



## Full wwPDB EM Validation Report ⓘ

Nov 20, 2022 – 07:12 AM EST

PDB ID : 4V7E  
EMDB ID : EMD-1780  
Title : Model of the small subunit RNA based on a 5.5 Å cryo-EM map of *Triticum aestivum* translating 80S ribosome  
Authors : Barrio-Garcia, C.; Armache, J.-P.; Jarasch, A.; Anger, A.M.; Villa, E.; Becker, T.; Bhushan, S.; Jossinet, F.; Habeck, M.; Dindar, G.; Franckenberg, S.; Marquez, V.; Mielke, T.; Thomm, M.; Berninghausen, O.; Beatrix, B.; Soeding, J.; Westhof, E.; Wilson, D.N.; Beckmann, R.  
Deposited on : 2013-11-22  
Resolution : 5.50 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](mailto: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>.

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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

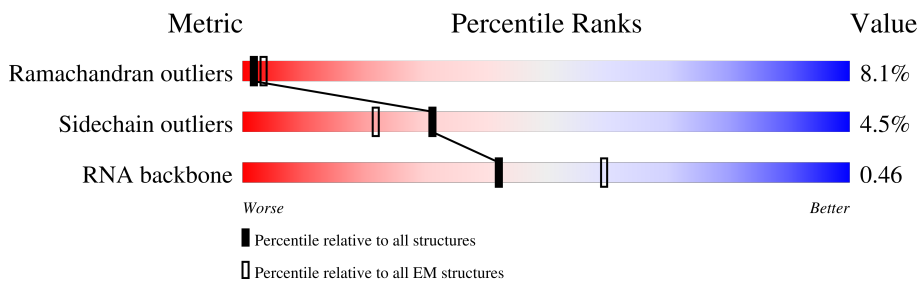
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 5.50 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  $\geq 3$ , 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  $\leq 5\%$ . 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	Ad	1810	<div> <div>9%</div> <div>69%</div> <div>24%</div> </div>
2	Ae	75	<div> <div>29%</div> <div>71%</div> <div>25%</div> </div>
3	Af	11	<div> <div>9%</div> <div>82%</div> <div>73%</div> <div>18%</div> </div>
4	BY	138	<div> <div>51%</div> <div>88%</div> <div>10%</div> </div>
5	BI	220	<div> <div>14%</div> <div>28%</div> <div>70%</div> </div>
6	BK	183	<div> <div>26%</div> <div>44%</div> <div>5%</div> <div>48%</div> </div>
7	BM	171	<div> <div>47%</div> <div>61%</div> <div>9%</div> <div>28%</div> </div>
8	Bf	155	<div> <div>25%</div> <div>35%</div> <div>11%</div> <div>54%</div> </div>

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Mol	Chain	Length	Quality of chain
9	BX	142	
10	Bg	380	
11	BD	208	
12	BE	265	
13	BF	191	
14	BQ	149	
15	BU	128	
16	BO	151	
17	BS	152	
18	BN	151	
19	BL	160	
20	BT	146	
21	BP	154	
22	BZ	108	
23	Bc	65	
24	BW	130	
25	Bd	56	
26	Bb	86	
27	Be	62	
28	BA	260	
29	BR	141	
30	BB	262	
31	BV	82	
32	Ba	133	
33	BJ	195	

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Mol	Chain	Length	Quality of chain
34	BC	263	
35	BG	245	
36	BH	189	
37	CG	257	
38	CT	164	
39	CZ	136	
40	Cz	216	
41	CA	261	
42	CJ	180	
43	CH	190	
44	CV	140	
45	CN	200	
46	Ca	144	
47	CQ	188	
48	CD	304	
49	CR	209	
50	CP	171	
51	CX	152	
52	CW	162	
53	CY	150	
54	Cr	147	
55	Cc	112	
56	Cd	123	
57	Ce	133	
58	Cj	94	

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Mol	Chain	Length	Quality of chain
59	Cl	51	
60	Co	105	
61	CM	134	
62	CS	178	
63	CU	130	
64	Ci	112	
65	CK	166	
66	Cu	110	
66	Cv	110	
67	Cs	113	
67	Ct	113	
68	Ch	124	
69	CF	244	
70	Cq	319	
71	CB	389	
72	CC	405	
73	CO	206	
74	Cp	92	
75	CI	224	
76	Cn	25	
77	Cm	53	
78	CL	208	
79	CE	219	
80	Cf	111	
81	Ck	69	

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Mol	Chain	Length	Quality of chain
82	Cb	60	<div><div></div><div>57%</div><div>90%</div><div></div><div></div><div></div></div>
83	Cg	119	<div><div></div><div>41%</div><div>82%</div><div>10%</div><div>8%</div><div></div></div>
84	Aa	3391	<div><div></div><div>11%</div><div>71%</div><div>25%</div><div></div><div></div></div>
85	Ac	160	<div><div></div><div>5%</div><div>68%</div><div>28%</div><div></div><div></div></div>
86	Ab	120	<div><div></div><div></div><div>67%</div><div>32%</div><div></div><div></div></div>

## 2 Entry composition

There are 86 unique types of molecules in this entry. The entry contains 212263 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 RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	Ad	1762	Total	C	N	O	P	0	0
			37584	16788	6708	12327	1761		

- Molecule 2 is a RNA chain called P-site tRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	Ae	75	Total	C	N	O	P	0	0
			1595	712	280	529	74		

- Molecule 3 is a RNA chain called 5'-R(\*AP\*AP\*AP\*AP\*GP\*AP\*CP\*UP\*UP\*CP\*A)-3'.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	Af	11	Total	C	N	O	P	0	0
			232	106	45	71	10		

- Molecule 4 is a protein called 40S ribosomal protein S24E.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	BY	138	Total	C	N	O	S	0	0
			1108	703	212	189	4		

- Molecule 5 is a protein called 40S ribosomal protein S8E.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	BI	66	Total	C	N	O	S	0	0
			533	330	105	95	3		

- Molecule 6 is a protein called 40S ribosomal protein S10E.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	BK	96	Total	C	N	O	S	0	0
			818	535	137	143	3		

- Molecule 7 is a protein called 40S ribosomal protein S12E.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	BM	123	Total	C	N	O	S	0	0
			924	577	159	179	9		

- Molecule 8 is a protein called 40S ribosomal protein S31e.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	Bf	71	Total	C	N	O	S	0	0
			577	367	107	98	5		

- Molecule 9 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	BX	142	Total	C	N	O	S	0	0
			1103	698	214	187	4		

- Molecule 10 is a protein called RACK1.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	Bg	380	Total	C	N	O	S	0	0
			2929	1813	530	567	19		

- Molecule 11 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	BD	208	Total	C	N	O	S	0	0
			1629	1029	294	297	9		

- Molecule 12 is a protein called 40S ribosomal protein S4E.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	BE	200	Total	C	N	O	S	0	0
			1607	1030	290	283	4		

- Molecule 13 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	BF	191	Total	C	N	O	S	0	0
			1489	928	281	273	7		

- Molecule 14 is a protein called 40S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	BQ	126	Total	C	N	O	S	0	0
			1017	648	195	170	4		

- Molecule 15 is a protein called 40S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	BU	128	Total	C	N	O	S	0	0
			982	613	176	187	6		

- Molecule 16 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	BO	119	Total	C	N	O	S	0	0
			899	550	178	167	4		

- Molecule 17 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	BS	152	Total	C	N	O	S	0	0
			1240	772	248	213	7		

- Molecule 18 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	BN	121	Total	C	N	O	S	0	0
			977	627	180	167	3		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
19	BL	85	Total	C	N	O	S	0	0
			688	435	134	115	4		

- Molecule 20 is a protein called 40S ribosomal protein S19E.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	BT	146	Total	C	N	O	S	0	0
			1155	726	218	207	4		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
21	BP	91	Total	C	N	O	S	0	0
			711	457	130	120	4		

- Molecule 22 is a protein called 40S ribosomal protein S25E.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	BZ	100	Total	C	N	O	S	0	0
			779	489	146	144			

- Molecule 23 is a protein called 40S ribosomal protein S28E.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	Bc	58	Total	C	N	O	S	0	0
			454	281	86	84	3		

- Molecule 24 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	BW	130	Total	C	N	O	S	0	0
			1042	667	189	181	5		

- Molecule 25 is a protein called 40S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	Bd	48	Total	C	N	O	S	0	0
			379	233	77	63	6		

- Molecule 26 is a protein called 40S ribosomal protein S27E.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	Bb	86	Total	C	N	O	S	0	0
			663	414	119	122	8		

- Molecule 27 is a protein called 40S ribosomal protein S30E.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	Be	60	Total	C	N	O	S	0	0
			469	289	104	75	1		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
28	BA	197	Total	C	N	O	S	0	0
			1537	969	280	278	10		

- Molecule 29 is a protein called 40S ribosomal protein S17E.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	BR	116	Total	C	N	O	S	0	0
			945	589	178	171	7		

- Molecule 30 is a protein called 40S ribosomal protein S1E.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	BB	211	Total	C	N	O	S	0	0
			1707	1089	308	302	8		

- Molecule 31 is a protein called 40S ribosomal protein S21E.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	BV	76	Total	C	N	O	S	0	0
			601	371	112	115	3		

- Molecule 32 is a protein called 40S ribosomal protein S26E.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	Ba	93	Total	C	N	O	S	0	0
			753	461	163	122	7		

- Molecule 33 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	BJ	187	Total	C	N	O	S	0	0
			1525	959	305	256	5		

- Molecule 34 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	BC	214	Total	C	N	O	S	0	0
			1665	1074	297	287	7		

- Molecule 35 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	BG	231	Total	C	N	O	S	0	0
			1867	1164	367	328	8		

- Molecule 36 is a protein called 40S ribosomal protein S7E.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	BH	184	Total	C	N	O	S	0	0
			1508	962	278	266	2		

- Molecule 37 is a protein called 60S ribosomal protein L8E.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	CG	237	Total	C	N	O	S	0	0
			1906	1226	351	322	7		

- Molecule 38 is a protein called 60S ribosomal protein L21E.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	CT	160	Total	C	N	O	S	0	0
			1288	814	251	219	4		

- Molecule 39 is a protein called 60S ribosomal protein L27E.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	CZ	136	Total	C	N	O	S	0	0
			1090	704	205	176	5		

- Molecule 40 is a protein called 60S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	Cz	216	Total	C	N	O	S	0	0
			1718	1092	309	304	13		

- Molecule 41 is a protein called 60S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	CA	255	Total	C	N	O	S	0	0
			1946	1210	399	328	9		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
42	CJ	170	Total	C	N	O	S	0	0
			1380	869	256	246	9		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
43	CH	190	Total	C	N	O	S	0	0
			1500	947	270	277	6		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
44	CV	140	Total	C	N	O	S	0	0
			1048	658	199	181	10		

- Molecule 45 is a protein called 60S ribosomal protein L15E.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	CN	194	Total	C	N	O	S	0	0
			1630	1027	342	257	4		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
46	Ca	144	Total	C	N	O	S	0	0
			1114	710	223	175	6		

- Molecule 47 is a protein called 60S ribosomal protein L18E.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	CQ	163	Total	C	N	O	S	0	0
			1284	810	248	219	7		

- Molecule 48 is a protein called 60S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	CD	304	Total	C	N	O	S	0	0
			2444	1531	440	466	7		

- Molecule 49 is a protein called 60S ribosomal protein L19E.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	CR	189	Total	C	N	O	S	0	0
			1569	972	330	257	10		

- Molecule 50 is a protein called 60S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	CP	171	Total	C	N	O	S	0	0
			1372	852	271	244	5		

- Molecule 51 is a protein called 60S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	CX	122	Total	C	N	O	S	0	0
			987	634	178	173	2		

- Molecule 52 is a protein called 60S ribosomal protein L24E.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	CW	75	Total	C	N	O	S	0	0
			635	408	126	97	4		

- Molecule 53 is a protein called 60S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	CY	130	Total	C	N	O	S	0	0
			1048	647	220	178	3		

- Molecule 54 is a protein called 60S ribosomal protein L28E.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	Cr	73	Total	C	N	O	S	0	0
			576	364	107	103	2		

- Molecule 55 is a protein called 60S ribosomal protein L30E.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	Cc	112	Total	C	N	O	S	0	0
			857	540	149	161	7		

- Molecule 56 is a protein called 60S ribosomal protein L31E.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	Cd	120	Total	C	N	O	S	0	0
			960	598	186	173	3		

- Molecule 57 is a protein called 60S ribosomal protein L32E.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	Ce	133	Total	C	N	O	S	0	0
			1103	696	216	185	6		

- Molecule 58 is a protein called 60S ribosomal protein L37E.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	Cj	94	Total	C	N	O	S	0	0
			755	459	166	123	7		

- Molecule 59 is a protein called 60S ribosomal protein L39E.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	Cl	51	Total	C	N	O	S	0	0
			460	291	100	67	2		

- Molecule 60 is a protein called 60S ribosomal protein L44E.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	Co	105	Total	C	N	O	S	0	0
			851	535	166	144	6		

- Molecule 61 is a protein called 60S ribosomal protein L14E.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	CM	134	Total	C	N	O	S	0	0
			1081	690	201	185	5		

- Molecule 62 is a protein called 60S ribosomal protein L20.

Mol	Chain	Residues	Atoms					AltConf	Trace
62	CS	167	Total	C	N	O	S	0	0
			1419	916	263	233	7		

- Molecule 63 is a protein called 60S ribosomal protein L22E.

Mol	Chain	Residues	Atoms					AltConf	Trace
63	CU	108	Total	C	N	O	S	0	0
			864	551	155	156	2		

- Molecule 64 is a protein called 60S ribosomal protein L36E.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	Ci	77	Total	C	N	O	S	0	0
			613	383	128	100	2		

- Molecule 65 is a protein called 60S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	CK	128	Total	C	N	O	S	0	0
			960	602	177	177	4		

- Molecule 66 is a protein called 60S ribosomal protein P1.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	Cu	58	Total	C	N	O	S	0	0
			432	283	69	79	1		
66	Cv	58	Total	C	N	O	S	0	0
			432	283	69	79	1		

- Molecule 67 is a protein called Acidic ribosomal protein P2.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	Cs	59	Total	C	N	O	S	0	0
			441	278	69	90	4		
67	Ct	59	Total	C	N	O	S	0	0
			441	278	69	90	4		

- Molecule 68 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	Ch	124	Total	C	N	O	S	0	0
			1012	636	202	173	1		

- Molecule 69 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	CF	244	Total	C	N	O	S	0	0
			1984	1271	368	339	6		

- Molecule 70 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	Cq	262	Total	C	N	O	S	0	0
			1993	1278	330	377	8		

- Molecule 71 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	CB	389	Total	C	N	O	S	0	0
			3139	1997	584	540	18		

- Molecule 72 is a protein called 60S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	CC	372	Total	C	N	O	S	0	0
			2898	1823	556	510	9		

- Molecule 73 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	CO	206	Total	C	N	O	S	0	0
			1650	1045	320	274	11		

- Molecule 74 is a protein called 60S ribosomal protein L43E.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	Cp	92	Total	C	N	O	S	0	0
			715	447	137	124	7		

- Molecule 75 is a protein called 60S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	CI	184	Total	C	N	O	S	0	0
			1490	941	290	247	12		

- Molecule 76 is a protein called 60S ribosomal protein L41E.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	Cn	25	Total	C	N	O	S	0	0
			238	145	62	28	3		

- Molecule 77 is a protein called 60S ribosomal protein L40E.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	Cm	52	Total	C	N	O	S	0	0
			428	267	90	66	5		

- Molecule 78 is a protein called 60S ribosomal protein L13E.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	CL	208	Total	C	N	O	S	0	0
			1691	1061	338	286	6		

- Molecule 79 is a protein called 60S ribosomal protein L6E.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	CE	219	Total	C	N	O	S	0	0
			1731	1106	314	307	4		

- Molecule 80 is a protein called 60S ribosomal protein L33E.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	Cf	111	Total	C	N	O	S	0	0
			891	561	170	156	4		

- Molecule 81 is a protein called 60S ribosomal protein L38E.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	Ck	69	Total	C	N	O	S	0	0
			564	360	104	97	3		

- Molecule 82 is a protein called 60S ribosomal protein L29E.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	Cb	58	Total	C	N	O	S	0	0
			477	288	103	85	1		

- Molecule 83 is a protein called 60S ribosomal protein L34E.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	Cg	110	Total	C	N	O	S	0	0
			897	567	182	146	2		

- Molecule 84 is a RNA chain called 60S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
84	Aa	3391	Total	C	N	O	P	0	0
			72601	32373	13241	23598	3389		

- Molecule 85 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
85	Ac	160	Total	C	N	O	P	0	0
			3408	1522	614	1113	159		

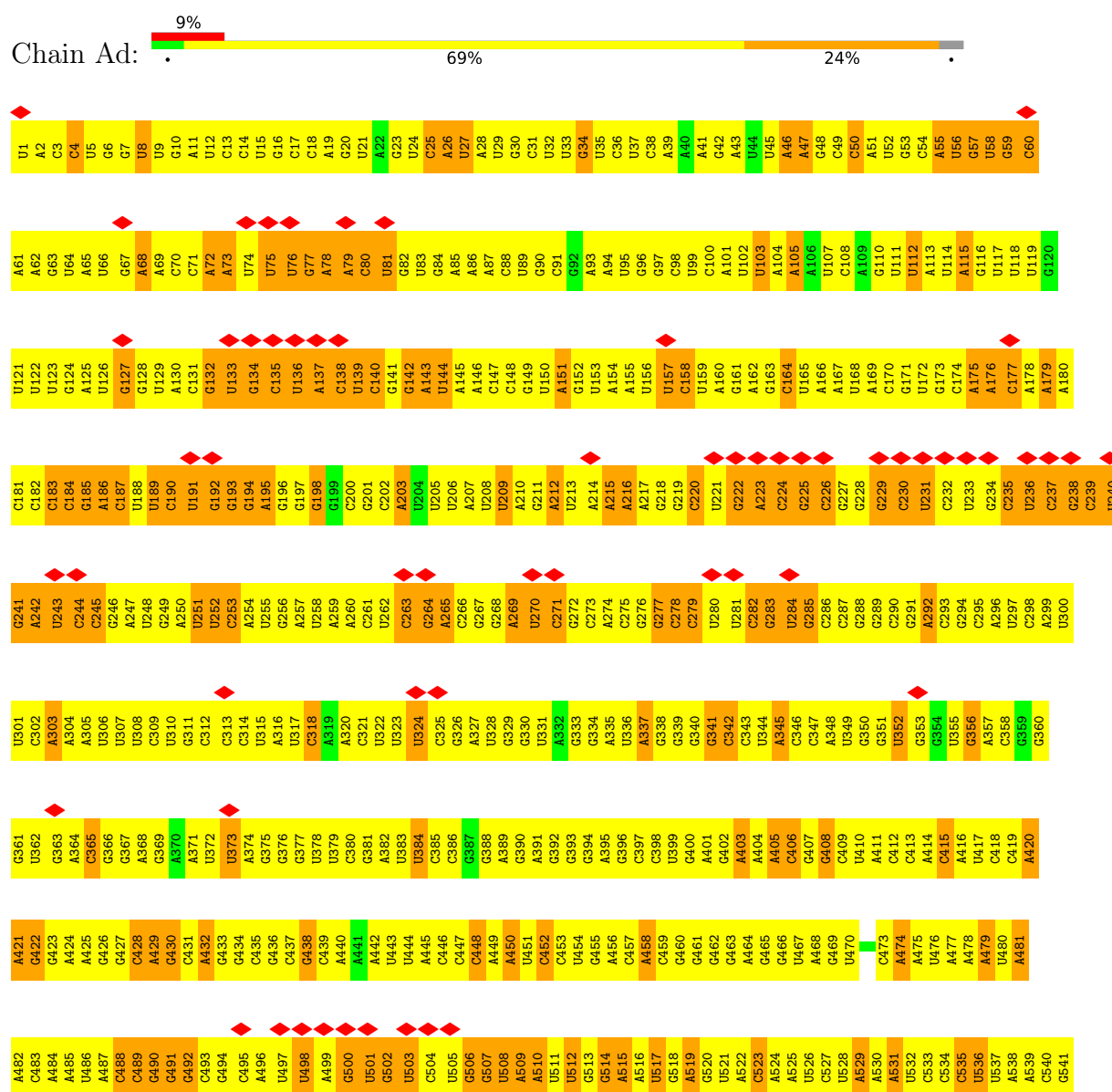
- Molecule 86 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
86	Ab	120	Total	C	N	O	P	0	0
			2561	1144	461	837	119		

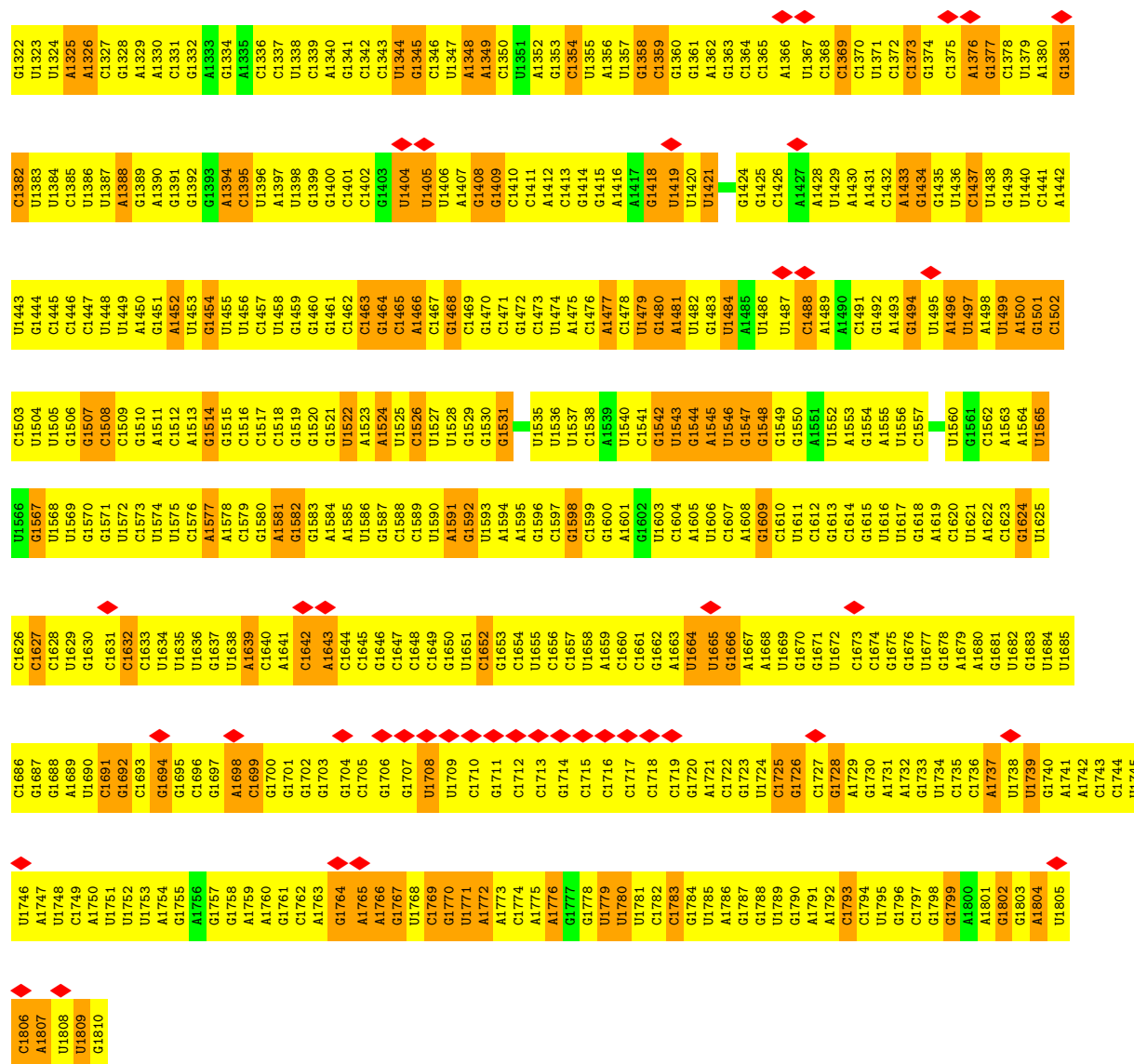
### 3 Residue-property plots

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.

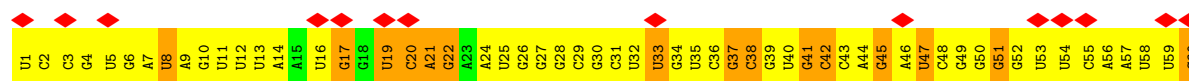
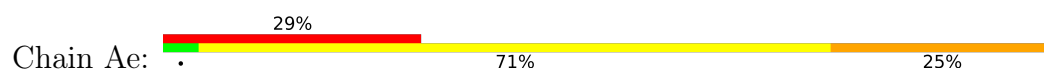
#### • Molecule 1: 18S ribosomal RNA



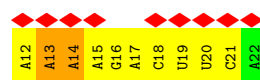
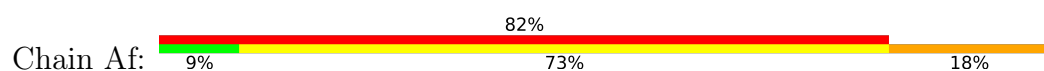
U1262	C1263	U1264	U1265	U1266	G1267	U1268	G1269	U1270	U1271	G1272	U1273	G1274	G1275	U1276	G1277	U1278	C1279	U1280	G1281	U1282	C1283	U1284	G1285	U1286	U1287	C1288	U1289	U1290	A1291	G1292	C1293	U1294	U1295	U1296	U1297	G1298	G1299	A1300	G1301	C1302	G1303	A1304	U1305	U1306	U1307	G1308	U1309	C1310	U1311	G1312	U1253	U1254	U1255	C1256	U1257	U1258	G1259	U1260	C1321
A1142	A1143	A1144	G1145	G1146	A1147	A1148	U1149	U1150	G1151	A1152	C1153	G1154	G1155	A1156	A1157	G1158	U1159	G1160	C1161	A1162	C1163	C1164	A1165	C1166	C1167	A1168	G1169	G1170	C1171	G1172	U1173	G1174	G1175	A1176	G1177	C1178	C1179	U1180	G1181	C1182	G1183	C1184	U1185	U1186	A1187	A1188	U1189	U1190	U1191	G1192	A1193	U1194	U1195	C1196	A1197	A1198	C1199	A1200	C1201
G1202	G1203	U1204	G1205	U1206	A1207	A1208	C1209	U1210	U1211	A1212	C1213	C1214	A1215	G1216	G1217	U1218	C1219	C1220	A1221	G1222	A1223	C1224	A1225	U1226	U1227	G1228	C1229	U1230	A1231	G1232	C1233	U1234	U1235	U1236	G1237	A1238	C1239	A1240	G1241	A1242	C1243	U1244	G1245	A1246	G1247	A1248	G1249	C1250	U1251	C1252	U1253	U1254	U1255	C1256	U1257	U1258	G1259	U1260	U1261
C1082	C1083	U1084	U1085	A1086	U1087	G1088	A1089	G1090	A1091	A1092	A1093	U1094	C1095	A1096	A1097	A1098	G1099	U1100	C1101	U1102	C1103	U1104	U1105	G1106	G1107	U1108	U1109	C1110	C1111	G1112	G1113	G1114	G1115	G1116	G1117	A1118	G1119	U1120	A1121	U1122	G1123	G1124	U1125	C1126	G1127	U1128	A1129	A1130	U1131	G1132	C1133	U1134	C1135	A1136	A1137	A1138	C1139	U1140	U1141
U1022	C1023	A1024	A1025	U1026	C1027	A1028	U1029	A1030	A1031	A1032	C1033	G1034	A1035	U1036	G1037	C1038	C1039	G1040	A1041	C1042	C1043	A1044	G1045	G1046	G1047	U1048	U1049	G1050	G1051	G1052	C1053	G1054	G1055	U1056	U1057	G1058	U1059	U1060	G1061	C1062	U1063	U1064	A1065	U1066	A1067	U1068	G1069	A1070	C1071	U1072	C1073	U1074	G1075	C1076	C1077	G1078	C1079	A1081	
G962	U963	U964	U965	U966	C967	A968	U969	U970	A971	A972	U973	C974	A975	U976	G977	A978	U979	C980	G981	A982	A983	A984	G985	U986	U987	G988	G989	G990	G991	G992	C993	U994	C995	G996	A997	A998	G999	C1000	C1001	G1002	A1003	U1004	C1005	A1006	G1007	A1008	U1009	A1010	C1011	C1012	G1013	U1014	C1015	C1016	U1017	A1018	G1019	U1020	C1021
C902	A903	G904	A905	G906	U907	U908	G909	A910	A911	A912	U913	U914	C915	U916	U917	G918	G919	A920	U921	U922	U923	A924	U925	G926	A927	U928	A929	G930	A931	C932	G933	A934	U935	C936	A937	A938	C939	U940	G941	C942	G943	A944	A945	A946	G947	C948	U949	A950	U951	U952	G953	C954	C955	A956	A957	A958	G959	A960	U961
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G782	C783	C784	A785	U786	C787	U788	C789	U790	C791	U792	G793	G794	A795	U796	A797	C798	A799	U800	U801	A802	G803	C804	A805	U806	G807	G808	G809	A810	U811	A812	A813	C814	A815	U816	C817	A818	U819	A820	G821	G822	A823	U824	U825	C826	C827	G828	G829	U830	C831	C832	G769	U770	A834	U835	U836	G837	U838	G839	U841
A722	A723	U724	U725	G726	G727	A728	C729	G730	G731	G732	U733	C734	A735	U736	G737	U738	U739	U740	C741	C742	G743	G744	C745	U746	U747	C748	G749	U750	U751	C752	G753	U754	U755	U756	G757	A758	A759	G760	A761	A762	A763	U764	U765	A766	G767	U768	C832	G769	U770	C771	C772	U773	C774	A775	A776	A777	G778	A780	A781
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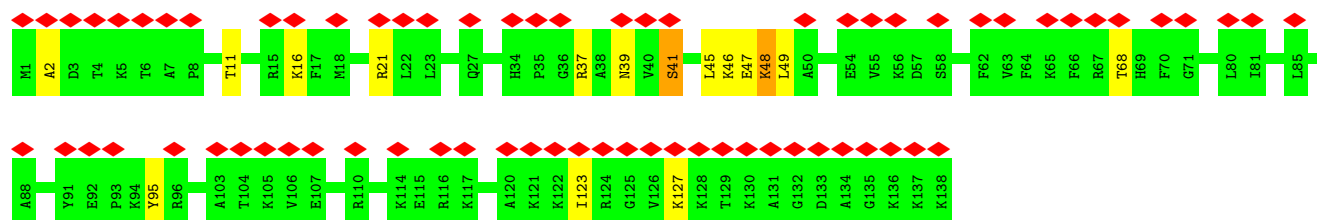
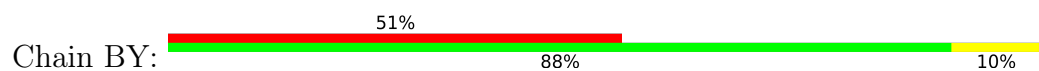
• Molecule 2: P-site tRNA



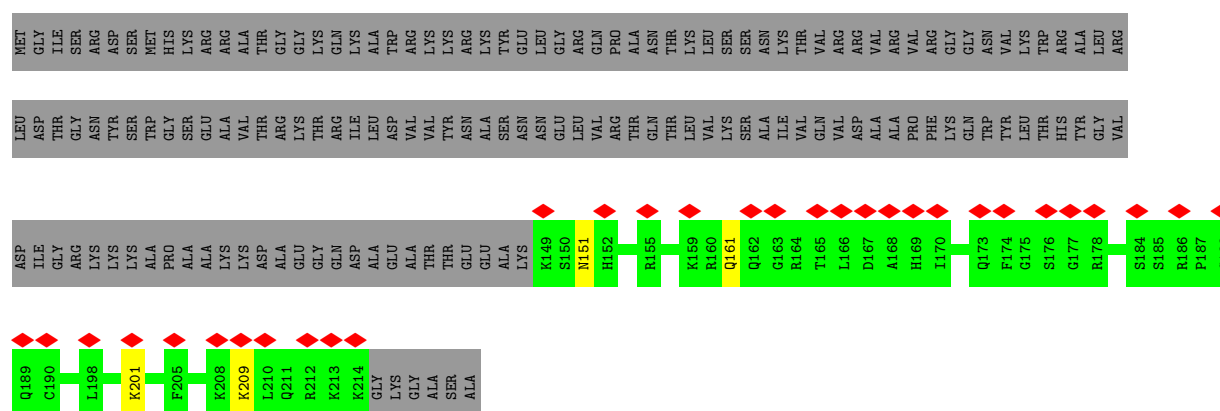
• Molecule 3: 5'-R(\*AP\*AP\*AP\*AP\*GP\*AP\*CP\*UP\*UP\*CP\*A)-3'



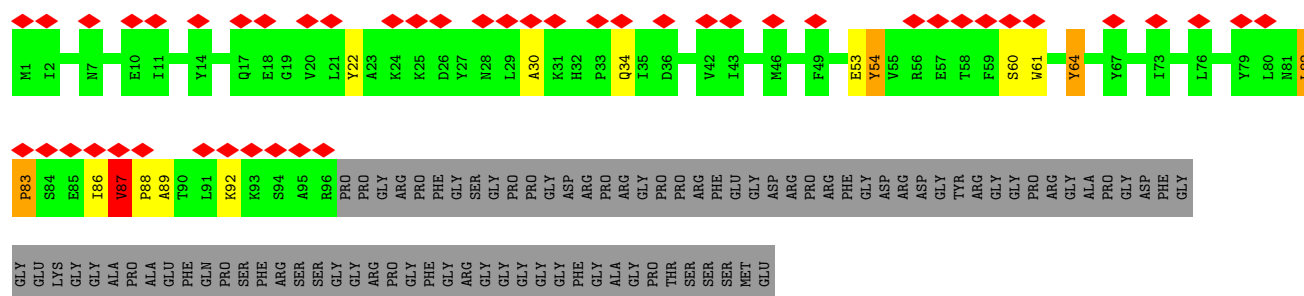
- Molecule 4: 40S ribosomal protein S24E



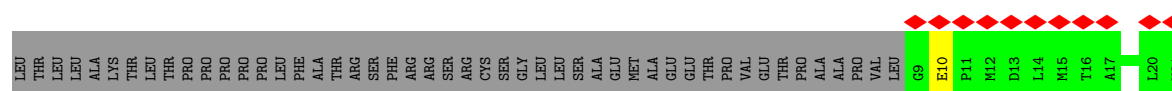
- Molecule 5: 40S ribosomal protein S8E

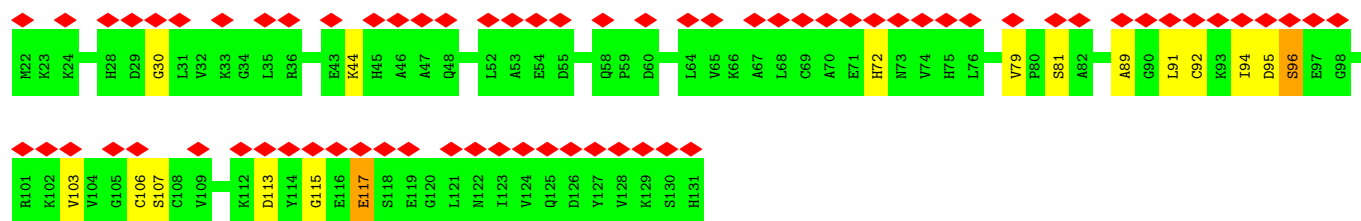


- Molecule 6: 40S ribosomal protein S10E

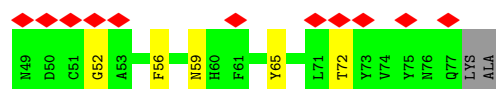
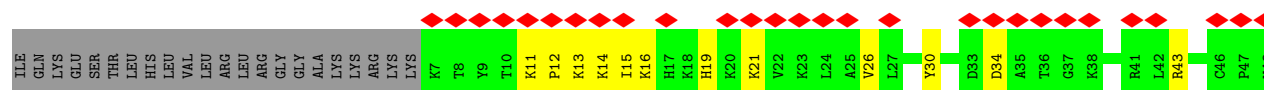
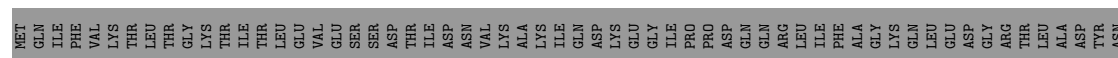
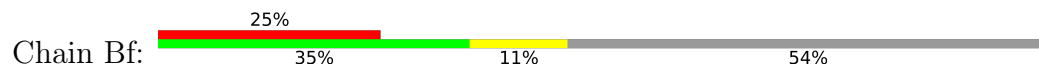


