OP1	250.11	0.45
40:L3:56:ILE:HD11	40:L3:359:ILE:CD1	2.45	0.45
36:5:3191:G:C6	36:5:3192:U:N3	2.84	0.45
46:L9:31:ARG:HD2	46:L9:149:ASN:OD1	2.16	0.45
1:6:1796:C:H4'	1:6:1797:A:OP2	2.15	0.45
28:D6:5:ARG:NH2	1:6:1795:U:OP2	337.17	0.45
11:S9:146:PHE:CE1	11:S9:148:VAL:HA	2.51	0.45
11:S9:37:LYS:HG3	11:S9:38:ASN:H	1.80	0.45
11:S9:84:GLY:O	11:S9:107:ARG:HD3	2.15	0.45
47:M0:58:GLU:OE1	47:M0:161:GLY:HA3	2.16	0.45
41:L4:327:LEU:O	41:L4:328:ASN:HB3	2.64	0.45
44:L7:141:TYR:O	44:L7:143:THR:N	2.79	0.45
1:6:328:A:C2	1:6:341:A:C2	3.04	0.45
26:D4:76:TYR:CG	26:D4:82:ALA:HA	2.87	0.45
10:S8:167:ALA:HB2	10:S8:183:ILE:HD12	5.98	0.45
36:1:1386:A:N6	41:L4:179:LEU:HD13	2.32	0.45
36:1:938:C:O2'	36:1:2814:G:O2'	2.32	0.45
73:O7:18:LEU:HA	73:O7:25:ARG:HA	1.98	0.45
55:M9:160:GLU:HA	55:M9:163:ARG:HD3	1.98	0.45
20:C8:37:GLY:O	1:6:1566:U:H4'	353.42	0.45
1:6:1573:A:H4'	1:6:1574:G:H5'	1.98	0.45
7:S5:184:PHE:CZ	7:S5:185:ARG:HG3	2.51	0.45
7:S5:37:GLN:HB3	18:C6:53:LEU:HD22	1.97	0.45
75:O9:6:SER:O	75:O9:9:ILE:HG12	2.91	0.45
36:1:1108:U:C2	36:1:1109:U:C5	3.04	0.45
42:L5:107:ARG:HH21	42:L5:110:LEU:HD23	1.81	0.45
1:6:1202:A:N3	1:6:1202:A:H3'	2.31	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:C9:15:ILE:HG21	21:C9:60:SER:HB2	1.98	0.45
22:D0:67:THR:HG21	31:D9:40:ARG:HB2	1.97	0.45
48:M1:89:TYR:O	48:M1:169:ALA:HB1	2.21	0.45
5:S3:98:ALA:C	5:S3:100:ALA:N	2.69	0.45
35:SM:57:ASN:O	35:SM:60:ALA:N	3.85	0.45
1:2:960:U:H2'	1:2:961:U:C6	2.51	0.45
15:C3:46:THR:O	15:C3:49:GLN:N	2.48	0.45
71:O5:101:THR:O	71:O5:105:ARG:HB2	2.91	0.45
36:5:1631:C:N3	36:5:1811:G:N2	2.60	0.45
16:C4:48:VAL:HG22	16:C4:49:LYS:H	2.42	0.45
16:C4:19:ILE:O	16:C4:83:ILE:HD12	2.16	0.45
28:D6:51:ARG:O	28:D6:53:LEU:N	2.50	0.45
1:2:1141:G:N2	1:2:1142:A:C2	2.84	0.45
23:D1:53:TYR:HD1	23:D1:53:TYR:N	3.11	0.45
36:1:1633:C:H41	63:N7:17:ARG:NH1	2.13	0.45
36:1:2826:U:C2'	36:1:2827:U:H5'	2.46	0.45
71:O5:4:VAL:HG13	71:O5:50:SER:HB3	2.76	0.45
79:Q3:30:GLU:HA	79:Q3:33:GLN:HG2	1.99	0.45
14:C2:45:LEU:HB2	1:6:1228:G:OP1	463.83	0.45
40:L3:63:PRO:HA	40:L3:68:HIS:CG	2.52	0.45
17:C5:130:ARG:HD2	17:C5:130:ARG:HA	1.74	0.45
56:N0:133:ALA:HA	56:N0:135:VAL:N	4.05	0.45
56:N0:14:LEU:HD23	56:N0:14:LEU:HA	1.97	0.45
36:1:2757:U:H4'	57:N1:7:TYR:HB3	1.98	0.45
40:L3:298:PHE:O	40:L3:300:ARG:HG2	4.30	0.45
36:1:3259:U:H4'	36:1:3260:G:H5''	1.97	0.45
36:5:3224:G:H2'	36:5:3225:C:H6	1.80	0.45
50:M4:121:MET:O	50:M4:125:LYS:HG2	3.15	0.45
69:O3:49:ILE:N	69:O3:69:GLY:O	2.47	0.45
1:6:1588:G:H1	1:6:1608:U:H3	1.65	0.45
18:C6:47:LYS:O	18:C6:82:ARG:HD2	3.66	0.45
34:SR:224:ASN:HD21	34:SR:226:ALA:HB3	3.68	0.45
52:M6:42:ASN:HD22	52:M6:42:ASN:HA	1.38	0.45
16:C4:129:LYS:HB2	16:C4:129:LYS:HE3	1.61	0.45
52:M6:195:ALA:C	52:M6:197:LEU:N	3.11	0.45
36:5:835:G:H22	36:5:857:G:C1'	2.29	0.45
36:5:1685:C:H2'	36:5:1686:U:C6	2.51	0.45
36:5:1339:C:H2'	36:5:1340:G:O4'	2.15	0.45
36:1:2319:U:O4	87:1:4039:OHX:N2	2.49	0.45
46:L9:129:ARG:HH22	46:L9:156:GLN:HG2	2.82	0.45
1:2:1092:A:C4	1:2:1094:G:C8	3.04	0.45
36:1:1946:A:H2'	36:1:1947:G:H8	1.79	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:193:ARG:HH21	36:5:2181:C:H5''	195.13	0.45
40:L3:35:ASP:OD1	40:L3:36:ASP:N	3.05	0.45
36:5:542:G:C6	36:5:543:C:C4	3.04	0.45
70:O4:56:THR:C	70:O4:57:LEU:HD23	2.54	0.45
42:L5:58:LYS:HD3	42:L5:58:LYS:N	2.31	0.45
64:N8:100:PRO:HG2	64:N8:123:VAL:CG1	4.34	0.45
36:1:3385:U:C2	36:1:3386:G:C8	3.04	0.45
36:1:1919:G:C2'	36:1:1933:A:H61	2.30	0.45
22:D0:25:THR:HG23	22:D0:90:TYR:HB3	3.76	0.45
46:L9:7:GLU:HA	46:L9:56:ALA:HA	2.62	0.45
79:Q3:55:TRP:CD1	79:Q3:55:TRP:N	2.84	0.45
36:5:2372:A:H5''	36:5:2373:A:H5''	1.97	0.45
36:5:3204:C:H2'	36:5:3205:G:C8	2.50	0.45
36:1:198:A:H1'	36:1:218:G:N3	2.31	0.45
8:S6:20:ASP:O	8:S6:23:ARG:HB2	2.71	0.45
69:O3:13:HIS:HA	69:O3:30:ILE:CD1	3.38	0.45
65:N9:50:THR:CG2	36:5:1072:G:H21	206.52	0.45
61:N5:115:ARG:HA	61:N5:116:PRO:HD2	1.75	0.45
58:N2:76:LEU:HG	58:N2:95:PHE:HE1	1.81	0.45
42:L5:286:VAL:HG22	47:M0:206:LEU:HD22	1.97	0.45
47:M0:207:GLU:O	47:M0:210:ILE:HB	3.38	0.45
6:S4:126:VAL:HG21	6:S4:155:LYS:O	3.38	0.45
6:S4:155:LYS:NZ	1:6:243:G:O3'	342.48	0.45
1:2:1319:A:C6	1:2:1320:U:C2	3.04	0.45
44:L7:92:ILE:HD11	54:M8:4:ASP:N	2.31	0.45
36:5:1350:A:C6	36:5:1351:U:C2	3.04	0.45
35:SM:88:ARG:HH12	35:SM:89:ARG:HH11	1.62	0.45
1:6:1314:U:HO2'	1:6:1315:U:P	2.37	0.45
36:5:1558:A:O2'	36:5:1559:A:H5'	2.16	0.45
36:5:1088:U:C5	36:5:1089:G:N7	2.84	0.45
45:L8:105:LYS:HE3	45:L8:108:ARG:HH12	1.82	0.45
45:L8:148:ALA:HA	45:L8:201:THR:HG22	1.97	0.45
36:5:1336:U:O2'	36:5:1337:A:H5'	2.17	0.45
40:L3:51:ALA:CB	40:L3:317:ILE:HD11	2.46	0.45
35:SM:43:ASP:O	36:1:2678:A:H1'	2.16	0.45
68:O2:62:LYS:HZ1	36:5:590:G:H5''	205.86	0.45
36:1:1370:G:O5'	64:N8:18:GLY:HA2	2.16	0.45
65:N9:23:LYS:CG	65:N9:24:PRO:HD3	4.73	0.45
87:5:4050:OHX:N3	87:5:4194:OHX:N6	2.65	0.45
36:1:1161:G:C2	36:1:1162:U:C5	3.04	0.45
36:1:2885:C:O2'	36:1:2886:U:H5'	2.16	0.45
87:5:4006:OHX:N3	87:5:4195:OHX:N5	2.64	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
62:N6:73:VAL:HG22	62:N6:80:VAL:CG2	2.46	0.45
1:2:1520:U:OP1	1:2:1520:U:H6	1.99	0.45
53:M7:120:ASN:HB2	53:M7:121:GLN:H	1.80	0.45
1:6:1464:G:C6	1:6:1465:C:C5	3.04	0.45
36:1:2855:U:OP2	47:M0:6:ALA:HB3	2.17	0.45
1:6:1417:A:OP1	87:6:2091:OHX:N4	2.48	0.45
1:6:256:A:H2'	1:6:257:A:O4'	2.17	0.45
51:M5:71:ARG:NH2	36:5:32:U:O3'	139.39	0.45
36:5:3364:C:H2'	36:5:3365:U:O4'	2.16	0.45
40:L3:384:LYS:O	87:L3:405:OHX:N3	2.49	0.45
1:2:628:G:O5'	1:2:628:G:H8	1.99	0.45
64:N8:88:ASP:OD1	64:N8:88:ASP:N	2.49	0.45
56:N0:96:ASP:OD1	56:N0:97:VAL:N	2.41	0.45
36:1:1182:A:H2'	36:1:1183:C:C6	2.51	0.45
45:L8:101:THR:OG1	45:L8:104:GLU:HG3	5.28	0.45
40:L3:264:VAL:CG2	40:L3:265:ALA:N	2.97	0.45
87:6:2125:OHX:N2	87:6:2177:OHX:N5	2.65	0.45
28:D6:28:LYS:HG3	28:D6:29:SER:N	2.30	0.45
28:D6:87:ARG:HD2	1:6:1797:A:C6	343.25	0.45
11:S9:146:PHE:HZ	1:6:765:G:N1	430.15	0.45
11:S9:77:ILE:HD11	11:S9:93:LEU:HB3	1.98	0.45
47:M0:76:MET:HE3	47:M0:148:VAL:O	4.61	0.45
47:M0:85:PHE:CA	47:M0:140:THR:HG22	2.57	0.45
44:L7:153:PHE:O	44:L7:202:LEU:HA	2.15	0.45
44:L7:158:LYS:HB3	44:L7:158:LYS:NZ	3.87	0.45
44:L7:51:TYR:CE1	44:L7:186:HIS:CE1	3.04	0.45
10:S8:59:ARG:NH2	1:6:1678:A:OP1	252.60	0.45
26:D4:12:VAL:HG12	1:6:783:G:C8	422.44	0.45
10:S8:191:PHE:CD1	13:C1:13:PHE:HB2	2.52	0.45
10:S8:46:VAL:HG13	10:S8:54:LYS:HB2	4.00	0.45
36:1:1386:A:N3	41:L4:180:LYS:HA	2.31	0.45
43:L6:131:LYS:O	43:L6:135:VAL:HG23	2.16	0.45
1:2:1542:G:N2	1:2:1569:A:OP2	2.49	0.45
1:2:1583:A:C8	1:2:1585:U:C2	3.03	0.45
20:C8:22:VAL:HG13	20:C8:31:ALA:HB1	1.98	0.45
7:S5:63:GLN:HG3	7:S5:86:GLN:O	2.78	0.45
36:5:2746:A:H2'	36:5:2747:A:O4'	2.15	0.45
17:C5:33:PHE:CE1	17:C5:36:LEU:HD21	4.62	0.45
20:C8:90:ASN:HA	20:C8:95:GLY:O	2.43	0.45
21:C9:117:SER:HB2	21:C9:123:ARG:HB2	1.98	0.45
21:C9:28:LEU:HB3	21:C9:29:GLU:H	4.07	0.45
5:S3:109:LEU:HD23	5:S3:109:LEU:HA	1.61	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:956:C:H2'	1:2:957:G:C8	2.52	0.45
15:C3:46:THR:HB	15:C3:47:PRO:HD2	2.83	0.45
15:C3:4:MET:HG3	15:C3:5:HIS:H	1.81	0.45
36:1:268:A:N1	36:1:295:A:H5'	2.30	0.45
1:6:1639:C:H2'	1:6:1640:C:O4'	2.16	0.45
77:Q1:22:ALA:C	77:Q1:24:SER:H	2.19	0.45
3:S1:66:VAL:HG22	16:C4:34:SER:CA	2.46	0.45
28:D6:44:ILE:H	28:D6:44:ILE:HG13	1.48	0.45
3:S1:128:LYS:NZ	3:S1:132:ASP:HB3	2.31	0.45
3:S1:137:ILE:HG21	3:S1:176:VAL:HG21	3.22	0.45
23:D1:51:VAL:CG2	23:D1:78:LEU:HD11	2.44	0.45
2:S0:60:ALA:HB1	2:S0:144:ILE:HG21	2.50	0.45
2:S0:59:LEU:HA	2:S0:59:LEU:HD23	4.25	0.45
36:1:1720:U:O4	55:M9:125:LYS:HD2	2.16	0.45
63:N7:81:LEU:HD22	63:N7:81:LEU:HA	1.71	0.45
14:C2:40:GLY:O	14:C2:124:LYS:N	3.62	0.45
14:C2:52:LEU:HD21	14:C2:60:VAL:HG22	2.82	0.45
1:2:1212:G:C2	1:2:1213:G:C8	3.05	0.45
6:S4:229:GLY:HA2	6:S4:235:TYR:CD2	2.81	0.45
56:N0:117:ARG:HG2	56:N0:117:ARG:H	1.60	0.45
56:N0:14:LEU:HD12	56:N0:55:SER:C	2.37	0.45
36:5:2726:C:N3	36:5:2728:G:C2	2.84	0.45
57:N1:72:VAL:HG21	57:N1:74:VAL:HG23	1.99	0.45
40:L3:294:GLY:O	40:L3:303:LYS:HE2	2.16	0.45
43:L6:176:PHE:C	50:M4:114:ASP:H	3.29	0.45
34:SR:256:THR:HG21	34:SR:261:LYS:HD2	1.98	0.45
34:SR:22:SER:HB2	34:SR:69:GLN:O	2.16	0.45
39:L2:80:GLU:N	39:L2:170:ALA:HB2	3.34	0.45
79:Q3:72:SER:OG	79:Q3:80:ARG:NH2	2.86	0.45
79:Q3:90:VAL:HG22	79:Q3:90:VAL:O	2.15	0.45
3:S1:83:LYS:HZ3	3:S1:106:THR:H	6.53	0.45
52:M6:110:PRO:CD	52:M6:111:PRO:HD2	4.97	0.45
36:5:3288:G:O2'	36:5:3289:G:O5'	2.33	0.45
8:S6:57:ASP:CB	8:S6:106:LEU:HD23	2.46	0.45
1:2:153:G:O2'	8:S6:108:VAL:HG21	2.15	0.45
57:N1:101:CYS:HB3	36:5:990:U:H1'	252.49	0.45
36:5:62:A:H2'	36:5:63:A:H8	1.80	0.45
38:8:106:C:O2'	87:8:234:OHX:N5	2.49	0.45
27:D5:79:ALA:C	27:D5:83:LEU:HD12	4.60	0.45
36:1:213:A:H2'	36:1:214:G:O4'	2.16	0.45
45:L8:163:VAL:HG23	45:L8:166:LEU:HD12	1.98	0.45
45:L8:196:ALA:HB3	36:5:147:U:OP2	119.64	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:D2:44:HIS:NE2	24:D2:101:TYR:CZ	2.84	0.45
36:1:2898:G:O6	76:Q0:125:LYS:NZ	2.40	0.45
36:1:1802:C:H1'	70:O4:59:PRO:O	2.15	0.45
70:O4:20:ILE:HA	70:O4:20:ILE:HD12	1.72	0.45
70:O4:8:ARG:HH21	70:O4:31:ARG:HH11	3.23	0.45
52:M6:58:LEU:HA	52:M6:72:HIS:CD2	2.53	0.45
1:2:539:G:OP2	1:2:539:G:H8	2.00	0.45
1:2:354:C:C5'	10:S8:16:ALA:HB2	2.41	0.45
22:D0:44:ASN:HD21	22:D0:103:ILE:CD1	4.95	0.45
36:1:224:C:H2'	36:1:225:C:H6	1.80	0.45
2:S0:102:PHE:CE1	2:S0:106:SER:HB2	2.81	0.45
1:6:1418:G:C8	1:6:1418:G:H5''	2.50	0.45
40:L3:248:LYS:HE2	36:5:2393:G:OP2	205.76	0.45
10:S8:138:ASN:O	10:S8:142:LYS:HG2	2.15	0.45
57:N1:68:THR:HG22	57:N1:71:SER:HB2	1.98	0.45
55:M9:64:ARG:O	55:M9:66:HIS:N	3.98	0.45
36:1:169:U:O2'	36:1:170:G:H8	1.96	0.45
2:S0:108:THR:CG2	2:S0:135:GLU:HG2	4.83	0.45
36:1:1536:G:C5	36:1:1537:A:N7	2.84	0.45
1:2:276:C:N4	1:2:281:G:N1	2.63	0.45
36:1:541:U:H2'	36:1:542:G:H8	1.81	0.45
36:1:1230:G:C6	36:1:1231:A:C6	3.04	0.45
36:5:2236:G:C5	36:5:2237:C:C5	3.04	0.45
74:O8:43:PHE:CZ	74:O8:65:LEU:HB3	2.91	0.45
36:5:1488:G:C2	36:5:1489:A:N7	2.84	0.45
36:5:709:A:H2'	36:5:710:A:O4'	2.16	0.45
57:N1:17:ARG:HH11	57:N1:17:ARG:CB	3.57	0.45
36:1:3062:G:H2'	36:1:3063:C:H6	1.81	0.45
36:1:1577:G:H2'	36:1:1578:C:C1'	2.46	0.45
59:N3:10:LYS:HB3	59:N3:10:LYS:HE2	3.29	0.45
1:2:980:G:N1	1:2:981:U:C4	2.84	0.45
36:1:1079:A:N6	36:1:1080:A:C6	2.84	0.45
36:1:1207:G:H4'	76:Q0:117:HIS:O	2.16	0.45
17:C5:77:ARG:HH22	1:6:1241:G:P	383.09	0.45
36:5:2345:A:O5'	36:5:2345:A:H8	1.99	0.45
36:5:3360:C:O2'	36:5:3361:G:H5'	2.16	0.45
48:M1:115:LYS:HB3	48:M1:116:TYR:H	1.58	0.45
36:5:1533:U:C2'	36:5:1534:A:H5'	2.46	0.45
36:5:3228:C:O2'	36:5:3229:G:OP2	2.34	0.45
78:Q2:105:GLN:HB2	78:Q2:106:PHE:CE1	2.90	0.45
87:8:220:OHX:N6	87:8:229:OHX:N3	2.63	0.45
36:5:886:C:C2'	36:5:887:G:H5'	2.45	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1673:G:C5	1:2:1674:C:C5	3.04	0.45
36:1:957:C:N3	36:1:958:C:C5	2.84	0.45
36:1:1509:A:O2'	36:1:1510:G:H5'	2.16	0.45
36:5:1549:U:H2'	36:5:1550:C:H6	1.80	0.45
1:6:1713:G:H8	1:6:1713:G:O5'	2.00	0.45
52:M6:43:ILE:HG22	52:M6:44:SER:O	2.15	0.45
34:SR:283:LYS:HG3	34:SR:284:ALA:N	4.87	0.45
36:1:1016:C:H1'	36:1:1028:U:C2	2.51	0.45
40:L3:283:TYR:HB3	40:L3:356:LEU:HD21	1.98	0.45
46:L9:77:ASN:HA	46:L9:80:THR:OG1	2.15	0.45
36:5:2358:A:O5'	36:5:2358:A:C8	2.69	0.45
1:2:40:A:H62	1:2:467:G:N2	2.15	0.45
28:D6:23:CYS:HB2	28:D6:74:CYS:HB3	1.97	0.45
32:E0:30:PRO:HB2	32:E0:34:ALA:CB	2.72	0.45
1:6:1579:U:P	87:6:2189:OHX:N6	2.90	0.45
45:L8:75:ILE:C	45:L8:77:GLN:H	2.18	0.45
1:6:303:U:O2'	1:6:304:U:O5'	2.21	0.45
1:6:343:C:H2'	1:6:344:A:C8	2.52	0.45
10:S8:48:THR:OG1	10:S8:49:ARG:N	2.47	0.45
36:1:1419:A:C2'	36:1:1420:C:H5'	2.46	0.45
43:L6:40:LEU:HD13	43:L6:84:VAL:HG11	1.98	0.45
5:S3:161:GLY:C	5:S3:163:PRO:HD2	2.37	0.45
1:6:1470:C:C4'	1:6:1540:G:H21	2.30	0.45
7:S5:118:LEU:HA	7:S5:118:LEU:HD23	1.91	0.45
46:L9:90:MET:O	46:L9:144:ILE:HG22	2.16	0.45
61:N5:108:LEU:H	61:N5:126:LEU:HA	2.85	0.45
61:N5:81:ILE:HA	61:N5:124:VAL:O	2.16	0.45
61:N5:127:THR:C	61:N5:129:ASP:N	2.76	0.45
42:L5:84:PRO:C	42:L5:86:TYR:N	2.66	0.45
1:2:1282:U:O2'	1:2:1283:U:H5'	2.16	0.45
1:6:1506:G:C2'	1:6:1507:G:H5'	2.45	0.45
12:C0:23:ALA:CB	12:C0:64:TYR:HB2	3.82	0.45
17:C5:15:HIS:O	17:C5:22:LEU:N	2.59	0.45
22:D0:68:ARG:HA	22:D0:78:THR:O	3.20	0.45
51:M5:46:ASP:O	51:M5:49:ARG:N	2.49	0.45
36:5:1784:G:C6	36:5:1785:U:N3	2.85	0.45
1:2:901:G:H22	16:C4:54:GLU:CD	2.20	0.45
1:6:886:U:O2'	1:6:887:A:H5'	2.17	0.45
2:S0:198:MET:HG3	19:C7:85:VAL:HG11	1.98	0.45
23:D1:37:ALA:HA	23:D1:50:TYR:HA	1.99	0.45
2:S0:52:LYS:HE2	23:D1:81:ASN:O	7.24	0.45
2:S0:172:LEU:HD13	2:S0:176:LEU:HD11	3.55	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S2:211:LEU:HD23	4:S2:211:LEU:HA	1.52	0.45
63:N7:41:ALA:C	63:N7:42:LEU:HD12	2.37	0.45
66:O0:34:LEU:HD12	66:O0:34:LEU:HA	1.87	0.45
55:M9:18:GLY:HA3	36:5:1874:A:H5''	135.34	0.45
39:L2:130:SER:HB3	39:L2:174:ARG:NH2	2.19	0.45
79:Q3:33:GLN:HG3	79:Q3:34:HIS:ND1	3.98	0.45
36:5:1185:C:H2'	36:5:1186:G:O4'	2.15	0.45
36:5:1320:C:H2'	36:5:1321:G:H8	1.81	0.45
56:N0:11:GLY:O	56:N0:12:ARG:HB3	3.19	0.45
40:L3:292:ALA:HA	40:L3:303:LYS:O	2.17	0.45
43:L6:170:LYS:O	43:L6:171:PRO:C	2.75	0.45
9:S7:168:SER:O	9:S7:171:ALA:N	2.48	0.45
38:4:52:A:H61	75:O9:35:ILE:HD13	1.81	0.45
36:5:2249:G:HO2'	36:5:2250:G:P	2.40	0.45
40:L3:166:ILE:HG13	40:L3:171:LEU:HD12	4.49	0.45
1:6:417:A:O2'	1:6:418:G:OP2	2.24	0.45
34:SR:299:GLN:O	34:SR:315:VAL:N	2.43	0.45
22:D0:58:LEU:HD23	22:D0:58:LEU:HA	1.55	0.45
36:1:3294:A:H2'	36:1:3295:A:O4'	2.16	0.45
1:2:1683:C:O2	1:2:1719:A:C2	2.70	0.45
36:1:3175:U:OP1	69:O3:10:LYS:HE2	2.15	0.45
24:D2:80:ASN:ND2	1:6:747:C:H4'	354.19	0.45
49:M3:92:THR:HB	71:O5:114:ARG:HG2	1.97	0.45
36:1:76:G:HO2'	49:M3:100:ARG:HH11	1.60	0.45
13:C1:91:LEU:HD23	13:C1:91:LEU:HA	3.53	0.45
13:C1:93:TYR:OH	13:C1:98:ASN:HA	2.16	0.45
10:S8:37:LYS:NZ	10:S8:95:THR:HG1	2.54	0.45
1:6:306:U:H2'	1:6:307:G:C8	2.51	0.45
4:S2:122:ALA:C	4:S2:125:ILE:HG13	2.37	0.45
4:S2:125:ILE:O	4:S2:129:ILE:HG13	2.25	0.45
4:S2:79:GLU:HG2	4:S2:186:LYS:HD2	1.99	0.45
36:1:2902:A:OP1	46:L9:170:LYS:NZ	2.45	0.45
70:O4:41:ARG:HA	70:O4:42:PRO:HD3	2.62	0.45
36:1:2194:G:H1'	36:1:2274:U:O2	2.16	0.45
36:5:3085:G:N3	36:5:3085:G:H2'	2.32	0.45
36:5:1578:C:H2'	36:5:1579:C:O4'	2.17	0.45
36:1:2623:G:C4	36:1:2624:G:C8	3.04	0.45
1:2:1433:G:N2	1:2:1434:U:C2	2.85	0.45
59:N3:6:ALA:HB2	59:N3:126:TRP:CZ2	3.01	0.45
36:5:1406:A:H2'	36:5:1407:A:C8	2.52	0.45
37:3:30:G:O2'	37:3:31:U:H5'	2.16	0.45
54:M8:115:VAL:C	54:M8:117:ALA:N	2.70	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2233:A:H2'	36:1:2234:G:O4'	2.16	0.45
36:1:1700:G:H1	36:1:1745:C:H42	1.64	0.45
87:5:3968:OHX:N3	87:5:4237:OHX:N2	2.63	0.45
42:L5:184:ASP:HB3	42:L5:187:THR:OG1	4.63	0.45
42:L5:190:ILE:O	42:L5:192:PRO:HD3	2.16	0.45
36:1:3309:G:H5'	53:M7:70:THR:HA	1.98	0.45
58:N2:23:THR:OG1	58:N2:30:PRO:HG3	2.77	0.45
62:N6:98:ASN:O	62:N6:99:LEU:HD23	2.16	0.45
55:M9:182:ASP:HB3	55:M9:183:ALA:H	3.72	0.45
74:O8:12:LEU:HA	74:O8:15:THR:HG23	1.98	0.45
5:S3:127:MET:SD	5:S3:131:ALA:HB3	2.56	0.45
36:1:1670:C:H1'	36:1:1780:G:N2	2.32	0.45
61:N5:49:LYS:HZ3	61:N5:53:HIS:HB2	3.95	0.45
49:M3:129:ASN:HB3	49:M3:131:LYS:CE	2.46	0.45
36:1:164:A:C2	36:1:165:A:C5	3.04	0.45
36:1:679:U:O5'	36:1:679:U:H6	2.00	0.45
35:SM:87:THR:O	35:SM:88:ARG:HB3	2.17	0.45
36:5:1582:C:C3'	36:5:1582:C:C6	2.99	0.45
13:C1:26:LYS:HA	13:C1:26:LYS:HD2	3.06	0.45
36:5:3393:U:H2'	36:5:3394:U:C6	2.49	0.45
1:2:1288:G:N7	1:2:1314:U:H2'	2.31	0.45
34:SR:10:ARG:HB3	34:SR:11:GLY:H	1.53	0.45
45:L8:173:MET:C	45:L8:175:VAL:H	2.20	0.45
6:S4:95:THR:CG2	26:D4:16:PRO:HG2	2.46	0.45
1:6:891:A:H2'	1:6:892:A:H8	1.81	0.45
36:1:1070:U:C4	36:1:1071:U:C4	3.04	0.45
36:1:1591:G:C6	36:1:1592:G:C6	3.04	0.45
87:1:3972:OHX:N3	87:1:4155:OHX:N4	2.64	0.45
11:S9:175:ARG:O	11:S9:179:ARG:HG3	2.16	0.45
8:S6:31:ARG:HA	8:S6:100:ALA:O	2.75	0.45
36:1:802:C:O2'	36:1:803:C:H5'	2.16	0.45
36:1:309:U:H3	36:1:2780:A:N6	2.14	0.45
6:S4:39:ARG:HG2	6:S4:39:ARG:NH1	4.07	0.45
46:L9:105:GLU:OE2	46:L9:108:GLY:HA2	2.16	0.45
26:D4:43:LYS:HG3	26:D4:46:GLU:OE2	6.28	0.45
36:5:2861:U:C2	36:5:2862:U:C6	3.04	0.45
36:5:1005:G:C6	36:5:1006:A:N7	2.84	0.45
48:M1:77:GLU:HG2	48:M1:77:GLU:H	1.46	0.45
1:6:499:U:H6	1:6:499:U:H3'	1.81	0.45
50:M4:127:LYS:O	50:M4:127:LYS:HG2	3.32	0.45
13:C1:94:ILE:HD12	13:C1:94:ILE:H	1.81	0.45
36:5:3330:A:H8	36:5:3330:A:H5''	1.82	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:6:LYS:HB2	6:S4:6:LYS:HE2	3.34	0.45
64:N8:13:GLY:N	36:5:943:U:OP2	164.66	0.45
1:6:561:G:C2'	1:6:562:G:H5'	2.45	0.45
25:D3:98:GLU:C	25:D3:100:ASP:H	2.20	0.45
25:D3:91:GLY:O	25:D3:93:LEU:N	2.48	0.45
36:1:1895:A:O2'	36:1:3053:G:H4'	2.17	0.45
20:C8:124:GLY:HA2	20:C8:127:HIS:HB2	1.99	0.45
36:1:1502:C:OP2	87:1:3879:OHX:N6	2.49	0.45
11:S9:158:PHE:CZ	11:S9:164:PHE:HD1	2.35	0.45
41:L4:330:TYR:CE2	44:L7:52:GLN:HG2	2.51	0.45
36:1:115:A:N6	36:1:154:U:N3	2.64	0.45
36:5:2586:G:H4'	36:5:2587:U:OP2	2.16	0.45
1:6:211:U:H2'	1:6:212:U:C6	2.50	0.45
6:S4:52:LEU:HD13	6:S4:54:TYR:CD2	2.52	0.45
41:L4:229:ASN:HD21	41:L4:231:ALA:HB3	2.49	0.45
41:L4:29:PRO:HD3	41:L4:279:HIS:NE2	2.30	0.45
43:L6:42:LEU:HD23	43:L6:42:LEU:HA	1.73	0.45
1:6:1330:G:H2'	1:6:1331:A:O4'	2.16	0.45
36:5:358:G:N1	36:5:361:A:OP2	2.46	0.45
1:2:1580:C:H4'	18:C6:137:ARG:CB	2.46	0.45
1:6:1566:U:O2'	1:6:1567:U:H5'	2.15	0.45
20:C8:62:THR:OG1	20:C8:65:GLU:HG3	3.70	0.45
20:C8:70:VAL:O	20:C8:73:MET:HB2	2.16	0.45
67:O1:29:ALA:HB2	67:O1:64:VAL:HA	1.99	0.45
1:6:1552:U:O2	1:6:1597:A:H2	2.00	0.45
12:C0:45:ALA:O	12:C0:49:LEU:HD23	2.25	0.45
15:C3:102:LEU:HD11	15:C3:112:LYS:HA	1.99	0.45
77:Q1:1:MET:HB2	77:Q1:1:MET:HE2	1.89	0.45
70:O4:19:LYS:HB2	70:O4:35:VAL:O	2.15	0.45
1:2:901:G:C6	1:2:902:G:C6	3.05	0.45
1:2:918:U:C2	1:2:919:A:C8	3.04	0.45
3:S1:69:CYS:SG	16:C4:114:ARG:NH1	4.55	0.45
3:S1:35:PRO:HA	3:S1:41:ARG:HH21	1.82	0.45
1:2:1142:A:OP1	28:D6:2:PRO:HB3	2.17	0.45
4:S2:101:VAL:HG22	4:S2:115:ILE:HG23	2.16	0.45
55:M9:101:VAL:HG22	55:M9:104:ARG:HH12	1.81	0.45
63:N7:26:VAL:HG22	63:N7:42:LEU:O	2.16	0.45
63:N7:97:SER:O	63:N7:100:THR:N	2.46	0.45
1:6:955:A:H4'	1:6:1073:G:O2'	2.16	0.45
36:5:230:U:H2'	36:5:231:G:O4'	2.16	0.45
62:N6:27:ARG:NE	62:N6:78:PHE:CE2	2.85	0.45
71:O5:6:ALA:HB1	71:O5:10:ARG:NH2	2.32	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
59:N3:11:PHE:CE1	59:N3:88:ARG:HD2	2.52	0.45
31:D9:5:ASN:ND2	31:D9:7:TRP:NE1	2.64	0.45
36:1:2444:C:N4	36:1:2503:G:H21	2.04	0.45
6:S4:208:VAL:O	6:S4:210:ILE:HG13	2.16	0.45
6:S4:72:VAL:HG22	6:S4:90:ILE:HA	3.69	0.45
8:S6:164:LYS:HD2	8:S6:167:LYS:HB2	1.98	0.45
36:1:2374:C:C5	36:1:2941:A:C2	3.01	0.45
1:6:146:U:O2'	1:6:147:A:H5'	2.17	0.45
34:SR:224:ASN:N	34:SR:231:MET:HG3	2.38	0.45
36:1:53:G:N3	36:1:54:C:C6	2.85	0.45
62:N6:37:LYS:HD3	62:N6:37:LYS:H	1.81	0.45
62:N6:37:LYS:HG2	62:N6:38:GLU:H	1.81	0.45
9:S7:144:VAL:HG22	24:D2:49:GLU:HB2	1.97	0.45
1:2:1323:C:H2'	1:2:1324:G:O4'	2.17	0.45
1:6:1301:U:C4	1:6:1302:U:C5	3.05	0.45
36:1:632:G:OP1	52:M6:94:ARG:N	2.43	0.45
36:5:908:G:OP1	87:5:4039:OHX:N3	2.50	0.45
72:O6:54:GLU:OE2	72:O6:86:LYS:NZ	2.48	0.45
36:5:989:A:C5	36:5:990:U:C5	3.05	0.45
51:M5:142:ILE:O	51:M5:144:ARG:O	2.34	0.45
36:1:96:G:OP1	64:N8:34:MET:N	2.45	0.45
46:L9:96:HIS:O	46:L9:96:HIS:ND1	3.30	0.45
26:D4:35:VAL:HG22	26:D4:36:SER:N	2.32	0.45
39:L2:117:GLU:HB3	39:L2:119:LYS:O	2.16	0.45
61:N5:56:ARG:O	61:N5:57:LEU:HB2	4.25	0.45
71:O5:23:ASP:O	71:O5:27:GLU:HB2	2.62	0.45
36:5:2240:G:N1	36:5:2241:U:C2	2.85	0.45
36:5:2281:A:C6	36:5:2959:C:H1'	2.52	0.45
56:N0:99:ARG:O	56:N0:103:VAL:HG23	2.32	0.45
64:N8:81:LEU:HD12	64:N8:104:THR:HG22	2.83	0.45
52:M6:54:TYR:O	52:M6:57:PHE:HB3	2.16	0.45
65:N9:3:LYS:HB3	36:5:2617:U:OP1	219.71	0.45
1:2:355:G:P	87:2:2036:OHX:N4	2.89	0.45
45:L8:36:ILE:H	45:L8:36:ILE:HG13	2.99	0.45
58:N2:81:LYS:HG2	58:N2:90:ARG:HH12	1.82	0.45
10:S8:151:LYS:HA	10:S8:151:LYS:HD2	4.10	0.45
6:S4:103:TYR:CE2	6:S4:189:LEU:HD11	3.39	0.45
6:S4:107:GLY:HA2	6:S4:189:LEU:HG	2.97	0.45
22:D0:25:THR:HA	22:D0:90:TYR:HA	2.57	0.45
36:5:2786:G:N2	36:5:2787:G:H1'	2.30	0.45
36:5:1718:G:H2'	36:5:1719:G:C8	2.51	0.45
59:N3:35:TYR:O	59:N3:35:TYR:CG	2.69	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:339:ARG:HG2	40:L3:340:LYS:N	2.31	0.45
36:5:2197:C:C5	36:5:2242:A:C6	3.04	0.45
36:1:1286:A:N3	36:1:1287:A:H1'	2.31	0.45
1:2:1224:A:O2'	1:2:1225:U:H5'	2.16	0.45
53:M7:69:ARG:CZ	36:5:2389:C:H1'	189.87	0.45
36:5:1523:U:P	36:5:1607:U:H3	2.40	0.45
1:2:319:U:H1'	1:2:323:A:C4	2.51	0.45
69:O3:88:ASN:HB2	36:5:429:U:C5'	214.44	0.45
14:C2:131:ASP:HB2	14:C2:132:GLU:OE2	2.16	0.45
1:6:139:C:N3	1:6:266:A:C2	2.84	0.45
1:6:176:C:OP1	87:6:2100:OHX:N6	2.50	0.45
36:5:659:G:C6	36:5:1432:C:C2	3.05	0.45
1:6:1283:U:N3	1:6:1425:A:C2	2.84	0.45
36:1:1497:C:H2'	36:1:1498:A:H8	1.79	0.45
37:7:70:U:N3	37:7:71:G:N7	2.64	0.45
1:2:759:U:OP2	1:2:759:U:H6	1.99	0.45
1:2:121:U:O2	6:S4:34:GLY:HA2	2.15	0.45
70:O4:24:LYS:HA	70:O4:30:LEU:HD23	2.80	0.45
36:5:2609:A:N3	36:5:2610:G:C8	2.84	0.45
36:1:913:A:H2	36:1:2134:G:N3	2.13	0.45
1:2:288:A:C2	1:2:289:U:C2	3.05	0.45
36:5:2592:G:H4'	36:5:2594:C:C2	2.52	0.45
45:L8:84:ARG:HB3	45:L8:84:ARG:HH11	1.81	0.45
68:O2:4:LEU:HD13	68:O2:90:LYS:HB2	3.79	0.45
1:2:81:G:N1	1:2:82:U:C2	2.85	0.45
47:M0:91:VAL:HG12	47:M0:91:VAL:O	2.35	0.45
14:C2:128:ALA:O	14:C2:133:LEU:HD22	2.73	0.45
11:S9:72:GLU:OE2	1:6:761:G:O2'	397.00	0.45
36:1:1524:A:C6	36:1:1527:C:C2	3.04	0.45
36:1:1355:A:C5'	36:1:1356:U:H5	2.29	0.45
69:O3:7:LEU:HA	69:O3:7:LEU:HD23	1.49	0.45
2:S0:43:ASP:N	2:S0:43:ASP:OD1	2.48	0.45
65:N9:22:LYS:HB3	65:N9:22:LYS:HE3	1.53	0.45
42:L5:67:SER:HA	42:L5:72:ASP:HA	2.36	0.45
36:5:2993:G:C6	36:5:3142:A:C4	3.04	0.45
1:2:748:U:O2'	1:2:749:U:H5'	2.17	0.45
1:6:552:G:C6	1:6:553:G:C5	3.05	0.45
1:6:565:C:H5''	1:6:566:C:C6	2.52	0.45
40:L3:212:ASN:ND2	40:L3:353:GLU:HB3	3.77	0.45
28:D6:5:ARG:HG2	1:6:1796:C:C6	341.21	0.45
1:2:544:A:H5''	1:2:545:A:P	2.57	0.45
1:6:477:A:H2'	1:6:478:A:H8	1.81	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1206:G:OP1	47:M0:157:TYR:OH	2.31	0.45
47:M0:205:SER:OG	47:M0:208:ASN:OD1	3.12	0.45
44:L7:39:GLU:C	44:L7:41:ARG:H	2.64	0.45
45:L8:172:LYS:HG2	72:O6:43:LEU:HD21	1.98	0.45
51:M5:5:LYS:HG2	72:O6:36:ARG:HD3	1.97	0.45
1:6:212:U:OP2	87:6:2130:OHX:N1	2.50	0.45
41:L4:150:LEU:HD11	41:L4:172:VAL:HG13	1.98	0.45
41:L4:177:ASP:O	41:L4:179:LEU:N	2.49	0.45
41:L4:25:VAL:HG21	41:L4:262:TRP:HB2	3.22	0.45
41:L4:39:PHE:CD2	41:L4:39:PHE:C	2.89	0.45
64:N8:3:SER:O	64:N8:4:ARG:C	2.55	0.45
1:2:1533:C:H5'	27:D5:74:SER:OG	2.17	0.45
1:2:1613:U:C4	1:2:1614:A:H2	2.34	0.45
1:2:1479:A:O2'	21:C9:12:GLN:OE1	2.22	0.45
7:S5:145:ASP:HA	7:S5:221:ALA:HB2	1.99	0.45
42:L5:148:ILE:CD1	42:L5:159:VAL:HG21	3.28	0.45
12:C0:59:PHE:CE2	12:C0:62:GLN:HA	3.39	0.45
17:C5:18:ARG:NH2	17:C5:38:PRO:HD3	2.31	0.45
17:C5:70:ASN:O	17:C5:71:GLU:HG2	4.25	0.45
48:M1:114:ILE:O	48:M1:114:ILE:HG22	2.74	0.45
5:S3:45:LYS:HB2	5:S3:45:LYS:HE2	1.85	0.45
36:5:699:A:C8	36:5:700:C:C5	3.05	0.45
1:2:1025:A:O2'	1:2:1773:C:O2'	2.32	0.45
15:C3:115:LEU:HA	15:C3:115:LEU:HD23	1.75	0.45
3:S1:48:VAL:HG21	3:S1:61:LEU:CD2	4.24	0.45
2:S0:172:LEU:CD2	2:S0:176:LEU:HD21	2.46	0.45
2:S0:177:LEU:O	2:S0:178:ALA:C	2.88	0.45
66:O0:42:ILE:HG13	66:O0:67:VAL:HG22	2.57	0.45
68:O2:79:VAL:CG1	68:O2:111:ARG:HG2	3.14	0.45
71:O5:4:VAL:HG21	71:O5:9:LEU:HD11	1.98	0.45
38:4:34:U:C5	73:O7:74:PHE:CE2	3.05	0.45
1:2:1228:G:OP2	14:C2:119:SER:OG	2.35	0.45
1:6:1185:U:H1'	1:6:1456:C:C5'	2.46	0.45
18:C6:143:ARG:CZ	35:SM:84:LYS:HE2	2.46	0.45
36:5:3242:G:O4'	36:5:3245:A:C8	2.70	0.45
43:L6:166:LYS:NZ	36:5:3214:U:C6	274.86	0.45
34:SR:89:LEU:O	34:SR:103:PHE:HD2	2.01	0.45
41:L4:53:SER:O	41:L4:55:LYS:N	2.69	0.45
66:O0:99:ASP:O	66:O0:103:THR:N	3.84	0.45
36:5:1235:U:C4'	36:5:1236:G:H5'	2.46	0.45
40:L3:84:VAL:HG22	40:L3:162:VAL:HB	2.53	0.45
52:M6:24:ALA:HB1	52:M6:88:VAL:HG23	2.65	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
78:Q2:32:LYS:O	78:Q2:32:LYS:HG2	2.16	0.45
36:1:1428:A:O2'	36:1:1429:G:H5''	2.17	0.45
36:1:345:G:OP1	36:1:1429:G:N1	2.49	0.45
1:2:747:C:H4'	24:D2:80:ASN:ND2	2.22	0.45
1:2:778:G:C6	1:2:783:G:C6	3.04	0.45
61:N5:60:TYR:CE2	71:O5:26:LYS:HG3	3.29	0.45
71:O5:63:ARG:NH2	71:O5:80:LEU:HD23	2.31	0.45
71:O5:77:PRO:HD2	71:O5:80:LEU:HB2	4.09	0.45
46:L9:106:LYS:HD2	46:L9:106:LYS:HA	3.77	0.45
36:5:89:A:C6	36:5:98:G:C2	3.04	0.45
1:2:591:A:C2	1:2:592:A:C5	3.05	0.45
35:SM:39:PRO:HD2	48:M1:52:TYR:CZ	2.52	0.45
48:M1:61:ARG:O	78:Q2:103:ALA:HB2	3.27	0.45
36:5:1733:G:H8	36:5:1733:G:O5'	2.00	0.45
60:N4:31:PHE:HB3	60:N4:36:SER:OG	2.41	0.45
36:1:3084:C:H5'	60:N4:38:SER:OG	2.16	0.45
47:M0:99:ILE:HG22	47:M0:123:HIS:HB2	1.98	0.45
36:1:944:C:OP1	36:1:944:C:H4'	2.17	0.45
37:3:47:C:H2'	37:3:48:U:C6	2.51	0.45
56:N0:71:LYS:HD2	36:5:562:C:H5''	341.38	0.45
56:N0:71:LYS:NZ	36:5:562:C:O3'	344.28	0.45
24:D2:38:LEU:HA	24:D2:38:LEU:HD23	2.47	0.45
32:E0:53:LYS:O	32:E0:54:ARG:HB3	2.56	0.45
36:1:3107:U:O2'	36:1:3108:G:H5'	2.16	0.45
46:L9:63:LYS:HD3	46:L9:63:LYS:HA	1.47	0.45
1:6:1418:G:H8	1:6:1418:G:H5''	1.81	0.45
36:5:1824:U:C4	36:5:1825:G:N7	2.85	0.45
1:2:189:C:H2'	1:2:190:C:H5'	1.98	0.45
79:Q3:52:ALA:O	79:Q3:54:ILE:N	2.50	0.45
15:C3:23:PRO:C	15:C3:25:TRP:N	2.70	0.45
36:1:1278:A:HO2'	36:1:1279:C:P	2.38	0.45
36:1:385:A:H2'	36:1:386:A:H8	1.79	0.45
36:5:2359:C:H6	36:5:2359:C:O5'	2.00	0.45
36:1:1741:A:C2	36:1:1742:U:C4	3.04	0.45
1:2:946:U:H5''	3:S1:165:ARG:CZ	2.47	0.45
1:6:1645:G:N2	1:6:1758:U:C5	2.85	0.45
1:6:1240:U:O2'	1:6:1242:A:N7	2.41	0.45
1:6:1237:G:P	87:6:2101:OHX:N4	2.90	0.45
36:5:2304:C:C5	36:5:2305:G:C6	3.05	0.45
1:2:1287:A:H61	1:2:1329:A:H5'	1.81	0.45
1:2:162:A:H3'	1:2:163:G:N2	2.29	0.45
36:1:2700:G:H5''	57:N1:17:ARG:HD3	1.99	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
57:N1:17:ARG:NH1	57:N1:45:ASN:HD21	2.14	0.45
40:L3:107:ALA:HB2	40:L3:199:PHE:HB3	2.34	0.45
36:1:2573:G:O6	87:1:3997:OHX:N3	2.50	0.45
8:S6:109:LEU:HD22	8:S6:111:LEU:HG	1.98	0.45
36:5:1276:U:H2'	36:5:1277:C:H6	1.82	0.45
13:C1:29:LYS:HE2	13:C1:31:THR:O	5.48	0.45
3:S1:119:THR:HB	3:S1:143:THR:CG2	2.81	0.45
36:5:1002:A:N6	36:5:1051:U:C4	2.84	0.45
36:5:2435:G:C2	36:5:2436:U:C2	3.04	0.45
2:S0:24:LEU:HA	2:S0:24:LEU:HD12	2.92	0.45
36:5:412:G:C5	36:5:413:U:C5	3.04	0.45
44:L7:233:GLU:HB2	44:L7:234:GLU:H	1.91	0.45
36:1:535:G:C2	36:1:555:U:O2	2.69	0.45
78:Q2:53:GLN:HE21	78:Q2:55:LYS:H	2.86	0.45
87:5:4061:OHX:N3	87:5:4138:OHX:N6	2.65	0.45
3:S1:136:ARG:HB2	3:S1:218:LEU:HD11	2.83	0.45
39:L2:219:ILE:HG22	39:L2:219:ILE:O	2.15	0.45
36:5:553:U:H2'	36:5:554:A:O4'	2.16	0.45
1:2:492:A:H5''	1:2:493:U:OP1	2.16	0.45
44:L7:191:VAL:HG13	44:L7:195:PHE:CG	2.75	0.45
44:L7:191:VAL:HG12	44:L7:192:GLY:N	3.80	0.45
36:5:851:C:H5''	36:5:851:C:H6	1.82	0.45
40:L3:383:LEU:N	40:L3:386:ASP:OD2	2.42	0.45
36:5:1223:A:C5	36:5:1224:C:C5	3.04	0.45
55:M9:174:ALA:O	55:M9:178:ALA:N	4.21	0.45
39:L2:11:GLY:O	36:5:2172:A:H1'	174.12	0.45
36:1:1187:C:H2'	36:1:1188:U:H6	1.81	0.45
46:L9:112:ILE:HB	46:L9:126:VAL:HB	2.66	0.45
53:M7:59:PRO:HG3	53:M7:76:PHE:CD1	3.75	0.45
49:M3:187:ALA:O	49:M3:190:LYS:HB3	2.19	0.45
36:1:628:A:H2'	36:1:629:U:O4'	2.16	0.45
43:L6:102:ASN:N	43:L6:102:ASN:OD1	2.49	0.45
44:L7:163:LEU:N	44:L7:163:LEU:HD23	2.32	0.45
1:6:585:A:H2'	1:6:586:G:H8	1.82	0.45
52:M6:68:ARG:NH1	36:5:2988:C:OP1	218.46	0.45
40:L3:10:ARG:NH1	40:L3:11:HIS:O	3.92	0.45
40:L3:14:LEU:HD23	40:L3:14:LEU:HA	2.30	0.45
36:5:2165:G:H5''	36:5:2166:A:OP2	2.17	0.45
53:M7:85:ALA:O	53:M7:87:SER:N	3.27	0.45
1:2:381:C:H1'	1:2:756:A:C2	2.52	0.45
1:6:57:G:O6	87:6:2094:OHX:N6	2.50	0.45
1:6:463:U:H3'	1:6:464:A:H8	1.82	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:455:C:H6	1:6:455:C:H2'	1.63	0.45
47:M0:37:GLY:HA3	47:M0:85:PHE:O	2.17	0.45
87:1:3993:OHX:N2	87:3:222:OHX:N1	2.64	0.45
41:L4:339:LEU:O	41:L4:339:LEU:HD12	4.74	0.45
44:L7:153:PHE:HE1	44:L7:162:PRO:HG3	3.16	0.45
36:5:2434:U:H6	87:5:4119:OHX:N4	2.14	0.45
41:L4:31:ARG:NH1	41:L4:120:TYR:OH	2.50	0.45
41:L4:183:LYS:HD3	41:L4:183:LYS:HA	1.82	0.45
69:O3:102:LEU:HA	69:O3:102:LEU:HD23	2.21	0.45
52:M6:130:LYS:HG3	52:M6:131:PRO:CD	3.50	0.45
36:1:813:G:H2'	36:1:813:G:N3	2.31	0.45
1:2:1542:G:H5''	21:C9:88:VAL:N	2.31	0.45
30:D8:14:LYS:HE3	30:D8:50:GLU:OE2	2.17	0.45
30:D8:12:VAL:HG23	30:D8:52:ASP:O	2.15	0.45
1:2:405:C:N4	1:2:406:U:O4	2.50	0.45
36:1:2706:G:C2	36:1:2707:C:C5	3.03	0.45
42:L5:122:VAL:HG23	42:L5:123:GLU:N	3.39	0.45
42:L5:236:LEU:O	42:L5:239:ILE:N	2.76	0.45
42:L5:52:VAL:HA	42:L5:147:ASP:HB3	1.99	0.45
1:6:1271:G:C6	1:6:1272:U:C4	3.05	0.45
12:C0:75:TYR:O	12:C0:78:GLU:N	2.50	0.45
17:C5:12:PHE:O	17:C5:13:LYS:HD2	2.17	0.45
21:C9:34:VAL:HG23	21:C9:53:TRP:NE1	2.32	0.45
21:C9:97:SER:O	21:C9:101:ASN:ND2	2.32	0.45
1:2:957:G:O2'	29:D7:49:HIS:ND1	2.48	0.45
15:C3:148:ALA:C	15:C3:150:VAL:H	3.22	0.45
49:M3:64:LYS:HG3	64:N8:69:TRP:CD2	2.79	0.45
1:6:1641:C:H1'	1:6:1762:A:C2	2.51	0.45
1:6:900:A:C2'	1:6:901:G:H5'	2.46	0.45
3:S1:135:LEU:HD22	3:S1:215:VAL:CG2	4.07	0.45
36:5:655:C:O2'	36:5:656:A:H5'	2.17	0.45
2:S0:172:LEU:HD22	2:S0:176:LEU:HG	3.13	0.45
2:S0:65:ALA:HB2	2:S0:181:VAL:HG12	1.98	0.45
68:O2:100:ILE:HG22	68:O2:105:ARG:HG3	1.99	0.45
1:2:1172:G:H2'	1:2:1173:C:O4'	2.15	0.45
50:M4:44:VAL:HG22	50:M4:60:LEU:HG	3.73	0.45
1:6:74:U:H5''	1:6:75:U:OP2	2.17	0.45
36:1:1130:A:C8	36:1:1132:C:C6	3.04	0.45
57:N1:139:ARG:HG3	57:N1:139:ARG:H	3.65	0.45
57:N1:63:VAL:H	57:N1:75:ILE:CD1	2.27	0.45
9:S7:129:LEU:HD23	9:S7:129:LEU:HA	1.88	0.45
36:5:3280:U:O2'	36:5:3281:U:P	2.75	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:8:54:A:H5''	38:8:55:U:OP2	2.17	0.45
37:7:1:G:H8	37:7:1:G:H5''	1.81	0.45
42:L5:270:LYS:HE2	42:L5:273:ARG:NH2	2.31	0.45
36:5:343:U:H4'	36:5:344:A:OP2	2.15	0.45
39:L2:112:ILE:HG23	39:L2:133:TYR:CD1	2.52	0.45
39:L2:116:VAL:HG11	39:L2:134:VAL:HG11	3.81	0.45
79:Q3:73:THR:HG22	79:Q3:74:ALA:N	4.21	0.45
40:L3:166:ILE:HG23	40:L3:167:ARG:N	2.32	0.45
8:S6:2:LYS:O	8:S6:108:VAL:HA	2.41	0.45
40:L3:134:SER:O	40:L3:137:TYR:N	3.39	0.45
51:M5:170:LYS:NZ	36:5:288:C:OP1	121.98	0.45
36:5:99:A:H1'	36:5:281:G:C8	2.52	0.45
51:M5:143:ARG:HH21	71:O5:92:LEU:HA	2.29	0.45
72:O6:15:LYS:HB3	36:5:73:C:C6	98.88	0.45
36:5:380:U:H6	36:5:380:U:O5'	1.98	0.45
36:5:1750:A:C4	36:5:1752:A:C8	3.04	0.45
38:8:119:C:C2	38:8:135:G:C2	3.04	0.45
79:Q3:22:LEU:HD23	79:Q3:22:LEU:HA	1.35	0.45
79:Q3:8:VAL:O	79:Q3:9:GLY:C	2.55	0.45
73:O7:65:ARG:HG2	73:O7:65:ARG:H	1.96	0.45
46:L9:104:VAL:HG23	46:L9:111:PHE:HB2	1.99	0.45
36:5:2697:A:N1	36:5:2698:G:C6	2.85	0.45
39:L2:188:LYS:O	39:L2:192:LYS:HG3	2.17	0.45
45:L8:154:ALA:CB	45:L8:183:LYS:HB3	2.47	0.45
1:2:79:C:P	8:S6:159:ARG:HH12	2.40	0.45
1:2:550:A:C2	1:2:589:C:O2	2.70	0.45
1:2:590:C:H2'	1:2:591:A:H8	1.82	0.45
48:M1:54:VAL:HB	48:M1:59:ILE:HD11	1.99	0.45
36:1:2925:C:O2'	36:1:2926:A:H5'	2.17	0.45
60:N4:44:LYS:HE3	36:5:2111:G:N3	226.73	0.45
36:5:783:A:OP2	87:5:4188:OHX:N6	2.50	0.45
41:L4:290:ILE:HG23	54:M8:35:PHE:CE2	2.77	0.45
36:5:1104:G:P	36:5:1104:G:H8	2.40	0.45
56:N0:66:GLU:HG3	56:N0:67:ALA:N	2.31	0.45
36:5:2904:U:H2'	36:5:2905:U:C6	2.52	0.45
36:5:3264:G:N2	36:5:3265:C:O2	2.49	0.45
63:N7:53:VAL:HG23	63:N7:57:HIS:CD2	2.52	0.45
36:1:2768:U:H2'	36:1:2769:A:H8	1.80	0.45
87:1:4003:OHX:N5	87:1:4171:OHX:N5	2.65	0.45
36:5:1597:C:C2	36:5:1598:G:C8	3.05	0.45
25:D3:26:GLU:HG3	1:6:609:U:H3	341.96	0.45
51:M5:50:ARG:HD3	36:5:267:G:O4'	107.97	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:M7:62:ARG:HG2	53:M7:63:PHE:CE1	2.51	0.45
68:O2:6:HIS:C	68:O2:6:HIS:ND1	2.69	0.45
36:5:2882:U:H2'	36:5:2883:U:O4'	2.16	0.45
36:5:2941:A:C5'	36:5:2943:G:H4'	2.45	0.45
1:6:452:A:H3'	1:6:453:U:C5	2.52	0.45
36:1:541:U:H2'	36:1:542:G:C8	2.52	0.45
54:M8:173:GLU:OE2	64:N8:49:HIS:HD2	5.85	0.45
36:1:732:C:N4	36:1:733:G:O6	2.50	0.45
15:C3:33:VAL:HG21	15:C3:66:ILE:HD12	4.61	0.45
36:5:2661:G:H2'	36:5:2662:G:C8	2.49	0.45
62:N6:98:ASN:C	62:N6:99:LEU:HD23	2.37	0.45
10:S8:43:ILE:HG22	1:6:260:U:C5	277.63	0.45
19:C7:67:ARG:NH2	1:6:1398:U:O2'	405.50	0.45
20:C8:136:GLN:H	20:C8:136:GLN:HG2	2.03	0.45
9:S7:112:ARG:O	9:S7:112:ARG:HG2	2.95	0.45
9:S7:114:ARG:O	9:S7:117:THR:HG22	2.35	0.45
47:M0:166:ILE:HG22	47:M0:167:LEU:N	2.50	0.45
74:O8:63:LYS:HE2	74:O8:64:LYS:NZ	2.31	0.45
36:1:1664:G:H2'	36:1:1665:C:C6	2.52	0.45
36:1:2649:A:C2	36:1:2650:U:C5	3.05	0.45
65:N9:28:LYS:O	65:N9:29:TYR:HB2	2.24	0.45
73:O7:19:CYS:SG	73:O7:22:CYS:SG	3.15	0.45
39:L2:229:ALA:HB3	39:L2:234:LYS:CG	2.46	0.45
1:6:983:A:H2'	1:6:984:G:C8	2.50	0.45
1:6:1715:G:C6	1:6:1716:C:C4	3.04	0.45
10:S8:147:ALA:C	10:S8:149:SER:N	2.70	0.45
1:2:71:A:C6	1:2:72:A:C6	3.05	0.45
36:1:510:G:C4	36:1:511:G:C8	3.05	0.45
36:5:816:A:H1'	36:5:819:U:O4	2.16	0.45
40:L3:17:LEU:HA	40:L3:18:PRO:HA	1.61	0.45
1:2:1061:A:C6	1:2:1062:A:C5	3.04	0.45
36:5:537:A:C6	36:5:538:G:C4	3.04	0.45
36:5:575:G:C2	36:5:576:C:C4	3.05	0.45
15:C3:136:PRO:HA	15:C3:137:PRO:HD2	2.12	0.45
6:S4:209:HIS:N	6:S4:209:HIS:ND1	3.69	0.45
6:S4:200:ARG:HB3	6:S4:201:HIS:H	1.60	0.45
1:2:681:U:O4	1:2:682:C:N4	2.50	0.45
59:N3:109:MET:SD	59:N3:129:VAL:HA	3.51	0.45
57:N1:76:ILE:HG23	57:N1:76:ILE:HD12	1.77	0.45
67:O1:43:HIS:H	67:O1:43:HIS:CD2	3.94	0.45
26:D4:45:ALA:HB2	26:D4:55:VAL:HG11	4.46	0.45
4:S2:181:SER:O	4:S2:183:ALA:N	2.49	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2891:U:O2'	36:1:3014:U:H5''	2.17	0.45
36:5:3322:A:H2'	36:5:3323:A:C8	2.52	0.45
36:1:2256:A:N3	36:1:2256:A:H5''	2.31	0.45
1:2:240:U:OP1	1:2:240:U:H4'	2.17	0.45
36:5:314:U:H2'	36:5:315:C:C6	2.52	0.45
36:5:219:A:O2'	36:5:220:G:H5'	2.17	0.45
49:M3:88:ALA:HA	49:M3:91:ARG:HG3	1.98	0.45
15:C3:57:ALA:HB2	29:D7:54:VAL:HG13	1.98	0.45
69:O3:14:LEU:HD11	69:O3:31:LYS:HB3	1.98	0.45
27:D5:44:GLN:O	27:D5:47:TYR:HB3	2.93	0.45
36:1:2988:C:H2'	36:1:2989:U:H6	1.81	0.45
6:S4:60:GLU:CD	26:D4:20:ARG:HH12	2.18	0.45
6:S4:30:ARG:HA	6:S4:31:PRO:HD2	2.39	0.45
10:S8:83:TYR:HB3	10:S8:101:ILE:HG21	3.54	0.45
36:1:404:G:N2	38:4:19:C:N3	2.58	0.45
41:L4:132:ALA:O	41:L4:134:LEU:N	3.30	0.45
41:L4:181:VAL:HG11	41:L4:224:GLY:CA	2.84	0.45
36:1:806:A:C8	36:1:936:A:N6	2.85	0.45
1:2:1409:G:N2	1:2:1411:A:H3'	2.32	0.45
1:6:1170:G:C2	1:6:1171:A:C8	3.05	0.45
7:S5:36:ALA:HB3	7:S5:45:LYS:NZ	2.31	0.45
36:1:3375:A:N3	36:1:3378:C:H5''	2.32	0.45
21:C9:49:ASP:O	21:C9:51:GLU:N	2.48	0.45
21:C9:57:ARG:CB	21:C9:57:ARG:HH11	2.58	0.45
48:M1:109:HIS:NE2	48:M1:121:GLY:O	2.25	0.45
5:S3:76:ARG:HD2	5:S3:77:PHE:CZ	4.34	0.45
64:N8:64:GLN:HE22	36:5:70:A:H5'	115.18	0.45
1:6:1774:G:C6	1:6:1775:U:N3	2.84	0.45
77:Q1:5:TRP:O	77:Q1:9:ARG:N	2.45	0.45
77:Q1:9:ARG:HA	77:Q1:12:ARG:HG3	4.05	0.45
67:O1:23:VAL:H	67:O1:28:ARG:NH1	3.28	0.45
16:C4:48:VAL:HG22	16:C4:49:LYS:N	2.60	0.45
28:D6:53:LEU:HA	28:D6:53:LEU:HD13	2.67	0.45
2:S0:173:ILE:HA	2:S0:176:LEU:HD12	2.48	0.45
2:S0:64:ILE:HD11	2:S0:177:LEU:HD11	1.98	0.45
54:M8:142:GLY:O	36:5:744:A:H4'	168.73	0.45
36:5:1413:G:H2'	36:5:1414:G:H8	1.82	0.45
55:M9:6:THR:O	55:M9:10:LEU:HB2	2.17	0.45
62:N6:50:ILE:HD13	62:N6:51:ARG:N	2.34	0.45
62:N6:52:ARG:HA	62:N6:70:ILE:HG22	3.03	0.45
71:O5:9:LEU:HD23	71:O5:9:LEU:HA	1.74	0.45
1:6:1211:A:H61	1:6:1452:U:H3	1.63	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:534:U:C3'	36:5:535:G:H5''	2.46	0.45
50:M4:91:CYS:O	50:M4:95:ALA:N	3.21	0.45
40:L3:303:LYS:HE3	40:L3:361:THR:OG1	2.17	0.45
60:N4:24:GLY:C	60:N4:26:SER:N	2.70	0.45
9:S7:49:ILE:HD12	9:S7:172:VAL:HG22	3.46	0.45
1:2:147:A:C6	1:2:168:A:C6	3.04	0.45
18:C6:94:GLN:CA	18:C6:102:LYS:HD2	2.45	0.45
35:SM:32:SER:OG	36:1:2666:C:O2'	2.24	0.45
35:SM:29:ASN:C	35:SM:31:SER:H	2.44	0.45
52:M6:41:LEU:HB2	52:M6:138:LEU:HD23	1.99	0.45
29:D7:58:SER:HB2	29:D7:59:CYS:H	1.96	0.45
36:5:347:G:H5''	36:5:348:A:OP2	2.17	0.45
41:L4:62:ALA:HB3	41:L4:90:PHE:CE2	2.52	0.45
36:5:295:A:H2'	36:5:296:A:O4'	2.17	0.45
1:2:1785:U:OP1	16:C4:136:ARG:NH2	2.50	0.45
39:L2:42:ARG:HG3	39:L2:89:TYR:CZ	3.22	0.45
3:S1:209:ASN:HD22	3:S1:209:ASN:HA	4.32	0.45
36:1:2424:A:C4	36:1:2607:G:N2	2.85	0.45
22:D0:105:GLN:O	22:D0:108:ILE:HG23	2.17	0.45
72:O6:51:SER:O	72:O6:52:PRO:C	2.55	0.45
51:M5:15:GLN:HG3	72:O6:52:PRO:HD2	1.99	0.45
72:O6:55:ARG:O	72:O6:58:ILE:HG12	3.62	0.45
1:6:1102:G:H2'	1:6:1103:U:O4'	2.16	0.45
13:C1:99:ARG:HG2	25:D3:9:LEU:HA	4.28	0.45
36:5:1566:A:H2'	36:5:1567:U:H5'	1.99	0.45
71:O5:23:ASP:O	71:O5:26:LYS:N	3.20	0.45
51:M5:114:ARG:NH1	51:M5:156:HIS:O	3.33	0.45
71:O5:85:THR:HG22	71:O5:87:ALA:HB3	3.81	0.45
46:L9:103:ILE:HA	46:L9:111:PHE:O	2.17	0.45
36:1:2244:A:O4'	39:L2:243:THR:HG21	2.16	0.45
39:L2:185:ALA:O	39:L2:188:LYS:HB3	2.28	0.45
10:S8:44:HIS:O	10:S8:56:ARG:N	2.92	0.45
48:M1:53:THR:OG1	48:M1:60:ARG:HA	2.16	0.45
36:5:548:G:H2'	36:5:549:U:C6	2.52	0.45
36:1:2924:U:C5	36:1:2925:C:C2	3.04	0.45
64:N8:73:LEU:HD21	64:N8:78:LEU:HA	1.97	0.45
52:M6:142:SER:HB3	52:M6:147:TRP:CB	2.46	0.45
1:6:844:A:C2	1:6:845:G:C5	3.04	0.45
36:1:1404:G:C5'	68:O2:64:LYS:HE3	2.44	0.45
36:1:1549:U:O4	87:1:4056:OHX:N1	2.50	0.45
1:6:1334:U:H2'	1:6:1335:U:O4'	2.17	0.45
45:L8:52:TRP:HB3	45:L8:56:VAL:HG11	1.98	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1615:C:OP1	87:1:4178:OHX:N3	2.50	0.45
36:1:1699:A:H2'	36:1:1700:G:C8	2.52	0.45
65:N9:36:ASP:OD1	36:5:2738:A:H5'	215.28	0.45
1:2:199:G:HO2'	1:2:200:A:P	2.40	0.45
36:5:401:U:H4'	36:5:403:C:C2	2.52	0.45
45:L8:248:LYS:HD2	45:L8:251:LYS:HD3	1.99	0.45
63:N7:102:GLU:CD	63:N7:103:GLN:H	2.19	0.45
55:M9:66:HIS:HA	55:M9:69:SER:OG	2.17	0.45
36:5:3189:G:C4	36:5:3190:C:C6	3.05	0.45
36:5:1136:A:H5'	36:5:2641:U:O2	2.17	0.45
3:S1:58:SER:H	3:S1:58:SER:HG	3.76	0.45
15:C3:24:ALA:O	15:C3:27:LYS:NZ	8.20	0.45
47:M0:210:ILE:HG12	47:M0:217:PHE:CZ	2.51	0.45
14:C2:30:VAL:HB	14:C2:132:GLU:CG	3.44	0.45
57:N1:48:ILE:O	57:N1:48:ILE:HG22	2.16	0.45
1:6:1344:A:H4'	1:6:1345:A:OP1	2.17	0.45
1:6:142:G:N7	1:6:173:A:H2	2.15	0.45
39:L2:14:SER:O	39:L2:16:PHE:N	2.75	0.45
36:1:650:C:O5'	36:1:650:C:H6	2.00	0.45
36:5:802:C:O2'	36:5:803:C:H5'	2.17	0.45
5:S3:119:ALA:HB3	5:S3:152:PHE:CE1	4.28	0.45
2:S0:32:HIS:CE1	23:D1:87:ARG:HH22	2.34	0.45
5:S3:11:LEU:O	5:S3:14:ASP:HB2	2.17	0.45
36:1:607:A:H4'	36:1:608:A:OP2	2.17	0.45
36:5:383:G:C6	36:5:387:A:N6	2.85	0.45
36:1:741:U:H2'	36:1:742:G:O4'	2.17	0.45
62:N6:69:LYS:O	62:N6:83:ASP:N	3.02	0.45
1:6:1714:A:C5	1:6:1715:G:C8	3.05	0.45
36:1:391:A:H2'	36:1:392:G:O4'	2.16	0.45
36:1:1079:A:N6	36:1:1080:A:N1	2.65	0.45
35:SM:43:ASP:HA	35:SM:44:PRO:HD3	2.22	0.45
1:2:76:A:H2'	1:2:80:A:N6	2.32	0.45
36:5:417:A:H2'	36:5:418:A:C8	2.52	0.45
68:O2:57:TYR:CE1	36:5:1162:U:H4'	199.29	0.45
36:1:243:G:H2'	36:1:244:G:O4'	2.16	0.45
13:C1:35:TYR:CG	13:C1:49:ILE:HG12	2.52	0.45
36:1:3372:A:C5	36:1:3373:U:C4	3.05	0.45
36:1:261:U:H2'	36:1:262:U:C6	2.52	0.45
36:5:1481:A:O4'	36:5:1481:A:OP1	2.34	0.45
36:5:74:G:C2	36:5:75:G:C8	3.04	0.45
51:M5:116:LEU:HB3	51:M5:133:ILE:HG13	1.98	0.45
1:2:293:U:N3	1:2:294:C:C4	2.85	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1152:A:C2	1:6:1627:U:C2	3.04	0.45
36:5:544:C:O2'	36:5:547:G:O6	2.25	0.45
1:2:402:C:O2'	1:2:403:G:H5''	2.17	0.45
36:5:2942:C:N3	87:5:4104:OHX:N2	2.64	0.45
35:SM:49:LYS:NZ	35:SM:53:ARG:HH12	12.49	0.45
13:C1:67:ARG:HD3	13:C1:67:ARG:N	2.65	0.45
11:S9:10:LYS:HE2	11:S9:10:LYS:HB3	1.77	0.45
38:8:35:C:H2'	38:8:35:C:O2	2.17	0.45
36:5:2535:A:H8	36:5:2535:A:OP2	1.99	0.45
8:S6:189:HIS:HA	8:S6:192:ALA:HB3	1.97	0.45
3:S1:163:ALA:O	3:S1:166:LYS:HB3	2.38	0.45
1:6:561:G:C2	1:6:585:A:N3	2.85	0.45
40:L3:233:TRP:CD1	40:L3:265:ALA:HB1	2.52	0.45
67:O1:74:ARG:HG2	67:O1:94:GLU:HG3	1.98	0.45
36:5:1506:A:H1'	36:5:1848:G:O6	2.17	0.45
6:S4:26:CYS:HB3	11:S9:2:PRO:O	4.49	0.45
1:2:479:C:OP1	11:S9:121:SER:OG	2.27	0.45
11:S9:77:ILE:HD11	11:S9:93:LEU:CD1	4.69	0.45
47:M0:155:ALA:O	47:M0:157:TYR:N	2.50	0.45
47:M0:47:PRO:HB3	47:M0:171:TRP:CD2	3.60	0.45
47:M0:66:GLU:O	47:M0:66:GLU:HG3	2.76	0.45
47:M0:75:TYR:CZ	47:M0:150:GLU:HG2	3.02	0.45
57:N1:134:GLN:HA	57:N1:135:PRO:HD2	1.57	0.45
45:L8:74:THR:HG22	45:L8:230:LYS:NZ	2.78	0.45
51:M5:27:VAL:HG23	51:M5:129:TYR:CZ	3.13	0.45
1:6:1317:C:O2	1:6:1400:A:H2	1.99	0.45
1:6:1405:G:C4	1:6:1406:A:C8	3.05	0.45
20:C8:64:GLU:O	20:C8:67:GLU:HB2	2.68	0.45
30:D8:49:ARG:HG2	30:D8:50:GLU:O	2.15	0.45
42:L5:85:ARG:NH2	42:L5:252:ALA:HB3	2.32	0.45
12:C0:46:LEU:HD23	12:C0:49:LEU:HB2	5.56	0.45
12:C0:61:TRP:CD1	12:C0:61:TRP:N	2.84	0.45
1:2:1072:C:H5'	1:2:1073:G:OP2	2.17	0.45
1:2:868:G:N2	1:2:961:U:C2	2.84	0.45
70:O4:21:LYS:HB2	70:O4:35:VAL:CG2	2.47	0.45
3:S1:91:VAL:HG22	3:S1:96:LEU:HB2	4.89	0.45
4:S2:178:ILE:HD13	4:S2:188:LEU:HB3	1.98	0.45
4:S2:68:ILE:O	4:S2:72:LEU:HB2	2.17	0.45
4:S2:73:LEU:C	4:S2:73:LEU:HD12	3.01	0.45
36:5:2652:U:C4	36:5:2759:U:O2	2.70	0.45
48:M1:160:VAL:HG12	48:M1:164:LYS:HD2	1.98	0.45
63:N7:4:PHE:HE1	63:N7:82:PRO:HG3	1.82	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3020:U:C4	36:1:3021:A:C6	3.04	0.45
31:D9:5:ASN:OD1	31:D9:7:TRP:CZ2	2.70	0.45
36:5:534:U:H4'	36:5:535:G:OP2	2.16	0.45
41:L4:354:VAL:HG11	57:N1:143:THR:HG21	1.99	0.45
57:N1:42:ILE:HG22	57:N1:43:LYS:N	2.70	0.45
59:N3:83:LYS:HG3	59:N3:84:SER:N	3.17	0.45
69:O3:45:LEU:HD22	69:O3:73:ARG:HA	2.55	0.45
52:M6:14:HIS:O	52:M6:41:LEU:HD12	2.17	0.45
36:1:362:U:O2'	36:1:363:G:H5'	2.17	0.45
79:Q3:37:TYR:N	79:Q3:47:VAL:O	2.49	0.45
3:S1:105:PHE:O	3:S1:106:THR:OG1	4.45	0.45
40:L3:114:VAL:HG22	40:L3:163:HIS:NE2	2.74	0.45
1:6:1764:C:C5	1:6:1767:G:N9	2.84	0.45
72:O6:62:ARG:HH22	72:O6:98:ARG:NH1	2.15	0.45
1:2:1516:A:H5''	22:D0:58:LEU:HD13	1.98	0.45
52:M6:81:TYR:CE2	52:M6:85:ARG:HG3	2.52	0.45
49:M3:54:LEU:HD22	49:M3:54:LEU:HA	2.01	0.45
36:1:3028:G:C2	36:1:3029:A:N3	2.85	0.45
33:E1:99:LYS:HA	33:E1:99:LYS:HE2	4.77	0.45
39:L2:186:PHE:HB2	39:L2:196:TRP:CH2	3.13	0.45
24:D2:23:ARG:NH1	24:D2:66:ASN:HA	2.32	0.45
36:1:2101:C:HO2'	36:1:2102:U:C5'	2.29	0.45
46:L9:93:VAL:HG22	76:Q0:82:LEU:HD22	1.99	0.45
40:L3:41:VAL:N	40:L3:185:GLY:HA3	2.31	0.45
13:C1:101:GLU:HB2	25:D3:13:ARG:HB2	1.98	0.45
46:L9:173:ARG:HB3	76:Q0:127:LEU:HG	4.42	0.45
1:2:332:U:P	10:S8:56:ARG:HH22	2.39	0.45
64:N8:73:LEU:HG	64:N8:74:ASN:O	2.16	0.45
36:1:1128:U:P	47:M0:4:ARG:HH22	2.40	0.45
36:1:1932:A:H5'	36:1:1933:A:OP2	2.17	0.45
54:M8:122:ILE:HG22	54:M8:123:THR:O	2.21	0.45
36:5:1108:U:N3	36:5:1109:U:C4	2.85	0.45
22:D0:24:ILE:HG22	22:D0:26:LEU:HD21	4.17	0.45
1:6:804:A:H2'	1:6:805:U:C6	2.52	0.45
1:2:1235:C:C2	33:E1:138:ARG:NH2	2.85	0.45
1:2:1235:C:O2'	33:E1:149:LYS:HD2	2.17	0.45
76:Q0:102:ARG:O	76:Q0:103:LEU:HD23	2.17	0.45
1:6:1294:G:C6	1:6:1295:G:N7	2.84	0.45
37:3:10:C:C4	42:L5:20:PHE:CG	3.05	0.45
36:5:2572:C:HO2'	36:5:2573:G:P	2.38	0.45
36:1:3095:U:C2	36:1:3096:C:C5	3.04	0.45
54:M8:90:ASP:C	54:M8:92:ARG:N	2.65	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:764:U:H5'	36:1:764:U:H6	1.82	0.45
36:5:259:C:H6	36:5:259:C:OP2	2.00	0.45
36:5:2546:C:H2'	36:5:2547:A:H8	1.82	0.45
44:L7:145:ARG:HA	44:L7:185:ILE:CD1	2.47	0.45
74:O8:5:ILE:HG22	74:O8:54:LEU:HB2	2.85	0.45
1:2:838:G:H2'	1:2:839:U:O4'	2.17	0.45
36:1:941:G:O4'	36:1:1435:A:H1'	2.17	0.45
5:S3:156:PHE:C	5:S3:157:LEU:HD12	2.37	0.45
36:5:2677:G:OP2	87:5:4152:OHX:N5	2.50	0.45
1:6:720:G:N7	1:6:722:G:C6	2.85	0.45
36:1:2552:C:H2'	66:O0:50:VAL:HG11	1.98	0.45
36:5:822:G:C6	36:5:904:A:C6	3.05	0.45
36:5:902:G:C5	36:5:903:U:C5	3.05	0.45
13:C1:109:VAL:HG23	13:C1:137:PHE:O	2.24	0.45
36:1:682:U:H5	41:L4:112:LYS:HE3	1.81	0.45
1:2:1776:A:N6	1:2:1777:G:O6	2.50	0.45
1:6:1314:U:O2'	1:6:1315:U:P	2.75	0.45
50:M4:49:PRO:C	50:M4:52:GLY:H	2.20	0.45
1:6:1041:G:N1	1:6:1042:G:C6	2.85	0.45
36:5:2796:G:H4'	36:5:2798:C:C6	2.52	0.45
59:N3:104:ASN:HD21	59:N3:108:GLU:HG3	2.28	0.45
36:1:2609:A:N3	36:1:2610:G:C8	2.85	0.45
34:SR:147:HIS:CE1	34:SR:179:LYS:HD2	2.52	0.45
1:6:47:A:C2	1:6:100:A:N3	2.85	0.45
1:6:1483:A:C6	1:6:1484:G:C6	3.05	0.45
36:1:2519:A:C6	36:1:2589:G:C6	3.05	0.45
75:O9:41:ARG:HG2	75:O9:42:ARG:H	3.44	0.45
1:6:1349:G:O2'	1:6:1379:C:N3	2.40	0.45
36:5:2694:A:C6	36:5:2695:A:C6	3.05	0.45
36:5:2638:C:H2'	36:5:2639:G:H5'	1.99	0.45
16:C4:57:PRO:HB3	16:C4:100:ALA:HB3	4.17	0.45
73:O7:45:ARG:NH1	36:5:814:U:H5'	127.78	0.45
36:5:1299:U:C2'	36:5:1300:G:H5'	2.47	0.45
49:M3:77:LEU:N	49:M3:77:LEU:HD23	2.31	0.45
1:2:1123:C:H6	1:2:1123:C:OP1	2.00	0.45
1:6:1000:C:O4'	1:6:1000:C:O2	2.34	0.45
68:O2:32:TRP:CZ2	68:O2:53:PRO:HD2	3.36	0.45
41:L4:7:THR:OG1	41:L4:147:GLU:OE2	3.35	0.45
40:L3:56:ILE:HD11	40:L3:359:ILE:HG23	2.99	0.45
36:1:951:A:C4	36:1:1369:A:C2	3.05	0.45
1:2:1797:A:N6	28:D6:84:VAL:HA	2.32	0.45
47:M0:138:VAL:HG11	47:M0:148:VAL:CG1	3.96	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:M0:198:LYS:NZ	36:5:1040:A:O2'	333.32	0.45
47:M0:29:SER:OG	47:M0:30:LYS:N	2.50	0.45
47:M0:41:ALA:CB	47:M0:46:PHE:HE2	2.29	0.45
41:L4:333:VAL:HG22	41:L4:334:PHE:N	3.81	0.45
6:S4:3:ARG:NH1	1:6:93:A:O4'	325.77	0.45
10:S8:160:PHE:CZ	10:S8:165:LEU:HD11	2.52	0.45
41:L4:269:SER:O	41:L4:269:SER:OG	2.94	0.45
54:M8:33:TYR:O	54:M8:34:THR:C	2.55	0.45
20:C8:28:ILE:HG13	20:C8:61:LEU:HG	1.99	0.45
20:C8:62:THR:O	20:C8:65:GLU:HG3	5.09	0.45
7:S5:145:ASP:CG	7:S5:146:THR:N	2.70	0.45
7:S5:163:SER:HB2	30:D8:48:VAL:HG23	2.79	0.45
7:S5:186:ASN:ND2	7:S5:187:ILE:N	4.90	0.45
7:S5:40:ILE:HD11	7:S5:47:SER:OG	2.17	0.45
67:O1:64:VAL:HG22	36:5:1456:A:C6	165.86	0.45
67:O1:37:LYS:HG2	67:O1:49:VAL:HB	3.05	0.45
67:O1:59:ILE:C	67:O1:61:LYS:H	4.53	0.45
67:O1:17:HIS:CD2	67:O1:69:TYR:CD1	3.14	0.45
42:L5:89:THR:HB	42:L5:90:HIS:CD2	4.85	0.45
1:6:1504:G:H22	1:6:1549:C:H1'	1.81	0.45
17:C5:34:VAL:O	17:C5:42:ARG:HG2	2.17	0.45
72:O6:29:LYS:HE2	72:O6:29:LYS:HB3	1.67	0.45
1:2:1025:A:HO2'	1:2:1773:C:HO2'	1.64	0.45
36:5:657:A:N6	36:5:658:G:C6	2.84	0.45
24:D2:45:GLY:O	24:D2:68:ARG:HD2	3.01	0.45
4:S2:65:GLU:HB2	4:S2:68:ILE:CD1	3.19	0.45
36:1:1721:U:H5	55:M9:103:ARG:HH12	1.63	0.45
63:N7:80:LEU:O	66:O0:59:TYR:OH	2.35	0.45
62:N6:27:ARG:HG2	62:N6:78:PHE:CZ	2.52	0.45
36:1:2179:C:C2	39:L2:130:SER:O	2.69	0.45
14:C2:40:GLY:CA	14:C2:124:LYS:HB2	4.28	0.45
1:6:1211:A:C5	1:6:1212:G:C8	3.04	0.45
69:O3:100:ILE:N	69:O3:100:ILE:HD12	2.54	0.45
18:C6:47:LYS:HA	18:C6:50:GLU:OE2	4.08	0.45
34:SR:23:LEU:HB2	34:SR:293:ALA:HB2	1.98	0.45
62:N6:58:VAL:HA	62:N6:104:LEU:CD2	2.73	0.45
50:M4:106:ARG:HA	50:M4:109:ARG:HB2	1.99	0.45
52:M6:188:SER:O	52:M6:190:VAL:N	3.68	0.45
36:1:2607:G:C5	36:1:2608:G:N7	2.85	0.45
36:1:1690:C:C2	36:1:1691:U:C5	3.05	0.45
49:M3:149:GLN:NE2	49:M3:149:GLN:HA	2.31	0.45
39:L2:201:GLY:O	39:L2:204:MET:HB2	3.32	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
61:N5:57:LEU:HD23	61:N5:57:LEU:HA	4.42	0.45
71:O5:28:LEU:O	71:O5:32:LYS:HG3	2.46	0.45
46:L9:97:PHE:HA	46:L9:98:PRO:HD3	1.69	0.45
1:6:1267:G:H2'	1:6:1268:G:C8	2.51	0.45
36:5:3139:A:O2'	36:5:3140:G:H5'	2.17	0.45
36:5:2950:G:C4	36:5:2979:U:C5	3.05	0.45
36:5:2202:C:H2'	36:5:2203:U:O4'	2.17	0.45
1:6:913:G:N7	36:5:2205:U:C2	2.84	0.45
45:L8:159:PRO:O	45:L8:160:ILE:C	2.56	0.45
40:L3:41:VAL:HG11	40:L3:194:TRP:CB	3.01	0.45
1:2:125:U:H5''	6:S4:148:ARG:CZ	2.47	0.45
8:S6:139:ASN:O	8:S6:143:LYS:HB2	2.71	0.45
1:2:335:U:C4	1:2:336:G:C5	3.05	0.45
48:M1:53:THR:HA	48:M1:59:ILE:O	2.65	0.45
36:5:1711:C:H2'	36:5:1712:G:O4'	2.17	0.45
36:5:1738:C:O2'	36:5:1739:U:H5'	2.17	0.45
36:1:2287:C:H4'	36:1:2288:G:OP2	2.17	0.45
58:N2:81:LYS:O	58:N2:85:LYS:N	2.48	0.45
25:D3:135:LEU:C	25:D3:137:LYS:H	3.47	0.45
25:D3:95:PHE:HB3	25:D3:135:LEU:HD13	1.99	0.45
36:5:738:A:H2'	36:5:739:G:C8	2.51	0.45
46:L9:67:ALA:CA	46:L9:70:THR:HG23	2.47	0.45
1:2:1344:A:H2'	1:2:1345:A:C8	2.51	0.45
36:1:1631:C:C2	36:1:1645:U:C4	3.05	0.45
36:5:2785:A:H2'	36:5:2786:G:O4'	2.17	0.45
78:Q2:28:TYR:C	78:Q2:28:TYR:CD1	3.05	0.45
14:C2:73:LYS:HD2	33:E1:108:VAL:O	2.16	0.45
87:1:4003:OHX:N3	87:1:4171:OHX:N3	2.64	0.45
1:2:90:C:C2	1:2:91:G:C8	3.05	0.45
36:1:2947:G:H4'	36:1:2947:G:OP2	2.16	0.45
25:D3:107:PHE:HE1	25:D3:123:LYS:HB3	1.80	0.45
1:2:10:G:H2'	1:2:11:A:H8	1.78	0.45
36:1:1758:G:H5''	58:N2:104:ARG:HH22	1.82	0.45
1:2:685:A:H2'	1:2:686:C:H6	1.81	0.45
36:1:3289:G:H2'	36:1:3290:G:O4'	2.17	0.45
36:1:3282:U:H6	36:1:3282:U:O5'	2.00	0.45
71:O5:13:SER:O	71:O5:14:LYS:C	3.01	0.45
34:SR:159:ASN:ND2	34:SR:166:SER:O	2.48	0.45
1:6:142:G:O6	1:6:173:A:N1	2.50	0.45
1:6:1692:G:H2'	1:6:1693:A:H8	1.82	0.45
39:L2:10:LYS:HA	39:L2:16:PHE:CE2	2.99	0.45
36:1:1211:U:H2'	36:1:1212:A:H8	1.79	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
65:N9:28:LYS:HA	65:N9:28:LYS:HD3	1.35	0.45
36:1:3316:A:OP2	40:L3:123:TYR:HB2	2.16	0.45
9:S7:150:GLN:HB3	9:S7:181:ILE:CD1	2.45	0.45
9:S7:67:LEU:HA	9:S7:70:PHE:HB2	1.99	0.45
49:M3:129:ASN:N	49:M3:129:ASN:OD1	3.75	0.45
36:5:1853:U:H5''	36:5:1854:C:OP1	2.17	0.45
1:6:1246:C:H5''	1:6:1247:U:OP2	2.16	0.45
73:O7:3:LYS:HB3	36:5:2138:A:N7	169.53	0.45
17:C5:60:LEU:O	17:C5:63:ALA:HB3	3.18	0.45
38:4:114:G:C6	38:4:115:C:C4	3.05	0.45
1:6:1466:G:O2'	1:6:1602:C:OP1	2.35	0.45
36:5:3145:C:H2'	36:5:3146:G:H8	1.82	0.45
8:S6:200:ALA:HA	8:S6:203:GLU:HB2	2.37	0.45
39:L2:28:LYS:HB3	39:L2:123:ARG:HB3	3.63	0.45
36:1:670:C:OP1	54:M8:147:ARG:NH2	2.49	0.45
32:E0:7:SER:C	32:E0:9:ALA:N	3.89	0.45
36:5:1681:U:H2'	36:5:1682:U:O4'	2.16	0.45
1:2:1766:A:H5''	87:2:2092:OHX:N6	2.32	0.45
36:1:901:G:C6	36:1:902:G:C5	3.05	0.45
1:6:263:C:H4'	1:6:292:U:H5'	1.99	0.45
69:O3:25:PRO:O	69:O3:27:VAL:N	3.25	0.45
24:D2:97:ARG:HB3	24:D2:97:ARG:HE	1.33	0.45
36:1:3010:U:H6	36:1:3010:U:H3'	1.82	0.45
1:6:91:G:H2'	1:6:92:A:H8	1.81	0.45
37:3:90:U:C4	37:3:91:G:C5	3.04	0.45
36:1:1186:G:C6	36:1:1187:C:C4	3.05	0.45
1:2:417:A:H4'	1:2:418:G:O5'	2.16	0.45
1:2:246:G:H21	13:C1:39:GLY:HA3	1.81	0.45
68:O2:17:PHE:HD1	68:O2:53:PRO:HD3	3.21	0.45
1:2:1026:A:H4'	1:2:1028:C:C5	2.52	0.45
1:6:1708:U:H2'	1:6:1709:C:C6	2.52	0.45
1:2:1440:C:O5'	1:2:1440:C:H6	2.00	0.45
1:6:555:A:H2'	1:6:556:A:C8	2.52	0.45
40:L3:306:THR:HA	40:L3:307:PRO:HD3	1.85	0.45
55:M9:146:LYS:HG2	55:M9:146:LYS:H	4.51	0.45
36:1:1168:U:H5''	36:1:1168:U:H6	1.82	0.45
52:M6:177:LYS:HB3	52:M6:177:LYS:HE2	4.05	0.45
1:2:567:A:H5'	32:E0:10:ARG:HB2	1.98	0.45
36:1:2254:U:H2'	36:1:2261:G:H22	1.81	0.45
36:1:3200:G:H2'	36:1:3201:C:O4'	2.17	0.45
36:5:3193:C:C2	36:5:3200:G:C2	3.05	0.45
46:L9:21:LYS:O	46:L9:22:SER:HB3	2.57	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2359:C:H2'	36:1:2360:C:H6	1.82	0.45
47:M0:30:LYS:H	47:M0:62:SER:HG	1.58	0.45
47:M0:30:LYS:N	47:M0:62:SER:OG	2.34	0.45
41:L4:328:ASN:ND2	41:L4:328:ASN:C	4.29	0.45
44:L7:131:GLU:O	44:L7:229:PHE:HB2	2.17	0.45
51:M5:14:LYS:HA	51:M5:19:LEU:HD23	2.68	0.45
36:1:368:G:C2	36:1:369:A:N7	2.85	0.45
41:L4:206:LEU:HD13	41:L4:248:VAL:HG22	3.79	0.45
43:L6:40:LEU:N	43:L6:52:VAL:O	2.64	0.45
36:1:929:A:C2	36:1:930:U:C2	3.05	0.45
20:C8:64:GLU:HB3	20:C8:68:ARG:NH1	5.29	0.45
7:S5:116:HIS:CD2	27:D5:98:GLN:HB3	3.20	0.45
42:L5:121:GLY:HA3	42:L5:168:ASP:O	2.17	0.45
42:L5:90:HIS:NE2	42:L5:229:ASP:OD2	3.08	0.45
42:L5:85:ARG:HG2	42:L5:86:TYR:CE2	4.12	0.45
1:6:1549:C:H6	1:6:1549:C:O5'	2.00	0.45
21:C9:126:GLU:H	21:C9:126:GLU:HG2	2.21	0.45
21:C9:6:VAL:HG13	21:C9:66:TYR:HE1	1.82	0.45
48:M1:166:LYS:HD2	48:M1:167:TYR:CD1	4.73	0.45
5:S3:175:VAL:O	5:S3:177:MET:N	4.05	0.45
15:C3:117:LEU:O	15:C3:118:ILE:C	2.55	0.45
15:C3:16:ILE:HG22	24:D2:57:ARG:NH2	2.32	0.45
51:M5:45:PRO:O	51:M5:49:ARG:HG3	4.66	0.45
1:2:357:G:OP2	87:2:2060:OHX:N6	2.50	0.45
36:5:1631:C:N4	36:5:1811:G:H1	2.15	0.45
28:D6:44:ILE:HG22	28:D6:45:VAL:HG13	6.19	0.45
3:S1:36:SER:HB3	3:S1:231:LEU:CB	2.47	0.45
36:1:657:A:H2'	36:1:658:G:O4'	2.16	0.45
2:S0:185:ARG:H	23:D1:45:ALA:H	2.39	0.45
2:S0:4:PRO:HD3	2:S0:62:ARG:NH2	2.32	0.45
1:6:1699:G:H22	1:6:1701:A:C3'	2.25	0.45
63:N7:36:HIS:N	63:N7:37:PRO:HD3	3.39	0.45
1:6:874:C:H2'	1:6:875:G:C8	2.51	0.45
36:1:534:U:O4	56:N0:144:LEU:HD23	2.17	0.45
50:M4:89:ALA:O	50:M4:90:VAL:C	3.06	0.45
56:N0:13:ARG:HG2	56:N0:55:SER:O	4.78	0.45
60:N4:14:TYR:HB3	60:N4:15:PRO:HD2	2.24	0.45
42:L5:269:SER:HB2	37:7:1:G:H21	318.63	0.45
34:SR:211:ILE:CD1	34:SR:225:LEU:HB2	2.47	0.45
52:M6:7:VAL:HG11	56:N0:163:PHE:CE2	2.52	0.45
56:N0:163:PHE:CD1	56:N0:163:PHE:N	2.83	0.45
1:2:1000:C:H5"	1:2:1001:A:OP2	2.16	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:84:THR:CG2	79:Q3:63:THR:HB	2.47	0.45
1:6:162:A:H2'	1:6:163:G:C8	2.51	0.45
8:S6:72:ARG:HG2	8:S6:98:ARG:HA	2.00	0.45
36:5:806:A:C4	36:5:936:A:C2	3.05	0.45
36:5:3069:G:C6	36:5:3070:A:C5	3.05	0.45
49:M3:116:LEU:HA	49:M3:116:LEU:HD23	2.23	0.45
1:2:580:A:C6	1:2:583:C:C2	3.05	0.45
38:8:41:A:N7	38:8:42:G:C8	2.85	0.45
45:L8:161:GLU:C	45:L8:163:VAL:H	2.75	0.45
48:M1:102:PHE:CZ	48:M1:129:VAL:HG11	2.68	0.45
36:5:1802:C:O2	36:5:1802:C:H2'	2.17	0.45
41:L4:300:ARG:HG3	41:L4:300:ARG:HH11	3.59	0.45
36:5:582:G:N7	87:5:4211:OHX:N2	2.65	0.45
69:O3:70:LYS:HE2	36:5:585:A:OP1	240.35	0.45
36:5:1609:C:H2'	36:5:1610:G:C8	2.52	0.45
1:6:640:U:C4	1:6:641:G:N7	2.85	0.45
1:6:190:C:C4	1:6:196:G:C6	3.05	0.45
36:1:2735:U:H2'	36:1:2736:A:C8	2.48	0.45
62:N6:89:LYS:HG2	62:N6:90:VAL:HG22	1.99	0.45
36:5:1556:C:H3'	36:5:1557:A:C5'	2.47	0.45
36:1:1815:U:O2'	36:1:1816:A:P	2.74	0.45
1:6:1342:C:O2'	1:6:1343:U:H5'	2.17	0.45
58:N2:18:ASP:O	58:N2:105:LEU:HB2	3.55	0.45
36:1:3163:A:N6	36:1:3164:C:N4	2.65	0.45
10:S8:43:ILE:HG22	1:6:260:U:H5	278.18	0.45
1:6:1398:U:H4'	1:6:1399:C:OP2	2.15	0.45
1:2:809:A:O2'	1:2:810:G:H5'	2.17	0.45
74:O8:12:LEU:O	74:O8:15:THR:N	2.50	0.45
36:1:1598:G:H2'	36:1:1599:G:H8	1.82	0.45
18:C6:81:ILE:O	18:C6:85:ILE:HG13	2.17	0.45
1:2:929:A:N6	1:2:930:A:C6	2.85	0.45
48:M1:107:ASP:HA	48:M1:124:GLY:HA2	1.99	0.45
40:L3:199:PHE:C	40:L3:201:LYS:N	2.95	0.45
49:M3:21:ARG:O	51:M5:196:THR:HG23	2.45	0.45
1:2:1786:G:C5	1:2:1787:C:C5	3.05	0.45
1:2:1787:C:H2'	1:2:1788:G:H8	1.82	0.45
15:C3:135:LEU:HD13	15:C3:139:TRP:CG	2.52	0.45
37:3:60:G:N1	37:3:61:G:C5	2.85	0.45
36:5:3009:G:N7	87:5:3921:OHX:N4	2.65	0.45
36:1:600:G:C2	36:1:604:G:C6	3.05	0.45
12:C0:32:HIS:ND1	12:C0:39:ASN:OD1	4.47	0.45
45:L8:106:LYS:HA	45:L8:109:LEU:HD12	1.98	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:L9:150:SER:CB	46:L9:153:ASP:HB2	3.51	0.45
1:2:760:A:OP2	87:2:2061:OHX:N4	2.49	0.45
36:1:716:A:N6	64:N8:117:ARG:HG3	2.32	0.45
36:1:2411:U:N3	36:1:2811:A:C2	2.82	0.45
36:1:795:G:O2'	36:1:796:U:H5'	2.17	0.45
36:5:996:A:C2	36:5:1054:A:C4	3.05	0.45
1:2:1246:C:C4	1:2:1247:U:N3	2.85	0.45
36:1:2322:C:H2'	36:1:2323:G:H5'	1.97	0.45
34:SR:147:HIS:NE2	34:SR:179:LYS:HB2	2.62	0.45
39:L2:13:GLY:HA2	36:5:2172:A:O2'	174.16	0.45
36:5:3352:U:O2'	87:5:4224:OHX:N5	2.50	0.45
1:6:411:C:H2'	1:6:412:A:O4'	2.17	0.45
36:1:627:U:O4	87:1:3998:OHX:N5	2.51	0.45
1:6:581:U:H6	1:6:581:U:H3'	1.81	0.45
78:Q2:93:LEU:HD13	78:Q2:93:LEU:O	5.09	0.45
18:C6:123:ARG:HA	18:C6:123:ARG:HD3	4.11	0.45
36:1:2259:A:OP2	87:1:3934:OHX:N2	2.50	0.44
36:1:1295:G:O2'	56:N0:115:ARG:HD3	2.17	0.44
36:5:3192:U:H2'	36:5:3193:C:H6	1.81	0.44
46:L9:20:ILE:HG23	46:L9:25:VAL:HG22	3.39	0.44
51:M5:81:TYR:CD1	51:M5:81:TYR:N	3.26	0.44
26:D4:109:LYS:O	26:D4:112:LYS:HB3	2.92	0.44
1:2:1795:U:H3'	28:D6:5:ARG:NH1	2.27	0.44
1:6:478:A:C2	1:6:511:A:N1	2.85	0.44
1:6:766:U:H3'	1:6:768:C:OP2	2.17	0.44
11:S9:110:GLN:HE22	11:S9:126:ARG:HA	4.87	0.44
44:L7:173:LEU:HD12	44:L7:173:LEU:HA	2.22	0.44
45:L8:74:THR:HG22	45:L8:230:LYS:HE3	1.99	0.44
36:1:1389:G:C6	36:1:1419:A:N6	2.85	0.44
41:L4:153:SER:OG	41:L4:155:ASP:N	2.24	0.44
41:L4:274:TYR:CD1	41:L4:275:THR:N	3.17	0.44
54:M8:23:ASN:O	54:M8:25:TYR:N	2.59	0.44
1:2:1402:G:H4'	19:C7:4:VAL:HG22	1.99	0.44
1:2:1368:G:C5	1:2:1369:U:C5	3.05	0.44
7:S5:116:HIS:HD2	27:D5:98:GLN:HB2	1.82	0.44
7:S5:145:ASP:OD1	30:D8:45:LYS:NZ	2.38	0.44
7:S5:177:ILE:HG12	7:S5:180:ARG:HH12	1.82	0.44
7:S5:42:LEU:HB2	7:S5:46:TRP:O	2.17	0.44
67:O1:30:PRO:O	67:O1:31:ARG:C	2.54	0.44
67:O1:41:LYS:O	67:O1:45:GLY:HA2	2.17	0.44
61:N5:63:ILE:HG13	61:N5:84:PHE:CD2	2.52	0.44
42:L5:51:LEU:HD23	42:L5:51:LEU:HA	4.48	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1428:G:H8	1:2:1428:G:H5'	1.82	0.44
12:C0:16:PHE:HE1	12:C0:73:VAL:HG12	6.71	0.44
17:C5:16:SER:HB3	17:C5:21:ASP:HA	2.49	0.44
15:C3:90:TYR:HA	15:C3:93:LYS:HB2	3.37	0.44
36:1:68:C:C5	36:1:315:C:H4'	2.52	0.44
19:C7:102:VAL:C	19:C7:104:ASN:H	4.73	0.44
23:D1:10:GLU:OE2	23:D1:10:GLU:HA	2.17	0.44
40:L3:271:GLY:O	40:L3:272:TYR:C	2.93	0.44
1:6:1699:G:N1	1:6:1702:A:H5''	2.32	0.44
48:M1:10:ARG:CZ	48:M1:10:ARG:HB2	2.47	0.44
36:1:1722:U:H2'	36:1:1723:A:O4'	2.17	0.44
63:N7:96:VAL:HA	63:N7:100:THR:OG1	4.49	0.44
1:6:872:G:H2'	1:6:873:U:O4'	2.17	0.44
73:O7:69:HIS:O	73:O7:72:ARG:HB3	2.17	0.44
6:S4:44:LEU:HD12	6:S4:65:LEU:HD21	3.31	0.44
36:5:1231:A:H2	36:5:1278:A:N7	2.15	0.44
18:C6:120:ASP:OD1	18:C6:122:ARG:N	2.27	0.44
18:C6:93:HIS:HA	18:C6:97:VAL:HG23	2.23	0.44
34:SR:222:LEU:HD23	34:SR:234:LEU:HD13	2.29	0.44
34:SR:293:ALA:O	34:SR:301:LEU:HD12	2.16	0.44
36:5:2666:C:OP2	36:5:2687:G:N1	2.42	0.44
36:5:1055:A:N7	36:5:1056:U:C5	2.85	0.44
29:D7:57:GLU:HG3	29:D7:58:SER:N	2.32	0.44
36:1:2554:A:C8	36:1:2554:A:H5'	2.51	0.44
1:2:989:U:H3	1:2:1015:U:H3	1.65	0.44
1:2:989:U:C4	1:2:990:C:N4	2.85	0.44
39:L2:112:ILE:HD11	79:Q3:79:VAL:HG13	4.52	0.44
1:2:151:G:N3	8:S6:13:GLN:NE2	2.47	0.44
52:M6:195:ALA:C	52:M6:197:LEU:H	2.93	0.44
36:1:188:U:H1'	36:1:208:C:O4'	2.16	0.44
36:1:210:U:C2	36:1:230:U:H4'	2.51	0.44
1:2:1537:C:C4	1:2:1572:G:O6	2.70	0.44
40:L3:43:LEU:HD12	40:L3:43:LEU:H	1.82	0.44
36:1:3181:C:C2	52:M6:168:TYR:CD2	3.04	0.44
1:6:1147:A:H2'	1:6:1148:C:H6	1.81	0.44
34:SR:297:ASP:C	34:SR:299:GLN:H	2.73	0.44
36:1:2226:U:C4	36:1:2227:C:N4	2.85	0.44
71:O5:118:ILE:HG22	71:O5:119:LYS:H	1.83	0.44
49:M3:73:ARG:HD3	49:M3:73:ARG:C	2.37	0.44
36:5:3033:A:H2'	36:5:3034:C:C6	2.53	0.44
26:D4:9:THR:HG22	26:D4:25:VAL:HG22	1.99	0.44
79:Q3:13:LYS:HG3	79:Q3:14:TYR:N	2.32	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
71:O5:35:LYS:HA	71:O5:41:LEU:HD23	1.99	0.44
40:L3:41:VAL:O	40:L3:41:VAL:HG12	3.05	0.44
37:3:113:C:N4	37:3:114:U:C4	2.86	0.44
35:SM:48:ARG:NH1	35:SM:51:ARG:HB2	2.31	0.44
17:C5:122:THR:HG21	1:6:1455:G:OP1	369.05	0.44
36:1:2194:G:H2'	36:1:2195:C:C6	2.52	0.44
60:N4:39:LEU:HD13	60:N4:39:LEU:HA	1.96	0.44
60:N4:38:SER:O	60:N4:42:GLN:HG3	3.87	0.44
4:S2:44:LEU:HD21	4:S2:246:GLU:C	2.38	0.44
4:S2:50:ILE:HD11	4:S2:239:PRO:CB	2.47	0.44
4:S2:147:ASN:O	4:S2:149:GLY:N	4.30	0.44
36:1:1919:G:C6	36:1:1920:U:C4	3.05	0.44
15:C3:20:ARG:NH1	24:D2:56:HIS:CE1	4.96	0.44
36:5:207:U:H2'	36:5:208:C:H6	1.82	0.44
34:SR:129:LYS:HD3	34:SR:148:ASN:O	2.16	0.44
36:1:1525:G:H2'	36:1:1594:A:C2	2.52	0.44
42:L5:21:ARG:C	42:L5:23:ARG:H	2.59	0.44
53:M7:82:ARG:HB3	53:M7:83:TRP:H	2.20	0.44
63:N7:107:ARG:O	63:N7:111:LYS:HG3	2.17	0.44
15:C3:83:GLU:H	15:C3:83:GLU:HG2	1.58	0.44
36:1:993:G:OP1	87:1:3890:OHX:N1	2.50	0.44
69:O3:20:LYS:HG2	69:O3:21:ARG:HG3	3.98	0.44
36:1:1117:G:C6	36:1:1118:C:C4	3.05	0.44
51:M5:185:ALA:HB3	51:M5:190:THR:HG22	3.06	0.44
45:L8:128:LYS:HE3	45:L8:130:TYR:CZ	5.08	0.44
1:6:407:A:O2'	1:6:1671:A:N3	2.42	0.44
36:5:1444:G:H1	36:5:2359:C:H42	1.65	0.44
36:5:1461:A:H2'	36:5:1462:A:O4'	2.17	0.44
1:6:365:G:C2	1:6:366:A:C8	3.05	0.44
1:2:1066:C:OP1	3:S1:151:LYS:NZ	2.36	0.44
24:D2:118:ARG:HD3	1:6:686:C:H4'	403.31	0.44
36:1:1781:C:H2'	36:1:1782:U:H6	1.82	0.44
5:S3:16:VAL:HG22	31:D9:50:ILE:HD13	3.83	0.44
1:6:717:C:H6	1:6:717:C:H2'	1.47	0.44
26:D4:64:PHE:CE1	1:6:767:U:C4	422.84	0.44
36:5:609:G:OP1	36:5:609:G:H4'	2.17	0.44
36:5:2994:A:O2'	38:8:1:A:N1	2.42	0.44
36:5:371:G:H1'	36:5:375:A:H61	1.83	0.44
1:6:1311:U:C2	1:6:1315:U:N3	2.85	0.44
26:D4:58:PHE:CE1	26:D4:90:ARG:CZ	3.37	0.44
58:N2:101:ASN:HA	58:N2:103:TYR:CZ	3.26	0.44
1:2:773:C:H6	1:2:773:C:O5'	2.00	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:97:GLU:HB3	6:S4:99:PHE:CE2	2.52	0.44
1:6:1680:G:OP2	1:6:1680:G:C8	2.70	0.44
36:1:1162:U:H4'	68:O2:57:TYR:CE1	2.53	0.44
13:C1:3:THR:HG22	13:C1:4:GLU:H	2.35	0.44
36:5:2623:G:H2'	36:5:2624:G:O4'	2.17	0.44
55:M9:175:GLN:HB3	55:M9:179:GLU:OE2	2.17	0.44
14:C2:37:VAL:HG12	14:C2:38:HIS:ND1	2.32	0.44
1:2:244:A:H2'	1:2:245:U:H6	1.83	0.44
33:E1:87:THR:HA	33:E1:88:PRO:HD2	1.78	0.44
26:D4:43:LYS:O	26:D4:47:VAL:HG23	2.17	0.44
73:O7:43:LYS:NZ	36:5:55:G:OP1	114.38	0.44
1:2:251:A:H2'	1:2:252:U:O4'	2.16	0.44
38:8:19:C:H2'	38:8:20:U:O4'	2.17	0.44
20:C8:86:LEU:N	20:C8:86:LEU:CD1	3.64	0.44
36:5:957:C:O2'	36:5:958:C:H5'	2.17	0.44
36:5:960:U:O2'	36:5:961:C:H5'	2.17	0.44
36:1:1191:U:OP2	52:M6:49:ARG:NH1	2.50	0.44
36:1:2865:U:C5	36:1:2866:U:C4	3.05	0.44
1:2:566:C:H2'	1:2:567:A:C8	2.52	0.44
36:1:1899:G:N1	36:1:2335:G:OP2	2.43	0.44
40:L3:356:LEU:HD23	40:L3:356:LEU:HA	2.62	0.44
76:Q0:121:LEU:HA	76:Q0:121:LEU:HD23	1.81	0.44
46:L9:34:LEU:HD23	46:L9:34:LEU:HA	1.86	0.44
36:1:1443:G:H2'	36:1:1444:G:C8	2.53	0.44
36:1:2356:A:C2	36:1:2357:A:N9	2.85	0.44
53:M7:36:ILE:O	53:M7:37:ASN:C	2.56	0.44
28:D6:38:ARG:HD3	28:D6:38:ARG:HA	4.05	0.44
1:6:477:A:N7	1:6:538:A:N6	2.66	0.44
11:S9:123:HIS:HE1	32:E0:37:ARG:HG3	2.60	0.44
44:L7:240:VAL:O	44:L7:244:ASN:N	2.76	0.44
61:N5:31:THR:HG23	36:5:2523:A:OP1	159.83	0.44
51:M5:19:LEU:HD12	51:M5:22:LEU:HD23	1.99	0.44
1:6:210:A:C6	1:6:211:U:C4	3.05	0.44
1:6:94:U:H2'	1:6:95:G:O4'	2.17	0.44
10:S8:184:LEU:HD12	10:S8:184:LEU:HA	1.80	0.44
10:S8:38:ILE:HA	10:S8:60:ILE:O	2.47	0.44
41:L4:198:ARG:CZ	41:L4:198:ARG:HB3	4.25	0.44
41:L4:33:ASP:OD1	41:L4:33:ASP:N	3.51	0.44
54:M8:19:PRO:HD3	54:M8:30:VAL:HG21	2.46	0.44
54:M8:42:ALA:HA	54:M8:43:PRO:HD3	1.71	0.44
54:M8:45:ASN:N	54:M8:45:ASN:HD22	2.13	0.44
30:D8:42:ARG:HH21	30:D8:56:LEU:HD13	7.25	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
67:O1:33:VAL:O	67:O1:36:ILE:N	2.60	0.44
67:O1:44:MET:HB3	67:O1:77:ARG:HD3	1.99	0.44
75:O9:5:LYS:HD3	75:O9:13:MET:HE1	3.91	0.44
42:L5:62:CYS:O	42:L5:105:ILE:HG13	2.17	0.44
42:L5:87:GLY:C	42:L5:88:ILE:HD12	2.37	0.44
1:6:1274:C:H4'	1:6:1275:A:O5'	2.17	0.44
17:C5:47:ARG:HH21	1:6:1555:A:P	402.06	0.44
1:6:878:G:H2'	1:6:879:G:H8	1.82	0.44
1:6:1784:C:H2'	1:6:1785:U:H6	1.81	0.44
15:C3:99:ARG:O	15:C3:102:LEU:N	2.72	0.44
1:6:987:G:H5''	1:6:988:A:OP1	2.17	0.44
16:C4:85:ALA:H	16:C4:119:THR:CG2	2.30	0.44
16:C4:20:TYR:HD1	16:C4:21:ALA:N	3.20	0.44
3:S1:65:VAL:HG23	3:S1:86:LEU:C	5.81	0.44
23:D1:71:ARG:HG3	23:D1:83:TRP:CZ3	2.52	0.44
63:N7:24:VAL:HG23	63:N7:26:VAL:HG13	1.98	0.44
36:5:1411:C:O2'	36:5:1412:G:H5'	2.17	0.44
14:C2:126:TRP:HD1	14:C2:127:GLY:N	3.13	0.44
50:M4:14:LEU:HA	50:M4:14:LEU:HD23	2.37	0.44
1:6:74:U:C5	1:6:76:A:OP2	2.70	0.44
56:N0:42:TRP:HH2	56:N0:56:GLY:HA3	1.82	0.44
69:O3:52:VAL:HG23	69:O3:52:VAL:H	1.82	0.44
34:SR:84:SER:H	34:SR:110:VAL:HB	1.81	0.44
40:L3:320:ASP:N	40:L3:320:ASP:OD2	2.49	0.44
39:L2:138:GLY:O	39:L2:147:ARG:HG3	6.26	0.44
56:N0:161:LYS:HD2	36:5:3209:A:P	281.46	0.44
36:1:1872:C:C5	36:1:1873:U:C5	3.06	0.44
72:O6:45:ARG:HH21	72:O6:50:LEU:HA	1.81	0.44
72:O6:99:ARG:HH11	72:O6:99:ARG:HG3	1.82	0.44
49:M3:119:TYR:HD1	49:M3:145:PHE:CE2	2.47	0.44
57:N1:105:PHE:O	57:N1:108:ARG:HB3	2.71	0.44
1:6:653:C:H5'	1:6:654:C:OP2	2.18	0.44
36:1:1677:G:N7	58:N2:74:LYS:NZ	2.45	0.44
36:5:3069:G:N1	36:5:3070:A:C5	2.85	0.44
49:M3:75:PHE:N	49:M3:97:VAL:HA	2.78	0.44
51:M5:38:ARG:HD3	51:M5:38:ARG:C	2.37	0.44
25:D3:7:ARG:N	1:6:1103:U:OP2	342.22	0.44
39:L2:209:HIS:HD2	39:L2:211:HIS:CB	2.26	0.44
33:E1:98:VAL:HG13	33:E1:99:LYS:H	1.80	0.44
26:D4:7:ILE:HD11	26:D4:40:LEU:HD22	1.99	0.44
36:5:1694:U:H3	36:5:1752:A:H61	1.63	0.44
74:O8:30:LYS:HD2	74:O8:40:GLN:CD	2.38	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1927:G:OP2	79:Q3:5:THR:HG22	2.18	0.44
4:S2:78:ASP:HB3	4:S2:129:ILE:HD13	1.99	0.44
37:3:113:C:C4	37:3:114:U:C4	3.05	0.44
36:5:3383:G:C6	36:5:3384:U:C4	3.06	0.44
47:M0:116:ARG:C	47:M0:118:ALA:H	4.26	0.44
36:1:2511:A:H2'	36:1:2512:C:O4'	2.17	0.44
36:5:3356:G:C2	36:5:3357:U:C2	3.06	0.44
36:1:2533:G:C4	36:1:2534:G:C8	3.05	0.44
57:N1:28:SER:O	57:N1:31:LEU:N	4.55	0.44
63:N7:55:LYS:C	63:N7:57:HIS:H	2.68	0.44
36:1:1889:G:H2'	36:1:1890:U:H6	1.82	0.44
38:4:123:G:C5	38:4:131:A:N1	2.85	0.44
36:1:3116:G:C3'	36:1:3117:C:H5'	2.47	0.44
36:5:1946:A:C6	36:5:1947:G:C6	3.05	0.44
36:1:994:G:OP1	57:N1:14:MET:HB2	2.17	0.44
36:5:3395:G:OP1	36:5:3395:G:H3'	2.16	0.44
54:M8:65:SER:HB3	54:M8:90:ASP:CB	3.51	0.44
56:N0:45:LEU:HD11	56:N0:49:HIS:CD2	3.03	0.44
28:D6:57:SER:OG	28:D6:58:VAL:N	3.44	0.44
36:5:2409:G:C2	36:5:2411:U:C6	3.04	0.44
24:D2:20:THR:HB	24:D2:22:LYS:HD3	1.99	0.44
42:L5:44:TYR:CE2	36:5:1084:A:H4'	229.67	0.44
25:D3:37:ALA:HB3	25:D3:38:PHE:HD2	4.11	0.44
36:1:1145:G:O2'	68:O2:45:ARG:O	2.25	0.44
22:D0:110:PRO:O	22:D0:112:VAL:HG23	2.40	0.44
53:M7:102:ALA:O	53:M7:107:LEU:HB2	2.18	0.44
36:5:1462:A:H2'	36:5:1462:A:N3	2.32	0.44
39:L2:16:PHE:O	39:L2:17:THR:O	2.34	0.44
1:2:1162:C:H1'	1:2:1616:G:N2	2.33	0.44
36:5:3239:G:N2	36:5:3240:C:C2	2.85	0.44
1:6:1324:G:O5'	1:6:1324:G:H8	2.00	0.44
8:S6:52:ILE:CG2	8:S6:109:LEU:HD21	3.56	0.44
33:E1:119:ARG:O	33:E1:131:PHE:HA	2.65	0.44
36:1:510:G:C6	36:1:511:G:N7	2.86	0.44
1:6:491:C:N4	1:6:496:G:O6	2.50	0.44
1:2:131:C:O2'	1:2:132:U:OP1	2.30	0.44
36:5:575:G:C6	36:5:576:C:N4	2.86	0.44
1:6:999:U:H3	1:6:1003:A:HO2'	1.59	0.44
36:1:3242:G:N2	36:1:3245:A:OP2	2.47	0.44
36:1:304:G:OP2	36:1:304:G:H3'	2.17	0.44
36:1:925:A:H61	39:L2:2:GLY:N	2.16	0.44
36:5:2730:G:C4	36:5:2799:A:N1	2.85	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1167:G:H2'	1:6:1168:U:H6	1.82	0.44
1:6:525:A:H2'	1:6:526:A:C8	2.52	0.44
24:D2:24:GLN:NE2	29:D7:5:GLN:HG2	2.32	0.44
36:1:2517:U:H2'	36:1:2518:C:C6	2.53	0.44
1:6:800:U:H2'	1:6:801:G:H8	1.82	0.44
41:L4:130:ALA:HA	41:L4:148:ILE:HG23	1.97	0.44
87:8:220:OHX:N2	87:8:229:OHX:N4	2.64	0.44
36:1:2598:G:C6	36:1:2599:U:C4	3.05	0.44
1:2:348:U:H2'	1:2:349:U:H6	1.82	0.44
34:SR:88:THR:HG22	34:SR:104:VAL:CG1	6.08	0.44
48:M1:74:PRO:O	48:M1:77:GLU:HG3	2.17	0.44
36:5:956:U:H6	36:5:956:U:O5'	2.01	0.44
67:O1:52:ALA:HB2	67:O1:92:TYR:CE2	2.52	0.44
40:L3:209:PHE:HB3	40:L3:282:ILE:HD13	2.00	0.44
36:1:235:A:C2	36:1:236:G:C4	3.05	0.44
66:O0:45:ALA:HB3	66:O0:48:THR:HG22	1.98	0.44
36:1:615:U:O2'	36:1:616:G:H5'	2.17	0.44
1:2:1342:C:H2'	1:2:1343:U:C6	2.52	0.44
25:D3:104:LEU:HD23	25:D3:104:LEU:HA	1.65	0.44
46:L9:22:SER:OG	46:L9:39:LYS:NZ	3.97	0.44
36:1:1511:U:H5''	36:1:1512:U:H5	1.82	0.44
36:1:2353:G:C2'	36:1:2354:C:H5'	2.47	0.44
53:M7:50:GLN:O	53:M7:53:ASP:N	2.43	0.44
1:6:992:A:C4	1:6:1013:A:C2	3.04	0.44
47:M0:39:LYS:HG2	47:M0:40:LYS:N	3.65	0.44
10:S8:106:ALA:O	10:S8:109:PHE:N	2.50	0.44
38:4:19:C:C5	38:4:20:U:C5	3.05	0.44
41:L4:206:LEU:HD22	41:L4:208:VAL:HG23	5.00	0.44
41:L4:261:VAL:HG12	41:L4:262:TRP:NE1	2.75	0.44
49:M3:35:ARG:HG2	49:M3:35:ARG:HH11	1.82	0.44
54:M8:29:LEU:HA	54:M8:29:LEU:HD23	1.89	0.44
1:6:1474:G:N2	1:6:1475:A:C4	2.86	0.44
20:C8:41:ARG:NH1	21:C9:38:LYS:HG3	2.32	0.44
27:D5:74:SER:HA	27:D5:77:ARG:HH21	1.81	0.44
42:L5:122:VAL:O	42:L5:122:VAL:HG13	2.17	0.44
42:L5:236:LEU:HA	42:L5:239:ILE:HG13	2.43	0.44
42:L5:244:HIS:O	42:L5:247:ILE:HB	2.45	0.44
42:L5:61:ILE:HG23	42:L5:79:TYR:CD1	2.53	0.44
1:2:1232:U:H4'	12:C0:2:LEU:HD21	1.98	0.44
21:C9:105:LEU:O	21:C9:108:LEU:N	2.38	0.44
1:6:977:A:N6	1:6:978:A:C2	2.85	0.44
36:5:1631:C:H5''	36:5:1632:A:H5''	1.99	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:133:TYR:CD2	3:S1:181:LEU:HD11	2.52	0.44
3:S1:70:LEU:CD1	3:S1:79:HIS:HB3	2.47	0.44
23:D1:52:THR:C	23:D1:53:TYR:HD1	2.94	0.44
4:S2:196:VAL:HG22	4:S2:197:TYR:N	2.31	0.44
36:1:3304:U:O3'	40:L3:334:ARG:NH2	2.48	0.44
54:M8:44:PHE:CD2	54:M8:134:GLY:HA3	2.70	0.44
48:M1:92:ARG:HH22	48:M1:94:ARG:NH1	2.15	0.44
38:4:65:A:C6	38:4:66:A:C5	3.06	0.44
1:2:1256:A:H4'	1:2:1257:U:O5'	2.18	0.44
36:1:3019:U:C4	36:1:3020:U:C4	3.05	0.44
17:C5:130:ARG:NH1	35:SM:74:LYS:HD3	2.32	0.44
11:S9:168:ARG:HD3	11:S9:174:ARG:CD	6.71	0.44
36:1:1129:A:C6	36:1:1130:A:C6	3.06	0.44
57:N1:54:HIS:O	57:N1:55:LYS:C	2.69	0.44
9:S7:130:VAL:O	9:S7:132:PRO:HD2	5.56	0.44
9:S7:46:ILE:HG12	9:S7:60:ILE:HG23	2.59	0.44
9:S7:58:LEU:HB2	9:S7:90:VAL:HG23	2.88	0.44
42:L5:268:GLU:HG2	37:7:121:U:C6	325.43	0.44
34:SR:205:SER:HB3	34:SR:210:LEU:H	3.93	0.44
34:SR:37:SER:HG	34:SR:38:ARG:H	1.65	0.44
34:SR:22:SER:CB	34:SR:70:ASP:HA	2.52	0.44
87:5:3973:OHX:N6	87:5:4193:OHX:N5	2.65	0.44
40:L3:286:GLY:HA3	40:L3:321:PHE:CD2	2.52	0.44
40:L3:286:GLY:HA3	40:L3:321:PHE:CE1	3.64	0.44
39:L2:140:ASN:OD1	39:L2:142:ASP:O	2.35	0.44
1:2:1574:G:C4	1:2:1574:G:OP2	2.70	0.44
36:5:3163:A:H2'	36:5:3164:C:C6	2.52	0.44
36:1:1481:A:C5	36:1:1859:A:C8	3.05	0.44
24:D2:126:LEU:HD23	24:D2:126:LEU:HA	1.92	0.44
49:M3:124:ILE:HD11	49:M3:126:PHE:CE1	2.51	0.44
36:1:1686:U:O2'	36:1:1688:U:H4'	2.17	0.44
36:1:2316:G:O2'	36:1:2317:A:H5'	2.18	0.44
39:L2:186:PHE:CD2	39:L2:187:HIS:N	2.85	0.44
61:N5:43:ALA:O	61:N5:44:PRO:O	3.02	0.44
40:L3:183:LEU:HD12	40:L3:183:LEU:HA	1.90	0.44
13:C1:101:GLU:CD	25:D3:16:ARG:HH21	2.20	0.44
10:S8:26:LYS:O	10:S8:29:LEU:HD22	2.18	0.44
36:1:2841:G:C5	36:1:2844:C:C4	3.05	0.44
36:1:2845:A:C2	36:1:2846:U:C2	3.05	0.44
36:5:2144:A:C4	36:5:2281:A:C6	3.06	0.44
36:5:1698:C:N4	36:5:1747:G:H1	2.16	0.44
36:5:1709:C:H2'	36:5:1710:C:H6	1.80	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2644:C:O2	47:M0:116:ARG:HD3	2.17	0.44
42:L5:55:PHE:CE1	42:L5:158:ARG:HB3	5.71	0.44
1:2:1489:U:H2'	1:2:1490:C:OP1	2.17	0.44
22:D0:49:ASN:O	22:D0:50:LEU:HD23	3.29	0.44
22:D0:57:ARG:HG3	22:D0:89:ARG:NE	2.32	0.44
56:N0:98:SER:O	56:N0:101:ALA:HB3	3.07	0.44
36:1:3110:C:O2	36:1:3110:C:H2'	2.17	0.44
36:1:1888:U:OP1	40:L3:228:GLY:HA3	2.16	0.44
36:1:1224:C:C2	36:1:1225:A:C8	3.05	0.44
53:M7:64:ASN:O	53:M7:67:ILE:HG12	3.87	0.44
53:M7:69:ARG:HH21	36:5:2992:U:H1'	191.68	0.44
36:1:830:A:H5'	36:1:830:A:H8	1.83	0.44
63:N7:103:GLN:O	63:N7:107:ARG:HG3	3.53	0.44
36:1:993:G:C4	36:1:2637:A:C2	3.05	0.44
36:1:2385:G:C4	36:1:3143:C:C5	3.05	0.44
49:M3:9:ILE:HG13	64:N8:49:HIS:CD2	3.72	0.44
58:N2:33:TYR:HE2	58:N2:63:VAL:HG21	3.07	0.44
1:6:271:A:H2'	1:6:271:A:N3	2.33	0.44
1:2:144:U:C2	1:2:145:A:C8	3.05	0.44
54:M8:182:LYS:HZ2	54:M8:182:LYS:HG2	1.55	0.44
40:L3:347:SER:HB3	40:L3:350:ALA:CB	3.13	0.44
53:M7:10:ASN:C	53:M7:12:ALA:H	2.20	0.44
44:L7:92:ILE:HG23	44:L7:92:ILE:HD12	1.64	0.44
55:M9:115:ILE:HD12	55:M9:120:TYR:HA	5.02	0.44
1:6:1097:U:H4'	1:6:1098:U:H5'	2.00	0.44
68:O2:15:LYS:HE3	68:O2:15:LYS:HB3	4.55	0.44
36:1:2376:G:C6	36:1:2377:G:C6	3.05	0.44
36:5:941:G:H8	36:5:941:G:O5'	2.00	0.44
45:L8:180:VAL:HG22	45:L8:181:LYS:H	1.83	0.44
1:6:225:A:C2'	1:6:226:A:H5'	2.48	0.44
18:C6:31:VAL:N	18:C6:34:SER:O	2.38	0.44
66:O0:69:TYR:N	66:O0:69:TYR:CD1	2.99	0.44
38:8:80:A:H8	38:8:80:A:OP2	2.00	0.44
36:1:776:U:O2	36:1:2720:G:C2	2.70	0.44
36:5:1559:A:C6	36:5:1582:C:N4	2.85	0.44
36:1:759:U:C2	36:1:773:G:N1	2.86	0.44
1:2:1658:G:C2	1:2:1659:A:C8	3.06	0.44
5:S3:182:LEU:HD12	5:S3:182:LEU:H	1.80	0.44
36:1:1621:A:N6	36:1:1823:A:H61	2.15	0.44
40:L3:115:LYS:O	40:L3:118:PHE:N	2.48	0.44
36:5:1336:U:H2'	36:5:1337:A:C8	2.48	0.44
1:6:892:A:C5	1:6:893:U:C5	3.06	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2578:U:H2'	36:5:2578:U:O2	2.18	0.44
39:L2:219:ILE:O	39:L2:221:LYS:N	2.60	0.44
1:6:1192:C:H3'	1:6:1193:A:H2'	1.98	0.44
15:C3:54:LEU:HD13	15:C3:60:VAL:HG21	1.98	0.44
36:1:829:U:H3	36:1:895:A:N6	2.15	0.44
1:2:348:U:O2'	1:2:349:U:H5'	2.17	0.44
1:2:265:A:C2	1:2:267:U:C4	3.05	0.44
64:N8:120:ASN:O	64:N8:141:ALA:HB1	2.17	0.44
16:C4:57:PRO:HB3	16:C4:100:ALA:CB	4.00	0.44
36:5:3312:U:OP1	87:5:4015:OHX:N1	2.50	0.44
40:L3:222:LYS:HB3	40:L3:222:LYS:HE2	4.12	0.44
22:D0:64:LYS:HE3	22:D0:64:LYS:HB2	1.69	0.44
1:6:141:U:H6	1:6:141:U:H2'	1.66	0.44
36:1:212:G:O2'	41:L4:223:PRO:HD3	2.17	0.44
36:1:296:A:C5	36:1:297:G:C6	3.04	0.44
36:1:30:G:H2'	36:1:30:G:N3	2.30	0.44
55:M9:24:LEU:HD13	55:M9:32:ILE:HG21	5.62	0.44
1:2:431:C:O5'	1:2:431:C:H6	1.99	0.44
76:Q0:96:CYS:CB	76:Q0:99:CYS:SG	3.06	0.44
36:5:2170:U:C2	36:5:2171:G:C8	3.04	0.44
36:5:1449:A:C2	36:5:2356:A:C4	3.05	0.44
1:6:477:A:N6	1:6:538:A:C2	2.85	0.44
11:S9:158:PHE:CD2	11:S9:164:PHE:HB3	2.52	0.44
11:S9:93:LEU:HA	11:S9:93:LEU:HD12	3.92	0.44
11:S9:95:TYR:O	11:S9:98:ALA:N	2.51	0.44
87:1:4032:OHX:N2	87:1:4044:OHX:N1	2.66	0.44
44:L7:229:PHE:CD1	44:L7:229:PHE:C	2.92	0.44
1:6:329:G:H2'	1:6:330:G:C8	2.51	0.44
26:D4:76:TYR:HE2	26:D4:85:PHE:HB2	1.82	0.44
55:M9:176:ARG:HD2	1:6:853:G:OP1	336.35	0.44
36:1:526:C:H42	36:1:566:G:H1	1.66	0.44
18:C6:49:TYR:O	18:C6:53:LEU:HG	2.17	0.44
27:D5:90:LYS:H	27:D5:101:TYR:HB3	1.81	0.44
46:L9:101:VAL:HG12	46:L9:136:PHE:CZ	2.74	0.44
4:S2:203:LYS:C	4:S2:205:ARG:H	2.62	0.44
67:O1:88:PRO:HG2	67:O1:89:LEU:CD1	3.84	0.44
42:L5:197:SER:O	42:L5:201:GLY:N	2.55	0.44
42:L5:85:ARG:HD3	42:L5:86:TYR:CE2	2.53	0.44
1:2:1253:U:H5''	33:E1:130:VAL:HB	1.99	0.44
17:C5:15:HIS:ND1	17:C5:110:GLU:OE2	2.49	0.44
20:C8:91:ASP:HB3	20:C8:95:GLY:N	2.26	0.44
21:C9:53:TRP:CG	21:C9:54:PHE:N	3.33	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:M1:109:HIS:HD2	48:M1:123:PHE:N	2.10	0.44
5:S3:55:THR:HA	5:S3:58:VAL:CG2	2.48	0.44
15:C3:127:ARG:HE	15:C3:127:ARG:HB2	2.30	0.44
3:S1:84:ILE:HD12	3:S1:84:ILE:HG23	3.78	0.44
4:S2:63:VAL:O	4:S2:134:LEU:HD22	5.52	0.44
4:S2:35:TRP:CE2	4:S2:37:PRO:HB3	2.53	0.44
36:1:1720:U:C4	55:M9:124:TYR:CE2	3.06	0.44
63:N7:27:LYS:HD3	63:N7:96:VAL:O	4.61	0.44
55:M9:38:ARG:O	55:M9:42:ARG:HB2	2.16	0.44
73:O7:74:PHE:C	73:O7:76:ASN:H	2.86	0.44
1:6:1179:G:C5	1:6:1180:C:C4	3.05	0.44
31:D9:9:SER:HA	1:6:1451:C:H5'	409.81	0.44
6:S4:102:VAL:HG21	6:S4:182:TYR:CE1	2.52	0.44
36:5:559:A:C2'	36:5:560:G:O5'	2.66	0.44
50:M4:86:ALA:O	50:M4:89:ALA:N	2.50	0.44
56:N0:14:LEU:HA	56:N0:15:PRO:HD3	1.88	0.44
1:2:1155:G:C6	1:2:1156:C:C4	3.05	0.44
1:6:65:A:H2	1:6:67:A:N7	2.14	0.44
34:SR:33:LEU:O	34:SR:45:TRP:HD1	2.11	0.44
62:N6:58:VAL:HA	62:N6:104:LEU:HD22	2.66	0.44
40:L3:305:ILE:HD11	40:L3:321:PHE:CE2	2.52	0.44
36:1:2157:G:O6	39:L2:152:SER:N	2.48	0.44
39:L2:118:GLU:HG2	39:L2:156:LYS:HZ3	1.82	0.44
41:L4:221:ASN:HB2	36:5:211:A:OP1	80.47	0.44
70:O4:4:ARG:HD2	36:5:1485:G:N2	151.05	0.44
36:5:2211:U:H5	36:5:2234:G:H1	1.64	0.44
40:L3:132:LYS:O	40:L3:135:ALA:HB3	2.17	0.44
40:L3:137:TYR:CZ	40:L3:144:ILE:HD12	2.52	0.44
49:M3:76:THR:HG22	49:M3:101:ARG:HG2	2.30	0.44
51:M5:143:ARG:HB3	71:O5:96:GLU:OE2	3.94	0.44
13:C1:100:TYR:HB2	25:D3:10:ASN:OD1	2.22	0.44
37:7:10:C:H1'	37:7:13:A:N1	2.33	0.44
1:2:1084:A:O2'	1:2:1085:G:H5'	2.16	0.44
36:1:3139:A:C5'	36:1:3139:A:C8	2.99	0.44
1:2:966:A:H2'	1:2:967:A:H8	1.82	0.44
42:L5:155:THR:N	42:L5:179:ARG:HH11	2.16	0.44
36:5:1699:A:C6	36:5:1747:G:C6	3.05	0.44
36:5:549:U:H2'	36:5:550:A:H8	1.82	0.44
52:M6:77:SER:OG	52:M6:78:ARG:N	2.50	0.44
41:L4:295:ILE:HG23	41:L4:299:ILE:HD11	2.01	0.44
59:N3:40:LYS:HB2	59:N3:57:MET:O	2.17	0.44
58:N2:90:ARG:C	58:N2:92:TRP:N	2.83	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:7:30:G:C6	37:7:31:U:C5	3.05	0.44
36:1:2591:A:C2'	36:1:2592:G:H5'	2.48	0.44
36:5:216:G:H2'	36:5:217:U:C6	2.52	0.44
38:4:122:U:H2'	38:4:123:G:C8	2.52	0.44
38:4:123:G:C2	38:4:124:G:C4	3.05	0.44
1:6:641:G:H2'	1:6:642:G:O4'	2.18	0.44
37:3:3:U:C2	37:3:4:U:C5	3.06	0.44
10:S8:140:GLU:HG2	10:S8:143:TRP:CE3	6.39	0.44
10:S8:73:SER:O	10:S8:74:LYS:HD2	2.17	0.44
25:D3:23:ARG:O	25:D3:26:GLU:HB2	2.17	0.44
36:1:1223:A:N6	36:1:1286:A:C5	2.86	0.44
36:5:1878:G:OP1	87:5:3952:OHX:N5	2.51	0.44
1:2:276:C:N4	1:2:281:G:H1	2.15	0.44
36:5:162:G:C2	36:5:260:C:O2	2.70	0.44
69:O3:92:LYS:O	36:5:3173:G:N1	227.03	0.44
36:1:1086:C:H1'	65:N9:47:LEU:HD21	1.98	0.44
69:O3:88:ASN:HB2	36:5:429:U:H4'	215.75	0.44
1:2:1308:G:N2	1:2:1318:G:H1'	2.31	0.44
36:1:660:A:H5''	41:L4:100:PHE:CD1	2.52	0.44
1:6:1433:G:H2'	1:6:1434:U:H6	1.79	0.44
62:N6:77:LYS:HD3	75:O9:31:THR:CG2	2.47	0.44
10:S8:89:GLU:OE1	10:S8:92:ARG:NH2	2.50	0.44
1:2:939:A:C6	1:2:940:A:C6	3.06	0.44
36:1:1237:G:H2'	36:1:1237:G:N3	2.32	0.44
36:5:2807:U:H2'	36:5:2810:C:C5	2.52	0.44
36:1:1520:G:C2	36:1:1521:G:C4	3.06	0.44
74:O8:31:LEU:HD12	74:O8:35:GLY:HA2	3.47	0.44
11:S9:115:LYS:HD2	11:S9:115:LYS:HA	1.61	0.44
6:S4:23:LEU:CD1	11:S9:4:ALA:HB3	2.48	0.44
36:1:1131:G:C2	36:1:2373:A:C5	3.04	0.44
1:2:47:A:C2	1:2:100:A:N3	2.85	0.44
36:1:1529:A:OP2	36:1:1592:G:N2	2.45	0.44
36:1:1591:G:O6	36:1:1592:G:C6	2.71	0.44
1:6:849:C:H2'	1:6:850:A:H8	1.81	0.44
37:3:100:C:P	56:N0:52:LYS:NZ	2.91	0.44
1:6:1363:U:H3'	1:6:1364:G:H8	1.82	0.44
36:5:1293:U:C2'	36:5:1294:A:H5'	2.48	0.44
6:S4:252:ARG:NH1	11:S9:71:PHE:HD2	2.15	0.44
1:2:881:A:H2'	1:2:882:U:O4'	2.18	0.44
36:5:67:A:OP2	87:5:3950:OHX:N6	2.50	0.44
6:S4:183:VAL:CG2	6:S4:191:ARG:HB2	4.17	0.44
1:2:1632:C:O5'	1:2:1632:C:H6	2.01	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1605:A:N1	36:5:1608:C:H1'	2.32	0.44
1:2:106:U:H2'	1:2:107:C:O4'	2.18	0.44
38:8:77:A:H2'	38:8:78:G:O4'	2.17	0.44
53:M7:134:GLY:H	36:5:883:A:P	158.88	0.44
78:Q2:99:GLN:O	78:Q2:99:GLN:HG2	3.11	0.44
36:1:3129:A:H2'	36:1:3130:A:H5''	1.98	0.44
36:5:1202:A:N6	36:5:1301:A:C4	2.85	0.44
24:D2:3:ARG:HG2	24:D2:3:ARG:HH11	4.00	0.44
36:5:3137:C:H6	36:5:3137:C:O5'	2.00	0.44
28:D6:41:ILE:H	28:D6:41:ILE:HG12	1.49	0.44
39:L2:75:ILE:HD13	39:L2:75:ILE:HG21	1.71	0.44
52:M6:48:PHE:CZ	36:5:1191:U:C2	287.31	0.44
36:5:3311:C:OP1	87:5:4225:OHX:N1	2.51	0.44
25:D3:76:LEU:HD23	25:D3:76:LEU:N	2.33	0.44
36:5:2656:A:C2	36:5:2658:G:C6	3.06	0.44
1:2:1641:C:C6	88:2:2181:GET:H931	2.53	0.44
40:L3:212:ASN:C	40:L3:281:LYS:HZ2	2.20	0.44
52:M6:68:ARG:HG2	52:M6:68:ARG:H	1.56	0.44
36:1:3191:G:H2'	36:1:3192:U:H6	1.83	0.44
46:L9:29:GLY:C	46:L9:31:ARG:H	3.11	0.44
51:M5:85:THR:HG23	87:Q2:502:OHX:N2	2.32	0.44
36:1:2983:C:O2	36:1:2983:C:O4'	2.32	0.44
26:D4:113:ASN:HA	26:D4:116:LYS:HB2	1.99	0.44
28:D6:24:VAL:HG11	28:D6:71:LEU:HD12	2.00	0.44
11:S9:134:ILE:HD13	11:S9:141:VAL:N	4.96	0.44
47:M0:199:PHE:N	47:M0:199:PHE:CD2	2.94	0.44
47:M0:46:PHE:CD2	47:M0:139:ARG:HG3	3.21	0.44
44:L7:127:LEU:HA	44:L7:127:LEU:HD23	3.71	0.44
44:L7:173:LEU:HD21	44:L7:198:ALA:HA	1.99	0.44
1:2:398:G:OP1	10:S8:50:GLY:N	2.43	0.44
1:6:448:C:H2'	1:6:449:C:H6	1.82	0.44
10:S8:31:ARG:NH2	10:S8:48:THR:HA	2.33	0.44
41:L4:230:VAL:CG1	41:L4:250:TRP:HZ3	3.59	0.44
43:L6:134:ARG:HA	43:L6:134:ARG:HD2	3.40	0.44
43:L6:98:VAL:O	43:L6:98:VAL:HG13	2.18	0.44
1:2:1388:A:HO2'	1:2:1411:A:H2	1.64	0.44
1:6:1403:C:O2'	1:6:1404:C:H5'	2.18	0.44
7:S5:109:LYS:NZ	1:6:1474:G:OP1	364.52	0.44
1:6:1546:G:H2'	1:6:1547:A:O4'	2.17	0.44
30:D8:44:VAL:HG11	30:D8:48:VAL:HG21	2.74	0.44
87:1:4180:OHX:N4	40:L3:364:LYS:HB3	2.32	0.44
36:5:3380:U:C4	36:5:3381:U:O4	2.70	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
67:O1:33:VAL:O	67:O1:34:LYS:C	2.78	0.44
42:L5:122:VAL:HG23	42:L5:123:GLU:H	3.38	0.44
1:2:1481:C:O2'	1:2:1482:C:P	2.74	0.44
12:C0:3:MET:HB2	12:C0:4:PRO:HD2	1.99	0.44
21:C9:73:VAL:HG23	21:C9:105:LEU:HD12	2.00	0.44
1:2:1428:G:N2	22:D0:74:GLU:OE1	2.51	0.44
5:S3:76:ARG:HD3	5:S3:76:ARG:O	3.78	0.44
36:1:268:A:OP1	51:M5:47:LYS:HD2	2.18	0.44
1:2:977:A:H2'	1:2:978:A:O4'	2.17	0.44
63:N7:47:GLU:HB3	63:N7:69:LYS:HG2	2.87	0.44
3:S1:87:ARG:HB2	3:S1:101:HIS:CB	3.64	0.44
36:1:1710:C:C2	36:1:1735:G:N2	2.85	0.44
55:M9:106:LEU:HD12	55:M9:106:LEU:HA	1.63	0.44
55:M9:125:LYS:HB3	55:M9:125:LYS:NZ	2.32	0.44
63:N7:3:LYS:HE2	63:N7:30:ASP:OD1	2.17	0.44
68:O2:85:LEU:N	68:O2:85:LEU:HD23	2.32	0.44
1:6:955:A:C6	1:6:956:C:N3	2.85	0.44
29:D7:67:THR:OG1	29:D7:68:GLY:N	3.13	0.44
14:C2:54:ARG:HG2	14:C2:56:GLU:OE1	2.18	0.44
36:1:3188:G:C2	36:1:3189:G:C5	3.06	0.44
36:1:3225:C:H42	36:1:3260:G:H1	1.64	0.44
1:2:78:A:H1'	8:S6:175:ILE:HD11	1.99	0.44
34:SR:103:PHE:HE1	34:SR:122:ILE:HD12	1.82	0.44
34:SR:211:ILE:HG22	34:SR:223:TRP:CD1	2.51	0.44
36:5:342:A:C5	36:5:349:A:N7	2.85	0.44
72:O6:83:ALA:O	72:O6:87:VAL:HG23	3.82	0.44
40:L3:305:ILE:HG13	40:L3:305:ILE:H	1.24	0.44
40:L3:81:THR:HG21	40:L3:322:ILE:HG12	2.57	0.44
36:1:2176:U:H2'	36:1:2177:G:H5'	2.00	0.44
49:M3:172:LEU:HA	49:M3:172:LEU:HD23	1.72	0.44
36:5:511:G:N2	36:5:512:U:O2	2.51	0.44
40:L3:122:TRP:CE2	40:L3:127:LYS:HE2	4.24	0.44
52:M6:8:VAL:HG21	52:M6:116:LYS:O	2.67	0.44
36:5:1340:G:C5	36:5:1341:U:C5	3.06	0.44
38:8:144:G:O2'	38:8:145:U:H5'	2.17	0.44
51:M5:173:GLY:O	51:M5:183:THR:O	2.36	0.44
51:M5:42:PRO:HD3	51:M5:61:ILE:HG13	1.99	0.44
33:E1:103:LEU:HD23	33:E1:105:TYR:CD2	3.59	0.44
36:1:2317:A:C6	36:1:2318:U:C4	3.06	0.44
79:Q3:14:TYR:HB3	79:Q3:18:TYR:CE1	2.53	0.44
79:Q3:14:TYR:HB3	79:Q3:18:TYR:HE1	1.93	0.44
36:5:247:C:H3'	36:5:248:U:C6	2.51	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:736:C:C4	1:2:737:A:N7	2.86	0.44
36:5:2960:C:H2'	36:5:2961:G:C8	2.52	0.44
44:L7:24:GLU:O	44:L7:26:VAL:HG22	2.18	0.44
52:M6:77:SER:HB3	52:M6:106:GLU:OE1	2.57	0.44
4:S2:242:ILE:C	4:S2:244:SER:H	2.74	0.44
36:1:1919:G:C5	36:1:1920:U:C5	3.06	0.44
13:C1:10:GLU:HB3	13:C1:12:ALA:O	2.17	0.44
42:L5:11:ALA:O	42:L5:14:SER:N	2.71	0.44
22:D0:57:ARG:HG3	22:D0:89:ARG:NH2	2.92	0.44
1:6:742:U:H3'	1:6:744:U:OP2	2.16	0.44
19:C7:33:ARG:NH2	34:SR:109:ASP:OD2	3.27	0.44
46:L9:6:THR:HB	46:L9:68:LEU:HD12	1.99	0.44
63:N7:53:VAL:HG23	63:N7:57:HIS:HD2	1.82	0.44
8:S6:22:HIS:HA	8:S6:25:ARG:NH2	5.33	0.44
40:L3:238:LEU:HB3	40:L3:239:PRO:CD	2.48	0.44
36:1:1565:G:N2	36:1:1574:C:C2	2.86	0.44
10:S8:12:SER:HA	10:S8:18:ARG:HH22	1.82	0.44
36:5:1036:A:C6	36:5:1037:C:N3	2.86	0.44
36:1:1447:G:OP1	53:M7:65:SER:N	2.49	0.44
59:N3:81:GLN:O	59:N3:82:ALA:HB2	2.16	0.44
55:M9:59:SER:C	55:M9:61:SER:H	2.41	0.44
36:5:2363:A:C2	36:5:2376:G:C6	3.06	0.44
36:5:2997:G:N2	36:5:3395:G:O4'	2.42	0.44
41:L4:317:PRO:O	41:L4:318:LEU:C	2.52	0.44
36:1:733:G:O6	87:1:4064:OHX:N2	2.51	0.44
22:D0:28:SER:HB2	22:D0:112:VAL:HA	1.99	0.44
1:2:126:A:C6	1:2:292:U:C2	3.05	0.44
1:6:244:A:N1	1:6:250:C:C2	2.86	0.44
36:5:1467:A:C4	36:5:1511:U:C4	3.05	0.44
1:6:139:C:C4	1:6:176:C:C6	3.06	0.44
4:S2:159:THR:HA	4:S2:167:VAL:O	2.18	0.44
4:S2:180:ALA:HB2	4:S2:198:THR:HG21	1.99	0.44
36:1:1664:G:H2'	36:1:1665:C:H6	1.82	0.44
1:2:1192:C:O2'	18:C6:140:LYS:NZ	2.42	0.44
36:5:3237:U:H2'	36:5:3238:G:O4'	2.18	0.44
1:6:1645:G:H2'	1:6:1646:C:H6	1.81	0.44
18:C6:32:ASN:OD1	18:C6:69:VAL:HG23	2.60	0.44
48:M1:37:LEU:HD23	48:M1:37:LEU:HA	1.74	0.44
1:6:763:G:C5	1:6:764:U:C5	3.06	0.44
65:N9:12:GLN:CD	36:5:954:U:H1'	213.10	0.44
33:E1:117:LEU:HD23	33:E1:117:LEU:HA	2.00	0.44
67:O1:98:VAL:HG22	67:O1:99:ALA:N	2.75	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2411:U:O2	36:1:2811:A:H2	2.00	0.44
36:5:2607:G:N2	36:5:2608:G:H1'	2.32	0.44
1:2:577:G:C3'	1:2:577:G:C8	3.00	0.44
17:C5:124:THR:OG1	17:C5:124:THR:O	2.36	0.44
36:5:278:U:H2'	36:5:279:U:C6	2.52	0.44
35:SM:37:VAL:HA	35:SM:38:PRO:HD2	1.94	0.44
36:1:351:A:H61	75:O9:39:ALA:H	1.64	0.44
36:5:1915:A:H2'	36:5:1916:U:C6	2.52	0.44
1:6:548:G:C2	1:6:549:G:C4	3.05	0.44
36:5:1560:G:HO2'	36:5:1561:G:P	2.40	0.44
36:5:2977:G:H5''	36:5:2977:G:H8	1.83	0.44
1:2:925:G:H8	1:2:925:G:O5'	2.00	0.44
68:O2:110:ALA:O	68:O2:113:LYS:HB3	2.79	0.44
1:6:597:G:H2'	1:6:598:U:O4'	2.17	0.44
36:1:189:G:C6	36:1:206:G:C5	3.06	0.44
25:D3:59:ILE:HG13	25:D3:71:CYS:SG	2.58	0.44
46:L9:16:VAL:HB	46:L9:28:VAL:O	3.15	0.44
36:1:39:A:O2'	36:1:94:G:N2	2.49	0.44
53:M7:36:ILE:O	53:M7:39:TRP:HD1	2.30	0.44
53:M7:87:SER:O	53:M7:88:VAL:C	2.59	0.44
47:M0:179:PRO:HG2	47:M0:180:GLU:H	2.50	0.44
47:M0:205:SER:HG	47:M0:208:ASN:N	2.15	0.44
36:1:1103:A:H1'	36:1:1104:G:OP1	2.17	0.44
41:L4:332:LYS:HE3	36:5:599:C:OP1	273.47	0.44
44:L7:184:LEU:C	44:L7:186:HIS:N	2.71	0.44
44:L7:243:MET:HE2	44:L7:243:MET:HB3	2.28	0.44
45:L8:230:LYS:HZ1	72:O6:47:ILE:HG23	1.82	0.44
45:L8:61:GLN:HB2	51:M5:28:TRP:CH2	3.19	0.44
41:L4:274:TYR:HE1	41:L4:276:LEU:HD23	1.83	0.44
1:6:1570:A:H2'	1:6:1571:C:O4'	2.17	0.44
1:6:1572:G:H5''	1:6:1574:G:N2	2.33	0.44
18:C6:52:LEU:HA	18:C6:55:VAL:HG12	1.99	0.44
21:C9:70:GLN:CD	21:C9:119:LYS:HD2	2.37	0.44
21:C9:88:VAL:HG23	1:6:1542:G:H4'	355.39	0.44
7:S5:33:VAL:HG12	7:S5:34:GLN:N	2.52	0.44
7:S5:59:VAL:C	7:S5:61:TYR:N	2.88	0.44
61:N5:75:LYS:HB3	61:N5:81:ILE:HB	2.41	0.44
61:N5:92:LYS:HA	61:N5:95:ILE:HD12	2.69	0.44
17:C5:15:HIS:N	17:C5:22:LEU:HD13	6.98	0.44
20:C8:115:ARG:O	20:C8:118:LYS:N	2.50	0.44
31:D9:21:CYS:HB2	31:D9:39:CYS:HB3	2.77	0.44
33:E1:123:ASN:HD22	33:E1:125:THR:HG23	1.82	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:S3:72:LEU:HG	12:C0:20:VAL:HG21	3.09	0.44
15:C3:72:MET:HB3	15:C3:72:MET:HE3	4.95	0.44
36:5:2128:C:OP1	87:5:4085:OHX:N3	2.51	0.44
1:6:1638:G:C6	1:6:1639:C:C2	3.05	0.44
1:6:887:A:H2'	1:6:888:U:C6	2.52	0.44
16:C4:117:ASP:HB2	28:D6:67:THR:CG2	2.47	0.44
68:O2:50:ILE:H	68:O2:50:ILE:HG23	1.43	0.44
2:S0:67:ILE:HA	2:S0:68:PRO:HD3	1.69	0.44
54:M8:64:VAL:O	54:M8:67:ILE:HG22	2.17	0.44
78:Q2:89:LYS:HG3	36:5:2652:U:O3'	235.04	0.44
63:N7:95:VAL:HG13	63:N7:110:ALA:HB1	2.00	0.44
70:O4:90:ILE:O	70:O4:94:LEU:HB2	2.52	0.44
1:2:1070:C:H4'	29:D7:17:ARG:HB2	2.00	0.44
36:1:1874:A:N7	55:M9:20:ARG:CZ	2.81	0.44
36:5:186:U:H5''	36:5:187:A:OP2	2.17	0.44
62:N6:29:VAL:O	62:N6:32:SER:HB3	4.08	0.44
39:L2:177:LYS:HA	39:L2:178:PRO:HD3	1.81	0.44
14:C2:58:LEU:HG	14:C2:124:LYS:HA	1.99	0.44
1:2:1455:G:C2	1:2:1456:C:C5	3.06	0.44
6:S4:117:GLU:O	6:S4:118:GLU:HB3	4.51	0.44
52:M6:108:ILE:HA	52:M6:109:PRO:HD3	2.28	0.44
52:M6:108:ILE:HG21	52:M6:160:ARG:NH1	4.44	0.44
47:M0:11:TYR:CD1	47:M0:11:TYR:N	3.03	0.44
57:N1:42:ILE:H	57:N1:42:ILE:HD12	4.48	0.44
69:O3:71:VAL:O	69:O3:71:VAL:HG12	2.17	0.44
9:S7:49:ILE:HD11	9:S7:172:VAL:HG22	1.99	0.44
1:6:168:A:H2'	1:6:169:A:C8	2.53	0.44
34:SR:19:TRP:CD1	34:SR:306:THR:O	2.70	0.44
40:L3:285:VAL:HG22	40:L3:322:ILE:HD13	1.99	0.44
3:S1:194:ASN:ND2	3:S1:211:HIS:HA	2.56	0.44
1:6:1765:A:H5'	1:6:1767:G:N7	2.31	0.44
8:S6:67:VAL:HB	8:S6:68:LEU:O	2.54	0.44
49:M3:79:GLU:HA	49:M3:113:VAL:HG23	1.99	0.44
36:5:706:A:C5	36:5:707:U:C5	3.06	0.44
71:O5:67:ARG:NH1	71:O5:80:LEU:HB3	2.32	0.44
71:O5:42:PRO:O	71:O5:44:ILE:N	2.50	0.44
36:5:3139:A:C2'	36:5:3140:G:H5'	2.47	0.44
36:5:2240:G:C6	36:5:2241:U:N3	2.85	0.44
36:1:87:U:O4	36:1:98:G:H2'	2.18	0.44
42:L5:177:GLU:C	42:L5:179:ARG:H	2.21	0.44
13:C1:92:HIS:HB2	13:C1:103:ARG:HG3	1.99	0.44
24:D2:72:CYS:O	24:D2:72:CYS:SG	3.65	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:L6:35:VAL:HA	43:L6:36:PRO:HD2	1.84	0.44
44:L7:30:ARG:HE	44:L7:34:LYS:HE3	4.70	0.44
1:6:861:U:H5'	1:6:862:A:OP2	2.18	0.44
1:6:973:A:H5'	36:5:848:A:C2	2.53	0.44
36:5:2777:G:H4'	36:5:2778:G:H5''	1.99	0.44
1:6:1346:A:H4'	1:6:1347:U:OP1	2.17	0.44
21:C9:74:GLY:HA3	1:6:1498:G:OP2	415.61	0.44
21:C9:75:LYS:HE3	1:6:1520:U:OP2	420.01	0.44
22:D0:20:ILE:HG13	22:D0:95:ALA:O	2.18	0.44
25:D3:95:PHE:CE1	25:D3:135:LEU:HB3	2.53	0.44
36:1:2535:A:H3'	36:1:2536:A:C8	2.53	0.44
76:Q0:94:SER:OG	76:Q0:105:PRO:HA	2.18	0.44
87:1:4000:OHX:N4	38:4:139:U:O4	2.50	0.44
15:C3:84:ILE:H	15:C3:84:ILE:HD13	4.23	0.44
36:5:2881:C:C2	36:5:2882:U:C5	3.05	0.44
11:S9:7:THR:O	11:S9:8:TYR:HB3	2.63	0.44
38:4:12:A:OP1	53:M7:3:ARG:NH2	2.50	0.44
71:O5:15:GLU:HA	71:O5:18:ALA:CB	4.46	0.44
9:S7:182:VAL:HG12	9:S7:183:PHE:N	2.31	0.44
41:L4:216:VAL:HG23	41:L4:217:LYS:HG3	1.99	0.44
36:5:941:G:H1'	36:5:1435:A:H1'	1.99	0.44
36:5:941:G:C6	36:5:942:U:N3	2.85	0.44
1:2:377:G:H4'	1:2:379:U:O4	2.18	0.44
36:5:2793:G:N7	87:5:3985:OHX:N1	2.66	0.44
8:S6:84:TYR:CZ	8:S6:86:PRO:HA	2.53	0.44
18:C6:73:GLY:H	18:C6:76:SER:HB2	1.83	0.44
4:S2:139:ILE:CD1	4:S2:218:ILE:HB	2.64	0.44
1:6:1313:A:O2'	1:6:1315:U:OP1	2.29	0.44
61:N5:137:ASN:N	61:N5:137:ASN:OD1	3.98	0.44
36:5:2633:U:H2'	36:5:2634:U:O4'	2.18	0.44
78:Q2:8:ARG:NH1	78:Q2:8:ARG:HG2	2.29	0.44
36:1:1025:A:C8	36:1:1025:A:OP1	2.71	0.44
36:5:795:G:C6	36:5:796:U:C5	3.05	0.44
36:5:2947:G:H21	36:5:2948:C:H1'	1.82	0.44
45:L8:207:ASP:O	45:L8:211:LEU:N	3.27	0.44
12:C0:27:PHE:HB3	1:6:1217:A:C2	424.90	0.44
50:M4:53:VAL:HG23	50:M4:54:PRO:O	2.18	0.44
36:1:1867:A:H2'	36:1:1868:G:O4'	2.18	0.44
36:5:1176:C:H42	36:5:1310:G:H1	1.65	0.44
1:2:246:G:O6	13:C1:67:ARG:HB2	2.18	0.44
55:M9:45:VAL:HG22	55:M9:50:ILE:HB	1.99	0.44
53:M7:96:GLN:O	53:M7:99:ALA:HB3	2.17	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1240:U:H2'	1:2:1242:A:OP2	2.18	0.44
36:1:1087:G:C2'	36:1:1088:U:H5'	2.48	0.44
17:C5:50:THR:O	17:C5:50:THR:OG1	2.31	0.44
