Full wwPDB EM Validation Report ⓘ

Nov 19, 2022 – 09:25 AM EST

PDB ID	:	4V6X
EMDB ID	:	EMD-5592
Title	:	Structure of the human 80S ribosome
Authors	:	Anger, A.M.; Armache, J.-P.; Berninghausen, O.; Habeck, M.; Subklewe, M.; Wilson, D.N.; Beckmann, R.
Deposited on	:	2013-02-27
Resolution	:	5.00 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

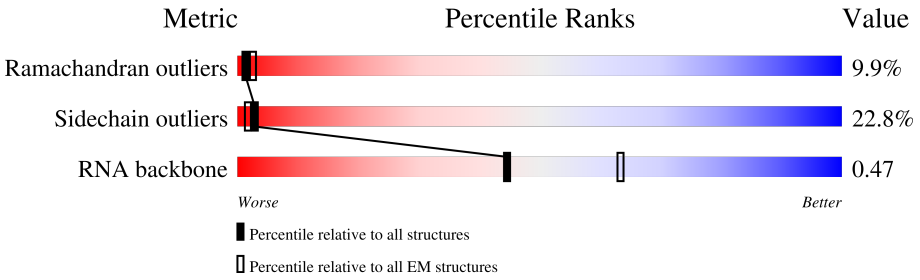
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.3

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 5.00 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)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	Az	858	68% 74% 19% 5%
2	Ag	317	65% 74% 20%
3	AU	119	53% 48% 30% 5% 13%
4	AK	165	25% 31% 16% 8% 41%
5	AO	151	44% 60% 27% 10%
6	AX	143	45% 68% 26% 6%
7	AM	132	75% 62% 26% 6% 6%
8	AS	152	41% 60% 20% 9% 10%

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Mol	Chain	Length	Quality of chain
9	Ad	56	23% 66% 27% 5%
10	AN	151	43% 67% 30%
11	AL	158	44% 66% 26%
12	AR	135	59% 65% 18% 7% 7%
13	AP	145	50% 50% 27% 8% 12%
14	AT	145	34% 70% 22% 5%
15	AB	264	37% 55% 23% 19%
16	AA	295	36% 47% 20% 29%
17	AV	83	49% 54% 28% 13%
18	AY	133	32% 59% 26% 8% 5%
19	AZ	125	32% 38% 15% 6% 40%
20	Aa	115	44% 62% 23% 7% 7%
21	Ab	84	51% 65% 24% 11%
22	Ac	69	55% 65% 20% 7% 7%
23	AD	243	57% 63% 25% 5% 7%
24	Ae	59	39% 39% 41% 19%
25	Af	80	52% 36% 35% 15% 11%
26	AJ	194	33% 58% 26% 8% 6%
27	AE	263	44% 67% 29%
28	AC	293	34% 53% 20% 23%
29	AG	249	57% 64% 28% 5%
30	AF	204	48% 67% 21% 6%
31	AH	194	49% 61% 26% 7%
32	AW	130	38% 81% 16%
33	AI	208	48% 70% 20% 8%

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Mol	Chain	Length	Quality of chain
34	AQ	146	47% 68% 23% 5%
35	Ah	408	15% 7% 8% 82%
36	B2	1869	14% 9% 63% 28%
37	BC	75	52% 76% 21%
38	Cz	217	94% 83% 12%
39	Cq	317	69% 58% 20% 7% 12%
40	CK	165	72% 48% 32% 15%
41	CO	203	32% 74% 24%
42	CL	211	36% 62% 26% 8%
43	CV	140	49% 74% 19% 5%
44	CM	215	17% 39% 20% 35%
45	Ca	148	28% 70% 24%
46	CN	204	24% 72% 24%
47	CI	214	34% 68% 22% 7%
48	CD	297	32% 71% 18% 7%
49	CQ	188	33% 62% 27% 10%
50	CR	196	33% 69% 24%
51	CA	257	39% 74% 22%
52	CS	176	24% 53% 31% 11%
53	CT	160	29% 56% 29% 12%
54	CP	184	20% 56% 21% 5% 17%
55	CU	128	38% 61% 21% 5% 12%
56	CX	156	28% 45% 28% 22%
57	CY	145	23% 61% 25% 5% 8%
58	CW	157	50% 48% 19% 10% 21%

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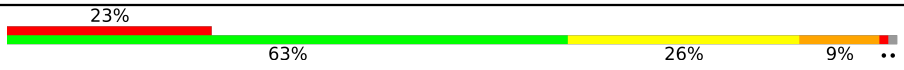
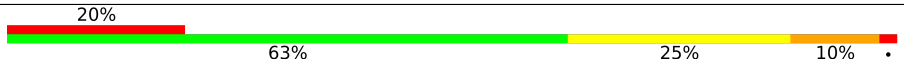
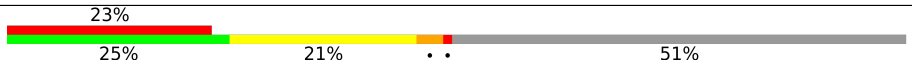
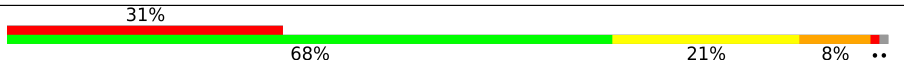
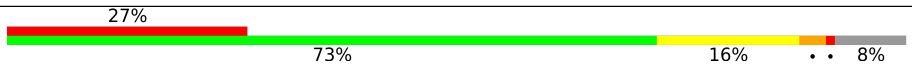
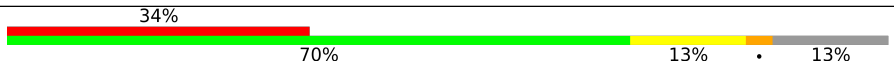
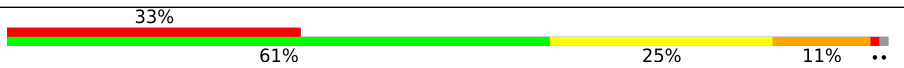
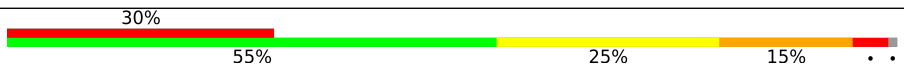
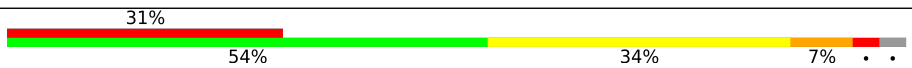
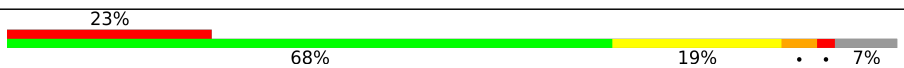
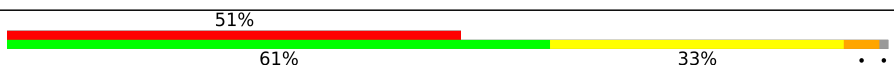
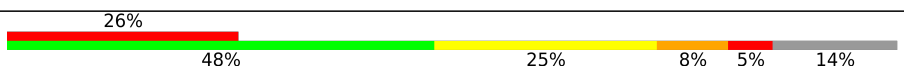
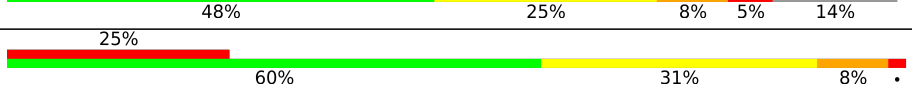
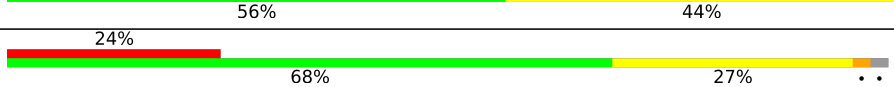
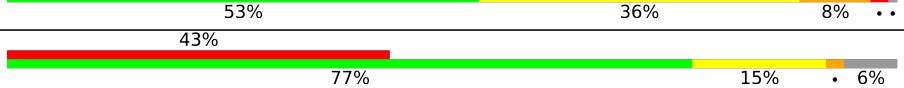
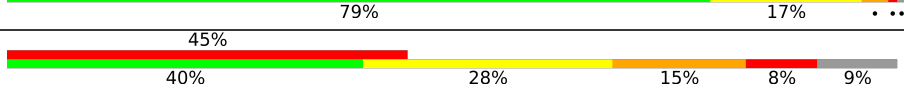
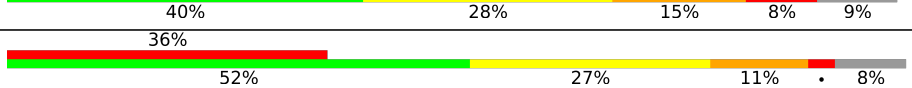
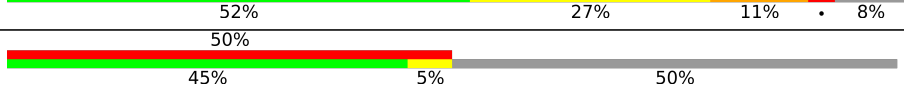
Mol	Chain	Length	Quality of chain
59	CZ	136	
60	Cr	137	
61	Ch	123	
62	Cb	159	
63	CB	403	
64	CF	248	
65	Cc	115	
66	Cd	125	
67	Ce	135	
68	Cf	110	
69	Cg	117	
70	Ci	105	
71	Cj	97	
72	Ck	70	
73	Cl	51	
74	CC	427	
75	Cm	52	
76	Cn	25	
77	Cp	92	
78	Co	106	
79	CJ	178	
80	CH	192	
81	CE	288	
82	CG	266	
83	Cs	114	

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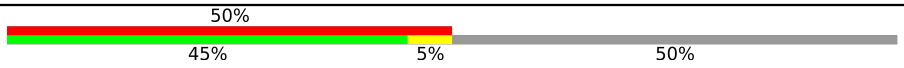
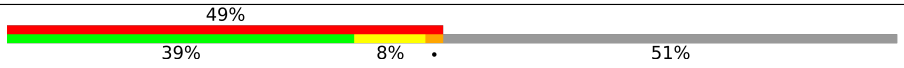
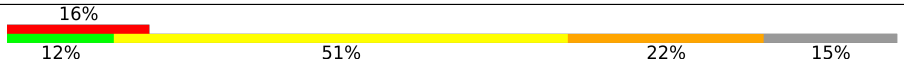
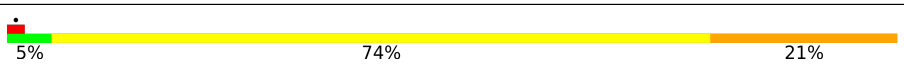
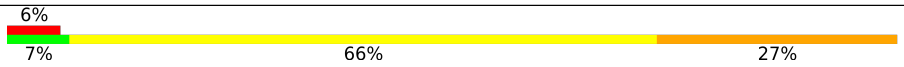
Mol	Chain	Length	Quality of chain
83	Ct	114	
84	Cu	115	
84	Cv	115	
85	A5	5070	
86	A7	121	
87	A8	157	

2 Entry composition (i)

There are 87 unique types of molecules in this entry. The entry contains 237685 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 protein called Elongation factor 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	Az	856	6673	4234	1148	1247	44	0	0

- Molecule 2 is a protein called Guanine nucleotide-binding protein subunit beta-2-like 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	Ag	313	2436	1535	424	465	12	0	0

- Molecule 3 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	AU	104	822	514	156	148	4	0	0

- Molecule 4 is a protein called 40S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	AK	98	827	539	148	134	6	0	0

- Molecule 5 is a protein called 40S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	AO	136	1016	621	199	190	6	0	0

- Molecule 6 is a protein called 40S ribosomal protein S23.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	AX	142	1106	698	220	184	4	0	0

- Molecule 7 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	AM	124	Total	C	N	O	S	0	0
			960	600	171	181	8		

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AM	52	GLN	LEU	conflict	UNP P25398
AM	69	LEU	CYS	conflict	UNP P25398
AM	99	ASN	LYS	conflict	UNP P25398

- Molecule 8 is a protein called 40S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AS	137	Total	C	N	O	S	0	0
			1139	714	231	193	1		

- Molecule 9 is a protein called 40S ribosomal protein S29.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	Ad	53	Total	C	N	O	S	0	0
			445	278	90	72	5		

- Molecule 10 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AN	150	Total	C	N	O	S	0	0
			1208	773	229	205	1		

- Molecule 11 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AL	158	Total	C	N	O	S	0	0
			1296	827	241	221	7		

- Molecule 12 is a protein called 40S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	AR	126	Total	C	N	O	S	0	0
			1019	639	188	187	5		

- Molecule 13 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	AP	127	Total	C	N	O	S	0	0
			1062	674	202	179	7		

- Molecule 14 is a protein called 40S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	AT	141	Total	C	N	O	S	0	0
			1101	690	212	196	3		

- Molecule 15 is a protein called 40S ribosomal protein S3a.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	AB	215	Total	C	N	O	S	0	0
			1747	1110	313	310	14		

- Molecule 16 is a protein called 40S ribosomal protein SA.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	AA	208	Total	C	N	O	S	0	0
			1642	1045	289	300	8		

- Molecule 17 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	AV	82	Total	C	N	O	S	0	0
			625	384	116	120	5		

- Molecule 18 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	AY	126	Total	C	N	O	S	0	0
			1023	646	200	172	5		

- Molecule 19 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	AZ	75	Total	C	N	O	S	0	0
			598	382	111	104	1		

- Molecule 20 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	Aa	107	Total	C	N	O	S	0	0
			847	528	176	138	5		

- Molecule 21 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	Ab	84	Total	C	N	O	S	0	0
			659	413	122	116	8		

- Molecule 22 is a protein called 40S ribosomal protein S28.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	Ac	64	Total	C	N	O	S	0	0
			506	308	102	94	2		

- Molecule 23 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	AD	227	Total	C	N	O	S	0	0
			1765	1125	317	315	8		

- Molecule 24 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Ae	59	Total	C	N	O	S	0	0
			468	290	102	75	1		

- Molecule 25 is a protein called 40S ribosomal protein S27a.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	Af	71	Total	C	N	O	S	0	0
			581	367	109	98	7		

- Molecule 26 is a protein called 40S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	AJ	182	Total	C	N	O	S	0	0
			1498	952	300	244	2		

- Molecule 27 is a protein called 40S ribosomal protein S4, X isoform.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	AE	263	Total	C	N	O	S	0	0
			2084	1329	387	359	9		

- Molecule 28 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	AC	226	Total	C	N	O	S	0	0
			1751	1130	301	310	10		

- Molecule 29 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	AG	237	Total	C	N	O	S	0	0
			1923	1200	387	329	7		

- Molecule 30 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	AF	191	Total	C	N	O	S	0	0
			1509	943	286	273	7		

- Molecule 31 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	AH	190	Total	C	N	O	S	0	0
			1530	975	281	273	1		

- Molecule 32 is a protein called 40S ribosomal protein S15a.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	AW	129	Total	C	N	O	S	0	0
			1034	659	193	176	6		

- Molecule 33 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	AI	206	Total	C	N	O	S	0	0
			1686	1058	332	291	5		

- Molecule 34 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	AQ	141	Total	C	N	O	S	0	0
			1124	715	212	194	3		

- Molecule 35 is a protein called Plasminogen activator inhibitor 1 RNA-binding protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	Ah	73	Total	C	N	O	S	0	0
			566	340	116	108	2		

- Molecule 36 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	B2	1861	Total	C	N	O	P	0	0
			38377	17073	6745	12699	1860		

- Molecule 37 is a RNA chain called E-tRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	BC	75	Total	C	N	O	P	0	0
			1604	717	298	515	74		

- Molecule 38 is a protein called 60S ribosomal protein L10a.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	Cz	217	Total	C	N	O	S	0	0
			1741	1113	312	307	9		

- Molecule 39 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	Cq	280	Total	C	N	O	S	0	0
			2138	1367	366	395	10		

- Molecule 40 is a protein called 60S ribosomal protein L12.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	CK	163	Total	C	N	O	S	0	0
			1238	773	230	230	5		

- Molecule 41 is a protein called 60S ribosomal protein L13a.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	CO	202	Total	C	N	O	S	0	0
			1655	1066	322	262	5		

- Molecule 42 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	CL	210	Total	C	N	O	S	0	0
			1701	1064	352	281	4		

- Molecule 43 is a protein called 60S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	CV	133	Total	C	N	O	S	0	0
			989	623	186	175	5		

- Molecule 44 is a protein called 60S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	CM	139	Total	C	N	O	S	0	0
			1139	730	218	183	8		

- Molecule 45 is a protein called 60S ribosomal protein L27a.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	Ca	147	Total	C	N	O	S	0	0
			1162	736	237	186	3		

- Molecule 46 is a protein called 60S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	CN	203	Total	C	N	O	S	0	0
			1701	1072	359	266	4		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
47	CI	213	Total	C	N	O	S	0	0
			1711	1082	329	285	15		

- Molecule 48 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	CD	289	Total	C	N	O	S	0	0
			2353	1483	429	427	14		

- Molecule 49 is a protein called 60S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	CQ	188	Total	C	N	O	S	0	0
			1521	949	315	251	6		

- Molecule 50 is a protein called 60S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	CR	189	Total	C	N	O	S	0	0
			1580	979	338	253	10		

- Molecule 51 is a protein called 60S ribosomal protein L8.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	CA	255	Total	C	N	O	S	0	0
			1957	1225	399	327	6		

- Molecule 52 is a protein called 60S ribosomal protein L18a.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	CS	175	Total	C	N	O	S	0	0
			1453	925	283	235	10		

- Molecule 53 is a protein called 60S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	CT	159	Total	C	N	O	S	0	0
			1298	823	252	217	6		

- Molecule 54 is a protein called 60S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	CP	152	Total	C	N	O	S	0	0
			1233	771	240	213	9		

- Molecule 55 is a protein called 60S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	CU	112	Total	C	N	O	S	0	0
			921	583	159	177	2		

- Molecule 56 is a protein called 60S ribosomal protein L23a.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	CX	121	Total	C	N	O	S	0	0
			994	636	187	170	1		

- Molecule 57 is a protein called 60S ribosomal protein L26.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	CY	133	Total	C	N	O	S	0	0
			1107	695	225	185	2		

- Molecule 58 is a protein called 60S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	CW	124	Total	C	N	O	S	0	0
			1015	634	207	170	4		

- Molecule 59 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	CZ	135	Total	C	N	O	S	0	0
			1107	714	208	182	3		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
60	Cr	137	Total	C	N	O	S	0	0
			1104	682	231	185	6		

- Molecule 61 is a protein called 60S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	Ch	123	Total	C	N	O	S	0	0
			1023	646	206	169	2		

- Molecule 62 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
62	Cb	78	Total	C	N	O	S	0	0
			635	395	135	102	3		

- Molecule 63 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
63	CB	397	Total	C	N	O	S	0	0
			3202	2039	602	547	14		

- Molecule 64 is a protein called 60S ribosomal protein L7.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	CF	229	Total	C	N	O	S	0	0
			1910	1226	370	305	9		

- Molecule 65 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	Cc	100	Total	C	N	O	S	0	0
			776	492	136	141	7		

- Molecule 66 is a protein called 60S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	Cd	113	Total	C	N	O	S	0	0
			931	586	181	162	2		

- Molecule 67 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	Ce	133	Total	C	N	O	S	0	0
			1096	691	224	175	6		

- Molecule 68 is a protein called 60S ribosomal protein L35a.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	Cf	109	Total	C	N	O	S	0	0
			876	555	174	144	3		

- Molecule 69 is a protein called 60S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	Cg	114	Total	C	N	O	S	0	0
			906	566	187	147	6		

- Molecule 70 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	Ci	103	Total	C	N	O	S	0	0
			840	526	178	130	6		

- Molecule 71 is a protein called 60S ribosomal protein L37.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	Cj	90	Total	C	N	O	S	0	0
			733	451	162	115	5		

- Molecule 72 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	Ck	69	Total	C	N	O	S	0	0
			569	366	103	99	1		

- Molecule 73 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	Cl	50	Total	C	N	O	S	0	0
			444	281	98	64	1		

- Molecule 74 is a protein called 60S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	CC	368	Total	C	N	O	S	0	0
			2925	1840	583	489	13		

- Molecule 75 is a protein called 60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	Cm	52	Total	C	N	O	S	0	0
			429	266	90	67	6		

- Molecule 76 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	Cn	25	Total	C	N	O	S	0	0
			240	145	64	28	3		

- Molecule 77 is a protein called 60S ribosomal protein L37a.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	Cp	90	Total	C	N	O	S	0	0
			703	442	135	119	7		

- Molecule 78 is a protein called 60S ribosomal protein L36a.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	Co	105	Total	C	N	O	S	0	0
			863	542	175	140	6		

- Molecule 79 is a protein called 60S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	CJ	168	Total	C	N	O	S	0	0
			1349	853	251	239	6		

- Molecule 80 is a protein called 60S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	CH	191	Total	C	N	O	S	0	0
			1526	960	285	275	6		

- Molecule 81 is a protein called 60S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	CE	262	Total	C	N	O	S	0	0
			2113	1357	403	349	4		

- Molecule 82 is a protein called 60S ribosomal protein L7a.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	CG	246	Total	C	N	O	S	0	0
			1973	1256	379	334	4		

- Molecule 83 is a protein called 60S acidic ribosomal protein P1.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	Cs	57	Total	C	N	O	S	0	0
			426	277	68	79	2		
83	Ct	57	Total	C	N	O	S	0	0
			426	277	68	79	2		

- Molecule 84 is a protein called 60S acidic ribosomal protein P2.

Mol	Chain	Residues	Atoms					AltConf	Trace
84	Cu	56	Total	C	N	O	S	0	0
			419	261	71	86	1		
84	Cv	56	Total	C	N	O	S	0	0
			419	261	71	86	1		

- Molecule 85 is a RNA chain called 28S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
85	A5	4298	Total	C	N	O	P	0	0
			84946	37522	14767	28360	4297		

- Molecule 86 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
86	A7	121	Total	C	N	O	P	0	0
			2578	1150	458	850	120		

- Molecule 87 is a RNA chain called 5.8S ribosomal RNA.

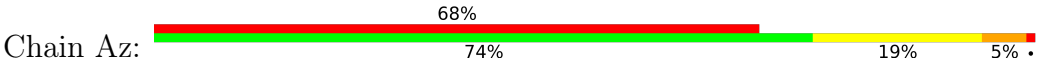
Mol	Chain	Residues	Atoms					AltConf	Trace
87	A8	157	Total	C	N	O	P	0	0
			3334	1489	587	1102	156		

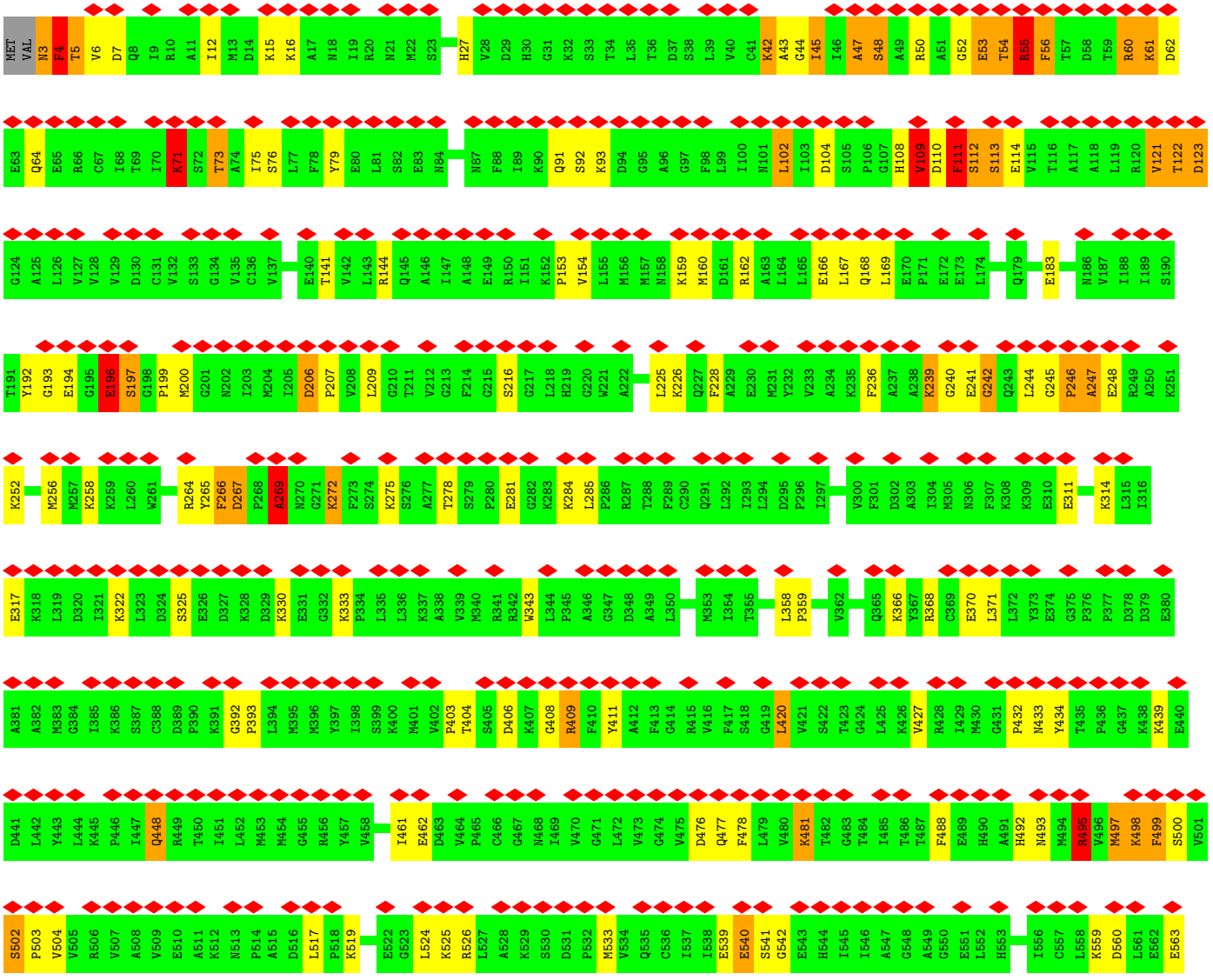
3 Residue-property plots (i)

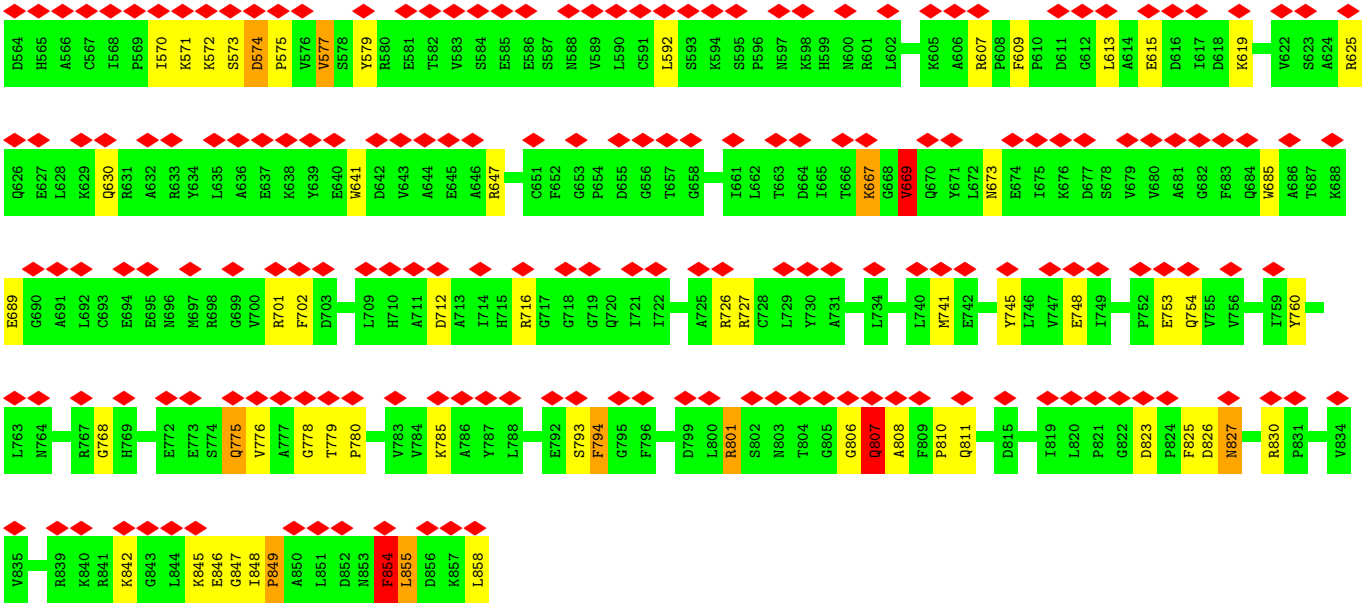
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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: Elongation factor 2

Chain Az:

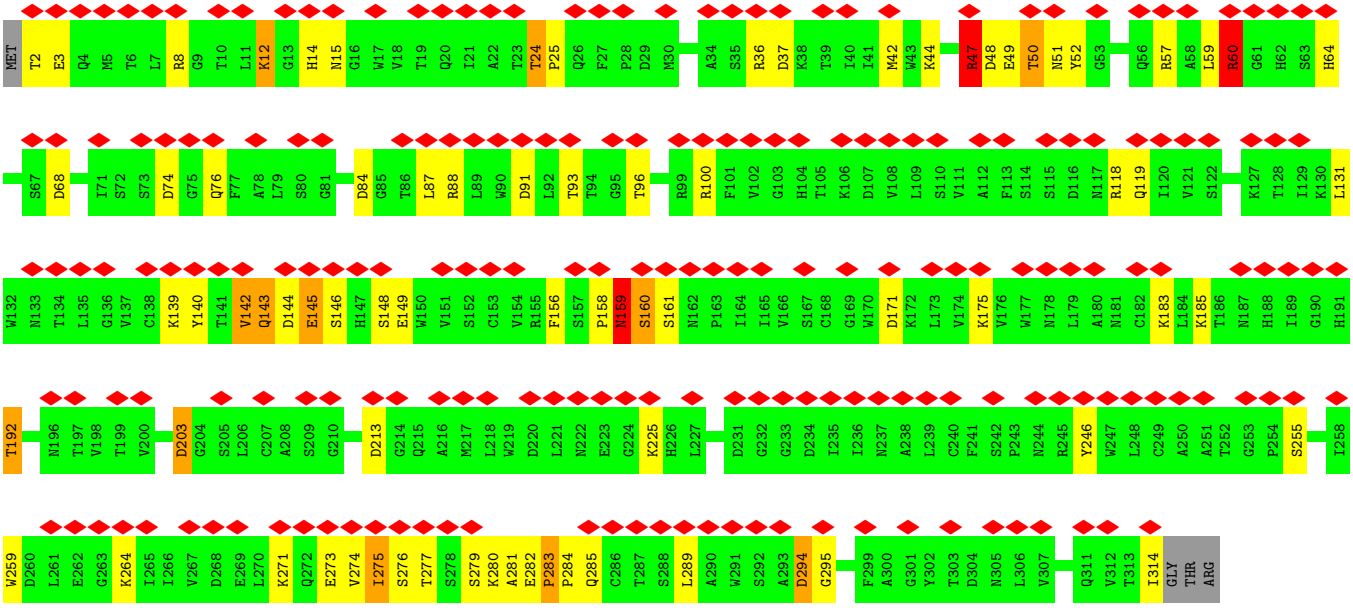






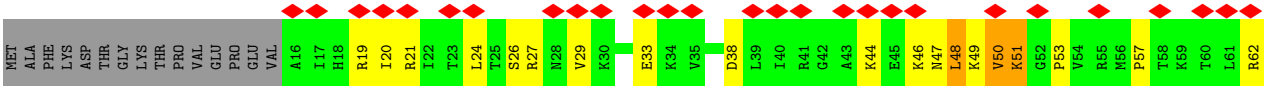
• Molecule 2: Guanine nucleotide-binding protein subunit beta-2-like 1

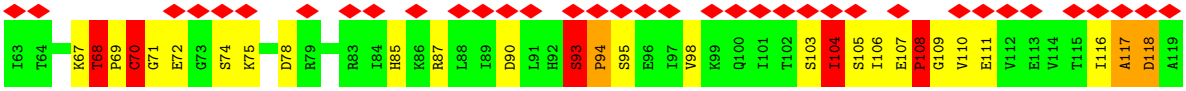
Chain Ag:



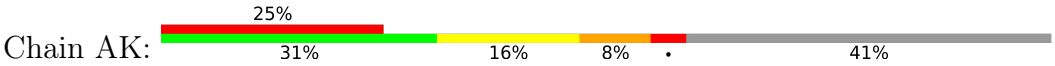
• Molecule 3: 40S ribosomal protein S20

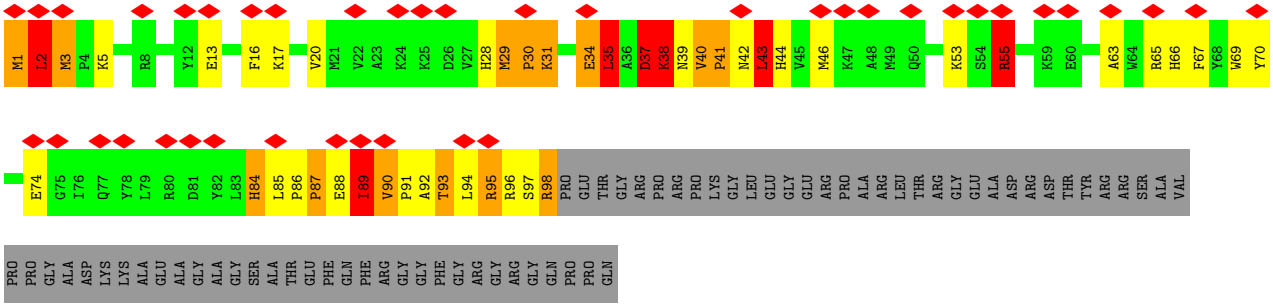
Chain AU:



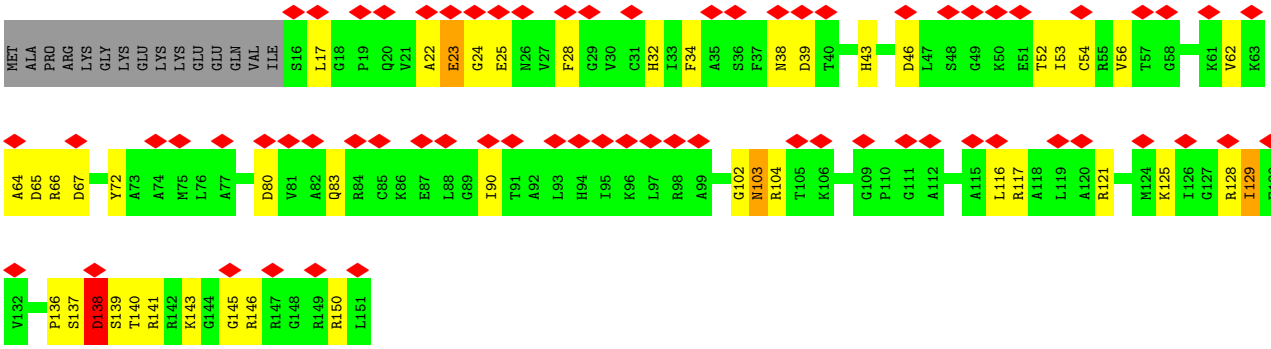


• Molecule 4: 40S ribosomal protein S10

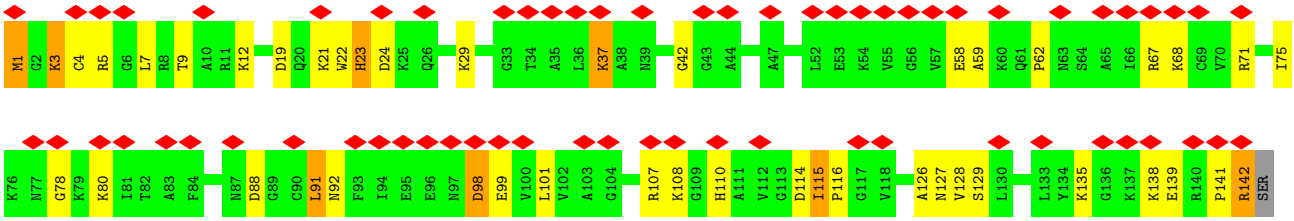




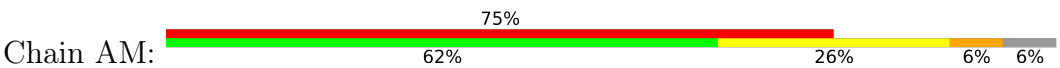
• Molecule 5: 40S ribosomal protein S14

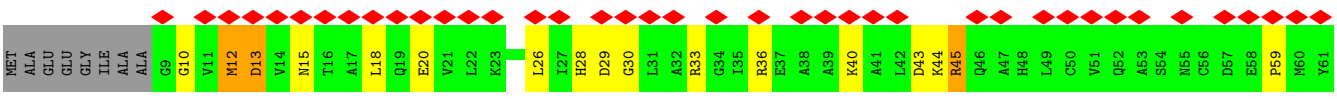


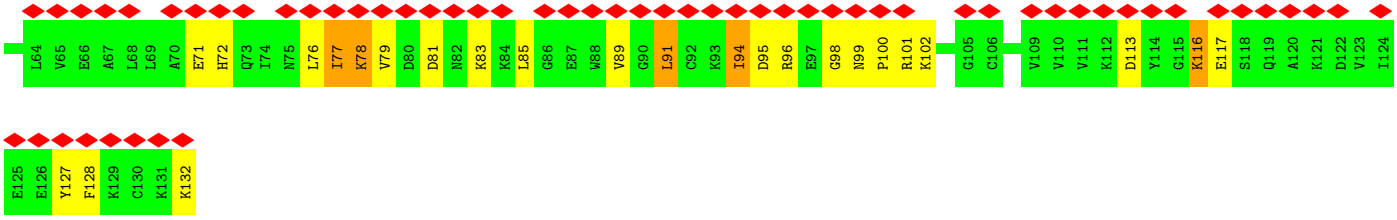
• Molecule 6: 40S ribosomal protein S23



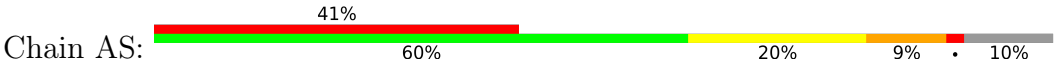
• Molecule 7: 40S ribosomal protein S12

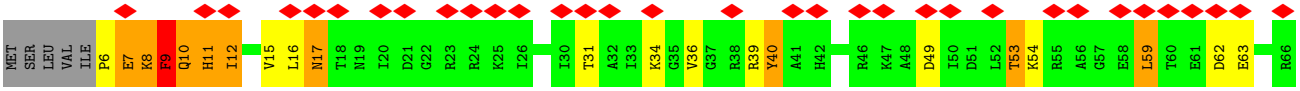




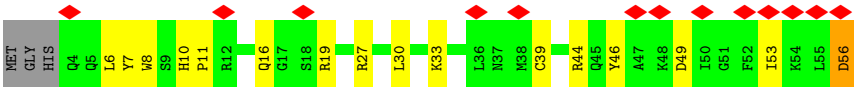


• Molecule 8: 40S ribosomal protein S18

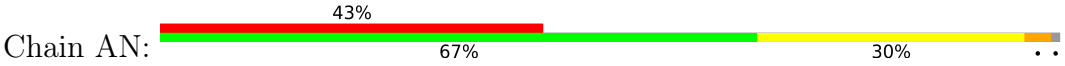


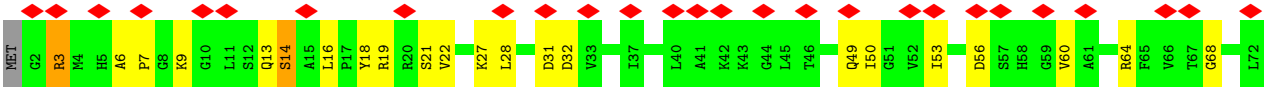


• Molecule 9: 40S ribosomal protein S29

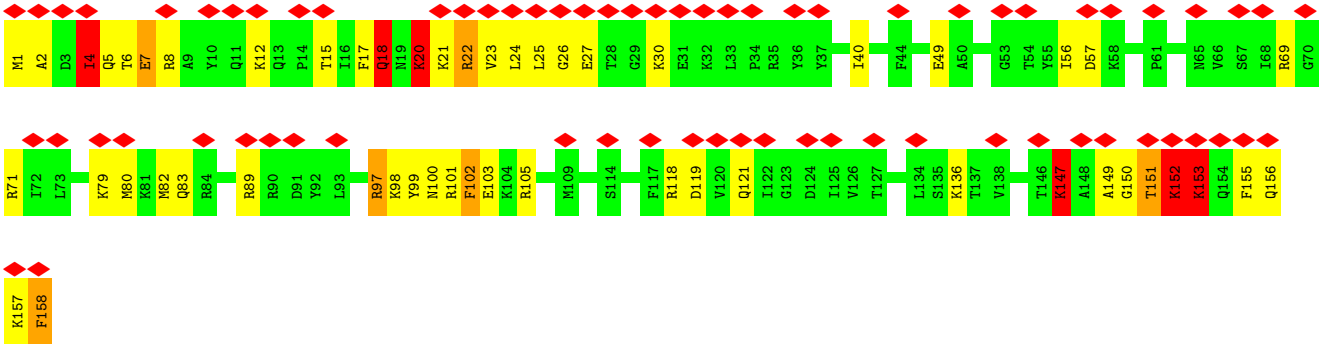


• Molecule 10: 40S ribosomal protein S13



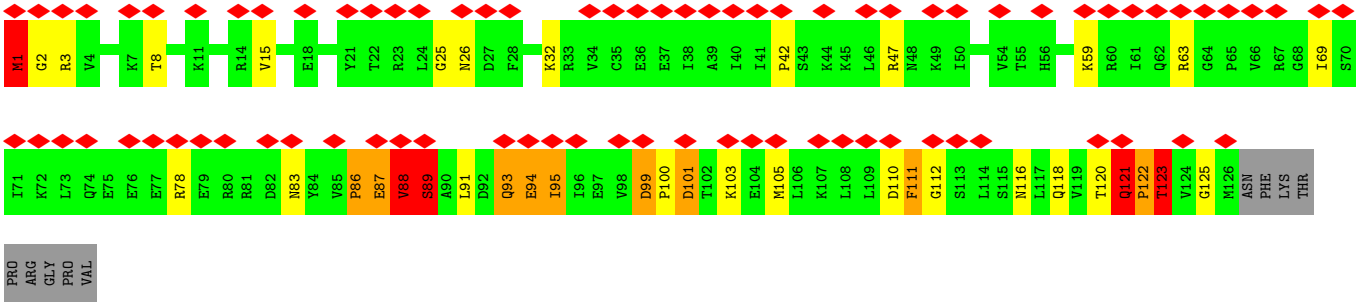


• Molecule 11: 40S ribosomal protein S11



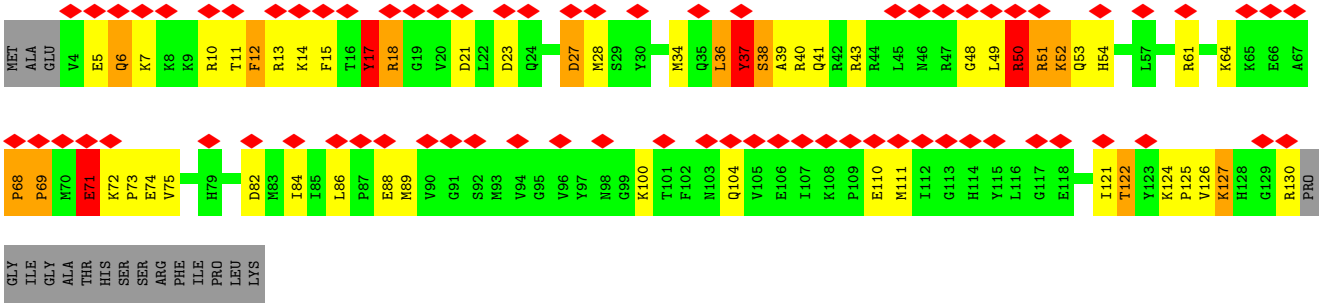
• Molecule 12: 40S ribosomal protein S17

Chain AR:



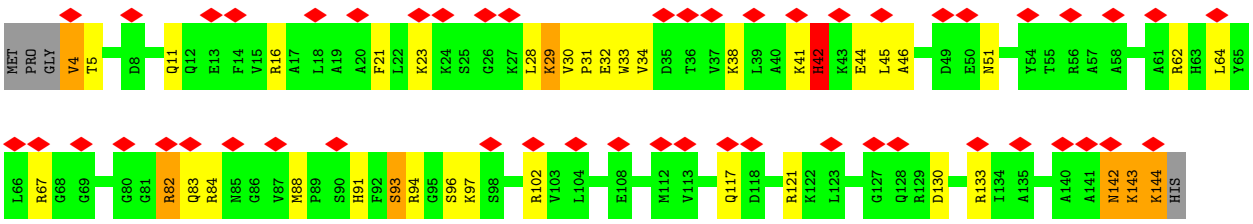
• Molecule 13: 40S ribosomal protein S15

Chain AP:

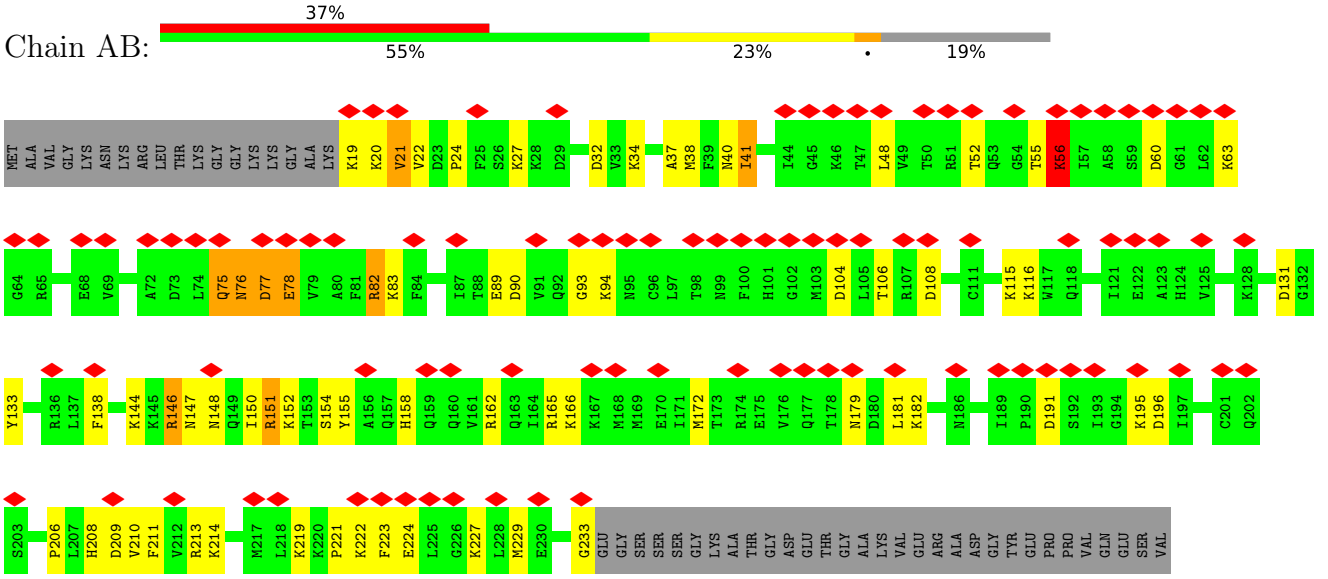


• Molecule 14: 40S ribosomal protein S19

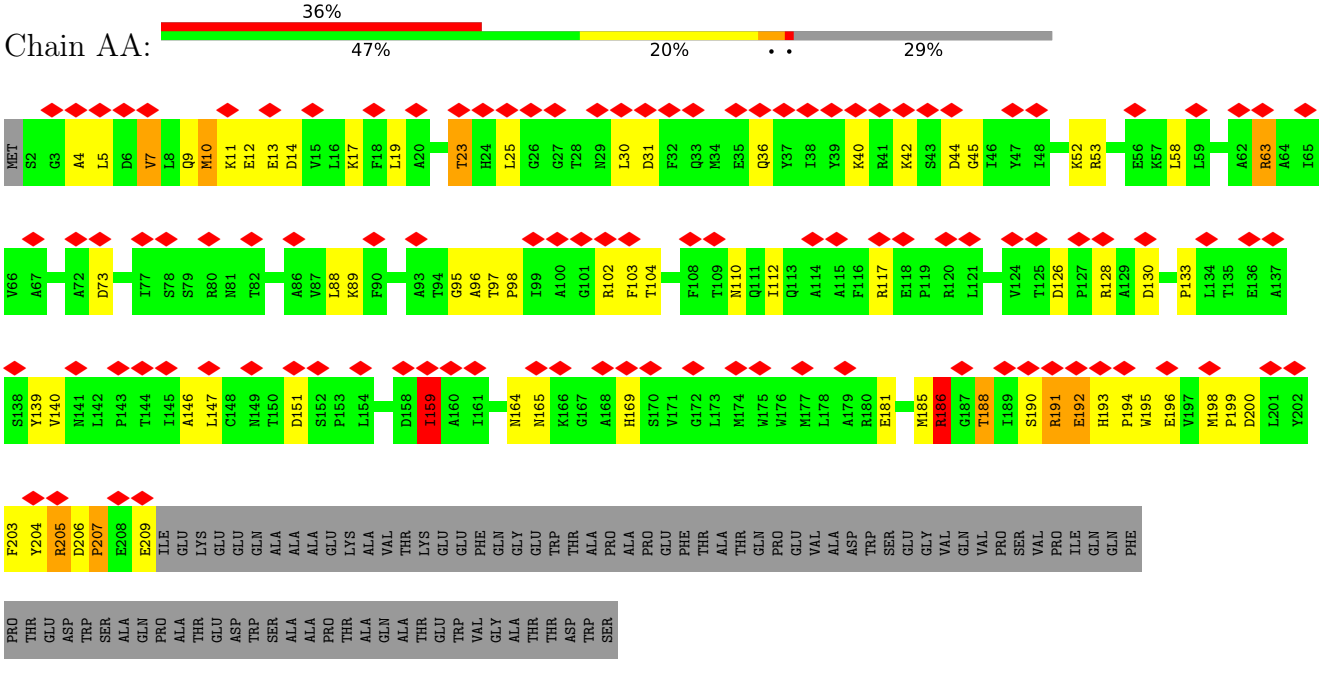
Chain AT:



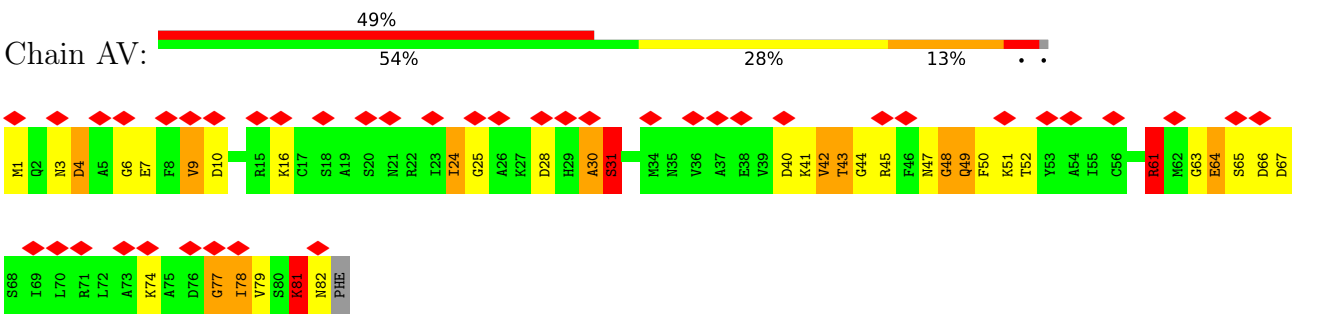
• Molecule 15: 40S ribosomal protein S3a



• Molecule 16: 40S ribosomal protein SA

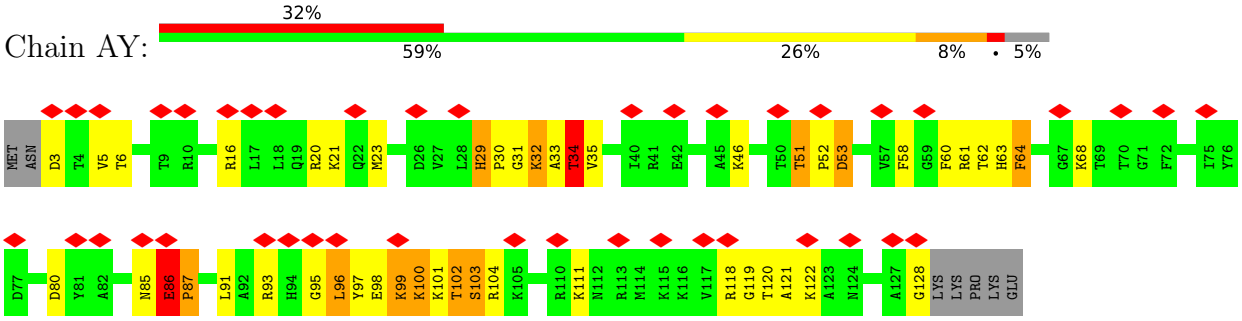


• Molecule 17: 40S ribosomal protein S21



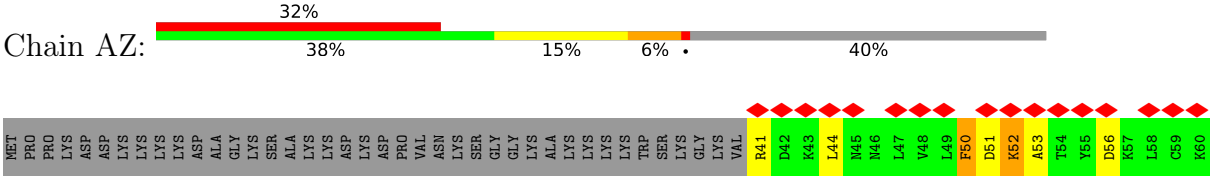
• Molecule 18: 40S ribosomal protein S24

Chain AY:



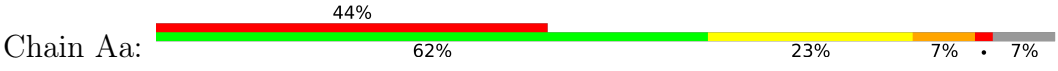
• Molecule 19: 40S ribosomal protein S25

Chain AZ:



• Molecule 20: 40S ribosomal protein S26

Chain Aa:

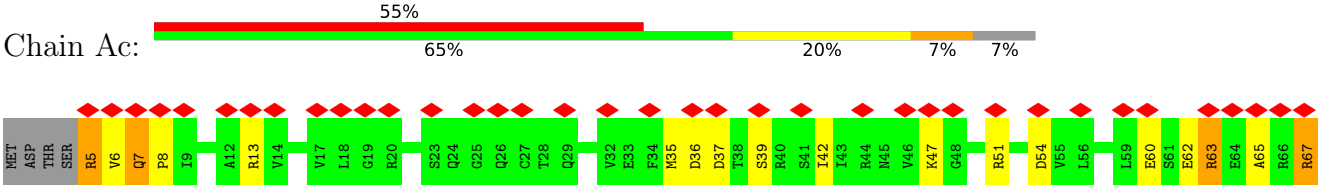


• Molecule 21: 40S ribosomal protein S27

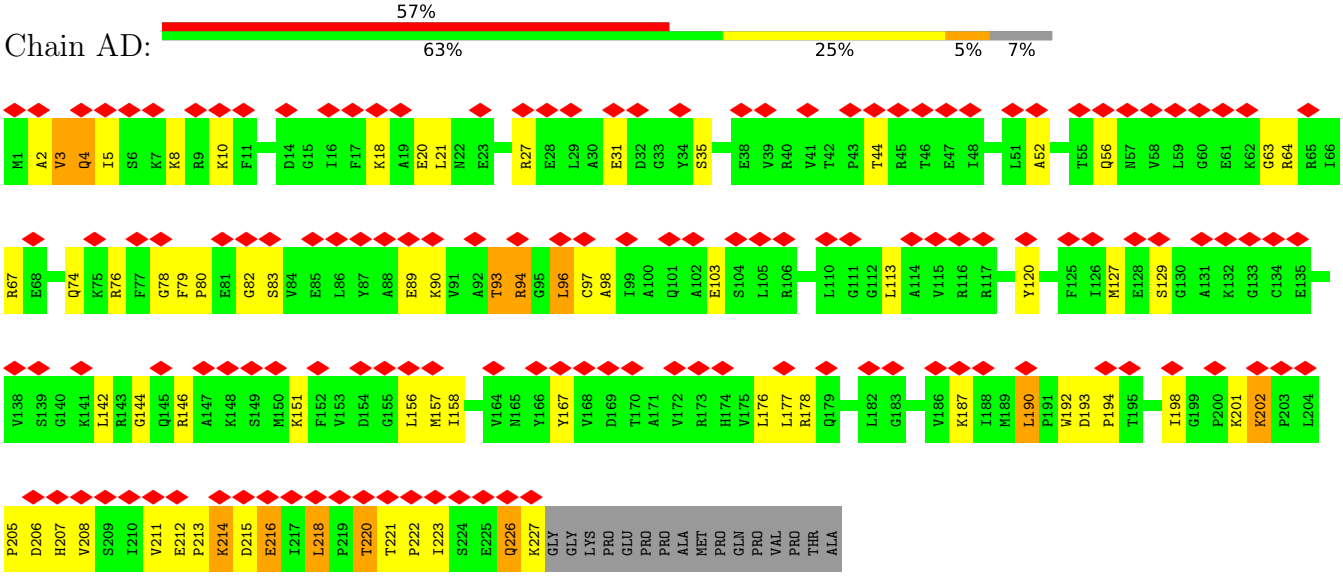
Chain Ab:

• Molecule 22: 40S ribosomal protein S28

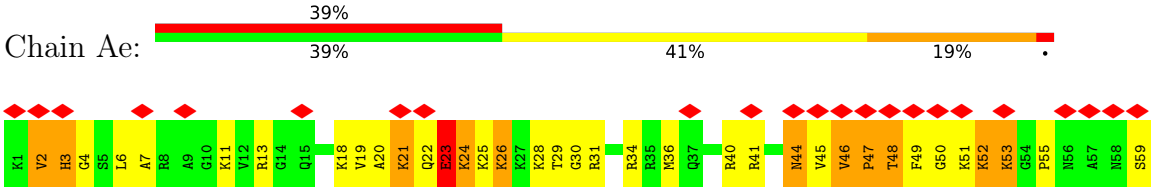
Chain Ac:



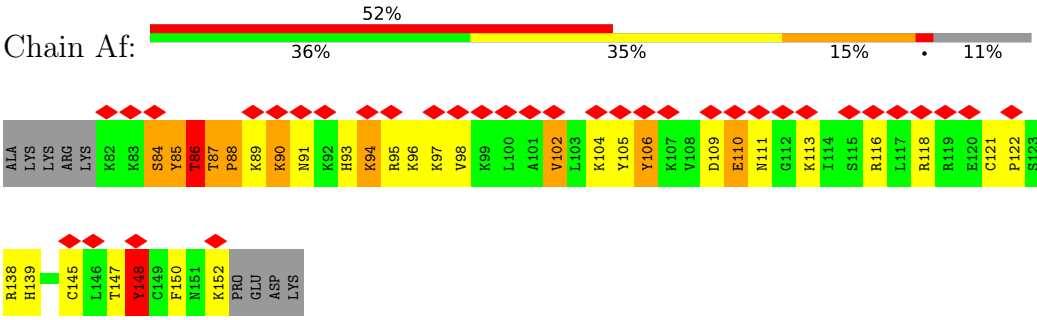
• Molecule 23: 40S ribosomal protein S3



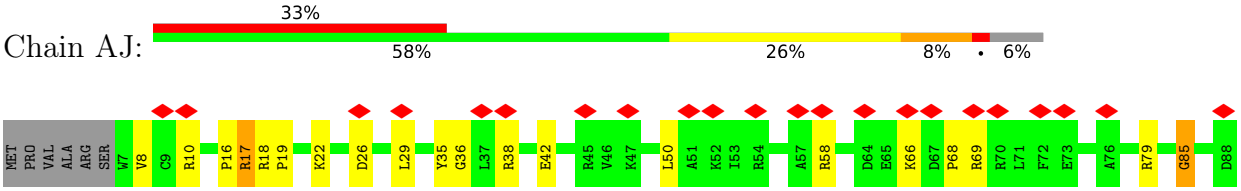
• Molecule 24: 40S ribosomal protein S30

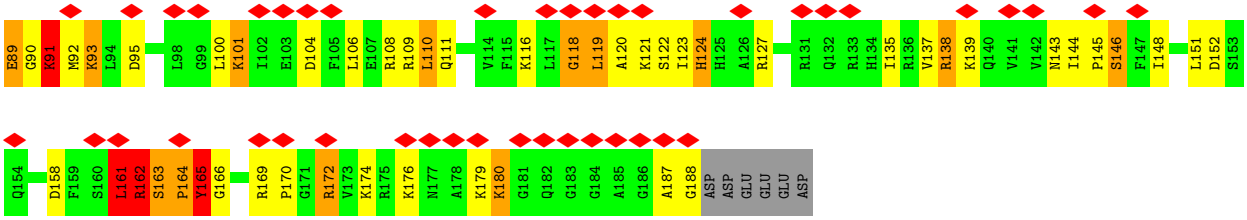


• Molecule 25: 40S ribosomal protein S27a

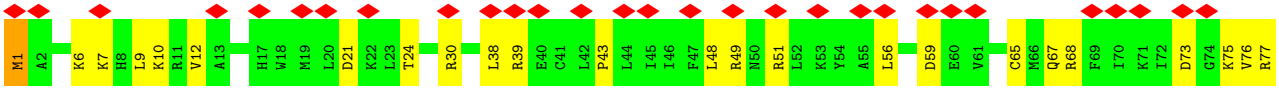


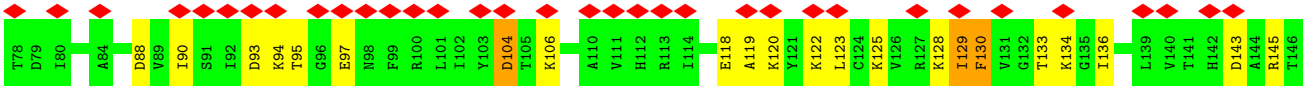
• Molecule 26: 40S ribosomal protein S9

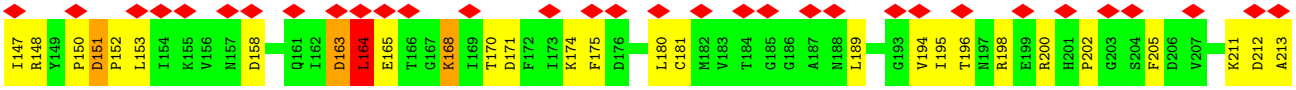


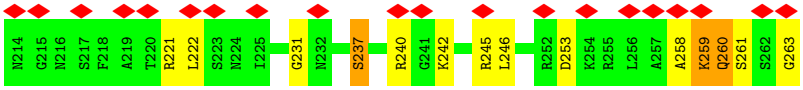


• Molecule 27: 40S ribosomal protein S4, X isoform

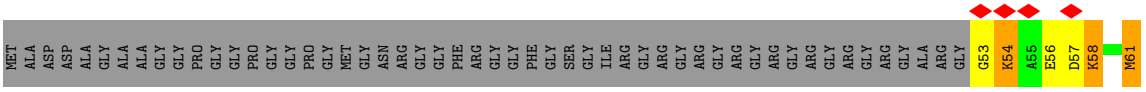


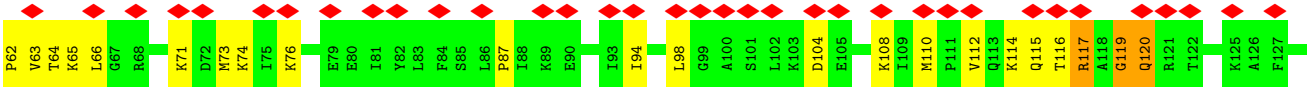


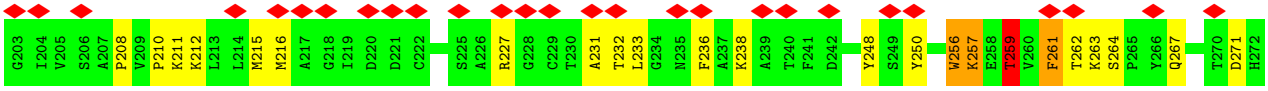


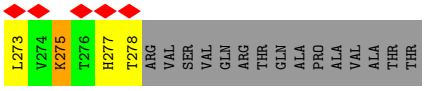


• Molecule 28: 40S ribosomal protein S2



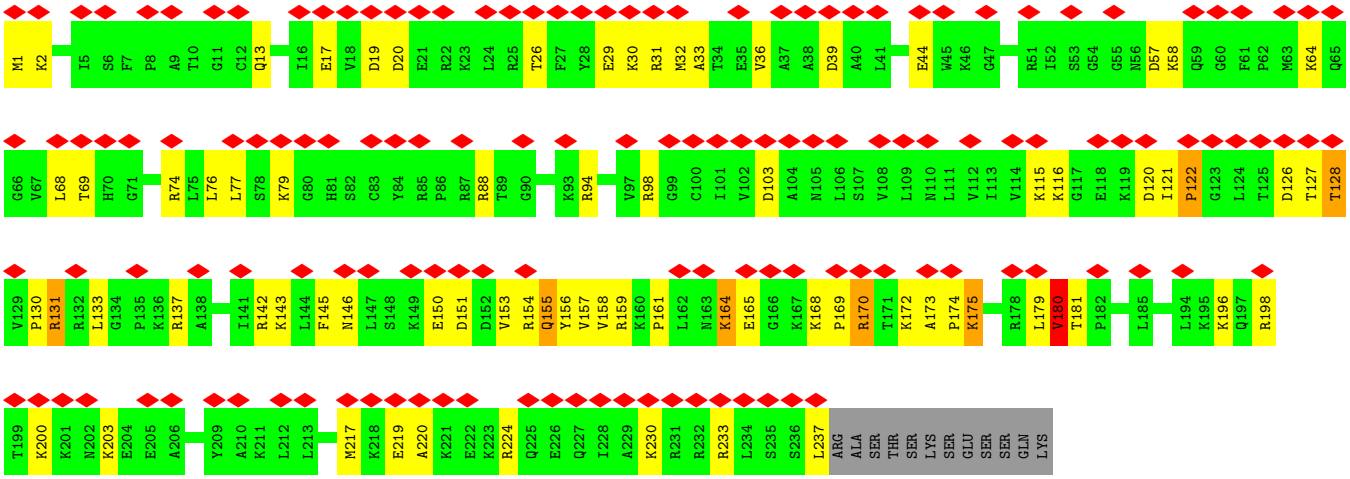






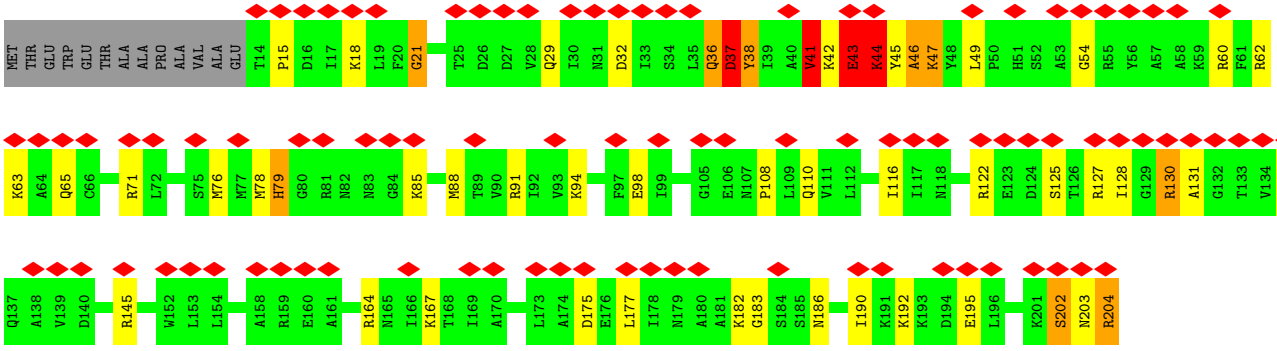
• Molecule 29: 40S ribosomal protein S6

Chain AG:



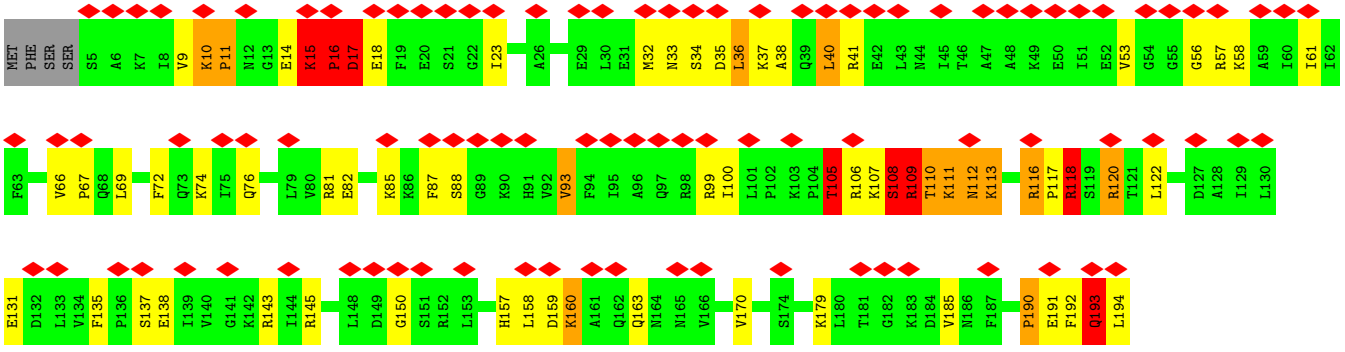
• Molecule 30: 40S ribosomal protein S5

Chain AF:



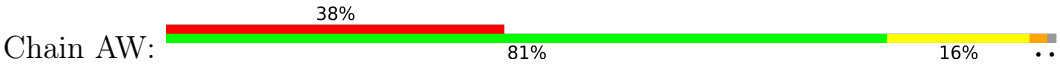
• Molecule 31: 40S ribosomal protein S7

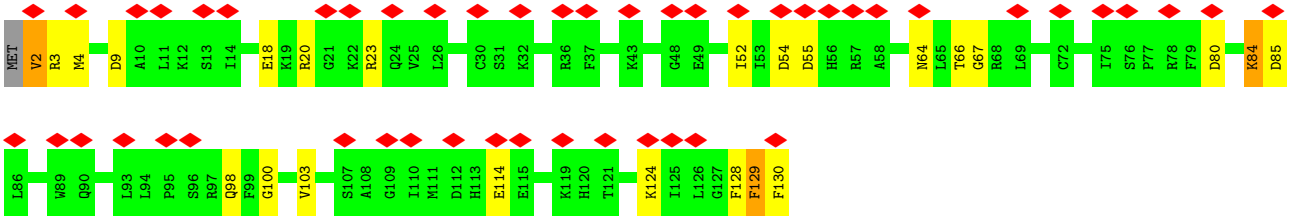
Chain AH:



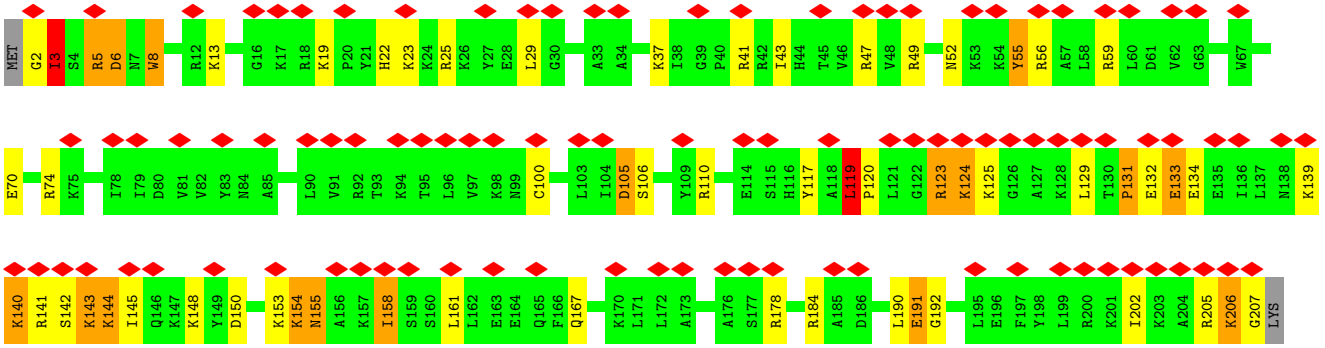
• Molecule 32: 40S ribosomal protein S15a

Chain AW:

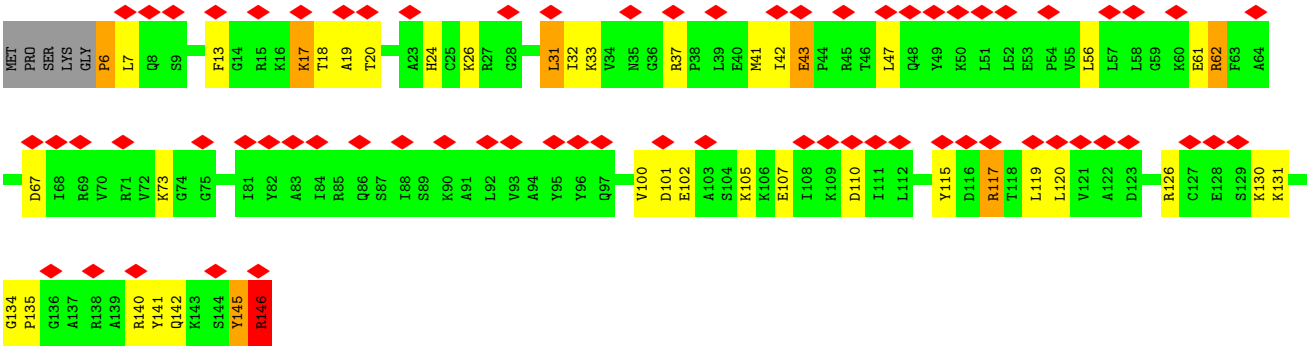




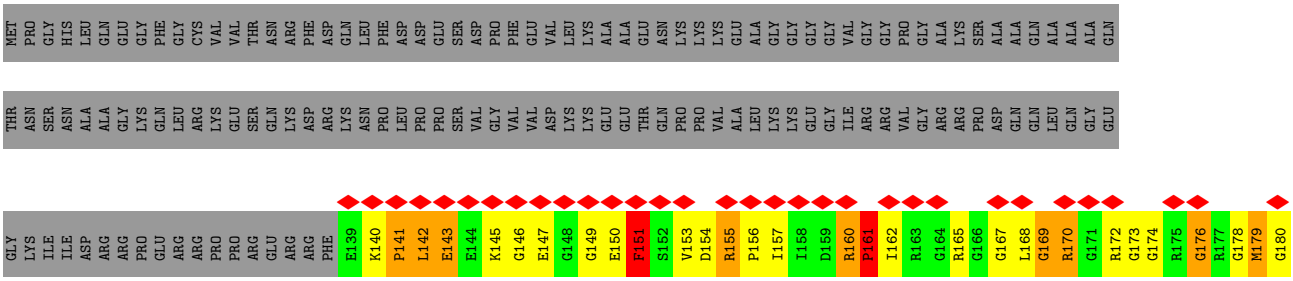
• Molecule 33: 40S ribosomal protein S8

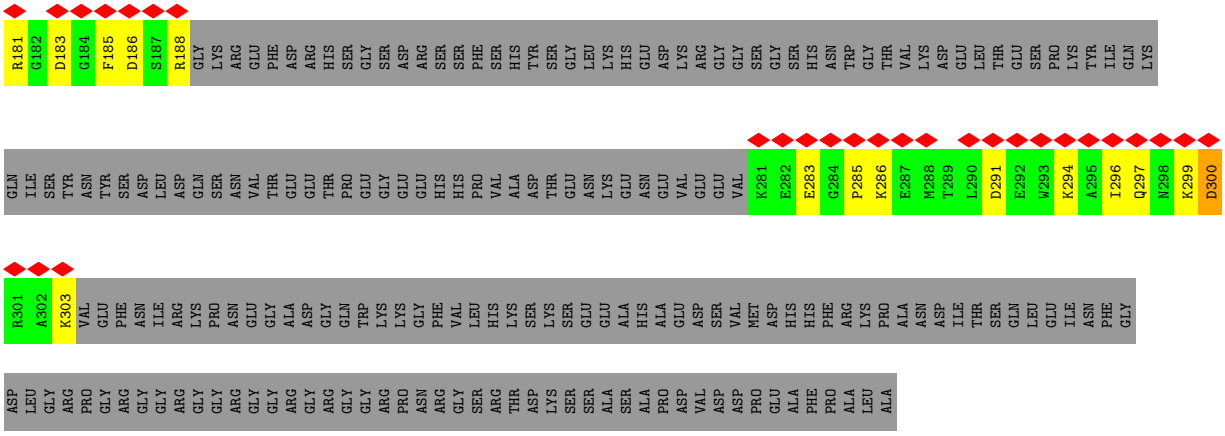


• Molecule 34: 40S ribosomal protein S16



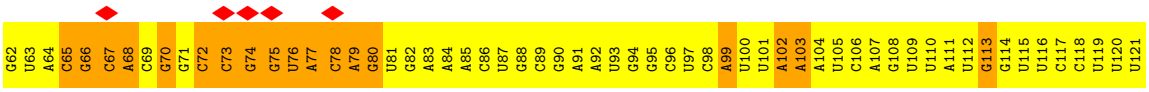
• Molecule 35: Plasminogen activator inhibitor 1 RNA-binding protein

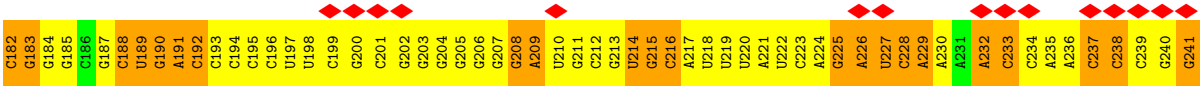


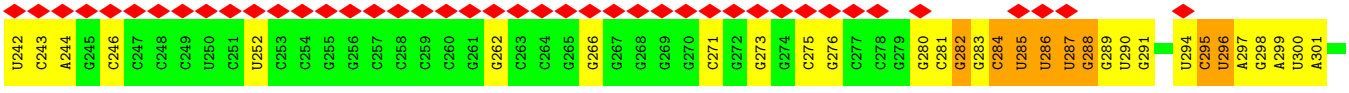


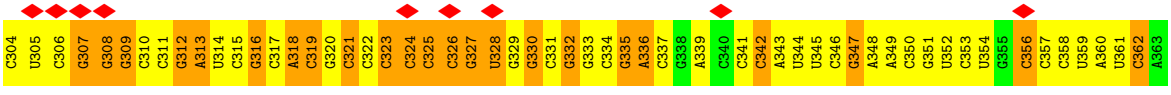
- Molecule 36: 18S ribosomal RNA

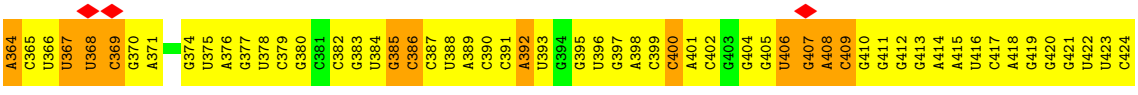
Chain B2:

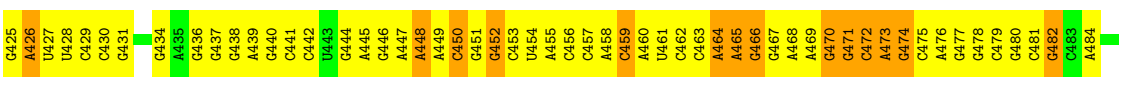


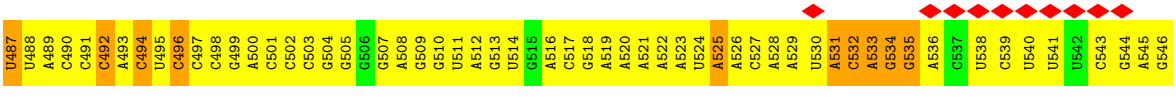


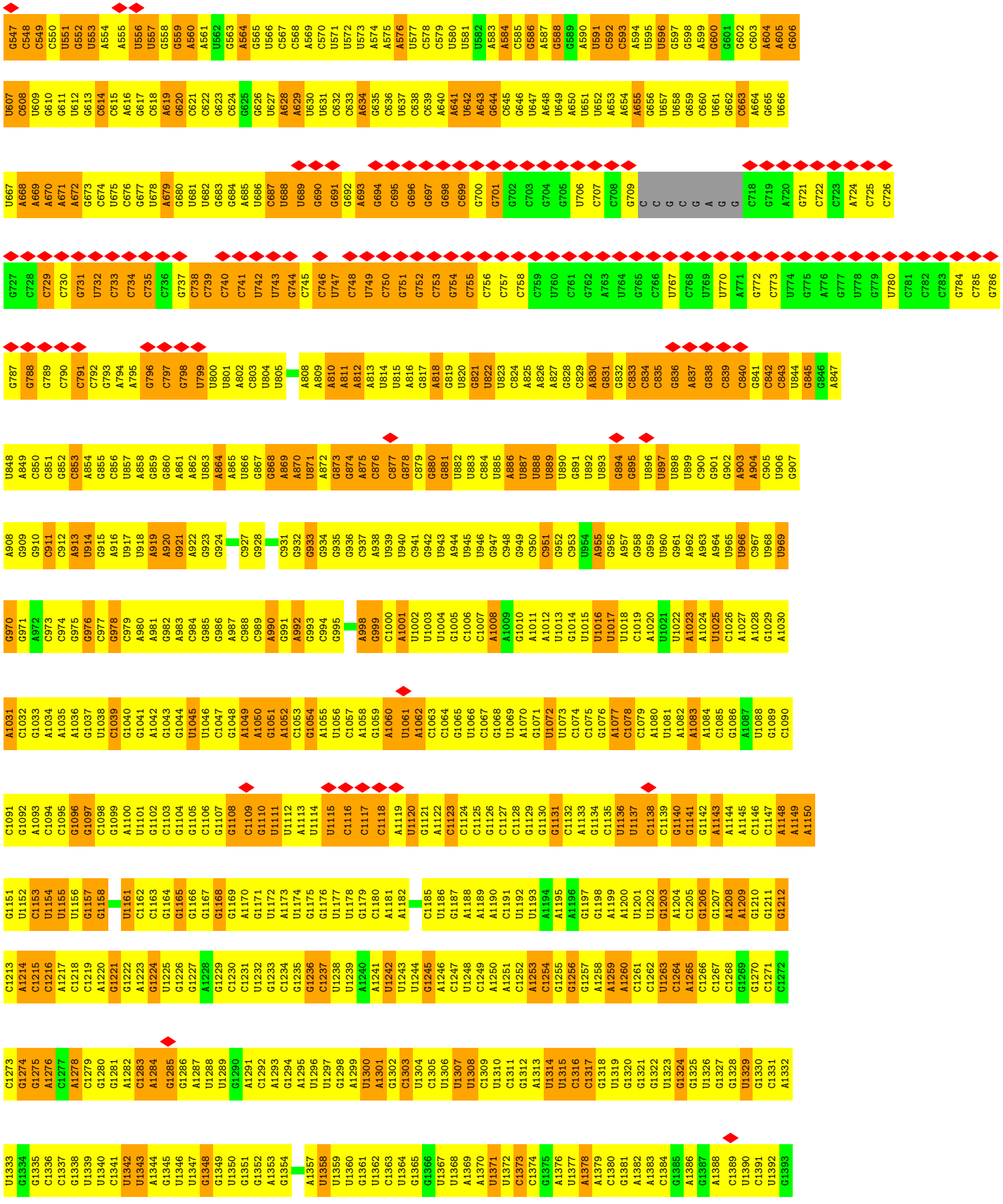


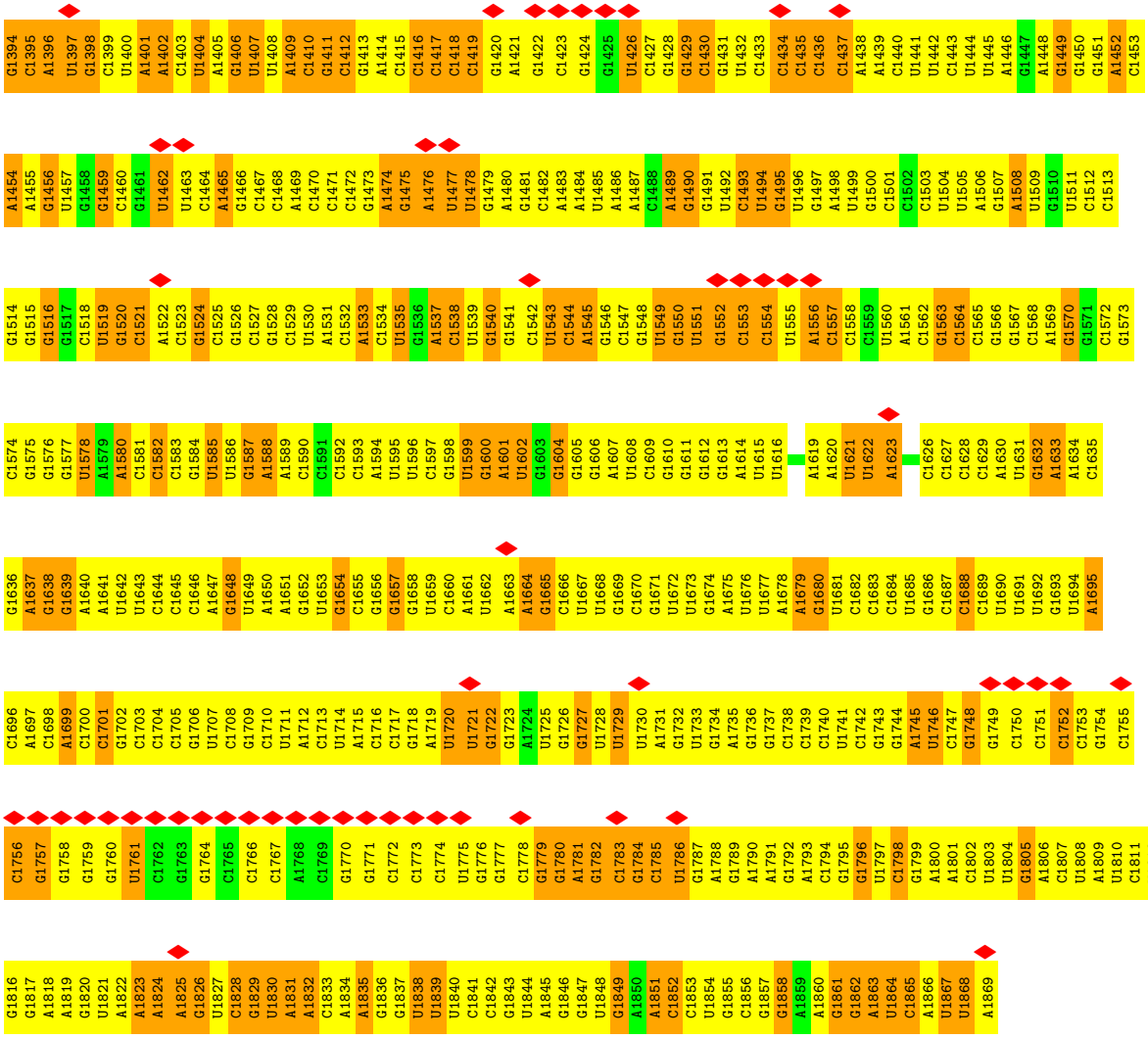






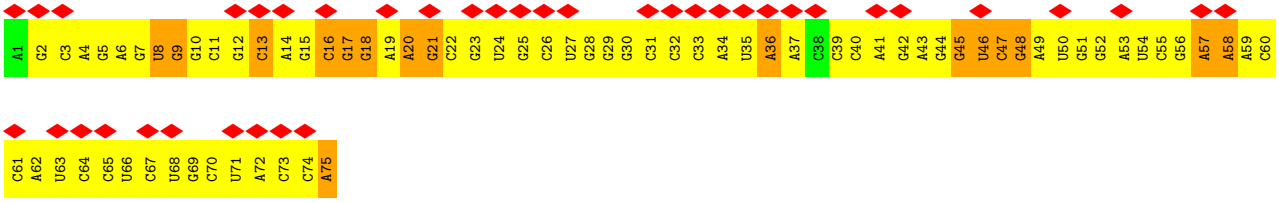






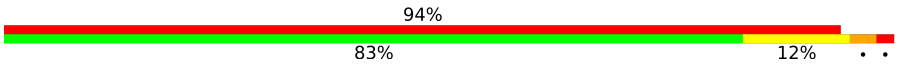
• Molecule 37: E-tRNA

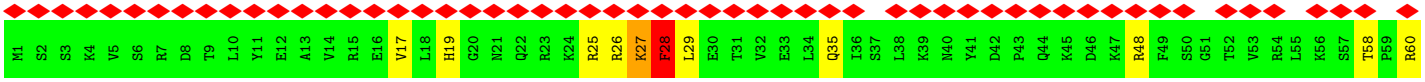
Chain BC:



• Molecule 38: 60S ribosomal protein L10a

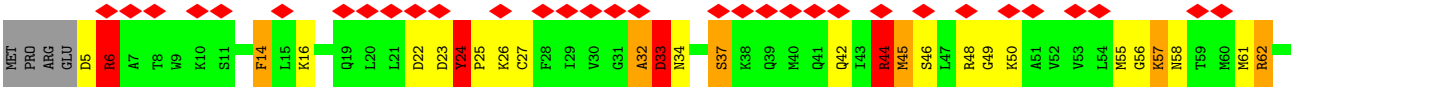
Chain Cz:





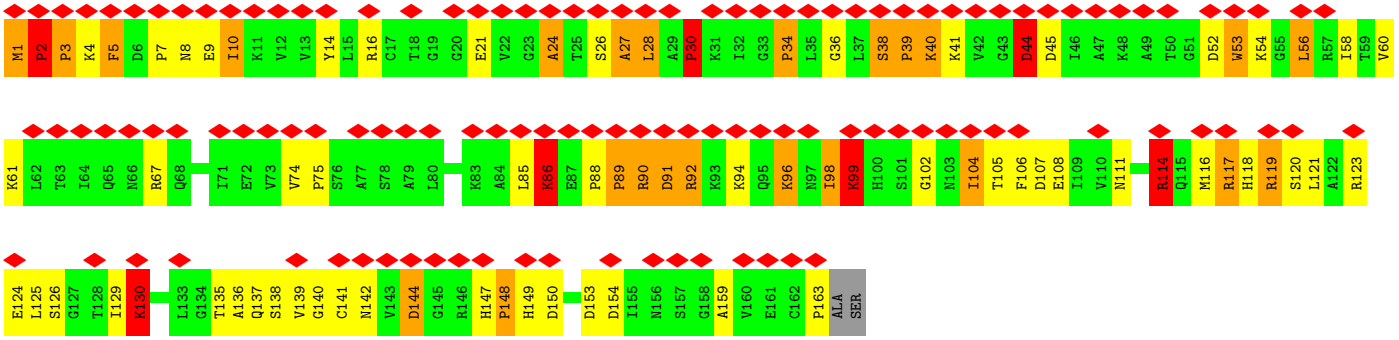
• Molecule 39: 60S acidic ribosomal protein P0

Chain Cq:



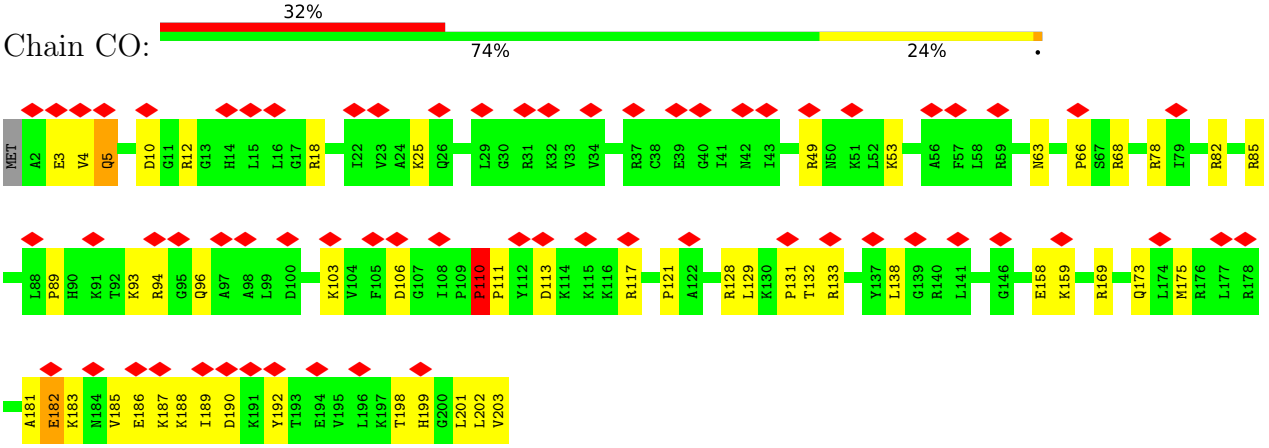
• Molecule 40: 60S ribosomal protein L12

Chain CK:



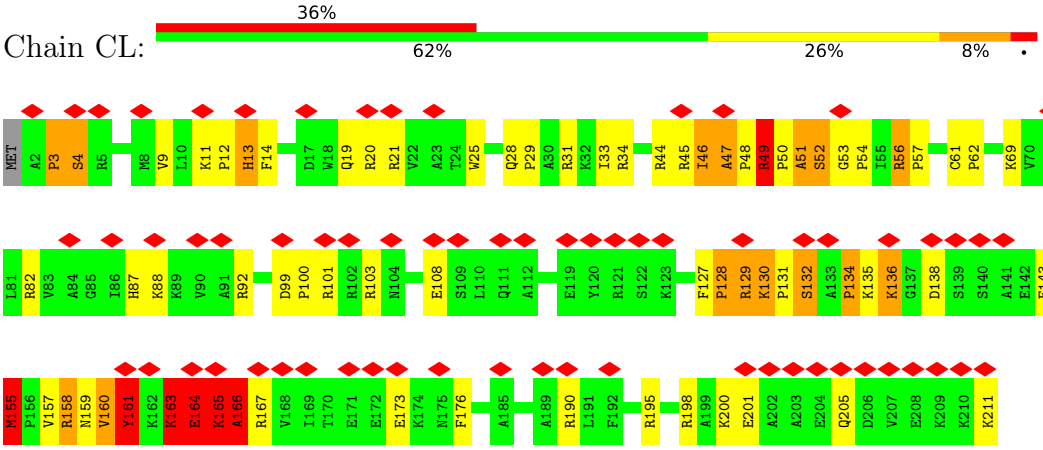
• Molecule 41: 60S ribosomal protein L13a

Chain CO:



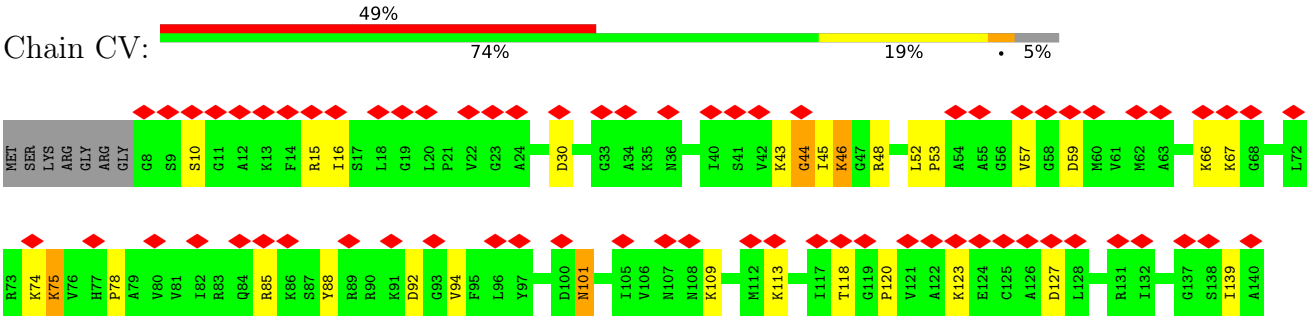
• Molecule 42: 60S ribosomal protein L13

Chain CL:



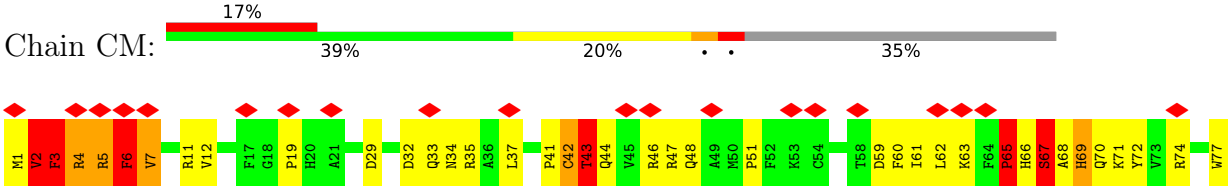
• Molecule 43: 60S ribosomal protein L23

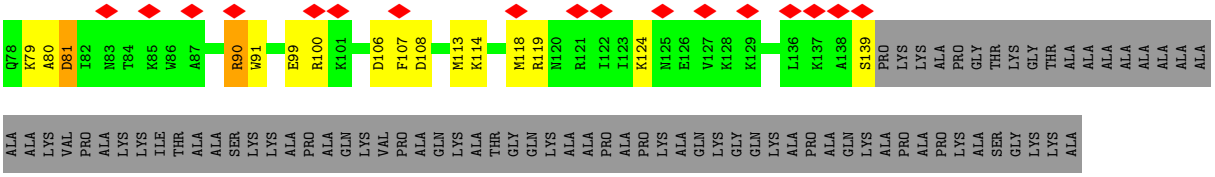
Chain CV:



• Molecule 44: 60S ribosomal protein L14

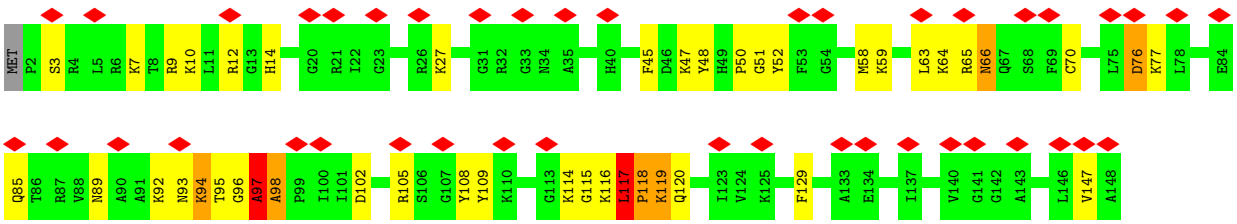
Chain CM:





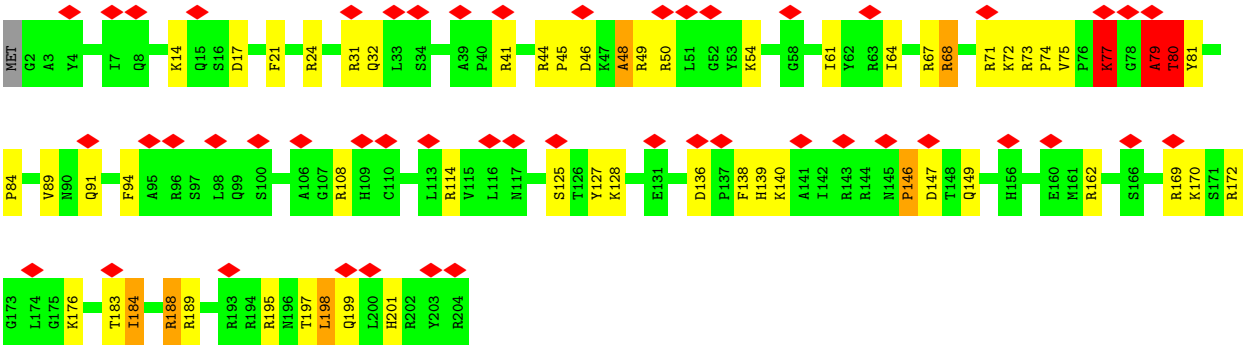
• Molecule 45: 60S ribosomal protein L27a

Chain Ca:



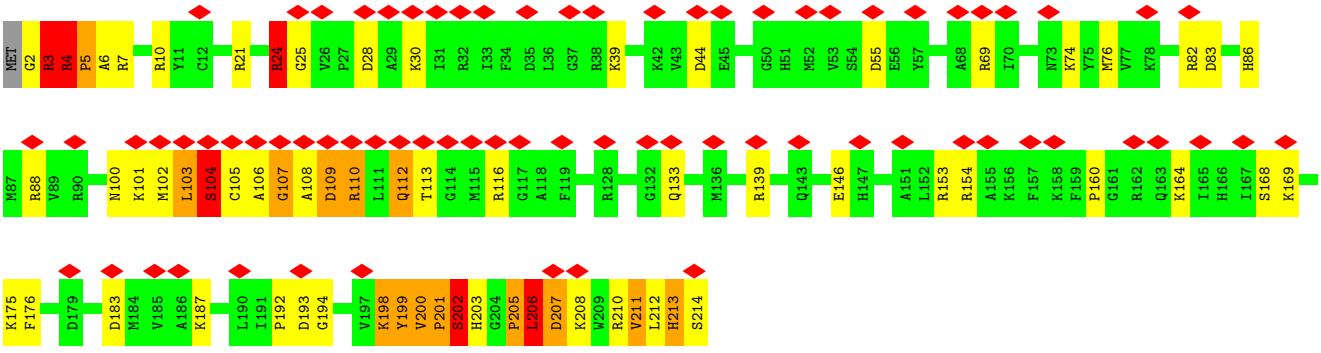
• Molecule 46: 60S ribosomal protein L15

Chain CN:



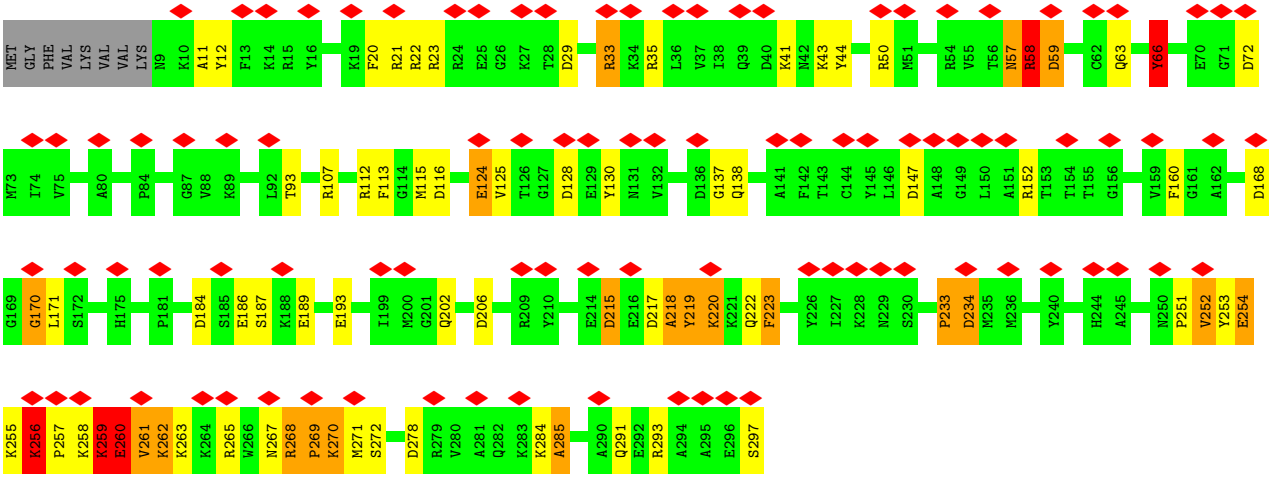
• Molecule 47: 60S ribosomal protein L10-like

Chain CI:



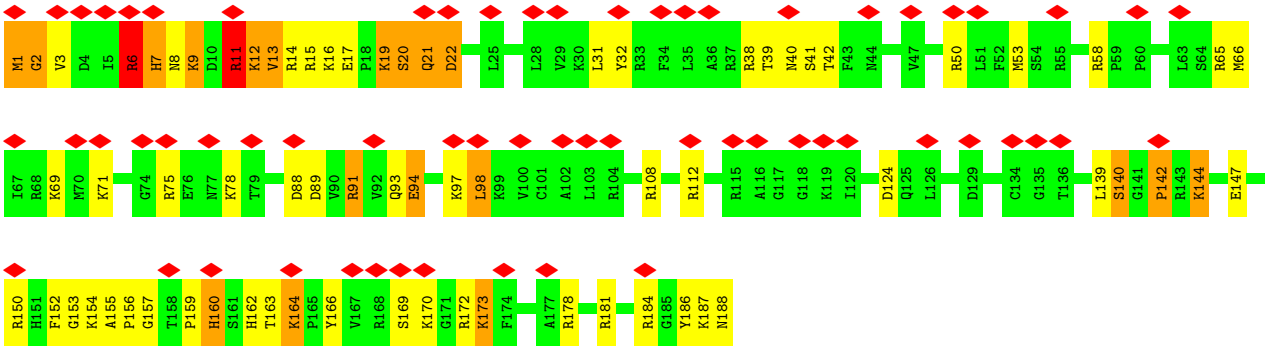
• Molecule 48: 60S ribosomal protein L5

Chain CD:



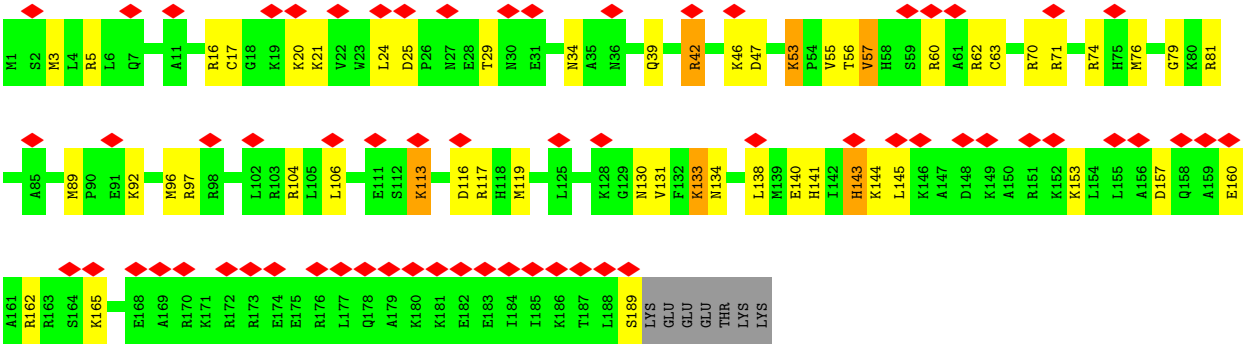
• Molecule 49: 60S ribosomal protein L18

Chain CQ:



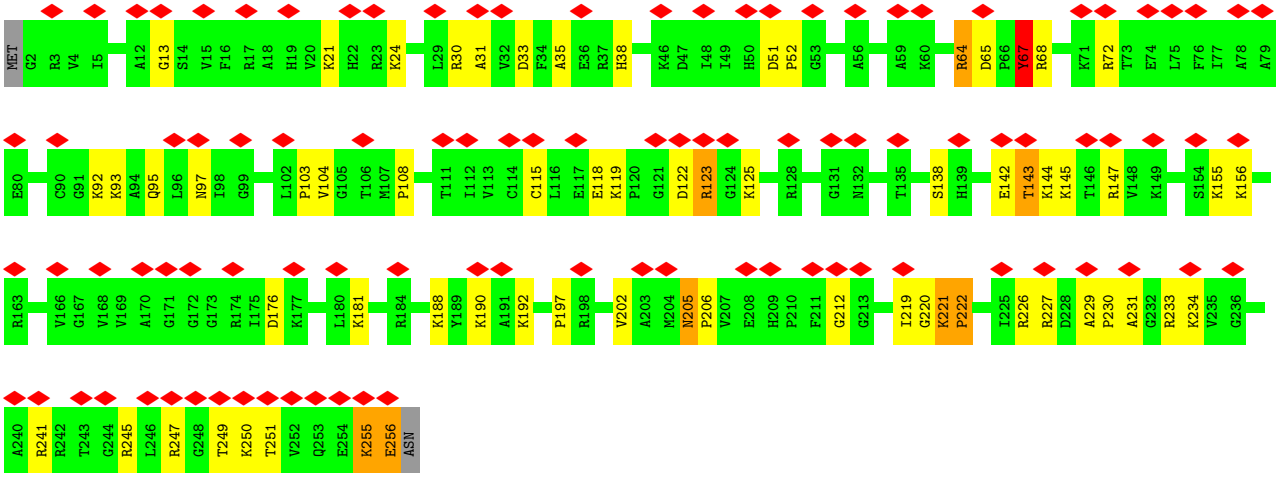
• Molecule 50: 60S ribosomal protein L19

Chain CR:



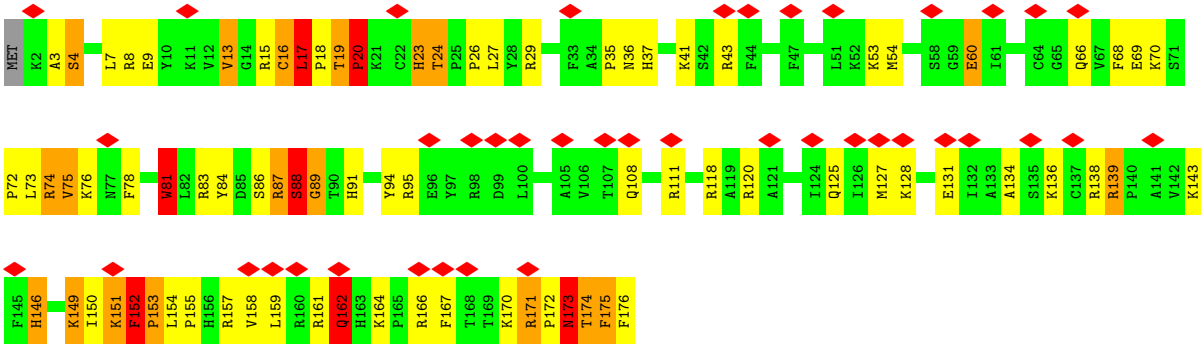
• Molecule 51: 60S ribosomal protein L8

Chain CA:



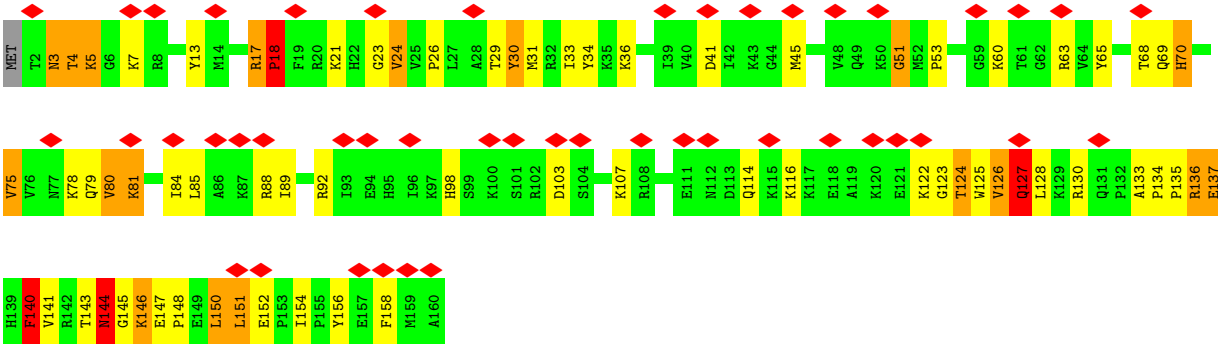
• Molecule 52: 60S ribosomal protein L18a

Chain CS:



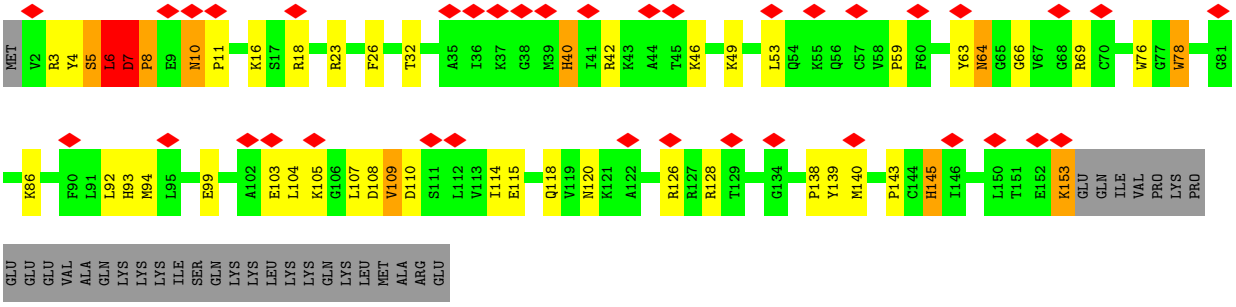
• Molecule 53: 60S ribosomal protein L21

Chain CT:



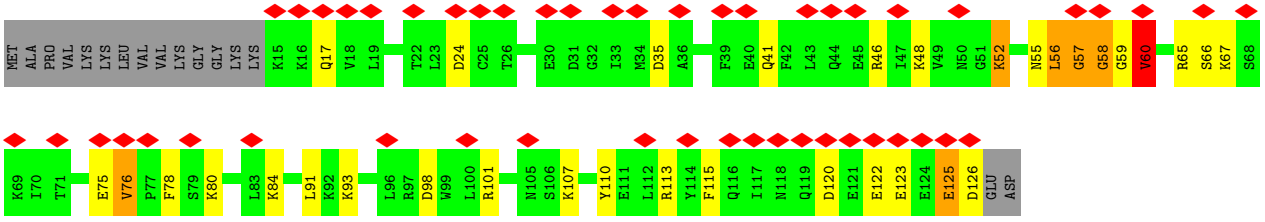
• Molecule 54: 60S ribosomal protein L17

Chain CP:



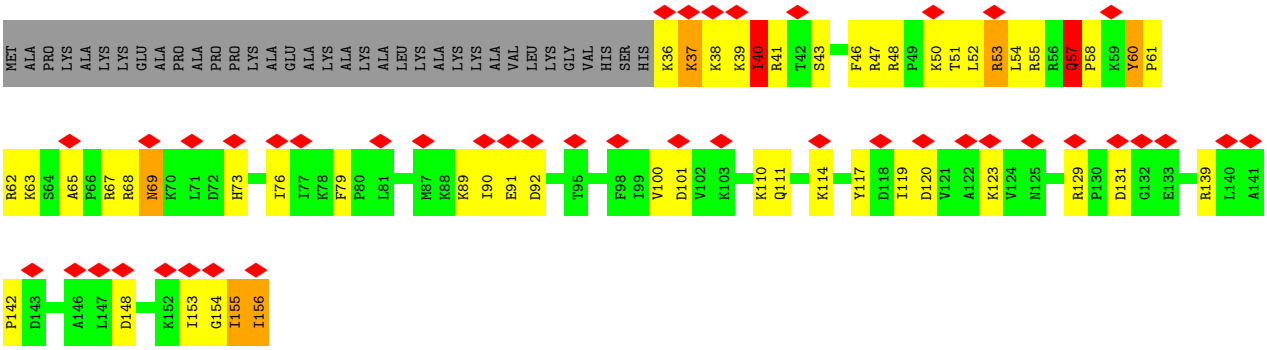
• Molecule 55: 60S ribosomal protein L22

Chain CU:



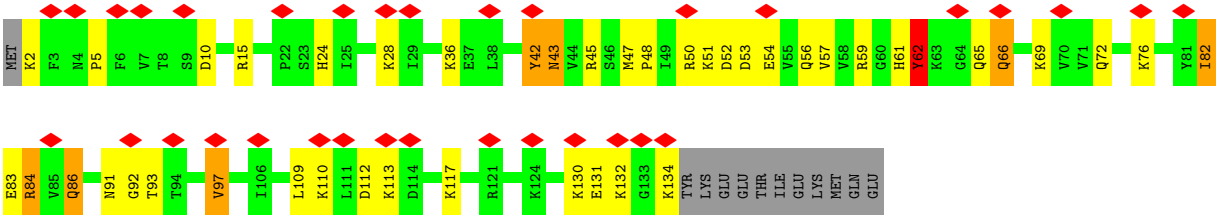
• Molecule 56: 60S ribosomal protein L23a

Chain CX:



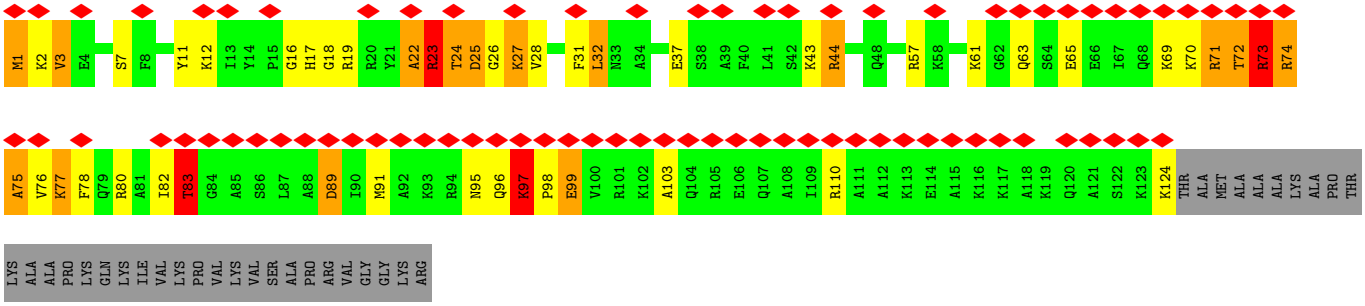
• Molecule 57: 60S ribosomal protein L26

Chain CY:



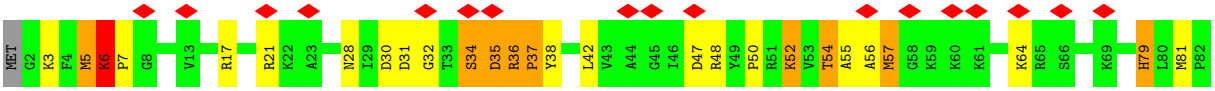
• Molecule 58: 60S ribosomal protein L24

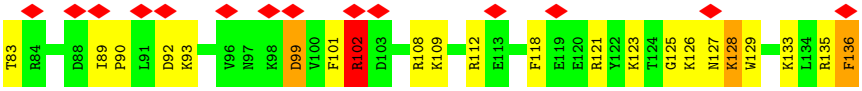
Chain CW:



• Molecule 59: 60S ribosomal protein L27

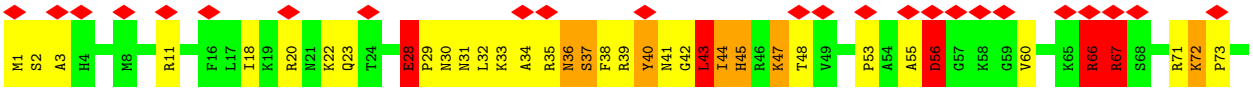
Chain CZ:

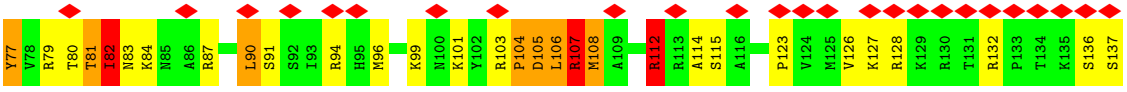




• Molecule 60: 60S ribosomal protein L28

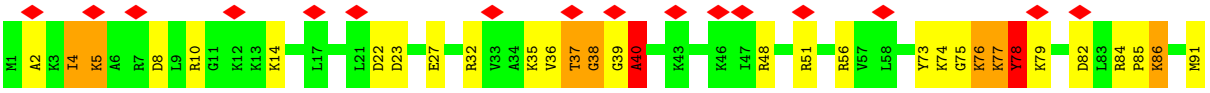
Chain Cr:

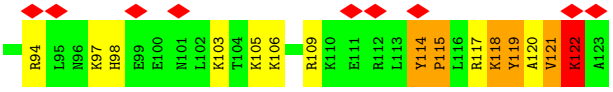




• Molecule 61: 60S ribosomal protein L35

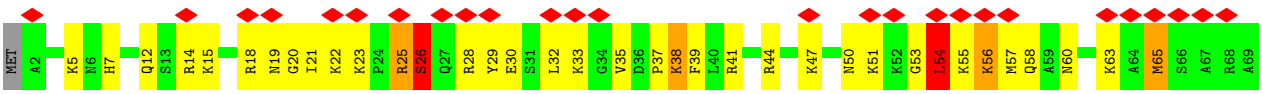
Chain Ch:

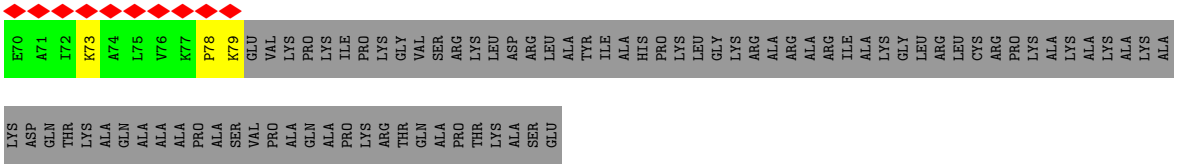




• Molecule 62: 60S ribosomal protein L29

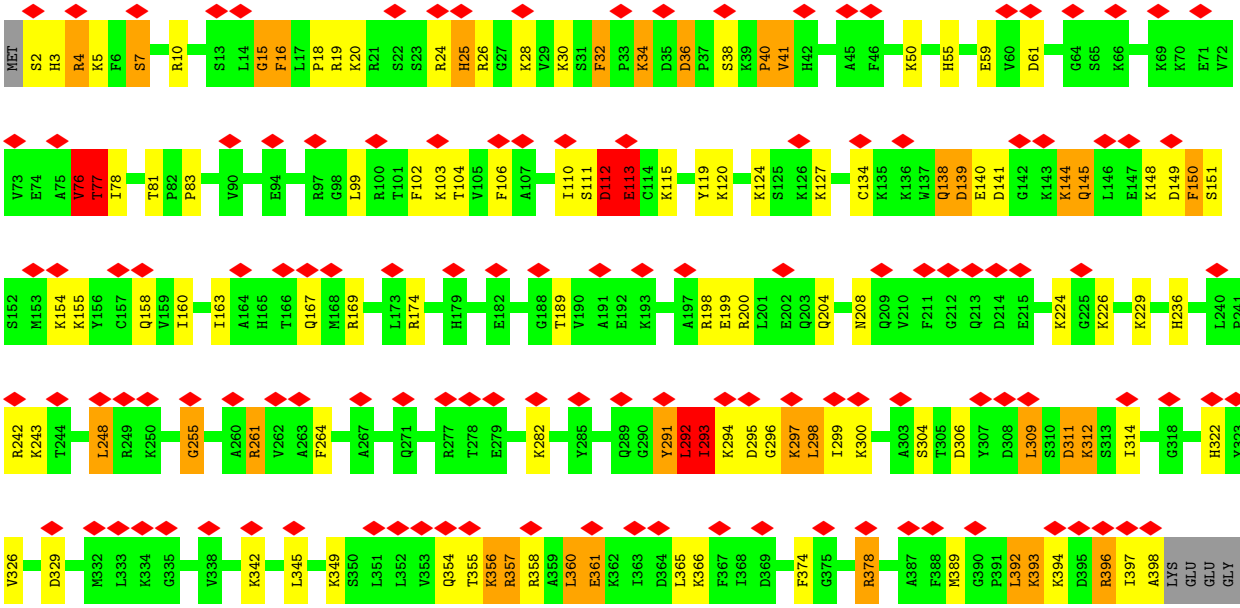
Chain Cb:





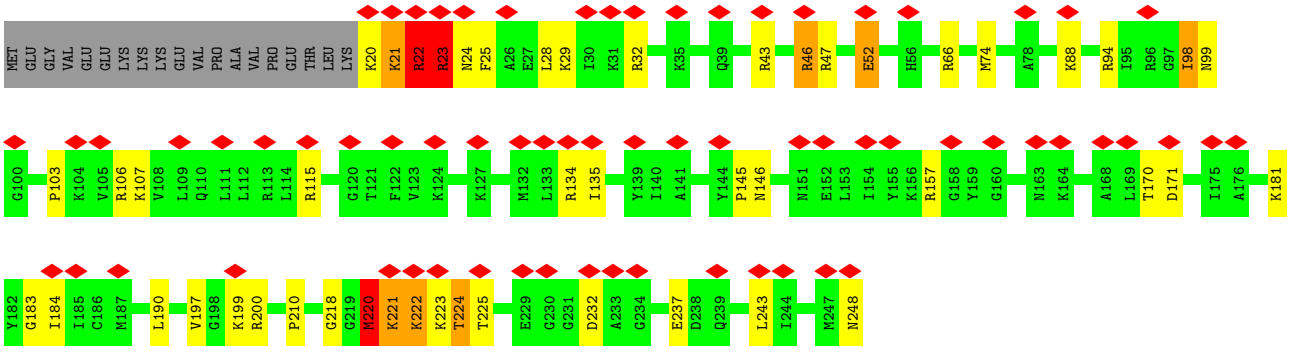
• Molecule 63: 60S ribosomal protein L3

Chain CB:



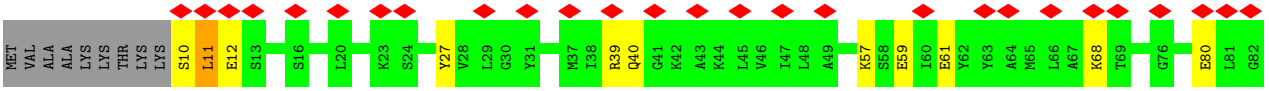
• Molecule 64: 60S ribosomal protein L7

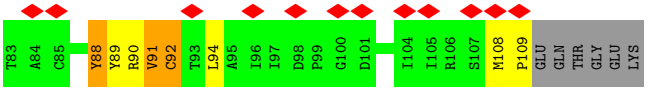
Chain CF:



• Molecule 65: 60S ribosomal protein L30

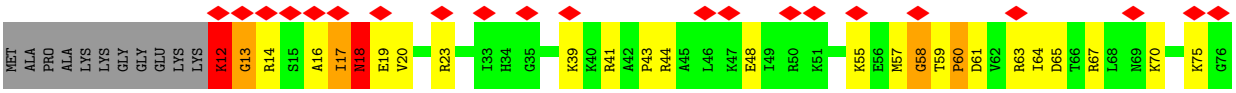
Chain Cc:

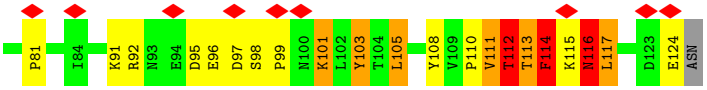




• Molecule 66: 60S ribosomal protein L31

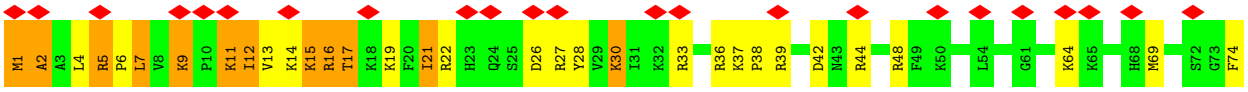
Chain Cd:

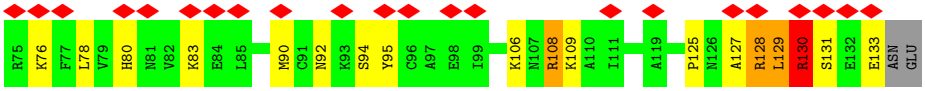




• Molecule 67: 60S ribosomal protein L32

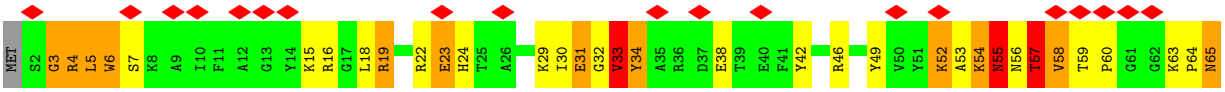
Chain Ce:

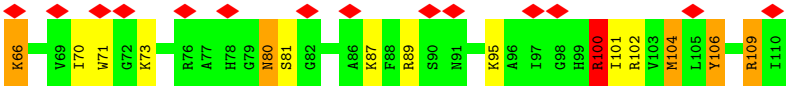




• Molecule 68: 60S ribosomal protein L35a

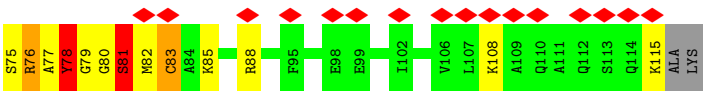
Chain Cf:





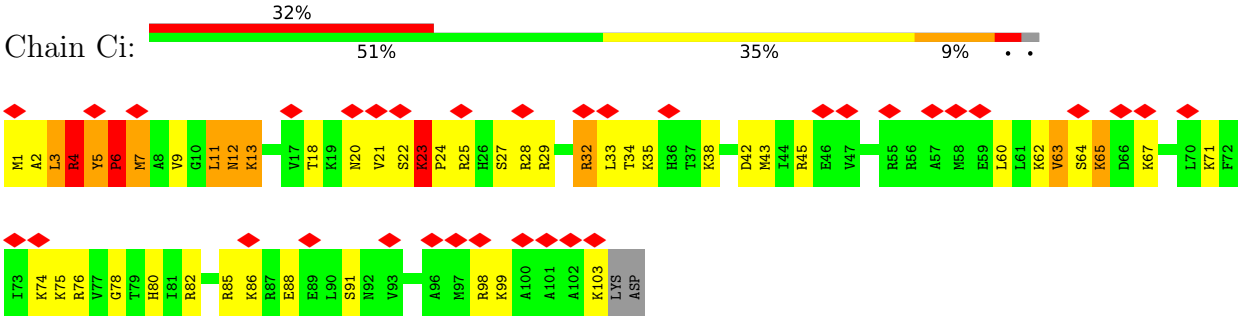
• Molecule 69: 60S ribosomal protein L34

Chain Cg:



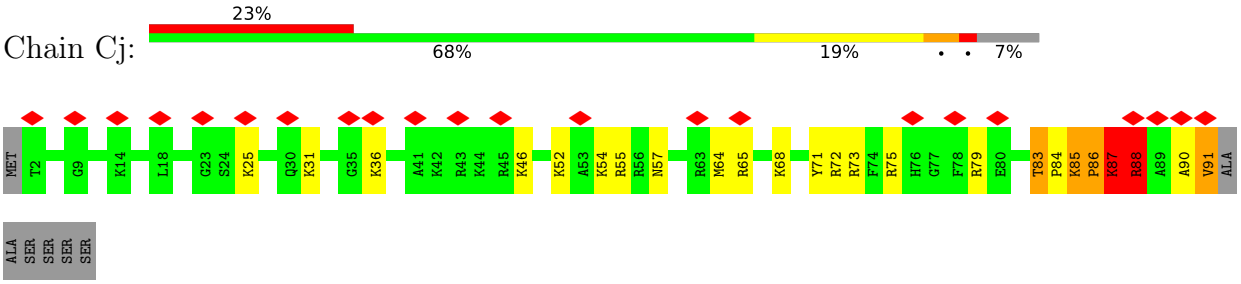
• Molecule 70: 60S ribosomal protein L36

Chain Ci:



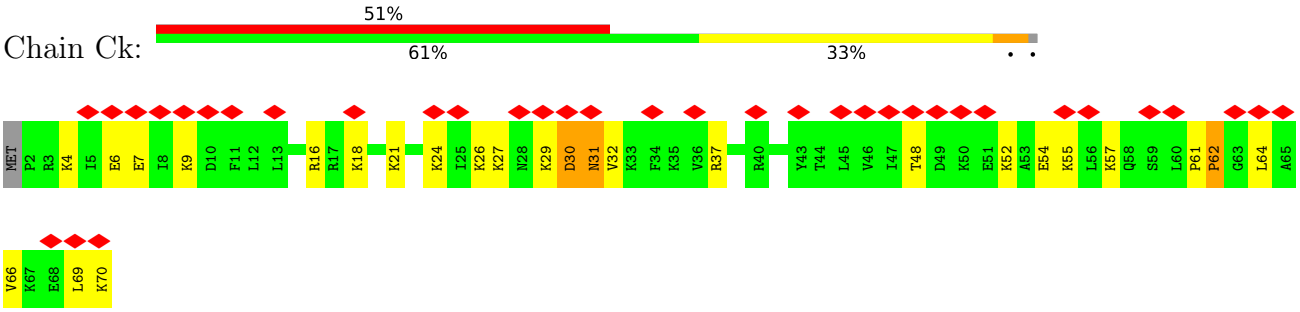
• Molecule 71: 60S ribosomal protein L37

Chain Cj:



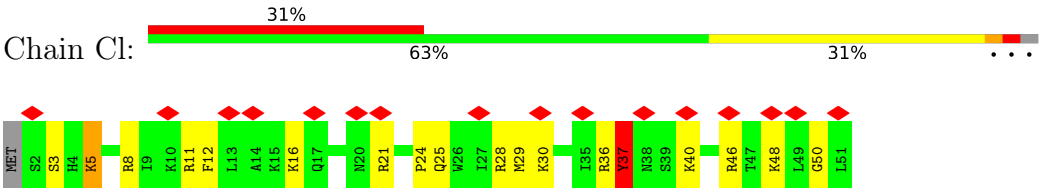
• Molecule 72: 60S ribosomal protein L38

Chain Ck:



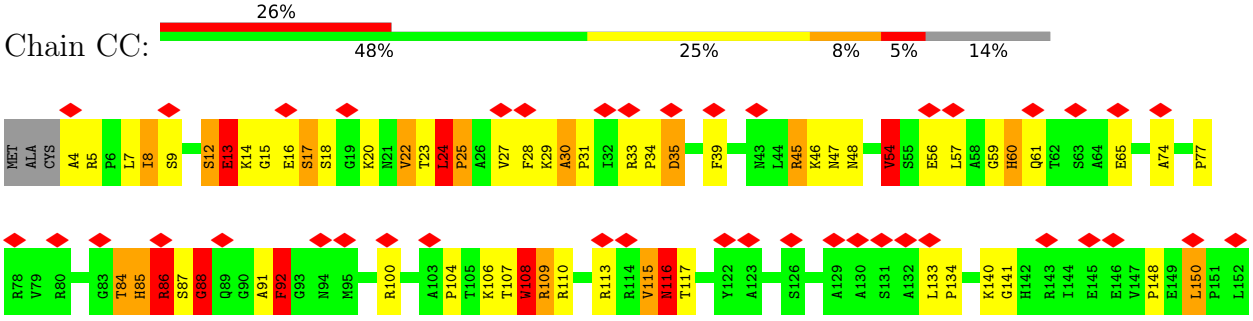
• Molecule 73: 60S ribosomal protein L39

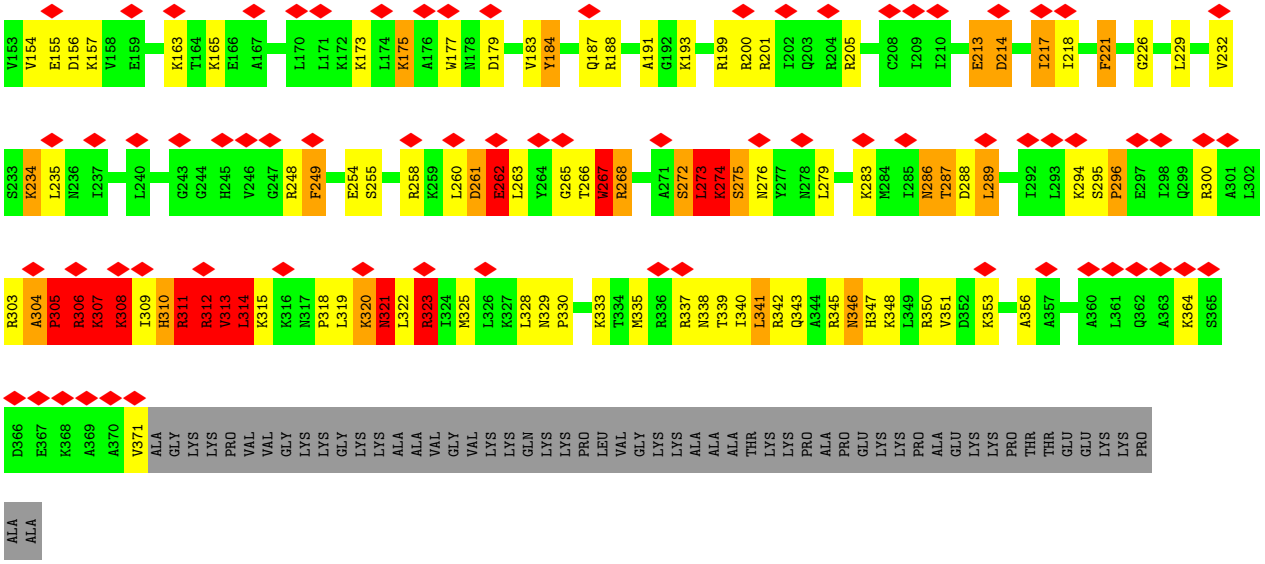
Chain Cl:



• Molecule 74: 60S ribosomal protein L4

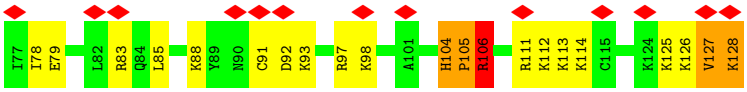
Chain CC:





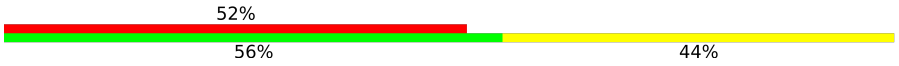
• Molecule 75: 60S ribosomal protein L40

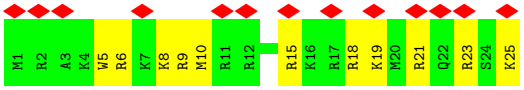
Chain Cm:



• Molecule 76: 60S ribosomal protein L41

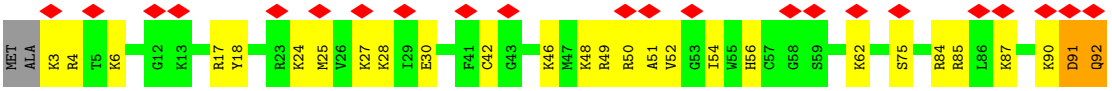
Chain Cn:





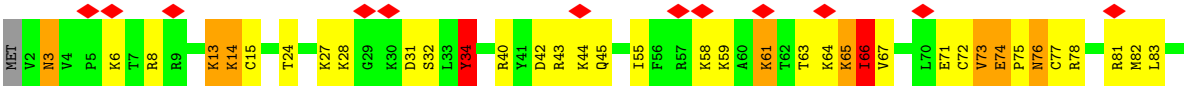
• Molecule 77: 60S ribosomal protein L37a

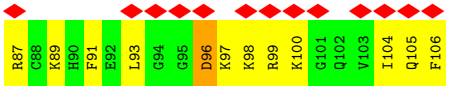
Chain Cp:



• Molecule 78: 60S ribosomal protein L36a

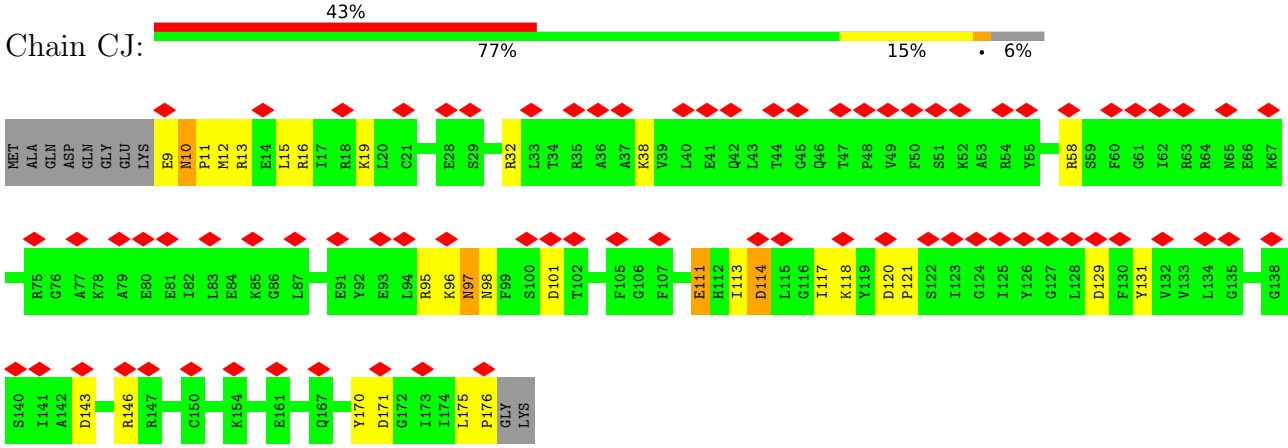
Chain Co:





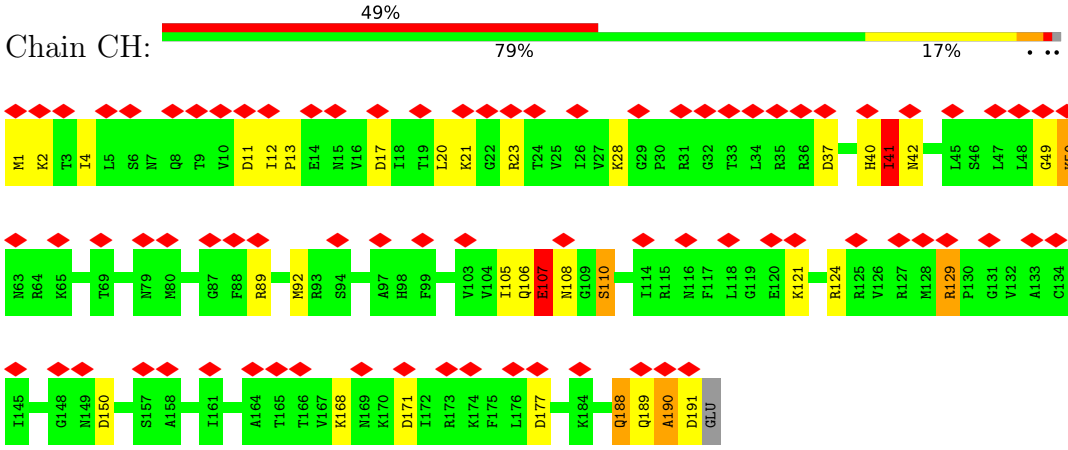
• Molecule 79: 60S ribosomal protein L11

Chain CJ:



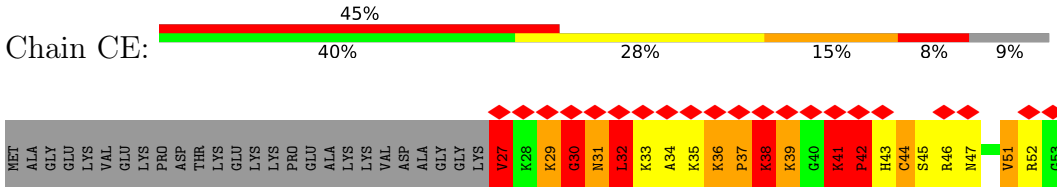
• Molecule 80: 60S ribosomal protein L9

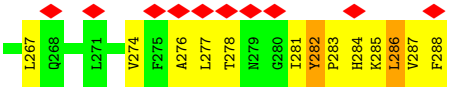
Chain CH:



• Molecule 81: 60S ribosomal protein L6

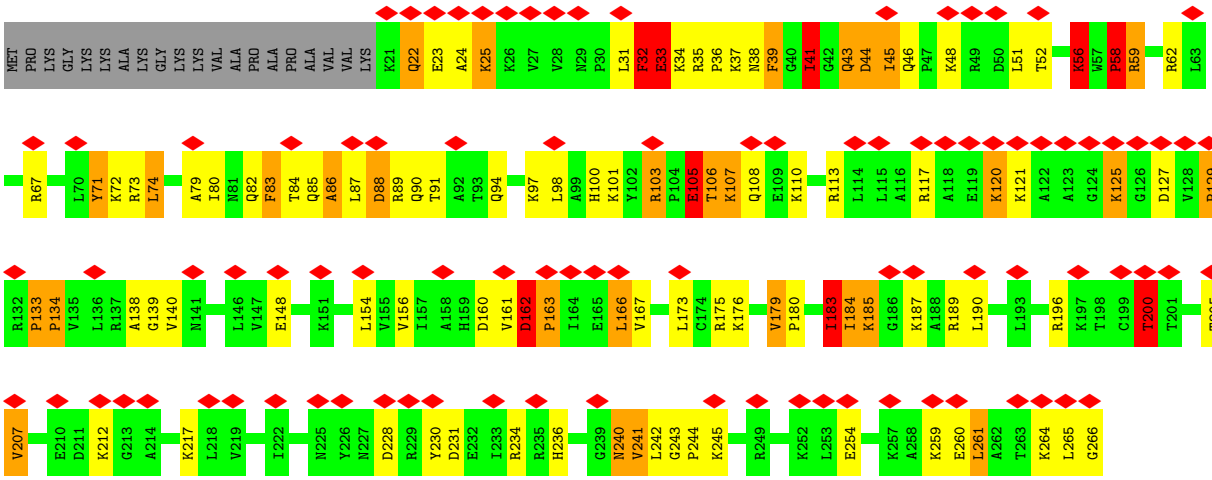
Chain CE:





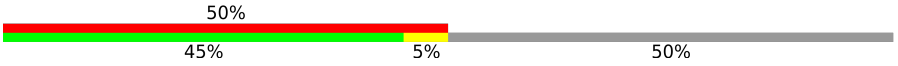
• Molecule 82: 60S ribosomal protein L7a

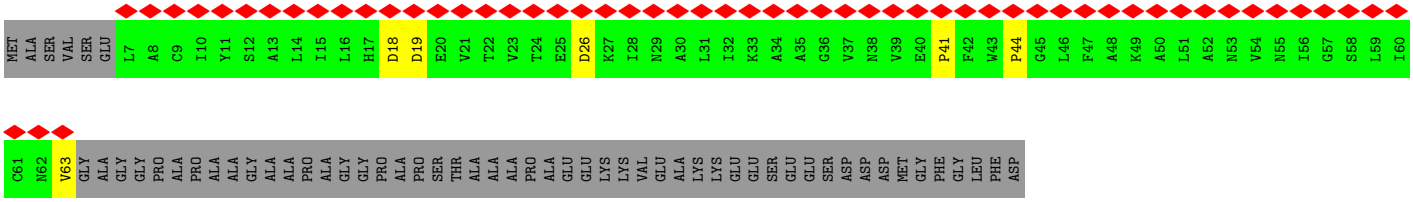
Chain CG:



• Molecule 83: 60S acidic ribosomal protein P1

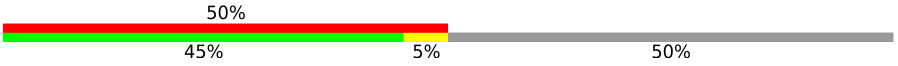
Chain Cs:

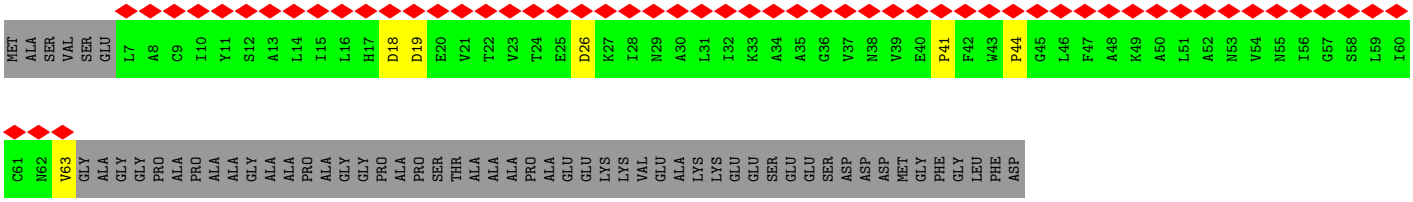




• Molecule 83: 60S acidic ribosomal protein P1

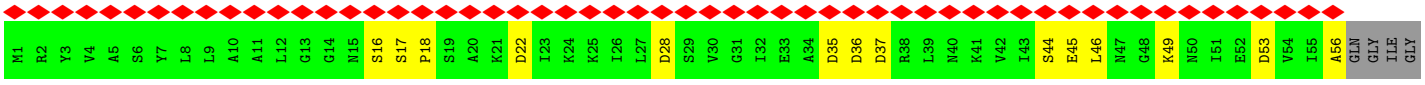
Chain Ct:



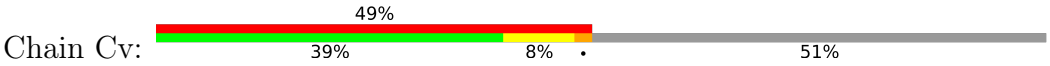


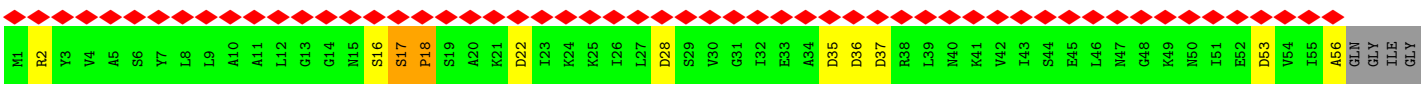
• Molecule 84: 60S acidic ribosomal protein P2

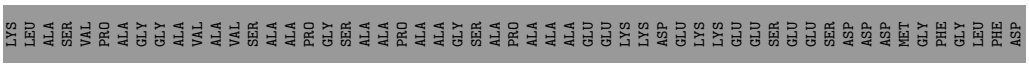
Chain Cu:



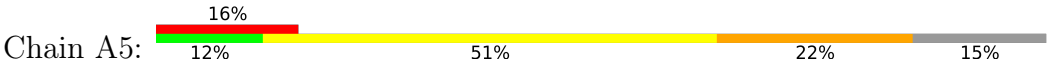
• Molecule 84: 60S acidic ribosomal protein P2

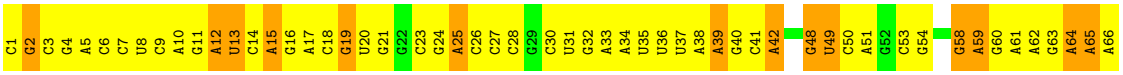


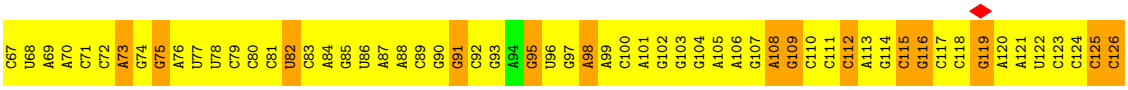


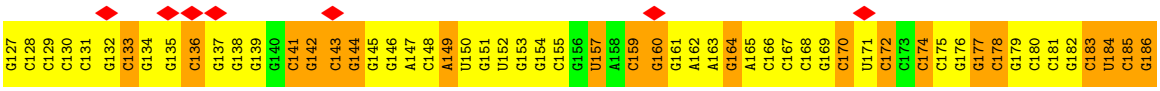


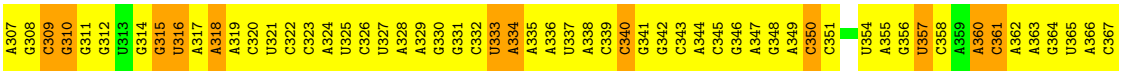
• Molecule 85: 28S ribosomal RNA

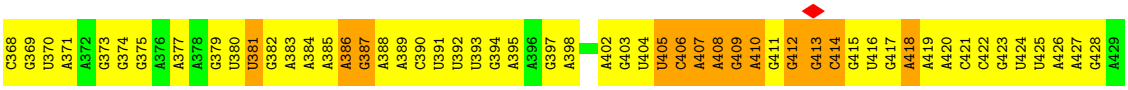


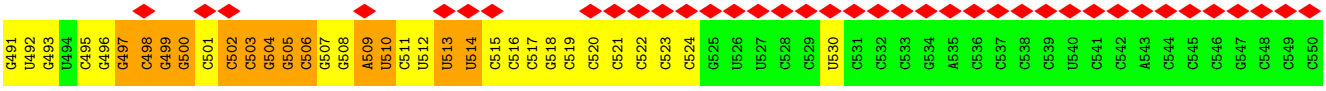


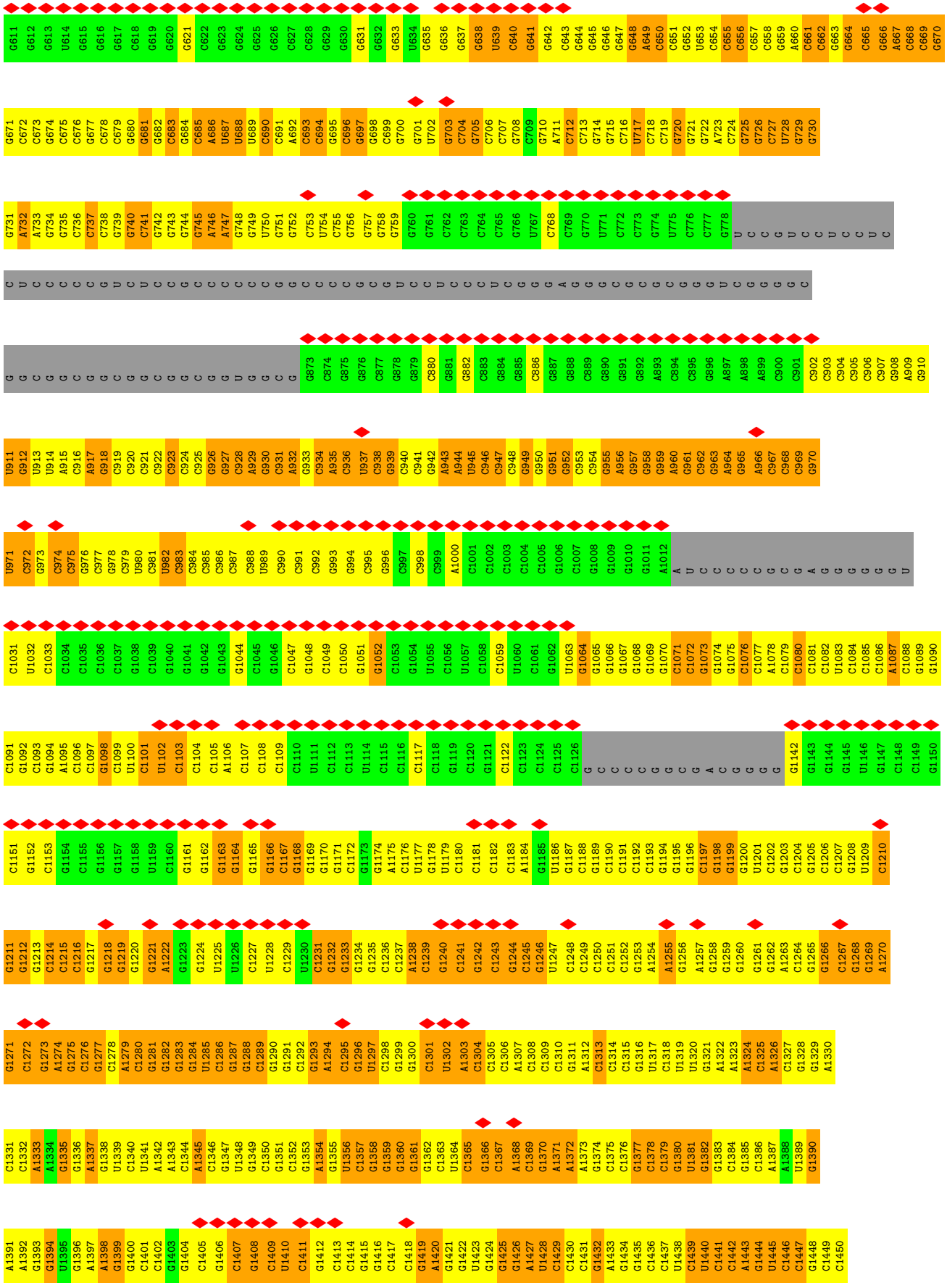


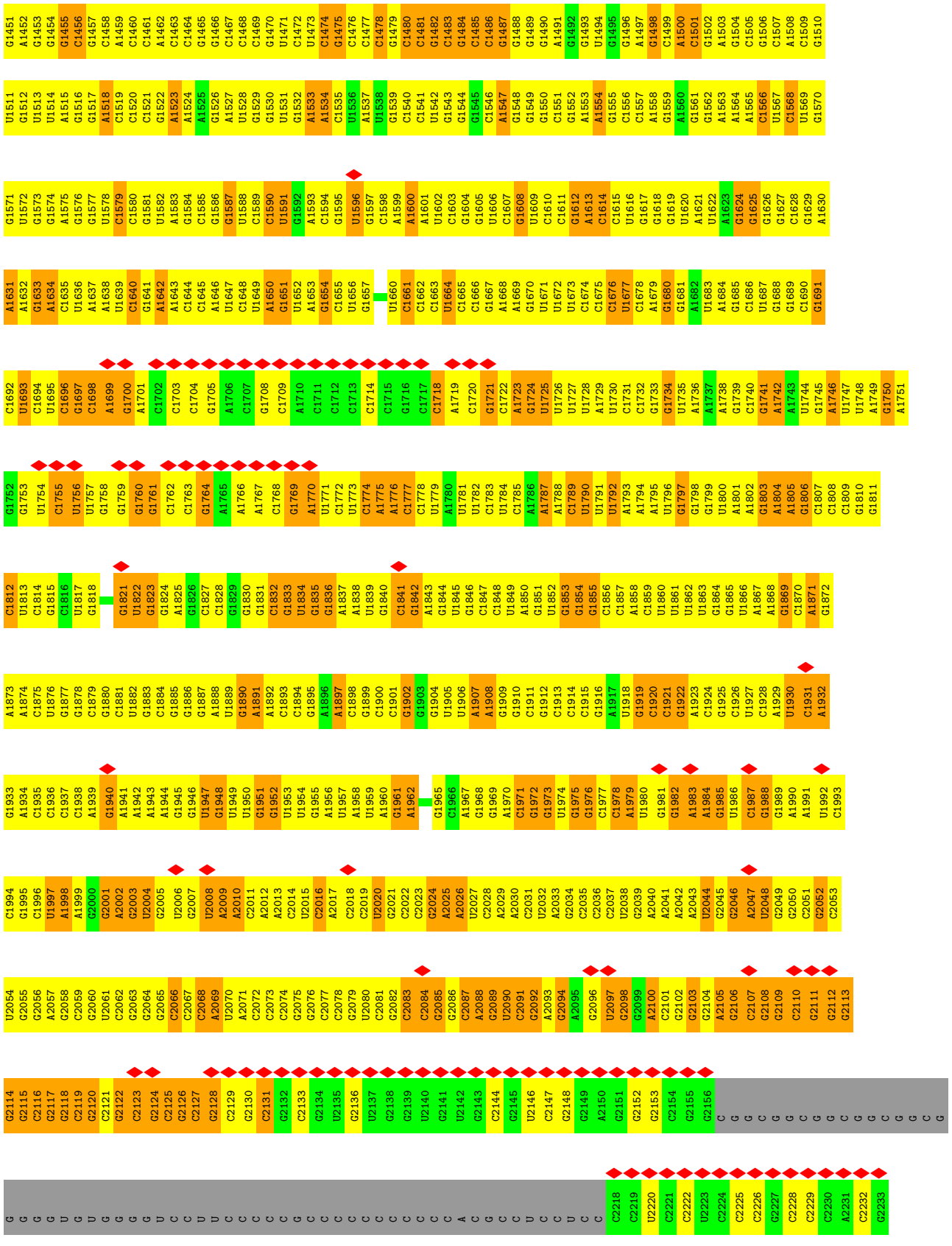


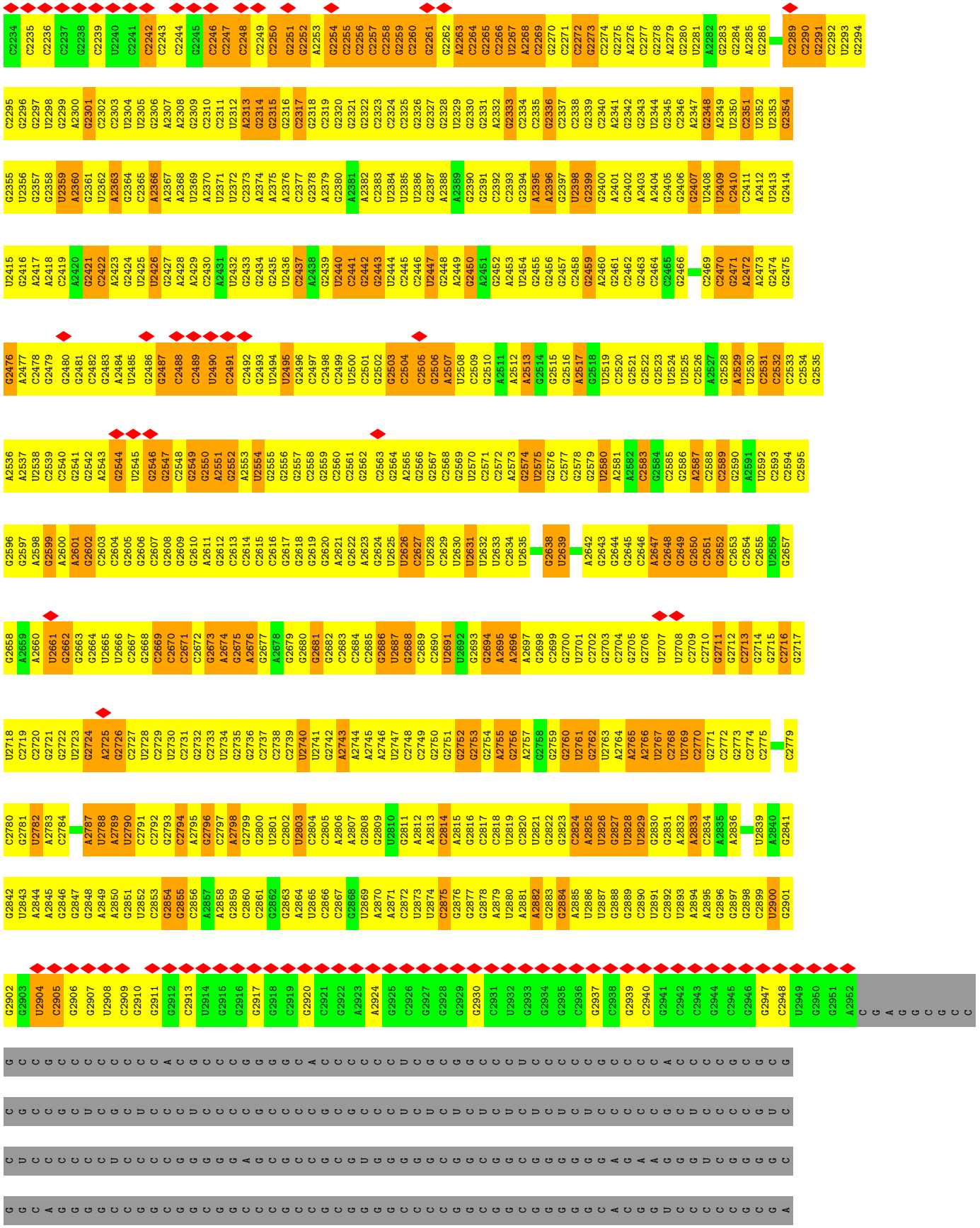


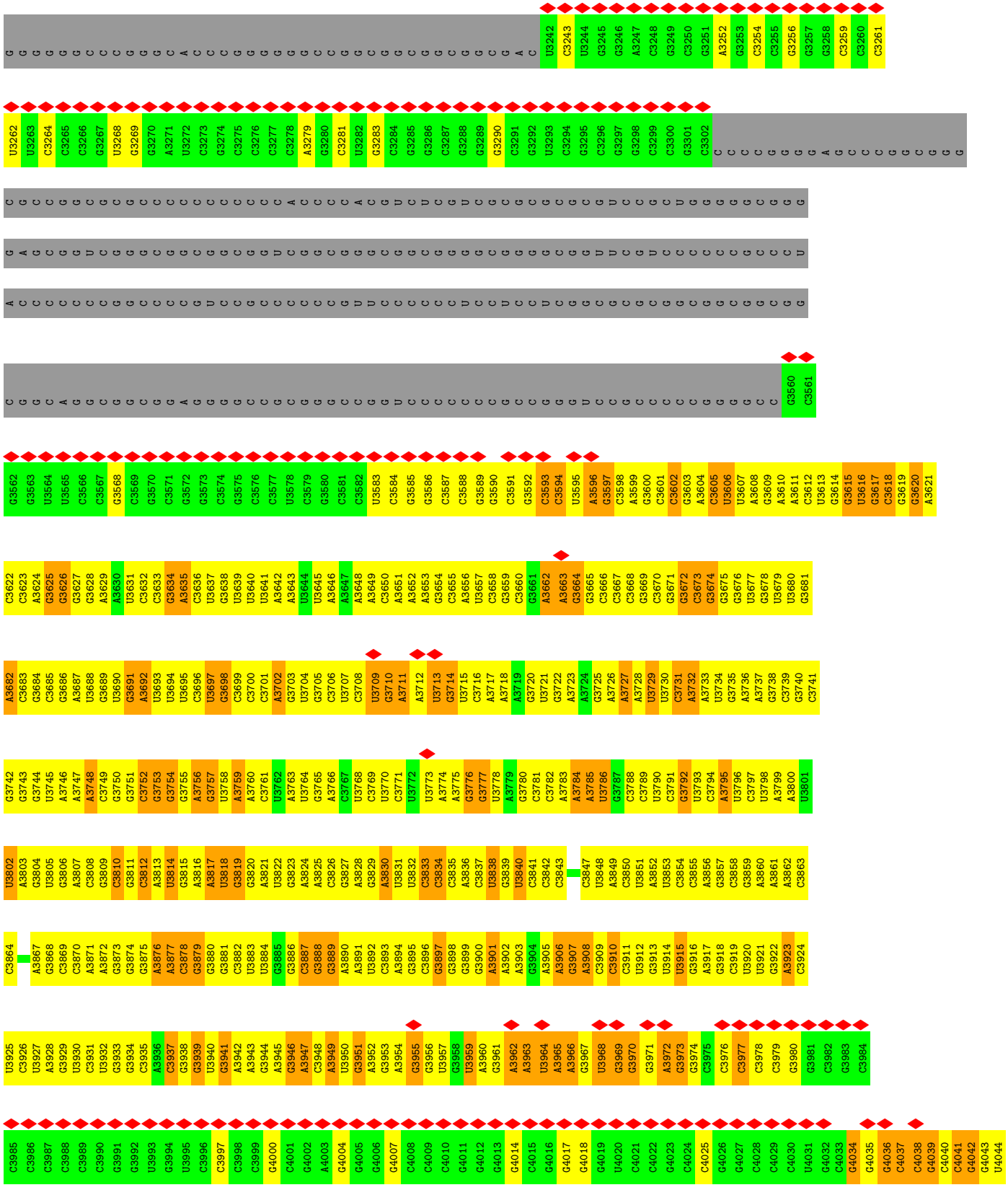


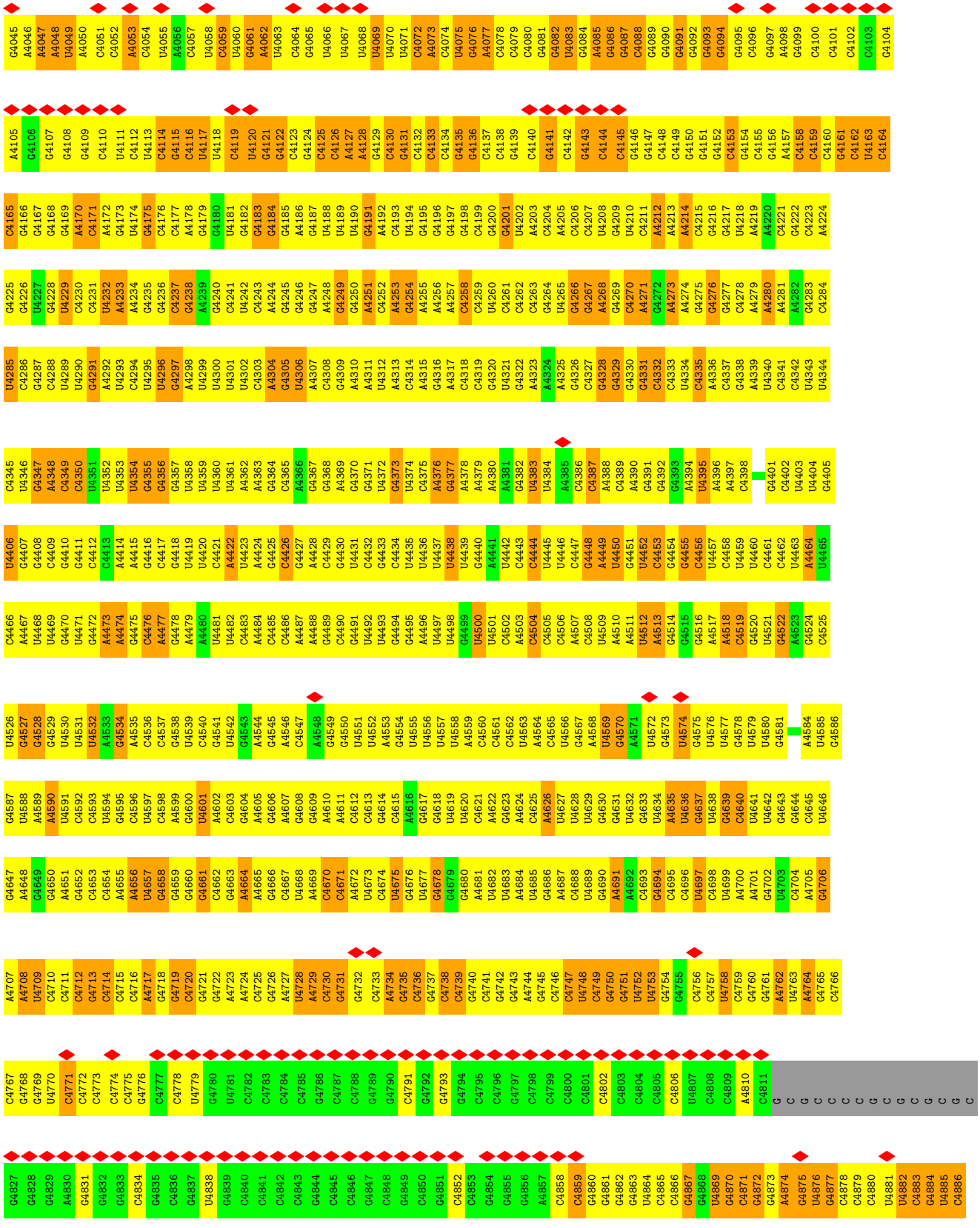


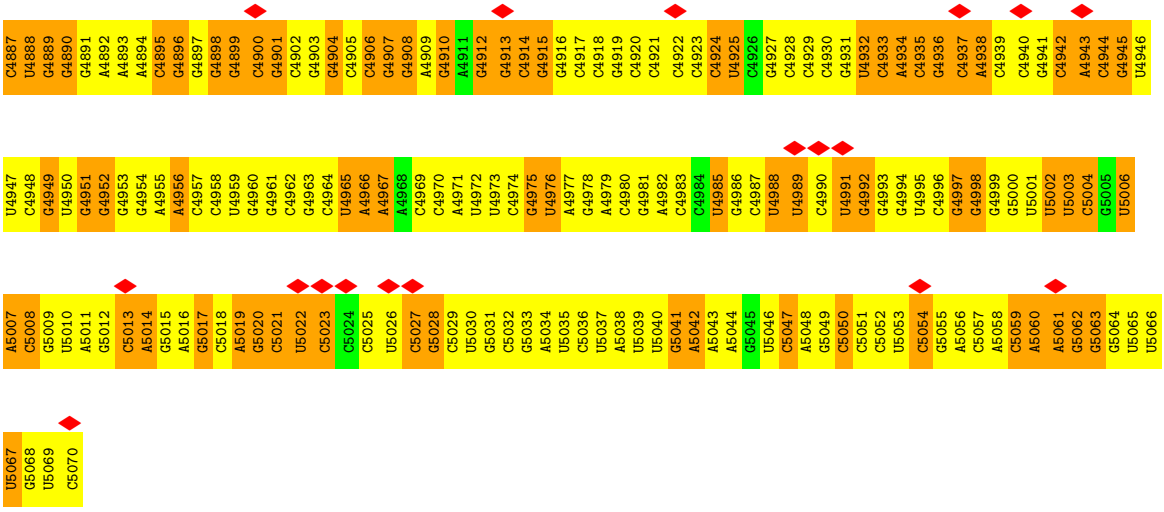






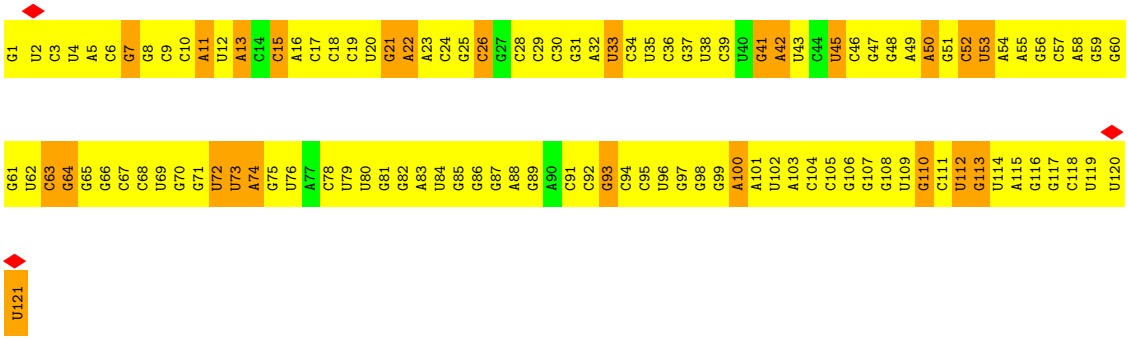






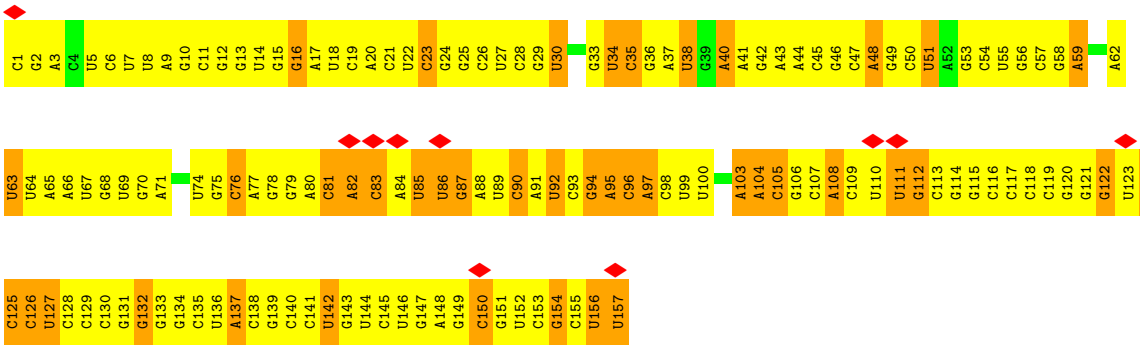
• Molecule 86: 5S ribosomal RNA

Chain A7:



• Molecule 87: 5.8S ribosomal RNA

Chain A8:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	343343	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	each subvolume	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	20	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	90000	Depositor
Image detector	FEI EAGLE (4k x 4k)	Depositor
Maximum map value	3.075	Depositor
Minimum map value	-0.773	Depositor
Average map value	0.080	Depositor
Map value standard deviation	0.258	Depositor
Recommended contour level	0.7	Depositor
Map size (Å)	309.375, 339.07498, 322.9875	wwPDB
Map dimensions	274, 250, 261	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.2375, 1.2375, 1.2375	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	Az	1.04	25/6804 (0.4%)	1.36	96/9189 (1.0%)
2	Ag	0.91	1/2493 (0.0%)	1.29	27/3394 (0.8%)
3	AU	0.96	1/832 (0.1%)	1.59	30/1117 (2.7%)
4	AK	1.21	7/851 (0.8%)	1.78	32/1147 (2.8%)
5	AO	0.61	0/1029	1.05	12/1380 (0.9%)
6	AX	0.99	8/1124 (0.7%)	1.24	21/1500 (1.4%)
7	AM	0.99	3/970 (0.3%)	1.22	6/1300 (0.5%)
8	AS	1.21	11/1157 (1.0%)	1.60	36/1548 (2.3%)
9	Ad	0.89	2/455 (0.4%)	0.79	3/603 (0.5%)
10	AN	0.82	4/1232 (0.3%)	1.00	14/1656 (0.8%)
11	AL	1.10	6/1319 (0.5%)	1.40	17/1761 (1.0%)
12	AR	1.23	10/1031 (1.0%)	1.64	30/1383 (2.2%)
13	AP	0.74	1/1081 (0.1%)	1.43	32/1440 (2.2%)
14	AT	0.96	3/1119 (0.3%)	1.27	13/1499 (0.9%)
15	AB	0.79	7/1774 (0.4%)	1.08	23/2372 (1.0%)
16	AA	0.76	2/1679 (0.1%)	1.05	17/2283 (0.7%)
17	AV	1.20	6/631 (1.0%)	1.69	24/844 (2.8%)
18	AY	0.92	3/1040 (0.3%)	1.42	21/1382 (1.5%)
19	AZ	1.04	6/604 (1.0%)	1.35	17/810 (2.1%)
20	Aa	0.96	5/863 (0.6%)	1.62	21/1159 (1.8%)
21	Ab	1.02	2/673 (0.3%)	1.36	13/902 (1.4%)
22	Ac	0.80	1/508 (0.2%)	1.17	8/680 (1.2%)
23	AD	1.03	6/1793 (0.3%)	1.30	22/2414 (0.9%)
24	Ae	1.50	5/474 (1.1%)	1.47	11/623 (1.8%)
25	Af	1.10	4/593 (0.7%)	1.49	16/786 (2.0%)
26	AJ	1.27	19/1522 (1.2%)	1.51	42/2031 (2.1%)
27	AE	0.76	4/2126 (0.2%)	0.98	23/2859 (0.8%)
28	AC	1.03	7/1788 (0.4%)	1.26	22/2414 (0.9%)
29	AG	1.05	17/1946 (0.9%)	1.28	29/2590 (1.1%)
30	AF	0.99	5/1531 (0.3%)	1.21	17/2059 (0.8%)
31	AH	1.09	8/1553 (0.5%)	2.20	29/2079 (1.4%)
32	AW	0.84	4/1051 (0.4%)	0.85	9/1406 (0.6%)
33	AI	1.11	7/1715 (0.4%)	1.51	33/2287 (1.4%)
34	AQ	0.70	3/1142 (0.3%)	1.11	15/1528 (1.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
35	Ah	1.51	9/572 (1.6%)	2.04	32/752 (4.3%)
36	B2	2.42	1909/42821 (4.5%)	2.23	2680/66606 (4.0%)
37	BC	2.31	82/1795 (4.6%)	2.06	106/2798 (3.8%)
38	Cz	1.50	16/1768 (0.9%)	1.87	43/2368 (1.8%)
39	Cq	1.02	14/2176 (0.6%)	1.48	58/2951 (2.0%)
40	CK	1.65	17/1257 (1.4%)	2.18	72/1697 (4.2%)
41	CO	0.83	5/1687 (0.3%)	0.87	12/2257 (0.5%)
42	CL	0.99	10/1732 (0.6%)	1.44	41/2315 (1.8%)
43	CV	0.71	3/1003 (0.3%)	0.84	6/1345 (0.4%)
44	CM	0.97	4/1161 (0.3%)	1.45	35/1552 (2.3%)
45	Ca	1.08	14/1191 (1.2%)	1.21	15/1591 (0.9%)
46	CN	0.71	3/1746 (0.2%)	0.96	16/2338 (0.7%)
47	CI	1.23	17/1751 (1.0%)	1.39	51/2340 (2.2%)
48	CD	0.90	11/2398 (0.5%)	1.30	50/3210 (1.6%)
49	CQ	1.40	14/1545 (0.9%)	1.74	36/2062 (1.7%)
50	CR	0.83	5/1596 (0.3%)	0.93	12/2109 (0.6%)
51	CA	0.77	9/1995 (0.5%)	1.07	18/2674 (0.7%)
52	CS	1.10	6/1493 (0.4%)	1.61	40/2003 (2.0%)
53	CT	1.33	17/1326 (1.3%)	1.51	35/1770 (2.0%)
54	CP	0.98	10/1259 (0.8%)	1.19	16/1689 (0.9%)
55	CU	0.89	4/935 (0.4%)	1.25	17/1253 (1.4%)
56	CX	1.19	7/1011 (0.7%)	1.51	29/1356 (2.1%)
57	CY	0.91	6/1124 (0.5%)	1.09	14/1494 (0.9%)
58	CW	1.29	14/1030 (1.4%)	1.76	36/1364 (2.6%)
59	CZ	1.01	6/1130 (0.5%)	1.29	21/1507 (1.4%)
60	Cr	1.43	16/1120 (1.4%)	2.15	65/1497 (4.3%)
61	Ch	0.87	6/1031 (0.6%)	1.39	26/1361 (1.9%)
62	Cb	1.13	4/646 (0.6%)	1.23	12/853 (1.4%)
63	CB	1.06	13/3270 (0.4%)	1.43	35/4377 (0.8%)
64	CF	1.18	11/1945 (0.6%)	1.27	24/2589 (0.9%)
65	Cc	1.04	4/787 (0.5%)	1.12	8/1057 (0.8%)
66	Cd	1.18	6/946 (0.6%)	1.38	26/1272 (2.0%)
67	Ce	0.98	8/1114 (0.7%)	1.34	20/1485 (1.3%)
68	Cf	1.21	3/895 (0.3%)	1.76	29/1198 (2.4%)
69	Cg	1.23	8/916 (0.9%)	1.39	20/1220 (1.6%)
70	Ci	1.17	3/851 (0.4%)	1.25	13/1125 (1.2%)
71	Cj	0.71	1/748 (0.1%)	0.89	4/990 (0.4%)
72	Ck	1.06	3/575 (0.5%)	1.09	4/761 (0.5%)
73	Cl	1.26	8/454 (1.8%)	1.39	6/599 (1.0%)
74	CC	1.25	30/2979 (1.0%)	1.72	111/4001 (2.8%)
75	Cm	1.07	2/435 (0.5%)	1.04	6/575 (1.0%)
76	Cn	1.12	2/241 (0.8%)	0.46	1/305 (0.3%)
77	Cp	0.88	3/713 (0.4%)	0.93	4/946 (0.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
78	Co	1.11	6/877 (0.7%)	1.26	10/1156 (0.9%)
79	CJ	0.51	1/1372 (0.1%)	0.76	8/1836 (0.4%)
80	CH	0.67	4/1545 (0.3%)	0.85	9/2077 (0.4%)
81	CE	1.59	39/2153 (1.8%)	2.38	153/2878 (5.3%)
82	CG	1.26	10/2006 (0.5%)	1.39	43/2697 (1.6%)
83	Cs	0.73	1/433 (0.2%)	0.84	6/592 (1.0%)
83	Ct	0.72	1/433 (0.2%)	0.85	6/592 (1.0%)
84	Cu	0.74	1/421 (0.2%)	1.08	10/566 (1.8%)
84	Cv	0.71	1/421 (0.2%)	1.26	9/566 (1.6%)
85	A5	2.47	4305/94517 (4.6%)	2.18	5688/146662 (3.9%)
86	A7	2.55	144/2880 (5.0%)	2.04	177/4489 (3.9%)
87	A8	2.37	168/3723 (4.5%)	2.08	216/5800 (3.7%)
All	All	1.98	7227/254452 (2.8%)	1.92	11021/371948 (3.0%)

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
1	Az	2	41
2	Ag	0	13
3	AU	0	8
4	AK	0	11
5	AO	0	1
6	AX	0	4
7	AM	0	1
8	AS	1	10
10	AN	0	4
11	AL	0	7
12	AR	1	5
13	AP	0	10
14	AT	1	6
15	AB	0	4
16	AA	0	11
17	AV	0	11
18	AY	1	6
19	AZ	0	6
20	Aa	0	3
21	Ab	0	3
23	AD	0	5
24	Ae	0	5

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Mol	Chain	#Chirality outliers	#Planarity outliers
25	Af	0	6
26	AJ	1	11
27	AE	1	2
28	AC	1	7
29	AG	0	1
30	AF	0	3
31	AH	0	10
32	AW	0	2
33	AI	0	8
34	AQ	0	4
35	Ah	0	4
36	B2	6	0
37	BC	1	0
38	Cz	2	6
39	Cq	0	14
40	CK	1	8
41	CO	0	2
42	CL	0	19
43	CV	0	2
44	CM	0	8
45	Ca	1	9
46	CN	1	3
47	CI	0	13
48	CD	1	15
49	CQ	0	10
50	CR	0	2
51	CA	0	1
52	CS	0	12
53	CT	0	13
54	CP	0	2
55	CU	0	4
56	CX	0	5
57	CY	0	6
58	CW	2	11
59	CZ	1	5
60	Cr	0	14
61	Ch	1	8
62	Cb	0	3
63	CB	0	18
64	CF	1	4
65	Cc	0	3
66	Cd	0	10

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Mol	Chain	#Chirality outliers	#Planarity outliers
67	Ce	1	5
68	Cf	0	14
69	Cg	0	4
70	Ci	0	6
71	Cj	0	1
72	Ck	0	2
74	CC	0	29
75	Cm	0	4
77	Cp	0	1
78	Co	0	4
80	CH	0	8
81	CE	5	36
82	CG	1	10
84	Cu	1	0
85	A5	7	0
All	All	42	587