- Molecule 7: 40S ribosomal protein S12E

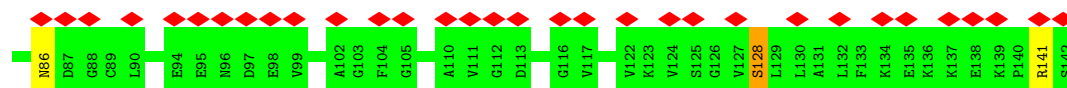
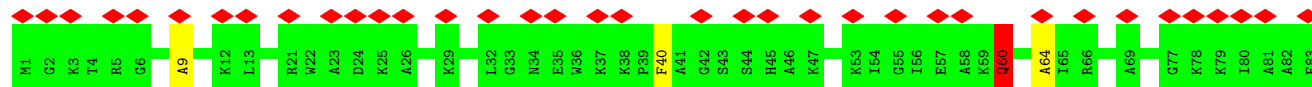




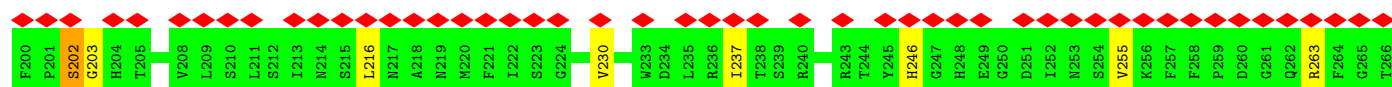
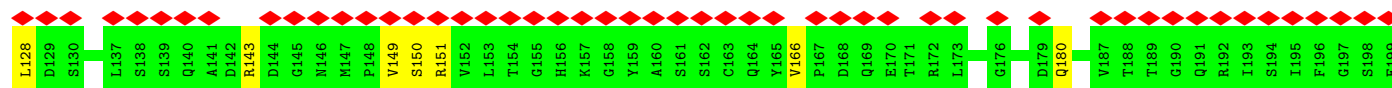
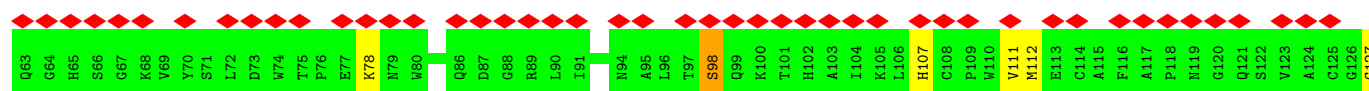
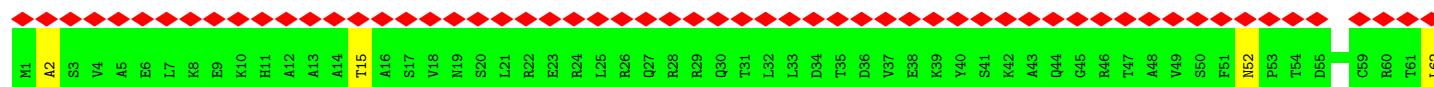
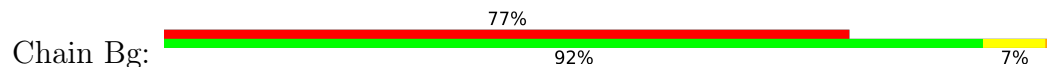
• Molecule 8: 40S ribosomal protein S31e

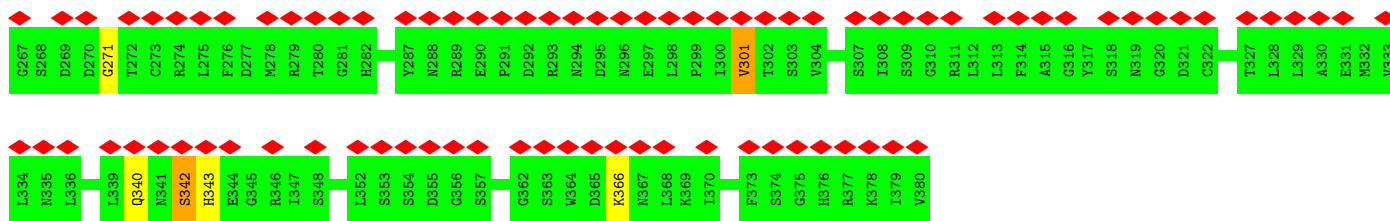


• Molecule 9: 40S ribosomal protein S12

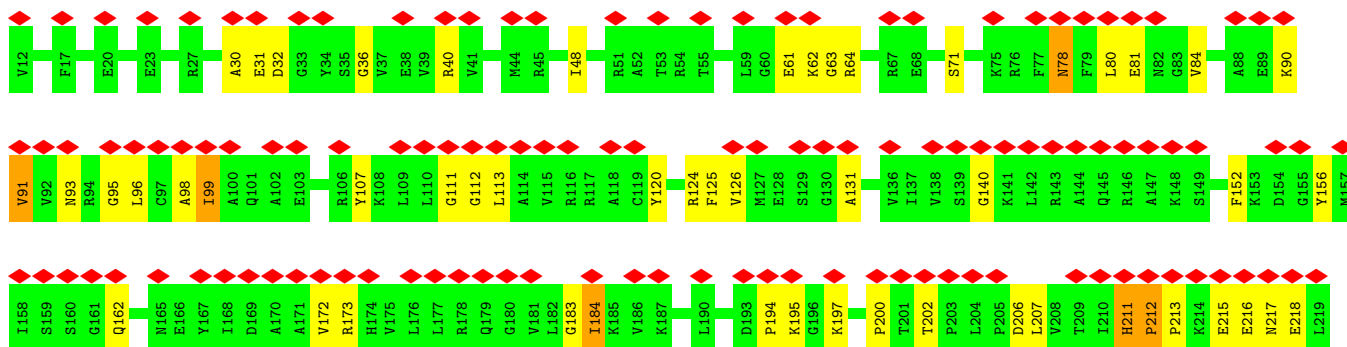
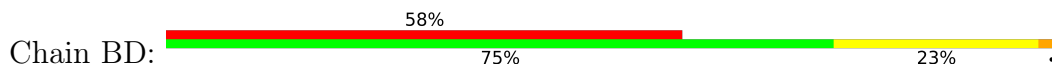


• Molecule 10: RACK1

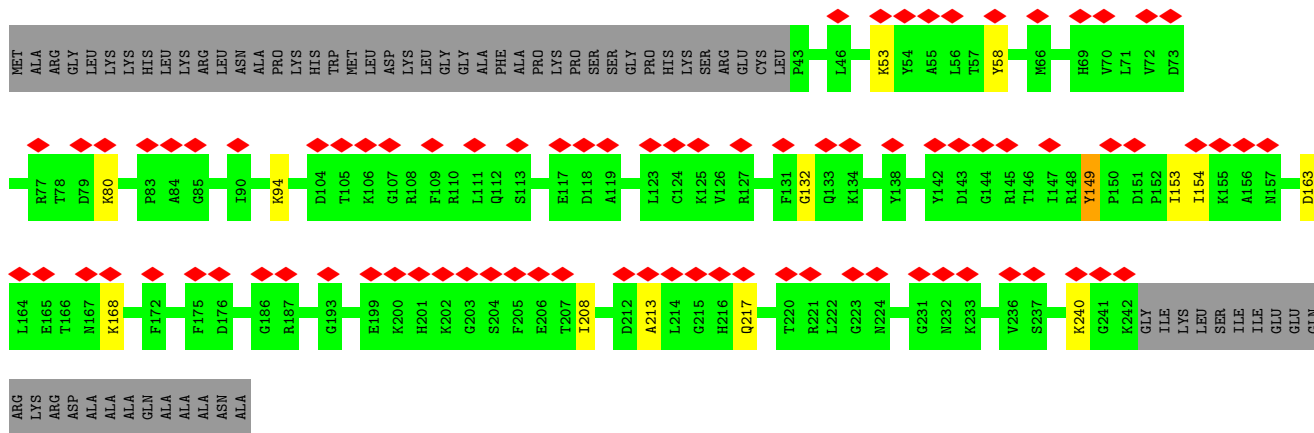




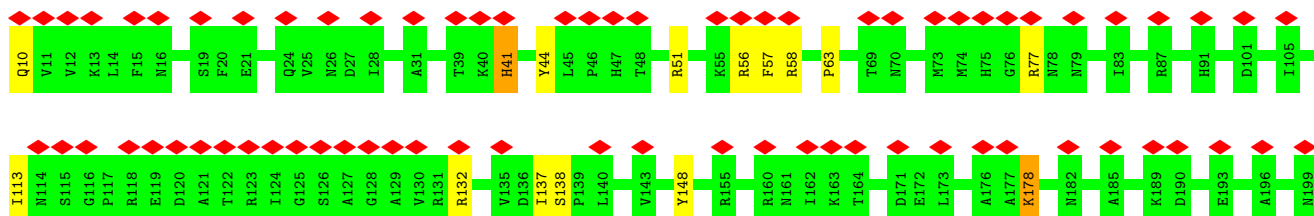
• Molecule 11: 40S ribosomal protein S3



• Molecule 12: 40S ribosomal protein S4E

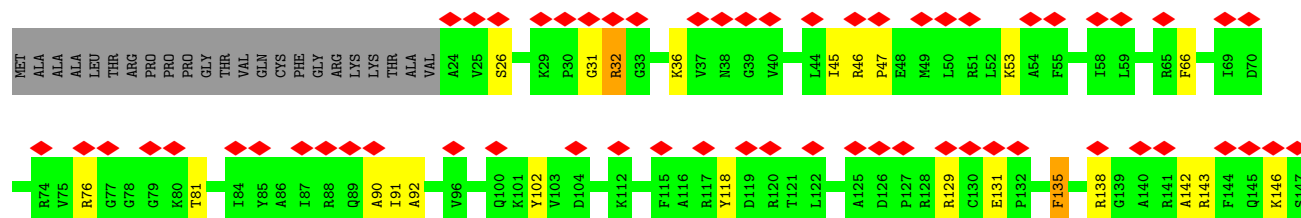
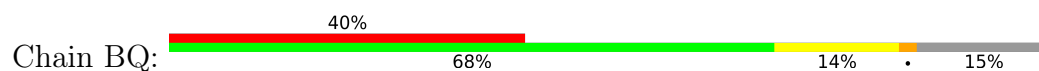


• Molecule 13: 40S ribosomal protein S7

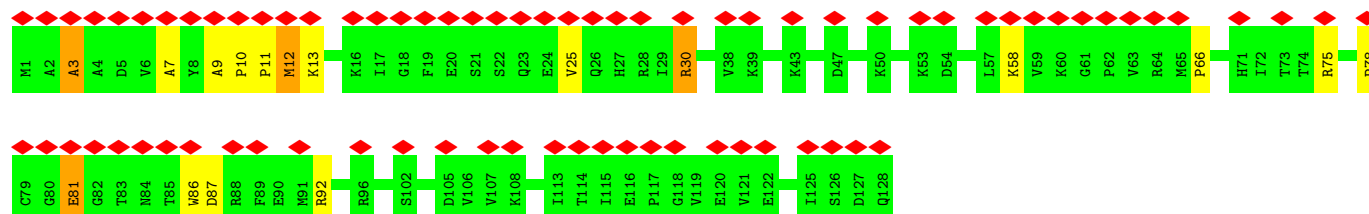
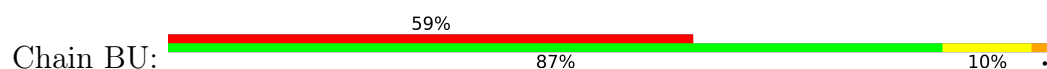




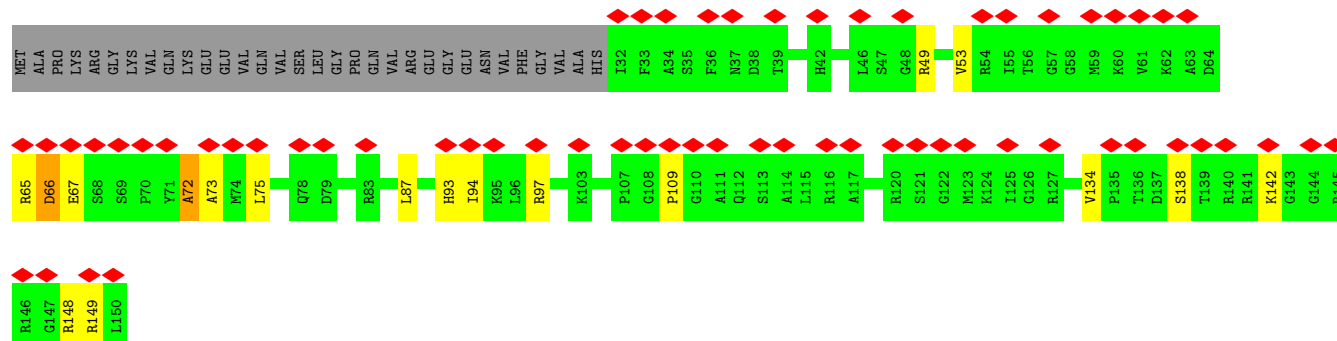
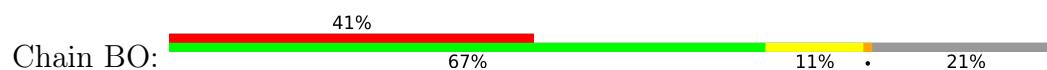
- Molecule 14: 40S ribosomal protein S9



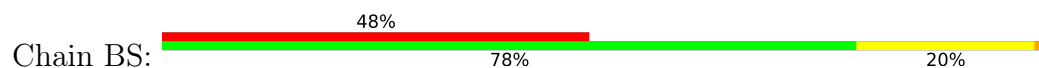
- Molecule 15: 40S ribosomal protein S10

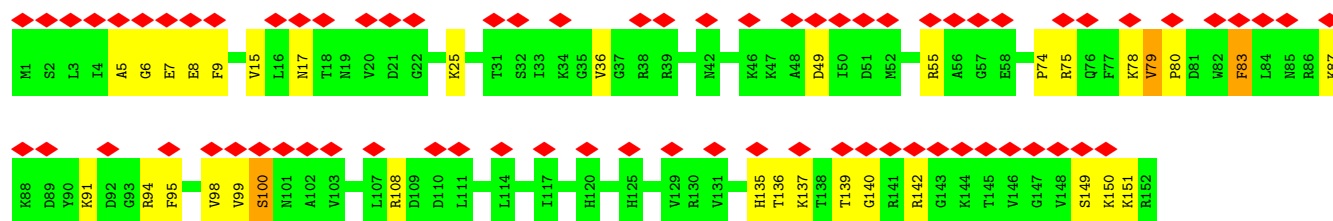


- Molecule 16: 40S ribosomal protein S11

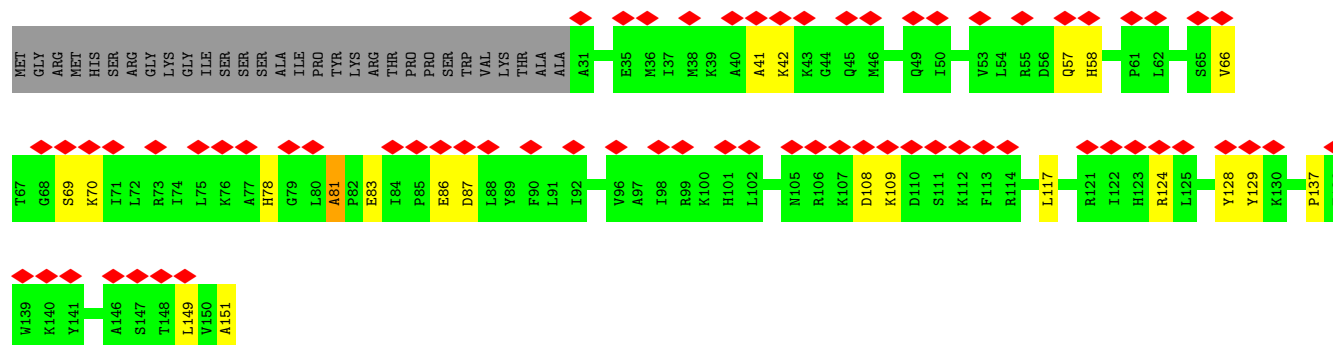


- Molecule 17: 40S ribosomal protein S13

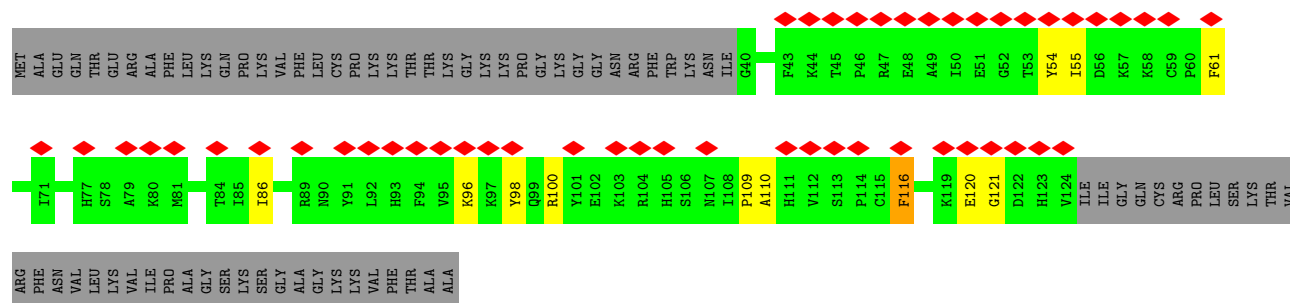




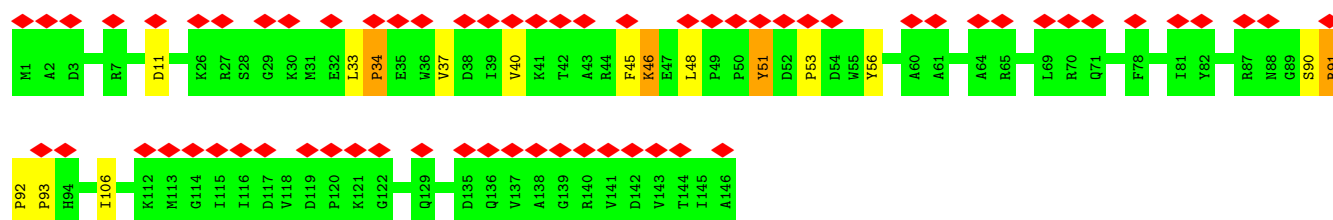
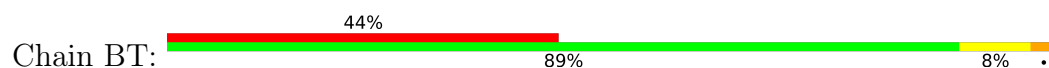
• Molecule 18: 40S ribosomal protein S15



• Molecule 19: 40S ribosomal protein S17



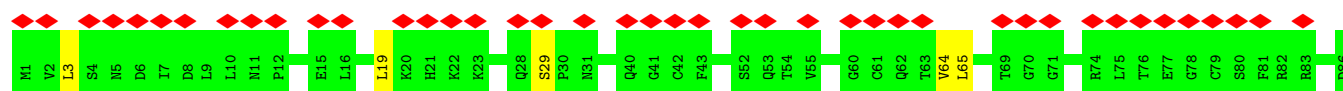
• Molecule 20: 40S ribosomal protein S19E



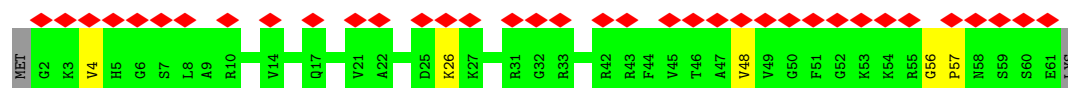
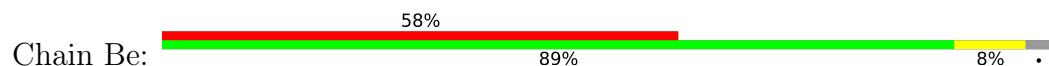
• Molecule 21: 40S ribosomal protein S19



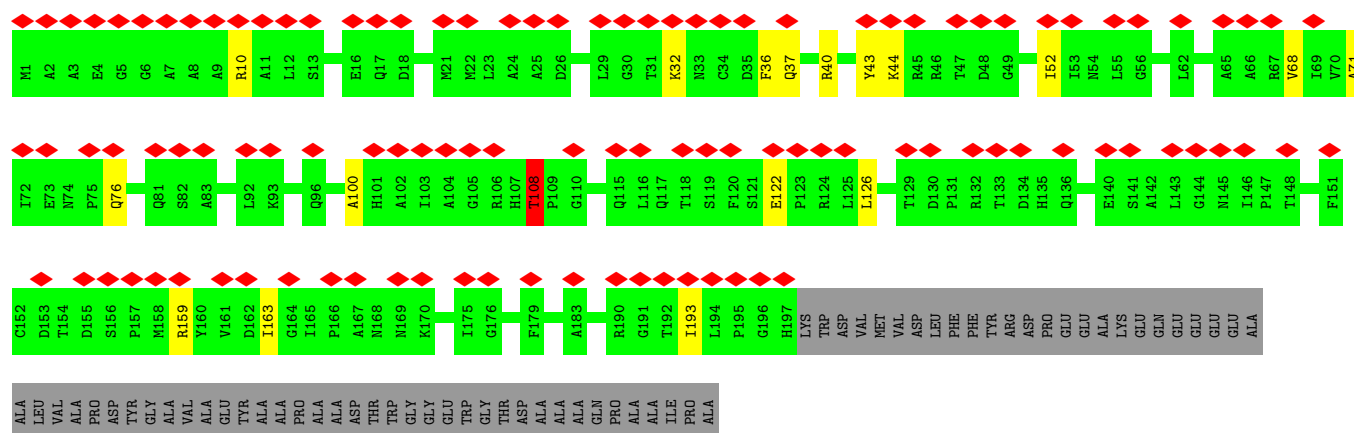




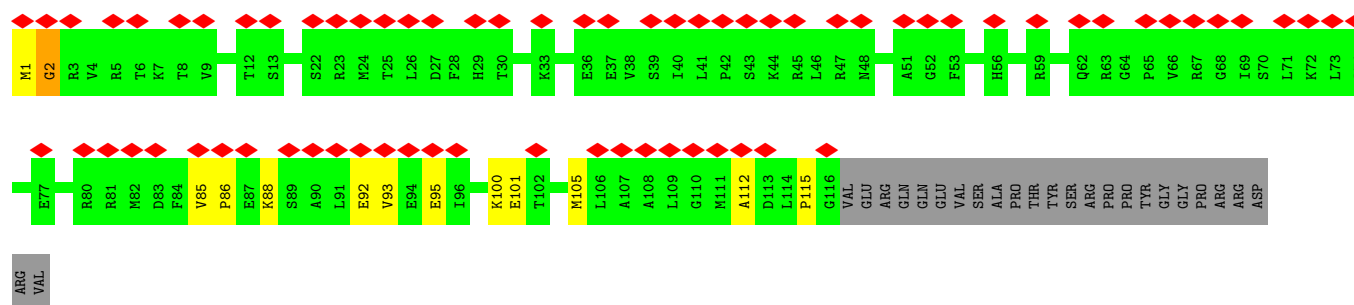
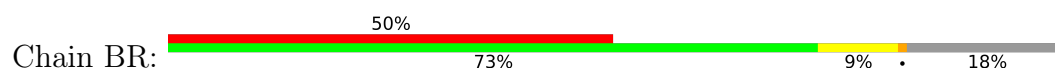
- Molecule 27: 40S ribosomal protein S30E



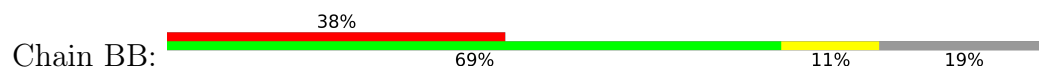
- Molecule 28: 40S ribosomal protein S2

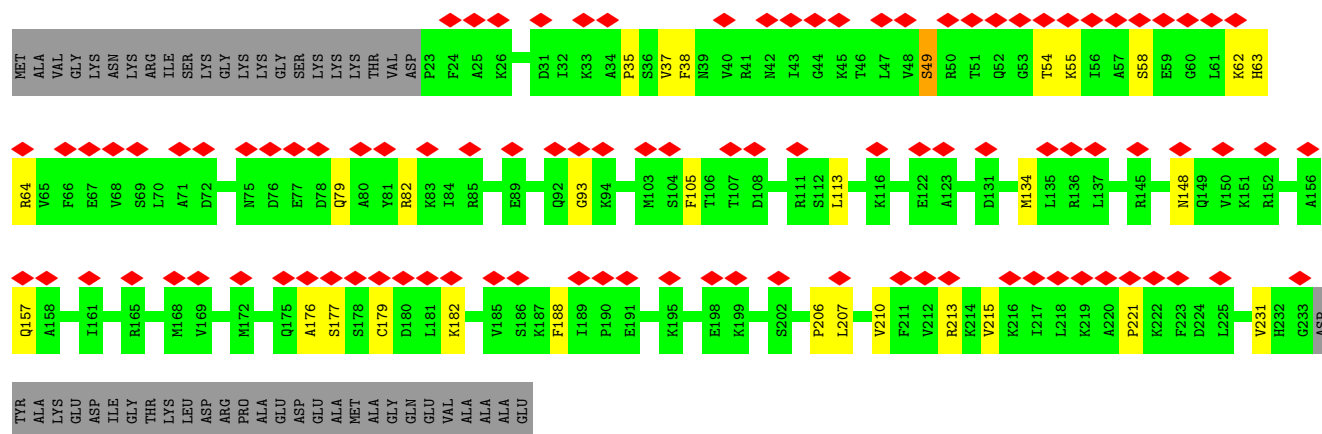


- Molecule 29: 40S ribosomal protein S17E

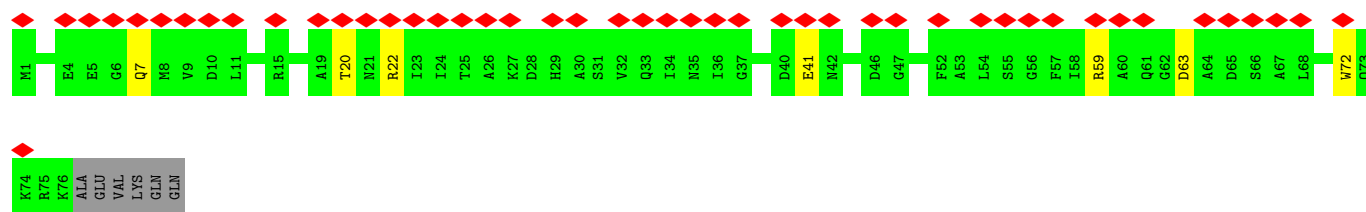
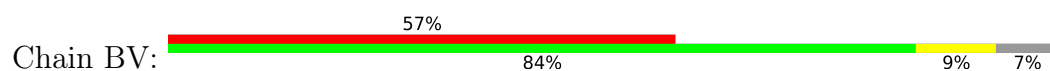


- Molecule 30: 40S ribosomal protein S1E

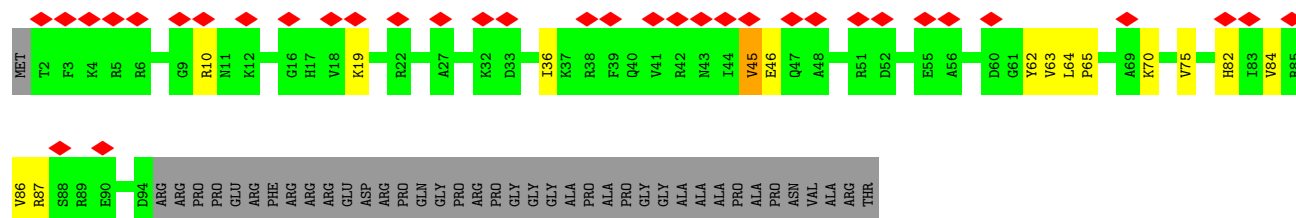




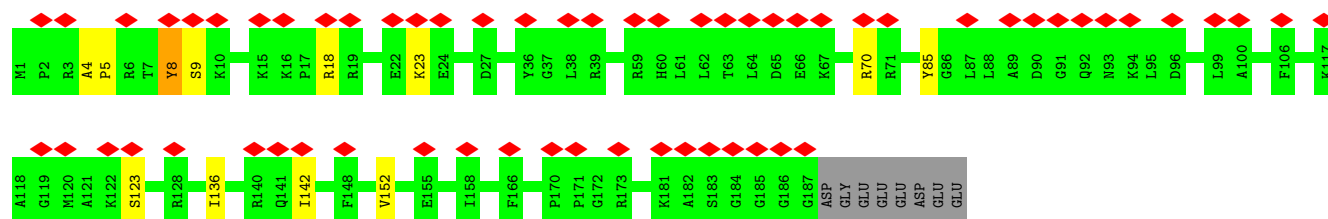
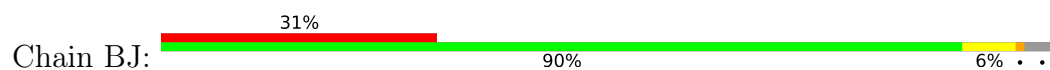
• Molecule 31: 40S ribosomal protein S21E



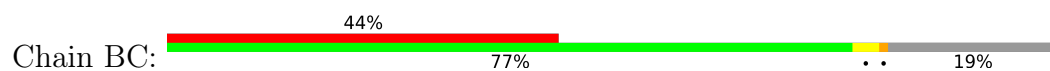
• Molecule 32: 40S ribosomal protein S26E

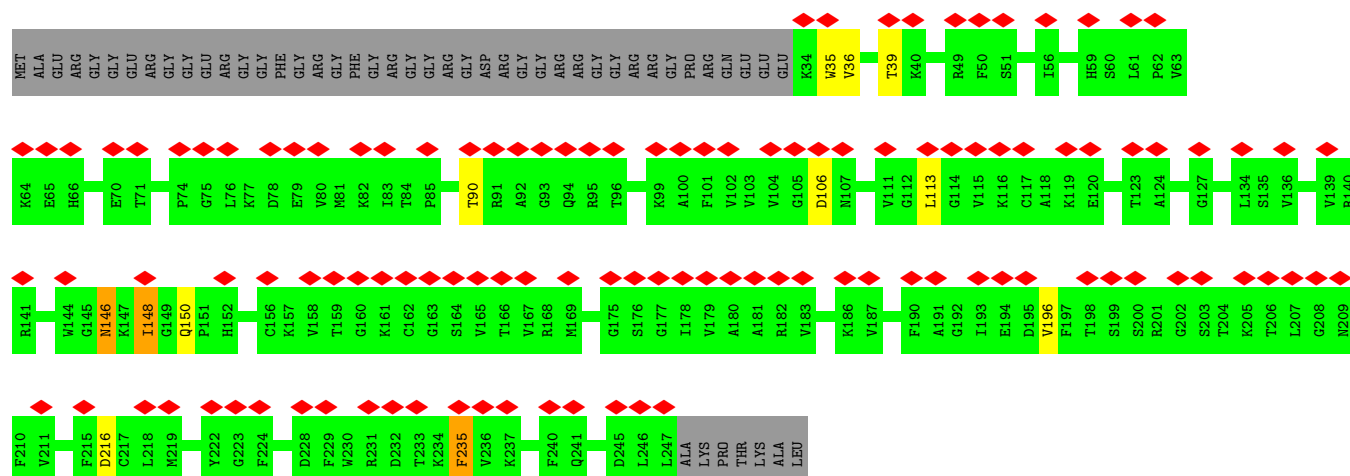


• Molecule 33: 40S ribosomal protein S4



• Molecule 34: 40S ribosomal protein S5





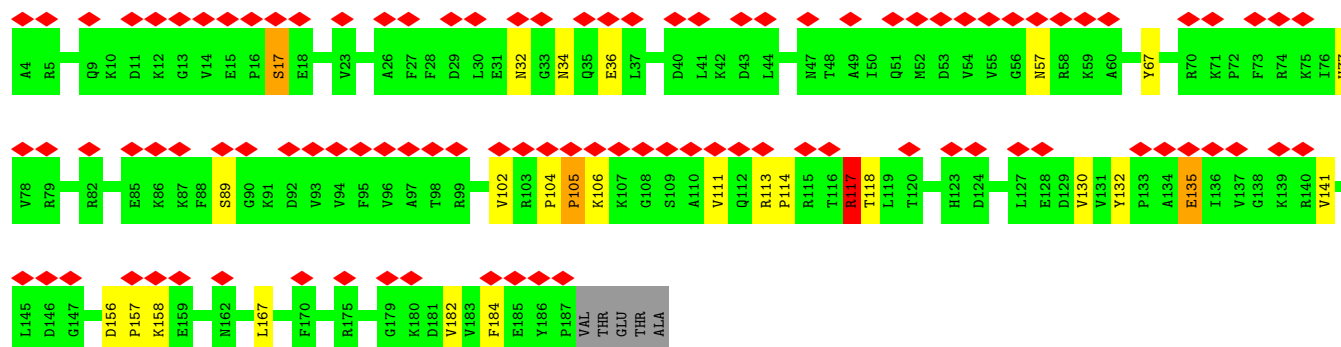
• Molecule 35: 40S ribosomal protein S6

Chain BG: 43% 88% 5% • 6%



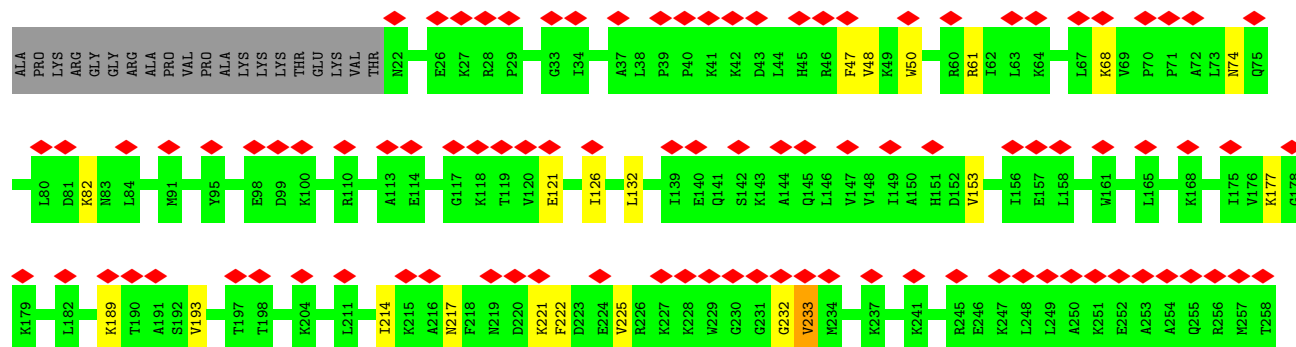
• Molecule 36: 40S ribosomal protein S7E