46:L9:122:LYS:NZ	46:L9:122:LYS:HB2	2.33	0.44
11:S9:24:LEU:HD23	11:S9:24:LEU:HA	2.03	0.44
1:6:121:U:H2'	1:6:122:U:O4'	2.17	0.44
56:N0:114:HIS:O	56:N0:115:ARG:C	2.55	0.44
51:M5:80:THR:O	51:M5:81:TYR:O	2.38	0.44
51:M5:89:VAL:C	51:M5:92:LEU:HD13	2.38	0.44
36:5:1495:U:H4'	36:5:1514:G:H4'	2.00	0.44
44:L7:43:ILE:HG22	44:L7:44:ILE:N	2.32	0.44
10:S8:106:ALA:HB1	10:S8:160:PHE:CD1	2.53	0.44
41:L4:187:LEU:HD23	41:L4:198:ARG:O	2.17	0.44
41:L4:198:ARG:HB2	41:L4:199:TRP:CD1	4.21	0.44
64:N8:4:ARG:NH1	64:N8:5:PHE:HZ	2.15	0.44
1:6:1392:U:H2'	1:6:1393:C:C6	2.52	0.44
52:M6:18:ARG:NH1	36:5:1315:U:OP1	278.90	0.44
27:D5:70:LYS:HB3	27:D5:71:ILE:HD12	1.99	0.44
27:D5:71:ILE:CG2	27:D5:76:ALA:HB2	3.58	0.44
36:1:1456:A:H5'	67:O1:26:LYS:HG2	1.98	0.44
67:O1:33:VAL:O	67:O1:36:ILE:HB	2.18	0.44
67:O1:37:LYS:HA	67:O1:49:VAL:HG11	1.98	0.44
12:C0:14:TYR:CZ	12:C0:18:GLU:HG3	2.53	0.44
12:C0:34:GLU:O	12:C0:35:ILE:HB	4.49	0.44
12:C0:61:TRP:H	12:C0:61:TRP:HD1	1.64	0.44
21:C9:102:ARG:O	21:C9:105:LEU:N	2.51	0.44
48:M1:110:ILE:C	48:M1:112:LEU:N	2.99	0.44
5:S3:65:ARG:O	5:S3:69:LEU:HG	2.18	0.44
15:C3:55:ARG:HD2	15:C3:56:ASP:OD2	2.17	0.44
77:Q1:13:LEU:O	77:Q1:15:ARG:N	3.14	0.44
36:5:1640:G:C2'	36:5:1641:U:H5'	2.48	0.44
70:O4:74:ARG:O	70:O4:75:ALA:C	2.66	0.44
1:2:906:A:C2	1:2:907:A:C4	3.06	0.44
16:C4:80:HIS:ND1	16:C4:114:ARG:HB3	4.10	0.44
16:C4:85:ALA:H	16:C4:119:THR:HB	1.82	0.44
23:D1:34:ILE:HD13	23:D1:34:ILE:HA	1.71	0.44
2:S0:185:ARG:NH1	23:D1:47:PRO:HG3	2.32	0.44
23:D1:80:LYS:O	23:D1:81:ASN:HB2	2.17	0.44
2:S0:141:ILE:HA	2:S0:142:PRO:HD2	2.34	0.44
63:N7:5:LEU:HD22	63:N7:25:ILE:HD11	2.00	0.44
63:N7:81:LEU:HD13	63:N7:82:PRO:HD2	4.49	0.44
70:O4:79:SER:CB	70:O4:80:ARG:HE	3.26	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1207:C:N4	1:6:1456:C:C5	2.77	0.44
52:M6:108:ILE:HG21	52:M6:108:ILE:HD13	1.87	0.44
36:1:1083:G:H2'	36:1:1084:A:C8	2.53	0.44
36:1:2658:G:H5''	36:1:2754:G:H1'	1.99	0.44
69:O3:39:GLN:C	69:O3:41:ALA:H	2.53	0.44
1:2:77:U:H4'	1:2:78:A:O5'	2.16	0.44
34:SR:59:ARG:HG3	34:SR:59:ARG:NH1	3.87	0.44
36:5:2189:U:O2	36:5:2189:U:H2'	2.17	0.44
52:M6:10:ASP:OD1	52:M6:12:LYS:HB2	3.30	0.44
52:M6:10:ASP:OD1	52:M6:12:LYS:HB3	2.18	0.44
56:N0:164:SER:OG	56:N0:165:TYR:N	2.51	0.44
39:L2:138:GLY:O	39:L2:146:THR:HG23	2.21	0.44
52:M6:190:VAL:O	52:M6:193:GLN:HB2	2.35	0.44
3:S1:188:LEU:O	3:S1:191:GLU:N	2.65	0.44
3:S1:144:ARG:CB	3:S1:208:GLN:HB3	2.46	0.44
1:2:1168:U:H6	1:2:1168:U:O5'	2.00	0.44
40:L3:166:ILE:HA	40:L3:169:THR:HG22	4.48	0.44
40:L3:173:GLN:O	40:L3:174:LYS:HB2	2.17	0.44
8:S6:87:ARG:NH2	1:6:161:U:OP2	315.06	0.44
36:5:2211:U:C5	36:5:2234:G:O6	2.71	0.44
64:N8:19:LYS:CG	64:N8:25:HIS:HB2	3.55	0.44
40:L3:133:TYR:CD1	40:L3:136:LYS:HE3	2.52	0.44
36:1:3174:A:H2'	36:1:3175:U:C5'	2.47	0.44
36:1:75:G:H3'	36:1:76:G:C8	2.53	0.44
1:2:777:C:N4	26:D4:10:ARG:HH12	2.16	0.44
1:6:1039:A:O2'	1:6:1040:G:P	2.76	0.44
46:L9:128:VAL:HG12	46:L9:129:ARG:O	2.18	0.44
39:L2:192:LYS:HZ3	39:L2:193:ARG:HH22	1.66	0.44
36:5:214:G:N3	36:5:214:G:H2'	2.33	0.44
36:5:2133:U:H2'	36:5:2134:G:C5'	2.48	0.44
36:1:1804:A:H4'	70:O4:70:LYS:O	2.17	0.44
52:M6:52:LEU:O	52:M6:53:LYS:C	2.55	0.44
1:6:103:A:C5	1:6:309:C:N4	2.86	0.44
36:1:2159:U:H3'	36:1:2160:G:H5'	2.00	0.44
36:5:1107:C:O2	36:5:1108:U:C6	2.71	0.44
36:1:431:U:H5''	69:O3:65:ARG:HH12	1.83	0.44
1:6:1381:U:H1'	1:6:1516:A:N6	2.32	0.44
57:N1:27:LEU:O	57:N1:29:THR:N	2.51	0.44
36:5:216:G:H2'	36:5:217:U:H6	1.83	0.44
36:1:3105:U:H2'	36:1:3106:A:O4'	2.18	0.44
36:1:3122:A:H1'	46:L9:63:LYS:CE	2.47	0.44
1:6:1414:U:C6	87:6:2051:OHX:N5	2.86	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1526:U:H5'	36:5:1594:A:C6	2.53	0.44
36:1:1700:G:H1	36:1:1745:C:N4	2.16	0.44
70:O4:36:LYS:NZ	36:5:1595:U:OP2	145.08	0.44
65:N9:36:ASP:HA	65:N9:37:PRO:HD2	2.02	0.44
51:M5:8:GLU:O	51:M5:12:ARG:HG3	2.18	0.44
36:5:2101:C:HO2'	36:5:2102:U:P	2.40	0.44
1:2:1146:G:C2	1:2:1633:A:C6	3.05	0.44
56:N0:152:LEU:HD23	56:N0:152:LEU:HA	1.73	0.44
36:1:551:A:C4	36:1:552:G:C8	3.06	0.44
1:6:1410:A:N6	1:6:1411:A:N1	2.66	0.44
13:C1:64:VAL:HG12	13:C1:129:ARG:CZ	3.46	0.44
58:N2:19:VAL:C	58:N2:22:PRO:HD2	2.38	0.44
36:1:3164:C:H42	36:1:3287:U:H3	1.66	0.44
71:O5:15:GLU:CD	71:O5:15:GLU:H	4.97	0.44
1:2:810:G:O2'	9:S7:111:LYS:HD3	2.17	0.44
1:6:1153:G:N2	1:6:1626:U:C2	2.86	0.44
46:L9:62:ARG:NH1	36:5:1210:U:OP1	321.53	0.44
23:D1:56:SER:O	23:D1:57:GLY:C	2.55	0.44
36:1:853:G:N2	55:M9:129:GLY:HA2	2.33	0.44
74:O8:14:LEU:HA	74:O8:14:LEU:HD23	1.80	0.44
36:1:1668:G:C6	36:1:1669:C:C4	3.06	0.44
65:N9:29:TYR:N	65:N9:29:TYR:CD1	2.86	0.44
61:N5:51:VAL:HG12	61:N5:51:VAL:O	2.72	0.44
8:S6:208:TYR:O	8:S6:211:LEU:N	2.53	0.44
25:D3:108:GLY:HA2	1:6:600:U:P	356.89	0.44
36:1:2789:U:OP1	54:M8:179:ARG:HD3	2.18	0.44
36:1:1534:A:OP1	87:1:3876:OHX:N2	2.51	0.44
1:6:19:A:C2	1:6:20:G:C4	3.05	0.44
15:C3:129:TYR:CD1	15:C3:134:VAL:HG11	2.57	0.44
36:1:2626:A:H5'	36:1:2627:C:C5'	2.46	0.44
42:L5:279:LYS:HZ2	42:L5:282:ARG:HH12	3.69	0.44
1:6:877:G:OP2	1:6:936:G:N2	2.45	0.44
36:5:627:U:H2'	36:5:628:A:C8	2.53	0.44
36:1:2111:G:C8	36:1:2111:G:H5'	2.47	0.44
14:C2:70:ASN:O	14:C2:74:LEU:HB2	3.26	0.44
78:Q2:22:GLN:HB3	78:Q2:75:VAL:HG21	2.00	0.44
78:Q2:8:ARG:O	78:Q2:22:GLN:HA	2.17	0.44
47:M0:112:GLN:O	47:M0:114:GLY:N	4.53	0.44
36:5:3146:G:H2'	36:5:3147:G:O5'	2.17	0.44
6:S4:23:LEU:O	6:S4:24:SER:HB3	2.82	0.44
1:6:11:A:O2'	1:6:12:U:H5'	2.18	0.44
1:6:1230:A:H62	1:6:1257:U:H3	1.64	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
78:Q2:53:GLN:HG3	36:5:2802:A:N1	180.47	0.44
87:1:4139:OHX:N1	87:1:4184:OHX:N5	2.66	0.44
14:C2:113:ARG:CB	14:C2:115:VAL:H	2.31	0.44
36:5:1240:A:C2'	36:5:1241:U:H5'	2.47	0.44
51:M5:105:ARG:HG2	51:M5:108:ARG:NH2	2.32	0.44
7:S5:147:THR:OG1	7:S5:148:ARG:N	2.51	0.44
45:L8:184:ALA:O	45:L8:187:GLY:N	2.48	0.44
66:O0:60:ALA:O	66:O0:64:LYS:N	2.50	0.44
36:5:625:G:H2'	36:5:626:U:O4'	2.18	0.44
24:D2:97:ARG:H	24:D2:97:ARG:HG2	1.45	0.44
32:E0:47:VAL:HG13	32:E0:48:THR:N	2.33	0.44
1:2:846:G:O4'	1:2:846:G:N3	2.51	0.44
1:2:1520:U:O4	1:2:1522:U:C4	2.71	0.44
36:5:1481:A:O2'	36:5:1858:A:C2	2.67	0.44
36:5:201:A:O5'	36:5:201:A:H8	2.01	0.44
36:5:2921:U:O5'	36:5:2921:U:H6	2.01	0.44
36:1:957:C:C2	36:1:958:C:C6	3.06	0.44
49:M3:185:LYS:C	49:M3:187:ALA:H	2.49	0.44
40:L3:267:ALA:O	36:5:2989:U:O2'	212.56	0.44
1:6:601:A:C2	1:6:602:U:C2	3.06	0.44
38:8:126:A:H4'	38:8:127:U:OP2	2.17	0.44
36:1:142:C:H5'	36:1:143:G:OP2	2.18	0.44
36:1:884:A:OP2	73:O7:4:GLY:HA3	2.18	0.44
69:O3:78:SER:OG	36:5:1180:A:OP1	264.06	0.44
36:5:1727:G:N3	36:5:1731:A:H1'	2.32	0.44
1:2:581:U:OP1	35:SM:104:LYS:HE2	2.18	0.44
1:2:582:U:C5	35:SM:104:LYS:HE3	2.52	0.44
1:2:582:U:H5	35:SM:104:LYS:HE3	1.83	0.44
36:1:2963:C:H2'	36:1:2964:G:O4'	2.18	0.44
78:Q2:19:LYS:O	78:Q2:21:THR:HG23	2.18	0.44
1:2:1761:U:O5'	1:2:1761:U:O2	2.36	0.44
76:Q0:96:CYS:SG	76:Q0:98:LYS:HB2	2.57	0.44
27:D5:43:ASP:O	27:D5:44:GLN:HB3	3.99	0.44
1:2:441:A:N6	1:2:464:A:N1	2.65	0.44
1:6:1014:G:H2'	1:6:1015:U:O4'	2.18	0.44
28:D6:73:TYR:HE2	28:D6:82:ARG:HG2	1.82	0.44
11:S9:109:LEU:O	11:S9:109:LEU:HD22	2.18	0.44
36:1:2854:U:OP1	47:M0:61:SER:OG	2.30	0.44
47:M0:52:LEU:HB3	47:M0:136:PHE:H	2.31	0.44
26:D4:20:ARG:HH11	26:D4:22:GLN:HE21	5.19	0.44
36:1:806:A:C8	36:1:936:A:C6	3.06	0.44
36:5:1313:G:O6	87:5:4158:OHX:N5	2.50	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:812:G:C5	36:1:813:G:C8	3.06	0.44
7:S5:177:ILE:HG12	7:S5:180:ARG:NH1	2.33	0.44
7:S5:43:PHE:N	7:S5:46:TRP:H	2.54	0.44
67:O1:17:HIS:C	67:O1:19:ARG:H	2.74	0.44
38:4:46:G:N2	38:4:57:C:O2	2.48	0.44
61:N5:102:LEU:HA	61:N5:102:LEU:HD22	2.83	0.44
61:N5:63:ILE:HD11	61:N5:84:PHE:CD1	4.28	0.44
42:L5:50:ARG:NE	42:L5:147:ASP:OD2	2.92	0.44
42:L5:86:TYR:HE1	42:L5:250:ASP:O	2.01	0.44
1:2:1273:G:H4'	1:2:1274:C:H3'	2.00	0.44
17:C5:26:LEU:HD23	17:C5:26:LEU:HA	4.41	0.44
5:S3:98:ALA:C	5:S3:100:ALA:H	2.20	0.44
1:2:1025:A:H2'	1:2:1027:A:O5'	2.17	0.44
8:S6:48:TYR:O	8:S6:49:VAL:HG23	2.59	0.44
16:C4:21:ALA:HB1	16:C4:95:GLY:O	2.18	0.44
16:C4:17:ALA:HB2	16:C4:30:VAL:HG22	6.12	0.44
16:C4:84:ARG:HG3	16:C4:119:THR:HA	1.99	0.44
28:D6:55:GLU:OE2	28:D6:55:GLU:HA	4.86	0.44
40:L3:25:ILE:HD12	40:L3:272:TYR:CE2	6.07	0.44
54:M8:66:ARG:HB2	54:M8:66:ARG:NH1	2.32	0.44
36:1:1949:G:H2'	36:1:1950:U:C6	2.53	0.44
63:N7:35:SER:OG	63:N7:36:HIS:N	2.51	0.44
70:O4:44:CYS:CB	70:O4:81:CYS:HB3	3.06	0.44
36:1:1603:A:OP2	55:M9:38:ARG:NH1	2.49	0.44
39:L2:174:ARG:HH22	36:5:2180:G:P	210.92	0.44
1:6:1227:A:O2'	1:6:1228:G:OP2	2.30	0.44
14:C2:61:VAL:HG13	14:C2:121:VAL:HG23	2.05	0.44
40:L3:63:PRO:HA	40:L3:68:HIS:ND1	2.32	0.44
20:C8:145:ARG:HG3	35:SM:68:ARG:CZ	4.06	0.44
1:6:71:A:C4	1:6:72:A:H1'	2.52	0.44
36:1:3183:A:H2	36:1:3188:G:H4'	1.82	0.44
9:S7:131:PHE:CD2	9:S7:132:PRO:HD3	4.71	0.44
38:4:53:A:C2	75:O9:35:ILE:HD11	2.53	0.44
34:SR:291:SER:O	34:SR:304:GLY:N	2.46	0.44
34:SR:295:SER:HB2	34:SR:302:PHE:CE2	2.52	0.44
34:SR:38:ARG:NE	34:SR:67:ILE:HD13	3.08	0.44
36:5:342:A:O2'	87:5:3920:OHX:N6	2.51	0.44
73:O7:55:ARG:HD3	36:5:353:G:N7	108.96	0.44
1:2:1010:C:OP2	87:2:2131:OHX:N5	2.50	0.44
87:2:2090:OHX:N5	87:2:2131:OHX:N2	2.66	0.44
39:L2:114:SER:HB3	39:L2:165:VAL:HG22	4.89	0.44
36:1:3320:A:H4'	40:L3:174:LYS:NZ	2.33	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1480:G:O2'	36:1:1871:U:O4	2.25	0.44
51:M5:15:GLN:O	72:O6:52:PRO:HD3	3.29	0.44
72:O6:52:PRO:HA	72:O6:55:ARG:HH12	2.13	0.44
49:M3:94:GLY:HA3	71:O5:116:TYR:OH	2.18	0.44
51:M5:143:ARG:CZ	71:O5:92:LEU:HD23	2.97	0.44
1:6:532:U:H2'	1:6:533:U:O4'	2.17	0.44
38:4:107:G:N2	38:4:116:G:C8	2.86	0.44
38:4:35:C:C4	38:4:36:G:N7	2.85	0.44
1:6:788:A:H8	1:6:788:A:O5'	2.01	0.44
38:4:42:G:C4	38:4:43:A:C8	3.06	0.44
46:L9:173:ARG:O	76:Q0:127:LEU:HD12	2.18	0.44
48:M1:59:ILE:HA	48:M1:63:GLU:OE1	2.18	0.44
1:2:830:U:H2'	1:2:830:U:O2	2.18	0.44
1:6:1186:U:C5	1:6:1208:A:N6	2.86	0.44
18:C6:14:LYS:HB3	18:C6:15:SER:H	1.43	0.44
67:O1:13:THR:HG23	67:O1:72:ARG:HD2	4.53	0.44
1:2:1433:G:C2	1:2:1434:U:N3	2.86	0.44
54:M8:153:PHE:CE1	36:5:1109:U:H4'	171.69	0.44
22:D0:35:GLU:OE1	22:D0:35:GLU:HA	2.17	0.44
32:E0:53:LYS:HD3	32:E0:55:ARG:CD	7.93	0.44
36:5:584:G:H2'	36:5:585:A:O4'	2.17	0.44
63:N7:53:VAL:HG13	63:N7:57:HIS:HD2	4.99	0.44
2:S0:110:TYR:CD2	4:S2:64:LYS:HB3	3.72	0.44
1:6:275:C:H5'	1:6:276:C:OP2	2.16	0.44
36:1:2736:A:H4'	57:N1:71:SER:OG	2.18	0.44
36:5:1878:G:H2'	36:5:1879:A:O4'	2.17	0.44
1:6:514:G:N3	1:6:515:A:C8	2.86	0.44
68:O2:66:LEU:HA	68:O2:66:LEU:HD23	1.55	0.44
36:5:2944:U:H5''	36:5:2945:G:OP2	2.18	0.44
1:2:50:C:O2	1:2:50:C:H2'	2.18	0.44
40:L3:188:ILE:HG13	40:L3:188:ILE:H	1.52	0.44
58:N2:33:TYR:HB2	58:N2:83:TYR:CE2	2.53	0.44
1:2:1311:U:H2'	1:2:1313:A:OP2	2.18	0.44
1:6:138:A:N6	1:6:266:A:N6	2.63	0.44
24:D2:118:ARG:CD	1:6:686:C:H4'	402.47	0.44
36:5:2439:A:C8	36:5:2440:G:C8	3.06	0.44
75:O9:24:PRO:O	75:O9:27:ILE:HG13	3.59	0.44
1:6:1759:C:H4'	36:5:2263:C:O2'	2.18	0.44
1:2:600:U:C5	1:2:601:A:N7	2.86	0.44
36:5:48:A:H8	36:5:48:A:OP1	2.01	0.44
35:SM:88:ARG:HG2	35:SM:91:THR:CB	2.47	0.44
36:1:717:C:N4	36:1:718:G:N1	2.66	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:S6:109:LEU:HD23	8:S6:110:ALA:N	2.33	0.44
36:1:665:A:N1	36:1:798:G:C6	2.86	0.44
43:L6:68:PRO:HB3	43:L6:142:ASP:CG	2.44	0.44
2:S0:21:ASN:C	2:S0:23:HIS:N	3.15	0.44
1:2:1394:G:N2	1:2:1405:G:C4	2.85	0.44
36:5:3389:U:O4	87:5:4245:OHX:N3	2.51	0.44
20:C8:71:GLN:OE1	20:C8:79:TYR:OH	2.18	0.44
87:5:4061:OHX:N1	87:5:4138:OHX:N2	2.66	0.44
45:L8:93:LEU:O	45:L8:96:LYS:HD2	3.27	0.44
36:1:2269:U:O2	36:1:2271:A:C8	2.71	0.44
36:5:849:C:H2'	36:5:850:U:H6	1.83	0.44
1:2:1654:G:C6	1:2:1745:G:C6	3.06	0.44
1:6:435:C:H2'	1:6:436:A:C8	2.53	0.44
5:S3:216:PRO:O	5:S3:218:LEU:HD12	2.17	0.44
1:2:629:U:O2	1:2:971:A:C2	2.70	0.44
36:1:1800:A:H2'	36:1:1801:U:O4'	2.17	0.44
36:5:887:G:C2	36:5:888:A:C4	3.06	0.44
1:2:1414:U:C5	87:2:2025:OHX:N2	2.86	0.44
59:N3:129:VAL:O	59:N3:130:ALA:C	2.94	0.44
56:N0:3:HIS:ND1	56:N0:4:PHE:N	2.66	0.44
2:S0:35:PRO:O	2:S0:37:VAL:N	2.51	0.44
41:L4:13:GLY:O	41:L4:14:GLU:HG2	3.93	0.44
52:M6:79:ILE:O	52:M6:82:LYS:HB3	2.18	0.44
1:2:1116:A:H2'	1:2:1117:U:O4'	2.18	0.44
36:5:2926:A:C6	36:5:2927:C:C4	3.05	0.44
1:2:517:U:H2'	1:2:518:A:O4'	2.17	0.44
36:1:2565:U:H2'	36:1:2566:C:C6	2.53	0.44
50:M4:17:VAL:H	50:M4:17:VAL:HG23	2.50	0.44
43:L6:106:PHE:O	43:L6:108:LYS:N	2.51	0.44
1:2:565:C:H4'	1:2:566:C:H5''	2.00	0.44
25:D3:93:LEU:O	25:D3:93:LEU:HG	2.17	0.44
78:Q2:10:THR:HG23	78:Q2:23:HIS:CE1	2.53	0.44
46:L9:85:GLY:O	46:L9:186:PHE:HB3	2.18	0.44
36:1:44:U:OP1	51:M5:84:PRO:HG2	2.18	0.44
36:5:1514:G:O6	36:5:1841:A:H2'	2.17	0.44
53:M7:22:LEU:HB3	53:M7:90:PHE:HE2	1.83	0.44
53:M7:50:GLN:OE1	53:M7:56:ARG:HD3	2.30	0.44
28:D6:17:HIS:CG	28:D6:18:VAL:N	3.27	0.44
3:S1:111:ARG:HG3	28:D6:68:TYR:HB2	1.99	0.44
32:E0:30:PRO:HB2	32:E0:34:ALA:HB3	1.99	0.44
47:M0:138:VAL:HG22	47:M0:152:LEU:HD11	1.99	0.44
47:M0:56:GLU:HB3	47:M0:58:GLU:CG	3.32	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:M0:80:SER:OG	47:M0:84:ALA:HB3	4.41	0.44
87:1:4032:OHX:N2	87:1:4044:OHX:N5	2.66	0.44
44:L7:158:LYS:HE2	36:5:1363:A:O4'	217.37	0.44
41:L4:311:HIS:NE2	41:L4:314:LYS:HA	2.33	0.44
36:1:116:A:H5''	36:1:265:A:C2	2.53	0.44
45:L8:73:PRO:C	45:L8:75:ILE:H	3.19	0.44
51:M5:120:TRP:CZ2	51:M5:123:GLN:HG2	3.26	0.44
51:M5:5:LYS:O	72:O6:40:VAL:HG11	3.15	0.44
1:6:330:G:N2	1:6:331:A:H1'	2.33	0.44
6:S4:52:LEU:HA	6:S4:52:LEU:HD23	1.74	0.44
10:S8:169:ILE:HD13	10:S8:169:ILE:HA	1.82	0.44
41:L4:178:LEU:O	41:L4:182:LEU:HD23	3.54	0.44
41:L4:232:SER:O	41:L4:233:LEU:HB2	2.37	0.44
43:L6:28:GLN:HE21	43:L6:57:HIS:CE1	2.36	0.44
43:L6:56:LYS:HE3	43:L6:98:VAL:HG13	3.78	0.44
1:2:1340:U:H4'	1:2:1341:A:C5'	2.47	0.44
5:S3:190:ARG:O	5:S3:190:ARG:HD3	2.18	0.44
42:L5:22:ARG:HB3	42:L5:28:THR:HB	1.98	0.44
75:O9:50:ASN:C	75:O9:51:ILE:HG13	2.38	0.44
18:C6:52:LEU:O	18:C6:53:LEU:HD23	2.18	0.44
7:S5:161:ASP:O	30:D8:44:VAL:HA	2.29	0.44
7:S5:118:LEU:HD22	7:S5:129:PRO:HB2	2.35	0.44
7:S5:26:ALA:O	7:S5:28:PRO:HD2	4.30	0.44
46:L9:161:LEU:HD13	46:L9:179:ILE:HG21	2.00	0.44
67:O1:69:TYR:OH	87:5:4114:OHX:N6	186.55	0.44
36:1:975:C:C2	36:1:976:U:C5	3.06	0.44
42:L5:242:SER:O	42:L5:245:GLU:N	2.50	0.44
1:2:1277:G:C2	1:2:1278:G:H1'	2.52	0.44
1:2:579:A:H3'	5:S3:143:ARG:NH1	2.33	0.44
21:C9:51:GLU:HA	21:C9:51:GLU:OE2	4.21	0.44
5:S3:48:VAL:HB	5:S3:86:LEU:HD12	2.00	0.44
1:2:957:G:H2'	1:2:958:U:O4'	2.18	0.44
15:C3:93:LYS:HZ2	15:C3:150:VAL:HG13	5.50	0.44
36:1:67:A:N1	36:1:300:G:O2'	2.48	0.44
64:N8:67:HIS:H	64:N8:67:HIS:HD2	1.66	0.44
15:C3:109:LYS:HD3	1:6:975:C:H5''	281.50	0.44
77:Q1:11:ARG:NH2	1:6:1126:G:O3'	291.25	0.44
77:Q1:19:LYS:O	77:Q1:22:ALA:HB3	2.67	0.44
77:Q1:7:LYS:O	77:Q1:8:LYS:C	3.06	0.44
2:S0:120:LEU:HD11	2:S0:144:ILE:HG13	3.75	0.44
2:S0:136:ALA:O	2:S0:141:ILE:HG13	3.57	0.44
4:S2:36:VAL:HA	4:S2:37:PRO:HD2	2.37	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:3095:U:C2	36:5:3096:C:C5	3.06	0.44
40:L3:16:PHE:HD2	40:L3:275:ARG:CZ	2.31	0.44
40:L3:25:ILE:HD11	40:L3:334:ARG:NE	7.86	0.44
63:N7:22:LYS:CE	63:N7:134:LEU:HB2	2.45	0.44
63:N7:4:PHE:O	63:N7:5:LEU:HB2	4.63	0.44
63:N7:24:VAL:CG2	63:N7:87:LEU:HD23	4.26	0.44
68:O2:118:LYS:HG2	68:O2:119:VAL:N	2.33	0.44
36:1:182:U:OP1	73:O7:75:LYS:NZ	2.45	0.44
1:6:1185:U:H1'	1:6:1456:C:H5''	1.99	0.44
36:5:535:G:N2	36:5:555:U:O2	2.50	0.44
50:M4:20:VAL:HG11	50:M4:90:VAL:HG13	5.43	0.44
44:L7:75:TYR:CD1	56:N0:60:SER:HB2	3.53	0.44
56:N0:26:ARG:HB3	57:N1:150:THR:HG22	4.37	0.44
57:N1:87:LYS:HB3	36:5:2723:U:OP1	217.87	0.44
57:N1:87:LYS:HE3	57:N1:87:LYS:HB3	3.36	0.44
59:N3:120:LYS:HB2	59:N3:137:VAL:CG2	5.19	0.44
59:N3:120:LYS:O	59:N3:124:ASP:HB2	2.83	0.44
36:1:2374:C:C5	36:1:2941:A:C5	3.05	0.44
36:1:2374:C:H5	36:1:2941:A:N1	2.16	0.44
42:L5:259:LYS:O	42:L5:260:PHE:HB2	2.25	0.44
8:S6:175:ILE:HG13	8:S6:178:LEU:HD22	3.01	0.44
18:C6:112:TYR:O	18:C6:113:ASP:C	3.05	0.44
34:SR:207:ASP:OD1	34:SR:209:THR:OG1	2.20	0.44
34:SR:90:ARG:HA	34:SR:101:GLN:O	3.11	0.44
36:5:2307:G:H4'	36:5:2308:C:OP2	2.16	0.44
52:M6:135:TYR:C	52:M6:135:TYR:CD1	3.44	0.44
72:O6:74:LYS:HA	72:O6:83:ALA:HB2	1.99	0.44
39:L2:113:VAL:HG12	39:L2:166:ILE:HD13	2.46	0.44
39:L2:100:ASN:O	39:L2:166:ILE:HG12	2.37	0.44
49:M3:165:SER:OG	49:M3:165:SER:O	2.30	0.44
3:S1:209:ASN:HB3	3:S1:211:HIS:CD2	2.53	0.44
36:1:188:U:H1'	36:1:208:C:C1'	2.48	0.44
1:6:1146:G:OP1	1:6:1146:G:H4'	2.17	0.44
36:5:38:U:H6	36:5:38:U:O5'	2.01	0.44
64:N8:30:GLY:HA2	36:5:40:A:C5	178.51	0.44
49:M3:42:ARG:O	49:M3:46:ILE:N	2.46	0.44
36:5:64:G:O2'	36:5:77:A:H1'	2.18	0.44
33:E1:103:LEU:CD2	33:E1:105:TYR:HB2	2.48	0.44
33:E1:98:VAL:C	33:E1:99:LYS:HG2	4.18	0.44
26:D4:60:PHE:CD2	26:D4:71:GLY:HA3	2.52	0.44
36:5:1750:A:N3	36:5:1752:A:C8	2.86	0.44
79:Q3:13:LYS:HG3	79:Q3:14:TYR:CD1	3.07	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:128:G:C6	36:1:129:U:C4	3.06	0.44
46:L9:93:VAL:O	46:L9:177:ASP:HA	2.24	0.44
8:S6:201:GLN:NE2	1:6:126:A:OP1	336.41	0.44
1:6:384:G:O6	1:6:385:A:N6	2.51	0.44
36:1:836:A:N3	36:1:858:A:H1'	2.33	0.44
52:M6:54:TYR:HE2	52:M6:58:LEU:CD2	2.67	0.44
59:N3:123:ALA:C	59:N3:125:LEU:H	2.38	0.44
36:5:1404:G:N2	36:5:1407:A:OP2	2.46	0.44
2:S0:125:ASP:HB3	2:S0:128:SER:HB2	3.20	0.44
36:1:1404:G:N1	36:1:1408:G:C6	2.86	0.44
9:S7:9:LEU:HD12	9:S7:9:LEU:HA	4.66	0.44
9:S7:9:LEU:HD22	9:S7:18:LEU:HD23	4.86	0.44
22:D0:24:ILE:HA	22:D0:116:VAL:HG13	1.99	0.44
1:6:1333:C:H42	1:6:1418:G:H1	1.66	0.44
1:2:89:G:C5	1:2:90:C:C5	3.06	0.44
36:1:3239:G:N2	36:1:3249:C:C2	2.86	0.44
38:4:124:G:N2	38:4:130:C:C4	2.86	0.44
42:L5:113:LEU:HB3	42:L5:115:LEU:HD22	1.99	0.44
36:5:1037:C:O5'	36:5:1037:C:H6	2.01	0.44
42:L5:164:LYS:HG2	42:L5:180:PHE:CE2	2.52	0.44
36:1:1861:G:H1'	36:1:3066:U:H5''	2.00	0.44
21:C9:18:TYR:HB3	21:C9:59:ALA:HB1	2.00	0.44
36:5:2997:G:H5'	36:5:2998:U:OP2	2.18	0.44
45:L8:200:LEU:HA	45:L8:200:LEU:HD23	1.76	0.44
39:L2:68:LYS:HD3	39:L2:70:ARG:NH2	6.71	0.44
65:N9:47:LEU:HD23	65:N9:47:LEU:HA	2.23	0.44
1:6:1342:C:H2'	1:6:1343:U:H6	1.81	0.44
58:N2:33:TYR:O	58:N2:37:LEU:HD12	2.18	0.44
42:L5:289:LYS:HD3	47:M0:206:LEU:HD23	1.99	0.44
40:L3:345:ASN:OD1	40:L3:347:SER:HB2	2.18	0.44
1:2:945:U:O2'	1:2:946:U:H5'	2.17	0.44
36:1:723:U:O2	65:N9:29:TYR:HE2	2.01	0.44
54:M8:159:LYS:HB3	54:M8:159:LYS:HE2	1.66	0.44
1:2:16:G:C2	1:2:17:C:N3	2.86	0.44
40:L3:109:HIS:HD1	40:L3:200:GLU:CD	2.41	0.44
41:L4:304:GLN:C	41:L4:306:THR:H	2.21	0.44
18:C6:11:GLY:N	18:C6:18:ALA:O	2.43	0.44
1:2:929:A:N6	1:2:930:A:C5	2.85	0.44
54:M8:179:ARG:NH2	36:5:709:A:OP1	167.41	0.44
15:C3:129:TYR:HB3	15:C3:135:LEU:HG	2.00	0.44
2:S0:206:ASP:N	2:S0:207:PRO:O	4.37	0.44
17:C5:77:ARG:HB3	17:C5:102:PHE:CE1	2.57	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:L5:222:LEU:HA	42:L5:222:LEU:HD23	3.78	0.44
40:L3:309:GLY:O	40:L3:310:GLY:O	2.36	0.44
36:5:1533:U:O2'	36:5:1534:A:H5'	2.17	0.44
36:1:2415:C:OP1	39:L2:2:GLY:N	2.50	0.44
36:1:1148:G:O6	36:1:1149:G:C6	2.70	0.44
39:L2:54:ARG:NH1	36:5:2177:G:OP1	199.48	0.44
36:1:1397:C:H2'	36:1:1398:U:H5'	1.99	0.44
1:6:1083:G:H2'	1:6:1084:A:H5'	2.00	0.44
69:O3:16:TYR:CE2	69:O3:25:PRO:HB3	2.53	0.44
37:7:11:A:O2'	37:7:12:U:H3'	2.18	0.44
1:2:846:G:H8	13:C1:46:LYS:HZ1	1.64	0.44
36:1:661:G:C5	36:1:802:C:C6	3.06	0.44
36:1:422:A:H1'	36:1:2364:G:OP1	2.18	0.44
36:5:105:C:O2'	36:5:684:G:H4'	2.17	0.44
72:O6:11:LEU:HA	72:O6:11:LEU:HD12	2.84	0.44
36:1:3153:U:H3	36:1:3293:U:H3	1.65	0.44
64:N8:138:ILE:O	64:N8:141:ALA:N	2.62	0.44
36:5:1560:G:O2'	36:5:1561:G:P	2.76	0.44
3:S1:182:ALA:O	3:S1:186:SER:N	2.95	0.44
49:M3:24:VAL:HB	49:M3:26:PHE:CE2	3.89	0.44
40:L3:289:ASP:OD1	40:L3:289:ASP:N	2.49	0.44
1:6:739:G:C4	1:6:740:A:C8	3.06	0.44
36:1:47:C:H6	36:1:47:C:O5'	2.00	0.44
64:N8:15:VAL:H	64:N8:15:VAL:HG23	2.94	0.44
74:O8:21:LYS:HD3	74:O8:21:LYS:HA	3.44	0.44
36:1:1061:A:H8	36:1:1061:A:O5'	2.01	0.44
39:L2:159:SER:C	39:L2:161:ASP:H	2.65	0.44
36:5:1130:A:N7	36:5:1132:C:C2	2.86	0.44
1:6:1096:C:N3	87:6:2150:OHX:N4	2.66	0.44
70:O4:49:SER:OG	70:O4:50:ALA:N	3.92	0.44
53:M7:40:GLU:HB2	53:M7:43:LYS:HG3	4.64	0.44
46:L9:48:VAL:O	46:L9:49:ASN:HB3	2.18	0.43
46:L9:84:LYS:HD3	46:L9:186:PHE:HE1	3.86	0.43
53:M7:36:ILE:HA	53:M7:39:TRP:CD1	2.57	0.43
1:2:461:G:N7	87:2:2143:OHX:N1	2.66	0.43
47:M0:193:ASP:HB2	47:M0:198:LYS:HG3	1.99	0.43
47:M0:81:GLY:O	47:M0:83:ASP:N	2.68	0.43
44:L7:217:PRO:HD2	44:L7:218:ARG:H	1.82	0.43
45:L8:145:ASN:O	45:L8:147:LYS:N	2.51	0.43
87:6:2130:OHX:N2	87:6:2155:OHX:N4	2.66	0.43
13:C1:54:ILE:HG23	13:C1:55:ASP:H	1.82	0.43
10:S8:172:ARG:HB3	10:S8:175:GLN:HG3	2.00	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:L4:180:LYS:HA	36:5:1386:A:C2	119.69	0.43
54:M8:25:TYR:O	54:M8:28:LEU:N	2.51	0.43
73:O7:18:LEU:HA	73:O7:25:ARG:CA	2.47	0.43
1:6:851:U:H2'	1:6:852:C:C6	2.53	0.43
1:2:1543:A:C4	1:2:1569:A:C8	3.05	0.43
18:C6:35:PRO:HD2	18:C6:38:LEU:HD12	2.00	0.43
18:C6:48:VAL:O	18:C6:51:PRO:HD2	2.18	0.43
7:S5:111:VAL:HG12	18:C6:43:ILE:HG21	4.46	0.43
7:S5:173:ALA:O	7:S5:177:ILE:HG13	2.18	0.43
42:L5:207:TYR:O	42:L5:211:LEU:HB2	3.87	0.43
12:C0:47:GLN:HA	12:C0:50:THR:OG1	2.17	0.43
12:C0:49:LEU:HB3	12:C0:55:VAL:CG1	2.80	0.43
20:C8:120:ARG:CD	35:SM:61:ILE:HG21	4.69	0.43
31:D9:30:LEU:HD23	31:D9:30:LEU:HA	2.25	0.43
48:M1:111:ASP:N	48:M1:112:LEU:HD23	2.33	0.43
36:1:315:C:H2'	36:1:315:C:O2	2.18	0.43
51:M5:46:ASP:O	51:M5:49:ARG:HG2	2.17	0.43
1:2:103:A:C4	1:2:309:C:N4	2.86	0.43
67:O1:20:LEU:HD23	67:O1:23:VAL:HG21	2.00	0.43
2:S0:188:LEU:HA	2:S0:188:LEU:HD22	1.65	0.43
2:S0:53:THR:HA	2:S0:161:PRO:HG2	2.01	0.43
4:S2:116:LYS:HD2	4:S2:117:THR:N	2.33	0.43
54:M8:62:VAL:HG21	54:M8:83:VAL:HG13	3.74	0.43
36:1:1732:U:H2'	36:1:1733:G:H5'	1.99	0.43
70:O4:82:ALA:O	70:O4:84:CYS:N	2.75	0.43
71:O5:7:TYR:HA	71:O5:10:ARG:NE	2.41	0.43
33:E1:97:LYS:HD3	1:6:1232:U:H5	436.10	0.43
1:2:1186:U:H2'	1:2:1187:U:O4'	2.17	0.43
6:S4:179:LYS:HA	6:S4:179:LYS:HD3	4.45	0.43
6:S4:85:GLY:O	6:S4:88:ASP:HB2	3.74	0.43
50:M4:80:THR:O	50:M4:83:LYS:N	2.51	0.43
57:N1:154:VAL:HA	57:N1:155:PRO:HD3	2.05	0.43
57:N1:56:PHE:CE1	57:N1:78:LYS:HD3	2.94	0.43
69:O3:6:ARG:HE	69:O3:6:ARG:HB3	2.89	0.43
8:S6:155:ASP:N	8:S6:155:ASP:OD2	2.56	0.43
5:S3:223:LYS:O	34:SR:190:ALA:HA	3.07	0.43
34:SR:254:ALA:O	34:SR:261:LYS:N	3.58	0.43
34:SR:73:LEU:HD23	34:SR:73:LEU:HA	1.70	0.43
52:M6:42:ASN:HA	52:M6:136:THR:O	2.75	0.43
36:5:348:A:N3	36:5:352:A:O2'	2.51	0.43
9:S7:149:ILE:O	9:S7:149:ILE:HG22	2.77	0.43
72:O6:98:ARG:HB3	72:O6:99:ARG:H	4.00	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:95:A:H5''	64:N8:34:MET:CB	2.48	0.43
1:6:1091:A:H4'	1:6:1092:A:O5'	2.17	0.43
38:8:107:G:H1'	38:8:116:G:N2	2.33	0.43
71:O5:76:GLN:O	71:O5:81:ARG:HD3	2.18	0.43
1:6:652:G:C2	1:6:682:C:O2	2.69	0.43
1:2:774:A:C6	1:2:775:G:H1'	2.53	0.43
1:2:561:G:C6	1:2:585:A:C2	3.07	0.43
36:1:2154:U:H2'	36:1:2155:G:H8	1.83	0.43
39:L2:193:ARG:NH2	36:5:2181:C:H5''	195.11	0.43
4:S2:122:ALA:HA	4:S2:125:ILE:HB	4.14	0.43
4:S2:80:VAL:HA	4:S2:102:VAL:HA	3.17	0.43
36:5:171:G:N2	36:5:172:G:H1'	2.33	0.43
36:5:248:U:H6	36:5:248:U:OP2	2.01	0.43
36:5:170:G:C2	36:5:249:U:O2	2.71	0.43
13:C1:40:LEU:HA	13:C1:40:LEU:HD12	2.53	0.43
1:2:355:G:OP1	10:S8:16:ALA:HB1	2.18	0.43
2:S0:133:ILE:CD1	2:S0:133:ILE:H	2.20	0.43
2:S0:29:VAL:HA	2:S0:149:LEU:O	5.94	0.43
64:N8:60:TYR:CD2	64:N8:63:LYS:HG3	4.10	0.43
5:S3:9:ARG:NH1	1:6:1490:C:O5'	434.94	0.43
1:2:1248:C:H2'	1:2:1249:U:C6	2.53	0.43
1:2:1376:C:O2'	1:2:1377:U:H5'	2.18	0.43
2:S0:112:THR:OG1	2:S0:113:ARG:N	2.50	0.43
1:2:456:A:H2'	1:2:457:G:C8	2.53	0.43
5:S3:114:ALA:HB3	5:S3:117:ARG:HB3	2.98	0.43
37:3:3:U:H2'	37:3:4:U:C6	2.53	0.43
42:L5:20:PHE:CD2	42:L5:20:PHE:N	2.98	0.43
10:S8:67:TRP:CD1	10:S8:70:GLU:HB2	2.53	0.43
36:1:24:G:C2	36:1:25:U:H1'	2.52	0.43
78:Q2:59:HIS:HA	78:Q2:61:LYS:NZ	4.47	0.43
36:5:3188:G:C2	36:5:3205:G:N1	2.86	0.43
36:1:1116:G:C4	36:1:2817:A:C2	3.06	0.43
1:2:520:A:H2'	1:2:521:A:C8	2.52	0.43
42:L5:187:THR:CG2	42:L5:189:GLU:HB2	2.47	0.43
52:M6:93:ALA:O	52:M6:96:LYS:N	3.65	0.43
65:N9:43:HIS:NE2	65:N9:47:LEU:HD11	3.38	0.43
36:5:1817:G:O2'	36:5:1818:U:P	2.76	0.43
13:C1:132:SER:OG	13:C1:133:LYS:N	3.03	0.43
47:M0:207:GLU:O	47:M0:210:ILE:N	2.40	0.43
9:S7:111:LYS:HG3	9:S7:112:ARG:H	1.83	0.43
47:M0:51:HIS:O	47:M0:165:ILE:HA	2.17	0.43
54:M8:182:LYS:O	54:M8:184:PHE:N	2.51	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1666:U:C4	1:6:1736:G:C2	3.06	0.43
55:M9:117:LYS:HD2	55:M9:118:HIS:CE1	6.02	0.43
36:1:653:A:C2	36:1:654:C:C2	3.06	0.43
36:1:425:G:C6	36:1:635:G:C6	3.06	0.43
36:1:2792:A:O2'	36:1:2793:G:H5'	2.17	0.43
64:N8:46:ASP:O	64:N8:47:LYS:HB3	2.46	0.43
1:2:17:C:C4	1:2:18:C:N4	2.86	0.43
8:S6:43:ASP:O	8:S6:45:PHE:N	2.51	0.43
49:M3:36:ARG:HG3	49:M3:39:ARG:NH2	3.40	0.43
36:1:1296:C:N4	36:1:1297:C:N3	2.66	0.43
36:5:2584:G:C3'	36:5:2585:G:H4'	2.45	0.43
14:C2:49:THR:HB	33:E1:106:TYR:CE1	3.77	0.43
43:L6:68:PRO:HD2	43:L6:71:VAL:HG21	2.14	0.43
19:C7:65:PRO:HA	19:C7:74:GLN:OE1	6.16	0.43
49:M3:61:PRO:O	49:M3:62:THR:HG23	2.18	0.43
1:2:1333:C:H2'	1:2:1334:U:H6	1.83	0.43
54:M8:73:GLN:HB2	54:M8:76:ALA:HB2	2.29	0.43
1:2:1562:G:OP1	21:C9:89:ARG:NH1	2.45	0.43
36:1:13:A:H5''	36:1:13:A:H8	1.83	0.43
1:2:759:U:H2'	1:2:760:A:C8	2.52	0.43
1:2:1122:G:O6	87:2:2171:OHX:N3	2.51	0.43
87:5:4061:OHX:N5	87:5:4138:OHX:N6	2.66	0.43
36:1:667:C:O2	36:1:667:C:H2'	2.17	0.43
36:1:1075:A:C5	65:N9:45:HIS:CD2	3.06	0.43
36:1:241:G:C2	36:1:242:C:C2	3.05	0.43
1:6:577:G:C3'	1:6:577:G:C8	3.01	0.43
87:1:3877:OHX:N5	51:M5:91:GLU:OE2	2.51	0.43
1:6:802:G:C6	1:6:803:A:N6	2.86	0.43
36:1:2366:C:H5'	40:L3:259:HIS:HE1	1.82	0.43
1:2:268:C:N4	1:2:287:G:H1	2.16	0.43
5:S3:216:PRO:HB2	5:S3:217:ILE:H	1.50	0.43
1:6:1032:G:C5	1:6:1033:C:C5	3.06	0.43
36:5:881:C:H1'	36:5:1850:A:C8	2.53	0.43
67:O1:42:LEU:HD23	67:O1:43:HIS:CE1	3.12	0.43
1:6:1288:G:C2	1:6:1289:U:C6	3.06	0.43
69:O3:14:LEU:HD21	69:O3:31:LYS:HB3	2.00	0.43
36:5:2099:A:H2'	36:5:2100:A:N3	2.33	0.43
36:5:2516:U:H2'	36:5:2517:U:C6	2.53	0.43
53:M7:157:VAL:HG12	53:M7:158:ALA:N	2.32	0.43
7:S5:32:GLU:H	7:S5:32:GLU:HG3	3.89	0.43
1:6:775:G:H2'	1:6:776:G:H5'	2.00	0.43
1:2:995:A:H2'	1:2:996:U:O4'	2.18	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
78:Q2:11:TYR:HB2	78:Q2:20:HIS:CE1	2.53	0.43
36:5:3089:C:C4	36:5:3090:U:C2	3.06	0.43
36:1:1505:C:N4	36:1:1506:A:H62	2.16	0.43
75:O9:43:ASN:HB3	75:O9:46:ARG:HB2	2.00	0.43
1:2:942:G:C2'	1:2:943:C:H5'	2.48	0.43
28:D6:10:ARG:NH2	28:D6:36:ILE:HG13	3.43	0.43
28:D6:40:ALA:O	28:D6:68:TYR:HA	2.17	0.43
11:S9:129:ILE:O	11:S9:142:ASN:HA	2.52	0.43
11:S9:152:SER:C	11:S9:154:LYS:N	2.68	0.43
36:5:2838:A:C2	36:5:2851:A:C4	3.06	0.43
47:M0:77:THR:OG1	47:M0:78:THR:N	2.91	0.43
44:L7:160:ARG:NH1	36:5:1363:A:OP1	226.83	0.43
45:L8:141:ALA:HB1	36:5:117:U:C6	103.24	0.43
41:L4:203:ARG:NH1	41:L4:226:GLU:OE1	3.57	0.43
41:L4:288:ARG:O	41:L4:291:ASN:N	2.89	0.43
41:L4:50:TYR:CD2	41:L4:109:TRP:CH2	3.12	0.43
54:M8:31:LYS:HE3	54:M8:31:LYS:HB3	4.51	0.43
54:M8:29:LEU:O	54:M8:32:LEU:HB3	2.83	0.43
43:L6:43:LEU:HA	43:L6:43:LEU:HD23	1.61	0.43
36:1:359:U:C4	36:1:360:G:C5	3.06	0.43
73:O7:18:LEU:HD11	75:O9:51:ILE:CG2	3.05	0.43
1:6:819:G:C2	1:6:853:G:N3	2.87	0.43
1:2:1532:U:C4	1:2:1533:C:C4	3.06	0.43
20:C8:24:GLY:HA2	20:C8:58:ALA:HB3	2.33	0.43
20:C8:66:LEU:O	20:C8:70:VAL:HG23	2.18	0.43
7:S5:144:GLU:HB3	7:S5:161:ASP:OD1	2.18	0.43
67:O1:48:ASP:HB3	67:O1:90:PHE:CB	2.47	0.43
1:2:1429:G:C6	1:2:1430:U:C4	3.05	0.43
33:E1:126:CYS:CB	33:E1:130:VAL:HG21	4.02	0.43
15:C3:5:HIS:CG	15:C3:117:LEU:HD22	4.09	0.43
36:1:299:G:H2'	36:1:300:G:O4'	2.19	0.43
47:M0:95:HIS:ND1	47:M0:128:ARG:NE	2.66	0.43
1:2:902:G:H2'	1:2:903:U:H6	1.78	0.43
16:C4:52:ARG:HD3	16:C4:53:ASP:OD1	5.13	0.43
3:S1:27:LYS:HA	3:S1:48:VAL:O	4.57	0.43
3:S1:61:LEU:HB2	3:S1:64:ARG:HE	1.83	0.43
3:S1:87:ARG:NH2	3:S1:220:GLN:OE1	5.48	0.43
2:S0:41:ARG:HG2	19:C7:105:GLN:HE21	1.83	0.43
2:S0:177:LEU:HA	2:S0:177:LEU:HD23	2.10	0.43
2:S0:179:ARG:HG2	2:S0:183:ARG:CD	3.25	0.43
40:L3:19:ARG:HG3	40:L3:273:HIS:CE1	2.53	0.43
63:N7:6:LYS:HB3	63:N7:6:LYS:HE2	1.52	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
68:O2:75:LEU:HD23	68:O2:95:GLU:HB3	3.47	0.43
68:O2:96:ILE:H	68:O2:121:ASN:ND2	2.15	0.43
38:4:34:U:O2	73:O7:70:VAL:HG12	2.18	0.43
62:N6:122:LYS:HE3	36:5:186:U:OP1	51.69	0.43
79:Q3:33:GLN:HB3	79:Q3:69:TYR:HB3	2.01	0.43
67:O1:83:GLU:O	67:O1:85:ALA:N	3.29	0.43
6:S4:163:ASP:CG	6:S4:164:LEU:H	4.57	0.43
57:N1:139:ARG:HG2	57:N1:139:ARG:NH2	4.81	0.43
59:N3:37:ILE:HG12	59:N3:59:MET:O	2.18	0.43
43:L6:158:TYR:HA	50:M4:118:PHE:CE1	2.68	0.43
1:6:146:U:C4	1:6:167:U:C4	3.05	0.43
8:S6:175:ILE:HG12	1:6:78:A:N3	338.75	0.43
7:S5:76:ARG:HD3	18:C6:122:ARG:CZ	3.12	0.43
34:SR:170:ILE:HG13	34:SR:202:LEU:HD11	2.49	0.43
34:SR:227:ALA:CB	34:SR:229:LYS:HD2	3.31	0.43
34:SR:292:LEU:HA	34:SR:303:ALA:HA	2.00	0.43
34:SR:78:ALA:O	34:SR:94:VAL:HG23	3.21	0.43
52:M6:38:ALA:HA	52:M6:41:LEU:CD2	2.49	0.43
62:N6:42:GLN:HB3	62:N6:43:TYR:CD2	2.53	0.43
36:1:2178:A:H5'	39:L2:129:ALA:HB3	2.00	0.43
79:Q3:44:LYS:HE3	79:Q3:59:CYS:SG	4.59	0.43
49:M3:167:PHE:CE2	64:N8:132:LYS:HB2	2.53	0.43
50:M4:106:ARG:HD3	36:5:3209:A:C8	293.34	0.43
40:L3:43:LEU:HB3	40:L3:181:ILE:HG21	1.99	0.43
1:2:1291:G:C8	1:2:1291:G:O5'	2.63	0.43
1:2:1324:G:C2	1:2:1325:A:C8	3.06	0.43
4:S2:94:GLN:HG2	4:S2:95:ARG:H	4.17	0.43
36:5:934:G:C6	36:5:935:U:O4	2.71	0.43
36:1:2217:U:H2'	36:1:2218:G:H8	1.83	0.43
36:5:281:G:C6	36:5:282:G:C5	3.06	0.43
1:2:632:U:P	13:C1:102:LYS:NZ	2.91	0.43
13:C1:96:LYS:HD3	13:C1:97:TYR:CE2	4.26	0.43
36:5:712:G:N2	36:5:754:G:O3'	2.51	0.43
38:8:139:U:H2'	38:8:140:G:C8	2.53	0.43
1:2:1091:A:H4'	1:2:1092:A:O4'	2.18	0.43
1:2:561:G:C5	1:2:585:A:C2	3.06	0.43
48:M1:44:THR:HA	48:M1:45:PRO:HD3	2.39	0.43
1:2:704:C:N4	1:2:734:A:H2'	2.33	0.43
36:5:1698:C:H42	36:5:1747:G:H1	1.66	0.43
36:5:1711:C:H42	36:5:1733:G:H1	1.65	0.43
36:5:3055:U:C2	36:5:3085:G:N1	2.86	0.43
52:M6:77:SER:HB2	52:M6:104:VAL:HG12	2.00	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2689:A:C8	36:5:2702:A:C6	3.07	0.43
37:3:46:A:C6	37:3:47:C:N4	2.86	0.43
10:S8:116:HIS:HB3	10:S8:117:TYR:HD2	3.43	0.43
22:D0:24:ILE:O	22:D0:90:TYR:HA	2.18	0.43
56:N0:71:LYS:NZ	36:5:563:U:OP1	342.44	0.43
36:1:2896:A:H5''	76:Q0:95:VAL:HG21	2.00	0.43
66:O0:51:LEU:CD2	70:O4:91:ARG:HB2	2.48	0.43
87:5:4029:OHX:N1	87:5:4113:OHX:N3	2.66	0.43
59:N3:35:TYR:H	59:N3:60:ALA:HB1	1.83	0.43
36:1:1565:G:H1'	36:1:1575:A:H2	1.83	0.43
25:D3:19:ARG:HG3	25:D3:19:ARG:O	2.79	0.43
36:1:411:U:O2'	36:1:412:G:H5'	2.18	0.43
1:2:10:G:C5	1:2:1633:A:C2	3.06	0.43
55:M9:70:LYS:NZ	36:5:1862:U:OP1	197.30	0.43
36:5:2375:G:O2'	36:5:2377:G:OP2	2.32	0.43
50:M4:22:LEU:HD22	50:M4:94:TRP:CH2	2.67	0.43
56:N0:171:PHE:C	56:N0:171:PHE:CD1	3.48	0.43
36:1:1339:C:H2'	36:1:1340:G:O4'	2.18	0.43
36:1:1340:G:H4'	68:O2:55:ILE:HD11	2.00	0.43
36:1:956:U:OP1	87:1:4123:OHX:N1	2.51	0.43
1:2:275:C:H5''	1:2:276:C:OP2	2.18	0.43
36:1:1628:C:C5	36:1:1814:A:C6	3.05	0.43
36:5:1818:U:H2'	36:5:1819:U:C6	2.44	0.43
41:L4:317:PRO:HA	41:L4:323:VAL:HG22	2.80	0.43
42:L5:284:ALA:HA	42:L5:287:ALA:HB3	1.99	0.43
1:2:1308:G:H2'	1:2:1309:C:O4'	2.18	0.43
1:6:142:G:N7	1:6:173:A:C2	2.86	0.43
36:1:3317:U:H1'	87:1:4023:OHX:N6	2.33	0.43
2:S0:202:TYR:O	2:S0:203:PHE:CD2	2.71	0.43
36:1:2552:C:C5	66:O0:53:LYS:HE3	2.53	0.43
36:1:1296:C:N4	36:1:1297:C:C4	2.87	0.43
22:D0:117:VAL:HG22	22:D0:118:VAL:H	1.83	0.43
19:C7:76:GLU:HA	19:C7:79:GLU:HB2	1.99	0.43
65:N9:10:HIS:O	65:N9:12:GLN:N	2.51	0.43
42:L5:57:ASN:OD1	42:L5:57:ASN:N	3.93	0.43
36:5:825:U:O4	87:5:3958:OHX:N6	2.50	0.43
36:5:2223:A:C6	36:5:2224:A:C6	3.07	0.43
7:S5:213:LYS:HA	7:S5:213:LYS:HD2	2.76	0.43
48:M1:117:ASP:HB3	48:M1:120:ILE:HB	1.99	0.43
36:5:515:C:H2'	36:5:515:C:O2	2.18	0.43
12:C0:27:PHE:HD1	12:C0:43:ILE:HD12	4.27	0.43
32:E0:29:LYS:NZ	32:E0:35:TYR:HE2	6.23	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:373:PRO:O	40:L3:376:LYS:N	3.09	0.43
50:M4:131:VAL:C	50:M4:133:LYS:N	2.71	0.43
36:1:1875:G:C6	36:1:1876:U:C4	3.06	0.43
87:8:220:OHX:N6	87:8:229:OHX:N4	2.67	0.43
1:2:1414:U:C6	87:2:2025:OHX:N4	2.86	0.43
73:O7:36:SER:O	73:O7:45:ARG:HB3	2.22	0.43
67:O1:52:ALA:HB2	67:O1:92:TYR:CZ	2.54	0.43
9:S7:79:ARG:HH12	9:S7:161:GLN:NE2	4.49	0.43
3:S1:31:ASP:OD2	3:S1:45:LYS:HE2	6.24	0.43
36:1:689:U:H4'	36:1:690:A:OP2	2.18	0.43
1:2:1764:C:OP1	1:2:1771:U:H4'	2.17	0.43
36:1:1908:A:H2'	36:1:1909:A:O4'	2.18	0.43
36:1:38:U:H6	36:1:38:U:O5'	2.02	0.43
40:L3:90:VAL:O	40:L3:90:VAL:HG12	2.17	0.43
5:S3:21:LEU:HD23	5:S3:21:LEU:HA	2.13	0.43
36:1:354:U:H2'	36:1:354:U:O2	2.16	0.43
21:C9:136:ALA:O	21:C9:139:THR:HB	3.45	0.43
1:6:296:U:H2'	1:6:297:U:O4'	2.18	0.43
1:6:552:G:O6	1:6:553:G:C6	2.71	0.43
25:D3:63:GLN:CA	25:D3:65:ASN:H	2.30	0.43
76:Q0:108:THR:O	76:Q0:121:LEU:HD12	2.17	0.43
36:1:2988:C:O2'	40:L3:266:ARG:NH1	2.47	0.43
53:M7:84:PRO:O	53:M7:88:VAL:HG23	2.18	0.43
11:S9:87:SER:HB3	11:S9:90:LYS:HD3	7.70	0.43
47:M0:32:ARG:HA	47:M0:32:ARG:HD2	1.83	0.43
41:L4:327:LEU:HA	44:L7:166:ASN:ND2	2.28	0.43
45:L8:74:THR:O	45:L8:77:GLN:HG2	2.18	0.43
10:S8:78:ILE:O	10:S8:80:GLY:N	2.51	0.43
43:L6:43:LEU:HD11	43:L6:85:ILE:CG1	2.69	0.43
52:M6:128:ARG:HD3	52:M6:128:ARG:HA	1.84	0.43
36:1:1438:U:H5''	41:L4:74:ILE:HD11	2.00	0.43
73:O7:14:LYS:HA	36:5:817:A:C6	134.69	0.43
18:C6:86:ALA:HB1	18:C6:109:PHE:CE2	3.03	0.43
18:C6:131:GLY:HA3	18:C6:137:ARG:NH2	3.10	0.43
7:S5:39:GLU:HB3	7:S5:40:ILE:H	1.57	0.43
42:L5:253:PHE:HE1	42:L5:255:PRO:HB3	2.75	0.43
36:1:1027:A:C6	36:1:1029:G:H1'	2.53	0.43
12:C0:57:THR:HG22	12:C0:58:GLN:O	2.19	0.43
21:C9:54:PHE:HZ	21:C9:103:LYS:O	2.01	0.43
22:D0:72:ASN:OD1	22:D0:72:ASN:N	2.42	0.43
15:C3:94:LYS:HG2	15:C3:118:ILE:HD13	2.49	0.43
8:S6:116:LYS:HD2	8:S6:125:THR:CG2	2.48	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:S1:101:HIS:O	3:S1:101:HIS:CG	3.32	0.43
3:S1:131:ASP:OD2	3:S1:180:THR:HG21	2.18	0.43
3:S1:67:GLU:HA	3:S1:84:ILE:O	2.67	0.43
3:S1:84:ILE:HG12	3:S1:103:MET:HB2	2.00	0.43
2:S0:12:GLU:HG2	2:S0:12:GLU:H	2.59	0.43
36:5:744:A:H2'	36:5:745:C:O4'	2.18	0.43
48:M1:151:SER:O	48:M1:152:HIS:CB	3.10	0.43
55:M9:104:ARG:NH2	55:M9:105:LEU:HB2	2.33	0.43
55:M9:124:TYR:HB3	55:M9:125:LYS:HG2	2.00	0.43
63:N7:26:VAL:HG21	63:N7:96:VAL:HB	2.29	0.43
38:4:94:C:O2'	38:4:95:G:H5''	2.18	0.43
36:1:1174:G:N2	52:M6:87:MET:HG2	2.32	0.43
36:5:536:U:H1'	36:5:559:A:C5	2.54	0.43
36:5:2727:A:H4'	36:5:2728:G:OP2	2.18	0.43
57:N1:37:GLY:O	57:N1:38:ASP:O	3.45	0.43
57:N1:38:ASP:OD2	57:N1:98:HIS:HD2	2.01	0.43
40:L3:284:ARG:NH2	40:L3:293:ASN:O	2.61	0.43
43:L6:157:GLN:O	43:L6:158:TYR:C	2.56	0.43
9:S7:133:THR:OG1	9:S7:162:ILE:HD11	3.28	0.43
9:S7:162:ILE:O	9:S7:166:LEU:HD22	4.24	0.43
9:S7:50:ASP:OD1	9:S7:56:LYS:NZ	4.32	0.43
42:L5:265:TYR:HE1	37:7:120:C:H2'	315.08	0.43
7:S5:73:THR:CG2	18:C6:114:ARG:HB3	5.46	0.43
34:SR:234:LEU:HD22	34:SR:263:PHE:HD1	1.83	0.43
62:N6:34:PRO:HD2	62:N6:104:LEU:O	2.18	0.43
79:Q3:79:VAL:HG12	79:Q3:80:ARG:N	3.52	0.43
66:O0:10:ILE:HG23	66:O0:11:ASN:OD1	2.44	0.43
50:M4:123:LEU:HA	50:M4:123:LEU:HD23	1.75	0.43
50:M4:109:ARG:CZ	52:M6:199:TYR:CE1	3.33	0.43
3:S1:175:GLU:HG2	3:S1:193:ILE:CG2	3.98	0.43
3:S1:188:LEU:CD2	3:S1:193:ILE:HD11	3.22	0.43
3:S1:194:ASN:O	3:S1:197:ILE:HB	2.84	0.43
52:M6:171:LYS:HG2	52:M6:171:LYS:O	2.60	0.43
36:5:3166:C:H2'	36:5:3166:C:O2	2.17	0.43
8:S6:98:ARG:HD3	8:S6:99:GLY:H	2.20	0.43
64:N8:26:ARG:HH12	36:5:938:C:H5''	181.53	0.43
36:1:2917:G:H4'	59:N3:48:ARG:O	2.18	0.43
36:5:2414:G:C5	36:5:2415:C:C5	3.06	0.43
39:L2:204:MET:CG	36:5:914:A:C2	194.56	0.43
39:L2:208:ASP:O	39:L2:209:HIS:HB2	2.86	0.43
1:6:777:C:N3	1:6:778:G:N7	2.66	0.43
79:Q3:20:SER:HB2	79:Q3:21:SER:H	2.36	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:788:A:H2'	6:S4:19:LEU:HD13	2.00	0.43
46:L9:173:ARG:NH1	36:5:2899:C:N3	327.08	0.43
36:5:2143:A:N7	36:5:2145:A:C5	2.86	0.43
44:L7:33:ARG:HA	44:L7:36:ALA:HB3	2.10	0.43
60:N4:38:SER:O	60:N4:42:GLN:NE2	2.50	0.43
52:M6:53:LYS:O	52:M6:56:ASP:HB3	2.18	0.43
1:6:825:U:O2'	1:6:826:U:OP2	2.28	0.43
64:N8:60:TYR:CE1	36:5:2777:G:C4	137.39	0.43
22:D0:26:LEU:N	22:D0:89:ARG:O	3.01	0.43
46:L9:71:VAL:O	46:L9:74:LEU:N	2.51	0.43
36:1:1809:A:OP1	63:N7:65:ARG:NH2	2.45	0.43
2:S0:104:PRO:HB3	1:6:1321:A:C4	402.25	0.43
1:6:1419:G:H2'	1:6:1420:C:O4'	2.18	0.43
36:1:2768:U:H2'	36:1:2769:A:C8	2.53	0.43
36:1:1854:C:OP2	87:1:4033:OHX:N5	2.52	0.43
25:D3:23:ARG:O	25:D3:29:TYR:CD1	2.71	0.43
49:M3:175:SER:O	49:M3:176:GLU:C	2.56	0.43
48:M1:28:ASP:O	48:M1:32:ARG:N	2.96	0.43
54:M8:8:LYS:HE2	36:5:950:G:OP1	201.80	0.43
1:2:138:A:C5	1:2:142:G:H1'	2.53	0.43
54:M8:93:ILE:HD12	54:M8:93:ILE:H	4.36	0.43
55:M9:97:ARG:O	55:M9:98:ARG:C	2.83	0.43
45:L8:126:SER:OG	36:5:121:A:N6	92.43	0.43
62:N6:120:GLN:HE22	62:N6:126:LEU:HA	9.46	0.43
58:N2:26:GLY:O	58:N2:28:PHE:N	2.52	0.43
44:L7:182:ASP:HA	44:L7:185:ILE:HB	2.00	0.43
34:SR:182:ASN:HD21	34:SR:184:ASN:HB2	1.84	0.43
47:M0:165:ILE:O	47:M0:165:ILE:HG22	4.98	0.43
36:1:1209:G:H3'	36:1:1210:U:C6	2.54	0.43
23:D1:56:SER:O	23:D1:60:ARG:HG3	2.87	0.43
29:D7:7:LEU:HA	29:D7:7:LEU:HD23	2.42	0.43
36:1:425:G:C5	36:1:635:G:C2	3.06	0.43
39:L2:200:ARG:O	39:L2:203:ALA:N	2.87	0.43
36:5:2161:G:C5	36:5:2162:U:C5	3.06	0.43
36:1:48:A:H5''	49:M3:16:LYS:HD3	2.00	0.43
36:1:1642:A:O2'	36:1:1643:A:C8	2.71	0.43
36:1:789:A:H2'	36:1:790:U:C6	2.53	0.43
36:1:881:C:C2'	36:1:882:A:H5'	2.49	0.43
36:5:2412:G:C2	36:5:2413:A:C4	3.06	0.43
1:2:1787:C:H2'	1:2:1788:G:C8	2.53	0.43
29:D7:34:ASP:HB3	29:D7:43:ILE:HD12	2.00	0.43
37:7:61:G:C6	37:7:62:U:C4	3.06	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:L7:121:LYS:O	44:L7:123:THR:N	2.52	0.43
36:5:1253:U:O2	36:5:1263:A:H5'	2.18	0.43
47:M0:112:GLN:C	47:M0:114:GLY:N	4.56	0.43
1:6:1525:A:C6	1:6:1526:A:C6	3.06	0.43
36:5:3343:G:N2	36:5:3361:G:H2'	2.33	0.43
36:1:1674:G:H2'	36:1:1675:G:O4'	2.18	0.43
36:5:797:U:O2'	36:5:798:G:H5'	2.18	0.43
37:7:14:U:C4	37:7:67:G:N2	2.87	0.43
68:O2:69:SER:OG	68:O2:71:HIS:HB2	2.18	0.43
16:C4:93:THR:HG22	16:C4:94:PRO:HD2	2.96	0.43
36:1:2122:G:O6	36:1:2331:C:N3	2.51	0.43
34:SR:14:GLU:HB3	34:SR:309:VAL:HG22	3.57	0.43
36:5:956:U:H2'	36:5:957:C:C6	2.53	0.43
36:1:1760:A:C6	36:1:1761:C:N4	2.87	0.43
36:1:2197:C:C2	36:1:2241:U:C4	3.06	0.43
1:6:231:U:H2'	1:6:232:U:H5''	1.99	0.43
53:M7:73:GLY:O	53:M7:78:VAL:N	2.50	0.43
36:1:414:U:C2'	36:1:415:G:H5'	2.48	0.43
47:M0:121:LYS:HA	47:M0:122:PRO:HD2	1.68	0.43
52:M6:80:PHE:O	52:M6:80:PHE:CD1	2.71	0.43
36:5:3255:U:H2'	36:5:3255:U:O2	2.16	0.43
36:5:1867:A:H2'	36:5:1868:G:C8	2.53	0.43
36:1:3237:U:H3	36:1:3250:U:H3	1.65	0.43
21:C9:83:ALA:HB1	21:C9:91:TYR:HD2	1.82	0.43
32:E0:14:VAL:HA	32:E0:17:GLN:HG2	2.42	0.43
51:M5:84:PRO:HA	51:M5:87:GLN:HB2	3.29	0.43
53:M7:53:ASP:O	53:M7:55:GLN:HB2	2.17	0.43
75:O9:44:TRP:CG	75:O9:45:ARG:N	2.91	0.43
47:M0:55:ASN:O	47:M0:131:ILE:HG23	3.67	0.43
26:D4:49:LYS:NZ	1:6:782:U:O4	433.06	0.43
6:S4:46:VAL:O	6:S4:50:ASN:HB2	2.19	0.43
10:S8:103:GLN:HA	10:S8:165:LEU:O	2.21	0.43
10:S8:40:ALA:N	10:S8:61:GLU:HB3	2.30	0.43
49:M3:35:ARG:HD2	36:5:685:G:OP1	81.02	0.43
41:L4:188:ARG:HB2	41:L4:188:ARG:HE	1.49	0.43
43:L6:98:VAL:HA	43:L6:101:PHE:CE2	2.53	0.43
1:2:1397:U:C5	1:2:1399:C:C2	3.06	0.43
19:C7:28:PHE:HA	19:C7:55:THR:HG21	2.35	0.43
30:D8:10:ALA:HB1	30:D8:30:VAL:CB	2.43	0.43
7:S5:116:HIS:CD2	27:D5:98:GLN:HB2	2.54	0.43
7:S5:211:ILE:HA	7:S5:211:ILE:HD13	1.92	0.43
36:1:1456:A:C6	67:O1:64:VAL:HG11	2.53	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3327:G:C2	36:1:3380:U:O2	2.71	0.43
36:5:3324:C:N4	36:5:3325:G:C6	2.87	0.43
55:M9:25:ASP:OD1	55:M9:26:PRO:HD2	4.87	0.43
42:L5:123:GLU:HG2	42:L5:248:ARG:CZ	2.48	0.43
1:2:1274:C:H5	35:SM:96:ARG:H	1.67	0.43
12:C0:59:PHE:CZ	12:C0:62:GLN:HA	2.71	0.43
17:C5:34:VAL:O	17:C5:37:ALA:HB3	2.45	0.43
31:D9:21:CYS:H	31:D9:25:SER:HA	1.82	0.43
31:D9:23:VAL:O	31:D9:25:SER:N	4.63	0.43
5:S3:106:LYS:O	5:S3:108:LYS:N	3.47	0.43
36:1:103:G:O4'	49:M3:65:TYR:CE1	2.71	0.43
16:C4:52:ARG:HE	16:C4:52:ARG:HB3	1.63	0.43
2:S0:4:PRO:HG2	2:S0:7:PHE:HB2	2.01	0.43
4:S2:162:CYS:H	4:S2:213:ALA:HB2	1.94	0.43
4:S2:113:LEU:HB2	4:S2:215:PHE:CD1	2.54	0.43
1:2:180:A:O5'	1:2:180:A:H8	2.00	0.43
36:1:2653:C:OP1	78:Q2:89:LYS:HB2	2.18	0.43
48:M1:160:VAL:O	48:M1:163:PHE:N	2.51	0.43
63:N7:88:ASP:HB3	63:N7:121:ARG:HH22	3.55	0.43
73:O7:76:ASN:O	73:O7:78:PHE:N	2.51	0.43
38:4:96:A:OP1	73:O7:80:THR:HG22	2.18	0.43
21:C9:94:ILE:HA	21:C9:94:ILE:HD13	3.90	0.43
14:C2:86:VAL:N	14:C2:87:PRO:HD3	2.59	0.43
1:2:1184:A:C2	1:2:1454:G:N3	2.87	0.43
6:S4:89:VAL:O	6:S4:90:ILE:HB	4.65	0.43
36:1:3146:G:O2'	36:1:3147:G:H5'	2.19	0.43
41:L4:358:THR:O	41:L4:359:LEU:C	2.68	0.43
43:L6:146:ILE:HA	43:L6:146:ILE:HD13	1.69	0.43
42:L5:260:PHE:HB3	42:L5:264:GLN:OE1	3.69	0.43
34:SR:292:LEU:HB2	34:SR:302:PHE:O	2.18	0.43
34:SR:293:ALA:O	34:SR:302:PHE:N	2.41	0.43
34:SR:296:ALA:O	34:SR:298:GLY:N	3.22	0.43
34:SR:61:PHE:HB3	34:SR:92:TRP:CZ3	2.54	0.43
52:M6:125:ARG:HD3	52:M6:125:ARG:HH11	1.63	0.43
1:2:1784:C:N3	1:2:1785:U:C4	2.86	0.43
49:M3:63:VAL:HG12	64:N8:128:ARG:HH12	1.83	0.43
1:6:1146:G:N3	1:6:1635:A:H2	2.15	0.43
36:1:613:G:C6	36:1:614:C:C4	3.07	0.43
36:5:1686:U:O2	36:5:1688:U:H1'	2.19	0.43
49:M3:149:GLN:HA	49:M3:150:PRO:HD2	2.86	0.43
39:L2:204:MET:HB3	39:L2:208:ASP:CB	2.49	0.43
6:S4:19:LEU:HA	6:S4:19:LEU:HD23	1.75	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:8:57:C:H2'	38:8:58:G:C8	2.53	0.43
46:L9:110:LYS:HB3	46:L9:128:VAL:HB	2.00	0.43
1:2:557:G:H3'	1:2:558:U:H5''	1.99	0.43
45:L8:156:ASP:HB2	45:L8:157:VAL:H	1.41	0.43
6:S4:148:ARG:HD2	1:6:124:A:O2'	339.76	0.43
70:O4:58:ARG:N	70:O4:61:GLN:HG3	4.24	0.43
1:2:327:U:HO2'	13:C1:10:GLU:HG2	1.80	0.43
36:5:847:A:C2	36:5:848:A:C4	3.07	0.43
36:5:408:A:OP1	87:5:4097:OHX:N6	2.52	0.43
22:D0:18:GLN:O	22:D0:96:PRO:HA	2.17	0.43
46:L9:45:PHE:HA	46:L9:54:LYS:O	2.18	0.43
45:L8:55:TYR:CD2	45:L8:56:VAL:N	2.87	0.43
36:5:1023:C:N3	36:5:1029:G:N2	2.48	0.43
36:1:2946:A:C2	36:1:2982:A:C4	3.07	0.43
62:N6:91:ASN:C	62:N6:93:ALA:H	2.20	0.43
56:N0:155:ARG:HG2	56:N0:172:TYR:CG	2.53	0.43
8:S6:18:ILE:HD12	8:S6:23:ARG:HD2	6.62	0.43
58:N2:18:ASP:HB3	58:N2:104:ARG:HB3	2.01	0.43
1:6:1671:A:N6	1:6:1672:G:C2	2.86	0.43
9:S7:111:LYS:HB3	9:S7:112:ARG:H	1.84	0.43
1:2:1052:U:OP1	1:2:1053:G:H5''	2.18	0.43
34:SR:117:LYS:HD2	34:SR:117:LYS:N	2.33	0.43
74:O8:65:LEU:HA	74:O8:68:SER:HB2	2.49	0.43
45:L8:150:LEU:HA	45:L8:150:LEU:HD23	1.87	0.43
36:1:823:C:H5''	39:L2:19:HIS:CD2	2.54	0.43
36:1:1668:G:H2'	36:1:1669:C:H6	1.82	0.43
18:C6:20:ALA:HB2	18:C6:84:ALA:HB1	2.00	0.43
36:5:3041:U:H2'	36:5:3042:U:H6	1.83	0.43
36:5:2636:A:H5''	36:5:2637:A:H5'	2.00	0.43
36:1:2674:A:C8	48:M1:125:MET:O	2.72	0.43
36:1:1240:A:H61	36:1:1244:A:H5'	1.81	0.43
36:1:507:U:O2'	36:1:1166:G:H4'	2.19	0.43
42:L5:233:ALA:C	42:L5:235:SER:H	2.22	0.43
36:1:35:A:C2'	36:1:36:C:H5'	2.48	0.43
74:O8:32:ASN:HD21	74:O8:36:LYS:HB2	1.83	0.43
37:7:70:U:H2'	37:7:71:G:C8	2.52	0.43
1:6:1575:G:N2	1:6:1576:A:N3	2.67	0.43
36:5:2930:A:O2'	36:5:2931:C:H5'	2.18	0.43
11:S9:34:PHE:N	11:S9:34:PHE:CD2	2.86	0.43
36:1:1630:U:OP1	63:N7:67:LYS:NZ	2.49	0.43
36:1:1025:A:H3'	36:1:1025:A:OP1	2.18	0.43
36:1:334:A:C2	36:1:335:G:C4	3.06	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:C9:64:HIS:CE1	21:C9:68:ARG:NE	4.24	0.43
36:1:1547:G:OP1	51:M5:105:ARG:HD3	2.18	0.43
12:C0:40:LEU:HG	1:6:1217:A:C2	426.68	0.43
69:O3:47:LYS:HA	69:O3:104:PRO:CD	2.48	0.43
36:1:1583:A:H3'	36:1:1584:U:C6	2.53	0.43
1:6:109:G:C8	1:6:109:G:H3'	2.54	0.43
1:6:110:U:C4	1:6:111:U:C5	3.07	0.43
50:M4:54:PRO:O	50:M4:56:GLN:HG2	2.70	0.43
26:D4:132:ARG:O	26:D4:132:ARG:HG2	2.18	0.43
36:1:2302:G:C6	36:1:2303:A:C5	3.06	0.43
36:5:264:G:O5'	36:5:264:G:H8	2.00	0.43
1:2:3:U:O2	4:S2:182:PRO:HD3	2.17	0.43
65:N9:32:LEU:HD12	65:N9:40:ARG:HD2	2.01	0.43
36:1:2904:U:H2'	36:1:2905:U:H6	1.83	0.43
54:M8:103:ALA:O	54:M8:124:LEU:HD23	2.17	0.43
36:5:68:C:C2'	36:5:69:C:H5'	2.48	0.43
22:D0:48:HIS:O	22:D0:48:HIS:ND1	2.51	0.43
10:S8:35:ASN:H	10:S8:35:ASN:ND2	4.18	0.43
38:8:66:A:O5'	38:8:66:A:H8	2.01	0.43
40:L3:280:HIS:CD2	40:L3:280:HIS:N	3.54	0.43
55:M9:78:TYR:HA	55:M9:78:TYR:HD1	4.54	0.43
36:5:1921:A:N3	36:5:1921:A:H2'	2.32	0.43
36:1:2136:C:C6	36:1:2142:A:C6	3.06	0.43
32:E0:14:VAL:O	32:E0:16:SER:N	3.53	0.43
40:L3:266:ARG:NH1	36:5:2988:C:O2	211.48	0.43
36:5:1505:C:O2'	36:5:1506:A:H5'	2.18	0.43
1:2:464:A:O2'	1:2:465:G:H5'	2.18	0.43
28:D6:82:ARG:HB2	28:D6:85:ARG:HH21	8.62	0.43
1:2:545:A:OP1	32:E0:31:LYS:HG3	2.19	0.43
11:S9:135:ALA:CB	11:S9:140:ILE:HA	2.49	0.43
11:S9:20:GLU:HG3	11:S9:23:ARG:HE	4.73	0.43
44:L7:88:ARG:HB2	44:L7:108:LEU:HB3	2.00	0.43
36:1:1171:G:OP2	44:L7:218:ARG:HD2	2.18	0.43
45:L8:73:PRO:C	45:L8:75:ILE:N	3.30	0.43
13:C1:55:ASP:HA	13:C1:82:ARG:HH12	1.82	0.43
41:L4:179:LEU:CD2	41:L4:183:LYS:HG2	2.45	0.43
41:L4:42:VAL:O	41:L4:44:LYS:N	3.39	0.43
1:6:1394:G:C2	1:6:1405:G:C4	3.05	0.43
19:C7:17:ILE:HD13	19:C7:61:ILE:HD11	1.99	0.43
55:M9:163:ARG:O	55:M9:166:ASN:N	3.41	0.43
20:C8:65:GLU:O	20:C8:68:ARG:HB2	2.18	0.43
30:D8:29:ARG:HG3	30:D8:41:VAL:HG22	2.01	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:45:C:OP1	75:O9:12:LYS:HE3	2.19	0.43
61:N5:105:VAL:HG11	61:N5:126:LEU:HD13	2.01	0.43
75:O9:9:ILE:C	75:O9:11:GLN:N	2.70	0.43
87:2:2044:OHX:N4	87:2:2099:OHX:N6	2.66	0.43
42:L5:227:LEU:C	42:L5:229:ASP:H	2.81	0.43
1:2:1553:G:N7	17:C5:43:ARG:NH1	2.67	0.43
1:2:1560:U:O4'	1:2:1560:U:O2	2.34	0.43
1:2:1466:G:O2'	1:2:1602:C:OP1	2.35	0.43
18:C6:129:PHE:CZ	22:D0:78:THR:HG22	2.53	0.43
20:C8:114:GLU:HG2	20:C8:117:LYS:HD3	2.00	0.43
5:S3:44:THR:HB	5:S3:45:LYS:HZ2	1.83	0.43
15:C3:121:ARG:O	15:C3:125:LEU:HB2	2.17	0.43
15:C3:46:THR:N	15:C3:49:GLN:HB2	2.31	0.43
36:1:848:A:H5''	36:1:849:C:OP2	2.18	0.43
1:2:103:A:HO2'	1:2:104:A:P	2.40	0.43
1:6:1761:U:H1'	1:6:1762:A:N7	2.34	0.43
8:S6:116:LYS:HD2	8:S6:125:THR:HG23	2.29	0.43
41:L4:89:ALA:C	41:L4:91:GLY:H	2.21	0.43
1:6:1140:G:N2	1:6:1141:G:C4	2.86	0.43
48:M1:170:ASP:HB3	48:M1:172:LEU:HG	2.01	0.43
68:O2:96:ILE:HD13	68:O2:105:ARG:HG2	3.13	0.43
55:M9:40:ALA:O	55:M9:44:LEU:HD22	2.19	0.43
71:O5:68:GLN:C	71:O5:70:TYR:H	2.91	0.43
21:C9:93:HIS:CG	21:C9:94:ILE:N	2.86	0.43
1:6:1226:A:HO2'	1:6:1256:A:N6	2.17	0.43
14:C2:94:ALA:HB1	14:C2:118:ALA:O	5.34	0.43
1:2:1198:G:C2	1:2:1200:G:C6	3.06	0.43
1:6:1649:G:C2	1:6:1650:U:C2	3.07	0.43
57:N1:84:TYR:HE1	65:N9:21:ILE:HG23	1.83	0.43
69:O3:35:VAL:HG13	69:O3:40:ASP:HB3	1.99	0.43
43:L6:172:HIS:CD2	69:O3:40:ASP:OD1	3.63	0.43
36:1:2374:C:C5	36:1:2941:A:N1	2.87	0.43
36:1:2941:A:O5'	36:1:2943:G:H4'	2.19	0.43
37:3:119:U:O2'	37:3:120:C:H5'	2.19	0.43
1:6:147:A:C6	1:6:168:A:C6	3.07	0.43
8:S6:141:ILE:HD12	8:S6:175:ILE:HG23	2.67	0.43
34:SR:247:PRO:HG3	34:SR:296:ALA:O	2.18	0.43
29:D7:55:THR:HA	29:D7:61:THR:O	2.18	0.43
36:1:2554:A:H5''	39:L2:87:PHE:CZ	2.53	0.43
39:L2:137:ILE:HG23	39:L2:147:ARG:O	5.51	0.43
39:L2:83:HIS:CE1	39:L2:86:GLN:HG3	2.53	0.43
52:M6:194:LEU:O	52:M6:195:ALA:C	2.67	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2125:A:C5	36:1:2126:A:C8	3.07	0.43
36:5:209:A:O2'	36:5:211:A:OP2	2.17	0.43
49:M3:170:LEU:HD11	64:N8:129:PHE:HA	2.01	0.43
36:5:929:A:H2'	36:5:930:U:H6	1.83	0.43
36:1:498:A:H5''	36:1:498:A:H8	1.84	0.43
64:N8:19:LYS:HE3	36:5:661:G:N7	161.91	0.43
69:O3:66:VAL:HG21	36:5:3275:U:OP2	227.54	0.43
36:1:3276:G:O2'	53:M7:175:ARG:HD3	2.18	0.43
24:D2:81:VAL:HG13	24:D2:89:TRP:CD1	2.54	0.43
36:1:282:G:H2'	36:1:286:U:H5'	2.00	0.43
40:L3:97:ARG:NH1	36:5:3244:A:N1	247.12	0.43
61:N5:46:TYR:HE1	71:O5:78:LYS:HG3	2.29	0.43
46:L9:104:VAL:HG21	46:L9:113:GLU:HB2	2.00	0.43
1:2:30:G:H1'	1:2:597:G:N2	2.34	0.43
25:D3:14:LYS:HD2	25:D3:14:LYS:O	2.17	0.43
1:2:125:U:H5''	6:S4:148:ARG:NH1	2.33	0.43
36:5:244:G:H2'	36:5:245:U:H6	1.82	0.43
10:S8:29:LEU:HD23	10:S8:29:LEU:C	2.64	0.43
20:C8:45:LEU:HD12	20:C8:45:LEU:HA	1.63	0.43
36:1:2278:C:C2'	36:1:2279:A:H5''	2.48	0.43
36:5:3057:U:H5'	36:5:3086:A:N6	2.32	0.43
36:5:3384:U:C4	36:5:3385:U:C4	3.06	0.43
2:S0:117:GLU:OE1	4:S2:40:LYS:HG3	2.19	0.43
36:1:2623:G:H2'	36:1:2624:G:C8	2.54	0.43
4:S2:176:SER:HA	11:S9:53:ARG:NH1	3.16	0.43
11:S9:49:LEU:CD1	11:S9:53:ARG:HD3	2.48	0.43
36:5:975:C:C2	36:5:976:U:C5	3.07	0.43
2:S0:150:ASP:N	2:S0:150:ASP:OD2	2.40	0.43
36:5:407:A:O2'	36:5:408:A:H5'	2.18	0.43
69:O3:53:TYR:N	69:O3:53:TYR:CD1	3.13	0.43
9:S7:21:ALA:O	9:S7:24:PHE:HB2	2.42	0.43
36:5:190:U:C4	36:5:224:C:H1'	2.54	0.43
19:C7:33:ARG:HG3	34:SR:127:ARG:HH11	1.84	0.43
46:L9:57:VAL:HG23	46:L9:68:LEU:HG	2.53	0.43
75:O9:2:ALA:HB1	75:O9:3:ALA:H	1.48	0.43
42:L5:40:HIS:NE2	42:L5:42:ALA:HB3	2.34	0.43
70:O4:26:PRO:HG3	36:5:1695:U:H1'	140.28	0.43
50:M4:32:LEU:HD11	50:M4:94:TRP:CG	2.53	0.43
1:2:501:U:C2	1:2:502:U:C5	3.06	0.43
49:M3:8:PRO:HA	54:M8:164:ARG:O	2.71	0.43
36:5:1658:G:C4	36:5:1796:G:C6	3.06	0.43
15:C3:27:LYS:HB2	15:C3:28:LEU:H	1.48	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:C3:65:VAL:C	15:C3:67:THR:H	3.85	0.43
1:2:385:A:H5''	10:S8:22:ARG:HB3	2.00	0.43
1:2:823:G:O6	1:2:849:C:N3	2.52	0.43
34:SR:161:LYS:O	34:SR:163:ASP:N	4.52	0.43
14:C2:30:VAL:O	14:C2:34:THR:HG23	2.18	0.43
4:S2:159:THR:OG1	4:S2:168:ARG:HB2	2.19	0.43
1:6:220:A:N6	1:6:832:U:O4	2.52	0.43
54:M8:157:PRO:C	54:M8:159:LYS:N	3.28	0.43
36:1:3263:G:C2	36:1:3264:G:C8	3.07	0.43
2:S0:167:LYS:HE3	2:S0:168:HIS:CE1	3.34	0.43
36:1:3342:A:H2'	36:1:3343:G:H5'	1.99	0.43
54:M8:71:LEU:CD2	54:M8:99:THR:HG21	2.47	0.43
41:L4:22:LEU:HA	41:L4:22:LEU:HD23	2.04	0.43
66:O0:69:TYR:N	66:O0:69:TYR:HD1	2.34	0.43
49:M3:21:ARG:HB2	49:M3:21:ARG:HE	1.78	0.43
15:C3:129:TYR:O	15:C3:134:VAL:HG13	2.19	0.43
1:6:1725:U:H2'	1:6:1726:G:O4'	2.18	0.43
45:L8:41:GLN:HE21	45:L8:44:ARG:HH12	1.66	0.43
61:N5:34:LEU:HD22	61:N5:35:PRO:HD2	1.99	0.43
1:6:996:U:H5''	1:6:996:U:C6	2.53	0.43
1:6:708:C:H2'	1:6:709:C:C1'	2.48	0.43
33:E1:131:PHE:HB2	1:6:1253:U:OP1	456.10	0.43
1:2:1266:U:H6	1:2:1266:U:O5'	2.02	0.43
36:5:2404:A:H2'	36:5:2404:A:N3	2.33	0.43
54:M8:57:ILE:HD13	54:M8:147:ARG:CZ	2.48	0.43
36:5:384:A:C6	36:5:385:A:C5	3.06	0.43
1:6:953:G:H2'	1:6:954:G:C8	2.53	0.43
55:M9:178:ALA:O	55:M9:181:ARG:HB3	2.17	0.43
36:1:2517:U:H2'	36:1:2518:C:H6	1.82	0.43
36:1:1478:C:H2'	36:1:1479:U:C6	2.54	0.43
1:6:137:U:H5''	1:6:137:U:C6	2.53	0.43
1:6:1032:G:H2'	1:6:1033:C:H6	1.84	0.43
36:1:2597:U:H2'	36:1:2598:G:O4'	2.19	0.43
36:1:1021:G:H1	36:1:1031:C:N4	2.16	0.43
36:5:1703:U:C4	36:5:1740:U:C2	3.06	0.43
36:1:3270:U:H5''	36:1:3271:G:C8	2.54	0.43
30:D8:32:PHE:HZ	30:D8:59:SER:HB3	7.69	0.43
57:N1:66:ASN:OD1	57:N1:67:VAL:N	2.96	0.43
76:Q0:89:TYR:HD2	76:Q0:89:TYR:N	2.23	0.43
11:S9:17:ARG:HA	11:S9:18:PRO:HD2	1.83	0.43
36:1:1293:U:C2'	36:1:1294:A:H5'	2.49	0.43
1:6:1013:A:C8	1:6:1014:G:C8	3.07	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D6:86:VAL:HB	1:6:1795:U:OP1	341.93	0.43
1:6:538:A:N9	1:6:543:C:H5	2.15	0.43
36:1:2852:C:H42	47:M0:158:LYS:HZ1	1.66	0.43
41:L4:328:ASN:HA	41:L4:329:PRO:HD2	1.97	0.43
44:L7:130:ILE:O	44:L7:134:VAL:HG13	2.33	0.43
44:L7:240:VAL:C	44:L7:242:SER:H	2.22	0.43
51:M5:16:SER:OG	51:M5:18:VAL:HG13	2.77	0.43
10:S8:69:SER:HB2	13:C1:22:ASN:OD1	2.18	0.43
10:S8:27:PHE:HB3	10:S8:49:ARG:CZ	3.82	0.43
36:5:1426:C:C2	36:5:1427:U:C6	3.07	0.43
1:2:1400:A:N1	1:2:1401:A:C2	2.86	0.43
73:O7:25:ARG:HD3	75:O9:51:ILE:HD12	4.07	0.43
21:C9:10:ALA:O	21:C9:11:ALA:C	3.00	0.43
21:C9:118:PRO:O	21:C9:119:LYS:HB2	2.28	0.43
21:C9:118:PRO:C	21:C9:120:GLY:N	2.71	0.43
7:S5:105:GLY:O	7:S5:107:LYS:N	3.26	0.43
7:S5:208:SER:OG	7:S5:211:ILE:HB	2.18	0.43
7:S5:43:PHE:HE2	7:S5:118:LEU:HD13	3.16	0.43
7:S5:94:THR:HG22	7:S5:114:ILE:CG1	2.45	0.43
40:L3:312:VAL:HA	36:5:3378:C:O2'	213.55	0.43
40:L3:308:MET:HE3	40:L3:370:PHE:HB2	4.46	0.43
67:O1:87:ASN:HA	67:O1:88:PRO:HD3	2.32	0.43
61:N5:111:ASN:O	61:N5:122:ALA:HA	2.92	0.43
61:N5:126:LEU:H	61:N5:126:LEU:HG	2.42	0.43
61:N5:79:GLY:O	61:N5:81:ILE:HD12	2.89	0.43
42:L5:194:LEU:HD22	42:L5:198:TYR:HD2	2.89	0.43
42:L5:236:LEU:O	42:L5:237:GLU:C	2.88	0.43
42:L5:51:LEU:HA	42:L5:64:ILE:HD12	2.01	0.43
12:C0:55:VAL:HB	12:C0:68:LEU:HA	1.99	0.43
12:C0:54:TYR:HA	12:C0:71:GLU:HG2	2.00	0.43
21:C9:76:LEU:HD23	21:C9:76:LEU:HA	1.41	0.43
1:2:1019:A:OP2	15:C3:107:LYS:HE3	2.18	0.43
29:D7:47:PHE:HE1	29:D7:49:HIS:HB2	1.83	0.43
36:5:83:U:H4'	36:5:700:C:O2'	2.19	0.43
36:1:1635:G:N2	36:1:1638:A:OP2	2.51	0.43
1:6:898:A:N1	1:6:911:U:O2'	2.36	0.43
1:6:894:U:C2	1:6:919:A:N1	2.87	0.43
23:D1:38:LYS:NZ	23:D1:50:TYR:O	2.42	0.43
2:S0:160:ILE:HA	2:S0:161:PRO:HD2	1.77	0.43
2:S0:185:ARG:H	23:D1:44:ARG:CA	2.26	0.43
2:S0:50:VAL:HA	2:S0:53:THR:HB	1.99	0.43
2:S0:56:LYS:HD3	2:S0:56:LYS:HA	1.93	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S0:9:LEU:HD21	2:S0:14:ALA:HB2	3.18	0.43
40:L3:25:ILE:CG2	40:L3:272:TYR:OH	2.67	0.43
36:5:678:G:H2'	36:5:679:U:C6	2.53	0.43
48:M1:90:GLN:HA	48:M1:170:ASP:HB2	2.01	0.43
66:O0:24:THR:HG22	66:O0:91:SER:HB3	2.00	0.43
68:O2:126:LEU:HD13	68:O2:127:ALA:O	7.57	0.43
38:4:81:U:O2	38:4:82:U:H3'	2.19	0.43
1:6:1648:A:H2'	1:6:1649:G:C8	2.53	0.43
1:6:71:A:H2'	1:6:72:A:H4'	2.00	0.43
36:1:3182:G:H8	36:1:3182:G:O5'	2.01	0.43
52:M6:36:VAL:HB	52:M6:108:ILE:HG12	2.00	0.43
60:N4:21:PHE:C	60:N4:21:PHE:CD1	2.91	0.43
69:O3:8:TYR:HB2	69:O3:100:ILE:O	2.19	0.43
69:O3:85:PHE:CD2	69:O3:89:LEU:HG	3.09	0.43
1:2:1156:C:O2'	1:2:1157:A:H5'	2.18	0.43
36:1:2941:A:H8	36:1:2941:A:OP2	2.00	0.43
18:C6:117:LEU:HA	18:C6:117:LEU:HD13	1.61	0.43
34:SR:112:SER:O	34:SR:124:SER:HA	2.94	0.43
34:SR:232:TYR:CE1	34:SR:234:LEU:HD11	2.54	0.43
34:SR:29:GLN:HG3	34:SR:32:LEU:HB2	3.97	0.43
72:O6:79:SER:HB3	72:O6:82:ARG:CB	6.13	0.43
39:L2:149:ARG:HH22	39:L2:253:GLN:HA	1.83	0.43
78:Q2:43:TYR:CE1	78:Q2:47:GLN:NE2	3.75	0.43
1:2:1170:G:N7	1:2:1574:G:C8	2.87	0.43
1:2:1573:A:O4'	1:2:1574:G:C2	2.71	0.43
1:2:1292:G:H2'	1:2:1293:U:C6	2.54	0.43
52:M6:34:VAL:HG21	52:M6:112:TYR:CE1	2.54	0.43
8:S6:64:LYS:NZ	8:S6:81:VAL:HG22	2.33	0.43
36:5:1807:G:C5	36:5:1808:G:C6	3.07	0.43
36:1:1099:A:C5	36:1:1100:U:C5	3.07	0.43
58:N2:53:ALA:HB1	58:N2:68:THR:HG22	2.00	0.43
45:L8:193:LYS:NZ	36:5:144:A:OP1	112.96	0.43
49:M3:78:ALA:HB1	49:M3:109:PHE:HE2	1.82	0.43
1:2:783:G:HO2'	1:2:784:C:H6	1.58	0.43
71:O5:51:ILE:O	71:O5:55:LEU:HB2	2.19	0.43
45:L8:134:TYR:CE1	36:5:146:U:C2	106.87	0.43
45:L8:160:ILE:HD13	45:L8:164:VAL:HG12	5.63	0.43
1:2:592:A:O2'	1:2:596:C:OP1	2.37	0.43
40:L3:196:ARG:C	40:L3:198:HIS:N	2.83	0.43
25:D3:27:ASN:OD1	25:D3:27:ASN:C	3.05	0.43
76:Q0:128:LYS:H	76:Q0:128:LYS:HG3	4.20	0.43
36:1:2847:A:P	76:Q0:97:ARG:HH21	2.42	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:L6:35:VAL:O	43:L6:36:PRO:C	2.57	0.43
36:5:2133:U:H2'	36:5:2134:G:H5'	2.00	0.43
64:N8:100:PRO:HG2	64:N8:123:VAL:HG13	3.37	0.43
67:O1:72:ARG:NH1	67:O1:105:GLN:O	2.91	0.43
1:6:103:A:H2'	1:6:103:A:H8	1.73	0.43
11:S9:49:LEU:HD22	11:S9:49:LEU:O	2.19	0.43
1:6:636:A:H2	1:6:861:U:C2	2.36	0.43
36:1:2549:G:C8	45:L8:33:ASN:ND2	2.86	0.43
9:S7:15:GLU:O	9:S7:18:LEU:HB2	2.19	0.43
24:D2:38:LEU:HB3	24:D2:50:PHE:CE1	2.54	0.43
25:D3:135:LEU:CD2	25:D3:142:LYS:HB2	2.48	0.43
36:1:3111:U:C2	36:1:3112:G:C8	3.07	0.43
46:L9:37:ASN:C	46:L9:37:ASN:OD1	2.57	0.43
36:5:2787:G:OP2	87:5:4029:OHX:N6	2.52	0.43
74:O8:19:ASP:OD1	74:O8:48:SER:N	4.21	0.43
40:L3:238:LEU:HB2	40:L3:246:LEU:HB2	2.99	0.43
36:1:1753:G:N2	36:1:1754:G:H1'	2.34	0.43
36:5:2719:U:H2'	36:5:2720:G:H8	1.83	0.43
65:N9:35:VAL:O	65:N9:37:PRO:HD3	2.19	0.43
41:L4:51:ALA:HB3	38:8:27:U:H4'	109.98	0.43
36:1:766:U:C2	36:1:767:U:C4	3.05	0.43
36:1:1807:G:C5	36:1:1808:G:C6	3.07	0.43
59:N3:54:LEU:HD23	59:N3:54:LEU:O	2.18	0.43
56:N0:155:ARG:HG2	56:N0:172:TYR:CD1	2.53	0.43
44:L7:110:ARG:CZ	54:M8:3:ILE:HD12	3.31	0.43
10:S8:9:HIS:C	10:S8:9:HIS:ND1	2.93	0.43
1:6:1398:U:C3'	1:6:1399:C:H4'	2.45	0.43
1:6:1218:G:O2'	1:6:1219:A:OP2	2.32	0.43
71:O5:16:GLN:O	71:O5:19:SER:N	2.50	0.43
11:S9:30:LEU:HD23	11:S9:30:LEU:HA	1.85	0.43
22:D0:16:GLN:HB3	22:D0:17:GLN:H	1.46	0.43
36:1:1158:A:O5'	36:1:1158:A:C8	2.66	0.43
1:6:4:C:H2'	1:6:5:U:H6	1.83	0.43
36:1:1094:U:H4'	36:1:1096:U:OP1	2.18	0.43
36:5:2441:A:H61	36:5:2507:C:N4	2.15	0.43
73:O7:19:CYS:HB3	73:O7:22:CYS:H	1.83	0.43
36:1:2107:A:C6	36:1:2108:C:C4	3.07	0.43
36:5:1944:U:O2	36:5:1945:A:C8	2.72	0.43
1:2:344:A:C4	1:2:345:U:C5	3.07	0.43
26:D4:58:PHE:HD1	26:D4:90:ARG:HD3	2.17	0.43
36:5:1246:G:C8	36:5:1264:G:C6	3.06	0.43
19:C7:74:GLN:HA	19:C7:77:GLU:OE1	6.41	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2673:A:N6	36:5:2681:U:H3	2.16	0.43
36:1:1263:A:H2'	36:1:1263:A:N3	2.34	0.43
36:1:3015:G:C5	36:1:3040:A:C2	3.07	0.43
68:O2:47:ARG:NH1	36:5:634:C:O3'	218.64	0.43
36:1:1131:G:O2'	36:1:2373:A:N1	2.46	0.43
36:1:2373:A:N3	36:1:2824:G:O2'	2.40	0.43
48:M1:116:TYR:CE1	48:M1:118:PRO:HA	2.54	0.43
51:M5:108:ARG:HG3	51:M5:108:ARG:NH1	2.33	0.43
11:S9:40:LYS:O	11:S9:43:TYR:HB2	2.18	0.43
1:2:1540:G:C6	1:2:1541:G:C4	3.06	0.43
36:1:2952:G:C6	36:1:2953:U:C2	3.06	0.43
36:5:1550:C:H2'	36:5:1551:C:O4'	2.18	0.43
36:1:884:A:OP2	36:1:2139:A:N6	2.52	0.43
1:6:775:G:C2	1:6:786:C:N4	2.86	0.43
36:5:1157:G:N2	36:5:1158:A:H1'	2.34	0.43
36:1:2670:G:H2'	36:1:2671:A:O4'	2.17	0.43
36:5:2951:G:O2'	36:5:2952:G:H5'	2.19	0.43
1:6:1195:C:O5'	1:6:1195:C:H6	2.01	0.43
36:1:2842:U:O2'	36:1:2843:U:OP1	2.33	0.43
5:S3:115:ILE:HG13	5:S3:115:ILE:H	4.06	0.43
58:N2:84:LEU:HA	58:N2:84:LEU:HD23	1.89	0.43
36:5:1728:G:N3	36:5:1728:G:H5'	2.33	0.43
40:L3:5:LYS:O	40:L3:5:LYS:HG2	2.18	0.43
71:O5:17:LEU:HA	71:O5:20:GLN:HB2	3.36	0.43
14:C2:108:ARG:O	14:C2:110:ALA:N	2.80	0.43
36:1:2137:U:C6	36:1:2141:U:O4	2.71	0.43
78:Q2:12:CYS:SG	78:Q2:74:CYS:SG	3.16	0.43
1:2:1645:G:C2	1:2:1757:G:C5	3.06	0.43
36:1:1306:G:C6	52:M6:62:THR:HA	2.53	0.43
1:6:1793:G:H1'	1:6:1794:A:H2'	1.99	0.43
1:6:992:A:OP2	1:6:1011:G:N1	2.42	0.43
11:S9:142:ASN:C	11:S9:143:ILE:HG13	2.39	0.43
36:5:2835:U:C2'	36:5:2836:C:H5'	2.48	0.43
47:M0:74:LYS:HB2	47:M0:74:LYS:HE3	1.98	0.43
47:M0:87:LEU:HD23	47:M0:138:VAL:CG2	4.68	0.43
65:N9:18:ARG:HD2	65:N9:18:ARG:HA	1.72	0.43
36:1:1170:A:H2'	36:1:1171:G:O4'	2.18	0.43
37:3:86:U:H3'	44:L7:218:ARG:NH2	2.34	0.43
36:1:115:A:C4	36:1:265:A:C2	3.06	0.43
41:L4:188:ARG:NE	41:L4:197:ARG:O	2.67	0.43
43:L6:56:LYS:NZ	43:L6:98:VAL:O	3.35	0.43
19:C7:25:THR:C	19:C7:27:ASP:H	2.22	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:M6:130:LYS:HB2	36:5:1316:C:C6	296.45	0.43
36:1:929:A:H2'	36:1:930:U:O4'	2.17	0.43
7:S5:123:VAL:CG1	27:D5:59:TYR:HB2	5.11	0.43
27:D5:61:SER:OG	27:D5:63:SER:OG	3.33	0.43
7:S5:51:VAL:HG13	7:S5:131:GLN:HA	2.81	0.43
7:S5:26:ALA:HB2	18:C6:26:LYS:O	4.54	0.43
67:O1:46:THR:HG21	67:O1:49:VAL:HG22	2.90	0.43
38:4:46:G:C6	38:4:47:C:N4	2.86	0.43
36:1:2702:A:H4'	36:1:2704:A:O4'	2.18	0.43
42:L5:148:ILE:CG1	42:L5:159:VAL:HG21	2.49	0.43
1:6:1504:G:N1	1:6:1505:A:C2	2.86	0.43
17:C5:108:ARG:N	17:C5:111:MET:HG3	2.28	0.43
17:C5:68:PRO:HG2	17:C5:71:GLU:OE2	2.49	0.43
31:D9:19:ARG:HD3	31:D9:32:ARG:HD2	2.80	0.43
31:D9:22:ARG:HG3	31:D9:37:ASN:O	2.18	0.43
24:D2:57:ARG:N	24:D2:57:ARG:HD2	2.33	0.43
1:6:1654:G:O2'	1:6:1746:A:N6	2.52	0.43
1:6:1784:C:H2'	1:6:1785:U:C6	2.52	0.43
15:C3:115:LEU:CD2	15:C3:119:GLU:HG3	2.43	0.43
3:S1:33:LYS:HE2	3:S1:33:LYS:HB3	4.48	0.43
3:S1:87:ARG:NH2	3:S1:89:ASP:OD1	4.77	0.43
1:6:14:C:O2	1:6:1141:G:C2	2.72	0.43
4:S2:141:ARG:NH2	23:D1:10:GLU:OE2	2.52	0.43
4:S2:61:LEU:HG	4:S2:61:LEU:H	3.30	0.43
1:6:1698:G:N2	1:6:1703:C:N4	2.66	0.43
4:S2:152:HIS:HD1	4:S2:174:ARG:HB3	4.25	0.43
63:N7:129:TRP:O	63:N7:131:PHE:N	2.87	0.43
43:L6:7:PRO:HD2	43:L6:10:TYR:OH	3.27	0.43
29:D7:69:GLY:HA2	1:6:957:G:O2'	337.07	0.43
55:M9:38:ARG:HB2	36:5:1602:A:OP2	101.06	0.43
38:4:84:C:H4'	38:4:85:G:C5	2.54	0.43
62:N6:30:LEU:C	62:N6:32:SER:H	2.32	0.43
14:C2:35:ALA:HB1	14:C2:40:GLY:O	2.82	0.43
35:SM:80:ALA:HB1	1:6:1178:G:H21	334.62	0.43
1:6:1183:A:C6	1:6:1184:A:N1	2.87	0.43
6:S4:129:VAL:CG1	6:S4:156:VAL:HG22	3.04	0.43
57:N1:9:SER:O	57:N1:10:ARG:HB2	2.19	0.43
40:L3:57:VAL:HG22	40:L3:73:VAL:HB	2.00	0.43
36:1:3215:A:H62	50:M4:122:VAL:HG13	1.84	0.43
9:S7:89:HIS:CE1	9:S7:168:SER:HG	3.55	0.43
9:S7:166:LEU:C	9:S7:168:SER:H	2.22	0.43
36:1:31:C:H2'	36:1:32:U:O4'	2.18	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:L4:60:THR:HG23	36:5:364:G:OP1	128.61	0.43
72:O6:70:ARG:O	72:O6:73:ALA:N	2.48	0.43
66:O0:100:ILE:HD12	66:O0:101:LEU:N	2.34	0.43
3:S1:142:PHE:O	3:S1:207:LEU:HA	2.29	0.43
3:S1:184:LEU:HA	3:S1:187:LYS:HB2	2.01	0.43
36:5:938:C:OP1	36:5:963:G:H5'	2.18	0.43
36:5:812:G:H1	36:5:928:C:N4	2.16	0.43
49:M3:50:PRO:CG	71:O5:118:ILE:HD11	2.43	0.43
36:5:61:A:N6	36:5:62:A:N1	2.67	0.43
26:D4:26:ASP:OD1	26:D4:68:LYS:HE3	2.19	0.43
26:D4:94:TYR:HB2	26:D4:96:LEU:HG	2.43	0.43
1:6:500:C:O2'	1:6:501:U:O5'	2.37	0.43
36:5:1754:G:H5''	36:5:1755:C:OP2	2.19	0.43
74:O8:24:THR:HG23	74:O8:44:LYS:CB	3.82	0.43
61:N5:58:ASP:OD2	61:N5:61:LYS:N	2.83	0.43
79:Q3:14:TYR:O	79:Q3:17:ARG:HB2	2.18	0.43
79:Q3:21:SER:O	79:Q3:24:ARG:HB3	3.00	0.43
36:5:18:G:C2	38:8:142:C:N3	2.87	0.43
38:4:36:G:N7	71:O5:86:ARG:HG3	2.34	0.43
36:5:2254:U:H2'	36:5:2261:G:N2	2.33	0.43
1:6:913:G:H8	36:5:2205:U:C4	2.36	0.43
45:L8:164:VAL:HG22	45:L8:164:VAL:H	1.52	0.43
40:L3:194:TRP:NE1	40:L3:198:HIS:CE1	3.10	0.43
4:S2:122:ALA:HA	4:S2:125:ILE:HD11	2.00	0.43
1:2:812:A:C4	1:2:859:A:C2	3.06	0.43
36:5:913:A:H2	36:5:2134:G:N3	2.16	0.43
36:5:2959:C:H2'	36:5:2960:C:H5'	2.01	0.43
48:M1:135:GLY:HA2	37:7:28:C:O3'	315.86	0.43
52:M6:74:ARG:O	52:M6:142:SER:OG	2.30	0.43
47:M0:4:ARG:CZ	47:M0:99:ILE:HG22	6.51	0.43
21:C9:74:GLY:O	21:C9:75:LYS:C	2.88	0.43
1:6:1530:C:H2'	1:6:1531:G:O5'	2.19	0.43
25:D3:110:LYS:O	25:D3:110:LYS:HG2	4.62	0.43
1:6:370:A:H5''	1:6:371:G:OP2	2.18	0.43
66:O0:51:LEU:HD11	70:O4:91:ARG:HA	2.50	0.43
87:1:3952:OHX:N4	87:1:4037:OHX:N3	2.67	0.43
36:5:1614:C:H6	36:5:1614:C:O5'	2.01	0.43
1:2:91:G:C5	1:2:92:A:N7	2.86	0.43
1:2:57:G:C4	1:2:91:G:N2	2.86	0.43
1:2:189:C:C2'	1:2:190:C:H5'	2.48	0.43
1:2:186:C:H42	1:2:199:G:H1	1.66	0.43
10:S8:138:ASN:OD1	10:S8:139:ALA:N	4.86	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:L5:113:LEU:HB3	42:L5:115:LEU:CD2	2.49	0.43
42:L5:95:TRP:CH2	42:L5:181:PRO:HD3	4.86	0.43
8:S6:1:MET:H1	8:S6:1:MET:HE3	5.81	0.43
36:5:854:G:H2'	36:5:854:G:N3	2.34	0.43
69:O3:13:HIS:O	69:O3:95:GLY:N	2.52	0.43
36:1:732:C:C4	36:1:733:G:C6	3.07	0.43
42:L5:287:ALA:HA	42:L5:290:ILE:CD1	2.48	0.43
14:C2:30:VAL:HB	14:C2:132:GLU:OE1	2.19	0.43
47:M0:167:LEU:H	47:M0:167:LEU:HD23	3.85	0.43
22:D0:52:LYS:HD2	1:6:1345:A:OP2	470.59	0.43
18:C6:73:GLY:O	18:C6:77:GLN:HG3	2.19	0.43
66:O0:53:LYS:O	66:O0:57:GLU:N	2.49	0.43
36:5:1897:G:H2'	36:5:1898:G:O4'	2.18	0.43
36:1:1411:C:P	68:O2:98:HIS:HB3	2.58	0.43
36:5:3146:G:C2'	36:5:3147:G:O5'	2.66	0.43
36:1:1346:G:C2	36:1:1359:C:O2	2.72	0.43
36:1:2268:U:O5'	36:1:2268:U:H6	2.02	0.43
36:5:2678:A:N7	36:5:2679:A:N7	2.66	0.43
36:5:891:G:C5	36:5:892:U:C4	3.07	0.43
36:1:1454:A:C6	36:1:1879:A:C4	3.07	0.43
36:1:923:C:H2'	36:1:923:C:O5'	2.19	0.43
36:5:327:A:H2'	36:5:328:U:C6	2.53	0.43
3:S1:146:GLN:NE2	1:6:1065:A:N3	341.68	0.43
21:C9:52:GLY:HA2	21:C9:55:TYR:CD2	2.54	0.43
36:5:1259:A:N7	36:5:1260:A:C6	2.87	0.43
36:5:384:A:H2'	36:5:385:A:O4'	2.19	0.43
3:S1:22:ASP:HA	3:S1:23:PRO:HD3	2.00	0.43
17:C5:73:PRO:HG2	17:C5:93:VAL:HG22	4.10	0.43
87:1:3972:OHX:N6	87:1:4155:OHX:N2	2.66	0.43
1:2:296:U:O2'	1:2:297:U:H5'	2.18	0.43
36:5:1756:C:H42	36:5:1769:G:H1	1.66	0.43
4:S2:146:THR:C	4:S2:148:LEU:H	2.82	0.43
36:5:1310:G:N2	36:5:1311:G:C4	2.87	0.43
36:1:2136:C:H2'	36:1:2142:A:H62	1.84	0.43
36:1:3270:U:H3'	36:1:3271:G:C5'	2.49	0.43
36:1:2972:G:N2	36:1:2973:G:C4	2.86	0.43
1:2:647:G:N2	1:2:688:G:C4	2.86	0.43
52:M6:148:LYS:O	52:M6:150:GLU:N	2.40	0.43
59:N3:16:GLY:O	59:N3:18:PRO:HD3	2.27	0.43
1:6:694:U:H3'	1:6:695:U:O2	2.18	0.43
1:6:101:U:H5''	1:6:102:U:OP2	2.18	0.43
36:5:2277:C:H6	36:5:2277:C:O5'	2.01	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:M3:53:LEU:HD23	49:M3:53:LEU:N	2.34	0.43
1:6:63:G:C6	1:6:64:U:C5	3.07	0.43
1:2:743:U:OP1	9:S7:108:GLN:N	2.37	0.43
25:D3:126:LYS:HB2	25:D3:126:LYS:HE3	3.17	0.43
36:1:2353:G:O2'	36:1:2354:C:H5'	2.18	0.43
53:M7:119:VAL:HG23	53:M7:146:ILE:HG12	2.00	0.43
28:D6:22:ARG:HE	28:D6:22:ARG:HB3	2.77	0.43
36:1:2836:C:C5	36:1:2852:C:N4	2.83	0.43
47:M0:33:ILE:HD11	47:M0:36:LEU:HD21	1.99	0.43
45:L8:242:ALA:O	45:L8:245:LYS:HB3	2.19	0.43
10:S8:83:TYR:HE2	13:C1:11:ARG:NH2	4.16	0.43
13:C1:45:PRO:HD2	13:C1:60:PHE:CE1	4.18	0.43
10:S8:101:ILE:HD12	10:S8:101:ILE:HG23	2.04	0.43
36:1:1393:A:N3	36:1:1419:A:O2'	2.47	0.43
41:L4:193:LYS:HA	41:L4:198:ARG:HA	2.24	0.43
19:C7:50:ILE:O	19:C7:51:ALA:C	2.86	0.43
36:5:817:A:H3'	36:5:818:C:H6	1.84	0.43
1:2:1358:G:H2'	1:2:1359:C:H6	1.80	0.43
7:S5:113:ILE:HG12	27:D5:97:LYS:NZ	2.33	0.43
30:D8:25:VAL:HG12	30:D8:43:ASN:HB3	2.01	0.43
30:D8:64:ARG:O	30:D8:66:LEU:HD12	5.75	0.43
1:2:1281:G:H2'	1:2:1282:U:H6	1.84	0.43
1:6:1279:C:H42	1:6:1280:C:N4	2.16	0.43
31:D9:38:ILE:CG2	31:D9:42:CYS:HB3	3.20	0.43
48:M1:109:HIS:CD2	48:M1:123:PHE:H	2.26	0.43
5:S3:90:ARG:HB3	5:S3:91:VAL:H	2.29	0.43
1:6:865:A:H2'	1:6:866:G:H8	1.83	0.43
15:C3:92:ILE:HD12	15:C3:92:ILE:H	4.00	0.43
64:N8:64:GLN:HB3	64:N8:67:HIS:CE1	4.04	0.43
1:6:926:A:H1'	1:6:988:A:C2	2.54	0.43
16:C4:117:ASP:OD2	16:C4:119:THR:HG22	4.01	0.43
16:C4:25:ASP:OD1	16:C4:54:GLU:HG2	2.19	0.43
3:S1:131:ASP:HB3	3:S1:180:THR:CG2	2.49	0.43
2:S0:59:LEU:O	2:S0:63:ILE:HG13	2.22	0.43
38:4:85:G:O2'	38:4:86:U:O5'	2.20	0.43
36:1:1321:G:O2'	56:N0:111:ALA:HB1	2.19	0.43
56:N0:77:VAL:O	56:N0:91:TYR:HA	2.19	0.43
1:6:72:A:C3'	1:6:73:U:O4'	2.67	0.43
56:N0:53:LYS:C	56:N0:55:SER:N	3.03	0.43
57:N1:34:TYR:CD2	57:N1:34:TYR:N	2.86	0.43
69:O3:42:GLN:O	69:O3:45:LEU:HB2	2.18	0.43
18:C6:104:GLU:O	18:C6:108:ALA:HB2	4.67	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:M6:28:LEU:HB3	52:M6:94:ARG:HH21	1.84	0.43
40:L3:106:TRP:CD1	40:L3:106:TRP:N	2.86	0.43
24:D2:123:GLY:HA2	1:6:748:U:H4'	365.72	0.43
36:1:1686:U:H5''	58:N2:42:LYS:NZ	2.33	0.43
26:D4:9:THR:HA	26:D4:24:VAL:O	2.58	0.43
36:5:2735:U:H2'	36:5:2736:A:O4'	2.19	0.43
38:4:117:C:H2'	38:4:118:C:H6	1.83	0.43
61:N5:45:LYS:HB3	36:5:17:G:OP1	84.59	0.43
46:L9:103:ILE:HD11	46:L9:134:ILE:HB	2.01	0.43
46:L9:113:GLU:OE2	46:L9:115:ARG:NH2	2.77	0.43
36:5:2649:A:H2'	36:5:2650:U:H5'	2.00	0.43
1:2:634:G:N3	1:2:966:A:C2	2.86	0.43
42:L5:153:THR:HG22	42:L5:179:ARG:NH1	4.27	0.43
25:D3:24:TRP:HE3	25:D3:30:LYS:CD	2.26	0.43
36:5:2971:A:C2'	36:5:2971:A:N3	2.82	0.43
36:5:1700:G:H2'	36:5:1701:C:C6	2.54	0.43
44:L7:26:VAL:HG23	44:L7:27:ALA:H	1.84	0.43
70:O4:20:ILE:HD11	70:O4:34:HIS:CE1	2.54	0.43
64:N8:121:VAL:HA	64:N8:122:PRO:HD3	2.16	0.43
64:N8:95:SER:O	64:N8:99:ALA:HB2	3.58	0.43
31:D9:26:SER:C	31:D9:28:THR:N	2.66	0.43
36:1:2159:U:H6	36:1:2159:U:O2'	1.99	0.43
2:S0:126:PRO:HB2	2:S0:152:PRO:HG2	2.00	0.43
33:E1:135:HIS:HB3	1:6:1250:U:H2'	432.58	0.43
36:5:732:C:C2	36:5:733:G:C8	3.07	0.43
34:SR:127:ARG:O	34:SR:129:LYS:N	2.49	0.43
46:L9:38:LEU:C	46:L9:40:HIS:H	2.22	0.43
46:L9:68:LEU:HD23	46:L9:68:LEU:HA	1.74	0.43
57:N1:122:GLN:HB3	57:N1:123:GLY:H	1.61	0.43
36:5:982:C:C2	36:5:1102:A:C2	3.07	0.43
36:5:981:U:H2'	36:5:982:C:C6	2.54	0.43
36:1:2294:U:O3'	59:N3:63:LYS:NZ	2.48	0.43
40:L3:33:PRO:HG2	40:L3:340:LYS:HB2	2.00	0.43
38:4:10:A:C5	38:4:11:C:C5	3.06	0.43
56:N0:155:ARG:HD3	56:N0:172:TYR:CD1	4.25	0.43
68:O2:55:ILE:HB	36:5:947:G:H5'	187.68	0.43
8:S6:26:VAL:HG22	8:S6:40:ALA:HB1	2.63	0.43
36:5:2881:C:H42	36:5:2943:G:H1	1.66	0.43
27:D5:49:ARG:HD2	27:D5:53:GLU:OE1	3.76	0.43
41:L4:316:ASN:HA	41:L4:317:PRO:HD2	2.87	0.43
42:L5:290:ILE:HG12	47:M0:206:LEU:HD11	5.73	0.43
1:2:852:C:H2'	1:2:853:G:O4'	2.18	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1722:U:C5	36:5:1723:A:N7	2.87	0.43
36:5:1465:A:N6	36:5:1466:G:C2	2.87	0.43
24:D2:114:GLU:O	24:D2:118:ARG:HG3	2.19	0.43
45:L8:90:THR:HG22	45:L8:214:LEU:HD21	4.15	0.43
36:1:2649:A:C2'	36:1:2650:U:H5'	2.48	0.43
72:O6:33:ALA:O	72:O6:34:SER:OG	2.32	0.43
9:S7:173:TYR:CZ	9:S7:181:ILE:HD11	4.18	0.43
8:S6:212:LEU:O	8:S6:215:ARG:HB2	3.60	0.43
36:5:167:U:H2'	36:5:168:U:H6	1.83	0.43
41:L4:307:GLN:OE1	36:5:1346:G:H1'	203.35	0.43
1:6:1758:U:H2'	1:6:1759:C:C6	2.53	0.43
1:6:767:U:O2	1:6:767:U:O4'	2.36	0.43
36:1:592:A:H5''	43:L6:19:LYS:HG3	2.00	0.43
70:O4:66:SER:O	70:O4:69:HIS:N	2.84	0.43
13:C1:27:THR:HG21	13:C1:29:LYS:NZ	2.33	0.43
36:1:3133:C:H2'	36:1:3134:A:O4'	2.19	0.43
1:2:1036:A:H1'	24:D2:9:ASP:OD1	2.19	0.43
36:5:2634:U:C2	36:5:2645:G:C6	3.06	0.43
36:5:3145:C:O2'	36:5:3146:G:H5'	2.18	0.43
36:5:1087:G:C2'	36:5:1088:U:H5'	2.49	0.43
11:S9:4:ALA:HA	11:S9:5:PRO:HD3	1.86	0.43
36:1:510:G:C5	36:1:511:G:N7	2.86	0.43
36:1:1070:U:O2	36:1:1070:U:H2'	2.18	0.43
1:6:23:G:N2	1:6:367:A:O2'	2.50	0.43
36:5:2886:U:C6	36:5:2911:A:N7	2.87	0.43
36:1:1074:U:O2'	36:1:1075:A:H2'	2.19	0.43
1:6:128:U:H5''	1:6:129:U:C5	2.54	0.43
36:5:1230:G:H1	36:5:1279:C:N4	2.17	0.43
11:S9:175:ARG:HD3	11:S9:179:ARG:NH2	2.34	0.43
34:SR:126:SER:OG	34:SR:128:ASP:OD1	2.88	0.43
1:2:1663:G:C2	1:2:1739:C:C2	3.07	0.43
1:2:629:U:H1'	1:2:971:A:C2	2.54	0.43
50:M4:48:GLY:N	50:M4:53:VAL:HG22	2.34	0.43
36:1:3247:G:C2	36:1:3248:C:C2	3.07	0.43
36:5:3372:A:C5	36:5:3373:U:C5	3.06	0.43
4:S2:181:SER:OG	4:S2:183:ALA:HB3	3.87	0.43
9:S7:95:GLU:OE1	9:S7:97:ARG:NH1	10.94	0.43
36:5:1148:G:C2	36:5:1156:C:N3	2.86	0.43
78:Q2:4:VAL:HA	78:Q2:5:PRO:HD2	2.23	0.43
36:5:2287:C:C2	36:5:2298:U:O4'	2.72	0.43
1:6:205:U:O4	87:6:2134:OHX:N6	2.52	0.43
46:L9:139:ASN:CG	46:L9:140:VAL:N	2.72	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:103:THR:HG22	40:L3:104:THR:N	2.34	0.43
36:1:1257:C:N3	36:1:1258:U:C2	2.86	0.43
1:2:970:A:H5''	1:2:970:A:H8	1.83	0.43
1:2:239:C:H6	1:2:239:C:H2'	1.56	0.43
1:2:1087:A:C6	1:2:1088:A:C6	3.06	0.43
43:L6:103:VAL:O	43:L6:105:TYR:N	2.52	0.43
25:D3:73:ARG:HG2	25:D3:84:THR:HB	2.53	0.43
1:2:443:C:OP2	26:D4:105:ARG:HB2	2.19	0.43
36:1:1009:A:H2'	36:1:1010:G:C1'	2.49	0.43
47:M0:84:ALA:O	47:M0:140:THR:HB	3.19	0.43
44:L7:160:ARG:HD2	44:L7:203:TRP:CD2	2.59	0.43
51:M5:6:TYR:CD2	72:O6:40:VAL:HG13	2.54	0.43
10:S8:48:THR:HG22	1:6:333:A:OP1	297.82	0.43
36:1:1388:U:O4	41:L4:186:LYS:HD3	2.18	0.43
41:L4:190:GLY:C	41:L4:192:GLY:N	2.72	0.43
41:L4:258:LEU:C	41:L4:260:GLN:H	2.91	0.43
43:L6:54:TYR:O	43:L6:55:LEU:HD23	2.20	0.43
1:6:1317:C:O2	1:6:1400:A:C2	2.72	0.43
52:M6:128:ARG:CG	52:M6:128:ARG:HH11	3.88	0.43
1:2:1165:G:N2	1:2:1581:C:O2	2.51	0.43
1:6:1547:A:N6	1:6:1564:U:H3	2.17	0.43
18:C6:36:ILE:C	18:C6:38:LEU:N	2.74	0.43
18:C6:59:LYS:HE2	18:C6:59:LYS:HB2	1.89	0.43
18:C6:60:PHE:CZ	18:C6:89:LEU:HD22	2.53	0.43
21:C9:37:VAL:HG12	21:C9:38:LYS:N	3.60	0.43
27:D5:66:VAL:HA	27:D5:70:LYS:O	2.18	0.43
30:D8:10:ALA:HB2	30:D8:56:LEU:HD11	2.01	0.43
7:S5:93:LEU:HD13	7:S5:114:ILE:HD11	4.14	0.43
7:S5:172:ILE:O	7:S5:176:THR:HG23	2.18	0.43
7:S5:197:GLU:HA	7:S5:200:ASN:HB2	3.12	0.43
4:S2:203:LYS:C	4:S2:205:ARG:N	2.98	0.43
40:L3:308:MET:O	40:L3:363:SER:HB2	2.19	0.43
67:O1:17:HIS:C	67:O1:19:ARG:N	3.08	0.43
61:N5:62:VAL:O	61:N5:86:VAL:HG12	5.54	0.43
61:N5:91:ASN:O	61:N5:94:GLN:N	2.51	0.43
42:L5:53:VAL:CG1	42:L5:159:VAL:HG23	3.12	0.43
42:L5:99:TYR:CE2	42:L5:165:GLY:HA2	2.62	0.43
1:6:1203:A:OP2	87:6:2135:OHX:N4	2.52	0.43
12:C0:64:TYR:N	12:C0:64:TYR:CD2	3.28	0.43
12:C0:64:TYR:HB3	12:C0:66:TYR:CE2	2.53	0.43
17:C5:111:MET:HE2	20:C8:119:ILE:HG22	2.00	0.43
17:C5:42:ARG:H	17:C5:42:ARG:HG3	1.58	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:C8:114:GLU:O	20:C8:115:ARG:C	3.18	0.43
31:D9:25:SER:O	31:D9:27:HIS:N	2.52	0.43
5:S3:61:GLU:CB	5:S3:64:ARG:HE	4.15	0.43
87:2:2032:OHX:N3	15:C3:12:SER:O	2.51	0.43
15:C3:98:VAL:HG21	15:C3:118:ILE:HD13	1.99	0.43
29:D7:47:PHE:HD1	29:D7:49:HIS:O	2.01	0.43
1:2:310:C:C5	1:2:311:U:C5	3.06	0.43
4:S2:226:THR:HG22	24:D2:99:PHE:CZ	2.66	0.43
4:S2:140:ARG:HH22	4:S2:228:ASN:CB	4.48	0.43
36:1:1722:U:C2'	36:1:1723:A:H5'	2.49	0.43
36:1:1735:G:O6	87:1:3916:OHX:N1	2.52	0.43
63:N7:73:LYS:NZ	36:5:1637:A:P	210.01	0.43
66:O0:36:GLN:HB2	66:O0:38:LYS:HG3	2.00	0.43
55:M9:14:VAL:HB	55:M9:15:VAL:H	1.65	0.43
1:6:1179:G:C6	1:6:1180:C:C4	3.07	0.43
6:S4:142:HIS:CG	6:S4:143:ASP:H	3.67	0.43
36:5:533:A:H4'	36:5:534:U:OP1	2.19	0.43
56:N0:81:TYR:HA	56:N0:120:SER:O	2.19	0.43
57:N1:15:PHE:CD1	57:N1:52:MET:HE1	2.54	0.43
38:4:54:A:C6	38:4:55:U:N3	2.87	0.43
34:SR:103:PHE:HB3	34:SR:134:TRP:CE3	2.55	0.43
34:SR:44:SER:HG	34:SR:59:ARG:N	3.04	0.43
1:2:1006:C:O3'	16:C4:136:ARG:NH1	2.52	0.43
1:6:151:G:N2	1:6:163:G:H22	2.15	0.43
26:D4:124:ARG:O	26:D4:126:ALA:N	3.33	0.43
4:S2:96:THR:O	4:S2:97:ARG:HB3	4.50	0.43
36:1:1858:A:HO2'	36:1:1859:A:P	2.41	0.43
1:6:1765:A:H5'	1:6:1767:G:C8	2.53	0.43
52:M6:185:ALA:O	52:M6:187:GLU:N	3.93	0.43
79:Q3:18:TYR:H	36:5:2131:A:H61	226.00	0.43
61:N5:46:TYR:HD1	71:O5:77:PRO:HA	1.84	0.43
40:L3:35:ASP:HA	40:L3:184:ASN:OD1	2.23	0.43
8:S6:195:VAL:O	8:S6:196:ARG:C	2.57	0.43
70:O4:52:GLN:HE21	36:5:1738:C:H1'	194.78	0.43
42:L5:56:THR:C	42:L5:58:LYS:H	2.19	0.43
48:M1:137:ARG:C	48:M1:139:THR:N	3.41	0.43
36:5:1554:U:C4	36:5:1555:U:C5	3.07	0.43
4:S2:44:LEU:HD21	4:S2:246:GLU:HB2	2.01	0.43
36:1:911:C:O2'	36:1:912:G:H5'	2.19	0.43
36:5:1081:U:H4'	36:5:1082:U:O5'	2.19	0.43
36:5:974:G:N2	36:5:1108:U:C6	2.87	0.43
38:8:13:A:C6	38:8:14:C:C4	3.07	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:D0:57:ARG:HD3	22:D0:57:ARG:N	2.34	0.43
36:1:3121:U:C2	36:1:3122:A:C8	3.07	0.43
36:5:3264:G:C2	36:5:3265:C:C2	3.07	0.43
1:6:614:C:C2	1:6:615:A:C8	3.06	0.43
2:S0:110:TYR:CD2	2:S0:110:TYR:N	2.97	0.43
36:5:1617:G:H1	36:5:1827:C:N4	2.16	0.43
36:1:1564:U:H2'	36:1:1565:G:O4'	2.19	0.43
36:1:1613:A:OP1	74:O8:2:ALA:HB3	2.19	0.43
38:4:120:C:H2'	38:4:121:U:H6	1.84	0.43
11:S9:54:ARG:NH2	11:S9:58:ASP:HB2	2.34	0.43
1:2:187:G:H5'	1:2:188:A:OP1	2.19	0.43
38:4:147:U:C4'	61:N5:38:LEU:HD12	2.48	0.43
67:O1:7:VAL:HG22	67:O1:78:LYS:HA	2.00	0.43
36:5:2376:G:N1	36:5:2377:G:C6	2.87	0.43
36:1:119:U:O3'	45:L8:133:LYS:NZ	2.52	0.43
36:5:1658:G:C6	36:5:1659:U:C4	3.06	0.43
13:C1:57:LYS:O	13:C1:138:ASN:ND2	2.72	0.43
53:M7:70:THR:OG1	53:M7:72:GLN:N	4.08	0.43
55:M9:177:VAL:HA	55:M9:180:LYS:HB3	2.79	0.43
36:1:5:G:C2	38:4:155:A:C2	3.07	0.43
36:5:3153:U:C6	36:5:3154:C:N4	2.87	0.43
1:2:1040:G:N2	1:2:1078:C:N3	2.63	0.43
1:6:1345:A:N6	1:6:1377:U:C2	2.87	0.43
6:S4:155:LYS:HB2	6:S4:174:LYS:NZ	2.34	0.43
6:S4:126:VAL:HG11	6:S4:155:LYS:O	2.19	0.43
29:D7:14:SER:O	29:D7:18:LYS:HD2	3.39	0.43
1:2:1160:A:OP2	18:C6:142:TYR:OH	2.36	0.43
36:1:1611:G:H2'	36:1:1612:A:C8	2.54	0.43
36:1:1037:C:H2'	36:1:1037:C:O2	2.18	0.43
36:1:3267:A:N6	43:L6:70:LYS:O	2.52	0.43
36:1:2573:G:H2'	36:1:2574:G:O4'	2.19	0.43
1:6:1685:G:H2'	1:6:1686:C:O4'	2.19	0.43
36:1:1499:C:H2'	36:1:1500:G:C8	2.54	0.43
43:L6:93:VAL:HG23	43:L6:145:LEU:HD21	2.22	0.43
6:S4:77:ARG:HD2	6:S4:82:TYR:HD1	5.61	0.43
36:1:2144:A:C5	36:1:2281:A:C6	3.06	0.43
39:L2:31:THR:OG1	39:L2:123:ARG:NH1	3.82	0.43
36:5:624:G:OP2	87:5:4103:OHX:N6	2.52	0.43
36:1:2620:G:C4	36:1:2621:G:C8	3.07	0.43
36:1:2620:G:C5	36:1:2621:G:N7	2.87	0.43
33:E1:95:HIS:CG	33:E1:96:LYS:N	2.86	0.43
36:1:3246:G:O6	87:1:4105:OHX:N4	2.52	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:M7:21:TYR:HD2	53:M7:21:TYR:N	2.17	0.43
36:5:3362:A:N3	36:5:3363:U:C6	2.87	0.43
6:S4:14:ALA:HB1	6:S4:18:TRP:CE3	3.57	0.43
1:6:263:C:O2'	1:6:264:G:H5'	2.19	0.43
36:1:2118:C:N4	36:1:2119:A:C2	2.87	0.43
36:5:572:A:N7	36:5:573:C:C5	2.86	0.43
40:L3:4:ARG:HG2	40:L3:4:ARG:H	4.30	0.43
11:S9:75:ALA:O	11:S9:79:ARG:HG3	5.24	0.43
62:N6:13:ARG:NH1	38:8:24:G:OP2	88.19	0.43
11:S9:21:SER:O	11:S9:24:LEU:HB2	2.18	0.43
36:5:1894:U:H2'	36:5:1895:A:O4'	2.19	0.43
19:C7:42:GLN:H	19:C7:42:GLN:HG2	1.53	0.43
1:6:215:A:OP1	87:6:2127:OHX:N1	2.52	0.43
58:N2:11:ILE:HD12	58:N2:11:ILE:O	2.59	0.43
36:5:81:C:H2'	36:5:82:C:H6	1.82	0.43
1:2:1270:G:C2	1:2:1271:G:C5	3.07	0.43
58:N2:107:PHE:HB3	58:N2:108:TYR:H	1.65	0.43
1:2:45:U:H2'	1:2:46:A:H2'	1.99	0.43
1:6:568:G:C2'	1:6:569:C:H5'	2.49	0.43
25:D3:70:LYS:HZ2	25:D3:70:LYS:HG2	1.65	0.43
78:Q2:2:VAL:O	78:Q2:92:GLU:HG2	2.19	0.43
1:6:592:A:C6	1:6:593:U:C4	3.07	0.43
47:M0:75:TYR:CE1	47:M0:150:GLU:HB3	3.26	0.43
36:5:1170:A:N7	36:5:1171:G:N7	2.67	0.43
36:1:115:A:H2'	36:1:265:A:N3	2.34	0.43
45:L8:240:ASN:O	45:L8:241:LYS:C	3.11	0.43
41:L4:269:SER:C	41:L4:271:LYS:H	2.22	0.43
43:L6:83:TYR:O	43:L6:84:VAL:HG23	3.36	0.43
19:C7:50:ILE:C	19:C7:52:GLY:N	3.36	0.43
19:C7:53:TYR:O	19:C7:54:THR:C	2.82	0.43
5:S3:191:ASP:HA	5:S3:192:PRO:HD2	1.81	0.43
1:2:1478:G:N2	1:2:1530:C:C2	2.87	0.43
1:2:1613:U:C5	1:2:1614:A:H2	2.37	0.43
18:C6:4:VAL:CG1	18:C6:23:LYS:HB2	5.71	0.43
27:D5:77:ARG:O	27:D5:80:LEU:HB2	3.35	0.43
67:O1:49:VAL:HG12	67:O1:50:ARG:N	2.66	0.43
61:N5:107:VAL:HG11	61:N5:110:VAL:HG23	3.49	0.43
12:C0:49:LEU:HB3	12:C0:55:VAL:HG11	2.60	0.43
17:C5:41:VAL:O	17:C5:45:PHE:N	3.45	0.43
31:D9:21:CYS:HA	31:D9:37:ASN:O	2.95	0.43
5:S3:56:GLN:O	5:S3:59:LEU:HB3	2.19	0.43
5:S3:76:ARG:NH1	12:C0:63:TYR:CZ	4.68	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:963:A:O2'	1:6:964:U:OP2	2.25	0.43
15:C3:121:ARG:O	15:C3:122:ILE:C	2.94	0.43
36:5:155:G:H5''	36:5:156:G:C8	2.54	0.43
1:6:1773:C:H2'	1:6:1774:G:O4'	2.18	0.43
47:M0:16:PRO:HD3	47:M0:128:ARG:NH1	2.34	0.43
1:2:898:A:H4'	16:C4:46:MET:HE3	2.00	0.43
1:6:899:G:H2'	1:6:900:A:C8	2.53	0.43
3:S1:66:VAL:HG22	16:C4:34:SER:HA	2.01	0.43
28:D6:53:LEU:HA	28:D6:53:LEU:HD22	1.72	0.43
1:6:15:U:H5'	1:6:619:A:N6	2.33	0.43
2:S0:9:LEU:HD11	2:S0:14:ALA:HB2	2.00	0.43
54:M8:62:VAL:HG13	54:M8:66:ARG:HD3	2.01	0.43
48:M1:6:GLN:HA	48:M1:6:GLN:NE2	2.32	0.43
68:O2:109:LEU:HD23	68:O2:109:LEU:HA	2.05	0.43
55:M9:10:LEU:HD12	55:M9:10:LEU:HA	1.68	0.43
62:N6:32:SER:HB2	62:N6:49:PRO:HA	4.23	0.43
33:E1:97:LYS:HD3	1:6:1232:U:C5	436.67	0.43
17:C5:121:ILE:HG12	17:C5:123:TYR:CE1	2.54	0.43
36:5:1317:A:C4	36:5:1319:G:C8	3.07	0.43
56:N0:135:VAL:HG23	56:N0:135:VAL:H	2.13	0.43
36:1:3188:G:H2'	36:1:3189:G:C8	2.54	0.43
56:N0:12:ARG:HD2	56:N0:22:PRO:HD2	2.01	0.43
57:N1:37:GLY:O	57:N1:63:VAL:HG13	2.68	0.43
36:1:2723:U:OP1	57:N1:87:LYS:HE2	2.19	0.43
36:1:3215:A:H5'	50:M4:121:MET:HE1	2.01	0.43
36:1:3260:G:OP2	50:M4:125:LYS:HD2	2.19	0.43
50:M4:112:LEU:HA	50:M4:116:GLU:OE1	2.18	0.43
8:S6:176:GLN:HG3	8:S6:177:ARG:H	1.84	0.43
18:C6:47:LYS:HA	18:C6:47:LYS:HD2	2.10	0.43
49:M3:167:PHE:CE1	64:N8:132:LYS:HE2	7.24	0.43
3:S1:144:ARG:HG2	3:S1:207:LEU:N	2.33	0.43
64:N8:128:ARG:HB3	64:N8:129:PHE:CD2	2.53	0.43
36:5:3159:C:H2'	36:5:3160:U:C6	2.52	0.43
70:O4:5:VAL:CG2	70:O4:6:THR:H	2.18	0.43
36:1:2383:C:OP2	52:M6:85:ARG:NH2	2.47	0.43
51:M5:59:PHE:HZ	51:M5:148:TYR:CE1	2.61	0.43
13:C1:93:TYR:O	13:C1:95:PRO:HD3	2.95	0.43
36:5:3017:A:C4	36:5:3018:C:C5	3.06	0.43
26:D4:91:LEU:HA	26:D4:91:LEU:HD22	2.95	0.43
36:1:2189:U:C5	36:1:2190:U:C4	3.07	0.43
39:L2:187:HIS:CD2	36:5:1794:G:C6	198.71	0.43
38:4:3:A:C5	38:4:4:C:C5	3.07	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
76:Q0:82:LEU:HD23	76:Q0:82:LEU:HA	1.81	0.43
36:1:1789:G:C6	36:1:1790:G:N7	2.87	0.43
1:2:386:G:H2'	1:2:387:A:C8	2.53	0.43
36:5:137:G:C6	36:5:138:U:C5	3.06	0.43
37:3:28:C:N4	37:3:29:C:C2	2.87	0.43
37:7:57:G:H5''	37:7:58:C:OP2	2.19	0.43
36:1:2249:G:OP1	36:1:2273:G:H8	2.01	0.43
36:1:2286:U:C4	36:1:2288:G:H1'	2.53	0.43
36:5:692:A:H2'	36:5:693:A:O4'	2.18	0.43
41:L4:234:ASN:ND2	41:L4:236:LEU:HD12	2.22	0.43
36:1:1403:C:N3	36:1:1408:G:N2	2.48	0.43
1:6:1347:U:O4'	1:6:1517:U:C2	2.72	0.43
36:1:2509:U:O2'	36:1:2510:U:H5'	2.19	0.43
62:N6:60:ARG:HD3	62:N6:60:ARG:HA	1.57	0.43
1:6:1295:G:C2	1:6:1303:U:O2	2.71	0.43
57:N1:121:ALA:O	57:N1:122:GLN:HG3	6.09	0.43
36:5:982:C:N3	36:5:1102:A:C2	2.87	0.43
36:1:1752:A:C5	36:1:1753:G:N7	2.87	0.43
39:L2:48:ILE:HD12	79:Q3:65:ALA:HB2	4.01	0.43
79:Q3:54:ILE:HD13	79:Q3:54:ILE:HG21	2.00	0.43
36:1:1225:A:H2'	36:1:1226:G:C8	2.53	0.43
36:5:3307:A:C5	36:5:3308:C:C5	3.07	0.43
36:5:2509:U:H3'	36:5:2510:U:H5''	2.01	0.43
36:1:1278:A:O2'	36:1:1279:C:P	2.77	0.43
54:M8:178:ARG:HA	54:M8:178:ARG:HD2	2.46	0.43
58:N2:33:TYR:O	58:N2:36:TYR:N	2.76	0.43
58:N2:95:PHE:CD2	58:N2:95:PHE:C	2.92	0.43
42:L5:294:ALA:HB1	47:M0:217:PHE:HB3	2.01	0.43
41:L4:352:ALA:H	44:L7:71:ALA:HA	2.34	0.43
41:L4:214:GLY:O	41:L4:217:LYS:N	2.52	0.43
1:6:138:A:N3	1:6:138:A:H5''	2.34	0.43
12:C0:87:VAL:O	12:C0:89:ALA:N	5.30	0.43
36:1:425:G:O6	87:1:3875:OHX:N6	2.52	0.43
36:5:651:G:H2'	36:5:652:G:O4'	2.19	0.43
36:1:1272:C:H5'	36:1:1273:A:OP2	2.19	0.43
5:S3:133:GLY:HA3	5:S3:156:PHE:N	2.34	0.43
18:C6:140:LYS:HD3	18:C6:142:TYR:CE1	3.36	0.43
19:C7:88:VAL:HG13	19:C7:89:SER:O	4.88	0.43
47:M0:127:ALA:O	47:M0:129:VAL:HG23	2.99	0.43
18:C6:18:ALA:HB2	18:C6:69:VAL:HG13	2.16	0.43
36:5:822:G:H2'	36:5:823:C:H6	1.80	0.43
36:1:2567:C:O2	36:1:2575:G:N2	2.51	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1714:A:H2'	1:6:1715:G:C4'	2.49	0.43
1:2:887:A:H1'	16:C4:122:PRO:CB	2.48	0.43
44:L7:126:LEU:HD23	44:L7:126:LEU:HA	1.42	0.43
36:1:1936:A:H2'	36:1:1937:U:O4'	2.19	0.43
19:C7:71:PHE:CE1	19:C7:73:LEU:HB3	2.54	0.43
36:5:3145:C:H2'	36:5:3146:G:C8	2.54	0.43
40:L3:26:ARG:NH2	36:5:3003:G:OP2	229.67	0.43
6:S4:23:LEU:O	6:S4:24:SER:OG	2.30	0.43
36:1:3015:G:C4	36:1:3040:A:C2	3.07	0.43
36:5:2105:G:O2'	36:5:2106:A:H5'	2.19	0.43
20:C8:50:ALA:C	20:C8:52:VAL:N	3.51	0.43
36:5:2217:U:O2'	36:5:2218:G:H5'	2.18	0.43
1:2:1121:C:C5	87:2:2171:OHX:N1	2.87	0.43
1:2:131:C:O2'	1:2:133:U:H5''	2.19	0.43
36:5:1536:G:C5	36:5:1586:G:N2	2.87	0.43
78:Q2:83:LEU:HD11	36:5:2716:U:H5'	215.64	0.43
36:5:1933:A:OP2	87:5:3911:OHX:N6	2.52	0.43
40:L3:376:LYS:HG2	40:L3:380:MET:HG3	2.38	0.43
36:5:279:U:O2'	36:5:280:U:H5'	2.19	0.43
36:1:1185:C:H2'	36:1:1186:G:O4'	2.19	0.43
36:5:876:A:C2'	36:5:877:C:O5'	2.67	0.43
59:N3:27:ASP:HA	59:N3:113:ALA:O	2.37	0.43
53:M7:96:GLN:HG3	53:M7:97:ASN:N	2.34	0.43
41:L4:10:SER:OG	41:L4:14:GLU:HB2	2.18	0.43
1:6:222:A:C6	1:6:223:U:C4	3.07	0.43
36:5:986:U:C2	36:5:987:U:C6	3.07	0.43
36:1:1033:U:H2'	36:1:1034:U:C6	2.53	0.43
34:SR:28:GLY:N	34:SR:75:ALA:O	2.46	0.43
54:M8:127:LEU:HD13	54:M8:127:LEU:C	2.80	0.43
36:5:2316:G:C6	36:5:2317:A:C5	3.07	0.43
1:2:155:U:O2'	1:2:157:A:N7	2.44	0.43
41:L4:125:ALA:O	41:L4:128:ALA:HB3	2.19	0.43
36:5:1397:C:C2'	36:5:1398:U:H5'	2.49	0.43
38:4:90:U:H5'	38:4:90:U:H6	1.83	0.43
45:L8:169:LEU:HA	45:L8:169:LEU:HD23	2.28	0.43
36:1:3132:C:H6	36:1:3132:C:O5'	2.02	0.43
1:2:566:C:H2'	1:2:567:A:H8	1.84	0.42
25:D3:74:VAL:N	25:D3:83:VAL:O	2.30	0.42
36:1:2656:A:H4'	78:Q2:98:LYS:CD	2.48	0.42
1:2:1760:G:C2'	1:2:1761:U:H5'	2.49	0.42
40:L3:211:GLN:O	40:L3:212:ASN:ND2	2.52	0.42
40:L3:11:HIS:CE1	40:L3:235:THR:HA	2.54	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:L9:25:VAL:O	46:L9:35:THR:HA	2.19	0.42
36:1:2358:A:H2'	36:1:2359:C:O4'	2.18	0.42
53:M7:130:TYR:CD2	53:M7:136:ILE:HD11	6.12	0.42
53:M7:39:TRP:CZ3	53:M7:47:TYR:HB2	2.54	0.42
53:M7:24:VAL:HG12	53:M7:86:LYS:NZ	5.47	0.42
1:6:1796:C:H5'	1:6:1797:A:C8	2.54	0.42
28:D6:36:ILE:C	28:D6:37:LYS:HG3	2.40	0.42
1:6:333:A:H2'	1:6:334:G:C8	2.54	0.42
13:C1:15:LYS:N	13:C1:54:ILE:HD12	4.40	0.42
26:D4:21:LYS:N	26:D4:75:VAL:O	2.70	0.42
6:S4:29:PRO:HD3	1:6:448:C:OP1	372.66	0.42
54:M8:33:TYR:HA	54:M8:36:LEU:HB2	2.47	0.42
1:2:1401:A:O3'	19:C7:10:LYS:NZ	2.52	0.42
19:C7:6:THR:HG23	19:C7:9:VAL:HG21	2.00	0.42
5:S3:190:ARG:HH12	5:S3:195:SER:HA	1.84	0.42
36:1:359:U:HO2'	73:O7:16:HIS:CE1	2.35	0.42
73:O7:25:ARG:HE	75:O9:51:ILE:CD1	2.32	0.42
7:S5:211:ILE:O	7:S5:215:ASP:HB2	2.33	0.42
7:S5:33:VAL:C	7:S5:37:GLN:OE1	3.06	0.42
46:L9:143:GLU:O	46:L9:143:GLU:HG3	3.84	0.42
36:5:3325:G:H2'	36:5:3326:G:H8	1.84	0.42
67:O1:56:ASN:O	67:O1:57:GLN:C	2.60	0.42
12:C0:46:LEU:HA	12:C0:46:LEU:HD23	3.88	0.42
21:C9:73:VAL:HA	21:C9:76:LEU:HB2	2.01	0.42
48:M1:165:GLN:CG	48:M1:166:LYS:N	2.82	0.42
36:1:313:A:C5	36:1:314:U:C5	3.07	0.42
36:5:115:A:N6	36:5:154:U:C2	2.87	0.42
36:5:1640:G:C6	36:5:1641:U:C4	3.07	0.42
16:C4:81:VAL:HG22	16:C4:115:ILE:HB	2.01	0.42
16:C4:114:ARG:HA	28:D6:62:TYR:CZ	2.53	0.42
3:S1:70:LEU:HD21	3:S1:79:HIS:CG	2.53	0.42
38:4:16:G:C8	38:4:16:G:OP2	2.72	0.42
19:C7:100:LEU:H	19:C7:118:PRO:HB2	1.84	0.42
19:C7:103:ASP:O	19:C7:104:ASN:ND2	6.09	0.42
2:S0:4:PRO:HB2	2:S0:5:ALA:H	1.63	0.42
2:S0:4:PRO:CB	2:S0:6:THR:HG23	7.95	0.42
4:S2:53:ILE:CG2	4:S2:56:ILE:HD12	2.48	0.42
40:L3:221:THR:N	40:L3:273:HIS:O	2.73	0.42
59:N3:86:ARG:HB2	59:N3:92:PHE:CE2	2.53	0.42
36:5:677:A:H4'	36:5:678:G:O5'	2.19	0.42
66:O0:44:ILE:HG23	66:O0:89:VAL:CG2	5.49	0.42
36:5:1412:G:C5	36:5:1413:G:N7	2.87	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:874:C:H5'	1:6:1047:G:OP1	2.19	0.42
1:2:1524:A:H2	1:2:1590:G:N3	2.17	0.42
1:2:1227:A:OP2	1:2:1228:G:H2'	2.19	0.42
40:L3:63:PRO:HA	40:L3:68:HIS:CE1	2.54	0.42
56:N0:93:GLU:HG3	56:N0:137:ARG:HB2	2.01	0.42
36:1:3145:C:H2'	36:1:3146:G:C8	2.52	0.42
5:S3:137:VAL:HG22	5:S3:151:LYS:HA	2.00	0.42
57:N1:40:VAL:HG21	57:N1:96:ILE:HD12	2.01	0.42
40:L3:296:THR:CG2	40:L3:297:SER:N	2.82	0.42
43:L6:146:ILE:HA	43:L6:149:ILE:HD12	2.00	0.42
1:6:81:G:C6	1:6:82:U:N3	2.87	0.42
34:SR:172:ALA:HB2	34:SR:202:LEU:HD22	2.01	0.42
34:SR:214:ALA:HB2	34:SR:220:ILE:HG23	2.01	0.42
34:SR:61:PHE:HZ	34:SR:94:VAL:O	2.01	0.42
56:N0:29:ILE:HD13	56:N0:29:ILE:HA	4.13	0.42
62:N6:124:GLY:O	62:N6:125:LYS:C	3.08	0.42
36:1:346:C:N3	36:1:348:A:N7	2.67	0.42
41:L4:60:THR:HG22	41:L4:62:ALA:H	2.51	0.42
39:L2:151:PRO:O	39:L2:153:GLY:N	3.38	0.42
66:O0:100:ILE:HG13	66:O0:101:LEU:CD1	6.75	0.42
36:1:3209:A:H2'	36:1:3209:A:H8	1.65	0.42
50:M4:106:ARG:O	50:M4:106:ARG:HG2	2.19	0.42
1:2:1572:G:H5''	1:2:1574:G:H22	1.84	0.42
40:L3:112:ASP:O	40:L3:113:GLU:C	2.56	0.42
49:M3:87:ALA:O	49:M3:89:TYR:N	2.51	0.42
51:M5:139:HIS:O	51:M5:142:ILE:N	2.46	0.42
9:S7:30:SER:HB3	9:S7:34:LEU:CD1	2.46	0.42
1:2:530:C:O2	26:D4:61:ARG:NH2	2.51	0.42
6:S4:106:LYS:HB2	6:S4:108:ARG:HD3	2.01	0.42
71:O5:51:ILE:O	71:O5:55:LEU:HD12	3.56	0.42
39:L2:192:LYS:NZ	39:L2:193:ARG:HH12	2.17	0.42
24:D2:11:LEU:HD22	24:D2:72:CYS:HB2	2.00	0.42
64:N8:78:LEU:C	64:N8:80:THR:N	2.81	0.42
4:S2:41:LEU:HD23	4:S2:240:LEU:HD11	2.00	0.42
41:L4:294:GLU:O	41:L4:295:ILE:C	2.57	0.42
1:6:826:U:H2'	1:6:827:C:C6	2.55	0.42
6:S4:185:GLY:H	6:S4:189:LEU:HB2	1.84	0.42
22:D0:55:PRO:HA	22:D0:91:ILE:HG12	2.25	0.42
1:2:1383:G:H1'	22:D0:57:ARG:NH2	2.32	0.42
36:1:3109:G:N2	36:1:3126:C:C6	2.87	0.42
36:1:2896:A:P	76:Q0:102:ARG:HE	2.42	0.42
69:O3:72:THR:CG2	69:O3:83:ALA:HA	2.77	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1345:A:N6	1:2:1377:U:C2	2.87	0.42
1:6:1734:U:C2	1:6:1735:U:C5	3.07	0.42
1:6:881:A:H2'	1:6:882:U:O4'	2.19	0.42
1:2:184:C:H42	1:2:201:G:H1	1.66	0.42
25:D3:19:ARG:NE	1:6:609:U:H1'	342.21	0.42
1:6:105:A:H2'	1:6:106:U:O4'	2.19	0.42
51:M5:12:ARG:O	51:M5:13:LYS:HG2	4.17	0.42
53:M7:27:LYS:HD3	53:M7:63:PHE:HB3	2.00	0.42
56:N0:86:GLY:O	56:N0:88:HIS:NE2	2.98	0.42
55:M9:77:GLY:O	55:M9:81:ARG:HG3	4.64	0.42
36:5:3188:G:C2	36:5:3189:G:C5	3.07	0.42
1:2:281:G:C6	1:2:282:C:C4	3.07	0.42
36:1:547:G:H4'	36:1:548:G:OP2	2.17	0.42
1:6:702:G:O2'	1:6:703:G:H5'	2.19	0.42
41:L4:316:ASN:OD1	41:L4:318:LEU:HB2	2.18	0.42
36:1:1350:A:H2'	36:1:1351:U:C6	2.53	0.42
1:2:145:A:C6	1:2:171:A:N1	2.87	0.42
53:M7:107:LEU:HA	53:M7:107:LEU:HD12	1.82	0.42
36:1:1209:G:H3'	36:1:1210:U:H6	1.84	0.42
1:6:605:A:H3'	1:6:606:A:H5'	2.00	0.42
62:N6:88:GLU:HG3	62:N6:94:SER:CB	3.92	0.42
45:L8:91:PHE:CE2	45:L8:185:ARG:HB3	4.35	0.42
36:5:3237:U:H2'	36:5:3238:G:H5''	2.01	0.42
36:1:1560:G:C6	36:1:1561:G:N7	2.87	0.42
38:8:80:A:N3	38:8:82:U:C5	2.86	0.42
36:1:3303:G:C2	36:1:3305:A:C4	3.07	0.42
36:1:3267:A:H2'	43:L6:69:PHE:CE1	2.54	0.42
61:N5:34:LEU:HD22	61:N5:35:PRO:O	3.31	0.42
51:M5:68:ARG:HG3	36:5:291:C:OP1	144.63	0.42
1:2:1360:A:H2'	1:2:1361:U:O4'	2.18	0.42
36:1:3335:A:H2'	36:1:3336:A:C8	2.54	0.42
45:L8:109:LEU:HA	45:L8:109:LEU:HD22	3.56	0.42
72:O6:2:THR:N	72:O6:4:LYS:HD3	6.65	0.42
36:1:278:U:C4	36:1:279:U:C4	3.07	0.42
21:C9:78:LYS:NZ	1:6:1523:G:OP1	409.93	0.42
36:5:831:G:H8	36:5:831:G:O5'	2.02	0.42
36:1:1501:U:C6	36:1:1501:U:O5'	2.69	0.42