All (7227) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1359	G	C2'-C1'	-36.90	1.12	1.53
49	CQ	6	ARG	NE-CZ	30.14	1.72	1.33
40	CK	2	PRO	CA-CB	28.43	2.10	1.53
85	A5	1266	G	C2'-C1'	-27.46	1.23	1.53
74	CC	348	LYS	C-N	-26.18	0.73	1.34
36	B2	1326	U	C2'-C1'	-25.54	1.25	1.53
85	A5	1246	G	C2'-C1'	-25.43	1.25	1.53
85	A5	4870	G	C2'-C1'	-25.31	1.25	1.53
85	A5	4606	G	C2'-C1'	-24.88	1.25	1.53
36	B2	66	G	C2'-C1'	-24.70	1.26	1.53
82	CG	243	GLY	C-N	24.41	1.80	1.34
85	A5	2128	G	C2'-C1'	-24.39	1.26	1.53
85	A5	80	C	C2'-C1'	-24.32	1.26	1.53
36	B2	662	G	C2'-C1'	-23.72	1.27	1.53
85	A5	4994	G	C2'-C1'	-23.59	1.27	1.53
36	B2	862	A	C2'-C1'	-23.48	1.27	1.53
85	A5	2770	C	C2'-C1'	-23.48	1.27	1.53
85	A5	1276	C	C2'-C1'	-23.11	1.27	1.53
85	A5	3684	G	C2'-C1'	-22.94	1.28	1.53
85	A5	4966	A	C2'-C1'	-22.92	1.28	1.53
85	A5	4169	G	C2'-C1'	-22.90	1.28	1.53
85	A5	1265	G	C2'-C1'	-22.61	1.28	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1311	C	C2'-C1'	-22.48	1.28	1.53
85	A5	1929	A	C2'-C1'	-22.34	1.28	1.53
36	B2	531	A	C2'-C1'	-22.07	1.29	1.53
38	Cz	28	PHE	CA-C	-21.95	0.95	1.52
40	CK	2	PRO	N-CD	21.89	1.78	1.47
36	B2	1041	G	C2'-C1'	-21.86	1.29	1.53
85	A5	2301	G	C2'-C1'	-21.84	1.29	1.53
85	A5	2058	G	C2'-C1'	-21.72	1.29	1.53
81	CE	74	SER	CA-CB	21.57	1.85	1.52
82	CG	35	ARG	C-N	21.55	1.75	1.34
85	A5	2079	G	C2'-C1'	-21.54	1.29	1.53
85	A5	1242	G	C2'-C1'	21.52	1.77	1.53
36	B2	1237	C	C2'-C1'	-21.50	1.29	1.53
85	A5	3674	G	C2'-C1'	-21.44	1.29	1.53
36	B2	145	G	C2'-C1'	-21.43	1.29	1.53
85	A5	958	G	O4'-C1'	21.27	1.69	1.41
36	B2	296	U	C2'-C1'	-21.20	1.30	1.53
23	AD	5	ILE	C-N	21.16	1.82	1.34
85	A5	2544	G	C2'-C1'	-21.13	1.30	1.53
85	A5	975	C	O4'-C1'	21.09	1.69	1.41
85	A5	39	A	C2'-C1'	-21.08	1.30	1.53
47	CI	205	PRO	C-N	21.04	1.82	1.34
86	A7	54	A	C2'-C1'	-20.82	1.30	1.53
36	B2	1331	C	C2'-C1'	-20.81	1.30	1.53
36	B2	1397	U	C2'-C1'	-20.61	1.30	1.53
85	A5	1361	G	O4'-C1'	-20.54	1.15	1.41
86	A7	99	G	C2'-C1'	-20.52	1.30	1.53
36	B2	308	G	C2'-C1'	-20.47	1.30	1.53
85	A5	688	U	C2'-C1'	-20.34	1.30	1.53
36	B2	218	U	C2'-C1'	-20.27	1.31	1.53
70	Ci	78	GLY	C-N	20.26	1.80	1.34
85	A5	2769	U	C2'-C1'	-20.25	1.31	1.53
41	CO	202	LEU	C-N	20.25	1.80	1.34
36	B2	1507	G	O4'-C1'	-20.21	1.15	1.41
85	A5	1661	C	C2'-C1'	-20.17	1.31	1.53
85	A5	2576	G	C2'-C1'	-20.14	1.31	1.53
85	A5	4676	G	C2'-C1'	-20.11	1.31	1.53
85	A5	1240	G	C2'-C1'	20.02	1.75	1.53
85	A5	2763	U	C2'-C1'	-20.01	1.31	1.53
85	A5	4042	G	C2'-C1'	-19.98	1.31	1.53
36	B2	353	C	C2'-C1'	-19.95	1.31	1.53
85	A5	1363	C	O4'-C1'	19.94	1.67	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1268	G	C2'-C1'	-19.89	1.31	1.53
1	Az	712	ASP	C-N	19.88	1.79	1.34
36	B2	640	A	C2'-C1'	-19.75	1.31	1.53
85	A5	736	C	O4'-C1'	19.71	1.67	1.41
36	B2	183	G	C2'-C1'	-19.69	1.31	1.53
85	A5	5032	C	C2'-C1'	-19.68	1.31	1.53
85	A5	4291	G	C2'-C1'	-19.61	1.31	1.53
85	A5	2390	G	C2'-C1'	-19.58	1.31	1.53
36	B2	1312	G	C2'-C1'	-19.58	1.31	1.53
85	A5	1680	G	C2'-C1'	-19.57	1.31	1.53
36	B2	622	C	C2'-C1'	-19.52	1.31	1.53
53	CT	150	LEU	C-N	19.52	1.78	1.34
36	B2	1411	G	C2'-C1'	-19.51	1.31	1.53
36	B2	1743	G	C2'-C1'	-19.47	1.31	1.53
85	A5	1291	G	C2'-C1'	-19.46	1.31	1.53
36	B2	182	C	O4'-C1'	19.42	1.66	1.41
38	Cz	28	PHE	CA-CB	19.41	1.96	1.53
85	A5	174	C	C2'-C1'	-19.31	1.32	1.53
36	B2	960	U	C2'-C1'	-19.29	1.32	1.53
85	A5	1276	C	O4'-C1'	19.29	1.66	1.41
36	B2	1861	G	C2'-C1'	-19.25	1.32	1.53
36	B2	694	G	C2'-C1'	-19.10	1.32	1.53
85	A5	292	G	C2'-C1'	-19.08	1.32	1.53
85	A5	3967	G	C2'-C1'	-19.01	1.32	1.53
85	A5	1245	C	C2'-C1'	-18.92	1.32	1.53
36	B2	1163	C	C2'-C1'	-18.82	1.32	1.53
85	A5	2427	G	O4'-C1'	18.81	1.66	1.41
85	A5	4152	G	C2'-C1'	-18.77	1.32	1.53
85	A5	1629	G	C2'-C1'	-18.76	1.32	1.53
85	A5	958	G	C2'-C1'	-18.75	1.32	1.53
36	B2	1500	G	C2'-C1'	-18.71	1.32	1.53
85	A5	674	G	C2'-C1'	-18.69	1.32	1.53
85	A5	448	G	C2'-C1'	-18.65	1.32	1.53
87	A8	112	G	C2'-C1'	-18.65	1.32	1.53
36	B2	1231	C	C2'-C1'	-18.62	1.32	1.53
85	A5	2461	G	C2'-C1'	-18.62	1.32	1.53
85	A5	1367	C	C2'-C1'	18.58	1.73	1.53
85	A5	1593	A	C2'-C1'	-18.53	1.32	1.53
85	A5	298	G	C2'-C1'	-18.51	1.32	1.53
85	A5	4943	A	C2'-C1'	-18.51	1.32	1.53
36	B2	1198	G	C2'-C1'	-18.51	1.32	1.53
85	A5	370	U	C2'-C1'	-18.49	1.33	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Ae	21	LYS	C-N	18.42	1.76	1.34
85	A5	368	C	C2'-C1'	-18.37	1.33	1.53
85	A5	2097	U	O4'-C1'	18.36	1.65	1.41
40	CK	2	PRO	N-CA	-18.32	1.16	1.47
36	B2	528	A	C2'-C1'	-18.31	1.33	1.53
86	A7	101	A	C2'-C1'	-18.26	1.33	1.53
85	A5	2063	G	C2'-C1'	-18.23	1.33	1.53
86	A7	103	A	C2'-C1'	-18.19	1.33	1.53
85	A5	2336	G	C2'-C1'	-18.18	1.33	1.53
85	A5	1280	C	C2'-C1'	-18.05	1.33	1.53
85	A5	1532	G	C2'-C1'	-18.01	1.33	1.53
36	B2	1780	G	C2'-C1'	-18.01	1.33	1.53
85	A5	1855	G	C2'-C1'	-18.01	1.33	1.53
85	A5	2677	G	C2'-C1'	-17.96	1.33	1.53
85	A5	4612	C	C2'-C1'	-17.95	1.33	1.53
85	A5	973	G	C2'-C1'	-17.95	1.33	1.53
85	A5	2109	G	C2'-C1'	-17.95	1.33	1.53
36	B2	184	G	C2'-C1'	-17.94	1.33	1.53
85	A5	1899	G	C2'-C1'	-17.94	1.33	1.53
36	B2	1226	G	C2'-C1'	-17.92	1.33	1.53
85	A5	181	C	C2'-C1'	-17.92	1.33	1.53
85	A5	364	G	C2'-C1'	-17.92	1.33	1.53
36	B2	1230	C	C2'-C1'	-17.87	1.33	1.53
85	A5	126	C	C2'-C1'	-17.86	1.33	1.53
85	A5	1769	G	C2'-C1'	-17.86	1.33	1.53
66	Cd	108	TYR	C-N	17.86	1.75	1.34
87	A8	88	A	C2'-C1'	-17.85	1.33	1.53
85	A5	2120	G	O4'-C1'	17.80	1.64	1.41
85	A5	2439	G	C2'-C1'	-17.78	1.33	1.53
36	B2	863	U	C2'-C1'	-17.73	1.33	1.53
85	A5	2547	G	C2'-C1'	-17.71	1.33	1.53
85	A5	1237	C	C2'-C1'	-17.69	1.33	1.53
36	B2	453	C	C2'-C1'	-17.65	1.33	1.53
85	A5	2427	G	C2'-C1'	-17.65	1.33	1.53
85	A5	1285	U	C2'-C1'	-17.62	1.33	1.53
85	A5	1271	G	C2'-C1'	-17.62	1.33	1.53
36	B2	41	G	C2'-C1'	-17.61	1.33	1.53
85	A5	4672	A	C2'-C1'	-17.61	1.33	1.53
85	A5	499	G	C2'-C1'	-17.60	1.33	1.53
85	A5	1457	G	C2'-C1'	-17.59	1.33	1.53
87	A8	153	C	C2'-C1'	-17.58	1.34	1.53
82	CG	103	ARG	C-N	17.57	1.67	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1912	G	C2'-C1'	-17.57	1.34	1.53
85	A5	3749	C	O4'-C1'	17.50	1.64	1.41
85	A5	2007	G	O4'-C1'	-17.49	1.19	1.41
85	A5	971	U	C2'-C1'	17.45	1.72	1.53
85	A5	4906	C	O4'-C1'	17.44	1.64	1.41
85	A5	1832	C	O4'-C1'	17.44	1.64	1.41
36	B2	1283	C	O4'-C1'	17.43	1.64	1.41
36	B2	616	A	C2'-C1'	-17.43	1.34	1.53
36	B2	1203	G	C2'-C1'	-17.40	1.34	1.53
85	A5	726	G	C2'-C1'	-17.39	1.34	1.53
85	A5	923	C	O4'-C1'	17.39	1.64	1.41
36	B2	399	C	O4'-C1'	17.38	1.64	1.41
85	A5	504	G	C2'-C1'	-17.38	1.34	1.53
36	B2	1014	G	C2'-C1'	-17.36	1.34	1.53
85	A5	4612	C	O4'-C1'	17.31	1.64	1.41
85	A5	2601	A	O4'-C1'	17.30	1.64	1.41
85	A5	1931	C	O4'-C1'	17.30	1.64	1.41
85	A5	4124	G	C2'-C1'	-17.30	1.34	1.53
85	A5	2670	C	O4'-C1'	17.29	1.64	1.41
86	A7	102	U	C2'-C1'	-17.21	1.34	1.53
36	B2	1218	C	C2'-C1'	-17.19	1.34	1.53
85	A5	1928	C	O4'-C1'	17.18	1.64	1.41
85	A5	182	G	C2'-C1'	-17.16	1.34	1.53
85	A5	4696	C	O4'-C1'	17.16	1.64	1.41
36	B2	1476	A	O4'-C1'	-17.14	1.19	1.41
85	A5	922	C	C2'-C1'	-17.12	1.34	1.53
87	A8	115	G	C2'-C1'	-17.12	1.34	1.53
36	B2	988	C	O4'-C1'	17.11	1.63	1.41
85	A5	2851	G	C2'-C1'	-17.10	1.34	1.53
26	AJ	118	GLY	C-N	17.07	1.73	1.34
85	A5	1196	G	C2'-C1'	-17.07	1.34	1.53
85	A5	939	G	C2'-C1'	-17.05	1.34	1.53
49	CQ	6	ARG	CD-NE	17.04	1.75	1.46
85	A5	2670	C	C2'-C1'	-17.03	1.34	1.53
85	A5	1077	C	C2'-C1'	-17.01	1.34	1.53
85	A5	3706	C	O4'-C1'	16.98	1.63	1.41
85	A5	1359	G	O4'-C1'	16.98	1.63	1.41
85	A5	2035	C	O4'-C1'	16.97	1.63	1.41
85	A5	207	G	C2'-C1'	-16.94	1.34	1.53
85	A5	2395	A	O4'-C1'	16.93	1.63	1.41
36	B2	1048	G	C2'-C1'	-16.92	1.34	1.53
85	A5	5015	G	O4'-C1'	16.92	1.63	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	243	A	C2'-C1'	-16.91	1.34	1.53
85	A5	4659	G	C2'-C1'	-16.90	1.34	1.53
85	A5	4238	G	C2'-C1'	-16.89	1.34	1.53
85	A5	1840	G	C2'-C1'	-16.88	1.34	1.53
85	A5	1880	G	C2'-C1'	-16.86	1.34	1.53
86	A7	37	G	O4'-C1'	16.86	1.63	1.41
86	A7	57	C	C2'-C1'	-16.85	1.34	1.53
36	B2	1352	G	C2'-C1'	-16.85	1.34	1.53
85	A5	2101	C	O4'-C1'	16.84	1.63	1.41
85	A5	470	A	C2'-C1'	-16.82	1.34	1.53
85	A5	1641	G	O4'-C1'	16.81	1.63	1.41
85	A5	1368	A	C2'-C1'	-16.78	1.34	1.53
85	A5	2488	C	O4'-C1'	16.78	1.63	1.41
36	B2	1237	C	O4'-C1'	16.78	1.63	1.41
85	A5	2771	G	C2'-C1'	-16.77	1.34	1.53
85	A5	1806	G	C2'-C1'	-16.76	1.34	1.53
85	A5	4196	G	O4'-C1'	16.75	1.63	1.41
85	A5	322	C	O4'-C1'	16.74	1.63	1.41
36	B2	842	C	C2'-C1'	-16.74	1.34	1.53
36	B2	1471	C	O4'-C1'	16.74	1.63	1.41
85	A5	299	C	C2'-C1'	-16.73	1.34	1.53
36	B2	1262	C	C2'-C1'	-16.72	1.34	1.53
85	A5	4347	G	C2'-C1'	-16.72	1.34	1.53
85	A5	3815	G	C2'-C1'	-16.72	1.34	1.53
36	B2	1737	G	C2'-C1'	-16.70	1.34	1.53
50	CR	143	HIS	CD2-NE2	-16.70	1.01	1.38
85	A5	303	C	O4'-C1'	16.67	1.63	1.41
26	AJ	85	GLY	C-N	-16.65	0.95	1.34
85	A5	1208	G	C2'-C1'	-16.65	1.35	1.53
36	B2	636	C	O4'-C1'	16.65	1.63	1.41
85	A5	464	G	C2'-C1'	-16.62	1.35	1.53
85	A5	1483	C	O4'-C1'	16.60	1.63	1.41
36	B2	933	G	C2'-C1'	-16.59	1.35	1.53
85	A5	1568	C	O4'-C1'	16.58	1.63	1.41
85	A5	3744	G	C2'-C1'	-16.57	1.35	1.53
36	B2	614	C	C2'-C1'	-16.55	1.35	1.53
85	A5	4774	C	C2'-C1'	-16.55	1.35	1.53
85	A5	2018	C	O4'-C1'	16.51	1.63	1.41
36	B2	94	G	C2'-C1'	-16.50	1.35	1.53
85	A5	2653	C	C2'-C1'	-16.50	1.35	1.53
85	A5	4896	G	C2'-C1'	-16.49	1.35	1.53
85	A5	663	G	C2'-C1'	-16.48	1.35	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3893	C	O4'-C1'	16.47	1.63	1.41
85	A5	5050	C	C2'-C1'	-16.46	1.35	1.53
36	B2	848	U	C2'-C1'	-16.46	1.35	1.53
85	A5	2380	G	C2'-C1'	-16.43	1.35	1.53
36	B2	614	C	O4'-C1'	16.43	1.63	1.41
36	B2	445	A	C2'-C1'	-16.41	1.35	1.53
85	A5	1775	A	O4'-C1'	16.41	1.62	1.41
85	A5	449	C	C2'-C1'	-16.41	1.35	1.53
85	A5	2022	C	O4'-C1'	16.40	1.62	1.41
85	A5	2293	U	C2'-C1'	-16.39	1.35	1.53
87	A8	56	G	C2'-C1'	-16.39	1.35	1.53
36	B2	1329	U	C2'-C1'	-16.39	1.35	1.53
85	A5	167	C	C2'-C1'	-16.36	1.35	1.53
85	A5	2463	G	C2'-C1'	-16.35	1.35	1.53
85	A5	2289	C	O4'-C1'	16.34	1.62	1.41
85	A5	1783	C	O4'-C1'	16.34	1.62	1.41
36	B2	1738	C	O4'-C1'	16.29	1.62	1.41
85	A5	1109	C	O4'-C1'	16.29	1.62	1.41
36	B2	1576	G	C2'-C1'	-16.29	1.35	1.53
85	A5	2461	G	O4'-C1'	16.28	1.62	1.41
36	B2	621	C	O4'-C1'	16.28	1.62	1.41
36	B2	1312	G	O4'-C1'	16.27	1.62	1.41
85	A5	3663	A	C2'-C1'	-16.26	1.35	1.53
12	AR	1	MET	N-CA	16.26	1.78	1.46
85	A5	384	A	O4'-C1'	16.25	1.62	1.41
85	A5	2751	G	C2'-C1'	-16.24	1.35	1.53
85	A5	4114	C	C2'-C1'	-16.23	1.35	1.53
36	B2	92	A	C2'-C1'	-16.22	1.35	1.53
86	A7	93	G	C2'-C1'	-16.22	1.35	1.53
36	B2	400	C	O4'-C1'	16.20	1.62	1.41
36	B2	1568	C	C2'-C1'	-16.20	1.35	1.53
36	B2	1671	G	C2'-C1'	-16.20	1.35	1.53
85	A5	1681	G	C2'-C1'	-16.19	1.35	1.53
85	A5	2613	C	C2'-C1'	-16.19	1.35	1.53
85	A5	1486	C	C2'-C1'	-16.18	1.35	1.53
87	A8	100	U	C2'-C1'	-16.17	1.35	1.53
85	A5	308	G	O4'-C1'	-16.16	1.20	1.41
36	B2	699	C	O4'-C1'	16.14	1.62	1.41
85	A5	515	C	O4'-C1'	16.14	1.62	1.41
36	B2	1047	C	O4'-C1'	16.13	1.62	1.41
85	A5	1163	G	C2'-C1'	-16.11	1.35	1.53
85	A5	1519	C	O4'-C1'	16.10	1.62	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	972	C	O4'-C1'	16.10	1.62	1.41
85	A5	4092	G	C2'-C1'	-16.09	1.35	1.53
85	A5	174	C	O4'-C1'	16.09	1.62	1.41
85	A5	4213	A	C2'-C1'	-16.09	1.35	1.53
36	B2	286	U	O4'-C1'	16.08	1.62	1.41
37	BC	70	C	O4'-C1'	16.06	1.62	1.41
86	A7	26	C	C2'-C1'	-16.06	1.35	1.53
36	B2	792	C	C2'-C1'	-16.05	1.35	1.53
36	B2	456	C	C2'-C1'	-16.03	1.35	1.53
85	A5	4283	G	C2'-C1'	-16.00	1.35	1.53
85	A5	3771	C	C2'-C1'	-15.97	1.35	1.53
36	B2	143	U	C2'-C1'	-15.93	1.35	1.53
85	A5	3921	U	C2'-C1'	-15.93	1.35	1.53
85	A5	4110	C	O4'-C1'	15.91	1.62	1.41
36	B2	1853	C	C2'-C1'	-15.90	1.35	1.53
85	A5	1600	A	C2'-C1'	-15.89	1.35	1.53
36	B2	834	C	C2'-C1'	-15.89	1.35	1.53
36	B2	1016	U	O4'-C1'	15.89	1.62	1.41
86	A7	68	C	O4'-C1'	15.89	1.62	1.41
85	A5	4345	C	C2'-C1'	-15.89	1.35	1.53
85	A5	5050	C	O4'-C1'	15.89	1.62	1.41
85	A5	2902	G	O4'-C1'	15.88	1.62	1.41
36	B2	1665	G	C2'-C1'	-15.87	1.35	1.53
85	A5	3961	G	C2'-C1'	-15.87	1.35	1.53
36	B2	1752	C	O4'-C1'	15.84	1.62	1.41
85	A5	2660	A	C2'-C1'	-15.84	1.35	1.53
85	A5	2761	U	O4'-C1'	15.84	1.62	1.41
36	B2	591	U	C2'-C1'	-15.83	1.35	1.53
85	A5	1648	C	O4'-C1'	15.80	1.62	1.41
85	A5	4120	U	O4'-C1'	15.80	1.62	1.41
85	A5	515	C	C2'-C1'	-15.78	1.35	1.53
85	A5	1534	A	O4'-C1'	15.77	1.62	1.41
36	B2	456	C	O4'-C1'	15.77	1.62	1.41
61	Ch	114	TYR	C-N	15.77	1.64	1.34
85	A5	706	C	C2'-C1'	-15.76	1.36	1.53
36	B2	1688	C	C2'-C1'	-15.74	1.36	1.53
85	A5	3594	C	O4'-C1'	15.74	1.62	1.41
36	B2	796	G	C2'-C1'	-15.74	1.36	1.53
36	B2	1231	C	O4'-C1'	15.74	1.62	1.41
85	A5	1657	G	C2'-C1'	-15.72	1.36	1.53
36	B2	295	C	O4'-C1'	15.72	1.62	1.41
85	A5	2770	C	O4'-C1'	15.71	1.62	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1309	C	O4'-C1'	15.70	1.62	1.41
85	A5	161	G	C2'-C1'	-15.70	1.36	1.53
85	A5	1308	C	O4'-C1'	15.70	1.62	1.41
85	A5	1902	G	C2'-C1'	-15.69	1.36	1.53
36	B2	798	G	O4'-C1'	15.68	1.62	1.41
85	A5	940	C	O4'-C1'	15.68	1.62	1.41
85	A5	3945	A	C2'-C1'	15.66	1.70	1.53
85	A5	264	C	O4'-C1'	15.65	1.62	1.41
85	A5	2654	C	O4'-C1'	15.64	1.61	1.41
62	Cb	78	PRO	N-CD	15.64	1.69	1.47
85	A5	1486	C	O4'-C1'	15.63	1.61	1.41
85	A5	996	G	C2'-C1'	-15.63	1.36	1.53
85	A5	4992	G	C2'-C1'	-15.63	1.36	1.53
85	A5	1358	G	C2'-C1'	-15.63	1.36	1.53
36	B2	1741	U	C2'-C1'	-15.61	1.36	1.53
36	B2	1693	G	C2'-C1'	-15.61	1.36	1.53
85	A5	4318	C	O4'-C1'	15.61	1.61	1.41
85	A5	19	G	C2'-C1'	-15.60	1.36	1.53
85	A5	1410	U	C2'-C1'	15.59	1.70	1.53
85	A5	1267	C	O4'-C1'	15.59	1.61	1.41
85	A5	3799	A	C2'-C1'	-15.58	1.36	1.53
85	A5	220	C	C2'-C1'	-15.58	1.36	1.53
85	A5	744	G	C2'-C1'	-15.58	1.36	1.53
85	A5	4176	C	C2'-C1'	-15.57	1.36	1.53
36	B2	551	U	C2'-C1'	-15.57	1.36	1.53
85	A5	383	A	C2'-C1'	-15.56	1.36	1.53
87	A8	88	A	O4'-C1'	15.55	1.61	1.41
36	B2	604	A	O4'-C1'	15.54	1.61	1.41
36	B2	881	G	C2'-C1'	-15.54	1.36	1.53
36	B2	228	C	O4'-C1'	15.52	1.61	1.41
36	B2	1436	C	O4'-C1'	15.52	1.61	1.41
85	A5	3771	C	O4'-C1'	15.52	1.61	1.41
85	A5	142	G	C2'-C1'	-15.51	1.36	1.53
36	B2	179	C	C2'-C1'	-15.51	1.36	1.53
36	B2	1772	C	O4'-C1'	15.50	1.61	1.41
36	B2	913	A	O4'-C1'	15.48	1.61	1.41
36	B2	1456	G	C2'-C1'	-15.48	1.36	1.53
85	A5	437	G	C2'-C1'	-15.47	1.36	1.53
85	A5	189	G	C2'-C1'	-15.46	1.36	1.53
85	A5	4401	G	C2'-C1'	-15.46	1.36	1.53
85	A5	4342	C	C2'-C1'	-15.45	1.36	1.53
36	B2	1016	U	C2'-C1'	-15.44	1.36	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4335	C	O4'-C1'	15.44	1.61	1.41
85	A5	4871	C	O4'-C1'	-15.43	1.21	1.41
36	B2	62	G	C2'-C1'	-15.43	1.36	1.53
36	B2	179	C	O4'-C1'	15.43	1.61	1.41
85	A5	4417	C	O4'-C1'	15.41	1.61	1.41
85	A5	929	A	O4'-C1'	15.41	1.61	1.41
36	B2	734	C	O4'-C1'	15.40	1.61	1.41
12	AR	1	MET	CA-CB	15.40	1.87	1.53
85	A5	643	C	O4'-C1'	15.39	1.61	1.41
63	CB	297	LYS	C-N	15.39	1.69	1.34
1	Az	267	ASP	N-CA	15.39	1.77	1.46
85	A5	1313	C	O4'-C1'	15.39	1.61	1.41
36	B2	745	C	O4'-C1'	15.38	1.61	1.41
85	A5	210	C	O4'-C1'	15.38	1.61	1.41
85	A5	2392	C	O4'-C1'	15.38	1.61	1.41
85	A5	1419	G	C2'-C1'	-15.37	1.36	1.53
85	A5	1647	U	C2'-C1'	-15.36	1.36	1.53
36	B2	1292	C	O4'-C1'	15.35	1.61	1.41
36	B2	187	G	C2'-C1'	-15.35	1.36	1.53
85	A5	4259	C	C2'-C1'	-15.35	1.36	1.53
85	A5	4709	U	C2'-C1'	-15.35	1.36	1.53
36	B2	1397	U	O4'-C1'	15.34	1.61	1.41
85	A5	1551	C	C2'-C1'	-15.34	1.36	1.53
85	A5	2270	G	C2'-C1'	-15.34	1.36	1.53
86	A7	25	G	C2'-C1'	-15.34	1.36	1.53
85	A5	3897	G	C2'-C1'	-15.33	1.36	1.53
37	BC	69	G	C2'-C1'	-15.33	1.36	1.53
85	A5	499	G	O4'-C1'	15.33	1.61	1.41
36	B2	225	G	C2'-C1'	-15.32	1.36	1.53
85	A5	919	C	O4'-C1'	15.32	1.61	1.41
85	A5	1516	G	C2'-C1'	-15.32	1.36	1.53
85	A5	3708	C	O4'-C1'	15.32	1.61	1.41
85	A5	2825	A	O4'-C1'	15.30	1.61	1.41
85	A5	106	A	C2'-C1'	-15.29	1.36	1.53
85	A5	459	C	O4'-C1'	15.29	1.61	1.41
86	A7	36	C	C2'-C1'	-15.28	1.36	1.53
85	A5	1929	A	O4'-C1'	15.28	1.61	1.41
85	A5	2814	C	O4'-C1'	15.27	1.61	1.41
85	A5	3861	A	O4'-C1'	15.25	1.61	1.41
36	B2	990	A	C2'-C1'	-15.22	1.36	1.53
36	B2	4	C	C2'-C1'	-15.21	1.36	1.53
36	B2	667	U	C2'-C1'	-15.21	1.36	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1175	G	C2'-C1'	-15.21	1.36	1.53
85	A5	1879	C	C2'-C1'	-15.20	1.36	1.53
85	A5	673	C	C2'-C1'	-15.20	1.36	1.53
85	A5	2550	G	C2'-C1'	-15.20	1.36	1.53
36	B2	1664	A	C2'-C1'	-15.19	1.36	1.53
85	A5	1662	C	O4'-C1'	15.19	1.61	1.41
85	A5	4710	C	O4'-C1'	15.18	1.61	1.41
36	B2	1241	A	O4'-C1'	15.18	1.61	1.41
85	A5	4658	G	C2'-C1'	-15.16	1.36	1.53
85	A5	1689	G	C2'-C1'	-15.15	1.36	1.53
36	B2	1620	A	C2'-C1'	-15.15	1.36	1.53
36	B2	217	A	O4'-C1'	15.15	1.61	1.41
36	B2	1022	U	C2'-C1'	-15.15	1.36	1.53
85	A5	4064	C	O4'-C1'	15.14	1.61	1.41
36	B2	738	C	C2'-C1'	-15.13	1.36	1.53
38	Cz	210	MET	C-N	15.13	1.60	1.33
38	Cz	210	MET	N-CA	15.13	1.76	1.46
85	A5	326	C	C2'-C1'	-15.12	1.36	1.53
85	A5	3834	C	C2'-C1'	-15.12	1.36	1.53
85	A5	678	C	O4'-C1'	15.11	1.61	1.41
85	A5	1974	U	C2'-C1'	-15.11	1.36	1.53
85	A5	1913	C	O4'-C1'	15.10	1.61	1.41
85	A5	2351	C	O4'-C1'	15.09	1.61	1.41
85	A5	4050	A	O4'-C1'	15.09	1.61	1.41
85	A5	668	C	C2'-C1'	-15.06	1.36	1.53
85	A5	2563	C	O4'-C1'	15.06	1.61	1.41
85	A5	1593	A	O4'-C1'	15.05	1.61	1.41
85	A5	654	C	O4'-C1'	15.05	1.61	1.41
40	CK	2	PRO	CA-C	15.05	1.82	1.52
85	A5	475	G	C2'-C1'	-15.04	1.36	1.53
85	A5	11	G	C2'-C1'	-15.04	1.36	1.53
36	B2	1529	C	O4'-C1'	15.03	1.61	1.41
36	B2	418	A	C2'-C1'	-15.01	1.36	1.53
85	A5	2084	C	O4'-C1'	15.01	1.61	1.41
85	A5	4259	C	O4'-C1'	15.00	1.61	1.41
36	B2	164	A	C2'-C1'	-14.99	1.36	1.53
85	A5	1722	C	O4'-C1'	14.99	1.61	1.41
36	B2	208	G	C2'-C1'	-14.99	1.36	1.53
85	A5	1070	G	C2'-C1'	-14.98	1.36	1.53
85	A5	1974	U	O4'-C1'	14.98	1.61	1.41
85	A5	4402	C	O4'-C1'	14.97	1.61	1.41
85	A5	390	C	C2'-C1'	-14.96	1.36	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1615	U	C2'-C1'	-14.94	1.36	1.53
36	B2	1311	C	O4'-C1'	14.94	1.61	1.41
85	A5	3607	U	C2'-C1'	-14.93	1.36	1.53
85	A5	4952	G	C2'-C1'	-14.92	1.36	1.53
85	A5	1104	C	C2'-C1'	-14.91	1.36	1.53
85	A5	2665	U	C2'-C1'	-14.91	1.36	1.53
36	B2	228	C	C2'-C1'	-14.91	1.36	1.53
85	A5	5018	C	O4'-C1'	14.89	1.61	1.41
36	B2	189	U	C2'-C1'	-14.89	1.36	1.53
85	A5	3683	C	O4'-C1'	14.88	1.60	1.41
85	A5	4054	C	O4'-C1'	14.85	1.60	1.41
85	A5	4608	G	C2'-C1'	-14.84	1.37	1.53
85	A5	1846	G	O4'-C1'	14.83	1.60	1.41
36	B2	1708	C	O4'-C1'	14.82	1.60	1.41
85	A5	2351	C	C2'-C1'	-14.81	1.37	1.53
85	A5	279	A	O4'-C1'	14.81	1.60	1.41
85	A5	3931	C	C2'-C1'	-14.81	1.37	1.53
85	A5	1496	G	C2'-C1'	-14.81	1.37	1.53
85	A5	2110	C	O4'-C1'	14.81	1.60	1.41
85	A5	2458	C	O4'-C1'	14.81	1.60	1.41
85	A5	4141	G	C2'-C1'	-14.80	1.37	1.53
85	A5	2569	G	C2'-C1'	-14.80	1.37	1.53
36	B2	842	C	O4'-C1'	14.80	1.60	1.41
36	B2	1417	C	O4'-C1'	14.78	1.60	1.41
85	A5	126	C	O4'-C1'	14.78	1.60	1.41
85	A5	4211	C	O4'-C1'	14.77	1.60	1.41
85	A5	3807	A	C2'-C1'	-14.76	1.37	1.53
85	A5	4130	C	O4'-C1'	14.76	1.60	1.41
36	B2	1410	C	O4'-C1'	14.75	1.60	1.41
85	A5	4171	C	C2'-C1'	-14.75	1.37	1.53
85	A5	2366	A	O4'-C1'	14.75	1.60	1.41
85	A5	197	A	C2'-C1'	-14.74	1.37	1.53
36	B2	548	C	O4'-C1'	14.73	1.60	1.41
85	A5	4505	C	O4'-C1'	14.73	1.60	1.41
85	A5	4558	U	C2'-C1'	-14.72	1.37	1.53
85	A5	4890	G	C2'-C1'	-14.72	1.37	1.53
85	A5	4271	A	C2'-C1'	-14.72	1.37	1.53
36	B2	1834	A	C2'-C1'	-14.71	1.37	1.53
85	A5	1931	C	C2'-C1'	-14.71	1.37	1.53
85	A5	4660	G	C2'-C1'	-14.71	1.37	1.53
36	B2	1661	A	C2'-C1'	-14.68	1.37	1.53
85	A5	2387	G	C2'-C1'	-14.68	1.37	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2791	C	C2'-C1'	-14.68	1.37	1.53
85	A5	4064	C	C2'-C1'	-14.68	1.37	1.53
85	A5	4771	C	O4'-C1'	14.68	1.60	1.41
36	B2	1293	A	O4'-C1'	14.67	1.60	1.41
85	A5	735	G	O4'-C1'	14.66	1.60	1.41
36	B2	974	C	O4'-C1'	14.66	1.60	1.41
36	B2	1146	C	C2'-C1'	-14.65	1.37	1.53
85	A5	4596	C	O4'-C1'	14.65	1.60	1.41
85	A5	1948	G	C2'-C1'	-14.65	1.37	1.53
85	A5	4390	A	C2'-C1'	-14.65	1.37	1.53
36	B2	1094	C	O4'-C1'	14.64	1.60	1.41
85	A5	4639	G	C2'-C1'	-14.63	1.37	1.53
85	A5	4729	A	O4'-C1'	14.63	1.60	1.41
85	A5	1650	A	C2'-C1'	-14.63	1.37	1.53
85	A5	2254	G	C2'-C1'	-14.62	1.37	1.53
85	A5	2386	U	C2'-C1'	-14.63	1.37	1.53
85	A5	1455	G	O4'-C1'	14.62	1.60	1.41
36	B2	1498	A	C2'-C1'	-14.60	1.37	1.53
85	A5	1546	C	C2'-C1'	-14.60	1.37	1.53
85	A5	7	C	O4'-C1'	14.60	1.60	1.41
85	A5	4593	C	C2'-C1'	-14.60	1.37	1.53
85	A5	3867	A	C2'-C1'	-14.59	1.37	1.53
36	B2	1234	C	O4'-C1'	14.58	1.60	1.41
85	A5	3594	C	C2'-C1'	-14.56	1.37	1.53
36	B2	1220	A	C2'-C1'	-14.56	1.37	1.53
85	A5	4518	A	O4'-C1'	14.55	1.60	1.41
36	B2	81	U	C2'-C1'	-14.54	1.37	1.53
85	A5	1541	C	C2'-C1'	-14.53	1.37	1.53
27	AE	263	GLY	C-O	-14.52	1.00	1.23
36	B2	1592	C	O4'-C1'	14.52	1.60	1.41
33	AI	207	GLY	C-O	-14.52	1.00	1.23
19	AZ	115	GLY	C-O	-14.51	1.00	1.23
85	A5	5032	C	O4'-C1'	14.51	1.60	1.41
26	AJ	188	GLY	C-O	-14.50	1.00	1.23
86	A7	74	A	C2'-C1'	14.50	1.69	1.53
18	AY	128	GLY	C-O	-14.49	1.00	1.23
82	CG	266	GLY	C-O	-14.49	1.00	1.23
85	A5	1914	C	O4'-C1'	14.49	1.60	1.41
15	AB	233	GLY	C-O	-14.48	1.00	1.23
85	A5	2319	C	O4'-C1'	14.48	1.60	1.41
85	A5	139	G	C2'-C1'	-14.47	1.37	1.53
85	A5	1183	C	O4'-C1'	14.47	1.60	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4120	U	C2'-C1'	-14.46	1.37	1.53
36	B2	732	U	C2'-C1'	-14.46	1.37	1.53
87	A8	6	C	O4'-C1'	14.46	1.60	1.41
36	B2	877	C	O4'-C1'	14.45	1.60	1.41
64	CF	23	ARG	C-N	-14.44	1.00	1.34
85	A5	714	G	C2'-C1'	-14.44	1.37	1.53
85	A5	2571	C	O4'-C1'	14.44	1.60	1.41
3	AU	93	SER	C-N	14.44	1.61	1.34
36	B2	1267	C	C2'-C1'	-14.44	1.37	1.53
36	B2	918	U	C2'-C1'	-14.43	1.37	1.53
87	A8	94	G	O4'-C1'	14.43	1.60	1.41
36	B2	808	A	C2'-C1'	-14.43	1.37	1.53
85	A5	2749	C	O4'-C1'	14.43	1.60	1.41
87	A8	152	U	C2'-C1'	-14.42	1.37	1.53
33	AI	43	ILE	C-N	14.42	1.67	1.34
36	B2	1704	C	O4'-C1'	14.39	1.60	1.41
85	A5	1371	A	C2'-C1'	14.39	1.69	1.53
85	A5	1519	C	C2'-C1'	-14.39	1.37	1.53
36	B2	441	C	O4'-C1'	14.38	1.60	1.41
36	B2	849	A	C2'-C1'	-14.38	1.37	1.53
81	CE	36	LYS	C-N	14.37	1.61	1.34
85	A5	4201	G	C2'-C1'	-14.37	1.37	1.53
85	A5	4114	C	O4'-C1'	14.37	1.60	1.41
85	A5	4584	A	C2'-C1'	-14.35	1.37	1.53
85	A5	4887	C	O4'-C1'	14.35	1.60	1.41
87	A8	11	C	O4'-C1'	14.35	1.60	1.41
85	A5	940	C	C2'-C1'	-14.34	1.37	1.53
85	A5	1382	G	C2'-C1'	-14.34	1.37	1.53
87	A8	46	G	C2'-C1'	-14.33	1.37	1.53
85	A5	1690	C	O4'-C1'	14.33	1.60	1.41
85	A5	2022	C	C2'-C1'	-14.33	1.37	1.53
85	A5	27	C	O4'-C1'	14.32	1.60	1.41
85	A5	8	U	C2'-C1'	-14.31	1.37	1.53
85	A5	1293	G	C2'-C1'	-14.31	1.37	1.53
36	B2	1018	U	C2'-C1'	-14.31	1.37	1.53
36	B2	1233	G	C2'-C1'	-14.30	1.37	1.53
85	A5	2335	C	O4'-C1'	14.30	1.60	1.41
85	A5	4580	U	C2'-C1'	-14.29	1.37	1.53
85	A5	2428	A	C2'-C1'	-14.29	1.37	1.53
36	B2	218	U	O4'-C1'	14.28	1.60	1.41
36	B2	1420	G	C2'-C1'	-14.28	1.37	1.53
85	A5	4080	C	O4'-C1'	14.28	1.60	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1463	C	C2'-C1'	-14.28	1.37	1.53
36	B2	1761	U	C2'-C1'	-14.28	1.37	1.53
85	A5	5057	C	O4'-C1'	14.28	1.60	1.41
85	A5	1867	A	C2'-C1'	-14.27	1.37	1.53
85	A5	2689	C	O4'-C1'	14.26	1.60	1.41
85	A5	948	C	C2'-C1'	-14.26	1.37	1.53
85	A5	2395	A	C2'-C1'	-14.26	1.37	1.53
85	A5	4124	G	O4'-C1'	14.25	1.60	1.41
85	A5	3949	A	C2'-C1'	-14.23	1.37	1.53
85	A5	3863	C	C2'-C1'	-14.23	1.37	1.53
85	A5	3909	C	O4'-C1'	14.23	1.60	1.41
36	B2	441	C	C2'-C1'	-14.22	1.37	1.53
36	B2	1380	C	O4'-C1'	14.22	1.60	1.41
36	B2	1616	U	C2'-C1'	-14.21	1.37	1.53
86	A7	73	U	C2'-C1'	-14.21	1.37	1.53
85	A5	1677	U	O4'-C1'	14.20	1.60	1.41
85	A5	4721	G	C2'-C1'	-14.20	1.37	1.53
86	A7	34	C	O4'-C1'	14.18	1.60	1.41
86	A7	31	G	C2'-C1'	-14.17	1.37	1.53
85	A5	3812	C	C2'-C1'	-14.16	1.37	1.53
85	A5	3826	C	C2'-C1'	-14.15	1.37	1.53
85	A5	4130	C	C2'-C1'	-14.15	1.37	1.53
36	B2	188	C	O4'-C1'	14.14	1.60	1.41
85	A5	2571	C	C2'-C1'	-14.14	1.37	1.53
36	B2	35	C	O4'-C1'	14.13	1.60	1.41
36	B2	144	U	O4'-C1'	14.13	1.60	1.41
85	A5	1328	G	C2'-C1'	-14.12	1.37	1.53
85	A5	1504	G	O4'-C1'	14.13	1.60	1.41
85	A5	1374	G	C2'-C1'	-14.11	1.37	1.53
85	A5	5033	G	C2'-C1'	-14.11	1.37	1.53
36	B2	856	C	O4'-C1'	14.11	1.59	1.41
85	A5	638	G	C2'-C1'	-14.11	1.37	1.53
85	A5	2373	C	O4'-C1'	14.11	1.59	1.41
12	AR	1	MET	CA-C	-14.10	1.16	1.52
36	B2	1743	G	O4'-C1'	14.10	1.59	1.41
85	A5	4088	C	O4'-C1'	14.10	1.59	1.41
85	A5	1554	A	C2'-C1'	-14.09	1.37	1.53
85	A5	273	U	O4'-C1'	14.08	1.59	1.41
85	A5	3678	G	O4'-C1'	14.08	1.59	1.41
85	A5	3815	G	O4'-C1'	14.08	1.59	1.41
36	B2	1144	A	C2'-C1'	-14.07	1.37	1.53
36	B2	1148	A	O4'-C1'	-14.07	1.23	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2652	G	C2'-C1'	-14.07	1.37	1.53
85	A5	4713	G	C2'-C1'	-14.06	1.37	1.53
85	A5	1993	C	C2'-C1'	-14.06	1.37	1.53
85	A5	4963	G	C2'-C1'	-14.06	1.37	1.53
85	A5	4341	C	O4'-C1'	14.06	1.59	1.41
36	B2	448	A	O4'-C1'	-14.05	1.23	1.41
85	A5	1330	A	C2'-C1'	-14.04	1.38	1.53
85	A5	4134	C	C2'-C1'	-14.04	1.38	1.53
36	B2	1218	C	O4'-C1'	14.04	1.59	1.41
85	A5	1972	G	C2'-C1'	-14.04	1.38	1.53
36	B2	1188	A	O4'-C1'	14.03	1.59	1.41
85	A5	4921	C	O4'-C1'	14.03	1.59	1.41
85	A5	395	A	C2'-C1'	-14.02	1.38	1.53
85	A5	2828	U	O4'-C1'	14.02	1.59	1.41
36	B2	1696	C	O4'-C1'	14.02	1.59	1.41
85	A5	79	C	C2'-C1'	-14.01	1.38	1.53
85	A5	2855	G	C2'-C1'	-14.01	1.38	1.53
85	A5	3887	C	C2'-C1'	-14.01	1.38	1.53
85	A5	3870	C	C2'-C1'	-14.01	1.38	1.53
85	A5	2073	C	C2'-C1'	-14.00	1.38	1.53
85	A5	4421	C	C2'-C1'	-14.00	1.38	1.53
36	B2	1007	C	O4'-C1'	13.99	1.59	1.41
36	B2	1592	C	C2'-C1'	-13.99	1.38	1.53
36	B2	1607	A	C2'-C1'	-13.98	1.38	1.53
85	A5	4308	C	O4'-C1'	13.98	1.59	1.41
85	A5	2423	A	O4'-C1'	13.98	1.59	1.41
36	B2	834	C	O4'-C1'	13.98	1.59	1.41
85	A5	4593	C	O4'-C1'	13.98	1.59	1.41
85	A5	4277	G	C2'-C1'	-13.97	1.38	1.53
85	A5	4230	C	C2'-C1'	-13.97	1.38	1.53
85	A5	3752	C	O4'-C1'	13.95	1.59	1.41
36	B2	1799	G	C2'-C1'	-13.95	1.38	1.53
85	A5	1731	C	O4'-C1'	13.95	1.59	1.41
85	A5	176	G	C2'-C1'	-13.95	1.38	1.53
85	A5	4368	G	C2'-C1'	-13.95	1.38	1.53
36	B2	1255	G	C2'-C1'	-13.94	1.38	1.53
85	A5	923	C	C2'-C1'	-13.94	1.38	1.53
36	B2	919	A	C2'-C1'	-13.94	1.38	1.53
85	A5	222	C	C2'-C1'	-13.94	1.38	1.53
85	A5	3812	C	O4'-C1'	13.93	1.59	1.41
36	B2	805	U	O4'-C1'	13.93	1.59	1.41
37	BC	65	C	O4'-C1'	13.93	1.59	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1698	C	O4'-C1'	13.92	1.59	1.41
85	A5	2341	A	C2'-C1'	-13.92	1.38	1.53
85	A5	4726	G	C2'-C1'	-13.92	1.38	1.53
36	B2	1807	C	C2'-C1'	-13.91	1.38	1.53
36	B2	1437	C	O4'-C1'	13.91	1.59	1.41
36	B2	739	C	O4'-C1'	13.90	1.59	1.41
85	A5	194	C	O4'-C1'	13.90	1.59	1.41
36	B2	626	G	O4'-C1'	13.90	1.59	1.41
85	A5	200	U	O4'-C1'	13.90	1.59	1.41
85	A5	720	G	C2'-C1'	-13.90	1.38	1.53
85	A5	4517	A	O4'-C1'	13.89	1.59	1.41
38	Cz	26	ARG	CD-NE	13.89	1.70	1.46
85	A5	146	G	C2'-C1'	-13.89	1.38	1.53
85	A5	1363	C	C2'-C1'	-13.89	1.38	1.53
36	B2	1771	G	C2'-C1'	-13.87	1.38	1.53
85	A5	2488	C	C2'-C1'	-13.86	1.38	1.53
85	A5	1411	C	O4'-C1'	13.83	1.59	1.41
36	B2	615	C	O4'-C1'	13.82	1.59	1.41
85	A5	1847	C	O4'-C1'	13.82	1.59	1.41
85	A5	4656	A	C2'-C1'	-13.82	1.38	1.53
36	B2	1741	U	O4'-C1'	13.81	1.59	1.41
85	A5	1529	G	C2'-C1'	-13.81	1.38	1.53
85	A5	3665	G	C2'-C1'	-13.81	1.38	1.53
85	A5	148	C	O4'-C1'	13.80	1.59	1.41
36	B2	1562	C	C2'-C1'	-13.79	1.38	1.53
85	A5	4634	U	O4'-C1'	13.79	1.59	1.41
36	B2	891	G	C2'-C1'	-13.78	1.38	1.53
74	CC	150	LEU	C-N	-13.78	1.08	1.34
36	B2	1006	C	O4'-C1'	13.78	1.59	1.41
85	A5	4459	U	C2'-C1'	-13.77	1.38	1.53
36	B2	168	C	O4'-C1'	13.77	1.59	1.41
36	B2	633	C	C2'-C1'	-13.77	1.38	1.53
85	A5	60	G	C2'-C1'	-13.77	1.38	1.53
36	B2	951	C	O4'-C1'	13.77	1.59	1.41
85	A5	725	G	C2'-C1'	-13.77	1.38	1.53
85	A5	4738	C	O4'-C1'	13.77	1.59	1.41
85	A5	4929	C	O4'-C1'	13.76	1.59	1.41
36	B2	1512	C	O4'-C1'	13.74	1.59	1.41
85	A5	1937	C	O4'-C1'	13.73	1.59	1.41
36	B2	1267	C	O4'-C1'	13.72	1.59	1.41
36	B2	1415	C	O4'-C1'	13.72	1.59	1.41
85	A5	1723	A	C2'-C1'	-13.71	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
87	A8	149	G	O4'-C1'	-13.71	1.23	1.41
36	B2	1431	G	C2'-C1'	-13.71	1.38	1.53
36	B2	387	C	O4'-C1'	13.70	1.59	1.41
85	A5	1789	C	C2'-C1'	-13.70	1.38	1.53
36	B2	1525	C	O4'-C1'	13.68	1.59	1.41
87	A8	106	G	C2'-C1'	-13.68	1.38	1.53
85	A5	1432	G	O4'-C1'	13.68	1.59	1.41
36	B2	1404	U	O4'-C1'	13.68	1.59	1.41
87	A8	90	C	O4'-C1'	13.68	1.59	1.41
85	A5	2597	G	C2'-C1'	-13.67	1.38	1.53
85	A5	4652	G	C2'-C1'	-13.67	1.38	1.53
36	B2	350	C	O4'-C1'	13.67	1.59	1.41
36	B2	856	C	C2'-C1'	-13.66	1.38	1.53
85	A5	1064	G	C2'-C1'	-13.66	1.38	1.53
85	A5	1795	A	C2'-C1'	-13.66	1.38	1.53
85	A5	2797	C	C2'-C1'	-13.65	1.38	1.53
85	A5	1300	G	C2'-C1'	-13.65	1.38	1.53
36	B2	1423	C	O4'-C1'	13.64	1.59	1.41
85	A5	2077	C	O4'-C1'	13.64	1.59	1.41
36	B2	888	U	C2'-C1'	-13.64	1.38	1.53
85	A5	239	C	O4'-C1'	13.64	1.59	1.41
36	B2	13	C	O4'-C1'	13.63	1.59	1.41
85	A5	180	C	O4'-C1'	13.62	1.59	1.41
85	A5	3963	A	O4'-C1'	13.61	1.59	1.41
36	B2	199	C	C2'-C1'	-13.61	1.38	1.53
36	B2	322	C	O4'-C1'	13.61	1.59	1.41
85	A5	4720	C	O4'-C1'	13.61	1.59	1.41
85	A5	9	C	O4'-C1'	13.60	1.59	1.41
85	A5	2594	C	O4'-C1'	13.60	1.59	1.41
36	B2	1622	U	O4'-C1'	13.59	1.59	1.41
85	A5	486	C	C2'-C1'	-13.59	1.38	1.53
85	A5	1979	A	O4'-C1'	13.59	1.59	1.41
85	A5	3670	C	C2'-C1'	-13.59	1.38	1.53
85	A5	1667	G	O4'-C1'	13.59	1.59	1.41
87	A8	59	A	C2'-C1'	-13.58	1.38	1.53
85	A5	1333	A	C2'-C1'	-13.58	1.38	1.53
85	A5	1677	U	C2'-C1'	-13.58	1.38	1.53
85	A5	2419	C	O4'-C1'	13.57	1.59	1.41
1	Az	267	ASP	CA-C	13.57	1.88	1.52
85	A5	4974	C	C2'-C1'	-13.57	1.38	1.53
36	B2	1408	U	O4'-C1'	13.57	1.59	1.41
85	A5	1181	C	O4'-C1'	13.56	1.59	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1382	G	O4'-C1'	13.56	1.59	1.41
85	A5	4536	C	O4'-C1'	13.56	1.59	1.41
36	B2	1026	C	O4'-C1'	13.55	1.59	1.41
36	B2	1475	G	C2'-C1'	-13.55	1.38	1.53
85	A5	5064	G	C2'-C1'	-13.55	1.38	1.53
36	B2	738	C	O4'-C1'	13.54	1.59	1.41
85	A5	4304	A	C2'-C1'	-13.54	1.38	1.53
36	B2	1245	G	C2'-C1'	-13.54	1.38	1.53
85	A5	4444	C	O4'-C1'	13.53	1.59	1.41
85	A5	1309	C	O4'-C1'	13.52	1.59	1.41
36	B2	1440	C	O4'-C1'	13.51	1.59	1.41
85	A5	983	C	O4'-C1'	13.51	1.59	1.41
85	A5	115	C	O4'-C1'	-13.51	1.24	1.41
36	B2	1410	C	C2'-C1'	-13.50	1.38	1.53
36	B2	1459	G	C2'-C1'	-13.50	1.38	1.53
85	A5	3700	C	C2'-C1'	-13.50	1.38	1.53
87	A8	57	C	O4'-C1'	13.50	1.59	1.41
85	A5	4247	G	C2'-C1'	-13.50	1.38	1.53
36	B2	558	G	C2'-C1'	-13.49	1.38	1.53
85	A5	1741	G	C2'-C1'	-13.49	1.38	1.53
85	A5	4953	G	C2'-C1'	-13.49	1.38	1.53
36	B2	1274	G	C2'-C1'	-13.49	1.38	1.53
85	A5	2361	G	O4'-C1'	13.48	1.59	1.41
87	A8	65	A	C2'-C1'	-13.48	1.38	1.53
85	A5	3668	C	O4'-C1'	13.48	1.59	1.41
36	B2	574	A	O4'-C1'	13.48	1.59	1.41
85	A5	949	G	C2'-C1'	-13.48	1.38	1.53
85	A5	4650	G	C2'-C1'	-13.48	1.38	1.53
85	A5	230	G	C2'-C1'	-13.47	1.38	1.53
86	A7	107	G	C2'-C1'	-13.47	1.38	1.53
85	A5	1077	C	O4'-C1'	13.46	1.59	1.41
85	A5	4261	C	O4'-C1'	13.46	1.59	1.41
85	A5	4562	C	O4'-C1'	13.46	1.59	1.41
85	A5	3609	G	C2'-C1'	-13.46	1.38	1.53
85	A5	1656	U	C2'-C1'	-13.45	1.38	1.53
85	A5	1649	U	C2'-C1'	-13.45	1.38	1.53
37	BC	65	C	C2'-C1'	-13.44	1.38	1.53
36	B2	1628	C	C2'-C1'	-13.44	1.38	1.53
52	CS	152	PHE	C-N	13.44	1.59	1.34
85	A5	370	U	O4'-C1'	13.42	1.59	1.41
85	A5	724	C	C2'-C1'	13.42	1.68	1.53
85	A5	1605	G	C2'-C1'	-13.42	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	288	G	C2'-C1'	-13.42	1.38	1.53
85	A5	912	G	C2'-C1'	-13.42	1.38	1.53
36	B2	984	C	C2'-C1'	-13.42	1.38	1.53
85	A5	5036	C	O4'-C1'	13.41	1.59	1.41
36	B2	174	C	O4'-C1'	13.41	1.59	1.41
85	A5	1846	G	C2'-C1'	-13.39	1.38	1.53
85	A5	2100	A	O4'-C1'	13.39	1.59	1.41
36	B2	548	C	C2'-C1'	-13.39	1.38	1.53
85	A5	2535	G	C2'-C1'	-13.38	1.38	1.53
36	B2	1671	G	O4'-C1'	13.38	1.59	1.41
36	B2	1811	C	O4'-C1'	13.38	1.59	1.41
36	B2	412	G	O4'-C1'	13.38	1.59	1.41
85	A5	449	C	O4'-C1'	13.37	1.59	1.41
85	A5	963	G	O4'-C1'	13.37	1.59	1.41
85	A5	2335	C	C2'-C1'	-13.37	1.38	1.53
85	A5	4613	C	O4'-C1'	13.36	1.59	1.41
85	A5	1252	C	O4'-C1'	13.36	1.59	1.41
87	A8	114	G	C2'-C1'	-13.36	1.38	1.53
85	A5	1612	G	C2'-C1'	-13.35	1.38	1.53
85	A5	2797	C	O4'-C1'	13.35	1.59	1.41
85	A5	4686	G	C2'-C1'	-13.35	1.38	1.53
85	A5	4906	C	C2'-C1'	-13.35	1.38	1.53
85	A5	1349	G	C2'-C1'	-13.35	1.38	1.53
36	B2	907	G	C2'-C1'	-13.35	1.38	1.53
36	B2	1582	C	C2'-C1'	-13.35	1.38	1.53
36	B2	1132	C	C2'-C1'	-13.34	1.38	1.53
36	B2	732	U	O4'-C1'	13.34	1.58	1.41
37	BC	67	C	C2'-C1'	-13.34	1.38	1.53
86	A7	24	C	O4'-C1'	13.34	1.58	1.41
85	A5	1407	C	O4'-C1'	13.33	1.58	1.41
36	B2	578	C	O4'-C1'	13.33	1.58	1.41
36	B2	1644	C	C2'-C1'	-13.32	1.38	1.53
85	A5	487	G	C2'-C1'	-13.32	1.38	1.53
85	A5	673	C	O4'-C1'	13.32	1.58	1.41
85	A5	1726	U	C2'-C1'	-13.32	1.38	1.53
85	A5	471	A	O4'-C1'	13.31	1.58	1.41
85	A5	3749	C	C2'-C1'	-13.30	1.38	1.53
36	B2	1754	G	C2'-C1'	-13.30	1.38	1.53
85	A5	4928	C	O4'-C1'	13.29	1.58	1.41
36	B2	54	A	O4'-C1'	13.29	1.58	1.41
36	B2	830	A	O4'-C1'	-13.29	1.24	1.41
85	A5	1509	C	O4'-C1'	13.29	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1437	C	C2'-C1'	-13.28	1.38	1.53
36	B2	862	A	O4'-C1'	13.27	1.58	1.41
85	A5	953	C	O4'-C1'	13.27	1.58	1.41
36	B2	144	U	C2'-C1'	-13.26	1.38	1.53
36	B2	1067	C	O4'-C1'	13.26	1.58	1.41
85	A5	1458	C	O4'-C1'	13.26	1.58	1.41
85	A5	2244	C	O4'-C1'	13.25	1.58	1.41
36	B2	1451	G	O4'-C1'	13.24	1.58	1.41
36	B2	1783	C	O4'-C1'	13.24	1.58	1.41
85	A5	1345	A	O4'-C1'	13.24	1.58	1.41
85	A5	4370	G	O4'-C1'	13.23	1.58	1.41
36	B2	1095	C	C2'-C1'	-13.23	1.38	1.53
85	A5	135	G	O4'-C1'	13.23	1.58	1.41
85	A5	2481	G	C2'-C1'	-13.23	1.38	1.53
85	A5	746	A	C2'-C1'	-13.22	1.38	1.53
85	A5	1478	C	O4'-C1'	13.22	1.58	1.41
85	A5	329	A	C2'-C1'	-13.22	1.38	1.53
85	A5	1245	C	O4'-C1'	13.22	1.58	1.41
85	A5	414	C	O4'-C1'	13.21	1.58	1.41
85	A5	2422	C	C2'-C1'	-13.21	1.38	1.53
36	B2	1271	C	O4'-C1'	13.21	1.58	1.41
36	B2	1853	C	O4'-C1'	13.21	1.58	1.41
85	A5	2791	C	O4'-C1'	13.21	1.58	1.41
85	A5	2306	G	O4'-C1'	13.21	1.58	1.41
85	A5	4327	C	O4'-C1'	13.20	1.58	1.41
85	A5	4169	G	O4'-C1'	13.20	1.58	1.41
85	A5	3671	G	C2'-C1'	-13.19	1.38	1.53
36	B2	790	C	O4'-C1'	13.19	1.58	1.41
85	A5	1470	G	C2'-C1'	-13.19	1.38	1.53
36	B2	520	A	C2'-C1'	-13.19	1.38	1.53
85	A5	1505	C	O4'-C1'	13.18	1.58	1.41
36	B2	575	A	O4'-C1'	13.18	1.58	1.41
85	A5	4145	C	O4'-C1'	13.17	1.58	1.41
85	A5	4503	A	C2'-C1'	-13.17	1.38	1.53
87	A8	118	C	C2'-C1'	-13.17	1.38	1.53
36	B2	552	G	C2'-C1'	-13.16	1.38	1.53
85	A5	2769	U	O4'-C1'	13.16	1.58	1.41
85	A5	1182	C	O4'-C1'	13.16	1.58	1.41
85	A5	4042	G	O4'-C1'	13.16	1.58	1.41
36	B2	296	U	O4'-C1'	13.15	1.58	1.41
85	A5	942	G	C2'-C1'	-13.15	1.38	1.53
85	A5	299	C	O4'-C1'	13.15	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4305	G	C2'-C1'	-13.15	1.38	1.53
85	A5	662	C	O4'-C1'	13.14	1.58	1.41
85	A5	276	C	O4'-C1'	13.13	1.58	1.41
85	A5	2435	G	C2'-C1'	-13.13	1.39	1.53
85	A5	4171	C	O4'-C1'	13.13	1.58	1.41
85	A5	2323	C	C2'-C1'	-13.12	1.39	1.53
85	A5	4625	C	C2'-C1'	-13.12	1.39	1.53
36	B2	990	A	O4'-C1'	13.10	1.58	1.41
85	A5	3701	C	O4'-C1'	13.09	1.58	1.41
85	A5	259	C	O4'-C1'	13.09	1.58	1.41
36	B2	1078	C	C2'-C1'	-13.09	1.39	1.53
36	B2	1777	G	C2'-C1'	-13.09	1.39	1.53
85	A5	4627	U	C2'-C1'	-13.09	1.39	1.53
85	A5	418	A	C2'-C1'	-13.08	1.39	1.53
85	A5	1076	C	C2'-C1'	-13.08	1.39	1.53
85	A5	977	C	O4'-C1'	13.07	1.58	1.41
85	A5	668	C	O4'-C1'	13.07	1.58	1.41
85	A5	2874	U	C2'-C1'	-13.07	1.39	1.53
85	A5	2407	G	O4'-C1'	-13.07	1.24	1.41
36	B2	1019	C	O4'-C1'	13.06	1.58	1.41
36	B2	1547	C	O4'-C1'	13.06	1.58	1.41
85	A5	4092	G	O4'-C1'	13.06	1.58	1.41
36	B2	1588	A	C2'-C1'	-13.05	1.39	1.53
85	A5	2065	G	C2'-C1'	-13.04	1.39	1.53
36	B2	1079	C	O4'-C1'	13.04	1.58	1.41
85	A5	83	C	O4'-C1'	13.04	1.58	1.41
85	A5	4057	C	C2'-C1'	-13.03	1.39	1.53
36	B2	199	C	O4'-C1'	13.02	1.58	1.41
36	B2	1551	U	C2'-C1'	-13.02	1.39	1.53
36	B2	1720	U	C2'-C1'	13.02	1.67	1.53
85	A5	1521	C	O4'-C1'	13.02	1.58	1.41
85	A5	4139	G	C2'-C1'	-13.02	1.39	1.53
85	A5	1789	C	O4'-C1'	13.01	1.58	1.41
36	B2	1236	G	O4'-C1'	-13.01	1.24	1.41
58	CW	71	ARG	CB-CG	13.00	1.87	1.52
36	B2	1126	G	C2'-C1'	-13.00	1.39	1.53
36	B2	1605	G	C2'-C1'	-13.00	1.39	1.53
85	A5	304	C	O4'-C1'	13.00	1.58	1.41
85	A5	178	C	O4'-C1'	12.99	1.58	1.41
85	A5	1596	U	C2'-C1'	-12.98	1.39	1.53
85	A5	3750	G	C2'-C1'	-12.98	1.39	1.53
36	B2	1394	G	C2'-C1'	-12.98	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	929	A	C2'-C1'	-12.98	1.39	1.53
85	A5	4634	U	C2'-C1'	-12.98	1.39	1.53
36	B2	1261	C	O4'-C1'	12.98	1.58	1.41
85	A5	3814	U	C2'-C1'	-12.97	1.39	1.53
85	A5	79	C	O4'-C1'	12.97	1.58	1.41
85	A5	107	G	C2'-C1'	-12.96	1.39	1.53
85	A5	2592	U	C2'-C1'	-12.97	1.39	1.53
85	A5	2727	C	C2'-C1'	-12.96	1.39	1.53
85	A5	4886	C	C2'-C1'	-12.96	1.39	1.53
85	A5	167	C	O4'-C1'	12.95	1.58	1.41
85	A5	696	C	O4'-C1'	12.95	1.58	1.41
85	A5	2860	C	O4'-C1'	12.94	1.58	1.41
85	A5	3804	G	C2'-C1'	-12.94	1.39	1.53
85	A5	1884	C	O4'-C1'	12.94	1.58	1.41
85	A5	2761	U	C2'-C1'	-12.94	1.39	1.53
36	B2	1688	C	O4'-C1'	12.93	1.58	1.41
36	B2	1695	A	O4'-C1'	12.93	1.58	1.41
85	A5	2255	C	O4'-C1'	12.92	1.58	1.41
85	A5	4140	C	O4'-C1'	12.91	1.58	1.41
85	A5	1995	G	C2'-C1'	-12.91	1.39	1.53
85	A5	3873	G	C2'-C1'	-12.91	1.39	1.53
85	A5	2317	C	O4'-C1'	12.90	1.58	1.41
85	A5	1556	C	O4'-C1'	12.90	1.58	1.41
86	A7	30	C	O4'-C1'	12.90	1.58	1.41
36	B2	1520	G	C2'-C1'	-12.89	1.39	1.53
85	A5	2437	C	O4'-C1'	12.89	1.58	1.41
35	Ah	294	LYS	C-N	-12.88	1.04	1.34
85	A5	1614	C	O4'-C1'	12.88	1.58	1.41
85	A5	1810	G	C2'-C1'	-12.88	1.39	1.53
85	A5	2105	A	C2'-C1'	-12.88	1.39	1.53
85	A5	4116	C	O4'-C1'	12.88	1.58	1.41
85	A5	1414	C	O4'-C1'	12.87	1.58	1.41
85	A5	1342	A	O4'-C1'	12.87	1.58	1.41
85	A5	2469	C	C2'-C1'	12.87	1.67	1.53
85	A5	2753	G	C2'-C1'	-12.87	1.39	1.53
85	A5	421	C	C2'-C1'	-12.86	1.39	1.53
36	B2	1091	C	O4'-C1'	12.86	1.58	1.41
85	A5	364	G	O4'-C1'	12.86	1.58	1.41
85	A5	3722	G	C2'-C1'	-12.85	1.39	1.53
36	B2	549	C	O4'-C1'	12.85	1.58	1.41
36	B2	1568	C	O4'-C1'	12.85	1.58	1.41
36	B2	697	G	O4'-C1'	12.84	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	989	C	O4'-C1'	12.84	1.58	1.41
36	B2	1798	C	C2'-C1'	-12.84	1.39	1.53
87	A8	148	A	O4'-C1'	12.84	1.58	1.41
87	A8	118	C	O4'-C1'	12.83	1.58	1.41
85	A5	4411	G	O4'-C1'	12.83	1.58	1.41
85	A5	3632	C	O4'-C1'	12.83	1.58	1.41
85	A5	4038	C	O4'-C1'	12.82	1.58	1.41
85	A5	1599	A	C2'-C1'	-12.82	1.39	1.53
36	B2	730	C	C2'-C1'	-12.82	1.39	1.53
85	A5	4502	C	O4'-C1'	12.82	1.58	1.41
85	A5	5031	G	C2'-C1'	-12.82	1.39	1.53
85	A5	3792	G	C2'-C1'	-12.81	1.39	1.53
36	B2	1544	C	O4'-C1'	12.81	1.58	1.41
85	A5	2629	C	O4'-C1'	12.80	1.58	1.41
85	A5	1303	A	O4'-C1'	12.80	1.58	1.41
85	A5	2400	G	C2'-C1'	-12.79	1.39	1.53
87	A8	54	C	O4'-C1'	12.79	1.58	1.41
85	A5	647	G	O4'-C1'	12.79	1.58	1.41
85	A5	700	G	C2'-C1'	-12.79	1.39	1.53
85	A5	1686	C	O4'-C1'	12.78	1.58	1.41
36	B2	194	C	O4'-C1'	12.77	1.58	1.41
85	A5	3931	C	O4'-C1'	12.77	1.58	1.41
85	A5	472	C	O4'-C1'	12.77	1.58	1.41
85	A5	931	C	O4'-C1'	-12.77	1.25	1.41
85	A5	4047	A	O4'-C1'	12.76	1.58	1.41
85	A5	3751	G	C2'-C1'	-12.76	1.39	1.53
85	A5	4904	G	C2'-C1'	-12.76	1.39	1.53
85	A5	1463	C	O4'-C1'	12.76	1.58	1.41
85	A5	1798	G	C2'-C1'	-12.74	1.39	1.53
36	B2	1843	G	C2'-C1'	-12.73	1.39	1.53
85	A5	2329	U	C2'-C1'	-12.73	1.39	1.53
36	B2	80	G	O4'-C1'	12.73	1.58	1.41
85	A5	2800	G	C2'-C1'	-12.73	1.39	1.53
85	A5	3636	C	C2'-C1'	-12.73	1.39	1.53
85	A5	345	C	O4'-C1'	12.73	1.58	1.41
85	A5	6	C	O4'-C1'	12.72	1.58	1.41
36	B2	1862	G	O4'-C1'	12.72	1.58	1.41
85	A5	133	C	C2'-C1'	-12.71	1.39	1.53
85	A5	486	C	O4'-C1'	12.71	1.58	1.41
85	A5	1478	C	C2'-C1'	-12.71	1.39	1.53
85	A5	1673	U	O4'-C1'	12.71	1.58	1.41
85	A5	2409	U	O4'-C1'	12.70	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	857	U	C2'-C1'	-12.70	1.39	1.53
85	A5	391	U	C2'-C1'	-12.70	1.39	1.53
85	A5	2053	C	C2'-C1'	-12.70	1.39	1.53
36	B2	291	G	C2'-C1'	-12.69	1.39	1.53
85	A5	4586	G	C2'-C1'	-12.69	1.39	1.53
85	A5	148	C	C2'-C1'	-12.69	1.39	1.53
85	A5	4226	G	C2'-C1'	-12.69	1.39	1.53
85	A5	4603	C	O4'-C1'	12.69	1.58	1.41
85	A5	4489	G	O4'-C1'	12.69	1.58	1.41
85	A5	239	C	C2'-C1'	-12.68	1.39	1.53
85	A5	1517	G	C2'-C1'	-12.68	1.39	1.53
36	B2	735	C	O4'-C1'	12.68	1.58	1.41
85	A5	2086	G	C2'-C1'	-12.68	1.39	1.53
85	A5	332	C	O4'-C1'	12.67	1.58	1.41
36	B2	1164	G	C2'-C1'	-12.67	1.39	1.53
85	A5	4866	C	C2'-C1'	-12.67	1.39	1.53
36	B2	334	C	O4'-C1'	12.66	1.58	1.41
85	A5	1726	U	O4'-C1'	12.65	1.58	1.41
36	B2	283	G	C2'-C1'	-12.65	1.39	1.53
85	A5	205	C	C2'-C1'	-12.64	1.39	1.53
36	B2	656	G	C2'-C1'	-12.63	1.39	1.53
85	A5	134	G	O4'-C1'	12.63	1.58	1.41
85	A5	1995	G	O4'-C1'	12.63	1.58	1.41
85	A5	1340	C	O4'-C1'	12.62	1.58	1.41
85	A5	4421	C	O4'-C1'	12.62	1.58	1.41
36	B2	792	C	O4'-C1'	12.62	1.58	1.41
63	CB	298	LEU	CA-C	12.61	1.85	1.52
85	A5	1854	G	O4'-C1'	12.61	1.58	1.41
85	A5	1900	C	C2'-C1'	-12.61	1.39	1.53
85	A5	304	C	C2'-C1'	-12.61	1.39	1.53
36	B2	1455	A	O4'-C1'	12.61	1.58	1.41
36	B2	1117	C	O4'-C1'	-12.60	1.25	1.41
85	A5	410	A	C2'-C1'	-12.60	1.39	1.53
85	A5	422	C	O4'-C1'	12.60	1.58	1.41
85	A5	2787	A	O4'-C1'	-12.60	1.25	1.41
85	A5	1535	C	C2'-C1'	-12.60	1.39	1.53
36	B2	494	C	O4'-C1'	12.59	1.58	1.41
36	B2	985	G	C2'-C1'	-12.59	1.39	1.53
85	A5	1353	G	C2'-C1'	-12.59	1.39	1.53
85	A5	4053	A	C2'-C1'	-12.59	1.39	1.53
36	B2	556	U	C2'-C1'	-12.58	1.39	1.53
36	B2	1792	G	C2'-C1'	-12.58	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1662	C	C2'-C1'	-12.58	1.39	1.53
86	A7	19	C	O4'-C1'	12.57	1.57	1.41
86	A7	85	G	C2'-C1'	-12.57	1.39	1.53
36	B2	1716	C	O4'-C1'	12.56	1.57	1.41
85	A5	81	C	O4'-C1'	12.55	1.57	1.41
85	A5	902	C	O4'-C1'	12.55	1.57	1.41
85	A5	469	C	C2'-C1'	-12.55	1.39	1.53
36	B2	1440	C	C2'-C1'	-12.54	1.39	1.53
85	A5	2455	G	O4'-C1'	12.54	1.57	1.41
85	A5	4643	G	C2'-C1'	-12.54	1.39	1.53
36	B2	48	C	O4'-C1'	12.54	1.57	1.41
36	B2	1330	G	C2'-C1'	-12.54	1.39	1.53
36	B2	155	G	C2'-C1'	-12.53	1.39	1.53
36	B2	977	C	O4'-C1'	12.52	1.57	1.41
36	B2	1263	U	O4'-C1'	12.52	1.57	1.41
85	A5	3745	U	O4'-C1'	12.52	1.57	1.41
36	B2	1511	U	O4'-C1'	12.51	1.57	1.41
85	A5	3880	G	C2'-C1'	-12.51	1.39	1.53
37	BC	55	C	C2'-C1'	-12.51	1.39	1.53
81	CE	36	LYS	CA-C	12.50	1.85	1.52
85	A5	4078	C	O4'-C1'	12.50	1.57	1.41
36	B2	802	A	C2'-C1'	-12.50	1.39	1.53
85	A5	1076	C	O4'-C1'	12.49	1.57	1.41
85	A5	3782	C	O4'-C1'	12.49	1.57	1.41
85	A5	236	G	C2'-C1'	-12.49	1.39	1.53
85	A5	1246	G	O4'-C1'	12.49	1.57	1.41
85	A5	2067	C	O4'-C1'	12.49	1.57	1.41
17	AV	31	SER	CA-C	12.48	1.85	1.52
85	A5	4432	C	O4'-C1'	12.48	1.57	1.41
85	A5	1432	G	C2'-C1'	-12.48	1.39	1.53
36	B2	745	C	C2'-C1'	-12.48	1.39	1.53
36	B2	911	C	C2'-C1'	-12.47	1.39	1.53
85	A5	234	G	O4'-C1'	-12.47	1.25	1.41
85	A5	1079	C	O4'-C1'	12.46	1.57	1.41
85	A5	1298	C	C2'-C1'	-12.47	1.39	1.53
85	A5	2664	G	C2'-C1'	-12.47	1.39	1.53
85	A5	650	C	O4'-C1'	12.46	1.57	1.41
36	B2	1169	G	C2'-C1'	-12.46	1.39	1.53
85	A5	1290	G	C2'-C1'	-12.46	1.39	1.53
85	A5	1624	G	C2'-C1'	-12.46	1.39	1.53
36	B2	1067	C	C2'-C1'	-12.45	1.39	1.53
36	B2	1682	C	O4'-C1'	12.45	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1600	A	O4'-C1'	12.45	1.57	1.41
85	A5	2866	C	O4'-C1'	12.45	1.57	1.41
85	A5	356	G	C2'-C1'	-12.45	1.39	1.53
85	A5	1587	G	O4'-C1'	12.45	1.57	1.41
86	A7	24	C	C2'-C1'	-12.45	1.39	1.53
85	A5	4884	G	C2'-C1'	-12.44	1.39	1.53
37	BC	3	C	O4'-C1'	12.44	1.57	1.41
36	B2	1083	A	C2'-C1'	-12.44	1.39	1.53
85	A5	4206	C	O4'-C1'	12.43	1.57	1.41
36	B2	492	C	O4'-C1'	12.42	1.57	1.41
85	A5	4929	C	C2'-C1'	-12.42	1.39	1.53
86	A7	1	G	O4'-C1'	12.42	1.57	1.41
85	A5	2497	C	O4'-C1'	12.42	1.57	1.41
85	A5	1086	C	O4'-C1'	12.42	1.57	1.41
85	A5	4508	C	O4'-C1'	12.41	1.57	1.41
85	A5	278	G	O4'-C1'	12.41	1.57	1.41
85	A5	1867	A	O4'-C1'	12.40	1.57	1.41
85	A5	1540	C	C2'-C1'	-12.40	1.39	1.53
85	A5	1535	C	O4'-C1'	12.40	1.57	1.41
85	A5	1219	G	C2'-C1'	-12.40	1.39	1.53
85	A5	4951	G	C2'-C1'	-12.39	1.39	1.53
36	B2	748	C	O4'-C1'	12.39	1.57	1.41
47	CI	4	ARG	C-N	12.39	1.57	1.34
85	A5	2015	U	O4'-C1'	12.39	1.57	1.41
36	B2	1266	C	C2'-C1'	-12.38	1.39	1.53
85	A5	447	C	C2'-C1'	-12.38	1.39	1.53
85	A5	2258	C	C2'-C1'	-12.38	1.39	1.53
85	A5	1250	C	C2'-C1'	-12.38	1.39	1.53
85	A5	1254	A	C2'-C1'	-12.38	1.39	1.53
36	B2	1380	C	C2'-C1'	-12.37	1.39	1.53
85	A5	910	G	C2'-C1'	-12.37	1.39	1.53
85	A5	2294	G	C2'-C1'	-12.37	1.39	1.53
36	B2	660	C	O4'-C1'	12.37	1.57	1.41
85	A5	3698	G	C2'-C1'	-12.37	1.39	1.53
85	A5	351	C	O4'-C1'	12.37	1.57	1.41
36	B2	64	A	O4'-C1'	-12.36	1.25	1.41
85	A5	4562	C	C2'-C1'	-12.36	1.39	1.53
36	B2	648	A	C2'-C1'	-12.36	1.39	1.53
85	A5	4614	G	C2'-C1'	-12.35	1.39	1.53
85	A5	1555	G	C2'-C1'	-12.35	1.39	1.53
36	B2	632	C	C2'-C1'	-12.35	1.39	1.53
85	A5	2087	C	O4'-C1'	12.35	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3622	C	O4'-C1'	12.34	1.57	1.41
85	A5	3638	G	C2'-C1'	-12.34	1.39	1.53
36	B2	750	C	O4'-C1'	12.34	1.57	1.41
86	A7	52	C	O4'-C1'	12.34	1.57	1.41
85	A5	194	C	C2'-C1'	-12.34	1.39	1.53
36	B2	752	G	C2'-C1'	-12.33	1.39	1.53
85	A5	2323	C	O4'-C1'	12.33	1.57	1.41
81	CE	37	PRO	N-CA	12.33	1.68	1.47
85	A5	460	C	O4'-C1'	12.33	1.57	1.41
36	B2	1637	A	C2'-C1'	12.33	1.67	1.53
85	A5	1419	G	O4'-C1'	12.32	1.57	1.41
85	A5	4546	A	O4'-C1'	12.32	1.57	1.41
36	B2	1326	U	O4'-C1'	12.32	1.57	1.41
85	A5	163	A	C2'-C1'	-12.32	1.39	1.53
85	A5	422	C	C2'-C1'	-12.32	1.39	1.53
85	A5	326	C	O4'-C1'	12.31	1.57	1.41
85	A5	1315	C	O4'-C1'	12.31	1.57	1.41
85	A5	1935	C	O4'-C1'	12.31	1.57	1.41
36	B2	1537	A	O4'-C1'	12.30	1.57	1.41
85	A5	371	A	O4'-C1'	12.30	1.57	1.41
85	A5	4905	C	O4'-C1'	12.30	1.57	1.41
85	A5	1384	C	O4'-C1'	12.29	1.57	1.41
85	A5	1430	C	O4'-C1'	12.29	1.57	1.41
36	B2	621	C	C2'-C1'	-12.29	1.39	1.53
85	A5	2422	C	O4'-C1'	12.28	1.57	1.41
85	A5	481	G	C2'-C1'	-12.28	1.39	1.53
85	A5	4261	C	C2'-C1'	-12.28	1.39	1.53
85	A5	421	C	O4'-C1'	12.27	1.57	1.41
85	A5	1102	U	C2'-C1'	12.27	1.66	1.53
85	A5	302	C	O4'-C1'	12.27	1.57	1.41
36	B2	755	C	O4'-C1'	12.26	1.57	1.41
85	A5	4070	U	O4'-C1'	12.26	1.57	1.41
36	B2	1316	C	C2'-C1'	-12.26	1.39	1.53
85	A5	1288	G	O4'-C1'	12.26	1.57	1.41
36	B2	1342	U	O4'-C1'	12.26	1.57	1.41
85	A5	4375	C	O4'-C1'	12.25	1.57	1.41
36	B2	1006	C	C2'-C1'	-12.25	1.39	1.53
85	A5	1644	C	C2'-C1'	-12.25	1.39	1.53
36	B2	201	C	O4'-C1'	12.25	1.57	1.41
85	A5	245	C	O4'-C1'	-12.25	1.25	1.41
85	A5	4662	C	C2'-C1'	-12.24	1.39	1.53
85	A5	1362	G	O4'-C1'	12.24	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4342	C	O4'-C1'	12.23	1.57	1.41
36	B2	1265	A	C2'-C1'	-12.23	1.40	1.53
85	A5	1343	A	O4'-C1'	12.23	1.57	1.41
85	A5	168	C	O4'-C1'	12.22	1.57	1.41
85	A5	476	G	C2'-C1'	-12.22	1.40	1.53
85	A5	934	C	O4'-C1'	12.22	1.57	1.41
87	A8	116	C	O4'-C1'	12.22	1.57	1.41
36	B2	1226	G	O4'-C1'	12.22	1.57	1.41
36	B2	1007	C	C2'-C1'	-12.21	1.40	1.53
87	A8	100	U	O4'-C1'	12.20	1.57	1.41
85	A5	1451	G	C2'-C1'	-12.20	1.40	1.53
37	BC	60	C	C2'-C1'	-12.20	1.40	1.53
85	A5	2455	G	C2'-C1'	-12.20	1.40	1.53
85	A5	2412	A	C2'-C1'	-12.19	1.40	1.53
85	A5	1794	A	O4'-C1'	12.19	1.57	1.41
36	B2	379	C	C2'-C1'	-12.19	1.40	1.53
85	A5	4257	A	O4'-C1'	12.19	1.57	1.41
85	A5	1402	C	O4'-C1'	12.19	1.57	1.41
36	B2	34	U	C2'-C1'	-12.18	1.40	1.53
85	A5	1336	G	C2'-C1'	-12.18	1.40	1.53
85	A5	1573	G	C2'-C1'	-12.18	1.40	1.53
36	B2	1070	A	C2'-C1'	-12.17	1.40	1.53
85	A5	3587	C	C2'-C1'	-12.17	1.40	1.53
85	A5	4461	C	O4'-C1'	12.17	1.57	1.41
85	A5	2058	G	O4'-C1'	12.17	1.57	1.41
85	A5	2653	C	O4'-C1'	12.17	1.57	1.41
36	B2	1304	U	C2'-C1'	-12.16	1.40	1.53
85	A5	1688	G	C2'-C1'	-12.16	1.40	1.53
85	A5	1915	C	C2'-C1'	-12.16	1.40	1.53
85	A5	2014	C	O4'-C1'	12.16	1.57	1.41
81	CE	102	GLY	C-N	12.16	1.54	1.33
85	A5	737	C	C2'-C1'	-12.16	1.40	1.53
36	B2	1547	C	C2'-C1'	-12.16	1.40	1.53
86	A7	102	U	O4'-C1'	12.15	1.57	1.41
36	B2	532	C	O4'-C1'	12.15	1.57	1.41
85	A5	4408	G	C2'-C1'	-12.15	1.40	1.53
36	B2	633	C	O4'-C1'	12.15	1.57	1.41
85	A5	2249	C	O4'-C1'	12.15	1.57	1.41
85	A5	4176	C	O4'-C1'	12.14	1.57	1.41
36	B2	974	C	C2'-C1'	-12.14	1.40	1.53
85	A5	1777	C	O4'-C1'	12.13	1.57	1.41
85	A5	2870	A	O4'-C1'	12.13	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2898	G	C2'-C1'	-12.13	1.40	1.53
85	A5	1585	C	O4'-C1'	12.13	1.57	1.41
85	A5	2271	C	O4'-C1'	12.12	1.57	1.41
85	A5	4115	G	C2'-C1'	-12.12	1.40	1.53
85	A5	4900	C	C2'-C1'	-12.12	1.40	1.53
85	A5	1532	G	O4'-C1'	12.12	1.57	1.41
36	B2	1739	C	O4'-C1'	12.12	1.57	1.41
85	A5	1371	A	O4'-C1'	12.12	1.57	1.41
36	B2	873	G	C2'-C1'	-12.11	1.40	1.53
85	A5	981	C	O4'-C1'	12.11	1.57	1.41
85	A5	2727	C	O4'-C1'	12.11	1.57	1.41
85	A5	2647	A	O4'-C1'	12.10	1.57	1.41
85	A5	3598	C	O4'-C1'	12.10	1.57	1.41
36	B2	1266	C	O4'-C1'	12.09	1.57	1.41
36	B2	1655	C	O4'-C1'	12.09	1.57	1.41
85	A5	4944	C	C2'-C1'	-12.09	1.40	1.53
36	B2	1118	C	C2'-C1'	12.09	1.66	1.53
36	B2	1584	G	C2'-C1'	-12.09	1.40	1.53
59	CZ	136	PHE	C-OXT	-12.09	1.00	1.23
38	Cz	217	TYR	C-O	-12.08	1.00	1.23
81	CE	288	PHE	C-O	-12.08	1.00	1.23
9	Ad	56	ASP	C-OXT	-12.08	1.00	1.23
35	Ah	303	LYS	C-O	-12.08	1.00	1.23
85	A5	4068	U	C2'-C1'	-12.08	1.40	1.53
85	A5	4706	G	O4'-C1'	12.08	1.57	1.41
36	B2	1529	C	C2'-C1'	-12.08	1.40	1.53
14	AT	144	LYS	C-O	-12.07	1.00	1.23
84	Cu	56	ALA	C-O	-12.07	1.00	1.23
29	AG	237	LEU	C-O	-12.07	1.00	1.23
35	Ah	188	ARG	C-O	-12.07	1.00	1.23
70	Ci	103	LYS	C-O	-12.07	1.00	1.23
9	Ad	56	ASP	C-O	-12.07	1.00	1.23
49	CQ	188	ASN	C-O	-12.07	1.00	1.23
67	Ce	133	GLU	C-O	-12.07	1.00	1.23
80	CH	191	ASP	C-O	-12.07	1.00	1.23
51	CA	256	GLU	C-O	-12.07	1.00	1.23
85	A5	4578	G	C2'-C1'	-12.07	1.40	1.53
7	AM	132	LYS	C-O	-12.06	1.00	1.23
30	AF	204	ARG	C-OXT	-12.06	1.00	1.23
56	CX	156	ILE	C-OXT	-12.06	1.00	1.23
60	Cr	137	SER	C-OXT	-12.06	1.00	1.23
62	Cb	79	LYS	C-O	-12.06	1.00	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
77	Cp	92	GLN	C-O	-12.06	1.00	1.23
85	A5	4662	C	O4'-C1'	12.06	1.57	1.41
64	CF	248	ASN	C-OXT	-12.06	1.00	1.23
85	A5	2320	G	C2'-C1'	-12.06	1.40	1.53
85	A5	4678	G	O4'-C1'	-12.06	1.25	1.41
6	AX	142	ARG	C-O	-12.06	1.00	1.23
21	Ab	84	HIS	C-O	-12.06	1.00	1.23
42	CL	211	LYS	C-OXT	-12.06	1.00	1.23
23	AD	227	LYS	C-O	-12.06	1.00	1.23
85	A5	4645	C	O4'-C1'	12.06	1.57	1.41
30	AF	204	ARG	C-O	-12.06	1.00	1.23
16	AA	209	GLU	C-O	-12.06	1.00	1.23
24	Ae	59	SER	C-OXT	-12.06	1.00	1.23
36	B2	56	G	C2'-C1'	-12.06	1.40	1.53
37	BC	60	C	O4'-C1'	12.06	1.57	1.41
38	Cz	217	TYR	C-OXT	-12.06	1.00	1.23
39	Cq	284	ALA	C-O	-12.06	1.00	1.23
47	CI	214	SER	C-O	-12.06	1.00	1.23
59	CZ	136	PHE	C-O	-12.06	1.00	1.23
81	CE	288	PHE	C-OXT	-12.06	1.00	1.23
85	A5	3788	C	O4'-C1'	12.06	1.57	1.41
58	CW	124	LYS	C-O	-12.06	1.00	1.23
78	Co	106	PHE	C-OXT	-12.06	1.00	1.23
85	A5	4090	G	C2'-C1'	-12.06	1.40	1.53
25	Af	152	LYS	C-O	-12.06	1.00	1.23
27	AE	263	GLY	C-OXT	-12.06	1.00	1.23
47	CI	214	SER	C-OXT	-12.06	1.00	1.23
73	Cl	5	LYS	C-N	12.05	1.61	1.34
83	Cs	63	VAL	C-O	-12.06	1.00	1.23
85	A5	1892	A	O4'-C1'	-12.06	1.25	1.41
4	AK	98	ARG	C-O	-12.05	1.00	1.23
42	CL	211	LYS	C-O	-12.05	1.00	1.23
57	CY	134	LYS	C-O	-12.05	1.00	1.23
77	Cp	92	GLN	C-OXT	-12.05	1.00	1.23
60	Cr	137	SER	C-O	-12.05	1.00	1.23
83	Ct	63	VAL	C-O	-12.05	1.00	1.23
85	A5	1278	C	O4'-C1'	12.05	1.57	1.41
10	AN	151	ALA	C-O	-12.05	1.00	1.23
48	CD	297	SER	C-O	-12.05	1.00	1.23
75	Cm	128	LYS	C-OXT	-12.05	1.00	1.23
76	Cn	25	LYS	C-O	-12.05	1.00	1.23
85	A5	1988	G	O4'-C1'	12.05	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	Ab	84	HIS	C-OXT	-12.05	1.00	1.23
28	AC	278	THR	C-O	-12.05	1.00	1.23
32	AW	130	PHE	C-O	-12.05	1.00	1.23
41	CO	203	VAL	C-O	-12.05	1.00	1.23
85	A5	1651	G	O4'-C1'	12.05	1.57	1.41
11	AL	158	PHE	C-O	-12.04	1.00	1.23
11	AL	158	PHE	C-OXT	-12.04	1.00	1.23
41	CO	203	VAL	C-OXT	-12.04	1.00	1.23
44	CM	139	SER	C-O	-12.05	1.00	1.23
82	CG	266	GLY	C-OXT	-12.05	1.00	1.23
85	A5	4039	G	C2'-C1'	-12.05	1.40	1.53
49	CQ	188	ASN	C-OXT	-12.04	1.00	1.23
74	CC	371	VAL	C-O	-12.04	1.00	1.23
85	A5	3586	G	C2'-C1'	-12.04	1.40	1.53
2	Ag	314	ILE	C-O	-12.04	1.00	1.23
24	Ae	59	SER	C-O	-12.04	1.00	1.23
31	AH	194	LEU	C-OXT	-12.04	1.00	1.23
32	AW	130	PHE	C-OXT	-12.04	1.00	1.23
36	B2	593	C	O4'-C1'	12.04	1.57	1.41
50	CR	189	SER	C-O	-12.04	1.00	1.23
56	CX	156	ILE	C-O	-12.04	1.00	1.23
66	Cd	124	GLU	C-O	-12.04	1.00	1.23
69	Cg	115	LYS	C-O	-12.04	1.00	1.23
72	Ck	70	LYS	C-O	-12.04	1.00	1.23
78	Co	106	PHE	C-O	-12.04	1.00	1.23
85	A5	1850	A	C2'-C1'	-12.04	1.40	1.53
7	AM	132	LYS	C-OXT	-12.04	1.00	1.23
22	Ac	68	LEU	C-O	-12.04	1.00	1.23
31	AH	194	LEU	C-O	-12.04	1.00	1.23
55	CU	126	ASP	C-O	-12.04	1.00	1.23
85	A5	1485	C	O4'-C1'	12.04	1.57	1.41
75	Cm	128	LYS	C-O	-12.04	1.00	1.23
85	A5	2434	G	C2'-C1'	-12.04	1.40	1.53
10	AN	151	ALA	C-OXT	-12.04	1.00	1.23
36	B2	308	G	O4'-C1'	12.04	1.57	1.41
64	CF	248	ASN	C-O	-12.03	1.00	1.23
72	Ck	70	LYS	C-OXT	-12.03	1.00	1.23
76	Cn	25	LYS	C-OXT	-12.04	1.00	1.23
85	A5	448	G	O4'-C1'	12.04	1.57	1.41
48	CD	297	SER	C-OXT	-12.03	1.00	1.23
54	CP	153	LYS	C-O	-12.03	1.00	1.23
63	CB	398	ALA	C-O	-12.03	1.00	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	Cv	56	ALA	C-O	-12.03	1.00	1.23
85	A5	4671	C	O4'-C1'	12.03	1.57	1.41
71	Cj	91	VAL	C-O	-12.03	1.00	1.23
85	A5	121	A	C2'-C1'	-12.03	1.40	1.53
85	A5	4426	C	C2'-C1'	-12.03	1.40	1.53
85	A5	3796	U	C2'-C1'	-12.03	1.40	1.53
85	A5	1902	G	O4'-C1'	12.02	1.57	1.41
37	BC	8	U	O4'-C1'	12.02	1.57	1.41
85	A5	2100	A	C2'-C1'	-12.02	1.40	1.53
36	B2	1120	U	C2'-C1'	-12.02	1.40	1.53
85	A5	1295	C	O4'-C1'	12.01	1.57	1.41
86	A7	54	A	O4'-C1'	12.01	1.57	1.41
36	B2	62	G	O4'-C1'	12.01	1.57	1.41
85	A5	4197	G	C2'-C1'	-12.01	1.40	1.53
85	A5	32	G	O4'-C1'	12.01	1.57	1.41
85	A5	462	G	C2'-C1'	-11.99	1.40	1.53
85	A5	4675	U	C2'-C1'	-11.97	1.40	1.53
36	B2	1807	C	O4'-C1'	11.97	1.57	1.41
36	B2	184	G	O4'-C1'	11.96	1.57	1.41
36	B2	328	U	C2'-C1'	-11.96	1.40	1.53
85	A5	2784	C	C2'-C1'	-11.96	1.40	1.53
85	A5	1101	C	O4'-C1'	11.96	1.57	1.41
85	A5	205	C	O4'-C1'	11.95	1.57	1.41
36	B2	1742	C	C2'-C1'	-11.95	1.40	1.53
85	A5	3862	A	O4'-C1'	11.95	1.57	1.41
36	B2	1553	C	O4'-C1'	-11.95	1.26	1.41
85	A5	271	C	O4'-C1'	11.94	1.57	1.41
85	A5	4243	C	O4'-C1'	11.94	1.57	1.41
85	A5	1812	C	O4'-C1'	11.94	1.57	1.41
26	AJ	146	SER	C-N	11.94	1.61	1.34
36	B2	1578	U	C2'-C1'	11.94	1.66	1.53
85	A5	1778	C	C2'-C1'	-11.94	1.40	1.53
85	A5	4057	C	O4'-C1'	11.94	1.57	1.41
85	A5	4736	C	O4'-C1'	11.93	1.57	1.41
85	A5	4996	C	C2'-C1'	-11.93	1.40	1.53
85	A5	340	C	O4'-C1'	11.93	1.57	1.41
85	A5	906	C	C2'-C1'	-11.93	1.40	1.53
85	A5	1812	C	C2'-C1'	-11.93	1.40	1.53
36	B2	183	G	O4'-C1'	11.92	1.57	1.41
85	A5	289	C	O4'-C1'	11.92	1.57	1.41
85	A5	1686	C	C2'-C1'	-11.92	1.40	1.53
87	A8	80	A	C2'-C1'	-11.92	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2044	U	C2'-C1'	-11.92	1.40	1.53
36	B2	608	C	O4'-C1'	11.91	1.57	1.41
85	A5	4270	C	O4'-C1'	11.91	1.57	1.41
85	A5	4528	G	O4'-C1'	11.91	1.57	1.41
85	A5	2820	C	O4'-C1'	11.91	1.57	1.41
36	B2	674	C	C2'-C1'	-11.90	1.40	1.53
85	A5	1489	G	C2'-C1'	-11.90	1.40	1.53
36	B2	311	C	O4'-C1'	11.90	1.57	1.41
85	A5	679	C	O4'-C1'	11.90	1.57	1.41
85	A5	2665	U	O4'-C1'	11.90	1.57	1.41
85	A5	1987	C	O4'-C1'	11.89	1.57	1.41
85	A5	3899	G	O4'-C1'	11.89	1.57	1.41
85	A5	1696	C	O4'-C1'	11.89	1.57	1.41
87	A8	5	U	C2'-C1'	-11.89	1.40	1.53
85	A5	3623	C	O4'-C1'	11.89	1.57	1.41
85	A5	3699	C	O4'-C1'	11.87	1.57	1.41
85	A5	2850	A	C2'-C1'	-11.87	1.40	1.53
85	A5	4321	U	C2'-C1'	-11.87	1.40	1.53
85	A5	5052	C	C2'-C1'	-11.87	1.40	1.53
85	A5	2866	C	C2'-C1'	-11.87	1.40	1.53
85	A5	4446	U	C2'-C1'	-11.86	1.40	1.53
85	A5	2878	G	C2'-C1'	-11.86	1.40	1.53
85	A5	3727	A	O4'-C1'	11.86	1.57	1.41
85	A5	2853	C	C2'-C1'	-11.86	1.40	1.53
85	A5	4134	C	O4'-C1'	11.86	1.57	1.41
85	A5	3882	C	O4'-C1'	11.86	1.57	1.41
36	B2	622	C	O4'-C1'	11.85	1.57	1.41
36	B2	1013	U	C2'-C1'	-11.85	1.40	1.53
36	B2	1408	U	C2'-C1'	-11.85	1.40	1.53
85	A5	1370	G	C2'-C1'	11.85	1.66	1.53
85	A5	4046	A	C2'-C1'	-11.85	1.40	1.53
85	A5	4504	C	O4'-C1'	11.85	1.57	1.41
36	B2	285	U	O4'-C1'	11.85	1.57	1.41
85	A5	1589	C	O4'-C1'	11.85	1.57	1.41
85	A5	1645	C	C2'-C1'	-11.85	1.40	1.53
85	A5	4455	G	C2'-C1'	-11.85	1.40	1.53
81	CE	115	TYR	C-N	11.84	1.61	1.34
85	A5	939	G	O4'-C1'	11.84	1.57	1.41
36	B2	731	G	C2'-C1'	-11.84	1.40	1.53
85	A5	699	C	O4'-C1'	11.83	1.57	1.41
36	B2	18	C	O4'-C1'	11.82	1.57	1.41
85	A5	335	A	O4'-C1'	11.82	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3816	A	C2'-C1'	-11.82	1.40	1.53
36	B2	475	C	O4'-C1'	11.82	1.57	1.41
85	A5	1520	C	C2'-C1'	-11.82	1.40	1.53
85	A5	1870	C	O4'-C1'	11.82	1.57	1.41
85	A5	2074	C	O4'-C1'	11.81	1.57	1.41
85	A5	4199	C	O4'-C1'	11.81	1.57	1.41
85	A5	2825	A	C2'-C1'	-11.81	1.40	1.53
85	A5	1436	C	O4'-C1'	11.80	1.56	1.41
85	A5	2486	G	C2'-C1'	-11.80	1.40	1.53
85	A5	3708	C	C2'-C1'	-11.80	1.40	1.53
85	A5	2899	C	O4'-C1'	11.80	1.56	1.41
85	A5	4443	C	O4'-C1'	11.80	1.56	1.41
36	B2	1327	G	C2'-C1'	-11.79	1.40	1.53
85	A5	1103	C	O4'-C1'	11.79	1.56	1.41
85	A5	4052	C	O4'-C1'	11.79	1.56	1.41
85	A5	697	G	C2'-C1'	-11.79	1.40	1.53
85	A5	4168	G	C2'-C1'	-11.79	1.40	1.53
36	B2	1391	C	O4'-C1'	11.79	1.56	1.41
87	A8	47	C	O4'-C1'	11.79	1.56	1.41
36	B2	911	C	O4'-C1'	11.78	1.56	1.41
85	A5	1629	G	O4'-C1'	11.78	1.56	1.41
87	A8	113	C	O4'-C1'	11.78	1.56	1.41
37	BC	49	A	C2'-C1'	-11.77	1.40	1.53
85	A5	220	C	O4'-C1'	11.77	1.56	1.41
85	A5	1455	G	C2'-C1'	-11.76	1.40	1.53
85	A5	4734	A	C2'-C1'	-11.76	1.40	1.53
85	A5	1504	G	C2'-C1'	-11.76	1.40	1.53
85	A5	4611	A	C2'-C1'	-11.76	1.40	1.53
56	CX	53	ARG	C-N	11.76	1.61	1.34
85	A5	3712	A	O4'-C1'	-11.76	1.26	1.41
36	B2	67	C	C2'-C1'	11.76	1.66	1.53
85	A5	423	G	C2'-C1'	-11.75	1.40	1.53
85	A5	2662	G	C2'-C1'	-11.75	1.40	1.53
85	A5	1666	C	O4'-C1'	11.75	1.56	1.41
85	A5	3592	G	C2'-C1'	-11.75	1.40	1.53
86	A7	80	U	C2'-C1'	-11.74	1.40	1.53
37	BC	44	G	C2'-C1'	-11.74	1.40	1.53
85	A5	5052	C	O4'-C1'	11.73	1.56	1.41
36	B2	579	C	O4'-C1'	11.72	1.56	1.41
36	B2	1794	C	O4'-C1'	11.72	1.56	1.41
36	B2	563	G	O4'-C1'	11.72	1.56	1.41
85	A5	951	G	C2'-C1'	-11.72	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1994	C	C2'-C1'	-11.72	1.40	1.53
36	B2	48	C	C2'-C1'	-11.71	1.40	1.53
36	B2	555	A	O4'-C1'	11.71	1.56	1.41
36	B2	1064	C	O4'-C1'	11.71	1.56	1.41
85	A5	4615	C	O4'-C1'	11.71	1.56	1.41
85	A5	2410	C	O4'-C1'	11.71	1.56	1.41
36	B2	975	G	C2'-C1'	-11.70	1.40	1.53
85	A5	2317	C	C2'-C1'	-11.70	1.40	1.53
36	B2	335	G	O4'-C1'	-11.70	1.26	1.41
36	B2	868	G	O4'-C1'	11.70	1.56	1.41
36	B2	481	C	C2'-C1'	-11.69	1.40	1.53
36	B2	1199	A	C2'-C1'	-11.69	1.40	1.53
85	A5	1413	C	O4'-C1'	11.69	1.56	1.41
85	A5	4710	C	C2'-C1'	-11.69	1.40	1.53
37	BC	45	G	O4'-C1'	11.68	1.56	1.41
85	A5	4945	G	C2'-C1'	-11.68	1.40	1.53
36	B2	1633	A	O4'-C1'	11.68	1.56	1.41
1	Az	269	ALA	C-N	11.67	1.60	1.34
36	B2	1432	U	O4'-C1'	11.67	1.56	1.41
85	A5	4125	C	C2'-C1'	-11.67	1.40	1.53
36	B2	680	G	C2'-C1'	-11.67	1.40	1.53
85	A5	2736	G	C2'-C1'	-11.67	1.40	1.53
85	A5	4714	C	O4'-C1'	11.67	1.56	1.41
85	A5	903	C	O4'-C1'	11.67	1.56	1.41
85	A5	4051	C	O4'-C1'	11.67	1.56	1.41
85	A5	5063	G	C2'-C1'	-11.66	1.40	1.53
36	B2	406	U	C2'-C1'	-11.66	1.40	1.53
36	B2	1264	C	C2'-C1'	-11.66	1.40	1.53
85	A5	406	C	O4'-C1'	11.66	1.56	1.41
81	CE	74	SER	N-CA	-11.65	1.23	1.46
85	A5	4156	G	O4'-C1'	-11.65	1.26	1.41
85	A5	504	G	O4'-C1'	11.64	1.56	1.41
85	A5	967	C	O4'-C1'	11.64	1.56	1.41
85	A5	2779	C	O4'-C1'	11.64	1.56	1.41
85	A5	90	G	O4'-C1'	11.64	1.56	1.41
85	A5	1480	C	O4'-C1'	11.64	1.56	1.41
85	A5	1186	U	C2'-C1'	11.64	1.66	1.53
85	A5	4640	C	C2'-C1'	-11.64	1.40	1.53
85	A5	3869	C	O4'-C1'	11.63	1.56	1.41
36	B2	677	G	C2'-C1'	-11.63	1.40	1.53
85	A5	1721	G	C2'-C1'	-11.63	1.40	1.53
85	A5	719	C	O4'-C1'	11.63	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
87	A8	49	G	O4'-C1'	11.63	1.56	1.41
36	B2	559	G	C2'-C1'	-11.62	1.40	1.53
85	A5	3794	C	O4'-C1'	11.63	1.56	1.41
37	BC	56	G	O4'-C1'	11.62	1.56	1.41
85	A5	2504	C	O4'-C1'	11.62	1.56	1.41
85	A5	3739	C	O4'-C1'	11.62	1.56	1.41
85	A5	3775	A	O4'-C1'	-11.62	1.26	1.41
85	A5	2733	C	O4'-C1'	11.62	1.56	1.41
85	A5	2753	G	O4'-C1'	11.62	1.56	1.41
85	A5	1832	C	C2'-C1'	-11.61	1.40	1.53
85	A5	4456	C	O4'-C1'	11.61	1.56	1.41
85	A5	3650	C	O4'-C1'	11.61	1.56	1.41
85	A5	1884	C	C2'-C1'	-11.61	1.40	1.53
85	A5	69	A	C2'-C1'	-11.61	1.40	1.53
85	A5	1878	G	C2'-C1'	-11.61	1.40	1.53
36	B2	549	C	C2'-C1'	-11.60	1.40	1.53
85	A5	3969	G	C2'-C1'	-11.60	1.40	1.53
36	B2	649	U	C2'-C1'	-11.60	1.40	1.53
85	A5	1483	C	C2'-C1'	-11.60	1.40	1.53
85	A5	93	G	C2'-C1'	-11.59	1.40	1.53
36	B2	749	U	O4'-C1'	11.59	1.56	1.41
85	A5	390	C	O4'-C1'	11.59	1.56	1.41
85	A5	4974	C	O4'-C1'	11.59	1.56	1.41
85	A5	1485	C	C2'-C1'	-11.56	1.40	1.53
85	A5	4749	C	C2'-C1'	11.56	1.66	1.53
36	B2	910	G	C2'-C1'	-11.56	1.40	1.53
36	B2	417	C	O4'-C1'	11.55	1.56	1.41
36	B2	599	A	C2'-C1'	-11.55	1.40	1.53
36	B2	837	A	C2'-C1'	-11.55	1.40	1.53
85	A5	2131	C	C2'-C1'	-11.55	1.40	1.53
85	A5	1420	A	C2'-C1'	-11.55	1.40	1.53
36	B2	692	G	C2'-C1'	-11.53	1.40	1.53
85	A5	3732	A	C2'-C1'	-11.53	1.40	1.53
36	B2	855	G	C2'-C1'	-11.53	1.40	1.53
86	A7	99	G	O4'-C1'	11.53	1.56	1.41
85	A5	358	C	C2'-C1'	-11.52	1.40	1.53
36	B2	678	U	C2'-C1'	-11.52	1.40	1.53
36	B2	616	A	O4'-C1'	11.52	1.56	1.41
85	A5	753	C	C2'-C1'	-11.52	1.40	1.53
36	B2	1118	C	O4'-C1'	-11.51	1.26	1.41
37	BC	11	C	O4'-C1'	11.51	1.56	1.41
36	B2	809	A	C2'-C1'	-11.51	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4676	G	O4'-C1'	11.51	1.56	1.41
85	A5	3924	C	C2'-C1'	-11.50	1.40	1.53
85	A5	465	G	C2'-C1'	-11.50	1.40	1.53
8	AS	141	ARG	C-N	11.50	1.60	1.34
85	A5	3823	G	O4'-C1'	11.50	1.56	1.41
85	A5	2658	G	C2'-C1'	-11.50	1.40	1.53
85	A5	4546	A	C2'-C1'	-11.50	1.40	1.53
85	A5	972	C	C2'-C1'	11.49	1.66	1.53
36	B2	1703	C	O4'-C1'	11.49	1.56	1.41
37	BC	10	G	O4'-C1'	11.48	1.56	1.41
85	A5	2280	G	C2'-C1'	-11.48	1.40	1.53
85	A5	2603	C	O4'-C1'	11.48	1.56	1.41
36	B2	1737	G	O4'-C1'	11.47	1.56	1.41
85	A5	316	U	O4'-C1'	11.47	1.56	1.41
85	A5	406	C	C2'-C1'	-11.47	1.40	1.53
85	A5	3699	C	C2'-C1'	-11.47	1.40	1.53
85	A5	1841	C	O4'-C1'	-11.46	1.26	1.41
85	A5	2768	C	O4'-C1'	11.46	1.56	1.41
85	A5	3899	G	C2'-C1'	-11.46	1.40	1.53
85	A5	4916	G	C2'-C1'	-11.46	1.40	1.53
85	A5	2602	G	C2'-C1'	-11.45	1.40	1.53
85	A5	5001	U	C2'-C1'	-11.45	1.40	1.53
86	A7	22	A	O4'-C1'	11.45	1.56	1.41
85	A5	1787	A	O4'-C1'	11.44	1.56	1.41
85	A5	2365	C	O4'-C1'	11.44	1.56	1.41
85	A5	419	A	C2'-C1'	-11.44	1.40	1.53
36	B2	1185	C	O4'-C1'	11.44	1.56	1.41
85	A5	2080	U	C2'-C1'	-11.44	1.40	1.53
85	A5	2738	C	O4'-C1'	11.44	1.56	1.41
85	A5	2443	G	C2'-C1'	-11.44	1.40	1.53
85	A5	4300	U	C2'-C1'	-11.44	1.40	1.53
85	A5	4387	C	O4'-C1'	11.43	1.56	1.41
85	A5	4565	C	P-O5'	-11.43	1.48	1.59
36	B2	980	A	C2'-C1'	-11.43	1.40	1.53
85	A5	4509	U	O4'-C1'	11.43	1.56	1.41
85	A5	4314	C	C2'-C1'	-11.43	1.40	1.53
85	A5	112	C	C2'-C1'	-11.43	1.40	1.53
85	A5	4470	G	C2'-C1'	-11.43	1.40	1.53
85	A5	686	A	C2'-C1'	11.42	1.66	1.53
85	A5	2444	U	O4'-C1'	11.42	1.56	1.41
85	A5	185	C	O4'-C1'	11.42	1.56	1.41
85	A5	4217	G	C2'-C1'	-11.42	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4367	G	C2'-C1'	-11.42	1.40	1.53
18	AY	86	GLU	C-N	11.41	1.55	1.34
36	B2	1542	C	O4'-C1'	11.41	1.56	1.41
36	B2	1658	G	C2'-C1'	-11.41	1.40	1.53
85	A5	506	C	C2'-C1'	-11.41	1.40	1.53
36	B2	891	G	O4'-C1'	11.40	1.56	1.41
79	CJ	176	PRO	C-O	-11.40	1.00	1.23
20	Aa	108	PRO	C-O	-11.40	1.00	1.23
36	B2	569	A	C2'-C1'	-11.40	1.40	1.53
40	CK	163	PRO	C-O	-11.40	1.00	1.23
85	A5	2087	C	C2'-C1'	-11.40	1.40	1.53
85	A5	4705	A	C2'-C1'	-11.40	1.40	1.53
85	A5	4887	C	C2'-C1'	-11.40	1.40	1.53
85	A5	1599	A	O4'-C1'	11.39	1.56	1.41
85	A5	4410	G	O4'-C1'	11.38	1.56	1.41
85	A5	3587	C	O4'-C1'	11.38	1.56	1.41
85	A5	1607	C	O4'-C1'	11.37	1.56	1.41
85	A5	4375	C	C2'-C1'	-11.37	1.40	1.53
36	B2	446	G	O4'-C1'	11.37	1.56	1.41
65	Cc	109	PRO	C-O	-11.37	1.00	1.23
85	A5	2872	C	C2'-C1'	-11.37	1.40	1.53
36	B2	940	U	C2'-C1'	-11.37	1.40	1.53
36	B2	297	A	C2'-C1'	-11.37	1.40	1.53
36	B2	333	G	C2'-C1'	-11.36	1.40	1.53
85	A5	2534	C	C2'-C1'	-11.36	1.40	1.53
85	A5	1993	C	O4'-C1'	11.36	1.56	1.41
85	A5	3935	C	C2'-C1'	-11.36	1.40	1.53
85	A5	1362	G	C2'-C1'	-11.35	1.40	1.53
85	A5	4196	G	C2'-C1'	-11.35	1.40	1.53
36	B2	1078	C	O4'-C1'	11.35	1.56	1.41
36	B2	951	C	C2'-C1'	-11.35	1.40	1.53
85	A5	4241	C	O4'-C1'	11.35	1.56	1.41
36	B2	750	C	C2'-C1'	-11.34	1.40	1.53
36	B2	1674	G	O4'-C1'	11.34	1.56	1.41
36	B2	1128	C	O4'-C1'	11.34	1.56	1.41
85	A5	1069	G	C2'-C1'	-11.32	1.40	1.53
85	A5	3962	A	O4'-C1'	-11.32	1.26	1.41
85	A5	4764	A	C2'-C1'	-11.32	1.40	1.53
36	B2	1781	A	C2'-C1'	-11.32	1.41	1.53
85	A5	480	C	O4'-C1'	11.31	1.56	1.41
87	A8	106	G	O4'-C1'	11.31	1.56	1.41
36	B2	345	U	C2'-C1'	-11.31	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
64	CF	183	GLY	C-N	-11.29	1.08	1.34
36	B2	632	C	O4'-C1'	11.29	1.56	1.41
36	B2	904	A	O4'-C1'	11.28	1.56	1.41
36	B2	1242	U	C2'-C1'	-11.28	1.41	1.53
85	A5	1911	C	O4'-C1'	11.28	1.56	1.41
85	A5	2515	G	C2'-C1'	-11.28	1.41	1.53
85	A5	307	A	O4'-C1'	11.28	1.56	1.41
36	B2	1019	C	C2'-C1'	-11.28	1.41	1.53
86	A7	68	C	C2'-C1'	-11.28	1.41	1.53
36	B2	405	G	C2'-C1'	-11.27	1.41	1.53
36	B2	462	C	C2'-C1'	-11.27	1.41	1.53
36	B2	531	A	O4'-C1'	11.27	1.56	1.41
85	A5	4470	G	O4'-C1'	11.27	1.56	1.41
85	A5	1674	C	C2'-C1'	-11.27	1.41	1.53
36	B2	1029	G	C2'-C1'	-11.26	1.41	1.53
36	B2	1798	C	O4'-C1'	11.26	1.56	1.41
85	A5	683	C	C2'-C1'	-11.26	1.41	1.53
85	A5	2816	G	C2'-C1'	-11.26	1.41	1.53
85	A5	4865	C	O4'-C1'	11.25	1.56	1.41
85	A5	1793	A	O4'-C1'	11.25	1.56	1.41
87	A8	33	G	C2'-C1'	-11.24	1.41	1.53
85	A5	1400	G	C2'-C1'	-11.24	1.41	1.53
85	A5	2292	C	O4'-C1'	11.24	1.56	1.41
85	A5	2763	U	O4'-C1'	11.24	1.56	1.41
85	A5	2456	G	C2'-C1'	-11.24	1.41	1.53
85	A5	3703	G	C2'-C1'	-11.24	1.41	1.53
36	B2	1048	G	O4'-C1'	11.23	1.56	1.41
85	A5	1368	A	O4'-C1'	11.23	1.56	1.41
85	A5	1920	C	C2'-C1'	-11.23	1.41	1.53
85	A5	4159	C	O4'-C1'	11.23	1.56	1.41
36	B2	1206	G	C2'-C1'	-11.23	1.41	1.53
85	A5	947	C	C2'-C1'	-11.23	1.41	1.53
85	A5	4902	C	O4'-C1'	11.23	1.56	1.41
36	B2	4	C	O4'-C1'	11.22	1.56	1.41
85	A5	1614	C	C2'-C1'	-11.22	1.41	1.53
36	B2	758	C	O4'-C1'	11.22	1.56	1.41
37	BC	26	C	O4'-C1'	11.22	1.56	1.41
85	A5	4262	C	C2'-C1'	-11.22	1.41	1.53
85	A5	4519	C	O4'-C1'	11.21	1.56	1.41
85	A5	368	C	O4'-C1'	11.21	1.56	1.41
36	B2	84	A	O4'-C1'	11.21	1.56	1.41
85	A5	1386	C	O4'-C1'	11.21	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	67	C	O4'-C1'	11.20	1.56	1.41
85	A5	3	C	O4'-C1'	11.20	1.56	1.41
85	A5	1234	G	C2'-C1'	-11.20	1.41	1.53
85	A5	1515	A	C2'-C1'	-11.20	1.41	1.53
85	A5	409	G	O4'-C1'	11.20	1.56	1.41
85	A5	2400	G	O4'-C1'	11.20	1.56	1.41
85	A5	4332	C	O4'-C1'	11.20	1.56	1.41
36	B2	77	A	C2'-C1'	11.19	1.65	1.53
85	A5	130	C	O4'-C1'	11.19	1.56	1.41
36	B2	446	G	C2'-C1'	-11.19	1.41	1.53
36	B2	424	C	O4'-C1'	11.18	1.56	1.41
32	AW	2	VAL	C-N	11.18	1.59	1.34
85	A5	695	G	O4'-C1'	11.17	1.56	1.41
85	A5	2513	A	O4'-C1'	11.17	1.56	1.41
85	A5	2869	U	O4'-C1'	11.16	1.56	1.41
85	A5	244	G	C2'-C1'	-11.16	1.41	1.53
85	A5	1589	C	C2'-C1'	-11.16	1.41	1.53
85	A5	4970	C	O4'-C1'	11.16	1.56	1.41
85	A5	1768	C	O4'-C1'	11.15	1.56	1.41
29	AG	131	ARG	C-N	11.15	1.59	1.34
85	A5	2709	C	O4'-C1'	11.15	1.56	1.41
86	A7	105	C	C2'-C1'	-11.15	1.41	1.53
36	B2	489	A	O4'-C1'	11.14	1.56	1.41
36	B2	412	G	C2'-C1'	-11.13	1.41	1.53
85	A5	3863	C	O4'-C1'	11.13	1.56	1.41
85	A5	1476	C	C2'-C1'	-11.13	1.41	1.53
85	A5	2050	G	C2'-C1'	-11.13	1.41	1.53
85	A5	2483	G	C2'-C1'	-11.13	1.41	1.53
85	A5	1305	C	O4'-C1'	11.12	1.56	1.41
85	A5	1298	C	O4'-C1'	11.12	1.56	1.41
85	A5	1375	C	C2'-C1'	-11.12	1.41	1.53
85	A5	4087	G	C2'-C1'	-11.11	1.41	1.53
85	A5	973	G	O4'-C1'	11.11	1.56	1.41
36	B2	357	C	C2'-C1'	-11.11	1.41	1.53
85	A5	4194	U	C2'-C1'	-11.10	1.41	1.53
36	B2	740	C	O4'-C1'	11.10	1.56	1.41
36	B2	510	G	C2'-C1'	-11.10	1.41	1.53
36	B2	1407	U	C2'-C1'	-11.10	1.41	1.53
36	B2	1573	G	C2'-C1'	-11.10	1.41	1.53
85	A5	916	C	C2'-C1'	-11.10	1.41	1.53
36	B2	1373	C	O4'-C1'	11.09	1.56	1.41
86	A7	94	C	O4'-C1'	11.09	1.56	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	905	C	C2'-C1'	-11.09	1.41	1.53
29	AG	131	ARG	CG-CD	11.08	1.79	1.51
85	A5	4037	C	O4'-C1'	11.08	1.56	1.41
12	AR	1	MET	C-N	-11.08	1.13	1.33
36	B2	1105	G	C2'-C1'	-11.08	1.41	1.53
85	A5	444	G	C2'-C1'	-11.08	1.41	1.53
74	CC	323	ARG	CA-C	-11.08	1.24	1.52
85	A5	3791	C	O4'-C1'	11.08	1.56	1.41
86	A7	9	C	O4'-C1'	11.08	1.56	1.41
85	A5	1318	C	O4'-C1'	11.07	1.56	1.41
85	A5	1384	C	C2'-C1'	-11.07	1.41	1.53
85	A5	2841	G	C2'-C1'	-11.07	1.41	1.53
85	A5	1216	C	O4'-C1'	11.07	1.56	1.41
36	B2	1124	C	C2'-C1'	-11.06	1.41	1.53
85	A5	1236	C	C2'-C1'	-11.06	1.41	1.53
85	A5	3599	A	C2'-C1'	-11.06	1.41	1.53
85	A5	2807	A	C2'-C1'	-11.06	1.41	1.53
85	A5	23	C	O4'-C1'	11.06	1.56	1.41
36	B2	968	U	O4'-C1'	11.05	1.56	1.41
85	A5	4749	C	O4'-C1'	-11.05	1.27	1.41
85	A5	4964	C	O4'-C1'	11.05	1.56	1.41
87	A8	145	C	C2'-C1'	-11.05	1.41	1.53
85	A5	1973	G	C2'-C1'	-11.05	1.41	1.53
85	A5	1490	G	C2'-C1'	-11.04	1.41	1.53
86	A7	36	C	O4'-C1'	11.04	1.56	1.41
85	A5	3732	A	O4'-C1'	11.03	1.55	1.41
36	B2	645	C	O4'-C1'	11.03	1.55	1.41
85	A5	208	A	O4'-C1'	11.03	1.55	1.41
85	A5	1181	C	C2'-C1'	-11.03	1.41	1.53
36	B2	942	G	C2'-C1'	-11.03	1.41	1.53
85	A5	1684	A	C2'-C1'	-11.03	1.41	1.53
85	A5	1460	C	O4'-C1'	11.03	1.55	1.41
87	A8	49	G	C2'-C1'	-11.03	1.41	1.53
85	A5	4962	C	O4'-C1'	11.02	1.55	1.41
85	A5	1920	C	O4'-C1'	11.02	1.55	1.41
36	B2	816	A	O4'-C1'	11.02	1.55	1.41
53	CT	75	VAL	C-N	11.02	1.59	1.34
85	A5	2404	A	O4'-C1'	11.01	1.55	1.41
85	A5	1296	G	C2'-C1'	-11.01	1.41	1.53
85	A5	4766	C	O4'-C1'	11.01	1.55	1.41
85	A5	1391	A	C2'-C1'	-10.99	1.41	1.53
36	B2	1608	U	O4'-C1'	10.99	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2279	A	O4'-C1'	10.99	1.55	1.41
85	A5	4430	G	C2'-C1'	-10.99	1.41	1.53
36	B2	1452	A	O4'-C1'	10.99	1.55	1.41
36	B2	317	C	O4'-C1'	10.99	1.55	1.41
85	A5	516	C	O4'-C1'	10.99	1.55	1.41
85	A5	710	G	C2'-C1'	-10.98	1.41	1.53
36	B2	1293	A	C2'-C1'	-10.98	1.41	1.53
36	B2	1224	G	C2'-C1'	-10.98	1.41	1.53
85	A5	4985	U	C2'-C1'	-10.98	1.41	1.53
36	B2	843	C	O4'-C1'	10.97	1.55	1.41
85	A5	4335	C	C2'-C1'	-10.97	1.41	1.53
85	A5	954	C	O4'-C1'	10.97	1.55	1.41
85	A5	1615	C	O4'-C1'	10.97	1.55	1.41
85	A5	199	G	O4'-C1'	10.97	1.55	1.41
36	B2	592	C	O4'-C1'	-10.96	1.27	1.41
85	A5	4241	C	C2'-C1'	-10.96	1.41	1.53
85	A5	4329	G	O4'-C1'	-10.96	1.27	1.41
47	CI	206	LEU	CA-C	-10.96	1.24	1.52
85	A5	2291	G	C2'-C1'	-10.96	1.41	1.53
85	A5	4491	G	C2'-C1'	-10.96	1.41	1.53
85	A5	4659	G	O4'-C1'	10.95	1.55	1.41
36	B2	875	A	O4'-C1'	10.95	1.55	1.41
85	A5	48	G	C2'-C1'	-10.95	1.41	1.53
85	A5	1579	C	O4'-C1'	10.94	1.55	1.41
85	A5	203	U	C2'-C1'	-10.94	1.41	1.53
85	A5	1221	G	C2'-C1'	10.94	1.65	1.53
87	A8	99	U	O4'-C1'	10.94	1.55	1.41
85	A5	69	A	O4'-C1'	10.94	1.55	1.41
85	A5	2861	C	O4'-C1'	10.94	1.55	1.41
36	B2	1230	C	O4'-C1'	10.94	1.55	1.41
85	A5	1910	G	C2'-C1'	-10.93	1.41	1.53
85	A5	175	C	O4'-C1'	10.93	1.55	1.41
36	B2	905	C	O4'-C1'	10.93	1.55	1.41
85	A5	2889	G	C2'-C1'	-10.93	1.41	1.53
85	A5	1950	U	O4'-C1'	10.93	1.55	1.41
85	A5	1074	G	C2'-C1'	-10.92	1.41	1.53
85	A5	4464	A	C2'-C1'	-10.92	1.41	1.53
47	CI	206	LEU	CA-CB	10.92	1.78	1.53
85	A5	459	C	C2'-C1'	-10.92	1.41	1.53
85	A5	3882	C	C2'-C1'	-10.92	1.41	1.53
36	B2	1840	U	C2'-C1'	-10.91	1.41	1.53
85	A5	2713	C	O4'-C1'	10.91	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	A7	26	C	O4'-C1'	10.91	1.55	1.41
85	A5	4288	C	O4'-C1'	10.91	1.55	1.41
36	B2	370	G	C2'-C1'	-10.91	1.41	1.53
85	A5	2250	C	O4'-C1'	10.91	1.55	1.41
85	A5	3678	G	C2'-C1'	-10.91	1.41	1.53
85	A5	2437	C	C2'-C1'	-10.90	1.41	1.53
85	A5	994	G	C2'-C1'	-10.90	1.41	1.53
85	A5	2549	G	C2'-C1'	-10.90	1.41	1.53
85	A5	28	C	O4'-C1'	10.90	1.55	1.41
85	A5	2690	C	O4'-C1'	10.90	1.55	1.41
85	A5	3799	A	O4'-C1'	10.90	1.55	1.41
85	A5	2257	C	O4'-C1'	10.90	1.55	1.41
85	A5	1769	G	O4'-C1'	10.89	1.55	1.41
85	A5	3670	C	O4'-C1'	10.89	1.55	1.41
36	B2	755	C	C2'-C1'	-10.89	1.41	1.53
85	A5	4667	C	O4'-C1'	10.89	1.55	1.41
85	A5	1356	U	C2'-C1'	-10.89	1.41	1.53
85	A5	2621	A	O4'-C1'	10.89	1.55	1.41
85	A5	2742	G	C2'-C1'	-10.88	1.41	1.53
85	A5	4153	C	O4'-C1'	10.88	1.55	1.41
36	B2	1819	A	C2'-C1'	-10.88	1.41	1.53
86	A7	113	G	C2'-C1'	-10.88	1.41	1.53
85	A5	2589	C	C2'-C1'	-10.88	1.41	1.53
36	B2	1054	G	C2'-C1'	-10.88	1.41	1.53
85	A5	1830	G	C2'-C1'	-10.88	1.41	1.53
36	B2	1590	C	O4'-C1'	10.87	1.55	1.41
85	A5	128	C	O4'-C1'	10.87	1.55	1.41
85	A5	4556	U	C2'-C1'	-10.87	1.41	1.53
36	B2	498	C	O4'-C1'	10.86	1.55	1.41
36	B2	674	C	O4'-C1'	10.86	1.55	1.41
85	A5	4158	C	C2'-C1'	-10.86	1.41	1.53
36	B2	424	C	C2'-C1'	-10.86	1.41	1.53
85	A5	916	C	O4'-C1'	10.85	1.55	1.41
85	A5	3591	C	O4'-C1'	10.85	1.55	1.41
36	B2	1813	A	C2'-C1'	-10.84	1.41	1.53
85	A5	988	C	O4'-C1'	10.84	1.55	1.41
36	B2	701	G	C2'-C1'	-10.84	1.41	1.53
36	B2	1583	C	O4'-C1'	10.84	1.55	1.41
85	A5	4642	U	O4'-C1'	10.83	1.55	1.41
85	A5	2716	C	O4'-C1'	10.83	1.55	1.41
85	A5	4741	C	O4'-C1'	10.83	1.55	1.41
85	A5	4036	G	C2'-C1'	-10.82	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	5013	C	O4'-C1'	10.82	1.55	1.41
85	A5	3814	U	O4'-C1'	10.82	1.55	1.41
86	A7	6	C	O4'-C1'	10.82	1.55	1.41
36	B2	874	G	C2'-C1'	-10.81	1.41	1.53
37	BC	55	C	O4'-C1'	10.81	1.55	1.41
85	A5	1429	C	O4'-C1'	10.81	1.55	1.41
85	A5	2534	C	O4'-C1'	10.81	1.55	1.41
36	B2	1552	G	C2'-C1'	10.81	1.65	1.53
85	A5	1469	C	O4'-C1'	10.81	1.55	1.41
85	A5	703	G	O4'-C1'	-10.80	1.27	1.41
85	A5	4590	A	O4'-C1'	10.80	1.55	1.41
87	A8	21	C	O4'-C1'	10.80	1.55	1.41
85	A5	5008	C	C2'-C1'	-10.80	1.41	1.53
36	B2	557	U	C2'-C1'	-10.80	1.41	1.53
85	A5	2076	G	C2'-C1'	-10.80	1.41	1.53
86	A7	110	G	O4'-C1'	10.80	1.55	1.41
85	A5	4137	C	O4'-C1'	10.79	1.55	1.41
85	A5	503	C	O4'-C1'	10.79	1.55	1.41
87	A8	146	U	O4'-C1'	10.79	1.55	1.41
36	B2	472	C	O4'-C1'	10.79	1.55	1.41
85	A5	4218	U	C2'-C1'	-10.79	1.41	1.53
85	A5	1099	C	O4'-C1'	10.79	1.55	1.41
36	B2	442	C	O4'-C1'	10.79	1.55	1.41
36	B2	1721	U	C2'-C1'	10.78	1.65	1.53
85	A5	4119	C	O4'-C1'	-10.78	1.27	1.41
87	A8	9	A	O4'-C1'	10.78	1.55	1.41
85	A5	1907	A	C2'-C1'	-10.78	1.41	1.53
85	A5	2747	U	O4'-C1'	10.77	1.55	1.41
85	A5	33	A	C2'-C1'	-10.77	1.41	1.53
85	A5	4696	C	C2'-C1'	-10.77	1.41	1.53
85	A5	86	U	C2'-C1'	-10.76	1.41	1.53
36	B2	493	A	C2'-C1'	-10.76	1.41	1.53
36	B2	1404	U	C2'-C1'	-10.76	1.41	1.53
85	A5	1438	U	C2'-C1'	-10.76	1.41	1.53
85	A5	241	G	C2'-C1'	-10.76	1.41	1.53
36	B2	1262	C	O4'-C1'	10.76	1.55	1.41
85	A5	1213	G	C2'-C1'	-10.76	1.41	1.53
36	B2	295	C	C2'-C1'	-10.75	1.41	1.53
36	B2	1713	C	O4'-C1'	10.75	1.55	1.41
85	A5	1856	C	O4'-C1'	10.75	1.55	1.41
85	A5	683	C	O4'-C1'	10.75	1.55	1.41
85	A5	1301	C	C2'-C1'	10.75	1.65	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4706	G	C2'-C1'	-10.74	1.41	1.53
85	A5	735	G	C2'-C1'	-10.73	1.41	1.53
85	A5	1249	C	C2'-C1'	-10.73	1.41	1.53
36	B2	1532	C	C2'-C1'	-10.73	1.41	1.53
87	A8	57	C	C2'-C1'	-10.73	1.41	1.53
85	A5	490	C	C2'-C1'	-10.73	1.41	1.53
85	A5	2722	G	C2'-C1'	-10.73	1.41	1.53
85	A5	2702	C	O4'-C1'	10.73	1.55	1.41
85	A5	4556	U	O4'-C1'	10.73	1.55	1.41
85	A5	932	A	C2'-C1'	10.72	1.65	1.53
85	A5	1668	A	C2'-C1'	-10.72	1.41	1.53
85	A5	155	C	O4'-C1'	10.72	1.55	1.41
85	A5	2875	C	O4'-C1'	10.71	1.55	1.41
36	B2	1752	C	C2'-C1'	-10.71	1.41	1.53
85	A5	275	C	O4'-C1'	10.70	1.55	1.41
85	A5	4195	G	C2'-C1'	-10.70	1.41	1.53
85	A5	4772	C	O4'-C1'	10.70	1.55	1.41
85	A5	2492	C	O4'-C1'	10.70	1.55	1.41
85	A5	2580	U	C2'-C1'	-10.70	1.41	1.53
85	A5	5014	A	O4'-C1'	10.70	1.55	1.41
85	A5	1390	G	C2'-C1'	-10.69	1.41	1.53
85	A5	2855	G	O4'-C1'	10.69	1.55	1.41
85	A5	4165	C	O4'-C1'	10.69	1.55	1.41
36	B2	1734	G	C2'-C1'	-10.69	1.41	1.53
85	A5	164	G	C2'-C1'	-10.69	1.41	1.53
85	A5	3752	C	C2'-C1'	-10.69	1.41	1.53
36	B2	643	A	O4'-C1'	10.68	1.55	1.41
36	B2	843	C	C2'-C1'	-10.68	1.41	1.53
36	B2	979	C	O4'-C1'	10.68	1.55	1.41
36	B2	1213	C	O4'-C1'	10.68	1.55	1.41
63	CB	298	LEU	C-N	-10.68	1.09	1.34
85	A5	1698	C	O4'-C1'	10.68	1.55	1.41
36	B2	1052	A	O4'-C1'	10.68	1.55	1.41
85	A5	1628	C	C2'-C1'	-10.68	1.41	1.53
85	A5	521	C	O4'-C1'	10.68	1.55	1.41
85	A5	712	C	O4'-C1'	10.68	1.55	1.41
85	A5	1988	G	C2'-C1'	-10.68	1.41	1.53
36	B2	988	C	C2'-C1'	-10.67	1.41	1.53
40	CK	2	PRO	C-N	10.67	1.54	1.34
85	A5	1331	C	O4'-C1'	10.67	1.55	1.41
85	A5	2	G	C2'-C1'	-10.67	1.41	1.53
85	A5	5013	C	C2'-C1'	-10.67	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	650	A	O4'-C1'	10.66	1.55	1.41
36	B2	395	G	C2'-C1'	-10.66	1.41	1.53
36	B2	1204	A	O4'-C1'	10.66	1.55	1.41
85	A5	1680	G	O4'-C1'	10.66	1.55	1.41
8	AS	54	LYS	N-CA	10.66	1.67	1.46
36	B2	1500	G	O4'-C1'	10.66	1.55	1.41
85	A5	1305	C	C2'-C1'	-10.66	1.41	1.53
85	A5	328	A	C2'-C1'	-10.66	1.41	1.53
85	A5	5017	G	C2'-C1'	-10.66	1.41	1.53
36	B2	1180	C	O4'-C1'	10.65	1.55	1.41
85	A5	2693	G	C2'-C1'	-10.65	1.41	1.53
85	A5	1201	U	C2'-C1'	-10.65	1.41	1.53
36	B2	920	A	C2'-C1'	-10.65	1.41	1.53
36	B2	1689	C	C2'-C1'	-10.65	1.41	1.53
85	A5	3686	G	C2'-C1'	-10.64	1.41	1.53
85	A5	1568	C	C2'-C1'	-10.64	1.41	1.53
36	B2	1212	G	C2'-C1'	-10.64	1.41	1.53
85	A5	966	A	C2'-C1'	-10.64	1.41	1.53
87	A8	103	A	O4'-C1'	10.64	1.55	1.41
36	B2	1261	C	C2'-C1'	-10.64	1.41	1.53
85	A5	1262	G	C2'-C1'	-10.63	1.41	1.53
85	A5	1990	A	O4'-C1'	10.63	1.55	1.41
86	A7	89	G	C2'-C1'	-10.63	1.41	1.53
85	A5	141	C	O4'-C1'	10.63	1.55	1.41
85	A5	1372	A	C2'-C1'	-10.62	1.41	1.53
85	A5	5014	A	C2'-C1'	-10.63	1.41	1.53
36	B2	1305	C	C2'-C1'	-10.62	1.41	1.53
85	A5	105	A	C2'-C1'	-10.62	1.41	1.53
85	A5	4502	C	C2'-C1'	-10.62	1.41	1.53
85	A5	1808	C	O4'-C1'	10.62	1.55	1.41
85	A5	2336	G	O4'-C1'	10.62	1.55	1.41
85	A5	985	C	O4'-C1'	10.62	1.55	1.41
85	A5	1906	U	C2'-C1'	-10.61	1.41	1.53
85	A5	4907	G	C2'-C1'	-10.61	1.41	1.53
85	A5	2731	C	O4'-C1'	10.61	1.55	1.41
36	B2	490	C	O4'-C1'	10.60	1.55	1.41
37	BC	70	C	C2'-C1'	-10.60	1.41	1.53
36	B2	365	C	O4'-C1'	10.60	1.55	1.41
36	B2	1263	U	C2'-C1'	-10.60	1.41	1.53
50	CR	143	HIS	CG-ND1	-10.60	1.15	1.38
85	A5	1787	A	C2'-C1'	-10.60	1.41	1.53
85	A5	1269	G	O4'-C1'	10.60	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4422	A	O4'-C1'	10.60	1.55	1.41
85	A5	2772	C	C2'-C1'	-10.59	1.41	1.53
85	A5	4598	C	O4'-C1'	10.59	1.55	1.41
36	B2	1485	U	C2'-C1'	-10.59	1.41	1.53
87	A8	119	C	O4'-C1'	10.59	1.55	1.41
87	A8	35	C	C2'-C1'	-10.59	1.41	1.53
36	B2	337	C	C2'-C1'	-10.59	1.41	1.53
85	A5	2792	C	C2'-C1'	-10.59	1.41	1.53
85	A5	2874	U	O4'-C1'	10.59	1.55	1.41
85	A5	3864	C	O4'-C1'	10.59	1.55	1.41
85	A5	3966	A	O4'-C1'	10.59	1.55	1.41
87	A8	89	U	C2'-C1'	-10.59	1.41	1.53
36	B2	1163	C	O4'-C1'	10.58	1.55	1.41
36	B2	1211	G	C2'-C1'	-10.58	1.41	1.53
85	A5	2269	C	O4'-C1'	10.58	1.55	1.41
85	A5	693	C	C2'-C1'	-10.58	1.41	1.53
36	B2	1485	U	O4'-C1'	10.57	1.55	1.41
85	A5	4670	C	O4'-C1'	10.57	1.55	1.41
85	A5	1909	G	C2'-C1'	-10.56	1.41	1.53
85	A5	3935	C	O4'-C1'	10.56	1.55	1.41
36	B2	50	A	C2'-C1'	-10.56	1.41	1.53
85	A5	903	C	C2'-C1'	-10.56	1.41	1.53
86	A7	104	C	O4'-C1'	10.55	1.55	1.41
36	B2	326	C	O4'-C1'	10.55	1.55	1.41
36	B2	570	C	O4'-C1'	10.55	1.55	1.41
36	B2	1629	C	C2'-C1'	-10.55	1.41	1.53
85	A5	3837	C	O4'-C1'	10.55	1.55	1.41
87	A8	13	G	C2'-C1'	-10.54	1.41	1.53
36	B2	872	A	O4'-C1'	-10.54	1.27	1.41
36	B2	879	C	C2'-C1'	-10.54	1.41	1.53
8	AS	40	TYR	C-N	-10.54	1.09	1.34
33	AI	43	ILE	CA-C	-10.54	1.25	1.52
85	A5	4354	U	O4'-C1'	-10.54	1.27	1.41
85	A5	658	C	O4'-C1'	10.54	1.55	1.41
85	A5	4672	A	O4'-C1'	10.53	1.55	1.41
85	A5	4870	G	O4'-C1'	10.53	1.55	1.41
29	AG	219	GLU	C-N	-10.53	1.09	1.34
85	A5	3956	G	O4'-C1'	10.53	1.55	1.41
37	BC	74	C	O4'-C1'	10.53	1.55	1.41
85	A5	1520	C	O4'-C1'	10.53	1.55	1.41
85	A5	3660	C	O4'-C1'	10.53	1.55	1.41
74	CC	86	ARG	CA-C	-10.53	1.25	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1276	C	O3'-P	-10.53	1.48	1.61
85	A5	1434	G	C2'-C1'	-10.53	1.41	1.53
85	A5	4445	U	C2'-C1'	-10.52	1.41	1.53
85	A5	4877	G	O4'-C1'	-10.52	1.27	1.41
36	B2	54	A	C2'-C1'	-10.52	1.41	1.53
85	A5	1107	C	O4'-C1'	10.52	1.55	1.41
85	A5	3929	G	C2'-C1'	-10.52	1.41	1.53
85	A5	3939	G	C2'-C1'	-10.52	1.41	1.53
86	A7	4	U	C2'-C1'	-10.52	1.41	1.53
36	B2	517	C	C2'-C1'	-10.52	1.41	1.53
36	B2	1379	A	C2'-C1'	-10.52	1.41	1.53
39	Cq	37	SER	C-N	10.51	1.58	1.34
85	A5	2589	C	O4'-C1'	10.51	1.55	1.41
85	A5	4088	C	C2'-C1'	-10.51	1.41	1.53
85	A5	123	C	O4'-C1'	10.50	1.55	1.41
85	A5	2506	G	C2'-C1'	-10.50	1.41	1.53
85	A5	3605	C	C2'-C1'	-10.50	1.41	1.53
85	A5	367	C	O4'-C1'	10.50	1.55	1.41
85	A5	2261	G	C2'-C1'	-10.50	1.41	1.53
36	B2	16	G	C2'-C1'	-10.49	1.41	1.53
36	B2	1784	G	O4'-C1'	10.49	1.55	1.41
85	A5	1557	C	O4'-C1'	10.49	1.55	1.41
36	B2	459	C	O4'-C1'	10.49	1.55	1.41
85	A5	4537	C	C2'-C1'	-10.49	1.41	1.53
36	B2	143	U	O4'-C1'	10.48	1.55	1.41
85	A5	3924	C	O4'-C1'	10.48	1.55	1.41
85	A5	4409	C	O4'-C1'	10.48	1.55	1.41
85	A5	3782	C	C2'-C1'	-10.47	1.41	1.53
85	A5	4046	A	O4'-C1'	10.47	1.55	1.41
36	B2	539	C	O4'-C1'	10.47	1.55	1.41
85	A5	2506	G	O4'-C1'	10.47	1.55	1.41
85	A5	2850	A	O4'-C1'	10.47	1.55	1.41
85	A5	1249	C	O4'-C1'	10.47	1.55	1.41
36	B2	178	C	C2'-C1'	-10.47	1.41	1.53
36	B2	426	A	O4'-C1'	10.47	1.55	1.41
36	B2	557	U	O4'-C1'	10.47	1.55	1.41
85	A5	3650	C	C2'-C1'	-10.47	1.41	1.53
36	B2	362	C	O4'-C1'	10.46	1.55	1.41
36	B2	1581	C	O4'-C1'	10.46	1.55	1.41
85	A5	2872	C	O4'-C1'	10.46	1.55	1.41
36	B2	1622	U	C2'-C1'	-10.46	1.41	1.53
36	B2	1490	G	C2'-C1'	-10.45	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1783	C	C2'-C1'	-10.45	1.41	1.53
85	A5	2610	G	C2'-C1'	-10.45	1.41	1.53
85	A5	1292	C	O4'-C1'	10.45	1.55	1.41
36	B2	497	C	O4'-C1'	10.44	1.55	1.41
36	B2	1109	C	O4'-C1'	-10.44	1.28	1.41
69	Cg	46	CYS	CA-CB	-10.44	1.30	1.53
85	A5	40	G	C2'-C1'	-10.45	1.41	1.53
36	B2	937	C	O4'-C1'	10.44	1.55	1.41
85	A5	1086	C	C2'-C1'	-10.44	1.41	1.53
85	A5	5056	A	C2'-C1'	-10.44	1.41	1.53
85	A5	2340	C	C2'-C1'	-10.44	1.41	1.53
85	A5	4661	G	C2'-C1'	-10.44	1.41	1.53
85	A5	4874	A	O4'-C1'	-10.44	1.28	1.41
85	A5	1206	C	O4'-C1'	10.44	1.55	1.41
85	A5	244	G	O4'-C1'	10.44	1.55	1.41
36	B2	1758	G	C2'-C1'	-10.44	1.41	1.53
85	A5	1796	U	C2'-C1'	-10.44	1.41	1.53
87	A8	145	C	O4'-C1'	10.44	1.55	1.41
85	A5	1985	G	O4'-C1'	10.43	1.55	1.41
36	B2	1761	U	O4'-C1'	10.43	1.55	1.41
85	A5	348	G	C2'-C1'	-10.43	1.41	1.53
85	A5	2784	C	O4'-C1'	10.43	1.55	1.41
85	A5	2031	C	C2'-C1'	-10.42	1.41	1.53
36	B2	79	A	C2'-C1'	10.42	1.64	1.53
85	A5	1751	A	C2'-C1'	-10.42	1.41	1.53
36	B2	615	C	C2'-C1'	-10.41	1.41	1.53
85	A5	3847	C	O4'-C1'	10.41	1.55	1.41
36	B2	1705	C	O4'-C1'	10.41	1.55	1.41
36	B2	568	C	O4'-C1'	10.41	1.55	1.41
85	A5	991	C	O4'-C1'	10.41	1.55	1.41
36	B2	1402	A	O4'-C1'	10.40	1.55	1.41
85	A5	3860	A	C2'-C1'	-10.40	1.42	1.53
87	A8	138	C	C2'-C1'	-10.40	1.42	1.53
85	A5	1406	G	C2'-C1'	10.39	1.64	1.53
85	A5	410	A	O4'-C1'	10.39	1.55	1.41
85	A5	238	C	O4'-C1'	10.39	1.55	1.41
85	A5	4211	C	C2'-C1'	-10.39	1.42	1.53
85	A5	4912	G	O4'-C1'	10.39	1.55	1.41
85	A5	1464	C	C2'-C1'	-10.39	1.42	1.53
36	B2	170	A	O4'-C1'	-10.38	1.28	1.41
37	BC	30	G	C2'-C1'	-10.38	1.42	1.53
85	A5	2487	G	C2'-C1'	-10.38	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1415	C	C2'-C1'	-10.38	1.42	1.53
36	B2	1687	C	C2'-C1'	-10.38	1.42	1.53
85	A5	485	C	O4'-C1'	10.37	1.55	1.41
36	B2	1583	C	C2'-C1'	-10.36	1.42	1.53
85	A5	1661	C	O4'-C1'	10.36	1.55	1.41
85	A5	1676	C	O4'-C1'	10.36	1.55	1.41
85	A5	2460	A	C2'-C1'	-10.36	1.42	1.53
85	A5	3709	U	C2'-C1'	-10.36	1.42	1.53
85	A5	1598	C	O4'-C1'	10.36	1.55	1.41
85	A5	5069	U	C2'-C1'	-10.35	1.42	1.53
85	A5	4074	C	O4'-C1'	10.35	1.55	1.41
85	A5	1287	G	C2'-C1'	-10.35	1.42	1.53
36	B2	829	C	O4'-C1'	10.35	1.55	1.41
85	A5	2507	A	O4'-C1'	10.35	1.55	1.41
85	A5	2078	C	O4'-C1'	10.35	1.55	1.41
85	A5	4466	C	O4'-C1'	10.35	1.55	1.41
85	A5	339	C	O4'-C1'	10.34	1.55	1.41
86	A7	63	C	O4'-C1'	10.34	1.55	1.41
85	A5	734	G	C2'-C1'	10.34	1.64	1.53
85	A5	1666	C	C2'-C1'	-10.34	1.42	1.53
36	B2	1284	A	O4'-C1'	10.33	1.55	1.41
85	A5	3632	C	C2'-C1'	-10.33	1.42	1.53
85	A5	1050	C	O4'-C1'	10.33	1.55	1.41
85	A5	4273	A	C2'-C1'	-10.33	1.42	1.53
86	A7	91	C	O4'-C1'	10.33	1.55	1.41
85	A5	1853	G	O4'-C1'	-10.32	1.28	1.41
63	CB	255	GLY	C-N	10.31	1.57	1.34
85	A5	4235	G	C2'-C1'	-10.31	1.42	1.53
86	A7	57	C	O4'-C1'	10.31	1.55	1.41
36	B2	362	C	C2'-C1'	-10.31	1.42	1.53
85	A5	1354	A	C2'-C1'	-10.31	1.42	1.53
36	B2	1687	C	O4'-C1'	10.31	1.55	1.41
85	A5	4102	C	O4'-C1'	10.31	1.55	1.41
36	B2	1137	U	O4'-C1'	10.30	1.55	1.41
85	A5	2419	C	C2'-C1'	-10.30	1.42	1.53
87	A8	28	C	O4'-C1'	10.30	1.55	1.41
36	B2	233	C	O4'-C1'	10.30	1.55	1.41
85	A5	4150	G	C2'-C1'	-10.30	1.42	1.53
36	B2	1132	C	O4'-C1'	10.29	1.55	1.41
85	A5	2248	C	O4'-C1'	10.29	1.55	1.41
85	A5	2615	C	O4'-C1'	10.29	1.55	1.41
87	A8	26	C	O4'-C1'	10.29	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4667	C	C2'-C1'	-10.29	1.42	1.53
85	A5	196	C	O4'-C1'	10.29	1.55	1.41
85	A5	2500	U	O4'-C1'	10.29	1.55	1.41
85	A5	381	U	C2'-C1'	-10.28	1.42	1.53
85	A5	1921	C	O4'-C1'	10.28	1.55	1.41
85	A5	3731	C	O4'-C1'	10.28	1.55	1.41
85	A5	980	U	O4'-C1'	10.28	1.55	1.41
85	A5	293	G	C2'-C1'	-10.28	1.42	1.53
85	A5	1096	C	O4'-C1'	10.28	1.55	1.41
85	A5	4216	G	O4'-C1'	10.28	1.55	1.41
85	A5	1663	C	O4'-C1'	10.28	1.55	1.41
85	A5	4453	C	O4'-C1'	10.28	1.55	1.41
36	B2	1185	C	C2'-C1'	-10.27	1.42	1.53
85	A5	2669	C	C2'-C1'	10.27	1.64	1.53
85	A5	1338	G	C2'-C1'	-10.27	1.42	1.53
86	A7	67	C	O4'-C1'	10.27	1.55	1.41
87	A8	138	C	O4'-C1'	10.27	1.54	1.41
85	A5	655	C	O4'-C1'	10.27	1.54	1.41
86	A7	37	G	C2'-C1'	-10.27	1.42	1.53
85	A5	1594	C	O4'-C1'	10.26	1.54	1.41
85	A5	3765	G	O4'-C1'	10.26	1.54	1.41
36	B2	142	C	O4'-C1'	-10.26	1.28	1.41
36	B2	1313	A	C2'-C1'	-10.26	1.42	1.53
36	B2	1841	C	O4'-C1'	10.26	1.54	1.41
85	A5	350	C	O4'-C1'	10.26	1.54	1.41
85	A5	664	G	C2'-C1'	-10.26	1.42	1.53
36	B2	1833	C	O4'-C1'	10.25	1.54	1.41
85	A5	190	G	O4'-C1'	10.25	1.54	1.41
85	A5	1441	C	O4'-C1'	10.25	1.54	1.41
85	A5	2700	G	C2'-C1'	-10.25	1.42	1.53
36	B2	420	G	C2'-C1'	-10.25	1.42	1.53
36	B2	1102	G	C2'-C1'	-10.25	1.42	1.53
85	A5	948	C	O4'-C1'	10.24	1.54	1.41
85	A5	4558	U	O4'-C1'	10.24	1.54	1.41
85	A5	210	C	C2'-C1'	-10.24	1.42	1.53
36	B2	84	A	C2'-C1'	-10.23	1.42	1.53
85	A5	1474	C	C2'-C1'	-10.23	1.42	1.53
85	A5	1759	G	C2'-C1'	-10.23	1.42	1.53
36	B2	733	C	O4'-C1'	10.23	1.54	1.41
85	A5	292	G	O4'-C1'	10.23	1.54	1.41
85	A5	1166	G	C2'-C1'	-10.23	1.42	1.53
36	B2	1169	G	O4'-C1'	10.22	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	141	C	C2'-C1'	-10.22	1.42	1.53
85	A5	2497	C	C2'-C1'	-10.22	1.42	1.53
85	A5	3926	C	C2'-C1'	-10.22	1.42	1.53
36	B2	1234	C	C2'-C1'	-10.21	1.42	1.53
85	A5	688	U	O4'-C1'	10.21	1.54	1.41
85	A5	705	G	C2'-C1'	-10.21	1.42	1.53
36	B2	392	A	O4'-C1'	10.21	1.54	1.41
85	A5	992	C	C2'-C1'	-10.21	1.42	1.53
85	A5	3878	C	O4'-C1'	10.21	1.54	1.41
85	A5	4370	G	C2'-C1'	-10.20	1.42	1.53
85	A5	1250	C	O4'-C1'	10.20	1.54	1.41
85	A5	1307	A	C2'-C1'	-10.20	1.42	1.53
85	A5	3837	C	C2'-C1'	-10.20	1.42	1.53
85	A5	303	C	C2'-C1'	-10.20	1.42	1.53
85	A5	524	C	O4'-C1'	10.20	1.54	1.41
85	A5	2759	G	O4'-C1'	10.20	1.54	1.41
85	A5	2880	U	O4'-C1'	10.20	1.54	1.41
85	A5	1188	C	O4'-C1'	10.20	1.54	1.41
36	B2	598	G	C2'-C1'	-10.19	1.42	1.53
36	B2	1275	G	C2'-C1'	-10.19	1.42	1.53
85	A5	1893	C	C2'-C1'	-10.19	1.42	1.53
85	A5	3819	G	C2'-C1'	-10.19	1.42	1.53
85	A5	1311	G	C2'-C1'	-10.18	1.42	1.53
85	A5	2794	C	O4'-C1'	10.18	1.54	1.41
85	A5	3911	C	C2'-C1'	-10.18	1.42	1.53
85	A5	4613	C	C2'-C1'	-10.18	1.42	1.53
36	B2	1414	A	C2'-C1'	-10.18	1.42	1.53
85	A5	1477	C	O4'-C1'	10.18	1.54	1.41
85	A5	1866	U	C2'-C1'	-10.18	1.42	1.53
85	A5	3915	U	O4'-C1'	10.18	1.54	1.41
85	A5	4327	C	C2'-C1'	-10.18	1.42	1.53
85	A5	1651	G	C2'-C1'	-10.17	1.42	1.53
36	B2	1276	A	O4'-C1'	10.17	1.54	1.41
85	A5	4286	C	O4'-C1'	10.17	1.54	1.41
36	B2	1578	U	O4'-C1'	-10.17	1.28	1.41
36	B2	1789	G	O4'-C1'	10.17	1.54	1.41
85	A5	4154	G	C2'-C1'	-10.17	1.42	1.53
36	B2	244	A	O4'-C1'	10.16	1.54	1.41
36	B2	827	A	C2'-C1'	-10.16	1.42	1.53
85	A5	1807	C	O4'-C1'	10.16	1.54	1.41
36	B2	981	A	O4'-C1'	10.16	1.54	1.41
85	A5	1461	C	O4'-C1'	10.16	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1398	A	O4'-C1'	-10.16	1.28	1.41
85	A5	1895	G	C2'-C1'	-10.16	1.42	1.53
36	B2	1100	A	O4'-C1'	10.15	1.54	1.41
85	A5	4262	C	O4'-C1'	10.15	1.54	1.41
85	A5	4068	U	O4'-C1'	10.15	1.54	1.41
85	A5	675	C	O4'-C1'	10.14	1.54	1.41
85	A5	1499	C	C2'-C1'	-10.14	1.42	1.53
85	A5	2728	U	C2'-C1'	-10.14	1.42	1.53
85	A5	3684	G	O4'-C1'	10.14	1.54	1.41
85	A5	4487	A	O4'-C1'	10.14	1.54	1.41
36	B2	52	G	C2'-C1'	-10.13	1.42	1.53
36	B2	693	A	C2'-C1'	-10.13	1.42	1.53
36	B2	76	U	O4'-C1'	10.13	1.54	1.41
85	A5	2716	C	C2'-C1'	-10.12	1.42	1.53
85	A5	2768	C	C2'-C1'	-10.12	1.42	1.53
87	A8	65	A	O4'-C1'	10.12	1.54	1.41
85	A5	4101	C	O4'-C1'	10.12	1.54	1.41
85	A5	2853	C	O4'-C1'	10.12	1.54	1.41
85	A5	5041	G	O4'-C1'	-10.11	1.28	1.41
36	B2	1328	G	C2'-C1'	-10.11	1.42	1.53
64	CF	210	PRO	N-CD	10.11	1.62	1.47
85	A5	4742	G	C2'-C1'	-10.11	1.42	1.53
85	A5	1097	C	O4'-C1'	10.11	1.54	1.41
85	A5	4153	C	C2'-C1'	-10.11	1.42	1.53
36	B2	663	C	C2'-C1'	-10.10	1.42	1.53
85	A5	1431	C	O4'-C1'	10.10	1.54	1.41
36	B2	323	C	O4'-C1'	10.10	1.54	1.41
36	B2	1080	A	O4'-C1'	-10.10	1.28	1.41
36	B2	75	G	C2'-C1'	-10.09	1.42	1.53
85	A5	1323	A	C2'-C1'	-10.09	1.42	1.53
36	B2	1316	C	O4'-C1'	10.09	1.54	1.41
87	A8	26	C	C2'-C1'	-10.09	1.42	1.53
36	B2	120	U	C2'-C1'	-10.09	1.42	1.53
36	B2	1745	A	C2'-C1'	10.09	1.64	1.53
85	A5	259	C	C2'-C1'	-10.09	1.42	1.53
85	A5	4207	C	C2'-C1'	-10.09	1.42	1.53
85	A5	5070	C	O4'-C1'	10.09	1.54	1.41
85	A5	2820	C	C2'-C1'	-10.08	1.42	1.53
87	A8	155	C	O4'-C1'	10.08	1.54	1.41
85	A5	4584	A	O4'-C1'	10.08	1.54	1.41
85	A5	2616	C	O4'-C1'	10.08	1.54	1.41
87	A8	69	U	C2'-C1'	-10.08	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2817	C	C2'-C1'	-10.07	1.42	1.53
85	A5	255	C	C2'-C1'	-10.07	1.42	1.53
85	A5	2026	A	C2'-C1'	-10.07	1.42	1.53
85	A5	2558	C	O4'-C1'	10.07	1.54	1.41
85	A5	4312	U	C2'-C1'	-10.07	1.42	1.53
36	B2	1143	A	C2'-C1'	-10.07	1.42	1.53
36	B2	1508	A	C2'-C1'	10.07	1.64	1.53
85	A5	1089	G	O4'-C1'	-10.07	1.28	1.41
36	B2	149	A	O4'-C1'	10.07	1.54	1.41
36	B2	1753	C	O4'-C1'	10.06	1.54	1.41
85	A5	983	C	C2'-C1'	-10.06	1.42	1.53
36	B2	1075	C	C2'-C1'	-10.06	1.42	1.53
85	A5	1192	C	O4'-C1'	10.06	1.54	1.41
85	A5	1346	C	O4'-C1'	10.06	1.54	1.41
85	A5	906	C	O4'-C1'	10.06	1.54	1.41
85	A5	2654	C	C2'-C1'	-10.06	1.42	1.53
85	A5	2502	G	C2'-C1'	-10.06	1.42	1.53
85	A5	2330	G	O4'-C1'	10.05	1.54	1.41
85	A5	1628	C	O4'-C1'	10.05	1.54	1.41
85	A5	1762	C	O4'-C1'	10.04	1.54	1.41
85	A5	4540	C	O4'-C1'	10.05	1.54	1.41
85	A5	4760	G	C2'-C1'	-10.05	1.42	1.53
36	B2	813	A	O4'-C1'	10.04	1.54	1.41
85	A5	4900	C	O4'-C1'	10.04	1.54	1.41
60	Cr	103	ARG	C-N	10.04	1.53	1.34
85	A5	346	G	O4'-C1'	-10.04	1.28	1.41
36	B2	325	C	C2'-C1'	10.04	1.64	1.53
85	A5	135	G	C2'-C1'	-10.04	1.42	1.53
36	B2	212	C	O4'-C1'	10.04	1.54	1.41
85	A5	1914	C	C2'-C1'	-10.04	1.42	1.53
85	A5	2760	G	C2'-C1'	10.04	1.64	1.53
85	A5	2321	G	C2'-C1'	-10.03	1.42	1.53
85	A5	5070	C	C2'-C1'	-10.03	1.42	1.53
36	B2	438	G	C2'-C1'	10.03	1.64	1.53
85	A5	464	G	O4'-C1'	10.03	1.54	1.41
85	A5	1479	G	C2'-C1'	-10.03	1.42	1.53
36	B2	196	C	O4'-C1'	10.03	1.54	1.41
46	CN	79	ALA	C-N	10.03	1.57	1.34
36	B2	82	G	C2'-C1'	10.03	1.64	1.53
36	B2	321	C	C2'-C1'	-10.02	1.42	1.53
36	B2	1213	C	C2'-C1'	-10.02	1.42	1.53
37	BC	47	C	O4'-C1'	10.02	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1431	C	C2'-C1'	-10.01	1.42	1.53
85	A5	2706	G	C2'-C1'	-10.01	1.42	1.53
85	A5	4110	C	C2'-C1'	-10.01	1.42	1.53
85	A5	199	G	C2'-C1'	-10.01	1.42	1.53
87	A8	12	G	C2'-C1'	-10.01	1.42	1.53
36	B2	1381	G	O4'-C1'	-10.01	1.28	1.41
85	A5	7	C	C2'-C1'	-10.01	1.42	1.53
36	B2	194	C	C2'-C1'	-10.01	1.42	1.53
36	B2	447	A	C2'-C1'	10.01	1.64	1.53
36	B2	960	U	O4'-C1'	10.01	1.54	1.41
36	B2	1793	A	O4'-C1'	10.01	1.54	1.41
85	A5	65	A	O4'-C1'	-10.00	1.28	1.41
85	A5	4553	A	O4'-C1'	10.00	1.54	1.41
85	A5	1655	C	O4'-C1'	9.99	1.54	1.41
85	A5	2540	C	O4'-C1'	9.99	1.54	1.41
85	A5	4698	C	O4'-C1'	9.99	1.54	1.41
36	B2	1605	G	O4'-C1'	9.98	1.54	1.41
85	A5	925	C	C2'-C1'	-9.98	1.42	1.53
85	A5	1496	G	O4'-C1'	9.98	1.54	1.41
85	A5	1634	A	O4'-C1'	9.98	1.54	1.41
36	B2	1828	C	O4'-C1'	9.98	1.54	1.41
36	B2	1590	C	C2'-C1'	-9.98	1.42	1.53
85	A5	3585	G	C2'-C1'	-9.98	1.42	1.53
85	A5	3649	A	O4'-C1'	9.97	1.54	1.41
85	A5	4771	C	C2'-C1'	-9.97	1.42	1.53
85	A5	2595	C	O4'-C1'	9.97	1.54	1.41
85	A5	4955	A	C2'-C1'	9.97	1.64	1.53
35	Ah	157	ILE	CA-C	9.96	1.78	1.52
85	A5	2620	G	C2'-C1'	-9.96	1.42	1.53
85	A5	2807	A	O4'-C1'	9.96	1.54	1.41
85	A5	2116	C	O4'-C1'	9.96	1.54	1.41
36	B2	496	C	O4'-C1'	9.96	1.54	1.41
74	CC	226	GLY	C-N	-9.96	1.11	1.34
85	A5	755	C	O4'-C1'	9.96	1.54	1.41
36	B2	859	G	C2'-C1'	-9.95	1.42	1.53
85	A5	1264	C	O4'-C1'	9.95	1.54	1.41
36	B2	573	U	C2'-C1'	-9.94	1.42	1.53
85	A5	133	C	O4'-C1'	9.95	1.54	1.41
85	A5	1393	G	O4'-C1'	9.94	1.54	1.41
85	A5	2246	C	O4'-C1'	9.94	1.54	1.41
85	A5	340	C	C2'-C1'	-9.94	1.42	1.53
85	A5	4871	C	C2'-C1'	9.94	1.64	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4505	C	C2'-C1'	-9.93	1.42	1.53
85	A5	501	C	O4'-C1'	9.93	1.54	1.41
85	A5	1619	G	C2'-C1'	-9.93	1.42	1.53
17	AV	31	SER	N-CA	9.93	1.66	1.46
36	B2	66	G	O4'-C1'	9.93	1.54	1.41
85	A5	1893	C	O4'-C1'	9.93	1.54	1.41
36	B2	1033	G	C2'-C1'	-9.92	1.42	1.53
85	A5	904	C	O4'-C1'	9.92	1.54	1.41
85	A5	718	C	O4'-C1'	9.92	1.54	1.41
85	A5	1467	C	O4'-C1'	9.92	1.54	1.41
36	B2	664	A	C2'-C1'	-9.92	1.42	1.53
45	Ca	109	TYR	CD2-CE2	-9.91	1.24	1.39
85	A5	5029	C	O4'-C1'	9.91	1.54	1.41
85	A5	2295	C	O4'-C1'	9.91	1.54	1.41
85	A5	2864	A	O4'-C1'	9.91	1.54	1.41
85	A5	474	C	O4'-C1'	9.91	1.54	1.41
85	A5	4233	A	O4'-C1'	-9.91	1.28	1.41
85	A5	2861	C	C2'-C1'	-9.91	1.42	1.53
85	A5	3789	C	O4'-C1'	9.91	1.54	1.41
85	A5	1279	A	C2'-C1'	-9.90	1.42	1.53
85	A5	2379	A	O4'-C1'	9.90	1.54	1.41
36	B2	570	C	C2'-C1'	-9.90	1.42	1.53
85	A5	1731	C	C2'-C1'	-9.89	1.42	1.53
85	A5	1848	C	O4'-C1'	9.89	1.54	1.41
85	A5	1857	C	O4'-C1'	9.89	1.54	1.41
85	A5	351	C	C2'-C1'	-9.89	1.42	1.53
85	A5	1417	C	C2'-C1'	-9.89	1.42	1.53
36	B2	1656	G	C2'-C1'	-9.89	1.42	1.53
85	A5	1465	G	C2'-C1'	-9.89	1.42	1.53
85	A5	1315	C	C2'-C1'	-9.89	1.42	1.53
87	A8	28	C	C2'-C1'	-9.89	1.42	1.53
85	A5	489	C	O4'-C1'	9.88	1.54	1.41
85	A5	3625	G	O4'-C1'	9.88	1.54	1.41
36	B2	543	C	O4'-C1'	9.88	1.54	1.41
85	A5	4490	C	O4'-C1'	9.88	1.54	1.41
85	A5	4635	A	O4'-C1'	-9.88	1.28	1.41
36	B2	1333	U	C2'-C1'	9.87	1.64	1.53
85	A5	736	C	C2'-C1'	-9.87	1.42	1.53
85	A5	134	G	C2'-C1'	-9.87	1.42	1.53
85	A5	4269	G	C2'-C1'	-9.87	1.42	1.53
85	A5	1796	U	O4'-C1'	9.87	1.54	1.41
85	A5	4892	A	O4'-C1'	9.87	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1683	C	O4'-C1'	9.87	1.54	1.41
85	A5	127	G	C2'-C1'	-9.86	1.42	1.53
85	A5	4606	G	O4'-C1'	9.87	1.54	1.41
36	B2	307	G	O4'-C1'	-9.86	1.28	1.41
36	B2	85	A	C2'-C1'	-9.86	1.42	1.53
36	B2	455	A	O4'-C1'	9.86	1.54	1.41
85	A5	4496	A	O4'-C1'	9.86	1.54	1.41
36	B2	1772	C	C2'-C1'	-9.86	1.42	1.53
85	A5	957	G	O4'-C1'	-9.86	1.28	1.41
85	A5	4527	G	O4'-C1'	-9.86	1.28	1.41
36	B2	111	A	O4'-C1'	-9.85	1.28	1.41
85	A5	274	C	O4'-C1'	9.85	1.54	1.41
85	A5	922	C	O4'-C1'	9.85	1.54	1.41
85	A5	4626	A	C2'-C1'	-9.85	1.42	1.53
36	B2	950	C	O4'-C1'	9.85	1.54	1.41
85	A5	1631	A	C2'-C1'	9.85	1.64	1.53
36	B2	497	C	C2'-C1'	-9.84	1.42	1.53
48	CD	66	TYR	CD2-CE2	-9.84	1.24	1.39
85	A5	2615	C	C2'-C1'	-9.84	1.42	1.53
85	A5	1104	C	O4'-C1'	9.84	1.54	1.41
36	B2	1010	G	O4'-C1'	-9.84	1.28	1.41
85	A5	925	C	O4'-C1'	9.84	1.54	1.41
85	A5	1417	C	O4'-C1'	9.84	1.54	1.41
85	A5	2500	U	C2'-C1'	-9.84	1.42	1.53
35	Ah	157	ILE	C-O	-9.83	1.04	1.23
36	B2	1035	A	C2'-C1'	-9.83	1.42	1.53
85	A5	947	C	O4'-C1'	9.83	1.54	1.41
85	A5	1579	C	C2'-C1'	-9.83	1.42	1.53
85	A5	4251	A	C2'-C1'	-9.83	1.42	1.53
36	B2	1471	C	C2'-C1'	-9.83	1.42	1.53
58	CW	31	PHE	C-N	-9.83	1.11	1.34
85	A5	1240	G	O4'-C1'	-9.82	1.28	1.41
85	A5	2560	C	O4'-C1'	9.81	1.54	1.41
36	B2	458	A	O4'-C1'	9.81	1.54	1.41
36	B2	1059	G	C2'-C1'	-9.81	1.42	1.53
36	B2	1363	C	O4'-C1'	9.81	1.54	1.41
85	A5	1515	A	O4'-C1'	9.81	1.54	1.41
85	A5	2818	C	O4'-C1'	9.81	1.54	1.41
85	A5	4263	C	C2'-C1'	-9.80	1.42	1.53
36	B2	1785	C	C2'-C1'	9.80	1.64	1.53
85	A5	33	A	O4'-C1'	9.80	1.54	1.41
85	A5	986	C	O4'-C1'	9.80	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	A7	72	U	C2'-C1'	-9.80	1.42	1.53
85	A5	4109	G	C2'-C1'	-9.80	1.42	1.53
85	A5	1474	C	O4'-C1'	9.79	1.54	1.41
85	A5	1554	A	O4'-C1'	9.79	1.54	1.41
85	A5	2863	G	O4'-C1'	9.79	1.54	1.41
36	B2	1790	A	C2'-C1'	-9.79	1.42	1.53
85	A5	2060	G	C2'-C1'	-9.79	1.42	1.53
85	A5	2073	C	O4'-C1'	9.79	1.54	1.41
36	B2	1320	G	O4'-C1'	-9.79	1.28	1.41
36	B2	1432	U	C2'-C1'	-9.78	1.42	1.53
85	A5	2247	C	C2'-C1'	9.78	1.64	1.53
85	A5	2701	U	C2'-C1'	-9.78	1.42	1.53
36	B2	936	G	C2'-C1'	-9.78	1.42	1.53
36	B2	1825	A	C2'-C1'	9.78	1.64	1.53
85	A5	3802	U	C2'-C1'	-9.78	1.42	1.53
85	A5	4619	U	C2'-C1'	-9.78	1.42	1.53
36	B2	554	A	C2'-C1'	-9.77	1.42	1.53
36	B2	1751	C	C2'-C1'	-9.77	1.42	1.53
85	A5	4750	G	C2'-C1'	-9.77	1.42	1.53
85	A5	5008	C	O4'-C1'	9.77	1.54	1.41
85	A5	4256	A	O4'-C1'	-9.77	1.28	1.41
36	B2	402	C	O4'-C1'	9.76	1.54	1.41
36	B2	892	U	C2'-C1'	-9.76	1.42	1.53
37	BC	63	U	C2'-C1'	-9.76	1.42	1.53
85	A5	2281	U	C2'-C1'	-9.76	1.42	1.53
85	A5	3829	G	C2'-C1'	-9.76	1.42	1.53
85	A5	2817	C	O4'-C1'	9.76	1.54	1.41
85	A5	4252	C	O4'-C1'	9.76	1.54	1.41
36	B2	1564	C	O4'-C1'	9.75	1.54	1.41
85	A5	2108	G	O4'-C1'	9.75	1.54	1.41
85	A5	3942	A	C2'-C1'	9.75	1.64	1.53
85	A5	4060	U	C2'-C1'	9.75	1.64	1.53
36	B2	67	C	O4'-C1'	-9.74	1.28	1.41
36	B2	655	A	C2'-C1'	-9.74	1.42	1.53
85	A5	63	G	C2'-C1'	-9.74	1.42	1.53
85	A5	3835	C	O4'-C1'	9.74	1.54	1.41
36	B2	1205	C	C2'-C1'	-9.74	1.42	1.53
85	A5	4258	C	C2'-C1'	-9.74	1.42	1.53
85	A5	1801	A	O4'-C1'	9.73	1.54	1.41
85	A5	250	C	C2'-C1'	-9.73	1.42	1.53
85	A5	436	C	O4'-C1'	9.73	1.54	1.41
85	A5	4928	C	C2'-C1'	-9.73	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2264	C	O4'-C1'	9.72	1.54	1.41
85	A5	2613	C	O4'-C1'	9.72	1.54	1.41
85	A5	1727	U	O4'-C1'	9.72	1.54	1.41
85	A5	2418	A	O4'-C1'	9.72	1.54	1.41
85	A5	3938	G	O4'-C1'	-9.72	1.29	1.41
85	A5	4158	C	O4'-C1'	9.72	1.54	1.41
36	B2	96	C	O4'-C1'	9.71	1.54	1.41
85	A5	1430	C	C2'-C1'	-9.72	1.42	1.53
85	A5	1	C	O4'-C1'	9.71	1.54	1.41
85	A5	2045	G	C2'-C1'	-9.71	1.42	1.53
85	A5	4048	A	O4'-C1'	-9.71	1.29	1.41
36	B2	521	A	C2'-C1'	-9.71	1.42	1.53
36	B2	667	U	O4'-C1'	9.70	1.54	1.41
85	A5	1365	C	O4'-C1'	9.70	1.54	1.41
85	A5	4298	A	O4'-C1'	9.70	1.54	1.41
85	A5	1668	A	O4'-C1'	9.70	1.54	1.41
36	B2	1124	C	O4'-C1'	9.70	1.54	1.41
36	B2	429	C	O4'-C1'	9.70	1.54	1.41
85	A5	302	C	C2'-C1'	-9.70	1.42	1.53
85	A5	2366	A	C2'-C1'	-9.69	1.42	1.53
85	A5	4136	G	C2'-C1'	-9.70	1.42	1.53
85	A5	4924	C	C2'-C1'	-9.69	1.42	1.53
36	B2	1814	G	C2'-C1'	-9.69	1.42	1.53
85	A5	2886	U	C2'-C1'	-9.69	1.42	1.53
85	A5	2580	U	O4'-C1'	9.69	1.54	1.41
85	A5	2319	C	C2'-C1'	-9.69	1.42	1.53
85	A5	3636	C	O4'-C1'	9.69	1.54	1.41
85	A5	5	A	O4'-C1'	9.68	1.54	1.41
85	A5	3655	C	O4'-C1'	9.68	1.54	1.41
85	A5	4346	U	C2'-C1'	-9.68	1.42	1.53
85	A5	275	C	C2'-C1'	-9.68	1.42	1.53
36	B2	517	C	O4'-C1'	9.68	1.54	1.41
36	B2	1577	G	O4'-C1'	9.68	1.54	1.41
85	A5	3663	A	O4'-C1'	9.68	1.54	1.41
85	A5	2638	G	C2'-C1'	9.68	1.64	1.53
87	A8	46	G	O4'-C1'	9.68	1.54	1.41
36	B2	294	U	O4'-C1'	9.67	1.54	1.41
36	B2	574	A	C2'-C1'	-9.67	1.42	1.53
85	A5	4155	C	C2'-C1'	-9.67	1.42	1.53
36	B2	13	C	C2'-C1'	-9.67	1.42	1.53
85	A5	1085	C	O4'-C1'	9.67	1.54	1.41
85	A5	2408	U	C2'-C1'	-9.67	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1665	C	C2'-C1'	-9.67	1.42	1.53
85	A5	4208	U	C2'-C1'	-9.67	1.42	1.53
87	A8	115	G	O4'-C1'	9.67	1.54	1.41
85	A5	2887	U	C2'-C1'	9.66	1.64	1.53
85	A5	512	U	O4'-C1'	9.66	1.54	1.41
87	A8	14	U	O4'-C1'	9.66	1.54	1.41
36	B2	150	A	O4'-C1'	9.66	1.54	1.41
36	B2	491	C	C2'-C1'	-9.66	1.42	1.53
36	B2	321	C	O4'-C1'	9.65	1.54	1.41
85	A5	523	C	O4'-C1'	9.65	1.54	1.41
36	B2	1324	G	C2'-C1'	-9.65	1.42	1.53
85	A5	3932	U	O4'-C1'	9.65	1.54	1.41
85	A5	921	C	O4'-C1'	9.65	1.54	1.41
36	B2	1103	C	C2'-C1'	-9.65	1.42	1.53
36	B2	1300	U	O4'-C1'	-9.64	1.29	1.41
85	A5	1575	A	C2'-C1'	-9.64	1.42	1.53
87	A8	121	G	C2'-C1'	-9.64	1.42	1.53
85	A5	1082	C	C2'-C1'	-9.63	1.42	1.53
85	A5	4568	A	O4'-C1'	9.63	1.54	1.41
85	A5	4048	A	C2'-C1'	9.63	1.64	1.53
36	B2	685	A	C2'-C1'	-9.63	1.42	1.53
85	A5	237	G	O4'-C1'	-9.63	1.29	1.41
85	A5	4607	A	C2'-C1'	9.63	1.64	1.53
36	B2	307	G	C2'-C1'	9.62	1.64	1.53
85	A5	1291	G	O4'-C1'	9.62	1.54	1.41
85	A5	2362	U	C2'-C1'	9.63	1.64	1.53
85	A5	1534	A	C2'-C1'	-9.62	1.42	1.53
85	A5	1909	G	O4'-C1'	9.62	1.54	1.41
85	A5	2879	A	O4'-C1'	9.62	1.54	1.41
85	A5	4458	C	O4'-C1'	9.62	1.54	1.41
36	B2	1208	A	C2'-C1'	9.61	1.64	1.53
36	B2	1507	G	C2'-C1'	-9.62	1.42	1.53
85	A5	3673	C	O4'-C1'	9.62	1.54	1.41
85	A5	1167	C	O4'-C1'	9.61	1.54	1.41
36	B2	1674	G	C2'-C1'	-9.61	1.42	1.53
85	A5	2263	A	O4'-C1'	9.61	1.54	1.41
85	A5	3680	U	C2'-C1'	-9.61	1.42	1.53
36	B2	1215	C	C2'-C1'	9.61	1.64	1.53
85	A5	2035	C	C2'-C1'	-9.61	1.42	1.53
86	A7	28	C	C2'-C1'	-9.61	1.42	1.53
36	B2	369	C	C2'-C1'	-9.61	1.42	1.53
85	A5	2393	C	O4'-C1'	9.61	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1587	G	C2'-C1'	-9.60	1.42	1.53
85	A5	3833	C	O4'-C1'	9.60	1.54	1.41
85	A5	1255	A	C2'-C1'	-9.60	1.42	1.53
85	A5	1465	G	O4'-C1'	9.60	1.54	1.41
63	CB	32	PHE	CB-CG	-9.59	1.35	1.51
85	A5	715	G	C2'-C1'	-9.59	1.42	1.53
85	A5	4091	G	C2'-C1'	-9.59	1.42	1.53
85	A5	4621	C	O4'-C1'	9.59	1.54	1.41
85	A5	2892	C	O4'-C1'	9.59	1.54	1.41
85	A5	4488	A	O4'-C1'	-9.59	1.29	1.41
36	B2	1747	C	O3'-P	-9.59	1.49	1.61
85	A5	1280	C	O4'-C1'	9.58	1.54	1.41
85	A5	4345	C	O4'-C1'	9.58	1.54	1.41
85	A5	480	C	C2'-C1'	-9.58	1.42	1.53
36	B2	1116	C	O4'-C1'	-9.57	1.29	1.41
36	B2	1599	U	C2'-C1'	9.57	1.63	1.53
85	A5	928	C	O4'-C1'	9.57	1.54	1.41
85	A5	1625	G	C2'-C1'	-9.57	1.42	1.53
85	A5	2705	G	C2'-C1'	-9.57	1.42	1.53
85	A5	1413	C	C2'-C1'	-9.57	1.42	1.53
85	A5	3834	C	O4'-C1'	9.57	1.54	1.41
87	A8	10	G	C2'-C1'	-9.57	1.42	1.53
85	A5	341	G	C2'-C1'	-9.57	1.42	1.53
26	AJ	35	TYR	CD1-CE1	-9.56	1.25	1.39
87	A8	17	A	O4'-C1'	9.56	1.54	1.41
85	A5	2066	C	O4'-C1'	9.56	1.54	1.41
85	A5	2128	G	O4'-C1'	9.55	1.54	1.41
87	A8	6	C	C2'-C1'	-9.55	1.42	1.53
36	B2	833	C	C2'-C1'	-9.55	1.42	1.53
85	A5	1241	C	O4'-C1'	9.55	1.54	1.41
36	B2	1468	C	O4'-C1'	9.55	1.54	1.41
87	A8	35	C	O4'-C1'	9.54	1.54	1.41
36	B2	1342	U	C2'-C1'	-9.54	1.42	1.53
85	A5	1340	C	C2'-C1'	-9.54	1.42	1.53
85	A5	699	C	C2'-C1'	-9.54	1.42	1.53
85	A5	2750	G	C2'-C1'	-9.54	1.42	1.53
36	B2	1796	G	C2'-C1'	-9.54	1.42	1.53
85	A5	4073	A	C2'-C1'	-9.54	1.42	1.53
36	B2	747	U	O4'-C1'	9.53	1.54	1.41
37	BC	31	C	O4'-C1'	9.54	1.54	1.41
36	B2	88	G	C2'-C1'	-9.53	1.42	1.53
85	A5	1476	C	O4'-C1'	9.53	1.54	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4934	A	O4'-C1'	9.53	1.54	1.41
85	A5	1541	C	O4'-C1'	9.53	1.54	1.41
85	A5	1740	C	C2'-C1'	9.53	1.63	1.53
85	A5	3607	U	O4'-C1'	9.53	1.54	1.41
85	A5	4538	G	C2'-C1'	-9.52	1.42	1.53
85	A5	2424	G	C2'-C1'	-9.52	1.42	1.53
85	A5	4739	C	O4'-C1'	9.52	1.54	1.41
87	A8	1	C	C2'-C1'	-9.52	1.42	1.53
85	A5	2781	G	C2'-C1'	-9.52	1.42	1.53
85	A5	1945	G	C2'-C1'	-9.51	1.42	1.53
36	B2	173	A	O4'-C1'	9.51	1.54	1.41
36	B2	1466	G	C2'-C1'	-9.51	1.42	1.53
85	A5	1189	G	C2'-C1'	-9.51	1.42	1.53
85	A5	4594	U	C2'-C1'	-9.51	1.42	1.53
86	A7	52	C	C2'-C1'	-9.51	1.42	1.53
36	B2	215	G	O4'-C1'	9.50	1.54	1.41
36	B2	1343	U	O4'-C1'	9.50	1.54	1.41
36	B2	803	C	C2'-C1'	-9.50	1.43	1.53
36	B2	1332	A	O4'-C1'	9.50	1.53	1.41
85	A5	2775	C	O4'-C1'	9.50	1.53	1.41
85	A5	4486	C	O4'-C1'	9.49	1.53	1.41
85	A5	4553	A	C2'-C1'	-9.49	1.43	1.53
85	A5	4712	C	O4'-C1'	9.49	1.53	1.41
63	CB	15	GLY	C-N	-9.49	1.12	1.34
85	A5	334	A	C2'-C1'	-9.49	1.43	1.53
37	BC	44	G	O4'-C1'	9.49	1.53	1.41
85	A5	273	U	C2'-C1'	-9.49	1.43	1.53
85	A5	469	C	O4'-C1'	9.48	1.53	1.41
85	A5	1692	C	C2'-C1'	-9.48	1.43	1.53
36	B2	1712	A	C2'-C1'	-9.48	1.43	1.53
85	A5	1071	C	O4'-C1'	9.48	1.53	1.41
85	A5	1468	C	O4'-C1'	9.48	1.53	1.41
85	A5	4184	G	C2'-C1'	-9.47	1.43	1.53
85	A5	4763	U	O4'-C1'	9.47	1.53	1.41
60	Cr	37	SER	C-N	9.47	1.55	1.34
85	A5	520	C	O4'-C1'	9.47	1.53	1.41
36	B2	1787	G	C2'-C1'	-9.46	1.43	1.53
36	B2	1341	C	O4'-C1'	9.46	1.53	1.41
85	A5	712	C	C2'-C1'	-9.46	1.43	1.53
85	A5	1908	A	O4'-C1'	9.46	1.53	1.41
85	A5	4995	U	O4'-C1'	9.46	1.53	1.41
85	A5	1900	C	O4'-C1'	9.45	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	984	C	O4'-C1'	9.45	1.53	1.41
37	BC	19	A	C2'-C1'	9.45	1.63	1.53
85	A5	4279	A	O4'-C1'	9.45	1.53	1.41
85	A5	2644	G	C2'-C1'	-9.45	1.43	1.53
85	A5	3973	G	O4'-C1'	9.45	1.53	1.41
85	A5	693	C	O4'-C1'	9.44	1.53	1.41
85	A5	2737	C	O4'-C1'	9.44	1.53	1.41
85	A5	1551	C	O4'-C1'	9.44	1.53	1.41
36	B2	1441	U	C2'-C1'	9.44	1.63	1.53
85	A5	1996	C	O4'-C1'	9.44	1.53	1.41
85	A5	4666	G	C2'-C1'	-9.44	1.43	1.53
36	B2	1444	U	C2'-C1'	-9.44	1.43	1.53
64	CF	23	ARG	CA-C	9.44	1.77	1.52
85	A5	112	C	O4'-C1'	9.44	1.53	1.41
85	A5	2633	U	C2'-C1'	-9.44	1.43	1.53
85	A5	4988	U	C2'-C1'	-9.44	1.43	1.53
36	B2	31	U	C2'-C1'	9.43	1.63	1.53
85	A5	1643	A	O4'-C1'	9.43	1.53	1.41
36	B2	1033	G	O4'-C1'	9.43	1.53	1.41
8	AS	6	PRO	CA-C	9.42	1.71	1.52
85	A5	3797	C	O4'-C1'	9.42	1.53	1.41
85	A5	175	C	C2'-C1'	-9.42	1.43	1.53
85	A5	1409	C	C2'-C1'	9.42	1.63	1.53
36	B2	1436	C	C2'-C1'	-9.41	1.43	1.53
36	B2	467	G	O4'-C1'	9.41	1.53	1.41
85	A5	754	U	C2'-C1'	9.41	1.63	1.53
45	Ca	109	TYR	CD1-CE1	-9.41	1.25	1.39
85	A5	2600	A	C2'-C1'	-9.41	1.43	1.53
85	A5	685	C	O4'-C1'	9.40	1.53	1.41
85	A5	1922	G	C2'-C1'	-9.40	1.43	1.53
85	A5	4076	G	C2'-C1'	-9.40	1.43	1.53
85	A5	1109	C	C2'-C1'	-9.40	1.43	1.53
85	A5	4579	U	C2'-C1'	-9.40	1.43	1.53
36	B2	1855	G	C2'-C1'	-9.40	1.43	1.53
85	A5	197	A	O4'-C1'	9.39	1.53	1.41
85	A5	2507	A	C2'-C1'	-9.39	1.43	1.53
87	A8	107	C	O4'-C1'	9.39	1.53	1.41
36	B2	1406	G	C2'-C1'	-9.39	1.43	1.53
36	B2	1541	G	C2'-C1'	-9.39	1.43	1.53
85	A5	2478	C	O4'-C1'	9.39	1.53	1.41
85	A5	2583	C	O4'-C1'	9.39	1.53	1.41
85	A5	3957	U	O4'-C1'	9.39	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1936	C	O4'-C1'	9.38	1.53	1.41
85	A5	2446	C	C2'-C1'	-9.38	1.43	1.53
85	A5	2054	U	C2'-C1'	9.38	1.63	1.53
85	A5	373	G	O4'-C1'	-9.38	1.29	1.41
85	A5	2045	G	O4'-C1'	9.38	1.53	1.41
85	A5	1436	C	C2'-C1'	-9.37	1.43	1.53
37	BC	22	C	O4'-C1'	9.37	1.53	1.41
36	B2	1105	G	O4'-C1'	9.37	1.53	1.41
85	A5	1283	G	C2'-C1'	-9.37	1.43	1.53
85	A5	1875	C	C2'-C1'	-9.37	1.43	1.53
85	A5	1467	C	C2'-C1'	-9.37	1.43	1.53
36	B2	1553	C	C2'-C1'	9.37	1.63	1.53
36	B2	1749	G	C2'-C1'	-9.37	1.43	1.53
85	A5	1776	A	O4'-C1'	9.37	1.53	1.41
85	A5	4187	G	C2'-C1'	-9.37	1.43	1.53
36	B2	1756	C	O4'-C1'	9.36	1.53	1.41
36	B2	1867	U	C2'-C1'	9.36	1.63	1.53
87	A8	70	G	C2'-C1'	-9.36	1.43	1.53
85	A5	450	G	C2'-C1'	9.36	1.63	1.53
85	A5	1204	C	O4'-C1'	9.36	1.53	1.41
85	A5	4255	A	C2'-C1'	-9.36	1.43	1.53
85	A5	3597	G	C2'-C1'	-9.36	1.43	1.53
48	CD	66	TYR	CB-CG	-9.35	1.37	1.51
85	A5	990	C	C2'-C1'	9.35	1.63	1.53
85	A5	3796	U	O4'-C1'	9.35	1.53	1.41
85	A5	3854	C	C2'-C1'	-9.35	1.43	1.53
85	A5	1443	A	O4'-C1'	9.35	1.53	1.41
85	A5	1724	G	C2'-C1'	9.35	1.63	1.53
85	A5	1938	C	O4'-C1'	9.35	1.53	1.41
36	B2	1305	C	O4'-C1'	9.34	1.53	1.41
85	A5	2579	G	C2'-C1'	9.34	1.63	1.53
86	A7	46	C	O4'-C1'	9.34	1.53	1.41
85	A5	2809	G	C2'-C1'	-9.34	1.43	1.53
85	A5	2034	G	C2'-C1'	-9.33	1.43	1.53
85	A5	4418	G	C2'-C1'	9.33	1.63	1.53
36	B2	730	C	O4'-C1'	9.33	1.53	1.41
85	A5	1768	C	C2'-C1'	9.33	1.63	1.53
36	B2	1255	G	O4'-C1'	9.32	1.53	1.41
85	A5	3835	C	C2'-C1'	-9.32	1.43	1.53
85	A5	5054	C	C2'-C1'	9.32	1.63	1.53
85	A5	361	C	O4'-C1'	9.32	1.53	1.41
85	A5	463	A	O4'-C1'	9.32	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	628	A	O4'-C1'	-9.31	1.29	1.41
36	B2	660	C	C2'-C1'	-9.31	1.43	1.53
36	B2	888	U	O4'-C1'	9.31	1.53	1.41
85	A5	1400	G	O4'-C1'	9.31	1.53	1.41
85	A5	4521	U	O4'-C1'	9.31	1.53	1.41
85	A5	70	A	O4'-C1'	-9.31	1.29	1.41
85	A5	4166	G	C2'-C1'	-9.31	1.43	1.53
86	A7	120	U	C2'-C1'	9.31	1.63	1.53
85	A5	471	A	C2'-C1'	-9.31	1.43	1.53
85	A5	1571	G	C2'-C1'	-9.31	1.43	1.53
85	A5	2585	C	C2'-C1'	9.31	1.63	1.53
85	A5	1187	G	O4'-C1'	9.30	1.53	1.41
36	B2	1369	A	C2'-C1'	-9.29	1.43	1.53
85	A5	3836	A	O4'-C1'	9.29	1.53	1.41
40	CK	1	MET	C-N	9.29	1.51	1.34
86	A7	111	C	O4'-C1'	9.29	1.53	1.41
36	B2	1740	C	O4'-C1'	9.28	1.53	1.41
85	A5	4133	C	O4'-C1'	9.28	1.53	1.41
85	A5	10	A	C2'-C1'	-9.28	1.43	1.53
85	A5	2297	G	C2'-C1'	-9.28	1.43	1.53
85	A5	4215	C	O4'-C1'	9.28	1.53	1.41
36	B2	53	C	O4'-C1'	9.28	1.53	1.41
85	A5	1851	G	C2'-C1'	-9.27	1.43	1.53
85	A5	2029	A	C2'-C1'	-9.27	1.43	1.53
85	A5	322	C	C2'-C1'	-9.27	1.43	1.53
85	A5	4206	C	C2'-C1'	-9.27	1.43	1.53
85	A5	1648	C	C2'-C1'	-9.27	1.43	1.53
36	B2	1562	C	O4'-C1'	9.27	1.53	1.41
60	Cr	115	SER	C-N	9.27	1.55	1.34
85	A5	506	C	O4'-C1'	9.27	1.53	1.41
85	A5	4893	A	C2'-C1'	-9.27	1.43	1.53
36	B2	342	C	O4'-C1'	9.26	1.53	1.41
85	A5	3659	G	C2'-C1'	-9.26	1.43	1.53
23	AD	96	LEU	C-N	9.26	1.55	1.34
36	B2	948	C	O4'-C1'	9.26	1.53	1.41
36	B2	1570	G	O4'-C1'	-9.26	1.29	1.41
36	B2	1627	C	O4'-C1'	9.26	1.53	1.41
85	A5	1800	U	C2'-C1'	-9.26	1.43	1.53
86	A7	101	A	O4'-C1'	9.26	1.53	1.41
36	B2	1612	G	C2'-C1'	9.25	1.63	1.53
36	B2	1464	C	O4'-C1'	9.25	1.53	1.41
85	A5	119	G	O4'-C1'	9.25	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	943	U	O4'-C1'	9.25	1.53	1.41
85	A5	2131	C	O4'-C1'	9.25	1.53	1.41
36	B2	166	A	C2'-C1'	-9.24	1.43	1.53
81	CE	127	SER	CA-CB	9.24	1.66	1.52
85	A5	1985	G	C2'-C1'	-9.24	1.43	1.53
85	A5	4957	C	C2'-C1'	-9.24	1.43	1.53
85	A5	80	C	O4'-C1'	9.24	1.53	1.41
85	A5	4722	G	C2'-C1'	9.24	1.63	1.53
36	B2	1345	G	O4'-C1'	9.24	1.53	1.41
36	B2	1389	C	C2'-C1'	-9.24	1.43	1.53
85	A5	2805	C	C2'-C1'	-9.24	1.43	1.53
36	B2	1122	A	C2'-C1'	9.23	1.63	1.53
36	B2	1481	G	C2'-C1'	-9.23	1.43	1.53
8	AS	40	TYR	CA-C	-9.23	1.28	1.52
36	B2	237	C	C2'-C1'	9.23	1.63	1.53
36	B2	1856	C	O4'-C1'	9.23	1.53	1.41
85	A5	1256	G	C2'-C1'	-9.23	1.43	1.53
85	A5	2053	C	O4'-C1'	9.23	1.53	1.41
36	B2	450	C	C2'-C1'	9.23	1.63	1.53
36	B2	1539	U	C2'-C1'	9.23	1.63	1.53
85	A5	2754	G	P-O5'	-9.23	1.50	1.59
36	B2	794	A	O4'-C1'	9.22	1.53	1.41
36	B2	931	C	O4'-C1'	9.22	1.53	1.41
85	A5	1241	C	C2'-C1'	-9.22	1.43	1.53
85	A5	4648	A	O4'-C1'	9.22	1.53	1.41
87	A8	68	G	C2'-C1'	-9.22	1.43	1.53
85	A5	4072	C	O4'-C1'	9.22	1.53	1.41
85	A5	1760	G	C2'-C1'	-9.21	1.43	1.53
28	AC	62	PRO	N-CD	9.21	1.60	1.47
85	A5	211	G	C2'-C1'	-9.21	1.43	1.53
85	A5	1580	C	O4'-C1'	9.21	1.53	1.41
85	A5	1182	C	C2'-C1'	-9.21	1.43	1.53
85	A5	976	G	C2'-C1'	-9.21	1.43	1.53
85	A5	1098	G	C2'-C1'	-9.21	1.43	1.53
85	A5	215	C	O4'-C1'	9.20	1.53	1.41
85	A5	1791	U	O4'-C1'	9.20	1.53	1.41
85	A5	4446	U	O4'-C1'	9.20	1.53	1.41
85	A5	665	C	O4'-C1'	9.20	1.53	1.41
37	BC	73	C	C2'-C1'	-9.20	1.43	1.53
85	A5	320	C	O4'-C1'	9.20	1.53	1.41
85	A5	4424	A	C2'-C1'	-9.20	1.43	1.53
36	B2	624	C	O4'-C1'	9.20	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1894	C	O4'-C1'	9.20	1.53	1.41
85	A5	2041	A	O4'-C1'	-9.20	1.29	1.41
85	A5	4386	C	C2'-C1'	-9.20	1.43	1.53
86	A7	2	U	O4'-C1'	9.20	1.53	1.41
55	CU	60	VAL	N-CA	-9.19	1.27	1.46
85	A5	3746	A	O4'-C1'	9.19	1.53	1.41
36	B2	1029	G	O4'-C1'	9.19	1.53	1.41
85	A5	648	G	C2'-C1'	-9.18	1.43	1.53
85	A5	681	G	C2'-C1'	-9.18	1.43	1.53
85	A5	1933	G	C2'-C1'	-9.18	1.43	1.53
85	A5	1868	A	C2'-C1'	9.18	1.63	1.53
85	A5	3974	G	C2'-C1'	-9.18	1.43	1.53
85	A5	4244	A	O4'-C1'	9.18	1.53	1.41
36	B2	1718	G	C2'-C1'	-9.18	1.43	1.53
36	B2	1734	G	O4'-C1'	9.18	1.53	1.41
85	A5	4982	A	O4'-C1'	9.18	1.53	1.41
85	A5	3780	G	C2'-C1'	-9.18	1.43	1.53
86	A7	95	C	O4'-C1'	9.18	1.53	1.41
85	A5	1295	C	C2'-C1'	-9.17	1.43	1.53
85	A5	2496	G	C2'-C1'	-9.17	1.43	1.53
85	A5	2773	G	C2'-C1'	-9.17	1.43	1.53
36	B2	1623	A	C2'-C1'	9.17	1.63	1.53
85	A5	1473	U	C2'-C1'	-9.17	1.43	1.53
85	A5	338	A	O4'-C1'	9.17	1.53	1.41
85	A5	1586	G	C2'-C1'	-9.17	1.43	1.53
85	A5	1639	U	O4'-C1'	9.17	1.53	1.41
87	A8	124	U	O4'-C1'	9.17	1.53	1.41
85	A5	41	C	O4'-C1'	9.16	1.53	1.41
36	B2	676	C	O4'-C1'	9.16	1.53	1.41
85	A5	1378	C	O4'-C1'	9.16	1.53	1.41
36	B2	377	G	C2'-C1'	-9.16	1.43	1.53
85	A5	2792	C	O4'-C1'	9.16	1.53	1.41
85	A5	3692	A	C2'-C1'	9.15	1.63	1.53
85	A5	4132	C	O4'-C1'	9.15	1.53	1.41
85	A5	2735	G	C2'-C1'	-9.15	1.43	1.53
85	A5	684	G	O4'-C1'	9.15	1.53	1.41
86	A7	100	A	C2'-C1'	-9.15	1.43	1.53
36	B2	223	C	O4'-C1'	9.14	1.53	1.41
36	B2	899	U	O4'-C1'	9.14	1.53	1.41
36	B2	491	C	O4'-C1'	9.14	1.53	1.41
36	B2	1032	C	C2'-C1'	-9.14	1.43	1.53
85	A5	2804	C	O4'-C1'	9.14	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3723	A	C2'-C1'	-9.14	1.43	1.53
85	A5	432	U	C2'-C1'	-9.13	1.43	1.53
85	A5	695	G	C2'-C1'	-9.13	1.43	1.53
85	A5	1583	A	C2'-C1'	9.13	1.63	1.53
20	Aa	10	ARG	CD-NE	9.13	1.61	1.46
36	B2	42	A	C2'-C1'	-9.13	1.43	1.53
36	B2	676	C	C2'-C1'	-9.13	1.43	1.53
36	B2	1279	C	C2'-C1'	9.13	1.63	1.53
85	A5	4434	C	O4'-C1'	9.13	1.53	1.41
36	B2	1389	C	O4'-C1'	9.13	1.53	1.41
85	A5	4099	G	C2'-C1'	-9.13	1.43	1.53
85	A5	4329	G	C2'-C1'	9.13	1.63	1.53
85	A5	4386	C	O4'-C1'	9.13	1.53	1.41
86	A7	2	U	C2'-C1'	-9.12	1.43	1.53
87	A8	48	A	C2'-C1'	9.12	1.63	1.53
36	B2	1339	U	P-O5'	-9.12	1.50	1.59
85	A5	4065	G	C2'-C1'	-9.12	1.43	1.53
86	A7	97	G	C2'-C1'	-9.12	1.43	1.53
37	BC	27	U	C2'-C1'	9.12	1.63	1.53
85	A5	50	C	O4'-C1'	9.12	1.53	1.41
85	A5	3676	G	C2'-C1'	-9.12	1.43	1.53
36	B2	1053	C	O4'-C1'	9.11	1.53	1.41
85	A5	4909	A	C2'-C1'	9.11	1.63	1.53
36	B2	49	C	C2'-C1'	-9.11	1.43	1.53
85	A5	4596	C	C2'-C1'	-9.11	1.43	1.53
85	A5	445	U	C2'-C1'	9.11	1.63	1.53
85	A5	2454	U	O4'-C1'	9.11	1.53	1.41
85	A5	1542	U	O4'-C1'	9.10	1.53	1.41
85	A5	125	C	O4'-C1'	9.10	1.53	1.41
85	A5	2457	G	O4'-C1'	9.10	1.53	1.41
36	B2	171	A	O4'-C1'	-9.10	1.29	1.41
85	A5	3651	A	O4'-C1'	9.10	1.53	1.41
85	A5	3953	G	C2'-C1'	-9.10	1.43	1.53
85	A5	2290	C	O4'-C1'	9.09	1.53	1.41
36	B2	1652	G	C2'-C1'	-9.09	1.43	1.53
85	A5	101	A	O4'-C1'	9.09	1.53	1.41
85	A5	1468	C	C2'-C1'	-9.09	1.43	1.53
85	A5	1771	U	C2'-C1'	9.09	1.63	1.53
36	B2	693	A	O4'-C1'	9.08	1.53	1.41
85	A5	1692	C	O4'-C1'	9.08	1.53	1.41
85	A5	4965	U	C2'-C1'	9.08	1.63	1.53
85	A5	283	G	C2'-C1'	-9.08	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1180	C	C2'-C1'	-9.08	1.43	1.53
85	A5	1351	G	O4'-C1'	9.08	1.53	1.41
86	A7	56	G	C2'-C1'	-9.07	1.43	1.53
85	A5	4258	C	O4'-C1'	9.07	1.53	1.41
85	A5	1675	C	O4'-C1'	9.07	1.53	1.41
81	CE	27	VAL	N-CA	-9.07	1.28	1.46
36	B2	383	G	O4'-C1'	9.07	1.53	1.41
85	A5	371	A	C2'-C1'	-9.07	1.43	1.53
85	A5	470	A	O4'-C1'	9.07	1.53	1.41
85	A5	1072	C	C2'-C1'	-9.07	1.43	1.53
85	A5	4628	U	O4'-C1'	9.07	1.53	1.41
36	B2	1181	A	C2'-C1'	-9.06	1.43	1.53
85	A5	1288	G	C2'-C1'	-9.06	1.43	1.53
85	A5	2452	G	C2'-C1'	-9.06	1.43	1.53
85	A5	1299	G	C2'-C1'	-9.06	1.43	1.53
85	A5	1575	A	O4'-C1'	9.06	1.53	1.41
85	A5	4160	C	O4'-C1'	9.06	1.53	1.41
85	A5	2450	G	C2'-C1'	-9.05	1.43	1.53
40	CK	114	ARG	CD-NE	9.05	1.61	1.46
85	A5	6	C	C2'-C1'	-9.05	1.43	1.53
85	A5	1606	U	O4'-C1'	9.05	1.53	1.41
36	B2	1564	C	C2'-C1'	-9.05	1.43	1.53
85	A5	446	C	O4'-C1'	9.05	1.53	1.41
85	A5	502	C	O4'-C1'	9.05	1.53	1.41
85	A5	995	C	O4'-C1'	9.05	1.53	1.41
85	A5	2729	C	O4'-C1'	9.05	1.53	1.41
85	A5	3909	C	C2'-C1'	-9.05	1.43	1.53
85	A5	1569	U	O4'-C1'	9.04	1.53	1.41
85	A5	4285	U	C2'-C1'	-9.04	1.43	1.53
36	B2	741	C	C2'-C1'	-9.04	1.43	1.53
17	AV	78	ILE	CA-C	9.04	1.76	1.52
87	A8	1	C	O4'-C1'	9.03	1.53	1.41
36	B2	1797	U	O4'-C1'	9.03	1.53	1.41
85	A5	113	A	C2'-C1'	-9.03	1.43	1.53
36	B2	808	A	O4'-C1'	9.03	1.53	1.41
85	A5	4921	C	C2'-C1'	-9.03	1.43	1.53
85	A5	1977	C	O4'-C1'	9.03	1.53	1.41
85	A5	4917	C	C2'-C1'	-9.03	1.43	1.53
85	A5	2696	A	C2'-C1'	9.03	1.63	1.53
85	A5	5031	G	O4'-C1'	9.03	1.53	1.41
87	A8	126	C	O4'-C1'	9.02	1.53	1.41
87	A8	154	G	O4'-C1'	-9.02	1.29	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	166	C	O4'-C1'	9.02	1.53	1.41
85	A5	966	A	O4'-C1'	9.02	1.53	1.41
36	B2	1044	G	C2'-C1'	-9.02	1.43	1.53
85	A5	2505	C	C2'-C1'	9.02	1.63	1.53
85	A5	2616	C	C2'-C1'	-9.02	1.43	1.53
31	AH	109	ARG	CA-CB	-9.02	1.34	1.53
37	BC	53	A	O4'-C1'	9.02	1.53	1.41
36	B2	69	C	C2'-C1'	-9.01	1.43	1.53
85	A5	672	C	C2'-C1'	-9.01	1.43	1.53
85	A5	1901	C	O4'-C1'	9.01	1.53	1.41
85	A5	718	C	C2'-C1'	-9.01	1.43	1.53
36	B2	831	G	C2'-C1'	-9.01	1.43	1.53
36	B2	688	U	O4'-C1'	-9.01	1.29	1.41
85	A5	1360	G	O3'-P	-9.00	1.50	1.61
85	A5	1357	C	O4'-C1'	9.00	1.53	1.41
85	A5	4284	C	O4'-C1'	9.00	1.53	1.41
85	A5	5004	C	O4'-C1'	9.00	1.53	1.41
73	Cl	37	TYR	CB-CG	-8.99	1.38	1.51
85	A5	102	G	O4'-C1'	8.99	1.53	1.41
85	A5	2316	G	C2'-C1'	-8.99	1.43	1.53
36	B2	41	G	O4'-C1'	8.98	1.53	1.41
36	B2	1786	U	O4'-C1'	8.98	1.53	1.41
85	A5	2011	C	O4'-C1'	8.98	1.53	1.41
85	A5	282	C	O4'-C1'	8.98	1.53	1.41
85	A5	1598	C	C2'-C1'	-8.98	1.43	1.53
87	A8	104	A	C2'-C1'	-8.98	1.43	1.53
20	Aa	97	PRO	C-N	8.97	1.51	1.34
85	A5	4701	A	O4'-C1'	8.97	1.53	1.41
85	A5	690	C	O4'-C1'	8.97	1.53	1.41
85	A5	4666	G	O4'-C1'	8.97	1.53	1.41
85	A5	2462	C	O4'-C1'	8.96	1.53	1.41
37	BC	57	A	O4'-C1'	8.96	1.53	1.41
85	A5	4477	A	O4'-C1'	8.96	1.53	1.41
85	A5	5004	C	C2'-C1'	-8.96	1.43	1.53
87	A8	59	A	O4'-C1'	8.96	1.53	1.41
36	B2	1819	A	O4'-C1'	8.95	1.53	1.41
36	B2	1651	A	C2'-C1'	8.94	1.63	1.53
36	B2	195	C	O4'-C1'	8.94	1.53	1.41
15	AB	155	TYR	CB-CG	-8.94	1.38	1.51
85	A5	143	C	O4'-C1'	8.94	1.53	1.41
85	A5	1255	A	O4'-C1'	8.93	1.53	1.41
85	A5	4580	U	O4'-C1'	8.93	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	A7	23	A	C2'-C1'	-8.93	1.43	1.53
87	A8	23	C	O4'-C1'	8.92	1.53	1.41
85	A5	660	A	C2'-C1'	8.92	1.63	1.53
36	B2	1058	A	O4'-C1'	8.91	1.53	1.41
85	A5	4922	C	O4'-C1'	8.91	1.53	1.41
87	A8	87	G	O4'-C1'	-8.91	1.30	1.41
85	A5	2302	C	O4'-C1'	8.91	1.53	1.41
85	A5	4275	G	O4'-C1'	-8.91	1.30	1.41
85	A5	5036	C	C2'-C1'	-8.91	1.43	1.53
36	B2	415	A	C2'-C1'	8.91	1.63	1.53
36	B2	1146	C	O4'-C1'	8.90	1.53	1.41
36	B2	520	A	O4'-C1'	8.90	1.53	1.41
36	B2	1340	U	C2'-C1'	8.90	1.63	1.53
36	B2	1438	A	O4'-C1'	8.90	1.53	1.41
36	B2	1538	C	O4'-C1'	8.90	1.53	1.41
74	CC	304	ALA	C-N	-8.90	1.17	1.34
85	A5	124	C	O4'-C1'	8.90	1.53	1.41
85	A5	4537	C	O4'-C1'	8.90	1.53	1.41
36	B2	69	C	O4'-C1'	8.90	1.53	1.41
36	B2	170	A	C2'-C1'	-8.89	1.43	1.53
36	B2	1482	C	O4'-C1'	8.89	1.53	1.41
85	A5	4321	U	O4'-C1'	8.89	1.53	1.41
85	A5	67	C	O4'-C1'	8.89	1.53	1.41
85	A5	4367	G	O4'-C1'	8.89	1.53	1.41
85	A5	1774	C	O4'-C1'	8.89	1.53	1.41
85	A5	2384	U	C2'-C1'	-8.89	1.43	1.53
85	A5	3592	G	O4'-C1'	8.89	1.53	1.41
85	A5	4630	G	C2'-C1'	-8.89	1.43	1.53
85	A5	1356	U	O4'-C1'	8.89	1.53	1.41
85	A5	1380	G	C2'-C1'	-8.89	1.43	1.53
85	A5	2337	C	O4'-C1'	8.89	1.53	1.41
36	B2	1513	C	O4'-C1'	8.89	1.53	1.41
85	A5	2528	G	C2'-C1'	-8.88	1.43	1.53
36	B2	904	A	C2'-C1'	-8.88	1.43	1.53
85	A5	1205	G	O4'-C1'	8.88	1.53	1.41
36	B2	1374	C	O4'-C1'	8.87	1.53	1.41
85	A5	4184	G	O4'-C1'	8.87	1.53	1.41
36	B2	1683	C	C2'-C1'	-8.87	1.43	1.53
36	B2	1835	A	O4'-C1'	8.87	1.53	1.41
85	A5	2481	G	O4'-C1'	8.87	1.53	1.41
85	A5	4451	G	O4'-C1'	8.87	1.53	1.41
37	BC	12	G	C2'-C1'	-8.87	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	301	G	C2'-C1'	-8.86	1.43	1.53
85	A5	1047	C	O4'-C1'	8.86	1.53	1.41
85	A5	3601	C	O4'-C1'	8.87	1.53	1.41
36	B2	178	C	O4'-C1'	8.86	1.53	1.41
86	A7	108	G	C2'-C1'	-8.86	1.43	1.53
85	A5	4429	C	O4'-C1'	8.86	1.53	1.41
87	A8	54	C	C2'-C1'	-8.86	1.43	1.53
36	B2	1022	U	O4'-C1'	8.86	1.53	1.41
85	A5	2315	G	C2'-C1'	-8.86	1.43	1.53
85	A5	366	A	O4'-C1'	8.86	1.53	1.41
85	A5	1776	A	C2'-C1'	-8.86	1.43	1.53
85	A5	2284	G	C2'-C1'	-8.86	1.43	1.53
85	A5	3977	C	O4'-C1'	8.86	1.53	1.41
29	AG	36	VAL	CB-CG1	-8.85	1.34	1.52
85	A5	4070	U	C2'-C1'	-8.85	1.43	1.53
85	A5	4371	G	C2'-C1'	-8.85	1.43	1.53
85	A5	1180	C	O4'-C1'	8.85	1.53	1.41
85	A5	1332	C	O4'-C1'	8.85	1.53	1.41
85	A5	1572	U	C2'-C1'	-8.85	1.43	1.53
85	A5	2614	C	C2'-C1'	-8.85	1.43	1.53
85	A5	1640	C	C2'-C1'	8.85	1.63	1.53
36	B2	857	U	O4'-C1'	8.85	1.53	1.41
85	A5	1237	C	O4'-C1'	8.85	1.53	1.41
85	A5	1778	C	O4'-C1'	8.84	1.53	1.41
36	B2	976	G	C2'-C1'	-8.84	1.43	1.53
85	A5	1361	G	C2'-C1'	8.84	1.63	1.53
85	A5	5069	U	O4'-C1'	8.84	1.53	1.41
58	CW	32	LEU	C-N	-8.84	1.13	1.34
85	A5	109	G	C2'-C1'	-8.84	1.43	1.53
85	A5	1865	G	P-O5'	-8.84	1.50	1.59
86	A7	86	G	C2'-C1'	-8.84	1.43	1.53
85	A5	1446	C	C2'-C1'	-8.84	1.43	1.53
85	A5	1397	A	C2'-C1'	8.83	1.63	1.53
85	A5	2655	C	C2'-C1'	-8.83	1.43	1.53
36	B2	106	C	O4'-C1'	8.83	1.53	1.41
36	B2	97	U	O4'-C1'	8.83	1.53	1.41
85	A5	2421	G	O4'-C1'	-8.82	1.30	1.41
85	A5	2846	G	C2'-C1'	-8.82	1.43	1.53
86	A7	17	C	O4'-C1'	8.82	1.53	1.41
36	B2	943	U	C2'-C1'	-8.82	1.43	1.53
36	B2	1108	G	O4'-C1'	-8.82	1.30	1.41
85	A5	3923	A	O4'-C1'	8.82	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	21	G	C2'-C1'	8.81	1.63	1.53
85	A5	2257	C	C2'-C1'	8.81	1.63	1.53
85	A5	1433	A	C2'-C1'	-8.81	1.43	1.53
85	A5	2307	A	C2'-C1'	-8.81	1.43	1.53
87	A8	44	A	C2'-C1'	-8.81	1.43	1.53
36	B2	214	U	O4'-C1'	8.81	1.53	1.41
38	Cz	28	PHE	C-N	8.81	1.54	1.34
85	A5	332	C	C2'-C1'	-8.81	1.43	1.53
85	A5	2611	A	C2'-C1'	-8.81	1.43	1.53
36	B2	663	C	O4'-C1'	8.81	1.53	1.41
81	CE	85	LYS	CA-C	8.81	1.75	1.52
36	B2	687	C	C2'-C1'	-8.80	1.43	1.53
85	A5	435	A	C2'-C1'	-8.80	1.43	1.53
85	A5	2607	C	O4'-C1'	8.80	1.53	1.41
85	A5	954	C	C2'-C1'	-8.80	1.43	1.53
85	A5	4281	A	C2'-C1'	-8.80	1.43	1.53
86	A7	23	A	O4'-C1'	8.80	1.53	1.41
87	A8	98	C	O4'-C1'	8.80	1.53	1.41
85	A5	697	G	O4'-C1'	8.80	1.53	1.41
85	A5	482	G	O4'-C1'	8.80	1.53	1.41
85	A5	4769	G	C2'-C1'	-8.80	1.43	1.53
36	B2	207	G	C2'-C1'	8.80	1.63	1.53
85	A5	110	C	O4'-C1'	8.80	1.53	1.41
36	B2	584	A	C2'-C1'	-8.79	1.43	1.53
85	A5	1880	G	O4'-C1'	8.79	1.53	1.41
85	A5	3894	A	O4'-C1'	8.79	1.53	1.41
85	A5	5019	A	C2'-C1'	-8.79	1.43	1.53
85	A5	250	C	O4'-C1'	8.79	1.53	1.41
85	A5	2905	C	O4'-C1'	8.79	1.53	1.41
85	A5	3667	C	O4'-C1'	8.79	1.53	1.41
85	A5	703	G	C2'-C1'	8.78	1.63	1.53
85	A5	2498	C	O4'-C1'	8.78	1.53	1.41
36	B2	26	U	O4'-C1'	8.78	1.53	1.41
36	B2	1043	G	C2'-C1'	-8.78	1.43	1.53
85	A5	3593	C	O4'-C1'	8.78	1.53	1.41
87	A8	66	A	C2'-C1'	-8.77	1.43	1.53
36	B2	1292	C	C2'-C1'	-8.77	1.43	1.53
85	A5	2876	G	O4'-C1'	-8.77	1.30	1.41
36	B2	390	C	O4'-C1'	8.77	1.53	1.41
85	A5	4223	C	O4'-C1'	8.77	1.53	1.41
85	A5	1785	C	C2'-C1'	-8.77	1.43	1.53
85	A5	1897	A	C2'-C1'	-8.77	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1189	A	O4'-C1'	8.76	1.53	1.41
85	A5	4640	C	O4'-C1'	8.76	1.53	1.41
85	A5	4595	G	C2'-C1'	-8.76	1.43	1.53
85	A5	2361	G	C2'-C1'	-8.76	1.43	1.53
85	A5	706	C	O4'-C1'	8.76	1.53	1.41
47	CI	212	LEU	N-CA	8.76	1.63	1.46
8	AS	54	LYS	CA-C	8.75	1.75	1.52
85	A5	2290	C	C2'-C1'	-8.75	1.43	1.53
85	A5	2401	A	C2'-C1'	-8.75	1.43	1.53
36	B2	940	U	O4'-C1'	8.75	1.53	1.41
36	B2	1180	C	C2'-C1'	-8.75	1.43	1.53
85	A5	4931	G	C2'-C1'	-8.75	1.43	1.53
36	B2	442	C	C2'-C1'	-8.74	1.43	1.53
85	A5	1507	C	O4'-C1'	8.74	1.53	1.41
85	A5	4142	C	O4'-C1'	8.74	1.53	1.41
36	B2	698	G	C2'-C1'	-8.74	1.43	1.53
36	B2	993	G	C2'-C1'	-8.74	1.43	1.53
85	A5	4423	U	C2'-C1'	8.74	1.62	1.53
85	A5	1665	C	O4'-C1'	8.74	1.53	1.41
85	A5	4687	A	O4'-C1'	8.74	1.53	1.41
17	AV	78	ILE	N-CA	8.73	1.63	1.46
36	B2	17	C	O4'-C1'	8.73	1.53	1.41
85	A5	3969	G	O4'-C1'	8.73	1.53	1.41
86	A7	31	G	O4'-C1'	8.73	1.53	1.41
85	A5	1678	C	O4'-C1'	8.73	1.52	1.41
36	B2	50	A	O4'-C1'	8.73	1.52	1.41
85	A5	2501	C	O4'-C1'	8.73	1.52	1.41
85	A5	4363	A	O4'-C1'	8.72	1.52	1.41
85	A5	482	G	C2'-C1'	-8.72	1.43	1.53
85	A5	729	G	O4'-C1'	8.72	1.52	1.41
85	A5	3910	C	O4'-C1'	8.72	1.52	1.41
36	B2	1089	G	C2'-C1'	-8.72	1.43	1.53
85	A5	3604	A	O4'-C1'	-8.72	1.30	1.41
85	A5	258	G	C2'-C1'	-8.71	1.43	1.53
36	B2	1711	U	C2'-C1'	-8.71	1.43	1.53
85	A5	30	C	O4'-C1'	8.71	1.52	1.41
85	A5	1782	U	C2'-C1'	-8.71	1.43	1.53
85	A5	119	G	C2'-C1'	8.71	1.62	1.53
85	A5	1194	G	C2'-C1'	-8.71	1.43	1.53
85	A5	4200	G	C2'-C1'	-8.71	1.43	1.53
85	A5	4478	G	C2'-C1'	-8.71	1.43	1.53
36	B2	1225	U	O4'-C1'	8.71	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
70	Ci	1	MET	C-N	8.71	1.54	1.34
73	Cl	37	TYR	CD1-CE1	-8.70	1.26	1.39
36	B2	585	C	O4'-C1'	8.70	1.52	1.41
85	A5	1199	G	C2'-C1'	-8.70	1.43	1.53
85	A5	4661	G	O4'-C1'	8.70	1.52	1.41
85	A5	4648	A	C2'-C1'	-8.70	1.43	1.53
85	A5	905	C	O4'-C1'	8.70	1.52	1.41
85	A5	234	G	C2'-C1'	8.70	1.62	1.53
85	A5	2329	U	O4'-C1'	8.70	1.52	1.41
85	A5	4165	C	C2'-C1'	-8.70	1.43	1.53
85	A5	4714	C	C2'-C1'	-8.70	1.43	1.53
86	A7	105	C	O4'-C1'	8.70	1.52	1.41
85	A5	132	G	C2'-C1'	-8.69	1.43	1.53
85	A5	4131	G	C2'-C1'	-8.69	1.43	1.53
36	B2	334	C	C2'-C1'	-8.69	1.43	1.53
36	B2	1565	C	O4'-C1'	8.69	1.52	1.41
85	A5	4886	C	O4'-C1'	8.69	1.52	1.41
85	A5	3700	C	O4'-C1'	8.68	1.52	1.41
85	A5	5019	A	O4'-C1'	8.68	1.52	1.41
86	A7	112	U	C2'-C1'	8.68	1.62	1.53
36	B2	817	G	C2'-C1'	-8.68	1.43	1.53
86	A7	110	G	C2'-C1'	-8.68	1.43	1.53
85	A5	3713	U	O4'-C1'	-8.68	1.30	1.41
85	A5	3871	A	C2'-C1'	-8.67	1.43	1.53
36	B2	550	C	O4'-C1'	8.67	1.52	1.41
85	A5	3954	A	O4'-C1'	8.67	1.52	1.41
36	B2	1828	C	C2'-C1'	-8.67	1.43	1.53
85	A5	4720	C	C2'-C1'	-8.67	1.43	1.53
85	A5	4035	G	C2'-C1'	-8.67	1.43	1.53
85	A5	3696	C	O4'-C1'	8.67	1.52	1.41
36	B2	887	U	O4'-C1'	-8.67	1.30	1.41
85	A5	159	C	O4'-C1'	8.67	1.52	1.41
85	A5	4874	A	C2'-C1'	8.67	1.62	1.53
36	B2	553	U	O4'-C1'	8.66	1.52	1.41
36	B2	848	U	O4'-C1'	8.66	1.52	1.41
36	B2	1411	G	O4'-C1'	8.66	1.52	1.41
85	A5	1105	C	O4'-C1'	8.66	1.52	1.41
85	A5	2578	G	C2'-C1'	-8.66	1.43	1.53
85	A5	3852	A	O4'-C1'	8.66	1.52	1.41
85	A5	751	G	C2'-C1'	-8.66	1.43	1.53
36	B2	1576	G	O4'-C1'	8.66	1.52	1.41
85	A5	4407	G	C2'-C1'	-8.66	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1757	G	C2'-C1'	-8.66	1.43	1.53
86	A7	58	A	C2'-C1'	-8.66	1.43	1.53
36	B2	680	G	O4'-C1'	8.65	1.52	1.41
36	B2	1225	U	C2'-C1'	-8.65	1.43	1.53
85	A5	2306	G	C2'-C1'	-8.65	1.43	1.53
85	A5	3783	A	O4'-C1'	8.65	1.52	1.41
36	B2	301	A	C2'-C1'	8.65	1.62	1.53
36	B2	1813	A	O4'-C1'	8.65	1.52	1.41
85	A5	461	G	C2'-C1'	-8.65	1.43	1.53
85	A5	3598	C	C2'-C1'	-8.65	1.43	1.53
85	A5	4192	A	C2'-C1'	-8.65	1.43	1.53
85	A5	248	C	O4'-C1'	8.64	1.52	1.41
36	B2	1469	A	O4'-C1'	8.64	1.52	1.41
36	B2	453	C	O4'-C1'	8.63	1.52	1.41
85	A5	3588	C	O4'-C1'	8.63	1.52	1.41
87	A8	122	G	C2'-C1'	-8.63	1.43	1.53
81	CE	85	LYS	N-CA	-8.63	1.29	1.46
87	A8	144	U	O4'-C1'	8.63	1.52	1.41
85	A5	222	C	O4'-C1'	8.63	1.52	1.41
85	A5	2031	C	O4'-C1'	8.63	1.52	1.41
86	A7	109	U	C2'-C1'	8.63	1.62	1.53
85	A5	1264	C	C2'-C1'	-8.62	1.43	1.53
85	A5	4930	C	O4'-C1'	8.62	1.52	1.41
86	A7	10	C	O4'-C1'	8.62	1.52	1.41
87	A8	66	A	O4'-C1'	8.62	1.52	1.41
36	B2	190	G	O4'-C1'	8.62	1.52	1.41
36	B2	1227	G	O4'-C1'	8.61	1.52	1.41
85	A5	1082	C	O4'-C1'	8.62	1.52	1.41
85	A5	2070	U	C2'-C1'	8.61	1.62	1.53
85	A5	3895	G	C2'-C1'	-8.61	1.43	1.53
85	A5	170	C	O4'-C1'	8.61	1.52	1.41
85	A5	334	A	C5'-C4'	8.61	1.61	1.51
85	A5	2690	C	C2'-C1'	-8.61	1.43	1.53
36	B2	1162	C	O4'-C1'	8.61	1.52	1.41
36	B2	386	C	C2'-C1'	-8.60	1.43	1.53
85	A5	4192	A	O4'-C1'	8.60	1.52	1.41
85	A5	1360	G	O4'-C1'	8.60	1.52	1.41
85	A5	2561	C	O4'-C1'	8.60	1.52	1.41
36	B2	165	G	C2'-C1'	8.60	1.62	1.53
36	B2	659	G	O4'-C1'	-8.60	1.30	1.41
85	A5	2360	A	O4'-C1'	8.60	1.52	1.41
36	B2	828	G	O4'-C1'	-8.60	1.30	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3870	C	O4'-C1'	8.60	1.52	1.41
85	A5	2757	A	O4'-C1'	8.60	1.52	1.41
85	A5	1049	C	O4'-C1'	8.60	1.52	1.41
86	A7	91	C	C2'-C1'	-8.59	1.43	1.53
85	A5	4746	C	O4'-C1'	8.59	1.52	1.41
1	Az	267	ASP	C-N	8.59	1.50	1.34
85	A5	2793	G	C2'-C1'	8.59	1.62	1.53
85	A5	4245	G	C2'-C1'	-8.59	1.44	1.53
36	B2	1222	G	C2'-C1'	-8.58	1.44	1.53
85	A5	2439	G	O4'-C1'	8.58	1.52	1.41
36	B2	107	A	C2'-C1'	8.58	1.62	1.53
36	B2	1831	A	O4'-C1'	8.58	1.52	1.41
85	A5	2051	C	O4'-C1'	8.58	1.52	1.41
85	A5	2748	C	O4'-C1'	8.58	1.52	1.41
85	A5	4125	C	O4'-C1'	8.58	1.52	1.41
36	B2	33	G	C2'-C1'	-8.58	1.44	1.53
85	A5	182	G	O4'-C1'	8.58	1.52	1.41
85	A5	1338	G	O4'-C1'	-8.58	1.30	1.41
85	A5	1392	A	C2'-C1'	-8.58	1.44	1.53
85	A5	3617	G	C2'-C1'	-8.57	1.44	1.53
85	A5	3862	A	C2'-C1'	-8.57	1.44	1.53
87	A8	89	U	O4'-C1'	8.57	1.52	1.41
36	B2	419	G	O4'-C1'	8.57	1.52	1.41
85	A5	4053	A	O4'-C1'	8.57	1.52	1.41
36	B2	53	C	C2'-C1'	8.57	1.62	1.53
85	A5	2642	A	O4'-C1'	8.57	1.52	1.41
85	A5	2867	C	O4'-C1'	8.57	1.52	1.41
85	A5	1982	G	O4'-C1'	8.57	1.52	1.41
85	A5	2564	G	C2'-C1'	-8.57	1.44	1.53
36	B2	1494	U	C2'-C1'	8.56	1.62	1.53
85	A5	4861	G	C2'-C1'	-8.56	1.44	1.53
36	B2	1204	A	C2'-C1'	-8.56	1.44	1.53
78	Co	74	GLU	CG-CD	-8.56	1.39	1.51
85	A5	1420	A	O4'-C1'	8.56	1.52	1.41
85	A5	2377	C	O4'-C1'	8.56	1.52	1.41
85	A5	4997	G	C2'-C1'	-8.56	1.44	1.53
58	CW	71	ARG	CD-NE	8.55	1.60	1.46
85	A5	4724	A	O4'-C1'	8.55	1.52	1.41
36	B2	547	G	C2'-C1'	-8.55	1.44	1.53
85	A5	1619	G	O4'-C1'	8.55	1.52	1.41
85	A5	3628	G	C2'-C1'	-8.55	1.44	1.53
36	B2	1781	A	O4'-C1'	8.55	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4221	C	O4'-C1'	8.55	1.52	1.41
36	B2	1172	U	C2'-C1'	8.54	1.62	1.53
85	A5	2605	G	C2'-C1'	-8.54	1.44	1.53
85	A5	3709	U	O4'-C1'	8.54	1.52	1.41
86	A7	118	C	O4'-C1'	8.54	1.52	1.41
85	A5	1777	C	C2'-C1'	-8.54	1.44	1.53
85	A5	2569	G	O4'-C1'	8.54	1.52	1.41
36	B2	1349	G	O4'-C1'	8.54	1.52	1.41
36	B2	1574	C	C2'-C1'	-8.54	1.44	1.53
85	A5	265	C	O4'-C1'	8.54	1.52	1.41
85	A5	2029	A	O4'-C1'	8.54	1.52	1.41
85	A5	4332	C	C2'-C1'	-8.54	1.44	1.53
85	A5	2019	C	O4'-C1'	8.53	1.52	1.41
85	A5	4389	C	O4'-C1'	8.53	1.52	1.41
36	B2	30	C	O4'-C1'	8.53	1.52	1.41
85	A5	4379	A	C2'-C1'	-8.52	1.44	1.53
85	A5	4866	C	O4'-C1'	8.52	1.52	1.41
85	A5	4138	C	O4'-C1'	8.52	1.52	1.41
85	A5	2307	A	O4'-C1'	8.52	1.52	1.41
85	A5	1355	G	C2'-C1'	-8.52	1.44	1.53
36	B2	1697	A	C2'-C1'	8.51	1.62	1.53
85	A5	2845	A	C2'-C1'	-8.51	1.44	1.53
36	B2	1537	A	C2'-C1'	8.51	1.62	1.53
36	B2	238	C	O4'-C1'	8.51	1.52	1.41
36	B2	811	A	C2'-C1'	-8.51	1.44	1.53
85	A5	4249	G	C2'-C1'	-8.51	1.44	1.53
36	B2	1616	U	O4'-C1'	8.51	1.52	1.41
85	A5	2255	C	C2'-C1'	-8.51	1.44	1.53
85	A5	2532	C	O4'-C1'	8.51	1.52	1.41
85	A5	3755	G	C2'-C1'	-8.51	1.44	1.53
86	A7	89	G	O4'-C1'	8.51	1.52	1.41
85	A5	4485	C	O4'-C1'	8.50	1.52	1.41
69	Cg	49	CYS	CB-SG	8.50	1.96	1.82
85	A5	3658	C	O4'-C1'	8.50	1.52	1.41
36	B2	1444	U	O4'-C1'	8.49	1.52	1.41
85	A5	4688	C	O4'-C1'	8.49	1.52	1.41
85	A5	4859	C	O4'-C1'	8.49	1.52	1.41
85	A5	4360	U	O4'-C1'	8.49	1.52	1.41
85	A5	233	U	O4'-C1'	-8.48	1.30	1.41
85	A5	300	A	C2'-C1'	-8.48	1.44	1.53
85	A5	2520	C	C2'-C1'	-8.48	1.44	1.53
36	B2	757	C	O4'-C1'	8.48	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	451	G	C2'-C1'	-8.48	1.44	1.53
85	A5	2090	U	C5'-C4'	8.48	1.61	1.51
36	B2	912	C	O4'-C1'	8.47	1.52	1.41
85	A5	1048	G	C2'-C1'	-8.47	1.44	1.53
85	A5	2732	G	C2'-C1'	-8.47	1.44	1.53
85	A5	4525	C	O4'-C1'	8.47	1.52	1.41
85	A5	4987	C	C2'-C1'	-8.47	1.44	1.53
36	B2	72	C	C2'-C1'	8.47	1.62	1.53
36	B2	1142	G	C2'-C1'	8.47	1.62	1.53
36	B2	1867	U	O4'-C1'	-8.47	1.30	1.41
85	A5	1940	G	C2'-C1'	-8.47	1.44	1.53
36	B2	239	C	O4'-C1'	8.47	1.52	1.41
85	A5	1331	C	C2'-C1'	-8.47	1.44	1.53
86	A7	103	A	O4'-C1'	8.47	1.52	1.41
85	A5	3913	G	O4'-C1'	8.46	1.52	1.41
36	B2	1229	G	C2'-C1'	-8.46	1.44	1.53
85	A5	3666	C	O4'-C1'	8.46	1.52	1.41
36	B2	371	A	C2'-C1'	-8.46	1.44	1.53
85	A5	3806	G	C2'-C1'	-8.46	1.44	1.53
85	A5	1281	G	C2'-C1'	-8.46	1.44	1.53
85	A5	1815	G	C2'-C1'	-8.46	1.44	1.53
85	A5	3887	C	O4'-C1'	8.46	1.52	1.41
85	A5	4319	C	C2'-C1'	-8.46	1.44	1.53
85	A5	4893	A	O4'-C1'	8.45	1.52	1.41
37	BC	33	C	O4'-C1'	8.45	1.52	1.41
85	A5	1358	G	O4'-C1'	8.45	1.52	1.41
85	A5	5058	A	C2'-C1'	8.45	1.62	1.53
36	B2	1072	U	C2'-C1'	8.45	1.62	1.53
36	B2	1480	A	O4'-C1'	8.45	1.52	1.41
36	B2	463	C	O4'-C1'	8.45	1.52	1.41
63	CB	16	PHE	C-N	-8.45	1.14	1.34
85	A5	4382	G	C2'-C1'	-8.45	1.44	1.53
85	A5	106	A	O4'-C1'	8.44	1.52	1.41
85	A5	978	G	O4'-C1'	8.44	1.52	1.41
36	B2	323	C	C2'-C1'	-8.44	1.44	1.53
73	Cl	37	TYR	CD2-CE2	-8.44	1.26	1.39
85	A5	3584	C	O4'-C1'	8.44	1.52	1.41
85	A5	4619	U	O4'-C1'	8.44	1.52	1.41
85	A5	3710	G	O4'-C1'	8.44	1.52	1.41
36	B2	969	U	O4'-C1'	8.43	1.52	1.41
85	A5	4709	U	O4'-C1'	8.43	1.52	1.41
87	A8	105	C	C2'-C1'	-8.43	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1629	C	O4'-C1'	8.43	1.52	1.41
85	A5	32	G	C2'-C1'	-8.43	1.44	1.53
85	A5	3781	C	O4'-C1'	8.43	1.52	1.41
36	B2	567	C	O4'-C1'	8.43	1.52	1.41
36	B2	906	U	O4'-C1'	8.43	1.52	1.41
85	A5	1937	C	C2'-C1'	-8.42	1.44	1.53
37	BC	40	C	O4'-C1'	8.42	1.52	1.41
85	A5	1540	C	O4'-C1'	8.42	1.52	1.41
85	A5	3664	G	C2'-C1'	-8.42	1.44	1.53
36	B2	603	C	O4'-C1'	8.42	1.52	1.41
85	A5	956	A	O4'-C1'	8.42	1.52	1.41
85	A5	2275	G	C2'-C1'	-8.42	1.44	1.53
87	A8	132	G	C2'-C1'	-8.42	1.44	1.53
36	B2	1499	U	C2'-C1'	-8.41	1.44	1.53
85	A5	4387	C	C2'-C1'	-8.41	1.44	1.53
85	A5	4236	G	C2'-C1'	-8.41	1.44	1.53
85	A5	911	U	O4'-C1'	8.41	1.52	1.41
85	A5	4774	C	O4'-C1'	8.41	1.52	1.41
36	B2	959	G	C2'-C1'	-8.41	1.44	1.53
69	Cg	21	ARG	C-N	8.41	1.53	1.34
85	A5	3896	C	C2'-C1'	-8.41	1.44	1.53
86	A7	63	C	C2'-C1'	-8.41	1.44	1.53
26	AJ	164	PRO	C-N	8.40	1.53	1.34
36	B2	994	C	C2'-C1'	-8.40	1.44	1.53
86	A7	12	U	O4'-C1'	8.39	1.52	1.41
36	B2	538	U	O4'-C1'	8.39	1.52	1.41
85	A5	4338	G	O4'-C1'	8.39	1.52	1.41
85	A5	3757	G	C2'-C1'	-8.39	1.44	1.53
85	A5	747	A	C2'-C1'	-8.39	1.44	1.53
85	A5	3858	C	O4'-C1'	8.39	1.52	1.41
85	A5	2831	G	C2'-C1'	-8.39	1.44	1.53
36	B2	1079	C	C2'-C1'	-8.38	1.44	1.53
36	B2	1582	C	O4'-C1'	8.38	1.52	1.41
85	A5	984	C	O4'-C1'	8.38	1.52	1.41
85	A5	122	U	O4'-C1'	8.38	1.52	1.41
36	B2	1216	C	O4'-C1'	8.38	1.52	1.41
36	B2	1704	C	C2'-C1'	-8.38	1.44	1.53
36	B2	1846	G	C2'-C1'	-8.38	1.44	1.53
36	B2	147	A	C2'-C1'	8.38	1.62	1.53
85	A5	1071	C	C2'-C1'	8.38	1.62	1.53
85	A5	4468	U	O4'-C1'	8.38	1.52	1.41
85	A5	4326	G	O4'-C1'	8.37	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	927	C	O4'-C1'	8.37	1.52	1.41
85	A5	1405	C	O4'-C1'	8.37	1.52	1.41
36	B2	1268	C	O4'-C1'	8.37	1.52	1.41
85	A5	716	C	O4'-C1'	8.37	1.52	1.41
85	A5	2598	A	C2'-C1'	-8.36	1.44	1.53
36	B2	1106	C	C2'-C1'	8.36	1.62	1.53
36	B2	1256	G	O4'-C1'	8.36	1.52	1.41
36	B2	671	A	C2'-C1'	-8.35	1.44	1.53
85	A5	4717	A	O4'-C1'	-8.35	1.30	1.41
85	A5	3637	U	O4'-C1'	8.35	1.52	1.41
85	A5	4038	C	C2'-C1'	-8.35	1.44	1.53
36	B2	879	C	O4'-C1'	8.35	1.52	1.41
85	A5	4320	G	C2'-C1'	-8.35	1.44	1.53
85	A5	4681	A	O4'-C1'	8.35	1.52	1.41
36	B2	1460	C	O4'-C1'	8.35	1.52	1.41
85	A5	60	G	O4'-C1'	8.35	1.52	1.41
85	A5	1901	C	C2'-C1'	-8.35	1.44	1.53
85	A5	2624	G	C2'-C1'	-8.35	1.44	1.53
85	A5	2858	A	C2'-C1'	-8.35	1.44	1.53
85	A5	1351	G	C2'-C1'	-8.34	1.44	1.53
85	A5	4983	C	O4'-C1'	8.34	1.52	1.41
36	B2	364	A	C2'-C1'	-8.34	1.44	1.53
85	A5	183	C	O4'-C1'	8.34	1.52	1.41
85	A5	128	C	C2'-C1'	-8.34	1.44	1.53
85	A5	2321	G	O4'-C1'	8.33	1.52	1.41
36	B2	1371	U	O4'-C1'	8.33	1.52	1.41
85	A5	1755	C	O4'-C1'	8.33	1.52	1.41
85	A5	2065	G	O4'-C1'	8.33	1.52	1.41
85	A5	2273	G	C2'-C1'	-8.33	1.44	1.53
36	B2	18	C	C2'-C1'	-8.33	1.44	1.53
36	B2	222	U	O4'-C1'	8.33	1.52	1.41
36	B2	1299	A	C2'-C1'	8.33	1.62	1.53
36	B2	1405	A	C2'-C1'	-8.33	1.44	1.53
85	A5	704	C	O4'-C1'	8.33	1.52	1.41
85	A5	3763	A	O4'-C1'	8.33	1.52	1.41
85	A5	4624	A	O4'-C1'	8.33	1.52	1.41
36	B2	1666	C	O4'-C1'	8.32	1.52	1.41
36	B2	1023	A	C2'-C1'	8.32	1.62	1.53
85	A5	733	A	C2'-C1'	-8.32	1.44	1.53
36	B2	1418	C	C2'-C1'	-8.32	1.44	1.53
36	B2	40	A	C2'-C1'	8.31	1.62	1.53
36	B2	1635	C	O4'-C1'	8.31	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1671	U	C2'-C1'	-8.31	1.44	1.53
85	A5	4762	A	C2'-C1'	8.31	1.62	1.53
36	B2	176	U	O4'-C1'	8.31	1.52	1.41
85	A5	1767	A	C2'-C1'	-8.31	1.44	1.53
85	A5	4044	U	C2'-C1'	8.31	1.62	1.53
36	B2	1271	C	C2'-C1'	-8.31	1.44	1.53
85	A5	1174	G	O4'-C1'	-8.31	1.30	1.41
85	A5	2501	C	C2'-C1'	-8.31	1.44	1.53
85	A5	2614	C	O4'-C1'	8.31	1.52	1.41
36	B2	475	C	C2'-C1'	-8.30	1.44	1.53
85	A5	1911	C	C2'-C1'	-8.30	1.44	1.53
85	A5	4290	U	C2'-C1'	8.30	1.62	1.53
36	B2	168	C	C2'-C1'	-8.30	1.44	1.53
36	B2	1335	G	C2'-C1'	-8.30	1.44	1.53
85	A5	3702	A	O4'-C1'	8.30	1.52	1.41
85	A5	731	G	C2'-C1'	-8.30	1.44	1.53
85	A5	4442	U	O4'-C1'	8.29	1.52	1.41
85	A5	4207	C	O4'-C1'	8.29	1.52	1.41
36	B2	635	G	C2'-C1'	-8.29	1.44	1.53
36	B2	1308	U	O4'-C1'	-8.29	1.30	1.41
85	A5	1559	G	C2'-C1'	-8.29	1.44	1.53
85	A5	2737	C	C2'-C1'	-8.28	1.44	1.53
36	B2	945	U	C2'-C1'	-8.28	1.44	1.53
85	A5	987	C	O4'-C1'	8.28	1.52	1.41
85	A5	1831	G	C2'-C1'	-8.28	1.44	1.53
85	A5	1516	G	O4'-C1'	8.28	1.52	1.41
85	A5	692	A	C2'-C1'	8.27	1.62	1.53
85	A5	2079	G	O4'-C1'	8.27	1.52	1.41
23	AD	4	GLN	N-CA	-8.27	1.29	1.46
85	A5	3807	A	O4'-C1'	8.27	1.52	1.41
85	A5	908	G	C2'-C1'	-8.27	1.44	1.53
85	A5	1831	G	O4'-C1'	8.27	1.52	1.41
85	A5	1875	C	O4'-C1'	8.27	1.52	1.41
36	B2	628	A	C2'-C1'	8.27	1.62	1.53
85	A5	2742	G	O4'-C1'	8.27	1.52	1.41
85	A5	5051	C	C2'-C1'	-8.27	1.44	1.53
36	B2	1791	A	O4'-C1'	8.27	1.52	1.41
85	A5	1803	G	O4'-C1'	8.27	1.52	1.41
36	B2	1329	U	O4'-C1'	8.26	1.52	1.41
36	B2	828	G	C2'-C1'	-8.26	1.44	1.53
36	B2	1532	C	O4'-C1'	8.26	1.52	1.41
85	A5	2281	U	O4'-C1'	8.26	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	743	U	O4'-C1'	8.26	1.52	1.41
85	A5	724	C	O4'-C1'	8.26	1.52	1.41
87	A8	40	A	C2'-C1'	-8.26	1.44	1.53
85	A5	2900	U	C2'-C1'	-8.25	1.44	1.53
85	A5	3622	C	C2'-C1'	-8.25	1.44	1.53
85	A5	4433	G	C2'-C1'	-8.25	1.44	1.53
37	BC	51	G	C2'-C1'	-8.25	1.44	1.53
85	A5	66	A	O4'-C1'	8.25	1.52	1.41
85	A5	363	A	C2'-C1'	8.25	1.62	1.53
85	A5	1652	U	C2'-C1'	-8.25	1.44	1.53
85	A5	4101	C	C2'-C1'	-8.24	1.44	1.53
36	B2	1684	C	O4'-C1'	8.24	1.52	1.41
40	CK	130	LYS	CA-CB	8.24	1.72	1.53
85	A5	2632	U	C2'-C1'	-8.24	1.44	1.53
36	B2	1090	C	O4'-C1'	8.24	1.52	1.41
85	A5	391	U	O4'-C1'	8.24	1.52	1.41
85	A5	1188	C	C2'-C1'	-8.24	1.44	1.53
86	A7	7	G	O4'-C1'	8.24	1.52	1.41
36	B2	164	A	O4'-C1'	8.23	1.52	1.41
85	A5	4137	C	C2'-C1'	-8.23	1.44	1.53
87	A8	108	A	C2'-C1'	8.23	1.62	1.53
87	A8	139	G	C2'-C1'	-8.23	1.44	1.53
85	A5	752	G	C2'-C1'	-8.23	1.44	1.53
85	A5	1994	C	O4'-C1'	8.23	1.52	1.41
36	B2	635	G	O4'-C1'	8.23	1.52	1.41
36	B2	1005	G	C2'-C1'	-8.23	1.44	1.53
85	A5	1609	U	C2'-C1'	-8.23	1.44	1.53
85	A5	2023	C	O4'-C1'	8.23	1.52	1.41
85	A5	2072	C	C2'-C1'	-8.23	1.44	1.53
85	A5	2338	C	O4'-C1'	8.23	1.52	1.41
85	A5	3694	U	C2'-C1'	-8.23	1.44	1.53
36	B2	740	C	C2'-C1'	-8.22	1.44	1.53
87	A8	147	G	C2'-C1'	-8.22	1.44	1.53
28	AC	208	PRO	N-CD	8.22	1.59	1.47
36	B2	1083	A	O4'-C1'	8.22	1.52	1.41
85	A5	4242	U	O4'-C1'	8.22	1.52	1.41
36	B2	1677	U	C2'-C1'	8.22	1.62	1.53
36	B2	312	G	C2'-C1'	8.21	1.62	1.53
36	B2	1187	G	O4'-C1'	8.21	1.52	1.41
85	A5	4353	U	C2'-C1'	8.21	1.62	1.53
36	B2	1205	C	O4'-C1'	8.21	1.52	1.41
36	B2	1394	G	O4'-C1'	8.21	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1081	C	O4'-C1'	8.21	1.52	1.41
85	A5	2056	G	C2'-C1'	-8.21	1.44	1.53
85	A5	2081	C	C2'-C1'	-8.21	1.44	1.53
36	B2	188	C	C2'-C1'	-8.21	1.44	1.53
36	B2	786	G	O4'-C1'	8.21	1.52	1.41
85	A5	1869	G	O4'-C1'	-8.21	1.30	1.41
85	A5	3741	C	C2'-C1'	-8.21	1.44	1.53
37	BC	15	G	C2'-C1'	8.20	1.62	1.53
85	A5	1443	A	C2'-C1'	-8.21	1.44	1.53
85	A5	1736	A	C2'-C1'	-8.20	1.44	1.53
85	A5	5012	G	C2'-C1'	8.20	1.62	1.53
85	A5	165	A	C2'-C1'	-8.20	1.44	1.53
87	A8	130	C	O4'-C1'	8.20	1.52	1.41
85	A5	190	G	C2'-C1'	-8.20	1.44	1.53
85	A5	1894	C	C2'-C1'	-8.20	1.44	1.53
36	B2	472	C	C2'-C1'	-8.20	1.44	1.53
85	A5	5	A	C2'-C1'	-8.20	1.44	1.53
36	B2	686	U	C2'-C1'	8.20	1.62	1.53
85	A5	207	G	O4'-C1'	8.19	1.52	1.41
85	A5	743	G	C2'-C1'	-8.20	1.44	1.53
85	A5	1639	U	C2'-C1'	-8.19	1.44	1.53
85	A5	4605	A	O4'-C1'	8.19	1.52	1.41
85	A5	1176	C	O4'-C1'	8.19	1.52	1.41
85	A5	2078	C	C2'-C1'	-8.19	1.44	1.53
85	A5	4314	C	O4'-C1'	8.19	1.52	1.41
36	B2	731	G	O4'-C1'	8.19	1.52	1.41
85	A5	2271	C	C2'-C1'	-8.19	1.44	1.53
87	A8	129	C	O4'-C1'	8.19	1.52	1.41
36	B2	26	U	C2'-C1'	-8.18	1.44	1.53
36	B2	1313	A	O4'-C1'	8.18	1.52	1.41
36	B2	1111	U	O4'-C1'	8.18	1.52	1.41
74	CC	323	ARG	CA-CB	8.18	1.72	1.53
85	A5	1427	A	O4'-C1'	8.17	1.52	1.41
36	B2	1451	G	C2'-C1'	-8.17	1.44	1.53
85	A5	2082	G	C2'-C1'	-8.17	1.44	1.53
85	A5	4622	A	C2'-C1'	8.17	1.62	1.53
87	A8	45	C	C2'-C1'	-8.17	1.44	1.53
36	B2	1308	U	C2'-C1'	8.17	1.62	1.53
85	A5	4574	U	O4'-C1'	8.17	1.52	1.41
85	A5	1847	C	C2'-C1'	-8.16	1.44	1.53
85	A5	4908	G	O4'-C1'	8.16	1.52	1.41
85	A5	4943	A	O4'-C1'	8.16	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1546	C	O4'-C1'	8.16	1.52	1.41
85	A5	1411	C	C2'-C1'	-8.16	1.44	1.53
85	A5	1608	G	C2'-C1'	-8.16	1.44	1.53
85	A5	3937	C	O4'-C1'	8.16	1.52	1.41
85	A5	296	A	O4'-C1'	-8.16	1.31	1.41
85	A5	4425	G	O4'-C1'	8.15	1.52	1.41
85	A5	2503	G	C2'-C1'	-8.15	1.44	1.53
36	B2	159	A	O4'-C1'	8.15	1.52	1.41
36	B2	1265	A	O4'-C1'	8.15	1.52	1.41
85	A5	202	C	O4'-C1'	8.15	1.52	1.41
85	A5	4355	G	O4'-C1'	8.15	1.52	1.41
85	A5	251	C	O4'-C1'	8.14	1.52	1.41
85	A5	1821	G	C2'-C1'	8.14	1.62	1.53
36	B2	327	G	O4'-C1'	-8.14	1.31	1.41
85	A5	1217	G	C2'-C1'	8.14	1.62	1.53
85	A5	2040	A	C2'-C1'	-8.14	1.44	1.53
36	B2	606	G	O4'-C1'	-8.14	1.31	1.41
36	B2	1296	U	C2'-C1'	-8.14	1.44	1.53
85	A5	323	C	O4'-C1'	8.14	1.52	1.41
87	A8	107	C	P-O5'	-8.13	1.51	1.59
36	B2	1491	G	C2'-C1'	-8.13	1.44	1.53
36	B2	1584	G	O4'-C1'	8.13	1.52	1.41
85	A5	5021	C	O4'-C1'	8.13	1.52	1.41
85	A5	691	C	O4'-C1'	8.13	1.52	1.41
85	A5	3808	C	O4'-C1'	8.12	1.52	1.41
85	A5	3929	G	O4'-C1'	8.12	1.52	1.41
85	A5	5055	G	C2'-C1'	-8.12	1.44	1.53
36	B2	148	U	C2'-C1'	8.12	1.62	1.53
36	B2	1863	A	C2'-C1'	8.12	1.62	1.53
87	A8	153	C	C4'-C3'	8.12	1.62	1.53
85	A5	1930	U	O4'-C1'	8.12	1.52	1.41
85	A5	2710	C	O4'-C1'	8.11	1.52	1.41
87	A8	133	G	C2'-C1'	-8.11	1.44	1.53
85	A5	354	U	O4'-C1'	8.11	1.52	1.41
85	A5	4384	U	O4'-C1'	8.11	1.52	1.41
85	A5	1392	A	O4'-C1'	8.11	1.52	1.41
36	B2	922	A	C2'-C1'	8.11	1.62	1.53
85	A5	4895	C	C2'-C1'	8.11	1.62	1.53
85	A5	2453	A	O4'-C1'	8.10	1.52	1.41
85	A5	4253	A	O4'-C1'	8.10	1.52	1.41
36	B2	1050	A	C2'-C1'	-8.10	1.44	1.53
85	A5	2326	G	O4'-C1'	8.10	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1830	U	O4'-C1'	8.10	1.52	1.41
85	A5	163	A	O4'-C1'	8.10	1.52	1.41
85	A5	2044	U	O4'-C1'	8.10	1.52	1.41
85	A5	3826	C	O4'-C1'	8.10	1.52	1.41
85	A5	3738	G	O4'-C1'	8.10	1.52	1.41
36	B2	1657	G	C2'-C1'	-8.09	1.44	1.53
85	A5	4198	G	C2'-C1'	-8.09	1.44	1.53
86	A7	22	A	C2'-C1'	-8.09	1.44	1.53
29	AG	36	VAL	CA-CB	-8.09	1.37	1.54
85	A5	4172	A	O4'-C1'	-8.09	1.31	1.41
85	A5	3937	C	C2'-C1'	-8.09	1.44	1.53
85	A5	2108	G	C5'-C4'	8.09	1.61	1.51
85	A5	2726	G	C2'-C1'	-8.09	1.44	1.53
47	CI	193	ASP	C-N	-8.08	1.18	1.33
85	A5	18	C	O4'-C1'	8.08	1.52	1.41
85	A5	1582	U	O4'-C1'	8.08	1.52	1.41
36	B2	941	C	O4'-C1'	8.07	1.52	1.41
85	A5	68	U	C2'-C1'	-8.07	1.44	1.53
85	A5	4654	C	C2'-C1'	-8.07	1.44	1.53
85	A5	1656	U	O4'-C1'	8.07	1.52	1.41
36	B2	37	C	C2'-C1'	-8.07	1.44	1.53
36	B2	152	U	C2'-C1'	-8.07	1.44	1.53
36	B2	1628	C	O4'-C1'	8.07	1.52	1.41
85	A5	2340	C	O4'-C1'	8.07	1.52	1.41
36	B2	1144	A	O4'-C1'	8.07	1.52	1.41
36	B2	1429	G	O3'-P	-8.07	1.51	1.61
36	B2	196	C	C2'-C1'	-8.06	1.44	1.53
85	A5	310	G	C2'-C1'	-8.06	1.44	1.53
85	A5	3742	G	C2'-C1'	-8.06	1.44	1.53
36	B2	640	A	O4'-C1'	8.06	1.52	1.41
85	A5	1699	A	O4'-C1'	-8.06	1.31	1.41
85	A5	4773	C	O4'-C1'	8.06	1.52	1.41
36	B2	547	G	O4'-C1'	8.06	1.52	1.41
37	BC	43	A	C2'-C1'	-8.06	1.44	1.53
85	A5	662	C	C2'-C1'	-8.06	1.44	1.53
85	A5	2655	C	O4'-C1'	8.06	1.52	1.41
85	A5	4295	U	C2'-C1'	8.05	1.62	1.53
36	B2	1450	G	C2'-C1'	-8.04	1.44	1.53
85	A5	2409	U	C2'-C1'	-8.05	1.44	1.53
85	A5	1879	C	O4'-C1'	8.04	1.52	1.41
85	A5	4585	U	C2'-C1'	-8.04	1.44	1.53
36	B2	457	C	O4'-C1'	8.04	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	57	U	C2'-C1'	8.04	1.62	1.53
36	B2	1063	C	C2'-C1'	-8.04	1.44	1.53
85	A5	201	C	C2'-C1'	-8.04	1.44	1.53
85	A5	2782	U	C2'-C1'	8.04	1.62	1.53
36	B2	1154	U	O4'-C1'	-8.03	1.31	1.41
85	A5	4326	G	C2'-C1'	-8.04	1.44	1.53
87	A8	117	C	O4'-C1'	8.04	1.52	1.41
53	CT	53	PRO	CA-C	-8.03	1.36	1.52
85	A5	3860	A	O4'-C1'	8.03	1.52	1.41
85	A5	985	C	C2'-C1'	-8.03	1.44	1.53
36	B2	358	C	O4'-C1'	8.03	1.52	1.41
36	B2	928	G	C2'-C1'	-8.03	1.44	1.53
36	B2	1032	C	O4'-C1'	8.03	1.52	1.41
85	A5	103	G	C2'-C1'	-8.03	1.44	1.53
85	A5	4432	C	C2'-C1'	-8.03	1.44	1.53
36	B2	190	G	C2'-C1'	-8.02	1.44	1.53
36	B2	947	G	C2'-C1'	-8.02	1.44	1.53
85	A5	1805	A	O4'-C1'	-8.02	1.31	1.41
36	B2	1563	G	C2'-C1'	-8.02	1.44	1.53
36	B2	957	A	C2'-C1'	-8.02	1.44	1.53
36	B2	1484	A	C2'-C1'	-8.02	1.44	1.53
85	A5	2901	G	C2'-C1'	-8.02	1.44	1.53
36	B2	1800	A	O4'-C1'	8.01	1.52	1.41
36	B2	1738	C	C2'-C1'	-8.01	1.44	1.53
36	B2	348	A	C2'-C1'	-8.01	1.44	1.53
85	A5	4482	U	C2'-C1'	-8.01	1.44	1.53
36	B2	86	C	C2'-C1'	-8.01	1.44	1.53
36	B2	617	G	C2'-C1'	-8.01	1.44	1.53
36	B2	1824	A	O4'-C1'	-8.01	1.31	1.41
85	A5	201	C	O4'-C1'	8.01	1.52	1.41
85	A5	1604	G	C2'-C1'	-8.01	1.44	1.53
36	B2	1806	A	C2'-C1'	-8.00	1.44	1.53
85	A5	2890	C	O4'-C1'	8.00	1.52	1.41
36	B2	1484	A	O4'-C1'	8.00	1.52	1.41
85	A5	2446	C	O4'-C1'	8.00	1.52	1.41
85	A5	4960	G	C2'-C1'	-8.00	1.44	1.53
36	B2	1065	G	C2'-C1'	-8.00	1.44	1.53
65	Cc	88	TYR	CB-CG	-8.00	1.39	1.51
85	A5	1473	U	O4'-C1'	8.00	1.52	1.41
85	A5	645	G	C2'-C1'	-8.00	1.44	1.53
85	A5	672	C	O4'-C1'	8.00	1.52	1.41
36	B2	836	G	C2'-C1'	7.99	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1540	G	C2'-C1'	-7.99	1.44	1.53
85	A5	1106	A	O4'-C1'	7.99	1.52	1.41
85	A5	3660	C	C2'-C1'	-7.99	1.44	1.53
8	AS	95	TYR	CD1-CE1	-7.99	1.27	1.39
85	A5	907	C	O4'-C1'	7.99	1.52	1.41
85	A5	2689	C	C2'-C1'	-7.99	1.44	1.53
85	A5	3605	C	O4'-C1'	7.99	1.52	1.41
85	A5	3923	A	C2'-C1'	-7.98	1.44	1.53
85	A5	90	G	C2'-C1'	-7.98	1.44	1.53
36	B2	790	C	C2'-C1'	-7.98	1.44	1.53
85	A5	1236	C	O4'-C1'	7.98	1.52	1.41
85	A5	3926	C	O4'-C1'	7.98	1.52	1.41
85	A5	4075	U	C2'-C1'	7.98	1.62	1.53
85	A5	1108	C	O4'-C1'	7.98	1.52	1.41
36	B2	311	C	C2'-C1'	-7.97	1.44	1.53
36	B2	880	G	C2'-C1'	7.97	1.62	1.53
36	B2	1331	C	O4'-C1'	7.97	1.52	1.41
52	CS	175	PHE	N-CA	-7.97	1.30	1.46
36	B2	1527	C	O4'-C1'	7.97	1.52	1.41
85	A5	4389	C	C2'-C1'	-7.97	1.44	1.53
12	AR	89	SER	CA-C	7.97	1.73	1.52
14	AT	4	VAL	C-N	7.96	1.52	1.34
36	B2	609	U	O4'-C1'	7.96	1.51	1.41
36	B2	850	C	C2'-C1'	-7.96	1.44	1.53
36	B2	496	C	C2'-C1'	-7.96	1.44	1.53
36	B2	867	G	O4'-C1'	7.96	1.51	1.41
36	B2	1668	U	P-O5'	-7.96	1.51	1.59
85	A5	388	A	O4'-C1'	7.96	1.51	1.41
36	B2	379	C	O4'-C1'	7.95	1.51	1.41
85	A5	511	C	O4'-C1'	7.95	1.51	1.41
85	A5	2458	C	C2'-C1'	-7.95	1.44	1.53
36	B2	346	C	O4'-C1'	7.95	1.51	1.41
85	A5	2856	C	O4'-C1'	7.95	1.51	1.41
85	A5	2645	G	C2'-C1'	-7.95	1.44	1.53
85	A5	1566	C	O4'-C1'	7.94	1.51	1.41
37	BC	58	A	C2'-C1'	-7.94	1.44	1.53
85	A5	2603	C	C2'-C1'	-7.94	1.44	1.53
36	B2	833	C	O4'-C1'	7.94	1.51	1.41
36	B2	1486	A	P-O5'	-7.94	1.51	1.59
85	A5	710	G	O4'-C1'	7.94	1.51	1.41
85	A5	1214	C	O4'-C1'	-7.94	1.31	1.41
36	B2	634	A	O4'-C1'	7.94	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1066	G	O4'-C1'	7.94	1.51	1.41
36	B2	1454	A	O4'-C1'	7.93	1.51	1.41
85	A5	4144	C	C2'-C1'	7.93	1.62	1.53
36	B2	884	C	O4'-C1'	7.93	1.51	1.41
36	B2	1710	C	O4'-C1'	7.93	1.51	1.41
85	A5	2360	A	C2'-C1'	-7.93	1.44	1.53
85	A5	4908	G	C2'-C1'	-7.93	1.44	1.53
46	CN	14	LYS	C-N	7.93	1.52	1.34
85	A5	1405	C	C2'-C1'	-7.93	1.44	1.53
36	B2	758	C	C2'-C1'	-7.92	1.44	1.53
85	A5	2114	G	C2'-C1'	-7.92	1.44	1.53
36	B2	952	G	C2'-C1'	-7.92	1.44	1.53
85	A5	2347	A	O4'-C1'	7.92	1.51	1.41
29	AG	131	ARG	N-CA	-7.92	1.30	1.46
85	A5	1694	C	O4'-C1'	7.92	1.51	1.41
85	A5	1987	C	C2'-C1'	-7.92	1.44	1.53
85	A5	3660	C	O3'-P	-7.91	1.51	1.61
85	A5	952	G	O4'-C1'	7.91	1.51	1.41
85	A5	2397	G	O4'-C1'	-7.91	1.31	1.41
36	B2	546	G	O4'-C1'	7.91	1.51	1.41
36	B2	1283	C	C2'-C1'	-7.91	1.44	1.53
85	A5	1456	C	O4'-C1'	7.91	1.51	1.41
36	B2	963	A	O4'-C1'	-7.91	1.31	1.41
63	CB	32	PHE	CD2-CE2	-7.91	1.23	1.39
36	B2	1390	U	C2'-C1'	-7.90	1.44	1.53
85	A5	1257	A	C2'-C1'	7.90	1.62	1.53
85	A5	1506	G	O4'-C1'	7.90	1.51	1.41
85	A5	3730	U	C2'-C1'	-7.90	1.44	1.53
36	B2	1031	A	O4'-C1'	7.90	1.51	1.41
36	B2	1398	G	C2'-C1'	-7.90	1.44	1.53
85	A5	4054	C	C2'-C1'	-7.90	1.44	1.53
85	A5	2867	C	C2'-C1'	-7.90	1.44	1.53
85	A5	3920	U	C2'-C1'	-7.90	1.44	1.53
85	A5	2544	G	O4'-C1'	7.89	1.51	1.41
85	A5	4415	A	O4'-C1'	7.89	1.51	1.41
85	A5	3788	C	C2'-C1'	-7.88	1.44	1.53
85	A5	935	A	C2'-C1'	-7.88	1.44	1.53
85	A5	4254	G	C2'-C1'	-7.88	1.44	1.53
42	CL	163	LYS	C-N	7.88	1.52	1.34
85	A5	463	A	C2'-C1'	7.88	1.62	1.53
85	A5	4506	C	O4'-C1'	7.88	1.51	1.41
37	BC	20	A	C2'-C1'	7.87	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2399	G	C2'-C1'	-7.87	1.44	1.53
85	A5	2405	G	C2'-C1'	-7.87	1.44	1.53
85	A5	522	C	O4'-C1'	7.87	1.51	1.41
36	B2	502	C	O4'-C1'	7.86	1.51	1.41
85	A5	5034	A	C2'-C1'	-7.86	1.44	1.53
36	B2	1542	C	C2'-C1'	-7.86	1.44	1.53
85	A5	1317	U	C2'-C1'	-7.86	1.44	1.53
36	B2	576	A	C2'-C1'	-7.86	1.44	1.53
85	A5	2251	G	C2'-C1'	-7.86	1.44	1.53
53	CT	30	TYR	CB-CG	-7.86	1.39	1.51
85	A5	89	C	O4'-C1'	7.86	1.51	1.41
85	A5	2780	C	C2'-C1'	-7.86	1.44	1.53
85	A5	1580	C	C2'-C1'	-7.86	1.44	1.53
36	B2	409	C	O4'-C1'	7.85	1.51	1.41
36	B2	839	C	C2'-C1'	-7.85	1.44	1.53
85	A5	4059	C	O4'-C1'	7.85	1.51	1.41
85	A5	438	G	C2'-C1'	-7.85	1.44	1.53
85	A5	2557	G	C2'-C1'	-7.85	1.44	1.53
85	A5	4431	U	O4'-C1'	7.85	1.51	1.41
37	BC	73	C	O4'-C1'	7.85	1.51	1.41
85	A5	397	G	O4'-C1'	7.85	1.51	1.41
36	B2	1407	U	O4'-C1'	7.84	1.51	1.41
64	CF	145	PRO	N-CD	7.84	1.58	1.47
85	A5	2684	C	P-O5'	-7.84	1.51	1.59
85	A5	2902	G	C2'-C1'	-7.84	1.44	1.53
85	A5	1961	G	C2'-C1'	7.84	1.61	1.53
85	A5	2695	A	O4'-C1'	-7.84	1.31	1.41
85	A5	3921	U	O4'-C1'	7.83	1.51	1.41
85	A5	312	G	C2'-C1'	-7.83	1.44	1.53
85	A5	944	A	C2'-C1'	7.83	1.61	1.53
80	CH	41	ILE	CA-CB	-7.83	1.36	1.54
85	A5	1096	C	C2'-C1'	-7.83	1.44	1.53
36	B2	1597	C	C2'-C1'	-7.82	1.44	1.53
85	A5	2386	U	O4'-C1'	7.82	1.51	1.41
85	A5	1850	A	O4'-C1'	7.82	1.51	1.41
85	A5	3903	A	C2'-C1'	-7.82	1.44	1.53
85	A5	4725	C	O4'-C1'	7.82	1.51	1.41
36	B2	347	G	O4'-C1'	7.82	1.51	1.41
85	A5	142	G	O4'-C1'	7.82	1.51	1.41
85	A5	2829	U	C2'-C1'	7.82	1.61	1.53
85	A5	3727	A	C2'-C1'	-7.82	1.44	1.53
26	AJ	35	TYR	CD2-CE2	-7.82	1.27	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1268	G	O4'-C1'	7.82	1.51	1.41
36	B2	60	A	O4'-C1'	-7.82	1.31	1.41
86	A7	106	G	C2'-C1'	-7.82	1.44	1.53
85	A5	5062	G	C2'-C1'	-7.81	1.44	1.53
85	A5	1479	G	O4'-C1'	7.81	1.51	1.41
85	A5	4251	A	O4'-C1'	7.81	1.51	1.41
36	B2	171	A	C2'-C1'	7.81	1.61	1.53
36	B2	868	G	C2'-C1'	-7.81	1.44	1.53
36	B2	992	A	O4'-C1'	7.81	1.51	1.41
85	A5	4695	C	C2'-C1'	-7.81	1.44	1.53
36	B2	973	C	O4'-C1'	7.81	1.51	1.41
36	B2	1325	G	O4'-C1'	7.80	1.51	1.41
36	B2	462	C	O4'-C1'	7.80	1.51	1.41
85	A5	2520	C	O4'-C1'	7.80	1.51	1.41
85	A5	2890	C	C2'-C1'	-7.80	1.44	1.53
85	A5	1316	G	C2'-C1'	-7.79	1.44	1.53
85	A5	2023	C	C2'-C1'	-7.79	1.44	1.53
85	A5	2682	G	C2'-C1'	-7.79	1.44	1.53
85	A5	3736	A	O4'-C1'	7.79	1.51	1.41
85	A5	395	A	O4'-C1'	7.79	1.51	1.41
85	A5	1881	C	O4'-C1'	7.79	1.51	1.41
86	A7	47	G	C2'-C1'	-7.79	1.44	1.53
36	B2	573	U	O4'-C1'	7.79	1.51	1.41
85	A5	317	A	O4'-C1'	7.79	1.51	1.41
85	A5	1674	C	O4'-C1'	7.79	1.51	1.41
36	B2	1127	C	O4'-C1'	7.78	1.51	1.41
85	A5	2367	A	O4'-C1'	7.78	1.51	1.41
45	Ca	52	TYR	CB-CG	-7.78	1.40	1.51
85	A5	1237	C	O3'-P	-7.78	1.51	1.61
85	A5	4654	C	O4'-C1'	7.78	1.51	1.41
85	A5	1090	G	C2'-C1'	-7.78	1.44	1.53
85	A5	3918	G	C2'-C1'	-7.78	1.44	1.53
85	A5	2852	U	C2'-C1'	-7.77	1.44	1.53
85	A5	384	A	C2'-C1'	-7.77	1.44	1.53
85	A5	1761	G	C2'-C1'	-7.77	1.44	1.53
85	A5	3786	U	C2'-C1'	-7.77	1.44	1.53
85	A5	1425	G	O4'-C1'	7.76	1.51	1.41
85	A5	1517	G	O4'-C1'	7.76	1.51	1.41
36	B2	191	A	O4'-C1'	7.76	1.51	1.41
36	B2	378	U	C2'-C1'	-7.76	1.44	1.53
86	A7	50	A	C2'-C1'	-7.76	1.44	1.53
36	B2	531	A	O3'-P	-7.76	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1669	G	C2'-C1'	-7.75	1.44	1.53
85	A5	3858	C	C2'-C1'	-7.75	1.44	1.53
86	A7	67	C	C2'-C1'	-7.75	1.44	1.53
36	B2	49	C	O4'-C1'	7.75	1.51	1.41
36	B2	195	C	C2'-C1'	-7.75	1.44	1.53
36	B2	567	C	C2'-C1'	-7.75	1.44	1.53
85	A5	270	U	C2'-C1'	-7.75	1.44	1.53
85	A5	2790	U	O4'-C1'	7.75	1.51	1.41
85	A5	2882	A	C2'-C1'	7.75	1.61	1.53
85	A5	1722	C	C2'-C1'	-7.75	1.44	1.53
85	A5	2562	G	C2'-C1'	7.75	1.61	1.53
85	A5	4071	U	O4'-C1'	7.75	1.51	1.41
85	A5	1596	U	O4'-C1'	7.74	1.51	1.41
85	A5	3633	C	O4'-C1'	7.74	1.51	1.41
85	A5	4214	A	C2'-C1'	7.74	1.61	1.53
85	A5	3751	G	O4'-C1'	7.74	1.51	1.41
37	BC	2	G	O4'-C1'	-7.74	1.31	1.41
85	A5	3714	G	C2'-C1'	-7.74	1.44	1.53
36	B2	1130	G	O4'-C1'	-7.74	1.31	1.41
36	B2	1802	C	O4'-C1'	7.74	1.51	1.41
64	CF	224	THR	CA-CB	-7.74	1.33	1.53
85	A5	4225	G	O4'-C1'	-7.74	1.31	1.41
85	A5	4620	U	O4'-C1'	7.73	1.51	1.41
85	A5	4875	G	C5'-C4'	7.73	1.60	1.51
36	B2	824	C	O4'-C1'	7.73	1.51	1.41
36	B2	1609	C	O4'-C1'	7.73	1.51	1.41
36	B2	203	G	C2'-C1'	-7.73	1.44	1.53
85	A5	1811	G	O4'-C1'	-7.73	1.31	1.41
85	A5	2888	G	C2'-C1'	-7.73	1.44	1.53
85	A5	4174	U	C2'-C1'	-7.73	1.44	1.53
85	A5	1676	C	C2'-C1'	-7.73	1.44	1.53
85	A5	4250	G	O4'-C1'	7.73	1.51	1.41
36	B2	1692	U	C2'-C1'	-7.73	1.44	1.53
85	A5	1260	G	C2'-C1'	-7.73	1.44	1.53
85	A5	2521	G	C2'-C1'	-7.73	1.44	1.53
36	B2	29	G	C2'-C1'	-7.73	1.44	1.53
85	A5	2293	U	O4'-C1'	7.72	1.51	1.41
85	A5	3645	U	O4'-C1'	7.72	1.51	1.41
85	A5	111	C	C2'-C1'	7.72	1.61	1.53
85	A5	2748	C	C2'-C1'	-7.72	1.44	1.53
85	A5	3841	C	C2'-C1'	-7.72	1.44	1.53
36	B2	934	G	C2'-C1'	-7.71	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3786	U	O4'-C1'	7.71	1.51	1.41
85	A5	347	A	C2'-C1'	-7.71	1.44	1.53
85	A5	1457	G	O4'-C1'	7.71	1.51	1.41
85	A5	3712	A	C2'-C1'	7.71	1.61	1.53
85	A5	1378	C	C2'-C1'	-7.71	1.44	1.53
85	A5	2043	A	C2'-C1'	7.71	1.61	1.53
85	A5	4459	U	O4'-C1'	7.71	1.51	1.41
36	B2	284	C	O4'-C1'	7.71	1.51	1.41
85	A5	498	C	O4'-C1'	7.70	1.51	1.41
36	B2	387	C	C2'-C1'	-7.70	1.44	1.53
85	A5	240	G	C2'-C1'	-7.70	1.44	1.53
36	B2	37	C	O4'-C1'	7.70	1.51	1.41
36	B2	1347	U	O4'-C1'	7.70	1.51	1.41
85	A5	2806	A	O4'-C1'	-7.70	1.31	1.41
36	B2	473	A	O4'-C1'	7.69	1.51	1.41
8	AS	82	TRP	CA-CB	-7.69	1.37	1.53
85	A5	1216	C	C2'-C1'	-7.69	1.44	1.53
85	A5	240	G	O4'-C1'	7.69	1.51	1.41
85	A5	1439	C	C2'-C1'	7.69	1.61	1.53
29	AG	130	PRO	C-N	-7.68	1.16	1.34
85	A5	129	C	O4'-C1'	7.68	1.51	1.41
85	A5	1566	C	C2'-C1'	-7.68	1.45	1.53
85	A5	4319	C	O4'-C1'	7.68	1.51	1.41
65	Cc	88	TYR	CD2-CE2	-7.68	1.27	1.39
85	A5	1969	G	O4'-C1'	-7.68	1.31	1.41
85	A5	4315	A	O4'-C1'	7.68	1.51	1.41
36	B2	1389	C	P-O5'	-7.68	1.52	1.59
85	A5	1978	C	C2'-C1'	-7.68	1.45	1.53
85	A5	926	G	C4'-C3'	7.67	1.61	1.53
85	A5	1647	U	O4'-C1'	7.67	1.51	1.41
85	A5	1889	U	C2'-C1'	-7.67	1.45	1.53
36	B2	495	U	C2'-C1'	-7.67	1.45	1.53
36	B2	554	A	O4'-C1'	-7.67	1.31	1.41
36	B2	729	C	O4'-C1'	7.67	1.51	1.41
85	A5	1567	U	O4'-C1'	7.67	1.51	1.41
85	A5	2107	C	O3'-P	-7.67	1.51	1.61
85	A5	4918	C	O4'-C1'	7.66	1.51	1.41
85	A5	1065	G	C2'-C1'	-7.66	1.45	1.53
85	A5	1802	A	O4'-C1'	7.66	1.51	1.41
85	A5	3743	G	C2'-C1'	-7.66	1.45	1.53
36	B2	850	C	O4'-C1'	7.66	1.51	1.41
37	BC	29	G	C2'-C1'	-7.66	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1427	C	C2'-C1'	7.66	1.61	1.53
85	A5	3795	A	O4'-C1'	7.66	1.51	1.41
85	A5	4096	C	O4'-C1'	7.65	1.51	1.41
85	A5	3668	C	C2'-C1'	-7.65	1.45	1.53
85	A5	383	A	O4'-C1'	7.65	1.51	1.41
85	A5	2618	G	O4'-C1'	-7.65	1.31	1.41
85	A5	1193	C	O4'-C1'	7.65	1.51	1.41
85	A5	3654	G	C2'-C1'	-7.65	1.45	1.53
85	A5	4466	C	C2'-C1'	-7.65	1.45	1.53
86	A7	82	G	C2'-C1'	-7.65	1.45	1.53
36	B2	229	A	C2'-C1'	-7.65	1.45	1.53
85	A5	4117	U	O4'-C1'	-7.65	1.31	1.41
36	B2	95	G	C2'-C1'	-7.64	1.45	1.53
85	A5	34	A	O4'-C1'	7.64	1.51	1.41
85	A5	4164	C	O4'-C1'	7.64	1.51	1.41
36	B2	352	U	O4'-C1'	7.64	1.51	1.41
36	B2	754	G	C2'-C1'	-7.64	1.45	1.53
36	B2	1317	C	O4'-C1'	7.64	1.51	1.41
36	B2	1396	A	C2'-C1'	7.64	1.61	1.53
85	A5	4969	C	C2'-C1'	-7.64	1.45	1.53
36	B2	38	A	C2'-C1'	7.63	1.61	1.53
85	A5	1375	C	O4'-C1'	7.63	1.51	1.41
85	A5	2041	A	C2'-C1'	7.63	1.61	1.53
85	A5	2298	U	C2'-C1'	-7.63	1.45	1.53
45	Ca	109	TYR	CE2-CZ	-7.63	1.28	1.38
85	A5	1321	G	C2'-C1'	-7.63	1.45	1.53
85	A5	4253	A	C2'-C1'	-7.63	1.45	1.53
36	B2	942	G	O4'-C1'	7.63	1.51	1.41
85	A5	1284	G	C2'-C1'	7.63	1.61	1.53
85	A5	2326	G	C2'-C1'	-7.63	1.45	1.53
85	A5	4162	C	O4'-C1'	-7.63	1.31	1.41
85	A5	4288	C	C2'-C1'	-7.63	1.45	1.53
85	A5	11	G	O4'-C1'	7.63	1.51	1.41
85	A5	4498	U	C2'-C1'	7.63	1.61	1.53
85	A5	5018	C	C2'-C1'	-7.63	1.45	1.53
85	A5	3905	A	C2'-C1'	7.62	1.61	1.53
85	A5	1482	G	O4'-C1'	-7.62	1.31	1.41
1	Az	76	SER	C-N	7.62	1.51	1.34
85	A5	4744	A	O4'-C1'	7.62	1.51	1.41
85	A5	1325	C	O4'-C1'	-7.62	1.31	1.41
36	B2	528	A	O4'-C1'	7.61	1.51	1.41
36	B2	1296	U	O4'-C1'	7.61	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1402	A	C2'-C1'	-7.61	1.45	1.53
85	A5	924	C	O4'-C1'	7.61	1.51	1.41
85	A5	3625	G	C2'-C1'	-7.61	1.45	1.53
39	Cq	24	TYR	CD2-CE2	-7.61	1.27	1.39
85	A5	4173	G	O4'-C1'	7.61	1.51	1.41
85	A5	4471	U	O4'-C1'	7.61	1.51	1.41
85	A5	4966	A	O4'-C1'	7.60	1.51	1.41
85	A5	1369	C	C2'-C1'	-7.60	1.45	1.53
85	A5	4963	G	O4'-C1'	7.60	1.51	1.41
85	A5	4975	G	O4'-C1'	-7.60	1.31	1.41
36	B2	1336	C	O4'-C1'	7.60	1.51	1.41
86	A7	6	C	O3'-P	-7.60	1.52	1.61
63	CB	32	PHE	CD1-CE1	-7.60	1.24	1.39
85	A5	257	C	O4'-C1'	7.60	1.51	1.41
85	A5	1907	A	O3'-P	-7.60	1.52	1.61
36	B2	452	G	O4'-C1'	7.60	1.51	1.41
85	A5	1464	C	O4'-C1'	7.59	1.51	1.41
85	A5	4039	G	O4'-C1'	7.59	1.51	1.41
87	A8	69	U	O4'-C1'	7.59	1.51	1.41
36	B2	1573	G	O4'-C1'	7.59	1.51	1.41
85	A5	2342	G	C2'-C1'	-7.59	1.45	1.53
85	A5	5033	G	O4'-C1'	7.59	1.51	1.41
36	B2	1264	C	O4'-C1'	7.59	1.51	1.41
85	A5	4877	G	C2'-C1'	7.59	1.61	1.53
85	A5	4987	C	O4'-C1'	7.59	1.51	1.41
36	B2	365	C	C2'-C1'	-7.59	1.45	1.53
36	B2	1049	A	O4'-C1'	-7.59	1.31	1.41
85	A5	1269	G	C2'-C1'	7.59	1.61	1.53
85	A5	1594	C	C2'-C1'	-7.59	1.45	1.53
36	B2	1010	G	C2'-C1'	7.58	1.61	1.53
85	A5	1404	G	C2'-C1'	7.58	1.61	1.53
85	A5	1438	U	O4'-C1'	7.58	1.51	1.41
85	A5	4916	G	O4'-C1'	7.58	1.51	1.41
36	B2	1427	C	O4'-C1'	7.58	1.51	1.41
85	A5	2906	G	O4'-C1'	7.58	1.51	1.41
85	A5	328	A	O4'-C1'	7.58	1.51	1.41
85	A5	358	C	O4'-C1'	7.58	1.51	1.41
85	A5	964	A	O4'-C1'	7.58	1.51	1.41
36	B2	1643	U	O4'-C1'	7.57	1.51	1.41
85	A5	2574	G	C2'-C1'	7.57	1.61	1.53
85	A5	1459	A	O4'-C1'	7.57	1.51	1.41
36	B2	1303	C	O4'-C1'	-7.57	1.31	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	50	C	C2'-C1'	-7.57	1.45	1.53
38	Cz	100	VAL	N-CA	7.56	1.61	1.46
36	B2	1075	C	O4'-C1'	7.56	1.51	1.41
36	B2	1820	G	C2'-C1'	-7.56	1.45	1.53
36	B2	1804	U	O4'-C1'	7.56	1.51	1.41
85	A5	2261	G	O4'-C1'	7.56	1.51	1.41
36	B2	1497	G	O4'-C1'	7.55	1.51	1.41
85	A5	2102	G	O4'-C1'	-7.55	1.31	1.41
85	A5	309	C	C2'-C1'	7.55	1.61	1.53
85	A5	2856	C	C2'-C1'	-7.54	1.45	1.53
36	B2	1141	G	O4'-C1'	-7.54	1.31	1.41
85	A5	1248	C	O4'-C1'	7.54	1.51	1.41
85	A5	4469	U	C2'-C1'	-7.54	1.45	1.53
85	A5	104	G	P-O5'	-7.54	1.52	1.59
85	A5	3641	U	O4'-C1'	7.54	1.51	1.41
85	A5	4341	C	C2'-C1'	-7.54	1.45	1.53
36	B2	459	C	C2'-C1'	-7.53	1.45	1.53
29	AG	170	ARG	CA-CB	7.53	1.70	1.53
36	B2	1249	C	O4'-C1'	7.53	1.51	1.41
85	A5	5007	A	O4'-C1'	7.52	1.51	1.41
85	A5	2375	A	C2'-C1'	-7.52	1.45	1.53
85	A5	350	C	C2'-C1'	-7.52	1.45	1.53
85	A5	1645	C	O4'-C1'	7.52	1.51	1.41
85	A5	4347	G	O4'-C1'	7.52	1.51	1.41
85	A5	4474	A	C2'-C1'	7.52	1.61	1.53
36	B2	353	C	O4'-C1'	7.52	1.51	1.41
36	B2	1388	A	O4'-C1'	7.52	1.51	1.41
85	A5	91	G	O4'-C1'	7.52	1.51	1.41
85	A5	757	G	C2'-C1'	-7.52	1.45	1.53
85	A5	1107	C	C2'-C1'	-7.52	1.45	1.53
85	A5	1376	C	C2'-C1'	-7.52	1.45	1.53
85	A5	3600	G	O4'-C1'	7.52	1.51	1.41
37	BC	32	C	O4'-C1'	7.52	1.51	1.41
85	A5	758	G	C2'-C1'	-7.52	1.45	1.53
85	A5	988	C	C2'-C1'	-7.52	1.45	1.53
85	A5	2032	U	C2'-C1'	-7.52	1.45	1.53
85	A5	4954	G	C2'-C1'	7.52	1.61	1.53
36	B2	1095	C	O4'-C1'	7.52	1.51	1.41
36	B2	214	U	O3'-P	-7.51	1.52	1.61
36	B2	119	U	C2'-C1'	-7.51	1.45	1.53
36	B2	498	C	C2'-C1'	-7.51	1.45	1.53
36	B2	1386	A	O4'-C1'	7.51	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2044	U	C5'-C4'	7.51	1.60	1.51
36	B2	396	U	O4'-C1'	7.51	1.51	1.41
85	A5	1946	G	C2'-C1'	-7.51	1.45	1.53
36	B2	1814	G	O4'-C1'	7.51	1.51	1.41
85	A5	1303	A	C5'-C4'	7.51	1.60	1.51
85	A5	1444	G	C2'-C1'	-7.51	1.45	1.53
85	A5	4294	C	O4'-C1'	7.51	1.51	1.41
85	A5	2359	U	O4'-C1'	7.51	1.51	1.41
36	B2	1829	G	O4'-C1'	7.51	1.51	1.41
85	A5	4119	C	C2'-C1'	7.51	1.61	1.53
85	A5	683	C	C5'-C4'	7.50	1.60	1.51
86	A7	18	C	C2'-C1'	-7.50	1.45	1.53
85	A5	2572	C	O4'-C1'	7.50	1.51	1.41
87	A8	156	U	O4'-C1'	7.50	1.51	1.41
36	B2	1841	C	C2'-C1'	-7.50	1.45	1.53
85	A5	5027	C	C2'-C1'	-7.50	1.45	1.53
36	B2	280	G	O3'-P	-7.50	1.52	1.61
36	B2	1631	U	C2'-C1'	-7.50	1.45	1.53
36	B2	1856	C	C2'-C1'	-7.50	1.45	1.53
85	A5	4095	G	O4'-C1'	7.50	1.51	1.41
85	A5	4932	U	C2'-C1'	-7.50	1.45	1.53
36	B2	791	C	O3'-P	-7.49	1.52	1.61
85	A5	1304	C	O4'-C1'	7.49	1.51	1.41
36	B2	466	G	C4'-C3'	7.49	1.61	1.53
66	Cd	105	LEU	C-N	-7.49	1.16	1.34
36	B2	1448	A	C2'-C1'	-7.49	1.45	1.53
36	B2	1754	G	O4'-C1'	7.49	1.51	1.41
85	A5	460	C	C2'-C1'	-7.49	1.45	1.53
85	A5	1690	C	C2'-C1'	-7.49	1.45	1.53
85	A5	4219	A	C2'-C1'	-7.49	1.45	1.53
85	A5	2787	A	C2'-C1'	7.49	1.61	1.53
36	B2	901	G	C2'-C1'	-7.49	1.45	1.53
36	B2	470	G	C2'-C1'	-7.48	1.45	1.53
85	A5	4762	A	O4'-C1'	-7.48	1.31	1.41
36	B2	822	U	O4'-C1'	7.48	1.51	1.41
85	A5	288	G	O4'-C1'	7.48	1.51	1.41
85	A5	1283	G	O4'-C1'	7.48	1.51	1.41
85	A5	1764	G	O4'-C1'	-7.48	1.31	1.41
36	B2	1805	G	O4'-C1'	7.48	1.51	1.41
85	A5	952	G	C2'-C1'	-7.48	1.45	1.53
36	B2	1344	A	O4'-C1'	7.47	1.51	1.41
85	A5	8	U	O4'-C1'	7.47	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2599	G	O4'-C1'	7.47	1.51	1.41
86	A7	15	C	O4'-C1'	7.47	1.51	1.41
85	A5	279	A	C2'-C1'	-7.47	1.45	1.53
36	B2	1045	U	O4'-C1'	7.47	1.51	1.41
85	A5	4216	G	C2'-C1'	-7.47	1.45	1.53
85	A5	5064	G	O4'-C1'	7.47	1.51	1.41
85	A5	4495	G	C2'-C1'	-7.46	1.45	1.53
87	A8	83	C	C2'-C1'	7.46	1.61	1.53
85	A5	661	C	O4'-C1'	7.46	1.51	1.41
85	A5	1080	C	C2'-C1'	-7.46	1.45	1.53
85	A5	2449	A	O4'-C1'	7.46	1.51	1.41
85	A5	4100	C	O4'-C1'	7.46	1.51	1.41
86	A7	9	C	C2'-C1'	-7.46	1.45	1.53
26	AJ	164	PRO	N-CA	-7.46	1.34	1.47
36	B2	337	C	O4'-C1'	7.46	1.51	1.41
36	B2	849	A	O4'-C1'	7.46	1.51	1.41
36	B2	287	U	O4'-C1'	7.45	1.51	1.41
36	B2	662	G	O4'-C1'	7.45	1.51	1.41
87	A8	92	U	C2'-C1'	-7.45	1.45	1.53
36	B2	1469	A	C2'-C1'	-7.45	1.45	1.53
36	B2	357	C	O4'-C1'	7.45	1.51	1.41
36	B2	1155	U	O4'-C1'	7.45	1.51	1.41
36	B2	1191	C	O4'-C1'	7.45	1.51	1.41
74	CC	54	VAL	C-N	-7.45	1.17	1.34
85	A5	1733	G	C2'-C1'	7.45	1.61	1.53
85	A5	2577	C	C2'-C1'	-7.45	1.45	1.53
85	A5	3851	U	C2'-C1'	-7.45	1.45	1.53
85	A5	518	G	C2'-C1'	-7.45	1.45	1.53
85	A5	1936	C	C2'-C1'	-7.45	1.45	1.53
85	A5	2055	G	C5'-C4'	7.45	1.60	1.51
85	A5	1928	C	C2'-C1'	-7.44	1.45	1.53
85	A5	2090	U	O4'-C1'	-7.44	1.31	1.41
85	A5	2487	G	O4'-C1'	7.44	1.51	1.41
85	A5	2596	G	O4'-C1'	7.44	1.51	1.41
85	A5	4694	G	O4'-C1'	-7.44	1.31	1.41
85	A5	652	G	C2'-C1'	-7.44	1.45	1.53
85	A5	1446	C	O4'-C1'	7.44	1.51	1.41
85	A5	1510	G	O4'-C1'	7.44	1.51	1.41
85	A5	1441	C	C2'-C1'	-7.44	1.45	1.53
85	A5	2774	C	O4'-C1'	7.44	1.51	1.41
85	A5	2444	U	C2'-C1'	-7.44	1.45	1.53
61	Ch	37	THR	C-N	7.44	1.46	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2815	A	O4'-C1'	7.44	1.51	1.41
36	B2	205	G	C2'-C1'	-7.43	1.45	1.53
85	A5	3698	G	O4'-C1'	7.43	1.51	1.41
78	Co	34	TYR	C-N	7.42	1.51	1.34
85	A5	1203	G	C2'-C1'	-7.42	1.45	1.53
36	B2	878	G	C2'-C1'	-7.42	1.45	1.53
85	A5	978	G	C2'-C1'	-7.42	1.45	1.53
85	A5	4230	C	O4'-C1'	7.42	1.51	1.41
86	A7	92	C	O4'-C1'	7.42	1.51	1.41
85	A5	111	C	O4'-C1'	-7.42	1.32	1.41
85	A5	229	G	O4'-C1'	7.42	1.51	1.41
85	A5	3849	A	C2'-C1'	-7.42	1.45	1.53
17	AV	78	ILE	C-N	7.42	1.51	1.34
36	B2	151	C	P-O5'	-7.42	1.52	1.59
85	A5	363	A	O4'-C1'	-7.42	1.32	1.41
85	A5	655	C	C2'-C1'	-7.42	1.45	1.53
85	A5	2273	G	O4'-C1'	7.41	1.51	1.41
36	B2	1476	A	C2'-C1'	7.41	1.61	1.53
85	A5	4219	A	O4'-C1'	7.41	1.51	1.41
85	A5	637	G	C2'-C1'	-7.41	1.45	1.53
85	A5	1801	A	C2'-C1'	-7.41	1.45	1.53
85	A5	1932	A	O4'-C1'	7.41	1.51	1.41
85	A5	2789	A	C2'-C1'	7.41	1.61	1.53
36	B2	1845	A	C2'-C1'	-7.41	1.45	1.53
85	A5	1075	G	O4'-C1'	-7.41	1.32	1.41
36	B2	666	U	O4'-C1'	7.41	1.51	1.41
85	A5	4772	C	C2'-C1'	-7.41	1.45	1.53
87	A8	64	U	O4'-C1'	7.41	1.51	1.41
36	B2	876	C	O4'-C1'	7.40	1.51	1.41
37	BC	47	C	C2'-C1'	-7.40	1.45	1.53
85	A5	1282	G	C2'-C1'	7.40	1.61	1.53
85	A5	1837	A	O4'-C1'	7.40	1.51	1.41
85	A5	4223	C	C2'-C1'	-7.40	1.45	1.53
36	B2	1750	C	O4'-C1'	7.40	1.51	1.41
36	B2	228	C	O3'-P	-7.40	1.52	1.61
36	B2	1638	G	O4'-C1'	7.40	1.51	1.41
85	A5	4951	G	O4'-C1'	-7.40	1.32	1.41
36	B2	120	U	O4'-C1'	7.40	1.51	1.41
36	B2	1149	A	C2'-C1'	-7.40	1.45	1.53
85	A5	214	G	C2'-C1'	-7.39	1.45	1.53
85	A5	1308	C	C2'-C1'	-7.39	1.45	1.53
36	B2	503	C	O4'-C1'	7.39	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
60	Cr	91	SER	CA-C	-7.39	1.33	1.52
85	A5	41	C	C2'-C1'	-7.39	1.45	1.53
85	A5	411	G	O4'-C1'	7.39	1.51	1.41
36	B2	1142	G	O4'-C1'	-7.39	1.32	1.41
36	B2	1127	C	C2'-C1'	-7.39	1.45	1.53
85	A5	1691	G	O4'-C1'	7.39	1.51	1.41
85	A5	2059	C	C2'-C1'	-7.39	1.45	1.53
85	A5	4403	U	C2'-C1'	-7.39	1.45	1.53
85	A5	1739	G	C2'-C1'	-7.39	1.45	1.53
85	A5	4213	A	O4'-C1'	7.39	1.51	1.41
36	B2	986	G	C2'-C1'	-7.39	1.45	1.53
87	A8	144	U	C2'-C1'	-7.38	1.45	1.53
36	B2	863	U	O4'-C1'	7.38	1.51	1.41
36	B2	1100	A	C2'-C1'	-7.38	1.45	1.53
85	A5	1377	G	O4'-C1'	7.38	1.51	1.41
85	A5	2456	G	O4'-C1'	7.38	1.51	1.41
36	B2	964	A	C2'-C1'	7.38	1.61	1.53
36	B2	1673	U	C2'-C1'	-7.38	1.45	1.53
36	B2	1349	G	C2'-C1'	-7.38	1.45	1.53
85	A5	4638	U	O4'-C1'	7.38	1.51	1.41
36	B2	802	A	O4'-C1'	7.37	1.51	1.41
85	A5	181	C	O4'-C1'	7.37	1.51	1.41
86	A7	94	C	C2'-C1'	-7.37	1.45	1.53
85	A5	1350	C	O4'-C1'	7.37	1.51	1.41
36	B2	226	A	O4'-C1'	7.37	1.51	1.41
85	A5	4277	G	O4'-C1'	7.37	1.51	1.41
36	B2	438	G	O4'-C1'	-7.37	1.32	1.41
85	A5	221	C	O4'-C1'	7.37	1.51	1.41
87	A8	116	C	C2'-C1'	-7.37	1.45	1.53
36	B2	525	A	C2'-C1'	-7.36	1.45	1.53
1	Az	810	PRO	N-CD	7.36	1.58	1.47
85	A5	2541	G	O4'-C1'	7.36	1.51	1.41
36	B2	495	U	O4'-C1'	7.36	1.51	1.41
62	Cb	54	LEU	CA-CB	7.36	1.70	1.53
85	A5	1883	G	C2'-C1'	-7.36	1.45	1.53
85	A5	4044	U	P-O5'	-7.36	1.52	1.59
85	A5	4071	U	C2'-C1'	-7.36	1.45	1.53
36	B2	747	U	O3'-P	-7.35	1.52	1.61
85	A5	1767	A	O4'-C1'	7.35	1.51	1.41
36	B2	414	A	C2'-C1'	7.35	1.61	1.53
36	B2	1049	A	C2'-C1'	7.35	1.61	1.53
36	B2	1227	G	C2'-C1'	-7.35	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1493	C	C2'-C1'	7.35	1.61	1.53
85	A5	1597	G	O4'-C1'	-7.35	1.32	1.41
85	A5	4156	G	C2'-C1'	7.35	1.61	1.53
85	A5	1650	A	O4'-C1'	7.35	1.51	1.41
85	A5	4401	G	O4'-C1'	7.35	1.51	1.41
39	Cq	24	TYR	CD1-CE1	-7.34	1.28	1.39
85	A5	1616	U	O4'-C1'	7.34	1.51	1.41
86	A7	107	G	O4'-C1'	7.34	1.51	1.41
36	B2	1681	U	C2'-C1'	-7.34	1.45	1.53
85	A5	1373	A	C2'-C1'	-7.34	1.45	1.53
85	A5	1747	U	O4'-C1'	7.34	1.51	1.41
85	A5	2565	A	O4'-C1'	7.34	1.51	1.41
85	A5	1199	G	O4'-C1'	7.34	1.51	1.41
85	A5	1254	A	O4'-C1'	7.34	1.51	1.41
85	A5	473	C	O4'-C1'	7.34	1.51	1.41
85	A5	3951	G	O4'-C1'	7.33	1.51	1.41
85	A5	2658	G	O4'-C1'	7.33	1.51	1.41
36	B2	642	U	O4'-C1'	7.33	1.51	1.41
85	A5	23	C	C2'-C1'	-7.33	1.45	1.53
85	A5	1694	C	C2'-C1'	-7.33	1.45	1.53
13	AP	122	THR	CA-CB	7.33	1.72	1.53
85	A5	2860	C	C2'-C1'	-7.33	1.45	1.53
85	A5	2869	U	C2'-C1'	-7.33	1.45	1.53
36	B2	3	C	C2'-C1'	7.33	1.61	1.53
85	A5	1748	U	C2'-C1'	7.32	1.61	1.53
85	A5	3726	A	C2'-C1'	7.32	1.61	1.53
85	A5	155	C	C2'-C1'	-7.32	1.45	1.53
36	B2	1190	A	O4'-C1'	7.32	1.51	1.41
85	A5	1888	A	C2'-C1'	-7.32	1.45	1.53
85	A5	3898	G	C2'-C1'	-7.32	1.45	1.53
85	A5	4058	U	C2'-C1'	7.32	1.61	1.53
85	A5	4937	C	C2'-C1'	7.32	1.61	1.53
87	A8	41	A	C2'-C1'	7.31	1.61	1.53
85	A5	751	G	O4'-C1'	7.31	1.51	1.41
85	A5	2012	A	C2'-C1'	-7.31	1.45	1.53
85	A5	2546	G	C2'-C1'	-7.31	1.45	1.53
85	A5	4610	A	O4'-C1'	7.31	1.51	1.41
85	A5	2435	G	O4'-C1'	7.31	1.51	1.41
85	A5	2880	U	C2'-C1'	-7.31	1.45	1.53
30	AF	108	PRO	N-CD	7.31	1.58	1.47
85	A5	4187	G	O3'-P	-7.30	1.52	1.61
36	B2	524	U	O4'-C1'	7.30	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2509	C	O4'-C1'	7.30	1.51	1.41
36	B2	409	C	C2'-C1'	-7.30	1.45	1.53
26	AJ	91	LYS	C-O	-7.29	1.09	1.23
36	B2	370	G	O4'-C1'	7.29	1.51	1.41
36	B2	824	C	C2'-C1'	-7.29	1.45	1.53
37	BC	28	G	O4'-C1'	-7.29	1.32	1.41
85	A5	193	G	C2'-C1'	-7.29	1.45	1.53
87	A8	95	A	O3'-P	-7.29	1.52	1.61
85	A5	3290	G	P-O5'	-7.29	1.52	1.59
85	A5	4338	G	C2'-C1'	7.29	1.61	1.53
36	B2	1012	A	C2'-C1'	-7.29	1.45	1.53
85	A5	979	C	C2'-C1'	-7.29	1.45	1.53
85	A5	2075	G	C2'-C1'	-7.29	1.45	1.53
36	B2	1784	G	C2'-C1'	-7.28	1.45	1.53
85	A5	2283	G	C2'-C1'	-7.28	1.45	1.53
54	CP	5	SER	CA-C	-7.28	1.34	1.52
85	A5	2010	A	O4'-C1'	7.28	1.51	1.41
36	B2	1428	G	C2'-C1'	7.28	1.61	1.53
85	A5	3934	G	O4'-C1'	-7.28	1.32	1.41
85	A5	1770	A	C2'-C1'	-7.28	1.45	1.53
85	A5	4735	G	O4'-C1'	7.27	1.51	1.41
85	A5	268	G	C2'-C1'	-7.27	1.45	1.53
85	A5	4724	A	C2'-C1'	-7.27	1.45	1.53
67	Ce	17	THR	CA-C	7.27	1.71	1.52
85	A5	2663	G	O4'-C1'	-7.27	1.32	1.41
85	A5	1799	G	O4'-C1'	7.27	1.51	1.41
85	A5	2243	C	O4'-C1'	7.26	1.51	1.41
85	A5	2526	C	O4'-C1'	7.26	1.51	1.41
85	A5	1206	C	C2'-C1'	-7.26	1.45	1.53
85	A5	942	G	O4'-C1'	7.26	1.51	1.41
85	A5	2303	C	O4'-C1'	7.26	1.51	1.41
45	Ca	96	GLY	CA-C	-7.26	1.40	1.51
85	A5	1527	A	O4'-C1'	7.26	1.51	1.41
85	A5	4566	U	C2'-C1'	-7.26	1.45	1.53
36	B2	42	A	O4'-C1'	7.26	1.51	1.41
36	B2	844	U	O4'-C1'	7.26	1.51	1.41
50	CR	57	VAL	N-CA	-7.26	1.31	1.46
85	A5	1858	A	O4'-C1'	7.25	1.51	1.41
36	B2	606	G	C2'-C1'	-7.25	1.45	1.53
36	B2	86	C	P-O5'	-7.25	1.52	1.59
36	B2	1533	A	C2'-C1'	-7.25	1.45	1.53
85	A5	2720	C	O4'-C1'	7.25	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4364	G	O4'-C1'	7.25	1.51	1.41
85	A5	2115	G	O4'-C1'	7.25	1.51	1.41
85	A5	4428	A	O4'-C1'	7.25	1.51	1.41
85	A5	4541	G	C2'-C1'	7.25	1.61	1.53
85	A5	5011	A	O4'-C1'	7.25	1.51	1.41
36	B2	1058	A	C2'-C1'	-7.24	1.45	1.53
85	A5	5030	U	O4'-C1'	7.24	1.51	1.41
85	A5	238	C	C2'-C1'	-7.24	1.45	1.53
85	A5	722	G	O4'-C1'	7.24	1.51	1.41
85	A5	2783	A	O4'-C1'	7.24	1.51	1.41
36	B2	6	G	C2'-C1'	-7.24	1.45	1.53
36	B2	371	A	O4'-C1'	7.24	1.51	1.41
85	A5	270	U	O4'-C1'	7.24	1.51	1.41
85	A5	2839	U	C2'-C1'	-7.24	1.45	1.53
85	A5	4564	A	O4'-C1'	7.24	1.51	1.41
85	A5	4728	U	C2'-C1'	7.24	1.61	1.53
87	A8	117	C	C2'-C1'	-7.24	1.45	1.53
36	B2	85	A	O4'-C1'	7.23	1.51	1.41
36	B2	86	C	O4'-C1'	7.23	1.51	1.41
85	A5	3693	U	O4'-C1'	7.23	1.51	1.41
85	A5	4725	C	C5'-C4'	7.23	1.60	1.51
36	B2	1391	C	C2'-C1'	-7.23	1.45	1.53
36	B2	1764	G	C5'-C4'	7.23	1.60	1.51
85	A5	2048	U	O4'-C1'	7.23	1.51	1.41
85	A5	2622	G	C2'-C1'	7.23	1.61	1.53
85	A5	451	C	O4'-C1'	7.23	1.51	1.41
36	B2	1297	U	C2'-C1'	7.22	1.61	1.53
85	A5	1202	C	O4'-C1'	7.22	1.51	1.41
85	A5	1772	C	O4'-C1'	7.22	1.51	1.41
36	B2	1746	U	O3'-P	7.22	1.69	1.61
36	B2	586	G	O4'-C1'	7.22	1.51	1.41
36	B2	526	A	C2'-C1'	-7.22	1.45	1.53
87	A8	9	A	C2'-C1'	-7.22	1.45	1.53
85	A5	4895	C	O3'-P	-7.22	1.52	1.61
36	B2	864	A	C2'-C1'	-7.22	1.45	1.53
85	A5	2542	G	C2'-C1'	7.22	1.61	1.53
85	A5	1514	U	O4'-C1'	7.21	1.51	1.41
85	A5	4058	U	O4'-C1'	7.21	1.51	1.41
85	A5	3889	G	C2'-C1'	-7.21	1.45	1.53
18	AY	91	LEU	C-N	7.21	1.50	1.34
10	AN	137	PRO	N-CD	7.21	1.57	1.47
85	A5	2593	C	O4'-C1'	7.21	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3674	G	O4'-C1'	7.21	1.51	1.41
85	A5	4237	C	O4'-C1'	7.21	1.51	1.41
36	B2	1409	A	O4'-C1'	7.21	1.51	1.41
85	A5	4542	U	C2'-C1'	-7.20	1.45	1.53
85	A5	242	U	C2'-C1'	-7.20	1.45	1.53
85	A5	2392	C	C2'-C1'	-7.20	1.45	1.53
85	A5	2565	A	C2'-C1'	7.20	1.61	1.53
85	A5	3672	G	C2'-C1'	-7.20	1.45	1.53
85	A5	4933	C	O4'-C1'	7.20	1.51	1.41
85	A5	1165	G	C2'-C1'	-7.20	1.45	1.53
85	A5	3268	U	C5'-C4'	7.20	1.59	1.51
36	B2	216	C	O4'-C1'	7.19	1.51	1.41
85	A5	4516	G	C2'-C1'	-7.19	1.45	1.53
85	A5	5042	A	O4'-C1'	7.19	1.51	1.41
85	A5	4627	U	O4'-C1'	7.19	1.50	1.41
36	B2	937	C	C2'-C1'	-7.19	1.45	1.53
85	A5	161	G	O4'-C1'	7.19	1.50	1.41
85	A5	1627	G	C2'-C1'	-7.19	1.45	1.53
85	A5	2453	A	C2'-C1'	-7.19	1.45	1.53
85	A5	3774	A	C2'-C1'	-7.19	1.45	1.53
85	A5	4594	U	O4'-C1'	7.19	1.50	1.41
85	A5	3692	A	O4'-C1'	7.19	1.50	1.41
85	A5	4212	A	O4'-C1'	7.19	1.50	1.41
85	A5	5040	U	C2'-C1'	-7.19	1.45	1.53
85	A5	298	G	O4'-C1'	7.18	1.50	1.41
36	B2	81	U	O4'-C1'	7.18	1.50	1.41
85	A5	1804	A	C2'-C1'	-7.18	1.45	1.53
85	A5	2028	C	O4'-C1'	7.18	1.50	1.41
36	B2	941	C	C2'-C1'	-7.18	1.45	1.53
85	A5	2357	G	O4'-C1'	7.18	1.50	1.41
36	B2	1464	C	C2'-C1'	-7.18	1.45	1.53
85	A5	987	C	C2'-C1'	-7.18	1.45	1.53
85	A5	4461	C	C2'-C1'	-7.18	1.45	1.53
36	B2	219	U	O4'-C1'	7.18	1.50	1.41
85	A5	2904	U	O4'-C1'	-7.18	1.32	1.41
29	AG	131	ARG	CB-CG	7.17	1.72	1.52
85	A5	2074	C	C2'-C1'	-7.17	1.45	1.53
85	A5	4094	G	C2'-C1'	7.17	1.61	1.53
33	AI	3	ILE	CA-CB	-7.17	1.38	1.54
85	A5	1408	G	O4'-C1'	7.17	1.50	1.41
85	A5	5020	G	C2'-C1'	-7.17	1.45	1.53
36	B2	1438	A	C2'-C1'	7.17	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	499	G	C2'-C1'	-7.17	1.45	1.53
85	A5	2622	G	O4'-C1'	7.17	1.50	1.41
86	A7	35	U	C2'-C1'	-7.17	1.45	1.53
85	A5	4435	U	C2'-C1'	-7.17	1.45	1.53
36	B2	1367	U	O4'-C1'	7.16	1.50	1.41
85	A5	2893	U	C2'-C1'	-7.16	1.45	1.53
37	BC	7	G	C2'-C1'	7.16	1.61	1.53
85	A5	382	G	O4'-C1'	7.16	1.50	1.41
85	A5	4469	U	O4'-C1'	7.16	1.50	1.41
85	A5	4993	G	O4'-C1'	-7.16	1.32	1.41
85	A5	5010	U	C2'-C1'	7.16	1.61	1.53
85	A5	5046	U	O4'-C1'	7.16	1.50	1.41
85	A5	253	G	C2'-C1'	-7.16	1.45	1.53
85	A5	443	G	C2'-C1'	-7.16	1.45	1.53
85	A5	1285	U	O4'-C1'	7.15	1.50	1.41
85	A5	1490	G	O4'-C1'	7.15	1.50	1.41
85	A5	467	U	O4'-C1'	7.15	1.50	1.41
85	A5	4177	C	O4'-C1'	7.15	1.50	1.41
36	B2	1063	C	O4'-C1'	7.15	1.50	1.41
85	A5	984	C	C2'-C1'	-7.14	1.45	1.53
85	A5	3854	C	O4'-C1'	7.14	1.50	1.41
36	B2	670	A	O4'-C1'	-7.14	1.32	1.41
36	B2	400	C	C2'-C1'	-7.14	1.45	1.53
85	A5	1269	G	O3'-P	-7.14	1.52	1.61
85	A5	4467	A	O4'-C1'	7.14	1.50	1.41
85	A5	1165	G	O4'-C1'	7.13	1.50	1.41
49	CQ	94	GLU	CG-CD	-7.13	1.41	1.51
85	A5	4586	G	O4'-C1'	7.13	1.50	1.41
36	B2	1037	G	C2'-C1'	-7.13	1.45	1.53
85	A5	2675	G	O4'-C1'	-7.13	1.32	1.41
85	A5	4063	U	C2'-C1'	-7.13	1.45	1.53
36	B2	631	U	C2'-C1'	-7.13	1.45	1.53
85	A5	2433	G	C2'-C1'	-7.13	1.45	1.53
85	A5	2909	C	O4'-C1'	7.13	1.50	1.41
85	A5	687	U	O4'-C1'	-7.12	1.32	1.41
85	A5	2661	U	O4'-C1'	7.12	1.50	1.41
36	B2	35	C	C2'-C1'	-7.12	1.45	1.53
36	B2	860	G	O4'-C1'	7.11	1.50	1.41
85	A5	4246	G	C2'-C1'	7.11	1.61	1.53
85	A5	2310	C	O4'-C1'	7.11	1.50	1.41
28	AC	108	LYS	C-N	-7.11	1.17	1.34
36	B2	59	U	C2'-C1'	7.11	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1259	A	O4'-C1'	-7.11	1.32	1.41
85	A5	952	G	O3'-P	-7.11	1.52	1.61
85	A5	4629	U	C2'-C1'	7.11	1.61	1.53
36	B2	1722	G	O4'-C1'	7.10	1.50	1.41
36	B2	642	U	C2'-C1'	-7.10	1.45	1.53
85	A5	2083	C	C2'-C1'	-7.10	1.45	1.53
85	A5	2274	C	O4'-C1'	7.10	1.50	1.41
85	A5	3707	U	O4'-C1'	7.10	1.50	1.41
31	AH	111	LYS	CA-C	-7.10	1.34	1.52
67	Ce	16	ARG	N-CA	-7.10	1.32	1.46
85	A5	379	G	C2'-C1'	-7.10	1.45	1.53
36	B2	1755	C	O4'-C1'	7.10	1.50	1.41
85	A5	1888	A	O4'-C1'	7.10	1.50	1.41
85	A5	4271	A	O4'-C1'	7.10	1.50	1.41
85	A5	2112	G	O4'-C1'	-7.09	1.32	1.41
85	A5	2632	U	O4'-C1'	7.09	1.50	1.41
85	A5	3857	G	C2'-C1'	-7.09	1.45	1.53
85	A5	4142	C	C2'-C1'	-7.09	1.45	1.53
36	B2	696	G	C2'-C1'	-7.09	1.45	1.53
85	A5	255	C	O4'-C1'	7.09	1.50	1.41
85	A5	1508	A	C2'-C1'	-7.09	1.45	1.53
58	CW	72	THR	N-CA	7.09	1.60	1.46
85	A5	53	C	O4'-C1'	7.09	1.50	1.41
85	A5	503	C	C2'-C1'	-7.09	1.45	1.53
36	B2	884	C	C2'-C1'	-7.08	1.45	1.53
36	B2	822	U	C2'-C1'	-7.08	1.45	1.53
85	A5	1884	C	P-O5'	-7.08	1.52	1.59
85	A5	2539	C	C2'-C1'	-7.08	1.45	1.53
85	A5	4221	C	C2'-C1'	-7.08	1.45	1.53
86	A7	10	C	C2'-C1'	-7.08	1.45	1.53
85	A5	4079	C	O4'-C1'	7.08	1.50	1.41
6	AX	24	ASP	CA-C	-7.07	1.34	1.52
85	A5	2546	G	O3'-P	-7.07	1.52	1.61
85	A5	644	G	C2'-C1'	-7.07	1.45	1.53
36	B2	480	G	C2'-C1'	-7.07	1.45	1.53
85	A5	2012	A	O4'-C1'	7.07	1.50	1.41
36	B2	1263	U	C5'-C4'	7.07	1.59	1.51
85	A5	1510	G	C2'-C1'	-7.07	1.45	1.53
58	CW	73	ARG	CA-C	7.06	1.71	1.52
85	A5	3821	A	O4'-C1'	-7.06	1.32	1.41
36	B2	875	A	C2'-C1'	-7.06	1.45	1.53
85	A5	991	C	C2'-C1'	-7.06	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1470	G	O4'-C1'	7.06	1.50	1.41
85	A5	4620	U	P-O5'	-7.06	1.52	1.59
85	A5	937	U	O4'-C1'	7.05	1.50	1.41
85	A5	1239	C	O4'-C1'	7.05	1.50	1.41
85	A5	1913	C	C2'-C1'	-7.05	1.45	1.53
45	Ca	120	GLN	N-CA	-7.05	1.32	1.46
36	B2	74	G	O4'-C1'	7.05	1.50	1.41
85	A5	186	G	O4'-C1'	7.05	1.50	1.41
85	A5	424	U	P-O5'	-7.05	1.52	1.59
85	A5	3639	U	C2'-C1'	-7.05	1.45	1.53
36	B2	880	G	O4'-C1'	-7.05	1.32	1.41
85	A5	4758	U	O4'-C1'	-7.05	1.32	1.41
85	A5	1736	A	O4'-C1'	7.04	1.50	1.41
36	B2	1524	G	O4'-C1'	-7.04	1.32	1.41
36	B2	1588	A	O4'-C1'	7.04	1.50	1.41
85	A5	2633	U	O4'-C1'	7.04	1.50	1.41
85	A5	1201	U	O4'-C1'	7.04	1.50	1.41
87	A8	125	C	C2'-C1'	7.04	1.61	1.53
85	A5	2873	U	C2'-C1'	-7.04	1.45	1.53
85	A5	1941	A	O4'-C1'	7.03	1.50	1.41
87	A8	12	G	O4'-C1'	7.03	1.50	1.41
85	A5	323	C	C2'-C1'	-7.03	1.45	1.53
85	A5	2845	A	O4'-C1'	7.03	1.50	1.41
85	A5	3928	A	O4'-C1'	7.03	1.50	1.41
36	B2	474	G	C2'-C1'	-7.03	1.45	1.53
85	A5	1509	C	C2'-C1'	-7.03	1.45	1.53
85	A5	1070	G	O4'-C1'	7.03	1.50	1.41
85	A5	2038	U	C2'-C1'	-7.03	1.45	1.53
85	A5	3775	A	C2'-C1'	7.03	1.61	1.53
36	B2	619	A	C2'-C1'	7.03	1.61	1.53
36	B2	1359	U	C2'-C1'	7.02	1.61	1.53
36	B2	1423	C	C2'-C1'	-7.02	1.45	1.53
85	A5	4739	C	C2'-C1'	-7.02	1.45	1.53
62	Cb	30	GLU	CB-CG	-7.02	1.38	1.52
85	A5	1253	G	C2'-C1'	-7.02	1.45	1.53
85	A5	1934	A	C2'-C1'	7.02	1.61	1.53
85	A5	4995	U	C2'-C1'	-7.02	1.45	1.53
36	B2	1254	C	O4'-C1'	7.01	1.50	1.41
47	CI	4	ARG	N-CA	-7.01	1.32	1.46
85	A5	4647	G	O4'-C1'	7.01	1.50	1.41
36	B2	787	G	O4'-C1'	7.01	1.50	1.41
36	B2	1129	G	C2'-C1'	-7.01	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2498	C	C2'-C1'	-7.01	1.45	1.53
36	B2	746	C	C2'-C1'	-7.01	1.45	1.53
85	A5	4372	U	C2'-C1'	-7.01	1.45	1.53
36	B2	907	G	O4'-C1'	7.01	1.50	1.41
85	A5	187	U	O4'-C1'	7.01	1.50	1.41
85	A5	965	G	O4'-C1'	7.01	1.50	1.41
85	A5	1960	A	C2'-C1'	7.01	1.61	1.53
37	BC	40	C	P-O5'	-7.00	1.52	1.59
85	A5	310	G	C5'-C4'	7.00	1.59	1.51
85	A5	3817	A	O4'-C1'	7.00	1.50	1.41
74	CC	92	PHE	CD1-CE1	-7.00	1.25	1.39
85	A5	1890	G	O4'-C1'	-7.00	1.32	1.41
36	B2	1686	G	C2'-C1'	-7.00	1.45	1.53
85	A5	93	G	O4'-C1'	7.00	1.50	1.41
85	A5	678	C	C2'-C1'	-7.00	1.45	1.53
85	A5	1740	C	O4'-C1'	6.99	1.50	1.41
86	A7	76	U	O4'-C1'	6.99	1.50	1.41
85	A5	4573	G	C2'-C1'	-6.99	1.45	1.53
36	B2	1025	U	C2'-C1'	6.99	1.61	1.53
85	A5	2597	G	O4'-C1'	6.99	1.50	1.41
85	A5	4723	A	O4'-C1'	6.99	1.50	1.41
36	B2	1260	A	C2'-C1'	-6.99	1.45	1.53
81	CE	32	LEU	N-CA	-6.99	1.32	1.46
85	A5	1981	G	C2'-C1'	-6.99	1.45	1.53
85	A5	4036	G	O4'-C1'	6.99	1.50	1.41
85	A5	4414	A	C2'-C1'	6.99	1.61	1.53
81	CE	125	LEU	C-N	-6.99	1.18	1.34
85	A5	4077	A	O4'-C1'	6.99	1.50	1.41
85	A5	2440	U	C2'-C1'	-6.98	1.45	1.53
36	B2	684	G	C2'-C1'	-6.98	1.45	1.53
85	A5	1330	A	O4'-C1'	6.98	1.50	1.41
85	A5	1528	U	C2'-C1'	-6.98	1.45	1.53
87	A8	98	C	C2'-C1'	-6.98	1.45	1.53
36	B2	1811	C	C2'-C1'	-6.97	1.45	1.53
36	B2	566	U	C2'-C1'	6.97	1.61	1.53
54	CP	78	TRP	CE3-CZ3	-6.97	1.26	1.38
85	A5	3706	C	C2'-C1'	-6.97	1.45	1.53
36	B2	1659	U	O3'-P	-6.97	1.52	1.61
37	BC	36	A	C5'-C4'	6.97	1.59	1.51
85	A5	327	U	C2'-C1'	6.97	1.61	1.53
85	A5	1069	G	O4'-C1'	6.97	1.50	1.41
85	A5	2548	C	O4'-C1'	6.97	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3961	G	O4'-C1'	6.97	1.50	1.41
36	B2	65	C	C2'-C1'	6.96	1.61	1.53
36	B2	987	A	O4'-C1'	6.96	1.50	1.41
85	A5	1263	A	O4'-C1'	6.96	1.50	1.41
36	B2	815	U	O4'-C1'	6.96	1.50	1.41
85	A5	217	C	O4'-C1'	6.96	1.50	1.41
85	A5	726	G	O4'-C1'	6.96	1.50	1.41
36	B2	428	U	C2'-C1'	6.96	1.61	1.53
85	A5	2790	U	C2'-C1'	-6.96	1.45	1.53
85	A5	4133	C	C2'-C1'	-6.96	1.45	1.53
85	A5	4263	C	O4'-C1'	6.96	1.50	1.41
36	B2	739	C	C2'-C1'	-6.96	1.45	1.53
85	A5	1733	G	O4'-C1'	-6.96	1.32	1.41
85	A5	1986	U	C2'-C1'	-6.95	1.45	1.53
85	A5	2741	U	O4'-C1'	6.95	1.50	1.41
85	A5	3618	C	C2'-C1'	6.95	1.60	1.53
85	A5	4102	C	C2'-C1'	-6.95	1.45	1.53
85	A5	4890	G	O4'-C1'	6.95	1.50	1.41
40	CK	137	GLN	N-CA	6.95	1.60	1.46
85	A5	4082	G	O4'-C1'	6.95	1.50	1.41
36	B2	1287	A	C2'-C1'	6.95	1.60	1.53
85	A5	1342	A	C2'-C1'	-6.95	1.45	1.53
85	A5	2491	C	O4'-C1'	6.95	1.50	1.41
85	A5	2607	C	C2'-C1'	-6.95	1.45	1.53
85	A5	4037	C	C2'-C1'	-6.95	1.45	1.53
85	A5	4047	A	C2'-C1'	-6.95	1.45	1.53
85	A5	4493	U	C2'-C1'	6.95	1.60	1.53
85	A5	221	C	C2'-C1'	-6.95	1.45	1.53
85	A5	4894	A	O4'-C1'	-6.95	1.32	1.41
8	AS	95	TYR	CE1-CZ	-6.95	1.29	1.38
36	B2	903	A	O4'-C1'	-6.95	1.32	1.41
36	B2	1043	G	O4'-C1'	6.95	1.50	1.41
85	A5	455	C	O4'-C1'	6.95	1.50	1.41
85	A5	1968	G	C2'-C1'	-6.95	1.45	1.53
85	A5	4040	C	O4'-C1'	6.95	1.50	1.41
85	A5	104	G	C2'-C1'	-6.94	1.45	1.53
85	A5	4863	G	C2'-C1'	6.94	1.60	1.53
48	CD	66	TYR	CD1-CE1	-6.94	1.28	1.39
85	A5	4520	G	C2'-C1'	-6.94	1.45	1.53
36	B2	1248	U	C2'-C1'	-6.94	1.45	1.53
85	A5	1520	C	O3'-P	-6.94	1.52	1.61
85	A5	3829	G	O4'-C1'	6.94	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	118	C	O4'-C1'	6.94	1.50	1.41
85	A5	26	C	C2'-C1'	-6.94	1.45	1.53
87	A8	105	C	O4'-C1'	6.94	1.50	1.41
85	A5	4945	G	O4'-C1'	6.94	1.50	1.41
36	B2	1626	C	O4'-C1'	6.93	1.50	1.41
85	A5	116	G	O4'-C1'	6.93	1.50	1.41
85	A5	266	C	C2'-C1'	-6.93	1.45	1.53
85	A5	4723	A	C2'-C1'	-6.93	1.45	1.53
85	A5	2403	A	O4'-C1'	6.93	1.50	1.41
86	A7	111	C	C2'-C1'	-6.93	1.45	1.53
85	A5	1675	C	C2'-C1'	-6.93	1.45	1.53
85	A5	960	A	C2'-C1'	-6.93	1.45	1.53
85	A5	1449	C	O4'-C1'	6.93	1.50	1.41
85	A5	936	C	O4'-C1'	6.92	1.50	1.41
85	A5	1210	C	O4'-C1'	6.92	1.50	1.41
85	A5	4688	C	C2'-C1'	-6.92	1.45	1.53
55	CU	60	VAL	C-N	6.92	1.50	1.34
87	A8	91	A	C2'-C1'	-6.92	1.45	1.53
36	B2	324	C	O4'-C1'	-6.92	1.32	1.41
85	A5	48	G	O4'-C1'	6.92	1.50	1.41
85	A5	1693	U	C2'-C1'	-6.92	1.45	1.53
85	A5	1955	G	C2'-C1'	-6.92	1.45	1.53
85	A5	2532	C	C2'-C1'	-6.92	1.45	1.53
36	B2	1178	U	C2'-C1'	-6.92	1.45	1.53
85	A5	4061	G	O3'-P	-6.92	1.52	1.61
86	A7	25	G	O4'-C1'	6.92	1.50	1.41
36	B2	1675	A	O4'-C1'	-6.91	1.32	1.41
85	A5	4501	U	O4'-C1'	6.91	1.50	1.41
36	B2	147	A	O4'-C1'	-6.91	1.32	1.41
74	CC	91	ALA	CA-CB	-6.91	1.38	1.52
85	A5	4427	G	C2'-C1'	-6.91	1.45	1.53
36	B2	827	A	O4'-C1'	6.91	1.50	1.41
36	B2	1399	C	O4'-C1'	6.91	1.50	1.41
56	CX	52	LEU	C-N	6.91	1.50	1.34
85	A5	2071	A	O4'-C1'	6.90	1.50	1.41
85	A5	2480	G	C2'-C1'	-6.90	1.45	1.53
85	A5	264	C	C2'-C1'	-6.90	1.45	1.53
85	A5	4493	U	O4'-C1'	6.89	1.50	1.41
36	B2	182	C	C2'-C1'	-6.89	1.45	1.53
85	A5	738	C	O4'-C1'	6.89	1.50	1.41
85	A5	4957	C	O4'-C1'	6.89	1.50	1.41
85	A5	1336	G	O4'-C1'	6.89	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1612	G	O4'-C1'	6.89	1.50	1.41
85	A5	4759	C	O4'-C1'	6.89	1.50	1.41
36	B2	1307	U	C2'-C1'	6.89	1.60	1.53
85	A5	5044	A	C2'-C1'	-6.89	1.45	1.53
39	Cq	24	TYR	CE1-CZ	-6.88	1.29	1.38
85	A5	1660	U	C2'-C1'	-6.88	1.45	1.53
85	A5	4374	U	O4'-C1'	6.88	1.50	1.41
85	A5	4080	C	C2'-C1'	-6.88	1.45	1.53
36	B2	335	G	C2'-C1'	6.88	1.60	1.53
85	A5	1178	G	C2'-C1'	-6.88	1.45	1.53
85	A5	2725	A	C2'-C1'	6.88	1.60	1.53
85	A5	4889	G	C2'-C1'	-6.88	1.45	1.53
85	A5	4915	G	O4'-C1'	6.88	1.50	1.41
36	B2	104	A	O4'-C1'	6.87	1.50	1.41
85	A5	1785	C	O4'-C1'	6.87	1.50	1.41
85	A5	1874	A	C2'-C1'	-6.87	1.45	1.53
36	B2	611	G	O4'-C1'	6.87	1.50	1.41
37	BC	29	G	O4'-C1'	6.87	1.50	1.41
36	B2	992	A	C2'-C1'	-6.87	1.45	1.53
85	A5	1339	U	O4'-C1'	6.87	1.50	1.41
85	A5	1569	U	C2'-C1'	-6.87	1.45	1.53
85	A5	4104	G	C2'-C1'	-6.87	1.45	1.53
86	A7	18	C	O4'-C1'	6.87	1.50	1.41
36	B2	1153	C	O4'-C1'	-6.86	1.32	1.41
85	A5	3956	G	C2'-C1'	-6.86	1.45	1.53
87	A8	16	G	O3'-P	-6.86	1.52	1.61
85	A5	2549	G	O4'-C1'	6.86	1.50	1.41
36	B2	234	C	C2'-C1'	-6.86	1.45	1.53
36	B2	1456	G	O4'-C1'	6.86	1.50	1.41
85	A5	977	C	C2'-C1'	-6.86	1.45	1.53
86	A7	20	U	C2'-C1'	-6.86	1.45	1.53
36	B2	1701	C	O4'-C1'	6.85	1.50	1.41
85	A5	1103	C	C2'-C1'	-6.85	1.45	1.53
85	A5	1287	G	O4'-C1'	6.85	1.50	1.41
36	B2	1215	C	O4'-C1'	6.85	1.50	1.41
85	A5	4719	G	C2'-C1'	-6.85	1.45	1.53
85	A5	2013	A	C2'-C1'	-6.85	1.45	1.53
85	A5	4674	C	C2'-C1'	-6.85	1.45	1.53
36	B2	1055	A	C5'-C4'	6.85	1.59	1.51
85	A5	2794	C	C2'-C1'	6.85	1.60	1.53
85	A5	3822	U	C2'-C1'	-6.85	1.45	1.53
35	Ah	176	GLY	CA-C	6.84	1.62	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	172	U	O4'-C1'	6.84	1.50	1.41
39	Cq	263	GLU	CA-C	6.84	1.70	1.52
85	A5	514	U	O4'-C1'	6.84	1.50	1.41
37	BC	42	G	C2'-C1'	-6.84	1.45	1.53
40	CK	99	LYS	N-CA	6.84	1.60	1.46
36	B2	638	C	O4'-C1'	6.84	1.50	1.41
36	B2	963	A	C2'-C1'	-6.84	1.45	1.53
85	A5	3662	A	C2'-C1'	-6.84	1.45	1.53
85	A5	1640	C	C5'-C4'	6.84	1.59	1.51
37	BC	7	G	O4'-C1'	6.84	1.50	1.41
36	B2	1036	A	C2'-C1'	-6.84	1.45	1.53
36	B2	1736	G	C2'-C1'	-6.84	1.45	1.53
51	CA	103	PRO	N-CD	6.84	1.57	1.47
85	A5	5053	U	C2'-C1'	6.83	1.60	1.53
85	A5	4439	U	C2'-C1'	-6.83	1.45	1.53
87	A8	90	C	C2'-C1'	-6.83	1.45	1.53
26	AJ	35	TYR	CE1-CZ	-6.83	1.29	1.38
85	A5	2003	G	C2'-C1'	-6.83	1.45	1.53
36	B2	629	A	C2'-C1'	6.83	1.60	1.53
36	B2	920	A	O4'-C1'	6.83	1.50	1.41
36	B2	273	G	O3'-P	-6.83	1.52	1.61
85	A5	452	A	C2'-C1'	6.83	1.60	1.53
85	A5	4637	G	C2'-C1'	-6.82	1.45	1.53
37	BC	9	G	O4'-C1'	6.82	1.50	1.41
85	A5	160	G	O4'-C1'	6.82	1.50	1.41
85	A5	981	C	C2'-C1'	6.82	1.60	1.53
85	A5	2598	A	O4'-C1'	6.82	1.50	1.41
85	A5	4434	C	C2'-C1'	-6.82	1.45	1.53
85	A5	1742	A	C2'-C1'	-6.82	1.45	1.53
85	A5	4115	G	O4'-C1'	6.82	1.50	1.41
36	B2	1849	G	C2'-C1'	-6.82	1.45	1.53
36	B2	1055	A	O4'-C1'	6.82	1.50	1.41
85	A5	1759	G	O4'-C1'	6.82	1.50	1.41
85	A5	2661	U	C2'-C1'	-6.82	1.45	1.53
85	A5	70	A	C2'-C1'	6.81	1.60	1.53
36	B2	1790	A	O4'-C1'	6.81	1.50	1.41
36	B2	392	A	C2'-C1'	-6.81	1.45	1.53
37	BC	43	A	O4'-C1'	6.81	1.50	1.41
85	A5	3806	G	O4'-C1'	6.81	1.50	1.41
36	B2	1395	C	O4'-C1'	6.80	1.50	1.41
36	B2	1842	C	C2'-C1'	-6.80	1.45	1.53
85	A5	3603	G	C2'-C1'	-6.80	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3941	G	C2'-C1'	-6.80	1.45	1.53
6	AX	126	ALA	CA-CB	-6.80	1.38	1.52
85	A5	2250	C	C2'-C1'	6.80	1.60	1.53
85	A5	4428	A	C2'-C1'	-6.80	1.45	1.53
85	A5	4503	A	O4'-C1'	6.80	1.50	1.41
36	B2	665	G	C2'-C1'	-6.80	1.45	1.53
85	A5	919	C	C2'-C1'	-6.80	1.45	1.53
85	A5	2800	G	O4'-C1'	6.80	1.50	1.41
36	B2	1788	A	O4'-C1'	6.79	1.50	1.41
36	B2	1842	C	O4'-C1'	6.79	1.50	1.41
85	A5	3612	C	O4'-C1'	6.79	1.50	1.41
86	A7	97	G	O3'-P	-6.79	1.53	1.61
36	B2	973	C	C5'-C4'	6.79	1.59	1.51
36	B2	1740	C	C2'-C1'	-6.79	1.45	1.53
36	B2	1035	A	O4'-C1'	6.79	1.50	1.41
85	A5	103	G	O4'-C1'	6.79	1.50	1.41
85	A5	4280	A	C2'-C1'	-6.79	1.45	1.53
36	B2	945	U	O4'-C1'	6.79	1.50	1.41
36	B2	1712	A	O4'-C1'	6.79	1.50	1.41
6	AX	128	VAL	CA-CB	-6.78	1.40	1.54
36	B2	1048	G	C5'-C4'	6.78	1.59	1.51
85	A5	1294	A	C2'-C1'	-6.78	1.45	1.53
85	A5	277	G	C2'-C1'	-6.78	1.45	1.53
36	B2	480	G	O4'-C1'	6.78	1.50	1.41
85	A5	2038	U	O4'-C1'	6.78	1.50	1.41
85	A5	2445	C	C2'-C1'	-6.78	1.45	1.53
36	B2	917	U	C2'-C1'	6.78	1.60	1.53
85	A5	1207	C	C2'-C1'	-6.78	1.45	1.53
85	A5	1274	A	O3'-P	-6.78	1.53	1.61
85	A5	40	G	O4'-C1'	6.78	1.50	1.41
85	A5	2090	U	O3'-P	-6.78	1.53	1.61
85	A5	2801	U	C2'-C1'	6.78	1.60	1.53
85	A5	2533	C	O4'-C1'	6.78	1.50	1.41
85	A5	3715	U	C2'-C1'	-6.78	1.45	1.53
85	A5	4557	U	C2'-C1'	-6.78	1.45	1.53
87	A8	50	C	O4'-C1'	6.78	1.50	1.41
52	CS	151	LYS	N-CA	-6.77	1.32	1.46
85	A5	4576	U	C2'-C1'	-6.77	1.45	1.53
85	A5	1088	C	O4'-C1'	6.77	1.50	1.41
85	A5	4034	G	C2'-C1'	-6.77	1.46	1.53
36	B2	46	A	C2'-C1'	-6.77	1.46	1.53
85	A5	1347	G	O4'-C1'	-6.77	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2094	G	O4'-C1'	6.77	1.50	1.41
85	A5	2802	C	O4'-C1'	6.77	1.50	1.41
85	A5	1877	G	O4'-C1'	6.77	1.50	1.41
37	BC	63	U	O4'-C1'	6.77	1.50	1.41
85	A5	4072	C	C2'-C1'	-6.76	1.46	1.53
85	A5	5040	U	O4'-C1'	6.76	1.50	1.41
85	A5	2728	U	O4'-C1'	6.76	1.50	1.41
36	B2	1047	C	C2'-C1'	-6.76	1.46	1.53
36	B2	1530	U	O4'-C1'	6.76	1.50	1.41
45	Ca	120	GLN	CA-CB	-6.76	1.39	1.53
81	CE	32	LEU	CB-CG	6.76	1.72	1.52
85	A5	218	A	O4'-C1'	6.76	1.50	1.41
85	A5	5015	G	C2'-C1'	6.76	1.60	1.53
36	B2	900	C	O4'-C1'	6.76	1.50	1.41
85	A5	2093	A	O4'-C1'	-6.76	1.32	1.41
85	A5	3683	C	C2'-C1'	-6.76	1.46	1.53
85	A5	990	C	O4'-C1'	6.76	1.50	1.41
85	A5	1409	C	O4'-C1'	6.76	1.50	1.41
36	B2	477	G	C2'-C1'	-6.75	1.46	1.53
85	A5	2579	G	O4'-C1'	-6.75	1.32	1.41
74	CC	22	VAL	CA-CB	-6.75	1.40	1.54
85	A5	3676	G	O4'-C1'	6.75	1.50	1.41
85	A5	4205	A	C2'-C1'	-6.75	1.46	1.53
36	B2	1639	G	O4'-C1'	6.75	1.50	1.41
85	A5	690	C	C2'-C1'	6.75	1.60	1.53
36	B2	445	A	O4'-C1'	6.75	1.50	1.41
36	B2	1000	C	O4'-C1'	6.75	1.50	1.41
36	B2	1039	C	O4'-C1'	6.75	1.50	1.41
85	A5	107	G	O4'-C1'	-6.75	1.32	1.41
85	A5	4763	U	C2'-C1'	-6.75	1.46	1.53
36	B2	1816	G	C2'-C1'	-6.75	1.46	1.53
85	A5	2822	G	O4'-C1'	-6.75	1.32	1.41
85	A5	2824	C	O4'-C1'	6.75	1.50	1.41
85	A5	4234	A	C2'-C1'	-6.75	1.46	1.53
36	B2	330	G	C2'-C1'	-6.74	1.46	1.53
85	A5	4160	C	C2'-C1'	-6.74	1.46	1.53
85	A5	962	C	O4'-C1'	6.74	1.50	1.41
85	A5	2112	G	C2'-C1'	-6.74	1.46	1.53
85	A5	4112	C	O4'-C1'	6.74	1.50	1.41
36	B2	1848	U	O4'-C1'	6.74	1.50	1.41
85	A5	289	C	C2'-C1'	-6.74	1.46	1.53
85	A5	3943	A	C2'-C1'	6.74	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1728	U	O4'-C1'	6.74	1.50	1.41
85	A5	1978	C	O4'-C1'	6.74	1.50	1.41
36	B2	421	G	O3'-P	-6.73	1.53	1.61
85	A5	4994	G	O4'-C1'	6.73	1.50	1.41
87	A8	2	G	C2'-C1'	-6.73	1.46	1.53
26	AJ	163	SER	C-N	-6.73	1.21	1.34
36	B2	1543	U	P-O5'	-6.73	1.53	1.59
85	A5	670	G	O4'-C1'	-6.73	1.32	1.41
36	B2	160	U	O4'-C1'	6.73	1.50	1.41
36	B2	348	A	O4'-C1'	6.73	1.50	1.41
60	Cr	36	ASN	CA-C	6.73	1.70	1.52
85	A5	2002	A	C2'-C1'	-6.73	1.46	1.53
85	A5	2803	U	C2'-C1'	-6.72	1.46	1.53
86	A7	19	C	C2'-C1'	-6.72	1.46	1.53
85	A5	1685	G	O4'-C1'	6.72	1.50	1.41
85	A5	2799	G	P-O5'	-6.72	1.53	1.59
85	A5	4365	C	O4'-C1'	6.72	1.50	1.41
85	A5	1360	G	C2'-C1'	-6.72	1.46	1.53
85	A5	4344	U	C2'-C1'	-6.72	1.46	1.53
85	A5	66	A	O3'-P	-6.72	1.53	1.61
85	A5	1803	G	C2'-C1'	-6.72	1.46	1.53
85	A5	2285	A	C2'-C1'	6.72	1.60	1.53
85	A5	392	U	C2'-C1'	6.72	1.60	1.53
85	A5	3853	U	O4'-C1'	6.72	1.50	1.41
44	CM	80	ALA	C-N	6.71	1.49	1.34
85	A5	4215	C	C2'-C1'	-6.71	1.46	1.53
85	A5	4208	U	O4'-C1'	6.71	1.50	1.41
85	A5	4970	C	P-O5'	-6.71	1.53	1.59
47	CI	212	LEU	CA-C	6.71	1.70	1.52
85	A5	2414	G	C2'-C1'	-6.71	1.46	1.53
85	A5	3626	G	C2'-C1'	-6.71	1.46	1.53
85	A5	1168	G	C2'-C1'	-6.71	1.46	1.53
85	A5	1620	U	O4'-C1'	6.70	1.50	1.41
85	A5	4674	C	O4'-C1'	6.70	1.50	1.41
85	A5	4914	C	O4'-C1'	6.70	1.50	1.41
36	B2	14	C	O4'-C1'	6.70	1.50	1.41
85	A5	2429	A	O4'-C1'	6.70	1.50	1.41
15	AB	133	TYR	CB-CG	-6.70	1.41	1.51
36	B2	1848	U	C2'-C1'	-6.70	1.46	1.53
85	A5	1891	A	C2'-C1'	-6.70	1.46	1.53
85	A5	4882	U	C5'-C4'	6.70	1.59	1.51
85	A5	488	G	O4'-C1'	-6.70	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	523	A	O4'-C1'	6.70	1.50	1.41
85	A5	2046	G	C2'-C1'	-6.70	1.46	1.53
85	A5	2127	C	O4'-C1'	6.70	1.50	1.41
85	A5	2720	C	C2'-C1'	-6.70	1.46	1.53
36	B2	448	A	C2'-C1'	6.69	1.60	1.53
36	B2	118	C	C2'-C1'	-6.69	1.46	1.53
36	B2	1519	U	C2'-C1'	6.69	1.60	1.53
85	A5	1795	A	O4'-C1'	6.69	1.50	1.41
85	A5	184	U	C2'-C1'	6.69	1.60	1.53
1	Az	154	VAL	C-N	6.69	1.49	1.34
40	CK	130	LYS	CA-C	-6.69	1.35	1.52
85	A5	2812	A	O4'-C1'	6.69	1.50	1.41
85	A5	2908	U	C2'-C1'	-6.69	1.46	1.53
85	A5	4417	C	C2'-C1'	-6.68	1.46	1.53
54	CP	5	SER	CA-CB	6.68	1.62	1.52
85	A5	4361	U	O4'-C1'	6.68	1.50	1.41
85	A5	3902	A	C2'-C1'	-6.68	1.46	1.53
36	B2	607	U	C2'-C1'	-6.67	1.46	1.53
36	B2	1207	G	O4'-C1'	6.67	1.50	1.41
85	A5	124	C	C2'-C1'	-6.67	1.46	1.53
85	A5	1833	G	C5'-C4'	6.67	1.59	1.51
36	B2	673	G	P-O5'	-6.67	1.53	1.59
85	A5	1215	C	O4'-C1'	6.67	1.50	1.41
85	A5	18	C	C2'-C1'	-6.67	1.46	1.53
85	A5	1696	C	C2'-C1'	-6.67	1.46	1.53
85	A5	2036	C	O4'-C1'	6.67	1.50	1.41
36	B2	816	A	C2'-C1'	-6.67	1.46	1.53
36	B2	1696	C	C2'-C1'	-6.67	1.46	1.53
36	B2	1179	G	C2'-C1'	-6.66	1.46	1.53
85	A5	102	G	C2'-C1'	-6.66	1.46	1.53
85	A5	2783	A	C2'-C1'	6.66	1.60	1.53
36	B2	9	U	O4'-C1'	6.66	1.50	1.41
85	A5	4954	G	O4'-C1'	-6.66	1.32	1.41
36	B2	1236	G	C3'-C2'	6.66	1.60	1.52
36	B2	1717	C	O4'-C1'	6.66	1.50	1.41
36	B2	1382	A	O4'-C1'	6.65	1.50	1.41
36	B2	1418	C	O4'-C1'	-6.65	1.33	1.41
85	A5	3918	G	O4'-C1'	6.65	1.50	1.41
85	A5	1763	C	O4'-C1'	6.65	1.50	1.41
85	A5	4972	U	O4'-C1'	6.65	1.50	1.41
36	B2	444	G	O4'-C1'	-6.64	1.33	1.41
36	B2	962	A	C2'-C1'	6.64	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1247	C	O4'-C1'	6.64	1.50	1.41
85	A5	1806	G	O4'-C1'	6.64	1.50	1.41
85	A5	4186	A	O4'-C1'	6.64	1.50	1.41
85	A5	4969	C	O4'-C1'	6.64	1.50	1.41
36	B2	709	G	C5'-C4'	6.64	1.59	1.51
85	A5	2499	C	C2'-C1'	-6.64	1.46	1.53
36	B2	1148	A	C2'-C1'	6.64	1.60	1.53
85	A5	51	A	O4'-C1'	6.64	1.50	1.41
85	A5	3905	A	O4'-C1'	-6.64	1.33	1.41
36	B2	101	U	C2'-C1'	6.64	1.60	1.53
85	A5	407	A	O4'-C1'	6.64	1.50	1.41
85	A5	2294	G	O4'-C1'	6.64	1.50	1.41
36	B2	358	C	C2'-C1'	-6.63	1.46	1.53
36	B2	1022	U	O3'-P	-6.63	1.53	1.61
85	A5	2020	U	C2'-C1'	6.63	1.60	1.53
85	A5	4309	G	C2'-C1'	6.63	1.60	1.53
36	B2	969	U	C2'-C1'	-6.63	1.46	1.53
85	A5	344	A	C2'-C1'	-6.63	1.46	1.53
87	A8	43	A	C2'-C1'	-6.63	1.46	1.53
36	B2	1739	C	C2'-C1'	-6.63	1.46	1.53
85	A5	1825	A	C2'-C1'	6.63	1.60	1.53
85	A5	4356	G	C2'-C1'	-6.63	1.46	1.53
86	A7	80	U	O4'-C1'	6.63	1.50	1.41
37	BC	49	A	O4'-C1'	6.63	1.50	1.41
85	A5	4918	C	C2'-C1'	-6.63	1.46	1.53
36	B2	678	U	O4'-C1'	6.63	1.50	1.41
85	A5	1321	G	O4'-C1'	6.63	1.50	1.41
36	B2	1076	G	C2'-C1'	-6.62	1.46	1.53
85	A5	1971	C	O4'-C1'	6.62	1.50	1.41
36	B2	208	G	O4'-C1'	6.62	1.50	1.41
85	A5	2129	C	O4'-C1'	6.62	1.50	1.41
85	A5	2445	C	O4'-C1'	6.62	1.50	1.41
36	B2	407	G	C2'-C1'	6.62	1.60	1.53
36	B2	452	G	C2'-C1'	-6.62	1.46	1.53
36	B2	1034	A	C2'-C1'	6.62	1.60	1.53
85	A5	252	C	O4'-C1'	6.61	1.50	1.41
36	B2	504	G	C2'-C1'	-6.61	1.46	1.53
85	A5	305	A	O4'-C1'	6.61	1.50	1.41
85	A5	4615	C	C2'-C1'	-6.61	1.46	1.53
85	A5	1939	A	C2'-C1'	6.61	1.60	1.53
85	A5	4557	U	O4'-C1'	6.61	1.50	1.41
85	A5	3901	A	C2'-C1'	-6.61	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	880	C	P-O5'	-6.60	1.53	1.59
36	B2	230	A	O4'-C1'	6.60	1.50	1.41
85	A5	5056	A	O4'-C1'	6.60	1.50	1.41
85	A5	4222	G	C2'-C1'	-6.60	1.46	1.53
36	B2	414	A	O4'-C1'	6.60	1.50	1.41
85	A5	2008	U	O4'-C1'	-6.60	1.33	1.41
85	A5	3681	G	O4'-C1'	6.60	1.50	1.41
36	B2	799	U	C2'-C1'	-6.60	1.46	1.53
85	A5	2564	G	O4'-C1'	6.60	1.50	1.41
85	A5	4278	C	O4'-C1'	6.60	1.50	1.41
85	A5	4478	G	O4'-C1'	6.60	1.50	1.41
85	A5	1373	A	O3'-P	-6.59	1.53	1.61
85	A5	2577	C	O4'-C1'	6.59	1.50	1.41
85	A5	4646	U	P-O5'	-6.59	1.53	1.59
85	A5	955	G	C2'-C1'	-6.59	1.46	1.53
85	A5	1437	C	C2'-C1'	6.59	1.60	1.53
85	A5	2337	C	C2'-C1'	-6.59	1.46	1.53
85	A5	3716	C	O4'-C1'	6.59	1.50	1.41
85	A5	3968	U	C2'-C1'	6.59	1.60	1.53
42	CL	130	LYS	CB-CG	6.59	1.70	1.52
85	A5	2109	G	O4'-C1'	6.59	1.50	1.41
85	A5	4587	G	C2'-C1'	-6.58	1.46	1.53
85	A5	4659	G	C5'-C4'	6.58	1.59	1.51
74	CC	109	ARG	N-CA	6.58	1.59	1.46
85	A5	4368	G	O4'-C1'	6.58	1.50	1.41
85	A5	1352	C	O4'-C1'	6.58	1.50	1.41
36	B2	1707	U	C2'-C1'	-6.58	1.46	1.53
81	CE	128	HIS	C-N	6.58	1.44	1.33
85	A5	1293	G	P-O5'	-6.58	1.53	1.59
85	A5	2681	G	O4'-C1'	6.58	1.50	1.41
85	A5	1267	C	P-O5'	-6.58	1.53	1.59
85	A5	229	G	C2'-C1'	-6.58	1.46	1.53
85	A5	1338	G	P-O5'	-6.58	1.53	1.59
85	A5	4317	A	C2'-C1'	-6.57	1.46	1.53
85	A5	2760	G	O3'-P	-6.57	1.53	1.61
36	B2	200	G	C2'-C1'	-6.57	1.46	1.53
36	B2	282	G	O4'-C1'	6.57	1.50	1.41
85	A5	2305	U	O4'-C1'	6.57	1.50	1.41
85	A5	3966	A	C2'-C1'	-6.57	1.46	1.53
85	A5	4190	U	C2'-C1'	6.57	1.60	1.53
85	A5	3600	G	C2'-C1'	-6.57	1.46	1.53
85	A5	4937	C	O4'-C1'	-6.57	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	AG	157	VAL	CA-CB	-6.57	1.41	1.54
36	B2	1001	A	C2'-C1'	6.57	1.60	1.53
85	A5	1733	G	P-O5'	-6.57	1.53	1.59
85	A5	2014	C	C2'-C1'	-6.57	1.46	1.53
85	A5	4343	U	O4'-C1'	6.57	1.50	1.41
85	A5	4460	U	C2'-C1'	-6.56	1.46	1.53
85	A5	1209	U	C2'-C1'	6.56	1.60	1.53
85	A5	2252	G	O3'-P	-6.56	1.53	1.61
85	A5	2812	A	C2'-C1'	-6.56	1.46	1.53
85	A5	3621	A	O4'-C1'	6.56	1.50	1.41
85	A5	225	G	O4'-C1'	6.56	1.50	1.41
85	A5	4100	C	C2'-C1'	-6.56	1.46	1.53
85	A5	2251	G	O4'-C1'	6.55	1.50	1.41
1	Az	768	GLY	C-N	6.55	1.49	1.34
49	CQ	13	VAL	CA-CB	-6.55	1.41	1.54
85	A5	5065	U	O4'-C1'	6.55	1.50	1.41
85	A5	2	G	O4'-C1'	6.55	1.50	1.41
85	A5	1547	A	O4'-C1'	6.55	1.50	1.41
85	A5	2390	G	O3'-P	-6.55	1.53	1.61
87	A8	149	G	C2'-C1'	6.55	1.60	1.53
36	B2	398	A	O4'-C1'	6.55	1.50	1.41
36	B2	1608	U	C2'-C1'	-6.55	1.46	1.53
85	A5	2858	A	O4'-C1'	6.55	1.50	1.41
85	A5	1751	A	O4'-C1'	6.54	1.50	1.41
85	A5	2891	U	O4'-C1'	6.54	1.50	1.41
85	A5	3886	G	O4'-C1'	-6.54	1.33	1.41
85	A5	4424	A	O4'-C1'	6.54	1.50	1.41
28	AC	87	PRO	N-CD	6.54	1.57	1.47
37	BC	52	G	C2'-C1'	-6.54	1.46	1.53
38	Cz	98	LYS	C-N	6.54	1.49	1.34
53	CT	30	TYR	CD2-CE2	-6.54	1.29	1.39
85	A5	3867	A	O4'-C1'	6.54	1.50	1.41
85	A5	3828	A	C2'-C1'	6.54	1.60	1.53
85	A5	654	C	C2'-C1'	-6.54	1.46	1.53
85	A5	455	C	C2'-C1'	-6.54	1.46	1.53
85	A5	2588	C	C2'-C1'	6.54	1.60	1.53
85	A5	152	U	C2'-C1'	6.53	1.60	1.53
1	Az	56	PHE	CB-CG	6.53	1.62	1.51
36	B2	1803	U	C2'-C1'	-6.53	1.46	1.53
36	B2	1803	U	O4'-C1'	6.53	1.50	1.41
37	BC	19	A	O4'-C1'	-6.53	1.33	1.41
85	A5	2808	G	C2'-C1'	-6.53	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	A7	79	U	C2'-C1'	6.53	1.60	1.53
85	A5	1416	G	C2'-C1'	-6.53	1.46	1.53
85	A5	1333	A	O4'-C1'	6.53	1.50	1.41
85	A5	10	A	O4'-C1'	6.53	1.50	1.41
85	A5	1663	C	C2'-C1'	-6.53	1.46	1.53
85	A5	2816	G	O4'-C1'	6.53	1.50	1.41
85	A5	707	C	C2'-C1'	-6.52	1.46	1.53
63	CB	7	SER	C-N	6.52	1.49	1.34
85	A5	753	C	O4'-C1'	6.52	1.50	1.41
85	A5	1642	A	O4'-C1'	6.52	1.50	1.41
85	A5	3685	C	O4'-C1'	6.52	1.50	1.41
85	A5	2779	C	C2'-C1'	-6.52	1.46	1.53
85	A5	4720	C	C3'-C2'	6.52	1.60	1.52
85	A5	2847	G	O4'-C1'	-6.52	1.33	1.41
85	A5	2328	G	C2'-C1'	-6.51	1.46	1.53
85	A5	635	G	O4'-C1'	-6.51	1.33	1.41
85	A5	1108	C	C2'-C1'	-6.51	1.46	1.53
36	B2	100	U	O4'-C1'	6.51	1.50	1.41
36	B2	1282	A	O4'-C1'	6.51	1.50	1.41
85	A5	219	G	C2'-C1'	-6.51	1.46	1.53
85	A5	1366	G	C2'-C1'	6.51	1.60	1.53
85	A5	3675	G	C2'-C1'	-6.51	1.46	1.53
36	B2	431	G	C2'-C1'	-6.51	1.46	1.53
36	B2	924	G	P-O5'	-6.51	1.53	1.59
85	A5	3696	C	C2'-C1'	-6.51	1.46	1.53
36	B2	896	U	O4'-C1'	6.51	1.50	1.41
58	CW	73	ARG	N-CA	6.51	1.59	1.46
8	AS	95	TYR	CD2-CE2	-6.50	1.29	1.39
36	B2	1631	U	O4'-C1'	6.50	1.50	1.41
85	A5	4139	G	O4'-C1'	6.50	1.50	1.41
85	A5	2851	G	O4'-C1'	6.50	1.50	1.41
53	CT	13	TYR	CB-CG	-6.50	1.41	1.51
85	A5	1813	U	O4'-C1'	6.50	1.50	1.41
36	B2	1125	C	C2'-C1'	-6.50	1.46	1.53
85	A5	1273	G	O4'-C1'	-6.50	1.33	1.41
85	A5	2576	G	O4'-C1'	6.50	1.50	1.41
85	A5	4638	U	C2'-C1'	-6.50	1.46	1.53
36	B2	468	A	C2'-C1'	-6.50	1.46	1.53
85	A5	1419	G	C5'-C4'	6.50	1.59	1.51
36	B2	103	A	O4'-C1'	-6.50	1.33	1.41
36	B2	30	C	C2'-C1'	-6.49	1.46	1.53
36	B2	204	G	C2'-C1'	6.49	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2705	G	P-O5'	-6.49	1.53	1.59
85	A5	3753	G	O4'-C1'	6.49	1.50	1.41
1	Az	745	TYR	CB-CG	-6.48	1.42	1.51
36	B2	1065	G	O4'-C1'	6.48	1.50	1.41
85	A5	3841	C	O4'-C1'	6.48	1.50	1.41
85	A5	2062	C	O4'-C1'	6.48	1.50	1.41
36	B2	830	A	C2'-C1'	6.48	1.60	1.53
74	CC	307	LYS	CA-CB	6.48	1.68	1.53
85	A5	4349	C	O4'-C1'	6.48	1.50	1.41
85	A5	1451	G	O4'-C1'	6.48	1.50	1.41
85	A5	4440	G	C2'-C1'	-6.48	1.46	1.53
36	B2	649	U	O4'-C1'	6.47	1.50	1.41
85	A5	2725	A	O4'-C1'	6.47	1.50	1.41
85	A5	2745	A	C2'-C1'	6.47	1.60	1.53
85	A5	4704	C	O4'-C1'	6.47	1.50	1.41
36	B2	514	U	C2'-C1'	-6.47	1.46	1.53
74	CC	313	VAL	CA-CB	-6.47	1.41	1.54
85	A5	2675	G	C2'-C1'	-6.47	1.46	1.53
36	B2	950	C	C2'-C1'	-6.47	1.46	1.53
36	B2	309	G	C2'-C1'	-6.47	1.46	1.53
36	B2	1430	C	P-O5'	-6.47	1.53	1.59
85	A5	4605	A	C2'-C1'	-6.47	1.46	1.53
85	A5	5038	A	C2'-C1'	6.47	1.60	1.53
85	A5	2387	G	O4'-C1'	6.47	1.50	1.41
36	B2	1467	C	O4'-C1'	6.47	1.50	1.41
85	A5	522	C	C2'-C1'	-6.47	1.46	1.53
85	A5	4716	C	O4'-C1'	6.47	1.50	1.41
36	B2	803	C	O4'-C1'	6.46	1.50	1.41
87	A8	155	C	C2'-C1'	-6.46	1.46	1.53
85	A5	2509	C	C2'-C1'	-6.46	1.46	1.53
85	A5	4766	C	C2'-C1'	-6.46	1.46	1.53
85	A5	5001	U	O4'-C1'	6.46	1.50	1.41
33	AI	8	TRP	CD2-CE3	-6.46	1.30	1.40
36	B2	201	C	C2'-C1'	-6.46	1.46	1.53
85	A5	333	U	O4'-C1'	6.46	1.50	1.41
85	A5	1367	C	O4'-C1'	6.46	1.50	1.41
85	A5	2842	G	O3'-P	-6.46	1.53	1.61
85	A5	3689	G	C2'-C1'	-6.46	1.46	1.53
85	A5	3710	G	C2'-C1'	-6.46	1.46	1.53
85	A5	258	G	O4'-C1'	6.46	1.50	1.41
85	A5	2267	U	C2'-C1'	-6.46	1.46	1.53
35	Ah	142	LEU	CA-C	-6.45	1.36	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4309	G	O4'-C1'	-6.45	1.33	1.41
36	B2	647	U	O4'-C1'	6.45	1.50	1.41
36	B2	1396	A	O4'-C1'	-6.45	1.33	1.41
85	A5	75	G	O4'-C1'	6.45	1.50	1.41
85	A5	1734	G	O4'-C1'	6.45	1.50	1.41
85	A5	4145	C	C3'-C2'	6.45	1.60	1.52
85	A5	1586	G	O4'-C1'	6.44	1.50	1.41
36	B2	737	G	C2'-C1'	6.44	1.60	1.53
36	B2	1125	C	O4'-C1'	6.44	1.50	1.41
36	B2	810	A	O4'-C1'	6.44	1.50	1.41
36	B2	932	G	C2'-C1'	-6.44	1.46	1.53
85	A5	2684	C	O4'-C1'	6.44	1.50	1.41
85	A5	4198	G	O4'-C1'	6.44	1.50	1.41
85	A5	2322	G	C2'-C1'	-6.44	1.46	1.53
85	A5	759	G	C2'-C1'	6.44	1.60	1.53
85	A5	1499	C	O4'-C1'	6.44	1.50	1.41
85	A5	2523	G	C2'-C1'	-6.44	1.46	1.53
85	A5	2559	G	C2'-C1'	-6.44	1.46	1.53
85	A5	4294	C	C2'-C1'	-6.44	1.46	1.53
23	AD	20	GLU	CG-CD	6.43	1.61	1.51
36	B2	1615	U	O4'-C1'	6.43	1.50	1.41
85	A5	1887	G	O4'-C1'	6.43	1.50	1.41
85	A5	2368	A	O4'-C1'	6.43	1.50	1.41
85	A5	4267	G	C2'-C1'	-6.43	1.46	1.53
36	B2	978	G	C2'-C1'	-6.43	1.46	1.53
36	B2	1627	C	C2'-C1'	-6.43	1.46	1.53
36	B2	1748	G	C2'-C1'	-6.43	1.46	1.53
85	A5	4944	C	O4'-C1'	6.43	1.50	1.41
85	A5	5051	C	O4'-C1'	6.43	1.50	1.41
85	A5	1854	G	C2'-C1'	-6.43	1.46	1.53
36	B2	165	G	O4'-C1'	-6.42	1.33	1.41
36	B2	1238	U	C2'-C1'	-6.42	1.46	1.53
36	B2	1672	U	C2'-C1'	-6.42	1.46	1.53
85	A5	2060	G	O4'-C1'	6.42	1.50	1.41
85	A5	2503	G	O4'-C1'	6.42	1.50	1.41
85	A5	2059	C	O4'-C1'	6.42	1.50	1.41
85	A5	3890	A	O4'-C1'	6.42	1.50	1.41
87	A8	38	U	C2'-C1'	-6.42	1.46	1.53
36	B2	1483	A	C2'-C1'	6.42	1.60	1.53
85	A5	1050	C	C2'-C1'	-6.42	1.46	1.53
85	A5	4305	G	O4'-C1'	6.42	1.50	1.41
36	B2	1503	C	O4'-C1'	6.41	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	Cq	56	GLY	CA-C	6.41	1.62	1.51
85	A5	2762	G	C2'-C1'	-6.41	1.46	1.53
85	A5	1558	A	O4'-C1'	6.41	1.50	1.41
36	B2	139	C	C2'-C1'	6.41	1.60	1.53
85	A5	4086	G	C2'-C1'	6.41	1.60	1.53
85	A5	4155	C	O4'-C1'	6.41	1.50	1.41
85	A5	4235	G	O3'-P	-6.41	1.53	1.61
85	A5	1697	G	C5'-C4'	6.41	1.59	1.51
45	Ca	120	GLN	CA-C	-6.41	1.36	1.52
85	A5	256	G	O4'-C1'	6.41	1.50	1.41
85	A5	1462	A	C2'-C1'	-6.40	1.46	1.53
36	B2	1620	A	O4'-C1'	-6.40	1.33	1.41
74	CC	92	PHE	CD2-CE2	-6.40	1.26	1.39
85	A5	1625	G	O4'-C1'	6.40	1.50	1.41
85	A5	2798	A	O3'-P	-6.40	1.53	1.61
85	A5	4285	U	O4'-C1'	6.40	1.50	1.41
85	A5	4357	G	C2'-C1'	-6.40	1.46	1.53
85	A5	4590	A	C2'-C1'	-6.40	1.46	1.53
85	A5	1626	G	O3'-P	-6.40	1.53	1.61
48	CD	268	ARG	N-CA	-6.39	1.33	1.46
85	A5	1673	U	C2'-C1'	-6.39	1.46	1.53
85	A5	122	U	O3'-P	-6.39	1.53	1.61
85	A5	3785	A	O4'-C1'	-6.39	1.33	1.41
85	A5	2477	A	C2'-C1'	6.39	1.60	1.53
36	B2	902	G	C2'-C1'	-6.39	1.46	1.53
85	A5	1099	C	C2'-C1'	-6.39	1.46	1.53
85	A5	1997	U	C2'-C1'	-6.39	1.46	1.53
85	A5	4152	G	O4'-C1'	6.39	1.50	1.41
85	A5	4224	A	O4'-C1'	6.39	1.50	1.41
36	B2	538	U	C2'-C1'	-6.38	1.46	1.53
53	CT	24	VAL	CA-C	-6.38	1.36	1.52
81	CE	36	LYS	N-CA	-6.38	1.33	1.46
36	B2	883	U	C5'-C4'	6.38	1.59	1.51
85	A5	2751	G	P-O5'	-6.38	1.53	1.59
19	AZ	104	ARG	CD-NE	-6.38	1.35	1.46
36	B2	1142	G	P-O5'	-6.38	1.53	1.59
85	A5	1834	U	O4'-C1'	-6.38	1.33	1.41
85	A5	4627	U	O3'-P	-6.38	1.53	1.61
36	B2	282	G	C2'-C1'	-6.37	1.46	1.53
36	B2	1689	C	O4'-C1'	6.37	1.50	1.41
85	A5	4098	A	O4'-C1'	6.37	1.50	1.41
85	A5	1825	A	O4'-C1'	6.37	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4917	C	O4'-C1'	6.37	1.50	1.41
85	A5	3745	U	C2'-C1'	-6.36	1.46	1.53
85	A5	1067	G	C2'-C1'	-6.36	1.46	1.53
36	B2	966	U	C2'-C1'	-6.36	1.46	1.53
85	A5	2062	C	C2'-C1'	-6.36	1.46	1.53
85	A5	4859	C	C2'-C1'	-6.36	1.46	1.53
36	B2	1094	C	C2'-C1'	-6.36	1.46	1.53
36	B2	471	G	O4'-C1'	-6.36	1.33	1.41
36	B2	1805	G	C2'-C1'	-6.36	1.46	1.53
85	A5	4416	G	C2'-C1'	-6.36	1.46	1.53
36	B2	688	U	C2'-C1'	6.36	1.60	1.53
85	A5	2560	C	C2'-C1'	-6.36	1.46	1.53
85	A5	4159	C	C2'-C1'	-6.35	1.46	1.53
36	B2	299	A	C2'-C1'	6.35	1.60	1.53
36	B2	637	U	C2'-C1'	6.35	1.60	1.53
36	B2	1171	G	C5'-C4'	6.35	1.58	1.51
85	A5	2623	A	O4'-C1'	6.35	1.50	1.41
85	A5	2554	U	C2'-C1'	-6.35	1.46	1.53
85	A5	4514	G	C2'-C1'	6.35	1.60	1.53
12	AR	89	SER	C-N	6.34	1.48	1.34
29	AG	156	TYR	CB-CG	-6.34	1.42	1.51
85	A5	2814	C	C2'-C1'	-6.34	1.46	1.53
85	A5	4552	U	O4'-C1'	6.34	1.49	1.41
36	B2	1237	C	P-O5'	-6.34	1.53	1.59
54	CP	93	HIS	N-CA	-6.34	1.33	1.46
85	A5	1224	G	C5'-C4'	6.34	1.58	1.51
36	B2	374	G	C2'-C1'	-6.34	1.46	1.53
85	A5	3873	G	O4'-C1'	6.34	1.49	1.41
36	B2	399	C	C2'-C1'	-6.34	1.46	1.53
36	B2	577	U	O4'-C1'	6.34	1.49	1.41
85	A5	4193	C	C2'-C1'	-6.34	1.46	1.53
85	A5	928	C	C2'-C1'	-6.34	1.46	1.53
85	A5	2276	A	C2'-C1'	-6.34	1.46	1.53
85	A5	4518	A	C2'-C1'	-6.34	1.46	1.53
86	A7	104	C	C2'-C1'	-6.34	1.46	1.53
36	B2	938	A	C2'-C1'	-6.33	1.46	1.53
36	B2	1036	A	C5'-C4'	6.33	1.58	1.51
85	A5	1550	G	P-O5'	-6.33	1.53	1.59
85	A5	2424	G	O4'-C1'	6.33	1.49	1.41
36	B2	1101	U	C2'-C1'	-6.33	1.46	1.53
36	B2	1846	G	O4'-C1'	6.33	1.49	1.41
85	A5	360	A	C2'-C1'	-6.33	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1260	A	O3'-P	-6.33	1.53	1.61
36	B2	1574	C	O4'-C1'	6.33	1.49	1.41
85	A5	2676	A	C2'-C1'	6.33	1.60	1.53
85	A5	2755	A	O4'-C1'	6.33	1.49	1.41
85	A5	4041	C	C2'-C1'	6.33	1.60	1.53
69	Cg	45	ALA	C-N	-6.33	1.19	1.34
85	A5	3896	C	O4'-C1'	6.33	1.49	1.41
85	A5	4646	U	O4'-C1'	6.33	1.49	1.41
36	B2	380	G	O4'-C1'	-6.33	1.33	1.41
85	A5	1191	C	C2'-C1'	-6.33	1.46	1.53
1	Az	669	VAL	CA-CB	6.32	1.68	1.54
85	A5	4993	G	C2'-C1'	6.32	1.60	1.53
85	A5	3629	A	O4'-C1'	6.32	1.49	1.41
85	A5	4977	A	C2'-C1'	-6.32	1.46	1.53
85	A5	1654	G	C2'-C1'	-6.32	1.46	1.53
85	A5	1864	G	C2'-C1'	-6.32	1.46	1.53
36	B2	611	G	C2'-C1'	-6.32	1.46	1.53
87	A8	76	C	O4'-C1'	6.32	1.49	1.41
36	B2	1177	U	O4'-C1'	6.31	1.49	1.41
36	B2	1315	U	C5'-C4'	6.31	1.58	1.51
85	A5	4875	G	C2'-C1'	6.31	1.60	1.53
85	A5	2277	C	O4'-C1'	6.31	1.49	1.41
36	B2	1106	C	O4'-C1'	6.31	1.49	1.41
36	B2	1759	G	C2'-C1'	-6.31	1.46	1.53
85	A5	1404	G	O4'-C1'	-6.31	1.33	1.41
36	B2	1406	G	O4'-C1'	6.30	1.49	1.41
36	B2	1744	G	C2'-C1'	6.30	1.60	1.53
42	CL	57	PRO	N-CD	6.30	1.56	1.47
85	A5	72	C	P-O5'	-6.30	1.53	1.59
85	A5	4303	C	C2'-C1'	-6.30	1.46	1.53
86	A7	34	C	C2'-C1'	-6.30	1.46	1.53
85	A5	97	G	O4'-C1'	6.30	1.49	1.41
85	A5	101	A	C2'-C1'	-6.30	1.46	1.53
85	A5	320	C	C2'-C1'	-6.30	1.46	1.53
85	A5	430	G	C2'-C1'	-6.30	1.46	1.53
85	A5	2524	U	O4'-C1'	6.30	1.49	1.41
85	A5	3912	U	C2'-C1'	-6.30	1.46	1.53
85	A5	4536	C	C2'-C1'	-6.30	1.46	1.53
85	A5	2055	G	C2'-C1'	6.29	1.60	1.53
36	B2	481	C	O4'-C1'	6.29	1.49	1.41
36	B2	1430	C	C2'-C1'	6.29	1.60	1.53
37	BC	69	G	O4'-C1'	6.29	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4991	U	C2'-C1'	-6.29	1.46	1.53
36	B2	1219	C	O4'-C1'	6.29	1.49	1.41
36	B2	1742	C	O4'-C1'	6.29	1.49	1.41
85	A5	2712	G	O4'-C1'	6.29	1.49	1.41
26	AJ	144	ILE	CA-CB	-6.29	1.40	1.54
85	A5	53	C	C4'-C3'	-6.29	1.46	1.53
85	A5	1085	C	C2'-C1'	-6.29	1.46	1.53
85	A5	1472	C	C2'-C1'	6.29	1.60	1.53
85	A5	4279	A	C2'-C1'	-6.29	1.46	1.53
85	A5	26	C	O3'-P	-6.28	1.53	1.61
85	A5	2839	U	O4'-C1'	6.28	1.49	1.41
85	A5	3692	A	P-O5'	-6.28	1.53	1.59
85	A5	5048	A	C2'-C1'	6.28	1.60	1.53
85	A5	1164	G	C2'-C1'	-6.28	1.46	1.53
85	A5	2648	G	O4'-C1'	-6.28	1.33	1.41
85	A5	714	G	O3'-P	-6.28	1.53	1.61
87	A8	7	U	O4'-C1'	6.28	1.49	1.41
85	A5	1047	C	C2'-C1'	-6.28	1.46	1.53
85	A5	2148	G	C5'-C4'	6.28	1.58	1.51
85	A5	700	G	O4'-C1'	6.27	1.49	1.41
85	A5	1774	C	C2'-C1'	-6.27	1.46	1.53
85	A5	2107	C	O4'-C1'	6.27	1.49	1.41
36	B2	1107	G	C2'-C1'	-6.27	1.46	1.53
85	A5	1882	U	O4'-C1'	-6.27	1.33	1.41
85	A5	4293	U	O4'-C1'	6.27	1.49	1.41
85	A5	25	A	O4'-C1'	6.26	1.49	1.41
85	A5	4193	C	O4'-C1'	6.26	1.49	1.41
86	A7	119	U	O4'-C1'	6.26	1.49	1.41
85	A5	4085	A	O3'-P	-6.26	1.53	1.61
36	B2	1419	C	O4'-C1'	6.26	1.49	1.41
85	A5	3718	A	C2'-C1'	-6.26	1.46	1.53
36	B2	973	C	C2'-C1'	-6.26	1.46	1.53
78	Co	13	LYS	N-CA	-6.26	1.33	1.46
85	A5	1176	C	C2'-C1'	-6.26	1.46	1.53
85	A5	1354	A	O4'-C1'	6.26	1.49	1.41
85	A5	1179	U	C2'-C1'	6.26	1.60	1.53
85	A5	2806	A	C2'-C1'	6.26	1.60	1.53
85	A5	4492	U	C2'-C1'	6.26	1.60	1.53
36	B2	416	U	C2'-C1'	6.25	1.60	1.53
36	B2	998	A	C2'-C1'	6.25	1.60	1.53
85	A5	1922	G	P-O5'	-6.25	1.53	1.59
85	A5	3679	U	O4'-C1'	6.25	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4641	U	C2'-C1'	6.25	1.60	1.53
85	A5	4746	C	C2'-C1'	-6.25	1.46	1.53
27	AE	150	PRO	N-CD	6.25	1.56	1.47
85	A5	2852	U	C5'-C4'	6.25	1.58	1.51
85	A5	343	C	O4'-C1'	6.25	1.49	1.41
85	A5	4178	A	C2'-C1'	6.25	1.60	1.53
85	A5	4423	U	O4'-C1'	-6.25	1.33	1.41
36	B2	223	C	C2'-C1'	-6.25	1.46	1.53
36	B2	1338	G	O4'-C1'	6.25	1.49	1.41
85	A5	754	U	O4'-C1'	6.25	1.49	1.41
85	A5	1452	A	C2'-C1'	-6.25	1.46	1.53
85	A5	1982	G	C2'-C1'	-6.25	1.46	1.53
29	AG	170	ARG	CA-C	-6.25	1.36	1.52
36	B2	347	G	C2'-C1'	-6.24	1.46	1.53
36	B2	1089	G	O4'-C1'	6.24	1.49	1.41
85	A5	3964	U	C2'-C1'	6.24	1.60	1.53
26	AJ	101	LYS	N-CA	6.24	1.58	1.46
85	A5	1882	U	C2'-C1'	6.24	1.60	1.53
85	A5	4041	C	O4'-C1'	6.24	1.49	1.41
85	A5	436	C	C2'-C1'	-6.24	1.46	1.53
85	A5	2522	G	C2'-C1'	-6.24	1.46	1.53
85	A5	1319	U	C2'-C1'	6.24	1.60	1.53
85	A5	4415	A	C2'-C1'	-6.23	1.46	1.53
85	A5	4919	G	C2'-C1'	-6.23	1.46	1.53
36	B2	666	U	O3'-P	-6.23	1.53	1.61
85	A5	2802	C	C2'-C1'	6.22	1.60	1.53
85	A5	4390	A	O4'-C1'	6.22	1.49	1.41
85	A5	4609	G	C2'-C1'	-6.22	1.46	1.53
36	B2	893	U	C2'-C1'	6.22	1.60	1.53
36	B2	1858	G	C2'-C1'	-6.22	1.46	1.53
36	B2	1046	U	O4'-C1'	6.22	1.49	1.41
85	A5	2393	C	C2'-C1'	-6.22	1.46	1.53
36	B2	94	G	O4'-C1'	6.22	1.49	1.41
85	A5	3677	U	O3'-P	-6.22	1.53	1.61
67	Ce	17	THR	N-CA	-6.22	1.33	1.46
85	A5	329	A	O4'-C1'	6.22	1.49	1.41
85	A5	2396	A	C2'-C1'	-6.22	1.46	1.53
85	A5	3864	C	C2'-C1'	-6.21	1.46	1.53
36	B2	479	C	O4'-C1'	6.21	1.49	1.41
85	A5	3722	G	O4'-C1'	6.21	1.49	1.41
85	A5	4087	G	O3'-P	-6.21	1.53	1.61
85	A5	4903	G	C2'-C1'	-6.21	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	A7	7	G	P-O5'	-6.21	1.53	1.59
85	A5	1948	G	O4'-C1'	6.21	1.49	1.41
85	A5	4570	G	C2'-C1'	-6.21	1.46	1.53
36	B2	603	C	C2'-C1'	-6.21	1.46	1.53
81	CE	69	TYR	C-N	6.21	1.48	1.34
85	A5	3759	A	C2'-C1'	6.21	1.60	1.53
36	B2	310	C	C2'-C1'	6.21	1.60	1.53
34	AQ	145	TYR	CD2-CE2	-6.20	1.30	1.39
36	B2	593	C	C2'-C1'	-6.20	1.46	1.53
36	B2	1705	C	C2'-C1'	-6.20	1.46	1.53
85	A5	1687	U	O4'-C1'	6.20	1.49	1.41
36	B2	1051	G	C2'-C1'	-6.20	1.46	1.53
85	A5	2103	G	C2'-C1'	-6.20	1.46	1.53
36	B2	487	U	C4'-C3'	6.20	1.59	1.53
68	Cf	106	TYR	CE1-CZ	-6.20	1.30	1.38
85	A5	475	G	O4'-C1'	6.20	1.49	1.41
36	B2	958	G	O4'-C1'	-6.19	1.33	1.41
36	B2	1633	A	C2'-C1'	-6.19	1.46	1.53
85	A5	3623	C	C2'-C1'	-6.19	1.46	1.53
85	A5	4438	U	O4'-C1'	6.19	1.49	1.41
87	A8	77	A	O4'-C1'	6.19	1.49	1.41
36	B2	1589	A	C2'-C1'	6.19	1.60	1.53
37	BC	35	U	O4'-C1'	6.19	1.49	1.41
85	A5	1432	G	O3'-P	-6.19	1.53	1.61
85	A5	1537	A	O4'-C1'	6.19	1.49	1.41
85	A5	1649	U	O4'-C1'	6.19	1.49	1.41
85	A5	1756	U	O3'-P	-6.19	1.53	1.61
85	A5	3673	C	C5'-C4'	6.19	1.58	1.51
36	B2	1797	U	P-O5'	-6.19	1.53	1.59
86	A7	59	G	O4'-C1'	6.18	1.49	1.41
85	A5	1518	A	O4'-C1'	6.18	1.49	1.41
85	A5	4307	A	O4'-C1'	6.18	1.49	1.41
36	B2	1715	A	O4'-C1'	6.18	1.49	1.41
85	A5	949	G	P-O5'	-6.18	1.53	1.59
87	A8	75	G	C2'-C1'	-6.18	1.46	1.53
85	A5	2039	G	C2'-C1'	-6.18	1.46	1.53
36	B2	359	U	C2'-C1'	-6.17	1.46	1.53
36	B2	675	U	O4'-C1'	6.17	1.49	1.41
85	A5	993	G	C2'-C1'	-6.17	1.46	1.53
85	A5	2638	G	O4'-C1'	6.17	1.49	1.41
85	A5	247	G	C2'-C1'	-6.17	1.46	1.53
85	A5	2877	G	C2'-C1'	-6.17	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1288	U	C5'-C4'	6.17	1.58	1.51
36	B2	1806	A	O4'-C1'	6.17	1.49	1.41
85	A5	692	A	O4'-C1'	6.17	1.49	1.41
85	A5	2554	U	O4'-C1'	6.17	1.49	1.41
85	A5	2371	U	O4'-C1'	6.17	1.49	1.41
85	A5	3638	G	O4'-C1'	6.17	1.49	1.41
85	A5	5016	A	O4'-C1'	-6.17	1.33	1.41
36	B2	895	G	C2'-C1'	-6.17	1.46	1.53
85	A5	1721	G	O4'-C1'	6.17	1.49	1.41
1	Az	825	PHE	CB-CG	-6.17	1.40	1.51
85	A5	729	G	C5'-C4'	6.17	1.58	1.51
36	B2	328	U	O4'-C1'	6.16	1.49	1.41
36	B2	1480	A	C2'-C1'	-6.16	1.46	1.53
36	B2	666	U	C2'-C1'	6.16	1.60	1.53
85	A5	917	A	C5'-C4'	6.16	1.58	1.51
85	A5	3939	G	O4'-C1'	6.16	1.49	1.41
85	A5	4888	U	O4'-C1'	-6.16	1.33	1.41
82	CG	106	THR	C-N	6.16	1.48	1.34
85	A5	2111	G	O3'-P	-6.16	1.53	1.61
85	A5	4457	U	C2'-C1'	-6.16	1.46	1.53
87	A8	136	U	O4'-C1'	6.16	1.49	1.41
28	AC	210	PRO	N-CD	6.15	1.56	1.47
36	B2	352	U	C4'-C3'	-6.15	1.46	1.53
37	BC	56	G	C2'-C1'	-6.15	1.46	1.53
85	A5	1944	A	C2'-C1'	-6.15	1.46	1.53
85	A5	4486	C	C2'-C1'	-6.15	1.46	1.53
85	A5	4528	G	C2'-C1'	-6.15	1.46	1.53
85	A5	2054	U	O3'-P	-6.15	1.53	1.61
85	A5	2277	C	C2'-C1'	-6.15	1.46	1.53
85	A5	3910	C	C2'-C1'	-6.15	1.46	1.53
85	A5	4201	G	O4'-C1'	6.14	1.49	1.41
36	B2	810	A	C2'-C1'	-6.14	1.46	1.53
85	A5	4923	C	O4'-C1'	6.14	1.49	1.41
36	B2	1171	G	C2'-C1'	6.14	1.60	1.53
85	A5	78	U	C2'-C1'	-6.14	1.46	1.53
85	A5	287	U	O4'-C1'	6.14	1.49	1.41
85	A5	737	C	O4'-C1'	6.14	1.49	1.41
85	A5	3774	A	O4'-C1'	6.14	1.49	1.41
85	A5	4264	G	O4'-C1'	6.14	1.49	1.41
85	A5	4871	C	C3'-C2'	6.14	1.59	1.52
85	A5	1257	A	O4'-C1'	6.14	1.49	1.41
85	A5	1266	G	O3'-P	-6.13	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2558	C	C2'-C1'	-6.13	1.46	1.53
36	B2	1448	A	O4'-C1'	6.13	1.49	1.41
36	B2	33	G	O4'-C1'	6.13	1.49	1.41
85	A5	418	A	O4'-C1'	6.13	1.49	1.41
85	A5	1406	G	O4'-C1'	-6.13	1.33	1.41
1	Az	109	VAL	CA-CB	-6.13	1.41	1.54
36	B2	482	G	C2'-C1'	-6.13	1.46	1.53
36	B2	639	C	C2'-C1'	-6.13	1.46	1.53
85	A5	1466	G	C2'-C1'	-6.13	1.46	1.53
85	A5	650	C	C2'-C1'	-6.12	1.46	1.53
36	B2	418	A	O4'-C1'	6.12	1.49	1.41
36	B2	1070	A	O4'-C1'	6.12	1.49	1.41
61	Ch	78	TYR	C-O	-6.12	1.11	1.23
85	A5	671	G	C2'-C1'	-6.12	1.46	1.53
85	A5	1282	G	C5'-C4'	6.12	1.58	1.51
85	A5	1644	C	O4'-C1'	6.12	1.49	1.41
85	A5	2047	A	O4'-C1'	6.12	1.49	1.41
85	A5	2624	G	O4'-C1'	6.12	1.49	1.41
85	A5	4698	C	P-O5'	-6.12	1.53	1.59
86	A7	57	C	P-O5'	-6.12	1.53	1.59
36	B2	801	U	P-O5'	-6.12	1.53	1.59
85	A5	4231	C	O4'-C1'	6.12	1.49	1.41
60	Cr	115	SER	N-CA	-6.12	1.34	1.46
85	A5	1602	U	O4'-C1'	6.12	1.49	1.41
85	A5	2332	A	C4'-C3'	6.12	1.59	1.53
12	AR	111	PHE	CB-CG	-6.12	1.41	1.51
36	B2	1136	U	O4'-C1'	6.12	1.49	1.41
87	A8	15	G	O3'-P	-6.12	1.53	1.61
36	B2	1082	A	O4'-C1'	6.11	1.49	1.41
85	A5	2585	C	P-O5'	-6.11	1.53	1.59
85	A5	4017	G	O3'-P	-6.11	1.53	1.61
36	B2	1569	A	C2'-C1'	6.11	1.60	1.53
45	Ca	52	TYR	CD1-CE1	-6.11	1.30	1.39
64	CF	221	LYS	C-N	6.11	1.48	1.34
85	A5	1938	C	C2'-C1'	-6.11	1.46	1.53
6	AX	116	PRO	CA-C	6.10	1.65	1.52
36	B2	575	A	C2'-C1'	-6.10	1.46	1.53
58	CW	71	ARG	CA-CB	-6.10	1.40	1.53
85	A5	970	G	C2'-C1'	-6.10	1.46	1.53
85	A5	3673	C	C2'-C1'	-6.10	1.46	1.53
85	A5	2825	A	O3'-P	-6.10	1.53	1.61
85	A5	3932	U	C2'-C1'	-6.10	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2721	G	O4'-C1'	6.10	1.49	1.41
85	A5	4306	U	C2'-C1'	6.10	1.60	1.53
85	A5	2260	C	O4'-C1'	6.09	1.49	1.41
85	A5	2448	G	O4'-C1'	-6.09	1.33	1.41
85	A5	3606	U	O4'-C1'	6.09	1.49	1.41
85	A5	3731	C	C2'-C1'	-6.09	1.46	1.53
85	A5	4268	A	C2'-C1'	-6.09	1.46	1.53
36	B2	753	C	C5'-C4'	6.09	1.58	1.51
85	A5	3687	A	C2'-C1'	6.09	1.60	1.53
36	B2	1097	G	O4'-C1'	-6.09	1.33	1.41
85	A5	1940	G	O4'-C1'	6.09	1.49	1.41
85	A5	4716	C	C2'-C1'	-6.09	1.46	1.53
37	BC	52	G	O4'-C1'	6.09	1.49	1.41
85	A5	246	G	C2'-C1'	-6.09	1.46	1.53
85	A5	3747	A	O4'-C1'	6.09	1.49	1.41
85	A5	4340	U	O4'-C1'	6.09	1.49	1.41
36	B2	1657	G	P-O5'	-6.08	1.53	1.59
85	A5	1840	G	O4'-C1'	6.08	1.49	1.41
29	AG	36	VAL	CB-CG2	-6.08	1.40	1.52
86	A7	4	U	O4'-C1'	6.08	1.49	1.41
85	A5	4581	G	C2'-C1'	-6.08	1.46	1.53
36	B2	1268	C	C2'-C1'	-6.08	1.46	1.53
85	A5	2448	G	C2'-C1'	6.08	1.60	1.53
85	A5	4141	G	O4'-C1'	6.08	1.49	1.41
36	B2	366	U	O4'-C1'	6.08	1.49	1.41
67	Ce	125	PRO	N-CD	6.08	1.56	1.47
85	A5	1512	G	C2'-C1'	-6.08	1.46	1.53
85	A5	2256	C	O3'-P	-6.08	1.53	1.61
85	A5	2486	G	O4'-C1'	6.08	1.49	1.41
85	A5	2568	C	O4'-C1'	6.08	1.49	1.41
36	B2	1123	C	C5'-C4'	6.08	1.58	1.51
36	B2	1284	A	C2'-C1'	-6.08	1.46	1.53
36	B2	1036	A	O4'-C1'	6.07	1.49	1.41
85	A5	1243	C	C2'-C1'	-6.07	1.46	1.53
85	A5	2570	U	O4'-C1'	6.07	1.49	1.41
36	B2	1662	U	O4'-C1'	6.07	1.49	1.41
85	A5	1627	G	O4'-C1'	6.07	1.49	1.41
85	A5	1618	G	O4'-C1'	6.07	1.49	1.41
85	A5	4572	U	C2'-C1'	-6.07	1.46	1.53
36	B2	170	A	O3'-P	-6.06	1.53	1.61
85	A5	4148	C	O4'-C1'	6.06	1.49	1.41
55	CU	58	GLY	N-CA	-6.06	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	CE	93	THR	CA-C	-6.06	1.37	1.52
85	A5	1396	G	C2'-C1'	-6.06	1.46	1.53
85	A5	4695	C	O4'-C1'	6.06	1.49	1.41
36	B2	380	G	P-O5'	-6.06	1.53	1.59
85	A5	2771	G	O4'-C1'	6.06	1.49	1.41
85	A5	1244	G	O4'-C1'	-6.06	1.33	1.41
85	A5	4328	G	C2'-C1'	6.06	1.60	1.53
85	A5	195	C	O4'-C1'	6.06	1.49	1.41
85	A5	4333	C	O4'-C1'	6.06	1.49	1.41
36	B2	1431	G	O4'-C1'	6.05	1.49	1.41
85	A5	4063	U	O4'-C1'	6.05	1.49	1.41
85	A5	447	C	O4'-C1'	6.05	1.49	1.41
85	A5	1919	G	O4'-C1'	6.05	1.49	1.41
85	A5	1923	A	P-O5'	-6.05	1.53	1.59
85	A5	5043	A	O4'-C1'	6.05	1.49	1.41
36	B2	1638	G	C2'-C1'	-6.05	1.46	1.53
85	A5	4870	G	O3'-P	-6.05	1.53	1.61
85	A5	2892	C	C2'-C1'	-6.04	1.46	1.53
85	A5	510	U	P-O5'	-6.04	1.53	1.59
85	A5	1746	A	O4'-C1'	6.04	1.49	1.41
69	Cg	78	TYR	CE2-CZ	-6.04	1.30	1.38
74	CC	109	ARG	CA-C	6.04	1.68	1.52
25	Af	85	TYR	CE2-CZ	-6.04	1.30	1.38
81	CE	37	PRO	CA-C	6.04	1.65	1.52
85	A5	904	C	C2'-C1'	-6.04	1.46	1.53
85	A5	1910	G	O4'-C1'	6.04	1.49	1.41
87	A8	107	C	C2'-C1'	-6.04	1.46	1.53
36	B2	329	G	C2'-C1'	-6.03	1.46	1.53
85	A5	1669	A	C2'-C1'	6.03	1.59	1.53
85	A5	3675	G	O4'-C1'	6.03	1.49	1.41
85	A5	4177	C	C2'-C1'	-6.03	1.46	1.53
1	Az	111	PHE	CA-CB	6.03	1.67	1.53
36	B2	1401	A	C2'-C1'	6.03	1.59	1.53
81	CE	93	THR	CA-CB	6.03	1.69	1.53
36	B2	1020	A	C5'-C4'	6.03	1.58	1.51
81	CE	70	LYS	N-CA	6.03	1.58	1.46
85	A5	689	U	C2'-C1'	-6.03	1.46	1.53
85	A5	1611	C	O4'-C1'	6.03	1.49	1.41
85	A5	2625	U	C2'-C1'	6.03	1.59	1.53
36	B2	504	G	C3'-C2'	-6.03	1.46	1.52
85	A5	209	U	O4'-C1'	6.03	1.49	1.41
85	A5	1842	G	O4'-C1'	6.03	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2324	C	O4'-C1'	6.03	1.49	1.41
87	A8	27	U	O4'-C1'	6.03	1.49	1.41
20	Aa	10	ARG	NE-CZ	6.03	1.40	1.33
36	B2	1780	G	O4'-C1'	6.03	1.49	1.41
85	A5	1823	G	O3'-P	-6.03	1.53	1.61
30	AF	45	TYR	CB-CG	-6.02	1.42	1.51
85	A5	2764	A	C2'-C1'	6.02	1.59	1.53
36	B2	8	U	C2'-C1'	6.02	1.59	1.53
85	A5	1380	G	O3'-P	-6.02	1.53	1.61
36	B2	949	G	C2'-C1'	-6.02	1.46	1.53
36	B2	1646	C	C4'-O4'	-6.02	1.37	1.45
85	A5	435	A	O4'-C1'	6.02	1.49	1.41
85	A5	3583	U	C5'-C4'	6.02	1.58	1.51
85	A5	4274	A	C2'-C1'	-6.02	1.46	1.53
85	A5	2482	C	O4'-C1'	6.02	1.49	1.41
36	B2	345	U	O4'-C1'	6.01	1.49	1.41
36	B2	1745	A	O4'-C1'	-6.01	1.33	1.41
85	A5	1772	C	C2'-C1'	-6.01	1.46	1.53
85	A5	910	G	O4'-C1'	6.01	1.49	1.41
36	B2	555	A	C2'-C1'	-6.01	1.46	1.53
81	CE	74	SER	C-N	6.01	1.47	1.34
85	A5	3671	G	O4'-C1'	6.01	1.49	1.41
85	A5	209	U	O3'-P	-6.01	1.53	1.61
85	A5	1983	A	C5'-C4'	6.01	1.58	1.51
85	A5	3748	A	O4'-C1'	6.01	1.49	1.41
36	B2	1041	G	O4'-C1'	6.01	1.49	1.41
36	B2	1810	U	O4'-C1'	6.01	1.49	1.41
85	A5	1997	U	O4'-C1'	6.01	1.49	1.41
85	A5	3872	A	C2'-C1'	-6.01	1.46	1.53
85	A5	4234	A	C4'-C3'	6.01	1.59	1.53
85	A5	4240	G	C2'-C1'	-6.01	1.46	1.53
85	A5	4747	C	O4'-C1'	6.01	1.49	1.41
85	A5	927	G	O4'-C1'	-6.00	1.33	1.41
85	A5	927	G	C4'-C3'	6.00	1.59	1.53
36	B2	217	A	C2'-C1'	-6.00	1.46	1.53
85	A5	1163	G	O4'-C1'	6.00	1.49	1.41
85	A5	1408	G	C2'-C1'	-6.00	1.46	1.53
36	B2	797	C	O3'-P	-6.00	1.53	1.61
85	A5	1	C	C2'-C1'	-6.00	1.46	1.53
85	A5	1643	A	C2'-C1'	-6.00	1.46	1.53
85	A5	4924	C	O3'-P	-6.00	1.53	1.61
85	A5	3281	C	C5'-C4'	6.00	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
87	A8	150	C	O4'-C1'	6.00	1.49	1.41
85	A5	63	G	O4'-C1'	6.00	1.49	1.41
85	A5	3934	G	C2'-C1'	6.00	1.59	1.53
87	A8	44	A	O4'-C1'	6.00	1.49	1.41
85	A5	1562	G	C5'-C4'	5.99	1.58	1.51
85	A5	1577	G	O3'-P	-5.99	1.53	1.61
51	CA	67	TYR	CG-CD2	5.99	1.47	1.39
85	A5	5049	G	O4'-C1'	-5.99	1.33	1.41
36	B2	1657	G	C4'-C3'	5.99	1.59	1.53
36	B2	1851	A	C2'-C1'	5.99	1.59	1.53
85	A5	4132	C	C2'-C1'	-5.99	1.46	1.53
36	B2	1019	C	C4'-C3'	5.99	1.59	1.53
85	A5	723	A	C2'-C1'	-5.99	1.46	1.53
85	A5	1196	G	C4'-C3'	5.99	1.59	1.53
85	A5	2399	G	O4'-C1'	-5.99	1.33	1.41
49	CQ	11	ARG	CA-CB	5.98	1.67	1.53
85	A5	4092	G	C5'-C4'	5.98	1.58	1.51
36	B2	175	A	O4'-C1'	5.98	1.49	1.41
85	A5	1504	G	P-O5'	-5.98	1.53	1.59
86	A7	116	G	C5'-C4'	5.98	1.58	1.51
36	B2	155	G	O4'-C1'	5.98	1.49	1.41
36	B2	539	C	C2'-C1'	-5.98	1.46	1.53
85	A5	647	G	C2'-C1'	-5.98	1.46	1.53
85	A5	4126	C	C2'-C1'	5.98	1.59	1.53
85	A5	2313	A	O4'-C1'	-5.98	1.33	1.41
85	A5	2374	A	O4'-C1'	5.98	1.49	1.41
37	BC	64	C	C2'-C1'	-5.97	1.46	1.53
85	A5	1972	G	C5'-C4'	5.97	1.58	1.51
85	A5	2530	U	O4'-C1'	5.97	1.49	1.41
85	A5	3902	A	O4'-C1'	5.97	1.49	1.41
36	B2	1655	C	C2'-C1'	-5.97	1.46	1.53
85	A5	1370	G	O3'-P	-5.97	1.53	1.61
36	B2	871	U	O4'-C1'	-5.97	1.33	1.41
36	B2	1815	A	O4'-C1'	5.97	1.49	1.41
85	A5	2415	U	O4'-C1'	5.97	1.49	1.41
85	A5	5027	C	O4'-C1'	-5.97	1.33	1.41
85	A5	3955	G	C2'-C1'	5.97	1.59	1.53
36	B2	1587	G	O4'-C1'	-5.96	1.33	1.41
85	A5	3620	G	C2'-C1'	-5.96	1.46	1.53
27	AE	130	PHE	CB-CG	-5.96	1.41	1.51
81	CE	27	VAL	CB-CG2	5.96	1.65	1.52
36	B2	449	A	C5'-C4'	5.96	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1572	C	O4'-C1'	5.96	1.49	1.41
85	A5	1080	C	O4'-C1'	5.96	1.49	1.41
85	A5	3606	U	C5'-C4'	5.96	1.58	1.51
36	B2	106	C	C2'-C1'	-5.96	1.46	1.53
85	A5	1450	C	O4'-C1'	5.96	1.49	1.41
36	B2	934	G	O4'-C1'	5.96	1.49	1.41
73	Cl	37	TYR	CE1-CZ	-5.96	1.30	1.38
85	A5	4479	A	O4'-C1'	5.96	1.49	1.41
85	A5	4751	G	C2'-C1'	-5.96	1.46	1.53
36	B2	361	U	C2'-C1'	5.96	1.59	1.53
36	B2	406	U	O4'-C1'	5.96	1.49	1.41
85	A5	129	C	C2'-C1'	-5.96	1.46	1.53
85	A5	1341	U	C2'-C1'	5.96	1.59	1.53
49	CQ	13	VAL	CB-CG1	-5.96	1.40	1.52
85	A5	1633	G	O4'-C1'	-5.96	1.33	1.41
81	CE	31	ASN	N-CA	5.95	1.58	1.46
85	A5	375	G	O4'-C1'	5.95	1.49	1.41
85	A5	2463	G	O4'-C1'	5.95	1.49	1.41
81	CE	32	LEU	CA-CB	5.95	1.67	1.53
85	A5	2018	C	C2'-C1'	-5.95	1.46	1.53
85	A5	2766	A	O4'-C1'	-5.95	1.33	1.41
85	A5	2847	G	C2'-C1'	5.95	1.59	1.53
85	A5	3790	U	C2'-C1'	5.95	1.59	1.53
36	B2	659	G	C2'-C1'	5.95	1.59	1.53
86	A7	72	U	O4'-C1'	5.95	1.49	1.41
85	A5	1271	G	C5'-C4'	5.95	1.58	1.51
85	A5	2441	C	C2'-C1'	-5.95	1.46	1.53
26	AJ	188	GLY	CA-C	5.94	1.61	1.51
85	A5	4287	G	C2'-C1'	-5.94	1.46	1.53
85	A5	38	A	C2'-C1'	5.94	1.59	1.53
85	A5	1172	C	O4'-C1'	5.94	1.49	1.41
36	B2	1300	U	C2'-C1'	5.94	1.59	1.53
85	A5	960	A	O4'-C1'	5.94	1.49	1.41
36	B2	994	C	O4'-C1'	5.94	1.49	1.41
36	B2	1176	G	O4'-C1'	5.94	1.49	1.41
36	B2	1406	G	C5'-C4'	5.94	1.58	1.51
36	B2	467	G	C2'-C1'	-5.93	1.46	1.53
85	A5	1364	U	P-O5'	-5.93	1.53	1.59
85	A5	2457	G	C2'-C1'	-5.93	1.46	1.53
36	B2	155	G	P-O5'	-5.93	1.53	1.59
36	B2	637	U	C5'-C4'	5.93	1.58	1.51
36	B2	1052	A	O3'-P	-5.93	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1103	C	C5'-C4'	5.93	1.58	1.51
36	B2	401	A	C2'-C1'	5.93	1.59	1.53
74	CC	85	HIS	C-N	5.93	1.47	1.34
85	A5	235	A	C4'-C3'	5.93	1.59	1.53
36	B2	1044	G	O4'-C1'	5.93	1.49	1.41
36	B2	1315	U	O4'-C1'	-5.93	1.33	1.41
85	A5	961	G	C2'-C1'	-5.93	1.46	1.53
85	A5	1300	G	O4'-C1'	5.93	1.49	1.41
85	A5	4260	U	O3'-P	-5.93	1.54	1.61
85	A5	1726	U	C4'-C3'	5.92	1.59	1.53
85	A5	2878	G	O4'-C1'	5.92	1.49	1.41
36	B2	146	G	C3'-O3'	5.92	1.50	1.42
36	B2	791	C	C5'-C4'	5.92	1.58	1.51
85	A5	703	G	O3'-P	-5.92	1.54	1.61
85	A5	2048	U	C2'-C1'	-5.92	1.46	1.53
45	Ca	52	TYR	CE1-CZ	-5.92	1.30	1.38
85	A5	1671	U	O3'-P	-5.92	1.54	1.61
85	A5	3637	U	C2'-C1'	-5.92	1.46	1.53
36	B2	418	A	C5'-C4'	5.91	1.58	1.51
36	B2	746	C	C5'-C4'	5.91	1.58	1.51
85	A5	2729	C	C2'-C1'	-5.91	1.46	1.53
36	B2	1685	U	C5'-C4'	5.91	1.58	1.51
85	A5	4751	G	O4'-C1'	-5.91	1.33	1.41
85	A5	4477	A	C2'-C1'	-5.91	1.46	1.53
36	B2	1596	U	O4'-C1'	5.91	1.49	1.41
36	B2	1851	A	O4'-C1'	5.91	1.49	1.41
85	A5	2376	A	O4'-C1'	5.91	1.49	1.41
36	B2	808	A	O3'-P	-5.90	1.54	1.61
36	B2	1252	C	O4'-C1'	5.90	1.49	1.41
36	B2	1623	A	O4'-C1'	-5.90	1.33	1.41
85	A5	1697	G	C2'-C1'	-5.90	1.46	1.53
23	AD	4	GLN	C-N	-5.90	1.20	1.34
29	AG	131	ARG	C-O	-5.90	1.12	1.23
34	AQ	145	TYR	CD1-CE1	-5.90	1.30	1.39
36	B2	83	A	C2'-C1'	-5.90	1.46	1.53
85	A5	1335	G	C2'-C1'	-5.90	1.46	1.53
85	A5	946	C	C2'-C1'	5.90	1.59	1.53
85	A5	3680	U	O4'-C1'	5.90	1.49	1.41
85	A5	4460	U	O3'-P	-5.90	1.54	1.61
85	A5	4471	U	C5'-C4'	5.90	1.58	1.51
85	A5	4888	U	C2'-C1'	5.90	1.59	1.53
85	A5	274	C	C2'-C1'	-5.90	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
87	A8	8	U	C2'-C1'	5.90	1.59	1.53
36	B2	54	A	C5'-C4'	5.89	1.58	1.51
43	CV	78	PRO	N-CD	5.89	1.56	1.47
85	A5	4125	C	C5'-C4'	5.89	1.58	1.51
85	A5	4233	A	C2'-C1'	5.89	1.59	1.53
85	A5	4898	G	O3'-P	-5.89	1.54	1.61
36	B2	1398	G	O4'-C1'	5.89	1.49	1.41
36	B2	1604	G	C3'-C2'	-5.89	1.46	1.52
85	A5	2683	C	O4'-C1'	5.89	1.49	1.41
37	BC	15	G	O4'-C1'	5.89	1.49	1.41
40	CK	137	GLN	CA-C	5.89	1.68	1.52
85	A5	1768	C	O3'-P	-5.89	1.54	1.61
85	A5	1555	G	O4'-C1'	5.89	1.49	1.41
26	AJ	187	ALA	CA-C	5.88	1.68	1.52
36	B2	809	A	O4'-C1'	5.88	1.49	1.41
85	A5	1188	C	P-O5'	-5.88	1.53	1.59
85	A5	2083	C	O4'-C1'	5.88	1.49	1.41
87	A8	37	A	C2'-C1'	-5.88	1.46	1.53
38	Cz	26	ARG	N-CA	-5.88	1.34	1.46
85	A5	520	C	C2'-C1'	-5.88	1.46	1.53
36	B2	1477	U	O4'-C1'	5.88	1.49	1.41
86	A7	30	C	C2'-C1'	-5.88	1.46	1.53
36	B2	1236	G	C2'-C1'	-5.88	1.46	1.53
85	A5	2085	G	O4'-C1'	-5.88	1.34	1.41
85	A5	721	G	C2'-C1'	-5.88	1.46	1.53
86	A7	11	A	O4'-C1'	5.88	1.49	1.41
40	CK	114	ARG	C-N	-5.87	1.20	1.34
85	A5	2788	U	C2'-C1'	5.87	1.59	1.53
85	A5	3911	C	O4'-C1'	5.87	1.49	1.41
87	A8	18	U	P-O5'	-5.87	1.53	1.59
85	A5	1418	C	O4'-C1'	5.87	1.49	1.41
85	A5	4864	U	O4'-C1'	5.87	1.49	1.41
36	B2	823	U	O4'-C1'	-5.87	1.34	1.41
85	A5	4765	G	O4'-C1'	5.86	1.49	1.41
85	A5	4867	G	P-O5'	-5.86	1.53	1.59
85	A5	4887	C	C5'-C4'	5.86	1.58	1.51
87	A8	38	U	O4'-C1'	5.86	1.49	1.41
85	A5	4266	G	O4'-C1'	5.86	1.49	1.41
85	A5	4579	U	O4'-C1'	5.86	1.49	1.41
85	A5	4865	C	C2'-C1'	-5.86	1.47	1.53
6	AX	23	HIS	N-CA	-5.86	1.34	1.46
85	A5	2304	U	O4'-C1'	-5.86	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	3735	G	C2'-C1'	-5.86	1.47	1.53
31	AH	111	LYS	N-CA	5.86	1.58	1.46
80	CH	190	ALA	N-CA	-5.86	1.34	1.46
38	Cz	99	LEU	C-N	5.85	1.47	1.34
85	A5	4496	A	C2'-C1'	-5.85	1.47	1.53
85	A5	4920	C	O4'-C1'	5.85	1.49	1.41
36	B2	213	G	C2'-C1'	5.85	1.59	1.53
42	CL	166	ALA	N-CA	-5.85	1.34	1.46
82	CG	163	PRO	N-CD	5.85	1.56	1.47
85	A5	1284	G	C4'-C3'	5.85	1.59	1.53
85	A5	4311	A	O4'-C1'	5.85	1.49	1.41
36	B2	918	U	O4'-C1'	5.85	1.49	1.41
85	A5	490	C	O4'-C1'	5.85	1.49	1.41
85	A5	3739	C	C2'-C1'	-5.85	1.47	1.53
36	B2	1582	C	C5'-C4'	5.85	1.58	1.51
85	A5	1791	U	C2'-C1'	-5.85	1.47	1.53
36	B2	1418	C	O3'-P	-5.84	1.54	1.61
36	B2	1506	A	O4'-C1'	5.84	1.49	1.41
85	A5	4416	G	O4'-C1'	5.84	1.49	1.41
12	AR	86	PRO	N-CD	5.84	1.56	1.47
85	A5	2446	C	O3'-P	-5.84	1.54	1.61
85	A5	2544	G	C5'-C4'	5.84	1.58	1.51
85	A5	14	C	O4'-C1'	5.84	1.49	1.41
85	A5	486	C	O3'-P	-5.84	1.54	1.61
85	A5	2435	G	C5'-C4'	5.84	1.58	1.51
37	BC	71	U	O4'-C1'	5.83	1.49	1.41
85	A5	1443	A	O3'-P	-5.83	1.54	1.61
85	A5	2529	A	C2'-C1'	5.83	1.59	1.53
85	A5	4405	G	O4'-C1'	5.83	1.49	1.41
36	B2	459	C	C5'-C4'	5.83	1.58	1.51
85	A5	2680	G	C2'-C1'	-5.83	1.47	1.53
85	A5	2423	A	C2'-C1'	-5.83	1.47	1.53
36	B2	1836	G	C2'-C1'	-5.83	1.47	1.53
85	A5	4408	G	O4'-C1'	5.83	1.49	1.41
1	Az	854	PHE	N-CA	-5.83	1.34	1.46
36	B2	838	G	C2'-C1'	-5.83	1.47	1.53
36	B2	1783	C	C2'-C1'	-5.83	1.47	1.53
85	A5	4471	U	C2'-C1'	-5.83	1.47	1.53
85	A5	5016	A	C5'-C4'	5.83	1.58	1.51
85	A5	152	U	P-O5'	-5.83	1.53	1.59
36	B2	2	A	O4'-C1'	5.82	1.49	1.41
85	A5	4054	C	C5'-C4'	5.82	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	599	A	O4'-C1'	5.82	1.49	1.41
85	A5	77	U	C4'-C3'	-5.82	1.46	1.52
85	A5	640	C	C5'-C4'	5.82	1.58	1.51
85	A5	941	C	C2'-C1'	-5.82	1.47	1.53
85	A5	2341	A	O4'-C1'	5.82	1.49	1.41
85	A5	676	C	C2'-C1'	-5.82	1.47	1.53
85	A5	3709	U	O3'-P	-5.82	1.54	1.61
85	A5	4074	C	C2'-C1'	-5.82	1.47	1.53
36	B2	657	U	O4'-C1'	5.81	1.49	1.41
85	A5	3658	C	C2'-C1'	-5.81	1.47	1.53
85	A5	3798	U	C2'-C1'	5.81	1.59	1.53
85	A5	4776	G	C2'-C1'	-5.81	1.47	1.53
36	B2	1520	G	C4'-C3'	5.81	1.59	1.53
85	A5	2321	G	O3'-P	-5.81	1.54	1.61
36	B2	316	G	C2'-C1'	-5.81	1.47	1.53
85	A5	4776	G	O4'-C1'	5.81	1.49	1.41
32	AW	129	PHE	CB-CG	-5.81	1.41	1.51
36	B2	1716	C	C2'-C1'	-5.81	1.47	1.53
85	A5	1279	A	O4'-C1'	5.81	1.49	1.41
85	A5	2536	A	C2'-C1'	5.81	1.59	1.53
85	A5	2646	C	O4'-C1'	5.81	1.49	1.41
36	B2	1165	G	C2'-C1'	5.80	1.59	1.53
85	A5	4516	G	O4'-C1'	5.80	1.49	1.41
85	A5	4323	A	O4'-C1'	5.80	1.49	1.41
59	CZ	79	HIS	CA-C	-5.80	1.37	1.52
36	B2	97	U	C2'-C1'	-5.80	1.47	1.53
85	A5	1196	G	O4'-C1'	5.80	1.49	1.41
85	A5	2883	G	C2'-C1'	-5.80	1.47	1.53
36	B2	1528	G	O4'-C1'	-5.80	1.34	1.41
85	A5	2813	A	O4'-C1'	-5.80	1.34	1.41
85	A5	3649	A	C2'-C1'	-5.80	1.47	1.53
36	B2	1513	C	C2'-C1'	-5.79	1.47	1.53
85	A5	3907	G	P-O5'	-5.79	1.53	1.59
85	A5	1216	C	C3'-C2'	-5.79	1.46	1.52
85	A5	1625	G	O3'-P	-5.79	1.54	1.61
87	A8	17	A	P-O5'	-5.79	1.53	1.59
36	B2	821	G	O3'-P	-5.79	1.54	1.61
85	A5	1221	G	O4'-C1'	-5.79	1.34	1.41
38	Cz	25	ARG	C-N	-5.79	1.20	1.34
36	B2	68	A	O4'-C1'	5.79	1.49	1.41
36	B2	612	U	C2'-C1'	-5.79	1.47	1.53
36	B2	1077	A	O4'-C1'	5.79	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1377	U	C2'-C1'	-5.79	1.47	1.53
36	B2	1328	G	O4'-C1'	5.79	1.49	1.41
85	A5	4174	U	P-O5'	-5.79	1.53	1.59
85	A5	4899	G	O4'-C1'	5.79	1.49	1.41
86	A7	20	U	O4'-C1'	5.79	1.49	1.41
36	B2	291	G	O4'-C1'	5.78	1.49	1.41
36	B2	1644	C	O4'-C1'	5.78	1.49	1.41
85	A5	1857	C	C2'-C1'	-5.78	1.47	1.53
85	A5	1923	A	O4'-C1'	5.78	1.49	1.41
85	A5	4619	U	P-O5'	-5.78	1.53	1.59
36	B2	560	A	C2'-C1'	-5.78	1.47	1.53
85	A5	1314	C	C2'-C1'	5.78	1.59	1.53
85	A5	2793	G	C5'-C4'	5.78	1.58	1.51
85	A5	3809	G	O4'-C1'	-5.78	1.34	1.41
85	A5	3880	G	O4'-C1'	5.78	1.49	1.41
85	A5	4952	G	O4'-C1'	5.78	1.49	1.41
86	A7	17	C	C2'-C1'	-5.78	1.47	1.53
86	A7	50	A	O4'-C1'	5.78	1.49	1.41
36	B2	288	G	C2'-C1'	5.78	1.59	1.53
74	CC	321	ASN	CA-C	-5.78	1.38	1.52
86	A7	29	C	C2'-C1'	5.78	1.59	1.53
85	A5	675	C	C2'-C1'	-5.77	1.47	1.53
85	A5	1491	A	P-O5'	-5.77	1.53	1.59
60	Cr	36	ASN	N-CA	5.77	1.57	1.46
85	A5	2355	G	C2'-C1'	-5.77	1.47	1.53
85	A5	2538	U	C2'-C1'	-5.77	1.47	1.53
85	A5	3871	A	O4'-C1'	5.77	1.49	1.41
36	B2	1030	A	C2'-C1'	5.77	1.59	1.53
85	A5	284	G	O4'-C1'	-5.77	1.34	1.41
85	A5	4632	U	O4'-C1'	5.77	1.49	1.41
36	B2	353	C	O3'-P	-5.77	1.54	1.61
36	B2	1498	A	C4'-C3'	-5.77	1.46	1.52
85	A5	1557	C	C2'-C1'	-5.77	1.47	1.53
85	A5	1615	C	C2'-C1'	-5.77	1.47	1.53
85	A5	1689	G	O4'-C1'	5.77	1.49	1.41
85	A5	2852	U	O4'-C1'	5.77	1.49	1.41
85	A5	423	G	C4'-C3'	-5.77	1.46	1.52
81	CE	88	VAL	CA-C	-5.76	1.38	1.52
85	A5	1797	G	O4'-C1'	5.76	1.49	1.41
85	A5	1841	C	C2'-C1'	-5.76	1.47	1.53
85	A5	4752	U	O4'-C1'	-5.76	1.34	1.41
36	B2	1314	U	O4'-C1'	-5.76	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	2	G	C2'-C1'	-5.76	1.47	1.53
36	B2	1416	C	C2'-C1'	-5.76	1.47	1.53
43	CV	53	PRO	N-CD	5.76	1.55	1.47
85	A5	1078	A	O4'-C1'	5.76	1.49	1.41
85	A5	1274	A	C5'-C4'	5.76	1.58	1.51
85	A5	1652	U	O3'-P	-5.76	1.54	1.61
85	A5	4076	G	O4'-C1'	5.76	1.49	1.41
85	A5	5059	C	O4'-C1'	5.76	1.49	1.41
85	A5	1797	G	C2'-C1'	-5.76	1.47	1.53
85	A5	2226	C	C5'-C4'	5.76	1.58	1.51
85	A5	1533	A	O4'-C1'	5.75	1.49	1.41
85	A5	428	G	O4'-C1'	-5.75	1.34	1.41
85	A5	2460	A	O3'-P	-5.75	1.54	1.61
85	A5	4273	A	O4'-C1'	5.75	1.49	1.41
85	A5	4435	U	O4'-C1'	5.75	1.49	1.41
36	B2	315	C	O4'-C1'	5.75	1.49	1.41
67	Ce	17	THR	C-N	5.75	1.47	1.34
86	A7	33	U	C2'-C1'	-5.75	1.47	1.53
86	A7	60	G	O4'-C1'	5.75	1.49	1.41
36	B2	425	G	P-O5'	-5.75	1.53	1.59
36	B2	1336	C	P-O5'	-5.75	1.54	1.59
85	A5	357	U	C2'-C1'	5.75	1.59	1.53
85	A5	1324	A	C2'-C1'	5.75	1.59	1.53
85	A5	2006	U	C2'-C1'	-5.75	1.47	1.53
85	A5	3919	C	O4'-C1'	5.75	1.49	1.41
36	B2	1210	G	O3'-P	-5.75	1.54	1.61
85	A5	1584	G	C2'-C1'	-5.75	1.47	1.53
85	A5	4252	C	C2'-C1'	-5.75	1.47	1.53
36	B2	1250	A	C2'-C1'	5.75	1.59	1.53
36	B2	1614	A	C2'-C1'	-5.75	1.47	1.53
42	CL	100	PRO	N-CD	5.75	1.55	1.47
54	CP	59	PRO	N-CD	5.75	1.55	1.47
85	A5	3243	C	O3'-P	-5.75	1.54	1.61
85	A5	4775	C	O4'-C1'	5.75	1.49	1.41
53	CT	34	TYR	CD1-CE1	-5.75	1.30	1.39
85	A5	1886	G	C2'-C1'	-5.75	1.47	1.53
85	A5	3602	C	O4'-C1'	5.75	1.49	1.41
85	A5	39	A	O4'-C1'	5.74	1.49	1.41
85	A5	686	A	O4'-C1'	5.74	1.49	1.41
85	A5	4539	U	O4'-C1'	5.74	1.49	1.41
36	B2	887	U	C5'-C4'	5.74	1.58	1.51
25	Af	136	PHE	CB-CG	-5.74	1.41	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	829	C	O3'-P	-5.74	1.54	1.61
36	B2	1701	C	C5'-C4'	5.74	1.58	1.51
36	B2	1419	C	O3'-P	-5.74	1.54	1.61
36	B2	1782	G	C2'-C1'	-5.74	1.47	1.53
57	CY	43	ASN	CA-C	-5.74	1.38	1.52
85	A5	3657	U	C2'-C1'	5.74	1.59	1.53
85	A5	271	C	C2'-C1'	-5.74	1.47	1.53
85	A5	4162	C	C5'-C4'	5.74	1.58	1.51
85	A5	262	G	O4'-C1'	-5.73	1.34	1.41
85	A5	2673	G	C2'-C1'	-5.73	1.47	1.53
87	A8	154	G	O3'-P	-5.73	1.54	1.61
36	B2	576	A	O4'-C1'	5.73	1.49	1.41
48	CD	270	LYS	CA-C	5.73	1.67	1.52
85	A5	285	G	C2'-C1'	-5.73	1.47	1.53
81	CE	70	LYS	C-N	-5.73	1.20	1.34
82	CG	179	VAL	CA-CB	-5.73	1.42	1.54
36	B2	1360	U	C2'-C1'	-5.73	1.47	1.53
42	CL	165	LYS	CA-C	5.73	1.67	1.52
85	A5	2401	A	O4'-C1'	5.73	1.49	1.41
85	A5	5026	U	O3'-P	-5.73	1.54	1.61
85	A5	4306	U	O4'-C1'	5.73	1.49	1.41
85	A5	2747	U	P-O5'	-5.73	1.54	1.59
36	B2	747	U	C2'-C1'	-5.72	1.47	1.53
36	B2	1042	A	O4'-C1'	5.72	1.49	1.41
85	A5	670	G	C2'-C1'	5.72	1.59	1.53
85	A5	1117	C	C5'-C4'	5.72	1.58	1.51
85	A5	1296	G	C5'-C4'	5.72	1.58	1.51
85	A5	1853	G	O3'-P	-5.72	1.54	1.61
85	A5	3839	G	O4'-C1'	-5.72	1.34	1.41
36	B2	281	C	O3'-P	-5.72	1.54	1.61
36	B2	799	U	C3'-C2'	5.72	1.59	1.52
85	A5	1376	C	O4'-C1'	5.72	1.49	1.41
85	A5	1552	G	O4'-C1'	-5.72	1.34	1.41
87	A8	27	U	C2'-C1'	-5.72	1.47	1.53
74	CC	323	ARG	N-CA	5.72	1.57	1.46
85	A5	2697	A	C2'-C1'	-5.72	1.47	1.53
36	B2	98	C	O4'-C1'	5.72	1.49	1.41
36	B2	1561	A	O4'-C1'	5.72	1.49	1.41
36	B2	1652	G	O4'-C1'	5.72	1.49	1.41
85	A5	1839	U	C2'-C1'	-5.72	1.47	1.53
85	A5	4551	U	C2'-C1'	5.72	1.59	1.53
1	Az	794	PHE	CD1-CE1	-5.71	1.27	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2695	A	C2'-C1'	5.71	1.59	1.53
85	A5	4317	A	O4'-C1'	5.71	1.49	1.41
87	A8	14	U	C2'-C1'	-5.71	1.47	1.53
36	B2	1732	G	C2'-C1'	-5.71	1.47	1.53
53	CT	13	TYR	CD1-CE1	-5.71	1.30	1.39
85	A5	1248	C	C2'-C1'	-5.71	1.47	1.53
47	CI	176	PHE	CD2-CE2	-5.71	1.27	1.39
85	A5	139	G	O4'-C1'	5.71	1.49	1.41
36	B2	654	A	O4'-C1'	5.71	1.49	1.41
36	B2	376	A	C2'-C1'	-5.71	1.47	1.53
40	CK	114	ARG	CA-C	-5.71	1.38	1.52
85	A5	3946	G	O3'-P	-5.71	1.54	1.61
85	A5	478	G	C2'-C1'	5.71	1.59	1.53
85	A5	4449	A	O4'-C1'	-5.71	1.34	1.41
53	CT	80	VAL	N-CA	5.71	1.57	1.46
31	AH	67	PRO	N-CD	5.70	1.55	1.47
36	B2	327	G	C5'-C4'	5.70	1.58	1.51
37	BC	12	G	C3'-C2'	-5.70	1.46	1.52
56	CX	40	ILE	CA-C	-5.70	1.38	1.52
85	A5	1363	C	P-O5'	-5.70	1.54	1.59
85	A5	2714	G	C2'-C1'	-5.70	1.47	1.53
85	A5	3917	A	C2'-C1'	-5.70	1.47	1.53
85	A5	4735	G	C2'-C1'	-5.70	1.47	1.53
85	A5	4867	G	C2'-C1'	-5.70	1.47	1.53
36	B2	1730	U	O4'-C1'	5.70	1.49	1.41
85	A5	969	C	O4'-C1'	5.70	1.49	1.41
24	Ae	3	HIS	C-N	5.70	1.43	1.33
1	Az	780	PRO	CA-C	5.70	1.64	1.52
85	A5	148	C	C5'-C4'	5.70	1.58	1.51
85	A5	2561	C	C2'-C1'	-5.70	1.47	1.53
36	B2	322	C	C2'-C1'	-5.70	1.47	1.53
56	CX	53	ARG	CA-C	5.70	1.67	1.52
85	A5	402	A	O4'-C1'	5.70	1.49	1.41
85	A5	4299	U	C2'-C1'	-5.70	1.47	1.53
26	AJ	187	ALA	N-CA	5.69	1.57	1.46
36	B2	1609	C	P-O5'	-5.69	1.54	1.59
85	A5	1583	A	O4'-C1'	-5.69	1.34	1.41
85	A5	674	G	O4'-C1'	5.69	1.49	1.41
85	A5	2297	G	C5'-C4'	5.69	1.58	1.51
36	B2	757	C	C2'-C1'	-5.69	1.47	1.53
85	A5	304	C	O3'-P	-5.69	1.54	1.61
85	A5	367	C	P-O5'	-5.69	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	419	A	O4'-C1'	5.69	1.49	1.41
85	A5	3635	A	C2'-C1'	-5.69	1.47	1.53
85	A5	4333	C	C2'-C1'	-5.69	1.47	1.53
36	B2	99	A	P-O5'	-5.69	1.54	1.59
1	Az	478	PHE	CD1-CE1	-5.68	1.27	1.39
33	AI	6	ASP	N-CA	-5.68	1.34	1.46
85	A5	285	G	O4'-C1'	5.68	1.49	1.41
36	B2	32	U	C2'-C1'	5.68	1.59	1.53
36	B2	1339	U	C2'-C1'	-5.68	1.47	1.53
36	B2	1827	U	O4'-C1'	5.68	1.49	1.41
85	A5	3965	A	O4'-C1'	5.68	1.49	1.41
36	B2	1572	C	C2'-C1'	-5.68	1.47	1.53
36	B2	18	C	O3'-P	-5.67	1.54	1.61
36	B2	234	C	O4'-C1'	5.67	1.49	1.41
36	B2	1383	A	O4'-C1'	5.67	1.49	1.41
81	CE	116	TYR	N-CA	5.67	1.57	1.46
26	AJ	188	GLY	N-CA	5.67	1.54	1.46
36	B2	1663	A	O4'-C1'	5.67	1.49	1.41
85	A5	979	C	O4'-C1'	5.67	1.49	1.41
85	A5	1456	C	C2'-C1'	-5.67	1.47	1.53
85	A5	1956	A	O4'-C1'	5.67	1.49	1.41
36	B2	725	C	P-O5'	5.67	1.65	1.59
86	A7	73	U	O3'-P	-5.67	1.54	1.61
48	CD	223	PHE	CD2-CE2	-5.67	1.27	1.39
85	A5	992	C	O4'-C1'	5.67	1.49	1.41
85	A5	2373	C	C2'-C1'	-5.67	1.47	1.53
85	A5	947	C	P-O5'	-5.67	1.54	1.59
11	AL	103	GLU	CG-CD	5.67	1.60	1.51
85	A5	440	U	O4'-C1'	5.67	1.49	1.41
85	A5	3949	A	O3'-P	-5.67	1.54	1.61
36	B2	1423	C	C5'-C4'	5.66	1.58	1.51
85	A5	1073	G	C2'-C1'	-5.66	1.47	1.53
87	A8	37	A	O3'-P	-5.66	1.54	1.61
85	A5	62	A	O4'-C1'	5.66	1.49	1.41
36	B2	294	U	C2'-C1'	-5.66	1.47	1.53
86	A7	92	C	C2'-C1'	-5.66	1.47	1.53
36	B2	1667	U	C2'-C1'	-5.66	1.47	1.53
85	A5	446	C	C2'-C1'	-5.66	1.47	1.53
85	A5	1310	C	C2'-C1'	-5.66	1.47	1.53
85	A5	2834	C	O4'-C1'	5.66	1.49	1.41
73	Cl	24	PRO	N-CD	5.66	1.55	1.47
85	A5	1107	C	C5'-C4'	5.66	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4187	G	O4'-C1'	5.66	1.49	1.41
34	AQ	145	TYR	CB-CG	-5.66	1.43	1.51
36	B2	1678	A	O4'-C1'	-5.65	1.34	1.41
85	A5	963	G	O3'-P	-5.65	1.54	1.61
85	A5	81	C	C2'-C1'	-5.65	1.47	1.53
36	B2	1646	C	C5'-C4'	5.65	1.58	1.51
61	Ch	78	TYR	N-CA	-5.65	1.35	1.46
85	A5	53	C	C2'-C1'	-5.65	1.47	1.53
85	A5	473	C	C2'-C1'	-5.65	1.47	1.53
85	A5	4283	G	O4'-C1'	5.65	1.49	1.41
4	AK	89	ILE	N-CA	-5.65	1.35	1.46
36	B2	1276	A	P-O5'	-5.65	1.54	1.59
39	Cq	263	GLU	CA-CB	5.64	1.66	1.53
85	A5	2630	U	O3'-P	-5.64	1.54	1.61
85	A5	3667	C	C5'-C4'	5.64	1.58	1.51
81	CE	38	LYS	N-CA	5.64	1.57	1.46
36	B2	1735	A	O4'-C1'	5.64	1.49	1.41
36	B2	735	C	C2'-C1'	-5.64	1.47	1.53
36	B2	1717	C	C2'-C1'	-5.64	1.47	1.53
36	B2	1795	G	C2'-C1'	-5.64	1.47	1.53
36	B2	1805	G	C5'-C4'	5.64	1.58	1.51
85	A5	223	G	C2'-C1'	-5.64	1.47	1.53
85	A5	725	G	C5'-C4'	5.64	1.58	1.51
85	A5	3691	G	O4'-C1'	5.64	1.49	1.41
85	A5	3920	U	O4'-C1'	5.64	1.49	1.41
36	B2	664	A	O4'-C1'	5.64	1.49	1.41
85	A5	1603	C	O4'-C1'	5.64	1.49	1.41
85	A5	4530	U	O4'-C1'	5.64	1.49	1.41
36	B2	914	U	C2'-C1'	5.63	1.59	1.53
36	B2	969	U	C5'-C4'	5.63	1.58	1.51
81	CE	70	LYS	CA-C	-5.63	1.38	1.52
85	A5	980	U	C3'-C2'	5.63	1.59	1.52
85	A5	1294	A	O3'-P	-5.63	1.54	1.61
86	A7	120	U	P-O5'	-5.63	1.54	1.59
36	B2	420	G	O4'-C1'	-5.63	1.34	1.41
51	CA	67	TYR	CB-CG	5.63	1.60	1.51
85	A5	3874	G	C5'-C4'	5.63	1.58	1.51
85	A5	4885	U	C2'-C1'	-5.63	1.47	1.53
85	A5	2845	A	O3'-P	-5.63	1.54	1.61
85	A5	5003	U	C2'-C1'	-5.63	1.47	1.53
86	A7	85	G	O4'-C1'	5.63	1.49	1.41
85	A5	1379	C	C2'-C1'	5.63	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1672	U	P-O5'	-5.63	1.54	1.59
85	A5	36	U	O4'-C1'	5.63	1.49	1.41
85	A5	998	C	O3'-P	-5.63	1.54	1.61
85	A5	4217	G	O4'-C1'	5.63	1.49	1.41
87	A8	119	C	C2'-C1'	-5.63	1.47	1.53
36	B2	800	U	P-O5'	-5.63	1.54	1.59
85	A5	9	C	C2'-C1'	-5.63	1.47	1.53
85	A5	1295	C	O3'-P	-5.63	1.54	1.61
85	A5	4181	U	C5'-C4'	5.63	1.58	1.51
85	A5	4894	A	C2'-C1'	-5.63	1.47	1.53
57	CY	48	PRO	N-CD	5.62	1.55	1.47
85	A5	4062	A	C2'-C1'	5.62	1.59	1.53
85	A5	7	C	O3'-P	-5.62	1.54	1.61
85	A5	3946	G	C2'-C1'	-5.62	1.47	1.53
36	B2	798	G	O3'-P	-5.62	1.54	1.61
85	A5	3688	U	C2'-C1'	5.62	1.59	1.53
86	A7	72	U	P-O5'	-5.62	1.54	1.59
36	B2	384	U	O4'-C1'	5.62	1.49	1.41
36	B2	1825	A	O4'-C1'	-5.62	1.34	1.41
54	CP	78	TRP	CE2-CZ2	-5.62	1.30	1.39
36	B2	1723	G	O4'-C1'	-5.62	1.34	1.41
36	B2	1549	U	O4'-C1'	5.62	1.49	1.41
36	B2	1670	C	O4'-C1'	5.62	1.49	1.41
85	A5	1186	U	O4'-C1'	-5.62	1.34	1.41
85	A5	1723	A	O4'-C1'	5.62	1.49	1.41
85	A5	2272	C	C2'-C1'	-5.62	1.47	1.53
85	A5	2298	U	O4'-C1'	5.62	1.49	1.41
85	A5	4007	G	C4'-C3'	5.62	1.59	1.53
85	A5	4225	G	P-O5'	-5.62	1.54	1.59
12	AR	42	PRO	N-CD	5.61	1.55	1.47
85	A5	2587	A	O3'-P	-5.61	1.54	1.61
85	A5	5067	U	C5'-C4'	5.61	1.58	1.51
87	A8	81	C	C2'-C1'	-5.61	1.47	1.53
82	CG	39	PHE	CD2-CE2	-5.61	1.28	1.39
85	A5	1097	C	C2'-C1'	-5.61	1.47	1.53
36	B2	482	G	O4'-C1'	-5.61	1.34	1.41
36	B2	915	G	O4'-C1'	-5.61	1.34	1.41
47	CI	176	PHE	CD1-CE1	-5.61	1.28	1.39
53	CT	13	TYR	CG-CD1	-5.61	1.31	1.39
85	A5	732	A	O4'-C1'	-5.61	1.34	1.41
85	A5	1309	C	C2'-C1'	-5.61	1.47	1.53
85	A5	1939	A	O3'-P	-5.61	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2115	G	O3'-P	-5.61	1.54	1.61
86	A7	16	A	O4'-C1'	5.61	1.49	1.41
43	CV	120	PRO	N-CD	5.61	1.55	1.47
85	A5	1763	C	C2'-C1'	-5.61	1.47	1.53
39	Cq	62	ARG	N-CA	-5.61	1.35	1.46
85	A5	1782	U	P-O5'	-5.61	1.54	1.59
86	A7	42	A	C5'-C4'	5.61	1.58	1.51
36	B2	822	U	C4'-C3'	5.60	1.59	1.53
36	B2	1491	G	O4'-C1'	5.60	1.49	1.41
85	A5	474	C	C2'-C1'	-5.60	1.47	1.53
85	A5	3888	G	C2'-C1'	5.60	1.59	1.53
85	A5	1866	U	O4'-C1'	5.60	1.49	1.41
58	CW	71	ARG	CG-CD	5.60	1.66	1.51
85	A5	4508	C	C2'-C1'	-5.60	1.47	1.53
85	A5	996	G	O4'-C1'	5.60	1.49	1.41
85	A5	2543	A	O3'-P	-5.60	1.54	1.61
36	B2	595	U	C2'-C1'	-5.60	1.47	1.53
36	B2	596	U	C2'-C1'	-5.60	1.47	1.53
86	A7	78	C	O4'-C1'	5.59	1.49	1.41
74	CC	330	PRO	N-CD	5.59	1.55	1.47
85	A5	2043	A	O4'-C1'	-5.59	1.34	1.41
86	A7	73	U	O4'-C1'	5.59	1.49	1.41
85	A5	219	G	O4'-C1'	5.59	1.49	1.41
85	A5	2333	G	O4'-C1'	-5.59	1.34	1.41
85	A5	3756	A	C2'-C1'	-5.59	1.47	1.53
85	A5	4455	G	O4'-C1'	5.59	1.49	1.41
87	A8	47	C	C2'-C1'	-5.59	1.47	1.53
36	B2	572	U	C2'-C1'	5.58	1.59	1.53
85	A5	513	U	C2'-C1'	-5.58	1.47	1.53
85	A5	2102	G	O3'-P	-5.58	1.54	1.61
85	A5	2359	U	C2'-C1'	-5.58	1.47	1.53
85	A5	2651	C	C2'-C1'	-5.58	1.47	1.53
85	A5	4055	U	C4'-C3'	5.58	1.59	1.53
85	A5	1365	C	C2'-C1'	5.58	1.59	1.53
85	A5	1984	A	O4'-C1'	5.58	1.49	1.41
36	B2	317	C	P-O5'	-5.58	1.54	1.59
36	B2	980	A	O4'-C1'	5.58	1.49	1.41
36	B2	1370	A	O4'-C1'	5.58	1.48	1.41
85	A5	124	C	C5'-C4'	5.58	1.58	1.51
85	A5	499	G	O3'-P	-5.58	1.54	1.61
85	A5	2597	G	C5'-C4'	5.58	1.58	1.51
87	A8	140	C	O4'-C1'	5.57	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	Ca	50	PRO	N-CD	5.57	1.55	1.47
85	A5	1122	C	P-O5'	-5.57	1.54	1.59
86	A7	60	G	C2'-C1'	-5.57	1.47	1.53
36	B2	1404	U	C4'-C3'	5.57	1.59	1.53
85	A5	3677	U	O4'-C1'	5.57	1.48	1.41
36	B2	87	U	O4'-C1'	5.57	1.48	1.41
36	B2	1018	U	O4'-C1'	5.57	1.48	1.41
85	A5	2068	C	P-O5'	-5.57	1.54	1.59
36	B2	21	U	C2'-C1'	5.56	1.59	1.53
85	A5	4762	A	O3'-P	-5.56	1.54	1.61
1	Az	196	GLU	CG-CD	5.56	1.60	1.51
35	Ah	180	GLY	N-CA	-5.56	1.37	1.46
36	B2	36	U	O4'-C1'	5.56	1.48	1.41
85	A5	1701	A	C5'-C4'	5.56	1.58	1.51
85	A5	2510	G	C2'-C1'	-5.56	1.47	1.53
86	A7	88	A	O4'-C1'	5.56	1.48	1.41
85	A5	370	U	P-O5'	-5.56	1.54	1.59
36	B2	1731	A	O4'-C1'	5.56	1.48	1.41
85	A5	2343	G	C2'-C1'	-5.56	1.47	1.53
85	A5	2649	G	C2'-C1'	-5.56	1.47	1.53
85	A5	3854	C	O3'-P	-5.56	1.54	1.61
85	A5	3922	G	C2'-C1'	5.56	1.59	1.53
87	A8	67	U	C2'-C1'	5.56	1.59	1.53
36	B2	214	U	C2'-C1'	-5.56	1.47	1.53
85	A5	131	C	O4'-C1'	5.56	1.48	1.41
85	A5	2824	C	C2'-C1'	5.56	1.59	1.53
85	A5	965	G	C2'-C1'	-5.55	1.47	1.53
85	A5	2587	A	O4'-C1'	-5.55	1.34	1.41
4	AK	40	VAL	CB-CG1	-5.55	1.41	1.52
36	B2	507	G	C5'-C4'	5.55	1.58	1.51
85	A5	4887	C	O3'-P	-5.55	1.54	1.61
85	A5	3730	U	O4'-C1'	5.55	1.48	1.41
85	A5	4683	U	C2'-C1'	-5.55	1.47	1.53
85	A5	5060	A	O3'-P	-5.55	1.54	1.61
86	A7	55	A	C2'-C1'	-5.55	1.47	1.53
87	A8	16	G	P-O5'	-5.55	1.54	1.59
59	CZ	102	ARG	CA-C	-5.55	1.38	1.52
85	A5	1075	G	C2'-C1'	-5.55	1.47	1.53
85	A5	2789	A	O4'-C1'	-5.55	1.34	1.41
85	A5	4767	C	O4'-C1'	5.55	1.48	1.41
36	B2	413	G	C2'-C1'	-5.54	1.47	1.53
68	Cf	106	TYR	CA-C	-5.54	1.38	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1708	G	C4'-C3'	5.54	1.59	1.53
85	A5	3693	U	C2'-C1'	-5.54	1.47	1.53
87	A8	25	G	C2'-C1'	-5.54	1.47	1.53
24	Ae	23	GLU	CG-CD	-5.54	1.43	1.51
36	B2	1707	U	O4'-C1'	5.54	1.48	1.41
85	A5	1744	U	O4'-C1'	5.54	1.48	1.41
36	B2	438	G	O3'-P	-5.54	1.54	1.61
36	B2	1449	G	O4'-C1'	5.54	1.48	1.41
85	A5	3652	A	O4'-C1'	5.54	1.48	1.41
85	A5	3677	U	C5'-C4'	5.54	1.57	1.51
36	B2	412	G	C5'-C4'	5.54	1.57	1.51
85	A5	2733	C	C2'-C1'	-5.54	1.47	1.53
74	CC	221	PHE	CB-CG	-5.54	1.42	1.51
36	B2	1428	G	O4'-C1'	-5.54	1.34	1.41
36	B2	1766	C	C4'-C3'	5.54	1.59	1.53
36	B2	77	A	C4'-C3'	5.53	1.59	1.53
74	CC	47	ASN	N-CA	-5.53	1.35	1.46
36	B2	93	U	C2'-C1'	5.53	1.59	1.53
86	A7	41	G	O4'-C1'	-5.53	1.34	1.41
85	A5	739	G	C2'-C1'	-5.53	1.47	1.53
85	A5	3928	A	C3'-C2'	-5.53	1.46	1.52
36	B2	187	G	O4'-C1'	5.53	1.48	1.41
85	A5	110	C	C2'-C1'	-5.52	1.47	1.53
85	A5	685	C	C2'-C1'	5.52	1.59	1.53
25	Af	148	TYR	CD1-CE1	-5.52	1.31	1.39
36	B2	479	C	C2'-C1'	-5.52	1.47	1.53
56	CX	53	ARG	N-CA	-5.52	1.35	1.46
85	A5	2882	A	O4'-C1'	5.52	1.48	1.41
36	B2	190	G	C3'-C2'	-5.52	1.46	1.52
36	B2	1222	G	O4'-C1'	5.52	1.48	1.41
39	Cq	263	GLU	N-CA	-5.52	1.35	1.46
85	A5	408	A	C2'-C1'	5.52	1.59	1.53
85	A5	4242	U	O3'-P	-5.52	1.54	1.61
36	B2	112	U	C5'-C4'	5.51	1.57	1.51
85	A5	2679	G	C2'-C1'	-5.51	1.47	1.53
36	B2	1868	U	C4'-C3'	5.51	1.59	1.53
85	A5	1251	C	O4'-C1'	5.51	1.48	1.41
85	A5	4834	C	C5'-C4'	5.51	1.57	1.51
86	A7	76	U	C2'-C1'	-5.51	1.47	1.53
54	CP	5	SER	C-O	-5.51	1.12	1.23
85	A5	3850	C	O4'-C1'	5.51	1.48	1.41
85	A5	4802	C	O3'-P	-5.51	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	224	A	O4'-C1'	5.51	1.48	1.41
36	B2	324	C	O3'-P	-5.51	1.54	1.61
36	B2	1416	C	O3'-P	-5.51	1.54	1.61
36	B2	1419	C	C2'-C1'	5.51	1.59	1.53
85	A5	14	C	C5'-C4'	5.51	1.57	1.51
85	A5	4376	A	O3'-P	-5.51	1.54	1.61
36	B2	1839	U	O3'-P	-5.50	1.54	1.61
85	A5	441	G	C2'-C1'	-5.50	1.47	1.53
85	A5	2440	U	P-O5'	-5.50	1.54	1.59
36	B2	353	C	P-O5'	-5.50	1.54	1.59
85	A5	1863	U	C2'-C1'	5.50	1.59	1.53
85	A5	2123	C	C4'-C3'	5.50	1.59	1.53
85	A5	4159	C	C5'-C4'	5.50	1.57	1.51
11	AL	102	PHE	C-O	5.50	1.33	1.23
85	A5	1212	G	C2'-C1'	-5.50	1.47	1.53
85	A5	1749	A	O4'-C1'	5.50	1.48	1.41
36	B2	1031	A	C2'-C1'	-5.50	1.47	1.53
85	A5	1306	C	C2'-C1'	-5.50	1.47	1.53
85	A5	4146	G	C2'-C1'	-5.50	1.47	1.53
36	B2	1443	C	O4'-C1'	5.50	1.48	1.41
36	B2	653	A	C2'-C1'	-5.49	1.47	1.53
36	B2	1150	A	C5'-C4'	5.49	1.57	1.51
85	A5	1992	U	C2'-C1'	5.49	1.59	1.53
85	A5	2805	C	O4'-C1'	5.49	1.48	1.41
85	A5	3615	G	C2'-C1'	-5.49	1.47	1.53
85	A5	2526	C	C2'-C1'	5.49	1.59	1.53
85	A5	1253	G	P-O5'	-5.49	1.54	1.59
85	A5	2588	C	P-O5'	-5.49	1.54	1.59
85	A5	4087	G	O4'-C1'	5.49	1.48	1.41
85	A5	4426	C	O4'-C1'	5.49	1.48	1.41
36	B2	959	G	O4'-C1'	5.49	1.48	1.41
85	A5	1326	A	O4'-C1'	5.49	1.48	1.41
85	A5	3725	G	C2'-C1'	-5.49	1.47	1.53
15	AB	155	TYR	CD1-CE1	-5.49	1.31	1.39
36	B2	1072	U	O4'-C1'	5.49	1.48	1.41
85	A5	3953	G	O3'-P	-5.49	1.54	1.61
86	A7	121	U	C2'-C1'	5.49	1.59	1.53
36	B2	152	U	C5'-C4'	5.48	1.57	1.51
36	B2	1827	U	C2'-C1'	-5.48	1.47	1.53
85	A5	2119	C	C2'-C1'	5.48	1.59	1.53
36	B2	1043	G	C5'-C4'	5.48	1.57	1.51
36	B2	1338	G	P-O5'	-5.48	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	Cz	26	ARG	C-N	5.48	1.46	1.34
52	CS	152	PHE	N-CA	-5.48	1.35	1.46
85	A5	2539	C	O4'-C1'	5.48	1.48	1.41
36	B2	858	A	O4'-C1'	5.48	1.48	1.41
85	A5	444	G	O3'-P	-5.48	1.54	1.61
85	A5	4306	U	P-O5'	-5.48	1.54	1.59
86	A7	42	A	O4'-C1'	5.48	1.48	1.41
85	A5	1318	C	C2'-C1'	-5.48	1.47	1.53
36	B2	1128	C	O3'-P	-5.48	1.54	1.61
85	A5	1282	G	C4'-C3'	5.48	1.59	1.53
85	A5	1498	G	O4'-C1'	5.48	1.48	1.41
85	A5	4982	A	C5'-C4'	5.48	1.57	1.51
36	B2	1409	A	C5'-C4'	5.47	1.57	1.51
87	A8	93	C	P-O5'	-5.47	1.54	1.59
64	CF	99	ASN	CB-CG	5.47	1.63	1.51
36	B2	679	A	C2'-C1'	-5.47	1.47	1.53
85	A5	513	U	O3'-P	-5.47	1.54	1.61
51	CA	68	ARG	CD-NE	5.47	1.55	1.46
85	A5	1522	G	O4'-C1'	-5.47	1.34	1.41
85	A5	2250	C	P-O5'	-5.47	1.54	1.59
85	A5	4925	U	O4'-C1'	5.47	1.48	1.41
36	B2	405	G	O4'-C1'	5.47	1.48	1.41
85	A5	3881	G	C2'-C1'	5.47	1.59	1.53
85	A5	915	A	C2'-C1'	-5.47	1.47	1.53
85	A5	2947	G	O3'-P	-5.47	1.54	1.61
51	CA	222	PRO	N-CD	5.46	1.55	1.47
53	CT	30	TYR	CG-CD1	-5.46	1.32	1.39
85	A5	2249	C	C2'-C1'	-5.46	1.47	1.53
36	B2	219	U	C5'-C4'	5.46	1.57	1.51
85	A5	599	C	O3'-P	-5.46	1.54	1.61
85	A5	937	U	C2'-C1'	-5.46	1.47	1.53
85	A5	1572	U	O4'-C1'	5.46	1.48	1.41
36	B2	227	U	C5'-C4'	5.46	1.57	1.51
85	A5	1664	U	O4'-C1'	5.46	1.48	1.41
85	A5	4691	A	C2'-C1'	-5.46	1.47	1.53
81	CE	115	TYR	N-CA	-5.46	1.35	1.46
85	A5	2743	A	O4'-C1'	5.46	1.48	1.41
85	A5	4956	A	C2'-C1'	-5.46	1.47	1.53
36	B2	440	G	C2'-C1'	-5.46	1.47	1.53
85	A5	260	C	C2'-C1'	-5.46	1.47	1.53
67	Ce	16	ARG	CA-C	-5.46	1.38	1.52
85	A5	4607	A	O4'-C1'	5.46	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1770	G	C5'-C4'	5.45	1.57	1.51
36	B2	335	G	C4'-C3'	5.45	1.59	1.53
36	B2	639	C	O4'-C1'	5.45	1.48	1.41
85	A5	1834	U	O3'-P	-5.45	1.54	1.61
85	A5	2605	G	P-O5'	-5.45	1.54	1.59
85	A5	5047	C	C2'-C1'	5.45	1.59	1.53
85	A5	5066	U	C2'-C1'	-5.45	1.47	1.53
36	B2	411	G	C2'-C1'	-5.45	1.47	1.53
37	BC	11	C	C2'-C1'	-5.45	1.47	1.53
85	A5	2711	G	C5'-C4'	5.45	1.57	1.51
85	A5	2813	A	O3'-P	-5.45	1.54	1.61
85	A5	2844	A	C2'-C1'	5.45	1.59	1.53
87	A8	75	G	O4'-C1'	5.45	1.48	1.41
36	B2	1786	U	C2'-C1'	-5.45	1.47	1.53
85	A5	3917	A	O4'-C1'	5.45	1.48	1.41
58	CW	71	ARG	CA-C	-5.45	1.38	1.52
85	A5	4264	G	O3'-P	-5.45	1.54	1.61
36	B2	145	G	O4'-C1'	5.45	1.48	1.41
85	A5	1576	G	C2'-C1'	5.45	1.59	1.53
85	A5	477	C	O4'-C1'	5.44	1.48	1.41
85	A5	2709	C	C2'-C1'	-5.44	1.47	1.53
85	A5	4163	U	O3'-P	-5.44	1.54	1.61
85	A5	4179	G	O3'-P	-5.44	1.54	1.61
74	CC	305	PRO	CA-C	-5.44	1.42	1.52
85	A5	4101	C	P-O5'	-5.44	1.54	1.59
85	A5	4883	C	O4'-C1'	5.44	1.48	1.41
36	B2	1200	A	C2'-C1'	-5.44	1.47	1.53
36	B2	1376	A	C3'-C2'	-5.44	1.46	1.52
36	B2	1854	U	C2'-C1'	5.44	1.59	1.53
72	Ck	62	PRO	CA-C	5.44	1.63	1.52
36	B2	244	A	C2'-C1'	5.43	1.59	1.53
36	B2	1569	A	P-O5'	-5.43	1.54	1.59
36	B2	1835	A	C2'-C1'	-5.43	1.47	1.53
85	A5	338	A	C2'-C1'	-5.43	1.47	1.53
85	A5	2327	G	C2'-C1'	-5.43	1.47	1.53
87	A8	51	U	C2'-C1'	-5.43	1.47	1.53
36	B2	34	U	C5'-C4'	5.43	1.57	1.51
85	A5	258	G	C3'-C2'	-5.43	1.46	1.52
36	B2	1374	C	C2'-C1'	-5.43	1.47	1.53
85	A5	3593	C	C2'-C1'	-5.43	1.47	1.53
85	A5	3903	A	O4'-C1'	5.43	1.48	1.41
36	B2	697	G	C2'-C1'	-5.43	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	CI	176	PHE	CE1-CZ	-5.43	1.27	1.37
85	A5	726	G	O3'-P	-5.43	1.54	1.61
85	A5	974	C	O3'-P	-5.43	1.54	1.61
85	A5	1508	A	O4'-C1'	5.43	1.48	1.41
85	A5	4727	A	C5'-C4'	5.43	1.57	1.51
36	B2	946	U	C2'-C1'	-5.43	1.47	1.53
36	B2	1092	G	O4'-C1'	5.43	1.48	1.41
47	CI	160	PRO	N-CD	5.43	1.55	1.47
85	A5	1977	C	O3'-P	-5.43	1.54	1.61
87	A8	34	U	O4'-C1'	5.43	1.48	1.41
37	BC	30	G	O3'-P	-5.42	1.54	1.61
85	A5	4773	C	C2'-C1'	-5.42	1.47	1.53
36	B2	584	A	O4'-C1'	5.42	1.48	1.41
85	A5	4718	G	C2'-C1'	-5.42	1.47	1.53
85	A5	1849	U	C2'-C1'	5.42	1.59	1.53
85	A5	1979	A	C2'-C1'	-5.42	1.47	1.53
85	A5	2263	A	C2'-C1'	5.42	1.59	1.53
36	B2	44	U	C2'-C1'	-5.42	1.47	1.53
37	BC	21	G	C2'-C1'	-5.42	1.47	1.53
85	A5	4743	G	C5'-C4'	5.42	1.57	1.51
36	B2	297	A	C5'-C4'	5.42	1.57	1.51
85	A5	1782	U	O4'-C1'	5.42	1.48	1.41
85	A5	2604	C	O4'-C1'	5.42	1.48	1.41
36	B2	437	G	C2'-C1'	-5.42	1.47	1.53
85	A5	1401	C	O4'-C1'	5.42	1.48	1.41
85	A5	4738	C	C2'-C1'	-5.42	1.47	1.53
85	A5	4726	G	O3'-P	-5.41	1.54	1.61
87	A8	53	G	O4'-C1'	5.41	1.48	1.41
36	B2	1700	C	O4'-C1'	5.41	1.48	1.41
51	CA	206	PRO	N-CD	5.41	1.55	1.47
85	A5	2634	C	O4'-C1'	5.41	1.48	1.41
85	A5	2819	U	O4'-C1'	5.41	1.48	1.41
85	A5	5049	G	C2'-C1'	5.41	1.59	1.53
85	A5	20	U	O4'-C1'	5.41	1.48	1.41
85	A5	1272	C	C5'-C4'	5.41	1.57	1.51
36	B2	1264	C	O3'-P	-5.41	1.54	1.61
36	B2	1386	A	C5'-C4'	5.41	1.57	1.51
51	CA	108	PRO	N-CD	5.41	1.55	1.47
52	CS	153	PRO	CA-C	-5.41	1.42	1.52
36	B2	494	C	C5'-C4'	5.41	1.57	1.51
85	A5	1987	C	P-O5'	-5.41	1.54	1.59
85	A5	2355	G	O4'-C1'	5.41	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2732	G	O4'-C1'	5.41	1.48	1.41
85	A5	3878	C	O3'-P	-5.41	1.54	1.61
4	AK	37	ASP	CB-CG	5.40	1.63	1.51
36	B2	189	U	O4'-C1'	5.40	1.48	1.41
85	A5	3959	U	C5'-C4'	5.40	1.57	1.51
36	B2	299	A	C3'-C2'	-5.40	1.46	1.52
36	B2	1345	G	C2'-C1'	-5.40	1.47	1.53
36	B2	1626	C	C2'-C1'	-5.40	1.47	1.53
85	A5	4307	A	O3'-P	-5.40	1.54	1.61
85	A5	269	G	C2'-C1'	-5.40	1.47	1.53
66	Cd	115	LYS	CA-C	5.40	1.67	1.52
85	A5	2920	G	C5'-C4'	5.40	1.57	1.51
36	B2	276	G	O3'-P	-5.40	1.54	1.61
36	B2	655	A	C5'-C4'	5.40	1.57	1.51
45	Ca	52	TYR	CG-CD1	-5.40	1.32	1.39
57	CY	57	VAL	C-N	-5.40	1.21	1.34
85	A5	166	C	C2'-C1'	-5.40	1.47	1.53
36	B2	583	A	O4'-C1'	5.40	1.48	1.41
85	A5	1931	C	C5'-C4'	5.40	1.57	1.51
85	A5	2751	G	C4'-C3'	5.40	1.59	1.53
36	B2	356	C	C2'-C1'	-5.39	1.47	1.53
36	B2	1508	A	O4'-C1'	-5.39	1.34	1.41
85	A5	108	A	O4'-C1'	5.39	1.48	1.41
85	A5	1316	G	O4'-C1'	5.39	1.48	1.41
26	AJ	144	ILE	C-N	5.39	1.44	1.34
60	Cr	112	ARG	CB-CG	-5.39	1.38	1.52
60	Cr	114	ALA	C-N	-5.39	1.21	1.34
74	CC	321	ASN	N-CA	-5.39	1.35	1.46
85	A5	1638	A	O4'-C1'	5.39	1.48	1.41
85	A5	3896	C	C4'-C3'	5.39	1.59	1.53
85	A5	4236	G	O4'-C1'	-5.39	1.34	1.41
85	A5	4293	U	C5'-C4'	5.39	1.57	1.51
85	A5	4361	U	O3'-P	-5.39	1.54	1.61
36	B2	421	G	C2'-C1'	-5.39	1.47	1.53
85	A5	2340	C	O3'-P	-5.39	1.54	1.61
85	A5	4971	A	C2'-C1'	-5.39	1.47	1.53
85	A5	3947	A	O4'-C1'	5.39	1.48	1.41
85	A5	4603	C	C2'-C1'	-5.39	1.47	1.53
85	A5	4734	A	O4'-C1'	5.39	1.48	1.41
85	A5	1297	U	C2'-C1'	5.38	1.59	1.53
36	B2	94	G	O3'-P	-5.38	1.54	1.61
36	B2	290	U	O3'-P	-5.38	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1291	A	C2'-C1'	5.38	1.59	1.53
69	Cg	82	MET	N-CA	-5.38	1.35	1.46
85	A5	27	C	C2'-C1'	-5.38	1.47	1.53
85	A5	1898	C	C2'-C1'	5.38	1.59	1.53
85	A5	1664	U	C2'-C1'	-5.38	1.47	1.53
85	A5	2821	U	P-O5'	-5.38	1.54	1.59
85	A5	2525	U	O4'-C1'	5.37	1.48	1.41
85	A5	4483	C	O4'-C1'	5.37	1.48	1.41
1	Az	801	ARG	NE-CZ	5.37	1.40	1.33
36	B2	636	C	P-O5'	-5.37	1.54	1.59
36	B2	805	U	C2'-C1'	-5.37	1.47	1.53
36	B2	1176	G	C2'-C1'	-5.37	1.47	1.53
36	B2	1507	G	O3'-P	-5.37	1.54	1.61
49	CQ	6	ARG	CZ-NH2	5.37	1.40	1.33
85	A5	385	A	O3'-P	-5.37	1.54	1.61
85	A5	1630	A	O4'-C1'	5.37	1.48	1.41
36	B2	73	C	O4'-C1'	5.37	1.48	1.41
81	CE	62	MET	C-N	5.37	1.46	1.34
85	A5	768	C	C5'-C4'	5.37	1.57	1.51
85	A5	3627	G	C2'-C1'	-5.37	1.47	1.53
85	A5	3979	C	P-O5'	-5.37	1.54	1.59
29	AG	180	VAL	CA-CB	-5.37	1.43	1.54
36	B2	530	U	O3'-P	-5.37	1.54	1.61
36	B2	1709	G	C2'-C1'	-5.37	1.47	1.53
85	A5	2118	G	O4'-C1'	5.37	1.48	1.41
85	A5	3760	A	O4'-C1'	-5.37	1.34	1.41
85	A5	4964	C	C5'-C4'	5.37	1.57	1.51
85	A5	2385	U	C2'-C1'	-5.37	1.47	1.53
36	B2	905	C	C2'-C1'	-5.37	1.47	1.53
81	CE	57	TYR	CA-C	-5.37	1.39	1.52
85	A5	691	C	C5'-C4'	5.37	1.57	1.51
85	A5	1429	C	P-O5'	-5.37	1.54	1.59
85	A5	2769	U	O3'-P	-5.37	1.54	1.61
85	A5	3259	C	C5'-C4'	5.37	1.57	1.51
85	A5	3741	C	O4'-C1'	5.37	1.48	1.41
85	A5	24	G	O3'-P	-5.36	1.54	1.61
85	A5	2818	C	C5'-C4'	5.36	1.57	1.51
36	B2	966	U	O4'-C1'	5.36	1.48	1.41
86	A7	53	U	C2'-C1'	5.36	1.59	1.53
37	BC	72	A	P-O5'	-5.36	1.54	1.59
47	CI	176	PHE	CE2-CZ	-5.36	1.27	1.37
44	CM	46	ARG	CA-C	-5.36	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	231	U	O4'-C1'	5.36	1.48	1.41
85	A5	1369	C	C5'-C4'	5.36	1.57	1.51
85	A5	2586	G	C4'-C3'	5.36	1.59	1.53
36	B2	983	A	O4'-C1'	5.36	1.48	1.41
36	B2	1379	A	O4'-C1'	5.36	1.48	1.41
85	A5	1642	A	C2'-C1'	-5.36	1.47	1.53
85	A5	2494	U	C5'-C4'	5.36	1.57	1.51
60	Cr	39	ARG	NE-CZ	5.35	1.40	1.33
33	AI	8	TRP	CB-CG	5.35	1.59	1.50
37	BC	23	G	C2'-C1'	-5.35	1.47	1.53
85	A5	4602	A	O4'-C1'	5.35	1.48	1.41
85	A5	4761	G	C2'-C1'	-5.35	1.47	1.53
36	B2	400	C	C5'-C4'	5.35	1.57	1.51
86	A7	17	C	C4'-C3'	5.35	1.59	1.53
36	B2	786	G	C2'-C1'	-5.35	1.47	1.53
36	B2	1662	U	C2'-C1'	-5.35	1.47	1.53
85	A5	213	G	C3'-C2'	-5.35	1.46	1.52
36	B2	1642	U	C2'-C1'	5.35	1.59	1.53
85	A5	5061	A	O3'-P	-5.35	1.54	1.61
36	B2	1134	G	C2'-C1'	-5.35	1.47	1.53
36	B2	1377	U	O4'-C1'	5.34	1.48	1.41
85	A5	3599	A	O4'-C1'	5.34	1.48	1.41
85	A5	3636	C	O3'-P	-5.34	1.54	1.61
37	BC	54	U	O4'-C1'	5.34	1.48	1.41
85	A5	1093	C	C2'-C1'	5.34	1.59	1.53
85	A5	4213	A	C4'-O4'	-5.34	1.38	1.45
48	CD	66	TYR	CG-CD1	-5.34	1.32	1.39
85	A5	1259	G	C2'-C1'	-5.34	1.47	1.53
36	B2	1394	G	C4'-O4'	5.33	1.52	1.45
59	CZ	90	PRO	N-CD	5.33	1.55	1.47
85	A5	5014	A	P-O5'	-5.33	1.54	1.59
38	Cz	210	MET	CA-C	5.33	1.66	1.52
85	A5	2408	U	O4'-C1'	5.33	1.48	1.41
85	A5	2594	C	C2'-C1'	-5.33	1.47	1.53
19	AZ	104	ARG	N-CA	-5.33	1.35	1.46
61	Ch	38	GLY	CA-C	5.33	1.60	1.51
85	A5	1272	C	O4'-C1'	5.33	1.48	1.41
85	A5	2517	A	O4'-C1'	5.33	1.48	1.41
36	B2	1713	C	C2'-C1'	-5.33	1.47	1.53
36	B2	1801	A	C5'-C4'	5.33	1.57	1.51
11	AL	20	LYS	N-CA	-5.33	1.35	1.46
58	CW	76	VAL	CB-CG2	-5.33	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
66	Cd	114	PHE	C-O	-5.33	1.13	1.23
85	A5	717	U	O4'-C1'	5.33	1.48	1.41
85	A5	2652	G	O4'-C1'	5.33	1.48	1.41
85	A5	4897	G	O4'-C1'	5.33	1.48	1.41
50	CR	89	MET	C-N	-5.33	1.24	1.34
85	A5	1360	G	C3'-O3'	-5.33	1.34	1.42
87	A8	141	C	P-O5'	-5.33	1.54	1.59
85	A5	934	C	C2'-C1'	5.33	1.59	1.53
86	A7	84	U	C2'-C1'	5.33	1.59	1.53
36	B2	756	C	C2'-C1'	-5.32	1.47	1.53
85	A5	2350	U	O4'-C1'	5.32	1.48	1.41
85	A5	3820	G	C2'-C1'	5.32	1.59	1.53
85	A5	4360	U	O3'-P	-5.32	1.54	1.61
85	A5	4424	A	O3'-P	-5.32	1.54	1.61
60	Cr	43	LEU	CG-CD1	-5.32	1.32	1.51
85	A5	986	C	C2'-C1'	-5.32	1.47	1.53
85	A5	4976	U	O4'-C1'	5.32	1.48	1.41
36	B2	428	U	O4'-C1'	-5.32	1.34	1.41
36	B2	1369	A	O4'-C1'	5.32	1.48	1.41
36	B2	1528	G	P-O5'	-5.32	1.54	1.59
49	CQ	13	VAL	CB-CG2	-5.32	1.41	1.52
85	A5	2368	A	C4'-O4'	-5.32	1.38	1.45
87	A8	147	G	O4'-C1'	5.32	1.48	1.41
80	CH	107	GLU	CD-OE2	-5.32	1.19	1.25
36	B2	1013	U	O4'-C1'	5.32	1.48	1.41
85	A5	1947	U	C4'-C3'	5.32	1.58	1.53
85	A5	4095	G	C2'-C1'	-5.32	1.47	1.53
85	A5	4402	C	C2'-C1'	-5.32	1.47	1.53
85	A5	4535	A	O4'-C1'	5.32	1.48	1.41
85	A5	4996	C	C4'-O4'	5.32	1.52	1.45
87	A8	120	G	C2'-C1'	-5.32	1.47	1.53
36	B2	1080	A	O3'-P	-5.32	1.54	1.61
36	B2	1534	C	O4'-C1'	5.32	1.48	1.41
86	A7	83	A	C5'-C4'	5.32	1.57	1.51
1	Az	266	PHE	C-N	5.31	1.46	1.34
36	B2	1714	U	O4'-C1'	5.31	1.48	1.41
85	A5	1205	G	C2'-C1'	-5.31	1.47	1.53
36	B2	1466	G	O3'-P	-5.31	1.54	1.61
85	A5	2426	U	C2'-C1'	-5.31	1.47	1.53
36	B2	290	U	C2'-C1'	5.31	1.59	1.53
36	B2	1336	C	C2'-C1'	-5.31	1.47	1.53
69	Cg	83	CYS	C-N	5.31	1.46	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1768	C	C5'-C4'	5.31	1.57	1.51
85	A5	2222	C	C5'-C4'	5.31	1.57	1.51
85	A5	5062	G	P-O5'	5.31	1.65	1.59
35	Ah	151	PHE	CD2-CE2	-5.31	1.28	1.39
74	CC	134	PRO	N-CD	5.31	1.55	1.47
85	A5	318	A	O3'-P	-5.31	1.54	1.61
7	AM	116	LYS	N-CA	5.30	1.56	1.46
36	B2	1818	A	C5'-C4'	5.30	1.57	1.51
85	A5	3964	U	O3'-P	-5.30	1.54	1.61
37	BC	48	G	C2'-C1'	-5.30	1.47	1.53
40	CK	34	PRO	N-CD	5.30	1.55	1.47
67	Ce	17	THR	CA-CB	-5.30	1.39	1.53
87	A8	119	C	C5'-C4'	5.30	1.57	1.51
85	A5	2089	G	C5'-C4'	5.30	1.57	1.51
85	A5	2385	U	C5'-C4'	5.30	1.57	1.51
85	A5	3959	U	C2'-C1'	5.30	1.59	1.53
36	B2	1145	A	C2'-C1'	5.30	1.59	1.53
85	A5	1189	G	O4'-C1'	5.30	1.48	1.41
31	AH	111	LYS	CA-CB	5.30	1.65	1.53
85	A5	1521	C	P-O5'	-5.29	1.54	1.59
10	AN	136	PRO	N-CD	5.29	1.55	1.47
36	B2	45	A	C2'-C1'	-5.29	1.47	1.53
36	B2	470	G	O4'-C1'	5.29	1.48	1.41
36	B2	1632	G	O4'-C1'	-5.29	1.34	1.41
85	A5	3760	A	C2'-C1'	-5.29	1.47	1.53
85	A5	1566	C	C5'-C4'	5.29	1.57	1.51
85	A5	2563	C	C2'-C1'	-5.29	1.47	1.53
28	AC	197	PRO	N-CD	5.29	1.55	1.47
36	B2	275	C	C5'-C4'	5.29	1.57	1.51
36	B2	843	C	O3'-P	-5.29	1.54	1.61
36	B2	1433	C	O3'-P	5.29	1.67	1.61
47	CI	2	GLY	CA-C	5.29	1.60	1.51
85	A5	293	G	O4'-C1'	5.29	1.48	1.41
85	A5	1518	A	C2'-C1'	5.29	1.59	1.53
85	A5	4191	G	C2'-C1'	-5.29	1.47	1.53
85	A5	4639	G	O4'-C1'	5.29	1.48	1.41
85	A5	4736	C	C2'-C1'	-5.29	1.47	1.53
87	A8	110	U	O3'-P	5.29	1.67	1.61
85	A5	1735	U	O4'-C1'	5.29	1.48	1.41
85	A5	1598	C	P-O5'	-5.29	1.54	1.59
85	A5	2673	G	O4'-C1'	-5.29	1.34	1.41
85	A5	2879	A	C2'-C1'	5.29	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1098	C	O4'-C1'	5.28	1.48	1.41
85	A5	2523	G	O4'-C1'	-5.28	1.34	1.41
86	A7	29	C	P-O5'	-5.28	1.54	1.59
87	A8	82	A	O4'-C1'	-5.28	1.34	1.41
85	A5	1504	G	O3'-P	-5.28	1.54	1.61
29	AG	169	PRO	N-CD	5.28	1.55	1.47
36	B2	1672	U	O4'-C1'	5.28	1.48	1.41
85	A5	4903	G	C5'-C4'	5.28	1.57	1.51
36	B2	90	G	O4'-C1'	5.28	1.48	1.41
85	A5	1487	G	O4'-C1'	5.28	1.48	1.41
85	A5	1523	A	O4'-C1'	5.28	1.48	1.41
36	B2	140	C	C2'-C1'	-5.28	1.47	1.53
85	A5	3264	C	C5'-C4'	5.28	1.57	1.51
85	A5	1169	G	P-O5'	-5.27	1.54	1.59
36	B2	563	G	C5'-C4'	5.27	1.57	1.51
58	CW	72	THR	CA-C	5.27	1.66	1.52
74	CC	322	LEU	C-N	5.27	1.46	1.34
85	A5	3929	G	O3'-P	-5.27	1.54	1.61
1	Az	4	PHE	CD1-CE1	-5.27	1.28	1.39
36	B2	832	G	C2'-C1'	-5.27	1.47	1.53
85	A5	2848	G	P-O5'	-5.27	1.54	1.59
85	A5	4869	U	O4'-C1'	5.27	1.48	1.41
30	AF	130	ARG	N-CA	5.27	1.56	1.46
36	B2	317	C	C2'-C1'	-5.27	1.47	1.53
36	B2	346	C	P-O5'	-5.27	1.54	1.59
36	B2	693	A	C4'-O4'	5.27	1.52	1.45
36	B2	1306	U	C2'-C1'	-5.27	1.47	1.53
59	CZ	50	PRO	N-CD	5.27	1.55	1.47
85	A5	3665	G	O4'-C1'	5.27	1.48	1.41
85	A5	4726	G	O4'-C1'	5.27	1.48	1.41
36	B2	221	A	C2'-C1'	-5.27	1.47	1.53
85	A5	216	C	O4'-C1'	5.27	1.48	1.41
85	A5	1870	C	C2'-C1'	-5.27	1.47	1.53
36	B2	98	C	C4'-C3'	5.26	1.58	1.53
85	A5	1087	A	O4'-C1'	5.26	1.48	1.41
85	A5	1950	U	C2'-C1'	-5.26	1.47	1.53
85	A5	80	C	O3'-P	-5.26	1.54	1.61
85	A5	4944	C	P-O5'	-5.26	1.54	1.59
36	B2	139	C	O3'-P	-5.26	1.54	1.61
36	B2	1318	G	C2'-C1'	-5.26	1.47	1.53
36	B2	1782	G	C5'-C4'	5.26	1.57	1.51
85	A5	1919	G	C2'-C1'	-5.26	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	2449	A	C5'-C4'	5.26	1.57	1.51
85	A5	3964	U	C5'-C4'	5.26	1.57	1.51
85	A5	1653	A	C5'-C4'	5.26	1.57	1.51
85	A5	3629	A	C2'-C1'	-5.26	1.47	1.53
85	A5	4127	A	O4'-C1'	-5.26	1.34	1.41
68	Cf	6	TRP	C-N	5.26	1.46	1.34
85	A5	1166	G	O4'-C1'	5.26	1.48	1.41
36	B2	397	G	O4'-C1'	5.26	1.48	1.41
36	B2	1152	U	O4'-C1'	5.26	1.48	1.41
36	B2	1399	C	C2'-C1'	-5.26	1.47	1.53
85	A5	485	C	C2'-C1'	-5.26	1.47	1.53
85	A5	2715	G	C2'-C1'	-5.26	1.47	1.53
36	B2	1654	G	C2'-C1'	-5.25	1.47	1.53
81	CE	128	HIS	N-CA	-5.25	1.35	1.46
85	A5	3664	G	P-O5'	-5.25	1.54	1.59
85	A5	1322	A	O3'-P	-5.25	1.54	1.61
85	A5	4364	G	P-O5'	-5.25	1.54	1.59
87	A8	81	C	O4'-C1'	-5.25	1.34	1.41
36	B2	871	U	C3'-O3'	5.25	1.49	1.42
36	B2	1123	C	O4'-C1'	5.25	1.48	1.41
41	CO	131	PRO	N-CD	5.25	1.55	1.47
85	A5	1247	U	O4'-C1'	5.25	1.48	1.41
85	A5	1415	G	C4'-C3'	5.25	1.58	1.53
85	A5	3839	G	C2'-C1'	-5.25	1.47	1.53
85	A5	4976	U	P-O5'	-5.25	1.54	1.59
36	B2	21	U	O4'-C1'	5.25	1.48	1.41
36	B2	287	U	C5'-C4'	5.25	1.57	1.51
77	Cp	91	ASP	CB-CG	-5.25	1.40	1.51
85	A5	3859	G	C2'-C1'	-5.25	1.47	1.53
85	A5	918	G	C2'-C1'	-5.25	1.47	1.53
85	A5	1259	G	O3'-P	-5.25	1.54	1.61
85	A5	1500	A	C2'-C1'	-5.25	1.47	1.53
85	A5	2009	A	O3'-P	-5.25	1.54	1.61
85	A5	4372	U	C5'-C4'	5.25	1.57	1.51
36	B2	83	A	O4'-C1'	5.25	1.48	1.41
36	B2	1171	G	O3'-P	-5.25	1.54	1.61
49	CQ	142	PRO	N-CD	5.25	1.55	1.47
60	Cr	106	LEU	N-CA	-5.25	1.35	1.46
85	A5	2275	G	O3'-P	-5.25	1.54	1.61
85	A5	4377	G	O4'-C1'	-5.25	1.34	1.41
36	B2	1798	C	C5'-C4'	5.24	1.57	1.51
85	A5	3682	A	C2'-C1'	-5.24	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4698	C	C5'-C4'	5.24	1.57	1.51
36	B2	1606	G	O4'-C1'	-5.24	1.34	1.41
85	A5	731	G	O4'-C1'	5.24	1.48	1.41
85	A5	962	C	C2'-C1'	-5.24	1.47	1.53
85	A5	4202	U	O4'-C1'	5.24	1.48	1.41
85	A5	4882	U	C2'-C1'	5.24	1.59	1.53
44	CM	69	HIS	N-CA	-5.24	1.35	1.46
85	A5	2734	U	O4'-C1'	5.24	1.48	1.41
36	B2	527	C	O4'-C1'	5.24	1.48	1.41
36	B2	734	C	O3'-P	-5.24	1.54	1.61
36	B2	1268	C	P-O5'	-5.24	1.54	1.59
85	A5	2388	A	C2'-C1'	-5.24	1.47	1.53
85	A5	4175	G	C2'-C1'	-5.24	1.47	1.53
85	A5	4234	A	C5'-C4'	5.24	1.57	1.51
36	B2	587	A	C2'-C1'	-5.23	1.47	1.53
36	B2	1735	A	C2'-C1'	-5.23	1.47	1.53
85	A5	1442	C	C2'-C1'	-5.23	1.47	1.53
85	A5	1814	C	O4'-C1'	5.23	1.48	1.41
85	A5	2681	G	C5'-C4'	5.23	1.57	1.51
26	AJ	89	GLU	CG-CD	-5.23	1.44	1.51
36	B2	1422	G	C2'-C1'	5.23	1.59	1.53
85	A5	642	G	O3'-P	-5.23	1.54	1.61
85	A5	1277	G	O4'-C1'	5.23	1.48	1.41
85	A5	1429	C	C3'-O3'	5.23	1.49	1.42
85	A5	2414	G	O3'-P	-5.23	1.54	1.61
85	A5	4495	G	O4'-C1'	5.23	1.48	1.41
37	BC	13	C	O4'-C1'	5.23	1.48	1.41
85	A5	2477	A	O4'-C1'	5.23	1.48	1.41
85	A5	4312	U	O4'-C1'	5.23	1.48	1.41
85	A5	4526	U	C5'-C4'	5.23	1.57	1.51
85	A5	4972	U	O3'-P	-5.23	1.54	1.61
85	A5	1416	G	O4'-C1'	5.23	1.48	1.41
36	B2	336	A	C2'-C1'	5.23	1.59	1.53
36	B2	1538	C	O3'-P	-5.23	1.54	1.61
85	A5	1401	C	C2'-C1'	5.23	1.59	1.53
85	A5	2325	C	C2'-C1'	-5.23	1.47	1.53
85	A5	2900	U	O4'-C1'	5.23	1.48	1.41
85	A5	3900	G	C2'-C1'	-5.23	1.47	1.53
85	A5	2568	C	C2'-C1'	-5.23	1.47	1.53
87	A8	6	C	C5'-C4'	5.22	1.57	1.51
36	B2	1528	G	C5'-C4'	-5.22	1.45	1.51
85	A5	85	G	C2'-C1'	-5.22	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	271	C	P-O5'	-5.22	1.54	1.59
39	Cq	24	TYR	N-CA	5.22	1.56	1.46
85	A5	192	G	C2'-C1'	-5.22	1.47	1.53
85	A5	4185	G	C2'-C1'	-5.22	1.47	1.53
36	B2	82	G	O3'-P	-5.22	1.54	1.61
36	B2	1367	U	C2'-C1'	-5.22	1.47	1.53
36	B2	1420	G	O4'-C1'	5.22	1.48	1.41
42	CL	128	PRO	N-CD	5.22	1.55	1.47
85	A5	78	U	O4'-C1'	5.22	1.48	1.41
85	A5	955	G	C5'-C4'	5.22	1.57	1.51
85	A5	1531	U	C2'-C1'	-5.22	1.47	1.53
85	A5	1605	G	P-O5'	-5.22	1.54	1.59
85	A5	1693	U	O3'-P	-5.22	1.54	1.61
85	A5	1908	A	C5'-C4'	5.22	1.57	1.51
85	A5	2904	U	C2'-C1'	5.22	1.59	1.53
85	A5	4644	G	C2'-C1'	-5.22	1.47	1.53
85	A5	4722	G	O3'-P	-5.22	1.54	1.61
36	B2	1543	U	O4'-C1'	5.22	1.48	1.41
85	A5	2734	U	C2'-C1'	-5.22	1.47	1.53
36	B2	78	C	C3'-C2'	5.22	1.58	1.52
36	B2	370	G	C4'-C3'	5.22	1.58	1.53
36	B2	1614	A	P-O5'	-5.22	1.54	1.59
85	A5	1621	A	O4'-C1'	5.22	1.48	1.41
85	A5	2887	U	O4'-C1'	-5.22	1.34	1.41
85	A5	3959	U	C4'-C3'	5.21	1.58	1.53
85	A5	489	C	C2'-C1'	-5.21	1.47	1.53
85	A5	1261	G	C2'-C1'	-5.21	1.47	1.53
85	A5	2265	G	O3'-P	-5.21	1.54	1.61
36	B2	1172	U	O3'-P	-5.21	1.54	1.61
36	B2	1772	C	C3'-C2'	-5.21	1.47	1.52
60	Cr	36	ASN	C-N	5.21	1.46	1.34
85	A5	1750	G	O4'-C1'	5.21	1.48	1.41
85	A5	3707	U	C5'-C4'	5.21	1.57	1.51
36	B2	672	A	C4'-C3'	5.21	1.58	1.53
85	A5	3919	C	C2'-C1'	-5.21	1.47	1.53
36	B2	921	G	O4'-C1'	5.20	1.48	1.41
36	B2	1641	A	O3'-P	-5.20	1.54	1.61
36	B2	1643	U	C2'-C1'	-5.20	1.47	1.53
57	CY	62	TYR	CE1-CZ	-5.20	1.31	1.38
82	CG	108	GLN	C-N	-5.20	1.22	1.34
85	A5	109	G	O4'-C1'	5.20	1.48	1.41
36	B2	1767	C	C4'-C3'	5.20	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	936	G	C5'-C4'	5.20	1.57	1.51
66	Cd	111	VAL	CB-CG1	-5.20	1.42	1.52
85	A5	212	A	O4'-C1'	5.20	1.48	1.41
85	A5	420	A	O4'-C1'	5.20	1.48	1.41
85	A5	2747	U	C4'-C3'	5.20	1.58	1.53
85	A5	4075	U	O3'-P	-5.20	1.54	1.61
87	A8	142	U	C2'-C1'	5.20	1.59	1.53
38	Cz	27	LYS	C-N	5.20	1.46	1.34
85	A5	1445	U	C2'-C1'	-5.20	1.47	1.53
85	A5	4089	G	O3'-P	-5.20	1.54	1.61
85	A5	2526	C	O3'-P	-5.20	1.54	1.61
85	A5	4197	G	O4'-C1'	5.20	1.48	1.41
36	B2	359	U	C5'-C4'	5.20	1.57	1.51
57	CY	43	ASN	N-CA	-5.20	1.35	1.46
85	A5	1049	C	C5'-C4'	5.20	1.57	1.51
85	A5	1899	G	P-O5'	-5.20	1.54	1.59
86	A7	41	G	O3'-P	-5.20	1.54	1.61
85	A5	1369	C	O4'-C1'	5.19	1.48	1.41
47	CI	194	GLY	C-N	-5.19	1.22	1.34
85	A5	698	G	C2'-C1'	-5.19	1.47	1.53
85	A5	2239	C	P-O5'	-5.19	1.54	1.59
36	B2	1210	G	O4'-C1'	-5.19	1.34	1.41
36	B2	1236	G	C4'-C3'	-5.19	1.47	1.52
85	A5	279	A	P-O5'	-5.19	1.54	1.59
36	B2	1568	C	C5'-C4'	5.19	1.57	1.51
85	A5	3949	A	O4'-C1'	5.19	1.48	1.41
6	AX	139	GLU	CB-CG	5.19	1.62	1.52
36	B2	112	U	C2'-C1'	5.19	1.59	1.53
36	B2	882	U	C4'-C3'	5.19	1.58	1.53
36	B2	1068	G	C2'-C1'	-5.19	1.47	1.53
73	Cl	37	TYR	CG-CD2	-5.19	1.32	1.39
85	A5	1306	C	O4'-C1'	5.19	1.48	1.41
85	A5	2311	C	O3'-P	-5.19	1.54	1.61
85	A5	2685	C	P-O5'	-5.19	1.54	1.59
1	Az	478	PHE	CD2-CE2	-5.19	1.28	1.39
86	A7	51	G	P-O5'	5.19	1.65	1.59
19	AZ	104	ARG	CG-CD	5.18	1.65	1.51
39	Cq	68	HIS	C-N	5.18	1.46	1.34
53	CT	80	VAL	CA-C	5.18	1.66	1.52
85	A5	2456	G	O3'-P	-5.18	1.54	1.61
85	A5	2677	G	O4'-C1'	5.18	1.48	1.41
15	AB	41	ILE	N-CA	-5.18	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	CE	126	LEU	CA-C	-5.18	1.39	1.52
85	A5	1097	C	C5'-C4'	5.18	1.57	1.51
85	A5	1415	G	C5'-C4'	5.18	1.57	1.51
85	A5	2828	U	C5'-C4'	5.18	1.57	1.51
85	A5	4284	C	C4'-C3'	5.18	1.58	1.53
85	A5	5059	C	C2'-C1'	-5.18	1.47	1.53
85	A5	2865	U	O4'-C1'	5.18	1.48	1.41
4	AK	35	LEU	N-CA	-5.18	1.35	1.46
36	B2	112	U	O3'-P	-5.18	1.54	1.61
85	A5	3825	A	O4'-C1'	5.18	1.48	1.41
36	B2	607	U	O4'-C1'	5.18	1.48	1.41
36	B2	1853	C	P-O5'	-5.18	1.54	1.59
85	A5	4972	U	C2'-C1'	-5.18	1.47	1.53
37	BC	72	A	O4'-C1'	5.17	1.48	1.41
36	B2	795	A	O4'-C1'	5.17	1.48	1.41
85	A5	2724	G	C5'-C4'	5.17	1.57	1.51
36	B2	865	A	C5'-C4'	5.17	1.57	1.51
36	B2	102	A	O3'-P	-5.17	1.54	1.61
36	B2	1685	U	C2'-C1'	-5.17	1.47	1.53
36	B2	1161	U	C2'-C1'	5.17	1.59	1.53
45	Ca	52	TYR	CE2-CZ	-5.17	1.31	1.38
85	A5	4695	C	O3'-P	-5.17	1.54	1.61
49	CQ	91	ARG	N-CA	-5.17	1.36	1.46
85	A5	3768	U	C2'-C1'	-5.17	1.47	1.53
12	AR	89	SER	N-CA	5.16	1.56	1.46
36	B2	739	C	O3'-P	-5.16	1.54	1.61
48	CD	43	LYS	CA-CB	-5.16	1.42	1.53
85	A5	2057	A	C2'-C1'	-5.16	1.47	1.53
17	AV	31	SER	C-N	5.16	1.46	1.34
20	Aa	97	PRO	CA-C	5.16	1.63	1.52
85	A5	1434	G	O4'-C1'	5.16	1.48	1.41
36	B2	857	U	P-O5'	5.16	1.65	1.59
85	A5	3803	A	C5'-C4'	5.16	1.57	1.51
36	B2	202	G	P-O5'	-5.16	1.54	1.59
85	A5	4248	A	O4'-C1'	5.16	1.48	1.41
36	B2	982	G	C2'-C1'	-5.16	1.47	1.53
85	A5	347	A	O4'-C1'	5.16	1.48	1.41
36	B2	1203	G	O4'-C1'	5.16	1.48	1.41
85	A5	187	U	C2'-C1'	-5.15	1.47	1.53
85	A5	468	U	C2'-C1'	5.15	1.59	1.53
85	A5	2687	U	O4'-C1'	5.15	1.48	1.41
46	CN	127	TYR	CE2-CZ	-5.15	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	329	A	C5'-C4'	5.15	1.57	1.51
85	A5	1052	G	O3'-P	-5.15	1.54	1.61
85	A5	1425	G	C5'-C4'	5.15	1.57	1.51
51	CA	197	PRO	N-CD	5.15	1.55	1.47
36	B2	220	U	P-O5'	-5.15	1.54	1.59
85	A5	2516	G	C2'-C1'	-5.15	1.47	1.53
85	A5	2581	A	O3'-P	-5.15	1.54	1.61
36	B2	1315	U	C2'-C1'	5.15	1.59	1.53
54	CP	138	PRO	N-CD	5.14	1.55	1.47
85	A5	2647	A	C2'-C1'	-5.14	1.47	1.53
53	CT	24	VAL	CA-CB	-5.14	1.44	1.54
85	A5	176	G	O4'-C1'	5.14	1.48	1.41
85	A5	3883	U	O4'-C1'	5.14	1.48	1.41
85	A5	4614	G	C4'-C3'	5.14	1.58	1.53
85	A5	4961	G	C2'-C1'	-5.14	1.47	1.53
85	A5	2466	G	O4'-C1'	5.14	1.48	1.41
36	B2	1384	C	O4'-C1'	5.14	1.48	1.41
36	B2	1623	A	C4'-C3'	-5.14	1.47	1.52
85	A5	2047	A	C5'-C4'	5.14	1.57	1.51
85	A5	2750	G	O4'-C1'	5.14	1.48	1.41
85	A5	2939	G	O3'-P	-5.14	1.54	1.61
36	B2	800	U	C4'-C3'	-5.14	1.47	1.52
85	A5	33	A	O3'-P	-5.14	1.54	1.61
85	A5	2088	A	O3'-P	-5.14	1.54	1.61
85	A5	4484	A	C2'-C1'	-5.14	1.47	1.53
85	A5	4636	U	C2'-C1'	5.14	1.59	1.53
36	B2	1074	C	O4'-C1'	5.13	1.48	1.41
85	A5	111	C	O3'-P	-5.13	1.54	1.61
85	A5	968	C	O4'-C1'	5.13	1.48	1.41
85	A5	951	G	O3'-P	-5.13	1.54	1.61
36	B2	1283	C	O3'-P	-5.13	1.54	1.61
36	B2	1343	U	O3'-P	-5.13	1.54	1.61
37	BC	2	G	O3'-P	-5.13	1.54	1.61
85	A5	84	A	O4'-C1'	5.13	1.48	1.41
85	A5	1389	U	O4'-C1'	5.13	1.48	1.41
85	A5	1595	G	C2'-C1'	-5.13	1.47	1.53
85	A5	2737	C	O3'-P	-5.13	1.54	1.61
85	A5	4986	G	C2'-C1'	5.13	1.58	1.53
36	B2	1421	A	O4'-C1'	5.13	1.48	1.41
36	B2	1852	C	C2'-C1'	-5.13	1.47	1.53
36	B2	553	U	P-O5'	-5.13	1.54	1.59
85	A5	2453	A	P-O5'	-5.13	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	4967	A	O4'-C1'	5.13	1.48	1.41
85	A5	3941	G	C5'-C4'	5.12	1.57	1.51
85	A5	4996	C	C5'-C4'	5.12	1.57	1.51
4	AK	93	THR	CA-C	5.12	1.66	1.52
36	B2	1464	C	O3'-P	-5.12	1.55	1.61
85	A5	759	G	O4'-C1'	-5.12	1.34	1.41
85	A5	1207	C	C5'-C4'	5.12	1.57	1.51
85	A5	1241	C	C5'-C4'	5.12	1.57	1.51
85	A5	4730	C	P-O5'	5.12	1.64	1.59
36	B2	151	C	C2'-C1'	-5.12	1.47	1.53
36	B2	1718	G	P-O5'	-5.12	1.54	1.59
61	Ch	115	PRO	N-CD	5.12	1.55	1.47
85	A5	3740	G	C5'-C4'	5.12	1.57	1.51
6	AX	115	ILE	CA-C	-5.12	1.39	1.52
36	B2	669	A	O3'-P	-5.12	1.55	1.61
85	A5	4081	G	C2'-C1'	-5.12	1.47	1.53
85	A5	4699	U	O3'-P	-5.12	1.55	1.61
85	A5	1549	G	O4'-C1'	5.12	1.48	1.41
85	A5	3568	G	C4'-C3'	5.12	1.58	1.53
85	A5	5003	U	C5'-C4'	5.12	1.57	1.51
85	A5	637	G	O4'-C1'	5.12	1.48	1.41
85	A5	1222	A	C2'-C1'	5.12	1.58	1.53
85	A5	1611	C	C2'-C1'	5.12	1.58	1.53
85	A5	1662	C	C5'-C4'	5.12	1.57	1.51
85	A5	2657	G	C2'-C1'	-5.12	1.47	1.53
85	A5	3711	A	O4'-C1'	-5.12	1.35	1.41
74	CC	4	ALA	C-N	5.11	1.45	1.34
36	B2	95	G	O4'-C1'	5.11	1.48	1.41
36	B2	1814	G	C5'-C4'	5.11	1.57	1.51
85	A5	2080	U	O4'-C1'	5.11	1.48	1.41
85	A5	4322	G	O4'-C1'	5.11	1.48	1.41
36	B2	577	U	C2'-C1'	-5.11	1.47	1.53
36	B2	1332	A	P-O5'	-5.11	1.54	1.59
65	Cc	88	TYR	CE2-CZ	-5.11	1.31	1.38
85	A5	297	U	O4'-C1'	5.11	1.48	1.41
85	A5	3863	C	O3'-P	-5.11	1.55	1.61
36	B2	1424	G	C5'-C4'	5.11	1.57	1.51
36	B2	821	G	C2'-C1'	5.11	1.58	1.53
36	B2	1060	A	C2'-C1'	-5.11	1.47	1.53
36	B2	1691	U	C2'-C1'	-5.11	1.47	1.53
85	A5	1162	G	C2'-C1'	-5.11	1.47	1.53
85	A5	3896	C	O3'-P	-5.11	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1607	A	O4'-C1'	5.10	1.48	1.41
85	A5	1142	G	C4'-C3'	5.10	1.58	1.53
85	A5	1679	A	O4'-C1'	5.10	1.48	1.41
85	A5	4309	G	C5'-C4'	5.10	1.57	1.51
58	CW	24	THR	N-CA	-5.10	1.36	1.46
85	A5	1294	A	P-O5'	-5.10	1.54	1.59
85	A5	3933	G	C2'-C1'	-5.10	1.47	1.53
36	B2	1343	U	C2'-C1'	-5.10	1.47	1.53
85	A5	1231	C	O4'-C1'	5.10	1.48	1.41
85	A5	4668	U	O3'-P	-5.10	1.55	1.61
36	B2	1348	G	O3'-P	-5.10	1.55	1.61
37	BC	33	C	C2'-C1'	-5.10	1.47	1.53
53	CT	13	TYR	CE1-CZ	-5.10	1.31	1.38
85	A5	1197	C	O4'-C1'	5.10	1.48	1.41
85	A5	3702	A	C2'-C1'	-5.10	1.47	1.53
85	A5	4572	U	O4'-C1'	5.10	1.48	1.41
36	B2	1348	G	C2'-C1'	5.10	1.58	1.53
45	Ca	52	TYR	CD2-CE2	-5.10	1.31	1.39
48	CD	12	TYR	CE2-CZ	-5.10	1.31	1.38
54	CP	110	ASP	CA-C	-5.10	1.39	1.52
85	A5	3682	A	C5'-C4'	5.10	1.57	1.51
85	A5	3705	G	O3'-P	-5.10	1.55	1.61
85	A5	3823	G	C5'-C4'	5.10	1.57	1.51
11	AL	152	LYS	C-N	5.09	1.45	1.34
36	B2	1033	G	O3'-P	-5.09	1.55	1.61
85	A5	4311	A	C2'-C1'	5.09	1.58	1.53
85	A5	1274	A	C2'-C1'	5.09	1.58	1.53
85	A5	1881	C	C2'-C1'	-5.09	1.47	1.53
85	A5	713	C	O4'-C1'	5.09	1.48	1.41
36	B2	552	G	O4'-C1'	5.09	1.48	1.41
85	A5	1940	G	C5'-C4'	5.09	1.57	1.51
85	A5	2516	G	C5'-C4'	5.09	1.57	1.51
86	A7	106	G	O4'-C1'	-5.09	1.35	1.41
1	Az	794	PHE	CD2-CE2	-5.09	1.29	1.39
15	AB	155	TYR	CD2-CE2	-5.09	1.31	1.39
85	A5	3954	A	C2'-C1'	-5.09	1.47	1.53
85	A5	4448	G	O4'-C1'	5.09	1.48	1.41
36	B2	271	C	C4'-C3'	5.09	1.58	1.53
36	B2	471	G	C2'-C1'	5.09	1.58	1.53
36	B2	629	A	C5'-C4'	5.09	1.57	1.51
85	A5	1547	A	C2'-C1'	5.09	1.58	1.53
85	A5	4191	G	O3'-P	-5.09	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1152	G	O3'-P	-5.08	1.55	1.61
85	A5	114	G	O4'-C1'	5.08	1.48	1.41
85	A5	5035	U	C2'-C1'	-5.08	1.47	1.53
53	CT	137	GLU	CD-OE1	-5.08	1.20	1.25
85	A5	287	U	C2'-C1'	-5.08	1.47	1.53
85	A5	516	C	C4'-C3'	5.08	1.58	1.53
85	A5	3737	A	C2'-C1'	-5.08	1.47	1.53
85	A5	4160	C	O3'-P	-5.08	1.55	1.61
36	B2	1246	A	C2'-C1'	-5.08	1.47	1.53
85	A5	1590	C	C5'-C4'	5.08	1.57	1.51
85	A5	2268	A	C2'-C1'	-5.08	1.47	1.53
19	AZ	103	HIS	C-N	-5.08	1.22	1.34
36	B2	1106	C	C5'-C4'	5.08	1.57	1.51
85	A5	2885	A	O4'-C1'	5.08	1.48	1.41
85	A5	4273	A	C5'-C4'	5.08	1.57	1.51
85	A5	4296	U	C2'-C1'	-5.08	1.47	1.53
87	A8	155	C	P-O5'	-5.08	1.54	1.59
42	CL	4	SER	N-CA	-5.08	1.36	1.46
85	A5	3290	G	C4'-C3'	5.08	1.58	1.53
8	AS	6	PRO	N-CA	5.07	1.55	1.47
36	B2	1181	A	C5'-C4'	5.07	1.57	1.51
49	CQ	12	LYS	N-CA	-5.07	1.36	1.46
74	CC	25	PRO	N-CD	5.07	1.54	1.47
85	A5	1095	A	O4'-C1'	5.07	1.48	1.41
85	A5	4145	C	C5'-C4'	5.07	1.57	1.51
36	B2	1102	G	O4'-C1'	5.07	1.48	1.41
52	CS	20	PRO	CA-C	-5.07	1.42	1.52
85	A5	2883	G	O4'-C1'	5.07	1.48	1.41
36	B2	746	C	O4'-C1'	5.07	1.48	1.41
36	B2	799	U	O4'-C1'	5.07	1.48	1.41
36	B2	967	C	O4'-C1'	5.07	1.48	1.41
36	B2	1227	G	C5'-C4'	5.07	1.57	1.51
85	A5	1877	G	C5'-C4'	5.07	1.57	1.51
87	A8	29	G	C4'-C3'	5.07	1.58	1.53
36	B2	1362	U	O4'-C1'	-5.07	1.35	1.41
36	B2	1494	U	O4'-C1'	-5.07	1.35	1.41
39	Cq	127	ASN	CA-C	-5.07	1.39	1.52
78	Co	67	VAL	C-N	5.07	1.45	1.34
81	CE	27	VAL	CA-C	-5.07	1.39	1.52
85	A5	2595	C	C2'-C1'	-5.07	1.47	1.53
37	BC	59	A	O4'-C1'	5.07	1.48	1.41
41	CO	4	VAL	CB-CG2	-5.07	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
85	A5	1732	C	O4'-C1'	5.07	1.48	1.41
85	A5	2012	A	C5'-C4'	5.07	1.57	1.51
85	A5	3672	G	C5'-C4'	5.07	1.57	1.51
36	B2	691	G	C2'-C1'	-5.07	1.47	1.53
36	B2	855	G	O3'-P	-5.07	1.55	1.61
36	B2	955	A	C5'-C4'	5.07	1.57	1.51
85	A5	1071	C	C4'-C3'	5.07	1.58	1.53
85	A5	3821	A	C2'-C1'	5.07	1.58	1.53
85	A5	906	C	C5'-C4'	5.06	1.57	1.51
85	A5	1807	C	C2'-C1'	-5.06	1.47	1.53
85	A5	3874	G	C2'-C1'	-5.06	1.47	1.53
31	AH	118	ARG	CA-CB	-5.06	1.42	1.53
85	A5	1391	A	P-O5'	-5.06	1.54	1.59
85	A5	3908	A	C2'-C1'	-5.06	1.47	1.53
36	B2	404	G	C5'-C4'	5.06	1.57	1.51
85	A5	1530	G	C2'-C1'	-5.06	1.47	1.53
85	A5	2059	C	O3'-P	-5.06	1.55	1.61
85	A5	2643	G	C2'-C1'	-5.06	1.47	1.53
39	Cq	234	VAL	CA-CB	-5.06	1.44	1.54
85	A5	1184	A	O4'-C1'	5.06	1.48	1.41
85	A5	1848	C	C2'-C1'	-5.06	1.47	1.53
85	A5	2404	A	C2'-C1'	-5.06	1.47	1.53
85	A5	2781	G	P-O5'	-5.06	1.54	1.59
87	A8	40	A	O4'-C1'	5.06	1.48	1.41
36	B2	113	G	C4'-C3'	5.06	1.58	1.53
85	A5	346	G	C4'-C3'	5.06	1.58	1.53
85	A5	2516	G	O4'-C1'	5.06	1.48	1.41
36	B2	307	G	O3'-P	-5.05	1.55	1.61
63	CB	83	PRO	N-CD	5.05	1.54	1.47
85	A5	3715	U	P-O5'	-5.05	1.54	1.59
74	CC	266	THR	CA-C	-5.05	1.39	1.52
36	B2	1753	C	C2'-C1'	-5.05	1.47	1.53
85	A5	86	U	O3'-P	-5.05	1.55	1.61
85	A5	5020	G	O4'-C1'	5.05	1.48	1.41
36	B2	682	U	P-O5'	-5.05	1.54	1.59
36	B2	1774	C	O4'-C1'	5.05	1.48	1.41
37	BC	18	G	C2'-C1'	-5.05	1.47	1.53
53	CT	30	TYR	CD1-CE1	-5.05	1.31	1.39
81	CE	126	LEU	N-CA	5.05	1.56	1.46
85	A5	71	C	O4'-C1'	-5.05	1.35	1.41
85	A5	1170	G	C2'-C1'	-5.05	1.47	1.53
85	A5	1751	A	C5'-C4'	5.05	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
87	A8	151	G	C2'-C1'	5.05	1.58	1.53
36	B2	116	U	O4'-C1'	5.04	1.48	1.41
36	B2	370	G	O3'-P	-5.04	1.55	1.61
40	CK	30	PRO	CA-C	-5.04	1.42	1.52
85	A5	1032	U	O3'-P	-5.04	1.55	1.61
85	A5	2756	G	C4'-C3'	5.04	1.58	1.53
85	A5	3656	A	O3'-P	-5.04	1.55	1.61
85	A5	3955	G	P-O5'	-5.04	1.54	1.59
85	A5	68	U	P-O5'	-5.04	1.54	1.59
85	A5	639	U	O4'-C1'	5.04	1.48	1.41
49	CQ	7	HIS	CA-C	5.04	1.66	1.52
85	A5	4229	U	C2'-C1'	-5.04	1.47	1.53
19	AZ	104	ARG	CB-CG	-5.04	1.39	1.52
36	B2	1551	U	O3'-P	-5.04	1.55	1.61
60	Cr	106	LEU	C-N	5.04	1.45	1.34
85	A5	83	C	C2'-C1'	-5.04	1.47	1.53
14	AT	82	ARG	CD-NE	5.04	1.55	1.46
36	B2	982	G	C5'-C4'	5.04	1.57	1.51
85	A5	651	C	O4'-C1'	5.04	1.48	1.41
85	A5	4068	U	C3'-O3'	5.04	1.49	1.42
85	A5	4589	A	O4'-C1'	5.04	1.48	1.41
85	A5	4744	A	C2'-C1'	-5.04	1.47	1.53
36	B2	1781	A	C5'-C4'	5.03	1.57	1.51
85	A5	182	G	C5'-C4'	5.03	1.57	1.51
85	A5	4531	U	C2'-C1'	-5.03	1.47	1.53
85	A5	4623	G	O4'-C1'	5.03	1.48	1.41
36	B2	404	G	O4'-C1'	-5.03	1.35	1.41
36	B2	677	G	O4'-C1'	5.03	1.48	1.41
85	A5	4212	A	C2'-C1'	-5.03	1.47	1.53
85	A5	4670	C	O3'-P	-5.03	1.55	1.61
36	B2	1350	U	O4'-C1'	5.03	1.48	1.41
85	A5	59	A	O4'-C1'	5.03	1.48	1.41
85	A5	1247	U	C2'-C1'	-5.03	1.47	1.53
85	A5	2885	A	C2'-C1'	-5.03	1.47	1.53
85	A5	4492	U	O3'-P	-5.03	1.55	1.61
85	A5	4718	G	O4'-C1'	5.03	1.48	1.41
87	A8	92	U	O4'-C1'	5.03	1.48	1.41
64	CF	103	PRO	N-CD	5.03	1.54	1.47
85	A5	2301	G	O4'-C1'	5.03	1.48	1.41
85	A5	2322	G	P-O5'	-5.03	1.54	1.59
36	B2	545	A	C2'-C1'	5.03	1.58	1.53
36	B2	1694	U	C5'-C4'	5.03	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
63	CB	112	ASP	CB-CG	-5.03	1.41	1.51
85	A5	1286	C	C5'-C4'	5.03	1.57	1.51
36	B2	1700	C	C2'-C1'	5.03	1.58	1.53
85	A5	369	G	C2'-C1'	-5.03	1.47	1.53
85	A5	743	G	O4'-C1'	5.03	1.48	1.41
85	A5	1892	A	C4'-C3'	5.03	1.58	1.53
85	A5	2886	U	O4'-C1'	5.03	1.48	1.41
85	A5	1212	G	O4'-C1'	-5.02	1.35	1.41
85	A5	2324	C	O3'-P	-5.02	1.55	1.61
85	A5	4007	G	C5'-C4'	5.02	1.57	1.51
85	A5	4504	C	C2'-C1'	-5.02	1.47	1.53
85	A5	2578	G	C3'-C2'	-5.02	1.47	1.52
87	A8	35	C	C5'-C4'	5.02	1.57	1.51
87	A8	137	A	C5'-C4'	5.02	1.57	1.51
4	AK	31	LYS	N-CA	-5.02	1.36	1.46
36	B2	1481	G	O3'-P	-5.02	1.55	1.61
36	B2	1864	U	O4'-C1'	5.02	1.48	1.41
85	A5	4332	C	P-O5'	-5.02	1.54	1.59
85	A5	1574	G	C2'-C1'	5.02	1.58	1.53
85	A5	2703	G	C2'-C1'	-5.02	1.47	1.53
85	A5	4476	C	O4'-C1'	-5.02	1.35	1.41
86	A7	119	U	C2'-C1'	-5.02	1.47	1.53
36	B2	1123	C	O3'-P	-5.02	1.55	1.61
36	B2	1554	C	O3'-P	-5.02	1.55	1.61
36	B2	407	G	O4'-C1'	-5.01	1.35	1.41
36	B2	671	A	O3'-P	-5.01	1.55	1.61
36	B2	684	G	C4'-C3'	5.01	1.58	1.53
85	A5	2899	C	C2'-C1'	-5.01	1.47	1.53
85	A5	5008	C	O3'-P	-5.01	1.55	1.61
36	B2	178	C	C3'-O3'	5.01	1.49	1.42
36	B2	658	U	C2'-C1'	-5.01	1.47	1.53
36	B2	1730	U	C2'-C1'	-5.01	1.47	1.53
85	A5	2112	G	P-O5'	-5.01	1.54	1.59
85	A5	2268	A	O4'-C1'	5.01	1.48	1.41
36	B2	770	U	C5'-C4'	5.01	1.57	1.51
37	BC	70	C	P-O5'	-5.01	1.54	1.59
85	A5	2333	G	C5'-C4'	5.01	1.57	1.51
85	A5	3824	A	O4'-C1'	5.01	1.48	1.41
85	A5	4525	C	C2'-C1'	-5.01	1.47	1.53
85	A5	5028	G	P-O5'	-5.01	1.54	1.59
15	AB	221	PRO	N-CD	5.01	1.54	1.47
36	B2	1403	C	O4'-C1'	-5.01	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	B2	1563	G	C4'-C3'	5.01	1.58	1.53
37	BC	54	U	O3'-P	-5.01	1.55	1.61
85	A5	161	G	P-O5'	-5.01	1.54	1.59
85	A5	2101	C	C2'-C1'	-5.01	1.47	1.53
85	A5	2396	A	P-O5'	-5.01	1.54	1.59
16	AA	200	ASP	CA-C	-5.00	1.40	1.52
36	B2	1443	C	O3'-P	-5.00	1.55	1.61
85	A5	1364	U	C2'-C1'	5.00	1.58	1.53
85	A5	1588	U	O4'-C1'	5.00	1.48	1.41
85	A5	2123	C	C2'-C1'	5.00	1.58	1.53
85	A5	2415	U	C2'-C1'	-5.00	1.47	1.53
36	B2	225	G	O3'-P	-5.00	1.55	1.61
36	B2	449	A	O4'-C1'	5.00	1.48	1.41
73	Cl	37	TYR	CG-CD1	-5.00	1.32	1.39
85	A5	393	U	C2'-C1'	5.00	1.58	1.53
85	A5	2110	C	C3'-O3'	5.00	1.49	1.42
85	A5	2686	G	O3'-P	-5.00	1.55	1.61
85	A5	2873	U	O4'-C1'	5.00	1.48	1.41
85	A5	3604	A	O3'-P	-5.00	1.55	1.61
36	B2	661	U	C5'-C4'	5.00	1.57	1.51
36	B2	1519	U	O3'-P	-5.00	1.55	1.61
85	A5	1359	G	C4'-C3'	-5.00	1.47	1.52
85	A5	4157	A	C2'-C1'	-5.00	1.47	1.53