Chain BH: 52% 83% 12% • • •

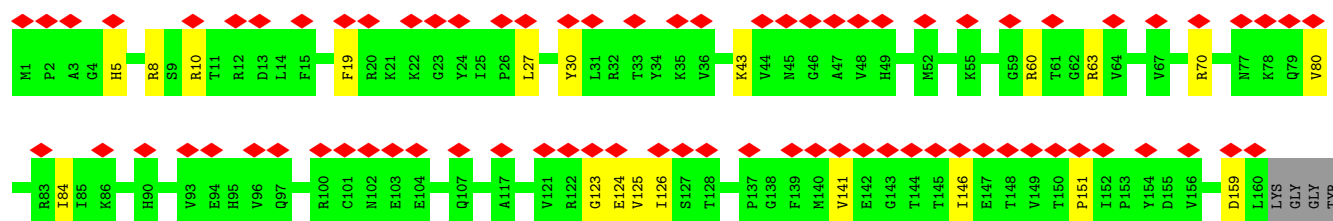
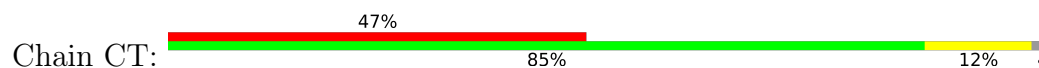


• Molecule 37: 60S ribosomal protein L8E

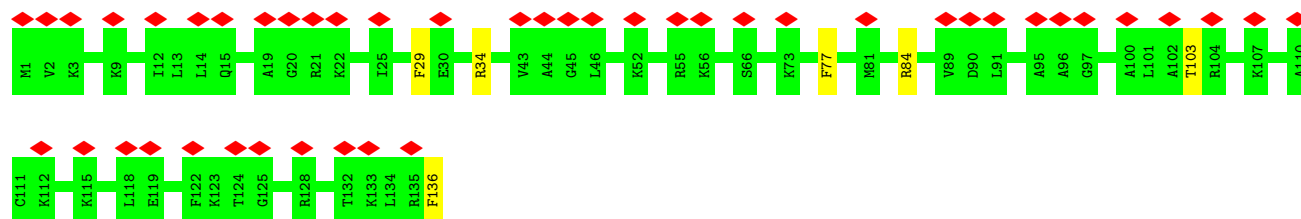
Chain CG: 38% 84% 8% 8%



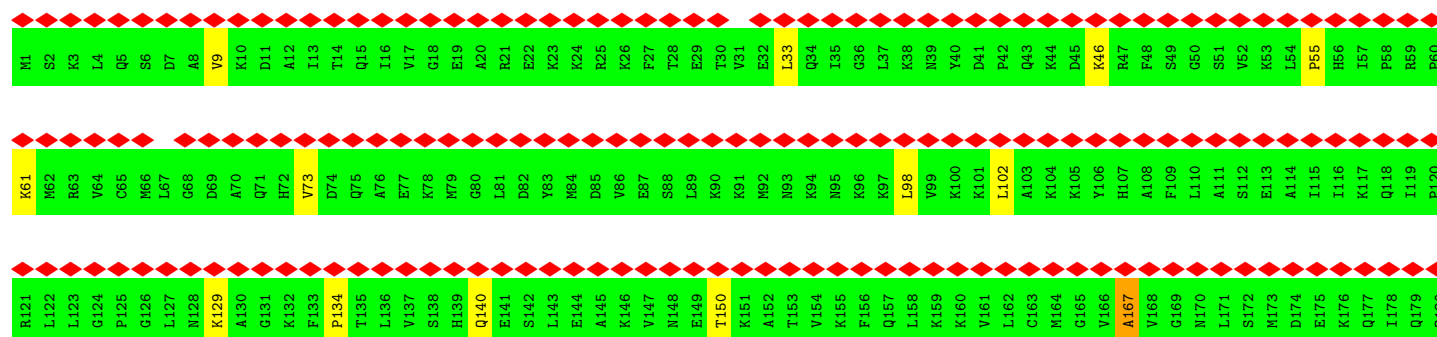
• Molecule 38: 60S ribosomal protein L21E



• Molecule 39: 60S ribosomal protein L27E

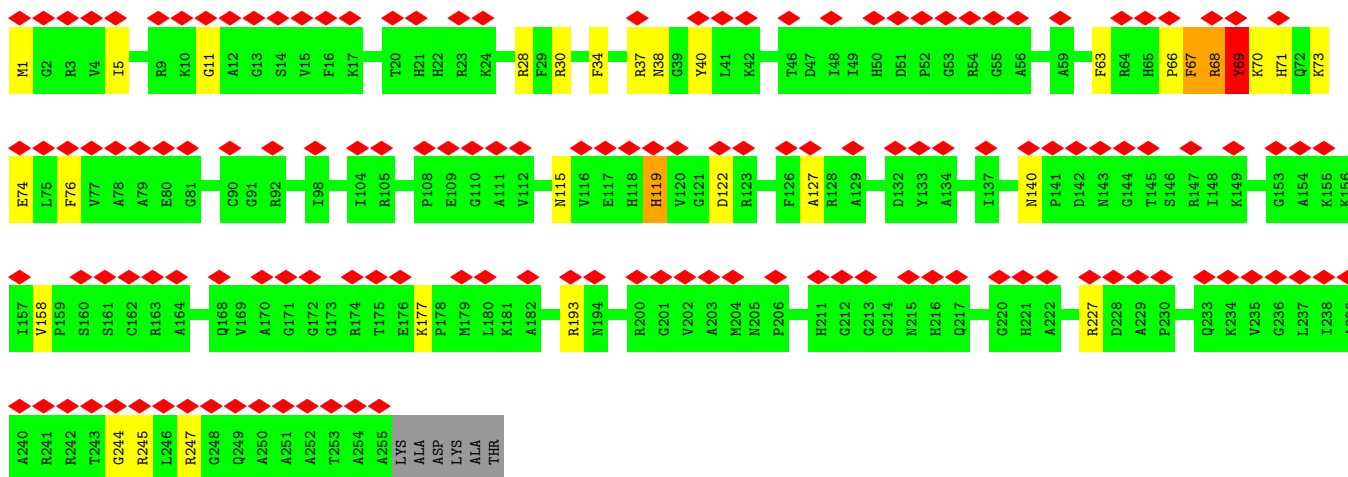
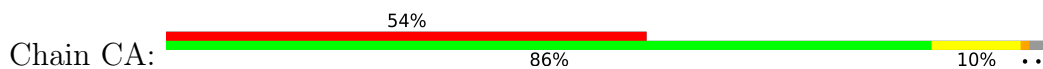


• Molecule 40: 60S ribosomal protein L1

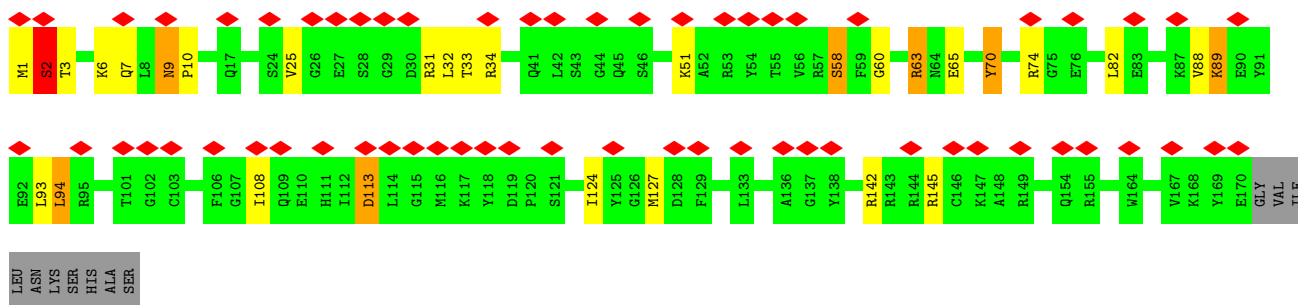
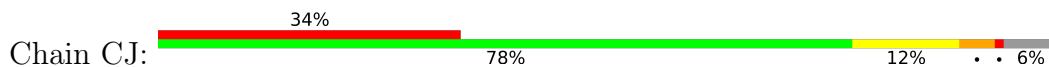




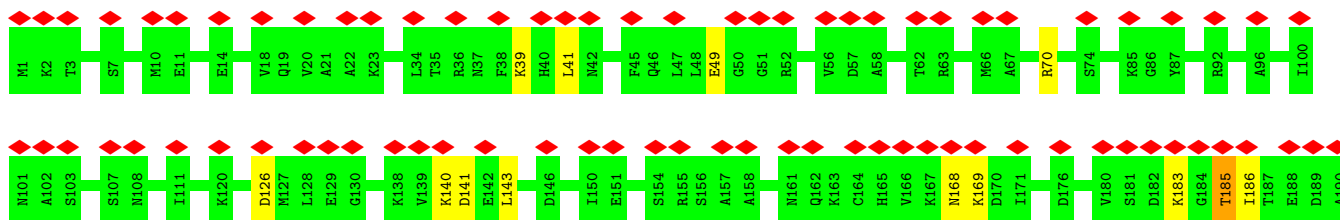
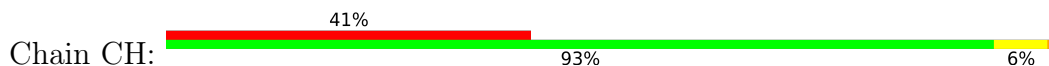
• Molecule 41: 60S ribosomal protein L2



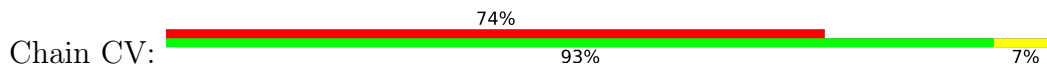
• Molecule 42: 60S ribosomal protein L5

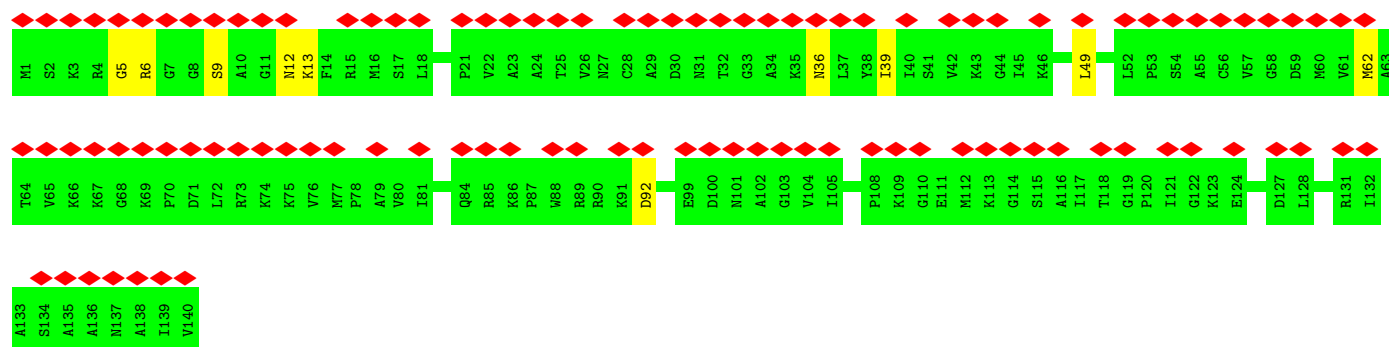


• Molecule 43: 60S ribosomal protein L6



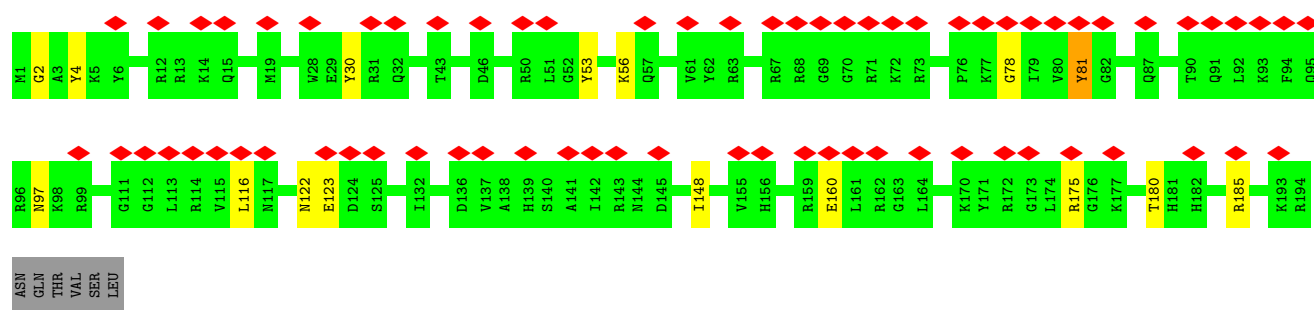
• Molecule 44: 60S ribosomal protein L14





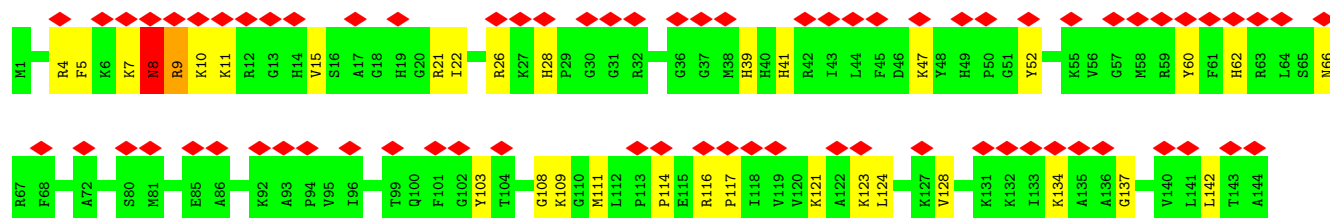
• Molecule 45: 60S ribosomal protein L15E

Chain CN: 35% 89% 8%



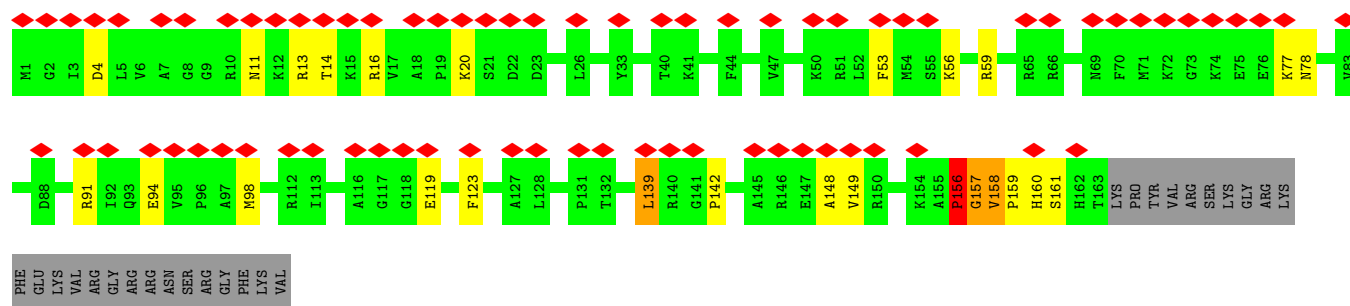
• Molecule 46: 60S ribosomal protein L15

Chain Ca: 50% 77% 22%




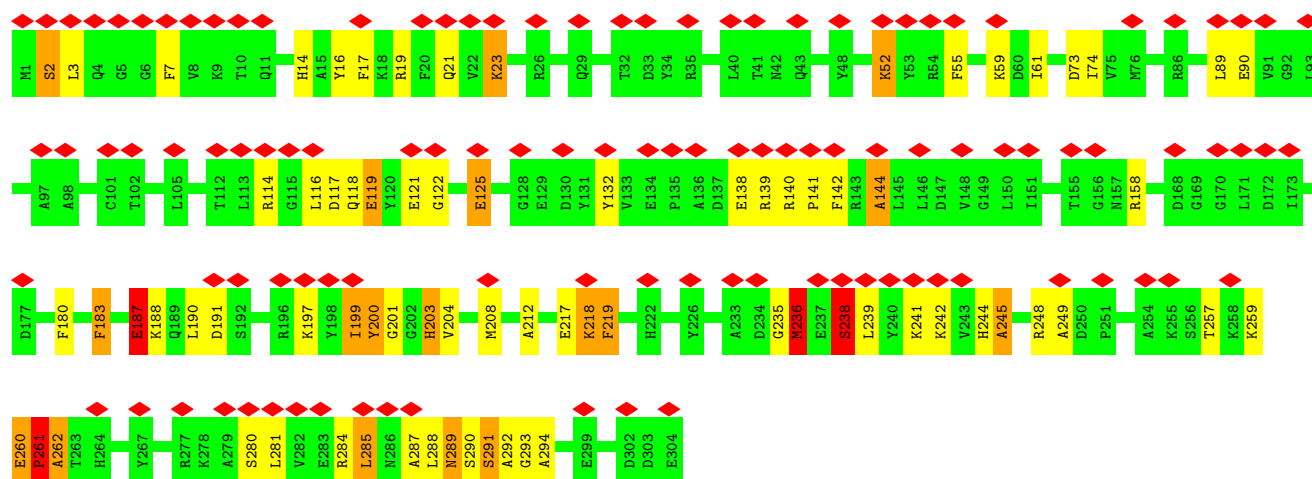
• Molecule 47: 60S ribosomal protein L18E

Chain CQ: 39% 73% 12% 13%




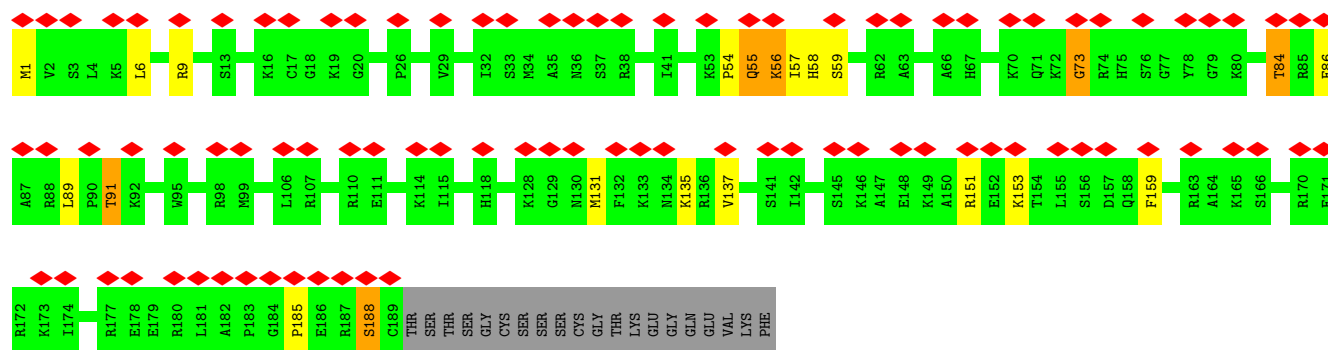
• Molecule 48: 60S ribosomal protein L18

Chain CD: 




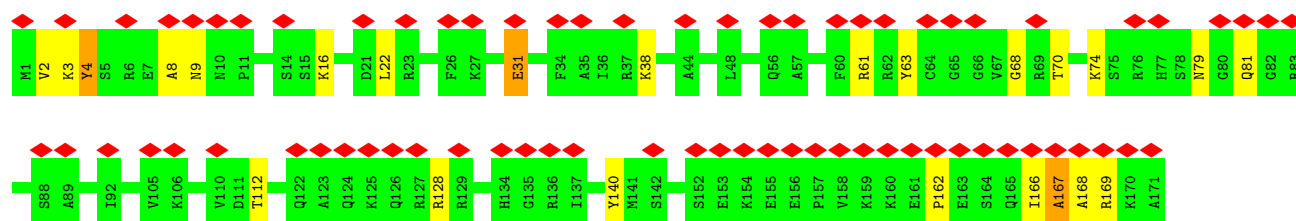
• Molecule 49: 60S ribosomal protein L19E

Chain CR: 




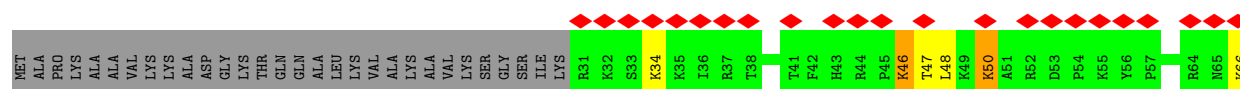
• Molecule 50: 60S ribosomal protein L22

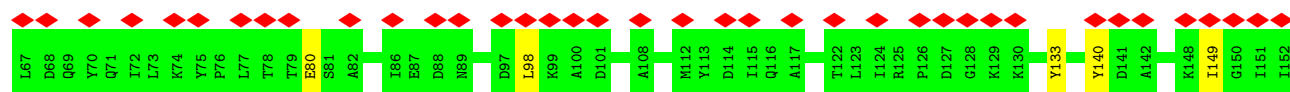
Chain CP: 



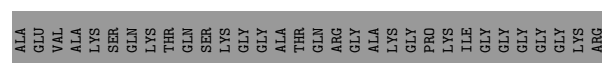
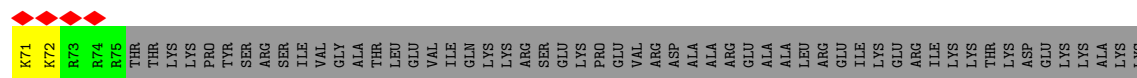
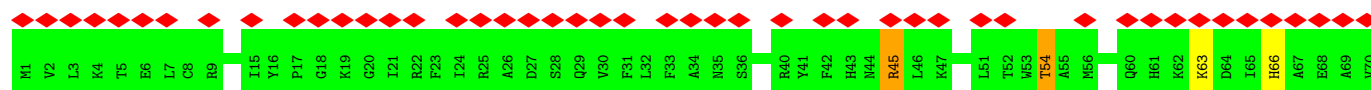
• Molecule 51: 60S ribosomal protein L23

Chain CX: 

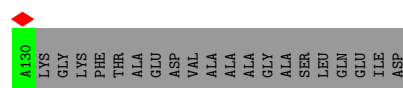
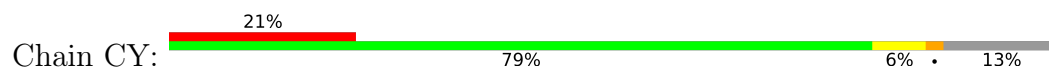




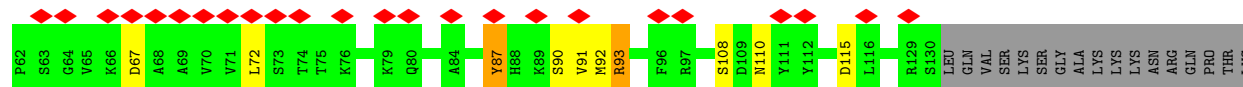
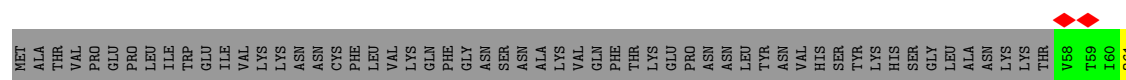
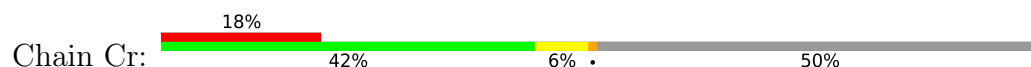
• Molecule 52: 60S ribosomal protein L24E



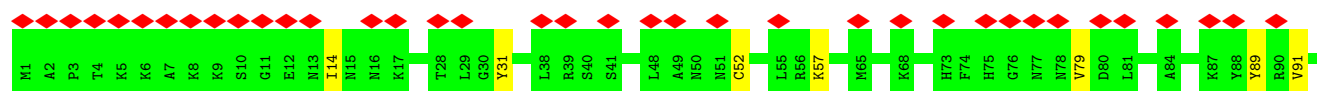
• Molecule 53: 60S ribosomal protein L24

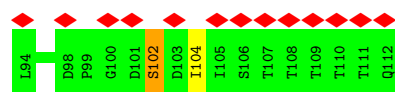


• Molecule 54: 60S ribosomal protein L28E

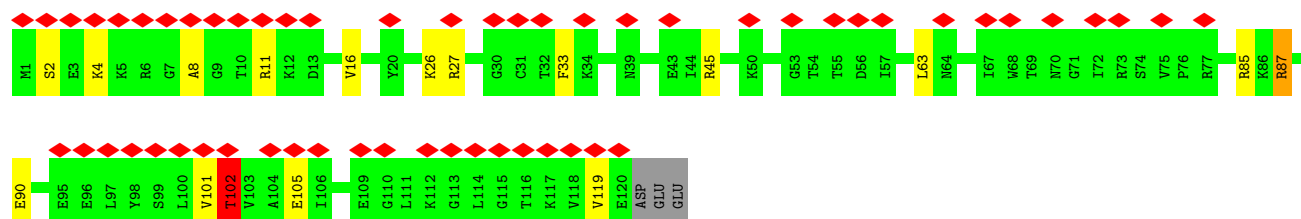
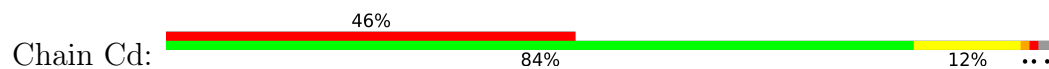


• Molecule 55: 60S ribosomal protein L30E

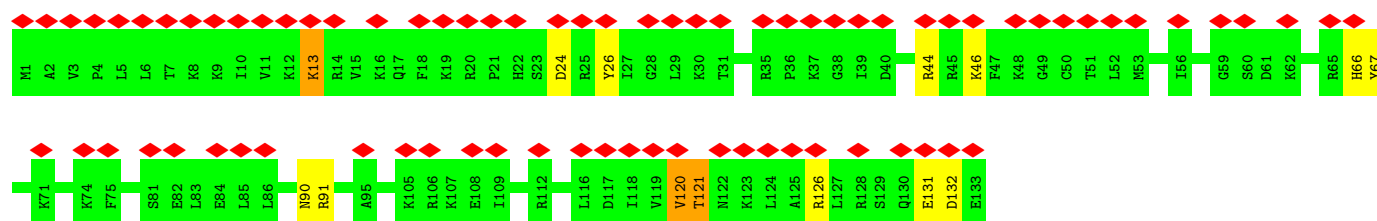
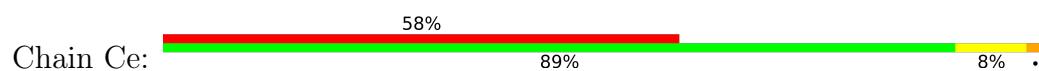




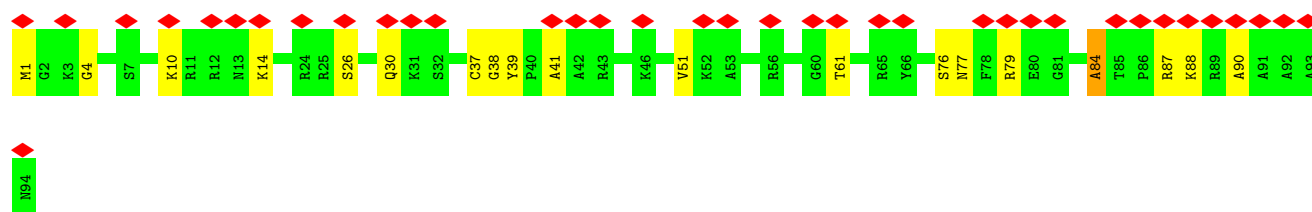
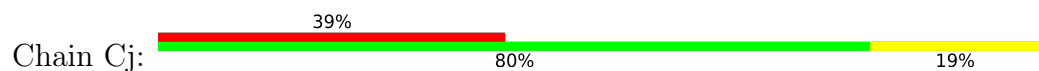
- Molecule 56: 60S ribosomal protein L31E



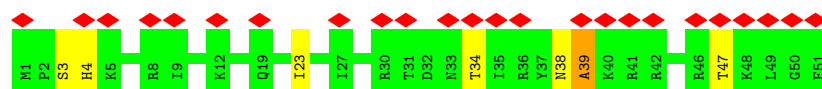
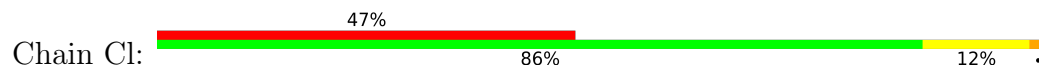
- Molecule 57: 60S ribosomal protein L32E



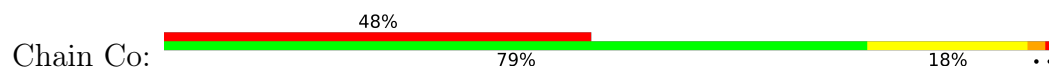
- Molecule 58: 60S ribosomal protein L37E

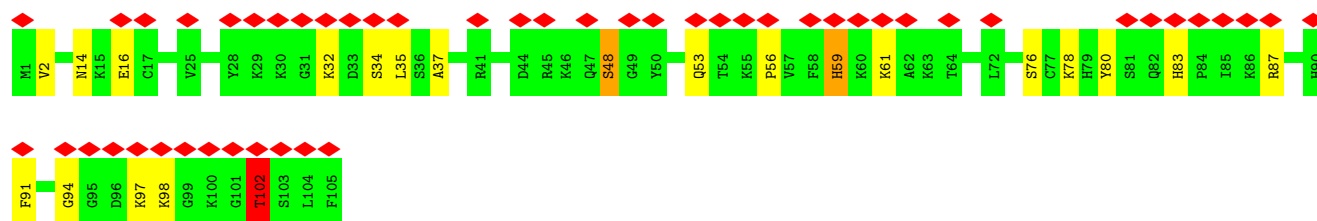


- Molecule 59: 60S ribosomal protein L39E

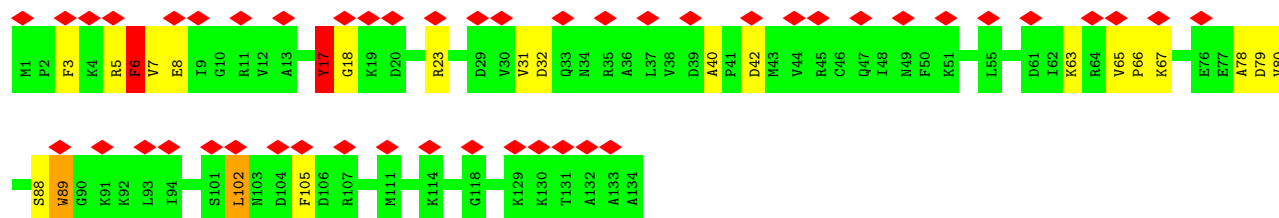
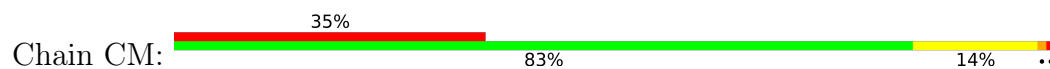


- Molecule 60: 60S ribosomal protein L44E

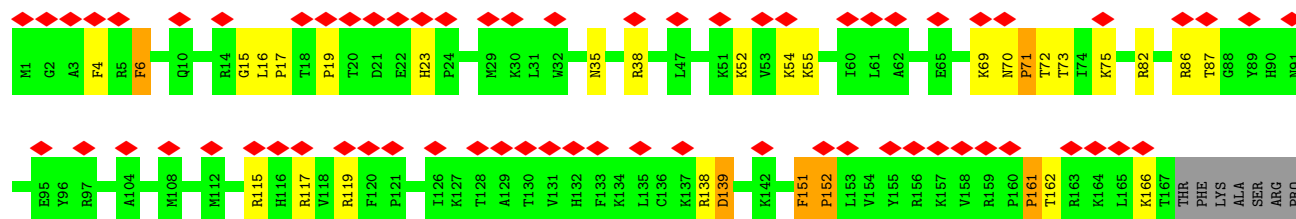
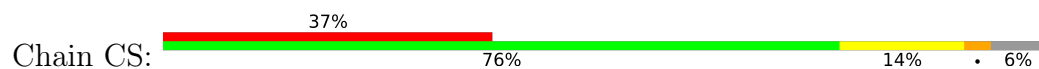




- Molecule 61: 60S ribosomal protein L14E

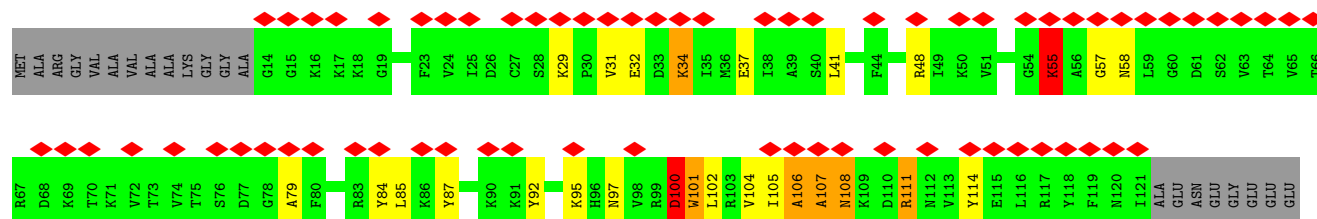


- Molecule 62: 60S ribosomal protein L20



ASN  
LEU  
PHE  
MET

- Molecule 63: 60S ribosomal protein L22E

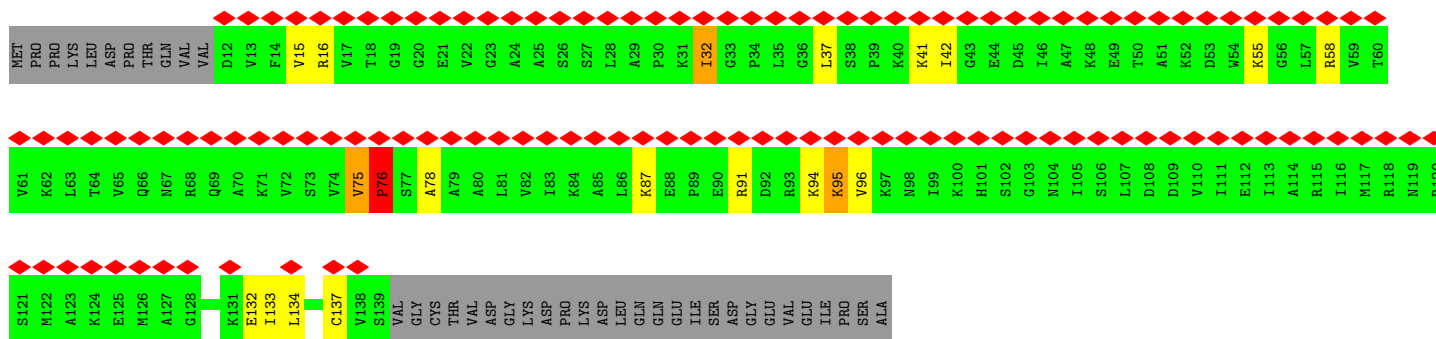
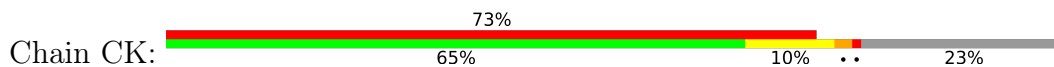


ASP

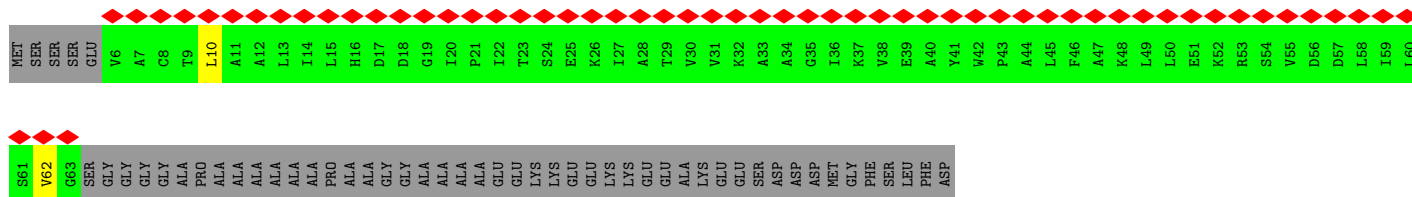
- Molecule 64: 60S ribosomal protein L36E