24:D2:97:ARG:NH1	24:D2:97:ARG:HG2	4.71	0.42
1:2:1778:G:N2	1:2:1779:U:N3	2.67	0.42
56:N0:48:LEU:HD23	56:N0:48:LEU:HA	2.06	0.42
1:2:679:U:H2'	1:2:680:U:C6	2.53	0.42
36:1:2955:U:H2'	36:1:2956:A:H8	1.84	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:188:ASN:HB3	6:S4:191:ARG:HG3	2.99	0.42
36:1:2876:C:H2'	36:1:2877:G:O4'	2.19	0.42
29:D7:29:ARG:HA	29:D7:29:ARG:HD3	1.79	0.42
51:M5:116:LEU:HA	51:M5:116:LEU:HD12	1.72	0.42
3:S1:186:SER:O	3:S1:190:PRO:HD2	3.47	0.42
1:6:775:G:C2	1:6:786:C:C4	3.07	0.42
43:L6:103:VAL:C	43:L6:105:TYR:H	2.22	0.42
1:6:98:U:H2'	1:6:99:C:C6	2.54	0.42
36:1:2524:A:C4	45:L8:46:LEU:HD21	2.53	0.42
1:6:1061:A:H2'	1:6:1062:A:O4'	2.19	0.42
36:1:2874:G:C6	36:1:2945:G:C8	3.07	0.42
29:D7:75:GLU:HG2	29:D7:76:GLY:H	2.74	0.42
64:N8:125:VAL:O	64:N8:146:GLU:N	2.90	0.42
36:1:3034:C:H42	46:L9:121:LYS:HB2	1.83	0.42
20:C8:104:ASN:O	20:C8:108:LYS:N	3.34	0.42
36:1:816:A:H4'	36:1:817:A:H5'	2.01	0.42
46:L9:24:ILE:HG22	46:L9:24:ILE:O	2.19	0.42
33:E1:116:LYS:HB2	33:E1:116:LYS:HE3	2.64	0.42
9:S7:167:GLU:H	9:S7:167:GLU:HG2	4.42	0.42
1:6:473:A:N6	1:6:474:A:C2	2.86	0.42
36:1:1679:A:OP1	58:N2:94:ARG:NH1	2.52	0.42
46:L9:28:VAL:HG22	46:L9:33:THR:CG2	2.50	0.42
36:5:1520:G:H2'	36:5:1521:G:C5'	2.49	0.42
1:2:1795:U:H4'	28:D6:84:VAL:HG23	2.00	0.42
1:2:477:A:N3	1:2:478:A:C8	2.87	0.42
11:S9:100:LYS:O	11:S9:103:ASP:HB2	2.20	0.42
11:S9:66:ASP:HA	11:S9:67:PRO:HD2	1.58	0.42
47:M0:159:PHE:HA	47:M0:160:PRO:HD2	2.33	0.42
41:L4:329:PRO:HB3	44:L7:41:ARG:NH2	2.35	0.42
51:M5:18:VAL:O	51:M5:22:LEU:HD22	2.18	0.42
45:L8:62:LYS:HB2	51:M5:28:TRP:HZ3	1.85	0.42
41:L4:134:LEU:O	41:L4:138:ARG:HB2	2.19	0.42
19:C7:27:ASP:H	19:C7:31:ASN:HD21	2.52	0.42
5:S3:210:GLU:HA	5:S3:211:PRO:HD3	1.86	0.42
1:2:1613:U:C4	1:2:1614:A:C2	3.07	0.42
1:2:1610:G:H5''	7:S5:107:LYS:HB2	2.00	0.42
7:S5:184:PHE:CE1	7:S5:185:ARG:HG3	2.54	0.42
7:S5:49:GLU:HA	7:S5:65:ARG:NH1	4.80	0.42
7:S5:93:LEU:HD23	7:S5:93:LEU:HA	2.83	0.42
46:L9:161:LEU:CD2	46:L9:179:ILE:HD12	2.49	0.42
36:5:3074:G:H5''	36:5:3074:G:H8	1.84	0.42
67:O1:14:ILE:HD12	67:O1:39:PHE:HB2	2.00	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
61:N5:99:VAL:HG11	61:N5:124:VAL:HG11	2.02	0.42
42:L5:210:GLU:O	42:L5:211:LEU:HD23	2.18	0.42
17:C5:43:ARG:HG2	17:C5:43:ARG:HH11	3.26	0.42
22:D0:82:TYR:HE1	31:D9:54:LYS:CD	2.31	0.42
31:D9:34:TYR:N	31:D9:34:TYR:CD1	2.84	0.42
48:M1:109:HIS:CD2	48:M1:114:ILE:HD13	7.36	0.42
15:C3:108:ASP:HB2	1:6:879:G:O4'	280.53	0.42
15:C3:55:ARG:HA	15:C3:59:GLY:O	5.68	0.42
47:M0:24:ARG:HG3	47:M0:24:ARG:H	3.42	0.42
36:1:1432:C:O2'	36:1:1433:A:H3'	2.19	0.42
19:C7:106:THR:O	19:C7:110:VAL:HG13	6.28	0.42
23:D1:81:ASN:N	23:D1:81:ASN:OD1	3.15	0.42
23:D1:83:TRP:CG	23:D1:84:SER:N	2.86	0.42
2:S0:62:ARG:HH21	23:D1:39:VAL:HG13	4.06	0.42
1:2:127:G:N2	1:2:179:A:H5'	2.34	0.42
36:1:437:G:C2'	36:1:438:A:H5'	2.49	0.42
62:N6:32:SER:CB	62:N6:49:PRO:HA	3.31	0.42
71:O5:6:ALA:HB1	71:O5:10:ARG:HH21	1.84	0.42
79:Q3:33:GLN:HG3	79:Q3:34:HIS:CE1	3.89	0.42
14:C2:60:VAL:O	14:C2:89:ILE:HG22	2.19	0.42
1:2:1453:G:H2'	1:2:1454:G:H8	1.84	0.42
6:S4:141:THR:C	6:S4:143:ASP:N	2.72	0.42
6:S4:162:ILE:HD12	6:S4:162:ILE:H	4.92	0.42
50:M4:82:SER:O	50:M4:83:LYS:C	2.57	0.42
1:6:74:U:C2	1:6:76:A:H5''	2.53	0.42
8:S6:162:VAL:O	8:S6:168:THR:HG22	3.48	0.42
56:N0:42:TRP:CH2	56:N0:56:GLY:HA3	2.54	0.42
57:N1:75:ILE:O	57:N1:75:ILE:HD13	2.18	0.42
57:N1:80:VAL:HG22	57:N1:85:LEU:HG	4.02	0.42
40:L3:293:ASN:HB2	40:L3:304:THR:HA	2.00	0.42
18:C6:115:THR:HG22	18:C6:116:LEU:HA	6.60	0.42
18:C6:99:GLU:HG3	18:C6:103:ASN:OD1	2.18	0.42
34:SR:84:SER:N	34:SR:110:VAL:HB	2.35	0.42
87:1:3878:OHX:N6	39:L2:215:ASN:OD1	2.52	0.42
41:L4:56:ALA:HA	36:5:347:G:OP1	118.62	0.42
41:L4:60:THR:HG22	41:L4:62:ALA:N	3.13	0.42
72:O6:69:ALA:HA	72:O6:72:VAL:HG23	5.20	0.42
72:O6:79:SER:O	72:O6:82:ARG:N	2.52	0.42
39:L2:248:GLY:O	39:L2:249:SER:HB2	4.34	0.42
39:L2:81:GLY:O	39:L2:83:HIS:HD2	2.95	0.42
79:Q3:86:LEU:O	79:Q3:90:VAL:HG12	2.19	0.42
36:1:770:G:P	49:M3:171:ARG:NH2	2.92	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:511:G:N2	36:5:512:U:C2	2.87	0.42
9:S7:148:LYS:O	9:S7:149:ILE:HG13	4.24	0.42
40:L3:85:VAL:O	40:L3:162:VAL:HA	2.38	0.42
8:S6:59:GLN:OE1	1:6:418:G:O2'	294.40	0.42
36:1:498:A:H2'	36:1:499:G:H8	1.84	0.42
36:1:3295:A:H61	36:1:3393:U:H3	1.67	0.42
36:1:3276:G:H1'	36:1:3277:U:H3	1.84	0.42
49:M3:115:ARG:NH1	49:M3:145:PHE:O	2.52	0.42
36:1:1686:U:H5''	58:N2:42:LYS:HZ1	1.84	0.42
36:1:73:C:OP1	72:O6:15:LYS:N	2.41	0.42
49:M3:73:ARG:HD2	36:5:76:G:C3'	81.54	0.42
51:M5:150:TRP:O	51:M5:153:ASP:N	2.84	0.42
71:O5:93:THR:HG23	71:O5:96:GLU:OE2	2.20	0.42
26:D4:29:HIS:HB3	26:D4:32:ARG:HB2	4.80	0.42
26:D4:8:ARG:NH1	26:D4:68:LYS:HE3	2.29	0.42
39:L2:90:ALA:HA	39:L2:101:VAL:HG13	2.01	0.42
8:S6:202:ARG:HA	8:S6:205:ALA:HB3	2.01	0.42
8:S6:148:SER:C	8:S6:150:GLU:N	2.84	0.42
36:5:170:G:H5'	36:5:171:G:P	2.59	0.42
36:1:2287:C:C2	36:1:2298:U:O4'	2.72	0.42
36:5:3059:G:C6	36:5:3060:C:C4	3.07	0.42
64:N8:74:ASN:CG	64:N8:115:LYS:HB3	3.67	0.42
2:S0:130:ALA:O	2:S0:131:GLN:C	2.91	0.42
36:5:410:U:O4	87:5:4097:OHX:N3	2.52	0.42
1:6:1380:U:H2'	1:6:1381:U:C6	2.55	0.42
36:5:732:C:N4	36:5:738:A:H61	2.17	0.42
36:1:2948:C:C1'	40:L3:242:THR:HG22	2.48	0.42
36:1:1299:U:H2'	36:1:1300:G:H8	1.84	0.42
38:8:26:U:C4	38:8:27:U:O4	2.71	0.42
38:4:62:C:H4'	38:4:63:G:O5'	2.18	0.42
36:5:1328:C:C4	36:5:1329:U:O4	2.71	0.42
55:M9:81:ARG:NH2	36:5:2104:A:OP2	222.72	0.42
42:L5:68:THR:O	42:L5:71:GLY:N	2.36	0.42
50:M4:65:LEU:HG	56:N0:172:TYR:CZ	3.44	0.42
56:N0:152:LEU:N	56:N0:153:PRO:HD3	2.57	0.42
1:6:403:G:N3	1:6:403:G:H2'	2.34	0.42
36:1:1159:A:H5'	54:M8:2:GLY:HA3	2.01	0.42
54:M8:2:GLY:C	54:M8:3:ILE:HD13	2.73	0.42
1:2:487:G:C6	1:2:488:G:C8	3.08	0.42
36:1:1341:U:H2'	36:1:1342:C:C6	2.54	0.42
6:S4:246:LEU:HD21	6:S4:254:ARG:NH2	5.59	0.42
1:2:1219:A:N7	1:2:1220:C:C2	2.87	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:763:G:N1	36:1:764:U:C2	2.88	0.42
36:1:120:G:N2	45:L8:126:SER:HB2	2.34	0.42
36:1:1231:A:H2	36:1:1278:A:N7	2.17	0.42
1:6:1340:U:H4'	1:6:1341:A:C5'	2.48	0.42
13:C1:83:THR:HB	13:C1:110:HIS:HA	2.01	0.42
8:S6:76:LEU:HD12	1:6:1673:G:H5'	288.10	0.42
36:1:537:A:O2'	36:1:558:U:C2	2.68	0.42
40:L3:348:ARG:H	40:L3:351:LEU:HG	5.19	0.42
53:M7:14:SER:O	53:M7:105:LYS:HD2	3.08	0.42
1:6:139:C:C4	1:6:266:A:C2	3.07	0.42
44:L7:93:ASN:C	44:L7:94:LYS:HG2	4.52	0.42
36:1:653:A:C2	36:1:654:C:C6	3.07	0.42
36:5:951:A:P	36:5:1367:G:H22	2.41	0.42
36:1:1611:G:C6	36:1:1612:A:C6	3.07	0.42
1:6:1645:G:N2	1:6:1758:U:H5	2.16	0.42
36:5:2442:G:N2	36:5:2443:A:C5	2.88	0.42
36:5:822:G:N2	36:5:903:U:O2	2.37	0.42
37:3:17:A:C2	37:3:62:U:N3	2.87	0.42
37:3:61:G:H4'	42:L5:274:GLN:HG2	2.02	0.42
36:1:158:G:H2'	36:1:159:A:H8	1.83	0.42
14:C2:74:LEU:HD21	33:E1:106:TYR:CB	4.24	0.42
36:1:3101:G:C6	36:1:3134:A:C6	3.07	0.42
36:5:997:A:H4'	37:7:80:G:H5'	2.00	0.42
11:S9:105:LEU:HA	11:S9:105:LEU:HD12	2.50	0.42
36:5:1268:G:N1	36:5:1269:U:C4	2.86	0.42
52:M6:61:ALA:O	52:M6:63:ALA:N	3.05	0.42
36:5:1882:G:C4	36:5:1883:A:N7	2.87	0.42
36:5:2223:A:N6	36:5:2224:A:N6	2.67	0.42
41:L4:341:SER:HA	36:5:515:C:H1'	296.26	0.42
51:M5:33:LYS:HD2	51:M5:33:LYS:H	3.85	0.42
25:D3:144:ARG:O	25:D3:145:SER:OG	2.32	0.42
35:SM:97:THR:HG22	35:SM:99:LYS:HG3	2.00	0.42
26:D4:92:VAL:O	26:D4:93:ARG:C	2.71	0.42
36:5:2291:A:H2'	36:5:2292:U:C6	2.54	0.42
1:6:756:A:N6	1:6:757:A:C2	2.87	0.42
36:1:380:U:C4	36:1:381:U:C4	3.07	0.42
1:6:1695:G:N2	1:6:1706:C:H41	2.17	0.42
4:S2:103:VAL:HG12	4:S2:190:LEU:HD12	2.01	0.42
1:6:1176:G:H1	1:6:1463:C:N4	2.18	0.42
1:6:1176:G:N1	1:6:1463:C:N4	2.67	0.42
8:S6:206:ALA:O	8:S6:209:ALA:N	2.52	0.42
36:1:1140:G:H2'	36:1:1141:C:C6	2.55	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1440:C:H2'	1:2:1441:C:O4'	2.19	0.42
36:5:423:A:C6	36:5:424:G:C6	3.07	0.42
58:N2:24:GLU:HG3	58:N2:25:ASN:N	3.95	0.42
36:1:1545:A:OP2	51:M5:67:ARG:HG3	2.18	0.42
36:5:109:A:H8	36:5:109:A:O5'	2.01	0.42
36:1:1283:C:H2'	36:1:1284:C:H6	1.84	0.42
76:Q0:99:CYS:O	76:Q0:100:TYR:HB2	2.21	0.42
36:1:1550:C:H1'	36:1:2166:A:H61	1.85	0.42
1:6:443:C:C2	1:6:462:G:N2	2.87	0.42
1:6:87:C:C4	1:6:88:U:C5	3.07	0.42
1:2:474:A:N1	1:2:594:A:H5'	2.34	0.42
47:M0:175:ASN:O	47:M0:176:LEU:HG	4.16	0.42
44:L7:160:ARG:HD2	44:L7:203:TRP:NE1	2.33	0.42
45:L8:136:LEU:HD11	45:L8:162:LEU:O	2.20	0.42
51:M5:2:GLY:N	36:5:117:U:OP1	106.29	0.42
26:D4:20:ARG:HA	26:D4:75:VAL:O	3.01	0.42
36:5:333:G:N2	38:8:30:C:N3	2.62	0.42
41:L4:138:ARG:HE	41:L4:240:PRO:HD2	1.83	0.42
36:5:1195:A:H2	36:5:1313:G:H22	1.68	0.42
1:2:1358:G:C2	1:2:1359:C:C2	3.08	0.42
1:6:1565:C:H2'	1:6:1566:U:C6	2.54	0.42
30:D8:25:VAL:CG1	30:D8:43:ASN:HB3	2.49	0.42
7:S5:149:VAL:HG23	30:D8:67:ARG:C	2.40	0.42
7:S5:25:LEU:HB2	7:S5:26:ALA:H	1.63	0.42
40:L3:312:VAL:HG23	40:L3:312:VAL:H	2.57	0.42
55:M9:23:TRP:HB3	55:M9:51:VAL:CG2	2.46	0.42
61:N5:98:ALA:O	61:N5:99:VAL:C	2.57	0.42
42:L5:211:LEU:C	42:L5:213:ASP:H	2.63	0.42
42:L5:253:PHE:CE1	42:L5:255:PRO:HA	4.07	0.42
17:C5:18:ARG:O	20:C8:95:GLY:HA3	2.18	0.42
1:2:1278:G:H4'	5:S3:174:HIS:HE1	1.83	0.42
1:2:959:U:H5''	15:C3:14:SER:OG	2.18	0.42
15:C3:15:ALA:HB2	29:D7:21:LEU:HD23	2.59	0.42
36:5:112:U:O2'	36:5:113:C:P	2.77	0.42
36:1:1639:C:O2'	36:1:1737:U:O3'	2.36	0.42
47:M0:22:TYR:CD1	36:5:1048:A:C5	267.92	0.42
16:C4:44:GLY:CA	16:C4:59:ALA:HB1	3.57	0.42
16:C4:43:THR:OG1	16:C4:44:GLY:N	2.52	0.42
23:D1:8:LEU:HD22	23:D1:9:VAL:O	2.61	0.42
2:S0:139:VAL:O	2:S0:141:ILE:HG12	3.64	0.42
2:S0:57:LEU:HD23	2:S0:57:LEU:HA	1.83	0.42
63:N7:26:VAL:HG12	63:N7:89:VAL:HG23	2.02	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
70:O4:96:GLU:HA	70:O4:99:LYS:HB2	3.38	0.42
1:6:1068:C:C4	1:6:1069:A:N7	2.87	0.42
38:8:92:A:C6	38:8:93:U:C4	3.07	0.42
62:N6:116:LYS:O	62:N6:119:ILE:N	3.26	0.42
62:N6:122:LYS:HE2	62:N6:122:LYS:HB3	1.92	0.42
1:2:1256:A:H4'	1:2:1257:U:C5'	2.49	0.42
14:C2:64:SER:O	14:C2:66:VAL:HG23	2.19	0.42
20:C8:145:ARG:HD3	35:SM:68:ARG:NH2	3.29	0.42
50:M4:16:GLU:HB3	56:N0:149:LYS:HD2	2.93	0.42
50:M4:83:LYS:O	50:M4:86:ALA:HB3	2.56	0.42
41:L4:359:LEU:O	56:N0:26:ARG:NH2	2.50	0.42
57:N1:83:ARG:HH11	57:N1:83:ARG:HD2	1.90	0.42
57:N1:91:LEU:HD12	57:N1:96:ILE:HD11	2.29	0.42
69:O3:45:LEU:HA	69:O3:45:LEU:HD23	1.48	0.42
75:O9:21:ARG:HD2	38:8:52:A:O4'	84.41	0.42
36:1:2665:U:H4'	36:1:2666:C:OP1	2.20	0.42
36:1:363:G:C2	36:1:364:G:H1'	2.55	0.42
1:2:1003:A:N3	1:2:1005:A:C6	2.87	0.42
66:O0:9:SER:OG	66:O0:12:GLN:HB3	3.34	0.42
1:2:1168:U:H2'	1:2:1169:G:H5'	2.01	0.42
1:2:1469:A:C2	1:2:1470:C:C2	3.07	0.42
36:1:3178:A:N3	52:M6:115:LYS:HG2	2.35	0.42
52:M6:186:ALA:O	52:M6:187:GLU:HB3	2.19	0.42
13:C1:97:TYR:CD1	25:D3:15:LEU:HB3	2.58	0.42
36:5:706:A:C6	36:5:707:U:C4	3.07	0.42
36:5:3024:A:C2	36:5:3032:A:C4	3.07	0.42
36:5:3032:A:C6	36:5:3033:A:C5	3.08	0.42
36:5:1752:A:H5''	36:5:1753:G:OP2	2.20	0.42
61:N5:60:TYR:OH	71:O5:26:LYS:HG3	2.20	0.42
55:M9:84:THR:O	55:M9:88:ARG:HG3	2.19	0.42
38:4:42:G:OP2	73:O7:64:MET:N	2.51	0.42
73:O7:63:ARG:NH1	38:8:57:C:C5	72.67	0.42
45:L8:134:TYR:CE2	45:L8:190:VAL:HG11	4.89	0.42
1:2:30:G:H2'	1:2:31:C:C6	2.55	0.42
1:2:591:A:C6	1:2:592:A:N6	2.87	0.42
24:D2:103:ILE:H	24:D2:103:ILE:HD13	4.20	0.42
46:L9:171:ASP:OD1	46:L9:172:ILE:N	2.52	0.42
42:L5:132:THR:HG21	42:L5:170:GLY:C	2.40	0.42
48:M1:53:THR:HG23	48:M1:59:ILE:O	2.20	0.42
60:N4:35:LYS:O	60:N4:38:SER:N	2.50	0.42
36:5:782:U:C4	36:5:783:A:C5	3.07	0.42
64:N8:78:LEU:O	64:N8:81:LEU:N	2.33	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:355:G:P	10:S8:16:ALA:HB1	2.60	0.42
33:E1:144:CYS:SG	33:E1:147:VAL:O	3.17	0.42
57:N1:27:LEU:C	57:N1:29:THR:N	2.72	0.42
36:1:250:U:C5'	36:1:251:G:H5''	2.44	0.42
36:1:1889:G:C4	36:1:1890:U:C5	3.07	0.42
59:N3:22:ILE:HD13	59:N3:35:TYR:HB2	3.64	0.42
38:4:126:A:OP2	87:4:234:OHX:N6	2.53	0.42
5:S3:117:ARG:HD3	35:SM:122:GLU:O	2.18	0.42
1:6:187:G:H8	1:6:187:G:O5'	2.02	0.42
10:S8:113:PHE:C	10:S8:115:ALA:H	2.22	0.42
53:M7:67:ILE:HG23	53:M7:68:GLY:N	2.33	0.42
36:5:2569:A:H4'	36:5:2570:U:H5'	2.00	0.42
2:S0:90:ALA:HB1	2:S0:95:ALA:O	2.32	0.42
36:1:2398:A:OP1	36:1:2873:U:H4'	2.18	0.42
36:1:2981:U:O2'	36:1:2982:A:H5'	2.18	0.42
36:5:2101:C:O2'	36:5:2102:U:P	2.77	0.42
36:1:198:A:C6	36:1:219:A:C6	3.07	0.42
36:1:3091:A:C4	36:1:3094:A:C8	3.07	0.42
40:L3:187:SER:CB	40:L3:190:GLU:HG3	2.49	0.42
49:M3:3:ILE:HG21	64:N8:45:MET:HE3	4.62	0.42
1:6:698:U:C4	1:6:699:U:C5	3.07	0.42
9:S7:111:LYS:O	9:S7:112:ARG:HB2	2.30	0.42
24:D2:113:HIS:NE2	24:D2:114:GLU:HG3	2.34	0.42
24:D2:115:GLU:HA	24:D2:118:ARG:NH1	3.26	0.42
74:O8:14:LEU:HD11	74:O8:52:TYR:CG	2.54	0.42
1:6:1408:G:H2'	1:6:1409:G:C8	2.54	0.42
5:S3:134:CYS:N	5:S3:157:LEU:HD11	2.34	0.42
36:1:1065:A:C2	65:N9:28:LYS:N	2.87	0.42
36:5:2440:G:C2	36:5:2441:A:C5	3.06	0.42
36:5:2906:C:C2	36:5:2907:G:C8	3.07	0.42
2:S0:168:HIS:HB3	2:S0:203:PHE:CE2	2.67	0.42
49:M3:157:ARG:NH1	64:N8:124:ILE:HD12	4.55	0.42
36:1:1166:G:O6	87:1:3866:OHX:N4	2.51	0.42
16:C4:122:PRO:C	16:C4:124:ASP:H	3.15	0.42
13:C1:26:LYS:O	1:6:838:G:O2'	281.02	0.42
45:L8:89:GLU:HA	45:L8:92:LYS:HB2	2.02	0.42
11:S9:108:ARG:HB2	11:S9:111:THR:HG23	2.00	0.42
39:L2:21:ARG:NH1	36:5:825:U:P	170.76	0.42
1:6:1680:G:HO2'	1:6:1681:A:P	2.42	0.42
1:2:1054:U:H2'	1:2:1055:U:C6	2.51	0.42
36:1:3159:C:H2'	36:1:3160:U:C6	2.54	0.42
36:1:2609:A:H2'	36:1:2610:G:H8	1.85	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:493:U:H2'	1:2:494:U:C5	2.54	0.42
36:5:2291:A:C5	36:5:2292:U:C4	3.06	0.42
36:5:277:G:C5	36:5:278:U:C5	3.07	0.42
59:N3:45:ARG:O	59:N3:46:LEU:C	2.75	0.42
38:8:121:U:O2'	38:8:122:U:H5'	2.20	0.42
36:5:1481:A:C2'	36:5:1858:A:N3	2.82	0.42
50:M4:48:GLY:O	50:M4:53:VAL:HG13	2.19	0.42
37:3:20:A:H2'	37:3:21:G:C8	2.54	0.42
36:1:829:U:N3	36:1:895:A:N6	2.67	0.42
52:M6:82:LYS:O	52:M6:82:LYS:HG3	4.58	0.42
26:D4:11:LYS:NZ	1:6:776:G:N7	419.32	0.42
36:5:2951:G:O3'	87:5:4083:OHX:N2	2.52	0.42
36:1:758:C:C2	36:1:774:G:C2	3.07	0.42
36:1:2525:G:C6	39:L2:34:TYR:CD2	3.08	0.42
1:2:84:A:H2'	1:2:85:A:O4'	2.19	0.42
57:N1:124:VAL:HB	57:N1:125:ALA:H	1.56	0.42
36:5:396:A:N6	36:5:399:A:C6	2.87	0.42
48:M1:141:ARG:O	48:M1:145:LYS:HE2	2.22	0.42
55:M9:186:LYS:O	55:M9:186:LYS:HG2	3.26	0.42
50:M4:59:ASN:C	50:M4:61:GLY:H	2.22	0.42
1:6:942:G:H2'	1:6:943:C:H6	1.83	0.42
36:1:2778:G:H2'	36:1:2779:A:H5'	2.01	0.42
66:O0:77:LEU:HD23	66:O0:87:VAL:O	2.61	0.42
20:C8:113:LEU:HA	20:C8:116:LEU:CD2	3.99	0.42
36:5:1889:G:C6	36:5:1890:U:C4	3.08	0.42
36:1:2341:A:OP2	40:L3:247:ARG:NH2	2.53	0.42
51:M5:84:PRO:O	78:Q2:51:GLY:HA2	2.90	0.42
11:S9:37:LYS:HA	32:E0:33:ARG:HA	2.02	0.42
32:E0:36:LYS:NZ	1:6:593:U:H5	412.34	0.42
47:M0:158:LYS:NZ	36:5:2836:C:H6	308.55	0.42
47:M0:154:ARG:O	47:M0:155:ALA:C	2.57	0.42
47:M0:155:ALA:C	47:M0:157:TYR:N	2.78	0.42
47:M0:71:CYS:O	47:M0:74:LYS:N	3.09	0.42
41:L4:334:PHE:CD2	36:5:578:A:H2'	278.86	0.42
44:L7:111:ILE:HD13	44:L7:111:ILE:HG21	1.66	0.42
44:L7:51:TYR:C	44:L7:53:LYS:H	2.66	0.42
45:L8:230:LYS:HG3	45:L8:230:LYS:O	2.89	0.42
1:6:119:A:H1'	1:6:397:A:C4	2.55	0.42
1:6:116:U:H1'	1:6:334:G:N3	2.33	0.42
1:6:326:G:N2	1:6:343:C:C2	2.87	0.42
10:S8:83:TYR:HE2	13:C1:11:ARG:HH21	3.58	0.42
41:L4:285:ASP:OD2	41:L4:288:ARG:HB2	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:M8:32:LEU:HD13	54:M8:36:LEU:HD12	3.90	0.42
1:2:1357:A:C2	1:2:1358:G:C5	3.08	0.42
1:6:1571:C:H5''	1:6:1572:G:OP2	2.18	0.42
20:C8:40:ARG:NH2	21:C9:44:GLU:OE2	2.52	0.42
27:D5:75:LEU:H	27:D5:75:LEU:HG	1.46	0.42
46:L9:166:ARG:HD2	46:L9:168:ARG:NH1	8.11	0.42
67:O1:46:THR:HG22	67:O1:46:THR:H	1.49	0.42
42:L5:51:LEU:HB3	42:L5:146:LEU:HD23	2.44	0.42
17:C5:52:LYS:HD3	1:6:1243:G:H21	409.46	0.42
17:C5:52:LYS:HA	17:C5:52:LYS:HD2	4.82	0.42
22:D0:67:THR:CG2	31:D9:40:ARG:HB2	2.49	0.42
5:S3:69:LEU:O	5:S3:72:LEU:HB2	2.20	0.42
1:2:624:G:N2	1:2:625:C:C2	2.87	0.42
1:6:1777:G:H8	1:6:1777:G:O5'	2.01	0.42
77:Q1:17:ARG:HD3	1:6:1749:A:O2'	291.31	0.42
3:S1:128:LYS:HG2	3:S1:129:THR:H	1.84	0.42
3:S1:48:VAL:HG11	3:S1:57:ALA:HB1	2.10	0.42
3:S1:61:LEU:HD13	3:S1:61:LEU:HA	3.65	0.42
23:D1:55:LEU:HD11	23:D1:69:LEU:HG	2.96	0.42
29:D7:6:ASP:OD1	29:D7:9:HIS:ND1	3.63	0.42
2:S0:41:ARG:NH1	2:S0:45:VAL:HG21	2.40	0.42
2:S0:64:ILE:HG12	2:S0:122:ILE:HD11	2.89	0.42
4:S2:53:ILE:HA	4:S2:56:ILE:HD11	2.56	0.42
66:O0:43:ILE:N	66:O0:90:VAL:O	2.78	0.42
70:O4:100:ILE:HG22	70:O4:101:VAL:N	2.98	0.42
70:O4:46:ASP:OD2	70:O4:84:CYS:HB3	2.18	0.42
68:O2:75:LEU:HD23	68:O2:76:VAL:H	1.84	0.42
1:2:1050:G:N2	1:2:1068:C:O2	2.45	0.42
36:1:1602:A:C5	36:1:1603:A:C6	3.07	0.42
36:5:1471:U:O5'	36:5:1471:U:H6	2.02	0.42
38:8:93:U:H2'	38:8:94:C:C6	2.55	0.42
62:N6:40:ARG:HE	62:N6:40:ARG:HB2	1.90	0.42
71:O5:57:VAL:O	71:O5:60:GLU:HB2	3.10	0.42
1:6:1651:A:O5'	1:6:1651:A:H8	2.02	0.42
41:L4:359:LEU:CD2	41:L4:360:LYS:HG2	2.48	0.42
4:S2:90:THR:C	4:S2:92:ALA:N	2.71	0.42
36:1:2631:U:N3	36:1:2648:G:C2	2.88	0.42
36:1:3213:A:C6	36:1:3214:U:C4	3.08	0.42
8:S6:178:LEU:HD12	8:S6:179:VAL:N	2.35	0.42
34:SR:44:SER:OG	34:SR:59:ARG:HB2	2.20	0.42
36:5:342:A:C4	36:5:368:G:C8	3.07	0.42
36:1:343:U:H1'	41:L4:95:ARG:HD2	2.01	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:79:VAL:HG12	40:L3:322:ILE:O	2.18	0.42
1:2:1010:C:H2'	1:2:1011:G:O4'	2.19	0.42
87:2:2090:OHX:N3	87:2:2131:OHX:N6	2.67	0.42
70:O4:105:VAL:HG12	70:O4:106:LYS:HG2	2.02	0.42
66:O0:101:LEU:CD2	66:O0:101:LEU:H	4.61	0.42
4:S2:87:GLN:HA	4:S2:96:THR:HA	2.03	0.42
78:Q2:35:LEU:O	78:Q2:36:PHE:CB	2.68	0.42
64:N8:19:LYS:HG2	64:N8:25:HIS:HB2	4.44	0.42
36:1:1063:G:N1	57:N1:109:VAL:HG13	2.34	0.42
58:N2:75:TYR:O	58:N2:78:TYR:HB3	2.20	0.42
36:5:1340:G:C2	36:5:1365:G:C6	3.08	0.42
51:M5:187:ARG:NH2	36:5:49:A:H2'	127.47	0.42
72:O6:21:THR:N	72:O6:22:PRO:HD3	3.75	0.42
40:L3:95:THR:HG21	36:5:3244:A:OP1	251.86	0.42
33:E1:102:VAL:HG12	33:E1:103:LEU:N	2.34	0.42
36:1:1813:A:P	36:1:1817:G:HO2'	2.41	0.42
71:O5:24:LEU:HA	71:O5:24:LEU:HD23	1.68	0.42
36:1:139:G:H2'	36:1:140:C:O4'	2.20	0.42
11:S9:22:SER:O	11:S9:25:ASP:HB2	2.20	0.42
25:D3:17:VAL:O	25:D3:20:ARG:N	3.36	0.42
25:D3:27:ASN:OD1	25:D3:31:LYS:HG2	3.07	0.42
36:1:1803:C:O3'	70:O4:70:LYS:HD2	2.20	0.42
40:L3:192:VAL:HA	40:L3:195:ALA:HB3	2.01	0.42
36:5:1577:G:H2'	36:5:1578:C:C6	2.53	0.42
36:1:3386:G:C2	36:1:3387:U:C4	3.07	0.42
36:5:3384:U:C4	36:5:3385:U:C5	3.08	0.42
67:O1:13:THR:N	67:O1:72:ARG:HH11	2.18	0.42
47:M0:101:LYS:HG2	47:M0:102:MET:H	1.84	0.42
13:C1:5:LEU:HB3	13:C1:6:THR:H	1.50	0.42
36:5:944:C:H42	36:5:1375:G:H1	1.68	0.42
36:5:1103:A:H3'	36:5:1104:G:C5'	2.49	0.42
9:S7:103:SER:HB3	9:S7:106:SER:HB2	2.27	0.42
1:2:1345:A:C2	1:2:1348:A:C5	3.08	0.42
1:6:1320:U:O2'	1:6:1322:A:O5'	2.30	0.42
8:S6:28:PHE:CE2	8:S6:104:PRO:HG3	4.77	0.42
36:5:2786:G:O6	87:5:4144:OHX:N4	2.53	0.42
45:L8:78:PHE:CD1	45:L8:78:PHE:N	3.04	0.42
36:1:1525:G:N3	36:1:1594:A:H2	2.17	0.42
36:1:1754:G:C6	36:1:1755:C:C4	3.07	0.42
1:2:196:G:HO2'	1:2:197:A:H8	1.62	0.42
36:1:1217:A:N1	36:1:1289:G:C5	2.87	0.42
36:5:1952:G:H1	36:5:2094:C:N4	2.09	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:D0:51:VAL:C	22:D0:93:LEU:HD23	2.40	0.42
36:1:336:A:H5'	36:1:336:A:C8	2.51	0.42
50:M4:100:ALA:O	50:M4:103:ILE:HB	2.19	0.42
56:N0:155:ARG:NE	56:N0:172:TYR:CD1	2.87	0.42
47:M0:19:LYS:HE3	47:M0:26:VAL:HG22	3.28	0.42
36:5:2374:C:C4	36:5:2941:A:C4	3.08	0.42
36:5:2943:G:N7	36:5:2944:U:C4	2.88	0.42
52:M6:92:THR:O	52:M6:96:LYS:HG3	2.24	0.42
44:L7:98:LYS:HG2	44:L7:129:LEU:CD2	2.47	0.42
53:M7:70:THR:OG1	53:M7:71:ALA:N	2.98	0.42
36:1:387:A:C4	36:1:388:G:C8	3.08	0.42
11:S9:26:ALA:HA	11:S9:29:LYS:HD2	5.39	0.42
11:S9:32:GLY:HA3	32:E0:40:TYR:CD2	3.06	0.42
74:O8:11:PHE:O	74:O8:14:LEU:HB2	2.20	0.42
36:1:1274:A:N6	36:1:1275:C:N4	2.67	0.42
2:S0:32:HIS:CD2	23:D1:63:GLY:HA3	11.62	0.42
36:5:1667:A:H8	36:5:1667:A:O5'	2.01	0.42
36:5:3238:G:C2	36:5:3239:G:C8	3.07	0.42
36:1:3340:G:N2	36:1:3342:A:C8	2.87	0.42
36:5:592:A:H2'	36:5:592:A:N3	2.34	0.42
36:1:90:C:O2'	36:1:91:G:H5'	2.20	0.42
3:S1:119:THR:OG1	3:S1:155:TYR:HA	2.93	0.42
6:S4:75:LYS:HD3	6:S4:77:ARG:HH22	3.69	0.42
36:5:1002:A:O2'	36:5:1003:A:H5'	2.19	0.42
5:S3:116:ARG:O	5:S3:120:TYR:HB2	2.19	0.42
45:L8:118:GLU:OE2	45:L8:118:GLU:N	2.53	0.42
36:5:413:U:H2'	36:5:414:U:C6	2.54	0.42
17:C5:77:ARG:NH1	1:6:1241:G:OP2	382.83	0.42
1:6:1521:G:O6	1:6:1523:G:C5	2.72	0.42
9:S7:78:THR:O	9:S7:82:GLU:HB2	3.77	0.42
1:2:641:G:H2'	1:2:642:G:C8	2.52	0.42
36:1:3159:C:HO2'	36:1:3395:G:N2	2.17	0.42
51:M5:199:LEU:HD22	51:M5:203:ARG:NE	3.63	0.42
36:1:434:U:C4	36:1:435:C:N4	2.87	0.42
70:O4:11:ASN:HA	70:O4:12:PRO:HD3	2.30	0.42
37:7:72:A:H8	37:7:72:A:O5'	2.03	0.42
46:L9:126:VAL:HA	46:L9:127:PRO:HD2	1.63	0.42
64:N8:70:LYS:H	64:N8:71:PRO:HD3	2.67	0.42
36:5:2560:C:N4	36:5:2575:G:OP2	2.52	0.42
1:6:419:G:C6	1:6:420:A:C5	3.07	0.42
36:1:1862:U:OP2	87:1:4160:OHX:N1	2.53	0.42
36:1:1452:A:O3'	87:1:4207:OHX:N6	2.52	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:S6:88:ARG:HG2	8:S6:89:ASP:N	2.33	0.42
9:S7:119:THR:O	9:S7:123:ASP:HB2	2.26	0.42
1:2:716:C:N4	1:2:722:G:C6	2.88	0.42
36:5:1941:C:N3	36:5:1942:U:C4	2.87	0.42
36:5:1272:C:H2'	36:5:1273:A:H5'	2.00	0.42
36:5:2335:G:H2'	36:5:2335:G:H8	1.72	0.42
8:S6:113:ILE:HG13	8:S6:113:ILE:H	1.63	0.42
72:O6:75:LYS:O	72:O6:75:LYS:HG3	2.20	0.42
36:5:1683:A:C5	36:5:1684:U:C5	3.06	0.42
32:E0:13:LYS:O	32:E0:17:GLN:HG2	2.19	0.42
47:M0:34:TYR:CD1	47:M0:34:TYR:N	3.05	0.42
44:L7:89:ILE:HD11	44:L7:135:ALA:N	2.34	0.42
36:5:2433:U:C4	36:5:2434:U:C4	3.08	0.42
51:M5:124:ASP:O	51:M5:125:SER:C	3.35	0.42
6:S4:49:ARG:NH2	6:S4:50:ASN:OD1	3.26	0.42
36:1:1419:A:H2'	36:1:1420:C:H5'	2.00	0.42
36:5:1393:A:O2'	36:5:1419:A:H2	2.02	0.42
41:L4:119:ARG:O	41:L4:123:ALA:N	2.31	0.42
43:L6:40:LEU:HD12	43:L6:65:ILE:HD11	5.91	0.42
43:L6:42:LEU:HD22	43:L6:79:VAL:HG21	2.01	0.42
43:L6:65:ILE:HA	43:L6:65:ILE:HD13	3.79	0.42
19:C7:13:SER:OG	19:C7:54:THR:HG22	2.20	0.42
5:S3:168:ILE:HA	5:S3:188:ILE:O	2.17	0.42
1:2:1615:C:H6	1:2:1615:C:O5'	2.02	0.42
36:5:3327:G:N2	36:5:3328:G:H1'	2.34	0.42
61:N5:114:VAL:HG21	36:5:1833:G:P	101.58	0.42
36:1:1109:U:O2	36:1:1109:U:H2'	2.19	0.42
42:L5:152:ARG:HG3	37:7:44:C:H4'	282.39	0.42
42:L5:253:PHE:C	42:L5:253:PHE:CD1	3.04	0.42
42:L5:85:ARG:NH1	42:L5:253:PHE:H	2.15	0.42
1:2:1550:A:OP2	17:C5:42:ARG:NH2	2.52	0.42
17:C5:14:THR:CB	17:C5:21:ASP:HB3	2.50	0.42
21:C9:57:ARG:NH2	21:C9:80:TYR:HB3	2.45	0.42
31:D9:44:ARG:HA	31:D9:47:ALA:CB	2.50	0.42
5:S3:66:ILE:O	5:S3:70:THR:HG23	2.20	0.42
1:6:865:A:H2'	1:6:866:G:C8	2.55	0.42
72:O6:27:SER:C	72:O6:29:LYS:N	3.95	0.42
77:Q1:16:LYS:O	77:Q1:19:LYS:HB3	2.19	0.42
36:1:1639:C:O2'	36:1:1640:G:H5'	2.20	0.42
70:O4:74:ARG:HB3	70:O4:74:ARG:NH1	3.19	0.42
47:M0:23:ASN:HB3	47:M0:24:ARG:H	1.65	0.42
36:1:409:A:H5"	68:O2:26:HIS:NE2	2.34	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:D1:27:ASP:O	23:D1:29:HIS:N	2.53	0.42
2:S0:146:LEU:HD13	2:S0:162:CYS:SG	5.28	0.42
2:S0:50:VAL:HA	2:S0:53:THR:CB	2.49	0.42
1:6:1696:G:H1'	1:6:1697:G:OP1	2.19	0.42
71:O5:60:GLU:HG2	71:O5:64:GLU:OE2	2.19	0.42
71:O5:60:GLU:O	71:O5:64:GLU:N	2.43	0.42
1:2:1483:A:C2	1:2:1524:A:C6	3.08	0.42
14:C2:78:LEU:HD23	14:C2:78:LEU:HA	1.85	0.42
36:1:3018:C:H2'	36:1:3019:U:C6	2.55	0.42
20:C8:145:ARG:HH21	35:SM:68:ARG:HD3	1.83	0.42
56:N0:117:ARG:HH21	36:5:1322:U:P	282.75	0.42
1:6:72:A:C6	1:6:73:U:N3	2.87	0.42
44:L7:80:GLN:HG3	57:N1:136:ARG:N	2.32	0.42
60:N4:3:VAL:HG23	60:N4:14:TYR:HA	4.76	0.42
43:L6:165:LEU:HA	43:L6:165:LEU:HD23	1.77	0.42
5:S3:225:TYR:HD2	34:SR:189:GLU:HA	3.05	0.42
34:SR:295:SER:OG	34:SR:296:ALA:N	2.53	0.42
56:N0:40:ARG:O	56:N0:43:TYR:N	2.81	0.42
62:N6:39:LEU:HA	62:N6:42:GLN:HB2	2.01	0.42
62:N6:66:GLN:O	62:N6:67:GLU:HG3	2.38	0.42
1:2:986:G:H22	1:2:1015:U:H5	1.65	0.42
3:S1:144:ARG:HB3	3:S1:208:GLN:CG	3.57	0.42
36:1:210:U:OP2	41:L4:161:LYS:HG3	2.18	0.42
8:S6:75:LEU:O	8:S6:94:ARG:HA	2.35	0.42
72:O6:99:ARG:NH1	72:O6:99:ARG:HG3	2.35	0.42
53:M7:110:THR:C	53:M7:112:LEU:H	2.84	0.42
36:1:1428:A:OP2	64:N8:2:PRO:HA	2.20	0.42
69:O3:97:SER:HB2	36:5:3174:A:OP1	241.57	0.42
70:O4:76:TYR:CE1	36:5:1806:A:H5'	192.90	0.42
24:D2:81:VAL:N	24:D2:123:GLY:O	3.25	0.42
49:M3:47:ALA:HB1	49:M3:48:PRO:CD	2.48	0.42
49:M3:48:PRO:O	49:M3:137:GLN:HG3	4.87	0.42
57:N1:105:PHE:CE2	36:5:1062:A:H4'	244.83	0.42
57:N1:39:ILE:O	57:N1:39:ILE:HG22	2.19	0.42
58:N2:75:TYR:CZ	36:5:1687:U:O4'	167.41	0.42
51:M5:170:LYS:NZ	36:5:288:C:P	123.22	0.42
49:M3:74:GLY:HA2	49:M3:96:ALA:HB1	2.02	0.42
36:1:3027:A:C2	36:1:3028:G:H1'	2.55	0.42
36:1:3030:G:O6	36:1:3031:G:C2	2.72	0.42
1:2:778:G:C8	1:2:779:U:H2'	2.54	0.42
36:5:1753:G:N2	36:5:1754:G:H1'	2.35	0.42
55:M9:88:ARG:CG	55:M9:88:ARG:HH11	2.59	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:4:43:A:H5''	38:4:44:A:OP2	2.19	0.42
11:S9:25:ASP:O	11:S9:28:LEU:N	3.46	0.42
36:1:1942:U:O2'	36:1:3345:G:O2'	2.06	0.42
44:L7:33:ARG:O	44:L7:37:ASN:N	2.57	0.42
36:5:137:G:C5	36:5:138:U:C5	3.07	0.42
60:N4:31:PHE:CD1	60:N4:37:ALA:HA	2.87	0.42
56:N0:6:GLU:OE2	56:N0:30:PHE:CE1	2.73	0.42
67:O1:72:ARG:O	67:O1:96:VAL:HG13	3.22	0.42
36:5:71:A:N1	36:5:2778:G:H1'	2.34	0.42
1:6:1347:U:N3	1:6:1516:A:OP1	2.44	0.42
56:N0:68:HIS:HA	56:N0:69:PRO:HD3	1.62	0.42
1:2:1446:A:C8	1:2:1448:G:N7	2.88	0.42
36:5:733:G:N2	36:5:735:A:H5''	2.34	0.42
16:C4:132:ARG:CZ	1:6:1788:G:C8	297.24	0.42
36:1:3119:U:H4'	76:Q0:104:PRO:HB3	2.01	0.42
76:Q0:103:LEU:CD2	76:Q0:104:PRO:HD2	2.46	0.42
1:6:1334:U:C2	1:6:1418:G:N2	2.88	0.42
78:Q2:28:TYR:HD1	78:Q2:29:LYS:N	2.43	0.42
73:O7:21:ARG:NH1	73:O7:44:THR:HG23	2.34	0.42
36:5:1618:G:C2	36:5:1827:C:N3	2.87	0.42
36:5:1529:A:O4'	36:5:1588:A:C2	2.72	0.42
1:2:766:U:H5	1:2:769:A:OP2	2.02	0.42
10:S8:138:ASN:O	10:S8:141:ARG:HB2	2.21	0.42
38:4:10:A:H8	38:4:10:A:O5'	2.02	0.42
50:M4:64:VAL:HG22	50:M4:65:LEU:O	2.20	0.42
50:M4:99:TRP:O	50:M4:102:LYS:N	2.46	0.42
69:O3:19:SER:O	69:O3:20:LYS:C	2.57	0.42
56:N0:45:LEU:HA	56:N0:45:LEU:HD22	1.49	0.42
52:M6:96:LYS:O	52:M6:97:ALA:C	2.82	0.42
64:N8:45:MET:HE3	64:N8:49:HIS:CD2	2.55	0.42
10:S8:6:ASP:OD1	10:S8:9:HIS:N	2.68	0.42
58:N2:22:PRO:HB3	58:N2:93:ILE:CG2	2.45	0.42
36:5:2660:G:H5''	36:5:2750:U:O2'	2.20	0.42
36:1:2168:A:C6	36:1:2170:U:H1'	2.53	0.42
9:S7:96:ARG:NH2	9:S7:128:ASP:OD2	3.17	0.42
36:5:3153:U:H1'	36:5:3154:C:C5	2.55	0.42
1:6:604:A:H2'	1:6:605:A:O4'	2.18	0.42
1:2:726:C:H2'	1:2:727:U:C5	2.54	0.42
36:5:2794:G:N7	87:5:3985:OHX:N1	2.67	0.42
18:C6:73:GLY:H	18:C6:76:SER:CB	2.32	0.42
1:6:1283:U:C2	1:6:1284:C:C5	3.07	0.42
15:C3:132:VAL:HG23	15:C3:134:VAL:CG1	3.43	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:C3:129:TYR:HD1	15:C3:134:VAL:HG11	1.89	0.42
19:C7:78:ARG:HH11	19:C7:81:LYS:NZ	2.18	0.42
1:6:1575:G:C2	1:6:1576:A:C4	3.07	0.42
36:5:1070:U:H2'	36:5:1071:U:H5'	2.01	0.42
36:1:1346:G:N2	36:1:1359:C:C2	2.88	0.42
36:1:1072:G:N2	36:1:1073:U:C2	2.87	0.42
36:5:1187:C:O2	36:5:1187:C:C2'	2.66	0.42
36:5:1490:A:H3'	36:5:1491:A:C8	2.55	0.42
36:5:760:G:H1'	36:5:770:G:N2	2.35	0.42
36:1:1727:G:N2	36:1:1731:A:N3	2.62	0.42
36:1:172:G:C6	36:1:173:G:C5	3.07	0.42
36:1:971:G:C2'	36:1:1371:G:HO2'	2.32	0.42
1:2:316:A:C5	1:2:317:C:C5	3.07	0.42
13:C1:79:LYS:CB	1:6:346:G:H5'	282.13	0.42
1:2:1271:G:C2	1:2:1272:U:C2	3.08	0.42
1:6:319:U:H1'	1:6:323:A:C4	2.55	0.42
36:5:2933:A:C5	36:5:3014:U:O2'	2.72	0.42
51:M5:103:GLU:OE1	51:M5:165:THR:HG21	4.53	0.42
13:C1:107:VAL:O	13:C1:107:VAL:HG12	2.66	0.42
40:L3:146:ARG:NE	40:L3:146:ARG:HA	2.87	0.42
68:O2:80:LYS:HA	68:O2:80:LYS:HD3	1.81	0.42
34:SR:76:ASP:OD1	34:SR:76:ASP:N	2.51	0.42
36:1:2390:A:H2'	36:1:2391:G:O4'	2.20	0.42
36:1:1317:A:C4	36:1:1319:G:N7	2.87	0.42
36:1:2341:A:O2'	36:1:2342:U:H5'	2.19	0.42
36:5:1507:G:H4'	36:5:1508:C:OP2	2.18	0.42
1:2:460:A:H5'	1:2:461:G:OP2	2.20	0.42
1:2:755:A:C6	1:2:756:A:C6	3.07	0.42
1:2:512:A:H2'	1:2:513:U:O4'	2.19	0.42
1:2:765:G:O6	11:S9:82:ARG:HD3	2.19	0.42
36:5:2837:A:O2'	36:5:2838:A:OP2	2.37	0.42
47:M0:29:SER:O	47:M0:32:ARG:HD3	2.37	0.42
47:M0:44:ASP:HA	47:M0:171:TRP:HZ2	1.85	0.42
1:6:327:U:O2'	1:6:328:A:H5'	2.19	0.42
41:L4:260:GLN:O	41:L4:270:SER:HB3	4.16	0.42
41:L4:276:LEU:HA	41:L4:276:LEU:HD23	1.93	0.42
19:C7:19:ARG:HG3	19:C7:20:TYR:HE1	1.83	0.42
20:C8:13:HIS:CD2	20:C8:13:HIS:H	2.89	0.42
36:1:975:C:H2'	36:1:976:U:C6	2.54	0.42
42:L5:61:ILE:HG12	42:L5:79:TYR:HD1	1.85	0.42
1:2:1280:C:H4'	22:D0:70:THR:HA	2.02	0.42
12:C0:21:VAL:HG11	12:C0:46:LEU:CD1	6.54	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:C0:35:ILE:H	12:C0:35:ILE:HG13	1.67	0.42
12:C0:72:GLY:C	12:C0:74:GLU:H	3.09	0.42
21:C9:109:GLU:HA	21:C9:114:VAL:O	2.19	0.42
21:C9:117:SER:HB2	21:C9:123:ARG:N	2.34	0.42
48:M1:166:LYS:O	48:M1:167:TYR:HB2	2.32	0.42
5:S3:102:ALA:C	5:S3:104:SER:N	2.73	0.42
5:S3:105:MET:SD	5:S3:118:ALA:HB1	2.60	0.42
5:S3:178:ARG:HB2	5:S3:179:GLN:H	3.44	0.42
15:C3:105:ASN:C	15:C3:107:LYS:H	2.34	0.42
1:6:1783:C:H2'	1:6:1784:C:H6	1.84	0.42
47:M0:20:SER:OG	47:M0:21:ARG:N	2.51	0.42
1:2:903:U:H1'	1:2:906:A:N7	2.34	0.42
16:C4:20:TYR:HA	16:C4:84:ARG:O	2.56	0.42
3:S1:73:LEU:HA	3:S1:73:LEU:HD13	4.55	0.42
3:S1:70:LEU:HB3	3:S1:79:HIS:CB	5.92	0.42
36:5:1439:U:H2'	36:5:1440:G:O4'	2.19	0.42
1:6:1141:G:C2	1:6:1142:A:C4	3.07	0.42
29:D7:6:ASP:OD1	29:D7:9:HIS:HB2	2.48	0.42
2:S0:195:TRP:HD1	2:S0:196:SER:HG	1.67	0.42
20:C8:18:LEU:HA	20:C8:18:LEU:HD13	1.77	0.42
48:M1:10:ARG:HD3	48:M1:133:ARG:HE	3.91	0.42
4:S2:143:TYR:CZ	4:S2:151:PRO:HG3	2.89	0.42
63:N7:3:LYS:O	63:N7:6:LYS:HG3	2.19	0.42
63:N7:4:PHE:HB2	63:N7:9:LYS:CE	3.95	0.42
55:M9:34:GLN:O	55:M9:35:ALA:C	2.58	0.42
14:C2:62:LEU:O	14:C2:91:VAL:HG12	4.48	0.42
31:D9:6:VAL:HB	31:D9:7:TRP:H	4.36	0.42
20:C8:145:ARG:CD	35:SM:68:ARG:HH22	4.28	0.42
50:M4:13:ARG:HE	50:M4:67:PRO:HB3	2.34	0.42
56:N0:142:GLN:HB3	56:N0:142:GLN:HE21	1.64	0.42
56:N0:78:TRP:HB3	56:N0:124:LEU:HB2	2.48	0.42
59:N3:87:ARG:HG3	59:N3:91:VAL:CG2	2.50	0.42
37:7:1:G:C8	37:7:1:G:H5''	2.54	0.42
34:SR:241:PHE:CE2	34:SR:288:HIS:CE1	5.02	0.42
36:5:1056:U:H2'	36:5:1057:A:O4'	2.19	0.42
36:1:53:G:P	73:O7:48:ASN:HB2	2.59	0.42
29:D7:63:LEU:O	29:D7:74:SER:N	2.91	0.42
1:2:889:U:H4'	1:2:989:U:OP1	2.19	0.42
16:C4:134:GLY:O	16:C4:136:ARG:HG2	2.19	0.42
39:L2:45:VAL:HG13	39:L2:83:HIS:O	2.20	0.42
66:O0:11:ASN:O	66:O0:13:LYS:N	3.99	0.42
52:M6:199:TYR:N	52:M6:199:TYR:CD2	2.87	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3180:A:H2'	52:M6:167:TYR:CE1	2.54	0.42
49:M3:92:THR:HB	71:O5:114:ARG:CG	2.49	0.42
36:5:287:G:H2'	36:5:288:C:H6	1.83	0.42
51:M5:58:GLY:O	51:M5:60:VAL:HG23	2.19	0.42
36:1:1927:G:OP1	79:Q3:8:VAL:HG22	2.20	0.42
45:L8:195:SER:O	45:L8:196:ALA:HB3	2.19	0.42
4:S2:80:VAL:HG11	4:S2:125:ILE:HD12	6.24	0.42
24:D2:74:VAL:O	24:D2:75:ILE:HD13	4.41	0.42
10:S8:29:LEU:HD12	1:6:400:A:C6	296.44	0.42
48:M1:48:SER:HB2	48:M1:66:ALA:O	2.58	0.42
34:SR:157:VAL:HG23	34:SR:169:ILE:HA	2.53	0.42
44:L7:27:ALA:CA	44:L7:30:ARG:HB3	2.44	0.42
37:7:26:C:N4	37:7:27:A:C6	2.88	0.42
56:N0:103:VAL:HG13	56:N0:123:ILE:HD12	2.01	0.42
64:N8:95:SER:OG	64:N8:97:GLU:HG2	6.89	0.42
52:M6:54:TYR:CD2	52:M6:145:VAL:HG11	2.55	0.42
36:5:2826:U:C2'	36:5:2827:U:H5'	2.50	0.42
1:6:824:G:C6	1:6:825:U:C4	3.08	0.42
4:S2:144:TRP:CG	4:S2:173:PRO:HA	2.54	0.42
1:2:327:U:H1'	13:C1:10:GLU:CD	2.40	0.42
41:L4:234:ASN:HB2	36:5:693:A:O2'	101.63	0.42
36:5:1107:C:H2'	36:5:1108:U:H6	1.85	0.42
22:D0:40:ASN:O	22:D0:44:ASN:HB3	2.19	0.42
36:5:2403:G:H2'	36:5:2870:C:O2'	2.19	0.42
36:5:1609:C:H2'	36:5:1610:G:H8	1.84	0.42
1:2:256:A:O2'	10:S8:72:ILE:HA	2.19	0.42
42:L5:40:HIS:CE1	57:N1:69:LYS:CA	3.08	0.42
36:1:2737:C:H4'	57:N1:68:THR:OG1	2.19	0.42
53:M7:27:LYS:HD3	53:M7:63:PHE:CG	2.54	0.42
36:1:765:C:H4'	36:1:766:U:OP1	2.19	0.42
62:N6:5:SER:HG	62:N6:7:ASP:H	1.63	0.42
36:5:2103:U:H2'	36:5:2104:A:C8	2.54	0.42
36:1:3205:G:OP2	36:1:3206:C:N4	2.53	0.42
36:5:259:C:H2'	36:5:260:C:H6	1.84	0.42
1:2:525:A:N6	1:2:526:A:C6	2.88	0.42
36:5:2531:C:HO2'	36:5:2532:U:P	2.43	0.42
1:6:1341:A:H2'	1:6:1341:A:N3	2.35	0.42
1:6:1338:C:H1'	1:6:1410:A:C4	2.54	0.42
36:1:1462:A:H2'	36:1:1463:U:O4'	2.20	0.42
18:C6:83:GLN:NE2	18:C6:119:ALA:HA	2.39	0.42
8:S6:76:LEU:C	8:S6:77:LEU:HG	2.40	0.42
87:6:2064:OHX:N2	87:6:2152:OHX:N4	2.67	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:685:A:HO2'	1:2:686:C:P	2.42	0.42
36:1:2170:U:C2	36:1:2171:G:C8	3.08	0.42
68:O2:46:PHE:O	68:O2:49:ASN:HB2	2.33	0.42
36:1:398:A:C4	53:M7:3:ARG:NH2	2.87	0.42
36:5:1209:G:C6	36:5:1210:U:N3	2.88	0.42
24:D2:118:ARG:C	24:D2:120:HIS:H	2.22	0.42
24:D2:83:ILE:HG13	24:D2:117:ARG:NH1	2.34	0.42
74:O8:9:LYS:O	74:O8:13:GLU:HG3	5.66	0.42
1:2:709:C:C4	1:2:710:U:H1'	2.55	0.42
36:5:1541:G:H2'	36:5:1542:G:O4'	2.19	0.42
36:1:671:U:H2'	36:1:672:A:H8	1.82	0.42
49:M3:157:ARG:HB3	49:M3:157:ARG:HE	1.47	0.42
38:8:70:G:C2	38:8:87:G:N3	2.87	0.42
36:1:718:G:H3'	36:1:719:U:C5'	2.49	0.42
37:3:63:A:C2	37:3:65:G:C5	3.07	0.42
79:Q3:85:ARG:O	79:Q3:88:GLU:HB2	2.22	0.42
3:S1:119:THR:HG22	3:S1:120:LEU:H	1.84	0.42
19:C7:73:LEU:O	19:C7:76:GLU:N	4.01	0.42
59:N3:26:ALA:O	59:N3:114:ILE:HA	2.19	0.42
46:L9:86:TYR:CE2	46:L9:151:VAL:HG13	3.21	0.42
40:L3:311:PHE:HE2	40:L3:317:ILE:HG13	1.85	0.42
36:5:2678:A:C8	36:5:2679:A:N7	2.88	0.42
36:1:2620:G:N3	36:1:2620:G:H2'	2.34	0.42
36:5:1258:U:O2	36:5:1260:A:H8	2.02	0.42
1:6:321:C:H6	1:6:321:C:OP1	2.02	0.42
1:2:577:G:C2	35:SM:99:LYS:HD2	2.55	0.42
8:S6:182:GLN:CA	8:S6:182:GLN:HE21	4.42	0.42
29:D7:31:TYR:CE1	29:D7:81:ARG:CZ	3.03	0.42
1:2:454:U:C5	6:S4:66:MET:HB3	2.54	0.42
36:1:2097:U:H6	36:1:2097:U:O5'	2.03	0.42
13:C1:39:GLY:C	13:C1:41:GLY:N	2.72	0.42
40:L3:282:ILE:HD13	40:L3:282:ILE:HG21	2.47	0.42
1:6:1195:C:H5''	1:6:1197:C:C6	2.54	0.42
36:5:985:U:H2'	36:5:986:U:H6	1.84	0.42
1:6:789:A:C2	1:6:790:U:H1'	2.54	0.42
36:1:2433:U:C4	36:1:2434:U:C4	3.08	0.42
36:1:222:A:C5	36:1:223:U:C5	3.07	0.42
36:5:2849:C:H2'	36:5:2850:G:H5'	2.00	0.42
36:5:2582:C:O2'	36:5:2583:C:H5'	2.20	0.42
3:S1:202:LYS:HG3	3:S1:203:ASP:OD1	2.20	0.42
42:L5:191:ASP:OD2	42:L5:193:GLU:HB2	2.18	0.42
1:6:734:A:H2'	1:6:735:C:O4'	2.20	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1738:U:H2'	1:6:1739:C:C6	2.54	0.42
36:1:867:G:H8	36:1:867:G:O5'	2.01	0.42
36:5:2839:G:N3	36:5:2839:G:H2'	2.35	0.42
74:O8:72:THR:O	74:O8:72:THR:OG1	2.69	0.42
36:5:2252:A:C2	36:5:2265:C:O2	2.72	0.42
40:L3:214:MET:SD	40:L3:281:LYS:HB2	2.70	0.42
1:2:1546:G:P	20:C8:127:HIS:HE2	2.38	0.42
46:L9:21:LYS:HB3	36:5:3198:U:H1'	325.06	0.42
36:1:1504:A:C5	36:1:1505:C:C5	3.08	0.42
53:M7:22:LEU:O	53:M7:143:PRO:HB2	2.19	0.42
1:6:86:A:C2	1:6:87:C:C5	3.08	0.42
28:D6:34:LYS:O	28:D6:35:ALA:CB	4.23	0.42
28:D6:38:ARG:HE	28:D6:83:ILE:HB	1.85	0.42
36:1:1038:C:C2	36:1:1039:U:C5	3.08	0.42
41:L4:333:VAL:O	41:L4:334:PHE:C	2.57	0.42
51:M5:22:LEU:C	51:M5:24:ARG:N	3.56	0.42
13:C1:20:PHE:CD1	1:6:211:U:H5''	281.71	0.42
1:6:341:A:H2'	1:6:342:C:H6	1.85	0.42
41:L4:203:ARG:HH11	41:L4:226:GLU:CD	3.10	0.42
54:M8:48:VAL:O	54:M8:51:ALA:HB3	2.20	0.42
41:L4:74:ILE:HA	41:L4:74:ILE:HD12	3.70	0.42
18:C6:57:LEU:H	18:C6:57:LEU:HD12	3.29	0.42
7:S5:28:PRO:O	7:S5:29:ILE:HB	4.26	0.42
7:S5:90:ILE:HG23	7:S5:90:ILE:HD12	2.15	0.42
7:S5:91:GLU:HA	7:S5:94:THR:HG23	2.01	0.42
17:C5:52:LYS:C	17:C5:54:ALA:H	3.16	0.42
29:D7:19:HIS:CG	29:D7:20:LYS:N	2.88	0.42
77:Q1:10:THR:OG1	77:Q1:11:ARG:N	3.54	0.42
77:Q1:15:ARG:HD3	1:6:1126:G:OP1	280.63	0.42
16:C4:21:ALA:CA	16:C4:26:THR:HG22	2.50	0.42
3:S1:38:PHE:HB3	3:S1:73:LEU:HD12	2.68	0.42
3:S1:97:LEU:HD22	3:S1:232:HIS:ND1	5.76	0.42
2:S0:185:ARG:HB2	23:D1:45:ALA:CB	2.49	0.42
2:S0:57:LEU:HA	2:S0:160:ILE:CD1	2.99	0.42
1:6:1699:G:O2'	1:6:1700:C:H5'	2.19	0.42
68:O2:105:ARG:CD	68:O2:124:GLY:HA3	2.75	0.42
62:N6:52:ARG:HA	62:N6:70:ILE:CG2	3.45	0.42
1:2:1485:C:H5''	87:2:2100:OHX:N6	2.35	0.42
1:2:1227:A:N6	1:2:1256:A:C4	2.88	0.42
1:2:1454:G:C4	1:2:1455:G:C8	3.07	0.42
6:S4:124:GLY:HA3	6:S4:162:ILE:HD11	2.83	0.42
60:N4:47:ARG:O	60:N4:55:PHE:HD2	2.60	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2661:G:N2	36:1:2709:C:N3	2.56	0.42
1:6:1587:A:O2'	1:6:1588:G:H5'	2.20	0.42
18:C6:115:THR:HG1	18:C6:116:LEU:H	1.68	0.42
29:D7:56:CYS:SG	29:D7:57:GLU:N	3.24	0.42
62:N6:58:VAL:HG12	62:N6:64:LYS:HA	2.00	0.42
51:M5:44:ARG:HB2	51:M5:119:TYR:CE2	3.21	0.42
4:S2:94:GLN:O	4:S2:95:ARG:HB2	4.56	0.42
49:M3:161:ASP:OD2	64:N8:139:ARG:NH1	4.42	0.42
64:N8:129:PHE:HZ	72:O6:9:ILE:HB	5.08	0.42
36:5:37:U:H5''	36:5:935:U:H1'	2.01	0.42
36:5:812:G:H1	36:5:928:C:H42	1.68	0.42
36:1:3393:U:C2	36:1:3394:U:C5	3.08	0.42
36:1:287:G:H5'	51:M5:179:LYS:O	2.20	0.42
51:M5:180:PHE:CD2	51:M5:180:PHE:N	3.20	0.42
36:1:3243:A:C4	52:M6:156:LEU:HD12	2.55	0.42
36:1:3027:A:H2'	36:1:3028:G:H8	1.84	0.42
36:1:2189:U:C5	36:1:2190:U:C5	3.07	0.42
71:O5:38:ARG:HA	71:O5:39:PRO:HD2	1.55	0.42
62:N6:2:ALA:N	36:5:213:A:H5''	81.10	0.42
1:2:79:C:H4'	8:S6:174:LYS:HB2	2.02	0.42
25:D3:17:VAL:HG12	25:D3:18:HIS:N	2.34	0.42
36:5:3316:A:H5''	36:5:3318:G:N2	2.34	0.42
36:1:1404:G:C6	36:1:1408:G:C6	3.08	0.42
36:1:3121:U:H4'	36:1:3122:A:OP1	2.19	0.42
1:6:1294:G:N2	1:6:1322:A:C8	2.87	0.42
14:C2:73:LYS:HE3	14:C2:73:LYS:HB3	1.74	0.42
1:6:276:C:O2'	1:6:277:U:OP2	2.30	0.42
36:1:1574:C:N4	36:1:1575:A:N7	2.68	0.42
38:4:140:G:H2'	38:4:141:C:O4'	2.20	0.42
38:4:141:C:H2'	38:4:142:C:C6	2.54	0.42
53:M7:69:ARG:NH2	36:5:2992:U:H1'	191.85	0.42
78:Q2:61:LYS:NZ	78:Q2:61:LYS:HB3	2.34	0.42
50:M4:103:ILE:HA	50:M4:103:ILE:HD13	1.81	0.42
36:5:1556:C:H5''	36:5:2169:G:N1	2.34	0.42
69:O3:93:THR:O	69:O3:96:ALA:N	2.52	0.42
15:C3:62:GLN:O	15:C3:66:ILE:HG22	2.20	0.42
37:3:81:U:O2'	37:3:82:G:H5'	2.19	0.42
14:C2:132:GLU:O	14:C2:136:ILE:HG12	2.20	0.42
54:M8:182:LYS:O	54:M8:183:GLY:C	2.55	0.42
36:1:1740:U:H4'	36:1:1741:A:H5'	2.01	0.42
6:S4:154:ILE:HG12	6:S4:172:PHE:CG	2.55	0.42
1:6:142:G:C2	1:6:266:A:C5	3.08	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S2:157:LYS:NZ	24:D2:91:ALA:O	4.26	0.42
36:5:660:A:H2	36:5:941:G:N3	2.18	0.42
1:6:1391:A:C8	1:6:1412:G:C6	3.08	0.42
1:6:831:U:OP2	1:6:831:U:H6	2.03	0.42
54:M8:157:PRO:HD3	64:N8:47:LYS:HB2	2.01	0.42
36:1:3220:G:C8	36:1:3266:G:N2	2.87	0.42
13:C1:121:ASP:OD1	13:C1:146:ALA:HA	2.19	0.42
41:L4:111:VAL:O	51:M5:202:TYR:HE2	2.65	0.42
47:M0:201:SER:HG	47:M0:203:LYS:H	1.85	0.42
36:1:686:G:P	49:M3:39:ARG:HH21	2.43	0.42
36:1:1533:U:H2'	36:1:1534:A:H5'	2.01	0.42
1:6:1284:C:O2	1:6:1286:U:C2	2.73	0.42
36:1:726:G:H3'	36:1:742:G:N2	2.34	0.42
1:6:906:A:C2	1:6:907:A:C4	3.07	0.42
6:S4:82:TYR:HE2	6:S4:84:ALA:HA	3.27	0.42
1:2:1267:G:C2	1:2:1268:G:C4	3.07	0.42
1:6:1048:G:H1	1:6:1070:C:H42	1.66	0.42
54:M8:76:ALA:O	54:M8:79:LYS:N	2.52	0.42
36:1:870:G:N2	36:1:871:U:O4	2.45	0.42
36:5:2981:U:H2'	36:5:2982:A:H5'	2.00	0.42
3:S1:134:VAL:HG12	3:S1:218:LEU:HD12	5.85	0.42
36:1:1454:A:C2	36:1:1840:U:O2	2.72	0.42
1:6:1085:G:N2	1:6:1088:A:OP2	2.49	0.42
48:M1:120:ILE:HD13	48:M1:120:ILE:HA	4.26	0.42
36:5:1054:A:N3	36:5:1054:A:H2'	2.34	0.42
62:N6:76:LEU:HD22	62:N6:76:LEU:O	3.18	0.42
1:6:729:G:O2'	1:6:730:G:H8	2.03	0.42
36:1:2589:G:C4	36:1:2590:A:C8	3.08	0.42
36:1:246:U:O2'	36:1:247:C:H5'	2.19	0.42
15:C3:50:ILE:O	15:C3:53:LEU:N	2.52	0.42
36:5:774:G:O2'	36:5:775:A:H5'	2.20	0.42
33:E1:86:THR:HG23	33:E1:87:THR:H	4.36	0.42
1:2:107:C:O5'	1:2:107:C:H6	2.02	0.42
36:1:189:G:C6	36:1:206:G:C6	3.07	0.42
36:1:689:U:O4	41:L4:228:ALA:HA	2.20	0.42
2:S0:42:PRO:C	2:S0:44:GLY:H	3.16	0.42
36:1:2815:G:H5''	36:1:2816:G:OP2	2.20	0.42
36:5:3331:U:C4	36:5:3332:U:C4	3.08	0.42
62:N6:87:LYS:HB2	62:N6:97:ILE:HD11	3.97	0.42
3:S1:116:LYS:HE3	3:S1:117:TRP:CZ2	7.75	0.42
60:N4:45:ASN:O	60:N4:48:ARG:HG3	2.19	0.42
11:S9:120:LYS:O	11:S9:120:LYS:HD3	4.00	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1201:C:N3	87:5:4027:OHX:N5	2.67	0.42
1:2:555:A:C6	11:S9:19:TYR:CZ	3.07	0.42
1:2:432:G:C6	1:2:433:C:C4	3.08	0.42
1:6:553:G:C6	1:6:554:C:C4	3.08	0.42
52:M6:59:ARG:HH12	36:5:1307:G:P	253.23	0.42
46:L9:48:VAL:HB	46:L9:49:ASN:H	4.26	0.42
46:L9:47:LYS:NZ	50:M4:4:ASP:HB3	3.36	0.42
51:M5:73:ARG:O	51:M5:75:VAL:HG22	2.20	0.42
36:1:2356:A:H4'	53:M7:138:LYS:HG3	2.02	0.42
53:M7:29:THR:HG22	53:M7:87:SER:CB	2.50	0.42
53:M7:48:LEU:HA	53:M7:48:LEU:HD23	1.77	0.42
1:2:765:G:C8	1:2:765:G:O5'	2.73	0.42
47:M0:211:ARG:O	47:M0:214:PRO:HD3	2.78	0.42
44:L7:189:ILE:CG2	44:L7:190:THR:HG23	2.93	0.42
45:L8:68:ARG:HH21	45:L8:237:ILE:HG22	5.06	0.42
1:2:119:A:H1'	1:2:397:A:C5	2.55	0.42
87:6:2130:OHX:N5	87:6:2155:OHX:N3	2.67	0.42
6:S4:57:ASN:HB2	6:S4:60:GLU:H	1.85	0.42
41:L4:157:GLU:HG2	41:L4:211:GLU:O	2.19	0.42
41:L4:229:ASN:ND2	41:L4:231:ALA:HB3	2.79	0.42
41:L4:6:VAL:O	41:L4:20:LEU:HB2	3.47	0.42
19:C7:20:TYR:CE2	19:C7:38:ILE:HG13	2.55	0.42
19:C7:17:ILE:HG21	19:C7:61:ILE:CD1	2.50	0.42
1:2:1369:U:O4	87:2:2095:OHX:N2	2.52	0.42
7:S5:190:ILE:HD12	1:6:1473:U:O2	352.35	0.42
18:C6:55:VAL:HG21	18:C6:105:LEU:HG	2.95	0.42
18:C6:39:VAL:HB	18:C6:45:ARG:HD3	2.02	0.42
20:C8:99:HIS:CD2	20:C8:101:LEU:HD21	2.55	0.42
7:S5:211:ILE:HD12	7:S5:211:ILE:HG23	2.40	0.42
75:O9:13:MET:SD	36:5:1493:G:C4	112.25	0.42
61:N5:113:LEU:HD12	61:N5:114:VAL:N	2.34	0.42
42:L5:85:ARG:HG2	42:L5:86:TYR:CZ	4.32	0.42
1:6:1274:C:N3	1:6:1427:A:N7	2.68	0.42
21:C9:100:ILE:HD13	21:C9:100:ILE:HA	1.67	0.42
21:C9:57:ARG:NH2	21:C9:80:TYR:CD1	3.15	0.42
5:S3:55:THR:OG1	5:S3:56:GLN:N	3.28	0.42
71:O5:98:SER:O	71:O5:100:VAL:N	3.29	0.42
1:2:898:A:C2	1:2:915:A:C5	3.08	0.42
3:S1:181:LEU:HD23	3:S1:181:LEU:HA	4.40	0.42
40:L3:232:ARG:HD2	40:L3:232:ARG:HH11	1.59	0.42
54:M8:83:VAL:O	54:M8:85:GLY:N	3.32	0.42
36:5:1948:G:C2	36:5:1949:G:C8	3.08	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
63:N7:128:GLN:O	63:N7:131:PHE:N	3.75	0.42
66:O0:33:SER:CB	66:O0:39:SER:HB2	2.50	0.42
68:O2:109:LEU:HD21	68:O2:122:PRO:HB3	2.87	0.42
73:O7:74:PHE:C	73:O7:76:ASN:N	2.96	0.42
1:2:1483:A:C2'	1:2:1484:G:H8	2.18	0.42
1:2:1184:A:H2	1:2:1454:G:N3	2.17	0.42
1:6:1174:C:C4	1:6:1175:U:C4	3.07	0.42
11:S9:169:PRO:HD2	11:S9:174:ARG:HE	4.22	0.42
56:N0:42:TRP:O	56:N0:46:GLN:HG3	2.19	0.42
36:1:2757:U:OP2	87:1:4006:OHX:N4	2.53	0.42
36:1:3215:A:C5'	50:M4:121:MET:HE1	2.50	0.42
9:S7:49:ILE:HG13	9:S7:57:ALA:O	4.79	0.42
38:8:53:A:H3'	38:8:54:A:H8	1.85	0.42
37:3:121:U:OP2	42:L5:265:TYR:OH	2.23	0.42
34:SR:177:MET:HG2	34:SR:193:ILE:HG12	2.01	0.42
34:SR:192:PHE:O	34:SR:223:TRP:CH2	2.73	0.42
34:SR:274:LEU:HD22	34:SR:313:TRP:CD1	2.55	0.42
34:SR:66:HIS:CG	34:SR:85:TRP:HB2	2.55	0.42
36:5:2275:A:H61	36:5:2311:G:H1'	1.84	0.42
72:O6:57:LEU:HD11	72:O6:73:ALA:HB2	2.02	0.42
72:O6:82:ARG:HD2	36:5:295:A:H1'	136.24	0.42
87:2:2090:OHX:N1	87:2:2131:OHX:N4	2.67	0.42
70:O4:109:THR:O	70:O4:113:LYS:HG3	2.19	0.42
36:5:3177:G:H1	36:5:3211:C:H42	1.68	0.42
52:M6:190:VAL:HA	52:M6:193:GLN:HG3	2.02	0.42
41:L4:156:LEU:C	41:L4:158:SER:H	2.22	0.42
36:5:934:G:C6	36:5:935:U:C4	3.08	0.42
72:O6:50:LEU:H	72:O6:50:LEU:HG	1.42	0.42
40:L3:105:VAL:HA	40:L3:133:TYR:OH	2.20	0.42
58:N2:43:VAL:N	58:N2:46:ALA:O	2.39	0.42
49:M3:103:ASN:ND2	49:M3:109:PHE:HB2	2.84	0.42
39:L2:204:MET:HB3	39:L2:208:ASP:HB2	2.07	0.42
1:2:780:A:C8	26:D4:8:ARG:HB3	2.55	0.42
1:2:583:C:C6	1:2:584:C:H5	2.38	0.42
74:O8:26:LYS:HE2	36:5:1751:G:H5'	126.83	0.42
1:6:1080:U:O2'	1:6:1081:A:H5'	2.19	0.42
1:6:1081:A:N3	1:6:1082:C:C5	2.84	0.42
38:8:139:U:H2'	38:8:140:G:H8	1.85	0.42
51:M5:156:HIS:N	51:M5:156:HIS:ND1	3.79	0.42
71:O5:86:ARG:NH1	71:O5:90:ARG:HH12	2.18	0.42
1:2:1083:G:C2'	1:2:1084:A:H5'	2.50	0.42
45:L8:134:TYR:HD2	45:L8:134:TYR:N	2.18	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:592:A:H2'	1:2:593:U:O4'	2.20	0.42
1:2:386:G:P	10:S8:25:ARG:NH2	2.93	0.42
35:SM:39:PRO:HD2	48:M1:52:TYR:CE2	2.55	0.42
36:5:1737:U:H2'	36:5:1738:C:H6	1.84	0.42
70:O4:37:LYS:HB3	70:O4:37:LYS:HE3	3.10	0.42
37:7:26:C:N4	37:7:27:A:C5	2.88	0.42
36:1:2307:G:C6	36:1:2310:U:C4	3.08	0.42
64:N8:82:ILE:HA	64:N8:83:PRO:HD2	1.86	0.42
36:5:3385:U:H2'	36:5:3386:G:H8	1.85	0.42
15:C3:138:ASN:N	15:C3:138:ASN:OD1	3.16	0.42
36:5:1407:A:H5''	36:5:1408:G:OP2	2.20	0.42
1:6:32:U:H2'	1:6:33:U:O4'	2.20	0.42
46:L9:38:LEU:HA	46:L9:38:LEU:HD23	1.46	0.42
69:O3:70:LYS:O	69:O3:72:THR:HG22	2.76	0.42
45:L8:26:LEU:HD23	63:N7:123:GLN:HA	2.01	0.42
1:2:800:U:O4	87:2:2054:OHX:N5	2.53	0.42
1:2:456:A:H2'	1:2:457:G:H8	1.84	0.42
36:1:1618:G:N2	36:1:1827:C:C2	2.88	0.42
36:1:1753:G:C2	36:1:1754:G:N9	2.87	0.42
10:S8:67:TRP:O	10:S8:67:TRP:CD1	2.73	0.42
42:L5:113:LEU:HD12	42:L5:113:LEU:HA	1.73	0.42
1:2:610:G:H21	25:D3:19:ARG:NH1	2.17	0.42
36:5:2536:A:H2'	36:5:2537:U:O4'	2.20	0.42
36:1:2944:U:H2'	36:1:2947:G:O6	2.20	0.42
1:2:139:C:N3	1:2:266:A:C2	2.88	0.42
1:6:1157:A:C2	1:6:1622:G:C2	3.07	0.42
36:5:1814:A:C2	36:5:1816:A:C5	3.07	0.42
44:L7:181:ILE:HG22	44:L7:182:ASP:OD1	2.18	0.42
9:S7:111:LYS:CG	9:S7:112:ARG:H	2.32	0.42
1:2:1318:G:O2'	1:2:1319:A:H5'	2.20	0.42
1:6:139:C:N3	1:6:176:C:C5	2.87	0.42
66:O0:18:ILE:HG13	66:O0:23:TYR:CZ	3.16	0.42
34:SR:183:LEU:HD23	34:SR:183:LEU:HA	1.84	0.42
1:6:5:U:C2	1:6:6:G:C8	3.08	0.42
74:O8:27:ILE:CD1	74:O8:41:THR:HG22	3.17	0.42
36:1:1266:G:N2	36:1:1275:C:O2	2.53	0.42
45:L8:218:ILE:HG23	45:L8:222:PHE:HD2	2.58	0.42
39:L2:20:THR:HB	36:5:2175:U:C5	178.00	0.42
36:1:1784:G:H2'	36:1:1785:U:O4'	2.20	0.42
1:6:834:G:HO2'	1:6:835:U:P	2.41	0.42
36:1:3316:A:C6	36:1:3389:U:C2	3.07	0.42
36:1:123:A:H5'	36:1:124:U:OP2	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:S0:167:LYS:HB3	2:S0:168:HIS:H	1.46	0.42
2:S0:170:ILE:H	2:S0:170:ILE:HG13	1.66	0.42
36:5:1851:G:H5''	36:5:1852:G:OP2	2.19	0.42
36:1:1236:G:N2	36:1:1244:A:H4'	2.35	0.42
13:C1:71:LEU:O	13:C1:125:VAL:N	2.40	0.42
1:6:1283:U:C6	1:6:1284:C:C5	3.07	0.42
36:1:2567:C:H2'	36:1:2568:C:H5'	2.01	0.42
58:N2:101:ASN:HA	58:N2:103:TYR:CE2	4.06	0.42
74:O8:36:LYS:HA	74:O8:37:PRO:HD3	2.04	0.42
36:1:3102:G:N2	36:1:3103:A:H1'	2.34	0.42
1:2:1276:U:O4	1:2:1431:C:C2	2.73	0.42
1:2:237:C:C5'	1:2:238:U:H5'	2.46	0.42
36:5:966:U:C4	36:5:967:A:N7	2.88	0.42
78:Q2:68:VAL:HB	78:Q2:85:LEU:HD23	2.00	0.42
36:5:1536:G:O6	87:5:3918:OHX:N2	2.53	0.42
36:1:2942:C:C6	36:1:2942:C:C3'	3.03	0.42
36:5:2115:G:N3	36:5:2119:A:C2	2.88	0.42
1:6:755:A:HO2'	1:6:756:A:H8	1.66	0.42
1:6:47:A:C2	1:6:425:A:N1	2.88	0.42
1:6:47:A:H2'	1:6:100:A:O4'	2.20	0.42
36:5:2347:U:C5	36:5:2348:A:C5	3.08	0.42
44:L7:147:LEU:HA	44:L7:147:LEU:HD23	1.64	0.42
1:2:226:A:C6	1:2:227:U:N3	2.88	0.42
36:1:829:U:C4	36:1:895:A:N6	2.87	0.42
36:5:876:A:H2'	36:5:877:C:O5'	2.20	0.42
36:5:74:G:C4	36:5:75:G:C8	3.08	0.42
1:6:430:G:C6	1:6:431:C:C4	3.07	0.42
5:S3:34:TYR:HE2	5:S3:37:VAL:HG13	2.47	0.42
1:6:1750:A:C6	1:6:1751:C:C4	3.08	0.42
51:M5:51:LEU:H	51:M5:51:LEU:HG	1.75	0.42
9:S7:76:LYS:HB3	9:S7:76:LYS:HE2	1.96	0.42
36:1:2655:U:C2	36:1:2656:A:N1	2.88	0.42
1:2:1642:G:O2'	1:2:1781:A:O2'	2.36	0.42
36:1:1895:A:C2	36:1:2335:G:C6	3.07	0.42
27:D5:44:GLN:C	27:D5:46:LYS:H	2.24	0.42
20:C8:116:LEU:HD23	20:C8:123:ARG:HB3	2.00	0.42
46:L9:79:ILE:O	46:L9:83:THR:HG23	2.21	0.42
26:D4:112:LYS:HB3	26:D4:112:LYS:HE2	1.32	0.42
1:2:938:G:C6	1:2:942:G:C6	3.07	0.42
28:D6:96:ALA:HA	28:D6:97:PRO:HD3	1.70	0.42
1:2:768:C:N1	11:S9:143:ILE:HD13	2.34	0.42
1:6:512:A:H2'	1:6:513:U:H6	1.83	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:E0:30:PRO:HB2	32:E0:34:ALA:HB1	2.65	0.42
36:5:2835:U:H2'	36:5:2836:C:H5'	2.02	0.42
36:1:598:A:C2	36:1:599:C:C2	3.08	0.42
45:L8:165:PHE:H	45:L8:165:PHE:HD1	1.89	0.42
45:L8:68:ARG:NH2	45:L8:239:GLY:HA3	3.33	0.42
1:6:299:A:C2	1:6:300:A:N9	2.88	0.42
1:6:300:A:H2'	1:6:301:A:O4'	2.20	0.42
41:L4:279:HIS:HB3	41:L4:281:ILE:O	2.19	0.42
49:M3:29:ALA:C	49:M3:31:LYS:N	2.73	0.42
54:M8:34:THR:HA	54:M8:49:LEU:CD1	2.50	0.42
41:L4:76:ARG:HA	41:L4:87:GLN:O	2.62	0.42
18:C6:131:GLY:HA2	18:C6:138:PHE:HD1	1.85	0.42
18:C6:40:GLU:C	18:C6:42:GLU:N	3.63	0.42
67:O1:48:ASP:HB3	67:O1:90:PHE:HB3	2.02	0.42
75:O9:9:ILE:O	75:O9:13:MET:N	2.64	0.42
36:1:1106:G:C6	36:1:1107:C:C4	3.07	0.42
42:L5:211:LEU:C	42:L5:213:ASP:N	2.90	0.42
42:L5:244:HIS:O	42:L5:245:GLU:C	2.79	0.42
1:2:1429:G:C6	1:2:1430:U:N3	2.88	0.42
12:C0:19:GLY:O	12:C0:68:LEU:HB3	2.20	0.42
12:C0:2:LEU:HD13	12:C0:3:MET:N	5.34	0.42
5:S3:20:GLU:HB2	12:C0:61:TRP:CZ3	3.53	0.42
12:C0:76:LEU:HD22	12:C0:76:LEU:O	5.03	0.42
21:C9:113:ILE:O	21:C9:125:SER:HB3	3.41	0.42
1:2:954:G:N1	1:2:955:A:C4	2.88	0.42
15:C3:45:LEU:HD13	15:C3:49:GLN:OE1	2.19	0.42
8:S6:44:GLU:HB2	8:S6:121:LEU:HD11	5.63	0.42
67:O1:20:LEU:HD11	67:O1:67:VAL:HG11	3.96	0.42
16:C4:29:HIS:O	16:C4:29:HIS:ND1	2.52	0.42
16:C4:103:ARG:HH12	28:D6:48:ALA:CB	4.59	0.42
2:S0:22:THR:HG21	2:S0:173:ILE:HD11	2.02	0.42
68:O2:105:ARG:NH1	68:O2:105:ARG:HG3	2.35	0.42
1:6:956:C:H1'	1:6:1047:G:O2'	2.20	0.42
55:M9:6:THR:C	55:M9:8:LYS:N	3.49	0.42
36:1:3039:C:OP1	40:L3:62:ARG:NH1	2.45	0.42
1:2:1179:G:H2'	1:2:1180:C:O4'	2.19	0.42
1:2:1452:U:N3	1:2:1453:G:N7	2.68	0.42
6:S4:180:LEU:HA	6:S4:180:LEU:HD23	2.07	0.42
6:S4:182:TYR:N	6:S4:226:PHE:O	2.43	0.42
50:M4:80:THR:O	50:M4:83:LYS:HB3	2.88	0.42
43:L6:174:LEU:HD22	50:M4:117:ARG:NH2	2.34	0.42
69:O3:15:SER:O	69:O3:29:LEU:HD12	2.20	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:67:A:C2	1:2:69:G:H1'	2.55	0.42
52:M6:14:HIS:CD2	52:M6:124:LEU:HD13	2.55	0.42
1:2:926:A:H2'	1:2:927:C:O4'	2.20	0.42
49:M3:167:PHE:O	49:M3:171:ARG:N	2.51	0.42
41:L4:335:ALA:HB1	36:5:579:G:OP2	280.27	0.42
78:Q2:40:LYS:HE3	78:Q2:44:ASP:OD2	3.47	0.42
36:1:864:G:OP2	87:1:3883:OHX:N1	2.52	0.42
36:5:3179:U:H3	36:5:3210:A:H61	1.68	0.42
51:M5:179:LYS:HD3	36:5:287:G:OP1	125.36	0.42
25:D3:9:LEU:O	25:D3:9:LEU:HD22	4.18	0.42
52:M6:149:TYR:N	52:M6:149:TYR:CD2	2.97	0.42
36:1:1927:G:OP1	79:Q3:7:LYS:HG3	2.20	0.42
36:1:56:G:H1'	51:M5:162:ARG:CG	2.50	0.42
71:O5:86:ARG:NH1	38:8:36:G:C6	86.77	0.42
1:2:587:C:H6	1:2:587:C:O5'	2.02	0.42
36:5:172:G:H2'	36:5:173:G:H5''	2.01	0.42
46:L9:172:ILE:H	46:L9:172:ILE:HD13	1.84	0.42
37:7:27:A:C2	37:7:28:C:C2	3.08	0.42
36:5:781:G:C2	36:5:782:U:C6	3.08	0.42
64:N8:80:THR:C	64:N8:82:ILE:N	2.73	0.42
36:5:1539:A:H2'	36:5:1540:U:O4'	2.20	0.42
4:S2:40:LYS:HA	4:S2:43:ARG:NH1	2.34	0.42
1:2:327:U:O2'	13:C1:14:GLN:NE2	2.49	0.42
41:L4:234:ASN:HD21	41:L4:236:LEU:CD1	2.43	0.42
40:L3:329:PRO:HA	36:5:3047:U:H5'	234.23	0.42
2:S0:126:PRO:HG2	2:S0:151:SER:HB3	2.51	0.42
22:D0:99:ILE:H	22:D0:99:ILE:HD13	5.03	0.42
25:D3:135:LEU:HD21	25:D3:142:LYS:HB2	2.02	0.42
36:5:1614:C:O2'	36:5:1615:C:H5'	2.19	0.42
36:1:2949:U:C2'	36:1:2950:G:H5'	2.50	0.42
36:1:2738:A:H5'	65:N9:36:ASP:OD1	2.20	0.42
10:S8:113:PHE:C	10:S8:115:ALA:N	2.73	0.42
10:S8:72:ILE:HG21	10:S8:112:TRP:CZ2	2.54	0.42
87:5:3968:OHX:N1	87:5:4237:OHX:N2	2.67	0.42
1:2:1146:G:N2	1:2:1633:A:C5	2.88	0.42
36:5:422:A:N3	36:5:2363:A:H4'	2.34	0.42
36:1:1342:C:C2	36:1:1343:A:C8	3.08	0.42
55:M9:89:LEU:HA	55:M9:89:LEU:HD12	2.97	0.42
45:L8:97:TYR:HH	45:L8:204:ARG:H	1.58	0.42
36:1:1463:U:OP2	87:1:4198:OHX:N5	2.53	0.42
58:N2:105:LEU:HD12	58:N2:105:LEU:HA	2.72	0.42
58:N2:22:PRO:HB3	58:N2:93:ILE:HG12	4.06	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1026:A:C2	1:6:1792:G:C5	3.08	0.42
22:D0:37:VAL:O	22:D0:41:ILE:N	2.52	0.42
38:4:153:U:O2'	38:4:154:C:H5'	2.20	0.42
14:C2:31:VAL:O	14:C2:34:THR:OG1	2.31	0.42
41:L4:216:VAL:C	41:L4:218:ALA:H	2.23	0.42
4:S2:167:VAL:HG21	4:S2:214:ALA:CA	3.91	0.42
5:S3:127:MET:CE	5:S3:133:GLY:HA2	2.50	0.42
8:S6:207:GLU:O	8:S6:208:TYR:C	3.24	0.42
1:2:399:A:C4	1:2:401:A:C8	3.08	0.42
36:5:594:U:H4'	36:5:594:U:OP1	2.19	0.42
13:C1:86:ILE:HD11	13:C1:125:VAL:HG11	2.77	0.42
1:6:772:G:C4	1:6:773:C:C5	3.08	0.42
38:8:79:A:H3'	38:8:80:A:C8	2.54	0.42
36:1:3059:G:H2'	36:1:3060:C:C6	2.55	0.42
36:5:3294:A:H8	36:5:3294:A:H5''	1.84	0.42
61:N5:137:ASN:HA	61:N5:141:TYR:N	2.32	0.42
45:L8:117:ALA:HB3	45:L8:118:GLU:OE2	2.20	0.42
54:M8:76:ALA:C	54:M8:78:ASN:H	2.23	0.42
36:1:92:G:O2'	78:Q2:55:LYS:HD2	2.20	0.42
36:5:1352:A:H2'	36:5:1352:A:N3	2.35	0.42
6:S4:34:GLY:HA3	6:S4:35:PRO:HD3	1.60	0.42
40:L3:17:LEU:HD12	40:L3:17:LEU:HA	2.63	0.42
3:S1:136:ARG:HB3	3:S1:216:LYS:HB2	4.44	0.42
11:S9:40:LYS:HA	11:S9:43:TYR:CG	2.55	0.42
79:Q3:53:GLY:HA2	79:Q3:67:GLY:O	2.56	0.42
36:5:1502:C:N3	36:5:1515:A:C2	2.88	0.42
1:6:1694:A:N6	1:6:1695:G:N1	2.67	0.42
55:M9:151:ARG:O	55:M9:151:ARG:HG2	2.20	0.42
36:1:777:U:O2'	36:1:778:U:H5'	2.19	0.42
1:2:1628:U:H2'	1:2:1629:G:C8	2.54	0.42
44:L7:205:PHE:CD2	44:L7:205:PHE:N	2.87	0.42
36:1:1021:G:C6	36:1:1022:U:O4	2.73	0.42
33:E1:87:THR:C	33:E1:89:LYS:H	2.23	0.42
36:1:2404:A:C2	36:1:2405:C:H5'	2.55	0.42
36:5:2942:C:O2	87:5:4049:OHX:N6	2.53	0.42
47:M0:115:MET:HB3	36:5:2865:U:OP1	238.06	0.42
36:5:1560:G:O2'	36:5:1561:G:OP1	2.33	0.42
1:2:855:A:C2	1:2:857:U:H1'	2.55	0.42
1:6:994:G:H2'	1:6:995:A:O4'	2.20	0.42
36:5:826:G:H2'	36:5:827:A:O4'	2.20	0.42
62:N6:17:LYS:HE3	38:8:23:U:O3'	82.48	0.42
1:6:1365:C:C4	1:6:1366:U:C4	3.07	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1658:G:H5'	1:6:1658:G:C8	2.53	0.42
37:7:38:U:H5''	37:7:38:U:H6	1.84	0.42
39:L2:175:VAL:H	39:L2:175:VAL:HG22	1.60	0.42
54:M8:56:LYS:HG2	54:M8:56:LYS:O	3.95	0.42
49:M3:27:ASP:N	49:M3:27:ASP:OD2	2.80	0.42
25:D3:43:PHE:C	25:D3:45:GLY:H	2.42	0.42
25:D3:48:HIS:HB3	25:D3:103:LEU:HD21	2.01	0.42
26:D4:109:LYS:HD3	1:6:54:C:O3'	353.83	0.42
28:D6:70:LYS:O	28:D6:71:LEU:HD23	4.96	0.42
11:S9:139:GLN:HG3	11:S9:140:ILE:O	2.19	0.42
47:M0:45:GLU:O	47:M0:141:LYS:HE3	2.66	0.42
44:L7:88:ARG:CZ	44:L7:103:LEU:HD13	2.50	0.42
44:L7:148:VAL:O	44:L7:149:TYR:C	2.56	0.42
44:L7:44:ILE:CG1	44:L7:180:SER:HB3	2.46	0.42
45:L8:63:LYS:O	45:L8:64:ILE:C	2.59	0.42
45:L8:73:PRO:HD2	45:L8:74:THR:HG23	2.02	0.42
13:C1:19:ILE:N	13:C1:19:ILE:HD13	2.92	0.42
41:L4:177:ASP:C	41:L4:179:LEU:N	2.73	0.42
41:L4:271:LYS:O	41:L4:274:TYR:N	2.36	0.42
43:L6:40:LEU:HB3	43:L6:84:VAL:HG21	2.01	0.42
43:L6:62:THR:OG1	43:L6:78:ARG:HD3	2.66	0.42
5:S3:161:GLY:H	1:6:1331:A:H61	415.24	0.42
19:C7:4:VAL:HA	1:6:1402:G:OP1	404.76	0.42
19:C7:20:TYR:O	19:C7:24:LEU:HG	2.49	0.42
19:C7:51:ALA:HA	19:C7:54:THR:CG2	2.49	0.42
36:1:359:U:H2'	36:1:360:G:O4'	2.20	0.42
36:1:929:A:C6	36:1:930:U:C4	3.08	0.42
41:L4:65:TRP:CD2	41:L4:76:ARG:HD2	3.38	0.42
36:1:526:C:N4	36:1:566:G:H1	2.17	0.42
1:6:1563:C:C2	1:6:1564:U:C5	3.08	0.42
1:6:1170:G:C6	1:6:1574:G:C6	3.08	0.42
20:C8:26:ILE:HD12	20:C8:31:ALA:HA	3.62	0.42
21:C9:9:VAL:HG12	21:C9:10:ALA:N	2.83	0.42
30:D8:16:LEU:HA	30:D8:16:LEU:HD23	2.42	0.42
30:D8:28:VAL:HG22	30:D8:29:ARG:N	3.78	0.42
7:S5:108:LEU:O	7:S5:109:LYS:C	2.58	0.42
7:S5:179:ALA:HB2	7:S5:194:LEU:HA	2.64	0.42
7:S5:92:ARG:NH2	7:S5:169:ASN:HA	2.35	0.42
42:L5:99:TYR:HD1	42:L5:244:HIS:HE2	3.48	0.42
42:L5:61:ILE:HG22	42:L5:63:GLN:HG3	2.01	0.42
1:2:1203:A:C2	1:2:1556:A:C4	3.08	0.42
21:C9:114:VAL:HG22	21:C9:115:GLU:N	2.35	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:C9:30:VAL:HA	21:C9:31:PRO:HD2	2.34	0.42
21:C9:79:LEU:HD11	1:6:1481:C:N4	397.85	0.42
48:M1:109:HIS:CD2	48:M1:122:ILE:HA	2.55	0.42
48:M1:80:LEU:O	48:M1:81:GLU:C	3.06	0.42
1:6:961:U:H2'	1:6:962:C:C6	2.54	0.42
15:C3:118:ILE:O	15:C3:121:ARG:HB2	3.19	0.42
64:N8:67:HIS:CD2	64:N8:67:HIS:N	2.87	0.42
3:S1:71:ALA:HB2	3:S1:79:HIS:O	2.35	0.42
2:S0:50:VAL:HG22	19:C7:109:LEU:HD21	2.01	0.42
2:S0:184:LEU:HD22	2:S0:184:LEU:HA	1.83	0.42
48:M1:133:ARG:NH1	48:M1:153:LYS:O	2.52	0.42
48:M1:8:PRO:HB2	48:M1:9:MET:H	2.32	0.42
63:N7:97:SER:OG	63:N7:98:THR:N	4.11	0.42
68:O2:74:PHE:CD1	68:O2:85:LEU:HD21	2.55	0.42
1:2:1069:A:O5'	1:2:1069:A:H8	2.02	0.42
36:1:1763:U:H2'	36:1:1764:U:C5	2.54	0.42
38:4:34:U:H3	73:O7:71:SER:CB	2.33	0.42
40:L3:65:SER:OG	36:5:3039:C:OP1	278.98	0.42
1:2:1544:U:H4'	20:C8:132:ARG:CZ	2.50	0.42
56:N0:91:TYR:HD1	56:N0:137:ARG:NH1	2.22	0.42
56:N0:77:VAL:N	56:N0:92:LYS:O	2.36	0.42
44:L7:77:VAL:CG1	56:N0:59:VAL:HA	2.50	0.42
36:5:1256:G:O6	36:5:1261:G:N2	2.53	0.42
69:O3:49:ILE:H	69:O3:49:ILE:HD12	1.85	0.42
69:O3:73:ARG:HH22	36:5:1167:U:P	249.25	0.42
36:1:2661:G:H2'	36:1:2662:G:C8	2.50	0.42
9:S7:46:ILE:HG12	9:S7:60:ILE:HG12	2.02	0.42
9:S7:60:ILE:HD12	9:S7:91:ILE:O	4.17	0.42
18:C6:110:THR:C	18:C6:112:TYR:H	2.80	0.42
18:C6:54:LEU:HD21	18:C6:112:TYR:CD1	4.24	0.42
18:C6:95:LYS:O	34:SR:59:ARG:NH2	2.58	0.42
44:L7:222:HIS:C	44:L7:224:ILE:H	2.70	0.42
73:O7:53:ALA:HB2	73:O7:56:ARG:HH12	1.85	0.42
1:2:985:G:N2	1:2:1016:C:N3	2.59	0.42
1:2:927:C:H1'	16:C4:125:SER:CB	2.50	0.42
39:L2:79:ASN:H	39:L2:82:VAL:CG1	3.67	0.42
40:L3:85:VAL:HG13	40:L3:163:HIS:CE1	2.55	0.42
1:2:1325:A:C2	1:2:1326:A:C4	3.08	0.42
26:D4:110:GLN:HB3	26:D4:114:ARG:NH1	2.63	0.42
36:1:500:C:O2'	36:1:501:A:H5'	2.19	0.42
53:M7:168:LEU:H	53:M7:168:LEU:HG	1.46	0.42
39:L2:207:VAL:HG13	36:5:2415:C:H5'	187.61	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:96:G:P	64:N8:34:MET:HB2	2.60	0.42
1:6:1267:G:H2'	1:6:1268:G:H8	1.84	0.42
36:1:2180:G:H2'	36:1:2181:C:C6	2.54	0.42
36:5:2204:C:H4'	36:5:2205:U:OP1	2.19	0.42
13:C1:105:LYS:HD2	1:6:306:U:P	321.46	0.42
1:2:706:A:C6	1:2:734:A:N6	2.88	0.42
1:2:736:C:OP1	6:S4:197:HIS:NE2	2.52	0.42
48:M1:59:ILE:CB	48:M1:65:ILE:HD11	3.05	0.42
35:SM:40:PRO:O	35:SM:42:ALA:N	2.68	0.42
44:L7:33:ARG:HH12	44:L7:34:LYS:CE	4.49	0.42
36:1:2112:U:H3'	60:N4:44:LYS:HZ1	1.84	0.42
36:5:2718:U:N3	36:5:2739:A:C2	2.88	0.42
64:N8:84:GLU:O	64:N8:87:ARG:HB2	3.62	0.42
41:L4:299:ILE:HG23	54:M8:39:ARG:HB2	2.02	0.42
41:L4:302:ALA:CB	54:M8:39:ARG:HH12	3.09	0.42
10:S8:178:ARG:HB3	10:S8:178:ARG:HH21	1.85	0.42
54:M8:151:ARG:HH11	54:M8:151:ARG:HD2	2.22	0.42
37:7:9:C:H42	37:7:112:G:H1	1.67	0.42
36:5:206:G:C5	36:5:207:U:C5	3.08	0.42
36:1:3120:C:O2'	36:1:3121:U:H2'	2.20	0.42
76:Q0:103:LEU:HA	76:Q0:103:LEU:HD23	1.80	0.42
31:D9:56:ARG:HA	1:6:1419:G:O4'	408.82	0.42
70:O4:10:ARG:HD2	70:O4:10:ARG:HH11	1.58	0.42
36:1:1833:G:H21	75:O9:4:GLN:HE22	1.68	0.42
1:2:422:G:N7	87:2:2108:OHX:N5	2.68	0.42
42:L5:95:TRP:NE1	42:L5:181:PRO:HG2	2.35	0.42
1:2:1147:A:C5	1:2:1148:C:C5	3.07	0.42
36:1:1116:G:O3'	36:1:1117:G:H4'	2.20	0.42
47:M0:26:VAL:HG23	47:M0:125:LEU:HD21	2.02	0.42
45:L8:128:LYS:HE3	45:L8:130:TYR:CE1	4.39	0.42
36:5:2749:G:C5	36:5:2750:U:C5	3.08	0.42
8:S6:122:GLU:HB3	8:S6:123:GLY:H	3.61	0.42
36:1:396:A:H5''	36:1:397:A:OP2	2.19	0.42
36:5:1462:A:N6	36:5:1463:U:C4	2.88	0.42
36:5:3305:A:H2'	36:5:3306:U:O4'	2.20	0.42
1:6:647:G:O5'	1:6:647:G:H8	2.03	0.42
55:M9:143:ILE:C	55:M9:145:ALA:N	2.96	0.42
4:S2:180:ALA:HA	1:6:3:U:O4'	392.26	0.42
74:O8:5:ILE:HD11	74:O8:10:GLN:OE1	4.18	0.42
74:O8:56:ILE:HG21	74:O8:61:LYS:HB2	2.01	0.42
75:O9:25:GLN:O	75:O9:28:ARG:HB2	2.20	0.42
78:Q2:65:THR:O	78:Q2:87:ARG:NH1	2.53	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:200:ARG:NH2	39:L2:200:ARG:HG3	4.62	0.42
41:L4:304:GLN:HG2	41:L4:306:THR:HG23	2.02	0.42
47:M0:129:VAL:HG13	47:M0:133:GLN:CG	2.70	0.42
36:1:593:C:N4	36:1:594:U:O4	2.53	0.42
36:1:3062:G:C4	36:1:3063:C:C5	3.07	0.42
48:M1:124:GLY:O	48:M1:125:MET:HG3	2.20	0.42
48:M1:21:ILE:HG21	48:M1:21:ILE:HD13	1.93	0.42
6:S4:131:LEU:HD23	6:S4:131:LEU:HA	2.84	0.42
36:5:375:A:H3'	36:5:376:G:H5''	2.01	0.42
36:5:2771:U:H2'	36:5:2772:C:C6	2.55	0.42
36:5:3220:G:C6	36:5:3221:C:C5	3.07	0.42
42:L5:279:LYS:HE3	42:L5:282:ARG:HH12	1.85	0.42
36:1:2567:C:H6	36:1:2567:C:OP2	2.03	0.42
1:6:1690:G:H1	1:6:1711:C:N4	2.14	0.42
36:1:1412:G:H2'	36:1:1413:G:C8	2.52	0.42
11:S9:111:THR:O	11:S9:115:LYS:HB2	3.35	0.42
36:5:1089:G:C6	36:5:1090:G:C5	3.08	0.42
36:5:1268:G:H8	36:5:1268:G:O5'	2.01	0.42
37:7:15:C:N3	37:7:65:G:O6	2.53	0.42
41:L4:309:ARG:CZ	41:L4:312:VAL:HG11	2.50	0.42
36:1:3245:A:H5'	36:1:3246:G:H5''	2.02	0.42
38:8:5:U:H2'	38:8:6:U:H6	1.85	0.42
36:1:948:C:H2'	36:1:949:C:C6	2.55	0.42
45:L8:96:LYS:O	45:L8:98:ARG:N	2.49	0.42
36:5:2608:G:C2	36:5:2609:A:N7	2.88	0.42
36:5:1546:A:N7	36:5:1547:G:C5	2.88	0.42
1:6:756:A:H5''	1:6:756:A:H8	1.84	0.42
1:2:616:G:N2	1:2:622:A:C8	2.88	0.42
69:O3:16:TYR:CG	69:O3:94:PHE:HZ	2.38	0.42
1:2:1250:U:HO2'	1:2:1251:U:P	2.43	0.42
51:M5:197:LEU:HD21	51:M5:199:LEU:HD11	2.02	0.42
36:5:1481:A:N7	36:5:1859:A:C5	2.88	0.42
53:M7:182:ILE:HG22	53:M7:183:ALA:N	2.35	0.42
36:1:1845:G:C6	36:1:1849:C:C6	3.08	0.42
1:2:347:G:C2	1:2:348:U:C5	3.07	0.42
74:O8:69:LEU:HD22	74:O8:69:LEU:H	1.85	0.42
33:E1:86:THR:O	33:E1:87:THR:OG1	2.69	0.42
36:1:2964:G:N7	87:1:4063:OHX:N1	2.67	0.42
65:N9:32:LEU:N	65:N9:32:LEU:HD23	2.35	0.42
1:2:743:U:C4	1:2:744:U:C4	3.08	0.42
54:M8:127:LEU:O	54:M8:131:ALA:N	2.59	0.42
1:6:473:A:N6	1:6:474:A:N1	2.68	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3235:C:C5	36:1:3236:U:C5	3.08	0.42
40:L3:193:ASP:O	40:L3:197:GLU:HG3	2.20	0.42
36:1:1515:A:C5	36:1:1516:C:C5	3.08	0.42
1:6:179:A:H2'	1:6:180:A:O4'	2.20	0.42
2:S0:83:GLN:O	2:S0:87:LEU:N	3.02	0.42
39:L2:69:TYR:HE2	36:5:1650:G:H1'	181.65	0.42
36:1:2660:G:H4'	36:1:2750:U:O2	2.19	0.42
36:1:1766:G:H2'	36:1:1766:G:N3	2.35	0.42
78:Q2:104:LEU:HD12	78:Q2:104:LEU:HA	2.19	0.42
53:M7:135:ARG:CZ	53:M7:135:ARG:HB2	2.49	0.42
1:6:1158:C:OP1	87:6:2147:OHX:N4	2.53	0.42
1:6:669:G:O2'	1:6:670:U:OP2	2.32	0.42
1:6:293:U:C4	1:6:294:C:C5	3.07	0.42
1:2:41:A:C8	1:2:438:A:N6	2.88	0.42
36:1:65:A:H4'	36:1:66:A:O5'	2.20	0.42
1:2:1642:G:HO2'	1:2:1781:A:HO2'	1.65	0.41
36:5:3089:C:N4	36:5:3090:U:N3	2.68	0.41
64:N8:21:ARG:HH11	64:N8:21:ARG:HD2	1.66	0.41
36:1:3187:A:H5'	46:L9:22:SER:HA	2.02	0.41
46:L9:23:ARG:HH21	46:L9:42:ASP:H	1.68	0.41
50:M4:4:ASP:O	50:M4:6:ILE:HG12	3.82	0.41
53:M7:24:VAL:HG11	53:M7:90:PHE:CD1	4.00	0.41
28:D6:36:ILE:HD11	28:D6:84:VAL:HG11	7.25	0.41
1:2:513:U:H1'	11:S9:131:GLN:NE2	2.34	0.41
11:S9:20:GLU:HG3	11:S9:23:ARG:HH21	5.02	0.41
36:1:1010:G:C5	36:1:1011:A:N7	2.88	0.41
36:5:1011:A:C2	36:5:1040:A:N1	2.88	0.41
47:M0:76:MET:CE	47:M0:138:VAL:HG11	2.51	0.41
47:M0:58:GLU:H	47:M0:58:GLU:HG3	2.59	0.41
87:1:3993:OHX:N6	87:3:222:OHX:N3	2.68	0.41
10:S8:167:ALA:HB2	10:S8:183:ILE:HA	2.02	0.41
36:1:369:A:C2	36:1:404:G:C6	3.08	0.41
54:M8:46:LYS:O	54:M8:50:LYS:HG3	2.93	0.41
19:C7:24:LEU:HA	19:C7:31:ASN:OD1	2.19	0.41
18:C6:35:PRO:O	18:C6:38:LEU:HB2	2.20	0.41
21:C9:10:ALA:HB3	21:C9:13:ASP:OD2	2.19	0.41
7:S5:127:GLN:HB3	7:S5:128:ASN:H	3.35	0.41
7:S5:58:LEU:HD21	7:S5:167:ARG:HB2	3.49	0.41
61:N5:103:TYR:O	61:N5:104:GLU:HB2	2.20	0.41
61:N5:105:VAL:HG12	61:N5:106:ASP:N	2.35	0.41
61:N5:86:VAL:HG11	61:N5:95:ILE:HG23	2.66	0.41
1:2:1427:A:O2'	1:2:1428:G:OP1	2.28	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1198:G:H2'	1:6:1200:G:N7	2.35	0.41
12:C0:15:LEU:HD12	12:C0:15:LEU:HA	1.65	0.41
21:C9:65:ILE:HG12	21:C9:71:VAL:HG22	3.19	0.41
5:S3:101:GLN:HB3	5:S3:122:VAL:CG1	2.77	0.41
15:C3:125:LEU:HA	15:C3:125:LEU:HD23	1.84	0.41
15:C3:46:THR:HG21	15:C3:90:TYR:OH	2.20	0.41
1:2:626:U:O2'	1:2:627:C:H5'	2.19	0.41
77:Q1:8:LYS:HD3	77:Q1:12:ARG:HH21	1.85	0.41
47:M0:15:LYS:HE2	47:M0:15:LYS:HB2	4.81	0.41
36:1:655:C:OP1	68:O2:27:ARG:HG2	2.20	0.41
4:S2:164:SER:OG	1:6:14:C:H5'	371.57	0.41
23:D1:19:ALA:HA	23:D1:71:ARG:HH12	1.86	0.41
2:S0:56:LYS:NZ	23:D1:70:ASN:OD1	3.87	0.41
54:M8:64:VAL:HG22	54:M8:96:PHE:CE2	2.55	0.41
43:L6:4:GLN:HG3	68:O2:74:PHE:CE2	2.54	0.41
36:1:1762:C:C2	36:1:1763:U:H1'	2.55	0.41
38:4:87:G:OP2	71:O5:7:TYR:OH	2.36	0.41
1:2:1207:C:H42	1:2:1456:C:H41	1.68	0.41
20:C8:131:LEU:HA	20:C8:131:LEU:HD23	1.81	0.41
35:SM:64:LYS:C	35:SM:66:ALA:N	2.89	0.41
6:S4:85:GLY:HA2	6:S4:109:PHE:CE2	2.55	0.41
56:N0:139:TYR:CD2	56:N0:140:VAL:N	3.60	0.41
60:N4:52:THR:O	60:N4:56:ARG:HG3	2.46	0.41
60:N4:52:THR:O	60:N4:55:PHE:HB3	2.19	0.41
9:S7:157:LYS:O	9:S7:159:VAL:HG13	2.20	0.41
42:L5:258:LYS:O	42:L5:258:LYS:HG2	4.74	0.41
8:S6:153:VAL:O	8:S6:154:ARG:C	2.59	0.41
62:N6:35:LEU:HB3	62:N6:39:LEU:HB2	2.48	0.41
62:N6:56:VAL:HG23	62:N6:106:ILE:CA	2.46	0.41
36:1:346:C:C4	36:1:348:A:C8	3.08	0.41
36:1:350:C:N3	36:1:367:A:H2'	2.35	0.41
73:O7:52:LYS:HD2	73:O7:56:ARG:NH2	2.30	0.41
1:2:1014:G:H2'	1:2:1015:U:O4'	2.20	0.41
41:L4:159:ILE:HG21	41:L4:165:ALA:HB2	2.02	0.41
40:L3:113:GLU:HB3	40:L3:166:ILE:HG22	2.02	0.41
36:5:3289:G:H4'	36:5:3290:G:OP1	2.20	0.41
36:5:3289:G:O2'	36:5:3290:G:OP1	2.22	0.41
40:L3:130:PHE:O	40:L3:133:TYR:N	3.85	0.41
49:M3:108:ILE:O	49:M3:109:PHE:C	2.58	0.41
51:M5:172:ARG:HH11	51:M5:172:ARG:HD3	1.71	0.41
51:M5:39:ALA:HB3	51:M5:61:ILE:O	2.25	0.41
71:O5:96:GLU:HG3	71:O5:96:GLU:H	1.78	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:6:ARG:NH1	39:L2:199:THR:H	2.14	0.41
1:6:520:A:C2	1:6:521:A:C4	3.08	0.41
1:2:772:G:N2	1:2:774:A:H1'	2.35	0.41
38:8:97:A:C2	38:8:98:U:C2	3.08	0.41
46:L9:156:GLN:O	46:L9:156:GLN:HG3	2.69	0.41
36:5:2949:U:O2'	36:5:2950:G:H5'	2.20	0.41
1:6:913:G:H3'	1:6:914:G:C5'	2.50	0.41
36:1:214:G:N2	36:1:215:G:C4	2.88	0.41
36:1:89:A:N6	36:1:98:G:C2	2.87	0.41
45:L8:159:PRO:C	45:L8:161:GLU:N	2.72	0.41
42:L5:155:THR:HA	42:L5:179:ARG:HD3	2.26	0.41
48:M1:97:SER:O	48:M1:156:LYS:HB2	3.39	0.41
48:M1:54:VAL:HG21	48:M1:57:PHE:CD2	4.80	0.41
48:M1:48:SER:O	48:M1:65:ILE:N	2.53	0.41
36:5:2972:G:N1	36:5:2973:G:C5	2.87	0.41
20:C8:75:ASN:N	20:C8:76:PRO:HD3	2.35	0.41
1:6:1186:U:C5	1:6:1208:A:C6	3.08	0.41
1:6:1453:G:C4	1:6:1454:G:C8	3.07	0.41
36:1:2288:G:H5''	36:1:2289:U:OP2	2.20	0.41
36:1:2112:U:H3'	60:N4:44:LYS:NZ	2.35	0.41
4:S2:144:TRP:CZ2	4:S2:173:PRO:HG3	2.55	0.41
54:M8:120:GLU:CD	54:M8:122:ILE:HD11	2.39	0.41
37:3:45:A:H2'	37:3:46:A:O4'	2.19	0.41
1:2:456:A:H2'	1:2:457:G:O4'	2.20	0.41
36:1:1615:C:H2'	36:1:1616:U:H6	1.84	0.41
36:1:1617:G:O2'	36:1:1618:G:H5'	2.19	0.41
38:4:124:G:H8	38:4:124:G:O5'	2.02	0.41
42:L5:20:PHE:N	42:L5:20:PHE:HD2	2.57	0.41
25:D3:26:GLU:HG3	1:6:609:U:N3	341.77	0.41
34:SR:40:LYS:HD2	34:SR:65:SER:C	4.13	0.41
36:5:1036:A:N1	36:5:1037:C:C2	2.88	0.41
53:M7:67:ILE:HD12	53:M7:82:ARG:NH2	3.79	0.41
53:M7:60:PHE:CE2	53:M7:82:ARG:HB2	2.55	0.41
36:5:2102:U:H2'	36:5:2103:U:C6	2.55	0.41
45:L8:95:ASN:C	45:L8:97:TYR:H	3.68	0.41
65:N9:43:HIS:O	65:N9:47:LEU:HG	2.96	0.41
36:1:543:C:H6	36:1:543:C:OP2	2.03	0.41
36:1:1814:A:C2	36:1:1816:A:C5	3.08	0.41
1:2:523:G:O6	87:2:2053:OHX:N3	2.53	0.41
58:N2:35:LYS:HG3	58:N2:36:TYR:N	2.35	0.41
36:5:2707:C:O2'	36:5:2708:C:H5'	2.20	0.41
40:L3:156:SER:C	40:L3:157:VAL:HG12	2.40	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
69:O3:88:ASN:HB2	36:5:429:U:C4'	214.92	0.41
6:S4:158:ASP:HB3	6:S4:173:ILE:O	2.75	0.41
36:1:2563:G:O2'	45:L8:29:SER:HB2	2.20	0.41
4:S2:157:LYS:NZ	24:D2:92:ASN:O	2.41	0.41
4:S2:168:ARG:HG3	1:6:1097:U:O2'	385.36	0.41
1:6:217:A:C8	1:6:218:A:H8	2.37	0.41
1:6:830:U:C4	1:6:831:U:C4	3.08	0.41
9:S7:174:ASN:C	9:S7:176:LEU:H	2.22	0.41
54:M8:159:LYS:HA	54:M8:159:LYS:HD3	4.55	0.41
36:5:1289:G:H2'	36:5:1290:A:C8	2.55	0.41
52:M6:65:ASN:C	52:M6:67:THR:H	2.95	0.41
36:1:1533:U:C2'	36:1:1534:A:H5'	2.50	0.41
36:1:1197:A:H5''	36:1:1198:C:OP2	2.20	0.41
42:L5:285:ARG:O	42:L5:288:ALA:HB3	2.29	0.41
61:N5:34:LEU:HB2	36:5:1558:A:H1'	140.08	0.41
36:1:1498:A:C6	36:1:1519:G:N1	2.88	0.41
6:S4:23:LEU:HD22	6:S4:23:LEU:N	2.35	0.41
45:L8:139:VAL:HG12	45:L8:143:ILE:HD12	2.02	0.41
20:C8:72:ILE:HG12	20:C8:79:TYR:CE2	4.72	0.41
36:1:908:G:C5	36:1:925:A:C4	3.07	0.41
39:L2:54:ARG:NH1	39:L2:54:ARG:HG3	2.76	0.41
1:2:1150:G:C8	1:2:1768:G:C2	3.08	0.41
46:L9:58:HIS:O	46:L9:59:ASN:C	2.57	0.41
36:5:2390:A:C5	36:5:2391:G:C8	3.08	0.41
6:S4:15:PRO:HG2	6:S4:18:TRP:CE2	2.77	0.41
36:1:496:C:H3'	36:1:496:C:C6	2.53	0.41
69:O3:16:TYR:N	69:O3:94:PHE:CE1	2.87	0.41
69:O3:24:ASN:OD1	69:O3:26:ASN:HB2	2.20	0.41
49:M3:134:GLU:HA	49:M3:134:GLU:OE2	2.20	0.41
66:O0:78:GLY:O	66:O0:81:VAL:HG22	2.81	0.41
35:SM:112:ASP:O	35:SM:114:LYS:N	2.53	0.41
47:M0:65:LEU:HD11	47:M0:91:VAL:HG12	2.02	0.41
68:O2:34:LYS:NZ	68:O2:52:GLN:OE1	2.52	0.41
1:6:775:G:C2'	1:6:776:G:H5'	2.50	0.41
1:2:1769:U:OP2	87:2:2145:OHX:N4	2.53	0.41
1:6:1001:A:H2'	1:6:1002:G:O4'	2.20	0.41
36:5:1038:C:C2	36:5:1039:U:C6	3.08	0.41
25:D3:126:LYS:HB3	25:D3:131:SER:HA	2.03	0.41
41:L4:98:ARG:HG2	41:L4:99:MET:N	2.70	0.41
1:2:1546:G:H2'	1:2:1547:A:H8	1.84	0.41
36:1:1847:A:C8	53:M7:130:TYR:CE2	3.07	0.41
1:2:53:G:H2'	1:2:54:C:C6	2.56	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:D4:105:ARG:NH1	26:D4:109:LYS:HE2	2.35	0.41
1:6:768:C:N4	1:6:769:A:N1	2.68	0.41
11:S9:23:ARG:HD2	11:S9:27:GLU:OE2	3.02	0.41
44:L7:153:PHE:HB3	44:L7:161:VAL:O	2.20	0.41
44:L7:210:PRO:HG2	44:L7:214:TRP:CE2	2.54	0.41
45:L8:65:LEU:O	45:L8:69:LEU:HD22	2.19	0.41
51:M5:16:SER:OG	51:M5:16:SER:O	3.10	0.41
51:M5:31:ARG:HG3	51:M5:129:TYR:OH	2.94	0.41
1:6:210:A:C5	1:6:211:U:C4	3.08	0.41
13:C1:113:PRO:O	13:C1:114:ALA:HB2	4.32	0.41
13:C1:17:PRO:O	13:C1:19:ILE:HG12	2.19	0.41
13:C1:44:THR:HB	13:C1:60:PHE:CD1	2.55	0.41
10:S8:83:TYR:HB3	10:S8:101:ILE:HG13	2.02	0.41
41:L4:132:ALA:O	41:L4:135:VAL:N	2.90	0.41
1:2:1402:G:H2'	1:2:1403:C:O4'	2.21	0.41
19:C7:28:PHE:CZ	19:C7:32:LYS:HD3	2.55	0.41
19:C7:57:LEU:O	19:C7:60:ARG:HG3	2.20	0.41
36:5:815:G:N2	36:5:919:U:O2'	2.53	0.41
73:O7:25:ARG:NH2	75:O9:50:ASN:OD1	5.90	0.41
20:C8:23:ASP:OD1	20:C8:24:GLY:N	2.82	0.41
36:1:3327:G:O2'	36:1:3328:G:H5'	2.20	0.41
55:M9:23:TRP:CH2	55:M9:25:ASP:HA	3.35	0.41
67:O1:56:ASN:ND2	36:5:1459:C:O4'	144.02	0.41
75:O9:11:GLN:O	75:O9:12:LYS:C	2.58	0.41
75:O9:15:LYS:O	75:O9:16:ALA:C	2.58	0.41
1:2:407:A:O2'	1:2:1671:A:N3	2.49	0.41
36:1:2747:A:C6	36:1:2748:A:N6	2.88	0.41
1:2:1203:A:C5	1:2:1555:A:C6	3.07	0.41
12:C0:14:TYR:CE1	12:C0:18:GLU:HG3	2.67	0.41
5:S3:98:ALA:O	5:S3:102:ALA:N	2.66	0.41
15:C3:94:LYS:O	15:C3:97:SER:N	2.62	0.41
72:O6:27:SER:HG	72:O6:27:SER:H	1.58	0.41
36:5:1640:G:C5	36:5:1641:U:C4	3.09	0.41
1:6:887:A:C2	1:6:926:A:N1	2.88	0.41
28:D6:64:LEU:HA	28:D6:65:PRO:HD3	1.76	0.41
68:O2:27:ARG:HB3	36:5:655:C:OP1	161.54	0.41
68:O2:42:VAL:HG13	68:O2:50:ILE:HG23	4.22	0.41
1:6:1139:A:N7	1:6:1140:G:C8	2.89	0.41
24:D2:99:PHE:HB2	24:D2:100:GLY:H	1.81	0.41
2:S0:175:TYR:CZ	2:S0:195:TRP:CE3	3.08	0.41
4:S2:207:LEU:O	4:S2:208:GLU:C	2.76	0.41
40:L3:275:ARG:HH11	40:L3:275:ARG:HD2	1.63	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
54:M8:140:LEU:HD23	54:M8:140:LEU:HA	2.15	0.41
54:M8:62:VAL:HG13	54:M8:66:ARG:CD	2.50	0.41
48:M1:91:LEU:C	48:M1:92:ARG:HG3	2.95	0.41
55:M9:99:LEU:HD23	55:M9:99:LEU:O	3.87	0.41
70:O4:94:LEU:O	70:O4:98:GLN:HB2	2.20	0.41
1:6:1049:U:H2'	1:6:1050:G:O4'	2.20	0.41
36:1:1765:U:H3'	55:M9:46:LYS:NZ	2.35	0.41
71:O5:68:GLN:C	71:O5:70:TYR:N	3.31	0.41
6:S4:157:ASN:O	6:S4:175:PHE:HB2	2.20	0.41
6:S4:192:ILE:CD1	6:S4:238:LEU:HD22	4.20	0.41
50:M4:38:ILE:HG21	50:M4:38:ILE:HD13	1.79	0.41
56:N0:141:LYS:C	56:N0:143:PHE:N	2.85	0.41
36:5:3245:A:N1	36:5:3246:G:C2	2.88	0.41
69:O3:85:PHE:HB2	69:O3:87:ASN:O	2.20	0.41
36:1:2708:C:H2'	36:1:2709:C:O4'	2.20	0.41
42:L5:265:TYR:CD1	37:7:120:C:C2	313.08	0.41
8:S6:175:ILE:H	8:S6:175:ILE:HG12	1.53	0.41
34:SR:13:LEU:HD13	34:SR:45:TRP:CE3	2.55	0.41
36:1:2667:A:C2	36:1:2690:G:C4	3.08	0.41
62:N6:36:SER:O	62:N6:37:LYS:C	2.58	0.41
36:1:2223:A:C6	36:1:2224:A:C6	3.08	0.41
40:L3:285:VAL:HG12	40:L3:285:VAL:O	2.20	0.41
40:L3:81:THR:HG23	40:L3:205:VAL:CG2	4.37	0.41
3:S1:81:PHE:HB2	3:S1:82:ARG:H	1.73	0.41
46:L9:27:VAL:CG2	46:L9:78:MET:HE3	2.99	0.41
52:M6:33:ILE:HG22	52:M6:34:VAL:N	2.62	0.41
36:1:1483:G:C8	36:1:1485:G:N7	2.88	0.41
26:D4:131:ARG:HH22	1:6:153:G:P	321.82	0.41
36:1:3276:G:O5'	43:L6:48:ARG:NH2	2.53	0.41
36:1:1689:U:C4	36:1:1690:C:C5	3.08	0.41
58:N2:43:VAL:HG21	58:N2:50:LEU:HA	3.25	0.41
58:N2:54:VAL:HG12	58:N2:67:SER:HA	2.02	0.41
36:5:1161:G:H5'	36:5:1365:G:HO2'	1.85	0.41
49:M3:100:ARG:O	49:M3:101:ARG:HB3	4.64	0.41
51:M5:183:THR:O	51:M5:183:THR:HG23	2.20	0.41
13:C1:102:LYS:HD3	1:6:632:U:OP1	325.18	0.41
25:D3:15:LEU:HA	25:D3:15:LEU:HD23	1.62	0.41
36:1:3337:G:H2'	36:1:3338:C:O4'	2.19	0.41
26:D4:5:VAL:HG13	26:D4:32:ARG:HH22	1.84	0.41
36:1:1927:G:N3	36:1:1927:G:H3'	2.35	0.41
38:4:41:A:C8	38:4:42:G:C8	3.08	0.41
45:L8:134:TYR:CD2	45:L8:190:VAL:HG11	4.48	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:383:G:C5	1:6:384:G:C8	3.09	0.41
48:M1:52:TYR:HA	48:M1:61:ARG:CB	3.37	0.41
36:1:1738:C:H1'	70:O4:52:GLN:HG3	2.03	0.41
60:N4:39:LEU:H	60:N4:39:LEU:HD22	1.84	0.41
64:N8:115:LYS:HE2	36:5:715:A:N7	149.04	0.41
64:N8:81:LEU:HD23	64:N8:81:LEU:HA	1.99	0.41
1:6:825:U:HO2'	1:6:826:U:P	2.42	0.41
49:M3:52:ASP:CG	49:M3:141:ALA:H	2.21	0.41
58:N2:77:LYS:O	58:N2:81:LYS:HG3	2.98	0.41
42:L5:11:ALA:O	42:L5:12:TYR:C	2.68	0.41
62:N6:102:SER:O	36:5:224:C:O2'	73.22	0.41
46:L9:41:ILE:HD13	46:L9:41:ILE:HA	1.47	0.41
1:6:610:G:H2'	1:6:614:C:C5	2.55	0.41
1:6:1733:C:C2	1:6:1734:U:C5	3.09	0.41
1:2:57:G:C5	1:2:58:U:C5	3.08	0.41
75:O9:2:ALA:O	75:O9:3:ALA:HB3	2.20	0.41
1:2:769:A:O2'	1:2:770:A:H5'	2.20	0.41
37:3:3:U:H2'	37:3:4:U:H6	1.85	0.41
36:5:2271:A:N7	36:5:2272:G:C6	2.88	0.41
36:1:2833:A:O3'	87:1:3912:OHX:N6	2.53	0.41
36:1:3203:U:H2'	36:1:3204:C:C6	2.55	0.41
71:O5:95:PHE:O	71:O5:97:ALA:N	2.53	0.41
69:O3:18:ARG:HA	69:O3:23:ASN:HA	2.51	0.41
39:L2:70:ARG:HE	39:L2:72:ARG:HG2	1.84	0.41
36:5:643:U:H5'	36:5:1117:G:H1'	2.02	0.41
37:7:6:C:H2'	37:7:7:G:O4'	2.20	0.41
1:6:1114:G:O2'	1:6:1115:U:OP2	2.36	0.41
36:1:537:A:C6	36:1:557:A:C5	3.08	0.41
3:S1:169:SER:O	3:S1:173:THR:OG1	2.37	0.41
74:O8:8:ILE:HD12	74:O8:8:ILE:H	2.61	0.41
1:2:378:A:C6	1:2:379:U:C2	3.08	0.41
9:S7:62:VAL:HA	9:S7:63:PRO:HD3	2.37	0.41
1:6:1432:U:H4'	1:6:1433:G:H5''	2.02	0.41
36:1:1939:G:N1	36:1:1940:G:C4	2.89	0.41
36:5:995:U:C2	36:5:2637:A:C8	3.08	0.41
36:1:3358:U:H2'	36:1:3359:A:H1'	2.03	0.41
73:O7:11:ARG:O	73:O7:12:HIS:HB3	3.40	0.41
36:5:3294:A:C6	36:5:3295:A:C5	3.08	0.41
1:2:358:U:O4	1:2:360:A:N6	2.53	0.41
1:2:1405:G:H2'	1:2:1406:A:O4'	2.21	0.41
36:1:873:C:O5'	36:1:873:C:H6	2.03	0.41
36:1:533:A:O2'	36:1:535:G:H5'	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2219:A:H61	36:5:2226:U:H3	1.69	0.41
1:6:493:U:H2'	1:6:494:U:H6	1.85	0.41
40:L3:311:PHE:O	40:L3:315:GLY:N	3.27	0.41
36:1:2678:A:N7	36:1:2679:A:C2	2.88	0.41
36:1:2621:G:H2'	36:1:2622:C:H5'	2.03	0.41
39:L2:51:ASP:HB3	39:L2:54:ARG:HD2	2.31	0.41
36:1:2366:C:OP1	40:L3:259:HIS:NE2	2.51	0.41
36:1:661:G:C4	36:1:802:C:H1'	2.56	0.41
38:8:31:G:H2'	38:8:32:C:O4'	2.20	0.41
36:5:3352:U:O2	87:5:4224:OHX:N5	2.53	0.41
36:1:957:C:O2'	36:1:958:C:H5'	2.20	0.41
34:SR:283:LYS:HE3	34:SR:283:LYS:HB2	1.68	0.41
36:1:1524:A:C5	36:1:1607:U:C6	3.08	0.41
38:8:127:U:C5	38:8:128:U:H5	2.38	0.41
36:1:2659:G:H2'	36:1:2660:G:H8	1.86	0.41
1:2:34:G:C4	1:2:475:A:C6	3.09	0.41
36:5:36:C:H4'	36:5:808:A:N1	2.35	0.41
39:L2:180:LEU:HD23	39:L2:180:LEU:HA	1.46	0.41
36:5:350:C:H2'	36:5:350:C:H6	1.56	0.41
36:1:982:C:H2'	36:1:982:C:O2	2.20	0.41
36:5:771:A:O2'	36:5:772:U:H5'	2.20	0.41
36:1:2213:A:C6	36:1:2214:A:C6	3.08	0.41
1:6:565:C:N3	87:6:2164:OHX:N4	2.69	0.41
25:D3:90:ASP:OD1	32:E0:14:VAL:HG12	2.19	0.41
40:L3:283:TYR:CD1	40:L3:354:VAL:HG21	3.19	0.41
36:5:1113:G:H1'	36:5:1369:A:H2	1.86	0.41
36:1:1444:G:N1	36:1:1445:U:O2	2.53	0.41
53:M7:42:THR:O	53:M7:45:GLN:HB2	2.20	0.41
1:6:512:A:HO2'	1:6:513:U:P	2.43	0.41
11:S9:95:TYR:O	11:S9:96:VAL:C	2.59	0.41
47:M0:48:LEU:HB2	47:M0:142:ASP:OD1	2.18	0.41
47:M0:86:HIS:CE1	47:M0:173:PHE:HE2	2.38	0.41
47:M0:88:ARG:HD2	47:M0:88:ARG:HH11	2.25	0.41
41:L4:329:PRO:HB2	41:L4:330:TYR:H	3.76	0.41
44:L7:158:LYS:HZ2	44:L7:159:GLN:N	4.03	0.41
44:L7:154:GLY:HA3	44:L7:201:PHE:CZ	2.55	0.41
44:L7:115:THR:HG22	44:L7:204:PRO:HB3	2.03	0.41
36:1:2513:U:H4'	36:1:2514:U:OP1	2.19	0.41
1:2:248:U:O3'	13:C1:34:TRP:HZ2	2.03	0.41
54:M8:26:LEU:C	54:M8:28:LEU:H	2.97	0.41
36:1:529:A:H2'	36:1:530:G:O4'	2.20	0.41
18:C6:127:LYS:HD3	1:6:1605:G:OP2	390.91	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:C6:53:LEU:H	18:C6:53:LEU:HG	2.78	0.41
18:C6:53:LEU:HD23	18:C6:53:LEU:HA	1.54	0.41
30:D8:53:ILE:HG22	30:D8:54:LEU:O	3.50	0.41
7:S5:169:ASN:O	7:S5:172:ILE:N	3.50	0.41
7:S5:187:ILE:HG13	7:S5:187:ILE:H	2.69	0.41
36:1:3380:U:O2'	36:1:3381:U:H5'	2.20	0.41
36:5:3326:G:N3	36:5:3327:G:C8	2.88	0.41
42:L5:65:ILE:HG22	42:L5:66:SER:N	2.41	0.41
1:6:1202:A:H2'	1:6:1203:A:H5''	2.03	0.41
12:C0:8:ARG:HG2	12:C0:79:TYR:OH	2.94	0.41
12:C0:3:MET:SD	12:C0:8:ARG:HD3	2.61	0.41
36:1:270:U:H2'	36:1:270:U:O2	2.19	0.41
36:5:115:A:N1	36:5:155:G:O6	2.54	0.41
36:1:1639:C:C2'	36:1:1640:G:H5'	2.50	0.41
1:6:902:G:H2'	1:6:903:U:C6	2.55	0.41
1:6:926:A:H2'	1:6:927:C:C6	2.56	0.41
3:S1:61:LEU:HB2	3:S1:62:LYS:H	1.62	0.41
3:S1:66:VAL:HG13	16:C4:33:LEU:O	2.20	0.41
23:D1:13:VAL:HA	23:D1:14:PRO:HD3	1.85	0.41
2:S0:118:PRO:HG2	2:S0:141:ILE:HG21	2.02	0.41
2:S0:175:TYR:CD2	2:S0:199:PRO:HB3	3.78	0.41
9:S7:141:ARG:HD2	24:D2:51:GLU:OE1	2.21	0.41
48:M1:131:MET:O	48:M1:154:THR:HG21	2.20	0.41
63:N7:136:PHE:HD1	63:N7:136:PHE:N	2.18	0.41
63:N7:79:HIS:CE1	36:5:1637:A:H4'	215.82	0.41
66:O0:55:GLU:HA	70:O4:94:LEU:HD11	2.46	0.41
68:O2:83:GLU:O	68:O2:86:THR:HB	3.95	0.41
55:M9:43:LYS:HZ3	36:5:1765:U:H5'	90.93	0.41
55:M9:14:VAL:HG12	87:M9:202:OHX:N4	2.35	0.41
14:C2:47:GLU:HG3	1:6:1229:G:O6	460.66	0.41
1:2:1178:G:C5	1:2:1462:G:C6	3.08	0.41
6:S4:98:ASN:ND2	6:S4:116:ASP:HA	2.35	0.41
40:L3:295:ALA:HB2	40:L3:301:THR:O	2.21	0.41
59:N3:94:TYR:CE1	60:N4:21:PHE:HB2	2.56	0.41
36:5:3225:C:C2	36:5:3226:A:C8	3.08	0.41
42:L5:262:LYS:O	42:L5:263:GLU:C	2.58	0.41
34:SR:81:LEU:HD12	34:SR:115:ILE:HB	2.01	0.41
34:SR:81:LEU:HA	34:SR:90:ARG:O	2.88	0.41
36:5:2189:U:H2'	36:5:2190:U:H5'	2.03	0.41
72:O6:79:SER:CB	72:O6:82:ARG:H	4.64	0.41
46:L9:18:VAL:HG12	46:L9:18:VAL:H	1.62	0.41
36:1:501:A:C4	36:1:502:U:C5	3.07	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1683:C:C2	1:2:1684:U:C6	3.08	0.41
49:M3:90:ALA:HA	49:M3:93:ILE:CD1	4.56	0.41
49:M3:68:LYS:NZ	49:M3:149:GLN:HG2	7.12	0.41
51:M5:183:THR:HA	51:M5:187:ARG:H	3.51	0.41
71:O5:96:GLU:HA	71:O5:99:GLN:HG3	2.01	0.41
1:6:626:U:O2'	1:6:627:C:H5'	2.21	0.41
36:1:3366:G:C6	36:1:3367:C:N4	2.89	0.41
39:L2:4:VAL:HA	39:L2:8:GLN:NE2	2.98	0.41
36:1:95:A:H5''	64:N8:34:MET:HB2	2.01	0.41
39:L2:122:ASP:C	39:L2:122:ASP:OD2	2.58	0.41
24:D2:18:GLU:CD	24:D2:69:LEU:HB3	2.41	0.41
38:4:3:A:C8	38:4:4:C:C5	3.08	0.41
76:Q0:79:GLU:HG3	76:Q0:82:LEU:H	1.85	0.41
70:O4:37:LYS:HG2	70:O4:37:LYS:H	3.53	0.41
36:5:131:C:O2'	36:5:132:C:H5'	2.21	0.41
36:1:856:G:N1	36:1:857:G:N2	2.67	0.41
36:1:2311:G:H3'	36:1:2311:G:C8	2.54	0.41
64:N8:78:LEU:HB3	64:N8:79:TRP:H	1.65	0.41
52:M6:73:PHE:C	52:M6:74:ARG:HG2	3.08	0.41
41:L4:295:ILE:O	41:L4:298:ALA:N	2.62	0.41
17:C5:85:ILE:HG22	17:C5:85:ILE:O	2.59	0.41
1:6:973:A:O2'	1:6:974:A:H5'	2.20	0.41
2:S0:126:PRO:HG2	2:S0:152:PRO:HG2	2.03	0.41
76:Q0:104:PRO:HA	76:Q0:105:PRO:HD3	1.82	0.41
78:Q2:71:ARG:HD3	78:Q2:71:ARG:C	4.91	0.41
53:M7:67:ILE:HD12	53:M7:82:ARG:NH1	3.55	0.41
1:2:421:A:N3	1:2:421:A:H2'	2.34	0.41
50:M4:23:ILE:HG12	50:M4:31:LYS:O	3.20	0.41
44:L7:60:ARG:O	44:L7:63:ILE:N	3.51	0.41
8:S6:1:MET:HG2	8:S6:24:ILE:HD13	2.02	0.41
13:C1:133:LYS:HG2	1:6:338:C:P	293.26	0.41
15:C3:33:VAL:O	15:C3:37:ILE:N	2.37	0.41
10:S8:22:ARG:HG3	10:S8:23:LYS:O	3.97	0.41
1:2:110:U:H2'	1:2:111:U:O5'	2.20	0.41
6:S4:151:ASP:HA	6:S4:152:PRO:HD3	2.02	0.41
32:E0:18:THR:HG21	1:6:584:C:O2'	390.15	0.41
36:1:1209:G:C5	36:1:1210:U:C5	3.08	0.41
24:D2:90:THR:HG21	24:D2:113:HIS:CD2	2.68	0.41
36:1:651:G:H2'	36:1:652:G:O4'	2.21	0.41
36:5:659:G:C5	36:5:1432:C:C4	3.09	0.41
1:6:225:A:H2'	1:6:226:A:H5'	2.02	0.41
1:6:831:U:HO2'	1:6:832:U:C5'	2.32	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:831:U:O2'	1:6:832:U:O5'	2.35	0.41
1:2:503:G:H2'	1:2:503:G:N3	2.36	0.41
36:1:440:A:OP2	36:1:440:A:H8	2.04	0.41
2:S0:200:ASP:OD1	19:C7:88:VAL:HG23	2.20	0.41
1:6:1324:G:H2'	1:6:1325:A:O4'	2.20	0.41
39:L2:230:VAL:O	39:L2:233:GLN:HB2	2.20	0.41
36:1:1578:C:H3'	36:1:1579:C:C6	2.56	0.41
36:1:881:C:H1'	36:1:1850:A:C8	2.55	0.41
45:L8:41:GLN:CG	45:L8:42:PRO:HD2	2.87	0.41
8:S6:52:ILE:HG12	8:S6:109:LEU:HD21	2.02	0.41
36:5:1252:A:C5	36:5:1253:U:C5	3.08	0.41
53:M7:74:LYS:HE2	36:5:3297:U:O3'	184.81	0.41
33:E1:120:GLU:HB3	33:E1:131:PHE:CD1	2.55	0.41
36:1:392:G:C2	36:1:393:U:C2	3.08	0.41
36:1:2571:U:H1'	36:1:2572:C:H5'	2.01	0.41
73:O7:28:HIS:N	73:O7:33:THR:O	2.63	0.41
1:2:1394:G:H2'	1:2:1395:G:O4'	2.20	0.41
36:1:1136:A:C6	36:1:1137:C:N4	2.89	0.41
36:5:1882:G:C5	36:5:1883:A:N7	2.88	0.41
36:5:2259:A:N7	36:5:2260:U:C5	2.88	0.41
3:S1:146:GLN:O	3:S1:149:GLN:HB2	2.20	0.41
36:5:2322:C:H2'	36:5:2323:G:H5'	2.01	0.41
36:5:3372:A:N6	36:5:3373:U:O4	2.54	0.41
36:1:2955:U:O5'	36:1:2955:U:H6	2.03	0.41
36:1:389:A:C6	36:1:390:G:C5	3.09	0.41
45:L8:229:VAL:C	45:L8:231:LYS:H	2.23	0.41
36:1:2933:A:C2	36:1:3014:U:H4'	2.56	0.41
36:5:956:U:H2'	36:5:957:C:H6	1.85	0.41
36:5:2925:C:C5	36:5:2926:A:N7	2.88	0.41
36:1:3033:A:H2'	36:1:3034:C:H6	1.85	0.41
36:5:426:G:H2'	36:5:427:C:C6	2.55	0.41
36:1:3369:G:HO2'	36:1:3370:A:H8	1.68	0.41
44:L7:223:PHE:HE2	56:N0:35:VAL:HG21	3.20	0.41
1:6:896:U:C4	1:6:897:C:N4	2.88	0.41
36:1:338:A:C2	36:1:1380:G:N2	2.88	0.41
9:S7:160:GLN:HA	9:S7:163:ASP:OD2	2.20	0.41
52:M6:19:LEU:O	52:M6:23:VAL:HG23	2.21	0.41
1:2:1521:G:N7	1:2:1523:G:C2	2.88	0.41
36:5:637:C:H2'	36:5:637:C:H6	1.58	0.41
1:2:21:U:H2'	1:2:22:A:C8	2.55	0.41
19:C7:96:SER:HA	19:C7:97:ASN:HA	1.68	0.41
36:5:227:G:N2	36:5:228:U:H1'	2.34	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3257:C:N3	36:1:3258:U:C5	2.88	0.41
20:C8:113:LEU:HA	20:C8:116:LEU:HD22	3.20	0.41
36:1:2988:C:P	52:M6:68:ARG:NH1	2.94	0.41
36:1:3197:G:C2'	36:1:3198:U:H5''	2.51	0.41
46:L9:52:LEU:HD22	46:L9:53:ILE:O	2.95	0.41
51:M5:88:GLY:O	51:M5:89:VAL:HG23	3.71	0.41
36:1:1508:C:O2'	36:1:2353:G:H1'	2.19	0.41
53:M7:29:THR:O	53:M7:30:ARG:C	2.84	0.41
53:M7:41:LEU:H	53:M7:113:TYR:HA	1.85	0.41
26:D4:116:LYS:NZ	1:6:57:G:OP2	338.38	0.41
16:C4:133:ARG:C	28:D6:28:LYS:HG3	4.24	0.41
28:D6:3:LYS:HG2	28:D6:5:ARG:O	2.20	0.41
11:S9:36:LEU:HA	11:S9:36:LEU:HD23	3.18	0.41
44:L7:215:GLY:O	44:L7:216:VAL:HG22	2.20	0.41
45:L8:75:ILE:O	45:L8:77:GLN:N	2.50	0.41
51:M5:31:ARG:HG2	51:M5:31:ARG:O	2.20	0.41
13:C1:82:ARG:NH2	13:C1:113:PRO:HG3	2.34	0.41
41:L4:131:VAL:O	41:L4:132:ALA:C	2.59	0.41
43:L6:100:LYS:HE2	43:L6:137:ASP:OD2	2.18	0.41
50:M4:36:VAL:HG12	50:M4:75:GLY:HA2	2.12	0.41
1:2:1566:U:O2'	20:C8:37:GLY:HA2	2.20	0.41
1:6:1570:A:C6	1:6:1571:C:C2	3.08	0.41
27:D5:64:VAL:O	27:D5:65:LEU:C	3.14	0.41
7:S5:208:SER:HB3	7:S5:211:ILE:CG1	4.44	0.41
7:S5:43:PHE:O	7:S5:69:PHE:HA	2.41	0.41
46:L9:161:LEU:HD21	46:L9:179:ILE:HD12	2.02	0.41
55:M9:28:GLU:O	55:M9:29:THR:C	3.28	0.41
38:4:46:G:N2	38:4:58:G:C5	2.88	0.41
1:2:1552:U:H3'	1:2:1553:G:H8	1.84	0.41
17:C5:37:ALA:O	17:C5:42:ARG:HD3	2.34	0.41
21:C9:77:ASN:OD1	21:C9:98:GLY:HA2	2.60	0.41
22:D0:71:PRO:O	22:D0:72:ASN:ND2	6.21	0.41
5:S3:138:VAL:HG22	5:S3:184:ILE:HD12	2.99	0.41
36:1:70:A:N6	36:1:71:A:N1	2.69	0.41
36:1:155:G:H1'	72:O6:26:ILE:CD1	2.50	0.41
16:C4:84:ARG:NE	16:C4:85:ALA:O	4.10	0.41
16:C4:103:ARG:NE	28:D6:52:ASP:HB2	5.43	0.41
23:D1:82:VAL:HG12	23:D1:83:TRP:N	2.62	0.41
2:S0:50:VAL:O	2:S0:54:TRP:N	2.49	0.41
4:S2:225:LEU:HD22	4:S2:226:THR:N	4.14	0.41
40:L3:16:PHE:CD2	40:L3:275:ARG:CZ	3.03	0.41
54:M8:81:VAL:O	54:M8:81:VAL:HG13	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:M1:92:ARG:HB2	48:M1:95:ASN:OD1	2.20	0.41
63:N7:23:VAL:HA	63:N7:45:GLY:HA3	3.31	0.41
63:N7:2:ALA:O	63:N7:4:PHE:N	2.53	0.41
70:O4:81:CYS:SG	70:O4:84:CYS:HB2	3.22	0.41
70:O4:96:GLU:OE1	36:5:2555:G:N1	212.86	0.41
70:O4:97:GLU:C	70:O4:99:LYS:N	2.74	0.41
1:6:871:G:C2	1:6:957:G:C2	3.08	0.41
73:O7:72:ARG:NH1	38:8:94:C:H2'	49.58	0.41
62:N6:118:LEU:HD12	62:N6:122:LYS:HG3	2.01	0.41
35:SM:76:VAL:HG13	1:6:1460:A:N7	327.63	0.41
31:D9:5:ASN:ND2	31:D9:7:TRP:HE1	2.19	0.41
6:S4:73:ASP:OD2	6:S4:122:LYS:NZ	2.72	0.41
36:5:559:A:N6	36:5:560:G:C4	2.89	0.41
60:N4:49:ILE:O	60:N4:49:ILE:HG22	2.54	0.41
36:1:3216:G:C4	36:1:3259:U:C4	3.08	0.41
43:L6:158:TYR:CG	50:M4:115:PHE:HD2	3.29	0.41
50:M4:113:THR:CB	50:M4:116:GLU:HG3	4.12	0.41
69:O3:73:ARG:HH11	69:O3:82:ARG:NH1	2.18	0.41
34:SR:21:THR:O	34:SR:291:SER:HB3	2.35	0.41
36:5:2275:A:N6	36:5:2311:G:H1'	2.35	0.41
52:M6:39:GLU:O	52:M6:139:GLY:N	2.53	0.41
40:L3:285:VAL:HG13	40:L3:322:ILE:CD1	5.13	0.41
40:L3:49:TYR:O	40:L3:79:VAL:HG23	2.28	0.41
1:2:1007:C:OP1	16:C4:136:ARG:HG3	2.21	0.41
39:L2:149:ARG:NH2	39:L2:252:THR:O	2.98	0.41
79:Q3:35:ALA:HB3	79:Q3:37:TYR:CZ	3.98	0.41
50:M4:108:ARG:NH2	52:M6:197:LEU:HA	2.70	0.41
3:S1:193:ILE:O	3:S1:194:ASN:C	2.85	0.41
78:Q2:43:TYR:CZ	78:Q2:47:GLN:NE2	3.17	0.41
36:5:1237:G:N2	36:5:1238:C:C2	2.88	0.41
8:S6:56:ASN:HA	8:S6:61:PHE:O	2.49	0.41
72:O6:52:PRO:HA	72:O6:55:ARG:NH1	2.49	0.41
40:L3:148:LEU:HD12	40:L3:148:LEU:HA	1.82	0.41
49:M3:127:PRO:HA	71:O5:114:ARG:HH21	3.34	0.41
33:E1:103:LEU:HA	33:E1:105:TYR:CD2	3.67	0.41
26:D4:10:ARG:HD2	26:D4:26:ASP:HB2	2.02	0.41
26:D4:5:VAL:HG22	26:D4:32:ARG:NH2	2.35	0.41
36:5:392:G:O6	87:5:4062:OHX:N3	2.54	0.41
61:N5:57:LEU:N	61:N5:61:LYS:HD2	3.96	0.41
1:2:787:G:C5	1:2:788:A:C5	3.09	0.41
36:1:1818:U:H5''	36:1:1819:U:OP2	2.20	0.41
46:L9:129:ARG:HG3	46:L9:157:ASN:HB2	2.02	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:M1:16:LYS:HG3	48:M1:130:VAL:HG13	2.93	0.41
4:S2:122:ALA:HA	4:S2:125:ILE:CD1	2.50	0.41
20:C8:81:ILE:HA	20:C8:82:PRO:HD3	1.81	0.41
36:5:437:G:O5'	36:5:437:G:C8	2.72	0.41
60:N4:35:LYS:O	60:N4:38:SER:HB3	2.19	0.41
64:N8:79:TRP:HZ2	64:N8:121:VAL:HB	1.85	0.41
64:N8:137:LYS:O	64:N8:140:ALA:HB3	3.18	0.41
52:M6:55:HIS:O	52:M6:57:PHE:N	2.53	0.41
4:S2:44:LEU:CD2	4:S2:246:GLU:HB2	2.51	0.41
36:1:2623:G:C5	36:1:2624:G:N7	2.88	0.41
36:1:1918:C:N4	36:1:1919:G:C6	2.87	0.41
36:5:1408:G:H5''	36:5:1408:G:H8	1.85	0.41
36:5:692:A:C2	36:5:693:A:H1'	2.54	0.41
44:L7:138:TYR:O	44:L7:237:ASN:ND2	2.53	0.41
36:5:407:A:N6	38:8:17:A:C8	2.89	0.41
36:5:408:A:N6	38:8:15:G:H1'	2.36	0.41
37:7:47:C:C2	37:7:48:U:C5	3.08	0.41
1:6:1508:U:H2'	1:6:1509:C:H6	1.85	0.41
1:2:1498:G:P	21:C9:74:GLY:HA3	2.60	0.41
22:D0:44:ASN:ND2	22:D0:102:ARG:HH21	7.18	0.41
22:D0:33:GLN:H	22:D0:33:GLN:CD	2.23	0.41
36:5:3357:U:O2'	36:5:3358:U:OP1	2.36	0.41
36:1:1543:G:OP1	51:M5:35:VAL:HG23	2.21	0.41
36:1:221:A:C4	36:1:224:C:N4	2.88	0.41
36:5:223:U:P	36:5:224:C:H41	2.42	0.41
46:L9:55:VAL:HG11	46:L9:71:VAL:HG11	3.09	0.41
38:8:37:A:C6	38:8:104:A:C5	3.08	0.41
2:S0:111:ILE:HA	2:S0:111:ILE:HD12	1.78	0.41
74:O8:17:ARG:NH2	36:5:1824:U:H4'	138.05	0.41
36:5:1304:A:N1	36:5:2938:G:O2'	2.45	0.41
36:1:2949:U:O2'	36:1:2950:G:H5'	2.20	0.41
42:L5:20:PHE:O	42:L5:23:ARG:HB3	3.14	0.41
1:6:196:G:C6	1:6:197:A:C2	3.09	0.41
78:Q2:26:THR:O	78:Q2:71:ARG:N	2.50	0.41
36:5:374:A:N1	36:5:400:G:N2	2.68	0.41
38:4:97:A:N1	38:4:98:U:C2	2.88	0.41
1:2:422:G:N2	1:2:423:G:C2	2.88	0.41
63:N7:108:GLU:O	63:N7:112:LYS:HG3	2.20	0.41
78:Q2:58:PHE:C	78:Q2:58:PHE:CD1	2.94	0.41
36:5:2437:G:C2	36:5:2438:A:H1'	2.55	0.41
56:N0:155:ARG:CG	56:N0:172:TYR:H	4.81	0.41
38:4:5:U:C4	38:4:6:U:C4	3.07	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:S4:246:LEU:O	6:S4:251:GLU:HG3	2.20	0.41
25:D3:97:ASP:N	25:D3:97:ASP:OD2	3.03	0.41
1:2:1790:A:H2'	1:2:1791:A:O4'	2.20	0.41
25:D3:37:ALA:HB3	25:D3:38:PHE:CD2	3.58	0.41
36:5:128:G:C6	36:5:129:U:C4	3.09	0.41
45:L8:71:VAL:HG23	45:L8:72:PRO:HD2	2.01	0.41
55:M9:122:VAL:O	55:M9:126:GLU:HB2	2.21	0.41
55:M9:126:GLU:O	55:M9:131:ALA:HB3	2.21	0.41
4:S2:180:ALA:HB2	4:S2:198:THR:OG1	2.54	0.41
36:5:941:G:C1'	36:5:1435:A:H1'	2.50	0.41
36:1:1274:A:C5	36:1:1275:C:C5	3.09	0.41
36:5:1348:U:H5''	36:5:1355:A:N6	2.35	0.41
39:L2:19:HIS:O	39:L2:20:THR:HB	2.20	0.41
36:5:2507:C:O2'	36:5:2508:U:P	2.79	0.41
62:N6:88:GLU:HA	62:N6:94:SER:OG	2.21	0.41
36:5:168:U:H2'	36:5:169:U:H6	1.84	0.41
36:1:966:U:H2'	36:1:967:A:C8	2.56	0.41
36:1:593:C:OP1	43:L6:19:LYS:HG2	2.20	0.41
1:6:1559:A:H3'	1:6:1559:A:C8	2.55	0.41
64:N8:131:SER:O	64:N8:134:ALA:HB3	2.20	0.41
1:6:772:G:C5	1:6:773:C:C4	3.08	0.41
45:L8:53:PRO:HD3	61:N5:32:PHE:CD1	4.57	0.41
49:M3:20:GLU:O	49:M3:21:ARG:HG3	4.15	0.41
15:C3:87:ASP:OD2	1:6:867:G:N2	314.56	0.41
3:S1:153:HIS:ND1	3:S1:155:TYR:CG	2.89	0.41
19:C7:76:GLU:O	19:C7:80:ARG:HG3	2.21	0.41
36:5:1270:A:H8	36:5:1270:A:OP1	2.03	0.41
45:L8:175:VAL:HG12	45:L8:176:PRO:HD2	2.45	0.41
36:5:2105:G:H2'	36:5:2106:A:C8	2.52	0.41
6:S4:212:ASP:C	6:S4:214:LEU:H	2.49	0.41
87:5:4061:OHX:N1	87:5:4138:OHX:N4	2.68	0.41
36:1:2619:G:H2'	36:1:2620:G:O4'	2.21	0.41
3:S1:218:LEU:HG	3:S1:218:LEU:H	4.07	0.41
60:N4:63:ILE:CD1	60:N4:64:THR:H	5.72	0.41