All (11021) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	AH	109	ARG	NE-CZ-NH2	-53.46	93.57	120.30
31	AH	109	ARG	NE-CZ-NH1	42.77	141.69	120.30
63	CB	248	LEU	O-C-N	-38.89	60.47	122.70
36	B2	1780	G	P-O3'-C3'	38.27	165.63	119.70
49	CQ	6	ARG	NE-CZ-NH2	-36.36	102.12	120.30
36	B2	1118	C	O4'-C1'-N1	35.26	136.41	108.20
85	A5	1274	A	P-O3'-C3'	32.93	159.22	119.70
36	B2	592	C	O4'-C1'-N1	32.58	134.26	108.20
85	A5	2124	G	P-O3'-C3'	32.37	158.55	119.70
85	A5	2760	G	P-O3'-C3'	32.15	158.28	119.70
85	A5	2546	G	P-O3'-C3'	31.51	157.51	119.70
36	B2	67	C	O4'-C1'-N1	31.22	133.18	108.20
85	A5	4423	U	O4'-C1'-N1	31.16	133.13	108.20
85	A5	245	C	O4'-C1'-N1	30.88	132.90	108.20
36	B2	72	C	O4'-C1'-N1	30.45	132.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	5060	A	P-O3'-C3'	30.37	156.14	119.70
85	A5	1442	C	P-O3'-C3'	30.07	155.79	119.70
37	BC	16	C	P-O3'-C3'	29.98	155.68	119.70
85	A5	1360	G	P-O3'-C3'	29.79	155.44	119.70
40	CK	2	PRO	N-CA-CB	-29.71	67.65	103.30
31	AH	118	ARG	NE-CZ-NH1	29.66	135.13	120.30
85	A5	971	U	P-O3'-C3'	29.29	154.85	119.70
85	A5	4749	C	O4'-C1'-N1	29.19	131.55	108.20
36	B2	688	U	O4'-C1'-N1	29.04	131.43	108.20
85	A5	1481	C	O4'-C1'-N1	28.93	131.35	108.20
36	B2	1553	C	O4'-C1'-N1	28.90	131.32	108.20
85	A5	3968	U	P-O3'-C3'	28.68	154.12	119.70
36	B2	887	U	P-O3'-C3'	28.34	153.70	119.70
36	B2	742	U	O4'-C1'-N1	28.32	130.86	108.20
36	B2	797	C	O4'-C1'-N1	28.31	130.85	108.20
85	A5	955	G	P-O3'-C3'	28.19	153.53	119.70
85	A5	183	C	P-O3'-C3'	27.93	153.21	119.70
85	A5	971	U	O4'-C1'-N1	27.76	130.41	108.20
36	B2	1303	C	O4'-C1'-N1	27.75	130.40	108.20
85	A5	4989	U	P-O3'-C3'	27.54	152.74	119.70
36	B2	1117	C	O4'-C1'-N1	27.45	130.16	108.20
36	B2	1823	A	P-O3'-C3'	27.30	152.46	119.70
36	B2	1084	A	P-O3'-C3'	27.27	152.42	119.70
36	B2	428	U	O4'-C1'-N1	27.26	130.01	108.20
85	A5	711	A	P-O3'-C3'	27.18	152.32	119.70
85	A5	2761	U	P-O3'-C3'	27.10	152.22	119.70
85	A5	2091	C	O4'-C1'-N1	26.91	129.73	108.20
36	B2	531	A	P-O3'-C3'	26.76	151.81	119.70
36	B2	750	C	P-O3'-C3'	26.20	151.14	119.70
85	A5	4871	C	O4'-C1'-N1	26.09	129.07	108.20
85	A5	4747	C	P-O3'-C3'	26.02	150.93	119.70
85	A5	1269	G	P-O3'-C3'	25.72	150.56	119.70
36	B2	1109	C	O4'-C1'-N1	25.58	128.66	108.20
85	A5	4924	C	P-O3'-C3'	25.36	150.14	119.70
36	B2	1315	U	O4'-C1'-N1	25.33	128.46	108.20
85	A5	1292	C	P-O3'-C3'	25.24	149.99	119.70
63	CB	248	LEU	CA-C-N	25.19	172.62	117.20
85	A5	4014	G	P-O3'-C3'	25.18	149.91	119.70
85	A5	2266	C	P-O3'-C3'	24.93	149.61	119.70
85	A5	1167	C	P-O3'-C3'	24.90	149.59	119.70
85	A5	4758	U	O4'-C1'-N1	24.88	128.10	108.20
85	A5	3977	C	P-O3'-C3'	24.78	149.43	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1396	A	O4'-C1'-N9	24.75	128.00	108.20
87	A8	111	U	P-O3'-C3'	24.59	149.20	119.70
85	A5	3775	A	O4'-C1'-N9	24.57	127.86	108.20
85	A5	115	C	O4'-C1'-N1	24.48	127.78	108.20
85	A5	4119	C	O4'-C1'-N1	24.45	127.76	108.20
85	A5	1841	C	O4'-C1'-N1	24.39	127.71	108.20
85	A5	308	G	O4'-C1'-N9	24.37	127.70	108.20
36	B2	1632	G	P-O3'-C3'	24.34	148.91	119.70
36	B2	871	U	O4'-C1'-N1	24.18	127.54	108.20
85	A5	1445	U	P-O3'-C3'	24.09	148.61	119.70
85	A5	5027	C	P-O3'-C3'	23.86	148.33	119.70
36	B2	327	G	P-O3'-C3'	23.80	148.26	119.70
36	B2	734	C	P-O3'-C3'	23.79	148.25	119.70
36	B2	1569	A	O4'-C1'-N9	23.77	127.21	108.20
36	B2	1474	A	P-O3'-C3'	23.58	148.00	119.70
36	B2	1154	U	O4'-C1'-N1	23.49	126.99	108.20
49	CQ	6	ARG	NE-CZ-NH1	23.45	132.03	120.30
36	B2	165	G	O4'-C1'-N9	23.38	126.91	108.20
85	A5	693	C	P-O3'-C3'	23.25	147.60	119.70
36	B2	66	G	P-O3'-C3'	23.14	147.47	119.70
85	A5	4877	G	O4'-C1'-N9	22.84	126.47	108.20
85	A5	1699	A	O4'-C1'-N9	22.84	126.47	108.20
36	B2	214	U	P-O3'-C3'	22.82	147.09	119.70
36	B2	1308	U	O4'-C1'-N1	22.76	126.41	108.20
36	B2	1476	A	O4'-C1'-N9	22.73	126.38	108.20
36	B2	554	A	O4'-C1'-N9	22.66	126.33	108.20
85	A5	1221	G	O4'-C1'-N9	22.66	126.33	108.20
36	B2	797	C	P-O3'-C3'	22.65	146.88	119.70
26	AJ	146	SER	O-C-N	-22.62	86.51	122.70
85	A5	1211	G	P-O3'-C3'	22.52	146.73	119.70
85	A5	4991	U	P-O3'-C3'	22.48	146.67	119.70
36	B2	140	C	P-O3'-C3'	22.47	146.67	119.70
58	CW	71	ARG	O-C-N	-22.47	86.75	122.70
84	Cv	17	SER	C-N-CD	-22.43	71.25	120.60
85	A5	1356	U	P-O3'-C3'	22.41	146.59	119.70
85	A5	1443	A	P-O3'-C3'	22.36	146.53	119.70
60	Cr	112	ARG	CD-NE-CZ	-22.27	92.43	123.60
36	B2	840	C	P-O3'-C3'	22.22	146.37	119.70
85	A5	1696	C	P-O3'-C3'	22.21	146.36	119.70
85	A5	703	G	O4'-C1'-N9	22.21	125.97	108.20
85	A5	1719	A	P-O3'-C3'	22.18	146.32	119.70
85	A5	2115	G	P-O3'-C3'	22.18	146.32	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4162	C	O4'-C1'-N1	22.16	125.93	108.20
81	CE	30	GLY	O-C-N	-22.09	87.36	122.70
36	B2	880	G	O4'-C1'-N9	22.07	125.86	108.20
36	B2	1578	U	O4'-C1'-N1	22.04	125.83	108.20
85	A5	3663	A	P-O3'-C3'	22.03	146.13	119.70
87	A8	95	A	P-O3'-C3'	-22.00	93.30	119.70
36	B2	324	C	O4'-C1'-N1	21.99	125.79	108.20
31	AH	118	ARG	NE-CZ-NH2	-21.98	109.31	120.30
85	A5	4947	U	P-O3'-C3'	21.88	145.96	119.70
85	A5	982	U	O4'-C1'-N1	21.81	125.65	108.20
36	B2	1782	G	O4'-C1'-N9	21.81	125.65	108.20
36	B2	1557	C	O4'-C1'-N1	21.78	125.63	108.20
85	A5	4635	A	O4'-C1'-N9	21.70	125.56	108.20
85	A5	1214	C	O4'-C1'-N1	21.69	125.56	108.20
85	A5	4164	C	P-O3'-C3'	21.69	145.73	119.70
36	B2	695	C	P-O3'-C3'	21.69	145.72	119.70
85	A5	3712	A	O4'-C1'-N9	21.67	125.54	108.20
36	B2	754	G	P-O3'-C3'	21.64	145.66	119.70
36	B2	1300	U	O4'-C1'-N1	21.56	125.45	108.20
36	B2	307	G	O4'-C1'-N9	21.54	125.43	108.20
58	CW	71	ARG	CA-C-N	21.53	164.56	117.20
85	A5	4874	A	O4'-C1'-N9	21.45	125.36	108.20
36	B2	1521	C	P-O3'-C3'	21.43	145.41	119.70
85	A5	3810	C	O4'-C1'-N1	21.38	125.31	108.20
1	Az	768	GLY	O-C-N	21.37	156.90	122.70
85	A5	1379	C	P-O3'-C3'	21.36	145.33	119.70
36	B2	747	U	P-O3'-C3'	21.33	145.29	119.70
36	B2	1669	G	P-O5'-C5'	21.31	155.00	120.90
85	A5	432	U	O4'-C1'-N1	21.27	125.21	108.20
85	A5	2090	U	O4'-C1'-N1	21.18	125.14	108.20
36	B2	726	C	P-O3'-C3'	21.16	145.09	119.70
85	A5	234	G	O4'-C1'-N9	21.10	125.08	108.20
85	A5	3261	C	P-O3'-C3'	21.08	144.99	119.70
85	A5	2147	C	P-O3'-C3'	21.07	144.98	119.70
85	A5	296	A	O4'-C1'-N9	21.06	125.05	108.20
36	B2	1567	G	O4'-C1'-N9	21.01	125.00	108.20
36	B2	1477	U	P-O3'-C3'	20.95	144.83	119.70
85	A5	3643	A	P-O3'-C3'	20.86	144.74	119.70
85	A5	2256	C	O4'-C1'-N1	20.84	124.87	108.20
85	A5	4476	C	O4'-C1'-N1	20.76	124.81	108.20
85	A5	125	C	P-O3'-C3'	20.74	144.59	119.70
36	B2	1395	C	P-O3'-C3'	20.68	144.51	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1237	C	P-O3'-C3'	20.67	144.50	119.70
36	B2	273	G	P-O3'-C3'	20.66	144.50	119.70
85	A5	2695	A	O4'-C1'-N9	20.66	124.73	108.20
40	CK	1	MET	O-C-N	20.65	160.34	121.10
36	B2	1507	G	O4'-C1'-C2'	20.61	126.41	105.80
85	A5	1276	C	P-O3'-C3'	20.58	144.40	119.70
85	A5	2669	C	P-O3'-C3'	20.56	144.37	119.70
85	A5	668	C	P-O3'-C3'	20.55	144.36	119.70
85	A5	664	G	P-O3'-C3'	20.55	144.36	119.70
85	A5	4237	C	P-O3'-C3'	20.55	144.36	119.70
85	A5	2490	U	P-O3'-C3'	20.49	144.29	119.70
85	A5	1240	G	O4'-C1'-N9	20.48	124.58	108.20
85	A5	2257	C	P-O3'-C3'	20.46	144.25	119.70
36	B2	1825	A	O4'-C1'-N9	20.45	124.56	108.20
85	A5	4048	A	O4'-C1'-N9	20.39	124.51	108.20
85	A5	2111	G	O4'-C1'-N9	20.38	124.50	108.20
74	CC	323	ARG	CB-CA-C	-20.37	69.66	110.40
85	A5	3711	A	O4'-C1'-N9	20.35	124.48	108.20
85	A5	3594	C	N1-C1'-C2'	20.33	140.43	114.00
85	A5	2105	A	P-O3'-C3'	20.24	143.98	119.70
36	B2	335	G	O4'-C1'-N9	20.17	124.34	108.20
85	A5	4117	U	O4'-C1'-N1	20.15	124.32	108.20
36	B2	628	A	O4'-C1'-N9	20.15	124.32	108.20
85	A5	2106	G	O4'-C1'-N9	20.11	124.29	108.20
36	B2	1116	C	O4'-C1'-N1	20.08	124.27	108.20
36	B2	1418	C	C3'-C2'-C1'	-20.07	85.44	101.50
85	A5	2671	C	P-O3'-C3'	-20.03	95.67	119.70
85	A5	931	C	O4'-C1'-N1	20.02	124.21	108.20
85	A5	1338	G	O4'-C1'-N9	20.02	124.21	108.20
85	A5	1753	G	P-O3'-C3'	19.96	143.65	119.70
36	B2	1396	A	P-O3'-C3'	19.94	143.62	119.70
85	A5	1364	U	O4'-C1'-N1	19.89	124.11	108.20
85	A5	1302	U	O4'-C1'-N1	19.84	124.08	108.20
85	A5	2123	C	O4'-C1'-N1	19.82	124.06	108.20
38	Cz	209	THR	O-C-N	-19.80	91.03	122.70
85	A5	4156	G	O4'-C1'-N9	19.78	124.03	108.20
85	A5	1280	C	P-O3'-C3'	19.77	143.43	119.70
36	B2	329	G	P-O3'-C3'	19.75	143.40	119.70
85	A5	450	G	P-O3'-C3'	19.73	143.38	119.70
36	B2	1721	U	O4'-C1'-N1	19.72	123.98	108.20
85	A5	4954	G	O4'-C1'-N9	19.72	123.98	108.20
85	A5	703	G	P-O3'-C3'	19.69	143.33	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1756	C	P-O3'-C3'	19.68	143.32	119.70
36	B2	1430	C	O4'-C1'-N1	19.62	123.89	108.20
48	CD	170	GLY	O-C-N	-19.61	91.33	122.70
85	A5	2007	G	O4'-C1'-N9	19.59	123.87	108.20
85	A5	1245	C	P-O3'-C3'	19.53	143.13	119.70
36	B2	1825	A	P-O3'-C3'	19.51	143.11	119.70
85	A5	1915	C	O4'-C1'-N1	19.50	123.80	108.20
85	A5	1241	C	P-O3'-C3'	19.49	143.09	119.70
85	A5	2246	C	P-O3'-C3'	19.49	143.09	119.70
85	A5	2008	U	O4'-C1'-N1	19.38	123.70	108.20
12	AR	1	MET	CA-C-N	-19.36	77.49	116.20
85	A5	1273	G	O4'-C1'-N9	19.35	123.68	108.20
36	B2	327	G	O4'-C1'-N9	19.29	123.63	108.20
37	BC	17	G	P-O3'-C3'	19.27	142.82	119.70
85	A5	499	G	P-O3'-C3'	19.23	142.78	119.70
85	A5	4233	A	O4'-C1'-N9	19.19	123.56	108.20
36	B2	228	C	P-O3'-C3'	19.19	142.73	119.70
81	CE	118	THR	O-C-N	-19.19	92.00	122.70
85	A5	3962	A	O4'-C1'-N9	19.18	123.54	108.20
85	A5	1360	G	O4'-C1'-N9	19.13	123.50	108.20
36	B2	1475	G	P-O3'-C3'	19.12	142.64	119.70
85	A5	1482	G	O4'-C1'-N9	19.10	123.48	108.20
36	B2	1362	U	O4'-C1'-N1	19.03	123.42	108.20
81	CE	74	SER	CB-CA-C	19.02	146.24	110.10
85	A5	2256	C	P-O3'-C3'	19.01	142.51	119.70
85	A5	1484	G	P-O3'-C3'	18.97	142.47	119.70
85	A5	3938	G	O4'-C1'-N9	18.97	123.38	108.20
85	A5	655	C	P-O3'-C3'	18.96	142.45	119.70
87	A8	82	A	O4'-C1'-N9	18.93	123.35	108.20
85	A5	4748	U	O4'-C1'-N1	18.93	123.35	108.20
36	B2	142	C	O4'-C1'-N1	18.92	123.34	108.20
85	A5	4869	U	P-O3'-C3'	18.91	142.39	119.70
85	A5	1380	G	P-O3'-C3'	18.91	142.39	119.70
85	A5	4044	U	O4'-C1'-N1	18.90	123.32	108.20
85	A5	4946	U	O4'-C1'-N1	18.90	123.32	108.20
85	A5	4885	U	O4'-C1'-N1	18.88	123.31	108.20
85	A5	4722	G	O4'-C1'-N9	18.85	123.28	108.20
85	A5	4951	G	P-O3'-C3'	18.83	142.30	119.70
85	A5	3922	G	O4'-C1'-N9	18.80	123.24	108.20
36	B2	1155	U	N1-C1'-C2'	18.78	138.42	114.00
85	A5	2107	C	P-O3'-C3'	18.76	142.21	119.70
85	A5	1407	C	P-O3'-C3'	18.71	142.15	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2112	G	C3'-C2'-C1'	-18.70	86.54	101.50
36	B2	78	C	P-O3'-C3'	18.70	142.14	119.70
36	B2	707	C	P-O3'-C3'	18.68	142.11	119.70
85	A5	1455	G	P-O3'-C3'	18.68	142.12	119.70
36	B2	698	G	P-O3'-C3'	18.67	142.11	119.70
36	B2	1678	A	O4'-C1'-N9	18.63	123.10	108.20
36	B2	751	G	P-O3'-C3'	18.62	142.05	119.70
36	B2	126	G	P-O3'-C3'	18.62	142.04	119.70
36	B2	958	G	O4'-C1'-N9	18.59	123.07	108.20
85	A5	2769	U	P-O3'-C3'	18.59	142.00	119.70
85	A5	488	G	O4'-C1'-N9	18.58	123.06	108.20
85	A5	4072	C	P-O3'-C3'	18.58	141.99	119.70
82	CG	59	ARG	N-CA-CB	18.57	144.03	110.60
85	A5	4731	G	O4'-C1'-N9	18.51	123.01	108.20
36	B2	180	G	P-O3'-C3'	-18.50	97.50	119.70
36	B2	753	C	P-O5'-C5'	18.49	150.49	120.90
85	A5	2123	C	P-O3'-C3'	18.49	141.89	119.70
85	A5	1063	U	P-O3'-C3'	18.48	141.88	119.70
85	A5	1358	G	P-O3'-C3'	18.46	141.85	119.70
85	A5	2489	C	C4'-C3'-O3'	18.46	149.92	113.00
85	A5	4943	A	P-O3'-C3'	18.43	141.82	119.70
36	B2	915	G	O4'-C1'-N9	18.41	122.93	108.20
85	A5	444	G	P-O3'-C3'	18.38	141.75	119.70
85	A5	1834	U	O4'-C1'-N1	18.37	122.90	108.20
85	A5	1295	C	P-O3'-C3'	18.37	141.74	119.70
86	A7	48	G	P-O3'-C3'	18.32	141.68	119.70
85	A5	734	G	O4'-C1'-N9	18.26	122.81	108.20
85	A5	2152	G	P-O3'-C3'	18.24	141.59	119.70
87	A8	109	C	P-O3'-C3'	18.23	141.57	119.70
74	CC	323	ARG	N-CA-CB	18.19	143.34	110.60
85	A5	1443	A	P-O5'-C5'	18.18	150.00	120.90
85	A5	4172	A	O4'-C1'-N9	18.18	122.74	108.20
36	B2	887	U	O4'-C1'-N1	18.18	122.74	108.20
36	B2	1397	U	N1-C1'-C2'	18.17	137.62	114.00
85	A5	2575	U	O4'-C1'-N1	18.16	122.72	108.20
36	B2	903	A	O4'-C1'-N9	18.15	122.72	108.20
36	B2	72	C	P-O3'-C3'	18.13	141.46	119.70
85	A5	1444	G	P-O3'-C3'	18.10	141.42	119.70
85	A5	1774	C	P-O3'-C3'	18.09	141.41	119.70
85	A5	670	G	O4'-C1'-N9	18.09	122.67	108.20
36	B2	1137	U	P-O3'-C3'	18.08	141.40	119.70
36	B2	740	C	P-O3'-C3'	18.08	141.39	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	233	U	O4'-C1'-N1	18.06	122.64	108.20
36	B2	1549	U	P-O3'-C3'	18.03	141.34	119.70
51	CA	67	TYR	CB-CG-CD2	18.03	131.82	121.00
36	B2	1230	C	N1-C1'-C2'	18.03	137.43	114.00
85	A5	1805	A	O4'-C1'-N9	18.01	122.61	108.20
85	A5	143	C	P-O3'-C3'	17.97	141.26	119.70
36	B2	1381	G	O4'-C1'-N9	17.93	122.54	108.20
85	A5	1398	A	O4'-C1'-N9	17.92	122.53	108.20
85	A5	2806	A	O4'-C1'-N9	17.91	122.53	108.20
87	A8	81	C	O4'-C1'-N1	17.90	122.52	108.20
36	B2	1745	A	O4'-C1'-N9	17.81	122.45	108.20
36	B2	731	G	P-O3'-C3'	17.77	141.02	119.70
36	B2	438	G	O4'-C1'-N9	17.75	122.40	108.20
85	A5	245	C	P-O3'-C3'	17.73	140.97	119.70
49	CQ	1	MET	C-N-CA	17.70	159.47	122.30
36	B2	1016	U	N1-C1'-C2'	17.69	137.00	114.00
85	A5	4256	A	O4'-C1'-N9	17.68	122.34	108.20
85	A5	2448	G	O4'-C1'-N9	17.66	122.33	108.20
85	A5	3715	U	O4'-C1'-N1	17.60	122.28	108.20
85	A5	3713	U	O4'-C1'-N1	17.57	122.26	108.20
36	B2	266	G	P-O3'-C3'	17.55	140.76	119.70
38	Cz	28	PHE	CB-CA-C	-17.53	75.33	110.40
20	Aa	10	ARG	NE-CZ-NH2	17.51	129.06	120.30
85	A5	1186	U	O4'-C1'-N1	17.48	122.18	108.20
29	AG	131	ARG	CB-CA-C	17.43	145.27	110.40
85	A5	1072	C	O4'-C1'-N1	17.40	122.12	108.20
40	CK	114	ARG	NE-CZ-NH1	17.38	128.99	120.30
85	A5	4942	C	P-O3'-C3'	17.38	140.56	119.70
85	A5	1764	G	O4'-C1'-N9	17.38	122.10	108.20
85	A5	4120	U	N1-C1'-C2'	17.37	136.58	114.00
85	A5	4779	U	P-O3'-C3'	17.37	140.54	119.70
36	B2	1320	G	O4'-C1'-N9	17.34	122.07	108.20
36	B2	190	G	P-O3'-C3'	17.34	140.50	119.70
85	A5	5053	U	O4'-C1'-N1	17.33	122.07	108.20
36	B2	1049	A	O4'-C1'-N9	17.33	122.06	108.20
36	B2	534	G	P-O3'-C3'	17.31	140.47	119.70
85	A5	1481	C	P-O3'-C3'	17.23	140.37	119.70
74	CC	24	LEU	C-N-CD	-17.21	82.73	120.60
12	AR	1	MET	N-CA-CB	17.21	141.58	110.60
85	A5	4943	A	C1'-O4'-C4'	-17.20	96.14	109.90
36	B2	135	U	P-O3'-C3'	17.18	140.32	119.70
85	A5	3604	A	O4'-C1'-N9	17.18	121.95	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2228	C	P-O3'-C3'	17.18	140.32	119.70
36	B2	356	C	O4'-C1'-N1	17.18	121.94	108.20
85	A5	5062	G	P-O3'-C3'	17.16	140.30	119.70
36	B2	1326	U	N1-C1'-C2'	17.15	136.30	114.00
85	A5	4329	G	O4'-C1'-N9	17.15	121.92	108.20
36	B2	1153	C	O4'-C1'-N1	17.15	121.92	108.20
85	A5	974	C	P-O3'-C3'	17.10	140.22	119.70
85	A5	3279	A	P-O3'-C3'	17.09	140.20	119.70
36	B2	74	G	O4'-C1'-N9	17.06	121.85	108.20
85	A5	2089	G	O4'-C1'-N9	17.05	121.84	108.20
36	B2	872	A	O4'-C1'-N9	17.02	121.82	108.20
17	AV	61	ARG	NE-CZ-NH2	-17.00	111.80	120.30
85	A5	2017	A	P-O3'-C3'	-16.99	99.31	119.70
36	B2	225	G	P-O3'-C3'	16.98	140.08	119.70
85	A5	2487	G	P-O3'-C3'	16.98	140.08	119.70
85	A5	452	A	O4'-C1'-N9	16.98	121.78	108.20
85	A5	1442	C	O4'-C1'-N1	16.98	121.78	108.20
36	B2	830	A	O4'-C1'-N9	16.97	121.77	108.20
36	B2	1403	C	O4'-C1'-N1	16.97	121.77	108.20
85	A5	2117	G	O4'-C1'-N9	16.96	121.77	108.20
85	A5	963	G	P-O3'-C3'	16.95	140.03	119.70
87	A8	111	U	C4'-C3'-O3'	-16.93	73.86	109.40
85	A5	2290	C	P-O3'-C3'	16.92	140.01	119.70
36	B2	242	U	P-O3'-C3'	16.92	140.00	119.70
36	B2	136	C	P-O3'-C3'	16.91	139.99	119.70
85	A5	65	A	O4'-C1'-N9	16.90	121.72	108.20
36	B2	889	U	O4'-C1'-N1	16.90	121.72	108.20
85	A5	4888	U	O4'-C1'-N1	16.89	121.71	108.20
85	A5	2153	G	P-O3'-C3'	16.87	139.94	119.70
36	B2	1623	A	O4'-C1'-N9	16.85	121.68	108.20
85	A5	727	C	O4'-C1'-N1	16.84	121.68	108.20
36	B2	823	U	O4'-C1'-N1	16.82	121.66	108.20
85	A5	4937	C	O4'-C1'-N1	16.81	121.64	108.20
85	A5	4143	G	P-O3'-C3'	16.80	139.87	119.70
38	Cz	210	MET	CG-SD-CE	-16.80	73.31	100.20
85	A5	1361	G	O4'-C1'-N9	16.80	121.64	108.20
36	B2	1568	C	N1-C1'-C2'	16.80	135.83	114.00
60	Cr	90	LEU	O-C-N	-16.76	95.89	122.70
36	B2	198	U	O4'-C1'-N1	16.75	121.60	108.20
85	A5	2767	U	O4'-C1'-N1	16.74	121.59	108.20
85	A5	2787	A	O4'-C1'-N9	16.69	121.55	108.20
85	A5	2904	U	O4'-C1'-N1	16.69	121.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1939	A	P-O3'-C3'	16.64	139.67	119.70
85	A5	1217	G	O4'-C1'-N9	16.62	121.50	108.20
85	A5	293	G	P-O3'-C3'	16.62	139.64	119.70
36	B2	1474	A	O4'-C1'-N9	16.61	121.49	108.20
85	A5	733	A	O4'-C1'-N9	16.61	121.49	108.20
85	A5	4119	C	P-O3'-C3'	16.60	139.62	119.70
29	AG	131	ARG	CB-CG-CD	16.60	154.75	111.60
85	A5	486	C	P-O3'-C3'	16.60	139.62	119.70
36	B2	171	A	O4'-C1'-N9	16.57	121.46	108.20
81	CE	70	LYS	CB-CA-C	-16.56	77.29	110.40
85	A5	1398	A	P-O3'-C3'	16.55	139.56	119.70
85	A5	3876	A	P-O3'-C3'	16.53	139.54	119.70
85	A5	4748	U	P-O3'-C3'	16.53	139.54	119.70
36	B2	1298	G	O4'-C1'-N9	16.53	121.42	108.20
39	Cq	57	LYS	CA-CB-CG	16.53	149.76	113.40
87	A8	87	G	O4'-C1'-N9	16.52	121.42	108.20
85	A5	4749	C	P-O3'-C3'	16.51	139.51	119.70
85	A5	4993	G	O4'-C1'-N9	16.50	121.40	108.20
85	A5	4730	C	P-O3'-C3'	16.49	139.49	119.70
36	B2	368	U	P-O3'-C3'	16.47	139.46	119.70
85	A5	946	C	P-O3'-C3'	16.45	139.44	119.70
85	A5	2789	A	O4'-C1'-N9	16.42	121.34	108.20
85	A5	1821	G	O4'-C1'-N9	16.41	121.33	108.20
85	A5	2089	G	P-O3'-C3'	16.40	139.38	119.70
1	Az	768	GLY	CA-C-N	-16.40	81.12	117.20
13	AP	37	TYR	N-CA-CB	-16.40	81.08	110.60
73	Cl	5	LYS	O-C-N	16.39	148.93	122.70
85	A5	13	U	O4'-C1'-N1	16.37	121.29	108.20
85	A5	1704	C	P-O3'-C3'	16.36	139.34	119.70
85	A5	406	C	P-O3'-C3'	16.36	139.34	119.70
85	A5	2824	C	P-O3'-C3'	16.36	139.33	119.70
85	A5	967	C	P-O3'-C3'	16.36	139.33	119.70
85	A5	190	G	P-O3'-C3'	16.35	139.32	119.70
81	CE	32	LEU	CB-CG-CD1	16.35	138.79	111.00
85	A5	1440	U	P-O3'-C3'	16.27	139.22	119.70
85	A5	1266	G	O4'-C1'-C2'	16.22	122.20	107.60
36	B2	752	G	P-O3'-C3'	16.22	139.16	119.70
36	B2	308	G	N9-C1'-C2'	16.21	135.08	114.00
85	A5	2766	A	P-O3'-C3'	16.21	139.15	119.70
81	CE	126	LEU	C-N-CA	-16.20	81.20	121.70
85	A5	2669	C	O4'-C1'-N1	16.20	121.16	108.20
85	A5	1296	G	O4'-C1'-N9	16.16	121.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2670	C	P-O3'-C3'	16.15	139.08	119.70
85	A5	3809	G	O4'-C1'-N9	16.14	121.11	108.20
85	A5	1561	G	O4'-C1'-N9	16.12	121.10	108.20
85	A5	2144	C	P-O3'-C3'	16.11	139.03	119.70
85	A5	2088	A	P-O3'-C3'	16.09	139.01	119.70
85	A5	3256	G	P-O3'-C3'	16.09	139.01	119.70
1	Az	154	VAL	CB-CA-C	16.09	141.97	111.40
40	CK	114	ARG	CD-NE-CZ	16.09	146.12	123.60
85	A5	1371	A	O4'-C1'-C2'	-16.08	89.72	105.80
85	A5	4751	G	O4'-C1'-N9	16.06	121.05	108.20
85	A5	1410	U	O4'-C1'-N1	16.04	121.03	108.20
85	A5	3785	A	O4'-C1'-N9	16.02	121.02	108.20
85	A5	2940	C	P-O3'-C3'	16.00	138.90	119.70
70	Ci	6	PRO	N-CA-CB	-16.00	84.11	103.30
36	B2	1237	C	N1-C1'-C2'	15.93	134.71	114.00
85	A5	1221	G	P-O3'-C3'	15.93	138.82	119.70
85	A5	1426	G	P-O3'-C3'	15.93	138.81	119.70
85	A5	926	G	O4'-C1'-N9	15.92	120.94	108.20
85	A5	1153	C	P-O3'-C3'	15.92	138.80	119.70
85	A5	3595	U	O4'-C1'-N1	15.89	120.92	108.20
85	A5	70	A	O4'-C1'-N9	15.89	120.91	108.20
36	B2	141	A	P-O3'-C3'	15.88	138.75	119.70
85	A5	2947	G	P-O3'-C3'	15.88	138.75	119.70
38	Cz	28	PHE	N-CA-C	15.87	153.85	111.00
85	A5	450	G	O4'-C1'-N9	15.87	120.89	108.20
81	CE	93	THR	N-CA-CB	15.85	140.42	110.30
85	A5	1771	U	O4'-C1'-N1	15.84	120.87	108.20
63	CB	248	LEU	C-N-CA	15.82	161.26	121.70
36	B2	73	C	O4'-C1'-N1	15.81	120.85	108.20
85	A5	177	G	P-O3'-C3'	15.80	138.66	119.70
33	AI	134	GLU	N-CA-CB	15.79	139.02	110.60
85	A5	2083	C	P-O3'-C3'	15.79	138.64	119.70
36	B2	630	U	O4'-C1'-N1	15.78	120.83	108.20
81	CE	127	SER	CB-CA-C	15.77	140.06	110.10
36	B2	1148	A	O4'-C1'-N9	15.77	120.81	108.20
85	A5	2252	G	P-O3'-C3'	15.77	138.62	119.70
85	A5	4061	G	P-O3'-C3'	15.76	138.61	119.70
85	A5	4075	U	P-O3'-C3'	15.76	138.61	119.70
85	A5	2920	G	P-O3'-C3'	15.75	138.60	119.70
85	A5	1578	U	P-O5'-C5'	-15.71	95.76	120.90
85	A5	4876	U	P-O3'-C3'	15.71	138.56	119.70
36	B2	1429	G	P-O3'-C3'	15.70	138.54	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2489	C	P-O3'-C3'	15.68	138.52	119.70
85	A5	4309	G	O4'-C1'-N9	15.68	120.75	108.20
85	A5	137	G	O4'-C1'-N9	15.67	120.74	108.20
85	A5	931	C	P-O3'-C3'	15.67	138.50	119.70
85	A5	1700	G	P-O3'-C3'	15.64	138.47	119.70
85	A5	1833	G	P-O3'-C3'	15.64	138.47	119.70
36	B2	138	C	P-O3'-C3'	15.64	138.47	119.70
85	A5	1435	G	O4'-C1'-N9	15.64	120.71	108.20
36	B2	1010	G	O4'-C1'-N9	15.63	120.70	108.20
85	A5	4094	G	O4'-C1'-N9	15.62	120.70	108.20
85	A5	2267	U	O4'-C1'-N1	15.62	120.70	108.20
85	A5	2265	G	P-O3'-C3'	15.62	138.44	119.70
85	A5	963	G	O4'-C1'-C2'	-15.60	90.20	105.80
85	A5	1832	C	P-O3'-C3'	15.60	138.42	119.70
85	A5	4694	G	O4'-C1'-N9	15.59	120.67	108.20
85	A5	4906	C	P-O5'-C5'	15.59	145.84	120.90
86	A7	84	U	O4'-C1'-N1	15.59	120.67	108.20
18	AY	86	GLU	C-N-CD	-15.58	86.32	120.60
85	A5	424	U	O4'-C1'-N1	15.56	120.64	108.20
23	AD	5	ILE	O-C-N	-15.55	97.82	122.70
36	B2	1060	A	O4'-C1'-N9	15.54	120.63	108.20
85	A5	2041	A	O4'-C1'-N9	15.53	120.62	108.20
36	B2	1331	C	N1-C1'-C2'	15.53	134.19	114.00
38	Cz	99	LEU	CA-C-N	15.48	151.26	117.20
36	B2	304	C	P-O3'-C3'	15.48	138.28	119.70
53	CT	150	LEU	O-C-N	-15.47	97.94	122.70
85	A5	4943	A	N9-C1'-C2'	15.46	134.10	114.00
85	A5	4752	U	O4'-C1'-N1	15.44	120.55	108.20
85	A5	2112	G	C1'-O4'-C4'	-15.43	97.56	109.90
85	A5	2112	G	O4'-C1'-N9	15.42	120.54	108.20
85	A5	927	G	O4'-C1'-N9	15.39	120.51	108.20
85	A5	2887	U	O4'-C1'-N1	15.39	120.51	108.20
39	Cq	263	GLU	N-CA-CB	-15.38	82.91	110.60
85	A5	1238	A	P-O3'-C3'	15.36	138.14	119.70
85	A5	1920	C	P-O3'-C3'	15.35	138.12	119.70
36	B2	64	A	O4'-C1'-N9	15.31	120.45	108.20
85	A5	4852	C	P-O3'-C3'	15.31	138.07	119.70
85	A5	1929	A	N9-C1'-C2'	15.31	133.90	114.00
85	A5	4793	G	P-O3'-C3'	15.29	138.05	119.70
85	A5	2226	C	P-O3'-C3'	15.29	138.04	119.70
36	B2	721	G	P-O3'-C3'	15.28	138.03	119.70
85	A5	4170	A	P-O3'-C3'	15.24	137.99	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4488	A	O4'-C1'-N9	15.24	120.39	108.20
85	A5	2519	U	O4'-C1'-N1	15.24	120.39	108.20
26	AJ	146	SER	CA-C-N	15.22	150.68	117.20
85	A5	2562	G	O4'-C1'-N9	15.20	120.36	108.20
36	B2	1668	U	O4'-C1'-N1	15.20	120.36	108.20
36	B2	406	U	P-O3'-C3'	15.19	137.93	119.70
36	B2	1283	C	P-O3'-C3'	15.18	137.92	119.70
85	A5	927	G	P-O3'-C3'	15.18	137.92	119.70
85	A5	1211	G	O4'-C1'-N9	15.18	120.34	108.20
36	B2	60	A	O4'-C1'-N9	15.16	120.33	108.20
36	B2	79	A	O4'-C1'-C2'	-15.15	90.64	105.80
85	A5	972	C	P-O5'-C5'	15.15	145.15	120.90
85	A5	1804	A	P-O3'-C3'	15.15	137.88	119.70
81	CE	85	LYS	N-CA-CB	-15.14	83.35	110.60
74	CC	323	ARG	CA-CB-CG	15.13	146.69	113.40
85	A5	342	G	O4'-C1'-N9	15.13	120.30	108.20
58	CW	83	THR	N-CA-CB	15.12	139.03	110.30
67	Ce	16	ARG	O-C-N	-15.12	98.51	122.70
85	A5	3907	G	P-O3'-C3'	15.10	137.81	119.70
85	A5	2876	G	O4'-C1'-N9	15.08	120.27	108.20
85	A5	687	U	O4'-C1'-N1	15.08	120.26	108.20
20	Aa	102	ARG	C-N-CD	-15.08	87.43	120.60
36	B2	1612	G	O4'-C1'-N9	15.07	120.25	108.20
33	AI	43	ILE	O-C-N	-15.06	98.60	122.70
85	A5	1052	G	P-O3'-C3'	15.05	137.76	119.70
85	A5	971	U	O4'-C1'-C2'	-15.02	90.78	105.80
36	B2	1548	G	O4'-C1'-N9	15.01	120.21	108.20
87	A8	96	C	P-O3'-C3'	14.98	137.68	119.70
36	B2	738	C	P-O3'-C3'	14.98	137.67	119.70
85	A5	1524	A	O4'-C1'-N9	14.97	120.17	108.20
85	A5	1170	G	O4'-C1'-N9	14.95	120.16	108.20
85	A5	1072	C	N1-C1'-C2'	14.95	133.43	114.00
36	B2	1675	A	O4'-C1'-N9	14.94	120.15	108.20
85	A5	392	U	O4'-C1'-N1	14.94	120.15	108.20
31	AH	109	ARG	CD-NE-CZ	14.94	144.51	123.60
67	Ce	16	ARG	C-N-CA	14.94	159.04	121.70
60	Cr	91	SER	N-CA-CB	14.93	132.89	110.50
85	A5	1302	U	C3'-C2'-C1'	-14.92	89.57	101.50
36	B2	1496	U	P-O3'-C3'	14.89	137.57	119.70
85	A5	489	C	P-O3'-C3'	14.89	137.57	119.70
36	B2	111	A	O4'-C1'-N9	14.87	120.10	108.20
85	A5	3934	G	O4'-C1'-N9	14.86	120.09	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3672	G	P-O3'-C3'	14.85	137.52	119.70
39	Cq	263	GLU	CB-CA-C	14.84	140.08	110.40
85	A5	1338	G	O4'-C1'-C2'	14.83	120.95	107.60
36	B2	218	U	N1-C1'-C2'	14.82	133.26	114.00
85	A5	499	G	N9-C1'-C2'	14.80	133.24	114.00
37	BC	20	A	O4'-C1'-N9	14.80	120.04	108.20
20	Aa	97	PRO	N-CA-C	14.80	150.57	112.10
85	A5	505	G	P-O3'-C3'	14.79	137.45	119.70
85	A5	2372	U	O4'-C1'-N1	14.77	120.02	108.20
36	B2	785	C	P-O3'-C3'	14.77	137.43	119.70
85	A5	1426	G	O4'-C1'-N9	14.77	120.01	108.20
36	B2	1428	G	O4'-C1'-N9	14.75	120.00	108.20
85	A5	2239	C	P-O3'-C3'	14.75	137.40	119.70
85	A5	740	G	P-O3'-C3'	14.72	137.37	119.70
85	A5	1474	C	P-O3'-C3'	14.71	137.35	119.70
38	Cz	28	PHE	CA-C-O	-14.70	89.23	120.10
85	A5	4281	A	O4'-C1'-N9	14.70	119.96	108.20
85	A5	1853	G	O4'-C1'-N9	14.70	119.96	108.20
85	A5	224	U	O4'-C1'-N1	14.68	119.94	108.20
85	A5	4871	C	P-O3'-C3'	14.68	137.31	119.70
85	A5	1822	U	O4'-C1'-N1	14.67	119.94	108.20
85	A5	3818	U	O4'-C1'-N1	14.67	119.93	108.20
36	B2	488	U	P-O3'-C3'	14.66	137.29	119.70
36	B2	839	C	N1-C1'-C2'	14.66	133.06	114.00
85	A5	1282	G	P-O3'-C3'	14.66	137.29	119.70
85	A5	4181	U	O4'-C1'-N1	14.65	119.92	108.20
36	B2	839	C	C3'-C2'-C1'	-14.65	89.78	101.50
85	A5	972	C	C3'-C2'-C1'	14.64	113.21	101.50
85	A5	4108	G	O4'-C1'-N9	14.63	119.90	108.20
85	A5	172	C	P-O3'-C3'	-14.63	102.15	119.70
36	B2	861	A	O4'-C1'-N9	14.62	119.89	108.20
17	AV	78	ILE	N-CA-C	14.62	150.46	111.00
85	A5	1235	G	O4'-C1'-N9	14.60	119.88	108.20
85	A5	742	G	O4'-C1'-N9	14.58	119.86	108.20
81	CE	59	ARG	O-C-N	14.57	146.01	122.70
85	A5	4887	C	P-O3'-C3'	14.57	137.19	119.70
85	A5	746	A	P-O3'-C3'	14.57	137.18	119.70
85	A5	4127	A	P-O3'-C3'	14.57	137.18	119.70
36	B2	548	C	P-O3'-C3'	14.55	137.16	119.70
36	B2	1231	C	N1-C1'-C2'	14.55	132.91	114.00
36	B2	1394	G	P-O3'-C3'	14.54	137.15	119.70
85	A5	2473	A	P-O3'-C3'	14.54	137.15	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1779	G	O4'-C1'-N9	14.53	119.82	108.20
85	A5	4894	A	O4'-C1'-N9	14.52	119.81	108.20
36	B2	1599	U	O4'-C1'-N1	14.51	119.81	108.20
85	A5	215	C	P-O3'-C3'	14.50	137.10	119.70
85	A5	2825	A	P-O3'-C3'	14.49	137.09	119.70
49	CQ	6	ARG	N-CA-CB	-14.49	84.52	110.60
85	A5	955	G	O4'-C1'-N9	14.49	119.79	108.20
85	A5	975	C	O4'-C1'-C2'	-14.49	91.31	105.80
85	A5	4175	G	O4'-C1'-N9	14.49	119.79	108.20
36	B2	393	U	O4'-C1'-N1	14.48	119.79	108.20
36	B2	790	C	P-O3'-C3'	14.48	137.08	119.70
36	B2	724	A	P-O3'-C3'	14.47	137.07	119.70
85	A5	1186	U	N1-C1'-C2'	-14.47	95.19	114.00
36	B2	553	U	O4'-C1'-N1	14.46	119.77	108.20
64	CF	23	ARG	CA-C-N	-14.46	85.39	117.20
85	A5	4449	A	O4'-C1'-N9	14.45	119.76	108.20
38	Cz	209	THR	CA-C-N	14.45	148.99	117.20
85	A5	2663	G	O4'-C1'-N9	14.44	119.75	108.20
85	A5	4949	G	P-O3'-C3'	14.44	137.02	119.70
85	A5	2421	G	O4'-C1'-N9	14.43	119.75	108.20
49	CQ	6	ARG	CB-CA-C	14.43	139.26	110.40
85	A5	3945	A	O4'-C1'-N9	14.43	119.74	108.20
36	B2	1014	G	O4'-C1'-C2'	14.42	120.58	107.60
74	CC	108	TRP	O-C-N	-14.41	99.64	122.70
85	A5	1724	G	O4'-C1'-N9	14.40	119.72	108.20
85	A5	2116	C	P-O3'-C3'	14.40	136.98	119.70
14	AT	93	SER	N-CA-CB	14.40	132.09	110.50
85	A5	1294	A	P-O3'-C3'	14.39	136.97	119.70
42	CL	166	ALA	C-N-CA	14.38	157.66	121.70
85	A5	4936	G	P-O5'-C5'	-14.38	97.89	120.90
85	A5	5059	C	P-O3'-C3'	14.38	136.96	119.70
36	B2	1479	G	O4'-C1'-N9	14.36	119.69	108.20
85	A5	2268	A	P-O3'-C3'	14.36	136.93	119.70
36	B2	133	C	P-O3'-C3'	14.35	136.92	119.70
85	A5	2413	U	O4'-C1'-N1	14.34	119.67	108.20
85	A5	3941	G	O4'-C1'-N9	14.34	119.67	108.20
85	A5	373	G	O4'-C1'-N9	14.33	119.67	108.20
36	B2	1416	C	O4'-C1'-N1	14.31	119.65	108.20
36	B2	1416	C	P-O3'-C3'	14.29	136.84	119.70
36	B2	591	U	O4'-C1'-N1	14.27	119.62	108.20
36	B2	213	G	O4'-C1'-N9	14.25	119.60	108.20
85	A5	452	A	P-O3'-C3'	14.23	136.78	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	AN	81	ALA	C-N-CD	-14.21	89.33	120.60
36	B2	1830	U	P-O3'-C3'	14.21	136.75	119.70
85	A5	1892	A	O4'-C1'-N9	14.20	119.56	108.20
18	AY	103	SER	O-C-N	-14.20	99.98	122.70
60	Cr	112	ARG	NE-CZ-NH2	-14.20	113.20	120.30
33	AI	184	ARG	NE-CZ-NH1	-14.20	113.20	120.30
36	B2	692	G	P-O3'-C3'	14.18	136.72	119.70
85	A5	497	G	P-O3'-C3'	14.17	136.71	119.70
36	B2	1239	U	P-O3'-C3'	-14.16	102.71	119.70
85	A5	1222	A	P-O3'-C3'	14.16	136.69	119.70
85	A5	5041	G	O4'-C1'-N9	14.16	119.53	108.20
36	B2	1418	C	O4'-C1'-N1	14.15	119.52	108.20
60	Cr	115	SER	CB-CA-C	14.15	136.98	110.10
85	A5	2651	C	P-O3'-C3'	14.14	136.66	119.70
36	B2	1348	G	O4'-C1'-N9	14.13	119.50	108.20
85	A5	2695	A	P-O3'-C3'	14.12	136.65	119.70
85	A5	1446	C	P-O3'-C3'	14.12	136.64	119.70
85	A5	1471	U	O4'-C1'-N1	14.11	119.49	108.20
36	B2	1824	A	O4'-C1'-N9	14.11	119.49	108.20
29	AG	170	ARG	CA-CB-CG	14.10	144.43	113.40
85	A5	972	C	O4'-C1'-C2'	-14.09	91.71	105.80
85	A5	5059	C	O4'-C1'-N1	14.09	119.47	108.20
35	Ah	294	LYS	C-N-CA	14.08	156.91	121.70
85	A5	1368	A	N9-C1'-C2'	14.08	132.31	114.00
85	A5	5034	A	O4'-C1'-N9	14.06	119.45	108.20
85	A5	712	C	N1-C1'-C2'	14.04	132.25	114.00
18	AY	86	GLU	N-CA-C	14.03	148.88	111.00
36	B2	687	C	O4'-C1'-N1	14.02	119.42	108.20
85	A5	4336	A	P-O3'-C3'	14.02	136.52	119.70
8	AS	40	TYR	CB-CG-CD1	14.02	129.41	121.00
85	A5	1995	G	N9-C1'-C2'	14.02	132.22	114.00
85	A5	1590	C	P-O3'-C3'	14.00	136.50	119.70
85	A5	4232	U	P-O3'-C3'	14.00	136.50	119.70
36	B2	304	C	C4'-C3'-O3'	-13.98	80.04	109.40
36	B2	1867	U	O4'-C1'-N1	13.97	119.38	108.20
36	B2	798	G	P-O3'-C3'	13.96	136.45	119.70
85	A5	4303	C	O4'-C1'-N1	13.96	119.37	108.20
36	B2	1417	C	O4'-C1'-C2'	-13.96	91.84	105.80
85	A5	727	C	P-O3'-C3'	13.95	136.44	119.70
81	CE	126	LEU	N-CA-CB	13.94	138.28	110.40
85	A5	1287	G	P-O3'-C3'	13.93	136.42	119.70
85	A5	1501	C	P-O3'-C3'	13.93	136.42	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	144	G	O4'-C1'-N9	13.93	119.34	108.20
36	B2	1642	U	O4'-C1'-N1	13.92	119.33	108.20
36	B2	1297	U	O4'-C1'-N1	13.91	119.33	108.20
85	A5	666	G	P-O3'-C3'	13.91	136.39	119.70
36	B2	916	A	O4'-C1'-N9	13.90	119.32	108.20
85	A5	2258	C	C1'-O4'-C4'	-13.89	98.79	109.90
85	A5	737	C	P-O5'-C5'	13.88	143.11	120.90
85	A5	2258	C	C3'-C2'-C1'	-13.88	90.40	101.50
1	Az	266	PHE	O-C-N	-13.88	100.50	122.70
85	A5	2426	U	O4'-C1'-N1	13.88	119.30	108.20
85	A5	425	U	O4'-C1'-N1	13.87	119.30	108.20
38	Cz	99	LEU	CA-C-O	-13.87	90.98	120.10
1	Az	121	VAL	O-C-N	-13.86	100.53	122.70
85	A5	886	C	P-O3'-C3'	13.85	136.32	119.70
85	A5	5048	A	O4'-C1'-N9	13.85	119.28	108.20
85	A5	445	U	O4'-C1'-N1	13.85	119.28	108.20
36	B2	1022	U	N1-C1'-C2'	13.84	132.00	114.00
85	A5	2552	G	P-O3'-C3'	-13.83	103.10	119.70
36	B2	659	G	O4'-C1'-N9	13.83	119.27	108.20
85	A5	3908	A	O4'-C1'-N9	13.82	119.26	108.20
85	A5	2033	A	O4'-C1'-N9	13.82	119.26	108.20
85	A5	5061	A	P-O3'-C3'	13.81	136.27	119.70
85	A5	2046	G	P-O3'-C3'	13.80	136.26	119.70
85	A5	2902	G	O4'-C1'-N9	-13.78	97.18	108.20
40	CK	2	PRO	N-CD-CG	13.76	123.84	103.20
85	A5	1266	G	P-O3'-C3'	13.76	136.21	119.70
85	A5	5049	G	O4'-C1'-N9	13.75	119.20	108.20
36	B2	243	C	P-O3'-C3'	13.75	136.20	119.70
36	B2	1779	G	P-O3'-C3'	13.74	136.19	119.70
1	Az	269	ALA	O-C-N	-13.72	100.75	122.70
85	A5	1270	A	P-O3'-C3'	13.72	136.17	119.70
36	B2	464	A	P-O3'-C3'	-13.72	103.24	119.70
36	B2	197	U	O4'-C1'-N1	13.72	119.17	108.20
85	A5	2085	G	O4'-C1'-N9	13.72	119.17	108.20
60	Cr	96	MET	CG-SD-CE	-13.70	78.28	100.20
21	Ab	36	LYS	C-N-CA	13.70	155.94	121.70
85	A5	957	G	P-O3'-C3'	13.69	136.13	119.70
85	A5	4629	U	O4'-C1'-N1	13.70	119.16	108.20
85	A5	4093	G	O4'-C1'-N9	13.69	119.15	108.20
85	A5	1303	A	O4'-C1'-C2'	-13.69	92.11	105.80
85	A5	3268	U	P-O3'-C3'	13.68	136.11	119.70
85	A5	2043	A	O4'-C1'-N9	13.67	119.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	AS	141	ARG	O-C-N	-13.67	100.83	122.70
85	A5	5002	U	O4'-C1'-N1	13.66	119.13	108.20
68	Cf	59	THR	N-CA-CB	13.66	136.25	110.30
85	A5	2362	U	O4'-C1'-N1	13.65	119.12	108.20
36	B2	323	C	P-O3'-C3'	13.65	136.07	119.70
36	B2	285	U	P-O3'-C3'	13.64	136.07	119.70
85	A5	4085	A	P-O3'-C3'	13.64	136.06	119.70
40	CK	1	MET	CA-C-N	-13.64	78.92	117.10
85	A5	1266	G	C1'-O4'-C4'	-13.63	98.99	109.90
36	B2	1726	G	O4'-C1'-N9	13.63	119.10	108.20
85	A5	654	C	P-O3'-C3'	13.62	136.04	119.70
85	A5	5027	C	O4'-C1'-N1	13.61	119.09	108.20
85	A5	4872	G	O4'-C1'-N9	13.61	119.08	108.20
85	A5	5068	G	O4'-C1'-N9	13.60	119.08	108.20
36	B2	1760	G	O4'-C1'-N9	13.60	119.08	108.20
85	A5	5054	C	O4'-C1'-N1	13.59	119.07	108.20
37	BC	27	U	O4'-C1'-N1	13.57	119.06	108.20
85	A5	1811	G	O4'-C1'-N9	13.56	119.05	108.20
85	A5	1790	U	O4'-C1'-N1	13.56	119.05	108.20
36	B2	296	U	N1-C1'-C2'	13.56	131.63	114.00
85	A5	1367	C	O4'-C1'-C2'	-13.56	92.24	105.80
36	B2	488	U	O4'-C1'-N1	13.55	119.04	108.20
85	A5	2225	C	P-O3'-C3'	13.54	135.95	119.70
85	A5	1513	U	O4'-C1'-N1	13.54	119.03	108.20
85	A5	3927	U	O4'-C1'-N1	13.53	119.03	108.20
36	B2	1397	U	O4'-C1'-N1	-13.53	97.38	108.20
47	CI	206	LEU	CB-CA-C	-13.52	84.51	110.20
36	B2	1015	U	O4'-C1'-N1	13.52	119.01	108.20
85	A5	4050	A	C3'-C2'-C1'	13.52	112.31	101.50
85	A5	636	G	O4'-C1'-N9	13.51	119.01	108.20
36	B2	834	C	N1-C1'-C2'	13.51	131.56	114.00
85	A5	4895	C	O4'-C1'-N1	13.51	119.01	108.20
14	AT	4	VAL	N-CA-C	13.50	147.45	111.00
85	A5	1705	G	P-O3'-C3'	13.50	135.90	119.70
36	B2	1453	C	O4'-C1'-N1	13.49	118.99	108.20
36	B2	1868	U	P-O3'-C3'	13.48	135.88	119.70
36	B2	1775	U	O4'-C1'-N1	13.48	118.98	108.20
85	A5	4888	U	P-O3'-C3'	13.48	135.87	119.70
51	CA	67	TYR	CB-CG-CD1	-13.46	112.93	121.00
51	CA	229	ALA	C-N-CD	-13.45	91.01	120.60
85	A5	4084	G	P-O3'-C3'	13.45	135.83	119.70
85	A5	2119	C	P-O3'-C3'	13.44	135.83	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2370	A	P-O3'-C3'	13.43	135.82	119.70
85	A5	2512	A	O4'-C1'-N9	13.43	118.95	108.20
36	B2	566	U	O4'-C1'-N1	13.43	118.94	108.20
85	A5	479	G	P-O3'-C3'	13.43	135.81	119.70
85	A5	4004	G	P-O3'-C3'	13.41	135.80	119.70
85	A5	1365	C	P-O3'-C3'	13.41	135.79	119.70
36	B2	558	G	O4'-C1'-N9	13.41	118.92	108.20
36	B2	529	A	P-O3'-C3'	-13.40	103.61	119.70
36	B2	893	U	O4'-C1'-N1	13.40	118.92	108.20
36	B2	1515	G	O4'-C1'-N9	13.40	118.92	108.20
87	A8	100	U	N1-C1'-C2'	13.40	131.42	114.00
85	A5	1454	G	O4'-C1'-N9	13.39	118.91	108.20
85	A5	4569	U	P-O3'-C3'	13.39	135.76	119.70
85	A5	82	U	O4'-C1'-N1	13.38	118.90	108.20
60	Cr	66	ARG	N-CA-CB	-13.38	86.52	110.60
85	A5	314	G	P-O3'-C3'	-13.38	103.65	119.70
38	Cz	98	LYS	O-C-N	13.37	144.09	122.70
85	A5	702	U	O4'-C1'-N1	13.36	118.89	108.20
85	A5	3766	A	P-O3'-C3'	-13.35	103.68	119.70
36	B2	448	A	O4'-C1'-N9	13.35	118.88	108.20
85	A5	4770	U	O4'-C1'-N1	13.34	118.87	108.20
36	B2	964	A	O4'-C1'-N9	13.34	118.87	108.20
85	A5	917	A	P-O3'-C3'	13.32	135.69	119.70
85	A5	4532	U	P-O3'-C3'	13.32	135.69	119.70
85	A5	2427	G	N9-C1'-C2'	13.31	131.31	114.00
85	A5	4885	U	P-O3'-C3'	13.31	135.68	119.70
85	A5	2121	C	C4'-C3'-O3'	-13.31	81.45	109.40
36	B2	1746	U	P-O3'-C3'	13.31	135.67	119.70
36	B2	147	A	O4'-C1'-N9	13.30	118.84	108.20
85	A5	2585	C	O4'-C1'-N1	13.30	118.84	108.20
85	A5	2559	G	O4'-C1'-N9	13.29	118.83	108.20
85	A5	1089	G	O4'-C1'-N9	13.29	118.83	108.20
85	A5	4641	U	O4'-C1'-N1	13.28	118.83	108.20
36	B2	833	C	P-O3'-C3'	13.28	135.64	119.70
36	B2	1621	U	O4'-C1'-N1	13.28	118.82	108.20
36	B2	24	C	P-O3'-C3'	13.28	135.63	119.70
36	B2	637	U	O4'-C1'-N1	13.28	118.82	108.20
85	A5	186	G	P-O3'-C3'	13.27	135.62	119.70
85	A5	1239	C	P-O3'-C3'	13.27	135.62	119.70
85	A5	58	G	O4'-C1'-N9	13.27	118.81	108.20
85	A5	972	C	P-O3'-C3'	13.26	135.62	119.70
85	A5	4067	U	O4'-C1'-N1	13.26	118.81	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	540	U	O4'-C1'-N1	13.26	118.81	108.20
29	AG	131	ARG	CA-CB-CG	13.25	142.54	113.40
85	A5	3881	G	O4'-C1'-N9	13.25	118.80	108.20
36	B2	841	G	O4'-C1'-N9	13.24	118.79	108.20
85	A5	3946	G	P-O3'-C3'	13.24	135.59	119.70
85	A5	2253	A	O4'-C1'-N9	13.23	118.78	108.20
85	A5	2397	G	O4'-C1'-N9	13.22	118.78	108.20
85	A5	1348	U	O4'-C1'-N1	13.22	118.77	108.20
36	B2	1553	C	C3'-C2'-C1'	-13.21	90.93	101.50
36	B2	1519	U	O4'-C1'-N1	13.21	118.77	108.20
36	B2	286	U	O4'-C1'-N1	-13.20	97.64	108.20
20	Aa	97	PRO	CB-CA-C	-13.20	78.99	112.00
85	A5	930	G	O4'-C1'-N9	13.20	118.76	108.20
85	A5	2111	G	P-O3'-C3'	13.20	135.54	119.70
85	A5	2670	C	N1-C1'-C2'	13.20	131.16	114.00
86	A7	72	U	P-O3'-C3'	13.18	135.52	119.70
36	B2	1265	A	N9-C1'-C2'	13.18	131.13	114.00
36	B2	752	G	O4'-C1'-N9	13.18	118.74	108.20
85	A5	4036	G	P-O3'-C3'	13.17	135.51	119.70
85	A5	4903	G	P-O3'-C3'	13.16	135.49	119.70
87	A8	94	G	O4'-C1'-C2'	-13.16	92.64	105.80
39	Cq	37	SER	N-CA-CB	-13.16	90.77	110.50
85	A5	1293	G	P-O3'-C3'	13.15	135.48	119.70
85	A5	1347	G	O4'-C1'-N9	13.14	118.72	108.20
85	A5	1310	C	O4'-C1'-N1	13.14	118.71	108.20
85	A5	4680	G	O4'-C1'-N9	13.14	118.71	108.20
85	A5	750	U	O4'-C1'-N1	13.14	118.71	108.20
85	A5	4697	U	O4'-C1'-N1	13.13	118.71	108.20
85	A5	4735	G	P-O3'-C3'	13.13	135.45	119.70
85	A5	911	U	P-O3'-C3'	13.12	135.45	119.70
36	B2	772	G	P-O3'-C3'	13.12	135.45	119.70
36	B2	746	C	P-O3'-C3'	13.12	135.44	119.70
36	B2	416	U	O4'-C1'-N1	13.11	118.69	108.20
85	A5	2766	A	O4'-C1'-N9	13.11	118.69	108.20
85	A5	3940	U	P-O3'-C3'	13.11	135.43	119.70
85	A5	2272	C	P-O3'-C3'	13.10	135.42	119.70
52	CS	174	THR	O-C-N	-13.10	101.74	122.70
36	B2	1847	G	O4'-C1'-N9	13.08	118.67	108.20
85	A5	413	G	O4'-C1'-N9	13.08	118.67	108.20
85	A5	3972	A	P-O3'-C3'	13.08	135.40	119.70
85	A5	4875	G	O4'-C1'-N9	13.08	118.66	108.20
36	B2	1261	C	N1-C1'-C2'	13.07	131.00	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	AK	55	ARG	CG-CD-NE	13.07	139.25	111.80
85	A5	4751	G	O4'-C1'-C2'	13.07	119.36	107.60
56	CX	52	LEU	O-C-N	-13.06	101.80	122.70
35	Ah	157	ILE	O-C-N	13.04	143.57	122.70
36	B2	1507	G	O4'-C1'-N9	13.04	118.64	108.20
85	A5	1367	C	N1-C1'-C2'	-13.04	97.05	114.00
85	A5	1240	G	C1'-O4'-C4'	13.03	120.32	109.90
74	CC	155	GLU	N-CA-CB	13.02	134.04	110.60
85	A5	4075	U	O4'-C1'-N1	13.02	118.61	108.20
74	CC	307	LYS	CB-CG-CD	13.01	145.43	111.60
85	A5	3821	A	O4'-C1'-N9	13.01	118.61	108.20
36	B2	1528	G	O4'-C1'-N9	13.00	118.60	108.20
85	A5	4978	G	O4'-C1'-N9	12.99	118.59	108.20
36	B2	1720	U	P-O3'-C3'	12.98	135.28	119.70
85	A5	976	G	O4'-C1'-N9	12.98	118.58	108.20
36	B2	1463	U	C4'-C3'-O3'	-12.97	82.17	109.40
36	B2	1486	A	O4'-C1'-N9	12.97	118.57	108.20
87	A8	149	G	O4'-C1'-N9	12.96	118.57	108.20
85	A5	2801	U	O4'-C1'-N1	12.96	118.57	108.20
85	A5	3967	G	C1'-O4'-C4'	-12.96	99.53	109.90
36	B2	183	G	C1'-O4'-C4'	-12.94	99.55	109.90
85	A5	2102	G	O4'-C1'-N9	12.93	118.55	108.20
85	A5	478	G	O4'-C1'-N9	12.93	118.54	108.20
85	A5	2665	U	N1-C1'-C2'	12.93	130.81	114.00
36	B2	1311	C	N1-C1'-C2'	12.92	130.79	114.00
85	A5	1313	C	O4'-C1'-C2'	-12.92	92.88	105.80
36	B2	880	G	P-O3'-C3'	12.91	135.19	119.70
85	A5	4229	U	O4'-C1'-N1	12.91	118.53	108.20
85	A5	2806	A	P-O3'-C3'	12.91	135.19	119.70
36	B2	466	G	O4'-C1'-N9	12.91	118.53	108.20
85	A5	4118	U	O4'-C1'-N1	12.90	118.52	108.20
85	A5	4150	G	O4'-C1'-N9	12.90	118.52	108.20
36	B2	425	G	O4'-C1'-N9	12.89	118.52	108.20
87	A8	63	U	O4'-C1'-N1	12.89	118.51	108.20
85	A5	4196	G	C3'-C2'-C1'	12.89	111.81	101.50
36	B2	751	G	O4'-C1'-N9	12.89	118.51	108.20
85	A5	2505	C	O4'-C1'-N1	12.88	118.50	108.20
85	A5	1268	G	N9-C1'-C2'	12.88	130.74	114.00
36	B2	873	G	P-O3'-C3'	12.87	135.15	119.70
85	A5	946	C	O4'-C1'-C2'	-12.87	92.93	105.80
85	A5	188	G	O4'-C1'-N9	12.87	118.49	108.20
85	A5	2018	C	P-O5'-C5'	12.87	141.49	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	969	C	P-O3'-C3'	12.87	135.14	119.70
85	A5	2093	A	O4'-C1'-N9	12.87	118.49	108.20
85	A5	2829	U	O4'-C1'-N1	12.87	118.49	108.20
85	A5	4062	A	O4'-C1'-N9	12.86	118.49	108.20
85	A5	4945	G	O4'-C1'-N9	12.86	118.48	108.20
39	Cq	57	LYS	CB-CA-C	-12.86	84.69	110.40
85	A5	1214	C	P-O3'-C3'	12.84	135.10	119.70
87	A8	154	G	O4'-C1'-N9	12.84	118.47	108.20
36	B2	1410	C	N1-C1'-C2'	12.82	130.67	114.00
40	CK	111	ASN	N-CA-CB	12.82	133.67	110.60
36	B2	604	A	P-O3'-C3'	12.80	135.06	119.70
36	B2	725	C	P-O3'-C3'	12.80	135.06	119.70
86	A7	72	U	P-O5'-C5'	12.80	141.39	120.90
36	B2	1	U	O4'-C1'-N1	12.80	118.44	108.20
36	B2	1433	C	O3'-P-O5'	-12.80	79.68	104.00
85	A5	5026	U	O4'-C1'-N1	12.80	118.44	108.20
36	B2	1406	G	P-O3'-C3'	12.80	135.06	119.70
36	B2	126	G	C4'-C3'-O3'	-12.79	82.53	109.40
61	Ch	119	TYR	CB-CG-CD1	12.79	128.68	121.00
85	A5	4708	A	O4'-C1'-N9	12.79	118.43	108.20
36	B2	75	G	O4'-C1'-N9	12.79	118.43	108.20
85	A5	938	C	P-O3'-C3'	12.79	135.04	119.70
85	A5	1447	C	O4'-C1'-N1	12.79	118.43	108.20
85	A5	2289	C	C3'-C2'-C1'	12.78	111.73	101.50
36	B2	1253	A	O4'-C1'-N9	12.78	118.42	108.20
38	Cz	98	LYS	CA-C-N	-12.77	89.10	117.20
85	A5	2025	A	P-O3'-C3'	12.77	135.03	119.70
37	BC	21	G	O4'-C1'-N9	12.77	118.41	108.20
85	A5	2447	U	O4'-C1'-N1	12.77	118.42	108.20
85	A5	2107	C	O4'-C1'-C2'	-12.77	93.03	105.80
36	B2	1570	G	O4'-C1'-N9	12.76	118.41	108.20
85	A5	4334	U	O4'-C1'-N1	12.76	118.41	108.20
85	A5	4685	U	O4'-C1'-N1	12.76	118.41	108.20
85	A5	385	A	O4'-C1'-N9	12.76	118.41	108.20
85	A5	3832	U	O4'-C1'-N1	12.75	118.40	108.20
38	Cz	28	PHE	O-C-N	12.73	143.08	122.70
36	B2	1172	U	O4'-C1'-N1	12.73	118.38	108.20
85	A5	1274	A	P-O5'-C5'	12.73	141.26	120.90
36	B2	1538	C	P-O3'-C3'	12.72	134.97	119.70
40	CK	130	LYS	CB-CA-C	-12.71	84.97	110.40
85	A5	3933	G	O4'-C1'-N9	12.71	118.37	108.20
36	B2	38	A	O4'-C1'-N9	12.71	118.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2850	A	N9-C1'-C2'	12.70	130.50	114.00
78	Co	34	TYR	O-C-N	-12.68	102.41	122.70
81	CE	100	LYS	O-C-N	-12.68	102.42	122.70
85	A5	754	U	O4'-C1'-N1	12.68	118.34	108.20
85	A5	428	G	O4'-C1'-N9	12.67	118.34	108.20
36	B2	170	A	O4'-C1'-C2'	12.67	119.00	107.60
36	B2	139	C	P-O3'-C3'	12.66	134.89	119.70
36	B2	123	G	O4'-C1'-N9	12.66	118.33	108.20
36	B2	1242	U	N1-C1'-C2'	12.66	130.46	114.00
85	A5	3268	U	C5'-C4'-C3'	12.65	136.24	116.00
61	Ch	78	TYR	CB-CG-CD1	-12.64	113.42	121.00
38	Cz	100	VAL	CA-C-O	-12.63	93.57	120.10
36	B2	632	C	N1-C1'-C2'	12.63	130.42	114.00
36	B2	820	U	O4'-C1'-N1	12.63	118.30	108.20
85	A5	2009	A	P-O3'-C3'	12.63	134.85	119.70
36	B2	59	U	O4'-C1'-N1	12.62	118.30	108.20
85	A5	1410	U	P-O3'-C3'	12.61	134.84	119.70
85	A5	708	G	P-O3'-C3'	12.61	134.84	119.70
85	A5	1757	U	P-O5'-C5'	-12.61	100.72	120.90
85	A5	1532	G	N9-C1'-C2'	12.61	130.39	114.00
36	B2	1244	U	O4'-C1'-N1	12.60	118.28	108.20
85	A5	2123	C	O4'-C1'-C2'	-12.60	93.20	105.80
85	A5	2649	G	P-O3'-C3'	12.60	134.81	119.70
85	A5	4081	G	O4'-C1'-N9	12.60	118.28	108.20
12	AR	88	VAL	O-C-N	-12.59	102.56	122.70
85	A5	4738	C	P-O3'-C3'	12.59	134.81	119.70
34	AQ	18	THR	N-CA-CB	12.58	134.19	110.30
6	AX	23	HIS	O-C-N	-12.57	102.58	122.70
36	B2	24	C	C1'-C2'-O2'	-12.57	72.89	110.60
36	B2	722	C	P-O3'-C3'	12.57	134.78	119.70
85	A5	2250	C	P-O3'-C3'	12.56	134.78	119.70
85	A5	2304	U	O4'-C1'-N1	12.56	118.25	108.20
54	CP	10	ASN	C-N-CD	-12.56	92.97	120.60
85	A5	688	U	N1-C1'-C2'	12.56	130.33	114.00
85	A5	1369	C	N1-C1'-C2'	12.56	130.33	114.00
36	B2	77	A	P-O3'-C3'	12.56	134.77	119.70
85	A5	272	U	O4'-C1'-N1	12.56	118.25	108.20
85	A5	1404	G	O4'-C1'-N9	12.55	118.24	108.20
12	AR	89	SER	N-CA-C	12.55	144.89	111.00
85	A5	2821	U	O4'-C1'-N1	12.54	118.23	108.20
85	A5	3760	A	O4'-C1'-N9	12.54	118.23	108.20
36	B2	1593	C	P-O3'-C3'	12.53	134.74	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4260	U	O4'-C1'-N1	12.52	118.22	108.20
85	A5	981	C	O4'-C1'-C2'	-12.51	93.29	105.80
85	A5	1869	G	O4'-C1'-N9	12.50	118.20	108.20
40	CK	2	PRO	CB-CA-C	12.49	143.23	112.00
36	B2	1149	A	O4'-C1'-N9	12.49	118.19	108.20
85	A5	3838	U	O4'-C1'-N1	12.49	118.19	108.20
85	A5	641	G	O4'-C1'-N9	12.48	118.19	108.20
85	A5	2911	G	P-O3'-C3'	12.48	134.68	119.70
85	A5	4889	G	P-O3'-C3'	12.48	134.68	119.70
63	CB	298	LEU	N-CA-CB	12.48	135.35	110.40
35	Ah	179	MET	C-N-CA	12.47	148.49	122.30
85	A5	405	U	O4'-C1'-N1	12.47	118.18	108.20
36	B2	885	U	O4'-C1'-N1	12.47	118.17	108.20
36	B2	789	G	O4'-C1'-N9	12.46	118.17	108.20
85	A5	882	G	P-O3'-C3'	12.45	134.64	119.70
49	CQ	6	ARG	CD-NE-CZ	12.44	141.02	123.60
85	A5	1994	C	N1-C1'-C2'	12.44	130.17	114.00
29	AG	170	ARG	N-CA-CB	12.44	132.99	110.60
85	A5	250	C	P-O3'-C3'	12.44	134.63	119.70
85	A5	1174	G	O4'-C1'-N9	12.44	118.15	108.20
85	A5	2686	G	O4'-C1'-N9	12.44	118.15	108.20
85	A5	4111	U	O4'-C1'-N1	12.44	118.15	108.20
85	A5	281	U	O4'-C1'-N1	12.43	118.15	108.20
36	B2	1108	G	O4'-C1'-N9	12.43	118.14	108.20
85	A5	1897	A	O4'-C1'-N9	12.43	118.14	108.20
85	A5	4060	U	O4'-C1'-N1	12.43	118.14	108.20
85	A5	4135	G	P-O3'-C3'	12.43	134.61	119.70
85	A5	4527	G	O4'-C1'-N9	12.43	118.14	108.20
85	A5	4671	C	O4'-C1'-C2'	-12.41	93.39	105.80
36	B2	66	G	C1'-O4'-C4'	-12.40	99.98	109.90
73	Cl	5	LYS	C-N-CA	-12.40	90.69	121.70
68	Cf	104	MET	CG-SD-CE	12.40	120.04	100.20
85	A5	4089	G	O4'-C1'-N9	12.40	118.12	108.20
85	A5	4570	G	O4'-C1'-N9	12.40	118.12	108.20
85	A5	4189	U	O4'-C1'-N1	12.39	118.11	108.20
85	A5	4838	U	P-O3'-C3'	12.39	134.57	119.70
85	A5	4941	G	O3'-P-O5'	-12.39	80.46	104.00
87	A8	80	A	O4'-C1'-N9	12.39	118.11	108.20
85	A5	1522	G	O4'-C1'-N9	12.38	118.10	108.20
85	A5	2133	C	P-O3'-C3'	12.37	134.54	119.70
85	A5	2232	C	P-O3'-C3'	12.37	134.54	119.70
85	A5	2630	U	O4'-C1'-N1	12.37	118.09	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4130	C	P-O3'-C3'	12.37	134.54	119.70
36	B2	741	C	O4'-C1'-N1	12.37	118.09	108.20
85	A5	4806	C	P-O3'-C3'	12.37	134.54	119.70
36	B2	1759	G	O4'-C1'-N9	12.36	118.09	108.20
85	A5	1578	U	P-O3'-C3'	-12.36	104.87	119.70
36	B2	20	G	O4'-C1'-N9	12.35	118.08	108.20
85	A5	1612	G	N9-C1'-C2'	12.35	130.05	114.00
36	B2	870	A	O4'-C1'-N9	12.34	118.07	108.20
36	B2	706	U	P-O3'-C3'	12.34	134.51	119.70
36	B2	369	C	O4'-C1'-N1	12.34	118.07	108.20
36	B2	835	C	P-O5'-C5'	12.34	140.64	120.90
85	A5	2768	C	N1-C1'-C2'	12.33	130.03	114.00
85	A5	3657	U	O4'-C1'-N1	12.32	118.06	108.20
13	AP	17	TYR	CB-CG-CD2	-12.32	113.61	121.00
50	CR	143	HIS	ND1-CE1-NE2	-12.32	82.79	109.90
85	A5	1075	G	O4'-C1'-N9	12.32	118.06	108.20
85	A5	3731	C	P-O3'-C3'	12.31	134.47	119.70
37	BC	37	A	P-O3'-C3'	-12.30	104.94	119.70
85	A5	3690	U	O4'-C1'-N1	12.30	118.04	108.20
85	A5	1890	G	O4'-C1'-N9	12.30	118.04	108.20
85	A5	2146	U	P-O3'-C3'	12.30	134.46	119.70
87	A8	88	A	N9-C1'-C2'	12.30	129.99	114.00
74	CC	133	LEU	C-N-CD	-12.29	93.56	120.60
81	CE	101	ASN	N-CA-CB	12.28	132.71	110.60
85	A5	333	U	O4'-C1'-N1	12.28	118.02	108.20
85	A5	958	G	P-O3'-C3'	12.28	134.43	119.70
85	A5	2549	G	P-O3'-C3'	12.28	134.43	119.70
85	A5	4066	U	O4'-C1'-N1	12.28	118.02	108.20
36	B2	4	C	N1-C1'-C2'	12.27	129.95	114.00
40	CK	99	LYS	N-CA-CB	12.27	132.69	110.60
49	CQ	6	ARG	CB-CG-CD	12.27	143.49	111.60
85	A5	1429	C	O4'-C1'-C2'	-12.27	93.53	105.80
36	B2	262	G	P-O3'-C3'	12.26	134.41	119.70
85	A5	2120	G	C3'-C2'-C1'	12.26	111.31	101.50
85	A5	2691	U	P-O3'-C3'	-12.26	104.99	119.70
36	B2	552	G	P-O3'-C3'	12.26	134.41	119.70
36	B2	1048	G	N9-C1'-C2'	12.26	129.93	114.00
85	A5	3887	C	P-O3'-C3'	12.25	134.41	119.70
85	A5	2260	C	P-O3'-C3'	12.25	134.40	119.70
85	A5	4863	G	O4'-C1'-N9	12.25	118.00	108.20
36	B2	289	G	O4'-C1'-N9	12.25	118.00	108.20
36	B2	1721	U	N1-C1'-C2'	-12.25	98.08	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	626	G	C3'-C2'-C1'	12.24	111.29	101.50
36	B2	1434	C	P-O3'-C3'	12.24	134.39	119.70
87	A8	111	U	O5'-C5'-C4'	12.23	134.94	111.70
36	B2	1418	C	O4'-C1'-C2'	12.23	118.61	107.60
85	A5	444	G	O4'-C1'-N9	12.23	117.98	108.20
85	A5	2313	A	P-O3'-C3'	12.22	134.37	119.70
58	CW	71	ARG	CA-CB-CG	12.22	140.28	113.40
36	B2	339	A	C4'-C3'-O3'	-12.21	83.75	109.40
85	A5	1401	C	O4'-C1'-N1	12.21	117.97	108.20
74	CC	4	ALA	CA-C-N	12.21	144.06	117.20
85	A5	2826	U	O4'-C1'-N1	12.21	117.97	108.20
85	A5	2696	A	O4'-C1'-N9	12.21	117.97	108.20
36	B2	990	A	N9-C1'-C2'	12.20	129.87	114.00
85	A5	1197	C	P-O3'-C3'	12.21	134.35	119.70
36	B2	1130	G	O4'-C1'-N9	12.20	117.96	108.20
85	A5	1361	G	N9-C1'-C2'	-12.20	98.14	114.00
86	A7	112	U	O4'-C1'-N1	12.20	117.96	108.20
36	B2	1085	C	P-O5'-C5'	-12.20	101.38	120.90
85	A5	3753	G	P-O3'-C3'	12.20	134.34	119.70
85	A5	4087	G	P-O3'-C3'	12.20	134.34	119.70
85	A5	966	A	P-O3'-C3'	12.20	134.34	119.70
85	A5	184	U	P-O3'-C3'	12.19	134.33	119.70
34	AQ	146	ARG	NE-CZ-NH2	12.18	126.39	120.30
85	A5	923	C	N1-C1'-C2'	12.18	129.83	114.00
85	A5	4874	A	P-O3'-C3'	12.17	134.31	119.70
85	A5	4762	A	O4'-C1'-N9	12.17	117.94	108.20
85	A5	64	A	P-O3'-C3'	12.16	134.29	119.70
36	B2	1567	G	C3'-C2'-C1'	-12.15	91.78	101.50
85	A5	2495	U	O4'-C1'-N1	12.15	117.92	108.20
85	A5	4093	G	P-O3'-C3'	12.15	134.28	119.70
87	A8	110	U	P-O3'-C3'	12.15	134.28	119.70
85	A5	468	U	O4'-C1'-N1	12.14	117.92	108.20
85	A5	3948	C	P-O3'-C3'	12.14	134.27	119.70
87	A8	123	U	O4'-C1'-N1	12.14	117.92	108.20
36	B2	146	G	O4'-C1'-N9	12.14	117.91	108.20
36	B2	541	U	O4'-C1'-N1	12.14	117.91	108.20
82	CG	106	THR	CA-C-O	-12.13	94.62	120.10
85	A5	4267	G	O4'-C1'-N9	12.13	117.91	108.20
85	A5	5015	G	O4'-C1'-C2'	-12.13	93.67	105.80
23	AD	4	GLN	CG-CD-OE1	-12.13	97.34	121.60
85	A5	149	A	C2'-C3'-O3'	12.13	136.18	109.50
85	A5	1809	C	O4'-C1'-N1	12.12	117.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1171	G	O4'-C1'-N9	12.12	117.90	108.20
85	A5	1381	U	O4'-C1'-N1	12.12	117.90	108.20
85	A5	1397	A	O4'-C1'-N9	12.11	117.89	108.20
36	B2	422	U	O4'-C1'-N1	12.11	117.89	108.20
85	A5	5047	C	O4'-C1'-N1	12.11	117.89	108.20
36	B2	1844	U	O4'-C1'-N1	12.10	117.88	108.20
36	B2	1473	G	O3'-P-O5'	12.10	126.99	104.00
36	B2	1259	A	O4'-C1'-N9	12.09	117.88	108.20
18	AY	86	GLU	CA-C-O	-12.09	94.71	120.10
85	A5	4541	G	O4'-C1'-N9	12.09	117.87	108.20
85	A5	934	C	P-O5'-C5'	12.09	140.24	120.90
85	A5	2255	C	C3'-C2'-C1'	12.09	111.17	101.50
85	A5	2242	C	O4'-C1'-N1	12.08	117.86	108.20
2	Ag	24	THR	C-N-CD	-12.08	94.03	120.60
36	B2	240	G	P-O3'-C3'	12.07	134.19	119.70
36	B2	1192	U	O4'-C1'-N1	12.07	117.86	108.20
36	B2	1401	A	P-O3'-C3'	12.07	134.19	119.70
85	A5	674	G	C1'-O4'-C4'	-12.07	100.25	109.90
53	CT	151	LEU	C-N-CA	12.06	151.86	121.70
85	A5	1616	U	O4'-C1'-N1	12.06	117.85	108.20
85	A5	4395	U	O4'-C1'-N1	12.06	117.85	108.20
85	A5	671	G	O4'-C1'-N9	12.06	117.85	108.20
85	A5	4942	C	N1-C1'-C2'	12.05	129.67	114.00
24	Ae	21	LYS	O-C-N	-12.04	103.43	122.70
85	A5	1359	G	O4'-C1'-N9	-12.05	98.56	108.20
36	B2	861	A	N9-C1'-C2'	-12.04	98.35	114.00
85	A5	1051	G	O4'-C1'-N9	12.03	117.83	108.20
85	A5	2574	G	P-O3'-C3'	12.03	134.14	119.70
85	A5	4065	G	O4'-C1'-N9	12.03	117.83	108.20
37	BC	64	C	O4'-C1'-N1	12.03	117.82	108.20
36	B2	919	A	P-O3'-C3'	12.02	134.12	119.70
85	A5	1360	G	O3'-P-O5'	-12.02	81.16	104.00
36	B2	1555	U	O4'-C1'-N1	12.02	117.82	108.20
85	A5	3861	A	C3'-C2'-C1'	12.02	111.11	101.50
85	A5	4069	U	O4'-C1'-N1	12.01	117.81	108.20
36	B2	530	U	O4'-C1'-N1	12.01	117.81	108.20
78	Co	3	ASN	O-C-N	-12.00	103.50	122.70
85	A5	5010	U	O4'-C1'-N1	12.00	117.80	108.20
58	CW	97	LYS	C-N-CD	-12.00	94.20	120.60
85	A5	1359	G	C1'-O4'-C4'	-12.00	100.30	109.90
84	Cu	45	GLU	N-CA-CB	12.00	132.19	110.60
85	A5	445	U	P-O3'-C3'	12.00	134.10	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	287	U	P-O3'-C3'	11.99	134.09	119.70
87	A8	142	U	O4'-C1'-N1	11.99	117.79	108.20
85	A5	2609	G	O4'-C1'-N9	11.99	117.79	108.20
36	B2	839	C	O4'-C1'-N1	11.98	117.78	108.20
36	B2	740	C	N1-C1'-C2'	11.97	129.57	114.00
36	B2	1101	U	O4'-C1'-N1	11.97	117.78	108.20
86	A7	119	U	O4'-C1'-N1	11.97	117.78	108.20
36	B2	227	U	O4'-C1'-N1	11.96	117.77	108.20
85	A5	2814	C	C3'-C2'-C1'	11.97	111.07	101.50
36	B2	1676	U	O4'-C1'-N1	11.96	117.77	108.20
36	B2	1376	A	O4'-C1'-N9	11.96	117.77	108.20
85	A5	1102	U	O4'-C1'-N1	11.96	117.77	108.20
36	B2	1664	A	P-O3'-C3'	11.96	134.05	119.70
85	A5	4163	U	P-O3'-C3'	11.96	134.05	119.70
36	B2	1314	U	O4'-C1'-N1	11.95	117.76	108.20
85	A5	2831	G	O4'-C1'-N9	11.95	117.76	108.20
85	A5	4664	A	O3'-P-O5'	11.95	126.70	104.00
85	A5	1610	C	O4'-C1'-N1	11.94	117.75	108.20
36	B2	471	G	O4'-C1'-N9	11.94	117.75	108.20
85	A5	676	C	O4'-C1'-N1	11.94	117.75	108.20
85	A5	1240	G	N9-C1'-C2'	-11.93	98.49	114.00
4	AK	1	MET	N-CA-CB	-11.93	89.13	110.60
36	B2	1543	U	P-O3'-C3'	11.93	134.01	119.70
85	A5	2220	U	P-O3'-C3'	11.93	134.01	119.70
36	B2	1359	U	O4'-C1'-N1	11.92	117.74	108.20
85	A5	945	U	P-O3'-C3'	11.91	134.00	119.70
1	Az	278	THR	O-C-N	-11.91	103.65	122.70
36	B2	1107	G	O4'-C1'-N9	11.91	117.73	108.20
36	B2	436	G	O4'-C1'-N9	11.91	117.72	108.20
85	A5	3861	A	O4'-C1'-C2'	-11.90	93.90	105.80
50	CR	53	LYS	C-N-CD	-11.89	94.43	120.60
85	A5	185	C	O4'-C1'-C2'	-11.89	93.91	105.80
85	A5	4350	C	O5'-P-OP1	-11.89	95.00	105.70
85	A5	724	C	O4'-C1'-C2'	-11.89	93.91	105.80
85	A5	3663	A	N9-C1'-C2'	11.88	129.45	114.00
36	B2	179	C	N1-C1'-C2'	11.88	129.44	114.00
42	CL	163	LYS	CA-C-N	-11.88	91.07	117.20
23	AD	4	GLN	N-CA-CB	-11.88	89.22	110.60
45	Ca	147	VAL	O-C-N	-11.87	103.70	122.70
85	A5	1633	G	P-O3'-C3'	11.88	133.95	119.70
64	CF	220	MET	C-N-CA	11.87	151.36	121.70
85	A5	1179	U	O4'-C1'-N1	11.85	117.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3283	G	P-O3'-C3'	11.85	133.92	119.70
53	CT	75	VAL	O-C-N	-11.85	103.74	122.70
36	B2	606	G	O4'-C1'-N9	11.85	117.68	108.20
36	B2	1612	G	N9-C1'-C2'	-11.85	98.60	114.00
85	A5	3888	G	P-O3'-C3'	11.85	133.92	119.70
38	Cz	28	PHE	C-N-CA	-11.84	92.09	121.70
85	A5	3886	G	O4'-C1'-N9	11.84	117.67	108.20
82	CG	103	ARG	C-N-CD	-11.84	94.55	120.60
38	Cz	26	ARG	N-CA-C	11.84	142.96	111.00
36	B2	1554	C	O3'-P-O5'	-11.84	81.51	104.00
85	A5	4265	U	O4'-C1'-N1	11.84	117.67	108.20
85	A5	940	C	P-O3'-C3'	11.83	133.89	119.70
36	B2	811	A	P-O3'-C3'	11.82	133.88	119.70
36	B2	872	A	P-O3'-C3'	11.82	133.88	119.70
85	A5	384	A	C3'-C2'-C1'	11.82	110.95	101.50
85	A5	1275	G	O4'-C1'-N9	11.82	117.65	108.20
87	A8	30	U	O4'-C1'-N1	11.81	117.65	108.20
85	A5	4768	G	O4'-C1'-N9	11.80	117.64	108.20
82	CG	162	ASP	C-N-CD	-11.79	94.65	120.60
85	A5	1714	C	P-O3'-C3'	11.79	133.85	119.70
85	A5	1175	A	O4'-C1'-N9	11.78	117.62	108.20
85	A5	1768	C	O4'-C1'-C2'	-11.78	94.02	105.80
36	B2	1319	U	O4'-C1'-N1	11.78	117.62	108.20
63	CB	292	LEU	O-C-N	-11.78	103.86	122.70
85	A5	2450	G	O4'-C1'-N9	11.78	117.62	108.20
12	AR	1	MET	C-N-CA	-11.77	97.57	122.30
36	B2	1323	U	O4'-C1'-N1	11.77	117.62	108.20
74	CC	34	PRO	O-C-N	-11.77	103.87	122.70
85	A5	2097	U	O4'-C1'-C2'	-11.77	94.03	105.80
85	A5	4751	G	C3'-C2'-C1'	-11.77	92.08	101.50
40	CK	24	ALA	O-C-N	-11.76	103.89	122.70
85	A5	142	G	P-O3'-C3'	11.75	133.80	119.70
36	B2	791	C	P-O3'-C3'	11.74	133.79	119.70
85	A5	2638	G	N9-C1'-C2'	-11.74	98.73	114.00
85	A5	934	C	C3'-C2'-C1'	11.74	110.89	101.50
85	A5	508	G	O4'-C1'-N9	11.73	117.58	108.20
7	AM	99	ASN	C-N-CD	-11.73	94.80	120.60
36	B2	1237	C	C1'-O4'-C4'	-11.72	100.52	109.90
85	A5	4994	G	C1'-O4'-C4'	-11.72	100.53	109.90
85	A5	3959	U	P-O3'-C3'	11.72	133.76	119.70
85	A5	1285	U	P-O3'-C3'	11.71	133.76	119.70
85	A5	4739	C	O4'-C1'-N1	11.71	117.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	AB	41	ILE	CB-CA-C	11.71	135.01	111.60
36	B2	1839	U	O4'-C1'-N1	11.70	117.56	108.20
85	A5	1235	G	P-O5'-C5'	11.70	139.61	120.90
85	A5	1367	C	C1'-O4'-C4'	11.69	119.25	109.90
85	A5	3593	C	P-O3'-C3'	11.69	133.73	119.70
36	B2	1812	U	O4'-C1'-N1	11.69	117.55	108.20
85	A5	1907	A	P-O3'-C3'	11.69	133.72	119.70
36	B2	1675	A	N9-C1'-C2'	-11.68	98.82	114.00
85	A5	105	A	O4'-C1'-N9	11.68	117.54	108.20
36	B2	1422	G	O4'-C1'-N9	11.67	117.54	108.20
36	B2	1235	G	O4'-C1'-N9	11.67	117.54	108.20
36	B2	1520	G	N9-C1'-C2'	11.67	129.17	114.00
36	B2	286	U	C3'-C2'-C1'	11.66	110.83	101.50
36	B2	738	C	N1-C1'-C2'	11.66	129.16	114.00
85	A5	2506	G	P-O3'-C3'	11.65	133.68	119.70
36	B2	580	U	P-O3'-C3'	-11.65	105.72	119.70
38	Cz	28	PHE	CA-CB-CG	11.64	141.84	113.90
85	A5	1265	G	N9-C1'-C2'	11.64	129.14	114.00
36	B2	800	U	O4'-C1'-N1	11.64	117.51	108.20
85	A5	404	U	O4'-C1'-N1	11.63	117.50	108.20
85	A5	1410	U	C1'-O4'-C4'	11.63	119.20	109.90
33	AI	134	GLU	CB-CA-C	-11.63	87.15	110.40
36	B2	1450	G	O4'-C1'-N9	11.62	117.50	108.20
36	B2	821	G	O4'-C1'-N9	11.62	117.50	108.20
36	B2	1834	A	N9-C1'-C2'	11.62	129.11	114.00
85	A5	1445	U	O4'-C1'-N1	11.62	117.50	108.20
85	A5	2313	A	O4'-C1'-N9	11.61	117.49	108.20
85	A5	652	G	O4'-C1'-N9	11.61	117.49	108.20
36	B2	536	A	P-O3'-C3'	-11.61	105.77	119.70
85	A5	2399	G	O4'-C1'-N9	11.61	117.49	108.20
45	Ca	97	ALA	CB-CA-C	11.60	127.50	110.10
36	B2	375	U	O4'-C1'-N1	11.59	117.47	108.20
36	B2	804	U	O4'-C1'-N1	11.59	117.47	108.20
73	Cl	5	LYS	CA-C-N	-11.59	91.69	117.20
85	A5	1787	A	C3'-C2'-C1'	11.59	110.78	101.50
85	A5	2542	G	O4'-C1'-N9	11.59	117.48	108.20
60	Cr	90	LEU	CA-C-N	11.59	142.70	117.20
85	A5	2648	G	O4'-C1'-N9	11.59	117.47	108.20
85	A5	2939	G	P-O3'-C3'	11.59	133.61	119.70
41	CO	202	LEU	O-C-N	-11.59	104.16	122.70
36	B2	1498	A	C1'-O4'-C4'	-11.58	100.63	109.90
85	A5	3925	U	O4'-C1'-N1	11.58	117.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	479	G	O4'-C1'-N9	11.57	117.46	108.20
37	BC	66	U	O4'-C1'-N1	11.57	117.46	108.20
39	Cq	231	TYR	CB-CA-C	11.57	133.54	110.40
36	B2	1441	U	O4'-C1'-N1	11.56	117.45	108.20
85	A5	2506	G	N9-C1'-C2'	11.56	129.03	114.00
36	B2	1161	U	O4'-C1'-N1	11.56	117.45	108.20
85	A5	1163	G	P-O3'-C3'	11.56	133.57	119.70
86	A7	33	U	O4'-C1'-N1	11.56	117.45	108.20
36	B2	228	C	C3'-C2'-C1'	11.56	110.75	101.50
12	AR	1	MET	N-CA-C	-11.55	79.81	111.00
36	B2	1011	A	O4'-C1'-N9	11.55	117.44	108.20
36	B2	1723	G	O4'-C1'-N9	11.54	117.43	108.20
85	A5	4673	U	O4'-C1'-N1	11.54	117.43	108.20
36	B2	933	G	C1'-O4'-C4'	-11.54	100.67	109.90
36	B2	682	U	O4'-C1'-N1	11.53	117.42	108.20
36	B2	732	U	P-O3'-C3'	11.53	133.53	119.70
85	A5	2471	G	N9-C1'-C2'	-11.52	99.02	114.00
85	A5	2286	G	O4'-C1'-N9	11.51	117.41	108.20
36	B2	378	U	O4'-C1'-N1	11.51	117.41	108.20
1	Az	768	GLY	C-N-CA	-11.51	92.93	121.70
85	A5	141	C	P-O3'-C3'	11.51	133.51	119.70
26	AJ	146	SER	C-N-CA	11.50	150.45	121.70
85	A5	1670	G	O4'-C1'-N9	11.50	117.40	108.20
85	A5	1853	G	P-O3'-C3'	11.49	133.49	119.70
85	A5	936	C	P-O3'-C3'	11.48	133.48	119.70
85	A5	1286	C	O4'-C1'-N1	11.48	117.39	108.20
85	A5	484	U	O4'-C1'-N1	11.48	117.38	108.20
36	B2	1004	U	O4'-C1'-N1	11.48	117.38	108.20
81	CE	74	SER	N-CA-CB	-11.48	93.28	110.50
11	AL	153	LYS	O-C-N	-11.48	104.34	122.70
35	Ah	170	ARG	C-N-CA	-11.48	98.20	122.30
36	B2	1557	C	P-O3'-C3'	11.46	133.46	119.70
85	A5	4906	C	N1-C1'-C2'	11.45	128.89	114.00
36	B2	31	U	O4'-C1'-N1	11.45	117.36	108.20
86	A7	55	A	O4'-C1'-N9	11.45	117.36	108.20
85	A5	4295	U	O4'-C1'-N1	11.45	117.36	108.20
36	B2	427	U	O4'-C1'-N1	11.44	117.35	108.20
54	CP	5	SER	CA-CB-OG	11.44	142.09	111.20
38	Cz	160	LYS	CB-CA-C	11.44	133.27	110.40
85	A5	4944	C	O4'-C1'-N1	11.43	117.34	108.20
36	B2	183	G	N9-C1'-C2'	11.41	128.84	114.00
87	A8	85	U	P-O3'-C3'	11.41	133.40	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	423	U	O4'-C1'-N1	11.40	117.32	108.20
85	A5	117	C	C4'-C3'-O3'	-11.40	85.46	109.40
85	A5	2653	C	N1-C1'-C2'	11.40	128.82	114.00
85	A5	2070	U	O4'-C1'-N1	11.40	117.32	108.20
85	A5	1254	A	N9-C1'-C2'	11.39	128.81	114.00
85	A5	2042	A	O4'-C1'-N9	11.39	117.31	108.20
85	A5	3684	G	C1'-O4'-C4'	-11.39	100.79	109.90
85	A5	4124	G	C3'-C2'-C1'	11.38	110.61	101.50
36	B2	732	U	P-O5'-C5'	11.38	139.10	120.90
36	B2	1210	G	O4'-C1'-N9	11.38	117.30	108.20
85	A5	2312	U	O4'-C1'-N1	11.37	117.30	108.20
85	A5	2546	G	P-O5'-C5'	11.37	139.09	120.90
36	B2	368	U	O4'-C1'-N1	11.37	117.29	108.20
42	CL	48	PRO	N-CA-C	11.36	141.64	112.10
85	A5	2483	G	O4'-C1'-N9	11.36	117.29	108.20
85	A5	3749	C	N1-C1'-C2'	11.36	128.77	114.00
85	A5	2490	U	P-O5'-C5'	-11.35	102.74	120.90
85	A5	2406	G	P-O3'-C3'	11.35	133.32	119.70
33	AI	6	ASP	CB-CG-OD2	-11.35	108.09	118.30
85	A5	149	A	C4'-C3'-O3'	-11.35	85.57	109.40
85	A5	1590	C	O4'-C1'-N1	11.35	117.28	108.20
85	A5	4743	G	O4'-C1'-N9	11.35	117.28	108.20
38	Cz	26	ARG	CB-CA-C	-11.34	87.72	110.40
85	A5	2258	C	N1-C1'-C2'	11.34	128.74	114.00
85	A5	16	G	P-O3'-C3'	11.34	133.30	119.70
85	A5	1423	U	O4'-C1'-N1	11.34	117.27	108.20
85	A5	4639	G	P-O3'-C3'	11.34	133.30	119.70
85	A5	5041	G	O4'-C1'-C2'	11.33	117.80	107.60
85	A5	107	G	O4'-C1'-C2'	11.33	117.80	107.60
85	A5	4500	U	O4'-C1'-N1	11.33	117.27	108.20
81	CE	57	TYR	N-CA-CB	11.32	130.98	110.60
36	B2	546	G	P-O3'-C3'	11.32	133.28	119.70
36	B2	1504	U	O4'-C1'-N1	11.32	117.25	108.20
85	A5	701	G	O4'-C1'-N9	11.32	117.25	108.20
86	A7	106	G	O4'-C1'-N9	11.32	117.25	108.20
35	Ah	170	ARG	N-CA-C	11.30	141.51	111.00
36	B2	1648	G	C4'-C3'-O3'	11.30	135.59	113.00
64	CF	23	ARG	C-N-CA	11.30	149.95	121.70
85	A5	2109	G	N9-C1'-C2'	11.30	128.69	114.00
74	CC	4	ALA	CA-C-O	-11.29	96.38	120.10
81	CE	43	HIS	C-N-CA	11.29	149.93	121.70
85	A5	970	G	N9-C1'-C2'	11.29	128.68	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1325	C	O4'-C1'-N1	11.29	117.23	108.20
85	A5	2344	U	O4'-C1'-N1	11.29	117.23	108.20
35	Ah	169	GLY	O-C-N	11.28	140.75	122.70
35	Ah	169	GLY	CA-C-N	-11.28	92.39	117.20
85	A5	2390	G	O4'-C1'-C2'	11.26	117.74	107.60
85	A5	363	A	O4'-C1'-N9	11.25	117.20	108.20
85	A5	4591	U	O4'-C1'-N1	11.25	117.20	108.20
87	A8	51	U	O4'-C1'-N1	11.25	117.20	108.20
74	CC	268	ARG	NE-CZ-NH2	-11.24	114.68	120.30
85	A5	2522	G	O4'-C1'-N9	11.24	117.19	108.20
85	A5	486	C	P-O5'-C5'	11.24	138.89	120.90
48	CD	268	ARG	C-N-CD	11.24	152.00	128.40
63	CB	298	LEU	CA-C-N	-11.24	92.48	117.20
37	BC	62	A	O4'-C1'-N9	11.23	117.19	108.20
85	A5	4448	G	P-O3'-C3'	11.23	133.18	119.70
36	B2	865	A	O4'-C1'-N9	11.23	117.19	108.20
85	A5	346	G	O4'-C1'-C2'	11.23	117.71	107.60
85	A5	4380	A	O4'-C1'-N9	11.23	117.18	108.20
87	A8	90	C	P-O5'-C5'	11.23	138.87	120.90
85	A5	2068	C	P-O3'-C3'	11.22	133.17	119.70
85	A5	4200	G	O4'-C1'-N9	11.22	117.18	108.20
85	A5	4864	U	O4'-C1'-N1	11.22	117.18	108.20
85	A5	2267	U	P-O3'-C3'	11.22	133.16	119.70
23	AD	5	ILE	CA-C-N	11.21	141.87	117.20
85	A5	1604	G	O4'-C1'-N9	11.21	117.17	108.20
77	Cp	91	ASP	CB-CG-OD1	-11.20	108.22	118.30
85	A5	1488	G	O4'-C1'-N9	11.20	117.16	108.20
85	A5	3800	A	P-O3'-C3'	-11.20	106.26	119.70
85	A5	262	G	O4'-C1'-N9	11.19	117.15	108.20
20	Aa	98	PRO	C-N-CD	-11.19	95.99	120.60
85	A5	268	G	O4'-C1'-N9	11.19	117.15	108.20
85	A5	945	U	O4'-C1'-N1	11.19	117.15	108.20
85	A5	5060	A	O4'-C1'-N9	11.19	117.15	108.20
11	AL	20	LYS	N-CA-CB	-11.18	90.47	110.60
36	B2	145	G	C1'-O4'-C4'	-11.18	100.95	109.90
48	CD	259	LYS	C-N-CA	11.18	149.66	121.70
36	B2	484	A	P-O3'-C3'	11.18	133.12	119.70
36	B2	421	G	O4'-C1'-N9	11.18	117.14	108.20
58	CW	31	PHE	O-C-N	11.18	140.58	122.70
85	A5	4719	G	P-O3'-C3'	11.18	133.11	119.70
85	A5	958	G	C3'-C2'-C1'	11.17	110.44	101.50
36	B2	1720	U	O4'-C1'-N1	11.17	117.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1241	A	C3'-C2'-C1'	11.17	110.43	101.50
36	B2	1418	C	P-O3'-C3'	11.17	133.10	119.70
85	A5	738	C	O4'-C1'-N1	11.16	117.13	108.20
36	B2	1747	C	P-O3'-C3'	11.16	133.09	119.70
36	B2	1821	U	O4'-C1'-N1	11.15	117.12	108.20
85	A5	733	A	C3'-C2'-C1'	-11.15	92.58	101.50
36	B2	1409	A	P-O3'-C3'	11.15	133.08	119.70
85	A5	4618	G	O4'-C1'-N9	11.15	117.12	108.20
47	CI	206	LEU	CB-CG-CD2	11.14	129.94	111.00
85	A5	4083	U	P-O3'-C3'	-11.14	106.33	119.70
85	A5	1681	G	C1'-O4'-C4'	-11.14	100.99	109.90
85	A5	2110	C	O4'-C1'-C2'	-11.14	94.66	105.80
85	A5	4899	G	P-O3'-C3'	11.14	133.06	119.70
85	A5	989	U	O4'-C1'-N1	11.13	117.11	108.20
36	B2	1854	U	O4'-C1'-N1	11.13	117.11	108.20
36	B2	753	C	O4'-C1'-N1	11.13	117.10	108.20
85	A5	1255	A	N9-C1'-C2'	11.12	128.46	114.00
36	B2	1352	G	C1'-O4'-C4'	-11.12	101.00	109.90
1	Az	4	PHE	N-CA-C	11.12	141.01	111.00
36	B2	530	U	C4'-C3'-O3'	-11.10	86.08	109.40
36	B2	1500	G	N9-C1'-C2'	11.10	128.43	114.00
85	A5	3631	U	O4'-C1'-N1	11.10	117.08	108.20
36	B2	170	A	C1'-O4'-C4'	-11.10	101.02	109.90
85	A5	1841	C	P-O3'-C3'	11.09	133.01	119.70
85	A5	2601	A	O4'-C1'-N9	-11.09	99.33	108.20
85	A5	3720	G	O4'-C1'-N9	11.09	117.07	108.20
85	A5	4404	U	O4'-C1'-N1	11.09	117.07	108.20
85	A5	2094	G	O4'-C1'-N9	11.07	117.06	108.20
85	A5	1244	G	O4'-C1'-N9	11.07	117.05	108.20
61	Ch	121	VAL	O-C-N	-11.06	105.00	122.70
36	B2	917	U	O4'-C1'-N1	11.05	117.04	108.20
36	B2	952	G	O4'-C1'-N9	11.05	117.04	108.20
36	B2	1653	U	O4'-C1'-N1	11.04	117.03	108.20
85	A5	4626	A	O4'-C1'-N9	11.04	117.03	108.20
36	B2	641	A	O4'-C1'-N9	11.04	117.03	108.20
36	B2	1028	A	P-O3'-C3'	-11.04	106.46	119.70
36	B2	1198	G	O4'-C1'-C2'	11.03	117.53	107.60
86	A7	6	C	O4'-C1'-C2'	-11.02	94.78	105.80
39	Cq	14	PHE	CB-CG-CD2	-11.01	113.09	120.80
36	B2	395	G	O4'-C1'-N9	11.01	117.01	108.20
36	B2	1743	G	N9-C1'-C2'	11.01	128.31	114.00
62	Cb	54	LEU	CA-CB-CG	11.01	140.62	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2414	G	O4'-C1'-N9	11.01	117.01	108.20
85	A5	2415	U	P-O3'-C3'	11.01	132.91	119.70
36	B2	1778	C	O4'-C1'-N1	11.00	117.00	108.20
85	A5	2460	A	N9-C1'-C2'	11.00	128.30	114.00
85	A5	4759	C	O4'-C1'-N1	11.00	117.00	108.20
85	A5	1272	C	P-O5'-C5'	11.00	138.49	120.90
85	A5	333	U	P-O3'-C3'	10.99	132.89	119.70
36	B2	951	C	C3'-C2'-C1'	10.99	110.29	101.50
85	A5	112	C	N1-C1'-C2'	10.99	128.28	114.00
85	A5	1733	G	O4'-C1'-N9	10.98	116.99	108.20
86	A7	98	G	O4'-C1'-N9	10.98	116.99	108.20
85	A5	2708	U	O4'-C1'-N1	10.98	116.98	108.20
36	B2	1412	C	P-O3'-C3'	10.98	132.87	119.70
36	B2	1142	G	O4'-C1'-N9	10.98	116.98	108.20
85	A5	4954	G	N9-C1'-C2'	-10.98	99.73	114.00
85	A5	4744	A	P-O3'-C3'	10.97	132.87	119.70
81	CE	115	TYR	C-N-CA	10.97	149.12	121.70
85	A5	946	C	O4'-C1'-N1	10.97	116.98	108.20
44	CM	80	ALA	O-C-N	10.97	140.25	122.70
60	Cr	81	THR	O-C-N	-10.97	105.15	122.70
36	B2	210	U	P-O3'-C3'	10.96	132.86	119.70
85	A5	1220	G	O4'-C1'-N9	10.96	116.97	108.20
36	B2	831	G	O4'-C1'-N9	10.96	116.97	108.20
36	B2	694	G	O4'-C1'-N9	10.96	116.97	108.20
85	A5	4728	U	O4'-C1'-N1	10.95	116.96	108.20
87	A8	78	G	O4'-C1'-N9	10.95	116.96	108.20
85	A5	2618	G	O4'-C1'-N9	10.95	116.96	108.20
55	CU	60	VAL	N-CA-CB	-10.94	87.43	111.50
85	A5	1581	G	O4'-C1'-N9	10.94	116.95	108.20
85	A5	1084	C	O4'-C1'-N1	10.94	116.95	108.20
6	AX	91	LEU	CA-CB-CG	10.93	140.44	115.30
36	B2	350	C	O4'-C1'-C2'	-10.93	94.87	105.80
85	A5	2761	U	P-O5'-C5'	10.93	138.38	120.90
85	A5	4238	G	C1'-O4'-C4'	-10.93	101.16	109.90
36	B2	922	A	O4'-C1'-N9	10.92	116.94	108.20
38	Cz	130	LYS	CB-CA-C	10.92	132.24	110.40
85	A5	3980	G	P-O3'-C3'	10.92	132.81	119.70
39	Cq	57	LYS	N-CA-CB	10.92	130.25	110.60
36	B2	1158	G	O4'-C1'-N9	10.91	116.93	108.20
81	CE	58	SER	O-C-N	-10.91	105.24	122.70
81	CE	70	LYS	N-CA-CB	10.91	130.25	110.60
38	Cz	207	LYS	N-CA-CB	-10.91	90.96	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1086	C	P-O3'-C3'	10.91	132.79	119.70
85	A5	2673	G	O4'-C1'-N9	10.91	116.93	108.20
36	B2	1418	C	C1'-O4'-C4'	-10.91	101.17	109.90
85	A5	661	C	P-O3'-C3'	10.91	132.79	119.70
36	B2	103	A	O4'-C1'-N9	10.89	116.91	108.20
85	A5	4715	C	O4'-C1'-N1	10.88	116.91	108.20
36	B2	203	G	O4'-C1'-N9	10.88	116.91	108.20
46	CN	79	ALA	CB-CA-C	10.88	126.42	110.10
85	A5	35	U	O4'-C1'-N1	10.88	116.91	108.20
36	B2	836	G	O4'-C1'-N9	10.88	116.90	108.20
85	A5	4656	A	P-O3'-C3'	10.88	132.75	119.70
85	A5	1705	G	P-O5'-C5'	10.88	138.30	120.90
85	A5	1308	C	C3'-C2'-C1'	10.87	110.20	101.50
87	A8	104	A	O4'-C1'-N9	10.87	116.89	108.20
36	B2	1197	G	O4'-C1'-N9	10.86	116.89	108.20
36	B2	1259	A	O4'-C1'-C2'	10.86	117.38	107.60
36	B2	1436	C	C3'-C2'-C1'	10.86	110.19	101.50
85	A5	1289	C	O4'-C1'-N1	10.86	116.89	108.20
85	A5	1872	G	O4'-C1'-N9	10.86	116.89	108.20
85	A5	3730	U	O4'-C1'-N1	10.86	116.89	108.20
85	A5	4114	C	N1-C1'-C2'	10.86	128.12	114.00
85	A5	2544	G	N9-C1'-C2'	10.85	128.11	114.00
36	B2	1677	U	O4'-C1'-N1	10.85	116.88	108.20
36	B2	61	A	O4'-C1'-N9	10.84	116.88	108.20
85	A5	346	G	O4'-C1'-N9	10.83	116.87	108.20
38	Cz	160	LYS	N-CA-CB	-10.83	91.11	110.60
85	A5	1568	C	N1-C1'-C2'	10.82	128.07	114.00
36	B2	1066	U	O4'-C1'-N1	10.82	116.86	108.20
85	A5	1441	C	P-O3'-C3'	10.82	132.68	119.70
47	CI	194	GLY	O-C-N	10.82	140.01	122.70
36	B2	686	U	O4'-C1'-N1	10.81	116.85	108.20
85	A5	2666	U	P-O3'-C3'	-10.81	106.72	119.70
74	CC	54	VAL	CA-C-N	-10.81	93.42	117.20
36	B2	1637	A	P-O3'-C3'	10.81	132.67	119.70
85	A5	3613	U	O4'-C1'-N1	10.81	116.84	108.20
36	B2	995	G	O4'-C1'-N9	10.81	116.84	108.20
85	A5	2246	C	O4'-C1'-N1	10.80	116.84	108.20
85	A5	1245	C	C1'-O4'-C4'	-10.80	101.26	109.90
85	A5	1472	C	O4'-C1'-N1	10.80	116.84	108.20
85	A5	2022	C	N1-C1'-C2'	10.80	128.04	114.00
19	AZ	107	VAL	N-CA-CB	-10.80	87.74	111.50
81	CE	38	LYS	N-CA-C	10.80	140.15	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1102	U	P-O3'-C3'	10.79	132.65	119.70
53	CT	147	GLU	C-N-CD	-10.79	96.86	120.60
85	A5	930	G	P-O3'-C3'	10.79	132.64	119.70
85	A5	1372	A	O4'-C1'-N9	10.79	116.83	108.20
85	A5	2576	G	C1'-O4'-C4'	-10.79	101.27	109.90
12	AR	89	SER	CA-C-N	10.78	140.92	117.20
36	B2	882	U	O4'-C1'-N1	10.78	116.83	108.20
85	A5	3697	U	O4'-C1'-N1	10.78	116.83	108.20
36	B2	1729	U	O4'-C1'-N1	10.78	116.83	108.20
67	Ce	16	ARG	CA-C-N	10.78	140.92	117.20
36	B2	694	G	O4'-C1'-C2'	10.78	117.30	107.60
85	A5	932	A	O4'-C1'-N9	10.78	116.82	108.20
85	A5	3646	A	N9-C1'-C2'	-10.78	99.99	114.00
85	A5	3695	U	O4'-C1'-N1	10.78	116.82	108.20
85	A5	1532	G	C1'-O4'-C4'	-10.77	101.29	109.90
85	A5	669	C	O4'-C1'-C2'	-10.77	95.03	105.80
85	A5	1231	C	O4'-C1'-N1	10.77	116.81	108.20
85	A5	2679	G	O4'-C1'-N9	10.77	116.81	108.20
85	A5	4973	U	O4'-C1'-N1	10.77	116.81	108.20
36	B2	487	U	P-O3'-C3'	10.76	132.62	119.70
85	A5	4861	G	O4'-C1'-N9	10.76	116.81	108.20
36	B2	446	G	N9-C1'-C2'	10.76	127.99	114.00
85	A5	138	G	O4'-C1'-N9	10.76	116.81	108.20
85	A5	909	A	O4'-C1'-N9	10.76	116.81	108.20
36	B2	1358	U	O4'-C1'-N1	10.76	116.81	108.20
86	A7	79	U	O4'-C1'-N1	10.75	116.80	108.20
85	A5	4709	U	N1-C1'-C2'	10.75	127.97	114.00
85	A5	1972	G	C1'-O4'-C4'	-10.74	101.31	109.90
86	A7	101	A	C1'-O4'-C4'	-10.74	101.31	109.90
54	CP	7	ASP	C-N-CD	-10.74	96.97	120.60
85	A5	3252	A	P-O3'-C3'	10.74	132.59	119.70
85	A5	1071	C	P-O3'-C3'	10.73	132.58	119.70
33	AI	6	ASP	CB-CG-OD1	10.73	127.96	118.30
63	CB	298	LEU	C-N-CA	10.73	148.51	121.70
85	A5	4559	A	O3'-P-O5'	-10.72	83.62	104.00
87	A8	124	U	P-O3'-C3'	10.72	132.57	119.70
36	B2	1748	G	O4'-C1'-N9	10.72	116.78	108.20
81	CE	73	TYR	C-N-CA	-10.72	94.90	121.70
85	A5	80	C	N1-C1'-C2'	10.72	127.93	114.00
85	A5	1835	G	P-O3'-C3'	10.71	132.55	119.70
36	B2	681	U	O4'-C1'-N1	10.71	116.77	108.20
8	AS	87	GLN	O-C-N	-10.71	105.57	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1294	G	O4'-C1'-N9	10.71	116.77	108.20
36	B2	692	G	O4'-C1'-N9	10.70	116.76	108.20
85	A5	2902	G	C3'-C2'-C1'	10.70	110.06	101.50
12	AR	86	PRO	CA-N-CD	-10.70	96.52	111.50
36	B2	911	C	P-O5'-C5'	10.70	138.02	120.90
85	A5	2651	C	O4'-C1'-N1	10.70	116.76	108.20
36	B2	1115	U	O4'-C1'-N1	10.70	116.76	108.20
85	A5	2064	G	O4'-C1'-N9	10.70	116.76	108.20
85	A5	456	C	O4'-C1'-N1	10.70	116.76	108.20
74	CC	307	LYS	CA-CB-CG	10.69	136.91	113.40
85	A5	644	G	O4'-C1'-N9	10.69	116.75	108.20
85	A5	135	G	C3'-C2'-C1'	10.69	110.05	101.50
85	A5	2020	U	O4'-C1'-N1	10.69	116.75	108.20
85	A5	4481	U	O4'-C1'-N1	10.69	116.75	108.20
86	A7	81	G	O4'-C1'-N9	10.69	116.75	108.20
8	AS	40	TYR	CB-CG-CD2	-10.68	114.59	121.00
36	B2	1041	G	C1'-O4'-C4'	-10.68	101.36	109.90
85	A5	1591	U	O4'-C1'-N1	10.67	116.74	108.20
85	A5	2847	G	O4'-C1'-N9	10.67	116.73	108.20
85	A5	1233	G	O4'-C1'-N9	10.66	116.73	108.20
85	A5	2333	G	O4'-C1'-N9	10.66	116.73	108.20
85	A5	2090	U	P-O5'-C5'	10.66	137.95	120.90
85	A5	4302	U	O4'-C1'-N1	10.66	116.72	108.20
47	CI	107	GLY	N-CA-C	-10.65	86.47	113.10
85	A5	1928	C	O4'-C1'-N1	-10.65	99.68	108.20
36	B2	1025	U	O4'-C1'-N1	10.65	116.72	108.20
36	B2	1560	U	O4'-C1'-N1	10.65	116.72	108.20
36	B2	602	G	O4'-C1'-N9	10.65	116.72	108.20
85	A5	68	U	O4'-C1'-N1	10.65	116.72	108.20
85	A5	4732	G	O3'-P-O5'	10.65	124.23	104.00
36	B2	79	A	O4'-C1'-N9	10.64	116.71	108.20
37	BC	55	C	N1-C1'-C2'	10.63	127.83	114.00
85	A5	1409	C	O4'-C1'-C2'	-10.64	95.16	105.80
85	A5	4230	C	C1'-O4'-C4'	-10.63	101.39	109.90
86	A7	1	G	C3'-C2'-C1'	10.63	110.01	101.50
36	B2	1620	A	N9-C1'-C2'	10.63	127.82	114.00
85	A5	1296	G	P-O3'-C3'	10.63	132.45	119.70
85	A5	2625	U	O4'-C1'-N1	10.63	116.70	108.20
85	A5	2761	U	C3'-C2'-C1'	10.63	110.00	101.50
85	A5	1840	G	C1'-O4'-C4'	-10.62	101.40	109.90
36	B2	866	U	O4'-C1'-N1	10.62	116.70	108.20
85	A5	1833	G	O4'-C1'-N9	10.62	116.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1093	C	O4'-C1'-N1	10.62	116.70	108.20
85	A5	2004	U	C4'-C3'-O3'	-10.62	87.09	109.40
36	B2	57	U	O4'-C1'-N1	10.62	116.70	108.20
36	B2	1679	A	P-O3'-C3'	10.62	132.44	119.70
85	A5	1680	G	C1'-O4'-C4'	-10.62	101.41	109.90
85	A5	2760	G	O4'-C1'-N9	10.62	116.69	108.20
63	CB	298	LEU	CB-CA-C	10.62	130.37	110.20
85	A5	1882	U	O4'-C1'-N1	10.61	116.69	108.20
60	Cr	112	ARG	N-CA-CB	-10.61	91.50	110.60
81	CE	232	ILE	CB-CA-C	-10.61	90.38	111.60
68	Cf	59	THR	CB-CA-C	-10.61	82.96	111.60
36	B2	1541	G	O4'-C1'-N9	10.61	116.68	108.20
49	CQ	6	ARG	CG-CD-NE	10.60	134.07	111.80
85	A5	4689	U	O4'-C1'-N1	10.60	116.68	108.20
36	B2	532	C	O4'-C1'-C2'	-10.60	95.20	105.80
52	CS	175	PHE	CB-CG-CD1	10.60	128.22	120.80
74	CC	335	MET	CB-CA-C	-10.60	89.21	110.40
85	A5	2480	G	O4'-C1'-N9	10.60	116.68	108.20
85	A5	2579	G	O4'-C1'-N9	10.59	116.67	108.20
85	A5	265	C	O4'-C1'-C2'	-10.59	95.21	105.80
85	A5	1552	G	O4'-C1'-N9	10.59	116.67	108.20
36	B2	862	A	N9-C1'-C2'	10.59	127.77	114.00
52	CS	175	PHE	CA-C-O	-10.58	97.87	120.10
85	A5	4894	A	C3'-C2'-C1'	-10.58	93.03	101.50
1	Az	539	GLU	C-N-CA	-10.58	95.25	121.70
37	BC	18	G	P-O3'-C3'	10.58	132.39	119.70
1	Az	111	PHE	CA-CB-CG	10.57	139.28	113.90
36	B2	1512	C	C3'-C2'-C1'	10.57	109.96	101.50
85	A5	2001	G	P-O3'-C3'	10.57	132.39	119.70
36	B2	743	U	O4'-C1'-N1	10.57	116.66	108.20
85	A5	2407	G	O4'-C1'-N9	10.57	116.66	108.20
36	B2	1016	U	C3'-C2'-C1'	10.57	109.96	101.50
85	A5	2499	C	O4'-C1'-N1	10.57	116.65	108.20
85	A5	4942	C	C4'-C3'-O3'	-10.57	87.21	109.40
85	A5	2574	G	O4'-C1'-N9	10.57	116.65	108.20
36	B2	531	A	C1'-O4'-C4'	-10.56	101.45	109.90
85	A5	926	G	P-O3'-C3'	10.56	132.38	119.70
85	A5	3697	U	P-O3'-C3'	10.56	132.38	119.70
36	B2	154	U	O4'-C1'-N1	10.56	116.65	108.20
85	A5	4267	G	C1'-O4'-C4'	-10.56	101.45	109.90
48	CD	33	ARG	CD-NE-CZ	10.55	138.38	123.60
36	B2	1575	G	O4'-C1'-N9	10.55	116.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	143	U	N1-C1'-C2'	10.55	127.72	114.00
36	B2	839	C	C1'-O4'-C4'	-10.55	101.46	109.90
85	A5	2027	U	O4'-C1'-N1	10.55	116.64	108.20
85	A5	2638	G	O4'-C1'-N9	10.55	116.64	108.20
85	A5	4894	A	O4'-C1'-C2'	10.55	117.09	107.60
81	CE	102	GLY	N-CA-C	-10.54	86.74	113.10
85	A5	1068	G	O4'-C1'-N9	10.54	116.63	108.20
85	A5	519	C	O4'-C1'-N1	10.54	116.63	108.20
85	A5	1302	U	P-O3'-C3'	10.54	132.35	119.70
36	B2	919	A	N9-C1'-C2'	10.54	127.70	114.00
60	Cr	108	MET	CG-SD-CE	-10.54	83.34	100.20
86	A7	63	C	N1-C1'-C2'	10.54	127.70	114.00
36	B2	1303	C	C3'-C2'-C1'	-10.53	93.07	101.50
36	B2	898	U	P-O3'-C3'	10.53	132.34	119.70
85	A5	1306	C	O4'-C1'-N1	10.53	116.62	108.20
36	B2	1862	G	O4'-C1'-C2'	-10.52	95.28	105.80
85	A5	1971	C	O4'-C1'-N1	10.52	116.61	108.20
20	Aa	10	ARG	CD-NE-CZ	10.51	138.31	123.60
85	A5	1957	U	O4'-C1'-N1	10.51	116.61	108.20
85	A5	4683	U	O4'-C1'-N1	10.51	116.60	108.20
36	B2	1589	A	O4'-C1'-N9	10.50	116.60	108.20
85	A5	451	C	P-O3'-C3'	10.50	132.30	119.70
36	B2	1299	A	O4'-C1'-N9	10.49	116.59	108.20
36	B2	1333	U	O4'-C1'-N1	10.49	116.59	108.20
1	Az	154	VAL	CA-CB-CG1	10.49	126.63	110.90
86	A7	109	U	O4'-C1'-N1	10.49	116.59	108.20
85	A5	2717	G	O4'-C1'-N9	10.48	116.59	108.20
8	AS	88	LYS	CB-CA-C	10.48	131.36	110.40
85	A5	1270	A	C4'-C3'-C2'	-10.48	92.12	102.60
85	A5	2767	U	P-O5'-C5'	10.48	137.67	120.90
85	A5	4151	G	O4'-C1'-N9	10.48	116.58	108.20
36	B2	332	G	O4'-C1'-N9	10.47	116.58	108.20
85	A5	136	C	P-O3'-C3'	10.47	132.27	119.70
85	A5	1698	C	N1-C1'-C2'	10.47	127.62	114.00
81	CE	101	ASN	C-N-CA	10.47	144.29	122.30
85	A5	2612	G	O4'-C1'-N9	10.47	116.58	108.20
85	A5	5003	U	O4'-C1'-N1	10.46	116.57	108.20
85	A5	4406	U	O4'-C1'-N1	10.46	116.57	108.20
85	A5	15	A	O4'-C1'-N9	10.46	116.57	108.20
85	A5	4122	G	C4'-C3'-O3'	-10.46	87.44	109.40
85	A5	4757	C	O4'-C1'-N1	10.46	116.57	108.20
36	B2	600	G	O4'-C1'-N9	10.46	116.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1214	A	P-O3'-C3'	10.45	132.25	119.70
36	B2	1483	A	O4'-C1'-N9	10.45	116.56	108.20
85	A5	2556	G	O4'-C1'-N9	10.45	116.56	108.20
85	A5	2908	U	O4'-C1'-N1	10.45	116.56	108.20
85	A5	2471	G	C4'-C3'-O3'	-10.45	87.46	109.40
36	B2	1350	U	O4'-C1'-N1	10.44	116.55	108.20
36	B2	1551	U	O4'-C1'-C2'	10.44	117.00	107.60
85	A5	3892	U	C4'-C3'-O3'	-10.44	87.48	109.40
36	B2	93	U	O4'-C1'-N1	10.43	116.55	108.20
85	A5	1794	A	C3'-C2'-C1'	10.43	109.84	101.50
36	B2	552	G	O4'-C1'-N9	10.43	116.55	108.20
85	A5	187	U	P-O3'-C3'	10.43	132.22	119.70
85	A5	1722	C	C3'-C2'-C1'	10.43	109.84	101.50
36	B2	796	G	O4'-C1'-N9	10.43	116.54	108.20
85	A5	1067	G	O4'-C1'-N9	10.43	116.54	108.20
61	Ch	38	GLY	C-N-CA	10.42	144.19	122.30
85	A5	4959	U	O4'-C1'-N1	10.42	116.54	108.20
85	A5	237	G	O4'-C1'-N9	10.42	116.54	108.20
85	A5	1861	U	O4'-C1'-N1	10.42	116.54	108.20
36	B2	798	G	O4'-C1'-C2'	-10.42	95.38	105.80
85	A5	3704	U	O4'-C1'-N1	10.42	116.53	108.20
86	A7	64	G	P-O3'-C3'	-10.42	107.20	119.70
36	B2	1083	A	C1'-O4'-C4'	-10.41	101.57	109.90
85	A5	4174	U	O4'-C1'-N1	10.41	116.53	108.20
55	CU	123	GLU	N-CA-CB	-10.41	91.86	110.60
36	B2	395	G	C1'-O4'-C4'	-10.41	101.57	109.90
36	B2	415	A	O4'-C1'-N9	10.41	116.53	108.20
85	A5	1343	A	C3'-C2'-C1'	10.41	109.83	101.50
85	A5	1836	G	O4'-C1'-N9	10.41	116.53	108.20
85	A5	1740	C	O4'-C1'-N1	10.40	116.52	108.20
85	A5	4713	G	P-O3'-C3'	10.40	132.18	119.70
85	A5	2301	G	C1'-O4'-C4'	-10.39	101.58	109.90
85	A5	4325	A	P-O3'-C3'	10.39	132.17	119.70
85	A5	1446	C	O4'-C1'-N1	10.39	116.51	108.20
36	B2	1259	A	C3'-C2'-C1'	-10.39	93.19	101.50
74	CC	267	TRP	O-C-N	-10.39	106.08	122.70
36	B2	500	A	O3'-P-O5'	-10.38	84.27	104.00
36	B2	1078	C	N1-C1'-C2'	10.39	127.50	114.00
85	A5	931	C	O4'-C1'-C2'	10.39	116.95	107.60
85	A5	3616	U	P-O3'-C3'	10.38	132.16	119.70
36	B2	1408	U	N1-C1'-C2'	10.38	127.49	114.00
85	A5	1270	A	O4'-C1'-N9	10.38	116.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1432	G	P-O3'-C3'	10.38	132.16	119.70
85	A5	2108	G	P-O5'-C5'	10.38	137.50	120.90
29	AG	170	ARG	CB-CG-CD	10.37	138.57	111.60
85	A5	2263	A	P-O3'-C3'	10.37	132.14	119.70
85	A5	2397	G	P-O3'-C3'	10.37	132.14	119.70
1	Az	123	ASP	O-C-N	-10.36	105.58	123.20
85	A5	2395	A	N9-C1'-C2'	10.36	127.47	114.00
85	A5	3703	G	O4'-C1'-N9	10.37	116.49	108.20
85	A5	2488	C	N1-C1'-C2'	10.36	127.47	114.00
36	B2	1312	G	O4'-C1'-N9	-10.36	99.91	108.20
85	A5	980	U	P-O3'-C3'	10.36	132.13	119.70
85	A5	4185	G	O4'-C1'-N9	10.36	116.49	108.20
85	A5	1031	C	P-O3'-C3'	10.35	132.12	119.70
85	A5	4710	C	N1-C1'-C2'	10.35	127.46	114.00
36	B2	1174	U	O4'-C1'-N1	10.35	116.48	108.20
85	A5	1269	G	O4'-C1'-C2'	-10.35	95.45	105.80
85	A5	4431	U	O4'-C1'-N1	10.35	116.48	108.20
85	A5	4636	U	O4'-C1'-N1	10.35	116.48	108.20
36	B2	141	A	O4'-C1'-C2'	-10.35	95.45	105.80
36	B2	1863	A	O4'-C1'-C2'	-10.35	95.45	105.80
48	CD	270	LYS	N-CA-C	10.35	138.93	111.00
85	A5	1269	G	C3'-C2'-C1'	10.35	109.78	101.50
40	CK	1	MET	C-N-CA	-10.34	78.56	122.00
85	A5	974	C	O4'-C1'-N1	10.34	116.47	108.20
5	AO	129	ILE	CB-CA-C	-10.34	90.92	111.60
36	B2	1292	C	C3'-C2'-C1'	10.34	109.77	101.50
85	A5	690	C	O4'-C1'-C2'	-10.34	95.46	105.80
36	B2	1411	G	C1'-O4'-C4'	-10.33	101.64	109.90
36	B2	167	G	O4'-C1'-N9	10.33	116.46	108.20
61	Ch	78	TYR	CB-CG-CD2	10.33	127.20	121.00
85	A5	276	C	O4'-C1'-N1	-10.33	99.94	108.20
85	A5	1286	C	P-O5'-C5'	10.33	137.42	120.90
85	A5	1700	G	O4'-C1'-N9	10.33	116.46	108.20
36	B2	207	G	O4'-C1'-N9	10.32	116.46	108.20
36	B2	19	A	O4'-C1'-N9	10.31	116.45	108.20
85	A5	736	C	O4'-C1'-C2'	-10.31	95.49	105.80
85	A5	4862	G	O4'-C1'-N9	10.31	116.45	108.20
85	A5	446	C	O4'-C1'-N1	10.31	116.45	108.20
1	Az	854	PHE	CB-CA-C	10.30	131.01	110.40
49	CQ	11	ARG	CA-C-N	-10.30	94.53	117.20
85	A5	493	G	O4'-C1'-N9	10.30	116.44	108.20
85	A5	975	C	C3'-C2'-C1'	10.30	109.74	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
61	Ch	38	GLY	N-CA-C	10.30	138.84	113.10
85	A5	4267	G	O4'-C1'-C2'	10.30	116.87	107.60
35	Ah	294	LYS	O-C-N	-10.29	106.23	122.70
36	B2	819	G	O4'-C1'-N9	10.29	116.43	108.20
36	B2	1079	C	C3'-C2'-C1'	10.29	109.73	101.50
85	A5	2718	U	O4'-C1'-N1	10.29	116.43	108.20
35	Ah	141	PRO	C-N-CA	10.29	147.41	121.70
85	A5	1639	U	P-O3'-C3'	10.29	132.04	119.70
37	BC	2	G	O4'-C1'-N9	10.28	116.42	108.20
55	CU	60	VAL	CG1-CB-CG2	10.27	127.34	110.90
85	A5	1975	G	P-O3'-C3'	10.27	132.03	119.70
85	A5	1242	G	C1'-O4'-C4'	10.27	118.12	109.90
74	CC	287	THR	OG1-CB-CG2	10.27	133.62	110.00
85	A5	2120	G	O4'-C1'-C2'	-10.27	95.53	105.80
85	A5	1255	A	C3'-C2'-C1'	10.27	109.71	101.50
26	AJ	138	ARG	N-CA-C	10.26	138.70	111.00
36	B2	1620	A	O4'-C1'-N9	10.26	116.41	108.20
85	A5	437	G	C1'-O4'-C4'	-10.26	101.69	109.90
36	B2	556	U	P-O5'-C5'	10.26	137.31	120.90
85	A5	724	C	P-O3'-C3'	10.25	132.00	119.70
36	B2	1780	G	C1'-O4'-C4'	-10.25	101.70	109.90
85	A5	4149	C	O4'-C1'-N1	10.25	116.40	108.20
85	A5	2103	G	O4'-C1'-N9	10.25	116.40	108.20
35	Ah	170	ARG	CA-C-N	10.24	136.69	116.20
85	A5	2550	G	O4'-C1'-N9	10.24	116.39	108.20
36	B2	170	A	C3'-C2'-C1'	-10.24	93.31	101.50
36	B2	1727	G	O4'-C1'-N9	10.24	116.39	108.20
85	A5	1224	G	P-O3'-C3'	10.24	131.99	119.70
36	B2	793	G	O4'-C1'-N9	10.23	116.39	108.20
39	Cq	231	TYR	C-N-CD	-10.23	98.09	120.60
85	A5	958	G	N9-C1'-C2'	10.23	127.29	114.00
85	A5	4674	C	O4'-C1'-N1	10.22	116.38	108.20
74	CC	307	LYS	CB-CA-C	-10.22	89.96	110.40
85	A5	7	C	N1-C1'-C2'	10.22	127.28	114.00
85	A5	1355	G	O4'-C1'-N9	10.21	116.37	108.20
85	A5	3770	U	O4'-C1'-N1	10.22	116.37	108.20
85	A5	654	C	N1-C1'-C2'	10.21	127.28	114.00
85	A5	1302	U	C1'-O4'-C4'	-10.21	101.73	109.90
36	B2	296	U	C1'-O4'-C4'	-10.21	101.73	109.90
85	A5	646	G	O4'-C1'-N9	10.21	116.37	108.20
85	A5	2258	C	O4'-C1'-N1	10.21	116.37	108.20
85	A5	4218	U	O4'-C1'-N1	10.21	116.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4338	G	O4'-C1'-C2'	-10.21	95.59	105.80
85	A5	2697	A	O4'-C1'-N9	10.21	116.37	108.20
85	A5	2746	A	O4'-C1'-N9	10.21	116.36	108.20
85	A5	2647	A	O4'-C1'-C2'	-10.20	95.60	105.80
36	B2	527	C	O4'-C1'-N1	10.20	116.36	108.20
27	AE	171	ASP	N-CA-C	10.20	138.53	111.00
36	B2	753	C	P-O3'-C3'	10.19	131.93	119.70
85	A5	4749	C	C1'-O4'-C4'	10.19	118.05	109.90
36	B2	1817	G	O4'-C1'-N9	10.19	116.35	108.20
85	A5	2508	U	O4'-C1'-N1	10.19	116.35	108.20
85	A5	4900	C	P-O3'-C3'	10.19	131.92	119.70
36	B2	74	G	C3'-C2'-C1'	10.18	109.65	101.50
85	A5	2570	U	P-O3'-C3'	10.18	131.92	119.70
40	CK	2	PRO	CA-CB-CG	10.18	124.14	104.80
85	A5	4146	G	O4'-C1'-N9	10.18	116.34	108.20
36	B2	102	A	P-O3'-C3'	10.17	131.91	119.70
36	B2	1236	G	O4'-C1'-C2'	10.17	116.76	107.60
85	A5	1862	U	O4'-C1'-N1	10.17	116.34	108.20
36	B2	975	G	O4'-C1'-N9	10.17	116.33	108.20
86	A7	99	G	C1'-O4'-C4'	-10.17	101.77	109.90
81	CE	74	SER	CA-CB-OG	10.16	138.64	111.20
85	A5	1399	G	O4'-C1'-N9	10.16	116.33	108.20
85	A5	4514	G	O4'-C1'-N9	10.16	116.33	108.20
85	A5	4452	U	O4'-C1'-N1	10.15	116.32	108.20
36	B2	65	C	P-O3'-C3'	10.15	131.88	119.70
3	AU	71	GLY	N-CA-C	10.15	138.47	113.10
85	A5	4951	G	O4'-C1'-N9	10.15	116.32	108.20
36	B2	672	A	O4'-C1'-N9	10.14	116.31	108.20
85	A5	4965	U	O4'-C1'-N1	10.14	116.31	108.20
85	A5	1724	G	P-O3'-C3'	10.14	131.87	119.70
85	A5	1314	C	O4'-C1'-N1	10.14	116.31	108.20
36	B2	168	C	N1-C1'-C2'	10.14	127.18	114.00
85	A5	4873	G	O4'-C1'-N9	10.14	116.31	108.20
4	AK	43	LEU	CA-CB-CG	10.13	138.61	115.30
85	A5	2555	G	O4'-C1'-N9	10.13	116.31	108.20
85	A5	4982	A	O4'-C1'-C2'	-10.13	95.67	105.80
85	A5	2894	A	O4'-C1'-N9	10.13	116.31	108.20
85	A5	2112	G	O4'-C1'-C2'	10.13	116.71	107.60
36	B2	1667	U	O4'-C1'-N1	10.12	116.30	108.20
41	CO	4	VAL	CB-CA-C	-10.12	92.17	111.40
85	A5	1301	C	P-O3'-C3'	10.12	131.85	119.70
85	A5	650	C	P-O5'-C5'	10.12	137.09	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4668	U	O3'-P-O5'	10.12	123.22	104.00
40	CK	34	PRO	CA-N-CD	-10.12	97.34	111.50
36	B2	595	U	O4'-C1'-N1	10.11	116.29	108.20
40	CK	38	SER	C-N-CD	-10.11	98.36	120.60
85	A5	1517	G	N9-C1'-C2'	10.11	127.14	114.00
85	A5	3879	G	O4'-C1'-N9	10.11	116.28	108.20
85	A5	1094	G	O4'-C1'-N9	10.10	116.28	108.20
85	A5	4626	A	C1'-O4'-C4'	-10.10	101.82	109.90
85	A5	2002	A	O4'-C1'-N9	10.10	116.28	108.20
85	A5	182	G	P-O3'-C3'	10.10	131.82	119.70
85	A5	150	U	P-O5'-C5'	10.10	137.06	120.90
85	A5	4113	U	P-O3'-C3'	10.10	131.81	119.70
36	B2	1556	A	P-O3'-C3'	10.09	131.81	119.70
50	CR	143	HIS	ND1-CG-CD2	-10.09	91.87	106.00
85	A5	4730	C	O4'-C1'-N1	10.09	116.27	108.20
36	B2	939	U	O4'-C1'-N1	10.09	116.27	108.20
36	B2	560	A	P-O3'-C3'	10.09	131.80	119.70
85	A5	431	G	P-O3'-C3'	10.09	131.80	119.70
85	A5	4986	G	O4'-C1'-N9	10.09	116.27	108.20
86	A7	69	U	O4'-C1'-N1	10.09	116.27	108.20
87	A8	126	C	O4'-C1'-C2'	-10.09	95.72	105.80
12	AR	2	GLY	O-C-N	-10.08	106.57	122.70
36	B2	869	A	P-O3'-C3'	10.08	131.80	119.70
36	B2	309	G	O4'-C1'-N9	10.08	116.26	108.20
87	A8	86	U	O4'-C1'-N1	10.07	116.26	108.20
85	A5	1681	G	N9-C1'-C2'	10.07	127.09	114.00
36	B2	1307	U	P-O3'-C3'	10.07	131.78	119.70
82	CG	183	ILE	CB-CA-C	-10.07	91.46	111.60
85	A5	1366	G	P-O3'-C3'	10.07	131.79	119.70
36	B2	675	U	O4'-C1'-N1	10.07	116.25	108.20
87	A8	127	U	O3'-P-O5'	-10.07	84.87	104.00
85	A5	2576	G	O4'-C1'-C2'	10.06	116.66	107.60
85	A5	1955	G	O4'-C1'-N9	10.06	116.25	108.20
85	A5	364	G	N9-C1'-C2'	10.06	127.08	114.00
85	A5	4932	U	O4'-C1'-N1	10.05	116.24	108.20
85	A5	4463	U	P-O3'-C3'	10.05	131.76	119.70
85	A5	2423	A	C3'-C2'-C1'	10.05	109.54	101.50
36	B2	359	U	O4'-C1'-N1	10.05	116.24	108.20
81	CE	104	THR	C-N-CA	-10.04	96.59	121.70
85	A5	1232	G	P-O3'-C3'	10.04	131.75	119.70
85	A5	2439	G	C1'-O4'-C4'	-10.04	101.87	109.90
85	A5	4042	G	N9-C1'-C2'	10.04	127.05	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4457	U	O4'-C1'-N1	10.04	116.23	108.20
4	AK	55	ARG	NE-CZ-NH1	10.03	125.32	120.30
85	A5	351	C	N1-C1'-C2'	10.04	127.05	114.00
36	B2	1014	G	O4'-C1'-N9	10.03	116.23	108.20
85	A5	1729	A	O4'-C1'-N9	10.03	116.23	108.20
85	A5	2021	G	O4'-C1'-N9	10.03	116.23	108.20
81	CE	73	TYR	O-C-N	10.03	138.75	122.70
85	A5	3634	G	O4'-C1'-N9	10.03	116.22	108.20
36	B2	1509	U	P-O3'-C3'	10.03	131.73	119.70
85	A5	1358	G	N9-C1'-C2'	10.02	127.03	114.00
33	AI	43	ILE	CA-C-O	10.02	141.14	120.10
36	B2	1262	C	N1-C1'-C2'	10.02	127.02	114.00
74	CC	330	PRO	CA-N-CD	-10.02	97.47	111.50
36	B2	1418	C	P-O5'-C5'	10.02	136.93	120.90
85	A5	416	U	P-O3'-C3'	-10.02	107.68	119.70
85	A5	1259	G	O4'-C1'-N9	10.02	116.21	108.20
36	B2	1720	U	C1'-O4'-C4'	10.01	117.91	109.90
42	CL	165	LYS	N-CA-C	10.01	138.03	111.00
85	A5	1739	G	O4'-C1'-N9	10.01	116.21	108.20
36	B2	799	U	O4'-C1'-N1	10.01	116.21	108.20
36	B2	1280	G	O4'-C1'-N9	10.01	116.21	108.20
36	B2	1412	C	O3'-P-O5'	-10.01	84.98	104.00
85	A5	4310	A	O4'-C1'-N9	10.01	116.21	108.20
85	A5	461	G	O4'-C1'-N9	10.01	116.21	108.20
36	B2	1215	C	O4'-C1'-C2'	-10.01	95.80	105.80
86	A7	73	U	P-O3'-C3'	10.00	131.70	119.70
36	B2	31	U	P-O3'-C3'	10.00	131.70	119.70
85	A5	292	G	N9-C1'-C2'	10.00	127.00	114.00
85	A5	4437	U	O4'-C1'-N1	10.00	116.20	108.20
36	B2	80	G	C3'-C2'-C1'	10.00	109.50	101.50
85	A5	3912	U	O4'-C1'-N1	10.00	116.20	108.20
85	A5	1166	G	N9-C1'-C2'	9.99	126.99	114.00
85	A5	2626	U	O4'-C1'-N1	9.99	116.19	108.20
36	B2	1537	A	O4'-C1'-C2'	-9.99	95.81	105.80
67	Ce	108	ARG	NE-CZ-NH2	-9.99	115.31	120.30
85	A5	530	U	P-O3'-C3'	9.99	131.68	119.70
60	Cr	106	LEU	CA-C-O	-9.98	99.14	120.10
85	A5	4051	C	C3'-C2'-C1'	9.98	109.49	101.50
85	A5	2638	G	O4'-C1'-C2'	-9.98	95.82	105.80
87	A8	55	U	O4'-C1'-N1	9.98	116.19	108.20
31	AH	110	THR	CA-C-O	-9.98	99.15	120.10
36	B2	557	U	N1-C1'-C2'	9.98	126.97	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1285	G	C4'-C3'-O3'	9.98	132.95	113.00
85	A5	4601	U	O4'-C1'-N1	9.98	116.18	108.20
85	A5	4949	G	C4'-C3'-O3'	9.97	132.95	113.00
4	AK	1	MET	CB-CG-SD	9.97	142.32	112.40
36	B2	73	C	O4'-C1'-C2'	-9.97	95.83	105.80
36	B2	918	U	N1-C1'-C2'	9.97	126.96	114.00
1	Az	807	GLN	N-CA-C	-9.97	84.09	111.00
85	A5	2409	U	C3'-C2'-C1'	9.97	109.47	101.50
85	A5	4209	G	O4'-C1'-N9	9.97	116.17	108.20
36	B2	1777	G	C3'-C2'-C1'	-9.96	93.53	101.50
37	BC	5	G	O4'-C1'-N9	9.96	116.17	108.20
85	A5	1194	G	P-O3'-C3'	9.96	131.66	119.70
85	A5	4945	G	C1'-O4'-C4'	-9.96	101.93	109.90
81	CE	59	ARG	C-N-CA	9.96	146.60	121.70
85	A5	4871	C	P-O5'-C5'	9.96	136.84	120.90
85	A5	3820	G	O4'-C1'-N9	9.96	116.17	108.20
85	A5	2469	C	O4'-C1'-N1	9.95	116.16	108.20
42	CL	166	ALA	N-CA-C	-9.95	84.14	111.00
85	A5	1730	U	O4'-C1'-N1	9.95	116.16	108.20
85	A5	1997	U	O4'-C1'-N1	9.95	116.16	108.20
85	A5	4129	G	P-O3'-C3'	-9.95	107.76	119.70
6	AX	23	HIS	CB-CA-C	9.95	130.29	110.40
36	B2	556	U	C4'-C3'-C2'	-9.95	92.65	102.60
85	A5	1597	G	O4'-C1'-N9	9.95	116.16	108.20
36	B2	1476	A	N9-C1'-C2'	-9.94	101.06	112.00
85	A5	957	G	O4'-C1'-N9	9.95	116.16	108.20
23	AD	4	GLN	CG-CD-NE2	9.94	140.56	116.70
54	CP	110	ASP	CB-CA-C	-9.94	90.52	110.40
85	A5	322	C	C3'-C2'-C1'	9.94	109.45	101.50
85	A5	1177	U	O4'-C1'-N1	9.94	116.15	108.20
85	A5	1274	A	O4'-C1'-C2'	-9.94	95.86	105.80
85	A5	2895	A	O4'-C1'-N9	9.94	116.15	108.20
86	A7	74	A	C1'-O4'-C4'	9.94	117.85	109.90
85	A5	1952	G	O4'-C1'-N9	9.94	116.15	108.20
36	B2	207	G	N9-C1'-C2'	-9.93	101.07	112.00
36	B2	1420	G	C1'-O4'-C4'	-9.93	101.95	109.90
85	A5	2107	C	N1-C1'-C2'	9.93	126.91	114.00
85	A5	113	A	O4'-C1'-N9	9.93	116.14	108.20
36	B2	5	U	O4'-C1'-N1	9.93	116.14	108.20
85	A5	4939	C	O3'-P-O5'	-9.93	85.14	104.00
85	A5	4044	U	P-O3'-C3'	9.92	131.61	119.70
85	A5	2126	G	O4'-C1'-N9	9.92	116.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2813	A	O4'-C1'-N9	9.92	116.14	108.20
38	Cz	207	LYS	CB-CA-C	-9.92	90.56	110.40
85	A5	4622	A	O4'-C1'-N9	9.92	116.14	108.20
36	B2	1155	U	O4'-C1'-N1	9.92	116.13	108.20
85	A5	1371	A	O4'-C1'-N9	-9.92	100.27	108.20
85	A5	1961	G	O4'-C1'-N9	9.92	116.13	108.20
29	AG	180	VAL	CB-CA-C	-9.91	92.57	111.40
85	A5	934	C	O4'-C1'-C2'	-9.91	95.89	105.80
85	A5	492	U	O4'-C1'-N1	9.91	116.12	108.20
85	A5	1065	G	O4'-C1'-N9	9.90	116.12	108.20
85	A5	958	G	O4'-C1'-N9	-9.90	100.28	108.20
85	A5	1242	G	O4'-C1'-C2'	-9.90	95.90	105.80
36	B2	626	G	O4'-C1'-C2'	-9.90	95.90	105.80
36	B2	1648	G	P-O3'-C3'	9.90	131.58	119.70
85	A5	1880	G	C1'-O4'-C4'	-9.90	101.98	109.90
85	A5	4349	C	P-O3'-C3'	9.90	131.58	119.70
85	A5	1288	G	C5'-C4'-O4'	9.89	120.97	109.10
85	A5	1954	U	O4'-C1'-N1	9.89	116.12	108.20
85	A5	37	U	O4'-C1'-N1	9.89	116.11	108.20
85	A5	2753	G	N9-C1'-C2'	9.89	126.86	114.00
36	B2	932	G	O4'-C1'-N9	9.89	116.11	108.20
85	A5	3614	G	O4'-C1'-N9	9.89	116.11	108.20
85	A5	1313	C	C3'-C2'-C1'	9.89	109.41	101.50
85	A5	3793	U	O4'-C1'-N1	9.89	116.11	108.20
85	A5	1335	G	O4'-C1'-N9	9.88	116.11	108.20
85	A5	1924	C	O4'-C1'-N1	9.88	116.11	108.20
85	A5	4663	G	O4'-C1'-N9	9.88	116.11	108.20
36	B2	1040	G	O4'-C1'-N9	9.87	116.10	108.20
85	A5	4750	G	P-O3'-C3'	9.87	131.55	119.70
85	A5	307	A	O4'-C1'-C2'	-9.87	95.93	105.80
36	B2	190	G	C1'-O4'-C4'	-9.86	102.01	109.90
12	AR	42	PRO	CA-N-CD	-9.86	97.69	111.50
86	A7	102	U	N1-C1'-C2'	9.86	126.82	114.00
36	B2	814	U	O4'-C1'-N1	9.86	116.09	108.20
36	B2	752	G	C3'-C2'-C1'	-9.85	93.62	101.50
36	B2	1439	A	O4'-C1'-N9	9.85	116.08	108.20
85	A5	2024	G	O4'-C1'-N9	9.85	116.08	108.20
85	A5	4472	G	O4'-C1'-N9	9.85	116.08	108.20
85	A5	4998	G	O4'-C1'-N9	9.85	116.08	108.20
36	B2	1401	A	O4'-C1'-N9	9.85	116.08	108.20
36	B2	1809	A	O4'-C1'-N9	9.85	116.08	108.20
36	B2	1014	G	C1'-O4'-C4'	-9.84	102.03	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4719	G	C3'-C2'-C1'	-9.84	93.63	101.50
36	B2	1253	A	P-O3'-C3'	9.84	131.50	119.70
85	A5	2907	G	O4'-C1'-N9	9.84	116.07	108.20
85	A5	1363	C	C3'-C2'-C1'	9.83	109.36	101.50
85	A5	1795	A	N9-C1'-C2'	9.83	126.78	114.00
85	A5	3948	C	O4'-C1'-N1	9.83	116.06	108.20
85	A5	4891	G	P-O5'-C5'	9.83	136.62	120.90
36	B2	92	A	N9-C1'-C2'	9.82	126.77	114.00
40	CK	30	PRO	CA-N-CD	-9.82	97.75	111.50
85	A5	1720	C	C4'-C3'-O3'	-9.82	88.77	109.40
85	A5	4344	U	O4'-C1'-N1	9.82	116.06	108.20
36	B2	673	G	O4'-C1'-N9	9.82	116.06	108.20
85	A5	983	C	P-O5'-C5'	9.82	136.61	120.90
85	A5	2784	C	N1-C1'-C2'	9.82	126.77	114.00
85	A5	2390	G	C1'-O4'-C4'	-9.81	102.05	109.90
36	B2	1238	U	O4'-C1'-N1	9.81	116.05	108.20
85	A5	463	A	O4'-C1'-C2'	-9.81	95.99	105.80
85	A5	2390	G	N9-C1'-C2'	9.81	126.75	114.00
86	A7	43	U	P-O3'-C3'	-9.81	107.93	119.70
36	B2	1008	A	P-O3'-C3'	9.80	131.47	119.70
36	B2	1003	U	O4'-C1'-N1	9.80	116.04	108.20
85	A5	2127	C	P-O3'-C3'	9.80	131.46	119.70
85	A5	4411	G	C3'-C2'-C1'	9.80	109.34	101.50
38	Cz	210	MET	N-CA-C	9.80	137.46	111.00
81	CE	31	ASN	O-C-N	-9.79	107.03	122.70
85	A5	1925	G	O4'-C1'-N9	9.79	116.03	108.20
85	A5	4907	G	P-O3'-C3'	9.79	131.45	119.70
85	A5	3733	A	O4'-C1'-N9	9.79	116.03	108.20
85	A5	4942	C	O3'-P-O5'	-9.79	85.40	104.00
36	B2	105	U	O4'-C1'-N1	9.78	116.03	108.20
85	A5	207	G	N9-C1'-C2'	9.78	126.72	114.00
85	A5	4891	G	O4'-C1'-N9	9.78	116.03	108.20
36	B2	1777	G	O4'-C1'-N9	9.78	116.02	108.20
85	A5	2096	G	P-O3'-C3'	9.78	131.44	119.70
85	A5	2685	C	O4'-C1'-N1	9.78	116.02	108.20
36	B2	1081	U	O4'-C1'-N1	9.77	116.02	108.20
85	A5	286	U	O4'-C1'-N1	9.77	116.02	108.20
85	A5	2537	A	O4'-C1'-N9	9.77	116.02	108.20
85	A5	3945	A	C1'-O4'-C4'	9.77	117.72	109.90
85	A5	5058	A	O4'-C1'-N9	9.77	116.02	108.20
86	A7	121	U	P-O5'-C5'	9.77	136.53	120.90
85	A5	1562	G	O4'-C1'-N9	9.77	116.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2686	G	P-O3'-C3'	9.77	131.42	119.70
87	A8	111	U	C5'-C4'-C3'	9.76	131.62	116.00
36	B2	1076	G	O4'-C1'-N9	9.76	116.01	108.20
85	A5	4349	C	OP2-P-O3'	9.76	126.67	105.20
36	B2	1119	A	O4'-C1'-N9	9.76	116.01	108.20
36	B2	1436	C	P-O3'-C3'	9.76	131.41	119.70
85	A5	346	G	C3'-C2'-C1'	-9.76	93.69	101.50
85	A5	4953	G	C1'-O4'-C4'	-9.76	102.09	109.90
8	AS	91	LYS	CG-CD-CE	9.76	141.17	111.90
85	A5	136	C	O4'-C1'-N1	9.76	116.00	108.20
85	A5	3855	C	O4'-C1'-N1	9.76	116.00	108.20
85	A5	4439	U	O4'-C1'-N1	9.75	116.00	108.20
47	CI	4	ARG	NE-CZ-NH2	-9.75	115.43	120.30
2	Ag	142	VAL	CA-C-N	-9.74	95.77	117.20
85	A5	246	G	P-O5'-C5'	9.74	136.48	120.90
85	A5	1288	G	P-O3'-C3'	9.73	131.38	119.70
85	A5	4751	G	C1'-O4'-C4'	-9.73	102.11	109.90
21	Ab	36	LYS	N-CA-C	9.73	137.27	111.00
36	B2	407	G	O4'-C1'-N9	9.73	115.98	108.20
85	A5	2285	A	O4'-C1'-N9	9.73	115.99	108.20
85	A5	4114	C	P-O3'-C3'	9.73	131.38	119.70
85	A5	3728	A	O4'-C1'-N9	9.73	115.98	108.20
16	AA	200	ASP	CB-CA-C	-9.73	90.95	110.40
52	CS	37	HIS	CB-CA-C	-9.72	90.95	110.40
85	A5	1277	G	O4'-C1'-N9	9.72	115.98	108.20
85	A5	4740	G	O4'-C1'-N9	9.72	115.98	108.20
28	AC	108	LYS	C-N-CA	9.72	146.00	121.70
85	A5	2661	U	P-O3'-C3'	9.72	131.37	119.70
36	B2	883	U	O4'-C1'-N1	9.72	115.97	108.20
85	A5	686	A	O4'-C1'-C2'	-9.71	96.09	105.80
85	A5	1754	U	O4'-C1'-N1	9.71	115.97	108.20
85	A5	2108	G	P-O3'-C3'	9.72	131.36	119.70
36	B2	1332	A	O4'-C1'-C2'	-9.71	96.09	105.80
36	B2	1556	A	O4'-C1'-N9	9.71	115.97	108.20
36	B2	1721	U	P-O3'-C3'	9.71	131.35	119.70
85	A5	448	G	N9-C1'-C2'	9.71	126.62	114.00
36	B2	747	U	O4'-C1'-N1	9.71	115.97	108.20
56	CX	53	ARG	N-CA-CB	-9.71	93.12	110.60
74	CC	266	THR	O-C-N	-9.71	107.17	122.70
85	A5	442	G	O4'-C1'-N9	9.71	115.97	108.20
36	B2	530	U	O4'-C4'-C3'	-9.71	94.30	104.00
85	A5	1209	U	O4'-C1'-N1	9.71	115.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	75	A	P-O5'-C5'	9.70	136.43	120.90
85	A5	1370	G	C1'-O4'-C4'	-9.70	102.14	109.90
2	Ag	159	ASN	N-CA-C	9.70	137.19	111.00
86	A7	66	G	O4'-C1'-N9	9.70	115.96	108.20
36	B2	1664	A	N9-C1'-C2'	9.70	126.61	114.00
85	A5	80	C	C1'-O4'-C4'	-9.70	102.14	109.90
85	A5	3892	U	O4'-C4'-C3'	-9.70	94.31	104.00
3	AU	104	ILE	N-CA-C	-9.69	84.83	111.00
36	B2	1604	G	O4'-C1'-N9	9.69	115.95	108.20
85	A5	1398	A	O4'-C1'-C2'	9.69	116.32	107.60
85	A5	4944	C	C1'-O4'-C4'	-9.69	102.15	109.90
85	A5	4996	C	O4'-C1'-N1	9.69	115.95	108.20
85	A5	4997	G	P-O3'-C3'	9.69	131.32	119.70
85	A5	171	U	O4'-C1'-N1	9.69	115.95	108.20
85	A5	938	C	O4'-C1'-N1	9.68	115.94	108.20
85	A5	1337	A	P-O3'-C3'	-9.68	108.09	119.70
85	A5	2740	U	O4'-C1'-N1	9.68	115.94	108.20
85	A5	1291	G	C1'-O4'-C4'	-9.68	102.16	109.90
85	A5	2439	G	N9-C1'-C2'	9.68	126.58	114.00
85	A5	147	A	O4'-C1'-N9	9.67	115.94	108.20
85	A5	220	C	N1-C1'-C2'	9.67	126.57	114.00
85	A5	2058	G	C1'-O4'-C4'	-9.67	102.17	109.90
26	AJ	89	GLU	N-CA-C	9.66	137.10	111.00
36	B2	354	U	O4'-C1'-N1	9.66	115.93	108.20
36	B2	1535	U	P-O3'-C3'	9.66	131.29	119.70
85	A5	21	G	N9-C1'-C2'	-9.66	101.37	112.00
36	B2	66	G	N9-C1'-C2'	9.66	126.56	114.00
85	A5	1921	C	P-O3'-C3'	9.66	131.29	119.70
85	A5	4909	A	O4'-C1'-N9	9.66	115.92	108.20
85	A5	161	G	C1'-O4'-C4'	-9.65	102.18	109.90
85	A5	660	A	O4'-C1'-N9	9.65	115.92	108.20
85	A5	746	A	C1'-O4'-C4'	-9.65	102.18	109.90
85	A5	1824	G	P-O3'-C3'	-9.65	108.12	119.70
59	CZ	90	PRO	CA-N-CD	-9.64	98.00	111.50
81	CE	134	SER	O-C-N	-9.64	107.27	122.70
85	A5	4764	A	O4'-C1'-C2'	9.64	116.28	107.60
36	B2	834	C	C1'-O4'-C4'	-9.64	102.19	109.90
85	A5	3769	C	O4'-C1'-N1	9.64	115.91	108.20
33	AI	105	ASP	CB-CG-OD2	9.64	126.97	118.30
36	B2	1130	G	N9-C1'-C2'	-9.63	101.40	112.00
36	B2	331	C	O4'-C1'-N1	9.63	115.91	108.20
87	A8	48	A	O4'-C1'-N9	9.63	115.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	AS	54	LYS	N-CA-C	9.63	137.00	111.00
85	A5	2545	U	P-O3'-C3'	9.63	131.26	119.70
85	A5	4626	A	O4'-C1'-C2'	9.63	116.27	107.60
36	B2	1136	U	O4'-C1'-N1	9.63	115.90	108.20
39	Cq	68	HIS	CA-C-O	-9.63	99.88	120.10
42	CL	161	TYR	N-CA-CB	9.63	127.93	110.60
85	A5	294	G	P-O3'-C3'	9.63	131.25	119.70
17	AV	31	SER	N-CA-C	9.63	136.99	111.00
36	B2	1417	C	C3'-C2'-C1'	9.62	109.20	101.50
85	A5	1641	G	C3'-C2'-C1'	9.62	109.20	101.50
85	A5	1947	U	O4'-C1'-N1	9.62	115.90	108.20
85	A5	4299	U	O4'-C1'-N1	9.62	115.90	108.20
85	A5	1612	G	C1'-O4'-C4'	-9.62	102.20	109.90
85	A5	3752	C	N1-C1'-C2'	9.62	126.50	114.00
85	A5	3963	A	P-O3'-C3'	9.62	131.24	119.70
37	BC	71	U	O4'-C1'-N1	9.61	115.89	108.20
85	A5	157	U	O4'-C1'-N1	9.61	115.89	108.20
36	B2	1337	C	O4'-C1'-N1	9.61	115.89	108.20
85	A5	1210	C	O4'-C1'-C2'	-9.61	96.19	105.80
85	A5	1709	C	O3'-P-O5'	-9.61	85.74	104.00
85	A5	968	C	O4'-C1'-C2'	-9.61	96.19	105.80
85	A5	1367	C	O4'-C1'-N1	9.61	115.89	108.20
85	A5	1406	G	N9-C1'-C2'	-9.61	101.43	112.00
29	AG	219	GLU	C-N-CA	9.60	145.71	121.70
36	B2	1198	G	C1'-O4'-C4'	-9.60	102.22	109.90
36	B2	1292	C	O4'-C1'-N1	-9.60	100.52	108.20
36	B2	1804	U	O4'-C1'-N1	9.60	115.88	108.20
85	A5	1092	G	O4'-C1'-N9	9.60	115.88	108.20
85	A5	204	U	O4'-C1'-N1	9.60	115.88	108.20
85	A5	4652	G	O4'-C1'-N9	9.60	115.88	108.20
36	B2	842	C	C3'-C2'-C1'	9.60	109.18	101.50
36	B2	1295	A	O4'-C1'-N9	9.60	115.88	108.20
85	A5	228	C	O4'-C1'-N1	9.60	115.88	108.20
85	A5	2016	C	O3'-P-O5'	-9.60	85.77	104.00
85	A5	4965	U	O4'-C1'-C2'	-9.59	96.21	105.80
36	B2	636	C	C3'-C2'-C1'	9.59	109.17	101.50
85	A5	1102	U	N1-C1'-C2'	-9.59	101.45	112.00
85	A5	2547	G	C1'-O4'-C4'	-9.59	102.23	109.90
85	A5	4563	U	O4'-C1'-N1	9.59	115.87	108.20
37	BC	23	G	O4'-C1'-N9	9.59	115.87	108.20
85	A5	3701	C	O4'-C1'-C2'	-9.59	96.21	105.80
36	B2	844	U	O4'-C1'-N1	9.58	115.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1494	U	P-O3'-C3'	9.58	131.19	119.70
85	A5	2111	G	C3'-C2'-C1'	9.58	109.16	101.50
85	A5	1428	U	P-O3'-C3'	9.58	131.19	119.70
36	B2	1167	G	O4'-C1'-N9	9.57	115.86	108.20
85	A5	2711	G	O4'-C1'-N9	9.57	115.86	108.20
36	B2	121	U	O4'-C1'-N1	9.57	115.86	108.20
85	A5	220	C	P-O3'-C3'	9.57	131.19	119.70
85	A5	1708	G	P-O5'-C5'	9.57	136.22	120.90
85	A5	2730	U	O4'-C1'-N1	9.57	115.86	108.20
85	A5	1828	C	C2'-C3'-O3'	9.57	130.56	109.50
85	A5	700	G	C1'-O4'-C4'	-9.57	102.25	109.90
85	A5	1703	C	P-O3'-C3'	9.57	131.18	119.70
36	B2	478	G	O4'-C1'-N9	9.57	115.85	108.20
40	CK	106	PHE	CB-CG-CD1	9.57	127.50	120.80
85	A5	1972	G	O4'-C1'-C2'	9.57	116.21	107.60
48	CD	170	GLY	CA-C-N	9.56	138.24	117.20
85	A5	685	C	P-O3'-C3'	9.56	131.18	119.70
85	A5	2093	A	P-O3'-C3'	9.56	131.18	119.70
85	A5	2316	G	O4'-C1'-N9	9.56	115.85	108.20
85	A5	3887	C	N1-C1'-C2'	9.56	126.43	114.00
37	BC	68	U	O4'-C1'-N1	9.56	115.85	108.20
85	A5	1834	U	P-O3'-C3'	9.56	131.17	119.70
85	A5	4210	U	O4'-C1'-N1	9.56	115.84	108.20
36	B2	1551	U	O4'-C1'-N1	9.56	115.84	108.20
81	CE	37	PRO	N-CA-C	9.55	136.94	112.10
85	A5	1273	G	C3'-C2'-C1'	-9.56	93.86	101.50
85	A5	2235	C	P-O3'-C3'	9.56	131.17	119.70
12	AR	1	MET	CA-C-O	9.55	140.16	120.10
74	CC	322	LEU	O-C-N	-9.55	107.42	122.70
85	A5	107	G	O4'-C1'-N9	9.55	115.84	108.20
36	B2	791	C	O4'-C1'-N1	9.55	115.84	108.20
36	B2	391	C	O4'-C1'-N1	9.55	115.84	108.20
85	A5	759	G	O4'-C1'-N9	9.54	115.83	108.20
85	A5	1641	G	O4'-C1'-N9	-9.54	100.56	108.20
85	A5	4936	G	C5'-C4'-O4'	-9.54	97.65	109.10
40	CK	148	PRO	CA-N-CD	-9.54	98.14	111.50
85	A5	1316	G	O4'-C1'-N9	9.54	115.83	108.20
36	B2	1255	G	C1'-O4'-C4'	-9.54	102.27	109.90
85	A5	449	C	P-O3'-C3'	9.54	131.15	119.70
36	B2	444	G	O4'-C1'-N9	9.54	115.83	108.20
87	A8	115	G	C1'-O4'-C4'	-9.54	102.27	109.90
36	B2	828	G	O4'-C1'-C2'	9.53	116.18	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	717	U	O4'-C1'-N1	9.53	115.83	108.20
85	A5	2028	C	O4'-C1'-N1	9.53	115.82	108.20
36	B2	1507	G	C1'-O4'-C4'	-9.52	102.28	109.90
23	AD	193	ASP	N-CA-C	-9.52	85.29	111.00
85	A5	1070	G	P-O3'-C3'	9.52	131.13	119.70
85	A5	942	G	N9-C1'-C2'	9.52	126.38	114.00
85	A5	648	G	P-O3'-C3'	9.51	131.11	119.70
82	CG	163	PRO	CA-N-CD	-9.51	98.19	111.50
85	A5	316	U	O4'-C1'-C2'	-9.51	96.30	105.80
85	A5	374	G	O4'-C1'-N9	9.50	115.80	108.20
85	A5	2020	U	O4'-C1'-C2'	-9.50	96.30	105.80
85	A5	1815	G	O4'-C1'-N9	9.50	115.80	108.20
85	A5	4444	C	C3'-C2'-C1'	9.50	109.10	101.50
85	A5	4729	A	O4'-C1'-C2'	-9.50	96.30	105.80
85	A5	657	C	P-O5'-C5'	9.49	136.09	120.90
12	AR	3	ARG	N-CA-CB	9.49	127.68	110.60
85	A5	651	C	O4'-C1'-N1	9.49	115.79	108.20
74	CC	305	PRO	CA-N-CD	-9.48	98.22	111.50
47	CI	206	LEU	CA-C-O	-9.48	100.19	120.10
36	B2	404	G	O4'-C1'-N9	9.48	115.78	108.20
85	A5	3889	G	O4'-C1'-N9	9.48	115.78	108.20
85	A5	269	G	O4'-C1'-N9	9.47	115.78	108.20
36	B2	1219	C	O4'-C1'-N1	9.47	115.78	108.20
85	A5	331	G	O4'-C1'-N9	9.47	115.78	108.20
85	A5	1195	G	O4'-C1'-N9	9.46	115.77	108.20
85	A5	1371	A	C1'-O4'-C4'	9.46	117.47	109.90
85	A5	316	U	C3'-C2'-C1'	9.46	109.07	101.50
36	B2	913	A	C3'-C2'-C1'	9.46	109.07	101.50
36	B2	1129	G	O4'-C1'-N9	9.46	115.77	108.20
36	B2	1494	U	O4'-C1'-N1	9.46	115.77	108.20
36	B2	661	U	O4'-C1'-N1	9.46	115.77	108.20
85	A5	2084	C	C3'-C2'-C1'	9.45	109.06	101.50
20	Aa	63	VAL	C-N-CA	9.45	145.32	121.70
36	B2	160	U	P-O3'-C3'	9.45	131.04	119.70
85	A5	4764	A	O4'-C1'-N9	9.45	115.76	108.20
36	B2	555	A	P-O3'-C3'	9.45	131.04	119.70
40	CK	2	PRO	N-CA-C	9.45	136.66	112.10
85	A5	2572	C	O4'-C1'-N1	9.45	115.76	108.20
85	A5	1564	A	O4'-C1'-N9	9.44	115.76	108.20
85	A5	5016	A	O4'-C1'-N9	9.44	115.75	108.20
36	B2	1851	A	O4'-C1'-C2'	-9.44	96.36	105.80
60	Cr	91	SER	CB-CA-C	-9.44	92.16	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	659	G	O4'-C1'-N9	9.44	115.75	108.20
85	A5	1844	G	O4'-C1'-N9	9.44	115.75	108.20
66	Cd	103	TYR	CB-CA-C	-9.44	91.52	110.40
87	A8	68	G	O4'-C1'-N9	9.44	115.75	108.20
49	CQ	12	LYS	N-CA-C	-9.44	85.52	111.00
81	CE	35	LYS	N-CA-CB	-9.44	93.61	110.60
31	AH	111	LYS	N-CA-CB	9.44	127.58	110.60
67	Ce	7	LEU	C-N-CA	-9.44	98.11	121.70
74	CC	31	PRO	CA-N-CD	-9.44	98.29	111.50
85	A5	2100	A	P-O3'-C3'	9.44	131.02	119.70
85	A5	3754	G	O4'-C1'-N9	9.44	115.75	108.20
85	A5	2325	C	O4'-C1'-N1	9.43	115.75	108.20
36	B2	1448	A	P-O3'-C3'	9.43	131.02	119.70
85	A5	203	U	C1'-O4'-C4'	-9.43	102.36	109.90
85	A5	1458	C	C3'-C2'-C1'	9.43	109.04	101.50
36	B2	1792	G	O4'-C1'-C2'	9.43	116.08	107.60
85	A5	740	G	O4'-C1'-N9	9.42	115.74	108.20
85	A5	2015	U	O4'-C1'-C2'	-9.42	96.38	105.80
85	A5	3802	U	O4'-C1'-N1	9.42	115.74	108.20
36	B2	830	A	C3'-C2'-C1'	-9.42	93.96	101.50
40	CK	2	PRO	CA-N-CD	-9.42	98.31	111.50
36	B2	657	U	O4'-C1'-N1	9.42	115.73	108.20
36	B2	1236	G	O4'-C1'-N9	9.42	115.73	108.20
54	CP	110	ASP	C-N-CA	-9.42	98.16	121.70
85	A5	2650	G	O4'-C1'-N9	9.42	115.73	108.20
52	CS	152	PHE	CB-CA-C	9.41	129.23	110.40
85	A5	1905	U	O4'-C1'-N1	9.41	115.73	108.20
85	A5	1980	U	O4'-C1'-N1	9.41	115.73	108.20
18	AY	103	SER	CA-C-N	9.41	137.91	117.20
20	Aa	10	ARG	CB-CG-CD	9.41	136.07	111.60
74	CC	304	ALA	C-N-CD	-9.41	99.90	120.60
36	B2	79	A	C5'-C4'-O4'	9.41	120.39	109.10
36	B2	1144	A	N9-C1'-C2'	9.41	126.23	114.00
85	A5	69	A	N9-C1'-C2'	9.41	126.23	114.00
85	A5	1422	G	O4'-C1'-N9	9.41	115.73	108.20
85	A5	2047	A	O4'-C1'-C2'	-9.41	96.39	105.80
36	B2	1590	C	N1-C1'-C2'	9.40	126.22	114.00
85	A5	499	G	C1'-O4'-C4'	-9.40	102.38	109.90
42	CL	166	ALA	O-C-N	-9.40	107.66	122.70
85	A5	3822	U	O4'-C1'-N1	9.40	115.72	108.20
42	CL	165	LYS	N-CA-CB	-9.40	93.68	110.60
61	Ch	119	TYR	CB-CG-CD2	-9.40	115.36	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	422	C	N1-C1'-C2'	9.40	126.22	114.00
86	A7	45	U	O4'-C1'-N1	9.40	115.72	108.20
17	AV	61	ARG	NE-CZ-NH1	9.39	125.00	120.30
36	B2	652	U	O4'-C1'-N1	9.39	115.72	108.20
85	A5	956	A	O4'-C1'-C2'	-9.39	96.41	105.80
85	A5	1825	A	O4'-C1'-C2'	-9.39	96.41	105.80
85	A5	4144	C	O4'-C1'-N1	9.39	115.71	108.20
85	A5	2521	G	O4'-C1'-N9	9.39	115.71	108.20
85	A5	4940	C	P-O3'-C3'	-9.39	108.44	119.70
85	A5	4938	A	P-O3'-C3'	9.39	130.96	119.70
86	A7	106	G	O4'-C1'-C2'	9.39	116.05	107.60
81	CE	85	LYS	CB-CA-C	9.38	129.16	110.40
85	A5	4749	C	P-O5'-C5'	9.38	135.91	120.90
36	B2	1041	G	O4'-C1'-C2'	9.38	116.04	107.60
85	A5	1640	C	O4'-C1'-N1	9.38	115.70	108.20
85	A5	2505	C	O4'-C1'-C2'	-9.38	96.42	105.80
86	A7	53	U	O4'-C1'-N1	9.38	115.70	108.20
36	B2	67	C	C3'-C2'-C1'	-9.38	94.00	101.50
36	B2	797	C	C3'-C2'-C1'	9.38	109.00	101.50
85	A5	4306	U	O4'-C1'-C2'	-9.38	96.42	105.80
36	B2	1157	G	O4'-C1'-N9	9.37	115.70	108.20
85	A5	3768	U	O4'-C1'-N1	9.37	115.70	108.20
86	A7	80	U	O4'-C1'-N1	9.37	115.70	108.20
36	B2	670	A	O4'-C1'-N9	9.37	115.70	108.20
85	A5	2264	C	O3'-P-O5'	-9.37	86.20	104.00
85	A5	4592	C	O4'-C1'-N1	9.37	115.69	108.20
85	A5	1210	C	P-O3'-C3'	9.37	130.94	119.70
85	A5	656	C	C4'-C3'-O3'	9.36	131.73	113.00
36	B2	909	G	O3'-P-O5'	9.36	121.79	104.00
85	A5	4049	U	O4'-C1'-N1	9.36	115.69	108.20
36	B2	1459	G	C1'-O4'-C4'	-9.36	102.41	109.90
85	A5	3911	C	N1-C1'-C2'	9.36	126.16	114.00
85	A5	907	C	O4'-C1'-N1	9.35	115.68	108.20
85	A5	4084	G	O3'-P-O5'	9.35	121.77	104.00
85	A5	3842	C	O3'-P-O5'	9.35	121.76	104.00
23	AD	82	GLY	C-N-CA	-9.35	98.33	121.70
85	A5	4658	G	C1'-O4'-C4'	-9.35	102.42	109.90
36	B2	965	U	O4'-C1'-N1	9.35	115.68	108.20
85	A5	2369	U	P-O3'-C3'	9.35	130.91	119.70
36	B2	887	U	P-O5'-C5'	9.34	135.85	120.90
70	Ci	78	GLY	O-C-N	9.34	137.65	122.70
85	A5	1303	A	P-O3'-C3'	9.34	130.91	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	409	G	O4'-C1'-C2'	-9.34	96.46	105.80
74	CC	335	MET	CA-C-O	-9.34	100.49	120.10
87	A8	111	U	O4'-C1'-N1	9.34	115.67	108.20
36	B2	514	U	O4'-C1'-N1	9.34	115.67	108.20
36	B2	201	C	C3'-C2'-C1'	9.33	108.97	101.50
36	B2	1808	U	O4'-C1'-N1	9.33	115.67	108.20
85	A5	5015	G	C3'-C2'-C1'	9.33	108.97	101.50
87	A8	120	G	O4'-C1'-N9	9.33	115.67	108.20
36	B2	1569	A	O5'-P-OP2	-9.33	97.30	105.70
85	A5	1899	G	C1'-O4'-C4'	-9.33	102.44	109.90
46	CN	74	PRO	CA-N-CD	-9.33	98.44	111.50
85	A5	3605	C	P-O3'-C3'	9.33	130.89	119.70
85	A5	4289	U	O4'-C1'-N1	9.32	115.66	108.20
33	AI	105	ASP	CB-CG-OD1	-9.32	109.91	118.30
36	B2	210	U	C4'-C3'-O3'	9.32	131.64	113.00
81	CE	32	LEU	CB-CG-CD2	9.32	126.84	111.00
85	A5	4529	G	O4'-C1'-N9	9.32	115.66	108.20
85	A5	1661	C	C1'-O4'-C4'	-9.32	102.45	109.90
85	A5	2076	G	O4'-C1'-N9	9.32	115.65	108.20
85	A5	2314	G	O4'-C1'-N9	9.31	115.65	108.20
85	A5	4769	G	O4'-C1'-N9	9.31	115.65	108.20
87	A8	131	G	O4'-C1'-N9	9.31	115.65	108.20
36	B2	1587	G	O4'-C1'-N9	9.31	115.65	108.20
36	B2	434	G	C4'-C3'-O3'	-9.31	89.84	109.40
85	A5	462	G	C3'-C2'-C1'	-9.31	94.05	101.50
85	A5	4577	U	O4'-C1'-N1	9.31	115.65	108.20
36	B2	1072	U	O4'-C1'-N1	9.31	115.65	108.20
81	CE	118	THR	C-N-CA	9.31	144.97	121.70
36	B2	859	G	O4'-C1'-N9	9.31	115.65	108.20
36	B2	955	A	O4'-C1'-N9	9.31	115.65	108.20
41	CO	66	PRO	CA-N-CD	-9.31	98.47	111.50
85	A5	2489	C	C2'-C3'-O3'	-9.31	89.02	109.50
85	A5	423	G	C1'-O4'-C4'	-9.31	102.45	109.90
36	B2	441	C	N1-C1'-C2'	9.30	126.09	114.00
74	CC	261	ASP	C-N-CA	9.30	144.94	121.70
85	A5	4370	G	N9-C1'-C2'	9.30	126.09	114.00
48	CD	285	ALA	N-CA-CB	9.30	123.11	110.10
36	B2	1106	C	O4'-C1'-N1	9.29	115.63	108.20
38	Cz	28	PHE	CB-CG-CD2	-9.29	114.30	120.80
44	CM	90	ARG	NE-CZ-NH1	9.29	124.95	120.30
85	A5	48	G	P-O3'-C3'	9.29	130.85	119.70
85	A5	394	G	O4'-C1'-N9	9.29	115.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	534	G	O3'-P-O5'	-9.29	86.35	104.00
40	CK	75	PRO	CA-N-CD	-9.29	98.50	111.50
85	A5	1407	C	O4'-C1'-C2'	-9.29	96.51	105.80
36	B2	1270	G	O4'-C1'-N9	9.29	115.63	108.20
74	CC	134	PRO	CA-N-CD	-9.29	98.50	111.50
85	A5	1294	A	O4'-C1'-N9	9.29	115.63	108.20
85	A5	2102	G	P-O3'-C3'	9.29	130.84	119.70
85	A5	2430	C	O4'-C1'-N1	9.29	115.63	108.20
85	A5	642	G	O4'-C1'-N9	9.28	115.62	108.20
85	A5	3968	U	O4'-C1'-N1	9.28	115.63	108.20
36	B2	51	U	O4'-C1'-N1	9.28	115.62	108.20
85	A5	3776	G	O4'-C1'-N9	9.28	115.62	108.20
36	B2	1647	A	O4'-C1'-N9	9.28	115.62	108.20
36	B2	53	C	O4'-C1'-C2'	-9.27	96.53	105.80
62	Cb	50	ASN	CB-CA-C	9.27	128.95	110.40
36	B2	60	A	C3'-C2'-C1'	-9.27	94.08	101.50
36	B2	1201	U	O4'-C1'-N1	9.27	115.62	108.20
60	Cr	43	LEU	CB-CG-CD2	9.27	126.76	111.00
85	A5	174	C	N1-C1'-C2'	9.27	126.05	114.00
85	A5	3586	G	C1'-O4'-C4'	-9.27	102.48	109.90
29	AG	122	PRO	CA-N-CD	-9.27	98.53	111.50
85	A5	1345	A	O4'-C1'-C2'	-9.27	96.53	105.80
85	A5	2769	U	N1-C1'-C2'	9.27	126.05	114.00
1	Az	267	ASP	N-CA-C	9.26	136.01	111.00
39	Cq	68	HIS	O-C-N	9.26	137.52	122.70
85	A5	1953	U	O4'-C1'-N1	9.26	115.61	108.20
85	A5	2402	G	O4'-C1'-N9	9.26	115.61	108.20
36	B2	1208	A	O4'-C1'-N9	9.26	115.61	108.20
53	CT	124	THR	CB-CA-C	-9.26	86.61	111.60
85	A5	2707	U	O4'-C1'-N1	9.26	115.61	108.20
50	CR	57	VAL	CB-CA-C	9.25	128.98	111.40
85	A5	677	G	O4'-C1'-N9	9.25	115.60	108.20
36	B2	1622	U	O4'-C1'-N1	-9.25	100.80	108.20
87	A8	127	U	P-O3'-C3'	9.25	130.80	119.70
1	Az	825	PHE	C-N-CA	-9.25	98.57	121.70
3	AU	94	PRO	CA-N-CD	-9.25	98.55	111.50
19	AZ	104	ARG	CD-NE-CZ	-9.25	110.65	123.60
36	B2	732	U	N1-C1'-C2'	9.25	126.02	114.00
85	A5	4331	G	O4'-C1'-N9	9.25	115.60	108.20
36	B2	1511	U	O4'-C1'-C2'	-9.25	96.55	105.80
85	A5	1287	G	O5'-C5'-C4'	9.25	129.27	111.70
85	A5	4588	U	O4'-C1'-N1	9.25	115.60	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	AL	17	PHE	O-C-N	9.24	137.49	122.70
85	A5	1371	A	C3'-C2'-C1'	9.24	108.89	101.50
85	A5	4913	G	O4'-C1'-N9	9.24	115.59	108.20
36	B2	1741	U	N1-C1'-C2'	9.24	126.01	114.00
85	A5	1317	U	O4'-C1'-N1	9.24	115.59	108.20
63	CB	298	LEU	N-CA-C	-9.24	86.06	111.00
85	A5	417	G	P-O3'-C3'	-9.24	108.62	119.70
36	B2	1017	U	O4'-C1'-N1	9.23	115.59	108.20
85	A5	2122	G	P-O5'-C5'	-9.23	106.13	120.90
85	A5	2528	G	O4'-C1'-C2'	9.23	115.91	107.60
36	B2	561	A	C4'-C3'-O3'	-9.23	90.01	109.40
2	Ag	274	VAL	O-C-N	-9.23	107.93	122.70
85	A5	1671	U	O4'-C1'-N1	9.23	115.58	108.20
36	B2	1816	G	O4'-C1'-N9	9.23	115.58	108.20
85	A5	1246	G	C1'-O4'-C4'	-9.23	102.52	109.90
15	AB	40	ASN	C-N-CA	-9.23	98.64	121.70
85	A5	640	C	O4'-C1'-C2'	-9.23	96.57	105.80
85	A5	1339	U	O4'-C1'-N1	9.22	115.58	108.20
40	CK	2	PRO	CB-CG-CD	-9.22	70.53	106.50
85	A5	934	C	P-O3'-C3'	9.22	130.77	119.70
85	A5	2395	A	O4'-C1'-C2'	-9.22	96.58	105.80
85	A5	2683	C	O4'-C1'-N1	9.22	115.58	108.20
85	A5	2063	G	O4'-C1'-C2'	9.22	115.89	107.60
42	CL	100	PRO	CA-N-CD	-9.22	98.60	111.50
85	A5	4058	U	O4'-C1'-C2'	-9.22	96.58	105.80
8	AS	40	TYR	N-CA-C	9.21	135.88	111.00
85	A5	5035	U	O4'-C1'-N1	9.21	115.57	108.20
36	B2	418	A	N9-C1'-C2'	9.21	125.98	114.00
36	B2	651	U	O4'-C1'-N1	9.21	115.57	108.20
36	B2	1069	U	P-O3'-C3'	9.21	130.75	119.70
58	CW	71	ARG	CB-CG-CD	9.21	135.56	111.60
85	A5	78	U	O4'-C1'-N1	9.21	115.57	108.20
85	A5	1222	A	O4'-C1'-N9	9.21	115.57	108.20
86	A7	74	A	N9-C1'-C2'	-9.21	101.86	112.00
36	B2	307	G	C3'-C2'-C1'	-9.21	94.13	101.50
36	B2	1364	U	O3'-P-O5'	9.21	121.50	104.00
85	A5	3848	U	O4'-C1'-N1	9.21	115.57	108.20
85	A5	1979	A	C3'-C2'-C1'	9.21	108.87	101.50
85	A5	4518	A	O4'-C1'-N9	-9.21	100.83	108.20
36	B2	914	U	O4'-C1'-N1	9.21	115.56	108.20
87	A8	133	G	O4'-C1'-N9	9.21	115.56	108.20
1	Az	206	ASP	C-N-CD	-9.20	100.36	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
82	CG	103	ARG	O-C-N	-9.20	103.62	121.10
85	A5	288	G	C1'-O4'-C4'	-9.20	102.54	109.90
85	A5	1077	C	N1-C1'-C2'	9.20	125.96	114.00
85	A5	3734	U	O4'-C1'-N1	9.20	115.56	108.20
3	AU	53	PRO	CA-N-CD	-9.20	98.62	111.50
29	AG	157	VAL	N-CA-C	9.20	135.84	111.00
85	A5	483	G	O4'-C1'-N9	9.20	115.56	108.20
85	A5	1380	G	O4'-C1'-N9	9.20	115.56	108.20
85	A5	3805	U	O4'-C1'-N1	9.20	115.56	108.20
85	A5	3874	G	O4'-C1'-N9	9.20	115.56	108.20
85	A5	1485	C	P-O3'-C3'	9.19	130.73	119.70
85	A5	1662	C	C3'-C2'-C1'	9.19	108.85	101.50
36	B2	1407	U	N1-C1'-C2'	9.19	125.95	114.00
85	A5	683	C	N1-C1'-C2'	9.19	125.95	114.00
67	Ce	129	LEU	CA-CB-CG	-9.19	94.17	115.30
36	B2	629	A	O4'-C1'-N9	9.19	115.55	108.20
39	Cq	14	PHE	CB-CG-CD1	9.19	127.23	120.80
36	B2	147	A	N9-C1'-C2'	-9.18	101.90	112.00
85	A5	1319	U	O4'-C1'-N1	9.18	115.55	108.20
85	A5	2675	G	O4'-C1'-N9	9.18	115.55	108.20
85	A5	2666	U	O3'-P-O5'	9.18	121.44	104.00
36	B2	1321	G	O4'-C1'-N9	9.18	115.54	108.20
58	CW	73	ARG	O-C-N	9.18	137.38	122.70
85	A5	2066	C	N1-C1'-C2'	9.18	125.93	114.00
85	A5	4933	C	P-O5'-C5'	9.18	135.58	120.90
85	A5	327	U	O4'-C1'-C2'	-9.17	96.63	105.80
36	B2	1292	C	N1-C1'-C2'	9.17	125.92	114.00
85	A5	189	G	O4'-C1'-C2'	9.17	115.85	107.60
85	A5	1267	C	C3'-C2'-C1'	9.17	108.83	101.50
85	A5	1814	C	O4'-C1'-N1	9.17	115.53	108.20
36	B2	1203	G	N9-C1'-C2'	9.16	125.91	114.00
85	A5	3783	A	C3'-C2'-C1'	9.16	108.83	101.50
85	A5	4196	G	N9-C1'-C2'	9.16	125.92	114.00
85	A5	254	G	O4'-C1'-N9	9.16	115.53	108.20
13	AP	37	TYR	CB-CG-CD2	-9.16	115.50	121.00
36	B2	991	G	O4'-C1'-N9	9.16	115.53	108.20
54	CP	109	VAL	CB-CA-C	-9.16	93.99	111.40
66	Cd	43	PRO	CA-N-CD	-9.16	98.68	111.50
85	A5	111	C	O4'-C1'-N1	9.16	115.53	108.20
85	A5	4228	G	O4'-C1'-N9	9.16	115.53	108.20
48	CD	218	ALA	N-CA-CB	9.15	122.92	110.10
85	A5	2356	U	O4'-C1'-N1	9.15	115.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	A8	108	A	N9-C1'-C2'	-9.15	101.93	112.00
85	A5	2485	U	O4'-C1'-N1	9.15	115.52	108.20
86	A7	58	A	O4'-C1'-N9	9.15	115.52	108.20
36	B2	107	A	O4'-C1'-N9	9.15	115.52	108.20
36	B2	896	U	O4'-C1'-N1	9.14	115.52	108.20
85	A5	4058	U	O4'-C1'-N1	9.14	115.51	108.20
85	A5	1962	A	P-O3'-C3'	-9.14	108.73	119.70
85	A5	4383	U	O4'-C1'-N1	9.14	115.51	108.20
36	B2	217	A	C3'-C2'-C1'	9.13	108.81	101.50
39	Cq	80	PRO	CA-N-CD	-9.14	98.71	111.50
85	A5	1052	G	O4'-C1'-N9	9.13	115.51	108.20
74	CC	305	PRO	CA-C-O	-9.13	98.28	120.20
37	BC	75	A	O4'-C1'-N9	9.13	115.50	108.20
56	CX	142	PRO	CA-N-CD	-9.13	98.72	111.50
85	A5	292	G	C1'-O4'-C4'	-9.13	102.60	109.90
85	A5	4113	U	O4'-C1'-N1	9.13	115.50	108.20
51	CA	206	PRO	CA-N-CD	-9.13	98.72	111.50
82	CG	59	ARG	N-CA-C	-9.12	86.37	111.00
85	A5	741	C	O4'-C1'-N1	9.12	115.50	108.20
81	CE	88	VAL	N-CA-CB	9.12	131.57	111.50
85	A5	692	A	O4'-C1'-C2'	-9.12	96.68	105.80
85	A5	4646	U	O4'-C1'-N1	9.12	115.49	108.20
36	B2	1232	U	O4'-C1'-N1	9.11	115.49	108.20
36	B2	456	C	N1-C1'-C2'	9.11	125.84	114.00
85	A5	4867	G	O4'-C1'-N9	9.11	115.49	108.20
36	B2	650	A	C3'-C2'-C1'	9.11	108.79	101.50
36	B2	999	G	O4'-C1'-N9	9.11	115.49	108.20
85	A5	1276	C	O3'-P-O5'	-9.11	86.70	104.00
36	B2	828	G	C3'-C2'-C1'	-9.11	94.22	101.50
85	A5	1939	A	O4'-C1'-N9	9.11	115.48	108.20
85	A5	273	U	N1-C1'-C2'	9.10	125.83	114.00
85	A5	2248	C	C3'-C2'-C1'	9.10	108.78	101.50
36	B2	780	U	P-O3'-C3'	9.10	130.62	119.70
85	A5	4051	C	O4'-C1'-C2'	-9.10	96.70	105.80
85	A5	2470	C	C4'-C3'-O3'	9.10	131.20	113.00
36	B2	739	C	N1-C1'-C2'	9.10	125.83	114.00
81	CE	57	TYR	CB-CG-CD2	-9.10	115.54	121.00
85	A5	3761	C	P-O3'-C3'	-9.10	108.78	119.70
85	A5	142	G	C1'-O4'-C4'	-9.10	102.62	109.90
85	A5	4238	G	O4'-C1'-C2'	9.10	115.79	107.60
85	A5	4359	U	O4'-C1'-N1	9.10	115.48	108.20
85	A5	125	C	O4'-C1'-N1	9.09	115.47	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1648	C	C3'-C2'-C1'	9.09	108.77	101.50
85	A5	4949	G	O3'-P-O5'	9.09	121.27	104.00
82	CG	180	PRO	CA-N-CD	-9.09	98.78	111.50
36	B2	99	A	O4'-C1'-N9	9.09	115.47	108.20
37	BC	45	G	O4'-C1'-C2'	-9.09	96.71	105.80
85	A5	1089	G	C3'-C2'-C1'	-9.08	94.23	101.50
85	A5	4904	G	O4'-C1'-N9	9.08	115.47	108.20
85	A5	4524	G	P-O3'-C3'	-9.08	108.80	119.70
36	B2	1026	C	C3'-C2'-C1'	9.08	108.76	101.50
36	B2	1133	A	O4'-C1'-N9	9.08	115.46	108.20
85	A5	243	A	N9-C1'-C2'	9.08	125.80	114.00
85	A5	2324	C	O4'-C1'-N1	9.08	115.46	108.20
85	A5	2471	G	C5'-C4'-O4'	-9.08	98.21	109.10
85	A5	1412	G	O4'-C1'-N9	9.08	115.46	108.20
85	A5	1866	U	O4'-C1'-N1	9.07	115.46	108.20
74	CC	307	LYS	O-C-N	-9.07	108.19	122.70
85	A5	2910	G	O4'-C1'-N9	9.07	115.46	108.20
36	B2	447	A	O4'-C1'-C2'	-9.07	96.73	105.80
36	B2	494	C	C3'-C2'-C1'	9.07	108.76	101.50
85	A5	3950	U	O4'-C1'-N1	9.07	115.46	108.20
87	A8	8	U	O4'-C1'-N1	9.07	115.46	108.20
36	B2	1265	A	C3'-C2'-C1'	9.07	108.75	101.50
36	B2	1429	G	O4'-C1'-N9	9.07	115.45	108.20
53	CT	150	LEU	C-N-CA	-9.07	99.03	121.70
81	CE	87	LYS	O-C-N	-9.07	108.19	122.70
85	A5	1693	U	O4'-C1'-N1	9.07	115.45	108.20
85	A5	1755	C	O4'-C1'-C2'	-9.07	96.73	105.80
85	A5	1951	G	O4'-C1'-N9	9.07	115.45	108.20
85	A5	4445	U	O4'-C1'-N1	9.07	115.45	108.20
36	B2	1080	A	O4'-C1'-N9	9.06	115.45	108.20
85	A5	652	G	C3'-C2'-C1'	-9.06	94.25	101.50
85	A5	2494	U	O4'-C1'-N1	9.06	115.45	108.20
85	A5	512	U	O4'-C1'-N1	9.06	115.45	108.20
85	A5	2294	G	C1'-O4'-C4'	-9.06	102.65	109.90
56	CX	155	ILE	CB-CA-C	-9.06	93.49	111.60
85	A5	2547	G	O4'-C1'-C2'	9.06	115.75	107.60
85	A5	3812	C	N1-C1'-C2'	9.06	125.78	114.00
85	A5	4882	U	P-O3'-C3'	9.05	130.57	119.70
36	B2	89	C	O4'-C1'-N1	9.05	115.44	108.20
85	A5	4256	A	C3'-C2'-C1'	-9.05	94.26	101.50
35	Ah	161	PRO	CA-N-CD	-9.05	98.83	111.50
36	B2	1520	G	C1'-O4'-C4'	-9.05	102.66	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2306	G	O4'-C1'-N9	-9.05	100.96	108.20
85	A5	1320	U	O4'-C1'-N1	9.05	115.44	108.20
36	B2	56	G	O4'-C1'-N9	9.05	115.44	108.20
85	A5	1740	C	O4'-C1'-C2'	-9.04	96.75	105.80
85	A5	4410	G	C3'-C2'-C1'	9.05	108.74	101.50
11	AL	17	PHE	CA-C-N	-9.04	97.31	117.20
57	CY	51	LYS	C-N-CA	-9.04	99.09	121.70
85	A5	2513	A	O4'-C1'-N9	-9.04	100.97	108.20
51	CA	52	PRO	CA-N-CD	-9.04	98.84	111.50
85	A5	423	G	O4'-C1'-C2'	9.04	115.73	107.60
85	A5	1213	G	O4'-C1'-C2'	9.04	115.73	107.60
85	A5	1783	C	N1-C1'-C2'	9.04	125.75	114.00
85	A5	2886	U	O4'-C1'-N1	9.04	115.43	108.20
85	A5	1855	G	C1'-O4'-C4'	-9.04	102.67	109.90
37	BC	50	U	O4'-C1'-N1	9.03	115.43	108.20
85	A5	1551	C	N1-C1'-C2'	9.03	125.74	114.00
85	A5	1102	U	C1'-O4'-C4'	9.03	117.13	109.90
85	A5	325	U	O4'-C1'-N1	9.03	115.42	108.20
85	A5	4747	C	O4'-C1'-N1	9.03	115.42	108.20
20	Aa	10	ARG	NH1-CZ-NH2	-9.03	109.47	119.40
85	A5	3687	A	O4'-C1'-N9	9.03	115.42	108.20
85	A5	4075	U	C1'-O4'-C4'	9.03	117.12	109.90
85	A5	2745	A	O4'-C1'-N9	9.03	115.42	108.20
23	AD	5	ILE	C-N-CA	9.02	144.25	121.70
20	Aa	103	PRO	CA-N-CD	-9.02	98.87	111.50
36	B2	663	C	N1-C1'-C2'	9.02	125.72	114.00
63	CB	292	LEU	CA-CB-CG	9.02	136.05	115.30
36	B2	1748	G	P-O5'-C5'	9.02	135.33	120.90
40	CK	88	PRO	CA-N-CD	-9.02	98.88	111.50
49	CQ	2	GLY	N-CA-C	9.02	135.64	113.10
85	A5	1072	C	C3'-C2'-C1'	9.02	108.71	101.50
85	A5	1237	C	N1-C1'-C2'	9.01	125.72	114.00
85	A5	2319	C	C3'-C2'-C1'	9.01	108.71	101.50
85	A5	2669	C	C1'-O4'-C4'	9.01	117.11	109.90
87	A8	37	A	O4'-C1'-N9	9.01	115.41	108.20
85	A5	4054	C	N1-C1'-C2'	9.01	125.72	114.00
85	A5	3961	G	N9-C1'-C2'	9.01	125.71	114.00
68	Cf	4	ARG	C-N-CA	9.01	144.22	121.70
85	A5	4716	C	O4'-C1'-N1	9.01	115.41	108.20
6	AX	62	PRO	CA-N-CD	-9.01	98.89	111.50
39	Cq	69	LEU	O-C-N	-9.01	108.29	122.70
36	B2	454	U	O4'-C1'-N1	9.00	115.40	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3651	A	C3'-C2'-C1'	9.00	108.70	101.50
85	A5	4748	U	N1-C1'-C2'	-9.00	102.10	112.00
36	B2	424	C	N1-C1'-C2'	9.00	125.70	114.00
36	B2	734	C	O4'-C1'-C2'	-9.00	96.80	105.80
52	CS	175	PHE	CA-C-N	9.00	137.00	117.20
85	A5	280	G	O4'-C1'-N9	9.00	115.40	108.20
85	A5	2086	G	O4'-C1'-N9	9.00	115.40	108.20
85	A5	263	G	O4'-C1'-N9	8.99	115.40	108.20
85	A5	2714	G	O4'-C1'-N9	8.99	115.39	108.20
36	B2	593	C	C3'-C2'-C1'	8.99	108.69	101.50
36	B2	662	G	N9-C1'-C2'	8.99	125.69	114.00
85	A5	1091	C	O4'-C1'-N1	8.99	115.39	108.20
85	A5	1284	G	P-O3'-C3'	8.99	130.48	119.70
85	A5	3604	A	C3'-C2'-C1'	-8.99	94.31	101.50
85	A5	4951	G	N9-C1'-C2'	8.99	125.68	114.00
8	AS	53	THR	O-C-N	-8.98	108.32	122.70
85	A5	3840	U	O4'-C1'-N1	8.98	115.39	108.20
36	B2	571	U	O4'-C1'-N1	8.98	115.39	108.20
85	A5	1362	G	N9-C1'-C2'	8.98	125.67	114.00
85	A5	1467	C	C3'-C2'-C1'	8.98	108.68	101.50
85	A5	1698	C	O4'-C1'-N1	8.98	115.38	108.20
85	A5	1915	C	O4'-C1'-C2'	8.97	115.68	107.60
52	CS	20	PRO	C-N-CA	-8.97	99.28	121.70
85	A5	491	G	O4'-C1'-N9	8.97	115.38	108.20
85	A5	2592	U	N1-C1'-C2'	8.97	125.66	114.00
85	A5	5026	U	O4'-C4'-C3'	-8.97	95.03	104.00
85	A5	2887	U	N1-C1'-C2'	-8.97	102.13	112.00
85	A5	307	A	C3'-C2'-C1'	8.97	108.67	101.50
85	A5	4354	U	O4'-C1'-N1	8.97	115.37	108.20
85	A5	5037	U	O4'-C1'-N1	8.97	115.37	108.20
39	Cq	231	TYR	CB-CG-CD1	8.96	126.38	121.00
87	A8	18	U	O4'-C1'-N1	8.96	115.37	108.20
85	A5	470	A	N9-C1'-C2'	8.96	125.65	114.00
85	A5	4063	U	O4'-C1'-N1	8.96	115.37	108.20
85	A5	1284	G	O4'-C1'-N9	8.96	115.37	108.20
85	A5	2601	A	O4'-C1'-C2'	-8.96	96.84	105.80
85	A5	4898	G	O4'-C1'-N9	8.96	115.37	108.20
36	B2	415	A	N9-C1'-C2'	-8.96	102.15	112.00
85	A5	3619	G	O4'-C1'-N9	8.96	115.36	108.20
85	A5	1993	C	N1-C1'-C2'	8.95	125.64	114.00
85	A5	1992	U	O4'-C1'-N1	8.95	115.36	108.20
85	A5	2736	G	O4'-C1'-C2'	8.95	115.66	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	114	G	O4'-C1'-N9	8.95	115.36	108.20
85	A5	1473	U	N1-C1'-C2'	8.95	125.63	114.00
85	A5	2081	C	O4'-C1'-N1	8.95	115.36	108.20
85	A5	2760	G	C1'-O4'-C4'	8.95	117.06	109.90
3	AU	93	SER	C-N-CD	8.94	147.18	128.40
36	B2	190	G	N9-C1'-C2'	8.94	125.63	114.00
36	B2	699	C	P-O3'-C3'	8.94	130.43	119.70
85	A5	608	C	P-O3'-C3'	8.94	130.43	119.70
85	A5	2593	C	O4'-C1'-N1	8.94	115.35	108.20
21	Ab	12	PRO	CA-N-CD	-8.94	98.98	111.50
36	B2	492	C	O4'-C1'-C2'	-8.94	96.86	105.80
36	B2	1721	U	O4'-C1'-C2'	-8.94	96.86	105.80
20	Aa	97	PRO	N-CA-CB	-8.94	92.58	103.30
85	A5	4678	G	O4'-C1'-N9	8.94	115.35	108.20
37	BC	47	C	C3'-C2'-C1'	8.94	108.65	101.50
85	A5	448	G	P-O3'-C3'	8.94	130.43	119.70
85	A5	3790	U	O4'-C1'-N1	8.94	115.35	108.20
36	B2	24	C	O3'-P-O5'	-8.93	87.03	104.00
36	B2	140	C	O4'-C1'-N1	8.93	115.35	108.20
68	Cf	100	ARG	O-C-N	-8.93	108.41	122.70
36	B2	335	G	N9-C1'-C2'	-8.93	102.18	112.00
85	A5	3642	A	O4'-C1'-N9	8.93	115.34	108.20
86	A7	49	A	O5'-C5'-C4'	8.93	128.66	111.70
74	CC	86	ARG	N-CA-CB	8.93	126.66	110.60
85	A5	5032	C	N1-C1'-C2'	8.93	125.60	114.00
85	A5	1219	G	C1'-O4'-C4'	-8.92	102.76	109.90
85	A5	4606	G	N9-C1'-C2'	8.92	125.60	114.00
36	B2	1188	A	O4'-C1'-C2'	-8.92	96.88	105.80
85	A5	1440	U	O4'-C1'-N1	8.92	115.34	108.20
85	A5	1548	G	O4'-C1'-N9	8.92	115.34	108.20
85	A5	2803	U	O4'-C1'-N1	8.92	115.33	108.20
85	A5	4900	C	C3'-C2'-C1'	8.92	108.64	101.50
1	Az	197	SER	C-N-CA	8.92	141.03	122.30
26	AJ	165	TYR	CB-CA-C	8.92	128.23	110.40
36	B2	152	U	O4'-C1'-N1	8.92	115.33	108.20
36	B2	1473	G	P-O3'-C3'	8.92	130.40	119.70
36	B2	1476	A	C1'-O4'-C4'	8.92	117.03	109.90
36	B2	1409	A	P-O5'-C5'	8.91	135.16	120.90
85	A5	3997	C	P-O3'-C3'	8.91	130.40	119.70
85	A5	4375	C	C3'-C2'-C1'	8.91	108.63	101.50
36	B2	204	G	O4'-C1'-N9	8.91	115.33	108.20
36	B2	619	A	O4'-C1'-N9	8.91	115.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	440	U	O4'-C1'-N1	8.91	115.33	108.20
48	CD	269	PRO	CA-N-CD	-8.91	99.03	111.50
36	B2	552	G	P-O5'-C5'	8.90	135.15	120.90
36	B2	215	G	O4'-C1'-N9	8.90	115.32	108.20
36	B2	1276	A	N9-C1'-C2'	-8.90	102.20	112.00
85	A5	1563	A	O4'-C1'-N9	8.90	115.32	108.20
85	A5	5023	C	P-O3'-C3'	8.90	130.38	119.70
51	CA	205	ASN	C-N-CD	-8.90	101.02	120.60
36	B2	951	C	P-O5'-C5'	8.90	135.13	120.90
36	B2	1514	G	O4'-C1'-N9	8.90	115.32	108.20
36	B2	1636	G	O4'-C1'-N9	8.90	115.32	108.20
85	A5	2845	A	N9-C1'-C2'	8.90	125.57	114.00
85	A5	4925	U	C3'-C2'-C1'	8.90	108.62	101.50
36	B2	1781	A	P-O3'-C3'	8.89	130.37	119.70
85	A5	5012	G	O4'-C1'-N9	8.89	115.31	108.20
36	B2	1477	U	P-O5'-C5'	8.89	135.12	120.90
85	A5	3907	G	O4'-C1'-N9	8.89	115.31	108.20
36	B2	1528	G	C3'-C2'-C1'	-8.88	94.39	101.50
85	A5	481	G	C1'-O4'-C4'	-8.89	102.79	109.90
87	A8	65	A	N9-C1'-C2'	8.89	125.55	114.00
85	A5	1501	C	C4'-C3'-O3'	8.88	130.76	113.00
85	A5	2411	C	O4'-C1'-N1	8.88	115.31	108.20
85	A5	4638	U	P-O3'-C3'	8.88	130.36	119.70
85	A5	4757	C	P-O3'-C3'	8.88	130.36	119.70
36	B2	737	G	C1'-O4'-C4'	8.88	117.00	109.90
36	B2	1601	A	P-O3'-C3'	8.88	130.35	119.70
83	Ct	41	PRO	CA-N-CD	-8.88	99.07	111.50
44	CM	90	ARG	N-CA-CB	8.88	126.58	110.60
85	A5	4290	U	O4'-C1'-N1	8.88	115.30	108.20
87	A8	112	G	O4'-C1'-C2'	8.88	115.59	107.60
36	B2	960	U	N1-C1'-C2'	8.88	125.54	114.00
62	Cb	50	ASN	O-C-N	-8.88	108.50	122.70
85	A5	1830	G	C1'-O4'-C4'	-8.87	102.80	109.90
36	B2	1861	G	O4'-C1'-C2'	8.87	115.58	107.60
8	AS	88	LYS	C-N-CA	-8.87	99.53	121.70
36	B2	1218	C	N1-C1'-C2'	8.87	125.53	114.00
85	A5	415	G	O4'-C1'-N9	8.87	115.29	108.20
85	A5	4353	U	O4'-C1'-N1	8.87	115.29	108.20
81	CE	37	PRO	CA-N-CD	-8.87	99.09	111.50
36	B2	1853	C	N1-C1'-C2'	8.86	125.52	114.00
36	B2	621	C	N1-C1'-C2'	8.86	125.51	114.00
36	B2	1440	C	C3'-C2'-C1'	8.86	108.59	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
86	A7	25	G	N9-C1'-C2'	8.86	125.52	114.00
36	B2	1193	U	O4'-C1'-N1	8.86	115.28	108.20
36	B2	851	C	O3'-P-O5'	-8.85	87.18	104.00
17	AV	67	ASP	CB-CA-C	8.85	128.10	110.40
36	B2	1830	U	C3'-C2'-C1'	8.85	108.58	101.50
36	B2	1776	G	O4'-C1'-N9	8.85	115.28	108.20
47	CI	192	PRO	CA-N-CD	-8.85	99.11	111.50
36	B2	1867	U	C3'-C2'-C1'	-8.85	94.42	101.50
85	A5	2458	C	N1-C1'-C2'	8.85	125.50	114.00
36	B2	25	A	N9-C1'-C2'	-8.85	102.27	112.00
45	Ca	52	TYR	CA-CB-CG	-8.85	96.59	113.40
85	A5	4225	G	O4'-C1'-N9	8.85	115.28	108.20
85	A5	1370	G	O4'-C1'-C2'	-8.85	96.95	105.80
56	CX	155	ILE	CA-CB-CG1	8.84	127.80	111.00
85	A5	1593	A	N9-C1'-C2'	8.84	125.50	114.00
87	A8	65	A	C1'-O4'-C4'	-8.84	102.83	109.90
36	B2	1431	G	O4'-C1'-N9	8.84	115.27	108.20
85	A5	368	C	N1-C1'-C2'	8.84	125.49	114.00
85	A5	4931	G	O4'-C1'-N9	8.84	115.27	108.20
85	A5	2086	G	O4'-C1'-C2'	8.84	115.56	107.60
52	CS	17	LEU	CA-CB-CG	8.84	135.63	115.30
36	B2	1195	A	O4'-C1'-N9	8.84	115.27	108.20
8	AS	94	LYS	CA-C-N	-8.83	97.77	117.20
8	AS	142	ARG	CB-CA-C	-8.83	92.74	110.40
36	B2	553	U	O4'-C1'-C2'	-8.83	96.97	105.80
85	A5	1252	C	O4'-C1'-C2'	-8.83	96.97	105.80
85	A5	4326	G	N9-C1'-C2'	8.83	125.48	114.00
36	B2	1782	G	C3'-C2'-C1'	-8.83	94.44	101.50
81	CE	219	LYS	CD-CE-NZ	8.83	132.00	111.70
85	A5	2327	G	O4'-C1'-N9	8.83	115.26	108.20
85	A5	4884	G	P-O3'-C3'	8.83	130.29	119.70
40	CK	136	ALA	O-C-N	-8.82	108.58	122.70
45	Ca	98	ALA	CB-CA-C	-8.82	96.86	110.10
85	A5	1505	C	C3'-C2'-C1'	8.82	108.56	101.50
85	A5	2318	G	O4'-C1'-N9	8.82	115.26	108.20
36	B2	1163	C	N1-C1'-C2'	8.82	125.47	114.00
85	A5	520	C	O4'-C1'-N1	8.82	115.26	108.20
85	A5	1781	U	O4'-C1'-N1	8.82	115.26	108.20
85	A5	195	C	O4'-C1'-N1	8.82	115.25	108.20
85	A5	1169	G	O4'-C1'-N9	8.82	115.25	108.20
85	A5	1873	A	O4'-C1'-N9	8.82	115.25	108.20
37	BC	61	C	O4'-C1'-N1	8.82	115.25	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	Cq	23	ASP	O-C-N	-8.81	108.60	122.70
85	A5	4870	G	P-O3'-C3'	-8.81	109.12	119.70
85	A5	146	G	C1'-O4'-C4'	-8.81	102.85	109.90
85	A5	1677	U	N1-C1'-C2'	8.81	125.45	114.00
85	A5	2128	G	C1'-O4'-C4'	-8.81	102.86	109.90
36	B2	227	U	N1-C1'-C2'	-8.80	102.32	112.00
85	A5	200	U	C3'-C2'-C1'	8.80	108.54	101.50
85	A5	1851	G	O4'-C1'-N9	8.80	115.24	108.20
86	A7	20	U	O4'-C1'-N1	8.80	115.24	108.20
86	A7	84	U	N1-C1'-C2'	-8.80	102.32	112.00
2	Ag	145	GLU	N-CA-C	-8.80	87.25	111.00
85	A5	79	C	N1-C1'-C2'	8.80	125.44	114.00
85	A5	1265	G	C1'-O4'-C4'	-8.80	102.86	109.90
85	A5	1756	U	P-O3'-C3'	-8.80	109.14	119.70
36	B2	1339	U	O4'-C1'-N1	8.79	115.24	108.20
41	CO	121	PRO	CA-N-CD	-8.80	99.19	111.50
74	CC	261	ASP	O-C-N	-8.79	108.64	122.70
85	A5	1343	A	O4'-C1'-C2'	-8.79	97.01	105.80
85	A5	1631	A	O4'-C1'-N9	8.79	115.23	108.20
85	A5	1636	U	O4'-C1'-N1	8.79	115.23	108.20
85	A5	2006	U	O4'-C1'-N1	8.79	115.23	108.20
85	A5	4096	C	O4'-C1'-N1	8.79	115.23	108.20
85	A5	4112	C	O4'-C1'-N1	8.79	115.23	108.20
36	B2	1392	U	O4'-C1'-N1	8.79	115.23	108.20
85	A5	697	G	N9-C1'-C2'	8.79	125.43	114.00
85	A5	2109	G	C1'-O4'-C4'	-8.79	102.87	109.90
36	B2	161	U	O4'-C1'-C2'	-8.79	97.02	105.80
36	B2	558	G	C3'-C2'-C1'	-8.78	94.47	101.50
36	B2	963	A	O4'-C1'-N9	8.78	115.23	108.20
36	B2	1072	U	C1'-O4'-C4'	8.79	116.93	109.90
36	B2	1681	U	O4'-C1'-N1	8.78	115.23	108.20
85	A5	2682	G	O4'-C1'-N9	8.78	115.23	108.20
85	A5	1756	U	C2'-C3'-O3'	8.78	128.82	109.50
85	A5	1267	C	P-O3'-C3'	8.78	130.24	119.70
85	A5	1998	A	P-O5'-C5'	8.78	134.95	120.90
36	B2	43	U	O4'-C1'-N1	8.78	115.22	108.20
85	A5	1049	C	O4'-C1'-N1	8.78	115.22	108.20
44	CM	80	ALA	CA-C-N	-8.78	97.89	117.20
85	A5	1948	G	C1'-O4'-C4'	-8.78	102.88	109.90
18	AY	52	PRO	CA-N-CD	-8.78	99.22	111.50
52	CS	23	HIS	N-CA-C	-8.77	87.32	111.00
36	B2	1692	U	O4'-C1'-N1	8.77	115.21	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	165	A	O4'-C1'-N9	8.77	115.21	108.20
86	A7	52	C	N1-C1'-C2'	8.77	125.40	114.00
85	A5	2443	G	C1'-O4'-C4'	-8.77	102.89	109.90
85	A5	4275	G	O4'-C1'-N9	8.76	115.21	108.20
36	B2	482	G	O4'-C1'-N9	8.76	115.21	108.20
85	A5	3930	U	O4'-C1'-N1	8.76	115.21	108.20
36	B2	1108	G	P-O3'-C3'	8.76	130.21	119.70
85	A5	1600	A	N9-C1'-C2'	8.76	125.39	114.00
48	CD	260	GLU	N-CA-C	8.75	134.63	111.00
85	A5	2396	A	P-O5'-C5'	8.75	134.91	120.90
36	B2	1226	G	N9-C1'-C2'	8.75	125.38	114.00
63	CB	392	LEU	CB-CG-CD2	-8.75	96.12	111.00
85	A5	4900	C	N1-C1'-C2'	8.75	125.37	114.00
36	B2	465	A	P-O3'-C3'	8.75	130.20	119.70
36	B2	742	U	P-O3'-C3'	8.75	130.20	119.70
85	A5	3707	U	O4'-C1'-N1	8.75	115.20	108.20
85	A5	6	C	C3'-C2'-C1'	8.75	108.50	101.50
85	A5	2340	C	N1-C1'-C2'	8.75	125.37	114.00
85	A5	5038	A	O4'-C1'-N9	8.75	115.20	108.20
85	A5	5066	U	O4'-C1'-N1	8.75	115.20	108.20
82	CG	200	THR	N-CA-CB	8.74	126.92	110.30
59	CZ	7	PRO	CA-N-CD	-8.74	99.26	111.50
85	A5	213	G	O4'-C1'-N9	8.74	115.19	108.20
87	A8	140	C	O4'-C1'-N1	8.74	115.19	108.20
36	B2	108	G	O4'-C1'-N9	8.74	115.19	108.20
36	B2	876	C	O4'-C1'-N1	8.74	115.19	108.20
36	B2	955	A	P-O3'-C3'	8.74	130.19	119.70
85	A5	1071	C	O4'-C1'-C2'	-8.74	97.06	105.80
85	A5	4335	C	C1'-O4'-C4'	-8.74	102.91	109.90
85	A5	4612	C	N1-C1'-C2'	8.74	125.36	114.00
87	A8	21	C	O4'-C1'-C2'	-8.74	97.06	105.80
85	A5	53	C	C1'-O4'-C4'	-8.74	102.91	109.90
83	Cs	41	PRO	CA-N-CD	-8.74	99.27	111.50
36	B2	841	G	C1'-C2'-O2'	-8.73	84.41	110.60
85	A5	2706	G	C1'-O4'-C4'	-8.73	102.92	109.90
86	A7	13	A	C4'-C3'-O3'	8.73	130.46	113.00
56	CX	52	LEU	CA-C-N	8.73	136.40	117.20
85	A5	1297	U	O4'-C1'-C2'	-8.73	97.07	105.80
36	B2	1233	G	C1'-O4'-C4'	-8.73	102.92	109.90
18	AY	86	GLU	CB-CA-C	-8.72	92.95	110.40
85	A5	4498	U	O4'-C1'-N1	8.72	115.18	108.20
28	AC	119	GLY	N-CA-C	8.72	134.90	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	CK	2	PRO	C-N-CD	-8.72	101.41	120.60
36	B2	907	G	N9-C1'-C2'	8.72	125.34	114.00
62	Cb	54	LEU	CB-CG-CD2	8.72	125.82	111.00
36	B2	796	G	P-O3'-C3'	8.72	130.16	119.70
36	B2	933	G	O4'-C1'-N9	8.72	115.17	108.20
36	B2	511	U	O4'-C1'-N1	8.72	115.17	108.20
42	CL	25	TRP	N-CA-CB	8.72	126.29	110.60
85	A5	3586	G	O4'-C1'-N9	8.72	115.17	108.20
85	A5	1516	G	N9-C1'-C2'	8.71	125.33	114.00
85	A5	1972	G	O4'-C1'-N9	8.71	115.17	108.20
36	B2	700	G	O4'-C1'-N9	8.71	115.17	108.20
36	B2	1553	C	P-O3'-C3'	8.71	130.15	119.70
85	A5	2523	G	O4'-C1'-N9	8.71	115.16	108.20
36	B2	308	G	C1'-O4'-C4'	-8.70	102.94	109.90
40	CK	163	PRO	CA-N-CD	-8.71	99.31	111.50
85	A5	1437	C	C1'-O4'-C4'	8.71	116.86	109.90
85	A5	2258	C	C5'-C4'-O4'	8.70	119.55	109.10
85	A5	2432	U	O4'-C1'-N1	8.71	115.16	108.20
36	B2	237	C	C1'-O4'-C4'	8.70	116.86	109.90
85	A5	2110	C	C3'-C2'-C1'	8.70	108.46	101.50
85	A5	4237	C	O4'-C1'-N1	8.70	115.16	108.20
85	A5	724	C	O4'-C1'-N1	8.70	115.16	108.20
86	A7	115	A	C5'-C4'-C3'	-8.70	102.08	116.00
36	B2	679	A	O4'-C1'-N9	8.70	115.16	108.20
36	B2	1236	G	C3'-C2'-C1'	-8.70	94.54	101.50
82	CG	58	PRO	N-CA-CB	-8.70	92.86	103.30
37	BC	7	G	P-O3'-C3'	8.69	130.13	119.70
87	A8	38	U	C3'-C2'-C1'	8.69	108.45	101.50
85	A5	355	A	O4'-C1'-N9	8.69	115.15	108.20
85	A5	972	C	C1'-O4'-C4'	8.69	116.85	109.90
3	AU	67	LYS	C-N-CA	-8.69	99.99	121.70
34	AQ	134	GLY	C-N-CD	-8.69	101.49	120.60
85	A5	4943	A	C3'-C2'-C1'	-8.69	94.55	101.50
85	A5	1989	G	O4'-C1'-N9	8.69	115.15	108.20
36	B2	1505	U	O4'-C1'-N1	8.68	115.15	108.20
64	CF	23	ARG	N-CA-C	8.68	134.45	111.00
85	A5	504	G	C1'-O4'-C4'	-8.68	102.95	109.90
36	B2	1470	C	O4'-C1'-N1	8.68	115.15	108.20
85	A5	3956	G	O4'-C1'-N9	-8.68	101.25	108.20
85	A5	1779	U	P-O3'-C3'	-8.68	109.28	119.70
85	A5	4662	C	O4'-C1'-N1	8.68	115.14	108.20
85	A5	4742	G	O4'-C1'-N9	8.68	115.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	Af	122	PRO	CA-N-CD	-8.68	99.35	111.50
47	CI	3	ARG	C-N-CA	-8.68	100.01	121.70
85	A5	2342	G	O4'-C1'-N9	8.68	115.14	108.20
40	CK	104	ILE	CG1-CB-CG2	8.67	130.48	111.40
85	A5	3598	C	N1-C1'-C2'	8.67	125.28	114.00
85	A5	4810	A	P-O3'-C3'	8.67	130.11	119.70
36	B2	1606	G	O4'-C1'-N9	8.67	115.14	108.20
38	Cz	28	PHE	N-CA-CB	8.67	126.21	110.60
85	A5	4300	U	C1'-O4'-C4'	-8.67	102.96	109.90
36	B2	153	G	O4'-C1'-N9	8.67	115.13	108.20
36	B2	574	A	C3'-C2'-C1'	8.67	108.43	101.50
85	A5	1505	C	O4'-C1'-C2'	-8.67	97.13	105.80
36	B2	1432	U	C3'-C2'-C1'	8.66	108.43	101.50
63	CB	297	LYS	O-C-N	-8.66	108.84	122.70
85	A5	49	U	O4'-C1'-N1	8.66	115.13	108.20
85	A5	4280	A	O4'-C1'-N9	8.66	115.13	108.20
53	CT	70	HIS	N-CA-C	-8.66	87.61	111.00
85	A5	1634	A	C3'-C2'-C1'	8.66	108.43	101.50
36	B2	237	C	O4'-C1'-C2'	-8.66	97.14	105.80
63	CB	292	LEU	CB-CA-C	8.66	126.65	110.20
85	A5	1719	A	C4'-C3'-O3'	8.66	130.32	113.00
85	A5	4204	C	O4'-C1'-N1	8.66	115.13	108.20
85	A5	2409	U	P-O3'-C3'	8.66	130.09	119.70
85	A5	975	C	C5'-C4'-C3'	8.65	129.85	116.00
36	B2	1276	A	O4'-C1'-C2'	-8.65	97.15	105.80
36	B2	1711	U	O4'-C1'-N1	8.65	115.12	108.20
85	A5	4131	G	O4'-C1'-N9	8.65	115.12	108.20
85	A5	2496	G	O4'-C1'-N9	8.65	115.12	108.20
85	A5	4576	U	O4'-C1'-N1	8.65	115.12	108.20
87	A8	76	C	O4'-C1'-C2'	-8.65	97.15	105.80
36	B2	1551	U	C1'-O4'-C4'	-8.65	102.98	109.90
85	A5	1161	G	O4'-C1'-N9	8.65	115.12	108.20
85	A5	3821	A	N9-C1'-C2'	-8.65	102.49	112.00
85	A5	4418	G	C1'-O4'-C4'	8.65	116.82	109.90
85	A5	4906	C	C3'-C2'-C1'	8.65	108.42	101.50
36	B2	225	G	C1'-O4'-C4'	-8.64	102.99	109.90
55	CU	59	GLY	O-C-N	8.64	136.53	122.70
85	A5	3791	C	O4'-C1'-C2'	-8.64	97.16	105.80
13	AP	17	TYR	CB-CA-C	8.64	127.68	110.40
81	CE	123	ARG	NE-CZ-NH1	-8.64	115.98	120.30
81	CE	100	LYS	CA-C-N	8.63	136.19	117.20
85	A5	1928	C	C3'-C2'-C1'	8.63	108.41	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1135	C	O4'-C1'-N1	8.63	115.10	108.20
74	CC	262	GLU	N-CA-CB	8.63	126.14	110.60
36	B2	1212	G	N9-C1'-C2'	8.63	125.22	114.00
48	CD	233	PRO	CA-N-CD	-8.62	99.42	111.50
58	CW	73	ARG	N-CA-CB	8.62	126.12	110.60
85	A5	3771	C	N1-C1'-C2'	8.63	125.21	114.00
85	A5	4658	G	O4'-C1'-C2'	8.63	115.36	107.60
36	B2	853	C	O3'-P-O5'	8.62	120.38	104.00
74	CC	54	VAL	C-N-CA	-8.62	100.15	121.70
85	A5	462	G	O4'-C1'-C2'	8.62	115.36	107.60
85	A5	984	C	O4'-C1'-N1	8.62	115.10	108.20
85	A5	4700	A	O4'-C1'-N9	8.62	115.10	108.20
85	A5	406	C	N1-C1'-C2'	8.62	125.21	114.00
85	A5	2380	G	O4'-C1'-C2'	8.62	115.36	107.60
85	A5	4134	C	N1-C1'-C2'	8.62	125.20	114.00
31	AH	111	LYS	N-CA-C	-8.62	87.74	111.00
36	B2	1429	G	N9-C1'-C2'	-8.61	102.52	112.00
36	B2	1581	C	O4'-C1'-C2'	-8.62	97.19	105.80
85	A5	27	C	C3'-C2'-C1'	8.61	108.39	101.50
36	B2	1071	G	O4'-C1'-N9	8.61	115.09	108.20
37	BC	24	U	O4'-C1'-N1	8.61	115.09	108.20
85	A5	1520	C	N1-C1'-C2'	8.61	125.19	114.00
85	A5	1934	A	O4'-C1'-N9	8.61	115.09	108.20
85	A5	4634	U	O4'-C1'-N1	-8.61	101.31	108.20
81	CE	85	LYS	CA-CB-CG	8.61	132.33	113.40
85	A5	920	C	O4'-C1'-N1	8.61	115.08	108.20
85	A5	2270	G	C1'-O4'-C4'	-8.61	103.02	109.90
85	A5	4461	C	C3'-C2'-C1'	8.61	108.38	101.50
36	B2	180	G	C4'-C3'-O3'	8.60	130.21	113.00
36	B2	1203	G	C1'-O4'-C4'	-8.60	103.02	109.90
39	Cq	231	TYR	CB-CG-CD2	-8.60	115.84	121.00
56	CX	155	ILE	N-CA-CB	8.60	130.59	110.80
81	CE	32	LEU	CD1-CG-CD2	-8.60	84.69	110.50
85	A5	100	C	P-O3'-C3'	-8.60	109.38	119.70
85	A5	3684	G	N9-C1'-C2'	8.60	125.18	114.00
85	A5	4308	C	O4'-C1'-C2'	-8.60	97.20	105.80
85	A5	4927	G	P-O3'-C3'	8.60	130.03	119.70
85	A5	145	G	O4'-C1'-N9	8.60	115.08	108.20
36	B2	1651	A	N9-C1'-C2'	-8.60	102.54	112.00
85	A5	706	C	N1-C1'-C2'	8.60	125.18	114.00
81	CE	126	LEU	CB-CG-CD1	8.60	125.61	111.00
85	A5	1285	U	N1-C1'-C2'	8.60	125.17	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1753	G	O3'-P-O5'	8.60	120.33	104.00
85	A5	2734	U	O4'-C1'-N1	8.60	115.08	108.20
87	A8	24	G	O4'-C1'-N9	8.60	115.08	108.20
30	AF	45	TYR	CA-CB-CG	-8.59	97.07	113.40
33	AI	184	ARG	N-CA-CB	8.59	126.07	110.60
36	B2	614	C	C3'-C2'-C1'	8.59	108.38	101.50
85	A5	3972	A	O4'-C1'-N9	8.59	115.08	108.20
42	CL	29	PRO	CA-N-CD	-8.59	99.47	111.50
47	CI	193	ASP	C-N-CA	-8.59	104.26	122.30
61	Ch	76	LYS	N-CA-C	8.59	134.19	111.00
85	A5	3974	G	P-O3'-C3'	8.59	130.01	119.70
85	A5	4449	A	P-O3'-C3'	8.59	130.01	119.70
85	A5	981	C	C1'-O4'-C4'	8.59	116.77	109.90
31	AH	36	LEU	CA-CB-CG	-8.59	95.55	115.30
85	A5	53	C	O4'-C1'-N1	8.59	115.07	108.20
85	A5	1476	C	O4'-C1'-N1	8.59	115.07	108.20
85	A5	3622	C	C3'-C2'-C1'	8.59	108.37	101.50
85	A5	4308	C	C3'-C2'-C1'	8.59	108.37	101.50
85	A5	468	U	P-O3'-C3'	8.58	130.00	119.70
85	A5	2293	U	C1'-O4'-C4'	-8.58	103.03	109.90
1	Az	794	PHE	CB-CA-C	8.58	127.56	110.40
36	B2	839	C	P-O3'-C3'	8.58	130.00	119.70
36	B2	1122	A	O4'-C1'-C2'	-8.58	97.22	105.80
59	CZ	112	ARG	NE-CZ-NH2	-8.58	116.01	120.30
85	A5	756	G	O4'-C1'-N9	8.58	115.06	108.20
85	A5	4152	G	C1'-O4'-C4'	-8.58	103.04	109.90
86	A7	93	G	C1'-O4'-C4'	-8.58	103.04	109.90
85	A5	1641	G	O4'-C1'-C2'	-8.58	97.22	105.80
36	B2	799	U	N1-C1'-C2'	8.57	125.15	114.00
85	A5	1379	C	O4'-C1'-C2'	-8.57	97.22	105.80
85	A5	2585	C	N1-C1'-C2'	-8.57	102.57	112.00
60	Cr	107	ARG	O-C-N	-8.57	108.98	122.70
85	A5	949	G	C1'-O4'-C4'	-8.57	103.04	109.90
36	B2	1007	C	C3'-C2'-C1'	8.57	108.36	101.50
85	A5	4985	U	O4'-C1'-N1	8.57	115.06	108.20
26	AJ	118	GLY	O-C-N	-8.57	108.99	122.70
36	B2	237	C	O4'-C1'-N1	8.57	115.06	108.20
36	B2	1415	C	N1-C1'-C2'	8.57	125.14	114.00
85	A5	4565	C	O5'-C5'-C4'	-8.57	95.42	111.70
46	CN	84	PRO	CA-N-CD	-8.57	99.51	111.50
86	A7	74	A	O4'-C1'-C2'	-8.57	97.23	105.80
81	CE	274	VAL	CB-CA-C	-8.57	95.12	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4182	G	O4'-C1'-N9	8.57	115.05	108.20
85	A5	4202	U	O4'-C1'-N1	8.57	115.05	108.20
36	B2	79	A	C4'-C3'-C2'	-8.56	94.03	102.60
36	B2	852	G	P-O3'-C3'	8.56	129.98	119.70
85	A5	231	U	O4'-C1'-N1	8.56	115.05	108.20
85	A5	441	G	C3'-C2'-C1'	-8.56	94.65	101.50
85	A5	1972	G	C3'-C2'-C1'	-8.56	94.65	101.50
85	A5	5032	C	C1'-O4'-C4'	-8.56	103.05	109.90
39	Cq	263	GLU	O-C-N	-8.56	109.00	122.70
85	A5	2715	G	O4'-C1'-N9	8.56	115.05	108.20
20	Aa	80	HIS	N-CA-CB	-8.56	95.20	110.60
36	B2	58	C	O4'-C1'-N1	8.56	115.05	108.20
85	A5	1251	C	C1'-O4'-C4'	8.55	116.74	109.90
21	Ab	10	PRO	CA-N-CD	-8.55	99.53	111.50
87	A8	36	G	O4'-C1'-N9	8.55	115.04	108.20
36	B2	25	A	O4'-C1'-C2'	-8.55	97.25	105.80
85	A5	680	G	O4'-C1'-N9	8.55	115.04	108.20
85	A5	2251	G	P-O3'-C3'	8.55	129.96	119.70
37	BC	65	C	C3'-C2'-C1'	8.55	108.34	101.50
60	Cr	40	TYR	CB-CG-CD2	8.55	126.13	121.00
47	CI	206	LEU	CA-CB-CG	8.55	134.96	115.30
85	A5	2874	U	C3'-C2'-C1'	8.55	108.34	101.50
85	A5	5026	U	P-O5'-C5'	8.55	134.58	120.90
85	A5	2879	A	O4'-C1'-C2'	-8.55	97.25	105.80
69	Cg	81	SER	C-N-CA	8.55	143.06	121.70
87	A8	130	C	O4'-C1'-N1	8.54	115.03	108.20
85	A5	639	U	P-O3'-C3'	8.54	129.95	119.70
85	A5	1274	A	O4'-C1'-N9	8.54	115.03	108.20
85	A5	1346	C	C3'-C2'-C1'	8.54	108.33	101.50
85	A5	3884	U	O4'-C1'-N1	8.54	115.03	108.20
36	B2	353	C	C5'-C4'-C3'	8.54	129.66	116.00
85	A5	206	U	O4'-C1'-N1	8.54	115.03	108.20
85	A5	4564	A	P-O3'-C3'	8.54	129.95	119.70
85	A5	4950	U	C4'-C3'-O3'	-8.54	91.47	109.40
86	A7	65	G	P-O3'-C3'	-8.54	109.45	119.70
30	AF	130	ARG	NE-CZ-NH1	8.54	124.57	120.30
85	A5	1297	U	C1'-O4'-C4'	8.54	116.73	109.90
36	B2	1209	A	O4'-C1'-N9	8.53	115.03	108.20
74	CC	346	ASN	CB-CA-C	8.53	127.47	110.40
85	A5	1480	C	O4'-C1'-C2'	-8.54	97.27	105.80
85	A5	1974	U	C3'-C2'-C1'	8.53	108.33	101.50
85	A5	4058	U	N1-C1'-C2'	-8.53	102.61	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
84	Cv	18	PRO	CA-N-CD	-8.53	99.55	111.50
85	A5	2395	A	C3'-C2'-C1'	8.53	108.33	101.50
40	CK	111	ASN	CB-CA-C	-8.53	93.34	110.40
36	B2	967	C	O4'-C1'-N1	8.53	115.02	108.20
85	A5	464	G	N9-C1'-C2'	8.53	125.09	114.00
36	B2	1756	C	O4'-C1'-N1	8.53	115.02	108.20
85	A5	327	U	O4'-C1'-N1	8.53	115.02	108.20
85	A5	1906	U	O4'-C1'-N1	8.53	115.02	108.20
36	B2	1733	U	O4'-C1'-N1	8.52	115.02	108.20
85	A5	2619	G	O4'-C1'-N9	8.52	115.02	108.20
85	A5	3867	A	N9-C1'-C2'	8.52	125.08	114.00
85	A5	4135	G	O4'-C1'-N9	8.52	115.02	108.20
74	CC	46	LYS	C-N-CA	-8.52	100.40	121.70
85	A5	2794	C	C3'-C2'-C1'	8.52	108.32	101.50
85	A5	5030	U	O4'-C1'-N1	8.52	115.02	108.20
36	B2	1006	C	N1-C1'-C2'	8.52	125.07	114.00
36	B2	1522	A	O4'-C1'-N9	8.52	115.01	108.20
85	A5	1824	G	P-O5'-C5'	8.52	134.53	120.90
36	B2	828	G	O4'-C1'-N9	8.51	115.01	108.20
85	A5	1266	G	C3'-C2'-C1'	-8.51	94.69	101.50
36	B2	1446	A	P-O3'-C3'	8.51	129.91	119.70
67	Ce	38	PRO	CA-N-CD	-8.51	99.59	111.50
85	A5	2483	G	C3'-C2'-C1'	-8.51	94.69	101.50
36	B2	1586	U	O4'-C1'-N1	8.50	115.00	108.20
67	Ce	21	ILE	CG1-CB-CG2	-8.50	92.69	111.40
85	A5	209	U	O4'-C1'-N1	8.50	115.00	108.20
85	A5	1870	C	C3'-C2'-C1'	8.50	108.30	101.50
60	Cr	37	SER	CA-CB-OG	8.50	134.15	111.20
26	AJ	161	LEU	O-C-N	-8.50	109.10	122.70
85	A5	149	A	O3'-P-O5'	-8.50	87.86	104.00
85	A5	2058	G	N9-C1'-C2'	8.50	125.05	114.00
85	A5	2106	G	C3'-C2'-C1'	-8.50	94.70	101.50
85	A5	2735	G	O4'-C1'-N9	8.50	115.00	108.20
85	A5	4560	C	O3'-P-O5'	-8.50	87.85	104.00
85	A5	4586	G	O4'-C1'-N9	8.50	115.00	108.20
85	A5	3799	A	C1'-O4'-C4'	-8.50	103.10	109.90
36	B2	853	C	P-O3'-C3'	-8.49	109.51	119.70
86	A7	70	G	O4'-C1'-N9	8.49	115.00	108.20
85	A5	1727	U	O4'-C1'-N1	8.49	115.00	108.20
87	A8	9	A	C3'-C2'-C1'	8.49	108.29	101.50
85	A5	1276	C	C1'-O4'-C4'	-8.49	103.11	109.90
36	B2	731	G	O3'-P-O5'	8.49	120.12	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1113	A	O4'-C1'-N9	8.49	114.99	108.20
38	Cz	28	PHE	CB-CG-CD1	8.49	126.74	120.80
48	CD	267	ASN	O-C-N	8.49	136.28	122.70
85	A5	2834	C	O4'-C1'-C2'	-8.49	97.31	105.80
37	BC	28	G	O4'-C1'-N9	8.48	114.99	108.20
36	B2	691	G	O4'-C1'-N9	8.48	114.98	108.20
36	B2	1114	U	O4'-C1'-N1	8.48	114.98	108.20
36	B2	1690	U	O4'-C1'-N1	8.48	114.98	108.20
85	A5	4288	C	C3'-C2'-C1'	8.48	108.28	101.50
85	A5	4767	C	O4'-C1'-N1	8.48	114.98	108.20
1	Az	392	GLY	C-N-CD	-8.48	101.95	120.60
36	B2	1202	U	N1-C1'-C2'	-8.48	102.67	112.00
85	A5	2759	G	C3'-C2'-C1'	8.48	108.28	101.50
36	B2	285	U	C3'-C2'-C1'	8.47	108.28	101.50
85	A5	500	G	O4'-C1'-N9	8.47	114.98	108.20
85	A5	4928	C	C3'-C2'-C1'	8.47	108.28	101.50
36	B2	612	U	O4'-C1'-N1	8.47	114.98	108.20
81	CE	36	LYS	N-CA-CB	-8.47	95.35	110.60
83	Cs	44	PRO	CA-N-CD	-8.47	99.64	111.50
85	A5	2359	U	O4'-C1'-N1	8.47	114.97	108.20
36	B2	1508	A	N9-C1'-C2'	-8.47	102.69	112.00
85	A5	938	C	O4'-C1'-C2'	-8.47	97.33	105.80
85	A5	1651	G	N9-C1'-C2'	8.46	125.00	114.00
85	A5	4060	U	O4'-C1'-C2'	-8.46	97.34	105.80
4	AK	87	PRO	C-N-CA	8.46	142.86	121.70
36	B2	528	A	C1'-O4'-C4'	-8.46	103.13	109.90
47	CI	194	GLY	C-N-CA	-8.46	100.54	121.70
36	B2	1086	G	O3'-P-O5'	-8.46	87.92	104.00
36	B2	1112	U	O4'-C1'-N1	8.46	114.97	108.20
36	B2	1468	C	O4'-C1'-N1	8.46	114.97	108.20
54	CP	143	PRO	CA-N-CD	-8.46	99.66	111.50
85	A5	4166	G	O4'-C1'-N9	8.46	114.97	108.20
85	A5	1524	A	O4'-C1'-C2'	8.46	115.21	107.60
34	AQ	18	THR	CA-CB-OG1	8.46	126.75	109.00
53	CT	26	PRO	CA-N-CD	-8.46	99.66	111.50
85	A5	2893	U	O4'-C1'-N1	8.46	114.97	108.20
85	A5	4371	G	O4'-C1'-N9	8.46	114.97	108.20
86	A7	12	U	C3'-C2'-C1'	8.46	108.27	101.50
87	A8	41	A	O4'-C1'-C2'	-8.45	97.35	105.80
85	A5	150	U	P-O3'-C3'	8.45	129.84	119.70
85	A5	4936	G	C2'-C3'-O3'	8.45	128.09	109.50
36	B2	976	G	P-O5'-C5'	8.45	134.42	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1478	U	O4'-C1'-N1	8.45	114.96	108.20
66	Cd	108	TYR	O-C-N	8.45	136.22	122.70
85	A5	1483	C	C3'-C2'-C1'	8.45	108.26	101.50
85	A5	3888	G	O4'-C1'-N9	8.45	114.96	108.20
85	A5	4779	U	P-O5'-C5'	8.45	134.42	120.90
3	AU	70	CYS	C-N-CA	8.44	140.03	122.30
74	CC	77	PRO	CA-N-CD	-8.45	99.68	111.50
85	A5	276	C	C3'-C2'-C1'	8.44	108.26	101.50
85	A5	689	U	O4'-C1'-N1	8.45	114.96	108.20
36	B2	1329	U	C1'-O4'-C4'	-8.44	103.15	109.90
85	A5	1308	C	O4'-C1'-C2'	-8.44	97.36	105.80
85	A5	3972	A	O3'-P-O5'	-8.44	87.96	104.00
36	B2	1276	A	C3'-C2'-C1'	8.44	108.25	101.50
65	Cc	89	TYR	CA-CB-CG	-8.44	97.37	113.40
24	Ae	21	LYS	CA-C-N	8.44	135.76	117.20
37	BC	14	A	O4'-C1'-N9	8.44	114.95	108.20
85	A5	1577	G	P-O3'-C3'	-8.44	109.58	119.70
85	A5	4921	C	C3'-C2'-C1'	8.44	108.25	101.50
47	CI	4	ARG	CD-NE-CZ	-8.43	111.79	123.60
85	A5	2546	G	O4'-C1'-N9	8.43	114.95	108.20
85	A5	2116	C	C3'-C2'-C1'	8.43	108.24	101.50
85	A5	3970	G	P-O3'-C3'	8.43	129.82	119.70
40	CK	89	PRO	CA-N-CD	-8.43	99.70	111.50
85	A5	2293	U	N1-C1'-C2'	8.43	124.96	114.00
86	A7	76	U	O4'-C1'-N1	8.43	114.94	108.20
85	A5	1359	G	O3'-P-O5'	-8.43	87.99	104.00
8	AS	95	TYR	N-CA-CB	-8.42	95.44	110.60
81	CE	60	SER	N-CA-CB	8.42	123.13	110.50
85	A5	54	G	O4'-C1'-N9	8.42	114.94	108.20
85	A5	311	G	O4'-C1'-N9	8.42	114.94	108.20
85	A5	1281	G	P-O3'-C3'	8.42	129.81	119.70
87	A8	38	U	N1-C1'-C2'	8.42	124.95	114.00
36	B2	452	G	C3'-C2'-C1'	8.42	108.24	101.50
48	CD	260	GLU	N-CA-CB	-8.42	95.44	110.60
85	A5	4524	G	C4'-C3'-O3'	-8.42	91.72	109.40
85	A5	330	G	O4'-C1'-N9	8.42	114.94	108.20
85	A5	2255	C	P-O3'-C3'	8.42	129.80	119.70
85	A5	4584	A	N9-C1'-C2'	8.42	124.95	114.00
58	CW	31	PHE	CA-C-N	-8.42	98.68	117.20
85	A5	943	A	P-O3'-C3'	8.42	129.80	119.70
85	A5	1163	G	C1'-O4'-C4'	-8.42	103.17	109.90
85	A5	1200	G	O4'-C1'-N9	8.42	114.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	AP	69	PRO	CA-N-CD	-8.42	99.72	111.50
85	A5	2269	C	C3'-C2'-C1'	8.42	108.23	101.50
85	A5	4402	C	N1-C1'-C2'	8.42	124.94	114.00
31	AH	108	SER	N-CA-CB	8.41	123.12	110.50
81	CE	73	TYR	CA-C-N	-8.41	98.69	117.20
85	A5	1102	U	O4'-C1'-C2'	-8.41	97.39	105.80
85	A5	1949	U	O4'-C1'-N1	8.41	114.93	108.20
23	AD	193	ASP	C-N-CD	8.41	146.06	128.40
36	B2	743	U	O4'-C1'-C2'	-8.41	97.39	105.80
85	A5	315	G	P-O5'-C5'	-8.41	107.44	120.90
85	A5	488	G	P-O3'-C3'	8.41	129.79	119.70
36	B2	131	C	P-O3'-C3'	8.41	129.79	119.70
36	B2	305	U	P-O3'-C3'	-8.41	109.61	119.70
36	B2	1693	G	C1'-O4'-C4'	-8.40	103.18	109.90
85	A5	3254	C	P-O3'-C3'	8.40	129.78	119.70
36	B2	21	U	O4'-C1'-N1	8.40	114.92	108.20
60	Cr	123	PRO	CA-N-CD	-8.40	99.74	111.50
85	A5	2229	C	P-O3'-C3'	8.40	129.78	119.70
85	A5	2645	G	O4'-C1'-N9	8.40	114.92	108.20
85	A5	4128	A	O5'-P-OP1	8.40	120.78	110.70
36	B2	144	U	N1-C1'-C2'	8.40	124.92	114.00
85	A5	1000	A	P-O3'-C3'	8.40	129.78	119.70
36	B2	1326	U	C3'-C2'-C1'	8.40	108.22	101.50
36	B2	1731	A	O4'-C1'-N9	8.40	114.92	108.20
36	B2	1750	C	O4'-C1'-N1	8.40	114.92	108.20
36	B2	1320	G	C3'-C2'-C1'	-8.39	94.78	101.50
36	B2	1462	U	C4'-C3'-O3'	8.39	129.79	113.00
85	A5	445	U	C1'-O4'-C4'	8.39	116.61	109.90
85	A5	1691	G	C3'-C2'-C1'	8.39	108.22	101.50
85	A5	2896	G	O4'-C1'-N9	8.39	114.91	108.20
85	A5	2846	G	O4'-C1'-N9	8.39	114.91	108.20
85	A5	4136	G	O4'-C1'-N9	8.39	114.91	108.20
36	B2	344	U	O4'-C1'-N1	8.39	114.91	108.20
36	B2	1202	U	O4'-C1'-N1	8.39	114.91	108.20
85	A5	2100	A	O5'-P-OP1	8.39	120.77	110.70
27	AE	43	PRO	CA-N-CD	-8.38	99.77	111.50
29	AG	170	ARG	CB-CA-C	-8.38	93.64	110.40
85	A5	754	U	O4'-C1'-C2'	-8.38	97.42	105.80
85	A5	2427	G	C1'-O4'-C4'	-8.38	103.20	109.90
36	B2	701	G	P-O3'-C3'	8.37	129.75	119.70
85	A5	303	C	C3'-C2'-C1'	8.37	108.20	101.50
36	B2	863	U	C1'-O4'-C4'	-8.37	103.21	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1336	C	O4'-C1'-N1	8.37	114.89	108.20
85	A5	2398	U	P-O3'-C3'	8.37	129.74	119.70
36	B2	28	U	O4'-C1'-N1	8.36	114.89	108.20
86	A7	73	U	N1-C1'-C2'	8.36	124.87	114.00
85	A5	298	G	C1'-O4'-C4'	-8.36	103.21	109.90
85	A5	4585	U	O4'-C1'-N1	8.36	114.89	108.20
36	B2	933	G	O4'-C1'-C2'	8.36	115.12	107.60
87	A8	129	C	O4'-C1'-C2'	-8.36	97.44	105.80
36	B2	530	U	P-O3'-C3'	8.36	129.73	119.70
36	B2	1340	U	O4'-C1'-N1	8.36	114.89	108.20
42	CL	163	LYS	C-N-CA	-8.36	100.81	121.70
85	A5	2462	C	C3'-C2'-C1'	8.36	108.19	101.50
19	AZ	104	ARG	NE-CZ-NH1	-8.36	116.12	120.30
26	AJ	180	LYS	C-N-CA	8.36	139.85	122.30
85	A5	1431	C	P-O3'-C3'	8.36	129.73	119.70
85	A5	1543	G	O4'-C1'-N9	8.36	114.89	108.20
36	B2	1141	G	O4'-C1'-N9	8.35	114.88	108.20
85	A5	3590	G	O4'-C1'-N9	8.35	114.88	108.20
85	A5	3711	A	C3'-C2'-C1'	-8.35	94.82	101.50
36	B2	968	U	O4'-C1'-C2'	-8.35	97.45	105.80
85	A5	2005	G	P-O5'-C5'	-8.35	107.54	120.90
36	B2	285	U	O4'-C1'-N1	-8.35	101.52	108.20
44	CM	6	PHE	O-C-N	-8.35	109.35	122.70
85	A5	957	G	O4'-C1'-C2'	8.35	115.11	107.60
86	A7	121	U	O4'-C1'-N1	8.35	114.88	108.20
36	B2	399	C	C3'-C2'-C1'	8.34	108.17	101.50
36	B2	1018	U	N1-C1'-C2'	8.34	124.85	114.00
85	A5	365	U	O4'-C1'-N1	8.34	114.87	108.20
36	B2	376	A	O4'-C1'-N9	8.34	114.87	108.20
85	A5	214	G	O4'-C1'-N9	8.34	114.87	108.20
49	CQ	139	LEU	CA-CB-CG	-8.34	96.12	115.30
85	A5	3830	A	O4'-C1'-N9	8.34	114.87	108.20
81	CE	190	HIS	C-N-CA	8.34	142.55	121.70
86	A7	1	G	O4'-C1'-C2'	-8.34	97.46	105.80
85	A5	153	G	O4'-C1'-N9	8.34	114.87	108.20
85	A5	226	G	P-O3'-C3'	8.34	129.70	119.70
85	A5	3863	C	N1-C1'-C2'	8.34	124.84	114.00
85	A5	3952	A	O4'-C1'-N9	8.34	114.87	108.20
85	A5	4041	C	O4'-C1'-C2'	-8.34	97.46	105.80
85	A5	3646	A	O4'-C1'-N9	8.33	114.87	108.20
87	A8	29	G	O4'-C1'-N9	8.33	114.87	108.20
36	B2	1810	U	O4'-C1'-N1	8.33	114.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1438	A	O4'-C1'-C2'	-8.33	97.47	105.80
85	A5	118	C	P-O3'-C3'	8.33	129.69	119.70
85	A5	635	G	O4'-C1'-N9	8.33	114.86	108.20
85	A5	2455	G	N9-C1'-C2'	8.33	124.83	114.00
85	A5	4389	C	O4'-C1'-N1	8.33	114.86	108.20
36	B2	553	U	C4'-C3'-C2'	-8.32	94.28	102.60
85	A5	1622	U	O4'-C1'-N1	8.32	114.86	108.20
85	A5	2704	C	O4'-C1'-N1	8.32	114.86	108.20
85	A5	2775	C	O4'-C1'-C2'	-8.32	97.47	105.80
85	A5	3729	U	O4'-C1'-N1	8.32	114.86	108.20
36	B2	159	A	O4'-C1'-N9	8.32	114.86	108.20
36	B2	970	G	P-O3'-C3'	8.32	129.68	119.70
85	A5	948	C	C1'-O4'-C4'	-8.32	103.25	109.90
85	A5	2272	C	O4'-C1'-N1	8.32	114.86	108.20
85	A5	3597	G	O4'-C1'-N9	8.32	114.86	108.20
85	A5	3727	A	C3'-C2'-C1'	8.32	108.16	101.50
36	B2	323	C	C3'-C2'-C1'	8.32	108.15	101.50
36	B2	737	G	N9-C1'-C2'	-8.32	102.85	112.00
36	B2	1656	G	O4'-C1'-N9	8.32	114.85	108.20
85	A5	3967	G	C3'-C2'-C1'	-8.32	94.85	101.50
85	A5	4061	G	O4'-C1'-N9	8.32	114.85	108.20
40	CK	102	GLY	N-CA-C	8.31	133.88	113.10
36	B2	689	U	P-O3'-C3'	-8.31	109.73	119.70
36	B2	1472	C	C4'-C3'-O3'	8.31	129.62	113.00
85	A5	736	C	N1-C1'-C2'	8.31	124.80	114.00
86	A7	71	G	O4'-C1'-N9	8.31	114.85	108.20
20	Aa	58	VAL	CB-CA-C	-8.31	95.61	111.40
36	B2	554	A	C3'-C2'-C1'	-8.31	94.85	101.50
36	B2	1010	G	C3'-C2'-C1'	-8.31	94.85	101.50
85	A5	1578	U	C5'-C4'-O4'	8.31	119.07	109.10
36	B2	1030	A	O4'-C1'-N9	8.30	114.84	108.20
85	A5	1436	C	N1-C1'-C2'	8.30	124.79	114.00
85	A5	2038	U	O4'-C1'-N1	8.30	114.84	108.20
85	A5	5025	C	P-O3'-C3'	-8.30	109.73	119.70
36	B2	321	C	C3'-C2'-C1'	8.30	108.14	101.50
36	B2	1296	U	O4'-C1'-N1	8.30	114.84	108.20
36	B2	1696	C	N1-C1'-C2'	8.30	124.79	114.00
85	A5	463	A	C1'-O4'-C4'	8.30	116.54	109.90
85	A5	3943	A	O4'-C1'-N9	8.30	114.84	108.20
36	B2	97	U	N1-C1'-C2'	8.30	124.79	114.00
85	A5	2073	C	N1-C1'-C2'	8.30	124.79	114.00
85	A5	2613	C	N1-C1'-C2'	8.30	124.79	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4430	G	C1'-O4'-C4'	-8.30	103.26	109.90
56	CX	73	HIS	N-CA-C	-8.29	88.61	111.00
87	A8	85	U	O4'-C1'-N1	8.29	114.83	108.20
85	A5	3823	G	O4'-C1'-C2'	-8.29	97.51	105.80
36	B2	1660	C	O4'-C1'-N1	8.29	114.83	108.20
74	CC	13	GLU	N-CA-C	8.29	133.39	111.00
85	A5	417	G	O4'-C1'-N9	8.29	114.83	108.20
85	A5	2273	G	C1'-O4'-C4'	-8.29	103.27	109.90
85	A5	2831	G	C3'-C2'-C1'	-8.29	94.87	101.50
86	A7	26	C	C1'-O4'-C4'	-8.29	103.27	109.90
85	A5	77	U	O4'-C1'-N1	8.29	114.83	108.20
85	A5	1376	C	N1-C1'-C2'	8.29	124.78	114.00
36	B2	367	U	O4'-C1'-N1	8.29	114.83	108.20
85	A5	1276	C	N1-C1'-C2'	8.29	124.77	114.00
36	B2	1623	A	C3'-C2'-C1'	-8.29	94.87	101.50
85	A5	266	C	O4'-C1'-N1	8.28	114.83	108.20
85	A5	967	C	C3'-C2'-C1'	8.28	108.13	101.50
36	B2	1531	A	O4'-C1'-N9	8.28	114.83	108.20
85	A5	1376	C	O4'-C1'-N1	8.28	114.83	108.20
81	CE	27	VAL	O-C-N	-8.28	109.45	122.70
85	A5	1313	C	C1'-O4'-C4'	8.28	116.53	109.90
85	A5	1851	G	C1'-O4'-C4'	-8.28	103.28	109.90
36	B2	1230	C	C1'-O4'-C4'	-8.28	103.28	109.90
37	BC	17	G	C5'-C4'-C3'	8.28	129.24	116.00
85	A5	4987	C	O4'-C1'-N1	8.28	114.82	108.20
85	A5	1849	U	O4'-C1'-N1	8.27	114.82	108.20
85	A5	4884	G	C3'-C2'-C1'	8.27	108.12	101.50
85	A5	1755	C	O3'-P-O5'	8.27	119.71	104.00
85	A5	4483	C	O4'-C1'-N1	8.27	114.81	108.20
36	B2	891	G	C1'-O4'-C4'	-8.26	103.29	109.90
36	B2	1048	G	C1'-O4'-C4'	-8.26	103.29	109.90
36	B2	909	G	P-O3'-C3'	-8.26	109.79	119.70
58	CW	71	ARG	CB-CA-C	-8.26	93.88	110.40
85	A5	3692	A	O4'-C1'-C2'	-8.26	97.54	105.80
85	A5	1722	C	P-O3'-C3'	8.26	129.61	119.70
85	A5	2482	C	O4'-C1'-N1	8.26	114.81	108.20
48	CD	259	LYS	O-C-N	-8.26	109.49	122.70
85	A5	1507	C	O4'-C1'-N1	8.26	114.81	108.20
3	AU	57	PRO	CA-N-CD	-8.25	99.94	111.50
8	AS	6	PRO	N-CA-C	8.25	133.56	112.10
16	AA	133	PRO	CA-N-CD	-8.25	99.94	111.50
11	AL	147	LYS	N-CA-C	8.25	133.28	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	CE	127	SER	CA-CB-OG	8.25	133.48	111.20
85	A5	119	G	O4'-C1'-C2'	-8.25	97.55	105.80
36	B2	395	G	C3'-C2'-C1'	-8.25	94.90	101.50
36	B2	1842	C	O4'-C1'-N1	8.25	114.80	108.20
85	A5	965	G	P-O3'-C3'	8.25	129.60	119.70
85	A5	3915	U	O4'-C1'-C2'	-8.25	97.55	105.80
36	B2	1018	U	C1'-O4'-C4'	-8.25	103.30	109.90
36	B2	572	U	O4'-C1'-N1	8.24	114.80	108.20
36	B2	80	G	P-O5'-C5'	8.24	134.09	120.90
85	A5	70	A	N9-C1'-C2'	-8.24	102.93	112.00
85	A5	2827	G	O4'-C1'-N9	8.24	114.80	108.20
85	A5	3944	G	O4'-C1'-N9	8.24	114.80	108.20
85	A5	4994	G	N9-C1'-C2'	8.24	124.72	114.00
36	B2	615	C	N1-C1'-C2'	8.24	124.71	114.00
36	B2	649	U	C1'-O4'-C4'	-8.24	103.31	109.90
37	BC	35	U	O4'-C1'-N1	8.24	114.79	108.20
85	A5	2824	C	C3'-C2'-C1'	8.24	108.09	101.50
85	A5	4624	A	C3'-C2'-C1'	8.24	108.09	101.50
85	A5	1728	U	O4'-C1'-N1	8.24	114.79	108.20
85	A5	1794	A	O4'-C1'-C2'	-8.24	97.56	105.80
36	B2	1237	C	C3'-C2'-C1'	8.24	108.09	101.50
85	A5	1810	G	N9-C1'-C2'	8.24	124.71	114.00
36	B2	522	A	O4'-C1'-N9	8.23	114.79	108.20
85	A5	1100	U	P-O3'-C3'	8.23	129.58	119.70
85	A5	1164	G	O4'-C1'-N9	8.23	114.79	108.20
36	B2	912	C	C3'-C2'-C1'	8.23	108.09	101.50
36	B2	1518	C	O4'-C1'-N1	8.23	114.79	108.20
35	Ah	151	PHE	N-CA-C	8.23	133.22	111.00
36	B2	556	U	N1-C1'-C2'	8.23	124.70	114.00
85	A5	1928	C	O4'-C1'-C2'	-8.23	97.57	105.80
4	AK	55	ARG	NE-CZ-NH2	-8.23	116.19	120.30
25	Af	87	THR	N-CA-C	-8.23	88.79	111.00
74	CC	232	VAL	O-C-N	8.23	135.86	122.70
85	A5	5025	C	C4'-C3'-O3'	8.22	129.45	113.00
51	CA	67	TYR	CB-CA-C	8.22	126.84	110.40
85	A5	4105	A	C4'-C3'-O3'	8.22	129.44	113.00
33	AI	5	ARG	O-C-N	-8.22	109.55	122.70
87	A8	42	G	O4'-C1'-N9	8.22	114.78	108.20
36	B2	156	G	P-O3'-C3'	-8.21	109.84	119.70
60	Cr	90	LEU	C-N-CA	8.21	142.24	121.70
85	A5	1186	U	C1'-O4'-C4'	8.21	116.47	109.90
85	A5	1470	G	C1'-O4'-C4'	-8.22	103.33	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2083	C	O4'-C1'-N1	8.21	114.77	108.20
85	A5	1805	A	N9-C1'-C2'	-8.21	102.97	112.00
85	A5	4988	U	O4'-C1'-N1	8.21	114.77	108.20
36	B2	556	U	O4'-C1'-N1	8.21	114.77	108.20
66	Cd	110	PRO	CA-N-CD	-8.21	100.01	111.50
85	A5	1247	U	O4'-C1'-N1	8.20	114.76	108.20
36	B2	913	A	O4'-C1'-C2'	-8.20	97.60	105.80
36	B2	1155	U	C5'-C4'-O4'	8.20	118.94	109.10
85	A5	654	C	O4'-C1'-C2'	-8.20	97.60	105.80
86	A7	31	G	N9-C1'-C2'	8.20	124.66	114.00
85	A5	1755	C	P-O3'-C3'	8.20	129.54	119.70
17	AV	31	SER	N-CA-CB	-8.20	98.20	110.50
85	A5	370	U	N1-C1'-C2'	8.20	124.66	114.00
85	A5	2349	A	P-O3'-C3'	8.20	129.54	119.70
85	A5	2830	G	O4'-C1'-N9	8.20	114.76	108.20
36	B2	38	A	N9-C1'-C2'	-8.20	102.98	112.00
36	B2	82	G	O4'-C1'-C2'	-8.20	97.60	105.80
85	A5	1853	G	O4'-C1'-C2'	8.20	114.98	107.60
85	A5	1860	U	O4'-C1'-N1	8.20	114.76	108.20
85	A5	2851	G	N9-C1'-C2'	8.20	124.66	114.00
85	A5	2531	C	O4'-C1'-N1	8.19	114.75	108.20
85	A5	3851	U	O4'-C1'-N1	8.19	114.75	108.20
36	B2	1534	C	O4'-C1'-C2'	-8.19	97.61	105.80
85	A5	914	U	O4'-C1'-N1	8.19	114.75	108.20
85	A5	1768	C	C1'-O4'-C4'	8.19	116.45	109.90
85	A5	2814	C	O4'-C1'-C2'	-8.19	97.61	105.80
85	A5	4654	C	O4'-C1'-N1	8.19	114.75	108.20
81	CE	119	GLU	CB-CA-C	8.18	126.77	110.40
85	A5	1960	A	O4'-C1'-N9	8.18	114.75	108.20
85	A5	4382	G	C1'-O4'-C4'	-8.18	103.35	109.90
85	A5	4409	C	C3'-C2'-C1'	8.18	108.05	101.50
86	A7	21	G	O4'-C1'-N9	8.18	114.75	108.20
36	B2	1165	G	N9-C1'-C2'	-8.18	103.00	112.00
81	CE	110	ARG	CB-CG-CD	8.18	132.87	111.60
85	A5	2653	C	C3'-C2'-C1'	8.18	108.04	101.50
36	B2	1309	C	O4'-C1'-C2'	-8.18	97.62	105.80
85	A5	1287	G	P-O5'-C5'	8.18	133.98	120.90
3	AU	93	SER	CA-C-N	-8.18	94.21	117.10
36	B2	187	G	C1'-O4'-C4'	-8.18	103.36	109.90
46	CN	197	THR	CB-CA-C	-8.18	89.53	111.60
52	CS	175	PHE	CB-CG-CD2	-8.18	115.08	120.80
85	A5	1104	C	N1-C1'-C2'	8.18	124.63	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	5022	U	O4'-C1'-N1	8.18	114.74	108.20
86	A7	85	G	C1'-O4'-C4'	-8.18	103.36	109.90
28	AC	108	LYS	O-C-N	-8.17	109.62	122.70
85	A5	703	G	N9-C1'-C2'	-8.17	103.01	112.00
10	AN	7	PRO	CA-N-CD	-8.17	100.06	111.50
36	B2	1212	G	C1'-O4'-C4'	-8.17	103.36	109.90
85	A5	2051	C	O4'-C1'-N1	8.17	114.74	108.20
36	B2	1038	U	O4'-C1'-N1	8.17	114.73	108.20
85	A5	441	G	O4'-C1'-N9	8.17	114.73	108.20
85	A5	1486	C	N1-C1'-C2'	8.17	124.62	114.00
3	AU	103	SER	C-N-CA	-8.17	101.28	121.70
36	B2	36	U	O4'-C1'-N1	8.17	114.73	108.20
85	A5	1683	U	O4'-C1'-N1	8.17	114.73	108.20
36	B2	588	G	O3'-P-O5'	-8.16	88.49	104.00
36	B2	1665	G	O4'-C1'-C2'	8.16	114.95	107.60
36	B2	1757	G	O4'-C1'-N9	8.16	114.73	108.20
81	CE	36	LYS	N-CA-C	-8.16	88.96	111.00
81	CE	115	TYR	CB-CG-CD1	-8.16	116.10	121.00
81	CE	113	PRO	CA-N-CD	-8.16	100.07	111.50
85	A5	463	A	C3'-C2'-C1'	8.16	108.03	101.50
85	A5	2333	G	O4'-C1'-C2'	8.16	114.95	107.60
85	A5	4720	C	C3'-C2'-C1'	8.16	108.03	101.50
85	A5	1240	G	O4'-C1'-C2'	-8.16	97.64	105.80
85	A5	4517	A	C3'-C2'-C1'	8.16	108.03	101.50
85	A5	2473	A	O3'-P-O5'	8.16	119.50	104.00
36	B2	103	A	C3'-C2'-C1'	-8.16	94.97	101.50
36	B2	1182	A	O4'-C1'-N9	8.16	114.72	108.20
85	A5	2566	G	O4'-C1'-N9	8.16	114.73	108.20
85	A5	4318	C	O4'-C1'-C2'	-8.16	97.64	105.80
85	A5	4972	U	O4'-C1'-N1	8.16	114.73	108.20
18	AY	87	PRO	CA-N-CD	-8.15	100.08	111.50
36	B2	300	U	O4'-C1'-N1	8.15	114.72	108.20
36	B2	325	C	P-O3'-C3'	8.15	129.49	119.70
85	A5	759	G	N9-C1'-C2'	-8.15	103.03	112.00
85	A5	2494	U	P-O3'-C3'	8.15	129.48	119.70
85	A5	4348	A	O4'-C1'-N9	8.15	114.72	108.20
86	A7	38	U	O4'-C1'-N1	8.15	114.72	108.20
36	B2	220	U	O4'-C1'-N1	8.15	114.72	108.20
36	B2	386	C	N1-C1'-C2'	8.15	124.60	114.00
49	CQ	2	GLY	CA-C-N	-8.15	99.27	117.20
85	A5	1278	C	C3'-C2'-C1'	8.15	108.02	101.50
85	A5	1426	G	C5'-C4'-O4'	-8.15	99.32	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2587	A	O4'-C1'-N9	8.15	114.72	108.20
36	B2	1720	U	O4'-C1'-C2'	-8.15	97.65	105.80
57	CY	97	VAL	O-C-N	-8.15	109.35	123.20
13	AP	37	TYR	CB-CG-CD1	8.15	125.89	121.00
71	Cj	85	LYS	C-N-CD	-8.15	102.68	120.60
85	A5	36	U	O4'-C1'-N1	8.15	114.72	108.20
85	A5	1193	C	P-O3'-C3'	8.15	129.48	119.70
85	A5	513	U	O4'-C1'-N1	8.14	114.72	108.20
85	A5	2004	U	P-O3'-C3'	-8.14	109.93	119.70
36	B2	1783	C	O4'-C1'-C2'	-8.14	97.66	105.80
85	A5	2018	C	C3'-C2'-C1'	8.14	108.01	101.50
85	A5	2061	U	O4'-C1'-N1	8.14	114.71	108.20
85	A5	4194	U	O4'-C1'-N1	8.14	114.71	108.20
85	A5	214	G	C3'-C2'-C1'	-8.14	94.99	101.50
36	B2	530	U	N1-C1'-C2'	-8.14	103.05	112.00
85	A5	1076	C	N1-C1'-C2'	8.14	124.58	114.00
85	A5	2875	C	C3'-C2'-C1'	8.14	108.01	101.50
85	A5	2924	A	P-O3'-C3'	8.14	129.47	119.70
85	A5	4226	G	O4'-C1'-N9	8.14	114.71	108.20
85	A5	645	G	O4'-C1'-N9	8.13	114.71	108.20
78	Co	34	TYR	CA-C-N	8.13	135.09	117.20
55	CU	59	GLY	CA-C-N	-8.13	99.32	117.20
36	B2	145	G	N9-C1'-C2'	8.12	124.56	114.00
36	B2	1380	C	C3'-C2'-C1'	8.13	108.00	101.50
85	A5	682	G	O4'-C1'-N9	8.13	114.70	108.20
36	B2	640	A	C1'-O4'-C4'	-8.12	103.40	109.90
85	A5	450	G	C1'-O4'-C4'	8.12	116.40	109.90
85	A5	1437	C	O4'-C1'-N1	8.12	114.70	108.20
36	B2	1326	U	C1'-O4'-C4'	-8.12	103.40	109.90
85	A5	312	G	O4'-C1'-N9	8.12	114.70	108.20
85	A5	341	G	O4'-C1'-N9	8.12	114.70	108.20
11	AL	153	LYS	C-N-CA	8.12	142.00	121.70
85	A5	1344	C	O4'-C1'-N1	8.12	114.70	108.20
85	A5	1537	A	C3'-C2'-C1'	8.12	108.00	101.50
85	A5	4097	G	O4'-C1'-N9	8.12	114.69	108.20
36	B2	290	U	O4'-C1'-N1	8.12	114.69	108.20
36	B2	445	A	C1'-O4'-C4'	-8.12	103.41	109.90
74	CC	307	LYS	N-CA-CB	-8.11	95.99	110.60
85	A5	237	G	O4'-C1'-C2'	8.11	114.90	107.60
36	B2	1539	U	O4'-C1'-C2'	-8.11	97.69	105.80
85	A5	2399	G	O4'-C1'-C2'	8.11	114.90	107.60
36	B2	858	A	O4'-C1'-C2'	-8.11	97.69	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	105	A	O4'-C1'-C2'	8.11	114.90	107.60
85	A5	5013	C	C3'-C2'-C1'	8.11	107.98	101.50
36	B2	1311	C	C1'-O4'-C4'	-8.10	103.42	109.90
87	A8	56	G	C1'-O4'-C4'	-8.10	103.42	109.90
36	B2	505	G	O4'-C1'-N9	8.10	114.68	108.20
36	B2	1363	C	C3'-C2'-C1'	8.10	107.98	101.50
66	Cd	13	GLY	N-CA-C	8.10	133.35	113.10
85	A5	214	G	O4'-C1'-C2'	8.10	114.89	107.60
85	A5	3688	U	O4'-C1'-N1	8.10	114.68	108.20
85	A5	4579	U	O4'-C1'-N1	8.10	114.68	108.20
85	A5	4876	U	O4'-C1'-N1	8.10	114.68	108.20
36	B2	629	A	O4'-C1'-C2'	-8.10	97.70	105.80
36	B2	461	U	O4'-C1'-N1	8.10	114.68	108.20
36	B2	1348	G	N9-C1'-C2'	-8.10	103.09	112.00
85	A5	1812	C	N1-C1'-C2'	8.10	124.52	114.00
85	A5	4126	C	O4'-C1'-N1	8.10	114.68	108.20
36	B2	208	G	N9-C1'-C2'	8.09	124.52	114.00
85	A5	2329	U	C1'-O4'-C4'	-8.09	103.43	109.90
85	A5	4442	U	O4'-C1'-N1	8.09	114.67	108.20
85	A5	2387	G	C1'-O4'-C4'	-8.09	103.43	109.90
36	B2	608	C	C3'-C2'-C1'	8.09	107.97	101.50
36	B2	1792	G	C3'-C2'-C1'	-8.09	95.03	101.50
85	A5	1757	U	C5'-C4'-O4'	-8.09	99.40	109.10
81	CE	60	SER	CB-CA-C	-8.09	94.74	110.10
85	A5	3940	U	O4'-C1'-N1	8.09	114.67	108.20
85	A5	361	C	O4'-C1'-C2'	-8.08	97.72	105.80
85	A5	1033	C	P-O3'-C3'	8.08	129.40	119.70
85	A5	1593	A	O4'-C1'-N9	-8.08	101.73	108.20
85	A5	2020	U	C1'-O4'-C4'	8.08	116.37	109.90
85	A5	2726	G	O4'-C1'-N9	8.08	114.67	108.20
85	A5	1823	G	C4'-C3'-O3'	-8.08	92.43	109.40
87	A8	149	G	C3'-C2'-C1'	-8.08	95.03	101.50
59	CZ	35	ASP	N-CA-C	-8.08	89.19	111.00
85	A5	92	C	O4'-C1'-N1	8.08	114.66	108.20
36	B2	748	C	C3'-C2'-C1'	8.08	107.96	101.50
36	B2	1137	U	C2'-C3'-O3'	8.08	127.27	109.50
36	B2	855	G	O4'-C1'-N9	8.07	114.66	108.20
36	B2	1352	G	O4'-C1'-C2'	8.07	114.87	107.60
36	B2	1471	C	N1-C1'-C2'	8.07	124.50	114.00
87	A8	154	G	C3'-C2'-C1'	-8.07	95.04	101.50
85	A5	4191	G	O4'-C1'-N9	8.07	114.66	108.20
85	A5	517	C	O4'-C1'-N1	8.07	114.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4236	G	O4'-C1'-C2'	8.07	114.86	107.60
85	A5	4607	A	O4'-C1'-C2'	-8.07	97.73	105.80
85	A5	2824	C	O4'-C1'-C2'	-8.06	97.73	105.80
85	A5	2504	C	C3'-C2'-C1'	8.06	107.95	101.50
85	A5	4697	U	P-O3'-C3'	8.06	129.37	119.70
36	B2	841	G	O4'-C4'-C3'	-8.06	95.94	104.00
36	B2	1655	C	N1-C1'-C2'	8.06	124.47	114.00
36	B2	1856	C	O4'-C1'-N1	8.06	114.65	108.20
85	A5	3892	U	O4'-C1'-N1	8.06	114.65	108.20
85	A5	192	G	O4'-C1'-N9	8.06	114.65	108.20
87	A8	109	C	C4'-C3'-O3'	-8.06	92.48	109.40
36	B2	501	C	P-O3'-C3'	8.05	129.37	119.70
40	CK	24	ALA	CA-C-N	8.05	134.92	117.20
85	A5	38	A	O4'-C1'-N9	8.05	114.64	108.20
37	BC	17	G	O4'-C4'-C3'	8.05	112.54	106.10
3	AU	93	SER	O-C-N	8.05	136.39	121.10
4	AK	84	HIS	CB-CA-C	-8.05	94.30	110.40
36	B2	1665	G	C1'-O4'-C4'	-8.05	103.46	109.90
85	A5	2017	A	O3'-P-O5'	8.05	119.29	104.00
85	A5	2422	C	N1-C1'-C2'	8.05	124.46	114.00
85	A5	1631	A	C1'-O4'-C4'	8.05	116.34	109.90
69	Cg	46	CYS	C-N-CA	-8.04	105.41	122.30
85	A5	2366	A	C3'-C2'-C1'	8.04	107.94	101.50
36	B2	1014	G	C3'-C2'-C1'	-8.04	95.07	101.50
36	B2	1195	A	O4'-C4'-C3'	-8.04	95.96	104.00
85	A5	471	A	C3'-C2'-C1'	8.04	107.93	101.50
57	CY	93	THR	N-CA-CB	-8.04	95.03	110.30
85	A5	2255	C	N1-C1'-C2'	8.04	124.45	114.00
85	A5	4345	C	N1-C1'-C2'	8.04	124.45	114.00
34	AQ	31	LEU	N-CA-C	8.04	132.70	111.00
85	A5	2080	U	O4'-C1'-N1	8.04	114.63	108.20
85	A5	3943	A	C1'-O4'-C4'	8.04	116.33	109.90
36	B2	931	C	C5'-C4'-C3'	-8.04	103.14	116.00
85	A5	2101	C	C3'-C2'-C1'	8.04	107.93	101.50
85	A5	4301	U	O4'-C1'-N1	8.04	114.63	108.20
85	A5	4778	C	P-O3'-C3'	8.03	129.34	119.70
36	B2	343	A	O4'-C1'-N9	8.03	114.62	108.20
85	A5	4335	C	N1-C1'-C2'	8.03	124.44	114.00
36	B2	1099	G	O4'-C1'-N9	8.03	114.62	108.20
85	A5	951	G	N9-C1'-C2'	8.03	124.44	114.00
60	Cr	37	SER	N-CA-C	8.03	132.67	111.00
83	Ct	44	PRO	CA-N-CD	-8.03	100.26	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	CY	5	PRO	CA-N-CD	-8.03	100.27	111.50
85	A5	690	C	C3'-C2'-C1'	8.03	107.92	101.50
85	A5	3726	A	O4'-C1'-N9	8.03	114.62	108.20
36	B2	361	U	O4'-C1'-N1	8.02	114.62	108.20
36	B2	77	A	N9-C1'-C2'	-8.02	103.18	112.00
36	B2	1050	A	O4'-C1'-N9	8.02	114.62	108.20
85	A5	713	C	O4'-C1'-N1	8.02	114.62	108.20
85	A5	4457	U	N1-C1'-C2'	8.02	124.43	114.00
85	A5	5067	U	O4'-C1'-N1	8.02	114.62	108.20
61	Ch	78	TYR	CB-CA-C	8.02	126.43	110.40
85	A5	1374	G	O4'-C1'-N9	8.02	114.61	108.20
85	A5	4372	U	O4'-C1'-N1	8.02	114.61	108.20
85	A5	295	A	P-O5'-C5'	-8.01	108.08	120.90
85	A5	2125	C	O4'-C1'-N1	8.01	114.61	108.20
85	A5	2763	U	C1'-O4'-C4'	-8.01	103.49	109.90
85	A5	1399	G	N9-C1'-C2'	-8.01	103.19	112.00
36	B2	1233	G	O4'-C1'-C2'	8.01	114.81	107.60
85	A5	707	C	O4'-C1'-N1	8.01	114.61	108.20
36	B2	1293	A	N9-C1'-C2'	8.01	124.41	114.00
85	A5	1260	G	O4'-C1'-N9	8.01	114.61	108.20
36	B2	894	G	O4'-C1'-N9	8.00	114.60	108.20
37	BC	11	C	N1-C1'-C2'	8.00	124.40	114.00
85	A5	678	C	N1-C1'-C2'	8.00	124.40	114.00
85	A5	902	C	C3'-C2'-C1'	8.00	107.90	101.50
1	Az	278	THR	CA-C-N	8.00	134.79	117.20
85	A5	1876	U	O4'-C1'-N1	8.00	114.60	108.20
85	A5	4286	C	O4'-C1'-N1	8.00	114.60	108.20
36	B2	1719	A	C1'-O4'-C4'	8.00	116.30	109.90
36	B2	162	C	P-O3'-C3'	7.99	129.29	119.70
36	B2	312	G	O4'-C1'-N9	7.99	114.60	108.20
36	B2	1316	C	N1-C1'-C2'	7.99	124.39	114.00
85	A5	1609	U	O4'-C1'-N1	7.99	114.59	108.20
85	A5	4064	C	C1'-O4'-C4'	-7.99	103.50	109.90
85	A5	1100	U	O4'-C1'-N1	7.99	114.59	108.20
36	B2	580	U	C4'-C3'-O3'	7.99	128.98	113.00
36	B2	1064	C	O4'-C1'-C2'	-7.99	97.81	105.80
36	B2	1637	A	O4'-C1'-N9	7.99	114.59	108.20
85	A5	249	C	O4'-C1'-N1	7.99	114.59	108.20
85	A5	2719	C	O4'-C1'-N1	7.99	114.59	108.20
85	A5	4870	G	N9-C1'-C2'	7.99	124.38	114.00
85	A5	724	C	C1'-O4'-C4'	7.98	116.29	109.90
85	A5	1769	G	C1'-O4'-C4'	-7.98	103.51	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4625	C	P-O3'-C3'	7.98	129.28	119.70
36	B2	530	U	P-O5'-C5'	-7.98	108.13	120.90
75	Cm	127	VAL	CB-CA-C	-7.98	96.23	111.40
85	A5	2536	A	O4'-C1'-N9	7.98	114.59	108.20
36	B2	500	A	P-O3'-C3'	7.98	129.28	119.70
66	Cd	61	ASP	C-N-CA	-7.98	101.75	121.70
85	A5	4626	A	N9-C1'-C2'	7.98	124.37	114.00
63	CB	293	ILE	CA-CB-CG2	7.98	126.86	110.90
85	A5	227	A	O4'-C1'-N9	7.98	114.58	108.20
52	CS	174	THR	CA-C-N	7.97	134.75	117.20
85	A5	4052	C	O4'-C1'-C2'	-7.97	97.83	105.80
85	A5	4462	C	C4'-C3'-O3'	-7.97	92.65	109.40
36	B2	1660	C	P-O3'-C3'	-7.97	110.13	119.70
64	CF	21	LYS	CG-CD-CE	7.97	135.81	111.90
85	A5	2723	U	O4'-C1'-N1	7.97	114.58	108.20
85	A5	4670	C	C3'-C2'-C1'	7.97	107.88	101.50
85	A5	237	G	C3'-C2'-C1'	-7.97	95.12	101.50
85	A5	4885	U	P-O5'-C5'	7.97	133.65	120.90
33	AI	184	ARG	CB-CA-C	-7.97	94.46	110.40
85	A5	692	A	C1'-O4'-C4'	7.97	116.28	109.90
85	A5	2524	U	O4'-C1'-N1	7.97	114.58	108.20
36	B2	1219	C	C3'-C2'-C1'	7.97	107.87	101.50
19	AZ	70	PRO	CA-N-CD	-7.97	100.35	111.50
36	B2	739	C	O4'-C1'-C2'	-7.97	97.83	105.80
36	B2	1714	U	O4'-C1'-N1	7.97	114.57	108.20
85	A5	2054	U	O4'-C1'-C2'	-7.97	97.83	105.80
87	A8	152	U	N1-C1'-C2'	7.97	124.36	114.00
36	B2	535	G	P-O3'-C3'	7.96	129.26	119.70
36	B2	1034	A	O4'-C1'-N9	7.96	114.57	108.20
36	B2	1072	U	O4'-C1'-C2'	-7.96	97.83	105.80
85	A5	2706	G	C3'-C2'-C1'	-7.96	95.13	101.50
85	A5	4530	U	O4'-C1'-N1	7.96	114.57	108.20
85	A5	4932	U	P-O3'-C3'	7.96	129.26	119.70
85	A5	5033	G	N9-C1'-C2'	7.96	124.35	114.00
85	A5	2037	C	O4'-C1'-N1	7.96	114.57	108.20
85	A5	3692	A	C1'-O4'-C4'	7.96	116.27	109.90
85	A5	4507	A	O4'-C1'-N9	7.96	114.57	108.20
36	B2	210	U	O3'-P-O5'	-7.96	88.88	104.00
85	A5	1314	C	O4'-C1'-C2'	-7.96	97.84	105.80
85	A5	2875	C	O4'-C1'-C2'	-7.96	97.84	105.80
85	A5	4113	U	C1'-O4'-C4'	7.96	116.27	109.90
29	AG	131	ARG	C-N-CA	-7.96	101.81	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4107	G	O4'-C1'-N9	7.96	114.57	108.20
36	B2	1658	G	O4'-C1'-C2'	7.95	114.76	107.60
36	B2	1682	C	O4'-C1'-C2'	-7.95	97.85	105.80
85	A5	4305	G	N9-C1'-C2'	7.95	124.34	114.00
36	B2	80	G	O4'-C1'-C2'	-7.95	97.85	105.80
85	A5	3931	C	N1-C1'-C2'	7.95	124.34	114.00
36	B2	41	G	O4'-C1'-N9	-7.95	101.84	108.20
85	A5	339	C	C3'-C2'-C1'	7.95	107.86	101.50
85	A5	1183	C	O4'-C1'-C2'	-7.95	97.85	105.80
85	A5	2879	A	C1'-O4'-C4'	7.95	116.26	109.90
85	A5	3610	A	O4'-C1'-N9	7.95	114.56	108.20
1	Az	267	ASP	CA-C-N	7.95	139.36	117.10
74	CC	104	PRO	CA-N-CD	-7.95	100.37	111.50
85	A5	1653	A	O4'-C1'-N9	7.95	114.56	108.20
36	B2	1792	G	C1'-O4'-C4'	-7.95	103.54	109.90
85	A5	1339	U	N1-C1'-C2'	7.95	124.33	114.00
40	CK	39	PRO	CA-N-CD	-7.95	100.38	111.50
85	A5	152	U	O4'-C1'-N1	7.95	114.56	108.20
85	A5	1883	G	O4'-C1'-N9	7.95	114.56	108.20
85	A5	1167	C	C3'-C2'-C1'	7.94	107.86	101.50
36	B2	439	A	N9-C1'-C2'	-7.94	103.26	112.00
85	A5	496	G	O4'-C1'-N9	7.94	114.55	108.20
85	A5	902	C	O4'-C1'-N1	7.94	114.55	108.20
85	A5	2068	C	O4'-C1'-N1	7.94	114.56	108.20
85	A5	4120	U	C3'-C2'-C1'	7.94	107.85	101.50
87	A8	153	C	C5'-C4'-C3'	7.94	128.71	116.00
85	A5	4594	U	O4'-C1'-N1	7.94	114.55	108.20
85	A5	1389	U	O4'-C1'-N1	7.94	114.55	108.20
1	Az	285	LEU	C-N-CD	-7.94	103.14	120.60
87	A8	11	C	C3'-C2'-C1'	7.94	107.85	101.50
85	A5	976	G	O4'-C4'-C3'	-7.94	96.06	104.00
85	A5	1458	C	O4'-C1'-C2'	-7.94	97.86	105.80
37	BC	17	G	O3'-P-O5'	-7.93	88.92	104.00
85	A5	2250	C	O4'-C1'-C2'	-7.93	97.86	105.80
85	A5	2580	U	N1-C1'-C2'	7.93	124.31	114.00
85	A5	4660	G	C1'-O4'-C4'	-7.93	103.55	109.90
36	B2	1475	G	P-O5'-C5'	7.93	133.59	120.90
85	A5	4693	C	P-O3'-C3'	7.93	129.22	119.70
36	B2	848	U	N1-C1'-C2'	7.93	124.31	114.00
85	A5	2136	G	P-O3'-C3'	7.93	129.22	119.70
36	B2	1121	G	O4'-C1'-N9	7.93	114.54	108.20
85	A5	2794	C	O4'-C1'-C2'	-7.93	97.87	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3965	A	N9-C1'-C2'	-7.93	103.28	112.00
52	CS	146	HIS	N-CA-CB	7.93	124.87	110.60
85	A5	4884	G	O4'-C1'-N9	7.93	114.54	108.20
36	B2	1489	A	O4'-C1'-N9	7.92	114.54	108.20
85	A5	1652	U	N1-C1'-C2'	7.92	124.30	114.00
85	A5	1988	G	N9-C1'-C2'	7.92	124.30	114.00
85	A5	2339	G	O4'-C1'-N9	7.92	114.54	108.20
85	A5	4596	C	C3'-C2'-C1'	7.92	107.84	101.50
86	A7	99	G	N9-C1'-C2'	7.92	124.30	114.00
85	A5	511	C	O4'-C1'-N1	7.92	114.54	108.20
85	A5	2654	C	C3'-C2'-C1'	7.92	107.84	101.50
85	A5	342	G	C3'-C2'-C1'	-7.92	95.17	101.50
85	A5	2257	C	C5'-C4'-O4'	7.92	118.60	109.10
36	B2	1140	G	O4'-C1'-N9	7.92	114.53	108.20
85	A5	1270	A	P-O5'-C5'	7.92	133.57	120.90
87	A8	7	U	O4'-C1'-N1	7.92	114.53	108.20
36	B2	474	G	N9-C1'-C2'	7.91	124.29	114.00
85	A5	443	G	O4'-C1'-N9	7.91	114.53	108.20
36	B2	660	C	N1-C1'-C2'	7.91	124.29	114.00
85	A5	2063	G	C1'-O4'-C4'	-7.91	103.57	109.90
85	A5	1349	G	C1'-O4'-C4'	-7.91	103.57	109.90
36	B2	199	C	N1-C1'-C2'	7.91	124.28	114.00
81	CE	88	VAL	CA-CB-CG2	-7.91	99.04	110.90
85	A5	1725	U	O4'-C1'-N1	7.91	114.53	108.20
85	A5	3797	C	C3'-C2'-C1'	7.91	107.83	101.50
85	A5	736	C	P-O3'-C3'	7.91	129.19	119.70
61	Ch	37	THR	CA-C-N	-7.90	100.40	116.20
85	A5	1620	U	O4'-C1'-N1	7.90	114.52	108.20
36	B2	445	A	N9-C1'-C2'	7.90	124.27	114.00
36	B2	991	G	O4'-C1'-C2'	7.90	114.71	107.60
85	A5	2822	G	N9-C1'-C2'	-7.90	103.31	112.00
35	Ah	176	GLY	N-CA-C	7.90	132.85	113.10
36	B2	821	G	P-O3'-C3'	7.90	129.18	119.70
85	A5	137	G	N9-C1'-C2'	-7.90	103.31	112.00
85	A5	1655	C	O4'-C1'-N1	7.90	114.52	108.20
86	A7	114	U	O3'-P-O5'	-7.90	88.99	104.00
85	A5	736	C	C3'-C2'-C1'	7.90	107.82	101.50
85	A5	4247	G	O4'-C1'-N9	7.90	114.52	108.20
85	A5	1754	U	C4'-C3'-O3'	-7.89	92.82	109.40
36	B2	1520	G	O3'-P-O5'	7.89	119.00	104.00
85	A5	449	C	O3'-P-O5'	-7.89	89.00	104.00
85	A5	4617	G	O4'-C1'-N9	7.89	114.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1746	U	C4'-C3'-O3'	7.89	128.78	113.00
85	A5	2016	C	P-O3'-C3'	7.89	129.17	119.70
85	A5	2471	G	P-O5'-C5'	7.89	133.52	120.90
85	A5	2843	U	O4'-C1'-N1	7.89	114.51	108.20
36	B2	1424	G	O4'-C1'-N9	7.89	114.51	108.20
57	CY	51	LYS	N-CA-C	7.89	132.30	111.00
85	A5	1449	C	O4'-C1'-N1	7.89	114.51	108.20
85	A5	2260	C	O4'-C1'-N1	7.89	114.51	108.20
85	A5	4116	C	O4'-C1'-C2'	-7.89	97.91	105.80
36	B2	1307	U	O4'-C1'-N1	7.89	114.51	108.20
48	CD	170	GLY	C-N-CA	7.89	141.41	121.70
85	A5	1916	G	O4'-C1'-N9	7.89	114.51	108.20
85	A5	4974	C	N1-C1'-C2'	7.89	124.25	114.00
36	B2	117	C	O4'-C1'-N1	7.88	114.51	108.20
87	A8	146	U	O4'-C1'-C2'	-7.88	97.92	105.80
85	A5	374	G	C3'-C2'-C1'	-7.88	95.19	101.50
85	A5	2702	C	O4'-C1'-N1	7.88	114.51	108.20
41	CO	5	GLN	C-N-CA	-7.88	102.00	121.70
19	AZ	104	ARG	N-CA-CB	-7.88	96.42	110.60
36	B2	1620	A	C1'-O4'-C4'	-7.88	103.60	109.90
36	B2	1712	A	O4'-C1'-N9	7.88	114.50	108.20
69	Cg	83	CYS	CA-C-O	-7.88	103.56	120.10
85	A5	2259	G	P-O3'-C3'	7.88	129.15	119.70
85	A5	2763	U	N1-C1'-C2'	7.88	124.24	114.00
85	A5	3589	G	O4'-C1'-N9	7.88	114.50	108.20
85	A5	193	G	O4'-C1'-N9	7.88	114.50	108.20
85	A5	1207	C	O4'-C1'-N1	7.88	114.50	108.20
85	A5	1217	G	N9-C1'-C2'	-7.88	103.34	112.00
85	A5	1234	G	O4'-C1'-N9	7.88	114.50	108.20
36	B2	1115	U	P-O3'-C3'	7.88	129.15	119.70
48	CD	267	ASN	CA-C-N	-7.88	99.88	117.20
85	A5	1599	A	N9-C1'-C2'	7.87	124.24	114.00
85	A5	3812	C	C3'-C2'-C1'	7.87	107.80	101.50
85	A5	5050	C	C1'-O4'-C4'	-7.87	103.60	109.90
85	A5	991	C	O4'-C1'-N1	7.87	114.50	108.20
85	A5	1822	U	O4'-C1'-C2'	7.87	114.68	107.60
36	B2	352	U	C3'-C2'-C1'	7.87	107.80	101.50
36	B2	1097	G	O4'-C1'-N9	7.87	114.49	108.20
60	Cr	66	ARG	CB-CA-C	-7.87	94.66	110.40
85	A5	1418	C	O4'-C1'-N1	7.87	114.50	108.20
36	B2	909	G	C4'-C3'-O3'	7.87	128.73	113.00
61	Ch	77	LYS	O-C-N	7.87	135.29	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	33	G	O4'-C1'-N9	7.87	114.49	108.20
37	BC	6	A	O4'-C1'-N9	7.87	114.49	108.20
74	CC	356	ALA	O-C-N	7.87	135.28	122.70
85	A5	419	A	O4'-C1'-N9	7.87	114.49	108.20
85	A5	4093	G	C3'-C2'-C1'	-7.87	95.21	101.50
85	A5	4298	A	O4'-C1'-C2'	-7.87	97.94	105.80
36	B2	1301	A	C4'-C3'-O3'	7.86	128.73	113.00
68	Cf	6	TRP	CA-C-O	-7.86	103.59	120.10
66	Cd	81	PRO	CA-N-CD	-7.86	100.49	111.50
85	A5	4287	G	O4'-C1'-N9	7.86	114.49	108.20
74	CC	86	ARG	CB-CG-CD	7.86	132.03	111.60
85	A5	1768	C	C3'-C2'-C1'	7.86	107.78	101.50
85	A5	3847	C	O4'-C1'-C2'	-7.86	97.94	105.80
85	A5	4860	G	O4'-C1'-N9	7.86	114.48	108.20
85	A5	1359	G	N9-C1'-C2'	7.85	124.21	114.00
29	AG	161	PRO	CA-N-CD	-7.85	100.51	111.50
36	B2	241	G	O4'-C1'-N9	7.85	114.48	108.20
36	B2	990	A	C3'-C2'-C1'	7.85	107.78	101.50
85	A5	2505	C	P-O3'-C3'	7.85	129.12	119.70
36	B2	164	A	C1'-O4'-C4'	-7.85	103.62	109.90
85	A5	2525	U	O4'-C1'-N1	7.85	114.48	108.20
85	A5	4300	U	O4'-C1'-N1	7.85	114.48	108.20
85	A5	2353	U	O4'-C1'-N1	7.85	114.48	108.20
85	A5	4205	A	O4'-C1'-N9	7.85	114.48	108.20
36	B2	1373	C	C3'-C2'-C1'	7.84	107.78	101.50
41	CO	89	PRO	CA-N-CD	-7.84	100.52	111.50
85	A5	1660	U	O4'-C1'-N1	7.84	114.47	108.20
85	A5	1783	C	C1'-O4'-C4'	-7.84	103.62	109.90
36	B2	378	U	C1'-O4'-C4'	-7.84	103.62	109.90
36	B2	559	G	O4'-C1'-N9	7.84	114.47	108.20
85	A5	2706	G	O4'-C1'-C2'	7.84	114.66	107.60
85	A5	90	G	N9-C1'-C2'	7.84	124.19	114.00
85	A5	3596	A	C3'-C2'-C1'	7.84	107.77	101.50
85	A5	4367	G	C3'-C2'-C1'	7.84	107.77	101.50
81	CE	188	ARG	N-CA-CB	-7.84	96.49	110.60
36	B2	1544	C	C3'-C2'-C1'	7.84	107.77	101.50
85	A5	941	C	O4'-C1'-N1	7.84	114.47	108.20
1	Az	76	SER	O-C-N	7.83	135.24	122.70
36	B2	147	A	C1'-O4'-C4'	7.83	116.17	109.90
36	B2	477	G	O4'-C1'-N9	7.83	114.47	108.20
85	A5	292	G	O4'-C1'-N9	7.83	114.47	108.20
36	B2	1866	A	P-O3'-C3'	7.83	129.10	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1656	U	O4'-C1'-N1	7.83	114.47	108.20
85	A5	2693	G	N9-C1'-C2'	7.83	124.19	114.00
69	Cg	82	MET	CB-CA-C	-7.83	94.74	110.40
85	A5	3965	A	O4'-C1'-N9	-7.83	101.94	108.20
85	A5	4257	A	O4'-C1'-C2'	-7.83	97.97	105.80
4	AK	35	LEU	CA-CB-CG	-7.83	97.29	115.30
31	AH	15	LYS	C-N-CD	-7.83	103.37	120.60
36	B2	876	C	O4'-C1'-C2'	-7.83	97.97	105.80
36	B2	1529	C	N1-C1'-C2'	7.83	124.18	114.00
36	B2	1542	C	C1'-O4'-C4'	-7.83	103.64	109.90
85	A5	640	C	O4'-C1'-N1	7.83	114.46	108.20
85	A5	668	C	N1-C1'-C2'	7.83	124.18	114.00
85	A5	2384	U	O4'-C1'-N1	7.83	114.46	108.20
85	A5	2635	U	O4'-C1'-N1	7.83	114.46	108.20
85	A5	1478	C	C3'-C2'-C1'	7.83	107.76	101.50
85	A5	2253	A	C2'-C3'-O3'	-7.83	92.28	109.50
85	A5	2292	C	C3'-C2'-C1'	7.83	107.76	101.50
81	CE	190	HIS	O-C-N	-7.82	110.18	122.70
85	A5	1196	G	C1'-O4'-C4'	-7.82	103.64	109.90
87	A8	112	G	C1'-O4'-C4'	-7.82	103.64	109.90
36	B2	96	C	N1-C1'-C2'	7.82	124.17	114.00
42	CL	165	LYS	C-N-CA	7.82	141.25	121.70
85	A5	416	U	O3'-P-O5'	7.82	118.86	104.00
85	A5	514	U	P-O3'-C3'	7.82	129.09	119.70
85	A5	1810	G	C1'-O4'-C4'	-7.82	103.64	109.90
85	A5	2668	G	P-O3'-C3'	7.82	129.09	119.70
36	B2	911	C	N1-C1'-C2'	7.82	124.16	114.00
36	B2	921	G	O4'-C1'-N9	7.82	114.45	108.20
85	A5	1722	C	O4'-C1'-C2'	-7.82	97.98	105.80
85	A5	2492	C	O4'-C1'-N1	7.82	114.45	108.20
85	A5	4312	U	O4'-C1'-N1	7.82	114.45	108.20
36	B2	1683	C	N1-C1'-C2'	7.82	124.16	114.00
85	A5	1898	C	O4'-C1'-N1	7.82	114.45	108.20
85	A5	2025	A	O4'-C1'-N9	7.82	114.45	108.20
85	A5	3746	A	O4'-C1'-C2'	-7.82	97.98	105.80
85	A5	4716	C	P-O3'-C3'	7.82	129.08	119.70
81	CE	101	ASN	CB-CA-C	-7.81	94.78	110.40
85	A5	460	C	C3'-C2'-C1'	7.81	107.75	101.50
85	A5	1830	G	O4'-C1'-C2'	7.81	114.63	107.60
85	A5	2032	U	N1-C1'-C2'	7.81	124.16	114.00
85	A5	3799	A	N9-C1'-C2'	7.81	124.16	114.00
56	CX	47	ARG	NE-CZ-NH2	-7.81	116.39	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	502	C	C3'-C2'-C1'	7.81	107.75	101.50
46	CN	146	PRO	CA-N-CD	-7.81	100.57	111.50
85	A5	348	G	O4'-C1'-C2'	-7.81	97.99	105.80
85	A5	2090	U	P-O3'-C3'	7.81	129.07	119.70
85	A5	4109	G	O4'-C1'-N9	7.81	114.45	108.20
36	B2	339	A	C2'-C3'-O3'	7.81	126.68	109.50
85	A5	142	G	N9-C1'-C2'	7.81	124.15	114.00
85	A5	746	A	O4'-C1'-N9	7.81	114.45	108.20
85	A5	1769	G	N9-C1'-C2'	7.81	124.15	114.00
85	A5	2882	A	O4'-C1'-N9	7.81	114.45	108.20
85	A5	1275	G	P-O5'-C5'	7.81	133.39	120.90
85	A5	2592	U	C1'-O4'-C4'	-7.81	103.66	109.90
36	B2	622	C	N1-C1'-C2'	7.80	124.15	114.00
85	A5	1478	C	P-O5'-C5'	7.80	133.38	120.90
85	A5	4411	G	O4'-C1'-C2'	-7.80	98.00	105.80
36	B2	825	A	P-O3'-C3'	-7.80	110.34	119.70
36	B2	326	C	O4'-C1'-C2'	-7.80	98.00	105.80
36	B2	1390	U	O4'-C1'-N1	7.80	114.44	108.20
85	A5	95	G	O4'-C1'-N9	7.80	114.44	108.20
85	A5	514	U	O4'-C1'-N1	7.80	114.44	108.20
85	A5	437	G	O4'-C1'-C2'	7.80	114.62	107.60
85	A5	1577	G	C4'-C3'-O3'	-7.80	93.03	109.40
87	A8	67	U	O4'-C1'-N1	7.80	114.44	108.20
85	A5	2739	C	P-O3'-C3'	-7.79	110.35	119.70
87	A8	92	U	O4'-C1'-N1	7.79	114.44	108.20
37	BC	4	A	C3'-C2'-C1'	7.79	107.73	101.50
54	CP	5	SER	CB-CA-C	-7.79	95.29	110.10
85	A5	2391	G	O4'-C1'-N9	7.79	114.44	108.20
87	A8	88	A	C1'-O4'-C4'	-7.79	103.67	109.90
87	A8	129	C	C3'-C2'-C1'	7.79	107.73	101.50
1	Az	854	PHE	CB-CG-CD2	7.79	126.25	120.80
36	B2	439	A	O4'-C1'-N9	7.79	114.43	108.20
85	A5	2079	G	N9-C1'-C2'	7.79	124.13	114.00
36	B2	964	A	C1'-O4'-C4'	7.79	116.13	109.90
81	CE	38	LYS	CA-C-N	7.79	134.33	117.20
85	A5	1974	U	N1-C1'-C2'	7.79	124.13	114.00
85	A5	4296	U	O4'-C1'-N1	7.79	114.43	108.20
65	Cc	27	TYR	CB-CA-C	-7.79	94.83	110.40
85	A5	4893	A	C3'-C2'-C1'	7.79	107.73	101.50
36	B2	636	C	P-O5'-C5'	7.78	133.35	120.90
85	A5	226	G	C4'-C3'-O3'	-7.78	93.05	109.40
85	A5	2479	G	O4'-C1'-N9	7.78	114.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1777	G	C1'-O4'-C4'	-7.78	103.67	109.90
53	CT	144	ASN	N-CA-C	-7.78	89.99	111.00
85	A5	1378	C	P-O3'-C3'	7.78	129.04	119.70
85	A5	1772	C	O4'-C1'-N1	7.78	114.42	108.20
85	A5	2761	U	N1-C1'-C2'	7.78	124.12	114.00
85	A5	4492	U	O4'-C1'-N1	7.78	114.42	108.20
85	A5	284	G	O4'-C1'-N9	7.78	114.42	108.20
85	A5	1824	G	C2'-C3'-O3'	7.78	126.61	109.50
85	A5	1904	G	O4'-C1'-N9	7.78	114.42	108.20
36	B2	1637	A	N9-C1'-C2'	-7.78	103.45	112.00
44	CM	3	PHE	C-N-CA	7.78	141.14	121.70
85	A5	2764	A	C1'-O4'-C4'	7.78	116.12	109.90
6	AX	23	HIS	CA-C-N	7.77	134.30	117.20
52	CS	73	LEU	N-CA-C	-7.77	90.01	111.00
36	B2	908	A	O3'-P-O5'	-7.77	89.23	104.00
37	BC	11	C	C3'-C2'-C1'	7.77	107.72	101.50
87	A8	3	A	P-O3'-C3'	-7.77	110.37	119.70
36	B2	192	C	C4'-C3'-O3'	7.77	128.54	113.00
85	A5	4717	A	O4'-C1'-N9	7.77	114.42	108.20
13	AP	36	LEU	CA-C-N	-7.77	100.11	117.20
36	B2	169	U	P-O3'-C3'	7.77	129.02	119.70
36	B2	305	U	O4'-C1'-N1	7.77	114.42	108.20
58	CW	44	ARG	NE-CZ-NH1	7.77	124.18	120.30
85	A5	1203	G	O4'-C1'-N9	7.77	114.41	108.20
36	B2	3	C	O4'-C1'-C2'	-7.77	98.03	105.80
85	A5	123	C	C3'-C2'-C1'	7.77	107.71	101.50
86	A7	42	A	O4'-C1'-N9	7.77	114.41	108.20
36	B2	1785	C	O4'-C1'-C2'	-7.76	98.04	105.80
85	A5	1437	C	P-O3'-C3'	7.76	129.02	119.70
85	A5	2891	U	O4'-C1'-N1	7.76	114.41	108.20
85	A5	1242	G	O4'-C1'-N9	7.76	114.41	108.20
85	A5	2751	G	O4'-C1'-N9	7.76	114.41	108.20
36	B2	534	G	C4'-C3'-O3'	7.76	128.52	113.00
87	A8	27	U	O4'-C1'-N1	7.76	114.41	108.20
86	A7	24	C	C3'-C2'-C1'	7.76	107.71	101.50
85	A5	125	C	O4'-C1'-C2'	-7.75	98.05	105.80
85	A5	4156	G	C3'-C2'-C1'	-7.75	95.30	101.50
87	A8	152	U	O4'-C1'-N1	7.75	114.40	108.20
36	B2	531	A	O4'-C4'-C3'	-7.75	96.25	104.00
44	CM	42	CYS	CA-CB-SG	-7.75	100.05	114.00
47	CI	205	PRO	CA-C-N	-7.75	100.15	117.20
36	B2	981	A	C3'-C2'-C1'	7.75	107.70	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	490	C	O4'-C1'-N1	7.75	114.40	108.20
85	A5	2262	G	P-O3'-C3'	7.75	129.00	119.70
36	B2	551	U	N1-C1'-C2'	7.75	124.07	114.00
85	A5	971	U	C5'-C4'-C3'	7.75	128.40	116.00
18	AY	51	THR	C-N-CD	-7.75	103.56	120.60
36	B2	352	U	O4'-C1'-C2'	-7.75	98.06	105.80
36	B2	1409	A	C5'-C4'-C3'	7.74	128.39	116.00
85	A5	1680	G	N9-C1'-C2'	7.74	124.06	114.00
85	A5	4141	G	C1'-O4'-C4'	-7.74	103.70	109.90
85	A5	4559	A	C4'-C3'-O3'	-7.74	93.14	109.40
36	B2	1660	C	C5'-C4'-C3'	-7.74	103.61	116.00
39	Cq	24	TYR	N-CA-C	7.74	131.90	111.00
81	CE	92	VAL	O-C-N	7.74	135.09	122.70
85	A5	2075	G	O4'-C1'-N9	7.74	114.39	108.20
33	AI	5	ARG	C-N-CA	7.74	141.04	121.70
36	B2	605	A	O4'-C1'-N9	7.74	114.39	108.20
37	BC	33	C	O4'-C1'-N1	7.74	114.39	108.20
85	A5	4222	G	O4'-C1'-N9	7.74	114.39	108.20
36	B2	604	A	O4'-C1'-C2'	-7.73	98.07	105.80
68	Cf	100	ARG	CD-NE-CZ	-7.73	112.77	123.60
85	A5	4204	C	O4'-C1'-C2'	-7.73	98.07	105.80
87	A8	96	C	P-O5'-C5'	-7.73	108.53	120.90
61	Ch	5	LYS	O-C-N	-7.73	110.34	122.70
74	CC	335	MET	N-CA-CB	7.73	124.51	110.60
85	A5	4314	C	O4'-C1'-N1	7.73	114.38	108.20
85	A5	1401	C	P-O3'-C3'	7.73	128.97	119.70
85	A5	1259	G	C3'-C2'-C1'	-7.72	95.32	101.50
85	A5	2409	U	N1-C1'-C2'	7.72	124.04	114.00
85	A5	4556	U	C3'-C2'-C1'	7.72	107.68	101.50
85	A5	745	G	P-O3'-C3'	7.72	128.97	119.70
85	A5	2082	G	C1'-O4'-C4'	-7.72	103.72	109.90
85	A5	2760	G	O4'-C1'-C2'	-7.72	98.08	105.80
15	AB	37	ALA	C-N-CA	-7.72	102.40	121.70
36	B2	76	U	O4'-C1'-N1	7.72	114.38	108.20
85	A5	1437	C	O4'-C1'-C2'	-7.72	98.08	105.80
85	A5	1646	A	O4'-C1'-N9	7.72	114.38	108.20
85	A5	2301	G	O4'-C1'-C2'	7.72	114.55	107.60
36	B2	1671	G	N9-C1'-C2'	7.72	124.04	114.00
36	B2	1757	G	C1'-O4'-C4'	-7.72	103.72	109.90
85	A5	1186	U	O4'-C1'-C2'	-7.72	98.08	105.80
85	A5	2617	G	O4'-C1'-N9	7.72	114.38	108.20
85	A5	3834	C	N1-C1'-C2'	7.72	124.03	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	82	G	O4'-C1'-N9	7.72	114.37	108.20
36	B2	1503	C	O4'-C1'-N1	7.72	114.37	108.20
85	A5	1478	C	N1-C1'-C2'	7.72	124.03	114.00
85	A5	130	C	C3'-C2'-C1'	7.71	107.67	101.50
86	A7	96	U	O4'-C1'-N1	7.71	114.37	108.20
36	B2	460	A	O4'-C1'-N9	7.71	114.37	108.20
85	A5	2301	G	N9-C1'-C2'	7.71	124.03	114.00
36	B2	40	A	O4'-C1'-N9	7.71	114.37	108.20
36	B2	943	U	O4'-C1'-N1	7.71	114.37	108.20
24	Ae	3	HIS	C-N-CA	7.71	138.49	122.30
86	A7	29	C	O4'-C1'-N1	7.71	114.37	108.20
36	B2	1611	G	O4'-C1'-N9	7.71	114.37	108.20
85	A5	966	A	N9-C1'-C2'	7.71	124.02	114.00
12	AR	89	SER	O-C-N	-7.70	110.37	122.70
36	B2	310	C	O4'-C1'-N1	7.70	114.36	108.20
85	A5	2534	C	O4'-C1'-N1	7.70	114.36	108.20
1	Az	495	ARG	O-C-N	-7.70	110.38	122.70
36	B2	1453	C	N1-C1'-C2'	7.70	124.01	114.00
36	B2	1847	G	N9-C1'-C2'	-7.70	103.53	112.00
48	CD	259	LYS	CA-C-N	-7.70	100.26	117.20
85	A5	368	C	C1'-O4'-C4'	-7.70	103.74	109.90
85	A5	3728	A	N9-C1'-C2'	-7.70	103.53	112.00
75	Cm	106	ARG	N-CA-C	-7.70	90.22	111.00
33	AI	178	ARG	CG-CD-NE	-7.70	95.64	111.80
36	B2	1730	U	O4'-C1'-N1	7.70	114.36	108.20
63	CB	360	LEU	C-N-CA	-7.69	102.47	121.70
85	A5	121	A	N9-C1'-C2'	7.69	124.00	114.00
85	A5	1645	C	C1'-O4'-C4'	-7.69	103.75	109.90
85	A5	1784	U	O4'-C1'-N1	7.69	114.36	108.20
85	A5	4606	G	C1'-O4'-C4'	-7.69	103.75	109.90
28	AC	163	VAL	C-N-CD	-7.69	103.68	120.60
14	AT	42	HIS	CB-CA-C	-7.69	95.02	110.40
85	A5	1942	A	O4'-C1'-N9	7.69	114.35	108.20
85	A5	4447	C	O4'-C1'-N1	7.69	114.35	108.20
36	B2	1701	C	O4'-C1'-C2'	-7.69	98.11	105.80
44	CM	90	ARG	NE-CZ-NH2	-7.69	116.46	120.30
36	B2	225	G	O4'-C1'-C2'	7.68	114.52	107.60
36	B2	655	A	O4'-C1'-N9	7.68	114.35	108.20
56	CX	40	ILE	CG1-CB-CG2	-7.68	94.49	111.40
85	A5	302	C	C3'-C2'-C1'	7.68	107.64	101.50
36	B2	1138	C	O3'-P-O5'	7.68	118.59	104.00
85	A5	1204	C	O4'-C1'-N1	7.68	114.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AJ	166	GLY	C-N-CA	-7.68	106.18	122.30
85	A5	1987	C	N1-C1'-C2'	7.68	123.98	114.00
85	A5	4169	G	N9-C1'-C2'	7.68	123.98	114.00
36	B2	410	G	O4'-C1'-N9	7.67	114.34	108.20
68	Cf	100	ARG	C-N-CA	7.67	140.88	121.70
36	B2	1400	U	O4'-C1'-N1	7.67	114.34	108.20
85	A5	4252	C	O4'-C1'-N1	7.67	114.34	108.20
85	A5	4497	U	O4'-C1'-N1	7.67	114.34	108.20
44	CM	80	ALA	C-N-CA	-7.67	102.53	121.70
85	A5	1686	C	N1-C1'-C2'	7.67	123.97	114.00
85	A5	4712	C	O4'-C1'-C2'	-7.67	98.13	105.80
8	AS	6	PRO	CA-C-N	7.67	134.07	117.20
35	Ah	179	MET	O-C-N	-7.67	110.17	123.20
81	CE	31	ASN	CA-C-N	7.67	134.07	117.20
42	CL	165	LYS	O-C-N	-7.67	110.44	122.70
85	A5	1718	C	P-O3'-C3'	7.67	128.90	119.70
36	B2	1007	C	N1-C1'-C2'	7.66	123.96	114.00
63	CB	15	GLY	O-C-N	-7.66	110.44	122.70
82	CG	183	ILE	O-C-N	-7.66	110.44	122.70
85	A5	4444	C	O4'-C1'-C2'	-7.66	98.14	105.80
36	B2	171	A	N9-C1'-C2'	-7.66	103.58	112.00
85	A5	165	A	C1'-O4'-C4'	-7.66	103.77	109.90
85	A5	733	A	O4'-C1'-C2'	7.66	114.49	107.60
85	A5	1189	G	O4'-C1'-N9	7.66	114.33	108.20
85	A5	2076	G	O4'-C1'-C2'	7.66	114.49	107.60
81	CE	105	ARG	C-N-CA	7.66	140.84	121.70
85	A5	118	C	C4'-C3'-O3'	7.66	128.31	113.00
85	A5	4041	C	O4'-C1'-N1	7.65	114.32	108.20
26	AJ	93	LYS	C-N-CA	7.65	140.83	121.70
87	A8	108	A	C1'-O4'-C4'	7.65	116.02	109.90
50	CR	56	THR	C-N-CA	-7.65	102.58	121.70
85	A5	942	G	O4'-C1'-N9	7.65	114.32	108.20
85	A5	2790	U	C3'-C2'-C1'	7.65	107.62	101.50
11	AL	153	LYS	CA-C-N	7.65	134.03	117.20
85	A5	395	A	C1'-O4'-C4'	-7.65	103.78	109.90
85	A5	2248	C	O4'-C1'-N1	7.65	114.32	108.20
85	A5	2471	G	C4'-C3'-C2'	7.65	110.25	102.60
85	A5	4421	C	C3'-C2'-C1'	7.65	107.62	101.50
27	AE	259	LYS	N-CA-C	7.64	131.64	111.00
85	A5	1637	A	O4'-C1'-N9	7.64	114.31	108.20
35	Ah	169	GLY	C-N-CA	7.64	140.81	121.70
81	CE	88	VAL	CB-CA-C	-7.64	96.88	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4255	A	C1'-O4'-C4'	-7.64	103.79	109.90
85	A5	1222	A	O4'-C1'-C2'	-7.64	98.16	105.80
85	A5	3873	G	C1'-O4'-C4'	-7.64	103.79	109.90
85	A5	2709	C	C3'-C2'-C1'	7.64	107.61	101.50
36	B2	935	G	O4'-C1'-N9	7.64	114.31	108.20
36	B2	1602	U	O3'-P-O5'	-7.64	89.49	104.00
85	A5	4335	C	C3'-C2'-C1'	7.64	107.61	101.50
36	B2	230	A	C1'-O4'-C4'	7.63	116.01	109.90
36	B2	494	C	O4'-C1'-C2'	-7.63	98.17	105.80
36	B2	1777	G	O4'-C1'-C2'	7.63	114.47	107.60
36	B2	1096	G	O4'-C1'-N9	7.63	114.31	108.20
85	A5	1838	A	O4'-C1'-N9	7.63	114.31	108.20
36	B2	2	A	P-O3'-C3'	7.63	128.86	119.70
34	AQ	146	ARG	NE-CZ-NH1	-7.63	116.48	120.30
68	Cf	3	GLY	O-C-N	-7.63	110.50	122.70
85	A5	4446	U	O4'-C1'-N1	7.63	114.30	108.20
85	A5	3881	G	N9-C1'-C2'	-7.63	103.61	112.00
44	CM	19	PRO	CA-N-CD	-7.62	100.83	111.50
85	A5	2113	G	O4'-C1'-N9	7.62	114.30	108.20
81	CE	127	SER	N-CA-CB	-7.62	99.07	110.50
85	A5	1607	C	O4'-C1'-C2'	-7.62	98.18	105.80
85	A5	934	C	C1'-O4'-C4'	7.62	116.00	109.90
2	Ag	274	VAL	C-N-CA	-7.62	102.66	121.70
85	A5	488	G	N9-C1'-C2'	-7.62	103.62	112.00
85	A5	3656	A	P-O3'-C3'	7.62	128.84	119.70
86	A7	93	G	C3'-C2'-C1'	-7.62	95.41	101.50
36	B2	1117	C	C3'-C2'-C1'	-7.62	95.41	101.50
36	B2	1697	A	O4'-C1'-N9	7.62	114.29	108.20
85	A5	1296	G	P-O5'-C5'	7.62	133.09	120.90
85	A5	2046	G	O4'-C1'-N9	7.61	114.29	108.20
85	A5	5064	G	N9-C1'-C2'	7.61	123.90	114.00
36	B2	852	G	C4'-C3'-O3'	-7.61	93.42	109.40
36	B2	788	G	O4'-C1'-N9	7.61	114.29	108.20
36	B2	1865	C	C4'-C3'-O3'	7.61	128.22	113.00
40	CK	30	PRO	CB-CA-C	7.61	131.03	112.00
82	CG	243	GLY	C-N-CA	-7.61	90.04	122.00
85	A5	4652	G	C1'-O4'-C4'	-7.61	103.81	109.90
36	B2	1060	A	N9-C1'-C2'	7.61	123.89	114.00
85	A5	1972	G	P-O5'-C5'	7.61	133.07	120.90
85	A5	2627	C	C4'-C3'-O3'	-7.61	93.42	109.40
29	AG	155	GLN	O-C-N	-7.61	110.53	122.70
85	A5	2351	C	N1-C1'-C2'	7.61	123.89	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1583	A	N9-C1'-C2'	-7.60	103.64	112.00
85	A5	1825	A	C3'-C2'-C1'	7.60	107.58	101.50
36	B2	640	A	N9-C1'-C2'	7.60	123.88	114.00
36	B2	1186	U	O4'-C1'-N1	7.60	114.28	108.20
36	B2	1691	U	O4'-C1'-N1	7.60	114.28	108.20
57	CY	42	TYR	O-C-N	7.60	134.86	122.70
85	A5	219	G	P-O3'-C3'	7.60	128.82	119.70
85	A5	5018	C	C3'-C2'-C1'	7.60	107.58	101.50
87	A8	153	C	C1'-O4'-C4'	-7.60	103.82	109.90
85	A5	1578	U	C5'-C4'-C3'	-7.60	103.85	116.00
85	A5	2116	C	O4'-C1'-C2'	-7.60	98.20	105.80
85	A5	754	U	C1'-O4'-C4'	7.59	115.98	109.90
85	A5	4924	C	O4'-C1'-N1	7.59	114.28	108.20
85	A5	3831	U	O4'-C1'-N1	7.59	114.27	108.20
85	A5	412	G	O4'-C1'-N9	7.59	114.27	108.20
85	A5	449	C	N1-C1'-C2'	7.59	123.87	114.00
87	A8	152	U	C1'-O4'-C4'	-7.59	103.83	109.90
36	B2	536	A	C4'-C3'-O3'	7.59	128.18	113.00
36	B2	699	C	O4'-C1'-C2'	-7.59	98.21	105.80
81	CE	127	SER	CA-C-N	-7.59	100.50	117.20
85	A5	1975	G	O4'-C1'-N9	7.59	114.27	108.20
85	A5	3680	U	N1-C1'-C2'	7.59	123.87	114.00
39	Cq	33	ASP	C-N-CA	7.59	140.67	121.70
36	B2	456	C	C3'-C2'-C1'	7.58	107.57	101.50
49	CQ	184	ARG	NE-CZ-NH2	-7.58	116.51	120.30
37	BC	17	G	C5'-C4'-O4'	7.58	118.20	109.10
85	A5	4057	C	N1-C1'-C2'	7.58	123.86	114.00
85	A5	4376	A	P-O3'-C3'	7.58	128.80	119.70
36	B2	1267	C	N1-C1'-C2'	7.58	123.86	114.00
85	A5	950	G	O4'-C1'-N9	7.58	114.27	108.20
85	A5	2461	G	C3'-C2'-C1'	7.58	107.57	101.50
31	AH	106	ARG	NE-CZ-NH1	-7.58	116.51	120.30
36	B2	1695	A	O4'-C1'-C2'	-7.58	98.22	105.80
85	A5	2076	G	C3'-C2'-C1'	-7.58	95.44	101.50
33	AI	55	TYR	CA-CB-CG	-7.58	99.00	113.40
36	B2	1522	A	C5'-C4'-O4'	7.58	118.19	109.10
85	A5	2060	G	C1'-O4'-C4'	-7.58	103.84	109.90
85	A5	4050	A	O4'-C1'-N9	-7.58	102.14	108.20
85	A5	4672	A	C1'-O4'-C4'	-7.58	103.84	109.90
36	B2	669	A	O4'-C1'-N9	7.57	114.26	108.20
85	A5	1197	C	O4'-C1'-N1	7.57	114.26	108.20
85	A5	2851	G	C1'-O4'-C4'	-7.57	103.84	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3847	C	O4'-C1'-N1	7.57	114.26	108.20
85	A5	2484	A	O4'-C1'-N9	7.57	114.26	108.20
87	A8	126	C	P-O3'-C3'	7.57	128.79	119.70
81	CE	32	LEU	CA-CB-CG	7.57	132.71	115.30
85	A5	510	U	O4'-C1'-N1	7.57	114.26	108.20
85	A5	4133	C	O4'-C1'-N1	7.57	114.25	108.20
36	B2	869	A	O4'-C1'-N9	7.57	114.25	108.20
85	A5	910	G	C1'-O4'-C4'	-7.57	103.84	109.90
85	A5	4329	G	C1'-O4'-C4'	7.57	115.95	109.90
61	Ch	78	TYR	O-C-N	-7.57	110.60	122.70
85	A5	1171	G	O4'-C1'-N9	7.57	114.25	108.20
36	B2	1274	G	C3'-C2'-C1'	7.56	107.55	101.50
85	A5	947	C	O4'-C1'-N1	7.56	114.25	108.20
47	CI	194	GLY	N-CA-C	7.56	132.00	113.10
36	B2	1047	C	C3'-C2'-C1'	7.56	107.55	101.50
48	CD	57	ASN	CB-CA-C	7.56	125.52	110.40
85	A5	2334	C	O4'-C1'-N1	7.56	114.25	108.20
85	A5	2563	C	C3'-C2'-C1'	7.56	107.55	101.50
85	A5	2632	U	N1-C1'-C2'	7.56	123.83	114.00
52	CS	73	LEU	C-N-CA	7.56	140.59	121.70
85	A5	3680	U	O4'-C1'-N1	7.56	114.25	108.20
85	A5	3782	C	N1-C1'-C2'	7.56	123.82	114.00
87	A8	19	C	P-O3'-C3'	-7.56	110.63	119.70
36	B2	395	G	O4'-C1'-C2'	7.56	114.40	107.60
23	AD	94	ARG	CB-CA-C	-7.55	95.29	110.40
36	B2	1262	C	C1'-O4'-C4'	-7.55	103.86	109.90
82	CG	129	PRO	CA-N-CD	-7.55	100.93	111.50
85	A5	518	G	O4'-C1'-N9	7.55	114.24	108.20
85	A5	4290	U	O4'-C1'-C2'	-7.55	98.25	105.80
36	B2	1273	C	P-O3'-C3'	-7.55	110.64	119.70
36	B2	1596	U	O4'-C1'-N1	7.55	114.24	108.20
85	A5	2683	C	C3'-C2'-C1'	7.55	107.54	101.50
85	A5	91	G	P-O3'-C3'	7.55	128.76	119.70
85	A5	234	G	N9-C1'-C2'	-7.55	103.69	112.00
85	A5	1208	G	O4'-C1'-N9	7.55	114.24	108.20
1	Az	104	ASP	CB-CA-C	7.55	125.50	110.40
40	CK	130	LYS	CA-CB-CG	7.55	130.01	113.40
85	A5	4086	G	O4'-C1'-C2'	-7.55	98.25	105.80
7	AM	10	GLY	N-CA-C	7.55	131.97	113.10
37	BC	7	G	O4'-C1'-C2'	-7.55	98.25	105.80
60	Cr	37	SER	CA-C-N	7.55	133.80	117.20
85	A5	293	G	C2'-C3'-O3'	7.55	126.10	109.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
69	Cg	81	SER	O-C-N	-7.54	110.63	122.70
85	A5	921	C	O4'-C1'-N1	7.54	114.23	108.20
85	A5	1280	C	O4'-C1'-C2'	-7.54	98.26	105.80
85	A5	2129	C	O4'-C1'-N1	7.54	114.23	108.20
13	AP	52	LYS	C-N-CA	-7.54	102.85	121.70
85	A5	4493	U	O4'-C1'-C2'	-7.54	98.26	105.80
87	A8	129	C	P-O5'-C5'	7.54	132.96	120.90
36	B2	737	G	O4'-C1'-N9	7.54	114.23	108.20
40	CK	104	ILE	CA-CB-CG2	-7.54	95.82	110.90
85	A5	1578	U	C4'-C3'-O3'	-7.54	93.57	109.40
85	A5	3798	U	O4'-C1'-N1	7.54	114.23	108.20
85	A5	3897	G	O4'-C1'-C2'	7.54	114.38	107.60
36	B2	78	C	N1-C1'-C2'	-7.54	103.71	112.00
85	A5	4980	C	O3'-P-O5'	-7.54	89.68	104.00
30	AF	36	GLN	N-CA-C	-7.54	90.65	111.00
36	B2	795	A	O4'-C1'-N9	7.54	114.23	108.20
36	B2	1605	G	C1'-O4'-C4'	-7.54	103.87	109.90
85	A5	4396	A	O4'-C1'-N9	7.54	114.23	108.20
36	B2	1492	U	O4'-C1'-N1	7.53	114.23	108.20
85	A5	4134	C	C1'-O4'-C4'	-7.53	103.87	109.90
85	A5	4627	U	N1-C1'-C2'	7.53	123.79	114.00
36	B2	649	U	N1-C1'-C2'	7.53	123.79	114.00
81	CE	239	LYS	CA-CB-CG	7.53	129.97	113.40
36	B2	1635	C	O4'-C1'-N1	7.53	114.22	108.20
36	B2	1834	A	O4'-C1'-N9	7.53	114.22	108.20
41	CO	186	GLU	N-CA-CB	7.53	124.15	110.60
85	A5	2597	G	P-O3'-C3'	7.53	128.73	119.70
86	A7	106	G	C1'-O4'-C4'	-7.53	103.88	109.90
36	B2	829	C	O4'-C1'-C2'	-7.53	98.28	105.80
36	B2	1752	C	N1-C1'-C2'	7.53	123.78	114.00
85	A5	992	C	O4'-C1'-N1	7.52	114.22	108.20
85	A5	4384	U	O4'-C1'-N1	7.52	114.22	108.20
85	A5	994	G	O4'-C1'-N9	7.52	114.22	108.20
85	A5	2733	C	N1-C1'-C2'	7.52	123.78	114.00
85	A5	3653	A	O4'-C1'-N9	7.52	114.22	108.20
85	A5	4143	G	O4'-C1'-N9	7.52	114.22	108.20
85	A5	4748	U	O4'-C1'-C2'	-7.52	98.28	105.80
85	A5	513	U	P-O3'-C3'	7.52	128.72	119.70
85	A5	4539	U	C3'-C2'-C1'	7.52	107.52	101.50
87	A8	151	G	O4'-C1'-N9	7.52	114.22	108.20
85	A5	955	G	C4'-C3'-C2'	-7.52	95.08	102.60
85	A5	1371	A	N9-C1'-C2'	-7.52	103.73	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4271	A	C1'-O4'-C4'	-7.52	103.89	109.90
85	A5	4534	G	O4'-C1'-N9	7.52	114.21	108.20
85	A5	4982	A	C1'-O4'-C4'	7.52	115.91	109.90
36	B2	616	A	N9-C1'-C2'	7.52	123.77	114.00
63	CB	297	LYS	CA-C-N	7.52	133.74	117.20
81	CE	113	PRO	C-N-CA	7.51	140.49	121.70
85	A5	328	A	C1'-O4'-C4'	-7.51	103.89	109.90
85	A5	1450	C	O4'-C1'-N1	7.51	114.21	108.20
85	A5	1695	U	O4'-C1'-N1	7.51	114.21	108.20
85	A5	3880	G	C1'-O4'-C4'	-7.51	103.89	109.90
85	A5	4355	G	O4'-C1'-C2'	-7.51	98.29	105.80
87	A8	94	G	O3'-P-O5'	7.51	118.27	104.00
36	B2	35	C	C3'-C2'-C1'	7.51	107.51	101.50
36	B2	1047	C	O4'-C1'-C2'	-7.51	98.29	105.80
85	A5	694	C	P-O5'-C5'	7.51	132.91	120.90
36	B2	1452	A	C3'-C2'-C1'	7.51	107.50	101.50
36	B2	1535	U	O3'-P-O5'	-7.51	89.74	104.00
85	A5	5067	U	C5'-C4'-O4'	-7.50	100.09	109.10
87	A8	57	C	O4'-C1'-N1	7.50	114.20	108.20
36	B2	305	U	P-O5'-C5'	7.50	132.90	120.90
36	B2	799	U	P-O3'-C3'	7.50	128.71	119.70
36	B2	1417	C	C1'-O4'-C4'	7.50	115.90	109.90
36	B2	81	U	N1-C1'-C2'	7.50	123.75	114.00
36	B2	1059	G	P-O3'-C3'	7.50	128.70	119.70
85	A5	434	A	P-O3'-C3'	7.50	128.70	119.70
85	A5	698	G	O4'-C1'-N9	7.50	114.20	108.20
87	A8	153	C	N1-C1'-C2'	7.50	123.75	114.00
36	B2	532	C	O4'-C1'-N1	7.50	114.20	108.20
36	B2	446	G	C3'-C2'-C1'	7.50	107.50	101.50
86	A7	63	C	C3'-C2'-C1'	7.50	107.50	101.50
85	A5	673	C	N1-C1'-C2'	7.50	123.75	114.00
36	B2	1293	A	C3'-C2'-C1'	7.49	107.49	101.50
85	A5	4880	C	P-O3'-C3'	-7.49	110.71	119.70
85	A5	3741	C	O4'-C1'-N1	7.49	114.19	108.20
85	A5	3794	C	O4'-C1'-N1	7.49	114.19	108.20
85	A5	4549	G	O4'-C1'-N9	7.49	114.19	108.20
85	A5	1761	G	O4'-C1'-N9	7.49	114.19	108.20
85	A5	4961	G	O4'-C1'-N9	7.49	114.19	108.20
35	Ah	294	LYS	CA-C-N	7.49	133.68	117.20
74	CC	4	ALA	C-N-CA	-7.49	102.98	121.70
85	A5	1268	G	C4'-C3'-C2'	7.49	110.09	102.60
85	A5	1900	C	C1'-O4'-C4'	-7.49	103.91	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4992	G	N9-C1'-C2'	7.49	123.73	114.00
40	CK	99	LYS	CA-CB-CG	7.49	129.87	113.40
52	CS	174	THR	C-N-CA	7.49	140.42	121.70
85	A5	1278	C	O4'-C1'-C2'	-7.49	98.31	105.80
86	A7	75	G	P-O3'-C3'	7.49	128.69	119.70
85	A5	968	C	O4'-C1'-N1	7.49	114.19	108.20
85	A5	1082	C	O4'-C1'-N1	7.49	114.19	108.20
85	A5	1358	G	O4'-C1'-N9	7.49	114.19	108.20
36	B2	1508	A	C1'-O4'-C4'	7.48	115.89	109.90
85	A5	4719	G	O4'-C1'-N9	7.48	114.19	108.20
85	A5	4761	G	O4'-C1'-N9	7.48	114.19	108.20
81	CE	219	LYS	CA-CB-CG	7.48	129.86	113.40
85	A5	2790	U	N1-C1'-C2'	7.48	123.72	114.00
36	B2	1463	U	P-O5'-C5'	7.48	132.87	120.90
85	A5	472	C	C3'-C2'-C1'	7.48	107.48	101.50
85	A5	2054	U	O4'-C1'-N1	7.48	114.18	108.20
36	B2	1410	C	C3'-C2'-C1'	7.48	107.48	101.50
36	B2	1637	A	C1'-O4'-C4'	7.48	115.88	109.90
39	Cq	80	PRO	C-N-CA	-7.48	103.00	121.70
85	A5	2086	G	C3'-C2'-C1'	-7.48	95.52	101.50
85	A5	4438	U	O4'-C1'-C2'	-7.48	98.32	105.80
39	Cq	33	ASP	CA-C-O	-7.48	104.40	120.10
60	Cr	73	PRO	CA-N-CD	-7.47	101.04	111.50
85	A5	2121	C	P-O3'-C3'	-7.47	110.73	119.70
85	A5	4858	C	P-O3'-C3'	7.47	128.67	119.70
26	AJ	17	ARG	CB-CA-C	-7.47	95.46	110.40
36	B2	1509	U	C4'-C3'-O3'	-7.47	93.71	109.40
57	CY	82	ILE	CA-C-N	-7.47	100.76	117.20
85	A5	940	C	C3'-C2'-C1'	7.47	107.48	101.50
85	A5	1208	G	C1'-O4'-C4'	-7.47	103.92	109.90
36	B2	1725	U	O4'-C1'-N1	7.47	114.18	108.20
85	A5	1419	G	N9-C1'-C2'	7.47	123.71	114.00
36	B2	170	A	O4'-C1'-N9	7.47	114.17	108.20
37	BC	69	G	C1'-O4'-C4'	-7.47	103.92	109.90
85	A5	2550	G	O4'-C1'-C2'	7.47	114.32	107.60
85	A5	4387	C	N1-C1'-C2'	7.47	123.71	114.00
85	A5	2308	A	O4'-C1'-N9	7.46	114.17	108.20
85	A5	4121	G	O4'-C1'-N9	7.46	114.17	108.20
36	B2	841	G	P-O5'-C5'	7.46	132.84	120.90
85	A5	2565	A	C1'-O4'-C4'	7.46	115.87	109.90
40	CK	137	GLN	N-CA-C	7.46	131.14	111.00
81	CE	126	LEU	N-CA-C	-7.46	90.86	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1606	U	O4'-C1'-N1	7.46	114.17	108.20
85	A5	4053	A	N9-C1'-C2'	7.46	123.70	114.00
85	A5	4322	G	O4'-C1'-N9	7.46	114.17	108.20
26	AJ	161	LEU	C-N-CA	-7.46	103.05	121.70
85	A5	2102	G	C5'-C4'-C3'	7.46	127.94	116.00
85	A5	21	G	C1'-O4'-C4'	7.46	115.87	109.90
85	A5	671	G	C3'-C2'-C1'	-7.46	95.53	101.50
85	A5	1788	A	C1'-O4'-C4'	7.46	115.87	109.90
1	Az	123	ASP	CA-C-N	7.46	131.11	116.20
85	A5	1676	C	C3'-C2'-C1'	7.46	107.47	101.50
85	A5	2086	G	C1'-O4'-C4'	-7.46	103.93	109.90
36	B2	638	C	O4'-C1'-N1	7.46	114.16	108.20
36	B2	1032	C	N1-C1'-C2'	7.45	123.69	114.00
58	CW	75	ALA	N-CA-C	7.45	131.12	111.00
85	A5	1919	G	P-O3'-C3'	7.45	128.64	119.70
85	A5	2123	C	C4'-C3'-C2'	-7.45	95.15	102.60
85	A5	4145	C	C3'-C2'-C1'	7.45	107.46	101.50
36	B2	802	A	C1'-O4'-C4'	-7.45	103.94	109.90
85	A5	2394	G	O4'-C1'-C2'	-7.45	98.35	105.80
85	A5	1237	C	P-O5'-C5'	7.45	132.82	120.90
36	B2	34	U	C1'-O4'-C4'	-7.45	103.94	109.90
36	B2	27	A	O4'-C1'-N9	7.45	114.16	108.20
36	B2	989	C	O4'-C1'-C2'	-7.45	98.36	105.80
36	B2	1095	C	N1-C1'-C2'	7.45	123.68	114.00
61	Ch	121	VAL	C-N-CA	7.45	140.31	121.70
36	B2	802	A	O4'-C1'-N9	7.44	114.16	108.20
85	A5	2262	G	O4'-C1'-N9	7.44	114.16	108.20
86	A7	66	G	P-O3'-C3'	7.44	128.63	119.70
31	AH	109	ARG	CA-CB-CG	-7.44	97.03	113.40
36	B2	213	G	N9-C1'-C2'	-7.44	103.81	112.00
36	B2	604	A	C3'-C2'-C1'	7.44	107.45	101.50
36	B2	812	A	O4'-C1'-N9	7.44	114.15	108.20
36	B2	845	G	P-O3'-C3'	-7.44	110.77	119.70
36	B2	906	U	O4'-C1'-N1	7.44	114.15	108.20
36	B2	984	C	N1-C1'-C2'	7.44	123.68	114.00
36	B2	1451	G	C3'-C2'-C1'	7.44	107.45	101.50
36	B2	1782	G	C5'-C4'-C3'	7.44	127.91	116.00
85	A5	2660	A	N9-C1'-C2'	7.44	123.67	114.00
85	A5	2565	A	O4'-C1'-C2'	-7.44	98.36	105.80
85	A5	5001	U	O4'-C1'-N1	7.44	114.15	108.20
42	CL	130	LYS	C-N-CD	-7.44	104.24	120.60
85	A5	1745	G	O4'-C1'-N9	7.44	114.15	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4214	A	O4'-C1'-N9	7.44	114.15	108.20
66	Cd	105	LEU	C-N-CA	-7.44	103.11	121.70
85	A5	297	U	O4'-C1'-N1	7.44	114.15	108.20
85	A5	1073	G	O4'-C1'-N9	7.44	114.15	108.20
36	B2	168	C	C3'-C2'-C1'	7.43	107.45	101.50
81	CE	32	LEU	CB-CA-C	7.43	124.32	110.20
85	A5	4540	C	C3'-C2'-C1'	7.43	107.45	101.50
35	Ah	157	ILE	CA-C-N	-7.43	100.85	117.20
45	Ca	147	VAL	CA-C-N	7.43	133.55	117.20
85	A5	4241	C	N1-C1'-C2'	7.43	123.66	114.00
52	CS	13	VAL	CA-CB-CG2	7.43	122.05	110.90
53	CT	140	PHE	CB-CG-CD2	-7.43	115.60	120.80
36	B2	1408	U	C1'-O4'-C4'	-7.43	103.96	109.90
85	A5	2744	A	O4'-C1'-N9	7.43	114.14	108.20
36	B2	980	A	C1'-O4'-C4'	-7.43	103.96	109.90
85	A5	507	G	O4'-C1'-N9	7.43	114.14	108.20
85	A5	1678	C	O4'-C1'-C2'	-7.43	98.37	105.80
85	A5	4587	G	O4'-C1'-N9	7.43	114.14	108.20
86	A7	102	U	C1'-O4'-C4'	-7.43	103.96	109.90
8	AS	9	PHE	N-CA-C	7.42	131.04	111.00
85	A5	2608	G	O4'-C1'-N9	7.42	114.14	108.20
85	A5	2463	G	C1'-O4'-C4'	-7.42	103.96	109.90
47	CI	210	ARG	CB-CA-C	-7.42	95.56	110.40
85	A5	4463	U	C1'-C2'-O2'	-7.42	88.33	110.60
30	AF	131	ALA	C-N-CA	-7.42	106.72	122.30
85	A5	948	C	N1-C1'-C2'	7.42	123.65	114.00
85	A5	4170	A	O4'-C1'-C2'	-7.42	98.38	105.80
3	AU	104	ILE	N-CA-CB	7.42	127.86	110.80
85	A5	11	G	N9-C1'-C2'	7.42	123.64	114.00
85	A5	1406	G	O4'-C1'-N9	7.42	114.14	108.20
85	A5	1899	G	N9-C1'-C2'	7.42	123.64	114.00
85	A5	1922	G	O4'-C1'-N9	7.42	114.14	108.20
33	AI	133	GLU	O-C-N	-7.42	110.83	122.70
36	B2	557	U	O4'-C1'-C2'	-7.42	98.38	105.80
81	CE	37	PRO	C-N-CA	7.42	140.24	121.70
85	A5	1174	G	C3'-C2'-C1'	-7.42	95.57	101.50
87	A8	69	U	N1-C1'-C2'	7.42	123.64	114.00
25	Af	148	TYR	CA-CB-CG	-7.41	99.31	113.40
36	B2	1072	U	P-O3'-C3'	7.41	128.59	119.70
85	A5	1575	A	N9-C1'-C2'	7.41	123.64	114.00
85	A5	2589	C	C3'-C2'-C1'	7.41	107.43	101.50
85	A5	3623	C	C3'-C2'-C1'	7.41	107.43	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	A8	51	U	O4'-C1'-C2'	7.41	114.27	107.60
36	B2	1359	U	C1'-O4'-C4'	7.41	115.83	109.90
43	CV	46	LYS	N-CA-C	7.41	131.01	111.00
36	B2	1669	G	O4'-C1'-N9	7.41	114.13	108.20
36	B2	1672	U	O4'-C1'-N1	7.41	114.13	108.20
85	A5	228	C	N1-C1'-C2'	-7.41	103.85	112.00
85	A5	1557	C	O4'-C1'-N1	7.41	114.13	108.20
85	A5	1943	A	O4'-C1'-N9	7.41	114.13	108.20
85	A5	4213	A	N9-C1'-C2'	7.41	123.63	114.00
36	B2	539	C	O4'-C1'-N1	7.41	114.12	108.20
60	Cr	40	TYR	C-N-CA	7.41	140.22	121.70
62	Cb	65	MET	CG-SD-CE	7.41	112.05	100.20
82	CG	138	ALA	N-CA-C	7.41	130.99	111.00
85	A5	2531	C	C3'-C2'-C1'	7.41	107.42	101.50
36	B2	35	C	O4'-C1'-C2'	-7.40	98.40	105.80
39	Cq	44	ARG	NE-CZ-NH1	7.40	124.00	120.30
85	A5	335	A	C3'-C2'-C1'	7.40	107.42	101.50
85	A5	1455	G	O4'-C1'-C2'	-7.40	98.40	105.80
85	A5	4619	U	N1-C1'-C2'	7.40	123.62	114.00
36	B2	1564	C	N1-C1'-C2'	7.40	123.62	114.00
36	B2	1722	G	P-O5'-C5'	7.40	132.74	120.90
85	A5	4999	G	O4'-C1'-N9	7.40	114.12	108.20
36	B2	798	G	P-O5'-C5'	7.40	132.74	120.90
36	B2	963	A	O4'-C1'-C2'	7.40	114.26	107.60
36	B2	1824	A	P-O3'-C3'	7.40	128.58	119.70
54	CP	109	VAL	N-CA-C	7.40	130.98	111.00
85	A5	485	C	O4'-C1'-C2'	-7.40	98.40	105.80
85	A5	1251	C	O4'-C1'-N1	7.40	114.12	108.20
85	A5	4048	A	C1'-O4'-C4'	7.40	115.82	109.90
36	B2	1131	G	O4'-C1'-N9	7.40	114.12	108.20
38	Cz	210	MET	CA-CB-CG	-7.40	100.72	113.30
87	A8	26	C	N1-C1'-C2'	7.40	123.62	114.00
36	B2	188	C	O4'-C1'-C2'	-7.40	98.40	105.80
86	A7	91	C	N1-C1'-C2'	7.40	123.62	114.00
36	B2	76	U	P-O5'-C5'	7.40	132.73	120.90
6	AX	115	ILE	N-CA-C	-7.39	91.04	111.00
36	B2	221	A	O4'-C1'-N9	7.39	114.11	108.20
36	B2	666	U	O4'-C1'-C2'	-7.39	98.41	105.80
85	A5	621	G	P-O3'-C3'	7.39	128.57	119.70
85	A5	1611	C	O4'-C1'-C2'	-7.39	98.41	105.80
85	A5	4262	C	O4'-C1'-N1	7.39	114.11	108.20
12	AR	1	MET	CB-CA-C	7.39	125.18	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	189	U	O4'-C1'-N1	7.39	114.11	108.20
58	CW	23	ARG	N-CA-C	-7.39	91.05	111.00
85	A5	1550	G	O4'-C1'-N9	7.39	114.11	108.20
85	A5	4315	A	O4'-C1'-C2'	-7.39	98.41	105.80
85	A5	183	C	O4'-C1'-C2'	-7.39	98.41	105.80
85	A5	1343	A	C4'-C3'-C2'	-7.39	95.21	102.60
85	A5	2937	G	C4'-C3'-O3'	7.39	127.77	113.00
85	A5	3745	U	N1-C1'-C2'	7.39	123.60	114.00
85	A5	4201	G	C1'-O4'-C4'	-7.39	103.99	109.90
12	AR	1	MET	O-C-N	7.38	135.75	123.20
36	B2	1779	G	C3'-C2'-C1'	-7.38	95.59	101.50
55	CU	57	GLY	O-C-N	7.38	135.75	123.20
85	A5	696	C	C3'-C2'-C1'	7.38	107.41	101.50
85	A5	4996	C	N1-C1'-C2'	7.38	123.60	114.00
36	B2	1508	A	O4'-C1'-N9	7.38	114.10	108.20
54	CP	5	SER	CA-C-O	-7.38	104.61	120.10
85	A5	1792	U	O4'-C1'-N1	7.38	114.10	108.20
36	B2	1779	G	N9-C1'-C2'	-7.38	103.89	112.00
85	A5	1756	U	C4'-C3'-O3'	-7.38	93.91	109.40
85	A5	2124	G	C5'-C4'-C3'	-7.38	104.20	116.00
36	B2	1851	A	P-O3'-C3'	7.38	128.55	119.70
85	A5	1212	G	O4'-C1'-N9	7.38	114.10	108.20
85	A5	1863	U	O4'-C1'-N1	7.38	114.10	108.20
85	A5	4660	G	N9-C1'-C2'	7.38	123.59	114.00
86	A7	36	C	N1-C1'-C2'	7.38	123.59	114.00
36	B2	544	G	O4'-C1'-N9	7.37	114.10	108.20
85	A5	1647	U	N1-C1'-C2'	7.37	123.59	114.00
85	A5	4306	U	O4'-C1'-N1	7.37	114.10	108.20
85	A5	4934	A	O4'-C1'-C2'	-7.37	98.43	105.80
85	A5	2442	G	O4'-C1'-N9	7.37	114.10	108.20
36	B2	1680	G	O4'-C1'-N9	7.37	114.10	108.20
85	A5	644	G	C3'-C2'-C1'	-7.37	95.60	101.50
85	A5	136	C	O5'-C5'-C4'	7.37	125.70	111.70
85	A5	654	C	C3'-C2'-C1'	7.37	107.39	101.50
85	A5	1374	G	O4'-C1'-C2'	7.37	114.23	107.60
85	A5	2753	G	C3'-C2'-C1'	7.37	107.39	101.50
12	AR	3	ARG	NE-CZ-NH2	7.37	123.98	120.30
36	B2	524	U	O4'-C1'-N1	7.37	114.09	108.20
85	A5	315	G	C5'-C4'-O4'	7.36	117.94	109.10
85	A5	4870	G	C1'-O4'-C4'	-7.36	104.01	109.90
49	CQ	1	MET	CB-CA-C	7.36	125.12	110.40
85	A5	167	C	N1-C1'-C2'	7.36	123.57	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1676	C	P-O3'-C3'	7.36	128.53	119.70
36	B2	14	C	O4'-C1'-N1	7.36	114.09	108.20
36	B2	897	U	O3'-P-O5'	-7.36	90.02	104.00
85	A5	115	C	P-O3'-C3'	7.36	128.53	119.70
26	AJ	144	ILE	CA-CB-CG1	-7.36	97.02	111.00
36	B2	1595	U	N1-C1'-C2'	-7.36	103.91	112.00
85	A5	519	C	O4'-C1'-C2'	-7.36	98.44	105.80
85	A5	1847	C	N1-C1'-C2'	7.36	123.56	114.00
85	A5	2702	C	O4'-C1'-C2'	-7.36	98.44	105.80
36	B2	1241	A	P-O3'-C3'	7.35	128.53	119.70
27	AE	75	LYS	N-CA-C	7.35	130.85	111.00
85	A5	1265	G	C4'-C3'-C2'	-7.35	95.25	102.60
85	A5	3945	A	O4'-C1'-C2'	-7.35	98.45	105.80
87	A8	94	G	N9-C1'-C2'	-7.35	103.91	112.00
36	B2	831	G	C3'-C2'-C1'	-7.35	95.62	101.50
44	CM	46	ARG	N-CA-CB	7.35	123.83	110.60
85	A5	1912	G	N9-C1'-C2'	7.35	123.56	114.00
85	A5	4250	G	O4'-C1'-C2'	-7.35	98.45	105.80
2	Ag	50	THR	C-N-CA	-7.35	103.33	121.70
26	AJ	180	LYS	CB-CA-C	-7.35	95.71	110.40
32	AW	100	GLY	N-CA-C	-7.35	94.73	113.10
36	B2	1414	A	O4'-C1'-N9	7.35	114.08	108.20
85	A5	4102	C	O4'-C1'-N1	7.35	114.08	108.20
60	Cr	40	TYR	N-CA-CB	7.35	123.82	110.60
85	A5	1640	C	N1-C1'-C2'	-7.35	103.92	112.00
74	CC	30	ALA	C-N-CD	-7.34	104.45	120.60
36	B2	233	C	O4'-C1'-N1	7.34	114.07	108.20
36	B2	430	C	O4'-C1'-N1	7.34	114.07	108.20
85	A5	1961	G	N9-C1'-C2'	-7.34	103.93	112.00
85	A5	3625	G	C3'-C2'-C1'	7.34	107.37	101.50
21	Ab	9	HIS	C-N-CD	-7.34	104.46	120.60
36	B2	60	A	O4'-C1'-C2'	7.34	114.20	107.60
82	CG	103	ARG	C-N-CA	7.34	152.82	122.00
85	A5	4884	G	P-O5'-C5'	7.34	132.64	120.90
33	AI	3	ILE	N-CA-C	7.34	130.81	111.00
36	B2	931	C	O4'-C1'-C2'	-7.34	98.46	105.80
36	B2	1437	C	C1'-O4'-C4'	-7.34	104.03	109.90
36	B2	1511	U	C4'-C3'-C2'	-7.34	95.26	102.60
56	CX	57	GLN	C-N-CD	-7.34	104.46	120.60
85	A5	2882	A	O4'-C1'-C2'	-7.33	98.47	105.80
85	A5	2496	G	O4'-C1'-C2'	7.33	114.20	107.60
85	A5	2519	U	O4'-C1'-C2'	-7.33	98.47	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3628	G	C3'-C2'-C1'	-7.33	95.63	101.50
85	A5	3961	G	O4'-C1'-N9	-7.33	102.33	108.20
36	B2	1190	A	O4'-C1'-C2'	-7.33	98.47	105.80
60	Cr	40	TYR	CB-CG-CD1	-7.33	116.60	121.00
36	B2	1198	G	C3'-C2'-C1'	-7.33	95.64	101.50
86	A7	60	G	O4'-C1'-N9	7.33	114.06	108.20
36	B2	1455	A	O4'-C1'-C2'	-7.33	98.47	105.80
70	Ci	23	LYS	C-N-CD	-7.33	104.48	120.60
85	A5	371	A	O4'-C1'-N9	-7.33	102.34	108.20
85	A5	434	A	O4'-C1'-N9	7.33	114.06	108.20
85	A5	1604	G	C3'-C2'-C1'	-7.33	95.64	101.50
85	A5	4417	C	C3'-C2'-C1'	7.33	107.36	101.50
86	A7	49	A	C5'-C4'-C3'	7.33	127.72	116.00
85	A5	982	U	N1-C1'-C2'	-7.33	103.94	112.00
6	AX	23	HIS	C-N-CA	7.33	140.01	121.70
36	B2	584	A	P-O5'-C5'	7.33	132.62	120.90
40	CK	74	VAL	C-N-CD	-7.33	104.48	120.60
85	A5	3269	G	P-O5'-C5'	7.33	132.62	120.90
85	A5	3759	A	O4'-C1'-N9	7.33	114.06	108.20
36	B2	464	A	O3'-P-O5'	7.32	117.92	104.00
85	A5	1257	A	O4'-C1'-C2'	-7.32	98.48	105.80
85	A5	2836	A	O4'-C1'-N9	7.32	114.06	108.20
85	A5	3777	G	O4'-C1'-C2'	-7.32	98.48	105.80
36	B2	564	A	O4'-C1'-N9	7.32	114.06	108.20
36	B2	1329	U	N1-C1'-C2'	7.32	123.52	114.00
85	A5	727	C	N1-C1'-C2'	-7.32	103.95	112.00
85	A5	2706	G	O4'-C1'-N9	7.32	114.06	108.20
87	A8	20	A	P-O3'-C3'	-7.32	110.91	119.70
85	A5	2348	G	O3'-P-O5'	-7.32	90.09	104.00
85	A5	4991	U	C4'-C3'-C2'	-7.32	95.28	102.60
36	B2	1248	U	O4'-C1'-N1	7.32	114.05	108.20
37	BC	34	A	O4'-C1'-N9	7.32	114.05	108.20
85	A5	4313	A	O4'-C1'-N9	7.32	114.05	108.20
87	A8	41	A	O4'-C1'-N9	7.32	114.05	108.20
23	AD	82	GLY	O-C-N	-7.32	111.00	122.70
85	A5	127	G	O4'-C1'-N9	7.32	114.05	108.20
85	A5	1198	G	O4'-C1'-N9	7.32	114.05	108.20
36	B2	1428	G	N9-C1'-C2'	-7.31	103.95	112.00
36	B2	1208	A	N9-C1'-C2'	-7.31	103.96	112.00
36	B2	1538	C	C4'-C3'-C2'	-7.31	95.29	102.60
85	A5	2015	U	P-O3'-C3'	-7.31	110.92	119.70
74	CC	163	LYS	N-CA-CB	7.31	123.75	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1215	C	C3'-C2'-C1'	7.31	107.35	101.50
85	A5	2685	C	O4'-C1'-C2'	-7.31	98.49	105.80
85	A5	2829	U	N1-C1'-C2'	-7.31	103.96	112.00
42	CL	164	GLU	O-C-N	-7.31	111.01	122.70
36	B2	167	G	N9-C1'-C2'	-7.30	103.96	112.00
36	B2	1241	A	O4'-C1'-C2'	-7.30	98.50	105.80
85	A5	2127	C	C3'-C2'-C1'	7.30	107.34	101.50
38	Cz	208	SER	O-C-N	7.30	134.38	122.70
85	A5	2664	G	C1'-O4'-C4'	-7.30	104.06	109.90
3	AU	93	SER	C-N-CA	-7.30	91.33	122.00
37	BC	40	C	O4'-C1'-N1	7.30	114.04	108.20
85	A5	1364	U	N1-C1'-C2'	-7.30	103.97	112.00
85	A5	1840	G	O4'-C1'-C2'	7.30	114.17	107.60
56	CX	37	LYS	N-CA-C	-7.30	91.29	111.00
85	A5	191	G	O4'-C1'-N9	7.30	114.04	108.20
85	A5	2794	C	C1'-O4'-C4'	7.30	115.74	109.90
37	BC	42	G	O4'-C1'-N9	7.30	114.04	108.20
85	A5	1633	G	O4'-C1'-N9	7.29	114.04	108.20
85	A5	3900	G	O4'-C1'-N9	7.29	114.04	108.20
86	A7	39	C	C4'-C3'-O3'	-7.29	94.08	109.40
37	BC	37	A	C4'-C3'-O3'	7.29	127.59	113.00
85	A5	79	C	O4'-C1'-N1	7.29	114.03	108.20
85	A5	1446	C	O5'-C5'-C4'	7.29	125.56	111.70
85	A5	4143	G	P-O5'-C5'	7.29	132.57	120.90
36	B2	1023	A	C1'-O4'-C4'	7.29	115.73	109.90
36	B2	1653	U	P-O3'-C3'	7.29	128.45	119.70
85	A5	4741	C	O4'-C1'-C2'	-7.29	98.51	105.80
36	B2	342	C	C3'-C2'-C1'	7.29	107.33	101.50
85	A5	716	C	O4'-C1'-N1	7.29	114.03	108.20
85	A5	1802	A	C3'-C2'-C1'	7.29	107.33	101.50
85	A5	2544	G	C1'-O4'-C4'	-7.29	104.07	109.90
36	B2	877	C	O4'-C1'-C2'	-7.29	98.51	105.80
85	A5	2765	A	P-O5'-C5'	7.29	132.56	120.90
85	A5	4221	C	C3'-C2'-C1'	7.29	107.33	101.50
85	A5	4950	U	P-O5'-C5'	7.29	132.56	120.90
85	A5	327	U	C1'-O4'-C4'	7.29	115.73	109.90
36	B2	577	U	O4'-C1'-N1	7.29	114.03	108.20
85	A5	1292	C	C3'-C2'-C1'	7.29	107.33	101.50
85	A5	1598	C	N1-C1'-C2'	7.29	123.47	114.00
85	A5	2550	G	C1'-O4'-C4'	-7.29	104.07	109.90
85	A5	2604	C	O4'-C1'-N1	7.29	114.03	108.20
85	A5	4110	C	C3'-C2'-C1'	7.29	107.33	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	AR	89	SER	C-N-CA	-7.28	103.49	121.70
36	B2	1532	C	C3'-C2'-C1'	7.28	107.33	101.50
63	CB	236	HIS	CB-CA-C	-7.28	95.83	110.40
74	CC	84	THR	C-N-CA	-7.28	103.49	121.70
85	A5	354	U	C3'-C2'-C1'	7.28	107.33	101.50
85	A5	2672	C	P-O5'-C5'	-7.28	109.25	120.90
60	Cr	112	ARG	NH1-CZ-NH2	7.28	127.41	119.40
85	A5	180	C	O4'-C1'-C2'	-7.28	98.52	105.80
36	B2	946	U	O4'-C1'-N1	7.28	114.02	108.20
40	CK	130	LYS	CB-CG-CD	7.28	130.53	111.60
85	A5	3792	G	N9-C1'-C2'	7.28	123.46	114.00
36	B2	228	C	N1-C1'-C2'	7.28	123.46	114.00
36	B2	508	A	O4'-C1'-N9	7.28	114.02	108.20
36	B2	551	U	P-O5'-C5'	7.28	132.54	120.90
36	B2	1694	U	O4'-C1'-N1	7.28	114.02	108.20
85	A5	4484	A	O4'-C1'-N9	7.28	114.02	108.20
36	B2	683	G	O4'-C1'-N9	7.28	114.02	108.20
85	A5	655	C	O4'-C1'-N1	7.28	114.02	108.20
85	A5	4699	U	P-O3'-C3'	7.28	128.43	119.70
85	A5	5011	A	O4'-C1'-N9	7.28	114.02	108.20
86	A7	118	C	O4'-C1'-C2'	-7.28	98.52	105.80
18	AY	64	PHE	C-N-CA	-7.27	107.03	122.30
85	A5	450	G	N9-C1'-C2'	-7.27	104.00	112.00
85	A5	3796	U	N1-C1'-C2'	7.27	123.46	114.00
74	CC	267	TRP	CA-C-N	7.27	133.20	117.20
85	A5	4091	G	O4'-C1'-N9	7.27	114.02	108.20
36	B2	801	U	O4'-C1'-N1	7.27	114.02	108.20
48	CD	260	GLU	CB-CG-CD	7.27	133.83	114.20
85	A5	331	G	C3'-C2'-C1'	-7.27	95.68	101.50
85	A5	4773	C	O4'-C1'-N1	7.27	114.02	108.20
36	B2	857	U	C1'-O4'-C4'	-7.27	104.08	109.90
85	A5	2647	A	C4'-C3'-C2'	-7.27	95.33	102.60
45	Ca	108	TYR	C-N-CA	-7.27	103.53	121.70
58	CW	83	THR	CA-CB-CG2	7.27	122.58	112.40
85	A5	385	A	P-O3'-C3'	7.27	128.42	119.70
85	A5	2870	A	C3'-C2'-C1'	7.27	107.31	101.50
85	A5	4293	U	O4'-C1'-N1	7.27	114.02	108.20
85	A5	4717	A	C1'-O4'-C4'	7.27	115.71	109.90
36	B2	1063	C	C3'-C2'-C1'	7.27	107.31	101.50
85	A5	4665	A	C4'-C3'-O3'	-7.27	94.14	109.40
67	Ce	15	LYS	C-N-CA	-7.26	103.54	121.70
12	AR	1	MET	CA-CB-CG	7.26	125.64	113.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	23	C	N1-C1'-C2'	7.26	123.44	114.00
85	A5	402	A	O4'-C1'-C2'	-7.26	98.54	105.80
85	A5	2489	C	O4'-C1'-N1	7.26	114.01	108.20
36	B2	17	C	O4'-C1'-N1	7.26	114.01	108.20
85	A5	3910	C	O4'-C1'-N1	7.26	114.01	108.20
86	A7	8	G	O4'-C1'-N9	7.26	114.01	108.20
87	A8	34	U	C3'-C2'-C1'	7.26	107.31	101.50
70	Ci	6	PRO	N-CD-CG	-7.25	92.32	103.20
36	B2	555	A	O4'-C1'-C2'	-7.25	98.55	105.80
85	A5	202	C	O4'-C1'-N1	7.25	114.00	108.20
85	A5	4329	G	N9-C1'-C2'	-7.25	104.02	112.00
36	B2	420	G	C1'-O4'-C4'	-7.25	104.10	109.90
36	B2	735	C	O4'-C1'-N1	7.25	114.00	108.20
85	A5	714	G	O4'-C1'-C2'	7.25	114.13	107.60
85	A5	2254	G	O4'-C1'-C2'	7.25	114.13	107.60
85	A5	4280	A	O4'-C1'-C2'	7.25	114.13	107.60
36	B2	1562	C	N1-C1'-C2'	7.25	123.43	114.00
36	B2	1565	C	O4'-C1'-C2'	-7.25	98.55	105.80
85	A5	1271	G	C1'-O4'-C4'	-7.25	104.10	109.90
85	A5	2100	A	N9-C1'-C2'	7.25	123.43	114.00
85	A5	2822	G	O4'-C1'-N9	7.25	114.00	108.20
85	A5	4730	C	O4'-C1'-C2'	-7.25	98.55	105.80
36	B2	618	C	O4'-C1'-N1	7.25	114.00	108.20
36	B2	374	G	O4'-C1'-N9	7.25	114.00	108.20
85	A5	42	A	O3'-P-O5'	-7.25	90.23	104.00
85	A5	2378	G	O4'-C1'-N9	7.25	114.00	108.20
85	A5	2772	C	O4'-C1'-N1	7.25	114.00	108.20
85	A5	3637	U	O4'-C1'-N1	7.25	114.00	108.20
85	A5	4734	A	P-O3'-C3'	7.25	128.39	119.70
36	B2	58	C	N1-C1'-C2'	-7.24	104.03	112.00
25	Af	88	PRO	O-C-N	-7.24	111.11	122.70
36	B2	106	C	O4'-C1'-N1	7.24	113.99	108.20
36	B2	170	A	C5'-C4'-C3'	-7.24	104.41	116.00
85	A5	363	A	P-O3'-C3'	7.24	128.39	119.70
85	A5	2305	U	C1'-O4'-C4'	7.24	115.69	109.90
85	A5	4714	C	C3'-C2'-C1'	7.24	107.29	101.50
87	A8	56	G	O4'-C1'-C2'	7.24	114.12	107.60
36	B2	1064	C	C3'-C2'-C1'	7.24	107.29	101.50
58	CW	31	PHE	C-N-CA	-7.24	103.61	121.70
36	B2	441	C	C1'-O4'-C4'	-7.24	104.11	109.90
85	A5	1298	C	C3'-C2'-C1'	7.24	107.29	101.50
85	A5	1986	U	N1-C1'-C2'	7.24	123.41	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1120	U	N1-C1'-C2'	7.23	123.40	114.00
44	CM	44	GLN	N-CA-CB	-7.23	97.58	110.60
36	B2	747	U	O4'-C1'-C2'	-7.23	98.57	105.80
85	A5	4200	G	O4'-C1'-C2'	7.23	114.11	107.60
10	AN	19	ARG	N-CA-C	-7.23	91.48	111.00
36	B2	1772	C	C3'-C2'-C1'	7.23	107.28	101.50
85	A5	1079	C	P-O3'-C3'	7.23	128.38	119.70
85	A5	1221	G	C1'-O4'-C4'	7.23	115.69	109.90
85	A5	1301	C	C1'-O4'-C4'	7.23	115.69	109.90
85	A5	2427	G	O4'-C1'-N9	-7.23	102.42	108.20
85	A5	1533	A	O4'-C1'-C2'	-7.23	98.57	105.80
85	A5	2779	C	N1-C1'-C2'	7.23	123.40	114.00
85	A5	4269	G	O4'-C1'-N9	7.23	113.98	108.20
87	A8	71	A	O4'-C1'-N9	7.23	113.98	108.20
85	A5	1489	G	O4'-C1'-N9	7.23	113.98	108.20
85	A5	3683	C	O4'-C1'-C2'	-7.23	98.57	105.80
85	A5	4489	G	C3'-C2'-C1'	7.23	107.28	101.50
85	A5	2026	A	O4'-C1'-N9	7.22	113.98	108.20
85	A5	4982	A	C3'-C2'-C1'	7.22	107.28	101.50
4	AK	37	ASP	CB-CG-OD2	7.22	124.80	118.30
26	AJ	35	TYR	CA-C-N	-7.22	101.75	116.20
36	B2	694	G	C3'-C2'-C1'	-7.22	95.72	101.50
36	B2	1456	G	C1'-O4'-C4'	-7.22	104.12	109.90
85	A5	4362	A	O4'-C1'-N9	7.22	113.98	108.20
36	B2	513	G	O4'-C1'-N9	7.22	113.98	108.20
44	CM	4	ARG	N-CA-CB	7.22	123.60	110.60
85	A5	1485	C	N1-C1'-C2'	7.22	123.39	114.00
47	CI	103	LEU	CB-CG-CD2	7.22	123.27	111.00
85	A5	462	G	O4'-C1'-N9	7.22	113.97	108.20
85	A5	4163	U	O4'-C1'-N1	7.22	113.98	108.20
85	A5	4958	C	O4'-C1'-N1	7.22	113.97	108.20
36	B2	1179	G	O4'-C1'-N9	7.22	113.97	108.20
36	B2	1309	C	C3'-C2'-C1'	7.22	107.27	101.50
85	A5	1324	A	P-O3'-C3'	7.21	128.36	119.70
85	A5	4960	G	C1'-O4'-C4'	-7.21	104.13	109.90
86	A7	12	U	C1'-O4'-C4'	7.21	115.67	109.90
86	A7	120	U	O4'-C1'-N1	7.21	113.97	108.20
85	A5	1672	U	O4'-C1'-N1	7.21	113.97	108.20
36	B2	552	G	C3'-C2'-C1'	-7.21	95.73	101.50
85	A5	1181	C	C3'-C2'-C1'	7.21	107.27	101.50
85	A5	2114	G	N9-C1'-C2'	7.21	123.38	114.00
85	A5	1457	G	N9-C1'-C2'	7.21	123.37	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	CW	71	ARG	NE-CZ-NH2	7.21	123.91	120.30
85	A5	2444	U	C3'-C2'-C1'	7.21	107.27	101.50
85	A5	2483	G	C1'-O4'-C4'	-7.21	104.13	109.90
36	B2	319	C	O3'-P-O5'	-7.21	90.31	104.00
60	Cr	39	ARG	NE-CZ-NH2	-7.21	116.70	120.30
85	A5	949	G	O4'-C1'-C2'	7.21	114.08	107.60
85	A5	4586	G	C1'-O4'-C4'	-7.21	104.14	109.90
10	AN	14	SER	CB-CA-C	-7.20	96.41	110.10
20	Aa	97	PRO	CA-CB-CG	7.20	118.49	104.80
53	CT	29	THR	C-N-CA	-7.20	103.69	121.70
85	A5	1806	G	C1'-O4'-C4'	-7.20	104.14	109.90
85	A5	3827	G	O4'-C1'-N9	7.20	113.96	108.20
85	A5	2701	U	O4'-C1'-N1	7.20	113.96	108.20
87	A8	146	U	C3'-C2'-C1'	7.20	107.26	101.50
85	A5	1366	G	O4'-C1'-N9	7.20	113.96	108.20
36	B2	64	A	N9-C1'-C2'	-7.20	104.08	112.00
36	B2	276	G	P-O3'-C3'	7.20	128.34	119.70
85	A5	4624	A	O4'-C1'-C2'	-7.20	98.61	105.80
85	A5	653	U	O4'-C1'-N1	7.19	113.95	108.20
85	A5	1297	U	O4'-C1'-N1	7.19	113.95	108.20
85	A5	4068	U	O4'-C1'-N1	7.19	113.95	108.20
85	A5	5023	C	O4'-C1'-N1	7.19	113.95	108.20
47	CI	206	LEU	N-CA-CB	7.19	124.78	110.40
85	A5	151	G	N9-C1'-C2'	-7.19	104.09	112.00
36	B2	308	G	P-O3'-C3'	7.19	128.33	119.70
36	B2	699	C	C3'-C2'-C1'	7.19	107.25	101.50
36	B2	1858	G	O4'-C1'-N9	7.19	113.95	108.20
85	A5	2043	A	C1'-O4'-C4'	7.19	115.65	109.90
87	A8	41	A	C1'-O4'-C4'	7.19	115.65	109.90
36	B2	244	A	O4'-C1'-C2'	-7.19	98.61	105.80
82	CG	134	PRO	C-N-CA	7.19	139.67	121.70
87	A8	94	G	P-O3'-C3'	7.19	128.33	119.70
36	B2	645	C	C3'-C2'-C1'	7.19	107.25	101.50
85	A5	1574	G	O4'-C1'-N9	7.19	113.95	108.20
31	AH	110	THR	CA-C-N	7.19	133.01	117.20
36	B2	1787	G	O4'-C1'-N9	7.19	113.95	108.20
85	A5	1341	U	O4'-C1'-N1	7.19	113.95	108.20
36	B2	49	C	N1-C1'-C2'	7.18	123.34	114.00
36	B2	1049	A	C4'-C3'-C2'	-7.18	95.42	102.60
36	B2	1305	C	O4'-C1'-N1	7.18	113.95	108.20
85	A5	1216	C	C3'-C2'-C1'	7.18	107.25	101.50
85	A5	1228	U	P-O3'-C3'	7.18	128.32	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2362	U	C1'-O4'-C4'	7.18	115.65	109.90
85	A5	2610	G	O4'-C1'-N9	7.18	113.95	108.20
85	A5	4498	U	N1-C1'-C2'	-7.18	104.10	112.00
2	Ag	275	ILE	N-CA-C	7.18	130.40	111.00
85	A5	971	U	O3'-P-O5'	7.18	117.65	104.00
85	A5	1288	G	O4'-C1'-N9	-7.18	102.45	108.20
85	A5	4318	C	C3'-C2'-C1'	7.18	107.25	101.50
1	Az	269	ALA	C-N-CA	-7.18	103.75	121.70
36	B2	1165	G	O4'-C1'-N9	7.18	113.94	108.20
85	A5	990	C	O4'-C1'-C2'	-7.18	98.62	105.80
36	B2	1023	A	N9-C1'-C2'	-7.18	104.10	112.00
36	B2	1671	G	C1'-O4'-C4'	-7.18	104.16	109.90
85	A5	14	C	O4'-C1'-N1	7.18	113.94	108.20
85	A5	2101	C	P-O5'-C5'	-7.18	109.41	120.90
36	B2	442	C	C3'-C2'-C1'	7.18	107.24	101.50
36	B2	796	G	C3'-C2'-C1'	-7.18	95.76	101.50
36	B2	1188	A	C3'-C2'-C1'	7.18	107.24	101.50
40	CK	28	LEU	CB-CG-CD1	7.18	123.20	111.00
85	A5	469	C	O4'-C1'-N1	7.18	113.94	108.20
85	A5	964	A	O4'-C1'-N9	7.18	113.94	108.20
85	A5	1855	G	O4'-C1'-C2'	7.18	114.06	107.60
85	A5	3609	G	C1'-O4'-C4'	-7.18	104.16	109.90
85	A5	4887	C	N1-C1'-C2'	7.18	123.33	114.00
36	B2	1291	A	P-O3'-C3'	7.17	128.31	119.70
85	A5	667	A	O4'-C1'-N9	7.17	113.94	108.20
85	A5	1311	G	O4'-C1'-N9	7.17	113.94	108.20
85	A5	4895	C	O4'-C1'-C2'	-7.17	98.63	105.80
85	A5	3666	C	C3'-C2'-C1'	7.17	107.24	101.50
36	B2	369	C	N1-C1'-C2'	7.17	123.32	114.00
85	A5	451	C	O4'-C1'-N1	7.17	113.94	108.20
85	A5	2419	C	N1-C1'-C2'	7.17	123.32	114.00
85	A5	2782	U	O4'-C1'-C2'	-7.17	98.63	105.80
85	A5	4696	C	N1-C1'-C2'	7.17	123.32	114.00
85	A5	3891	A	C4'-C3'-O3'	7.17	127.34	113.00
23	AD	52	ALA	C-N-CA	-7.17	103.78	121.70
36	B2	32	U	O4'-C1'-N1	7.17	113.93	108.20
36	B2	1005	G	O4'-C1'-N9	7.17	113.94	108.20
36	B2	1122	A	N9-C1'-C2'	-7.17	104.11	112.00
81	CE	102	GLY	C-N-CA	-7.17	107.25	122.30
85	A5	2687	U	N1-C1'-C2'	7.17	123.32	114.00
12	AR	111	PHE	N-CA-C	7.17	130.35	111.00
36	B2	57	U	C1'-O4'-C4'	7.17	115.63	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2250	C	O4'-C1'-N1	7.17	113.93	108.20
85	A5	1275	G	P-O3'-C3'	7.17	128.30	119.70
85	A5	4628	U	O4'-C1'-N1	7.17	113.93	108.20
85	A5	1517	G	C1'-O4'-C4'	-7.16	104.17	109.90
85	A5	4992	G	O4'-C1'-N9	7.16	113.93	108.20
39	Cq	206	ILE	C-N-CA	-7.16	103.80	121.70
60	Cr	66	ARG	N-CA-C	7.16	130.33	111.00
87	A8	139	G	O4'-C1'-N9	7.16	113.93	108.20
36	B2	286	U	O4'-C1'-C2'	-7.16	98.64	105.80
36	B2	795	A	O4'-C1'-C2'	-7.16	98.64	105.80
36	B2	1673	U	O4'-C1'-N1	7.16	113.92	108.20
61	Ch	40	ALA	N-CA-C	7.16	130.32	111.00
85	A5	1482	G	P-O3'-C3'	7.16	128.29	119.70
85	A5	4566	U	O4'-C1'-N1	7.16	113.92	108.20
85	A5	4611	A	O4'-C1'-N9	7.16	113.92	108.20
36	B2	838	G	O4'-C1'-N9	7.15	113.92	108.20
85	A5	2015	U	N1-C1'-C2'	7.15	123.30	114.00
85	A5	2670	C	C1'-O4'-C4'	-7.15	104.18	109.90
87	A8	57	C	N1-C1'-C2'	7.15	123.30	114.00
85	A5	3749	C	C3'-C2'-C1'	7.15	107.22	101.50
85	A5	4544	A	P-O3'-C3'	-7.15	111.12	119.70
85	A5	3633	C	O4'-C1'-C2'	-7.15	98.65	105.80
35	Ah	142	LEU	CB-CG-CD1	7.15	123.15	111.00
36	B2	230	A	C3'-C2'-C1'	7.15	107.22	101.50
36	B2	378	U	C4'-C3'-C2'	-7.15	95.45	102.60
49	CQ	11	ARG	N-CA-CB	-7.15	97.74	110.60
85	A5	21	G	O4'-C1'-C2'	-7.15	98.65	105.80
85	A5	251	C	C3'-C2'-C1'	7.15	107.22	101.50
85	A5	4088	C	C3'-C2'-C1'	7.15	107.22	101.50
36	B2	1279	C	O4'-C1'-C2'	-7.15	98.65	105.80
36	B2	1677	U	N1-C1'-C2'	-7.15	104.14	112.00
15	AB	147	ASN	C-N-CA	-7.14	103.84	121.70
81	CE	276	ALA	O-C-N	-7.14	111.27	122.70
85	A5	4035	G	O4'-C1'-N9	7.14	113.92	108.20
36	B2	949	G	O4'-C1'-N9	7.14	113.91	108.20
36	B2	1522	A	P-O3'-C3'	-7.14	111.13	119.70
36	B2	1661	A	C1'-O4'-C4'	-7.14	104.19	109.90
85	A5	2471	G	O4'-C1'-N9	7.14	113.91	108.20
36	B2	1001	A	O4'-C1'-C2'	-7.14	98.66	105.80
85	A5	1588	U	O4'-C1'-N1	7.14	113.91	108.20
85	A5	1929	A	O4'-C1'-N9	-7.14	102.49	108.20
85	A5	2781	G	O4'-C1'-N9	7.14	113.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2802	C	O4'-C1'-C2'	-7.14	98.66	105.80
57	CY	42	TYR	CA-C-N	-7.14	101.50	117.20
67	Ce	21	ILE	CB-CA-C	-7.14	97.32	111.60
87	A8	90	C	O4'-C1'-C2'	-7.14	98.66	105.80
36	B2	834	C	P-O3'-C3'	7.14	128.26	119.70
85	A5	1493	G	C3'-C2'-C1'	-7.14	95.79	101.50
85	A5	2425	U	C1'-O4'-C4'	7.14	115.61	109.90
85	A5	2748	C	O4'-C1'-N1	7.14	113.91	108.20
85	A5	4039	G	C1'-O4'-C4'	-7.14	104.19	109.90
85	A5	3758	U	O4'-C1'-N1	7.13	113.91	108.20
85	A5	4759	C	O4'-C1'-C2'	-7.13	98.67	105.80
36	B2	162	C	C4'-C3'-O3'	7.13	127.27	113.00
36	B2	744	G	C3'-C2'-C1'	7.13	107.21	101.50
85	A5	3716	C	O4'-C1'-N1	7.13	113.91	108.20
31	AH	191	GLU	O-C-N	-7.13	111.29	122.70
36	B2	1019	C	N1-C1'-C2'	7.13	123.27	114.00
8	AS	93	GLY	CA-C-N	-7.13	101.51	117.20
65	Cc	88	TYR	CB-CG-CD2	-7.13	116.72	121.00
85	A5	199	G	O4'-C1'-N9	-7.13	102.50	108.20
85	A5	3928	A	C3'-C2'-C1'	7.13	107.20	101.50
36	B2	528	A	N9-C1'-C2'	7.13	123.27	114.00
74	CC	323	ARG	C-N-CA	-7.13	103.88	121.70
77	Cp	56	HIS	CB-CA-C	-7.13	96.14	110.40
85	A5	2094	G	P-O3'-C3'	-7.13	111.14	119.70
85	A5	3601	C	O4'-C1'-N1	7.13	113.90	108.20
5	AO	145	GLY	N-CA-C	7.13	130.91	113.10
50	CR	79	GLY	C-N-CA	-7.13	103.88	121.70
85	A5	1099	C	O4'-C1'-N1	7.13	113.90	108.20
87	A8	12	G	N9-C1'-C2'	7.12	123.26	114.00
3	AU	118	ASP	CB-CG-OD1	7.12	124.71	118.30
15	AB	77	ASP	CB-CG-OD1	7.12	124.71	118.30
36	B2	898	U	P-O5'-C5'	7.12	132.30	120.90
36	B2	1668	U	O5'-P-OP2	-7.12	99.29	105.70
85	A5	2025	A	O4'-C1'-C2'	-7.12	98.68	105.80
36	B2	1001	A	C1'-O4'-C4'	7.12	115.60	109.90
36	B2	1463	U	O4'-C1'-N1	7.12	113.90	108.20
38	Cz	26	ARG	C-N-CA	-7.12	103.90	121.70
85	A5	2114	G	O4'-C1'-C2'	7.12	114.01	107.60
13	AP	49	LEU	CA-C-N	7.12	132.86	117.20
36	B2	284	C	C3'-C2'-C1'	7.12	107.20	101.50
36	B2	694	G	C1'-O4'-C4'	-7.12	104.20	109.90
81	CE	58	SER	CA-C-N	7.12	132.87	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1929	A	C1'-O4'-C4'	-7.12	104.20	109.90
36	B2	315	C	O4'-C1'-N1	7.12	113.90	108.20
36	B2	1045	U	O4'-C1'-N1	7.12	113.89	108.20
39	Cq	55	MET	C-N-CA	7.12	137.25	122.30
85	A5	1443	A	C3'-C2'-C1'	7.12	107.19	101.50
85	A5	1825	A	C1'-O4'-C4'	7.12	115.59	109.90
85	A5	2263	A	O4'-C1'-C2'	-7.12	98.68	105.80
85	A5	2427	G	C3'-C2'-C1'	7.12	107.19	101.50
85	A5	2538	U	O4'-C1'-N1	7.12	113.89	108.20
85	A5	4907	G	O4'-C1'-N9	7.12	113.89	108.20
14	AT	82	ARG	NE-CZ-NH2	7.12	123.86	120.30
36	B2	53	C	C3'-C2'-C1'	7.11	107.19	101.50
36	B2	299	A	O4'-C1'-N9	7.11	113.89	108.20
85	A5	2280	G	N9-C1'-C2'	7.11	123.25	114.00
36	B2	288	G	N9-C1'-C2'	-7.11	104.18	112.00
40	CK	114	ARG	CG-CD-NE	7.11	126.73	111.80
69	Cg	46	CYS	CA-C-N	-7.11	101.97	116.20
81	CE	29	LYS	C-N-CA	7.11	137.24	122.30
85	A5	4578	G	O4'-C1'-N9	7.11	113.89	108.20
36	B2	1547	C	C3'-C2'-C1'	7.11	107.19	101.50
69	Cg	82	MET	CA-CB-CG	7.11	125.39	113.30
85	A5	1978	C	O4'-C1'-N1	7.11	113.89	108.20
36	B2	100	U	O4'-C1'-N1	7.11	113.89	108.20
4	AK	35	LEU	N-CA-C	-7.11	91.81	111.00
14	AT	4	VAL	N-CA-CB	-7.11	95.87	111.50
36	B2	1833	C	C3'-C2'-C1'	7.11	107.19	101.50
64	CF	46	ARG	NE-CZ-NH2	7.11	123.85	120.30
85	A5	203	U	N1-C1'-C2'	7.11	123.24	114.00
85	A5	1481	C	N1-C1'-C2'	-7.11	104.18	112.00
85	A5	4178	A	O4'-C1'-N9	7.11	113.89	108.20
86	A7	115	A	C2'-C3'-O3'	7.11	125.13	109.50
53	CT	3	ASN	CB-CA-C	-7.10	96.19	110.40
67	Ce	128	ARG	C-N-CA	-7.10	103.94	121.70
85	A5	1451	G	N9-C1'-C2'	7.10	123.23	114.00
85	A5	2367	A	O4'-C1'-C2'	-7.10	98.70	105.80
36	B2	166	A	O4'-C1'-N9	7.10	113.88	108.20
36	B2	205	G	O4'-C1'-N9	7.10	113.88	108.20
85	A5	975	C	P-O5'-C5'	-7.10	109.54	120.90
36	B2	1639	G	C3'-C2'-C1'	7.10	107.18	101.50
36	B2	1864	U	P-O5'-C5'	7.10	132.26	120.90
36	B2	974	C	N1-C1'-C2'	7.10	123.22	114.00
85	A5	1280	C	C3'-C2'-C1'	7.09	107.18	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	91	A	O4'-C1'-N9	7.09	113.88	108.20
85	A5	1721	G	N9-C1'-C2'	7.09	123.22	114.00
85	A5	1360	G	P-O5'-C5'	7.09	132.25	120.90
85	A5	4176	C	N1-C1'-C2'	7.09	123.22	114.00
85	A5	4707	A	O4'-C1'-N9	7.09	113.87	108.20
36	B2	614	C	N1-C1'-C2'	7.09	123.22	114.00
85	A5	1059	C	C5'-C4'-C3'	-7.09	104.66	116.00
85	A5	2252	G	C4'-C3'-O3'	7.09	127.18	113.00
36	B2	1367	U	O4'-C1'-N1	7.09	113.87	108.20
85	A5	715	G	O4'-C1'-C2'	7.09	113.98	107.60
36	B2	295	C	N1-C1'-C2'	7.08	123.21	114.00
85	A5	3894	A	C3'-C2'-C1'	7.08	107.17	101.50
85	A5	674	G	O4'-C1'-C2'	7.08	113.97	107.60
85	A5	2732	G	C1'-O4'-C4'	-7.08	104.23	109.90
85	A5	4088	C	N1-C1'-C2'	7.08	123.21	114.00
36	B2	1773	C	O4'-C1'-N1	7.08	113.86	108.20
81	CE	118	THR	CA-C-N	7.08	132.78	117.20
85	A5	1439	C	O4'-C1'-C2'	-7.08	98.72	105.80
85	A5	2648	G	P-O5'-C5'	7.08	132.23	120.90
85	A5	3857	G	O4'-C1'-N9	7.08	113.86	108.20
85	A5	980	U	O4'-C1'-C2'	-7.08	98.72	105.80
85	A5	2068	C	P-O5'-C5'	7.08	132.23	120.90
36	B2	283	G	O4'-C1'-C2'	7.08	113.97	107.60
36	B2	352	U	O4'-C1'-N1	7.08	113.86	108.20
36	B2	53	C	C1'-O4'-C4'	7.08	115.56	109.90
85	A5	264	C	C3'-C2'-C1'	7.08	107.16	101.50
85	A5	2749	C	O4'-C1'-C2'	-7.08	98.72	105.80
85	A5	3701	C	O4'-C1'-N1	-7.08	102.54	108.20
86	A7	105	C	N1-C1'-C2'	7.07	123.19	114.00
85	A5	8	U	O4'-C1'-N1	7.07	113.86	108.20
8	AS	142	ARG	N-CA-CB	-7.07	97.87	110.60
36	B2	1507	G	C1'-C2'-O2'	7.07	131.81	110.60
85	A5	943	A	O4'-C1'-N9	7.07	113.86	108.20
85	A5	1463	C	N1-C1'-C2'	7.07	123.19	114.00
85	A5	1667	G	O4'-C1'-C2'	-7.07	98.73	105.80
86	A7	106	G	C3'-C2'-C1'	-7.07	95.84	101.50
37	BC	7	G	O4'-C1'-N9	7.07	113.86	108.20
86	A7	85	G	N9-C1'-C2'	7.07	123.19	114.00
6	AX	22	TRP	C-N-CA	-7.07	104.03	121.70
36	B2	597	G	O4'-C1'-N9	7.07	113.85	108.20
36	B2	47	G	O4'-C1'-N9	7.07	113.85	108.20
36	B2	1761	U	P-O5'-C5'	7.07	132.21	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	CU	57	GLY	CA-C-N	-7.07	102.07	116.20
85	A5	644	G	O4'-C1'-C2'	7.06	113.96	107.60
85	A5	2890	C	O4'-C1'-N1	7.06	113.85	108.20
26	AJ	91	LYS	O-C-N	-7.06	111.41	122.70
36	B2	960	U	C1'-O4'-C4'	-7.06	104.25	109.90
39	Cq	32	ALA	CA-C-N	-7.06	101.67	117.20
85	A5	8	U	N1-C1'-C2'	7.06	123.18	114.00
1	Az	495	ARG	C-N-CA	-7.06	104.06	121.70
36	B2	183	G	C4'-C3'-C2'	-7.06	95.54	102.60
36	B2	1330	G	C1'-O4'-C4'	-7.06	104.25	109.90
36	B2	1377	U	O4'-C1'-N1	7.06	113.85	108.20
85	A5	1719	A	O4'-C1'-N9	7.06	113.85	108.20
44	CM	91	TRP	CB-CG-CD2	-7.06	117.43	126.60
85	A5	1374	G	C1'-O4'-C4'	-7.06	104.25	109.90
85	A5	4633	G	N9-C1'-C2'	-7.06	104.24	112.00
36	B2	288	G	O4'-C1'-N9	7.05	113.84	108.20
36	B2	1292	C	P-O5'-C5'	-7.05	109.61	120.90
36	B2	1743	G	C1'-O4'-C4'	-7.05	104.26	109.90
59	CZ	54	THR	N-CA-C	7.05	130.05	111.00
85	A5	673	C	C1'-O4'-C4'	-7.05	104.26	109.90
31	AH	109	ARG	O-C-N	7.05	133.98	122.70
85	A5	2277	C	O4'-C1'-N1	7.05	113.84	108.20
36	B2	145	G	O4'-C1'-C2'	7.05	113.95	107.60
85	A5	1773	U	O4'-C1'-N1	7.05	113.84	108.20
85	A5	2773	G	C1'-O4'-C4'	-7.05	104.26	109.90
26	AJ	123	ILE	CB-CA-C	7.05	125.70	111.60
81	CE	93	THR	CB-CA-C	-7.05	92.56	111.60
85	A5	3666	C	O4'-C1'-C2'	-7.05	98.75	105.80
85	A5	4376	A	O4'-C1'-N9	7.05	113.84	108.20
86	A7	34	C	C3'-C2'-C1'	7.05	107.14	101.50
85	A5	1240	G	P-O5'-C5'	7.05	132.18	120.90
85	A5	2100	A	C5'-C4'-C3'	7.05	127.28	116.00
36	B2	41	G	C1'-O4'-C4'	-7.05	104.26	109.90
36	B2	607	U	N1-C1'-C2'	7.05	123.16	114.00
36	B2	1666	C	O4'-C1'-N1	7.05	113.84	108.20
36	B2	1698	C	C3'-C2'-C1'	7.05	107.14	101.50
85	A5	1554	A	N9-C1'-C2'	7.05	123.16	114.00
85	A5	2782	U	C1'-O4'-C4'	7.05	115.54	109.90
85	A5	3973	G	C3'-C2'-C1'	7.05	107.14	101.50
85	A5	4580	U	O4'-C1'-N1	7.05	113.84	108.20
85	A5	4060	U	C1'-O4'-C4'	7.04	115.54	109.90
1	Az	113	SER	N-CA-C	-7.04	91.98	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	520	A	C1'-O4'-C4'	-7.04	104.27	109.90
85	A5	1295	C	N1-C1'-C2'	7.04	123.16	114.00
85	A5	2053	C	N1-C1'-C2'	7.04	123.16	114.00
85	A5	3736	A	C5'-C4'-O4'	7.04	117.55	109.10
52	CS	72	PRO	N-CA-C	-7.04	93.79	112.10
70	Ci	78	GLY	C-N-CA	-7.04	104.10	121.70
85	A5	3786	U	N1-C1'-C2'	7.04	123.15	114.00
36	B2	149	A	C3'-C2'-C1'	7.04	107.13	101.50
36	B2	284	C	O4'-C1'-C2'	-7.04	98.76	105.80
85	A5	2321	G	P-O3'-C3'	7.04	128.15	119.70
36	B2	184	G	N9-C1'-C2'	7.04	123.15	114.00
36	B2	903	A	C3'-C2'-C1'	-7.04	95.87	101.50
36	B2	1442	U	O4'-C1'-N1	7.04	113.83	108.20
60	Cr	108	MET	CA-CB-CG	-7.04	101.33	113.30
85	A5	16	G	C4'-C3'-O3'	7.04	127.08	113.00
36	B2	1794	C	O4'-C1'-C2'	-7.04	98.76	105.80
36	B2	1843	G	C1'-O4'-C4'	-7.04	104.27	109.90
37	BC	19	A	O4'-C1'-N9	7.04	113.83	108.20
85	A5	2618	G	C3'-C2'-C1'	-7.04	95.87	101.50
85	A5	4659	G	N9-C1'-C2'	7.04	123.15	114.00
65	Cc	89	TYR	CB-CG-CD1	-7.04	116.78	121.00
85	A5	1565	A	O4'-C1'-N9	7.04	113.83	108.20
85	A5	4964	C	O3'-P-O5'	-7.04	90.63	104.00
86	A7	67	C	N1-C1'-C2'	7.04	123.15	114.00
36	B2	1103	C	O4'-C1'-N1	7.03	113.83	108.20
36	B2	1209	A	N9-C1'-C2'	-7.03	104.26	112.00
36	B2	1642	U	C1'-O4'-C4'	7.03	115.53	109.90
85	A5	3943	A	N9-C1'-C2'	-7.03	104.26	112.00
85	A5	1895	G	O4'-C1'-N9	7.03	113.83	108.20
85	A5	3698	G	N9-C1'-C2'	7.03	123.14	114.00
36	B2	1333	U	N1-C1'-C2'	-7.03	104.27	112.00
85	A5	1556	C	O4'-C1'-C2'	-7.03	98.77	105.80
85	A5	4537	C	N1-C1'-C2'	7.03	123.14	114.00
85	A5	2052	G	C3'-C2'-C1'	7.03	107.12	101.50
85	A5	3603	G	O4'-C1'-N9	7.03	113.82	108.20
85	A5	921	C	O4'-C1'-C2'	-7.03	98.77	105.80
85	A5	665	C	C3'-C2'-C1'	7.03	107.12	101.50
85	A5	1676	C	N1-C1'-C2'	7.02	123.13	114.00
85	A5	2122	G	P-O3'-C3'	7.02	128.13	119.70
82	CG	243	GLY	C-N-CD	-7.02	105.15	120.60
85	A5	4314	C	C3'-C2'-C1'	7.02	107.12	101.50
75	Cm	128	LYS	N-CA-C	-7.02	92.05	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	296	A	C1'-O4'-C4'	7.02	115.52	109.90
1	Az	701	ARG	NE-CZ-NH1	7.02	123.81	120.30
36	B2	910	G	O4'-C1'-N9	7.02	113.81	108.20
48	CD	66	TYR	CB-CG-CD2	-7.02	116.79	121.00
87	A8	150	C	O4'-C1'-N1	7.02	113.81	108.20
85	A5	4352	U	O4'-C1'-N1	7.02	113.81	108.20
18	AY	31	GLY	N-CA-C	7.01	130.64	113.10
36	B2	1429	G	P-O5'-C5'	7.01	132.12	120.90
85	A5	922	C	C5'-C4'-C3'	7.01	127.22	116.00
85	A5	2504	C	P-O5'-C5'	7.01	132.12	120.90
85	A5	3870	C	N1-C1'-C2'	7.01	123.12	114.00
36	B2	1409	A	O4'-C1'-C2'	-7.01	98.79	105.80
85	A5	1083	U	O4'-C1'-N1	7.01	113.81	108.20
85	A5	1436	C	C3'-C2'-C1'	7.01	107.11	101.50
74	CC	322	LEU	CA-C-N	7.01	132.62	117.20
85	A5	1500	A	P-O3'-C3'	7.01	128.11	119.70
85	A5	2882	A	C1'-O4'-C4'	7.01	115.51	109.90
87	A8	93	C	O4'-C1'-N1	7.01	113.81	108.20
4	AK	1	MET	N-CA-C	7.01	129.92	111.00
85	A5	196	C	C3'-C2'-C1'	7.01	107.11	101.50
85	A5	3655	C	C3'-C2'-C1'	7.01	107.11	101.50
86	A7	29	C	C3'-C2'-C1'	7.01	107.11	101.50
86	A7	37	G	C3'-C2'-C1'	7.01	107.11	101.50
12	AR	2	GLY	CA-C-N	7.00	132.61	117.20
36	B2	1653	U	N1-C1'-C2'	-7.00	104.30	112.00
36	B2	1853	C	C1'-O4'-C4'	-7.00	104.30	109.90
85	A5	2425	U	O4'-C1'-N1	7.00	113.80	108.20
85	A5	116	G	O4'-C1'-C2'	-7.00	98.80	105.80
85	A5	1681	G	O4'-C1'-C2'	7.00	113.90	107.60
85	A5	4196	G	O4'-C1'-C2'	-7.00	98.80	105.80
85	A5	4921	C	O4'-C1'-C2'	-7.00	98.80	105.80
36	B2	127	C	P-O3'-C3'	7.00	128.10	119.70
74	CC	296	PRO	CA-N-CD	-7.00	101.70	111.50
85	A5	2382	A	O4'-C1'-N9	7.00	113.80	108.20
8	AS	93	GLY	O-C-N	7.00	133.90	122.70
14	AT	4	VAL	CA-C-N	7.00	132.60	117.20
36	B2	93	U	O4'-C1'-C2'	-7.00	98.80	105.80
70	Ci	78	GLY	CA-C-N	-7.00	101.80	117.20
85	A5	143	C	O4'-C1'-C2'	-7.00	98.80	105.80
85	A5	1503	A	O4'-C1'-N9	7.00	113.80	108.20
85	A5	2109	G	O4'-C1'-C2'	7.00	113.90	107.60
14	AT	82	ARG	NH1-CZ-NH2	-7.00	111.70	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	308	G	O4'-C1'-C2'	7.00	113.90	107.60
85	A5	417	G	P-O5'-C5'	7.00	132.09	120.90
85	A5	1271	G	C3'-C2'-C1'	-7.00	95.90	101.50
85	A5	2531	C	P-O3'-C3'	7.00	128.10	119.70
85	A5	1251	C	O4'-C1'-C2'	-7.00	98.81	105.80
85	A5	4358	U	O4'-C1'-N1	7.00	113.80	108.20
85	A5	3792	G	C1'-O4'-C4'	-6.99	104.31	109.90
36	B2	1583	C	C3'-C2'-C1'	6.99	107.09	101.50
85	A5	1392	A	C3'-C2'-C1'	6.99	107.09	101.50
28	AC	273	LEU	CB-CG-CD2	6.99	122.88	111.00
85	A5	322	C	O4'-C1'-C2'	-6.99	98.81	105.80
85	A5	432	U	O4'-C1'-C2'	6.99	113.89	107.60
85	A5	688	U	C1'-O4'-C4'	-6.99	104.31	109.90
85	A5	3585	G	O4'-C1'-N9	6.99	113.79	108.20
85	A5	2259	G	O4'-C1'-N9	6.99	113.79	108.20
85	A5	4347	G	C1'-O4'-C4'	-6.99	104.31	109.90
85	A5	1152	G	P-O3'-C3'	6.99	128.08	119.70
85	A5	4555	U	O4'-C1'-N1	6.99	113.79	108.20
17	AV	31	SER	CA-C-N	6.98	132.57	117.20
25	Af	148	TYR	N-CA-C	6.98	129.86	111.00
85	A5	2547	G	P-O5'-C5'	6.98	132.07	120.90
85	A5	4613	C	N1-C1'-C2'	6.98	123.08	114.00
36	B2	864	A	O4'-C1'-N9	6.98	113.79	108.20
36	B2	1676	U	P-O3'-C3'	-6.98	111.32	119.70
85	A5	3699	C	C3'-C2'-C1'	6.98	107.09	101.50
86	A7	51	G	P-O3'-C3'	6.98	128.08	119.70
4	AK	55	ARG	CB-CG-CD	6.98	129.75	111.60
36	B2	63	U	O4'-C1'-N1	6.98	113.78	108.20
36	B2	1781	A	C3'-C2'-C1'	6.98	107.08	101.50
85	A5	4171	C	C3'-C2'-C1'	6.98	107.08	101.50
26	AJ	164	PRO	N-CA-CB	-6.98	94.92	102.60
69	Cg	62	LYS	N-CA-CB	6.98	123.16	110.60
85	A5	1401	C	N1-C1'-C2'	-6.98	104.32	112.00
36	B2	1097	G	C5'-C4'-O4'	6.98	117.47	109.10
36	B2	1214	A	O4'-C1'-N9	6.98	113.78	108.20
85	A5	1090	G	O4'-C1'-N9	6.98	113.78	108.20
85	A5	1582	U	O4'-C1'-N1	6.98	113.78	108.20
36	B2	1482	C	O4'-C1'-N1	6.98	113.78	108.20
36	B2	1507	G	C3'-C2'-C1'	-6.98	95.92	101.50
81	CE	36	LYS	C-N-CD	-6.97	105.26	120.60
85	A5	1397	A	N9-C1'-C2'	-6.97	104.33	112.00
85	A5	3761	C	O4'-C1'-N1	6.97	113.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	46	U	O4'-C1'-N1	6.97	113.78	108.20
36	B2	419	G	O4'-C1'-C2'	-6.97	98.83	105.80
85	A5	512	U	O4'-C1'-C2'	-6.97	98.83	105.80
85	A5	2433	G	O4'-C1'-N9	6.97	113.78	108.20
85	A5	1201	U	C1'-O4'-C4'	-6.97	104.32	109.90
85	A5	1546	C	N1-C1'-C2'	6.97	123.06	114.00
85	A5	1729	A	N9-C1'-C2'	-6.97	104.33	112.00
85	A5	1788	A	N9-C1'-C2'	-6.97	104.33	112.00
85	A5	2247	C	C1'-O4'-C4'	6.97	115.47	109.90
85	A5	4284	C	O4'-C1'-N1	6.97	113.78	108.20
36	B2	1051	G	O4'-C1'-N9	6.97	113.78	108.20
36	B2	1647	A	C3'-C2'-C1'	-6.97	95.92	101.50
85	A5	19	G	O4'-C1'-C2'	6.97	113.87	107.60
85	A5	1651	G	C3'-C2'-C1'	6.97	107.08	101.50
85	A5	2335	C	N1-C1'-C2'	6.97	123.06	114.00
1	Az	54	THR	N-CA-C	6.97	129.81	111.00
48	CD	260	GLU	CB-CA-C	6.97	124.33	110.40
85	A5	1312	A	N9-C1'-C2'	-6.97	104.34	112.00
85	A5	2292	C	O4'-C1'-C2'	-6.97	98.83	105.80
85	A5	4223	C	N1-C1'-C2'	6.97	123.06	114.00
36	B2	183	G	C5'-C4'-C3'	6.96	127.14	116.00
36	B2	1343	U	O4'-C1'-N1	6.96	113.77	108.20
36	B2	1645	C	P-O3'-C3'	6.96	128.06	119.70
85	A5	27	C	O4'-C1'-C2'	-6.96	98.84	105.80
85	A5	265	C	P-O3'-C3'	6.96	128.06	119.70
85	A5	3700	C	C1'-O4'-C4'	-6.96	104.33	109.90
66	Cd	115	LYS	N-CA-C	6.96	129.80	111.00
85	A5	1447	C	C4'-C3'-C2'	-6.96	95.64	102.60
85	A5	2884	G	O4'-C1'-N9	6.96	113.77	108.20
85	A5	2861	C	N1-C1'-C2'	6.96	123.05	114.00
36	B2	1122	A	C1'-O4'-C4'	6.96	115.47	109.90
85	A5	2590	G	P-O3'-C3'	6.96	128.05	119.70
85	A5	3678	G	C3'-C2'-C1'	6.96	107.07	101.50
85	A5	4667	C	N1-C1'-C2'	6.96	123.05	114.00
85	A5	4741	C	C3'-C2'-C1'	6.96	107.07	101.50
85	A5	4922	C	O4'-C1'-N1	6.96	113.77	108.20
85	A5	2050	G	O4'-C1'-N9	6.96	113.76	108.20
1	Az	741	MET	CA-CB-CG	6.96	125.12	113.30
85	A5	201	C	N1-C1'-C2'	6.96	123.04	114.00
85	A5	2593	C	O4'-C1'-C2'	-6.96	98.84	105.80
85	A5	145	G	O4'-C4'-C3'	-6.95	97.05	104.00
85	A5	326	C	N1-C1'-C2'	6.95	123.04	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4305	G	C1'-O4'-C4'	-6.95	104.34	109.90
23	AD	83	SER	N-CA-CB	6.95	120.93	110.50
85	A5	3671	G	N9-C1'-C2'	6.95	123.04	114.00
21	Ab	79	PHE	N-CA-C	6.95	129.76	111.00
85	A5	3905	A	O4'-C1'-N9	6.95	113.76	108.20
85	A5	4418	G	O4'-C1'-C2'	-6.95	98.85	105.80
36	B2	353	C	N1-C1'-C2'	6.95	123.03	114.00
36	B2	733	C	O4'-C1'-C2'	-6.95	98.85	105.80
85	A5	4402	C	O4'-C1'-C2'	-6.95	98.85	105.80
36	B2	1406	G	N9-C1'-C2'	6.95	123.03	114.00
1	Az	801	ARG	N-CA-CB	6.94	123.10	110.60
85	A5	117	C	C2'-C3'-O3'	6.94	124.81	113.70
36	B2	271	C	P-O3'-C3'	6.94	128.03	119.70
36	B2	1789	G	O4'-C1'-C2'	-6.94	98.86	105.80
85	A5	2007	G	C3'-C2'-C1'	-6.94	95.94	101.50
36	B2	517	C	N1-C1'-C2'	6.94	123.02	114.00
85	A5	2255	C	C1'-O4'-C4'	-6.94	104.35	109.90
85	A5	2783	A	O4'-C1'-C2'	-6.94	98.86	105.80
85	A5	3963	A	O4'-C1'-C2'	-6.94	98.86	105.80
36	B2	1315	U	C3'-C2'-C1'	-6.94	95.95	101.50
36	B2	1430	C	O4'-C1'-C2'	-6.94	98.86	105.80
1	Az	121	VAL	C-N-CA	6.94	139.04	121.70
14	AT	82	ARG	NE-CZ-NH1	6.94	123.77	120.30
85	A5	4165	C	C5'-C4'-C3'	6.94	127.10	116.00
85	A5	4395	U	C1'-O4'-C4'	6.94	115.45	109.90
85	A5	1922	G	O5'-C5'-C4'	-6.94	98.52	111.70
4	AK	2	LEU	CA-CB-CG	-6.93	99.35	115.30
36	B2	65	C	C1'-O4'-C4'	6.93	115.45	109.90
85	A5	939	G	C1'-O4'-C4'	-6.93	104.35	109.90
85	A5	4927	G	O4'-C1'-N9	6.93	113.75	108.20
36	B2	985	G	O4'-C1'-N9	6.93	113.75	108.20
85	A5	99	A	P-O3'-C3'	-6.93	111.38	119.70
85	A5	1195	G	C3'-C2'-C1'	-6.93	95.95	101.50
85	A5	1493	G	O4'-C1'-N9	6.93	113.75	108.20
85	A5	2836	A	N9-C1'-C2'	-6.93	104.38	112.00
85	A5	5061	A	O4'-C1'-N9	6.93	113.75	108.20
36	B2	399	C	O4'-C1'-C2'	-6.93	98.87	105.80
36	B2	1132	C	O4'-C1'-N1	6.93	113.74	108.20
85	A5	332	C	N1-C1'-C2'	6.93	123.01	114.00
85	A5	2035	C	C3'-C2'-C1'	6.93	107.04	101.50
85	A5	2054	U	C1'-O4'-C4'	6.93	115.44	109.90
85	A5	2128	G	N9-C1'-C2'	6.93	123.01	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2896	G	C3'-C2'-C1'	-6.93	95.96	101.50
85	A5	3915	U	C3'-C2'-C1'	6.93	107.04	101.50
36	B2	1056	U	P-O3'-C3'	-6.93	111.39	119.70
36	B2	1483	A	N9-C1'-C2'	-6.93	104.38	112.00
36	B2	1589	A	N9-C1'-C2'	-6.93	104.38	112.00
85	A5	1081	C	O4'-C1'-N1	6.93	113.74	108.20
85	A5	2398	U	O4'-C1'-N1	6.93	113.74	108.20
85	A5	4286	C	O4'-C1'-C2'	-6.93	98.87	105.80
85	A5	4898	G	O3'-P-O5'	-6.93	90.84	104.00
36	B2	1220	A	C1'-O4'-C4'	-6.92	104.36	109.90
85	A5	685	C	O4'-C1'-C2'	-6.92	98.88	105.80
85	A5	3877	A	O4'-C1'-N9	6.92	113.74	108.20
85	A5	4178	A	N9-C1'-C2'	-6.92	104.38	112.00
85	A5	4625	C	O4'-C1'-N1	6.92	113.74	108.20
87	A8	153	C	O4'-C1'-C2'	6.92	113.83	107.60
85	A5	2105	A	C4'-C3'-C2'	-6.92	95.68	102.60
36	B2	74	G	P-O3'-C3'	6.92	128.00	119.70
81	CE	81	GLU	C-N-CA	6.92	139.01	121.70
85	A5	1248	C	O4'-C1'-N1	6.92	113.74	108.20
85	A5	2557	G	O4'-C1'-N9	6.92	113.74	108.20
85	A5	3691	G	O4'-C1'-C2'	-6.92	98.88	105.80
85	A5	969	C	O4'-C1'-C2'	-6.92	98.88	105.80
85	A5	1282	G	P-O5'-C5'	6.92	131.97	120.90
85	A5	1719	A	O4'-C4'-C3'	-6.92	97.08	104.00
85	A5	4945	G	N9-C1'-C2'	6.92	123.00	114.00
36	B2	417	C	C3'-C2'-C1'	6.92	107.03	101.50
85	A5	354	U	O4'-C1'-C2'	-6.92	98.88	105.80
85	A5	4420	U	O4'-C1'-N1	6.92	113.73	108.20
85	A5	2399	G	C3'-C2'-C1'	-6.92	95.97	101.50
36	B2	1656	G	C1'-O4'-C4'	-6.91	104.37	109.90
69	Cg	46	CYS	N-CA-CB	-6.91	98.16	110.60
85	A5	1359	G	P-O3'-C3'	6.91	128.00	119.70
85	A5	1854	G	O4'-C1'-C2'	-6.91	98.89	105.80
85	A5	4717	A	N9-C1'-C2'	-6.91	104.39	112.00
85	A5	381	U	N1-C1'-C2'	6.91	122.98	114.00
85	A5	990	C	O4'-C1'-N1	6.91	113.73	108.20
85	A5	3742	G	O4'-C1'-N9	6.91	113.73	108.20
85	A5	1439	C	O4'-C1'-N1	6.91	113.73	108.20
85	A5	3744	G	C1'-O4'-C4'	-6.91	104.37	109.90
87	A8	21	C	C3'-C2'-C1'	6.91	107.03	101.50
85	A5	1567	U	O4'-C1'-N1	6.91	113.72	108.20
36	B2	1501	C	O3'-P-O5'	-6.91	90.88	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1511	U	N1-C1'-C2'	6.91	122.98	114.00
85	A5	2477	A	O4'-C1'-C2'	-6.91	98.89	105.80
85	A5	2795	A	O4'-C1'-C2'	-6.91	98.89	105.80
85	A5	4765	G	O4'-C1'-N9	6.91	113.72	108.20
36	B2	1243	U	O4'-C1'-N1	6.90	113.72	108.20
47	CI	211	VAL	O-C-N	-6.90	111.65	122.70
85	A5	319	A	O4'-C1'-N9	6.90	113.72	108.20
85	A5	4152	G	N9-C1'-C2'	6.90	122.98	114.00
85	A5	264	C	N1-C1'-C2'	6.90	122.97	114.00
85	A5	2718	U	C1'-O4'-C4'	6.90	115.42	109.90
85	A5	2769	U	C1'-O4'-C4'	-6.90	104.38	109.90
85	A5	3605	C	O4'-C1'-N1	6.90	113.72	108.20
39	Cq	32	ALA	O-C-N	6.90	133.74	122.70
47	CI	110	ARG	NE-CZ-NH1	6.90	123.75	120.30
86	A7	24	C	N1-C1'-C2'	6.90	122.97	114.00
12	AR	123	THR	CB-CA-C	-6.90	92.97	111.60
36	B2	384	U	N1-C1'-C2'	6.90	122.97	114.00
36	B2	730	C	P-O3'-C3'	6.90	127.98	119.70
74	CC	266	THR	CA-C-N	6.90	132.37	117.20
85	A5	1541	C	N1-C1'-C2'	6.90	122.97	114.00
85	A5	2539	C	N1-C1'-C2'	6.90	122.97	114.00
85	A5	3949	A	C1'-O4'-C4'	-6.90	104.38	109.90
85	A5	4569	U	O4'-C1'-N1	6.90	113.72	108.20
36	B2	1788	A	O4'-C1'-N9	6.89	113.72	108.20
64	CF	52	GLU	CB-CA-C	6.89	124.19	110.40
85	A5	214	G	C1'-O4'-C4'	-6.89	104.39	109.90
85	A5	3965	A	C3'-C2'-C1'	6.89	107.02	101.50
85	A5	2340	C	C3'-C2'-C1'	6.89	107.01	101.50
85	A5	4623	G	O4'-C1'-C2'	-6.89	98.91	105.80
36	B2	843	C	O4'-C1'-N1	6.89	113.71	108.20
85	A5	2513	A	C3'-C2'-C1'	6.89	107.01	101.50
85	A5	2874	U	N1-C1'-C2'	6.89	122.96	114.00
85	A5	3596	A	P-O3'-C3'	6.89	127.97	119.70
85	A5	3833	C	O4'-C1'-C2'	-6.89	98.91	105.80
86	A7	63	C	C5'-C4'-C3'	6.89	127.02	116.00
79	CJ	12	MET	N-CA-C	-6.89	92.40	111.00
85	A5	4055	U	O4'-C1'-N1	6.89	113.71	108.20
68	Cf	100	ARG	NE-CZ-NH2	-6.89	116.86	120.30
85	A5	1490	G	C3'-C2'-C1'	6.89	107.01	101.50
85	A5	2247	C	O4'-C1'-C2'	-6.89	98.91	105.80
85	A5	2332	A	C3'-C2'-C1'	-6.88	95.99	101.50
36	B2	693	A	O4'-C4'-C3'	-6.88	97.12	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	27	U	N1-C1'-C2'	-6.88	104.43	112.00
85	A5	1390	G	O4'-C1'-C2'	6.88	113.79	107.60
85	A5	2257	C	O4'-C1'-C2'	-6.88	98.92	105.80
85	A5	2375	A	O4'-C1'-N9	6.88	113.70	108.20
85	A5	3674	G	N9-C1'-C2'	6.88	122.94	114.00
85	A5	3746	A	C3'-C2'-C1'	6.88	107.01	101.50
85	A5	4729	A	P-O3'-C3'	6.88	127.96	119.70
85	A5	4963	G	N9-C1'-C2'	6.88	122.95	114.00
85	A5	4747	C	C4'-C3'-C2'	-6.88	95.72	102.60
7	AM	13	ASP	CB-CG-OD1	-6.88	112.11	118.30
36	B2	475	C	C3'-C2'-C1'	6.88	107.00	101.50
36	B2	509	G	O4'-C1'-N9	6.88	113.70	108.20
36	B2	1057	C	O4'-C1'-N1	6.88	113.70	108.20
66	Cd	117	LEU	CB-CG-CD1	-6.88	99.31	111.00
85	A5	3856	A	O4'-C1'-N9	6.88	113.70	108.20
36	B2	647	U	O4'-C1'-N1	6.88	113.70	108.20
36	B2	1652	G	O4'-C1'-N9	6.88	113.70	108.20
47	CI	176	PHE	N-CA-CB	-6.88	98.22	110.60
82	CG	35	ARG	CA-C-N	-6.88	97.85	117.10
85	A5	2347	A	O4'-C1'-C2'	-6.88	98.92	105.80
1	Az	427	VAL	CB-CA-C	-6.87	98.34	111.40
36	B2	387	C	N1-C1'-C2'	6.87	122.94	114.00
85	A5	244	G	C3'-C2'-C1'	6.87	107.00	101.50
85	A5	515	C	C3'-C2'-C1'	6.87	107.00	101.50
85	A5	694	C	O4'-C1'-N1	6.87	113.70	108.20
85	A5	2279	A	C3'-C2'-C1'	6.87	107.00	101.50
36	B2	1698	C	P-O3'-C3'	6.87	127.94	119.70
44	CM	70	GLN	CA-C-O	-6.87	105.68	120.10
69	Cg	82	MET	CB-CG-SD	6.87	133.01	112.40
85	A5	1358	G	C1'-O4'-C4'	-6.87	104.41	109.90
85	A5	4042	G	C1'-O4'-C4'	-6.87	104.41	109.90
36	B2	745	C	C3'-C2'-C1'	6.87	106.99	101.50
85	A5	3648	A	O4'-C1'-C2'	-6.87	98.93	105.80
85	A5	4676	G	N9-C1'-C2'	6.87	122.93	114.00
4	AK	2	LEU	N-CA-C	6.87	129.53	111.00
28	AC	257	LYS	N-CA-C	6.87	129.54	111.00
36	B2	325	C	O4'-C1'-C2'	-6.87	98.93	105.80
36	B2	1109	C	C3'-C2'-C1'	-6.87	96.01	101.50
85	A5	150	U	C4'-C3'-O3'	6.87	126.73	113.00
85	A5	1208	G	O4'-C1'-C2'	6.87	113.78	107.60
85	A5	1483	C	O4'-C1'-N1	-6.87	102.71	108.20
85	A5	1559	G	C1'-O4'-C4'	-6.87	104.41	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2491	C	O4'-C1'-N1	6.87	113.69	108.20
87	A8	13	G	N9-C1'-C2'	6.87	122.92	114.00
36	B2	202	G	O4'-C1'-N9	6.86	113.69	108.20
36	B2	1332	A	C3'-C2'-C1'	6.86	106.99	101.50
85	A5	299	C	C1'-O4'-C4'	-6.86	104.41	109.90
85	A5	3703	G	C1'-O4'-C4'	-6.86	104.41	109.90
87	A8	110	U	C4'-C3'-O3'	6.86	126.73	113.00
85	A5	917	A	N9-C1'-C2'	-6.86	104.45	112.00
85	A5	2745	A	N9-C1'-C2'	-6.86	104.45	112.00
85	A5	2902	G	O4'-C1'-C2'	-6.86	98.94	105.80
85	A5	3687	A	N9-C1'-C2'	-6.86	104.45	112.00
60	Cr	67	ARG	CB-CG-CD	6.86	129.44	111.60
85	A5	3655	C	O4'-C1'-C2'	-6.86	98.94	105.80
6	AX	128	VAL	N-CA-C	6.86	129.52	111.00
85	A5	2496	G	C1'-O4'-C4'	-6.86	104.41	109.90
36	B2	375	U	P-O5'-C5'	6.86	131.87	120.90
36	B2	383	G	C3'-C2'-C1'	6.86	106.99	101.50
63	CB	298	LEU	CA-C-O	6.86	134.50	120.10
85	A5	4896	G	P-O5'-C5'	6.86	131.87	120.90
85	A5	2563	C	N1-C1'-C2'	6.85	122.91	114.00
36	B2	773	C	P-O3'-C3'	6.85	127.92	119.70
49	CQ	139	LEU	N-CA-C	6.85	129.50	111.00
85	A5	949	G	O4'-C1'-N9	6.85	113.68	108.20
85	A5	1106	A	C4'-C3'-C2'	-6.85	95.75	102.60
85	A5	1580	C	N1-C1'-C2'	6.85	122.91	114.00
36	B2	287	U	O4'-C1'-N1	-6.85	102.72	108.20
36	B2	1732	G	O4'-C1'-N9	6.85	113.68	108.20
63	CB	112	ASP	N-CA-C	-6.85	92.50	111.00
36	B2	230	A	O4'-C1'-C2'	-6.85	98.95	105.80
61	Ch	121	VAL	CA-C-N	6.85	132.27	117.20
85	A5	1291	G	N9-C1'-C2'	6.85	122.90	114.00
85	A5	1894	C	N1-C1'-C2'	6.85	122.91	114.00
85	A5	18	C	C3'-C2'-C1'	6.85	106.98	101.50
85	A5	207	G	C1'-O4'-C4'	-6.85	104.42	109.90
85	A5	1242	G	P-O5'-C5'	6.85	131.86	120.90
85	A5	1409	C	P-O3'-C3'	6.85	127.92	119.70
85	A5	2493	G	O4'-C1'-N9	6.85	113.68	108.20
85	A5	2740	U	C5'-C4'-O4'	6.85	117.32	109.10
53	CT	75	VAL	CA-C-N	6.84	132.26	117.20
85	A5	497	G	O4'-C1'-N9	6.84	113.68	108.20
85	A5	1692	C	N1-C1'-C2'	6.84	122.90	114.00
85	A5	2634	C	O4'-C1'-N1	6.84	113.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	A8	90	C	C5'-C4'-C3'	6.84	126.95	116.00
44	CM	51	PRO	CA-N-CD	-6.84	101.92	111.50
85	A5	4259	C	C3'-C2'-C1'	6.84	106.97	101.50
85	A5	4492	U	C1'-O4'-C4'	6.84	115.38	109.90
1	Az	779	THR	C-N-CD	6.84	142.77	128.40
42	CL	130	LYS	CB-CA-C	6.84	124.08	110.40
85	A5	2303	C	O4'-C1'-N1	6.84	113.67	108.20
85	A5	2724	G	P-O3'-C3'	6.84	127.91	119.70
36	B2	379	C	C3'-C2'-C1'	6.84	106.97	101.50
36	B2	459	C	C5'-C4'-O4'	6.84	117.31	109.10
85	A5	28	C	O4'-C1'-N1	6.84	113.67	108.20
85	A5	2333	G	C5'-C4'-O4'	6.84	117.31	109.10
85	A5	2710	C	P-O3'-C3'	6.84	127.91	119.70
38	Cz	209	THR	N-CA-CB	6.84	123.29	110.30
87	A8	106	G	N9-C1'-C2'	6.84	122.89	114.00
36	B2	619	A	N9-C1'-C2'	-6.84	104.48	112.00
37	BC	53	A	C3'-C2'-C1'	6.84	106.97	101.50
33	AI	8	TRP	CG-CD2-CE3	-6.83	127.75	133.90
36	B2	194	C	N1-C1'-C2'	6.83	122.89	114.00
36	B2	1657	G	C1'-O4'-C4'	-6.83	104.43	109.90
42	CL	164	GLU	C-N-CA	-6.83	104.61	121.70
85	A5	2092	G	C4'-C3'-C2'	-6.83	95.77	102.60
85	A5	2110	C	P-O3'-C3'	-6.83	111.50	119.70
85	A5	4346	U	O4'-C1'-N1	6.83	113.67	108.20
81	CE	30	GLY	CA-C-N	6.83	132.23	117.20
85	A5	953	C	O4'-C1'-C2'	-6.83	98.97	105.80
85	A5	4953	G	O4'-C1'-C2'	6.83	113.75	107.60
36	B2	1551	U	C3'-C2'-C1'	-6.83	96.04	101.50
36	B2	1863	A	C1'-O4'-C4'	6.83	115.36	109.90
74	CC	306	ARG	N-CA-CB	6.83	122.89	110.60
12	AR	87	GLU	CB-CA-C	-6.83	96.75	110.40
59	CZ	79	HIS	N-CA-C	6.83	129.43	111.00
85	A5	1285	U	C3'-C2'-C1'	6.83	106.96	101.50
85	A5	2124	G	O4'-C1'-N9	6.83	113.66	108.20
85	A5	4276	G	O4'-C1'-N9	6.83	113.66	108.20