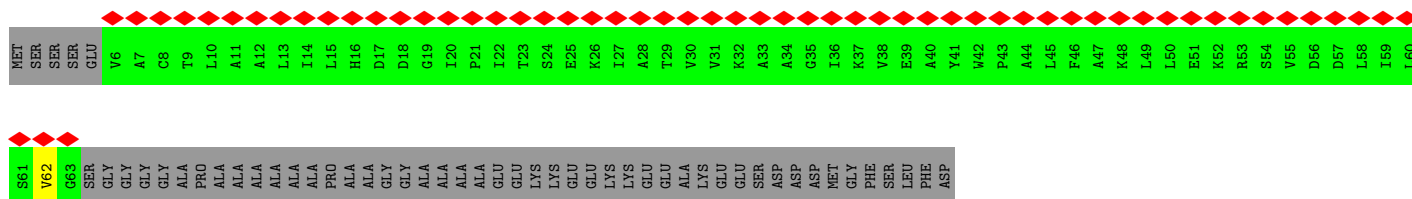
- Molecule 65: 60S ribosomal protein L11



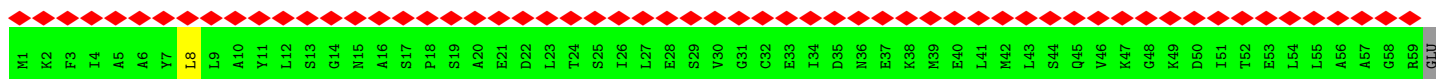
- Molecule 66: 60S ribosomal protein P1



- Molecule 66: 60S ribosomal protein P1



- Molecule 67: Acidic ribosomal protein P2



LYS PHE ALA ALA VAL PRO SER GLY GLY VAL VAL VAL SER SER ALA ALA ALA PRO ALA ALA ALA ALA PRO PRO GLU GLU SER LYS LYS LYS GLU GLU GLU LYS VAL VAL VAL GLU LYS GLU GLU GLU SER ASP ASP ASP ASP MET MET GLY PHE SER SER PHE LEU PHE ASP

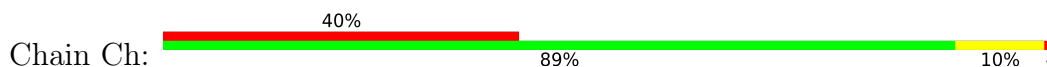
• Molecule 67: Acidic ribosomal protein P2



M1 K2 F3 T4 A5 A6 Y7 L8 L9 A10 Y11 L12 S13 S14 A16 S17 S18 S19 A20 E21 E22 D22 L23 L24 T24 S25 S26 L27 L28 E28 S29 V30 G31 C32 C33 E33 I34 D35 N36 E37 K38 K39 E40 L41 M42 L43 S44 Q45 Q46 K47 Q48 K49 D50 I51 T52 E53 L54 L55 A56 A57 C58 R59 GLU

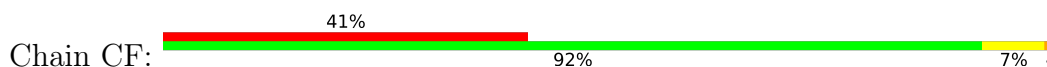
LYS PHE ALA ALA VAL PRO SER GLY GLY VAL VAL VAL SER SER ALA ALA ALA PRO ALA ALA ALA PRO PRO GLU GLU SER LYS LYS LYS GLU GLU GLU LYS VAL VAL VAL GLU LYS GLU GLU GLU SER ASP ASP ASP ASP MET MET GLY PHE SER SER PHE LEU PHE ASP

• Molecule 68: 60S ribosomal protein L29



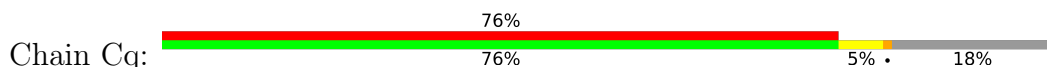
M1 S2 S3 G4 K5 V6 K7 W12 S15 K16 L19 L23 L26 K27 L30 L33 R34 I35 Q36 Q37 V38 A39 S40 L45 M46 H49 R52 K53 R57 R71 Y74 K75 K77 K78 Y79 A80 L84 K87 Q88 T89 R90 A91 I92  
R95 I96 S97 P98 D99 E100 E101 S102 R103 V104 L105 E106 V113 H114 Q117 R118 K119 K123 A124

• Molecule 69: 60S ribosomal protein L30

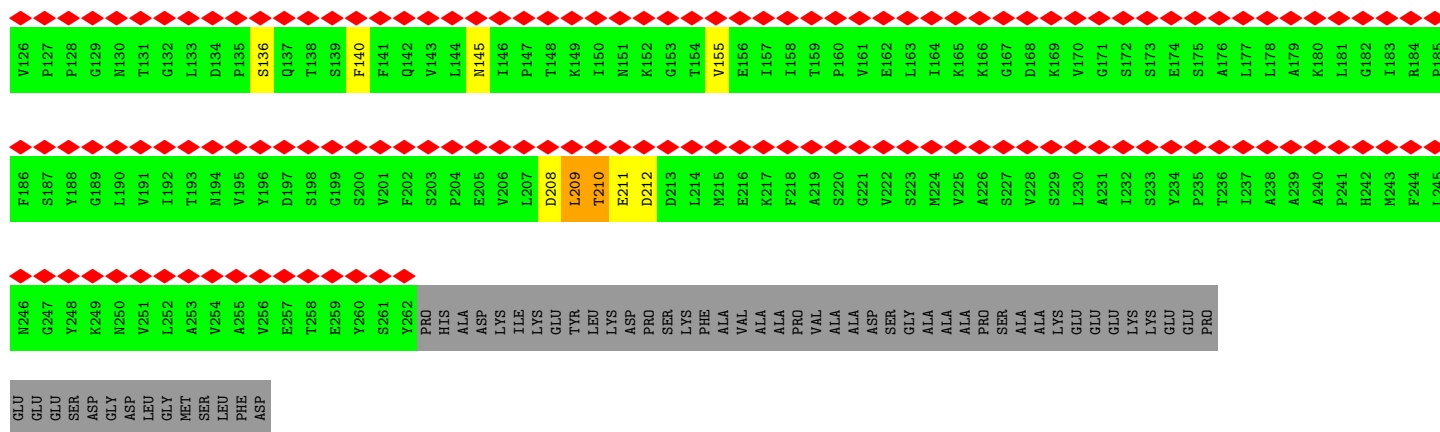


M1 A2 S3 L16 K17 R18 R19 R20 W24 E35 K36 K38 M42 V45 I46 R49 Y53 K62 B63 K68 B69 E70 A71 R72 M73 K74 G75 G76 F77 Y79 A83 R90 I91 R92 G93 I94 N95 N97 H98 P99 K100 L107 L108 R109 L110 R111  
Q112 I113 F114 M115 G116 V117 F118 V121 H127 R130 R131 V132 E133 P141 M142 L143 K144 E148 L149 I150 Y151 K152 R153 L158 M159 K160 I163 P164 L165 A166 M167 N168 K169 V170 I171 E172 E173 H178 M179 I180 I181 C182 A96 I183 E184 I190 L191 T192 V193 G194 P195 H196  
F197 K198 L204 W205 P206 F207 K208 G214 G215 L216 E217 R220 H221 H222 Y223 V224 E225 D228 A229 G230 N231 I236 V240 M243 M244

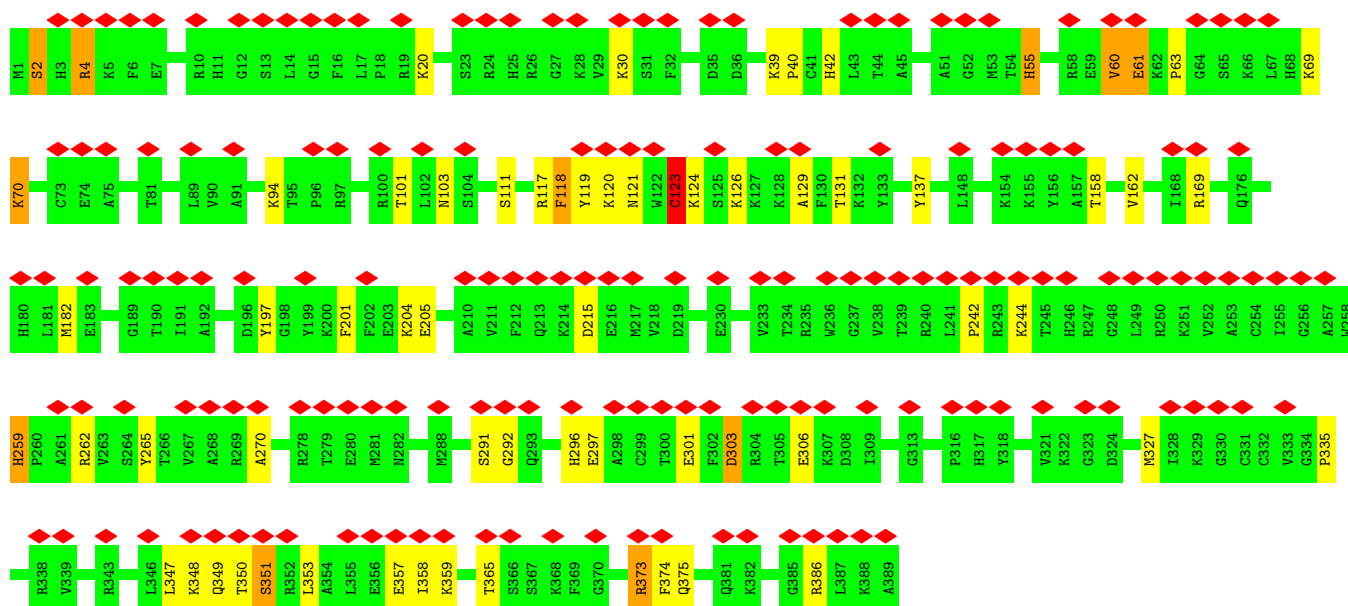
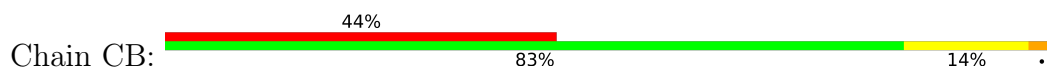
• Molecule 70: 60S acidic ribosomal protein P0



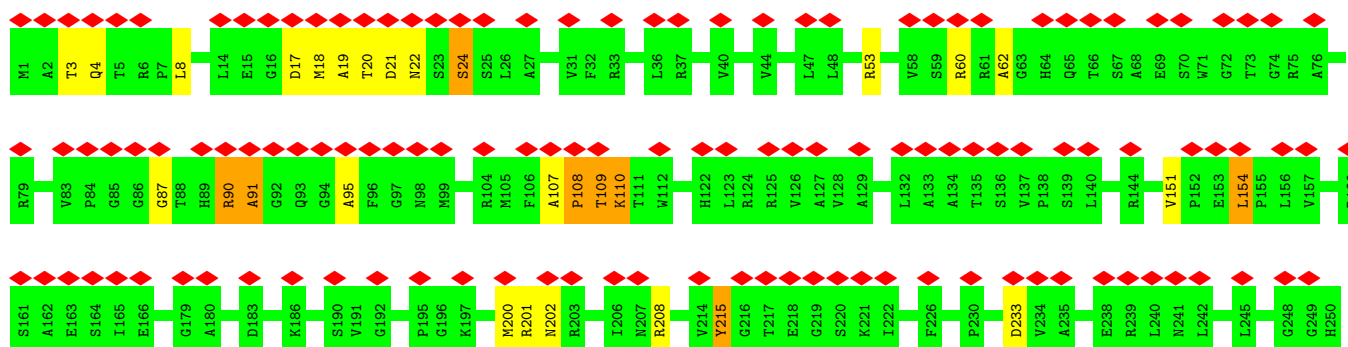
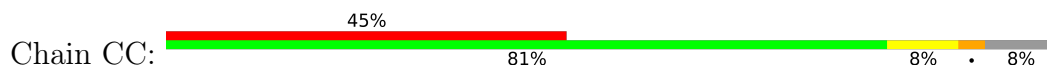
M1 A2 I3 K4 R5 D7 K7 A8 E9 V12 A13 Y14 D15 K16 Q20 L21 L22 D23 E24 Y25 G26 K27 V28 G29 L29 I30 A31 V32 A33 D34 N35 G36 G37 N39 Q40 Q41 Q42 E43 I44 R45 K46 G47 L48 R49 G50 D51 S52 I53 V54 L55 M56 G57 K58 N59 R63 R64 C65  
I66 K67 V68 H69 A70 D71 N72 T73 G74 N75 K76 E77 F78 L79 E80 L81 M82 P83 L84 L85 V86 G87 N88 V89 G90 L91 I92 F93 T94 K95 G96 G97 L98 K99 E100 V101 R102 E103 E104 V105 A106 K107 Y108 K109 V110 G111 A112 P113 A114 R115 V116 G117 L118 V119 A120 P121 V122 D123 V124 V125

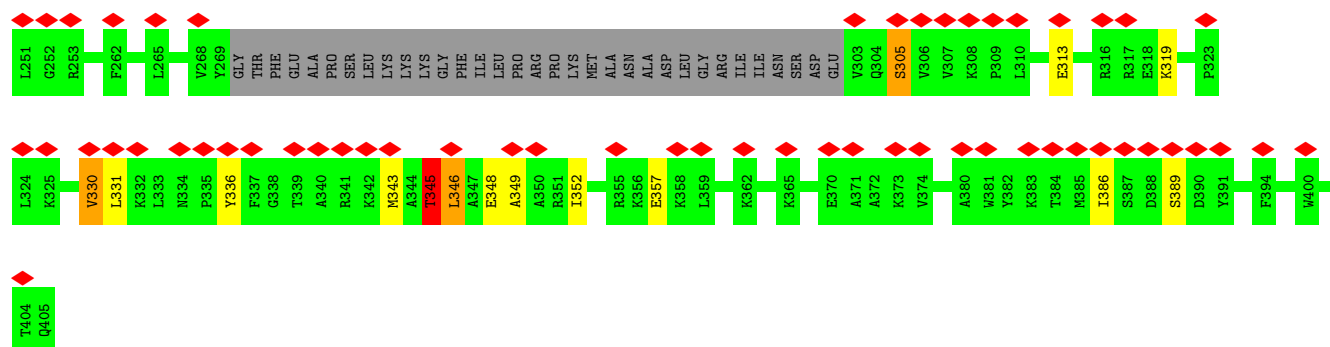


• Molecule 71: 60S ribosomal protein L3



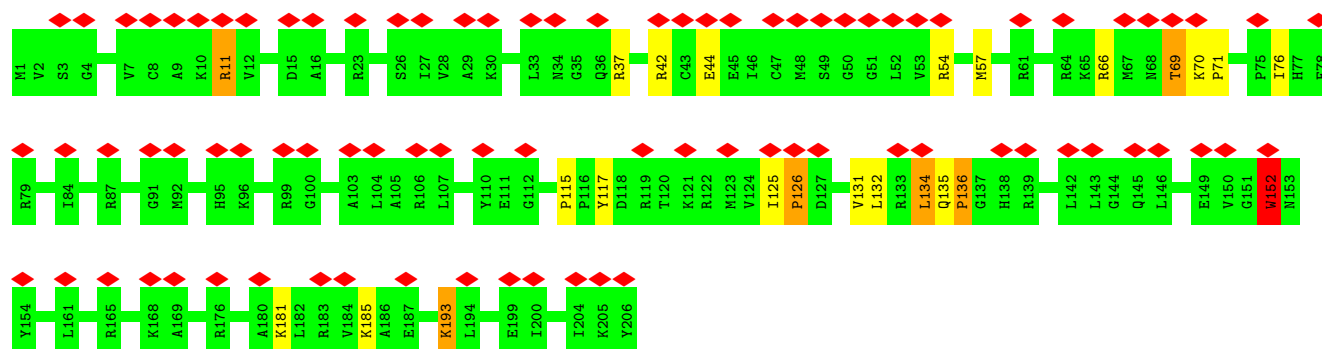
• Molecule 72: 60S ribosomal protein L4





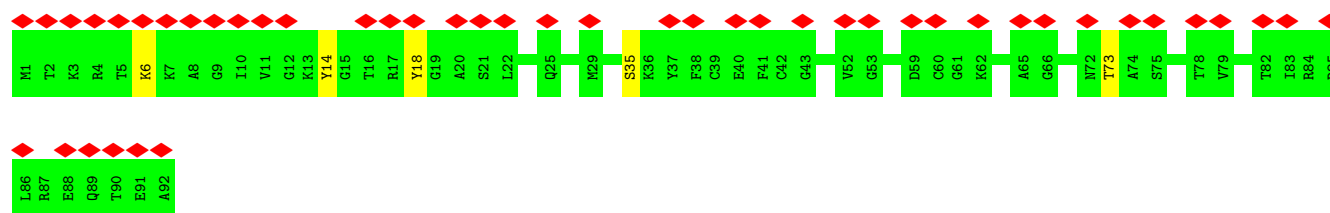
- Molecule 73: 60S ribosomal protein L13

Chain CO: 42% 88% 8%



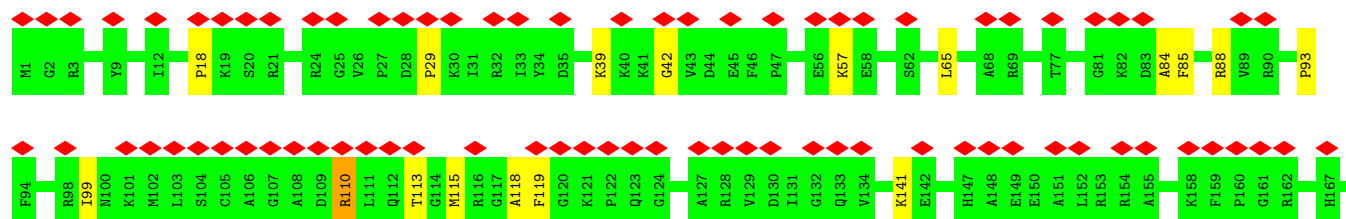
- Molecule 74: 60S ribosomal protein L43E

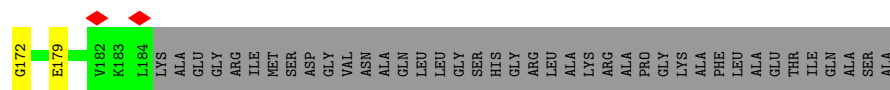
Chain Cp: 50% 95% 5%



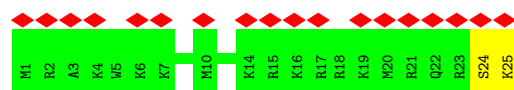
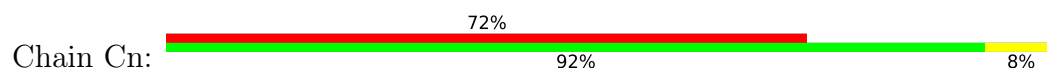
- Molecule 75: 60S ribosomal protein L16

Chain CI: 36% 74% 8% 18%

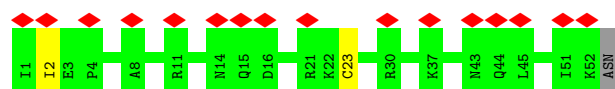




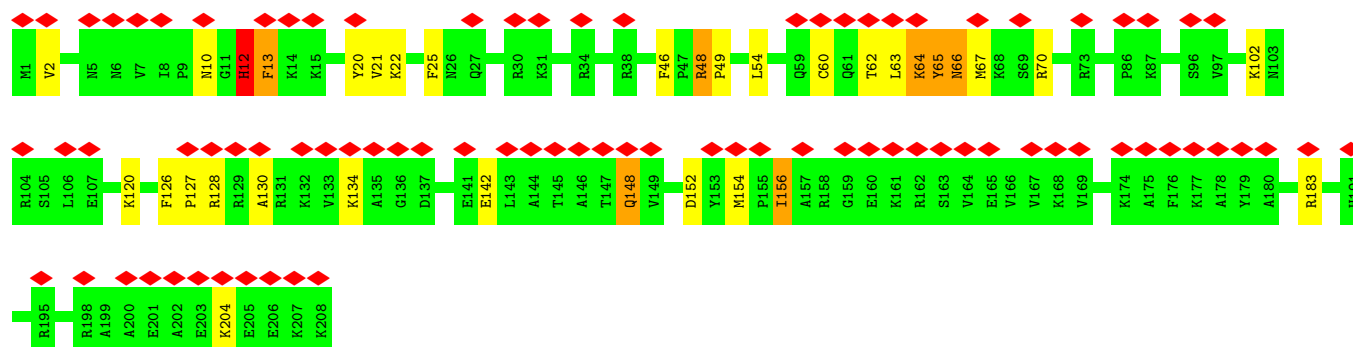
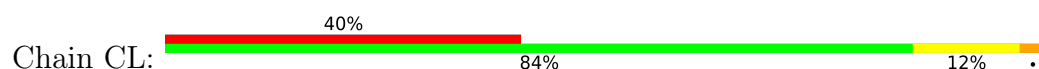
- Molecule 76: 60S ribosomal protein L41E



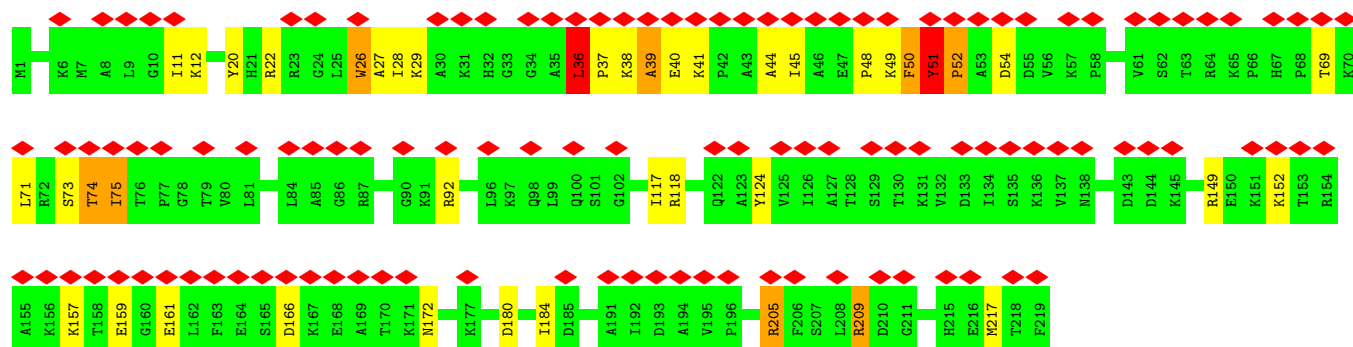
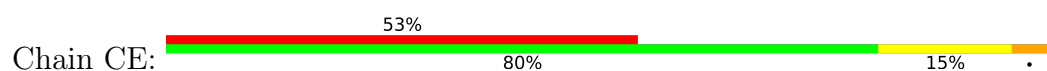
- Molecule 77: 60S ribosomal protein L40E



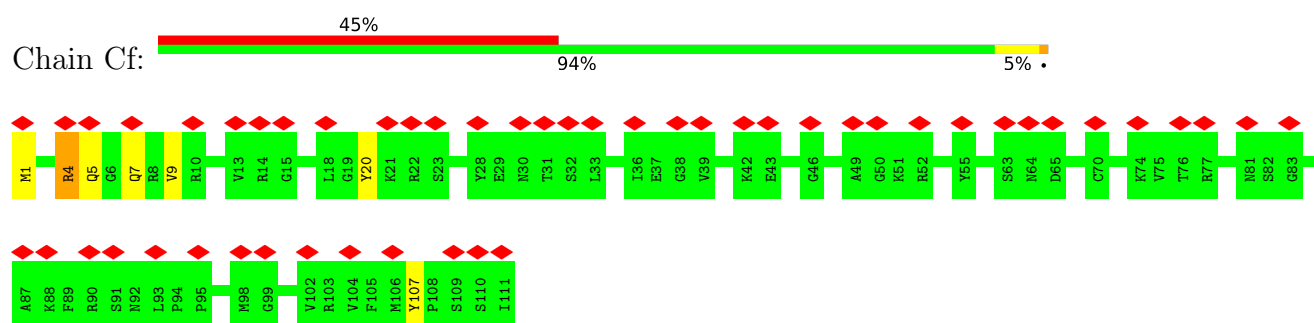
- Molecule 78: 60S ribosomal protein L13E



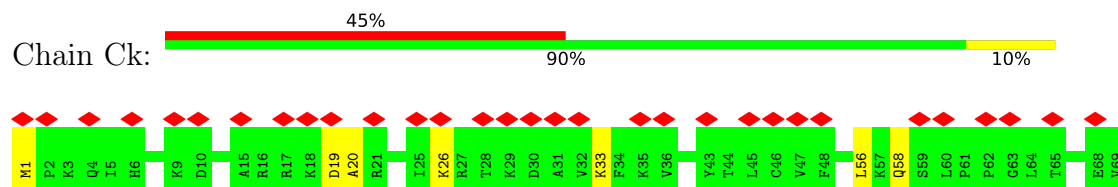
- Molecule 79: 60S ribosomal protein L6E



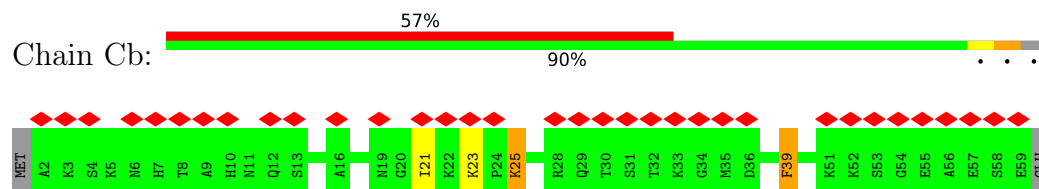
- Molecule 80: 60S ribosomal protein L33E



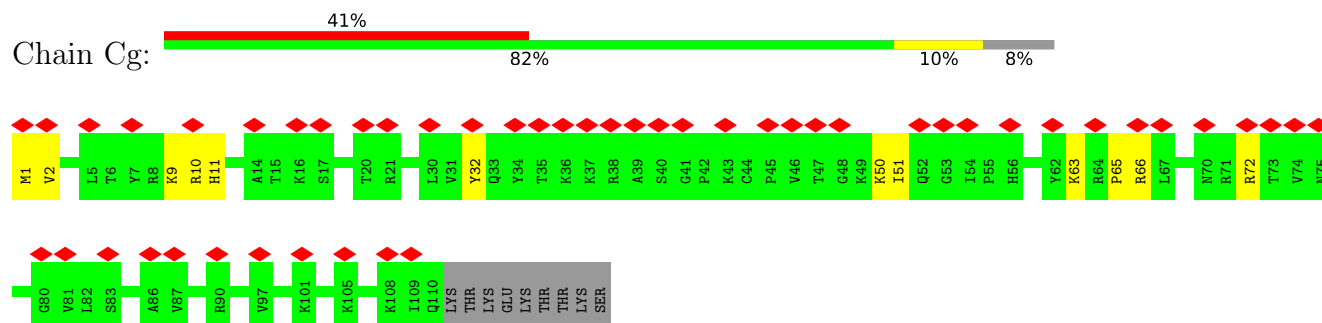
- Molecule 81: 60S ribosomal protein L38E



- Molecule 82: 60S ribosomal protein L29E



- Molecule 83: 60S ribosomal protein L34E



- Molecule 84: 60S ribosomal RNA



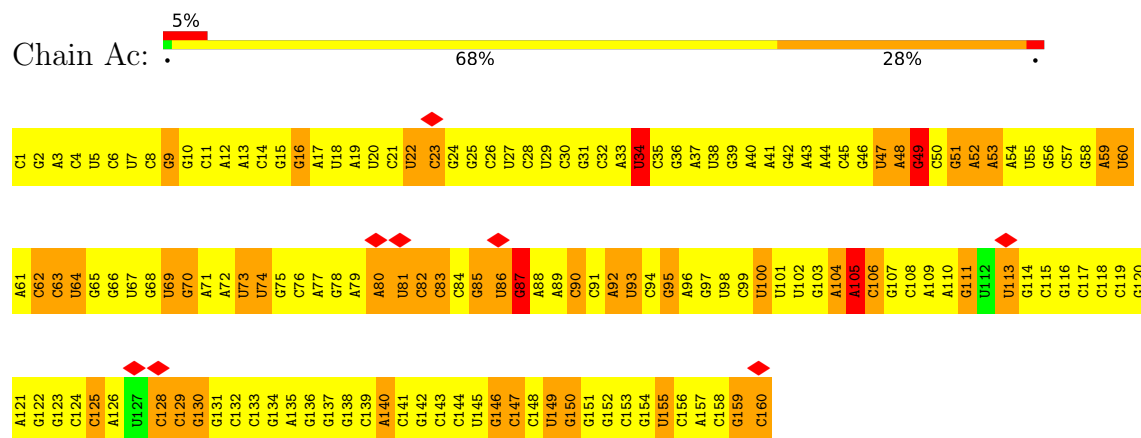
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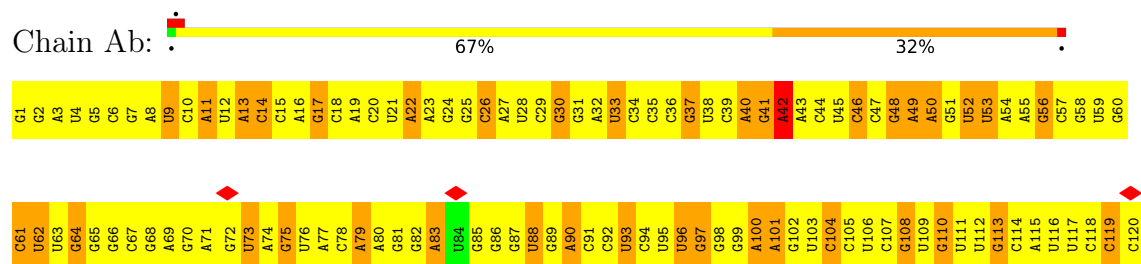
G2527	U2528	A2467	U2407	A2347	U2287	G2227	G2167	A2107	A2047	C1987	A1927	U1867	C1807
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G2529	C2469	C2469	U2409	C2349	C2289	G2229	U2169	G2109	C2049	G1989	A1929	U1869	A1809
G2530	C2470	C2470	U2410	C2350	A2290	G2230	G2170	G2110	G2050	A1990	G1931	U1870	G1810
G2531	C2471	C2471	G2411	G2351	A2291	G2231	A2171	A2111	G2051	U1991	A1932	C1872	A1812
A2532	U2472	U2472	G2412	C2352	U2292	G2232	C2172	C2112	G2052	U1992	U1933	C1873	C1813
A2533	C2473	C2473	G2413	G2353	U2293	G2233	G2173	A2113	A2053	G1993	U1934	A1874	C1814
G2534	A2474	A2474	U2414	G2354	U2294	G2234	C2174	A2114	G2054	U1994	G1935	A1875	G1815
G2535	G2475	G2475	G2415	A2355	G2295	G2235	A2175	G2115	A2055	G1995	G1936	U1876	U1816
G2536	G2476	G2476	U2416	A2356	U2296	A2237	A2176	G2116	U2055	U1996	C1937	G1877	U1817
G2537	G2477	G2477	A2418	A2357	A2297	U2238	U2177	G2117	G2056	U1997	U1938	G1878	C1818
G2538	G2478	G2478	G2419	C2358	A2298	U2239	G2178	G2118	G2057	U1998	C1939	A1879	A1819
G2539	G2479	G2479	U2420	C2359	C2299	G2240	U2179	A2119	G2058	G1999	U1940	A1880	C1820
A2540	C2480	C2480	G2421	A2360	G2300	G2241	G2180	U2120	C2059	A1982	G1941	C1881	G1821
A2541	G2481	G2481	U2422	C2361	C2301	G2242	U2181	G2121	C2059	G1999	A1942	C1882	C1822
U2542	A2482	A2482	A2423	C2362	C2302	G2243	G2182	C2122	C2060	C2000	G1943	A1883	C1823
G2543	U2424	U2424	G2424	C2363	C2303	G2244	A2183	C2123	C2061	U2001	G1944	A1884	C1824
G2544	G2425	G2425	U2425	A2364	A2304	G2245	U2184	G2124	U2062	G2002	A1945	G1885	G1825
G2545	C2426	C2426	G2426	C2365	U2305	G2246	U2185	A2125	G2063	U2004	C1946	U1886	G1826
G2546	U2427	U2427	G2427	A2366	G2306	A2247	U2186	G2126	U2064	G1948	G1947	G1887	U1827
G2547	G2428	G2428	A2429	C2367	A2307	G2248	C2187	G2127	G2065	C2005	G1949	G1888	C1828
G2548	U2429	U2429	G2430	G2368	U2308	U2249	U2188	G2128	G2066	A2006	G1950	G1889	G1829
G2549	G2430	G2430	U2431	G2369	U2309	A2250	G2189	U2129	G2067	C2007	G1951	A1890	U1830
G2550	U2432	U2432	U2432	A2370	A2310	A2251	C2190	U2130	G2068	G2008	G1952	A1891	U1831
U2551	G2433	G2433	G2433	A2371	A2311	C2252	C2191	U2131	G2069	G2009	C1953	A1892	C1832
U2552	A2434	A2434	U2434	C2372	A2312	U2253	C2192	A2132	U2071	G2011	G1954	G1893	U1833
U2553	G2435	G2435	G2435	G2373	U2313	A2254	A2193	U2133	U2072	C2012	G1955	G1894	C1834
U2554	U2436	U2436	G2436	G2374	G2314	U2255	G2194	U2134	G2073	G2013	G1956	G1895	A1835
U2555	G2437	G2437	G2437	G2375	G2315	U2256	U2195	U2135	C2074	A2014	G1957	A1896	U1836
U2556	A2438	A2438	U2438	G2376	G2316	G2257	G2196	A2136	G2075	G2015	G1958	A1897	A1837
U2557	G2439	G2439	U2439	G2377	A2317	A2257	U2197	U2137	U2076	C2016	G1959	G1898	A1838
U2558	A2440	A2440	G2440	U2378	U2317	C2258	U2198	A2138	C2076	A2016	C1960	U1900	C1839
U2559	G2441	G2441	U2441	C2380	U2318	U2259	C2199	A2139	G2077	G2017	C1961	A1906	A1846
U2560	C2442	C2442	G2442	G2381	U2319	U2260	U2200	U2140	G2078	C2018	G1962	A1907	G1847
U2561	G2443	G2443	U2443	C2382	A2320	U2261	G2201	A2141	G2079	G2019	G1963	C1908	G1848
U2562	A2444	A2444	G2444	G2383	A2321	U2262	G2202	U2142	G2080	G2020	G1964	U1849	U1850
U2563	U2445	U2445	U2445	C2384	A2322	U2263	A2203	A2143	C2081	G2021	C1965	G1910	U1851
U2564	G2446	G2446	G2446	A2385	G2323	G2264	U2204	G2144	A2082	U2022	C1966	A1911	C1852
U2565	U2501	U2501	A2447	A2386	A2324	A2265	G2205	C2145	U2083	G2023	C1967	C1912	C1853
U2566	G2502	G2502	G2448	U2387	G2325	G2266	U2206	G2146	G2084	C2024	G1968	A1854	A1854
U2567	A2503	A2503	U2503	C2388	U2326	G2267	C2207	U2147	A2085	G2025	A1970	G1916	G1856
U2568	G2504	G2504	A2449	A2389	U2327	U2268	A2208	U2148	A2086	G2026	A1971	U1917	G1857
U2569	C2505	C2505	G2450	C2390	C2329	G2271	A2209	G2150	A2087	G2027	C1972	A1918	U1858
U2570	G2506	G2506	U2451	G2391	G2330	C2272	A2210	U2151	C2088	C2028	C1973	G1919	G1859
U2571	U2507	U2507	G2452	C2392	A2331	C2273	G2211	G2152	G2090	G2029	C1974	U1920	A1860
U2572	A2508	A2508	U2508	G2393	U2332	A2274	U2212	C2153	U2091	G2030	G1975	U1921	A1861
U2573	G2509	G2509	G2454	G2394	G2333	A2275	G2213	G2154	G2092	G2031	U1976	G1922	C1862
A2574	U2510	U2510	A2455	G2395	U2334	U2276	A2214	U2155	A2093	G2032	C1977	G1923	A1863
G2575	U2511	U2511	G2456	A2396	G2335	U2277	G2215	G2156	A2094	G2033	U1977	C1924	C1864
G2576	U2512	U2512	U2457	A2397	U2336	G2278	A2216	C2157	A2095	G2034	G1978	G1925	G1865
G2577	G2513	G2513	G2458	A2398	C2337	C2279	U2218	U2158	U2096	G2035	G1979	U1926	C1866
G2578	A2514	A2514	U2459	U2399	U2338	U2280	C2219	G2160	C2097	G2036	C1979	U1927	
G2579	G2515	G2515	G2460	G2402	U2339	U2281	U2220	C2161	A2098	G2037	C1979	U1928	
G2580	U2516	U2516	A2461	A2403	C2340	C2282	U2221	C2162	A2099	G2038	C1979	U1929	
G2581	U2517	U2517	C2405	G2404	U2341	U2283	C2222	G2163	C2092	G2039	G1979	U1930	
G2582	A2518	A2518	C2406	U2405	U2342	U2284	A2223	G2164	C2093	G2040	G1979	U1931	
G2583	U2519	U2519	A2462	C2406	U2343	C2285	C2224	U2165	A2094	G2041	G1979	U1932	
G2584	G2463	G2463	U2463	C2345	A2344	A2286	C2225	U2166	C2095	G2042	G1979	U1933	
G2585	U2520	U2520	G2464	U2346	U2345		C2226		C2096	G2043	G1979	U1934	
G2586	G2521	G2521	G2465						C2097	G2044	G1979	U1935	
G2587	G2522	G2522							C2098	G2045	G1979	U1936	
G2588	U2523	U2523							C2099	G2046	G1979	U1937	
G2589	G2524	G2524							C2100	G2047	G1979	U1938	
G2590	G2525	G2525							C2101	G2048	G1979	U1939	
G2591	G2526	G2526							C2102	G2049	G1979	U1940	
G2592									C2103	G2050	G1979	U1941	
G2593									C2104	G2051	G1979	U1942	
G2594									C2105	G2052	G1979	U1943	
G2595									C2106	G2053	G1979	U1944	
G2596									C2107	G2054	G1979	U1945	
G2597									C2108	G2055	G1979	U1946	
G2598									C2109	G2056	G1979	U1947	
G2599									C2110	G2057	G1979	U1948	
G2600									C2111	G2058	G1979	U1949	
G2601									C2112	G2059	G1979	U1950	
G2602									C2113	G2060	G1979	U1951	
G2603									C2114	G2061	G1979	U1952	
G2604									C2115	G2062	G1979	U1953	
G2605									C2116	G2063	G1979	U1954	
G2606									C2117	G2064	G1979	U1955	
G2607									C2118	G2065	G1979	U1956	
G2608									C2119	G2066	G1979	U1957	
G2609									C2120	G2067	G1979	U1958	
G2610									C2121	G2068	G1979	U1959	
G2611									C2122	G2069	G1979	U1960	
G2612									C2123	G2070	G1979	U1961	
G2613									C2124	G2071	G1979	U1962	
G2614									C2125	G2072	G1979	U1963	
G2615									C2126	G2073	G1979	U1964	
G2616									C2127	G2074	G1979	U1965	
G2617									C2128	G2075	G1979	U1966	
G2618									C2129	G2076	G1979	U1967	
G2619									C2130	G2077	G1979	U1968	
G2620									C2131	G2078	G1979	U1969	
G2621									C2132	G2079	G1979	U1970	
G2622									C2133	G2080	G1979	U1971	
G2623									C2134	G2081	G1979	U1972	
G2624									C2135	G2082	G1979	U1973	
G2625									C2136	G2083	G1979	U1974	
G2626									C2137	G2084	G1979	U1975	
G2627									C2138	G2085	G1979	U1976	
G2628									C2139	G2086	G1979	U1977	
G2629									C2140	G2087	G1979	U1978	
G2630									C2141	G2088	G1979	U1979	
G2631									C2142	G2089	G1979	U1980	
G2632									C2143	G2090	G1979	U1981	
G2633									C2144	G2091	G1979	U1982	
G2634									C2145	G2092	G1979	U1983	
G2635									C2146	G2093	G1979	U1984	
G2636									C21				