1:6:24:U:O2'	1:6:367:A:H4'	2.19	0.41
36:1:304:G:N1	64:N8:62:HIS:NE2	2.69	0.41
65:N9:6:ASN:OD1	65:N9:6:ASN:N	4.21	0.41
36:1:900:G:O2'	36:1:1589:A:N6	2.53	0.41
24:D2:25:VAL:HG23	24:D2:63:VAL:HB	2.84	0.41
12:C0:10:LYS:HZ3	12:C0:36:ASP:HB3	2.67	0.41
36:1:968:G:C5	36:1:969:C:C4	3.09	0.41
4:S2:148:LEU:HA	23:D1:4:ASP:CG	3.27	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
87:8:220:OHX:N5	87:8:229:OHX:N1	2.69	0.41
54:M8:166:LEU:HA	54:M8:166:LEU:HD23	2.20	0.41
36:1:1345:G:H5''	36:1:1345:G:H8	1.86	0.41
36:5:3257:C:C4	36:5:3258:U:C5	3.09	0.41
59:N3:130:ALA:O	59:N3:131:SER:C	2.90	0.41
36:5:1149:G:N7	87:5:4205:OHX:N5	2.68	0.41
49:M3:185:LYS:NZ	49:M3:189:GLU:OE1	2.48	0.41
53:M7:93:GLY:O	53:M7:96:GLN:HG2	2.20	0.41
40:L3:287:LYS:HD2	40:L3:289:ASP:OD1	5.44	0.41
40:L3:226:PHE:CE2	40:L3:268:GLY:HA2	3.50	0.41
36:5:2841:G:H2'	36:5:2844:C:H42	1.85	0.41
46:L9:183:HIS:ND1	46:L9:183:HIS:C	2.93	0.41
49:M3:136:GLU:HG3	49:M3:136:GLU:O	2.18	0.41
3:S1:40:ASN:N	3:S1:40:ASN:OD1	3.11	0.41
15:C3:41:ALA:HA	15:C3:44:GLY:H	3.41	0.41
25:D3:49:ALA:O	25:D3:104:LEU:N	2.59	0.41
27:D5:43:ASP:HB3	27:D5:46:LYS:H	4.06	0.41
46:L9:26:LYS:HB2	36:5:3198:U:O4	327.46	0.41
36:1:2166:A:H2'	36:1:2167:A:C8	2.55	0.41
36:1:1505:C:C4	36:1:1506:A:N7	2.89	0.41
36:1:2353:G:C5	36:1:2354:C:C5	3.09	0.41
11:S9:119:ALA:HA	11:S9:124:HIS:HD1	5.66	0.41
11:S9:38:ASN:HB2	11:S9:41:GLU:HG3	2.03	0.41
47:M0:43:VAL:HG12	47:M0:171:TRP:NE1	2.35	0.41
47:M0:76:MET:HB3	47:M0:85:PHE:CE1	3.28	0.41
1:6:1163:A:N6	1:6:1164:G:C6	2.89	0.41
64:N8:22:ILE:HG22	36:5:642:U:OP1	192.96	0.41
44:L7:184:LEU:CD2	44:L7:198:ALA:HB1	2.78	0.41
44:L7:203:TRP:HD1	44:L7:204:PRO:O	3.17	0.41
41:L4:330:TYR:CE2	44:L7:49:ALA:HA	2.89	0.41
51:M5:123:GLN:HB3	51:M5:128:LYS:HA	2.49	0.41
87:6:2130:OHX:N6	87:6:2155:OHX:N3	2.68	0.41
10:S8:172:ARG:O	10:S8:174:GLY:N	2.52	0.41
41:L4:280:ILE:HD11	54:M8:25:TYR:HB2	2.01	0.41
43:L6:131:LYS:HG2	43:L6:133:GLU:N	2.35	0.41
19:C7:7:LYS:HE2	1:6:1316:G:OP1	409.47	0.41
55:M9:172:ARG:NH1	1:6:852:C:P	321.05	0.41
1:2:1166:A:O2'	1:2:1587:A:H4'	2.20	0.41
1:6:1473:U:O2	1:6:1473:U:H2'	2.19	0.41
7:S5:108:LEU:HD22	18:C6:43:ILE:HG12	3.98	0.41
20:C8:56:LYS:HB3	20:C8:60:GLU:CD	2.40	0.41
27:D5:70:LYS:HD3	27:D5:70:LYS:HA	1.90	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:L9:91:ARG:HA	46:L9:142:ASP:O	2.21	0.41
36:1:3087:A:H2'	36:1:3088:G:C8	2.55	0.41
42:L5:85:ARG:NH2	42:L5:252:ALA:O	5.72	0.41
12:C0:21:VAL:HG12	12:C0:22:VAL:N	2.35	0.41
17:C5:108:ARG:HG2	17:C5:109:PRO:HD2	2.03	0.41
21:C9:14:PHE:HZ	21:C9:132:LEU:HD23	1.85	0.41
21:C9:30:VAL:HA	21:C9:31:PRO:HD3	1.83	0.41
5:S3:138:VAL:HA	5:S3:183:GLY:O	3.08	0.41
5:S3:20:GLU:OE2	5:S3:76:ARG:NH2	4.40	0.41
15:C3:16:ILE:HD12	15:C3:16:ILE:HA	4.40	0.41
15:C3:94:LYS:NZ	1:6:952:A:OP1	298.79	0.41
36:1:155:G:O4'	36:1:157:A:H1'	2.21	0.41
1:2:1119:G:C5	1:2:1120:U:C5	3.09	0.41
1:2:1127:G:C6	1:2:1128:C:C4	3.09	0.41
15:C3:109:LYS:O	15:C3:110:ASP:C	2.67	0.41
16:C4:27:PHE:O	16:C4:28:VAL:HG23	2.21	0.41
3:S1:57:ALA:O	3:S1:60:ALA:HB3	4.69	0.41
68:O2:21:HIS:O	68:O2:24:ARG:N	2.62	0.41
23:D1:41:GLU:O	23:D1:44:ARG:CZ	5.09	0.41
23:D1:48:GLY:HA2	23:D1:50:TYR:CZ	2.55	0.41
23:D1:70:ASN:O	23:D1:74:GLN:HB3	2.20	0.41
4:S2:162:CYS:SG	4:S2:212:LYS:HE2	2.69	0.41
36:5:3095:U:C2	36:5:3096:C:C6	3.09	0.41
54:M8:108:ALA:C	54:M8:110:ALA:N	3.36	0.41
1:6:795:U:O4	1:6:796:A:C5	2.74	0.41
66:O0:42:ILE:HA	66:O0:90:VAL:O	2.49	0.41
68:O2:126:LEU:HD23	68:O2:126:LEU:HA	1.85	0.41
55:M9:5:ARG:HH11	55:M9:5:ARG:HG3	3.44	0.41
14:C2:41:LEU:HD13	14:C2:121:VAL:HG11	2.03	0.41
14:C2:90:LYS:HE2	14:C2:90:LYS:HB3	4.78	0.41
41:L4:358:THR:HG21	57:N1:148:PRO:HD2	2.02	0.41
44:L7:77:VAL:HG22	57:N1:139:ARG:O	2.93	0.41
59:N3:83:LYS:HE2	36:5:3093:C:O4'	245.63	0.41
40:L3:58:ARG:HG3	40:L3:59:ASP:N	2.35	0.41
18:C6:114:ARG:N	18:C6:116:LEU:HD22	2.27	0.41
5:S3:222:VAL:C	5:S3:223:LYS:HD2	5.58	0.41
34:SR:101:GLN:HG2	34:SR:137:LYS:C	2.40	0.41
34:SR:209:THR:HG22	34:SR:226:ALA:HB2	2.02	0.41
41:L4:53:SER:HB3	36:5:346:C:OP1	112.95	0.41
40:L3:319:ASN:O	40:L3:320:ASP:C	3.66	0.41
1:2:992:A:C2	1:2:993:A:C8	3.08	0.41
39:L2:112:ILE:O	39:L2:167:GLY:N	2.43	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
79:Q3:59:CYS:O	79:Q3:60:CYS:HB3	2.19	0.41
3:S1:193:ILE:H	3:S1:193:ILE:HD13	2.62	0.41
64:N8:28:HIS:NE2	64:N8:32:ARG:CZ	3.53	0.41
36:1:2225:U:H4'	78:Q2:36:PHE:HE2	1.86	0.41
36:5:3277:U:H2'	36:5:3278:C:O4'	2.21	0.41
57:N1:102:ARG:NH2	36:5:1061:A:O3'	238.83	0.41
1:6:676:G:C4	1:6:677:G:C8	3.08	0.41
36:5:7:C:O2'	36:5:8:C:H5'	2.20	0.41
51:M5:172:ARG:O	51:M5:183:THR:OG1	2.76	0.41
26:D4:2:SER:N	26:D4:32:ARG:HG3	2.35	0.41
36:5:20:A:C2	38:8:140:G:C2	3.09	0.41
71:O5:90:ARG:HE	71:O5:90:ARG:HB3	4.54	0.41
71:O5:31:LEU:HA	71:O5:34:GLN:HB2	2.02	0.41
36:1:1952:G:N1	36:1:2095:G:C2	2.89	0.41
1:2:28:A:H2'	1:2:29:U:C6	2.55	0.41
1:2:548:G:C6	1:2:549:G:C5	3.09	0.41
32:E0:39:LEU:HA	32:E0:39:LEU:HD13	1.68	0.41
48:M1:97:SER:N	48:M1:101:ASN:O	2.47	0.41
6:S4:148:ARG:HG2	6:S4:148:ARG:H	2.63	0.41
64:N8:82:ILE:HA	64:N8:82:ILE:HD12	4.41	0.41
36:5:1580:A:O2'	36:5:1581:C:P	2.78	0.41
52:M6:54:TYR:O	52:M6:55:HIS:C	2.57	0.41
4:S2:41:LEU:O	4:S2:44:LEU:N	2.52	0.41
1:6:827:C:H2'	1:6:828:U:O4'	2.21	0.41
49:M3:140:SER:O	49:M3:144:THR:OG1	2.23	0.41
41:L4:234:ASN:HD21	41:L4:236:LEU:HB2	2.74	0.41
1:2:1494:C:H2'	1:2:1495:C:C6	2.55	0.41
63:N7:54:THR:O	63:N7:55:LYS:C	2.59	0.41
56:N0:50:LYS:HZ3	37:7:76:A:HO2'	303.13	0.41
79:Q3:54:ILE:C	79:Q3:55:TRP:CD1	2.94	0.41
53:M7:57:ALA:HB2	53:M7:83:TRP:CE2	2.59	0.41
53:M7:67:ILE:HD12	53:M7:67:ILE:HG23	4.16	0.41
36:5:2186:U:H2'	36:5:2187:G:O4'	2.20	0.41
36:1:1806:A:N6	36:1:1807:G:C2	2.88	0.41
38:8:148:G:N3	38:8:149:A:C8	2.88	0.41
36:1:2206:G:H2'	36:1:2206:G:N3	2.36	0.41
69:O3:90:PRO:HD2	69:O3:93:THR:OG1	3.12	0.41
20:C8:134:ARG:O	20:C8:136:GLN:HG2	3.44	0.41
47:M0:51:HIS:ND1	47:M0:137:SER:OG	4.34	0.41
22:D0:23:ARG:HD3	22:D0:92:ASP:OD1	2.98	0.41
1:6:603:U:O2'	1:6:604:A:H5'	2.20	0.41
1:6:142:G:C4	1:6:266:A:N6	2.89	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:D2:28:ARG:HG3	24:D2:60:LYS:HG2	2.02	0.41
36:1:1440:G:H2'	36:1:1441:G:H8	1.85	0.41
36:5:1432:C:O2'	36:5:1433:A:H3'	2.20	0.41
31:D9:41:GLN:HG2	1:6:1433:G:N9	399.26	0.41
41:L4:304:GLN:O	41:L4:305:ALA:HB3	2.19	0.41
49:M3:36:ARG:O	49:M3:40:ALA:N	2.87	0.41
36:5:139:G:H2'	36:5:140:C:O4'	2.21	0.41
51:M5:10:LEU:HD23	51:M5:10:LEU:HA	2.52	0.41
49:M3:188:ARG:HA	49:M3:191:ALA:CB	2.51	0.41
36:5:2683:U:C4	36:5:2684:C:C5	3.09	0.41
1:2:1360:A:C2	1:2:1361:U:H1'	2.55	0.41
21:C9:89:ARG:HH11	21:C9:89:ARG:CG	3.65	0.41
36:1:510:G:O6	87:1:4007:OHX:N1	2.54	0.41
36:1:511:G:C5	36:1:512:U:C4	3.09	0.41
36:1:532:A:N1	36:1:533:A:C6	2.89	0.41
46:L9:150:SER:OG	46:L9:153:ASP:N	2.34	0.41
42:L5:119:TYR:CE1	42:L5:141:PRO:HB3	2.55	0.41
1:2:448:C:O2'	1:2:449:C:H5'	2.21	0.41
36:5:2796:G:H5''	36:5:2798:C:O4'	2.20	0.41
1:6:310:C:H2'	1:6:311:U:C6	2.54	0.41
36:1:1075:A:C4	65:N9:45:HIS:CD2	3.08	0.41
78:Q2:83:LEU:HD23	78:Q2:84:THR:N	2.37	0.41
1:2:1177:C:H4'	1:2:1189:A:H61	1.85	0.41
1:6:45:U:C5	1:6:436:A:C6	3.09	0.41
36:1:998:A:O2'	36:1:999:G:H5'	2.20	0.41
36:1:3228:C:H4'	36:1:3229:G:O5'	2.21	0.41
21:C9:86:ARG:HG3	21:C9:90:PRO:O	2.21	0.41
36:1:1187:C:H6	36:1:1187:C:O5'	2.03	0.41
1:2:81:G:C6	1:2:82:U:C2	3.08	0.41
36:5:270:U:O2'	36:5:318:A:N3	2.33	0.41
40:L3:75:ALA:HB2	36:5:3049:A:C2	245.91	0.41
8:S6:204:ALA:O	8:S6:206:ALA:N	2.53	0.41
62:N6:11:ASP:HB3	62:N6:14:LYS:HG3	2.39	0.41
36:1:2403:G:N3	36:1:2405:C:C5	2.89	0.41
36:1:432:G:H1	36:1:627:U:H3	1.69	0.41
38:8:124:G:C2	38:8:126:A:N7	2.89	0.41
49:M3:24:VAL:HB	49:M3:26:PHE:HE2	4.50	0.41
76:Q0:89:TYR:CD2	76:Q0:89:TYR:N	2.89	0.41
58:N2:94:ARG:O	58:N2:96:VAL:HG23	2.21	0.41
2:S0:87:LEU:HA	2:S0:87:LEU:HD13	2.52	0.41
14:C2:129:GLU:OE2	14:C2:130:THR:N	2.51	0.41
24:D2:121:VAL:HB	24:D2:122:SER:H	2.85	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1135:U:C4	1:2:1136:U:C4	3.08	0.41
36:1:1332:A:C2	36:1:1333:C:C4	3.08	0.41
1:6:724:C:O5'	1:6:724:C:H6	2.03	0.41
3:S1:124:ASN:HB3	3:S1:138:PHE:CD1	2.61	0.41
1:2:607:G:N7	1:2:613:G:C8	2.89	0.41
61:N5:27:ARG:H	61:N5:27:ARG:HG2	1.70	0.41
36:1:233:C:O5'	36:1:233:C:H6	2.03	0.41
25:D3:68:ILE:HB	25:D3:70:LYS:NZ	3.32	0.41
78:Q2:17:CYS:C	78:Q2:19:LYS:H	3.20	0.41
1:2:768:C:C2	11:S9:143:ILE:HD13	2.55	0.41
11:S9:148:VAL:O	11:S9:150:LEU:N	2.49	0.41
47:M0:208:ASN:CA	47:M0:211:ARG:HG2	4.69	0.41
7:S5:166:ARG:NH1	7:S5:170:GLN:OE1	3.20	0.41
36:5:1114:U:C4	36:5:1115:G:N7	2.89	0.41
44:L7:158:LYS:HZ1	36:5:1362:G:H1'	215.57	0.41
6:S4:49:ARG:HB3	6:S4:55:ALA:HB3	3.03	0.41
10:S8:105:ASP:O	10:S8:106:ALA:HB3	2.20	0.41
10:S8:184:LEU:HD11	10:S8:188:GLU:HB2	2.02	0.41
36:5:685:G:N2	36:5:695:C:N3	2.64	0.41
41:L4:193:LYS:HG2	41:L4:194:TYR:N	2.41	0.41
1:6:1405:G:C5	1:6:1406:A:N7	2.88	0.41
27:D5:59:TYR:CD2	27:D5:60:VAL:N	2.88	0.41
7:S5:195:ALA:C	7:S5:197:GLU:N	2.74	0.41
87:2:2044:OHX:N2	87:2:2099:OHX:N5	2.69	0.41
42:L5:122:VAL:C	42:L5:124:GLU:H	2.90	0.41
42:L5:36:LEU:HD13	42:L5:50:ARG:HD2	5.36	0.41
31:D9:14:TYR:O	31:D9:18:SER:HB3	2.20	0.41
12:C0:61:TRP:CE2	31:D9:23:VAL:HG22	3.45	0.41
36:5:699:A:H2'	36:5:700:C:H6	1.86	0.41
51:M5:49:ARG:HH22	36:5:115:A:P	100.23	0.41
1:2:313:U:C6	1:2:1118:G:N2	2.89	0.41
1:6:1773:C:C2	1:6:1789:G:C2	3.08	0.41
77:Q1:1:MET:HE2	77:Q1:5:TRP:HB2	2.00	0.41
29:D7:8:LEU:HB3	29:D7:9:HIS:CE1	2.88	0.41
54:M8:81:VAL:HB	54:M8:138:LEU:HD12	3.61	0.41
48:M1:155:THR:O	48:M1:159:THR:HG23	5.75	0.41
48:M1:155:THR:OG1	48:M1:158:ASP:HB2	2.81	0.41
48:M1:164:LYS:O	48:M1:168:ASP:HA	2.76	0.41
55:M9:38:ARG:O	55:M9:39:ASN:C	3.00	0.41
55:M9:6:THR:HG23	55:M9:9:ARG:NH1	4.25	0.41
36:1:3020:U:C4	36:1:3021:A:C5	3.08	0.41
1:6:1185:U:H2'	1:6:1185:U:O2	2.21	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1460:A:H5'	1:6:1461:C:OP2	2.20	0.41
52:M6:20:ALA:HA	52:M6:84:LEU:HD11	2.02	0.41
6:S4:47:PHE:CE2	6:S4:90:ILE:HD12	2.55	0.41
40:L3:102:LEU:HD21	40:L3:150:ARG:HG3	2.02	0.41
35:SM:83:LYS:CG	35:SM:84:LYS:H	4.07	0.41
47:M0:10:ARG:O	47:M0:59:GLN:HB2	2.20	0.41
44:L7:80:GLN:OE1	57:N1:136:ARG:HG3	3.46	0.41
57:N1:74:VAL:HG12	57:N1:75:ILE:N	3.05	0.41
36:1:3215:A:C4	36:1:3259:U:C2	3.09	0.41
43:L6:170:LYS:N	43:L6:174:LEU:HD12	2.36	0.41
43:L6:171:PRO:HG2	69:O3:9:VAL:HG21	2.01	0.41
9:S7:88:ARG:HA	9:S7:88:ARG:HD3	1.87	0.41
36:5:3279:A:N6	36:5:3280:U:O4	2.54	0.41
37:7:22:A:H2'	37:7:23:A:O4'	2.20	0.41
7:S5:74:ALA:C	18:C6:122:ARG:HH22	2.21	0.41
34:SR:216:LYS:C	34:SR:218:GLY:N	2.73	0.41
52:M6:125:ARG:NH1	52:M6:135:TYR:CZ	3.08	0.41
52:M6:138:LEU:HA	52:M6:138:LEU:HD12	2.88	0.41
36:1:343:U:OP1	87:1:3884:OHX:N6	2.53	0.41
36:1:2157:G:H22	36:1:2177:G:HO2'	1.65	0.41
39:L2:153:GLY:HA3	39:L2:251:LYS:HG2	7.36	0.41
39:L2:79:ASN:O	39:L2:168:VAL:O	4.47	0.41
79:Q3:77:ALA:HA	79:Q3:80:ARG:NH1	5.30	0.41
36:5:2211:U:O2	36:5:2211:U:O4'	2.39	0.41
40:L3:137:TYR:O	40:L3:138:ALA:C	2.59	0.41
49:M3:93:ILE:HG22	49:M3:93:ILE:O	2.20	0.41
36:1:3069:G:C6	36:1:3070:A:C5	3.08	0.41
58:N2:12:ALA:HB1	58:N2:67:SER:C	3.49	0.41
51:M5:139:HIS:O	51:M5:143:ARG:HG3	2.20	0.41
51:M5:38:ARG:NH2	51:M5:60:VAL:HG13	2.34	0.41
33:E1:103:LEU:HA	33:E1:103:LEU:HD23	1.86	0.41
1:2:778:G:C6	1:2:783:G:O6	2.74	0.41
1:2:782:U:H4'	1:2:783:G:OP2	2.20	0.41
1:2:783:G:O2'	1:2:784:C:P	2.78	0.41
26:D4:35:VAL:HG22	26:D4:36:SER:H	1.85	0.41
79:Q3:20:SER:O	79:Q3:21:SER:C	2.64	0.41
36:1:28:C:N4	36:1:56:G:H1	2.18	0.41
46:L9:110:LYS:HB3	46:L9:128:VAL:CB	2.50	0.41
1:6:1448:G:C5	1:6:1449:U:C5	3.09	0.41
48:M1:68:HIS:ND1	48:M1:68:HIS:N	2.80	0.41
25:D3:14:LYS:HG3	25:D3:14:LYS:O	3.27	0.41
24:D2:11:LEU:HD11	24:D2:37:PHE:CE2	3.25	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:7:90:U:O4	37:7:91:G:C6	2.74	0.41
48:M1:144:CYS:O	48:M1:146:GLY:N	3.23	0.41
36:1:2961:G:O2'	36:1:2962:U:H5'	2.20	0.41
36:5:2112:U:H4'	36:5:2113:A:H5'	2.03	0.41
60:N4:39:LEU:HD12	60:N4:44:LYS:HG3	2.09	0.41
39:L2:237:LEU:HD23	39:L2:237:LEU:HA	2.05	0.41
13:C1:6:THR:O	13:C1:7:VAL:HG12	2.20	0.41
40:L3:28:ARG:HH21	40:L3:30:LYS:HE3	2.25	0.41
36:5:222:A:N7	36:5:223:U:C5	2.89	0.41
36:1:3121:U:C2	36:1:3122:A:N7	2.89	0.41
46:L9:57:VAL:HG13	46:L9:64:HIS:CE1	2.56	0.41
2:S0:110:TYR:HA	2:S0:115:PHE:CD1	2.66	0.41
36:1:2948:C:O2'	40:L3:242:THR:HG22	2.21	0.41
36:5:1025:A:H2'	36:5:1025:A:N3	2.36	0.41
10:S8:136:SER:CB	10:S8:139:ALA:HB3	3.23	0.41
36:5:2150:G:H1	36:5:2186:U:H3	1.67	0.41
62:N6:5:SER:OG	62:N6:8:VAL:HG12	2.20	0.41
36:5:1049:C:H2'	36:5:1050:U:C6	2.45	0.41
36:5:2943:G:C8	36:5:2944:U:C5	3.09	0.41
36:5:1302:A:N7	36:5:2857:C:O2'	2.52	0.41
62:N6:126:LEU:C	62:N6:126:LEU:HD12	2.40	0.41
41:L4:316:ASN:C	41:L4:317:PRO:O	2.59	0.41
65:N9:15:LYS:HE3	36:5:953:G:OP1	208.86	0.41
36:5:2706:G:H2'	36:5:2707:C:C6	2.56	0.41
36:5:2708:C:H2'	36:5:2709:C:C6	2.55	0.41
42:L5:287:ALA:HA	42:L5:290:ILE:HD12	3.35	0.41
36:1:1554:U:C4	36:1:1582:C:H2'	2.55	0.41
55:M9:180:LYS:HD3	55:M9:184:LEU:HD12	2.03	0.41
1:6:1218:G:C6	1:6:1444:A:C5	3.08	0.41
9:S7:120:ALA:O	9:S7:124:LYS:HG2	2.93	0.41
34:SR:121:MET:SD	34:SR:183:LEU:HD13	2.60	0.41
4:S2:200:SER:OG	1:6:4:C:P	382.98	0.41
55:M9:115:ILE:O	55:M9:115:ILE:HG13	4.94	0.41
55:M9:131:ALA:O	55:M9:132:PHE:CD1	2.73	0.41
74:O8:43:PHE:CE1	74:O8:65:LEU:HD13	2.99	0.41
36:1:1780:G:C4	36:1:1781:C:C5	3.09	0.41
36:1:1785:U:H2'	36:1:1786:G:C8	2.56	0.41
21:C9:42:GLY:CA	21:C9:84:LYS:HB2	2.79	0.41
40:L3:123:TYR:CD1	36:5:3315:G:H2'	182.77	0.41
36:1:1260:A:H4'	36:1:1280:C:H4'	2.01	0.41
52:M6:65:ASN:OD1	52:M6:65:ASN:C	2.59	0.41
1:2:600:U:P	25:D3:108:GLY:H	2.43	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
66:O0:86:ARG:HE	66:O0:86:ARG:HB3	2.36	0.41
36:5:3219:G:H4'	36:5:3220:G:H5'	2.02	0.41
37:3:60:G:N3	37:3:61:G:C8	2.89	0.41
1:6:1721:A:H2'	1:6:1722:A:O4'	2.20	0.41
62:N6:82:VAL:HG12	62:N6:85:VAL:H	2.06	0.41
8:S6:53:SER:HB3	8:S6:112:VAL:HG23	2.02	0.41
87:1:4024:OHX:N4	87:1:4170:OHX:N3	2.69	0.41
36:1:1500:G:H2'	36:1:1500:G:N3	2.35	0.41
1:2:73:U:H4'	1:2:74:U:OP1	2.19	0.41
45:L8:175:VAL:HG13	45:L8:176:PRO:HD2	2.03	0.41
1:2:1111:G:N7	87:2:2069:OHX:N6	2.68	0.41
33:E1:117:LEU:HD22	33:E1:118:ARG:NH1	5.02	0.41
6:S4:95:THR:O	6:S4:96:ASN:HB2	2.21	0.41
36:5:2244:A:C6	36:5:2245:C:C4	3.09	0.41
1:6:891:A:O2'	1:6:892:A:H5'	2.21	0.41
36:1:590:G:C2	36:1:610:G:H2'	2.54	0.41
1:6:1087:A:N6	1:6:1088:A:N6	2.69	0.41
36:5:1259:A:C6	36:5:1260:A:N1	2.89	0.41
1:2:1150:G:C8	1:2:1768:G:N2	2.88	0.41
36:1:1589:A:C4	70:O4:13:TYR:CD2	3.08	0.41
12:C0:82:LEU:HA	12:C0:83:PRO:HD2	1.92	0.41
62:N6:95:VAL:HA	62:N6:96:PRO:HD3	1.84	0.41
1:2:243:G:O5'	1:2:243:G:C8	2.73	0.41
36:5:3330:A:C8	36:5:3330:A:H5''	2.56	0.41
49:M3:190:LYS:O	49:M3:193:ALA:N	2.42	0.41
34:SR:28:GLY:O	34:SR:30:PRO:HD3	2.21	0.41
36:5:1397:C:H2'	36:5:1398:U:H5'	2.01	0.41
1:6:293:U:H2'	1:6:294:C:H6	1.85	0.41
36:1:1767:C:O2'	36:1:1768:U:H5'	2.20	0.41
44:L7:35:ALA:O	44:L7:38:LYS:HB3	2.21	0.41
28:D6:54:SER:HB3	28:D6:61:GLU:O	2.20	0.41
1:2:1063:U:H5'	1:2:1064:G:OP2	2.21	0.41
30:D8:9:LEU:HA	30:D8:9:LEU:HD23	2.25	0.41
34:SR:175:ASP:N	34:SR:175:ASP:OD1	2.54	0.41
6:S4:127:LYS:HA	6:S4:127:LYS:HE3	4.06	0.41
44:L7:106:LEU:HA	44:L7:106:LEU:HD23	1.60	0.41
4:S2:250:GLN:HG3	4:S2:250:GLN:H	3.67	0.41
30:D8:15:VAL:HG12	30:D8:15:VAL:H	1.87	0.41
1:2:934:C:C4	1:2:1077:C:H4'	2.55	0.41
4:S2:154:LEU:HD11	4:S2:193:VAL:HG11	2.03	0.41
25:D3:73:ARG:HD2	25:D3:73:ARG:HH11	2.41	0.41
25:D3:90:ASP:OD2	1:6:567:A:O2'	373.39	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:76:VAL:HG11	40:L3:323:MET:CE	3.28	0.41
53:M7:119:VAL:HA	53:M7:145:HIS:O	2.31	0.41
53:M7:127:ARG:O	53:M7:139:TYR:HB3	2.83	0.41
1:2:441:A:C2	1:2:442:C:C4	3.08	0.41
11:S9:123:HIS:CE1	32:E0:37:ARG:CD	3.32	0.41
11:S9:68:LYS:O	11:S9:69:ARG:C	2.97	0.41
11:S9:86:LEU:CD1	11:S9:95:TYR:HB3	2.51	0.41
47:M0:208:ASN:CB	47:M0:211:ARG:HD2	3.03	0.41
47:M0:71:CYS:O	47:M0:72:ALA:C	3.05	0.41
87:1:3965:OHX:N1	64:N8:24:LYS:O	2.53	0.41
44:L7:39:GLU:C	44:L7:41:ARG:N	3.01	0.41
36:1:113:C:N4	36:1:154:U:O2	2.54	0.41
10:S8:188:GLU:HG2	13:C1:13:PHE:CE2	2.55	0.41
26:D4:75:VAL:HG13	26:D4:75:VAL:O	2.21	0.41
10:S8:83:TYR:CD1	10:S8:84:HIS:N	2.88	0.41
41:L4:166:VAL:O	41:L4:170:LYS:HB2	3.94	0.41
1:2:1532:U:O2'	1:2:1539:G:N2	2.54	0.41
7:S5:25:LEU:O	7:S5:27:THR:N	4.79	0.41
67:O1:31:ARG:HB3	67:O1:31:ARG:NH1	2.25	0.41
67:O1:17:HIS:CD2	67:O1:69:TYR:HD1	2.58	0.41
61:N5:76:VAL:HA	61:N5:81:ILE:O	2.67	0.41
42:L5:198:TYR:CE1	42:L5:203:HIS:CG	3.53	0.41
21:C9:132:LEU:HD13	21:C9:132:LEU:HA	4.03	0.41
5:S3:118:ALA:O	5:S3:121:GLY:N	2.54	0.41
1:2:1073:G:H4'	15:C3:10:GLY:HA2	2.03	0.41
15:C3:114:ARG:HA	15:C3:114:ARG:HD3	1.91	0.41
36:5:70:A:OP1	36:5:101:G:H1'	2.20	0.41
1:2:103:A:C2	1:2:309:C:C5	3.08	0.41
36:5:2126:A:C2	36:5:2127:U:C4	3.09	0.41
8:S6:7:TYR:HB3	8:S6:124:LEU:HG	3.46	0.41
1:6:910:C:H2'	1:6:911:U:C6	2.56	0.41
28:D6:46:GLU:HB2	28:D6:47:ALA:H	1.46	0.41
19:C7:105:GLN:CD	19:C7:105:GLN:H	2.23	0.41
9:S7:140:VAL:O	24:D2:51:GLU:HA	2.31	0.41
48:M1:14:ILE:HG13	48:M1:131:MET:SD	3.23	0.41
48:M1:13:LYS:HE2	48:M1:132:ASN:OD1	5.25	0.41
63:N7:34:LYS:HA	63:N7:34:LYS:HD2	3.16	0.41
66:O0:30:THR:O	66:O0:34:LEU:HD22	2.20	0.41
70:O4:81:CYS:O	70:O4:82:ALA:HB3	2.19	0.41
70:O4:86:LYS:O	70:O4:90:ILE:HG12	2.20	0.41
70:O4:99:LYS:HG2	70:O4:103:LYS:CE	2.48	0.41
55:M9:40:ALA:O	55:M9:44:LEU:HG	4.44	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
71:O5:7:TYR:HE2	38:8:86:U:H2'	20.79	0.41
71:O5:7:TYR:H	71:O5:7:TYR:HD2	1.69	0.41
1:2:1525:A:N1	1:2:1608:U:H1'	2.35	0.41
1:6:1231:U:C4	1:6:1255:G:N2	2.88	0.41
14:C2:66:VAL:HB	14:C2:67:THR:H	1.60	0.41
14:C2:79:ALA:HB1	14:C2:87:PRO:O	2.21	0.41
1:2:1460:A:C2	1:2:1461:C:C6	3.09	0.41
1:6:1211:A:N6	1:6:1212:G:C5	2.89	0.41
35:SM:70:ASN:C	35:SM:72:ARG:N	2.74	0.41
11:S9:171:ARG:HE	11:S9:174:ARG:HB2	4.19	0.41
6:S4:176:ASP:O	6:S4:177:ALA:O	3.33	0.41
6:S4:195:ILE:CG2	6:S4:196:VAL:H	3.30	0.41
60:N4:56:ARG:C	60:N4:58:HIS:N	3.39	0.41
1:2:1423:U:H2'	1:2:1424:A:O4'	2.20	0.41
36:1:1084:A:H5"	57:N1:35:LYS:HD2	2.02	0.41
50:M4:122:VAL:O	50:M4:125:LYS:HB2	2.21	0.41
69:O3:45:LEU:HA	69:O3:71:VAL:CG1	2.50	0.41
3:S1:104:ASP:HB3	3:S1:105:PHE:H	1.59	0.41
36:1:211:A:H3'	41:L4:221:ASN:OD1	2.20	0.41
36:5:3287:U:H2'	36:5:3288:G:C5'	2.43	0.41
8:S6:68:LEU:O	8:S6:69:LEU:HB2	2.20	0.41
40:L3:108:GLU:HA	40:L3:137:TYR:CD2	2.56	0.41
36:1:2185:G:OP1	39:L2:202:VAL:HG12	2.21	0.41
26:D4:8:ARG:HB3	1:6:780:A:O2'	437.27	0.41
39:L2:117:GLU:HG2	39:L2:122:ASP:OD2	2.60	0.41
36:1:2189:U:O3'	79:Q3:21:SER:OG	2.24	0.41
36:5:19:U:H3	38:8:140:G:H1	1.67	0.41
51:M5:109:ARG:HG3	51:M5:109:ARG:O	2.66	0.41
38:8:43:A:H2	38:8:102:U:H1'	1.86	0.41
46:L9:129:ARG:O	46:L9:130:ASP:C	3.54	0.41
46:L9:157:ASN:HA	46:L9:157:ASN:HD22	1.61	0.41
60:N4:97:LYS:HA	60:N4:98:PRO:HD3	4.24	0.41
37:3:39:C:N3	48:M1:70:THR:HG23	2.36	0.41
37:7:37:G:C6	37:7:41:G:C2	3.09	0.41
48:M1:43:GLN:HE21	48:M1:69:VAL:HG22	1.86	0.41
40:L3:41:VAL:HA	40:L3:185:GLY:N	2.35	0.41
40:L3:194:TRP:CD1	40:L3:198:HIS:CE1	3.25	0.41
36:5:170:G:N2	36:5:249:U:O2	2.54	0.41
36:1:645:A:C5	36:1:649:A:C5	3.08	0.41
1:2:731:C:H4'	1:2:732:G:OP1	2.19	0.41
35:SM:51:ARG:O	35:SM:52:PRO:C	2.58	0.41
60:N4:34:SER:HB2	36:5:3085:G:OP1	227.60	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S2:48:GLY:O	4:S2:49:LYS:HD3	2.20	0.41
4:S2:145:GLY:HA2	24:D2:98:GLN:OE1	2.20	0.41
15:C3:140:LYS:HG2	15:C3:141:TYR:O	3.83	0.41
36:5:1103:A:O5'	36:5:1104:G:H5'	2.20	0.41
54:M8:148:GLU:O	54:M8:151:ARG:HG3	2.44	0.41
42:L5:215:ASP:O	42:L5:218:ARG:N	4.72	0.41
51:M5:65:ARG:HB3	51:M5:127:TYR:CD1	2.55	0.41
36:5:979:U:H4'	36:5:980:A:OP1	2.20	0.41
42:L5:25:GLU:HG3	42:L5:27:LYS:HD2	6.03	0.41
1:2:188:A:C6	1:2:189:C:O2	2.73	0.41
1:6:190:C:O2'	1:6:191:C:H5'	2.19	0.41
36:1:1794:G:H4'	39:L2:191:LEU:HD13	2.03	0.41
36:1:3117:C:H2'	36:1:3118:C:O4'	2.19	0.41
55:M9:64:ARG:O	55:M9:65:ALA:C	2.90	0.41
36:1:3205:G:C4	56:N0:171:PHE:CE1	3.09	0.41
50:M4:58:ILE:O	50:M4:58:ILE:HG23	2.42	0.41
36:5:2822:U:O2'	36:5:2941:A:H1'	2.20	0.41
28:D6:58:VAL:HG22	28:D6:59:TYR:N	4.30	0.41
41:L4:321:LYS:C	41:L4:323:VAL:N	2.73	0.41
1:6:1344:A:O2'	1:6:1345:A:P	2.78	0.41
6:S4:160:VAL:HG11	6:S4:169:ILE:HG12	2.03	0.41
36:5:1466:G:H5''	36:5:1467:A:OP2	2.20	0.41
44:L7:94:LYS:O	44:L7:95:ILE:HD13	2.21	0.41
1:6:5:U:C2	1:6:6:G:N7	2.89	0.41
59:N3:15:LEU:HD23	59:N3:15:LEU:HA	1.82	0.41
36:1:1266:G:OP2	36:1:1266:G:H8	2.03	0.41
36:1:2697:A:N1	36:1:2698:G:C6	2.89	0.41
9:S7:62:VAL:HG11	9:S7:67:LEU:HD23	2.02	0.41
1:2:23:G:H2'	1:2:24:U:H5'	2.03	0.41
1:2:24:U:O2	1:2:601:A:H2	2.03	0.41
57:N1:17:ARG:NH1	57:N1:17:ARG:HB3	4.73	0.41
13:C1:75:VAL:HG12	13:C1:119:VAL:HA	2.17	0.41
1:2:980:G:H4'	1:2:1776:A:H4'	2.01	0.41
15:C3:85:PRO:HG2	15:C3:129:TYR:CD2	3.00	0.41
42:L5:282:ARG:O	42:L5:285:ARG:N	3.02	0.41
8:S6:109:LEU:HD13	8:S6:111:LEU:HG	3.93	0.41
1:6:1716:C:O2'	1:6:1717:G:P	2.79	0.41
10:S8:2:GLY:N	1:6:1729:C:HO2'	289.34	0.41
1:6:1007:C:O2'	1:6:1008:G:H5'	2.20	0.41
36:1:3078:U:O4'	36:1:3078:U:O2	2.37	0.41
46:L9:176:LEU:HB3	76:Q0:86:ALA:HB1	3.37	0.41
45:L8:115:ALA:O	45:L8:117:ALA:N	4.18	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:512:U:O2'	36:1:513:G:H5'	2.20	0.41
3:S1:95:ASN:HD22	3:S1:95:ASN:HA	1.65	0.41
33:E1:118:ARG:HH11	33:E1:118:ARG:N	2.58	0.41
36:5:2953:U:O5'	36:5:2953:U:H6	2.04	0.41
44:L7:58:ALA:O	44:L7:61:ASN:HB2	2.21	0.41
51:M5:37:HIS:NE2	51:M5:63:ARG:HD2	2.35	0.41
36:5:1908:A:H2'	36:5:1909:A:O4'	2.21	0.41
15:C3:54:LEU:HD22	15:C3:60:VAL:HG11	5.01	0.41
36:5:1010:G:H8	36:5:1010:G:H5''	1.86	0.41
36:1:1654:A:N6	36:1:1655:G:C2	2.89	0.41
1:2:789:A:C2	11:S9:71:PHE:HE1	2.37	0.41
45:L8:226:TYR:O	45:L8:229:VAL:N	2.39	0.41
76:Q0:113:ARG:NH2	36:5:1191:U:H3'	291.33	0.41
1:6:739:G:H2'	1:6:740:A:H8	1.86	0.41
59:N3:18:PRO:O	59:N3:19:VAL:C	2.58	0.41
9:S7:97:ARG:HG2	9:S7:97:ARG:HH11	3.14	0.41
41:L4:69:ARG:O	41:L4:71:VAL:HB	4.70	0.41
41:L4:348:GLY:O	41:L4:349:THR:O	2.39	0.41
16:C4:78:ALA:HB2	16:C4:111:ARG:HB2	2.06	0.41
1:2:1296:A:C2	1:2:1302:U:C2	3.09	0.41
36:5:3335:A:H2'	36:5:3336:A:C8	2.56	0.41
36:5:2332:A:H2'	36:5:2333:C:O4'	2.21	0.41
14:C2:24:ILE:O	14:C2:26:ASP:N	2.95	0.41
36:5:1392:G:H1'	36:5:1418:A:N6	2.35	0.41
58:N2:99:LYS:HD2	58:N2:102:GLU:OE1	2.20	0.41
20:C8:17:LEU:HG	20:C8:17:LEU:H	3.50	0.41
57:N1:36:VAL:HG23	57:N1:36:VAL:H	1.51	0.41
22:D0:22:ILE:HA	22:D0:22:ILE:HD12	3.14	0.41
68:O2:36:LYS:HZ3	68:O2:36:LYS:HG3	1.64	0.41
36:1:284:A:C8	78:Q2:41:ARG:NH1	2.89	0.41
25:D3:79:ASN:HB3	25:D3:81:LYS:H	1.86	0.41
32:E0:10:ARG:H	32:E0:10:ARG:HG2	2.36	0.41
36:5:92:G:C6	36:5:94:G:N2	2.89	0.41
36:1:1847:A:C4	53:M7:130:TYR:CD2	3.09	0.41
53:M7:32:THR:HG21	53:M7:87:SER:OG	3.23	0.41
1:2:1153:G:H5'	28:D6:85:ARG:CD	2.51	0.41
1:2:1796:C:H1'	28:D6:7:SER:OG	2.20	0.41
16:C4:133:ARG:O	28:D6:28:LYS:HG3	4.28	0.41
11:S9:92:LYS:O	11:S9:94:ASP:N	2.54	0.41
47:M0:135:ILE:HD12	47:M0:135:ILE:N	2.35	0.41
47:M0:191:LYS:HG3	47:M0:192:ASP:O	2.21	0.41
47:M0:77:THR:O	47:M0:80:SER:N	3.52	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:L7:214:TRP:O	44:L7:216:VAL:HG13	2.21	0.41
26:D4:23:PHE:CE2	26:D4:75:VAL:HG23	6.35	0.41
36:1:728:G:H2'	36:1:729:C:O4'	2.20	0.41
54:M8:34:THR:HG22	54:M8:49:LEU:HD21	3.75	0.41
19:C7:50:ILE:O	19:C7:54:THR:HG22	2.20	0.41
41:L4:74:ILE:CG2	41:L4:93:MET:HE1	2.46	0.41
36:1:527:A:C5	36:1:528:U:C4	3.09	0.41
36:1:529:A:C2	36:1:564:G:C6	3.09	0.41
7:S5:40:ILE:HD11	7:S5:47:SER:HB2	2.03	0.41
7:S5:42:LEU:HD12	7:S5:46:TRP:C	2.41	0.41
46:L9:92:TYR:N	46:L9:92:TYR:CD2	3.98	0.41
67:O1:88:PRO:C	67:O1:89:LEU:HD12	2.90	0.41
75:O9:13:MET:SD	36:5:1493:G:C5	112.93	0.41
61:N5:105:VAL:HG13	61:N5:130:TYR:CD2	2.55	0.41
61:N5:99:VAL:O	61:N5:103:TYR:HB2	2.21	0.41
1:2:391:A:C4	1:2:392:G:C8	3.09	0.41
36:1:974:G:C4	36:1:975:C:C5	3.09	0.41
42:L5:146:LEU:HD13	42:L5:148:ILE:HD11	5.17	0.41
1:2:1275:A:C6	1:2:1438:G:C5	3.08	0.41
1:2:1481:C:C4	21:C9:79:LEU:HD11	2.55	0.41
21:C9:60:SER:OG	1:6:1480:G:OP1	399.85	0.41
12:C0:72:GLY:O	12:C0:76:LEU:HD22	2.21	0.41
31:D9:30:LEU:HD12	31:D9:32:ARG:HD3	2.02	0.41
31:D9:42:CYS:O	31:D9:43:PHE:C	2.59	0.41
5:S3:82:GLY:C	5:S3:84:ILE:H	2.24	0.41
1:6:863:A:C8	1:6:865:A:C8	3.09	0.41
15:C3:4:MET:HG3	15:C3:5:HIS:N	2.35	0.41
36:1:699:A:C6	36:1:700:C:C2	3.09	0.41
1:2:1772:C:H5''	77:Q1:2:ARG:HH11	1.86	0.41
77:Q1:2:ARG:O	77:Q1:5:TRP:N	2.53	0.41
77:Q1:1:MET:HG3	77:Q1:6:ARG:HG3	4.74	0.41
1:2:898:A:H4'	16:C4:46:MET:CE	2.50	0.41
1:2:900:A:OP1	16:C4:43:THR:OG1	2.23	0.41
2:S0:185:ARG:N	23:D1:44:ARG:HA	2.30	0.41
23:D1:44:ARG:HB2	23:D1:44:ARG:HE	4.29	0.41
54:M8:62:VAL:HG12	54:M8:63:SER:O	2.21	0.41
1:6:1702:A:H8	1:6:1703:C:H6	1.68	0.41
63:N7:136:PHE:N	63:N7:136:PHE:CD1	2.88	0.41
63:N7:4:PHE:CE2	66:O0:35:ARG:HA	2.56	0.41
36:1:1765:U:C5	55:M9:46:LYS:HE3	2.56	0.41
36:1:2179:C:O2'	39:L2:174:ARG:NH2	2.54	0.41
14:C2:41:LEU:HD23	14:C2:123:VAL:HG13	2.02	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:C2:32:LEU:HD22	14:C2:41:LEU:HD11	2.02	0.41
14:C2:62:LEU:HD21	14:C2:90:LYS:HG2	6.26	0.41
1:2:1460:A:H2	1:2:1461:C:C5	2.38	0.41
6:S4:65:LEU:C	6:S4:67:GLN:H	2.24	0.41
50:M4:40:ASP:C	50:M4:40:ASP:OD1	2.97	0.41
47:M0:10:ARG:NE	47:M0:11:TYR:HE1	2.89	0.41
56:N0:14:LEU:HG	56:N0:56:GLY:CA	3.09	0.41
41:L4:362:ASP:H	56:N0:26:ARG:HH12	1.68	0.41
57:N1:137:GLU:O	57:N1:139:ARG:HD2	2.21	0.41
36:1:3261:C:P	50:M4:126:GLN:HE21	2.42	0.41
42:L5:261:THR:O	42:L5:264:GLN:HG3	2.21	0.41
42:L5:262:LYS:O	42:L5:265:TYR:HB2	2.56	0.41
1:6:67:A:H4'	1:6:68:A:H2	1.86	0.41
1:6:77:U:H4'	1:6:78:A:O5'	2.21	0.41
18:C6:99:GLU:O	18:C6:100:GLN:C	3.09	0.41
34:SR:205:SER:HB2	34:SR:210:LEU:HD13	3.28	0.41
34:SR:216:LYS:HA	34:SR:239:GLU:CG	2.67	0.41
34:SR:32:LEU:HA	34:SR:45:TRP:O	2.20	0.41
52:M6:121:PRO:C	52:M6:123:ALA:H	2.60	0.41
73:O7:52:LYS:CD	73:O7:56:ARG:HH21	2.28	0.41
79:Q3:60:CYS:O	79:Q3:62:LYS:N	2.49	0.41
40:L3:117:ARG:HE	40:L3:117:ARG:HB2	2.23	0.41
40:L3:47:LEU:HA	40:L3:47:LEU:HD12	2.23	0.41
36:5:3179:U:H3'	36:5:3180:A:H5'	2.03	0.41
52:M6:34:VAL:HG11	52:M6:112:TYR:CE1	2.55	0.41
8:S6:58:LYS:HB2	8:S6:59:GLN:HE22	1.84	0.41
36:5:811:U:O2'	36:5:812:G:H5'	2.20	0.41
36:5:929:A:C5	36:5:930:U:C5	3.09	0.41
40:L3:105:VAL:HG12	40:L3:105:VAL:O	2.53	0.41
36:1:1098:A:C2	36:1:1099:A:C8	3.09	0.41
36:1:1097:G:H4'	36:1:1098:A:O5'	2.20	0.41
57:N1:102:ARG:HD2	57:N1:102:ARG:HA	1.78	0.41
36:1:58:G:H4'	51:M5:155:VAL:HG13	2.02	0.41
72:O6:15:LYS:HE2	72:O6:16:LYS:O	5.01	0.41
36:1:3028:G:N1	36:1:3029:A:C2	2.89	0.41
26:D4:29:HIS:CE1	26:D4:69:SER:N	4.12	0.41
36:1:2402:A:N3	36:1:2871:G:C4	2.88	0.41
36:5:939:U:C2	36:5:940:G:C8	3.09	0.41
38:8:138:A:C6	38:8:139:U:C4	3.09	0.41
71:O5:54:VAL:HG12	71:O5:58:ILE:HD11	2.61	0.41
1:2:1092:A:C2	1:2:1094:G:C5	3.09	0.41
1:6:913:G:C8	36:5:2205:U:C2	3.08	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:122:A:C5	36:5:146:U:C4	3.09	0.41
37:3:39:C:O5'	37:3:39:C:H6	2.04	0.41
37:7:39:C:H5''	37:7:40:C:OP2	2.21	0.41
4:S2:78:ASP:CB	4:S2:129:ILE:HD13	2.50	0.41
17:C5:81:ARG:NH1	17:C5:120:SER:HB3	2.91	0.41
35:SM:40:PRO:CG	35:SM:41:SER:H	2.48	0.41
52:M6:141:LEU:O	52:M6:145:VAL:HG22	2.43	0.41
1:6:822:U:C4	1:6:823:G:N2	2.89	0.41
1:2:326:G:C6	1:2:327:U:C4	3.09	0.41
40:L3:332:ARG:HD3	40:L3:332:ARG:O	2.38	0.41
42:L5:16:PHE:O	57:N1:20:ARG:HG2	4.87	0.41
38:8:14:C:H2'	38:8:15:G:C8	2.56	0.41
22:D0:47:GLN:HG2	22:D0:47:GLN:O	2.21	0.41
36:1:2509:U:H2'	36:1:2510:U:H5'	2.02	0.41
33:E1:144:CYS:HB2	33:E1:147:VAL:HG12	3.67	0.41
1:6:557:G:O2'	1:6:558:U:OP1	2.31	0.41
36:5:216:G:C4	36:5:217:U:C5	3.08	0.41
76:Q0:102:ARG:NH2	36:5:2896:A:OP1	319.77	0.41
36:5:585:A:H2'	36:5:586:C:C6	2.55	0.41
8:S6:25:ARG:O	8:S6:28:PHE:HB2	2.21	0.41
36:5:1617:G:H2'	36:5:1618:G:O4'	2.21	0.41
36:5:2939:G:O2'	36:5:2940:A:H5'	2.21	0.41
36:5:1724:U:O2	36:5:1725:C:N1	2.53	0.41
1:6:190:C:O2'	1:6:191:C:H2'	2.20	0.41
22:D0:51:VAL:HG11	22:D0:94:GLU:OE1	2.20	0.41
1:6:515:A:N6	1:6:537:G:O2'	2.49	0.41
36:1:3073:A:N1	36:1:3074:G:C4	2.88	0.41
36:5:1861:G:H2'	36:5:1862:U:O4'	2.21	0.41
50:M4:98:SER:O	50:M4:102:LYS:HE3	2.20	0.41
1:2:1263:G:C6	1:2:1264:G:C4	3.09	0.41
36:5:258:G:C6	36:5:259:C:N4	2.89	0.41
1:6:59:C:C4	1:6:452:A:C6	3.08	0.41
1:6:1338:C:H2'	1:6:1339:C:C6	2.55	0.41
27:D5:56:THR:H	27:D5:103:ARG:NE	2.17	0.41
36:1:5:G:H2'	36:1:6:A:O4'	2.21	0.41
9:S7:116:ARG:NH2	1:6:856:A:C4	355.49	0.41
1:2:639:U:O2	9:S7:118:LEU:HD23	2.21	0.41
1:2:824:G:H2'	1:2:825:U:H5'	2.03	0.41
1:2:110:U:O3'	1:2:797:G:N2	2.53	0.41
57:N1:48:ILE:HD13	57:N1:48:ILE:HA	1.81	0.41
22:D0:52:LYS:HB3	22:D0:53:LYS:H	4.11	0.41
1:2:712:G:H22	1:2:726:C:H1'	1.85	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2629:U:H2'	36:1:2630:C:H6	1.85	0.41
36:1:1562:C:H2'	36:1:1563:C:C6	2.55	0.41
13:C1:109:VAL:HG21	13:C1:125:VAL:HG11	2.30	0.41
36:1:686:G:C5	36:1:687:U:C6	3.09	0.41
54:M8:94:PHE:CD1	64:N8:119:PRO:HG3	4.12	0.41
1:2:1637:C:C2	35:SM:93:ARG:HG3	2.55	0.41
36:5:3216:G:H5''	36:5:3219:G:C2	2.56	0.41
79:Q3:81:SER:O	79:Q3:84:ARG:HB2	2.21	0.41
36:1:1519:G:H2'	36:1:1520:G:C8	2.50	0.41
36:5:25:U:O4	87:5:3902:OHX:N5	2.54	0.41
36:1:3218:A:C6	69:O3:5:HIS:ND1	2.89	0.41
45:L8:100:GLU:OE2	45:L8:108:ARG:NH1	2.53	0.41
45:L8:105:LYS:CE	45:L8:109:LEU:HD21	2.51	0.41
1:6:1042:G:H1	1:6:1076:A:N6	2.19	0.41
36:1:555:U:H6	36:1:555:U:H2'	1.61	0.41
36:1:1454:A:N6	36:1:1879:A:C4	2.88	0.41
14:C2:105:LYS:H	14:C2:113:ARG:CB	4.10	0.41
65:N9:23:LYS:HD2	65:N9:24:PRO:CG	4.40	0.41
36:5:2422:C:H2'	36:5:2423:U:H6	1.84	0.41
6:S4:240:LYS:H	6:S4:240:LYS:HD3	1.85	0.41
36:5:602:A:N6	36:5:603:A:N6	2.68	0.41
36:1:1471:U:C2	36:1:1472:U:C5	3.09	0.41
69:O3:26:ASN:O	69:O3:84:THR:HG22	2.20	0.41
36:5:2121:G:H3'	36:5:2121:G:C8	2.56	0.41
36:5:521:A:C4	36:5:572:A:C2	3.09	0.41
1:6:1362:U:C6	1:6:1363:U:C5	3.08	0.41
40:L3:50:LYS:HE2	40:L3:331:ASN:HA	2.15	0.41
1:2:1149:G:C4	1:2:1629:G:N2	2.89	0.41
37:3:92:A:H8	37:3:92:A:O5'	2.04	0.41
1:2:1215:C:O5'	1:2:1215:C:H6	2.03	0.41
36:5:1770:G:C2	36:5:1771:C:C6	3.09	0.41
8:S6:33:GLY:O	8:S6:51:LYS:HG3	2.21	0.41
5:S3:212:LYS:HA	5:S3:212:LYS:HD3	3.29	0.41
1:2:350:U:H4'	1:2:351:C:H5''	2.03	0.41
36:5:158:G:N2	36:5:264:G:H1'	2.36	0.41
65:N9:39:PHE:O	65:N9:40:ARG:C	3.28	0.41
1:6:98:U:C2	1:6:99:C:C5	3.09	0.41
36:1:2515:A:C8	36:1:2516:U:C5	3.09	0.41
1:6:114:C:C4	1:6:248:U:C4	3.09	0.41
29:D7:64:CYS:HA	29:D7:72:LYS:O	2.21	0.41
36:5:2124:G:H2'	36:5:2125:A:H8	1.86	0.41
29:D7:51:GLN:O	29:D7:66:PRO:HB3	2.67	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2211:U:H6	36:1:2211:U:O5'	2.04	0.41
36:1:3310:A:N3	36:1:3310:A:H2'	2.34	0.41
36:1:1375:G:O6	64:N8:10:LYS:HE3	2.21	0.41
1:6:567:A:H2	1:6:583:C:O2	2.04	0.41
25:D3:49:ALA:CB	25:D3:76:LEU:HD13	2.50	0.41
76:Q0:96:CYS:C	76:Q0:98:LYS:H	2.30	0.41
20:C8:2:SER:O	20:C8:4:VAL:HG22	6.26	0.41
27:D5:43:ASP:O	27:D5:45:GLU:N	2.54	0.41
1:2:1547:A:H1'	20:C8:87:ASN:O	2.20	0.41
36:5:3195:U:O2	36:5:3195:U:H2'	2.19	0.41
46:L9:80:THR:OG1	46:L9:81:GLY:N	2.96	0.41
46:L9:16:VAL:HA	46:L9:28:VAL:O	2.21	0.41
36:1:1468:A:C2	36:1:1469:C:C2	3.09	0.41
53:M7:22:LEU:HD12	53:M7:146:ILE:HG13	2.44	0.41
53:M7:136:ILE:CG2	53:M7:137:ASN:N	3.77	0.41
53:M7:41:LEU:C	53:M7:41:LEU:HD13	2.49	0.41
11:S9:3:ARG:HD3	1:6:462:G:OP2	367.94	0.41
1:2:466:U:C5	1:2:467:G:C5	3.08	0.41
1:2:381:C:O2'	1:2:755:A:N1	2.45	0.41
28:D6:73:TYR:CE2	28:D6:82:ARG:HG2	2.56	0.41
28:D6:4:LYS:O	28:D6:4:LYS:HE2	2.20	0.41
11:S9:38:ASN:HB2	11:S9:41:GLU:CG	2.50	0.41
11:S9:31:ALA:HB2	11:S9:42:ILE:HD11	2.03	0.41
11:S9:87:SER:CB	11:S9:90:LYS:HD3	7.09	0.41
1:6:546:U:O2'	1:6:595:G:N2	2.52	0.41
32:E0:34:ALA:O	32:E0:37:ARG:HB3	2.27	0.41
47:M0:147:VAL:CG1	47:M0:147:VAL:O	3.13	0.41
47:M0:152:LEU:O	47:M0:155:ALA:HB3	2.20	0.41
36:1:1039:U:H2'	36:1:1040:A:H8	1.85	0.41
47:M0:63:GLU:HG2	47:M0:63:GLU:H	1.42	0.41
65:N9:18:ARG:HB2	65:N9:19:ASN:OD1	5.25	0.41
41:L4:337:GLU:O	41:L4:339:LEU:N	2.53	0.41
44:L7:153:PHE:CD2	44:L7:153:PHE:N	2.89	0.41
45:L8:241:LYS:HA	36:5:2527:G:O2'	192.23	0.41
51:M5:16:SER:O	51:M5:17:ASP:C	2.89	0.41
51:M5:21:PHE:O	51:M5:23:GLN:N	2.54	0.41
6:S4:7:LYS:O	6:S4:30:ARG:HD2	2.20	0.41
10:S8:66:SER:O	10:S8:183:ILE:HG22	5.41	0.41
10:S8:49:ARG:HD3	1:6:333:A:N7	308.76	0.41
10:S8:50:GLY:HA2	1:6:397:A:O3'	314.34	0.41
26:D4:53:ASP:O	26:D4:79:VAL:HG13	5.54	0.41
6:S4:51:ARG:O	6:S4:53:LYS:HG2	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:S8:159:GLN:OE1	10:S8:165:LEU:HA	2.21	0.41
36:5:1382:G:C6	36:5:1383:G:C5	3.09	0.41
54:M8:50:LYS:O	54:M8:51:ALA:C	2.59	0.41
41:L4:177:ASP:O	41:L4:180:LYS:HB3	2.60	0.41
43:L6:134:ARG:O	43:L6:137:ASP:N	2.54	0.41
43:L6:64:LEU:CD1	43:L6:76:LEU:HD23	2.34	0.41
36:1:936:A:H2'	36:1:938:C:N4	2.36	0.41
19:C7:14:LYS:O	19:C7:16:LEU:N	2.53	0.41
5:S3:164:VAL:HG12	5:S3:165:ASN:N	2.36	0.41
73:O7:17:THR:HB	73:O7:18:LEU:H	2.16	0.41
1:2:813:U:C5	55:M9:163:ARG:HD2	2.56	0.41
36:1:563:U:H2'	36:1:564:G:C8	2.56	0.41
18:C6:42:GLU:O	18:C6:43:ILE:C	2.58	0.41
20:C8:28:ILE:O	20:C8:29:VAL:C	2.92	0.41
27:D5:59:TYR:CG	27:D5:60:VAL:N	3.33	0.41
27:D5:76:ALA:O	27:D5:80:LEU:HD12	2.21	0.41
50:M4:77:ARG:HH21	36:5:524:U:H5''	341.40	0.41
1:2:1543:A:C5	1:2:1569:A:C8	3.08	0.41
1:6:1469:A:OP2	87:6:2179:OHX:N1	2.53	0.41
7:S5:146:THR:HA	7:S5:158:GLN:O	2.21	0.41
36:5:3328:G:C2	36:5:3379:C:C2	3.09	0.41
67:O1:59:ILE:O	67:O1:61:LYS:N	4.45	0.41
61:N5:107:VAL:HG13	61:N5:124:VAL:HG13	2.82	0.41
36:1:3375:A:C2	36:1:3378:C:H5''	2.56	0.41
67:O1:16:LEU:HD12	67:O1:16:LEU:HA	1.60	0.41
42:L5:148:ILE:HA	42:L5:148:ILE:HD13	4.34	0.41
42:L5:50:ARG:HG2	42:L5:147:ASP:HB2	3.98	0.41
1:6:1198:G:O2'	1:6:1199:G:OP2	2.37	0.41
1:6:1506:G:H2'	1:6:1507:G:H5'	2.03	0.41
21:C9:66:TYR:HA	21:C9:124:ILE:HG21	2.03	0.41
33:E1:121:CYS:N	33:E1:132:LEU:HD21	3.27	0.41
1:6:1499:G:H2'	1:6:1500:C:O4'	2.21	0.41
12:C0:15:LEU:HD13	12:C0:21:VAL:HG23	2.01	0.41
17:C5:41:VAL:O	17:C5:44:ARG:N	2.52	0.41
21:C9:79:LEU:HD23	21:C9:80:TYR:CZ	2.56	0.41
31:D9:19:ARG:NE	31:D9:32:ARG:NH1	2.69	0.41
31:D9:39:CYS:O	31:D9:40:ARG:C	3.04	0.41
48:M1:108:GLU:HA	48:M1:122:ILE:CG2	3.07	0.41
15:C3:3:ARG:HB2	15:C3:8:GLY:O	2.21	0.41
29:D7:49:HIS:ND1	29:D7:49:HIS:N	4.59	0.41
1:2:959:U:H5'	15:C3:15:ALA:O	2.21	0.41
1:2:1775:U:OP2	77:Q1:7:LYS:HE2	2.21	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1774:G:H5''	1:6:1775:U:OP2	2.20	0.41
1:2:915:A:C5	1:2:916:U:C4	3.09	0.41
1:6:901:G:C2	1:6:902:G:C6	3.09	0.41
3:S1:61:LEU:HG	3:S1:64:ARG:HH21	1.86	0.41
3:S1:70:LEU:O	3:S1:74:GLN:N	2.54	0.41
38:4:16:G:N7	87:4:224:OHX:N3	2.69	0.41
16:C4:81:VAL:O	16:C4:115:ILE:HB	2.21	0.41
16:C4:16:VAL:HB	16:C4:18:ARG:HE	1.86	0.41
3:S1:35:PRO:HB2	3:S1:36:SER:H	1.63	0.41
2:S0:50:VAL:HA	2:S0:53:THR:OG1	2.20	0.41
1:6:1142:A:C6	1:6:1143:A:C6	3.09	0.41
4:S2:134:LEU:C	4:S2:136:VAL:H	2.23	0.41
4:S2:226:THR:O	4:S2:227:PRO:C	2.80	0.41
36:5:2990:G:C6	36:5:2991:A:N7	2.89	0.41
54:M8:110:ALA:O	54:M8:114:ILE:HB	3.15	0.41
55:M9:124:TYR:HE2	36:5:1720:U:C4	234.49	0.41
36:1:1636:U:H4'	63:N7:74:VAL:O	2.21	0.41
66:O0:44:ILE:HA	66:O0:89:VAL:HA	2.77	0.41
68:O2:81:ASP:O	68:O2:83:GLU:N	2.71	0.41
36:5:1949:G:O5'	36:5:1949:G:H8	2.03	0.41
36:5:2555:G:C6	36:5:2556:C:N3	2.89	0.41
63:N7:88:ASP:CG	63:N7:89:VAL:N	3.27	0.41
68:O2:81:ASP:O	68:O2:82:LEU:C	2.64	0.41
38:4:83:C:H1'	38:4:85:G:H21	1.85	0.41
36:1:1764:U:H3'	36:1:1765:U:C5'	2.45	0.41
36:5:1875:G:C2	36:5:1876:U:C2	3.09	0.41
55:M9:3:ASN:C	55:M9:4:LEU:HD23	2.48	0.41
55:M9:43:LYS:O	55:M9:46:LYS:N	2.53	0.41
1:2:1525:A:OP1	21:C9:82:GLY:HA2	2.21	0.41
14:C2:40:GLY:HA2	14:C2:124:LYS:HB2	3.70	0.41
1:6:1178:G:H5''	1:6:1179:G:OP2	2.20	0.41
1:6:1185:U:H5'	1:6:1185:U:O2	2.21	0.41
1:6:1649:G:N2	1:6:1650:U:C2	2.89	0.41
6:S4:88:ASP:O	6:S4:100:ARG:HA	2.21	0.41
36:5:533:A:N1	36:5:560:G:N2	2.69	0.41
50:M4:85:TRP:CD2	50:M4:90:VAL:HG21	3.89	0.41
56:N0:144:LEU:O	56:N0:145:THR:C	3.20	0.41
56:N0:27:MET:HE3	56:N0:27:MET:HB3	2.23	0.41
60:N4:49:ILE:HD12	60:N4:49:ILE:HG23	2.38	0.41
60:N4:56:ARG:O	60:N4:57:LYS:C	3.54	0.41
36:5:1256:G:H2'	36:5:1257:C:C6	2.56	0.41
36:5:3093:C:O2'	36:5:3094:A:H5'	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:3261:C:OP1	50:M4:126:GLN:NE2	2.36	0.41
69:O3:85:PHE:O	87:O3:202:OHX:N1	2.54	0.41
42:L5:269:SER:CB	37:7:1:G:H21	319.07	0.41
8:S6:160:ARG:CZ	1:6:68:A:C5	339.74	0.41
18:C6:100:GLN:C	18:C6:102:LYS:H	3.47	0.41
34:SR:131:ILE:HG23	34:SR:154:VAL:HG11	2.03	0.41
1:2:66:U:O2'	1:2:67:A:H5'	2.21	0.41
1:6:66:U:H2'	1:6:66:U:H6	1.72	0.41
8:S6:136:LYS:O	8:S6:175:ILE:HA	2.39	0.41
34:SR:204:ALA:HA	34:SR:210:LEU:O	2.20	0.41
34:SR:23:LEU:HD12	34:SR:292:LEU:HA	2.03	0.41
34:SR:85:TRP:HD1	34:SR:85:TRP:N	2.17	0.41
35:SM:29:ASN:OD1	35:SM:29:ASN:C	2.59	0.41
36:1:53:G:C2	36:1:54:C:C6	3.09	0.41
36:5:348:A:O2'	36:5:367:A:N6	2.51	0.41
39:L2:79:ASN:O	39:L2:80:GLU:HB3	4.58	0.41
39:L2:135:ILE:O	39:L2:148:VAL:HG12	2.21	0.41
26:D4:122:GLY:O	26:D4:126:ALA:N	2.54	0.41
50:M4:106:ARG:HD3	36:5:3209:A:N7	293.92	0.41
50:M4:108:ARG:O	50:M4:109:ARG:C	2.87	0.41
3:S1:207:LEU:HB3	3:S1:210:ILE:HD11	2.03	0.41
36:1:211:A:H2	36:1:228:U:O4	2.04	0.41
4:S2:88:LYS:O	4:S2:94:GLN:HG2	3.06	0.41
40:L3:166:ILE:CG1	40:L3:171:LEU:HD12	4.47	0.41
49:M3:174:ARG:HH12	72:O6:9:ILE:HD13	1.85	0.41
52:M6:25:LYS:O	52:M6:26:GLN:C	2.58	0.41
36:5:3163:A:C6	36:5:3288:G:C6	3.09	0.41
1:6:1148:C:O2	1:6:1765:A:H2	2.03	0.41
8:S6:58:LYS:O	1:6:155:U:H5''	300.76	0.41
36:5:3159:C:O2'	36:5:3160:U:H5'	2.21	0.41
1:6:1764:C:N4	1:6:1767:G:N3	2.69	0.41
8:S6:57:ASP:CA	8:S6:106:LEU:HD23	2.51	0.41
36:5:2211:U:H5	36:5:2234:G:N1	2.19	0.41
36:5:3174:A:H2'	36:5:3175:U:H5'	2.03	0.41
36:5:1807:G:C6	36:5:1808:G:N1	2.88	0.41
49:M3:42:ARG:O	49:M3:45:LYS:N	2.89	0.41
51:M5:62:TYR:O	51:M5:131:GLU:HA	2.21	0.41
51:M5:150:TRP:C	51:M5:152:CYS:H	2.24	0.41
1:6:1101:G:C2'	1:6:1102:G:H5'	2.51	0.41
36:5:3017:A:C2'	36:5:3018:C:H5'	2.50	0.41
26:D4:62:THR:HG23	1:6:531:C:O2	420.91	0.41
39:L2:40:TYR:HA	39:L2:90:ALA:O	2.23	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1697:A:N6	36:1:1748:G:O2'	2.54	0.41
1:6:1092:A:C5	1:6:1094:G:C8	3.08	0.41
71:O5:85:THR:O	71:O5:89:ARG:HB2	2.21	0.41
1:6:681:U:H1'	1:6:682:C:C5	2.55	0.41
1:2:774:A:C6	1:2:787:G:C2	3.09	0.41
1:6:1268:G:C2	1:6:1270:G:C5	3.09	0.41
1:2:561:G:C6	1:2:585:A:N1	2.89	0.41
36:5:2203:U:H2'	36:5:2204:C:H6	1.84	0.41
76:Q0:78:ILE:HG13	76:Q0:83:LYS:HD2	2.03	0.41
36:5:124:U:H4'	36:5:150:A:O2'	2.21	0.41
1:2:591:A:N1	1:2:592:A:C6	2.88	0.41
48:M1:41:SER:C	48:M1:43:GLN:N	2.94	0.41
48:M1:41:SER:O	48:M1:43:GLN:N	2.66	0.41
48:M1:40:LEU:HD11	48:M1:79:ILE:HD13	4.27	0.41
36:5:247:C:H3'	36:5:248:U:H6	1.86	0.41
36:5:3317:U:O4'	36:5:3317:U:O2	2.38	0.41
1:2:730:G:H21	1:2:731:C:C5'	2.34	0.41
48:M1:52:TYR:HB2	48:M1:53:THR:H	1.47	0.41
36:5:2143:A:H3'	36:5:2143:A:C8	2.56	0.41
9:S7:107:ARG:NH1	1:6:743:U:OP2	342.43	0.41
70:O4:51:LEU:HA	70:O4:51:LEU:HD23	3.80	0.41
42:L5:56:THR:C	42:L5:58:LYS:N	2.74	0.41
36:1:2309:A:H4'	87:1:4137:OHX:N4	2.36	0.41
64:N8:133:LEU:HD11	64:N8:137:LYS:CE	3.01	0.41
64:N8:99:ALA:HB1	64:N8:122:PRO:O	3.31	0.41
1:6:846:G:C4	1:6:847:A:C8	3.08	0.41
68:O2:33:ARG:NH2	36:5:1408:G:P	160.56	0.41
2:S0:29:VAL:CG2	2:S0:150:ASP:HB3	2.51	0.41
36:5:1104:G:N2	36:5:1105:A:C4	2.88	0.41
36:5:1108:U:C2	36:5:1109:U:C5	3.08	0.41
38:8:13:A:C5	38:8:14:C:C5	3.09	0.41
9:S7:24:PHE:O	9:S7:28:GLU:N	2.47	0.41
1:6:1520:U:O2	87:6:2083:OHX:N4	2.54	0.41
1:2:802:G:C6	1:2:803:A:N1	2.89	0.41
36:5:2816:G:C8	36:5:2869:U:H3'	2.56	0.41
62:N6:60:ARG:NH1	62:N6:60:ARG:CG	2.84	0.41
76:Q0:93:LYS:HB3	76:Q0:103:LEU:O	2.21	0.41
36:5:2785:A:C4	36:5:2786:G:C8	3.09	0.41
36:5:839:C:H2'	36:5:840:C:H6	1.86	0.41
36:1:1746:U:H2'	36:1:1747:G:C8	2.56	0.41
36:1:1754:G:OP1	87:1:4153:OHX:N1	2.54	0.41
40:L3:339:ARG:HH12	40:L3:342:LEU:HD11	2.19	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:514:G:C4	1:6:515:A:C8	3.08	0.41
36:5:1946:A:C6	36:5:1947:G:C5	3.08	0.41
36:5:3189:G:H2'	36:5:3190:C:C6	2.53	0.41
34:SR:123:ILE:HG22	34:SR:133:VAL:HG13	2.02	0.41
51:M5:194:GLN:H	51:M5:194:GLN:HG2	1.69	0.41
42:L5:184:ASP:CG	42:L5:187:THR:HG22	2.41	0.41
43:L6:23:LYS:HE3	36:5:503:C:O2	240.78	0.41
37:7:103:A:H8	37:7:103:A:O5'	2.04	0.41
36:5:2943:G:N7	36:5:2944:U:C5	2.89	0.41
36:5:1192:C:C5	87:5:4086:OHX:N6	2.79	0.41
36:5:2546:C:H2'	36:5:2547:A:C8	2.55	0.41
65:N9:54:LEU:HD23	65:N9:54:LEU:HA	1.90	0.41
36:1:1522:U:C5	61:N5:116:PRO:HG3	2.55	0.41
13:C1:57:LYS:HG2	13:C1:131:ILE:HD12	2.02	0.41
58:N2:39:ASP:OD2	58:N2:39:ASP:N	2.54	0.41
58:N2:36:TYR:CZ	58:N2:40:HIS:CD2	3.09	0.41
25:D3:38:PHE:N	25:D3:38:PHE:CD2	3.42	0.41
36:1:383:G:C6	36:1:387:A:N6	2.89	0.41
38:4:12:A:H2'	38:4:13:A:O5'	2.21	0.41
36:1:3170:A:C5	36:1:3171:U:C5	3.09	0.41
22:D0:109:GLU:HG3	22:D0:110:PRO:CD	2.63	0.41
71:O5:15:GLU:HA	71:O5:18:ALA:HB2	4.59	0.41
14:C2:31:VAL:HG23	14:C2:132:GLU:HG2	2.03	0.41
1:2:109:G:H1	1:2:305:C:H42	1.69	0.41
53:M7:10:ASN:OD1	53:M7:12:ALA:HB3	2.20	0.41
36:5:2398:A:C2	36:5:2399:A:C4	3.09	0.41
29:D7:24:LEU:HA	29:D7:24:LEU:HD12	1.78	0.41
55:M9:109:TYR:HD1	55:M9:109:TYR:N	2.18	0.41
55:M9:123:LEU:HA	55:M9:126:GLU:HB2	2.38	0.41
55:M9:143:ILE:CG1	36:5:2093:A:H5''	248.37	0.41
36:5:638:C:H2'	36:5:639:G:H8	1.85	0.41
36:1:1245:A:N6	36:1:1272:C:H4'	2.36	0.41
39:L2:20:THR:OG1	39:L2:23:ARG:HD3	2.21	0.41
36:5:2441:A:N6	36:5:2507:C:C4	2.89	0.41
45:L8:91:PHE:CZ	45:L8:185:ARG:HD3	4.33	0.41
36:1:1347:U:O4'	41:L4:305:ALA:HA	2.21	0.41
1:2:753:A:H2'	1:2:754:A:O4'	2.21	0.41
47:M0:129:VAL:HG13	47:M0:133:GLN:HG2	2.03	0.41
36:1:701:G:C5	36:1:702:C:C4	3.09	0.41
57:N1:17:ARG:HD2	36:5:2700:G:H5''	264.34	0.41
4:S2:139:ILE:HG13	4:S2:218:ILE:HB	3.32	0.41
38:8:85:G:C8	38:8:85:G:H3'	2.55	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
68:O2:92:TYR:CD2	68:O2:92:TYR:N	2.89	0.41
36:1:3057:U:C5	36:1:3059:G:H1'	2.56	0.41
17:C5:116:LEU:HD23	17:C5:116:LEU:HA	1.93	0.41
62:N6:69:LYS:HB2	62:N6:69:LYS:HE3	4.49	0.41
36:5:1252:A:H5'	36:5:1253:U:OP2	2.21	0.41
36:1:2105:G:C2'	36:1:2106:A:H5'	2.51	0.41
1:2:123:G:OP1	6:S4:75:LYS:HD2	2.21	0.41
36:1:3102:G:C2	36:1:3103:A:C4	3.09	0.41
1:2:603:U:H2'	1:2:604:A:C8	2.50	0.41
41:L4:264:SER:C	41:L4:266:THR:N	2.73	0.41
3:S1:32:ILE:HG13	3:S1:44:GLY:O	4.70	0.41
73:O7:28:HIS:CD2	73:O7:31:LYS:HD3	5.36	0.41
36:5:589:A:H3'	36:5:589:A:OP2	2.20	0.41
36:1:873:C:O3'	36:1:875:G:H5'	2.19	0.41
36:5:2756:C:H2'	36:5:2757:U:O4'	2.21	0.41
36:5:2630:C:O4'	36:5:2758:A:H1'	2.21	0.41
36:1:201:A:H2'	36:1:202:G:C8	2.55	0.41
20:C8:84:TRP:CZ2	21:C9:36:ILE:HD11	5.13	0.41
36:5:3360:C:H2'	36:5:3361:G:H5'	2.03	0.41
1:6:628:G:C5	1:6:969:C:C5	3.09	0.41
36:1:1069:C:C2	36:1:1070:U:C5	3.09	0.41
36:1:2266:U:H2'	36:1:2267:C:C6	2.56	0.41
87:1:4139:OHX:N1	87:1:4184:OHX:N2	2.69	0.41
37:3:76:A:O4'	37:3:78:U:C6	2.74	0.41
3:S1:219:LYS:NZ	79:Q3:92:ALA:H	12.38	0.41
36:1:669:U:H2'	36:1:670:C:O4'	2.21	0.41
21:C9:68:ARG:NH1	1:6:1521:G:O6	415.34	0.41
21:C9:64:HIS:CE1	1:6:1523:G:N7	410.14	0.41
56:N0:34:GLU:HG2	56:N0:34:GLU:H	1.57	0.41
36:5:2947:G:H2'	36:5:2948:C:H6	1.86	0.41
36:5:384:A:H3'	36:5:385:A:H8	1.86	0.41
36:5:384:A:C4	36:5:385:A:C8	3.08	0.41
36:5:2609:A:C2	36:5:2610:G:C8	3.08	0.41
45:L8:209:ALA:C	45:L8:211:LEU:H	2.42	0.41
51:M5:178:HIS:O	51:M5:181:ASN:ND2	4.15	0.41
36:1:1839:A:N1	36:1:1843:C:C6	2.89	0.41
38:4:27:U:O2'	38:4:28:C:H5'	2.21	0.41
46:L9:58:HIS:HB2	36:5:3186:A:C6	322.43	0.41
44:L7:118:LYS:HB2	44:L7:195:PHE:CD1	2.98	0.41
36:1:277:G:OP1	87:1:3877:OHX:N3	2.54	0.41
36:5:278:U:H2'	36:5:279:U:H6	1.85	0.41
36:5:2623:G:C5	36:5:2624:G:N7	2.89	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:M4:131:VAL:C	50:M4:133:LYS:H	2.23	0.41
7:S5:20:PHE:O	7:S5:21:THR:OG1	2.35	0.41
1:2:287:G:C4	1:2:288:A:C8	3.09	0.41
36:5:1569:U:H5'	36:5:1570:U:C6	2.54	0.41
1:2:1601:G:OP1	21:C9:86:ARG:NH2	2.54	0.41
36:1:2645:G:C6	36:1:2646:C:C4	3.09	0.41
68:O2:3:SER:O	68:O2:4:LEU:C	2.59	0.41
36:5:110:G:C2	36:5:111:C:H1'	2.55	0.41
36:1:1056:U:H2'	36:1:1057:A:H5'	2.01	0.41
1:6:1176:G:C6	1:6:1464:G:C6	3.09	0.41
36:1:1018:G:H2'	36:1:1019:G:C8	2.55	0.41
37:7:19:C:H6	37:7:19:C:H5''	1.86	0.41
36:1:2865:U:OP1	47:M0:115:MET:HB2	2.21	0.41
78:Q2:99:GLN:HG2	78:Q2:102:GLN:HG2	2.03	0.41
36:5:1867:A:C2	36:5:1868:G:C4	3.09	0.41
1:2:688:G:N1	1:2:689:G:C5	2.89	0.41
29:D7:75:GLU:HB3	29:D7:76:GLY:H	1.66	0.41
36:5:1683:A:H5'	36:5:1683:A:H8	1.86	0.41
1:6:723:G:H5'	1:6:724:C:OP2	2.21	0.41
16:C4:78:ALA:CB	16:C4:111:ARG:HB2	2.68	0.41
60:N4:78:ALA:HB1	60:N4:79:GLN:H	3.48	0.41
34:SR:201:THR:HG21	34:SR:242:SER:CA	2.93	0.41
36:5:527:A:C4	36:5:566:G:N2	2.89	0.41
72:O6:18:THR:O	72:O6:18:THR:OG1	3.69	0.41
40:L3:337:THR:O	40:L3:337:THR:HG22	2.19	0.41
8:S6:210:GLN:H	8:S6:210:GLN:HG3	2.88	0.41
36:5:708:G:H8	36:5:708:G:C5'	2.34	0.41
76:Q0:85:LEU:HA	76:Q0:85:LEU:HD23	2.19	0.41
79:Q3:6:LYS:HB3	79:Q3:6:LYS:HE2	1.36	0.41
1:6:394:C:H2'	1:6:395:U:O4'	2.21	0.41
36:1:3255:U:H2'	36:1:3256:G:C8	2.55	0.41
25:D3:66:SER:O	25:D3:67:ALA:HB2	2.24	0.41
42:L5:92:LEU:HD23	42:L5:92:LEU:HA	3.99	0.41
32:E0:26:LYS:H	32:E0:26:LYS:HE3	1.86	0.41
36:5:1673:G:C4	36:5:1775:G:C2	3.09	0.41
38:8:48:A:C2	38:8:51:G:N1	2.89	0.41
2:S0:155:PHE:CZ	23:D1:61:SER:HB3	2.56	0.41
13:C1:76:VAL:HG13	13:C1:85:VAL:O	2.20	0.41
25:D3:91:GLY:C	25:D3:93:LEU:H	2.24	0.41
20:C8:4:VAL:HG11	27:D5:47:TYR:CD2	2.56	0.41
36:5:1888:U:C5	36:5:1889:G:C8	3.09	0.41
26:D4:103:ALA:O	26:D4:104:SER:O	2.39	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1006:C:OP1	87:6:2057:OHX:N4	2.54	0.41
1:2:1796:C:OP1	28:D6:87:ARG:HD3	2.21	0.41
1:6:766:U:C4	1:6:769:A:N7	2.89	0.41
47:M0:153:ARG:NH1	47:M0:153:ARG:HG2	2.36	0.41
44:L7:140:SER:O	44:L7:144:ILE:HG13	2.25	0.41
44:L7:153:PHE:HD2	44:L7:153:PHE:N	2.18	0.41
51:M5:18:VAL:O	51:M5:21:PHE:HB3	2.21	0.41
10:S8:48:THR:OG1	10:S8:52:ASN:HB2	2.21	0.41
36:1:739:G:C2	36:1:740:G:N7	2.89	0.41
41:L4:119:ARG:HA	41:L4:122:THR:OG1	2.21	0.41
41:L4:135:VAL:HG12	41:L4:140:HIS:HB2	3.25	0.41
41:L4:186:LYS:HD3	36:5:1388:U:O4	118.47	0.41
43:L6:97:ASN:O	43:L6:99:GLU:N	2.52	0.41
1:6:1403:C:H2'	1:6:1404:C:C6	2.56	0.41
52:M6:15:LEU:O	52:M6:16:VAL:C	2.57	0.41
36:1:561:C:H2'	36:1:562:C:H6	1.80	0.41
20:C8:61:LEU:HD22	20:C8:66:LEU:HD23	6.06	0.41
7:S5:121:ILE:O	7:S5:125:THR:OG1	4.31	0.41
7:S5:25:LEU:HB2	18:C6:27:GLY:O	2.48	0.41
7:S5:35:GLN:HG3	7:S5:39:GLU:HB2	5.55	0.41
7:S5:94:THR:OG1	7:S5:95:ASN:N	2.54	0.41
67:O1:12:TYR:HD2	67:O1:75:ILE:HG13	1.85	0.41
67:O1:33:VAL:C	67:O1:35:GLU:N	3.02	0.41
1:2:1671:A:C4	1:2:1731:A:C2	3.09	0.41
1:6:1554:U:C5	1:6:1555:A:N7	2.88	0.41
17:C5:18:ARG:NH2	17:C5:38:PRO:HG3	2.93	0.41
17:C5:39:ALA:HB2	1:6:1549:C:C5	384.42	0.41
17:C5:84:ILE:N	17:C5:84:ILE:HD12	3.99	0.41
21:C9:5:SER:OG	21:C9:7:ARG:N	3.32	0.41
21:C9:61:VAL:O	21:C9:62:ALA:C	2.71	0.41
5:S3:66:ILE:O	5:S3:70:THR:N	2.75	0.41
15:C3:55:ARG:HD3	29:D7:47:PHE:CD1	2.55	0.41
36:1:156:G:H8	36:1:156:G:O5'	2.03	0.41
1:2:1774:G:H2'	1:2:1775:U:O4'	2.21	0.41
1:2:896:U:C1'	16:C4:38:THR:HG21	2.51	0.41
16:C4:49:LYS:HG3	16:C4:49:LYS:HZ3	3.70	0.41
3:S1:232:HIS:HB3	3:S1:233:GLY:H	2.37	0.41
36:1:407:A:C2'	36:1:408:A:H5'	2.51	0.41
23:D1:40:ASP:OD1	23:D1:44:ARG:HD3	2.21	0.41
2:S0:12:GLU:HG2	2:S0:13:ASP:N	2.36	0.41
2:S0:96:THR:HA	2:S0:97:PRO:HD3	2.04	0.41
54:M8:81:VAL:HG13	54:M8:101:VAL:HA	2.03	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:1719:G:H4'	36:1:1732:U:O2'	2.20	0.41
36:1:1722:U:H2'	36:1:1723:A:H5'	2.03	0.41
63:N7:73:LYS:NZ	36:5:1637:A:OP2	209.25	0.41
55:M9:134:HIS:HB2	55:M9:135:LYS:H	1.65	0.41
66:O0:52:ARG:HB2	66:O0:52:ARG:HE	2.71	0.41
63:N7:17:ARG:HG2	70:O4:73:SER:HB2	3.16	0.41
43:L6:10:TYR:HB3	68:O2:88:HIS:CE1	2.55	0.41
1:6:1074:G:H8	1:6:1074:G:H5'	1.86	0.41
36:1:1764:U:H2'	36:1:1765:U:H4'	2.02	0.41
14:C2:60:VAL:HG23	14:C2:87:PRO:HG2	2.03	0.41
14:C2:97:LEU:HA	14:C2:97:LEU:HD23	1.88	0.41
36:1:3017:A:C6	36:1:3018:C:C4	3.09	0.41
6:S4:143:ASP:OD1	6:S4:145:ARG:NE	2.52	0.41
6:S4:156:VAL:O	6:S4:157:ASN:HB2	2.50	0.41
6:S4:222:LEU:HD23	6:S4:222:LEU:O	2.21	0.41
56:N0:117:ARG:NH1	37:7:88:G:H4'	283.54	0.41
56:N0:142:GLN:O	56:N0:145:THR:HG23	2.21	0.41
8:S6:169:TYR:CG	1:6:72:A:N6	362.49	0.41
57:N1:139:ARG:HH21	57:N1:139:ARG:CG	3.91	0.41
59:N3:83:LYS:HE2	59:N3:84:SER:OG	2.21	0.41
36:1:3261:C:C2'	36:1:3262:U:H5'	2.51	0.41
43:L6:158:TYR:CE1	50:M4:115:PHE:HA	2.83	0.41
69:O3:89:LEU:HA	69:O3:89:LEU:HD23	1.63	0.41
9:S7:162:ILE:CA	9:S7:165:LYS:HB2	2.51	0.41
18:C6:120:ASP:C	18:C6:122:ARG:N	3.69	0.41
7:S5:73:THR:HG22	7:S5:74:ALA:N	2.83	0.41
34:SR:236:ALA:O	34:SR:237:GLN:HB2	2.24	0.41
1:2:985:G:C2	1:2:986:G:H1'	2.56	0.41
39:L2:134:VAL:CG2	39:L2:148:VAL:HB	3.42	0.41
39:L2:155:LYS:HZ1	39:L2:253:GLN:C	2.24	0.41
39:L2:114:SER:HB2	39:L2:169:ILE:CD1	2.67	0.41
39:L2:83:HIS:O	39:L2:84:THR:C	2.90	0.41
39:L2:46:LYS:O	39:L2:84:THR:HG22	4.82	0.41
50:M4:109:ARG:HG2	52:M6:198:GLY:HA3	2.70	0.41
52:M6:189:ASP:OD1	52:M6:189:ASP:N	3.04	0.41
41:L4:158:SER:HA	41:L4:213:ASN:HB2	2.03	0.41
1:6:1637:C:OP2	87:6:2119:OHX:N4	2.54	0.41
1:6:1764:C:N4	1:6:1767:G:C2	2.89	0.41
8:S6:2:LYS:HB2	8:S6:2:LYS:HE3	1.81	0.41
36:5:28:C:C2'	36:5:29:C:O5'	2.68	0.41
49:M3:149:GLN:HA	49:M3:150:PRO:HD3	1.86	0.41
40:L3:97:ARG:NH1	36:5:3244:A:C2	246.16	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:L9:96:HIS:CD2	36:5:3024:A:H5''	339.74	0.41
36:1:896:A:C2	39:L2:196:TRP:CH2	3.09	0.41
49:M3:2:ALA:CB	64:N8:33:GLY:H	2.24	0.41
25:D3:31:LYS:HA	25:D3:31:LYS:HD3	2.20	0.41
35:SM:39:PRO:HD3	48:M1:52:TYR:CZ	3.54	0.41
36:5:1712:G:C2	36:5:1713:G:N2	2.89	0.41
70:O4:41:ARG:NH2	70:O4:51:LEU:O	3.94	0.41
36:1:2274:U:C2'	36:1:2275:A:H5'	2.51	0.41
56:N0:103:VAL:HG12	56:N0:107:TYR:HD2	2.88	0.41
64:N8:95:SER:HB2	64:N8:96:LYS:O	2.21	0.41
41:L4:295:ILE:CG2	41:L4:299:ILE:HD11	2.51	0.41
62:N6:100:HIS:HA	62:N6:101:PRO:HD2	1.55	0.41
36:5:1594:A:H1'	36:5:1615:C:H1'	2.03	0.41
10:S8:70:GLU:O	10:S8:72:ILE:HG23	2.33	0.41
36:1:1217:A:C2	36:1:1289:G:C4	3.09	0.41
36:1:1216:C:H5'	36:1:1217:A:P	2.60	0.41
36:5:1879:A:H2'	36:5:1879:A:N3	2.36	0.41
38:4:142:C:O2'	38:4:143:U:H5'	2.21	0.41
36:1:831:G:N7	87:1:3889:OHX:N1	2.68	0.41
36:5:3187:A:C2	36:5:3188:G:C1'	3.03	0.41
34:SR:123:ILE:HA	34:SR:132:LYS:O	2.20	0.41
42:L5:178:ASN:HB2	42:L5:183:TRP:NE1	2.36	0.41
36:1:1536:G:C6	36:1:1537:A:C5	3.09	0.41
52:M6:93:ALA:HB3	36:5:632:G:OP1	219.98	0.41
13:C1:80:MET:HE2	13:C1:83:THR:OG1	3.18	0.41
56:N0:169:SER:HA	36:5:3185:U:O2	302.50	0.41
58:N2:57:THR:O	58:N2:63:VAL:HG13	2.21	0.41
36:1:660:A:OP1	41:L4:92:ASN:ND2	2.54	0.41
36:5:1348:U:H5	36:5:1355:A:N7	2.19	0.41
36:5:1348:U:OP1	36:5:1349:G:H8	2.04	0.41
1:2:1160:A:C2	1:2:1161:C:C2	3.09	0.41
1:2:930:A:N3	3:S1:114:VAL:HG11	2.36	0.41
36:5:1943:C:OP1	36:5:3346:U:H1'	2.20	0.41
36:1:162:G:C2	36:1:163:C:C2	3.09	0.41
8:S6:3:LEU:HD23	8:S6:109:LEU:HB3	2.09	0.41
1:2:1008:G:H2'	1:2:1009:U:O4'	2.20	0.41
6:S4:79:ASP:HB3	6:S4:82:TYR:HB2	2.03	0.41
5:S3:140:GLY:O	5:S3:147:ALA:HB1	2.83	0.41
36:5:2782:U:H6	36:5:2782:U:H5''	1.85	0.41
36:5:306:A:H5''	36:5:307:A:OP2	2.21	0.41
1:2:1393:C:O2'	1:2:1394:G:H5'	2.21	0.41
36:5:909:G:N2	36:5:910:G:H1'	2.36	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:1:2995:A:O4'	38:4:1:A:N6	2.54	0.41
10:S8:90:LEU:HG	10:S8:90:LEU:H	1.55	0.41
1:2:1149:G:H1	1:2:1628:U:H3	1.69	0.41
36:1:1718:G:C2	36:1:1727:G:N1	2.89	0.41
1:2:1720:G:H8	1:2:1720:G:O5'	2.04	0.41
52:M6:155:LYS:HE2	52:M6:155:LYS:HB2	1.79	0.41
36:1:2332:A:H2'	36:1:2333:C:C5'	2.51	0.41
44:L7:163:LEU:HA	44:L7:163:LEU:HD22	1.77	0.41
52:M6:177:LYS:HB2	52:M6:177:LYS:HE3	1.90	0.41
36:5:959:C:H5'	36:5:960:U:O5'	2.21	0.41
36:1:2139:A:H62	73:O7:4:GLY:HA3	1.85	0.41
1:2:551:G:H1	1:2:573:C:H42	1.68	0.41
36:5:2925:C:C5	36:5:2926:A:C8	3.08	0.41
1:2:806:A:H2'	1:2:807:A:O4'	2.20	0.41
42:L5:125:VAL:HG12	42:L5:125:VAL:O	2.54	0.41
36:1:2872:A:H2'	36:1:2872:A:N3	2.36	0.41
46:L9:107:ASP:OD2	46:L9:107:ASP:N	2.53	0.41
9:S7:126:LEU:HD12	9:S7:126:LEU:HA	3.03	0.41
36:5:3370:A:N6	36:5:3371:G:N1	2.68	0.41
36:5:3087:A:H2'	36:5:3088:G:O4'	2.20	0.41
36:1:3244:A:N6	52:M6:105:PHE:CE1	2.89	0.41
1:6:1684:U:C2	1:6:1718:G:N1	2.89	0.41
47:M0:27:PRO:HB2	47:M0:28:ASP:H	1.56	0.41
36:1:2264:U:H6	36:1:2264:U:O5'	2.03	0.40
36:1:639:G:C2'	36:1:640:U:H5'	2.51	0.40
52:M6:68:ARG:NH1	36:5:2988:C:P	217.21	0.40
53:M7:53:ASP:O	53:M7:54:HIS:C	2.60	0.40
1:2:462:G:OP1	11:S9:3:ARG:HG2	2.21	0.40
1:2:463:U:C2	1:2:464:A:C8	3.09	0.40
1:6:512:A:H2'	1:6:513:U:C6	2.55	0.40
11:S9:83:VAL:HA	11:S9:149:ARG:HA	2.46	0.40
47:M0:70:ILE:O	47:M0:71:CYS:C	2.59	0.40
64:N8:23:GLY:C	64:N8:24:LYS:HG3	2.96	0.40
87:6:2130:OHX:N2	87:6:2155:OHX:N1	2.69	0.40
13:C1:53:TYR:HE1	13:C1:55:ASP:HB3	1.86	0.40
36:1:739:G:C2	36:1:740:G:C8	3.09	0.40
43:L6:96:VAL:HG22	43:L6:144:ALA:HB3	3.16	0.40
19:C7:24:LEU:HA	19:C7:24:LEU:HD23	1.82	0.40
55:M9:156:ASN:O	55:M9:159:ALA:HB3	2.22	0.40
18:C6:105:LEU:HA	18:C6:105:LEU:HD12	1.90	0.40
20:C8:69:ILE:O	20:C8:73:MET:HG3	2.21	0.40
7:S5:120:ILE:HG23	27:D5:59:TYR:CE1	2.56	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S5:41:LYS:HB3	7:S5:41:LYS:HZ3	3.96	0.40
46:L9:162:GLN:HG3	46:L9:163:GLN:N	2.36	0.40
42:L5:122:VAL:C	42:L5:124:GLU:N	3.28	0.40
12:C0:38:LYS:HB2	12:C0:41:TYR:CG	2.55	0.40
17:C5:15:HIS:O	17:C5:22:LEU:HB3	4.58	0.40
31:D9:30:LEU:HA	31:D9:39:CYS:HA	2.03	0.40
48:M1:106:ILE:HD13	48:M1:106:ILE:N	3.89	0.40
15:C3:117:LEU:O	15:C3:120:SER:N	2.53	0.40
1:2:977:A:C6	1:2:1025:A:C8	3.09	0.40
1:6:1762:A:C2'	1:6:1763:A:H5'	2.51	0.40
3:S1:34:ALA:O	3:S1:41:ARG:NE	2.55	0.40
4:S2:216:VAL:O	4:S2:219:GLY:N	3.19	0.40
4:S2:67:GLN:O	4:S2:68:ILE:C	2.59	0.40
48:M1:10:ARG:HB2	48:M1:133:ARG:HG2	4.26	0.40
63:N7:95:VAL:HG12	63:N7:96:VAL:HG23	2.04	0.40
55:M9:18:GLY:C	55:M9:20:ARG:H	2.67	0.40
21:C9:93:HIS:O	21:C9:94:ILE:HD13	4.30	0.40
1:2:1171:A:H2'	1:2:1172:G:C8	2.56	0.40
20:C8:142:GLY:HA2	1:6:1173:C:OP2	341.22	0.40
36:5:1213:G:N2	36:5:1214:U:C2	2.89	0.40
50:M4:19:ARG:O	50:M4:35:ILE:HG13	2.20	0.40
56:N0:124:LEU:HD13	57:N1:155:PRO:HG3	2.89	0.40
57:N1:35:LYS:HG3	57:N1:38:ASP:OD1	3.22	0.40
36:5:3224:G:C5	36:5:3225:C:C5	3.09	0.40
43:L6:170:LYS:H	43:L6:174:LEU:HD12	1.86	0.40
69:O3:39:GLN:C	69:O3:41:ALA:N	2.89	0.40
69:O3:49:ILE:HD13	69:O3:49:ILE:HG21	3.38	0.40
52:M6:11:GLY:O	52:M6:12:LYS:C	2.59	0.40
29:D7:59:CYS:O	29:D7:60:SER:C	2.80	0.40
39:L2:110:GLY:O	39:L2:112:ILE:HG23	5.90	0.40
79:Q3:57:CYS:N	79:Q3:62:LYS:O	3.38	0.40
9:S7:143:LEU:HA	24:D2:49:GLU:HG3	2.03	0.40
1:2:1291:G:H21	1:2:1324:G:N2	2.01	0.40
4:S2:121:VAL:O	4:S2:124:ALA:N	2.62	0.40
36:1:1481:A:O2'	36:1:1858:A:C2	2.66	0.40
8:S6:69:LEU:HB3	8:S6:71:THR:OG1	2.20	0.40
53:M7:168:LEU:CD1	53:M7:173:ARG:HG2	2.51	0.40
57:N1:130:ARG:HH21	36:5:988:U:H1'	255.61	0.40
57:N1:103:GLN:O	57:N1:107:GLU:HG3	2.21	0.40
51:M5:172:ARG:HB3	51:M5:174:ILE:HD11	2.03	0.40
1:6:519:C:C2	1:6:534:A:C4	3.08	0.40
39:L2:36:GLU:OE2	39:L2:163:ARG:NH1	2.86	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:1039:A:N7	1:6:1091:A:C5	2.89	0.40
36:1:2402:A:C2	36:1:2871:G:C4	3.09	0.40
38:8:44:A:C5	38:8:45:C:C5	3.09	0.40
36:1:213:A:O4'	62:N6:2:ALA:HB1	2.21	0.40
45:L8:153:ILE:HA	45:L8:197:VAL:HG12	3.44	0.40
43:L6:38:THR:HG23	43:L6:90:LYS:HE2	2.02	0.40
43:L6:18:LEU:HB3	36:5:591:G:N3	219.10	0.40
48:M1:59:ILE:HD13	36:5:2680:A:N3	306.59	0.40
34:SR:116:ASP:CG	34:SR:120:SER:HG	2.42	0.40
20:C8:47:CYS:C	20:C8:49:LYS:N	2.94	0.40
1:2:829:A:O2'	1:2:830:U:OP2	2.29	0.40
36:5:1700:G:N1	36:5:1745:C:N3	2.42	0.40
70:O4:56:THR:OG1	36:5:1739:U:O2'	177.43	0.40
37:7:49:G:H4'	37:7:50:U:O5'	2.21	0.40
36:5:750:G:H2'	36:5:751:A:H8	1.85	0.40
36:5:846:A:H2'	36:5:847:A:O4'	2.22	0.40
36:1:2436:U:O2	36:1:2512:C:O2	2.39	0.40
36:1:2536:A:O5'	36:1:2536:A:H8	2.03	0.40
13:C1:73:GLY:HA3	13:C1:88:ARG:CG	3.46	0.40
16:C4:87:GLY:HA2	16:C4:92:LYS:NZ	6.33	0.40
79:Q3:55:TRP:CE2	79:Q3:71:VAL:HA	3.06	0.40
36:5:1953:G:C6	36:5:2094:C:N4	2.89	0.40
36:5:1861:G:C6	36:5:1862:U:C4	3.09	0.40
55:M9:66:HIS:CD2	55:M9:75:HIS:HD2	6.42	0.40
55:M9:69:SER:O	55:M9:72:GLU:N	4.02	0.40
55:M9:70:LYS:C	55:M9:72:GLU:N	2.74	0.40
36:1:119:U:C2	45:L8:138:HIS:CE1	3.09	0.40
36:5:1192:C:C5	87:5:4086:OHX:N3	2.89	0.40
1:6:704:C:H2'	1:6:705:U:O4'	2.21	0.40
36:5:1116:G:C4	36:5:2817:A:C2	3.09	0.40
36:5:953:G:O2'	36:5:1116:G:H5'	2.21	0.40
1:2:1790:A:C2'	1:2:1791:A:H5'	2.52	0.40
8:S6:76:LEU:HA	8:S6:76:LEU:HD23	1.81	0.40
36:5:2709:C:H2'	36:5:2710:C:C6	2.57	0.40
42:L5:293:LEU:HD23	42:L5:293:LEU:HA	2.57	0.40
36:1:384:A:H2'	36:1:385:A:O4'	2.21	0.40
1:2:1039:A:O2'	1:2:1040:G:P	2.79	0.40
1:2:1315:U:H5''	1:2:1316:G:OP2	2.21	0.40
66:O0:18:ILE:HG23	66:O0:19:LYS:N	2.36	0.40
74:O8:5:ILE:CG2	74:O8:54:LEU:HB2	3.58	0.40
36:5:659:G:N2	36:5:1437:C:N3	2.69	0.40
36:1:1274:A:N6	36:1:1275:C:H41	2.18	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:L8:181:LYS:HD3	38:8:154:C:OP1	150.74	0.40
5:S3:128:GLU:C	5:S3:130:GLY:N	2.72	0.40
1:6:225:A:N6	1:6:226:A:H62	2.19	0.40
1:6:720:G:N3	1:6:720:G:H5''	2.36	0.40
1:2:1329:A:C8	1:2:1329:A:O5'	2.71	0.40
1:6:432:G:H5''	1:6:433:C:OP2	2.21	0.40
49:M3:36:ARG:O	49:M3:39:ARG:N	3.28	0.40
1:2:4:C:H5'	4:S2:204:THR:OG1	2.21	0.40
43:L6:50:LYS:HE3	36:5:3219:G:H22	264.26	0.40
36:1:162:G:H1	36:1:259:C:H42	1.68	0.40
26:D4:58:PHE:CE2	26:D4:72:PHE:HB3	2.96	0.40
13:C1:122:ILE:H	13:C1:144:ALA:CB	2.34	0.40
36:5:3296:A:H2'	36:5:3297:U:O4'	2.22	0.40
36:1:1820:U:HO2'	36:1:1821:U:P	2.42	0.40
38:4:109:A:H2'	38:4:110:C:H5'	2.03	0.40
5:S3:140:GLY:O	5:S3:147:ALA:HA	2.22	0.40
36:5:1020:G:H2'	36:5:1021:G:O4'	2.21	0.40
1:6:1172:G:H8	1:6:1172:G:OP2	2.04	0.40
44:L7:136:TYR:HE2	44:L7:231:ASN:HD22	3.06	0.40
7:S5:137:ILE:HA	7:S5:175:LEU:HD11	2.83	0.40
70:O4:30:LEU:HA	70:O4:30:LEU:HD23	1.80	0.40
36:5:796:U:H2'	36:5:797:U:C6	2.57	0.40
1:2:1362:U:C2	1:2:1363:U:C4	3.08	0.40
51:M5:105:ARG:HH11	51:M5:105:ARG:HD3	1.59	0.40
60:N4:1:MET:HG3	60:N4:1:MET:O	3.88	0.40
1:6:524:U:O2	1:6:526:A:H3'	2.21	0.40
1:6:527:A:C2'	1:6:528:U:H5'	2.51	0.40
36:1:2995:A:O4'	38:4:1:A:C6	2.74	0.40
87:5:4006:OHX:N3	87:5:4195:OHX:N1	2.69	0.40
24:D2:24:GLN:HE22	29:D7:5:GLN:HG2	1.87	0.40
25:D3:5:LYS:NZ	1:6:612:U:OP2	352.41	0.40
38:8:68:G:C2	38:8:69:U:C2	3.09	0.40
14:C2:81:ASP:CG	14:C2:81:ASP:O	2.82	0.40
36:5:1293:U:O2'	36:5:1294:A:H5'	2.20	0.40
36:5:1703:U:H1'	36:5:1743:G:C2	2.56	0.40
1:2:751:G:N3	1:2:799:A:C2	2.89	0.40
33:E1:88:PRO:C	33:E1:89:LYS:HZ2	5.67	0.40
36:1:30:G:C6	36:1:55:G:C6	3.09	0.40
36:5:2927:C:H2'	36:5:2928:C:C6	2.55	0.40
62:N6:97:ILE:HD12	62:N6:97:ILE:H	1.87	0.40
36:1:284:A:OP2	78:Q2:41:ARG:NH1	2.53	0.40
23:D1:62:ARG:HD3	23:D1:62:ARG:HA	1.60	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
77:Q1:4:LYS:HE2	77:Q1:4:LYS:HB2	1.61	0.40
43:L6:159:LEU:HD23	43:L6:159:LEU:HA	1.50	0.40
36:5:1923:C:H6	36:5:1923:C:O5'	2.03	0.40
36:1:1656:A:H4'	36:1:1657:C:O5'	2.20	0.40
45:L8:45:ASN:CG	61:N5:26:VAL:HG13	6.85	0.40
8:S6:27:PHE:C	8:S6:30:LYS:HG2	2.42	0.40
36:1:571:U:H2'	36:1:572:A:C8	2.56	0.40
25:D3:98:GLU:C	25:D3:100:ASP:N	2.75	0.40
78:Q2:98:LYS:HD2	36:5:2656:A:H4'	252.43	0.40
78:Q2:98:LYS:HG3	36:5:2656:A:P	249.94	0.40
36:1:1319:G:C2	36:1:1320:C:C5	3.09	0.40
36:1:2989:U:H1'	40:L3:266:ARG:HB2	2.04	0.40
36:1:1444:G:C6	36:1:1445:U:O2	2.74	0.40
36:1:1470:U:OP1	87:1:3928:OHX:N3	2.54	0.40
36:1:2357:A:C2	36:1:2358:A:C4	3.08	0.40
28:D6:73:TYR:CZ	28:D6:83:ILE:HD12	10.69	0.40
65:N9:19:ASN:N	65:N9:19:ASN:OD1	3.91	0.40
45:L8:136:LEU:HD13	51:M5:3:ALA:HB3	2.02	0.40
51:M5:27:VAL:O	51:M5:28:TRP:C	2.78	0.40
45:L8:62:LYS:HD3	51:M5:29:GLU:HG3	5.34	0.40
1:6:298:C:C5	1:6:299:A:C8	3.09	0.40
6:S4:49:ARG:HG2	6:S4:50:ASN:OD1	2.20	0.40
36:5:1426:C:C2	36:5:1427:U:C5	3.09	0.40
41:L4:183:LYS:HD2	41:L4:183:LYS:HA	2.76	0.40
41:L4:237:GLN:HG2	41:L4:246:ARG:HH21	3.32	0.40
41:L4:206:LEU:HB2	41:L4:246:ARG:HD2	2.08	0.40
41:L4:281:ILE:O	41:L4:281:ILE:HG23	2.35	0.40
41:L4:42:VAL:C	41:L4:44:LYS:H	2.75	0.40
19:C7:41:ILE:O	19:C7:43:SER:N	2.61	0.40
87:2:2095:OHX:N3	87:2:2109:OHX:N5	2.69	0.40
18:C6:21:HIS:HB2	18:C6:66:ARG:CG	2.42	0.40
18:C6:23:LYS:HE3	18:C6:64:ASP:O	6.25	0.40
18:C6:60:PHE:HA	18:C6:63:ILE:CD1	2.54	0.40
27:D5:96:SER:O	27:D5:98:GLN:N	2.54	0.40
7:S5:101:GLY:HA2	7:S5:104:ASN:OD1	2.63	0.40
7:S5:57:SER:OG	7:S5:58:LEU:HG	2.21	0.40
36:1:3086:A:H5'	36:1:3087:A:OP2	2.21	0.40
36:1:3087:A:C2	36:1:3088:G:C4	3.09	0.40
67:O1:31:ARG:HH11	67:O1:31:ARG:CB	2.25	0.40
1:2:1553:G:H2'	1:2:1555:A:OP2	2.21	0.40
1:2:1595:U:OP1	31:D9:32:ARG:N	2.46	0.40
1:6:1480:G:H3'	1:6:1481:C:C6	2.57	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:C0:14:TYR:HD2	12:C0:21:VAL:HG22	2.53	0.40
21:C9:128:GLY:O	21:C9:131:ASP:N	2.86	0.40
21:C9:66:TYR:HA	21:C9:124:ILE:CG2	2.51	0.40
31:D9:14:TYR:CD2	31:D9:14:TYR:C	3.34	0.40
31:D9:14:TYR:HD2	31:D9:14:TYR:C	2.80	0.40
31:D9:33:LYS:HD3	31:D9:34:TYR:CE2	3.76	0.40
48:M1:81:GLU:O	48:M1:82:ARG:C	2.70	0.40
1:6:879:G:H2'	1:6:880:C:C6	2.56	0.40
1:6:962:C:O2'	1:6:963:A:H5'	2.21	0.40
1:2:864:U:O2'	15:C3:11:ILE:HG21	2.20	0.40
36:1:300:G:O6	87:1:4149:OHX:N1	2.55	0.40
71:O5:102:GLU:O	71:O5:105:ARG:HB3	2.73	0.40
1:2:103:A:O2'	1:2:104:A:OP1	2.37	0.40
47:M0:18:PRO:HA	47:M0:96:VAL:HG23	3.10	0.40
24:D2:95:PRO:HD3	24:D2:130:TYR:CD1	2.55	0.40
2:S0:123:VAL:N	2:S0:144:ILE:O	2.76	0.40
2:S0:176:LEU:O	2:S0:179:ARG:HB3	2.34	0.40
4:S2:188:LEU:HD13	4:S2:196:VAL:HG11	2.35	0.40
4:S2:215:PHE:O	4:S2:219:GLY:N	2.49	0.40
6:S4:221:ARG:HG2	6:S4:221:ARG:H	1.50	0.40
55:M9:105:LEU:O	55:M9:105:LEU:HD22	4.40	0.40
63:N7:76:ASN:OD1	63:N7:78:ASN:HB2	2.20	0.40
68:O2:76:VAL:HG12	68:O2:96:ILE:HA	2.03	0.40
71:O5:62:GLN:HA	71:O5:65:ALA:CB	2.51	0.40
1:2:1452:U:C2	1:2:1453:G:C8	3.09	0.40
6:S4:71:LYS:HA	6:S4:76:VAL:O	2.21	0.40
56:N0:13:ARG:O	56:N0:22:PRO:HG3	3.82	0.40
69:O3:8:TYR:N	69:O3:8:TYR:CD1	2.88	0.40
42:L5:270:LYS:HA	42:L5:272:TYR:HB2	5.23	0.40
1:2:169:A:OP1	8:S6:137:ARG:NH2	2.53	0.40
1:6:65:A:C2	1:6:83:G:C2	3.09	0.40
8:S6:132:ARG:C	8:S6:133:LEU:HD13	2.41	0.40
18:C6:122:ARG:CD	1:6:1584:G:H5''	394.32	0.40
34:SR:306:THR:C	34:SR:308:ASN:N	2.72	0.40
18:C6:100:GLN:HB2	34:SR:57:PRO:HG2	3.39	0.40
56:N0:29:ILE:HD13	56:N0:40:ARG:HB2	2.03	0.40
29:D7:55:THR:HG1	29:D7:56:CYS:H	1.53	0.40
41:L4:95:ARG:NE	36:5:343:U:O4'	126.25	0.40
70:O4:102:LYS:O	70:O4:106:LYS:HG3	3.84	0.40
3:S1:113:MET:HE3	3:S1:211:HIS:CD2	3.85	0.40
3:S1:211:HIS:N	3:S1:211:HIS:CD2	3.26	0.40
78:Q2:40:LYS:HD3	78:Q2:40:LYS:HA	1.80	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1291:G:N2	1:2:1324:G:N1	2.65	0.40
70:O4:4:ARG:HG2	36:5:1857:C:H2'	154.13	0.40
1:6:1765:A:C5	1:6:1767:G:C6	3.08	0.40
36:5:2234:G:O5'	36:5:2234:G:H8	2.04	0.40
52:M6:81:TYR:HE2	52:M6:85:ARG:HG3	1.86	0.40
36:1:3174:A:C2'	36:1:3175:U:H5'	2.50	0.40
36:1:980:A:C4	36:1:981:U:N3	2.89	0.40
58:N2:42:LYS:HB2	58:N2:75:TYR:OH	2.21	0.40
49:M3:80:VAL:O	49:M3:85:LEU:HD23	2.20	0.40
26:D4:60:PHE:CG	26:D4:71:GLY:HA3	2.56	0.40
36:1:2402:A:H5''	41:L4:67:THR:OG1	2.21	0.40
38:4:49:G:C6	38:4:50:C:C4	3.09	0.40
38:8:41:A:N6	38:8:103:G:H1'	2.35	0.40
36:5:172:G:H2'	36:5:172:G:N3	2.36	0.40
36:5:173:G:C5	36:5:174:C:C4	3.09	0.40
67:O1:10:ARG:NH2	36:5:3386:G:H5'	155.40	0.40
10:S8:171:SER:OG	10:S8:178:ARG:O	2.20	0.40
6:S4:184:THR:O	6:S4:184:THR:OG1	2.35	0.40
1:6:1382:A:C2	1:6:1383:G:C5	3.09	0.40
1:6:1511:U:H2'	1:6:1512:G:C8	2.56	0.40
1:6:804:A:C4	1:6:805:U:C5	3.10	0.40
36:5:1617:G:C8	36:5:1617:G:H3'	2.56	0.40
42:L5:23:ARG:O	42:L5:24:ARG:C	2.74	0.40
36:5:2196:C:N3	36:5:2242:A:C6	2.90	0.40
56:N0:82:ASP:HB3	56:N0:87:THR:CA	2.51	0.40
61:N5:38:LEU:HD12	38:8:147:U:C4'	122.39	0.40
36:5:2596:U:H2'	36:5:2597:U:H6	1.87	0.40
1:2:1106:U:H2'	1:2:1107:G:C8	2.43	0.40
25:D3:56:LYS:HD2	25:D3:97:ASP:HA	2.03	0.40
36:1:548:G:C6	36:1:549:U:N3	2.89	0.40
49:M3:9:ILE:HD11	64:N8:45:MET:CE	2.47	0.40
36:5:2531:C:H2'	36:5:2532:U:H6	1.87	0.40
1:6:1384:A:H5''	1:6:1385:G:OP2	2.21	0.40
8:S6:79:LYS:O	8:S6:80:ASN:HB2	2.49	0.40
37:3:80:G:C6	37:3:81:U:C4	3.09	0.40
1:2:126:A:N6	1:2:292:U:C2	2.89	0.40
36:5:127:G:H2'	36:5:128:G:C8	2.56	0.40
1:6:687:G:H2'	1:6:687:G:N3	2.36	0.40
36:1:1158:A:C6	44:L7:93:ASN:ND2	2.90	0.40
74:O8:41:THR:OG1	74:O8:43:PHE:HE2	2.04	0.40
73:O7:29:VAL:HG11	38:8:111:A:C6	133.59	0.40
36:5:2514:U:OP1	36:5:2514:U:C6	2.67	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:1350:A:C6	36:5:1351:U:O2	2.75	0.40
36:1:1662:G:C5	36:1:1663:C:C4	3.09	0.40
36:1:2649:A:H4'	36:1:2696:A:O4'	2.21	0.40
36:5:255:A:C2	36:5:256:G:C4	3.09	0.40
40:L3:109:HIS:ND1	40:L3:109:HIS:N	3.01	0.40
36:5:1779:C:H3'	36:5:1780:G:C5'	2.51	0.40
1:6:985:G:C2	1:6:1017:U:O2	2.75	0.40
78:Q2:15:LYS:NZ	36:5:2771:U:O3'	183.00	0.40
36:1:3059:G:C6	36:1:3060:C:N4	2.89	0.40
22:D0:118:VAL:O	22:D0:119:ALA:HB2	3.51	0.40
61:N5:77:GLU:HA	61:N5:133:LEU:HB2	2.03	0.40
36:1:291:C:OP1	51:M5:68:ARG:HG2	2.21	0.40
36:5:2632:G:H5''	36:5:2633:U:OP2	2.22	0.40
1:2:1380:U:H2'	1:2:1381:U:O4'	2.20	0.40
65:N9:45:HIS:CE1	36:5:1075:A:C6	194.03	0.40
1:2:553:G:OP2	1:2:554:C:O2'	2.15	0.40
36:5:766:U:H4'	36:5:767:U:O5'	2.21	0.40
15:C3:111:ALA:C	15:C3:113:PHE:N	3.24	0.40
36:1:126:U:C5	36:1:127:G:N7	2.88	0.40
36:5:886:C:O2'	36:5:887:G:H5'	2.20	0.40
36:5:2574:G:H2'	36:5:2575:G:C8	2.56	0.40
37:7:19:C:H2'	37:7:20:A:H8	1.86	0.40
11:S9:10:LYS:HE3	11:S9:10:LYS:HB2	4.09	0.40
36:1:296:A:N7	36:1:297:G:C6	2.89	0.40
2:S0:35:PRO:C	2:S0:37:VAL:N	2.75	0.40
1:6:739:G:H2'	1:6:740:A:C8	2.55	0.40
36:1:2137:U:C6	36:1:2141:U:C4	3.08	0.40
9:S7:97:ARG:HD3	1:6:694:U:O2	366.46	0.40
1:6:63:G:C2	1:6:64:U:C6	3.08	0.40
36:5:80:G:C6	36:5:81:C:N4	2.89	0.40
39:L2:69:TYR:HE2	36:5:1650:G:C1'	180.92	0.40
36:5:629:U:H2'	36:5:630:A:C8	2.56	0.40
38:8:72:A:H2	38:8:89:A:H5'	1.86	0.40
36:1:2639:G:N3	36:1:2639:G:H2'	2.36	0.40
62:N6:15:ALA:HB1	36:5:215:G:H4'	78.81	0.40
1:2:367:A:OP1	87:2:2160:OHX:N6	2.54	0.40
1:6:570:A:H5''	1:6:571:G:OP2	2.21	0.40
78:Q2:9:LYS:O	36:5:2713:U:H3'	223.47	0.40
20:C8:133:VAL:HG22	20:C8:133:VAL:O	2.22	0.40
36:1:2342:U:H1'	36:1:3054:U:O2'	2.22	0.40
36:1:2353:G:H2'	36:1:2354:C:O4'	2.21	0.40
1:2:755:A:C6	1:2:756:A:C5	3.08	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:943:C:H42	28:D6:15:ARG:HG2	1.86	0.40
28:D6:5:ARG:HB3	28:D6:8:ASN:O	2.71	0.40
11:S9:36:LEU:H	11:S9:36:LEU:HG	1.76	0.40
47:M0:150:GLU:O	47:M0:154:ARG:N	2.72	0.40
47:M0:69:ARG:HD2	47:M0:70:ILE:N	2.68	0.40
41:L4:327:LEU:HA	41:L4:327:LEU:HD12	2.70	0.40
45:L8:165:PHE:HA	72:O6:47:ILE:CD1	3.50	0.40
1:6:300:A:C6	1:6:301:A:C5	3.10	0.40
10:S8:76:THR:HG22	10:S8:108:PRO:CG	2.51	0.40
36:1:404:G:C5'	36:1:404:G:H8	2.34	0.40
41:L4:30:ILE:HA	41:L4:124:SER:OG	2.21	0.40
41:L4:20:LEU:HD23	41:L4:20:LEU:HA	2.11	0.40
41:L4:26:PHE:HE2	41:L4:258:LEU:HD23	2.46	0.40
43:L6:96:VAL:CG1	43:L6:141:VAL:HG13	2.51	0.40
1:2:1614:A:C5	1:2:1615:C:C5	3.10	0.40
18:C6:38:LEU:HA	18:C6:38:LEU:HD23	1.98	0.40
18:C6:64:ASP:O	18:C6:65:ILE:HD13	2.21	0.40
20:C8:46:VAL:HG11	20:C8:73:MET:HG3	2.03	0.40
21:C9:12:GLN:O	21:C9:16:ASN:N	3.48	0.40
21:C9:70:GLN:O	21:C9:70:GLN:HG2	2.99	0.40
7:S5:46:TRP:HH2	7:S5:115:LYS:HG2	1.85	0.40
46:L9:124:ARG:HB3	46:L9:164:ILE:CD1	2.52	0.40
46:L9:144:ILE:O	46:L9:144:ILE:HG22	2.87	0.40
46:L9:91:ARG:NH2	46:L9:91:ARG:HG3	2.34	0.40
67:O1:48:ASP:O	67:O1:90:PHE:HB2	2.21	0.40
67:O1:62:ARG:HB2	67:O1:66:GLY:O	2.21	0.40
42:L5:163:LEU:HD12	42:L5:163:LEU:HA	4.45	0.40
1:6:1203:A:C6	1:6:1555:A:C6	3.10	0.40
5:S3:75:LYS:NZ	12:C0:34:GLU:OE2	2.36	0.40
12:C0:68:LEU:HD12	12:C0:69:THR:N	2.37	0.40
12:C0:54:TYR:HA	12:C0:72:GLY:H	1.86	0.40
17:C5:25:LEU:HD23	17:C5:25:LEU:HA	3.15	0.40
21:C9:127:ASN:HA	21:C9:130:ARG:HD2	4.68	0.40
15:C3:46:THR:HG23	15:C3:49:GLN:OE1	2.21	0.40
36:5:2127:U:C4	36:5:2128:C:C5	3.09	0.40
1:6:1775:U:H2'	1:6:1776:A:H8	1.86	0.40
1:2:906:A:H2'	1:2:906:A:N3	2.36	0.40
1:2:914:G:O3'	1:2:915:A:H8	2.04	0.40
16:C4:41:ARG:HG3	16:C4:41:ARG:O	3.98	0.40
3:S1:178:GLY:O	3:S1:183:GLN:HB3	2.21	0.40
2:S0:198:MET:HA	2:S0:199:PRO:HD2	1.83	0.40
2:S0:63:ILE:HG21	23:D1:34:ILE:CG2	4.94	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S2:184:VAL:HA	4:S2:211:LEU:HD21	2.76	0.40
4:S2:35:TRP:NE1	4:S2:37:PRO:HB3	2.36	0.40
4:S2:152:HIS:CD2	4:S2:153:SER:N	2.95	0.40
55:M9:101:VAL:O	55:M9:105:LEU:N	2.48	0.40
55:M9:103:ARG:NH1	55:M9:124:TYR:CZ	2.89	0.40
43:L6:3:ALA:HB3	68:O2:75:LEU:O	3.26	0.40
68:O2:78:ASN:O	68:O2:81:ASP:HB2	2.21	0.40
1:6:1045:C:H2'	1:6:1046:G:H8	1.86	0.40
36:5:1478:C:H2'	36:5:1479:U:H6	1.86	0.40
71:O5:61:GLN:HA	71:O5:64:GLU:HG2	2.04	0.40
61:N5:50:ALA:O	71:O5:66:VAL:HG21	2.22	0.40
40:L3:60:LEU:HD23	40:L3:67:PHE:O	2.22	0.40
1:2:1178:G:H2'	1:2:1179:G:C8	2.57	0.40
6:S4:129:VAL:HG12	6:S4:156:VAL:HG23	2.04	0.40
52:M6:159:LYS:O	52:M6:160:ARG:C	2.74	0.40
35:SM:82:THR:HB	35:SM:83:LYS:H	1.42	0.40
36:1:1167:U:OP1	69:O3:73:ARG:NH2	2.54	0.40
1:2:1622:G:C5	1:2:1623:C:C5	3.09	0.40
9:S7:131:PHE:CG	9:S7:132:PRO:N	3.60	0.40
75:O9:19:GLN:HB3	38:8:52:A:O3'	90.45	0.40
37:3:23:A:H2'	37:3:24:A:C8	2.56	0.40
8:S6:137:ARG:O	8:S6:140:ASN:HB2	2.20	0.40
8:S6:144:PHE:O	8:S6:144:PHE:CG	2.73	0.40
36:5:1055:A:N3	37:7:81:U:O2'	2.52	0.40
73:O7:52:LYS:HB2	73:O7:52:LYS:HE3	2.27	0.40
39:L2:137:ILE:HG13	39:L2:147:ARG:HB3	2.04	0.40
39:L2:89:TYR:CD1	36:5:2551:U:C4	220.65	0.40
3:S1:206:PRO:HB2	3:S1:207:LEU:H	1.92	0.40
40:L3:163:HIS:HA	40:L3:177:HIS:O	2.40	0.40
36:5:3163:A:O2'	36:5:3164:C:H5'	2.21	0.40
1:2:153:G:C6	1:2:154:G:C6	3.09	0.40
1:6:156:A:H1'	1:6:416:A:C8	2.57	0.40
36:5:806:A:N3	36:5:2812:C:O2'	2.50	0.40
72:O6:90:MET:O	72:O6:93:ILE:N	2.90	0.40
38:8:143:U:C2	38:8:144:G:C8	3.10	0.40
36:5:1565:G:C2	36:5:1566:A:H1'	2.56	0.40
39:L2:213:GLY:HA2	36:5:2967:A:H5''	204.96	0.40
36:1:2900:A:H2	36:1:3025:C:O2	2.04	0.40
57:N1:26:HIS:CE1	37:7:10:C:OP2	270.73	0.40
61:N5:45:LYS:O	61:N5:46:TYR:HB3	2.94	0.40
38:8:96:A:H5''	38:8:97:A:OP2	2.21	0.40
46:L9:109:ALA:HB1	46:L9:111:PHE:CD2	2.57	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:L2:192:LYS:HB3	39:L2:193:ARG:NH1	2.39	0.40
36:5:148:G:O2'	36:5:149:U:OP2	2.28	0.40
1:2:219:A:N1	1:2:842:C:O2	2.55	0.40
70:O4:56:THR:N	70:O4:57:LEU:HD23	3.29	0.40
37:7:25:G:N2	37:7:26:C:H1'	2.36	0.40
36:1:2286:U:C4	36:1:2288:G:C1'	3.04	0.40
52:M6:142:SER:C	52:M6:144:SER:N	2.80	0.40
36:1:2623:G:C6	36:1:2624:G:C5	3.09	0.40
36:5:1404:G:C6	87:5:4084:OHX:N3	2.86	0.40
36:5:944:C:H2'	36:5:944:C:O2	2.21	0.40
36:1:1407:A:O3'	68:O2:33:ARG:NH2	2.55	0.40
14:C2:138:GLU:OE1	14:C2:142:GLN:HB3	3.88	0.40
36:5:408:A:O2'	36:5:409:A:H5'	2.22	0.40
1:6:1512:G:C6	1:6:1513:G:C5	3.09	0.40
25:D3:136:TRP:O	25:D3:137:LYS:HG3	5.02	0.40
25:D3:137:LYS:O	25:D3:139:LYS:HG3	5.48	0.40
46:L9:40:HIS:CD2	46:L9:40:HIS:H	2.38	0.40
36:1:2344:U:H2'	36:1:2345:A:C8	2.57	0.40
36:1:1573:G:N3	36:1:1573:G:H2'	2.36	0.40
36:5:372:A:C5	36:5:373:A:C5	3.09	0.40
39:L2:191:LEU:HD11	36:5:1795:U:OP1	191.00	0.40
79:Q3:52:ALA:O	79:Q3:54:ILE:HG13	2.21	0.40
22:D0:21:LYS:H	22:D0:21:LYS:HG2	4.09	0.40
50:M4:22:LEU:HD12	50:M4:31:LYS:O	2.42	0.40
55:M9:130:ASN:HB2	36:5:854:G:O2'	240.85	0.40
1:2:291:G:H2'	1:2:292:U:C5	2.56	0.40
36:5:1461:A:C4	36:5:1462:A:C8	3.09	0.40
47:M0:129:VAL:HG12	47:M0:130:ASP:O	2.65	0.40
3:S1:114:VAL:HG11	1:6:930:A:C2'	308.31	0.40
37:3:61:G:C4	37:3:62:U:C5	3.10	0.40
36:1:1490:A:C2	36:1:1491:A:C1'	3.04	0.40
36:5:3297:U:O2	36:5:3297:U:H2'	2.22	0.40
36:5:1421:G:N3	36:5:1422:G:C8	2.89	0.40
49:M3:188:ARG:HA	49:M3:191:ALA:HB3	2.04	0.40
41:L4:264:SER:HG	41:L4:267:VAL:HG12	3.87	0.40
54:M8:69:ARG:O	54:M8:70:ALA:C	2.59	0.40
36:1:3015:G:C2	36:1:3040:A:N3	2.90	0.40
1:2:497:G:O2'	1:2:498:G:C8	2.68	0.40
78:Q2:53:GLN:HG3	78:Q2:55:LYS:O	2.22	0.40
62:N6:107:THR:OG1	62:N6:108:LYS:N	2.88	0.40
48:M1:117:ASP:HA	48:M1:118:PRO:HD2	1.90	0.40
65:N9:23:LYS:HG3	65:N9:24:PRO:HD3	5.57	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:8:4:C:C4	38:8:5:U:C4	3.09	0.40
36:1:824:C:H2'	36:1:825:U:O4'	2.22	0.40
74:O8:47:GLY:C	74:O8:49:SER:N	2.74	0.40
36:5:2520:A:C6	36:5:2521:U:C4	3.09	0.40
36:1:891:G:C6	36:1:892:U:N3	2.90	0.40
1:2:1496:U:O2'	1:2:1519:U:O2'	2.33	0.40
36:1:1056:U:C2'	36:1:1057:A:H5'	2.51	0.40
6:S4:211:LYS:HB2	6:S4:211:LYS:HZ3	1.85	0.40
87:5:3996:OHX:N2	87:5:4187:OHX:N5	2.70	0.40
38:8:19:C:C5	38:8:20:U:C5	3.09	0.40
1:2:970:A:H5''	1:2:970:A:C8	2.56	0.40
5:S3:203:PRO:HA	19:C7:42:GLN:HG3	2.03	0.40
36:5:81:C:H2'	36:5:82:C:C6	2.56	0.40
36:5:2316:G:C4	36:5:2317:A:C8	3.10	0.40
1:2:156:A:H2'	1:2:157:A:O4'	2.21	0.40
20:C8:108:LYS:O	20:C8:111:ASP:HB2	2.26	0.40
1:6:1718:G:H2'	1:6:1719:A:O4'	2.21	0.40
20:C8:129:TRP:CD1	35:SM:67:GLY:HA2	3.22	0.40
36:5:2519:A:H61	36:5:2588:U:H3	1.70	0.40
4:S2:111:VAL:HG21	4:S2:191:ALA:HB2	3.13	0.40
33:E1:113:LYS:HB3	33:E1:113:LYS:HE3	2.58	0.40
54:M8:111:ARG:HD2	54:M8:111:ARG:HH11	1.62	0.40
39:L2:104:LEU:HD12	39:L2:104:LEU:HA	2.64	0.40
41:L4:202:ARG:HA	41:L4:202:ARG:NE	2.50	0.40
45:L8:24:ASN:N	45:L8:25:PRO:HD2	2.36	0.40
1:6:570:A:H8	1:6:570:A:OP2	2.04	0.40
78:Q2:74:CYS:SG	78:Q2:77:CYS:SG	3.17	0.40
25:D3:71:CYS:O	25:D3:72:VAL:HG13	2.21	0.40
36:1:1208:U:H2'	76:Q0:109:ASN:OD1	2.21	0.40
46:L9:12:VAL:H	46:L9:51:GLN:C	2.25	0.40
1:6:88:U:C2	1:6:89:G:C8	3.09	0.40
11:S9:133:HIS:HE1	1:6:512:A:O2'	447.48	0.40
47:M0:39:LYS:HG2	47:M0:40:LYS:HG2	5.44	0.40
36:5:1333:C:C2'	36:5:1334:U:H5'	2.51	0.40
44:L7:141:TYR:C	44:L7:143:THR:N	3.02	0.40
44:L7:107:ARG:NE	44:L7:204:PRO:HG3	2.34	0.40
37:3:86:U:H2'	44:L7:218:ARG:CZ	2.52	0.40
44:L7:239:LEU:HD22	44:L7:243:MET:SD	2.64	0.40
10:S8:188:GLU:HA	13:C1:13:PHE:CE2	3.28	0.40
26:D4:84:LYS:HG3	26:D4:85:PHE:CD1	2.57	0.40
10:S8:106:ALA:O	10:S8:110:ARG:N	2.54	0.40
10:S8:122:GLY:O	87:S8:302:OHX:N5	2.54	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:S8:193:LEU:O	10:S8:196:LEU:N	2.74	0.40
41:L4:6:VAL:HG21	41:L4:255:PHE:CE1	2.56	0.40
43:L6:76:LEU:N	43:L6:138:GLN:HE22	2.19	0.40
19:C7:46:LEU:HD22	19:C7:50:ILE:HD11	3.30	0.40
5:S3:188:ILE:HG13	5:S3:188:ILE:H	2.53	0.40
36:5:359:U:C2	36:5:920:A:N1	2.90	0.40
50:M4:36:VAL:O	50:M4:36:VAL:HG12	2.98	0.40
1:2:1609:U:H2'	1:2:1610:G:C5'	2.52	0.40
27:D5:90:LYS:HA	27:D5:91:PRO:HD2	1.90	0.40
46:L9:166:ARG:NH2	36:5:3108:G:H1'	312.45	0.40
67:O1:36:ILE:HG22	67:O1:37:LYS:N	2.35	0.40
75:O9:5:LYS:HD3	75:O9:13:MET:HE3	3.76	0.40
42:L5:107:ARG:O	42:L5:108:ARG:C	2.59	0.40
42:L5:108:ARG:HD3	42:L5:253:PHE:HB2	3.47	0.40
12:C0:56:LYS:O	12:C0:66:TYR:HA	2.91	0.40
20:C8:90:ASN:C	20:C8:90:ASN:HD22	5.00	0.40
20:C8:90:ASN:C	20:C8:90:ASN:ND2	4.76	0.40
20:C8:94:ASP:OD2	20:C8:95:GLY:N	2.54	0.40
48:M1:85:LYS:O	48:M1:88:GLU:N	2.55	0.40
5:S3:101:GLN:HA	5:S3:104:SER:HB3	2.32	0.40
5:S3:32:GLU:O	5:S3:53:THR:OG1	2.38	0.40
1:2:983:A:C2	1:2:1019:A:C6	3.10	0.40
1:2:1018:U:H2'	1:2:1019:A:C8	2.56	0.40
1:2:984:G:N1	1:2:1018:U:C2	2.90	0.40
24:D2:55:ASP:OD1	24:D2:57:ARG:HB2	2.81	0.40
23:D1:41:GLU:H	23:D1:41:GLU:CD	2.19	0.40
2:S0:64:ILE:CG2	2:S0:181:VAL:HG11	2.52	0.40
2:S0:65:ALA:C	2:S0:67:ILE:H	3.26	0.40
54:M8:101:VAL:HG21	54:M8:114:ILE:HD11	2.35	0.40
1:6:795:U:O4	1:6:796:A:C6	2.75	0.40
43:L6:13:GLU:OE2	68:O2:88:HIS:HA	2.65	0.40
68:O2:87:MET:O	68:O2:88:HIS:CG	2.75	0.40
1:6:1045:C:H2'	1:6:1046:G:C8	2.56	0.40
36:1:1602:A:C6	36:1:1603:A:N1	2.90	0.40
38:4:65:A:C2	38:4:96:A:C8	3.09	0.40
38:8:91:C:H2'	38:8:92:A:O4'	2.21	0.40
38:8:93:U:H2'	38:8:94:C:H6	1.86	0.40
62:N6:115:ARG:O	62:N6:118:LEU:HB3	2.69	0.40
1:2:1212:G:O6	87:2:2029:OHX:N4	2.54	0.40
1:6:1182:U:O2	1:6:1184:A:H8	2.05	0.40
36:5:3182:G:C4	36:5:3183:A:C8	3.09	0.40
56:N0:12:ARG:HD3	56:N0:59:VAL:HG21	3.36	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:L7:74:SER:OG	57:N1:142:SER:HA	3.12	0.40
36:1:2661:G:O5'	36:1:2661:G:H8	2.05	0.40
9:S7:164:TYR:CD2	9:S7:164:TYR:N	2.89	0.40
9:S7:56:LYS:HB2	9:S7:88:ARG:CZ	2.50	0.40
1:2:67:A:OP1	8:S6:171:LYS:NZ	2.34	0.40
36:5:2279:A:C2	36:5:2288:G:N1	2.89	0.40
52:M6:136:THR:CG2	52:M6:137:THR:N	3.74	0.40
52:M6:118:VAL:HG21	56:N0:163:PHE:HB3	2.02	0.40
62:N6:63:LYS:O	62:N6:66:GLN:HG3	2.21	0.40
39:L2:140:ASN:HB3	39:L2:145:LYS:HB2	2.02	0.40
79:Q3:36:ARG:HH22	79:Q3:46:THR:HG23	3.40	0.40
3:S1:200:ALA:HB3	3:S1:201:THR:HG23	6.22	0.40
36:1:2424:A:O5'	36:1:2424:A:C8	2.70	0.40
36:1:188:U:H1'	36:1:208:C:H1'	2.02	0.40
52:M6:116:LYS:HB2	36:5:3180:A:H4'	277.18	0.40
36:1:500:C:H42	36:1:613:G:H1	1.68	0.40
1:2:1718:G:H2'	1:2:1719:A:O4'	2.21	0.40
36:5:3174:A:N6	36:5:3278:C:C2	2.88	0.40
49:M3:95:ILE:HG12	49:M3:95:ILE:H	3.37	0.40
51:M5:179:LYS:O	36:5:287:G:H5'	124.13	0.40
1:2:631:G:C6	1:2:632:U:C4	3.09	0.40
26:D4:42:GLU:CG	26:D4:52:LYS:HE3	3.34	0.40
61:N5:56:ARG:HG2	38:8:134:G:OP1	76.60	0.40
1:2:218:A:N1	1:2:843:U:O2'	2.53	0.40
71:O5:31:LEU:HD23	71:O5:44:ILE:HA	5.04	0.40
46:L9:106:LYS:H	46:L9:109:ALA:CB	2.34	0.40
46:L9:146:LEU:H	46:L9:146:LEU:HD12	2.36	0.40
76:Q0:78:ILE:HA	76:Q0:78:ILE:HD12	1.86	0.40
76:Q0:80:PRO:C	76:Q0:82:LEU:N	3.84	0.40
1:2:967:A:O2'	1:2:1034:C:H1'	2.20	0.40
8:S6:159:ARG:HG2	8:S6:172:ALA:HB2	2.11	0.40
48:M1:70:THR:O	48:M1:70:THR:OG1	2.38	0.40
36:5:968:G:C5	36:5:969:C:C4	3.10	0.40
36:5:782:U:N3	36:5:783:A:C4	2.90	0.40
1:2:1433:G:O2'	31:D9:26:SER:HB2	2.22	0.40
56:N0:66:GLU:O	56:N0:69:PRO:HG3	2.65	0.40
32:E0:50:VAL:C	32:E0:52:GLY:H	4.26	0.40
57:N1:28:SER:O	57:N1:29:THR:C	3.45	0.40
36:5:733:G:O6	87:5:4059:OHX:N1	2.54	0.40
36:1:221:A:N6	62:N6:103:LYS:NZ	2.68	0.40
34:SR:174:ASN:CG	34:SR:198:ASN:HB3	3.51	0.40
46:L9:38:LEU:CD1	46:L9:71:VAL:HG13	2.51	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:S6:22:HIS:HA	8:S6:25:ARG:CZ	4.16	0.40
36:5:1025:A:H3'	36:5:1026:A:H4'	2.04	0.40
36:1:3116:G:H3'	36:1:3117:C:H5'	2.03	0.40
38:8:25:G:O5'	38:8:25:G:H8	2.04	0.40
36:5:1327:C:O2'	36:5:1328:C:H5'	2.20	0.40
36:1:1326:A:O2'	69:O3:77:ASN:OD1	2.35	0.40
68:O2:7:PRO:HG2	68:O2:63:THR:HG23	2.03	0.40
63:N7:104:PRO:C	63:N7:106:GLN:N	2.75	0.40
36:1:995:U:C2	36:1:2637:A:C8	3.09	0.40
36:1:1537:A:O2'	36:1:1538:G:H5'	2.21	0.40
1:2:1263:G:C2	1:2:1264:G:H1'	2.56	0.40
36:1:1882:G:C2	36:1:2351:U:O2	2.75	0.40
52:M6:98:ALA:HA	52:M6:101:ARG:NH1	2.94	0.40
36:5:198:A:N3	36:5:218:G:O2'	2.54	0.40
58:N2:28:PHE:HD1	58:N2:28:PHE:HA	2.62	0.40
22:D0:38:SER:O	22:D0:41:ILE:HG22	2.22	0.40
14:C2:31:VAL:HG23	14:C2:132:GLU:CG	2.52	0.40
4:S2:214:ALA:O	4:S2:217:ALA:HB3	2.22	0.40
1:6:228:G:N2	1:6:237:C:N3	2.70	0.40
45:L8:48:ARG:NH2	36:5:2526:C:C2	185.19	0.40
1:2:503:G:O2'	1:2:504:U:OP1	2.32	0.40
36:1:2108:C:C4	36:1:2109:U:C4	3.09	0.40
36:1:256:G:H2'	36:1:257:U:H6	1.85	0.40
1:2:601:A:H2'	1:2:602:U:C6	2.56	0.40
36:1:608:A:C6	43:L6:22:ARG:HD3	2.57	0.40
1:6:1283:U:H2'	1:6:1284:C:C5	2.56	0.40
36:5:2584:G:OP1	36:5:2584:G:C4'	2.69	0.40
37:3:62:U:N3	37:3:63:A:N7	2.70	0.40
42:L5:208:MET:CE	42:L5:233:ALA:H	2.34	0.40
16:C4:135:ARG:HG2	1:6:1007:C:H5''	297.53	0.40
36:5:3296:A:C5	36:5:3297:U:C5	3.09	0.40
43:L6:142:ASP:O	43:L6:145:LEU:HB2	3.45	0.40
19:C7:74:GLN:O	19:C7:78:ARG:HB2	2.77	0.40
36:1:3009:G:N7	87:1:3902:OHX:N5	2.69	0.40
14:C2:84:ASN:OD1	14:C2:85:LYS:N	2.42	0.40
36:5:413:U:H2'	36:5:414:U:O4'	2.21	0.40
73:O7:27:PHE:CE1	73:O7:33:THR:HA	2.72	0.40
36:5:3147:G:O5'	36:5:3147:G:H8	2.03	0.40
17:C5:77:ARG:HA	17:C5:95:GLY:CA	2.64	0.40
36:1:1346:G:C2	36:1:1359:C:C2	3.09	0.40
36:5:1881:A:C6	36:5:2352:A:N6	2.89	0.40
1:2:131:C:HO2'	1:2:132:U:P	2.43	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:574:U:H2'	36:5:575:G:C8	2.55	0.40
36:1:2228:A:H2'	36:1:2229:A:H8	1.87	0.40
11:S9:43:TYR:C	11:S9:45:ILE:H	3.20	0.40
52:M6:174:PHE:C	52:M6:176:LYS:N	2.80	0.40
36:5:768:C:N4	36:5:769:G:C6	2.89	0.40
1:6:797:G:H2'	1:6:798:C:O4'	2.22	0.40
36:5:572:A:C8	36:5:573:C:C5	3.09	0.40
14:C2:81:ASP:HA	14:C2:82:PRO:HD2	2.48	0.40
1:6:968:U:O3'	1:6:1032:G:N2	2.55	0.40
1:2:680:U:C4	1:2:681:U:C4	3.09	0.40
1:2:682:C:H2'	1:2:683:C:O4'	2.20	0.40
47:M0:6:ALA:HB3	36:5:2855:U:OP2	284.94	0.40
49:M3:185:LYS:O	49:M3:189:GLU:HB2	2.56	0.40
36:5:544:C:H2'	36:5:546:C:C5	2.57	0.40
36:5:2639:G:C4	36:5:2640:A:C8	3.09	0.40
1:2:1342:C:H2'	1:2:1343:U:H6	1.86	0.40
1:2:551:G:N7	1:2:582:U:C2	2.89	0.40
36:1:1909:A:O2'	36:1:1910:A:H5'	2.22	0.40
48:M1:145:LYS:HB2	48:M1:145:LYS:HE2	1.77	0.40
36:1:1832:C:OP1	61:N5:120:LYS:HE2	2.21	0.40
70:O4:15:THR:HG22	36:5:826:G:O2'	158.44	0.40
34:SR:201:THR:HG21	34:SR:242:SER:HA	2.81	0.40
36:1:2849:C:C5	36:1:2850:G:N7	2.89	0.40
36:1:2732:G:C6	36:1:2733:A:C4	3.09	0.40
9:S7:8:ILE:HG12	9:S7:42:GLN:HA	2.03	0.40
25:D3:74:VAL:O	25:D3:82:LYS:HA	2.22	0.40
36:1:2741:C:HO2'	78:Q2:20:HIS:CG	2.32	0.40
36:5:3197:G:H3'	36:5:3197:G:C8	2.57	0.40
46:L9:87:LYS:HE3	46:L9:187:ILE:HA	4.08	0.40
36:1:45:A:OP2	51:M5:85:THR:OG1	2.33	0.40
78:Q2:46:LYS:O	78:Q2:48:SER:N	3.33	0.40
36:5:2356:A:H2'	36:5:2356:A:N3	2.37	0.40
53:M7:24:VAL:O	53:M7:143:PRO:HA	2.21	0.40
1:6:25:C:H1'	1:6:26:A:OP2	2.22	0.40
11:S9:64:GLU:HA	11:S9:69:ARG:CD	2.83	0.40
11:S9:59:LEU:HD13	11:S9:69:ARG:HA	4.36	0.40
47:M0:34:TYR:O	47:M0:88:ARG:HA	2.53	0.40
36:1:1363:A:OP2	87:1:4044:OHX:N6	2.55	0.40
44:L7:103:LEU:HG	44:L7:130:ILE:HD11	5.37	0.40
36:1:115:A:HO2'	36:1:116:A:P	2.41	0.40
36:1:115:A:N6	36:1:154:U:C4	2.90	0.40
45:L8:68:ARG:NE	45:L8:237:ILE:O	3.14	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:6:334:G:O2'	1:6:335:U:H5'	2.21	0.40
10:S8:157:GLU:O	10:S8:159:GLN:N	3.30	0.40
41:L4:25:VAL:O	41:L4:28:ALA:N	2.42	0.40
54:M8:24:VAL:O	54:M8:27:LYS:HB2	2.22	0.40
43:L6:82:ARG:HA	43:L6:82:ARG:HD3	1.73	0.40
1:6:1394:G:N1	1:6:1405:G:C5	2.89	0.40
1:2:1477:G:C2	1:2:1531:G:C2	3.09	0.40
7:S5:131:GLN:O	7:S5:134:VAL:HB	2.21	0.40
7:S5:207:THR:O	7:S5:212:LYS:NZ	2.51	0.40
46:L9:92:TYR:OH	46:L9:101:VAL:HB	2.21	0.40
42:L5:239:ILE:O	42:L5:243:ALA:HB2	2.89	0.40
42:L5:83:LEU:HB3	42:L5:88:ILE:HG13	4.63	0.40
1:2:1553:G:C5	17:C5:47:ARG:NH2	2.89	0.40
22:D0:75:GLY:O	22:D0:76:SER:C	3.04	0.40
48:M1:165:GLN:CG	48:M1:166:LYS:H	2.33	0.40
1:2:950:C:N3	1:2:951:A:C5	2.90	0.40
71:O5:104:GLN:NE2	36:5:112:U:H5''	66.73	0.40
1:2:310:C:C4	1:2:311:U:C5	3.10	0.40
1:2:310:C:N3	1:2:357:G:C2	2.89	0.40
8:S6:124:LEU:HA	8:S6:124:LEU:HD12	1.90	0.40
57:N1:32:LYS:NZ	57:N1:97:LYS:HA	2.37	0.40
47:M0:15:LYS:O	47:M0:16:PRO:C	2.93	0.40
1:2:918:U:N3	1:2:919:A:N7	2.69	0.40
16:C4:67:VAL:O	16:C4:70:LYS:N	2.62	0.40
16:C4:95:GLY:HA2	16:C4:96:PRO:HD3	1.89	0.40
2:S0:179:ARG:HG2	2:S0:183:ARG:HD2	2.79	0.40
4:S2:56:ILE:H	4:S2:56:ILE:HG13	1.78	0.40
40:L3:25:ILE:HD13	40:L3:25:ILE:N	2.36	0.40
48:M1:152:HIS:CE1	37:7:55:A:N3	326.34	0.40
4:S2:152:HIS:HD1	4:S2:174:ARG:HA	1.85	0.40
36:1:1949:G:N2	36:1:1950:U:O2	2.55	0.40
66:O0:39:SER:O	66:O0:40:LYS:HD2	2.21	0.40
66:O0:41:LEU:O	66:O0:91:SER:HA	3.42	0.40
38:4:67:U:O2'	38:4:68:G:H5'	2.22	0.40
79:Q3:30:GLU:O	79:Q3:33:GLN:HG2	2.22	0.40
17:C5:99:GLY:O	1:6:1211:A:H1'	374.73	0.40
1:6:74:U:O5'	1:6:74:U:H6	2.04	0.40
56:N0:80:ARG:HG2	56:N0:81:TYR:N	3.74	0.40
57:N1:136:ARG:HD2	57:N1:139:ARG:HH22	1.86	0.40
57:N1:15:PHE:HA	57:N1:15:PHE:HD2	1.71	0.40
40:L3:296:THR:O	40:L3:300:ARG:N	2.51	0.40
40:L3:361:THR:HG23	40:L3:361:THR:O	2.92	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:L3:73:VAL:HG13	59:N3:89:ASP:C	2.42	0.40
43:L6:158:TYR:HB2	50:M4:115:PHE:CE2	3.05	0.40
50:M4:118:PHE:O	50:M4:122:VAL:HG23	2.54	0.40
69:O3:35:VAL:HG12	69:O3:35:VAL:O	3.25	0.40
69:O3:49:ILE:CG2	69:O3:85:PHE:CE1	3.85	0.40
9:S7:131:PHE:C	9:S7:133:THR:H	2.24	0.40
9:S7:46:ILE:HD13	9:S7:60:ILE:HG12	2.86	0.40
34:SR:296:ALA:C	34:SR:298:GLY:H	2.78	0.40
37:7:97:A:H2'	37:7:98:C:H6	1.86	0.40
62:N6:57:LEU:HD22	62:N6:58:VAL:N	2.36	0.40
36:1:366:A:C5'	41:L4:95:ARG:HH22	2.34	0.40
1:6:150:U:H2'	1:6:151:G:O4'	2.21	0.40
52:M6:114:LYS:HA	36:5:3180:A:C4	274.85	0.40
36:5:3163:A:C6	36:5:3288:G:O6	2.74	0.40
1:6:1764:C:H5	1:6:1767:G:O2'	2.03	0.40
36:1:2916:U:O2'	36:1:2917:G:H5'	2.22	0.40
36:1:2383:C:H2'	36:1:2384:A:H5'	2.03	0.40
51:M5:154:PRO:O	51:M5:157:LYS:HD2	4.56	0.40
26:D4:35:VAL:HG13	26:D4:36:SER:N	2.36	0.40
26:D4:37:LYS:O	26:D4:41:ARG:N	3.18	0.40
26:D4:59:GLY:O	26:D4:60:PHE:CB	2.70	0.40
74:O8:26:LYS:NZ	74:O8:28:ASN:OD1	4.06	0.40
71:O5:24:LEU:HB3	71:O5:51:ILE:HG12	2.67	0.40
1:6:1267:G:O2'	1:6:1268:G:H5'	2.22	0.40
36:5:2648:G:N2	36:5:2649:A:H1'	2.37	0.40
46:L9:173:ARG:HD3	46:L9:173:ARG:HH11	2.17	0.40
36:5:1698:C:C4	36:5:1699:A:N7	2.90	0.40
64:N8:74:ASN:CB	64:N8:76:ASP:H	2.30	0.40
36:5:3006:A:H2'	36:5:3007:U:O4'	2.22	0.40
4:S2:144:TRP:C	24:D2:98:GLN:HE22	3.56	0.40
13:C1:6:THR:HB	13:C1:9:SER:CB	2.49	0.40
22:D0:19:ILE:HA	22:D0:96:PRO:HB3	4.60	0.40
36:5:2815:G:H3'	36:5:2816:G:H5''	2.02	0.40
25:D3:139:LYS:HE3	25:D3:139:LYS:HB3	4.56	0.40
36:5:1674:G:H2'	36:5:1675:G:O4'	2.22	0.40
62:N6:60:ARG:NH2	36:5:190:U:C2	84.97	0.40
37:7:77:G:N2	37:7:102:A:OP2	2.36	0.40
1:2:190:C:O2'	1:2:191:C:H5'	2.21	0.40
39:L2:57:PRO:HB3	79:Q3:54:ILE:CG2	4.64	0.40
1:2:1231:U:OP1	1:2:1259:U:H1'	2.21	0.40
87:5:4184:OHX:N3	87:5:4186:OHX:N6	2.69	0.40
36:1:1326:A:H2'	36:1:1327:C:O4'	2.21	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:L8:244:ALA:O	45:L8:247:ASP:HB2	2.84	0.40
59:N3:119:GLY:O	59:N3:122:CYS:N	2.92	0.40
36:1:3206:C:H2'	50:M4:99:TRP:NE1	2.36	0.40
36:5:3189:G:C4	36:5:3190:C:C5	3.09	0.40
50:M4:107:GLU:O	50:M4:110:ALA:HB3	2.25	0.40
1:2:1219:A:N3	12:C0:51:SER:OG	2.54	0.40
36:1:120:G:C6	45:L8:128:LYS:HB2	2.56	0.40
1:6:1619:C:O2'	1:6:1620:C:H5'	2.20	0.40
65:N9:54:LEU:HA	65:N9:57:ALA:HB2	2.04	0.40
36:1:549:U:H2'	36:1:550:A:C8	2.57	0.40
36:1:1277:C:O2'	36:1:1278:A:C8	2.74	0.40
58:N2:35:LYS:HA	58:N2:38:ILE:HB	3.12	0.40
58:N2:40:HIS:HA	58:N2:47:VAL:HG11	2.04	0.40
36:1:2856:G:H2'	36:1:2857:C:H6	1.87	0.40
1:6:268:C:O2'	1:6:269:G:H5'	2.21	0.40
32:E0:18:THR:HA	32:E0:19:PRO:HD2	2.32	0.40
36:1:1209:G:H5"	36:1:1210:U:OP2	2.21	0.40
1:2:1308:G:C2	1:2:1309:C:C2	3.09	0.40
74:O8:11:PHE:CD2	74:O8:54:LEU:HD22	2.57	0.40
1:6:228:G:C4	1:6:834:G:C6	3.09	0.40
36:5:2440:G:H22	36:5:2508:U:H1'	1.86	0.40
36:5:256:G:C5	36:5:257:U:C5	3.09	0.40
1:2:1618:C:O4'	1:2:1619:C:H5	2.04	0.40
36:1:3223:A:C5	36:1:3263:G:C6	3.10	0.40
1:2:1086:A:OP2	4:S2:161:LYS:NZ	2.46	0.40
36:1:1236:G:O2'	36:1:1237:G:O5'	2.26	0.40
36:1:3305:A:C4	36:1:3306:U:O2	2.74	0.40
36:5:3216:G:C5	36:5:3259:U:C4	3.10	0.40
36:1:3332:U:O5'	36:1:3332:U:H6	2.05	0.40
50:M4:39:ILE:HG12	56:N0:72:VAL:HG13	2.93	0.40
37:7:61:G:C4	37:7:62:U:C5	3.09	0.40
42:L5:276:LYS:HG3	42:L5:277:LEU:N	4.81	0.40
79:Q3:84:ARG:HD2	79:Q3:84:ARG:HA	1.80	0.40
36:1:726:G:H3'	36:1:742:G:H22	1.84	0.40
14:C2:46:ARG:O	14:C2:49:THR:OG1	2.58	0.40
74:O8:31:LEU:HA	74:O8:37:PRO:CA	2.50	0.40
36:1:27:C:H1'	36:1:328:U:H1'	2.04	0.40
36:1:1154:A:H5"	36:1:1155:C:C5	2.49	0.40
11:S9:34:PHE:CD2	11:S9:105:LEU:HD23	2.57	0.40
36:5:966:U:C2	36:5:967:A:C8	3.09	0.40
1:2:1562:G:H2'	1:2:1563:C:C6	2.57	0.40
57:N1:8:ARG:HD2	36:5:2756:C:O2'	243.29	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:5:2757:U:H5''	36:5:2758:A:OP2	2.22	0.40
36:5:2752:U:O2	87:5:4226:OHX:N3	2.55	0.40
1:2:1372:U:C4	1:2:1373:C:C5	3.09	0.40
1:2:121:U:H1'	6:S4:33:ALA:C	2.42	0.40
9:S7:78:THR:HA	9:S7:81:LEU:HB2	3.33	0.40
36:5:2761:G:C4	36:5:2795:U:C5	3.10	0.40
36:5:702:C:C2	36:5:703:G:C8	3.09	0.40
36:5:1229:G:C6	36:5:1230:G:C5	3.09	0.40
11:S9:177:ALA:O	11:S9:179:ARG:N	4.16	0.40
1:6:755:A:H2'	1:6:755:A:H8	1.69	0.40
36:1:3010:U:C3'	36:1:3010:U:C6	3.05	0.40
1:6:1603:U:H2'	1:6:1604:U:C6	2.57	0.40
34:SR:151:VAL:HA	34:SR:173:GLY:HA2	2.04	0.40
1:6:799:A:H2'	1:6:800:U:O4'	2.22	0.40
36:1:3217:C:N3	53:M7:182:ILE:HG23	2.37	0.40
1:2:167:U:H4'	8:S6:134:GLY:O	2.21	0.40
8:S6:134:GLY:HA3	8:S6:158:ILE:HG13	4.88	0.40
2:S0:87:LEU:HA	2:S0:87:LEU:HD12	1.69	0.40
1:2:429:G:OP1	1:2:438:A:O2'	2.23	0.40
16:C4:111:ARG:HA	16:C4:111:ARG:HD2	1.76	0.40
1:2:1302:U:O2'	1:2:1303:U:H5'	2.20	0.40
29:D7:64:CYS:HB2	29:D7:71:ALA:HB1	2.02	0.40
8:S6:27:PHE:CE2	8:S6:41:VAL:HG22	4.03	0.40
1:2:623:A:OP1	87:2:2157:OHX:N2	2.55	0.40
36:5:39:A:H2'	36:5:42:C:N4	2.37	0.40
38:4:48:A:N1	38:4:51:G:C6	2.90	0.40
36:1:1704:A:C8	36:1:1739:U:O4	2.73	0.40
44:L7:197:GLN:OE1	44:L7:197:GLN:N	2.36	0.40
25:D3:32:ARG:HH11	25:D3:32:ARG:HD3	1.73	0.40
36:1:1698:C:H6	36:1:1698:C:O5'	2.05	0.40
36:5:720:A:H2'	36:5:720:A:N3	2.37	0.40
1:2:816:G:C2	1:2:817:A:C8	3.10	0.40
5:S3:220:PRO:HB2	5:S3:221:SER:H	1.64	0.40
36:1:2506:U:H2'	36:1:2507:C:C6	2.57	0.40