36	B2	581	U	P-O3'-C3'	-6.83	111.51	119.70
36	B2	904	A	C1'-O4'-C4'	-6.83	104.44	109.90
36	B2	1177	U	O4'-C1'-N1	6.83	113.66	108.20
85	A5	141	C	C3'-C2'-C1'	6.83	106.96	101.50
52	CS	152	PHE	CA-C-O	-6.82	105.77	120.10
85	A5	3646	A	C1'-O4'-C4'	6.82	115.36	109.90
36	B2	519	A	O4'-C1'-C2'	-6.82	98.98	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3747	A	O4'-C1'-C2'	-6.82	98.98	105.80
36	B2	331	C	O4'-C1'-C2'	-6.82	98.98	105.80
36	B2	379	C	P-O3'-C3'	6.82	127.89	119.70
85	A5	1628	C	C1'-O4'-C4'	-6.82	104.44	109.90
63	CB	314	ILE	CB-CA-C	-6.82	97.96	111.60
85	A5	1846	G	N9-C1'-C2'	6.82	122.86	114.00
31	AH	110	THR	CA-CB-CG2	6.82	121.94	112.40
85	A5	184	U	C1'-O4'-C4'	6.82	115.35	109.90
85	A5	184	U	O4'-C1'-N1	6.82	113.66	108.20
85	A5	1688	G	O4'-C1'-C2'	6.82	113.74	107.60
85	A5	2520	C	O4'-C1'-N1	6.82	113.65	108.20
36	B2	15	U	O4'-C1'-N1	6.82	113.65	108.20
36	B2	646	G	O4'-C1'-N9	6.82	113.65	108.20
39	Cq	6	ARG	N-CA-C	6.82	129.40	111.00
85	A5	276	C	C4'-C3'-C2'	6.82	109.42	102.60
85	A5	930	G	C3'-C2'-C1'	-6.82	96.05	101.50
85	A5	413	G	P-O3'-C3'	6.81	127.88	119.70
85	A5	3641	U	C3'-C2'-C1'	6.81	106.95	101.50
85	A5	4598	C	O4'-C1'-C2'	-6.81	98.99	105.80
36	B2	1046	U	O4'-C1'-N1	6.81	113.65	108.20
36	B2	1643	U	C3'-C2'-C1'	6.81	106.95	101.50
85	A5	2248	C	O4'-C1'-C2'	-6.81	98.99	105.80
85	A5	3926	C	N1-C1'-C2'	6.81	122.86	114.00
36	B2	1535	U	C4'-C3'-O3'	6.81	126.62	113.00
85	A5	66	A	C3'-C2'-C1'	6.81	106.95	101.50
1	Az	285	LEU	O-C-N	-6.81	108.16	121.10
20	Aa	58	VAL	CG1-CB-CG2	-6.81	100.01	110.90
36	B2	322	C	C3'-C2'-C1'	6.81	106.95	101.50
36	B2	1516	G	O4'-C1'-N9	6.81	113.65	108.20
36	B2	1638	G	C3'-C2'-C1'	6.81	106.95	101.50
85	A5	1744	U	O4'-C1'-N1	6.81	113.65	108.20
85	A5	4145	C	O4'-C1'-C2'	-6.81	98.99	105.80
36	B2	322	C	P-O3'-C3'	6.81	127.87	119.70
36	B2	849	A	O4'-C1'-N9	6.81	113.65	108.20
85	A5	2335	C	C3'-C2'-C1'	6.81	106.95	101.50
86	A7	41	G	O4'-C1'-C2'	6.81	113.73	107.60
36	B2	1427	C	O4'-C1'-C2'	-6.81	98.99	105.80
87	A8	54	C	N1-C1'-C2'	6.81	122.85	114.00
28	AC	120	GLN	N-CA-C	6.80	129.38	111.00
37	BC	63	U	O4'-C1'-N1	6.80	113.64	108.20
86	A7	4	U	C1'-O4'-C4'	-6.80	104.46	109.90
86	A7	4	U	N1-C1'-C2'	6.80	122.84	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1285	U	C4'-C3'-C2'	-6.80	95.80	102.60
85	A5	1573	G	P-O3'-C3'	6.80	127.86	119.70
85	A5	1690	C	C3'-C2'-C1'	6.80	106.94	101.50
85	A5	2244	C	O4'-C1'-N1	6.80	113.64	108.20
85	A5	3864	C	C3'-C2'-C1'	6.80	106.94	101.50
86	A7	4	U	C5'-C4'-C3'	-6.80	105.12	116.00
30	AF	37	ASP	N-CA-C	6.80	129.35	111.00
85	A5	1491	A	O4'-C1'-N9	6.80	113.64	108.20
85	A5	3816	A	O4'-C1'-N9	6.80	113.64	108.20
36	B2	912	C	O4'-C1'-N1	6.80	113.64	108.20
36	B2	1550	G	P-O3'-C3'	6.80	127.86	119.70
48	CD	268	ARG	N-CA-C	-6.80	92.65	111.00
85	A5	2647	A	O4'-C1'-N9	-6.80	102.76	108.20
85	A5	4493	U	O4'-C1'-N1	6.79	113.64	108.20
36	B2	1744	G	C1'-O4'-C4'	6.79	115.33	109.90
81	CE	188	ARG	CD-NE-CZ	-6.79	114.09	123.60
85	A5	218	A	P-O3'-C3'	6.79	127.85	119.70
85	A5	1048	G	O4'-C1'-N9	6.79	113.64	108.20
36	B2	1608	U	O4'-C1'-N1	6.79	113.63	108.20
50	CR	143	HIS	CE1-NE2-CD2	6.79	123.58	106.60
85	A5	2019	C	O4'-C1'-N1	6.79	113.63	108.20
87	A8	100	U	C1'-O4'-C4'	-6.79	104.47	109.90
85	A5	677	G	P-O3'-C3'	6.79	127.85	119.70
86	A7	68	C	C3'-C2'-C1'	6.79	106.93	101.50
36	B2	246	C	P-O3'-C3'	6.79	127.85	119.70
85	A5	2899	C	C3'-C2'-C1'	6.79	106.93	101.50
85	A5	4935	C	P-O3'-C3'	-6.79	111.55	119.70
24	Ae	48	THR	O-C-N	-6.79	111.84	122.70
63	CB	112	ASP	C-N-CA	-6.79	104.73	121.70
36	B2	740	C	O4'-C1'-N1	6.79	113.63	108.20
60	Cr	106	LEU	CA-C-N	6.78	132.12	117.20
85	A5	501	C	O4'-C1'-C2'	-6.78	99.02	105.80
85	A5	4188	U	O4'-C1'-N1	6.78	113.63	108.20
85	A5	4631	G	O4'-C1'-N9	6.78	113.63	108.20
36	B2	794	A	C3'-C2'-C1'	6.78	106.93	101.50
74	CC	232	VAL	CA-C-N	-6.78	102.28	117.20
85	A5	2667	C	P-O3'-C3'	-6.78	111.56	119.70
2	Ag	159	ASN	C-N-CA	-6.78	104.75	121.70
36	B2	910	G	C1'-O4'-C4'	-6.78	104.48	109.90
85	A5	181	C	P-O3'-C3'	6.78	127.84	119.70
85	A5	2119	C	O4'-C1'-N1	6.78	113.62	108.20
85	A5	4622	A	N9-C1'-C2'	-6.78	104.54	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
86	A7	87	G	O4'-C1'-N9	6.78	113.62	108.20
56	CX	51	THR	O-C-N	-6.78	111.85	122.70
85	A5	170	C	O4'-C1'-N1	6.78	113.62	108.20
85	A5	912	G	C1'-O4'-C4'	-6.78	104.48	109.90
85	A5	1425	G	O4'-C1'-N9	6.78	113.62	108.20
85	A5	1907	A	O4'-C1'-C2'	6.78	113.70	107.60
85	A5	2313	A	C1'-O4'-C4'	6.78	115.32	109.90
85	A5	5041	G	C3'-C2'-C1'	-6.78	96.08	101.50
3	AU	48	LEU	CA-CB-CG	-6.78	99.71	115.30
36	B2	31	U	C1'-O4'-C4'	6.78	115.32	109.90
36	B2	880	G	C3'-C2'-C1'	-6.78	96.08	101.50
36	B2	1203	G	O4'-C1'-C2'	6.78	113.70	107.60
36	B2	1785	C	P-O3'-C3'	6.78	127.83	119.70
85	A5	4079	C	O4'-C1'-N1	6.78	113.62	108.20
85	A5	965	G	C5'-C4'-O4'	6.78	117.23	109.10
85	A5	1444	G	O4'-C1'-N9	6.78	113.62	108.20
85	A5	2802	C	C3'-C2'-C1'	6.78	106.92	101.50
85	A5	4417	C	N1-C1'-C2'	6.78	122.81	114.00
36	B2	741	C	N1-C1'-C2'	6.77	122.80	114.00
1	Az	825	PHE	N-CA-C	6.77	129.28	111.00
81	CE	219	LYS	CG-CD-CE	6.77	132.21	111.90
85	A5	2571	C	C1'-O4'-C4'	-6.77	104.48	109.90
85	A5	4158	C	N1-C1'-C2'	6.77	122.80	114.00
86	A7	46	C	O4'-C1'-N1	6.77	113.62	108.20
55	CU	76	VAL	N-CA-CB	6.77	126.39	111.50
85	A5	1602	U	O4'-C1'-N1	6.77	113.61	108.20
85	A5	1656	U	C1'-O4'-C4'	-6.77	104.49	109.90
85	A5	2110	C	C5'-C4'-O4'	6.77	117.22	109.10
85	A5	4989	U	O3'-P-O5'	6.77	116.86	104.00
85	A5	4930	C	N1-C1'-C2'	6.76	122.79	114.00
36	B2	854	A	P-O5'-C5'	6.76	131.72	120.90
85	A5	1293	G	C1'-O4'-C4'	-6.76	104.49	109.90
85	A5	2506	G	O4'-C1'-N9	-6.76	102.79	108.20
85	A5	3914	U	O4'-C1'-N1	6.76	113.61	108.20
36	B2	1226	G	C1'-O4'-C4'	-6.76	104.49	109.90
36	B2	1354	G	C2'-C3'-O3'	6.76	124.52	113.70
47	CI	194	GLY	CA-C-N	-6.76	102.33	117.20
85	A5	2826	U	N1-C1'-C2'	6.76	122.79	114.00
15	AB	41	ILE	CG1-CB-CG2	-6.76	96.53	111.40
36	B2	1075	C	C1'-O4'-C4'	-6.76	104.49	109.90
36	B2	1760	G	N9-C1'-C2'	-6.76	104.56	112.00
85	A5	299	C	N1-C1'-C2'	6.76	122.79	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2355	G	O4'-C1'-N9	6.76	113.61	108.20
85	A5	2385	U	O4'-C1'-N1	6.76	113.61	108.20
82	CG	105	GLU	O-C-N	6.76	133.51	122.70
85	A5	4604	G	O4'-C1'-N9	6.75	113.60	108.20
36	B2	982	G	O4'-C1'-N9	6.75	113.60	108.20
85	A5	31	U	O4'-C1'-N1	6.75	113.60	108.20
85	A5	4177	C	O4'-C1'-N1	6.75	113.60	108.20
85	A5	4597	U	O4'-C1'-N1	6.75	113.60	108.20
36	B2	866	U	C3'-C2'-C1'	-6.75	96.10	101.50
36	B2	881	G	C1'-O4'-C4'	-6.75	104.50	109.90
85	A5	236	G	O4'-C1'-N9	6.75	113.60	108.20
87	A8	68	G	C1'-O4'-C4'	-6.75	104.50	109.90
66	Cd	105	LEU	CA-C-N	-6.75	102.35	117.20
74	CC	356	ALA	CA-C-N	-6.75	102.35	117.20
15	AB	133	TYR	N-CA-CB	-6.75	98.45	110.60
36	B2	558	G	C1'-O4'-C4'	-6.75	104.50	109.90
85	A5	1854	G	O4'-C1'-N9	-6.75	102.80	108.20
85	A5	2505	C	C5'-C4'-O4'	6.75	117.20	109.10
85	A5	3606	U	O4'-C1'-N1	6.75	113.60	108.20
85	A5	4175	G	C3'-C2'-C1'	-6.75	96.10	101.50
36	B2	1686	G	O4'-C1'-N9	6.75	113.60	108.20
36	B2	1865	C	C2'-C3'-O3'	-6.75	94.66	109.50
85	A5	1162	G	C1'-O4'-C4'	-6.75	104.50	109.90
85	A5	1401	C	O4'-C1'-C2'	-6.75	99.05	105.80
85	A5	1741	G	O4'-C1'-C2'	6.75	113.67	107.60
85	A5	2802	C	O4'-C1'-N1	6.75	113.60	108.20
85	A5	4641	U	N1-C1'-C2'	-6.75	104.58	112.00
87	A8	132	G	O4'-C1'-N9	6.75	113.60	108.20
41	CO	185	VAL	O-C-N	-6.75	111.91	122.70
85	A5	4320	G	C1'-O4'-C4'	-6.75	104.50	109.90
36	B2	481	C	N1-C1'-C2'	6.74	122.77	114.00
36	B2	1370	A	O4'-C1'-C2'	-6.74	99.06	105.80
85	A5	1614	C	C3'-C2'-C1'	6.74	106.89	101.50
85	A5	4908	G	C1'-O4'-C4'	-6.74	104.51	109.90
36	B2	1578	U	C1'-O4'-C4'	6.74	115.29	109.90
36	B2	1698	C	O4'-C1'-C2'	-6.74	99.06	105.80
85	A5	1378	C	P-O5'-C5'	6.74	131.69	120.90
85	A5	4950	U	O4'-C1'-N1	6.74	113.59	108.20
85	A5	1107	C	O4'-C1'-N1	6.74	113.59	108.20
85	A5	2236	C	C4'-C3'-O3'	-6.74	95.25	109.40
85	A5	4866	C	C1'-O4'-C4'	-6.74	104.51	109.90
17	AV	67	ASP	CB-CG-OD2	6.74	124.37	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1687	C	C3'-C2'-C1'	6.74	106.89	101.50
85	A5	2602	G	O4'-C1'-N9	6.74	113.59	108.20
85	A5	2879	A	C3'-C2'-C1'	6.74	106.89	101.50
85	A5	4370	G	C5'-C4'-O4'	6.74	117.19	109.10
85	A5	4614	G	O4'-C1'-C2'	6.74	113.67	107.60
36	B2	125	C	O3'-P-O5'	6.74	116.80	104.00
85	A5	1859	C	O4'-C1'-N1	6.74	113.59	108.20
85	A5	2669	C	P-O5'-C5'	6.74	131.68	120.90
36	B2	1028	A	C5'-C4'-C3'	-6.74	105.22	116.00
85	A5	1245	C	N1-C1'-C2'	6.74	122.76	114.00
85	A5	4696	C	C3'-C2'-C1'	6.74	106.89	101.50
1	Az	42	LYS	CA-C-N	-6.73	102.39	117.20
37	BC	60	C	C3'-C2'-C1'	6.73	106.89	101.50
1	Az	76	SER	CA-C-N	-6.73	102.39	117.20
36	B2	1422	G	N9-C1'-C2'	-6.73	104.59	112.00
85	A5	448	G	C1'-O4'-C4'	-6.73	104.51	109.90
85	A5	4380	A	C1'-O4'-C4'	6.73	115.29	109.90
85	A5	1865	G	C4'-C3'-C2'	-6.73	95.87	102.60
85	A5	4459	U	C1'-O4'-C4'	-6.73	104.52	109.90
40	CK	26	SER	C-N-CA	6.73	138.52	121.70
85	A5	3618	C	O4'-C1'-N1	6.73	113.58	108.20
29	AG	157	VAL	CA-C-N	-6.73	102.40	117.20
36	B2	1783	C	C3'-C2'-C1'	6.73	106.88	101.50
44	CM	3	PHE	O-C-N	-6.73	111.94	122.70
49	CQ	91	ARG	CB-CA-C	6.73	123.86	110.40
85	A5	647	G	O4'-C1'-C2'	-6.73	99.07	105.80
85	A5	3639	U	O4'-C1'-N1	6.73	113.58	108.20
85	A5	84	A	O4'-C1'-C2'	-6.73	99.07	105.80
85	A5	1105	C	O4'-C1'-N1	6.73	113.58	108.20
85	A5	1274	A	C5'-C4'-C3'	6.72	126.76	116.00
85	A5	1845	U	O4'-C1'-N1	6.72	113.58	108.20
85	A5	4264	G	O4'-C1'-N9	6.72	113.58	108.20
85	A5	4634	U	N1-C1'-C2'	6.72	122.74	114.00
36	B2	1459	G	O4'-C1'-C2'	6.72	113.65	107.60
85	A5	2638	G	C1'-O4'-C4'	6.72	115.28	109.90
36	B2	622	C	C1'-O4'-C4'	-6.72	104.52	109.90
85	A5	69	A	C3'-C2'-C1'	6.72	106.88	101.50
85	A5	2900	U	O4'-C1'-N1	6.72	113.58	108.20
36	B2	560	A	O4'-C1'-N9	6.72	113.58	108.20
74	CC	305	PRO	CB-CA-C	-6.72	95.20	112.00
85	A5	4593	C	N1-C1'-C2'	6.72	122.73	114.00
85	A5	4718	G	C3'-C2'-C1'	6.72	106.88	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	487	G	O4'-C1'-N9	6.72	113.57	108.20
26	AJ	144	ILE	CB-CA-C	6.72	125.03	111.60
85	A5	169	G	O4'-C1'-N9	6.72	113.57	108.20
85	A5	2767	U	C3'-C2'-C1'	-6.71	96.13	101.50
26	AJ	179	LYS	C-N-CA	6.71	138.48	121.70
85	A5	4408	G	O4'-C1'-N9	6.71	113.57	108.20
85	A5	4910	G	C4'-C3'-O3'	-6.71	95.30	109.40
36	B2	308	G	O4'-C1'-C2'	6.71	113.64	107.60
36	B2	993	G	O4'-C1'-N9	6.71	113.57	108.20
85	A5	1478	C	C1'-O4'-C4'	-6.71	104.53	109.90
85	A5	4684	A	O4'-C1'-C2'	-6.71	99.09	105.80
36	B2	1780	G	O3'-P-O5'	6.71	116.75	104.00
36	B2	729	C	O4'-C1'-C2'	-6.71	99.09	105.80
85	A5	1531	U	O4'-C1'-N1	6.71	113.57	108.20
85	A5	1227	C	P-O3'-C3'	6.71	127.75	119.70
36	B2	1092	G	O4'-C1'-N9	6.71	113.56	108.20
68	Cf	100	ARG	N-CA-CB	6.71	122.67	110.60
81	CE	81	GLU	N-CA-C	6.71	129.10	111.00
85	A5	26	C	O4'-C1'-N1	6.71	113.56	108.20
36	B2	550	C	O3'-P-O5'	-6.70	91.27	104.00
36	B2	1524	G	O4'-C1'-N9	6.70	113.56	108.20
36	B2	1784	G	N9-C1'-C2'	6.70	122.71	114.00
85	A5	2594	C	N1-C1'-C2'	6.70	122.71	114.00
85	A5	4501	U	O4'-C1'-N1	6.70	113.56	108.20
36	B2	551	U	O4'-C1'-C2'	6.70	113.63	107.60
36	B2	1459	G	N9-C1'-C2'	6.70	122.71	114.00
59	CZ	102	ARG	NE-CZ-NH2	-6.70	116.95	120.30
81	CE	93	THR	CA-CB-OG1	6.70	123.07	109.00
85	A5	2569	G	C1'-O4'-C4'	-6.70	104.54	109.90
85	A5	2823	G	O4'-C1'-N9	6.70	113.56	108.20
85	A5	686	A	N9-C1'-C2'	-6.70	104.63	112.00
85	A5	3670	C	N1-C1'-C2'	6.70	122.71	114.00
1	Az	197	SER	CA-C-N	-6.70	102.81	116.20
36	B2	924	G	O4'-C1'-N9	6.70	113.56	108.20
82	CG	56	LYS	O-C-N	6.70	133.41	122.70
85	A5	150	U	N1-C1'-C2'	-6.70	104.64	112.00
85	A5	4433	G	O4'-C1'-N9	6.70	113.56	108.20
86	A7	93	G	O4'-C1'-C2'	6.70	113.63	107.60
36	B2	1173	A	O4'-C1'-N9	6.69	113.56	108.20
85	A5	1101	C	C3'-C2'-C1'	6.69	106.86	101.50
15	AB	155	TYR	CB-CA-C	-6.69	97.02	110.40
85	A5	1748	U	N1-C1'-C2'	-6.69	104.64	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2303	C	C5'-C4'-O4'	6.69	117.13	109.10
85	A5	3628	G	O4'-C1'-N9	6.69	113.55	108.20
32	AW	2	VAL	C-N-CA	-6.69	104.97	121.70
40	CK	111	ASN	CA-CB-CG	6.69	128.12	113.40
38	Cz	27	LYS	O-C-N	-6.69	112.00	122.70
85	A5	1303	A	O4'-C1'-N9	6.69	113.55	108.20
1	Az	122	THR	N-CA-CB	-6.68	97.60	110.30
85	A5	2477	A	O4'-C1'-N9	6.68	113.55	108.20
36	B2	31	U	N1-C1'-C2'	-6.68	104.65	112.00
85	A5	3814	U	N1-C1'-C2'	6.68	122.69	114.00
36	B2	1118	C	C1'-O4'-C4'	6.68	115.25	109.90
85	A5	2443	G	O4'-C1'-C2'	6.68	113.61	107.60
85	A5	4211	C	C3'-C2'-C1'	6.68	106.84	101.50
86	A7	75	G	O4'-C1'-N9	6.68	113.55	108.20
16	AA	53	ARG	NE-CZ-NH1	-6.68	116.96	120.30
36	B2	457	C	O4'-C1'-N1	6.68	113.54	108.20
85	A5	336	A	O4'-C1'-N9	6.68	113.54	108.20
85	A5	391	U	N1-C1'-C2'	6.68	122.68	114.00
85	A5	2250	C	C3'-C2'-C1'	6.68	106.84	101.50
85	A5	2647	A	C3'-C2'-C1'	6.68	106.84	101.50
36	B2	1281	G	O4'-C1'-N9	6.68	113.54	108.20
85	A5	1268	G	P-O3'-C3'	6.68	127.71	119.70
85	A5	1586	G	C3'-C2'-C1'	6.68	106.84	101.50
85	A5	2677	G	N9-C1'-C2'	6.68	122.68	114.00
85	A5	4564	A	C3'-C2'-C1'	6.68	106.84	101.50
26	AJ	91	LYS	N-CA-C	-6.67	92.98	111.00
36	B2	1175	G	C1'-O4'-C4'	-6.67	104.56	109.90
85	A5	185	C	C1'-O4'-C4'	6.67	115.24	109.90
85	A5	1070	G	C1'-O4'-C4'	-6.67	104.56	109.90
85	A5	2392	C	C3'-C2'-C1'	6.67	106.84	101.50
86	A7	120	U	P-O3'-C3'	6.67	127.71	119.70
85	A5	2546	G	O3'-P-O5'	6.67	116.68	104.00
85	A5	2814	C	N1-C1'-C2'	6.67	122.67	114.00
85	A5	4767	C	C5'-C4'-C3'	6.67	126.68	116.00
85	A5	4869	U	O4'-C1'-N1	6.67	113.54	108.20
86	A7	73	U	C1'-O4'-C4'	-6.67	104.56	109.90
85	A5	2397	G	C3'-C2'-C1'	-6.67	96.16	101.50
36	B2	442	C	N1-C1'-C2'	6.67	122.67	114.00
2	Ag	142	VAL	O-C-N	6.67	133.37	122.70
36	B2	1538	C	O4'-C1'-C2'	-6.67	99.13	105.80
85	A5	430	G	C3'-C2'-C1'	-6.67	96.17	101.50
85	A5	3954	A	O4'-C1'-C2'	-6.67	99.13	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3964	U	C1'-O4'-C4'	6.67	115.23	109.90
30	AF	130	ARG	N-CA-C	6.67	129.00	111.00
81	CE	62	MET	CA-CB-CG	6.67	124.63	113.30
85	A5	2458	C	O4'-C1'-C2'	-6.67	99.14	105.80
17	AV	78	ILE	N-CA-CB	-6.66	95.47	110.80
36	B2	314	U	P-O3'-C3'	-6.66	111.70	119.70
36	B2	447	A	C1'-O4'-C4'	6.66	115.23	109.90
36	B2	448	A	C3'-C2'-C1'	-6.66	96.17	101.50
85	A5	4640	C	N1-C1'-C2'	6.66	122.66	114.00
4	AK	89	ILE	CA-CB-CG1	-6.66	98.34	111.00
36	B2	1270	G	N9-C1'-C2'	-6.66	104.67	112.00
85	A5	432	U	C1'-O4'-C4'	-6.66	104.57	109.90
85	A5	3911	C	O4'-C1'-N1	6.66	113.53	108.20
87	A8	17	A	C3'-C2'-C1'	6.66	106.83	101.50
12	AR	121	GLN	C-N-CD	-6.66	105.95	120.60
13	AP	36	LEU	N-CA-C	-6.66	93.02	111.00
28	AC	57	ASP	C-N-CA	-6.66	105.05	121.70
36	B2	857	U	N1-C1'-C2'	6.66	122.66	114.00
85	A5	1363	C	C5'-C4'-O4'	6.66	117.09	109.10
85	A5	2913	C	P-O3'-C3'	6.66	127.69	119.70
85	A5	4137	C	C3'-C2'-C1'	6.66	106.83	101.50
85	A5	5064	G	C1'-O4'-C4'	-6.66	104.57	109.90
85	A5	5065	U	C4'-C3'-C2'	6.66	109.26	102.60
36	B2	827	A	N9-C1'-C2'	6.66	122.66	114.00
36	B2	1644	C	P-O3'-C3'	6.66	127.69	119.70
74	CC	54	VAL	O-C-N	6.66	133.35	122.70
85	A5	4966	A	N9-C1'-C2'	6.66	122.66	114.00
85	A5	430	G	O4'-C1'-C2'	6.66	113.59	107.60
36	B2	522	A	P-O5'-C5'	6.66	131.55	120.90
85	A5	1486	C	C3'-C2'-C1'	6.66	106.83	101.50
85	A5	1919	G	C3'-C2'-C1'	6.66	106.83	101.50
36	B2	1171	G	O4'-C1'-C2'	-6.65	99.15	105.80
36	B2	1258	A	O4'-C1'-N9	6.65	113.52	108.20
68	Cf	65	ASN	N-CA-CB	6.65	122.58	110.60
85	A5	122	U	O4'-C1'-N1	6.65	113.52	108.20
85	A5	2130	G	O4'-C1'-N9	6.65	113.52	108.20
85	A5	3978	C	P-O3'-C3'	6.65	127.68	119.70
85	A5	1212	G	C1'-O4'-C4'	-6.65	104.58	109.90
85	A5	3594	C	C1'-O4'-C4'	-6.65	104.58	109.90
85	A5	4919	G	O4'-C1'-N9	6.65	113.52	108.20
36	B2	1867	U	P-O3'-C3'	6.65	127.68	119.70
68	Cf	59	THR	CA-CB-OG1	6.65	122.97	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1709	C	C4'-C3'-O3'	6.65	126.30	113.00
85	A5	3609	G	O4'-C1'-N9	6.65	113.52	108.20
85	A5	4236	G	C1'-O4'-C4'	-6.65	104.58	109.90
37	BC	54	U	P-O3'-C3'	6.65	127.68	119.70
85	A5	1239	C	O4'-C1'-C2'	-6.65	99.15	105.80
36	B2	591	U	P-O3'-C3'	6.65	127.68	119.70
85	A5	1635	C	O4'-C1'-N1	6.65	113.52	108.20
85	A5	2736	G	C1'-O4'-C4'	-6.65	104.58	109.90
36	B2	328	U	O4'-C1'-N1	6.65	113.52	108.20
36	B2	1255	G	P-O3'-C3'	-6.64	111.73	119.70
36	B2	1678	A	C3'-C2'-C1'	-6.64	96.18	101.50
52	CS	72	PRO	C-N-CA	6.64	138.31	121.70
81	CE	87	LYS	C-N-CA	6.64	138.31	121.70
85	A5	218	A	C3'-C2'-C1'	6.64	106.81	101.50
85	A5	278	G	O4'-C1'-N9	-6.64	102.89	108.20
85	A5	911	U	O4'-C1'-N1	6.64	113.52	108.20
85	A5	2703	G	O4'-C1'-N9	6.64	113.52	108.20
85	A5	5057	C	O4'-C1'-N1	6.64	113.52	108.20
47	CI	4	ARG	N-CA-C	6.64	128.94	111.00
64	CF	183	GLY	N-CA-C	-6.64	96.49	113.10
36	B2	182	C	O4'-C1'-C2'	-6.64	99.16	105.80
74	CC	108	TRP	CA-C-N	6.64	131.81	117.20
85	A5	1285	U	C1'-O4'-C4'	-6.64	104.59	109.90
85	A5	2853	C	N1-C1'-C2'	6.64	122.63	114.00
85	A5	4997	G	C1'-O4'-C4'	-6.64	104.59	109.90
86	A7	61	G	P-O3'-C3'	-6.64	111.73	119.70
8	AS	16	LEU	CB-CG-CD2	-6.64	99.72	111.00
17	AV	78	ILE	C-N-CA	-6.64	105.11	121.70
36	B2	626	G	O4'-C1'-N9	-6.64	102.89	108.20
85	A5	1603	C	O4'-C1'-N1	6.64	113.51	108.20
85	A5	2416	G	C1'-O4'-C4'	6.64	115.21	109.90
64	CF	115	ARG	CB-CA-C	-6.63	97.13	110.40
85	A5	96	U	O4'-C1'-N1	6.63	113.51	108.20
85	A5	187	U	O4'-C1'-N1	6.63	113.51	108.20
85	A5	3921	U	N1-C1'-C2'	6.63	122.62	114.00
85	A5	4528	G	C3'-C2'-C1'	6.63	106.81	101.50
85	A5	4995	U	C3'-C2'-C1'	6.63	106.81	101.50
29	AG	219	GLU	O-C-N	-6.63	112.09	122.70
80	CH	50	LYS	C-N-CA	-6.63	105.12	121.70
80	CH	129	ARG	C-N-CD	-6.63	106.01	120.60
85	A5	4738	C	N1-C1'-C2'	6.63	122.62	114.00
85	A5	1748	U	O4'-C1'-N1	6.63	113.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	281	C	O3'-P-O5'	6.63	116.60	104.00
36	B2	1247	C	O4'-C1'-C2'	-6.63	99.17	105.80
85	A5	733	A	C1'-O4'-C4'	-6.63	104.60	109.90
85	A5	4737	G	O4'-C1'-N9	6.63	113.50	108.20
87	A8	77	A	O4'-C1'-C2'	-6.63	99.17	105.80
85	A5	1868	A	N9-C1'-C2'	-6.63	104.71	112.00
85	A5	2315	G	O4'-C1'-N9	6.63	113.50	108.20
36	B2	94	G	C1'-O4'-C4'	-6.62	104.60	109.90
36	B2	1042	A	O4'-C1'-N9	6.62	113.50	108.20
85	A5	73	A	O4'-C1'-N9	6.62	113.50	108.20
85	A5	652	G	C1'-O4'-C4'	-6.62	104.60	109.90
85	A5	4923	C	O4'-C1'-N1	6.62	113.50	108.20
87	A8	23	C	O4'-C1'-C2'	-6.62	99.17	105.80
36	B2	144	U	C1'-O4'-C4'	-6.62	104.60	109.90
42	CL	46	ILE	CA-C-O	-6.62	106.19	120.10
85	A5	2784	C	C1'-O4'-C4'	-6.62	104.60	109.90
36	B2	1284	A	O4'-C1'-C2'	-6.62	99.18	105.80
39	Cq	94	ASP	N-CA-C	6.62	128.88	111.00
36	B2	1526	G	O4'-C1'-N9	6.62	113.50	108.20
85	A5	3667	C	O4'-C1'-N1	6.62	113.50	108.20
36	B2	1494	U	C2'-C3'-O3'	6.62	124.29	113.70
54	CP	93	HIS	CB-CA-C	6.62	123.64	110.40
81	CE	140	LEU	O-C-N	-6.62	112.11	122.70
85	A5	1187	G	O4'-C1'-C2'	-6.62	99.18	105.80
85	A5	2500	U	O4'-C1'-N1	6.62	113.49	108.20
85	A5	2889	G	C1'-O4'-C4'	-6.62	104.61	109.90
36	B2	453	C	C3'-C2'-C1'	6.62	106.79	101.50
52	CS	89	GLY	C-N-CA	-6.62	105.16	121.70
85	A5	1935	C	O4'-C1'-C2'	-6.62	99.19	105.80
85	A5	3967	G	N9-C1'-C2'	6.62	122.60	114.00
87	A8	108	A	O4'-C1'-N9	6.62	113.49	108.20
20	Aa	63	VAL	CB-CA-C	6.61	123.97	111.40
36	B2	62	G	C1'-O4'-C4'	-6.61	104.61	109.90
36	B2	1825	A	C3'-C2'-C1'	-6.61	96.21	101.50
85	A5	310	G	O4'-C1'-N9	6.61	113.49	108.20
85	A5	2536	A	N9-C1'-C2'	-6.61	104.72	112.00
36	B2	70	G	O3'-P-O5'	-6.61	91.44	104.00
64	CF	32	ARG	CB-CA-C	-6.61	97.17	110.40
36	B2	1158	G	N9-C1'-C2'	-6.61	104.73	112.00
36	B2	1288	U	O4'-C1'-N1	6.61	113.49	108.20
85	A5	1930	U	O4'-C1'-C2'	-6.61	99.19	105.80
36	B2	316	G	P-O5'-C5'	6.61	131.47	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1530	U	O4'-C1'-N1	6.61	113.49	108.20
58	CW	71	ARG	N-CA-C	6.61	128.84	111.00
85	A5	133	C	N1-C1'-C2'	6.61	122.59	114.00
85	A5	1544	G	O4'-C1'-N9	6.61	113.49	108.20
36	B2	191	A	O3'-P-O5'	6.61	116.55	104.00
40	CK	3	PRO	N-CA-C	6.61	129.27	112.10
57	CY	43	ASN	N-CA-C	-6.61	93.17	111.00
85	A5	59	A	O4'-C1'-N9	6.61	113.48	108.20
36	B2	563	G	O4'-C1'-C2'	-6.60	99.20	105.80
85	A5	1494	U	P-O3'-C3'	-6.60	111.78	119.70
85	A5	4217	G	N9-C1'-C2'	6.60	122.59	114.00
85	A5	4175	G	C1'-O4'-C4'	-6.60	104.62	109.90
36	B2	632	C	C3'-C2'-C1'	6.60	106.78	101.50
78	Co	3	ASN	CA-C-N	6.60	131.72	117.20
85	A5	111	C	P-O3'-C3'	6.60	127.62	119.70
85	A5	926	G	C5'-C4'-O4'	6.60	117.02	109.10
85	A5	2436	U	O4'-C1'-N1	6.60	113.48	108.20
85	A5	2574	G	O4'-C1'-C2'	-6.60	99.20	105.80
85	A5	4964	C	P-O3'-C3'	6.60	127.62	119.70
85	A5	732	A	P-O5'-C5'	6.60	131.46	120.90
36	B2	1255	G	N9-C1'-C2'	6.60	122.58	114.00
45	Ca	95	THR	O-C-N	-6.60	111.99	123.20
85	A5	1108	C	O4'-C1'-N1	6.60	113.48	108.20
85	A5	4039	G	C3'-C2'-C1'	6.60	106.78	101.50
36	B2	298	G	N9-C1'-C2'	-6.59	104.75	112.00
85	A5	1396	G	O4'-C1'-N9	6.59	113.48	108.20
85	A5	1468	C	C3'-C2'-C1'	6.59	106.78	101.50
85	A5	2896	G	O4'-C1'-C2'	6.59	113.53	107.60
8	AS	87	GLN	CA-C-N	6.59	131.70	117.20
85	A5	1404	G	N9-C1'-C2'	-6.59	104.75	112.00
85	A5	1687	U	O4'-C1'-N1	6.59	113.47	108.20
36	B2	1781	A	P-O5'-C5'	6.59	131.45	120.90
85	A5	929	A	C1'-O4'-C4'	-6.59	104.63	109.90
85	A5	1453	G	O4'-C1'-N9	6.59	113.47	108.20
4	AK	42	ASN	CA-C-N	6.59	131.70	117.20
36	B2	164	A	N9-C1'-C2'	6.59	122.57	114.00
36	B2	283	G	C1'-O4'-C4'	-6.59	104.63	109.90
36	B2	1206	G	C1'-O4'-C4'	-6.59	104.63	109.90
36	B2	1865	C	P-O3'-C3'	-6.59	111.79	119.70
42	CL	166	ALA	N-CA-CB	6.59	119.33	110.10
61	Ch	78	TYR	C-N-CA	6.59	138.18	121.70
85	A5	3964	U	O4'-C1'-N1	6.59	113.47	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	811	A	O4'-C1'-N9	6.59	113.47	108.20
5	AO	43	HIS	N-CA-C	6.59	128.78	111.00
85	A5	2822	G	C1'-O4'-C4'	6.59	115.17	109.90
85	A5	747	A	O4'-C1'-N9	6.58	113.47	108.20
85	A5	1523	A	N9-C1'-C2'	6.58	122.56	114.00
36	B2	667	U	C1'-O4'-C4'	-6.58	104.63	109.90
36	B2	1391	C	O4'-C1'-N1	6.58	113.47	108.20
85	A5	13	U	C1'-O4'-C4'	6.58	115.17	109.90
85	A5	4435	U	O4'-C1'-N1	6.58	113.47	108.20
86	A7	112	U	N1-C1'-C2'	-6.58	104.76	112.00
36	B2	1389	C	P-O5'-C5'	6.58	131.43	120.90
36	B2	1792	G	O4'-C1'-N9	6.58	113.47	108.20
85	A5	2550	G	C3'-C2'-C1'	-6.58	96.23	101.50
85	A5	3645	U	C3'-C2'-C1'	6.58	106.77	101.50
85	A5	4871	C	C2'-C3'-O3'	6.58	124.23	113.70
36	B2	1546	G	O4'-C1'-N9	6.58	113.46	108.20
37	BC	57	A	O4'-C1'-N9	-6.58	102.94	108.20
36	B2	211	G	P-O5'-C5'	6.58	131.43	120.90
85	A5	3650	C	N1-C1'-C2'	6.58	122.55	114.00
17	AV	64	GLU	N-CA-C	6.58	128.76	111.00
36	B2	1837	G	O4'-C1'-N9	6.58	113.46	108.20
36	B2	411	G	O4'-C1'-N9	6.58	113.46	108.20
52	CS	73	LEU	CA-C-N	6.58	131.67	117.20
85	A5	1199	G	O4'-C1'-N9	6.58	113.46	108.20
85	A5	1412	G	N9-C1'-C2'	-6.58	104.77	112.00
85	A5	1723	A	C1'-O4'-C4'	-6.58	104.64	109.90
85	A5	2736	G	C3'-C2'-C1'	-6.58	96.24	101.50
85	A5	4565	C	P-O5'-C5'	6.58	131.42	120.90
85	A5	5056	A	N9-C1'-C2'	6.58	122.55	114.00
1	Az	122	THR	CB-CA-C	6.57	129.35	111.60
36	B2	1661	A	O4'-C1'-N9	6.57	113.46	108.20
85	A5	383	A	C1'-O4'-C4'	-6.57	104.64	109.90
85	A5	474	C	O4'-C1'-N1	6.57	113.46	108.20
85	A5	1799	G	O4'-C1'-N9	6.57	113.46	108.20
2	Ag	160	SER	N-CA-C	6.57	128.74	111.00
36	B2	438	G	N9-C1'-C2'	-6.57	104.77	112.00
36	B2	1352	G	C3'-C2'-C1'	-6.57	96.24	101.50
36	B2	1426	U	O4'-C1'-N1	6.57	113.46	108.20
85	A5	661	C	O4'-C1'-N1	6.57	113.46	108.20
85	A5	2087	C	N1-C1'-C2'	6.57	122.54	114.00
1	Az	745	TYR	CA-CB-CG	-6.57	100.92	113.40
1	Az	801	ARG	NE-CZ-NH2	-6.57	117.02	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	935	A	O4'-C1'-N9	6.57	113.45	108.20
85	A5	4565	C	C3'-C2'-C1'	6.57	106.75	101.50
36	B2	1206	G	O4'-C1'-N9	6.57	113.45	108.20
36	B2	1357	A	O4'-C1'-N9	6.57	113.45	108.20
36	B2	1700	C	O4'-C1'-C2'	-6.57	99.23	105.80
36	B2	1822	A	C4'-C3'-O3'	-6.57	95.61	109.40
85	A5	2503	G	P-O3'-C3'	6.57	127.58	119.70
85	A5	3593	C	C3'-C2'-C1'	6.57	106.75	101.50
85	A5	3624	A	O4'-C1'-N9	6.57	113.45	108.20
85	A5	3814	U	C1'-O4'-C4'	-6.57	104.65	109.90
85	A5	4127	A	O3'-P-O5'	-6.57	91.53	104.00
36	B2	1555	U	O4'-C4'-C3'	-6.56	97.44	104.00
85	A5	503	C	N1-C1'-C2'	6.56	122.53	114.00
85	A5	3974	G	C5'-C4'-C3'	6.56	126.50	116.00
28	AC	232	THR	C-N-CA	6.56	138.11	121.70
85	A5	1328	G	C1'-O4'-C4'	-6.56	104.65	109.90
85	A5	421	C	C3'-C2'-C1'	6.56	106.75	101.50
85	A5	2423	A	O4'-C1'-C2'	-6.56	99.24	105.80
34	AQ	18	THR	N-CA-C	-6.56	93.29	111.00
85	A5	2885	A	O4'-C1'-N9	6.56	113.45	108.20
36	B2	158	A	O4'-C1'-N9	6.56	113.44	108.20
36	B2	1785	C	C1'-O4'-C4'	6.56	115.15	109.90
85	A5	2300	A	P-O3'-C3'	6.56	127.57	119.70
85	A5	2415	U	O3'-P-O5'	6.56	116.46	104.00
87	A8	38	U	C1'-O4'-C4'	6.56	115.15	109.90
36	B2	1289	U	P-O3'-C3'	6.55	127.57	119.70
85	A5	704	C	O4'-C1'-N1	6.55	113.44	108.20
85	A5	2078	C	C3'-C2'-C1'	6.55	106.74	101.50
36	B2	40	A	C1'-O4'-C4'	6.55	115.14	109.90
36	B2	182	C	N1-C1'-C2'	6.55	122.52	114.00
36	B2	621	C	C3'-C2'-C1'	6.55	106.74	101.50
36	B2	961	G	O4'-C1'-N9	6.55	113.44	108.20
36	B2	1465	A	C1'-O4'-C4'	6.55	115.14	109.90
85	A5	2112	G	N9-C1'-C2'	6.55	122.52	114.00
85	A5	2472	A	O4'-C1'-N9	6.55	113.44	108.20
85	A5	4488	A	O4'-C1'-C2'	6.55	113.50	107.60
85	A5	4560	C	C4'-C3'-O3'	-6.55	95.64	109.40
87	A8	118	C	C1'-O4'-C4'	-6.55	104.66	109.90
36	B2	496	C	O4'-C1'-C2'	-6.55	99.25	105.80
36	B2	844	U	P-O3'-C3'	-6.55	111.84	119.70
85	A5	1368	A	C1'-O4'-C4'	-6.55	104.66	109.90
85	A5	2948	C	P-O5'-C5'	6.55	131.38	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	53	C	O4'-C1'-N1	6.55	113.44	108.20
36	B2	987	A	P-O5'-C5'	-6.55	110.42	120.90
85	A5	19	G	C1'-O4'-C4'	-6.55	104.66	109.90
85	A5	243	A	O4'-C1'-C2'	6.55	113.49	107.60
85	A5	1573	G	N9-C1'-C2'	6.55	122.51	114.00
85	A5	2246	C	O4'-C1'-C2'	-6.55	99.25	105.80
36	B2	564	A	P-O3'-C3'	6.54	127.55	119.70
36	B2	1139	C	O4'-C1'-N1	6.54	113.44	108.20
85	A5	1480	C	C3'-C2'-C1'	6.54	106.73	101.50
26	AJ	101	LYS	N-CA-C	6.54	128.66	111.00
85	A5	1661	C	N1-C1'-C2'	6.54	122.50	114.00
85	A5	3752	C	C1'-O4'-C4'	-6.54	104.67	109.90
36	B2	1822	A	O3'-P-O5'	-6.54	91.58	104.00
85	A5	2541	G	O4'-C1'-N9	6.54	113.43	108.20
86	A7	97	G	O4'-C1'-N9	6.54	113.43	108.20
36	B2	750	C	C1'-O4'-C4'	-6.54	104.67	109.90
36	B2	1109	C	O4'-C1'-C2'	6.54	113.48	107.60
36	B2	1351	G	O4'-C1'-N9	6.54	113.43	108.20
60	Cr	36	ASN	N-CA-C	6.54	128.65	111.00
85	A5	1648	C	O4'-C1'-C2'	-6.54	99.26	105.80
85	A5	1933	G	N9-C1'-C2'	6.54	122.50	114.00
85	A5	4859	C	O4'-C1'-N1	6.54	113.43	108.20
33	AI	8	TRP	CB-CG-CD1	6.54	135.50	127.00
81	CE	36	LYS	CB-CA-C	6.54	123.47	110.40
85	A5	4719	G	O4'-C1'-C2'	6.54	113.48	107.60
86	A7	12	U	O4'-C1'-C2'	-6.54	99.26	105.80
36	B2	1796	G	O4'-C1'-N9	6.54	113.43	108.20
85	A5	2090	U	O5'-C5'-C4'	6.54	124.12	111.70
85	A5	4209	G	N9-C1'-C2'	-6.54	104.81	112.00
36	B2	352	U	C5'-C4'-C3'	-6.53	105.55	116.00
36	B2	1086	G	P-O3'-C3'	6.53	127.54	119.70
85	A5	1367	C	P-O3'-C3'	-6.53	111.86	119.70
85	A5	2650	G	C1'-O4'-C4'	-6.53	104.67	109.90
85	A5	4505	C	N1-C1'-C2'	6.53	122.49	114.00
74	CC	267	TRP	N-CA-C	-6.53	93.36	111.00
85	A5	1640	C	O4'-C1'-C2'	-6.53	99.27	105.80
85	A5	4240	G	O4'-C1'-N9	6.53	113.42	108.20
36	B2	1867	U	O4'-C1'-C2'	-6.53	99.27	105.80
85	A5	1645	C	N1-C1'-C2'	6.53	122.49	114.00
85	A5	4977	A	P-O3'-C3'	6.53	127.53	119.70
3	AU	70	CYS	O-C-N	-6.53	112.10	123.20
85	A5	2834	C	O4'-C1'-N1	6.53	113.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	5039	U	O4'-C1'-N1	6.53	113.42	108.20
87	A8	35	C	O4'-C1'-N1	6.53	113.42	108.20
36	B2	401	A	O4'-C1'-C2'	-6.52	99.28	105.80
36	B2	548	C	N1-C1'-C2'	6.52	122.48	114.00
36	B2	1661	A	C3'-C2'-C1'	-6.52	96.28	101.50
85	A5	17	A	P-O3'-C3'	6.52	127.53	119.70
85	A5	2253	A	C5'-C4'-O4'	6.52	116.93	109.10
85	A5	4375	C	N1-C1'-C2'	6.52	122.48	114.00
85	A5	4614	G	O4'-C1'-N9	6.52	113.42	108.20
85	A5	4931	G	P-O3'-C3'	6.52	127.53	119.70
85	A5	2354	G	O4'-C1'-N9	6.52	113.42	108.20
36	B2	431	G	O4'-C1'-N9	6.52	113.42	108.20
85	A5	2816	G	N9-C1'-C2'	6.52	122.48	114.00
85	A5	3663	A	P-O5'-C5'	6.52	131.33	120.90
85	A5	4867	G	C1'-O4'-C4'	-6.52	104.68	109.90
85	A5	162	A	O4'-C1'-N9	6.52	113.41	108.20
85	A5	3663	A	C3'-C2'-C1'	6.52	106.71	101.50
1	Az	154	VAL	N-CA-C	-6.52	93.41	111.00
85	A5	4168	G	C1'-O4'-C4'	-6.52	104.69	109.90
36	B2	191	A	O4'-C1'-C2'	-6.51	99.29	105.80
36	B2	214	U	O4'-C1'-N1	6.51	113.41	108.20
36	B2	295	C	O4'-C1'-C2'	-6.51	99.28	105.80
36	B2	695	C	O4'-C1'-C2'	-6.51	99.29	105.80
36	B2	818	A	O4'-C1'-N9	6.51	113.41	108.20
59	CZ	54	THR	CB-CA-C	-6.51	94.02	111.60
85	A5	3851	U	C1'-O4'-C4'	-6.51	104.69	109.90
36	B2	1661	A	N9-C1'-C2'	6.51	122.47	114.00
85	A5	113	A	P-O5'-C5'	-6.51	110.48	120.90
85	A5	1681	G	C3'-C2'-C1'	-6.51	96.29	101.50
87	A8	139	G	C1'-O4'-C4'	-6.51	104.69	109.90
36	B2	1542	C	O5'-C5'-C4'	6.51	124.07	111.70
36	B2	1669	G	O5'-P-OP2	6.51	118.51	110.70
85	A5	2805	C	O4'-C1'-N1	6.51	113.41	108.20
87	A8	19	C	O3'-P-O5'	-6.51	91.63	104.00
52	CS	81	TRP	CA-C-O	-6.51	106.43	120.10
85	A5	2783	A	C3'-C2'-C1'	6.51	106.71	101.50
36	B2	1506	A	P-O3'-C3'	6.51	127.51	119.70
81	CE	59	ARG	CA-C-O	-6.51	106.44	120.10
85	A5	4682	U	O4'-C1'-N1	6.51	113.41	108.20
2	Ag	274	VAL	CA-C-N	6.50	131.51	117.20
4	AK	42	ASN	CA-C-O	-6.50	106.44	120.10
74	CC	34	PRO	CA-C-N	6.50	131.51	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4054	C	O4'-C1'-C2'	-6.50	99.30	105.80
85	A5	4321	U	C3'-C2'-C1'	6.50	106.70	101.50
36	B2	1419	C	C3'-C2'-C1'	6.50	106.70	101.50
85	A5	1474	C	C1'-O4'-C4'	-6.50	104.70	109.90
85	A5	4586	G	C3'-C2'-C1'	-6.50	96.30	101.50
36	B2	732	U	C1'-O4'-C4'	-6.50	104.70	109.90
36	B2	1346	U	O4'-C1'-N1	6.50	113.40	108.20
85	A5	2910	G	N9-C1'-C2'	-6.50	104.85	112.00
6	AX	91	LEU	N-CA-C	-6.50	93.45	111.00
36	B2	560	A	C3'-C2'-C1'	-6.50	96.30	101.50
36	B2	1148	A	O4'-C1'-C2'	6.50	113.45	107.60
37	BC	54	U	O4'-C1'-N1	6.50	113.40	108.20
84	Cu	44	SER	O-C-N	-6.50	112.30	122.70
85	A5	4414	A	O4'-C1'-C2'	-6.50	99.30	105.80
36	B2	966	U	O4'-C1'-N1	6.50	113.40	108.20
36	B2	886	A	C3'-C2'-C1'	6.49	106.69	101.50
67	Ce	108	ARG	CG-CD-NE	-6.49	98.16	111.80
81	CE	116	TYR	N-CA-CB	6.49	122.29	110.60
85	A5	4487	A	C3'-C2'-C1'	6.49	106.69	101.50
36	B2	208	G	O4'-C1'-N9	6.49	113.39	108.20
36	B2	1043	G	C3'-C2'-C1'	6.49	106.69	101.50
60	Cr	37	SER	CA-C-O	-6.49	106.47	120.10
36	B2	587	A	P-O3'-C3'	-6.49	111.91	119.70
85	A5	168	C	O4'-C1'-C2'	-6.49	99.31	105.80
85	A5	4629	U	N1-C1'-C2'	-6.49	104.86	112.00
17	AV	81	LYS	O-C-N	-6.49	112.32	122.70
36	B2	294	U	C3'-C2'-C1'	6.49	106.69	101.50
36	B2	350	C	C3'-C2'-C1'	6.49	106.69	101.50
36	B2	907	G	C1'-O4'-C4'	-6.49	104.71	109.90
36	B2	1210	G	C3'-C2'-C1'	-6.49	96.31	101.50
85	A5	174	C	C3'-C2'-C1'	6.49	106.69	101.50
85	A5	982	U	O4'-C1'-C2'	-6.49	99.31	105.80
36	B2	291	G	N9-C1'-C2'	6.49	122.43	114.00
37	BC	39	C	O4'-C1'-N1	6.49	113.39	108.20
1	Az	269	ALA	CA-C-N	6.49	131.47	117.20
36	B2	551	U	C1'-O4'-C4'	-6.49	104.71	109.90
85	A5	1218	G	O4'-C1'-N9	6.49	113.39	108.20
85	A5	4176	C	C1'-O4'-C4'	-6.49	104.71	109.90
86	A7	47	G	O4'-C1'-N9	6.49	113.39	108.20
36	B2	988	C	C3'-C2'-C1'	6.48	106.69	101.50
85	A5	1912	G	C1'-O4'-C4'	-6.48	104.71	109.90
36	B2	841	G	C2'-C3'-O3'	-6.48	95.24	109.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1609	C	O4'-C1'-N1	6.48	113.39	108.20
52	CS	72	PRO	O-C-N	-6.48	112.33	122.70
85	A5	444	G	O3'-P-O5'	-6.48	91.68	104.00
85	A5	1264	C	O4'-C1'-N1	6.48	113.39	108.20
85	A5	1960	A	C1'-O4'-C4'	6.48	115.09	109.90
85	A5	4279	A	C3'-C2'-C1'	6.48	106.69	101.50
8	AS	92	ASP	CB-CG-OD2	-6.48	112.47	118.30
36	B2	1373	C	O4'-C1'-C2'	-6.48	99.32	105.80
74	CC	335	MET	C-N-CA	6.48	137.90	121.70
85	A5	245	C	N1-C1'-C2'	-6.48	104.87	112.00
85	A5	951	G	C1'-O4'-C4'	-6.48	104.72	109.90
36	B2	1651	A	C1'-O4'-C4'	6.48	115.08	109.90
85	A5	177	G	O4'-C1'-N9	6.48	113.38	108.20
85	A5	4870	G	OP1-P-O3'	-6.48	90.95	105.20
36	B2	1364	U	P-O3'-C3'	-6.48	111.93	119.70
62	Cb	54	LEU	N-CA-CB	6.48	123.35	110.40
85	A5	1776	A	O4'-C1'-N9	6.48	113.38	108.20
85	A5	5055	G	C1'-O4'-C4'	-6.48	104.72	109.90
28	AC	172	ASN	N-CA-C	6.48	128.48	111.00
35	Ah	179	MET	CA-C-N	6.48	129.15	116.20
38	Cz	210	MET	C-N-CA	-6.48	108.70	122.30
36	B2	951	C	N1-C1'-C2'	6.47	122.42	114.00
36	B2	1206	G	N9-C1'-C2'	6.47	122.42	114.00
82	CG	105	GLU	CA-C-N	-6.47	102.96	117.20
85	A5	356	G	C1'-O4'-C4'	-6.47	104.72	109.90
85	A5	1735	U	O4'-C1'-N1	6.47	113.38	108.20
85	A5	1973	G	O4'-C1'-N9	6.47	113.38	108.20
86	A7	118	C	P-O3'-C3'	6.47	127.47	119.70
87	A8	89	U	P-O3'-C3'	6.47	127.47	119.70
87	A8	154	G	P-O3'-C3'	6.47	127.47	119.70
4	AK	46	MET	N-CA-CB	6.47	122.25	110.60
36	B2	193	C	P-O5'-C5'	6.47	131.25	120.90
40	CK	129	ILE	O-C-N	-6.47	112.34	122.70
85	A5	261	G	O4'-C1'-N9	6.47	113.38	108.20
85	A5	1821	G	C3'-C2'-C1'	-6.47	96.32	101.50
85	A5	2531	C	C1'-O4'-C4'	6.47	115.08	109.90
19	AZ	107	VAL	CA-CB-CG2	6.47	120.60	110.90
37	BC	21	G	C1'-O4'-C4'	-6.47	104.72	109.90
42	CL	165	LYS	CB-CA-C	-6.47	97.46	110.40
85	A5	40	G	N9-C1'-C2'	6.47	122.41	114.00
85	A5	1369	C	C5'-C4'-C3'	6.47	126.35	116.00
85	A5	2866	C	O4'-C1'-N1	6.47	113.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3784	A	C1'-O4'-C4'	6.47	115.08	109.90
15	AB	77	ASP	N-CA-C	6.47	128.46	111.00
36	B2	544	G	C1'-O4'-C4'	6.47	115.08	109.90
36	B2	695	C	O3'-P-O5'	6.47	116.29	104.00
36	B2	400	C	O4'-C1'-C2'	-6.47	99.33	105.80
36	B2	691	G	C3'-C2'-C1'	-6.47	96.33	101.50
81	CE	87	LYS	CA-C-N	6.47	131.43	117.20
85	A5	430	G	P-O3'-C3'	6.47	127.46	119.70
85	A5	1475	G	O4'-C1'-N9	6.47	113.37	108.20
85	A5	2898	G	C1'-O4'-C4'	-6.47	104.73	109.90
85	A5	4054	C	C3'-C2'-C1'	6.47	106.67	101.50
36	B2	70	G	N9-C1'-C2'	-6.46	104.89	112.00
36	B2	1380	C	N1-C1'-C2'	6.46	122.40	114.00
59	CZ	35	ASP	CA-C-O	-6.46	106.53	120.10
81	CE	97	GLY	N-CA-C	6.46	129.26	113.10
85	A5	2345	G	P-O3'-C3'	6.46	127.46	119.70
85	A5	4160	C	C3'-C2'-C1'	6.46	106.67	101.50
36	B2	1751	C	C1'-O4'-C4'	-6.46	104.73	109.90
85	A5	167	C	C1'-O4'-C4'	-6.46	104.73	109.90
85	A5	631	G	P-O3'-C3'	6.46	127.46	119.70
85	A5	700	G	O4'-C1'-C2'	6.46	113.42	107.60
85	A5	722	G	P-O3'-C3'	-6.46	111.94	119.70
85	A5	3667	C	O4'-C1'-C2'	-6.46	99.34	105.80
36	B2	1075	C	N1-C1'-C2'	6.46	122.40	114.00
36	B2	1343	U	C3'-C2'-C1'	6.46	106.67	101.50
85	A5	1318	C	O4'-C1'-N1	6.46	113.37	108.20
36	B2	841	G	C5'-C4'-O4'	6.46	116.85	109.10
85	A5	1421	G	O4'-C1'-N9	6.46	113.37	108.20
85	A5	11	G	C1'-O4'-C4'	-6.46	104.73	109.90
85	A5	105	A	C1'-O4'-C4'	-6.46	104.73	109.90
85	A5	2258	C	O4'-C1'-C2'	6.46	113.41	107.60
85	A5	2305	U	O4'-C1'-N1	6.46	113.37	108.20
85	A5	4525	C	O4'-C1'-N1	6.46	113.37	108.20
15	AB	233	GLY	CA-C-O	-6.46	108.98	120.60
85	A5	2526	C	C1'-O4'-C4'	6.46	115.06	109.90
27	AE	263	GLY	CA-C-O	-6.46	108.98	120.60
36	B2	533	A	C2'-C3'-O3'	6.46	124.03	113.70
36	B2	963	A	C3'-C2'-C1'	-6.46	96.34	101.50
85	A5	2809	G	C1'-O4'-C4'	-6.46	104.74	109.90
85	A5	4206	C	C1'-O4'-C4'	-6.46	104.74	109.90
85	A5	4462	C	P-O3'-C3'	6.46	127.45	119.70
85	A5	4887	C	C1'-O4'-C4'	-6.46	104.74	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	286	U	P-O3'-C3'	6.45	127.44	119.70
85	A5	379	G	O4'-C1'-N9	6.45	113.36	108.20
85	A5	410	A	N9-C1'-C2'	6.45	122.39	114.00
85	A5	1273	G	P-O3'-C3'	6.45	127.44	119.70
85	A5	4917	C	O4'-C1'-N1	6.45	113.36	108.20
33	AI	207	GLY	CA-C-O	-6.45	108.99	120.60
64	CF	23	ARG	N-CA-CB	-6.45	98.99	110.60
85	A5	74	G	O4'-C1'-N9	6.45	113.36	108.20
85	A5	4897	G	O4'-C1'-N9	6.45	113.36	108.20
74	CC	338	ASN	N-CA-C	-6.45	93.58	111.00
85	A5	318	A	C5'-C4'-O4'	6.45	116.84	109.10
85	A5	1341	U	O4'-C1'-C2'	-6.45	99.35	105.80
85	A5	1914	C	N1-C1'-C2'	6.45	122.39	114.00
85	A5	1995	G	C3'-C2'-C1'	6.45	106.66	101.50
85	A5	2771	G	C4'-C3'-C2'	-6.45	96.15	102.60
85	A5	3863	C	C3'-C2'-C1'	6.45	106.66	101.50
85	A5	3887	C	C1'-O4'-C4'	-6.45	104.74	109.90
85	A5	4169	G	C1'-O4'-C4'	-6.45	104.74	109.90
82	CG	266	GLY	CA-C-O	-6.45	108.99	120.60
19	AZ	115	GLY	CA-C-O	-6.45	109.00	120.60
37	BC	26	C	C3'-C2'-C1'	6.45	106.66	101.50
85	A5	4058	U	C1'-O4'-C4'	6.45	115.06	109.90
36	B2	1162	C	O4'-C1'-N1	6.45	113.36	108.20
36	B2	1381	G	C3'-C2'-C1'	-6.45	96.34	101.50
85	A5	1594	C	C3'-C2'-C1'	6.45	106.66	101.50
85	A5	2463	G	N9-C1'-C2'	6.45	122.38	114.00
85	A5	2476	G	O4'-C1'-N9	6.45	113.36	108.20
85	A5	3710	G	N9-C1'-C2'	6.45	122.38	114.00
85	A5	15	A	C3'-C2'-C1'	-6.44	96.34	101.50
85	A5	464	G	C1'-O4'-C4'	-6.44	104.75	109.90
86	A7	110	G	O4'-C1'-N9	6.44	113.36	108.20
8	AS	49	ASP	O-C-N	-6.44	112.39	122.70
18	AY	128	GLY	CA-C-O	-6.44	109.00	120.60
36	B2	10	G	P-O3'-C3'	-6.44	111.97	119.70
36	B2	79	A	O5'-C5'-C4'	6.44	123.94	111.70
60	Cr	81	THR	C-N-CA	-6.44	105.59	121.70
85	A5	904	C	O4'-C1'-N1	6.44	113.35	108.20
85	A5	2760	G	O3'-P-O5'	6.44	116.24	104.00
85	A5	4545	G	C5'-C4'-O4'	-6.44	101.37	109.10
12	AR	99	ASP	C-N-CD	-6.44	106.43	120.60
85	A5	493	G	C3'-C2'-C1'	-6.44	96.35	101.50
85	A5	697	G	C1'-O4'-C4'	-6.44	104.75	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
86	A7	82	G	C1'-O4'-C4'	-6.44	104.75	109.90
36	B2	1236	G	P-O3'-C3'	6.44	127.43	119.70
85	A5	1553	A	O4'-C1'-N9	6.44	113.35	108.20
26	AJ	188	GLY	CA-C-O	-6.44	109.01	120.60
36	B2	1365	G	C4'-C3'-O3'	-6.44	95.88	109.40
81	CE	131	LYS	CB-CA-C	6.44	123.28	110.40
85	A5	78	U	N1-C1'-C2'	6.44	122.37	114.00
85	A5	334	A	P-O5'-C5'	6.44	131.20	120.90
85	A5	467	U	O4'-C1'-N1	6.44	113.35	108.20
85	A5	1504	G	C1'-O4'-C4'	-6.44	104.75	109.90
85	A5	3878	C	O4'-C1'-C2'	-6.44	99.36	105.80
85	A5	4235	G	C1'-O4'-C4'	-6.44	104.75	109.90
44	CM	7	VAL	CB-CA-C	6.44	123.63	111.40
85	A5	21	G	O4'-C1'-N9	6.44	113.35	108.20
85	A5	2409	U	O4'-C1'-N1	-6.44	103.05	108.20
36	B2	1471	C	C3'-C2'-C1'	6.43	106.65	101.50
85	A5	220	C	C1'-O4'-C4'	-6.43	104.75	109.90
85	A5	1234	G	C1'-O4'-C4'	-6.43	104.75	109.90
85	A5	1257	A	C3'-C2'-C1'	6.43	106.65	101.50
85	A5	1990	A	O4'-C1'-C2'	-6.43	99.36	105.80
85	A5	2358	G	O4'-C1'-N9	6.43	113.35	108.20
85	A5	4752	U	P-O5'-C5'	6.43	131.19	120.90
85	A5	4952	G	N9-C1'-C2'	6.43	122.37	114.00
36	B2	320	G	C4'-C3'-O3'	6.43	125.87	113.00
85	A5	487	G	C1'-O4'-C4'	-6.43	104.75	109.90
87	A8	124	U	O4'-C1'-C2'	-6.43	99.37	105.80
36	B2	239	C	O4'-C1'-N1	6.43	113.34	108.20
36	B2	1440	C	N1-C1'-C2'	6.43	122.36	114.00
85	A5	480	C	O4'-C1'-N1	6.43	113.34	108.20
85	A5	1419	G	P-O3'-C3'	6.43	127.42	119.70
85	A5	2752	G	P-O5'-C5'	-6.43	110.61	120.90
85	A5	4659	G	C1'-O4'-C4'	-6.43	104.76	109.90
47	CI	205	PRO	O-C-N	-6.43	112.42	122.70
85	A5	231	U	O4'-C1'-C2'	-6.43	99.37	105.80
85	A5	956	A	C3'-C2'-C1'	6.43	106.64	101.50
85	A5	1332	C	O4'-C1'-N1	6.43	113.34	108.20
36	B2	1843	G	O4'-C1'-C2'	6.43	113.38	107.60
37	BC	28	G	C4'-C3'-C2'	-6.43	96.17	102.60
85	A5	1482	G	O4'-C1'-C2'	6.43	113.38	107.60
85	A5	2323	C	C3'-C2'-C1'	6.43	106.64	101.50
85	A5	4343	U	N1-C1'-C2'	6.43	122.35	114.00
85	A5	4545	G	P-O5'-C5'	-6.43	110.62	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1800	A	C3'-C2'-C1'	6.42	106.64	101.50
81	CE	219	LYS	CB-CA-C	-6.42	97.55	110.40
85	A5	2658	G	O4'-C1'-N9	-6.42	103.06	108.20
36	B2	469	A	O4'-C1'-C2'	-6.42	99.38	105.80
36	B2	1500	G	C1'-O4'-C4'	-6.42	104.76	109.90
85	A5	3262	U	P-O3'-C3'	6.42	127.41	119.70
85	A5	5026	U	O3'-P-O5'	-6.42	91.80	104.00
13	AP	18	ARG	NE-CZ-NH1	6.42	123.51	120.30
85	A5	964	A	O4'-C1'-C2'	-6.42	99.38	105.80
85	A5	977	C	C5'-C4'-C3'	-6.42	105.73	116.00
85	A5	1358	G	O3'-P-O5'	6.42	116.20	104.00
85	A5	1811	G	N9-C1'-C2'	-6.42	104.94	112.00
36	B2	503	C	O4'-C1'-C2'	-6.42	99.38	105.80
36	B2	1539	U	C1'-O4'-C4'	6.42	115.03	109.90
85	A5	3654	G	O4'-C1'-N9	6.42	113.33	108.20
85	A5	4955	A	P-O3'-C3'	6.42	127.40	119.70
36	B2	844	U	O4'-C1'-C2'	-6.42	99.38	105.80
36	B2	1490	G	O4'-C1'-N9	6.42	113.33	108.20
36	B2	1707	U	N1-C1'-C2'	6.42	122.34	114.00
74	CC	311	ARG	N-CA-C	6.42	128.32	111.00
81	CE	117	PRO	O-C-N	-6.42	112.43	122.70
85	A5	1451	G	P-O3'-C3'	6.42	127.40	119.70
85	A5	2528	G	C1'-O4'-C4'	-6.42	104.77	109.90
85	A5	4882	U	O4'-C1'-N1	6.42	113.33	108.20
36	B2	82	G	C1'-O4'-C4'	6.41	115.03	109.90
36	B2	155	G	C5'-C4'-C3'	6.41	126.26	116.00
36	B2	208	G	C1'-O4'-C4'	-6.41	104.77	109.90
74	CC	116	ASN	N-CA-C	6.41	128.31	111.00
85	A5	1167	C	O4'-C1'-C2'	-6.41	99.39	105.80
85	A5	1817	U	C4'-C3'-O3'	-6.41	95.93	109.40
85	A5	2101	C	O4'-C1'-C2'	-6.41	99.39	105.80
85	A5	2243	C	O4'-C1'-N1	6.41	113.33	108.20
85	A5	4965	U	C1'-O4'-C4'	6.41	115.03	109.90
85	A5	4454	G	O4'-C1'-N9	6.41	113.33	108.20
60	Cr	39	ARG	NE-CZ-NH1	6.41	123.50	120.30
85	A5	4124	G	N9-C1'-C2'	6.41	122.33	114.00
85	A5	1075	G	C3'-C2'-C1'	-6.41	96.37	101.50
85	A5	1973	G	C3'-C2'-C1'	-6.41	96.37	101.50
85	A5	4199	C	C3'-C2'-C1'	6.41	106.63	101.50
85	A5	4910	G	P-O3'-C3'	-6.41	112.01	119.70
87	A8	79	G	O4'-C1'-N9	6.41	113.33	108.20
36	B2	733	C	C3'-C2'-C1'	6.41	106.63	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	521	C	N1-C1'-C2'	6.41	122.33	114.00
1	Az	278	THR	C-N-CA	6.41	137.71	121.70
2	Ag	284	PRO	N-CA-C	-6.41	95.44	112.10
36	B2	1419	C	O4'-C1'-C2'	-6.41	99.39	105.80
36	B2	1054	G	C1'-O4'-C4'	-6.40	104.78	109.90
85	A5	2551	A	C4'-C3'-C2'	-6.40	96.20	102.60
36	B2	1208	A	O4'-C1'-C2'	-6.40	99.40	105.80
36	B2	1254	C	O4'-C1'-N1	6.40	113.32	108.20
85	A5	1919	G	N9-C1'-C2'	6.40	122.32	114.00
85	A5	3743	G	O4'-C1'-N9	6.40	113.32	108.20
85	A5	4401	G	C1'-O4'-C4'	-6.40	104.78	109.90
85	A5	1906	U	N1-C1'-C2'	6.40	122.32	114.00
36	B2	1155	U	P-O5'-C5'	6.40	131.13	120.90
47	CI	105	CYS	CA-CB-SG	6.40	125.52	114.00
85	A5	422	C	C1'-O4'-C4'	-6.40	104.78	109.90
85	A5	1106	A	P-O3'-C3'	6.40	127.38	119.70
85	A5	1236	C	O4'-C1'-N1	6.40	113.32	108.20
85	A5	1368	A	P-O5'-C5'	6.40	131.13	120.90
85	A5	3919	C	O4'-C1'-N1	6.40	113.32	108.20
85	A5	4668	U	P-O3'-C3'	-6.40	112.03	119.70
33	AI	119	LEU	C-N-CD	-6.39	106.53	120.60
36	B2	1499	U	O4'-C1'-N1	6.39	113.32	108.20
85	A5	1087	A	O4'-C1'-N9	6.39	113.32	108.20
85	A5	1256	G	N9-C1'-C2'	6.39	122.31	114.00
85	A5	4658	G	C3'-C2'-C1'	-6.39	96.39	101.50
36	B2	798	G	C3'-C2'-C1'	6.39	106.61	101.50
85	A5	1547	A	C3'-C2'-C1'	6.39	106.61	101.50
87	A8	58	G	O4'-C1'-N9	6.39	113.31	108.20
39	Cq	45	MET	CA-CB-CG	-6.39	102.44	113.30
70	Ci	1	MET	CA-C-O	-6.39	106.68	120.10
85	A5	2271	C	C3'-C2'-C1'	6.39	106.61	101.50
85	A5	2601	A	C3'-C2'-C1'	6.39	106.61	101.50
85	A5	3721	U	O4'-C1'-N1	6.39	113.31	108.20
85	A5	4996	C	C1'-O4'-C4'	-6.39	104.79	109.90
87	A8	111	U	P-O5'-C5'	-6.39	110.68	120.90
36	B2	649	U	O4'-C1'-N1	6.39	113.31	108.20
36	B2	1409	A	C1'-O4'-C4'	6.39	115.01	109.90
36	B2	1515	G	N9-C1'-C2'	-6.39	104.97	112.00
85	A5	1303	A	P-O5'-C5'	6.39	131.12	120.90
85	A5	4466	C	O4'-C1'-N1	6.39	113.31	108.20
36	B2	734	C	C3'-C2'-C1'	6.39	106.61	101.50
38	Cz	26	ARG	N-CA-CB	-6.39	99.11	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2136	G	O3'-P-O5'	6.39	116.14	104.00
36	B2	1864	U	O4'-C1'-N1	6.38	113.31	108.20
52	CS	151	LYS	N-CA-CB	-6.38	99.11	110.60
85	A5	1684	A	C1'-O4'-C4'	-6.38	104.79	109.90
85	A5	4430	G	O4'-C1'-N9	6.38	113.31	108.20
36	B2	1301	A	P-O3'-C3'	6.38	127.36	119.70
36	B2	1512	C	O4'-C1'-N1	6.38	113.31	108.20
85	A5	1326	A	C1'-O4'-C4'	6.38	115.01	109.90
85	A5	2408	U	N1-C1'-C2'	6.38	122.30	114.00
85	A5	2700	G	O4'-C1'-N9	6.38	113.31	108.20
85	A5	1331	C	O4'-C1'-N1	6.38	113.31	108.20
85	A5	3815	G	C1'-O4'-C4'	-6.38	104.79	109.90
86	A7	56	G	N9-C1'-C2'	6.38	122.30	114.00
20	Aa	96	THR	O-C-N	6.38	133.22	121.10
22	Ac	7	GLN	C-N-CD	-6.38	106.56	120.60
36	B2	8	U	O4'-C1'-N1	6.38	113.30	108.20
48	CD	57	ASN	N-CA-C	-6.38	93.77	111.00
1	Az	404	THR	N-CA-CB	6.38	122.42	110.30
85	A5	2384	U	N1-C1'-C2'	6.38	122.29	114.00
86	A7	73	U	O4'-C1'-N1	6.38	113.30	108.20
44	CM	66	HIS	N-CA-C	6.38	128.21	111.00
85	A5	1386	C	C3'-C2'-C1'	6.38	106.60	101.50
85	A5	2317	C	N1-C1'-C2'	6.38	122.29	114.00
85	A5	2644	G	C1'-O4'-C4'	-6.38	104.80	109.90
85	A5	3604	A	O4'-C1'-C2'	6.38	113.34	107.60
19	AZ	112	ASN	N-CA-CB	-6.37	99.13	110.60
26	AJ	162	ARG	N-CA-C	6.37	128.21	111.00
36	B2	176	U	N1-C1'-C2'	6.37	122.29	114.00
36	B2	1206	G	C3'-C2'-C1'	-6.37	96.40	101.50
36	B2	1518	C	P-O3'-C3'	-6.37	112.05	119.70
36	B2	1615	U	C1'-O4'-C4'	-6.37	104.80	109.90
60	Cr	107	ARG	CA-C-N	6.37	131.22	117.20
85	A5	76	A	O4'-C1'-N9	6.37	113.30	108.20
85	A5	1906	U	C1'-O4'-C4'	-6.37	104.80	109.90
85	A5	2069	A	O4'-C1'-N9	6.37	113.30	108.20
85	A5	4218	U	N1-C1'-C2'	6.37	122.28	114.00
85	A5	4607	A	C1'-O4'-C4'	6.37	115.00	109.90
85	A5	5004	C	P-O3'-C3'	6.37	127.35	119.70
36	B2	1155	U	C3'-C2'-C1'	6.37	106.60	101.50
36	B2	1791	A	O4'-C1'-C2'	-6.37	99.43	105.80
74	CC	88	GLY	N-CA-C	-6.37	97.18	113.10
85	A5	681	G	O4'-C1'-N9	6.37	113.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2728	U	O4'-C1'-N1	6.37	113.29	108.20
87	A8	45	C	C1'-O4'-C4'	-6.37	104.81	109.90
36	B2	592	C	N1-C1'-C2'	-6.36	105.00	112.00
85	A5	1541	C	C1'-O4'-C4'	-6.36	104.81	109.90
85	A5	2613	C	C1'-O4'-C4'	-6.36	104.81	109.90
85	A5	2615	C	N1-C1'-C2'	6.36	122.27	114.00
85	A5	2684	C	C3'-C2'-C1'	6.36	106.59	101.50
85	A5	4725	C	O4'-C1'-C2'	-6.36	99.44	105.80
36	B2	810	A	C3'-C2'-C1'	6.36	106.59	101.50
85	A5	725	G	C3'-C2'-C1'	-6.36	96.41	101.50
85	A5	4613	C	C1'-O4'-C4'	-6.36	104.81	109.90
85	A5	4613	C	C3'-C2'-C1'	6.36	106.59	101.50
85	A5	4665	A	O3'-P-O5'	-6.36	91.92	104.00
36	B2	1341	C	O4'-C1'-C2'	-6.36	99.44	105.80
36	B2	1388	A	O4'-C1'-N9	6.36	113.29	108.20
47	CI	201	PRO	CA-N-CD	-6.36	102.60	111.50
85	A5	3883	U	O4'-C1'-N1	6.36	113.29	108.20
36	B2	1288	U	N1-C1'-C2'	6.36	122.26	114.00
85	A5	638	G	C1'-O4'-C4'	-6.36	104.81	109.90
85	A5	910	G	N9-C1'-C2'	6.36	122.26	114.00
85	A5	2761	U	C5'-C4'-O4'	-6.36	101.47	109.10
85	A5	4430	G	C3'-C2'-C1'	-6.36	96.41	101.50
36	B2	62	G	N9-C1'-C2'	6.36	122.26	114.00
36	B2	319	C	P-O3'-C3'	6.36	127.33	119.70
36	B2	382	C	P-O3'-C3'	-6.36	112.07	119.70
85	A5	1097	C	O4'-C1'-N1	6.36	113.28	108.20
27	AE	258	ALA	C-N-CA	-6.35	105.81	121.70
36	B2	578	C	C3'-C2'-C1'	6.35	106.58	101.50
36	B2	1813	A	C1'-O4'-C4'	-6.35	104.82	109.90
85	A5	948	C	C4'-C3'-C2'	-6.35	96.25	102.60
85	A5	3942	A	O4'-C1'-C2'	-6.35	99.45	105.80
85	A5	4256	A	O4'-C1'-C2'	6.35	113.32	107.60
86	A7	83	A	O4'-C1'-N9	6.35	113.28	108.20
36	B2	1545	A	C5'-C4'-O4'	6.35	116.72	109.10
36	B2	150	A	O4'-C1'-C2'	-6.35	99.45	105.80
85	A5	480	C	C5'-C4'-C3'	6.35	126.16	116.00
85	A5	2573	A	P-O5'-C5'	-6.35	110.74	120.90
85	A5	2627	C	O3'-P-O5'	6.35	116.06	104.00
85	A5	4250	G	C3'-C2'-C1'	6.35	106.58	101.50
1	Az	497	MET	C-N-CA	6.35	137.57	121.70
36	B2	9	U	O4'-C1'-N1	6.35	113.28	108.20
36	B2	835	C	P-O3'-C3'	6.35	127.32	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	260	C	O4'-C1'-N1	6.35	113.28	108.20
85	A5	1922	G	O4'-C1'-C2'	6.35	113.31	107.60
85	A5	2021	G	P-O3'-C3'	6.35	127.32	119.70
85	A5	3790	U	C1'-O4'-C4'	6.35	114.98	109.90
85	A5	3893	C	N1-C1'-C2'	6.35	122.25	114.00
85	A5	4164	C	C4'-C3'-C2'	-6.35	96.25	102.60
87	A8	76	C	O4'-C1'-N1	6.35	113.28	108.20
85	A5	2097	U	P-O3'-C3'	6.35	127.31	119.70
36	B2	499	G	C1'-O4'-C4'	-6.34	104.82	109.90
85	A5	471	A	O4'-C1'-N9	-6.34	103.12	108.20
85	A5	2456	G	N9-C1'-C2'	6.34	122.25	114.00
85	A5	4867	G	O4'-C1'-C2'	6.34	113.31	107.60
85	A5	4933	C	O4'-C1'-N1	6.34	113.28	108.20
85	A5	971	U	C1'-O4'-C4'	6.34	114.97	109.90
85	A5	3892	U	O3'-P-O5'	-6.34	91.95	104.00
24	Ae	46	VAL	C-N-CD	-6.34	106.65	120.60
35	Ah	141	PRO	O-C-N	-6.34	112.55	122.70
37	BC	45	G	O4'-C1'-N9	-6.34	103.13	108.20
81	CE	208	ILE	C-N-CD	-6.34	106.65	120.60
85	A5	1330	A	C1'-O4'-C4'	-6.34	104.83	109.90
85	A5	3740	G	O4'-C1'-N9	6.34	113.27	108.20
85	A5	4598	C	N1-C1'-C2'	6.34	122.24	114.00
85	A5	4997	G	C3'-C2'-C1'	-6.34	96.43	101.50
36	B2	1381	G	N9-C1'-C2'	-6.34	105.03	112.00
85	A5	1679	A	O4'-C1'-C2'	-6.34	99.46	105.80
86	A7	9	C	N1-C1'-C2'	6.34	122.24	114.00
36	B2	202	G	P-O3'-C3'	6.34	127.30	119.70
36	B2	532	C	P-O3'-C3'	6.34	127.31	119.70
39	Cq	44	ARG	CD-NE-CZ	6.34	132.47	123.60
87	A8	128	C	P-O5'-C5'	6.34	131.04	120.90
49	CQ	19	LYS	CB-CA-C	-6.33	97.73	110.40
13	AP	68	PRO	C-N-CD	-6.33	106.67	120.60
36	B2	756	C	O4'-C1'-N1	6.33	113.27	108.20
66	Cd	105	LEU	O-C-N	6.33	132.84	122.70
85	A5	1254	A	C1'-O4'-C4'	-6.33	104.83	109.90
85	A5	4251	A	N9-C1'-C2'	6.33	122.23	114.00
36	B2	756	C	C4'-C3'-C2'	-6.33	96.27	102.60
36	B2	1260	A	N9-C1'-C2'	6.33	122.23	114.00
36	B2	1394	G	C1'-O4'-C4'	-6.33	104.83	109.90
36	B2	1670	C	O4'-C1'-N1	6.33	113.27	108.20
60	Cr	56	ASP	CB-CG-OD1	-6.33	112.60	118.30
85	A5	1076	C	C3'-C2'-C1'	6.33	106.56	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1266	G	N9-C1'-C2'	6.33	122.23	114.00
85	A5	2526	C	O4'-C1'-C2'	-6.33	99.47	105.80
85	A5	4746	C	C3'-C2'-C1'	6.33	106.56	101.50
87	A8	85	U	C1'-O4'-C4'	6.33	114.97	109.90
36	B2	74	G	C4'-C3'-C2'	-6.33	96.27	102.60
85	A5	2496	G	C3'-C2'-C1'	-6.33	96.44	101.50
85	A5	2832	A	O4'-C1'-N9	6.33	113.26	108.20
21	Ab	53	VAL	N-CA-C	-6.33	93.91	111.00
36	B2	800	U	C5'-C4'-C3'	-6.33	105.87	116.00
85	A5	2545	U	O4'-C1'-N1	6.33	113.26	108.20
85	A5	4120	U	O4'-C1'-N1	-6.33	103.14	108.20
85	A5	4572	U	N1-C1'-C2'	6.33	122.23	114.00
13	AP	18	ARG	CB-CG-CD	6.33	128.05	111.60
85	A5	923	C	C1'-O4'-C4'	-6.33	104.84	109.90
85	A5	1808	C	C3'-C2'-C1'	6.33	106.56	101.50
36	B2	645	C	O4'-C1'-C2'	-6.33	99.47	105.80
36	B2	891	G	N9-C1'-C2'	6.33	122.22	114.00
36	B2	1019	C	C3'-C2'-C1'	6.33	106.56	101.50
85	A5	98	A	N9-C1'-C2'	-6.33	105.04	112.00
85	A5	2688	G	C1'-O4'-C4'	-6.33	104.84	109.90
36	B2	38	A	C1'-O4'-C4'	6.32	114.96	109.90
36	B2	147	A	O4'-C1'-C2'	-6.32	99.48	105.80
36	B2	1807	C	N1-C1'-C2'	6.32	122.22	114.00
74	CC	35	ASP	N-CA-C	6.32	128.07	111.00
85	A5	1849	U	O4'-C1'-C2'	-6.32	99.48	105.80
85	A5	4267	G	C5'-C4'-O4'	6.32	116.69	109.10
86	A7	5	A	O4'-C1'-N9	6.32	113.26	108.20
74	CC	86	ARG	C-N-CA	-6.32	105.90	121.70
85	A5	492	U	N1-C1'-C2'	6.32	122.22	114.00
85	A5	501	C	P-O5'-C5'	6.32	131.01	120.90
85	A5	1365	C	O4'-C1'-C2'	-6.32	99.48	105.80
85	A5	1926	C	P-O3'-C3'	-6.32	112.11	119.70
85	A5	2371	U	O4'-C1'-N1	6.32	113.26	108.20
85	A5	5036	C	N1-C1'-C2'	6.32	122.22	114.00
36	B2	1211	G	N9-C1'-C2'	6.32	122.22	114.00
70	Ci	1	MET	O-C-N	6.32	132.81	122.70
85	A5	322	C	N1-C1'-C2'	6.32	122.22	114.00
85	A5	2076	G	C1'-O4'-C4'	-6.32	104.84	109.90
85	A5	2316	G	O4'-C1'-C2'	6.32	113.29	107.60
87	A8	118	C	N1-C1'-C2'	6.32	122.22	114.00
15	AB	76	ASN	N-CA-C	6.32	128.06	111.00
63	CB	293	ILE	CB-CA-C	-6.32	98.96	111.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	752	G	O4'-C1'-N9	6.32	113.25	108.20
85	A5	2096	G	C4'-C3'-O3'	-6.32	96.13	109.40
36	B2	434	G	C2'-C3'-O3'	6.32	123.81	113.70
66	Cd	115	LYS	CD-CE-NZ	6.32	126.23	111.70
85	A5	294	G	N9-C1'-C2'	6.32	122.21	114.00
85	A5	1377	G	O4'-C1'-C2'	-6.32	99.48	105.80
85	A5	4991	U	P-O5'-C5'	6.32	131.01	120.90
40	CK	106	PHE	CB-CG-CD2	-6.32	116.38	120.80
85	A5	477	C	O4'-C1'-N1	6.32	113.25	108.20
85	A5	1277	G	O4'-C1'-C2'	-6.32	99.48	105.80
85	A5	5007	A	O4'-C1'-C2'	-6.32	99.48	105.80
53	CT	80	VAL	N-CA-C	6.31	128.04	111.00
85	A5	1897	A	O4'-C1'-C2'	6.31	113.28	107.60
85	A5	4082	G	O4'-C1'-N9	6.31	113.25	108.20
85	A5	4942	C	O4'-C1'-N1	6.31	113.25	108.20
8	AS	92	ASP	N-CA-C	6.31	128.04	111.00
13	AP	37	TYR	CB-CA-C	6.31	123.02	110.40
17	AV	47	ASN	N-CA-C	-6.31	93.97	111.00
36	B2	1093	A	O4'-C1'-N9	6.31	113.25	108.20
48	CD	219	TYR	N-CA-CB	6.31	121.96	110.60
85	A5	255	C	N1-C1'-C2'	6.31	122.20	114.00
85	A5	2626	U	P-O3'-C3'	6.31	127.27	119.70
85	A5	4392	G	O4'-C1'-N9	6.31	113.25	108.20
36	B2	519	A	N9-C1'-C2'	-6.31	105.06	112.00
36	B2	1668	U	C3'-C2'-C1'	-6.31	96.45	101.50
85	A5	4297	G	O4'-C1'-N9	6.31	113.25	108.20
85	A5	4412	C	P-O3'-C3'	-6.31	112.13	119.70
53	CT	79	GLN	CB-CA-C	-6.31	97.79	110.40
59	CZ	102	ARG	N-CA-CB	6.31	121.95	110.60
85	A5	2006	U	N1-C1'-C2'	6.31	122.20	114.00
36	B2	29	G	O4'-C1'-N9	6.30	113.24	108.20
36	B2	191	A	C5'-C4'-C3'	-6.30	105.91	116.00
36	B2	1568	C	C1'-O4'-C4'	-6.30	104.86	109.90
66	Cd	108	TYR	C-N-CA	-6.30	105.94	121.70
20	Aa	85	ARG	NE-CZ-NH2	6.30	123.45	120.30
36	B2	886	A	P-O3'-C3'	6.30	127.26	119.70
36	B2	1126	G	C1'-O4'-C4'	-6.30	104.86	109.90
36	B2	1520	G	O4'-C1'-N9	6.30	113.24	108.20
74	CC	268	ARG	NE-CZ-NH1	6.30	123.45	120.30
85	A5	254	G	C3'-C2'-C1'	-6.30	96.46	101.50
85	A5	1656	U	N1-C1'-C2'	6.30	122.19	114.00
33	AI	55	TYR	CB-CG-CD1	6.30	124.78	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	636	C	O4'-C1'-C2'	-6.30	99.50	105.80
36	B2	1628	C	C1'-O4'-C4'	-6.30	104.86	109.90
40	CK	129	ILE	C-N-CA	6.30	137.45	121.70
85	A5	1843	A	O4'-C1'-N9	6.30	113.24	108.20
36	B2	607	U	P-O3'-C3'	6.30	127.26	119.70
36	B2	1171	G	C3'-C2'-C1'	-6.30	96.46	101.50
85	A5	344	A	O4'-C1'-N9	6.30	113.24	108.20
85	A5	3819	G	O4'-C1'-N9	6.30	113.24	108.20
36	B2	753	C	C5'-C4'-C3'	6.29	126.07	116.00
85	A5	24	G	O4'-C1'-N9	6.29	113.24	108.20
85	A5	4075	U	O4'-C1'-C2'	-6.29	99.50	105.80
85	A5	4343	U	O4'-C1'-N1	6.29	113.23	108.20
86	A7	115	A	P-O3'-C3'	-6.29	112.15	119.70
36	B2	998	A	C1'-O4'-C4'	6.29	114.93	109.90
56	CX	53	ARG	CB-CA-C	-6.29	97.82	110.40
85	A5	100	C	O4'-C1'-N1	6.29	113.23	108.20
85	A5	1967	A	C1'-O4'-C4'	6.29	114.93	109.90
85	A5	3893	C	C3'-C2'-C1'	6.29	106.53	101.50
85	A5	4000	G	P-O3'-C3'	-6.29	112.15	119.70
36	B2	1780	G	N9-C1'-C2'	6.29	122.18	114.00
52	CS	173	ASN	CB-CA-C	-6.29	97.82	110.40
85	A5	639	U	C1'-O4'-C4'	-6.29	104.87	109.90
74	CC	155	GLU	CB-CA-C	-6.29	97.82	110.40
85	A5	4271	A	N9-C1'-C2'	6.29	122.17	114.00
86	A7	18	C	O4'-C1'-N1	6.29	113.23	108.20
87	A8	49	G	C3'-C2'-C1'	6.29	106.53	101.50
36	B2	288	G	P-O5'-C5'	6.29	130.96	120.90
85	A5	1902	G	C1'-O4'-C4'	-6.29	104.87	109.90
85	A5	4708	A	N9-C1'-C2'	6.29	122.17	114.00
36	B2	737	G	O4'-C1'-C2'	-6.29	99.51	105.80
74	CC	60	HIS	N-CA-C	6.29	127.97	111.00
85	A5	375	G	O4'-C1'-N9	6.29	113.23	108.20
85	A5	2905	C	O4'-C1'-C2'	-6.29	99.52	105.80
31	AH	106	ARG	CD-NE-CZ	6.28	132.40	123.60
36	B2	644	G	O4'-C1'-N9	6.28	113.23	108.20
85	A5	4025	C	P-O3'-C3'	6.28	127.24	119.70
85	A5	9	C	C3'-C2'-C1'	6.28	106.53	101.50
85	A5	439	G	O4'-C1'-N9	6.28	113.23	108.20
85	A5	1420	A	C3'-C2'-C1'	6.28	106.53	101.50
85	A5	1908	A	O4'-C1'-C2'	-6.28	99.52	105.80
29	AG	173	ALA	C-N-CD	-6.28	106.78	120.60
36	B2	1592	C	C1'-O4'-C4'	-6.28	104.88	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	942	G	C1'-O4'-C4'	-6.28	104.88	109.90
85	A5	1638	A	C3'-C2'-C1'	6.28	106.53	101.50
85	A5	2852	U	O4'-C1'-N1	6.28	113.22	108.20
85	A5	4230	C	O4'-C1'-N1	6.28	113.22	108.20
85	A5	962	C	O4'-C1'-N1	6.28	113.22	108.20
85	A5	2570	U	O4'-C1'-N1	6.28	113.22	108.20
85	A5	4652	G	C3'-C2'-C1'	-6.28	96.48	101.50
85	A5	3921	U	O4'-C1'-N1	6.28	113.22	108.20
85	A5	4132	C	O4'-C1'-N1	6.28	113.22	108.20
85	A5	4906	C	O4'-C1'-N1	-6.28	103.18	108.20
85	A5	5016	A	O4'-C1'-C2'	6.28	113.25	107.60
36	B2	201	C	O4'-C1'-C2'	-6.28	99.52	105.80
37	BC	32	C	O4'-C1'-N1	6.28	113.22	108.20
48	CD	256	LYS	C-N-CD	6.28	141.58	128.40
85	A5	1593	A	C3'-C2'-C1'	6.27	106.52	101.50
13	AP	18	ARG	N-CA-CB	6.27	121.89	110.60
33	AI	6	ASP	N-CA-CB	-6.27	99.31	110.60
36	B2	1491	G	O4'-C1'-N9	6.27	113.22	108.20
85	A5	2789	A	N9-C1'-C2'	-6.27	105.10	112.00
85	A5	2937	G	O3'-P-O5'	6.27	115.92	104.00
85	A5	2056	G	N9-C1'-C2'	6.27	122.15	114.00
16	AA	186	ARG	C-N-CA	6.27	135.47	122.30
85	A5	1991	A	O4'-C1'-N9	6.27	113.22	108.20
85	A5	4551	U	O4'-C1'-N1	6.27	113.22	108.20
29	AG	128	THR	N-CA-CB	-6.27	98.39	110.30
33	AI	178	ARG	CD-NE-CZ	6.27	132.38	123.60
41	CO	182	GLU	CB-CA-C	-6.27	97.86	110.40
85	A5	2417	A	O4'-C1'-N9	6.27	113.21	108.20
85	A5	4173	G	C3'-C2'-C1'	6.27	106.51	101.50
85	A5	4541	G	N9-C1'-C2'	-6.27	105.11	112.00
85	A5	4139	G	C1'-O4'-C4'	-6.27	104.89	109.90
28	AC	98	LEU	C-N-CA	-6.26	109.14	122.30
85	A5	476	G	C1'-O4'-C4'	-6.26	104.89	109.90
85	A5	1338	G	C1'-O4'-C4'	-6.26	104.89	109.90
85	A5	1600	A	C1'-O4'-C4'	-6.26	104.89	109.90
85	A5	1995	G	O4'-C1'-N9	-6.26	103.19	108.20
85	A5	1280	C	N1-C1'-C2'	6.26	122.14	114.00
85	A5	1438	U	N1-C1'-C2'	6.26	122.14	114.00
85	A5	1901	C	O4'-C1'-N1	6.26	113.21	108.20
30	AF	130	ARG	N-CA-CB	6.26	121.87	110.60
36	B2	109	U	C4'-C3'-O3'	-6.26	96.25	109.40
36	B2	1034	A	C1'-O4'-C4'	6.26	114.91	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
65	Cc	94	LEU	CB-CA-C	-6.26	98.30	110.20
85	A5	1064	G	C1'-O4'-C4'	-6.26	104.89	109.90
36	B2	798	G	N9-C1'-C2'	6.26	122.14	114.00
47	CI	198	LYS	C-N-CA	6.26	137.35	121.70
52	CS	60	GLU	CA-C-N	-6.26	103.43	117.20
85	A5	1361	G	C4'-C3'-C2'	-6.26	96.34	102.60
85	A5	2251	G	C3'-C2'-C1'	6.26	106.51	101.50
85	A5	2410	C	O4'-C1'-C2'	-6.26	99.54	105.80
85	A5	4660	G	O4'-C1'-C2'	6.26	113.23	107.60
36	B2	1080	A	P-O3'-C3'	6.26	127.21	119.70
74	CC	13	GLU	N-CA-CB	-6.26	99.34	110.60
82	CG	106	THR	O-C-N	6.26	132.71	122.70
85	A5	1553	A	C1'-O4'-C4'	6.26	114.91	109.90
85	A5	2437	C	N1-C1'-C2'	6.26	122.13	114.00
36	B2	174	C	O4'-C1'-C2'	-6.25	99.55	105.80
51	CA	212	GLY	C-N-CA	6.25	135.44	122.30
85	A5	3973	G	P-O5'-C5'	6.25	130.91	120.90
36	B2	978	G	O4'-C1'-N9	6.25	113.20	108.20
36	B2	1200	A	O4'-C1'-N9	6.25	113.20	108.20
85	A5	452	A	C3'-C2'-C1'	-6.25	96.50	101.50
85	A5	1365	C	O4'-C1'-N1	6.25	113.20	108.20
85	A5	2077	C	C3'-C2'-C1'	6.25	106.50	101.50
85	A5	4704	C	O4'-C1'-N1	6.25	113.20	108.20
36	B2	1115	U	O4'-C1'-C2'	6.25	113.23	107.60
85	A5	3868	G	O4'-C1'-N9	6.25	113.20	108.20
85	A5	4994	G	O4'-C1'-C2'	6.25	113.23	107.60
36	B2	1734	G	C3'-C2'-C1'	6.25	106.50	101.50
38	Cz	67	VAL	CB-CA-C	-6.25	99.52	111.40
85	A5	958	G	O4'-C1'-C2'	-6.25	99.55	105.80
85	A5	4990	C	P-O5'-C5'	-6.25	110.90	120.90
86	A7	63	C	O4'-C4'-C3'	-6.25	97.75	104.00
2	Ag	47	ARG	N-CA-C	-6.25	94.13	111.00
85	A5	114	G	O4'-C1'-N9	6.25	113.20	108.20
85	A5	4870	G	C5'-C4'-O4'	6.25	116.60	109.10
87	A8	25	G	O4'-C1'-N9	6.25	113.20	108.20
87	A8	150	C	O4'-C1'-C2'	-6.25	99.55	105.80
36	B2	1139	C	P-O5'-C5'	-6.25	110.91	120.90
85	A5	1528	U	O4'-C1'-N1	6.25	113.20	108.20
85	A5	2014	C	C3'-C2'-C1'	6.25	106.50	101.50
86	A7	2	U	N1-C1'-C2'	6.25	122.12	114.00
36	B2	1218	C	C3'-C2'-C1'	6.25	106.50	101.50
85	A5	1309	C	C3'-C2'-C1'	6.25	106.50	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	874	G	O4'-C1'-N9	6.24	113.19	108.20
85	A5	5047	C	O4'-C1'-C2'	-6.24	99.56	105.80
85	A5	918	G	O4'-C1'-N9	6.24	113.19	108.20
85	A5	2408	U	P-O5'-C5'	-6.24	110.91	120.90
85	A5	4950	U	P-O3'-C3'	6.24	127.19	119.70
36	B2	304	C	O3'-P-O5'	6.24	115.85	104.00
36	B2	455	A	C3'-C2'-C1'	6.24	106.49	101.50
36	B2	1855	G	O4'-C1'-C2'	6.24	113.22	107.60
36	B2	1524	G	O4'-C4'-C3'	-6.24	97.76	104.00
85	A5	1734	G	C3'-C2'-C1'	6.24	106.49	101.50
8	AS	6	PRO	CA-C-O	-6.24	105.23	120.20
36	B2	351	G	O4'-C1'-N9	6.24	113.19	108.20
36	B2	1444	U	O4'-C1'-N1	6.23	113.19	108.20
85	A5	959	G	P-O3'-C3'	6.23	127.18	119.70
36	B2	223	C	O4'-C1'-N1	6.23	113.19	108.20
36	B2	466	G	O4'-C1'-C2'	6.23	113.21	107.60
36	B2	1308	U	P-O3'-C3'	6.23	127.18	119.70
85	A5	1272	C	O4'-C1'-C2'	-6.23	99.57	105.80
85	A5	1889	U	O4'-C1'-N1	6.23	113.18	108.20
36	B2	434	G	O3'-P-O5'	-6.23	92.17	104.00
36	B2	1408	U	P-O3'-C3'	6.23	127.17	119.70
36	B2	1429	G	O3'-P-O5'	-6.23	92.17	104.00
36	B2	1484	A	P-O3'-C3'	6.23	127.17	119.70
85	A5	979	C	N1-C1'-C2'	-6.23	105.15	112.00
85	A5	996	G	C1'-O4'-C4'	-6.23	104.92	109.90
85	A5	1868	A	O4'-C1'-C2'	-6.23	99.57	105.80
85	A5	4339	A	C3'-C2'-C1'	6.23	106.48	101.50
85	A5	4531	U	O4'-C1'-N1	6.23	113.18	108.20
7	AM	116	LYS	N-CA-C	6.23	127.81	111.00
36	B2	796	G	C1'-O4'-C4'	-6.23	104.92	109.90
36	B2	1599	U	P-O5'-C5'	6.23	130.86	120.90
85	A5	1760	G	O4'-C1'-C2'	6.23	113.20	107.60
8	AS	82	TRP	CB-CA-C	-6.22	97.95	110.40
36	B2	1519	U	N1-C1'-C2'	-6.22	105.16	112.00
44	CM	91	TRP	CB-CG-CD1	6.22	135.09	127.00
85	A5	72	C	O4'-C1'-C2'	-6.22	99.58	105.80
85	A5	454	U	C3'-C2'-C1'	6.22	106.48	101.50
85	A5	2860	C	C3'-C2'-C1'	6.22	106.48	101.50
85	A5	4561	C	P-O5'-C5'	-6.22	110.94	120.90
87	A8	14	U	N1-C1'-C2'	6.22	122.09	114.00
36	B2	194	C	C3'-C2'-C1'	6.22	106.47	101.50
36	B2	1297	U	C1'-O4'-C4'	6.22	114.88	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1493	C	N1-C1'-C2'	-6.22	105.16	112.00
85	A5	358	C	C3'-C2'-C1'	6.22	106.47	101.50
85	A5	2115	G	O4'-C1'-C2'	-6.22	99.58	105.80
85	A5	2446	C	C3'-C2'-C1'	6.22	106.47	101.50
85	A5	3920	U	O4'-C1'-N1	6.22	113.17	108.20
5	AO	102	GLY	C-N-CA	-6.22	106.16	121.70
85	A5	4085	A	O3'-P-O5'	-6.22	92.19	104.00
5	AO	143	LYS	CB-CA-C	-6.22	97.97	110.40
26	AJ	93	LYS	O-C-N	-6.22	112.75	122.70
36	B2	944	A	C3'-C2'-C1'	6.22	106.47	101.50
36	B2	1790	A	N9-C1'-C2'	6.22	122.08	114.00
85	A5	1533	A	C1'-O4'-C4'	6.22	114.87	109.90
85	A5	1884	C	N1-C1'-C2'	6.22	122.08	114.00
85	A5	2067	C	C3'-C2'-C1'	6.22	106.47	101.50
85	A5	2731	C	O4'-C1'-N1	6.22	113.17	108.20
36	B2	1519	U	O4'-C1'-C2'	-6.21	99.58	105.80
85	A5	4528	G	O4'-C1'-C2'	-6.21	99.58	105.80
85	A5	4867	G	C5'-C4'-O4'	6.21	116.56	109.10
85	A5	5042	A	C3'-C2'-C1'	6.21	106.47	101.50
87	A8	103	A	C3'-C2'-C1'	6.21	106.47	101.50
2	Ag	50	THR	CB-CA-C	6.21	128.37	111.60
63	CB	76	VAL	CB-CA-C	-6.21	99.60	111.40
85	A5	2017	A	C5'-C4'-O4'	6.21	116.55	109.10
85	A5	2106	G	O4'-C4'-C3'	-6.21	97.79	104.00
85	A5	2461	G	C1'-O4'-C4'	-6.21	104.93	109.90
85	A5	2709	C	O4'-C1'-N1	6.21	113.17	108.20
85	A5	4738	C	O4'-C1'-C2'	-6.21	99.59	105.80
86	A7	4	U	C5'-C4'-O4'	6.21	116.55	109.10
85	A5	402	A	C1'-O4'-C4'	6.21	114.87	109.90
1	Az	712	ASP	O-C-N	-6.21	112.77	122.70
85	A5	1311	G	C1'-O4'-C4'	-6.21	104.93	109.90
85	A5	1394	G	O4'-C1'-N9	6.21	113.17	108.20
85	A5	1442	C	O4'-C4'-C3'	-6.21	97.79	104.00
85	A5	2748	C	C1'-O4'-C4'	-6.21	104.93	109.90
85	A5	3611	A	O4'-C1'-N9	6.21	113.17	108.20
36	B2	323	C	O4'-C1'-N1	6.21	113.17	108.20
36	B2	1399	C	O4'-C1'-N1	6.21	113.17	108.20
48	CD	260	GLU	C-N-CA	6.21	137.22	121.70
85	A5	1720	C	O4'-C1'-N1	6.21	113.17	108.20
85	A5	4327	C	N1-C1'-C2'	6.21	122.07	114.00
85	A5	4938	A	O3'-P-O5'	6.21	115.79	104.00
36	B2	552	G	C1'-O4'-C4'	-6.21	104.94	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	559	G	N9-C1'-C2'	6.21	122.07	114.00
36	B2	1218	C	C1'-O4'-C4'	-6.21	104.94	109.90
85	A5	1366	G	C3'-C2'-C1'	-6.21	96.54	101.50
28	AC	273	LEU	CA-CB-CG	6.20	129.57	115.30
85	A5	1721	G	P-O5'-C5'	-6.20	110.97	120.90
85	A5	2621	A	O4'-C1'-C2'	-6.20	99.60	105.80
85	A5	3714	G	C1'-O4'-C4'	-6.20	104.94	109.90
85	A5	4101	C	N1-C1'-C2'	6.20	122.06	114.00
30	AF	41	VAL	N-CA-C	-6.20	94.25	111.00
85	A5	672	C	N1-C1'-C2'	6.20	122.06	114.00
36	B2	119	U	O4'-C1'-N1	6.20	113.16	108.20
67	Ce	17	THR	CA-C-N	6.20	130.84	117.20
85	A5	3670	C	C3'-C2'-C1'	6.20	106.46	101.50
36	B2	907	G	C3'-C2'-C1'	-6.20	96.54	101.50
85	A5	2499	C	C4'-C3'-C2'	-6.20	96.40	102.60
85	A5	4491	G	C1'-O4'-C4'	-6.20	104.94	109.90
85	A5	4647	G	C3'-C2'-C1'	6.20	106.46	101.50
85	A5	747	A	P-O3'-C3'	6.20	127.14	119.70
85	A5	3804	G	C1'-O4'-C4'	-6.20	104.94	109.90
85	A5	1377	G	N9-C1'-C2'	-6.19	105.19	112.00
85	A5	1393	G	O4'-C1'-C2'	-6.19	99.61	105.80
85	A5	2539	C	C1'-O4'-C4'	-6.19	104.94	109.90
36	B2	496	C	O4'-C1'-N1	6.19	113.15	108.20
47	CI	4	ARG	CB-CA-C	-6.19	98.02	110.40
64	CF	220	MET	O-C-N	6.19	132.61	122.70
73	Cl	37	TYR	C-N-CA	-6.19	106.22	121.70
81	CE	126	LEU	CA-C-N	6.19	130.82	117.20
85	A5	996	G	O4'-C1'-N9	6.19	113.15	108.20
86	A7	97	G	O4'-C1'-C2'	6.19	113.17	107.60
1	Az	432	PRO	C-N-CA	-6.19	106.23	121.70
26	AJ	145	PRO	N-CA-C	-6.19	96.01	112.10
26	AJ	164	PRO	N-CD-CG	-6.19	93.92	103.20
36	B2	1070	A	N9-C1'-C2'	6.19	122.05	114.00
36	B2	1782	G	O4'-C4'-C3'	-6.19	97.81	104.00
81	CE	80	VAL	N-CA-C	6.19	127.71	111.00
85	A5	2299	G	O3'-P-O5'	6.19	115.76	104.00
85	A5	2620	G	O4'-C1'-C2'	6.19	113.17	107.60
87	A8	134	G	O4'-C1'-N9	6.19	113.15	108.20
36	B2	110	U	P-O3'-C3'	-6.19	112.27	119.70
85	A5	150	U	O5'-C5'-C4'	-6.19	99.94	111.70
85	A5	426	A	O4'-C1'-N9	6.19	113.15	108.20
36	B2	745	C	O4'-C1'-C2'	-6.19	99.61	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	940	C	N1-C1'-C2'	6.19	122.04	114.00
85	A5	2497	C	C3'-C2'-C1'	6.19	106.45	101.50
85	A5	4971	A	O4'-C1'-N9	6.19	113.15	108.20
24	Ae	46	VAL	CB-CA-C	-6.19	99.65	111.40
36	B2	351	G	N9-C1'-C2'	-6.19	105.19	112.00
36	B2	1341	C	C3'-C2'-C1'	6.19	106.45	101.50
36	B2	1728	U	O4'-C1'-N1	6.19	113.15	108.20
85	A5	3824	A	C3'-C2'-C1'	6.19	106.45	101.50
85	A5	4471	U	O4'-C1'-N1	6.19	113.15	108.20
30	AF	46	ALA	C-N-CA	-6.18	106.24	121.70
36	B2	213	G	P-O3'-C3'	-6.18	112.28	119.70
58	CW	71	ARG	C-N-CA	6.18	137.16	121.70
85	A5	499	G	C4'-C3'-C2'	-6.18	96.42	102.60
85	A5	4140	C	O4'-C1'-C2'	-6.18	99.61	105.80
85	A5	4713	G	O4'-C1'-N9	6.18	113.15	108.20
36	B2	977	C	O4'-C1'-N1	6.18	113.15	108.20
40	CK	136	ALA	CA-C-N	6.18	130.80	117.20
64	CF	43	ARG	NE-CZ-NH1	6.18	123.39	120.30
85	A5	3684	G	O4'-C1'-C2'	6.18	113.16	107.60
36	B2	1368	U	O4'-C1'-N1	6.18	113.14	108.20
85	A5	1086	C	N1-C1'-C2'	6.18	122.03	114.00
85	A5	1377	G	P-O3'-C3'	6.18	127.12	119.70
11	AL	152	LYS	CA-C-O	-6.18	107.12	120.10
36	B2	1399	C	C5'-C4'-C3'	-6.18	106.11	116.00
36	B2	1550	G	O4'-C1'-N9	6.18	113.14	108.20
85	A5	453	G	O4'-C1'-N9	6.18	113.14	108.20
85	A5	1290	G	P-O3'-C3'	-6.18	112.28	119.70
85	A5	1601	A	O4'-C1'-C2'	-6.18	99.62	105.80
85	A5	4723	A	C3'-C2'-C1'	6.18	106.44	101.50
28	AC	56	GLU	C-N-CA	-6.18	106.26	121.70
81	CE	115	TYR	CB-CG-CD2	6.18	124.71	121.00
85	A5	4721	G	C1'-O4'-C4'	-6.18	104.96	109.90
1	Az	806	GLY	C-N-CA	-6.17	106.26	121.70
8	AS	10	GLN	C-N-CA	6.17	137.14	121.70
11	AL	102	PHE	N-CA-C	-6.17	94.33	111.00
37	BC	20	A	C1'-O4'-C4'	6.17	114.84	109.90
85	A5	2583	C	O4'-C1'-N1	6.17	113.14	108.20
85	A5	2848	G	O4'-C1'-N9	6.17	113.14	108.20
85	A5	3603	G	O4'-C1'-C2'	6.17	113.16	107.60
86	A7	54	A	C1'-O4'-C4'	-6.17	104.96	109.90
36	B2	1567	G	P-O3'-C3'	-6.17	112.30	119.70
68	Cf	109	ARG	C-N-CA	6.17	137.13	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1685	G	C3'-C2'-C1'	6.17	106.44	101.50
85	A5	1965	G	C2'-C3'-O3'	6.17	123.58	113.70
36	B2	337	C	O4'-C1'-N1	6.17	113.14	108.20
85	A5	754	U	N1-C1'-C2'	-6.17	105.21	112.00
85	A5	4298	A	C3'-C2'-C1'	6.17	106.44	101.50
36	B2	1490	G	C3'-C2'-C1'	-6.17	96.56	101.50
85	A5	1823	G	P-O3'-C3'	-6.17	112.30	119.70
36	B2	1538	C	P-O5'-C5'	-6.17	111.03	120.90
85	A5	2002	A	O4'-C1'-C2'	6.17	113.15	107.60
36	B2	1231	C	C3'-C2'-C1'	6.17	106.43	101.50
70	Ci	3	LEU	CA-CB-CG	-6.17	101.12	115.30
84	Cu	45	GLU	CB-CA-C	6.17	122.73	110.40
85	A5	2533	C	N1-C1'-C2'	6.17	122.02	114.00
36	B2	1304	U	C1'-O4'-C4'	-6.16	104.97	109.90
37	BC	17	G	O4'-C1'-N9	6.16	113.13	108.20
39	Cq	69	LEU	CA-C-N	6.16	130.76	117.20
85	A5	638	G	N9-C1'-C2'	6.16	122.01	114.00
85	A5	381	U	C5'-C4'-O4'	6.16	116.50	109.10
85	A5	681	G	C1'-O4'-C4'	-6.16	104.97	109.90
26	AJ	180	LYS	N-CA-C	6.16	127.64	111.00
28	AC	61	MET	CB-CG-SD	-6.16	93.92	112.40
36	B2	252	U	P-O3'-C3'	6.16	127.09	119.70
85	A5	1295	C	C3'-C2'-C1'	6.16	106.43	101.50
85	A5	1596	U	N1-C1'-C2'	6.16	122.01	114.00
85	A5	2800	G	C1'-O4'-C4'	-6.16	104.97	109.90
85	A5	2850	A	C1'-O4'-C4'	-6.16	104.97	109.90
86	A7	103	A	N9-C1'-C2'	6.16	122.01	114.00
36	B2	4	C	C1'-O4'-C4'	-6.16	104.97	109.90
36	B2	1861	G	C1'-O4'-C4'	-6.16	104.97	109.90
74	CC	117	THR	N-CA-CB	6.16	122.00	110.30
85	A5	1232	G	O4'-C1'-N9	6.16	113.13	108.20
85	A5	1442	C	C5'-C4'-O4'	-6.16	101.71	109.10
85	A5	2901	G	O4'-C1'-N9	6.16	113.13	108.20
85	A5	4053	A	P-O3'-C3'	6.16	127.09	119.70
85	A5	4675	U	C1'-O4'-C4'	-6.16	104.97	109.90
85	A5	4175	G	O4'-C1'-C2'	6.16	113.14	107.60
85	A5	4200	G	C1'-O4'-C4'	-6.16	104.97	109.90
85	A5	3615	G	O4'-C1'-N9	6.16	113.12	108.20
36	B2	829	C	P-O3'-C3'	6.15	127.08	119.70
45	Ca	117	LEU	C-N-CD	-6.15	107.06	120.60
85	A5	1725	U	C5'-C4'-C3'	6.15	125.85	116.00
85	A5	3861	A	C1'-O4'-C4'	6.15	114.82	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1365	G	P-O5'-C5'	6.15	130.75	120.90
36	B2	1659	U	O3'-P-O5'	6.15	115.69	104.00
85	A5	1593	A	C1'-O4'-C4'	-6.15	104.98	109.90
85	A5	2905	C	O4'-C1'-N1	6.15	113.12	108.20
36	B2	1176	G	O4'-C1'-N9	6.15	113.12	108.20
36	B2	1415	C	O4'-C1'-N1	6.15	113.12	108.20
36	B2	1493	C	O4'-C1'-N1	6.15	113.12	108.20
36	B2	1707	U	O4'-C1'-N1	6.15	113.12	108.20
39	Cq	150	GLY	C-N-CA	-6.15	106.32	121.70
53	CT	125	TRP	N-CA-C	6.15	127.61	111.00
85	A5	1198	G	P-O3'-C3'	6.15	127.08	119.70
86	A7	18	C	P-O5'-C5'	-6.15	111.06	120.90
1	Az	153	PRO	O-C-N	6.15	132.54	122.70
36	B2	212	C	P-O5'-C5'	6.15	130.74	120.90
85	A5	460	C	P-O5'-C5'	6.15	130.74	120.90
85	A5	1410	U	N1-C1'-C2'	-6.15	105.24	112.00
85	A5	1535	C	N1-C1'-C2'	6.15	121.99	114.00
86	A7	49	A	P-O5'-C5'	-6.15	111.06	120.90
85	A5	1720	C	O4'-C4'-C3'	-6.15	97.85	104.00
85	A5	4289	U	N1-C1'-C2'	-6.15	105.24	112.00
36	B2	688	U	P-O3'-C3'	6.14	127.07	119.70
36	B2	828	G	C1'-O4'-C4'	-6.14	104.98	109.90
36	B2	841	G	P-O3'-C3'	6.14	127.07	119.70
36	B2	1259	A	C1'-O4'-C4'	-6.14	104.98	109.90
39	Cq	6	ARG	C-N-CA	6.14	137.06	121.70
85	A5	935	A	N9-C1'-C2'	6.14	121.99	114.00
85	A5	4291	G	C1'-O4'-C4'	-6.14	104.98	109.90
1	Az	793	SER	C-N-CA	-6.14	106.34	121.70
36	B2	1223	A	O4'-C1'-C2'	-6.14	99.66	105.80
36	B2	1649	U	P-O3'-C3'	-6.14	112.33	119.70
37	BC	53	A	O4'-C1'-C2'	-6.14	99.66	105.80
74	CC	323	ARG	O-C-N	6.14	132.53	122.70
81	CE	125	LEU	C-N-CA	-6.14	106.35	121.70
85	A5	1519	C	C3'-C2'-C1'	6.14	106.41	101.50
85	A5	2847	G	N9-C1'-C2'	-6.14	105.24	112.00
36	B2	7	G	O4'-C1'-N9	6.14	113.11	108.20
36	B2	353	C	C4'-C3'-C2'	6.14	108.74	102.60
36	B2	1106	C	O4'-C1'-C2'	-6.14	99.66	105.80
36	B2	1191	C	O4'-C1'-N1	6.14	113.11	108.20
85	A5	1051	G	P-O3'-C3'	6.14	127.07	119.70
85	A5	4430	G	O4'-C1'-C2'	6.14	113.13	107.60
85	A5	1073	G	N9-C1'-C2'	-6.14	105.25	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	AP	130	ARG	NE-CZ-NH1	6.14	123.37	120.30
36	B2	1663	A	C3'-C2'-C1'	6.14	106.41	101.50
85	A5	1614	C	N1-C1'-C2'	6.14	121.98	114.00
85	A5	4147	G	O4'-C1'-N9	6.14	113.11	108.20
36	B2	1539	U	C3'-C2'-C1'	6.13	106.41	101.50
81	CE	41	LYS	N-CA-CB	6.13	121.64	110.60
85	A5	3592	G	N9-C1'-C2'	6.13	121.97	114.00
85	A5	3892	U	N1-C1'-C2'	-6.13	105.25	112.00
85	A5	4748	U	C1'-O4'-C4'	6.13	114.81	109.90
36	B2	910	G	O4'-C1'-C2'	6.13	113.12	107.60
85	A5	1785	C	N1-C1'-C2'	6.13	121.97	114.00
85	A5	4674	C	P-O3'-C3'	6.13	127.06	119.70
85	A5	1502	G	P-O3'-C3'	-6.13	112.34	119.70
85	A5	2680	G	O4'-C1'-N9	6.13	113.11	108.20
85	A5	5009	G	O4'-C1'-N9	6.13	113.11	108.20
36	B2	440	G	O4'-C1'-N9	6.13	113.10	108.20
75	Cm	106	ARG	C-N-CA	-6.13	106.37	121.70
85	A5	1363	C	O4'-C1'-C2'	-6.13	99.67	105.80
85	A5	2488	C	C3'-C2'-C1'	6.13	106.40	101.50
85	A5	4047	A	C3'-C2'-C1'	6.13	106.40	101.50
25	Af	134	SER	O-C-N	6.13	132.51	122.70
36	B2	1145	A	O4'-C1'-N9	6.13	113.10	108.20
36	B2	1185	C	N1-C1'-C2'	6.13	121.97	114.00
44	CM	43	THR	O-C-N	-6.13	112.89	122.70
85	A5	1327	C	O4'-C1'-N1	6.13	113.10	108.20
85	A5	2079	G	C1'-O4'-C4'	-6.13	105.00	109.90
85	A5	2266	C	C4'-C3'-O3'	-6.13	96.53	109.40
85	A5	3847	C	C3'-C2'-C1'	6.13	106.40	101.50
36	B2	876	C	C3'-C2'-C1'	6.13	106.40	101.50
36	B2	1752	C	C1'-O4'-C4'	-6.13	105.00	109.90
36	B2	1802	C	O4'-C1'-N1	6.13	113.10	108.20
85	A5	5027	C	O4'-C1'-C2'	6.13	113.11	107.60
19	AZ	104	ARG	CA-C-N	-6.12	103.73	117.20
36	B2	126	G	O3'-P-O5'	6.12	115.64	104.00
85	A5	4937	C	P-O3'-C3'	6.12	127.05	119.70
36	B2	366	U	O4'-C1'-N1	6.12	113.10	108.20
36	B2	1662	U	O4'-C1'-N1	6.12	113.10	108.20
73	Cl	37	TYR	N-CA-C	6.12	127.53	111.00
85	A5	3	C	C3'-C2'-C1'	6.12	106.40	101.50
85	A5	1542	U	O4'-C1'-N1	6.12	113.10	108.20
85	A5	2502	G	P-O3'-C3'	6.12	127.05	119.70
36	B2	1548	G	C3'-C2'-C1'	-6.12	96.60	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	293	G	C1'-O4'-C4'	-6.12	105.00	109.90
85	A5	1650	A	C1'-O4'-C4'	-6.12	105.00	109.90
85	A5	2264	C	P-O3'-C3'	6.12	127.05	119.70
85	A5	4051	C	P-O5'-C5'	6.12	130.70	120.90
87	A8	17	A	O4'-C1'-C2'	-6.12	99.68	105.80
36	B2	799	U	C1'-O4'-C4'	-6.12	105.01	109.90
36	B2	1122	A	C4'-C3'-C2'	-6.12	96.48	102.60
36	B2	1466	G	O4'-C1'-N9	6.12	113.09	108.20
85	A5	655	C	C4'-C3'-O3'	-6.12	96.55	109.40
85	A5	2588	C	C1'-O4'-C4'	6.12	114.79	109.90
85	A5	4988	U	N1-C1'-C2'	6.12	121.95	114.00
36	B2	24	C	O4'-C1'-N1	6.12	113.09	108.20
85	A5	3934	G	C3'-C2'-C1'	-6.12	96.61	101.50
56	CX	52	LEU	C-N-CA	6.12	136.99	121.70
81	CE	33	LYS	CA-CB-CG	6.12	126.85	113.40
36	B2	1435	C	C3'-C2'-C1'	6.11	106.39	101.50
81	CE	277	LEU	CA-C-N	6.11	130.65	117.20
85	A5	4524	G	C5'-C4'-C3'	-6.11	106.22	116.00
85	A5	1447	C	O4'-C1'-C2'	-6.11	99.69	105.80
85	A5	2629	C	O4'-C1'-C2'	-6.11	99.69	105.80
85	A5	2704	C	C4'-C3'-C2'	-6.11	96.49	102.60
36	B2	420	G	O4'-C1'-N9	6.11	113.09	108.20
36	B2	1651	A	O4'-C1'-N9	6.11	113.09	108.20
43	CV	75	LYS	N-CA-C	6.11	127.50	111.00
85	A5	2593	C	C3'-C2'-C1'	6.11	106.39	101.50
85	A5	3813	A	O4'-C1'-N9	6.11	113.09	108.20
8	AS	9	PHE	C-N-CA	-6.11	106.43	121.70
36	B2	554	A	C1'-O4'-C4'	-6.11	105.01	109.90
58	CW	22	ALA	C-N-CA	-6.11	106.43	121.70
85	A5	4730	C	C2'-C3'-O3'	6.11	123.47	113.70
85	A5	4928	C	O4'-C1'-C2'	-6.11	99.69	105.80
36	B2	695	C	C5'-C4'-C3'	6.11	125.77	116.00
85	A5	1398	A	C2'-C3'-O3'	6.11	123.47	113.70
85	A5	1537	A	O4'-C1'-C2'	-6.11	99.69	105.80
85	A5	1543	G	N9-C1'-C2'	-6.11	105.28	112.00
85	A5	1934	A	C1'-O4'-C4'	6.11	114.78	109.90
85	A5	4661	G	C3'-C2'-C1'	6.11	106.39	101.50
54	CP	64	ASN	CB-CA-C	-6.10	98.19	110.40
55	CU	60	VAL	CB-CA-C	6.10	122.99	111.40
61	Ch	114	TYR	C-N-CD	6.10	141.22	128.40
82	CG	59	ARG	NE-CZ-NH1	6.10	123.35	120.30
85	A5	307	A	C1'-O4'-C4'	6.10	114.78	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2399	G	C1'-O4'-C4'	-6.10	105.02	109.90
85	A5	4434	C	O4'-C1'-N1	6.10	113.08	108.20
46	CN	198	LEU	CA-CB-CG	-6.10	101.27	115.30
85	A5	1922	G	C1'-O4'-C4'	-6.10	105.02	109.90
85	A5	2336	G	C3'-C2'-C1'	6.10	106.38	101.50
36	B2	1593	C	O4'-C1'-N1	6.10	113.08	108.20
37	BC	11	C	O4'-C1'-C2'	-6.10	99.70	105.80
85	A5	86	U	N1-C1'-C2'	6.10	121.93	114.00
85	A5	1359	G	O4'-C1'-C2'	6.10	113.09	107.60
85	A5	2747	U	C3'-C2'-C1'	6.10	106.38	101.50
85	A5	2749	C	C3'-C2'-C1'	6.10	106.38	101.50
87	A8	114	G	C1'-O4'-C4'	-6.10	105.02	109.90
36	B2	615	C	C1'-O4'-C4'	-6.09	105.02	109.90
36	B2	1242	U	C1'-O4'-C4'	-6.09	105.02	109.90
60	Cr	112	ARG	CA-C-N	-6.09	103.79	117.20
85	A5	966	A	C1'-O4'-C4'	-6.09	105.02	109.90
85	A5	1690	C	N1-C1'-C2'	6.09	121.92	114.00
85	A5	4728	U	N1-C1'-C2'	-6.09	105.30	112.00
85	A5	4939	C	P-O3'-C3'	6.09	127.01	119.70
85	A5	4084	G	N9-C1'-C2'	6.09	121.92	114.00
87	A8	103	A	O4'-C1'-C2'	-6.09	99.71	105.80
36	B2	1490	G	O4'-C1'-C2'	6.09	113.08	107.60
85	A5	524	C	O4'-C1'-N1	6.09	113.07	108.20
85	A5	1753	G	C4'-C3'-O3'	6.09	125.18	113.00
85	A5	2404	A	C3'-C2'-C1'	6.09	106.37	101.50
85	A5	2726	G	C5'-C4'-O4'	6.09	116.41	109.10
85	A5	3858	C	O4'-C1'-N1	6.09	113.07	108.20
23	AD	4	GLN	CA-C-O	6.09	132.89	120.10
69	Cg	49	CYS	N-CA-C	-6.09	94.56	111.00
85	A5	121	A	O4'-C1'-N9	6.09	113.07	108.20
85	A5	4369	A	O4'-C1'-N9	6.09	113.07	108.20
85	A5	4656	A	O4'-C1'-C2'	6.09	113.08	107.60
85	A5	4763	U	C3'-C2'-C1'	6.09	106.37	101.50
85	A5	4729	A	C5'-C4'-C3'	6.09	125.74	116.00
3	AU	117	ALA	O-C-N	6.09	132.44	122.70
36	B2	1526	G	N9-C1'-C2'	-6.09	105.31	112.00
82	CG	106	THR	CA-C-N	6.09	130.59	117.20
85	A5	262	G	C4'-C3'-C2'	-6.09	96.51	102.60
85	A5	271	C	C3'-C2'-C1'	6.09	106.37	101.50
85	A5	455	C	C5'-C4'-C3'	-6.09	106.26	116.00
85	A5	2270	G	O4'-C1'-C2'	6.09	113.08	107.60
85	A5	3775	A	N9-C1'-C2'	-6.09	105.31	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4675	U	N1-C1'-C2'	6.09	121.91	114.00
87	A8	6	C	N1-C1'-C2'	6.09	121.91	114.00
15	AB	151	ARG	C-N-CA	-6.08	106.49	121.70
36	B2	405	G	C1'-O4'-C4'	-6.08	105.03	109.90
37	BC	69	G	N9-C1'-C2'	6.08	121.91	114.00
36	B2	1190	A	C3'-C2'-C1'	6.08	106.37	101.50
40	CK	85	LEU	C-N-CA	6.08	136.91	121.70
74	CC	85	HIS	N-CA-CB	-6.08	99.65	110.60
81	CE	44	CYS	N-CA-C	6.08	127.43	111.00
85	A5	991	C	N1-C1'-C2'	6.08	121.91	114.00
85	A5	4081	G	C5'-C4'-O4'	6.08	116.40	109.10
85	A5	4752	U	P-O3'-C3'	-6.08	112.40	119.70
85	A5	5069	U	N1-C1'-C2'	6.08	121.91	114.00
36	B2	977	C	O4'-C1'-C2'	-6.08	99.72	105.80
85	A5	6	C	N1-C1'-C2'	6.08	121.91	114.00
85	A5	245	C	C3'-C2'-C1'	-6.08	96.63	101.50
85	A5	1313	C	O4'-C1'-N1	-6.08	103.33	108.20
85	A5	1852	U	O4'-C1'-N1	6.08	113.06	108.20
85	A5	4643	G	C1'-O4'-C4'	-6.08	105.03	109.90
81	CE	41	LYS	CA-C-N	6.08	134.12	117.10
85	A5	729	G	O4'-C1'-C2'	-6.08	99.72	105.80
36	B2	1371	U	C3'-C2'-C1'	6.08	106.36	101.50
37	BC	53	A	C1'-O4'-C4'	6.08	114.76	109.90
62	Cb	54	LEU	CB-CG-CD1	6.08	121.33	111.00
85	A5	1628	C	C3'-C2'-C1'	6.08	106.36	101.50
85	A5	3731	C	O4'-C1'-C2'	-6.08	99.72	105.80
85	A5	4776	G	O4'-C1'-N9	6.08	113.06	108.20
4	AK	89	ILE	CA-CB-CG2	6.08	123.05	110.90
36	B2	301	A	O4'-C1'-N9	6.08	113.06	108.20
85	A5	491	G	P-O3'-C3'	6.07	126.99	119.70
85	A5	1368	A	C5'-C4'-C3'	6.07	125.72	116.00
85	A5	1535	C	C1'-O4'-C4'	-6.07	105.04	109.90
85	A5	4438	U	O4'-C1'-N1	6.07	113.06	108.20
36	B2	1040	G	C3'-C2'-C1'	-6.07	96.64	101.50
85	A5	1615	C	N1-C1'-C2'	6.07	121.89	114.00
13	AP	49	LEU	C-N-CA	-6.07	106.52	121.70
36	B2	21	U	O4'-C1'-C2'	-6.07	99.73	105.80
36	B2	420	G	O4'-C1'-C2'	6.07	113.06	107.60
36	B2	964	A	N9-C1'-C2'	-6.07	105.32	112.00
36	B2	1088	U	O4'-C1'-N1	6.07	113.06	108.20
85	A5	1547	A	O4'-C1'-N9	6.07	113.06	108.20
85	A5	1873	A	C5'-C4'-C3'	-6.07	106.29	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2104	G	N9-C1'-C2'	-6.07	105.32	112.00
85	A5	3703	G	N9-C1'-C2'	6.07	121.89	114.00
85	A5	4933	C	P-O3'-C3'	6.07	126.98	119.70
85	A5	4469	U	N1-C1'-C2'	6.07	121.89	114.00
36	B2	1738	C	C3'-C2'-C1'	6.07	106.35	101.50
85	A5	437	G	N9-C1'-C2'	6.07	121.89	114.00
85	A5	660	A	N9-C1'-C2'	-6.07	105.33	112.00
85	A5	1420	A	N9-C1'-C2'	6.07	121.89	114.00
85	A5	1720	C	O5'-C5'-C4'	6.07	123.23	111.70
85	A5	1851	G	C3'-C2'-C1'	-6.07	96.65	101.50
85	A5	4665	A	C5'-C4'-C3'	-6.07	106.29	116.00
85	A5	4960	G	O4'-C1'-N9	6.07	113.05	108.20
47	CI	206	LEU	CA-C-N	6.07	130.55	117.20
64	CF	23	ARG	O-C-N	6.07	132.40	122.70
85	A5	1431	C	O4'-C1'-N1	6.07	113.05	108.20
85	A5	1051	G	N9-C1'-C2'	-6.06	105.33	112.00
85	A5	1278	C	P-O3'-C3'	6.06	126.98	119.70
85	A5	1851	G	O4'-C1'-C2'	6.06	113.06	107.60
18	AY	96	LEU	N-CA-CB	6.06	122.52	110.40
85	A5	74	G	C1'-O4'-C4'	-6.06	105.05	109.90
85	A5	1222	A	C2'-C3'-O3'	6.06	123.40	113.70
85	A5	1774	C	O4'-C1'-N1	6.06	113.05	108.20
85	A5	4322	G	N9-C1'-C2'	-6.06	105.33	112.00
85	A5	5054	C	C1'-O4'-C4'	6.06	114.75	109.90
87	A8	83	C	O4'-C1'-C2'	-6.06	99.74	105.80
36	B2	163	U	O4'-C4'-C3'	-6.06	97.94	104.00
85	A5	4634	U	O4'-C1'-C2'	-6.06	99.74	105.80
4	AK	40	VAL	C-N-CD	-6.06	107.27	120.60
85	A5	1353	G	N9-C1'-C2'	6.06	121.88	114.00
85	A5	4295	U	O4'-C1'-C2'	-6.06	99.74	105.80
85	A5	4510	A	O3'-P-O5'	6.06	115.51	104.00
87	A8	95	A	O3'-P-O5'	6.06	115.51	104.00
2	Ag	15	ASN	C-N-CA	-6.06	109.58	122.30
13	AP	17	TYR	N-CA-CB	6.06	121.50	110.60
36	B2	226	A	O4'-C1'-C2'	-6.06	99.74	105.80
40	CK	106	PHE	CA-CB-CG	6.06	128.44	113.90
85	A5	1267	C	O4'-C1'-C2'	-6.06	99.74	105.80
36	B2	958	G	C3'-C2'-C1'	-6.05	96.66	101.50
36	B2	1122	A	C3'-C2'-C1'	6.05	106.34	101.50
60	Cr	91	SER	CA-CB-OG	6.05	127.55	111.20
85	A5	2788	U	O4'-C1'-C2'	-6.05	99.75	105.80
85	A5	5047	C	N1-C1'-C2'	-6.05	105.34	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	962	A	N9-C1'-C2'	-6.05	105.34	112.00
37	BC	51	G	O4'-C1'-N9	6.05	113.04	108.20
85	A5	1166	G	C5'-C4'-O4'	6.05	116.36	109.10
85	A5	1299	G	O4'-C1'-N9	6.05	113.04	108.20
85	A5	1429	C	C1'-O4'-C4'	6.05	114.74	109.90
85	A5	1868	A	C1'-O4'-C4'	6.05	114.74	109.90
85	A5	4042	G	P-O3'-C3'	6.05	126.96	119.70
86	A7	107	G	C1'-O4'-C4'	-6.05	105.06	109.90
36	B2	974	C	C3'-C2'-C1'	6.05	106.34	101.50
36	B2	1449	G	P-O3'-C3'	6.05	126.96	119.70
39	Cq	81	HIS	CB-CA-C	6.05	122.50	110.40
40	CK	130	LYS	CD-CE-NZ	6.05	125.61	111.70
85	A5	468	U	C1'-O4'-C4'	6.05	114.74	109.90
85	A5	1211	G	N9-C1'-C2'	-6.05	105.35	112.00
85	A5	2309	G	C1'-O4'-C4'	6.05	114.74	109.90
85	A5	2447	U	C1'-O4'-C4'	6.05	114.74	109.90
85	A5	4443	C	C3'-C2'-C1'	6.05	106.34	101.50
36	B2	2	A	O4'-C1'-N9	6.05	113.04	108.20
36	B2	204	G	O4'-C1'-C2'	-6.05	99.75	105.80
40	CK	30	PRO	CA-C-O	-6.05	105.68	120.20
47	CI	100	ASN	C-N-CA	-6.05	106.58	121.70
85	A5	2049	G	O4'-C1'-N9	6.05	113.04	108.20
36	B2	884	C	O4'-C1'-N1	6.05	113.04	108.20
36	B2	1359	U	O4'-C1'-C2'	-6.05	99.75	105.80
74	CC	312	ARG	O-C-N	6.05	132.38	122.70
85	A5	210	C	N1-C1'-C2'	6.05	121.86	114.00
85	A5	302	C	N1-C1'-C2'	6.05	121.86	114.00
85	A5	1408	G	O4'-C1'-N9	6.05	113.04	108.20
85	A5	2812	A	O5'-C5'-C4'	-6.05	100.21	111.70
36	B2	1575	G	C4'-C3'-C2'	-6.04	96.56	102.60
86	A7	113	G	C5'-C4'-O4'	6.04	116.35	109.10
42	CL	49	ARG	O-C-N	-6.04	109.62	121.10
85	A5	4261	C	C3'-C2'-C1'	6.04	106.33	101.50
24	Ae	47	PRO	CA-N-CD	-6.04	103.04	111.50
36	B2	928	G	O4'-C1'-N9	6.04	113.03	108.20
36	B2	1552	G	P-O5'-C5'	6.04	130.57	120.90
36	B2	1563	G	C1'-O4'-C4'	-6.04	105.07	109.90
46	CN	48	ALA	O-C-N	6.04	132.37	122.70
85	A5	1764	G	O4'-C1'-C2'	6.04	113.04	107.60
85	A5	2400	G	N9-C1'-C2'	6.04	121.86	114.00
4	AK	38	LYS	N-CA-C	-6.04	94.70	111.00
11	AL	150	GLY	N-CA-C	-6.04	98.00	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	281	C	O5'-P-OP1	-6.04	100.27	105.70
74	CC	315	LYS	N-CA-C	6.04	127.30	111.00
36	B2	1395	C	O4'-C1'-N1	6.04	113.03	108.20
36	B2	1748	G	O5'-C5'-C4'	6.04	123.17	111.70
85	A5	4216	G	C3'-C2'-C1'	6.04	106.33	101.50
36	B2	383	G	O4'-C1'-N9	6.04	113.03	108.20
36	B2	633	C	N1-C1'-C2'	6.04	121.85	114.00
85	A5	1342	A	C3'-C2'-C1'	6.04	106.33	101.50
85	A5	2805	C	N1-C1'-C2'	6.04	121.85	114.00
85	A5	4485	C	O4'-C1'-N1	6.04	113.03	108.20
86	A7	112	U	C1'-O4'-C4'	6.04	114.73	109.90
85	A5	4206	C	N1-C1'-C2'	6.03	121.84	114.00
87	A8	90	C	C3'-C2'-C1'	6.03	106.33	101.50
85	A5	693	C	C4'-C3'-C2'	-6.03	96.57	102.60
85	A5	944	A	O4'-C1'-C2'	-6.03	99.77	105.80
85	A5	3931	C	C3'-C2'-C1'	6.03	106.33	101.50
28	AC	277	HIS	CB-CA-C	-6.03	98.34	110.40
36	B2	1437	C	N1-C1'-C2'	6.03	121.84	114.00
36	B2	1438	A	C3'-C2'-C1'	6.03	106.32	101.50
60	Cr	103	ARG	C-N-CD	6.03	141.06	128.40
85	A5	902	C	O4'-C1'-C2'	-6.03	99.77	105.80
85	A5	1410	U	O4'-C1'-C2'	-6.03	99.77	105.80
85	A5	2716	C	N1-C1'-C2'	6.03	121.84	114.00
85	A5	3691	G	O4'-C1'-N9	6.03	113.02	108.20
85	A5	4162	C	O4'-C1'-C2'	6.03	113.03	107.60
36	B2	633	C	C3'-C2'-C1'	6.03	106.32	101.50
45	Ca	66	ASN	N-CA-C	-6.03	94.73	111.00
85	A5	4231	C	O4'-C1'-N1	6.03	113.02	108.20
85	A5	4612	C	C3'-C2'-C1'	6.03	106.32	101.50
85	A5	1089	G	P-O3'-C3'	6.03	126.93	119.70
85	A5	1574	G	C1'-O4'-C4'	6.03	114.72	109.90
85	A5	2253	A	O4'-C4'-C3'	-6.03	97.97	104.00
29	AG	173	ALA	O-C-N	-6.02	109.65	121.10
30	AF	135	ARG	CB-CA-C	6.02	122.45	110.40
36	B2	573	U	N1-C1'-C2'	6.02	121.83	114.00
36	B2	594	A	P-O3'-C3'	6.02	126.93	119.70
58	CW	27	LYS	CB-CA-C	-6.02	98.35	110.40
85	A5	1479	G	P-O3'-C3'	6.02	126.93	119.70
22	Ac	6	VAL	N-CA-C	6.02	127.26	111.00
36	B2	990	A	C1'-O4'-C4'	-6.02	105.08	109.90
71	Cj	88	ARG	NE-CZ-NH1	-6.02	117.29	120.30
85	A5	4086	G	O4'-C1'-N9	6.02	113.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Az	760	TYR	CB-CG-CD1	-6.02	117.39	121.00
36	B2	1371	U	O4'-C1'-N1	6.02	113.02	108.20
85	A5	1486	C	C1'-O4'-C4'	-6.02	105.08	109.90
85	A5	444	G	C1'-O4'-C4'	-6.02	105.08	109.90
85	A5	730	G	O4'-C1'-N9	6.02	113.02	108.20
85	A5	1459	A	C3'-C2'-C1'	6.02	106.32	101.50
85	A5	1469	C	O4'-C1'-C2'	-6.02	99.78	105.80
85	A5	2685	C	C4'-C3'-C2'	-6.02	96.58	102.60
85	A5	3802	U	N1-C1'-C2'	6.02	121.82	114.00
36	B2	1142	G	C3'-C2'-C1'	-6.02	96.69	101.50
60	Cr	66	ARG	CA-CB-CG	6.02	126.64	113.40
85	A5	993	G	O4'-C1'-N9	6.02	113.01	108.20
85	A5	1640	C	C1'-O4'-C4'	6.02	114.71	109.90
36	B2	857	U	P-O5'-C5'	-6.01	111.28	120.90
81	CE	93	THR	CA-CB-CG2	6.01	120.82	112.40
85	A5	987	C	O4'-C1'-N1	6.01	113.01	108.20
85	A5	1774	C	C4'-C3'-C2'	-6.01	96.58	102.60
85	A5	4676	G	C1'-O4'-C4'	-6.01	105.09	109.90
74	CC	287	THR	O-C-N	-6.01	113.08	122.70
85	A5	380	U	O4'-C1'-N1	6.01	113.01	108.20
36	B2	1540	G	C1'-O4'-C4'	-6.01	105.09	109.90
37	BC	7	G	C1'-O4'-C4'	6.01	114.71	109.90
85	A5	967	C	O4'-C1'-C2'	-6.01	99.79	105.80
85	A5	1632	A	C3'-C2'-C1'	-6.01	96.69	101.50
87	A8	108	A	O4'-C1'-C2'	-6.01	99.79	105.80
36	B2	852	G	O4'-C1'-N9	6.01	113.01	108.20
36	B2	853	C	O4'-C1'-N1	6.01	113.01	108.20
36	B2	1851	A	C1'-O4'-C4'	6.01	114.71	109.90
63	CB	292	LEU	CA-C-N	6.01	130.42	117.20
85	A5	410	A	C1'-O4'-C4'	-6.01	105.09	109.90
85	A5	4522	G	O4'-C1'-N9	6.01	113.01	108.20
36	B2	747	U	O3'-P-O5'	-6.01	92.58	104.00
69	Cg	82	MET	CA-C-O	6.01	132.72	120.10
85	A5	4662	C	C1'-O4'-C4'	-6.01	105.09	109.90
2	Ag	213	ASP	CB-CG-OD2	-6.01	112.89	118.30
81	CE	177	GLY	N-CA-C	-6.01	98.08	113.10
81	CE	234	ASP	CA-C-N	-6.01	103.98	117.20
85	A5	4387	C	O4'-C1'-C2'	-6.01	99.79	105.80
36	B2	1554	C	C2'-C3'-O3'	-6.00	96.29	109.50
52	CS	86	SER	CB-CA-C	6.00	121.51	110.10
85	A5	3797	C	O4'-C1'-C2'	-6.00	99.80	105.80
36	B2	1398	G	P-O3'-C3'	-6.00	112.50	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1404	U	N1-C1'-C2'	6.00	121.80	114.00
85	A5	4445	U	N1-C1'-C2'	6.00	121.81	114.00
85	A5	5012	G	N9-C1'-C2'	-6.00	105.39	112.00
35	Ah	142	LEU	N-CA-CB	6.00	122.40	110.40
36	B2	182	C	C3'-C2'-C1'	6.00	106.30	101.50
36	B2	551	U	P-O3'-C3'	6.00	126.90	119.70
36	B2	1178	U	O4'-C1'-N1	6.00	113.00	108.20
59	CZ	6	LYS	C-N-CD	-6.00	107.40	120.60
85	A5	107	G	C3'-C2'-C1'	-6.00	96.70	101.50
85	A5	432	U	C3'-C2'-C1'	-6.00	96.70	101.50
85	A5	1747	U	O4'-C1'-N1	6.00	113.00	108.20
36	B2	1429	G	OP1-P-O3'	6.00	118.40	105.20
36	B2	1641	A	C3'-C2'-C1'	6.00	106.30	101.50
85	A5	141	C	C4'-C3'-C2'	-6.00	96.60	102.60
85	A5	2882	A	N9-C1'-C2'	-6.00	105.40	112.00
85	A5	4436	U	O4'-C1'-N1	6.00	113.00	108.20
4	AK	90	VAL	N-CA-C	6.00	127.19	111.00
25	Af	88	PRO	N-CA-C	-6.00	96.51	112.10
85	A5	1303	A	C4'-C3'-C2'	-6.00	96.60	102.60
85	A5	2018	C	O5'-C5'-C4'	-6.00	100.31	111.70
85	A5	2285	A	N9-C1'-C2'	-6.00	105.40	112.00
87	A8	97	A	O4'-C1'-N9	6.00	113.00	108.20
36	B2	790	C	O4'-C1'-C2'	-6.00	99.81	105.80
85	A5	2877	G	O4'-C1'-N9	6.00	113.00	108.20
85	A5	4173	G	O4'-C1'-C2'	-6.00	99.81	105.80
36	B2	1552	G	O4'-C1'-C2'	-5.99	99.81	105.80
85	A5	348	G	C5'-C4'-C3'	5.99	125.59	116.00
85	A5	2030	A	P-O3'-C3'	5.99	126.89	119.70
85	A5	4161	G	C5'-C4'-C3'	-5.99	106.41	116.00
85	A5	503	C	O4'-C1'-N1	5.99	112.99	108.20
36	B2	1407	U	O4'-C1'-N1	5.99	112.99	108.20
85	A5	469	C	O3'-P-O5'	5.99	115.38	104.00
85	A5	1872	G	C3'-C2'-C1'	-5.99	96.71	101.50
85	A5	2501	C	O4'-C1'-N1	5.99	112.99	108.20
85	A5	4600	G	O4'-C1'-C2'	-5.99	99.81	105.80
19	AZ	112	ASN	N-CA-C	5.99	127.17	111.00
29	AG	220	ALA	O-C-N	-5.99	113.12	122.70
33	AI	132	GLU	CA-C-N	5.99	130.38	117.20
36	B2	1703	C	O4'-C1'-C2'	-5.99	99.81	105.80
53	CT	145	GLY	N-CA-C	-5.99	98.13	113.10
85	A5	174	C	C1'-O4'-C4'	-5.99	105.11	109.90
85	A5	3723	A	O4'-C1'-N9	5.99	112.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	AR	88	VAL	C-N-CA	-5.99	106.73	121.70
85	A5	2492	C	O4'-C1'-C2'	-5.99	99.81	105.80
48	CD	186	GLU	CA-C-N	-5.99	104.03	117.20
78	Co	66	ILE	CG1-CB-CG2	-5.99	98.23	111.40
85	A5	200	U	O4'-C1'-N1	-5.99	103.41	108.20
85	A5	1096	C	C3'-C2'-C1'	5.99	106.29	101.50
36	B2	207	G	O4'-C1'-C2'	-5.98	99.82	105.80
36	B2	1747	C	C5'-C4'-O4'	5.98	116.28	109.10
51	CA	68	ARG	N-CA-CB	5.98	121.37	110.60
13	AP	121	ILE	O-C-N	-5.98	113.13	122.70
36	B2	470	G	O4'-C1'-N9	5.98	112.99	108.20
69	Cg	45	ALA	O-C-N	-5.98	113.13	122.70
85	A5	1432	G	O3'-P-O5'	-5.98	92.63	104.00
85	A5	2107	C	O4'-C1'-N1	5.98	112.99	108.20
85	A5	4641	U	C1'-O4'-C4'	5.98	114.69	109.90
85	A5	4898	G	P-O3'-C3'	5.98	126.88	119.70
36	B2	791	C	O3'-P-O5'	-5.98	92.64	104.00
36	B2	1397	U	C3'-C2'-C1'	5.98	106.28	101.50
45	Ca	95	THR	CA-C-N	5.98	128.16	116.20
85	A5	2110	C	N1-C1'-C2'	5.98	121.77	114.00
85	A5	1282	G	O4'-C1'-N9	5.98	112.98	108.20
85	A5	2691	U	C4'-C3'-O3'	-5.98	96.84	109.40
85	A5	4691	A	C5'-C4'-O4'	5.98	116.28	109.10
18	AY	86	GLU	CA-C-N	5.98	133.84	117.10
30	AF	38	TYR	C-N-CA	-5.98	106.76	121.70
36	B2	1445	U	C4'-C3'-O3'	-5.98	96.85	109.40
81	CE	92	VAL	CA-C-N	-5.98	104.05	117.20
85	A5	484	U	P-O3'-C3'	5.98	126.87	119.70
85	A5	2470	C	O3'-P-O5'	5.98	115.36	104.00
36	B2	631	U	O4'-C1'-N1	5.98	112.98	108.20
36	B2	858	A	C3'-C2'-C1'	5.98	106.28	101.50
36	B2	1091	C	O4'-C1'-C2'	-5.98	99.82	105.80
53	CT	17	ARG	C-N-CD	-5.98	107.45	120.60
85	A5	2590	G	N9-C1'-C2'	5.98	121.77	114.00
36	B2	281	C	O5'-P-OP2	-5.97	100.32	105.70
85	A5	33	A	N9-C1'-C2'	5.97	121.77	114.00
85	A5	1463	C	C3'-C2'-C1'	5.97	106.28	101.50
85	A5	2646	C	O4'-C1'-N1	5.97	112.98	108.20
85	A5	4068	U	C1'-O4'-C4'	-5.97	105.12	109.90
85	A5	4197	G	O4'-C1'-N9	5.97	112.98	108.20
87	A8	121	G	P-O3'-C3'	5.97	126.87	119.70
11	AL	151	THR	C-N-CA	5.97	136.63	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1576	G	C1'-O4'-C4'	-5.97	105.12	109.90
40	CK	28	LEU	N-CA-CB	5.97	122.34	110.40
85	A5	644	G	C1'-O4'-C4'	-5.97	105.12	109.90
85	A5	720	G	N9-C1'-C2'	5.97	121.77	114.00
16	AA	193	HIS	C-N-CD	-5.97	107.46	120.60
85	A5	938	C	C4'-C3'-C2'	-5.97	96.63	102.60
85	A5	4409	C	O4'-C1'-C2'	-5.97	99.83	105.80
1	Az	267	ASP	C-N-CD	5.97	140.94	128.40
36	B2	963	A	P-O5'-C5'	-5.97	111.35	120.90
85	A5	1436	C	C4'-C3'-C2'	-5.97	96.63	102.60
85	A5	1582	U	O4'-C1'-C2'	-5.97	99.83	105.80
85	A5	1777	C	O4'-C1'-N1	5.97	112.97	108.20
86	A7	29	C	O4'-C1'-C2'	-5.97	99.83	105.80
85	A5	2898	G	N9-C1'-C2'	5.97	121.76	114.00
85	A5	4336	A	O3'-P-O5'	-5.97	92.66	104.00
36	B2	193	C	O5'-C5'-C4'	-5.97	100.36	111.70
74	CC	265	GLY	O-C-N	-5.97	113.16	122.70
85	A5	4443	C	O4'-C1'-C2'	-5.97	99.83	105.80
3	AU	68	THR	N-CA-CB	-5.96	98.97	110.30
53	CT	151	LEU	O-C-N	-5.96	113.16	122.70
85	A5	236	G	O4'-C1'-C2'	5.96	112.97	107.60
85	A5	3792	G	O4'-C1'-N9	5.96	112.97	108.20
85	A5	4355	G	C1'-O4'-C4'	5.96	114.67	109.90
3	AU	109	GLY	N-CA-C	-5.96	98.19	113.10
36	B2	568	C	C3'-C2'-C1'	5.96	106.27	101.50
85	A5	1607	C	C3'-C2'-C1'	5.96	106.27	101.50
85	A5	4258	C	N1-C1'-C2'	5.96	121.75	114.00
86	A7	7	G	O4'-C1'-C2'	-5.96	99.84	105.80
36	B2	195	C	O4'-C1'-N1	5.96	112.97	108.20
36	B2	1706	G	O4'-C1'-N9	5.96	112.97	108.20
42	CL	160	VAL	C-N-CA	5.96	136.60	121.70
60	Cr	56	ASP	N-CA-CB	-5.96	99.87	110.60
85	A5	2930	G	O3'-P-O5'	5.96	115.33	104.00
85	A5	4730	C	C4'-C3'-C2'	5.96	108.56	102.60
86	A7	62	U	P-O3'-C3'	-5.96	112.55	119.70
85	A5	4018	G	P-O3'-C3'	5.96	126.85	119.70
87	A8	115	G	O4'-C1'-C2'	5.96	112.96	107.60
36	B2	1118	C	C3'-C2'-C1'	-5.96	96.73	101.50
36	B2	1412	C	C4'-C3'-O3'	5.96	124.92	113.00
36	B2	1445	U	P-O3'-C3'	-5.96	112.55	119.70
85	A5	1438	U	C3'-C2'-C1'	5.96	106.27	101.50
87	A8	45	C	O4'-C1'-N1	5.96	112.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	A8	68	G	C3'-C2'-C1'	-5.96	96.73	101.50
36	B2	1327	G	C1'-O4'-C4'	-5.96	105.13	109.90
68	Cf	100	ARG	CA-C-N	5.96	130.31	117.20
74	CC	308	LYS	CA-C-O	-5.96	107.59	120.10
85	A5	1305	C	N1-C1'-C2'	5.96	121.74	114.00
85	A5	1330	A	N9-C1'-C2'	5.96	121.74	114.00
36	B2	1352	G	O4'-C1'-N9	5.96	112.96	108.20
53	CT	151	LEU	CA-C-N	5.96	130.30	117.20
56	CX	120	ASP	C-N-CA	-5.96	106.81	121.70
58	CW	73	ARG	CG-CD-NE	-5.96	99.29	111.80
85	A5	338	A	O4'-C1'-N9	5.96	112.96	108.20
18	AY	64	PHE	N-CA-CB	-5.95	99.88	110.60
36	B2	591	U	N1-C1'-C2'	5.95	121.74	114.00
36	B2	848	U	C1'-O4'-C4'	-5.95	105.14	109.90
36	B2	1051	G	C3'-C2'-C1'	-5.95	96.74	101.50
40	CK	85	LEU	CD1-CG-CD2	5.95	128.36	110.50
40	CK	86	LYS	CB-CA-C	-5.95	98.50	110.40
45	Ca	116	LYS	N-CA-C	5.95	127.07	111.00
85	A5	2737	C	O4'-C1'-N1	5.95	112.96	108.20
85	A5	2871	A	O4'-C1'-N9	5.95	112.96	108.20
33	AI	29	LEU	C-N-CA	5.95	134.80	122.30
36	B2	1304	U	O4'-C1'-N1	5.95	112.96	108.20
85	A5	423	G	C3'-C2'-C1'	-5.95	96.74	101.50
85	A5	1411	C	P-O5'-C5'	5.95	130.42	120.90
85	A5	2769	U	O4'-C1'-N1	5.95	112.96	108.20
85	A5	2819	U	C3'-C2'-C1'	5.95	106.26	101.50
87	A8	83	C	P-O3'-C3'	5.95	126.84	119.70
36	B2	974	C	C1'-O4'-C4'	-5.95	105.14	109.90
39	Cq	23	ASP	CA-C-N	5.95	130.29	117.20
47	CI	212	LEU	N-CA-C	5.95	127.07	111.00
85	A5	87	A	O4'-C1'-N9	5.95	112.96	108.20
85	A5	98	A	O4'-C1'-N9	5.95	112.96	108.20
85	A5	2235	C	O3'-P-O5'	5.95	115.31	104.00
4	AK	41	PRO	N-CA-C	-5.95	96.64	112.10
85	A5	135	G	O4'-C1'-N9	-5.95	103.44	108.20
85	A5	4453	C	C1'-O4'-C4'	-5.95	105.14	109.90
86	A7	111	C	O4'-C1'-N1	5.95	112.96	108.20
85	A5	1791	U	C3'-C2'-C1'	5.95	106.26	101.50
85	A5	3681	G	O4'-C1'-C2'	-5.95	99.85	105.80
36	B2	287	U	P-O5'-C5'	5.95	130.41	120.90
85	A5	1556	C	C3'-C2'-C1'	5.95	106.26	101.50
85	A5	3607	U	N1-C1'-C2'	5.95	121.73	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	965	G	P-O5'-C5'	5.94	130.41	120.90
36	B2	64	A	C3'-C2'-C1'	-5.94	96.75	101.50
36	B2	90	G	O4'-C1'-N9	5.94	112.95	108.20
85	A5	2396	A	O5'-C5'-C4'	-5.94	100.41	111.70
85	A5	4905	C	C3'-C2'-C1'	5.94	106.25	101.50
85	A5	4939	C	O4'-C1'-N1	5.94	112.95	108.20
85	A5	2005	G	P-O3'-C3'	-5.94	112.57	119.70
85	A5	4368	G	C1'-O4'-C4'	-5.94	105.15	109.90
87	A8	59	A	C1'-O4'-C4'	-5.94	105.15	109.90
49	CQ	21	GLN	O-C-N	-5.94	113.20	122.70
1	Az	71	LYS	C-N-CA	-5.94	106.86	121.70
36	B2	1540	G	O4'-C1'-N9	5.94	112.95	108.20
22	Ac	5	ARG	N-CA-C	5.93	127.03	111.00
36	B2	1852	C	N1-C1'-C2'	5.93	121.71	114.00
85	A5	257	C	O4'-C1'-N1	5.93	112.95	108.20
85	A5	315	G	N9-C1'-C2'	5.93	121.71	114.00
85	A5	2820	C	C3'-C2'-C1'	5.93	106.25	101.50
36	B2	1758	G	C1'-O4'-C4'	-5.93	105.15	109.90
36	B2	1807	C	C1'-O4'-C4'	-5.93	105.16	109.90
85	A5	203	U	C3'-C2'-C1'	-5.93	96.75	101.50
85	A5	2397	G	P-O5'-C5'	5.93	130.39	120.90
85	A5	2881	A	O4'-C1'-C2'	-5.93	99.87	105.80
85	A5	1985	G	P-O5'-C5'	5.93	130.39	120.90
85	A5	2067	C	N1-C1'-C2'	5.93	121.71	114.00
85	A5	2710	C	O4'-C1'-N1	5.93	112.94	108.20
3	AU	69	PRO	N-CA-C	-5.93	96.69	112.10
36	B2	1203	G	C3'-C2'-C1'	-5.93	96.76	101.50
37	BC	17	G	N9-C1'-C2'	5.93	121.71	114.00
85	A5	144	G	N9-C1'-C2'	-5.93	105.48	112.00
85	A5	178	C	O4'-C1'-N1	5.93	112.94	108.20
85	A5	460	C	O4'-C1'-C2'	-5.93	99.87	105.80
85	A5	512	U	C4'-C3'-C2'	-5.93	96.67	102.60
85	A5	2741	U	C3'-C2'-C1'	5.93	106.24	101.50
85	A5	4645	C	C3'-C2'-C1'	5.93	106.24	101.50
85	A5	4681	A	C3'-C2'-C1'	5.93	106.24	101.50
85	A5	1849	U	C1'-O4'-C4'	5.93	114.64	109.90
36	B2	191	A	O5'-P-OP2	-5.93	100.37	105.70
36	B2	362	C	N1-C1'-C2'	5.93	121.70	114.00
36	B2	1699	A	P-O3'-C3'	-5.93	112.59	119.70
44	CM	70	GLN	CB-CA-C	5.93	122.25	110.40
85	A5	50	C	N1-C1'-C2'	5.93	121.70	114.00
85	A5	1373	A	O4'-C1'-N9	5.93	112.94	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2674	A	P-O3'-C3'	5.93	126.81	119.70
85	A5	2770	C	C1'-O4'-C4'	-5.93	105.16	109.90
36	B2	1026	C	O4'-C1'-C2'	-5.92	99.88	105.80
36	B2	1417	C	OP1-P-OP2	-5.92	110.71	119.60
36	B2	1420	G	N9-C1'-C2'	5.92	121.70	114.00
85	A5	1756	U	O3'-P-O5'	5.92	115.26	104.00
85	A5	1931	C	O4'-C1'-C2'	-5.92	99.88	105.80
85	A5	2462	C	O4'-C1'-C2'	-5.92	99.88	105.80
85	A5	228	C	C3'-C2'-C1'	5.92	106.24	101.50
85	A5	953	C	C3'-C2'-C1'	5.92	106.24	101.50
85	A5	1643	A	C3'-C2'-C1'	5.92	106.24	101.50
85	A5	4975	G	O4'-C1'-N9	5.92	112.94	108.20
17	AV	66	ASP	C-N-CA	-5.92	106.90	121.70
63	CB	150	PHE	N-CA-C	-5.92	95.01	111.00
85	A5	505	G	C4'-C3'-C2'	-5.92	96.68	102.60
85	A5	2836	A	C4'-C3'-C2'	-5.92	96.68	102.60
85	A5	4608	G	N9-C1'-C2'	5.92	121.70	114.00
85	A5	4634	U	C1'-O4'-C4'	-5.92	105.16	109.90
85	A5	4678	G	N9-C1'-C2'	-5.92	105.49	112.00
85	A5	4763	U	O4'-C1'-C2'	-5.92	99.88	105.80
85	A5	4901	G	O4'-C1'-N9	5.92	112.94	108.20
85	A5	115	C	C1'-O4'-C4'	5.92	114.64	109.90
85	A5	1511	U	O4'-C1'-N1	5.92	112.94	108.20
21	Ab	53	VAL	C-N-CA	-5.92	106.90	121.70
36	B2	797	C	P-O5'-C5'	5.92	130.37	120.90
36	B2	1231	C	O4'-C1'-N1	-5.92	103.47	108.20
85	A5	407	A	C3'-C2'-C1'	5.92	106.23	101.50
85	A5	951	G	P-O3'-C3'	5.92	126.80	119.70
85	A5	2380	G	C1'-O4'-C4'	-5.92	105.17	109.90
85	A5	2771	G	C1'-O4'-C4'	-5.92	105.17	109.90
85	A5	4047	A	P-O3'-C3'	5.92	126.80	119.70
85	A5	4270	C	C3'-C2'-C1'	5.92	106.23	101.50
36	B2	77	A	O4'-C1'-N9	5.92	112.93	108.20
60	Cr	103	ARG	N-CA-CB	5.92	121.25	110.60
85	A5	908	G	O4'-C1'-N9	5.92	112.93	108.20
85	A5	2803	U	N1-C1'-C2'	5.92	121.69	114.00
74	CC	267	TRP	CA-C-O	-5.92	107.68	120.10
85	A5	5008	C	N1-C1'-C2'	5.92	121.69	114.00
86	A7	64	G	C4'-C3'-O3'	-5.92	96.98	109.40
37	BC	13	C	O4'-C1'-N1	5.91	112.93	108.20
85	A5	89	C	O4'-C1'-N1	5.91	112.93	108.20
85	A5	4168	G	O4'-C1'-C2'	5.91	112.92	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4526	U	O4'-C1'-N1	5.91	112.93	108.20
85	A5	4936	G	P-O3'-C3'	-5.91	112.60	119.70
36	B2	1114	U	C1'-O4'-C4'	5.91	114.63	109.90
36	B2	1780	G	C3'-C2'-C1'	-5.91	96.77	101.50
38	Cz	208	SER	CA-C-N	-5.91	104.19	117.20
42	CL	56	ARG	NE-CZ-NH2	-5.91	117.34	120.30
42	CL	164	GLU	CA-C-N	5.91	130.21	117.20
85	A5	2290	C	C4'-C3'-C2'	-5.91	96.69	102.60
36	B2	1347	U	O4'-C1'-C2'	-5.91	99.89	105.80
36	B2	1421	A	O4'-C1'-N9	5.91	112.93	108.20
74	CC	191	ALA	C-N-CA	-5.91	109.89	122.30
85	A5	660	A	O4'-C1'-C2'	-5.91	99.89	105.80
36	B2	1435	C	C5'-C4'-C3'	5.91	125.45	116.00
85	A5	1968	G	O4'-C1'-N9	5.91	112.93	108.20
85	A5	131	C	C4'-C3'-C2'	-5.91	96.69	102.60
35	Ah	170	ARG	O-C-N	-5.91	113.16	123.20
81	CE	27	VAL	N-CA-CB	-5.91	98.51	111.50
85	A5	1984	A	N9-C1'-C2'	-5.91	105.50	112.00
85	A5	2544	G	C5'-C4'-C3'	5.91	125.45	116.00
85	A5	1186	U	O4'-C4'-C3'	-5.90	98.10	104.00
86	A7	22	A	C3'-C2'-C1'	5.90	106.22	101.50
36	B2	1069	U	P-O5'-C5'	-5.90	111.46	120.90
36	B2	1785	C	O4'-C1'-N1	5.90	112.92	108.20
60	Cr	56	ASP	CB-CG-OD2	5.90	123.61	118.30
85	A5	27	C	N1-C1'-C2'	5.90	121.67	114.00
85	A5	1283	G	C3'-C2'-C1'	5.90	106.22	101.50
85	A5	1846	G	C1'-O4'-C4'	-5.90	105.18	109.90
85	A5	2317	C	P-O5'-C5'	5.90	130.34	120.90
85	A5	2539	C	O4'-C1'-N1	5.90	112.92	108.20
87	A8	38	U	O4'-C1'-N1	5.90	112.92	108.20
36	B2	1095	C	C1'-O4'-C4'	-5.90	105.18	109.90
85	A5	1077	C	C1'-O4'-C4'	-5.90	105.18	109.90
85	A5	4517	A	O4'-C1'-C2'	-5.90	99.90	105.80
85	A5	1777	C	C1'-O4'-C4'	-5.90	105.18	109.90
31	AH	16	PRO	O-C-N	-5.90	113.26	122.70
85	A5	337	U	O4'-C1'-N1	5.90	112.92	108.20
36	B2	378	U	N1-C1'-C2'	5.90	121.67	114.00
85	A5	1368	A	C4'-C3'-C2'	-5.90	96.70	102.60
85	A5	1547	A	O4'-C1'-C2'	-5.90	99.90	105.80
85	A5	1921	C	O4'-C1'-C2'	-5.90	99.90	105.80
85	A5	2690	C	C3'-C2'-C1'	5.90	106.22	101.50
36	B2	1146	C	C1'-O4'-C4'	-5.89	105.19	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1255	G	C3'-C2'-C1'	-5.89	96.78	101.50
85	A5	183	C	C1'-O4'-C4'	5.89	114.62	109.90
85	A5	2012	A	N9-C1'-C2'	5.89	121.66	114.00
85	A5	4304	A	C3'-C2'-C1'	5.89	106.22	101.50
85	A5	5014	A	N9-C1'-C2'	5.89	121.66	114.00
87	A8	14	U	O4'-C1'-N1	5.89	112.92	108.20
87	A8	99	U	O4'-C1'-N1	5.89	112.92	108.20
36	B2	1432	U	N1-C1'-C2'	5.89	121.66	114.00
85	A5	2003	G	N9-C1'-C2'	5.89	121.66	114.00
2	Ag	12	LYS	C-N-CA	5.89	134.67	122.30
85	A5	145	G	C1'-O4'-C4'	5.89	114.61	109.90
1	Az	196	GLU	N-CA-C	-5.89	95.10	111.00
36	B2	1463	U	P-O3'-C3'	-5.89	112.63	119.70
44	CM	2	VAL	C-N-CA	5.89	136.42	121.70
74	CC	261	ASP	CA-C-N	5.89	130.16	117.20
85	A5	504	G	P-O3'-C3'	5.89	126.77	119.70
85	A5	1657	G	O4'-C1'-C2'	5.89	112.90	107.60
85	A5	1700	G	C4'-C3'-C2'	-5.89	96.71	102.60
85	A5	3598	C	P-O3'-C3'	5.89	126.77	119.70
85	A5	4174	U	C3'-C2'-C1'	-5.89	96.79	101.50
85	A5	1578	U	O5'-C5'-C4'	5.89	122.89	111.70
85	A5	2464	C	O3'-P-O5'	-5.89	92.81	104.00
48	CD	66	TYR	CA-CB-CG	-5.89	102.21	113.40
64	CF	22	ARG	C-N-CA	5.89	136.41	121.70
85	A5	2737	C	P-O3'-C3'	5.89	126.77	119.70
85	A5	4423	U	C1'-O4'-C4'	5.89	114.61	109.90
85	A5	4990	C	C5'-C4'-O4'	5.89	116.16	109.10
36	B2	54	A	N9-C1'-C2'	5.88	121.65	114.00
36	B2	1840	U	O4'-C1'-N1	5.88	112.91	108.20
85	A5	4623	G	C1'-O4'-C4'	5.88	114.61	109.90
36	B2	1683	C	C3'-C2'-C1'	5.88	106.21	101.50
85	A5	1808	C	O4'-C1'-C2'	-5.88	99.92	105.80
36	B2	402	C	O4'-C1'-C2'	-5.88	99.92	105.80
36	B2	1710	C	C3'-C2'-C1'	5.88	106.21	101.50
85	A5	1811	G	C3'-C2'-C1'	-5.88	96.80	101.50
85	A5	1827	C	C4'-C3'-O3'	-5.88	97.05	109.40
85	A5	3977	C	O4'-C1'-N1	5.88	112.91	108.20
85	A5	1245	C	O4'-C1'-N1	5.88	112.90	108.20
85	A5	4190	U	O4'-C1'-N1	5.88	112.90	108.20
85	A5	5015	G	C1'-O4'-C4'	5.88	114.60	109.90
36	B2	662	G	C1'-O4'-C4'	-5.88	105.20	109.90
36	B2	1307	U	N1-C1'-C2'	-5.88	105.53	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	AH	192	PHE	N-CA-C	5.88	126.86	111.00
36	B2	620	G	C1'-O4'-C4'	5.88	114.60	109.90
36	B2	956	G	O4'-C1'-N9	5.88	112.90	108.20
52	CS	152	PHE	CB-CG-CD2	5.88	124.91	120.80
85	A5	2289	C	O4'-C1'-N1	-5.88	103.50	108.20
85	A5	4989	U	O4'-C1'-N1	5.88	112.90	108.20
36	B2	1055	A	C3'-C2'-C1'	5.88	106.20	101.50
85	A5	186	G	C3'-C2'-C1'	5.88	106.20	101.50
85	A5	3268	U	P-O5'-C5'	5.88	130.30	120.90
36	B2	324	C	C3'-C2'-C1'	-5.87	96.80	101.50
36	B2	1745	A	C4'-C3'-C2'	-5.87	96.73	102.60
81	CE	37	PRO	N-CA-CB	5.87	110.35	103.30
85	A5	1931	C	C3'-C2'-C1'	5.87	106.20	101.50
85	A5	2454	U	C3'-C2'-C1'	5.87	106.20	101.50
85	A5	4955	A	O4'-C1'-N9	5.87	112.90	108.20
87	A8	80	A	C1'-O4'-C4'	-5.87	105.20	109.90
20	Aa	96	THR	CA-C-N	-5.87	100.66	117.10
36	B2	377	G	O4'-C1'-N9	5.87	112.90	108.20
36	B2	792	C	N1-C1'-C2'	5.87	121.63	114.00
59	CZ	102	ARG	NE-CZ-NH1	5.87	123.24	120.30
85	A5	2071	A	C3'-C2'-C1'	5.87	106.20	101.50
36	B2	734	C	N1-C1'-C2'	5.87	121.63	114.00
36	B2	1353	A	O3'-P-O5'	-5.87	92.85	104.00
46	CN	79	ALA	CA-C-O	-5.87	107.77	120.10
57	CY	91	ASN	CA-C-N	-5.87	104.46	116.20
85	A5	965	G	C3'-C2'-C1'	5.87	106.20	101.50
85	A5	1361	G	O4'-C1'-C2'	5.87	112.88	107.60
36	B2	918	U	C1'-O4'-C4'	-5.87	105.20	109.90
81	CE	36	LYS	C-N-CA	5.87	146.65	122.00
85	A5	91	G	C3'-C2'-C1'	5.87	106.19	101.50
85	A5	2553	A	N9-C1'-C2'	-5.87	105.54	112.00
85	A5	2568	C	O4'-C1'-N1	5.87	112.89	108.20
85	A5	661	C	O4'-C1'-C2'	-5.87	99.93	105.80
85	A5	1922	G	C3'-C2'-C1'	-5.87	96.81	101.50
34	AQ	17	LYS	O-C-N	-5.87	113.31	122.70
36	B2	730	C	O4'-C1'-N1	5.87	112.89	108.20
85	A5	1880	G	O4'-C1'-C2'	5.87	112.88	107.60
85	A5	1956	A	C1'-O4'-C4'	5.87	114.59	109.90
85	A5	2409	U	O4'-C1'-C2'	-5.87	99.94	105.80
85	A5	461	G	C1'-O4'-C4'	-5.86	105.21	109.90
85	A5	650	C	O4'-C1'-C2'	-5.86	99.94	105.80
85	A5	4705	A	C1'-O4'-C4'	-5.86	105.21	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	695	C	O4'-C1'-N1	5.86	112.89	108.20
85	A5	144	G	C4'-C3'-C2'	-5.86	96.74	102.60
36	B2	115	U	O4'-C1'-N1	5.86	112.89	108.20
36	B2	1278	A	P-O5'-C5'	5.86	130.28	120.90
85	A5	3853	U	O4'-C1'-N1	5.86	112.89	108.20
85	A5	488	G	C3'-C2'-C1'	-5.86	96.81	101.50
36	B2	879	C	O4'-C1'-N1	5.86	112.89	108.20
36	B2	950	C	C3'-C2'-C1'	5.86	106.19	101.50
72	Ck	31	ASN	C-N-CA	-5.86	107.06	121.70
81	CE	96	VAL	C-N-CA	5.86	134.60	122.30
85	A5	1738	A	O4'-C1'-N9	5.86	112.89	108.20
85	A5	2362	U	N1-C1'-C2'	-5.86	105.56	112.00
85	A5	2662	G	C1'-O4'-C4'	-5.86	105.21	109.90
87	A8	152	U	C3'-C2'-C1'	-5.86	96.81	101.50
36	B2	538	U	C3'-C2'-C1'	5.86	106.18	101.50
36	B2	556	U	C5'-C4'-C3'	5.86	125.37	116.00
58	CW	71	ARG	CG-CD-NE	5.86	124.10	111.80
63	CB	356	LYS	CA-CB-CG	-5.86	100.52	113.40
85	A5	67	C	O4'-C1'-C2'	-5.86	99.94	105.80
85	A5	1919	G	C1'-O4'-C4'	-5.86	105.22	109.90
85	A5	2816	G	C1'-O4'-C4'	-5.86	105.22	109.90
85	A5	2865	U	O4'-C1'-N1	5.86	112.89	108.20
85	A5	3608	A	O4'-C1'-N9	5.86	112.88	108.20
1	Az	247	ALA	N-CA-CB	5.85	118.30	110.10
36	B2	1668	U	P-O3'-C3'	5.85	126.72	119.70
36	B2	1806	A	N9-C1'-C2'	5.85	121.61	114.00
37	BC	31	C	C3'-C2'-C1'	5.85	106.18	101.50
85	A5	1329	G	O4'-C1'-N9	5.85	112.88	108.20
85	A5	4904	G	C3'-C2'-C1'	-5.85	96.82	101.50
36	B2	313	A	P-O3'-C3'	5.85	126.72	119.70
36	B2	862	A	C1'-O4'-C4'	-5.85	105.22	109.90
42	CL	52	SER	C-N-CA	5.85	134.59	122.30
85	A5	70	A	C1'-O4'-C4'	5.85	114.58	109.90
85	A5	1252	C	C3'-C2'-C1'	5.85	106.18	101.50
85	A5	2534	C	C1'-O4'-C4'	-5.85	105.22	109.90
36	B2	1489	A	P-O3'-C3'	5.85	126.72	119.70
85	A5	50	C	O4'-C1'-N1	5.85	112.88	108.20
85	A5	287	U	O4'-C1'-N1	5.85	112.88	108.20
85	A5	663	G	C1'-O4'-C4'	-5.85	105.22	109.90
85	A5	1568	C	C3'-C2'-C1'	5.85	106.18	101.50
36	B2	1062	A	C3'-C2'-C1'	5.85	106.18	101.50
36	B2	1501	C	P-O3'-C3'	5.85	126.72	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	929	A	N9-C1'-C2'	5.85	121.60	114.00
85	A5	2374	A	C3'-C2'-C1'	5.85	106.18	101.50
36	B2	694	G	P-O5'-C5'	5.85	130.26	120.90
36	B2	731	G	C5'-C4'-O4'	-5.85	102.08	109.10
36	B2	1349	G	N9-C1'-C2'	5.85	121.60	114.00
85	A5	705	G	O4'-C1'-N9	5.85	112.88	108.20
85	A5	2346	C	P-O3'-C3'	5.85	126.72	119.70
85	A5	3807	A	C1'-O4'-C4'	-5.85	105.22	109.90
52	CS	13	VAL	N-CA-C	-5.85	95.22	111.00
85	A5	1378	C	N1-C1'-C2'	5.85	121.60	114.00
85	A5	1558	A	C3'-C2'-C1'	5.85	106.18	101.50
85	A5	1570	G	O4'-C1'-N9	5.85	112.88	108.20
85	A5	1741	G	C1'-O4'-C4'	-5.85	105.22	109.90
85	A5	3786	U	C3'-C2'-C1'	5.85	106.18	101.50
85	A5	4431	U	O4'-C1'-C2'	-5.85	99.95	105.80
63	CB	77	THR	CA-CB-CG2	-5.84	104.22	112.40
85	A5	246	G	O4'-C1'-N9	5.84	112.88	108.20
85	A5	1571	G	O4'-C1'-N9	5.84	112.88	108.20
85	A5	2253	A	C1'-O4'-C4'	-5.84	105.22	109.90
35	Ah	162	ILE	CA-CB-CG2	5.84	122.58	110.90
36	B2	412	G	C3'-C2'-C1'	5.84	106.17	101.50
86	A7	25	G	P-O3'-C3'	5.84	126.71	119.70
36	B2	1138	C	C4'-C3'-O3'	-5.84	97.14	109.40
36	B2	1152	U	O4'-C1'-N1	5.84	112.87	108.20
85	A5	4342	C	C1'-O4'-C4'	-5.84	105.23	109.90
85	A5	4388	A	O4'-C1'-N9	5.84	112.87	108.20
85	A5	4612	C	C1'-O4'-C4'	-5.84	105.23	109.90
85	A5	4658	G	N9-C1'-C2'	5.84	121.59	114.00
85	A5	4930	C	O4'-C1'-N1	5.84	112.87	108.20
39	Cq	68	HIS	N-CA-CB	5.84	121.11	110.60
51	CA	64	ARG	N-CA-C	-5.84	95.24	111.00
59	CZ	52	LYS	N-CA-C	5.84	126.76	111.00
14	AT	30	VAL	N-CA-C	5.84	126.76	111.00
36	B2	429	C	C3'-C2'-C1'	5.84	106.17	101.50
36	B2	1131	G	C5'-C4'-C3'	-5.84	106.66	116.00
51	CA	67	TYR	CD1-CE1-CZ	5.84	125.05	119.80
66	Cd	116	ASN	N-CA-C	5.84	126.76	111.00
82	CG	105	GLU	N-CA-C	5.84	126.76	111.00
85	A5	4215	C	N1-C1'-C2'	5.84	121.59	114.00
85	A5	4749	C	O4'-C1'-C2'	-5.84	99.96	105.80
36	B2	1610	G	O4'-C1'-N9	5.83	112.87	108.20
56	CX	73	HIS	O-C-N	-5.83	113.36	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1266	C	N1-C1'-C2'	5.83	121.58	114.00
82	CG	33	GLU	N-CA-C	-5.83	95.25	111.00
85	A5	267	G	O4'-C1'-N9	5.83	112.87	108.20
85	A5	1050	C	O4'-C1'-N1	5.83	112.87	108.20
85	A5	2797	C	O4'-C1'-N1	-5.83	103.53	108.20
85	A5	4199	C	O4'-C1'-C2'	-5.83	99.97	105.80
85	A5	4742	G	C3'-C2'-C1'	-5.83	96.83	101.50
85	A5	4991	U	O4'-C1'-N1	5.83	112.86	108.20
36	B2	834	C	C3'-C2'-C1'	-5.83	96.84	101.50
85	A5	2788	U	O4'-C1'-N1	5.83	112.86	108.20
85	A5	4078	C	O4'-C1'-C2'	-5.83	99.97	105.80
87	A8	48	A	O4'-C1'-C2'	-5.83	99.97	105.80
36	B2	1286	G	C4'-C3'-O3'	-5.83	97.16	109.40
36	B2	1737	G	C1'-O4'-C4'	-5.83	105.24	109.90
85	A5	74	G	O4'-C1'-C2'	5.83	112.85	107.60
85	A5	691	C	O4'-C1'-N1	5.83	112.86	108.20
85	A5	4373	G	O4'-C1'-C2'	-5.83	99.97	105.80
85	A5	1675	C	C3'-C2'-C1'	5.83	106.16	101.50
85	A5	3586	G	O4'-C1'-C2'	5.83	112.84	107.60
17	AV	42	VAL	CB-CA-C	-5.83	100.33	111.40
36	B2	734	C	O3'-P-O5'	5.83	115.07	104.00
64	CF	23	ARG	CA-C-O	5.83	132.33	120.10
85	A5	1259	G	O4'-C1'-C2'	5.83	112.84	107.60
85	A5	2254	G	C5'-C4'-C3'	5.83	125.32	116.00
85	A5	3675	G	O4'-C1'-N9	5.83	112.86	108.20
85	A5	3800	A	O3'-P-O5'	5.83	115.07	104.00
85	A5	4236	G	O4'-C1'-N9	5.83	112.86	108.20
85	A5	190	G	C1'-O4'-C4'	-5.82	105.24	109.90
85	A5	1293	G	N9-C1'-C2'	5.82	121.57	114.00
85	A5	1408	G	P-O5'-C5'	5.82	130.22	120.90
85	A5	1810	G	O4'-C1'-C2'	5.82	112.84	107.60
1	Az	432	PRO	O-C-N	-5.82	113.39	122.70
85	A5	1512	G	C1'-O4'-C4'	-5.82	105.24	109.90
85	A5	4349	C	OP1-P-O3'	-5.82	92.39	105.20
85	A5	4892	A	O4'-C1'-C2'	-5.82	99.98	105.80
36	B2	788	G	C1'-O4'-C4'	-5.82	105.25	109.90
36	B2	386	C	C1'-O4'-C4'	-5.82	105.25	109.90
36	B2	1002	U	O4'-C1'-N1	5.82	112.85	108.20
36	B2	1017	U	C1'-O4'-C4'	5.82	114.55	109.90
85	A5	314	G	C4'-C3'-O3'	-5.82	97.18	109.40
85	A5	524	C	O4'-C1'-C2'	-5.82	99.98	105.80
85	A5	2596	G	O4'-C1'-C2'	-5.82	99.98	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3896	C	O4'-C1'-N1	5.82	112.85	108.20
36	B2	627	U	O4'-C1'-C2'	-5.82	99.98	105.80
36	B2	1370	A	C1'-O4'-C4'	5.82	114.55	109.90
85	A5	726	G	C1'-O4'-C4'	-5.82	105.25	109.90
85	A5	1664	U	N1-C1'-C2'	5.82	121.56	114.00
85	A5	4725	C	O4'-C1'-N1	5.82	112.85	108.20
36	B2	1023	A	O4'-C1'-C2'	-5.81	99.99	105.80
85	A5	973	G	O4'-C1'-N9	5.81	112.85	108.20
36	B2	1234	C	C1'-O4'-C4'	-5.81	105.25	109.90
37	BC	54	U	C5'-C4'-C3'	-5.81	106.70	116.00
49	CQ	41	SER	C-N-CA	-5.81	107.17	121.70
85	A5	1271	G	O4'-C1'-N9	5.81	112.85	108.20
85	A5	4752	U	O4'-C1'-C2'	-5.81	99.99	105.80
85	A5	4925	U	O4'-C1'-C2'	-5.81	99.99	105.80
29	AG	131	ARG	CG-CD-NE	5.81	124.00	111.80
36	B2	668	A	O4'-C1'-N9	5.81	112.85	108.20
36	B2	1796	G	C5'-C4'-O4'	5.81	116.07	109.10
85	A5	1600	A	C3'-C2'-C1'	5.81	106.15	101.50
85	A5	1624	G	N9-C1'-C2'	5.81	121.56	114.00
85	A5	4236	G	C3'-C2'-C1'	-5.81	96.85	101.50
85	A5	4750	G	C4'-C3'-C2'	-5.81	96.79	102.60
36	B2	86	C	O4'-C1'-N1	5.81	112.85	108.20
36	B2	1582	C	N1-C1'-C2'	5.81	121.55	114.00
85	A5	197	A	N9-C1'-C2'	5.81	121.55	114.00
85	A5	1477	C	O4'-C1'-C2'	-5.81	99.99	105.80
85	A5	3943	A	O4'-C1'-C2'	-5.81	99.99	105.80
85	A5	4899	G	N9-C1'-C2'	5.81	121.55	114.00
1	Az	60	ARG	NE-CZ-NH1	-5.81	117.40	120.30
36	B2	1139	C	C4'-C3'-O3'	-5.81	97.20	109.40
36	B2	1552	G	C1'-O4'-C4'	5.81	114.55	109.90
36	B2	55	U	O4'-C1'-N1	5.81	112.84	108.20
36	B2	830	A	O4'-C1'-C2'	5.81	112.83	107.60
36	B2	1626	C	O4'-C1'-N1	5.81	112.84	108.20
47	CI	24	ARG	C-N-CA	5.81	134.49	122.30
67	Ce	1	MET	C-N-CA	5.81	136.22	121.70
85	A5	1272	C	P-O3'-C3'	5.81	126.67	119.70
85	A5	1626	G	O4'-C1'-N9	5.81	112.84	108.20
85	A5	2331	G	O4'-C1'-N9	5.81	112.84	108.20
85	A5	4140	C	P-O3'-C3'	5.81	126.67	119.70
1	Az	685	TRP	CB-CG-CD2	-5.80	119.05	126.60
36	B2	163	U	O4'-C1'-N1	5.80	112.84	108.20
36	B2	554	A	O4'-C1'-C2'	5.80	112.82	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1703	C	C3'-C2'-C1'	5.80	106.14	101.50
85	A5	664	G	C1'-O4'-C4'	-5.80	105.26	109.90
85	A5	1649	U	N1-C1'-C2'	5.80	121.55	114.00
85	A5	1721	G	P-O3'-C3'	5.80	126.67	119.70
85	A5	2278	G	O4'-C1'-N9	5.80	112.84	108.20
85	A5	4452	U	P-O3'-C3'	5.80	126.67	119.70
85	A5	4663	G	P-O3'-C3'	5.80	126.67	119.70
44	CM	46	ARG	CA-CB-CG	5.80	126.17	113.40
36	B2	114	G	C1'-O4'-C4'	5.80	114.54	109.90
85	A5	1065	G	C3'-C2'-C1'	-5.80	96.86	101.50
85	A5	1893	C	N1-C1'-C2'	5.80	121.54	114.00
85	A5	2796	G	O4'-C1'-N9	5.80	112.84	108.20
85	A5	4300	U	O4'-C1'-C2'	5.80	112.82	107.60
60	Cr	43	LEU	CB-CG-CD1	5.80	120.86	111.00
85	A5	1850	A	N9-C1'-C2'	5.80	121.54	114.00
36	B2	1116	C	O4'-C1'-C2'	5.80	112.82	107.60
85	A5	956	A	P-O5'-C5'	5.80	130.18	120.90
85	A5	1967	A	O4'-C1'-C2'	-5.80	100.00	105.80
85	A5	4902	C	C3'-C2'-C1'	5.80	106.14	101.50
36	B2	1418	C	N1-C1'-C2'	5.80	121.53	114.00
85	A5	639	U	O4'-C1'-C2'	-5.80	100.00	105.80
85	A5	755	C	O4'-C1'-C2'	-5.80	100.00	105.80
85	A5	3652	A	C3'-C2'-C1'	5.80	106.14	101.50
85	A5	3859	G	O4'-C1'-N9	5.80	112.84	108.20
74	CC	141	GLY	N-CA-C	-5.79	98.61	113.10
85	A5	356	G	O4'-C1'-C2'	5.79	112.81	107.60
36	B2	189	U	C1'-O4'-C4'	-5.79	105.27	109.90
36	B2	843	C	C3'-C2'-C1'	5.79	106.13	101.50
85	A5	205	C	N1-C1'-C2'	5.79	121.53	114.00
85	A5	685	C	C3'-C2'-C1'	5.79	106.13	101.50
85	A5	985	C	O4'-C1'-N1	5.79	112.83	108.20
85	A5	1182	C	C3'-C2'-C1'	5.79	106.14	101.50
85	A5	1477	C	O4'-C1'-N1	5.79	112.83	108.20
85	A5	1689	G	C1'-O4'-C4'	-5.79	105.27	109.90
85	A5	4159	C	O4'-C1'-N1	5.79	112.83	108.20
85	A5	4662	C	N1-C1'-C2'	5.79	121.53	114.00
30	AF	131	ALA	N-CA-C	5.79	126.64	111.00
36	B2	973	C	C3'-C2'-C1'	5.79	106.13	101.50
39	Cq	94	ASP	C-N-CA	-5.79	107.22	121.70
85	A5	134	G	N9-C1'-C2'	5.79	121.53	114.00
85	A5	251	C	O4'-C1'-C2'	-5.79	100.01	105.80
85	A5	3686	G	O4'-C1'-N9	5.79	112.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4404	U	N1-C1'-C2'	-5.79	105.63	112.00
85	A5	498	C	O4'-C1'-C2'	-5.79	100.01	105.80
85	A5	5003	U	N1-C1'-C2'	5.79	121.53	114.00
39	Cq	255	THR	O-C-N	5.79	131.96	122.70
82	CG	245	LYS	CB-CA-C	-5.79	98.83	110.40
85	A5	4184	G	C1'-O4'-C4'	-5.79	105.27	109.90
85	A5	4498	U	C1'-O4'-C4'	5.79	114.53	109.90
85	A5	4895	C	C1'-O4'-C4'	5.79	114.53	109.90
86	A7	29	C	C5'-C4'-C3'	-5.79	106.74	116.00
85	A5	4262	C	C1'-O4'-C4'	-5.79	105.27	109.90
4	AK	41	PRO	CA-N-CD	-5.79	103.40	111.50
36	B2	172	U	O4'-C1'-C2'	-5.79	100.02	105.80
68	Cf	71	TRP	CB-CG-CD2	-5.79	119.08	126.60
85	A5	2085	G	P-O3'-C3'	5.79	126.64	119.70
85	A5	2115	G	O4'-C1'-N9	5.79	112.83	108.20
85	A5	2740	U	N1-C1'-C2'	5.79	121.52	114.00
85	A5	4464	A	N9-C1'-C2'	5.79	121.52	114.00
7	AM	99	ASN	N-CA-C	5.78	126.62	111.00
16	AA	10	MET	N-CA-C	5.78	126.62	111.00
69	Cg	48	VAL	CB-CA-C	-5.78	100.41	111.40
85	A5	1470	G	N9-C1'-C2'	5.78	121.52	114.00
85	A5	2307	A	C3'-C2'-C1'	5.78	106.13	101.50
28	AC	256	TRP	C-N-CA	-5.78	107.25	121.70
36	B2	1464	C	C3'-C2'-C1'	5.78	106.12	101.50
85	A5	1237	C	C1'-O4'-C4'	-5.78	105.27	109.90
85	A5	1517	G	P-O3'-C3'	5.78	126.64	119.70
85	A5	4402	C	C3'-C2'-C1'	5.78	106.12	101.50
85	A5	4894	A	C1'-O4'-C4'	-5.78	105.27	109.90
2	Ag	159	ASN	O-C-N	-5.78	113.45	122.70
36	B2	185	G	P-O3'-C3'	-5.78	112.76	119.70
37	BC	25	G	O4'-C1'-N9	5.78	112.83	108.20
85	A5	154	G	P-O3'-C3'	5.78	126.64	119.70
85	A5	725	G	O4'-C1'-N9	5.78	112.82	108.20
85	A5	2359	U	P-O3'-C3'	5.78	126.64	119.70
85	A5	3928	A	O4'-C1'-C2'	-5.78	100.02	105.80
85	A5	4449	A	C1'-O4'-C4'	5.78	114.52	109.90
36	B2	868	G	O4'-C1'-N9	-5.78	103.58	108.20
36	B2	875	A	O4'-C1'-C2'	-5.78	100.02	105.80
85	A5	131	C	O4'-C1'-N1	5.78	112.82	108.20
85	A5	2753	G	P-O5'-C5'	5.78	130.15	120.90
1	Az	5	THR	C-N-CA	-5.78	107.26	121.70
36	B2	1208	A	C1'-O4'-C4'	5.78	114.52	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
69	Cg	83	CYS	CA-C-N	5.78	129.91	117.20
47	CI	202	SER	C-N-CA	5.78	136.14	121.70
85	A5	1	C	C3'-C2'-C1'	5.78	106.12	101.50
85	A5	277	G	O4'-C1'-N9	5.78	112.82	108.20
85	A5	509	A	O4'-C1'-N9	5.78	112.82	108.20
85	A5	1467	C	O4'-C1'-N1	5.78	112.82	108.20
85	A5	2859	G	O4'-C1'-N9	5.78	112.82	108.20
85	A5	3916	G	O4'-C1'-N9	5.78	112.82	108.20
36	B2	299	A	N9-C1'-C2'	-5.77	105.65	112.00
36	B2	643	A	O4'-C1'-C2'	-5.77	100.03	105.80
85	A5	2103	G	C3'-C2'-C1'	-5.77	96.88	101.50
85	A5	2272	C	C4'-C3'-C2'	-5.77	96.83	102.60
85	A5	4354	U	C4'-C3'-C2'	5.77	108.37	102.60
85	A5	28	C	C3'-C2'-C1'	5.77	106.12	101.50
85	A5	450	G	O4'-C1'-C2'	-5.77	100.03	105.80
85	A5	2410	C	C3'-C2'-C1'	5.77	106.12	101.50
36	B2	1532	C	N1-C1'-C2'	5.77	121.50	114.00
85	A5	387	G	O4'-C1'-C2'	-5.77	100.03	105.80
85	A5	3886	G	C3'-C2'-C1'	-5.77	96.88	101.50
85	A5	4155	C	N1-C1'-C2'	5.77	121.50	114.00
36	B2	880	G	N9-C1'-C2'	-5.77	105.66	112.00
85	A5	502	C	O4'-C1'-C2'	-5.77	100.03	105.80
85	A5	1360	G	O4'-C4'-C3'	-5.77	98.23	104.00
85	A5	1905	U	C5'-C4'-O4'	5.77	116.02	109.10
85	A5	1921	C	C3'-C2'-C1'	5.77	106.11	101.50
85	A5	1978	C	C1'-O4'-C4'	-5.77	105.29	109.90
85	A5	2789	A	C1'-O4'-C4'	5.77	114.51	109.90
85	A5	5013	C	P-O3'-C3'	-5.77	112.78	119.70
87	A8	6	C	C3'-C2'-C1'	5.77	106.11	101.50
29	AG	155	GLN	C-N-CA	-5.77	107.28	121.70
85	A5	2396	A	N9-C1'-C2'	5.77	121.50	114.00
85	A5	4397	A	O4'-C1'-N9	5.77	112.81	108.20
4	AK	29	MET	C-N-CD	-5.76	107.92	120.60
36	B2	1557	C	C2'-C3'-O3'	5.76	122.92	113.70
68	Cf	54	LYS	CD-CE-NZ	5.76	124.96	111.70
85	A5	4340	U	C3'-C2'-C1'	5.76	106.11	101.50
4	AK	40	VAL	CB-CA-C	-5.76	100.45	111.40
55	CU	48	LYS	O-C-N	-5.76	113.48	122.70
74	CC	221	PHE	CB-CG-CD1	-5.76	116.77	120.80
85	A5	179	G	O4'-C1'-N9	5.76	112.81	108.20
85	A5	2060	G	O4'-C1'-N9	5.76	112.81	108.20
85	A5	4123	C	P-O5'-C5'	-5.76	111.68	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1454	A	O4'-C1'-C2'	-5.76	100.04	105.80
74	CC	45	ARG	NE-CZ-NH2	-5.76	117.42	120.30
85	A5	61	A	O4'-C1'-N9	5.76	112.81	108.20
85	A5	1380	G	O4'-C1'-C2'	5.76	112.78	107.60
85	A5	1959	U	O4'-C1'-N1	5.76	112.81	108.20
85	A5	3924	C	C3'-C2'-C1'	5.76	106.11	101.50
86	A7	91	C	C3'-C2'-C1'	5.76	106.11	101.50
85	A5	2618	G	N9-C1'-C2'	-5.76	105.67	112.00
11	AL	4	ILE	N-CA-C	-5.76	95.45	111.00
85	A5	4418	G	N9-C1'-C2'	-5.76	105.67	112.00
36	B2	209	A	O3'-P-O5'	5.76	114.94	104.00
85	A5	199	G	C1'-O4'-C4'	-5.76	105.30	109.90
85	A5	958	G	C4'-C3'-C2'	-5.76	96.84	102.60
85	A5	1219	G	O4'-C1'-C2'	5.76	112.78	107.60
85	A5	2009	A	P-O5'-C5'	-5.76	111.69	120.90
85	A5	4360	U	O4'-C1'-N1	5.76	112.81	108.20
85	A5	4463	U	N1-C1'-C2'	5.76	121.48	114.00
86	A7	75	G	C3'-C2'-C1'	-5.76	96.89	101.50
31	AH	40	LEU	CA-CB-CG	-5.75	102.06	115.30
36	B2	1000	C	C3'-C2'-C1'	5.75	106.10	101.50
85	A5	4115	G	C1'-O4'-C4'	-5.75	105.30	109.90
36	B2	969	U	P-O3'-C3'	5.75	126.61	119.70
79	CJ	10	ASN	C-N-CD	-5.75	107.94	120.60
85	A5	297	U	O4'-C1'-C2'	-5.75	100.05	105.80
85	A5	386	A	O4'-C1'-N9	5.75	112.80	108.20
85	A5	649	A	O4'-C1'-C2'	-5.75	100.05	105.80
85	A5	1645	C	C3'-C2'-C1'	-5.75	96.90	101.50
85	A5	1696	C	O4'-C1'-N1	5.75	112.80	108.20
85	A5	1946	G	C1'-O4'-C4'	-5.75	105.30	109.90
36	B2	384	U	C1'-O4'-C4'	-5.75	105.30	109.90
36	B2	831	G	O4'-C1'-C2'	5.75	112.78	107.60
36	B2	1537	A	C3'-C2'-C1'	5.75	106.10	101.50
74	CC	115	VAL	O-C-N	-5.75	113.50	122.70
85	A5	24	G	P-O5'-C5'	-5.75	111.70	120.90
85	A5	1258	G	O4'-C1'-N9	5.75	112.80	108.20
37	BC	15	G	O4'-C1'-C2'	-5.75	100.05	105.80
85	A5	2687	U	P-O3'-C3'	5.75	126.60	119.70
85	A5	4310	A	C1'-O4'-C4'	5.75	114.50	109.90
36	B2	888	U	P-O5'-C5'	5.75	130.10	120.90
85	A5	1210	C	C2'-C3'-O3'	5.75	122.90	113.70
85	A5	4966	A	C1'-O4'-C4'	-5.75	105.30	109.90
85	A5	5054	C	O4'-C1'-C2'	-5.75	100.05	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	451	G	P-O5'-C5'	5.75	130.10	120.90
85	A5	39	A	C1'-O4'-C4'	-5.75	105.30	109.90
85	A5	504	G	N9-C1'-C2'	5.75	121.47	114.00
85	A5	2376	A	C3'-C2'-C1'	5.75	106.10	101.50
85	A5	4281	A	N9-C1'-C2'	5.75	121.47	114.00
36	B2	1061	U	O4'-C1'-N1	5.75	112.80	108.20
85	A5	4732	G	P-O3'-C3'	-5.75	112.81	119.70
36	B2	218	U	C1'-O4'-C4'	-5.74	105.30	109.90
36	B2	754	G	N9-C1'-C2'	5.74	121.47	114.00
36	B2	1475	G	O4'-C1'-N9	5.74	112.80	108.20
53	CT	126	VAL	N-CA-C	-5.74	95.49	111.00
85	A5	2507	A	C5'-C4'-C3'	-5.74	106.81	116.00
85	A5	2849	A	O4'-C1'-N9	5.74	112.80	108.20
86	A7	120	U	C1'-O4'-C4'	5.74	114.49	109.90
36	B2	1083	A	C3'-C2'-C1'	5.74	106.09	101.50
36	B2	1313	A	O4'-C1'-C2'	-5.74	100.06	105.80
36	B2	444	G	C3'-C2'-C1'	-5.74	96.91	101.50
85	A5	979	C	C3'-C2'-C1'	5.74	106.09	101.50
85	A5	2111	G	N9-C1'-C2'	-5.74	105.69	112.00
36	B2	286	U	N1-C1'-C2'	5.74	121.46	114.00
36	B2	514	U	N1-C1'-C2'	5.74	121.46	114.00
37	BC	43	A	C1'-O4'-C4'	-5.74	105.31	109.90
64	CF	98	ILE	N-CA-C	5.74	126.49	111.00
85	A5	146	G	O4'-C1'-C2'	5.74	112.77	107.60
85	A5	685	C	P-O5'-C5'	5.74	130.08	120.90
85	A5	1094	G	C3'-C2'-C1'	-5.74	96.91	101.50
85	A5	2034	G	C1'-O4'-C4'	-5.74	105.31	109.90
85	A5	2801	U	C1'-O4'-C4'	5.74	114.49	109.90
86	A7	33	U	N1-C1'-C2'	5.74	121.46	114.00
85	A5	932	A	C1'-O4'-C4'	5.74	114.49	109.90
85	A5	1673	U	C3'-C2'-C1'	5.74	106.09	101.50
85	A5	2125	C	P-O3'-C3'	5.74	126.58	119.70
6	AX	98	ASP	N-CA-C	5.74	126.49	111.00
36	B2	1430	C	C1'-O4'-C4'	5.74	114.49	109.90
52	CS	60	GLU	N-CA-C	5.74	126.48	111.00
85	A5	4942	C	O4'-C1'-C2'	5.74	112.76	107.60
1	Az	3	ASN	N-CA-C	-5.73	95.52	111.00
56	CX	40	ILE	CB-CA-C	-5.73	100.14	111.60
66	Cd	65	ASP	CB-CG-OD2	5.73	123.46	118.30
86	A7	48	G	N9-C1'-C2'	5.73	121.45	114.00
36	B2	171	A	C1'-O4'-C4'	5.73	114.48	109.90
74	CC	249	PHE	O-C-N	5.73	131.87	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1448	G	O4'-C1'-N9	5.73	112.78	108.20
85	A5	1646	A	C3'-C2'-C1'	5.73	106.08	101.50
36	B2	1576	G	N9-C1'-C2'	5.73	121.45	114.00
85	A5	259	C	O4'-C1'-N1	5.73	112.78	108.20
85	A5	973	G	C4'-C3'-C2'	-5.73	96.87	102.60
85	A5	3609	G	O4'-C1'-C2'	5.73	112.76	107.60
36	B2	91	A	C1'-O4'-C4'	5.73	114.48	109.90
36	B2	1024	A	O4'-C1'-N9	5.73	112.78	108.20
74	CC	47	ASN	CB-CA-C	5.73	121.85	110.40
85	A5	1488	G	C5'-C4'-C3'	5.73	125.17	116.00
86	A7	85	G	P-O5'-C5'	-5.73	111.73	120.90
86	A7	109	U	C1'-O4'-C4'	5.73	114.48	109.90
85	A5	2338	C	C3'-C2'-C1'	5.73	106.08	101.50
85	A5	4511	A	P-O3'-C3'	5.73	126.57	119.70
36	B2	966	U	C5'-C4'-O4'	5.72	115.97	109.10
36	B2	1471	C	O4'-C1'-C2'	-5.72	100.08	105.80
85	A5	1508	A	O4'-C1'-N9	5.72	112.78	108.20
85	A5	2783	A	C1'-O4'-C4'	5.72	114.48	109.90
36	B2	1125	C	O4'-C1'-N1	5.72	112.78	108.20
85	A5	1199	G	C5'-C4'-O4'	-5.72	102.23	109.10
85	A5	1539	G	O5'-C5'-C4'	5.72	122.57	111.70
85	A5	4075	U	N1-C1'-C2'	-5.72	105.71	112.00
85	A5	4559	A	OP1-P-O3'	5.72	117.79	105.20
58	CW	1	MET	CA-C-N	-5.72	104.61	117.20
87	A8	68	G	O4'-C1'-C2'	5.72	112.75	107.60
87	A8	129	C	C1'-O4'-C4'	5.72	114.48	109.90
36	B2	613	G	C1'-O4'-C4'	5.72	114.48	109.90
36	B2	1537	A	C5'-C4'-C3'	-5.72	106.85	116.00
85	A5	2771	G	P-O3'-C3'	-5.72	112.84	119.70
85	A5	2819	U	O4'-C1'-C2'	-5.72	100.08	105.80
85	A5	3708	C	C3'-C2'-C1'	5.72	106.08	101.50
86	A7	68	C	N1-C1'-C2'	5.72	121.44	114.00
27	AE	170	THR	C-N-CA	5.72	136.00	121.70
36	B2	471	G	C5'-C4'-O4'	5.72	115.96	109.10
14	AT	51	ASN	C-N-CA	5.72	135.99	121.70
19	AZ	107	VAL	C-N-CA	5.72	135.99	121.70
85	A5	2771	G	O4'-C1'-N9	5.72	112.77	108.20
85	A5	2798	A	O4'-C1'-C2'	-5.72	100.08	105.80
85	A5	3833	C	C3'-C2'-C1'	5.72	106.07	101.50
39	Cq	200	ASN	C-N-CD	-5.71	108.03	120.60
85	A5	1213	G	C1'-O4'-C4'	-5.71	105.33	109.90
85	A5	1802	A	O4'-C1'-C2'	-5.71	100.08	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3668	C	N1-C1'-C2'	5.71	121.43	114.00
85	A5	3850	C	O4'-C1'-N1	5.71	112.77	108.20
85	A5	4141	G	C5'-C4'-O4'	5.71	115.95	109.10
23	AD	96	LEU	O-C-N	-5.71	113.56	122.70
34	AQ	146	ARG	CA-CB-CG	5.71	125.97	113.40
61	Ch	37	THR	O-C-N	5.71	132.91	123.20
85	A5	1732	C	O4'-C1'-N1	5.71	112.77	108.20
85	A5	2630	U	P-O3'-C3'	5.71	126.55	119.70
85	A5	2712	G	C4'-C3'-C2'	-5.71	96.89	102.60
14	AT	4	VAL	O-C-N	-5.71	113.56	122.70
36	B2	98	C	N1-C1'-C2'	-5.71	105.72	112.00
36	B2	141	A	C2'-C3'-O3'	5.71	122.83	113.70
36	B2	351	G	C4'-C3'-C2'	-5.71	96.89	102.60
36	B2	1638	G	O4'-C1'-N9	-5.71	103.63	108.20
36	B2	635	G	C5'-C4'-C3'	5.71	125.13	116.00
36	B2	1049	A	P-O3'-C3'	5.71	126.55	119.70
42	CL	53	GLY	C-N-CD	-5.71	108.04	120.60
85	A5	5018	C	N1-C1'-C2'	5.71	121.42	114.00
36	B2	791	C	N1-C1'-C2'	5.71	121.42	114.00
85	A5	746	A	N9-C1'-C2'	5.71	121.42	114.00
85	A5	1891	A	N9-C1'-C2'	5.71	121.42	114.00
85	A5	2796	G	C5'-C4'-O4'	5.71	115.95	109.10
85	A5	2798	A	C1'-O4'-C4'	5.71	114.47	109.90
85	A5	3633	C	C3'-C2'-C1'	5.71	106.06	101.50
85	A5	3773	U	C5'-C4'-O4'	5.71	115.95	109.10
36	B2	621	C	C1'-O4'-C4'	-5.71	105.34	109.90
36	B2	1710	C	O4'-C1'-N1	5.71	112.76	108.20
85	A5	1749	A	O4'-C1'-N9	5.71	112.76	108.20
85	A5	4878	C	P-O3'-C3'	-5.71	112.86	119.70
36	B2	824	C	O4'-C1'-N1	5.70	112.76	108.20
85	A5	151	G	C3'-C2'-C1'	-5.70	96.94	101.50
85	A5	1936	C	N1-C1'-C2'	5.70	121.41	114.00
85	A5	2388	A	O4'-C1'-N9	5.70	112.76	108.20
85	A5	2809	G	N9-C1'-C2'	5.70	121.41	114.00
85	A5	3674	G	C1'-O4'-C4'	-5.70	105.34	109.90
85	A5	3855	C	C5'-C4'-O4'	5.70	115.94	109.10
85	A5	4203	A	O4'-C1'-N9	5.70	112.76	108.20
85	A5	4877	G	C1'-O4'-C4'	5.70	114.46	109.90
86	A7	100	A	C3'-C2'-C1'	5.70	106.06	101.50
36	B2	1711	U	N1-C1'-C2'	5.70	121.41	114.00
54	CP	145	HIS	CB-CA-C	-5.70	99.00	110.40
68	Cf	6	TRP	CA-C-N	5.70	129.74	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1674	C	C1'-O4'-C4'	-5.70	105.34	109.90
85	A5	2819	U	O4'-C1'-N1	5.70	112.76	108.20
85	A5	4277	G	C1'-O4'-C4'	-5.70	105.34	109.90
36	B2	607	U	O4'-C1'-N1	5.70	112.76	108.20
36	B2	1156	U	O4'-C1'-N1	5.70	112.76	108.20
38	Cz	111	LEU	CB-CA-C	-5.70	99.37	110.20
85	A5	149	A	N9-C1'-C2'	5.70	121.41	114.00
85	A5	1442	C	C5'-C4'-C3'	5.70	125.12	116.00
24	Ae	26	LYS	N-CA-C	-5.70	95.62	111.00
85	A5	2598	A	C3'-C2'-C1'	5.70	106.06	101.50
85	A5	2854	G	O4'-C1'-N9	5.70	112.76	108.20
87	A8	53	G	O4'-C1'-N9	5.70	112.76	108.20
36	B2	1594	A	C5'-C4'-C3'	5.70	125.11	116.00
53	CT	68	THR	C-N-CA	-5.70	107.46	121.70
85	A5	2017	A	C4'-C3'-O3'	5.70	124.39	113.00
85	A5	2743	A	C3'-C2'-C1'	5.70	106.06	101.50
13	AP	49	LEU	O-C-N	-5.69	113.59	122.70
85	A5	1818	G	N9-C1'-C2'	5.69	121.40	114.00
36	B2	607	U	C3'-C2'-C1'	5.69	106.05	101.50
36	B2	931	C	C5'-C4'-O4'	5.69	115.93	109.10
36	B2	991	G	C3'-C2'-C1'	-5.69	96.95	101.50
85	A5	1800	U	O4'-C1'-N1	5.69	112.75	108.20
85	A5	2572	C	O4'-C1'-C2'	-5.69	100.11	105.80
1	Az	669	VAL	CB-CA-C	5.69	122.21	111.40
36	B2	836	G	C1'-O4'-C4'	5.69	114.45	109.90
85	A5	346	G	C1'-O4'-C4'	-5.69	105.35	109.90
85	A5	2290	C	C3'-C2'-C1'	5.69	106.05	101.50
85	A5	4937	C	C3'-C2'-C1'	-5.69	96.95	101.50
36	B2	193	C	O4'-C1'-N1	5.69	112.75	108.20
36	B2	1172	U	N1-C1'-C2'	-5.69	105.74	112.00
36	B2	1185	C	C3'-C2'-C1'	5.69	106.05	101.50
85	A5	414	C	C3'-C2'-C1'	5.69	106.05	101.50
85	A5	1424	G	O4'-C1'-N9	5.69	112.75	108.20
85	A5	2417	A	P-O3'-C3'	5.69	126.53	119.70
13	AP	130	ARG	NE-CZ-NH2	-5.69	117.46	120.30
31	AH	111	LYS	CA-CB-CG	5.69	125.91	113.40
53	CT	75	VAL	C-N-CA	5.69	135.92	121.70
85	A5	300	A	O4'-C1'-N9	5.69	112.75	108.20
85	A5	4370	G	C3'-C2'-C1'	5.69	106.05	101.50
85	A5	5012	G	P-O3'-C3'	-5.69	112.88	119.70
1	Az	420	LEU	CB-CG-CD2	-5.69	101.33	111.00
36	B2	962	A	O4'-C1'-C2'	-5.69	100.11	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	3815	G	C3'-C2'-C1'	5.69	106.05	101.50
36	B2	767	U	P-O3'-C3'	5.68	126.52	119.70
36	B2	1142	G	N9-C1'-C2'	-5.68	105.75	112.00
37	BC	30	G	O4'-C1'-N9	5.68	112.75	108.20
61	Ch	77	LYS	CA-C-N	-5.68	104.69	117.20
85	A5	981	C	C3'-C2'-C1'	5.68	106.05	101.50
85	A5	1384	C	N1-C1'-C2'	5.68	121.39	114.00
85	A5	1576	G	N9-C1'-C2'	-5.68	105.75	112.00
85	A5	1754	U	O4'-C4'-C3'	-5.68	98.31	104.00
11	AL	151	THR	CB-CA-C	5.68	126.94	111.60
19	AZ	104	ARG	N-CA-C	5.68	126.34	111.00
36	B2	927	C	O4'-C1'-N1	5.68	112.75	108.20
36	B2	1411	G	N9-C1'-C2'	5.68	121.39	114.00
36	B2	1827	U	O4'-C1'-N1	5.68	112.75	108.20
36	B2	1832	A	P-O5'-C5'	5.68	129.99	120.90
85	A5	2029	A	N9-C1'-C2'	5.68	121.39	114.00
85	A5	2264	C	O4'-C1'-N1	5.68	112.75	108.20
85	A5	2762	G	P-O3'-C3'	5.68	126.52	119.70
85	A5	2872	C	C3'-C2'-C1'	5.68	106.05	101.50
85	A5	3596	A	O4'-C1'-C2'	-5.68	100.12	105.80
87	A8	113	C	O4'-C1'-C2'	-5.68	100.12	105.80
85	A5	1066	G	O4'-C1'-N9	5.68	112.75	108.20
85	A5	2727	C	C1'-O4'-C4'	-5.68	105.36	109.90
85	A5	4507	A	N9-C1'-C2'	-5.68	105.75	112.00
87	A8	94	G	O4'-C1'-N9	-5.68	103.66	108.20
66	Cd	112	THR	CB-CA-C	-5.68	96.27	111.60
85	A5	1644	C	N1-C1'-C2'	5.68	121.38	114.00
85	A5	2045	G	O4'-C1'-N9	-5.68	103.66	108.20
85	A5	2091	C	N1-C1'-C2'	-5.68	105.75	112.00
85	A5	2592	U	O4'-C1'-C2'	5.68	112.71	107.60
85	A5	2723	U	C5'-C4'-O4'	5.68	115.92	109.10
85	A5	2825	A	C3'-C2'-C1'	5.68	106.04	101.50
85	A5	3714	G	O4'-C1'-C2'	5.68	112.71	107.60
85	A5	3963	A	C5'-C4'-C3'	-5.68	106.91	116.00
85	A5	4713	G	C1'-O4'-C4'	-5.68	105.36	109.90
1	Az	358	LEU	C-N-CD	-5.68	108.11	120.60
36	B2	396	U	O4'-C1'-N1	5.68	112.74	108.20
36	B2	1082	A	C3'-C2'-C1'	5.68	106.04	101.50
85	A5	1389	U	P-O3'-C3'	5.68	126.51	119.70
85	A5	1639	U	N1-C1'-C2'	5.68	121.38	114.00
85	A5	3748	A	C3'-C2'-C1'	5.68	106.04	101.50
85	A5	178	C	O4'-C1'-C2'	-5.68	100.12	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4360	U	N1-C1'-C2'	5.68	121.38	114.00
36	B2	342	C	O4'-C1'-N1	5.67	112.74	108.20
85	A5	4183	G	O4'-C1'-C2'	5.67	112.71	107.60
85	A5	4230	C	C4'-C3'-C2'	-5.67	96.93	102.60
85	A5	4444	C	N1-C1'-C2'	5.67	121.38	114.00
85	A5	4765	G	C5'-C4'-C3'	-5.67	106.92	116.00
86	A7	32	A	O4'-C1'-N9	5.67	112.74	108.20
85	A5	2101	C	O4'-C1'-N1	-5.67	103.66	108.20
85	A5	2917	G	P-O3'-C3'	5.67	126.51	119.70
85	A5	4154	G	O4'-C1'-C2'	5.67	112.71	107.60
36	B2	1785	C	N1-C1'-C2'	-5.67	105.76	112.00
63	CB	113	GLU	N-CA-CB	5.67	120.81	110.60
64	CF	28	LEU	CA-CB-CG	5.67	128.34	115.30
85	A5	1349	G	O4'-C1'-C2'	5.67	112.70	107.60
85	A5	1788	A	O4'-C1'-N9	5.67	112.74	108.20
85	A5	2400	G	C1'-O4'-C4'	-5.67	105.36	109.90
85	A5	2616	C	N1-C1'-C2'	5.67	121.37	114.00
85	A5	4316	G	C5'-C4'-C3'	-5.67	106.92	116.00
44	CM	65	PRO	CB-CA-C	-5.67	97.82	112.00
85	A5	1172	C	O4'-C1'-N1	5.67	112.74	108.20
85	A5	1383	G	O4'-C1'-N9	5.67	112.74	108.20
85	A5	2802	C	C1'-O4'-C4'	5.67	114.44	109.90
85	A5	4144	C	O4'-C4'-C3'	-5.67	98.33	104.00
87	A8	115	G	N9-C1'-C2'	5.67	121.37	114.00
36	B2	1284	A	C5'-C4'-O4'	5.67	115.90	109.10
85	A5	2811	G	P-O3'-C3'	-5.67	112.90	119.70
36	B2	1787	G	C3'-C2'-C1'	-5.67	96.97	101.50
82	CG	87	LEU	CA-CB-CG	-5.67	102.27	115.30
85	A5	110	C	C1'-O4'-C4'	-5.67	105.37	109.90
85	A5	4562	C	N1-C1'-C2'	5.67	121.37	114.00
4	AK	42	ASN	N-CA-C	-5.67	95.70	111.00
85	A5	2370	A	C2'-C3'-O3'	5.67	122.77	113.70
36	B2	407	G	P-O3'-C3'	5.66	126.50	119.70
36	B2	505	G	P-O3'-C3'	-5.66	112.90	119.70
36	B2	1394	G	C2'-C3'-O3'	5.66	122.76	113.70
42	CL	13	HIS	CA-CB-CG	5.66	123.23	113.60
85	A5	142	G	O4'-C1'-C2'	5.66	112.70	107.60
85	A5	176	G	C1'-O4'-C4'	-5.66	105.37	109.90
85	A5	304	C	C3'-C2'-C1'	5.66	106.03	101.50
85	A5	1719	A	C4-N9-C1'	5.66	136.49	126.30
85	A5	2780	C	N1-C1'-C2'	5.66	121.36	114.00
36	B2	1322	G	O4'-C1'-N9	5.66	112.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
82	CG	241	VAL	N-CA-C	5.66	126.29	111.00
85	A5	1708	G	P-O3'-C3'	5.66	126.50	119.70
85	A5	1772	C	C4'-C3'-C2'	-5.66	96.94	102.60
1	Az	112	SER	CA-C-N	-5.66	104.75	117.20
36	B2	228	C	C2'-C3'-O3'	5.66	122.76	113.70
36	B2	579	C	O4'-C1'-C2'	-5.66	100.14	105.80
36	B2	1275	G	C5'-C4'-C3'	5.66	125.06	116.00
85	A5	343	C	O4'-C1'-N1	5.66	112.73	108.20
85	A5	1459	A	O4'-C1'-C2'	-5.66	100.14	105.80
85	A5	4357	G	O4'-C1'-N9	5.66	112.73	108.20
36	B2	103	A	O4'-C1'-C2'	5.66	112.69	107.60
36	B2	821	G	C2'-C3'-O3'	5.66	122.75	113.70
59	CZ	37	PRO	N-CA-CB	5.66	110.09	103.30
85	A5	1886	G	O4'-C1'-N9	5.66	112.73	108.20
85	A5	1913	C	C3'-C2'-C1'	5.66	106.03	101.50
85	A5	2722	G	C1'-O4'-C4'	-5.66	105.37	109.90
87	A8	135	C	N1-C1'-C2'	5.66	121.36	114.00
1	Az	56	PHE	N-CA-CB	5.66	120.78	110.60
36	B2	1613	G	C3'-C2'-C1'	-5.66	96.97	101.50
85	A5	1390	G	C1'-O4'-C4'	-5.66	105.37	109.90
36	B2	283	G	N9-C1'-C2'	5.66	121.35	114.00
36	B2	526	A	C3'-C2'-C1'	-5.66	96.98	101.50
36	B2	745	C	C5'-C4'-C3'	5.66	125.05	116.00
36	B2	1523	C	P-O5'-C5'	-5.66	111.85	120.90
36	B2	1651	A	O4'-C1'-C2'	-5.66	100.14	105.80
85	A5	93	G	P-O5'-C5'	-5.66	111.85	120.90
85	A5	1363	C	P-O5'-C5'	5.66	129.95	120.90
85	A5	4408	G	C1'-O4'-C4'	-5.66	105.38	109.90
85	A5	4639	G	C1'-O4'-C4'	-5.66	105.38	109.90
81	CE	38	LYS	O-C-N	-5.65	113.65	122.70
1	Az	533	MET	CB-CA-C	-5.65	99.09	110.40
36	B2	341	C	P-O3'-C3'	-5.65	112.92	119.70
36	B2	899	U	O4'-C1'-N1	5.65	112.72	108.20
85	A5	278	G	C3'-C2'-C1'	5.65	106.02	101.50
85	A5	1183	C	C3'-C2'-C1'	5.65	106.02	101.50
85	A5	4090	G	O4'-C1'-N9	5.65	112.72	108.20
85	A5	4547	C	O3'-P-O5'	-5.65	93.26	104.00
87	A8	94	G	C4'-C3'-C2'	-5.65	96.95	102.60
36	B2	227	U	P-O5'-C5'	5.65	129.94	120.90
36	B2	754	G	O4'-C1'-C2'	5.65	112.69	107.60
36	B2	1498	A	O4'-C1'-C2'	5.65	112.69	107.60
36	B2	1547	C	N1-C1'-C2'	5.65	121.35	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1368	A	O4'-C4'-C3'	-5.65	98.35	104.00
85	A5	5021	C	P-O5'-C5'	5.65	129.94	120.90
36	B2	79	A	O3'-P-O5'	-5.65	93.27	104.00
85	A5	3640	U	C3'-C2'-C1'	5.65	106.02	101.50
85	A5	3915	U	O4'-C1'-N1	5.65	112.72	108.20
36	B2	3	C	C1'-O4'-C4'	5.65	114.42	109.90
36	B2	216	C	C3'-C2'-C1'	5.65	106.02	101.50
36	B2	1520	G	C5'-C4'-C3'	5.65	125.03	116.00
36	B2	1644	C	C3'-C2'-C1'	5.65	106.02	101.50
70	Ci	6	PRO	CB-CA-C	-5.65	97.88	112.00
85	A5	389	A	C3'-C2'-C1'	5.65	106.02	101.50
85	A5	1169	G	O4'-C4'-C3'	-5.65	98.35	104.00
85	A5	2751	G	C1'-O4'-C4'	-5.65	105.38	109.90
85	A5	4438	U	C4'-C3'-C2'	-5.65	96.95	102.60
36	B2	1223	A	C3'-C2'-C1'	5.65	106.02	101.50
36	B2	1394	G	N9-C1'-C2'	5.65	121.34	114.00
85	A5	1361	G	C3'-C2'-C1'	-5.65	96.98	101.50
36	B2	899	U	O4'-C1'-C2'	-5.64	100.16	105.80
36	B2	1751	C	N1-C1'-C2'	5.64	121.34	114.00
38	Cz	99	LEU	O-C-N	-5.64	113.67	122.70
38	Cz	99	LEU	C-N-CA	-5.64	107.59	121.70
85	A5	203	U	O4'-C1'-N1	5.64	112.72	108.20
85	A5	289	C	N1-C1'-C2'	5.64	121.34	114.00
85	A5	4741	C	P-O3'-C3'	-5.64	112.93	119.70
86	A7	84	U	O4'-C1'-C2'	-5.64	100.16	105.80
87	A8	148	A	O4'-C1'-C2'	-5.64	100.16	105.80
11	AL	98	LYS	N-CA-C	-5.64	95.77	111.00
36	B2	176	U	O4'-C1'-N1	5.64	112.71	108.20
82	CG	35	ARG	CB-CA-C	-5.64	99.12	110.40
85	A5	136	C	O4'-C1'-C2'	-5.64	100.16	105.80
85	A5	1805	A	C5'-C4'-O4'	-5.64	102.33	109.10
85	A5	1921	C	C1'-O4'-C4'	-5.64	105.39	109.90
85	A5	2626	U	O3'-P-O5'	-5.64	93.28	104.00
85	A5	4589	A	O4'-C1'-C2'	-5.64	100.16	105.80
36	B2	93	U	N1-C1'-C2'	-5.64	105.80	112.00
36	B2	1365	G	P-O3'-C3'	-5.64	112.93	119.70
85	A5	1073	G	C3'-C2'-C1'	-5.64	96.99	101.50
85	A5	2831	G	C1'-O4'-C4'	-5.64	105.39	109.90
85	A5	3773	U	P-O3'-C3'	-5.64	112.93	119.70
85	A5	4145	C	P-O5'-C5'	5.64	129.93	120.90
36	B2	1104	G	O4'-C1'-N9	5.64	112.71	108.20
36	B2	1825	A	C2'-C3'-O3'	5.64	122.72	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
42	CL	3	PRO	O-C-N	5.64	131.72	122.70
85	A5	1806	G	O4'-C1'-N9	5.64	112.71	108.20
85	A5	2740	U	P-O3'-C3'	-5.64	112.93	119.70
85	A5	4292	A	C3'-C2'-C1'	-5.64	96.99	101.50
87	A8	67	U	O4'-C1'-C2'	-5.64	100.16	105.80
36	B2	1475	G	C4'-C3'-C2'	-5.64	96.96	102.60
85	A5	643	C	O4'-C1'-C2'	-5.64	100.16	105.80
36	B2	1317	C	O4'-C1'-N1	5.64	112.71	108.20
85	A5	4200	G	C3'-C2'-C1'	-5.64	96.99	101.50
36	B2	655	A	C5'-C4'-O4'	5.63	115.86	109.10
36	B2	784	G	O3'-P-O5'	-5.63	93.29	104.00
81	CE	132	PRO	CA-N-CD	-5.63	103.61	111.50
85	A5	438	G	O4'-C1'-N9	5.63	112.71	108.20
85	A5	658	C	O4'-C1'-N1	5.63	112.71	108.20
85	A5	1415	G	N9-C1'-C2'	-5.63	105.80	112.00
85	A5	523	C	O4'-C1'-N1	5.63	112.71	108.20
85	A5	1637	A	P-O3'-C3'	5.63	126.46	119.70
85	A5	4183	G	O4'-C1'-N9	5.63	112.71	108.20
36	B2	1450	G	C3'-C2'-C1'	-5.63	97.00	101.50
37	BC	74	C	O4'-C1'-C2'	-5.63	100.17	105.80
85	A5	973	G	O4'-C4'-C3'	-5.63	98.37	104.00
85	A5	4321	U	C1'-O4'-C4'	-5.63	105.39	109.90
1	Az	478	PHE	CB-CA-C	5.63	121.66	110.40
74	CC	92	PHE	C-N-CA	-5.63	110.48	122.30
8	AS	53	THR	CA-C-N	5.63	129.58	117.20
38	Cz	209	THR	N-CA-C	-5.63	95.80	111.00
49	CQ	91	ARG	N-CA-CB	-5.63	100.47	110.60
85	A5	1674	C	O4'-C1'-N1	5.63	112.70	108.20
85	A5	4392	G	P-O3'-C3'	5.63	126.45	119.70
86	A7	89	G	C1'-O4'-C4'	-5.63	105.40	109.90
31	AH	105	THR	CB-CA-C	5.63	126.79	111.60
36	B2	1677	U	C1'-O4'-C4'	5.63	114.40	109.90
36	B2	1865	C	O4'-C1'-N1	5.63	112.70	108.20
38	Cz	83	PRO	C-N-CA	5.63	135.76	121.70
77	Cp	91	ASP	CB-CG-OD2	5.63	123.36	118.30
81	CE	70	LYS	CB-CG-CD	5.63	126.23	111.60
85	A5	48	G	C1'-O4'-C4'	-5.63	105.40	109.90
85	A5	364	G	C1'-O4'-C4'	-5.63	105.40	109.90
85	A5	516	C	C4'-C3'-C2'	-5.63	96.97	102.60
85	A5	4127	A	C4'-C3'-O3'	5.63	124.25	113.00
85	A5	4698	C	C3'-C2'-C1'	5.63	106.00	101.50
85	A5	4965	U	C5'-C4'-O4'	5.63	115.85	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	459	C	C1'-O4'-C4'	-5.62	105.40	109.90
85	A5	1436	C	O4'-C1'-C2'	-5.62	100.17	105.80
85	A5	1770	A	O4'-C1'-N9	5.62	112.70	108.20
85	A5	2283	G	O4'-C1'-N9	5.62	112.70	108.20
85	A5	2581	A	C1'-O4'-C4'	5.62	114.40	109.90
85	A5	2652	G	C1'-O4'-C4'	-5.62	105.40	109.90
85	A5	3968	U	O3'-P-O5'	5.62	114.69	104.00
3	AU	108	PRO	CA-N-CD	-5.62	103.63	111.50
36	B2	116	U	O4'-C1'-N1	5.62	112.70	108.20
36	B2	1224	G	N9-C1'-C2'	5.62	121.31	114.00
85	A5	226	G	C2'-C3'-O3'	5.62	122.70	113.70
85	A5	4753	U	C4'-C3'-O3'	5.62	124.25	113.00
25	Af	125	GLU	CB-CA-C	5.62	121.64	110.40
36	B2	244	A	O4'-C1'-N9	5.62	112.70	108.20
85	A5	4502	C	O4'-C1'-C2'	-5.62	100.18	105.80
17	AV	30	ALA	O-C-N	-5.62	113.71	122.70
36	B2	466	G	C3'-C2'-C1'	-5.62	97.01	101.50
36	B2	860	G	N9-C1'-C2'	5.62	121.31	114.00
46	CN	198	LEU	CB-CG-CD1	5.62	120.55	111.00
85	A5	4614	G	C3'-C2'-C1'	-5.62	97.00	101.50
36	B2	549	C	O4'-C1'-N1	5.62	112.69	108.20
85	A5	4450	U	O4'-C1'-N1	5.62	112.69	108.20
36	B2	1710	C	O4'-C1'-C2'	-5.62	100.18	105.80
85	A5	2774	C	C3'-C2'-C1'	5.62	105.99	101.50
33	AI	55	TYR	CB-CG-CD2	-5.61	117.63	121.00
36	B2	1384	C	O4'-C1'-N1	5.61	112.69	108.20
36	B2	1759	G	C3'-C2'-C1'	-5.61	97.01	101.50
37	BC	70	C	O4'-C1'-N1	5.61	112.69	108.20
62	Cb	53	GLY	O-C-N	-5.61	113.72	122.70
85	A5	917	A	O4'-C1'-N9	5.61	112.69	108.20
85	A5	1302	U	C2'-C3'-O3'	5.61	122.68	113.70
85	A5	2577	C	N1-C1'-C2'	5.61	121.30	114.00
85	A5	2761	U	O4'-C1'-N1	-5.61	103.71	108.20
85	A5	3626	G	C4'-C3'-C2'	-5.61	96.99	102.60
85	A5	3968	U	C2'-C3'-O3'	5.61	122.68	113.70
85	A5	1193	C	O4'-C1'-N1	5.61	112.69	108.20
36	B2	151	C	C3'-C2'-C1'	5.61	105.99	101.50
85	A5	3594	C	P-O3'-C3'	5.61	126.43	119.70
85	A5	3656	A	O4'-C1'-C2'	-5.61	100.19	105.80
36	B2	808	A	N9-C1'-C2'	5.61	121.29	114.00
36	B2	1452	A	O4'-C1'-C2'	-5.61	100.19	105.80
85	A5	4189	U	O4'-C1'-C2'	-5.61	100.19	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
62	Cb	26	SER	N-CA-C	5.61	126.14	111.00
81	CE	41	LYS	CB-CA-C	5.61	121.62	110.40
85	A5	279	A	C3'-C2'-C1'	5.61	105.99	101.50
85	A5	2757	A	O4'-C1'-C2'	-5.61	100.19	105.80
85	A5	4039	G	C5'-C4'-O4'	5.61	115.83	109.10
85	A5	4546	A	N9-C1'-C2'	5.61	121.29	114.00
36	B2	518	G	O4'-C1'-N9	5.61	112.68	108.20
39	Cq	91	THR	O-C-N	-5.61	113.73	122.70
68	Cf	58	VAL	N-CA-CB	5.61	123.83	111.50
85	A5	1109	C	C3'-C2'-C1'	5.61	105.98	101.50
85	A5	1382	G	N9-C1'-C2'	5.61	121.29	114.00
85	A5	1855	G	N9-C1'-C2'	5.61	121.29	114.00
85	A5	2022	C	C3'-C2'-C1'	5.61	105.98	101.50
85	A5	2519	U	C1'-O4'-C4'	5.61	114.39	109.90
85	A5	4509	U	C3'-C2'-C1'	5.61	105.98	101.50
85	A5	4607	A	O4'-C1'-N9	5.61	112.69	108.20
85	A5	1069	G	C1'-O4'-C4'	-5.60	105.42	109.90
85	A5	4331	G	N9-C1'-C2'	-5.60	105.83	112.00
6	AX	37	LYS	N-CA-C	5.60	126.13	111.00
27	AE	151	ASP	CB-CA-C	5.60	121.61	110.40
82	CG	207	VAL	C-N-CA	-5.60	107.69	121.70
85	A5	34	A	C3'-C2'-C1'	5.60	105.98	101.50
85	A5	4909	A	O4'-C1'-C2'	-5.60	100.20	105.80
86	A7	117	G	C5'-C4'-O4'	5.60	115.82	109.10
85	A5	5	A	C3'-C2'-C1'	5.60	105.98	101.50
85	A5	928	C	C3'-C2'-C1'	5.60	105.98	101.50
36	B2	301	A	O4'-C1'-C2'	-5.60	100.20	105.80
38	Cz	210	MET	CB-CG-SD	-5.60	95.60	112.40
85	A5	983	C	C3'-C2'-C1'	5.60	105.98	101.50
85	A5	3892	U	P-O5'-C5'	-5.60	111.94	120.90
85	A5	4263	C	O4'-C1'-N1	5.60	112.68	108.20
36	B2	677	G	C1'-O4'-C4'	-5.60	105.42	109.90
36	B2	1126	G	O4'-C1'-N9	5.60	112.68	108.20
36	B2	1127	C	O4'-C1'-N1	5.60	112.68	108.20
39	Cq	234	VAL	CB-CA-C	5.60	122.03	111.40
74	CC	308	LYS	N-CA-CB	5.60	120.68	110.60
85	A5	704	C	O4'-C1'-C2'	-5.60	100.20	105.80
85	A5	1411	C	C3'-C2'-C1'	5.60	105.98	101.50
36	B2	1745	A	C3'-C2'-C1'	-5.60	97.02	101.50
42	CL	161	TYR	CA-CB-CG	5.60	124.03	113.40
85	A5	236	G	C1'-O4'-C4'	-5.60	105.42	109.90
85	A5	2034	G	N9-C1'-C2'	5.60	121.28	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4632	U	O4'-C1'-N1	5.60	112.68	108.20
63	CB	236	HIS	N-CA-C	-5.59	95.89	111.00
85	A5	1064	G	O4'-C1'-N9	5.59	112.67	108.20
85	A5	2528	G	O4'-C1'-N9	5.59	112.67	108.20
85	A5	4265	U	C5'-C4'-O4'	5.59	115.81	109.10
85	A5	4943	A	O4'-C1'-N9	5.59	112.68	108.20
85	A5	643	C	C3'-C2'-C1'	5.59	105.97	101.50
36	B2	191	A	C5'-C4'-O4'	5.59	115.81	109.10
36	B2	559	G	C3'-C2'-C1'	-5.59	97.03	101.50
81	CE	70	LYS	CA-C-O	5.59	131.84	120.10
85	A5	3754	G	N9-C1'-C2'	-5.59	105.85	112.00
85	A5	4092	G	C1'-O4'-C4'	-5.59	105.43	109.90
85	A5	5044	A	P-O3'-C3'	-5.59	112.99	119.70
36	B2	746	C	C4'-C3'-C2'	-5.59	97.01	102.60
36	B2	1039	C	O4'-C1'-N1	5.59	112.67	108.20
36	B2	1623	A	N9-C1'-C2'	-5.59	105.85	112.00
85	A5	1068	G	C3'-C2'-C1'	-5.59	97.03	101.50
30	AF	47	LYS	CD-CE-NZ	-5.59	98.85	111.70
81	CE	27	VAL	C-N-CA	5.59	135.67	121.70
85	A5	64	A	O4'-C1'-N9	5.59	112.67	108.20
85	A5	88	A	O4'-C1'-N9	5.59	112.67	108.20
85	A5	2093	A	N9-C1'-C2'	5.59	121.26	114.00
85	A5	4110	C	C1'-O4'-C4'	-5.59	105.43	109.90
3	AU	70	CYS	CA-C-N	5.59	127.37	116.20
6	AX	58	GLU	N-CA-C	5.59	126.08	111.00
13	AP	53	GLN	CB-CA-C	5.59	121.57	110.40
36	B2	1505	U	O4'-C1'-C2'	-5.59	100.21	105.80
85	A5	1808	C	O4'-C1'-N1	5.59	112.67	108.20
85	A5	4486	C	N1-C1'-C2'	5.59	121.26	114.00
36	B2	1417	C	C5'-C4'-C3'	5.58	124.94	116.00
85	A5	2305	U	C3'-C2'-C1'	5.58	105.97	101.50
85	A5	4123	C	C2'-C3'-O3'	5.58	122.64	113.70
14	AT	45	LEU	O-C-N	-5.58	113.77	122.70
36	B2	1347	U	O4'-C1'-N1	5.58	112.67	108.20
36	B2	1848	U	O4'-C1'-N1	5.58	112.67	108.20
38	Cz	25	ARG	C-N-CA	-5.58	107.74	121.70
85	A5	1375	C	N1-C1'-C2'	5.58	121.26	114.00
85	A5	1513	U	C3'-C2'-C1'	-5.58	97.03	101.50
85	A5	2878	G	C3'-C2'-C1'	5.58	105.97	101.50
87	A8	137	A	O4'-C1'-N9	5.58	112.67	108.20
36	B2	738	C	C3'-C2'-C1'	5.58	105.97	101.50
36	B2	1017	U	O4'-C1'-C2'	-5.58	100.22	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1780	G	O4'-C1'-N9	5.58	112.67	108.20
85	A5	248	C	O4'-C1'-N1	5.58	112.67	108.20
85	A5	633	G	P-O3'-C3'	5.58	126.40	119.70
85	A5	3942	A	N9-C1'-C2'	-5.58	105.86	112.00
85	A5	3971	G	P-O3'-C3'	-5.58	113.00	119.70
85	A5	4050	A	O4'-C1'-C2'	-5.58	100.22	105.80
85	A5	1985	G	C3'-C2'-C1'	5.58	105.96	101.50
2	Ag	143	GLN	N-CA-C	-5.58	95.94	111.00
13	AP	36	LEU	C-N-CA	5.58	135.65	121.70
36	B2	450	C	O4'-C1'-N1	5.58	112.66	108.20
36	B2	1250	A	C1'-O4'-C4'	5.58	114.36	109.90
58	CW	71	ARG	CA-C-O	-5.58	108.39	120.10
85	A5	1378	C	C4'-C3'-C2'	-5.58	97.02	102.60
85	A5	1997	U	N1-C1'-C2'	5.58	121.25	114.00
85	A5	2102	G	C5'-C4'-O4'	-5.58	102.41	109.10
85	A5	2365	C	C3'-C2'-C1'	5.58	105.96	101.50
85	A5	4159	C	P-O3'-C3'	5.58	126.39	119.70
85	A5	4579	U	N1-C1'-C2'	5.58	121.25	114.00
3	AU	68	THR	CB-CA-C	5.58	126.66	111.60
85	A5	403	G	C5'-C4'-O4'	5.58	115.79	109.10
85	A5	2256	C	P-O5'-C5'	5.58	129.82	120.90
85	A5	2698	G	N9-C1'-C2'	-5.58	105.86	112.00
85	A5	4652	G	O4'-C1'-C2'	5.58	112.62	107.60
2	Ag	294	ASP	N-CA-CB	-5.58	100.57	110.60
37	BC	4	A	O4'-C1'-C2'	-5.58	100.22	105.80
45	Ca	95	THR	C-N-CA	-5.58	110.59	122.30
54	CP	6	LEU	N-CA-CB	5.58	121.55	110.40
56	CX	65	ALA	C-N-CD	-5.58	108.34	120.60
68	Cf	23	GLU	O-C-N	5.58	131.62	122.70
20	Aa	70	LYS	CD-CE-NZ	5.57	124.52	111.70
36	B2	1048	G	P-O5'-C5'	5.57	129.82	120.90
53	CT	23	GLY	C-N-CA	-5.57	107.77	121.70
85	A5	4573	G	C1'-O4'-C4'	-5.57	105.44	109.90
85	A5	4654	C	N1-C1'-C2'	5.57	121.25	114.00
8	AS	10	GLN	N-CA-C	5.57	126.04	111.00
36	B2	40	A	N9-C1'-C2'	-5.57	105.87	112.00
36	B2	58	C	C1'-O4'-C4'	5.57	114.36	109.90
85	A5	4456	C	O4'-C1'-C2'	-5.57	100.23	105.80
22	Ac	60	GLU	N-CA-C	-5.57	95.96	111.00
35	Ah	162	ILE	C-N-CA	5.57	135.62	121.70
36	B2	125	C	C4'-C3'-O3'	5.57	124.14	113.00
36	B2	1436	C	O4'-C1'-C2'	-5.57	100.23	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	41	A	O4'-C1'-N9	5.57	112.66	108.20
85	A5	1810	G	O4'-C1'-N9	5.57	112.66	108.20
85	A5	2395	A	O4'-C1'-N9	-5.57	103.74	108.20
87	A8	81	C	O4'-C1'-C2'	5.57	112.61	107.60
35	Ah	160	ARG	C-N-CD	5.57	140.09	128.40
36	B2	1287	A	N9-C1'-C2'	-5.57	105.88	112.00
36	B2	1411	G	C3'-C2'-C1'	-5.57	97.05	101.50
82	CG	58	PRO	CB-CA-C	-5.57	98.08	112.00
85	A5	4406	U	C5'-C4'-O4'	5.57	115.78	109.10
85	A5	371	A	C5'-C4'-C3'	-5.57	107.09	116.00
36	B2	388	U	O4'-C1'-N1	5.56	112.65	108.20
36	B2	823	U	O4'-C1'-C2'	5.56	112.61	107.60
36	B2	1263	U	C3'-C2'-C1'	5.56	105.95	101.50
52	CS	139	ARG	C-N-CD	-5.56	108.36	120.60
85	A5	103	G	O4'-C1'-N9	5.56	112.65	108.20
85	A5	3955	G	C1'-O4'-C4'	5.56	114.35	109.90
36	B2	148	U	O4'-C1'-N1	5.56	112.65	108.20
36	B2	350	C	C1'-O4'-C4'	5.56	114.35	109.90
36	B2	360	A	O4'-C1'-N9	5.56	112.65	108.20
36	B2	414	A	O4'-C1'-C2'	-5.56	100.24	105.80
36	B2	793	G	C4'-C3'-C2'	-5.56	97.04	102.60
36	B2	953	C	P-O3'-C3'	-5.56	113.03	119.70
36	B2	1441	U	O4'-C1'-C2'	-5.56	100.24	105.80
36	B2	1566	G	N9-C1'-C2'	-5.56	105.88	112.00
85	A5	407	A	P-O5'-C5'	5.56	129.80	120.90
85	A5	1944	A	O4'-C1'-N9	5.56	112.65	108.20
85	A5	3623	C	O4'-C1'-C2'	-5.56	100.24	105.80
85	A5	4372	U	O4'-C4'-C3'	-5.56	98.44	104.00
85	A5	4462	C	O3'-P-O5'	-5.56	93.43	104.00
36	B2	685	A	O4'-C1'-N9	5.56	112.65	108.20
36	B2	1630	A	O4'-C1'-N9	5.56	112.65	108.20
85	A5	2097	U	C1'-O4'-C4'	5.56	114.35	109.90
85	A5	3832	U	C4'-C3'-C2'	-5.56	97.04	102.60
47	CI	4	ARG	N-CA-CB	-5.56	100.59	110.60
85	A5	459	C	N1-C1'-C2'	5.56	121.23	114.00
85	A5	2892	C	O4'-C1'-N1	5.56	112.65	108.20
85	A5	4246	G	O4'-C1'-N9	5.56	112.65	108.20
85	A5	4890	G	P-O3'-C3'	-5.56	113.03	119.70
85	A5	4890	G	O4'-C4'-C3'	-5.56	98.44	104.00
23	AD	142	LEU	CB-CG-CD1	5.56	120.45	111.00
36	B2	38	A	C5'-C4'-C3'	-5.56	107.11	116.00
36	B2	1041	G	C3'-C2'-C1'	-5.56	97.05	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1170	A	C3'-C2'-C1'	-5.56	97.05	101.50
85	A5	693	C	N1-C1'-C2'	5.56	121.22	114.00
85	A5	2762	G	O4'-C1'-N9	5.56	112.65	108.20
85	A5	4689	U	N1-C1'-C2'	-5.56	105.89	112.00
50	CR	143	HIS	CB-CG-ND1	-5.56	109.31	123.20
85	A5	1871	A	N9-C1'-C2'	-5.56	105.89	112.00
36	B2	78	C	O4'-C1'-N1	5.55	112.64	108.20
36	B2	86	C	C3'-C2'-C1'	5.55	105.94	101.50
85	A5	28	C	O4'-C1'-C2'	-5.55	100.25	105.80
85	A5	4422	A	O4'-C1'-C2'	-5.55	100.25	105.80
36	B2	1607	A	O4'-C1'-C2'	5.55	112.60	107.60
36	B2	1752	C	C5'-C4'-O4'	5.55	115.76	109.10
85	A5	306	A	P-O3'-C3'	5.55	126.36	119.70
85	A5	1472	C	O4'-C1'-C2'	-5.55	100.25	105.80
85	A5	4046	A	C3'-C2'-C1'	5.55	105.94	101.50
85	A5	671	G	C1'-O4'-C4'	-5.55	105.46	109.90
85	A5	1353	G	C1'-O4'-C4'	-5.55	105.46	109.90
85	A5	2256	C	C3'-C2'-C1'	-5.55	97.06	101.50
85	A5	2621	A	C3'-C2'-C1'	5.55	105.94	101.50
85	A5	4594	U	N1-C1'-C2'	5.55	121.22	114.00
36	B2	143	U	C1'-O4'-C4'	-5.55	105.46	109.90
85	A5	1407	C	C4'-C3'-C2'	-5.55	97.05	102.60
85	A5	4228	G	P-O3'-C3'	5.55	126.36	119.70
33	AI	5	ARG	CA-C-N	5.55	129.41	117.20
36	B2	596	U	O4'-C1'-N1	5.55	112.64	108.20
36	B2	624	C	C5'-C4'-C3'	-5.55	107.12	116.00
78	Co	3	ASN	C-N-CA	5.55	135.57	121.70
85	A5	321	U	C3'-C2'-C1'	5.55	105.94	101.50
85	A5	995	C	O4'-C1'-C2'	-5.55	100.25	105.80
85	A5	1290	G	O4'-C1'-C2'	5.55	112.59	107.60
85	A5	1961	G	O4'-C1'-C2'	-5.55	100.25	105.80
85	A5	3731	C	O4'-C4'-C3'	-5.55	98.45	104.00
36	B2	291	G	C1'-O4'-C4'	-5.55	105.46	109.90
85	A5	1726	U	O4'-C1'-N1	5.55	112.64	108.20
85	A5	1832	C	O4'-C1'-C2'	-5.55	100.25	105.80
85	A5	2725	A	O4'-C1'-C2'	-5.55	100.25	105.80
86	A7	118	C	C3'-C2'-C1'	5.55	105.94	101.50
16	AA	159	ILE	CA-CB-CG1	-5.54	100.47	111.00
34	AQ	145	TYR	C-N-CA	5.54	135.56	121.70
36	B2	139	C	C1'-O4'-C4'	5.54	114.33	109.90
36	B2	1022	U	C1'-O4'-C4'	-5.54	105.47	109.90
36	B2	1443	C	O4'-C1'-N1	5.54	112.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1592	C	N1-C1'-C2'	5.54	121.21	114.00
85	A5	161	G	C4'-C3'-C2'	-5.54	97.06	102.60
85	A5	282	C	O4'-C1'-N1	5.54	112.63	108.20
85	A5	1688	G	C1'-O4'-C4'	-5.54	105.47	109.90
85	A5	2001	G	O4'-C1'-N9	5.54	112.64	108.20
85	A5	2661	U	C3'-C2'-C1'	5.54	105.94	101.50
85	A5	3739	C	O4'-C1'-C2'	-5.54	100.26	105.80
85	A5	4249	G	O4'-C1'-N9	5.54	112.64	108.20
87	A8	131	G	N9-C1'-C2'	-5.54	105.90	112.00
36	B2	57	U	C3'-C2'-C1'	5.54	105.93	101.50
36	B2	447	A	O4'-C1'-N9	5.54	112.63	108.20
36	B2	901	G	O4'-C1'-N9	5.54	112.63	108.20
36	B2	1244	U	P-O3'-C3'	5.54	126.35	119.70
36	B2	1505	U	C1'-O4'-C4'	5.54	114.33	109.90
81	CE	103	GLY	O-C-N	-5.54	113.83	122.70
85	A5	932	A	N9-C1'-C2'	-5.54	105.90	112.00
85	A5	1174	G	N9-C1'-C2'	-5.54	105.90	112.00
85	A5	1515	A	C3'-C2'-C1'	5.54	105.93	101.50
85	A5	4080	C	C3'-C2'-C1'	5.54	105.93	101.50
17	AV	77	GLY	N-CA-C	-5.54	99.25	113.10
36	B2	1613	G	O4'-C1'-N9	5.54	112.63	108.20
36	B2	1713	C	N1-C1'-C2'	5.54	121.20	114.00
85	A5	181	C	C1'-O4'-C4'	-5.54	105.47	109.90
36	B2	356	C	O4'-C1'-C2'	5.54	112.58	107.60
36	B2	1202	U	C3'-C2'-C1'	5.54	105.93	101.50
81	CE	33	LYS	CB-CA-C	-5.54	99.32	110.40
85	A5	381	U	O4'-C1'-N1	5.54	112.63	108.20
85	A5	1606	U	O4'-C1'-C2'	-5.54	100.26	105.80
85	A5	1919	G	C5'-C4'-O4'	5.54	115.75	109.10
85	A5	3882	C	N1-C1'-C2'	5.54	121.20	114.00
85	A5	3976	C	P-O3'-C3'	-5.54	113.05	119.70
42	CL	158	ARG	N-CA-C	-5.54	96.05	111.00
85	A5	1657	G	C1'-O4'-C4'	-5.54	105.47	109.90
85	A5	2757	A	C3'-C2'-C1'	5.54	105.93	101.50
85	A5	4072	C	C5'-C4'-C3'	5.54	124.86	116.00
36	B2	101	U	O4'-C1'-N1	5.54	112.63	108.20
36	B2	410	G	N9-C1'-C2'	-5.54	105.91	112.00
36	B2	998	A	O4'-C1'-C2'	-5.54	100.26	105.80
36	B2	1643	U	O4'-C1'-N1	5.54	112.63	108.20
49	CQ	22	ASP	CB-CG-OD1	5.54	123.28	118.30
58	CW	76	VAL	CB-CA-C	-5.54	100.88	111.40
85	A5	258	G	O4'-C1'-N9	5.54	112.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1083	U	P-O5'-C5'	5.54	129.76	120.90
85	A5	3660	C	C3'-C2'-C1'	5.54	105.93	101.50
85	A5	3944	G	P-O3'-C3'	-5.54	113.06	119.70
85	A5	4752	U	C1'-O4'-C4'	5.54	114.33	109.90
86	A7	42	A	O4'-C1'-C2'	-5.54	100.26	105.80
86	A7	113	G	O4'-C1'-C2'	5.54	112.58	107.60
33	AI	105	ASP	CB-CA-C	5.53	121.47	110.40
36	B2	809	A	P-O3'-C3'	5.53	126.34	119.70
36	B2	1067	C	C1'-O4'-C4'	-5.53	105.47	109.90
36	B2	1777	G	P-O3'-C3'	-5.53	113.06	119.70
85	A5	753	C	O4'-C1'-N1	5.53	112.63	108.20
85	A5	1301	C	O4'-C1'-N1	5.53	112.63	108.20
85	A5	2481	G	C1'-O4'-C4'	-5.53	105.47	109.90
85	A5	2790	U	O4'-C1'-N1	5.53	112.63	108.20
85	A5	4656	A	C1'-O4'-C4'	-5.53	105.47	109.90
36	B2	1860	A	P-O3'-C3'	-5.53	113.06	119.70
37	BC	57	A	O4'-C1'-C2'	-5.53	100.27	105.80
85	A5	660	A	C1'-O4'-C4'	5.53	114.33	109.90
36	B2	408	A	O4'-C1'-C2'	-5.53	100.27	105.80
36	B2	479	C	C3'-C2'-C1'	5.53	105.92	101.50
36	B2	1278	A	O4'-C1'-N9	5.53	112.62	108.20
36	B2	1415	C	O4'-C1'-C2'	-5.53	100.27	105.80
36	B2	1666	C	C3'-C2'-C1'	5.53	105.92	101.50
85	A5	2352	U	O4'-C1'-N1	5.53	112.62	108.20
1	Az	52	GLY	C-N-CA	5.53	135.52	121.70
85	A5	1215	C	C4'-C3'-C2'	-5.53	97.07	102.60
85	A5	4193	C	O4'-C1'-N1	5.53	112.62	108.20
36	B2	88	G	O4'-C1'-N9	5.53	112.62	108.20
36	B2	1147	C	O4'-C1'-N1	5.53	112.62	108.20
85	A5	1331	C	C4'-C3'-C2'	-5.53	97.07	102.60
34	AQ	6	PRO	CB-CA-C	-5.53	98.19	112.00
48	CD	58	ARG	C-N-CA	5.53	135.52	121.70
85	A5	2113	G	C1'-O4'-C4'	5.53	114.32	109.90
85	A5	4491	G	O4'-C1'-C2'	5.53	112.57	107.60
36	B2	1164	G	N9-C1'-C2'	5.52	121.18	114.00
85	A5	1443	A	C1'-O4'-C4'	-5.52	105.48	109.90
25	Af	148	TYR	C-N-CA	5.52	135.50	121.70
36	B2	650	A	O4'-C1'-C2'	-5.52	100.28	105.80
36	B2	692	G	C1'-O4'-C4'	-5.52	105.48	109.90
37	BC	17	G	O4'-C1'-C2'	5.52	112.57	107.60
85	A5	107	G	C1'-O4'-C4'	-5.52	105.48	109.90
85	A5	948	C	P-O5'-C5'	5.52	129.74	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	915	G	O4'-C1'-C2'	5.52	112.57	107.60
85	A5	393	U	C1'-O4'-C4'	5.52	114.32	109.90
85	A5	4119	C	C3'-C2'-C1'	-5.52	97.08	101.50
85	A5	276	C	O4'-C1'-C2'	-5.52	100.28	105.80
85	A5	470	A	C1'-O4'-C4'	-5.52	105.48	109.90
85	A5	1151	C	P-O3'-C3'	-5.52	113.08	119.70
85	A5	1747	U	O4'-C1'-C2'	-5.52	100.28	105.80
85	A5	4947	U	C4'-C3'-O3'	5.52	124.04	113.00
1	Az	855	LEU	C-N-CA	5.52	135.49	121.70
85	A5	1176	C	O4'-C1'-N1	5.52	112.61	108.20
85	A5	1520	C	C1'-O4'-C4'	-5.52	105.49	109.90
85	A5	4283	G	N9-C1'-C2'	5.52	121.17	114.00
85	A5	4337	C	P-O3'-C3'	-5.52	113.08	119.70
36	B2	1062	A	O4'-C1'-N9	5.52	112.61	108.20
87	A8	125	C	O4'-C1'-C2'	-5.52	100.28	105.80
66	Cd	108	TYR	CA-C-N	-5.51	105.07	117.20
74	CC	323	ARG	CB-CG-CD	5.51	125.94	111.60
85	A5	700	G	C3'-C2'-C1'	-5.51	97.09	101.50
85	A5	2333	G	C3'-C2'-C1'	-5.51	97.09	101.50
36	B2	1823	A	C5'-C4'-O4'	-5.51	102.48	109.10
85	A5	185	C	C3'-C2'-C1'	5.51	105.91	101.50
85	A5	255	C	C1'-O4'-C4'	-5.51	105.49	109.90
36	B2	1413	G	P-O3'-C3'	-5.51	113.09	119.70
85	A5	686	A	C1'-O4'-C4'	5.51	114.31	109.90
85	A5	690	C	C1'-O4'-C4'	5.51	114.31	109.90
85	A5	693	C	O4'-C1'-N1	5.51	112.61	108.20
85	A5	4961	G	P-O5'-C5'	5.51	129.72	120.90
87	A8	76	C	C1'-O4'-C4'	5.51	114.31	109.90
36	B2	49	C	C1'-O4'-C4'	-5.51	105.49	109.90
36	B2	689	U	O3'-P-O5'	-5.51	93.53	104.00
36	B2	1331	C	C1'-O4'-C4'	-5.51	105.49	109.90
36	B2	1801	A	O4'-C1'-N9	5.51	112.61	108.20
58	CW	73	ARG	NE-CZ-NH1	-5.51	117.55	120.30
63	CB	4	ARG	NE-CZ-NH2	-5.51	117.55	120.30
85	A5	235	A	O4'-C1'-C2'	-5.51	100.29	105.80
85	A5	3775	A	C3'-C2'-C1'	-5.51	97.09	101.50
85	A5	4067	U	O4'-C1'-C2'	-5.51	100.29	105.80
85	A5	4114	C	C1'-O4'-C4'	-5.51	105.49	109.90
85	A5	4741	C	O4'-C1'-N1	5.51	112.61	108.20
1	Az	267	ASP	CA-C-O	-5.51	108.53	120.10
81	CE	110	ARG	N-CA-CB	-5.51	100.69	110.60
85	A5	83	C	C3'-C2'-C1'	5.51	105.91	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	135	G	O4'-C1'-C2'	-5.51	100.29	105.80
31	AH	16	PRO	CA-N-CD	-5.51	103.79	111.50
36	B2	513	G	C1'-O4'-C4'	-5.51	105.49	109.90
74	CC	335	MET	CA-CB-CG	5.51	122.66	113.30
85	A5	486	C	C2'-C3'-O3'	5.51	122.51	113.70
85	A5	988	C	O4'-C1'-C2'	-5.51	100.29	105.80
85	A5	1183	C	O4'-C1'-N1	5.51	112.61	108.20
85	A5	1359	G	OP1-P-OP2	-5.51	111.34	119.60
85	A5	1719	A	C8-N9-C1'	-5.51	117.79	127.70
85	A5	2874	U	O4'-C1'-N1	-5.51	103.79	108.20
87	A8	145	C	N1-C1'-C2'	5.51	121.16	114.00
85	A5	952	G	N9-C1'-C2'	5.50	121.16	114.00
85	A5	1835	G	C1'-O4'-C4'	5.50	114.30	109.90
86	A7	111	C	C3'-C2'-C1'	5.50	105.90	101.50
36	B2	183	G	C3'-C2'-C1'	5.50	105.90	101.50
36	B2	287	U	C3'-C2'-C1'	5.50	105.90	101.50
36	B2	686	U	P-O3'-C3'	-5.50	113.09	119.70
36	B2	1562	C	C3'-C2'-C1'	5.50	105.90	101.50
85	A5	1441	C	C4'-C3'-C2'	-5.50	97.10	102.60
85	A5	2797	C	N1-C1'-C2'	5.50	121.15	114.00
85	A5	4874	A	C3'-C2'-C1'	-5.50	97.10	101.50
17	AV	67	ASP	N-CA-CB	-5.50	100.70	110.60
42	CL	56	ARG	N-CA-C	-5.50	96.14	111.00
52	CS	152	PHE	CB-CG-CD1	-5.50	116.95	120.80
69	Cg	49	CYS	CA-CB-SG	5.50	123.90	114.00
85	A5	1785	C	C1'-O4'-C4'	-5.50	105.50	109.90
36	B2	1275	G	O4'-C1'-N9	5.50	112.60	108.20
85	A5	676	C	C4'-C3'-C2'	-5.50	97.10	102.60
85	A5	939	G	N9-C1'-C2'	5.50	121.15	114.00
85	A5	976	G	P-O3'-C3'	-5.50	113.10	119.70
85	A5	1356	U	N1-C1'-C2'	5.50	121.15	114.00
36	B2	80	G	O4'-C1'-N9	5.50	112.60	108.20
36	B2	228	C	C1'-O4'-C4'	-5.50	105.50	109.90
36	B2	629	A	C1'-O4'-C4'	5.50	114.30	109.90
36	B2	750	C	N1-C1'-C2'	5.50	121.15	114.00
36	B2	886	A	O3'-P-O5'	5.50	114.45	104.00
85	A5	1225	U	P-O3'-C3'	5.50	126.30	119.70
85	A5	4684	A	C1'-O4'-C4'	5.50	114.30	109.90
36	B2	1533	A	O4'-C1'-N9	5.50	112.60	108.20
36	B2	1592	C	C3'-C2'-C1'	5.50	105.90	101.50
36	B2	1672	U	C1'-O4'-C4'	-5.50	105.50	109.90
81	CE	188	ARG	CG-CD-NE	-5.50	100.26	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1496	G	C3'-C2'-C1'	5.50	105.90	101.50
85	A5	3820	G	N9-C1'-C2'	-5.50	105.95	112.00
8	AS	89	ASP	CB-CA-C	-5.50	99.41	110.40
23	AD	3	VAL	C-N-CA	5.50	135.44	121.70
36	B2	101	U	O4'-C1'-C2'	-5.50	100.31	105.80
40	CK	85	LEU	N-CA-CB	5.50	121.39	110.40
52	CS	81	TRP	CB-CA-C	5.50	121.39	110.40
85	A5	3764	U	O4'-C1'-N1	5.50	112.60	108.20
36	B2	232	A	O4'-C1'-N9	5.49	112.59	108.20
36	B2	878	G	C1'-O4'-C4'	-5.49	105.50	109.90
37	BC	21	G	O4'-C1'-C2'	5.49	112.54	107.60
85	A5	2474	G	P-O5'-C5'	5.49	129.69	120.90
85	A5	2407	G	O4'-C1'-C2'	5.49	112.54	107.60
85	A5	3609	G	C3'-C2'-C1'	-5.49	97.11	101.50
36	B2	1483	A	C4'-C3'-C2'	-5.49	97.11	102.60
40	CK	114	ARG	NH1-CZ-NH2	-5.49	113.36	119.40
85	A5	668	C	C1'-O4'-C4'	-5.49	105.51	109.90
85	A5	2670	C	C2'-C3'-O3'	5.49	122.48	113.70
85	A5	2713	C	O4'-C1'-N1	5.49	112.59	108.20
85	A5	5051	C	O4'-C1'-N1	5.49	112.59	108.20
1	Az	73	THR	N-CA-C	5.49	125.82	111.00
85	A5	943	A	C1'-O4'-C4'	5.49	114.29	109.90
85	A5	1413	C	C3'-C2'-C1'	5.49	105.89	101.50
85	A5	2447	U	O4'-C1'-C2'	-5.49	100.31	105.80
85	A5	4669	A	P-O3'-C3'	-5.49	113.11	119.70
36	B2	238	C	O4'-C1'-C2'	-5.49	100.31	105.80
36	B2	1600	G	P-O3'-C3'	-5.49	113.11	119.70
85	A5	4398	C	P-O3'-C3'	5.49	126.28	119.70
87	A8	50	C	O4'-C1'-N1	5.49	112.59	108.20
36	B2	570	C	N1-C1'-C2'	5.49	121.13	114.00
36	B2	1283	C	C1'-O4'-C4'	-5.49	105.51	109.90
36	B2	1509	U	O3'-P-O5'	-5.49	93.58	104.00
49	CQ	3	VAL	N-CA-C	-5.49	96.19	111.00
85	A5	256	G	C3'-C2'-C1'	5.49	105.89	101.50
85	A5	1876	U	N1-C1'-C2'	-5.48	105.97	112.00
85	A5	2722	G	O4'-C1'-N9	5.48	112.59	108.20
36	B2	526	A	C5'-C4'-C3'	5.48	124.77	116.00
46	CN	201	HIS	O-C-N	-5.48	113.93	122.70
85	A5	166	C	P-O3'-C3'	-5.48	113.12	119.70
85	A5	639	U	O4'-C1'-N1	5.48	112.59	108.20
85	A5	2754	G	O4'-C1'-N9	5.48	112.59	108.20
85	A5	4320	G	O4'-C1'-C2'	5.48	112.53	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
68	Cf	4	ARG	CG-CD-NE	-5.48	100.29	111.80
85	A5	2097	U	N1-C1'-C2'	5.48	121.13	114.00
85	A5	3766	A	N9-C1'-C2'	-5.48	105.97	112.00
85	A5	4365	C	O4'-C1'-C2'	-5.48	100.32	105.80
85	A5	4870	G	O4'-C4'-C3'	-5.48	98.52	104.00
86	A7	37	G	O4'-C1'-C2'	-5.48	100.32	105.80
36	B2	1843	G	P-O3'-C3'	-5.48	113.12	119.70
85	A5	1639	U	C3'-C2'-C1'	5.48	105.88	101.50
85	A5	4246	G	O4'-C1'-C2'	-5.48	100.32	105.80
87	A8	157	U	C1'-O4'-C4'	5.48	114.28	109.90
36	B2	1415	C	C3'-C2'-C1'	5.48	105.88	101.50
37	BC	57	A	P-O3'-C3'	5.48	126.27	119.70
85	A5	33	A	C1'-O4'-C4'	-5.48	105.52	109.90
85	A5	59	A	N9-C1'-C2'	-5.48	105.97	112.00
85	A5	1314	C	C4'-C3'-C2'	-5.48	97.12	102.60
85	A5	2365	C	O4'-C1'-C2'	-5.48	100.32	105.80
74	CC	262	GLU	CA-C-O	-5.48	108.60	120.10
85	A5	3945	A	N9-C1'-C2'	-5.48	105.98	112.00
85	A5	4432	C	C3'-C2'-C1'	5.48	105.88	101.50
85	A5	154	G	O4'-C1'-N9	5.47	112.58	108.20
85	A5	683	C	P-O5'-C5'	5.47	129.66	120.90
85	A5	1616	U	O4'-C1'-C2'	-5.47	100.33	105.80
85	A5	2328	G	O4'-C1'-N9	5.47	112.58	108.20
85	A5	2627	C	P-O3'-C3'	-5.47	113.13	119.70
85	A5	3743	G	C3'-C2'-C1'	-5.47	97.12	101.50
85	A5	4205	A	P-O3'-C3'	-5.47	113.13	119.70
85	A5	4879	C	O3'-P-O5'	-5.47	93.60	104.00
85	A5	4952	G	O4'-C1'-N9	5.47	112.58	108.20
36	B2	1721	U	O3'-P-O5'	5.47	114.40	104.00
67	Ce	17	THR	O-C-N	-5.47	113.95	122.70
85	A5	655	C	C2'-C3'-O3'	5.47	122.46	113.70
85	A5	1920	C	N1-C1'-C2'	5.47	121.11	114.00
85	A5	1411	C	N1-C1'-C2'	5.47	121.11	114.00
5	AO	103	ASN	N-CA-CB	5.47	120.45	110.60
85	A5	663	G	O4'-C1'-C2'	5.47	112.52	107.60
85	A5	1660	U	P-O3'-C3'	-5.47	113.14	119.70
85	A5	1988	G	C1'-O4'-C4'	-5.47	105.52	109.90
85	A5	3944	G	C4'-C3'-C2'	-5.47	97.13	102.60
36	B2	1057	C	P-O3'-C3'	-5.47	113.14	119.70
36	B2	1169	G	C1'-O4'-C4'	-5.47	105.53	109.90
36	B2	1629	C	O4'-C4'-C3'	-5.47	98.53	104.00
85	A5	1956	A	O4'-C1'-C2'	-5.47	100.33	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	A8	11	C	O4'-C1'-C2'	-5.47	100.33	105.80
36	B2	826	A	P-O3'-C3'	-5.47	113.14	119.70
36	B2	923	G	O4'-C1'-N9	5.47	112.57	108.20
36	B2	1644	C	C1'-O4'-C4'	-5.47	105.53	109.90
42	CL	134	PRO	C-N-CA	-5.47	108.04	121.70
85	A5	89	C	C3'-C2'-C1'	5.47	105.87	101.50
85	A5	910	G	O4'-C1'-N9	5.47	112.57	108.20
85	A5	1698	C	C3'-C2'-C1'	5.47	105.87	101.50
85	A5	1847	C	C1'-O4'-C4'	-5.47	105.53	109.90
86	A7	78	C	C3'-C2'-C1'	5.47	105.87	101.50
36	B2	324	C	O4'-C1'-C2'	5.46	112.52	107.60
36	B2	1360	U	O4'-C1'-N1	5.46	112.57	108.20
36	B2	1441	U	C1'-O4'-C4'	5.46	114.27	109.90
53	CT	13	TYR	CA-CB-CG	-5.46	103.02	113.40
36	B2	333	G	C1'-O4'-C4'	-5.46	105.53	109.90
85	A5	2275	G	O4'-C1'-N9	5.46	112.57	108.20
85	A5	4178	A	C1'-O4'-C4'	5.46	114.27	109.90
85	A5	4964	C	C5'-C4'-O4'	5.46	115.66	109.10
36	B2	532	C	C4'-C3'-C2'	-5.46	97.14	102.60
36	B2	1148	A	C3'-C2'-C1'	-5.46	97.13	101.50
36	B2	1411	G	O4'-C1'-C2'	5.46	112.52	107.60
40	CK	28	LEU	N-CA-C	-5.46	96.25	111.00
85	A5	75	G	O4'-C1'-C2'	-5.46	100.34	105.80
85	A5	214	G	C5'-C4'-O4'	5.46	115.66	109.10
85	A5	427	A	O4'-C1'-C2'	-5.46	100.34	105.80
85	A5	1076	C	C1'-O4'-C4'	-5.46	105.53	109.90
85	A5	4491	G	N9-C1'-C2'	5.46	121.10	114.00
23	AD	167	TYR	CA-CB-CG	-5.46	103.03	113.40
36	B2	616	A	C1'-O4'-C4'	-5.46	105.53	109.90
36	B2	1428	G	C3'-C2'-C1'	-5.46	97.13	101.50
85	A5	689	U	C5'-C4'-C3'	5.46	124.73	116.00
85	A5	693	C	O3'-P-O5'	5.46	114.37	104.00
85	A5	728	U	C5'-C4'-C3'	-5.46	107.27	116.00
85	A5	2503	G	C5'-C4'-O4'	5.46	115.65	109.10
85	A5	4997	G	O4'-C1'-N9	5.46	112.57	108.20
36	B2	666	U	C3'-C2'-C1'	5.46	105.87	101.50
39	Cq	255	THR	CA-C-O	-5.46	108.64	120.10
85	A5	303	C	O4'-C1'-C2'	-5.46	100.34	105.80
85	A5	974	C	C1'-O4'-C4'	5.46	114.27	109.90
85	A5	1437	C	P-O5'-C5'	-5.46	112.17	120.90
85	A5	4535	A	O4'-C1'-N9	5.46	112.56	108.20
36	B2	550	C	C3'-C2'-C1'	5.46	105.86	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1231	C	C1'-O4'-C4'	-5.46	105.54	109.90
36	B2	229	A	O4'-C1'-N9	5.45	112.56	108.20
36	B2	386	C	P-O5'-C5'	-5.45	112.17	120.90
36	B2	570	C	C5'-C4'-O4'	5.45	115.64	109.10
36	B2	822	U	O4'-C1'-N1	5.45	112.56	108.20
42	CL	49	ARG	CA-C-N	5.45	132.37	117.10
81	CE	118	THR	N-CA-CB	5.45	120.66	110.30
85	A5	215	C	O4'-C1'-N1	5.45	112.56	108.20
85	A5	1326	A	O4'-C1'-C2'	-5.45	100.35	105.80
85	A5	1401	C	C4'-C3'-C2'	-5.45	97.15	102.60
85	A5	2345	G	O3'-P-O5'	-5.45	93.64	104.00
85	A5	2407	G	N9-C1'-C2'	5.45	121.09	114.00
85	A5	2498	C	O4'-C1'-N1	5.45	112.56	108.20
85	A5	4145	C	C4'-C3'-C2'	-5.45	97.15	102.60
85	A5	4391	G	O4'-C1'-N9	5.45	112.56	108.20
85	A5	4690	G	N9-C1'-C2'	-5.45	106.00	112.00
85	A5	4955	A	C1'-O4'-C4'	5.45	114.26	109.90
48	CD	217	ASP	O-C-N	5.45	131.42	122.70
85	A5	113	A	C1'-O4'-C4'	-5.45	105.54	109.90
85	A5	1437	C	C3'-C2'-C1'	5.45	105.86	101.50
85	A5	3804	G	O4'-C1'-C2'	5.45	112.51	107.60
36	B2	339	A	P-O3'-C3'	-5.45	113.16	119.70
36	B2	1134	G	O4'-C1'-N9	5.45	112.56	108.20
36	B2	1561	A	O4'-C1'-C2'	-5.45	100.35	105.80
36	B2	1820	G	O4'-C1'-N9	5.45	112.56	108.20
39	Cq	69	LEU	C-N-CA	5.45	135.32	121.70
85	A5	469	C	N1-C1'-C2'	5.45	121.08	114.00
85	A5	1191	C	O4'-C1'-N1	5.45	112.56	108.20
85	A5	2459	G	P-O3'-C3'	5.45	126.24	119.70
85	A5	3921	U	C1'-O4'-C4'	-5.45	105.54	109.90
17	AV	82	ASN	CB-CA-C	-5.45	99.50	110.40
36	B2	1386	A	O4'-C1'-C2'	-5.45	100.35	105.80
85	A5	1709	C	P-O3'-C3'	5.45	126.24	119.70
85	A5	2336	G	C1'-O4'-C4'	-5.45	105.54	109.90
85	A5	2889	G	O4'-C1'-N9	5.45	112.56	108.20
36	B2	13	C	O4'-C1'-N1	5.45	112.56	108.20
36	B2	998	A	N9-C1'-C2'	-5.45	106.01	112.00
36	B2	1046	U	O4'-C1'-C2'	-5.45	100.35	105.80
68	Cf	59	THR	CA-CB-CG2	5.45	120.03	112.40
36	B2	874	G	P-O3'-C3'	5.45	126.23	119.70
36	B2	1110	G	O4'-C1'-C2'	-5.45	100.36	105.80
85	A5	696	C	O4'-C1'-C2'	-5.45	100.35	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4117	U	C1'-O4'-C4'	5.45	114.26	109.90
85	A5	4132	C	C5'-C4'-O4'	5.45	115.64	109.10
85	A5	4362	A	N9-C1'-C2'	-5.45	106.01	112.00
85	A5	4711	C	C3'-C2'-C1'	5.45	105.86	101.50
85	A5	4490	C	C3'-C2'-C1'	5.44	105.86	101.50
87	A8	64	U	O4'-C1'-N1	5.44	112.55	108.20
28	AC	231	ALA	O-C-N	-5.44	114.00	122.70
36	B2	233	C	O4'-C1'-C2'	-5.44	100.36	105.80
36	B2	317	C	C3'-C2'-C1'	5.44	105.85	101.50
85	A5	688	U	P-O5'-C5'	5.44	129.60	120.90
85	A5	1283	G	N9-C1'-C2'	5.44	121.07	114.00
85	A5	1442	C	O3'-P-O5'	5.44	114.34	104.00
85	A5	1639	U	C1'-O4'-C4'	-5.44	105.55	109.90
85	A5	1910	G	N9-C1'-C2'	5.44	121.07	114.00
85	A5	2294	G	O4'-C1'-N9	5.44	112.55	108.20
85	A5	4345	C	C1'-O4'-C4'	-5.44	105.55	109.90
86	A7	3	C	O4'-C1'-N1	5.44	112.55	108.20
46	CN	80	THR	CA-CB-CG2	-5.44	104.79	112.40
56	CX	40	ILE	N-CA-CB	5.44	123.31	110.80
85	A5	928	C	O4'-C1'-N1	5.44	112.55	108.20
85	A5	2750	G	C1'-O4'-C4'	-5.44	105.55	109.90
36	B2	1133	A	O5'-C5'-C4'	-5.44	101.37	111.70
36	B2	1427	C	O4'-C1'-N1	5.44	112.55	108.20
36	B2	1696	C	C3'-C2'-C1'	5.44	105.85	101.50
48	CD	124	GLU	N-CA-C	5.44	125.68	111.00
85	A5	940	C	O4'-C1'-C2'	-5.44	100.36	105.80
85	A5	1720	C	C5'-C4'-O4'	5.44	115.62	109.10
85	A5	1958	A	C4'-C3'-C2'	-5.44	97.16	102.60
85	A5	1967	A	C3'-C2'-C1'	5.44	105.85	101.50
85	A5	2091	C	C4'-C3'-C2'	-5.44	97.16	102.60
85	A5	2720	C	O4'-C1'-N1	5.44	112.55	108.20
85	A5	2773	G	O4'-C1'-N9	5.44	112.55	108.20
34	AQ	18	THR	C-N-CA	5.44	135.29	121.70
44	CM	65	PRO	N-CA-C	5.44	126.23	112.10
85	A5	4407	G	C1'-O4'-C4'	-5.44	105.55	109.90
12	AR	89	SER	CA-C-O	-5.43	108.69	120.10
68	Cf	33	VAL	N-CA-C	-5.43	96.33	111.00
85	A5	649	A	C4'-C3'-C2'	-5.43	97.17	102.60
85	A5	3651	A	O4'-C1'-C2'	-5.43	100.36	105.80
85	A5	4892	A	C3'-C2'-C1'	5.43	105.85	101.50
36	B2	102	A	C1'-O4'-C4'	-5.43	105.55	109.90
85	A5	39	A	N9-C1'-C2'	5.43	121.06	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1633	G	C1'-O4'-C4'	5.43	114.25	109.90
85	A5	2897	G	O4'-C1'-N9	5.43	112.55	108.20
66	Cd	111	VAL	CB-CA-C	-5.43	101.08	111.40
85	A5	2038	U	C5'-C4'-O4'	5.43	115.62	109.10
36	B2	968	U	O4'-C1'-N1	5.43	112.54	108.20
36	B2	1123	C	O4'-C1'-N1	5.43	112.54	108.20
36	B2	1854	U	N1-C1'-C2'	-5.43	106.03	112.00
37	BC	7	G	C3'-C2'-C1'	5.43	105.84	101.50
85	A5	288	G	N9-C1'-C2'	5.43	121.06	114.00
85	A5	519	C	C1'-O4'-C4'	5.43	114.24	109.90
85	A5	1759	G	C3'-C2'-C1'	5.43	105.84	101.50
85	A5	1856	C	C3'-C2'-C1'	5.43	105.84	101.50
85	A5	2760	G	N9-C1'-C2'	-5.43	106.03	112.00
36	B2	146	G	O4'-C1'-C2'	-5.43	100.37	105.80
36	B2	794	A	O4'-C1'-C2'	-5.43	100.37	105.80
44	CM	41	PRO	C-N-CA	-5.43	108.13	121.70
85	A5	4657	U	O4'-C1'-N1	5.43	112.54	108.20
13	AP	71	GLU	CA-C-N	-5.43	105.26	117.20
36	B2	67	C	N1-C1'-C2'	-5.43	106.03	112.00
36	B2	1388	A	P-O3'-C3'	-5.43	113.19	119.70
58	CW	82	ILE	CB-CA-C	5.43	122.45	111.60
81	CE	105	ARG	N-CA-C	5.43	125.65	111.00
85	A5	347	A	C5'-C4'-C3'	-5.43	107.32	116.00
85	A5	1761	G	C5'-C4'-O4'	5.43	115.61	109.10
85	A5	3782	C	C3'-C2'-C1'	5.43	105.84	101.50
59	CZ	54	THR	CA-C-N	-5.42	105.27	117.20
72	Ck	64	LEU	C-N-CA	5.42	135.26	121.70
85	A5	118	C	O4'-C4'-C3'	5.42	110.44	106.10
85	A5	725	G	C1'-O4'-C4'	-5.42	105.56	109.90
85	A5	1524	A	C3'-C2'-C1'	-5.42	97.16	101.50
85	A5	2087	C	C1'-O4'-C4'	-5.42	105.56	109.90
54	CP	5	SER	CA-C-N	5.42	129.13	117.20
85	A5	683	C	C3'-C2'-C1'	5.42	105.84	101.50
86	A7	86	G	C1'-O4'-C4'	-5.42	105.56	109.90
36	B2	749	U	O4'-C1'-C2'	-5.42	100.38	105.80
36	B2	1543	U	O4'-C1'-N1	5.42	112.54	108.20
48	CD	11	ALA	C-N-CA	-5.42	108.14	121.70
85	A5	448	G	C3'-C2'-C1'	5.42	105.84	101.50
85	A5	1617	G	O4'-C1'-N9	5.42	112.54	108.20
86	A7	6	C	O4'-C1'-N1	5.42	112.54	108.20
85	A5	4482	U	O4'-C1'-N1	5.42	112.54	108.20
36	B2	221	A	C3'-C2'-C1'	-5.42	97.17	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	519	A	C1'-O4'-C4'	5.42	114.23	109.90
36	B2	1074	C	O4'-C1'-N1	5.42	112.53	108.20
36	B2	1374	C	O4'-C1'-N1	5.42	112.53	108.20
58	CW	3	VAL	N-CA-C	-5.42	96.37	111.00
81	CE	62	MET	N-CA-CB	5.42	120.35	110.60
85	A5	721	G	O4'-C1'-N9	5.42	112.53	108.20
85	A5	1090	G	C1'-O4'-C4'	-5.42	105.56	109.90
85	A5	2573	A	C5'-C4'-C3'	5.42	124.67	116.00
85	A5	4945	G	O4'-C4'-C3'	-5.42	98.58	104.00
15	AB	63	LYS	N-CA-C	5.42	125.63	111.00
85	A5	86	U	O4'-C1'-N1	5.42	112.53	108.20
85	A5	1844	G	C3'-C2'-C1'	-5.42	97.17	101.50
85	A5	2503	G	O4'-C1'-N9	5.42	112.53	108.20
85	A5	4513	A	N9-C1'-C2'	-5.42	106.04	112.00
85	A5	4558	U	C3'-C2'-C1'	5.42	105.83	101.50
3	AU	118	ASP	N-CA-C	-5.42	96.38	111.00
42	CL	132	SER	N-CA-C	5.42	125.62	111.00
85	A5	699	C	C3'-C2'-C1'	5.42	105.83	101.50
85	A5	1369	C	C3'-C2'-C1'	5.42	105.83	101.50
85	A5	4573	G	N9-C1'-C2'	5.42	121.04	114.00
36	B2	365	C	C3'-C2'-C1'	5.41	105.83	101.50
36	B2	472	C	C3'-C2'-C1'	5.41	105.83	101.50
36	B2	1378	A	O4'-C1'-C2'	-5.41	100.39	105.80
85	A5	1613	A	O4'-C1'-C2'	-5.41	100.39	105.80
85	A5	3942	A	C1'-O4'-C4'	5.41	114.23	109.90
85	A5	4098	A	O4'-C1'-C2'	-5.41	100.39	105.80
85	A5	4977	A	C4'-C3'-C2'	-5.41	97.19	102.60
85	A5	1206	C	C3'-C2'-C1'	5.41	105.83	101.50
85	A5	2414	G	C3'-C2'-C1'	-5.41	97.17	101.50
36	B2	238	C	N1-C1'-C2'	5.41	121.03	114.00
36	B2	863	U	O4'-C1'-C2'	5.41	112.47	107.60
36	B2	1697	A	N9-C1'-C2'	-5.41	106.05	112.00
85	A5	317	A	O4'-C1'-C2'	-5.41	100.39	105.80
85	A5	1587	G	O4'-C1'-C2'	-5.41	100.39	105.80
85	A5	1789	C	C3'-C2'-C1'	5.41	105.83	101.50
87	A8	146	U	C4'-C3'-C2'	-5.41	97.19	102.60
36	B2	401	A	C3'-C2'-C1'	5.41	105.83	101.50
36	B2	856	C	C1'-O4'-C4'	-5.41	105.57	109.90
36	B2	893	U	C1'-O4'-C4'	5.41	114.23	109.90
36	B2	1829	G	O4'-C1'-C2'	-5.41	100.39	105.80
40	CK	44	ASP	CB-CG-OD2	-5.41	113.43	118.30
85	A5	1202	C	O4'-C1'-N1	5.41	112.53	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4169	G	C3'-C2'-C1'	5.41	105.83	101.50
85	A5	4943	A	C5'-C4'-C3'	-5.41	107.35	116.00
86	A7	112	U	O4'-C1'-C2'	-5.41	100.39	105.80
36	B2	15	U	O4'-C1'-C2'	-5.41	100.39	105.80
36	B2	1007	C	O4'-C1'-C2'	-5.41	100.39	105.80
85	A5	1534	A	O4'-C1'-C2'	-5.41	100.39	105.80
85	A5	2469	C	P-O3'-C3'	5.41	126.19	119.70
36	B2	546	G	O4'-C1'-C2'	-5.41	100.39	105.80
47	CI	104	SER	N-CA-C	5.41	125.60	111.00
85	A5	907	C	C3'-C2'-C1'	5.41	105.82	101.50
85	A5	1529	G	C1'-O4'-C4'	-5.41	105.58	109.90
86	A7	98	G	P-O5'-C5'	-5.41	112.25	120.90
36	B2	1031	A	C5'-C4'-O4'	5.40	115.58	109.10
74	CC	338	ASN	C-N-CA	5.40	135.21	121.70
85	A5	4566	U	C3'-C2'-C1'	5.40	105.82	101.50
36	B2	1852	C	O4'-C1'-N1	5.40	112.52	108.20
85	A5	2902	G	N9-C1'-C2'	5.40	121.02	114.00
5	AO	129	ILE	CG1-CB-CG2	5.40	123.28	111.40
26	AJ	100	LEU	N-CA-C	5.40	125.58	111.00
36	B2	472	C	N1-C1'-C2'	5.40	121.02	114.00
37	BC	70	C	C3'-C2'-C1'	5.40	105.82	101.50
36	B2	499	G	P-O5'-C5'	-5.40	112.26	120.90
85	A5	1970	A	O4'-C1'-N9	5.40	112.52	108.20
85	A5	4341	C	C3'-C2'-C1'	5.40	105.82	101.50
36	B2	71	G	C4'-C3'-O3'	5.40	123.80	113.00
61	Ch	40	ALA	C-N-CA	-5.40	108.21	121.70
81	CE	57	TYR	CA-CB-CG	5.40	123.66	113.40
85	A5	315	G	O4'-C4'-C3'	5.40	110.42	106.10
85	A5	1440	U	P-O5'-C5'	-5.40	112.26	120.90
17	AV	31	SER	O-C-N	-5.40	114.07	122.70
85	A5	954	C	N1-C1'-C2'	5.40	121.02	114.00
85	A5	1487	G	O4'-C1'-N9	5.40	112.52	108.20
85	A5	3735	G	O4'-C1'-N9	5.40	112.52	108.20
85	A5	5050	C	C3'-C2'-C1'	5.40	105.82	101.50
36	B2	670	A	C1'-O4'-C4'	5.39	114.22	109.90
36	B2	1212	G	O4'-C1'-N9	5.39	112.52	108.20
81	CE	61	ALA	N-CA-CB	5.39	117.65	110.10
85	A5	735	G	C3'-C2'-C1'	5.39	105.81	101.50
85	A5	2517	A	C3'-C2'-C1'	5.39	105.81	101.50
85	A5	2736	G	O4'-C1'-N9	5.39	112.52	108.20
85	A5	2804	C	O4'-C1'-C2'	-5.39	100.41	105.80
30	AF	21	GLY	N-CA-C	-5.39	99.62	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	406	U	N1-C1'-C2'	5.39	121.01	114.00
36	B2	1374	C	N1-C1'-C2'	5.39	121.01	114.00
60	Cr	31	ASN	N-CA-C	-5.39	96.44	111.00
85	A5	988	C	O4'-C1'-N1	5.39	112.52	108.20
85	A5	1293	G	C3'-C2'-C1'	-5.39	97.19	101.50
85	A5	2074	C	C3'-C2'-C1'	5.39	105.81	101.50
85	A5	4041	C	O4'-C4'-C3'	-5.39	98.61	104.00
85	A5	4505	C	C3'-C2'-C1'	5.39	105.81	101.50
85	A5	4539	U	O4'-C1'-C2'	-5.39	100.41	105.80
85	A5	4600	G	P-O3'-C3'	5.39	126.17	119.70
86	A7	31	G	C1'-O4'-C4'	-5.39	105.59	109.90
36	B2	437	G	N9-C1'-C2'	5.39	121.01	114.00
65	Cc	88	TYR	CA-CB-CG	-5.39	103.16	113.40
85	A5	1332	C	C3'-C2'-C1'	5.39	105.81	101.50
85	A5	4226	G	C1'-O4'-C4'	-5.39	105.59	109.90
86	A7	97	G	C1'-O4'-C4'	-5.39	105.59	109.90
2	Ag	14	HIS	C-N-CA	-5.39	108.23	121.70
36	B2	453	C	N1-C1'-C2'	5.39	121.01	114.00
85	A5	183	C	O3'-P-O5'	5.39	114.24	104.00
85	A5	1300	G	C1'-O4'-C4'	-5.39	105.59	109.90
85	A5	2727	C	N1-C1'-C2'	5.39	121.01	114.00
85	A5	3709	U	P-O5'-C5'	5.39	129.52	120.90
85	A5	4040	C	C3'-C2'-C1'	5.39	105.81	101.50
85	A5	4218	U	C1'-O4'-C4'	-5.39	105.59	109.90
85	A5	4303	C	O4'-C1'-C2'	5.39	112.45	107.60
36	B2	1131	G	O4'-C1'-C2'	-5.39	100.41	105.80
49	CQ	19	LYS	CB-CG-CD	-5.39	97.60	111.60
65	Cc	91	VAL	N-CA-C	-5.39	96.46	111.00
85	A5	695	G	N9-C1'-C2'	5.39	121.00	114.00
85	A5	1088	C	O4'-C1'-N1	5.39	112.51	108.20
86	A7	121	U	O4'-C1'-C2'	-5.39	100.41	105.80
87	A8	126	C	O4'-C1'-N1	5.39	112.51	108.20
1	Az	760	TYR	CB-CA-C	-5.38	99.63	110.40
36	B2	76	U	N1-C1'-C2'	5.38	121.00	114.00
74	CC	273	LEU	CB-CG-CD1	-5.38	101.84	111.00
85	A5	2606	G	O4'-C1'-N9	5.38	112.51	108.20
85	A5	4691	A	C3'-C2'-C1'	5.38	105.81	101.50
28	AC	256	TRP	O-C-N	-5.38	114.09	122.70
85	A5	421	C	N1-C1'-C2'	5.38	121.00	114.00
74	CC	335	MET	O-C-N	5.38	131.31	122.70
85	A5	505	G	N9-C1'-C2'	-5.38	106.08	112.00
85	A5	663	G	P-O3'-C3'	5.38	126.16	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	978	G	C4'-C3'-C2'	-5.38	97.22	102.60
85	A5	1950	U	O4'-C1'-N1	5.38	112.50	108.20
85	A5	4085	A	P-O5'-C5'	5.38	129.51	120.90
85	A5	4657	U	P-O3'-C3'	5.38	126.16	119.70
36	B2	472	C	P-O3'-C3'	5.38	126.16	119.70
28	AC	259	THR	N-CA-C	5.38	125.52	111.00
36	B2	295	C	C3'-C2'-C1'	5.38	105.80	101.50
36	B2	899	U	P-O5'-C5'	5.38	129.51	120.90
36	B2	1114	U	O4'-C1'-C2'	-5.38	100.42	105.80
36	B2	1838	U	O4'-C1'-N1	5.38	112.50	108.20
53	CT	133	ALA	C-N-CD	-5.38	108.77	120.60
85	A5	716	C	C3'-C2'-C1'	5.38	105.80	101.50
85	A5	981	C	O4'-C1'-N1	5.38	112.50	108.20
85	A5	2281	U	N1-C1'-C2'	5.38	120.99	114.00
85	A5	2444	U	N1-C1'-C2'	5.38	120.99	114.00
85	A5	3816	A	C1'-O4'-C4'	-5.38	105.60	109.90
85	A5	4068	U	N1-C1'-C2'	5.38	120.99	114.00
85	A5	4382	G	O4'-C1'-C2'	5.38	112.44	107.60
85	A5	92	C	C5'-C4'-O4'	-5.38	102.65	109.10
85	A5	384	A	N9-C1'-C2'	5.38	120.99	114.00
85	A5	720	G	P-O3'-C3'	5.38	126.15	119.70
85	A5	1671	U	C5'-C4'-O4'	5.38	115.55	109.10
85	A5	2737	C	N1-C1'-C2'	5.38	120.99	114.00
85	A5	2747	U	O4'-C1'-N1	5.38	112.50	108.20
87	A8	142	U	N1-C1'-C2'	-5.38	106.09	112.00
36	B2	189	U	P-O3'-C3'	-5.38	113.25	119.70
36	B2	1744	G	O4'-C1'-N9	5.38	112.50	108.20
85	A5	231	U	P-O3'-C3'	5.37	126.15	119.70
85	A5	1075	G	P-O3'-C3'	5.37	126.15	119.70
85	A5	1455	G	N9-C1'-C2'	5.37	120.99	114.00
85	A5	3774	A	N9-C1'-C2'	5.37	120.99	114.00
85	A5	4340	U	O4'-C1'-C2'	-5.37	100.43	105.80
85	A5	4506	C	C3'-C2'-C1'	5.37	105.80	101.50
18	AY	62	THR	C-N-CA	-5.37	108.27	121.70
36	B2	398	A	C1'-O4'-C4'	5.37	114.20	109.90
37	BC	74	C	C1'-O4'-C4'	5.37	114.20	109.90
85	A5	154	G	C5'-C4'-O4'	5.37	115.55	109.10
85	A5	1366	G	C5'-C4'-C3'	5.37	124.59	116.00
85	A5	2610	G	C5'-C4'-O4'	5.37	115.55	109.10
85	A5	2849	A	C1'-O4'-C4'	5.37	114.20	109.90
85	A5	3897	G	O4'-C1'-N9	5.37	112.50	108.20
85	A5	4293	U	C3'-C2'-C1'	5.37	105.80	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4573	G	O4'-C1'-N9	5.37	112.50	108.20
85	A5	5021	C	O4'-C1'-C2'	-5.37	100.43	105.80
36	B2	1348	G	P-O3'-C3'	5.37	126.14	119.70
85	A5	1213	G	O4'-C1'-N9	5.37	112.50	108.20
85	A5	1736	A	O4'-C1'-N9	5.37	112.50	108.20
24	Ae	21	LYS	C-N-CA	5.37	135.12	121.70
36	B2	1490	G	C1'-O4'-C4'	-5.37	105.61	109.90
85	A5	453	G	P-O5'-C5'	-5.37	112.31	120.90
85	A5	1788	A	O4'-C1'-C2'	-5.37	100.43	105.80
36	B2	238	C	O4'-C1'-N1	5.37	112.49	108.20
36	B2	1141	G	O4'-C1'-C2'	5.37	112.43	107.60
70	Ci	7	MET	C-N-CA	-5.37	108.28	121.70
85	A5	9	C	O4'-C1'-C2'	-5.37	100.43	105.80
85	A5	1498	G	O4'-C1'-N9	5.37	112.49	108.20
85	A5	2729	C	C3'-C2'-C1'	5.37	105.79	101.50
86	A7	110	G	C3'-C2'-C1'	5.37	105.79	101.50
4	AK	43	LEU	CB-CG-CD1	5.37	120.12	111.00
85	A5	2297	G	O4'-C1'-N9	5.37	112.49	108.20
85	A5	2322	G	O4'-C1'-N9	5.37	112.49	108.20
85	A5	4517	A	O4'-C1'-N9	-5.37	103.91	108.20
85	A5	4750	G	C1'-O4'-C4'	-5.37	105.61	109.90
26	AJ	35	TYR	C-N-CA	5.36	133.56	122.30
36	B2	1540	G	P-O5'-C5'	-5.36	112.32	120.90
37	BC	9	G	O4'-C1'-C2'	-5.36	100.44	105.80
37	BC	26	C	O4'-C1'-N1	5.36	112.49	108.20
44	CM	33	GLN	CB-CA-C	5.36	121.13	110.40
85	A5	1187	G	C3'-C2'-C1'	5.36	105.79	101.50
85	A5	1629	G	N9-C1'-C2'	5.36	120.97	114.00
85	A5	2002	A	C1'-O4'-C4'	-5.36	105.61	109.90
85	A5	2254	G	C1'-O4'-C4'	-5.36	105.61	109.90
85	A5	2694	G	O4'-C1'-N9	5.36	112.49	108.20
68	Cf	42	TYR	CA-CB-CG	-5.36	103.21	113.40
85	A5	197	A	C1'-O4'-C4'	-5.36	105.61	109.90
85	A5	1800	U	N1-C1'-C2'	5.36	120.97	114.00
36	B2	526	A	O4'-C1'-N9	5.36	112.49	108.20
36	B2	824	C	N1-C1'-C2'	5.36	120.97	114.00
36	B2	1304	U	N1-C1'-C2'	5.36	120.97	114.00
50	CR	79	GLY	O-C-N	-5.36	114.12	122.70
81	CE	31	ASN	N-CA-CB	5.36	120.25	110.60
85	A5	687	U	C3'-C2'-C1'	-5.36	97.21	101.50
85	A5	1771	U	O4'-C1'-C2'	-5.36	100.44	105.80
85	A5	1814	C	O4'-C1'-C2'	-5.36	100.44	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2330	G	O4'-C1'-C2'	-5.36	100.44	105.80
85	A5	3873	G	N9-C1'-C2'	5.36	120.97	114.00
85	A5	4128	A	N9-C1'-C2'	-5.36	106.11	112.00
85	A5	4171	C	C1'-O4'-C4'	-5.36	105.61	109.90
85	A5	4702	G	N9-C1'-C2'	-5.36	106.10	112.00
55	CU	76	VAL	CB-CA-C	5.36	121.58	111.40
85	A5	427	A	C3'-C2'-C1'	5.36	105.79	101.50
85	A5	1286	C	P-O3'-C3'	-5.36	113.27	119.70
87	A8	43	A	O4'-C1'-N9	5.36	112.49	108.20
36	B2	1260	A	O4'-C1'-N9	5.36	112.49	108.20
37	BC	58	A	O4'-C1'-N9	5.36	112.49	108.20
85	A5	1109	C	C1'-O4'-C4'	-5.36	105.61	109.90
85	A5	1266	G	C2'-C3'-O3'	5.36	122.27	113.70
85	A5	1920	C	O4'-C1'-N1	5.36	112.49	108.20
85	A5	4447	C	C3'-C2'-C1'	5.36	105.79	101.50
85	A5	5055	G	C3'-C2'-C1'	-5.36	97.21	101.50
85	A5	5062	G	P-O5'-C5'	-5.36	112.33	120.90
87	A8	5	U	O4'-C1'-N1	5.36	112.49	108.20
87	A8	143	G	O4'-C1'-N9	5.36	112.48	108.20
81	CE	126	LEU	CA-C-O	-5.36	108.86	120.10
85	A5	919	C	O4'-C1'-C2'	-5.36	100.44	105.80
85	A5	4160	C	O4'-C1'-N1	5.36	112.48	108.20
85	A5	4717	A	C5'-C4'-O4'	-5.36	102.67	109.10
85	A5	4888	U	O4'-C1'-C2'	-5.36	100.44	105.80
85	A5	170	C	C5'-C4'-O4'	5.35	115.53	109.10
85	A5	324	A	P-O3'-C3'	5.35	126.12	119.70
85	A5	2820	C	N1-C1'-C2'	5.35	120.96	114.00
85	A5	4167	G	O4'-C1'-N9	5.35	112.48	108.20
33	AI	132	GLU	CA-C-O	-5.35	108.86	120.10
36	B2	380	G	C1'-O4'-C4'	5.35	114.18	109.90
36	B2	469	A	O4'-C1'-N9	5.35	112.48	108.20
36	B2	560	A	O5'-C5'-C4'	5.35	121.87	111.70
36	B2	1190	A	O4'-C1'-N9	5.35	112.48	108.20
52	CS	81	TRP	CA-C-N	5.35	128.97	117.20
85	A5	307	A	P-O5'-C5'	-5.35	112.34	120.90
85	A5	345	C	C3'-C2'-C1'	5.35	105.78	101.50
85	A5	2127	C	O4'-C1'-C2'	-5.35	100.45	105.80
85	A5	4642	U	C3'-C2'-C1'	5.35	105.78	101.50
28	AC	248	TYR	CA-CB-CG	-5.35	103.23	113.40
40	CK	114	ARG	NE-CZ-NH2	-5.35	117.62	120.30
59	CZ	54	THR	N-CA-CB	-5.35	100.13	110.30
36	B2	103	A	P-O3'-C3'	5.35	126.12	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	933	G	C3'-C2'-C1'	-5.35	97.22	101.50
36	B2	1195	A	N9-C1'-C2'	-5.35	106.11	112.00
68	Cf	6	TRP	CD1-CG-CD2	-5.35	102.02	106.30
68	Cf	6	TRP	N-CA-C	5.35	125.44	111.00
85	A5	371	A	C3'-C2'-C1'	5.35	105.78	101.50
85	A5	1347	G	C5'-C4'-O4'	5.35	115.52	109.10
85	A5	4622	A	C1'-O4'-C4'	5.35	114.18	109.90
36	B2	1693	G	O4'-C1'-C2'	5.35	112.41	107.60
37	BC	33	C	O4'-C1'-C2'	-5.35	100.45	105.80
47	CI	100	ASN	O-C-N	-5.35	114.14	122.70
85	A5	237	G	C1'-O4'-C4'	-5.35	105.62	109.90
85	A5	696	C	C5'-C4'-O4'	5.35	115.52	109.10
85	A5	2007	G	P-O3'-C3'	5.35	126.12	119.70
85	A5	2275	G	C1'-O4'-C4'	-5.35	105.62	109.90
85	A5	4540	C	O4'-C1'-C2'	-5.35	100.45	105.80
87	A8	76	C	C4'-C3'-C2'	-5.35	97.25	102.60
36	B2	285	U	P-O5'-C5'	-5.35	112.35	120.90
48	CD	186	GLU	C-N-CA	5.35	135.06	121.70
85	A5	4306	U	C1'-O4'-C4'	5.35	114.18	109.90
85	A5	4653	C	O4'-C1'-N1	5.35	112.48	108.20
22	Ac	54	ASP	CB-CG-OD2	5.34	123.11	118.30
74	CC	262	GLU	CA-C-N	5.34	128.96	117.20
85	A5	205	C	O4'-C1'-N1	5.34	112.48	108.20
85	A5	684	G	C3'-C2'-C1'	5.34	105.78	101.50
85	A5	1402	C	N1-C1'-C2'	5.34	120.95	114.00
85	A5	2492	C	P-O5'-C5'	-5.34	112.35	120.90
85	A5	2741	U	O4'-C1'-C2'	-5.34	100.45	105.80
85	A5	2892	C	N1-C1'-C2'	5.34	120.95	114.00
85	A5	4748	U	C4'-C3'-C2'	-5.34	97.26	102.60
85	A5	4750	G	C5'-C4'-O4'	5.34	115.51	109.10
86	A7	119	U	C3'-C2'-C1'	5.34	105.77	101.50
16	AA	53	ARG	CD-NE-CZ	-5.34	116.12	123.60
29	AG	170	ARG	CA-C-N	-5.34	105.45	117.20
36	B2	546	G	O4'-C1'-N9	5.34	112.47	108.20
36	B2	695	C	C1'-O4'-C4'	5.34	114.17	109.90
36	B2	1205	C	O4'-C1'-N1	5.34	112.47	108.20
37	BC	36	A	C3'-C2'-C1'	5.34	105.77	101.50
85	A5	23	C	O4'-C1'-N1	5.34	112.47	108.20
85	A5	370	U	C1'-O4'-C4'	-5.34	105.63	109.90
85	A5	4144	C	O4'-C1'-C2'	-5.34	100.46	105.80
86	A7	15	C	N1-C1'-C2'	5.34	120.94	114.00
10	AN	6	ALA	C-N-CD	5.34	139.61	128.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	380	G	O4'-C1'-N9	5.34	112.47	108.20
36	B2	652	U	C1'-O4'-C4'	5.34	114.17	109.90
36	B2	1154	U	C4'-C3'-C2'	-5.34	97.26	102.60
36	B2	1345	G	O4'-C1'-C2'	-5.34	100.46	105.80
82	CG	103	ARG	CA-C-N	5.34	132.05	117.10
85	A5	1262	G	O4'-C1'-N9	5.34	112.47	108.20
85	A5	3587	C	O4'-C1'-N1	5.34	112.47	108.20
85	A5	4133	C	P-O3'-C3'	-5.34	113.29	119.70
47	CI	210	ARG	N-CA-CB	5.34	120.21	110.60
69	Cg	13	TYR	CA-CB-CG	-5.34	103.26	113.40
85	A5	2267	U	O4'-C1'-C2'	5.34	112.40	107.60
30	AF	46	ALA	O-C-N	-5.34	114.16	122.70
39	Cq	133	GLU	O-C-N	-5.34	114.16	122.70
50	CR	42	ARG	NE-CZ-NH1	-5.34	117.63	120.30
60	Cr	28	GLU	C-N-CD	-5.34	108.86	120.60
60	Cr	77	TYR	CA-CB-CG	5.34	123.54	113.40
82	CG	100	HIS	N-CA-CB	5.34	120.21	110.60
85	A5	686	A	C4'-C3'-C2'	-5.34	97.26	102.60
85	A5	1459	A	P-O5'-C5'	-5.34	112.36	120.90
85	A5	2249	C	N1-C1'-C2'	5.34	120.94	114.00
85	A5	2441	C	O4'-C1'-N1	5.34	112.47	108.20
85	A5	4500	U	C1'-O4'-C4'	5.34	114.17	109.90
85	A5	4733	C	P-O3'-C3'	5.34	126.10	119.70
85	A5	4871	C	O4'-C4'-C3'	-5.34	98.66	104.00
85	A5	1282	G	O5'-C5'-C4'	5.33	121.84	111.70
85	A5	1802	A	P-O3'-C3'	5.33	126.10	119.70
85	A5	3894	A	O4'-C1'-C2'	-5.33	100.47	105.80
85	A5	4880	C	O3'-P-O5'	-5.33	93.86	104.00
36	B2	471	G	N9-C1'-C2'	-5.33	106.13	112.00
36	B2	623	G	O4'-C1'-N9	5.33	112.47	108.20
36	B2	731	G	N9-C1'-C2'	5.33	120.94	114.00
36	B2	790	C	C3'-C2'-C1'	5.33	105.77	101.50
36	B2	964	A	O4'-C1'-C2'	-5.33	100.47	105.80
49	CQ	2	GLY	C-N-CA	5.33	135.03	121.70
82	CG	261	LEU	C-N-CA	-5.33	108.37	121.70
85	A5	276	C	P-O3'-C3'	5.33	126.10	119.70
85	A5	276	C	C1'-O4'-C4'	5.33	114.17	109.90
85	A5	1080	C	C1'-O4'-C4'	-5.33	105.63	109.90
85	A5	2036	C	O4'-C1'-N1	5.33	112.47	108.20
85	A5	4655	A	C1'-O4'-C4'	5.33	114.17	109.90
87	A8	41	A	N9-C1'-C2'	-5.33	106.13	112.00
85	A5	1430	C	O4'-C1'-N1	5.33	112.47	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1466	G	O4'-C1'-N9	5.33	112.47	108.20
85	A5	1544	G	N9-C1'-C2'	-5.33	106.14	112.00
85	A5	3699	C	N1-C1'-C2'	5.33	120.93	114.00
85	A5	3895	G	O4'-C1'-N9	5.33	112.47	108.20
68	Cf	57	THR	C-N-CA	5.33	135.03	121.70
85	A5	1938	C	C3'-C2'-C1'	5.33	105.76	101.50
85	A5	3664	G	O4'-C1'-N9	5.33	112.46	108.20
36	B2	426	A	C3'-C2'-C1'	5.33	105.76	101.50
36	B2	1237	C	C4'-C3'-C2'	-5.33	97.27	102.60
70	Ci	4	ARG	CA-CB-CG	5.33	125.12	113.40
85	A5	1363	C	O4'-C1'-N1	-5.33	103.94	108.20
85	A5	2118	G	N9-C1'-C2'	-5.33	106.14	112.00
85	A5	2303	C	O4'-C1'-C2'	-5.33	100.47	105.80
85	A5	3843	C	P-O3'-C3'	-5.33	113.31	119.70
85	A5	3968	U	C1'-O4'-C4'	5.33	114.16	109.90
85	A5	4449	A	C3'-C2'-C1'	5.33	105.76	101.50
36	B2	692	G	O4'-C1'-C2'	5.33	112.39	107.60
85	A5	3893	C	O4'-C1'-C2'	-5.33	100.47	105.80
36	B2	66	G	O4'-C1'-C2'	5.33	112.39	107.60
36	B2	1168	G	O4'-C1'-N9	5.33	112.46	108.20
36	B2	1459	G	C3'-C2'-C1'	-5.33	97.24	101.50
74	CC	13	GLU	C-N-CA	5.33	135.01	121.70
81	CE	58	SER	C-N-CA	5.33	135.01	121.70
85	A5	1218	G	C5'-C4'-C3'	5.33	124.52	116.00
85	A5	2018	C	O4'-C1'-C2'	-5.33	100.47	105.80
36	B2	406	U	O4'-C1'-N1	5.32	112.46	108.20
36	B2	552	G	O4'-C1'-C2'	5.32	112.39	107.60
63	CB	55	HIS	N-CA-CB	5.32	120.18	110.60
85	A5	1568	C	O4'-C1'-C2'	-5.32	100.48	105.80
87	A8	110	U	O3'-P-O5'	-5.32	93.89	104.00
31	AH	16	PRO	C-N-CA	5.32	135.00	121.70
36	B2	561	A	C2'-C3'-O3'	5.32	122.21	113.70
85	A5	329	A	N9-C1'-C2'	5.32	120.92	114.00
85	A5	4336	A	C4'-C3'-O3'	5.32	123.64	113.00
85	A5	5000	G	O4'-C1'-N9	5.32	112.46	108.20
36	B2	65	C	O4'-C1'-C2'	-5.32	100.48	105.80
36	B2	512	A	O4'-C1'-N9	5.32	112.46	108.20
36	B2	872	A	O4'-C1'-C2'	5.32	112.39	107.60
36	B2	1495	G	O4'-C1'-N9	5.32	112.46	108.20
60	Cr	105	ASP	N-CA-C	5.32	125.37	111.00
85	A5	937	U	N1-C1'-C2'	5.32	120.92	114.00
85	A5	1101	C	O4'-C1'-C2'	-5.32	100.48	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2252	G	C2'-C3'-O3'	-5.32	97.79	109.50
36	B2	94	G	N9-C1'-C2'	5.32	120.92	114.00
36	B2	385	G	O4'-C1'-N9	5.32	112.45	108.20
85	A5	2698	G	P-O3'-C3'	-5.32	113.32	119.70
85	A5	3886	G	O4'-C1'-C2'	5.32	112.39	107.60
85	A5	4983	C	N1-C1'-C2'	5.32	120.91	114.00
36	B2	839	C	O3'-P-O5'	-5.32	93.90	104.00
36	B2	1608	U	N1-C1'-C2'	5.32	120.91	114.00
60	Cr	1	MET	CG-SD-CE	-5.32	91.69	100.20
85	A5	248	C	C3'-C2'-C1'	5.32	105.75	101.50
85	A5	388	A	O4'-C1'-C2'	-5.32	100.48	105.80
85	A5	1297	U	C3'-C2'-C1'	5.32	105.75	101.50
85	A5	4232	U	C3'-C2'-C1'	5.32	105.75	101.50
85	A5	4369	A	C1'-O4'-C4'	5.32	114.16	109.90
36	B2	142	C	O4'-C1'-C2'	5.32	112.38	107.60
36	B2	1238	U	C3'-C2'-C1'	-5.32	97.25	101.50
85	A5	239	C	C1'-O4'-C4'	-5.32	105.65	109.90
85	A5	1993	C	C1'-O4'-C4'	-5.32	105.65	109.90
85	A5	2544	G	O4'-C4'-C3'	-5.32	98.69	104.00
85	A5	2562	G	N9-C1'-C2'	-5.32	106.15	112.00
85	A5	2731	C	C3'-C2'-C1'	5.32	105.75	101.50
85	A5	3631	U	O4'-C1'-C2'	-5.32	100.48	105.80
87	A8	34	U	N1-C1'-C2'	5.32	120.91	114.00
36	B2	910	G	O5'-P-OP1	-5.31	100.92	105.70
85	A5	1509	C	C1'-O4'-C4'	-5.31	105.65	109.90
87	A8	64	U	O4'-C1'-C2'	-5.31	100.49	105.80
36	B2	799	U	C4'-C3'-C2'	-5.31	97.29	102.60
36	B2	1305	C	N1-C1'-C2'	5.31	120.91	114.00
36	B2	1462	U	O4'-C1'-N1	5.31	112.45	108.20
60	Cr	36	ASN	CB-CA-C	-5.31	99.78	110.40
85	A5	1650	A	N9-C1'-C2'	5.31	120.91	114.00
85	A5	1927	U	P-O3'-C3'	-5.31	113.33	119.70
85	A5	2032	U	O4'-C1'-N1	5.31	112.45	108.20
85	A5	3699	C	C1'-O4'-C4'	-5.31	105.65	109.90
85	A5	3909	C	C3'-C2'-C1'	5.31	105.75	101.50
85	A5	4412	C	C4'-C3'-O3'	-5.31	98.25	109.40
85	A5	5034	A	C4'-C3'-C2'	-5.31	97.29	102.60
87	A8	113	C	O4'-C1'-N1	5.31	112.45	108.20
17	AV	24	ILE	CB-CA-C	-5.31	100.98	111.60
36	B2	922	A	N9-C1'-C2'	-5.31	106.16	112.00
36	B2	1225	U	O4'-C1'-N1	5.31	112.45	108.20
81	CE	34	ALA	N-CA-CB	5.31	117.53	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	524	C	C3'-C2'-C1'	5.31	105.75	101.50
85	A5	1507	C	C5'-C4'-C3'	5.31	124.50	116.00
85	A5	2034	G	C5'-C4'-C3'	-5.31	107.50	116.00
85	A5	3700	C	O4'-C1'-N1	5.31	112.45	108.20
27	AE	170	THR	O-C-N	5.31	131.19	122.70
36	B2	323	C	C2'-C3'-O3'	5.31	122.20	113.70
85	A5	439	G	C5'-C4'-C3'	5.31	124.50	116.00
85	A5	2638	G	O3'-P-O5'	-5.31	93.91	104.00
86	A7	66	G	N9-C1'-C2'	-5.31	106.16	112.00
36	B2	69	C	O4'-C1'-N1	5.31	112.45	108.20
36	B2	936	G	O4'-C1'-N9	5.31	112.45	108.20
36	B2	1857	G	O4'-C1'-C2'	5.31	112.38	107.60
47	CI	193	ASP	O-C-N	-5.31	114.18	123.20
85	A5	165	A	O4'-C1'-C2'	5.31	112.38	107.60
85	A5	411	G	O4'-C1'-C2'	-5.31	100.49	105.80
85	A5	2298	U	O4'-C1'-N1	5.31	112.45	108.20
85	A5	3913	G	C3'-C2'-C1'	5.31	105.75	101.50
85	A5	4328	G	C1'-O4'-C4'	5.31	114.15	109.90
85	A5	4580	U	P-O3'-C3'	-5.31	113.33	119.70
36	B2	1028	A	C4'-C3'-O3'	-5.31	98.26	109.40
36	B2	1640	A	C3'-C2'-C1'	5.31	105.75	101.50
85	A5	4733	C	O3'-P-O5'	5.31	114.08	104.00
36	B2	109	U	C2'-C3'-O3'	5.30	122.19	113.70
36	B2	988	C	O4'-C1'-N1	-5.30	103.96	108.20
36	B2	1722	G	C5'-C4'-C3'	-5.30	107.51	116.00
37	BC	17	G	C2'-C3'-O3'	-5.30	97.83	109.50
81	CE	36	LYS	O-C-N	5.30	131.18	121.10
85	A5	2073	C	C1'-O4'-C4'	-5.30	105.66	109.90
85	A5	2709	C	O4'-C1'-C2'	-5.30	100.50	105.80
85	A5	4521	U	N1-C1'-C2'	5.30	120.89	114.00
36	B2	1829	G	C5'-C4'-O4'	5.30	115.46	109.10
85	A5	2306	G	C5'-C4'-O4'	5.30	115.46	109.10
85	A5	4593	C	C1'-O4'-C4'	-5.30	105.66	109.90
85	A5	5014	A	C5'-C4'-O4'	5.30	115.46	109.10
1	Az	55	ARG	C-N-CA	5.30	134.95	121.70
18	AY	53	ASP	CB-CG-OD2	5.30	123.07	118.30
36	B2	574	A	N9-C1'-C2'	5.30	120.89	114.00
36	B2	1162	C	O4'-C1'-C2'	-5.30	100.50	105.80
36	B2	1259	A	C5'-C4'-O4'	5.30	115.46	109.10
61	Ch	122	LYS	N-CA-CB	5.30	120.14	110.60
70	Ci	103	LYS	CA-C-O	-5.30	108.97	120.10
85	A5	3799	A	P-O3'-C3'	-5.30	113.34	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	5016	A	C3'-C2'-C1'	-5.30	97.26	101.50
7	AM	132	LYS	CA-C-O	-5.30	108.97	120.10
22	Ac	68	LEU	CA-C-O	-5.30	108.97	120.10
44	CM	139	SER	CA-C-O	-5.30	108.97	120.10
85	A5	2392	C	N1-C1'-C2'	5.30	120.89	114.00
85	A5	2873	U	O4'-C1'-N1	5.30	112.44	108.20
36	B2	665	G	N9-C1'-C2'	5.30	120.89	114.00
85	A5	1599	A	C1'-O4'-C4'	-5.30	105.66	109.90
85	A5	1805	A	C3'-C2'-C1'	-5.30	97.26	101.50
16	AA	209	GLU	CA-C-O	-5.30	108.98	120.10
36	B2	1585	U	O4'-C1'-N1	5.30	112.44	108.20
69	Cg	115	LYS	CA-C-O	-5.30	108.98	120.10
85	A5	2691	U	O3'-P-O5'	5.30	114.06	104.00
85	A5	4080	C	O4'-C1'-C2'	-5.30	100.50	105.80
85	A5	5050	C	N1-C1'-C2'	5.30	120.89	114.00
24	Ae	59	SER	CA-C-O	-5.29	108.98	120.10
32	AW	130	PHE	CA-C-O	-5.29	108.98	120.10
36	B2	449	A	O4'-C1'-N9	5.29	112.44	108.20
36	B2	741	C	P-O3'-C3'	5.29	126.05	119.70
36	B2	1022	U	P-O3'-C3'	5.29	126.05	119.70
36	B2	1361	G	C3'-C2'-C1'	5.29	105.73	101.50
48	CD	297	SER	CA-C-O	-5.29	108.98	120.10
49	CQ	188	ASN	CA-C-O	-5.29	108.98	120.10
68	Cf	19	ARG	NE-CZ-NH2	-5.29	117.65	120.30
83	Cs	63	VAL	CA-C-O	-5.29	108.98	120.10
85	A5	469	C	C1'-O4'-C4'	-5.29	105.67	109.90
85	A5	708	G	O3'-P-O5'	-5.29	93.94	104.00
85	A5	2683	C	O4'-C1'-C2'	-5.29	100.51	105.80
23	AD	193	ASP	C-N-CA	-5.29	99.78	122.00
29	AG	237	LEU	CA-C-O	-5.29	108.99	120.10
31	AH	194	LEU	CA-C-O	-5.29	108.99	120.10
36	B2	658	U	O4'-C1'-N1	5.29	112.43	108.20
52	CS	4	SER	N-CA-C	5.29	125.29	111.00
60	Cr	137	SER	CA-C-O	-5.29	108.99	120.10
72	Ck	70	LYS	CA-C-O	-5.29	108.99	120.10
80	CH	191	ASP	CA-C-O	-5.29	108.99	120.10
85	A5	1250	C	C3'-C2'-C1'	5.29	105.73	101.50
85	A5	1438	U	C5'-C4'-O4'	-5.29	102.75	109.10
85	A5	1729	A	C4'-C3'-C2'	-5.29	97.31	102.60
85	A5	2305	U	O4'-C1'-C2'	-5.29	100.51	105.80
85	A5	2470	C	O4'-C1'-N1	5.29	112.43	108.20
85	A5	4285	U	O4'-C1'-N1	5.29	112.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4445	U	C1'-O4'-C4'	-5.29	105.67	109.90
48	CD	220	LYS	CB-CA-C	-5.29	99.82	110.40
59	CZ	136	PHE	CA-C-O	-5.29	108.99	120.10
62	Cb	79	LYS	CA-C-O	-5.29	108.99	120.10
66	Cd	124	GLU	CA-C-O	-5.29	108.99	120.10
85	A5	183	C	C5'-C4'-C3'	5.29	124.46	116.00
85	A5	702	U	P-O5'-C5'	5.29	129.36	120.90
85	A5	1086	C	C3'-C2'-C1'	5.29	105.73	101.50
85	A5	4290	U	N1-C1'-C2'	-5.29	106.18	112.00
11	AL	158	PHE	CA-C-O	-5.29	109.00	120.10
28	AC	278	THR	CA-C-O	-5.29	108.99	120.10
36	B2	1134	G	C5'-C4'-O4'	5.29	115.45	109.10
36	B2	1708	C	C3'-C2'-C1'	5.29	105.73	101.50
38	Cz	217	TYR	CA-C-O	-5.29	109.00	120.10
57	CY	134	LYS	CA-C-O	-5.29	109.00	120.10
75	Cm	128	LYS	CA-C-O	-5.29	109.00	120.10
85	A5	2713	C	P-O5'-C5'	5.29	129.36	120.90
85	A5	3802	U	O4'-C1'-C2'	5.29	112.36	107.60
10	AN	151	ALA	CA-C-O	-5.29	109.00	120.10
33	AI	191	GLU	CB-CA-C	-5.29	99.83	110.40
36	B2	790	C	N1-C1'-C2'	5.29	120.87	114.00
67	Ce	133	GLU	CA-C-O	-5.29	109.00	120.10
85	A5	334	A	N9-C1'-C2'	5.29	120.87	114.00
85	A5	1265	G	P-O5'-C5'	-5.29	112.44	120.90
85	A5	1771	U	N1-C1'-C2'	-5.29	106.18	112.00
1	Az	807	GLN	CA-C-N	-5.29	105.57	117.20
2	Ag	314	ILE	CA-C-O	-5.29	109.00	120.10
23	AD	227	LYS	CA-C-O	-5.29	109.00	120.10
36	B2	733	C	C4'-C3'-C2'	-5.29	97.31	102.60
36	B2	750	C	C4'-C3'-C2'	-5.29	97.31	102.60
36	B2	854	A	P-O3'-C3'	5.29	126.04	119.70
36	B2	1344	A	P-O3'-C3'	5.29	126.04	119.70
36	B2	1457	U	P-O3'-C3'	-5.29	113.36	119.70
39	Cq	284	ALA	CA-C-O	-5.29	109.00	120.10
41	CO	203	VAL	CA-C-O	-5.29	109.00	120.10
54	CP	153	LYS	CA-C-O	-5.29	109.00	120.10
55	CU	126	ASP	CA-C-O	-5.29	109.00	120.10
71	Cj	91	VAL	CA-C-O	-5.29	109.00	120.10
73	Cl	36	ARG	NE-CZ-NH1	5.29	122.94	120.30
76	Cn	25	LYS	CA-C-O	-5.29	109.00	120.10
77	Cp	92	GLN	CA-C-O	-5.29	109.00	120.10
85	A5	119	G	C1'-O4'-C4'	5.29	114.13	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	213	G	C3'-C2'-C1'	-5.29	97.27	101.50
85	A5	2486	G	N9-C1'-C2'	5.29	120.87	114.00
85	A5	3781	C	O4'-C1'-C2'	-5.29	100.52	105.80
85	A5	4452	U	C5'-C4'-C3'	-5.29	107.54	116.00
67	Ce	7	LEU	CA-C-N	5.28	128.82	117.20
74	CC	371	VAL	CA-C-O	-5.28	109.00	120.10
83	Ct	63	VAL	CA-C-O	-5.28	109.00	120.10
84	Cv	56	ALA	CA-C-O	-5.28	109.00	120.10
85	A5	1089	G	O4'-C1'-C2'	5.28	112.36	107.60
85	A5	2490	U	C5'-C4'-C3'	-5.28	107.55	116.00
85	A5	2543	A	P-O3'-C3'	5.28	126.04	119.70
85	A5	4760	G	O4'-C1'-N9	5.28	112.43	108.20
85	A5	4929	C	C1'-O4'-C4'	-5.28	105.67	109.90
86	A7	34	C	P-O3'-C3'	5.28	126.04	119.70
23	AD	93	THR	C-N-CA	5.28	134.91	121.70
30	AF	204	ARG	CA-C-O	-5.28	109.01	120.10
56	CX	37	LYS	C-N-CA	5.28	134.91	121.70
64	CF	248	ASN	CA-C-O	-5.28	109.01	120.10
81	CE	56	ARG	O-C-N	-5.28	114.25	122.70
84	Cu	56	ALA	CA-C-O	-5.28	109.01	120.10
85	A5	2644	G	O4'-C1'-N9	5.28	112.42	108.20
85	A5	4485	C	C5'-C4'-O4'	5.28	115.44	109.10
9	Ad	56	ASP	CA-C-O	-5.28	109.01	120.10
35	Ah	303	LYS	CA-C-O	-5.28	109.01	120.10
36	B2	1098	C	O4'-C1'-N1	5.28	112.42	108.20
47	CI	199	TYR	C-N-CA	5.28	134.90	121.70
56	CX	156	ILE	CA-C-O	-5.28	109.01	120.10
63	CB	398	ALA	CA-C-O	-5.28	109.01	120.10
85	A5	118	C	N1-C1'-C2'	5.28	120.86	114.00
85	A5	405	U	N1-C1'-C2'	-5.28	106.19	112.00
85	A5	720	G	C1'-O4'-C4'	-5.28	105.67	109.90
85	A5	1630	A	C3'-C2'-C1'	5.28	105.72	101.50
85	A5	5059	C	O4'-C4'-C3'	-5.28	98.72	104.00
14	AT	144	LYS	CA-C-O	-5.28	109.01	120.10
16	AA	130	ASP	CB-CG-OD2	5.28	123.05	118.30
47	CI	214	SER	CA-C-O	-5.28	109.02	120.10
55	CU	98	ASP	CB-CG-OD2	5.28	123.05	118.30
85	A5	284	G	O4'-C1'-C2'	5.28	112.35	107.60
85	A5	1979	A	O4'-C1'-C2'	-5.28	100.52	105.80
85	A5	4771	C	C3'-C2'-C1'	5.28	105.72	101.50
6	AX	142	ARG	CA-C-O	-5.28	109.02	120.10
25	Af	152	LYS	CA-C-O	-5.28	109.02	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	Ah	188	ARG	CA-C-O	-5.28	109.02	120.10
50	CR	189	SER	CA-C-O	-5.28	109.02	120.10
52	CS	162	GLN	N-CA-C	-5.28	96.75	111.00
85	A5	1468	C	O4'-C1'-N1	5.28	112.42	108.20
85	A5	1519	C	N1-C1'-C2'	5.28	120.86	114.00
85	A5	1628	C	N1-C1'-C2'	5.28	120.86	114.00
85	A5	2284	G	O4'-C1'-N9	5.28	112.42	108.20
85	A5	3850	C	O4'-C1'-C2'	-5.28	100.52	105.80
87	A8	36	G	P-O5'-C5'	5.28	129.34	120.90
87	A8	114	G	O4'-C1'-C2'	5.28	112.35	107.60
1	Az	409	ARG	CB-CA-C	5.28	120.95	110.40
36	B2	550	C	O4'-C1'-C2'	-5.28	100.52	105.80
36	B2	1423	C	O4'-C1'-N1	5.28	112.42	108.20
37	BC	15	G	O4'-C1'-N9	5.28	112.42	108.20
42	CL	211	LYS	CA-C-O	-5.28	109.02	120.10
51	CA	256	GLU	CA-C-O	-5.28	109.02	120.10
56	CX	101	ASP	CB-CG-OD2	5.28	123.05	118.30
58	CW	124	LYS	CA-C-O	-5.28	109.02	120.10
85	A5	290	U	O3'-P-O5'	-5.28	93.98	104.00
85	A5	2621	A	C5'-C4'-O4'	5.28	115.43	109.10
85	A5	3899	G	C3'-C2'-C1'	5.28	105.72	101.50
21	Ab	84	HIS	CA-C-O	-5.27	109.03	120.10
36	B2	526	A	C1'-O4'-C4'	-5.27	105.68	109.90
36	B2	540	U	N1-C1'-C2'	-5.27	106.20	112.00
60	Cr	91	SER	C-N-CA	-5.27	108.52	121.70
81	CE	288	PHE	CA-C-O	-5.27	109.03	120.10
85	A5	1331	C	C1'-O4'-C4'	-5.27	105.68	109.90
33	AI	133	GLU	CA-C-N	5.27	128.80	117.20
36	B2	1322	G	C1'-O4'-C4'	5.27	114.12	109.90
81	CE	38	LYS	CB-CA-C	-5.27	99.86	110.40
85	A5	1508	A	C1'-O4'-C4'	-5.27	105.68	109.90
85	A5	1948	G	O4'-C1'-C2'	5.27	112.34	107.60
85	A5	2495	U	O4'-C1'-C2'	-5.27	100.53	105.80
85	A5	4337	C	P-O5'-C5'	5.27	129.34	120.90
85	A5	4494	G	O4'-C1'-N9	5.27	112.42	108.20
1	Az	826	ASP	N-CA-C	-5.27	96.77	111.00
36	B2	22	A	C1'-O4'-C4'	5.27	114.12	109.90
36	B2	1825	A	C5'-C4'-O4'	5.27	115.43	109.10
85	A5	666	G	C2'-C3'-O3'	5.27	122.13	113.70
36	B2	1213	C	N1-C1'-C2'	5.27	120.85	114.00
36	B2	1221	G	C3'-C2'-C1'	-5.27	97.28	101.50
36	B2	1826	G	O4'-C1'-N9	5.27	112.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
78	Co	106	PHE	CA-C-O	-5.27	109.04	120.10
85	A5	4	G	O4'-C1'-N9	5.27	112.42	108.20
85	A5	2125	C	C5'-C4'-C3'	5.27	124.43	116.00
85	A5	2761	U	C5'-C4'-C3'	5.27	124.43	116.00
85	A5	2866	C	C1'-O4'-C4'	-5.27	105.69	109.90
4	AK	98	ARG	CA-C-O	-5.27	109.04	120.10
27	AE	258	ALA	O-C-N	-5.27	114.27	122.70
30	AF	43	GLU	N-CA-C	-5.27	96.78	111.00
36	B2	210	U	N1-C1'-C2'	5.27	120.85	114.00
36	B2	1233	G	O4'-C1'-N9	5.27	112.41	108.20
36	B2	1284	A	N9-C1'-C2'	5.27	120.85	114.00
36	B2	1640	A	N9-C1'-C2'	-5.27	106.21	112.00
37	BC	4	A	N9-C1'-C2'	-5.27	106.20	112.00
85	A5	522	C	O4'-C1'-N1	5.27	112.41	108.20
85	A5	1534	A	C1'-O4'-C4'	-5.27	105.69	109.90
85	A5	4517	A	P-O3'-C3'	5.27	126.02	119.70
85	A5	4554	G	O4'-C1'-N9	5.27	112.41	108.20
85	A5	4706	G	C3'-C2'-C1'	5.27	105.71	101.50
36	B2	333	G	O4'-C1'-N9	5.27	112.41	108.20
87	A8	42	G	C4'-C3'-C2'	-5.27	97.33	102.60
36	B2	77	A	C5'-C4'-C3'	5.26	124.42	116.00
36	B2	139	C	C3'-C2'-C1'	5.26	105.71	101.50
36	B2	1302	G	C2'-C3'-O3'	-5.26	97.92	109.50
36	B2	1312	G	C3'-C2'-C1'	5.26	105.71	101.50
36	B2	1612	G	C3'-C2'-C1'	-5.26	97.29	101.50
36	B2	1623	A	C1'-O4'-C4'	5.26	114.11	109.90
85	A5	1947	U	O4'-C1'-C2'	-5.26	100.54	105.80
85	A5	2434	G	C1'-O4'-C4'	-5.26	105.69	109.90
85	A5	2718	U	C3'-C2'-C1'	5.26	105.71	101.50
85	A5	3906	A	P-O3'-C3'	5.26	126.02	119.70
85	A5	4594	U	C1'-O4'-C4'	-5.26	105.69	109.90
53	CT	18	PRO	N-CA-C	5.26	125.78	112.10
85	A5	913	U	O4'-C1'-N1	5.26	112.41	108.20
85	A5	3878	C	O4'-C1'-N1	-5.26	103.99	108.20
85	A5	4238	G	C4'-C3'-C2'	-5.26	97.34	102.60
12	AR	94	GLU	N-CA-C	-5.26	96.79	111.00
15	AB	60	ASP	CB-CG-OD2	5.26	123.03	118.30
15	AB	196	ASP	CB-CG-OD2	5.26	123.03	118.30
36	B2	33	G	C5'-C4'-O4'	5.26	115.41	109.10
36	B2	564	A	N9-C1'-C2'	-5.26	106.21	112.00
85	A5	1920	C	O5'-C5'-C4'	5.26	121.69	111.70
85	A5	2066	C	O4'-C1'-N1	5.26	112.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2615	C	C3'-C2'-C1'	5.26	105.71	101.50
85	A5	2856	C	O4'-C1'-N1	5.26	112.41	108.20
85	A5	3620	G	O4'-C1'-N9	5.26	112.41	108.20
85	A5	3974	G	O3'-P-O5'	5.26	114.00	104.00
85	A5	4557	U	O4'-C1'-N1	5.26	112.41	108.20
85	A5	4676	G	O4'-C1'-N9	-5.26	103.99	108.20
85	A5	4991	U	C5'-C4'-C3'	5.26	124.42	116.00
1	Az	542	GLY	N-CA-C	-5.26	99.95	113.10
21	Ab	52	THR	O-C-N	5.26	131.12	122.70
36	B2	306	C	O4'-C1'-N1	5.26	112.41	108.20
36	B2	1276	A	C1'-O4'-C4'	5.26	114.11	109.90
36	B2	1562	C	P-O3'-C3'	5.26	126.01	119.70
46	CN	46	ASP	CB-CG-OD2	5.26	123.03	118.30
85	A5	1720	C	P-O3'-C3'	5.26	126.01	119.70
85	A5	1830	G	C3'-C2'-C1'	-5.26	97.29	101.50
85	A5	1839	U	O4'-C1'-N1	5.26	112.41	108.20
85	A5	1867	A	N9-C1'-C2'	5.26	120.84	114.00
85	A5	3933	G	C1'-O4'-C4'	-5.26	105.69	109.90
15	AB	104	ASP	CB-CG-OD2	5.26	123.03	118.30
36	B2	1327	G	N9-C1'-C2'	5.26	120.84	114.00
37	BC	62	A	N9-C1'-C2'	-5.26	106.22	112.00
42	CL	46	ILE	CA-CB-CG2	-5.26	100.38	110.90
85	A5	744	G	C1'-O4'-C4'	-5.26	105.69	109.90
85	A5	3269	G	O5'-C5'-C4'	-5.26	101.71	111.70
85	A5	5021	C	O4'-C1'-N1	5.26	112.41	108.20
8	AS	110	ASP	CB-CG-OD2	5.26	123.03	118.30
21	Ab	34	ASP	CB-CG-OD2	5.26	123.03	118.30
40	CK	44	ASP	CB-CG-OD1	5.26	123.03	118.30
47	CI	83	ASP	CB-CG-OD2	5.26	123.03	118.30
60	Cr	105	ASP	CB-CG-OD1	-5.26	113.57	118.30
85	A5	186	G	O4'-C1'-C2'	-5.26	100.54	105.80
85	A5	2596	G	C4'-C3'-C2'	-5.26	97.34	102.60
85	A5	3627	G	O4'-C1'-N9	5.26	112.40	108.20
85	A5	4446	U	N1-C1'-C2'	5.26	120.83	114.00
85	A5	1835	G	P-O5'-C5'	-5.25	112.49	120.90
85	A5	2360	A	C5'-C4'-O4'	5.25	115.41	109.10
36	B2	125	C	C5'-C4'-O4'	-5.25	102.80	109.10
36	B2	752	G	O4'-C4'-C3'	-5.25	98.75	104.00
85	A5	495	C	P-O3'-C3'	-5.25	113.40	119.70
85	A5	1221	G	N9-C1'-C2'	-5.25	106.22	112.00
85	A5	3824	A	O4'-C1'-C2'	-5.25	100.55	105.80
36	B2	1335	G	N9-C1'-C2'	5.25	120.83	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	1427	C	C3'-C2'-C1'	5.25	105.70	101.50
85	A5	4193	C	N1-C1'-C2'	5.25	120.83	114.00
85	A5	4696	C	C1'-O4'-C4'	-5.25	105.70	109.90
36	B2	315	C	P-O5'-C5'	-5.25	112.50	120.90
37	BC	65	C	N1-C1'-C2'	5.25	120.82	114.00
85	A5	243	A	C1'-O4'-C4'	-5.25	105.70	109.90
85	A5	417	G	O5'-C5'-C4'	-5.25	101.72	111.70
85	A5	4473	A	O4'-C1'-N9	5.25	112.40	108.20
36	B2	787	G	O3'-P-O5'	5.25	113.97	104.00
44	CM	108	ASP	CB-CG-OD2	5.25	123.02	118.30
61	Ch	84	ARG	C-N-CD	-5.25	109.05	120.60
85	A5	136	C	P-O5'-C5'	5.25	129.30	120.90
85	A5	737	C	C1'-O4'-C4'	-5.25	105.70	109.90
85	A5	4044	U	C5'-C4'-O4'	5.25	115.40	109.10
85	A5	4130	C	P-O5'-C5'	-5.25	112.50	120.90
85	A5	4296	U	P-O5'-C5'	5.25	129.30	120.90
1	Az	102	LEU	N-CA-C	-5.25	96.83	111.00
26	AJ	26	ASP	CB-CG-OD2	5.25	123.02	118.30
36	B2	120	U	C3'-C2'-C1'	5.25	105.70	101.50
36	B2	1563	G	O4'-C1'-C2'	5.25	112.32	107.60
58	CW	72	THR	N-CA-C	5.25	125.16	111.00
85	A5	366	A	O4'-C1'-C2'	-5.25	100.55	105.80
85	A5	1044	G	P-O5'-C5'	-5.25	112.51	120.90
85	A5	2363	A	O4'-C1'-N9	5.25	112.40	108.20
85	A5	4445	U	C3'-C2'-C1'	-5.25	97.30	101.50
10	AN	108	ASP	CB-CG-OD2	5.25	123.02	118.30
27	AE	88	ASP	CB-CG-OD2	5.25	123.02	118.30
36	B2	691	G	C5'-C4'-O4'	5.25	115.39	109.10
48	CD	268	ARG	CA-CB-CG	-5.25	101.86	113.40
85	A5	1550	G	C5'-C4'-O4'	5.25	115.39	109.10
85	A5	2464	C	P-O3'-C3'	5.25	125.99	119.70
6	AX	114	ASP	CB-CG-OD2	5.24	123.02	118.30
8	AS	81	ASP	CB-CG-OD2	5.24	123.02	118.30
36	B2	915	G	C3'-C2'-C1'	-5.24	97.30	101.50
47	CI	198	LYS	CA-C-N	-5.24	105.66	117.20
85	A5	1976	G	O4'-C1'-N9	5.24	112.39	108.20
85	A5	2833	A	O4'-C1'-N9	5.24	112.39	108.20
85	A5	4154	G	C1'-O4'-C4'	-5.24	105.70	109.90
85	A5	4285	U	P-O3'-C3'	5.24	125.99	119.70
85	A5	4924	C	C1'-O4'-C4'	-5.24	105.71	109.90
85	A5	4993	G	C3'-C2'-C1'	-5.24	97.31	101.50
1	Az	123	ASP	C-N-CA	5.24	133.31	122.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	AE	21	ASP	CB-CG-OD2	5.24	123.02	118.30
36	B2	84	A	C5'-C4'-O4'	5.24	115.39	109.10
36	B2	1656	G	C3'-C2'-C1'	-5.24	97.31	101.50
85	A5	340	C	C3'-C2'-C1'	5.24	105.69	101.50
85	A5	2296	G	O4'-C1'-N9	5.24	112.39	108.20
85	A5	4126	C	O4'-C1'-C2'	-5.24	100.56	105.80
27	AE	163	ASP	CB-CG-OD2	5.24	123.02	118.30
36	B2	139	C	O4'-C1'-N1	5.24	112.39	108.20
36	B2	905	C	O4'-C1'-N1	5.24	112.39	108.20
36	B2	910	G	C3'-C2'-C1'	-5.24	97.31	101.50
36	B2	920	A	P-O3'-C3'	5.24	125.99	119.70
43	CV	30	ASP	CB-CG-OD2	5.24	123.02	118.30
60	Cr	108	MET	CB-CG-SD	5.24	128.12	112.40
74	CC	154	VAL	O-C-N	-5.24	114.31	122.70
85	A5	635	G	C3'-C2'-C1'	-5.24	97.31	101.50
85	A5	1298	C	O4'-C1'-N1	5.24	112.39	108.20
85	A5	5070	C	C3'-C2'-C1'	5.24	105.69	101.50
87	A8	54	C	P-O3'-C3'	5.24	125.99	119.70
87	A8	156	U	N1-C1'-C2'	5.24	120.81	114.00
36	B2	1082	A	O4'-C1'-C2'	-5.24	100.56	105.80
36	B2	1634	A	O4'-C1'-N9	5.24	112.39	108.20
85	A5	369	G	C4'-C3'-C2'	-5.24	97.36	102.60
85	A5	1739	G	C1'-O4'-C4'	-5.24	105.71	109.90
85	A5	4767	C	P-O3'-C3'	5.24	125.99	119.70
85	A5	4888	U	C1'-O4'-C4'	5.24	114.09	109.90
86	A7	1	G	P-O3'-C3'	-5.24	113.42	119.70
13	AP	82	ASP	CB-CG-OD2	5.24	123.01	118.30
36	B2	342	C	O4'-C1'-C2'	-5.24	100.56	105.80
36	B2	609	U	O4'-C1'-C2'	-5.24	100.56	105.80
42	CL	136	LYS	C-N-CA	-5.24	111.30	122.30
48	CD	59	ASP	CB-CG-OD2	5.24	123.01	118.30
85	A5	2634	C	C3'-C2'-C1'	5.24	105.69	101.50
85	A5	2738	C	O4'-C1'-N1	5.24	112.39	108.20
85	A5	4211	C	N1-C1'-C2'	5.24	120.81	114.00
85	A5	4387	C	O4'-C1'-N1	5.24	112.39	108.20
85	A5	5002	U	C5'-C4'-C3'	-5.24	107.62	116.00
26	AJ	137	VAL	C-N-CA	5.24	134.79	121.70
29	AG	39	ASP	CB-CG-OD2	5.24	123.01	118.30
31	AH	118	ARG	CB-CA-C	-5.24	99.93	110.40
36	B2	356	C	C3'-C2'-C1'	-5.24	97.31	101.50
36	B2	975	G	O4'-C4'-C3'	-5.24	98.77	104.00
36	B2	1025	U	C1'-O4'-C4'	5.24	114.09	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1789	C	N1-C1'-C2'	5.24	120.81	114.00
85	A5	2035	C	N1-C1'-C2'	5.24	120.81	114.00
85	A5	2504	C	O4'-C1'-N1	5.24	112.39	108.20
15	AB	32	ASP	CB-CG-OD2	5.23	123.01	118.30
36	B2	204	G	C1'-O4'-C4'	5.23	114.09	109.90
36	B2	1352	G	N9-C1'-C2'	5.23	120.80	114.00
36	B2	1544	C	O4'-C1'-C2'	-5.23	100.57	105.80
48	CD	184	ASP	CB-CG-OD2	5.23	123.01	118.30
65	Cc	27	TYR	CB-CG-CD2	-5.23	117.86	121.00
85	A5	2055	G	C1'-O4'-C4'	5.23	114.09	109.90
85	A5	4729	A	C3'-C2'-C1'	5.23	105.69	101.50
85	A5	4746	C	O4'-C1'-N1	5.23	112.39	108.20
15	AB	90	ASP	CB-CG-OD2	5.23	123.01	118.30
26	AJ	152	ASP	CB-CG-OD2	5.23	123.01	118.30
29	AG	103	ASP	CB-CG-OD2	5.23	123.01	118.30
36	B2	1567	G	O4'-C4'-C3'	-5.23	98.77	104.00
79	CJ	171	ASP	CB-CG-OD2	5.23	123.01	118.30
85	A5	1588	U	C3'-C2'-C1'	5.23	105.69	101.50
85	A5	3771	C	C5'-C4'-O4'	5.23	115.38	109.10
10	AN	32	ASP	CB-CG-OD2	5.23	123.01	118.30
10	AN	87	ASP	CB-CG-OD2	5.23	123.01	118.30
15	AB	108	ASP	CB-CG-OD2	5.23	123.01	118.30
16	AA	14	ASP	CB-CG-OD2	5.23	123.01	118.30
36	B2	84	A	P-O5'-C5'	-5.23	112.53	120.90
51	CA	33	ASP	CB-CG-OD2	5.23	123.01	118.30
78	Co	42	ASP	CB-CG-OD2	5.23	123.01	118.30
85	A5	2128	G	P-O5'-C5'	5.23	129.27	120.90
87	A8	6	C	O4'-C1'-C2'	-5.23	100.57	105.80
16	AA	53	ARG	N-CA-CB	-5.23	101.19	110.60
47	CI	183	ASP	CB-CG-OD2	5.23	123.01	118.30
85	A5	1336	G	P-O3'-C3'	5.23	125.97	119.70
85	A5	3597	G	C3'-C2'-C1'	-5.23	97.32	101.50
35	Ah	291	ASP	CB-CG-OD2	5.23	123.00	118.30
36	B2	1041	G	N9-C1'-C2'	5.23	120.80	114.00
36	B2	1052	A	C3'-C2'-C1'	5.23	105.68	101.50
38	Cz	26	ARG	CG-CD-NE	5.23	122.78	111.80
39	Cq	72	ASN	C-N-CD	-5.23	109.10	120.60
41	CO	113	ASP	CB-CG-OD2	5.23	123.00	118.30
44	CM	29	ASP	CB-CG-OD2	5.23	123.00	118.30
85	A5	252	C	O4'-C1'-N1	5.23	112.38	108.20
85	A5	364	G	C5'-C4'-C3'	-5.23	107.64	116.00
85	A5	1324	A	C1'-O4'-C4'	5.23	114.08	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	1445	U	C4'-C3'-C2'	-5.23	97.37	102.60
85	A5	2544	G	C3'-C2'-C1'	-5.23	97.32	101.50
85	A5	2648	G	O5'-C5'-C4'	5.23	121.63	111.70
85	A5	4881	U	O4'-C1'-N1	5.23	112.38	108.20
87	A8	22	U	O4'-C1'-N1	5.23	112.38	108.20
36	B2	280	G	OP1-P-O3'	5.23	116.70	105.20
36	B2	388	U	N1-C1'-C2'	5.23	120.79	114.00
47	CI	193	ASP	CB-CG-OD2	5.23	123.00	118.30
56	CX	92	ASP	CB-CG-OD2	5.23	123.00	118.30
68	Cf	80	ASN	N-CA-CB	-5.23	101.19	110.60
79	CJ	120	ASP	CB-CG-OD2	5.23	123.00	118.30
85	A5	220	C	C5'-C4'-C3'	-5.23	107.64	116.00
85	A5	3692	A	N9-C1'-C2'	-5.23	106.25	112.00
18	AY	80	ASP	CB-CG-OD2	5.22	123.00	118.30
44	CM	81	ASP	CB-CG-OD2	5.22	123.00	118.30
85	A5	223	G	C5'-C4'-O4'	5.22	115.37	109.10
85	A5	707	C	C1'-O4'-C4'	-5.22	105.72	109.90
85	A5	1290	G	O4'-C1'-N9	5.22	112.38	108.20
85	A5	2471	G	P-O3'-C3'	5.22	125.97	119.70
85	A5	3607	U	C1'-O4'-C4'	-5.22	105.72	109.90
85	A5	4270	C	O4'-C1'-N1	5.22	112.38	108.20
85	A5	4918	C	O4'-C1'-N1	5.22	112.38	108.20
36	B2	178	C	N1-C1'-C2'	5.22	120.79	114.00
55	CU	120	ASP	CB-CG-OD2	5.22	123.00	118.30
85	A5	1163	G	N9-C1'-C2'	5.22	120.79	114.00
85	A5	2622	G	O4'-C1'-C2'	-5.22	100.58	105.80
85	A5	3803	A	N9-C1'-C2'	-5.22	106.25	112.00
5	AO	39	ASP	CB-CG-OD2	5.22	123.00	118.30
39	Cq	271	ASP	CB-CG-OD2	5.22	123.00	118.30
85	A5	2303	C	C5'-C4'-C3'	-5.22	107.65	116.00
84	Cv	22	ASP	CB-CG-OD2	5.22	123.00	118.30
85	A5	1665	C	C1'-O4'-C4'	-5.22	105.72	109.90
85	A5	2898	G	C3'-C2'-C1'	-5.22	97.33	101.50
85	A5	3909	C	P-O3'-C3'	5.22	125.96	119.70
85	A5	4365	C	N1-C1'-C2'	5.22	120.79	114.00
6	AX	19	ASP	CB-CG-OD2	5.22	123.00	118.30
31	AH	56	GLY	N-CA-C	5.22	126.15	113.10
36	B2	22	A	O4'-C1'-C2'	-5.22	100.58	105.80
36	B2	1742	C	N1-C1'-C2'	5.22	120.78	114.00
37	BC	54	U	O4'-C1'-C2'	-5.22	100.58	105.80
85	A5	2047	A	C5'-C4'-O4'	5.22	115.36	109.10
85	A5	2543	A	O4'-C1'-N9	5.22	112.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4729	A	N9-C1'-C2'	5.22	120.78	114.00
87	A8	95	A	C4'-C3'-O3'	-5.22	98.44	109.40
1	Az	47	ALA	O-C-N	5.22	131.05	122.70
5	AO	80	ASP	CB-CG-OD2	5.22	123.00	118.30
26	AJ	124	HIS	N-CA-C	-5.22	96.91	111.00
36	B2	746	C	O4'-C1'-N1	5.22	112.37	108.20
36	B2	1700	C	O4'-C1'-N1	5.22	112.37	108.20
85	A5	704	C	C5'-C4'-C3'	-5.22	107.65	116.00
11	AL	24	LEU	C-N-CA	5.21	134.74	121.70
17	AV	28	ASP	CB-CG-OD2	5.21	122.99	118.30
19	AZ	52	LYS	N-CA-C	-5.21	96.92	111.00
26	AJ	95	ASP	CB-CG-OD2	5.21	122.99	118.30
41	CO	10	ASP	CB-CG-OD2	5.21	122.99	118.30
49	CQ	140	SER	N-CA-C	-5.21	96.92	111.00
82	CG	228	ASP	CB-CG-OD2	5.21	122.99	118.30
84	Cv	53	ASP	CB-CG-OD2	5.21	122.99	118.30
85	A5	305	A	O4'-C1'-C2'	-5.21	100.58	105.80
85	A5	1856	C	O4'-C1'-C2'	-5.21	100.59	105.80
85	A5	2895	A	C5'-C4'-O4'	5.21	115.36	109.10
86	A7	80	U	N1-C1'-C2'	5.21	120.78	114.00
36	B2	109	U	P-O3'-C3'	-5.21	113.44	119.70
51	CA	65	ASP	CB-CG-OD2	5.21	122.99	118.30
55	CU	24	ASP	CB-CG-OD2	5.21	122.99	118.30
74	CC	265	GLY	C-N-CA	-5.21	108.67	121.70
85	A5	1229	C	P-O3'-C3'	5.21	125.96	119.70
85	A5	4343	U	C5'-C4'-C3'	-5.21	107.66	116.00
10	AN	110	ASP	CB-CG-OD2	5.21	122.99	118.30
27	AE	158	ASP	CB-CG-OD2	5.21	122.99	118.30
36	B2	787	G	O4'-C1'-C2'	-5.21	100.59	105.80
36	B2	1023	A	O4'-C1'-N9	5.21	112.37	108.20
36	B2	1486	A	O5'-C5'-C4'	-5.21	101.80	111.70
36	B2	1565	C	O4'-C1'-N1	5.21	112.37	108.20
40	CK	45	ASP	CB-CG-OD2	5.21	122.99	118.30
40	CK	52	ASP	CB-CG-OD2	5.21	122.99	118.30
46	CN	17	ASP	CB-CG-OD2	5.21	122.99	118.30
48	CD	116	ASP	CB-CG-OD2	5.21	122.99	118.30
56	CX	148	ASP	CB-CG-OD2	5.21	122.99	118.30
84	Cv	36	ASP	CB-CG-OD2	5.21	122.99	118.30
85	A5	2351	C	C1'-O4'-C4'	-5.21	105.73	109.90
85	A5	3870	C	C1'-O4'-C4'	-5.21	105.73	109.90
85	A5	4379	A	P-O3'-C3'	5.21	125.95	119.70
85	A5	4651	A	C4'-C3'-C2'	-5.21	97.39	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4886	C	N1-C1'-C2'	5.21	120.77	114.00
85	A5	4903	G	O4'-C1'-N9	5.21	112.37	108.20
85	A5	5038	A	N9-C1'-C2'	-5.21	106.27	112.00
27	AE	253	ASP	CB-CG-OD2	5.21	122.99	118.30
36	B2	165	G	N9-C1'-C2'	-5.21	106.27	112.00
85	A5	1940	G	P-O3'-C3'	-5.21	113.45	119.70
36	B2	620	G	O4'-C1'-C2'	-5.21	100.59	105.80
36	B2	1330	G	O4'-C1'-C2'	5.21	112.29	107.60
36	B2	1332	A	C4'-C3'-C2'	-5.21	97.39	102.60
39	Cq	205	ASP	CB-CG-OD2	5.21	122.99	118.30
49	CQ	88	ASP	CB-CG-OD2	5.21	122.99	118.30
67	Ce	2	ALA	C-N-CA	-5.21	108.68	121.70
84	Cv	28	ASP	CB-CG-OD2	5.21	122.99	118.30
85	A5	1396	G	N9-C1'-C2'	5.21	120.77	114.00
85	A5	2332	A	P-O3'-C3'	5.21	125.95	119.70
85	A5	3788	C	C3'-C2'-C1'	5.21	105.67	101.50
85	A5	4443	C	C5'-C4'-O4'	5.21	115.35	109.10
5	AO	67	ASP	CB-CG-OD2	5.21	122.99	118.30
19	AZ	51	ASP	CB-CG-OD2	5.21	122.99	118.30
36	B2	78	C	C1'-O4'-C4'	-5.21	105.73	109.90
36	B2	1864	U	C5'-C4'-O4'	5.21	115.35	109.10
45	Ca	102	ASP	CB-CG-OD2	5.21	122.99	118.30
48	CD	72	ASP	CB-CG-OD2	5.21	122.98	118.30
84	Cu	28	ASP	CB-CG-OD2	5.21	122.98	118.30
84	Cu	53	ASP	CB-CG-OD2	5.21	122.99	118.30
84	Cv	35	ASP	CB-CG-OD2	5.21	122.99	118.30
85	A5	317	A	C3'-C2'-C1'	5.21	105.67	101.50
85	A5	1998	A	O4'-C4'-C3'	-5.21	98.79	104.00
25	Af	137	ASP	CB-CG-OD2	5.21	122.98	118.30
36	B2	469	A	C1'-O4'-C4'	5.21	114.06	109.90
36	B2	1266	C	C1'-O4'-C4'	-5.21	105.74	109.90
48	CD	217	ASP	CB-CG-OD2	5.21	122.98	118.30
58	CW	73	ARG	CA-C-N	-5.21	105.75	117.20
81	CE	31	ASN	CB-CA-C	5.21	120.81	110.40
85	A5	2005	G	O3'-P-O5'	-5.21	94.11	104.00
85	A5	4354	U	O4'-C1'-C2'	5.21	112.28	107.60
36	B2	1141	G	P-O5'-C5'	5.20	129.23	120.90
36	B2	1306	U	O4'-C1'-N1	5.20	112.36	108.20
36	B2	1759	G	C1'-O4'-C4'	-5.20	105.74	109.90
36	B2	1868	U	O4'-C1'-N1	5.20	112.36	108.20
40	CK	107	ASP	CB-CG-OD2	5.20	122.98	118.30
48	CD	29	ASP	CB-CG-OD2	5.20	122.98	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	CX	60	TYR	N-CA-C	-5.20	96.95	111.00
74	CC	307	LYS	N-CA-C	5.20	125.05	111.00
80	CH	17	ASP	CB-CG-OD2	5.20	122.98	118.30
80	CH	171	ASP	CB-CG-OD2	5.20	122.98	118.30
81	CE	117	PRO	C-N-CA	-5.20	108.69	121.70
85	A5	1078	A	O4'-C1'-C2'	-5.20	100.60	105.80
85	A5	1583	A	O4'-C1'-N9	5.20	112.36	108.20
85	A5	3653	A	C1'-O4'-C4'	5.20	114.06	109.90
86	A7	48	G	O3'-P-O5'	-5.20	94.11	104.00
87	A8	55	U	C3'-C2'-C1'	-5.20	97.34	101.50
12	AR	101	ASP	CB-CG-OD2	5.20	122.98	118.30
36	B2	1312	G	N9-C1'-C2'	5.20	120.76	114.00
56	CX	60	TYR	C-N-CD	-5.20	109.16	120.60
58	CW	82	ILE	N-CA-CB	-5.20	98.84	110.80
58	CW	89	ASP	CB-CG-OD2	5.20	122.98	118.30
85	A5	223	G	O4'-C1'-N9	5.20	112.36	108.20
3	AU	38	ASP	CB-CG-OD2	5.20	122.98	118.30
34	AQ	67	ASP	CB-CG-OD2	5.20	122.98	118.30
36	B2	190	G	O5'-C5'-C4'	5.20	121.58	111.70
85	A5	168	C	O4'-C1'-N1	5.20	112.36	108.20
85	A5	1237	C	C5'-C4'-C3'	5.20	124.32	116.00
85	A5	1410	U	C2'-C3'-O3'	5.20	122.02	113.70
85	A5	1878	G	N9-C1'-C2'	5.20	120.76	114.00
85	A5	1898	C	C1'-O4'-C4'	5.20	114.06	109.90
85	A5	4210	U	C3'-C2'-C1'	5.20	105.66	101.50
87	A8	74	U	P-O3'-C3'	-5.20	113.46	119.70
13	AP	21	ASP	CB-CG-OD2	5.20	122.98	118.30
13	AP	27	ASP	CB-CG-OD2	5.20	122.98	118.30
22	Ac	36	ASP	CB-CG-OD2	5.20	122.98	118.30
36	B2	1401	A	N9-C1'-C2'	-5.20	106.28	112.00
36	B2	1839	U	C5'-C4'-O4'	5.20	115.34	109.10
39	Cq	157	ASP	CB-CG-OD2	5.20	122.98	118.30
39	Cq	194	ASP	CB-CG-OD2	5.20	122.98	118.30
85	A5	380	U	O4'-C1'-C2'	-5.20	100.60	105.80
85	A5	1370	G	C5'-C4'-O4'	5.20	115.34	109.10
85	A5	4440	G	O4'-C1'-N9	5.20	112.36	108.20
85	A5	4572	U	C1'-O4'-C4'	-5.20	105.74	109.90
82	CG	41	ILE	N-CA-C	5.20	125.03	111.00
82	CG	260	GLU	O-C-N	-5.20	114.39	122.70
85	A5	390	C	C1'-O4'-C4'	-5.20	105.74	109.90
85	A5	1939	A	C1'-O4'-C4'	5.20	114.06	109.90
85	A5	1987	C	O4'-C1'-C2'	-5.20	100.60	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2662	G	O4'-C1'-C2'	5.20	112.28	107.60
85	A5	2699	C	O4'-C1'-N1	5.20	112.36	108.20
16	AA	53	ARG	CB-CG-CD	-5.20	98.09	111.60
32	AW	54	ASP	CB-CG-OD2	5.20	122.98	118.30
36	B2	1271	C	N1-C1'-C2'	5.20	120.75	114.00
47	CI	168	SER	C-N-CA	-5.20	108.71	121.70
49	CQ	124	ASP	CB-CG-OD2	5.20	122.98	118.30
85	A5	1210	C	C3'-C2'-C1'	5.20	105.66	101.50
87	A8	92	U	N1-C1'-C2'	5.20	120.75	114.00
36	B2	544	G	O4'-C1'-C2'	-5.19	100.61	105.80
36	B2	1165	G	C5'-C4'-O4'	5.19	115.33	109.10
64	CF	224	THR	CA-CB-CG2	-5.19	105.13	112.40
83	Ct	18	ASP	CB-CG-OD2	5.19	122.97	118.30
85	A5	510	U	C3'-C2'-C1'	5.19	105.66	101.50
85	A5	4946	U	C5'-C4'-C3'	-5.19	107.69	116.00
5	AO	46	ASP	CB-CG-OD2	5.19	122.97	118.30
17	AV	4	ASP	CB-CG-OD2	5.19	122.97	118.30
20	Aa	52	ASP	CB-CG-OD2	5.19	122.97	118.30
26	AJ	158	ASP	CB-CG-OD2	5.19	122.97	118.30
36	B2	899	U	C3'-C2'-C1'	5.19	105.66	101.50
36	B2	1494	U	C3'-C2'-C1'	-5.19	97.35	101.50
39	Cq	45	MET	CB-CA-C	5.19	120.78	110.40
40	CK	154	ASP	CB-CG-OD2	5.19	122.97	118.30
47	CI	207	ASP	CB-CG-OD2	5.19	122.97	118.30
48	CD	215	ASP	CB-CG-OD2	5.19	122.97	118.30
83	Cs	26	ASP	CB-CG-OD2	5.19	122.97	118.30
85	A5	1775	A	N9-C1'-C2'	5.19	120.75	114.00
1	Az	448	GLN	CB-CA-C	-5.19	100.02	110.40
8	AS	62	ASP	CB-CG-OD2	5.19	122.97	118.30
36	B2	392	A	C5'-C4'-O4'	5.19	115.33	109.10
48	CD	234	ASP	CB-CG-OD2	5.19	122.97	118.30
75	Cm	92	ASP	CB-CG-OD2	5.19	122.97	118.30
83	Cs	19	ASP	CB-CG-OD2	5.19	122.97	118.30
84	Cu	37	ASP	CB-CG-OD2	5.19	122.97	118.30
85	A5	189	G	O4'-C1'-N9	5.19	112.35	108.20
85	A5	2887	U	C1'-O4'-C4'	5.19	114.05	109.90
85	A5	2930	G	C4'-C3'-O3'	5.19	123.38	113.00
85	A5	4074	C	O4'-C1'-N1	5.19	112.35	108.20
86	A7	17	C	O4'-C1'-N1	5.19	112.35	108.20
29	AG	57	ASP	CB-CG-OD2	5.19	122.97	118.30
36	B2	32	U	C5'-C4'-O4'	5.19	115.33	109.10
39	Cq	165	ASP	CB-CG-OD2	5.19	122.97	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	CK	150	ASP	CB-CG-OD2	5.19	122.97	118.30
42	CL	99	ASP	CB-CG-OD2	5.19	122.97	118.30
85	A5	964	A	C1'-O4'-C4'	5.19	114.05	109.90
5	AO	131	ASP	CB-CG-OD2	5.19	122.97	118.30
8	AS	104	ASP	CB-CG-OD2	5.19	122.97	118.30
9	Ad	49	ASP	CB-CG-OD2	5.19	122.97	118.30
18	AY	3	ASP	CB-CG-OD2	5.19	122.97	118.30
36	B2	327	G	C5'-C4'-O4'	5.19	115.32	109.10
36	B2	1412	C	O5'-P-OP1	5.19	116.92	110.70
36	B2	1573	G	C4'-C3'-C2'	-5.19	97.41	102.60
48	CD	57	ASN	CA-C-N	-5.19	105.79	117.20
48	CD	168	ASP	CB-CG-OD2	5.19	122.97	118.30
48	CD	278	ASP	CB-CG-OD2	5.19	122.97	118.30
51	CA	51	ASP	CB-CG-OD2	5.19	122.97	118.30
85	A5	1469	C	C3'-C2'-C1'	5.19	105.65	101.50
85	A5	4363	A	O4'-C1'-C2'	-5.19	100.61	105.80
85	A5	4565	C	O4'-C4'-C3'	-5.19	98.81	104.00
48	CD	206	ASP	CB-CG-OD2	5.19	122.97	118.30
85	A5	1977	C	O4'-C1'-N1	5.19	112.35	108.20
86	A7	101	A	O4'-C1'-C2'	5.19	112.27	107.60
10	AN	83	ASP	CB-CG-OD2	5.18	122.97	118.30
12	AR	110	ASP	CB-CG-OD2	5.18	122.97	118.30
16	AA	126	ASP	CB-CG-OD2	5.18	122.97	118.30
17	AV	66	ASP	CB-CG-OD2	5.18	122.97	118.30
35	Ah	183	ASP	CB-CG-OD2	5.18	122.97	118.30
36	B2	1420	G	O4'-C1'-C2'	5.18	112.27	107.60
36	B2	1650	A	O4'-C1'-C2'	-5.18	100.62	105.80
49	CQ	89	ASP	CB-CG-OD2	5.18	122.97	118.30
78	Co	96	ASP	CB-CG-OD2	5.18	122.97	118.30
85	A5	486	C	C1'-O4'-C4'	-5.18	105.75	109.90
85	A5	1421	G	N9-C1'-C2'	-5.18	106.30	112.00
85	A5	1740	C	C1'-O4'-C4'	5.18	114.05	109.90
85	A5	4356	G	O4'-C1'-N9	5.18	112.35	108.20
85	A5	4447	C	O4'-C1'-C2'	-5.18	100.62	105.80
27	AE	73	ASP	CB-CG-OD2	5.18	122.96	118.30
36	B2	733	C	O4'-C1'-N1	5.18	112.35	108.20
36	B2	1549	U	N1-C1'-C2'	5.18	120.74	114.00
43	CV	127	ASP	CB-CG-OD2	5.18	122.96	118.30
80	CH	58	ASP	CB-CG-OD2	5.18	122.96	118.30
85	A5	2567	G	O4'-C1'-N9	5.18	112.34	108.20
86	A7	93	G	C5'-C4'-O4'	5.18	115.32	109.10
26	AJ	104	ASP	CB-CG-OD2	5.18	122.96	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	25	A	O4'-C1'-N9	5.18	112.34	108.20
10	AN	133	ARG	NE-CZ-NH1	5.18	122.89	120.30
61	Ch	5	LYS	CA-C-N	5.18	128.59	117.20
62	Cb	44	ARG	NE-CZ-NH2	-5.18	117.71	120.30
81	CE	39	LYS	C-N-CA	5.18	133.18	122.30
85	A5	334	A	O4'-C1'-N9	5.18	112.34	108.20
85	A5	2930	G	P-O3'-C3'	-5.18	113.48	119.70
85	A5	5006	U	O4'-C1'-N1	5.18	112.34	108.20
43	CV	59	ASP	CB-CG-OD2	5.18	122.96	118.30
60	Cr	77	TYR	CB-CG-CD2	5.18	124.11	121.00
84	Cu	22	ASP	CB-CG-OD2	5.18	122.96	118.30
85	A5	2119	C	P-O5'-C5'	5.18	129.18	120.90
85	A5	4232	U	O4'-C1'-N1	5.18	112.34	108.20
10	AN	31	ASP	CB-CG-OD2	5.18	122.96	118.30
25	Af	124	ASP	CB-CG-OD2	5.18	122.96	118.30
29	AG	151	ASP	CB-CG-OD2	5.18	122.96	118.30
32	AW	80	ASP	CB-CG-OD2	5.18	122.96	118.30
36	B2	1094	C	N1-C1'-C2'	5.18	120.73	114.00
36	B2	1284	A	C5'-C4'-C3'	-5.18	107.72	116.00
48	CD	147	ASP	CB-CG-OD2	5.18	122.96	118.30
55	CU	76	VAL	C-N-CD	-5.18	109.21	120.60
80	CH	142	ASP	CB-CG-OD2	5.18	122.96	118.30
85	A5	1771	U	C1'-O4'-C4'	5.18	114.04	109.90
85	A5	2077	C	O4'-C1'-C2'	-5.18	100.62	105.80
85	A5	3788	C	O4'-C1'-N1	5.18	112.34	108.20
21	Ab	3	LEU	CB-CG-CD2	5.17	119.80	111.00
35	Ah	300	ASP	CB-CG-OD2	5.17	122.96	118.30
36	B2	1431	G	N9-C1'-C2'	5.17	120.73	114.00
49	CQ	9	LYS	N-CA-C	5.17	124.97	111.00
74	CC	155	GLU	CA-CB-CG	5.17	124.78	113.40
79	CJ	114	ASP	CB-CG-OD2	5.17	122.96	118.30
81	CE	35	LYS	C-N-CA	5.17	134.64	121.70
85	A5	4976	U	O4'-C1'-N1	5.17	112.34	108.20
85	A5	5016	A	P-O3'-C3'	5.17	125.91	119.70
3	AU	90	ASP	CB-CG-OD2	5.17	122.96	118.30
11	AL	18	GLN	C-N-CA	-5.17	108.77	121.70
32	AW	9	ASP	CB-CG-OD2	5.17	122.96	118.30
36	B2	1688	C	C5'-C4'-O4'	5.17	115.31	109.10
51	CA	176	ASP	CB-CG-OD2	5.17	122.96	118.30
79	CJ	101	ASP	CB-CG-OD2	5.17	122.96	118.30
85	A5	969	C	C1'-O4'-C4'	5.17	114.04	109.90
85	A5	3666	C	C1'-O4'-C4'	5.17	114.04	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	B2	927	C	C3'-C2'-C1'	5.17	105.64	101.50
79	CJ	143	ASP	CB-CG-OD2	5.17	122.95	118.30
84	Cu	36	ASP	CB-CG-OD2	5.17	122.95	118.30
85	A5	2523	G	O4'-C1'-C2'	5.17	112.25	107.60
85	A5	2579	G	N9-C1'-C2'	-5.17	106.31	112.00
40	CK	144	ASP	CB-CG-OD2	5.17	122.95	118.30
48	CD	128	ASP	CB-CG-OD2	5.17	122.95	118.30
85	A5	377	A	C4'-C3'-O3'	5.17	123.34	113.00
85	A5	3821	A	C1'-O4'-C4'	5.17	114.04	109.90
1	Az	794	PHE	N-CA-C	-5.17	97.04	111.00
36	B2	13	C	C3'-C2'-C1'	5.17	105.63	101.50
36	B2	1082	A	C1'-O4'-C4'	5.17	114.04	109.90
36	B2	1747	C	C5'-C4'-C3'	5.17	124.27	116.00
45	Ca	76	ASP	CB-CG-OD2	5.17	122.95	118.30
46	CN	136	ASP	CB-CG-OD2	5.17	122.95	118.30
47	CI	55	ASP	CB-CG-OD2	5.17	122.95	118.30
53	CT	103	ASP	CB-CG-OD2	5.17	122.95	118.30
53	CT	127	GLN	CB-CA-C	-5.17	100.06	110.40
60	Cr	104	PRO	CA-C-N	-5.17	105.83	117.20
61	Ch	22	ASP	CB-CG-OD2	5.17	122.95	118.30
85	A5	1667	G	C3'-C2'-C1'	5.17	105.63	101.50
85	A5	2085	G	C3'-C2'-C1'	-5.17	97.36	101.50
85	A5	2098	G	O4'-C1'-N9	5.17	112.33	108.20
85	A5	2735	G	P-O5'-C5'	-5.17	112.63	120.90
85	A5	4089	G	C1'-O4'-C4'	-5.17	105.77	109.90
1	Az	196	GLU	N-CA-CB	5.17	119.90	110.60
13	AP	37	TYR	CA-CB-CG	5.17	123.22	113.40
26	AJ	89	GLU	N-CA-CB	-5.17	101.30	110.60
36	B2	74	G	C1'-O4'-C4'	-5.17	105.77	109.90
36	B2	78	C	O4'-C1'-C2'	-5.17	100.63	105.80
36	B2	754	G	C1'-O4'-C4'	-5.17	105.77	109.90
36	B2	1287	A	O4'-C1'-N9	5.17	112.33	108.20
36	B2	1404	U	C3'-C2'-C1'	5.17	105.63	101.50
37	BC	9	G	O4'-C1'-N9	5.17	112.33	108.20
47	CI	28	ASP	CB-CG-OD2	5.17	122.95	118.30
67	Ce	26	ASP	CB-CG-OD2	5.17	122.95	118.30
80	CH	191	ASP	CB-CG-OD2	5.17	122.95	118.30
85	A5	4305	G	C3'-C2'-C1'	5.17	105.63	101.50
85	A5	4414	A	N9-C1'-C2'	-5.17	106.32	112.00
27	AE	59	ASP	CB-CG-OD2	5.17	122.95	118.30
36	B2	560	A	C1'-O4'-C4'	-5.17	105.77	109.90
71	Cj	87	LYS	N-CA-C	-5.17	97.06	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	CJ	129	ASP	CB-CG-OD2	5.17	122.95	118.30
85	A5	194	C	C1'-O4'-C4'	-5.17	105.77	109.90
85	A5	269	G	P-O5'-C5'	5.17	129.16	120.90
85	A5	5014	A	C3'-C2'-C1'	5.17	105.63	101.50
3	AU	27	ARG	O-C-N	-5.16	114.44	122.70
16	AA	151	ASP	CB-CG-OD2	5.16	122.95	118.30
32	AW	85	ASP	CB-CG-OD2	5.16	122.95	118.30
36	B2	1477	U	O4'-C1'-N1	5.16	112.33	108.20
39	Cq	23	ASP	CB-CG-OD2	5.16	122.95	118.30
83	Cs	18	ASP	CB-CG-OD2	5.16	122.95	118.30
85	A5	2694	G	C3'-C2'-C1'	-5.16	97.37	101.50
85	A5	4665	A	P-O3'-C3'	-5.16	113.50	119.70
36	B2	1560	U	C4'-C3'-C2'	-5.16	97.44	102.60
37	BC	19	A	N9-C1'-C2'	-5.16	106.32	112.00
36	B2	107	A	C1'-O4'-C4'	5.16	114.03	109.90
36	B2	468	A	P-O5'-C5'	-5.16	112.64	120.90
36	B2	648	A	C1'-O4'-C4'	-5.16	105.77	109.90
36	B2	1010	G	N9-C1'-C2'	-5.16	106.32	112.00
85	A5	423	G	O4'-C1'-N9	5.16	112.33	108.20
86	A7	91	C	O4'-C1'-N1	5.16	112.33	108.20
15	AB	155	TYR	CB-CG-CD1	-5.16	117.91	121.00
27	AE	104	ASP	CB-CG-OD2	5.16	122.94	118.30
36	B2	1700	C	N1-C1'-C2'	-5.16	106.33	112.00
57	CY	112	ASP	CB-CG-OD2	5.16	122.94	118.30
74	CC	35	ASP	C-N-CA	5.16	134.60	121.70
82	CG	127	ASP	CB-CG-OD2	5.16	122.94	118.30
85	A5	121	A	P-O3'-C3'	5.16	125.89	119.70
85	A5	133	C	O4'-C1'-N1	5.16	112.33	108.20
85	A5	692	A	C3'-C2'-C1'	5.16	105.63	101.50
85	A5	1798	G	C1'-O4'-C4'	-5.16	105.77	109.90
85	A5	1822	U	C3'-C2'-C1'	-5.16	97.37	101.50
85	A5	2498	C	N1-C1'-C2'	5.16	120.71	114.00
85	A5	3591	C	O4'-C1'-C2'	-5.16	100.64	105.80
87	A8	117	C	C1'-O4'-C4'	-5.16	105.77	109.90
6	AX	88	ASP	CB-CG-OD2	5.16	122.94	118.30
36	B2	73	C	P-O3'-C3'	-5.16	113.51	119.70
83	Ct	19	ASP	CB-CG-OD2	5.16	122.94	118.30
85	A5	1258	G	O4'-C1'-C2'	-5.16	100.64	105.80
85	A5	2089	G	O4'-C4'-C3'	-5.16	98.84	104.00
1	Az	272	LYS	C-N-CA	5.16	134.59	121.70
2	Ag	12	LYS	CB-CA-C	-5.16	100.09	110.40
6	AX	139	GLU	CB-CA-C	5.16	120.71	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	AP	71	GLU	C-N-CA	5.16	134.59	121.70
36	B2	465	A	O3'-P-O5'	-5.16	94.20	104.00
36	B2	631	U	N1-C1'-C2'	5.16	120.70	114.00
56	CX	131	ASP	CB-CG-OD2	5.16	122.94	118.30
66	Cd	64	ILE	C-N-CA	-5.16	108.81	121.70
85	A5	19	G	N9-C1'-C2'	5.16	120.70	114.00
85	A5	1190	C	O4'-C1'-N1	5.16	112.33	108.20
85	A5	1474	C	N1-C1'-C2'	5.16	120.70	114.00
85	A5	1634	A	O4'-C1'-C2'	-5.16	100.64	105.80
85	A5	3586	G	C3'-C2'-C1'	-5.16	97.38	101.50
85	A5	363	A	C3'-C2'-C1'	-5.15	97.38	101.50
85	A5	440	U	P-O3'-C3'	5.15	125.89	119.70
85	A5	4161	G	C1'-O4'-C4'	5.15	114.02	109.90
85	A5	4226	G	O4'-C1'-C2'	5.15	112.24	107.60
4	AK	43	LEU	N-CA-C	-5.15	97.09	111.00
8	AS	16	LEU	CA-C-N	-5.15	105.87	117.20
32	AW	55	ASP	CB-CG-OD2	5.15	122.94	118.30
36	B2	1161	U	N1-C1'-C2'	-5.15	106.33	112.00
74	CC	217	ILE	CB-CA-C	5.15	121.90	111.60
83	Ct	26	ASP	CB-CG-OD2	5.15	122.94	118.30
85	A5	719	C	P-O3'-C3'	5.15	125.88	119.70
85	A5	1340	C	N1-C1'-C2'	5.15	120.70	114.00
85	A5	1824	G	O5'-C5'-C4'	-5.15	101.91	111.70
85	A5	2394	G	O4'-C1'-N9	5.15	112.32	108.20
85	A5	3959	U	C1'-O4'-C4'	5.15	114.02	109.90
36	B2	71	G	C2'-C3'-O3'	-5.15	98.17	109.50
36	B2	662	G	C3'-C2'-C1'	5.15	105.62	101.50
85	A5	1369	C	O4'-C4'-C3'	-5.15	98.85	104.00
85	A5	1885	G	O4'-C1'-N9	5.15	112.32	108.20
85	A5	2084	C	O4'-C1'-C2'	-5.15	100.65	105.80
85	A5	2100	A	O3'-P-O5'	-5.15	94.22	104.00
85	A5	3673	C	N1-C1'-C2'	5.15	120.69	114.00
85	A5	3947	A	O4'-C1'-N9	5.15	112.32	108.20
47	CI	44	ASP	CB-CG-OD2	5.15	122.93	118.30
85	A5	2280	G	O4'-C1'-N9	5.15	112.32	108.20
19	AZ	56	ASP	CB-CG-OD2	5.15	122.93	118.30
39	Cq	22	ASP	CB-CG-OD2	5.15	122.93	118.30
51	CA	122	ASP	CB-CG-OD2	5.15	122.93	118.30
59	CZ	92	ASP	CB-CG-OD2	5.15	122.93	118.30
85	A5	82	U	C5'-C4'-O4'	5.15	115.28	109.10
85	A5	1652	U	O4'-C1'-N1	5.15	112.32	108.20
85	A5	4311	A	C3'-C2'-C1'	5.15	105.62	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4958	C	O4'-C1'-C2'	-5.15	100.65	105.80
13	AP	51	ARG	N-CA-C	5.15	124.89	111.00
36	B2	670	A	P-O3'-C3'	5.15	125.88	119.70
85	A5	1913	C	O4'-C1'-C2'	-5.15	100.65	105.80
85	A5	3279	A	O3'-P-O5'	5.15	113.78	104.00
85	A5	3963	A	C3'-C2'-C1'	5.15	105.62	101.50
85	A5	4067	U	C4'-C3'-C2'	-5.15	97.45	102.60
1	Az	239	LYS	CD-CE-NZ	-5.14	99.87	111.70
36	B2	8	U	O4'-C1'-C2'	-5.14	100.66	105.80
40	CK	44	ASP	CA-C-O	-5.14	109.30	120.10
40	CK	153	ASP	CB-CG-OD2	5.14	122.93	118.30
59	CZ	128	LYS	N-CA-C	5.14	124.89	111.00
84	Cv	37	ASP	CB-CG-OD2	5.14	122.93	118.30
85	A5	1945	G	O4'-C1'-C2'	5.14	112.23	107.60
85	A5	2621	A	O4'-C1'-N9	-5.14	104.08	108.20
85	A5	2782	U	O4'-C1'-N1	5.14	112.31	108.20
85	A5	4091	G	C1'-O4'-C4'	-5.14	105.78	109.90
85	A5	4092	G	N9-C1'-C2'	5.14	120.69	114.00
85	A5	4754	G	O3'-P-O5'	-5.14	94.22	104.00
27	AE	93	ASP	CB-CG-OD2	5.14	122.93	118.30
36	B2	634	A	C3'-C2'-C1'	5.14	105.61	101.50
36	B2	1040	G	O4'-C1'-C2'	5.14	112.23	107.60
37	BC	48	G	P-O5'-C5'	5.14	129.13	120.90
37	BC	55	C	C3'-C2'-C1'	5.14	105.61	101.50
42	CL	129	ARG	N-CA-C	5.14	124.88	111.00
60	Cr	36	ASN	N-CA-CB	-5.14	101.34	110.60
60	Cr	40	TYR	CA-CB-CG	5.14	123.17	113.40
81	CE	132	PRO	N-CD-CG	5.14	110.91	103.20
84	Cu	35	ASP	CB-CG-OD2	5.14	122.93	118.30
85	A5	485	C	C1'-O4'-C4'	-5.14	105.79	109.90
85	A5	1211	G	O4'-C4'-C3'	-5.14	98.86	104.00
85	A5	1696	C	O4'-C1'-C2'	-5.14	100.66	105.80
85	A5	1996	C	C3'-C2'-C1'	5.14	105.61	101.50
85	A5	3628	G	O4'-C4'-C3'	-5.14	98.86	104.00
85	A5	4303	C	N1-C1'-C2'	5.14	120.69	114.00
52	CS	151	LYS	N-CA-C	-5.14	97.12	111.00
80	CH	11	ASP	CB-CG-OD2	5.14	122.93	118.30
85	A5	1365	C	O4'-C4'-C3'	-5.14	98.86	104.00
85	A5	2007	G	C1'-C2'-O2'	5.14	126.02	110.60
85	A5	3927	U	C1'-O4'-C4'	5.14	114.01	109.90
6	AX	138	LYS	O-C-N	-5.14	114.48	122.70
13	AP	23	ASP	CB-CG-OD2	5.14	122.93	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	AQ	110	ASP	CB-CG-OD2	5.14	122.93	118.30
36	B2	1223	A	C1'-O4'-C4'	5.14	114.01	109.90
44	CM	106	ASP	CB-CG-OD2	5.14	122.92	118.30
74	CC	22	VAL	CA-C-N	-5.14	105.89	117.20
85	A5	117	C	P-O3'-C3'	5.14	125.87	119.70
85	A5	208	A	P-O3'-C3'	-5.14	113.53	119.70
85	A5	486	C	N1-C1'-C2'	5.14	120.68	114.00
85	A5	970	G	P-O3'-C3'	5.14	125.87	119.70
85	A5	1439	C	C3'-C2'-C1'	5.14	105.61	101.50
85	A5	2003	G	C3'-C2'-C1'	5.14	105.61	101.50
85	A5	2710	C	O4'-C1'-C2'	-5.14	100.66	105.80
6	AX	126	ALA	N-CA-C	-5.14	97.13	111.00
53	CT	18	PRO	CA-C-N	-5.14	105.90	117.20
85	A5	2470	C	P-O3'-C3'	5.14	125.87	119.70
85	A5	4090	G	P-O5'-C5'	-5.14	112.68	120.90
85	A5	4867	G	C3'-C2'-C1'	-5.14	97.39	101.50
85	A5	4893	A	N9-C1'-C2'	5.14	120.68	114.00
3	AU	78	ASP	CB-CG-OD2	5.14	122.92	118.30
36	B2	690	G	O4'-C1'-N9	5.14	112.31	108.20
36	B2	744	G	O3'-P-O5'	-5.14	94.24	104.00
36	B2	757	C	C3'-C2'-C1'	5.14	105.61	101.50
36	B2	786	G	O4'-C1'-N9	5.14	112.31	108.20
36	B2	1747	C	C4'-C3'-O3'	-5.14	98.61	109.40
36	B2	1813	A	O4'-C1'-N9	5.14	112.31	108.20
39	Cq	100	ASP	CB-CG-OD2	5.14	122.92	118.30
57	CY	86	GLN	N-CA-C	5.14	124.87	111.00
81	CE	243	THR	CA-C-N	5.14	128.50	117.20
85	A5	2570	U	C4'-C3'-C2'	-5.14	97.46	102.60
85	A5	3700	C	N1-C1'-C2'	5.14	120.68	114.00
85	A5	4410	G	O4'-C1'-C2'	-5.14	100.66	105.80
85	A5	5007	A	C3'-C2'-C1'	5.14	105.61	101.50
15	AB	191	ASP	CB-CG-OD2	5.13	122.92	118.30
19	AZ	50	PHE	CB-CA-C	-5.13	100.13	110.40
27	AE	164	LEU	C-N-CA	-5.13	108.86	121.70
32	AW	2	VAL	O-C-N	-5.13	114.48	122.70
49	CQ	144	LYS	N-CA-C	-5.13	97.14	111.00
69	Cg	82	MET	C-N-CA	5.13	134.54	121.70
74	CC	107	THR	C-N-CA	-5.13	108.86	121.70
85	A5	1601	A	C1'-O4'-C4'	5.13	114.01	109.90
85	A5	4094	G	C5'-C4'-O4'	5.13	115.26	109.10
85	A5	4361	U	O4'-C1'-N1	5.13	112.31	108.20
26	AJ	85	GLY	CA-C-N	-5.13	105.91	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AJ	91	LYS	CA-C-N	5.13	128.49	117.20
27	AE	143	ASP	CB-CG-OD2	5.13	122.92	118.30
85	A5	1822	U	C1'-O4'-C4'	-5.13	105.79	109.90
53	CT	69	GLN	O-C-N	-5.13	114.49	122.70
85	A5	63	G	C1'-O4'-C4'	-5.13	105.80	109.90
85	A5	1305	C	C1'-O4'-C4'	-5.13	105.80	109.90
85	A5	1346	C	O4'-C1'-C2'	-5.13	100.67	105.80
85	A5	2722	G	O4'-C1'-C2'	5.13	112.22	107.60
85	A5	4614	G	C1'-O4'-C4'	-5.13	105.80	109.90
35	Ah	186	ASP	CB-CG-OD2	5.13	122.92	118.30
36	B2	421	G	O4'-C1'-C2'	5.13	112.22	107.60
36	B2	992	A	C1'-O4'-C4'	-5.13	105.80	109.90
36	B2	1650	A	P-O5'-C5'	-5.13	112.69	120.90
85	A5	48	G	C3'-C2'-C1'	5.13	105.60	101.50
85	A5	406	C	O4'-C1'-N1	5.13	112.30	108.20
85	A5	1460	C	C3'-C2'-C1'	5.13	105.60	101.50
36	B2	892	U	O4'-C1'-N1	5.13	112.30	108.20
36	B2	1546	G	C3'-C2'-C1'	-5.13	97.40	101.50
36	B2	1650	A	C1'-O4'-C4'	5.13	114.00	109.90
85	A5	126	C	N1-C1'-C2'	5.13	120.67	114.00
85	A5	4512	U	N1-C1'-C2'	5.13	120.67	114.00
85	A5	4524	G	O3'-P-O5'	-5.13	94.26	104.00
85	A5	4742	G	O4'-C1'-C2'	5.13	112.22	107.60
36	B2	1505	U	C3'-C2'-C1'	5.13	105.60	101.50
74	CC	12	SER	C-N-CA	5.13	134.51	121.70
82	CG	56	LYS	CA-C-N	-5.13	105.92	117.20
85	A5	334	A	C5'-C4'-O4'	5.13	115.25	109.10
85	A5	1201	U	O4'-C1'-N1	5.13	112.30	108.20
85	A5	2125	C	C5'-C4'-O4'	5.13	115.25	109.10
85	A5	2628	U	C4'-C3'-O3'	5.13	123.25	113.00
85	A5	4963	G	C1'-O4'-C4'	-5.13	105.80	109.90
6	AX	115	ILE	C-N-CD	-5.12	109.32	120.60
22	Ac	37	ASP	CB-CG-OD2	5.12	122.91	118.30
36	B2	212	C	C3'-C2'-C1'	5.12	105.60	101.50
36	B2	526	A	O4'-C1'-C2'	5.12	112.21	107.60
36	B2	1518	C	O4'-C4'-C3'	-5.12	98.88	104.00
66	Cd	12	LYS	C-N-CA	5.12	133.06	122.30
2	Ag	213	ASP	CB-CG-OD1	5.12	122.91	118.30
36	B2	59	U	C1'-O4'-C4'	5.12	114.00	109.90
36	B2	328	U	C5'-C4'-C3'	5.12	124.20	116.00
44	CM	66	HIS	N-CA-CB	5.12	119.82	110.60
57	CY	10	ASP	CB-CG-OD2	5.12	122.91	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	CE	128	HIS	CA-CB-CG	5.12	122.31	113.60
85	A5	1355	G	C3'-C2'-C1'	-5.12	97.40	101.50
85	A5	1489	G	C5'-C4'-C3'	5.12	124.20	116.00
85	A5	1923	A	C4'-C3'-C2'	-5.12	97.48	102.60
85	A5	3638	G	N9-C1'-C2'	5.12	120.66	114.00
85	A5	4983	C	O4'-C1'-N1	5.12	112.30	108.20
36	B2	884	C	C3'-C2'-C1'	5.12	105.60	101.50
36	B2	1043	G	O4'-C1'-N9	5.12	112.30	108.20
59	CZ	35	ASP	O-C-N	5.12	130.89	122.70
85	A5	988	C	C3'-C2'-C1'	5.12	105.60	101.50
85	A5	1285	U	P-O5'-C5'	5.12	129.10	120.90
85	A5	1636	U	N1-C1'-C2'	5.12	120.66	114.00
85	A5	3678	G	O4'-C1'-C2'	-5.12	100.68	105.80
36	B2	1324	G	C3'-C2'-C1'	5.12	105.60	101.50
85	A5	385	A	C3'-C2'-C1'	-5.12	97.41	101.50
85	A5	951	G	P-O5'-C5'	5.12	129.09	120.90
85	A5	2050	G	C1'-O4'-C4'	-5.12	105.81	109.90
85	A5	4927	G	C4-N9-C1'	5.12	133.16	126.50
28	AC	54	LYS	CD-CE-NZ	5.12	123.47	111.70
36	B2	513	G	O4'-C1'-C2'	5.12	112.21	107.60
42	CL	49	ARG	N-CA-CB	-5.12	101.39	110.60
85	A5	1092	G	N9-C1'-C2'	-5.12	106.37	112.00
85	A5	2419	C	C1'-O4'-C4'	-5.12	105.81	109.90
19	AZ	104	ARG	CB-CA-C	-5.12	100.17	110.40
36	B2	754	G	O4'-C1'-N9	5.12	112.29	108.20
36	B2	1379	A	C5'-C4'-C3'	-5.12	107.81	116.00
36	B2	1794	C	C3'-C2'-C1'	5.12	105.59	101.50
46	CN	80	THR	CB-CA-C	5.12	125.41	111.60
85	A5	4561	C	C5'-C4'-O4'	5.12	115.24	109.10
85	A5	4791	C	P-O3'-C3'	-5.12	113.56	119.70
36	B2	1139	C	C2-N1-C1'	5.11	124.42	118.80
60	Cr	67	ARG	CA-CB-CG	5.11	124.65	113.40
81	CE	242	ILE	O-C-N	-5.11	114.52	122.70
85	A5	185	C	C5'-C4'-O4'	5.11	115.24	109.10
85	A5	649	A	O4'-C1'-N9	5.11	112.29	108.20
85	A5	1222	A	C1'-O4'-C4'	5.11	113.99	109.90
85	A5	2698	G	O4'-C1'-N9	5.11	112.29	108.20
85	A5	3670	C	C1'-O4'-C4'	-5.11	105.81	109.90
85	A5	4955	A	O4'-C1'-C2'	-5.11	100.69	105.80
86	A7	79	U	C1'-O4'-C4'	5.11	113.99	109.90
36	B2	1487	A	C4'-C3'-O3'	-5.11	98.66	109.40
85	A5	2363	A	P-O3'-C3'	5.11	125.83	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4948	C	P-O5'-C5'	5.11	129.08	120.90
36	B2	687	C	O4'-C1'-C2'	5.11	112.20	107.60
36	B2	1453	C	C3'-C2'-C1'	-5.11	97.41	101.50
37	BC	19	A	C1'-O4'-C4'	5.11	113.99	109.90
66	Cd	110	PRO	O-C-N	5.11	130.88	122.70
85	A5	298	G	O4'-C1'-C2'	5.11	112.20	107.60
85	A5	1945	G	O4'-C1'-N9	5.11	112.29	108.20
85	A5	3763	A	O4'-C1'-N9	5.11	112.29	108.20
85	A5	4136	G	C4'-C3'-C2'	-5.11	97.49	102.60
1	Az	539	GLU	O-C-N	-5.11	114.53	122.70
36	B2	1250	A	O4'-C1'-C2'	-5.11	100.69	105.80
36	B2	1339	U	C5'-C4'-O4'	5.11	115.23	109.10
85	A5	1311	G	C5'-C4'-C3'	-5.11	107.83	116.00
85	A5	2256	C	O4'-C4'-C3'	-5.11	98.89	104.00
85	A5	2427	G	C5'-C4'-O4'	5.11	115.23	109.10
85	A5	2588	C	C3'-C2'-C1'	5.11	105.59	101.50
85	A5	3955	G	O4'-C1'-N9	5.11	112.29	108.20
85	A5	4518	A	O4'-C1'-C2'	-5.11	100.69	105.80
85	A5	4587	G	P-O5'-C5'	-5.11	112.73	120.90
87	A8	132	G	C3'-C2'-C1'	-5.11	97.41	101.50
36	B2	490	C	O4'-C1'-C2'	-5.11	100.69	105.80
85	A5	4058	U	O4'-C4'-C3'	-5.11	98.89	104.00
16	AA	205	ARG	NE-CZ-NH1	5.11	122.85	120.30
36	B2	72	C	P-O5'-C5'	5.11	129.07	120.90
36	B2	803	C	C3'-C2'-C1'	5.11	105.58	101.50
36	B2	998	A	C3'-C2'-C1'	5.11	105.58	101.50
85	A5	236	G	N9-C1'-C2'	5.11	120.64	114.00
85	A5	309	C	C1'-O4'-C4'	5.11	113.98	109.90
85	A5	2411	C	P-O3'-C3'	-5.11	113.57	119.70
85	A5	4037	C	C3'-C2'-C1'	5.11	105.58	101.50
85	A5	4088	C	P-O5'-C5'	-5.11	112.73	120.90
86	A7	2	U	O4'-C1'-N1	5.11	112.28	108.20
36	B2	1719	A	C3'-C2'-C1'	5.10	105.58	101.50
85	A5	438	G	C4'-C3'-C2'	-5.10	97.50	102.60
29	AG	180	VAL	N-CA-CB	-5.10	100.28	111.50
36	B2	591	U	O4'-C1'-C2'	5.10	112.19	107.60
36	B2	757	C	O4'-C4'-C3'	-5.10	98.90	104.00
36	B2	1110	G	C1'-O4'-C4'	5.10	113.98	109.90
85	A5	361	C	C3'-C2'-C1'	5.10	105.58	101.50
85	A5	2461	G	N9-C1'-C2'	5.10	120.63	114.00
85	A5	3716	C	C3'-C2'-C1'	5.10	105.58	101.50
85	A5	4197	G	P-O3'-C3'	5.10	125.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4423	U	N1-C1'-C2'	-5.10	106.39	112.00
85	A5	4939	C	C4'-C3'-O3'	-5.10	98.69	109.40
36	B2	1580	A	O4'-C1'-N9	5.10	112.28	108.20
85	A5	192	G	C1'-O4'-C4'	-5.10	105.82	109.90
85	A5	2818	C	O4'-C1'-C2'	-5.10	100.70	105.80
85	A5	3683	C	O4'-C1'-N1	-5.10	104.12	108.20
36	B2	1271	C	O4'-C1'-C2'	-5.10	100.70	105.80
51	CA	67	TYR	CD1-CG-CD2	-5.10	112.29	117.90
85	A5	3692	A	O4'-C1'-N9	5.10	112.28	108.20
85	A5	4871	C	C1'-O4'-C4'	5.10	113.98	109.90
86	A7	47	G	C1'-O4'-C4'	-5.10	105.82	109.90
36	B2	234	C	O4'-C1'-N1	5.10	112.28	108.20
36	B2	1616	U	C3'-C2'-C1'	5.10	105.58	101.50
64	CF	21	LYS	C-N-CA	5.10	134.44	121.70
85	A5	18	C	P-O3'-C3'	5.10	125.82	119.70
85	A5	452	A	C5'-C4'-O4'	5.10	115.22	109.10
85	A5	1076	C	C5'-C4'-O4'	5.10	115.22	109.10
85	A5	1078	A	C1'-O4'-C4'	5.10	113.98	109.90
85	A5	2081	C	C1'-O4'-C4'	-5.10	105.82	109.90
85	A5	2327	G	C1'-O4'-C4'	-5.10	105.82	109.90
85	A5	2643	G	C3'-C2'-C1'	-5.10	97.42	101.50
36	B2	655	A	C3'-C2'-C1'	5.10	105.58	101.50
61	Ch	5	LYS	C-N-CA	5.10	134.44	121.70
64	CF	223	LYS	C-N-CA	-5.10	108.96	121.70
36	B2	1279	C	C3'-C2'-C1'	5.09	105.58	101.50
36	B2	1342	U	C3'-C2'-C1'	5.09	105.58	101.50
85	A5	2383	C	O4'-C1'-C2'	-5.09	100.70	105.80
85	A5	4637	G	O4'-C1'-N9	5.09	112.28	108.20
85	A5	4962	C	P-O5'-C5'	5.09	129.05	120.90
36	B2	1607	A	C1'-O4'-C4'	-5.09	105.83	109.90
85	A5	2751	G	C4'-C3'-C2'	-5.09	97.51	102.60
1	Az	433	ASN	CB-CA-C	5.09	120.58	110.40
36	B2	1302	G	C5'-C4'-O4'	5.09	115.21	109.10
36	B2	1482	C	C3'-C2'-C1'	5.09	105.57	101.50
66	Cd	18	ASN	O-C-N	5.09	130.85	122.70
85	A5	1574	G	O4'-C1'-C2'	-5.09	100.71	105.80
85	A5	1888	A	N9-C1'-C2'	5.09	120.62	114.00
85	A5	2222	C	P-O3'-C3'	5.09	125.81	119.70
85	A5	2556	G	C4'-C3'-C2'	-5.09	97.51	102.60
85	A5	2759	G	O4'-C1'-N9	-5.09	104.13	108.20
85	A5	2822	G	C5'-C4'-C3'	5.09	124.14	116.00
85	A5	4200	G	O4'-C4'-C3'	-5.09	98.91	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4645	C	O4'-C1'-C2'	-5.09	100.71	105.80
36	B2	15	U	C1'-O4'-C4'	5.09	113.97	109.90
36	B2	559	G	O4'-C4'-C3'	-5.09	98.91	104.00
36	B2	748	C	P-O3'-C3'	5.09	125.81	119.70
36	B2	937	C	O4'-C1'-N1	5.09	112.27	108.20
36	B2	1614	A	O4'-C1'-N9	5.09	112.27	108.20
36	B2	1752	C	P-O3'-C3'	-5.09	113.59	119.70
58	CW	23	ARG	NE-CZ-NH1	5.09	122.84	120.30
85	A5	1892	A	C3'-C2'-C1'	-5.09	97.43	101.50
85	A5	2242	C	C5'-C4'-C3'	5.09	124.14	116.00
85	A5	2631	U	N1-C1'-C2'	5.09	120.62	114.00
55	CU	58	GLY	CA-C-O	5.09	129.76	120.60
27	AE	237	SER	N-CA-CB	-5.09	102.87	110.50
36	B2	836	G	N9-C1'-C2'	-5.09	106.41	112.00
36	B2	1025	U	N1-C1'-C2'	-5.09	106.41	112.00
36	B2	1680	G	C3'-C2'-C1'	5.09	105.57	101.50
85	A5	209	U	O4'-C1'-C2'	-5.09	100.71	105.80
85	A5	1668	A	O4'-C1'-N9	-5.09	104.13	108.20
85	A5	1908	A	C3'-C2'-C1'	5.09	105.57	101.50
85	A5	4759	C	P-O5'-C5'	-5.09	112.76	120.90
86	A7	13	A	N9-C1'-C2'	-5.09	106.40	112.00
87	A8	146	U	O4'-C1'-N1	5.09	112.27	108.20
85	A5	1105	C	O4'-C1'-C2'	-5.08	100.72	105.80
85	A5	1390	G	C3'-C2'-C1'	-5.08	97.43	101.50
85	A5	2112	G	C5'-C4'-O4'	5.08	115.20	109.10
85	A5	2883	G	O4'-C1'-N9	5.08	112.27	108.20
85	A5	4059	C	O4'-C1'-N1	5.08	112.27	108.20
25	Af	134	SER	CA-C-N	-5.08	106.02	117.20
74	CC	221	PHE	N-CA-CB	5.08	119.75	110.60
85	A5	743	G	O4'-C1'-N9	5.08	112.27	108.20
85	A5	2680	G	C1'-O4'-C4'	-5.08	105.83	109.90
85	A5	4338	G	C1'-O4'-C4'	5.08	113.97	109.90
85	A5	4899	G	C2'-C3'-O3'	5.08	121.83	113.70
86	A7	35	U	O4'-C1'-N1	5.08	112.27	108.20
12	AR	25	GLY	O-C-N	5.08	130.83	122.70
36	B2	1242	U	O4'-C1'-N1	-5.08	104.13	108.20
56	CX	154	GLY	C-N-CA	5.08	134.41	121.70
72	Ck	61	PRO	C-N-CD	-5.08	109.42	120.60
85	A5	470	A	C3'-C2'-C1'	5.08	105.57	101.50
85	A5	1268	G	C2'-C3'-O3'	5.08	121.83	113.70
85	A5	1902	G	O4'-C1'-N9	-5.08	104.14	108.20
85	A5	2280	G	C1'-O4'-C4'	-5.08	105.83	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2698	G	O4'-C1'-C2'	-5.08	100.72	105.80
85	A5	4348	A	C1'-O4'-C4'	5.08	113.97	109.90
85	A5	4904	G	C1'-O4'-C4'	-5.08	105.83	109.90
16	AA	193	HIS	N-CA-C	5.08	124.72	111.00
36	B2	136	C	C5'-C4'-C3'	5.08	124.13	116.00
40	CK	91	ASP	N-CA-C	5.08	124.72	111.00
85	A5	1385	G	O4'-C1'-N9	5.08	112.26	108.20
85	A5	4266	G	C3'-C2'-C1'	5.08	105.56	101.50
36	B2	125	C	P-O3'-C3'	5.08	125.79	119.70
36	B2	420	G	P-O3'-C3'	-5.08	113.61	119.70
36	B2	606	G	P-O3'-C3'	5.08	125.79	119.70
36	B2	1512	C	O4'-C1'-C2'	-5.08	100.72	105.80
40	CK	27	ALA	N-CA-C	5.08	124.71	111.00
40	CK	44	ASP	CA-CB-CG	5.08	124.57	113.40
66	Cd	65	ASP	CA-C-N	-5.08	106.03	117.20
85	A5	110	C	C4'-C3'-C2'	-5.08	97.52	102.60
85	A5	2329	U	O4'-C1'-N1	5.08	112.26	108.20
85	A5	2798	A	N9-C1'-C2'	-5.08	106.41	112.00
85	A5	3937	C	C5'-C4'-O4'	5.08	115.19	109.10
85	A5	4315	A	O4'-C1'-N9	5.08	112.26	108.20
85	A5	4941	G	N9-C1'-C2'	-5.08	106.41	112.00
36	B2	1477	U	C1'-O4'-C4'	-5.08	105.84	109.90
85	A5	1279	A	O4'-C1'-N9	5.08	112.26	108.20
85	A5	1484	G	O4'-C1'-N9	5.08	112.26	108.20
3	AU	48	LEU	CB-CG-CD2	-5.08	102.37	111.00
36	B2	22	A	O4'-C1'-N9	5.08	112.26	108.20
39	Cq	68	HIS	C-N-CA	5.08	134.39	121.70
46	CN	198	LEU	CB-CA-C	5.08	119.84	110.20
58	CW	75	ALA	C-N-CA	5.08	134.39	121.70
85	A5	184	U	O4'-C1'-C2'	-5.08	100.72	105.80
85	A5	1243	C	C4'-C3'-C2'	5.08	107.67	102.60
85	A5	1621	A	OP1-P-OP2	-5.08	111.99	119.60
85	A5	4669	A	C5'-C4'-C3'	-5.08	107.88	116.00
36	B2	875	A	C3'-C2'-C1'	5.07	105.56	101.50
85	A5	2788	U	P-O3'-C3'	5.07	125.79	119.70
85	A5	4347	G	C5'-C4'-O4'	5.07	115.19	109.10
85	A5	4775	C	O4'-C1'-N1	5.07	112.26	108.20
36	B2	313	A	O3'-P-O5'	5.07	113.64	104.00
36	B2	875	A	O4'-C1'-N9	5.07	112.26	108.20
36	B2	1371	U	O4'-C1'-C2'	-5.07	100.73	105.80
67	Ce	14	LYS	O-C-N	5.07	130.81	122.70
85	A5	408	A	C5'-C4'-O4'	5.07	115.19	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	479	G	C4'-C3'-C2'	-5.07	97.53	102.60
85	A5	1267	C	P-O5'-C5'	5.07	129.01	120.90
85	A5	2500	U	C1'-O4'-C4'	-5.07	105.84	109.90
85	A5	2804	C	N1-C1'-C2'	5.07	120.59	114.00
85	A5	4962	C	O4'-C1'-C2'	-5.07	100.73	105.80
36	B2	1782	G	O5'-C5'-C4'	5.07	121.33	111.70
85	A5	4453	C	C3'-C2'-C1'	5.07	105.56	101.50
36	B2	1332	A	N9-C1'-C2'	-5.07	106.42	112.00
36	B2	1716	C	N1-C1'-C2'	5.07	120.59	114.00
60	Cr	94	ARG	NE-CZ-NH2	-5.07	117.77	120.30
85	A5	2756	G	C5'-C4'-O4'	5.07	115.18	109.10
27	AE	129	ILE	CA-C-N	-5.07	106.05	117.20
36	B2	317	C	O4'-C1'-C2'	-5.07	100.73	105.80
36	B2	729	C	C1'-O4'-C4'	5.07	113.95	109.90
36	B2	1365	G	O4'-C1'-N9	5.07	112.25	108.20
36	B2	1465	A	C3'-C2'-C1'	5.07	105.55	101.50
36	B2	1615	U	N1-C1'-C2'	5.07	120.59	114.00
43	CV	101	ASN	N-CA-CB	-5.07	101.48	110.60
74	CC	314	LEU	CB-CG-CD1	5.07	119.61	111.00
85	A5	511	C	N1-C1'-C2'	5.07	120.59	114.00
85	A5	652	G	O4'-C1'-C2'	5.07	112.16	107.60
85	A5	2127	C	C4'-C3'-C2'	-5.07	97.53	102.60
85	A5	2507	A	P-O3'-C3'	5.07	125.78	119.70
85	A5	2660	A	C1'-O4'-C4'	-5.07	105.85	109.90
85	A5	4116	C	C3'-C2'-C1'	5.07	105.56	101.50
85	A5	4883	C	O4'-C1'-N1	5.07	112.25	108.20
36	B2	1274	G	N9-C1'-C2'	5.07	120.58	114.00
36	B2	1668	U	C4'-C3'-C2'	-5.07	97.53	102.60
66	Cd	18	ASN	CA-C-N	-5.07	106.06	117.20
85	A5	462	G	C1'-O4'-C4'	-5.07	105.85	109.90
85	A5	2131	C	C1'-O4'-C4'	-5.07	105.85	109.90
85	A5	4059	C	P-O5'-C5'	5.07	129.00	120.90
85	A5	4136	G	C1'-O4'-C4'	-5.07	105.85	109.90
85	A5	4663	G	C5'-C4'-O4'	5.07	115.18	109.10
85	A5	4931	G	C4'-C3'-C2'	-5.07	97.53	102.60
85	A5	2289	C	O4'-C1'-C2'	-5.06	100.74	105.80
36	B2	281	C	P-O5'-C5'	-5.06	112.80	120.90
36	B2	900	C	P-O5'-C5'	5.06	129.00	120.90
36	B2	1151	G	O4'-C1'-N9	5.06	112.25	108.20
85	A5	49	U	C1'-O4'-C4'	5.06	113.95	109.90
85	A5	2728	U	N1-C1'-C2'	5.06	120.58	114.00
85	A5	3750	G	C3'-C2'-C1'	-5.06	97.45	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	4069	U	C5'-C4'-C3'	5.06	124.10	116.00
85	A5	4258	C	O4'-C1'-N1	5.06	112.25	108.20
85	A5	1733	G	C1'-O4'-C4'	5.06	113.95	109.90
85	A5	4077	A	O4'-C1'-C2'	-5.06	100.74	105.80
31	AH	191	GLU	C-N-CA	-5.06	109.05	121.70
36	B2	549	C	C3'-C2'-C1'	5.06	105.55	101.50
36	B2	639	C	O4'-C1'-N1	5.06	112.25	108.20
49	CQ	152	PHE	N-CA-C	5.06	124.66	111.00
33	AI	8	TRP	CE3-CZ3-CH2	5.06	126.76	121.20
45	Ca	109	TYR	CA-CB-CG	-5.06	103.79	113.40
85	A5	113	A	C5'-C4'-O4'	5.06	115.17	109.10
85	A5	436	C	O4'-C1'-N1	5.06	112.25	108.20
85	A5	1363	C	N1-C1'-C2'	5.06	120.58	114.00
85	A5	1467	C	O4'-C1'-C2'	-5.06	100.74	105.80
2	Ag	143	GLN	CB-CA-C	-5.06	100.29	110.40
36	B2	318	A	O4'-C1'-N9	5.06	112.25	108.20
36	B2	530	U	C4'-C3'-C2'	-5.06	97.54	102.60
85	A5	1465	G	O4'-C1'-N9	5.06	112.25	108.20
85	A5	2292	C	O4'-C1'-N1	5.06	112.24	108.20
13	AP	28	MET	CA-C-N	-5.05	106.08	117.20
36	B2	1389	C	O4'-C1'-N1	5.05	112.24	108.20
36	B2	1639	G	O4'-C1'-C2'	-5.05	100.75	105.80
50	CR	57	VAL	CG1-CB-CG2	-5.05	102.81	110.90
74	CC	305	PRO	CA-C-N	5.05	128.32	117.20
85	A5	939	G	P-O3'-C3'	5.05	125.77	119.70
85	A5	3743	G	C1'-O4'-C4'	-5.05	105.86	109.90
85	A5	3880	G	P-O3'-C3'	5.05	125.77	119.70
87	A8	28	C	C3'-C2'-C1'	5.05	105.54	101.50
52	CS	3	ALA	C-N-CA	5.05	134.33	121.70
85	A5	1362	G	C1'-O4'-C4'	-5.05	105.86	109.90
86	A7	39	C	C2'-C3'-O3'	5.05	121.78	113.70
15	AB	152	LYS	CB-CA-C	5.05	120.50	110.40
36	B2	1350	U	O4'-C1'-C2'	-5.05	100.75	105.80
36	B2	1474	A	O3'-P-O5'	5.05	113.60	104.00
37	BC	29	G	O4'-C1'-N9	5.05	112.24	108.20
85	A5	229	G	C3'-C2'-C1'	5.05	105.54	101.50
85	A5	678	C	O4'-C1'-C2'	-5.05	100.75	105.80
85	A5	2027	U	C5'-C4'-O4'	5.05	115.16	109.10
85	A5	2780	C	O4'-C1'-N1	5.05	112.24	108.20
23	AD	52	ALA	O-C-N	-5.05	114.62	122.70
53	CT	3	ASN	CA-CB-CG	5.05	124.51	113.40
85	A5	104	G	O4'-C1'-N9	5.05	112.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	451	C	C3'-C2'-C1'	5.05	105.54	101.50
85	A5	705	G	P-O5'-C5'	5.05	128.98	120.90
85	A5	4041	C	C5'-C4'-O4'	5.05	115.16	109.10
85	A5	4284	C	C3'-C2'-C1'	5.05	105.54	101.50
85	A5	4970	C	N1-C1'-C2'	5.05	120.57	114.00
87	A8	2	G	O4'-C1'-N9	5.05	112.24	108.20
36	B2	959	G	C3'-C2'-C1'	5.05	105.54	101.50
36	B2	1663	A	O4'-C1'-C2'	-5.05	100.75	105.80
53	CT	136	ARG	N-CA-C	-5.05	97.37	111.00
85	A5	1866	U	C3'-C2'-C1'	-5.05	97.46	101.50
85	A5	3892	U	C5'-C4'-O4'	5.05	115.16	109.10
85	A5	4229	U	C3'-C2'-C1'	-5.05	97.46	101.50
85	A5	4725	C	C3'-C2'-C1'	5.05	105.54	101.50
85	A5	4863	G	N9-C1'-C2'	-5.05	106.45	112.00
24	Ae	44	ASN	N-CA-C	5.05	124.62	111.00
36	B2	1383	A	O4'-C1'-N9	5.05	112.24	108.20
47	CI	199	TYR	N-CA-C	-5.05	97.38	111.00
85	A5	726	G	N9-C1'-C2'	5.05	120.56	114.00
85	A5	751	G	P-O3'-C3'	5.05	125.76	119.70
85	A5	1526	G	P-O3'-C3'	-5.05	113.64	119.70
85	A5	2875	C	O4'-C1'-N1	5.05	112.24	108.20
85	A5	3786	U	C1'-O4'-C4'	-5.05	105.86	109.90
85	A5	3839	G	O4'-C1'-N9	5.05	112.24	108.20
2	Ag	203	ASP	CB-CG-OD1	5.04	122.84	118.30
36	B2	1556	A	C5'-C4'-C3'	-5.04	107.93	116.00
81	CE	78	SER	C-N-CA	5.04	134.31	121.70
36	B2	1055	A	C1'-O4'-C4'	5.04	113.94	109.90
36	B2	1497	G	C3'-C2'-C1'	5.04	105.53	101.50
36	B2	1790	A	C1'-O4'-C4'	-5.04	105.86	109.90
37	BC	56	G	O4'-C1'-N9	5.04	112.23	108.20
85	A5	360	A	O4'-C1'-N9	5.04	112.23	108.20
85	A5	1382	G	O4'-C1'-N9	-5.04	104.17	108.20
85	A5	1754	U	P-O3'-C3'	5.04	125.75	119.70
85	A5	2046	G	P-O5'-C5'	-5.04	112.83	120.90
85	A5	2639	U	P-O3'-C3'	5.04	125.75	119.70
85	A5	2663	G	P-O3'-C3'	5.04	125.75	119.70
85	A5	4113	U	O4'-C1'-C2'	-5.04	100.76	105.80
85	A5	4170	A	C3'-C2'-C1'	5.04	105.53	101.50
85	A5	4771	C	O4'-C4'-C3'	-5.04	98.96	104.00
87	A8	51	U	N1-C1'-C2'	5.04	120.56	114.00
36	B2	1584	G	C3'-C2'-C1'	5.04	105.53	101.50
52	CS	19	THR	N-CA-C	5.04	124.61	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
60	Cr	38	PHE	N-CA-CB	5.04	119.67	110.60
47	CI	2	GLY	N-CA-C	5.04	125.70	113.10
85	A5	2688	G	P-O3'-C3'	-5.04	113.65	119.70
85	A5	3967	G	O4'-C1'-C2'	5.04	112.14	107.60
1	Az	242	GLY	C-N-CA	5.04	134.30	121.70
25	Af	106	TYR	N-CA-C	-5.04	97.40	111.00
36	B2	21	U	C3'-C2'-C1'	5.04	105.53	101.50
36	B2	1137	U	O4'-C1'-N1	5.04	112.23	108.20
36	B2	1279	C	C1'-O4'-C4'	5.04	113.93	109.90
53	CT	18	PRO	CA-C-O	5.04	132.29	120.20
85	A5	1394	G	O4'-C1'-C2'	-5.04	100.76	105.80
85	A5	2361	G	P-O3'-C3'	5.04	125.75	119.70
85	A5	4371	G	P-O3'-C3'	-5.04	113.65	119.70
85	A5	4584	A	C1'-O4'-C4'	-5.04	105.87	109.90
36	B2	1661	A	O4'-C1'-C2'	5.04	112.13	107.60
37	BC	3	C	O4'-C1'-N1	5.04	112.23	108.20
44	CM	1	MET	CB-CG-SD	5.04	127.51	112.40
36	B2	386	C	C5'-C4'-C3'	-5.04	107.94	116.00
36	B2	1040	G	C1'-O4'-C4'	-5.04	105.87	109.90
85	A5	12	A	C4'-C3'-C2'	5.04	107.64	102.60
85	A5	273	U	C3'-C2'-C1'	5.04	105.53	101.50
85	A5	2605	G	O4'-C1'-N9	5.04	112.23	108.20
21	Ab	26	GLN	CB-CA-C	-5.03	100.33	110.40
26	AJ	188	GLY	N-CA-C	5.03	125.68	113.10
36	B2	429	C	N1-C1'-C2'	5.03	120.54	114.00
36	B2	1276	A	P-O3'-C3'	5.03	125.74	119.70
36	B2	1390	U	N1-C1'-C2'	5.03	120.54	114.00
81	CE	81	GLU	CA-C-N	-5.03	106.13	117.20
85	A5	2104	G	O4'-C1'-N9	5.03	112.23	108.20
85	A5	4395	U	O4'-C4'-C3'	-5.03	98.97	104.00
85	A5	4417	C	O4'-C1'-C2'	-5.03	100.77	105.80
85	A5	4428	A	C3'-C2'-C1'	5.03	105.53	101.50
36	B2	843	C	C5'-C4'-O4'	5.03	115.14	109.10
36	B2	1417	C	O4'-C4'-C3'	-5.03	98.97	104.00
85	A5	4195	G	O4'-C1'-N9	5.03	112.22	108.20
85	A5	4338	G	P-O5'-C5'	-5.03	112.85	120.90
9	Ad	6	LEU	N-CA-C	-5.03	97.42	111.00
18	AY	29	HIS	C-N-CD	-5.03	109.53	120.60
36	B2	180	G	O3'-P-O5'	5.03	113.56	104.00
47	CI	105	CYS	N-CA-C	-5.03	97.42	111.00
85	A5	1297	U	P-O3'-C3'	5.03	125.74	119.70
85	A5	4738	C	C3'-C2'-C1'	5.03	105.53	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
86	A7	59	G	O4'-C1'-N9	5.03	112.22	108.20
87	A8	97	A	P-O5'-C5'	-5.03	112.85	120.90
60	Cr	1	MET	C-N-CA	5.03	134.27	121.70
81	CE	185	PRO	C-N-CA	-5.03	109.13	121.70
85	A5	518	G	O4'-C1'-C2'	5.03	112.13	107.60
85	A5	938	C	C5'-C4'-O4'	5.03	115.14	109.10
85	A5	3954	A	C1'-O4'-C4'	5.03	113.92	109.90
85	A5	4831	G	P-O3'-C3'	5.03	125.73	119.70
36	B2	124	U	O3'-P-O5'	-5.03	94.45	104.00
36	B2	1252	C	P-O3'-C3'	-5.03	113.67	119.70
36	B2	1279	C	O4'-C1'-N1	5.03	112.22	108.20
85	A5	2575	U	C3'-C2'-C1'	-5.03	97.48	101.50
87	A8	36	G	C3'-C2'-C1'	-5.03	97.48	101.50
87	A8	154	G	O4'-C1'-C2'	5.03	112.12	107.60
36	B2	618	C	C1'-O4'-C4'	5.03	113.92	109.90
36	B2	1027	A	O3'-P-O5'	5.03	113.55	104.00
36	B2	1682	C	O4'-C1'-N1	5.03	112.22	108.20
36	B2	1819	A	N9-C1'-C2'	5.03	120.53	114.00
62	Cb	35	VAL	O-C-N	-5.03	114.66	122.70
85	A5	4196	G	O4'-C1'-N9	-5.03	104.18	108.20
34	AQ	31	LEU	C-N-CA	5.02	134.26	121.70
36	B2	687	C	P-O3'-C3'	5.02	125.73	119.70
36	B2	1005	G	O4'-C1'-C2'	5.02	112.12	107.60
85	A5	735	G	O4'-C1'-C2'	-5.02	100.78	105.80
85	A5	1382	G	C3'-C2'-C1'	5.02	105.52	101.50
85	A5	2670	C	C4'-C3'-C2'	-5.02	97.58	102.60
35	Ah	179	MET	CA-CB-CG	-5.02	104.76	113.30
36	B2	798	G	O4'-C1'-N9	-5.02	104.18	108.20
81	CE	69	TYR	C-N-CA	5.02	134.26	121.70
85	A5	1804	A	C3'-C2'-C1'	5.02	105.52	101.50
3	AU	103	SER	O-C-N	-5.02	114.67	122.70
85	A5	337	U	O4'-C1'-C2'	-5.02	100.78	105.80
85	A5	1769	G	O4'-C1'-N9	-5.02	104.18	108.20
85	A5	3669	G	O4'-C1'-N9	5.02	112.22	108.20
18	AY	34	THR	N-CA-C	5.02	124.55	111.00
36	B2	21	U	C1'-O4'-C4'	5.02	113.92	109.90
36	B2	1239	U	O3'-P-O5'	5.02	113.54	104.00
53	CT	51	GLY	N-CA-C	-5.02	100.55	113.10
85	A5	1514	U	O4'-C1'-N1	5.02	112.22	108.20
85	A5	1698	C	O4'-C1'-C2'	-5.02	100.78	105.80
85	A5	2091	C	P-O3'-C3'	5.02	125.72	119.70
85	A5	2318	G	N9-C1'-C2'	-5.02	106.48	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2826	U	C4'-C3'-C2'	-5.02	97.58	102.60
10	AN	82	PRO	CA-C-N	-5.02	106.16	117.20
15	AB	38	MET	CB-CA-C	5.02	120.44	110.40
25	Af	86	THR	N-CA-C	-5.02	97.45	111.00
36	B2	219	U	C3'-C2'-C1'	5.02	105.51	101.50
49	CQ	9	LYS	O-C-N	5.02	130.73	122.70
85	A5	2114	G	C3'-C2'-C1'	-5.02	97.49	101.50
85	A5	4660	G	P-O3'-C3'	5.02	125.72	119.70
85	A5	4684	A	C3'-C2'-C1'	5.02	105.51	101.50
36	B2	1013	U	O4'-C1'-N1	5.02	112.21	108.20
85	A5	1996	C	O4'-C1'-C2'	-5.02	100.78	105.80
85	A5	2553	A	O4'-C4'-C3'	-5.02	98.98	104.00
36	B2	587	A	O4'-C1'-N9	5.01	112.21	108.20
60	Cr	82	ILE	N-CA-C	5.01	124.54	111.00
63	CB	149	ASP	C-N-CA	-5.01	109.16	121.70
64	CF	220	MET	CA-C-N	-5.01	106.17	117.20
85	A5	147	A	C1'-O4'-C4'	5.01	113.91	109.90
85	A5	641	G	C3'-C2'-C1'	-5.01	97.49	101.50
85	A5	1048	G	C1'-O4'-C4'	-5.01	105.89	109.90
85	A5	1866	U	C1'-O4'-C4'	-5.01	105.89	109.90
25	Af	148	TYR	CB-CG-CD1	-5.01	117.99	121.00
59	CZ	99	ASP	CA-CB-CG	5.01	124.43	113.40
36	B2	386	C	O4'-C1'-N1	5.01	112.21	108.20
36	B2	1250	A	N9-C1'-C2'	-5.01	106.49	112.00
36	B2	1310	U	O4'-C1'-N1	5.01	112.21	108.20
85	A5	1072	C	P-O3'-C3'	5.01	125.71	119.70
85	A5	1566	C	C3'-C2'-C1'	5.01	105.51	101.50
85	A5	2699	C	P-O3'-C3'	5.01	125.71	119.70
85	A5	4872	G	P-O5'-C5'	-5.01	112.88	120.90
36	B2	85	A	P-O3'-C3'	5.01	125.71	119.70
36	B2	1446	A	C4'-C3'-O3'	5.01	123.02	113.00
36	B2	1619	A	P-O3'-C3'	5.01	125.71	119.70
39	Cq	37	SER	CB-CA-C	5.01	119.62	110.10
63	CB	296	GLY	N-CA-C	-5.01	100.58	113.10
85	A5	714	G	C1'-O4'-C4'	-5.01	105.89	109.90
85	A5	1338	G	C3'-C2'-C1'	-5.01	97.49	101.50
85	A5	2559	G	C3'-C2'-C1'	-5.01	97.49	101.50
85	A5	3619	G	P-O3'-C3'	5.01	125.71	119.70
85	A5	4544	A	C4'-C3'-O3'	5.01	123.02	113.00
36	B2	301	A	N9-C1'-C2'	-5.01	106.49	112.00
36	B2	351	G	O4'-C4'-C3'	-5.01	98.99	104.00
36	B2	496	C	C3'-C2'-C1'	5.01	105.51	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
69	Cg	83	CYS	CB-CA-C	5.01	120.42	110.40
82	CG	74	LEU	CA-CB-CG	-5.01	103.78	115.30
85	A5	477	C	N1-C1'-C2'	-5.01	106.49	112.00
85	A5	1286	C	N1-C1'-C2'	-5.01	106.49	112.00
85	A5	2041	A	C1'-O4'-C4'	5.01	113.91	109.90
85	A5	2330	G	C1'-O4'-C4'	5.01	113.91	109.90
36	B2	244	A	C1'-O4'-C4'	5.01	113.91	109.90
37	BC	27	U	C1'-O4'-C4'	5.01	113.91	109.90
85	A5	207	G	O4'-C1'-C2'	5.01	112.11	107.60
85	A5	1298	C	N1-C1'-C2'	5.01	120.51	114.00
85	A5	1644	C	O4'-C1'-N1	5.01	112.20	108.20
85	A5	2765	A	O5'-C5'-C4'	5.01	121.21	111.70
85	A5	4623	G	O4'-C1'-N9	5.01	112.20	108.20
36	B2	575	A	C1'-O4'-C4'	-5.00	105.90	109.90
36	B2	1578	U	C5'-C4'-O4'	5.00	115.11	109.10
64	CF	21	LYS	CB-CG-CD	5.00	124.61	111.60
85	A5	1830	G	O4'-C1'-N9	5.00	112.20	108.20
85	A5	4719	G	N9-C1'-C2'	5.00	120.51	114.00
85	A5	4838	U	P-O5'-C5'	-5.00	112.89	120.90
36	B2	71	G	N9-C1'-C2'	-5.00	106.50	112.00
36	B2	79	A	C1'-O4'-C4'	5.00	113.90	109.90
36	B2	1338	G	C4'-C3'-C2'	-5.00	97.60	102.60
49	CQ	11	ARG	CA-C-O	5.00	130.61	120.10
52	CS	88	SER	CB-CA-C	-5.00	100.59	110.10
78	Co	73	VAL	CB-CA-C	-5.00	101.89	111.40
85	A5	268	G	C3'-C2'-C1'	-5.00	97.50	101.50
85	A5	1547	A	C1'-O4'-C4'	5.00	113.90	109.90
85	A5	1812	C	C1'-O4'-C4'	-5.00	105.90	109.90
85	A5	1847	C	C3'-C2'-C1'	5.00	105.50	101.50
85	A5	2105	A	O3'-P-O5'	5.00	113.51	104.00
85	A5	2855	G	C3'-C2'-C1'	5.00	105.50	101.50
85	A5	4870	G	C4'-C3'-C2'	5.00	107.60	102.60
85	A5	4934	A	C3'-C2'-C1'	5.00	105.50	101.50
85	A5	4981	G	C5'-C4'-O4'	-5.00	103.09	109.10
85	A5	5033	G	C1'-O4'-C4'	-5.00	105.90	109.90
4	AK	55	ARG	CD-NE-CZ	5.00	130.60	123.60
36	B2	596	U	P-O3'-C3'	5.00	125.70	119.70
36	B2	834	C	O4'-C1'-N1	5.00	112.20	108.20
36	B2	1430	C	P-O5'-C5'	-5.00	112.90	120.90
36	B2	1755	C	C3'-C2'-C1'	5.00	105.50	101.50
85	A5	189	G	C1'-O4'-C4'	-5.00	105.90	109.90
85	A5	1437	C	C5'-C4'-C3'	5.00	124.00	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	A5	2619	G	C5'-C4'-O4'	5.00	115.10	109.10
85	A5	3964	U	C5'-C4'-O4'	5.00	115.10	109.10