C3367	C3368	C3369	C3370	C3371	C3372	C3373	C3374	C3375	C3376	C3377	C3378	C3379	C3380	C3381	C3382	C3383	C3384	C3385	C3386	C3387	C3388	C3389	C3390	C3391
A3307	A3308	U3309	A3310	C3311	C3312	C3313	C3314	C3315	C3316	C3317	C3318	C3319	C3320	C3321	C3322	C3323	C3324	C3325	C3326	C3327	C3328	C3329	C3330	C3331
C3247	C3248	C3249	C3250	C3251	C3252	C3253	C3254	C3255	C3256	C3257	C3258	C3259	C3260	C3261	C3262	C3263	C3264	C3265	C3266	C3267	C3268	C3269	C3270	C3271
G3247	G3248	G3249	G3250	G3251	G3252	G3253	G3254	G3255	G3256	G3257	G3258	G3259	G3260	G3261	G3262	G3263	G3264	G3265	G3266	G3267	G3268	G3269	G3270	G3271
C3187	C3188	C3189	C3190	C3191	C3192	C3193	C3194	C3195	C3196	C3197	C3198	C3199	C3200	C3201	C3202	C3203	C3204	C3205	C3206	C3207	C3208	C3209	C3210	C3211
G3127	G3128	G3129	G3130	G3131	G3132	G3133	G3134	G3135	G3136	G3137	G3138	G3139	G3140	G3141	G3142	G3143	G3144	G3145	G3146	G3147	G3148	G3149	G3150	G3151
U3067	U3068	U3069	U3070	U3071	U3072	U3073	U3074	U3075	U3076	U3077	U3078	U3079	U3080	U3081	U3082	U3083	U3084	U3085	U3086	U3087	U3088	U3089	U3090	U3091
A3007	A3008	A3009	A3010	A3011	A3012	A3013	A3014	A3015	A3016	A3017	A3018	A3019	A3020	A3021	A3022	A3023	A3024	A3025	A3026	A3027	A3028	A3029	A3030	A3031
G2947	G2948	G2949	G2950	G2951	G2952	G2953	G2954	G2955	G2956	G2957	G2958	G2959	G2960	G2961	G2962	G2963	G2964	G2965	G2966	G2967	G2968	G2969	G2970	G2971
C2887	C2888	C2889	C2890	C2891	C2892	C2893	C2894	C2895	C2896	C2897	C2898	C2899	C2900	C2901	C2902	C2903	C2904	C2905	C2906	C2907	C2908	C2909	C2910	C2911
U2828	U2829	U2830	U2831	U2832	U2833	U2834	U2835	U2836	U2837	U2838	U2839	U2840	U2841	U2842	U2843	U2844	U2845	U2846	U2847	U2848	U2849	U2850	U2851	U2852
G2827	G2828	G2829	G2830	G2831	G2832	G2833	G2834	G2835	G2836	G2837	G2838	G2839	G2840	G2841	G2842	G2843	G2844	G2845	G2846	G2847	G2848	G2849	G2850	G2851
C2767	C2768	C2769	C2770	C2771	C2772	C2773	C2774	C2775	C2776	C2777	C2778	C2779	C2780	C2781	C2782	C2783	C2784	C2785	C2786	C2787	C2788	C2789	C2790	C2791
A2707	A2708	A2709	A2710	A2711	A2712	A2713	A2714	A2715	A2716	A2717	A2718	A2719	A2720	A2721	A2722	A2723	A2724	A2725	A2726	A2727	A2728	A2729	A2730	A2731
C2647	C2648	C2649	C2650	C2651	C2652	C2653	C2654	C2655	C2656	C2657	C2658	C2659	C2660	C2661	C2662	C2663	C2664	C2665	C2666	C2667	C2668	C2669	C2670	C2671
G2647	G2648	G2649	G2650	G2651	G2652	G2653	G2654	G2655	G2656	G2657	G2658	G2659	G2660	G2661	G2662	G2663	G2664	G2665	G2666	G2667	G2668	G2669	G2670	G2671
C2587	C2588	C2589	C2590	C2591	C2592	C2593	C2594	C2595	C2596	C2597	C2598	C2599	C2600	C2601	C2602	C2603	C2604	C2605	C2606	C2607	C2608	C2609	C2610	C2611
G2587	G2588	G2589	G2590	G2591	G2592	G2593	G2594	G2595	G2596	G2597	G2598	G2599	G2600	G2601	G2602	G2603	G2604	G2605	G2606	G2607	G2608	G2609	G2610	G2611

## ● Molecule 85: 5.8S ribosomal RNA



## ● Molecule 86: 5S ribosomal RNA



## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	2108230	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Wiener Filter on 3D volumes (SPIDER)	Depositor
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	25	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	4500	Depositor
Magnification	38900	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	0.454	Depositor
Minimum map value	-0.200	Depositor
Average map value	0.003	Depositor
Map value standard deviation	0.027	Depositor
Recommended contour level	0.11	Depositor
Map size ( $\text{\AA}$ )	455.4, 455.4, 455.4	wwPDB
Map dimensions	368, 368, 368	wwPDB
Map angles ( $^\circ$ )	90, 90, 90	wwPDB
Pixel spacing ( $\text{\AA}$ )	1.2375, 1.2375, 1.2375	Depositor

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

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	Ad	2.49	2030/42036 (4.8%)	2.11	2382/65520 (3.6%)
2	Ae	2.62	95/1781 (5.3%)	2.13	105/2775 (3.8%)
3	Af	2.45	12/260 (4.6%)	2.06	16/403 (4.0%)
4	BY	0.99	0/1123	1.10	1/1487 (0.1%)
5	BI	1.05	0/539	0.95	0/712
6	BK	0.93	0/840	1.21	6/1135 (0.5%)
7	BM	0.82	0/936	1.11	2/1260 (0.2%)
8	Bf	0.93	0/590	1.17	1/788 (0.1%)
9	BX	0.96	0/1122	1.05	4/1492 (0.3%)
10	Bg	0.97	0/2988	1.06	3/4049 (0.1%)
11	BD	1.01	0/1652	1.20	4/2222 (0.2%)
12	BE	0.99	0/1637	1.07	0/2202
13	BF	0.98	0/1509	1.00	3/2034 (0.1%)
14	BQ	1.11	0/1034	1.19	6/1379 (0.4%)
15	BU	0.93	0/995	1.14	3/1338 (0.2%)
16	BO	1.05	0/909	1.11	2/1217 (0.2%)
17	BS	1.04	0/1258	1.15	5/1674 (0.3%)
18	BN	0.96	0/994	1.13	5/1332 (0.4%)
19	BL	1.04	0/704	1.15	3/944 (0.3%)
20	BT	1.01	0/1179	1.08	3/1586 (0.2%)
21	BP	0.91	0/727	1.11	2/975 (0.2%)
22	BZ	0.94	0/791	1.18	7/1057 (0.7%)
23	Bc	1.04	0/455	1.26	2/609 (0.3%)
24	BW	1.02	0/1060	1.16	6/1419 (0.4%)
25	Bd	1.11	0/386	1.25	4/510 (0.8%)
26	Bb	0.92	0/674	1.04	0/905
27	Be	1.07	0/476	1.01	0/627
28	BA	0.96	0/1567	1.06	4/2121 (0.2%)
29	BR	1.03	0/955	1.03	1/1273 (0.1%)
30	BB	0.96	0/1736	1.12	4/2329 (0.2%)
31	BV	1.00	0/610	1.07	0/820
32	Ba	1.07	0/766	1.13	0/1023
33	BJ	1.09	0/1553	1.05	4/2079 (0.2%)
34	BC	0.93	0/1701	1.05	3/2298 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
35	BG	1.06	0/1888	1.05	4/2507 (0.2%)
36	BH	3.40	1/1535 (0.1%)	1.14	4/2065 (0.2%)
37	CG	0.94	0/1939	1.01	5/2598 (0.2%)
38	CT	0.99	0/1316	1.11	2/1772 (0.1%)
39	CZ	1.00	0/1110	1.02	2/1480 (0.1%)
40	Cz	0.89	0/1741	1.00	1/2323 (0.0%)
41	CA	1.05	0/1992	1.15	10/2681 (0.4%)
42	CJ	1.06	0/1401	1.14	7/1869 (0.4%)
43	CH	0.96	0/1519	1.03	0/2042
44	CV	0.99	0/1064	1.07	0/1425
45	CN	1.12	0/1669	1.07	6/2235 (0.3%)
46	Ca	0.98	0/1143	1.17	4/1527 (0.3%)
47	CQ	1.04	0/1303	1.11	5/1748 (0.3%)
48	CD	1.00	0/2489	1.23	22/3342 (0.7%)
49	CR	1.09	0/1590	1.06	4/2100 (0.2%)
50	CP	1.03	0/1397	1.14	6/1871 (0.3%)
51	CX	0.90	0/1002	1.03	3/1340 (0.2%)
52	CW	1.04	0/649	1.07	1/861 (0.1%)
53	CY	1.10	0/1061	1.08	4/1418 (0.3%)
54	Cr	0.98	0/585	1.16	1/786 (0.1%)
55	Cc	0.86	0/869	0.98	1/1169 (0.1%)
56	Cd	1.01	0/970	1.10	4/1295 (0.3%)
57	Ce	1.01	0/1122	1.06	4/1497 (0.3%)
58	Cj	1.17	0/769	1.16	1/1019 (0.1%)
59	Cl	1.14	0/472	1.12	1/627 (0.2%)
60	Co	0.93	0/867	1.12	3/1144 (0.3%)
61	CM	0.99	0/1094	1.10	4/1461 (0.3%)
62	CS	1.01	0/1457	1.16	3/1957 (0.2%)
63	CU	0.98	0/876	1.27	12/1170 (1.0%)
64	Ci	1.07	0/618	1.16	5/809 (0.6%)
65	CK	0.92	0/968	1.11	1/1299 (0.1%)
66	Cu	0.78	0/438	0.91	0/596
66	Cv	0.79	0/438	0.90	0/596
67	Cs	0.83	0/444	0.82	0/596
67	Ct	0.84	0/444	0.81	0/596
68	Ch	1.02	0/1023	1.05	2/1359 (0.1%)
69	CF	0.98	0/2020	1.00	4/2708 (0.1%)
70	Cq	0.87	0/2023	0.96	5/2739 (0.2%)
71	CB	0.97	0/3207	1.14	16/4289 (0.4%)
72	CC	1.01	0/2951	1.11	8/3972 (0.2%)
73	CO	1.03	0/1678	1.07	6/2246 (0.3%)
74	Cp	1.00	0/724	1.02	1/958 (0.1%)
75	CI	1.01	0/1523	1.00	1/2036 (0.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
76	Cn	1.34	0/239	1.04	0/302
77	Cm	1.01	0/434	0.95	0/574
78	CL	1.03	0/1721	1.13	6/2299 (0.3%)
79	CE	0.95	0/1766	1.16	8/2374 (0.3%)
80	Cf	1.05	0/908	1.13	3/1215 (0.2%)
81	Ck	0.98	0/572	1.09	0/763
82	Cb	0.98	0/486	1.06	2/641 (0.3%)
83	Cg	1.07	0/913	1.02	0/1223
84	Aa	1.61	170/81235 (0.2%)	2.52	9121/126706 (7.2%)
85	Ac	1.61	7/3809 (0.2%)	2.48	426/5936 (7.2%)
86	Ab	2.31	125/2864 (4.4%)	2.91	380/4464 (8.5%)
All	All	1.65	2440/227878 (1.1%)	2.00	12710/334219 (3.8%)

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
4	BY	0	1
6	BK	0	4
7	BM	0	1
8	Bf	0	1
10	Bg	0	1
11	BD	0	3
12	BE	0	2
13	BF	0	2
14	BQ	0	1
15	BU	0	2
17	BS	0	1
19	BL	0	1
20	BT	0	4
23	Bc	0	1
24	BW	0	1
25	Bd	0	1
26	Bb	0	2
29	BR	0	1
30	BB	0	1
32	Ba	0	1
35	BG	0	1
36	BH	0	4
37	CG	0	2

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Mol	Chain	#Chirality outliers	#Planarity outliers
41	CA	0	4
42	CJ	0	2
43	CH	0	3
45	CN	0	1
46	Ca	0	7
47	CQ	0	6
48	CD	0	13
49	CR	0	3
50	CP	0	1
51	CX	0	1
55	Cc	0	1
57	Ce	0	1
58	Cj	0	1
59	Cl	0	1
60	Co	0	2
61	CM	0	4
62	CS	0	3
63	CU	0	2
65	CK	0	2
68	Ch	0	1
69	CF	0	3
70	Cq	0	2
71	CB	0	9
72	CC	0	4
73	CO	0	4
74	Cp	0	1
75	CI	0	4
78	CL	0	5
79	CE	0	7
80	Cf	0	2
83	Cg	0	1
84	Aa	0	309
85	Ac	0	18
86	Ab	0	19
All	All	0	486