All (3) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:2:1491:U:O2'	22:d0:12:GLN:OE1[1_454]	2.02	0.18
36:1:3154:C:N4	34:sR:77:GLY:O[2_656]	2.15	0.05
34:sR:160:GLU:OE2	87:1:4023:OHX:N4[2_646]	2.17	0.03

5.3 Torsion angles

5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	S0	204/251 (81%)	137 (67%)	42 (21%)	25 (12%)	1	12
2	s0	204/251 (81%)	139 (68%)	31 (15%)	34 (17%)	0	6
3	S1	212/254 (84%)	142 (67%)	42 (20%)	28 (13%)	0	10
3	s1	214/254 (84%)	155 (72%)	39 (18%)	20 (9%)	1	20
4	S2	215/253 (85%)	148 (69%)	47 (22%)	20 (9%)	1	20
4	s2	215/253 (85%)	156 (73%)	30 (14%)	29 (14%)	0	9
5	S3	221/239 (92%)	154 (70%)	48 (22%)	19 (9%)	1	22
5	s3	221/239 (92%)	147 (66%)	51 (23%)	23 (10%)	1	16
6	S4	258/260 (99%)	184 (71%)	44 (17%)	30 (12%)	1	13
6	s4	258/260 (99%)	175 (68%)	53 (20%)	30 (12%)	1	13
7	S5	204/224 (91%)	129 (63%)	46 (22%)	29 (14%)	0	9
7	s5	204/224 (91%)	124 (61%)	51 (25%)	29 (14%)	0	9
8	S6	224/236 (95%)	166 (74%)	37 (16%)	21 (9%)	1	20
8	s6	216/236 (92%)	165 (76%)	36 (17%)	15 (7%)	2	30
9	S7	182/189 (96%)	131 (72%)	35 (19%)	16 (9%)	1	22
9	s7	184/189 (97%)	126 (68%)	37 (20%)	21 (11%)	1	13
10	S8	184/200 (92%)	132 (72%)	32 (17%)	20 (11%)	1	14
10	s8	184/200 (92%)	144 (78%)	26 (14%)	14 (8%)	2	26
11	S9	183/196 (93%)	128 (70%)	36 (20%)	19 (10%)	1	16
11	s9	183/196 (93%)	122 (67%)	42 (23%)	19 (10%)	1	16
12	C0	94/105 (90%)	54 (57%)	21 (22%)	19 (20%)	0	3
12	c0	92/105 (88%)	56 (61%)	17 (18%)	19 (21%)	0	3
13	C1	153/155 (99%)	113 (74%)	22 (14%)	18 (12%)	1	13
13	c1	144/155 (93%)	108 (75%)	20 (14%)	16 (11%)	1	14
14	C2	122/142 (86%)	71 (58%)	22 (18%)	29 (24%)	0	1

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	c2	122/142 (86%)	65 (53%)	36 (30%)	21 (17%)	0	5
15	C3	148/150 (99%)	107 (72%)	29 (20%)	12 (8%)	1	24
15	c3	148/150 (99%)	95 (64%)	28 (19%)	25 (17%)	0	5
16	C4	125/136 (92%)	80 (64%)	25 (20%)	20 (16%)	0	6
16	c4	126/136 (93%)	90 (71%)	24 (19%)	12 (10%)	1	19
17	C5	122/141 (86%)	78 (64%)	26 (21%)	18 (15%)	0	7
17	c5	133/141 (94%)	75 (56%)	29 (22%)	29 (22%)	0	2
18	C6	139/142 (98%)	105 (76%)	22 (16%)	12 (9%)	1	22
18	c6	140/142 (99%)	97 (69%)	24 (17%)	19 (14%)	0	9
19	C7	116/136 (85%)	76 (66%)	22 (19%)	18 (16%)	0	6
19	c7	113/136 (83%)	73 (65%)	29 (26%)	11 (10%)	1	19
20	C8	143/145 (99%)	107 (75%)	27 (19%)	9 (6%)	2	33
20	c8	143/145 (99%)	98 (68%)	27 (19%)	18 (13%)	0	11
21	C9	141/143 (99%)	99 (70%)	31 (22%)	11 (8%)	1	25
21	c9	141/143 (99%)	98 (70%)	36 (26%)	7 (5%)	3	40
22	D0	105/120 (88%)	74 (70%)	22 (21%)	9 (9%)	1	22
22	d0	108/120 (90%)	75 (69%)	15 (14%)	18 (17%)	0	6
23	D1	85/87 (98%)	53 (62%)	18 (21%)	14 (16%)	0	6
23	d1	85/87 (98%)	64 (75%)	14 (16%)	7 (8%)	1	24
24	D2	127/129 (98%)	91 (72%)	28 (22%)	8 (6%)	2	33
24	d2	127/129 (98%)	105 (83%)	17 (13%)	5 (4%)	5	49
25	D3	142/144 (99%)	87 (61%)	29 (20%)	26 (18%)	0	4
25	d3	142/144 (99%)	119 (84%)	16 (11%)	7 (5%)	3	41
26	D4	132/134 (98%)	98 (74%)	25 (19%)	9 (7%)	2	30
26	d4	132/134 (98%)	101 (76%)	17 (13%)	14 (11%)	1	15
27	D5	68/107 (64%)	43 (63%)	16 (24%)	9 (13%)	0	10
27	d5	67/107 (63%)	45 (67%)	14 (21%)	8 (12%)	1	12
28	D6	95/97 (98%)	53 (56%)	18 (19%)	24 (25%)	0	1
28	d6	95/97 (98%)	71 (75%)	16 (17%)	8 (8%)	1	23
29	D7	79/81 (98%)	58 (73%)	14 (18%)	7 (9%)	1	21
29	d7	79/81 (98%)	61 (77%)	11 (14%)	7 (9%)	1	21

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
30	D8	61/66 (92%)	45 (74%)	11 (18%)	5 (8%)	1	24
30	d8	61/66 (92%)	39 (64%)	14 (23%)	8 (13%)	0	11
31	D9	51/55 (93%)	32 (63%)	11 (22%)	8 (16%)	0	6
31	d9	51/55 (93%)	35 (69%)	8 (16%)	8 (16%)	0	6
32	E0	58/60 (97%)	34 (59%)	16 (28%)	8 (14%)	0	9
33	E1	69/76 (91%)	39 (56%)	13 (19%)	17 (25%)	0	1
34	SR	316/318 (99%)	237 (75%)	56 (18%)	23 (7%)	2	28
34	sR	316/318 (99%)	251 (79%)	46 (15%)	19 (6%)	2	34
35	SM	155/273 (57%)	90 (58%)	40 (26%)	25 (16%)	0	6
35	sM	98/273 (36%)	59 (60%)	20 (20%)	19 (19%)	0	3
39	L2	250/253 (99%)	197 (79%)	31 (12%)	22 (9%)	1	22
39	l2	250/253 (99%)	192 (77%)	42 (17%)	16 (6%)	2	33
40	L3	384/386 (100%)	290 (76%)	63 (16%)	31 (8%)	1	24
40	l3	384/386 (100%)	299 (78%)	53 (14%)	32 (8%)	1	23
41	L4	359/361 (99%)	260 (72%)	62 (17%)	37 (10%)	1	16
41	l4	359/361 (99%)	251 (70%)	68 (19%)	40 (11%)	1	14
42	L5	294/296 (99%)	200 (68%)	58 (20%)	36 (12%)	1	12
42	l5	292/296 (99%)	221 (76%)	44 (15%)	27 (9%)	1	20
43	L6	152/175 (87%)	123 (81%)	17 (11%)	12 (8%)	1	25
43	l6	153/175 (87%)	107 (70%)	27 (18%)	19 (12%)	1	12
44	L7	220/243 (90%)	154 (70%)	45 (20%)	21 (10%)	1	19
44	l7	221/243 (91%)	165 (75%)	34 (15%)	22 (10%)	1	17
45	L8	231/255 (91%)	137 (59%)	65 (28%)	29 (13%)	0	11
45	l8	229/255 (90%)	155 (68%)	52 (23%)	22 (10%)	1	19
46	L9	189/191 (99%)	137 (72%)	30 (16%)	22 (12%)	1	13
46	l9	189/191 (99%)	142 (75%)	27 (14%)	20 (11%)	1	15
47	M0	207/220 (94%)	148 (72%)	38 (18%)	21 (10%)	1	17
47	m0	209/220 (95%)	149 (71%)	41 (20%)	19 (9%)	1	21
48	M1	167/173 (96%)	116 (70%)	27 (16%)	24 (14%)	0	8
48	m1	167/173 (96%)	120 (72%)	27 (16%)	20 (12%)	1	12
49	M3	191/198 (96%)	134 (70%)	46 (24%)	11 (6%)	3	35

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
49	m3	192/198 (97%)	126 (66%)	37 (19%)	29 (15%)	0	7
50	M4	134/137 (98%)	97 (72%)	25 (19%)	12 (9%)	1	21
50	m4	135/137 (98%)	92 (68%)	35 (26%)	8 (6%)	2	35
51	M5	201/203 (99%)	151 (75%)	38 (19%)	12 (6%)	2	34
51	m5	201/203 (99%)	151 (75%)	35 (17%)	15 (8%)	2	27
52	M6	195/198 (98%)	146 (75%)	36 (18%)	13 (7%)	2	31
52	m6	195/198 (98%)	151 (77%)	26 (13%)	18 (9%)	1	20
53	M7	181/183 (99%)	128 (71%)	34 (19%)	19 (10%)	1	15
53	m7	153/183 (84%)	111 (72%)	29 (19%)	13 (8%)	1	23
54	M8	183/185 (99%)	132 (72%)	36 (20%)	15 (8%)	1	24
54	m8	183/185 (99%)	134 (73%)	36 (20%)	13 (7%)	2	29
55	M9	186/188 (99%)	136 (73%)	33 (18%)	17 (9%)	1	21
55	m9	186/188 (99%)	125 (67%)	40 (22%)	21 (11%)	1	14
56	N0	170/172 (99%)	139 (82%)	21 (12%)	10 (6%)	2	35
56	n0	170/172 (99%)	145 (85%)	16 (9%)	9 (5%)	3	38
57	N1	157/159 (99%)	115 (73%)	28 (18%)	14 (9%)	1	21
57	n1	157/159 (99%)	121 (77%)	27 (17%)	9 (6%)	3	36
58	N2	98/120 (82%)	65 (66%)	26 (26%)	7 (7%)	2	29
58	n2	96/120 (80%)	64 (67%)	24 (25%)	8 (8%)	1	23
59	N3	134/136 (98%)	109 (81%)	16 (12%)	9 (7%)	2	31
59	n3	134/136 (98%)	113 (84%)	12 (9%)	9 (7%)	2	31
60	N4	96/155 (62%)	63 (66%)	16 (17%)	17 (18%)	0	4
60	n4	133/155 (86%)	88 (66%)	25 (19%)	20 (15%)	0	7
61	N5	119/141 (84%)	81 (68%)	30 (25%)	8 (7%)	2	31
61	n5	118/141 (84%)	91 (77%)	17 (14%)	10 (8%)	1	23
62	N6	124/126 (98%)	94 (76%)	18 (14%)	12 (10%)	1	19
62	n6	124/126 (98%)	92 (74%)	17 (14%)	15 (12%)	1	12
63	N7	133/135 (98%)	98 (74%)	19 (14%)	16 (12%)	1	12
63	n7	133/135 (98%)	94 (71%)	26 (20%)	13 (10%)	1	18
64	N8	146/148 (99%)	100 (68%)	30 (20%)	16 (11%)	1	14
64	n8	146/148 (99%)	104 (71%)	28 (19%)	14 (10%)	1	19

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
65	N9	56/58 (97%)	40 (71%)	11 (20%)	5 (9%)	1	21
65	n9	56/58 (97%)	33 (59%)	14 (25%)	9 (16%)	0	6
66	O0	95/104 (91%)	82 (86%)	10 (10%)	3 (3%)	6	55
66	o0	98/104 (94%)	75 (76%)	18 (18%)	5 (5%)	3	40
67	O1	107/112 (96%)	86 (80%)	12 (11%)	9 (8%)	1	23
67	o1	107/112 (96%)	73 (68%)	14 (13%)	20 (19%)	0	3
68	O2	125/129 (97%)	95 (76%)	20 (16%)	10 (8%)	1	25
68	o2	125/129 (97%)	89 (71%)	23 (18%)	13 (10%)	1	16
69	O3	104/106 (98%)	90 (86%)	7 (7%)	7 (7%)	2	31
69	o3	104/106 (98%)	82 (79%)	13 (12%)	9 (9%)	1	22
70	O4	110/119 (92%)	80 (73%)	19 (17%)	11 (10%)	1	17
70	o4	110/119 (92%)	75 (68%)	24 (22%)	11 (10%)	1	17
71	O5	117/119 (98%)	75 (64%)	28 (24%)	14 (12%)	1	12
71	o5	117/119 (98%)	80 (68%)	18 (15%)	19 (16%)	0	6
72	O6	97/99 (98%)	69 (71%)	16 (16%)	12 (12%)	1	12
72	o6	97/99 (98%)	67 (69%)	18 (19%)	12 (12%)	1	12
73	O7	85/87 (98%)	63 (74%)	16 (19%)	6 (7%)	2	29
73	o7	85/87 (98%)	60 (71%)	14 (16%)	11 (13%)	0	11
74	O8	75/77 (97%)	55 (73%)	12 (16%)	8 (11%)	1	15
74	o8	75/77 (97%)	53 (71%)	18 (24%)	4 (5%)	3	38
75	O9	48/50 (96%)	34 (71%)	10 (21%)	4 (8%)	1	23
75	o9	48/50 (96%)	36 (75%)	8 (17%)	4 (8%)	1	23
76	Q0	50/52 (96%)	32 (64%)	12 (24%)	6 (12%)	1	12
76	q0	50/52 (96%)	39 (78%)	6 (12%)	5 (10%)	1	17
77	Q1	23/25 (92%)	18 (78%)	3 (13%)	2 (9%)	1	22
77	q1	23/25 (92%)	16 (70%)	3 (13%)	4 (17%)	0	5
78	Q2	103/105 (98%)	75 (73%)	20 (19%)	8 (8%)	1	25
78	q2	103/105 (98%)	83 (81%)	14 (14%)	6 (6%)	3	35
79	Q3	89/91 (98%)	59 (66%)	16 (18%)	14 (16%)	0	6
79	q3	89/91 (98%)	71 (80%)	9 (10%)	9 (10%)	1	17
80	e0	60/62 (97%)	37 (62%)	14 (23%)	9 (15%)	0	7

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
81	e1	74/76 (97%)	28 (38%)	26 (35%)	20 (27%)	0	1
83	p0	139/311 (45%)	103 (74%)	27 (19%)	9 (6%)	2	32
All	All	22333/24141 (92%)	15914 (71%)	4073 (18%)	2346 (10%)	1	15

All (2346) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	30	GLN
2	S0	39	ASN
2	S0	95	ALA
2	S0	132	ALA
2	S0	140	ASN
2	S0	158	VAL
2	S0	190	ASP
2	S0	191	ARG
3	S1	49	ASN
3	S1	63	GLY
3	S1	82	ARG
3	S1	177	GLN
3	S1	179	SER
3	S1	206	PRO
3	S1	207	LEU
4	S2	121	VAL
4	S2	135	SER
4	S2	148	LEU
4	S2	163	GLY
4	S2	208	GLU
4	S2	236	PRO
5	S3	44	THR
5	S3	129	SER
5	S3	211	PRO
5	S3	216	PRO
5	S3	220	PRO
6	S4	104	ASP
6	S4	119	ALA
6	S4	142	HIS
6	S4	188	ASN
6	S4	245	LYS
7	S5	31	GLU
7	S5	37	GLN

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Mol	Chain	Res	Type
7	S5	63	GLN
7	S5	78	ALA
7	S5	81	ARG
7	S5	98	MET
7	S5	101	GLY
7	S5	109	LYS
8	S6	10	ASN
8	S6	25	ARG
8	S6	138	ALA
8	S6	154	ARG
8	S6	173	PRO
8	S6	174	LYS
9	S7	5	GLN
9	S7	64	VAL
9	S7	73	VAL
9	S7	116	ARG
9	S7	131	PHE
10	S8	22	ARG
10	S8	137	LYS
10	S8	199	LYS
11	S9	100	LYS
11	S9	134	ILE
11	S9	153	GLU
11	S9	156	ILE
11	S9	164	PHE
11	S9	168	ARG
12	C0	60	SER
12	C0	61	TRP
12	C0	81	ASN
12	C0	87	VAL
12	C0	88	PRO
13	C1	3	THR
13	C1	6	THR
13	C1	7	VAL
13	C1	29	LYS
13	C1	96	LYS
13	C1	144	ALA
13	C1	146	ALA
13	C1	149	ALA
13	C1	154	ALA
14	C2	87	PRO
14	C2	91	VAL

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Mol	Chain	Res	Type
14	C2	113	ARG
14	C2	141	SER
15	C3	27	LYS
15	C3	28	LEU
15	C3	118	ILE
16	C4	18	ARG
16	C4	48	VAL
16	C4	50	ALA
16	C4	51	ASP
16	C4	94	PRO
17	C5	11	VAL
17	C5	22	LEU
17	C5	29	SER
17	C5	125	PRO
17	C5	126	VAL
17	C5	127	ARG
18	C6	39	VAL
18	C6	41	PRO
18	C6	42	GLU
18	C6	113	ASP
19	C7	85	VAL
19	C7	86	PRO
19	C7	88	VAL
19	C7	124	VAL
20	C8	14	ILE
20	C8	92	ILE
20	C8	144	ARG
21	C9	39	THR
21	C9	41	SER
21	C9	69	LYS
22	D0	16	GLN
22	D0	17	GLN
22	D0	117	VAL
22	D0	118	VAL
23	D1	2	GLU
23	D1	4	ASP
23	D1	10	GLU
23	D1	28	ASP
24	D2	29	PRO
24	D2	30	SER
24	D2	83	ILE
25	D3	3	LYS

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Mol	Chain	Res	Type
25	D3	5	LYS
25	D3	36	THR
25	D3	78	LYS
25	D3	99	ASN
25	D3	137	LYS
25	D3	138	GLU
25	D3	144	ARG
26	D4	33	ALA
26	D4	35	VAL
26	D4	104	SER
27	D5	43	ASP
27	D5	44	GLN
27	D5	71	ILE
27	D5	97	LYS
28	D6	5	ARG
28	D6	45	VAL
28	D6	47	ALA
28	D6	84	VAL
28	D6	86	VAL
29	D7	18	LYS
29	D7	38	PRO
29	D7	63	LEU
31	D9	11	PRO
31	D9	25	SER
31	D9	26	SER
31	D9	27	HIS
31	D9	34	TYR
33	E1	84	VAL
33	E1	106	TYR
33	E1	107	LYS
33	E1	110	ALA
33	E1	111	GLU
33	E1	137	ASP
34	SR	51	ASP
34	SR	80	ALA
34	SR	94	VAL
34	SR	162	ALA
35	SM	52	PRO
35	SM	54	PRO
35	SM	64	LYS
35	SM	65	THR
35	SM	69	ARG

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Mol	Chain	Res	Type
35	SM	90	ALA
35	SM	91	THR
35	SM	116	GLU
35	SM	140	ASP
35	SM	166	VAL
35	SM	167	PRO
35	SM	173	GLU
39	L2	17	THR
39	L2	20	THR
39	L2	144	ASN
39	L2	229	ALA
40	L3	83	PRO
40	L3	96	PRO
40	L3	140	ASP
40	L3	188	ILE
40	L3	240	ARG
40	L3	289	ASP
40	L3	308	MET
40	L3	310	GLY
40	L3	333	LYS
41	L4	4	PRO
41	L4	24	ALA
41	L4	61	SER
41	L4	72	ALA
41	L4	130	ALA
41	L4	132	ALA
41	L4	184	SER
41	L4	190	GLY
41	L4	197	ARG
41	L4	220	ARG
41	L4	349	THR
41	L4	361	HIS
42	L5	19	PRO
42	L5	37	VAL
42	L5	57	ASN
42	L5	85	ARG
42	L5	125	VAL
42	L5	178	ASN
42	L5	234	ASP
42	L5	236	LEU
42	L5	260	PHE
42	L5	263	GLU

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Mol	Chain	Res	Type
43	L6	93	VAL
43	L6	98	VAL
43	L6	100	LYS
43	L6	107	ALA
44	L7	24	GLU
44	L7	25	GLN
44	L7	38	LYS
44	L7	112	ASN
44	L7	129	LEU
44	L7	171	ALA
44	L7	175	LYS
44	L7	217	PRO
45	L8	31	PRO
45	L8	36	ILE
45	L8	37	GLY
45	L8	40	VAL
45	L8	64	ILE
45	L8	92	LYS
45	L8	121	SER
46	L9	48	VAL
46	L9	49	ASN
46	L9	50	ASN
46	L9	110	LYS
46	L9	162	GLN
46	L9	189	GLU
47	M0	16	PRO
47	M0	38	LYS
47	M0	145	LYS
47	M0	207	GLU
48	M1	8	PRO
48	M1	11	ASP
48	M1	12	LEU
48	M1	24	GLY
48	M1	94	ARG
48	M1	95	ASN
48	M1	112	LEU
49	M3	50	PRO
49	M3	164	GLU
50	M4	8	LYS
50	M4	62	GLN
50	M4	99	TRP
50	M4	134	ALA

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Mol	Chain	Res	Type
50	M4	135	LEU
50	M4	136	ALA
51	M5	81	TYR
51	M5	158	HIS
51	M5	166	ALA
52	M6	85	ARG
52	M6	111	PRO
52	M6	149	TYR
52	M6	182	ASN
53	M7	9	THR
53	M7	37	ASN
53	M7	158	ALA
53	M7	163	LYS
53	M7	177	ALA
54	M8	41	ASP
54	M8	99	THR
54	M8	116	LYS
54	M8	151	ARG
54	M8	152	HIS
55	M9	15	VAL
55	M9	35	ALA
55	M9	66	HIS
55	M9	121	HIS
56	N0	59	VAL
57	N1	55	LYS
57	N1	101	CYS
57	N1	119	ALA
57	N1	120	LYS
57	N1	122	GLN
57	N1	133	ALA
57	N1	138	SER
58	N2	11	ILE
58	N2	51	GLY
58	N2	91	ASP
59	N3	9	THR
59	N3	10	LYS
59	N3	66	LYS
59	N3	67	PRO
59	N3	82	ALA
60	N4	25	ASP
60	N4	35	LYS
60	N4	77	LYS

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Mol	Chain	Res	Type
60	N4	81	PRO
60	N4	86	SER
61	N5	36	LYS
61	N5	62	VAL
62	N6	31	LEU
62	N6	37	LYS
62	N6	91	ASN
62	N6	92	GLY
63	N7	18	TYR
63	N7	35	SER
63	N7	59	ALA
63	N7	98	THR
63	N7	105	SER
63	N7	128	GLN
64	N8	15	VAL
64	N8	30	GLY
64	N8	79	TRP
64	N8	93	SER
64	N8	117	ARG
65	N9	5	LYS
65	N9	24	PRO
67	O1	6	ASP
67	O1	7	VAL
67	O1	46	THR
68	O2	41	VAL
68	O2	62	LYS
69	O3	33	GLU
69	O3	90	PRO
69	O3	94	PHE
70	O4	46	ASP
70	O4	108	GLN
70	O4	109	THR
71	O5	30	GLU
71	O5	31	LEU
71	O5	86	ARG
71	O5	96	GLU
71	O5	97	ALA
71	O5	119	LYS
72	O6	11	LEU
72	O6	21	THR
72	O6	27	SER
72	O6	89	GLU

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Mol	Chain	Res	Type
73	O7	32	LYS
73	O7	51	ALA
74	O8	33	LYS
75	O9	4	GLN
75	O9	10	LYS
75	O9	27	ILE
76	Q0	78	ILE
76	Q0	117	HIS
77	Q1	23	ARG
78	Q2	15	LYS
78	Q2	17	CYS
78	Q2	60	LYS
78	Q2	100	LYS
79	Q3	21	SER
79	Q3	53	GLY
79	Q3	60	CYS
79	Q3	61	LYS
2	s0	4	PRO
2	s0	95	ALA
2	s0	97	PRO
2	s0	111	ILE
2	s0	114	SER
2	s0	152	PRO
2	s0	155	PHE
2	s0	158	VAL
2	s0	164	ASN
2	s0	177	LEU
2	s0	178	ALA
2	s0	189	VAL
2	s0	194	PRO
2	s0	206	ASP
3	s1	26	ARG
3	s1	81	PHE
3	s1	82	ARG
3	s1	93	GLY
3	s1	108	ASP
3	s1	147	ALA
3	s1	206	PRO
4	s2	106	ASP
4	s2	121	VAL
4	s2	148	LEU
4	s2	149	GLY

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Mol	Chain	Res	Type
4	s2	164	SER
4	s2	228	ASN
4	s2	234	PRO
4	s2	236	PRO
5	s3	9	ARG
5	s3	30	ALA
5	s3	115	ILE
5	s3	142	LEU
5	s3	144	ALA
5	s3	177	MET
5	s3	219	ALA
5	s3	220	PRO
5	s3	221	SER
6	s4	57	ASN
6	s4	80	THR
6	s4	142	HIS
6	s4	150	PRO
6	s4	163	ASP
6	s4	171	ASP
6	s4	177	ALA
6	s4	178	GLY
6	s4	196	VAL
7	s5	28	PRO
7	s5	33	VAL
7	s5	34	GLN
7	s5	36	ALA
7	s5	37	GLN
7	s5	41	LYS
7	s5	55	ASP
7	s5	100	ASN
7	s5	151	GLY
7	s5	155	ALA
7	s5	184	PHE
8	s6	58	LYS
8	s6	70	PRO
8	s6	122	GLU
8	s6	154	ARG
8	s6	156	PHE
8	s6	173	PRO
8	s6	174	LYS
9	s7	64	VAL
9	s7	74	GLN

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Mol	Chain	Res	Type
9	s7	112	ARG
9	s7	113	PRO
9	s7	118	LEU
9	s7	131	PHE
9	s7	147	ASN
9	s7	149	ILE
9	s7	158	ASP
9	s7	165	LYS
10	s8	3	ILE
10	s8	100	ALA
10	s8	101	ILE
10	s8	107	THR
10	s8	147	ALA
10	s8	148	ALA
11	s9	118	LEU
11	s9	167	ALA
11	s9	182	GLU
12	c0	24	LYS
12	c0	25	LYS
12	c0	35	ILE
12	c0	82	LEU
12	c0	83	PRO
12	c0	88	PRO
12	c0	92	ILE
12	c0	94	GLU
12	c0	97	PRO
13	c1	8	GLN
13	c1	75	VAL
13	c1	144	ALA
14	c2	22	VAL
14	c2	39	ASP
14	c2	66	VAL
14	c2	82	PRO
14	c2	101	ALA
14	c2	131	ASP
15	c3	12	SER
15	c3	19	SER
15	c3	60	VAL
15	c3	62	GLN
15	c3	66	ILE
15	c3	87	ASP
15	c3	106	ARG

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Mol	Chain	Res	Type
15	c3	122	ILE
15	c3	139	TRP
15	c3	149	LEU
16	c4	39	ILE
16	c4	50	ALA
16	c4	126	THR
16	c4	132	ARG
17	c5	7	ALA
17	c5	18	ARG
17	c5	26	LEU
17	c5	27	GLU
17	c5	41	VAL
17	c5	49	MET
17	c5	51	SER
17	c5	71	GLU
17	c5	75	PRO
17	c5	125	PRO
17	c5	126	VAL
17	c5	127	ARG
18	c6	39	VAL
18	c6	106	LYS
18	c6	110	THR
19	c7	63	LYS
19	c7	88	VAL
19	c7	99	VAL
19	c7	116	LYS
20	c8	9	GLY
20	c8	29	VAL
20	c8	46	VAL
20	c8	91	ASP
20	c8	128	PHE
20	c8	145	ARG
21	c9	11	ALA
21	c9	29	GLU
22	d0	15	GLN
22	d0	16	GLN
22	d0	17	GLN
22	d0	49	ASN
22	d0	51	VAL
22	d0	96	PRO
22	d0	97	VAL
22	d0	118	VAL

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Mol	Chain	Res	Type
22	d0	119	ALA
22	d0	120	SER
23	d1	43	GLY
23	d1	66	ASP
23	d1	67	ASP
24	d2	68	ARG
24	d2	95	PRO
25	d3	131	SER
25	d3	138	GLU
26	d4	4	ALA
26	d4	30	PRO
26	d4	33	ALA
26	d4	54	ALA
26	d4	68	LYS
26	d4	125	LEU
27	d5	38	HIS
27	d5	85	LYS
27	d5	87	GLY
27	d5	104	ALA
28	d6	28	LYS
28	d6	63	ALA
29	d7	4	VAL
29	d7	38	PRO
29	d7	57	GLU
29	d7	60	SER
30	d8	52	ASP
31	d9	6	VAL
31	d9	7	TRP
80	e0	48	THR
80	e0	49	LEU
80	e0	60	PRO
81	e1	83	LYS
81	e1	84	VAL
81	e1	87	THR
81	e1	100	LEU
81	e1	102	VAL
81	e1	103	LEU
81	e1	106	TYR
81	e1	124	PRO
81	e1	125	THR
81	e1	127	GLY
81	e1	148	TYR

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Mol	Chain	Res	Type
34	sR	4	ASN
34	sR	75	ALA
34	sR	149	ASP
34	sR	160	GLU
34	sR	162	ALA
34	sR	165	ASP
34	sR	166	SER
34	sR	226	ALA
34	sR	285	ALA
34	sR	318	ALA
35	sM	41	SER
35	sM	47	ALA
35	sM	48	ARG
35	sM	50	ASN
35	sM	64	LYS
35	sM	172	VAL
39	l2	24	GLN
39	l2	130	SER
39	l2	143	GLU
39	l2	212	GLY
39	l2	249	SER
40	l3	23	ALA
40	l3	129	ALA
40	l3	140	ASP
40	l3	142	ALA
40	l3	170	PRO
40	l3	188	ILE
40	l3	235	THR
40	l3	252	ILE
40	l3	263	SER
40	l3	302	LYS
41	l4	15	ALA
41	l4	17	ALA
41	l4	74	ILE
41	l4	132	ALA
41	l4	133	SER
41	l4	193	LYS
41	l4	301	PRO
41	l4	305	ALA
41	l4	349	THR
42	l5	57	ASN
42	l5	116	ASP

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Mol	Chain	Res	Type
42	l5	178	ASN
42	l5	212	ALA
42	l5	216	GLU
42	l5	228	ALA
43	l6	8	LYS
43	l6	24	ALA
43	l6	26	ARG
43	l6	32	ALA
43	l6	81	ALA
43	l6	98	VAL
43	l6	107	ALA
43	l6	129	GLU
43	l6	142	ASP
43	l6	171	PRO
44	l7	66	LYS
44	l7	67	ARG
44	l7	130	ILE
44	l7	168	ILE
44	l7	178	ILE
44	l7	180	SER
44	l7	193	PRO
45	l8	25	PRO
45	l8	26	LEU
45	l8	34	PHE
45	l8	122	LYS
45	l8	240	ASN
45	l8	241	LYS
46	l9	2	LYS
46	l9	77	ASN
46	l9	144	ILE
47	m0	16	PRO
47	m0	38	LYS
47	m0	77	THR
47	m0	78	THR
47	m0	79	VAL
47	m0	82	ARG
47	m0	91	VAL
47	m0	118	ALA
48	m1	8	PRO
48	m1	9	MET
48	m1	10	ARG
48	m1	23	VAL

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Mol	Chain	Res	Type
48	m1	115	LYS
48	m1	117	ASP
48	m1	173	ASP
49	m3	19	GLN
49	m3	47	ALA
49	m3	50	PRO
49	m3	133	PRO
49	m3	134	GLU
49	m3	141	ALA
49	m3	150	PRO
49	m3	152	THR
49	m3	161	ASP
49	m3	186	ARG
50	m4	90	VAL
50	m4	136	ALA
51	m5	17	ASP
51	m5	77	LYS
51	m5	81	TYR
51	m5	183	THR
51	m5	187	ARG
52	m6	4	GLU
52	m6	63	ALA
52	m6	94	ARG
52	m6	122	GLN
52	m6	178	VAL
52	m6	196	ALA
53	m7	12	ALA
53	m7	34	GLN
53	m7	67	ILE
53	m7	109	ALA
54	m8	99	THR
54	m8	108	ALA
54	m8	112	ALA
54	m8	149	ALA
55	m9	7	GLN
55	m9	36	ASN
55	m9	47	ASN
55	m9	55	VAL
55	m9	117	LYS
55	m9	130	ASN
55	m9	182	ASP
55	m9	183	ALA

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Mol	Chain	Res	Type
56	n0	98	SER
56	n0	142	GLN
57	n1	38	ASP
57	n1	55	LYS
57	n1	126	VAL
57	n1	127	GLN
57	n1	146	ASN
58	n2	50	LEU
59	n3	124	ASP
60	n4	14	TYR
60	n4	16	GLY
60	n4	25	ASP
60	n4	57	LYS
60	n4	71	ARG
60	n4	77	LYS
60	n4	133	THR
60	n4	134	GLN
61	n5	44	PRO
61	n5	45	LYS
61	n5	46	TYR
62	n6	25	SER
62	n6	37	LYS
62	n6	62	SER
62	n6	71	SER
62	n6	83	ASP
62	n6	84	LYS
62	n6	96	PRO
62	n6	125	LYS
62	n6	126	LEU
63	n7	5	LEU
63	n7	36	HIS
63	n7	103	GLN
63	n7	130	PHE
64	n8	12	ARG
64	n8	76	ASP
64	n8	78	LEU
64	n8	79	TRP
65	n9	23	LYS
65	n9	39	PHE
65	n9	42	ASN
67	o1	5	LYS
67	o1	33	VAL

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Mol	Chain	Res	Type
67	o1	45	GLY
67	o1	63	GLY
67	o1	84	ASP
67	o1	86	LYS
67	o1	99	ALA
68	o2	6	HIS
68	o2	27	ARG
68	o2	124	GLY
69	o3	40	ASP
69	o3	60	ARG
69	o3	90	PRO
70	o4	32	ALA
70	o4	35	VAL
71	o5	6	ALA
71	o5	39	PRO
71	o5	43	LYS
71	o5	83	LYS
71	o5	87	ALA
71	o5	99	GLN
71	o5	119	LYS
72	o6	13	LYS
72	o6	64	SER
72	o6	91	ASN
72	o6	98	ARG
73	o7	12	HIS
73	o7	67	LEU
73	o7	86	ALA
75	o9	30	ARG
75	o9	35	ILE
76	q0	78	ILE
76	q0	80	PRO
76	q0	81	SER
76	q0	120	GLN
77	q1	14	LYS
78	q2	73	GLU
79	q3	10	ILE
79	q3	20	SER
79	q3	21	SER
79	q3	45	LYS
79	q3	51	ALA
83	p0	206	ASP
2	S0	26	ALA

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Mol	Chain	Res	Type
2	S0	36	TYR
2	S0	37	VAL
2	S0	130	ALA
3	S1	21	VAL
3	S1	54	LEU
3	S1	158	SER
3	S1	213	ARG
3	S1	224	ASP
4	S2	75	GLY
4	S2	182	PRO
4	S2	200	SER
4	S2	207	LEU
5	S3	31	GLU
5	S3	61	GLU
5	S3	78	LYS
5	S3	130	GLY
5	S3	217	ILE
6	S4	12	LEU
6	S4	66	MET
6	S4	87	MET
6	S4	95	THR
6	S4	178	GLY
6	S4	231	GLN
6	S4	260	GLY
7	S5	39	GLU
7	S5	43	PHE
7	S5	45	LYS
7	S5	127	GLN
8	S6	44	GLU
8	S6	148	SER
8	S6	149	LYS
9	S7	32	PRO
9	S7	98	ILE
9	S7	111	LYS
9	S7	118	LEU
9	S7	133	THR
9	S7	167	GLU
10	S8	10	LYS
10	S8	41	LYS
10	S8	152	ILE
11	S9	67	PRO
11	S9	122	VAL

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Mol	Chain	Res	Type
11	S9	150	LEU
11	S9	162	SER
11	S9	163	PRO
11	S9	169	PRO
12	C0	25	LYS
12	C0	31	LYS
12	C0	33	GLU
12	C0	64	TYR
12	C0	84	GLU
13	C1	55	ASP
13	C1	88	ARG
13	C1	95	PRO
13	C1	145	ALA
13	C1	147	ALA
14	C2	67	THR
14	C2	126	TRP
14	C2	127	GLY
14	C2	131	ASP
14	C2	142	GLN
15	C3	68	GLY
15	C3	117	LEU
16	C4	35	GLY
16	C4	36	LYS
16	C4	47	LYS
16	C4	64	ALA
16	C4	75	GLY
16	C4	79	VAL
16	C4	123	SER
17	C5	52	LYS
17	C5	53	PRO
17	C5	69	GLU
18	C6	40	GLU
18	C6	59	LYS
18	C6	107	LYS
19	C7	6	THR
19	C7	23	LYS
19	C7	113	LEU
19	C7	120	SER
20	C8	8	GLN
20	C8	70	VAL
20	C8	119	ILE
20	C8	120	ARG

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Mol	Chain	Res	Type
21	C9	40	SER
21	C9	119	LYS
25	D3	79	ASN
25	D3	131	SER
26	D4	5	VAL
26	D4	11	LYS
27	D5	37	GLN
27	D5	88	ILE
28	D6	32	LYS
28	D6	53	LEU
28	D6	61	GLU
28	D6	62	TYR
28	D6	65	PRO
28	D6	80	HIS
28	D6	85	ARG
28	D6	97	PRO
29	D7	51	GLN
30	D8	36	THR
31	D9	6	VAL
31	D9	8	PHE
32	E0	6	GLY
32	E0	13	LYS
32	E0	47	VAL
32	E0	52	GLY
33	E1	83	LYS
33	E1	98	VAL
33	E1	102	VAL
33	E1	118	ARG
34	SR	217	ASP
34	SR	237	GLN
35	SM	41	SER
35	SM	71	ASN
35	SM	87	THR
35	SM	89	ARG
35	SM	133	GLU
35	SM	139	GLU
39	L2	7	ASN
39	L2	13	GLY
39	L2	133	TYR
39	L2	146	THR
39	L2	175	VAL
39	L2	220	GLY

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Mol	Chain	Res	Type
40	L3	139	GLN
40	L3	142	ALA
40	L3	245	GLY
40	L3	348	ARG
40	L3	351	LEU
40	L3	378	ALA
40	L3	385	LYS
40	L3	386	ASP
41	L4	14	GLU
41	L4	26	PHE
41	L4	82	THR
41	L4	174	ALA
41	L4	291	ASN
41	L4	295	ILE
41	L4	311	HIS
41	L4	317	PRO
42	L5	7	ALA
42	L5	59	ASP
42	L5	115	LEU
42	L5	126	GLU
42	L5	177	GLU
42	L5	221	GLU
42	L5	231	ILE
42	L5	256	THR
42	L5	258	LYS
43	L6	59	GLU
43	L6	61	ASN
43	L6	90	LYS
44	L7	91	GLY
44	L7	122	ALA
44	L7	185	ILE
44	L7	193	PRO
44	L7	241	LYS
45	L8	78	PHE
45	L8	103	ALA
45	L8	182	GLY
45	L8	209	ALA
45	L8	240	ASN
46	L9	39	LYS
46	L9	66	ALA
46	L9	67	ALA
46	L9	161	LEU

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Mol	Chain	Res	Type
46	L9	169	ASN
47	M0	41	ALA
47	M0	84	ALA
47	M0	117	GLY
47	M0	149	VAL
47	M0	155	ALA
47	M0	208	ASN
48	M1	115	LYS
48	M1	138	VAL
48	M1	139	THR
48	M1	140	ARG
48	M1	167	TYR
48	M1	171	VAL
49	M3	47	ALA
49	M3	193	ALA
51	M5	94	TYR
52	M6	191	ALA
52	M6	195	ALA
53	M7	36	ILE
53	M7	54	HIS
53	M7	157	VAL
53	M7	161	ALA
53	M7	164	LYS
53	M7	178	ALA
54	M8	44	PHE
54	M8	46	LYS
54	M8	91	ALA
54	M8	183	GLY
55	M9	14	VAL
55	M9	20	ARG
55	M9	65	ALA
55	M9	67	ALA
56	N0	139	TYR
57	N1	16	GLN
57	N1	18	ASP
57	N1	81	GLY
57	N1	124	VAL
58	N2	27	VAL
58	N2	52	ASN
59	N3	6	ALA
60	N4	16	GLY
60	N4	36	SER

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Mol	Chain	Res	Type
60	N4	46	PRO
60	N4	62	GLY
60	N4	76	VAL
62	N6	45	ILE
62	N6	90	VAL
62	N6	101	PRO
63	N7	3	LYS
63	N7	28	PRO
63	N7	55	LYS
64	N8	4	ARG
64	N8	27	LYS
64	N8	29	PRO
64	N8	81	LEU
64	N8	84	GLU
66	O0	71	GLN
67	O1	5	LYS
67	O1	31	ARG
67	O1	47	ASP
67	O1	61	LYS
68	O2	13	HIS
68	O2	27	ARG
70	O4	33	GLN
70	O4	98	GLN
71	O5	8	GLU
71	O5	43	LYS
71	O5	75	TYR
71	O5	82	ALA
71	O5	95	PHE
72	O6	94	ILE
73	O7	77	GLY
73	O7	85	LYS
73	O7	86	ALA
74	O8	37	PRO
74	O8	74	LYS
76	Q0	120	GLN
77	Q1	3	ALA
78	Q2	32	LYS
78	Q2	34	SER
79	Q3	74	ALA
79	Q3	85	ARG
79	Q3	89	MET
2	s0	9	LEU

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Mol	Chain	Res	Type
2	s0	31	VAL
2	s0	65	ALA
2	s0	115	PHE
2	s0	130	ALA
2	s0	185	ARG
2	s0	196	SER
3	s1	21	VAL
3	s1	107	THR
3	s1	191	GLU
3	s1	218	LEU
3	s1	224	ASP
4	s2	91	ARG
4	s2	92	ALA
4	s2	163	GLY
4	s2	192	GLY
4	s2	204	THR
4	s2	233	GLN
5	s3	161	GLY
5	s3	211	PRO
5	s3	216	PRO
5	s3	217	ILE
6	s4	12	LEU
6	s4	31	PRO
6	s4	168	LYS
6	s4	195	ILE
6	s4	248	ILE
6	s4	259	GLN
7	s5	43	PHE
7	s5	75	GLY
7	s5	204	GLY
7	s5	224	ASN
8	s6	68	LEU
8	s6	153	VAL
8	s6	157	VAL
8	s6	195	VAL
9	s7	9	LEU
9	s7	25	VAL
9	s7	35	LYS
9	s7	54	GLY
9	s7	145	GLY
9	s7	160	GLN
10	s8	88	ASN

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Mol	Chain	Res	Type
10	s8	153	GLU
10	s8	174	GLY
11	s9	121	SER
11	s9	128	LEU
11	s9	158	PHE
12	c0	23	ALA
12	c0	30	ALA
12	c0	51	SER
12	c0	73	VAL
13	c1	53	TYR
13	c1	61	THR
13	c1	82	ARG
13	c1	114	ALA
13	c1	119	VAL
13	c1	128	CYS
14	c2	45	LEU
14	c2	103	LEU
14	c2	113	ARG
14	c2	115	VAL
15	c3	18	TYR
15	c3	88	LEU
15	c3	89	TYR
15	c3	137	PRO
15	c3	138	ASN
15	c3	140	LYS
16	c4	32	ASP
16	c4	36	LYS
16	c4	124	ASP
17	c5	13	LYS
17	c5	29	SER
17	c5	38	PRO
17	c5	52	LYS
17	c5	69	GLU
17	c5	72	LYS
18	c6	37	THR
18	c6	42	GLU
18	c6	101	SER
18	c6	107	LYS
18	c6	113	ASP
18	c6	115	THR
18	c6	116	LEU
18	c6	142	TYR

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Mol	Chain	Res	Type
19	c7	42	GLN
19	c7	67	ARG
20	c8	14	ILE
20	c8	115	ARG
20	c8	127	HIS
21	c9	86	ARG
22	d0	18	GLN
22	d0	35	GLU
22	d0	39	SER
22	d0	43	LYS
22	d0	53	LYS
23	d1	4	ASP
25	d3	101	GLU
25	d3	119	GLY
25	d3	125	VAL
26	d4	53	ASP
26	d4	58	PHE
26	d4	67	GLY
28	d6	9	GLY
28	d6	58	VAL
28	d6	62	TYR
29	d7	3	LEU
29	d7	59	CYS
30	d8	32	PHE
31	d9	11	PRO
80	e0	47	VAL
81	e1	98	VAL
81	e1	128	ALA
81	e1	129	GLY
81	e1	136	LYS
81	e1	137	ASP
34	sR	163	ASP
34	sR	231	MET
34	sR	297	ASP
35	sM	63	ASP
35	sM	67	GLY
39	l2	14	SER
39	l2	15	ILE
39	l2	115	ASN
39	l2	182	ALA
39	l2	240	ALA
40	l3	3	HIS

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Mol	Chain	Res	Type
40	l3	24	SER
40	l3	131	THR
40	l3	330	GLY
40	l3	385	LYS
41	l4	24	ALA
41	l4	25	VAL
41	l4	172	VAL
41	l4	259	ASP
41	l4	272	VAL
41	l4	311	HIS
41	l4	327	LEU
41	l4	329	PRO
42	l5	29	ASP
42	l5	72	ASP
42	l5	123	GLU
42	l5	125	VAL
42	l5	249	ALA
42	l5	294	ALA
43	l6	31	ARG
43	l6	94	GLU
43	l6	141	VAL
44	l7	28	ALA
44	l7	91	GLY
44	l7	207	LEU
44	l7	223	PHE
45	l8	79	GLN
45	l8	121	SER
45	l8	162	LEU
45	l8	225	LYS
45	l8	239	GLY
45	l8	253	SER
46	l9	5	GLN
46	l9	40	HIS
46	l9	76	ASP
46	l9	151	VAL
46	l9	190	ASP
47	m0	3	ARG
47	m0	25	ALA
47	m0	27	PRO
47	m0	113	GLN
47	m0	176	LEU
48	m1	39	GLN

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Mol	Chain	Res	Type
48	m1	111	ASP
48	m1	145	LYS
48	m1	153	LYS
49	m3	76	THR
49	m3	157	ARG
50	m4	133	LYS
51	m5	23	GLN
51	m5	42	PRO
51	m5	57	GLN
52	m6	16	VAL
52	m6	62	THR
52	m6	110	PRO
52	m6	113	ASP
52	m6	186	ALA
53	m7	23	ARG
53	m7	33	ALA
53	m7	54	HIS
53	m7	86	LYS
53	m7	89	LYS
54	m8	46	LYS
54	m8	84	VAL
54	m8	109	GLY
54	m8	180	ARG
54	m8	183	GLY
55	m9	6	THR
55	m9	94	VAL
55	m9	97	ARG
55	m9	120	TYR
56	n0	12	ARG
56	n0	45	LEU
56	n0	50	LYS
56	n0	145	THR
56	n0	168	PRO
58	n2	41	ILE
58	n2	51	GLY
59	n3	54	LEU
60	n4	64	THR
60	n4	72	SER
60	n4	76	VAL
61	n5	47	ALA
61	n5	55	ASN
61	n5	116	PRO

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Mol	Chain	Res	Type
63	n7	7	ALA
63	n7	92	PHE
63	n7	105	SER
63	n7	134	LEU
64	n8	65	GLN
64	n8	70	LYS
64	n8	85	ASP
64	n8	109	TYR
65	n9	24	PRO
65	n9	30	PRO
65	n9	41	ARG
66	o0	12	GLN
66	o0	19	LYS
66	o0	71	GLN
67	o1	7	VAL
67	o1	18	LYS
67	o1	34	LYS
67	o1	40	ALA
67	o1	60	TRP
68	o2	12	LYS
68	o2	41	VAL
68	o2	125	ARG
69	o3	26	ASN
70	o4	10	ARG
70	o4	33	GLN
70	o4	62	TYR
70	o4	79	SER
70	o4	83	ASN
71	o5	12	LYS
72	o6	28	TYR
72	o6	65	GLY
73	o7	32	LYS
73	o7	55	ARG
73	o7	73	ARG
74	o8	18	ALA
75	o9	3	ALA
76	q0	107	ALA
78	q2	78	LYS
79	q3	18	TYR
79	q3	77	ALA
83	p0	201	ILE
2	S0	66	ALA

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Mol	Chain	Res	Type
2	S0	162	CYS
2	S0	195	TRP
2	S0	196	SER
3	S1	35	PRO
3	S1	64	ARG
3	S1	73	LEU
3	S1	79	HIS
3	S1	194	ASN
3	S1	199	ASN
4	S2	41	LEU
4	S2	106	ASP
4	S2	145	GLY
5	S3	46	THR
5	S3	74	GLN
5	S3	81	PRO
5	S3	118	ALA
6	S4	3	ARG
6	S4	24	SER
6	S4	26	CYS
6	S4	195	ILE
6	S4	200	ARG
6	S4	242	LYS
6	S4	250	GLU
7	S5	25	LEU
7	S5	58	LEU
7	S5	64	VAL
7	S5	108	LEU
8	S6	58	LYS
8	S6	196	ARG
9	S7	103	SER
9	S7	166	LEU
10	S8	12	SER
10	S8	58	LEU
10	S8	106	ALA
10	S8	120	THR
10	S8	154	SER
11	S9	91	LYS
11	S9	149	ARG
11	S9	167	ALA
12	C0	36	ASP
13	C1	30	ARG
14	C2	54	ARG

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Mol	Chain	Res	Type
14	C2	55	GLY
14	C2	68	GLU
14	C2	84	ASN
14	C2	125	ASN
15	C3	95	ALA
15	C3	128	TYR
16	C4	40	ALA
17	C5	23	GLU
17	C5	51	SER
17	C5	54	ALA
18	C6	74	HIS
18	C6	115	THR
18	C6	120	ASP
19	C7	12	ALA
19	C7	24	LEU
19	C7	84	TYR
20	C8	61	LEU
21	C9	28	LEU
22	D0	21	LYS
22	D0	120	SER
23	D1	7	GLN
23	D1	15	ARG
23	D1	16	LYS
23	D1	44	ARG
23	D1	81	ASN
24	D2	66	ASN
24	D2	67	GLY
24	D2	96	ALA
25	D3	16	ARG
25	D3	40	SER
25	D3	41	SER
25	D3	67	ALA
25	D3	70	LYS
25	D3	128	SER
26	D4	16	PRO
26	D4	34	ASN
28	D6	11	ASN
28	D6	36	ILE
28	D6	52	ASP
28	D6	64	LEU
28	D6	94	ASN
29	D7	70	LYS

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Mol	Chain	Res	Type
30	D8	34	GLU
31	D9	5	ASN
32	E0	16	SER
32	E0	33	ARG
33	E1	85	TYR
33	E1	87	THR
33	E1	99	LYS
33	E1	100	LEU
34	SR	48	THR
34	SR	79	TYR
34	SR	111	MET
34	SR	117	LYS
34	SR	128	ASP
34	SR	194	GLY
35	SM	17	VAL
35	SM	88	ARG
39	L2	34	TYR
39	L2	47	GLN
39	L2	227	ARG
39	L2	246	LEU
39	L2	251	LYS
40	L3	69	LYS
40	L3	127	LYS
40	L3	138	ALA
40	L3	155	ALA
40	L3	244	ARG
40	L3	246	LEU
41	L4	5	GLN
41	L4	175	HIS
41	L4	185	LYS
41	L4	189	ALA
41	L4	215	ILE
41	L4	292	SER
41	L4	339	LEU
42	L5	6	ASP
42	L5	78	ALA
42	L5	108	ARG
42	L5	110	LEU
42	L5	162	ALA
42	L5	255	PRO
43	L6	36	PRO
43	L6	154	LEU

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Mol	Chain	Res	Type
44	L7	79	ALA
44	L7	148	VAL
44	L7	163	LEU
44	L7	210	PRO
45	L8	25	PRO
45	L8	79	GLN
45	L8	99	PRO
45	L8	168	ALA
45	L8	169	LEU
45	L8	226	TYR
46	L9	2	LYS
47	M0	26	VAL
47	M0	27	PRO
47	M0	71	CYS
47	M0	122	PRO
47	M0	146	ASP
48	M1	39	GLN
48	M1	118	PRO
48	M1	165	GLN
48	M1	166	LYS
49	M3	30	GLY
49	M3	51	LEU
49	M3	136	GLU
50	M4	4	ASP
50	M4	9	ALA
50	M4	79	ALA
50	M4	125	LYS
51	M5	22	LEU
51	M5	171	SER
51	M5	181	ASN
52	M6	41	LEU
52	M6	63	ALA
52	M6	196	ALA
54	M8	51	ALA
55	M9	26	PRO
55	M9	53	LYS
56	N0	104	GLU
59	N3	68	GLU
59	N3	109	MET
60	N4	9	SER
60	N4	14	TYR
60	N4	70	LYS

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Mol	Chain	Res	Type
60	N4	96	LEU
60	N4	97	LYS
61	N5	100	LYS
61	N5	108	LEU
61	N5	137	ASN
62	N6	44	GLY
63	N7	78	ASN
64	N8	83	PRO
64	N8	104	THR
64	N8	116	GLY
66	O0	20	SER
66	O0	97	ASP
67	O1	83	GLU
68	O2	29	ALA
68	O2	80	LYS
69	O3	42	GLN
70	O4	47	CYS
70	O4	48	GLY
70	O4	67	LYS
72	O6	3	VAL
72	O6	18	THR
72	O6	28	TYR
73	O7	70	VAL
74	O8	48	SER
74	O8	63	LYS
78	Q2	62	ALA
79	Q3	40	SER
79	Q3	71	VAL
2	s0	68	PRO
2	s0	127	ARG
2	s0	179	ARG
3	s1	154	SER
3	s1	160	HIS
3	s1	192	VAL
4	s2	37	PRO
4	s2	146	THR
5	s3	145	ALA
5	s3	163	PRO
5	s3	195	SER
6	s4	90	ILE
6	s4	94	ALA
7	s5	26	ALA

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Mol	Chain	Res	Type
7	s5	56	ALA
7	s5	67	PRO
7	s5	129	PRO
7	s5	209	TYR
8	s6	131	LYS
8	s6	208	TYR
9	s7	10	SER
10	s8	70	GLU
11	s9	67	PRO
11	s9	110	GLN
11	s9	144	PRO
12	c0	31	LYS
12	c0	93	GLN
12	c0	95	ARG
13	c1	130	PRO
13	c1	133	LYS
14	c2	90	LYS
14	c2	107	ASP
14	c2	108	ARG
14	c2	109	GLU
14	c2	125	ASN
15	c3	47	PRO
15	c3	57	ALA
17	c5	34	VAL
17	c5	54	ALA
17	c5	66	ALA
17	c5	98	ASN
17	c5	133	ALA
17	c5	135	THR
18	c6	3	ALA
18	c6	40	GLU
18	c6	141	SER
19	c7	68	GLY
19	c7	104	ASN
20	c8	3	LEU
20	c8	7	GLU
20	c8	60	GLU
20	c8	121	ALA
22	d0	72	ASN
23	d1	41	GLU
23	d1	44	ARG
24	d2	4	SER

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Mol	Chain	Res	Type
24	d2	70	ASN
25	d3	137	LYS
26	d4	35	VAL
26	d4	52	LYS
27	d5	54	VAL
27	d5	57	TYR
27	d5	103	ARG
30	d8	6	PRO
30	d8	36	THR
31	d9	25	SER
80	e0	15	LYS
80	e0	50	VAL
81	e1	91	ILE
81	e1	97	LYS
34	sR	17	ASN
35	sM	42	ALA
35	sM	68	ARG
39	l2	35	ALA
39	l2	180	LEU
40	l3	111	SER
40	l3	197	GLU
40	l3	200	GLU
40	l3	262	TRP
40	l3	386	ASP
41	l4	5	GLN
41	l4	16	THR
41	l4	18	ASN
41	l4	67	THR
41	l4	90	PHE
41	l4	146	PRO
41	l4	189	ALA
41	l4	215	ILE
41	l4	247	PHE
41	l4	252	GLU
41	l4	320	ASN
41	l4	326	ARG
41	l4	330	TYR
41	l4	331	ALA
41	l4	353	ALA
42	l5	9	SER
42	l5	132	THR
42	l5	227	LEU

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Mol	Chain	Res	Type
42	l5	245	GLU
42	l5	280	GLU
43	l6	10	TYR
43	l6	84	VAL
44	l7	54	GLU
44	l7	124	LEU
44	l7	217	PRO
44	l7	228	SER
45	l8	163	VAL
45	l8	203	VAL
45	l8	237	ILE
46	l9	117	PHE
46	l9	120	ASP
46	l9	137	SER
46	l9	152	GLU
47	m0	12	GLN
47	m0	18	PRO
48	m1	11	ASP
48	m1	26	SER
48	m1	82	ARG
48	m1	108	GLU
48	m1	138	VAL
49	m3	51	LEU
49	m3	130	GLY
49	m3	135	ALA
49	m3	162	ASN
49	m3	187	ALA
49	m3	193	ALA
50	m4	86	ALA
50	m4	87	ALA
51	m5	68	ARG
51	m5	201	ARG
52	m6	12	LYS
52	m6	100	GLU
52	m6	175	THR
52	m6	195	ALA
53	m7	37	ASN
53	m7	55	GLN
54	m8	61	PRO
55	m9	112	ALA
56	n0	133	ALA
57	n1	135	PRO

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Mol	Chain	Res	Type
57	n1	143	THR
58	n2	52	ASN
58	n2	91	ASP
59	n3	46	LEU
59	n3	47	ASN
59	n3	94	TYR
60	n4	46	PRO
61	n5	48	SER
61	n5	117	ASN
62	n6	24	SER
62	n6	102	SER
63	n7	28	PRO
64	n8	15	VAL
64	n8	29	PRO
64	n8	47	LYS
67	o1	47	ASP
67	o1	61	LYS
67	o1	82	GLU
67	o1	83	GLU
68	o2	26	HIS
68	o2	40	SER
68	o2	45	ARG
68	o2	66	LEU
68	o2	87	MET
70	o4	76	TYR
71	o5	88	LEU
71	o5	89	ARG
71	o5	101	THR
72	o6	29	LYS
72	o6	76	ARG
73	o7	58	THR
73	o7	87	SER
75	o9	45	ARG
78	q2	33	ALA
78	q2	76	LYS
78	q2	96	GLU
83	p0	93	LEU
2	S0	5	ALA
2	S0	80	THR
3	S1	26	ARG
3	S1	176	VAL
3	S1	209	ASN

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Mol	Chain	Res	Type
4	S2	60	SER
4	S2	85	PRO
4	S2	91	ARG
5	S3	8	LYS
5	S3	99	VAL
5	S3	193	ALA
6	S4	83	PRO
6	S4	165	ALA
6	S4	179	LYS
6	S4	259	GLN
7	S5	62	VAL
7	S5	74	ALA
7	S5	174	LEU
8	S6	11	GLY
8	S6	104	PRO
8	S6	152	ASP
8	S6	199	GLN
10	S8	151	LYS
10	S8	153	GLU
10	S8	155	SER
10	S8	186	GLY
11	S9	84	GLY
11	S9	118	LEU
12	C0	18	GLU
12	C0	26	ASP
12	C0	28	ASN
14	C2	101	ALA
14	C2	105	LYS
14	C2	106	ILE
14	C2	108	ARG
14	C2	111	ASN
14	C2	119	SER
15	C3	3	ARG
15	C3	22	ALA
15	C3	24	ALA
15	C3	32	SER
16	C4	90	ARG
16	C4	126	THR
17	C5	20	VAL
19	C7	13	SER
19	C7	14	LYS
19	C7	83	GLN

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Mol	Chain	Res	Type
20	C8	83	ALA
21	C9	29	GLU
21	C9	130	ARG
22	D0	73	GLY
23	D1	49	GLU
23	D1	66	ASP
23	D1	82	VAL
25	D3	20	ARG
25	D3	92	CYS
25	D3	109	ARG
25	D3	112	LYS
26	D4	51	GLU
28	D6	35	ALA
28	D6	54	SER
28	D6	58	VAL
30	D8	21	SER
30	D8	22	ARG
32	E0	54	ARG
34	SR	10	ARG
34	SR	63	GLY
34	SR	105	GLY
35	SM	100	THR
35	SM	153	ASP
39	L2	35	ALA
39	L2	174	ARG
39	L2	180	LEU
40	L3	8	ALA
40	L3	144	ILE
40	L3	241	LYS
41	L4	29	PRO
41	L4	90	PHE
41	L4	140	HIS
41	L4	306	THR
42	L5	11	ALA
42	L5	107	ARG
42	L5	119	TYR
42	L5	268	GLU
43	L6	30	LEU
44	L7	178	ILE
44	L7	205	PHE
44	L7	216	VAL
44	L7	239	LEU

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Mol	Chain	Res	Type
45	L8	53	PRO
45	L8	76	ALA
45	L8	157	VAL
45	L8	161	GLU
45	L8	180	VAL
46	L9	5	GLN
46	L9	30	PRO
46	L9	72	LYS
46	L9	85	GLY
46	L9	127	PRO
46	L9	190	ASP
47	M0	7	ARG
47	M0	70	ILE
47	M0	220	GLN
48	M1	74	PRO
48	M1	114	ILE
49	M3	85	LEU
51	M5	21	PHE
51	M5	75	VAL
53	M7	3	ARG
53	M7	44	ALA
53	M7	143	PRO
54	M8	77	ALA
54	M8	112	ALA
54	M8	162	ALA
54	M8	171	LYS
55	M9	3	ASN
55	M9	34	GLN
55	M9	151	ARG
55	M9	178	ALA
56	N0	24	LEU
56	N0	167	ARG
57	N1	110	LYS
57	N1	127	GLN
60	N4	23	ARG
61	N5	116	PRO
62	N6	107	THR
62	N6	126	LEU
63	N7	70	PRO
63	N7	117	ALA
63	N7	127	ASN
64	N8	65	GLN

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Mol	Chain	Res	Type
65	N9	25	LYS
65	N9	32	LEU
67	O1	60	TRP
68	O2	40	SER
68	O2	65	PHE
70	O4	112	ALA
72	O6	29	LYS
72	O6	84	LYS
72	O6	88	GLU
74	O8	34	ALA
76	Q0	79	GLU
76	Q0	88	LYS
78	Q2	30	ALA
79	Q3	84	ARG
2	s0	5	ALA
2	s0	80	THR
2	s0	103	THR
2	s0	167	LYS
3	s1	41	ARG
4	s2	95	ARG
4	s2	147	ASN
4	s2	223	GLY
4	s2	238	SER
5	s3	59	LEU
5	s3	62	ASN
5	s3	107	PHE
6	s4	3	ARG
6	s4	30	ARG
6	s4	96	ASN
6	s4	143	ASP
6	s4	157	ASN
6	s4	166	SER
7	s5	60	ASP
7	s5	84	LYS
9	s7	11	GLN
9	s7	24	PHE
9	s7	170	GLN
10	s8	78	ILE
10	s8	108	PRO
11	s9	25	ASP
11	s9	26	ALA
11	s9	44	ARG

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Mol	Chain	Res	Type
11	s9	115	LYS
11	s9	178	ALA
11	s9	183	ALA
13	c1	7	VAL
13	c1	15	LYS
13	c1	129	ARG
14	c2	25	GLU
14	c2	40	GLY
14	c2	89	ILE
14	c2	106	ILE
16	c4	72	LYS
16	c4	92	LYS
16	c4	123	SER
17	c5	6	ASN
17	c5	31	GLU
18	c6	112	TYR
19	c7	117	LEU
20	c8	64	GLU
20	c8	102	ALA
20	c8	109	LEU
21	c9	34	VAL
21	c9	143	ASP
22	d0	44	ASN
22	d0	100	VAL
23	d1	42	GLU
26	d4	78	SER
26	d4	82	ALA
28	d6	59	TYR
34	sR	153	GLN
34	sR	296	ALA
35	sM	65	THR
35	sM	79	SER
35	sM	132	ALA
35	sM	168	GLU
39	l2	34	TYR
40	l3	10	ARG
40	l3	34	LYS
40	l3	108	GLU
40	l3	187	SER
41	l4	190	GLY
41	l4	328	ASN
41	l4	351	PRO

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Mol	Chain	Res	Type
42	l5	11	ALA
42	l5	15	ARG
42	l5	119	TYR
42	l5	197	SER
42	l5	234	ASP
42	l5	258	LYS
42	l5	265	TYR
43	l6	36	PRO
43	l6	72	ASN
43	l6	108	LYS
44	l7	39	GLU
44	l7	47	ARG
44	l7	159	GLN
44	l7	191	VAL
45	l8	74	THR
45	l8	140	VAL
46	l9	14	GLU
46	l9	110	LYS
46	l9	167	VAL
47	m0	207	GLU
48	m1	116	TYR
49	m3	60	ALA
49	m3	101	ARG
49	m3	140	SER
50	m4	49	PRO
50	m4	97	SER
51	m5	12	ARG
51	m5	33	LYS
52	m6	20	ALA
53	m7	134	GLY
54	m8	97	PRO
54	m8	150	VAL
55	m9	61	SER
55	m9	155	LEU
55	m9	157	GLU
56	n0	97	VAL
58	n2	33	TYR
58	n2	45	GLY
59	n3	16	GLY
59	n3	123	ALA
59	n3	131	SER
60	n4	63	ILE

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Mol	Chain	Res	Type
60	n4	68	ALA
60	n4	83	THR
60	n4	86	SER
60	n4	132	GLY
62	n6	26	GLN
62	n6	116	LYS
63	n7	91	ALA
64	n8	89	GLN
65	n9	29	TYR
66	o0	27	TYR
67	o1	37	LYS
68	o2	50	ILE
68	o2	65	PHE
69	o3	19	SER
69	o3	58	GLU
69	o3	94	PHE
70	o4	28	GLY
71	o5	71	LYS
72	o6	34	SER
72	o6	67	LYS
73	o7	65	ARG
73	o7	85	LYS
74	o8	46	ARG
78	q2	77	CYS
83	p0	72	ASP
83	p0	193	ASN
2	S0	118	PRO
2	S0	203	PHE
3	S1	93	GLY
3	S1	116	LYS
3	S1	127	VAL
4	S2	92	ALA
4	S2	227	PRO
5	S3	59	LEU
6	S4	9	LEU
6	S4	35	PRO
6	S4	77	ARG
6	S4	201	HIS
6	S4	205	PHE
6	S4	214	LEU
6	S4	233	LYS
7	S5	27	THR

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Mol	Chain	Res	Type
7	S5	34	GLN
7	S5	36	ALA
7	S5	163	SER
8	S6	9	VAL
8	S6	70	PRO
8	S6	126	ASP
8	S6	200	ALA
9	S7	39	ARG
9	S7	85	PHE
10	S8	11	ARG
10	S8	52	ASN
10	S8	173	PRO
11	S9	30	LEU
11	S9	82	ARG
12	C0	70	GLU
12	C0	94	GLU
13	C1	9	SER
13	C1	108	PRO
14	C2	92	ALA
14	C2	107	ASP
14	C2	112	ALA
14	C2	140	PHE
15	C3	21	ASN
16	C4	25	ASP
16	C4	42	VAL
17	C5	10	ARG
17	C5	71	GLU
18	C6	85	ILE
19	C7	9	VAL
19	C7	42	GLN
19	C7	44	LYS
21	C9	105	LEU
24	D2	22	LYS
25	D3	11	SER
25	D3	143	PRO
26	D4	63	GLN
27	D5	42	LEU
28	D6	3	LYS
28	D6	59	TYR
29	D7	60	SER
32	E0	27	PRO
33	E1	125	THR

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Mol	Chain	Res	Type
34	SR	160	GLU
34	SR	186	PHE
34	SR	230	ALA
34	SR	232	TYR
34	SR	307	ASP
39	L2	69	TYR
39	L2	206	PRO
40	L3	111	SER
40	L3	116	ARG
40	L3	185	GLY
41	L4	96	GLY
41	L4	233	LEU
41	L4	318	LEU
42	L5	58	LYS
42	L5	132	THR
42	L5	187	THR
45	L8	86	THR
45	L8	91	PHE
45	L8	97	TYR
45	L8	114	ALA
45	L8	156	ASP
46	L9	13	PRO
46	L9	15	GLY
46	L9	81	GLY
47	M0	24	ARG
47	M0	156	ARG
47	M0	196	PHE
48	M1	172	LEU
49	M3	76	THR
49	M3	163	GLY
50	M4	6	ILE
51	M5	73	ARG
52	M6	181	ALA
53	M7	45	GLN
53	M7	121	GLN
55	M9	107	ALA
56	N0	124	LEU
57	N1	126	VAL
58	N2	20	SER
58	N2	38	ILE
62	N6	15	ALA
62	N6	84	LYS

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Mol	Chain	Res	Type
64	N8	47	LYS
64	N8	66	ALA
68	O2	4	LEU
68	O2	45	ARG
69	O3	59	VAL
69	O3	91	ALA
71	O5	90	ARG
71	O5	91	ALA
72	O6	52	PRO
74	O8	18	ALA
75	O9	28	ARG
79	Q3	18	TYR
79	Q3	35	ALA
79	Q3	51	ALA
79	Q3	75	ALA
2	s0	202	TYR
2	s0	205	ARG
3	s1	159	SER
3	s1	193	ILE
4	s2	242	ILE
4	s2	245	ASP
5	s3	45	LYS
6	s4	149	TYR
6	s4	164	LEU
6	s4	204	GLY
6	s4	223	ASN
7	s5	29	ILE
7	s5	39	GLU
8	s6	69	LEU
9	s7	161	GLN
10	s8	112	TRP
10	s8	158	SER
11	s9	162	SER
13	c1	120	GLY
15	c3	29	SER
15	c3	116	ILE
15	c3	145	THR
16	c4	114	ARG
17	c5	14	THR
17	c5	28	MET
18	c6	99	GLU
18	c6	109	PHE

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Mol	Chain	Res	Type
18	c6	124	PRO
19	c7	51	ALA
19	c7	86	PRO
20	c8	90	ASN
21	c9	19	ALA
25	d3	39	LYS
28	d6	35	ALA
28	d6	46	GLU
30	d8	51	ASN
30	d8	61	ARG
31	d9	12	ARG
31	d9	27	HIS
80	e0	13	LYS
80	e0	14	VAL
81	e1	85	TYR
34	sR	48	THR
35	sM	39	PRO
35	sM	46	LYS
39	l2	238	ILE
40	l3	5	LYS
40	l3	40	PRO
40	l3	297	SER
40	l3	358	TRP
41	l4	72	ALA
41	l4	233	LEU
42	l5	260	PHE
44	l7	97	PRO
45	l8	81	THR
45	l8	93	LEU
45	l8	133	LYS
46	l9	43	VAL
46	l9	48	VAL
46	l9	116	ASN
46	l9	158	ALA
48	m1	85	LYS
48	m1	114	ILE
49	m3	5	LYS
49	m3	62	THR
49	m3	124	ILE
49	m3	153	ASP
51	m5	7	LEU
51	m5	32	GLN

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Mol	Chain	Res	Type
51	m5	125	SER
54	m8	24	VAL
55	m9	65	ALA
57	n1	122	GLN
60	n4	56	ARG
60	n4	85	ALA
61	n5	39	LYS
61	n5	115	ARG
62	n6	91	ASN
63	n7	17	ARG
64	n8	129	PHE
65	n9	25	LYS
67	o1	24	SER
67	o1	103	GLY
69	o3	10	LYS
70	o4	58	ARG
71	o5	42	PRO
71	o5	51	ILE
71	o5	65	ALA
72	o6	33	ALA
73	o7	66	TYR
74	o8	32	ASN
74	o8	76	ASN
77	q1	7	LYS
77	q1	13	LEU
79	q3	49	ARG
79	q3	59	CYS
83	p0	33	VAL
83	p0	47	GLY
83	p0	210	VAL
2	S0	68	PRO
2	S0	78	SER
2	S0	103	THR
2	S0	206	ASP
3	S1	58	SER
3	S1	62	LYS
7	S5	51	VAL
7	S5	79	ASN
7	S5	137	ILE
7	S5	150	GLY
10	S8	34	ALA
10	S8	194	ARG

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Mol	Chain	Res	Type
12	C0	17	GLN
14	C2	66	VAL
14	C2	85	LYS
17	C5	97	TYR
19	C7	61	ILE
21	C9	95	ASP
23	D1	48	GLY
24	D2	98	GLN
25	D3	8	GLY
27	D5	74	SER
33	E1	88	PRO
33	E1	148	TYR
35	SM	12	VAL
35	SM	152	GLN
40	L3	170	PRO
40	L3	317	ILE
41	L4	162	THR
41	L4	232	SER
41	L4	320	ASN
42	L5	91	GLY
42	L5	106	ALA
43	L6	92	SER
45	L8	72	PRO
48	M1	13	LYS
48	M1	55	ARG
48	M1	101	ASN
48	M1	152	HIS
51	M5	46	ASP
52	M6	83	ALA
53	M7	63	PHE
53	M7	160	ALA
55	M9	184	LEU
56	N0	22	PRO
56	N0	69	PRO
63	N7	103	GLN
70	O4	82	ALA
74	O8	8	ILE
2	s0	10	THR
3	s1	22	ASP
3	s1	99	ASN
4	s2	48	GLY
4	s2	85	PRO

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Mol	Chain	Res	Type
4	s2	246	GLU
5	s3	43	PRO
5	s3	179	GLN
6	s4	213	SER
6	s4	245	LYS
7	s5	102	ARG
7	s5	180	ARG
8	s6	86	PRO
11	s9	184	SER
15	c3	10	GLY
15	c3	150	VAL
17	c5	43	ARG
21	c9	46	PRO
26	d4	11	LYS
27	d5	63	SER
30	d8	24	GLY
31	d9	24	CYS
31	d9	41	GLN
39	l2	248	GLY
40	l3	12	GLY
41	l4	196	ASN
42	l5	237	GLU
43	l6	158	TYR
44	l7	27	ALA
44	l7	231	ASN
45	l8	39	ALA
47	m0	101	LYS
49	m3	43	ALA
49	m3	49	ARG
50	m4	134	ALA
52	m6	111	PRO
52	m6	176	LYS
55	m9	93	VAL
55	m9	172	ARG
57	n1	101	CYS
60	n4	131	ALA
62	n6	90	VAL
64	n8	56	VAL
67	o1	17	HIS
71	o5	21	LEU
71	o5	54	VAL
71	o5	112	PRO

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Mol	Chain	Res	Type
77	q1	21	ARG
9	S7	63	PRO
14	C2	63	VAL
16	C4	39	ILE
17	C5	68	PRO
17	C5	129	GLY
18	C6	33	GLY
21	C9	118	PRO
23	D1	23	ILE
30	D8	12	VAL
34	SR	49	GLY
35	SM	20	LEU
39	L2	196	TRP
42	L5	87	GLY
50	M4	75	GLY
51	M5	151	ILE
52	M6	16	VAL
53	M7	88	VAL
63	N7	104	PRO
2	s0	58	VAL
2	s0	139	VAL
2	s0	186	GLY
7	s5	21	THR
12	c0	3	MET
16	c4	131	GLY
29	d7	68	GLY
34	sR	15	GLY
39	l2	210	PRO
40	l3	239	PRO
47	m0	214	PRO
59	n3	104	ASN
63	n7	70	PRO
63	n7	89	VAL
65	n9	21	ILE
66	o0	87	VAL
70	o4	48	GLY
71	o5	22	VAL
7	S5	164	PRO
8	S6	69	LEU
12	C0	86	ILE
14	C2	115	VAL
16	C4	122	PRO

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Mol	Chain	Res	Type
22	D0	95	ALA
27	D5	41	ILE
28	D6	60	PRO
34	SR	20	VAL
42	L5	295	GLY
49	M3	133	PRO
52	M6	70	PRO
54	M8	43	PRO
56	N0	135	VAL
63	N7	36	HIS
65	N9	21	ILE
71	O5	41	LEU
76	Q0	123	PRO
4	s2	104	VAL
4	s2	145	GLY
4	s2	239	PRO
6	s4	227	VAL
7	s5	59	VAL
14	c2	63	VAL
14	c2	87	PRO
24	d2	6	VAL
80	e0	4	VAL
34	sR	193	ILE
35	sM	43	ASP
40	l3	166	ILE
40	l3	245	GLY
49	m3	84	GLY
55	m9	101	VAL
55	m9	113	GLY
83	p0	204	ILE
3	S1	210	ILE
5	S3	84	ILE
7	S5	172	ILE
12	C0	92	ILE
13	C1	41	GLY
16	C4	67	VAL
25	D3	88	PRO
29	D7	62	ILE
43	L6	171	PRO
46	L9	187	ILE
55	M9	143	ILE
56	N0	21	GLU

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Mol	Chain	Res	Type
11	s9	134	ILE
18	c6	4	VAL
20	c8	76	PRO
30	d8	12	VAL
41	l4	145	ILE
45	l8	98	ARG
47	m0	194	GLY
48	m1	113	GLY
49	m3	159	VAL
53	m7	88	VAL
58	n2	27	VAL
69	o3	59	VAL
4	S2	234	PRO
8	S6	162	VAL
14	C2	89	ILE
25	D3	17	VAL
25	D3	96	VAL
34	SR	206	PRO
61	N5	79	GLY
4	s2	235	LEU
5	s3	81	PRO
11	s9	168	ARG
12	c0	11	ILE
13	c1	54	ILE
81	e1	130	VAL
35	sM	51	ARG
41	l4	23	PRO
72	o6	9	ILE
3	S1	43	VAL
4	S2	150	GLN
22	D0	108	ILE
39	L2	98	VAL
59	N3	3	GLY
60	N4	80	ARG
61	N5	44	PRO
70	O4	89	ILE
7	s5	152	GLY
12	c0	72	GLY
15	c3	22	ALA
15	c3	52	VAL
35	sM	40	PRO
42	l5	255	PRO

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Mol	Chain	Res	Type
46	l9	30	PRO
69	O3	104	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	S0	164/209 (78%)	117 (71%)	47 (29%)	0	4
2	s0	165/209 (79%)	123 (74%)	42 (26%)	1	7
3	S1	191/223 (86%)	139 (73%)	52 (27%)	0	5
3	s1	192/223 (86%)	147 (77%)	45 (23%)	1	8
4	S2	176/204 (86%)	126 (72%)	50 (28%)	0	4
4	s2	176/204 (86%)	119 (68%)	57 (32%)	0	3
5	S3	182/194 (94%)	133 (73%)	49 (27%)	1	5
5	s3	182/194 (94%)	131 (72%)	51 (28%)	0	5
6	S4	221/221 (100%)	170 (77%)	51 (23%)	1	8
6	s4	221/221 (100%)	165 (75%)	56 (25%)	1	7
7	S5	173/190 (91%)	136 (79%)	37 (21%)	1	10
7	s5	173/190 (91%)	125 (72%)	48 (28%)	0	5
8	S6	188/201 (94%)	139 (74%)	49 (26%)	1	6
8	s6	187/201 (93%)	132 (71%)	55 (29%)	0	4
9	S7	165/169 (98%)	127 (77%)	38 (23%)	1	8
9	s7	165/169 (98%)	122 (74%)	43 (26%)	1	6
10	S8	150/161 (93%)	118 (79%)	32 (21%)	1	10
10	s8	150/161 (93%)	106 (71%)	44 (29%)	0	4
11	S9	158/165 (96%)	121 (77%)	37 (23%)	1	8
11	s9	158/165 (96%)	116 (73%)	42 (27%)	1	6
12	C0	77/98 (79%)	58 (75%)	19 (25%)	1	7
12	c0	73/98 (74%)	54 (74%)	19 (26%)	1	6
13	C1	129/136 (95%)	111 (86%)	18 (14%)	5	30

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
13	c1	129/136 (95%)	98 (76%)	31 (24%)	1	7
14	C2	88/118 (75%)	66 (75%)	22 (25%)	1	7
14	c2	88/118 (75%)	62 (70%)	26 (30%)	0	4
15	C3	127/127 (100%)	101 (80%)	26 (20%)	2	11
15	c3	127/127 (100%)	96 (76%)	31 (24%)	1	7
16	C4	81/104 (78%)	58 (72%)	23 (28%)	0	4
16	c4	97/104 (93%)	67 (69%)	30 (31%)	0	4
17	C5	101/117 (86%)	72 (71%)	29 (29%)	0	4
17	c5	103/117 (88%)	73 (71%)	30 (29%)	0	4
18	C6	117/118 (99%)	83 (71%)	34 (29%)	0	4
18	c6	118/118 (100%)	87 (74%)	31 (26%)	1	6
19	C7	94/124 (76%)	65 (69%)	29 (31%)	0	4
19	c7	92/124 (74%)	61 (66%)	31 (34%)	0	3
20	C8	128/128 (100%)	101 (79%)	27 (21%)	1	10
20	c8	128/128 (100%)	96 (75%)	32 (25%)	1	7
21	C9	115/115 (100%)	83 (72%)	32 (28%)	0	5
21	c9	115/115 (100%)	85 (74%)	30 (26%)	1	6
22	D0	100/113 (88%)	74 (74%)	26 (26%)	1	6
22	d0	103/113 (91%)	67 (65%)	36 (35%)	0	2
23	D1	74/74 (100%)	59 (80%)	15 (20%)	2	11
23	d1	74/74 (100%)	52 (70%)	22 (30%)	0	4
24	D2	110/110 (100%)	81 (74%)	29 (26%)	1	6
24	d2	110/110 (100%)	88 (80%)	22 (20%)	2	12
25	D3	119/119 (100%)	79 (66%)	40 (34%)	0	3
25	d3	119/119 (100%)	89 (75%)	30 (25%)	1	7
26	D4	112/112 (100%)	88 (79%)	24 (21%)	1	10
26	d4	112/112 (100%)	89 (80%)	23 (20%)	2	11
27	D5	61/88 (69%)	47 (77%)	14 (23%)	1	8
27	d5	61/88 (69%)	47 (77%)	14 (23%)	1	8
28	D6	83/83 (100%)	60 (72%)	23 (28%)	0	5
28	d6	83/83 (100%)	51 (61%)	32 (39%)	0	1

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
29	D7	70/70 (100%)	57 (81%)	13 (19%)	2	15
29	d7	70/70 (100%)	54 (77%)	16 (23%)	1	8
30	D8	56/59 (95%)	39 (70%)	17 (30%)	0	4
30	d8	56/59 (95%)	42 (75%)	14 (25%)	1	7
31	D9	47/48 (98%)	34 (72%)	13 (28%)	0	5
31	d9	47/48 (98%)	32 (68%)	15 (32%)	0	3
32	E0	51/51 (100%)	35 (69%)	16 (31%)	0	4
33	E1	62/66 (94%)	47 (76%)	15 (24%)	1	7
34	SR	260/261 (100%)	216 (83%)	44 (17%)	3	20
34	sR	260/261 (100%)	213 (82%)	47 (18%)	2	16
35	SM	97/228 (42%)	68 (70%)	29 (30%)	0	4
35	sM	54/228 (24%)	39 (72%)	15 (28%)	0	5
39	L2	193/195 (99%)	138 (72%)	55 (28%)	0	4
39	l2	192/195 (98%)	137 (71%)	55 (29%)	0	4
40	L3	321/322 (100%)	229 (71%)	92 (29%)	0	4
40	l3	321/322 (100%)	235 (73%)	86 (27%)	1	5
41	L4	288/288 (100%)	212 (74%)	76 (26%)	1	6
41	l4	288/288 (100%)	208 (72%)	80 (28%)	0	5
42	L5	244/244 (100%)	195 (80%)	49 (20%)	2	12
42	l5	243/244 (100%)	176 (72%)	67 (28%)	0	5
43	L6	134/152 (88%)	110 (82%)	24 (18%)	2	17
43	l6	135/152 (89%)	105 (78%)	30 (22%)	1	9
44	L7	186/204 (91%)	138 (74%)	48 (26%)	1	6
44	l7	187/204 (92%)	146 (78%)	41 (22%)	1	9
45	L8	187/207 (90%)	144 (77%)	43 (23%)	1	8
45	l8	177/207 (86%)	134 (76%)	43 (24%)	1	7
46	L9	171/171 (100%)	110 (64%)	61 (36%)	0	2
46	l9	171/171 (100%)	119 (70%)	52 (30%)	0	4
47	M0	177/186 (95%)	135 (76%)	42 (24%)	1	7
47	m0	179/186 (96%)	131 (73%)	48 (27%)	1	5
48	M1	147/150 (98%)	111 (76%)	36 (24%)	1	7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
48	m1	147/150 (98%)	91 (62%)	56 (38%)	0	1
49	M3	154/158 (98%)	114 (74%)	40 (26%)	1	6
49	m3	154/158 (98%)	102 (66%)	52 (34%)	0	3
50	M4	107/108 (99%)	78 (73%)	29 (27%)	1	5
50	m4	108/108 (100%)	81 (75%)	27 (25%)	1	7
51	M5	175/175 (100%)	143 (82%)	32 (18%)	2	16
51	m5	175/175 (100%)	132 (75%)	43 (25%)	1	7
52	M6	160/161 (99%)	120 (75%)	40 (25%)	1	7
52	m6	160/161 (99%)	119 (74%)	41 (26%)	1	7
53	M7	140/145 (97%)	98 (70%)	42 (30%)	0	4
53	m7	125/145 (86%)	83 (66%)	42 (34%)	0	3
54	M8	150/150 (100%)	115 (77%)	35 (23%)	1	8
54	m8	150/150 (100%)	104 (69%)	46 (31%)	0	4
55	M9	153/153 (100%)	112 (73%)	41 (27%)	1	5
55	m9	153/153 (100%)	113 (74%)	40 (26%)	1	6
56	N0	156/156 (100%)	108 (69%)	48 (31%)	0	4
56	n0	156/156 (100%)	114 (73%)	42 (27%)	1	5
57	N1	136/136 (100%)	100 (74%)	36 (26%)	1	6
57	n1	136/136 (100%)	100 (74%)	36 (26%)	1	6
58	N2	87/106 (82%)	68 (78%)	19 (22%)	1	9
58	n2	85/106 (80%)	68 (80%)	17 (20%)	2	12
59	N3	104/104 (100%)	79 (76%)	25 (24%)	1	7
59	n3	104/104 (100%)	78 (75%)	26 (25%)	1	7
60	N4	57/129 (44%)	45 (79%)	12 (21%)	1	10
60	n4	100/129 (78%)	69 (69%)	31 (31%)	0	4
61	N5	104/117 (89%)	83 (80%)	21 (20%)	2	12
61	n5	104/117 (89%)	70 (67%)	34 (33%)	0	3
62	N6	109/109 (100%)	80 (73%)	29 (27%)	1	6
62	n6	109/109 (100%)	75 (69%)	34 (31%)	0	4
63	N7	115/115 (100%)	92 (80%)	23 (20%)	2	12
63	n7	115/115 (100%)	93 (81%)	22 (19%)	2	14

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
64	N8	118/118 (100%)	95 (80%)	23 (20%)	2	13
64	n8	118/118 (100%)	85 (72%)	33 (28%)	0	5
65	N9	46/46 (100%)	30 (65%)	16 (35%)	0	2
65	n9	46/46 (100%)	23 (50%)	23 (50%)	0	0
66	O0	81/87 (93%)	62 (76%)	19 (24%)	1	8
66	o0	84/87 (97%)	54 (64%)	30 (36%)	0	2
67	O1	92/96 (96%)	67 (73%)	25 (27%)	0	5
67	o1	94/96 (98%)	67 (71%)	27 (29%)	0	4
68	O2	109/110 (99%)	73 (67%)	36 (33%)	0	3
68	o2	109/110 (99%)	78 (72%)	31 (28%)	0	4
69	O3	90/90 (100%)	71 (79%)	19 (21%)	1	10
69	o3	90/90 (100%)	62 (69%)	28 (31%)	0	4
70	O4	95/101 (94%)	66 (70%)	29 (30%)	0	4
70	o4	95/101 (94%)	70 (74%)	25 (26%)	1	6
71	O5	104/104 (100%)	69 (66%)	35 (34%)	0	3
71	o5	103/104 (99%)	77 (75%)	26 (25%)	1	7
72	O6	81/81 (100%)	56 (69%)	25 (31%)	0	4
72	o6	80/81 (99%)	55 (69%)	25 (31%)	0	4
73	O7	70/70 (100%)	51 (73%)	19 (27%)	1	5
73	o7	70/70 (100%)	48 (69%)	22 (31%)	0	4
74	O8	68/68 (100%)	53 (78%)	15 (22%)	1	9
74	o8	67/68 (98%)	52 (78%)	15 (22%)	1	9
75	O9	45/45 (100%)	35 (78%)	10 (22%)	1	9
75	o9	45/45 (100%)	34 (76%)	11 (24%)	1	7
76	Q0	47/47 (100%)	36 (77%)	11 (23%)	1	8
76	q0	47/47 (100%)	33 (70%)	14 (30%)	0	4
77	Q1	23/23 (100%)	15 (65%)	8 (35%)	0	2
77	q1	23/23 (100%)	14 (61%)	9 (39%)	0	1
78	Q2	90/90 (100%)	65 (72%)	25 (28%)	0	5
78	q2	90/90 (100%)	58 (64%)	32 (36%)	0	2
79	Q3	71/71 (100%)	54 (76%)	17 (24%)	1	7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
79	q3	71/71 (100%)	49 (69%)	22 (31%)	0	4
80	e0	53/53 (100%)	41 (77%)	12 (23%)	1	8
81	e1	66/66 (100%)	41 (62%)	25 (38%)	0	1
83	p0	105/253 (42%)	79 (75%)	26 (25%)	1	7
All	All	18730/20239 (92%)	13794 (74%)	4936 (26%)	1	6

All (4936) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	S0	6	THR
2	S0	7	PHE
2	S0	8	ASP
2	S0	16	LEU
2	S0	21	ASN
2	S0	22	THR
2	S0	27	ARG
2	S0	34	GLU
2	S0	37	VAL
2	S0	43	ASP
2	S0	45	VAL
2	S0	50	VAL
2	S0	62	ARG
2	S0	84	ARG
2	S0	87	LEU
2	S0	88	LYS
2	S0	96	THR
2	S0	98	ILE
2	S0	101	ARG
2	S0	103	THR
2	S0	106	SER
2	S0	110	TYR
2	S0	111	ILE
2	S0	124	THR
2	S0	129	ASP
2	S0	135	GLU
2	S0	137	SER
2	S0	141	ILE
2	S0	143	VAL
2	S0	146	LEU
2	S0	150	ASP
2	S0	156	VAL

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Mol	Chain	Res	Type
2	S0	157	ASP
2	S0	165	ARG
2	S0	169	SER
2	S0	170	ILE
2	S0	172	LEU
2	S0	177	LEU
2	S0	181	VAL
2	S0	184	LEU
2	S0	185	ARG
2	S0	188	LEU
2	S0	189	VAL
2	S0	196	SER
2	S0	197	ILE
2	S0	198	MET
2	S0	203	PHE
3	S1	21	VAL
3	S1	25	THR
3	S1	37	THR
3	S1	38	PHE
3	S1	40	ASN
3	S1	46	THR
3	S1	59	ASP
3	S1	61	LEU
3	S1	70	LEU
3	S1	73	LEU
3	S1	78	ASP
3	S1	80	SER
3	S1	81	PHE
3	S1	82	ARG
3	S1	85	LYS
3	S1	89	ASP
3	S1	95	ASN
3	S1	96	LEU
3	S1	97	LEU
3	S1	101	HIS
3	S1	104	ASP
3	S1	105	PHE
3	S1	111	ARG
3	S1	119	THR
3	S1	125	VAL
3	S1	129	THR
3	S1	130	SER

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Mol	Chain	Res	Type
3	S1	131	ASP
3	S1	137	ILE
3	S1	149	GLN
3	S1	154	SER
3	S1	155	TYR
3	S1	169	SER
3	S1	173	THR
3	S1	176	VAL
3	S1	177	GLN
3	S1	180	THR
3	S1	181	LEU
3	S1	186	SER
3	S1	188	LEU
3	S1	191	GLU
3	S1	193	ILE
3	S1	198	GLU
3	S1	199	ASN
3	S1	202	LYS
3	S1	212	VAL
3	S1	214	LYS
3	S1	218	LEU
3	S1	219	LYS
3	S1	220	GLN
3	S1	223	PHE
3	S1	228	LEU
4	S2	38	VAL
4	S2	41	LEU
4	S2	53	ILE
4	S2	54	GLU
4	S2	60	SER
4	S2	61	LEU
4	S2	70	ASP
4	S2	72	LEU
4	S2	76	LEU
4	S2	77	GLN
4	S2	86	VAL
4	S2	87	GLN
4	S2	89	GLN
4	S2	90	THR
4	S2	95	ARG
4	S2	96	THR
4	S2	97	ARG

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Mol	Chain	Res	Type
4	S2	111	VAL
4	S2	113	LEU
4	S2	117	THR
4	S2	125	ILE
4	S2	131	ILE
4	S2	134	LEU
4	S2	137	ILE
4	S2	139	ILE
4	S2	141	ARG
4	S2	146	THR
4	S2	148	LEU
4	S2	150	GLN
4	S2	152	HIS
4	S2	153	SER
4	S2	158	THR
4	S2	166	THR
4	S2	168	ARG
4	S2	174	ARG
4	S2	187	LEU
4	S2	188	LEU
4	S2	201	ASN
4	S2	205	ARG
4	S2	207	LEU
4	S2	218	ILE
4	S2	222	TYR
4	S2	224	PHE
4	S2	229	LEU
4	S2	234	PRO
4	S2	236	PRO
4	S2	237	VAL
4	S2	242	ILE
4	S2	246	GLU
4	S2	248	SER
5	S3	4	LEU
5	S3	6	SER
5	S3	7	LYS
5	S3	9	ARG
5	S3	16	VAL
5	S3	21	LEU
5	S3	26	THR
5	S3	37	VAL
5	S3	38	GLU

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Mol	Chain	Res	Type
5	S3	39	VAL
5	S3	42	THR
5	S3	44	THR
5	S3	57	ASP
5	S3	65	ARG
5	S3	66	ILE
5	S3	67	ASN
5	S3	76	ARG
5	S3	79	TYR
5	S3	84	ILE
5	S3	92	GLN
5	S3	93	ASP
5	S3	94	ARG
5	S3	99	VAL
5	S3	108	LYS
5	S3	113	LEU
5	S3	115	ILE
5	S3	117	ARG
5	S3	127	MET
5	S3	128	GLU
5	S3	137	VAL
5	S3	139	SER
5	S3	143	ARG
5	S3	158	ILE
5	S3	160	SER
5	S3	169	ASP
5	S3	172	THR
5	S3	175	VAL
5	S3	176	LEU
5	S3	178	ARG
5	S3	181	VAL
5	S3	182	LEU
5	S3	187	LYS
5	S3	190	ARG
5	S3	204	ASP
5	S3	207	THR
5	S3	212	LYS
5	S3	218	LEU
5	S3	221	SER
5	S3	224	ASP
6	S4	7	LYS
6	S4	9	LEU

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Mol	Chain	Res	Type
6	S4	12	LEU
6	S4	21	ASP
6	S4	22	LYS
6	S4	38	LEU
6	S4	39	ARG
6	S4	42	LEU
6	S4	45	ILE
6	S4	49	ARG
6	S4	54	TYR
6	S4	68	ARG
6	S4	69	HIS
6	S4	71	LYS
6	S4	77	ARG
6	S4	88	ASP
6	S4	102	VAL
6	S4	105	VAL
6	S4	108	ARG
6	S4	109	PHE
6	S4	131	LEU
6	S4	133	LYS
6	S4	140	VAL
6	S4	143	ASP
6	S4	162	ILE
6	S4	174	LYS
6	S4	176	ASP
6	S4	180	LEU
6	S4	182	TYR
6	S4	187	ARG
6	S4	189	LEU
6	S4	191	ARG
6	S4	199	GLU
6	S4	200	ARG
6	S4	211	LYS
6	S4	217	THR
6	S4	219	VAL
6	S4	221	ARG
6	S4	226	PHE
6	S4	227	VAL
6	S4	228	ILE
6	S4	240	LYS
6	S4	242	LYS
6	S4	244	ILE

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Mol	Chain	Res	Type
6	S4	246	LEU
6	S4	248	ILE
6	S4	252	ARG
6	S4	253	ASP
6	S4	256	ARG
6	S4	259	GLN
6	S4	261	LEU
7	S5	23	VAL
7	S5	25	LEU
7	S5	32	GLU
7	S5	41	LYS
7	S5	43	PHE
7	S5	45	LYS
7	S5	48	PHE
7	S5	49	GLU
7	S5	52	GLU
7	S5	65	ARG
7	S5	66	GLN
7	S5	70	VAL
7	S5	76	ARG
7	S5	83	ARG
7	S5	86	GLN
7	S5	87	CYS
7	S5	89	ILE
7	S5	97	LEU
7	S5	112	ARG
7	S5	114	ILE
7	S5	119	ASP
7	S5	122	ASN
7	S5	130	ILE
7	S5	131	GLN
7	S5	139	ASN
7	S5	147	THR
7	S5	148	ARG
7	S5	149	VAL
7	S5	156	ARG
7	S5	157	ARG
7	S5	160	VAL
7	S5	165	LEU
7	S5	170	GLN
7	S5	188	LYS
7	S5	194	LEU

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Mol	Chain	Res	Type
7	S5	196	GLU
7	S5	216	GLU
8	S6	2	LYS
8	S6	5	ILE
8	S6	7	TYR
8	S6	15	THR
8	S6	18	ILE
8	S6	21	GLU
8	S6	25	ARG
8	S6	29	ASP
8	S6	30	LYS
8	S6	34	GLN
8	S6	37	ASP
8	S6	45	PHE
8	S6	67	VAL
8	S6	71	THR
8	S6	72	ARG
8	S6	74	LYS
8	S6	76	LEU
8	S6	78	THR
8	S6	98	ARG
8	S6	108	VAL
8	S6	115	LYS
8	S6	124	LEU
8	S6	125	THR
8	S6	127	THR
8	S6	128	THR
8	S6	132	ARG
8	S6	133	LEU
8	S6	137	ARG
8	S6	141	ILE
8	S6	142	ARG
8	S6	150	GLU
8	S6	151	ASP
8	S6	154	ARG
8	S6	163	THR
8	S6	164	LYS
8	S6	169	TYR
8	S6	170	THR
8	S6	175	ILE
8	S6	176	GLN
8	S6	177	ARG

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Mol	Chain	Res	Type
8	S6	180	THR
8	S6	182	GLN
8	S6	184	LEU
8	S6	193	LEU
8	S6	201	GLN
8	S6	202	ARG
8	S6	211	LEU
8	S6	216	LEU
8	S6	223	LYS
9	S7	11	GLN
9	S7	14	THR
9	S7	20	VAL
9	S7	34	LEU
9	S7	37	GLU
9	S7	38	LEU
9	S7	50	ASP
9	S7	77	LEU
9	S7	79	ARG
9	S7	80	GLU
9	S7	85	PHE
9	S7	97	ARG
9	S7	103	SER
9	S7	108	GLN
9	S7	109	VAL
9	S7	110	GLN
9	S7	112	ARG
9	S7	113	PRO
9	S7	114	ARG
9	S7	115	SER
9	S7	116	ARG
9	S7	118	LEU
9	S7	130	VAL
9	S7	131	PHE
9	S7	136	VAL
9	S7	139	ARG
9	S7	141	ARG
9	S7	144	VAL
9	S7	147	ASN
9	S7	152	VAL
9	S7	156	SER
9	S7	157	LYS
9	S7	160	GLN

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Mol	Chain	Res	Type
9	S7	168	SER
9	S7	174	ASN
9	S7	180	GLN
9	S7	181	ILE
9	S7	185	ILE
10	S8	3	ILE
10	S8	7	SER
10	S8	8	ARG
10	S8	9	HIS
10	S8	11	ARG
10	S8	20	GLN
10	S8	21	PHE
10	S8	22	ARG
10	S8	23	LYS
10	S8	25	ARG
10	S8	26	LYS
10	S8	29	LEU
10	S8	31	ARG
10	S8	36	THR
10	S8	48	THR
10	S8	58	LEU
10	S8	60	ILE
10	S8	72	ILE
10	S8	95	THR
10	S8	97	THR
10	S8	110	ARG
10	S8	121	LEU
10	S8	138	ASN
10	S8	140	GLU
10	S8	142	LYS
10	S8	151	LYS
10	S8	152	ILE
10	S8	154	SER
10	S8	172	ARG
10	S8	176	SER
10	S8	178	ARG
10	S8	194	ARG
11	S9	3	ARG
11	S9	6	ARG
11	S9	7	THR
11	S9	14	THR
11	S9	21	SER

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Mol	Chain	Res	Type
11	S9	22	SER
11	S9	28	LEU
11	S9	36	LEU
11	S9	40	LYS
11	S9	58	ASP
11	S9	60	LEU
11	S9	69	ARG
11	S9	78	ARG
11	S9	80	LEU
11	S9	88	GLU
11	S9	89	ASP
11	S9	91	LYS
11	S9	93	LEU
11	S9	95	TYR
11	S9	109	LEU
11	S9	113	VAL
11	S9	120	LYS
11	S9	130	THR
11	S9	134	ILE
11	S9	138	LYS
11	S9	140	ILE
11	S9	145	SER
11	S9	149	ARG
11	S9	155	HIS
11	S9	156	ILE
11	S9	157	ASP
11	S9	161	THR
11	S9	171	ARG
11	S9	172	VAL
11	S9	180	LYS
11	S9	182	GLU
11	S9	186	GLU
12	C0	5	LYS
12	C0	8	ARG
12	C0	26	ASP
12	C0	27	PHE
12	C0	31	LYS
12	C0	32	HIS
12	C0	47	GLN
12	C0	52	LYS
12	C0	55	VAL
12	C0	56	LYS

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Mol	Chain	Res	Type
12	C0	65	TYR
12	C0	68	LEU
12	C0	69	THR
12	C0	70	GLU
12	C0	74	GLU
12	C0	76	LEU
12	C0	77	ARG
12	C0	78	GLU
12	C0	82	LEU
13	C1	11	ARG
13	C1	29	LYS
13	C1	37	ASN
13	C1	44	THR
13	C1	63	LEU
13	C1	67	ARG
13	C1	69	LYS
13	C1	74	THR
13	C1	76	VAL
13	C1	80	MET
13	C1	83	THR
13	C1	87	ARG
13	C1	99	ARG
13	C1	108	PRO
13	C1	112	SER
13	C1	115	PHE
13	C1	131	ILE
13	C1	134	THR
14	C2	28	LEU
14	C2	30	VAL
14	C2	39	ASP
14	C2	43	ARG
14	C2	46	ARG
14	C2	54	ARG
14	C2	62	LEU
14	C2	64	SER
14	C2	71	ILE
14	C2	73	LYS
14	C2	81	ASP
14	C2	83	GLU
14	C2	89	ILE
14	C2	97	LEU
14	C2	103	LEU

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Mol	Chain	Res	Type
14	C2	121	VAL
14	C2	124	LYS
14	C2	126	TRP
14	C2	131	ASP
14	C2	135	MET
14	C2	137	MET
14	C2	139	HIS
15	C3	9	LYS
15	C3	16	ILE
15	C3	27	LYS
15	C3	30	SER
15	C3	35	GLU
15	C3	39	LYS
15	C3	45	LEU
15	C3	61	THR
15	C3	64	ARG
15	C3	66	ILE
15	C3	72	MET
15	C3	76	LYS
15	C3	83	GLU
15	C3	84	ILE
15	C3	97	SER
15	C3	102	LEU
15	C3	105	ASN
15	C3	114	ARG
15	C3	115	LEU
15	C3	121	ARG
15	C3	125	LEU
15	C3	127	ARG
15	C3	132	VAL
15	C3	134	VAL
15	C3	135	LEU
15	C3	149	LEU
16	C4	13	VAL
16	C4	16	VAL
16	C4	24	ASN
16	C4	26	THR
16	C4	29	HIS
16	C4	31	THR
16	C4	39	ILE
16	C4	42	VAL
16	C4	43	THR

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Mol	Chain	Res	Type
16	C4	51	ASP
16	C4	52	ARG
16	C4	55	SER
16	C4	56	SER
16	C4	86	THR
16	C4	92	LYS
16	C4	103	ARG
16	C4	111	ARG
16	C4	119	THR
16	C4	123	SER
16	C4	126	THR
16	C4	132	ARG
16	C4	133	ARG
16	C4	137	LEU
17	C5	13	LYS
17	C5	14	THR
17	C5	18	ARG
17	C5	20	VAL
17	C5	22	LEU
17	C5	29	SER
17	C5	32	ASP
17	C5	34	VAL
17	C5	36	LEU
17	C5	40	ARG
17	C5	43	ARG
17	C5	52	LYS
17	C5	58	LYS
17	C5	60	LEU
17	C5	78	THR
17	C5	84	ILE
17	C5	86	VAL
17	C5	89	MET
17	C5	93	VAL
17	C5	106	GLU
17	C5	108	ARG
17	C5	110	GLU
17	C5	111	MET
17	C5	120	SER
17	C5	123	TYR
17	C5	124	THR
17	C5	125	PRO
17	C5	127	ARG

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Mol	Chain	Res	Type
17	C5	128	HIS
18	C6	4	VAL
18	C6	7	VAL
18	C6	14	LYS
18	C6	15	SER
18	C6	17	THR
18	C6	28	LEU
18	C6	34	SER
18	C6	36	ILE
18	C6	40	GLU
18	C6	43	ILE
18	C6	52	LEU
18	C6	54	LEU
18	C6	57	LEU
18	C6	59	LYS
18	C6	66	ARG
18	C6	68	ARG
18	C6	69	VAL
18	C6	70	THR
18	C6	76	SER
18	C6	93	HIS
18	C6	97	VAL
18	C6	98	ASP
18	C6	104	GLU
18	C6	109	PHE
18	C6	110	THR
18	C6	114	ARG
18	C6	116	LEU
18	C6	118	ILE
18	C6	123	ARG
18	C6	125	GLU
18	C6	136	SER
18	C6	137	ARG
18	C6	138	PHE
18	C6	143	ARG
19	C7	3	ARG
19	C7	5	ARG
19	C7	6	THR
19	C7	8	THR
19	C7	16	LEU
19	C7	26	LEU
19	C7	29	GLN

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Mol	Chain	Res	Type
19	C7	34	LEU
19	C7	36	ASP
19	C7	37	GLU
19	C7	38	ILE
19	C7	40	THR
19	C7	43	SER
19	C7	49	LYS
19	C7	54	THR
19	C7	55	THR
19	C7	57	LEU
19	C7	62	GLN
19	C7	69	ILE
19	C7	72	LYS
19	C7	76	GLU
19	C7	77	GLU
19	C7	78	ARG
19	C7	83	GLN
19	C7	86	PRO
19	C7	88	VAL
19	C7	105	GLN
19	C7	115	LEU
19	C7	119	LEU
20	C8	3	LEU
20	C8	11	PHE
20	C8	13	HIS
20	C8	14	ILE
20	C8	15	LEU
20	C8	16	ARG
20	C8	28	ILE
20	C8	32	LEU
20	C8	38	VAL
20	C8	40	ARG
20	C8	44	ASN
20	C8	61	LEU
20	C8	63	GLN
20	C8	71	GLN
20	C8	77	THR
20	C8	80	LYS
20	C8	86	LEU
20	C8	88	ARG
20	C8	90	ASN
20	C8	92	ILE

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Mol	Chain	Res	Type
20	C8	98	TYR
20	C8	100	THR
20	C8	105	VAL
20	C8	108	LYS
20	C8	132	ARG
20	C8	136	GLN
20	C8	143	ARG
21	C9	4	VAL
21	C9	13	ASP
21	C9	15	ILE
21	C9	16	ASN
21	C9	18	TYR
21	C9	22	LEU
21	C9	28	LEU
21	C9	29	GLU
21	C9	30	VAL
21	C9	33	TYR
21	C9	35	ASP
21	C9	36	ILE
21	C9	37	VAL
21	C9	39	THR
21	C9	54	PHE
21	C9	57	ARG
21	C9	66	TYR
21	C9	70	GLN
21	C9	71	VAL
21	C9	75	LYS
21	C9	84	LYS
21	C9	88	VAL
21	C9	89	ARG
21	C9	94	ILE
21	C9	100	ILE
21	C9	124	ILE
21	C9	130	ARG
21	C9	134	ARG
21	C9	139	THR
21	C9	140	LEU
21	C9	142	GLU
21	C9	144	GLU
22	D0	16	GLN
22	D0	17	GLN
22	D0	18	GLN

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Mol	Chain	Res	Type
22	D0	19	ILE
22	D0	22	ILE
22	D0	23	ARG
22	D0	27	THR
22	D0	31	VAL
22	D0	39	SER
22	D0	40	ASN
22	D0	42	VAL
22	D0	47	GLN
22	D0	57	ARG
22	D0	61	LYS
22	D0	64	LYS
22	D0	74	GLU
22	D0	76	SER
22	D0	80	GLU
22	D0	81	THR
22	D0	84	MET
22	D0	85	ARG
22	D0	89	ARG
22	D0	99	ILE
22	D0	100	VAL
22	D0	103	ILE
22	D0	121	ASN
23	D1	5	LYS
23	D1	7	GLN
23	D1	16	LYS
23	D1	17	CYS
23	D1	27	ASP
23	D1	31	SER
23	D1	41	GLU
23	D1	44	ARG
23	D1	51	VAL
23	D1	52	THR
23	D1	62	ARG
23	D1	75	ASN
23	D1	76	ASP
23	D1	78	LEU
23	D1	80	LYS
24	D2	4	SER
24	D2	7	LEU
24	D2	19	LYS
24	D2	20	THR

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Mol	Chain	Res	Type
24	D2	22	LYS
24	D2	24	GLN
24	D2	25	VAL
24	D2	26	LEU
24	D2	36	LYS
24	D2	37	PHE
24	D2	53	ILE
24	D2	65	LEU
24	D2	68	ARG
24	D2	72	CYS
24	D2	76	SER
24	D2	81	VAL
24	D2	82	LYS
24	D2	93	LEU
24	D2	97	ARG
24	D2	99	PHE
24	D2	103	ILE
24	D2	104	LEU
24	D2	107	SER
24	D2	110	ILE
24	D2	111	MET
24	D2	121	VAL
24	D2	124	LYS
24	D2	126	LEU
24	D2	129	VAL
25	D3	7	ARG
25	D3	9	LEU
25	D3	14	LYS
25	D3	17	VAL
25	D3	19	ARG
25	D3	30	LYS
25	D3	34	LEU
25	D3	38	PHE
25	D3	40	SER
25	D3	43	PHE
25	D3	54	LEU
25	D3	57	LEU
25	D3	59	ILE
25	D3	63	GLN
25	D3	70	LYS
25	D3	72	VAL
25	D3	74	VAL

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Mol	Chain	Res	Type
25	D3	77	ILE
25	D3	78	LYS
25	D3	82	LYS
25	D3	83	VAL
25	D3	84	THR
25	D3	86	PHE
25	D3	87	VAL
25	D3	94	ASN
25	D3	96	VAL
25	D3	99	ASN
25	D3	100	ASP
25	D3	107	PHE
25	D3	109	ARG
25	D3	110	LYS
25	D3	114	LYS
25	D3	116	ASP
25	D3	117	ILE
25	D3	126	LYS
25	D3	130	VAL
25	D3	132	LEU
25	D3	133	LEU
25	D3	138	GLU
25	D3	140	LYS
26	D4	2	SER
26	D4	3	ASP
26	D4	5	VAL
26	D4	8	ARG
26	D4	10	ARG
26	D4	11	LYS
26	D4	14	SER
26	D4	17	LEU
26	D4	21	LYS
26	D4	32	ARG
26	D4	34	ASN
26	D4	51	GLU
26	D4	61	ARG
26	D4	62	THR
26	D4	63	GLN
26	D4	77	ASN
26	D4	79	VAL
26	D4	100	VAL
26	D4	102	LYS

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Mol	Chain	Res	Type
26	D4	111	LYS
26	D4	123	LYS
26	D4	124	ARG
26	D4	127	LYS
26	D4	129	VAL
27	D5	40	VAL
27	D5	42	LEU
27	D5	63	SER
27	D5	69	LEU
27	D5	71	ILE
27	D5	75	LEU
27	D5	77	ARG
27	D5	84	GLU
27	D5	85	LYS
27	D5	88	ILE
27	D5	92	ILE
27	D5	95	HIS
27	D5	98	GLN
27	D5	100	ILE
28	D6	5	ARG
28	D6	30	ILE
28	D6	36	ILE
28	D6	38	ARG
28	D6	41	ILE
28	D6	44	ILE
28	D6	45	VAL
28	D6	46	GLU
28	D6	53	LEU
28	D6	57	SER
28	D6	58	VAL
28	D6	61	GLU
28	D6	64	LEU
28	D6	66	LYS
28	D6	68	TYR
28	D6	69	ASN
28	D6	76	SER
28	D6	77	CYS
28	D6	82	ARG
28	D6	86	VAL
28	D6	88	SER
28	D6	89	ARG
28	D6	91	ASP

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Mol	Chain	Res	Type
29	D7	3	LEU
29	D7	8	LEU
29	D7	15	GLU
29	D7	23	THR
29	D7	33	LEU
29	D7	34	ASP
29	D7	35	VAL
29	D7	52	THR
29	D7	55	THR
29	D7	57	GLU
29	D7	58	SER
29	D7	63	LEU
29	D7	73	LEU
30	D8	7	VAL
30	D8	8	THR
30	D8	14	LYS
30	D8	19	THR
30	D8	28	VAL
30	D8	29	ARG
30	D8	30	VAL
30	D8	32	PHE
30	D8	33	LEU
30	D8	34	GLU
30	D8	36	THR
30	D8	39	THR
30	D8	49	ARG
30	D8	55	VAL
30	D8	58	GLU
30	D8	64	ARG
30	D8	65	ARG
31	D9	5	ASN
31	D9	8	PHE
31	D9	10	HIS
31	D9	12	ARG
31	D9	19	ARG
31	D9	20	GLN
31	D9	21	CYS
31	D9	23	VAL
31	D9	27	HIS
31	D9	28	THR
31	D9	30	LEU
31	D9	31	ILE

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Mol	Chain	Res	Type
31	D9	41	GLN
32	E0	3	LYS
32	E0	14	VAL
32	E0	16	SER
32	E0	20	LYS
32	E0	21	VAL
32	E0	22	GLU
32	E0	24	THR
32	E0	26	LYS
32	E0	38	LEU
32	E0	39	LEU
32	E0	42	ARG
32	E0	48	THR
32	E0	49	LEU
32	E0	50	VAL
32	E0	55	ARG
32	E0	56	MET
33	E1	82	LYS
33	E1	84	VAL
33	E1	91	ILE
33	E1	97	LYS
33	E1	103	LEU
33	E1	108	VAL
33	E1	109	ASP
33	E1	115	THR
33	E1	118	ARG
33	E1	130	VAL
33	E1	134	ASN
33	E1	137	ASP
33	E1	140	TYR
33	E1	149	LYS
33	E1	150	VAL
34	SR	6	VAL
34	SR	9	LEU
34	SR	10	ARG
34	SR	16	HIS
34	SR	25	THR
34	SR	26	SER
34	SR	29	GLN
34	SR	32	LEU
34	SR	51	ASP
34	SR	52	GLN

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Mol	Chain	Res	Type
34	SR	58	VAL
34	SR	60	SER
34	SR	66	HIS
34	SR	70	ASP
34	SR	72	THR
34	SR	73	LEU
34	SR	76	ASP
34	SR	87	LYS
34	SR	96	THR
34	SR	103	PHE
34	SR	110	VAL
34	SR	117	LYS
34	SR	135	THR
34	SR	140	CYS
34	SR	144	LEU
34	SR	149	ASP
34	SR	152	SER
34	SR	153	GLN
34	SR	154	VAL
34	SR	178	VAL
34	SR	191	ASP
34	SR	200	ASN
34	SR	216	LYS
34	SR	220	ILE
34	SR	238	ASP
34	SR	242	SER
34	SR	246	SER
34	SR	263	PHE
34	SR	272	ASP
34	SR	283	LYS
34	SR	288	HIS
34	SR	314	GLN
34	SR	317	THR
34	SR	319	ASN
35	SM	25	ILE
35	SM	27	LYS
35	SM	28	SER
35	SM	30	THR
35	SM	43	ASP
35	SM	45	SER
35	SM	48	ARG
35	SM	50	ASN

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Mol	Chain	Res	Type
35	SM	55	SER
35	SM	62	ARG
35	SM	74	LYS
35	SM	78	ASP
35	SM	81	THR
35	SM	82	THR
35	SM	83	LYS
35	SM	84	LYS
35	SM	85	SER
35	SM	87	THR
35	SM	88	ARG
35	SM	89	ARG
35	SM	91	THR
35	SM	92	ASP
35	SM	100	THR
35	SM	102	THR
35	SM	106	VAL
35	SM	112	ASP
35	SM	113	ASP
35	SM	115	LYS
35	SM	120	GLU
39	L2	8	GLN
39	L2	17	THR
39	L2	18	SER
39	L2	19	HIS
39	L2	21	ARG
39	L2	29	LEU
39	L2	31	THR
39	L2	32	LEU
39	L2	37	ARG
39	L2	41	ILE
39	L2	44	ILE
39	L2	45	VAL
39	L2	49	VAL
39	L2	52	SER
39	L2	62	VAL
39	L2	68	LYS
39	L2	70	ARG
39	L2	71	LEU
39	L2	74	GLU
39	L2	79	ASN
39	L2	84	THR

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Mol	Chain	Res	Type
39	L2	86	GLN
39	L2	88	ILE
39	L2	96	LEU
39	L2	97	ASN
39	L2	98	VAL
39	L2	101	VAL
39	L2	104	LEU
39	L2	109	GLU
39	L2	114	SER
39	L2	118	GLU
39	L2	122	ASP
39	L2	137	ILE
39	L2	142	ASP
39	L2	143	GLU
39	L2	148	VAL
39	L2	152	SER
39	L2	157	VAL
39	L2	158	ILE
39	L2	163	ARG
39	L2	168	VAL
39	L2	175	VAL
39	L2	179	LEU
39	L2	181	LYS
39	L2	192	LYS
39	L2	199	THR
39	L2	200	ARG
39	L2	204	MET
39	L2	207	VAL
39	L2	227	ARG
39	L2	230	VAL
39	L2	242	ARG
39	L2	245	LEU
39	L2	250	GLN
39	L2	251	LYS
40	L3	3	HIS
40	L3	10	ARG
40	L3	17	LEU
40	L3	19	ARG
40	L3	25	ILE
40	L3	34	LYS
40	L3	37	ARG
40	L3	39	LYS

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Mol	Chain	Res	Type
40	L3	40	PRO
40	L3	43	LEU
40	L3	47	LEU
40	L3	50	LYS
40	L3	56	ILE
40	L3	58	ARG
40	L3	67	PHE
40	L3	73	VAL
40	L3	76	VAL
40	L3	77	THR
40	L3	80	ASP
40	L3	83	PRO
40	L3	84	VAL
40	L3	85	VAL
40	L3	87	VAL
40	L3	97	ARG
40	L3	102	LEU
40	L3	109	HIS
40	L3	114	VAL
40	L3	116	ARG
40	L3	126	LYS
40	L3	128	LYS
40	L3	134	SER
40	L3	139	GLN
40	L3	144	ILE
40	L3	147	GLU
40	L3	150	ARG
40	L3	156	SER
40	L3	157	VAL
40	L3	159	ARG
40	L3	167	ARG
40	L3	168	LYS
40	L3	169	THR
40	L3	184	ASN
40	L3	187	SER
40	L3	188	ILE
40	L3	192	VAL
40	L3	201	LYS
40	L3	205	VAL
40	L3	206	ASP
40	L3	210	GLU
40	L3	211	GLN

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Mol	Chain	Res	Type
40	L3	212	ASN
40	L3	215	ILE
40	L3	216	ASP
40	L3	226	PHE
40	L3	229	VAL
40	L3	230	THR
40	L3	232	ARG
40	L3	235	THR
40	L3	236	LYS
40	L3	241	LYS
40	L3	242	THR
40	L3	246	LEU
40	L3	248	LYS
40	L3	261	MET
40	L3	264	VAL
40	L3	270	ARG
40	L3	272	TYR
40	L3	274	SER
40	L3	284	ARG
40	L3	287	LYS
40	L3	291	GLU
40	L3	297	SER
40	L3	305	ILE
40	L3	319	ASN
40	L3	320	ASP
40	L3	324	VAL
40	L3	327	CYS
40	L3	328	ILE
40	L3	332	ARG
40	L3	335	ILE
40	L3	337	THR
40	L3	342	LEU
40	L3	344	THR
40	L3	351	LEU
40	L3	353	GLU
40	L3	356	LEU
40	L3	359	ILE
40	L3	364	LYS
40	L3	370	PHE
40	L3	372	THR
40	L3	379	PHE
40	L3	382	THR

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Mol	Chain	Res	Type
41	L4	6	VAL
41	L4	11	LEU
41	L4	22	LEU
41	L4	25	VAL
41	L4	27	SER
41	L4	30	ILE
41	L4	35	VAL
41	L4	39	PHE
41	L4	44	LYS
41	L4	60	THR
41	L4	63	GLU
41	L4	67	THR
41	L4	71	VAL
41	L4	73	ARG
41	L4	74	ILE
41	L4	77	VAL
41	L4	92	ASN
41	L4	93	MET
41	L4	95	ARG
41	L4	99	MET
41	L4	105	THR
41	L4	107	ARG
41	L4	112	LYS
41	L4	120	TYR
41	L4	124	SER
41	L4	138	ARG
41	L4	148	ILE
41	L4	150	LEU
41	L4	151	VAL
41	L4	154	THR
41	L4	159	ILE
41	L4	176	SER
41	L4	178	LEU
41	L4	179	LEU
41	L4	180	LYS
41	L4	182	LEU
41	L4	187	LEU
41	L4	188	ARG
41	L4	193	LYS
41	L4	194	TYR
41	L4	198	ARG
41	L4	200	THR