All (42) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	Az	73	THR	CA
1	Az	854	PHE	CA
8	AS	92	ASP	CA
12	AR	3	ARG	CA
14	AT	93	SER	CA
18	AY	86	GLU	CA
26	AJ	138	ARG	CA
27	AE	171	ASP	CA
28	AC	172	ASN	CA
36	B2	554	A	C1'
36	B2	798	G	C4'
36	B2	839	C	C1'
36	B2	1155	U	C1'
36	B2	1418	C	C1'
36	B2	1507	G	C1'
37	BC	17	G	C4'
38	Cz	28	PHE	CA
38	Cz	210	MET	CA
40	CK	99	LYS	CA
45	Ca	120	GLN	CA
46	CN	79	ALA	CA
48	CD	285	ALA	CA
58	CW	73	ARG	CA
58	CW	83	THR	CA
59	CZ	79	HIS	CA
61	Ch	78	TYR	CA
64	CF	98	ILE	CA
67	Ce	16	ARG	CA
81	CE	31	ASN	CA
81	CE	42	PRO	CA
81	CE	118	THR	CA
81	CE	119	GLU	CA
81	CE	127	SER	CA
82	CG	200	THR	CA
84	Cu	45	GLU	CA
85	A5	1072	C	C1'

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Mol	Chain	Res	Type	Atom
85	A5	2097	U	C1'
85	A5	2112	G	C1'
85	A5	2126	G	C1'
85	A5	2258	C	C1'
85	A5	4626	A	C1'
85	A5	4942	C	C1'