All (2440) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BH	117	ARG	CZ-NH2	127.06	2.98	1.33
1	Ad	1203	G	C2'-C1'	23.55	1.79	1.53
2	Ae	28	G	C2'-C1'	-23.31	1.27	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	218	G	C2'-C1'	-23.01	1.28	1.53
1	Ad	999	G	C2'-C1'	-22.88	1.28	1.53
1	Ad	707	C	C2'-C1'	22.87	1.78	1.53
1	Ad	67	G	C2'-C1'	-22.47	1.28	1.53
1	Ad	1580	G	C2'-C1'	21.80	1.77	1.53
1	Ad	843	G	O4'-C1'	21.60	1.69	1.41
1	Ad	821	G	C2'-C1'	-21.45	1.29	1.53
1	Ad	1810	G	O4'-C1'	21.00	1.69	1.41
1	Ad	1796	G	C2'-C1'	-20.71	1.30	1.53
1	Ad	1080	C	O4'-C1'	20.56	1.68	1.41
1	Ad	1434	G	C2'-C1'	-20.34	1.30	1.53
1	Ad	260	A	C2'-C1'	-20.17	1.31	1.53
1	Ad	141	G	C2'-C1'	-20.08	1.31	1.53
1	Ad	457	C	C2'-C1'	-20.07	1.31	1.53
1	Ad	339	G	C2'-C1'	-19.92	1.31	1.53
1	Ad	1206	A	C2'-C1'	-19.53	1.31	1.53
1	Ad	1259	G	O4'-C1'	-19.39	1.16	1.41
2	Ae	19	U	O4'-C1'	19.14	1.66	1.41
1	Ad	179	A	O4'-C1'	18.97	1.66	1.41
1	Ad	836	U	O4'-C1'	18.92	1.66	1.41
1	Ad	67	G	O4'-C1'	18.85	1.66	1.41
1	Ad	617	G	C2'-C1'	-18.83	1.32	1.53
1	Ad	220	C	O4'-C1'	18.76	1.66	1.41
1	Ad	1206	A	O4'-C1'	18.70	1.66	1.41
1	Ad	1700	G	C2'-C1'	-18.54	1.32	1.53
1	Ad	782	G	C2'-C1'	-18.37	1.33	1.53
1	Ad	96	G	C2'-C1'	-18.25	1.33	1.53
1	Ad	648	C	O4'-C1'	18.05	1.65	1.41
1	Ad	1155	G	C2'-C1'	-17.96	1.33	1.53
1	Ad	176	A	C2'-C1'	17.93	1.73	1.53
1	Ad	87	A	C2'-C1'	17.86	1.73	1.53
2	Ae	69	G	C2'-C1'	-17.84	1.33	1.53
1	Ad	1260	A	C2'-C1'	-17.82	1.33	1.53
1	Ad	1466	A	C2'-C1'	-17.65	1.33	1.53
1	Ad	212	A	O4'-C1'	17.64	1.64	1.41
1	Ad	257	A	C2'-C1'	-17.60	1.33	1.53
1	Ad	1303	G	C2'-C1'	-17.57	1.34	1.53
1	Ad	238	G	O4'-C1'	17.52	1.64	1.41
1	Ad	238	G	C2'-C1'	-17.51	1.34	1.53
1	Ad	1002	G	C2'-C1'	-17.51	1.34	1.53
1	Ad	1464	G	C2'-C1'	-17.47	1.34	1.53
1	Ad	34	G	C2'-C1'	-17.43	1.34	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	617	G	O4'-C1'	17.41	1.64	1.41
2	Ae	30	G	C2'-C1'	-17.37	1.34	1.53
1	Ad	1444	G	C2'-C1'	-17.29	1.34	1.53
1	Ad	846	U	O4'-C1'	17.23	1.64	1.41
1	Ad	728	C	O4'-C1'	17.11	1.63	1.41
1	Ad	1580	G	O4'-C1'	-17.10	1.19	1.41
1	Ad	1445	C	O4'-C1'	17.10	1.63	1.41
1	Ad	140	C	O4'-C1'	17.02	1.63	1.41
1	Ad	524	A	C2'-C1'	-16.98	1.34	1.53
1	Ad	1311	U	C2'-C1'	16.95	1.72	1.53
1	Ad	1162	A	C2'-C1'	16.93	1.72	1.53
1	Ad	1375	C	O4'-C1'	16.91	1.63	1.41
1	Ad	174	C	C2'-C1'	16.86	1.71	1.53
1	Ad	613	U	O4'-C1'	16.82	1.63	1.41
1	Ad	254	A	C2'-C1'	-16.78	1.34	1.53
1	Ad	1161	C	O4'-C1'	16.71	1.63	1.41
1	Ad	1358	G	C2'-C1'	-16.67	1.35	1.53
1	Ad	1065	A	C2'-C1'	-16.66	1.35	1.53
1	Ad	1637	G	C2'-C1'	-16.66	1.35	1.53
1	Ad	1006	A	O4'-C1'	16.64	1.63	1.41
1	Ad	341	G	C2'-C1'	-16.53	1.35	1.53
1	Ad	570	C	C2'-C1'	-16.45	1.35	1.53
1	Ad	936	C	O4'-C1'	16.39	1.62	1.41
1	Ad	1447	C	C2'-C1'	-16.37	1.35	1.53
2	Ae	45	G	C2'-C1'	-16.31	1.35	1.53
1	Ad	385	C	O4'-C1'	16.30	1.62	1.41
1	Ad	998	A	C2'-C1'	-16.23	1.35	1.53
1	Ad	507	G	C2'-C1'	-16.18	1.35	1.53
1	Ad	14	C	C2'-C1'	-16.17	1.35	1.53
1	Ad	612	U	C2'-C1'	-16.14	1.35	1.53
1	Ad	861	A	C2'-C1'	16.03	1.71	1.53
1	Ad	1080	C	C2'-C1'	-15.99	1.35	1.53
1	Ad	280	U	O3'-P	-15.98	1.42	1.61
1	Ad	114	U	O4'-C1'	15.96	1.62	1.41
1	Ad	437	C	C2'-C1'	-15.93	1.35	1.53
1	Ad	1321	C	C2'-C1'	-15.88	1.35	1.53
1	Ad	1650	G	C2'-C1'	-15.80	1.35	1.53
1	Ad	281	U	O3'-P	-15.79	1.42	1.61
1	Ad	1687	G	C2'-C1'	-15.75	1.36	1.53
1	Ad	80	C	O4'-C1'	15.74	1.62	1.41
1	Ad	535	C	C2'-C1'	-15.71	1.36	1.53
1	Ad	504	C	O4'-C1'	15.69	1.62	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	839	G	C2'-C1'	-15.62	1.36	1.53
1	Ad	225	G	C2'-C1'	-15.62	1.36	1.53
1	Ad	1327	C	O4'-C1'	15.62	1.61	1.41
1	Ad	632	G	C2'-C1'	-15.61	1.36	1.53
1	Ad	1397	A	C2'-C1'	-15.57	1.36	1.53
1	Ad	135	C	O4'-C1'	15.56	1.61	1.41
1	Ad	1263	C	O4'-C1'	15.55	1.61	1.41
1	Ad	1391	G	C2'-C1'	-15.45	1.36	1.53
1	Ad	631	C	C2'-C1'	-15.44	1.36	1.53
1	Ad	282	C	C2'-C1'	15.42	1.70	1.53
1	Ad	1589	C	O4'-C1'	15.41	1.61	1.41
1	Ad	321	C	O4'-C1'	15.41	1.61	1.41
1	Ad	713	C	O4'-C1'	15.41	1.61	1.41
1	Ad	1354	C	C2'-C1'	-15.39	1.36	1.53
1	Ad	193	G	C2'-C1'	-15.36	1.36	1.53
1	Ad	1027	C	O4'-C1'	15.31	1.61	1.41
1	Ad	1184	C	O4'-C1'	15.30	1.61	1.41
1	Ad	861	A	O4'-C1'	15.28	1.61	1.41
1	Ad	1372	C	C2'-C1'	-15.15	1.36	1.53
1	Ad	287	C	O4'-C1'	15.14	1.61	1.41
1	Ad	1395	C	C2'-C1'	-15.14	1.36	1.53
1	Ad	158	C	C2'-C1'	-15.12	1.36	1.53
1	Ad	1730	G	O4'-C1'	15.05	1.61	1.41
1	Ad	25	C	O4'-C1'	15.04	1.61	1.41
1	Ad	457	C	O4'-C1'	15.04	1.61	1.41
1	Ad	1705	C	C2'-C1'	-15.03	1.36	1.53
1	Ad	1172	G	C2'-C1'	-15.01	1.36	1.53
1	Ad	223	A	C2'-C1'	-15.00	1.36	1.53
1	Ad	1154	G	C2'-C1'	-14.99	1.36	1.53
1	Ad	1023	C	O4'-C1'	14.98	1.61	1.41
1	Ad	753	C	C2'-C1'	-14.97	1.36	1.53
1	Ad	181	C	O4'-C1'	14.91	1.61	1.41
1	Ad	212	A	C2'-C1'	-14.86	1.37	1.53
1	Ad	1626	C	O4'-C1'	14.86	1.60	1.41
1	Ad	1778	G	C2'-C1'	-14.85	1.37	1.53
1	Ad	4	C	C2'-C1'	-14.77	1.37	1.53
1	Ad	381	G	C2'-C1'	-14.74	1.37	1.53
1	Ad	498	U	C2'-C1'	14.74	1.69	1.53
3	Af	17	A	C2'-C1'	-14.69	1.37	1.53
2	Ae	36	C	C2'-C1'	-14.68	1.37	1.53
1	Ad	1735	C	O4'-C1'	14.68	1.60	1.41
3	Af	17	A	O4'-C1'	14.64	1.60	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1358	G	O4'-C1'	14.63	1.60	1.41
1	Ad	290	C	O4'-C1'	14.62	1.60	1.41
1	Ad	480	U	C2'-C1'	-14.58	1.37	1.53
1	Ad	1783	C	C2'-C1'	-14.58	1.37	1.53
1	Ad	945	A	C2'-C1'	14.57	1.69	1.53
1	Ad	506	G	C2'-C1'	-14.56	1.37	1.53
1	Ad	509	A	O4'-C1'	14.55	1.60	1.41
1	Ad	1016	C	O4'-C1'	14.55	1.60	1.41
1	Ad	346	C	C2'-C1'	-14.53	1.37	1.53
1	Ad	183	C	O4'-C1'	14.49	1.60	1.41
1	Ad	1614	C	O4'-C1'	14.47	1.60	1.41
1	Ad	1346	C	O4'-C1'	14.44	1.60	1.41
1	Ad	1806	C	O4'-C1'	14.42	1.60	1.41
1	Ad	245	C	C2'-C1'	-14.39	1.37	1.53
1	Ad	774	C	O4'-C1'	14.36	1.60	1.41
1	Ad	1392	G	C2'-C1'	-14.35	1.37	1.53
1	Ad	1310	C	O4'-C1'	14.34	1.60	1.41
1	Ad	413	C	O4'-C1'	14.30	1.60	1.41
1	Ad	1263	C	C2'-C1'	-14.28	1.37	1.53
1	Ad	524	A	O4'-C1'	14.25	1.60	1.41
1	Ad	1461	G	C2'-C1'	-14.24	1.37	1.53
1	Ad	758	A	C2'-C1'	-14.22	1.37	1.53
1	Ad	257	A	O4'-C1'	14.21	1.60	1.41
1	Ad	1110	C	O4'-C1'	14.19	1.60	1.41
1	Ad	1444	G	O4'-C1'	14.14	1.60	1.41
1	Ad	938	A	C2'-C1'	-14.13	1.37	1.53
1	Ad	966	U	C2'-C1'	-14.12	1.37	1.53
1	Ad	1611	U	C2'-C1'	-14.10	1.37	1.53
1	Ad	201	G	C2'-C1'	-14.10	1.37	1.53
1	Ad	1620	C	C2'-C1'	-14.09	1.37	1.53
1	Ad	791	C	C2'-C1'	-14.07	1.37	1.53
1	Ad	1372	C	O4'-C1'	14.07	1.59	1.41
1	Ad	439	C	C2'-C1'	-14.06	1.37	1.53
1	Ad	187	C	O4'-C1'	14.04	1.59	1.41
1	Ad	1471	C	C2'-C1'	-14.02	1.38	1.53
1	Ad	1336	C	O4'-C1'	14.02	1.59	1.41
1	Ad	25	C	C2'-C1'	-13.99	1.38	1.53
1	Ad	1397	A	O4'-C1'	13.96	1.59	1.41
1	Ad	1416	A	C2'-C1'	-13.89	1.38	1.53
1	Ad	409	C	C2'-C1'	-13.89	1.38	1.53
1	Ad	1345	G	C2'-C1'	-13.88	1.38	1.53
1	Ad	1640	C	C2'-C1'	-13.86	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	205	U	C2'-C1'	13.84	1.68	1.53
1	Ad	914	U	C2'-C1'	-13.84	1.38	1.53
1	Ad	20	G	C2'-C1'	-13.83	1.38	1.53
1	Ad	719	C	O4'-C1'	13.78	1.59	1.41
1	Ad	1472	G	C2'-C1'	-13.77	1.38	1.53
1	Ad	849	G	C2'-C1'	-13.77	1.38	1.53
1	Ad	745	C	C2'-C1'	13.76	1.68	1.53
2	Ae	73	C	O4'-C1'	13.76	1.59	1.41
1	Ad	36	C	O4'-C1'	13.73	1.59	1.41
1	Ad	245	C	O4'-C1'	13.73	1.59	1.41
1	Ad	164	C	O4'-C1'	13.71	1.59	1.41
1	Ad	848	C	O4'-C1'	13.70	1.59	1.41
1	Ad	1069	G	C2'-C1'	-13.68	1.38	1.53
1	Ad	650	G	C2'-C1'	-13.64	1.38	1.53
1	Ad	839	G	O4'-C1'	13.63	1.59	1.41
1	Ad	1281	G	C2'-C1'	-13.63	1.38	1.53
1	Ad	1042	C	O4'-C1'	13.62	1.59	1.41
1	Ad	1705	C	O4'-C1'	13.59	1.59	1.41
1	Ad	533	C	C2'-C1'	-13.58	1.38	1.53
1	Ad	1296	G	C2'-C1'	-13.57	1.38	1.53
2	Ae	19	U	C2'-C1'	-13.57	1.38	1.53
1	Ad	644	U	C2'-C1'	-13.55	1.38	1.53
1	Ad	1329	A	O4'-C1'	13.54	1.59	1.41
1	Ad	237	C	C2'-C1'	-13.51	1.38	1.53
1	Ad	1654	C	O4'-C1'	13.51	1.59	1.41
1	Ad	220	C	C2'-C1'	-13.49	1.38	1.53
1	Ad	73	A	C2'-C1'	13.48	1.68	1.53
1	Ad	734	C	O4'-C1'	13.44	1.59	1.41
1	Ad	846	U	C2'-C1'	-13.43	1.38	1.53
1	Ad	1462	C	O4'-C1'	-13.42	1.24	1.41
1	Ad	1310	C	C2'-C1'	-13.41	1.38	1.53
1	Ad	793	G	C2'-C1'	-13.38	1.38	1.53
1	Ad	954	C	O4'-C1'	13.37	1.59	1.41
1	Ad	1038	C	O4'-C1'	13.34	1.58	1.41
1	Ad	877	G	C2'-C1'	-13.34	1.38	1.53
1	Ad	1033	C	O4'-C1'	13.34	1.58	1.41
1	Ad	1091	A	C2'-C1'	-13.31	1.38	1.53
1	Ad	286	C	O4'-C1'	13.31	1.58	1.41
1	Ad	944	A	O4'-C1'	13.30	1.58	1.41
1	Ad	94	A	C2'-C1'	-13.29	1.38	1.53
1	Ad	1231	A	C2'-C1'	-13.28	1.38	1.53
1	Ad	301	U	C2'-C1'	-13.27	1.38	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	256	G	O4'-C1'	13.26	1.58	1.41
2	Ae	55	C	O4'-C1'	13.26	1.58	1.41
1	Ad	1548	G	C2'-C1'	-13.25	1.38	1.53
1	Ad	1511	A	O4'-C1'	-13.25	1.24	1.41
1	Ad	704	C	O4'-C1'	13.23	1.58	1.41
1	Ad	1105	G	C2'-C1'	-13.21	1.38	1.53
1	Ad	954	C	C2'-C1'	-13.17	1.38	1.53
1	Ad	1302	C	O4'-C1'	13.16	1.58	1.41
1	Ad	1045	G	C2'-C1'	-13.14	1.38	1.53
2	Ae	60	C	C2'-C1'	-13.14	1.38	1.53
1	Ad	249	G	C2'-C1'	-13.14	1.38	1.53
1	Ad	1463	C	O4'-C1'	13.13	1.58	1.41
1	Ad	262	U	C2'-C1'	13.13	1.67	1.53
1	Ad	358	C	O4'-C1'	13.12	1.58	1.41
1	Ad	1801	A	C2'-C1'	13.12	1.67	1.53
1	Ad	202	C	O4'-C1'	13.11	1.58	1.41
1	Ad	1082	C	C2'-C1'	-13.11	1.39	1.53
1	Ad	1301	G	C2'-C1'	13.09	1.67	1.53
1	Ad	902	C	O4'-C1'	13.09	1.58	1.41
1	Ad	180	A	C2'-C1'	13.05	1.67	1.53
1	Ad	1704	G	C2'-C1'	-13.05	1.39	1.53
1	Ad	177	C	O4'-C1'	13.04	1.58	1.41
1	Ad	235	C	C2'-C1'	13.04	1.67	1.53
1	Ad	558	C	O4'-C1'	13.03	1.58	1.41
1	Ad	1727	C	O4'-C1'	13.02	1.58	1.41
1	Ad	536	U	C2'-C1'	-13.02	1.39	1.53
1	Ad	147	C	O4'-C1'	12.94	1.58	1.41
1	Ad	1599	C	O4'-C1'	12.94	1.58	1.41
1	Ad	1029	U	C2'-C1'	12.92	1.67	1.53
1	Ad	1409	G	C2'-C1'	-12.92	1.39	1.53
1	Ad	1184	C	C2'-C1'	-12.91	1.39	1.53
1	Ad	31	C	O4'-C1'	12.90	1.58	1.41
2	Ae	6	G	C2'-C1'	-12.90	1.39	1.53
1	Ad	757	G	C2'-C1'	-12.89	1.39	1.53
1	Ad	108	C	C2'-C1'	-12.88	1.39	1.53
2	Ae	45	G	O4'-C1'	12.84	1.58	1.41
1	Ad	1161	C	C2'-C1'	-12.84	1.39	1.53
1	Ad	1442	A	C2'-C1'	-12.84	1.39	1.53
1	Ad	1007	G	C2'-C1'	-12.84	1.39	1.53
1	Ad	1609	G	C2'-C1'	-12.82	1.39	1.53
1	Ad	1071	C	C2'-C1'	-12.78	1.39	1.53
1	Ad	971	A	O4'-C1'	12.77	1.58	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1615	G	C2'-C1'	-12.77	1.39	1.53
1	Ad	849	G	O4'-C1'	12.76	1.58	1.41
1	Ad	1572	U	O4'-C1'	12.76	1.58	1.41
1	Ad	1794	C	O4'-C1'	12.72	1.58	1.41
1	Ad	1758	G	C2'-C1'	-12.70	1.39	1.53
1	Ad	260	A	O4'-C1'	12.70	1.58	1.41
1	Ad	814	C	C2'-C1'	-12.70	1.39	1.53
1	Ad	1346	C	C2'-C1'	-12.68	1.39	1.53
1	Ad	296	A	C2'-C1'	-12.68	1.39	1.53
1	Ad	261	C	C2'-C1'	-12.66	1.39	1.53
1	Ad	1618	G	C2'-C1'	-12.62	1.39	1.53
1	Ad	881	G	C2'-C1'	-12.60	1.39	1.53
1	Ad	1715	C	O4'-C1'	12.60	1.58	1.41
1	Ad	1220	C	O4'-C1'	12.58	1.58	1.41
1	Ad	1082	C	O4'-C1'	12.57	1.57	1.41
1	Ad	1350	C	O4'-C1'	-12.57	1.25	1.41
1	Ad	1386	U	C2'-C1'	-12.57	1.39	1.53
1	Ad	253	C	O4'-C1'	12.57	1.57	1.41
1	Ad	1803	G	O4'-C1'	12.57	1.57	1.41
1	Ad	1020	U	C2'-C1'	-12.56	1.39	1.53
1	Ad	431	C	O4'-C1'	12.55	1.57	1.41
1	Ad	1593	U	C2'-C1'	-12.55	1.39	1.53
1	Ad	1232	G	C2'-C1'	-12.53	1.39	1.53
1	Ad	1631	C	O4'-C1'	12.53	1.57	1.41
1	Ad	388	G	C2'-C1'	-12.53	1.39	1.53
1	Ad	1047	G	C2'-C1'	-12.53	1.39	1.53
1	Ad	1656	C	O4'-C1'	12.52	1.57	1.41
1	Ad	570	C	O4'-C1'	12.52	1.57	1.41
1	Ad	845	C	C2'-C1'	12.52	1.67	1.53
1	Ad	834	A	C2'-C1'	12.52	1.67	1.53
1	Ad	1643	A	C2'-C1'	12.52	1.67	1.53
1	Ad	1773	A	O4'-C1'	12.52	1.57	1.41
1	Ad	1722	C	O4'-C1'	12.51	1.57	1.41
1	Ad	41	A	C2'-C1'	12.49	1.67	1.53
1	Ad	592	U	C2'-C1'	-12.48	1.39	1.53
1	Ad	342	C	O4'-C1'	12.48	1.57	1.41
1	Ad	1471	C	O4'-C1'	12.48	1.57	1.41
1	Ad	746	A	C2'-C1'	12.47	1.67	1.53
1	Ad	856	G	C2'-C1'	-12.47	1.39	1.53
1	Ad	259	A	O4'-C1'	12.47	1.57	1.41
1	Ad	762	A	O4'-C1'	12.46	1.57	1.41
1	Ad	12	U	C2'-C1'	-12.46	1.39	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	750	U	C2'-C1'	-12.46	1.39	1.53
1	Ad	1171	C	O4'-C1'	12.46	1.57	1.41
1	Ad	1336	C	C2'-C1'	-12.45	1.39	1.53
1	Ad	826	C	C2'-C1'	12.45	1.67	1.53
1	Ad	170	C	O4'-C1'	12.43	1.57	1.41
1	Ad	298	C	O4'-C1'	12.43	1.57	1.41
1	Ad	58	U	C2'-C1'	-12.43	1.39	1.53
1	Ad	369	G	C2'-C1'	12.43	1.67	1.53
1	Ad	1074	C	O4'-C1'	12.43	1.57	1.41
1	Ad	1500	A	C2'-C1'	12.42	1.67	1.53
1	Ad	297	U	O4'-C1'	12.40	1.57	1.41
1	Ad	1549	G	C2'-C1'	-12.39	1.39	1.53
1	Ad	547	C	O4'-C1'	-12.39	1.25	1.41
1	Ad	1582	G	O4'-C1'	12.36	1.57	1.41
1	Ad	1733	G	C2'-C1'	-12.36	1.39	1.53
1	Ad	1196	C	O4'-C1'	12.35	1.57	1.41
1	Ad	12	U	O4'-C1'	12.35	1.57	1.41
1	Ad	30	G	C2'-C1'	-12.35	1.39	1.53
1	Ad	753	C	O4'-C1'	12.34	1.57	1.41
1	Ad	1432	C	C2'-C1'	12.34	1.67	1.53
1	Ad	791	C	O4'-C1'	12.31	1.57	1.41
1	Ad	899	A	C2'-C1'	-12.29	1.39	1.53
1	Ad	1517	C	C2'-C1'	-12.25	1.39	1.53
1	Ad	351	G	C2'-C1'	-12.25	1.39	1.53
1	Ad	1213	C	O4'-C1'	12.23	1.57	1.41
1	Ad	1229	C	O4'-C1'	12.22	1.57	1.41
1	Ad	523	C	O4'-C1'	12.22	1.57	1.41
1	Ad	1644	C	C2'-C1'	-12.22	1.40	1.53
1	Ad	1240	A	O4'-C1'	12.19	1.57	1.41
1	Ad	356	G	O4'-C1'	12.19	1.57	1.41
1	Ad	1588	C	O4'-C1'	12.19	1.57	1.41
1	Ad	438	G	C2'-C1'	12.17	1.66	1.53
1	Ad	1156	A	C2'-C1'	-12.16	1.40	1.53
1	Ad	363	G	O4'-C1'	-12.16	1.25	1.41
1	Ad	439	C	O4'-C1'	12.15	1.57	1.41
1	Ad	1273	U	C2'-C1'	-12.13	1.40	1.53
1	Ad	1563	A	C2'-C1'	-12.13	1.40	1.53
1	Ad	336	U	C2'-C1'	12.12	1.66	1.53
1	Ad	237	C	O4'-C1'	12.12	1.57	1.41
1	Ad	1373	C	O4'-C1'	12.12	1.57	1.41
1	Ad	1253	U	C2'-C1'	-12.12	1.40	1.53
1	Ad	45	U	O4'-C1'	12.12	1.57	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	784	C	O4'-C1'	-12.10	1.25	1.41
1	Ad	1494	G	C2'-C1'	-12.09	1.40	1.53
1	Ad	361	G	C2'-C1'	-12.08	1.40	1.53
1	Ad	343	C	C2'-C1'	-12.08	1.40	1.53
1	Ad	394	G	C2'-C1'	12.05	1.66	1.53
1	Ad	922	U	C2'-C1'	-12.04	1.40	1.53
1	Ad	196	G	C2'-C1'	-12.04	1.40	1.53
3	Af	18	C	O4'-C1'	12.03	1.57	1.41
2	Ae	74	C	C2'-C1'	12.02	1.66	1.53
1	Ad	1021	C	O4'-C1'	12.01	1.57	1.41
1	Ad	1518	C	O4'-C1'	12.00	1.57	1.41
1	Ad	1252	C	C2'-C1'	-12.00	1.40	1.53
1	Ad	415	C	O4'-C1'	11.98	1.57	1.41
1	Ad	397	C	O4'-C1'	11.97	1.57	1.41
1	Ad	967	C	O4'-C1'	11.96	1.57	1.41
1	Ad	1652	C	O4'-C1'	11.96	1.57	1.41
1	Ad	1046	G	C2'-C1'	-11.96	1.40	1.53
1	Ad	1608	A	C2'-C1'	-11.94	1.40	1.53
1	Ad	334	G	C2'-C1'	-11.93	1.40	1.53
1	Ad	1488	C	O4'-C1'	11.92	1.57	1.41
1	Ad	1238	A	O4'-C1'	11.89	1.57	1.41
1	Ad	1342	C	C2'-C1'	-11.89	1.40	1.53
1	Ad	900	G	C2'-C1'	-11.86	1.40	1.53
1	Ad	588	C	O4'-C1'	11.85	1.57	1.41
1	Ad	1332	G	O4'-C1'	11.84	1.57	1.41
1	Ad	1610	C	O4'-C1'	11.83	1.57	1.41
1	Ad	535	C	O4'-C1'	11.83	1.57	1.41
1	Ad	644	U	O4'-C1'	11.81	1.57	1.41
1	Ad	259	A	C2'-C1'	-11.81	1.40	1.53
1	Ad	850	G	C2'-C1'	-11.79	1.40	1.53
1	Ad	870	A	C2'-C1'	11.79	1.66	1.53
1	Ad	700	C	O4'-C1'	11.75	1.56	1.41
1	Ad	1327	C	C2'-C1'	-11.74	1.40	1.53
1	Ad	117	U	C2'-C1'	-11.74	1.40	1.53
1	Ad	948	C	O4'-C1'	11.74	1.56	1.41
1	Ad	869	U	C2'-C1'	11.73	1.66	1.53
1	Ad	964	U	C2'-C1'	-11.73	1.40	1.53
2	Ae	29	C	O4'-C1'	11.71	1.56	1.41
1	Ad	915	C	O4'-C1'	11.70	1.56	1.41
1	Ad	955	C	O4'-C1'	11.70	1.56	1.41
1	Ad	1316	A	C2'-C1'	-11.70	1.40	1.53
1	Ad	1258	U	C2'-C1'	-11.69	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	202	C	C2'-C1'	-11.69	1.40	1.53
3	Af	20	U	C2'-C1'	-11.68	1.40	1.53
1	Ad	219	G	C2'-C1'	11.68	1.66	1.53
1	Ad	1557	C	O4'-C1'	11.65	1.56	1.41
1	Ad	832	C	C2'-C1'	-11.64	1.40	1.53
1	Ad	1686	C	C2'-C1'	-11.63	1.40	1.53
1	Ad	1589	C	C2'-C1'	-11.62	1.40	1.53
1	Ad	1710	C	O4'-C1'	11.62	1.56	1.41
2	Ae	43	C	C2'-C1'	-11.62	1.40	1.53
1	Ad	1648	C	O4'-C1'	11.61	1.56	1.41
1	Ad	1162	A	O4'-C1'	-11.61	1.26	1.41
1	Ad	346	C	O4'-C1'	11.59	1.56	1.41
1	Ad	1122	U	C2'-C1'	-11.59	1.40	1.53
1	Ad	1627	C	O4'-C1'	11.57	1.56	1.41
1	Ad	99	U	C2'-C1'	-11.57	1.40	1.53
1	Ad	1568	U	C2'-C1'	11.56	1.66	1.53
1	Ad	973	U	C2'-C1'	-11.55	1.40	1.53
1	Ad	488	C	O4'-C1'	11.55	1.56	1.41
1	Ad	1457	C	O4'-C1'	11.55	1.56	1.41
1	Ad	1110	C	C2'-C1'	-11.54	1.40	1.53
1	Ad	1407	A	C2'-C1'	11.54	1.66	1.53
1	Ad	1281	G	O4'-C1'	11.53	1.56	1.41
1	Ad	832	C	O4'-C1'	11.53	1.56	1.41
1	Ad	1731	A	O4'-C1'	11.52	1.56	1.41
1	Ad	146	A	C2'-C1'	11.50	1.66	1.53
1	Ad	801	U	C2'-C1'	11.50	1.66	1.53
1	Ad	1073	C	O4'-C1'	11.50	1.56	1.41
1	Ad	1032	A	C2'-C1'	11.48	1.66	1.53
1	Ad	968	A	C2'-C1'	11.48	1.66	1.53
1	Ad	1794	C	C2'-C1'	-11.47	1.40	1.53
1	Ad	1079	G	C2'-C1'	-11.47	1.40	1.53
1	Ad	1716	C	C2'-C1'	-11.46	1.40	1.53
1	Ad	1117	G	C2'-C1'	-11.46	1.40	1.53
1	Ad	1736	C	O4'-C1'	11.44	1.56	1.41
1	Ad	1451	G	O4'-C1'	11.42	1.56	1.41
2	Ae	4	G	C2'-C1'	-11.41	1.40	1.53
1	Ad	483	C	O4'-C1'	11.40	1.56	1.41
1	Ad	858	G	O4'-C1'	11.39	1.56	1.41
1	Ad	969	U	C2'-C1'	-11.38	1.40	1.53
1	Ad	1027	C	C2'-C1'	-11.36	1.40	1.53
1	Ad	288	G	C2'-C1'	-11.35	1.40	1.53
1	Ad	385	C	C2'-C1'	-11.35	1.40	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1058	G	C2'-C1'	-11.34	1.40	1.53
1	Ad	1447	C	O4'-C1'	11.34	1.56	1.41
1	Ad	1613	G	C2'-C1'	-11.34	1.40	1.53
1	Ad	1762	C	O4'-C1'	11.33	1.56	1.41
2	Ae	50	G	C2'-C1'	11.32	1.65	1.53
1	Ad	1426	C	O4'-C1'	11.30	1.56	1.41
1	Ad	239	C	O4'-C1'	11.30	1.56	1.41
2	Ae	22	G	C2'-C1'	-11.29	1.41	1.53
1	Ad	1715	C	C2'-C1'	-11.29	1.41	1.53
1	Ad	792	U	C2'-C1'	11.29	1.65	1.53
1	Ad	1064	U	C2'-C1'	11.28	1.65	1.53
1	Ad	133	U	O4'-C1'	11.28	1.56	1.41
1	Ad	711	C	C2'-C1'	-11.28	1.41	1.53
1	Ad	437	C	O4'-C1'	11.27	1.56	1.41
1	Ad	297	U	C2'-C1'	-11.26	1.41	1.53
1	Ad	1685	U	C2'-C1'	-11.26	1.41	1.53
1	Ad	1749	C	C2'-C1'	-11.26	1.41	1.53
2	Ae	60	C	O4'-C1'	11.25	1.56	1.41
1	Ad	949	A	O4'-C1'	11.22	1.56	1.41
1	Ad	1492	G	C2'-C1'	11.22	1.65	1.53
1	Ad	591	C	C2'-C1'	-11.21	1.41	1.53
1	Ad	885	C	O4'-C1'	11.21	1.56	1.41
1	Ad	651	G	C2'-C1'	-11.20	1.41	1.53
1	Ad	556	G	C2'-C1'	-11.20	1.41	1.53
1	Ad	1224	C	C2'-C1'	-11.18	1.41	1.53
1	Ad	81	U	O4'-C1'	11.18	1.56	1.41
1	Ad	995	C	C2'-C1'	-11.17	1.41	1.53
1	Ad	1545	A	C2'-C1'	11.17	1.65	1.53
1	Ad	1013	G	C2'-C1'	-11.17	1.41	1.53
1	Ad	1128	C	O4'-C1'	11.16	1.56	1.41
1	Ad	1239	C	O4'-C1'	11.16	1.56	1.41
1	Ad	804	C	O4'-C1'	11.15	1.56	1.41
1	Ad	182	C	O4'-C1'	11.15	1.56	1.41
1	Ad	1572	U	C2'-C1'	-11.15	1.41	1.53
1	Ad	175	A	O4'-C1'	11.15	1.56	1.41
1	Ad	45	U	C2'-C1'	-11.14	1.41	1.53
1	Ad	1414	G	C2'-C1'	-11.13	1.41	1.53
1	Ad	79	A	C2'-C1'	11.13	1.65	1.53
1	Ad	68	A	C2'-C1'	-11.12	1.41	1.53
1	Ad	1375	C	C2'-C1'	-11.12	1.41	1.53
1	Ad	1596	G	O4'-C1'	11.12	1.56	1.41
1	Ad	1476	C	C2'-C1'	-11.12	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	713	C	C2'-C1'	-11.11	1.41	1.53
1	Ad	879	C	C2'-C1'	-11.11	1.41	1.53
1	Ad	17	C	C2'-C1'	-11.11	1.41	1.53
1	Ad	169	A	O4'-C1'	11.11	1.56	1.41
1	Ad	587	C	C2'-C1'	-11.10	1.41	1.53
1	Ad	345	A	C2'-C1'	-11.10	1.41	1.53
1	Ad	1174	G	C2'-C1'	-11.10	1.41	1.53
1	Ad	1735	C	C2'-C1'	-11.08	1.41	1.53
1	Ad	1670	G	C2'-C1'	-11.07	1.41	1.53
1	Ad	428	C	C2'-C1'	-11.06	1.41	1.53
1	Ad	1037	G	C2'-C1'	-11.04	1.41	1.53
1	Ad	49	C	O4'-C1'	11.04	1.55	1.41
1	Ad	814	C	O4'-C1'	11.01	1.55	1.41
1	Ad	412	C	O4'-C1'	11.00	1.55	1.41
1	Ad	53	G	C2'-C1'	-10.98	1.41	1.53
1	Ad	121	U	O4'-C1'	10.98	1.55	1.41
1	Ad	1673	C	O4'-C1'	10.97	1.55	1.41
1	Ad	1516	C	C2'-C1'	-10.97	1.41	1.53
1	Ad	591	C	O4'-C1'	10.96	1.55	1.41
1	Ad	1507	G	C2'-C1'	-10.96	1.41	1.53
1	Ad	1319	U	C2'-C1'	-10.96	1.41	1.53
1	Ad	391	A	C2'-C1'	10.95	1.65	1.53
1	Ad	309	C	O4'-C1'	10.95	1.55	1.41
1	Ad	1443	U	C2'-C1'	-10.95	1.41	1.53
1	Ad	1502	C	O4'-C1'	10.94	1.55	1.41
1	Ad	384	U	O4'-C1'	-10.94	1.27	1.41
2	Ae	26	G	C2'-C1'	-10.92	1.41	1.53
2	Ae	56	A	O4'-C1'	10.91	1.55	1.41
1	Ad	1208	A	O4'-C1'	10.91	1.55	1.41
1	Ad	1765	A	C2'-C1'	10.91	1.65	1.53
2	Ae	58	U	C2'-C1'	10.91	1.65	1.53
1	Ad	1716	C	O4'-C1'	10.90	1.55	1.41
1	Ad	950	U	O4'-C1'	10.88	1.55	1.41
1	Ad	1515	G	C2'-C1'	-10.88	1.41	1.53
1	Ad	1699	C	O4'-C1'	10.87	1.55	1.41
1	Ad	649	C	C2'-C1'	-10.86	1.41	1.53
1	Ad	216	A	C2'-C1'	-10.85	1.41	1.53
1	Ad	1210	U	C2'-C1'	10.85	1.65	1.53
1	Ad	198	G	C2'-C1'	-10.83	1.41	1.53
1	Ad	158	C	O4'-C1'	10.83	1.55	1.41
1	Ad	1531	G	C2'-C1'	10.83	1.65	1.53
1	Ad	1644	C	O4'-C1'	10.82	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	135	C	C2'-C1'	-10.82	1.41	1.53
1	Ad	1517	C	O4'-C1'	10.81	1.55	1.41
1	Ad	1775	A	O4'-C1'	-10.80	1.27	1.41
1	Ad	1163	C	O4'-C1'	10.80	1.55	1.41
1	Ad	1119	G	C2'-C1'	10.80	1.65	1.53
1	Ad	1673	C	C2'-C1'	-10.80	1.41	1.53
1	Ad	198	G	O4'-C1'	10.79	1.55	1.41
1	Ad	448	C	O4'-C1'	10.79	1.55	1.41
1	Ad	1151	G	C2'-C1'	-10.78	1.41	1.53
1	Ad	249	G	O4'-C1'	10.77	1.55	1.41
1	Ad	1378	C	O4'-C1'	10.76	1.55	1.41
1	Ad	1174	G	O4'-C1'	10.75	1.55	1.41
1	Ad	484	A	O4'-C1'	10.74	1.55	1.41
1	Ad	593	C	O4'-C1'	10.74	1.55	1.41
1	Ad	179	A	C2'-C1'	-10.74	1.41	1.53
1	Ad	993	C	C2'-C1'	-10.72	1.41	1.53
1	Ad	121	U	C2'-C1'	-10.72	1.41	1.53
2	Ae	43	C	O4'-C1'	10.71	1.55	1.41
1	Ad	1567	G	O4'-C1'	-10.71	1.27	1.41
1	Ad	71	C	O4'-C1'	10.70	1.55	1.41
1	Ad	122	U	O4'-C1'	10.69	1.55	1.41
1	Ad	1603	U	O4'-C1'	-10.69	1.27	1.41
1	Ad	1585	A	O4'-C1'	10.67	1.55	1.41
1	Ad	796	U	C2'-C1'	-10.66	1.41	1.53
1	Ad	1219	C	O4'-C1'	10.66	1.55	1.41
1	Ad	380	C	O4'-C1'	10.64	1.55	1.41
1	Ad	539	A	C2'-C1'	-10.64	1.41	1.53
1	Ad	1760	A	C2'-C1'	-10.63	1.41	1.53
1	Ad	1077	C	O4'-C1'	10.63	1.55	1.41
1	Ad	18	C	O4'-C1'	10.61	1.55	1.41
1	Ad	36	C	C2'-C1'	-10.61	1.41	1.53
1	Ad	1193	A	C2'-C1'	10.61	1.65	1.53
1	Ad	17	C	O4'-C1'	10.60	1.55	1.41
1	Ad	1225	A	C2'-C1'	-10.60	1.41	1.53
1	Ad	1718	C	O4'-C1'	10.60	1.55	1.41
1	Ad	465	G	O4'-C1'	10.60	1.55	1.41
1	Ad	1410	C	O4'-C1'	10.60	1.55	1.41
1	Ad	1743	C	O4'-C1'	10.60	1.55	1.41
1	Ad	741	C	O4'-C1'	10.59	1.55	1.41
2	Ae	73	C	C2'-C1'	-10.58	1.41	1.53
1	Ad	296	A	O4'-C1'	10.57	1.55	1.41
1	Ad	1549	G	O4'-C1'	10.56	1.55	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1056	A	C2'-C1'	10.56	1.65	1.53
1	Ad	1096	A	C2'-C1'	-10.56	1.41	1.53
1	Ad	1702	G	C2'-C1'	-10.55	1.41	1.53
2	Ae	38	C	O4'-C1'	10.55	1.55	1.41
1	Ad	879	C	O4'-C1'	10.54	1.55	1.41
1	Ad	86	A	C2'-C1'	-10.53	1.41	1.53
1	Ad	999	G	O4'-C1'	10.53	1.55	1.41
1	Ad	342	C	C2'-C1'	-10.53	1.41	1.53
1	Ad	483	C	C2'-C1'	-10.52	1.41	1.53
1	Ad	1194	C	O4'-C1'	10.52	1.55	1.41
1	Ad	1012	C	O4'-C1'	10.52	1.55	1.41
1	Ad	136	U	C2'-C1'	-10.50	1.41	1.53
1	Ad	600	C	O4'-C1'	10.50	1.55	1.41
1	Ad	1232	G	O4'-C1'	10.50	1.55	1.41
1	Ad	321	C	C2'-C1'	-10.49	1.41	1.53
1	Ad	188	U	C2'-C1'	-10.49	1.41	1.53