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Mol	Chain	Res	Type
41	L4	220	ARG
41	L4	222	VAL
41	L4	223	PRO
41	L4	227	THR
41	L4	230	VAL
41	L4	244	LEU
41	L4	246	ARG
41	L4	256	THR
41	L4	259	ASP
41	L4	275	THR
41	L4	278	SER
41	L4	281	ILE
41	L4	282	SER
41	L4	283	THR
41	L4	287	THR
41	L4	292	SER
41	L4	297	SER
41	L4	300	ARG
41	L4	311	HIS
41	L4	313	LEU
41	L4	314	LYS
41	L4	321	LYS
41	L4	323	VAL
41	L4	324	LEU
41	L4	326	ARG
41	L4	327	LEU
41	L4	339	LEU
41	L4	345	GLU
41	L4	346	LYS
41	L4	347	THR
41	L4	349	THR
41	L4	350	LYS
41	L4	354	VAL
41	L4	362	ASP
42	L5	8	LYS
42	L5	9	SER
42	L5	19	PRO
42	L5	23	ARG
42	L5	32	GLN
42	L5	33	ARG
42	L5	35	ARG
42	L5	41	LYS

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Mol	Chain	Res	Type
42	L5	50	ARG
42	L5	52	VAL
42	L5	64	ILE
42	L5	66	SER
42	L5	69	ILE
42	L5	70	THR
42	L5	80	SER
42	L5	81	HIS
42	L5	92	LEU
42	L5	94	ASN
42	L5	95	TRP
42	L5	105	ILE
42	L5	110	LEU
42	L5	112	LYS
42	L5	115	LEU
42	L5	117	GLU
42	L5	125	VAL
42	L5	131	LEU
42	L5	135	VAL
42	L5	140	ARG
42	L5	146	LEU
42	L5	151	GLN
42	L5	163	LEU
42	L5	168	ASP
42	L5	185	PHE
42	L5	188	GLU
42	L5	189	GLU
42	L5	194	LEU
42	L5	196	ARG
42	L5	207	TYR
42	L5	217	GLU
42	L5	219	PHE
42	L5	220	SER
42	L5	222	LEU
42	L5	231	ILE
42	L5	232	ASP
42	L5	257	GLU
42	L5	259	LYS
42	L5	263	GLU
42	L5	264	GLN
42	L5	276	LYS
43	L6	4	GLN

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Mol	Chain	Res	Type
43	L6	5	LYS
43	L6	19	LYS
43	L6	21	THR
43	L6	29	LYS
43	L6	41	ILE
43	L6	46	ARG
43	L6	52	VAL
43	L6	65	ILE
43	L6	78	ARG
43	L6	84	VAL
43	L6	88	SER
43	L6	89	THR
43	L6	92	SER
43	L6	98	VAL
43	L6	99	GLU
43	L6	129	GLU
43	L6	134	ARG
43	L6	146	ILE
43	L6	151	LYS
43	L6	154	LEU
43	L6	155	LEU
43	L6	163	PHE
43	L6	174	LEU
44	L7	24	GLU
44	L7	25	GLN
44	L7	29	GLU
44	L7	30	ARG
44	L7	33	ARG
44	L7	34	LYS
44	L7	38	LYS
44	L7	39	GLU
44	L7	40	LYS
44	L7	43	ILE
44	L7	44	ILE
44	L7	47	ARG
44	L7	59	GLU
44	L7	60	ARG
44	L7	63	ILE
44	L7	77	VAL
44	L7	80	GLN
44	L7	83	LEU
44	L7	88	ARG

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Mol	Chain	Res	Type
44	L7	89	ILE
44	L7	92	ILE
44	L7	97	PRO
44	L7	98	LYS
44	L7	101	LYS
44	L7	110	ARG
44	L7	112	ASN
44	L7	113	SER
44	L7	121	LYS
44	L7	123	THR
44	L7	124	LEU
44	L7	127	LEU
44	L7	134	VAL
44	L7	153	PHE
44	L7	157	ASN
44	L7	158	LYS
44	L7	160	ARG
44	L7	163	LEU
44	L7	164	SER
44	L7	179	LEU
44	L7	181	ILE
44	L7	183	ASP
44	L7	184	LEU
44	L7	185	ILE
44	L7	202	LEU
44	L7	216	VAL
44	L7	219	LYS
44	L7	224	ILE
44	L7	239	LEU
45	L8	26	LEU
45	L8	27	THR
45	L8	31	PRO
45	L8	36	ILE
45	L8	38	GLN
45	L8	41	GLN
45	L8	42	PRO
45	L8	47	SER
45	L8	49	TYR
45	L8	55	TYR
45	L8	67	ILE
45	L8	69	LEU
45	L8	71	VAL

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Mol	Chain	Res	Type
45	L8	79	GLN
45	L8	81	THR
45	L8	83	ASP
45	L8	84	ARG
45	L8	95	ASN
45	L8	106	LYS
45	L8	108	ARG
45	L8	109	LEU
45	L8	110	THR
45	L8	132	VAL
45	L8	134	TYR
45	L8	136	LEU
45	L8	137	ASN
45	L8	150	LEU
45	L8	155	ASN
45	L8	156	ASP
45	L8	160	ILE
45	L8	164	VAL
45	L8	183	LYS
45	L8	185	ARG
45	L8	189	LEU
45	L8	190	VAL
45	L8	197	VAL
45	L8	203	VAL
45	L8	204	ARG
45	L8	214	LEU
45	L8	216	SER
45	L8	218	ILE
45	L8	246	MET
45	L8	255	SER
46	L9	2	LYS
46	L9	5	GLN
46	L9	6	THR
46	L9	12	VAL
46	L9	14	GLU
46	L9	18	VAL
46	L9	19	SER
46	L9	20	ILE
46	L9	21	LYS
46	L9	24	ILE
46	L9	25	VAL
46	L9	41	ILE

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Mol	Chain	Res	Type
46	L9	44	THR
46	L9	52	LEU
46	L9	53	ILE
46	L9	55	VAL
46	L9	63	LYS
46	L9	68	LEU
46	L9	69	ARG
46	L9	70	THR
46	L9	72	LYS
46	L9	78	MET
46	L9	79	ILE
46	L9	82	VAL
46	L9	90	MET
46	L9	92	TYR
46	L9	94	TYR
46	L9	102	ASN
46	L9	104	VAL
46	L9	106	LYS
46	L9	107	ASP
46	L9	111	PHE
46	L9	118	LEU
46	L9	120	ASP
46	L9	121	LYS
46	L9	122	LYS
46	L9	123	ILE
46	L9	125	ASN
46	L9	130	ASP
46	L9	133	THR
46	L9	139	ASN
46	L9	146	LEU
46	L9	147	SER
46	L9	150	SER
46	L9	151	VAL
46	L9	154	VAL
46	L9	157	ASN
46	L9	161	LEU
46	L9	162	GLN
46	L9	163	GLN
46	L9	166	ARG
46	L9	168	ARG
46	L9	172	ILE
46	L9	173	ARG

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Mol	Chain	Res	Type
46	L9	174	LYS
46	L9	176	LEU
46	L9	182	SER
46	L9	186	PHE
46	L9	188	THR
46	L9	189	GLU
46	L9	191	LEU
47	M0	7	ARG
47	M0	12	GLN
47	M0	15	LYS
47	M0	16	PRO
47	M0	20	SER
47	M0	21	ARG
47	M0	22	TYR
47	M0	26	VAL
47	M0	30	LYS
47	M0	31	ILE
47	M0	33	ILE
47	M0	39	LYS
47	M0	42	THR
47	M0	50	VAL
47	M0	52	LEU
47	M0	53	VAL
47	M0	61	SER
47	M0	63	GLU
47	M0	73	ASN
47	M0	82	ARG
47	M0	87	LEU
47	M0	99	ILE
47	M0	102	MET
47	M0	128	ARG
47	M0	130	ASP
47	M0	133	GLN
47	M0	134	ILE
47	M0	138	VAL
47	M0	139	ARG
47	M0	143	SER
47	M0	146	ASP
47	M0	163	GLN
47	M0	165	ILE
47	M0	174	THR
47	M0	177	ASP

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Mol	Chain	Res	Type
47	M0	191	LYS
47	M0	197	VAL
47	M0	200	LEU
47	M0	201	SER
47	M0	203	LYS
47	M0	208	ASN
47	M0	215	GLU
48	M1	6	GLN
48	M1	10	ARG
48	M1	12	LEU
48	M1	13	LYS
48	M1	19	LEU
48	M1	22	SER
48	M1	23	VAL
48	M1	26	SER
48	M1	28	ASP
48	M1	29	ARG
48	M1	30	LEU
48	M1	43	GLN
48	M1	46	VAL
48	M1	52	TYR
48	M1	56	THR
48	M1	59	ILE
48	M1	70	THR
48	M1	71	VAL
48	M1	77	GLU
48	M1	79	ILE
48	M1	85	LYS
48	M1	99	THR
48	M1	101	ASN
48	M1	106	ILE
48	M1	107	ASP
48	M1	119	SER
48	M1	137	ARG
48	M1	140	ARG
48	M1	142	LYS
48	M1	145	LYS
48	M1	147	THR
48	M1	150	ASN
48	M1	155	THR
48	M1	158	ASP
48	M1	166	LYS

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Mol	Chain	Res	Type
48	M1	173	ASP
49	M3	9	ILE
49	M3	13	HIS
49	M3	15	ARG
49	M3	21	ARG
49	M3	22	VAL
49	M3	23	LYS
49	M3	24	VAL
49	M3	35	ARG
49	M3	41	THR
49	M3	46	ILE
49	M3	50	PRO
49	M3	53	LEU
49	M3	55	ARG
49	M3	58	VAL
49	M3	59	ARG
49	M3	69	VAL
49	M3	73	ARG
49	M3	86	THR
49	M3	91	ARG
49	M3	98	ASP
49	M3	101	ARG
49	M3	106	GLN
49	M3	110	ASP
49	M3	115	ARG
49	M3	120	GLN
49	M3	121	SER
49	M3	122	LYS
49	M3	124	ILE
49	M3	131	LYS
49	M3	136	GLU
49	M3	137	GLN
49	M3	138	VAL
49	M3	152	THR
49	M3	154	VAL
49	M3	157	ARG
49	M3	159	VAL
49	M3	168	ARG
49	M3	171	ARG
49	M3	174	ARG
49	M3	194	GLU
50	M4	5	SER

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Mol	Chain	Res	Type
50	M4	11	ASN
50	M4	15	VAL
50	M4	27	GLN
50	M4	28	SER
50	M4	38	ILE
50	M4	44	VAL
50	M4	50	LYS
50	M4	53	VAL
50	M4	55	ARG
50	M4	66	THR
50	M4	68	LEU
50	M4	82	SER
50	M4	83	LYS
50	M4	90	VAL
50	M4	91	CYS
50	M4	92	GLU
50	M4	102	LYS
50	M4	106	ARG
50	M4	107	GLU
50	M4	108	ARG
50	M4	109	ARG
50	M4	113	THR
50	M4	117	ARG
50	M4	127	LYS
50	M4	131	VAL
50	M4	133	LYS
50	M4	135	LEU
50	M4	137	LYS
51	M5	5	LYS
51	M5	10	LEU
51	M5	22	LEU
51	M5	23	GLN
51	M5	25	VAL
51	M5	38	ARG
51	M5	43	THR
51	M5	49	ARG
51	M5	51	LEU
51	M5	54	LYS
51	M5	57	GLN
51	M5	62	TYR
51	M5	64	VAL
51	M5	80	THR

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Mol	Chain	Res	Type
51	M5	90	ASN
51	M5	96	ARG
51	M5	101	THR
51	M5	104	GLU
51	M5	113	LEU
51	M5	117	ASN
51	M5	128	LYS
51	M5	133	ILE
51	M5	142	ILE
51	M5	151	ILE
51	M5	153	ASP
51	M5	155	VAL
51	M5	165	THR
51	M5	174	ILE
51	M5	184	LYS
51	M5	190	THR
51	M5	201	ARG
51	M5	204	LYS
52	M6	8	VAL
52	M6	16	VAL
52	M6	41	LEU
52	M6	42	ASN
52	M6	44	SER
52	M6	47	PHE
52	M6	57	PHE
52	M6	58	LEU
52	M6	59	ARG
52	M6	67	THR
52	M6	68	ARG
52	M6	70	PRO
52	M6	78	ARG
52	M6	82	LYS
52	M6	85	ARG
52	M6	87	MET
52	M6	89	SER
52	M6	92	THR
52	M6	104	VAL
52	M6	105	PHE
52	M6	106	GLU
52	M6	110	PRO
52	M6	117	ARG
52	M6	118	VAL

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Mol	Chain	Res	Type
52	M6	122	GLN
52	M6	124	LEU
52	M6	126	VAL
52	M6	141	LEU
52	M6	142	SER
52	M6	143	THR
52	M6	155	LYS
52	M6	156	LEU
52	M6	161	LYS
52	M6	164	SER
52	M6	166	GLU
52	M6	170	LYS
52	M6	177	LYS
52	M6	184	THR
52	M6	190	VAL
52	M6	194	LEU
53	M7	7	THR
53	M7	9	THR
53	M7	13	LYS
53	M7	14	SER
53	M7	16	SER
53	M7	20	SER
53	M7	21	TYR
53	M7	26	PHE
53	M7	34	GLN
53	M7	36	ILE
53	M7	42	THR
53	M7	49	GLU
53	M7	52	LEU
53	M7	53	ASP
53	M7	54	HIS
53	M7	55	GLN
53	M7	56	ARG
53	M7	61	ARG
53	M7	62	ARG
53	M7	67	ILE
53	M7	69	ARG
53	M7	78	VAL
53	M7	79	THR
53	M7	86	LYS
53	M7	90	PHE
53	M7	91	VAL

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Mol	Chain	Res	Type
53	M7	107	LEU
53	M7	111	LYS
53	M7	112	LEU
53	M7	125	GLN
53	M7	127	ARG
53	M7	128	ARG
53	M7	131	ARG
53	M7	136	ILE
53	M7	138	LYS
53	M7	141	SER
53	M7	144	SER
53	M7	154	GLU
53	M7	155	GLU
53	M7	168	LEU
53	M7	180	LYS
53	M7	181	ARG
54	M8	3	ILE
54	M8	6	THR
54	M8	7	SER
54	M8	8	LYS
54	M8	11	LYS
54	M8	20	LYS
54	M8	26	LEU
54	M8	29	LEU
54	M8	32	LEU
54	M8	34	THR
54	M8	39	ARG
54	M8	41	ASP
54	M8	46	LYS
54	M8	49	LEU
54	M8	55	SER
54	M8	56	LYS
54	M8	63	SER
54	M8	66	ARG
54	M8	67	ILE
54	M8	93	ILE
54	M8	100	THR
54	M8	105	ARG
54	M8	106	PHE
54	M8	107	THR
54	M8	111	ARG
54	M8	115	VAL

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Mol	Chain	Res	Type
54	M8	124	LEU
54	M8	133	LYS
54	M8	146	SER
54	M8	147	ARG
54	M8	150	VAL
54	M8	174	ARG
54	M8	176	ARG
54	M8	180	ARG
54	M8	186	VAL
55	M9	4	LEU
55	M9	5	ARG
55	M9	10	LEU
55	M9	17	VAL
55	M9	24	LEU
55	M9	25	ASP
55	M9	28	GLU
55	M9	31	GLU
55	M9	37	SER
55	M9	41	ILE
55	M9	44	LEU
55	M9	46	LYS
55	M9	49	THR
55	M9	55	VAL
55	M9	57	VAL
55	M9	63	THR
55	M9	70	LYS
55	M9	71	ARG
55	M9	74	ARG
55	M9	81	ARG
55	M9	84	THR
55	M9	89	LEU
55	M9	92	GLN
55	M9	100	ARG
55	M9	104	ARG
55	M9	105	LEU
55	M9	106	LEU
55	M9	116	ASP
55	M9	119	LEU
55	M9	125	LYS
55	M9	130	ASN
55	M9	134	HIS
55	M9	135	LYS

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Mol	Chain	Res	Type
55	M9	139	VAL
55	M9	141	HIS
55	M9	164	LEU
55	M9	165	LYS
55	M9	167	ARG
55	M9	173	ARG
55	M9	176	ARG
55	M9	188	ASP
56	N0	1	MET
56	N0	3	HIS
56	N0	5	LYS
56	N0	7	TYR
56	N0	8	GLN
56	N0	16	THR
56	N0	17	GLU
56	N0	18	SER
56	N0	23	LYS
56	N0	34	GLU
56	N0	36	ILE
56	N0	45	LEU
56	N0	47	LYS
56	N0	51	VAL
56	N0	55	SER
56	N0	57	GLU
56	N0	58	ILE
56	N0	63	GLN
56	N0	71	LYS
56	N0	81	TYR
56	N0	82	ASP
56	N0	87	THR
56	N0	88	HIS
56	N0	98	SER
56	N0	100	VAL
56	N0	106	LEU
56	N0	107	TYR
56	N0	108	GLN
56	N0	117	ARG
56	N0	119	ARG
56	N0	120	SER
56	N0	123	ILE
56	N0	137	ARG
56	N0	142	GLN

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Mol	Chain	Res	Type
56	N0	145	THR
56	N0	148	LEU
56	N0	149	LYS
56	N0	155	ARG
56	N0	156	VAL
56	N0	158	LYS
56	N0	159	SER
56	N0	162	THR
56	N0	166	LYS
56	N0	167	ARG
56	N0	169	SER
56	N0	170	THR
56	N0	171	PHE
56	N0	172	TYR
57	N1	5	HIS
57	N1	9	SER
57	N1	12	ARG
57	N1	15	PHE
57	N1	25	VAL
57	N1	29	THR
57	N1	32	LYS
57	N1	35	LYS
57	N1	60	LYS
57	N1	69	LYS
57	N1	72	VAL
57	N1	74	VAL
57	N1	75	ILE
57	N1	78	LYS
57	N1	79	MET
57	N1	88	ARG
57	N1	92	ARG
57	N1	93	VAL
57	N1	97	LYS
57	N1	98	HIS
57	N1	102	ARG
57	N1	103	GLN
57	N1	104	GLU
57	N1	106	LEU
57	N1	118	GLU
57	N1	120	LYS
57	N1	122	GLN
57	N1	124	VAL

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Mol	Chain	Res	Type
57	N1	126	VAL
57	N1	127	GLN
57	N1	128	LEU
57	N1	130	ARG
57	N1	139	ARG
57	N1	141	VAL
57	N1	158	THR
57	N1	160	ILE
58	N2	14	THR
58	N2	27	VAL
58	N2	29	ASP
58	N2	32	SER
58	N2	35	LYS
58	N2	39	ASP
58	N2	43	VAL
58	N2	50	LEU
58	N2	52	ASN
58	N2	54	VAL
58	N2	68	THR
58	N2	70	LYS
58	N2	72	SER
58	N2	91	ASP
58	N2	93	ILE
58	N2	94	ARG
58	N2	95	PHE
58	N2	100	THR
58	N2	108	TYR
59	N3	12	ARG
59	N3	13	ILE
59	N3	29	SER
59	N3	36	ILE
59	N3	40	LYS
59	N3	42	SER
59	N3	45	ARG
59	N3	54	LEU
59	N3	59	MET
59	N3	68	GLU
59	N3	70	ARG
59	N3	72	LYS
59	N3	74	MET
59	N3	86	ARG
59	N3	87	ARG

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Mol	Chain	Res	Type
59	N3	96	GLU
59	N3	97	ASP
59	N3	102	ILE
59	N3	104	ASN
59	N3	114	ILE
59	N3	120	LYS
59	N3	124	ASP
59	N3	128	ARG
59	N3	136	VAL
59	N3	137	VAL
60	N4	4	GLU
60	N4	9	SER
60	N4	19	THR
60	N4	21	PHE
60	N4	23	ARG
60	N4	27	LYS
60	N4	38	SER
60	N4	39	LEU
60	N4	42	GLN
60	N4	45	ASN
60	N4	47	ARG
60	N4	52	THR
61	N5	24	LEU
61	N5	27	ARG
61	N5	32	PHE
61	N5	34	LEU
61	N5	38	LEU
61	N5	46	TYR
61	N5	58	ASP
61	N5	60	TYR
61	N5	61	LYS
61	N5	63	ILE
61	N5	65	GLN
61	N5	71	THR
61	N5	80	ASN
61	N5	85	GLN
61	N5	108	LEU
61	N5	115	ARG
61	N5	127	THR
61	N5	133	LEU
61	N5	134	ASP
61	N5	135	ILE

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Mol	Chain	Res	Type
61	N5	139	ILE
62	N6	5	SER
62	N6	7	ASP
62	N6	8	VAL
62	N6	13	ARG
62	N6	25	SER
62	N6	26	GLN
62	N6	36	SER
62	N6	37	LYS
62	N6	38	GLU
62	N6	39	LEU
62	N6	42	GLN
62	N6	45	ILE
62	N6	46	LYS
62	N6	50	ILE
62	N6	51	ARG
62	N6	57	LEU
62	N6	60	ARG
62	N6	62	SER
62	N6	74	TYR
62	N6	80	VAL
62	N6	83	ASP
62	N6	88	GLU
62	N6	90	VAL
62	N6	94	SER
62	N6	95	VAL
62	N6	115	ARG
62	N6	118	LEU
62	N6	126	LEU
62	N6	127	GLU
63	N7	9	LYS
63	N7	14	VAL
63	N7	33	SER
63	N7	34	LYS
63	N7	46	ILE
63	N7	52	LYS
63	N7	56	LYS
63	N7	57	HIS
63	N7	72	ILE
63	N7	75	VAL
63	N7	81	LEU
63	N7	88	ASP

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Mol	Chain	Res	Type
63	N7	92	PHE
63	N7	99	GLU
63	N7	100	THR
63	N7	102	GLU
63	N7	107	ARG
63	N7	109	GLU
63	N7	121	ARG
63	N7	129	TRP
63	N7	132	SER
63	N7	134	LEU
63	N7	136	PHE
64	N8	8	THR
64	N8	15	VAL
64	N8	22	ILE
64	N8	38	GLN
64	N8	42	ARG
64	N8	43	ILE
64	N8	45	MET
64	N8	47	LYS
64	N8	56	VAL
64	N8	60	TYR
64	N8	75	LEU
64	N8	78	LEU
64	N8	83	PRO
64	N8	84	GLU
64	N8	86	LYS
64	N8	93	SER
64	N8	96	LYS
64	N8	98	THR
64	N8	115	LYS
64	N8	120	ASN
64	N8	135	GLU
64	N8	136	GLU
64	N8	139	ARG
65	N9	3	LYS
65	N9	6	ASN
65	N9	10	HIS
65	N9	13	THR
65	N9	14	ARG
65	N9	22	LYS
65	N9	25	LYS
65	N9	26	THR

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Mol	Chain	Res	Type
65	N9	28	LYS
65	N9	33	LYS
65	N9	35	VAL
65	N9	37	PRO
65	N9	38	LYS
65	N9	50	THR
65	N9	58	LYS
65	N9	59	LYS
66	O0	18	ILE
66	O0	30	THR
66	O0	32	LYS
66	O0	34	LEU
66	O0	40	LYS
66	O0	41	LEU
66	O0	43	ILE
66	O0	48	THR
66	O0	52	ARG
66	O0	61	MET
66	O0	62	LEU
66	O0	65	THR
66	O0	66	LYS
66	O0	83	LYS
66	O0	87	VAL
66	O0	90	VAL
66	O0	92	ILE
66	O0	97	ASP
66	O0	100	ILE
67	O1	9	THR
67	O1	13	THR
67	O1	14	ILE
67	O1	16	LEU
67	O1	18	LYS
67	O1	21	HIS
67	O1	24	SER
67	O1	26	LYS
67	O1	31	ARG
67	O1	35	GLU
67	O1	41	LYS
67	O1	46	THR
67	O1	64	VAL
67	O1	73	LEU
67	O1	75	ILE

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Mol	Chain	Res	Type
67	O1	79	ARG
67	O1	82	GLU
67	O1	83	GLU
67	O1	84	ASP
67	O1	86	LYS
67	O1	89	LEU
67	O1	93	VAL
67	O1	98	VAL
67	O1	100	SER
67	O1	110	GLU
68	O2	6	HIS
68	O2	10	VAL
68	O2	14	THR
68	O2	18	LYS
68	O2	19	ARG
68	O2	26	HIS
68	O2	33	ARG
68	O2	36	LYS
68	O2	38	ILE
68	O2	39	ASP
68	O2	41	VAL
68	O2	44	ARG
68	O2	47	ARG
68	O2	49	ASN
68	O2	50	ILE
68	O2	61	LYS
68	O2	62	LYS
68	O2	67	SER
68	O2	68	PRO
68	O2	74	PHE
68	O2	75	LEU
68	O2	76	VAL
68	O2	78	ASN
68	O2	80	LYS
68	O2	82	LEU
68	O2	84	THR
68	O2	85	LEU
68	O2	86	THR
68	O2	96	ILE
68	O2	100	ILE
68	O2	103	LYS
68	O2	104	ASN

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Mol	Chain	Res	Type
68	O2	105	ARG
68	O2	108	ILE
68	O2	109	LEU
68	O2	121	ASN
69	O3	20	LYS
69	O3	21	ARG
69	O3	22	VAL
69	O3	29	LEU
69	O3	31	LYS
69	O3	37	THR
69	O3	38	PRO
69	O3	56	SER
69	O3	59	VAL
69	O3	60	ARG
69	O3	62	SER
69	O3	67	MET
69	O3	70	LYS
69	O3	82	ARG
69	O3	84	THR
69	O3	86	ARG
69	O3	98	VAL
69	O3	106	ASN
69	O3	107	ILE
70	O4	4	ARG
70	O4	8	ARG
70	O4	10	ARG
70	O4	14	ASN
70	O4	15	THR
70	O4	18	ASN
70	O4	20	ILE
70	O4	22	VAL
70	O4	29	ILE
70	O4	35	VAL
70	O4	38	LEU
70	O4	43	LYS
70	O4	44	CYS
70	O4	51	LEU
70	O4	52	GLN
70	O4	56	THR
70	O4	57	LEU
70	O4	58	ARG
70	O4	65	VAL

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Mol	Chain	Res	Type
70	O4	66	SER
70	O4	68	THR
70	O4	71	THR
70	O4	81	CYS
70	O4	88	ARG
70	O4	89	ILE
70	O4	98	GLN
70	O4	102	LYS
70	O4	105	VAL
70	O4	110	GLU
71	O5	4	VAL
71	O5	7	TYR
71	O5	8	GLU
71	O5	11	THR
71	O5	13	SER
71	O5	15	GLU
71	O5	28	LEU
71	O5	36	LEU
71	O5	41	LEU
71	O5	45	LYS
71	O5	46	THR
71	O5	47	VAL
71	O5	48	ARG
71	O5	49	LYS
71	O5	50	SER
71	O5	51	ILE
71	O5	55	LEU
71	O5	58	ILE
71	O5	62	GLN
71	O5	68	GLN
71	O5	69	LEU
71	O5	71	LYS
71	O5	73	LYS
71	O5	74	LYS
71	O5	81	ARG
71	O5	86	ARG
71	O5	89	ARG
71	O5	93	THR
71	O5	96	GLU
71	O5	101	THR
71	O5	102	GLU
71	O5	107	LYS

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Mol	Chain	Res	Type
71	O5	115	LYS
71	O5	118	ILE
71	O5	119	LYS
72	O6	2	THR
72	O6	18	THR
72	O6	20	MET
72	O6	21	THR
72	O6	25	LYS
72	O6	28	TYR
72	O6	29	LYS
72	O6	43	LEU
72	O6	44	VAL
72	O6	45	ARG
72	O6	50	LEU
72	O6	52	PRO
72	O6	58	ILE
72	O6	59	ASP
72	O6	60	LEU
72	O6	64	SER
72	O6	68	ARG
72	O6	71	LYS
72	O6	76	ARG
72	O6	84	LYS
72	O6	87	VAL
72	O6	88	GLU
72	O6	90	MET
72	O6	98	ARG
72	O6	99	ARG
73	O7	3	LYS
73	O7	11	ARG
73	O7	17	THR
73	O7	18	LEU
73	O7	24	ARG
73	O7	31	LYS
73	O7	32	LYS
73	O7	33	THR
73	O7	43	LYS
73	O7	45	ARG
73	O7	55	ARG
73	O7	58	THR
73	O7	65	ARG
73	O7	67	LEU

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Mol	Chain	Res	Type
73	O7	74	PHE
73	O7	75	LYS
73	O7	80	THR
73	O7	82	SER
73	O7	85	LYS
74	O8	8	ILE
74	O8	14	LEU
74	O8	17	ARG
74	O8	20	VAL
74	O8	24	THR
74	O8	31	LEU
74	O8	32	ASN
74	O8	36	LYS
74	O8	41	THR
74	O8	53	THR
74	O8	61	LYS
74	O8	65	LEU
74	O8	69	LEU
74	O8	72	THR
74	O8	77	ARG
75	O9	7	PHE
75	O9	12	LYS
75	O9	17	LYS
75	O9	21	ARG
75	O9	23	LEU
75	O9	28	ARG
75	O9	29	LEU
75	O9	41	ARG
75	O9	42	ARG
75	O9	45	ARG
76	Q0	85	LEU
76	Q0	88	LYS
76	Q0	89	TYR
76	Q0	92	ASP
76	Q0	94	SER
76	Q0	99	CYS
76	Q0	108	THR
76	Q0	113	ARG
76	Q0	114	LYS
76	Q0	122	ARG
76	Q0	127	LEU
77	Q1	1	MET

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Mol	Chain	Res	Type
77	Q1	2	ARG
77	Q1	4	LYS
77	Q1	7	LYS
77	Q1	11	ARG
77	Q1	16	LYS
77	Q1	17	ARG
77	Q1	21	ARG
78	Q2	6	LYS
78	Q2	7	THR
78	Q2	8	ARG
78	Q2	15	LYS
78	Q2	16	THR
78	Q2	19	LYS
78	Q2	20	HIS
78	Q2	28	TYR
78	Q2	35	LEU
78	Q2	40	LYS
78	Q2	45	ARG
78	Q2	54	THR
78	Q2	55	LYS
78	Q2	57	VAL
78	Q2	58	PHE
78	Q2	61	LYS
78	Q2	64	THR
78	Q2	78	LYS
78	Q2	80	ARG
78	Q2	83	LEU
78	Q2	85	LEU
78	Q2	90	HIS
78	Q2	93	LEU
78	Q2	96	GLU
78	Q2	105	GLN
79	Q3	5	THR
79	Q3	6	LYS
79	Q3	7	LYS
79	Q3	8	VAL
79	Q3	20	SER
79	Q3	21	SER
79	Q3	25	GLN
79	Q3	41	PHE
79	Q3	42	CYS
79	Q3	45	LYS

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Mol	Chain	Res	Type
79	Q3	48	LYS
79	Q3	49	ARG
79	Q3	58	SER
79	Q3	70	THR
79	Q3	81	SER
79	Q3	84	ARG
79	Q3	91	GLU
2	s0	6	THR
2	s0	9	LEU
2	s0	12	GLU
2	s0	15	GLN
2	s0	22	THR
2	s0	24	LEU
2	s0	28	ASN
2	s0	29	VAL
2	s0	41	ARG
2	s0	50	VAL
2	s0	59	LEU
2	s0	62	ARG
2	s0	63	ILE
2	s0	69	ASN
2	s0	72	ASP
2	s0	84	ARG
2	s0	86	VAL
2	s0	87	LEU
2	s0	96	THR
2	s0	98	ILE
2	s0	110	TYR
2	s0	111	ILE
2	s0	113	ARG
2	s0	119	ARG
2	s0	122	ILE
2	s0	128	SER
2	s0	129	ASP
2	s0	131	GLN
2	s0	133	ILE
2	s0	141	ILE
2	s0	153	SER
2	s0	156	VAL
2	s0	157	ASP
2	s0	165	ARG
2	s0	172	LEU

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Mol	Chain	Res	Type
2	s0	177	LEU
2	s0	181	VAL
2	s0	183	ARG
2	s0	185	ARG
2	s0	188	LEU
2	s0	189	VAL
2	s0	196	SER
3	s1	21	VAL
3	s1	36	SER
3	s1	37	THR
3	s1	46	THR
3	s1	47	LEU
3	s1	50	LYS
3	s1	55	LYS
3	s1	59	ASP
3	s1	61	LEU
3	s1	62	LYS
3	s1	65	VAL
3	s1	66	VAL
3	s1	70	LEU
3	s1	73	LEU
3	s1	76	SER
3	s1	77	GLU
3	s1	79	HIS
3	s1	81	PHE
3	s1	89	ASP
3	s1	90	GLU
3	s1	98	THR
3	s1	105	PHE
3	s1	108	ASP
3	s1	115	ARG
3	s1	126	THR
3	s1	129	THR
3	s1	137	ILE
3	s1	158	SER
3	s1	162	ARG
3	s1	173	THR
3	s1	180	THR
3	s1	181	LEU
3	s1	185	THR
3	s1	188	LEU
3	s1	193	ILE

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Mol	Chain	Res	Type
3	s1	194	ASN
3	s1	202	LYS
3	s1	205	PHE
3	s1	208	GLN
3	s1	209	ASN
3	s1	211	HIS
3	s1	222	LYS
3	s1	223	PHE
3	s1	232	HIS
3	s1	234	GLU
4	s2	41	LEU
4	s2	43	ARG
4	s2	46	LYS
4	s2	51	THR
4	s2	52	THR
4	s2	53	ILE
4	s2	56	ILE
4	s2	58	LEU
4	s2	60	SER
4	s2	66	PHE
4	s2	69	ILE
4	s2	70	ASP
4	s2	72	LEU
4	s2	80	VAL
4	s2	83	ILE
4	s2	86	VAL
4	s2	89	GLN
4	s2	90	THR
4	s2	91	ARG
4	s2	95	ARG
4	s2	96	THR
4	s2	97	ARG
4	s2	107	SER
4	s2	111	VAL
4	s2	113	LEU
4	s2	117	THR
4	s2	119	LYS
4	s2	130	ILE
4	s2	131	ILE
4	s2	139	ILE
4	s2	140	ARG
4	s2	141	ARG

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Mol	Chain	Res	Type
4	s2	146	THR
4	s2	147	ASN
4	s2	150	GLN
4	s2	152	HIS
4	s2	154	LEU
4	s2	164	SER
4	s2	166	THR
4	s2	167	VAL
4	s2	170	ILE
4	s2	174	ARG
4	s2	179	VAL
4	s2	181	SER
4	s2	187	LEU
4	s2	189	GLN
4	s2	195	ASP
4	s2	205	ARG
4	s2	216	VAL
4	s2	222	TYR
4	s2	224	PHE
4	s2	225	LEU
4	s2	229	LEU
4	s2	232	GLU
4	s2	233	GLN
4	s2	246	GLU
4	s2	250	GLN
5	s3	4	LEU
5	s3	14	ASP
5	s3	21	LEU
5	s3	26	THR
5	s3	32	GLU
5	s3	34	TYR
5	s3	37	VAL
5	s3	40	ARG
5	s3	41	VAL
5	s3	44	THR
5	s3	54	ARG
5	s3	57	ASP
5	s3	59	LEU
5	s3	66	ILE
5	s3	67	ASN
5	s3	69	LEU
5	s3	70	THR

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Mol	Chain	Res	Type
5	s3	72	LEU
5	s3	74	GLN
5	s3	76	ARG
5	s3	84	ILE
5	s3	90	ARG
5	s3	94	ARG
5	s3	97	SER
5	s3	103	GLU
5	s3	109	LEU
5	s3	115	ILE
5	s3	117	ARG
5	s3	128	GLU
5	s3	139	SER
5	s3	142	LEU
5	s3	143	ARG
5	s3	148	LYS
5	s3	152	PHE
5	s3	154	ASP
5	s3	158	ILE
5	s3	162	GLN
5	s3	167	PHE
5	s3	168	ILE
5	s3	174	HIS
5	s3	178	ARG
5	s3	181	VAL
5	s3	189	MET
5	s3	195	SER
5	s3	196	ARG
5	s3	197	THR
5	s3	207	THR
5	s3	212	LYS
5	s3	213	GLU
5	s3	217	ILE
5	s3	223	LYS
6	s4	12	LEU
6	s4	20	LEU
6	s4	23	LEU
6	s4	32	SER
6	s4	38	LEU
6	s4	39	ARG
6	s4	42	LEU
6	s4	45	ILE

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Mol	Chain	Res	Type
6	s4	49	ARG
6	s4	56	LEU
6	s4	57	ASN
6	s4	65	LEU
6	s4	77	ARG
6	s4	80	THR
6	s4	82	TYR
6	s4	88	ASP
6	s4	100	ARG
6	s4	108	ARG
6	s4	113	ARG
6	s4	115	THR
6	s4	116	ASP
6	s4	127	LYS
6	s4	130	GLN
6	s4	131	LEU
6	s4	133	LYS
6	s4	140	VAL
6	s4	143	ASP
6	s4	147	ILE
6	s4	151	ASP
6	s4	156	VAL
6	s4	160	VAL
6	s4	164	LEU
6	s4	169	ILE
6	s4	170	THR
6	s4	171	ASP
6	s4	174	LYS
6	s4	180	LEU
6	s4	182	TYR
6	s4	187	ARG
6	s4	194	THR
6	s4	195	ILE
6	s4	202	ASP
6	s4	209	HIS
6	s4	214	LEU
6	s4	217	THR
6	s4	219	VAL
6	s4	220	THR
6	s4	221	ARG
6	s4	227	VAL
6	s4	230	GLU

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Mol	Chain	Res	Type
6	s4	240	LYS
6	s4	244	ILE
6	s4	246	LEU
6	s4	248	ILE
6	s4	254	ARG
6	s4	259	GLN
7	s5	20	PHE
7	s5	21	THR
7	s5	25	LEU
7	s5	28	PRO
7	s5	31	GLU
7	s5	32	GLU
7	s5	38	THR
7	s5	39	GLU
7	s5	40	ILE
7	s5	41	LYS
7	s5	44	ASN
7	s5	45	LYS
7	s5	53	VAL
7	s5	57	SER
7	s5	59	VAL
7	s5	63	GLN
7	s5	64	VAL
7	s5	65	ARG
7	s5	68	ILE
7	s5	70	VAL
7	s5	73	THR
7	s5	76	ARG
7	s5	79	ASN
7	s5	89	ILE
7	s5	92	ARG
7	s5	93	LEU
7	s5	96	SER
7	s5	99	MET
7	s5	112	ARG
7	s5	119	ASP
7	s5	127	GLN
7	s5	146	THR
7	s5	147	THR
7	s5	148	ARG
7	s5	156	ARG
7	s5	157	ARG

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Mol	Chain	Res	Type
7	s5	162	VAL
7	s5	166	ARG
7	s5	170	GLN
7	s5	187	ILE
7	s5	190	ILE
7	s5	194	LEU
7	s5	203	LYS
7	s5	205	SER
7	s5	217	LEU
7	s5	219	ARG
7	s5	223	SER
7	s5	225	ARG
8	s6	1	MET
8	s6	5	ILE
8	s6	6	SER
8	s6	7	TYR
8	s6	10	ASN
8	s6	15	THR
8	s6	19	ASP
8	s6	22	HIS
8	s6	24	ILE
8	s6	29	ASP
8	s6	44	GLU
8	s6	49	VAL
8	s6	50	PHE
8	s6	57	ASP
8	s6	67	VAL
8	s6	71	THR
8	s6	73	ILE
8	s6	76	LEU
8	s6	78	THR
8	s6	79	LYS
8	s6	81	VAL
8	s6	93	LYS
8	s6	108	VAL
8	s6	111	LEU
8	s6	119	GLN
8	s6	120	GLU
8	s6	121	LEU
8	s6	122	GLU
8	s6	126	ASP
8	s6	127	THR

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Mol	Chain	Res	Type
8	s6	129	VAL
8	s6	133	LEU
8	s6	143	LYS
8	s6	150	GLU
8	s6	151	ASP
8	s6	153	VAL
8	s6	154	ARG
8	s6	156	PHE
8	s6	157	VAL
8	s6	158	ILE
8	s6	162	VAL
8	s6	168	THR
8	s6	171	LYS
8	s6	173	PRO
8	s6	175	ILE
8	s6	177	ARG
8	s6	182	GLN
8	s6	184	LEU
8	s6	185	GLN
8	s6	197	ASN
8	s6	210	GLN
8	s6	211	LEU
8	s6	215	ARG
8	s6	216	LEU
8	s6	217	SER
9	s7	7	LYS
9	s7	11	GLN
9	s7	16	LEU
9	s7	25	VAL
9	s7	26	GLU
9	s7	35	LYS
9	s7	37	GLU
9	s7	38	LEU
9	s7	39	ARG
9	s7	48	GLU
9	s7	49	ILE
9	s7	50	ASP
9	s7	67	LEU
9	s7	77	LEU
9	s7	79	ARG
9	s7	80	GLU
9	s7	84	LYS

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Mol	Chain	Res	Type
9	s7	87	ASP
9	s7	90	VAL
9	s7	97	ARG
9	s7	104	ARG
9	s7	105	THR
9	s7	107	ARG
9	s7	108	GLN
9	s7	109	VAL
9	s7	114	ARG
9	s7	116	ARG
9	s7	118	LEU
9	s7	119	THR
9	s7	123	ASP
9	s7	125	ILE
9	s7	126	LEU
9	s7	129	LEU
9	s7	135	ILE
9	s7	144	VAL
9	s7	149	ILE
9	s7	154	LEU
9	s7	157	LYS
9	s7	160	GLN
9	s7	161	GLN
9	s7	166	LEU
9	s7	167	GLU
9	s7	185	ILE
10	s8	3	ILE
10	s8	4	SER
10	s8	6	ASP
10	s8	8	ARG
10	s8	9	HIS
10	s8	11	ARG
10	s8	17	LYS
10	s8	18	ARG
10	s8	29	LEU
10	s8	36	THR
10	s8	38	ILE
10	s8	41	LYS
10	s8	43	ILE
10	s8	45	SER
10	s8	46	VAL
10	s8	47	ARG

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Mol	Chain	Res	Type
10	s8	48	THR
10	s8	56	ARG
10	s8	59	ARG
10	s8	61	GLU
10	s8	62	THR
10	s8	64	ASN
10	s8	66	SER
10	s8	72	ILE
10	s8	76	THR
10	s8	89	GLU
10	s8	92	ARG
10	s8	93	THR
10	s8	101	ILE
10	s8	111	GLN
10	s8	120	THR
10	s8	121	LEU
10	s8	136	SER
10	s8	151	LYS
10	s8	152	ILE
10	s8	153	GLU
10	s8	155	SER
10	s8	158	SER
10	s8	169	ILE
10	s8	184	LEU
10	s8	193	LEU
10	s8	195	ARG
10	s8	196	LEU
10	s8	197	THR
11	s9	3	ARG
11	s9	7	THR
11	s9	9	SER
11	s9	11	THR
11	s9	16	LYS
11	s9	17	ARG
11	s9	20	GLU
11	s9	28	LEU
11	s9	30	LEU
11	s9	39	LYS
11	s9	40	LYS
11	s9	45	ILE
11	s9	46	SER
11	s9	49	LEU

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Mol	Chain	Res	Type
11	s9	53	ARG
11	s9	59	LEU
11	s9	60	LEU
11	s9	61	THR
11	s9	78	ARG
11	s9	82	ARG
11	s9	83	VAL
11	s9	90	LYS
11	s9	93	LEU
11	s9	101	VAL
11	s9	105	LEU
11	s9	109	LEU
11	s9	110	GLN
11	s9	112	GLN
11	s9	115	LYS
11	s9	126	ARG
11	s9	127	VAL
11	s9	130	THR
11	s9	134	ILE
11	s9	140	ILE
11	s9	150	LEU
11	s9	154	LYS
11	s9	155	HIS
11	s9	162	SER
11	s9	168	ARG
11	s9	171	ARG
11	s9	172	VAL
11	s9	180	LYS
12	c0	2	LEU
12	c0	3	MET
12	c0	5	LYS
12	c0	6	GLU
12	c0	8	ARG
12	c0	15	LEU
12	c0	20	VAL
12	c0	33	GLU
12	c0	36	ASP
12	c0	49	LEU
12	c0	51	SER
12	c0	55	VAL
12	c0	57	THR
12	c0	64	TYR

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Mol	Chain	Res	Type
12	c0	67	THR
12	c0	70	GLU
12	c0	73	VAL
12	c0	74	GLU
12	c0	75	TYR
13	c1	5	LEU
13	c1	8	GLN
13	c1	9	SER
13	c1	16	GLN
13	c1	19	ILE
13	c1	21	ASN
13	c1	25	VAL
13	c1	26	LYS
13	c1	30	ARG
13	c1	40	LEU
13	c1	44	THR
13	c1	47	THR
13	c1	56	LYS
13	c1	60	PHE
13	c1	63	LEU
13	c1	67	ARG
13	c1	72	THR
13	c1	74	THR
13	c1	77	SER
13	c1	80	MET
13	c1	86	ILE
13	c1	87	ARG
13	c1	91	LEU
13	c1	103	ARG
13	c1	105	LYS
13	c1	111	VAL
13	c1	117	VAL
13	c1	123	VAL
13	c1	124	THR
13	c1	136	ARG
13	c1	143	SER
14	c2	28	LEU
14	c2	30	VAL
14	c2	36	LEU
14	c2	41	LEU
14	c2	43	ARG
14	c2	58	LEU

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Mol	Chain	Res	Type
14	c2	59	LEU
14	c2	61	VAL
14	c2	62	LEU
14	c2	66	VAL
14	c2	71	ILE
14	c2	74	LEU
14	c2	83	GLU
14	c2	85	LYS
14	c2	89	ILE
14	c2	97	LEU
14	c2	103	LEU
14	c2	116	VAL
14	c2	119	SER
14	c2	121	VAL
14	c2	125	ASN
14	c2	126	TRP
14	c2	132	GLU
14	c2	135	MET
14	c2	136	ILE
14	c2	140	PHE
15	c3	13	SER
15	c3	16	ILE
15	c3	20	ARG
15	c3	26	PHE
15	c3	28	LEU
15	c3	30	SER
15	c3	35	GLU
15	c3	36	GLN
15	c3	37	ILE
15	c3	42	ARG
15	c3	50	ILE
15	c3	64	ARG
15	c3	66	ILE
15	c3	67	THR
15	c3	71	ILE
15	c3	72	MET
15	c3	80	LEU
15	c3	82	PRO
15	c3	84	ILE
15	c3	94	LYS
15	c3	98	VAL
15	c3	102	LEU

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Mol	Chain	Res	Type
15	c3	104	ARG
15	c3	110	ASP
15	c3	114	ARG
15	c3	115	LEU
15	c3	125	LEU
15	c3	127	ARG
15	c3	131	THR
15	c3	134	VAL
15	c3	138	ASN
16	c4	10	ASN
16	c4	13	VAL
16	c4	14	PHE
16	c4	18	ARG
16	c4	20	TYR
16	c4	22	SER
16	c4	43	THR
16	c4	49	LYS
16	c4	52	ARG
16	c4	55	SER
16	c4	58	TYR
16	c4	66	ASP
16	c4	67	VAL
16	c4	81	VAL
16	c4	82	LYS
16	c4	83	ILE
16	c4	90	ARG
16	c4	91	THR
16	c4	92	LYS
16	c4	93	THR
16	c4	102	LEU
16	c4	107	ARG
16	c4	114	ARG
16	c4	123	SER
16	c4	124	ASP
16	c4	125	SER
16	c4	127	ARG
16	c4	133	ARG
16	c4	136	ARG
16	c4	137	LEU
17	c5	15	HIS
17	c5	16	SER
17	c5	20	VAL

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Mol	Chain	Res	Type
17	c5	22	LEU
17	c5	24	LYS
17	c5	27	GLU
17	c5	29	SER
17	c5	34	VAL
17	c5	36	LEU
17	c5	41	VAL
17	c5	43	ARG
17	c5	45	PHE
17	c5	49	MET
17	c5	52	LYS
17	c5	60	LEU
17	c5	61	ARG
17	c5	64	LYS
17	c5	65	LEU
17	c5	69	GLU
17	c5	72	LYS
17	c5	76	VAL
17	c5	86	VAL
17	c5	92	SER
17	c5	93	VAL
17	c5	94	VAL
17	c5	110	GLU
17	c5	120	SER
17	c5	121	ILE
17	c5	124	THR
17	c5	127	ARG
18	c6	8	GLN
18	c6	15	SER
18	c6	17	THR
18	c6	23	LYS
18	c6	26	LYS
18	c6	32	ASN
18	c6	36	ILE
18	c6	43	ILE
18	c6	50	GLU
18	c6	53	LEU
18	c6	54	LEU
18	c6	55	VAL
18	c6	57	LEU
18	c6	61	SER
18	c6	63	ILE

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Mol	Chain	Res	Type
18	c6	68	ARG
18	c6	69	VAL
18	c6	81	ILE
18	c6	101	SER
18	c6	103	ASN
18	c6	105	LEU
18	c6	111	SER
18	c6	113	ASP
18	c6	114	ARG
18	c6	115	THR
18	c6	117	LEU
18	c6	118	ILE
18	c6	123	ARG
18	c6	132	LYS
18	c6	137	ARG
18	c6	143	ARG
19	c7	3	ARG
19	c7	4	VAL
19	c7	5	ARG
19	c7	6	THR
19	c7	7	LYS
19	c7	14	LYS
19	c7	25	THR
19	c7	29	GLN
19	c7	30	THR
19	c7	34	LEU
19	c7	35	CYS
19	c7	36	ASP
19	c7	38	ILE
19	c7	44	LYS
19	c7	46	LEU
19	c7	49	LYS
19	c7	54	THR
19	c7	55	THR
19	c7	56	HIS
19	c7	69	ILE
19	c7	72	LYS
19	c7	73	LEU
19	c7	78	ARG
19	c7	83	GLN
19	c7	88	VAL
19	c7	104	ASN

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Mol	Chain	Res	Type
19	c7	105	GLN
19	c7	106	THR
19	c7	108	ASP
19	c7	112	SER
19	c7	113	LEU
20	c8	3	LEU
20	c8	5	VAL
20	c8	13	HIS
20	c8	17	LEU
20	c8	19	ASN
20	c8	25	ASN
20	c8	29	VAL
20	c8	36	LYS
20	c8	38	VAL
20	c8	40	ARG
20	c8	41	ARG
20	c8	53	ASP
20	c8	57	ARG
20	c8	61	LEU
20	c8	63	GLN
20	c8	65	GLU
20	c8	67	GLU
20	c8	75	ASN
20	c8	86	LEU
20	c8	89	GLN
20	c8	90	ASN
20	c8	94	ASP
20	c8	96	LYS
20	c8	100	THR
20	c8	109	LEU
20	c8	112	ASP
20	c8	116	LEU
20	c8	134	ARG
20	c8	136	GLN
20	c8	138	THR
20	c8	141	THR
20	c8	145	ARG
21	c9	4	VAL
21	c9	5	SER
21	c9	6	VAL
21	c9	16	ASN
21	c9	25	GLN

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Mol	Chain	Res	Type
21	c9	27	LYS
21	c9	33	TYR
21	c9	36	ILE
21	c9	41	SER
21	c9	44	GLU
21	c9	51	GLU
21	c9	57	ARG
21	c9	68	ARG
21	c9	70	GLN
21	c9	84	LYS
21	c9	86	ARG
21	c9	89	ARG
21	c9	94	ILE
21	c9	110	LYS
21	c9	111	ILE
21	c9	116	ILE
21	c9	123	ARG
21	c9	126	GLU
21	c9	130	ARG
21	c9	132	LEU
21	c9	133	ASP
21	c9	140	LEU
21	c9	141	GLU
21	c9	142	GLU
21	c9	144	GLU
22	d0	13	GLU
22	d0	14	GLN
22	d0	15	GLN
22	d0	20	ILE
22	d0	21	LYS
22	d0	22	ILE
22	d0	23	ARG
22	d0	24	ILE
22	d0	27	THR
22	d0	33	GLN
22	d0	34	LEU
22	d0	43	LYS
22	d0	44	ASN
22	d0	46	GLU
22	d0	48	HIS
22	d0	50	LEU
22	d0	53	LYS

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Mol	Chain	Res	Type
22	d0	62	VAL
22	d0	66	SER
22	d0	67	THR
22	d0	69	LYS
22	d0	70	THR
22	d0	74	GLU
22	d0	77	LYS
22	d0	78	THR
22	d0	94	GLU
22	d0	99	ILE
22	d0	102	ARG
22	d0	103	ILE
22	d0	105	GLN
22	d0	107	THR
22	d0	108	ILE
22	d0	109	GLU
22	d0	115	GLU
22	d0	116	VAL
22	d0	120	SER
23	d1	3	ASN
23	d1	4	ASP
23	d1	5	LYS
23	d1	7	GLN
23	d1	8	LEU
23	d1	10	GLU
23	d1	12	TYR
23	d1	21	ASN
23	d1	23	ILE
23	d1	25	LYS
23	d1	32	VAL
23	d1	38	LYS
23	d1	42	GLU
23	d1	44	ARG
23	d1	52	THR
23	d1	53	TYR
23	d1	56	SER
23	d1	61	SER
23	d1	62	ARG
23	d1	75	ASN
23	d1	78	LEU
23	d1	86	SER
24	d2	4	SER

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Mol	Chain	Res	Type
24	d2	6	VAL
24	d2	7	LEU
24	d2	9	ASP
24	d2	12	ASN
24	d2	15	ASN
24	d2	23	ARG
24	d2	25	VAL
24	d2	31	SER
24	d2	33	VAL
24	d2	37	PHE
24	d2	42	GLN
24	d2	43	LYS
24	d2	56	HIS
24	d2	65	LEU
24	d2	76	SER
24	d2	98	GLN
24	d2	103	ILE
24	d2	110	ILE
24	d2	117	ARG
24	d2	126	LEU
24	d2	129	VAL
25	d3	7	ARG
25	d3	9	LEU
25	d3	14	LYS
25	d3	16	ARG
25	d3	19	ARG
25	d3	33	LEU
25	d3	36	THR
25	d3	40	SER
25	d3	50	LYS
25	d3	52	ILE
25	d3	55	GLU
25	d3	64	PRO
25	d3	73	ARG
25	d3	76	LEU
25	d3	77	ILE
25	d3	78	LYS
25	d3	83	VAL
25	d3	84	THR
25	d3	92	CYS
25	d3	97	ASP
25	d3	107	PHE

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Mol	Chain	Res	Type
25	d3	109	ARG
25	d3	117	ILE
25	d3	123	LYS
25	d3	126	LYS
25	d3	132	LEU
25	d3	133	LEU
25	d3	140	LYS
25	d3	144	ARG
25	d3	145	SER
26	d4	3	ASP
26	d4	7	ILE
26	d4	10	ARG
26	d4	12	VAL
26	d4	13	ILE
26	d4	28	LEU
26	d4	30	PRO
26	d4	32	ARG
26	d4	43	LYS
26	d4	44	LEU
26	d4	47	VAL
26	d4	49	LYS
26	d4	51	GLU
26	d4	55	VAL
26	d4	58	PHE
26	d4	62	THR
26	d4	63	GLN
26	d4	88	THR
26	d4	91	LEU
26	d4	104	SER
26	d4	125	LEU
26	d4	128	LYS
26	d4	132	ARG
27	d5	42	LEU
27	d5	51	LEU
27	d5	58	ARG
27	d5	60	VAL
27	d5	62	VAL
27	d5	63	SER
27	d5	68	ARG
27	d5	71	ILE
27	d5	74	SER
27	d5	81	ARG

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Mol	Chain	Res	Type
27	d5	85	LYS
27	d5	92	ILE
27	d5	102	THR
27	d5	105	THR
28	d6	4	LYS
28	d6	5	ARG
28	d6	7	SER
28	d6	10	ARG
28	d6	12	LYS
28	d6	15	ARG
28	d6	18	VAL
28	d6	22	ARG
28	d6	27	SER
28	d6	33	ASP
28	d6	34	LYS
28	d6	36	ILE
28	d6	39	MET
28	d6	41	ILE
28	d6	42	ARG
28	d6	44	ILE
28	d6	46	GLU
28	d6	50	VAL
28	d6	51	ARG
28	d6	53	LEU
28	d6	55	GLU
28	d6	57	SER
28	d6	64	LEU
28	d6	67	THR
28	d6	73	TYR
28	d6	76	SER
28	d6	83	ILE
28	d6	85	ARG
28	d6	86	VAL
28	d6	88	SER
28	d6	90	GLU
28	d6	95	ARG
29	d7	2	VAL
29	d7	3	LEU
29	d7	5	GLN
29	d7	18	LYS
29	d7	24	LEU
29	d7	31	TYR

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Mol	Chain	Res	Type
29	d7	34	ASP
29	d7	35	VAL
29	d7	37	CYS
29	d7	41	LEU
29	d7	43	ILE
29	d7	45	THR
29	d7	48	SER
29	d7	49	HIS
29	d7	58	SER
29	d7	67	THR
30	d8	14	LYS
30	d8	15	VAL
30	d8	18	ARG
30	d8	22	ARG
30	d8	26	THR
30	d8	32	PHE
30	d8	33	LEU
30	d8	36	THR
30	d8	38	ARG
30	d8	49	ARG
30	d8	52	ASP
30	d8	53	ILE
30	d8	54	LEU
30	d8	65	ARG
31	d9	4	GLU
31	d9	6	VAL
31	d9	7	TRP
31	d9	8	PHE
31	d9	10	HIS
31	d9	14	TYR
31	d9	19	ARG
31	d9	20	GLN
31	d9	28	THR
31	d9	31	ILE
31	d9	42	CYS
31	d9	44	ARG
31	d9	50	ILE
31	d9	54	LYS
31	d9	56	ARG
80	e0	5	HIS
80	e0	7	SER
80	e0	8	LEU

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Mol	Chain	Res	Type
80	e0	13	LYS
80	e0	15	LYS
80	e0	26	LYS
80	e0	44	PHE
80	e0	45	VAL
80	e0	50	VAL
80	e0	53	LYS
80	e0	56	MET
80	e0	62	VAL
81	e1	78	LYS
81	e1	79	LYS
81	e1	80	ARG
81	e1	84	VAL
81	e1	86	THR
81	e1	89	LYS
81	e1	90	LYS
81	e1	92	LYS
81	e1	96	LYS
81	e1	98	VAL
81	e1	100	LEU
81	e1	102	VAL
81	e1	106	TYR
81	e1	108	VAL
81	e1	109	ASP
81	e1	113	LYS
81	e1	118	ARG
81	e1	119	ARG
81	e1	121	CYS
81	e1	135	HIS
81	e1	140	TYR
81	e1	144	CYS
81	e1	147	VAL
81	e1	149	LYS
81	e1	151	ASN
34	sR	5	GLU
34	sR	8	VAL
34	sR	17	ASN
34	sR	20	VAL
34	sR	23	LEU
34	sR	25	THR
34	sR	29	GLN
34	sR	43	ILE

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Mol	Chain	Res	Type
34	sR	56	VAL
34	sR	58	VAL
34	sR	59	ARG
34	sR	60	SER
34	sR	69	GLN
34	sR	72	THR
34	sR	82	SER
34	sR	96	THR
34	sR	98	GLU
34	sR	102	ARG
34	sR	104	VAL
34	sR	106	HIS
34	sR	108	SER
34	sR	115	ILE
34	sR	116	ASP
34	sR	128	ASP
34	sR	136	ILE
34	sR	145	LEU
34	sR	154	VAL
34	sR	159	ASN
34	sR	160	GLU
34	sR	164	ASP
34	sR	166	SER
34	sR	167	VAL
34	sR	170	ILE
34	sR	178	VAL
34	sR	205	SER
34	sR	228	LYS
34	sR	232	TYR
34	sR	233	THR
34	sR	258	THR
34	sR	269	TYR
34	sR	275	ARG
34	sR	283	LYS
34	sR	297	ASP
34	sR	299	GLN
34	sR	314	GLN
34	sR	315	VAL
34	sR	317	THR
35	sM	25	ILE
35	sM	27	LYS
35	sM	30	THR

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Mol	Chain	Res	Type
35	sM	41	SER
35	sM	43	ASP
35	sM	49	LYS
35	sM	51	ARG
35	sM	61	ILE
35	sM	64	LYS
35	sM	68	ARG
35	sM	72	ARG
35	sM	74	LYS
35	sM	77	THR
35	sM	81	THR
35	sM	82	THR
39	l2	18	SER
39	l2	23	ARG
39	l2	29	LEU
39	l2	45	VAL
39	l2	46	LYS
39	l2	48	ILE
39	l2	52	SER
39	l2	62	VAL
39	l2	67	TYR
39	l2	73	GLU
39	l2	74	GLU
39	l2	79	ASN
39	l2	82	VAL
39	l2	96	LEU
39	l2	101	VAL
39	l2	104	LEU
39	l2	106	SER
39	l2	107	VAL
39	l2	109	GLU
39	l2	111	THR
39	l2	114	SER
39	l2	119	LYS
39	l2	126	LEU
39	l2	128	ARG
39	l2	134	VAL
39	l2	136	ILE
39	l2	142	ASP
39	l2	147	ARG
39	l2	152	SER
39	l2	158	ILE

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Mol	Chain	Res	Type
39	l2	159	SER
39	l2	161	ASP
39	l2	179	LEU
39	l2	180	LEU
39	l2	186	PHE
39	l2	188	LYS
39	l2	193	ARG
39	l2	196	TRP
39	l2	200	ARG
39	l2	204	MET
39	l2	205	ASN
39	l2	207	VAL
39	l2	210	PRO
39	l2	217	GLN
39	l2	219	ILE
39	l2	224	THR
39	l2	225	ILE
39	l2	238	ILE
39	l2	242	ARG
39	l2	243	THR
39	l2	246	LEU
39	l2	247	ARG
39	l2	249	SER
39	l2	250	GLN
39	l2	251	LYS
40	l3	3	HIS
40	l3	4	ARG
40	l3	10	ARG
40	l3	17	LEU
40	l3	19	ARG
40	l3	20	LYS
40	l3	24	SER
40	l3	25	ILE
40	l3	30	LYS
40	l3	34	LYS
40	l3	37	ARG
40	l3	40	PRO
40	l3	41	VAL
40	l3	47	LEU
40	l3	55	THR
40	l3	56	ILE
40	l3	65	SER

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Mol	Chain	Res	Type
40	l3	66	LYS
40	l3	70	ARG
40	l3	72	VAL
40	l3	81	THR
40	l3	83	PRO
40	l3	85	VAL
40	l3	86	VAL
40	l3	87	VAL
40	l3	101	SER
40	l3	103	THR
40	l3	109	HIS
40	l3	112	ASP
40	l3	114	VAL
40	l3	120	LYS
40	l3	123	TYR
40	l3	125	SER
40	l3	127	LYS
40	l3	134	SER
40	l3	140	ASP
40	l3	146	ARG
40	l3	148	LEU
40	l3	150	ARG
40	l3	157	VAL
40	l3	162	VAL
40	l3	167	ARG
40	l3	183	LEU
40	l3	184	ASN
40	l3	188	ILE
40	l3	192	VAL
40	l3	201	LYS
40	l3	202	THR
40	l3	207	SER
40	l3	208	VAL
40	l3	210	GLU
40	l3	211	GLN
40	l3	213	GLU
40	l3	214	MET
40	l3	221	THR
40	l3	226	PHE
40	l3	229	VAL
40	l3	231	HIS
40	l3	232	ARG

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Mol	Chain	Res	Type
40	l3	235	THR
40	l3	236	LYS
40	l3	246	LEU
40	l3	247	ARG
40	l3	248	LYS
40	l3	252	ILE
40	l3	263	SER
40	l3	264	VAL
40	l3	270	ARG
40	l3	274	SER
40	l3	276	THR
40	l3	278	ILE
40	l3	284	ARG
40	l3	296	THR
40	l3	308	MET
40	l3	316	GLU
40	l3	328	ILE
40	l3	332	ARG
40	l3	344	THR
40	l3	345	ASN
40	l3	353	GLU
40	l3	359	ILE
40	l3	361	THR
40	l3	364	LYS
40	l3	379	PHE
40	l3	382	THR
40	l3	387	LEU
41	l4	3	ARG
41	l4	12	THR
41	l4	16	THR
41	l4	18	ASN
41	l4	22	LEU
41	l4	25	VAL
41	l4	33	ASP
41	l4	37	THR
41	l4	48	GLN
41	l4	50	TYR
41	l4	53	SER
41	l4	54	GLU
41	l4	64	SER
41	l4	65	TRP
41	l4	69	ARG

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Mol	Chain	Res	Type
41	l4	73	ARG
41	l4	82	THR
41	l4	93	MET
41	l4	94	CYS
41	l4	105	THR
41	l4	110	ASN
41	l4	112	LYS
41	l4	113	VAL
41	l4	120	TYR
41	l4	134	LEU
41	l4	136	LEU
41	l4	138	ARG
41	l4	142	VAL
41	l4	144	LYS
41	l4	145	ILE
41	l4	148	ILE
41	l4	150	LEU
41	l4	153	SER
41	l4	154	THR
41	l4	172	VAL
41	l4	178	LEU
41	l4	179	LEU
41	l4	183	LYS
41	l4	184	SER
41	l4	186	LYS
41	l4	187	LEU
41	l4	191	LYS
41	l4	193	LYS
41	l4	194	TYR
41	l4	197	ARG
41	l4	203	ARG
41	l4	206	LEU
41	l4	217	LYS
41	l4	222	VAL
41	l4	223	PRO
41	l4	230	VAL
41	l4	246	ARG
41	l4	247	PHE
41	l4	256	THR
41	l4	258	LEU
41	l4	276	LEU
41	l4	278	SER

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Mol	Chain	Res	Type
41	14	279	HIS
41	14	280	ILE
41	14	289	ILE
41	14	292	SER
41	14	297	SER
41	14	304	GLN
41	14	306	THR
41	14	307	GLN
41	14	312	VAL
41	14	313	LEU
41	14	318	LEU
41	14	323	VAL
41	14	327	LEU
41	14	328	ASN
41	14	333	VAL
41	14	337	GLU
41	14	338	LYS
41	14	342	LYS
41	14	345	GLU
41	14	351	PRO
41	14	354	VAL
41	14	357	GLU
41	14	359	LEU
42	15	4	GLN
42	15	8	LYS
42	15	9	SER
42	15	10	SER
42	15	24	ARG
42	15	32	GLN
42	15	34	LYS
42	15	35	ARG
42	15	36	LEU
42	15	51	LEU
42	15	66	SER
42	15	69	ILE
42	15	70	THR
42	15	75	LEU
42	15	81	HIS
42	15	82	GLU
42	15	85	ARG
42	15	89	THR
42	15	92	LEU

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Mol	Chain	Res	Type
42	15	110	LEU
42	15	112	LYS
42	15	115	LEU
42	15	116	ASP
42	15	118	THR
42	15	120	LYS
42	15	123	GLU
42	15	129	TYR
42	15	130	GLU
42	15	131	LEU
42	15	132	THR
42	15	133	GLU
42	15	136	GLU
42	15	140	ARG
42	15	144	VAL
42	15	146	LEU
42	15	152	ARG
42	15	154	THR
42	15	155	THR
42	15	158	ARG
42	15	167	SER
42	15	176	SER
42	15	185	PHE
42	15	187	THR
42	15	189	GLU
42	15	190	ILE
42	15	194	LEU
42	15	211	LEU
42	15	214	ASP
42	15	218	ARG
42	15	220	SER
42	15	227	LEU
42	15	236	LEU
42	15	237	GLU
42	15	239	ILE
42	15	245	GLU
42	15	254	LYS
42	15	256	THR
42	15	258	LYS
42	15	262	LYS
42	15	263	GLU
42	15	268	GLU

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Mol	Chain	Res	Type
42	15	269	SER
42	15	271	LYS
42	15	273	ARG
42	15	276	LYS
42	15	279	LYS
42	15	281	GLU
43	16	4	GLN
43	16	13	GLU
43	16	15	VAL
43	16	20	LYS
43	16	21	THR
43	16	28	GLN
43	16	31	ARG
43	16	36	PRO
43	16	42	LEU
43	16	50	LYS
43	16	51	ARG
43	16	52	VAL
43	16	59	GLU
43	16	65	ILE
43	16	71	VAL
43	16	88	SER
43	16	89	THR
43	16	90	LYS
43	16	93	VAL
43	16	98	VAL
43	16	104	GLU
43	16	108	LYS
43	16	109	GLU
43	16	130	ILE
43	16	137	ASP
43	16	140	VAL
43	16	150	LYS
43	16	155	LEU
43	16	157	GLN
43	16	171	PRO
44	17	22	THR
44	17	24	GLU
44	17	25	GLN
44	17	26	VAL
44	17	39	GLU
44	17	40	LYS

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Mol	Chain	Res	Type
44	17	52	GLN
44	17	60	ARG
44	17	67	ARG
44	17	83	LEU
44	17	89	ILE
44	17	90	LYS
44	17	93	ASN
44	17	97	PRO
44	17	98	LYS
44	17	123	THR
44	17	124	LEU
44	17	127	LEU
44	17	129	LEU
44	17	130	ILE
44	17	142	SER
44	17	147	LEU
44	17	148	VAL
44	17	156	ILE
44	17	157	ASN
44	17	158	LYS
44	17	164	SER
44	17	165	ASP
44	17	173	LEU
44	17	176	TYR
44	17	178	ILE
44	17	179	LEU
44	17	180	SER
44	17	181	ILE
44	17	184	LEU
44	17	196	LYS
44	17	207	LEU
44	17	229	PHE
44	17	232	ARG
44	17	234	GLU
44	17	239	LEU
45	18	26	LEU
45	18	38	GLN
45	18	50	VAL
45	18	64	ILE
45	18	67	ILE
45	18	71	VAL
45	18	74	THR

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Mol	Chain	Res	Type
45	18	77	GLN
45	18	79	GLN
45	18	81	THR
45	18	83	ASP
45	18	85	ASN
45	18	89	GLU
45	18	90	THR
45	18	95	ASN
45	18	96	LYS
45	18	109	LEU
45	18	128	LYS
45	18	132	VAL
45	18	136	LEU
45	18	146	LYS
45	18	150	LEU
45	18	151	VAL
45	18	155	ASN
45	18	156	ASP
45	18	160	ILE
45	18	165	PHE
45	18	169	LEU
45	18	183	LYS
45	18	185	ARG
45	18	194	THR
45	18	197	VAL
45	18	200	LEU
45	18	211	LEU
45	18	217	THR
45	18	224	ASP
45	18	228	GLU
45	18	230	LYS
45	18	232	HIS
45	18	240	ASN
45	18	241	LYS
45	18	245	LYS
45	18	248	LYS
46	19	5	GLN
46	19	6	THR
46	19	9	GLN
46	19	17	THR
46	19	18	VAL
46	19	31	ARG

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Mol	Chain	Res	Type
46	19	33	THR
46	19	37	ASN
46	19	49	ASN
46	19	52	LEU
46	19	55	VAL
46	19	63	LYS
46	19	68	LEU
46	19	69	ARG
46	19	70	THR
46	19	71	VAL
46	19	72	LYS
46	19	73	SER
46	19	79	ILE
46	19	80	THR
46	19	84	LYS
46	19	90	MET
46	19	96	HIS
46	19	107	ASP
46	19	112	ILE
46	19	113	GLU
46	19	115	ARG
46	19	123	ILE
46	19	124	ARG
46	19	125	ASN
46	19	129	ARG
46	19	133	THR
46	19	144	ILE
46	19	146	LEU
46	19	147	SER
46	19	151	VAL
46	19	152	GLU
46	19	157	ASN
46	19	161	LEU
46	19	162	GLN
46	19	163	GLN
46	19	164	ILE
46	19	168	ARG
46	19	172	ILE
46	19	174	LYS
46	19	177	ASP
46	19	182	SER
46	19	183	HIS

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Mol	Chain	Res	Type
46	l9	186	PHE
46	l9	187	ILE
46	l9	188	THR
46	l9	191	LEU
47	m0	4	ARG
47	m0	13	LYS
47	m0	22	TYR
47	m0	24	ARG
47	m0	36	LEU
47	m0	39	LYS
47	m0	42	THR
47	m0	46	PHE
47	m0	48	LEU
47	m0	52	LEU
47	m0	57	LEU
47	m0	58	GLU
47	m0	63	GLU
47	m0	71	CYS
47	m0	73	ASN
47	m0	74	LYS
47	m0	83	ASP
47	m0	87	LEU
47	m0	99	ILE
47	m0	103	LEU
47	m0	116	ARG
47	m0	125	LEU
47	m0	130	ASP
47	m0	133	GLN
47	m0	141	LYS
47	m0	142	ASP
47	m0	144	ASN
47	m0	145	LYS
47	m0	152	LEU
47	m0	154	ARG
47	m0	156	ARG
47	m0	163	GLN
47	m0	165	ILE
47	m0	166	ILE
47	m0	167	LEU
47	m0	169	LYS
47	m0	176	LEU
47	m0	180	GLU

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Mol	Chain	Res	Type
47	m0	183	LYS
47	m0	185	ARG
47	m0	192	ASP
47	m0	201	SER
47	m0	203	LYS
47	m0	206	LEU
47	m0	209	ASN
47	m0	210	ILE
47	m0	211	ARG
47	m0	217	PHE
48	m1	6	GLN
48	m1	9	MET
48	m1	10	ARG
48	m1	11	ASP
48	m1	12	LEU
48	m1	13	LYS
48	m1	16	LYS
48	m1	20	ASN
48	m1	25	GLU
48	m1	26	SER
48	m1	28	ASP
48	m1	30	LEU
48	m1	31	THR
48	m1	35	LYS
48	m1	44	THR
48	m1	46	VAL
48	m1	51	ARG
48	m1	56	THR
48	m1	60	ARG
48	m1	62	ASN
48	m1	72	ARG
48	m1	79	ILE
48	m1	82	ARG
48	m1	85	LYS
48	m1	88	GLU
48	m1	92	ARG
48	m1	93	ASP
48	m1	94	ARG
48	m1	95	ASN
48	m1	99	THR
48	m1	101	ASN
48	m1	106	ILE

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Mol	Chain	Res	Type
48	m1	107	ASP
48	m1	112	LEU
48	m1	115	LYS
48	m1	119	SER
48	m1	128	TYR
48	m1	129	VAL
48	m1	130	VAL
48	m1	133	ARG
48	m1	137	ARG
48	m1	138	VAL
48	m1	140	ARG
48	m1	142	LYS
48	m1	147	THR
48	m1	148	VAL
48	m1	151	SER
48	m1	152	HIS
48	m1	153	LYS
48	m1	155	THR
48	m1	156	LYS
48	m1	158	ASP
48	m1	159	THR
48	m1	165	GLN
48	m1	166	LYS
48	m1	174	LYS
49	m3	10	LEU
49	m3	11	LYS
49	m3	12	ASN
49	m3	13	HIS
49	m3	15	ARG
49	m3	16	LYS
49	m3	23	LYS
49	m3	24	VAL
49	m3	41	THR
49	m3	45	LYS
49	m3	46	ILE
49	m3	52	ASP
49	m3	54	LEU
49	m3	57	VAL
49	m3	58	VAL
49	m3	59	ARG
49	m3	63	VAL
49	m3	67	ARG

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Mol	Chain	Res	Type
49	m3	68	LYS
49	m3	69	VAL
49	m3	73	ARG
49	m3	76	THR
49	m3	80	VAL
49	m3	93	ILE
49	m3	95	ILE
49	m3	97	VAL
49	m3	100	ARG
49	m3	102	GLN
49	m3	113	VAL
49	m3	114	GLN
49	m3	115	ARG
49	m3	116	LEU
49	m3	123	ILE
49	m3	124	ILE
49	m3	125	VAL
49	m3	129	ASN
49	m3	138	VAL
49	m3	144	THR
49	m3	145	PHE
49	m3	149	GLN
49	m3	150	PRO
49	m3	153	ASP
49	m3	164	GLU
49	m3	168	ARG
49	m3	171	ARG
49	m3	174	ARG
49	m3	177	LYS
49	m3	180	ARG
49	m3	184	GLU
49	m3	188	ARG
49	m3	189	GLU
49	m3	194	GLU
50	m4	3	THR
50	m4	5	SER
50	m4	6	ILE
50	m4	8	LYS
50	m4	15	VAL
50	m4	27	GLN
50	m4	32	LEU
50	m4	35	ILE

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Mol	Chain	Res	Type
50	m4	44	VAL
50	m4	45	LEU
50	m4	53	VAL
50	m4	55	ARG
50	m4	60	LEU
50	m4	62	GLN
50	m4	64	VAL
50	m4	67	PRO
50	m4	68	LEU
50	m4	77	ARG
50	m4	80	THR
50	m4	82	SER
50	m4	103	ILE
50	m4	107	GLU
50	m4	108	ARG
50	m4	121	MET
50	m4	126	GLN
50	m4	127	LYS
50	m4	135	LEU
51	m5	5	LYS
51	m5	7	LEU
51	m5	10	LEU
51	m5	12	ARG
51	m5	18	VAL
51	m5	24	ARG
51	m5	31	ARG
51	m5	33	LYS
51	m5	41	ARG
51	m5	43	THR
51	m5	53	TYR
51	m5	54	LYS
51	m5	57	GLN
51	m5	63	ARG
51	m5	71	ARG
51	m5	72	LYS
51	m5	80	THR
51	m5	83	LYS
51	m5	92	LEU
51	m5	96	ARG
51	m5	97	SER
51	m5	98	LEU
51	m5	105	ARG

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Mol	Chain	Res	Type
51	m5	117	ASN
51	m5	121	VAL
51	m5	126	THR
51	m5	128	LYS
51	m5	129	TYR
51	m5	138	GLN
51	m5	152	CYS
51	m5	153	ASP
51	m5	156	HIS
51	m5	159	ARG
51	m5	160	GLU
51	m5	165	THR
51	m5	172	ARG
51	m5	175	ASN
51	m5	178	HIS
51	m5	180	PHE
51	m5	182	ASN
51	m5	184	LYS
51	m5	198	SER
51	m5	201	ARG
52	m6	3	VAL
52	m6	4	GLU
52	m6	7	VAL
52	m6	8	VAL
52	m6	12	LYS
52	m6	15	LEU
52	m6	28	LEU
52	m6	41	LEU
52	m6	43	ILE
52	m6	46	GLU
52	m6	49	ARG
52	m6	52	LEU
52	m6	58	LEU
52	m6	66	LYS
52	m6	67	THR
52	m6	74	ARG
52	m6	77	SER
52	m6	78	ARG
52	m6	82	LYS
52	m6	85	ARG
52	m6	88	VAL
52	m6	91	LYS

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Mol	Chain	Res	Type
52	m6	92	THR
52	m6	102	LEU
52	m6	106	GLU
52	m6	108	ILE
52	m6	116	LYS
52	m6	117	ARG
52	m6	124	LEU
52	m6	126	VAL
52	m6	128	ARG
52	m6	130	LYS
52	m6	140	LYS
52	m6	143	THR
52	m6	144	SER
52	m6	152	VAL
52	m6	170	LYS
52	m6	177	LYS
52	m6	180	SER
52	m6	182	ASN
52	m6	192	LYS
53	m7	3	ARG
53	m7	7	THR
53	m7	9	THR
53	m7	18	ARG
53	m7	21	TYR
53	m7	25	SER
53	m7	32	THR
53	m7	36	ILE
53	m7	46	LYS
53	m7	48	LEU
53	m7	49	GLU
53	m7	51	VAL
53	m7	56	ARG
53	m7	66	SER
53	m7	69	ARG
53	m7	70	THR
53	m7	78	VAL
53	m7	79	THR
53	m7	87	SER
53	m7	89	LYS
53	m7	94	LEU
53	m7	96	GLN
53	m7	103	GLU

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Mol	Chain	Res	Type
53	m7	107	LEU
53	m7	112	LEU
53	m7	113	TYR
53	m7	114	VAL
53	m7	115	SER
53	m7	116	HIS
53	m7	119	VAL
53	m7	120	ASN
53	m7	121	GLN
53	m7	125	GLN
53	m7	126	ARG
53	m7	127	ARG
53	m7	137	ASN
53	m7	138	LYS
53	m7	142	SER
53	m7	147	GLU
53	m7	148	LEU
53	m7	153	LYS
53	m7	155	GLU
54	m8	3	ILE
54	m8	8	LYS
54	m8	12	ARG
54	m8	17	THR
54	m8	22	ASP
54	m8	24	VAL
54	m8	26	LEU
54	m8	28	LEU
54	m8	32	LEU
54	m8	34	THR
54	m8	44	PHE
54	m8	47	VAL
54	m8	49	LEU
54	m8	56	LYS
54	m8	57	ILE
54	m8	62	VAL
54	m8	63	SER
54	m8	64	VAL
54	m8	65	SER
54	m8	69	ARG
54	m8	80	THR
54	m8	82	VAL
54	m8	86	THR

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Mol	Chain	Res	Type
54	m8	93	ILE
54	m8	98	LYS
54	m8	99	THR
54	m8	107	THR
54	m8	114	ILE
54	m8	129	VAL
54	m8	135	GLN
54	m8	138	LEU
54	m8	139	ILE
54	m8	144	ARG
54	m8	150	VAL
54	m8	155	MET
54	m8	165	ILE
54	m8	167	SER
54	m8	168	THR
54	m8	170	ARG
54	m8	171	LYS
54	m8	174	ARG
54	m8	178	ARG
54	m8	179	ARG
54	m8	180	ARG
54	m8	185	LYS
54	m8	186	VAL
55	m9	5	ARG
55	m9	7	GLN
55	m9	9	ARG
55	m9	10	LEU
55	m9	13	SER
55	m9	17	VAL
55	m9	20	ARG
55	m9	31	GLU
55	m9	32	ILE
55	m9	36	ASN
55	m9	41	ILE
55	m9	43	LYS
55	m9	56	THR
55	m9	57	VAL
55	m9	61	SER
55	m9	62	ARG
55	m9	70	LYS
55	m9	71	ARG
55	m9	74	ARG

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Mol	Chain	Res	Type
55	m9	82	LYS
55	m9	88	ARG
55	m9	91	SER
55	m9	99	LEU
55	m9	102	LEU
55	m9	106	LEU
55	m9	108	LYS
55	m9	119	LEU
55	m9	121	HIS
55	m9	127	SER
55	m9	128	LYS
55	m9	134	HIS
55	m9	139	VAL
55	m9	151	ARG
55	m9	153	LYS
55	m9	164	LEU
55	m9	167	ARG
55	m9	171	ASP
55	m9	173	ARG
55	m9	182	ASP
55	m9	186	LYS
56	n0	1	MET
56	n0	3	HIS
56	n0	12	ARG
56	n0	16	THR
56	n0	21	GLU
56	n0	23	LYS
56	n0	34	GLU
56	n0	45	LEU
56	n0	59	VAL
56	n0	61	ILE
56	n0	62	ASN
56	n0	70	THR
56	n0	80	ARG
56	n0	82	ASP
56	n0	87	THR
56	n0	88	HIS
56	n0	89	ASN
56	n0	90	MET
56	n0	92	LYS
56	n0	96	ASP
56	n0	98	SER

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Mol	Chain	Res	Type
56	n0	105	THR
56	n0	107	TYR
56	n0	113	ARG
56	n0	117	ARG
56	n0	129	ILE
56	n0	130	GLU
56	n0	132	THR
56	n0	136	LYS
56	n0	137	ARG
56	n0	141	LYS
56	n0	145	THR
56	n0	148	LEU
56	n0	149	LYS
56	n0	155	ARG
56	n0	156	VAL
56	n0	158	LYS
56	n0	160	THR
56	n0	162	THR
56	n0	164	SER
56	n0	171	PHE
56	n0	172	TYR
57	n1	4	SER
57	n1	9	SER
57	n1	14	MET
57	n1	17	ARG
57	n1	19	PHE
57	n1	27	LEU
57	n1	31	LEU
57	n1	33	VAL
57	n1	35	LYS
57	n1	36	VAL
57	n1	38	ASP
57	n1	48	ILE
57	n1	55	LYS
57	n1	64	VAL
57	n1	69	LYS
57	n1	75	ILE
57	n1	76	ILE
57	n1	83	ARG
57	n1	85	LEU
57	n1	87	LYS
57	n1	96	ILE

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Mol	Chain	Res	Type
57	n1	97	LYS
57	n1	104	GLU
57	n1	106	LEU
57	n1	118	GLU
57	n1	122	GLN
57	n1	126	VAL
57	n1	127	GLN
57	n1	128	LEU
57	n1	132	PRO
57	n1	135	PRO
57	n1	136	ARG
57	n1	139	ARG
57	n1	143	THR
57	n1	154	VAL
57	n1	158	THR
58	n2	15	PHE
58	n2	19	VAL
58	n2	27	VAL
58	n2	28	PHE
58	n2	38	ILE
58	n2	47	VAL
58	n2	50	LEU
58	n2	55	THR
58	n2	58	GLU
58	n2	65	VAL
58	n2	72	SER
58	n2	74	LYS
58	n2	75	TYR
58	n2	91	ASP
58	n2	93	ILE
58	n2	100	THR
58	n2	104	ARG
59	n3	13	ILE
59	n3	19	VAL
59	n3	22	ILE
59	n3	23	MET
59	n3	35	TYR
59	n3	37	ILE
59	n3	42	SER
59	n3	45	ARG
59	n3	46	LEU
59	n3	48	ARG

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Mol	Chain	Res	Type
59	n3	61	THR
59	n3	67	PRO
59	n3	70	ARG
59	n3	72	LYS
59	n3	74	MET
59	n3	78	VAL
59	n3	83	LYS
59	n3	84	SER
59	n3	88	ARG
59	n3	91	VAL
59	n3	92	PHE
59	n3	102	ILE
59	n3	108	GLU
59	n3	115	THR
59	n3	124	ASP
59	n3	128	ARG
60	n4	1	MET
60	n4	3	VAL
60	n4	5	ILE
60	n4	17	ARG
60	n4	19	THR
60	n4	20	LEU
60	n4	39	LEU
60	n4	43	ARG
60	n4	46	PRO
60	n4	49	ILE
60	n4	52	THR
60	n4	54	LEU
60	n4	57	LYS
60	n4	59	HIS
60	n4	61	LYS
60	n4	82	ILE
60	n4	87	LEU
60	n4	89	LEU
60	n4	93	ARG
60	n4	99	GLU
60	n4	100	VAL
60	n4	102	LYS
60	n4	107	GLU
60	n4	109	LEU
60	n4	112	ASN
60	n4	116	LYS

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Mol	Chain	Res	Type
60	n4	123	ARG
60	n4	127	LYS
60	n4	129	LYS
60	n4	133	THR
60	n4	135	SER
61	n5	24	LEU
61	n5	25	LYS
61	n5	27	ARG
61	n5	28	THR
61	n5	31	THR
61	n5	34	LEU
61	n5	39	LYS
61	n5	40	LEU
61	n5	44	PRO
61	n5	45	LYS
61	n5	48	SER
61	n5	53	HIS
61	n5	56	ARG
61	n5	58	ASP
61	n5	59	SER
61	n5	63	ILE
61	n5	67	ILE
61	n5	73	MET
61	n5	81	ILE
61	n5	86	VAL
61	n5	95	ILE
61	n5	102	LEU
61	n5	105	VAL
61	n5	106	ASP
61	n5	108	LEU
61	n5	113	LEU
61	n5	114	VAL
61	n5	115	ARG
61	n5	119	THR
61	n5	125	ARG
61	n5	126	LEU
61	n5	127	THR
61	n5	135	ILE
61	n5	138	ARG
62	n6	3	LYS
62	n6	5	SER
62	n6	8	VAL

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Mol	Chain	Res	Type
62	n6	10	SER
62	n6	12	ARG
62	n6	13	ARG
62	n6	14	LYS
62	n6	17	LYS
62	n6	25	SER
62	n6	28	ARG
62	n6	32	SER
62	n6	37	LYS
62	n6	40	ARG
62	n6	48	LEU
62	n6	50	ILE
62	n6	51	ARG
62	n6	52	ARG
62	n6	55	GLU
62	n6	62	SER
62	n6	66	GLN
62	n6	70	ILE
62	n6	73	VAL
62	n6	74	TYR
62	n6	90	VAL
62	n6	94	SER
62	n6	95	VAL
62	n6	98	ASN
62	n6	102	SER
62	n6	105	VAL
62	n6	111	LEU
62	n6	115	ARG
62	n6	120	GLN
62	n6	122	LYS
62	n6	127	GLU
63	n7	3	LYS
63	n7	14	VAL
63	n7	15	ARG
63	n7	17	ARG
63	n7	24	VAL
63	n7	25	ILE
63	n7	26	VAL
63	n7	30	ASP
63	n7	34	LYS
63	n7	46	ILE
63	n7	47	GLU

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Mol	Chain	Res	Type
63	n7	52	LYS
63	n7	64	LYS
63	n7	66	THR
63	n7	72	ILE
63	n7	73	LYS
63	n7	74	VAL
63	n7	81	LEU
63	n7	94	SER
63	n7	102	GLU
63	n7	132	SER
63	n7	134	LEU
64	n8	4	ARG
64	n8	6	THR
64	n8	7	LYS
64	n8	8	THR
64	n8	10	LYS
64	n8	14	HIS
64	n8	22	ILE
64	n8	32	ARG
64	n8	34	MET
64	n8	42	ARG
64	n8	44	ASN
64	n8	46	ASP
64	n8	58	MET
64	n8	60	TYR
64	n8	65	GLN
64	n8	73	LEU
64	n8	77	LYS
64	n8	78	LEU
64	n8	80	THR
64	n8	82	ILE
64	n8	91	LEU
64	n8	95	SER
64	n8	97	GLU
64	n8	101	VAL
64	n8	102	ILE
64	n8	117	ARG
64	n8	118	ILE
64	n8	120	ASN
64	n8	123	VAL
64	n8	124	ILE
64	n8	128	ARG

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Mol	Chain	Res	Type
64	n8	133	LEU
64	n8	146	GLU
65	n9	3	LYS
65	n9	6	ASN
65	n9	10	HIS
65	n9	13	THR
65	n9	14	ARG
65	n9	15	LYS
65	n9	17	HIS
65	n9	18	ARG
65	n9	19	ASN
65	n9	21	ILE
65	n9	23	LYS
65	n9	28	LYS
65	n9	29	TYR
65	n9	33	LYS
65	n9	35	VAL
65	n9	37	PRO
65	n9	38	LYS
65	n9	40	ARG
65	n9	42	ASN
65	n9	48	HIS
65	n9	52	LYS
65	n9	58	LYS
65	n9	59	LYS
66	o0	7	GLN
66	o0	8	GLU
66	o0	12	GLN
66	o0	14	LEU
66	o0	18	ILE
66	o0	19	LYS
66	o0	20	SER
66	o0	25	LEU
66	o0	29	SER
66	o0	33	SER
66	o0	34	LEU
66	o0	35	ARG
66	o0	40	LYS
66	o0	41	LEU
66	o0	44	ILE
66	o0	48	THR
66	o0	52	ARG

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Mol	Chain	Res	Type
66	o0	54	SER
66	o0	55	GLU
66	o0	56	LEU
66	o0	58	TYR
66	o0	61	MET
66	o0	65	THR
66	o0	86	ARG
66	o0	91	SER
66	o0	92	ILE
66	o0	94	GLU
66	o0	99	ASP
66	o0	101	LEU
66	o0	102	THR
67	o1	16	LEU
67	o1	17	HIS
67	o1	24	SER
67	o1	26	LYS
67	o1	28	ARG
67	o1	31	ARG
67	o1	43	HIS
67	o1	44	MET
67	o1	50	ARG
67	o1	53	PRO
67	o1	55	LEU
67	o1	64	VAL
67	o1	74	ARG
67	o1	76	SER
67	o1	79	ARG
67	o1	81	GLU
67	o1	83	GLU
67	o1	84	ASP
67	o1	90	PHE
67	o1	91	SER
67	o1	94	GLU
67	o1	96	VAL
67	o1	100	SER
67	o1	102	LYS
67	o1	104	LEU
67	o1	106	THR
67	o1	110	GLU
68	o2	4	LEU
68	o2	9	ILE

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Mol	Chain	Res	Type
68	o2	10	VAL
68	o2	11	LYS
68	o2	19	ARG
68	o2	21	HIS
68	o2	24	ARG
68	o2	27	ARG
68	o2	28	VAL
68	o2	30	GLU
68	o2	33	ARG
68	o2	34	LYS
68	o2	40	SER
68	o2	41	VAL
68	o2	44	ARG
68	o2	49	ASN
68	o2	50	ILE
68	o2	51	SER
68	o2	54	LYS
68	o2	61	LYS
68	o2	73	THR
68	o2	75	LEU
68	o2	82	LEU
68	o2	84	THR
68	o2	86	THR
68	o2	87	MET
68	o2	88	HIS
68	o2	91	THR
68	o2	108	ILE
68	o2	126	LEU
68	o2	128	LEU
69	o3	4	SER
69	o3	6	ARG
69	o3	9	VAL
69	o3	14	LEU
69	o3	15	SER
69	o3	19	SER
69	o3	22	VAL
69	o3	31	LYS
69	o3	37	THR
69	o3	42	GLN
69	o3	48	ARG
69	o3	49	ILE
69	o3	53	TYR

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Mol	Chain	Res	Type
69	o3	57	LYS
69	o3	58	GLU
69	o3	60	ARG
69	o3	62	SER
69	o3	63	LYS
69	o3	66	VAL
69	o3	70	LYS
69	o3	72	THR
69	o3	78	SER
69	o3	84	THR
69	o3	86	ARG
69	o3	97	SER
69	o3	98	VAL
69	o3	105	SER
69	o3	107	ILE
70	o4	3	GLN
70	o4	9	ARG
70	o4	11	ASN
70	o4	20	ILE
70	o4	29	ILE
70	o4	30	LEU
70	o4	33	GLN
70	o4	36	LYS
70	o4	37	LYS
70	o4	38	LEU
70	o4	46	ASP
70	o4	57	LEU
70	o4	58	ARG
70	o4	64	THR
70	o4	66	SER
70	o4	68	THR
70	o4	73	SER
70	o4	79	SER
70	o4	80	ARG
70	o4	81	CYS
70	o4	84	CYS
70	o4	86	LYS
70	o4	87	GLU
70	o4	109	THR
70	o4	110	GLU
71	o5	10	ARG
71	o5	15	GLU

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Mol	Chain	Res	Type
71	o5	19	SER
71	o5	20	GLN
71	o5	21	LEU
71	o5	27	GLU
71	o5	31	LEU
71	o5	35	LYS
71	o5	36	LEU
71	o5	37	SER
71	o5	42	PRO
71	o5	45	LYS
71	o5	46	THR
71	o5	47	VAL
71	o5	62	GLN
71	o5	79	ASP
71	o5	81	ARG
71	o5	84	LYS
71	o5	89	ARG
71	o5	94	LYS
71	o5	96	GLU
71	o5	100	VAL
71	o5	101	THR
71	o5	107	LYS
71	o5	115	LYS
71	o5	119	LYS
72	o6	3	VAL
72	o6	9	ILE
72	o6	18	THR
72	o6	21	THR
72	o6	34	SER
72	o6	36	ARG
72	o6	42	SER
72	o6	43	LEU
72	o6	45	ARG
72	o6	47	ILE
72	o6	55	ARG
72	o6	57	LEU
72	o6	58	ILE
72	o6	59	ASP
72	o6	62	ARG
72	o6	68	ARG
72	o6	71	LYS
72	o6	74	LYS

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Mol	Chain	Res	Type
72	o6	76	ARG
72	o6	81	THR
72	o6	90	MET
72	o6	93	ILE
72	o6	94	ILE
72	o6	98	ARG
72	o6	100	HIS
73	o7	3	LYS
73	o7	5	THR
73	o7	12	HIS
73	o7	13	ASN
73	o7	16	HIS
73	o7	17	THR
73	o7	19	CYS
73	o7	25	ARG
73	o7	31	LYS
73	o7	36	SER
73	o7	45	ARG
73	o7	56	ARG
73	o7	58	THR
73	o7	64	MET
73	o7	65	ARG
73	o7	66	TYR
73	o7	67	LEU
73	o7	72	ARG
73	o7	74	PHE
73	o7	75	LYS
73	o7	80	THR
73	o7	87	SER
74	o8	6	THR
74	o8	14	LEU
74	o8	17	ARG
74	o8	19	ASP
74	o8	24	THR
74	o8	32	ASN
74	o8	33	LYS
74	o8	38	PHE
74	o8	53	THR
74	o8	61	LYS
74	o8	64	LYS
74	o8	65	LEU
74	o8	73	LEU

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Mol	Chain	Res	Type
74	o8	77	ARG
74	o8	78	LEU
75	o9	4	GLN
75	o9	5	LYS
75	o9	6	SER
75	o9	9	ILE
75	o9	12	LYS
75	o9	19	GLN
75	o9	21	ARG
75	o9	23	LEU
75	o9	27	ILE
75	o9	34	THR
75	o9	36	ARG
76	q0	81	SER
76	q0	83	LYS
76	q0	89	TYR
76	q0	92	ASP
76	q0	99	CYS
76	q0	109	ASN
76	q0	110	CYS
76	q0	112	LYS
76	q0	113	ARG
76	q0	114	LYS
76	q0	120	GLN
76	q0	122	ARG
76	q0	126	LYS
76	q0	128	LYS
77	q1	2	ARG
77	q1	6	ARG
77	q1	9	ARG
77	q1	13	LEU
77	q1	14	LYS
77	q1	16	LYS
77	q1	19	LYS
77	q1	21	ARG
77	q1	25	LYS
78	q2	2	VAL
78	q2	7	THR
78	q2	8	ARG
78	q2	10	THR
78	q2	17	CYS
78	q2	19	LYS

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Mol	Chain	Res	Type
78	q2	20	HIS
78	q2	26	THR
78	q2	28	TYR
78	q2	34	SER
78	q2	38	GLN
78	q2	47	GLN
78	q2	54	THR
78	q2	55	LYS
78	q2	61	LYS
78	q2	63	LYS
78	q2	71	ARG
78	q2	72	LEU
78	q2	74	CYS
78	q2	76	LYS
78	q2	78	LYS
78	q2	80	ARG
78	q2	84	THR
78	q2	85	LEU
78	q2	87	ARG
78	q2	93	LEU
78	q2	96	GLU
78	q2	98	LYS
78	q2	99	GLN
78	q2	100	LYS
78	q2	104	LEU
78	q2	105	GLN
79	q3	3	LYS
79	q3	4	ARG
79	q3	6	LYS
79	q3	8	VAL
79	q3	16	VAL
79	q3	17	ARG
79	q3	18	TYR
79	q3	20	SER
79	q3	31	ILE
79	q3	40	SER
79	q3	42	CYS
79	q3	44	LYS
79	q3	46	THR
79	q3	49	ARG
79	q3	58	SER
79	q3	59	CYS

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Mol	Chain	Res	Type
79	q3	60	CYS
79	q3	70	THR
79	q3	71	VAL
79	q3	78	THR
79	q3	81	SER
79	q3	82	THR
83	p0	4	ILE
83	p0	5	ARG
83	p0	7	LYS
83	p0	15	LEU
83	p0	19	LEU
83	p0	24	SER
83	p0	25	LEU
83	p0	28	VAL
83	p0	42	ARG
83	p0	43	LYS
83	p0	48	ARG
83	p0	57	THR
83	p0	63	ILE
83	p0	67	LEU
83	p0	69	ASP
83	p0	70	LEU
83	p0	72	ASP
83	p0	74	GLU
83	p0	76	LEU
83	p0	84	VAL
83	p0	93	LEU
83	p0	101	VAL
83	p0	186	THR
83	p0	192	ASP
83	p0	193	ASN
83	p0	196	VAL

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (122) such sidechains are listed below:

Mol	Chain	Res	Type
2	S0	32	HIS
3	S1	177	GLN
4	S2	228	ASN
5	S3	62	ASN
6	S4	98	ASN
7	S5	103	ASN

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Mol	Chain	Res	Type
10	S8	52	ASN
13	C1	14	GLN
13	C1	37	ASN
13	C1	110	HIS
19	C7	105	GLN
21	C9	70	GLN
22	D0	121	ASN
23	D1	29	HIS
25	D3	79	ASN
27	D5	38	HIS
27	D5	44	GLN
33	E1	123	ASN
35	SM	57	ASN
39	L2	8	GLN
39	L2	209	HIS
39	L2	211	HIS
43	L6	28	GLN
43	L6	167	ASN
44	L7	25	GLN
44	L7	48	ASN
44	L7	64	GLN
44	L7	112	ASN
44	L7	209	ASN
45	L8	145	ASN
46	L9	102	ASN
46	L9	156	GLN
48	M1	150	ASN
49	M3	25	HIS
49	M3	99	HIS
49	M3	103	ASN
49	M3	106	GLN
49	M3	129	ASN
49	M3	149	GLN
51	M5	139	HIS
52	M6	90	HIS
53	M7	34	GLN
54	M8	73	GLN
55	M9	121	HIS
57	N1	122	GLN
59	N3	81	GLN
63	N7	127	ASN
64	N8	74	ASN

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Mol	Chain	Res	Type
68	O2	13	HIS
70	O4	18	ASN
75	O9	11	GLN
78	Q2	47	GLN
3	s1	209	ASN
4	s2	94	GLN
4	s2	228	ASN
5	s3	74	GLN
5	s3	179	GLN
6	s4	36	HIS
6	s4	57	ASN
6	s4	142	HIS
6	s4	157	ASN
6	s4	224	ASN
6	s4	231	GLN
7	s5	44	ASN
9	s7	5	GLN
10	s8	35	ASN
11	s9	110	GLN
11	s9	112	GLN
13	c1	37	ASN
15	c3	5	HIS
15	c3	36	GLN
15	c3	49	GLN
16	c4	12	GLN
16	c4	29	HIS
18	c6	93	HIS
19	c7	62	GLN
20	c8	6	GLN
20	c8	13	HIS
20	c8	90	ASN
21	c9	64	HIS
21	c9	70	GLN
22	d0	44	ASN
23	d1	3	ASN
24	d2	56	HIS
25	d3	75	GLN
26	d4	22	GLN
26	d4	63	GLN
26	d4	113	ASN
28	d6	69	ASN
34	sR	17	ASN

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Mol	Chain	Res	Type
34	sR	159	ASN
35	sM	71	ASN
39	l2	8	GLN
39	l2	144	ASN
39	l2	250	GLN
41	l4	361	HIS
43	l6	4	GLN
44	l7	159	GLN
45	l8	192	GLN
45	l8	240	ASN
51	m5	86	ASN
52	m6	90	HIS
53	m7	121	GLN
54	m8	5	HIS
54	m8	9	GLN
55	m9	66	HIS
57	n1	90	ASN
57	n1	98	HIS
59	n3	33	ASN
62	n6	91	ASN
62	n6	120	GLN
63	n7	57	HIS
64	n8	25	HIS
64	n8	44	ASN
64	n8	49	HIS
65	n9	45	HIS
66	o0	12	GLN
69	o3	106	ASN
73	o7	13	ASN
74	o8	32	ASN
78	q2	47	GLN
83	p0	195	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	0/1800	-	-
1	6	0/1800	-	-
36	1	0/3396	-	-
36	5	0/3396	-	-
37	3	0/121	-	-

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
37	7	0/121	-	-
38	4	0/158	-	-
38	8	0/158	-	-
All	All	0/10950	-	-

There are no RNA backbone outliers to report.

There are no RNA pucker outliers to report.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

Of 2558 ligands modelled in this entry, 1426 are monoatomic - leaving 1132 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	1	3866	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3867	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3868	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3869	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3870	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3871	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3872	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3873	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3874	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3875	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	1	3876	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3877	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3878	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3879	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3880	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3881	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3882	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3883	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3884	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3885	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3886	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3887	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3888	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3889	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3890	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3891	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3892	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3893	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3894	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3895	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3896	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3897	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3898	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3899	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3900	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3901	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3902	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3903	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3904	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3905	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3906	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3907	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3908	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3909	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3910	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3911	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3912	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3913	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3914	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3915	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3916	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3917	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3918	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	1	3919	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3920	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3921	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3922	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3923	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3924	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3925	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3926	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3927	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3928	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3929	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3930	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3931	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3932	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3933	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3934	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3935	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3936	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3937	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3938	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3939	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3940	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3941	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3942	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3943	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3944	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3945	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3946	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3947	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3948	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3949	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3950	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3951	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3952	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3953	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3954	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3955	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3956	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3957	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3958	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3959	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3960	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3961	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	1	3962	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3963	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3964	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3965	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3966	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3967	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3968	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3969	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3970	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3971	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3972	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3973	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3974	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3975	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3976	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3977	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3978	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3979	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3980	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3981	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3982	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3983	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3984	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3985	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3986	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3987	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3988	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3989	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3990	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3991	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3992	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3993	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3994	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3995	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3996	36	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3997	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3998	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	3999	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4000	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4001	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4002	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4003	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4004	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	1	4005	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4006	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4007	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4008	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4009	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4010	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4011	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4012	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4013	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4014	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4015	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4016	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4017	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4018	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4019	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4020	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4021	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4022	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4023	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4024	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4025	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4026	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4027	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4028	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4029	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4030	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4031	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4032	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4033	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4034	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4035	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4036	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4037	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4038	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4039	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4040	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4041	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4042	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4043	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4044	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4045	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4046	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4047	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	1	4048	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4049	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4050	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4051	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4052	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4053	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4054	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4055	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4056	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4057	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4058	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4059	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4060	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4061	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4062	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4063	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4064	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4065	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4066	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4067	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4068	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4069	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4070	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4071	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4072	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4073	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4074	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4075	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4076	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4077	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4078	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4079	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4080	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4081	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4082	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4083	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4084	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4085	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4086	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4087	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4088	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4089	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4090	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	1	4091	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4092	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4093	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4094	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4095	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4096	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4097	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4098	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4099	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4100	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4101	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4102	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4103	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4104	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4105	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4106	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4107	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4108	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4109	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4110	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4111	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4112	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4113	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4114	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4115	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4116	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4117	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4118	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4119	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4120	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4121	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4122	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4123	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4124	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4125	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4126	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4127	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4128	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4129	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4130	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4131	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4132	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4133	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4134	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4135	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4136	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4137	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4138	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4139	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4140	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4141	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4142	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4143	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4144	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4145	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4146	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4147	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4148	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4149	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4150	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4151	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4152	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4153	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4154	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4155	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4156	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4157	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4158	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4159	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4160	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4161	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4162	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4163	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4164	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4165	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4166	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4167	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4168	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4169	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4170	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4171	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4172	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4173	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4174	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4175	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4176	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	1	4177	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4178	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4179	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4180	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4181	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4182	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4183	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4184	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4185	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4186	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4187	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4188	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4189	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4190	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4191	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4192	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4193	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4194	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4195	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4196	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4197	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4198	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4199	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4200	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4203	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4204	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4205	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4206	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4207	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4208	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4209	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4210	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4211	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	1	4212	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2024	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2025	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2026	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2027	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2028	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2029	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2030	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	2	2031	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2032	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2033	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2034	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2035	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2036	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2037	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2038	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2039	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2040	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2041	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2042	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2043	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2044	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2045	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2046	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2047	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2048	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2049	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2050	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2051	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2052	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2053	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2054	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2055	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2056	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2057	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2058	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2059	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2060	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2061	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2062	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2063	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2064	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2065	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2066	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2067	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2068	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2069	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2070	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2071	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2072	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2073	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	2	2074	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2075	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2076	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2077	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2078	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2079	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2080	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2081	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2082	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2083	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2084	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2085	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2086	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2087	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2088	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2089	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2090	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2091	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2092	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2093	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2094	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2095	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2096	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2097	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2098	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2099	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2100	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2101	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2102	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2103	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2104	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2105	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2106	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2107	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2108	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2109	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2110	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2111	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2112	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2113	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2114	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2115	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2116	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	2	2117	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2118	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2119	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2120	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2121	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2122	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2123	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2124	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2125	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2126	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2127	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2128	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2129	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2130	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2131	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2132	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2133	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2134	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2135	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2136	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2137	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2138	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2139	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2140	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2141	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2142	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2143	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2144	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2145	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2146	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2147	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2148	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2149	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2150	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2151	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2152	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2153	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2154	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2155	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2156	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2157	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2158	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2159	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	2	2160	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2161	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2162	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2163	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2164	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2165	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2166	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2167	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2168	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2169	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2170	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2171	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2172	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2173	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2174	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2175	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2176	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2177	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2178	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2179	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	2	2180	-	0,6,6	0.00	-	0,15,15	0.00	-
88	GET	2	2181	-	36,36,36	0.45	0	55,55,55	1.78	13 (23%)
87	OHX	3	215	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	216	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	217	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	218	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	219	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	220	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	221	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	222	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	223	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	224	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	3	225	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	224	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	225	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	226	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	227	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	228	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	229	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	230	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	231	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	232	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	233	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	4	234	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	235	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	236	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	237	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	238	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	239	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	4	240	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3894	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3895	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3896	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3897	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3898	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3899	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3900	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3901	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3902	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3903	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3904	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3905	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3906	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3907	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3908	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3909	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3910	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3911	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3912	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3913	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3914	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3915	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3916	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3917	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3918	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3919	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3920	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3921	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3922	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3923	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3924	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3925	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3926	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3927	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3928	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3929	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	5	3930	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3931	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3932	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3933	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3934	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3935	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3936	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3937	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3938	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3939	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3940	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3941	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3942	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3943	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3944	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3945	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3946	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3947	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3948	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3949	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3950	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3951	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3952	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3953	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3954	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3955	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3956	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3957	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3958	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3959	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3960	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3961	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3962	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3963	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3964	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3965	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3966	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3967	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3968	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3969	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3970	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3971	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3972	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	5	3973	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3974	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3975	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3976	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3977	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3978	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3979	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3980	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3981	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3982	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3983	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3984	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3985	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3986	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3987	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3988	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3989	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3990	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3991	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3992	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3993	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3994	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3995	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3996	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3997	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3998	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	3999	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4000	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4001	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4002	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4003	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4004	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4005	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4006	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4007	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4008	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4009	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4010	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4011	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4012	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4013	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4014	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4015	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	5	4016	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4017	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4018	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4019	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4020	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4021	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4022	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4023	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4024	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4025	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4026	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4027	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4028	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4029	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4030	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4031	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4032	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4033	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4034	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4035	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4036	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4037	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4038	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4039	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4040	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4041	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4042	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4043	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4044	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4045	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4046	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4047	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4048	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4049	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4050	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4051	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4052	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4053	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4054	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4055	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4056	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4057	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4058	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	5	4059	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4060	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4061	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4062	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4063	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4064	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4065	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4066	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4067	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4068	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4069	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4070	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4071	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4072	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4073	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4074	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4075	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4076	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4077	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4078	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4079	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4080	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4081	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4082	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4083	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4084	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4085	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4086	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4087	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4088	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4089	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4090	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4091	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4092	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4093	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4094	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4095	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4096	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4097	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4098	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4099	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4100	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4101	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	5	4102	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4103	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4104	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4105	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4106	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4107	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4108	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4109	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4110	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4111	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4112	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4113	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4114	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4115	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4116	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4117	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4118	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4119	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4120	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4121	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4122	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4123	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4124	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4125	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4126	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4127	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4128	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4129	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4130	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4131	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4132	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4133	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4134	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4135	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4136	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4137	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4138	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4139	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4140	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4141	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4142	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4143	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4144	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	5	4145	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4146	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4147	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4148	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4149	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4150	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4151	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4152	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4153	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4154	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4155	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4156	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4157	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4158	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4159	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4160	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4161	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4162	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4163	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4164	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4165	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4166	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4167	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4168	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4169	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4170	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4171	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4172	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4173	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4174	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4175	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4176	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4177	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4178	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4179	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4180	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4181	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4182	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4183	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4184	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4185	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4186	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4187	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	5	4188	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4189	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4190	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4191	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4192	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4193	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4194	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4195	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4196	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4197	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4198	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4199	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4200	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4203	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4204	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4205	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4206	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4207	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4208	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4209	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4210	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4211	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4212	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4213	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4214	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4215	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4216	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4217	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4218	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4219	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4220	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4221	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4222	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4223	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4224	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4225	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4226	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4227	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4228	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4229	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4230	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	5	4231	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4232	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4233	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4234	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4235	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4236	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4237	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4238	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4239	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4240	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4241	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4242	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4243	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4244	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4245	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	5	4246	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2050	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2051	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2052	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2053	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2054	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2055	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2056	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2057	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2058	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2059	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2060	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2061	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2062	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2063	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2064	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2065	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2066	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2067	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2068	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2069	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2070	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2071	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2072	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2073	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2074	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2075	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2076	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	6	2077	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2078	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2079	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2080	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2081	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2082	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2083	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2084	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2085	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2086	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2087	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2088	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2089	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2090	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2091	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2092	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2093	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2094	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2095	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2096	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2097	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2098	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2099	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2100	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2101	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2102	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2103	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2104	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2105	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2106	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2107	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2108	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2109	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2110	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2111	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2112	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2113	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2114	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2115	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2116	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2117	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2118	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2119	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	6	2120	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2121	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2122	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2123	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2124	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2125	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2126	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2127	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2128	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2129	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2130	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2131	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2132	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2133	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2134	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2135	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2136	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2137	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2138	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2139	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2140	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2141	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2142	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2143	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2144	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2145	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2146	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2147	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2148	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2149	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2150	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2151	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2152	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2153	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2154	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2155	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2156	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2157	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2158	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2159	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2160	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2161	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2162	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	6	2163	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2164	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2165	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2166	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2167	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2168	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2169	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2170	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2171	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2172	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2173	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2174	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2175	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2176	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2177	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2178	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2179	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2180	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2181	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2182	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2183	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2184	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2185	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2186	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2187	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2188	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2189	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2190	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2191	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2192	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2193	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2194	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2195	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2196	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2197	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2198	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2199	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2200	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2203	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2204	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2205	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
87	OHX	6	2206	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2207	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2208	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2209	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2210	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	6	2211	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	216	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	217	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	218	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	219	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	220	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	221	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	222	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	223	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	224	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	225	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	7	226	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	218	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	219	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	220	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	221	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	222	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	223	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	224	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	225	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	226	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	227	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	228	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	229	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	230	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	231	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	232	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	233	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	234	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	8	235	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	C3	201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	C5	201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	C8	201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	D3	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	D9	102	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	L3	403	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	L3	404	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	L3	405	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	L4	403	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	M0	304	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	M5	303	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	M6	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	M7	206	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	M9	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	M9	203	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	N9	102	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	O1	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	O2	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	O3	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	O7	103	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	O7	104	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	Q2	502	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	S8	302	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	SR	401	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	c3	201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	c5	201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	c8	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	d4	201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	d9	102	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l3	407	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l3	408	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l4	402	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l4	403	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l5	304	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l5	305	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l5	306	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l5	307	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	l9	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	m0	302	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	m0	303	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	m1	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	m4	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	m5	303	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	m7	205	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	m9	201	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	n3	202	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	n9	103	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	o3	203	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	o7	502	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	o9	101	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	q1	102	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
87	OHX	q2	502	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	s1	302	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	s8	303	-	0,6,6	0.00	-	0,15,15	0.00	-
87	OHX	sR	401	-	0,6,6	0.00	-	0,15,15	0.00	-

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	3866	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3867	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3868	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3869	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3870	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3871	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3872	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3873	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3874	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3875	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3876	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3877	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3878	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3879	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3880	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3881	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3882	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3883	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3884	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3885	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3886	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3887	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3888	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3889	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3890	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3891	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3892	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3893	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3894	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3895	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3896	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3897	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	3898	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3899	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3900	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3901	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3902	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3903	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3904	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3905	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3906	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3907	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3908	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3909	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3910	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3911	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3912	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3913	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3914	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3915	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3916	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3917	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3918	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3919	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3920	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3921	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3922	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3923	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3924	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3925	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3926	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3927	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3928	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3929	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3930	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3931	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3932	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3933	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3934	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3935	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3936	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3937	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3938	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3939	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	3940	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3941	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3942	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3943	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3944	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3945	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3946	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3947	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3948	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3949	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3950	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3951	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3952	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3953	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3954	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3955	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3956	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3957	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3958	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3959	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3960	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3961	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3962	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3963	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3964	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3965	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3966	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3967	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3968	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3969	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3970	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3971	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3972	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3973	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3974	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3975	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3976	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3977	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3978	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3979	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3980	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3981	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	3982	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3983	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3984	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3985	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3986	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3987	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3988	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3989	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3990	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3991	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3992	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3993	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3994	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3995	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3996	36	-	0/0/0/0	0/0/0/0
87	OHX	1	3997	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3998	-	-	0/0/0/0	0/0/0/0
87	OHX	1	3999	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4000	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4001	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4002	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4003	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4004	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4005	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4006	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4007	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4008	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4009	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4010	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4011	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4012	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4013	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4014	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4015	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4016	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4017	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4018	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4019	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4020	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4021	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4022	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4023	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	4024	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4025	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4026	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4027	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4028	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4029	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4030	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4031	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4032	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4033	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4034	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4035	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4036	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4037	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4038	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4039	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4040	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4041	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4042	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4043	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4044	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4045	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4046	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4047	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4048	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4049	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4050	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4051	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4052	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4053	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4054	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4055	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4056	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4057	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4058	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4059	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4060	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4061	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4062	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4063	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4064	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4065	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	4066	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4067	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4068	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4069	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4070	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4071	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4072	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4073	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4074	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4075	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4076	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4077	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4078	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4079	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4080	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4081	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4082	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4083	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4084	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4085	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4086	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4087	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4088	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4089	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4090	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4091	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4092	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4093	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4094	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4095	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4096	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4097	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4098	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4099	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4100	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4101	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4102	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4103	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4104	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4105	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4106	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4107	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	4108	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4109	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4110	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4111	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4112	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4113	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4114	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4115	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4116	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4117	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4118	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4119	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4120	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4121	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4122	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4123	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4124	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4125	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4126	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4127	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4128	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4129	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4130	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4131	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4132	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4133	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4134	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4135	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4136	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4137	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4138	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4139	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4140	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4141	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4142	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4143	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4144	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4145	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4146	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4147	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4148	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4149	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	4150	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4151	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4152	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4153	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4154	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4155	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4156	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4157	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4158	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4159	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4160	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4161	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4162	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4163	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4164	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4165	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4166	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4167	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4168	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4169	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4170	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4171	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4172	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4173	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4174	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4175	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4176	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4177	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4178	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4179	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4180	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4181	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4182	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4183	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4184	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4185	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4186	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4187	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4188	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4189	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4190	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4191	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	1	4192	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4193	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4194	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4195	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4196	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4197	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4198	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4199	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4200	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4201	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4202	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4203	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4204	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4205	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4206	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4207	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4208	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4209	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4210	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4211	-	-	0/0/0/0	0/0/0/0
87	OHX	1	4212	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2024	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2025	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2026	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2027	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2028	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2029	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2030	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2031	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2032	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2033	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2034	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2035	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2036	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2037	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2038	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2039	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2040	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2041	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2042	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2043	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2044	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	2	2045	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2046	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2047	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2048	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2049	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2050	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2051	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2052	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2053	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2054	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2055	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2056	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2057	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2058	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2059	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2060	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2061	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2062	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2063	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2064	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2065	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2066	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2067	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2068	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2069	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2070	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2071	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2072	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2073	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2074	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2075	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2076	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2077	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2078	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2079	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2080	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2081	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2082	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2083	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2084	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2085	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2086	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	2	2087	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2088	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2089	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2090	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2091	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2092	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2093	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2094	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2095	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2096	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2097	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2098	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2099	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2100	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2101	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2102	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2103	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2104	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2105	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2106	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2107	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2108	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2109	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2110	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2111	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2112	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2113	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2114	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2115	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2116	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2117	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2118	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2119	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2120	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2121	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2122	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2123	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2124	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2125	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2126	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2127	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2128	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	2	2129	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2130	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2131	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2132	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2133	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2134	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2135	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2136	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2137	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2138	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2139	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2140	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2141	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2142	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2143	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2144	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2145	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2146	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2147	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2148	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2149	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2150	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2151	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2152	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2153	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2154	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2155	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2156	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2157	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2158	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2159	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2160	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2161	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2162	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2163	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2164	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2165	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2166	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2167	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2168	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2169	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2170	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	2	2171	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2172	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2173	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2174	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2175	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2176	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2177	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2178	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2179	-	-	0/0/0/0	0/0/0/0
87	OHX	2	2180	-	-	0/0/0/0	0/0/0/0
88	GET	2	2181	-	-	0/14/74/74	0/3/3/3
87	OHX	3	215	-	-	0/0/0/0	0/0/0/0
87	OHX	3	216	-	-	0/0/0/0	0/0/0/0
87	OHX	3	217	-	-	0/0/0/0	0/0/0/0
87	OHX	3	218	-	-	0/0/0/0	0/0/0/0
87	OHX	3	219	-	-	0/0/0/0	0/0/0/0
87	OHX	3	220	-	-	0/0/0/0	0/0/0/0
87	OHX	3	221	-	-	0/0/0/0	0/0/0/0
87	OHX	3	222	-	-	0/0/0/0	0/0/0/0
87	OHX	3	223	-	-	0/0/0/0	0/0/0/0
87	OHX	3	224	-	-	0/0/0/0	0/0/0/0
87	OHX	3	225	-	-	0/0/0/0	0/0/0/0
87	OHX	4	224	-	-	0/0/0/0	0/0/0/0
87	OHX	4	225	-	-	0/0/0/0	0/0/0/0
87	OHX	4	226	-	-	0/0/0/0	0/0/0/0
87	OHX	4	227	-	-	0/0/0/0	0/0/0/0
87	OHX	4	228	-	-	0/0/0/0	0/0/0/0
87	OHX	4	229	-	-	0/0/0/0	0/0/0/0
87	OHX	4	230	-	-	0/0/0/0	0/0/0/0
87	OHX	4	231	-	-	0/0/0/0	0/0/0/0
87	OHX	4	232	-	-	0/0/0/0	0/0/0/0
87	OHX	4	233	-	-	0/0/0/0	0/0/0/0
87	OHX	4	234	-	-	0/0/0/0	0/0/0/0
87	OHX	4	235	-	-	0/0/0/0	0/0/0/0
87	OHX	4	236	-	-	0/0/0/0	0/0/0/0
87	OHX	4	237	-	-	0/0/0/0	0/0/0/0
87	OHX	4	238	-	-	0/0/0/0	0/0/0/0
87	OHX	4	239	-	-	0/0/0/0	0/0/0/0
87	OHX	4	240	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3894	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3895	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3896	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	3897	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3898	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3899	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3900	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3901	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3902	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3903	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3904	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3905	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3906	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3907	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3908	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3909	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3910	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3911	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3912	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3913	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3914	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3915	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3916	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3917	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3918	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3919	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3920	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3921	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3922	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3923	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3924	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3925	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3926	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3927	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3928	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3929	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3930	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3931	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3932	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3933	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3934	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3935	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3936	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3937	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3938	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	3939	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3940	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3941	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3942	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3943	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3944	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3945	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3946	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3947	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3948	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3949	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3950	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3951	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3952	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3953	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3954	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3955	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3956	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3957	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3958	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3959	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3960	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3961	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3962	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3963	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3964	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3965	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3966	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3967	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3968	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3969	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3970	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3971	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3972	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3973	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3974	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3975	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3976	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3977	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3978	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3979	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3980	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	3981	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3982	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3983	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3984	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3985	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3986	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3987	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3988	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3989	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3990	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3991	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3992	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3993	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3994	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3995	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3996	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3997	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3998	-	-	0/0/0/0	0/0/0/0
87	OHX	5	3999	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4000	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4001	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4002	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4003	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4004	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4005	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4006	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4007	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4008	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4009	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4010	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4011	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4012	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4013	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4014	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4015	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4016	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4017	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4018	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4019	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4020	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4021	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4022	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	4023	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4024	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4025	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4026	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4027	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4028	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4029	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4030	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4031	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4032	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4033	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4034	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4035	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4036	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4037	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4038	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4039	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4040	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4041	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4042	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4043	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4044	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4045	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4046	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4047	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4048	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4049	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4050	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4051	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4052	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4053	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4054	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4055	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4056	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4057	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4058	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4059	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4060	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4061	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4062	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4063	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4064	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	4065	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4066	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4067	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4068	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4069	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4070	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4071	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4072	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4073	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4074	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4075	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4076	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4077	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4078	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4079	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4080	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4081	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4082	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4083	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4084	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4085	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4086	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4087	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4088	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4089	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4090	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4091	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4092	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4093	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4094	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4095	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4096	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4097	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4098	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4099	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4100	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4101	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4102	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4103	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4104	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4105	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4106	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	4107	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4108	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4109	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4110	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4111	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4112	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4113	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4114	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4115	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4116	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4117	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4118	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4119	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4120	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4121	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4122	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4123	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4124	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4125	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4126	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4127	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4128	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4129	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4130	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4131	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4132	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4133	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4134	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4135	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4136	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4137	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4138	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4139	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4140	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4141	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4142	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4143	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4144	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4145	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4146	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4147	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4148	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	4149	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4150	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4151	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4152	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4153	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4154	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4155	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4156	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4157	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4158	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4159	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4160	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4161	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4162	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4163	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4164	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4165	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4166	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4167	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4168	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4169	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4170	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4171	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4172	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4173	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4174	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4175	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4176	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4177	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4178	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4179	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4180	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4181	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4182	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4183	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4184	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4185	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4186	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4187	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4188	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4189	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4190	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	4191	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4192	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4193	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4194	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4195	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4196	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4197	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4198	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4199	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4200	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4201	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4202	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4203	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4204	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4205	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4206	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4207	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4208	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4209	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4210	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4211	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4212	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4213	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4214	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4215	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4216	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4217	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4218	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4219	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4220	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4221	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4222	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4223	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4224	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4225	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4226	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4227	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4228	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4229	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4230	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4231	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4232	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	5	4233	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4234	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4235	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4236	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4237	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4238	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4239	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4240	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4241	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4242	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4243	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4244	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4245	-	-	0/0/0/0	0/0/0/0
87	OHX	5	4246	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2050	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2051	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2052	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2053	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2054	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2055	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2056	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2057	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2058	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2059	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2060	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2061	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2062	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2063	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2064	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2065	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2066	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2067	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2068	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2069	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2070	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2071	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2072	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2073	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2074	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2075	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2076	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2077	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	6	2078	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2079	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2080	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2081	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2082	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2083	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2084	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2085	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2086	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2087	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2088	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2089	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2090	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2091	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2092	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2093	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2094	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2095	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2096	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2097	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2098	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2099	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2100	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2101	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2102	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2103	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2104	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2105	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2106	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2107	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2108	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2109	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2110	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2111	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2112	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2113	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2114	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2115	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2116	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2117	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2118	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2119	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	6	2120	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2121	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2122	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2123	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2124	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2125	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2126	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2127	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2128	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2129	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2130	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2131	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2132	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2133	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2134	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2135	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2136	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2137	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2138	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2139	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2140	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2141	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2142	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2143	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2144	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2145	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2146	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2147	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2148	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2149	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2150	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2151	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2152	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2153	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2154	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2155	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2156	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2157	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2158	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2159	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2160	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2161	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	6	2162	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2163	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2164	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2165	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2166	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2167	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2168	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2169	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2170	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2171	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2172	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2173	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2174	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2175	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2176	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2177	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2178	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2179	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2180	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2181	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2182	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2183	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2184	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2185	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2186	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2187	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2188	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2189	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2190	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2191	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2192	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2193	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2194	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2195	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2196	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2197	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2198	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2199	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2200	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2201	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2202	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2203	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	6	2204	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2205	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2206	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2207	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2208	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2209	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2210	-	-	0/0/0/0	0/0/0/0
87	OHX	6	2211	-	-	0/0/0/0	0/0/0/0
87	OHX	7	216	-	-	0/0/0/0	0/0/0/0
87	OHX	7	217	-	-	0/0/0/0	0/0/0/0
87	OHX	7	218	-	-	0/0/0/0	0/0/0/0
87	OHX	7	219	-	-	0/0/0/0	0/0/0/0
87	OHX	7	220	-	-	0/0/0/0	0/0/0/0
87	OHX	7	221	-	-	0/0/0/0	0/0/0/0
87	OHX	7	222	-	-	0/0/0/0	0/0/0/0
87	OHX	7	223	-	-	0/0/0/0	0/0/0/0
87	OHX	7	224	-	-	0/0/0/0	0/0/0/0
87	OHX	7	225	-	-	0/0/0/0	0/0/0/0
87	OHX	7	226	-	-	0/0/0/0	0/0/0/0
87	OHX	8	218	-	-	0/0/0/0	0/0/0/0
87	OHX	8	219	-	-	0/0/0/0	0/0/0/0
87	OHX	8	220	-	-	0/0/0/0	0/0/0/0
87	OHX	8	221	-	-	0/0/0/0	0/0/0/0
87	OHX	8	222	-	-	0/0/0/0	0/0/0/0
87	OHX	8	223	-	-	0/0/0/0	0/0/0/0
87	OHX	8	224	-	-	0/0/0/0	0/0/0/0
87	OHX	8	225	-	-	0/0/0/0	0/0/0/0
87	OHX	8	226	-	-	0/0/0/0	0/0/0/0
87	OHX	8	227	-	-	0/0/0/0	0/0/0/0
87	OHX	8	228	-	-	0/0/0/0	0/0/0/0
87	OHX	8	229	-	-	0/0/0/0	0/0/0/0
87	OHX	8	230	-	-	0/0/0/0	0/0/0/0
87	OHX	8	231	-	-	0/0/0/0	0/0/0/0
87	OHX	8	232	-	-	0/0/0/0	0/0/0/0
87	OHX	8	233	-	-	0/0/0/0	0/0/0/0
87	OHX	8	234	-	-	0/0/0/0	0/0/0/0
87	OHX	8	235	-	-	0/0/0/0	0/0/0/0
87	OHX	C3	201	-	-	0/0/0/0	0/0/0/0
87	OHX	C5	201	-	-	0/0/0/0	0/0/0/0
87	OHX	C8	201	-	-	0/0/0/0	0/0/0/0
87	OHX	D3	202	-	-	0/0/0/0	0/0/0/0
87	OHX	D9	102	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	L3	403	-	-	0/0/0/0	0/0/0/0
87	OHX	L3	404	-	-	0/0/0/0	0/0/0/0
87	OHX	L3	405	-	-	0/0/0/0	0/0/0/0
87	OHX	L4	403	-	-	0/0/0/0	0/0/0/0
87	OHX	M0	304	-	-	0/0/0/0	0/0/0/0
87	OHX	M5	303	-	-	0/0/0/0	0/0/0/0
87	OHX	M6	202	-	-	0/0/0/0	0/0/0/0
87	OHX	M7	206	-	-	0/0/0/0	0/0/0/0
87	OHX	M9	202	-	-	0/0/0/0	0/0/0/0
87	OHX	M9	203	-	-	0/0/0/0	0/0/0/0
87	OHX	N9	102	-	-	0/0/0/0	0/0/0/0
87	OHX	O1	202	-	-	0/0/0/0	0/0/0/0
87	OHX	O2	202	-	-	0/0/0/0	0/0/0/0
87	OHX	O3	202	-	-	0/0/0/0	0/0/0/0
87	OHX	O7	103	-	-	0/0/0/0	0/0/0/0
87	OHX	O7	104	-	-	0/0/0/0	0/0/0/0
87	OHX	Q2	502	-	-	0/0/0/0	0/0/0/0
87	OHX	S8	302	-	-	0/0/0/0	0/0/0/0
87	OHX	SR	401	-	-	0/0/0/0	0/0/0/0
87	OHX	c3	201	-	-	0/0/0/0	0/0/0/0
87	OHX	c5	201	-	-	0/0/0/0	0/0/0/0
87	OHX	c8	202	-	-	0/0/0/0	0/0/0/0
87	OHX	d4	201	-	-	0/0/0/0	0/0/0/0
87	OHX	d9	102	-	-	0/0/0/0	0/0/0/0
87	OHX	l3	407	-	-	0/0/0/0	0/0/0/0
87	OHX	l3	408	-	-	0/0/0/0	0/0/0/0
87	OHX	l4	402	-	-	0/0/0/0	0/0/0/0
87	OHX	l4	403	-	-	0/0/0/0	0/0/0/0
87	OHX	l5	304	-	-	0/0/0/0	0/0/0/0
87	OHX	l5	305	-	-	0/0/0/0	0/0/0/0
87	OHX	l5	306	-	-	0/0/0/0	0/0/0/0
87	OHX	l5	307	-	-	0/0/0/0	0/0/0/0
87	OHX	l9	202	-	-	0/0/0/0	0/0/0/0
87	OHX	m0	302	-	-	0/0/0/0	0/0/0/0
87	OHX	m0	303	-	-	0/0/0/0	0/0/0/0
87	OHX	m1	202	-	-	0/0/0/0	0/0/0/0
87	OHX	m4	202	-	-	0/0/0/0	0/0/0/0
87	OHX	m5	303	-	-	0/0/0/0	0/0/0/0
87	OHX	m7	205	-	-	0/0/0/0	0/0/0/0
87	OHX	m9	201	-	-	0/0/0/0	0/0/0/0
87	OHX	n3	202	-	-	0/0/0/0	0/0/0/0
87	OHX	n9	103	-	-	0/0/0/0	0/0/0/0

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
87	OHX	o3	203	-	-	0/0/0/0	0/0/0/0
87	OHX	o7	502	-	-	0/0/0/0	0/0/0/0
87	OHX	o9	101	-	-	0/0/0/0	0/0/0/0
87	OHX	q1	102	-	-	0/0/0/0	0/0/0/0
87	OHX	q2	502	-	-	0/0/0/0	0/0/0/0
87	OHX	s1	302	-	-	0/0/0/0	0/0/0/0
87	OHX	s8	303	-	-	0/0/0/0	0/0/0/0
87	OHX	sR	401	-	-	0/0/0/0	0/0/0/0

There are no bond length outliers.