All (587) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
16	AA	146	ALA	Mainchain
16	AA	185	MET	Mainchain
16	AA	192	GLU	Peptide,Mainchain
16	AA	199	PRO	Mainchain
16	AA	206	ASP	Peptide,Mainchain
16	AA	23	THR	Mainchain
16	AA	4	ALA	Peptide
16	AA	63	ARG	Sidechain
16	AA	97	THR	Mainchain
15	AB	146	ARG	Peptide
15	AB	56	LYS	Mainchain
15	AB	75	GLN	Peptide
15	AB	76	ASN	Peptide
28	AC	112	VAL	Peptide,Mainchain
28	AC	172	ASN	Peptide
28	AC	175	GLY	Mainchain
28	AC	256	TRP	Mainchain
28	AC	53	GLY	Mainchain
28	AC	58	LYS	Mainchain
23	AD	144	GLY	Peptide
23	AD	190	LEU	Mainchain
23	AD	3	VAL	Peptide,Mainchain
23	AD	96	LEU	Mainchain
27	AE	1	MET	Peptide
27	AE	129	ILE	Peptide
30	AF	43	GLU	Peptide
30	AF	44	LYS	Peptide
30	AF	79	HIS	Peptide
29	AG	155	GLN	Mainchain
31	AH	105	THR	Peptide
31	AH	108	SER	Peptide
31	AH	109	ARG	Sidechain