1	Ad	183	C	C2'-C1'	-10.49	1.41	1.53
1	Ad	1001	C	O4'-C1'	10.49	1.55	1.41
1	Ad	473	C	O4'-C1'	10.48	1.55	1.41
1	Ad	889	C	C2'-C1'	-10.48	1.41	1.53
1	Ad	1122	U	O4'-C1'	10.48	1.55	1.41
1	Ad	141	G	O4'-C1'	10.48	1.55	1.41
1	Ad	504	C	C2'-C1'	-10.47	1.41	1.53
1	Ad	1751	U	C2'-C1'	-10.47	1.41	1.53
1	Ad	993	C	O4'-C1'	10.47	1.55	1.41
1	Ad	903	A	C2'-C1'	10.44	1.64	1.53
1	Ad	1574	U	C2'-C1'	10.43	1.64	1.53
1	Ad	1104	U	C2'-C1'	10.43	1.64	1.53
1	Ad	1610	C	C2'-C1'	-10.42	1.41	1.53
1	Ad	1304	A	C2'-C1'	10.42	1.64	1.53
1	Ad	148	C	C2'-C1'	-10.42	1.41	1.53
1	Ad	155	A	C2'-C1'	10.40	1.64	1.53
2	Ae	31	C	O4'-C1'	10.40	1.55	1.41
1	Ad	1051	G	C2'-C1'	-10.39	1.42	1.53
1	Ad	326	G	C2'-C1'	-10.39	1.42	1.53
1	Ad	316	A	C2'-C1'	10.37	1.64	1.53
1	Ad	1754	A	O4'-C1'	10.37	1.55	1.41
1	Ad	1708	U	O4'-C1'	10.36	1.55	1.41
1	Ad	533	C	O4'-C1'	10.36	1.55	1.41
1	Ad	1680	A	C2'-C1'	-10.36	1.42	1.53
1	Ad	1755	G	C2'-C1'	-10.36	1.42	1.53
1	Ad	642	C	C2'-C1'	-10.35	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	Ae	36	C	O4'-C1'	10.35	1.55	1.41
1	Ad	453	C	O4'-C1'	10.32	1.55	1.41
1	Ad	1388	A	C2'-C1'	10.32	1.64	1.53
1	Ad	1467	C	C2'-C1'	-10.32	1.42	1.53
1	Ad	301	U	O4'-C1'	10.31	1.55	1.41
1	Ad	415	C	C2'-C1'	-10.31	1.42	1.53
1	Ad	1382	C	O4'-C1'	10.31	1.55	1.41
1	Ad	889	C	O4'-C1'	10.31	1.55	1.41
1	Ad	1355	U	O4'-C1'	10.31	1.55	1.41
1	Ad	1503	C	O4'-C1'	10.30	1.55	1.41
1	Ad	1778	G	O4'-C1'	10.28	1.55	1.41
1	Ad	1007	G	O4'-C1'	10.27	1.55	1.41
1	Ad	1038	C	C2'-C1'	-10.26	1.42	1.53
1	Ad	1562	C	O4'-C1'	10.26	1.54	1.41
1	Ad	1124	G	C2'-C1'	-10.25	1.42	1.53
1	Ad	1678	G	C2'-C1'	-10.23	1.42	1.53
1	Ad	1571	G	C2'-C1'	-10.23	1.42	1.53
1	Ad	4	C	O4'-C1'	10.23	1.54	1.41
1	Ad	1612	C	O4'-C1'	10.22	1.54	1.41
1	Ad	1213	C	C2'-C1'	-10.22	1.42	1.53
1	Ad	798	C	O4'-C1'	10.21	1.54	1.41
1	Ad	936	C	C2'-C1'	-10.20	1.42	1.53
1	Ad	1187	A	C2'-C1'	-10.19	1.42	1.53
1	Ad	1255	U	C2'-C1'	10.19	1.64	1.53
1	Ad	1676	G	C2'-C1'	-10.19	1.42	1.53
1	Ad	376	G	C2'-C1'	-10.18	1.42	1.53
1	Ad	649	C	O4'-C1'	10.17	1.54	1.41
1	Ad	596	A	O4'-C1'	10.16	1.54	1.41
1	Ad	182	C	C2'-C1'	-10.16	1.42	1.53
1	Ad	1369	C	C2'-C1'	-10.16	1.42	1.53
1	Ad	1274	G	C2'-C1'	-10.14	1.42	1.53
1	Ad	735	G	C2'-C1'	-10.13	1.42	1.53
1	Ad	1725	C	C2'-C1'	10.14	1.64	1.53
1	Ad	1615	G	O4'-C1'	10.13	1.54	1.41
1	Ad	430	G	C2'-C1'	-10.12	1.42	1.53
1	Ad	1322	G	C2'-C1'	-10.11	1.42	1.53
1	Ad	714	C	O4'-C1'	10.11	1.54	1.41
1	Ad	810	A	O4'-C1'	10.10	1.54	1.41
1	Ad	1298	G	C2'-C1'	-10.08	1.42	1.53
1	Ad	604	U	C2'-C1'	-10.08	1.42	1.53
1	Ad	469	G	C2'-C1'	-10.07	1.42	1.53
1	Ad	393	G	C2'-C1'	-10.06	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	919	G	C2'-C1'	10.06	1.64	1.53
1	Ad	1385	C	O4'-C1'	10.05	1.54	1.41
1	Ad	1695	G	O4'-C1'	10.03	1.54	1.41
1	Ad	391	A	O4'-C1'	-10.03	1.28	1.41
1	Ad	404	A	O4'-C1'	-10.03	1.28	1.41
1	Ad	299	A	C2'-C1'	-10.02	1.42	1.53
1	Ad	408	G	C2'-C1'	-10.02	1.42	1.53
84	Aa	1747	A	O3'-P	-10.02	1.49	1.61
1	Ad	1083	C	O4'-C1'	10.02	1.54	1.41
1	Ad	1674	C	O4'-C1'	10.01	1.54	1.41
1	Ad	1282	G	C2'-C1'	-10.01	1.42	1.53
1	Ad	1625	U	C2'-C1'	-10.01	1.42	1.53
1	Ad	760	G	C2'-C1'	-10.00	1.42	1.53
1	Ad	1570	G	C2'-C1'	-10.00	1.42	1.53
1	Ad	313	C	C2'-C1'	-9.97	1.42	1.53
1	Ad	114	U	C2'-C1'	-9.95	1.42	1.53
1	Ad	538	A	O4'-C1'	9.94	1.54	1.41
1	Ad	1168	A	O4'-C1'	9.94	1.54	1.41
1	Ad	394	G	O4'-C1'	-9.94	1.28	1.41
1	Ad	1237	G	C2'-C1'	-9.94	1.42	1.53
1	Ad	435	C	O4'-C1'	9.93	1.54	1.41
1	Ad	526	U	C2'-C1'	-9.93	1.42	1.53
1	Ad	1139	C	O4'-C1'	9.92	1.54	1.41
1	Ad	527	C	O4'-C1'	9.91	1.54	1.41
1	Ad	93	A	C2'-C1'	9.91	1.64	1.53
2	Ae	21	A	O4'-C1'	9.91	1.54	1.41
1	Ad	462	G	C2'-C1'	-9.90	1.42	1.53
1	Ad	576	C	O4'-C1'	9.90	1.54	1.41
2	Ae	17	G	O4'-C1'	9.90	1.54	1.41
1	Ad	453	C	C2'-C1'	-9.89	1.42	1.53
1	Ad	1766	A	O4'-C1'	-9.89	1.28	1.41
1	Ad	914	U	O4'-C1'	9.88	1.54	1.41
1	Ad	630	U	C2'-C1'	-9.88	1.42	1.53
1	Ad	1599	C	C2'-C1'	-9.88	1.42	1.53
1	Ad	371	A	C2'-C1'	-9.88	1.42	1.53
1	Ad	1199	C	C2'-C1'	-9.88	1.42	1.53
1	Ad	1238	A	C2'-C1'	-9.86	1.42	1.53
1	Ad	588	C	C2'-C1'	-9.86	1.42	1.53
1	Ad	318	C	O4'-C1'	9.85	1.54	1.41
1	Ad	1766	A	C2'-C1'	9.85	1.64	1.53
1	Ad	1579	C	C2'-C1'	-9.83	1.42	1.53
86	Ab	46	C	N1-C6	9.83	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1349	A	C2'-C1'	-9.82	1.42	1.53
1	Ad	1687	G	O4'-C1'	9.81	1.54	1.41
1	Ad	980	C	O4'-C1'	9.81	1.54	1.41
1	Ad	1312	G	C2'-C1'	-9.81	1.42	1.53
1	Ad	1779	U	O4'-C1'	9.80	1.54	1.41
1	Ad	1765	A	O4'-C1'	-9.79	1.28	1.41
2	Ae	50	G	O4'-C1'	-9.79	1.28	1.41
1	Ad	289	G	C2'-C1'	-9.79	1.42	1.53
1	Ad	561	G	C2'-C1'	-9.79	1.42	1.53
2	Ae	75	A	C2'-C1'	9.78	1.64	1.53
1	Ad	229	G	C2'-C1'	-9.77	1.42	1.53
1	Ad	1462	C	C2'-C1'	9.77	1.64	1.53
1	Ad	1187	A	O4'-C1'	9.77	1.54	1.41
1	Ad	1199	C	O4'-C1'	9.77	1.54	1.41
1	Ad	1802	G	O4'-C1'	-9.77	1.28	1.41
1	Ad	550	U	O4'-C1'	9.76	1.54	1.41
1	Ad	1717	C	C2'-C1'	-9.76	1.42	1.53
1	Ad	1410	C	C2'-C1'	-9.76	1.42	1.53
2	Ae	9	A	O4'-C1'	9.75	1.54	1.41
1	Ad	966	U	O4'-C1'	9.75	1.54	1.41
1	Ad	1421	U	C2'-C1'	-9.75	1.42	1.53
1	Ad	165	U	O4'-C1'	9.74	1.54	1.41
1	Ad	187	C	C2'-C1'	-9.74	1.42	1.53
1	Ad	48	G	C2'-C1'	-9.74	1.42	1.53
1	Ad	548	C	C2'-C1'	-9.73	1.42	1.53
1	Ad	152	G	C2'-C1'	-9.73	1.42	1.53
2	Ae	61	C	O4'-C1'	9.73	1.54	1.41
1	Ad	881	G	O4'-C1'	9.73	1.54	1.41
1	Ad	569	C	O4'-C1'	9.72	1.54	1.41
1	Ad	641	C	O4'-C1'	9.72	1.54	1.41
1	Ad	1696	C	C2'-C1'	-9.71	1.42	1.53
1	Ad	1607	C	O4'-C1'	9.71	1.54	1.41
1	Ad	969	U	O4'-C1'	9.70	1.54	1.41
1	Ad	1123	G	C2'-C1'	-9.69	1.42	1.53
1	Ad	34	G	O4'-C1'	9.68	1.54	1.41
1	Ad	1538	C	O4'-C1'	9.68	1.54	1.41
1	Ad	1557	C	C2'-C1'	-9.67	1.42	1.53
1	Ad	1597	C	O4'-C1'	9.67	1.54	1.41
1	Ad	485	A	O4'-C1'	9.66	1.54	1.41
1	Ad	1043	C	O4'-C1'	9.66	1.54	1.41
1	Ad	632	G	O4'-C1'	9.65	1.54	1.41
1	Ad	820	A	C2'-C1'	-9.64	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1005	C	O4'-C1'	-9.64	1.29	1.41
1	Ad	1624	G	C2'-C1'	-9.64	1.42	1.53
1	Ad	458	A	C2'-C1'	9.63	1.64	1.53
1	Ad	942	C	C2'-C1'	-9.63	1.42	1.53
1	Ad	934	A	C2'-C1'	-9.61	1.42	1.53
1	Ad	537	U	O4'-C1'	9.60	1.54	1.41
1	Ad	1646	G	C2'-C1'	-9.60	1.42	1.53
1	Ad	406	C	C2'-C1'	-9.59	1.42	1.53
1	Ad	190	C	O4'-C1'	9.56	1.54	1.41
1	Ad	1645	C	O4'-C1'	9.55	1.54	1.41
1	Ad	1142	A	O4'-C1'	9.55	1.54	1.41
1	Ad	747	U	O4'-C1'	9.54	1.54	1.41
1	Ad	780	A	O4'-C1'	-9.54	1.29	1.41
1	Ad	235	C	O4'-C1'	9.54	1.54	1.41
1	Ad	1401	C	O4'-C1'	9.53	1.54	1.41
1	Ad	1095	C	O4'-C1'	9.53	1.54	1.41
1	Ad	1579	C	O4'-C1'	9.52	1.54	1.41
1	Ad	1109	U	C2'-C1'	-9.51	1.42	1.53
1	Ad	1354	C	O4'-C1'	9.51	1.54	1.41
1	Ad	97	G	O4'-C1'	9.49	1.53	1.41
1	Ad	1321	C	O4'-C1'	9.49	1.53	1.41
1	Ad	1686	C	O4'-C1'	9.48	1.53	1.41
1	Ad	1578	A	C2'-C1'	-9.48	1.43	1.53
1	Ad	540	C	C2'-C1'	-9.47	1.43	1.53
1	Ad	188	U	O4'-C1'	9.46	1.53	1.41
1	Ad	54	C	C2'-C1'	9.45	1.63	1.53
1	Ad	1305	U	O4'-C1'	9.45	1.53	1.41
86	Ab	24	G	N7-C5	-9.44	1.33	1.39
2	Ae	3	C	O4'-C1'	9.44	1.53	1.41
1	Ad	162	A	C2'-C1'	-9.43	1.43	1.53
1	Ad	317	U	O4'-C1'	9.43	1.53	1.41
1	Ad	1468	G	O4'-C1'	9.42	1.53	1.41
1	Ad	759	A	C2'-C1'	-9.42	1.43	1.53
1	Ad	896	C	O4'-C1'	9.42	1.53	1.41
1	Ad	772	C	C2'-C1'	-9.40	1.43	1.53
1	Ad	1649	C	O4'-C1'	9.40	1.53	1.41
1	Ad	98	C	O4'-C1'	9.40	1.53	1.41
1	Ad	286	C	C2'-C1'	-9.38	1.43	1.53
1	Ad	317	U	C2'-C1'	-9.38	1.43	1.53
1	Ad	1808	U	O4'-C1'	9.37	1.53	1.41
1	Ad	1379	U	O4'-C1'	9.37	1.53	1.41
1	Ad	1531	G	O4'-C1'	-9.36	1.29	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	804	C	C2'-C1'	-9.35	1.43	1.53
1	Ad	1451	G	C2'-C1'	-9.35	1.43	1.53
1	Ad	562	U	C2'-C1'	-9.34	1.43	1.53
1	Ad	821	G	O4'-C1'	9.34	1.53	1.41
1	Ad	277	G	C2'-C1'	-9.34	1.43	1.53
1	Ad	327	A	O4'-C1'	9.34	1.53	1.41
1	Ad	1015	C	O4'-C1'	9.34	1.53	1.41
1	Ad	1469	C	O4'-C1'	9.33	1.53	1.41
1	Ad	419	C	O4'-C1'	9.33	1.53	1.41
1	Ad	309	C	C2'-C1'	-9.33	1.43	1.53
1	Ad	953	G	C2'-C1'	-9.33	1.43	1.53
1	Ad	998	A	O4'-C1'	9.33	1.53	1.41
1	Ad	1520	G	C2'-C1'	-9.33	1.43	1.53
1	Ad	1252	C	O4'-C1'	9.32	1.53	1.41
1	Ad	711	C	O4'-C1'	9.32	1.53	1.41
1	Ad	31	C	C2'-C1'	-9.32	1.43	1.53
1	Ad	1337	C	O4'-C1'	9.32	1.53	1.41
1	Ad	116	G	C2'-C1'	-9.31	1.43	1.53
1	Ad	1418	G	O4'-C1'	9.31	1.53	1.41
1	Ad	1491	C	O4'-C1'	9.31	1.53	1.41
1	Ad	1754	A	C2'-C1'	-9.30	1.43	1.53
1	Ad	427	G	C2'-C1'	-9.30	1.43	1.53
1	Ad	573	C	O4'-C1'	9.29	1.53	1.41
1	Ad	860	A	C2'-C1'	9.29	1.63	1.53
1	Ad	1285	G	C2'-C1'	-9.29	1.43	1.53
1	Ad	116	G	O4'-C1'	9.29	1.53	1.41
1	Ad	278	C	C2'-C1'	-9.29	1.43	1.53
1	Ad	228	G	O4'-C1'	9.28	1.53	1.41
1	Ad	1783	C	O4'-C1'	9.27	1.53	1.41
2	Ae	72	G	O4'-C1'	-9.27	1.29	1.41
1	Ad	69	A	C2'-C1'	-9.27	1.43	1.53
1	Ad	421	A	O4'-C1'	9.26	1.53	1.41
1	Ad	795	A	O4'-C1'	9.26	1.53	1.41
1	Ad	460	G	C2'-C1'	-9.25	1.43	1.53
1	Ad	82	G	C2'-C1'	-9.23	1.43	1.53
86	Ab	40	A	N7-C5	-9.23	1.33	1.39
2	Ae	10	G	O4'-C1'	9.22	1.53	1.41
1	Ad	1059	U	C2'-C1'	-9.22	1.43	1.53
2	Ae	48	C	O4'-C1'	9.21	1.53	1.41
1	Ad	823	A	C2'-C1'	-9.20	1.43	1.53
1	Ad	1075	G	C2'-C1'	-9.20	1.43	1.53
1	Ad	416	A	C2'-C1'	9.18	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1269	G	C2'-C1'	-9.17	1.43	1.53
1	Ad	1680	A	O4'-C1'	9.17	1.53	1.41
1	Ad	918	G	C2'-C1'	-9.17	1.43	1.53
1	Ad	748	C	O4'-C1'	9.17	1.53	1.41
1	Ad	434	G	C2'-C1'	-9.16	1.43	1.53
1	Ad	254	A	O4'-C1'	9.16	1.53	1.41
1	Ad	278	C	O4'-C1'	9.14	1.53	1.41
1	Ad	1590	U	O4'-C1'	-9.14	1.29	1.41
2	Ae	71	A	C2'-C1'	-9.14	1.43	1.53
1	Ad	1125	U	C2'-C1'	9.13	1.63	1.53
1	Ad	1067	A	O4'-C1'	-9.13	1.29	1.41
1	Ad	1467	C	O4'-C1'	9.12	1.53	1.41
1	Ad	178	A	O4'-C1'	9.12	1.53	1.41
1	Ad	709	C	O4'-C1'	9.12	1.53	1.41
1	Ad	1179	C	O4'-C1'	9.12	1.53	1.41
1	Ad	426	G	C2'-C1'	-9.11	1.43	1.53
1	Ad	225	G	O4'-C1'	9.09	1.53	1.41
1	Ad	1491	C	C2'-C1'	-9.09	1.43	1.53
1	Ad	788	G	O4'-C1'	9.09	1.53	1.41
1	Ad	72	A	O4'-C1'	9.08	1.53	1.41
1	Ad	398	C	O4'-C1'	9.08	1.53	1.41
1	Ad	975	A	C2'-C1'	9.08	1.63	1.53
1	Ad	295	C	O4'-C1'	9.07	1.53	1.41
1	Ad	1562	C	C2'-C1'	-9.07	1.43	1.53
1	Ad	490	G	C2'-C1'	-9.05	1.43	1.53
1	Ad	261	C	O4'-C1'	9.05	1.53	1.41
1	Ad	702	G	C2'-C1'	-9.05	1.43	1.53
1	Ad	631	C	O4'-C1'	9.03	1.53	1.41
1	Ad	728	C	C2'-C1'	-9.03	1.43	1.53
1	Ad	150	U	C2'-C1'	9.03	1.63	1.53
1	Ad	1240	A	C2'-C1'	-9.03	1.43	1.53
1	Ad	406	C	O4'-C1'	9.02	1.53	1.41
1	Ad	1703	G	C2'-C1'	-9.02	1.43	1.53
1	Ad	1202	G	C2'-C1'	-9.00	1.43	1.53
1	Ad	149	G	C2'-C1'	-9.00	1.43	1.53
1	Ad	85	A	O4'-C1'	8.99	1.53	1.41
2	Ae	35	U	O4'-C1'	8.99	1.53	1.41
86	Ab	20	C	N3-C4	8.99	1.40	1.33
1	Ad	1712	C	O4'-C1'	8.98	1.53	1.41
1	Ad	1020	U	O4'-C1'	8.98	1.53	1.41
1	Ad	1614	C	C2'-C1'	-8.98	1.43	1.53
1	Ad	1398	U	O4'-C1'	8.97	1.53	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	965	U	O4'-C1'	8.97	1.53	1.41
2	Ae	72	G	C2'-C1'	8.97	1.63	1.53
1	Ad	474	A	O4'-C1'	8.96	1.53	1.41
1	Ad	727	G	O4'-C1'	8.96	1.53	1.41
1	Ad	558	C	C2'-C1'	-8.96	1.43	1.53
1	Ad	311	G	C2'-C1'	-8.95	1.43	1.53
1	Ad	506	G	O4'-C1'	8.94	1.53	1.41
1	Ad	1083	C	C2'-C1'	-8.94	1.43	1.53
1	Ad	126	U	O4'-C1'	8.92	1.53	1.41
1	Ad	43	A	C2'-C1'	8.91	1.63	1.53
1	Ad	903	A	O4'-C1'	-8.91	1.30	1.41
2	Ae	62	C	C2'-C1'	-8.91	1.43	1.53
1	Ad	1207	A	C2'-C1'	-8.89	1.43	1.53
1	Ad	1646	G	O4'-C1'	8.88	1.53	1.41
1	Ad	1355	U	C2'-C1'	-8.87	1.43	1.53
1	Ad	1166	C	C2'-C1'	-8.86	1.43	1.53
1	Ad	854	C	O4'-C1'	8.86	1.53	1.41
1	Ad	1060	U	C2'-C1'	-8.85	1.43	1.53
1	Ad	1552	U	O4'-C1'	8.85	1.53	1.41
1	Ad	932	C	O4'-C1'	8.84	1.53	1.41
1	Ad	376	G	O4'-C1'	8.84	1.53	1.41
1	Ad	979	A	O4'-C1'	8.84	1.53	1.41
1	Ad	24	U	O4'-C1'	8.84	1.53	1.41
1	Ad	860	A	O4'-C1'	-8.83	1.30	1.41
1	Ad	1442	A	O4'-C1'	8.83	1.53	1.41
1	Ad	1620	C	O4'-C1'	8.83	1.53	1.41
1	Ad	822	G	O4'-C1'	8.82	1.53	1.41
1	Ad	1475	A	O4'-C1'	8.82	1.53	1.41
1	Ad	345	A	O4'-C1'	8.81	1.53	1.41
1	Ad	1331	C	O4'-C1'	8.81	1.53	1.41
1	Ad	1523	A	O4'-C1'	8.81	1.53	1.41
2	Ae	7	A	C2'-C1'	-8.81	1.43	1.53
2	Ae	62	C	O4'-C1'	8.80	1.53	1.41
1	Ad	1113	G	C2'-C1'	-8.79	1.43	1.53
1	Ad	964	U	O4'-C1'	8.78	1.53	1.41
1	Ad	1137	A	O4'-C1'	8.78	1.53	1.41
1	Ad	623	A	C2'-C1'	-8.78	1.43	1.53
1	Ad	759	A	O4'-C1'	8.77	1.53	1.41
1	Ad	540	C	O4'-C1'	8.77	1.53	1.41
1	Ad	992	G	O4'-C1'	8.77	1.53	1.41
86	Ab	31	G	C6-N1	8.75	1.45	1.39
1	Ad	1399	G	C2'-C1'	-8.75	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1630	G	O4'-C1'	8.73	1.53	1.41
1	Ad	1685	U	O4'-C1'	8.71	1.52	1.41
1	Ad	1737	A	O4'-C1'	8.70	1.52	1.41
1	Ad	447	C	C2'-C1'	-8.70	1.43	1.53
1	Ad	1598	G	O4'-C1'	8.67	1.52	1.41
3	Af	16	G	O4'-C1'	8.66	1.52	1.41
1	Ad	1790	G	C2'-C1'	-8.66	1.43	1.53
1	Ad	344	U	C2'-C1'	8.64	1.62	1.53
1	Ad	1710	C	C2'-C1'	-8.64	1.43	1.53
1	Ad	847	U	C2'-C1'	-8.62	1.43	1.53
1	Ad	1395	C	O4'-C1'	8.61	1.52	1.41
1	Ad	1115	G	C2'-C1'	-8.61	1.43	1.53
1	Ad	23	G	C2'-C1'	-8.61	1.43	1.53
1	Ad	1026	C	O4'-C1'	8.60	1.52	1.41
1	Ad	1076	C	O4'-C1'	8.60	1.52	1.41
1	Ad	1749	C	O4'-C1'	8.60	1.52	1.41
1	Ad	932	C	C2'-C1'	-8.59	1.43	1.53
1	Ad	1033	C	C2'-C1'	-8.59	1.44	1.53
1	Ad	1700	G	O4'-C1'	8.59	1.52	1.41
1	Ad	1578	A	O4'-C1'	8.58	1.52	1.41
1	Ad	1600	G	C2'-C1'	-8.58	1.44	1.53
1	Ad	933	G	C2'-C1'	-8.58	1.44	1.53
1	Ad	1146	G	C2'-C1'	-8.57	1.44	1.53
1	Ad	1280	U	C2'-C1'	8.56	1.62	1.53
1	Ad	232	C	O4'-C1'	8.56	1.52	1.41
1	Ad	783	C	O4'-C1'	8.54	1.52	1.41
1	Ad	1744	C	O4'-C1'	8.54	1.52	1.41
1	Ad	195	A	O4'-C1'	8.53	1.52	1.41
1	Ad	589	A	C2'-C1'	-8.53	1.44	1.53
1	Ad	1633	C	O4'-C1'	8.53	1.52	1.41
1	Ad	1809	U	C2'-C1'	8.53	1.62	1.53
1	Ad	1111	C	O4'-C1'	8.53	1.52	1.41
2	Ae	27	G	C2'-C1'	-8.52	1.44	1.53
1	Ad	218	G	O4'-C1'	8.52	1.52	1.41
1	Ad	215	A	C2'-C1'	8.51	1.62	1.53
1	Ad	224	C	C2'-C1'	8.51	1.62	1.53
1	Ad	1696	C	O4'-C1'	8.51	1.52	1.41
1	Ad	1772	A	C2'-C1'	8.51	1.62	1.53
1	Ad	322	U	O4'-C1'	8.51	1.52	1.41
1	Ad	733	U	O4'-C1'	8.50	1.52	1.41
1	Ad	1797	C	O4'-C1'	8.50	1.52	1.41
1	Ad	1288	C	O4'-C1'	8.50	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1028	A	O4'-C1'	-8.50	1.30	1.41
2	Ae	35	U	C2'-C1'	-8.49	1.44	1.53
1	Ad	534	C	O4'-C1'	8.49	1.52	1.41
1	Ad	108	C	O4'-C1'	8.49	1.52	1.41
1	Ad	54	C	O4'-C1'	8.49	1.52	1.41
1	Ad	459	C	O4'-C1'	8.49	1.52	1.41
1	Ad	787	C	O4'-C1'	-8.48	1.30	1.41
1	Ad	561	G	O4'-C1'	8.48	1.52	1.41
1	Ad	973	U	O4'-C1'	8.48	1.52	1.41
1	Ad	1457	C	C2'-C1'	-8.48	1.44	1.53
1	Ad	1584	A	O4'-C1'	8.47	1.52	1.41
1	Ad	990	G	C2'-C1'	-8.47	1.44	1.53
1	Ad	1097	A	C2'-C1'	-8.47	1.44	1.53
1	Ad	110	G	C2'-C1'	-8.46	1.44	1.53
1	Ad	186	A	O4'-C1'	8.46	1.52	1.41
1	Ad	1587	G	C2'-C1'	-8.46	1.44	1.53
1	Ad	519	A	O4'-C1'	8.45	1.52	1.41
1	Ad	1672	U	C2'-C1'	-8.45	1.44	1.53
1	Ad	548	C	O4'-C1'	8.45	1.52	1.41
1	Ad	776	A	C2'-C1'	8.44	1.62	1.53
1	Ad	1205	G	C2'-C1'	8.43	1.62	1.53
1	Ad	350	G	O4'-C1'	8.43	1.52	1.41
1	Ad	1026	C	C2'-C1'	-8.42	1.44	1.53
1	Ad	1751	U	O4'-C1'	8.42	1.52	1.41
1	Ad	555	G	C2'-C1'	-8.41	1.44	1.53
1	Ad	68	A	O4'-C1'	8.41	1.52	1.41
1	Ad	57	G	C2'-C1'	-8.38	1.44	1.53
1	Ad	1059	U	O4'-C1'	8.38	1.52	1.41
1	Ad	1370	C	O4'-C1'	8.37	1.52	1.41
1	Ad	66	U	C2'-C1'	8.36	1.62	1.53
1	Ad	1506	G	C2'-C1'	-8.36	1.44	1.53
1	Ad	911	A	C2'-C1'	-8.36	1.44	1.53
1	Ad	646	G	C2'-C1'	-8.35	1.44	1.53
1	Ad	234	G	C2'-C1'	-8.35	1.44	1.53
1	Ad	1308	G	C2'-C1'	-8.34	1.44	1.53
1	Ad	1	U	O4'-C1'	8.34	1.52	1.41
1	Ad	285	G	C2'-C1'	-8.34	1.44	1.53
86	Ab	97	G	N7-C5	-8.33	1.34	1.39
1	Ad	835	U	O4'-C1'	-8.32	1.30	1.41
1	Ad	1543	U	O4'-C1'	8.31	1.52	1.41
1	Ad	1028	A	C2'-C1'	8.31	1.62	1.53
1	Ad	838	U	O4'-C1'	8.31	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	55	A	C2'-C1'	-8.30	1.44	1.53
1	Ad	1338	U	O4'-C1'	8.30	1.52	1.41
1	Ad	91	C	O4'-C1'	8.30	1.52	1.41
2	Ae	47	U	C2'-C1'	8.30	1.62	1.53
1	Ad	298	C	C2'-C1'	-8.28	1.44	1.53
1	Ad	727	G	C2'-C1'	-8.27	1.44	1.53
1	Ad	1223	A	O4'-C1'	8.27	1.52	1.41
86	Ab	81	G	N7-C5	-8.27	1.34	1.39
1	Ad	1628	C	O4'-C1'	8.26	1.52	1.41
86	Ab	99	G	C6-N1	8.26	1.45	1.39
1	Ad	66	U	O4'-C1'	-8.26	1.30	1.41
1	Ad	1378	C	C2'-C1'	-8.26	1.44	1.53
1	Ad	1094	U	O4'-C1'	8.25	1.52	1.41
1	Ad	1159	G	C2'-C1'	-8.25	1.44	1.53
1	Ad	1601	A	C2'-C1'	-8.25	1.44	1.53
1	Ad	1717	C	O4'-C1'	8.25	1.52	1.41
1	Ad	1727	C	C2'-C1'	-8.24	1.44	1.53
84	Aa	723	G	C2'-C1'	-8.24	1.44	1.53
1	Ad	1405	U	C2'-C1'	-8.24	1.44	1.53
1	Ad	628	G	C2'-C1'	-8.24	1.44	1.53
1	Ad	1164	C	O4'-C1'	8.24	1.52	1.41
2	Ae	1	U	O4'-C1'	8.23	1.52	1.41
1	Ad	1805	U	O4'-C1'	8.23	1.52	1.41
1	Ad	88	C	O4'-C1'	8.22	1.52	1.41
1	Ad	140	C	C2'-C1'	-8.22	1.44	1.53
1	Ad	1734	U	C2'-C1'	-8.22	1.44	1.53
1	Ad	1044	A	C2'-C1'	8.22	1.62	1.53
1	Ad	1524	A	O4'-C1'	-8.21	1.30	1.41
1	Ad	785	A	O4'-C1'	8.21	1.52	1.41
1	Ad	1262	U	C2'-C1'	8.20	1.62	1.53
1	Ad	810	A	C2'-C1'	-8.20	1.44	1.53
1	Ad	1630	G	C2'-C1'	-8.20	1.44	1.53
1	Ad	1401	C	C2'-C1'	-8.19	1.44	1.53
1	Ad	838	U	C2'-C1'	-8.18	1.44	1.53
1	Ad	161	G	O4'-C1'	-8.18	1.31	1.41
1	Ad	1439	G	C2'-C1'	-8.18	1.44	1.53
1	Ad	1594	A	C2'-C1'	8.17	1.62	1.53
1	Ad	343	C	O4'-C1'	8.17	1.52	1.41
1	Ad	530	A	O4'-C1'	8.16	1.52	1.41
1	Ad	1665	U	C2'-C1'	8.16	1.62	1.53
2	Ae	63	C	O4'-C1'	8.16	1.52	1.41
1	Ad	347	C	O4'-C1'	8.16	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1606	U	C2'-C1'	-8.16	1.44	1.53
2	Ae	51	G	C2'-C1'	-8.16	1.44	1.53
1	Ad	979	A	C2'-C1'	-8.16	1.44	1.53
1	Ad	790	U	C2'-C1'	-8.16	1.44	1.53
1	Ad	572	G	C2'-C1'	-8.15	1.44	1.53
1	Ad	466	G	C2'-C1'	-8.14	1.44	1.53
1	Ad	1368	C	O4'-C1'	-8.14	1.31	1.41
1	Ad	139	U	C2'-C1'	-8.14	1.44	1.53
1	Ad	1774	C	O4'-C1'	8.14	1.52	1.41
2	Ae	37	G	C2'-C1'	-8.14	1.44	1.53
1	Ad	96	G	O4'-C1'	8.13	1.52	1.41
1	Ad	248	U	O4'-C1'	8.13	1.52	1.41
1	Ad	537	U	C2'-C1'	-8.13	1.44	1.53
1	Ad	1062	C	C2'-C1'	8.13	1.62	1.53
1	Ad	1661	C	C2'-C1'	-8.12	1.44	1.53
1	Ad	1804	A	C2'-C1'	8.12	1.62	1.53
1	Ad	339	G	O4'-C1'	8.12	1.52	1.41
1	Ad	56	U	C4'-C3'	8.11	1.62	1.53
84	Aa	1827	U	P-O5'	-8.11	1.51	1.59
1	Ad	1203	G	O4'-C1'	-8.11	1.31	1.41
1	Ad	933	G	O3'-P	-8.11	1.51	1.61
1	Ad	312	C	O4'-C1'	8.11	1.52	1.41
1	Ad	511	U	C2'-C1'	8.10	1.62	1.53
1	Ad	779	C	O4'-C1'	8.10	1.52	1.41
1	Ad	619	A	C2'-C1'	8.10	1.62	1.53
1	Ad	1512	C	O4'-C1'	8.10	1.52	1.41
1	Ad	1720	G	C2'-C1'	-8.10	1.44	1.53
1	Ad	841	U	C2'-C1'	8.09	1.62	1.53
1	Ad	1430	A	C2'-C1'	-8.09	1.44	1.53
1	Ad	577	C	O4'-C1'	8.09	1.52	1.41
1	Ad	515	A	O4'-C1'	8.09	1.52	1.41
1	Ad	1102	U	C2'-C1'	-8.09	1.44	1.53
1	Ad	363	G	C2'-C1'	8.08	1.62	1.53
2	Ae	66	C	O4'-C1'	8.08	1.52	1.41
1	Ad	382	A	O4'-C1'	8.08	1.52	1.41
1	Ad	1402	C	O4'-C1'	8.08	1.52	1.41
1	Ad	1419	U	O4'-C1'	8.08	1.52	1.41
1	Ad	417	U	O4'-C1'	8.07	1.52	1.41
1	Ad	1071	C	O4'-C1'	8.07	1.52	1.41
1	Ad	629	C	C2'-C1'	-8.06	1.44	1.53
1	Ad	24	U	C2'-C1'	-8.06	1.44	1.53
1	Ad	1201	C	O4'-C1'	8.06	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	868	A	O4'-C1'	8.06	1.52	1.41
1	Ad	863	G	C2'-C1'	-8.05	1.44	1.53
1	Ad	1112	G	C2'-C1'	-8.06	1.44	1.53
1	Ad	1369	C	O4'-C1'	8.05	1.52	1.41
1	Ad	1750	A	C2'-C1'	-8.06	1.44	1.53
1	Ad	1669	U	C2'-C1'	-8.05	1.44	1.53
1	Ad	920	A	O4'-C1'	8.04	1.52	1.41
1	Ad	1433	A	C2'-C1'	8.04	1.62	1.53
1	Ad	1769	C	O4'-C1'	8.04	1.52	1.41
1	Ad	1092	A	C2'-C1'	-8.03	1.44	1.53
1	Ad	1170	G	C2'-C1'	-8.03	1.44	1.53
84	Aa	2354	G	N7-C5	-8.02	1.34	1.39
1	Ad	606	U	O4'-C1'	8.02	1.52	1.41
1	Ad	389	A	O4'-C1'	8.01	1.52	1.41
1	Ad	1050	C	C2'-C1'	-8.01	1.44	1.53
1	Ad	1595	A	O4'-C1'	8.01	1.52	1.41
86	Ab	18	C	N1-C6	8.01	1.42	1.37
1	Ad	147	C	C2'-C1'	-8.01	1.44	1.53
1	Ad	1649	C	C2'-C1'	-8.00	1.44	1.53
1	Ad	554	A	C2'-C1'	-8.00	1.44	1.53
1	Ad	1726	G	C5'-C4'	8.00	1.60	1.51
1	Ad	885	C	C2'-C1'	-8.00	1.44	1.53
1	Ad	1552	U	C2'-C1'	-7.99	1.44	1.53
1	Ad	1652	C	C2'-C1'	-7.99	1.44	1.53
1	Ad	341	G	O4'-C1'	7.99	1.52	1.41
1	Ad	304	A	C2'-C1'	-7.99	1.44	1.53
1	Ad	5	U	C2'-C1'	-7.98	1.44	1.53
1	Ad	990	G	O4'-C1'	7.98	1.52	1.41
1	Ad	1070	A	O4'-C1'	7.97	1.52	1.41
1	Ad	1512	C	C2'-C1'	-7.97	1.44	1.53
1	Ad	277	G	O4'-C1'	7.97	1.52	1.41
1	Ad	1165	A	C2'-C1'	-7.97	1.44	1.53
1	Ad	134	G	O4'-C1'	7.96	1.52	1.41
1	Ad	626	A	O4'-C1'	7.96	1.52	1.41
1	Ad	1413	C	C2'-C1'	-7.96	1.44	1.53
1	Ad	98	C	C2'-C1'	-7.96	1.44	1.53
1	Ad	1111	C	C2'-C1'	-7.96	1.44	1.53
1	Ad	285	G	O4'-C1'	7.96	1.51	1.41
1	Ad	447	C	O4'-C1'	7.96	1.51	1.41
1	Ad	807	G	C2'-C1'	-7.96	1.44	1.53
3	Af	21	C	O4'-C1'	7.95	1.51	1.41
1	Ad	566	G	C2'-C1'	-7.95	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	Ab	23	A	C6-N6	7.94	1.40	1.33
1	Ad	464	A	C2'-C1'	-7.94	1.44	1.53
1	Ad	967	C	C2'-C1'	-7.94	1.44	1.53
1	Ad	1126	C	O4'-C1'	7.93	1.51	1.41
1	Ad	714	C	C2'-C1'	-7.93	1.44	1.53
1	Ad	1171	C	C2'-C1'	-7.93	1.44	1.53
1	Ad	747	U	C2'-C1'	-7.93	1.44	1.53
1	Ad	717	G	C2'-C1'	-7.92	1.44	1.53
1	Ad	1214	C	C2'-C1'	-7.92	1.44	1.53
1	Ad	1664	U	C2'-C1'	7.92	1.62	1.53
1	Ad	1226	U	C2'-C1'	7.92	1.62	1.53
1	Ad	38	C	O4'-C1'	7.92	1.51	1.41
1	Ad	867	A	C2'-C1'	7.91	1.62	1.53
1	Ad	767	G	O4'-C1'	7.91	1.51	1.41
1	Ad	480	U	O4'-C1'	7.91	1.51	1.41
1	Ad	497	U	O4'-C1'	7.91	1.51	1.41
1	Ad	1636	U	C2'-C1'	-7.91	1.44	1.53
1	Ad	401	A	C2'-C1'	-7.90	1.44	1.53
86	Ab	27	A	N7-C5	-7.90	1.34	1.39
1	Ad	1269	G	O4'-C1'	7.89	1.51	1.41
1	Ad	81	U	C2'-C1'	-7.88	1.44	1.53
86	Ab	40	A	C6-N6	7.88	1.40	1.33
1	Ad	1191	U	O4'-C1'	7.88	1.51	1.41
1	Ad	1225	A	O4'-C1'	7.88	1.51	1.41
1	Ad	583	A	C2'-C1'	-7.87	1.44	1.53
1	Ad	1530	G	O4'-C1'	7.87	1.51	1.41
84	Aa	2084	G	O3'-P	-7.87	1.51	1.61
1	Ad	1294	U	O4'-C1'	7.87	1.51	1.41
1	Ad	1303	G	O4'-C1'	7.86	1.51	1.41
1	Ad	1747	A	C5'-C4'	7.84	1.60	1.51
1	Ad	1260	A	O4'-C1'	7.84	1.51	1.41
1	Ad	947	G	C5'-C4'	7.83	1.60	1.51
1	Ad	612	U	O4'-C1'	7.83	1.51	1.41
1	Ad	1207	A	O4'-C1'	7.83	1.51	1.41
1	Ad	937	A	C2'-C1'	7.83	1.61	1.53
1	Ad	1236	U	O4'-C1'	7.82	1.51	1.41
1	Ad	423	G	C2'-C1'	-7.80	1.44	1.53
1	Ad	915	C	C2'-C1'	-7.80	1.44	1.53
1	Ad	14	C	O4'-C1'	7.79	1.51	1.41
1	Ad	421	A	C2'-C1'	7.78	1.61	1.53
86	Ab	87	G	C2-N3	7.77	1.39	1.32
1	Ad	122	U	C2'-C1'	-7.77	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	629	C	O4'-C1'	7.77	1.51	1.41
1	Ad	450	A	O4'-C1'	7.76	1.51	1.41
1	Ad	1736	C	C2'-C1'	-7.76	1.44	1.53
1	Ad	1359	C	O4'-C1'	7.76	1.51	1.41
1	Ad	1554	G	C2'-C1'	-7.75	1.44	1.53
1	Ad	942	C	O4'-C1'	7.75	1.51	1.41
1	Ad	1492	G	O4'-C1'	-7.75	1.31	1.41
1	Ad	1728	G	C2'-C1'	-7.75	1.44	1.53
1	Ad	436	G	C2'-C1'	-7.75	1.44	1.53
1	Ad	189	U	C2'-C1'	7.75	1.61	1.53