All (13) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
88	2	2181	GET	C23-C33-N33	-5.95	94.93	111.30
88	2	2181	GET	O11-C42-C32	-5.60	95.57	108.97
88	2	2181	GET	C43-C33-N33	-4.38	103.47	111.90
88	2	2181	GET	O62-C62-C12	-3.35	100.96	108.97
88	2	2181	GET	O11-C11-C21	-2.84	102.47	108.08
88	2	2181	GET	O23-C23-C13	-2.70	104.17	110.03
88	2	2181	GET	O51-C11-C21	2.38	115.61	110.32
88	2	2181	GET	C41-C31-C21	-2.27	107.47	111.39
88	2	2181	GET	C32-C22-C12	2.24	116.47	111.59
88	2	2181	GET	C53-C43-C33	2.14	112.44	107.80
88	2	2181	GET	C53-O53-C13	-2.13	108.19	111.22
88	2	2181	GET	C13-O62-C62	-2.12	112.61	118.00
88	2	2181	GET	C11-C21-N21	2.02	114.24	110.30

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	2	1750/1800 (97%)	0.40	140 (8%) 12 8	77, 125, 214, 302	0
1	6	1791/1800 (99%)	0.29	98 (5%) 24 13	59, 93, 221, 311	0
2	S0	206/251 (82%)	0.89	31 (15%) 3 3	124, 145, 157, 186	0
2	s0	206/251 (82%)	0.35	2 (0%) 79 53	92, 111, 123, 133	0
3	S1	214/254 (84%)	0.83	32 (14%) 3 3	151, 183, 213, 218	0
3	s1	216/254 (85%)	0.97	37 (17%) 2 2	91, 109, 132, 145	0
4	S2	217/253 (85%)	0.75	22 (10%) 7 6	97, 113, 137, 142	0
4	s2	217/253 (85%)	0.94	31 (14%) 3 3	75, 91, 109, 127	0
5	S3	223/239 (93%)	0.62	22 (9%) 8 6	99, 118, 149, 159	0
5	s3	223/239 (93%)	0.25	7 (3%) 47 26	88, 119, 139, 151	0
6	S4	260/260 (100%)	1.29	65 (25%) 1 2	102, 125, 145, 175	0
6	s4	260/260 (100%)	0.45	17 (6%) 18 11	70, 104, 122, 149	0
7	S5	206/224 (91%)	1.27	51 (24%) 1 2	132, 156, 167, 176	0
7	s5	206/224 (91%)	0.29	11 (5%) 25 14	73, 91, 114, 132	0
8	S6	226/236 (95%)	1.43	66 (29%) 1 1	93, 134, 158, 174	0
8	s6	218/236 (92%)	0.74	29 (13%) 4 4	68, 98, 134, 150	0
9	S7	184/189 (97%)	0.76	23 (12%) 5 4	131, 163, 183, 187	0
9	s7	186/189 (98%)	0.32	4 (2%) 59 34	93, 130, 159, 170	0
10	S8	188/200 (94%)	1.68	74 (39%) 1 1	84, 100, 148, 163	0
10	s8	188/200 (94%)	1.03	34 (18%) 2 2	69, 90, 142, 159	0
11	S9	185/196 (94%)	1.73	67 (36%) 1 1	106, 135, 167, 180	0
11	s9	185/196 (94%)	1.39	54 (29%) 1 1	88, 112, 145, 169	0
12	C0	96/105 (91%)	0.77	14 (14%) 3 3	108, 134, 156, 178	0
12	c0	96/105 (91%)	1.24	27 (28%) 1 1	111, 149, 171, 188	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	C1	155/155 (100%)	0.94	19 (12%) 5 4	86, 103, 149, 153	0
13	c1	146/155 (94%)	0.20	2 (1%) 72 45	75, 89, 130, 157	0
14	C2	124/142 (87%)	1.53	38 (30%) 1 1	168, 179, 192, 201	0
14	c2	124/142 (87%)	2.06	58 (46%) 1 1	193, 214, 224, 226	0
15	C3	150/150 (100%)	0.93	26 (17%) 2 2	109, 137, 156, 161	0
15	c3	150/150 (100%)	0.32	3 (2%) 62 36	79, 102, 119, 138	0
16	C4	127/136 (93%)	1.17	31 (24%) 1 2	106, 177, 195, 198	0
16	c4	128/136 (94%)	0.76	9 (7%) 16 9	76, 102, 113, 128	0
17	C5	124/141 (87%)	1.52	43 (34%) 1 1	109, 126, 155, 173	0
17	c5	135/141 (95%)	0.45	7 (5%) 26 14	79, 99, 134, 149	0
18	C6	141/142 (99%)	1.68	49 (34%) 1 1	121, 143, 152, 155	0
18	c6	142/142 (100%)	0.97	22 (15%) 3 3	71, 84, 101, 132	0
19	C7	120/136 (88%)	2.03	58 (48%) 1 1	117, 140, 162, 165	0
19	c7	117/136 (86%)	1.33	38 (32%) 1 1	87, 102, 129, 133	0
20	C8	145/145 (100%)	1.74	56 (38%) 1 1	107, 139, 169, 176	0
20	c8	145/145 (100%)	1.11	28 (19%) 2 2	71, 90, 113, 125	0
21	C9	143/143 (100%)	1.17	32 (22%) 1 2	118, 140, 152, 169	0
21	c9	143/143 (100%)	0.29	2 (1%) 72 45	68, 76, 96, 112	0
22	D0	107/120 (89%)	1.12	20 (18%) 2 2	105, 139, 162, 172	0
22	d0	110/120 (91%)	1.53	34 (30%) 1 1	76, 111, 164, 179	0
23	D1	87/87 (100%)	0.61	5 (5%) 23 12	121, 137, 151, 161	0
23	d1	87/87 (100%)	0.34	0 100 100	91, 102, 125, 133	0
24	D2	129/129 (100%)	1.63	49 (37%) 1 1	101, 122, 134, 143	0
24	d2	129/129 (100%)	0.54	2 (1%) 68 41	76, 89, 99, 115	0
25	D3	144/144 (100%)	0.15	1 (0%) 84 63	82, 91, 103, 110	0
25	d3	144/144 (100%)	0.23	0 100 100	60, 68, 82, 103	0
26	D4	134/134 (100%)	1.37	42 (31%) 1 1	110, 138, 152, 156	0
26	d4	134/134 (100%)	0.52	9 (6%) 17 10	81, 110, 126, 147	0
27	D5	70/107 (65%)	1.19	18 (25%) 1 2	148, 169, 178, 180	0
27	d5	69/107 (64%)	0.49	6 (8%) 10 7	83, 103, 114, 122	0
28	D6	97/97 (100%)	0.87	14 (14%) 3 3	106, 128, 189, 192	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	d6	97/97 (100%)	0.79	13 (13%) 4 4	79, 91, 117, 121	0
29	D7	81/81 (100%)	1.56	27 (33%) 1 1	131, 160, 192, 198	0
29	d7	81/81 (100%)	0.74	10 (12%) 5 4	95, 115, 148, 151	0
30	D8	63/66 (95%)	0.64	8 (12%) 4 4	142, 158, 173, 178	0
30	d8	63/66 (95%)	0.63	3 (4%) 29 16	89, 104, 120, 139	0
31	D9	53/55 (96%)	1.52	18 (33%) 1 1	103, 109, 132, 137	0
31	d9	53/55 (96%)	2.02	25 (47%) 1 1	80, 92, 132, 154	0
32	E0	60/60 (100%)	0.97	14 (23%) 1 2	93, 128, 170, 176	0
33	E1	71/76 (93%)	0.86	11 (15%) 3 3	129, 159, 171, 172	0
34	SR	318/318 (100%)	1.42	95 (29%) 1 1	83, 152, 174, 192	0
34	sR	318/318 (100%)	0.87	43 (13%) 4 4	99, 120, 141, 163	0
35	SM	159/273 (58%)	0.82	27 (16%) 2 3	76, 118, 176, 183	0
35	sM	104/273 (38%)	0.53	13 (12%) 5 4	89, 108, 202, 209	0
36	1	3149/3396 (92%)	0.15	67 (2%) 60 35	41, 75, 160, 278	0
36	5	3150/3396 (92%)	0.14	58 (1%) 65 39	38, 73, 149, 262	0
37	3	121/121 (100%)	0.24	2 (1%) 67 40	57, 94, 109, 117	0
37	7	121/121 (100%)	-0.11	0 100 100	44, 65, 80, 91	0
38	4	158/158 (100%)	0.06	2 (1%) 74 47	55, 84, 127, 172	0
38	8	158/158 (100%)	0.07	2 (1%) 74 47	60, 97, 140, 158	0
39	L2	252/253 (99%)	0.47	12 (4%) 29 16	53, 77, 99, 114	0
39	l2	252/253 (99%)	0.16	0 100 100	54, 80, 103, 116	0
40	L3	386/386 (100%)	0.01	1 (0%) 91 81	45, 68, 86, 121	0
40	l3	386/386 (100%)	0.00	0 100 100	39, 52, 69, 111	0
41	L4	361/361 (100%)	-0.08	0 100 100	49, 67, 86, 101	0
41	l4	361/361 (100%)	0.04	1 (0%) 91 81	55, 77, 102, 116	0
42	L5	296/296 (100%)	1.10	60 (20%) 1 2	74, 98, 116, 129	0
42	l5	294/296 (99%)	0.73	20 (6%) 17 10	51, 69, 100, 149	0
43	L6	156/175 (89%)	-0.00	1 (0%) 86 66	55, 65, 88, 112	0
43	l6	157/175 (89%)	0.07	1 (0%) 86 66	53, 66, 92, 109	0
44	L7	222/243 (91%)	0.22	1 (0%) 88 71	46, 59, 98, 136	0
44	l7	223/243 (91%)	0.12	0 100 100	42, 52, 99, 144	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
45	L8	233/255 (91%)	0.52	18 (7%) 13 8	87, 105, 137, 148	0
45	l8	231/255 (90%)	0.77	19 (8%) 12 8	101, 120, 148, 155	0
46	L9	191/191 (100%)	0.84	19 (9%) 8 6	67, 80, 95, 109	0
46	l9	191/191 (100%)	0.15	3 (1%) 68 41	44, 52, 72, 84	0
47	M0	211/220 (95%)	0.38	7 (3%) 44 25	61, 79, 111, 128	0
47	m0	213/220 (96%)	-0.09	0 100 100	44, 65, 93, 123	0
48	M1	169/173 (97%)	1.54	54 (31%) 1 1	83, 105, 123, 133	0
48	m1	169/173 (97%)	0.59	8 (4%) 30 17	54, 72, 87, 96	0
49	M3	193/198 (97%)	0.26	2 (1%) 79 53	58, 83, 128, 153	0
49	m3	194/198 (97%)	0.58	8 (4%) 35 20	65, 94, 134, 149	0
50	M4	136/137 (99%)	0.28	4 (2%) 49 28	60, 70, 83, 96	0
50	m4	137/137 (100%)	-0.03	0 100 100	44, 56, 76, 93	0
51	M5	203/203 (100%)	0.92	25 (12%) 5 4	56, 78, 92, 97	0
51	m5	203/203 (100%)	1.53	64 (31%) 1 1	62, 88, 104, 112	0
52	M6	197/198 (99%)	0.02	0 100 100	46, 55, 78, 84	0
52	m6	197/198 (99%)	0.05	0 100 100	37, 43, 69, 74	0
53	M7	183/183 (100%)	0.24	5 (2%) 52 29	53, 61, 133, 149	0
53	m7	155/183 (84%)	0.19	0 100 100	50, 61, 74, 105	0
54	M8	185/185 (100%)	0.32	4 (2%) 59 34	52, 71, 92, 122	0
54	m8	185/185 (100%)	0.27	4 (2%) 59 34	56, 73, 82, 86	0
55	M9	188/188 (100%)	0.51	16 (8%) 11 7	77, 95, 187, 192	0
55	m9	188/188 (100%)	0.60	16 (8%) 11 7	74, 88, 154, 164	0
56	N0	172/172 (100%)	0.40	6 (3%) 42 23	56, 67, 83, 88	0
56	n0	172/172 (100%)	0.17	2 (1%) 75 49	40, 48, 62, 77	0
57	N1	159/159 (100%)	0.60	10 (6%) 19 11	56, 70, 119, 125	0
57	n1	159/159 (100%)	0.56	7 (4%) 33 18	45, 57, 106, 112	0
58	N2	100/120 (83%)	0.65	6 (6%) 21 12	104, 118, 132, 144	0
58	n2	98/120 (81%)	1.11	21 (21%) 1 2	98, 110, 124, 128	0
59	N3	136/136 (100%)	0.17	2 (1%) 70 43	57, 68, 83, 87	0
59	n3	136/136 (100%)	-0.02	0 100 100	40, 51, 66, 70	0
60	N4	98/155 (63%)	2.03	31 (31%) 1 1	66, 90, 209, 217	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
60	n4	135/155 (87%)	0.69	16 (11%) 5 5	53, 110, 140, 151	0
61	N5	121/141 (85%)	1.56	37 (30%) 1 1	74, 90, 108, 150	0
61	n5	120/141 (85%)	1.83	53 (44%) 1 1	81, 97, 119, 132	0
62	N6	126/126 (100%)	0.68	6 (4%) 29 16	70, 82, 95, 108	0
62	n6	126/126 (100%)	1.05	21 (16%) 2 3	87, 95, 113, 123	0
63	N7	135/135 (100%)	1.71	57 (42%) 1 1	106, 118, 137, 149	0
63	n7	135/135 (100%)	2.26	69 (51%) 0 1	106, 124, 147, 158	0
64	N8	148/148 (100%)	0.37	2 (1%) 72 45	54, 72, 95, 105	0
64	n8	148/148 (100%)	0.40	6 (4%) 35 20	53, 76, 97, 102	0
65	N9	58/58 (100%)	0.69	6 (10%) 7 6	69, 80, 119, 127	0
65	n9	58/58 (100%)	0.82	6 (10%) 7 6	60, 72, 105, 119	0
66	O0	97/104 (93%)	0.62	10 (10%) 7 6	101, 109, 125, 128	0
66	o0	100/104 (96%)	0.98	16 (16%) 3 3	97, 108, 135, 143	0
67	O1	109/112 (97%)	0.75	5 (4%) 31 17	67, 78, 107, 132	0
67	o1	109/112 (97%)	0.33	1 (0%) 81 57	56, 68, 106, 127	0
68	O2	127/129 (98%)	0.03	1 (0%) 83 60	47, 60, 73, 92	0
68	o2	127/129 (98%)	0.25	1 (0%) 83 60	47, 73, 86, 99	0
69	O3	106/106 (100%)	0.08	0 100 100	48, 55, 78, 85	0
69	o3	106/106 (100%)	0.27	1 (0%) 81 57	44, 52, 82, 91	0
70	O4	112/119 (94%)	1.53	40 (35%) 1 1	77, 98, 130, 136	0
70	o4	112/119 (94%)	0.84	17 (15%) 3 3	74, 98, 130, 136	0
71	O5	119/119 (100%)	0.71	7 (5%) 22 12	77, 92, 107, 109	0
71	o5	119/119 (100%)	0.89	15 (12%) 4 4	95, 105, 129, 136	0
72	O6	99/99 (100%)	0.67	10 (10%) 7 6	79, 93, 126, 138	0
72	o6	99/99 (100%)	1.24	24 (24%) 1 2	84, 105, 125, 144	0
73	O7	87/87 (100%)	0.29	1 (1%) 77 50	55, 66, 97, 121	0
73	o7	87/87 (100%)	0.63	7 (8%) 12 8	62, 73, 116, 152	0
74	O8	77/77 (100%)	1.07	18 (23%) 1 2	107, 117, 133, 141	0
74	o8	77/77 (100%)	1.14	17 (22%) 1 2	107, 116, 124, 127	0
75	O9	50/50 (100%)	0.41	0 100 100	66, 73, 85, 92	0
75	o9	50/50 (100%)	0.95	8 (16%) 3 3	81, 84, 93, 101	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
76	Q0	52/52 (100%)	0.50	4 (7%) 13 8	63, 70, 82, 91	0
76	q0	52/52 (100%)	0.05	0 100 100	42, 48, 57, 66	0
77	Q1	25/25 (100%)	0.91	2 (8%) 12 8	80, 85, 88, 96	0
77	q1	25/25 (100%)	0.25	0 100 100	65, 68, 82, 89	0
78	Q2	105/105 (100%)	0.48	2 (1%) 64 37	61, 78, 98, 131	0
78	q2	105/105 (100%)	0.76	10 (9%) 8 6	63, 74, 87, 123	0
79	Q3	91/91 (100%)	0.12	0 100 100	68, 80, 97, 104	0
79	q3	91/91 (100%)	0.02	0 100 100	61, 80, 96, 106	0
80	e0	62/62 (100%)	0.49	4 (6%) 18 11	73, 106, 134, 136	0
81	e1	76/76 (100%)	1.12	23 (30%) 1 1	162, 182, 192, 194	0
82	m2	0/160	-	-	-	-
83	p0	143/311 (45%)	1.71	51 (35%) 1 1	103, 123, 186, 190	0
84	p1	0/47	-	-	-	-
85	p2	0/46	-	-	-	-
All	All	33059/35344 (93%)	0.55	3149 (9%) 8 6	37, 92, 168, 311	0

All (3149) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
60	N4	75	THR	18.8
60	N4	74	LYS	13.4
60	N4	76	VAL	13.4
60	N4	77	LYS	12.0
1	2	718	U	11.7
1	6	1693	A	11.4
60	N4	83	THR	10.2
1	6	1694	A	9.0
7	S5	106	LYS	8.8
18	C6	127	LYS	8.4
60	N4	82	ILE	8.3
18	C6	128	LYS	8.2
60	N4	78	ALA	8.1
14	c2	59	LEU	8.0
1	6	1709	C	8.0
60	N4	84	GLY	8.0
14	c2	20	ALA	7.9
60	N4	88	ASP	7.9
1	2	238	U	7.8

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Mol	Chain	Res	Type	RSRZ
8	S6	154	ARG	7.8
34	SR	309	VAL	7.8
63	N7	18	TYR	7.7
1	6	1710	U	7.6
29	D7	51	GLN	7.5
60	N4	87	LEU	7.4
34	SR	2	ALA	7.3
16	C4	41	ARG	7.2
34	SR	261	LYS	7.1
31	d9	4	GLU	7.1
60	N4	81	PRO	7.0
1	6	494	U	7.0
11	S9	180	LYS	7.0
63	n7	21	LYS	6.9
34	SR	32	LEU	6.9
34	SR	81	LEU	6.9
14	c2	28	LEU	6.8
60	N4	73	ARG	6.7
22	d0	98	GLN	6.7
14	c2	102	GLY	6.7
20	C8	146	ALA	6.7
1	6	495	C	6.7
60	N4	68	ALA	6.6
22	d0	18	GLN	6.5
14	C2	88	LEU	6.5
2	S0	113	ARG	6.5
22	d0	17	GLN	6.5
22	D0	84	MET	6.4
29	D7	70	LYS	6.4
1	6	1217	A	6.4
14	c2	23	THR	6.3
14	C2	61	VAL	6.3
14	C2	62	LEU	6.3
19	C7	59	LYS	6.3
8	S6	92	ARG	6.3
33	E1	149	LYS	6.3
34	SR	115	ILE	6.2
17	C5	77	ARG	6.2
61	N5	123	TYR	6.2
1	2	78	A	6.2
20	C8	40	ARG	6.2
18	C6	140	LYS	6.2

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Mol	Chain	Res	Type	RSRZ
20	C8	101	LEU	6.2
34	SR	102	ARG	6.1
34	SR	284	ALA	6.1
81	e1	85	TYR	6.1
36	1	2445	A	6.1
8	S6	91	GLU	6.0
3	S1	156	ALA	6.0
19	C7	63	LYS	6.0
83	p0	53	MET	5.9
1	6	1700	C	5.9
8	S6	182	GLN	5.9
19	C7	2	GLY	5.9
7	S5	107	LYS	5.9
1	6	675	U	5.9
11	S9	141	VAL	5.9
63	n7	11	ALA	5.9
34	SR	305	TYR	5.8
16	C4	27	PHE	5.8
8	S6	77	LEU	5.8
1	6	1708	U	5.8
17	C5	104	GLN	5.7
7	S5	105	GLY	5.7
16	C4	40	ALA	5.7
29	d7	64	CYS	5.7
34	SR	286	GLU	5.7
7	S5	102	ARG	5.7
75	o9	2	ALA	5.7
8	S6	78	THR	5.7
7	S5	181	GLU	5.6
18	C6	132	LYS	5.6
22	D0	54	GLY	5.6
35	SM	27	LYS	5.6
36	1	2506	U	5.6
60	N4	69	LYS	5.6
61	n5	142	ILE	5.6
74	O8	30	LYS	5.6
63	N7	22	LYS	5.6
17	C5	75	PRO	5.6
22	D0	85	ARG	5.5
18	C6	142	TYR	5.5
14	C2	89	ILE	5.5
14	c2	29	LYS	5.5

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Mol	Chain	Res	Type	RSRZ
83	p0	51	VAL	5.5
19	c7	58	MET	5.5
34	SR	285	ALA	5.5
36	5	1563	C	5.4
70	O4	70	LYS	5.4
19	C7	71	PHE	5.4
1	2	236	A	5.4
21	C9	71	VAL	5.4
17	C5	83	MET	5.4
6	S4	197	HIS	5.4
8	S6	79	LYS	5.4
8	S6	152	ASP	5.4
48	M1	47	GLN	5.3
10	s8	200	LYS	5.3
8	S6	186	ARG	5.3
8	S6	174	LYS	5.3
70	O4	62	TYR	5.3
14	c2	58	LEU	5.3
10	S8	200	LYS	5.3
34	SR	23	LEU	5.3
42	L5	2	ALA	5.3
60	N4	80	ARG	5.3
60	N4	85	ALA	5.3
6	S4	54	TYR	5.3
1	2	237	C	5.3
3	S1	103	MET	5.3
8	S6	175	ILE	5.3
10	S8	54	LYS	5.3
63	n7	52	LYS	5.3
1	6	1711	C	5.3
3	S1	91	VAL	5.3
36	5	1017	C	5.3
8	S6	84	TYR	5.2
11	S9	3	ARG	5.2
8	S6	88	ARG	5.2
48	M1	142	LYS	5.2
19	C7	53	TYR	5.2
11	s9	110	GLN	5.2
36	5	1815	U	5.2
8	S6	180	THR	5.2
6	S4	100	ARG	5.2
10	S8	22	ARG	5.2

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Mol	Chain	Res	Type	RSRZ
34	SR	306	THR	5.2
63	N7	11	ALA	5.2
31	d9	12	ARG	5.2
63	n7	65	ARG	5.2
1	6	678	A	5.2
21	C9	4	VAL	5.2
8	S6	75	LEU	5.2
15	C3	61	THR	5.1
20	C8	22	VAL	5.1
34	SR	36	ALA	5.1
34	SR	311	ARG	5.1
3	S1	213	ARG	5.1
34	SR	80	ALA	5.1
83	p0	52	LEU	5.1
20	C8	102	ALA	5.1
63	n7	41	ALA	5.1
18	C6	133	GLY	5.1
8	S6	149	LYS	5.1
9	s7	108	GLN	5.1
1	6	712	G	5.1
1	2	719	U	5.0
19	c7	3	ARG	5.0
62	n6	126	LEU	5.0
19	C7	56	HIS	5.0
24	D2	72	CYS	5.0
8	S6	95	LYS	5.0
12	c0	64	TYR	5.0
60	N4	86	SER	5.0
1	2	656	G	5.0
19	C7	57	LEU	5.0
1	2	1471	A	5.0
14	C2	92	ALA	5.0
17	C5	94	VAL	5.0
83	p0	104	ARG	5.0
48	M1	122	ILE	4.9
20	C8	16	ARG	4.9
34	SR	307	ASP	4.9
22	d0	94	GLU	4.9
42	L5	27	LYS	4.9
8	S6	142	ARG	4.9
1	6	713	A	4.9
8	S6	83	CYS	4.9

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Mol	Chain	Res	Type	RSRZ
83	p0	49	ALA	4.9
18	c6	132	LYS	4.9
83	p0	38	MET	4.9
11	S9	181	ALA	4.9
24	D2	27	ILE	4.9
1	2	717	C	4.9
22	D0	64	LYS	4.9
14	c2	89	ILE	4.9
1	2	658	C	4.9
36	5	1016	C	4.9
27	D5	97	LYS	4.9
12	c0	22	VAL	4.9
1	6	506	A	4.9
19	C7	62	GLN	4.8
34	SR	310	ILE	4.8
8	S6	93	LYS	4.8
4	s2	95	ARG	4.8
4	S2	64	LYS	4.8
29	D7	64	CYS	4.8
61	N5	23	ALA	4.8
14	C2	90	LYS	4.8
45	l8	198	ALA	4.8
14	c2	60	VAL	4.8
36	1	1016	C	4.8
33	E1	102	VAL	4.8
12	c0	23	ALA	4.8
1	6	711	U	4.8
8	S6	156	PHE	4.8
63	N7	17	ARG	4.8
12	c0	24	LYS	4.7
21	C9	92	LYS	4.7
8	S6	151	ASP	4.7
11	S9	105	LEU	4.7
1	6	1692	G	4.7
11	S9	86	LEU	4.7
17	C5	81	ARG	4.7
20	C8	145	ARG	4.7
34	SR	106	HIS	4.7
14	C2	60	VAL	4.7
18	C6	141	SER	4.7
48	M1	141	ARG	4.7
8	S6	158	ILE	4.7

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Mol	Chain	Res	Type	RSRZ
34	SR	254	ALA	4.7
4	s2	91	ARG	4.7
22	D0	83	GLU	4.7
2	S0	24	LEU	4.7
26	D4	25	VAL	4.7
1	2	239	C	4.7
63	n7	22	LYS	4.7
19	c7	62	GLN	4.7
22	d0	19	ILE	4.7
22	d0	99	ILE	4.7
6	S4	207	LEU	4.7
45	l8	28	HIS	4.7
34	SR	308	ASN	4.7
35	SM	23	LYS	4.7
14	C2	63	VAL	4.6
14	c2	62	LEU	4.6
1	6	710	U	4.6
48	M1	153	LYS	4.6
35	SM	173	GLU	4.6
10	S8	55	TYR	4.6
20	C8	41	ARG	4.6
19	c7	53	TYR	4.6
22	d0	93	LEU	4.6
22	D0	55	PRO	4.6
7	S5	183	ALA	4.6
11	s9	147	MET	4.6
36	5	2506	U	4.6
11	S9	33	GLU	4.6
14	c2	123	VAL	4.6
81	e1	94	LYS	4.6
1	2	506	A	4.6
1	6	1712	A	4.6
27	D5	36	ALA	4.6
1	2	235	G	4.6
4	s2	84	LYS	4.6
26	D4	28	LEU	4.6
83	p0	26	PHE	4.6
81	e1	90	LYS	4.6
70	O4	34	HIS	4.6
8	S6	76	LEU	4.5
18	C6	12	LYS	4.5
18	C6	131	GLY	4.5

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Mol	Chain	Res	Type	RSRZ
31	D9	4	GLU	4.5
8	S6	87	ARG	4.5
21	C9	124	ILE	4.5
26	D4	7	ILE	4.5
61	n5	24	LEU	4.5
26	D4	26	ASP	4.5
19	C7	69	ILE	4.5
81	e1	95	HIS	4.5
7	S5	180	ARG	4.5
18	C6	126	PRO	4.5
4	s2	97	ARG	4.5
22	d0	97	VAL	4.5
14	c2	22	VAL	4.5
10	S8	25	ARG	4.5
26	D4	8	ARG	4.5
1	6	1707	A	4.5
6	S4	198	LYS	4.5
12	c0	29	GLN	4.5
20	C8	30	TYR	4.5
29	D7	49	HIS	4.5
32	E0	54	ARG	4.5
14	c2	128	ALA	4.5
36	5	1568	U	4.5
73	o7	73	ARG	4.5
3	S1	121	ILE	4.5
61	N5	82	LEU	4.5
7	S5	92	ARG	4.4
26	D4	22	GLN	4.5
8	S6	74	LYS	4.4
72	O6	70	ARG	4.4
17	C5	78	THR	4.4
22	D0	82	TYR	4.4
61	n5	121	LYS	4.4
1	6	1701	A	4.4
36	5	1809	A	4.4
61	n5	88	MET	4.4
11	s9	36	LEU	4.4
19	C7	8	THR	4.4
36	5	1629	U	4.4
61	n5	107	VAL	4.4
63	n7	23	VAL	4.4
10	S8	181	GLY	4.4

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Mol	Chain	Res	Type	RSRZ
83	p0	3	GLY	4.4
61	n5	120	LYS	4.4
1	6	1695	G	4.4
32	E0	40	TYR	4.4
6	S4	6	LYS	4.4
16	C4	20	TYR	4.4
1	6	715	U	4.4
60	n4	75	THR	4.4
1	2	394	C	4.4
22	d0	16	GLN	4.4
8	s6	191	ARG	4.4
11	S9	6	ARG	4.4
61	n5	23	ALA	4.4
24	D2	60	LYS	4.4
31	d9	11	PRO	4.4
83	p0	86	PHE	4.4
20	C8	17	LEU	4.4
1	2	1059	U	4.4
60	N4	90	ILE	4.4
20	c8	73	MET	4.3
34	sR	121	MET	4.3
36	5	1492	G	4.3
16	C4	88	GLY	4.3
20	C8	18	LEU	4.3
31	D9	30	LEU	4.3
20	C8	73	MET	4.3
36	1	1239	C	4.3
17	c5	4	ALA	4.3
42	l5	6	ASP	4.3
1	6	490	C	4.3
81	e1	100	LEU	4.3
63	n7	9	LYS	4.3
62	n6	45	ILE	4.3
1	2	280	U	4.3
19	C7	60	ARG	4.3
17	C5	84	ILE	4.3
63	n7	130	PHE	4.3
66	o0	55	GLU	4.3
11	s9	37	LYS	4.3
60	n4	77	LYS	4.3
1	2	1795	U	4.3
7	S5	93	LEU	4.3

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Mol	Chain	Res	Type	RSRZ
63	n7	18	TYR	4.3
19	C7	7	LYS	4.3
14	C2	78	LEU	4.3
42	L5	150	LEU	4.3
45	l8	162	LEU	4.3
4	s2	116	LYS	4.3
63	N7	5	LEU	4.3
10	s8	54	LYS	4.3
12	C0	41	TYR	4.3
63	N7	46	ILE	4.3
10	s8	53	LYS	4.3
24	D2	104	LEU	4.3
11	s9	138	LYS	4.3
19	C7	58	MET	4.3
61	n5	33	ARG	4.3
63	N7	135	ARG	4.3
6	S4	22	LYS	4.2
2	S0	104	PRO	4.2
14	c2	131	ASP	4.2
17	C5	72	LYS	4.2
29	D7	71	ALA	4.2
28	D6	5	ARG	4.2
48	M1	136	ALA	4.2
19	c7	65	PRO	4.2
1	6	1444	A	4.2
14	c2	41	LEU	4.2
14	c2	97	LEU	4.2
8	S6	177	ARG	4.2
63	n7	48	ARG	4.2
63	n7	56	LYS	4.2
71	o5	83	LYS	4.2
1	2	474	A	4.2
19	C7	74	GLN	4.2
35	SM	176	ALA	4.2
45	l8	197	VAL	4.2
22	D0	63	LEU	4.2
21	C9	91	TYR	4.2
18	c6	8	GLN	4.2
26	D4	6	THR	4.2
7	S5	182	ALA	4.2
4	s2	87	GLN	4.2
63	n7	111	LYS	4.2

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Mol	Chain	Res	Type	RSRZ
10	S8	168	CYS	4.2
19	c7	57	LEU	4.2
1	2	507	U	4.2
11	S9	5	PRO	4.2
58	n2	56	VAL	4.2
34	sR	311	ARG	4.2
48	M1	43	GLN	4.2
61	n5	108	LEU	4.2
8	S6	150	GLU	4.2
58	n2	93	ILE	4.1
11	S9	27	GLU	4.1
62	n6	127	GLU	4.1
1	2	1316	G	4.1
8	S6	179	VAL	4.1
38	4	158	U	4.1
51	m5	148	TYR	4.1
63	n7	73	LYS	4.1
58	N2	89	LEU	4.1
61	N5	24	LEU	4.1
74	O8	5	ILE	4.1
83	p0	18	TYR	4.1
31	d9	19	ARG	4.1
11	S9	36	LEU	4.1
11	s9	134	ILE	4.1
36	1	1617	G	4.1
34	SR	7	LEU	4.1
74	o8	42	LYS	4.1
63	n7	74	VAL	4.1
10	S8	179	CYS	4.1
24	D2	127	GLY	4.1
1	2	217	A	4.1
10	S8	165	LEU	4.1
2	S0	41	ARG	4.1
63	n7	75	VAL	4.1
45	l8	26	LEU	4.1
11	S9	138	LYS	4.1
63	n7	72	ILE	4.1
36	1	1025	A	4.1
83	p0	25	LEU	4.1
18	C6	143	ARG	4.1
60	n4	78	ALA	4.1
14	C2	50	LYS	4.1

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Mol	Chain	Res	Type	RSRZ
24	D2	110	ILE	4.1
8	s6	175	ILE	4.1
34	SR	260	ILE	4.1
60	N4	79	GLN	4.1
1	2	261	U	4.1
1	6	662	U	4.1
12	c0	65	TYR	4.1
15	C3	17	PRO	4.1
16	C4	18	ARG	4.1
31	d9	10	HIS	4.1
63	n7	49	TYR	4.1
14	c2	88	LEU	4.1
18	C6	79	TYR	4.1
18	c6	140	LYS	4.1
19	c7	2	GLY	4.1
14	C2	42	ALA	4.0
34	SR	257	ALA	4.0
51	m5	55	ALA	4.0
7	S5	90	ILE	4.0
20	C8	32	LEU	4.0
63	n7	5	LEU	4.0
63	n7	61	LYS	4.0
11	s9	148	VAL	4.0
6	S4	199	GLU	4.0
24	D2	103	ILE	4.0
36	5	1566	A	4.0
1	2	959	U	4.0
1	6	493	U	4.0
19	c7	59	LYS	4.0
61	n5	25	LYS	4.0
20	C8	31	ALA	4.0
34	sR	14	GLU	4.0
1	2	135	A	4.0
19	C7	16	LEU	4.0
5	S3	208	ILE	4.0
36	1	1238	C	4.0
36	5	1565	G	4.0
19	C7	11	ARG	4.0
16	C4	97	GLY	4.0
2	S0	107	PHE	4.0
21	C9	90	PRO	4.0
72	o6	2	THR	4.0

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Mol	Chain	Res	Type	RSRZ
19	c7	14	LYS	4.0
18	C6	138	PHE	4.0
70	O4	71	THR	4.0
8	S6	178	LEU	4.0
10	S8	24	LYS	4.0
10	S8	21	PHE	4.0
20	c8	15	LEU	4.0
31	d9	30	LEU	4.0
51	m5	59	PHE	4.0
7	S5	70	VAL	4.0
35	SM	19	VAL	4.0
17	C5	106	GLU	4.0
28	d6	89	ARG	4.0
1	6	484	C	4.0
11	S9	35	GLY	4.0
83	p0	87	VAL	4.0
34	sR	62	LYS	4.0
14	c2	126	TRP	4.0
3	S1	94	LYS	4.0
29	D7	29	ARG	4.0
81	e1	77	GLY	4.0
1	2	1415	U	4.0
1	6	1446	A	4.0
73	o7	86	ALA	4.0
17	C5	74	ALA	4.0
66	o0	56	LEU	4.0
1	2	1287	A	3.9
19	C7	26	LEU	3.9
21	C9	70	GLN	3.9
83	p0	60	ARG	3.9
42	l5	4	GLN	3.9
34	SR	253	ALA	3.9
20	C8	128	PHE	3.9
1	2	393	C	3.9
11	s9	109	LEU	3.9
20	C8	120	ARG	3.9
26	D4	27	VAL	3.9
61	n5	32	PHE	3.9
83	p0	46	ARG	3.9
1	2	134	U	3.9
83	p0	88	PHE	3.9
7	S5	94	THR	3.9

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Mol	Chain	Res	Type	RSRZ
12	c0	25	LYS	3.9
34	SR	121	MET	3.9
81	e1	80	ARG	3.9
81	e1	99	LYS	3.9
61	n5	109	LYS	3.9
63	N7	21	LYS	3.9
10	S8	167	ALA	3.9
8	s6	190	GLN	3.9
3	S1	140	ILE	3.9
11	S9	140	ILE	3.9
6	S4	245	LYS	3.9
31	d9	20	GLN	3.9
34	SR	145	LEU	3.9
12	c0	26	ASP	3.9
36	5	2505	U	3.9
61	n5	46	TYR	3.9
16	C4	39	ILE	3.9
10	s8	22	ARG	3.9
71	o5	82	ALA	3.9
24	D2	83	ILE	3.9
63	N7	10	VAL	3.9
19	c7	16	LEU	3.9
74	O8	52	TYR	3.9
1	2	132	U	3.9
1	2	1472	C	3.9
10	S8	121	LEU	3.9
34	SR	90	ARG	3.9
34	SR	239	GLU	3.9
29	D7	66	PRO	3.9
21	C9	69	LYS	3.9
48	M1	143	ARG	3.8
8	S6	80	ASN	3.8
18	c6	12	LYS	3.8
71	o5	84	LYS	3.8
48	m1	65	ILE	3.8
17	C5	80	MET	3.8
36	1	1028	U	3.8
22	D0	80	GLU	3.8
14	C2	20	ALA	3.8
70	O4	74	ARG	3.8
31	d9	5	ASN	3.8
1	2	1286	U	3.8

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Mol	Chain	Res	Type	RSRZ
3	S1	92	GLN	3.8
36	5	1816	A	3.8
14	C2	59	LEU	3.8
15	C3	5	HIS	3.8
29	D7	72	LYS	3.8
63	n7	57	HIS	3.8
1	2	1413	U	3.8
71	O5	76	GLN	3.8
10	S8	2	GLY	3.8
17	C5	76	VAL	3.8
20	C8	57	ARG	3.8
16	C4	95	GLY	3.8
63	n7	118	PHE	3.8
36	1	1802	C	3.8
14	c2	25	GLU	3.8
6	S4	9	LEU	3.8
12	c0	98	THR	3.8
20	C8	23	ASP	3.8
20	c8	18	LEU	3.8
42	L5	163	LEU	3.8
70	O4	33	GLN	3.8
51	m5	129	TYR	3.8
36	5	2503	G	3.8
31	d9	22	ARG	3.8
36	1	2532	U	3.8
10	S8	83	TYR	3.7
3	S1	137	ILE	3.7
36	1	1242	G	3.7
43	l6	129	GLU	3.7
51	m5	114	ARG	3.7
6	S4	7	LYS	3.7
27	D5	72	GLY	3.7
7	s5	81	ARG	3.7
36	1	1241	U	3.7
10	S8	192	TYR	3.7
5	S3	206	VAL	3.7
8	s6	194	LYS	3.7
19	c7	10	LYS	3.7
48	M1	120	ILE	3.7
2	S0	110	TYR	3.7
19	C7	61	ILE	3.7
11	S9	8	TYR	3.7

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Mol	Chain	Res	Type	RSRZ
83	p0	43	LYS	3.7
19	c7	56	HIS	3.7
72	o6	100	HIS	3.7
74	O8	54	LEU	3.7
15	C3	16	ILE	3.7
65	N9	58	LYS	3.7
36	5	1564	U	3.7
1	2	126	A	3.7
8	S6	183	ARG	3.7
36	5	1814	A	3.7
29	D7	50	ALA	3.7
67	O1	79	ARG	3.7
18	C6	139	GLN	3.7
19	C7	46	LEU	3.7
3	S1	139	ALA	3.7
61	n5	92	LYS	3.7
63	n7	6	LYS	3.7
36	5	1567	U	3.7
61	n5	57	LEU	3.7
21	C9	45	MET	3.7
15	C3	9	LYS	3.7
24	D2	108	ALA	3.7
36	5	1562	C	3.7
1	2	960	U	3.7
6	S4	261	LEU	3.7
2	S0	23	HIS	3.7
12	c0	43	ILE	3.7
19	c7	60	ARG	3.7
10	S8	199	LYS	3.7
61	N5	45	LYS	3.7
61	N5	47	ALA	3.7
13	C1	141	LYS	3.7
33	E1	85	TYR	3.7
51	M5	148	TYR	3.7
19	c7	69	ILE	3.7
71	o5	85	THR	3.7
3	S1	120	LEU	3.7
26	D4	67	GLY	3.7
10	S8	56	ARG	3.7
37	3	39	C	3.7
36	5	1810	A	3.7
34	SR	283	LYS	3.7

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Mol	Chain	Res	Type	RSRZ
63	N7	9	LYS	3.7
11	S9	2	PRO	3.6
62	N6	81	GLN	3.6
5	s3	187	LYS	3.6
26	D4	9	THR	3.6
31	D9	40	ARG	3.6
34	SR	15	GLY	3.6
36	1	1593	A	3.6
20	C8	106	GLU	3.6
8	S6	94	ARG	3.6
11	S9	77	ILE	3.6
11	s9	35	GLY	3.6
15	C3	62	GLN	3.6
34	SR	288	HIS	3.6
70	O4	61	GLN	3.6
71	O5	75	TYR	3.6
34	SR	33	LEU	3.6
6	S4	8	HIS	3.6
7	S5	184	PHE	3.6
42	L5	50	ARG	3.6
22	D0	91	ILE	3.6
22	D0	93	LEU	3.6
61	N5	40	LEU	3.6
8	S6	181	PRO	3.6
4	S2	63	VAL	3.6
11	S9	95	TYR	3.6
19	c7	67	ARG	3.6
42	L5	8	LYS	3.6
22	D0	67	THR	3.6
11	S9	134	ILE	3.6
83	p0	185	LEU	3.6
12	c0	1	MET	3.6
26	D4	32	ARG	3.6
35	sM	27	LYS	3.6
63	n7	134	LEU	3.6
63	n7	50	PRO	3.6
14	c2	63	VAL	3.6
34	SR	91	LEU	3.6
35	sM	33	LYS	3.6
74	O8	40	GLN	3.6
83	p0	22	TYR	3.6
1	2	1401	A	3.6

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Mol	Chain	Res	Type	RSRZ
6	s4	261	LEU	3.6
10	s8	179	CYS	3.6
63	N7	19	ALA	3.6
14	C2	87	PRO	3.6
55	m9	21	LYS	3.6
61	N5	25	LYS	3.6
10	S8	103	GLN	3.6
19	C7	65	PRO	3.6
74	O8	53	THR	3.6
17	C5	105	VAL	3.6
19	C7	66	VAL	3.6
35	SM	26	VAL	3.6
1	6	716	C	3.6
18	C6	20	ALA	3.6
74	O8	44	LYS	3.6
12	c0	45	ALA	3.6
19	C7	5	ARG	3.6
22	D0	57	ARG	3.6
26	D4	43	LYS	3.6
35	SM	84	LYS	3.6
19	C7	73	LEU	3.6
19	C7	124	VAL	3.6
3	S1	46	THR	3.6
63	n7	12	VAL	3.6
18	c6	138	PHE	3.5
34	sR	80	ALA	3.5
36	5	296	A	3.5
9	S7	134	GLU	3.5
36	5	2504	U	3.5
10	S8	65	PHE	3.5
12	c0	27	PHE	3.5
20	C8	58	ALA	3.5
55	M9	60	LYS	3.5
74	O8	29	LYS	3.5
24	D2	111	MET	3.5
1	6	496	G	3.5
21	C9	44	GLU	3.5
34	sR	72	THR	3.5
35	SM	28	SER	3.5
22	d0	95	ALA	3.5
34	SR	287	PRO	3.5
66	o0	59	TYR	3.5

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Mol	Chain	Res	Type	RSRZ
29	D7	82	LYS	3.5
10	S8	166	TYR	3.5
17	C5	116	LEU	3.5
26	D4	117	LYS	3.5
31	d9	17	GLY	3.5
31	d9	31	ILE	3.5
15	C3	59	GLY	3.5
16	c4	92	LYS	3.5
83	p0	44	GLU	3.5
18	c6	18	ALA	3.5
19	c7	66	VAL	3.5
73	o7	87	SER	3.5
3	s1	62	LYS	3.5
51	m5	131	GLU	3.5
55	M9	53	LYS	3.5
7	S5	187	ILE	3.5
16	c4	29	HIS	3.5
5	S3	88	ALA	3.5
17	C5	91	GLY	3.5
26	D4	68	LYS	3.5
60	n4	97	LYS	3.5
83	p0	40	GLU	3.5
6	S4	200	ARG	3.5
27	D5	71	ILE	3.5
71	o5	10	ARG	3.5
63	n7	80	LEU	3.5
16	C4	15	GLY	3.5
8	s6	133	LEU	3.5
12	C0	40	LEU	3.5
5	S3	205	ALA	3.5
28	d6	17	HIS	3.5
11	s9	141	VAL	3.5
17	C5	93	VAL	3.5
63	N7	45	GLY	3.5
76	Q0	106	ARG	3.5
6	s4	38	LEU	3.5
51	M5	139	HIS	3.5
45	l8	32	LYS	3.5
10	s8	30	GLY	3.5
18	c6	20	ALA	3.5
66	o0	67	VAL	3.5
3	S1	122	GLU	3.5

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Mol	Chain	Res	Type	RSRZ
8	s6	193	LEU	3.4
16	C4	89	THR	3.4
6	s4	25	GLY	3.4
72	o6	86	LYS	3.4
15	C3	55	ARG	3.4
63	n7	10	VAL	3.4
16	C4	85	ALA	3.4
17	C5	95	GLY	3.4
6	S4	209	HIS	3.4
83	p0	85	GLY	3.4
14	c2	61	VAL	3.4
61	n5	99	VAL	3.4
83	p0	100	ILE	3.4
3	s1	64	ARG	3.4
5	S3	148	LYS	3.4
8	S6	159	ARG	3.4
31	d9	16	LYS	3.4
53	M7	180	LYS	3.4
3	s1	65	VAL	3.4
16	C4	29	HIS	3.4
17	C5	73	PRO	3.4
1	6	718	U	3.4
11	s9	139	GLN	3.4
3	s1	156	ALA	3.4
51	m5	152	CYS	3.4
19	c7	17	ILE	3.4
19	c7	18	GLU	3.4
63	N7	13	VAL	3.4
63	N7	69	LYS	3.4
83	p0	7	LYS	3.4
19	C7	67	ARG	3.4
51	m5	40	ALA	3.4
61	n5	115	ARG	3.4
7	s5	80	LYS	3.4
32	E0	53	LYS	3.4
83	p0	50	VAL	3.4
17	C5	53	PRO	3.4
9	s7	93	LEU	3.4
63	n7	68	ILE	3.4
12	C0	6	GLU	3.4
8	S6	136	LYS	3.4
42	L5	34	LYS	3.4

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Mol	Chain	Res	Type	RSRZ
9	S7	100	PRO	3.4
31	D9	31	ILE	3.4
31	D9	16	LYS	3.4
5	S3	217	ILE	3.4
11	S9	53	ARG	3.4
70	O4	72	VAL	3.4
45	l8	161	GLU	3.4
16	C4	28	VAL	3.4
28	d6	98	PRO	3.4
32	E0	42	ARG	3.4
35	SM	61	ILE	3.4
58	n2	57	THR	3.4
63	n7	87	LEU	3.4
70	o4	90	ILE	3.4
2	s0	110	TYR	3.4
2	S0	103	THR	3.4
16	c4	15	GLY	3.4
24	D2	125	ILE	3.4
45	L8	189	LEU	3.4
51	m5	54	LYS	3.4
1	6	487	G	3.4
34	sR	81	LEU	3.4
14	C2	91	VAL	3.4
4	s2	99	LYS	3.4
1	6	717	C	3.4
14	c2	101	ALA	3.4
48	M1	152	HIS	3.4
7	S5	84	LYS	3.4
14	c2	133	LEU	3.4
7	S5	71	ALA	3.4
20	C8	26	ILE	3.4
16	C4	94	PRO	3.4
1	6	400	A	3.4
6	s4	246	LEU	3.4
7	S5	143	ARG	3.4
19	c7	5	ARG	3.4
26	D4	10	ARG	3.4
34	SR	13	LEU	3.4
42	L5	151	GLN	3.4
83	p0	14	LYS	3.4
4	s2	115	ILE	3.4
72	O6	68	ARG	3.3

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Mol	Chain	Res	Type	RSRZ
26	D4	37	LYS	3.3
74	o8	43	PHE	3.3
1	6	679	U	3.3
12	c0	97	PRO	3.3
48	M1	148	VAL	3.3
1	2	127	G	3.3
16	C4	121	VAL	3.3
20	c8	123	ARG	3.3
51	m5	60	VAL	3.3
19	c7	26	LEU	3.3
26	D4	35	VAL	3.3
48	M1	144	CYS	3.3
48	M1	51	ARG	3.3
66	o0	6	SER	3.3
17	C5	115	TYR	3.3
5	s3	8	LYS	3.3
8	S6	73	ILE	3.3
11	S9	90	LYS	3.3
19	C7	64	GLY	3.3
58	n2	69	ALA	3.3
61	n5	119	THR	3.3
4	S2	163	GLY	3.3
19	C7	18	GLU	3.3
61	n5	141	TYR	3.3
51	M5	57	GLN	3.3
5	S3	134	CYS	3.3
1	2	495	C	3.3
11	S9	28	LEU	3.3
10	s8	31	ARG	3.3
11	S9	7	THR	3.3
17	C5	90	ILE	3.3
34	SR	99	THR	3.3
36	1	1955	U	3.3
48	M1	49	LYS	3.3
72	o6	9	ILE	3.3
34	sR	55	GLY	3.3
34	sR	136	ILE	3.3
8	s6	135	PRO	3.3
29	d7	49	HIS	3.3
63	n7	81	LEU	3.3
63	N7	71	PHE	3.3
16	C4	93	THR	3.3

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Mol	Chain	Res	Type	RSRZ
19	C7	17	ILE	3.3
28	D6	15	ARG	3.3
46	L9	166	ARG	3.3
3	s1	86	LEU	3.3
6	S4	99	PHE	3.3
14	C2	41	LEU	3.3
19	c7	71	PHE	3.3
21	C9	108	LEU	3.3
28	D6	20	PRO	3.3
11	s9	93	LEU	3.3
63	n7	131	PHE	3.3
34	sR	115	ILE	3.3
1	2	241	U	3.3
1	2	1315	U	3.3
10	S8	177	GLY	3.3
14	C2	52	LEU	3.3
24	D2	26	LEU	3.3
34	SR	237	GLN	3.3
10	S8	8	ARG	3.3
21	C9	65	ILE	3.3
24	D2	37	PHE	3.3
56	n0	1	MET	3.3
6	S4	38	LEU	3.3
14	c2	87	PRO	3.3
6	S4	210	ILE	3.3
1	6	725	U	3.3
22	d0	84	MET	3.3
45	L8	198	ALA	3.3
49	m3	179	PHE	3.3
61	n5	110	VAL	3.3
63	n7	13	VAL	3.3
9	S7	105	THR	3.3
21	C9	84	LYS	3.3
61	N5	22	LYS	3.3
7	S5	209	TYR	3.3
63	n7	51	LEU	3.3
72	o6	28	TYR	3.3
1	2	400	A	3.3
8	S6	153	VAL	3.3
18	C6	14	LYS	3.3
51	m5	56	LYS	3.3
6	S4	101	LEU	3.3

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Mol	Chain	Res	Type	RSRZ
61	N5	103	TYR	3.3
4	s2	90	THR	3.3
70	o4	21	LYS	3.3
1	6	497	G	3.3
14	c2	135	MET	3.3
23	D1	53	TYR	3.3
51	m5	6	TYR	3.3
58	n2	76	LEU	3.3
51	m5	138	GLN	3.3
10	S8	74	LYS	3.3
18	C6	137	ARG	3.3
61	n5	26	VAL	3.3
10	S8	193	LEU	3.3
11	s9	33	GLU	3.3
60	n4	66	GLU	3.3
29	D7	65	THR	3.2
8	S6	85	ARG	3.2
63	N7	48	ARG	3.2
18	C6	130	GLY	3.2
63	N7	133	LYS	3.2
46	L9	52	LEU	3.2
1	2	871	G	3.2
76	Q0	107	ALA	3.2
1	2	92	A	3.2
26	D4	71	GLY	3.2
26	d4	67	GLY	3.2
4	S2	65	GLU	3.2
10	s8	117	TYR	3.2
72	O6	53	TYR	3.2
70	O4	67	LYS	3.2
16	c4	28	VAL	3.2
48	M1	17	LEU	3.2
49	m3	178	LYS	3.2
81	e1	92	LYS	3.2
61	n5	82	LEU	3.2
51	m5	58	GLY	3.2
24	D2	82	LYS	3.2
63	N7	65	ARG	3.2
66	o0	53	LYS	3.2
11	S9	122	VAL	3.2
19	c7	55	THR	3.2
42	L5	3	PHE	3.2

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Mol	Chain	Res	Type	RSRZ
18	C6	122	ARG	3.2
55	M9	58	HIS	3.2
51	m5	134	LEU	3.2
18	C6	134	ALA	3.2
77	Q1	1	MET	3.2
20	C8	69	ILE	3.2
48	M1	137	ARG	3.2
61	N5	121	LYS	3.2
81	e1	79	LYS	3.2
18	c6	17	THR	3.2
61	n5	30	ALA	3.2
8	S6	115	LYS	3.2
36	5	2572	C	3.2
81	e1	96	LYS	3.2
14	C2	28	LEU	3.2
24	D2	85	ASP	3.2
26	D4	72	PHE	3.2
34	SR	130	THR	3.2
22	d0	64	LYS	3.2
34	sR	90	ARG	3.2
58	N2	93	ILE	3.2
3	s1	89	ASP	3.2
51	m5	115	VAL	3.2
56	N0	95	ARG	3.2
62	n6	124	GLY	3.2
34	SR	42	LEU	3.2
36	1	2703	A	3.2
51	M5	137	PRO	3.2
17	C5	85	ILE	3.2
24	D2	35	ILE	3.2
42	L5	24	ARG	3.2
48	m1	145	LYS	3.2
70	O4	60	ARG	3.2
78	q2	70	LEU	3.2
1	2	657	U	3.2
20	C8	121	ALA	3.2
1	2	654	C	3.2
11	s9	140	ILE	3.2
21	C9	86	ARG	3.2
63	n7	44	ALA	3.2
75	o9	3	ALA	3.2
26	D4	70	VAL	3.2

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Mol	Chain	Res	Type	RSRZ
34	SR	274	LEU	3.2
1	2	1052	U	3.2
8	S6	157	VAL	3.2
1	2	1469	A	3.2
12	c0	46	LEU	3.2
24	D2	124	LYS	3.2
26	D4	40	LEU	3.2
42	L5	92	LEU	3.2
16	C4	96	PRO	3.2
16	C4	102	LEU	3.2
24	D2	126	LEU	3.2
18	C6	29	ILE	3.2
36	1	1594	A	3.2
61	N5	41	ALA	3.2
19	C7	125	SER	3.2
11	S9	43	TYR	3.2
18	C6	21	HIS	3.2
38	8	83	C	3.2
51	m5	12	ARG	3.1
71	o5	80	LEU	3.2
1	6	219	A	3.1
10	s8	46	VAL	3.1
35	SM	16	ASP	3.1
8	s6	136	LYS	3.1
12	C0	28	ASN	3.1
34	sR	13	LEU	3.1
35	sM	29	ASN	3.1
70	O4	69	HIS	3.1
3	S1	105	PHE	3.1
61	N5	84	PHE	3.1
74	O8	28	ASN	3.1
3	S1	141	ALA	3.1
36	1	2257	C	3.1
8	S6	155	ASP	3.1
8	s6	8	PRO	3.1
2	S0	131	GLN	3.1
46	L9	165	CYS	3.1
34	SR	129	LYS	3.1
66	O0	62	LEU	3.1
46	L9	10	ILE	3.1
63	N7	14	VAL	3.1
20	c8	17	LEU	3.1

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Mol	Chain	Res	Type	RSRZ
11	S9	132	ARG	3.1
18	C6	66	ARG	3.1
36	1	2507	C	3.1
7	S5	104	ASN	3.1
48	M1	131	MET	3.1
1	2	1049	U	3.1
13	C1	63	LEU	3.1
29	D7	20	LYS	3.1
81	e1	83	LYS	3.1
7	S5	100	ASN	3.1
57	N1	30	TYR	3.1
4	s2	120	GLU	3.1
58	n2	95	PHE	3.1
10	S8	31	ARG	3.1
22	d0	82	TYR	3.1
33	E1	148	TYR	3.1
61	n5	27	ARG	3.1
4	s2	113	LEU	3.1
4	S2	140	ARG	3.1
8	s6	88	ARG	3.1
58	n2	27	VAL	3.1
4	s2	208	GLU	3.1
1	2	1534	G	3.1
34	sR	83	ALA	3.1
36	1	1095	U	3.1
36	1	1525	G	3.1
73	o7	88	ALA	3.1
11	S9	42	ILE	3.1
13	C1	60	PHE	3.1
63	N7	72	ILE	3.1
71	o5	118	ILE	3.1
51	m5	119	TYR	3.1
63	n7	42	LEU	3.1
65	N9	59	LYS	3.1
72	O6	66	GLU	3.1
42	L5	127	GLY	3.1
63	n7	45	GLY	3.1
7	S5	109	LYS	3.1
42	l5	5	LYS	3.1
63	n7	55	LYS	3.1
19	C7	52	GLY	3.1
46	L9	163	GLN	3.1

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Mol	Chain	Res	Type	RSRZ
72	o6	99	ARG	3.1
4	s2	88	LYS	3.1
18	C6	125	GLU	3.1
60	N4	70	LYS	3.1
36	1	2539	C	3.1
36	5	1579	C	3.1
66	o0	7	GLN	3.1
7	S5	191	ALA	3.1
10	S8	67	TRP	3.1
12	c0	21	VAL	3.1
31	D9	54	LYS	3.1
51	M5	134	LEU	3.1
60	N4	89	LEU	3.1
63	n7	2	ALA	3.1
3	S1	84	ILE	3.1
10	s8	52	ASN	3.1
17	C5	108	ARG	3.1
64	n8	67	HIS	3.1
20	C8	48	LYS	3.1
21	C9	113	ILE	3.1
45	L8	152	LEU	3.1
36	1	2540	A	3.1
51	m5	135	VAL	3.1
60	N4	67	VAL	3.1
14	C2	36	LEU	3.1
22	d0	65	ILE	3.1
18	C6	129	PHE	3.1
35	sM	31	SER	3.1
36	1	1829	G	3.1
45	l8	254	ASP	3.1
72	O6	56	ARG	3.1
83	p0	42	ARG	3.1
18	C6	3	ALA	3.1
34	sR	183	LEU	3.1
6	S4	3	ARG	3.1
1	2	781	U	3.1
4	s2	101	VAL	3.1
45	l8	106	LYS	3.1
81	e1	102	VAL	3.1
28	d6	15	ARG	3.1
7	S5	98	MET	3.0
24	D2	33	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
63	n7	14	VAL	3.0
1	2	943	C	3.0
35	SM	58	GLU	3.0
4	s2	100	ALA	3.0
45	l8	199	ALA	3.0
60	n4	87	LEU	3.0
24	D2	25	VAL	3.0
51	m5	44	ARG	3.0
2	S0	98	ILE	3.0
61	N5	92	LYS	3.0
66	o0	41	LEU	3.0
71	O5	83	LYS	3.0
81	e1	97	LYS	3.0
63	n7	71	PHE	3.0
14	c2	91	VAL	3.0
1	6	263	C	3.0
5	S3	207	THR	3.0
16	C4	37	GLU	3.0
42	L5	177	GLU	3.0
24	D2	34	ILE	3.0
7	S5	178	GLY	3.0
19	C7	9	VAL	3.0
4	S2	62	PRO	3.0
12	c0	66	TYR	3.0
35	SM	48	ARG	3.0
47	M0	211	ARG	3.0
49	M3	183	ARG	3.0
7	S5	108	LEU	3.0
17	C5	82	ASN	3.0
17	C5	113	GLY	3.0
46	L9	8	GLN	3.0
29	D7	52	THR	3.0
2	S0	141	ILE	3.0
36	1	1581	C	3.0
3	S1	45	LYS	3.0
14	c2	30	VAL	3.0
11	s9	132	ARG	3.0
26	d4	134	ALA	3.0
27	D5	79	ALA	3.0
31	D9	38	ILE	3.0
70	O4	64	THR	3.0
1	6	1228	G	3.0

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Mol	Chain	Res	Type	RSRZ
14	C2	74	LEU	3.0
17	C5	112	LEU	3.0
55	M9	52	LYS	3.0
15	C3	50	ILE	3.0
1	6	1196	A	3.0
2	S0	138	TYR	3.0
27	D5	81	ARG	3.0
63	n7	47	GLU	3.0
2	s0	107	PHE	3.0
3	s1	121	ILE	3.0
7	S5	140	THR	3.0
17	C5	109	PRO	3.0
19	C7	54	THR	3.0
34	sR	102	ARG	3.0
46	l9	190	ASP	3.0
1	2	1584	G	3.0
6	S4	27	TYR	3.0
6	s4	26	CYS	3.0
61	n5	96	LYS	3.0
1	2	494	U	3.0
20	C8	50	ALA	3.0
33	E1	100	LEU	3.0
14	C2	85	LYS	3.0
46	l9	189	GLU	3.0
70	O4	21	LYS	3.0
14	C2	121	VAL	3.0
18	c6	133	GLY	3.0
3	s1	164	ILE	3.0
70	O4	111	ALA	3.0
23	D1	69	LEU	3.0
26	D4	5	VAL	3.0
60	N4	92	GLU	3.0
81	e1	145	HIS	3.0
11	S9	4	ALA	3.0
1	2	263	C	3.0
27	D5	80	LEU	3.0
35	sM	49	LYS	3.0
48	m1	142	LYS	3.0
48	M1	66	ALA	3.0
60	N4	96	LEU	3.0
74	O8	42	LYS	3.0
2	S0	122	ILE	3.0

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Mol	Chain	Res	Type	RSRZ
20	c8	32	LEU	3.0
35	SM	68	ARG	3.0
51	m5	7	LEU	3.0
1	2	1470	C	3.0
35	sM	23	LYS	3.0
36	1	1026	A	3.0
8	S6	81	VAL	3.0
30	D8	15	VAL	3.0
63	N7	68	ILE	3.0
8	S6	90	GLY	3.0
16	C4	33	LEU	3.0
19	c7	11	ARG	3.0
70	O4	31	ARG	3.0
8	S6	89	ASP	3.0
19	C7	72	LYS	3.0
14	c2	57	ALA	3.0
34	sR	303	ALA	3.0
70	O4	32	ALA	3.0
1	2	1217	A	3.0
14	c2	31	VAL	3.0
42	L5	60	ILE	3.0
51	m5	53	TYR	3.0
11	S9	37	LYS	3.0
42	L5	159	VAL	3.0
36	1	2505	U	3.0
63	n7	69	LYS	3.0
1	6	1699	G	3.0
10	S8	96	LEU	3.0
19	C7	3	ARG	3.0
1	2	1587	A	3.0
1	6	333	A	3.0
17	C5	89	MET	3.0
10	S8	109	PHE	3.0
66	O0	94	GLU	3.0
5	S3	76	ARG	2.9
10	s8	199	LYS	2.9
81	e1	101	ALA	2.9
83	p0	187	VAL	2.9
51	M5	138	GLN	2.9
60	n4	79	GLN	2.9
1	6	491	C	2.9
19	C7	14	LYS	2.9

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Mol	Chain	Res	Type	RSRZ
36	5	1086	C	2.9
36	5	1842	A	2.9
32	E0	50	VAL	2.9
60	n4	125	ALA	2.9
29	D7	27	GLY	2.9
10	s8	41	LYS	2.9
22	d0	88	LYS	2.9
71	o5	115	LYS	2.9
28	d6	90	GLU	2.9
61	n5	100	LYS	2.9
70	o4	33	GLN	2.9
1	2	140	A	2.9
56	N0	1	MET	2.9
3	s1	139	ALA	2.9
10	S8	57	ALA	2.9
12	C0	24	LYS	2.9
24	D2	61	ILE	2.9
67	O1	28	ARG	2.9
61	n5	84	PHE	2.9
72	O6	69	ALA	2.9
57	N1	31	LEU	2.9
74	o8	12	LEU	2.9
19	C7	21	TYR	2.9
29	d7	65	THR	2.9
1	6	653	C	2.9
34	SR	16	HIS	2.9
63	N7	20	GLY	2.9
9	S7	101	LYS	2.9
19	c7	74	GLN	2.9
24	D2	2	THR	2.9
35	SM	62	ARG	2.9
24	D2	129	VAL	2.9
27	D5	83	LEU	2.9
33	E1	145	HIS	2.9
6	S4	113	ARG	2.9
21	C9	38	LYS	2.9
51	m5	73	ARG	2.9
70	O4	68	THR	2.9
42	L5	95	TRP	2.9
66	O0	90	VAL	2.9
3	s1	96	LEU	2.9
1	2	532	U	2.9

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Mol	Chain	Res	Type	RSRZ
3	S1	162	ARG	2.9
17	C5	52	LYS	2.9
42	l5	152	ARG	2.9
73	O7	70	VAL	2.9
75	o9	4	GLN	2.9
19	C7	50	ILE	2.9
34	SR	262	VAL	2.9
11	s9	34	PHE	2.9
42	L5	4	GLN	2.9
1	2	1414	U	2.9
61	N5	124	VAL	2.9
3	S1	95	ASN	2.9
51	M5	140	LYS	2.9
46	L9	90	MET	2.9
20	c8	7	GLU	2.9
73	o7	72	ARG	2.9
6	S4	130	GLN	2.9
28	D6	17	HIS	2.9
34	sR	309	VAL	2.9
53	M7	181	ARG	2.9
54	m8	81	VAL	2.9
55	m9	22	VAL	2.9
62	N6	115	ARG	2.9
8	S6	33	GLY	2.9
6	S4	48	LEU	2.9
10	S8	191	PHE	2.9
10	s8	55	TYR	2.9
13	C1	35	TYR	2.9
63	n7	4	PHE	2.9
11	S9	113	VAL	2.9
1	2	707	A	2.9
1	2	1583	A	2.9
1	6	676	G	2.9
51	m5	64	VAL	2.9
1	6	1686	C	2.9
24	d2	51	GLU	2.9
36	5	70	A	2.9
8	S6	184	LEU	2.9
36	5	1630	U	2.9
63	n7	70	PRO	2.9
6	S4	78	THR	2.9
26	D4	66	GLY	2.9

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Mol	Chain	Res	Type	RSRZ
35	SM	20	LEU	2.9
71	o5	92	LEU	2.9
83	p0	15	LEU	2.9
9	S7	142	TYR	2.9
11	S9	85	VAL	2.9
10	S8	123	LYS	2.9
22	D0	53	LYS	2.9
51	m5	143	ARG	2.9
70	o4	10	ARG	2.9
1	6	501	U	2.9
8	S6	147	LEU	2.9
42	L5	133	GLU	2.9
55	m9	23	TRP	2.9
20	c8	42	TYR	2.9
6	S4	59	ARG	2.9
7	S5	185	ARG	2.9
8	s6	147	LEU	2.9
17	C5	15	HIS	2.9
46	l9	191	LEU	2.9
83	p0	84	VAL	2.9
8	S6	96	SER	2.9
18	c6	68	ARG	2.8
20	C8	36	LYS	2.9
63	n7	133	LYS	2.9
7	S5	190	ILE	2.8
11	s9	105	LEU	2.8
19	C7	41	ILE	2.8
42	L5	53	VAL	2.8
20	C8	55	HIS	2.8
7	S5	77	TYR	2.8
11	S9	40	LYS	2.8
31	D9	32	ARG	2.8
61	N5	49	LYS	2.8
26	D4	23	PHE	2.8
66	o0	44	ILE	2.8
73	o7	78	PHE	2.8
10	s8	48	THR	2.8
48	M1	108	GLU	2.8
60	n4	99	GLU	2.8
16	C4	16	VAL	2.8
16	C4	42	VAL	2.8
19	c7	29	GLN	2.8

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Mol	Chain	Res	Type	RSRZ
24	D2	101	TYR	2.8
42	L5	64	ILE	2.8
70	O4	16	ARG	2.8
18	C6	89	LEU	2.8
61	N5	122	ALA	2.8
22	d0	69	LYS	2.8
28	D6	22	ARG	2.8
48	M1	127	PHE	2.8
51	M5	119	TYR	2.8
4	s2	83	ILE	2.8
35	sM	25	ILE	2.8
61	n5	63	ILE	2.8
62	n6	115	ARG	2.8
70	o4	8	ARG	2.8
7	S5	179	ALA	2.8
10	s8	61	GLU	2.8
19	c7	70	SER	2.8
60	N4	95	SER	2.8
63	N7	81	LEU	2.8
83	p0	45	LEU	2.8
30	D8	57	MET	2.8
61	N5	50	ALA	2.8
63	N7	79	HIS	2.8
16	c4	41	ARG	2.8
83	p0	54	GLY	2.8
45	l8	253	SER	2.8
3	s1	103	MET	2.8
14	c2	85	LYS	2.8
5	S3	87	TYR	2.8
10	s8	47	ARG	2.8
18	C6	43	ILE	2.8
20	C8	44	ASN	2.8
27	D5	98	GLN	2.8
31	d9	27	HIS	2.8
34	SR	6	VAL	2.8
42	L5	152	ARG	2.8
74	O8	6	THR	2.8
10	S8	46	VAL	2.8
14	c2	71	ILE	2.8
27	d5	88	ILE	2.8
48	M1	12	LEU	2.8
67	o1	71	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
1	6	714	G	2.8
18	c6	131	GLY	2.8
36	1	1255	C	2.8
70	O4	78	GLY	2.8
5	S3	158	ILE	2.8
18	C6	13	LYS	2.8
34	SR	314	GLN	2.8
55	m9	53	LYS	2.8
11	s9	146	PHE	2.8
63	n7	46	ILE	2.8
61	n5	112	THR	2.8
2	S0	102	PHE	2.8
4	S2	84	LYS	2.8
6	S4	60	GLU	2.8
14	c2	64	SER	2.8
22	D0	86	ILE	2.8
39	L2	60	LYS	2.8
80	e0	36	LYS	2.8
1	2	725	U	2.8
1	2	1538	U	2.8
21	C9	68	ARG	2.8
61	N5	27	ARG	2.8
69	o3	60	ARG	2.8
1	2	131	C	2.8
70	O4	73	SER	2.8
6	S4	244	ILE	2.8
34	SR	117	LYS	2.8
83	p0	4	ILE	2.8
9	s7	107	ARG	2.8
11	s9	149	ARG	2.8
70	O4	6	THR	2.8
72	O6	98	ARG	2.8
6	s4	149	TYR	2.8
39	L2	26	ALA	2.8
22	d0	103	ILE	2.8
1	6	1059	U	2.8
9	S7	95	GLU	2.8
10	S8	53	LYS	2.8
6	S4	216	ASN	2.8
29	D7	69	GLY	2.8
42	L5	153	THR	2.8
1	6	1696	G	2.8

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Mol	Chain	Res	Type	RSRZ
19	C7	12	ALA	2.8
20	C8	39	GLY	2.8
22	D0	65	ILE	2.8
63	n7	64	LYS	2.8
24	D2	7	LEU	2.8
63	n7	135	ARG	2.8
19	C7	13	SER	2.8
1	6	239	C	2.8
1	2	1199	G	2.8
19	C7	10	LYS	2.8
20	C8	103	ASN	2.8
36	1	1254	C	2.8
81	e1	93	HIS	2.8
70	O4	24	LYS	2.8
3	S1	96	LEU	2.8
34	SR	238	ASP	2.8
34	SR	292	LEU	2.8
35	sM	28	SER	2.8
21	C9	83	ALA	2.8
19	C7	123	ASN	2.8
34	SR	92	TRP	2.8
42	L5	145	PHE	2.8
42	L5	148	ILE	2.8
8	s6	131	LYS	2.8
46	L9	3	TYR	2.8
3	s1	47	LEU	2.8
3	s1	104	ASP	2.8
17	C5	96	ILE	2.8
57	N1	27	LEU	2.8
11	s9	135	ALA	2.8
21	C9	62	ALA	2.8
63	n7	53	VAL	2.8
3	s1	140	ILE	2.8
4	s2	119	LYS	2.8
28	d6	19	LYS	2.8
36	1	1764	U	2.8
62	n6	116	LYS	2.8
66	o0	66	LYS	2.8
3	s1	100	PHE	2.8
18	C6	16	ALA	2.8
58	n2	106	ALA	2.8
48	m1	47	GLN	2.8

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Mol	Chain	Res	Type	RSRZ
20	C8	2	SER	2.8
26	D4	69	SER	2.8
26	d4	27	VAL	2.8
34	SR	103	PHE	2.8
48	M1	138	VAL	2.8
1	2	641	G	2.8
3	s1	63	GLY	2.8
61	n5	60	TYR	2.8
63	n7	83	THR	2.8
10	S8	173	PRO	2.8
14	c2	21	GLU	2.8
27	D5	77	ARG	2.8
20	c8	14	ILE	2.8
51	m5	133	ILE	2.8
63	n7	82	PRO	2.8
1	2	272	U	2.7
61	n5	106	ASP	2.7
3	S1	142	PHE	2.7
24	D2	38	LEU	2.7
24	D2	105	THR	2.7
11	S9	174	ARG	2.7
35	SM	17	VAL	2.7
60	N4	72	SER	2.7
1	2	1312	A	2.7
19	C7	105	GLN	2.7
36	5	1491	A	2.7
36	1	2664	C	2.7
42	l5	151	GLN	2.7
18	c6	11	GLY	2.7
1	2	1601	G	2.7
7	S5	194	LEU	2.7
58	n2	108	TYR	2.7
20	C8	127	HIS	2.7
14	C2	80	ASN	2.7
12	c0	68	LEU	2.7
14	C2	79	ALA	2.7
8	S6	86	PRO	2.7
32	E0	33	ARG	2.7
63	N7	12	VAL	2.7
1	2	399	A	2.7
1	2	1166	A	2.7
1	6	731	C	2.7

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Mol	Chain	Res	Type	RSRZ
8	S6	64	LYS	2.7
61	n5	97	LYS	2.7
9	S7	77	LEU	2.7
14	C2	86	VAL	2.7
70	O4	57	LEU	2.7
21	C9	123	ARG	2.7
34	SR	79	TYR	2.7
1	2	1473	U	2.7
6	s4	9	LEU	2.7
63	N7	74	VAL	2.7
42	L5	61	ILE	2.7
61	N5	81	ILE	2.7
10	s8	24	LYS	2.7
11	s9	136	VAL	2.7
36	1	1017	C	2.7
60	n4	68	ALA	2.7
62	n6	117	ALA	2.7
1	2	1521	G	2.7
36	1	1618	G	2.7
1	2	262	U	2.7
26	D4	39	GLU	2.7
60	n4	69	LYS	2.7
70	o4	93	PHE	2.7
6	S4	52	LEU	2.7
31	d9	36	LEU	2.7
58	n2	34	ALA	2.7
1	2	1391	A	2.7
11	s9	104	PHE	2.7
34	sR	61	PHE	2.7
58	n2	33	TYR	2.7
26	D4	116	LYS	2.7
27	D5	95	HIS	2.7
74	o8	74	LYS	2.7
16	c4	39	ILE	2.7
34	sR	92	TRP	2.7
1	6	722	G	2.7
1	6	727	U	2.7
35	sM	53	ARG	2.7
19	c7	54	THR	2.7
11	S9	34	PHE	2.7
42	L5	54	ARG	2.7
8	S6	145	PHE	2.7

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Mol	Chain	Res	Type	RSRZ
10	S8	28	GLU	2.7
11	S9	104	PHE	2.7
45	L8	89	GLU	2.7
48	M1	145	LYS	2.7
24	D2	53	ILE	2.7
39	L2	211	HIS	2.7
1	6	1285	U	2.7
1	6	1392	U	2.7
1	6	1398	U	2.7
20	C8	19	ASN	2.7
15	C3	107	LYS	2.7
19	c7	9	VAL	2.7
34	sR	281	TYR	2.7
36	1	2115	G	2.7
42	L5	5	LYS	2.7
51	m5	169	LYS	2.7
62	n6	120	GLN	2.7
4	S2	111	VAL	2.7
14	C2	122	VAL	2.7
34	SR	107	LYS	2.7
48	M1	96	PHE	2.7
51	m5	150	TRP	2.7
61	n5	118	GLY	2.7
6	S4	45	ILE	2.7
8	s6	149	LYS	2.7
14	c2	45	LEU	2.7
18	C6	26	LYS	2.7
34	sR	310	ILE	2.7
48	M1	116	TYR	2.7
48	M1	150	ASN	2.7
34	SR	54	PHE	2.7
1	2	1288	G	2.7
11	S9	72	GLU	2.7
22	d0	63	LEU	2.7
29	D7	33	LEU	2.7
51	M5	184	LYS	2.7
75	o9	51	ILE	2.7
70	O4	65	VAL	2.7
3	S1	47	LEU	2.7
11	s9	156	ILE	2.7
18	c6	14	LYS	2.7
31	d9	14	TYR	2.7

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Mol	Chain	Res	Type	RSRZ
26	d4	120	GLY	2.7
42	L5	160	PHE	2.7
45	L8	49	TYR	2.7
45	L8	162	LEU	2.7
48	M1	79	ILE	2.7
48	M1	167	TYR	2.7
61	N5	67	ILE	2.7
12	C0	94	GLU	2.7
18	c6	19	VAL	2.7
22	d0	83	GLU	2.7
18	C6	5	PRO	2.7
29	d7	51	GLN	2.7
51	M5	58	GLY	2.7
42	L5	15	ARG	2.7
49	m3	183	ARG	2.7
70	o4	31	ARG	2.7
1	2	514	G	2.7
1	6	488	G	2.7
10	S8	23	LYS	2.7
10	S8	183	ILE	2.7
24	D2	41	MET	2.7
26	D4	12	VAL	2.7
29	D7	73	LEU	2.7
35	sM	34	LYS	2.7
42	L5	55	PHE	2.7
74	o8	25	VAL	2.7
16	C4	32	ASP	2.7
42	l5	17	GLN	2.7
72	o6	62	ARG	2.7
75	o9	11	GLN	2.7
6	S4	110	ALA	2.7
20	C8	15	LEU	2.7
23	D1	36	VAL	2.7
32	E0	45	VAL	2.7
1	2	194	U	2.7
29	d7	66	PRO	2.7
18	c6	114	ARG	2.7
63	N7	15	ARG	2.7
15	c3	16	ILE	2.7
20	C8	28	ILE	2.7
51	m5	36	ILE	2.7
7	S5	91	GLU	2.7

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Mol	Chain	Res	Type	RSRZ
18	c6	142	TYR	2.7
66	o0	58	TYR	2.7
3	s1	217	LEU	2.7
26	D4	11	LYS	2.7
34	SR	216	LYS	2.7
35	SM	141	ALA	2.7
48	M1	80	LEU	2.7
1	2	1317	C	2.6
1	2	1604	U	2.6
34	SR	17	ASN	2.6
36	5	1628	C	2.6
9	S7	75	THR	2.6
51	m5	137	PRO	2.6
22	D0	22	ILE	2.6
24	D2	28	ARG	2.6
26	d4	28	LEU	2.6
51	m5	116	LEU	2.6
36	5	1261	G	2.6
27	d5	102	THR	2.6
48	M1	45	PRO	2.6
74	o8	52	TYR	2.6
2	S0	116	LYS	2.6
10	S8	43	ILE	2.6
14	C2	71	ILE	2.6
26	D4	74	LEU	2.6
68	o2	75	LEU	2.6
83	p0	221	ALA	2.6
21	C9	40	SER	2.6
63	N7	75	VAL	2.6
11	s9	5	PRO	2.6
65	n9	27	TYR	2.6
4	S2	208	GLU	2.6
26	D4	24	VAL	2.6
61	n5	126	LEU	2.6
63	N7	92	PHE	2.6
36	5	1593	A	2.6
1	6	709	C	2.6
29	D7	32	PHE	2.6
51	M5	183	THR	2.6
11	s9	4	ALA	2.6
34	sR	79	TYR	2.6
42	l5	179	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
53	M7	184	ALA	2.6
54	m8	101	VAL	2.6
70	O4	63	ALA	2.6
80	e0	33	ARG	2.6
81	e1	91	ILE	2.6
11	s9	86	LEU	2.6
29	D7	26	GLN	2.6
61	N5	94	GLN	2.6
72	o6	11	LEU	2.6
1	6	677	G	2.6
11	s9	7	THR	2.6
32	E0	30	PRO	2.6
36	1	1243	G	2.6
6	S4	191	ARG	2.6
10	S8	180	ASP	2.6
14	c2	132	GLU	2.6
27	D5	65	LEU	2.6
66	O0	58	TYR	2.6
1	2	133	U	2.6
12	C0	27	PHE	2.6
34	sR	302	PHE	2.6
63	N7	131	PHE	2.6
23	D1	34	ILE	2.6
33	E1	93	HIS	2.6
34	SR	71	CYS	2.6
42	L5	65	ILE	2.6
61	N5	95	ILE	2.6
6	S4	44	LEU	2.6
17	c5	116	LEU	2.6
19	C7	24	LEU	2.6
11	S9	112	GLN	2.6
63	N7	118	PHE	2.6
42	l5	153	THR	2.6
14	c2	90	LYS	2.6
16	c4	33	LEU	2.6
17	C5	114	HIS	2.6
20	C8	13	HIS	2.6
35	sM	46	LYS	2.6
60	n4	67	VAL	2.6
83	p0	213	PHE	2.6
36	5	1259	A	2.6
11	S9	103	ASP	2.6

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Mol	Chain	Res	Type	RSRZ
34	SR	272	ASP	2.6
11	s9	128	LEU	2.6
31	D9	14	TYR	2.6
57	n1	110	LYS	2.6
14	c2	34	THR	2.6
71	o5	93	THR	2.6
13	C1	140	VAL	2.6
1	6	663	U	2.6
7	s5	84	LYS	2.6
15	C3	70	LYS	2.6
22	d0	57	ARG	2.6
55	M9	177	VAL	2.6
67	O1	92	TYR	2.6
1	2	1389	C	2.6
17	C5	111	MET	2.6
19	C7	68	GLY	2.6
28	d6	18	VAL	2.6
34	SR	289	ALA	2.6
34	SR	303	ALA	2.6
61	n5	62	VAL	2.6
48	M1	140	ARG	2.6
63	N7	87	LEU	2.6
4	s2	59	HIS	2.6
28	D6	30	ILE	2.6
42	L5	272	TYR	2.6
2	S0	99	ALA	2.6
11	s9	2	PRO	2.6
22	d0	121	ASN	2.6
65	N9	54	LEU	2.6
1	2	260	U	2.6
1	2	640	U	2.6
48	M1	147	THR	2.6
63	n7	101	PHE	2.6
20	c8	12	GLN	2.6
66	o0	42	ILE	2.6
8	S6	143	LYS	2.6
51	m5	51	LEU	2.6
70	O4	7	PHE	2.6
83	p0	28	VAL	2.6
19	c7	13	SER	2.6
36	1	1751	G	2.6
48	M1	102	PHE	2.6

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Mol	Chain	Res	Type	RSRZ
13	C1	26	LYS	2.6
24	D2	109	GLY	2.6
83	p0	19	LEU	2.6
36	1	550	A	2.6
26	D4	29	HIS	2.6
51	M5	178	HIS	2.6
51	m5	3	ALA	2.6
57	n1	34	TYR	2.6
63	n7	37	PRO	2.6
66	O0	105	ALA	2.6
5	S3	140	GLY	2.6
76	Q0	111	ARG	2.6
14	C2	56	GLU	2.6
51	m5	142	ILE	2.6
10	s8	25	ARG	2.6
11	s9	107	ARG	2.6
32	E0	31	LYS	2.6
33	E1	97	LYS	2.6
70	O4	37	LYS	2.6
34	SR	55	GLY	2.6
35	SM	22	PRO	2.6
8	S6	176	GLN	2.6
10	S8	58	LEU	2.6
11	s9	8	TYR	2.6
45	L8	214	LEU	2.6
55	m9	7	GLN	2.6
4	S2	141	ARG	2.6
10	S8	104	ILE	2.6
22	D0	79	TRP	2.6
26	D4	58	PHE	2.6
34	SR	302	PHE	2.6
14	C2	40	GLY	2.6
51	m5	39	ALA	2.6
72	o6	69	ALA	2.6
18	C6	44	LEU	2.6
26	d4	26	ASP	2.5
34	SR	89	LEU	2.6
51	m5	175	ASN	2.6
1	2	1540	G	2.5
7	S5	112	ARG	2.5
70	o4	34	HIS	2.6
11	S9	45	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
11	S9	101	VAL	2.5
24	D2	121	VAL	2.5
42	L5	144	VAL	2.5
11	S9	142	ASN	2.5
29	D7	68	GLY	2.5
6	S4	47	PHE	2.5
11	s9	6	ARG	2.5
14	C2	75	VAL	2.5
27	d5	37	GLN	2.5
20	C8	72	ILE	2.5
28	d6	3	LYS	2.5
35	sM	30	THR	2.5
70	O4	54	ILE	2.5
2	S0	109	ASN	2.5
15	C3	15	ALA	2.5
20	C8	21	ASN	2.5
1	2	242	U	2.5
9	S7	154	LEU	2.5
24	D2	128	PHE	2.5
45	l8	152	LEU	2.5
51	m5	199	LEU	2.5
63	N7	47	GLU	2.5
15	C3	141	TYR	2.5
18	C6	30	LYS	2.5
29	d7	31	TYR	2.5
42	L5	28	THR	2.5
77	Q1	4	LYS	2.5
81	e1	81	LYS	2.5
83	p0	81	LYS	2.5
8	S6	135	PRO	2.5
34	SR	293	ALA	2.5
34	SR	5	GLU	2.5
62	n6	104	LEU	2.5
10	S8	49	ARG	2.5
10	S8	175	GLN	2.5
34	SR	258	THR	2.5
58	N2	33	TYR	2.5
78	q2	91	PHE	2.5
19	C7	70	SER	2.5
42	l5	236	LEU	2.5
31	D9	44	ARG	2.5
47	M0	112	GLN	2.5

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Mol	Chain	Res	Type	RSRZ
63	N7	27	LYS	2.5
66	o0	35	ARG	2.5
74	O8	39	ARG	2.5
36	1	2687	G	2.5
48	M1	69	VAL	2.5
63	N7	26	VAL	2.5
1	2	489	C	2.5
10	S8	189	LEU	2.5
11	S9	80	LEU	2.5
35	SM	29	ASN	2.5
10	s8	56	ARG	2.5
11	S9	179	ARG	2.5
48	m1	141	ARG	2.5
75	o9	13	MET	2.5
1	6	843	U	2.5
1	6	1390	U	2.5
8	s6	145	PHE	2.5
31	D9	52	PHE	2.5
8	S6	51	LYS	2.5
51	M5	142	ILE	2.5
5	S3	189	MET	2.5
51	m5	147	ARG	2.5
7	S5	103	ASN	2.5
8	S6	62	PRO	2.5
7	s5	93	LEU	2.5
9	S7	153	LEU	2.5
16	C4	98	GLY	2.5
18	C6	15	SER	2.5
64	N8	110	GLY	2.5
1	6	393	C	2.5
8	S6	137	ARG	2.5
18	C6	45	ARG	2.5
34	SR	38	ARG	2.5
5	s3	150	MET	2.5
42	L5	7	ALA	2.5
72	o6	90	MET	2.5
1	2	56	U	2.5
9	S7	91	ILE	2.5
10	S8	184	LEU	2.5
65	n9	54	LEU	2.5
16	C4	92	LYS	2.5
28	d6	22	ARG	2.5

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Mol	Chain	Res	Type	RSRZ
60	N4	71	ARG	2.5
62	n6	63	LYS	2.5
63	N7	16	GLY	2.5
64	n8	128	ARG	2.5
36	1	1529	A	2.5
36	5	1571	A	2.5
45	l8	139	VAL	2.5
54	m8	140	LEU	2.5
1	6	724	C	2.5
34	SR	45	TRP	2.5
36	1	1597	C	2.5
34	SR	236	ALA	2.5
48	M1	123	PHE	2.5
74	o8	44	LYS	2.5
11	S9	48	GLN	2.5
1	2	395	U	2.5
36	1	1862	U	2.5
61	N5	110	VAL	2.5
5	S3	157	LEU	2.5
9	S7	135	ILE	2.5
61	n5	123	TYR	2.5
14	C2	140	PHE	2.5
34	SR	62	LYS	2.5
34	SR	256	THR	2.5
7	S5	81	ARG	2.5
7	s5	151	GLY	2.5
15	C3	60	VAL	2.5
22	d0	80	GLU	2.5
54	M8	74	GLU	2.5
63	N7	93	LYS	2.5
24	D2	3	ARG	2.5
51	M5	114	ARG	2.5
18	c6	139	GLN	2.5
6	S4	173	ILE	2.5
14	C2	49	THR	2.5
18	C6	105	LEU	2.5
51	m5	62	TYR	2.5
1	2	1158	C	2.5
1	6	1216	C	2.5
8	s6	95	LYS	2.5
8	s6	174	LYS	2.5
12	C0	38	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
20	C8	25	ASN	2.5
3	S1	26	ARG	2.5
10	s8	8	ARG	2.5
14	c2	27	ALA	2.5
48	m1	49	LYS	2.5
56	N0	71	LYS	2.5
63	N7	73	LYS	2.5
78	q2	9	LYS	2.5
32	E0	37	ARG	2.5
58	n2	97	SER	2.5
1	2	1314	U	2.5
9	S7	98	ILE	2.5
24	D2	14	ILE	2.5
29	D7	67	THR	2.5
34	SR	136	ILE	2.5
45	L8	67	ILE	2.5
51	m5	15	GLN	2.5
63	N7	70	PRO	2.5
62	n6	74	TYR	2.5
3	s1	214	LYS	2.5
6	S4	128	LYS	2.5
20	c8	16	ARG	2.5
57	n1	94	GLU	2.5
70	o4	16	ARG	2.5
2	S0	97	PRO	2.5
20	c8	136	GLN	2.5
1	2	426	G	2.5
1	2	492	A	2.5
1	6	655	G	2.5
2	S0	158	VAL	2.5
3	s1	204	ILE	2.5
63	N7	130	PHE	2.5
10	s8	50	GLY	2.5
12	c0	42	VAL	2.5
31	d9	15	GLY	2.5
1	2	870	C	2.5
35	SM	34	LYS	2.5
65	N9	56	ALA	2.5
74	O8	2	ALA	2.5
1	2	64	U	2.5
11	S9	102	GLU	2.5
17	C5	110	GLU	2.5

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Mol	Chain	Res	Type	RSRZ
34	SR	14	GLU	2.5
36	5	1258	U	2.5
3	S1	102	GLY	2.5
10	S8	30	GLY	2.5
11	S9	128	LEU	2.5
12	C0	2	LEU	2.5
16	C4	31	THR	2.5
20	c8	100	THR	2.5
61	N5	57	LEU	2.5
57	N1	32	LYS	2.5
72	o6	84	LYS	2.5
78	Q2	100	LYS	2.5
48	M1	133	ARG	2.5
51	M5	143	ARG	2.5
4	S2	154	LEU	2.5
45	L8	153	ILE	2.5
63	n7	128	GLN	2.5
66	O0	43	ILE	2.5
29	d7	52	THR	2.5
5	s3	151	LYS	2.5
30	D8	44	VAL	2.5
36	1	2531	C	2.5
48	M1	16	LYS	2.5
55	m9	52	LYS	2.5
65	n9	59	LYS	2.5
6	S4	70	VAL	2.5
60	N4	93	ARG	2.5
71	O5	48	ARG	2.5
18	C6	8	GLN	2.5
53	M7	172	GLN	2.5
63	N7	134	LEU	2.5
3	s1	88	VAL	2.5
4	s2	86	VAL	2.5
11	s9	10	LYS	2.5
81	e1	98	VAL	2.5
3	s1	87	ARG	2.5
9	S7	78	THR	2.5
19	c7	28	PHE	2.5
22	d0	96	PRO	2.5
34	sR	89	LEU	2.5
36	5	1580	A	2.5
42	l5	150	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
61	n5	113	LEU	2.5
1	6	1229	G	2.5
15	C3	57	ALA	2.5
1	2	653	C	2.5
1	6	719	U	2.5
10	S8	51	GLY	2.5
51	M5	177	GLY	2.5
70	O4	19	LYS	2.5
9	S7	183	PHE	2.5
49	M3	182	ILE	2.5
11	S9	41	GLU	2.4
28	D6	71	LEU	2.4
57	n1	91	LEU	2.4
8	S6	97	VAL	2.4
10	s8	20	GLN	2.4
21	C9	85	SER	2.4
18	C6	123	ARG	2.4
51	M5	61	ILE	2.4
51	m5	63	ARG	2.4
3	S1	28	GLU	2.4
34	SR	82	SER	2.4
11	s9	32	GLY	2.4
12	C0	93	GLN	2.4
31	D9	20	GLN	2.4
46	L9	9	GLN	2.4
1	6	177	U	2.4
34	sR	278	PHE	2.4
11	s9	108	ARG	2.4
4	s2	117	THR	2.4
10	s8	29	LEU	2.4
20	C8	29	VAL	2.4
31	D9	13	ARG	2.4
42	L5	146	LEU	2.4
67	O1	20	LEU	2.4
10	S8	44	HIS	2.4
14	c2	124	LYS	2.4
29	D7	53	ALA	2.4
57	N1	21	LYS	2.4
61	N5	43	ALA	2.4
70	o4	2	ALA	2.4
15	C3	92	ILE	2.4
20	c8	22	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
20	c8	35	ILE	2.4
21	C9	8	ASP	2.4
45	L8	68	ARG	2.4
48	M1	48	SER	2.4
6	S4	23	LEU	2.4
7	S5	193	THR	2.4
19	C7	55	THR	2.4
55	M9	78	TYR	2.4
10	S8	66	SER	2.4
21	C9	5	SER	2.4
31	D9	43	PHE	2.4
36	1	1240	A	2.4
42	L5	157	ALA	2.4
51	m5	184	LYS	2.4
1	2	1370	U	2.4
11	s9	12	TYR	2.4
12	c0	44	LYS	2.4
14	c2	35	ALA	2.4
57	N1	160	ILE	2.4
7	S5	151	GLY	2.4
12	c0	41	TYR	2.4
31	d9	34	TYR	2.4
57	N1	34	TYR	2.4
72	O6	77	LEU	2.4
8	s6	116	LYS	2.4
17	c5	52	LYS	2.4
45	l8	102	ALA	2.4
36	1	1237	G	2.4
36	1	2258	U	2.4
36	1	2504	U	2.4
63	N7	126	LYS	2.4
4	S2	90	THR	2.4
8	s6	196	ARG	2.4
51	m5	130	PHE	2.4
6	S4	138	TYR	2.4
34	SR	251	TRP	2.4
34	sR	134	TRP	2.4
41	l4	187	LEU	2.4
4	s2	92	ALA	2.4
16	C4	17	ALA	2.4
51	M5	60	VAL	2.4
20	c8	106	GLU	2.4

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Mol	Chain	Res	Type	RSRZ
51	m5	174	ILE	2.4
66	O0	42	ILE	2.4
2	S0	101	ARG	2.4
19	C7	78	ARG	2.4
51	m5	49	ARG	2.4
61	n5	31	THR	2.4
63	N7	80	LEU	2.4
65	N9	55	ALA	2.4
10	S8	185	GLU	2.4
28	D6	19	LYS	2.4
36	5	246	U	2.4
39	L2	248	GLY	2.4
74	o8	27	ILE	2.4
14	c2	78	LEU	2.4
16	C4	132	ARG	2.4
42	L5	173	VAL	2.4
70	O4	58	ARG	2.4
74	o8	24	THR	2.4
11	S9	177	ALA	2.4
20	C8	119	ILE	2.4
81	e1	78	LYS	2.4
6	s4	148	ARG	2.4
45	L8	84	ARG	2.4
74	o8	73	LEU	2.4
1	2	483	A	2.4
2	S0	166	GLY	2.4
7	S5	137	ILE	2.4
36	5	747	A	2.4
36	5	1572	U	2.4
65	n9	29	TYR	2.4
20	C8	70	VAL	2.4
60	n4	76	VAL	2.4
65	n9	58	LYS	2.4
70	O4	29	ILE	2.4
1	2	696	C	2.4
1	2	716	C	2.4
1	6	1215	C	2.4
30	D8	5	THR	2.4
11	s9	129	ILE	2.4
12	C0	3	MET	2.4
20	C8	27	LYS	2.4
29	d7	72	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
3	s1	213	ARG	2.4
34	SR	252	LEU	2.4
35	SM	21	PRO	2.4
61	N5	42	ARG	2.4
72	o6	41	ARG	2.4
34	SR	20	VAL	2.4
56	n0	2	ALA	2.4
20	C8	42	TYR	2.4
48	M1	75	LYS	2.4
63	N7	49	TYR	2.4
3	s1	61	LEU	2.4
71	O5	96	GLU	2.4
26	d4	135	ASP	2.4
34	SR	290	VAL	2.4
36	1	1037	C	2.4
17	C5	101	ALA	2.4
3	S1	214	LYS	2.4
42	L5	88	ILE	2.4
14	C2	67	THR	2.4
50	M4	37	GLU	2.4
4	s2	85	PRO	2.4
34	sR	38	ARG	2.4
48	M1	92	ARG	2.4
58	n2	17	VAL	2.4
72	O6	11	LEU	2.4
1	2	58	U	2.4
63	N7	4	PHE	2.4
13	C1	24	LYS	2.4
42	l5	275	THR	2.4
51	m5	52	GLY	2.4
61	n5	103	TYR	2.4
42	l5	277	LEU	2.4
48	M1	15	GLU	2.4
63	n7	20	GLY	2.4
3	s1	73	LEU	2.4
5	s3	142	LEU	2.4
10	S8	47	ARG	2.4
11	S9	38	ASN	2.4
13	C1	146	ALA	2.4
14	c2	42	ALA	2.4
15	C3	7	ALA	2.4
42	l5	274	GLN	2.4

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Mol	Chain	Res	Type	RSRZ
45	l8	196	ALA	2.4
34	SR	46	LYS	2.4
3	s1	138	PHE	2.4
7	s5	83	ARG	2.4
11	S9	97	LEU	2.4
51	m5	136	ASP	2.4
63	N7	2	ALA	2.4
63	n7	92	PHE	2.4
13	C1	14	GLN	2.4
27	d5	89	ILE	2.4
42	L5	63	GLN	2.4
45	l8	237	ILE	2.4
36	1	2502	A	2.4
42	L5	26	GLY	2.4
55	m9	18	GLY	2.4
10	s8	44	HIS	2.4
10	s8	78	ILE	2.4
14	c2	116	VAL	2.4
35	sM	32	SER	2.4
28	D6	16	GLY	2.4
19	C7	25	THR	2.4
78	q2	24	LYS	2.4
6	s4	12	LEU	2.4
20	c8	66	LEU	2.4
28	D6	8	ASN	2.4
48	M1	128	TYR	2.4
51	M5	182	ASN	2.4
1	2	864	U	2.4
1	6	194	U	2.4
1	6	959	U	2.4
6	s4	248	ILE	2.4
10	s8	49	ARG	2.4
11	S9	44	ARG	2.4
36	1	3275	U	2.4
36	5	1033	U	2.4
48	M1	125	MET	2.4
11	s9	142	ASN	2.3
11	S9	133	HIS	2.3
1	2	491	C	2.3
4	S2	139	ILE	2.3
14	c2	24	ILE	2.3
14	c2	82	PRO	2.3

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Mol	Chain	Res	Type	RSRZ
4	s2	98	PHE	2.3
5	S3	214	GLU	2.3
6	s4	27	TYR	2.3
10	S8	196	LEU	2.3
62	N6	31	LEU	2.3
67	O1	71	LEU	2.3
7	S5	197	GLU	2.3
8	s6	158	ILE	2.3
32	E0	32	GLY	2.3
34	sR	15	GLY	2.3
61	n5	98	ALA	2.3
62	N6	33	ALA	2.3
70	o4	9	ARG	2.3
5	S3	133	GLY	2.3
1	2	231	U	2.3
1	2	896	U	2.3
26	D4	13	ILE	2.3
34	SR	64	HIS	2.3
43	L6	129	GLU	2.3
46	L9	53	ILE	2.3
17	c5	80	MET	2.3
1	2	512	A	2.3
6	S4	129	VAL	2.3
14	C2	32	LEU	2.3
7	S5	218	GLU	2.3
36	1	1196	C	2.3
36	5	1257	C	2.3
11	S9	139	GLN	2.3
18	C6	17	THR	2.3
62	N6	26	GLN	2.3
6	s4	84	ALA	2.3
11	S9	143	ILE	2.3
10	S8	110	ARG	2.3
42	L5	6	ASP	2.3
55	M9	22	VAL	2.3
66	O0	23	TYR	2.3
81	e1	106	TYR	2.3
83	p0	41	VAL	2.3
30	D8	14	LYS	2.3
78	q2	85	LEU	2.3
26	D4	48	TYR	2.3
62	n6	16	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
74	o8	39	ARG	2.3
55	m9	75	HIS	2.3
63	N7	101	PHE	2.3
83	p0	11	TYR	2.3
9	S7	74	GLN	2.3
8	S6	141	ILE	2.3
35	SM	18	VAL	2.3
58	n2	38	ILE	2.3
70	O4	20	ILE	2.3
1	2	533	U	2.3
1	2	1557	U	2.3
1	6	1247	U	2.3
83	p0	27	VAL	2.3
42	L5	23	ARG	2.3
62	n6	51	ARG	2.3
6	S4	112	HIS	2.3
10	S8	169	ILE	2.3
42	L5	190	ILE	2.3
45	l8	136	LEU	2.3
60	n4	82	ILE	2.3
78	Q2	38	GLN	2.3
22	d0	89	ARG	2.3
34	SR	263	PHE	2.3
10	S8	171	SER	2.3
17	C5	92	SER	2.3
10	s8	43	ILE	2.3
13	C1	66	ILE	2.3
21	C9	104	VAL	2.3
5	S3	86	LEU	2.3
27	d5	50	ILE	2.3
34	SR	313	TRP	2.3
36	1	1524	A	2.3
51	m5	48	ALA	2.3
55	m9	183	ALA	2.3
83	p0	63	ILE	2.3
4	s2	62	PRO	2.3
1	6	674	C	2.3
2	S0	38	PHE	2.3
3	s1	122	GLU	2.3
6	S4	149	TYR	2.3
6	s4	138	TYR	2.3
31	d9	46	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
35	SM	33	LYS	2.3
20	c8	3	LEU	2.3
42	L5	30	TYR	2.3
1	6	665	U	2.3
1	6	1316	G	2.3
1	6	1758	U	2.3
36	5	2771	U	2.3
54	m8	102	ALA	2.3
7	s5	92	ARG	2.3
10	S8	172	ARG	2.3
51	M5	135	VAL	2.3
83	p0	101	VAL	2.3
29	d7	82	LYS	2.3
1	2	387	A	2.3
24	D2	10	ALA	2.3
63	N7	91	ALA	2.3
55	M9	118	HIS	2.3
3	s1	165	ARG	2.3
16	C4	86	THR	2.3
19	C7	47	ARG	2.3
36	1	544	C	2.3
36	1	2772	C	2.3
51	m5	144	ARG	2.3
14	C2	76	GLU	2.3
1	2	1416	G	2.3
7	S5	79	ASN	2.3
9	S7	94	ALA	2.3
46	L9	144	ILE	2.3
66	o0	23	TYR	2.3
42	L5	175	HIS	2.3
22	d0	68	ARG	2.3
6	S4	66	MET	2.3
10	s8	60	ILE	2.3
2	S0	39	ASN	2.3
4	s2	82	ASN	2.3
11	S9	178	ALA	2.3
16	C4	22	SER	2.3
30	D8	28	VAL	2.3
46	L9	126	VAL	2.3
47	M0	33	ILE	2.3
55	m9	19	LYS	2.3
19	C7	51	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
48	M1	91	LEU	2.3
42	L5	154	THR	2.3
1	6	654	C	2.3
55	M9	62	ARG	2.3
11	S9	10	LYS	2.3
55	m9	50	ILE	2.3
61	n5	111	ASN	2.3
1	2	240	U	2.3
14	c2	56	GLU	2.3
36	5	3064	U	2.3
42	L5	186	GLU	2.3
61	n5	101	GLU	2.3
1	2	496	G	2.3
1	6	1713	G	2.3
22	d0	14	GLN	2.3
12	c0	20	VAL	2.3
14	c2	32	LEU	2.3
14	c2	136	ILE	2.3
24	D2	62	VAL	2.3
35	SM	49	LYS	2.3
42	L5	158	ARG	2.3
48	M1	68	HIS	2.3
63	n7	66	THR	2.3
74	o8	22	THR	2.3
17	C5	56	PHE	2.3
20	C8	3	LEU	2.3
21	C9	132	LEU	2.3
34	sR	214	ALA	2.3
47	M0	196	PHE	2.3
36	1	1804	A	2.3
36	1	2686	A	2.3
36	5	266	A	2.3
36	5	1103	A	2.3
64	n8	109	TYR	2.3
80	e0	40	TYR	2.3
1	2	1581	C	2.3
7	S5	172	ILE	2.3
8	s6	164	LYS	2.3
18	c6	29	ILE	2.3
34	SR	61	PHE	2.3
63	n7	67	LYS	2.3
64	n8	126	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
36	1	1523	U	2.3
34	sR	290	VAL	2.3
51	m5	9	GLU	2.3
8	s6	189	HIS	2.3
11	s9	30	LEU	2.3
56	N0	110	MET	2.3
57	N1	19	PHE	2.3
63	n7	8	GLY	2.3
6	S4	62	LYS	2.3
6	S4	77	ARG	2.3
13	C1	69	LYS	2.3
13	c1	94	ILE	2.3
20	c8	69	ILE	2.3
1	6	240	U	2.3
3	s1	181	LEU	2.3
4	S2	38	VAL	2.3
9	S7	93	LEU	2.3
73	o7	75	LYS	2.3
25	D3	102	VAL	2.3
11	S9	47	PHE	2.3
31	D9	29	GLY	2.3
61	n5	29	SER	2.3
48	M1	44	THR	2.3
81	e1	86	THR	2.3
1	6	1318	G	2.2
4	S2	133	LYS	2.2
5	s3	208	ILE	2.2
11	s9	3	ARG	2.2
6	S4	41	SER	2.2
6	S4	56	LEU	2.2
15	C3	76	LYS	2.2
20	c8	125	ILE	2.2
42	L5	33	ARG	2.2
1	2	1635	A	2.2
62	n6	50	ILE	2.2
10	s8	177	GLY	2.2
27	D5	94	LYS	2.2
64	N8	38	GLN	2.2
74	o8	11	PHE	2.2
15	C3	58	HIS	2.2
11	s9	111	THR	2.2
19	c7	50	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
36	5	1829	G	2.2
37	3	5	G	2.2
39	L2	73	GLU	2.2
83	p0	80	VAL	2.2
24	D2	36	LYS	2.2
44	L7	149	TYR	2.2
46	L9	191	LEU	2.2
47	M0	87	LEU	2.2
51	m5	166	ALA	2.2
63	n7	17	ARG	2.2
63	n7	77	TYR	2.2
65	n9	57	ALA	2.2
71	O5	32	LYS	2.2
2	S0	124	THR	2.2
19	C7	4	VAL	2.2
42	L5	38	THR	2.2
1	2	1468	U	2.2
4	S2	188	LEU	2.2
22	d0	102	ARG	2.2
36	5	1620	U	2.2
36	5	1644	C	2.2
48	m1	16	LYS	2.2
50	M4	62	GLN	2.2
61	n5	89	LYS	2.2
63	N7	7	ALA	2.2
66	O0	51	LEU	2.2
75	o9	10	LYS	2.2
3	s1	66	VAL	2.2
4	S2	178	ILE	2.2
17	C5	107	ILE	2.2
34	SR	66	HIS	2.2
34	sR	11	GLY	2.2
58	n2	107	PHE	2.2
4	S2	222	TYR	2.2
11	S9	79	ARG	2.2
11	S9	126	ARG	2.2
6	S4	61	VAL	2.2
24	D2	46	TYR	2.2
26	D4	33	ALA	2.2
34	sR	91	LEU	2.2
48	M1	156	LYS	2.2
49	m3	49	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
70	o4	58	ARG	2.2
72	o6	8	ALA	2.2
83	p0	107	ALA	2.2
51	M5	152	CYS	2.2
7	S5	211	ILE	2.2
20	c8	21	ASN	2.2
51	m5	151	ILE	2.2
51	m5	181	ASN	2.2
63	n7	36	HIS	2.2
6	s4	134	LYS	2.2
11	S9	182	GLU	2.2
12	c0	94	GLU	2.2
1	2	427	C	2.2
1	6	1317	C	2.2
7	S5	198	LEU	2.2
8	s6	171	LYS	2.2
10	S8	195	ARG	2.2
10	S8	20	GLN	2.2
10	S8	29	LEU	2.2
60	N4	65	GLU	2.2
14	c2	122	VAL	2.2
19	c7	4	VAL	2.2
22	d0	51	VAL	2.2
63	N7	42	LEU	2.2
70	O4	8	ARG	2.2
72	o6	25	LYS	2.2
51	M5	62	TYR	2.2
64	n8	64	GLN	2.2
2	S0	48	ILE	2.2
45	L8	90	THR	2.2
51	m5	177	GLY	2.2
6	S4	55	ALA	2.2
1	2	63	G	2.2
1	2	403	G	2.2
5	S3	89	GLU	2.2
12	c0	38	LYS	2.2
19	c7	12	ALA	2.2
42	L5	131	LEU	2.2
48	M1	64	LYS	2.2
51	m5	41	ARG	2.2
51	m5	47	LYS	2.2
61	N5	126	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
63	n7	7	ALA	2.2
66	O0	93	LEU	2.2
11	S9	12	TYR	2.2
4	s2	218	ILE	2.2
18	c6	9	THR	2.2
34	sR	313	TRP	2.2
78	q2	22	GLN	2.2
54	M8	155	MET	2.2
1	6	178	U	2.2
1	6	721	U	2.2
3	S1	138	PHE	2.2
7	s5	82	PHE	2.2
34	sR	312	VAL	2.2
55	M9	81	ARG	2.2
68	O2	24	ARG	2.2
70	O4	9	ARG	2.2
74	o8	14	LEU	2.2
2	S0	144	ILE	2.2
5	S3	50	ILE	2.2
31	D9	34	TYR	2.2
74	o8	53	THR	2.2
3	s1	205	PHE	2.2
61	N5	99	VAL	2.2
27	D5	99	ALA	2.2
74	O8	43	PHE	2.2
6	S4	134	LYS	2.2
11	s9	41	GLU	2.2
15	C3	51	GLY	2.2
20	C8	117	LYS	2.2
29	D7	19	HIS	2.2
46	L9	124	ARG	2.2
55	M9	75	HIS	2.2
57	N1	116	ARG	2.2
62	n6	121	ARG	2.2
19	C7	6	THR	2.2
36	1	2663	G	2.2
1	2	477	A	2.2
6	S4	5	PRO	2.2
6	S4	228	ILE	2.2
10	S8	3	ILE	2.2
34	sR	122	ILE	2.2
42	L5	62	CYS	2.2

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Mol	Chain	Res	Type	RSRZ
46	L9	179	ILE	2.2
70	o4	25	THR	2.2
58	n2	15	PHE	2.2
34	sR	279	ALA	2.2
6	S4	201	HIS	2.2
10	S8	194	ARG	2.2
13	C1	67	ARG	2.2
51	M5	181	ASN	2.2
57	N1	20	ARG	2.2
83	p0	103	ASN	2.2
34	SR	68	VAL	2.2
63	N7	83	THR	2.2
62	n6	43	TYR	2.2
63	N7	85	TYR	2.2
14	C2	94	ALA	2.2
21	C9	130	ARG	2.2
21	c9	92	LYS	2.2
24	D2	81	VAL	2.2
62	n6	14	LYS	2.2
70	O4	30	LEU	2.2
39	L2	36	GLU	2.2
83	p0	39	HIS	2.2
1	2	926	A	2.2
34	SR	18	GLY	2.2
3	s1	216	LYS	2.2
3	s1	218	LEU	2.2
15	C3	54	LEU	2.2
18	c6	127	LYS	2.2
29	D7	81	ARG	2.2
31	d9	13	ARG	2.2
34	SR	34	LEU	2.2
42	l5	34	LYS	2.2
51	m5	203	ARG	2.2
59	N3	25	CYS	2.2
62	n6	113	LYS	2.2
74	O8	3	ARG	2.2
21	C9	64	HIS	2.2
36	1	2685	C	2.2
3	s1	68	VAL	2.2
8	s6	134	GLY	2.2
11	S9	135	ALA	2.2
15	C3	40	TYR	2.2

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Mol	Chain	Res	Type	RSRZ
17	C5	17	TYR	2.2
20	C8	74	GLN	2.2
6	S4	133	LYS	2.2
20	c8	133	VAL	2.2
22	d0	58	LEU	2.2
55	M9	82	LYS	2.2
55	m9	51	VAL	2.2
20	c8	20	THR	2.2
1	2	1523	G	2.2
62	n6	119	ILE	2.2
4	s2	94	GLN	2.2
4	s2	118	ALA	2.2
6	S4	225	VAL	2.2
18	C6	92	TYR	2.2
27	D5	76	ALA	2.2
32	E0	35	TYR	2.2
42	L5	49	TYR	2.2
9	S7	81	LEU	2.2
1	2	490	C	2.2
7	S5	199	ILE	2.2
35	SM	9	GLY	2.2
48	M1	121	GLY	2.2
61	N5	142	ILE	2.2
61	n5	95	ILE	2.2
10	S8	82	VAL	2.2
16	c4	27	PHE	2.2
24	D2	39	GLN	2.2
26	d4	40	LEU	2.2
34	SR	144	LEU	2.2
61	N5	108	LEU	2.2
5	S3	184	ILE	2.2
14	c2	127	GLY	2.2
30	d8	18	ARG	2.2
1	2	958	U	2.2
1	2	1172	G	2.2
61	N5	116	PRO	2.2
83	p0	66	PHE	2.2
1	6	1391	A	2.2
70	O4	75	ALA	2.2
42	l5	12	TYR	2.2
42	l5	51	LEU	2.2
21	C9	63	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
28	d6	14	GLY	2.2
72	o6	56	ARG	2.2
4	S2	61	LEU	2.2
8	S6	119	GLN	2.2
10	s8	26	LYS	2.2
13	C1	71	LEU	2.2
22	d0	90	TYR	2.2
24	D2	130	TYR	2.2
39	L2	71	LEU	2.2
19	C7	19	ARG	2.2
26	d4	32	ARG	2.2
1	2	1328	G	2.2
1	2	1422	A	2.2
4	s2	249	ALA	2.2
11	s9	67	PRO	2.2
19	C7	77	GLU	2.2
26	D4	31	ASN	2.2
36	1	1801	U	2.2
36	1	2514	U	2.2
55	M9	66	HIS	2.2
61	n5	139	ILE	2.2
63	n7	34	LYS	2.2
74	O8	31	LEU	2.2
20	c8	132	ARG	2.2
22	D0	68	ARG	2.2
2	S0	139	VAL	2.1
12	c0	28	ASN	2.1
13	C1	64	VAL	2.1
15	C3	26	PHE	2.1
18	C6	75	VAL	2.1
20	C8	105	VAL	2.1
45	L8	197	VAL	2.1
70	O4	110	GLU	2.1
83	p0	33	VAL	2.1
2	S0	108	THR	2.1
10	s8	58	LEU	2.1
26	D4	118	ILE	2.1
28	D6	72	HIS	2.1
42	l5	273	ARG	2.1
48	M1	70	THR	2.1
8	S6	139	ASN	2.1
10	S8	145	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
36	1	1863	G	2.1
45	l8	107	GLU	2.1
27	d5	38	HIS	2.1
40	L3	50	LYS	2.1
7	s5	156	ARG	2.1
28	D6	85	ARG	2.1
63	n7	40	HIS	2.1
1	2	1192	C	2.1
11	s9	144	PRO	2.1
72	o6	87	VAL	2.1
31	d9	29	GLY	2.1
10	S8	26	LYS	2.1
13	C1	61	THR	2.1
18	C6	70	THR	2.1
22	d0	20	ILE	2.1
26	D4	3	ASP	2.1
30	D8	16	LEU	2.1
42	L5	29	ASP	2.1
48	M1	30	LEU	2.1
8	S6	114	VAL	2.1
10	s8	172	ARG	2.1
18	c6	137	ARG	2.1
21	C9	66	TYR	2.1
27	D5	40	VAL	2.1
28	d6	92	ARG	2.1
48	M1	132	ASN	2.1
61	N5	46	TYR	2.1
83	p0	64	ARG	2.1
36	5	748	U	2.1
1	2	1586	A	2.1
14	C2	136	ILE	2.1
18	C6	40	GLU	2.1
34	SR	52	GLN	2.1
45	L8	133	LYS	2.1
49	m3	185	LYS	2.1
55	M9	59	SER	2.1
3	s1	101	HIS	2.1
14	c2	137	MET	2.1
36	5	749	C	2.1
8	S6	140	ASN	2.1
20	c8	128	PHE	2.1
30	d8	48	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
31	d9	38	ILE	2.1
66	o0	93	LEU	2.1
78	q2	6	LYS	2.1
1	2	77	U	2.1
4	S2	110	HIS	2.1
8	S6	63	MET	2.1
12	c0	61	TRP	2.1
14	C2	51	ALA	2.1
63	n7	85	TYR	2.1
1	2	55	A	2.1
4	s2	63	VAL	2.1
4	s2	64	LYS	2.1
6	S4	64	ILE	2.1
22	d0	22	ILE	2.1
34	SR	104	VAL	2.1
39	L2	252	THR	2.1
56	N0	94	ILE	2.1
9	S7	108	GLN	2.1
34	SR	65	SER	2.1
2	S0	126	PRO	2.1
28	D6	2	PRO	2.1
29	d7	71	ALA	2.1
58	N2	83	TYR	2.1
74	O8	38	PHE	2.1
19	c7	24	LEU	2.1
24	D2	75	ILE	2.1
35	SM	25	ILE	2.1
28	d6	32	LYS	2.1
48	M1	155	THR	2.1
55	m9	24	LEU	2.1
66	o0	22	LYS	2.1
6	S4	136	VAL	2.1
10	S8	160	PHE	2.1
19	C7	29	GLN	2.1
34	sR	181	TRP	2.1
38	4	38	U	2.1
39	L2	70	ARG	2.1
34	sR	114	ASP	2.1
42	l5	7	ALA	2.1
45	L8	45	ASN	2.1
63	N7	136	PHE	2.1
63	n7	43	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
19	c7	21	TYR	2.1
1	6	1401	A	2.1
3	S1	27	LYS	2.1
12	c0	40	LEU	2.1
14	c2	130	THR	2.1
20	c8	127	HIS	2.1
42	l5	148	ILE	2.1
58	N2	76	LEU	2.1
72	o6	58	ILE	2.1
3	S1	29	TRP	2.1
5	s3	138	VAL	2.1
8	s6	9	VAL	2.1
70	O4	23	VAL	2.1
12	C0	4	PRO	2.1
1	2	686	C	2.1
11	s9	118	LEU	2.1
18	c6	92	TYR	2.1
20	C8	20	THR	2.1
45	L8	179	ILE	2.1
51	m5	61	ILE	2.1
55	m9	78	TYR	2.1
4	S2	224	PHE	2.1
9	S7	17	GLU	2.1
11	S9	96	VAL	2.1
20	C8	47	CYS	2.1
21	C9	119	LYS	2.1
48	m1	64	LYS	2.1
58	n2	55	THR	2.1
63	n7	122	HIS	2.1
31	d9	37	ASN	2.1
55	M9	51	VAL	2.1
58	n2	92	TRP	2.1
3	s1	141	ALA	2.1
22	D0	92	ASP	2.1
36	5	1645	U	2.1
38	8	143	U	2.1
72	o6	70	ARG	2.1
46	L9	85	GLY	2.1
32	E0	44	PHE	2.1
55	m9	66	HIS	2.1
72	o6	50	LEU	2.1
12	C0	1	MET	2.1

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Mol	Chain	Res	Type	RSRZ
24	D2	32	LYS	2.1
71	o5	94	LYS	2.1
74	o8	21	LYS	2.1
1	2	396	G	2.1
6	s4	255	ARG	2.1
7	s5	71	ALA	2.1
10	S8	99	ALA	2.1
11	s9	153	GLU	2.1
13	c1	101	GLU	2.1
31	D9	56	ARG	2.1
36	5	1576	G	2.1
55	m9	26	PRO	2.1
59	N3	32	ARG	2.1
1	2	268	C	2.1
31	D9	36	LEU	2.1
50	M4	39	ILE	2.1
70	o4	29	ILE	2.1
72	O6	61	ILE	2.1
15	c3	90	TYR	2.1
34	SR	19	TRP	2.1
46	L9	122	LYS	2.1
76	Q0	112	LYS	2.1
1	2	1579	U	2.1
10	S8	61	GLU	2.1
14	c2	92	ALA	2.1
30	D8	67	ARG	2.1
61	N5	125	ARG	2.1
11	s9	130	THR	2.1
19	c7	41	ILE	2.1
71	o5	76	GLN	2.1
8	s6	7	TYR	2.1
15	C3	93	LYS	2.1
36	1	2259	A	2.1
61	N5	109	LYS	2.1
6	s4	259	GLN	2.1
11	S9	130	THR	2.1
36	5	2684	C	2.1
42	L5	51	LEU	2.1
70	O4	52	GLN	2.1
8	S6	50	PHE	2.1
24	D2	5	SER	2.1
34	SR	304	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
42	L5	226	TYR	2.1
47	M0	198	LYS	2.1
51	m5	4	TYR	2.1
60	n4	132	GLY	2.1
74	o8	26	LYS	2.1
75	o9	12	LYS	2.1
10	S8	157	GLU	2.1
11	s9	31	ALA	2.1
11	s9	85	VAL	2.1
13	C1	139	VAL	2.1
14	c2	121	VAL	2.1
17	c5	118	GLU	2.1
26	D4	30	PRO	2.1
34	sR	123	ILE	2.1
54	M8	139	ILE	2.1
63	N7	82	PRO	2.1
70	o4	59	PRO	2.1
20	C8	116	LEU	2.1
36	5	3077	A	2.1
18	C6	19	VAL	2.1
51	M5	54	LYS	2.1
56	N0	31	ALA	2.1
72	o6	53	TYR	2.1
1	6	127	G	2.1
11	s9	62	ARG	2.1
17	C5	87	PRO	2.1
39	L2	209	HIS	2.1
1	2	233	C	2.1
1	6	489	C	2.1
1	6	1399	C	2.1
8	s6	146	GLY	2.1
15	C3	53	LEU	2.1
36	1	1284	C	2.1
36	1	2771	U	2.1
60	N4	91	LYS	2.1
72	o6	71	LYS	2.1
42	L5	129	TYR	2.1
61	N5	141	TYR	2.1
10	S8	78	ILE	2.1
3	s1	126	THR	2.1
13	C1	59	PRO	2.1
20	c8	122	HIS	2.1

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Mol	Chain	Res	Type	RSRZ
51	m5	99	ARG	2.1
3	s1	166	LYS	2.1
7	S5	212	LYS	2.1
11	S9	110	GLN	2.1
18	C6	52	LEU	2.1
24	D2	11	LEU	2.1
28	D6	18	VAL	2.1
51	m5	10	LEU	2.1
13	C1	15	LYS	2.1
16	c4	47	LYS	2.1
19	c7	49	LYS	2.1
33	E1	96	LYS	2.1
60	N4	97	LYS	2.1
61	n5	94	GLN	2.1
70	o4	32	ALA	2.1
1	2	802	G	2.1
1	6	1616	G	2.1
7	s5	102	ARG	2.1
8	s6	163	THR	2.1
8	s6	215	ARG	2.1
36	1	2585	G	2.1
50	M4	6	ILE	2.1
13	C1	92	HIS	2.1
14	c2	103	LEU	2.1
24	D2	6	VAL	2.1
61	n5	104	GLU	2.1
78	q2	26	THR	2.1
1	2	1285	U	2.1
1	2	1423	U	2.1
1	6	1393	C	2.1
36	1	1122	U	2.1
36	5	1279	C	2.1
61	n5	39	LYS	2.1
3	S1	100	PHE	2.1
6	S4	90	ILE	2.1
14	c2	115	VAL	2.1
34	SR	123	ILE	2.1
61	n5	93	TYR	2.1
6	S4	123	LEU	2.1
18	C6	28	LEU	2.1
26	D4	125	LEU	2.1
72	o6	54	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
36	1	1613	A	2.0
49	m3	177	LYS	2.0
58	n2	77	LYS	2.0
70	o4	24	LYS	2.0
72	o6	29	LYS	2.0
2	S0	127	ARG	2.0
5	S3	124	ARG	2.0
6	S4	182	TYR	2.0
6	S4	208	VAL	2.0
10	s8	38	ILE	2.0
6	s4	11	ARG	2.0
3	S1	207	LEU	2.0
7	S5	25	LEU	2.0
7	S5	175	LEU	2.0
18	C6	41	PRO	2.0
58	n2	80	THR	2.0
78	q2	18	ARG	2.0
78	q2	41	ARG	2.0
15	C3	13	SER	2.0
39	L2	90	ALA	2.0
57	n1	35	LYS	2.0
62	n6	17	LYS	2.0
62	N6	97	ILE	2.0
63	N7	44	ALA	2.0
24	D2	84	GLY	2.0
3	S1	23	PRO	2.0
17	c5	97	TYR	2.0
33	E1	106	TYR	2.0
1	2	535	A	2.0
8	s6	115	LYS	2.0
9	s7	92	PHE	2.0
24	d2	62	VAL	2.0
31	d9	50	ILE	2.0
39	L2	229	ALA	2.0
51	m5	5	LYS	2.0
55	M9	50	ILE	2.0
15	c3	106	ARG	2.0
23	D1	55	LEU	2.0
31	d9	44	ARG	2.0
34	sR	144	LEU	2.0
61	n5	102	LEU	2.0
83	p0	209	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
6	S4	111	VAL	2.0
11	s9	100	LYS	2.0
30	d8	45	LYS	2.0
33	E1	101	ALA	2.0
36	5	316	U	2.0
36	5	1235	U	2.0
36	5	1574	C	2.0
51	M5	56	LYS	2.0
53	M7	165	VAL	2.0
51	m5	156	HIS	2.0
61	N5	96	LYS	2.0
63	N7	23	VAL	2.0
2	S0	111	ILE	2.0
10	S8	152	ILE	2.0
14	c2	94	ALA	2.0
17	c5	101	ALA	2.0
19	c7	51	ALA	2.0
20	C8	35	ILE	2.0
64	n8	110	GLY	2.0
9	S7	152	VAL	2.0
21	C9	80	TYR	2.0
31	d9	52	PHE	2.0
54	M8	164	ARG	2.0
57	n1	30	TYR	2.0
14	c2	76	GLU	2.0
22	d0	21	LYS	2.0
22	d0	77	LYS	2.0
29	D7	48	SER	2.0
46	L9	11	GLU	2.0
36	1	1605	A	2.0
36	5	1260	A	2.0
42	L5	162	ALA	2.0
61	n5	45	LYS	2.0
17	C5	79	HIS	2.0
10	S8	197	THR	2.0
34	SR	312	VAL	2.0
35	SM	51	ARG	2.0
49	m3	62	THR	2.0
7	S5	97	LEU	2.0
11	s9	28	LEU	2.0
60	n4	80	ARG	2.0
71	o5	75	TYR	2.0

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Mol	Chain	Res	Type	RSRZ
83	p0	70	LEU	2.0
27	D5	78	ILE	2.0
28	d6	13	LYS	2.0
45	L8	43	LYS	2.0
45	L8	62	LYS	2.0
46	L9	60	GLY	2.0
71	o5	99	GLN	2.0
72	o6	26	ILE	2.0
10	S8	48	THR	2.0
29	D7	28	PRO	2.0
20	C8	130	GLY	2.0
57	n1	89	LEU	2.0
12	C0	10	LYS	2.0
34	sR	305	TYR	2.0
19	C7	38	ILE	2.0
34	sR	103	PHE	2.0
49	m3	64	LYS	2.0
7	S5	176	THR	2.0
34	sR	104	VAL	2.0
45	l8	140	VAL	2.0
70	O4	35	VAL	2.0
11	s9	123	HIS	2.0
4	S2	174	ARG	2.0
5	S3	142	LEU	2.0
21	c9	86	ARG	2.0
62	n6	118	LEU	2.0
71	o5	9	LEU	2.0
74	O8	51	LEU	2.0
1	2	454	U	2.0
1	6	1423	U	2.0
1	6	1558	U	2.0
18	C6	96	TYR	2.0
42	l5	185	PHE	2.0
48	M1	14	ILE	2.0
61	n5	86	VAL	2.0
63	N7	25	ILE	2.0
20	C8	8	GLN	2.0
20	C8	33	THR	2.0
20	C8	34	THR	2.0
42	L5	183	TRP	2.0
6	S4	49	ARG	2.0
6	S4	218	PHE	2.0

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Mol	Chain	Res	Type	RSRZ
9	S7	99	LEU	2.0
10	S8	52	ASN	2.0
11	s9	38	ASN	2.0
19	C7	33	ARG	2.0
27	D5	38	HIS	2.0
32	E0	49	LEU	2.0
47	M0	36	LEU	2.0
58	N2	95	PHE	2.0
80	e0	46	ASN	2.0
11	S9	29	LYS	2.0
11	S9	68	LYS	2.0
29	D7	31	TYR	2.0
58	n2	54	VAL	2.0
65	N9	51	ALA	2.0
1	6	483	A	2.0
1	6	1244	A	2.0
51	m5	43	THR	2.0
10	s8	33	PRO	2.0
17	C5	38	PRO	2.0
20	c8	19	ASN	2.0
26	D4	119	PHE	2.0
71	O5	99	GLN	2.0