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Mol	Chain	Res	Type	Group
31	AH	113	LYS	Mainchain
31	AH	118	ARG	Sidechain
31	AH	16	PRO	Peptide
31	AH	17	ASP	Peptide
31	AH	190	PRO	Peptide
31	AH	193	GLN	Peptide
31	AH	53	VAL	Peptide
33	AI	123	ARG	Mainchain
33	AI	129	LEU	Mainchain
33	AI	131	PRO	Mainchain
33	AI	155	ASN	Peptide
33	AI	190	LEU	Mainchain
33	AI	2	GLY	Mainchain
33	AI	3	ILE	Peptide
33	AI	55	TYR	Sidechain
26	AJ	146	SER	Mainchain
26	AJ	16	PRO	Peptide
26	AJ	161	LEU	Peptide,Mainchain
26	AJ	162	ARG	Peptide
26	AJ	164	PRO	Mainchain
26	AJ	165	TYR	Peptide
26	AJ	85	GLY	Mainchain
26	AJ	90	GLY	Peptide
26	AJ	91	LYS	Mainchain
26	AJ	92	MET	Peptide
4	AK	29	MET	Peptide
4	AK	30	PRO	Peptide
4	AK	37	ASP	Peptide
4	AK	43	LEU	Peptide
4	AK	55	ARG	Sidechain
4	AK	70	TYR	Sidechain
4	AK	86	PRO	Peptide
4	AK	89	ILE	Mainchain
4	AK	90	VAL	Mainchain
4	AK	92	ALA	Peptide
4	AK	97	SER	Peptide
11	AL	147	LYS	Peptide
11	AL	149	ALA	Mainchain
11	AL	152	LYS	Mainchain
11	AL	18	GLN	Peptide
11	AL	26	GLY	Peptide
11	AL	27	GLU	Peptide

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Mol	Chain	Res	Type	Group
11	AL	97	ARG	Peptide
7	AM	98	GLY	Peptide
10	AN	13	GLN	Peptide
10	AN	14	SER	Peptide
10	AN	18	TYR	Peptide
10	AN	82	PRO	Peptide
5	AO	138	ASP	Peptide
13	AP	17	TYR	Peptide,Sidechain
13	AP	18	ARG	Sidechain
13	AP	27	ASP	Peptide
13	AP	36	LEU	Peptide
13	AP	37	TYR	Peptide
13	AP	38	SER	Peptide
13	AP	48	GLY	Peptide,Mainchain
13	AP	50	ARG	Peptide
34	AQ	146	ARG	Sidechain
34	AQ	31	LEU	Peptide
34	AQ	43	GLU	Peptide
34	AQ	47	LEU	Peptide
12	AR	1	MET	Mainchain
12	AR	122	PRO	Peptide
12	AR	88	VAL	Peptide,Mainchain
12	AR	89	SER	Peptide
8	AS	10	GLN	Peptide
8	AS	141	ARG	Mainchain
8	AS	15	VAL	Peptide
8	AS	40	TYR	Mainchain,Sidechain
8	AS	8	LYS	Peptide
8	AS	87	GLN	Mainchain
8	AS	9	PHE	Peptide
8	AS	93	GLY	Peptide
8	AS	94	LYS	Peptide
14	AT	142	ASN	Peptide,Mainchain
14	AT	4	VAL	Peptide,Mainchain
14	AT	42	HIS	Sidechain
14	AT	82	ARG	Sidechain
3	AU	104	ILE	Mainchain
3	AU	105	SER	Mainchain
3	AU	108	PRO	Peptide
3	AU	46	LYS	Peptide
3	AU	50	VAL	Peptide
3	AU	68	THR	Peptide

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Mol	Chain	Res	Type	Group
3	AU	70	CYS	Mainchain
3	AU	93	SER	Mainchain
17	AV	25	GLY	Peptide
17	AV	30	ALA	Mainchain
17	AV	31	SER	Peptide
17	AV	48	GLY	Peptide,Mainchain
17	AV	49	GLN	Peptide
17	AV	61	ARG	Sidechain
17	AV	63	GLY	Mainchain
17	AV	81	LYS	Peptide,Mainchain
17	AV	9	VAL	Peptide
32	AW	2	VAL	Mainchain
32	AW	84	LYS	Peptide
6	AX	1	MET	Peptide
6	AX	127	ASN	Peptide
6	AX	23	HIS	Mainchain
6	AX	42	GLY	Peptide
18	AY	103	SER	Peptide
18	AY	32	LYS	Peptide
18	AY	33	ALA	Peptide
18	AY	34	THR	Peptide
18	AY	85	ASN	Peptide
18	AY	86	GLU	Mainchain
19	AZ	101	SER	Mainchain
19	AZ	104	ARG	Mainchain,Sidechain
19	AZ	41	ARG	Peptide
19	AZ	93	SER	Peptide
19	AZ	95	GLY	Peptide
20	Aa	105	GLY	Peptide
20	Aa	96	THR	Peptide,Mainchain
21	Ab	2	PRO	Mainchain
21	Ab	36	LYS	Peptide
21	Ab	37	CYS	Mainchain
24	Ae	19	VAL	Mainchain
24	Ae	20	ALA	Peptide,Mainchain
24	Ae	22	GLN	Mainchain
24	Ae	23	GLU	Peptide
25	Af	102	VAL	Peptide
25	Af	105	TYR	Peptide
25	Af	135	HIS	Mainchain
25	Af	148	TYR	Peptide
25	Af	84	SER	Peptide

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Mol	Chain	Res	Type	Group
25	Af	90	LYS	Peptide
2	Ag	12	LYS	Peptide
2	Ag	142	VAL	Mainchain
2	Ag	148	SER	Mainchain
2	Ag	158	PRO	Peptide
2	Ag	159	ASN	Peptide,Mainchain
2	Ag	160	SER	Peptide
2	Ag	192	THR	Peptide
2	Ag	273	GLU	Peptide
2	Ag	283	PRO	Peptide
2	Ag	47	ARG	Peptide
2	Ag	59	LEU	Mainchain
2	Ag	60	ARG	Peptide
35	Ah	143	GLU	Mainchain
35	Ah	161	PRO	Peptide,Mainchain
35	Ah	169	GLY	Mainchain
1	Az	102	LEU	Mainchain
1	Az	108	HIS	Peptide
1	Az	111	PHE	Sidechain
1	Az	112	SER	Peptide,Mainchain
1	Az	121	VAL	Mainchain
1	Az	123	ASP	Mainchain
1	Az	193	GLY	Mainchain
1	Az	196	GLU	Peptide
1	Az	197	SER	Peptide
1	Az	199	PRO	Peptide
1	Az	242	GLY	Peptide,Mainchain
1	Az	245	GLY	Peptide
1	Az	246	PRO	Peptide
1	Az	247	ALA	Peptide
1	Az	266	PHE	Peptide,Mainchain
1	Az	269	ALA	Mainchain
1	Az	272	LYS	Peptide
1	Az	325	SER	Peptide
1	Az	4	PHE	Peptide
1	Az	403	PRO	Peptide
1	Az	406	ASP	Peptide
1	Az	408	GLY	Peptide
1	Az	42	LYS	Mainchain
1	Az	495	ARG	Peptide,Mainchain
1	Az	540	GLU	Peptide
1	Az	55	ARG	Peptide

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Mol	Chain	Res	Type	Group
1	Az	573	SER	Peptide
1	Az	574	ASP	Peptide
1	Az	667	LYS	Peptide
1	Az	669	VAL	Peptide
1	Az	702	PHE	Sidechain
1	Az	775	GLN	Peptide
1	Az	807	GLN	Peptide
1	Az	827	ASN	Peptide
1	Az	847	GLY	Peptide
1	Az	854	PHE	Mainchain,Sidechain
51	CA	67	TYR	Sidechain
63	CB	110	ILE	Mainchain
63	CB	111	SER	Peptide
63	CB	113	GLU	Peptide
63	CB	15	GLY	Mainchain
63	CB	16	PHE	Mainchain
63	CB	248	LEU	Peptide,Mainchain
63	CB	255	GLY	Mainchain
63	CB	291	TYR	Peptide
63	CB	292	LEU	Peptide
63	CB	293	ILE	Mainchain
63	CB	298	LEU	Mainchain
63	CB	355	THR	Mainchain
63	CB	392	LEU	Peptide
63	CB	40	PRO	Peptide
63	CB	7	SER	Mainchain
63	CB	76	VAL	Mainchain
63	CB	77	THR	Peptide
74	CC	108	TRP	Peptide,Mainchain
74	CC	12	SER	Peptide,Mainchain
74	CC	150	LEU	Peptide,Mainchain
74	CC	188	ARG	Sidechain
74	CC	221	PHE	Sidechain
74	CC	262	GLU	Mainchain
74	CC	267	TRP	Mainchain
74	CC	274	LYS	Peptide
74	CC	305	PRO	Mainchain
74	CC	306	ARG	Peptide,Mainchain
74	CC	307	LYS	Mainchain
74	CC	308	LYS	Mainchain
74	CC	310	HIS	Peptide
74	CC	313	VAL	Peptide

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Mol	Chain	Res	Type	Group
74	CC	314	LEU	Peptide
74	CC	320	LYS	Peptide
74	CC	321	ASN	Peptide
74	CC	323	ARG	Sidechain
74	CC	337	ARG	Sidechain
74	CC	346	ASN	Mainchain
74	CC	54	VAL	Peptide,Mainchain
74	CC	84	THR	Mainchain
74	CC	85	HIS	Peptide
74	CC	88	GLY	Peptide
48	CD	170	GLY	Mainchain
48	CD	218	ALA	Peptide
48	CD	222	GLN	Peptide
48	CD	252	VAL	Peptide
48	CD	254	GLU	Peptide
48	CD	256	LYS	Peptide
48	CD	259	LYS	Peptide,Mainchain
48	CD	261	VAL	Peptide
48	CD	262	LYS	Peptide
48	CD	269	PRO	Peptide
48	CD	284	LYS	Peptide
48	CD	33	ARG	Sidechain
48	CD	57	ASN	Peptide
48	CD	66	TYR	Peptide
81	CE	105	ARG	Peptide
81	CE	114	ARG	Peptide,Sidechain
81	CE	115	TYR	Peptide
81	CE	117	PRO	Mainchain
81	CE	118	THR	Mainchain
81	CE	125	LEU	Peptide
81	CE	126	LEU	Peptide,Mainchain
81	CE	127	SER	Peptide
81	CE	128	HIS	Peptide
81	CE	129	GLY	Peptide
81	CE	131	LYS	Peptide
81	CE	132	PRO	Peptide
81	CE	134	SER	Mainchain
81	CE	140	LEU	Mainchain
81	CE	188	ARG	Sidechain
81	CE	223	ARG	Peptide
81	CE	224	LYS	Peptide
81	CE	225	PRO	Peptide

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Mol	Chain	Res	Type	Group
81	CE	229	GLU	Peptide
81	CE	27	VAL	Peptide
81	CE	30	GLY	Mainchain
81	CE	31	ASN	Peptide
81	CE	32	LEU	Mainchain
81	CE	36	LYS	Mainchain
81	CE	38	LYS	Peptide
81	CE	41	LYS	Peptide
81	CE	42	PRO	Peptide
81	CE	57	TYR	Sidechain
81	CE	59	ARG	Sidechain
81	CE	78	SER	Peptide
81	CE	80	VAL	Peptide
81	CE	84	LYS	Peptide,Mainchain
81	CE	93	THR	Mainchain
64	CF	20	LYS	Peptide
64	CF	22	ARG	Mainchain
64	CF	23	ARG	Mainchain
64	CF	46	ARG	Sidechain
82	CG	105	GLU	Peptide
82	CG	106	THR	Mainchain
82	CG	162	ASP	Peptide
82	CG	183	ILE	Peptide,Mainchain
82	CG	32	PHE	Mainchain
82	CG	33	GLU	Peptide
82	CG	56	LYS	Peptide
82	CG	79	ALA	Peptide
82	CG	86	ALA	Peptide
80	CH	106	GLN	Peptide
80	CH	107	GLU	Peptide
80	CH	110	SER	Peptide
80	CH	189	GLN	Peptide
80	CH	190	ALA	Peptide
80	CH	21	LYS	Peptide
80	CH	40	HIS	Mainchain
80	CH	49	GLY	Mainchain
47	CI	104	SER	Mainchain
47	CI	107	GLY	Peptide
47	CI	108	ALA	Peptide
47	CI	198	LYS	Peptide,Mainchain
47	CI	199	TYR	Peptide
47	CI	203	HIS	Mainchain

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Mol	Chain	Res	Type	Group
47	CI	206	LEU	Peptide
47	CI	211	VAL	Mainchain
47	CI	24	ARG	Peptide
47	CI	3	ARG	Peptide
47	CI	4	ARG	Sidechain
47	CI	5	PRO	Peptide
40	CK	10	ILE	Peptide
40	CK	114	ARG	Mainchain
40	CK	130	LYS	Mainchain
40	CK	27	ALA	Peptide
40	CK	4	LYS	Peptide
40	CK	44	ASP	Mainchain
40	CK	86	LYS	Peptide
40	CK	98	ILE	Peptide
42	CL	11	LYS	Peptide
42	CL	128	PRO	Peptide,Mainchain
42	CL	13	HIS	Peptide
42	CL	132	SER	Peptide
42	CL	155	MET	Mainchain
42	CL	161	TYR	Mainchain,Sidechain
42	CL	163	LYS	Mainchain
42	CL	164	GLU	Peptide
42	CL	166	ALA	Peptide,Mainchain
42	CL	4	SER	Mainchain
42	CL	45	ARG	Mainchain
42	CL	47	ALA	Peptide
42	CL	51	ALA	Peptide
42	CL	56	ARG	Sidechain
42	CL	87	HIS	Peptide
42	CL	9	VAL	Peptide
44	CM	2	VAL	Peptide,Mainchain
44	CM	3	PHE	Peptide
44	CM	6	PHE	Mainchain
44	CM	67	SER	Peptide
44	CM	68	ALA	Peptide
44	CM	72	TYR	Sidechain
44	CM	81	ASP	Peptide
46	CN	48	ALA	Peptide
46	CN	77	LYS	Mainchain
46	CN	79	ALA	Mainchain
41	CO	110	PRO	Peptide
41	CO	63	ASN	Peptide

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Mol	Chain	Res	Type	Group
54	CP	108	ASP	Mainchain
54	CP	63	TYR	Peptide
49	CQ	1	MET	Peptide
49	CQ	11	ARG	Peptide,Mainchain
49	CQ	12	LYS	Mainchain
49	CQ	156	PRO	Peptide
49	CQ	2	GLY	Peptide
49	CQ	38	ARG	Mainchain
49	CQ	39	THR	Peptide
49	CQ	40	ASN	Mainchain
49	CQ	6	ARG	Peptide
50	CR	143	HIS	Sidechain
50	CR	42	ARG	Mainchain
52	CS	151	LYS	Peptide
52	CS	152	PHE	Mainchain
52	CS	171	ARG	Peptide
52	CS	173	ASN	Mainchain
52	CS	18	PRO	Peptide,Mainchain
52	CS	35	PRO	Mainchain
52	CS	75	VAL	Peptide
52	CS	81	TRP	Mainchain
52	CS	87	ARG	Peptide
52	CS	88	SER	Peptide
52	CS	89	GLY	Peptide
53	CT	123	GLY	Mainchain
53	CT	130	ARG	Mainchain
53	CT	137	GLU	Peptide
53	CT	138	ALA	Peptide
53	CT	140	PHE	Sidechain
53	CT	141	VAL	Mainchain
53	CT	144	ASN	Peptide
53	CT	151	LEU	Peptide
53	CT	18	PRO	Peptide
53	CT	24	VAL	Peptide
53	CT	75	VAL	Mainchain
53	CT	81	LYS	Peptide
53	CT	92	ARG	Peptide
55	CU	57	GLY	Peptide
55	CU	58	GLY	Peptide
55	CU	60	VAL	Mainchain
55	CU	76	VAL	Peptide
43	CV	44	GLY	Peptide

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Mol	Chain	Res	Type	Group
43	CV	46	LYS	Peptide
58	CW	1	MET	Mainchain
58	CW	16	GLY	Mainchain
58	CW	22	ALA	Mainchain
58	CW	23	ARG	Peptide
58	CW	24	THR	Peptide
58	CW	25	ASP	Peptide
58	CW	32	LEU	Mainchain
58	CW	70	LYS	Peptide
58	CW	72	THR	Peptide
58	CW	73	ARG	Sidechain
58	CW	97	LYS	Peptide
56	CX	117	TYR	Mainchain
56	CX	37	LYS	Peptide
56	CX	38	LYS	Peptide
56	CX	53	ARG	Sidechain
56	CX	57	GLN	Peptide
57	CY	42	TYR	Mainchain
57	CY	62	TYR	Mainchain
57	CY	66	GLN	Peptide
57	CY	82	ILE	Mainchain
57	CY	84	ARG	Peptide
57	CY	97	VAL	Mainchain
59	CZ	101	PHE	Sidechain
59	CZ	34	SER	Peptide
59	CZ	35	ASP	Peptide
59	CZ	55	ALA	Peptide
59	CZ	57	MET	Peptide
45	Ca	105	ARG	Sidechain
45	Ca	114	LYS	Mainchain
45	Ca	115	GLY	Peptide
45	Ca	118	PRO	Peptide
45	Ca	3	SER	Peptide,Mainchain
45	Ca	51	GLY	Mainchain
45	Ca	89	ASN	Peptide
45	Ca	97	ALA	Peptide
62	Cb	19	ASN	Peptide
62	Cb	20	GLY	Peptide
62	Cb	26	SER	Peptide
65	Cc	108	MET	Peptide,Mainchain
65	Cc	92	CYS	Peptide
66	Cd	105	LEU	Mainchain

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Mol	Chain	Res	Type	Group
66	Cd	112	THR	Peptide
66	Cd	114	PHE	Peptide,Mainchain
66	Cd	12	LYS	Peptide
66	Cd	14	ARG	Sidechain
66	Cd	18	ASN	Peptide
66	Cd	19	GLU	Peptide
66	Cd	58	GLY	Peptide,Mainchain
67	Ce	1	MET	Peptide
67	Ce	11	LYS	Peptide
67	Ce	130	ARG	Peptide
67	Ce	16	ARG	Peptide
67	Ce	95	TYR	Sidechain
68	Cf	100	ARG	Mainchain,Sidechain
68	Cf	3	GLY	Peptide
68	Cf	30	ILE	Peptide
68	Cf	33	VAL	Peptide
68	Cf	34	TYR	Peptide
68	Cf	5	LEU	Peptide
68	Cf	52	LYS	Peptide,Mainchain
68	Cf	53	ALA	Peptide
68	Cf	55	ASN	Peptide
68	Cf	56	ASN	Peptide
68	Cf	57	THR	Peptide
68	Cf	6	TRP	Peptide
69	Cg	41	ALA	Mainchain
69	Cg	44	SER	Peptide
69	Cg	45	ALA	Peptide
69	Cg	77	ALA	Peptide
61	Ch	118	LYS	Mainchain
61	Ch	119	TYR	Peptide
61	Ch	121	VAL	Mainchain
61	Ch	36	VAL	Mainchain
61	Ch	38	GLY	Peptide
61	Ch	40	ALA	Peptide
61	Ch	75	GLY	Peptide
61	Ch	78	TYR	Mainchain
70	Ci	11	LEU	Peptide
70	Ci	32	ARG	Sidechain
70	Ci	4	ARG	Peptide
70	Ci	5	TYR	Peptide
70	Ci	6	PRO	Peptide
70	Ci	63	VAL	Mainchain

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Mol	Chain	Res	Type	Group
71	Cj	86	PRO	Peptide
72	Ck	30	ASP	Mainchain
72	Ck	62	PRO	Peptide
75	Cm	104	HIS	Mainchain
75	Cm	105	PRO	Peptide,Mainchain
75	Cm	106	ARG	Peptide
78	Co	3	ASN	Mainchain
78	Co	34	TYR	Mainchain
78	Co	72	CYS	Peptide
78	Co	76	ASN	Peptide
77	Cp	91	ASP	Peptide
39	Cq	110	ALA	Peptide
39	Cq	133	GLU	Mainchain
39	Cq	142	GLY	Peptide
39	Cq	148	SER	Peptide
39	Cq	155	LEU	Peptide
39	Cq	205	ASP	Peptide
39	Cq	206	ILE	Peptide
39	Cq	263	GLU	Mainchain
39	Cq	32	ALA	Mainchain
39	Cq	33	ASP	Mainchain
39	Cq	44	ARG	Sidechain
39	Cq	57	LYS	Mainchain
39	Cq	6	ARG	Peptide
39	Cq	91	THR	Mainchain
60	Cr	112	ARG	Sidechain
60	Cr	136	SER	Mainchain
60	Cr	36	ASN	Mainchain
60	Cr	40	TYR	Sidechain
60	Cr	43	LEU	Peptide
60	Cr	56	ASP	Peptide
60	Cr	60	VAL	Peptide
60	Cr	66	ARG	Peptide,Sidechain
60	Cr	72	LYS	Peptide
60	Cr	80	THR	Mainchain
60	Cr	81	THR	Peptide,Mainchain
60	Cr	82	ILE	Peptide
38	Cz	209	THR	Mainchain
38	Cz	27	LYS	Mainchain
38	Cz	28	PHE	Mainchain,Sidechain
38	Cz	98	LYS	Peptide
38	Cz	99	LEU	Mainchain

5.2 Too-close contacts

Due to software issues we are unable to calculate clashes - this section is therefore empty.