6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q < 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	8	211	1/1	1.13	1941.00	92,92,92,92	0
86	MG	1	3771	1/1	0.64	971.00	72,72,72,72	0
86	MG	5	3444	1/1	0.56	800.44	64,64,64,64	0
86	MG	1	3813	1/1	1.26	535.00	85,85,85,85	0
86	MG	5	3471	1/1	0.42	505.00	88,88,88,88	0
86	MG	5	3729	1/1	0.45	499.00	96,96,96,96	0
86	MG	8	217	1/1	0.73	388.33	96,96,96,96	0
86	MG	6	2035	1/1	0.35	343.00	90,90,90,90	0
86	MG	5	3718	1/1	0.56	326.00	67,67,67,67	0
86	MG	2	1973	1/1	0.91	282.50	94,94,94,94	0
86	MG	1	3502	1/1	1.11	202.37	55,55,55,55	0
86	MG	1	3759	1/1	0.38	201.00	78,78,78,78	0
86	MG	6	1989	1/1	1.23	188.64	80,80,80,80	0
86	MG	2	1958	1/1	0.65	185.00	108,108,108,108	0
86	MG	5	3410	1/1	0.60	183.00	98,98,98,98	0
86	MG	5	3830	1/1	1.08	174.72	64,64,64,64	0
86	MG	5	3734	1/1	0.47	156.00	65,65,65,65	0
86	MG	5	3775	1/1	0.80	155.00	100,100,100,100	0
86	MG	2	1957	1/1	0.61	151.00	97,97,97,97	0
86	MG	1	3538	1/1	0.76	147.89	58,58,58,58	0
86	MG	1	3738	1/1	0.71	145.00	58,58,58,58	0
86	MG	1	3439	1/1	0.87	143.44	60,60,60,60	0
86	MG	1	3463	1/1	0.62	142.33	38,38,38,38	0
86	MG	6	1916	1/1	1.08	132.28	73,73,73,73	0
86	MG	5	3754	1/1	0.40	129.00	62,62,62,62	0
86	MG	5	3875	1/1	0.62	128.67	44,44,44,44	0
86	MG	5	3771	1/1	0.79	124.43	48,48,48,48	0
86	MG	5	3799	1/1	0.55	124.33	72,72,72,72	0
86	MG	5	3404	1/1	0.79	123.10	82,82,82,82	0
86	MG	1	3562	1/1	0.42	120.02	50,50,50,50	0
86	MG	2	1995	1/1	1.54	114.08	113,113,113,113	0
86	MG	2	2009	1/1	2.45	111.85	83,83,83,83	0
86	MG	1	3704	1/1	0.71	109.60	69,69,69,69	0
86	MG	3	208	1/1	0.66	108.22	59,59,59,59	0
86	MG	5	3517	1/1	0.60	107.31	28,28,28,28	0
86	MG	1	3549	1/1	0.42	105.50	87,87,87,87	0
86	MG	1	3530	1/1	0.68	105.05	34,34,34,34	0
86	MG	5	3893	1/1	0.69	102.78	50,50,50,50	0
86	MG	1	3846	1/1	1.09	98.68	61,61,61,61	0
86	MG	1	3766	1/1	1.09	97.89	69,69,69,69	0
86	MG	1	3681	1/1	0.47	97.74	85,85,85,85	0
86	MG	2	1988	1/1	0.76	96.69	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	2	1956	1/1	1.03	94.98	77,77,77,77	0
86	MG	5	3455	1/1	0.77	94.15	49,49,49,49	0
86	MG	1	3848	1/1	0.37	92.50	60,60,60,60	0
86	MG	5	3647	1/1	1.34	91.61	41,41,41,41	0
86	MG	5	3473	1/1	0.28	91.00	88,88,88,88	0
86	MG	5	3435	1/1	0.92	88.85	53,53,53,53	0
86	MG	5	3414	1/1	0.62	86.59	50,50,50,50	0
86	MG	1	3645	1/1	0.53	86.25	49,49,49,49	0
86	MG	1	3823	1/1	0.62	82.33	60,60,60,60	0
86	MG	2	1927	1/1	0.90	82.32	49,49,49,49	0
86	MG	5	3628	1/1	0.83	80.02	121,121,121,121	0
86	MG	5	3762	1/1	1.00	76.73	69,69,69,69	0
86	MG	1	3831	1/1	0.71	76.53	40,40,40,40	0
86	MG	1	3783	1/1	1.03	76.36	56,56,56,56	0
86	MG	5	3764	1/1	0.68	76.01	47,47,47,47	0
86	MG	1	3684	1/1	0.43	75.86	78,78,78,78	0
86	MG	1	3696	1/1	1.10	74.36	80,80,80,80	0
86	MG	5	3701	1/1	1.49	73.91	85,85,85,85	0
86	MG	5	3566	1/1	0.81	73.43	31,31,31,31	0
86	MG	6	2037	1/1	0.70	70.86	88,88,88,88	0
86	MG	5	3842	1/1	0.71	65.87	67,67,67,67	0
86	MG	1	3609	1/1	0.54	65.18	52,52,52,52	0
86	MG	1	3590	1/1	1.00	64.27	49,49,49,49	0
86	MG	1	3500	1/1	1.10	63.71	105,105,105,105	0
86	MG	1	3718	1/1	1.03	63.64	118,118,118,118	0
86	MG	5	3589	1/1	0.91	63.40	50,50,50,50	0
86	MG	8	212	1/1	0.94	62.53	95,95,95,95	0
86	MG	1	3402	1/1	0.92	62.01	61,61,61,61	0
86	MG	5	3546	1/1	0.52	60.77	61,61,61,61	0
86	MG	5	3731	1/1	0.54	60.29	105,105,105,105	0
86	MG	1	3656	1/1	0.92	60.22	50,50,50,50	0
86	MG	6	1983	1/1	1.13	60.21	99,99,99,99	0
86	MG	2	1935	1/1	0.53	59.53	72,72,72,72	0
86	MG	1	3785	1/1	0.89	58.37	66,66,66,66	0
86	MG	1	3852	1/1	0.76	57.88	89,89,89,89	0
86	MG	5	3645	1/1	0.81	57.02	83,83,83,83	0
86	MG	5	3869	1/1	0.85	56.33	64,64,64,64	0
86	MG	5	3841	1/1	1.05	55.91	63,63,63,63	0
86	MG	5	3854	1/1	0.76	54.36	88,88,88,88	0
86	MG	5	3856	1/1	0.50	54.24	58,58,58,58	0
86	MG	1	3675	1/1	0.59	54.23	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	5	3845	1/1	0.57	54.22	100,100,100,100	0
87	OHX	1	4138	7/7	0.22	53.89	177,177,177,177	0
86	MG	5	3801	1/1	1.03	53.73	61,61,61,61	0
86	MG	1	3613	1/1	0.68	53.67	52,52,52,52	0
86	MG	5	3481	1/1	0.58	53.35	47,47,47,47	0
86	MG	1	3560	1/1	0.73	53.22	34,34,34,34	0
86	MG	1	3490	1/1	1.14	52.39	77,77,77,77	0
86	MG	2	1962	1/1	0.66	52.27	92,92,92,92	0
86	MG	1	3689	1/1	1.01	52.22	73,73,73,73	0
86	MG	2	1974	1/1	0.49	51.65	100,100,100,100	0
86	MG	1	3593	1/1	0.74	51.61	31,31,31,31	0
86	MG	5	3581	1/1	0.61	50.93	61,61,61,61	0
86	MG	1	3671	1/1	1.46	50.88	74,74,74,74	0
86	MG	1	3749	1/1	1.48	50.67	93,93,93,93	0
86	MG	5	3687	1/1	0.76	50.15	42,42,42,42	0
86	MG	1	3596	1/1	1.15	49.84	38,38,38,38	0
86	MG	6	2011	1/1	0.38	49.57	78,78,78,78	0
86	MG	1	3470	1/1	1.02	49.49	67,67,67,67	0
86	MG	1	3770	1/1	0.60	49.21	76,76,76,76	0
86	MG	5	3868	1/1	0.39	49.00	56,56,56,56	0
86	MG	5	3482	1/1	0.79	48.93	30,30,30,30	0
86	MG	1	3577	1/1	0.86	48.72	53,53,53,53	0
86	MG	5	3489	1/1	0.56	48.51	49,49,49,49	0
86	MG	5	3407	1/1	0.91	48.32	53,53,53,53	0
86	MG	6	2043	1/1	1.53	47.46	136,136,136,136	0
86	MG	1	3850	1/1	0.77	47.41	50,50,50,50	0
86	MG	1	3476	1/1	0.48	47.36	74,74,74,74	0
86	MG	2	1902	1/1	0.77	46.93	75,75,75,75	0
86	MG	5	3593	1/1	0.70	46.19	28,28,28,28	0
86	MG	1	3414	1/1	0.54	45.91	68,68,68,68	0
86	MG	6	2039	1/1	1.16	43.13	102,102,102,102	0
86	MG	1	3515	1/1	0.79	42.55	44,44,44,44	0
86	MG	5	3555	1/1	0.80	42.37	67,67,67,67	0
86	MG	1	3817	1/1	0.85	41.90	37,37,37,37	0
86	MG	5	3560	1/1	0.71	41.74	48,48,48,48	0
86	MG	5	3467	1/1	0.94	41.50	72,72,72,72	0
86	MG	1	3573	1/1	0.81	41.44	23,23,23,23	0
86	MG	1	3712	1/1	0.50	41.03	76,76,76,76	0
86	MG	1	3658	1/1	0.67	40.91	47,47,47,47	0
86	MG	5	3575	1/1	0.70	40.91	56,56,56,56	0
86	MG	2	1942	1/1	1.08	40.59	97,97,97,97	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3764	1/1	0.93	40.56	47,47,47,47	0
86	MG	5	3661	1/1	1.17	40.54	70,70,70,70	0
86	MG	1	3679	1/1	0.88	40.52	63,63,63,63	0
86	MG	5	3425	1/1	1.02	39.99	73,73,73,73	0
86	MG	5	3679	1/1	0.46	39.92	63,63,63,63	0
86	MG	1	3676	1/1	1.55	39.57	94,94,94,94	0
86	MG	5	3530	1/1	0.66	39.32	30,30,30,30	0
86	MG	5	3634	1/1	0.80	39.00	73,73,73,73	0
86	MG	4	217	1/1	1.59	38.92	100,100,100,100	0
86	MG	1	3541	1/1	0.73	38.40	64,64,64,64	0
86	MG	5	3879	1/1	0.73	38.27	51,51,51,51	0
86	MG	6	1941	1/1	0.24	38.20	96,96,96,96	0
86	MG	1	3550	1/1	0.92	38.16	49,49,49,49	0
86	MG	5	3624	1/1	0.58	37.71	74,74,74,74	0
86	MG	1	3843	1/1	1.18	37.67	81,81,81,81	0
86	MG	1	3832	1/1	0.70	37.65	44,44,44,44	0
86	MG	5	3772	1/1	0.38	37.46	110,110,110,110	0
86	MG	5	3576	1/1	0.47	37.40	36,36,36,36	0
86	MG	5	3614	1/1	0.61	37.39	48,48,48,48	0
86	MG	1	3786	1/1	0.64	37.34	57,57,57,57	0
86	MG	2	1904	1/1	0.43	36.85	110,110,110,110	0
86	MG	1	3648	1/1	0.67	36.39	51,51,51,51	0
86	MG	5	3656	1/1	0.65	36.26	59,59,59,59	0
86	MG	5	3635	1/1	1.24	35.99	60,60,60,60	0
86	MG	1	3661	1/1	0.69	35.51	62,62,62,62	0
86	MG	1	3459	1/1	0.89	35.50	46,46,46,46	0
86	MG	5	3583	1/1	0.75	35.40	28,28,28,28	0
86	MG	1	3468	1/1	0.36	35.36	75,75,75,75	0
86	MG	7	206	1/1	0.45	34.84	58,58,58,58	0
86	MG	5	3843	1/1	0.74	34.67	70,70,70,70	0
86	MG	1	3546	1/1	0.43	34.43	72,72,72,72	0
86	MG	5	3735	1/1	0.83	34.32	47,47,47,47	0
86	MG	5	3755	1/1	0.97	34.30	67,67,67,67	0
86	MG	5	3749	1/1	0.56	34.24	47,47,47,47	0
86	MG	1	3421	1/1	0.81	33.33	47,47,47,47	0
86	MG	1	3594	1/1	0.69	33.21	41,41,41,41	0
86	MG	1	3564	1/1	0.77	32.94	38,38,38,38	0
86	MG	5	3880	1/1	0.97	32.75	67,67,67,67	0
86	MG	1	3520	1/1	0.79	32.44	43,43,43,43	0
86	MG	2	1933	1/1	0.53	32.14	85,85,85,85	0
86	MG	6	1934	1/1	0.70	32.13	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3763	1/1	1.27	32.05	63,63,63,63	0
86	MG	5	3464	1/1	0.36	32.01	77,77,77,77	0
86	MG	1	3827	1/1	0.76	31.92	71,71,71,71	0
86	MG	1	3682	1/1	0.66	31.71	50,50,50,50	0
86	MG	1	3677	1/1	0.64	31.71	68,68,68,68	0
86	MG	5	3570	1/1	0.57	31.65	26,26,26,26	0
86	MG	1	3838	1/1	0.65	31.43	39,39,39,39	0
86	MG	5	3582	1/1	0.74	31.40	56,56,56,56	0
86	MG	1	3575	1/1	0.38	31.36	51,51,51,51	0
86	MG	5	3874	1/1	0.58	31.36	34,34,34,34	0
86	MG	1	3815	1/1	0.72	31.35	111,111,111,111	0
86	MG	1	3438	1/1	0.80	31.33	32,32,32,32	0
86	MG	5	3504	1/1	0.85	31.25	78,78,78,78	0
86	MG	1	3513	1/1	1.12	31.17	37,37,37,37	0
86	MG	5	3578	1/1	0.50	31.17	41,41,41,41	0
86	MG	5	3501	1/1	0.47	31.12	60,60,60,60	0
86	MG	5	3447	1/1	0.42	31.08	70,70,70,70	0
86	MG	1	3774	1/1	0.35	31.00	69,69,69,69	0
86	MG	1	3706	1/1	0.61	30.78	92,92,92,92	0
86	MG	2	1982	1/1	0.71	30.74	65,65,65,65	0
86	MG	D3	201	1/1	0.80	30.71	80,80,80,80	0
86	MG	5	3792	1/1	0.76	30.66	68,68,68,68	0
86	MG	5	3540	1/1	0.68	30.64	44,44,44,44	0
86	MG	1	3834	1/1	1.02	30.57	63,63,63,63	0
86	MG	1	3453	1/1	1.02	30.52	54,54,54,54	0
86	MG	5	3585	1/1	0.71	30.28	39,39,39,39	0
87	OHX	1	4205	7/7	0.51	30.20	192,192,192,192	0
86	MG	1	3452	1/1	0.51	30.05	47,47,47,47	0
86	MG	2	1918	1/1	0.95	29.91	61,61,61,61	0
86	MG	5	3864	1/1	1.01	29.90	41,41,41,41	0
86	MG	5	3551	1/1	0.69	29.56	35,35,35,35	0
86	MG	1	3865	1/1	0.55	29.46	103,103,103,103	0
86	MG	5	3748	1/1	0.85	29.33	64,64,64,64	0
86	MG	1	3428	1/1	1.08	29.30	55,55,55,55	0
86	MG	1	3811	1/1	0.44	29.29	64,64,64,64	0
86	MG	5	3779	1/1	0.42	29.12	45,45,45,45	0
86	MG	1	3410	1/1	0.78	28.74	35,35,35,35	0
86	MG	2	2007	1/1	0.66	28.72	107,107,107,107	0
86	MG	1	3583	1/1	0.64	28.62	68,68,68,68	0
86	MG	5	3871	1/1	0.50	28.60	57,57,57,57	0
86	MG	5	3445	1/1	0.51	28.37	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	5	4123	7/7	0.26	28.32	185,185,185,185	0
86	MG	1	3841	1/1	0.40	28.25	80,80,80,80	0
86	MG	5	3450	1/1	0.73	27.89	49,49,49,49	0
86	MG	4	213	1/1	0.51	27.78	89,89,89,89	0
86	MG	8	216	1/1	0.66	27.59	79,79,79,79	0
86	MG	6	2036	1/1	0.55	27.43	67,67,67,67	0
86	MG	1	3446	1/1	0.61	27.43	67,67,67,67	0
86	MG	2	1984	1/1	1.18	27.40	97,97,97,97	0
86	MG	6	2016	1/1	1.30	27.20	83,83,83,83	0
86	MG	5	3658	1/1	0.61	27.17	45,45,45,45	0
86	MG	1	3527	1/1	0.50	26.98	36,36,36,36	0
86	MG	2	1916	1/1	0.63	26.87	70,70,70,70	0
86	MG	5	3809	1/1	0.56	26.64	63,63,63,63	0
86	MG	5	3860	1/1	0.72	26.36	87,87,87,87	0
86	MG	5	3878	1/1	0.76	26.25	49,49,49,49	0
86	MG	5	3538	1/1	0.99	26.09	38,38,38,38	0
86	MG	5	3571	1/1	0.59	25.90	59,59,59,59	0
86	MG	6	1946	1/1	0.44	25.88	38,38,38,38	0
86	MG	5	3521	1/1	0.72	25.56	48,48,48,48	0
86	MG	5	3865	1/1	0.66	25.48	50,50,50,50	0
86	MG	1	3532	1/1	0.45	25.48	49,49,49,49	0
86	MG	1	3528	1/1	0.55	25.40	36,36,36,36	0
86	MG	1	3680	1/1	0.34	25.36	91,91,91,91	0
86	MG	6	1943	1/1	0.77	25.34	41,41,41,41	0
86	MG	5	3507	1/1	0.78	25.21	37,37,37,37	0
86	MG	5	3703	1/1	0.56	25.14	68,68,68,68	0
86	MG	1	3578	1/1	0.44	25.07	56,56,56,56	0
87	OHX	5	4224	7/7	0.15	25.00	204,204,204,204	0
86	MG	5	3774	1/1	1.06	24.98	60,60,60,60	0
86	MG	5	3553	1/1	0.90	24.97	63,63,63,63	0
86	MG	5	3649	1/1	0.75	24.94	80,80,80,80	0
86	MG	5	3814	1/1	0.45	24.81	83,83,83,83	0
86	MG	5	3683	1/1	0.67	24.69	88,88,88,88	0
86	MG	1	3621	1/1	0.57	24.63	57,57,57,57	0
86	MG	5	3532	1/1	0.43	24.57	44,44,44,44	0
86	MG	1	3512	1/1	0.78	24.50	55,55,55,55	0
86	MG	5	3806	1/1	0.37	24.50	43,43,43,43	0
86	MG	1	3496	1/1	0.70	24.49	38,38,38,38	0
86	MG	5	3506	1/1	0.97	24.46	39,39,39,39	0
86	MG	5	3742	1/1	0.45	24.37	71,71,71,71	0
86	MG	1	3758	1/1	0.69	24.31	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3542	1/1	0.52	23.86	45,45,45,45	0
86	MG	1	3523	1/1	0.67	23.81	44,44,44,44	0
86	MG	5	3723	1/1	0.55	23.76	53,53,53,53	0
86	MG	5	3654	1/1	0.32	23.69	56,56,56,56	0
86	MG	5	3636	1/1	0.68	23.68	53,53,53,53	0
86	MG	6	2049	1/1	0.55	23.63	123,123,123,123	0
86	MG	6	2029	1/1	1.08	23.56	88,88,88,88	0
86	MG	1	3690	1/1	0.52	23.24	52,52,52,52	0
86	MG	5	3433	1/1	0.57	23.17	44,44,44,44	0
86	MG	5	3442	1/1	0.42	23.04	40,40,40,40	0
86	MG	1	3835	1/1	0.60	22.93	64,64,64,64	0
86	MG	1	3531	1/1	0.70	22.83	79,79,79,79	0
86	MG	5	3639	1/1	0.48	22.63	51,51,51,51	0
87	OHX	5	3899	7/7	0.27	22.49	78,78,78,78	0
86	MG	1	3460	1/1	0.72	22.43	42,42,42,42	0
86	MG	1	3752	1/1	0.43	22.38	55,55,55,55	0
86	MG	1	3819	1/1	0.54	22.20	73,73,73,73	0
86	MG	5	3536	1/1	0.74	22.18	38,38,38,38	0
87	OHX	6	2113	7/7	0.34	22.09	184,184,184,184	0
86	MG	1	3678	1/1	0.44	22.01	64,64,64,64	0
86	MG	5	3673	1/1	0.71	21.94	72,72,72,72	0
86	MG	1	3864	1/1	0.68	21.83	74,74,74,74	0
86	MG	6	1929	1/1	0.51	21.80	81,81,81,81	0
86	MG	5	3803	1/1	0.85	21.70	61,61,61,61	0
86	MG	1	3475	1/1	0.39	21.70	52,52,52,52	0
86	MG	5	3594	1/1	0.52	21.69	49,49,49,49	0
86	MG	5	3676	1/1	0.71	21.66	98,98,98,98	0
86	MG	1	3652	1/1	0.33	21.61	57,57,57,57	0
86	MG	5	3784	1/1	0.81	21.44	86,86,86,86	0
86	MG	5	3574	1/1	0.66	21.41	30,30,30,30	0
86	MG	5	3882	1/1	0.75	21.29	113,113,113,113	0
86	MG	L3	402	1/1	0.48	21.25	77,77,77,77	0
86	MG	1	3849	1/1	0.58	21.23	68,68,68,68	0
86	MG	5	3537	1/1	0.56	21.03	54,54,54,54	0
86	MG	5	3619	1/1	0.35	21.00	90,90,90,90	0
86	MG	1	3563	1/1	0.68	20.92	52,52,52,52	0
86	MG	5	3535	1/1	0.92	20.82	37,37,37,37	0
86	MG	5	3524	1/1	0.55	20.63	40,40,40,40	0
86	MG	5	3603	1/1	0.75	20.53	60,60,60,60	0
86	MG	5	3418	1/1	0.85	20.52	40,40,40,40	0
86	MG	6	2012	1/1	0.51	20.48	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	5	3697	1/1	0.58	20.42	62,62,62,62	0
86	MG	1	3673	1/1	0.41	20.22	75,75,75,75	0
86	MG	1	3526	1/1	0.45	20.21	44,44,44,44	0
86	MG	1	3539	1/1	0.43	20.13	64,64,64,64	0
86	MG	1	3544	1/1	0.56	20.12	47,47,47,47	0
86	MG	5	3883	1/1	0.58	20.06	78,78,78,78	0
86	MG	1	3692	1/1	0.87	20.06	67,67,67,67	0
86	MG	1	3587	1/1	0.58	20.04	58,58,58,58	0
86	MG	2	1985	1/1	1.07	20.04	77,77,77,77	0
86	MG	1	3443	1/1	0.67	20.01	83,83,83,83	0
86	MG	5	3561	1/1	0.87	19.97	34,34,34,34	0
86	MG	4	206	1/1	0.69	19.91	53,53,53,53	0
86	MG	2	1914	1/1	0.50	19.89	89,89,89,89	0
86	MG	6	1954	1/1	0.41	19.88	80,80,80,80	0
86	MG	5	3829	1/1	0.67	19.87	58,58,58,58	0
86	MG	1	3650	1/1	0.74	19.83	122,122,122,122	0
86	MG	2	2017	1/1	0.57	19.82	85,85,85,85	0
86	MG	1	3750	1/1	0.56	19.80	75,75,75,75	0
86	MG	5	3833	1/1	0.20	19.80	61,61,61,61	0
86	MG	6	1932	1/1	0.60	19.78	67,67,67,67	0
86	MG	5	3509	1/1	0.68	19.73	45,45,45,45	0
86	MG	5	3494	1/1	0.68	19.72	43,43,43,43	0
86	MG	1	3657	1/1	0.83	19.69	68,68,68,68	0
87	OHX	5	4216	7/7	0.41	19.54	217,217,217,217	0
86	MG	1	3533	1/1	0.57	19.49	51,51,51,51	0
86	MG	6	1988	1/1	0.67	19.44	91,91,91,91	0
86	MG	3	204	1/1	0.43	19.35	65,65,65,65	0
86	MG	5	3595	1/1	0.66	19.25	34,34,34,34	0
86	MG	6	2045	1/1	0.83	19.20	94,94,94,94	0
86	MG	5	3831	1/1	0.59	19.13	57,57,57,57	0
86	MG	1	3784	1/1	0.60	19.07	73,73,73,73	0
86	MG	6	1962	1/1	0.85	18.94	94,94,94,94	0
86	MG	1	3580	1/1	0.49	18.89	55,55,55,55	0
86	MG	1	3649	1/1	0.56	18.85	69,69,69,69	0
86	MG	5	3443	1/1	0.72	18.85	45,45,45,45	0
87	OHX	5	4116	7/7	0.31	18.64	197,197,197,197	0
86	MG	1	3572	1/1	0.48	18.63	51,51,51,51	0
86	MG	5	3730	1/1	0.31	18.56	46,46,46,46	0
86	MG	2	1923	1/1	0.62	18.56	88,88,88,88	0
86	MG	6	1918	1/1	0.54	18.50	80,80,80,80	0
86	MG	5	3807	1/1	0.70	18.45	109,109,109,109	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	5	3565	1/1	0.45	18.39	67,67,67,67	0
86	MG	7	210	1/1	0.80	18.33	91,91,91,91	0
86	MG	1	3810	1/1	0.32	18.17	61,61,61,61	0
86	MG	5	3670	1/1	1.12	18.10	62,62,62,62	0
86	MG	1	3630	1/1	0.46	18.05	47,47,47,47	0
86	MG	1	3540	1/1	0.54	18.05	36,36,36,36	0
86	MG	5	3625	1/1	0.44	18.04	72,72,72,72	0
86	MG	5	3457	1/1	0.57	18.01	44,44,44,44	0
86	MG	5	3503	1/1	0.67	17.92	44,44,44,44	0
86	MG	5	3520	1/1	0.77	17.86	54,54,54,54	0
86	MG	1	3504	1/1	0.62	17.86	45,45,45,45	0
86	MG	1	3576	1/1	0.51	17.85	35,35,35,35	0
86	MG	5	3588	1/1	0.70	17.78	43,43,43,43	0
86	MG	1	3605	1/1	0.45	17.75	66,66,66,66	0
86	MG	6	2034	1/1	0.52	17.70	92,92,92,92	0
86	MG	5	3459	1/1	0.53	17.61	39,39,39,39	0
86	MG	5	3552	1/1	0.67	17.61	72,72,72,72	0
86	MG	1	3534	1/1	0.51	17.53	50,50,50,50	0
86	MG	5	3500	1/1	0.71	17.51	44,44,44,44	0
86	MG	1	3733	1/1	0.46	17.49	52,52,52,52	0
86	MG	1	3693	1/1	0.37	17.41	58,58,58,58	0
86	MG	5	3848	1/1	0.46	17.30	89,89,89,89	0
86	MG	6	1921	1/1	0.41	17.21	57,57,57,57	0
86	MG	5	3705	1/1	0.63	17.21	68,68,68,68	0
86	MG	6	2032	1/1	0.35	17.20	103,103,103,103	0
86	MG	1	3484	1/1	0.47	17.17	70,70,70,70	0
86	MG	5	3522	1/1	0.56	17.13	58,58,58,58	0
86	MG	5	3835	1/1	0.60	17.06	47,47,47,47	0
86	MG	1	3702	1/1	0.47	17.05	57,57,57,57	0
86	MG	2	1945	1/1	0.42	17.02	91,91,91,91	0
86	MG	5	3867	1/1	0.40	16.98	66,66,66,66	0
86	MG	5	3529	1/1	0.36	16.93	47,47,47,47	0
86	MG	5	3720	1/1	0.66	16.90	63,63,63,63	0
86	MG	1	3588	1/1	0.56	16.85	66,66,66,66	0
86	MG	7	202	1/1	0.61	16.70	9,9,9,9	0
86	MG	5	4247	1/1	0.43	16.68	64,64,64,64	0
86	MG	1	3615	1/1	1.67	16.68	108,108,108,108	0
86	MG	5	3733	1/1	0.35	16.66	54,54,54,54	0
86	MG	5	3737	1/1	0.70	16.63	50,50,50,50	0
86	MG	5	3573	1/1	0.61	16.56	53,53,53,53	0
86	MG	5	3870	1/1	0.40	16.52	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	6	2022	1/1	0.55	16.52	64,64,64,64	0
86	MG	5	3760	1/1	1.10	16.51	49,49,49,49	0
86	MG	2	1966	1/1	0.46	16.44	126,126,126,126	0
86	MG	1	3498	1/1	0.36	16.44	53,53,53,53	0
86	MG	1	3440	1/1	0.61	16.44	59,59,59,59	0
86	MG	1	3451	1/1	0.42	16.42	51,51,51,51	0
86	MG	1	3765	1/1	0.43	16.34	68,68,68,68	0
86	MG	1	3620	1/1	0.95	16.34	63,63,63,63	0
86	MG	1	3473	1/1	0.54	16.33	33,33,33,33	0
86	MG	1	3853	1/1	0.24	16.31	95,95,95,95	0
86	MG	6	1917	1/1	0.37	16.30	58,58,58,58	0
86	MG	5	3759	1/1	0.25	16.27	94,94,94,94	0
86	MG	5	3873	1/1	0.48	16.25	47,47,47,47	0
86	MG	1	3552	1/1	0.55	16.07	56,56,56,56	0
86	MG	5	3461	1/1	0.60	16.03	46,46,46,46	0
86	MG	5	3797	1/1	0.35	16.00	58,58,58,58	0
86	MG	5	3405	1/1	0.58	16.00	72,72,72,72	0
86	MG	1	3571	1/1	0.69	15.98	40,40,40,40	0
86	MG	5	3518	1/1	0.46	15.86	31,31,31,31	0
86	MG	5	3712	1/1	0.53	15.86	57,57,57,57	0
86	MG	1	3559	1/1	0.36	15.85	56,56,56,56	0
86	MG	8	207	1/1	0.43	15.82	81,81,81,81	0
87	OHX	1	4056	7/7	0.31	15.81	147,147,147,147	0
86	MG	6	1944	1/1	0.44	15.79	53,53,53,53	0
86	MG	5	3667	1/1	0.42	15.72	63,63,63,63	0
86	MG	1	3519	1/1	0.58	15.66	40,40,40,40	0
86	MG	5	3409	1/1	0.62	15.64	53,53,53,53	0
86	MG	5	3526	1/1	0.53	15.63	46,46,46,46	0
86	MG	5	3610	1/1	0.62	15.61	44,44,44,44	0
86	MG	1	3719	1/1	0.55	15.60	55,55,55,55	0
86	MG	5	3629	1/1	0.64	15.49	49,49,49,49	0
86	MG	1	3514	1/1	0.55	15.44	36,36,36,36	0
86	MG	5	3491	1/1	0.39	15.41	63,63,63,63	0
86	MG	1	3653	1/1	0.91	15.39	62,62,62,62	0
86	MG	1	3721	1/1	0.35	15.32	45,45,45,45	0
86	MG	1	3826	1/1	0.52	15.31	50,50,50,50	0
86	MG	1	3581	1/1	0.72	15.18	65,65,65,65	0
86	MG	5	3745	1/1	0.60	15.16	51,51,51,51	0
86	MG	5	3627	1/1	0.54	15.13	58,58,58,58	0
86	MG	1	3506	1/1	0.61	15.07	59,59,59,59	0
86	MG	1	3833	1/1	0.90	15.06	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3829	1/1	0.48	14.91	43,43,43,43	0
86	MG	1	3486	1/1	0.58	14.86	54,54,54,54	0
86	MG	1	3458	1/1	0.59	14.81	82,82,82,82	0
86	MG	5	3812	1/1	0.28	14.80	51,51,51,51	0
86	MG	1	3517	1/1	0.76	14.77	50,50,50,50	0
86	MG	1	3697	1/1	1.87	14.73	96,96,96,96	0
86	MG	5	3657	1/1	0.43	14.69	38,38,38,38	0
86	MG	2	1919	1/1	0.58	14.68	67,67,67,67	0
86	MG	5	3885	1/1	0.51	14.65	53,53,53,53	0
86	MG	1	3441	1/1	0.53	14.54	42,42,42,42	0
86	MG	5	3616	1/1	0.33	14.47	68,68,68,68	0
86	MG	1	3570	1/1	0.74	14.47	39,39,39,39	0
86	MG	5	3617	1/1	0.52	14.44	52,52,52,52	0
86	MG	1	3672	1/1	1.17	14.42	73,73,73,73	0
86	MG	1	3503	1/1	0.58	14.37	45,45,45,45	0
86	MG	5	3704	1/1	0.72	14.35	63,63,63,63	0
86	MG	5	3750	1/1	0.45	14.32	63,63,63,63	0
86	MG	1	3595	1/1	0.65	14.30	47,47,47,47	0
86	MG	1	3603	1/1	0.99	14.28	89,89,89,89	0
86	MG	5	3642	1/1	0.37	14.24	50,50,50,50	0
86	MG	5	3470	1/1	0.42	14.22	60,60,60,60	0
86	MG	1	3805	1/1	0.56	14.22	54,54,54,54	0
86	MG	5	3431	1/1	0.42	14.22	45,45,45,45	0
86	MG	1	3791	1/1	0.67	14.19	53,53,53,53	0
86	MG	5	3699	1/1	0.41	14.18	58,58,58,58	0
86	MG	3	202	1/1	0.60	14.18	74,74,74,74	0
86	MG	6	1972	1/1	0.68	14.17	75,75,75,75	0
86	MG	1	3567	1/1	0.46	14.16	37,37,37,37	0
86	MG	5	3539	1/1	0.64	14.09	31,31,31,31	0
86	MG	1	3522	1/1	0.86	14.09	65,65,65,65	0
86	MG	5	3608	1/1	0.38	14.07	66,66,66,66	0
86	MG	5	3487	1/1	0.54	14.07	42,42,42,42	0
86	MG	6	1939	1/1	0.55	14.04	52,52,52,52	0
86	MG	6	1923	1/1	0.42	14.00	88,88,88,88	0
86	MG	5	3428	1/1	0.38	14.00	43,43,43,43	0
86	MG	5	3523	1/1	0.60	14.00	63,63,63,63	0
86	MG	5	3655	1/1	0.45	13.99	53,53,53,53	0
86	MG	2	1978	1/1	0.43	13.97	86,86,86,86	0
86	MG	1	3423	1/1	0.48	13.95	57,57,57,57	0
86	MG	o2	201	1/1	0.44	13.93	47,47,47,47	0
86	MG	5	3531	1/1	0.67	13.91	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	5	3458	1/1	0.39	13.88	63,63,63,63	0
86	MG	5	3432	1/1	0.42	13.82	89,89,89,89	0
86	MG	1	3509	1/1	0.61	13.76	35,35,35,35	0
86	MG	1	3789	1/1	0.34	13.74	117,117,117,117	0
86	MG	1	3818	1/1	0.46	13.71	71,71,71,71	0
86	MG	2	1905	1/1	0.63	13.69	74,74,74,74	0
86	MG	5	3690	1/1	0.49	13.68	60,60,60,60	0
86	MG	5	3685	1/1	0.32	13.67	56,56,56,56	0
86	MG	5	3430	1/1	0.39	13.61	51,51,51,51	0
86	MG	2	2002	1/1	0.51	13.57	133,133,133,133	0
86	MG	1	3798	1/1	0.53	13.55	58,58,58,58	0
86	MG	5	3590	1/1	0.64	13.48	41,41,41,41	0
86	MG	1	3761	1/1	0.68	13.44	56,56,56,56	0
86	MG	6	1930	1/1	0.35	13.44	76,76,76,76	0
86	MG	5	3497	1/1	0.27	13.39	52,52,52,52	0
86	MG	1	3665	1/1	0.51	13.34	53,53,53,53	0
86	MG	1	3535	1/1	0.45	13.29	41,41,41,41	0
86	MG	5	3756	1/1	0.41	13.28	70,70,70,70	0
86	MG	1	3407	1/1	0.44	13.28	63,63,63,63	0
86	MG	1	3687	1/1	0.44	13.20	58,58,58,58	0
87	OHX	5	4244	7/7	0.53	13.13	214,214,214,214	0
86	MG	5	3587	1/1	0.46	13.11	43,43,43,43	0
86	MG	6	2025	1/1	0.49	12.98	100,100,100,100	0
86	MG	1	3403	1/1	0.33	12.95	53,53,53,53	0
87	OHX	1	4206	7/7	0.79	12.93	225,225,225,225	0
86	MG	5	3643	1/1	0.65	12.91	65,65,65,65	0
86	MG	1	3753	1/1	0.31	12.91	44,44,44,44	0
86	MG	6	2024	1/1	0.47	12.89	144,144,144,144	0
86	MG	1	3655	1/1	0.58	12.85	64,64,64,64	0
86	MG	6	1908	1/1	0.45	12.83	58,58,58,58	0
86	MG	5	3454	1/1	0.40	12.80	38,38,38,38	0
86	MG	6	2014	1/1	0.52	12.79	69,69,69,69	0
86	MG	M3	201	1/1	0.72	12.78	66,66,66,66	0
86	MG	2	1983	1/1	0.54	12.72	95,95,95,95	0
86	MG	5	3739	1/1	0.46	12.67	48,48,48,48	0
86	MG	6	2033	1/1	0.35	12.66	112,112,112,112	0
86	MG	1	3449	1/1	0.38	12.65	46,46,46,46	0
86	MG	5	3572	1/1	0.62	12.63	40,40,40,40	0
86	MG	1	3863	1/1	0.51	12.56	83,83,83,83	0
87	OHX	5	4182	7/7	0.48	12.56	149,149,149,149	0
86	MG	5	3876	1/1	0.45	12.47	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3618	1/1	0.30	12.44	60,60,60,60	0
86	MG	L8	301	1/1	0.52	12.33	104,104,104,104	0
86	MG	5	3513	1/1	0.58	12.31	36,36,36,36	0
86	MG	4	221	1/1	0.35	12.28	63,63,63,63	0
86	MG	5	3651	1/1	0.53	12.27	52,52,52,52	0
86	MG	5	3528	1/1	0.35	12.23	43,43,43,43	0
87	OHX	1	4199	7/7	0.34	12.20	159,159,159,159	0
86	MG	5	3650	1/1	0.51	12.18	48,48,48,48	0
86	MG	5	3641	1/1	0.73	12.18	64,64,64,64	0
86	MG	6	1963	1/1	0.65	12.17	68,68,68,68	0
86	MG	1	3768	1/1	0.50	12.13	48,48,48,48	0
86	MG	n4	201	1/1	0.52	12.08	60,60,60,60	0
86	MG	1	3862	1/1	0.41	12.05	117,117,117,117	0
86	MG	5	3886	1/1	0.46	12.02	42,42,42,42	0
86	MG	5	3866	1/1	0.50	11.96	41,41,41,41	0
86	MG	5	3476	1/1	0.31	11.96	79,79,79,79	0
86	MG	1	3628	1/1	0.49	11.89	58,58,58,58	0
86	MG	1	3812	1/1	0.55	11.85	64,64,64,64	0
86	MG	1	3485	1/1	0.39	11.83	62,62,62,62	0
86	MG	5	3465	1/1	0.30	11.73	47,47,47,47	0
86	MG	5	3541	1/1	0.34	11.55	40,40,40,40	0
86	MG	1	3545	1/1	0.50	11.55	62,62,62,62	0
86	MG	6	2013	1/1	0.70	11.54	66,66,66,66	0
86	MG	7	215	1/1	0.41	11.54	73,73,73,73	0
86	MG	5	3586	1/1	0.41	11.52	33,33,33,33	0
86	MG	5	3832	1/1	0.58	11.52	53,53,53,53	0
86	MG	5	4248	1/1	0.43	11.50	51,51,51,51	0
86	MG	6	2046	1/1	0.48	11.38	67,67,67,67	0
86	MG	1	3432	1/1	0.39	11.38	47,47,47,47	0
86	MG	1	3524	1/1	0.39	11.37	41,41,41,41	0
86	MG	1	3816	1/1	0.41	11.37	55,55,55,55	0
86	MG	1	3518	1/1	0.67	11.35	45,45,45,45	0
86	MG	1	3860	1/1	0.45	11.33	72,72,72,72	0
87	OHX	1	4209	7/7	0.38	11.33	160,160,160,160	0
86	MG	5	3753	1/1	0.24	11.30	66,66,66,66	0
86	MG	5	3567	1/1	0.47	11.26	34,34,34,34	0
86	MG	1	3448	1/1	0.78	11.25	59,59,59,59	0
86	MG	5	3680	1/1	0.66	11.24	104,104,104,104	0
86	MG	5	3441	1/1	0.51	11.18	53,53,53,53	0
86	MG	5	3554	1/1	0.46	11.17	51,51,51,51	0
86	MG	1	3589	1/1	0.52	11.17	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	o3	202	1/1	0.46	11.14	49,49,49,49	0
86	MG	1	3543	1/1	0.47	11.13	36,36,36,36	0
86	MG	6	1948	1/1	0.54	11.12	62,62,62,62	0
86	MG	o1	201	1/1	1.04	11.10	116,116,116,116	0
86	MG	5	3600	1/1	0.42	11.05	56,56,56,56	0
86	MG	1	3857	1/1	0.40	11.04	52,52,52,52	0
86	MG	5	3790	1/1	0.79	11.04	69,69,69,69	0
86	MG	4	207	1/1	0.54	11.03	39,39,39,39	0
86	MG	1	3434	1/1	0.56	11.02	60,60,60,60	0
86	MG	1	3844	1/1	0.83	11.02	57,57,57,57	0
86	MG	2	1939	1/1	0.31	11.02	92,92,92,92	0
86	MG	5	3881	1/1	0.21	11.00	112,112,112,112	0
86	MG	1	3642	1/1	0.34	10.99	57,57,57,57	0
86	MG	1	3851	1/1	0.35	10.94	66,66,66,66	0
86	MG	1	3585	1/1	0.47	10.93	46,46,46,46	0
86	MG	5	3606	1/1	0.37	10.84	52,52,52,52	0
86	MG	5	3765	1/1	0.41	10.81	63,63,63,63	0
86	MG	2	1990	1/1	0.88	10.80	142,142,142,142	0
86	MG	m4	201	1/1	0.66	10.79	49,49,49,49	0
86	MG	6	1967	1/1	0.31	10.77	95,95,95,95	0
86	MG	2	1969	1/1	0.57	10.76	87,87,87,87	0
86	MG	5	3569	1/1	0.52	10.73	53,53,53,53	0
86	MG	1	3408	1/1	0.88	10.70	75,75,75,75	0
86	MG	1	3625	1/1	0.90	10.66	53,53,53,53	0
86	MG	1	3729	1/1	0.34	10.58	55,55,55,55	0
86	MG	1	3529	1/1	0.40	10.53	63,63,63,63	0
86	MG	5	3798	1/1	0.58	10.50	69,69,69,69	0
86	MG	5	3485	1/1	0.35	10.47	63,63,63,63	0
87	OHX	1	4202	7/7	0.32	10.46	166,166,166,166	0
86	MG	5	3821	1/1	0.37	10.41	49,49,49,49	0
86	MG	1	3794	1/1	0.43	10.39	44,44,44,44	0
86	MG	2	1917	1/1	0.72	10.36	83,83,83,83	0
86	MG	m0	301	1/1	0.56	10.35	48,48,48,48	0
86	MG	6	1984	1/1	0.73	10.33	60,60,60,60	0
86	MG	1	3828	1/1	0.56	10.31	50,50,50,50	0
86	MG	5	3694	1/1	0.52	10.29	52,52,52,52	0
86	MG	5	4249	1/1	0.37	10.25	42,42,42,42	0
86	MG	5	3746	1/1	0.83	10.24	62,62,62,62	0
86	MG	4	215	1/1	0.57	10.19	64,64,64,64	0
86	MG	6	1937	1/1	0.38	10.19	97,97,97,97	0
86	MG	6	1901	1/1	0.43	10.14	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	6	1997	1/1	0.46	10.11	72,72,72,72	0
86	MG	2	1910	1/1	0.55	10.10	75,75,75,75	0
86	MG	2	1947	1/1	0.42	10.10	87,87,87,87	0
86	MG	5	3427	1/1	0.51	10.09	67,67,67,67	0
86	MG	1	3781	1/1	0.38	9.98	80,80,80,80	0
86	MG	5	3434	1/1	0.32	9.97	42,42,42,42	0
87	OHX	2	2159	7/7	0.31	9.90	195,195,195,195	0
86	MG	1	3720	1/1	0.51	9.89	62,62,62,62	0
86	MG	5	3406	1/1	0.39	9.87	44,44,44,44	0
87	OHX	1	4203	7/7	0.28	9.84	182,182,182,182	0
86	MG	5	3707	1/1	0.47	9.84	55,55,55,55	0
86	MG	1	3480	1/1	0.60	9.82	62,62,62,62	0
86	MG	2	1946	1/1	0.40	9.81	111,111,111,111	0
86	MG	5	3562	1/1	0.78	9.78	26,26,26,26	0
86	MG	5	3828	1/1	0.34	9.77	49,49,49,49	0
86	MG	5	3469	1/1	0.41	9.76	66,66,66,66	0
86	MG	3	212	1/1	0.32	9.75	98,98,98,98	0
86	MG	1	3547	1/1	0.57	9.74	73,73,73,73	0
86	MG	6	1926	1/1	0.48	9.72	53,53,53,53	0
86	MG	6	1922	1/1	0.39	9.68	54,54,54,54	0
86	MG	6	1949	1/1	0.55	9.61	61,61,61,61	0
86	MG	5	3559	1/1	0.59	9.61	48,48,48,48	0
86	MG	8	204	1/1	0.51	9.61	63,63,63,63	0
86	MG	4	214	1/1	0.36	9.56	79,79,79,79	0
86	MG	1	3433	1/1	0.37	9.53	75,75,75,75	0
86	MG	5	3695	1/1	0.41	9.48	75,75,75,75	0
87	OHX	5	4199	7/7	0.32	9.41	187,187,187,187	0
86	MG	1	3778	1/1	0.45	9.35	68,68,68,68	0
86	MG	5	3557	1/1	0.55	9.33	40,40,40,40	0
86	MG	5	3689	1/1	0.37	9.32	82,82,82,82	0
86	MG	1	3732	1/1	1.03	9.28	86,86,86,86	0
86	MG	5	3548	1/1	0.33	9.27	84,84,84,84	0
86	MG	1	3824	1/1	0.49	9.27	65,65,65,65	0
86	MG	1	3461	1/1	0.45	9.26	42,42,42,42	0
86	MG	N9	101	1/1	0.35	9.26	46,46,46,46	0
86	MG	5	3678	1/1	0.32	9.20	72,72,72,72	0
86	MG	O1	201	1/1	0.55	9.15	76,76,76,76	0
87	OHX	5	4134	7/7	0.37	9.13	173,173,173,173	0
86	MG	5	3545	1/1	0.48	9.09	79,79,79,79	0
86	MG	1	3787	1/1	0.98	9.07	47,47,47,47	0
87	OHX	1	4169	7/7	0.40	9.01	233,233,233,233	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3415	1/1	0.61	8.96	46,46,46,46	0
86	MG	6	1927	1/1	0.42	8.94	63,63,63,63	0
87	OHX	8	233	7/7	0.32	8.93	189,189,189,189	0
86	MG	1	3555	1/1	0.45	8.92	26,26,26,26	0
86	MG	1	3861	1/1	0.54	8.92	86,86,86,86	0
86	MG	2	1908	1/1	0.26	8.92	97,97,97,97	0
86	MG	1	3762	1/1	0.32	8.92	77,77,77,77	0
86	MG	5	3564	1/1	0.40	8.91	37,37,37,37	0
86	MG	7	212	1/1	0.44	8.89	75,75,75,75	0
86	MG	5	3713	1/1	0.38	8.89	72,72,72,72	0
86	MG	3	206	1/1	0.45	8.88	46,46,46,46	0
86	MG	4	208	1/1	0.41	8.87	43,43,43,43	0
86	MG	5	3597	1/1	0.34	8.84	61,61,61,61	0
86	MG	5	3534	1/1	0.42	8.78	57,57,57,57	0
86	MG	5	3499	1/1	0.44	8.76	57,57,57,57	0
86	MG	1	3760	1/1	0.41	8.73	52,52,52,52	0
86	MG	l3	401	1/1	0.64	8.73	27,27,27,27	0
86	MG	5	3519	1/1	0.43	8.73	43,43,43,43	0
86	MG	5	3637	1/1	0.90	8.69	75,75,75,75	0
86	MG	5	3440	1/1	0.51	8.68	50,50,50,50	0
86	MG	1	3586	1/1	0.37	8.62	40,40,40,40	0
86	MG	1	3641	1/1	0.28	8.57	71,71,71,71	0
86	MG	4	204	1/1	0.51	8.54	72,72,72,72	0
86	MG	L6	202	1/1	0.38	8.52	64,64,64,64	0
86	MG	6	1964	1/1	0.67	8.52	75,75,75,75	0
86	MG	1	3668	1/1	0.37	8.44	55,55,55,55	0
86	MG	5	3859	1/1	0.25	8.43	78,78,78,78	0
86	MG	1	3699	1/1	0.42	8.42	68,68,68,68	0
86	MG	6	1903	1/1	0.42	8.42	51,51,51,51	0
87	OHX	1	4208	7/7	0.40	8.40	181,181,181,181	0
86	MG	5	3563	1/1	0.80	8.33	54,54,54,54	0
86	MG	5	3452	1/1	0.56	8.33	48,48,48,48	0
86	MG	5	3646	1/1	0.40	8.32	65,65,65,65	0
87	OHX	5	4196	7/7	0.51	8.28	162,162,162,162	0
86	MG	2	2018	1/1	0.76	8.26	116,116,116,116	0
86	MG	1	3701	1/1	0.42	8.24	52,52,52,52	0
86	MG	2	1986	1/1	0.96	8.22	95,95,95,95	0
86	MG	1	3431	1/1	0.38	8.21	55,55,55,55	0
86	MG	l3	405	1/1	0.52	8.21	44,44,44,44	0
86	MG	1	3674	1/1	0.36	8.17	44,44,44,44	0
86	MG	6	1971	1/1	0.39	8.11	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	5	3475	1/1	0.39	8.10	40,40,40,40	0
86	MG	4	222	1/1	0.62	8.09	77,77,77,77	0
86	MG	1	3450	1/1	0.56	8.05	71,71,71,71	0
86	MG	6	1969	1/1	0.35	8.03	91,91,91,91	0
86	MG	5	3515	1/1	0.40	8.00	52,52,52,52	0
86	MG	L4	402	1/1	0.40	8.00	47,47,47,47	0
86	MG	7	205	1/1	0.49	7.99	35,35,35,35	0
87	OHX	6	2058	7/7	0.24	7.98	89,89,89,89	0
86	MG	1	3565	1/1	0.65	7.96	44,44,44,44	0
86	MG	5	3449	1/1	0.44	7.94	53,53,53,53	0
86	MG	5	3847	1/1	0.51	7.93	71,71,71,71	0
86	MG	6	2020	1/1	0.52	7.92	70,70,70,70	0
86	MG	6	2001	1/1	0.46	7.92	89,89,89,89	0
86	MG	5	3484	1/1	0.49	7.89	70,70,70,70	0
86	MG	1	3636	1/1	0.27	7.88	74,74,74,74	0
86	MG	5	3840	1/1	3.28	7.87	76,76,76,76	0
86	MG	5	3411	1/1	0.39	7.83	57,57,57,57	0
86	MG	6	1982	1/1	0.37	7.82	77,77,77,77	0
86	MG	1	3619	1/1	0.56	7.82	61,61,61,61	0
86	MG	5	3702	1/1	0.26	7.78	66,66,66,66	0
86	MG	5	3580	1/1	0.35	7.78	44,44,44,44	0
86	MG	1	3425	1/1	0.42	7.77	73,73,73,73	0
86	MG	q0	203	1/1	0.63	7.72	58,58,58,58	0
86	MG	5	3724	1/1	0.33	7.69	122,122,122,122	0
86	MG	8	206	1/1	0.29	7.68	82,82,82,82	0
86	MG	1	3556	1/1	0.48	7.67	56,56,56,56	0
86	MG	5	3671	1/1	0.49	7.66	43,43,43,43	0
86	MG	6	1976	1/1	0.40	7.60	69,69,69,69	0
86	MG	1	3730	1/1	0.56	7.59	42,42,42,42	0
86	MG	1	3591	1/1	0.59	7.57	50,50,50,50	0
86	MG	1	3744	1/1	0.34	7.54	44,44,44,44	0
86	MG	1	3711	1/1	0.34	7.51	76,76,76,76	0
86	MG	5	3604	1/1	0.36	7.50	51,51,51,51	0
86	MG	5	3493	1/1	0.41	7.47	68,68,68,68	0
86	MG	7	207	1/1	0.23	7.42	67,67,67,67	0
86	MG	1	3822	1/1	0.28	7.41	96,96,96,96	0
86	MG	4	211	1/1	0.35	7.40	79,79,79,79	0
86	MG	4	203	1/1	0.47	7.40	55,55,55,55	0
86	MG	5	3677	1/1	0.35	7.39	48,48,48,48	0
86	MG	2	2004	1/1	0.73	7.38	122,122,122,122	0
86	MG	5	3857	1/1	0.46	7.37	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3469	1/1	0.47	7.35	60,60,60,60	0
87	OHX	6	2193	7/7	0.32	7.34	202,202,202,202	0
86	MG	1	3465	1/1	0.52	7.33	89,89,89,89	0
86	MG	5	3468	1/1	0.41	7.32	58,58,58,58	0
86	MG	5	3439	1/1	0.71	7.27	56,56,56,56	0
86	MG	8	202	1/1	0.26	7.23	110,110,110,110	0
86	MG	6	1998	1/1	0.31	7.21	69,69,69,69	0
86	MG	1	3568	1/1	0.41	7.16	48,48,48,48	0
86	MG	5	3408	1/1	0.52	7.16	45,45,45,45	0
86	MG	3	210	1/1	2.97	7.15	95,95,95,95	0
86	MG	1	3629	1/1	0.41	7.09	48,48,48,48	0
86	MG	6	1973	1/1	0.35	7.04	78,78,78,78	0
86	MG	6	2009	1/1	1.55	7.04	96,96,96,96	0
86	MG	6	2040	1/1	0.40	7.03	88,88,88,88	0
86	MG	5	3783	1/1	0.42	7.00	48,48,48,48	0
86	MG	N8	203	1/1	0.37	6.96	66,66,66,66	0
86	MG	5	3741	1/1	0.39	6.96	56,56,56,56	0
86	MG	1	3736	1/1	0.54	6.95	61,61,61,61	0
86	MG	6	1912	1/1	0.34	6.94	96,96,96,96	0
86	MG	1	3462	1/1	0.43	6.94	36,36,36,36	0
86	MG	1	3491	1/1	0.36	6.93	42,42,42,42	0
86	MG	M0	302	1/1	0.41	6.93	63,63,63,63	0
86	MG	1	3624	1/1	0.37	6.89	49,49,49,49	0
86	MG	1	3726	1/1	0.35	6.87	66,66,66,66	0
86	MG	5	3648	1/1	0.60	6.85	93,93,93,93	0
86	MG	O7	102	1/1	0.60	6.84	61,61,61,61	0
86	MG	1	3727	1/1	0.43	6.82	90,90,90,90	0
86	MG	1	3511	1/1	0.43	6.81	44,44,44,44	0
86	MG	2	2010	1/1	0.38	6.80	107,107,107,107	0
86	MG	5	3516	1/1	0.26	6.80	61,61,61,61	0
86	MG	5	3666	1/1	0.34	6.78	37,37,37,37	0
86	MG	1	3479	1/1	0.30	6.77	77,77,77,77	0
86	MG	1	3548	1/1	0.38	6.76	52,52,52,52	0
86	MG	1	3508	1/1	0.35	6.75	51,51,51,51	0
86	MG	2	1941	1/1	0.32	6.74	94,94,94,94	0
86	MG	2	1928	1/1	0.51	6.65	131,131,131,131	0
86	MG	7	203	1/1	0.31	6.65	69,69,69,69	0
86	MG	5	3714	1/1	0.43	6.64	88,88,88,88	0
86	MG	1	3731	1/1	0.42	6.61	89,89,89,89	0
86	MG	5	3837	1/1	0.31	6.61	67,67,67,67	0
86	MG	n9	101	1/1	0.45	6.60	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
87	OHX	5	4229	7/7	0.35	6.59	202,202,202,202	0
86	MG	6	1980	1/1	0.37	6.59	64,64,64,64	0
87	OHX	8	234	7/7	0.31	6.55	165,165,165,165	0
86	MG	5	3584	1/1	0.53	6.53	39,39,39,39	0
86	MG	1	3457	1/1	0.44	6.52	64,64,64,64	0
86	MG	4	219	1/1	0.32	6.52	77,77,77,77	0
86	MG	1	3795	1/1	0.32	6.52	73,73,73,73	0
87	OHX	5	4223	7/7	0.28	6.52	156,156,156,156	0
86	MG	2	1992	1/1	0.44	6.47	80,80,80,80	0
86	MG	5	3412	1/1	0.35	6.44	46,46,46,46	0
87	OHX	5	4191	7/7	0.22	6.42	198,198,198,198	0
86	MG	1	3412	1/1	0.45	6.41	39,39,39,39	0
86	MG	5	3767	1/1	0.42	6.40	97,97,97,97	0
86	MG	1	3722	1/1	0.42	6.38	60,60,60,60	0
86	MG	5	3816	1/1	0.36	6.36	69,69,69,69	0
86	MG	5	3818	1/1	0.22	6.33	80,80,80,80	0
86	MG	1	3612	1/1	0.55	6.32	48,48,48,48	0
86	MG	5	3717	1/1	0.44	6.32	79,79,79,79	0
86	MG	1	3782	1/1	0.72	6.32	49,49,49,49	0
86	MG	5	3426	1/1	0.37	6.28	57,57,57,57	0
86	MG	N3	201	1/1	0.47	6.28	43,43,43,43	0
86	MG	5	3853	1/1	0.30	6.26	134,134,134,134	0
86	MG	1	3553	1/1	0.48	6.24	62,62,62,62	0
86	MG	1	3447	1/1	0.29	6.23	46,46,46,46	0
86	MG	5	3728	1/1	0.31	6.22	70,70,70,70	0
86	MG	1	3430	1/1	0.32	6.22	67,67,67,67	0
86	MG	1	3525	1/1	0.41	6.21	58,58,58,58	0
86	MG	6	1970	1/1	0.42	6.19	78,78,78,78	0
86	MG	o3	201	1/1	0.88	6.15	56,56,56,56	0
86	MG	2	2023	1/1	0.65	6.11	129,129,129,129	0
86	MG	5	3780	1/1	0.40	6.11	41,41,41,41	0
86	MG	1	3717	1/1	0.71	6.10	58,58,58,58	0
86	MG	5	3709	1/1	0.36	6.08	63,63,63,63	0
86	MG	2	1903	1/1	0.30	6.08	73,73,73,73	0
86	MG	1	3569	1/1	0.48	6.05	76,76,76,76	0
86	MG	6	1913	1/1	0.48	6.05	52,52,52,52	0
87	OHX	5	4231	7/7	0.23	6.03	202,202,202,202	0
86	MG	2	2019	1/1	0.37	6.00	106,106,106,106	0
86	MG	1	3793	1/1	0.60	5.99	67,67,67,67	0
86	MG	1	3735	1/1	0.31	5.99	58,58,58,58	0
86	MG	2	2014	1/1	0.44	5.95	98,98,98,98	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	2	1944	1/1	0.66	5.95	93,93,93,93	0
86	MG	5	3451	1/1	0.29	5.94	52,52,52,52	0
86	MG	5	3793	1/1	0.31	5.90	55,55,55,55	0
86	MG	5	3514	1/1	0.34	5.88	60,60,60,60	0
86	MG	6	2017	1/1	0.57	5.85	86,86,86,86	0
86	MG	n3	201	1/1	0.46	5.85	33,33,33,33	0
87	OHX	5	4173	7/7	0.32	5.83	142,142,142,142	0
86	MG	5	3605	1/1	0.26	5.82	48,48,48,48	0
86	MG	1	4215	1/1	0.53	5.74	65,65,65,65	0
86	MG	1	3839	1/1	0.24	5.72	94,94,94,94	0
86	MG	5	3858	1/1	0.40	5.71	56,56,56,56	0
86	MG	8	214	1/1	0.59	5.68	71,71,71,71	0
86	MG	1	3654	1/1	0.30	5.68	54,54,54,54	0
86	MG	1	3714	1/1	0.32	5.67	101,101,101,101	0
86	MG	5	3877	1/1	0.40	5.66	116,116,116,116	0
86	MG	6	1945	1/1	0.29	5.66	65,65,65,65	0
86	MG	8	209	1/1	0.32	5.64	97,97,97,97	0
86	MG	1	3493	1/1	0.30	5.63	106,106,106,106	0
86	MG	l3	402	1/1	0.51	5.63	45,45,45,45	0
86	MG	5	3674	1/1	0.23	5.62	63,63,63,63	0
86	MG	5	3621	1/1	0.41	5.61	66,66,66,66	0
87	OHX	1	4189	7/7	0.36	5.60	181,181,181,181	0
86	MG	5	3684	1/1	0.37	5.59	106,106,106,106	0
87	OHX	5	4153	7/7	0.26	5.59	168,168,168,168	0
86	MG	8	203	1/1	0.56	5.56	62,62,62,62	0
86	MG	1	3688	1/1	0.27	5.50	58,58,58,58	0
86	MG	5	3623	1/1	0.33	5.48	79,79,79,79	0
86	MG	n9	102	1/1	0.46	5.47	51,51,51,51	0
86	MG	5	3688	1/1	0.39	5.45	42,42,42,42	0
86	MG	6	1977	1/1	0.32	5.43	80,80,80,80	0
86	MG	5	4250	1/1	0.34	5.40	54,54,54,54	0
87	OHX	5	4197	7/7	0.22	5.39	175,175,175,175	0
86	MG	M7	203	1/1	0.51	5.38	45,45,45,45	0
86	MG	5	3727	1/1	0.20	5.35	71,71,71,71	0
86	MG	5	3525	1/1	0.27	5.31	73,73,73,73	0
86	MG	N5	201	1/1	1.12	5.31	71,71,71,71	0
86	MG	1	3456	1/1	0.35	5.29	47,47,47,47	0
86	MG	5	3598	1/1	0.28	5.27	53,53,53,53	0
86	MG	1	3808	1/1	0.36	5.26	61,61,61,61	0
86	MG	6	2031	1/1	0.34	5.23	94,94,94,94	0
86	MG	4	220	1/1	0.32	5.21	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3663	1/1	0.64	5.18	83,83,83,83	0
86	MG	5	3725	1/1	0.33	5.16	37,37,37,37	0
86	MG	1	3492	1/1	0.28	5.13	70,70,70,70	0
86	MG	L7	302	1/1	0.82	5.13	53,53,53,53	0
86	MG	5	3711	1/1	0.26	5.13	61,61,61,61	0
86	MG	1	3666	1/1	0.32	5.10	116,116,116,116	0
86	MG	5	3568	1/1	0.65	5.08	52,52,52,52	0
86	MG	4	210	1/1	0.49	5.02	64,64,64,64	0
87	OHX	5	4091	7/7	0.33	4.99	205,205,205,205	0
86	MG	3	205	1/1	0.42	4.98	43,43,43,43	0
86	MG	6	1978	1/1	0.53	4.97	74,74,74,74	0
86	MG	1	3483	1/1	0.33	4.93	64,64,64,64	0
87	OHX	5	4149	7/7	0.36	4.90	142,142,142,142	0
87	OHX	6	2131	7/7	0.37	4.88	128,128,128,128	0
86	MG	2	1922	1/1	0.29	4.84	97,97,97,97	0
86	MG	5	3808	1/1	0.50	4.81	76,76,76,76	0
86	MG	1	4214	1/1	0.29	4.80	41,41,41,41	0
86	MG	5	3665	1/1	0.40	4.78	48,48,48,48	0
86	MG	1	3651	1/1	0.38	4.76	92,92,92,92	0
87	OHX	5	3895	7/7	0.28	4.75	58,58,58,58	0
87	OHX	1	4116	7/7	0.28	4.74	164,164,164,164	0
87	OHX	5	4076	7/7	0.27	4.73	142,142,142,142	0
86	MG	6	2044	1/1	0.29	4.72	70,70,70,70	0
86	MG	2	1979	1/1	0.25	4.70	129,129,129,129	0
86	MG	1	3856	1/1	0.31	4.66	86,86,86,86	0
86	MG	1	3700	1/1	0.53	4.63	144,144,144,144	0
86	MG	1	3772	1/1	0.35	4.59	73,73,73,73	0
86	MG	5	3496	1/1	0.30	4.58	62,62,62,62	0
86	MG	4	201	1/1	0.38	4.57	62,62,62,62	0
86	MG	O5	201	1/1	1.04	4.55	70,70,70,70	0
86	MG	m6	201	1/1	0.33	4.53	46,46,46,46	0
87	OHX	1	3887	7/7	0.23	4.53	87,87,87,87	0
86	MG	1	3814	1/1	0.41	4.53	71,71,71,71	0
86	MG	2	2015	1/1	0.57	4.53	71,71,71,71	0
87	OHX	1	4176	7/7	0.37	4.47	190,190,190,190	0
86	MG	1	3427	1/1	0.45	4.47	67,67,67,67	0
86	MG	5	3511	1/1	0.31	4.44	54,54,54,54	0
86	MG	5	3549	1/1	0.39	4.42	73,73,73,73	0
86	MG	5	3420	1/1	0.22	4.41	128,128,128,128	0
86	MG	5	3424	1/1	0.37	4.41	46,46,46,46	0
86	MG	D4	201	1/1	1.26	4.39	115,115,115,115	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
86	MG	6	1960	1/1	0.42	4.39	81,81,81,81	0
86	MG	5	3822	1/1	0.33	4.37	39,39,39,39	0
86	MG	2	1960	1/1	0.46	4.36	89,89,89,89	0
86	MG	5	3824	1/1	0.32	4.35	101,101,101,101	0
86	MG	1	3639	1/1	0.39	4.32	61,61,61,61	0
86	MG	6	1942	1/1	0.31	4.31	71,71,71,71	0
86	MG	6	1974	1/1	0.24	4.31	77,77,77,77	0
86	MG	5	3850	1/1	0.32	4.30	78,78,78,78	0
86	MG	l3	406	1/1	0.56	4.29	47,47,47,47	0
86	MG	2	2001	1/1	0.29	4.22	109,109,109,109	0
86	MG	1	3779	1/1	0.35	4.20	71,71,71,71	0
86	MG	5	3786	1/1	0.33	4.20	48,48,48,48	0
86	MG	5	4252	1/1	0.42	4.15	60,60,60,60	0
86	MG	1	3584	1/1	0.41	4.15	55,55,55,55	0
86	MG	1	3777	1/1	0.40	4.15	59,59,59,59	0
86	MG	5	3819	1/1	0.47	4.14	47,47,47,47	0
86	MG	7	208	1/1	0.62	4.12	60,60,60,60	0
86	MG	1	3626	1/1	0.31	4.11	78,78,78,78	0
86	MG	5	3805	1/1	0.34	4.11	51,51,51,51	0
86	MG	m7	203	1/1	0.59	4.11	52,52,52,52	0
86	MG	5	3403	1/1	1.90	4.10	65,65,65,65	0
86	MG	2	1970	1/1	0.54	4.08	105,105,105,105	0
86	MG	1	3669	1/1	0.21	4.08	105,105,105,105	0
86	MG	2	1943	1/1	0.47	4.07	117,117,117,117	0
86	MG	2	1912	1/1	0.41	4.07	91,91,91,91	0
86	MG	5	3601	1/1	0.28	4.07	44,44,44,44	0
87	OHX	l5	307	7/7	0.42	4.06	177,177,177,177	0
86	MG	1	3554	1/1	0.48	4.02	50,50,50,50	0
86	MG	1	3419	1/1	0.30	4.01	83,83,83,83	0
86	MG	1	3604	1/1	0.87	4.00	65,65,65,65	0
86	MG	6	1914	1/1	0.35	3.99	55,55,55,55	0
86	MG	5	3752	1/1	0.30	3.98	67,67,67,67	0
86	MG	1	3667	1/1	0.34	3.97	73,73,73,73	0
87	OHX	5	4144	7/7	0.35	3.97	167,167,167,167	0
86	MG	5	3659	1/1	0.35	3.94	48,48,48,48	0
86	MG	5	3777	1/1	0.33	3.92	112,112,112,112	0
86	MG	q3	503	1/1	0.41	3.92	89,89,89,89	0
87	OHX	5	3901	7/7	0.25	3.92	73,73,73,73	0
86	MG	1	3713	1/1	1.04	3.91	75,75,75,75	0
86	MG	6	1965	1/1	0.26	3.90	103,103,103,103	0
86	MG	5	3785	1/1	0.45	3.88	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
86	MG	6	1950	1/1	0.66	3.86	64,64,64,64	0
86	MG	1	3435	1/1	0.36	3.85	63,63,63,63	0
86	MG	1	3607	1/1	0.26	3.81	73,73,73,73	0
86	MG	5	3675	1/1	0.42	3.80	54,54,54,54	0
86	MG	1	3855	1/1	0.32	3.78	38,38,38,38	0
86	MG	6	1996	1/1	0.43	3.78	72,72,72,72	0
86	MG	6	2038	1/1	1.18	3.75	93,93,93,93	0
86	MG	6	2027	1/1	0.20	3.74	74,74,74,74	0
87	OHX	1	4123	7/7	0.32	3.74	146,146,146,146	0
86	MG	1	3647	1/1	0.36	3.74	67,67,67,67	0
86	MG	1	3797	1/1	0.57	3.74	56,56,56,56	0
86	MG	1	3751	1/1	0.25	3.71	69,69,69,69	0
86	MG	2	1994	1/1	0.40	3.68	116,116,116,116	0
87	OHX	1	3891	7/7	0.18	3.67	112,112,112,112	0
87	OHX	5	3905	7/7	0.22	3.66	102,102,102,102	0
86	MG	1	3422	1/1	0.42	3.63	51,51,51,51	0
86	MG	5	3800	1/1	0.37	3.62	188,188,188,188	0
86	MG	1	3739	1/1	0.47	3.62	83,83,83,83	0
86	MG	6	1975	1/1	0.32	3.61	59,59,59,59	0
86	MG	5	3736	1/1	0.25	3.61	108,108,108,108	0
86	MG	m7	201	1/1	0.55	3.61	46,46,46,46	0
86	MG	1	3632	1/1	0.36	3.57	83,83,83,83	0
86	MG	5	3498	1/1	0.33	3.56	50,50,50,50	0
86	MG	1	3845	1/1	0.34	3.55	68,68,68,68	0
86	MG	1	3598	1/1	0.34	3.55	52,52,52,52	0
86	MG	1	3537	1/1	0.30	3.54	71,71,71,71	0
86	MG	2	1921	1/1	0.43	3.53	79,79,79,79	0
86	MG	1	3742	1/1	0.34	3.52	75,75,75,75	0
86	MG	1	3633	1/1	0.82	3.51	65,65,65,65	0
86	MG	l3	403	1/1	0.48	3.51	44,44,44,44	0
86	MG	5	3802	1/1	0.37	3.50	102,102,102,102	0
86	MG	4	202	1/1	0.41	3.50	91,91,91,91	0
86	MG	n8	201	1/1	0.41	3.49	70,70,70,70	0
86	MG	5	3626	1/1	0.63	3.44	65,65,65,65	0
87	OHX	5	4198	7/7	0.30	3.43	162,162,162,162	0
86	MG	O3	201	1/1	0.55	3.42	67,67,67,67	0
87	OHX	1	4195	7/7	0.15	3.42	192,192,192,192	0
86	MG	1	3740	1/1	0.31	3.42	66,66,66,66	0
87	OHX	1	4168	7/7	0.28	3.38	192,192,192,192	0
86	MG	2	2020	1/1	0.70	3.37	100,100,100,100	0
86	MG	6	1958	1/1	0.54	3.37	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	14	403	7/7	0.36	3.36	185,185,185,185	0
87	OHX	5	3896	7/7	0.27	3.35	70,70,70,70	0
86	MG	1	3796	1/1	0.34	3.33	53,53,53,53	0
86	MG	1	3646	1/1	0.33	3.32	55,55,55,55	0
86	MG	5	3823	1/1	0.30	3.31	65,65,65,65	0
86	MG	17	301	1/1	0.31	3.28	52,52,52,52	0
86	MG	5	3622	1/1	0.29	3.27	53,53,53,53	0
86	MG	7	204	1/1	0.27	3.27	95,95,95,95	0
86	MG	1	3611	1/1	0.36	3.27	57,57,57,57	0
86	MG	1	3716	1/1	0.31	3.26	54,54,54,54	0
86	MG	1	3501	1/1	0.63	3.26	47,47,47,47	0
86	MG	5	3664	1/1	0.44	3.26	72,72,72,72	0
86	MG	5	3757	1/1	0.22	3.26	54,54,54,54	0
86	MG	SM	301	1/1	0.91	3.25	75,75,75,75	0
86	MG	2	1930	1/1	0.27	3.25	99,99,99,99	0
86	MG	5	3495	1/1	0.26	3.19	56,56,56,56	0
87	OHX	8	226	7/7	0.22	3.18	183,183,183,183	0
87	OHX	2	2108	7/7	0.42	3.18	188,188,188,188	0
86	MG	6	1951	1/1	0.31	3.17	60,60,60,60	0
86	MG	1	4213	1/1	0.28	3.17	95,95,95,95	0
86	MG	2	1926	1/1	0.42	3.14	110,110,110,110	0
86	MG	L6	201	1/1	0.23	3.12	67,67,67,67	0
86	MG	6	1938	1/1	0.30	3.12	59,59,59,59	0
86	MG	1	3746	1/1	0.41	3.12	61,61,61,61	0
86	MG	1	3557	1/1	0.36	3.11	72,72,72,72	0
86	MG	q1	101	1/1	0.43	3.10	58,58,58,58	0
86	MG	5	3787	1/1	0.34	3.10	68,68,68,68	0
86	MG	1	3416	1/1	0.85	3.10	78,78,78,78	0
87	OHX	5	4183	7/7	0.29	3.08	202,202,202,202	0
86	MG	M0	303	1/1	0.51	3.06	67,67,67,67	0
86	MG	5	3653	1/1	0.50	3.06	73,73,73,73	0
86	MG	5	3544	1/1	0.26	3.05	57,57,57,57	0
86	MG	1	3574	1/1	0.45	2.99	44,44,44,44	0
87	OHX	6	2052	7/7	0.26	2.99	90,90,90,90	0
86	MG	5	3863	1/1	0.32	2.95	46,46,46,46	0
87	OHX	6	2183	7/7	0.31	2.95	142,142,142,142	0
87	OHX	2	2162	7/7	0.37	2.95	219,219,219,219	0
86	MG	1	3597	1/1	0.25	2.94	59,59,59,59	0
86	MG	5	3862	1/1	0.35	2.93	51,51,51,51	0
87	OHX	1	4098	7/7	0.25	2.93	206,206,206,206	0
87	OHX	5	4178	7/7	0.22	2.93	182,182,182,182	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
87	OHX	6	2180	7/7	0.28	2.90	165,165,165,165	0
86	MG	1	3743	1/1	1.07	2.88	88,88,88,88	0
86	MG	5	3547	1/1	0.43	2.85	70,70,70,70	0
86	MG	1	3756	1/1	0.48	2.85	41,41,41,41	0
86	MG	5	3505	1/1	0.32	2.83	38,38,38,38	0
86	MG	1	3404	1/1	0.70	2.81	76,76,76,76	0
86	MG	5	3660	1/1	0.30	2.80	69,69,69,69	0
86	MG	8	215	1/1	0.49	2.77	82,82,82,82	0
86	MG	7	211	1/1	0.33	2.76	54,54,54,54	0
86	MG	1	3454	1/1	1.30	2.76	88,88,88,88	0
87	OHX	5	4179	7/7	0.22	2.75	158,158,158,158	0
86	MG	5	3488	1/1	0.23	2.73	47,47,47,47	0
87	OHX	1	3897	7/7	0.23	2.72	95,95,95,95	0
86	MG	6	1957	1/1	0.55	2.71	51,51,51,51	0
87	OHX	7	225	7/7	0.24	2.70	149,149,149,149	0
87	OHX	3	222	7/7	0.43	2.69	151,151,151,151	0
86	MG	5	3510	1/1	0.38	2.67	34,34,34,34	0
86	MG	m7	202	1/1	0.33	2.66	65,65,65,65	0
87	OHX	5	4141	7/7	0.23	2.66	152,152,152,152	0
86	MG	1	3802	1/1	0.52	2.66	75,75,75,75	0
86	MG	5	3672	1/1	0.23	2.65	75,75,75,75	0
87	OHX	2	2113	7/7	0.25	2.64	168,168,168,168	0
87	OHX	1	4186	7/7	0.27	2.62	204,204,204,204	0
87	OHX	3	224	7/7	0.21	2.61	165,165,165,165	0
86	MG	6	1911	1/1	0.25	2.60	75,75,75,75	0
87	OHX	1	4137	7/7	0.28	2.59	135,135,135,135	0
86	MG	1	3505	1/1	0.30	2.58	45,45,45,45	0
86	MG	1	3821	1/1	0.27	2.58	60,60,60,60	0
87	OHX	5	3939	7/7	0.21	2.58	119,119,119,119	0
86	MG	1	3773	1/1	0.28	2.57	78,78,78,78	0
86	MG	8	205	1/1	0.52	2.57	54,54,54,54	0
87	OHX	6	2170	7/7	0.52	2.54	172,172,172,172	0
86	MG	1	3478	1/1	0.39	2.53	108,108,108,108	0
86	MG	1	3754	1/1	0.25	2.53	111,111,111,111	0
86	MG	1	3413	1/1	0.29	2.53	57,57,57,57	0
86	MG	1	3807	1/1	0.34	2.52	72,72,72,72	0
86	MG	5	3794	1/1	0.32	2.52	55,55,55,55	0
87	OHX	1	4092	7/7	0.23	2.51	171,171,171,171	0
86	MG	5	3416	1/1	0.40	2.51	49,49,49,49	0
86	MG	6	1995	1/1	0.35	2.51	75,75,75,75	0
87	OHX	1	4131	7/7	0.29	2.51	171,171,171,171	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3488	1/1	0.58	2.50	79,79,79,79	0
87	OHX	5	4068	7/7	0.20	2.50	144,144,144,144	0
87	OHX	1	3866	7/7	0.26	2.50	55,55,55,55	0
86	MG	m5	301	1/1	0.60	2.49	74,74,74,74	0
86	MG	o4	201	1/1	0.61	2.48	81,81,81,81	0
87	OHX	7	226	7/7	0.35	2.46	171,171,171,171	0
87	OHX	6	2198	7/7	0.40	2.44	187,187,187,187	0
86	MG	2	1997	1/1	0.64	2.44	140,140,140,140	0
86	MG	1	3516	1/1	0.30	2.43	58,58,58,58	0
86	MG	5	3644	1/1	0.23	2.43	44,44,44,44	0
86	MG	5	3486	1/1	0.27	2.43	80,80,80,80	0
86	MG	m7	204	1/1	0.40	2.42	62,62,62,62	0
87	OHX	1	4175	7/7	0.25	2.41	145,145,145,145	0
87	OHX	4	233	7/7	0.24	2.38	144,144,144,144	0
86	MG	6	2003	1/1	0.28	2.36	69,69,69,69	0
86	MG	5	3474	1/1	0.32	2.35	58,58,58,58	0
86	MG	M7	202	1/1	0.83	2.34	100,100,100,100	0
86	MG	1	3691	1/1	0.29	2.34	55,55,55,55	0
86	MG	6	2000	1/1	0.25	2.34	77,77,77,77	0
87	OHX	1	4136	7/7	0.43	2.33	183,183,183,183	0
87	OHX	1	4025	7/7	0.24	2.33	175,175,175,175	0
86	MG	5	3708	1/1	0.18	2.32	128,128,128,128	0
87	OHX	1	4112	7/7	0.40	2.32	155,155,155,155	0
86	MG	M5	302	1/1	0.40	2.32	75,75,75,75	0
86	MG	2	2006	1/1	0.28	2.29	92,92,92,92	0
86	MG	M7	204	1/1	0.37	2.28	45,45,45,45	0
86	MG	n8	202	1/1	0.32	2.28	64,64,64,64	0
86	MG	6	2021	1/1	0.45	2.27	62,62,62,62	0
87	OHX	2	2149	7/7	0.22	2.27	229,229,229,229	0
86	MG	2	1976	1/1	0.33	2.26	87,87,87,87	0
87	OHX	5	3989	7/7	0.22	2.26	143,143,143,143	0
87	OHX	5	3907	7/7	0.29	2.24	68,68,68,68	0
86	MG	2	1937	1/1	0.32	2.24	81,81,81,81	0
86	MG	1	3776	1/1	0.27	2.23	96,96,96,96	0
86	MG	2	1981	1/1	0.24	2.22	96,96,96,96	0
86	MG	6	1905	1/1	0.49	2.22	69,69,69,69	0
86	MG	1	3599	1/1	0.33	2.22	50,50,50,50	0
86	MG	5	3691	1/1	0.29	2.18	47,47,47,47	0
87	OHX	5	4226	7/7	0.29	2.18	150,150,150,150	0
87	OHX	5	4188	7/7	0.26	2.17	157,157,157,157	0
87	OHX	5	4151	7/7	0.40	2.17	177,177,177,177	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	5	4176	7/7	0.20	2.16	177,177,177,177	0
86	MG	5	3669	1/1	0.41	2.16	41,41,41,41	0
87	OHX	5	4128	7/7	0.34	2.14	175,175,175,175	0
86	MG	2	1999	1/1	0.46	2.13	97,97,97,97	0
87	OHX	1	4170	7/7	0.31	2.12	169,169,169,169	0
86	MG	5	3817	1/1	0.35	2.12	141,141,141,141	0
86	MG	2	1913	1/1	0.32	2.11	118,118,118,118	0
87	OHX	6	2185	7/7	0.33	2.11	169,169,169,169	0
86	MG	5	3602	1/1	0.19	2.11	42,42,42,42	0
86	MG	m1	201	1/1	0.56	2.09	68,68,68,68	0
87	OHX	1	4061	7/7	0.25	2.07	159,159,159,159	0
86	MG	1	3417	1/1	0.29	2.06	52,52,52,52	0
87	OHX	1	3946	7/7	0.22	2.05	134,134,134,134	0
86	MG	5	3640	1/1	0.92	2.02	63,63,63,63	0
87	OHX	1	4212	7/7	0.29	2.02	194,194,194,194	0
86	MG	2	2016	1/1	0.64	2.02	82,82,82,82	0
87	OHX	1	3872	7/7	0.20	2.01	89,89,89,89	0
87	OHX	6	2057	7/7	0.25	2.01	97,97,97,97	0
86	MG	1	3769	1/1	0.25	2.00	95,95,95,95	0
87	OHX	6	2174	7/7	0.41	1.99	149,149,149,149	0
86	MG	M3	202	1/1	0.30	1.99	39,39,39,39	0
86	MG	5	3891	1/1	0.27	1.98	83,83,83,83	0
86	MG	1	3747	1/1	0.44	1.97	60,60,60,60	0
86	MG	5	3820	1/1	0.31	1.97	71,71,71,71	0
86	MG	5	3417	1/1	0.23	1.97	44,44,44,44	0
87	OHX	5	4170	7/7	0.25	1.97	184,184,184,184	0
87	OHX	8	227	7/7	0.23	1.97	143,143,143,143	0
86	MG	l5	302	1/1	0.32	1.96	77,77,77,77	0
87	OHX	1	3906	7/7	0.18	1.96	107,107,107,107	0
87	OHX	5	3934	7/7	0.21	1.96	104,104,104,104	0
86	MG	1	3445	1/1	0.34	1.93	75,75,75,75	0
86	MG	1	3640	1/1	0.49	1.92	49,49,49,49	0
86	MG	1	3803	1/1	0.45	1.91	93,93,93,93	0
87	OHX	2	2175	7/7	0.38	1.91	188,188,188,188	0
86	MG	5	3448	1/1	0.25	1.91	72,72,72,72	0
87	OHX	2	2143	7/7	0.33	1.90	163,163,163,163	0
87	OHX	4	232	7/7	0.28	1.89	170,170,170,170	0
87	OHX	5	4214	7/7	0.33	1.89	220,220,220,220	0
86	MG	1	3592	1/1	0.45	1.88	42,42,42,42	0
87	OHX	4	237	7/7	0.21	1.88	194,194,194,194	0
86	MG	6	1952	1/1	0.32	1.88	79,79,79,79	0
87	OHX	3	223	7/7	0.29	1.88	216,216,216,216	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
87	OHX	6	2171	7/7	0.40	1.88	202,202,202,202	0
86	MG	5	3782	1/1	0.31	1.88	61,61,61,61	0
86	MG	6	1985	1/1	0.98	1.87	67,67,67,67	0
86	MG	7	213	1/1	0.20	1.86	87,87,87,87	0
86	MG	1	3487	1/1	0.29	1.86	50,50,50,50	0
87	OHX	6	2125	7/7	0.23	1.85	141,141,141,141	0
86	MG	6	1919	1/1	0.29	1.83	82,82,82,82	0
87	OHX	2	2026	7/7	0.23	1.83	112,112,112,112	0
86	MG	5	3550	1/1	0.37	1.83	86,86,86,86	0
86	MG	2	2011	1/1	0.65	1.83	77,77,77,77	0
87	OHX	1	4110	7/7	0.28	1.83	133,133,133,133	0
86	MG	2	1938	1/1	0.24	1.81	90,90,90,90	0
86	MG	19	201	1/1	0.33	1.81	44,44,44,44	0
87	OHX	6	2211	7/7	0.24	1.81	189,189,189,189	0
86	MG	5	3743	1/1	0.28	1.81	71,71,71,71	0
87	OHX	m7	205	7/7	0.46	1.80	172,172,172,172	0
86	MG	1	3536	1/1	0.24	1.79	70,70,70,70	0
86	MG	6	1991	1/1	0.24	1.79	65,65,65,65	0
86	MG	6	1920	1/1	0.45	1.79	56,56,56,56	0
86	MG	1	3705	1/1	0.31	1.78	72,72,72,72	0
87	OHX	5	4121	7/7	0.16	1.78	174,174,174,174	0
87	OHX	5	3919	7/7	0.25	1.76	95,95,95,95	0
86	MG	1	3709	1/1	0.26	1.75	74,74,74,74	0
86	MG	2	1934	1/1	0.29	1.73	103,103,103,103	0
86	MG	5	3726	1/1	0.67	1.73	113,113,113,113	0
86	MG	1	3429	1/1	0.29	1.72	71,71,71,71	0
87	OHX	6	2207	7/7	0.27	1.69	202,202,202,202	0
86	MG	5	3825	1/1	0.36	1.69	59,59,59,59	0
87	OHX	8	218	7/7	0.22	1.68	80,80,80,80	0
86	MG	1	3436	1/1	0.31	1.68	53,53,53,53	0
86	MG	1	3734	1/1	0.44	1.67	98,98,98,98	0
87	OHX	5	4190	7/7	0.21	1.66	152,152,152,152	0
86	MG	7	201	1/1	0.32	1.64	59,59,59,59	0
86	MG	5	3446	1/1	0.20	1.64	56,56,56,56	0
86	MG	L7	301	1/1	0.46	1.63	57,57,57,57	0
86	MG	1	3809	1/1	0.31	1.62	54,54,54,54	0
87	OHX	1	4211	7/7	0.36	1.61	164,164,164,164	0
86	MG	N8	204	1/1	0.55	1.61	59,59,59,59	0
87	OHX	5	4222	7/7	0.47	1.60	209,209,209,209	0
86	MG	5	3437	1/1	0.21	1.60	74,74,74,74	0
87	OHX	1	4161	7/7	0.27	1.59	195,195,195,195	0
87	OHX	6	2145	7/7	0.17	1.58	182,182,182,182	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	1	4015	7/7	0.34	1.57	156,156,156,156	0
87	OHX	1	4000	7/7	0.26	1.56	145,145,145,145	0
86	MG	12	301	1/1	0.39	1.56	52,52,52,52	0
86	MG	1	3600	1/1	0.24	1.55	61,61,61,61	0
86	MG	8	210	1/1	0.36	1.54	77,77,77,77	0
86	MG	5	3732	1/1	0.46	1.54	61,61,61,61	0
86	MG	4	212	1/1	0.46	1.54	78,78,78,78	0
86	MG	1	3579	1/1	0.40	1.53	63,63,63,63	0
87	OHX	5	4108	7/7	0.25	1.52	132,132,132,132	0
87	OHX	5	3930	7/7	0.21	1.52	96,96,96,96	0
87	OHX	5	4087	7/7	0.21	1.52	141,141,141,141	0
86	MG	2	1975	1/1	0.47	1.51	102,102,102,102	0
86	MG	5	3402	1/1	0.25	1.50	38,38,38,38	0
87	OHX	5	4094	7/7	0.26	1.49	157,157,157,157	0
88	GET	2	2181	34/34	0.30	1.48	91,91,91,91	0
86	MG	1	3694	1/1	0.38	1.47	62,62,62,62	0
86	MG	m5	302	1/1	1.10	1.47	107,107,107,107	0
86	MG	5	3770	1/1	0.27	1.47	47,47,47,47	0
87	OHX	m9	201	7/7	0.45	1.47	173,173,173,173	0
87	OHX	2	2174	7/7	0.25	1.46	209,209,209,209	0
86	MG	2	2021	1/1	0.31	1.45	123,123,123,123	0
86	MG	5	3492	1/1	0.37	1.45	72,72,72,72	0
87	OHX	6	2202	7/7	0.22	1.44	209,209,209,209	0
86	MG	1	3847	1/1	0.23	1.44	67,67,67,67	0
86	MG	5	3421	1/1	0.27	1.44	59,59,59,59	0
87	OHX	1	4102	7/7	0.26	1.42	164,164,164,164	0
87	OHX	M7	206	7/7	0.27	1.42	151,151,151,151	0
86	MG	5	3618	1/1	0.25	1.42	49,49,49,49	0
87	OHX	4	236	7/7	0.32	1.41	164,164,164,164	0
86	MG	6	1981	1/1	0.28	1.41	102,102,102,102	0
86	MG	5	3761	1/1	0.24	1.38	59,59,59,59	0
87	OHX	2	2084	7/7	0.27	1.38	169,169,169,169	0
86	MG	1	3442	1/1	0.32	1.38	106,106,106,106	0
86	MG	2	1971	1/1	0.25	1.36	116,116,116,116	0
87	OHX	2	2117	7/7	0.48	1.35	182,182,182,182	0
87	OHX	N9	102	7/7	0.21	1.35	84,84,84,84	0
87	OHX	6	2165	7/7	0.29	1.35	168,168,168,168	0
86	MG	1	3608	1/1	0.36	1.34	68,68,68,68	0
86	MG	6	1961	1/1	0.38	1.33	51,51,51,51	0
86	MG	5	3401	1/1	0.32	1.32	76,76,76,76	0
87	OHX	5	4100	7/7	0.37	1.32	136,136,136,136	0
87	OHX	1	3985	7/7	0.30	1.31	149,149,149,149	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	5	4230	7/7	0.24	1.31	159,159,159,159	0
86	MG	M7	205	1/1	0.34	1.30	52,52,52,52	0
86	MG	6	2006	1/1	0.38	1.29	84,84,84,84	0
86	MG	2	1955	1/1	0.23	1.29	95,95,95,95	0
86	MG	o0	201	1/1	0.45	1.29	95,95,95,95	0
86	MG	S2	302	1/1	0.38	1.28	96,96,96,96	0
87	OHX	2	2122	7/7	0.30	1.28	201,201,201,201	0
87	OHX	2	2169	7/7	0.28	1.28	207,207,207,207	0
86	MG	5	3849	1/1	0.41	1.27	60,60,60,60	0
86	MG	s8	302	1/1	0.67	1.26	65,65,65,65	0
86	MG	5	3778	1/1	0.17	1.23	92,92,92,92	0
86	MG	5	3836	1/1	0.32	1.22	70,70,70,70	0
86	MG	M5	301	1/1	0.74	1.22	74,74,74,74	0
86	MG	1	3437	1/1	0.34	1.22	71,71,71,71	0
86	MG	1	3409	1/1	0.30	1.21	48,48,48,48	0
86	MG	N0	201	1/1	0.30	1.21	66,66,66,66	0
87	OHX	1	3931	7/7	0.25	1.21	92,92,92,92	0
86	MG	6	1955	1/1	0.27	1.21	80,80,80,80	0
86	MG	l4	401	1/1	0.46	1.20	63,63,63,63	0
86	MG	2	1965	1/1	0.34	1.20	85,85,85,85	0
86	MG	m6	203	1/1	0.43	1.20	41,41,41,41	0
87	OHX	5	4106	7/7	0.34	1.19	178,178,178,178	0
86	MG	m6	202	1/1	0.30	1.19	78,78,78,78	0
87	OHX	5	3922	7/7	0.23	1.19	92,92,92,92	0
86	MG	1	3820	1/1	0.26	1.19	81,81,81,81	0
87	OHX	2	2072	7/7	0.28	1.18	176,176,176,176	0
86	MG	6	1993	1/1	0.35	1.16	91,91,91,91	0
86	MG	2	1925	1/1	0.33	1.15	92,92,92,92	0
86	MG	5	3715	1/1	0.31	1.14	62,62,62,62	0
87	OHX	2	2176	7/7	0.24	1.14	176,176,176,176	0
87	OHX	2	2179	7/7	0.33	1.14	183,183,183,183	0
86	MG	1	3499	1/1	0.29	1.13	101,101,101,101	0
86	MG	5	3508	1/1	0.33	1.13	51,51,51,51	0
87	OHX	2	2128	7/7	0.19	1.13	200,200,200,200	0
86	MG	6	1959	1/1	0.34	1.13	76,76,76,76	0
87	OHX	1	3951	7/7	0.18	1.13	160,160,160,160	0
86	MG	1	3617	1/1	0.27	1.12	112,112,112,112	0
87	OHX	6	2075	7/7	0.15	1.10	141,141,141,141	0
87	OHX	6	2112	7/7	0.29	1.10	151,151,151,151	0
87	OHX	6	2059	7/7	0.24	1.09	96,96,96,96	0
87	OHX	6	2121	7/7	0.40	1.09	166,166,166,166	0
86	MG	5	3462	1/1	0.26	1.09	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	2	2152	7/7	0.22	1.08	192,192,192,192	0
87	OHX	5	4213	7/7	0.31	1.07	180,180,180,180	0
86	MG	1	3521	1/1	0.29	1.05	52,52,52,52	0
87	OHX	1	3918	7/7	0.17	1.05	124,124,124,124	0
87	OHX	5	4185	7/7	0.23	1.04	169,169,169,169	0
87	OHX	6	2053	7/7	0.19	1.03	92,92,92,92	0
86	MG	1	3780	1/1	0.40	1.03	55,55,55,55	0
86	MG	5	3788	1/1	0.25	1.02	49,49,49,49	0
86	MG	S8	301	1/1	0.36	1.02	85,85,85,85	0
87	OHX	6	2142	7/7	0.38	0.99	144,144,144,144	0
87	OHX	1	4140	7/7	0.29	0.99	163,163,163,163	0
86	MG	5	3744	1/1	0.20	0.99	97,97,97,97	0
86	MG	1	3455	1/1	0.35	0.99	90,90,90,90	0
87	OHX	2	2027	7/7	0.23	0.99	102,102,102,102	0
86	MG	6	1909	1/1	0.24	0.98	114,114,114,114	0
87	OHX	1	4183	7/7	0.26	0.97	133,133,133,133	0
86	MG	5	3615	1/1	0.38	0.97	65,65,65,65	0
86	MG	5	3502	1/1	0.24	0.94	66,66,66,66	0
86	MG	1	3631	1/1	0.40	0.94	111,111,111,111	0
87	OHX	1	4066	7/7	0.36	0.93	175,175,175,175	0
87	OHX	3	225	7/7	0.23	0.93	167,167,167,167	0
86	MG	5	3527	1/1	0.41	0.92	93,93,93,93	0
87	OHX	5	4132	7/7	0.43	0.91	169,169,169,169	0
86	MG	2	1906	1/1	0.43	0.91	80,80,80,80	0
86	MG	6	2028	1/1	0.46	0.89	58,58,58,58	0
86	MG	5	3827	1/1	0.24	0.89	59,59,59,59	0
87	OHX	4	225	7/7	0.22	0.89	79,79,79,79	0
86	MG	8	213	1/1	0.26	0.89	111,111,111,111	0
87	OHX	1	3868	7/7	0.26	0.89	70,70,70,70	0
86	MG	6	1925	1/1	0.31	0.88	133,133,133,133	0
87	OHX	5	3910	7/7	0.20	0.88	92,92,92,92	0
86	MG	5	3700	1/1	0.28	0.88	65,65,65,65	0
87	OHX	6	2179	7/7	0.41	0.88	170,170,170,170	0
86	MG	5	3838	1/1	0.37	0.88	64,64,64,64	0
87	OHX	5	4064	7/7	0.15	0.88	179,179,179,179	0
87	OHX	1	4078	7/7	0.39	0.87	165,165,165,165	0
87	OHX	5	4008	7/7	0.14	0.87	163,163,163,163	0
86	MG	4	216	1/1	0.30	0.86	89,89,89,89	0
87	OHX	1	3869	7/7	0.26	0.86	76,76,76,76	0
86	MG	5	3773	1/1	0.89	0.85	92,92,92,92	0
87	OHX	6	2055	7/7	0.23	0.85	95,95,95,95	0
87	OHX	1	3867	7/7	0.21	0.84	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3715	1/1	0.28	0.82	62,62,62,62	0
87	OHX	1	3944	7/7	0.17	0.81	137,137,137,137	0
87	OHX	5	4245	7/7	0.20	0.79	183,183,183,183	0
86	MG	15	301	1/1	0.29	0.79	71,71,71,71	0
86	MG	2	1980	1/1	0.37	0.78	95,95,95,95	0
87	OHX	5	4161	7/7	0.23	0.78	182,182,182,182	0
87	OHX	2	2172	7/7	0.26	0.77	191,191,191,191	0
86	MG	6	1953	1/1	0.28	0.76	64,64,64,64	0
87	OHX	6	2163	7/7	0.21	0.76	198,198,198,198	0
86	MG	6	2008	1/1	0.18	0.76	120,120,120,120	0
86	MG	5	3577	1/1	0.50	0.76	66,66,66,66	0
86	MG	5	3722	1/1	0.37	0.74	87,87,87,87	0
86	MG	5	3890	1/1	0.23	0.74	78,78,78,78	0
87	OHX	5	3928	7/7	0.19	0.74	128,128,128,128	0
87	OHX	1	4014	7/7	0.50	0.74	179,179,179,179	0
86	MG	1	3507	1/1	0.46	0.73	57,57,57,57	0
87	OHX	1	4113	7/7	0.18	0.73	166,166,166,166	0
86	MG	1	3755	1/1	0.21	0.72	60,60,60,60	0
87	OHX	6	2162	7/7	0.31	0.71	162,162,162,162	0
86	MG	5	3696	1/1	0.22	0.70	48,48,48,48	0
86	MG	5	3662	1/1	0.25	0.70	72,72,72,72	0
87	OHX	6	2105	7/7	0.14	0.69	200,200,200,200	0
87	OHX	6	2210	7/7	0.37	0.69	166,166,166,166	0
86	MG	5	3480	1/1	0.48	0.69	92,92,92,92	0
87	OHX	5	3935	7/7	0.19	0.68	94,94,94,94	0
86	MG	5	3834	1/1	0.30	0.68	81,81,81,81	0
86	MG	2	1967	1/1	0.53	0.67	108,108,108,108	0
86	MG	5	3415	1/1	0.22	0.67	73,73,73,73	0
87	OHX	5	4130	7/7	0.23	0.66	154,154,154,154	0
86	MG	5	3693	1/1	0.22	0.66	99,99,99,99	0
86	MG	1	3775	1/1	0.29	0.64	54,54,54,54	0
87	OHX	5	4240	7/7	0.24	0.63	188,188,188,188	0
87	OHX	4	227	7/7	0.19	0.62	142,142,142,142	0
86	MG	1	3471	1/1	0.30	0.61	56,56,56,56	0
86	MG	6	1915	1/1	0.46	0.61	85,85,85,85	0
87	OHX	6	2056	7/7	0.16	0.61	113,113,113,113	0
87	OHX	1	3904	7/7	0.22	0.61	96,96,96,96	0
87	OHX	5	4157	7/7	0.19	0.61	146,146,146,146	0
86	MG	5	3413	1/1	0.49	0.59	45,45,45,45	0
87	OHX	1	3894	7/7	0.19	0.59	95,95,95,95	0
87	OHX	2	2040	7/7	0.18	0.58	128,128,128,128	0
87	OHX	6	2208	7/7	0.47	0.58	182,182,182,182	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	5	4220	7/7	0.19	0.58	187,187,187,187	0
86	MG	2	1953	1/1	0.34	0.55	179,179,179,179	0
87	OHX	5	3898	7/7	0.25	0.55	77,77,77,77	0
87	OHX	5	4095	7/7	0.14	0.55	175,175,175,175	0
87	OHX	6	2203	7/7	0.18	0.55	205,205,205,205	0
86	MG	1	3710	1/1	0.26	0.54	47,47,47,47	0
86	MG	5	3512	1/1	0.29	0.54	79,79,79,79	0
87	OHX	2	2136	7/7	0.21	0.54	203,203,203,203	0
87	OHX	5	3917	7/7	0.20	0.53	93,93,93,93	0
86	MG	5	3721	1/1	0.34	0.52	41,41,41,41	0
86	MG	2	1920	1/1	0.45	0.52	86,86,86,86	0
86	MG	1	3635	1/1	0.38	0.52	86,86,86,86	0
87	OHX	5	4115	7/7	0.17	0.51	153,153,153,153	0
86	MG	5	3740	1/1	0.20	0.51	60,60,60,60	0
87	OHX	2	2160	7/7	0.52	0.51	176,176,176,176	0
86	MG	5	3556	1/1	0.30	0.50	35,35,35,35	0
86	MG	6	2005	1/1	0.22	0.50	66,66,66,66	0
87	OHX	5	4225	7/7	0.22	0.49	180,180,180,180	0
87	OHX	1	4197	7/7	0.23	0.48	149,149,149,149	0
86	MG	5	3810	1/1	0.32	0.48	55,55,55,55	0
87	OHX	5	4201	7/7	0.28	0.48	181,181,181,181	0
87	OHX	5	4065	7/7	0.36	0.48	149,149,149,149	0
86	MG	5	3591	1/1	0.27	0.47	58,58,58,58	0
86	MG	c7	201	1/1	0.31	0.47	62,62,62,62	0
86	MG	5	3751	1/1	0.32	0.46	77,77,77,77	0
87	OHX	1	4178	7/7	0.63	0.45	184,184,184,184	0
86	MG	5	3668	1/1	0.24	0.45	68,68,68,68	0
87	OHX	6	2176	7/7	0.31	0.45	190,190,190,190	0
87	OHX	6	2173	7/7	0.20	0.45	200,200,200,200	0
87	OHX	1	3929	7/7	0.17	0.44	143,143,143,143	0
86	MG	2	1911	1/1	0.40	0.42	89,89,89,89	0
87	OHX	1	4084	7/7	0.22	0.42	174,174,174,174	0
87	OHX	5	3972	7/7	0.21	0.42	119,119,119,119	0
86	MG	2	1959	1/1	0.20	0.42	143,143,143,143	0
86	MG	2	1909	1/1	0.24	0.42	121,121,121,121	0
87	OHX	8	230	7/7	0.18	0.42	178,178,178,178	0
86	MG	2	2000	1/1	0.46	0.41	134,134,134,134	0
86	MG	1	3725	1/1	0.16	0.39	69,69,69,69	0
86	MG	N6	201	1/1	0.37	0.38	72,72,72,72	0
86	MG	1	3622	1/1	0.27	0.38	72,72,72,72	0
87	OHX	2	2178	7/7	0.28	0.37	211,211,211,211	0
86	MG	d3	201	1/1	0.43	0.36	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3685	1/1	0.28	0.36	58,58,58,58	0
87	OHX	5	4099	7/7	0.22	0.36	161,161,161,161	0
87	OHX	1	4173	7/7	0.16	0.35	184,184,184,184	0
86	MG	5	3429	1/1	0.20	0.34	81,81,81,81	0
86	MG	6	2007	1/1	0.24	0.34	93,93,93,93	0
87	OHX	6	2186	7/7	0.20	0.33	187,187,187,187	0
87	OHX	5	3960	7/7	0.20	0.33	130,130,130,130	0
86	MG	5	3892	1/1	0.44	0.33	93,93,93,93	0
87	OHX	6	2201	7/7	0.18	0.32	195,195,195,195	0
87	OHX	2	2173	7/7	0.28	0.32	199,199,199,199	0
86	MG	5	3758	1/1	0.27	0.32	66,66,66,66	0
86	MG	5	3846	1/1	0.45	0.32	75,75,75,75	0
86	MG	6	2010	1/1	0.29	0.31	80,80,80,80	0
86	MG	6	1999	1/1	0.26	0.31	102,102,102,102	0
86	MG	8	208	1/1	0.32	0.31	70,70,70,70	0
86	MG	6	1936	1/1	0.37	0.30	66,66,66,66	0
87	OHX	6	2120	7/7	0.25	0.30	145,145,145,145	0
87	OHX	5	3951	7/7	0.23	0.29	118,118,118,118	0
87	OHX	5	3970	7/7	0.24	0.29	107,107,107,107	0
87	OHX	2	2165	7/7	0.16	0.29	235,235,235,235	0
87	OHX	1	4200	7/7	0.19	0.27	174,174,174,174	0
87	OHX	1	3980	7/7	0.24	0.27	139,139,139,139	0
86	MG	q3	502	1/1	0.41	0.27	83,83,83,83	0
87	OHX	6	2147	7/7	0.32	0.26	164,164,164,164	0
86	MG	1	3566	1/1	0.26	0.25	43,43,43,43	0
86	MG	5	3460	1/1	0.26	0.25	43,43,43,43	0
87	OHX	1	4145	7/7	0.21	0.25	168,168,168,168	0
87	OHX	1	4104	7/7	0.22	0.25	153,153,153,153	0
86	MG	5	3811	1/1	0.27	0.24	54,54,54,54	0
87	OHX	2	2157	7/7	0.23	0.24	152,152,152,152	0
87	OHX	2	2164	7/7	0.24	0.24	173,173,173,173	0
86	MG	5	3781	1/1	0.17	0.23	60,60,60,60	0
86	MG	1	3601	1/1	0.23	0.23	54,54,54,54	0
86	MG	1	3842	1/1	0.23	0.22	58,58,58,58	0
87	OHX	5	3947	7/7	0.15	0.22	142,142,142,142	0
87	OHX	1	4207	7/7	0.23	0.22	151,151,151,151	0
87	OHX	5	4086	7/7	0.22	0.22	134,134,134,134	0
87	OHX	2	2137	7/7	0.28	0.22	216,216,216,216	0
86	MG	5	3692	1/1	0.20	0.22	61,61,61,61	0
86	MG	5	3453	1/1	0.20	0.21	63,63,63,63	0
87	OHX	1	4062	7/7	0.18	0.20	154,154,154,154	0
87	OHX	5	4239	7/7	0.36	0.19	179,179,179,179	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3708	1/1	0.22	0.19	76,76,76,76	0
86	MG	5	3663	1/1	0.29	0.19	52,52,52,52	0
87	OHX	6	2070	7/7	0.18	0.18	152,152,152,152	0
87	OHX	2	2096	7/7	0.35	0.18	189,189,189,189	0
87	OHX	2	2054	7/7	0.26	0.17	192,192,192,192	0
86	MG	N3	202	1/1	0.38	0.16	62,62,62,62	0
87	OHX	1	3889	7/7	0.22	0.15	99,99,99,99	0
87	OHX	2	2041	7/7	0.18	0.15	164,164,164,164	0
87	OHX	1	4194	7/7	0.35	0.15	172,172,172,172	0
87	OHX	5	4177	7/7	0.17	0.14	181,181,181,181	0
86	MG	5	3747	1/1	0.24	0.14	57,57,57,57	0
87	OHX	5	3915	7/7	0.18	0.14	101,101,101,101	0
86	MG	3	201	1/1	0.20	0.13	95,95,95,95	0
87	OHX	5	4206	7/7	0.17	0.13	172,172,172,172	0
87	OHX	1	4165	7/7	0.23	0.13	134,134,134,134	0
87	OHX	1	4088	7/7	0.12	0.12	197,197,197,197	0
87	OHX	2	2151	7/7	0.17	0.11	236,236,236,236	0
87	OHX	D9	102	7/7	0.38	0.11	184,184,184,184	0
87	OHX	5	3996	7/7	0.20	0.11	130,130,130,130	0
87	OHX	1	3938	7/7	0.22	0.11	123,123,123,123	0
87	OHX	5	4001	7/7	0.20	0.11	126,126,126,126	0
86	MG	1	3420	1/1	0.47	0.10	113,113,113,113	0
86	MG	1	3748	1/1	0.22	0.10	62,62,62,62	0
86	MG	8	201	1/1	0.27	0.10	69,69,69,69	0
86	MG	2	1949	1/1	0.21	0.10	86,86,86,86	0
87	OHX	1	3881	7/7	0.19	0.09	91,91,91,91	0
87	OHX	5	4164	7/7	0.23	0.09	165,165,165,165	0
86	MG	4	218	1/1	0.25	0.09	84,84,84,84	0
86	MG	4	209	1/1	0.23	0.08	56,56,56,56	0
87	OHX	1	4128	7/7	0.17	0.08	194,194,194,194	0
87	OHX	1	4119	7/7	0.29	0.08	197,197,197,197	0
87	OHX	1	4157	7/7	0.23	0.08	165,165,165,165	0
87	OHX	5	4042	7/7	0.41	0.07	180,180,180,180	0
87	OHX	5	4184	7/7	0.40	0.07	166,166,166,166	0
86	MG	1	3757	1/1	0.16	0.06	72,72,72,72	0
86	MG	5	3768	1/1	0.22	0.04	45,45,45,45	0
87	OHX	1	4162	7/7	0.14	0.04	190,190,190,190	0
86	MG	2	1996	1/1	0.25	0.04	123,123,123,123	0
87	OHX	2	2134	7/7	0.31	0.03	192,192,192,192	0
87	OHX	1	4179	7/7	0.24	0.03	174,174,174,174	0
87	OHX	1	4181	7/7	0.40	0.03	166,166,166,166	0
86	MG	1	3444	1/1	0.53	0.02	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	5	4114	7/7	0.24	0.02	148,148,148,148	0
86	MG	c8	201	1/1	0.35	0.02	53,53,53,53	0
87	OHX	1	4079	7/7	0.27	0.01	157,157,157,157	0
86	MG	1	3830	1/1	0.19	0.01	54,54,54,54	0
87	OHX	2	2115	7/7	0.27	0.00	161,161,161,161	0
87	OHX	1	3874	7/7	0.21	0.00	78,78,78,78	0
87	OHX	1	4111	7/7	0.22	0.00	213,213,213,213	0
87	OHX	1	4172	7/7	0.12	-0.02	213,213,213,213	0
87	OHX	5	3900	7/7	0.20	-0.02	80,80,80,80	0
87	OHX	5	4003	7/7	0.21	-0.02	91,91,91,91	0
86	MG	5	3632	1/1	0.33	-0.03	62,62,62,62	0
87	OHX	5	4234	7/7	0.20	-0.03	217,217,217,217	0
86	MG	L2	302	1/1	0.25	-0.03	62,62,62,62	0
86	MG	1	3627	1/1	0.22	-0.03	77,77,77,77	0
86	MG	5	3579	1/1	0.21	-0.03	40,40,40,40	0
87	OHX	6	2177	7/7	0.22	-0.04	141,141,141,141	0
87	OHX	1	3921	7/7	0.13	-0.04	135,135,135,135	0
86	MG	1	3662	1/1	0.36	-0.04	92,92,92,92	0
87	OHX	5	4246	7/7	0.35	-0.05	205,205,205,205	0
87	OHX	2	2071	7/7	0.40	-0.05	184,184,184,184	0
87	OHX	2	2150	7/7	0.22	-0.05	213,213,213,213	0
87	OHX	D3	202	7/7	0.31	-0.05	210,210,210,210	0
86	MG	6	1956	1/1	0.33	-0.07	48,48,48,48	0
87	OHX	2	2075	7/7	0.19	-0.07	186,186,186,186	0
86	MG	2	2012	1/1	0.33	-0.07	88,88,88,88	0
87	OHX	5	3902	7/7	0.21	-0.07	91,91,91,91	0
86	MG	5	3851	1/1	0.34	-0.08	71,71,71,71	0
86	MG	5	3738	1/1	0.19	-0.11	67,67,67,67	0
87	OHX	2	2180	7/7	0.23	-0.11	205,205,205,205	0
86	MG	M1	201	1/1	0.30	-0.11	104,104,104,104	0
87	OHX	5	4111	7/7	0.14	-0.11	230,230,230,230	0
87	OHX	5	3942	7/7	0.20	-0.12	116,116,116,116	0
87	OHX	5	4186	7/7	0.23	-0.13	158,158,158,158	0
87	OHX	2	2135	7/7	0.19	-0.13	182,182,182,182	0
87	OHX	1	4069	7/7	0.31	-0.13	163,163,163,163	0
89	ZN	d7	101	1/1	0.24	-0.14	156,156,156,156	0
87	OHX	6	2199	7/7	0.15	-0.14	188,188,188,188	0
87	OHX	1	3940	7/7	0.19	-0.14	123,123,123,123	0
86	MG	l3	404	1/1	0.24	-0.14	58,58,58,58	0
87	OHX	l5	306	7/7	0.52	-0.14	175,175,175,175	0
87	OHX	7	220	7/7	0.21	-0.15	137,137,137,137	0
87	OHX	5	3969	7/7	0.17	-0.15	133,133,133,133	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
87	OHX	7	218	7/7	0.17	-0.15	106,106,106,106	0
87	OHX	6	2129	7/7	0.17	-0.16	156,156,156,156	0
86	MG	1	3707	1/1	0.21	-0.16	64,64,64,64	0
87	OHX	1	3886	7/7	0.18	-0.16	105,105,105,105	0
86	MG	1	3670	1/1	0.23	-0.16	61,61,61,61	0
87	OHX	2	2139	7/7	0.37	-0.17	213,213,213,213	0
87	OHX	1	4002	7/7	0.12	-0.17	147,147,147,147	0
87	OHX	1	4144	7/7	0.20	-0.17	182,182,182,182	0
86	MG	6	2023	1/1	0.26	-0.17	67,67,67,67	0
87	OHX	6	2184	7/7	0.30	-0.19	164,164,164,164	0
87	OHX	5	3909	7/7	0.21	-0.19	92,92,92,92	0
87	OHX	1	4135	7/7	0.24	-0.20	159,159,159,159	0
86	MG	5	3438	1/1	0.20	-0.20	41,41,41,41	0
86	MG	N8	202	1/1	0.29	-0.20	64,64,64,64	0
87	OHX	5	4180	7/7	0.16	-0.20	152,152,152,152	0
87	OHX	5	4217	7/7	0.18	-0.20	192,192,192,192	0
86	MG	1	3634	1/1	0.26	-0.21	95,95,95,95	0
87	OHX	7	224	7/7	0.16	-0.21	188,188,188,188	0
87	OHX	1	4184	7/7	0.21	-0.22	166,166,166,166	0
87	OHX	5	4204	7/7	0.20	-0.23	175,175,175,175	0
86	MG	1	3606	1/1	0.29	-0.23	96,96,96,96	0
86	MG	2	1915	1/1	0.22	-0.24	96,96,96,96	0
86	MG	5	3789	1/1	0.22	-0.24	67,67,67,67	0
87	OHX	2	2146	7/7	0.15	-0.25	167,167,167,167	0
87	OHX	2	2144	7/7	0.19	-0.25	223,223,223,223	0
86	MG	1	3790	1/1	0.14	-0.25	78,78,78,78	0
86	MG	5	3795	1/1	0.18	-0.25	100,100,100,100	0
87	OHX	6	2205	7/7	0.22	-0.25	204,204,204,204	0
87	OHX	1	4177	7/7	0.17	-0.25	280,280,280,280	0
87	OHX	1	3879	7/7	0.15	-0.26	92,92,92,92	0
86	MG	O2	201	1/1	0.26	-0.26	46,46,46,46	0
86	MG	5	3472	1/1	0.39	-0.27	72,72,72,72	0
86	MG	2	1929	1/1	0.24	-0.27	96,96,96,96	0
87	OHX	2	2116	7/7	0.23	-0.28	188,188,188,188	0
86	MG	6	2041	1/1	0.32	-0.28	81,81,81,81	0
87	OHX	1	4158	7/7	0.14	-0.28	199,199,199,199	0
87	OHX	1	3994	7/7	0.19	-0.29	195,195,195,195	0
87	OHX	5	4227	7/7	0.12	-0.29	207,207,207,207	0
87	OHX	1	4038	7/7	0.19	-0.30	152,152,152,152	0
86	MG	5	3543	1/1	0.19	-0.30	97,97,97,97	0
87	OHX	1	4151	7/7	0.19	-0.30	172,172,172,172	0
87	OHX	1	4153	7/7	0.23	-0.31	177,177,177,177	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	M9	201	1/1	0.34	-0.34	92,92,92,92	0
87	OHX	1	4046	7/7	0.20	-0.34	156,156,156,156	0
87	OHX	6	2158	7/7	0.18	-0.34	176,176,176,176	0
87	OHX	5	4063	7/7	0.26	-0.34	145,145,145,145	0
87	OHX	1	4164	7/7	0.25	-0.34	247,247,247,247	0
87	OHX	1	4068	7/7	0.20	-0.35	143,143,143,143	0
87	OHX	4	230	7/7	0.18	-0.36	171,171,171,171	0
87	OHX	1	4037	7/7	0.18	-0.36	138,138,138,138	0
87	OHX	2	2030	7/7	0.18	-0.36	163,163,163,163	0
87	OHX	d4	201	7/7	0.26	-0.36	187,187,187,187	0
86	MG	s8	301	1/1	0.33	-0.37	71,71,71,71	0
87	OHX	6	2089	7/7	0.14	-0.37	128,128,128,128	0
86	MG	1	3489	1/1	0.23	-0.37	51,51,51,51	0
87	OHX	1	4103	7/7	0.13	-0.38	185,185,185,185	0
87	OHX	2	2098	7/7	0.16	-0.38	206,206,206,206	0
87	OHX	5	4145	7/7	0.21	-0.39	182,182,182,182	0
87	OHX	5	4066	7/7	0.20	-0.39	170,170,170,170	0
87	OHX	2	2102	7/7	0.22	-0.39	182,182,182,182	0
86	MG	5	3791	1/1	0.19	-0.39	88,88,88,88	0
87	OHX	6	2141	7/7	0.29	-0.40	165,165,165,165	0
86	MG	1	3806	1/1	0.20	-0.40	224,224,224,224	0
87	OHX	1	3924	7/7	0.24	-0.40	113,113,113,113	0
87	OHX	1	3878	7/7	0.24	-0.40	80,80,80,80	0
86	MG	L5	301	1/1	0.43	-0.40	81,81,81,81	0
87	OHX	2	2109	7/7	0.20	-0.41	205,205,205,205	0
87	OHX	1	3983	7/7	0.18	-0.42	159,159,159,159	0
87	OHX	1	4085	7/7	0.24	-0.42	151,151,151,151	0
87	OHX	1	4182	7/7	0.15	-0.42	188,188,188,188	0
86	MG	2	1931	1/1	0.35	-0.42	96,96,96,96	0
86	MG	5	3477	1/1	0.23	-0.43	90,90,90,90	0
86	MG	6	1904	1/1	0.19	-0.43	75,75,75,75	0
86	MG	1	3614	1/1	0.13	-0.43	94,94,94,94	0
86	MG	5	3558	1/1	0.26	-0.43	72,72,72,72	0
87	OHX	2	2101	7/7	0.18	-0.44	195,195,195,195	0
87	OHX	7	216	7/7	0.17	-0.45	108,108,108,108	0
87	OHX	2	2090	7/7	0.18	-0.45	172,172,172,172	0
86	MG	5	3612	1/1	0.22	-0.45	61,61,61,61	0
86	MG	2	2022	1/1	0.16	-0.45	115,115,115,115	0
87	OHX	6	2195	7/7	0.22	-0.45	183,183,183,183	0
87	OHX	2	2035	7/7	0.20	-0.45	136,136,136,136	0
87	OHX	1	4156	7/7	0.17	-0.46	192,192,192,192	0
86	MG	5	3710	1/1	0.22	-0.46	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	2	2005	1/1	0.21	-0.46	100,100,100,100	0
87	OHX	1	4005	7/7	0.18	-0.46	151,151,151,151	0
87	OHX	1	3936	7/7	0.15	-0.46	119,119,119,119	0
87	OHX	c8	202	7/7	0.14	-0.47	177,177,177,177	0
86	MG	2	1901	1/1	0.20	-0.47	117,117,117,117	0
87	OHX	5	4135	7/7	0.14	-0.47	172,172,172,172	0
86	MG	3	207	1/1	0.16	-0.47	86,86,86,86	0
86	MG	6	1928	1/1	0.18	-0.47	65,65,65,65	0
87	OHX	2	2047	7/7	0.14	-0.47	162,162,162,162	0
87	OHX	1	3907	7/7	0.20	-0.48	104,104,104,104	0
87	OHX	5	3943	7/7	0.30	-0.48	104,104,104,104	0
87	OHX	6	2078	7/7	0.15	-0.48	170,170,170,170	0
87	OHX	6	2133	7/7	0.27	-0.48	173,173,173,173	0
87	OHX	1	3885	7/7	0.20	-0.49	98,98,98,98	0
86	MG	5	3592	1/1	0.25	-0.49	42,42,42,42	0
87	OHX	6	2187	7/7	0.18	-0.50	164,164,164,164	0
87	OHX	2	2124	7/7	0.17	-0.50	207,207,207,207	0
87	OHX	6	2196	7/7	0.15	-0.50	176,176,176,176	0
87	OHX	2	2062	7/7	0.22	-0.50	161,161,161,161	0
86	MG	7	214	1/1	0.13	-0.50	47,47,47,47	0
87	OHX	1	4201	7/7	0.20	-0.50	164,164,164,164	0
87	OHX	2	2161	7/7	0.38	-0.51	199,199,199,199	0
87	OHX	1	4139	7/7	0.19	-0.51	167,167,167,167	0
87	OHX	2	2076	7/7	0.20	-0.51	176,176,176,176	0
86	MG	1	3800	1/1	0.20	-0.52	80,80,80,80	0
87	OHX	5	4089	7/7	0.18	-0.52	171,171,171,171	0
87	OHX	1	3914	7/7	0.25	-0.53	101,101,101,101	0
87	OHX	1	4075	7/7	0.19	-0.53	188,188,188,188	0
86	MG	5	3607	1/1	0.21	-0.53	55,55,55,55	0
87	OHX	3	221	7/7	0.15	-0.53	173,173,173,173	0
87	OHX	1	4133	7/7	0.21	-0.53	146,146,146,146	0
87	OHX	5	3932	7/7	0.15	-0.53	101,101,101,101	0
86	MG	2	1987	1/1	0.16	-0.53	139,139,139,139	0
86	MG	5	3463	1/1	0.22	-0.53	113,113,113,113	0
87	OHX	M6	202	7/7	0.22	-0.53	182,182,182,182	0
86	MG	2	1993	1/1	0.21	-0.54	96,96,96,96	0
87	OHX	1	3888	7/7	0.15	-0.54	115,115,115,115	0
87	OHX	2	2140	7/7	0.15	-0.54	200,200,200,200	0
87	OHX	6	2178	7/7	0.22	-0.54	182,182,182,182	0
87	OHX	8	235	7/7	0.18	-0.54	175,175,175,175	0
86	MG	6	1966	1/1	0.18	-0.56	83,83,83,83	0
87	OHX	1	4054	7/7	0.13	-0.56	178,178,178,178	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	3	216	7/7	0.21	-0.56	155,155,155,155	0
87	OHX	1	3877	7/7	0.19	-0.57	86,86,86,86	0
87	OHX	2	2131	7/7	0.22	-0.57	168,168,168,168	0
87	OHX	1	3934	7/7	0.32	-0.57	126,126,126,126	0
87	OHX	5	4210	7/7	0.19	-0.57	165,165,165,165	0
87	OHX	2	2053	7/7	0.09	-0.58	177,177,177,177	0
87	OHX	6	2111	7/7	0.19	-0.58	155,155,155,155	0
87	OHX	5	3926	7/7	0.19	-0.58	93,93,93,93	0
87	OHX	1	3911	7/7	0.20	-0.59	118,118,118,118	0
86	MG	1	3411	1/1	0.19	-0.60	79,79,79,79	0
86	MG	1	3551	1/1	0.22	-0.60	68,68,68,68	0
87	OHX	M9	202	7/7	0.17	-0.60	169,169,169,169	0
87	OHX	5	4219	7/7	0.32	-0.60	178,178,178,178	0
87	OHX	5	3908	7/7	0.15	-0.60	92,92,92,92	0
86	MG	5	3611	1/1	0.14	-0.61	72,72,72,72	0
87	OHX	d9	102	7/7	0.32	-0.61	189,189,189,189	0
86	MG	5	3706	1/1	0.17	-0.62	120,120,120,120	0
87	OHX	C8	201	7/7	0.14	-0.62	158,158,158,158	0
87	OHX	5	4232	7/7	0.12	-0.62	173,173,173,173	0
87	OHX	1	3970	7/7	0.18	-0.63	160,160,160,160	0
87	OHX	1	4196	7/7	0.15	-0.64	186,186,186,186	0
87	OHX	2	2094	7/7	0.15	-0.64	216,216,216,216	0
86	MG	5	3698	1/1	0.20	-0.64	89,89,89,89	0
87	OHX	O7	104	7/7	0.21	-0.65	144,144,144,144	0
87	OHX	1	3871	7/7	0.18	-0.65	77,77,77,77	0
87	OHX	5	3913	7/7	0.17	-0.65	69,69,69,69	0
87	OHX	6	2087	7/7	0.12	-0.66	157,157,157,157	0
87	OHX	8	223	7/7	0.08	-0.66	180,180,180,180	0
87	OHX	1	3989	7/7	0.19	-0.66	146,146,146,146	0
87	OHX	6	2181	7/7	0.12	-0.66	189,189,189,189	0
86	MG	1	3859	1/1	0.19	-0.67	71,71,71,71	0
87	OHX	5	4102	7/7	0.18	-0.67	152,152,152,152	0
87	OHX	2	2121	7/7	0.23	-0.67	201,201,201,201	0
87	OHX	5	4156	7/7	0.14	-0.69	145,145,145,145	0
87	OHX	2	2085	7/7	0.22	-0.69	180,180,180,180	0
87	OHX	6	2137	7/7	0.24	-0.69	158,158,158,158	0
87	OHX	2	2100	7/7	0.24	-0.69	188,188,188,188	0
87	OHX	s1	302	7/7	0.33	-0.69	194,194,194,194	0
87	OHX	5	4200	7/7	0.19	-0.70	174,174,174,174	0
87	OHX	2	2147	7/7	0.16	-0.70	240,240,240,240	0
86	MG	5	3766	1/1	0.16	-0.70	73,73,73,73	0
87	OHX	2	2154	7/7	0.24	-0.71	185,185,185,185	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
86	MG	1	3482	1/1	0.18	-0.71	82,82,82,82	0
87	OHX	2	2081	7/7	0.17	-0.72	194,194,194,194	0
87	OHX	6	2068	7/7	0.16	-0.72	113,113,113,113	0
87	OHX	1	4159	7/7	0.15	-0.72	194,194,194,194	0
86	MG	s2	301	1/1	0.16	-0.73	97,97,97,97	0
87	OHX	1	4035	7/7	0.20	-0.73	158,158,158,158	0
87	OHX	8	229	7/7	0.19	-0.73	168,168,168,168	0
87	OHX	6	2189	7/7	0.16	-0.74	147,147,147,147	0
87	OHX	6	2073	7/7	0.10	-0.74	114,114,114,114	0
87	OHX	1	4027	7/7	0.19	-0.74	135,135,135,135	0
87	OHX	2	2107	7/7	0.14	-0.74	144,144,144,144	0
87	OHX	5	4243	7/7	0.19	-0.75	187,187,187,187	0
86	MG	1	3724	1/1	0.12	-0.76	67,67,67,67	0
87	OHX	1	3982	7/7	0.10	-0.77	135,135,135,135	0
86	MG	5	3852	1/1	0.14	-0.77	108,108,108,108	0
86	MG	6	1987	1/1	0.15	-0.77	104,104,104,104	0
86	MG	2	2182	1/1	0.28	-0.77	103,103,103,103	0
86	MG	5	3419	1/1	0.20	-0.78	55,55,55,55	0
87	OHX	1	4210	7/7	0.13	-0.78	217,217,217,217	0
87	OHX	1	4023	7/7	0.14	-0.78	172,172,172,172	0
86	MG	6	1992	1/1	0.12	-0.79	98,98,98,98	0
87	OHX	1	3969	7/7	0.16	-0.80	162,162,162,162	0
87	OHX	6	2160	7/7	0.15	-0.80	146,146,146,146	0
86	MG	1	3467	1/1	0.14	-0.80	64,64,64,64	0
86	MG	6	1902	1/1	0.19	-0.81	75,75,75,75	0
87	OHX	2	2057	7/7	0.14	-0.81	180,180,180,180	0
87	OHX	1	4204	7/7	0.16	-0.81	182,182,182,182	0
87	OHX	5	4189	7/7	0.29	-0.81	218,218,218,218	0
86	MG	6	1935	1/1	0.14	-0.81	77,77,77,77	0
87	OHX	2	2126	7/7	0.23	-0.81	194,194,194,194	0
86	MG	M6	201	1/1	0.17	-0.82	55,55,55,55	0
86	MG	2	1936	1/1	0.27	-0.83	81,81,81,81	0
87	OHX	5	4124	7/7	0.13	-0.83	162,162,162,162	0
87	OHX	M0	304	7/7	0.18	-0.83	154,154,154,154	0
87	OHX	5	3949	7/7	0.17	-0.84	112,112,112,112	0
87	OHX	1	3927	7/7	0.09	-0.84	173,173,173,173	0
87	OHX	2	2037	7/7	0.12	-0.84	162,162,162,162	0
87	OHX	6	2130	7/7	0.14	-0.85	176,176,176,176	0
87	OHX	2	2074	7/7	0.19	-0.85	166,166,166,166	0
87	OHX	o7	502	7/7	0.14	-0.85	153,153,153,153	0
87	OHX	2	2156	7/7	0.17	-0.85	295,295,295,295	0
87	OHX	5	4069	7/7	0.17	-0.86	157,157,157,157	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
86	MG	5	3620	1/1	0.17	-0.86	73,73,73,73	0
87	OHX	5	4012	7/7	0.15	-0.86	177,177,177,177	0
89	ZN	O7	101	1/1	0.12	-0.86	68,68,68,68	0
87	OHX	2	2087	7/7	0.17	-0.87	182,182,182,182	0
87	OHX	2	2048	7/7	0.14	-0.87	146,146,146,146	0
87	OHX	5	3950	7/7	0.16	-0.87	126,126,126,126	0
87	OHX	1	3937	7/7	0.18	-0.87	118,118,118,118	0
86	MG	5	3638	1/1	0.17	-0.88	83,83,83,83	0
86	MG	2	1989	1/1	0.32	-0.88	83,83,83,83	0
87	OHX	2	2024	7/7	0.18	-0.90	120,120,120,120	0
86	MG	1	3703	1/1	0.20	-0.91	62,62,62,62	0
86	MG	6	1907	1/1	0.20	-0.92	82,82,82,82	0
87	OHX	6	2154	7/7	0.18	-0.92	139,139,139,139	0
86	MG	2	1940	1/1	0.12	-0.92	104,104,104,104	0
87	OHX	1	3963	7/7	0.09	-0.92	170,170,170,170	0
87	OHX	6	2101	7/7	0.11	-0.92	163,163,163,163	0
86	MG	2	1977	1/1	0.15	-0.93	122,122,122,122	0
86	MG	5	3681	1/1	0.20	-0.93	44,44,44,44	0
87	OHX	4	239	7/7	0.15	-0.93	165,165,165,165	0
86	MG	5	3609	1/1	0.21	-0.93	51,51,51,51	0
87	OHX	5	3990	7/7	0.14	-0.94	171,171,171,171	0
86	MG	d6	102	1/1	0.27	-0.94	70,70,70,70	0
86	MG	1	3401	1/1	0.14	-0.94	61,61,61,61	0
87	OHX	L3	405	7/7	0.19	-0.95	187,187,187,187	0
87	OHX	5	4041	7/7	0.14	-0.95	119,119,119,119	0
87	OHX	1	4106	7/7	0.13	-0.95	154,154,154,154	0
87	OHX	1	3882	7/7	0.20	-0.95	86,86,86,86	0
87	OHX	6	2200	7/7	0.14	-0.96	211,211,211,211	0
87	OHX	1	3892	7/7	0.14	-0.96	87,87,87,87	0
87	OHX	6	2126	7/7	0.10	-0.96	167,167,167,167	0
87	OHX	2	2067	7/7	0.14	-0.97	180,180,180,180	0
87	OHX	5	3921	7/7	0.20	-0.97	73,73,73,73	0
89	ZN	q3	501	1/1	0.15	-0.97	99,99,99,99	0
87	OHX	6	2172	7/7	0.12	-0.97	237,237,237,237	0
86	MG	5	3490	1/1	0.22	-0.98	70,70,70,70	0
87	OHX	5	3977	7/7	0.22	-0.98	101,101,101,101	0
86	MG	6	2212	1/1	0.17	-0.98	82,82,82,82	0
87	OHX	6	2050	7/7	0.17	-0.98	106,106,106,106	0
87	OHX	5	4140	7/7	0.13	-0.99	167,167,167,167	0
87	OHX	5	3984	7/7	0.14	-0.99	165,165,165,165	0
87	OHX	5	3976	7/7	0.13	-0.99	141,141,141,141	0
87	OHX	2	2129	7/7	0.10	-1.00	250,250,250,250	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	2	2163	7/7	0.17	-1.00	236,236,236,236	0
86	MG	1	3728	1/1	0.16	-1.00	56,56,56,56	0
87	OHX	5	4202	7/7	0.18	-1.00	187,187,187,187	0
87	OHX	2	2042	7/7	0.07	-1.00	134,134,134,134	0
89	ZN	d6	101	1/1	0.14	-1.00	88,88,88,88	0
87	OHX	5	4166	7/7	0.16	-1.01	192,192,192,192	0
87	OHX	8	232	7/7	0.15	-1.01	179,179,179,179	0
87	OHX	5	3965	7/7	0.11	-1.01	132,132,132,132	0
87	OHX	1	3971	7/7	0.17	-1.01	142,142,142,142	0
87	OHX	6	2088	7/7	0.10	-1.01	145,145,145,145	0
87	OHX	n9	103	7/7	0.16	-1.02	89,89,89,89	0
87	OHX	1	4147	7/7	0.11	-1.02	188,188,188,188	0
87	OHX	6	2110	7/7	0.12	-1.02	142,142,142,142	0
87	OHX	1	4187	7/7	0.12	-1.02	167,167,167,167	0
87	OHX	1	4090	7/7	0.14	-1.02	215,215,215,215	0
87	OHX	1	3913	7/7	0.18	-1.03	103,103,103,103	0
87	OHX	6	2062	7/7	0.14	-1.03	123,123,123,123	0
87	OHX	2	2130	7/7	0.16	-1.03	150,150,150,150	0
87	OHX	5	4036	7/7	0.09	-1.03	202,202,202,202	0
87	OHX	5	3906	7/7	0.17	-1.04	63,63,63,63	0
86	MG	5	3542	1/1	0.18	-1.04	52,52,52,52	0
87	OHX	6	2148	7/7	0.12	-1.04	158,158,158,158	0
87	OHX	6	2051	7/7	0.19	-1.04	82,82,82,82	0
86	MG	2	1907	1/1	0.25	-1.05	78,78,78,78	0
86	MG	5	3889	1/1	0.17	-1.05	161,161,161,161	0
87	OHX	6	2175	7/7	0.16	-1.05	204,204,204,204	0
87	OHX	5	3953	7/7	0.14	-1.05	109,109,109,109	0
87	OHX	5	4019	7/7	0.12	-1.05	142,142,142,142	0
87	OHX	1	4122	7/7	0.17	-1.06	186,186,186,186	0
87	OHX	5	4110	7/7	0.17	-1.06	147,147,147,147	0
87	OHX	5	4007	7/7	0.21	-1.06	148,148,148,148	0
86	MG	2	1948	1/1	0.21	-1.06	122,122,122,122	0
86	MG	2	2008	1/1	0.26	-1.06	76,76,76,76	0
87	OHX	1	4047	7/7	0.08	-1.06	175,175,175,175	0
87	OHX	8	220	7/7	0.07	-1.07	154,154,154,154	0
87	OHX	1	3917	7/7	0.16	-1.08	125,125,125,125	0
87	OHX	1	4107	7/7	0.16	-1.08	187,187,187,187	0
86	MG	5	3436	1/1	0.15	-1.09	77,77,77,77	0
87	OHX	2	2099	7/7	0.12	-1.09	152,152,152,152	0
86	MG	6	1947	1/1	0.19	-1.09	77,77,77,77	0
87	OHX	1	4148	7/7	0.14	-1.09	170,170,170,170	0
86	MG	5	3633	1/1	0.16	-1.09	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
86	MG	2	1968	1/1	0.22	-1.10	160,160,160,160	0
86	MG	6	2026	1/1	0.16	-1.10	87,87,87,87	0
87	OHX	6	2064	7/7	0.16	-1.10	105,105,105,105	0
86	MG	5	3533	1/1	0.15	-1.11	78,78,78,78	0
87	OHX	5	3974	7/7	0.15	-1.11	124,124,124,124	0
87	OHX	1	3898	7/7	0.15	-1.11	112,112,112,112	0
87	OHX	5	4000	7/7	0.14	-1.12	125,125,125,125	0
86	MG	1	3723	1/1	0.17	-1.12	80,80,80,80	0
87	OHX	5	4056	7/7	0.15	-1.12	140,140,140,140	0
87	OHX	1	4074	7/7	0.11	-1.12	142,142,142,142	0
87	OHX	5	4155	7/7	0.20	-1.12	161,161,161,161	0
86	MG	5	3686	1/1	0.15	-1.12	73,73,73,73	0
87	OHX	6	2091	7/7	0.19	-1.13	142,142,142,142	0
87	OHX	5	4083	7/7	0.22	-1.13	133,133,133,133	0
87	OHX	l3	408	7/7	0.17	-1.13	180,180,180,180	0
87	OHX	1	4100	7/7	0.16	-1.14	160,160,160,160	0
87	OHX	6	2134	7/7	0.16	-1.14	180,180,180,180	0
89	ZN	Q3	501	1/1	0.08	-1.14	96,96,96,96	0
87	OHX	5	4236	7/7	0.12	-1.15	157,157,157,157	0
86	MG	5	3483	1/1	0.11	-1.16	98,98,98,98	0
86	MG	1	3801	1/1	0.19	-1.16	84,84,84,84	0
87	OHX	o9	101	7/7	0.16	-1.16	155,155,155,155	0
87	OHX	6	2100	7/7	0.08	-1.17	159,159,159,159	0
87	OHX	5	4203	7/7	0.10	-1.17	205,205,205,205	0
86	MG	1	3698	1/1	0.15	-1.18	113,113,113,113	0
86	MG	L2	301	1/1	0.17	-1.18	50,50,50,50	0
87	OHX	1	4030	7/7	0.17	-1.18	147,147,147,147	0
86	MG	5	3630	1/1	0.13	-1.19	111,111,111,111	0
87	OHX	5	4071	7/7	0.10	-1.19	220,220,220,220	0
87	OHX	1	3995	7/7	0.20	-1.19	133,133,133,133	0
87	OHX	O1	202	7/7	0.08	-1.19	151,151,151,151	0
87	OHX	5	4074	7/7	0.12	-1.19	154,154,154,154	0
87	OHX	1	3972	7/7	0.12	-1.19	145,145,145,145	0
87	OHX	2	2043	7/7	0.14	-1.19	147,147,147,147	0
86	MG	2	1951	1/1	0.15	-1.20	121,121,121,121	0
87	OHX	1	4142	7/7	0.19	-1.20	137,137,137,137	0
87	OHX	3	218	7/7	0.07	-1.20	151,151,151,151	0
87	OHX	6	2150	7/7	0.12	-1.21	160,160,160,160	0
87	OHX	1	4017	7/7	0.16	-1.21	132,132,132,132	0
87	OHX	S8	302	7/7	0.29	-1.21	191,191,191,191	0
87	OHX	6	2188	7/7	0.18	-1.21	186,186,186,186	0
87	OHX	1	3996	7/7	0.06	-1.21	196,196,196,196	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
87	OHX	5	4175	7/7	0.23	-1.22	207,207,207,207	0
87	OHX	2	2033	7/7	0.14	-1.22	175,175,175,175	0
89	ZN	D7	101	1/1	0.15	-1.22	208,208,208,208	0
87	OHX	1	4108	7/7	0.16	-1.22	134,134,134,134	0
87	OHX	5	4137	7/7	0.14	-1.23	187,187,187,187	0
86	MG	1	3582	1/1	0.14	-1.24	74,74,74,74	0
87	OHX	6	2209	7/7	0.08	-1.25	235,235,235,235	0
86	MG	M7	201	1/1	0.24	-1.25	47,47,47,47	0
87	OHX	6	2103	7/7	0.11	-1.25	212,212,212,212	0
87	OHX	2	2177	7/7	0.14	-1.25	210,210,210,210	0
86	MG	3	209	1/1	0.10	-1.26	75,75,75,75	0
87	OHX	m1	202	7/7	0.10	-1.26	178,178,178,178	0
87	OHX	M9	203	7/7	0.12	-1.27	213,213,213,213	0
87	OHX	4	228	7/7	0.12	-1.27	139,139,139,139	0
86	MG	4	205	1/1	0.09	-1.28	108,108,108,108	0
87	OHX	1	4012	7/7	0.11	-1.28	181,181,181,181	0
87	OHX	1	4011	7/7	0.19	-1.28	173,173,173,173	0
86	MG	6	2015	1/1	0.14	-1.28	83,83,83,83	0
87	OHX	5	4242	7/7	0.16	-1.28	177,177,177,177	0
89	ZN	Q0	500	1/1	0.12	-1.28	68,68,68,68	0
86	MG	2	1964	1/1	0.19	-1.28	141,141,141,141	0
86	MG	1	3466	1/1	0.11	-1.29	70,70,70,70	0
86	MG	7	209	1/1	0.14	-1.30	42,42,42,42	0
87	OHX	5	3933	7/7	0.14	-1.30	111,111,111,111	0
87	OHX	1	4057	7/7	0.07	-1.30	210,210,210,210	0
87	OHX	1	4032	7/7	0.12	-1.30	127,127,127,127	0
87	OHX	5	3931	7/7	0.18	-1.30	108,108,108,108	0
87	OHX	1	3910	7/7	0.16	-1.30	101,101,101,101	0
87	OHX	6	2152	7/7	0.14	-1.31	141,141,141,141	0
87	OHX	2	2032	7/7	0.11	-1.31	157,157,157,157	0
86	MG	6	1940	1/1	0.16	-1.31	70,70,70,70	0
87	OHX	1	3945	7/7	0.11	-1.31	135,135,135,135	0
87	OHX	1	3902	7/7	0.16	-1.32	85,85,85,85	0
87	OHX	1	4163	7/7	0.16	-1.32	154,154,154,154	0
87	OHX	C5	201	7/7	0.09	-1.33	201,201,201,201	0
87	OHX	1	4006	7/7	0.14	-1.33	129,129,129,129	0
87	OHX	8	221	7/7	0.15	-1.33	156,156,156,156	0
86	MG	N8	201	1/1	0.18	-1.33	57,57,57,57	0
86	MG	q0	202	1/1	0.15	-1.33	73,73,73,73	0
87	OHX	1	4141	7/7	0.16	-1.33	179,179,179,179	0
87	OHX	2	2110	7/7	0.06	-1.33	167,167,167,167	0
87	OHX	1	3953	7/7	0.15	-1.33	136,136,136,136	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
87	OHX	1	3920	7/7	0.13	-1.34	118,118,118,118	0
87	OHX	1	4082	7/7	0.11	-1.34	179,179,179,179	0
86	MG	3	213	1/1	0.15	-1.34	78,78,78,78	0
87	OHX	2	2025	7/7	0.16	-1.34	122,122,122,122	0
87	OHX	5	4238	7/7	0.10	-1.34	200,200,200,200	0
87	OHX	1	4029	7/7	0.07	-1.35	183,183,183,183	0
87	OHX	6	2136	7/7	0.12	-1.35	177,177,177,177	0
87	OHX	1	3880	7/7	0.16	-1.35	90,90,90,90	0
87	OHX	O7	103	7/7	0.09	-1.35	129,129,129,129	0
87	OHX	1	4070	7/7	0.15	-1.36	174,174,174,174	0
87	OHX	5	3956	7/7	0.12	-1.36	128,128,128,128	0
87	OHX	1	3895	7/7	0.18	-1.37	99,99,99,99	0
87	OHX	1	4024	7/7	0.20	-1.38	140,140,140,140	0
86	MG	6	1986	1/1	0.20	-1.38	91,91,91,91	0
87	OHX	6	2099	7/7	0.15	-1.38	168,168,168,168	0
86	MG	5	3813	1/1	0.16	-1.39	87,87,87,87	0
87	OHX	SR	401	7/7	0.10	-1.40	223,223,223,223	0
87	OHX	5	4006	7/7	0.10	-1.40	150,150,150,150	0
87	OHX	1	4192	7/7	0.14	-1.40	193,193,193,193	0
87	OHX	1	4008	7/7	0.16	-1.41	159,159,159,159	0
87	OHX	Q2	502	7/7	0.14	-1.41	114,114,114,114	0
87	OHX	6	2192	7/7	0.12	-1.41	220,220,220,220	0
87	OHX	1	4166	7/7	0.14	-1.41	151,151,151,151	0
87	OHX	1	4191	7/7	0.14	-1.42	177,177,177,177	0
87	OHX	1	4040	7/7	0.07	-1.42	165,165,165,165	0
87	OHX	5	3957	7/7	0.16	-1.43	116,116,116,116	0
89	ZN	D6	500	1/1	0.10	-1.43	120,120,120,120	0
87	OHX	m0	303	7/7	0.13	-1.43	153,153,153,153	0
87	OHX	6	2066	7/7	0.11	-1.43	117,117,117,117	0
87	OHX	2	2036	7/7	0.16	-1.44	110,110,110,110	0
87	OHX	1	4185	7/7	0.15	-1.44	188,188,188,188	0
87	OHX	6	2115	7/7	0.13	-1.44	151,151,151,151	0
87	OHX	5	3894	7/7	0.17	-1.44	59,59,59,59	0
87	OHX	6	2077	7/7	0.12	-1.45	150,150,150,150	0
87	OHX	O3	202	7/7	0.12	-1.45	145,145,145,145	0
87	OHX	5	3991	7/7	0.16	-1.45	134,134,134,134	0
87	OHX	1	4099	7/7	0.13	-1.46	189,189,189,189	0
87	OHX	5	4032	7/7	0.17	-1.46	153,153,153,153	0
87	OHX	4	224	7/7	0.18	-1.46	71,71,71,71	0
87	OHX	3	219	7/7	0.15	-1.46	155,155,155,155	0
87	OHX	6	2169	7/7	0.11	-1.46	243,243,243,243	0
86	MG	L3	401	1/1	0.20	-1.46	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	1	3919	7/7	0.07	-1.46	156,156,156,156	0
86	MG	2	1924	1/1	0.20	-1.47	108,108,108,108	0
87	OHX	6	2108	7/7	0.15	-1.47	134,134,134,134	0
87	OHX	1	3960	7/7	0.12	-1.48	135,135,135,135	0
87	OHX	6	2123	7/7	0.17	-1.48	173,173,173,173	0
86	MG	6	1979	1/1	0.17	-1.49	68,68,68,68	0
86	MG	6	1931	1/1	0.15	-1.49	65,65,65,65	0
87	OHX	5	3941	7/7	0.26	-1.49	89,89,89,89	0
87	OHX	6	2116	7/7	0.16	-1.50	179,179,179,179	0
87	OHX	5	3954	7/7	0.16	-1.50	97,97,97,97	0
87	OHX	1	4042	7/7	0.14	-1.50	143,143,143,143	0
87	OHX	5	4037	7/7	0.16	-1.50	182,182,182,182	0
87	OHX	1	3933	7/7	0.10	-1.50	137,137,137,137	0
87	OHX	6	2191	7/7	0.19	-1.50	152,152,152,152	0
87	OHX	8	231	7/7	0.12	-1.51	183,183,183,183	0
87	OHX	l3	407	7/7	0.12	-1.51	153,153,153,153	0
86	MG	5	3826	1/1	0.14	-1.51	94,94,94,94	0
87	OHX	4	234	7/7	0.07	-1.52	185,185,185,185	0
87	OHX	2	2132	7/7	0.08	-1.52	198,198,198,198	0
87	OHX	6	2071	7/7	0.11	-1.52	106,106,106,106	0
87	OHX	2	2092	7/7	0.14	-1.52	148,148,148,148	0
87	OHX	5	3993	7/7	0.10	-1.53	130,130,130,130	0
89	ZN	D9	101	1/1	0.07	-1.55	111,111,111,111	0
89	ZN	d9	101	1/1	0.07	-1.55	95,95,95,95	0
87	OHX	5	3918	7/7	0.14	-1.55	109,109,109,109	0
87	OHX	1	4093	7/7	0.18	-1.55	193,193,193,193	0
86	MG	3	214	1/1	0.14	-1.55	91,91,91,91	0
87	OHX	5	4078	7/7	0.11	-1.56	192,192,192,192	0
87	OHX	1	3997	7/7	0.08	-1.56	189,189,189,189	0
87	OHX	7	222	7/7	0.07	-1.56	122,122,122,122	0
87	OHX	6	2069	7/7	0.12	-1.56	128,128,128,128	0
87	OHX	6	2079	7/7	0.09	-1.56	124,124,124,124	0
87	OHX	2	2093	7/7	0.09	-1.56	194,194,194,194	0
87	OHX	1	3870	7/7	0.14	-1.56	78,78,78,78	0
87	OHX	5	4038	7/7	0.19	-1.56	139,139,139,139	0
89	ZN	q0	201	1/1	0.14	-1.56	47,47,47,47	0
87	OHX	2	2158	7/7	0.12	-1.57	285,285,285,285	0
87	OHX	c5	201	7/7	0.08	-1.57	181,181,181,181	0
87	OHX	5	4150	7/7	0.12	-1.59	138,138,138,138	0
87	OHX	1	4031	7/7	0.12	-1.59	189,189,189,189	0
87	OHX	1	3883	7/7	0.18	-1.59	87,87,87,87	0
86	MG	2	1998	1/1	0.15	-1.59	125,125,125,125	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	2	2142	7/7	0.12	-1.60	166,166,166,166	0
87	OHX	5	4088	7/7	0.13	-1.60	149,149,149,149	0
87	OHX	5	4120	7/7	0.09	-1.60	170,170,170,170	0
86	MG	2	1954	1/1	0.22	-1.60	133,133,133,133	0
87	OHX	1	4146	7/7	0.17	-1.60	177,177,177,177	0
89	ZN	e1	501	1/1	0.06	-1.61	189,189,189,189	0
87	OHX	6	2127	7/7	0.13	-1.61	184,184,184,184	0
87	OHX	1	3988	7/7	0.12	-1.61	129,129,129,129	0
87	OHX	2	2055	7/7	0.14	-1.62	152,152,152,152	0
87	OHX	6	2060	7/7	0.13	-1.62	119,119,119,119	0
86	MG	1	3659	1/1	0.19	-1.63	100,100,100,100	0
87	OHX	2	2068	7/7	0.12	-1.63	201,201,201,201	0
87	OHX	1	4129	7/7	0.12	-1.64	173,173,173,173	0
86	MG	1	3424	1/1	0.16	-1.64	78,78,78,78	0
87	OHX	c3	201	7/7	0.11	-1.64	187,187,187,187	0
87	OHX	6	2107	7/7	0.21	-1.64	154,154,154,154	0
87	OHX	5	3897	7/7	0.17	-1.64	60,60,60,60	0
87	OHX	6	2061	7/7	0.10	-1.64	108,108,108,108	0
87	OHX	6	2197	7/7	0.16	-1.65	175,175,175,175	0
87	OHX	2	2058	7/7	0.13	-1.66	165,165,165,165	0
87	OHX	5	4096	7/7	0.10	-1.66	170,170,170,170	0
87	OHX	2	2044	7/7	0.12	-1.67	121,121,121,121	0
87	OHX	1	3943	7/7	0.14	-1.69	126,126,126,126	0
87	OHX	5	4055	7/7	0.10	-1.69	180,180,180,180	0
87	OHX	1	4149	7/7	0.13	-1.69	144,144,144,144	0
87	OHX	5	3952	7/7	0.10	-1.69	120,120,120,120	0
87	OHX	5	4165	7/7	0.20	-1.69	217,217,217,217	0
87	OHX	6	2206	7/7	0.17	-1.70	189,189,189,189	0
87	OHX	2	2170	7/7	0.11	-1.70	152,152,152,152	0
86	MG	1	3561	1/1	0.20	-1.70	72,72,72,72	0
87	OHX	5	4060	7/7	0.15	-1.70	145,145,145,145	0
87	OHX	5	3955	7/7	0.21	-1.70	88,88,88,88	0
87	OHX	5	3914	7/7	0.12	-1.70	90,90,90,90	0
87	OHX	5	4129	7/7	0.12	-1.71	192,192,192,192	0
87	OHX	1	4101	7/7	0.14	-1.71	165,165,165,165	0
87	OHX	2	2066	7/7	0.06	-1.71	180,180,180,180	0
87	OHX	2	2167	7/7	0.11	-1.71	203,203,203,203	0
87	OHX	5	3994	7/7	0.12	-1.72	122,122,122,122	0
87	OHX	15	305	7/7	0.13	-1.72	164,164,164,164	0
87	OHX	2	2083	7/7	0.17	-1.72	167,167,167,167	0
87	OHX	5	3998	7/7	0.10	-1.72	140,140,140,140	0
86	MG	1	3477	1/1	0.19	-1.73	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3602	1/1	0.10	-1.73	66,66,66,66	0
87	OHX	3	220	7/7	0.11	-1.73	160,160,160,160	0
87	OHX	5	4117	7/7	0.07	-1.73	170,170,170,170	0
87	OHX	6	2128	7/7	0.16	-1.73	178,178,178,178	0
87	OHX	5	3963	7/7	0.09	-1.74	148,148,148,148	0
87	OHX	1	4143	7/7	0.12	-1.74	180,180,180,180	0
87	OHX	6	2139	7/7	0.13	-1.75	171,171,171,171	0
86	MG	1	3558	1/1	0.17	-1.75	53,53,53,53	0
87	OHX	19	202	7/7	0.09	-1.75	140,140,140,140	0
87	OHX	5	4062	7/7	0.09	-1.76	150,150,150,150	0
87	OHX	6	2086	7/7	0.15	-1.76	146,146,146,146	0
89	ZN	o7	501	1/1	0.11	-1.76	72,72,72,72	0
87	OHX	1	4127	7/7	0.12	-1.76	193,193,193,193	0
87	OHX	2	2141	7/7	0.07	-1.76	201,201,201,201	0
87	OHX	2	2070	7/7	0.08	-1.77	170,170,170,170	0
86	MG	6	1910	1/1	0.10	-1.78	76,76,76,76	0
87	OHX	2	2069	7/7	0.17	-1.78	146,146,146,146	0
86	MG	1	3481	1/1	0.14	-1.78	56,56,56,56	0
87	OHX	5	3944	7/7	0.13	-1.79	108,108,108,108	0
87	OHX	6	2144	7/7	0.15	-1.79	165,165,165,165	0
87	OHX	1	4063	7/7	0.13	-1.79	126,126,126,126	0
86	MG	M0	301	1/1	0.15	-1.80	65,65,65,65	0
87	OHX	2	2133	7/7	0.12	-1.80	200,200,200,200	0
87	OHX	1	3993	7/7	0.12	-1.80	112,112,112,112	0
87	OHX	5	4112	7/7	0.20	-1.81	99,99,99,99	0
87	OHX	2	2138	7/7	0.09	-1.81	174,174,174,174	0
87	OHX	2	2078	7/7	0.13	-1.81	183,183,183,183	0
87	OHX	5	4058	7/7	0.09	-1.81	160,160,160,160	0
87	OHX	2	2112	7/7	0.13	-1.82	213,213,213,213	0
87	OHX	7	217	7/7	0.11	-1.83	113,113,113,113	0
87	OHX	1	3948	7/7	0.09	-1.83	149,149,149,149	0
87	OHX	5	4103	7/7	0.14	-1.83	146,146,146,146	0
87	OHX	1	4095	7/7	0.07	-1.84	184,184,184,184	0
87	OHX	1	4059	7/7	0.10	-1.84	195,195,195,195	0
87	OHX	2	2049	7/7	0.08	-1.84	160,160,160,160	0
87	OHX	1	3925	7/7	0.15	-1.84	110,110,110,110	0
87	OHX	6	2143	7/7	0.13	-1.85	173,173,173,173	0
87	OHX	1	3950	7/7	0.09	-1.86	143,143,143,143	0
86	MG	2	1932	1/1	0.15	-1.86	89,89,89,89	0
87	OHX	5	4033	7/7	0.06	-1.86	182,182,182,182	0
87	OHX	5	4002	7/7	0.07	-1.86	150,150,150,150	0
87	OHX	C3	201	7/7	0.10	-1.86	208,208,208,208	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	5	4098	7/7	0.10	-1.86	169,169,169,169	0
86	MG	5	3844	1/1	0.19	-1.86	73,73,73,73	0
86	MG	2	1972	1/1	0.08	-1.87	117,117,117,117	0
87	OHX	m0	302	7/7	0.12	-1.87	139,139,139,139	0
89	ZN	E1	501	1/1	0.07	-1.88	155,155,155,155	0
87	OHX	1	4155	7/7	0.07	-1.88	149,149,149,149	0
87	OHX	6	2138	7/7	0.14	-1.90	194,194,194,194	0
87	OHX	1	4171	7/7	0.13	-1.90	144,144,144,144	0
86	MG	5	3479	1/1	0.17	-1.91	66,66,66,66	0
87	OHX	1	3890	7/7	0.13	-1.91	82,82,82,82	0
87	OHX	q2	502	7/7	0.09	-1.91	115,115,115,115	0
87	OHX	1	4167	7/7	0.14	-1.91	143,143,143,143	0
87	OHX	1	4077	7/7	0.17	-1.91	171,171,171,171	0
87	OHX	2	2088	7/7	0.12	-1.91	179,179,179,179	0
87	OHX	5	4026	7/7	0.09	-1.92	196,196,196,196	0
86	MG	2	1991	1/1	0.13	-1.92	136,136,136,136	0
87	OHX	2	2123	7/7	0.13	-1.94	182,182,182,182	0
87	OHX	1	3923	7/7	0.14	-1.95	144,144,144,144	0
87	OHX	1	3916	7/7	0.08	-1.95	141,141,141,141	0
87	OHX	6	2106	7/7	0.08	-1.95	147,147,147,147	0
87	OHX	2	2104	7/7	0.08	-1.96	257,257,257,257	0
87	OHX	6	2124	7/7	0.11	-1.96	166,166,166,166	0
86	MG	6	1994	1/1	0.09	-1.96	88,88,88,88	0
87	OHX	5	4142	7/7	0.14	-1.96	151,151,151,151	0
86	MG	1	3854	1/1	0.09	-1.96	63,63,63,63	0
87	OHX	2	2039	7/7	0.13	-1.96	126,126,126,126	0
87	OHX	1	3930	7/7	0.18	-1.98	131,131,131,131	0
87	OHX	5	3927	7/7	0.15	-1.98	95,95,95,95	0
87	OHX	5	3911	7/7	0.17	-1.98	93,93,93,93	0
87	OHX	6	2092	7/7	0.11	-1.99	154,154,154,154	0
87	OHX	5	3968	7/7	0.15	-1.99	120,120,120,120	0
87	OHX	1	4041	7/7	0.19	-2.00	162,162,162,162	0
87	OHX	1	4193	7/7	0.07	-2.00	206,206,206,206	0
86	MG	1	3745	1/1	0.12	-2.00	62,62,62,62	0
86	MG	5	3682	1/1	0.22	-2.00	54,54,54,54	0
86	MG	1	3495	1/1	0.15	-2.02	74,74,74,74	0
87	OHX	7	221	7/7	0.09	-2.03	124,124,124,124	0
87	OHX	6	2096	7/7	0.11	-2.03	149,149,149,149	0
87	OHX	5	4049	7/7	0.20	-2.03	136,136,136,136	0
87	OHX	5	4154	7/7	0.13	-2.04	134,134,134,134	0
86	MG	6	1924	1/1	0.10	-2.04	85,85,85,85	0
87	OHX	5	4146	7/7	0.18	-2.04	145,145,145,145	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
87	OHX	5	4013	7/7	0.10	-2.05	173,173,173,173	0
86	MG	6	1968	1/1	0.09	-2.05	113,113,113,113	0
86	MG	1	3406	1/1	0.27	-2.05	158,158,158,158	0
87	OHX	5	4160	7/7	0.13	-2.05	194,194,194,194	0
87	OHX	6	2074	7/7	0.13	-2.06	127,127,127,127	0
86	MG	1	3474	1/1	0.14	-2.08	114,114,114,114	0
87	OHX	5	4127	7/7	0.08	-2.08	225,225,225,225	0
87	OHX	5	3903	7/7	0.15	-2.09	70,70,70,70	0
86	MG	1	3664	1/1	0.17	-2.10	79,79,79,79	0
87	OHX	5	3983	7/7	0.09	-2.11	154,154,154,154	0
87	OHX	8	225	7/7	0.13	-2.11	150,150,150,150	0
87	OHX	6	2153	7/7	0.15	-2.11	175,175,175,175	0
86	MG	2	1952	1/1	0.07	-2.11	140,140,140,140	0
87	OHX	5	4171	7/7	0.10	-2.11	167,167,167,167	0
86	MG	6	1933	1/1	0.15	-2.13	63,63,63,63	0
87	OHX	1	4016	7/7	0.13	-2.14	190,190,190,190	0
89	ZN	q2	501	1/1	0.06	-2.14	97,97,97,97	0
87	OHX	L4	403	7/7	0.15	-2.15	166,166,166,166	0
87	OHX	5	4045	7/7	0.10	-2.15	174,174,174,174	0
86	MG	5	3466	1/1	0.10	-2.15	134,134,134,134	0
87	OHX	1	4045	7/7	0.17	-2.16	145,145,145,145	0
87	OHX	6	2122	7/7	0.11	-2.17	139,139,139,139	0
87	OHX	5	4159	7/7	0.11	-2.17	173,173,173,173	0
87	OHX	6	2054	7/7	0.15	-2.18	110,110,110,110	0
86	MG	2	1961	1/1	0.11	-2.19	85,85,85,85	0
86	MG	1	3643	1/1	0.10	-2.20	92,92,92,92	0
87	OHX	2	2045	7/7	0.13	-2.20	136,136,136,136	0
87	OHX	1	3926	7/7	0.17	-2.21	103,103,103,103	0
87	OHX	1	4115	7/7	0.13	-2.21	176,176,176,176	0
87	OHX	5	4205	7/7	0.17	-2.22	129,129,129,129	0
86	MG	1	3637	1/1	0.12	-2.22	91,91,91,91	0
87	OHX	2	2056	7/7	0.09	-2.25	178,178,178,178	0
87	OHX	1	3952	7/7	0.09	-2.26	130,130,130,130	0
87	OHX	6	2104	7/7	0.19	-2.27	251,251,251,251	0
87	OHX	1	3915	7/7	0.14	-2.27	120,120,120,120	0
87	OHX	s8	303	7/7	0.11	-2.28	199,199,199,199	0
87	OHX	1	4048	7/7	0.18	-2.29	146,146,146,146	0
87	OHX	2	2089	7/7	0.14	-2.29	146,146,146,146	0
87	OHX	2	2111	7/7	0.13	-2.29	150,150,150,150	0
87	OHX	1	4036	7/7	0.07	-2.30	177,177,177,177	0
87	OHX	1	3967	7/7	0.10	-2.30	156,156,156,156	0
87	OHX	4	229	7/7	0.09	-2.30	150,150,150,150	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	1	4034	7/7	0.08	-2.31	197,197,197,197	0
87	OHX	5	3964	7/7	0.11	-2.32	147,147,147,147	0
86	MG	5	3423	1/1	0.14	-2.33	96,96,96,96	0
87	OHX	L3	404	7/7	0.13	-2.33	158,158,158,158	0
87	OHX	o3	203	7/7	0.08	-2.33	129,129,129,129	0
87	OHX	2	2148	7/7	0.16	-2.33	147,147,147,147	0
87	OHX	5	4172	7/7	0.09	-2.34	174,174,174,174	0
86	MG	1	3825	1/1	0.10	-2.34	73,73,73,73	0
87	OHX	1	3873	7/7	0.12	-2.34	80,80,80,80	0
87	OHX	1	4180	7/7	0.13	-2.34	119,119,119,119	0
87	OHX	5	3916	7/7	0.16	-2.35	88,88,88,88	0
87	OHX	5	4081	7/7	0.10	-2.35	153,153,153,153	0
87	OHX	1	4152	7/7	0.16	-2.35	162,162,162,162	0
87	OHX	1	3875	7/7	0.17	-2.35	90,90,90,90	0
87	OHX	1	4087	7/7	0.08	-2.36	163,163,163,163	0
87	OHX	1	3968	7/7	0.10	-2.37	118,118,118,118	0
87	OHX	1	4120	7/7	0.13	-2.37	135,135,135,135	0
87	OHX	1	4051	7/7	0.10	-2.39	191,191,191,191	0
87	OHX	5	4125	7/7	0.05	-2.39	189,189,189,189	0
87	OHX	1	4114	7/7	0.10	-2.40	148,148,148,148	0
87	OHX	4	238	7/7	0.11	-2.40	174,174,174,174	0
87	OHX	1	3974	7/7	0.08	-2.41	162,162,162,162	0
87	OHX	5	4054	7/7	0.16	-2.41	116,116,116,116	0
87	OHX	2	2106	7/7	0.13	-2.41	180,180,180,180	0
87	OHX	m5	303	7/7	0.14	-2.41	168,168,168,168	0
87	OHX	6	2065	7/7	0.15	-2.42	168,168,168,168	0
86	MG	l5	303	1/1	0.11	-2.42	60,60,60,60	0
87	OHX	8	219	7/7	0.14	-2.42	109,109,109,109	0
86	MG	1	3660	1/1	0.17	-2.43	54,54,54,54	0
87	OHX	5	4143	7/7	0.09	-2.43	151,151,151,151	0
87	OHX	l4	402	7/7	0.12	-2.44	181,181,181,181	0
89	ZN	Q2	501	1/1	0.03	-2.45	109,109,109,109	0
87	OHX	6	2072	7/7	0.11	-2.45	142,142,142,142	0
87	OHX	5	3936	7/7	0.15	-2.46	104,104,104,104	0
87	OHX	1	3956	7/7	0.15	-2.46	150,150,150,150	0
87	OHX	1	4134	7/7	0.17	-2.46	130,130,130,130	0
87	OHX	1	3959	7/7	0.11	-2.48	100,100,100,100	0
87	OHX	3	215	7/7	0.12	-2.49	137,137,137,137	0
87	OHX	sR	401	7/7	0.13	-2.50	180,180,180,180	0
87	OHX	2	2073	7/7	0.12	-2.50	183,183,183,183	0
86	MG	6	1990	1/1	0.09	-2.50	77,77,77,77	0
87	OHX	5	4133	7/7	0.13	-2.50	167,167,167,167	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	5	4047	7/7	0.09	-2.51	112,112,112,112	0
87	OHX	1	4117	7/7	0.16	-2.52	141,141,141,141	0
87	OHX	2	2034	7/7	0.11	-2.52	139,139,139,139	0
87	OHX	6	2140	7/7	0.08	-2.52	170,170,170,170	0
87	OHX	8	228	7/7	0.09	-2.52	195,195,195,195	0
86	MG	3	203	1/1	0.15	-2.53	114,114,114,114	0
87	OHX	1	4124	7/7	0.14	-2.53	180,180,180,180	0
87	OHX	1	4073	7/7	0.09	-2.53	150,150,150,150	0
87	OHX	5	3975	7/7	0.15	-2.54	131,131,131,131	0
86	MG	3	211	1/1	0.10	-2.54	100,100,100,100	0
87	OHX	5	3971	7/7	0.17	-2.54	129,129,129,129	0
87	OHX	2	2082	7/7	0.07	-2.55	199,199,199,199	0
87	OHX	5	4119	7/7	0.11	-2.55	174,174,174,174	0
86	MG	5	3631	1/1	0.16	-2.56	74,74,74,74	0
87	OHX	2	2166	7/7	0.07	-2.56	198,198,198,198	0
87	OHX	5	4207	7/7	0.12	-2.56	185,185,185,185	0
87	OHX	5	3946	7/7	0.14	-2.56	123,123,123,123	0
87	OHX	4	235	7/7	0.05	-2.57	171,171,171,171	0
87	OHX	5	4093	7/7	0.11	-2.59	172,172,172,172	0
87	OHX	5	4050	7/7	0.07	-2.59	125,125,125,125	0
87	OHX	6	2146	7/7	0.09	-2.59	207,207,207,207	0
87	OHX	6	2151	7/7	0.12	-2.59	157,157,157,157	0
86	MG	5	3456	1/1	0.17	-2.60	97,97,97,97	0
87	OHX	1	3991	7/7	0.08	-2.60	183,183,183,183	0
87	OHX	5	3923	7/7	0.16	-2.61	122,122,122,122	0
87	OHX	1	4126	7/7	0.07	-2.62	152,152,152,152	0
87	OHX	2	2079	7/7	0.14	-2.62	152,152,152,152	0
87	OHX	1	3986	7/7	0.11	-2.62	143,143,143,143	0
87	OHX	5	4022	7/7	0.13	-2.63	134,134,134,134	0
87	OHX	5	4004	7/7	0.10	-2.63	110,110,110,110	0
87	OHX	2	2029	7/7	0.11	-2.65	137,137,137,137	0
87	OHX	5	4073	7/7	0.17	-2.65	194,194,194,194	0
87	OHX	2	2168	7/7	0.08	-2.65	164,164,164,164	0
87	OHX	1	4001	7/7	0.12	-2.66	122,122,122,122	0
87	OHX	6	2159	7/7	0.13	-2.66	153,153,153,153	0
87	OHX	2	2145	7/7	0.10	-2.67	190,190,190,190	0
87	OHX	6	2117	7/7	0.17	-2.67	140,140,140,140	0
87	OHX	5	4048	7/7	0.13	-2.67	133,133,133,133	0
87	OHX	6	2182	7/7	0.15	-2.68	144,144,144,144	0
87	OHX	1	3928	7/7	0.09	-2.68	122,122,122,122	0
87	OHX	5	3945	7/7	0.14	-2.69	107,107,107,107	0
87	OHX	1	3947	7/7	0.17	-2.69	103,103,103,103	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
87	OHX	1	4132	7/7	0.15	-2.70	143,143,143,143	0
87	OHX	1	4003	7/7	0.09	-2.71	119,119,119,119	0
86	MG	s1	301	1/1	0.11	-2.71	104,104,104,104	0
87	OHX	6	2093	7/7	0.09	-2.72	153,153,153,153	0
87	OHX	5	4035	7/7	0.14	-2.72	160,160,160,160	0
87	OHX	1	3939	7/7	0.13	-2.73	122,122,122,122	0
87	OHX	1	3900	7/7	0.11	-2.74	114,114,114,114	0
87	OHX	5	4046	7/7	0.11	-2.75	127,127,127,127	0
87	OHX	1	3876	7/7	0.13	-2.75	107,107,107,107	0
87	OHX	1	3978	7/7	0.15	-2.75	120,120,120,120	0
86	MG	5	3887	1/1	0.15	-2.76	89,89,89,89	0
87	OHX	M5	303	7/7	0.16	-2.78	155,155,155,155	0
87	OHX	1	4039	7/7	0.13	-2.79	137,137,137,137	0
87	OHX	1	3984	7/7	0.13	-2.79	116,116,116,116	0
87	OHX	1	4076	7/7	0.19	-2.80	154,154,154,154	0
87	OHX	5	4152	7/7	0.11	-2.81	162,162,162,162	0
87	OHX	5	3961	7/7	0.09	-2.81	152,152,152,152	0
86	MG	1	3510	1/1	0.11	-2.83	75,75,75,75	0
87	OHX	5	4139	7/7	0.11	-2.83	131,131,131,131	0
87	OHX	O2	202	7/7	0.13	-2.83	119,119,119,119	0
87	OHX	1	3949	7/7	0.12	-2.83	139,139,139,139	0
87	OHX	5	3995	7/7	0.09	-2.84	149,149,149,149	0
87	OHX	1	3999	7/7	0.10	-2.85	130,130,130,130	0
87	OHX	4	240	7/7	0.17	-2.86	172,172,172,172	0
87	OHX	1	3903	7/7	0.12	-2.86	122,122,122,122	0
87	OHX	5	4080	7/7	0.12	-2.87	147,147,147,147	0
87	OHX	2	2077	7/7	0.11	-2.88	149,149,149,149	0
87	OHX	3	217	7/7	0.12	-2.88	132,132,132,132	0
87	OHX	m4	202	7/7	0.18	-2.88	241,241,241,241	0
87	OHX	2	2063	7/7	0.07	-2.91	187,187,187,187	0
87	OHX	6	2168	7/7	0.13	-2.91	171,171,171,171	0
87	OHX	1	4130	7/7	0.14	-2.93	150,150,150,150	0
87	OHX	6	2063	7/7	0.12	-2.94	128,128,128,128	0
87	OHX	2	2031	7/7	0.08	-2.96	149,149,149,149	0
86	MG	6	1906	1/1	0.14	-2.98	64,64,64,64	0
87	OHX	5	4212	7/7	0.12	-2.98	176,176,176,176	0
87	OHX	5	4017	7/7	0.16	-2.99	167,167,167,167	0
87	OHX	2	2095	7/7	0.10	-2.99	189,189,189,189	0
87	OHX	5	4059	7/7	0.08	-2.99	189,189,189,189	0
87	OHX	1	4052	7/7	0.08	-3.00	174,174,174,174	0
87	OHX	1	3955	7/7	0.14	-3.01	127,127,127,127	0
87	OHX	1	3899	7/7	0.12	-3.03	129,129,129,129	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	2	2119	7/7	0.10	-3.03	193,193,193,193	0
87	OHX	6	2155	7/7	0.07	-3.04	176,176,176,176	0
87	OHX	5	3981	7/7	0.13	-3.05	103,103,103,103	0
87	OHX	5	4118	7/7	0.17	-3.07	152,152,152,152	0
87	OHX	2	2120	7/7	0.13	-3.07	184,184,184,184	0
87	OHX	15	304	7/7	0.07	-3.08	173,173,173,173	0
87	OHX	6	2082	7/7	0.16	-3.08	113,113,113,113	0
87	OHX	5	4237	7/7	0.08	-3.09	121,121,121,121	0
87	OHX	2	2114	7/7	0.13	-3.09	183,183,183,183	0
87	OHX	5	4148	7/7	0.18	-3.10	142,142,142,142	0
86	MG	6	2030	1/1	0.07	-3.11	95,95,95,95	0
87	OHX	2	2051	7/7	0.12	-3.12	169,169,169,169	0
87	OHX	1	4118	7/7	0.13	-3.12	172,172,172,172	0
87	OHX	1	4026	7/7	0.13	-3.14	157,157,157,157	0
87	OHX	1	4020	7/7	0.13	-3.16	140,140,140,140	0
86	MG	1	3741	1/1	0.12	-3.17	64,64,64,64	0
87	OHX	5	4136	7/7	0.12	-3.17	177,177,177,177	0
87	OHX	1	3954	7/7	0.13	-3.18	121,121,121,121	0
86	MG	5	3804	1/1	0.17	-3.19	88,88,88,88	0
87	OHX	5	4181	7/7	0.12	-3.19	160,160,160,160	0
87	OHX	2	2060	7/7	0.10	-3.22	142,142,142,142	0
87	OHX	1	4065	7/7	0.09	-3.22	137,137,137,137	0
87	OHX	1	4071	7/7	0.15	-3.23	124,124,124,124	0
87	OHX	1	4094	7/7	0.07	-3.23	176,176,176,176	0
87	OHX	2	2097	7/7	0.07	-3.24	225,225,225,225	0
87	OHX	q1	102	7/7	0.13	-3.25	114,114,114,114	0
87	OHX	5	4113	7/7	0.11	-3.26	150,150,150,150	0
87	OHX	6	2081	7/7	0.13	-3.27	130,130,130,130	0
87	OHX	5	4053	7/7	0.10	-3.28	180,180,180,180	0
87	OHX	6	2094	7/7	0.08	-3.29	138,138,138,138	0
86	MG	5	3422	1/1	0.10	-3.30	55,55,55,55	0
87	OHX	1	3987	7/7	0.07	-3.31	150,150,150,150	0
87	OHX	5	4040	7/7	0.14	-3.32	162,162,162,162	0
87	OHX	1	4150	7/7	0.08	-3.32	154,154,154,154	0
87	OHX	1	4018	7/7	0.09	-3.32	155,155,155,155	0
87	OHX	5	4241	7/7	0.14	-3.33	171,171,171,171	0
87	OHX	1	3981	7/7	0.14	-3.33	106,106,106,106	0
87	OHX	1	4053	7/7	0.14	-3.33	134,134,134,134	0
87	OHX	4	226	7/7	0.16	-3.38	107,107,107,107	0
87	OHX	5	3958	7/7	0.14	-3.38	117,117,117,117	0
87	OHX	5	4028	7/7	0.08	-3.38	123,123,123,123	0
86	MG	1	3737	1/1	0.10	-3.39	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	1	3976	7/7	0.08	-3.39	133,133,133,133	0
87	OHX	1	4050	7/7	0.04	-3.41	171,171,171,171	0
87	OHX	1	3901	7/7	0.10	-3.41	117,117,117,117	0
87	OHX	2	2061	7/7	0.07	-3.41	160,160,160,160	0
87	OHX	1	4009	7/7	0.15	-3.42	142,142,142,142	0
87	OHX	1	4058	7/7	0.07	-3.44	152,152,152,152	0
87	OHX	5	3912	7/7	0.15	-3.45	89,89,89,89	0
87	OHX	7	223	7/7	0.09	-3.45	156,156,156,156	0
86	MG	1	3644	1/1	0.08	-3.45	81,81,81,81	0
87	OHX	2	2153	7/7	0.20	-3.45	207,207,207,207	0
87	OHX	5	4092	7/7	0.11	-3.47	155,155,155,155	0
87	OHX	1	4007	7/7	0.11	-3.48	148,148,148,148	0
87	OHX	5	3986	7/7	0.09	-3.49	136,136,136,136	0
87	OHX	1	4125	7/7	0.16	-3.49	190,190,190,190	0
87	OHX	2	2080	7/7	0.04	-3.49	219,219,219,219	0
87	OHX	5	4085	7/7	0.13	-3.50	123,123,123,123	0
87	OHX	1	4021	7/7	0.13	-3.50	173,173,173,173	0
87	OHX	5	4233	7/7	0.17	-3.51	169,169,169,169	0
87	OHX	6	2194	7/7	0.15	-3.53	167,167,167,167	0
87	OHX	2	2038	7/7	0.08	-3.53	142,142,142,142	0
86	MG	1	3472	1/1	0.16	-3.54	51,51,51,51	0
86	MG	1	3418	1/1	0.13	-3.54	68,68,68,68	0
87	OHX	5	4101	7/7	0.09	-3.55	133,133,133,133	0
87	OHX	1	4004	7/7	0.06	-3.55	137,137,137,137	0
87	OHX	L3	403	7/7	0.10	-3.56	143,143,143,143	0
87	OHX	5	3987	7/7	0.10	-3.56	134,134,134,134	0
87	OHX	5	3924	7/7	0.12	-3.57	113,113,113,113	0
87	OHX	6	2157	7/7	0.14	-3.57	200,200,200,200	0
87	OHX	n3	202	7/7	0.08	-3.58	132,132,132,132	0
87	OHX	1	4188	7/7	0.13	-3.59	148,148,148,148	0
87	OHX	5	3962	7/7	0.15	-3.60	123,123,123,123	0
87	OHX	5	4084	7/7	0.09	-3.60	116,116,116,116	0
87	OHX	1	3975	7/7	0.11	-3.61	137,137,137,137	0
87	OHX	5	4218	7/7	0.18	-3.61	139,139,139,139	0
87	OHX	5	3929	7/7	0.14	-3.62	112,112,112,112	0
87	OHX	8	224	7/7	0.08	-3.62	165,165,165,165	0
87	OHX	6	2156	7/7	0.13	-3.62	145,145,145,145	0
86	MG	1	3497	1/1	0.16	-3.62	67,67,67,67	0
87	OHX	6	2067	7/7	0.14	-3.63	151,151,151,151	0
87	OHX	6	2164	7/7	0.10	-3.63	134,134,134,134	0
87	OHX	2	2091	7/7	0.14	-3.65	174,174,174,174	0
87	OHX	5	4077	7/7	0.12	-3.66	151,151,151,151	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	5	4228	7/7	0.10	-3.70	144,144,144,144	0
87	OHX	6	2118	7/7	0.10	-3.71	163,163,163,163	0
87	OHX	1	3932	7/7	0.12	-3.73	104,104,104,104	0
87	OHX	5	4009	7/7	0.11	-3.73	115,115,115,115	0
87	OHX	5	4195	7/7	0.10	-3.74	166,166,166,166	0
87	OHX	5	4030	7/7	0.08	-3.77	156,156,156,156	0
87	OHX	5	3940	7/7	0.17	-3.78	101,101,101,101	0
87	OHX	5	4052	7/7	0.09	-3.78	162,162,162,162	0
87	OHX	5	4024	7/7	0.09	-3.79	118,118,118,118	0
87	OHX	6	2097	7/7	0.12	-3.80	135,135,135,135	0
87	OHX	6	2135	7/7	0.18	-3.80	130,130,130,130	0
87	OHX	5	4107	7/7	0.12	-3.82	140,140,140,140	0
86	MG	5	3596	1/1	0.13	-3.83	71,71,71,71	0
87	OHX	5	3997	7/7	0.12	-3.84	95,95,95,95	0
86	MG	5	3599	1/1	0.16	-3.84	51,51,51,51	0
87	OHX	6	2190	7/7	0.20	-3.84	197,197,197,197	0
87	OHX	6	2119	7/7	0.09	-3.86	155,155,155,155	0
87	OHX	5	4168	7/7	0.13	-3.87	120,120,120,120	0
87	OHX	1	4154	7/7	0.08	-3.89	132,132,132,132	0
87	OHX	5	4122	7/7	0.10	-3.89	134,134,134,134	0
87	OHX	6	2083	7/7	0.09	-3.91	121,121,121,121	0
87	OHX	5	4187	7/7	0.13	-3.92	147,147,147,147	0
87	OHX	5	4167	7/7	0.12	-3.93	119,119,119,119	0
87	OHX	1	4013	7/7	0.15	-3.93	166,166,166,166	0
87	OHX	5	3938	7/7	0.11	-3.99	125,125,125,125	0
87	OHX	2	2028	7/7	0.12	-4.02	133,133,133,133	0
87	OHX	1	4081	7/7	0.15	-4.03	203,203,203,203	0
87	OHX	1	3893	7/7	0.12	-4.06	98,98,98,98	0
87	OHX	1	3935	7/7	0.12	-4.09	110,110,110,110	0
86	MG	5	4251	1/1	0.14	-4.10	44,44,44,44	0
87	OHX	6	2102	7/7	0.07	-4.11	153,153,153,153	0
87	OHX	6	2090	7/7	0.10	-4.11	147,147,147,147	0
87	OHX	6	2167	7/7	0.14	-4.12	162,162,162,162	0
87	OHX	1	4083	7/7	0.08	-4.16	215,215,215,215	0
87	OHX	5	3937	7/7	0.08	-4.17	136,136,136,136	0
87	OHX	5	4005	7/7	0.08	-4.20	131,131,131,131	0
87	OHX	1	4096	7/7	0.13	-4.25	119,119,119,119	0
87	OHX	5	3985	7/7	0.10	-4.26	105,105,105,105	0
87	OHX	1	3958	7/7	0.11	-4.27	123,123,123,123	0
87	OHX	5	3948	7/7	0.12	-4.28	110,110,110,110	0
87	OHX	1	3965	7/7	0.12	-4.29	94,94,94,94	0
87	OHX	5	3959	7/7	0.16	-4.35	110,110,110,110	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
87	OHX	1	3909	7/7	0.13	-4.36	119,119,119,119	0
87	OHX	5	4193	7/7	0.14	-4.37	116,116,116,116	0
87	OHX	1	3961	7/7	0.10	-4.39	151,151,151,151	0
87	OHX	5	4209	7/7	0.05	-4.40	224,224,224,224	0
87	OHX	2	2046	7/7	0.10	-4.40	161,161,161,161	0
87	OHX	5	4082	7/7	0.10	-4.41	143,143,143,143	0
87	OHX	5	4097	7/7	0.11	-4.41	123,123,123,123	0
87	OHX	1	4067	7/7	0.09	-4.42	144,144,144,144	0
87	OHX	1	3992	7/7	0.10	-4.42	163,163,163,163	0
87	OHX	1	4089	7/7	0.10	-4.45	134,134,134,134	0
87	OHX	2	2065	7/7	0.07	-4.50	134,134,134,134	0
87	OHX	1	4043	7/7	0.08	-4.53	129,129,129,129	0
87	OHX	2	2064	7/7	0.11	-4.54	149,149,149,149	0
87	OHX	5	4057	7/7	0.13	-4.56	154,154,154,154	0
87	OHX	1	3896	7/7	0.15	-4.57	111,111,111,111	0
87	OHX	1	4049	7/7	0.12	-4.58	152,152,152,152	0
87	OHX	1	4121	7/7	0.08	-4.63	172,172,172,172	0
87	OHX	5	4031	7/7	0.11	-4.67	167,167,167,167	0
87	OHX	5	4061	7/7	0.04	-4.67	154,154,154,154	0
87	OHX	5	4075	7/7	0.08	-4.68	133,133,133,133	0
87	OHX	5	4235	7/7	0.09	-4.68	251,251,251,251	0
87	OHX	1	3922	7/7	0.12	-4.69	120,120,120,120	0
87	OHX	1	3964	7/7	0.11	-4.69	117,117,117,117	0
87	OHX	5	3925	7/7	0.18	-4.69	113,113,113,113	0
87	OHX	4	231	7/7	0.07	-4.70	135,135,135,135	0
87	OHX	8	222	7/7	0.07	-4.71	143,143,143,143	0
86	MG	1	3767	1/1	0.16	-4.71	110,110,110,110	0
87	OHX	6	2132	7/7	0.13	-4.72	145,145,145,145	0
87	OHX	1	3977	7/7	0.10	-4.73	107,107,107,107	0
87	OHX	2	2125	7/7	0.11	-4.76	167,167,167,167	0
86	MG	1	3426	1/1	0.12	-4.76	64,64,64,64	0
87	OHX	5	4090	7/7	0.09	-4.78	155,155,155,155	0
87	OHX	1	4097	7/7	0.09	-4.78	143,143,143,143	0
87	OHX	5	4015	7/7	0.10	-4.78	141,141,141,141	0
87	OHX	6	2114	7/7	0.08	-4.80	149,149,149,149	0
87	OHX	5	4072	7/7	0.14	-4.83	133,133,133,133	0
87	OHX	5	4105	7/7	0.10	-4.86	113,113,113,113	0
87	OHX	6	2166	7/7	0.11	-4.86	155,155,155,155	0
87	OHX	5	3967	7/7	0.11	-4.88	108,108,108,108	0
87	OHX	6	2149	7/7	0.17	-4.89	157,157,157,157	0
87	OHX	5	3920	7/7	0.09	-4.90	106,106,106,106	0
87	OHX	6	2098	7/7	0.06	-4.96	173,173,173,173	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
86	MG	1	3858	1/1	0.16	-4.98	70,70,70,70	0
87	OHX	5	4039	7/7	0.10	-4.98	126,126,126,126	0
87	OHX	5	3988	7/7	0.11	-5.04	141,141,141,141	0
87	OHX	2	2052	7/7	0.13	-5.05	178,178,178,178	0
87	OHX	6	2076	7/7	0.11	-5.06	118,118,118,118	0
87	OHX	5	4029	7/7	0.09	-5.15	141,141,141,141	0
87	OHX	5	4192	7/7	0.09	-5.15	150,150,150,150	0
87	OHX	5	4051	7/7	0.11	-5.17	140,140,140,140	0
87	OHX	5	4174	7/7	0.12	-5.19	162,162,162,162	0
87	OHX	5	4147	7/7	0.09	-5.20	161,161,161,161	0
87	OHX	5	4169	7/7	0.09	-5.21	155,155,155,155	0
87	OHX	6	2204	7/7	0.08	-5.22	168,168,168,168	0
87	OHX	5	4034	7/7	0.16	-5.22	129,129,129,129	0
87	OHX	5	3979	7/7	0.09	-5.25	124,124,124,124	0
87	OHX	6	2085	7/7	0.08	-5.26	146,146,146,146	0
87	OHX	5	4025	7/7	0.11	-5.28	142,142,142,142	0
87	OHX	5	3973	7/7	0.13	-5.31	97,97,97,97	0
87	OHX	5	4109	7/7	0.08	-5.44	139,139,139,139	0
87	OHX	1	3973	7/7	0.05	-5.44	136,136,136,136	0
87	OHX	2	2118	7/7	0.19	-5.44	191,191,191,191	0
87	OHX	5	4027	7/7	0.12	-5.56	136,136,136,136	0
87	OHX	5	4020	7/7	0.09	-5.59	129,129,129,129	0
87	OHX	5	4221	7/7	0.14	-5.60	166,166,166,166	0
87	OHX	2	2059	7/7	0.09	-5.62	153,153,153,153	0
87	OHX	1	4160	7/7	0.15	-5.63	170,170,170,170	0
87	OHX	2	2105	7/7	0.10	-5.71	151,151,151,151	0
87	OHX	1	4105	7/7	0.15	-5.71	174,174,174,174	0
87	OHX	5	4011	7/7	0.10	-5.72	140,140,140,140	0
87	OHX	1	3979	7/7	0.10	-5.74	140,140,140,140	0
87	OHX	1	4060	7/7	0.10	-5.80	170,170,170,170	0
87	OHX	1	3966	7/7	0.09	-5.81	128,128,128,128	0
87	OHX	1	3905	7/7	0.09	-5.81	106,106,106,106	0
87	OHX	6	2109	7/7	0.15	-5.88	149,149,149,149	0
87	OHX	1	4010	7/7	0.07	-5.90	154,154,154,154	0
87	OHX	5	3999	7/7	0.15	-5.90	160,160,160,160	0
87	OHX	5	3966	7/7	0.10	-5.93	135,135,135,135	0
87	OHX	5	4126	7/7	0.07	-5.93	129,129,129,129	0
87	OHX	1	4086	7/7	0.10	-5.97	104,104,104,104	0
87	OHX	5	3980	7/7	0.14	-5.97	124,124,124,124	0
87	OHX	1	3998	7/7	0.10	-6.05	133,133,133,133	0
87	OHX	5	4010	7/7	0.09	-6.05	150,150,150,150	0
87	OHX	2	2171	7/7	0.13	-6.13	169,169,169,169	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3494	1/1	0.08	-6.16	74,74,74,74	0
87	OHX	1	3908	7/7	0.14	-6.19	111,111,111,111	0
87	OHX	6	2095	7/7	0.07	-6.24	141,141,141,141	0
86	MG	1	3804	1/1	0.13	-6.26	59,59,59,59	0
87	OHX	5	4018	7/7	0.12	-6.27	142,142,142,142	0
87	OHX	1	4064	7/7	0.09	-6.35	191,191,191,191	0
87	OHX	6	2084	7/7	0.13	-6.35	151,151,151,151	0
87	OHX	2	2155	7/7	0.09	-6.36	173,173,173,173	0
87	OHX	5	4070	7/7	0.15	-6.42	145,145,145,145	0
87	OHX	1	4198	7/7	0.09	-6.52	153,153,153,153	0
87	OHX	5	4162	7/7	0.13	-6.63	186,186,186,186	0
87	OHX	5	4023	7/7	0.11	-6.67	110,110,110,110	0
87	OHX	1	3957	7/7	0.11	-6.72	168,168,168,168	0
87	OHX	1	4055	7/7	0.12	-6.86	117,117,117,117	0
86	MG	1	3638	1/1	0.09	-6.95	85,85,85,85	0
87	OHX	1	3884	7/7	0.09	-6.97	92,92,92,92	0
87	OHX	2	2086	7/7	0.10	-7.03	141,141,141,141	0
87	OHX	1	3912	7/7	0.10	-7.09	141,141,141,141	0
87	OHX	5	4194	7/7	0.08	-7.42	135,135,135,135	0
87	OHX	2	2103	7/7	0.08	-7.44	172,172,172,172	0
87	OHX	5	4079	7/7	0.09	-7.50	137,137,137,137	0
87	OHX	1	3990	7/7	0.14	-7.50	137,137,137,137	0
87	OHX	1	4019	7/7	0.08	-7.50	134,134,134,134	0
87	OHX	5	4163	7/7	0.08	-7.63	177,177,177,177	0
87	OHX	1	4044	7/7	0.09	-7.77	134,134,134,134	0
87	OHX	5	3978	7/7	0.09	-7.94	112,112,112,112	0
87	OHX	1	3942	7/7	0.08	-7.99	136,136,136,136	0
87	OHX	1	4091	7/7	0.06	-8.09	168,168,168,168	0
87	OHX	2	2050	7/7	0.12	-8.37	170,170,170,170	0
87	OHX	5	4016	7/7	0.07	-8.52	112,112,112,112	0
87	OHX	1	4080	7/7	0.19	-8.56	183,183,183,183	0
87	OHX	1	3941	7/7	0.06	-8.62	145,145,145,145	0
87	OHX	7	219	7/7	0.11	-8.64	105,105,105,105	0
87	OHX	5	4211	7/7	0.10	-8.68	130,130,130,130	0
87	OHX	5	4021	7/7	0.08	-8.71	123,123,123,123	0
87	OHX	1	4174	7/7	0.14	-9.00	180,180,180,180	0
87	OHX	5	3992	7/7	0.10	-9.01	122,122,122,122	0
87	OHX	1	4190	7/7	0.12	-9.14	174,174,174,174	0
87	OHX	1	4072	7/7	0.09	-9.24	152,152,152,152	0
87	OHX	5	4215	7/7	0.16	-9.44	167,167,167,167	0
87	OHX	5	4044	7/7	0.09	-9.45	143,143,143,143	0
87	OHX	5	4158	7/7	0.08	-9.74	126,126,126,126	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	1	3686	1/1	0.13	-9.86	118,118,118,118	0
87	OHX	5	4138	7/7	0.09	-9.88	168,168,168,168	0
87	OHX	1	3962	7/7	0.13	-9.96	138,138,138,138	0
87	OHX	5	3904	7/7	0.12	-10.08	74,74,74,74	0
87	OHX	1	4022	7/7	0.08	-10.13	173,173,173,173	0
86	MG	5	3763	1/1	0.10	-10.17	74,74,74,74	0
87	OHX	5	4104	7/7	0.14	-10.29	137,137,137,137	0
87	OHX	5	4208	7/7	0.14	-10.53	136,136,136,136	0
87	OHX	1	4033	7/7	0.13	-10.57	139,139,139,139	0
86	MG	5	3855	1/1	0.16	-10.60	83,83,83,83	0
86	MG	1	3623	1/1	0.08	-10.68	92,92,92,92	0
86	MG	N5	202	1/1	0.12	-10.68	83,83,83,83	0
87	OHX	1	4028	7/7	0.06	-10.85	153,153,153,153	0
87	OHX	5	4131	7/7	0.07	-11.02	173,173,173,173	0
87	OHX	5	4014	7/7	0.13	-12.20	126,126,126,126	0
87	OHX	6	2080	7/7	0.10	-12.49	157,157,157,157	0
87	OHX	6	2161	7/7	0.10	-15.29	212,212,212,212	0
86	MG	5	3839	1/1	0.15	-15.35	50,50,50,50	0
86	MG	5	3815	1/1	0.10	-16.35	87,87,87,87	0
87	OHX	5	4067	7/7	0.15	-17.28	161,161,161,161	0
87	OHX	5	3982	7/7	0.12	-20.25	114,114,114,114	0
87	OHX	2	2127	7/7	0.13	-23.70	174,174,174,174	0
87	OHX	5	4043	7/7	0.08	-31.82	139,139,139,139	0
87	OHX	1	4109	7/7	0.13	-32.20	216,216,216,216	0
86	MG	1	3695	1/1	0.58	-	66,66,66,66	0
86	MG	17	302	1/1	0.60	-	55,55,55,55	0
86	MG	1	3837	1/1	0.69	-	43,43,43,43	0
86	MG	5	3776	1/1	0.30	-	108,108,108,108	0
86	MG	5	3872	1/1	1.19	-	66,66,66,66	0
86	MG	4	223	1/1	0.46	-	113,113,113,113	0
86	MG	1	3792	1/1	0.61	-	77,77,77,77	0
86	MG	2	1950	1/1	0.53	-	137,137,137,137	0
86	MG	2	2003	1/1	0.56	-	115,115,115,115	0
86	MG	1	3799	1/1	0.15	-	107,107,107,107	0
86	MG	5	3478	1/1	0.88	-	77,77,77,77	0
86	MG	5	3716	1/1	0.29	-	53,53,53,53	0
86	MG	5	3613	1/1	0.63	-	36,36,36,36	0
86	MG	6	2018	1/1	0.33	-	166,166,166,166	0
86	MG	1	3788	1/1	0.14	-	92,92,92,92	0
86	MG	6	2002	1/1	0.13	-	133,133,133,133	0
86	MG	6	2042	1/1	0.33	-	90,90,90,90	0
86	MG	1	3464	1/1	1.44	-	94,94,94,94	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
86	MG	5	3861	1/1	0.32	-	47,47,47,47	0
86	MG	1	3610	1/1	0.24	-	81,81,81,81	0
86	MG	5	3719	1/1	0.35	-	70,70,70,70	0
86	MG	5	3769	1/1	0.34	-	103,103,103,103	0
86	MG	1	3683	1/1	0.43	-	53,53,53,53	0
86	MG	5	3796	1/1	1.37	-	63,63,63,63	0
86	MG	1	3836	1/1	0.98	-	53,53,53,53	0
86	MG	1	3616	1/1	0.59	-	49,49,49,49	0
86	MG	5	3888	1/1	0.14	-	75,75,75,75	0
86	MG	6	2048	1/1	1.11	-	123,123,123,123	0
86	MG	L4	401	1/1	1.10	-	67,67,67,67	0
86	MG	1	3840	1/1	0.46	-	63,63,63,63	0
86	MG	S2	301	1/1	0.56	-	89,89,89,89	0
86	MG	2	1963	1/1	0.90	-	110,110,110,110	0
86	MG	6	2047	1/1	0.89	-	77,77,77,77	0
86	MG	6	2019	1/1	1.47	-	79,79,79,79	0
86	MG	5	3652	1/1	1.21	-	73,73,73,73	0
86	MG	5	3884	1/1	0.97	-	30,30,30,30	0
86	MG	6	2004	1/1	0.17	-	122,122,122,122	0
86	MG	1	3405	1/1	0.20	-	73,73,73,73	0
86	MG	2	2013	1/1	0.92	-	93,93,93,93	0

6.5 Other polymers ⓘ

There are no such residues in this entry.