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 PDB entries followed by that with respect to all EM entries.

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
1	Az	854/858 (100%)	766 (90%)	51 (6%)	37 (4%)	2 24
2	Ag	311/317 (98%)	271 (87%)	23 (7%)	17 (6%)	2 21
3	AU	102/119 (86%)	77 (76%)	9 (9%)	16 (16%)	0 4
4	AK	96/165 (58%)	67 (70%)	11 (12%)	18 (19%)	0 2
5	AO	134/151 (89%)	101 (75%)	14 (10%)	19 (14%)	0 4
6	AX	140/143 (98%)	121 (86%)	11 (8%)	8 (6%)	1 20
7	AM	122/132 (92%)	85 (70%)	16 (13%)	21 (17%)	0 3
8	AS	135/152 (89%)	106 (78%)	20 (15%)	9 (7%)	1 17
9	Ad	51/56 (91%)	46 (90%)	3 (6%)	2 (4%)	3 26
10	AN	148/151 (98%)	124 (84%)	18 (12%)	6 (4%)	3 25
11	AL	156/158 (99%)	132 (85%)	10 (6%)	14 (9%)	1 12
12	AR	124/135 (92%)	96 (77%)	13 (10%)	15 (12%)	0 6
13	AP	125/145 (86%)	92 (74%)	16 (13%)	17 (14%)	0 4
14	AT	139/145 (96%)	121 (87%)	8 (6%)	10 (7%)	1 16
15	AB	213/264 (81%)	174 (82%)	24 (11%)	15 (7%)	1 16
16	AA	206/295 (70%)	156 (76%)	23 (11%)	27 (13%)	0 4
17	AV	80/83 (96%)	59 (74%)	10 (12%)	11 (14%)	0 4
18	AY	124/133 (93%)	91 (73%)	15 (12%)	18 (14%)	0 4
19	AZ	73/125 (58%)	52 (71%)	12 (16%)	9 (12%)	0 5
20	Aa	105/115 (91%)	74 (70%)	13 (12%)	18 (17%)	0 3
21	Ab	82/84 (98%)	57 (70%)	14 (17%)	11 (13%)	0 4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
22	Ac	62/69 (90%)	44 (71%)	13 (21%)	5 (8%)	1 13
23	AD	225/243 (93%)	180 (80%)	24 (11%)	21 (9%)	0 11
24	Ae	57/59 (97%)	39 (68%)	5 (9%)	13 (23%)	0 1
25	Af	69/80 (86%)	38 (55%)	13 (19%)	18 (26%)	0 1
26	AJ	180/194 (93%)	138 (77%)	18 (10%)	24 (13%)	0 4
27	AE	261/263 (99%)	210 (80%)	29 (11%)	22 (8%)	1 12
28	AC	224/293 (76%)	203 (91%)	10 (4%)	11 (5%)	2 22
29	AG	235/249 (94%)	202 (86%)	18 (8%)	15 (6%)	1 18
30	AF	189/204 (93%)	162 (86%)	15 (8%)	12 (6%)	1 18
31	AH	188/194 (97%)	146 (78%)	11 (6%)	31 (16%)	0 3
32	AW	127/130 (98%)	111 (87%)	14 (11%)	2 (2%)	9 44
33	AI	204/208 (98%)	169 (83%)	13 (6%)	22 (11%)	0 8
34	AQ	139/146 (95%)	110 (79%)	19 (14%)	10 (7%)	1 16
35	Ah	69/408 (17%)	31 (45%)	15 (22%)	23 (33%)	0 0
38	Cz	213/217 (98%)	189 (89%)	16 (8%)	8 (4%)	3 26
39	Cq	278/317 (88%)	197 (71%)	31 (11%)	50 (18%)	0 2
40	CK	161/165 (98%)	77 (48%)	35 (22%)	49 (30%)	0 0
41	CO	200/203 (98%)	183 (92%)	12 (6%)	5 (2%)	5 34
42	CL	208/211 (99%)	165 (79%)	18 (9%)	25 (12%)	0 6
43	CV	131/140 (94%)	116 (88%)	11 (8%)	4 (3%)	4 30
44	CM	137/215 (64%)	112 (82%)	16 (12%)	9 (7%)	1 17
45	Ca	145/148 (98%)	120 (83%)	14 (10%)	11 (8%)	1 15
46	CN	201/204 (98%)	179 (89%)	9 (4%)	13 (6%)	1 18
47	CI	211/214 (99%)	165 (78%)	27 (13%)	19 (9%)	1 12
48	CD	287/297 (97%)	237 (83%)	24 (8%)	26 (9%)	1 12
49	CQ	186/188 (99%)	152 (82%)	18 (10%)	16 (9%)	1 12
50	CR	187/196 (95%)	165 (88%)	15 (8%)	7 (4%)	3 27
51	CA	253/257 (98%)	210 (83%)	23 (9%)	20 (8%)	1 14
52	CS	173/176 (98%)	137 (79%)	15 (9%)	21 (12%)	0 6
53	CT	157/160 (98%)	131 (83%)	11 (7%)	15 (10%)	0 10
54	CP	150/184 (82%)	134 (89%)	9 (6%)	7 (5%)	2 23

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
55	CU	110/128 (86%)	90 (82%)	13 (12%)	7 (6%)	1 18
56	CX	119/156 (76%)	98 (82%)	14 (12%)	7 (6%)	1 19
57	CY	131/145 (90%)	116 (88%)	11 (8%)	4 (3%)	4 30
58	CW	122/157 (78%)	94 (77%)	13 (11%)	15 (12%)	0 5
59	CZ	133/136 (98%)	109 (82%)	14 (10%)	10 (8%)	1 15
60	Cr	135/137 (98%)	86 (64%)	22 (16%)	27 (20%)	0 2
61	Ch	121/123 (98%)	93 (77%)	14 (12%)	14 (12%)	0 6
62	Cb	76/159 (48%)	58 (76%)	9 (12%)	9 (12%)	0 6
63	CB	395/403 (98%)	322 (82%)	34 (9%)	39 (10%)	0 10
64	CF	227/248 (92%)	209 (92%)	6 (3%)	12 (5%)	2 21
65	Cc	98/115 (85%)	90 (92%)	5 (5%)	3 (3%)	4 30
66	Cd	111/125 (89%)	75 (68%)	20 (18%)	16 (14%)	0 4
67	Ce	131/135 (97%)	102 (78%)	14 (11%)	15 (12%)	0 6
68	Cf	107/110 (97%)	82 (77%)	12 (11%)	13 (12%)	0 6
69	Cg	112/117 (96%)	91 (81%)	7 (6%)	14 (12%)	0 5
70	Ci	101/105 (96%)	78 (77%)	7 (7%)	16 (16%)	0 3
71	Cj	88/97 (91%)	74 (84%)	7 (8%)	7 (8%)	1 14
72	Ck	67/70 (96%)	59 (88%)	5 (8%)	3 (4%)	2 24
73	Cl	48/51 (94%)	37 (77%)	8 (17%)	3 (6%)	1 18
74	CC	366/427 (86%)	259 (71%)	41 (11%)	66 (18%)	0 2
75	Cm	50/52 (96%)	44 (88%)	3 (6%)	3 (6%)	1 19
76	Cn	23/25 (92%)	21 (91%)	2 (9%)	0	100 100
77	Cp	88/92 (96%)	75 (85%)	9 (10%)	4 (4%)	2 24
78	Co	103/106 (97%)	74 (72%)	14 (14%)	15 (15%)	0 4
79	CJ	166/178 (93%)	132 (80%)	20 (12%)	14 (8%)	1 12
80	CH	189/192 (98%)	163 (86%)	18 (10%)	8 (4%)	3 25
81	CE	260/288 (90%)	164 (63%)	39 (15%)	57 (22%)	0 1
82	CG	244/266 (92%)	165 (68%)	31 (13%)	48 (20%)	0 2
83	Cs	55/114 (48%)	53 (96%)	2 (4%)	0	100 100
83	Ct	55/114 (48%)	55 (100%)	0	0	100 100
84	Cu	54/115 (47%)	49 (91%)	1 (2%)	4 (7%)	1 15

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
84	Cv	54/115 (47%)	51 (94%)	0	3 (6%)	2 20
All	All	13166/14959 (88%)	10588 (80%)	1270 (10%)	1308 (10%)	1 10

All (1308) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	Az	4	PHE
1	Az	43	ALA
1	Az	44	GLY
1	Az	45	ILE
1	Az	47	ALA
1	Az	61	LYS
1	Az	71	LYS
1	Az	206	ASP
1	Az	207	PRO
1	Az	240	GLY
1	Az	241	GLU
1	Az	481	LYS
1	Az	498	LYS
1	Az	499	PHE
1	Az	500	SER
1	Az	504	VAL
1	Az	577	VAL
1	Az	716	ARG
1	Az	753	GLU
1	Az	776	VAL
1	Az	778	GLY
1	Az	808	ALA
1	Az	849	PRO
2	Ag	3	GLU
2	Ag	48	ASP
2	Ag	52	TYR
2	Ag	96	THR
2	Ag	282	GLU
2	Ag	283	PRO
3	AU	51	LYS
3	AU	94	PRO
3	AU	95	SER
3	AU	107	GLU
3	AU	118	ASP
4	AK	2	LEU
4	AK	3	MET

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Mol	Chain	Res	Type
4	AK	30	PRO
4	AK	35	LEU
4	AK	39	ASN
4	AK	40	VAL
4	AK	41	PRO
4	AK	44	HIS
4	AK	63	ALA
4	AK	88	GLU
4	AK	89	ILE
5	AO	23	GLU
5	AO	52	THR
5	AO	53	ILE
5	AO	64	ALA
5	AO	104	ARG
5	AO	137	SER
5	AO	138	ASP
5	AO	139	SER
5	AO	140	THR
6	AX	3	LYS
6	AX	4	CYS
7	AM	12	MET
7	AM	15	ASN
7	AM	44	LYS
7	AM	72	HIS
7	AM	77	ILE
7	AM	78	LYS
7	AM	79	VAL
7	AM	81	ASP
7	AM	89	VAL
7	AM	96	ARG
7	AM	100	PRO
7	AM	116	LYS
7	AM	117	GLU
8	AS	11	HIS
8	AS	53	THR
8	AS	59	LEU
8	AS	90	VAL
9	Ad	8	TRP
10	AN	22	VAL
11	AL	5	GLN
11	AL	6	THR
11	AL	7	GLU

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Mol	Chain	Res	Type
11	AL	20	LYS
11	AL	23	VAL
11	AL	147	LYS
11	AL	152	LYS
11	AL	153	LYS
12	AR	88	VAL
12	AR	89	SER
12	AR	100	PRO
12	AR	101	ASP
12	AR	121	GLN
12	AR	123	THR
13	AP	6	GLN
13	AP	11	THR
13	AP	12	PHE
13	AP	37	TYR
13	AP	38	SER
13	AP	68	PRO
13	AP	69	PRO
13	AP	71	GLU
13	AP	73	PRO
13	AP	75	VAL
13	AP	125	PRO
13	AP	126	VAL
13	AP	127	LYS
14	AT	5	THR
14	AT	31	PRO
14	AT	32	GLU
14	AT	33	TRP
14	AT	34	VAL
14	AT	96	SER
14	AT	143	LYS
15	AB	27	LYS
15	AB	77	ASP
15	AB	78	GLU
15	AB	106	THR
15	AB	154	SER
15	AB	179	ASN
15	AB	206	PRO
15	AB	210	VAL
16	AA	9	GLN
16	AA	31	ASP
16	AA	45	GLY

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Mol	Chain	Res	Type
16	AA	103	PHE
16	AA	164	ASN
16	AA	165	ASN
16	AA	188	THR
16	AA	192	GLU
16	AA	203	PHE
16	AA	207	PRO
17	AV	4	ASP
17	AV	10	ASP
17	AV	42	VAL
17	AV	43	THR
17	AV	44	GLY
17	AV	50	PHE
17	AV	65	SER
18	AY	6	THR
18	AY	30	PRO
18	AY	34	THR
18	AY	86	GLU
18	AY	87	PRO
18	AY	100	LYS
18	AY	104	ARG
18	AY	120	THR
19	AZ	93	SER
19	AZ	104	ARG
19	AZ	108	ILE
19	AZ	113	THR
20	Aa	28	ARG
20	Aa	46	GLU
20	Aa	47	ALA
20	Aa	58	VAL
20	Aa	59	PHE
20	Aa	61	ALA
20	Aa	63	VAL
20	Aa	64	LEU
20	Aa	98	PRO
20	Aa	99	PRO
20	Aa	107	ALA
21	Ab	62	VAL
21	Ab	63	LEU
21	Ab	64	CYS
22	Ac	8	PRO
22	Ac	67	ARG

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Mol	Chain	Res	Type
23	AD	2	ALA
23	AD	4	GLN
23	AD	93	THR
23	AD	98	ALA
23	AD	202	LYS
23	AD	205	PRO
23	AD	213	PRO
23	AD	214	LYS
23	AD	216	GLU
23	AD	220	THR
23	AD	221	THR
23	AD	222	PRO
23	AD	223	ILE
23	AD	226	GLN
24	Ae	2	VAL
24	Ae	4	GLY
24	Ae	7	ALA
24	Ae	24	LYS
24	Ae	45	VAL
24	Ae	47	PRO
24	Ae	52	LYS
25	Af	84	SER
25	Af	85	TYR
25	Af	86	THR
25	Af	91	ASN
25	Af	102	VAL
25	Af	106	TYR
25	Af	110	GLU
25	Af	128	ALA
26	AJ	19	PRO
26	AJ	22	LYS
26	AJ	36	GLY
26	AJ	110	LEU
26	AJ	111	GLN
26	AJ	118	GLY
26	AJ	119	LEU
26	AJ	122	SER
26	AJ	138	ARG
26	AJ	161	LEU
26	AJ	163	SER
26	AJ	169	ARG
26	AJ	170	PRO

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Mol	Chain	Res	Type
26	AJ	172	ARG
27	AE	12	VAL
27	AE	24	THR
27	AE	76	VAL
27	AE	95	THR
27	AE	163	ASP
27	AE	196	THR
27	AE	260	GLN
27	AE	261	SER
28	AC	117	ARG
28	AC	119	GLY
28	AC	132	ASP
28	AC	233	LEU
28	AC	275	LYS
29	AG	20	ASP
29	AG	154	ARG
29	AG	164	LYS
29	AG	174	PRO
29	AG	175	LYS
29	AG	180	VAL
29	AG	181	THR
30	AF	43	GLU
30	AF	44	LYS
30	AF	202	SER
30	AF	203	ASN
31	AH	15	LYS
31	AH	16	PRO
31	AH	33	ASN
31	AH	35	ASP
31	AH	66	VAL
31	AH	88	SER
31	AH	108	SER
31	AH	109	ARG
31	AH	110	THR
31	AH	116	ARG
31	AH	135	PHE
31	AH	137	SER
31	AH	138	GLU
31	AH	160	LYS
31	AH	190	PRO
33	AI	8	TRP
33	AI	120	PRO

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Mol	Chain	Res	Type
33	AI	124	LYS
33	AI	131	PRO
33	AI	133	GLU
33	AI	139	LYS
33	AI	140	LYS
33	AI	142	SER
33	AI	143	LYS
33	AI	145	ILE
33	AI	153	LYS
33	AI	154	LYS
33	AI	158	ILE
33	AI	206	LYS
34	AQ	19	ALA
34	AQ	61	GLU
34	AQ	62	ARG
34	AQ	117	ARG
34	AQ	119	LEU
34	AQ	141	TYR
35	Ah	143	GLU
35	Ah	149	GLY
35	Ah	150	GLU
35	Ah	151	PHE
35	Ah	154	ASP
35	Ah	155	ARG
35	Ah	176	GLY
35	Ah	178	GLY
35	Ah	299	LYS
35	Ah	300	ASP
38	Cz	60	ARG
38	Cz	81	ASP
38	Cz	84	HIS
38	Cz	209	THR
38	Cz	210	MET
39	Cq	25	PRO
39	Cq	27	CYS
39	Cq	37	SER
39	Cq	69	LEU
39	Cq	70	GLU
39	Cq	73	PRO
39	Cq	74	ALA
39	Cq	108	PRO
39	Cq	109	ALA

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Mol	Chain	Res	Type
39	Cq	126	GLN
39	Cq	135	THR
39	Cq	140	ALA
39	Cq	149	ARG
39	Cq	150	GLY
39	Cq	182	PRO
39	Cq	183	PHE
39	Cq	184	SER
39	Cq	185	PHE
39	Cq	201	PRO
39	Cq	232	PRO
39	Cq	237	VAL
39	Cq	257	TYR
39	Cq	260	PRO
39	Cq	261	LEU
39	Cq	263	GLU
40	CK	2	PRO
40	CK	5	PHE
40	CK	7	PRO
40	CK	8	ASN
40	CK	9	GLU
40	CK	28	LEU
40	CK	30	PRO
40	CK	38	SER
40	CK	39	PRO
40	CK	54	LYS
40	CK	58	ILE
40	CK	86	LYS
40	CK	89	PRO
40	CK	92	ARG
40	CK	98	ILE
40	CK	105	THR
40	CK	117	ARG
40	CK	118	HIS
40	CK	119	ARG
40	CK	121	LEU
40	CK	126	SER
40	CK	135	THR
40	CK	141	CYS
40	CK	142	ASN
40	CK	144	ASP
40	CK	147	HIS

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Mol	Chain	Res	Type
40	CK	148	PRO
40	CK	149	HIS
40	CK	159	ALA
41	CO	110	PRO
41	CO	111	PRO
41	CO	182	GLU
42	CL	3	PRO
42	CL	14	PHE
42	CL	47	ALA
42	CL	49	ARG
42	CL	50	PRO
42	CL	51	ALA
42	CL	52	SER
42	CL	54	PRO
42	CL	129	ARG
42	CL	130	LYS
42	CL	131	PRO
42	CL	134	PRO
42	CL	143	GLU
42	CL	151	THR
42	CL	153	PRO
42	CL	155	MET
42	CL	160	VAL
42	CL	165	LYS
42	CL	166	ALA
44	CM	3	PHE
44	CM	4	ARG
44	CM	35	ARG
44	CM	43	THR
44	CM	65	PRO
44	CM	71	LYS
45	Ca	48	TYR
45	Ca	76	ASP
45	Ca	94	LYS
45	Ca	97	ALA
45	Ca	98	ALA
45	Ca	118	PRO
45	Ca	119	LYS
46	CN	79	ALA
46	CN	80	THR
46	CN	81	TYR
46	CN	125	SER

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Mol	Chain	Res	Type
46	CN	146	PRO
46	CN	147	ASP
46	CN	184	ILE
47	CI	3	ARG
47	CI	6	ALA
47	CI	104	SER
47	CI	106	ALA
47	CI	110	ARG
47	CI	112	GLN
47	CI	113	THR
47	CI	200	VAL
47	CI	201	PRO
47	CI	205	PRO
47	CI	206	LEU
47	CI	207	ASP
48	CD	20	PHE
48	CD	44	TYR
48	CD	58	ARG
48	CD	187	SER
48	CD	189	GLU
48	CD	219	TYR
48	CD	220	LYS
48	CD	233	PRO
48	CD	234	ASP
48	CD	253	TYR
48	CD	259	LYS
48	CD	261	VAL
48	CD	271	MET
48	CD	272	SER
48	CD	285	ALA
49	CQ	11	ARG
49	CQ	98	LEU
49	CQ	147	GLU
49	CQ	153	GLY
49	CQ	160	HIS
50	CR	16	ARG
51	CA	115	CYS
51	CA	142	GLU
51	CA	219	ILE
51	CA	221	LYS
51	CA	222	PRO
51	CA	230	PRO

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Mol	Chain	Res	Type
51	CA	231	ALA
51	CA	233	ARG
51	CA	234	LYS
51	CA	249	THR
51	CA	251	THR
51	CA	255	LYS
52	CS	16	CYS
52	CS	20	PRO
52	CS	24	THR
52	CS	76	LYS
52	CS	149	LYS
52	CS	152	PHE
52	CS	153	PRO
52	CS	155	PRO
52	CS	171	ARG
52	CS	174	THR
53	CT	5	LYS
53	CT	81	LYS
53	CT	127	GLN
53	CT	134	PRO
53	CT	135	PRO
53	CT	138	ALA
53	CT	158	PHE
54	CP	6	LEU
54	CP	7	ASP
54	CP	8	PRO
54	CP	11	PRO
54	CP	66	GLY
55	CU	17	GLN
56	CX	40	ILE
56	CX	54	LEU
56	CX	58	PRO
56	CX	61	PRO
57	CY	92	GLY
58	CW	73	ARG
58	CW	74	ARG
58	CW	75	ALA
58	CW	77	LYS
58	CW	89	ASP
58	CW	95	ASN
58	CW	98	PRO
58	CW	99	GLU

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Mol	Chain	Res	Type
59	CZ	36	ARG
59	CZ	56	ALA
59	CZ	125	GLY
60	Cr	2	SER
60	Cr	3	ALA
60	Cr	22	LYS
60	Cr	28	GLU
60	Cr	29	PRO
60	Cr	30	ASN
60	Cr	32	LEU
60	Cr	41	ASN
60	Cr	42	GLY
60	Cr	43	LEU
60	Cr	66	ARG
60	Cr	67	ARG
60	Cr	83	ASN
60	Cr	90	LEU
60	Cr	107	ARG
60	Cr	126	VAL
60	Cr	127	LYS
61	Ch	2	ALA
61	Ch	4	ILE
61	Ch	37	THR
61	Ch	77	LYS
61	Ch	78	TYR
61	Ch	85	PRO
61	Ch	86	LYS
61	Ch	115	PRO
61	Ch	120	ALA
61	Ch	122	LYS
62	Cb	25	ARG
62	Cb	37	PRO
62	Cb	38	LYS
63	CB	3	HIS
63	CB	5	LYS
63	CB	19	ARG
63	CB	25	HIS
63	CB	34	LYS
63	CB	40	PRO
63	CB	41	VAL
63	CB	112	ASP
63	CB	113	GLU

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Mol	Chain	Res	Type
63	CB	139	ASP
63	CB	140	GLU
63	CB	144	LYS
63	CB	189	THR
63	CB	293	ILE
63	CB	312	LYS
63	CB	357	ARG
63	CB	393	LYS
64	CF	22	ARG
64	CF	23	ARG
64	CF	25	PHE
64	CF	218	GLY
64	CF	220	MET
64	CF	225	THR
66	Cd	16	ALA
66	Cd	17	ILE
66	Cd	20	VAL
66	Cd	58	GLY
66	Cd	59	THR
66	Cd	60	PRO
66	Cd	96	GLU
66	Cd	97	ASP
66	Cd	113	THR
67	Ce	2	ALA
67	Ce	5	ARG
67	Ce	6	PRO
67	Ce	7	LEU
67	Ce	12	ILE
67	Ce	92	ASN
67	Ce	127	ALA
67	Ce	130	ARG
67	Ce	131	SER
68	Cf	7	SER
68	Cf	31	GLU
68	Cf	34	TYR
68	Cf	57	THR
68	Cf	58	VAL
68	Cf	64	PRO
68	Cf	65	ASN
69	Cg	48	VAL
69	Cg	50	PRO
69	Cg	58	ALA

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Mol	Chain	Res	Type
69	Cg	75	SER
69	Cg	76	ARG
69	Cg	81	SER
70	Ci	2	ALA
70	Ci	4	ARG
70	Ci	5	TYR
70	Ci	6	PRO
70	Ci	9	VAL
70	Ci	12	ASN
70	Ci	20	ASN
70	Ci	23	LYS
70	Ci	24	PRO
70	Ci	34	THR
70	Ci	63	VAL
70	Ci	64	SER
71	Cj	83	THR
71	Cj	86	PRO
71	Cj	87	LYS
71	Cj	90	ALA
73	Cl	37	TYR
74	CC	8	ILE
74	CC	17	SER
74	CC	18	SER
74	CC	23	THR
74	CC	24	LEU
74	CC	25	PRO
74	CC	45	ARG
74	CC	60	HIS
74	CC	61	GLN
74	CC	92	PHE
74	CC	156	ASP
74	CC	175	LYS
74	CC	213	GLU
74	CC	263	LEU
74	CC	267	TRP
74	CC	268	ARG
74	CC	273	LEU
74	CC	274	LYS
74	CC	275	SER
74	CC	276	ASN
74	CC	286	ASN
74	CC	287	THR

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Mol	Chain	Res	Type
74	CC	288	ASP
74	CC	289	LEU
74	CC	295	SER
74	CC	296	PRO
74	CC	304	ALA
74	CC	307	LYS
74	CC	310	HIS
74	CC	311	ARG
74	CC	312	ARG
74	CC	313	VAL
74	CC	318	PRO
74	CC	319	LEU
74	CC	342	ARG
75	Cm	104	HIS
77	Cp	4	ARG
78	Co	14	LYS
78	Co	31	ASP
78	Co	32	SER
78	Co	63	THR
78	Co	65	LYS
78	Co	66	ILE
78	Co	73	VAL
78	Co	74	GLU
78	Co	77	CYS
78	Co	100	LYS
79	CJ	10	ASN
79	CJ	11	PRO
79	CJ	13	ARG
79	CJ	15	LEU
79	CJ	97	ASN
79	CJ	98	ASN
79	CJ	111	GLU
79	CJ	118	LYS
79	CJ	170	TYR
80	CH	42	ASN
80	CH	53	LYS
80	CH	107	GLU
80	CH	110	SER
81	CE	37	PRO
81	CE	41	LYS
81	CE	42	PRO
81	CE	44	CYS

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Mol	Chain	Res	Type
81	CE	45	SER
81	CE	47	ASN
81	CE	51	VAL
81	CE	58	SER
81	CE	60	SER
81	CE	75	ALA
81	CE	76	ALA
81	CE	86	GLU
81	CE	94	LYS
81	CE	96	VAL
81	CE	101	ASN
81	CE	106	VAL
81	CE	115	TYR
81	CE	116	TYR
81	CE	118	THR
81	CE	119	GLU
81	CE	121	VAL
81	CE	128	HIS
81	CE	130	LYS
81	CE	131	LYS
81	CE	138	ARG
81	CE	187	ARG
81	CE	208	ILE
81	CE	214	ASP
81	CE	224	LYS
81	CE	227	HIS
81	CE	230	GLY
81	CE	234	ASP
81	CE	267	LEU
81	CE	278	THR
81	CE	283	PRO
81	CE	284	HIS
82	CG	22	GLN
82	CG	23	GLU
82	CG	24	ALA
82	CG	25	LYS
82	CG	32	PHE
82	CG	36	PRO
82	CG	37	LYS
82	CG	41	ILE
82	CG	44	ASP
82	CG	45	ILE

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Mol	Chain	Res	Type
82	CG	52	THR
82	CG	71	TYR
82	CG	83	PHE
82	CG	86	ALA
82	CG	88	ASP
82	CG	107	LYS
82	CG	120	LYS
82	CG	125	LYS
82	CG	133	PRO
82	CG	161	VAL
82	CG	163	PRO
82	CG	185	LYS
82	CG	212	LYS
82	CG	240	ASN
82	CG	241	VAL
82	CG	242	LEU
82	CG	244	PRO
84	Cu	16	SER
84	Cu	17	SER
84	Cu	18	PRO
84	Cv	18	PRO
1	Az	48	SER
1	Az	53	GLU
1	Az	54	THR
1	Az	62	ASP
2	Ag	49	GLU
2	Ag	60	ARG
2	Ag	144	ASP
2	Ag	159	ASN
2	Ag	171	ASP
2	Ag	281	ALA
2	Ag	295	GLY
3	AU	74	SER
3	AU	98	VAL
4	AK	34	GLU
4	AK	91	PRO
5	AO	54	CYS
5	AO	56	VAL
6	AX	59	ALA
7	AM	45	ARG
8	AS	17	ASN
8	AS	31	THR

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Mol	Chain	Res	Type
8	AS	140	GLY
10	AN	68	GLY
11	AL	4	ILE
11	AL	21	LYS
11	AL	22	ARG
11	AL	57	ASP
12	AR	93	GLN
12	AR	112	GLY
12	AR	125	GLY
13	AP	54	HIS
14	AT	142	ASN
15	AB	93	GLY
15	AB	209	ASP
16	AA	7	VAL
16	AA	96	ALA
16	AA	112	ILE
16	AA	140	VAL
16	AA	159	ILE
16	AA	186	ARG
16	AA	190	SER
16	AA	191	ARG
17	AV	6	GLY
17	AV	48	GLY
17	AV	77	GLY
18	AY	95	GLY
18	AY	99	LYS
18	AY	119	GLY
19	AZ	53	ALA
20	Aa	35	ALA
21	Ab	2	PRO
21	Ab	38	PRO
21	Ab	81	ARG
23	AD	78	GLY
23	AD	194	PRO
23	AD	201	LYS
23	AD	208	VAL
24	Ae	3	HIS
24	Ae	30	GLY
24	Ae	50	GLY
25	Af	98	VAL
25	Af	127	GLY
25	Af	148	TYR

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Mol	Chain	Res	Type
26	AJ	106	LEU
26	AJ	120	ALA
26	AJ	124	HIS
26	AJ	135	ILE
26	AJ	148	ILE
27	AE	104	ASP
27	AE	164	LEU
28	AC	261	PHE
29	AG	26	THR
29	AG	146	ASN
29	AG	153	VAL
30	AF	21	GLY
30	AF	32	ASP
30	AF	41	VAL
30	AF	54	GLY
30	AF	79	HIS
31	AH	11	PRO
31	AH	17	ASP
31	AH	38	ALA
31	AH	41	ARG
31	AH	76	GLN
31	AH	100	ILE
31	AH	112	ASN
31	AH	120	ARG
31	AH	159	ASP
31	AH	193	GLN
32	AW	66	THR
33	AI	22	HIS
33	AI	192	GLY
34	AQ	32	ILE
34	AQ	100	VAL
35	Ah	146	GLY
35	Ah	147	GLU
35	Ah	156	PRO
35	Ah	168	LEU
35	Ah	174	GLY
35	Ah	283	GLU
35	Ah	285	PRO
35	Ah	296	ILE
39	Cq	33	ASP
39	Cq	46	SER
39	Cq	49	GLY

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Mol	Chain	Res	Type
39	Cq	58	ASN
39	Cq	94	ASP
39	Cq	105	ASN
39	Cq	106	LYS
39	Cq	142	GLY
39	Cq	156	SER
39	Cq	179	ASN
39	Cq	180	ILE
39	Cq	259	PHE
40	CK	10	ILE
40	CK	24	ALA
40	CK	34	PRO
40	CK	40	LYS
40	CK	53	TRP
40	CK	60	VAL
40	CK	94	LYS
40	CK	99	LYS
40	CK	120	SER
40	CK	140	GLY
41	CO	132	THR
42	CL	157	VAL
43	CV	44	GLY
43	CV	45	ILE
44	CM	5	ARG
45	Ca	47	LYS
45	Ca	66	ASN
46	CN	188	ARG
47	CI	4	ARG
47	CI	109	ASP
47	CI	175	LYS
47	CI	202	SER
48	CD	59	ASP
48	CD	137	GLY
48	CD	171	LEU
48	CD	215	ASP
49	CQ	20	SER
49	CQ	169	SER
50	CR	47	ASP
50	CR	113	LYS
50	CR	131	VAL
50	CR	133	LYS
51	CA	13	GLY

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Mol	Chain	Res	Type
51	CA	31	ALA
51	CA	143	THR
52	CS	27	LEU
52	CS	134	ALA
53	CT	3	ASN
53	CT	136	ARG
53	CT	143	THR
53	CT	146	LYS
54	CP	3	ARG
55	CU	55	ASN
55	CU	60	VAL
57	CY	43	ASN
57	CY	53	ASP
58	CW	18	GLY
58	CW	26	GLY
58	CW	71	ARG
59	CZ	5	MET
59	CZ	32	GLY
59	CZ	102	ARG
60	Cr	44	ILE
60	Cr	47	LYS
60	Cr	53	PRO
60	Cr	55	ALA
60	Cr	56	ASP
60	Cr	104	PRO
61	Ch	39	GLY
61	Ch	40	ALA
62	Cb	23	LYS
62	Cb	54	LEU
63	CB	38	SER
63	CB	138	GLN
63	CB	141	ASP
63	CB	145	GLN
63	CB	151	SER
63	CB	292	LEU
63	CB	294	LYS
63	CB	361	GLU
63	CB	397	ILE
64	CF	24	ASN
64	CF	237	GLU
65	Cc	11	LEU
65	Cc	12	GLU

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Mol	Chain	Res	Type
65	Cc	92	CYS
66	Cd	13	GLY
66	Cd	98	SER
66	Cd	116	ASN
67	Ce	4	LEU
67	Ce	30	LYS
67	Ce	48	ARG
68	Cf	55	ASN
68	Cf	66	LYS
68	Cf	81	SER
69	Cg	49	CYS
69	Cg	78	TYR
69	Cg	79	GLY
69	Cg	80	GLY
70	Ci	13	LYS
71	Cj	88	ARG
72	Ck	66	VAL
73	Cl	50	GLY
74	CC	7	LEU
74	CC	15	GLY
74	CC	35	ASP
74	CC	59	GLY
74	CC	108	TRP
74	CC	116	ASN
74	CC	157	LYS
74	CC	214	ASP
74	CC	272	SER
74	CC	305	PRO
74	CC	306	ARG
74	CC	309	ILE
74	CC	321	ASN
74	CC	339	THR
74	CC	341	LEU
78	Co	34	TYR
80	CH	4	ILE
81	CE	29	LYS
81	CE	61	ALA
81	CE	73	TYR
81	CE	87	LYS
81	CE	90	ALA
81	CE	139	LYS
81	CE	229	GLU

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Mol	Chain	Res	Type
81	CE	286	LEU
82	CG	46	GLN
82	CG	58	PRO
82	CG	59	ARG
82	CG	72	LYS
82	CG	140	VAL
82	CG	160	ASP
82	CG	167	VAL
82	CG	184	ILE
82	CG	200	THR
82	CG	207	VAL
84	Cv	16	SER
1	Az	269	ALA
1	Az	434	TYR
2	Ag	84	ASP
2	Ag	255	SER
2	Ag	285	GLN
3	AU	70	CYS
3	AU	93	SER
3	AU	110	VAL
4	AK	28	HIS
4	AK	87	PRO
5	AO	32	HIS
6	AX	92	ASN
7	AM	91	LEU
10	AN	28	LEU
12	AR	86	PRO
12	AR	122	PRO
13	AP	17	TYR
13	AP	39	ALA
14	AT	29	LYS
15	AB	56	LYS
15	AB	82	ARG
16	AA	11	LYS
16	AA	30	LEU
16	AA	194	PRO
16	AA	205	ARG
18	AY	53	ASP
18	AY	60	PHE
18	AY	63	HIS
20	Aa	13	LYS
20	Aa	97	PRO

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Mol	Chain	Res	Type
20	Aa	102	ARG
20	Aa	103	PRO
21	Ab	7	LEU
22	Ac	65	ALA
23	AD	218	LEU
24	Ae	53	LYS
24	Ae	55	PRO
25	Af	137	ASP
25	Af	138	ARG
26	AJ	91	LYS
27	AE	168	LYS
27	AE	194	VAL
27	AE	205	PHE
29	AG	69	THR
31	AH	18	GLU
31	AH	117	PRO
31	AH	150	GLY
33	AI	105	ASP
33	AI	106	SER
33	AI	144	LYS
35	Ah	161	PRO
38	Cz	105	LYS
39	Cq	137	PHE
39	Cq	256	ASP
39	Cq	262	ALA
40	CK	3	PRO
40	CK	56	LEU
40	CK	67	ARG
40	CK	90	ARG
40	CK	125	LEU
40	CK	139	VAL
42	CL	62	PRO
42	CL	149	GLN
44	CM	6	PHE
44	CM	67	SER
46	CN	50	ARG
47	CI	5	PRO
48	CD	112	ARG
48	CD	138	GLN
48	CD	251	PRO
48	CD	257	PRO
49	CQ	159	PRO

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Mol	Chain	Res	Type
49	CQ	186	TYR
52	CS	162	GLN
53	CT	4	THR
53	CT	98	HIS
54	CP	40	HIS
55	CU	52	LYS
55	CU	122	GLU
56	CX	69	ASN
60	Cr	34	ALA
62	Cb	29	TYR
63	CB	4	ARG
63	CB	261	ARG
63	CB	326	VAL
63	CB	396	ARG
64	CF	184	ILE
64	CF	197	VAL
66	Cd	101	LYS
67	Ce	94	SER
70	Ci	65	LYS
71	Cj	84	PRO
72	Ck	18	LYS
74	CC	13	GLU
74	CC	86	ARG
74	CC	183	VAL
74	CC	184	TYR
74	CC	249	PHE
74	CC	255	SER
75	Cm	105	PRO
77	Cp	18	TYR
78	Co	15	CYS
78	Co	61	LYS
78	Co	96	ASP
81	CE	30	GLY
81	CE	39	LYS
81	CE	85	LYS
82	CG	33	GLU
82	CG	84	THR
82	CG	134	PRO
82	CG	139	GLY
1	Az	502	SER
2	Ag	37	ASP
3	AU	50	VAL

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Mol	Chain	Res	Type
4	AK	67	PHE
4	AK	95	ARG
5	AO	17	LEU
5	AO	83	GLN
6	AX	9	THR
6	AX	129	SER
7	AM	29	ASP
7	AM	113	ASP
8	AS	12	ILE
11	AL	119	ASP
12	AR	95	ILE
13	AP	50	ARG
14	AT	46	ALA
15	AB	224	GLU
16	AA	104	THR
18	AY	5	VAL
18	AY	102	THR
19	AZ	111	ARG
19	AZ	114	LYS
20	Aa	62	TYR
21	Ab	10	PRO
21	Ab	24	LEU
22	Ac	63	ARG
25	Af	145	CYS
26	AJ	151	LEU
26	AJ	162	ARG
27	AE	30	ARG
27	AE	119	ALA
27	AE	189	LEU
28	AC	259	THR
28	AC	264	SER
29	AG	33	ALA
29	AG	122	PRO
30	AF	37	ASP
35	Ah	153	VAL
35	Ah	167	GLY
38	Cz	197	ASN
39	Cq	24	TYR
39	Cq	61	MET
39	Cq	191	GLN
39	Cq	199	TYR
41	CO	181	ALA

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Mol	Chain	Res	Type
42	CL	161	TYR
46	CN	68	ARG
46	CN	77	LYS
46	CN	183	THR
47	CI	213	HIS
48	CD	21	ARG
48	CD	260	GLU
50	CR	53	LYS
51	CA	138	SER
51	CA	220	GLY
52	CS	26	PRO
52	CS	75	VAL
52	CS	146	HIS
52	CS	150	ILE
52	CS	172	PRO
55	CU	56	LEU
56	CX	43	SER
56	CX	57	GLN
58	CW	78	PHE
58	CW	83	THR
59	CZ	129	TRP
60	Cr	82	ILE
62	Cb	32	LEU
63	CB	78	ILE
63	CB	309	LEU
63	CB	311	ASP
63	CB	342	LYS
63	CB	360	LEU
66	Cd	112	THR
68	Cf	63	LYS
69	Cg	47	GLY
70	Ci	27	SER
70	Ci	67	LYS
74	CC	148	PRO
74	CC	177	TRP
74	CC	262	GLU
79	CJ	58	ARG
79	CJ	114	ASP
79	CJ	175	LEU
81	CE	83	LYS
81	CE	134	SER
81	CE	282	TYR

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Mol	Chain	Res	Type
82	CG	162	ASP
82	CG	166	LEU
84	Cv	17	SER
1	Az	246	PRO
1	Az	574	ASP
3	AU	26	SER
3	AU	116	ILE
3	AU	117	ALA
4	AK	38	LYS
5	AO	22	ALA
5	AO	38	ASN
6	AX	99	GLU
7	AM	59	PRO
7	AM	94	ILE
7	AM	95	ASP
8	AS	7	GLU
10	AN	3	ARG
10	AN	138	ASN
11	AL	2	ALA
12	AR	99	ASP
18	AY	51	THR
18	AY	121	ALA
19	AZ	62	VAL
19	AZ	78	LYS
22	Ac	39	SER
23	AD	80	PRO
24	Ae	23	GLU
25	Af	93	HIS
25	Af	94	LYS
25	Af	147	THR
26	AJ	116	LYS
27	AE	90	ILE
27	AE	134	LYS
27	AE	213	ALA
28	AC	179	THR
32	AW	67	GLY
33	AI	52	ASN
33	AI	59	ARG
34	AQ	43	GLU
35	Ah	141	PRO
35	Ah	173	GLY
39	Cq	133	GLU

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Mol	Chain	Res	Type
40	CK	36	GLY
40	CK	96	LYS
40	CK	124	GLU
42	CL	138	ASP
42	CL	146	LEU
46	CN	45	PRO
47	CI	25	GLY
48	CD	125	VAL
49	CQ	42	THR
49	CQ	142	PRO
49	CQ	157	GLY
49	CQ	173	LYS
50	CR	55	VAL
51	CA	35	ALA
51	CA	123	ARG
51	CA	145	LYS
52	CS	4	SER
52	CS	74	ARG
60	Cr	37	SER
61	Ch	5	LYS
63	CB	378	ARG
64	CF	232	ASP
67	Ce	9	LYS
68	Cf	32	GLY
69	Cg	57	ARG
69	Cg	69	LYS
72	Ck	32	VAL
74	CC	30	ALA
74	CC	74	ALA
74	CC	234	LYS
75	Cm	78	ILE
77	Cp	51	ALA
80	CH	13	PRO
80	CH	188	GLN
81	CE	77	LYS
81	CE	80	VAL
82	CG	43	GLN
82	CG	74	LEU
82	CG	129	PRO
1	Az	7	ASP
1	Az	503	PRO
5	AO	24	GLY

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Mol	Chain	Res	Type
5	AO	136	PRO
6	AX	78	GLY
10	AN	60	VAL
12	AR	116	ASN
16	AA	23	THR
16	AA	110	ASN
17	AV	9	VAL
25	Af	87	THR
26	AJ	68	PRO
28	AC	181	PRO
29	AG	68	LEU
29	AG	165	GLU
30	AF	46	ALA
30	AF	183	GLY
31	AH	170	VAL
38	Cz	19	HIS
40	CK	138	SER
45	Ca	117	LEU
49	CQ	164	LYS
55	CU	125	GLU
57	CY	84	ARG
58	CW	63	GLN
58	CW	103	ALA
59	CZ	6	LYS
60	Cr	45	HIS
62	Cb	21	ILE
62	Cb	56	LYS
64	CF	222	LYS
67	Ce	15	LYS
71	Cj	85	LYS
73	Cl	3	SER
74	CC	54	VAL
74	CC	88	GLY
74	CC	329	ASN
77	Cp	52	VAL
78	Co	75	PRO
79	CJ	117	ILE
80	CH	41	ILE
81	CE	232	ILE
82	CG	80	ILE
84	Cu	46	LEU
1	Az	517	LEU

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Mol	Chain	Res	Type
3	AU	104	ILE
23	AD	63	GLY
33	AI	119	LEU
39	Cq	198	ILE
53	CT	126	VAL
61	Ch	79	LYS
63	CB	36	ASP
66	Cd	99	PRO
69	Cg	38	VAL
81	CE	117	PRO
81	CE	264	ILE
1	Az	109	VAL
27	AE	152	PRO
31	AH	10	LYS
39	Cq	80	PRO
43	CV	139	ILE
49	CQ	58	ARG
52	CS	17	LEU
68	Cf	60	PRO
81	CE	209	PRO
5	AO	62	VAL
15	AB	24	PRO
16	AA	95	GLY
16	AA	98	PRO
20	Aa	96	THR
21	Ab	37	CYS
27	AE	195	ILE
27	AE	231	GLY
28	AC	176	LYS
34	AQ	42	ILE
39	Cq	206	ILE
43	CV	57	VAL
49	CQ	155	ALA
63	CB	81	THR
66	Cd	111	VAL
74	CC	115	VAL
79	CJ	121	PRO
81	CE	185	PRO
3	AU	29	VAL
7	AM	30	GLY
9	Ad	11	PRO
21	Ab	9	HIS

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Mol	Chain	Res	Type
31	AH	93	VAL
39	Cq	107	VAL
45	Ca	70	CYS
59	CZ	37	PRO
59	CZ	89	ILE
82	CG	103	ARG
1	Az	575	PRO
12	AR	15	VAL
15	AB	21	VAL
39	Cq	82	ILE
53	CT	51	GLY
63	CB	18	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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
1	Az	728/730 (100%)	586 (80%)	142 (20%)	1 9
2	Ag	272/275 (99%)	223 (82%)	49 (18%)	1 11
3	AU	94/107 (88%)	74 (79%)	20 (21%)	1 6
4	AK	89/136 (65%)	61 (68%)	28 (32%)	0 2
5	AO	106/119 (89%)	87 (82%)	19 (18%)	2 11
6	AX	114/115 (99%)	91 (80%)	23 (20%)	1 8
7	AM	104/108 (96%)	81 (78%)	23 (22%)	1 6
8	AS	119/132 (90%)	95 (80%)	24 (20%)	1 8
9	Ad	47/49 (96%)	35 (74%)	12 (26%)	0 4
10	AN	130/131 (99%)	103 (79%)	27 (21%)	1 7
11	AL	142/142 (100%)	105 (74%)	37 (26%)	0 4
12	AR	114/122 (93%)	90 (79%)	24 (21%)	1 7
13	AP	116/130 (89%)	84 (72%)	32 (28%)	0 3
14	AT	112/115 (97%)	85 (76%)	27 (24%)	0 5

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
15	AB	196/231 (85%)	154 (79%)	42 (21%)	1 6
16	AA	174/243 (72%)	140 (80%)	34 (20%)	1 9
17	AV	66/67 (98%)	47 (71%)	19 (29%)	0 3
18	AY	108/115 (94%)	85 (79%)	23 (21%)	1 6
19	AZ	66/103 (64%)	53 (80%)	13 (20%)	1 8
20	Aa	90/98 (92%)	75 (83%)	15 (17%)	2 13
21	Ab	76/76 (100%)	63 (83%)	13 (17%)	2 12
22	Ac	57/62 (92%)	46 (81%)	11 (19%)	1 9
23	AD	190/202 (94%)	144 (76%)	46 (24%)	0 5
24	Ae	48/48 (100%)	24 (50%)	24 (50%)	0 0
25	Af	64/72 (89%)	43 (67%)	21 (33%)	0 2
26	AJ	157/168 (94%)	128 (82%)	29 (18%)	1 10
27	AE	225/225 (100%)	172 (76%)	53 (24%)	1 5
28	AC	190/225 (84%)	145 (76%)	45 (24%)	1 5
29	AG	207/218 (95%)	157 (76%)	50 (24%)	0 5
30	AF	161/170 (95%)	117 (73%)	44 (27%)	0 3
31	AH	170/174 (98%)	125 (74%)	45 (26%)	0 4
32	AW	112/113 (99%)	98 (88%)	14 (12%)	4 21
33	AI	178/180 (99%)	142 (80%)	36 (20%)	1 8
34	AQ	117/121 (97%)	89 (76%)	28 (24%)	0 5
35	Ah	55/328 (17%)	41 (74%)	14 (26%)	0 4
38	Cz	195/196 (100%)	174 (89%)	21 (11%)	6 25
39	Cq	232/258 (90%)	194 (84%)	38 (16%)	2 14
40	CK	136/137 (99%)	110 (81%)	26 (19%)	1 9
41	CO	173/174 (99%)	137 (79%)	36 (21%)	1 7
42	CL	176/177 (99%)	135 (77%)	41 (23%)	1 5
43	CV	102/107 (95%)	83 (81%)	19 (19%)	1 10
44	CM	118/161 (73%)	85 (72%)	33 (28%)	0 3
45	Ca	120/121 (99%)	100 (83%)	20 (17%)	2 13
46	CN	171/172 (99%)	132 (77%)	39 (23%)	1 6
47	CI	180/181 (99%)	150 (83%)	30 (17%)	2 13

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
48	CD	243/250 (97%)	210 (86%)	33 (14%)	3 19
49	CQ	165/165 (100%)	119 (72%)	46 (28%)	0 3
50	CR	168/175 (96%)	126 (75%)	42 (25%)	0 4
51	CA	197/199 (99%)	161 (82%)	36 (18%)	1 10
52	CS	156/157 (99%)	97 (62%)	59 (38%)	0 1
53	CT	139/140 (99%)	102 (73%)	37 (27%)	0 3
54	CP	133/163 (82%)	94 (71%)	39 (29%)	0 2
55	CU	102/115 (89%)	82 (80%)	20 (20%)	1 9
56	CX	109/133 (82%)	78 (72%)	31 (28%)	0 3
57	CY	123/135 (91%)	95 (77%)	28 (23%)	1 6
58	CW	103/126 (82%)	75 (73%)	28 (27%)	0 3
59	CZ	117/118 (99%)	82 (70%)	35 (30%)	0 2
60	Cr	121/121 (100%)	91 (75%)	30 (25%)	0 4
61	Ch	110/110 (100%)	81 (74%)	29 (26%)	0 4
62	Cb	66/126 (52%)	41 (62%)	25 (38%)	0 1
63	CB	345/349 (99%)	261 (76%)	84 (24%)	0 4
64	CF	198/215 (92%)	172 (87%)	26 (13%)	4 20
65	Cc	85/97 (88%)	73 (86%)	12 (14%)	3 18
66	Cd	102/110 (93%)	78 (76%)	24 (24%)	1 5
67	Ce	119/121 (98%)	87 (73%)	32 (27%)	0 3
68	Cf	88/89 (99%)	57 (65%)	31 (35%)	0 1
69	Cg	98/100 (98%)	63 (64%)	35 (36%)	0 1
70	Ci	87/89 (98%)	51 (59%)	36 (41%)	0 0
71	Cj	75/80 (94%)	55 (73%)	20 (27%)	0 3
72	Ck	64/65 (98%)	45 (70%)	19 (30%)	0 2
73	Cl	47/48 (98%)	33 (70%)	14 (30%)	0 2
74	CC	305/348 (88%)	222 (73%)	83 (27%)	0 3
75	Cm	48/48 (100%)	31 (65%)	17 (35%)	0 1
76	Cn	24/24 (100%)	14 (58%)	10 (42%)	0 0
77	Cp	74/75 (99%)	53 (72%)	21 (28%)	0 3
78	Co	93/94 (99%)	60 (64%)	33 (36%)	0 1

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
79	CJ	142/149 (95%)	130 (92%)	12 (8%)	10 36
80	CH	170/171 (99%)	146 (86%)	24 (14%)	3 18
81	CE	232/252 (92%)	156 (67%)	76 (33%)	0 2
82	CG	209/223 (94%)	141 (68%)	68 (32%)	0 2
83	Cs	46/81 (57%)	46 (100%)	0	100 100
83	Ct	46/81 (57%)	46 (100%)	0	100 100
84	Cu	46/83 (55%)	45 (98%)	1 (2%)	52 71
84	Cv	46/83 (55%)	45 (98%)	1 (2%)	52 71
All	All	11438/12642 (90%)	8832 (77%)	2606 (23%)	3 6

All (2606) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	Az	3	ASN
1	Az	4	PHE
1	Az	5	THR
1	Az	6	VAL
1	Az	12	ILE
1	Az	15	LYS
1	Az	16	LYS
1	Az	27	HIS
1	Az	45	ILE
1	Az	48	SER
1	Az	50	ARG
1	Az	53	GLU
1	Az	55	ARG
1	Az	56	PHE
1	Az	60	ARG
1	Az	61	LYS
1	Az	64	GLN
1	Az	71	LYS
1	Az	73	THR
1	Az	75	ILE
1	Az	79	TYR
1	Az	91	GLN
1	Az	92	SER
1	Az	93	LYS
1	Az	109	VAL
1	Az	110	ASP

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Mol	Chain	Res	Type
1	Az	111	PHE
1	Az	113	SER
1	Az	114	GLU
1	Az	122	THR
1	Az	141	THR
1	Az	144	ARG
1	Az	159	LYS
1	Az	160	MET
1	Az	162	ARG
1	Az	166	GLU
1	Az	167	LEU
1	Az	168	GLN
1	Az	169	LEU
1	Az	183	GLU
1	Az	192	TYR
1	Az	194	GLU
1	Az	196	GLU
1	Az	200	MET
1	Az	209	LEU
1	Az	216	SER
1	Az	225	LEU
1	Az	226	LYS
1	Az	228	PHE
1	Az	236	PHE
1	Az	239	LYS
1	Az	244	LEU
1	Az	248	GLU
1	Az	252	LYS
1	Az	256	MET
1	Az	258	LYS
1	Az	264	ARG
1	Az	265	TYR
1	Az	267	ASP
1	Az	275	LYS
1	Az	281	GLU
1	Az	284	LYS
1	Az	311	GLU
1	Az	314	LYS
1	Az	317	GLU
1	Az	322	LYS
1	Az	330	LYS
1	Az	333	LYS

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Mol	Chain	Res	Type
1	Az	343	TRP
1	Az	359	PRO
1	Az	366	LYS
1	Az	368	ARG
1	Az	370	GLU
1	Az	371	LEU
1	Az	393	PRO
1	Az	409	ARG
1	Az	411	TYR
1	Az	420	LEU
1	Az	439	LYS
1	Az	448	GLN
1	Az	461	ILE
1	Az	462	GLU
1	Az	476	ASP
1	Az	477	GLN
1	Az	481	LYS
1	Az	488	PHE
1	Az	492	HIS
1	Az	493	ASN
1	Az	495	ARG
1	Az	497	MET
1	Az	498	LYS
1	Az	499	PHE
1	Az	502	SER
1	Az	519	LYS
1	Az	524	LEU
1	Az	525	LYS
1	Az	526	ARG
1	Az	540	GLU
1	Az	541	SER
1	Az	559	LYS
1	Az	560	ASP
1	Az	563	GLU
1	Az	570	ILE
1	Az	571	LYS
1	Az	572	LYS
1	Az	577	VAL
1	Az	579	TYR
1	Az	592	LEU
1	Az	607	ARG
1	Az	609	PHE

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Mol	Chain	Res	Type
1	Az	613	LEU
1	Az	615	GLU
1	Az	619	LYS
1	Az	625	ARG
1	Az	630	GLN
1	Az	641	TRP
1	Az	647	ARG
1	Az	667	LYS
1	Az	669	VAL
1	Az	673	ASN
1	Az	689	GLU
1	Az	726	ARG
1	Az	727	ARG
1	Az	748	GLU
1	Az	754	GLN
1	Az	775	GLN
1	Az	785	LYS
1	Az	794	PHE
1	Az	801	ARG
1	Az	807	GLN
1	Az	811	GLN
1	Az	823	ASP
1	Az	827	ASN
1	Az	830	ARG
1	Az	842	LYS
1	Az	845	LYS
1	Az	846	GLU
1	Az	848	ILE
1	Az	849	PRO
1	Az	854	PHE
1	Az	855	LEU
1	Az	858	LEU
2	Ag	2	THR
2	Ag	8	ARG
2	Ag	24	THR
2	Ag	25	PRO
2	Ag	36	ARG
2	Ag	42	MET
2	Ag	44	LYS
2	Ag	47	ARG
2	Ag	50	THR
2	Ag	51	ASN

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Mol	Chain	Res	Type
2	Ag	57	ARG
2	Ag	60	ARG
2	Ag	64	HIS
2	Ag	68	ASP
2	Ag	74	ASP
2	Ag	76	GLN
2	Ag	87	LEU
2	Ag	88	ARG
2	Ag	91	ASP
2	Ag	93	THR
2	Ag	100	ARG
2	Ag	118	ARG
2	Ag	119	GLN
2	Ag	131	LEU
2	Ag	139	LYS
2	Ag	140	TYR
2	Ag	143	GLN
2	Ag	145	GLU
2	Ag	146	SER
2	Ag	149	GLU
2	Ag	156	PHE
2	Ag	161	SER
2	Ag	175	LYS
2	Ag	183	LYS
2	Ag	185	LYS
2	Ag	192	THR
2	Ag	203	ASP
2	Ag	225	LYS
2	Ag	246	TYR
2	Ag	259	TRP
2	Ag	264	LYS
2	Ag	271	LYS
2	Ag	275	ILE
2	Ag	276	SER
2	Ag	277	THR
2	Ag	279	SER
2	Ag	280	LYS
2	Ag	289	LEU
2	Ag	294	ASP
3	AU	19	ARG
3	AU	20	ILE
3	AU	21	ARG

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Mol	Chain	Res	Type
3	AU	24	LEU
3	AU	33	GLU
3	AU	44	LYS
3	AU	47	ASN
3	AU	48	LEU
3	AU	49	LYS
3	AU	51	LYS
3	AU	62	ARG
3	AU	68	THR
3	AU	72	GLU
3	AU	75	LYS
3	AU	85	HIS
3	AU	87	ARG
3	AU	104	ILE
3	AU	106	ILE
3	AU	108	PRO
3	AU	111	GLU
4	AK	1	MET
4	AK	2	LEU
4	AK	3	MET
4	AK	5	LYS
4	AK	13	GLU
4	AK	16	PHE
4	AK	17	LYS
4	AK	20	VAL
4	AK	31	LYS
4	AK	34	GLU
4	AK	35	LEU
4	AK	37	ASP
4	AK	38	LYS
4	AK	43	LEU
4	AK	53	LYS
4	AK	55	ARG
4	AK	65	ARG
4	AK	66	HIS
4	AK	69	TRP
4	AK	74	GLU
4	AK	84	HIS
4	AK	85	LEU
4	AK	89	ILE
4	AK	93	THR
4	AK	94	LEU

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Mol	Chain	Res	Type
4	AK	95	ARG
4	AK	96	ARG
4	AK	98	ARG
5	AO	23	GLU
5	AO	25	GLU
5	AO	28	PHE
5	AO	34	PHE
5	AO	65	ASP
5	AO	66	ARG
5	AO	72	TYR
5	AO	90	ILE
5	AO	103	ASN
5	AO	116	LEU
5	AO	117	ARG
5	AO	121	ARG
5	AO	125	LYS
5	AO	128	ARG
5	AO	129	ILE
5	AO	138	ASP
5	AO	141	ARG
5	AO	146	ARG
5	AO	150	ARG
6	AX	1	MET
6	AX	3	LYS
6	AX	5	ARG
6	AX	7	LEU
6	AX	12	LYS
6	AX	21	LYS
6	AX	29	LYS
6	AX	37	LYS
6	AX	67	ARG
6	AX	68	LYS
6	AX	71	ARG
6	AX	75	ILE
6	AX	80	LYS
6	AX	91	LEU
6	AX	98	ASP
6	AX	101	LEU
6	AX	107	ARG
6	AX	108	LYS
6	AX	110	HIS
6	AX	115	ILE

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Mol	Chain	Res	Type
6	AX	135	LYS
6	AX	141	PRO
6	AX	142	ARG
7	AM	12	MET
7	AM	13	ASP
7	AM	18	LEU
7	AM	20	GLU
7	AM	26	LEU
7	AM	28	HIS
7	AM	33	ARG
7	AM	36	ARG
7	AM	40	LYS
7	AM	43	ASP
7	AM	45	ARG
7	AM	71	GLU
7	AM	76	LEU
7	AM	77	ILE
7	AM	78	LYS
7	AM	83	LYS
7	AM	85	LEU
7	AM	91	LEU
7	AM	94	ILE
7	AM	101	ARG
7	AM	102	LYS
7	AM	127	TYR
7	AM	128	PHE
8	AS	7	GLU
8	AS	8	LYS
8	AS	9	PHE
8	AS	11	HIS
8	AS	12	ILE
8	AS	17	ASN
8	AS	34	LYS
8	AS	36	VAL
8	AS	39	ARG
8	AS	59	LEU
8	AS	63	GLU
8	AS	71	MET
8	AS	78	LYS
8	AS	86	ARG
8	AS	87	GLN
8	AS	92	ASP

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Mol	Chain	Res	Type
8	AS	94	LYS
8	AS	118	ARG
8	AS	125	HIS
8	AS	130	ARG
8	AS	132	ARG
8	AS	134	GLN
8	AS	137	LYS
8	AS	142	ARG
9	Ad	7	TYR
9	Ad	10	HIS
9	Ad	16	GLN
9	Ad	19	ARG
9	Ad	27	ARG
9	Ad	30	LEU
9	Ad	33	LYS
9	Ad	39	CYS
9	Ad	44	ARG
9	Ad	46	TYR
9	Ad	53	ILE
9	Ad	56	ASP
10	AN	3	ARG
10	AN	9	LYS
10	AN	16	LEU
10	AN	21	SER
10	AN	27	LYS
10	AN	49	GLN
10	AN	50	ILE
10	AN	53	ILE
10	AN	56	ASP
10	AN	64	ARG
10	AN	73	ARG
10	AN	76	LYS
10	AN	78	LYS
10	AN	80	LEU
10	AN	94	LYS
10	AN	104	ARG
10	AN	107	LYS
10	AN	112	LYS
10	AN	114	ARG
10	AN	119	GLU
10	AN	121	ARG
10	AN	125	LEU

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Mol	Chain	Res	Type
10	AN	130	LYS
10	AN	133	ARG
10	AN	134	VAL
10	AN	141	TYR
10	AN	142	GLU
11	AL	1	MET
11	AL	4	ILE
11	AL	7	GLU
11	AL	8	ARG
11	AL	12	LYS
11	AL	15	THR
11	AL	18	GLN
11	AL	20	LYS
11	AL	22	ARG
11	AL	25	LEU
11	AL	30	LYS
11	AL	40	ILE
11	AL	49	GLU
11	AL	56	ILE
11	AL	69	ARG
11	AL	71	ARG
11	AL	79	LYS
11	AL	80	MET
11	AL	82	MET
11	AL	83	GLN
11	AL	89	ARG
11	AL	97	ARG
11	AL	99	TYR
11	AL	100	ASN
11	AL	101	ARG
11	AL	102	PHE
11	AL	105	ARG
11	AL	118	ARG
11	AL	121	GLN
11	AL	136	LYS
11	AL	147	LYS
11	AL	151	THR
11	AL	153	LYS
11	AL	155	PHE
11	AL	156	GLN
11	AL	157	LYS
11	AL	158	PHE

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Mol	Chain	Res	Type
12	AR	1	MET
12	AR	8	THR
12	AR	26	ASN
12	AR	32	LYS
12	AR	47	ARG
12	AR	59	LYS
12	AR	63	ARG
12	AR	69	ILE
12	AR	78	ARG
12	AR	83	ASN
12	AR	87	GLU
12	AR	88	VAL
12	AR	89	SER
12	AR	91	LEU
12	AR	93	GLN
12	AR	94	GLU
12	AR	95	ILE
12	AR	103	LYS
12	AR	105	MET
12	AR	111	PHE
12	AR	118	GLN
12	AR	120	THR
12	AR	121	GLN
12	AR	123	THR
13	AP	5	GLU
13	AP	6	GLN
13	AP	7	LYS
13	AP	10	ARG
13	AP	12	PHE
13	AP	13	ARG
13	AP	14	LYS
13	AP	15	PHE
13	AP	17	TYR
13	AP	34	MET
13	AP	40	ARG
13	AP	41	GLN
13	AP	43	ARG
13	AP	50	ARG
13	AP	51	ARG
13	AP	52	LYS
13	AP	61	ARG
13	AP	64	LYS

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Mol	Chain	Res	Type
13	AP	71	GLU
13	AP	72	LYS
13	AP	74	GLU
13	AP	84	ILE
13	AP	86	LEU
13	AP	88	GLU
13	AP	89	MET
13	AP	100	LYS
13	AP	104	GLN
13	AP	110	GLU
13	AP	111	MET
13	AP	122	THR
13	AP	124	LYS
13	AP	127	LYS
14	AT	11	GLN
14	AT	16	ARG
14	AT	21	PHE
14	AT	23	LYS
14	AT	28	LEU
14	AT	29	LYS
14	AT	38	LYS
14	AT	41	LYS
14	AT	42	HIS
14	AT	44	GLU
14	AT	62	ARG
14	AT	64	LEU
14	AT	67	ARG
14	AT	83	GLN
14	AT	84	ARG
14	AT	88	MET
14	AT	91	HIS
14	AT	93	SER
14	AT	94	ARG
14	AT	97	LYS
14	AT	102	ARG
14	AT	117	GLN
14	AT	121	ARG
14	AT	130	ASP
14	AT	133	ARG
14	AT	143	LYS
14	AT	144	LYS
15	AB	19	LYS

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Mol	Chain	Res	Type
15	AB	20	LYS
15	AB	21	VAL
15	AB	22	VAL
15	AB	34	LYS
15	AB	41	ILE
15	AB	48	LEU
15	AB	52	THR
15	AB	55	THR
15	AB	56	LYS
15	AB	75	GLN
15	AB	78	GLU
15	AB	82	ARG
15	AB	83	LYS
15	AB	89	GLU
15	AB	94	LYS
15	AB	115	LYS
15	AB	116	LYS
15	AB	131	ASP
15	AB	138	PHE
15	AB	144	LYS
15	AB	146	ARG
15	AB	148	ASN
15	AB	150	ILE
15	AB	151	ARG
15	AB	158	HIS
15	AB	162	ARG
15	AB	165	ARG
15	AB	166	LYS
15	AB	172	MET
15	AB	181	LEU
15	AB	182	LYS
15	AB	195	LYS
15	AB	208	HIS
15	AB	211	PHE
15	AB	213	ARG
15	AB	214	LYS
15	AB	219	LYS
15	AB	222	LYS
15	AB	223	PHE
15	AB	227	LYS
15	AB	229	MET
16	AA	5	LEU

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Mol	Chain	Res	Type
16	AA	7	VAL
16	AA	10	MET
16	AA	12	GLU
16	AA	13	GLU
16	AA	17	LYS
16	AA	19	LEU
16	AA	25	LEU
16	AA	36	GLN
16	AA	40	LYS
16	AA	42	LYS
16	AA	44	ASP
16	AA	52	LYS
16	AA	58	LEU
16	AA	63	ARG
16	AA	73	ASP
16	AA	88	LEU
16	AA	89	LYS
16	AA	102	ARG
16	AA	117	ARG
16	AA	128	ARG
16	AA	139	TYR
16	AA	147	LEU
16	AA	159	ILE
16	AA	169	HIS
16	AA	181	GLU
16	AA	186	ARG
16	AA	188	THR
16	AA	191	ARG
16	AA	195	TRP
16	AA	196	GLU
16	AA	198	MET
16	AA	204	TYR
16	AA	207	PRO
17	AV	1	MET
17	AV	3	ASN
17	AV	7	GLU
17	AV	16	LYS
17	AV	24	ILE
17	AV	31	SER
17	AV	40	ASP
17	AV	41	LYS
17	AV	43	THR

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Mol	Chain	Res	Type
17	AV	45	ARG
17	AV	49	GLN
17	AV	51	LYS
17	AV	52	THR
17	AV	61	ARG
17	AV	64	GLU
17	AV	74	LYS
17	AV	78	ILE
17	AV	79	VAL
17	AV	81	LYS
18	AY	16	ARG
18	AY	20	ARG
18	AY	21	LYS
18	AY	23	MET
18	AY	29	HIS
18	AY	32	LYS
18	AY	35	VAL
18	AY	46	LYS
18	AY	58	PHE
18	AY	61	ARG
18	AY	64	PHE
18	AY	68	LYS
18	AY	93	ARG
18	AY	96	LEU
18	AY	97	TYR
18	AY	98	GLU
18	AY	99	LYS
18	AY	100	LYS
18	AY	101	LYS
18	AY	102	THR
18	AY	111	LYS
18	AY	118	ARG
18	AY	122	LYS
19	AZ	44	LEU
19	AZ	50	PHE
19	AZ	52	LYS
19	AZ	65	TYR
19	AZ	85	ARG
19	AZ	91	LEU
19	AZ	94	LYS
19	AZ	102	LYS
19	AZ	103	HIS

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Mol	Chain	Res	Type
19	AZ	104	ARG
19	AZ	107	VAL
19	AZ	112	ASN
19	AZ	114	LYS
20	Aa	10	ARG
20	Aa	15	ARG
20	Aa	26	CYS
20	Aa	38	LYS
20	Aa	41	ILE
20	Aa	44	ILE
20	Aa	50	VAL
20	Aa	51	ARG
20	Aa	60	ASP
20	Aa	63	VAL
20	Aa	70	LYS
20	Aa	82	LYS
20	Aa	85	ARG
20	Aa	94	ASP
20	Aa	95	ARG
21	Ab	3	LEU
21	Ab	5	LYS
21	Ab	16	LYS
21	Ab	20	LYS
21	Ab	23	ARG
21	Ab	26	GLN
21	Ab	41	TYR
21	Ab	42	LYS
21	Ab	49	HIS
21	Ab	51	GLN
21	Ab	53	VAL
21	Ab	83	GLN
21	Ab	84	HIS
22	Ac	5	ARG
22	Ac	7	GLN
22	Ac	13	ARG
22	Ac	35	MET
22	Ac	42	ILE
22	Ac	47	LYS
22	Ac	51	ARG
22	Ac	62	GLU
22	Ac	63	ARG
22	Ac	67	ARG

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Mol	Chain	Res	Type
22	Ac	68	LEU
23	AD	8	LYS
23	AD	10	LYS
23	AD	18	LYS
23	AD	21	LEU
23	AD	27	ARG
23	AD	31	GLU
23	AD	35	SER
23	AD	44	THR
23	AD	56	GLN
23	AD	64	ARG
23	AD	67	ARG
23	AD	74	GLN
23	AD	76	ARG
23	AD	79	PHE
23	AD	89	GLU
23	AD	90	LYS
23	AD	94	ARG
23	AD	97	CYS
23	AD	103	GLU
23	AD	113	LEU
23	AD	120	TYR
23	AD	127	MET
23	AD	129	SER
23	AD	146	ARG
23	AD	151	LYS
23	AD	156	LEU
23	AD	157	MET
23	AD	158	ILE
23	AD	176	LEU
23	AD	177	LEU
23	AD	178	ARG
23	AD	187	LYS
23	AD	190	LEU
23	AD	192	TRP
23	AD	198	ILE
23	AD	202	LYS
23	AD	206	ASP
23	AD	207	HIS
23	AD	211	VAL
23	AD	212	GLU
23	AD	214	LYS

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Mol	Chain	Res	Type
23	AD	215	ASP
23	AD	216	GLU
23	AD	218	LEU
23	AD	220	THR
23	AD	226	GLN
24	Ae	2	VAL
24	Ae	6	LEU
24	Ae	11	LYS
24	Ae	13	ARG
24	Ae	18	LYS
24	Ae	21	LYS
24	Ae	23	GLU
24	Ae	24	LYS
24	Ae	25	LYS
24	Ae	26	LYS
24	Ae	28	LYS
24	Ae	29	THR
24	Ae	31	ARG
24	Ae	34	ARG
24	Ae	36	MET
24	Ae	40	ARG
24	Ae	41	ARG
24	Ae	44	ASN
24	Ae	46	VAL
24	Ae	48	THR
24	Ae	49	PHE
24	Ae	51	LYS
24	Ae	52	LYS
24	Ae	53	LYS
25	Af	86	THR
25	Af	88	PRO
25	Af	89	LYS
25	Af	90	LYS
25	Af	94	LYS
25	Af	95	ARG
25	Af	96	LYS
25	Af	97	LYS
25	Af	104	LYS
25	Af	109	ASP
25	Af	110	GLU
25	Af	111	ASN
25	Af	113	LYS

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Mol	Chain	Res	Type
25	Af	116	ARG
25	Af	118	ARG
25	Af	121	CYS
25	Af	130	VAL
25	Af	135	HIS
25	Af	136	PHE
25	Af	139	HIS
25	Af	150	PHE
26	AJ	8	VAL
26	AJ	10	ARG
26	AJ	17	ARG
26	AJ	18	ARG
26	AJ	29	LEU
26	AJ	38	ARG
26	AJ	42	GLU
26	AJ	50	LEU
26	AJ	58	ARG
26	AJ	66	LYS
26	AJ	69	ARG
26	AJ	79	ARG
26	AJ	89	GLU
26	AJ	93	LYS
26	AJ	101	LYS
26	AJ	108	ARG
26	AJ	109	ARG
26	AJ	110	LEU
26	AJ	119	LEU
26	AJ	121	LYS
26	AJ	127	ARG
26	AJ	139	LYS
26	AJ	143	ASN
26	AJ	162	ARG
26	AJ	165	TYR
26	AJ	172	ARG
26	AJ	174	LYS
26	AJ	176	LYS
26	AJ	180	LYS
27	AE	1	MET
27	AE	6	LYS
27	AE	7	LYS
27	AE	9	LEU
27	AE	10	LYS

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Mol	Chain	Res	Type
27	AE	38	LEU
27	AE	39	ARG
27	AE	48	LEU
27	AE	49	ARG
27	AE	51	ARG
27	AE	56	LEU
27	AE	65	CYS
27	AE	67	GLN
27	AE	68	ARG
27	AE	77	ARG
27	AE	94	LYS
27	AE	97	GLU
27	AE	106	LYS
27	AE	118	GLU
27	AE	120	LYS
27	AE	122	LYS
27	AE	123	LEU
27	AE	125	LYS
27	AE	128	LYS
27	AE	130	PHE
27	AE	133	THR
27	AE	136	ILE
27	AE	145	ARG
27	AE	147	ILE
27	AE	148	ARG
27	AE	151	ASP
27	AE	153	LEU
27	AE	164	LEU
27	AE	165	GLU
27	AE	168	LYS
27	AE	174	LYS
27	AE	175	PHE
27	AE	180	LEU
27	AE	181	CYS
27	AE	198	ARG
27	AE	200	ARG
27	AE	202	PRO
27	AE	211	LYS
27	AE	212	ASP
27	AE	221	ARG
27	AE	222	LEU
27	AE	237	SER

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Mol	Chain	Res	Type
27	AE	240	ARG
27	AE	242	LYS
27	AE	245	ARG
27	AE	246	LEU
27	AE	259	LYS
27	AE	260	GLN
28	AC	54	LYS
28	AC	58	LYS
28	AC	61	MET
28	AC	63	VAL
28	AC	64	THR
28	AC	65	LYS
28	AC	66	LEU
28	AC	71	LYS
28	AC	73	MET
28	AC	74	LYS
28	AC	76	LYS
28	AC	94	ILE
28	AC	104	ASP
28	AC	110	MET
28	AC	114	LYS
28	AC	115	GLN
28	AC	116	THR
28	AC	117	ARG
28	AC	120	GLN
28	AC	134	ASN
28	AC	142	LYS
28	AC	146	GLU
28	AC	160	LEU
28	AC	166	ARG
28	AC	167	ARG
28	AC	172	ASN
28	AC	173	LYS
28	AC	183	LYS
28	AC	184	VAL
28	AC	211	LYS
28	AC	212	LYS
28	AC	215	MET
28	AC	216	MET
28	AC	227	ARG
28	AC	236	PHE
28	AC	238	LYS

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Mol	Chain	Res	Type
28	AC	250	TYR
28	AC	257	LYS
28	AC	259	THR
28	AC	261	PHE
28	AC	262	THR
28	AC	263	LYS
28	AC	267	GLN
28	AC	271	ASP
28	AC	275	LYS
29	AG	1	MET
29	AG	2	LYS
29	AG	13	GLN
29	AG	17	GLU
29	AG	19	ASP
29	AG	29	GLU
29	AG	30	LYS
29	AG	31	ARG
29	AG	32	MET
29	AG	44	GLU
29	AG	58	LYS
29	AG	64	LYS
29	AG	74	ARG
29	AG	76	LEU
29	AG	77	LEU
29	AG	79	LYS
29	AG	88	ARG
29	AG	94	ARG
29	AG	98	ARG
29	AG	115	LYS
29	AG	116	LYS
29	AG	120	ASP
29	AG	121	ILE
29	AG	126	ASP
29	AG	127	THR
29	AG	128	THR
29	AG	131	ARG
29	AG	133	LEU
29	AG	137	ARG
29	AG	142	ARG
29	AG	143	LYS
29	AG	145	PHE
29	AG	150	GLU

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Mol	Chain	Res	Type
29	AG	158	VAL
29	AG	159	ARG
29	AG	164	LYS
29	AG	168	LYS
29	AG	170	ARG
29	AG	172	LYS
29	AG	175	LYS
29	AG	179	LEU
29	AG	180	VAL
29	AG	196	LYS
29	AG	198	ARG
29	AG	200	LYS
29	AG	203	LYS
29	AG	217	MET
29	AG	224	ARG
29	AG	230	LYS
29	AG	233	ARG
30	AF	15	PRO
30	AF	18	LYS
30	AF	29	GLN
30	AF	36	GLN
30	AF	37	ASP
30	AF	38	TYR
30	AF	41	VAL
30	AF	42	LYS
30	AF	43	GLU
30	AF	44	LYS
30	AF	47	LYS
30	AF	49	LEU
30	AF	60	ARG
30	AF	62	ARG
30	AF	63	LYS
30	AF	65	GLN
30	AF	71	ARG
30	AF	76	MET
30	AF	78	MET
30	AF	85	LYS
30	AF	88	MET
30	AF	91	ARG
30	AF	94	LYS
30	AF	98	GLU
30	AF	110	GLN

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Mol	Chain	Res	Type
30	AF	116	ILE
30	AF	122	ARG
30	AF	125	SER
30	AF	127	ARG
30	AF	128	ILE
30	AF	130	ARG
30	AF	136	ARG
30	AF	145	ARG
30	AF	164	ARG
30	AF	167	LYS
30	AF	175	ASP
30	AF	177	LEU
30	AF	182	LYS
30	AF	186	ASN
30	AF	190	ILE
30	AF	192	LYS
30	AF	195	GLU
30	AF	202	SER
30	AF	204	ARG
31	AH	9	VAL
31	AH	10	LYS
31	AH	11	PRO
31	AH	14	GLU
31	AH	15	LYS
31	AH	16	PRO
31	AH	17	ASP
31	AH	23	ILE
31	AH	32	MET
31	AH	34	SER
31	AH	36	LEU
31	AH	37	LYS
31	AH	40	LEU
31	AH	57	ARG
31	AH	58	LYS
31	AH	61	ILE
31	AH	69	LEU
31	AH	72	PHE
31	AH	74	LYS
31	AH	81	ARG
31	AH	82	GLU
31	AH	85	LYS
31	AH	87	PHE

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Mol	Chain	Res	Type
31	AH	93	VAL
31	AH	99	ARG
31	AH	105	THR
31	AH	107	LYS
31	AH	109	ARG
31	AH	111	LYS
31	AH	112	ASN
31	AH	113	LYS
31	AH	116	ARG
31	AH	118	ARG
31	AH	120	ARG
31	AH	122	LEU
31	AH	131	GLU
31	AH	143	ARG
31	AH	145	ARG
31	AH	157	HIS
31	AH	158	LEU
31	AH	160	LYS
31	AH	163	GLN
31	AH	179	LYS
31	AH	185	VAL
31	AH	193	GLN
32	AW	3	ARG
32	AW	4	MET
32	AW	18	GLU
32	AW	20	ARG
32	AW	23	ARG
32	AW	52	ILE
32	AW	64	ASN
32	AW	84	LYS
32	AW	98	GLN
32	AW	103	VAL
32	AW	114	GLU
32	AW	124	LYS
32	AW	128	PHE
32	AW	129	PHE
33	AI	3	ILE
33	AI	5	ARG
33	AI	6	ASP
33	AI	13	LYS
33	AI	19	LYS
33	AI	23	LYS

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Mol	Chain	Res	Type
33	AI	25	ARG
33	AI	37	LYS
33	AI	41	ARG
33	AI	47	ARG
33	AI	49	ARG
33	AI	56	ARG
33	AI	70	GLU
33	AI	74	ARG
33	AI	100	CYS
33	AI	110	ARG
33	AI	117	TYR
33	AI	119	LEU
33	AI	123	ARG
33	AI	124	LYS
33	AI	125	LYS
33	AI	140	LYS
33	AI	141	ARG
33	AI	143	LYS
33	AI	144	LYS
33	AI	148	LYS
33	AI	150	ASP
33	AI	154	LYS
33	AI	155	ASN
33	AI	158	ILE
33	AI	161	LEU
33	AI	167	GLN
33	AI	191	GLU
33	AI	202	ILE
33	AI	205	ARG
33	AI	206	LYS
34	AQ	6	PRO
34	AQ	7	LEU
34	AQ	13	PHE
34	AQ	17	LYS
34	AQ	20	THR
34	AQ	24	HIS
34	AQ	26	LYS
34	AQ	33	LYS
34	AQ	37	ARG
34	AQ	41	MET
34	AQ	56	LEU
34	AQ	62	ARG

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Mol	Chain	Res	Type
34	AQ	73	LYS
34	AQ	101	ASP
34	AQ	102	GLU
34	AQ	105	LYS
34	AQ	107	GLU
34	AQ	115	TYR
34	AQ	117	ARG
34	AQ	120	LEU
34	AQ	126	ARG
34	AQ	130	LYS
34	AQ	131	LYS
34	AQ	135	PRO
34	AQ	140	ARG
34	AQ	142	GLN
34	AQ	145	TYR
34	AQ	146	ARG
35	Ah	140	LYS
35	Ah	142	LEU
35	Ah	145	LYS
35	Ah	151	PHE
35	Ah	155	ARG
35	Ah	160	ARG
35	Ah	165	ARG
35	Ah	170	ARG
35	Ah	172	ARG
35	Ah	179	MET
35	Ah	181	ARG
35	Ah	185	PHE
35	Ah	286	LYS
35	Ah	297	GLN
38	Cz	17	VAL
38	Cz	28	PHE
38	Cz	29	LEU
38	Cz	35	GLN
38	Cz	48	ARG
38	Cz	58	THR
38	Cz	91	LYS
38	Cz	99	LEU
38	Cz	100	VAL
38	Cz	101	LYS
38	Cz	111	LEU
38	Cz	119	GLN

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Mol	Chain	Res	Type
38	Cz	147	LYS
38	Cz	156	LYS
38	Cz	159	MET
38	Cz	160	LYS
38	Cz	163	LEU
38	Cz	202	ARG
38	Cz	207	LYS
38	Cz	210	MET
38	Cz	212	LYS
39	Cq	5	ASP
39	Cq	6	ARG
39	Cq	14	PHE
39	Cq	16	LYS
39	Cq	24	TYR
39	Cq	26	LYS
39	Cq	34	ASN
39	Cq	42	GLN
39	Cq	44	ARG
39	Cq	45	MET
39	Cq	48	ARG
39	Cq	50	LYS
39	Cq	62	ARG
39	Cq	69	LEU
39	Cq	77	LYS
39	Cq	81	HIS
39	Cq	94	ASP
39	Cq	96	THR
39	Cq	99	ARG
39	Cq	105	ASN
39	Cq	108	PRO
39	Cq	130	LEU
39	Cq	133	GLU
39	Cq	134	LYS
39	Cq	137	PHE
39	Cq	141	LEU
39	Cq	149	ARG
39	Cq	155	LEU
39	Cq	162	LYS
39	Cq	183	PHE
39	Cq	185	PHE
39	Cq	191	GLN
39	Cq	206	ILE

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Mol	Chain	Res	Type
39	Cq	231	TYR
39	Cq	234	VAL
39	Cq	239	HIS
39	Cq	255	THR
39	Cq	264	LYS
40	CK	1	MET
40	CK	2	PRO
40	CK	5	PHE
40	CK	14	TYR
40	CK	16	ARG
40	CK	21	GLU
40	CK	30	PRO
40	CK	40	LYS
40	CK	41	LYS
40	CK	44	ASP
40	CK	53	TRP
40	CK	56	LEU
40	CK	61	LYS
40	CK	90	ARG
40	CK	91	ASP
40	CK	92	ARG
40	CK	96	LYS
40	CK	99	LYS
40	CK	104	ILE
40	CK	108	GLU
40	CK	114	ARG
40	CK	116	MET
40	CK	117	ARG
40	CK	119	ARG
40	CK	123	ARG
40	CK	130	LYS
41	CO	3	GLU
41	CO	5	GLN
41	CO	12	ARG
41	CO	18	ARG
41	CO	25	LYS
41	CO	49	ARG
41	CO	53	LYS
41	CO	68	ARG
41	CO	78	ARG
41	CO	82	ARG
41	CO	85	ARG

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Mol	Chain	Res	Type
41	CO	93	LYS
41	CO	94	ARG
41	CO	96	GLN
41	CO	103	LYS
41	CO	106	ASP
41	CO	110	PRO
41	CO	117	ARG
41	CO	128	ARG
41	CO	129	LEU
41	CO	133	ARG
41	CO	138	LEU
41	CO	158	GLU
41	CO	159	LYS
41	CO	169	ARG
41	CO	173	GLN
41	CO	175	MET
41	CO	183	LYS
41	CO	187	LYS
41	CO	188	LYS
41	CO	189	ILE
41	CO	190	ASP
41	CO	192	TYR
41	CO	198	THR
41	CO	199	HIS
41	CO	201	LEU
42	CL	12	PRO
42	CL	19	GLN
42	CL	20	ARG
42	CL	21	ARG
42	CL	28	GLN
42	CL	31	ARG
42	CL	33	ILE
42	CL	34	ARG
42	CL	44	ARG
42	CL	46	ILE
42	CL	49	ARG
42	CL	61	CYS
42	CL	69	LYS
42	CL	74	ARG
42	CL	79	GLU
42	CL	82	ARG
42	CL	88	LYS

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Mol	Chain	Res	Type
42	CL	92	ARG
42	CL	101	ARG
42	CL	103	ARG
42	CL	108	GLU
42	CL	127	PHE
42	CL	135	LYS
42	CL	136	LYS
42	CL	149	GLN
42	CL	150	LEU
42	CL	155	MET
42	CL	158	ARG
42	CL	159	ASN
42	CL	163	LYS
42	CL	164	GLU
42	CL	165	LYS
42	CL	167	ARG
42	CL	173	GLU
42	CL	176	PHE
42	CL	190	ARG
42	CL	195	ARG
42	CL	198	ARG
42	CL	200	LYS
42	CL	201	GLU
42	CL	205	GLN
43	CV	10	SER
43	CV	15	ARG
43	CV	16	ILE
43	CV	43	LYS
43	CV	48	ARG
43	CV	52	LEU
43	CV	66	LYS
43	CV	67	LYS
43	CV	74	LYS
43	CV	75	LYS
43	CV	85	ARG
43	CV	88	TYR
43	CV	92	ASP
43	CV	94	VAL
43	CV	101	ASN
43	CV	109	LYS
43	CV	113	LYS
43	CV	118	THR

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Mol	Chain	Res	Type
43	CV	123	LYS
44	CM	2	VAL
44	CM	3	PHE
44	CM	5	ARG
44	CM	7	VAL
44	CM	11	ARG
44	CM	12	VAL
44	CM	32	ASP
44	CM	34	ASN
44	CM	37	LEU
44	CM	42	CYS
44	CM	43	THR
44	CM	47	ARG
44	CM	48	GLN
44	CM	59	ASP
44	CM	60	PHE
44	CM	61	ILE
44	CM	62	LEU
44	CM	63	LYS
44	CM	65	PRO
44	CM	67	SER
44	CM	69	HIS
44	CM	74	ARG
44	CM	77	TRP
44	CM	79	LYS
44	CM	90	ARG
44	CM	99	GLU
44	CM	100	ARG
44	CM	107	PHE
44	CM	113	MET
44	CM	114	LYS
44	CM	118	MET
44	CM	119	ARG
44	CM	124	LYS
45	Ca	7	LYS
45	Ca	9	ARG
45	Ca	10	LYS
45	Ca	12	ARG
45	Ca	14	HIS
45	Ca	27	LYS
45	Ca	45	PHE
45	Ca	58	MET

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Mol	Chain	Res	Type
45	Ca	59	LYS
45	Ca	63	LEU
45	Ca	64	LYS
45	Ca	65	ARG
45	Ca	77	LYS
45	Ca	85	GLN
45	Ca	92	LYS
45	Ca	93	ASN
45	Ca	94	LYS
45	Ca	117	LEU
45	Ca	119	LYS
45	Ca	129	PHE
46	CN	21	PHE
46	CN	24	ARG
46	CN	31	ARG
46	CN	32	GLN
46	CN	41	ARG
46	CN	44	ARG
46	CN	49	ARG
46	CN	54	LYS
46	CN	61	ILE
46	CN	64	ILE
46	CN	67	ARG
46	CN	68	ARG
46	CN	71	ARG
46	CN	72	LYS
46	CN	73	ARG
46	CN	75	VAL
46	CN	77	LYS
46	CN	80	THR
46	CN	89	VAL
46	CN	91	GLN
46	CN	94	PHE
46	CN	108	ARG
46	CN	114	ARG
46	CN	128	LYS
46	CN	138	PHE
46	CN	139	HIS
46	CN	140	LYS
46	CN	149	GLN
46	CN	162	ARG
46	CN	169	ARG

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Mol	Chain	Res	Type
46	CN	170	LYS
46	CN	172	ARG
46	CN	176	LYS
46	CN	184	ILE
46	CN	188	ARG
46	CN	189	ARG
46	CN	195	ARG
46	CN	198	LEU
46	CN	199	GLN
47	CI	7	ARG
47	CI	10	ARG
47	CI	21	ARG
47	CI	24	ARG
47	CI	30	LYS
47	CI	39	LYS
47	CI	69	ARG
47	CI	74	LYS
47	CI	76	MET
47	CI	82	ARG
47	CI	86	HIS
47	CI	88	ARG
47	CI	101	LYS
47	CI	102	MET
47	CI	103	LEU
47	CI	109	ASP
47	CI	112	GLN
47	CI	116	ARG
47	CI	133	GLN
47	CI	139	ARG
47	CI	146	GLU
47	CI	153	ARG
47	CI	154	ARG
47	CI	164	LYS
47	CI	169	LYS
47	CI	187	LYS
47	CI	200	VAL
47	CI	202	SER
47	CI	208	LYS
47	CI	213	HIS
48	CD	22	ARG
48	CD	23	ARG
48	CD	35	ARG

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Mol	Chain	Res	Type
48	CD	41	LYS
48	CD	50	ARG
48	CD	58	ARG
48	CD	63	GLN
48	CD	66	TYR
48	CD	93	THR
48	CD	107	ARG
48	CD	113	PHE
48	CD	115	MET
48	CD	124	GLU
48	CD	130	TYR
48	CD	152	ARG
48	CD	160	PHE
48	CD	193	GLU
48	CD	202	GLN
48	CD	223	PHE
48	CD	252	VAL
48	CD	254	GLU
48	CD	255	LYS
48	CD	256	LYS
48	CD	258	LYS
48	CD	259	LYS
48	CD	260	GLU
48	CD	262	LYS
48	CD	263	LYS
48	CD	265	ARG
48	CD	268	ARG
48	CD	270	LYS
48	CD	291	GLN
48	CD	293	ARG
49	CQ	6	ARG
49	CQ	7	HIS
49	CQ	8	ASN
49	CQ	9	LYS
49	CQ	11	ARG
49	CQ	13	VAL
49	CQ	14	ARG
49	CQ	15	ARG
49	CQ	16	LYS
49	CQ	17	GLU
49	CQ	19	LYS
49	CQ	20	SER

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Mol	Chain	Res	Type
49	CQ	21	GLN
49	CQ	22	ASP
49	CQ	31	LEU
49	CQ	32	TYR
49	CQ	50	ARG
49	CQ	53	MET
49	CQ	65	ARG
49	CQ	66	MET
49	CQ	69	LYS
49	CQ	71	LYS
49	CQ	75	ARG
49	CQ	78	LYS
49	CQ	91	ARG
49	CQ	93	GLN
49	CQ	94	GLU
49	CQ	97	LYS
49	CQ	98	LEU
49	CQ	108	ARG
49	CQ	112	ARG
49	CQ	140	SER
49	CQ	144	LYS
49	CQ	150	ARG
49	CQ	154	LYS
49	CQ	160	HIS
49	CQ	162	HIS
49	CQ	163	THR
49	CQ	164	LYS
49	CQ	166	TYR
49	CQ	170	LYS
49	CQ	172	ARG
49	CQ	173	LYS
49	CQ	178	ARG
49	CQ	181	ARG
49	CQ	187	LYS
50	CR	3	MET
50	CR	5	ARG
50	CR	17	CYS
50	CR	20	LYS
50	CR	21	LYS
50	CR	24	LEU
50	CR	25	ASP
50	CR	29	THR

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Mol	Chain	Res	Type
50	CR	34	ASN
50	CR	39	GLN
50	CR	46	LYS
50	CR	57	VAL
50	CR	60	ARG
50	CR	62	ARG
50	CR	63	CYS
50	CR	70	ARG
50	CR	71	ARG
50	CR	74	ARG
50	CR	76	MET
50	CR	81	ARG
50	CR	92	LYS
50	CR	96	MET
50	CR	97	ARG
50	CR	104	ARG
50	CR	106	LEU
50	CR	113	LYS
50	CR	116	ASP
50	CR	117	ARG
50	CR	119	MET
50	CR	130	ASN
50	CR	133	LYS
50	CR	134	ASN
50	CR	138	LEU
50	CR	140	GLU
50	CR	141	HIS
50	CR	144	LYS
50	CR	145	LEU
50	CR	153	LYS
50	CR	157	ASP
50	CR	160	GLU
50	CR	162	ARG
50	CR	165	LYS
51	CA	21	LYS
51	CA	24	LYS
51	CA	30	ARG
51	CA	38	HIS
51	CA	64	ARG
51	CA	67	TYR
51	CA	72	ARG
51	CA	92	LYS

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Mol	Chain	Res	Type
51	CA	93	LYS
51	CA	95	GLN
51	CA	97	ASN
51	CA	104	VAL
51	CA	118	GLU
51	CA	119	LYS
51	CA	123	ARG
51	CA	125	LYS
51	CA	143	THR
51	CA	144	LYS
51	CA	147	ARG
51	CA	155	LYS
51	CA	156	LYS
51	CA	181	LYS
51	CA	188	LYS
51	CA	190	LYS
51	CA	192	LYS
51	CA	202	VAL
51	CA	205	ASN
51	CA	221	LYS
51	CA	226	ARG
51	CA	227	ARG
51	CA	241	ARG
51	CA	245	ARG
51	CA	247	ARG
51	CA	250	LYS
51	CA	255	LYS
51	CA	256	GLU
52	CS	7	LEU
52	CS	8	ARG
52	CS	9	GLU
52	CS	13	VAL
52	CS	15	ARG
52	CS	16	CYS
52	CS	17	LEU
52	CS	19	THR
52	CS	20	PRO
52	CS	23	HIS
52	CS	24	THR
52	CS	29	ARG
52	CS	36	ASN
52	CS	41	LYS

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Mol	Chain	Res	Type
52	CS	43	ARG
52	CS	53	LYS
52	CS	54	MET
52	CS	60	GLU
52	CS	66	GLN
52	CS	68	PHE
52	CS	69	GLU
52	CS	70	LYS
52	CS	74	ARG
52	CS	78	PHE
52	CS	81	TRP
52	CS	83	ARG
52	CS	84	TYR
52	CS	87	ARG
52	CS	88	SER
52	CS	91	HIS
52	CS	94	TYR
52	CS	95	ARG
52	CS	108	GLN
52	CS	111	ARG
52	CS	118	ARG
52	CS	120	ARG
52	CS	125	GLN
52	CS	127	MET
52	CS	128	LYS
52	CS	131	GLU
52	CS	136	LYS
52	CS	138	ARG
52	CS	139	ARG
52	CS	143	LYS
52	CS	149	LYS
52	CS	152	PHE
52	CS	154	LEU
52	CS	157	ARG
52	CS	158	VAL
52	CS	159	LEU
52	CS	161	ARG
52	CS	162	GLN
52	CS	164	LYS
52	CS	166	ARG
52	CS	167	PHE
52	CS	170	LYS

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Mol	Chain	Res	Type
52	CS	173	ASN
52	CS	175	PHE
52	CS	176	PHE
53	CT	4	THR
53	CT	5	LYS
53	CT	7	LYS
53	CT	17	ARG
53	CT	18	PRO
53	CT	21	LYS
53	CT	30	TYR
53	CT	31	MET
53	CT	33	ILE
53	CT	36	LYS
53	CT	41	ASP
53	CT	45	MET
53	CT	60	LYS
53	CT	63	ARG
53	CT	65	TYR
53	CT	70	HIS
53	CT	78	LYS
53	CT	80	VAL
53	CT	84	ILE
53	CT	85	LEU
53	CT	88	ARG
53	CT	89	ILE
53	CT	107	LYS
53	CT	114	GLN
53	CT	116	LYS
53	CT	122	LYS
53	CT	124	THR
53	CT	127	GLN
53	CT	128	LEU
53	CT	140	PHE
53	CT	144	ASN
53	CT	146	LYS
53	CT	148	PRO
53	CT	150	LEU
53	CT	152	GLU
53	CT	154	ILE
53	CT	156	TYR
54	CP	4	TYR
54	CP	5	SER

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Mol	Chain	Res	Type
54	CP	6	LEU
54	CP	7	ASP
54	CP	8	PRO
54	CP	10	ASN
54	CP	16	LYS
54	CP	18	ARG
54	CP	23	ARG
54	CP	26	PHE
54	CP	32	THR
54	CP	40	HIS
54	CP	42	ARG
54	CP	46	LYS
54	CP	49	LYS
54	CP	53	LEU
54	CP	64	ASN
54	CP	69	ARG
54	CP	76	TRP
54	CP	78	TRP
54	CP	86	LYS
54	CP	92	LEU
54	CP	94	MET
54	CP	99	GLU
54	CP	103	GLU
54	CP	104	LEU
54	CP	105	LYS
54	CP	107	LEU
54	CP	109	VAL
54	CP	114	ILE
54	CP	115	GLU
54	CP	118	GLN
54	CP	120	ASN
54	CP	126	ARG
54	CP	128	ARG
54	CP	139	TYR
54	CP	140	MET
54	CP	145	HIS
54	CP	153	LYS
55	CU	35	ASP
55	CU	41	GLN
55	CU	46	ARG
55	CU	52	LYS
55	CU	56	LEU

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Mol	Chain	Res	Type
55	CU	65	ARG
55	CU	66	SER
55	CU	67	LYS
55	CU	75	GLU
55	CU	78	PHE
55	CU	80	LYS
55	CU	84	LYS
55	CU	91	LEU
55	CU	93	LYS
55	CU	101	ARG
55	CU	107	LYS
55	CU	110	TYR
55	CU	113	ARG
55	CU	115	PHE
55	CU	125	GLU
56	CX	36	LYS
56	CX	39	LYS
56	CX	40	ILE
56	CX	41	ARG
56	CX	46	PHE
56	CX	48	ARG
56	CX	50	LYS
56	CX	55	ARG
56	CX	57	GLN
56	CX	60	TYR
56	CX	62	ARG
56	CX	63	LYS
56	CX	67	ARG
56	CX	68	ARG
56	CX	69	ASN
56	CX	76	ILE
56	CX	79	PHE
56	CX	89	LYS
56	CX	90	ILE
56	CX	91	GLU
56	CX	100	VAL
56	CX	110	LYS
56	CX	111	GLN
56	CX	114	LYS
56	CX	119	ILE
56	CX	123	LYS
56	CX	129	ARG

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Mol	Chain	Res	Type
56	CX	139	ARG
56	CX	153	ILE
56	CX	155	ILE
56	CX	156	ILE
57	CY	2	LYS
57	CY	15	ARG
57	CY	24	HIS
57	CY	28	LYS
57	CY	36	LYS
57	CY	45	ARG
57	CY	47	MET
57	CY	50	ARG
57	CY	52	ASP
57	CY	54	GLU
57	CY	56	GLN
57	CY	59	ARG
57	CY	61	HIS
57	CY	62	TYR
57	CY	65	GLN
57	CY	66	GLN
57	CY	69	LYS
57	CY	72	GLN
57	CY	76	LYS
57	CY	83	GLU
57	CY	86	GLN
57	CY	109	LEU
57	CY	110	LYS
57	CY	113	LYS
57	CY	117	LYS
57	CY	130	LYS
57	CY	131	GLU
57	CY	132	LYS
58	CW	2	LYS
58	CW	3	VAL
58	CW	7	SER
58	CW	11	TYR
58	CW	12	LYS
58	CW	17	HIS
58	CW	19	ARG
58	CW	23	ARG
58	CW	25	ASP
58	CW	27	LYS

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Mol	Chain	Res	Type
58	CW	28	VAL
58	CW	37	GLU
58	CW	43	LYS
58	CW	44	ARG
58	CW	57	ARG
58	CW	61	LYS
58	CW	65	GLU
58	CW	69	LYS
58	CW	73	ARG
58	CW	74	ARG
58	CW	77	LYS
58	CW	80	ARG
58	CW	83	THR
58	CW	91	MET
58	CW	96	GLN
58	CW	97	LYS
58	CW	99	GLU
58	CW	110	ARG
59	CZ	3	LYS
59	CZ	5	MET
59	CZ	6	LYS
59	CZ	17	ARG
59	CZ	21	ARG
59	CZ	28	ASN
59	CZ	30	ASP
59	CZ	31	ASP
59	CZ	34	SER
59	CZ	36	ARG
59	CZ	38	TYR
59	CZ	42	LEU
59	CZ	47	ASP
59	CZ	48	ARG
59	CZ	52	LYS
59	CZ	54	THR
59	CZ	57	MET
59	CZ	64	LYS
59	CZ	79	HIS
59	CZ	81	MET
59	CZ	83	THR
59	CZ	93	LYS
59	CZ	99	ASP
59	CZ	102	ARG

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Mol	Chain	Res	Type
59	CZ	108	ARG
59	CZ	109	LYS
59	CZ	118	PHE
59	CZ	121	ARG
59	CZ	123	LYS
59	CZ	126	LYS
59	CZ	127	ASN
59	CZ	128	LYS
59	CZ	133	LYS
59	CZ	135	ARG
59	CZ	136	PHE
60	Cr	11	ARG
60	Cr	18	ILE
60	Cr	20	ARG
60	Cr	23	GLN
60	Cr	28	GLU
60	Cr	33	LYS
60	Cr	35	ARG
60	Cr	43	LEU
60	Cr	44	ILE
60	Cr	45	HIS
60	Cr	47	LYS
60	Cr	48	THR
60	Cr	56	ASP
60	Cr	67	ARG
60	Cr	71	ARG
60	Cr	72	LYS
60	Cr	77	TYR
60	Cr	79	ARG
60	Cr	82	ILE
60	Cr	84	LYS
60	Cr	87	ARG
60	Cr	99	LYS
60	Cr	101	LYS
60	Cr	105	ASP
60	Cr	106	LEU
60	Cr	107	ARG
60	Cr	108	MET
60	Cr	112	ARG
60	Cr	128	ARG
60	Cr	132	ARG
61	Ch	4	ILE

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Mol	Chain	Res	Type
61	Ch	8	ASP
61	Ch	10	ARG
61	Ch	14	LYS
61	Ch	23	ASP
61	Ch	27	GLU
61	Ch	32	ARG
61	Ch	35	LYS
61	Ch	48	ARG
61	Ch	51	ARG
61	Ch	56	ARG
61	Ch	73	TYR
61	Ch	74	LYS
61	Ch	76	LYS
61	Ch	78	TYR
61	Ch	82	ASP
61	Ch	86	LYS
61	Ch	91	MET
61	Ch	94	ARG
61	Ch	97	LYS
61	Ch	98	HIS
61	Ch	103	LYS
61	Ch	105	LYS
61	Ch	106	LYS
61	Ch	109	ARG
61	Ch	114	TYR
61	Ch	117	ARG
61	Ch	118	LYS
61	Ch	122	LYS
62	Cb	5	LYS
62	Cb	7	HIS
62	Cb	12	GLN
62	Cb	14	ARG
62	Cb	15	LYS
62	Cb	18	ARG
62	Cb	22	LYS
62	Cb	25	ARG
62	Cb	26	SER
62	Cb	28	ARG
62	Cb	33	LYS
62	Cb	38	LYS
62	Cb	39	PHE
62	Cb	41	ARG

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Mol	Chain	Res	Type
62	Cb	47	LYS
62	Cb	51	LYS
62	Cb	54	LEU
62	Cb	55	LYS
62	Cb	56	LYS
62	Cb	57	MET
62	Cb	58	GLN
62	Cb	60	ASN
62	Cb	63	LYS
62	Cb	65	MET
62	Cb	73	LYS
63	CB	2	SER
63	CB	10	ARG
63	CB	20	LYS
63	CB	24	ARG
63	CB	25	HIS
63	CB	26	ARG
63	CB	28	LYS
63	CB	30	LYS
63	CB	32	PHE
63	CB	34	LYS
63	CB	36	ASP
63	CB	41	VAL
63	CB	50	LYS
63	CB	59	GLU
63	CB	61	ASP
63	CB	76	VAL
63	CB	77	THR
63	CB	99	LEU
63	CB	102	PHE
63	CB	103	LYS
63	CB	104	THR
63	CB	106	PHE
63	CB	112	ASP
63	CB	115	LYS
63	CB	119	TYR
63	CB	120	LYS
63	CB	124	LYS
63	CB	127	LYS
63	CB	134	CYS
63	CB	138	GLN
63	CB	139	ASP

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Mol	Chain	Res	Type
63	CB	144	LYS
63	CB	145	GLN
63	CB	148	LYS
63	CB	150	PHE
63	CB	154	LYS
63	CB	155	LYS
63	CB	158	GLN
63	CB	160	ILE
63	CB	163	ILE
63	CB	167	GLN
63	CB	169	ARG
63	CB	174	ARG
63	CB	198	ARG
63	CB	199	GLU
63	CB	200	ARG
63	CB	204	GLN
63	CB	208	ASN
63	CB	224	LYS
63	CB	226	LYS
63	CB	229	LYS
63	CB	242	ARG
63	CB	243	LYS
63	CB	261	ARG
63	CB	264	PHE
63	CB	282	LYS
63	CB	291	TYR
63	CB	295	ASP
63	CB	297	LYS
63	CB	299	ILE
63	CB	300	LYS
63	CB	304	SER
63	CB	306	ASP
63	CB	309	LEU
63	CB	311	ASP
63	CB	312	LYS
63	CB	322	HIS
63	CB	325	GLU
63	CB	329	ASP
63	CB	345	LEU
63	CB	349	LYS
63	CB	354	GLN
63	CB	356	LYS

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Mol	Chain	Res	Type
63	CB	357	ARG
63	CB	358	ARG
63	CB	361	GLU
63	CB	365	LEU
63	CB	366	LYS
63	CB	374	PHE
63	CB	378	ARG
63	CB	389	MET
63	CB	393	LYS
63	CB	394	LYS
63	CB	396	ARG
64	CF	21	LYS
64	CF	29	LYS
64	CF	47	ARG
64	CF	52	GLU
64	CF	66	ARG
64	CF	74	MET
64	CF	88	LYS
64	CF	94	ARG
64	CF	98	ILE
64	CF	106	ARG
64	CF	107	LYS
64	CF	134	ARG
64	CF	135	ILE
64	CF	146	ASN
64	CF	157	ARG
64	CF	170	THR
64	CF	171	ASP
64	CF	181	LYS
64	CF	190	LEU
64	CF	199	LYS
64	CF	200	ARG
64	CF	220	MET
64	CF	221	LYS
64	CF	222	LYS
64	CF	224	THR
64	CF	243	LEU
65	Cc	10	SER
65	Cc	11	LEU
65	Cc	39	ARG
65	Cc	40	GLN
65	Cc	57	LYS

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Mol	Chain	Res	Type
65	Cc	59	GLU
65	Cc	61	GLU
65	Cc	68	LYS
65	Cc	80	GLU
65	Cc	88	TYR
65	Cc	90	ARG
65	Cc	91	VAL
66	Cd	12	LYS
66	Cd	17	ILE
66	Cd	18	ASN
66	Cd	23	ARG
66	Cd	39	LYS
66	Cd	41	ARG
66	Cd	44	ARG
66	Cd	48	GLU
66	Cd	55	LYS
66	Cd	57	MET
66	Cd	60	PRO
66	Cd	63	ARG
66	Cd	67	ARG
66	Cd	70	LYS
66	Cd	75	LYS
66	Cd	91	LYS
66	Cd	92	ARG
66	Cd	95	ASP
66	Cd	101	LYS
66	Cd	103	TYR
66	Cd	113	THR
66	Cd	114	PHE
66	Cd	116	ASN
66	Cd	117	LEU
67	Ce	5	ARG
67	Ce	9	LYS
67	Ce	11	LYS
67	Ce	12	ILE
67	Ce	13	VAL
67	Ce	17	THR
67	Ce	19	LYS
67	Ce	21	ILE
67	Ce	22	ARG
67	Ce	27	ARG
67	Ce	28	TYR

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Mol	Chain	Res	Type
67	Ce	30	LYS
67	Ce	33	ARG
67	Ce	36	ARG
67	Ce	37	LYS
67	Ce	39	ARG
67	Ce	42	ASP
67	Ce	44	ARG
67	Ce	64	LYS
67	Ce	69	MET
67	Ce	74	PHE
67	Ce	76	LYS
67	Ce	78	LEU
67	Ce	80	HIS
67	Ce	83	LYS
67	Ce	90	MET
67	Ce	106	LYS
67	Ce	108	ARG
67	Ce	109	LYS
67	Ce	128	ARG
67	Ce	129	LEU
67	Ce	130	ARG
68	Cf	4	ARG
68	Cf	5	LEU
68	Cf	15	LYS
68	Cf	16	ARG
68	Cf	18	LEU
68	Cf	19	ARG
68	Cf	22	ARG
68	Cf	23	GLU
68	Cf	24	HIS
68	Cf	29	LYS
68	Cf	31	GLU
68	Cf	33	VAL
68	Cf	38	GLU
68	Cf	46	ARG
68	Cf	49	TYR
68	Cf	52	LYS
68	Cf	54	LYS
68	Cf	55	ASN
68	Cf	66	LYS
68	Cf	70	ILE
68	Cf	73	LYS

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Mol	Chain	Res	Type
68	Cf	80	ASN
68	Cf	87	LYS
68	Cf	89	ARG
68	Cf	95	LYS
68	Cf	100	ARG
68	Cf	101	ILE
68	Cf	102	ARG
68	Cf	104	MET
68	Cf	106	TYR
68	Cf	109	ARG
69	Cg	3	GLN
69	Cg	5	LEU
69	Cg	8	ARG
69	Cg	9	ARG
69	Cg	18	ASN
69	Cg	19	LYS
69	Cg	21	ARG
69	Cg	22	LEU
69	Cg	29	ARG
69	Cg	30	ILE
69	Cg	32	TYR
69	Cg	36	LYS
69	Cg	38	VAL
69	Cg	40	LYS
69	Cg	42	PRO
69	Cg	43	LYS
69	Cg	48	VAL
69	Cg	50	PRO
69	Cg	53	LEU
69	Cg	54	ARG
69	Cg	57	ARG
69	Cg	59	VAL
69	Cg	60	ARG
69	Cg	65	MET
69	Cg	66	ARG
69	Cg	67	LEU
69	Cg	72	LYS
69	Cg	74	VAL
69	Cg	76	ARG
69	Cg	78	TYR
69	Cg	81	SER
69	Cg	83	CYS

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Mol	Chain	Res	Type
69	Cg	85	LYS
69	Cg	88	ARG
69	Cg	108	LYS
70	Ci	3	LEU
70	Ci	4	ARG
70	Ci	6	PRO
70	Ci	7	MET
70	Ci	11	LEU
70	Ci	12	ASN
70	Ci	13	LYS
70	Ci	18	THR
70	Ci	21	VAL
70	Ci	22	SER
70	Ci	23	LYS
70	Ci	25	ARG
70	Ci	28	ARG
70	Ci	29	ARG
70	Ci	32	ARG
70	Ci	33	LEU
70	Ci	35	LYS
70	Ci	38	LYS
70	Ci	42	ASP
70	Ci	43	MET
70	Ci	45	ARG
70	Ci	60	LEU
70	Ci	62	LYS
70	Ci	65	LYS
70	Ci	71	LYS
70	Ci	74	LYS
70	Ci	75	LYS
70	Ci	76	ARG
70	Ci	80	HIS
70	Ci	82	ARG
70	Ci	85	ARG
70	Ci	86	LYS
70	Ci	88	GLU
70	Ci	91	SER
70	Ci	98	ARG
70	Ci	99	LYS
71	Cj	25	LYS
71	Cj	31	LYS
71	Cj	36	LYS

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Mol	Chain	Res	Type
71	Cj	46	LYS
71	Cj	52	LYS
71	Cj	54	LYS
71	Cj	55	ARG
71	Cj	57	ASN
71	Cj	64	MET
71	Cj	65	ARG
71	Cj	68	LYS
71	Cj	71	TYR
71	Cj	72	ARG
71	Cj	73	ARG
71	Cj	75	ARG
71	Cj	79	ARG
71	Cj	83	THR
71	Cj	87	LYS
71	Cj	88	ARG
71	Cj	91	VAL
72	Ck	4	LYS
72	Ck	6	GLU
72	Ck	7	GLU
72	Ck	9	LYS
72	Ck	16	ARG
72	Ck	21	LYS
72	Ck	24	LYS
72	Ck	26	LYS
72	Ck	27	LYS
72	Ck	29	LYS
72	Ck	30	ASP
72	Ck	31	ASN
72	Ck	37	ARG
72	Ck	48	THR
72	Ck	52	LYS
72	Ck	54	GLU
72	Ck	55	LYS
72	Ck	57	LYS
72	Ck	69	LEU
73	Cl	5	LYS
73	Cl	8	ARG
73	Cl	11	ARG
73	Cl	12	PHE
73	Cl	16	LYS
73	Cl	21	ARG

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Mol	Chain	Res	Type
73	Cl	25	GLN
73	Cl	28	ARG
73	Cl	29	MET
73	Cl	30	LYS
73	Cl	37	TYR
73	Cl	40	LYS
73	Cl	46	ARG
73	Cl	48	LYS
74	CC	5	ARG
74	CC	8	ILE
74	CC	9	SER
74	CC	13	GLU
74	CC	14	LYS
74	CC	16	GLU
74	CC	17	SER
74	CC	20	LYS
74	CC	22	VAL
74	CC	24	LEU
74	CC	27	VAL
74	CC	28	PHE
74	CC	29	LYS
74	CC	33	ARG
74	CC	39	PHE
74	CC	48	ASN
74	CC	56	GLU
74	CC	57	LEU
74	CC	65	GLU
74	CC	86	ARG
74	CC	87	SER
74	CC	92	PHE
74	CC	100	ARG
74	CC	106	LYS
74	CC	109	ARG
74	CC	110	ARG
74	CC	113	ARG
74	CC	116	ASN
74	CC	140	LYS
74	CC	165	LYS
74	CC	173	LYS
74	CC	175	LYS
74	CC	179	ASP
74	CC	184	TYR

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Mol	Chain	Res	Type
74	CC	187	GLN
74	CC	193	LYS
74	CC	199	ARG
74	CC	200	ARG
74	CC	201	ARG
74	CC	205	ARG
74	CC	213	GLU
74	CC	214	ASP
74	CC	217	ILE
74	CC	218	ILE
74	CC	229	LEU
74	CC	234	LYS
74	CC	235	LEU
74	CC	248	ARG
74	CC	254	GLU
74	CC	258	ARG
74	CC	260	LEU
74	CC	261	ASP
74	CC	272	SER
74	CC	273	LEU
74	CC	274	LYS
74	CC	275	SER
74	CC	279	LEU
74	CC	283	LYS
74	CC	286	ASN
74	CC	289	LEU
74	CC	294	LYS
74	CC	300	ARG
74	CC	303	ARG
74	CC	308	LYS
74	CC	311	ARG
74	CC	312	ARG
74	CC	313	VAL
74	CC	314	LEU
74	CC	320	LYS
74	CC	321	ASN
74	CC	323	ARG
74	CC	325	MET
74	CC	328	LEU
74	CC	333	LYS
74	CC	340	ILE
74	CC	341	LEU

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Mol	Chain	Res	Type
74	CC	343	GLN
74	CC	345	ARG
74	CC	347	HIS
74	CC	350	ARG
74	CC	351	VAL
74	CC	353	LYS
74	CC	364	LYS
75	Cm	79	GLU
75	Cm	83	ARG
75	Cm	85	LEU
75	Cm	88	LYS
75	Cm	91	CYS
75	Cm	93	LYS
75	Cm	97	ARG
75	Cm	98	LYS
75	Cm	106	ARG
75	Cm	111	ARG
75	Cm	112	LYS
75	Cm	113	LYS
75	Cm	114	LYS
75	Cm	125	LYS
75	Cm	126	LYS
75	Cm	127	VAL
75	Cm	128	LYS
76	Cn	5	TRP
76	Cn	6	ARG
76	Cn	8	LYS
76	Cn	9	ARG
76	Cn	10	MET
76	Cn	15	ARG
76	Cn	18	ARG
76	Cn	19	LYS
76	Cn	21	ARG
76	Cn	23	ARG
77	Cp	3	LYS
77	Cp	6	LYS
77	Cp	17	ARG
77	Cp	24	LYS
77	Cp	25	MET
77	Cp	27	LYS
77	Cp	28	LYS
77	Cp	30	GLU

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Mol	Chain	Res	Type
77	Cp	42	CYS
77	Cp	46	LYS
77	Cp	48	LYS
77	Cp	49	ARG
77	Cp	50	ARG
77	Cp	54	ILE
77	Cp	62	LYS
77	Cp	75	SER
77	Cp	84	ARG
77	Cp	85	ARG
77	Cp	87	LYS
77	Cp	90	LYS
77	Cp	92	GLN
78	Co	6	LYS
78	Co	8	ARG
78	Co	13	LYS
78	Co	14	LYS
78	Co	24	THR
78	Co	27	LYS
78	Co	28	LYS
78	Co	40	ARG
78	Co	43	ARG
78	Co	44	LYS
78	Co	45	GLN
78	Co	55	ILE
78	Co	58	LYS
78	Co	59	LYS
78	Co	61	LYS
78	Co	64	LYS
78	Co	65	LYS
78	Co	66	ILE
78	Co	71	GLU
78	Co	76	ASN
78	Co	78	ARG
78	Co	81	ARG
78	Co	82	MET
78	Co	83	LEU
78	Co	87	ARG
78	Co	89	LYS
78	Co	91	PHE
78	Co	93	LEU
78	Co	97	LYS

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Mol	Chain	Res	Type
78	Co	98	LYS
78	Co	99	ARG
78	Co	104	ILE
78	Co	105	GLN
79	CJ	9	GLU
79	CJ	16	ARG
79	CJ	19	LYS
79	CJ	32	ARG
79	CJ	38	LYS
79	CJ	95	ARG
79	CJ	96	LYS
79	CJ	97	ASN
79	CJ	111	GLU
79	CJ	113	ILE
79	CJ	131	TYR
79	CJ	146	ARG
80	CH	1	MET
80	CH	2	LYS
80	CH	12	ILE
80	CH	20	LEU
80	CH	23	ARG
80	CH	28	LYS
80	CH	37	ASP
80	CH	41	ILE
80	CH	50	LYS
80	CH	52	LYS
80	CH	53	LYS
80	CH	59	LYS
80	CH	89	ARG
80	CH	92	MET
80	CH	105	ILE
80	CH	107	GLU
80	CH	108	ASN
80	CH	121	LYS
80	CH	124	ARG
80	CH	129	ARG
80	CH	150	ASP
80	CH	168	LYS
80	CH	177	ASP
80	CH	188	GLN
81	CE	27	VAL
81	CE	32	LEU

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Mol	Chain	Res	Type
81	CE	38	LYS
81	CE	41	LYS
81	CE	42	PRO
81	CE	46	ARG
81	CE	51	VAL
81	CE	52	ARG
81	CE	56	ARG
81	CE	57	TYR
81	CE	60	SER
81	CE	62	MET
81	CE	65	ARG
81	CE	66	LYS
81	CE	68	MET
81	CE	72	LYS
81	CE	74	SER
81	CE	80	VAL
81	CE	81	GLU
81	CE	82	LYS
81	CE	84	LYS
81	CE	85	LYS
81	CE	87	LYS
81	CE	94	LYS
81	CE	99	ASP
81	CE	108	LYS
81	CE	109	LEU
81	CE	111	LYS
81	CE	114	ARG
81	CE	115	TYR
81	CE	120	ASP
81	CE	121	VAL
81	CE	123	ARG
81	CE	126	LEU
81	CE	127	SER
81	CE	130	LYS
81	CE	133	PHE
81	CE	134	SER
81	CE	136	HIS
81	CE	138	ARG
81	CE	139	LYS
81	CE	144	ILE
81	CE	158	ARG
81	CE	163	VAL

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Mol	Chain	Res	Type
81	CE	167	GLN
81	CE	183	ARG
81	CE	186	LEU
81	CE	187	ARG
81	CE	192	LYS
81	CE	198	SER
81	CE	204	SER
81	CE	205	ASN
81	CE	207	LYS
81	CE	210	LYS
81	CE	212	LEU
81	CE	213	THR
81	CE	222	LEU
81	CE	223	ARG
81	CE	224	LYS
81	CE	228	GLN
81	CE	229	GLU
81	CE	232	ILE
81	CE	234	ASP
81	CE	239	LYS
81	CE	240	TYR
81	CE	243	THR
81	CE	245	GLN
81	CE	247	LYS
81	CE	256	GLN
81	CE	260	LYS
81	CE	264	ILE
81	CE	281	ILE
81	CE	282	TYR
81	CE	285	LYS
81	CE	286	LEU
81	CE	287	VAL
82	CG	22	GLN
82	CG	25	LYS
82	CG	31	LEU
82	CG	32	PHE
82	CG	33	GLU
82	CG	34	LYS
82	CG	38	ASN
82	CG	39	PHE
82	CG	41	ILE
82	CG	43	GLN

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Mol	Chain	Res	Type
82	CG	44	ASP
82	CG	45	ILE
82	CG	48	LYS
82	CG	51	LEU
82	CG	56	LYS
82	CG	58	PRO
82	CG	62	ARG
82	CG	67	ARG
82	CG	71	TYR
82	CG	73	ARG
82	CG	82	GLN
82	CG	83	PHE
82	CG	85	GLN
82	CG	88	ASP
82	CG	89	ARG
82	CG	90	GLN
82	CG	91	THR
82	CG	94	GLN
82	CG	97	LYS
82	CG	98	LEU
82	CG	101	LYS
82	CG	105	GLU
82	CG	107	LYS
82	CG	110	LYS
82	CG	113	ARG
82	CG	117	ARG
82	CG	120	LYS
82	CG	121	LYS
82	CG	125	LYS
82	CG	133	PRO
82	CG	148	GLU
82	CG	154	LEU
82	CG	156	VAL
82	CG	166	LEU
82	CG	173	LEU
82	CG	175	ARG
82	CG	176	LYS
82	CG	179	VAL
82	CG	183	ILE
82	CG	184	ILE
82	CG	185	LYS
82	CG	187	LYS

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Mol	Chain	Res	Type
82	CG	189	ARG
82	CG	190	LEU
82	CG	196	ARG
82	CG	200	THR
82	CG	205	THR
82	CG	217	LYS
82	CG	230	TYR
82	CG	231	ASP
82	CG	234	ARG
82	CG	236	HIS
82	CG	240	ASN
82	CG	254	GLU
82	CG	259	LYS
82	CG	261	LEU
82	CG	264	LYS
82	CG	265	LEU
84	Cu	49	LYS
84	Cv	2	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (308) such sidechains are listed below:

Mol	Chain	Res	Type
1	Az	3	ASN
1	Az	21	ASN
1	Az	27	HIS
1	Az	64	GLN
1	Az	101	ASN
1	Az	158	ASN
1	Az	168	GLN
1	Az	176	GLN
1	Az	448	GLN
1	Az	477	GLN
1	Az	493	ASN
1	Az	705	HIS
1	Az	710	HIS
1	Az	715	HIS
1	Az	737	GLN
1	Az	803	ASN
1	Az	827	ASN
2	Ag	20	GLN
2	Ag	64	HIS
2	Ag	76	GLN

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Mol	Chain	Res	Type
2	Ag	119	GLN
2	Ag	143	GLN
2	Ag	226	HIS
2	Ag	237	ASN
3	AU	18	HIS
3	AU	47	ASN
4	AK	7	ASN
4	AK	28	HIS
4	AK	39	ASN
4	AK	44	HIS
4	AK	50	GLN
4	AK	66	HIS
5	AO	20	GLN
6	AX	39	ASN
6	AX	46	HIS
7	AM	19	GLN
7	AM	28	HIS
7	AM	75	ASN
7	AM	82	ASN
8	AS	11	HIS
8	AS	42	HIS
8	AS	87	GLN
9	Ad	26	ASN
9	Ad	28	HIS
10	AN	5	HIS
10	AN	62	GLN
10	AN	101	HIS
10	AN	123	HIS
11	AL	18	GLN
11	AL	19	ASN
11	AL	65	ASN
11	AL	121	GLN
11	AL	156	GLN
12	AR	74	GLN
12	AR	121	GLN
13	AP	41	GLN
13	AP	53	GLN
13	AP	79	HIS
13	AP	103	ASN
13	AP	114	HIS
13	AP	128	HIS
14	AT	11	GLN

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Mol	Chain	Res	Type
14	AT	42	HIS
14	AT	63	HIS
14	AT	83	GLN
14	AT	85	ASN
14	AT	126	GLN
14	AT	128	GLN
15	AB	75	GLN
15	AB	76	ASN
15	AB	101	HIS
15	AB	118	GLN
15	AB	147	ASN
15	AB	148	ASN
15	AB	179	ASN
15	AB	202	GLN
15	AB	232	HIS
16	AA	50	ASN
16	AA	81	ASN
16	AA	110	ASN
16	AA	141	ASN
17	AV	47	ASN
18	AY	29	HIS
18	AY	85	ASN
18	AY	89	HIS
18	AY	94	HIS
19	AZ	103	HIS
21	Ab	49	HIS
21	Ab	83	GLN
21	Ab	84	HIS
22	Ac	26	GLN
23	AD	74	GLN
23	AD	179	GLN
23	AD	226	GLN
25	Af	151	ASN
26	AJ	125	HIS
27	AE	50	ASN
27	AE	98	ASN
27	AE	142	HIS
27	AE	188	ASN
27	AE	209	HIS
28	AC	115	GLN
28	AC	172	ASN
29	AG	56	ASN

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Mol	Chain	Res	Type
29	AG	65	GLN
29	AG	81	HIS
29	AG	177	GLN
29	AG	187	HIS
30	AF	29	GLN
30	AF	65	GLN
30	AF	83	ASN
30	AF	186	ASN
31	AH	12	ASN
31	AH	73	GLN
31	AH	163	GLN
31	AH	168	HIS
32	AW	15	ASN
32	AW	44	HIS
32	AW	64	ASN
32	AW	98	GLN
33	AI	22	HIS
33	AI	84	ASN
33	AI	99	ASN
33	AI	165	GLN
34	AQ	80	GLN
35	Ah	298	ASN
38	Cz	44	GLN
38	Cz	72	GLN
38	Cz	96	ASN
38	Cz	143	ASN
38	Cz	188	ASN
39	Cq	39	GLN
39	Cq	68	HIS
39	Cq	127	ASN
39	Cq	139	GLN
39	Cq	212	HIS
41	CO	26	GLN
41	CO	50	ASN
41	CO	72	HIS
41	CO	199	HIS
42	CL	67	HIS
42	CL	87	HIS
42	CL	104	ASN
42	CL	115	GLN
43	CV	36	ASN
43	CV	84	GLN

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Mol	Chain	Res	Type
45	Ca	14	HIS
45	Ca	17	HIS
45	Ca	93	ASN
46	CN	8	GLN
46	CN	29	GLN
46	CN	57	GLN
46	CN	87	HIS
46	CN	90	ASN
46	CN	91	GLN
46	CN	109	HIS
46	CN	139	HIS
46	CN	149	GLN
46	CN	156	HIS
46	CN	199	GLN
46	CN	201	HIS
47	CI	86	HIS
47	CI	92	HIS
47	CI	112	GLN
47	CI	123	GLN
47	CI	130	HIS
47	CI	133	GLN
47	CI	147	HIS
47	CI	163	GLN
47	CI	203	HIS
47	CI	213	HIS
48	CD	81	HIS
48	CD	122	GLN
48	CD	195	HIS
48	CD	244	HIS
49	CQ	8	ASN
49	CQ	21	GLN
49	CQ	45	GLN
49	CQ	93	GLN
49	CQ	188	ASN
50	CR	34	ASN
50	CR	39	GLN
50	CR	40	GLN
50	CR	121	HIS
50	CR	130	ASN
50	CR	158	GLN
51	CA	8	GLN
51	CA	50	HIS

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Mol	Chain	Res	Type
51	CA	97	ASN
51	CA	209	HIS
52	CS	23	HIS
52	CS	92	ASN
52	CS	108	GLN
52	CS	117	HIS
52	CS	125	GLN
52	CS	144	GLN
52	CS	173	ASN
53	CT	22	HIS
53	CT	54	HIS
53	CT	70	HIS
53	CT	112	ASN
53	CT	127	GLN
53	CT	131	GLN
53	CT	144	ASN
54	CP	10	ASN
54	CP	54	GLN
54	CP	93	HIS
54	CP	97	ASN
54	CP	118	GLN
54	CP	137	ASN
54	CP	145	HIS
55	CU	50	ASN
56	CX	107	HIS
57	CY	56	GLN
57	CY	61	HIS
57	CY	66	GLN
57	CY	100	HIS
58	CW	17	HIS
58	CW	59	HIS
58	CW	95	ASN
59	CZ	76	ASN
59	CZ	127	ASN
60	Cr	6	GLN
60	Cr	31	ASN
60	Cr	70	GLN
60	Cr	95	HIS
62	Cb	7	HIS
62	Cb	42	ASN
62	Cb	49	HIS
63	CB	42	HIS

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Mol	Chain	Res	Type
63	CB	55	HIS
63	CB	68	ASN
63	CB	175	GLN
63	CB	203	GLN
63	CB	204	GLN
63	CB	245	HIS
63	CB	275	HIS
63	CB	328	ASN
63	CB	376	HIS
64	CF	24	ASN
64	CF	39	GLN
64	CF	58	HIS
64	CF	63	GLN
64	CF	192	HIS
64	CF	239	GLN
64	CF	248	ASN
65	Cc	19	GLN
65	Cc	33	GLN
65	Cc	78	ASN
66	Cd	18	ASN
66	Cd	79	ASN
66	Cd	93	ASN
66	Cd	100	ASN
66	Cd	116	ASN
66	Cd	118	GLN
67	Ce	24	GLN
67	Ce	43	ASN
67	Ce	92	ASN
68	Cf	20	ASN
68	Cf	91	ASN
69	Cg	112	GLN
70	Ci	15	HIS
70	Ci	26	HIS
70	Ci	80	HIS
71	Cj	48	ASN
71	Cj	57	ASN
72	Ck	31	ASN
73	Cl	33	ASN
73	Cl	43	HIS
74	CC	50	GLN
74	CC	61	GLN
74	CC	142	HIS

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Mol	Chain	Res	Type
74	CC	187	GLN
74	CC	321	ASN
74	CC	329	ASN
74	CC	346	ASN
75	Cm	90	ASN
77	Cp	33	GLN
77	Cp	34	HIS
77	Cp	92	GLN
78	Co	36	GLN
79	CJ	46	GLN
79	CJ	98	ASN
80	CH	42	ASN
80	CH	98	HIS
80	CH	162	GLN
81	CE	47	ASN
81	CE	182	ASN
81	CE	191	GLN
81	CE	205	ASN
81	CE	228	GLN
81	CE	250	GLN
81	CE	256	GLN
81	CE	266	GLN
81	CE	279	ASN
82	CG	43	GLN
82	CG	46	GLN
82	CG	64	GLN
82	CG	85	GLN
82	CG	100	HIS
82	CG	159	HIS
82	CG	208	ASN
82	CG	227	ASN
82	CG	236	HIS
82	CG	240	ASN
83	Cs	17	HIS
83	Ct	17	HIS
84	Cv	15	ASN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
36	B2	1760/1869 (94%)	503 (28%)	128 (7%)

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
37	BC	74/75 (98%)	13 (17%)	3 (4%)
85	A5	3761/5070 (74%)	1048 (27%)	337 (8%)
86	A7	120/121 (99%)	24 (20%)	2 (1%)
87	A8	156/157 (99%)	38 (24%)	12 (7%)
All	All	5871/7292 (80%)	1626 (27%)	482 (8%)

All (1626) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
36	B2	2	A
36	B2	3	C
36	B2	4	C
36	B2	8	U
36	B2	16	G
36	B2	25	A
36	B2	26	U
36	B2	32	U
36	B2	33	G
36	B2	41	G
36	B2	44	U
36	B2	45	A
36	B2	46	A
36	B2	50	A
36	B2	56	G
36	B2	59	U
36	B2	66	G
36	B2	67	C
36	B2	68	A
36	B2	70	G
36	B2	72	C
36	B2	73	C
36	B2	74	G
36	B2	75	G
36	B2	76	U
36	B2	77	A
36	B2	78	C
36	B2	79	A
36	B2	80	G
36	B2	99	A
36	B2	103	A
36	B2	113	G
36	B2	126	G

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Mol	Chain	Res	Type
36	B2	139	C
36	B2	140	C
36	B2	141	A
36	B2	142	C
36	B2	143	U
36	B2	147	A
36	B2	148	U
36	B2	155	G
36	B2	160	U
36	B2	161	U
36	B2	162	C
36	B2	170	A
36	B2	176	U
36	B2	182	C
36	B2	183	G
36	B2	188	C
36	B2	189	U
36	B2	190	G
36	B2	191	A
36	B2	192	C
36	B2	206	G
36	B2	208	G
36	B2	209	A
36	B2	215	G
36	B2	216	C
36	B2	226	A
36	B2	227	U
36	B2	228	C
36	B2	229	A
36	B2	232	A
36	B2	233	C
36	B2	235	A
36	B2	236	A
36	B2	237	C
36	B2	238	C
36	B2	241	G
36	B2	282	G
36	B2	284	C
36	B2	285	U
36	B2	286	U
36	B2	287	U
36	B2	288	G

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Mol	Chain	Res	Type
36	B2	295	C
36	B2	296	U
36	B2	307	G
36	B2	308	G
36	B2	309	G
36	B2	312	G
36	B2	313	A
36	B2	316	G
36	B2	318	A
36	B2	319	C
36	B2	321	C
36	B2	323	C
36	B2	324	C
36	B2	325	C
36	B2	326	C
36	B2	327	G
36	B2	328	U
36	B2	330	G
36	B2	332	G
36	B2	336	A
36	B2	342	C
36	B2	347	G
36	B2	349	A
36	B2	356	C
36	B2	362	C
36	B2	364	A
36	B2	367	U
36	B2	369	C
36	B2	385	G
36	B2	386	C
36	B2	389	A
36	B2	392	A
36	B2	400	C
36	B2	407	G
36	B2	408	A
36	B2	409	C
36	B2	426	A
36	B2	448	A
36	B2	450	C
36	B2	452	G
36	B2	459	C
36	B2	464	A

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Mol	Chain	Res	Type
36	B2	466	G
36	B2	470	G
36	B2	471	G
36	B2	472	C
36	B2	473	A
36	B2	474	G
36	B2	476	A
36	B2	482	G
36	B2	487	U
36	B2	492	C
36	B2	494	C
36	B2	496	C
36	B2	525	A
36	B2	531	A
36	B2	532	C
36	B2	533	A
36	B2	535	G
36	B2	547	G
36	B2	549	C
36	B2	551	U
36	B2	552	G
36	B2	553	U
36	B2	556	U
36	B2	557	U
36	B2	559	G
36	B2	560	A
36	B2	564	A
36	B2	565	G
36	B2	576	A
36	B2	584	A
36	B2	586	G
36	B2	588	G
36	B2	590	A
36	B2	591	U
36	B2	592	C
36	B2	593	C
36	B2	596	U
36	B2	600	G
36	B2	605	A
36	B2	606	G
36	B2	607	U
36	B2	608	C

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Mol	Chain	Res	Type
36	B2	610	G
36	B2	614	C
36	B2	619	A
36	B2	620	G
36	B2	628	A
36	B2	629	A
36	B2	634	A
36	B2	641	A
36	B2	642	U
36	B2	643	A
36	B2	644	G
36	B2	655	A
36	B2	663	C
36	B2	668	A
36	B2	669	A
36	B2	670	A
36	B2	671	A
36	B2	672	A
36	B2	679	A
36	B2	688	U
36	B2	689	U
36	B2	691	G
36	B2	693	A
36	B2	694	G
36	B2	695	C
36	B2	696	G
36	B2	697	G
36	B2	699	C
36	B2	701	G
36	B2	729	C
36	B2	731	G
36	B2	732	U
36	B2	733	C
36	B2	734	C
36	B2	735	C
36	B2	738	C
36	B2	739	C
36	B2	740	C
36	B2	741	C
36	B2	742	U
36	B2	743	U
36	B2	744	G

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Mol	Chain	Res	Type
36	B2	746	C
36	B2	747	U
36	B2	748	C
36	B2	749	U
36	B2	751	G
36	B2	752	G
36	B2	753	C
36	B2	754	G
36	B2	755	C
36	B2	788	G
36	B2	791	C
36	B2	797	C
36	B2	798	G
36	B2	799	U
36	B2	810	A
36	B2	811	A
36	B2	812	A
36	B2	818	A
36	B2	821	G
36	B2	822	U
36	B2	830	A
36	B2	831	G
36	B2	834	C
36	B2	835	C
36	B2	836	G
36	B2	837	A
36	B2	838	G
36	B2	839	C
36	B2	840	C
36	B2	842	C
36	B2	843	C
36	B2	845	G
36	B2	847	A
36	B2	853	C
36	B2	864	A
36	B2	868	G
36	B2	869	A
36	B2	870	A
36	B2	871	U
36	B2	873	G
36	B2	874	G
36	B2	875	A

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Mol	Chain	Res	Type
36	B2	876	C
36	B2	877	C
36	B2	878	G
36	B2	881	G
36	B2	886	A
36	B2	887	U
36	B2	888	U
36	B2	889	U
36	B2	890	U
36	B2	894	G
36	B2	895	G
36	B2	897	U
36	B2	903	A
36	B2	904	A
36	B2	911	C
36	B2	913	A
36	B2	914	U
36	B2	920	A
36	B2	921	G
36	B2	933	G
36	B2	951	C
36	B2	955	A
36	B2	966	U
36	B2	969	U
36	B2	970	G
36	B2	971	G
36	B2	976	G
36	B2	978	G
36	B2	990	A
36	B2	992	A
36	B2	999	G
36	B2	1001	A
36	B2	1008	A
36	B2	1017	U
36	B2	1023	A
36	B2	1025	U
36	B2	1031	A
36	B2	1039	C
36	B2	1045	U
36	B2	1049	A
36	B2	1050	A
36	B2	1051	G

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Mol	Chain	Res	Type
36	B2	1052	A
36	B2	1054	G
36	B2	1060	A
36	B2	1061	U
36	B2	1062	A
36	B2	1072	U
36	B2	1073	U
36	B2	1077	A
36	B2	1078	C
36	B2	1083	A
36	B2	1096	G
36	B2	1097	G
36	B2	1109	C
36	B2	1110	G
36	B2	1111	U
36	B2	1115	U
36	B2	1116	C
36	B2	1117	C
36	B2	1118	C
36	B2	1120	U
36	B2	1123	C
36	B2	1131	G
36	B2	1136	U
36	B2	1138	C
36	B2	1140	G
36	B2	1141	G
36	B2	1143	A
36	B2	1148	A
36	B2	1149	A
36	B2	1150	A
36	B2	1153	C
36	B2	1154	U
36	B2	1155	U
36	B2	1157	G
36	B2	1158	G
36	B2	1161	U
36	B2	1166	G
36	B2	1168	G
36	B2	1203	G
36	B2	1206	G
36	B2	1208	A
36	B2	1209	A

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Mol	Chain	Res	Type
36	B2	1212	G
36	B2	1214	A
36	B2	1215	C
36	B2	1216	C
36	B2	1217	A
36	B2	1221	G
36	B2	1224	G
36	B2	1236	G
36	B2	1237	C
36	B2	1242	U
36	B2	1245	G
36	B2	1251	A
36	B2	1253	A
36	B2	1254	C
36	B2	1256	G
36	B2	1257	G
36	B2	1259	A
36	B2	1260	A
36	B2	1263	U
36	B2	1264	C
36	B2	1274	G
36	B2	1275	G
36	B2	1276	A
36	B2	1278	A
36	B2	1283	C
36	B2	1284	A
36	B2	1285	G
36	B2	1300	U
36	B2	1301	A
36	B2	1303	C
36	B2	1307	U
36	B2	1308	U
36	B2	1314	U
36	B2	1315	U
36	B2	1316	C
36	B2	1317	C
36	B2	1324	G
36	B2	1329	U
36	B2	1342	U
36	B2	1343	U
36	B2	1348	G
36	B2	1358	U

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Mol	Chain	Res	Type
36	B2	1371	U
36	B2	1372	U
36	B2	1373	C
36	B2	1378	A
36	B2	1394	G
36	B2	1395	C
36	B2	1396	A
36	B2	1397	U
36	B2	1398	G
36	B2	1401	A
36	B2	1402	A
36	B2	1404	U
36	B2	1406	G
36	B2	1407	U
36	B2	1409	A
36	B2	1410	C
36	B2	1412	C
36	B2	1417	C
36	B2	1418	C
36	B2	1419	C
36	B2	1426	U
36	B2	1430	C
36	B2	1435	C
36	B2	1437	C
36	B2	1449	G
36	B2	1452	A
36	B2	1454	A
36	B2	1456	G
36	B2	1459	G
36	B2	1462	U
36	B2	1465	A
36	B2	1474	A
36	B2	1475	G
36	B2	1476	A
36	B2	1477	U
36	B2	1478	U
36	B2	1489	A
36	B2	1490	G
36	B2	1493	C
36	B2	1494	U
36	B2	1495	G
36	B2	1508	A

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Mol	Chain	Res	Type
36	B2	1516	G
36	B2	1519	U
36	B2	1520	G
36	B2	1521	C
36	B2	1524	G
36	B2	1533	A
36	B2	1535	U
36	B2	1537	A
36	B2	1540	G
36	B2	1544	C
36	B2	1545	A
36	B2	1550	G
36	B2	1551	U
36	B2	1552	G
36	B2	1553	C
36	B2	1554	C
36	B2	1556	A
36	B2	1557	C
36	B2	1558	C
36	B2	1563	G
36	B2	1564	C
36	B2	1570	G
36	B2	1578	U
36	B2	1580	A
36	B2	1582	C
36	B2	1585	U
36	B2	1587	G
36	B2	1588	A
36	B2	1598	G
36	B2	1599	U
36	B2	1600	G
36	B2	1602	U
36	B2	1604	G
36	B2	1621	U
36	B2	1622	U
36	B2	1623	A
36	B2	1632	G
36	B2	1633	A
36	B2	1637	A
36	B2	1638	G
36	B2	1639	G
36	B2	1648	G

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Mol	Chain	Res	Type
36	B2	1654	G
36	B2	1657	G
36	B2	1665	G
36	B2	1680	G
36	B2	1688	C
36	B2	1695	A
36	B2	1699	A
36	B2	1701	C
36	B2	1702	G
36	B2	1721	U
36	B2	1722	G
36	B2	1727	G
36	B2	1729	U
36	B2	1745	A
36	B2	1746	U
36	B2	1748	G
36	B2	1752	C
36	B2	1757	G
36	B2	1761	U
36	B2	1780	G
36	B2	1781	A
36	B2	1782	G
36	B2	1783	C
36	B2	1784	G
36	B2	1785	C
36	B2	1786	U
36	B2	1796	G
36	B2	1798	C
36	B2	1805	G
36	B2	1824	A
36	B2	1825	A
36	B2	1826	G
36	B2	1828	C
36	B2	1829	G
36	B2	1831	A
36	B2	1832	A
36	B2	1835	A
36	B2	1838	U
36	B2	1839	U
36	B2	1849	G
36	B2	1851	A
36	B2	1852	C

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Mol	Chain	Res	Type
36	B2	1858	G
36	B2	1861	G
36	B2	1862	G
36	B2	1863	A
36	B2	1864	U
36	B2	1865	C
36	B2	1867	U
36	B2	1869	A
37	BC	8	U
37	BC	9	G
37	BC	13	C
37	BC	16	C
37	BC	18	G
37	BC	20	A
37	BC	21	G
37	BC	36	A
37	BC	46	U
37	BC	47	C
37	BC	48	G
37	BC	58	A
37	BC	75	A
85	A5	2	G
85	A5	12	A
85	A5	13	U
85	A5	15	A
85	A5	19	G
85	A5	25	A
85	A5	39	A
85	A5	42	A
85	A5	48	G
85	A5	49	U
85	A5	58	G
85	A5	59	A
85	A5	64	A
85	A5	65	A
85	A5	73	A
85	A5	75	G
85	A5	82	U
85	A5	91	G
85	A5	95	G
85	A5	98	A
85	A5	108	A

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Mol	Chain	Res	Type
85	A5	109	G
85	A5	112	C
85	A5	115	C
85	A5	116	G
85	A5	120	A
85	A5	126	C
85	A5	133	C
85	A5	136	C
85	A5	142	G
85	A5	143	C
85	A5	144	G
85	A5	149	A
85	A5	157	U
85	A5	159	C
85	A5	160	G
85	A5	164	G
85	A5	170	C
85	A5	172	C
85	A5	174	C
85	A5	178	C
85	A5	184	U
85	A5	185	C
85	A5	187	U
85	A5	188	G
85	A5	189	G
85	A5	190	G
85	A5	191	G
85	A5	200	U
85	A5	201	C
85	A5	202	C
85	A5	207	G
85	A5	210	C
85	A5	216	C
85	A5	217	C
85	A5	219	G
85	A5	220	C
85	A5	221	C
85	A5	224	U
85	A5	226	G
85	A5	228	C
85	A5	232	G
85	A5	233	U

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Mol	Chain	Res	Type
85	A5	238	C
85	A5	245	C
85	A5	246	G
85	A5	251	C
85	A5	265	C
85	A5	266	C
85	A5	276	C
85	A5	277	G
85	A5	280	G
85	A5	281	U
85	A5	286	U
85	A5	293	G
85	A5	294	G
85	A5	297	U
85	A5	305	A
85	A5	306	A
85	A5	310	G
85	A5	316	U
85	A5	318	A
85	A5	334	A
85	A5	340	C
85	A5	349	A
85	A5	350	C
85	A5	357	U
85	A5	360	A
85	A5	361	C
85	A5	362	A
85	A5	381	U
85	A5	386	A
85	A5	387	G
85	A5	398	A
85	A5	405	U
85	A5	406	C
85	A5	407	A
85	A5	408	A
85	A5	409	G
85	A5	410	A
85	A5	412	G
85	A5	413	G
85	A5	414	C
85	A5	418	A
85	A5	431	G

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Mol	Chain	Res	Type
85	A5	432	U
85	A5	433	A
85	A5	435	A
85	A5	436	C
85	A5	445	U
85	A5	446	C
85	A5	449	C
85	A5	451	C
85	A5	452	A
85	A5	453	G
85	A5	454	U
85	A5	455	C
85	A5	460	C
85	A5	464	G
85	A5	465	G
85	A5	466	A
85	A5	468	U
85	A5	469	C
85	A5	470	A
85	A5	480	C
85	A5	485	C
85	A5	486	C
85	A5	487	G
85	A5	489	C
85	A5	490	C
85	A5	497	G
85	A5	498	C
85	A5	500	G
85	A5	502	C
85	A5	503	C
85	A5	504	G
85	A5	505	G
85	A5	506	C
85	A5	509	A
85	A5	510	U
85	A5	513	U
85	A5	514	U
85	A5	639	U
85	A5	640	C
85	A5	641	G
85	A5	649	A
85	A5	650	C

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Mol	Chain	Res	Type
85	A5	656	C
85	A5	662	C
85	A5	664	G
85	A5	665	C
85	A5	666	G
85	A5	667	A
85	A5	668	C
85	A5	669	C
85	A5	670	G
85	A5	681	G
85	A5	683	C
85	A5	685	C
85	A5	686	A
85	A5	687	U
85	A5	688	U
85	A5	690	C
85	A5	694	C
85	A5	696	C
85	A5	697	G
85	A5	704	C
85	A5	705	G
85	A5	712	C
85	A5	717	U
85	A5	720	G
85	A5	725	G
85	A5	726	G
85	A5	728	U
85	A5	729	G
85	A5	730	G
85	A5	732	A
85	A5	737	C
85	A5	741	C
85	A5	746	A
85	A5	747	A
85	A5	748	G
85	A5	749	G
85	A5	912	G
85	A5	918	G
85	A5	923	C
85	A5	927	G
85	A5	928	C
85	A5	929	A

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Mol	Chain	Res	Type
85	A5	931	C
85	A5	932	A
85	A5	933	G
85	A5	934	C
85	A5	935	A
85	A5	936	C
85	A5	937	U
85	A5	938	C
85	A5	939	G
85	A5	943	A
85	A5	944	A
85	A5	945	U
85	A5	946	C
85	A5	947	C
85	A5	949	G
85	A5	951	G
85	A5	952	G
85	A5	956	A
85	A5	957	G
85	A5	958	G
85	A5	959	G
85	A5	960	A
85	A5	961	G
85	A5	962	C
85	A5	963	G
85	A5	964	A
85	A5	965	G
85	A5	966	A
85	A5	967	C
85	A5	968	C
85	A5	969	C
85	A5	970	G
85	A5	971	U
85	A5	972	C
85	A5	975	C
85	A5	982	U
85	A5	983	C
85	A5	1052	G
85	A5	1064	G
85	A5	1072	C
85	A5	1073	G
85	A5	1076	C

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Mol	Chain	Res	Type
85	A5	1080	C
85	A5	1087	A
85	A5	1098	G
85	A5	1101	C
85	A5	1102	U
85	A5	1103	C
85	A5	1164	G
85	A5	1166	G
85	A5	1167	C
85	A5	1168	G
85	A5	1198	G
85	A5	1199	G
85	A5	1210	C
85	A5	1211	G
85	A5	1212	G
85	A5	1214	C
85	A5	1215	C
85	A5	1216	C
85	A5	1218	G
85	A5	1219	G
85	A5	1222	A
85	A5	1231	C
85	A5	1233	G
85	A5	1238	A
85	A5	1239	C
85	A5	1240	G
85	A5	1242	G
85	A5	1243	C
85	A5	1244	G
85	A5	1245	C
85	A5	1246	G
85	A5	1255	A
85	A5	1266	G
85	A5	1267	C
85	A5	1268	G
85	A5	1269	G
85	A5	1270	A
85	A5	1271	G
85	A5	1272	C
85	A5	1273	G
85	A5	1274	A
85	A5	1275	G

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Mol	Chain	Res	Type
85	A5	1276	C
85	A5	1277	G
85	A5	1279	A
85	A5	1281	G
85	A5	1282	G
85	A5	1283	G
85	A5	1285	U
85	A5	1286	C
85	A5	1287	G
85	A5	1288	G
85	A5	1289	C
85	A5	1293	G
85	A5	1294	A
85	A5	1295	C
85	A5	1296	G
85	A5	1297	U
85	A5	1301	C
85	A5	1302	U
85	A5	1303	A
85	A5	1304	C
85	A5	1313	C
85	A5	1325	C
85	A5	1326	A
85	A5	1333	A
85	A5	1335	G
85	A5	1337	A
85	A5	1345	A
85	A5	1354	A
85	A5	1357	C
85	A5	1358	G
85	A5	1359	G
85	A5	1360	G
85	A5	1361	G
85	A5	1365	C
85	A5	1366	G
85	A5	1367	C
85	A5	1368	A
85	A5	1369	C
85	A5	1370	G
85	A5	1371	A
85	A5	1372	A
85	A5	1377	G

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Mol	Chain	Res	Type
85	A5	1378	C
85	A5	1379	C
85	A5	1380	G
85	A5	1381	U
85	A5	1382	G
85	A5	1387	A
85	A5	1390	G
85	A5	1394	G
85	A5	1398	A
85	A5	1399	G
85	A5	1407	C
85	A5	1408	G
85	A5	1409	C
85	A5	1410	U
85	A5	1411	C
85	A5	1420	A
85	A5	1425	G
85	A5	1426	G
85	A5	1427	A
85	A5	1428	U
85	A5	1429	C
85	A5	1432	G
85	A5	1439	C
85	A5	1440	U
85	A5	1441	C
85	A5	1442	C
85	A5	1443	A
85	A5	1444	G
85	A5	1445	U
85	A5	1446	C
85	A5	1447	C
85	A5	1455	G
85	A5	1456	C
85	A5	1475	G
85	A5	1478	C
85	A5	1480	C
85	A5	1481	C
85	A5	1482	G
85	A5	1483	C
85	A5	1485	C
85	A5	1486	C
85	A5	1487	G

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Mol	Chain	Res	Type
85	A5	1497	A
85	A5	1498	G
85	A5	1501	C
85	A5	1518	A
85	A5	1523	A
85	A5	1534	A
85	A5	1547	A
85	A5	1554	A
85	A5	1566	C
85	A5	1568	C
85	A5	1579	C
85	A5	1587	G
85	A5	1591	U
85	A5	1596	U
85	A5	1600	A
85	A5	1608	G
85	A5	1612	G
85	A5	1613	A
85	A5	1614	C
85	A5	1624	G
85	A5	1625	G
85	A5	1631	A
85	A5	1633	G
85	A5	1634	A
85	A5	1640	C
85	A5	1642	A
85	A5	1650	A
85	A5	1651	G
85	A5	1654	G
85	A5	1661	C
85	A5	1664	U
85	A5	1676	C
85	A5	1677	U
85	A5	1680	G
85	A5	1691	G
85	A5	1693	U
85	A5	1697	G
85	A5	1698	C
85	A5	1699	A
85	A5	1700	G
85	A5	1718	C
85	A5	1721	G

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Mol	Chain	Res	Type
85	A5	1723	A
85	A5	1724	G
85	A5	1725	U
85	A5	1734	G
85	A5	1741	G
85	A5	1742	A
85	A5	1746	A
85	A5	1750	G
85	A5	1755	C
85	A5	1756	U
85	A5	1758	G
85	A5	1760	G
85	A5	1761	G
85	A5	1764	G
85	A5	1766	A
85	A5	1769	G
85	A5	1770	A
85	A5	1775	A
85	A5	1776	A
85	A5	1777	C
85	A5	1787	A
85	A5	1789	C
85	A5	1790	U
85	A5	1792	U
85	A5	1797	G
85	A5	1803	G
85	A5	1804	A
85	A5	1805	A
85	A5	1806	G
85	A5	1812	C
85	A5	1821	G
85	A5	1822	U
85	A5	1823	G
85	A5	1833	G
85	A5	1834	U
85	A5	1835	G
85	A5	1836	G
85	A5	1841	C
85	A5	1842	G
85	A5	1854	G
85	A5	1855	G
85	A5	1869	G

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Mol	Chain	Res	Type
85	A5	1871	A
85	A5	1890	G
85	A5	1891	A
85	A5	1897	A
85	A5	1902	G
85	A5	1907	A
85	A5	1908	A
85	A5	1918	U
85	A5	1920	C
85	A5	1921	C
85	A5	1922	G
85	A5	1930	U
85	A5	1931	C
85	A5	1932	A
85	A5	1940	G
85	A5	1947	U
85	A5	1948	G
85	A5	1951	G
85	A5	1952	G
85	A5	1961	G
85	A5	1962	A
85	A5	1971	C
85	A5	1972	G
85	A5	1973	G
85	A5	1976	G
85	A5	1978	C
85	A5	1979	A
85	A5	1982	G
85	A5	1983	A
85	A5	1984	A
85	A5	1985	G
85	A5	1987	C
85	A5	1988	G
85	A5	1997	U
85	A5	1998	A
85	A5	1999	A
85	A5	2001	G
85	A5	2002	A
85	A5	2003	G
85	A5	2004	U
85	A5	2008	U
85	A5	2009	A

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Mol	Chain	Res	Type
85	A5	2010	A
85	A5	2016	C
85	A5	2020	U
85	A5	2024	G
85	A5	2025	A
85	A5	2026	A
85	A5	2044	U
85	A5	2047	A
85	A5	2048	U
85	A5	2052	G
85	A5	2066	C
85	A5	2069	A
85	A5	2084	C
85	A5	2085	G
85	A5	2087	C
85	A5	2089	G
85	A5	2090	U
85	A5	2091	C
85	A5	2092	G
85	A5	2094	G
85	A5	2097	U
85	A5	2098	G
85	A5	2100	A
85	A5	2103	G
85	A5	2105	A
85	A5	2106	G
85	A5	2107	C
85	A5	2108	G
85	A5	2109	G
85	A5	2110	C
85	A5	2111	G
85	A5	2112	G
85	A5	2113	G
85	A5	2114	G
85	A5	2115	G
85	A5	2116	C
85	A5	2117	G
85	A5	2118	G
85	A5	2119	C
85	A5	2120	G
85	A5	2123	C
85	A5	2124	G

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Mol	Chain	Res	Type
85	A5	2125	C
85	A5	2126	G
85	A5	2127	C
85	A5	2128	G
85	A5	2131	C
85	A5	2242	C
85	A5	2247	C
85	A5	2248	C
85	A5	2250	C
85	A5	2251	G
85	A5	2252	G
85	A5	2254	G
85	A5	2255	C
85	A5	2256	C
85	A5	2257	C
85	A5	2258	C
85	A5	2259	G
85	A5	2260	C
85	A5	2261	G
85	A5	2263	A
85	A5	2264	C
85	A5	2265	G
85	A5	2267	U
85	A5	2268	A
85	A5	2269	C
85	A5	2273	G
85	A5	2289	C
85	A5	2290	C
85	A5	2291	G
85	A5	2301	G
85	A5	2313	A
85	A5	2314	G
85	A5	2315	G
85	A5	2317	C
85	A5	2333	G
85	A5	2336	G
85	A5	2348	G
85	A5	2351	C
85	A5	2354	G
85	A5	2359	U
85	A5	2360	A
85	A5	2363	A

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Mol	Chain	Res	Type
85	A5	2364	G
85	A5	2366	A
85	A5	2395	A
85	A5	2396	A
85	A5	2398	U
85	A5	2399	G
85	A5	2407	G
85	A5	2409	U
85	A5	2410	C
85	A5	2421	G
85	A5	2422	C
85	A5	2426	U
85	A5	2437	C
85	A5	2440	U
85	A5	2441	C
85	A5	2442	G
85	A5	2443	G
85	A5	2447	U
85	A5	2450	G
85	A5	2459	G
85	A5	2470	C
85	A5	2471	G
85	A5	2472	A
85	A5	2475	G
85	A5	2476	G
85	A5	2487	G
85	A5	2488	C
85	A5	2489	C
85	A5	2491	C
85	A5	2495	U
85	A5	2503	G
85	A5	2504	C
85	A5	2505	C
85	A5	2506	G
85	A5	2507	A
85	A5	2513	A
85	A5	2517	A
85	A5	2531	C
85	A5	2532	C
85	A5	2544	G
85	A5	2546	G
85	A5	2547	G

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Mol	Chain	Res	Type
85	A5	2550	G
85	A5	2552	G
85	A5	2554	U
85	A5	2575	U
85	A5	2580	U
85	A5	2583	C
85	A5	2589	C
85	A5	2599	G
85	A5	2601	A
85	A5	2602	G
85	A5	2627	C
85	A5	2631	U
85	A5	2639	U
85	A5	2647	A
85	A5	2648	G
85	A5	2650	G
85	A5	2652	G
85	A5	2661	U
85	A5	2662	G
85	A5	2669	C
85	A5	2670	C
85	A5	2671	C
85	A5	2673	G
85	A5	2674	A
85	A5	2675	G
85	A5	2676	A
85	A5	2681	G
85	A5	2686	G
85	A5	2687	U
85	A5	2688	G
85	A5	2691	U
85	A5	2694	G
85	A5	2695	A
85	A5	2696	A
85	A5	2711	G
85	A5	2713	C
85	A5	2716	C
85	A5	2725	A
85	A5	2726	G
85	A5	2743	A
85	A5	2752	G
85	A5	2753	G

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Mol	Chain	Res	Type
85	A5	2755	A
85	A5	2756	G
85	A5	2761	U
85	A5	2762	G
85	A5	2765	A
85	A5	2766	A
85	A5	2767	U
85	A5	2768	C
85	A5	2769	U
85	A5	2770	C
85	A5	2782	U
85	A5	2787	A
85	A5	2788	U
85	A5	2789	A
85	A5	2790	U
85	A5	2794	C
85	A5	2796	G
85	A5	2798	A
85	A5	2803	U
85	A5	2814	C
85	A5	2824	C
85	A5	2825	A
85	A5	2826	U
85	A5	2827	G
85	A5	2828	U
85	A5	2829	U
85	A5	2833	A
85	A5	2854	G
85	A5	2855	G
85	A5	2884	G
85	A5	2900	U
85	A5	2904	U
85	A5	2905	C
85	A5	3594	C
85	A5	3596	A
85	A5	3597	G
85	A5	3602	C
85	A5	3605	C
85	A5	3606	U
85	A5	3615	G
85	A5	3616	U
85	A5	3617	G

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Mol	Chain	Res	Type
85	A5	3618	C
85	A5	3620	G
85	A5	3625	G
85	A5	3626	G
85	A5	3634	G
85	A5	3635	A
85	A5	3662	A
85	A5	3663	A
85	A5	3664	G
85	A5	3673	C
85	A5	3674	G
85	A5	3682	A
85	A5	3691	G
85	A5	3692	A
85	A5	3697	U
85	A5	3698	G
85	A5	3702	A
85	A5	3709	U
85	A5	3710	G
85	A5	3711	A
85	A5	3713	U
85	A5	3714	G
85	A5	3717	A
85	A5	3727	A
85	A5	3729	U
85	A5	3732	A
85	A5	3748	A
85	A5	3752	C
85	A5	3753	G
85	A5	3754	G
85	A5	3756	A
85	A5	3757	G
85	A5	3759	A
85	A5	3776	G
85	A5	3777	G
85	A5	3778	U
85	A5	3784	A
85	A5	3785	A
85	A5	3786	U
85	A5	3792	G
85	A5	3795	A
85	A5	3802	U

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Mol	Chain	Res	Type
85	A5	3810	C
85	A5	3811	G
85	A5	3812	C
85	A5	3814	U
85	A5	3817	A
85	A5	3818	U
85	A5	3819	G
85	A5	3830	A
85	A5	3833	C
85	A5	3834	C
85	A5	3838	U
85	A5	3840	U
85	A5	3875	G
85	A5	3877	A
85	A5	3878	C
85	A5	3879	G
85	A5	3888	G
85	A5	3889	G
85	A5	3897	G
85	A5	3901	A
85	A5	3906	A
85	A5	3907	G
85	A5	3908	A
85	A5	3910	C
85	A5	3915	U
85	A5	3923	A
85	A5	3937	C
85	A5	3939	G
85	A5	3941	G
85	A5	3947	A
85	A5	3949	A
85	A5	3951	G
85	A5	3955	G
85	A5	3959	U
85	A5	3960	A
85	A5	3962	A
85	A5	3963	A
85	A5	3964	U
85	A5	3965	A
85	A5	3966	A
85	A5	3969	G
85	A5	3970	G

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Mol	Chain	Res	Type
85	A5	3973	G
85	A5	4034	G
85	A5	4037	C
85	A5	4038	C
85	A5	4039	G
85	A5	4041	C
85	A5	4042	G
85	A5	4043	G
85	A5	4045	G
85	A5	4047	A
85	A5	4048	A
85	A5	4049	U
85	A5	4053	A
85	A5	4059	C
85	A5	4061	G
85	A5	4062	A
85	A5	4069	U
85	A5	4073	A
85	A5	4076	G
85	A5	4077	A
85	A5	4083	U
85	A5	4086	G
85	A5	4088	C
85	A5	4091	G
85	A5	4093	G
85	A5	4094	G
85	A5	4114	C
85	A5	4115	G
85	A5	4116	C
85	A5	4117	U
85	A5	4119	C
85	A5	4120	U
85	A5	4121	G
85	A5	4122	G
85	A5	4125	C
85	A5	4126	C
85	A5	4127	A
85	A5	4128	A
85	A5	4131	G
85	A5	4133	C
85	A5	4136	G
85	A5	4141	G

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Mol	Chain	Res	Type
85	A5	4143	G
85	A5	4144	C
85	A5	4145	C
85	A5	4153	C
85	A5	4158	C
85	A5	4159	C
85	A5	4161	G
85	A5	4162	C
85	A5	4163	U
85	A5	4164	C
85	A5	4165	C
85	A5	4170	A
85	A5	4171	C
85	A5	4175	G
85	A5	4183	G
85	A5	4184	G
85	A5	4191	G
85	A5	4201	G
85	A5	4212	A
85	A5	4214	A
85	A5	4229	U
85	A5	4232	U
85	A5	4233	A
85	A5	4238	G
85	A5	4249	G
85	A5	4251	A
85	A5	4253	A
85	A5	4254	G
85	A5	4258	C
85	A5	4266	G
85	A5	4267	G
85	A5	4268	A
85	A5	4270	C
85	A5	4271	A
85	A5	4273	A
85	A5	4276	G
85	A5	4280	A
85	A5	4285	U
85	A5	4291	G
85	A5	4296	U
85	A5	4297	G
85	A5	4304	A

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Mol	Chain	Res	Type
85	A5	4306	U
85	A5	4328	G
85	A5	4329	G
85	A5	4330	G
85	A5	4331	G
85	A5	4332	C
85	A5	4347	G
85	A5	4348	A
85	A5	4349	C
85	A5	4350	C
85	A5	4354	U
85	A5	4355	G
85	A5	4356	G
85	A5	4373	G
85	A5	4376	A
85	A5	4377	G
85	A5	4378	A
85	A5	4383	U
85	A5	4387	C
85	A5	4394	A
85	A5	4395	U
85	A5	4406	U
85	A5	4419	U
85	A5	4422	A
85	A5	4426	C
85	A5	4438	U
85	A5	4444	C
85	A5	4448	G
85	A5	4449	A
85	A5	4450	U
85	A5	4452	U
85	A5	4453	C
85	A5	4455	G
85	A5	4456	C
85	A5	4464	A
85	A5	4473	A
85	A5	4474	A
85	A5	4475	G
85	A5	4476	C
85	A5	4477	A
85	A5	4500	U
85	A5	4504	C

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Mol	Chain	Res	Type
85	A5	4512	U
85	A5	4513	A
85	A5	4518	A
85	A5	4519	C
85	A5	4522	G
85	A5	4528	G
85	A5	4532	U
85	A5	4534	G
85	A5	4550	G
85	A5	4567	G
85	A5	4569	U
85	A5	4570	G
85	A5	4574	U
85	A5	4575	G
85	A5	4590	A
85	A5	4599	A
85	A5	4601	U
85	A5	4626	A
85	A5	4636	U
85	A5	4637	G
85	A5	4639	G
85	A5	4640	C
85	A5	4656	A
85	A5	4657	U
85	A5	4658	G
85	A5	4661	G
85	A5	4664	A
85	A5	4670	C
85	A5	4675	U
85	A5	4677	U
85	A5	4678	G
85	A5	4691	A
85	A5	4694	G
85	A5	4697	U
85	A5	4706	G
85	A5	4708	A
85	A5	4709	U
85	A5	4712	C
85	A5	4714	C
85	A5	4717	A
85	A5	4720	C
85	A5	4728	U

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Mol	Chain	Res	Type
85	A5	4729	A
85	A5	4730	C
85	A5	4731	G
85	A5	4734	A
85	A5	4735	G
85	A5	4736	C
85	A5	4739	C
85	A5	4745	G
85	A5	4748	U
85	A5	4749	C
85	A5	4750	G
85	A5	4751	G
85	A5	4752	U
85	A5	4753	U
85	A5	4756	C
85	A5	4758	U
85	A5	4762	A
85	A5	4764	A
85	A5	4771	C
85	A5	4859	C
85	A5	4867	G
85	A5	4870	G
85	A5	4871	C
85	A5	4872	G
85	A5	4874	A
85	A5	4875	G
85	A5	4876	U
85	A5	4877	G
85	A5	4882	U
85	A5	4883	C
85	A5	4884	G
85	A5	4885	U
85	A5	4886	C
85	A5	4888	U
85	A5	4889	G
85	A5	4890	G
85	A5	4895	C
85	A5	4896	G
85	A5	4898	G
85	A5	4899	G
85	A5	4900	C
85	A5	4901	G

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Mol	Chain	Res	Type
85	A5	4904	G
85	A5	4906	C
85	A5	4908	G
85	A5	4910	G
85	A5	4912	G
85	A5	4913	G
85	A5	4914	C
85	A5	4915	G
85	A5	4925	U
85	A5	4932	U
85	A5	4933	C
85	A5	4934	A
85	A5	4935	C
85	A5	4937	C
85	A5	4938	A
85	A5	4943	A
85	A5	4944	C
85	A5	4945	G
85	A5	4949	G
85	A5	4951	G
85	A5	4952	G
85	A5	4956	A
85	A5	4965	U
85	A5	4966	A
85	A5	4967	A
85	A5	4975	G
85	A5	4976	U
85	A5	4979	A
85	A5	4985	U
85	A5	4988	U
85	A5	4989	U
85	A5	4991	U
85	A5	4992	G
85	A5	4998	G
85	A5	5002	U
85	A5	5003	U
85	A5	5004	C
85	A5	5006	U
85	A5	5007	A
85	A5	5008	C
85	A5	5013	C
85	A5	5014	A

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Mol	Chain	Res	Type
85	A5	5017	G
85	A5	5019	A
85	A5	5020	G
85	A5	5021	C
85	A5	5022	U
85	A5	5023	C
85	A5	5027	C
85	A5	5028	G
85	A5	5041	G
85	A5	5042	A
85	A5	5047	C
85	A5	5050	C
85	A5	5054	C
85	A5	5059	C
85	A5	5060	A
85	A5	5061	A
85	A5	5062	G
85	A5	5063	G
85	A5	5067	U
86	A7	7	G
86	A7	11	A
86	A7	13	A
86	A7	15	C
86	A7	21	G
86	A7	22	A
86	A7	26	C
86	A7	33	U
86	A7	41	G
86	A7	42	A
86	A7	45	U
86	A7	50	A
86	A7	52	C
86	A7	53	U
86	A7	63	C
86	A7	64	G
86	A7	73	U
86	A7	74	A
86	A7	93	G
86	A7	100	A
86	A7	110	G
86	A7	112	U
86	A7	113	G

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Mol	Chain	Res	Type
86	A7	121	U
87	A8	16	G
87	A8	23	C
87	A8	30	U
87	A8	34	U
87	A8	35	C
87	A8	38	U
87	A8	51	U
87	A8	59	A
87	A8	62	A
87	A8	63	U
87	A8	76	C
87	A8	81	C
87	A8	82	A
87	A8	83	C
87	A8	84	A
87	A8	85	U
87	A8	86	U
87	A8	87	G
87	A8	90	C
87	A8	92	U
87	A8	94	G
87	A8	95	A
87	A8	97	A
87	A8	103	A
87	A8	104	A
87	A8	105	C
87	A8	112	G
87	A8	122	G
87	A8	125	C
87	A8	126	C
87	A8	127	U
87	A8	132	G
87	A8	137	A
87	A8	142	U
87	A8	150	C
87	A8	154	G
87	A8	156	U
87	A8	157	U

All (482) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
36	B2	2	A
36	B2	24	C
36	B2	31	U
36	B2	44	U
36	B2	65	C
36	B2	66	G
36	B2	72	C
36	B2	74	G
36	B2	77	A
36	B2	78	C
36	B2	102	A
36	B2	127	C
36	B2	139	C
36	B2	140	C
36	B2	141	A
36	B2	160	U
36	B2	181	A
36	B2	183	G
36	B2	190	G
36	B2	214	U
36	B2	225	G
36	B2	228	C
36	B2	285	U
36	B2	287	U
36	B2	308	G
36	B2	325	C
36	B2	327	G
36	B2	335	G
36	B2	368	U
36	B2	406	U
36	B2	465	A
36	B2	516	A
36	B2	531	A
36	B2	532	C
36	B2	534	G
36	B2	548	C
36	B2	552	G
36	B2	592	C
36	B2	604	A
36	B2	606	G
36	B2	655	A
36	B2	687	C
36	B2	688	U

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Mol	Chain	Res	Type
36	B2	690	G
36	B2	695	C
36	B2	698	G
36	B2	732	U
36	B2	734	C
36	B2	740	C
36	B2	746	C
36	B2	747	U
36	B2	750	C
36	B2	751	G
36	B2	752	G
36	B2	753	C
36	B2	754	G
36	B2	796	G
36	B2	797	C
36	B2	798	G
36	B2	811	A
36	B2	821	G
36	B2	833	C
36	B2	839	C
36	B2	869	A
36	B2	873	G
36	B2	875	A
36	B2	880	G
36	B2	886	A
36	B2	919	A
36	B2	970	G
36	B2	998	A
36	B2	1016	U
36	B2	1108	G
36	B2	1115	U
36	B2	1137	U
36	B2	1155	U
36	B2	1157	G
36	B2	1165	G
36	B2	1214	A
36	B2	1215	C
36	B2	1253	A
36	B2	1265	A
36	B2	1276	A
36	B2	1283	C
36	B2	1307	U

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Mol	Chain	Res	Type
36	B2	1394	G
36	B2	1395	C
36	B2	1396	A
36	B2	1401	A
36	B2	1411	G
36	B2	1416	C
36	B2	1417	C
36	B2	1418	C
36	B2	1429	G
36	B2	1434	C
36	B2	1436	C
36	B2	1474	A
36	B2	1475	G
36	B2	1476	A
36	B2	1477	U
36	B2	1494	U
36	B2	1519	U
36	B2	1520	G
36	B2	1538	C
36	B2	1543	U
36	B2	1549	U
36	B2	1553	C
36	B2	1556	A
36	B2	1557	C
36	B2	1578	U
36	B2	1598	G
36	B2	1601	A
36	B2	1632	G
36	B2	1637	A
36	B2	1664	A
36	B2	1679	A
36	B2	1701	C
36	B2	1720	U
36	B2	1721	U
36	B2	1756	C
36	B2	1779	G
36	B2	1780	G
36	B2	1783	C
36	B2	1823	A
36	B2	1825	A
36	B2	1830	U
36	B2	1851	A

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Mol	Chain	Res	Type
36	B2	1868	U
37	BC	17	G
37	BC	45	G
37	BC	57	A
85	A5	12	A
85	A5	64	A
85	A5	119	G
85	A5	125	C
85	A5	141	C
85	A5	142	G
85	A5	143	C
85	A5	177	G
85	A5	183	C
85	A5	184	U
85	A5	186	G
85	A5	187	U
85	A5	215	C
85	A5	218	A
85	A5	219	G
85	A5	220	C
85	A5	224	U
85	A5	237	G
85	A5	245	C
85	A5	293	G
85	A5	309	C
85	A5	315	G
85	A5	316	U
85	A5	333	U
85	A5	406	C
85	A5	408	A
85	A5	431	G
85	A5	444	G
85	A5	445	U
85	A5	451	C
85	A5	452	A
85	A5	453	G
85	A5	484	U
85	A5	486	C
85	A5	497	G
85	A5	499	G
85	A5	503	C
85	A5	505	G

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Mol	Chain	Res	Type
85	A5	638	G
85	A5	639	U
85	A5	648	G
85	A5	655	C
85	A5	661	C
85	A5	664	G
85	A5	666	G
85	A5	668	C
85	A5	669	C
85	A5	685	C
85	A5	686	A
85	A5	693	C
85	A5	703	G
85	A5	727	C
85	A5	740	G
85	A5	745	G
85	A5	746	A
85	A5	911	U
85	A5	917	A
85	A5	926	G
85	A5	927	G
85	A5	930	G
85	A5	931	C
85	A5	934	C
85	A5	936	C
85	A5	943	A
85	A5	945	U
85	A5	955	G
85	A5	956	A
85	A5	957	G
85	A5	958	G
85	A5	959	G
85	A5	963	G
85	A5	965	G
85	A5	967	C
85	A5	969	C
85	A5	970	G
85	A5	971	U
85	A5	974	C
85	A5	982	U
85	A5	1052	G
85	A5	1071	C

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Mol	Chain	Res	Type
85	A5	1072	C
85	A5	1163	G
85	A5	1166	G
85	A5	1167	C
85	A5	1197	C
85	A5	1210	C
85	A5	1211	G
85	A5	1214	C
85	A5	1218	G
85	A5	1221	G
85	A5	1222	A
85	A5	1232	G
85	A5	1238	A
85	A5	1239	C
85	A5	1240	G
85	A5	1241	C
85	A5	1242	G
85	A5	1243	C
85	A5	1245	C
85	A5	1266	G
85	A5	1267	C
85	A5	1268	G
85	A5	1269	G
85	A5	1270	A
85	A5	1272	C
85	A5	1274	A
85	A5	1280	C
85	A5	1281	G
85	A5	1284	G
85	A5	1285	U
85	A5	1287	G
85	A5	1288	G
85	A5	1293	G
85	A5	1294	A
85	A5	1296	G
85	A5	1302	U
85	A5	1324	A
85	A5	1325	C
85	A5	1356	U
85	A5	1358	G
85	A5	1360	G
85	A5	1365	C

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Mol	Chain	Res	Type
85	A5	1366	G
85	A5	1369	C
85	A5	1371	A
85	A5	1378	C
85	A5	1379	C
85	A5	1380	G
85	A5	1387	A
85	A5	1398	A
85	A5	1407	C
85	A5	1410	U
85	A5	1419	G
85	A5	1420	A
85	A5	1426	G
85	A5	1428	U
85	A5	1439	C
85	A5	1440	U
85	A5	1442	C
85	A5	1444	G
85	A5	1445	U
85	A5	1446	C
85	A5	1455	G
85	A5	1474	C
85	A5	1481	C
85	A5	1482	G
85	A5	1484	G
85	A5	1485	C
85	A5	1500	A
85	A5	1533	A
85	A5	1590	C
85	A5	1613	A
85	A5	1633	G
85	A5	1650	A
85	A5	1696	C
85	A5	1698	C
85	A5	1700	G
85	A5	1774	C
85	A5	1804	A
85	A5	1805	A
85	A5	1832	C
85	A5	1833	G
85	A5	1835	G
85	A5	1841	C

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Mol	Chain	Res	Type
85	A5	1853	G
85	A5	1919	G
85	A5	1920	C
85	A5	1921	C
85	A5	1931	C
85	A5	1947	U
85	A5	1975	G
85	A5	2009	A
85	A5	2025	A
85	A5	2046	G
85	A5	2068	C
85	A5	2083	C
85	A5	2088	A
85	A5	2089	G
85	A5	2091	C
85	A5	2094	G
85	A5	2097	U
85	A5	2105	A
85	A5	2107	C
85	A5	2116	C
85	A5	2119	C
85	A5	2122	G
85	A5	2123	C
85	A5	2124	G
85	A5	2127	C
85	A5	2246	C
85	A5	2247	C
85	A5	2250	C
85	A5	2251	G
85	A5	2255	C
85	A5	2256	C
85	A5	2257	C
85	A5	2258	C
85	A5	2259	G
85	A5	2260	C
85	A5	2263	A
85	A5	2264	C
85	A5	2266	C
85	A5	2267	U
85	A5	2268	A
85	A5	2272	C
85	A5	2290	C

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Mol	Chain	Res	Type
85	A5	2313	A
85	A5	2395	A
85	A5	2398	U
85	A5	2421	G
85	A5	2487	G
85	A5	2490	U
85	A5	2505	C
85	A5	2506	G
85	A5	2529	A
85	A5	2531	C
85	A5	2546	G
85	A5	2549	G
85	A5	2551	A
85	A5	2574	G
85	A5	2587	A
85	A5	2626	U
85	A5	2638	G
85	A5	2649	G
85	A5	2651	C
85	A5	2661	U
85	A5	2669	C
85	A5	2670	C
85	A5	2673	G
85	A5	2675	G
85	A5	2695	A
85	A5	2724	G
85	A5	2740	U
85	A5	2760	G
85	A5	2761	U
85	A5	2766	A
85	A5	2769	U
85	A5	2825	A
85	A5	2827	G
85	A5	2875	C
85	A5	2882	A
85	A5	3593	C
85	A5	3605	C
85	A5	3616	U
85	A5	3662	A
85	A5	3663	A
85	A5	3672	G
85	A5	3697	U

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Mol	Chain	Res	Type
85	A5	3731	C
85	A5	3753	G
85	A5	3777	G
85	A5	3784	A
85	A5	3786	U
85	A5	3876	A
85	A5	3887	C
85	A5	3888	G
85	A5	3907	G
85	A5	3946	G
85	A5	3959	U
85	A5	3963	A
85	A5	3965	A
85	A5	3968	U
85	A5	3972	A
85	A5	3977	C
85	A5	4036	G
85	A5	4041	C
85	A5	4061	G
85	A5	4072	C
85	A5	4075	U
85	A5	4082	G
85	A5	4085	A
85	A5	4087	G
85	A5	4093	G
85	A5	4115	G
85	A5	4119	C
85	A5	4121	G
85	A5	4127	A
85	A5	4130	C
85	A5	4135	G
85	A5	4143	G
85	A5	4144	C
85	A5	4163	U
85	A5	4164	C
85	A5	4170	A
85	A5	4232	U
85	A5	4233	A
85	A5	4237	C
85	A5	4305	G
85	A5	4329	G
85	A5	4335	C

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Mol	Chain	Res	Type
85	A5	4348	A
85	A5	4354	U
85	A5	4395	U
85	A5	4448	G
85	A5	4449	A
85	A5	4452	U
85	A5	4527	G
85	A5	4635	A
85	A5	4639	G
85	A5	4656	A
85	A5	4671	C
85	A5	4694	G
85	A5	4713	G
85	A5	4719	G
85	A5	4720	C
85	A5	4730	C
85	A5	4735	G
85	A5	4738	C
85	A5	4747	C
85	A5	4748	U
85	A5	4749	C
85	A5	4752	U
85	A5	4869	U
85	A5	4871	C
85	A5	4874	A
85	A5	4876	U
85	A5	4882	U
85	A5	4885	U
85	A5	4887	C
85	A5	4888	U
85	A5	4889	G
85	A5	4900	C
85	A5	4907	G
85	A5	4924	C
85	A5	4936	G
85	A5	4937	C
85	A5	4942	C
85	A5	4943	A
85	A5	4951	G
85	A5	4991	U
85	A5	4997	G
85	A5	5006	U

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Mol	Chain	Res	Type
85	A5	5022	U
85	A5	5027	C
85	A5	5059	C
85	A5	5060	A
85	A5	5061	A
86	A7	72	U
86	A7	73	U
87	A8	34	U
87	A8	38	U
87	A8	40	A
87	A8	48	A
87	A8	83	C
87	A8	85	U
87	A8	94	G
87	A8	96	C
87	A8	108	A
87	A8	111	U
87	A8	124	U
87	A8	126	C

5.4 Non-standard residues in protein, DNA, RNA chains (i)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
74	CC	5
63	CB	4
82	CG	3
26	AJ	3
81	CE	3
47	CI	2
1	Az	2
66	Cd	2
8	AS	2
29	AG	2
58	CW	2
64	CF	2
38	Cz	1
23	AD	1
41	CO	1
70	Ci	1
53	CT	1
24	Ae	1
33	AI	1
61	Ch	1
3	AU	1
56	CX	1
73	Cl	1
69	Cg	1
28	AC	1
12	AR	1
35	Ah	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	Cz	100:VAL	C	101:LYS	N	2.08
1	AD	5:ILE	C	6:SER	N	1.82
1	CI	205:PRO	C	206:LEU	N	1.82
1	CO	202:LEU	C	203:VAL	N	1.80
1	Ci	78:GLY	C	79:THR	N	1.80
1	CG	243:GLY	C	244:PRO	N	1.80
1	Az	712:ASP	C	713:ALA	N	1.79
1	CT	150:LEU	C	151:LEU	N	1.78
1	Ae	21:LYS	C	22:GLN	N	1.76
1	Cd	108:TYR	C	109:VAL	N	1.75
1	CG	35:ARG	C	36:PRO	N	1.75
1	AJ	118:GLY	C	119:LEU	N	1.73
1	CB	297:LYS	C	298:LEU	N	1.69

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AI	43:ILE	C	44:HIS	N	1.67
1	CG	103:ARG	C	104:PRO	N	1.67
1	Ch	114:TYR	C	115:PRO	N	1.64
1	AU	93:SER	C	94:PRO	N	1.61
1	AJ	146:SER	C	147:PHE	N	1.61
1	CX	53:ARG	C	54:LEU	N	1.61
1	Cl	5:LYS	C	6:THR	N	1.61
1	CE	36:LYS	C	37:PRO	N	1.61
1	CE	115:TYR	C	116:TYR	N	1.61
1	Az	269:ALA	C	270:ASN	N	1.60
1	AS	141:ARG	C	142:ARG	N	1.60
1	Cg	45:ALA	C	46:CYS	N	1.19
1	CI	193:ASP	C	194:GLY	N	1.18
1	CE	125:LEU	C	126:LEU	N	1.18
1	AC	108:LYS	C	109:ILE	N	1.17
1	CC	304:ALA	C	305:PRO	N	1.17
1	AG	130:PRO	C	131:ARG	N	1.16
1	Cd	105:LEU	C	106:VAL	N	1.16
1	CC	54:VAL	C	55:SER	N	1.16
1	CB	16:PHE	C	17:LEU	N	1.14
1	AR	1:MET	C	2:GLY	N	1.13
1	CW	32:LEU	C	33:ASN	N	1.13
1	CB	15:GLY	C	16:PHE	N	1.12
1	CW	31:PHE	C	32:LEU	N	1.11
1	CC	226:GLY	C	227:ILE	N	1.11
1	AS	40:TYR	C	41:ALA	N	1.09
1	AG	219:GLU	C	220:ALA	N	1.09
1	CB	298:LEU	C	299:ILE	N	1.09
1	CF	183:GLY	C	184:ILE	N	1.08
1	CC	150:LEU	C	151:PRO	N	1.08
1	Ah	294:LYS	C	295:ALA	N	1.04
1	CF	23:ARG	C	24:ASN	N	1.00
1	AJ	85:GLY	C	86:VAL	N	0.95
1	CC	348:LYS	C	349:LEU	N	0.73

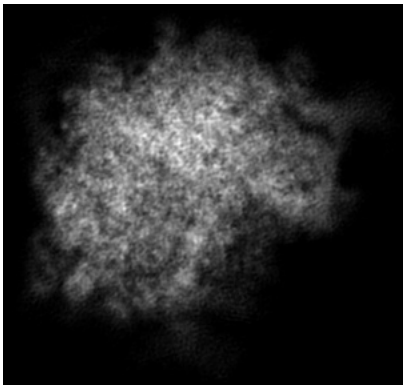
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-5592. These allow visual inspection of the internal detail of the map and identification of artifacts.

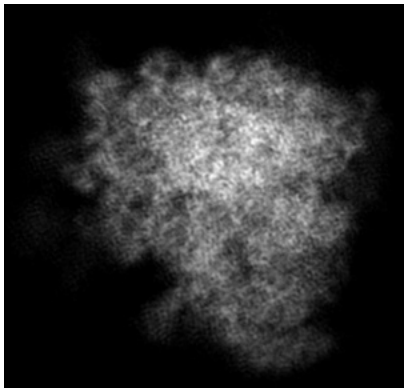
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

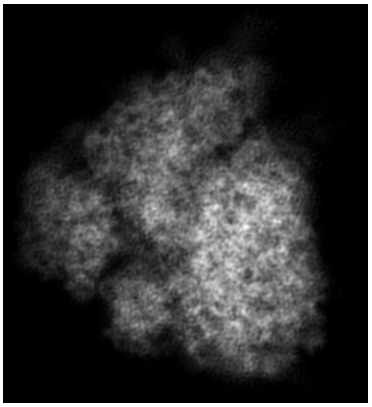
6.1.1 Primary map



X



Y

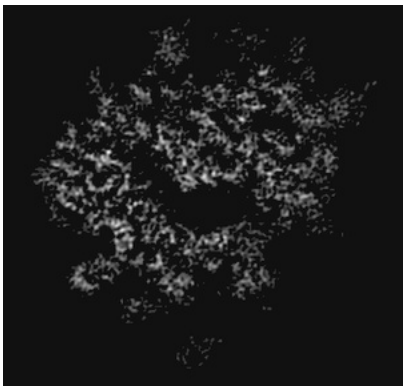


Z

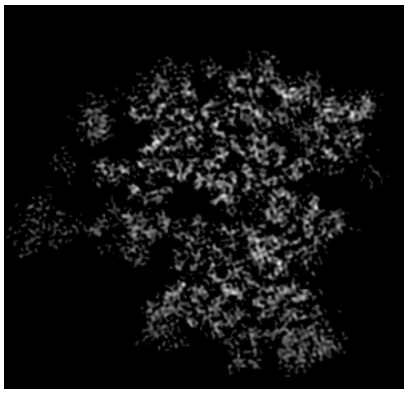
The images above show the map projected in three orthogonal directions.

6.2 Central slices

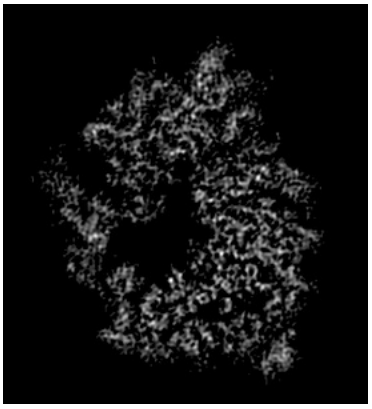
6.2.1 Primary map



X Index: 125



Y Index: 137

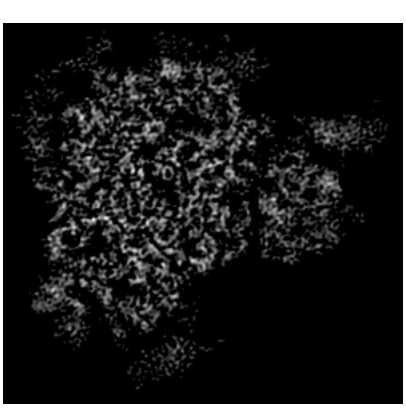


Z Index: 130

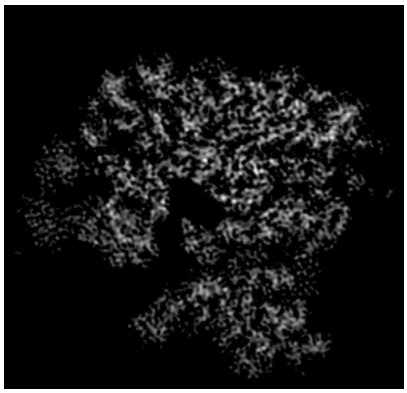
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

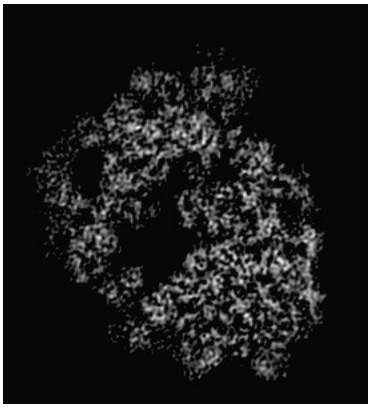
6.3.1 Primary map



X Index: 156



Y Index: 127



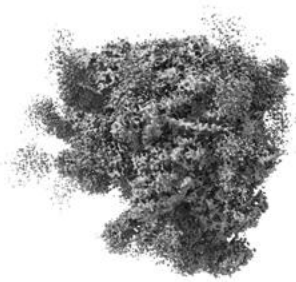
Z Index: 137

The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

6.4.1 Primary map

X



Y

Z

The images above show the 3D surface view of the map at the recommended contour level 0.7. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

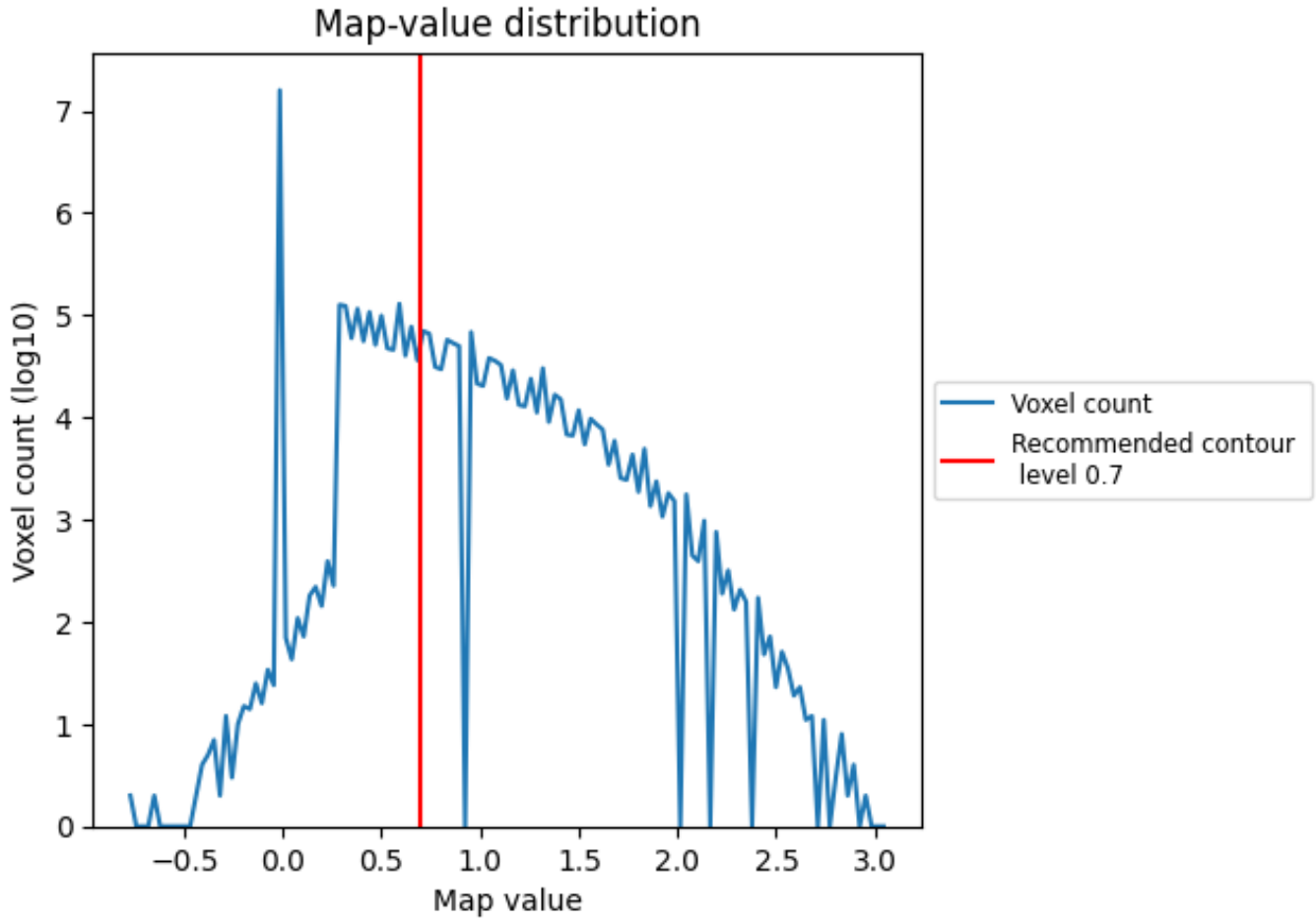
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

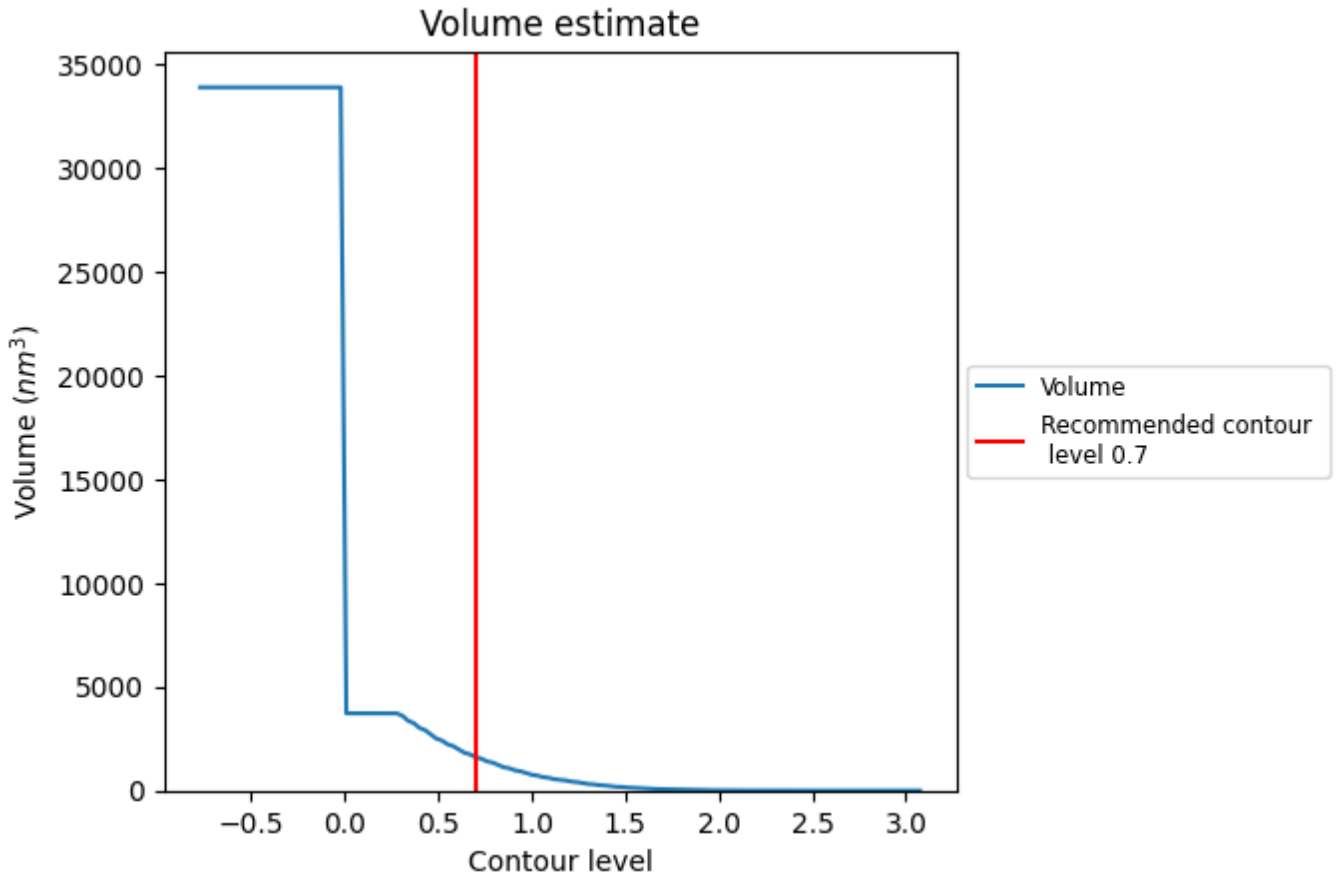
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2 Volume estimate



The volume at the recommended contour level is 1606 nm^3; this corresponds to an approximate mass of 1451 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.

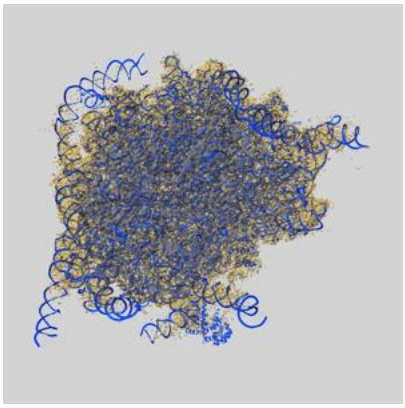
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

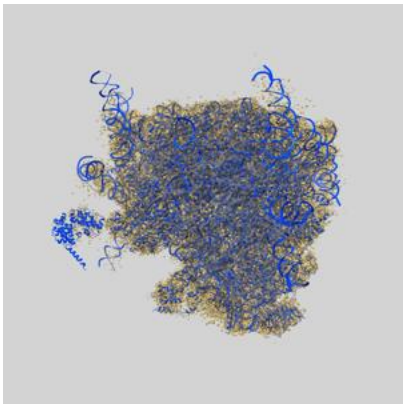
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-5592 and PDB model 4V6X. Per-residue inclusion information can be found in section 3 on page 20.

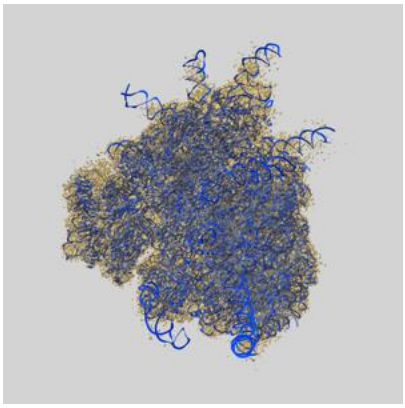
9.1 Map-model overlay



X



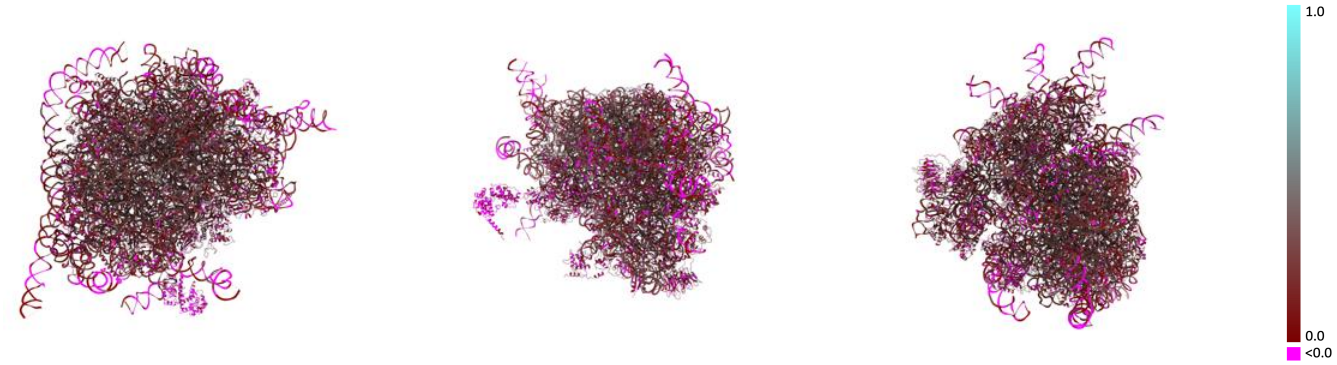
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.7 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

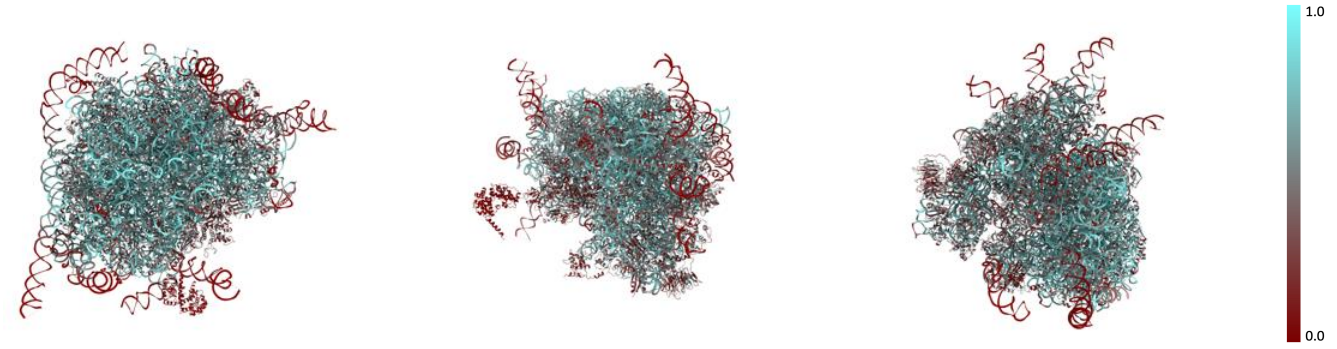
9.2 Q-score mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

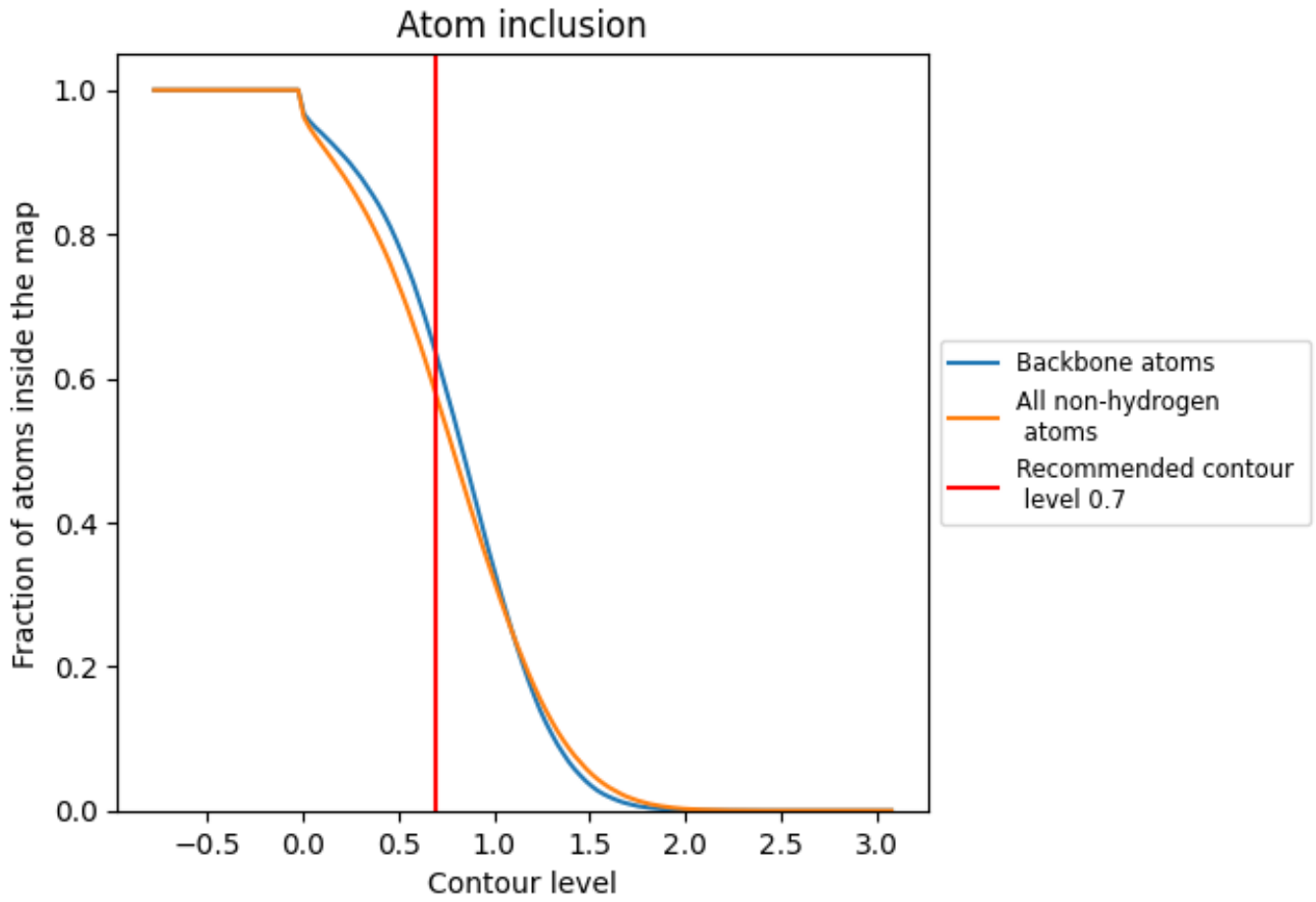
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.7).

9.4 Atom inclusion (i)



At the recommended contour level, 63% of all backbone atoms, 58% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.7) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5760	0.2200
A5	0.6923	0.2410
A7	0.7995	0.2610
A8	0.7525	0.2580
AA	0.4179	0.1840
AB	0.4444	0.2060
AC	0.4351	0.2170
AD	0.3455	0.1920
AE	0.4427	0.1820
AF	0.4094	0.1580
AG	0.3784	0.1510
AH	0.4064	0.2060
AI	0.4370	0.1800
AJ	0.5083	0.1950
AK	0.4696	0.2000
AL	0.4140	0.2350
AM	0.2368	0.0930
AN	0.4488	0.1920
AO	0.4174	0.1860
AP	0.3784	0.1600
AQ	0.4118	0.1930
AR	0.3380	0.1640
AS	0.4507	0.1900
AT	0.4865	0.2080
AU	0.3695	0.2080
AV	0.4255	0.2210
AW	0.4644	0.2290
AX	0.4393	0.2380
AY	0.4914	0.2130
AZ	0.3911	0.1750
Aa	0.4423	0.2090
Ab	0.4111	0.2280
Ac	0.3354	0.1740
Ad	0.5293	0.2270
Ae	0.4547	0.2860

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Chain	Atom inclusion	Q-score
Af	0.3746	0.1780
Ag	0.3392	0.1580
Ah	0.1657	0.1290
Az	0.3146	0.1840
B2	0.6854	0.2240
BC	0.4034	0.1640
CA	0.4625	0.2400
CB	0.5042	0.2580
CC	0.5293	0.2470
CD	0.5291	0.1920
CE	0.4157	0.1750
CF	0.5225	0.2430
CG	0.4950	0.2200
CH	0.4261	0.1790
CI	0.4828	0.2490
CJ	0.4365	0.1350
CK	0.2574	0.1450
CL	0.4853	0.2420
CM	0.5487	0.2360
CN	0.5407	0.2460
CO	0.4947	0.2180
CP	0.5622	0.2760
CQ	0.4815	0.2220
CR	0.5036	0.2240
CS	0.5675	0.2640
CT	0.5479	0.3120
CU	0.4419	0.1920
CV	0.4209	0.2490
CW	0.3082	0.1930
CX	0.5119	0.2550
CY	0.5486	0.2140
CZ	0.5433	0.2490
Ca	0.5336	0.2650
Cb	0.4459	0.2260
Cc	0.4783	0.2200
Cd	0.5579	0.2800
Ce	0.4792	0.2510
Cf	0.5036	0.2510
Cg	0.5351	0.2690
Ch	0.5470	0.2380
Ci	0.5000	0.2400
Cj	0.5673	0.2740

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Chain	Atom inclusion	Q-score
Ck	0.4219	0.1630
Cl	0.5319	0.2540
Cm	0.5229	0.2620
Cn	0.4429	0.2520
Co	0.5460	0.2610
Cp	0.5095	0.2620
Cq	0.2269	0.0770
Cr	0.4863	0.2410
Cs	0.0189	-0.0450
Ct	0.0000	-0.0960
Cu	0.0266	-0.0600
Cv	0.0024	-0.0450
Cz	0.0939	-0.0200