1	Ad	1068	G	C2'-C1'	-7.75	1.44	1.53
1	Ad	1456	U	O4'-C1'	7.75	1.51	1.41
1	Ad	592	U	O4'-C1'	7.74	1.51	1.41
1	Ad	918	G	O4'-C1'	7.74	1.51	1.41
1	Ad	1542	G	O4'-C1'	-7.73	1.31	1.41
1	Ad	1000	A	C2'-C1'	-7.73	1.44	1.53
1	Ad	1789	U	O4'-C1'	7.72	1.51	1.41
1	Ad	1035	A	O3'-P	-7.72	1.51	1.61
1	Ad	1435	G	C2'-C1'	-7.72	1.44	1.53
1	Ad	374	A	C2'-C1'	-7.72	1.44	1.53
1	Ad	323	U	C2'-C1'	-7.70	1.44	1.53
1	Ad	1421	U	O4'-C1'	7.70	1.51	1.41
1	Ad	1640	C	O4'-C1'	7.69	1.51	1.41
1	Ad	1655	U	C2'-C1'	7.69	1.61	1.53
1	Ad	1086	A	O4'-C1'	7.69	1.51	1.41
1	Ad	875	C	O4'-C1'	7.69	1.51	1.41
1	Ad	1553	A	C2'-C1'	-7.68	1.44	1.53
2	Ae	29	C	C2'-C1'	-7.68	1.44	1.53
1	Ad	151	A	C2'-C1'	7.68	1.61	1.53
1	Ad	227	G	C2'-C1'	-7.67	1.45	1.53
1	Ad	292	A	O4'-C1'	7.67	1.51	1.41
1	Ad	923	U	O4'-C1'	7.67	1.51	1.41
1	Ad	1666	G	C2'-C1'	-7.67	1.45	1.53
1	Ad	148	C	O4'-C1'	7.67	1.51	1.41
1	Ad	771	G	C2'-C1'	7.65	1.61	1.53
86	Ab	37	G	C2-N3	7.65	1.38	1.32
1	Ad	1338	U	C2'-C1'	-7.65	1.45	1.53
1	Ad	1008	A	O4'-C1'	-7.64	1.31	1.41
1	Ad	1693	C	O4'-C1'	7.64	1.51	1.41
1	Ad	1339	C	O4'-C1'	7.64	1.51	1.41
1	Ad	210	A	C2'-C1'	-7.63	1.45	1.53
1	Ad	1642	C	O4'-C1'	7.63	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	514	G	C2'-C1'	-7.63	1.45	1.53
1	Ad	164	C	C2'-C1'	-7.62	1.45	1.53
1	Ad	1362	A	C2'-C1'	-7.62	1.45	1.53
86	Ab	5	G	C2-N3	7.61	1.38	1.32
1	Ad	137	A	O4'-C1'	-7.61	1.31	1.41
1	Ad	1496	A	C2'-C1'	7.61	1.61	1.53
1	Ad	456	A	O4'-C1'	-7.59	1.31	1.41
1	Ad	404	A	C2'-C1'	7.59	1.61	1.53
1	Ad	538	A	C2'-C1'	-7.59	1.45	1.53
1	Ad	1141	U	O4'-C1'	7.59	1.51	1.41
86	Ab	25	G	N1-C2	7.58	1.43	1.37
1	Ad	329	G	C2'-C1'	-7.57	1.45	1.53
1	Ad	167	A	C2'-C1'	7.57	1.61	1.53
1	Ad	1311	U	O4'-C1'	-7.57	1.31	1.41
1	Ad	412	C	C2'-C1'	-7.56	1.45	1.53
1	Ad	1278	C	O4'-C1'	-7.56	1.31	1.41
1	Ad	1398	U	C2'-C1'	-7.55	1.45	1.53
1	Ad	452	C	O4'-C1'	7.55	1.51	1.41
1	Ad	1738	U	C2'-C1'	-7.55	1.45	1.53
1	Ad	1682	U	O4'-C1'	7.54	1.51	1.41
1	Ad	495	C	O4'-C1'	7.54	1.51	1.41
86	Ab	99	G	C2-N3	7.54	1.38	1.32
1	Ad	1111	C	P-O5'	-7.53	1.52	1.59
1	Ad	1364	C	O4'-C1'	7.53	1.51	1.41
1	Ad	273	C	O4'-C1'	7.53	1.51	1.41
1	Ad	1647	C	O4'-C1'	7.53	1.51	1.41
1	Ad	797	A	O4'-C1'	7.52	1.51	1.41
1	Ad	3	C	C2'-C1'	7.52	1.61	1.53
1	Ad	1329	A	C2'-C1'	-7.52	1.45	1.53
2	Ae	52	G	C2'-C1'	-7.52	1.45	1.53
1	Ad	516	A	C2'-C1'	7.50	1.61	1.53
1	Ad	253	C	C2'-C1'	-7.49	1.45	1.53
1	Ad	1286	U	C2'-C1'	-7.49	1.45	1.53
1	Ad	1231	A	O4'-C1'	7.49	1.51	1.41
1	Ad	1592	G	O4'-C1'	-7.49	1.31	1.41
1	Ad	1594	A	O4'-C1'	7.49	1.51	1.41
1	Ad	1446	C	O4'-C1'	7.48	1.51	1.41
1	Ad	458	A	O4'-C1'	-7.47	1.31	1.41
1	Ad	817	C	C2'-C1'	7.47	1.61	1.53
1	Ad	1363	G	C2'-C1'	-7.47	1.45	1.53
3	Af	21	C	C2'-C1'	7.47	1.61	1.53
1	Ad	1230	A	O4'-C1'	7.46	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	Aa	290	C	P-O5'	-7.46	1.52	1.59
1	Ad	624	A	P-O5'	-7.46	1.52	1.59
1	Ad	712	U	C2'-C1'	7.46	1.61	1.53
1	Ad	1155	G	O4'-C1'	7.46	1.51	1.41
1	Ad	599	G	C2'-C1'	-7.46	1.45	1.53
1	Ad	1521	G	O4'-C1'	-7.45	1.31	1.41
1	Ad	386	C	O4'-C1'	7.45	1.51	1.41
1	Ad	414	A	C2'-C1'	-7.45	1.45	1.53
1	Ad	1136	A	O4'-C1'	7.45	1.51	1.41
1	Ad	33	U	C2'-C1'	7.44	1.61	1.53
1	Ad	1365	C	O4'-C1'	7.44	1.51	1.41
1	Ad	1469	C	C2'-C1'	-7.44	1.45	1.53
1	Ad	378	U	O4'-C1'	7.43	1.51	1.41
1	Ad	704	C	C2'-C1'	-7.43	1.45	1.53
1	Ad	1109	U	O4'-C1'	7.43	1.51	1.41
1	Ad	1555	A	O4'-C1'	7.43	1.51	1.41
1	Ad	1688	G	O4'-C1'	-7.43	1.31	1.41
2	Ae	55	C	C2'-C1'	-7.43	1.45	1.53
86	Ab	94	C	C4-C5	7.43	1.48	1.43
1	Ad	1099	G	C2'-C1'	-7.42	1.45	1.53
1	Ad	1623	C	O4'-C1'	7.42	1.51	1.41
84	Aa	2512	U	O3'-P	-7.42	1.52	1.61
2	Ae	68	C	O4'-C1'	7.42	1.51	1.41
1	Ad	858	G	C2'-C1'	-7.42	1.45	1.53
1	Ad	435	C	C2'-C1'	-7.41	1.45	1.53
1	Ad	380	C	C2'-C1'	-7.41	1.45	1.53
1	Ad	244	C	C2'-C1'	7.39	1.61	1.53
1	Ad	1041	A	C2'-C1'	7.39	1.61	1.53
1	Ad	1117	G	O4'-C1'	7.39	1.51	1.41
1	Ad	407	G	O4'-C1'	-7.39	1.32	1.41
1	Ad	1166	C	O4'-C1'	7.39	1.51	1.41
3	Af	20	U	O4'-C1'	7.39	1.51	1.41
1	Ad	960	A	O4'-C1'	7.38	1.51	1.41
1	Ad	117	U	O4'-C1'	7.38	1.51	1.41
1	Ad	596	A	C2'-C1'	-7.37	1.45	1.53
1	Ad	823	A	O3'-P	-7.37	1.52	1.61
86	Ab	10	C	N3-C4	7.37	1.39	1.33
1	Ad	1661	C	O4'-C1'	7.36	1.51	1.41
1	Ad	1362	A	O4'-C1'	7.36	1.51	1.41
1	Ad	308	U	O4'-C1'	7.34	1.51	1.41
1	Ad	1255	U	O4'-C1'	-7.33	1.32	1.41
1	Ad	651	G	O4'-C1'	7.33	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1244	U	O4'-C1'	7.33	1.51	1.41
1	Ad	1070	A	C2'-C1'	-7.33	1.45	1.53
1	Ad	217	A	C2'-C1'	-7.32	1.45	1.53
1	Ad	735	G	O4'-C1'	7.32	1.51	1.41
1	Ad	1779	U	C2'-C1'	-7.32	1.45	1.53
1	Ad	913	U	O4'-C1'	7.31	1.51	1.41
1	Ad	55	A	O4'-C1'	7.31	1.51	1.41
1	Ad	193	G	O4'-C1'	7.30	1.51	1.41
1	Ad	1364	C	C2'-C1'	-7.30	1.45	1.53
1	Ad	372	U	C2'-C1'	7.30	1.61	1.53
1	Ad	1316	A	O4'-C1'	7.30	1.51	1.41
1	Ad	1477	A	C2'-C1'	7.29	1.61	1.53
1	Ad	828	G	C2'-C1'	-7.29	1.45	1.53
1	Ad	388	G	O4'-C1'	7.29	1.51	1.41
1	Ad	1192	G	C2'-C1'	-7.29	1.45	1.53
1	Ad	368	A	C2'-C1'	7.29	1.61	1.53
1	Ad	1229	C	C2'-C1'	-7.28	1.45	1.53
1	Ad	1035	A	O4'-C1'	7.28	1.51	1.41
1	Ad	336	U	O4'-C1'	-7.27	1.32	1.41
1	Ad	755	U	O4'-C1'	7.27	1.51	1.41
1	Ad	1094	U	C2'-C1'	-7.27	1.45	1.53
1	Ad	1381	G	C2'-C1'	-7.27	1.45	1.53
1	Ad	772	C	O4'-C1'	7.27	1.51	1.41
1	Ad	49	C	C2'-C1'	-7.26	1.45	1.53
2	Ae	20	C	C5'-C4'	7.26	1.60	1.51
2	Ae	64	G	C2'-C1'	-7.26	1.45	1.53
1	Ad	269	A	O4'-C1'	-7.26	1.32	1.41
1	Ad	985	G	C2'-C1'	-7.25	1.45	1.53
1	Ad	1133	C	O4'-C1'	7.25	1.51	1.41
1	Ad	587	C	O4'-C1'	7.25	1.51	1.41
1	Ad	1499	U	C2'-C1'	-7.25	1.45	1.53
84	Aa	87	A	N7-C5	-7.25	1.34	1.39
1	Ad	590	G	O4'-C1'	7.24	1.51	1.41
1	Ad	1760	A	O4'-C1'	7.24	1.51	1.41
1	Ad	409	C	O4'-C1'	7.24	1.51	1.41
1	Ad	708	G	O4'-C1'	7.24	1.51	1.41
1	Ad	448	C	C5'-C4'	7.24	1.60	1.51
1	Ad	1526	C	O4'-C1'	7.24	1.51	1.41
2	Ae	17	G	C2'-C1'	-7.24	1.45	1.53
1	Ad	1453	U	O4'-C1'	7.23	1.51	1.41
2	Ae	59	U	O4'-C1'	7.23	1.51	1.41
1	Ad	706	U	O4'-C1'	7.22	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1152	A	C2'-C1'	-7.22	1.45	1.53
1	Ad	1660	C	O4'-C1'	7.22	1.51	1.41
1	Ad	517	U	O4'-C1'	7.22	1.51	1.41
86	Ab	107	C	N1-C6	7.22	1.41	1.37
3	Af	12	A	O4'-C1'	-7.22	1.32	1.41
1	Ad	20	G	O4'-C1'	7.22	1.51	1.41
1	Ad	1268	G	O4'-C1'	7.21	1.51	1.41
2	Ae	57	A	C2'-C1'	7.21	1.61	1.53
1	Ad	1040	G	C2'-C1'	-7.21	1.45	1.53
1	Ad	927	A	C2'-C1'	-7.21	1.45	1.53
1	Ad	1194	C	C2'-C1'	7.20	1.61	1.53
1	Ad	1576	C	C3'-C2'	7.20	1.60	1.52
1	Ad	1367	U	C2'-C1'	7.20	1.61	1.53
1	Ad	1605	A	C2'-C1'	-7.20	1.45	1.53
1	Ad	761	A	C2'-C1'	-7.20	1.45	1.53
1	Ad	1152	A	O4'-C1'	7.20	1.51	1.41
1	Ad	1054	G	O4'-C1'	7.19	1.51	1.41
1	Ad	1015	C	C2'-C1'	-7.18	1.45	1.53
2	Ae	66	C	C2'-C1'	-7.18	1.45	1.53
1	Ad	762	A	C2'-C1'	-7.18	1.45	1.53
1	Ad	1157	A	C2'-C1'	-7.18	1.45	1.53
1	Ad	840	U	O4'-C1'	7.16	1.50	1.41
1	Ad	835	U	C2'-C1'	7.16	1.61	1.53
1	Ad	1043	C	C2'-C1'	-7.16	1.45	1.53
1	Ad	333	G	C2'-C1'	-7.16	1.45	1.53
2	Ae	21	A	C2'-C1'	-7.16	1.45	1.53
1	Ad	607	U	C2'-C1'	-7.15	1.45	1.53
1	Ad	1307	U	C2'-C1'	-7.15	1.45	1.53
1	Ad	1524	A	C2'-C1'	7.15	1.61	1.53
1	Ad	239	C	C2'-C1'	-7.14	1.45	1.53
1	Ad	970	U	C2'-C1'	-7.14	1.45	1.53
1	Ad	1177	G	C2'-C1'	-7.14	1.45	1.53
1	Ad	313	C	O4'-C1'	7.14	1.50	1.41
1	Ad	1289	U	O4'-C1'	7.13	1.50	1.41
1	Ad	959	G	O4'-C1'	7.12	1.50	1.41
1	Ad	487	A	C2'-C1'	-7.12	1.45	1.53
1	Ad	1656	C	C2'-C1'	-7.12	1.45	1.53
3	Af	13	A	C2'-C1'	7.12	1.61	1.53
1	Ad	989	G	C2'-C1'	-7.11	1.45	1.53
85	Ac	59	A	N7-C5	-7.11	1.34	1.39
1	Ad	105	A	O4'-C1'	7.11	1.50	1.41
1	Ad	455	G	C2'-C1'	-7.11	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1045	G	C5'-C4'	7.11	1.59	1.51
1	Ad	1411	C	C2'-C1'	-7.11	1.45	1.53
1	Ad	997	A	C2'-C1'	-7.10	1.45	1.53
1	Ad	491	G	C2'-C1'	7.10	1.61	1.53
2	Ae	68	C	C2'-C1'	-7.10	1.45	1.53
1	Ad	223	A	O4'-C1'	7.09	1.50	1.41
1	Ad	1439	G	O4'-C1'	7.09	1.50	1.41
1	Ad	1296	G	O4'-C1'	7.08	1.50	1.41
1	Ad	1567	G	C2'-C1'	7.08	1.61	1.53
1	Ad	1678	G	O4'-C1'	7.08	1.50	1.41
1	Ad	347	C	C2'-C1'	-7.07	1.45	1.53
86	Ab	60	G	C2-N3	7.07	1.38	1.32
1	Ad	1004	U	O4'-C1'	7.07	1.50	1.41
86	Ab	90	A	C6-N1	7.07	1.40	1.35
1	Ad	1793	C	O4'-C1'	7.07	1.50	1.41
1	Ad	1476	C	O4'-C1'	7.06	1.50	1.41
1	Ad	1004	U	C2'-C1'	-7.06	1.45	1.53
1	Ad	465	G	C2'-C1'	-7.06	1.45	1.53
1	Ad	1139	C	C2'-C1'	-7.06	1.45	1.53
1	Ad	1413	C	O4'-C1'	7.05	1.50	1.41
1	Ad	1483	G	C2'-C1'	-7.05	1.45	1.53
1	Ad	1343	C	O4'-C1'	7.05	1.50	1.41
1	Ad	1436	U	O4'-C1'	7.05	1.50	1.41
84	Aa	2415	U	P-O5'	-7.04	1.52	1.59
2	Ae	3	C	C2'-C1'	-7.04	1.45	1.53
1	Ad	1224	C	O4'-C1'	7.04	1.50	1.41
2	Ae	7	A	O4'-C1'	7.03	1.50	1.41
1	Ad	1167	C	C2'-C1'	-7.01	1.45	1.53
1	Ad	978	A	O4'-C1'	7.00	1.50	1.41
1	Ad	207	A	C2'-C1'	-7.00	1.45	1.53
1	Ad	115	A	C2'-C1'	-7.00	1.45	1.53
1	Ad	948	C	C2'-C1'	-7.00	1.45	1.53
1	Ad	1158	G	C2'-C1'	-6.99	1.45	1.53
1	Ad	1720	G	O4'-C1'	6.99	1.50	1.41
1	Ad	230	C	O4'-C1'	6.99	1.50	1.41
1	Ad	305	A	O4'-C1'	6.98	1.50	1.41
1	Ad	1412	A	C2'-C1'	-6.98	1.45	1.53
1	Ad	958	G	C2'-C1'	-6.97	1.45	1.53
1	Ad	1654	C	C2'-C1'	-6.97	1.45	1.53
1	Ad	850	G	O4'-C1'	6.97	1.50	1.41
1	Ad	169	A	C2'-C1'	-6.96	1.45	1.53
1	Ad	327	A	C2'-C1'	-6.96	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	528	U	O4'-C1'	6.96	1.50	1.41
1	Ad	975	A	O4'-C1'	6.96	1.50	1.41
1	Ad	18	C	C2'-C1'	-6.96	1.45	1.53
1	Ad	525	A	C2'-C1'	-6.95	1.45	1.53
1	Ad	1236	U	C2'-C1'	-6.95	1.45	1.53
1	Ad	488	C	C2'-C1'	-6.94	1.45	1.53
84	Aa	2345	C	P-O5'	-6.94	1.52	1.59
1	Ad	546	U	O3'-P	-6.92	1.52	1.61
1	Ad	1677	U	O4'-C1'	6.92	1.50	1.41
1	Ad	1769	C	C5'-C4'	6.92	1.59	1.51
86	Ab	23	A	C6-N1	6.92	1.40	1.35
1	Ad	328	U	C2'-C1'	6.91	1.60	1.53
1	Ad	1767	G	C2'-C1'	-6.90	1.45	1.53
1	Ad	125	A	C2'-C1'	-6.90	1.45	1.53
1	Ad	888	U	C2'-C1'	-6.90	1.45	1.53
1	Ad	1146	G	O4'-C1'	6.89	1.50	1.41
1	Ad	1178	C	O4'-C1'	6.89	1.50	1.41
1	Ad	1741	A	C2'-C1'	-6.89	1.45	1.53
1	Ad	1436	U	C2'-C1'	-6.88	1.45	1.53
1	Ad	154	A	C2'-C1'	-6.88	1.45	1.53
1	Ad	47	A	C2'-C1'	-6.88	1.45	1.53
2	Ae	53	U	O4'-C1'	6.88	1.50	1.41
1	Ad	1384	U	C2'-C1'	6.87	1.60	1.53
1	Ad	1473	C	O4'-C1'	6.87	1.50	1.41
86	Ab	94	C	N3-C4	6.87	1.38	1.33
1	Ad	424	A	O4'-C1'	6.87	1.50	1.41
1	Ad	1556	U	C2'-C1'	6.86	1.60	1.53
1	Ad	127	G	O4'-C1'	6.85	1.50	1.41
1	Ad	1089	A	O4'-C1'	6.85	1.50	1.41
1	Ad	1684	U	O4'-C1'	6.84	1.50	1.41
1	Ad	1133	C	C2'-C1'	-6.84	1.45	1.53
1	Ad	1431	A	C5'-C4'	6.84	1.59	1.51
1	Ad	610	A	C2'-C1'	-6.83	1.45	1.53
1	Ad	1465	C	O4'-C1'	6.83	1.50	1.41
1	Ad	931	A	O4'-C1'	6.83	1.50	1.41
86	Ab	5	G	C2'-C1'	-6.82	1.45	1.53
1	Ad	1452	A	C5'-C4'	6.82	1.59	1.51
1	Ad	477	A	O4'-C1'	6.82	1.50	1.41
1	Ad	1563	A	O4'-C1'	6.81	1.50	1.41
1	Ad	282	C	C3'-C2'	6.81	1.60	1.52
1	Ad	293	C	O4'-C1'	6.81	1.50	1.41
1	Ad	200	C	O4'-C1'	6.81	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	Ab	66	G	N1-C2	6.81	1.43	1.37
1	Ad	1443	U	O4'-C1'	6.80	1.50	1.41
1	Ad	1002	G	O4'-C1'	6.80	1.50	1.41
1	Ad	1498	A	O4'-C1'	-6.79	1.32	1.41
1	Ad	976	A	C2'-C1'	-6.78	1.45	1.53
2	Ae	22	G	O4'-C1'	6.78	1.50	1.41
1	Ad	131	C	C2'-C1'	6.78	1.60	1.53
2	Ae	11	U	C2'-C1'	-6.78	1.45	1.53
86	Ab	58	G	C2'-C1'	-6.78	1.45	1.53
1	Ad	1085	U	C2'-C1'	6.77	1.60	1.53
86	Ab	83	A	C6-N6	6.77	1.39	1.33
1	Ad	479	A	O4'-C1'	6.77	1.50	1.41
1	Ad	165	U	C2'-C1'	-6.75	1.46	1.53
1	Ad	650	G	O4'-C1'	6.75	1.50	1.41
1	Ad	1639	A	O4'-C1'	6.75	1.50	1.41
86	Ab	6	C	N3-C4	6.75	1.38	1.33
1	Ad	266	C	O4'-C1'	6.75	1.50	1.41
86	Ab	85	G	C6-N1	6.74	1.44	1.39
84	Aa	1747	A	P-O5'	-6.74	1.53	1.59
1	Ad	418	C	C2'-C1'	-6.73	1.46	1.53
1	Ad	857	A	C2'-C1'	-6.71	1.46	1.53
1	Ad	1450	A	O4'-C1'	6.71	1.50	1.41
1	Ad	247	A	C2'-C1'	6.70	1.60	1.53
1	Ad	473	C	C2'-C1'	-6.70	1.46	1.53
1	Ad	1023	C	C2'-C1'	-6.70	1.46	1.53
1	Ad	166	A	O4'-C1'	6.70	1.50	1.41
1	Ad	984	A	C5'-C4'	6.70	1.59	1.51
1	Ad	531	A	O4'-C1'	6.70	1.50	1.41
2	Ae	48	C	C2'-C1'	-6.70	1.46	1.53
1	Ad	847	U	O4'-C1'	6.70	1.50	1.41
1	Ad	1350	C	C4'-C3'	6.69	1.60	1.53
1	Ad	226	C	O4'-C1'	6.69	1.50	1.41
1	Ad	470	U	C2'-C1'	-6.69	1.46	1.53
1	Ad	459	C	C2'-C1'	6.68	1.60	1.53
1	Ad	102	U	O4'-C1'	6.68	1.50	1.41
1	Ad	1441	C	O4'-C1'	6.68	1.50	1.41
1	Ad	1513	A	C2'-C1'	6.68	1.60	1.53
1	Ad	963	U	O4'-C1'	6.67	1.50	1.41
1	Ad	1386	U	O4'-C1'	6.67	1.50	1.41
1	Ad	83	U	C2'-C1'	6.66	1.60	1.53
1	Ad	639	G	C2'-C1'	-6.66	1.46	1.53
1	Ad	902	C	C2'-C1'	6.66	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1136	A	C2'-C1'	-6.66	1.46	1.53
1	Ad	1018	A	C5'-C4'	6.65	1.59	1.51
1	Ad	1338	U	C5'-C4'	6.65	1.59	1.51
1	Ad	1370	C	C2'-C1'	-6.65	1.46	1.53
1	Ad	365	C	O4'-C1'	6.64	1.50	1.41
1	Ad	625	A	P-O5'	-6.64	1.53	1.59
2	Ae	19	U	C5'-C4'	6.64	1.59	1.51
1	Ad	1424	G	C2'-C1'	-6.63	1.46	1.53
84	Aa	2092	C	C2'-C1'	-6.63	1.46	1.53
1	Ad	13	C	O4'-C1'	6.63	1.50	1.41
2	Ae	20	C	O4'-C1'	6.63	1.50	1.41
2	Ae	71	A	O4'-C1'	6.63	1.50	1.41
1	Ad	836	U	C5'-C4'	6.63	1.59	1.51
1	Ad	1741	A	O4'-C1'	6.63	1.50	1.41
1	Ad	1472	G	O4'-C1'	6.62	1.50	1.41
1	Ad	1049	U	O4'-C1'	6.61	1.50	1.41
86	Ab	29	C	C2-N3	6.61	1.41	1.35
1	Ad	307	U	O4'-C1'	6.61	1.50	1.41
1	Ad	959	G	C2'-C1'	-6.61	1.46	1.53
1	Ad	107	U	C2'-C1'	6.60	1.60	1.53
1	Ad	423	G	O4'-C1'	6.60	1.50	1.41
1	Ad	454	U	O4'-C1'	6.60	1.50	1.41
1	Ad	396	G	O4'-C1'	-6.60	1.33	1.41
86	Ab	101	A	C6-N6	6.60	1.39	1.33
1	Ad	1671	G	O3'-P	-6.60	1.53	1.61
1	Ad	732	G	O4'-C1'	-6.59	1.33	1.41
1	Ad	1535	U	O4'-C1'	6.59	1.50	1.41
1	Ad	748	C	C2'-C1'	-6.59	1.46	1.53
1	Ad	926	G	C2'-C1'	-6.58	1.46	1.53
1	Ad	1508	C	O4'-C1'	6.58	1.50	1.41
1	Ad	531	A	C5'-C4'	6.58	1.59	1.51
1	Ad	1077	C	C2'-C1'	-6.57	1.46	1.53
1	Ad	574	A	C2'-C1'	6.57	1.60	1.53
1	Ad	1185	U	O4'-C1'	6.57	1.50	1.41
1	Ad	761	A	C3'-C2'	6.57	1.60	1.52
86	Ab	71	A	C6-N1	6.56	1.40	1.35
1	Ad	163	G	C2'-C1'	-6.56	1.46	1.53
1	Ad	523	C	C2'-C1'	-6.56	1.46	1.53
1	Ad	614	G	C2'-C1'	-6.56	1.46	1.53
1	Ad	1672	U	O4'-C1'	6.56	1.50	1.41
1	Ad	337	A	O4'-C1'	6.55	1.50	1.41
1	Ad	927	A	O4'-C1'	6.55	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	768	A	O4'-C1'	6.55	1.50	1.41
1	Ad	793	G	C5'-C4'	6.55	1.59	1.51
1	Ad	899	A	O4'-C1'	6.55	1.50	1.41
1	Ad	468	A	O4'-C1'	-6.55	1.33	1.41
1	Ad	1537	U	C2'-C1'	6.54	1.60	1.53
1	Ad	1054	G	C2'-C1'	-6.54	1.46	1.53
86	Ab	76	U	N3-C4	6.53	1.44	1.38
1	Ad	1762	C	C2'-C1'	-6.53	1.46	1.53
1	Ad	1509	C	O4'-C1'	6.53	1.50	1.41
1	Ad	1271	G	O4'-C1'	-6.53	1.33	1.41
1	Ad	825	U	C2'-C1'	-6.52	1.46	1.53
2	Ae	11	U	O4'-C1'	6.52	1.50	1.41
1	Ad	1277	G	C2'-C1'	-6.52	1.46	1.53
1	Ad	741	C	C5'-C4'	6.52	1.59	1.51
1	Ad	1590	U	C2'-C1'	6.52	1.60	1.53
1	Ad	581	G	O3'-P	-6.51	1.53	1.61
1	Ad	113	A	C5'-C4'	6.51	1.59	1.51
1	Ad	133	U	C2'-C1'	-6.51	1.46	1.53
2	Ae	25	U	C2'-C1'	-6.51	1.46	1.53
1	Ad	366	G	O3'-P	-6.50	1.53	1.61
1	Ad	565	G	C2'-C1'	-6.50	1.46	1.53
84	Aa	1747	A	C2'-C1'	-6.50	1.46	1.53
1	Ad	801	U	O4'-C1'	-6.50	1.33	1.41
1	Ad	1167	C	O4'-C1'	6.50	1.50	1.41
1	Ad	586	U	C2'-C1'	-6.50	1.46	1.53
2	Ae	38	C	C2'-C1'	-6.50	1.46	1.53
86	Ab	74	A	C6-N6	6.50	1.39	1.33
1	Ad	1553	A	O4'-C1'	6.50	1.50	1.41
1	Ad	1062	C	O4'-C1'	6.49	1.50	1.41
1	Ad	937	A	P-O5'	-6.49	1.53	1.59
1	Ad	1420	U	C2'-C1'	-6.49	1.46	1.53
1	Ad	1663	A	C2'-C1'	6.49	1.60	1.53
1	Ad	1233	G	O4'-C1'	6.49	1.50	1.41
84	Aa	2374	G	N7-C5	-6.48	1.35	1.39
1	Ad	920	A	C2'-C1'	-6.47	1.46	1.53
1	Ad	1341	G	C2'-C1'	-6.47	1.46	1.53
1	Ad	974	C	O4'-C1'	6.47	1.50	1.41
1	Ad	1019	G	O4'-C1'	-6.47	1.33	1.41
1	Ad	1258	U	O4'-C1'	6.47	1.50	1.41
1	Ad	1358	G	O3'-P	-6.47	1.53	1.61
1	Ad	426	G	C5'-C4'	6.46	1.59	1.51
86	Ab	103	U	N3-C4	6.46	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	Aa	2527	G	N7-C5	-6.46	1.35	1.39
1	Ad	1253	U	O4'-C1'	6.46	1.50	1.41
1	Ad	1415	G	O4'-C1'	6.46	1.50	1.41
86	Ab	11	A	C6-N6	6.45	1.39	1.33
1	Ad	11	A	O4'-C1'	6.45	1.50	1.41
1	Ad	1118	A	C4'-C3'	6.45	1.60	1.53
1	Ad	27	U	O4'-C1'	6.45	1.50	1.41
1	Ad	622	U	C2'-C1'	-6.45	1.46	1.53
1	Ad	1448	U	C2'-C1'	-6.45	1.46	1.53
1	Ad	274	A	O4'-C1'	6.44	1.50	1.41
1	Ad	1703	G	O4'-C1'	6.44	1.50	1.41
86	Ab	74	A	C6-N1	6.44	1.40	1.35
1	Ad	529	A	O4'-C1'	6.44	1.50	1.41
84	Aa	1450	G	N7-C5	-6.44	1.35	1.39
1	Ad	411	A	O4'-C1'	6.44	1.50	1.41
1	Ad	15	U	O4'-C1'	6.43	1.50	1.41
1	Ad	1385	C	C2'-C1'	-6.43	1.46	1.53
1	Ad	357	A	O4'-C1'	6.42	1.50	1.41
1	Ad	402	G	O4'-C1'	6.42	1.50	1.41
84	Aa	1612	C	P-O5'	-6.42	1.53	1.59
1	Ad	1734	U	O4'-C1'	6.42	1.50	1.41
1	Ad	1651	U	C2'-C1'	-6.42	1.46	1.53
84	Aa	2093	G	C6-N1	6.42	1.44	1.39
1	Ad	263	C	C2'-C1'	6.42	1.60	1.53
1	Ad	584	A	C5'-C4'	6.41	1.59	1.51
1	Ad	598	A	O4'-C1'	6.41	1.50	1.41
1	Ad	723	A	C2'-C1'	6.41	1.60	1.53
1	Ad	1186	U	C2'-C1'	6.41	1.60	1.53
1	Ad	873	G	C2'-C1'	6.39	1.60	1.53
1	Ad	490	G	O4'-C1'	6.39	1.50	1.41
1	Ad	1658	U	O4'-C1'	6.39	1.50	1.41
1	Ad	331	U	C2'-C1'	6.39	1.60	1.53
1	Ad	1641	A	O3'-P	-6.39	1.53	1.61
84	Aa	423	C	N3-C4	6.38	1.38	1.33
1	Ad	501	U	C5'-C4'	6.38	1.59	1.51
1	Ad	852	A	O4'-C1'	6.38	1.50	1.41
1	Ad	1651	U	O4'-C1'	6.38	1.50	1.41
1	Ad	306	U	O4'-C1'	6.38	1.50	1.41
1	Ad	1550	G	O4'-C1'	-6.38	1.33	1.41
1	Ad	1723	G	C2'-C1'	-6.38	1.46	1.53
1	Ad	982	A	O4'-C1'	6.37	1.50	1.41
1	Ad	1613	G	O4'-C1'	6.37	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	252	U	C2'-C1'	6.36	1.60	1.53
84	Aa	3042	U	P-O5'	-6.36	1.53	1.59
1	Ad	1188	A	C2'-C1'	6.36	1.60	1.53
1	Ad	1128	C	C2'-C1'	-6.36	1.46	1.53
1	Ad	378	U	C5'-C4'	6.36	1.58	1.51
1	Ad	1054	G	P-O5'	-6.36	1.53	1.59
1	Ad	1246	A	O4'-C1'	6.35	1.50	1.41
1	Ad	1573	C	O4'-C1'	6.35	1.50	1.41
84	Aa	97	G	N7-C5	-6.35	1.35	1.39
1	Ad	482	A	O4'-C1'	6.35	1.50	1.41
1	Ad	1738	U	O4'-C1'	6.34	1.49	1.41
1	Ad	1713	C	O4'-C1'	6.34	1.49	1.41
1	Ad	54	C	P-O5'	-6.34	1.53	1.59
1	Ad	222	G	C2'-C1'	-6.33	1.46	1.53
1	Ad	1459	G	C2'-C1'	6.33	1.60	1.53
1	Ad	1278	C	C2'-C1'	-6.33	1.46	1.53
1	Ad	844	C	O4'-C1'	6.33	1.49	1.41
84	Aa	978	C	P-O5'	-6.32	1.53	1.59
86	Ab	42	A	C6-N6	6.32	1.39	1.33
1	Ad	802	A	O4'-C1'	6.32	1.49	1.41
1	Ad	1674	C	C2'-C1'	-6.32	1.46	1.53
1	Ad	200	C	C2'-C1'	-6.32	1.46	1.53
1	Ad	767	G	C2'-C1'	-6.32	1.46	1.53
86	Ab	75	G	N9-C8	6.32	1.42	1.37
1	Ad	1037	G	O4'-C1'	6.31	1.49	1.41
86	Ab	17	G	C6-N1	6.31	1.44	1.39
1	Ad	335	A	C5'-C4'	6.31	1.58	1.51
1	Ad	1259	G	C2'-C1'	6.31	1.60	1.53
1	Ad	1265	A	C2'-C1'	-6.31	1.46	1.53
86	Ab	8	A	C6-N6	6.31	1.39	1.33
1	Ad	1340	A	C2'-C1'	-6.30	1.46	1.53
1	Ad	1091	A	O4'-C1'	6.30	1.49	1.41
1	Ad	1106	G	C2'-C1'	-6.30	1.46	1.53
1	Ad	1419	U	C4'-C3'	6.30	1.60	1.53
1	Ad	1578	A	C5'-C4'	6.29	1.58	1.51
1	Ad	428	C	O4'-C1'	6.29	1.49	1.41
86	Ab	115	A	N7-C5	-6.29	1.35	1.39
1	Ad	1368	C	C2'-C1'	6.28	1.60	1.53
1	Ad	1540	U	P-O5'	-6.28	1.53	1.59
1	Ad	797	A	C2'-C1'	-6.28	1.46	1.53
1	Ad	6	G	C2'-C1'	-6.27	1.46	1.53
1	Ad	236	U	C2'-C1'	-6.27	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	Aa	2162	C	O3'-P	-6.26	1.53	1.61
1	Ad	1347	U	C2'-C1'	-6.26	1.46	1.53
1	Ad	1135	G	O4'-C1'	6.26	1.49	1.41
1	Ad	1334	G	C2'-C1'	6.25	1.60	1.53
86	Ab	109	U	N1-C6	6.25	1.43	1.38
3	Af	18	C	C2'-C1'	-6.25	1.46	1.53
1	Ad	269	A	C5'-C4'	6.25	1.58	1.51
1	Ad	1719	C	O4'-C1'	6.25	1.49	1.41
1	Ad	1004	U	C4'-C3'	6.24	1.60	1.53
1	Ad	1025	A	C2'-C1'	-6.24	1.46	1.53
1	Ad	1190	U	C2'-C1'	6.24	1.60	1.53
1	Ad	1430	A	C5'-C4'	6.24	1.58	1.51
1	Ad	1685	U	P-O5'	-6.24	1.53	1.59
1	Ad	1631	C	C2'-C1'	-6.23	1.46	1.53
86	Ab	60	G	O3'-P	-6.23	1.53	1.61
1	Ad	645	G	C2'-C1'	-6.22	1.46	1.53
1	Ad	844	C	C2'-C1'	6.22	1.60	1.53
1	Ad	1560	U	C2'-C1'	-6.22	1.46	1.53
1	Ad	1342	C	O4'-C1'	6.22	1.49	1.41
1	Ad	1660	C	C2'-C1'	-6.22	1.46	1.53
1	Ad	564	U	C2'-C1'	-6.21	1.46	1.53
1	Ad	1737	A	C5'-C4'	6.21	1.58	1.51
84	Aa	587	A	N7-C5	-6.21	1.35	1.39
84	Aa	1693	A	N7-C5	-6.21	1.35	1.39
86	Ab	56	G	N1-C2	6.20	1.42	1.37
1	Ad	563	C	C2'-C1'	-6.20	1.46	1.53
1	Ad	422	G	C5'-C4'	6.20	1.58	1.51
1	Ad	266	C	O3'-P	-6.19	1.53	1.61
1	Ad	90	G	C2'-C1'	-6.18	1.46	1.53
1	Ad	224	C	O4'-C1'	6.17	1.49	1.41
1	Ad	233	U	O4'-C1'	6.17	1.49	1.41
1	Ad	744	G	C2'-C1'	6.17	1.60	1.53
1	Ad	876	A	O4'-C1'	6.17	1.49	1.41
1	Ad	1131	G	C2'-C1'	6.17	1.60	1.53
1	Ad	72	A	C2'-C1'	-6.17	1.46	1.53
1	Ad	144	U	O4'-C1'	6.16	1.49	1.41
1	Ad	1785	U	C2'-C1'	-6.16	1.46	1.53
84	Aa	2177	U	O3'-P	-6.16	1.53	1.61
1	Ad	1796	G	O4'-C1'	6.16	1.49	1.41
86	Ab	28	U	C2'-C1'	-6.16	1.46	1.53
1	Ad	1221	A	C2'-C1'	6.16	1.60	1.53
1	Ad	1142	A	O3'-P	-6.15	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	834	A	P-O5'	-6.15	1.53	1.59
1	Ad	887	U	C2'-C1'	6.15	1.60	1.53
1	Ad	264	G	C5'-C4'	6.14	1.58	1.51
1	Ad	293	C	C2'-C1'	-6.14	1.46	1.53
1	Ad	1752	U	C2'-C1'	-6.14	1.46	1.53
86	Ab	50	A	C6-N1	6.14	1.39	1.35
1	Ad	1179	C	C2'-C1'	-6.13	1.46	1.53
86	Ab	109	U	P-O5'	-6.13	1.53	1.59
1	Ad	1571	G	O4'-C1'	6.13	1.49	1.41
86	Ab	93	U	O3'-P	-6.13	1.53	1.61
86	Ab	64	G	C2-N3	6.13	1.37	1.32
1	Ad	444	U	C2'-C1'	6.13	1.60	1.53
1	Ad	221	U	O4'-C1'	6.12	1.49	1.41
1	Ad	547	C	C2'-C1'	6.12	1.60	1.53
1	Ad	853	U	O4'-C1'	6.12	1.49	1.41
1	Ad	104	A	C2'-C1'	6.12	1.60	1.53
1	Ad	851	G	O4'-C1'	-6.12	1.33	1.41
1	Ad	1129	A	C2'-C1'	-6.12	1.46	1.53
1	Ad	1414	G	O4'-C1'	6.12	1.49	1.41
1	Ad	1698	A	C2'-C1'	-6.12	1.46	1.53
1	Ad	857	A	C5'-C4'	6.11	1.58	1.51
1	Ad	1438	U	C2'-C1'	-6.11	1.46	1.53
84	Aa	3234	G	N7-C5	-6.11	1.35	1.39
86	Ab	106	U	C2-N3	6.11	1.42	1.37
1	Ad	1250	C	O4'-C1'	-6.11	1.33	1.41
1	Ad	1536	U	O4'-C1'	6.10	1.49	1.41
1	Ad	1564	A	C2'-C1'	6.10	1.60	1.53
1	Ad	1044	A	O4'-C1'	-6.10	1.33	1.41
1	Ad	152	G	O3'-P	-6.09	1.53	1.61
84	Aa	279	G	C2-N3	6.09	1.37	1.32
1	Ad	730	G	O4'-C1'	-6.09	1.33	1.41
1	Ad	637	U	O4'-C1'	6.09	1.49	1.41
1	Ad	702	G	O4'-C1'	6.09	1.49	1.41
86	Ab	56	G	N7-C5	-6.08	1.35	1.39
1	Ad	1785	U	O4'-C1'	6.08	1.49	1.41
1	Ad	1170	G	C3'-C2'	-6.08	1.46	1.52
84	Aa	1079	G	C2-N3	6.08	1.37	1.32
1	Ad	555	G	O4'-C1'	6.07	1.49	1.41
1	Ad	326	G	O4'-C1'	6.07	1.49	1.41
1	Ad	625	A	C2'-C1'	6.07	1.60	1.53
1	Ad	1115	G	O4'-C1'	6.07	1.49	1.41
84	Aa	1526	A	N7-C5	-6.06	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1319	U	O4'-C1'	6.06	1.49	1.41
1	Ad	1071	C	C5'-C4'	6.06	1.58	1.51
1	Ad	1245	G	O4'-C1'	-6.06	1.33	1.41
1	Ad	783	C	C2'-C1'	-6.05	1.46	1.53
1	Ad	830	U	C2'-C1'	-6.05	1.46	1.53
1	Ad	957	A	O4'-C1'	6.04	1.49	1.41
1	Ad	843	G	C5'-C4'	6.04	1.58	1.51
1	Ad	494	G	C2'-C1'	6.03	1.59	1.53
1	Ad	1575	U	O3'-P	-6.03	1.53	1.61
84	Aa	3067	G	O3'-P	-6.03	1.53	1.61
1	Ad	1582	G	C2'-C1'	-6.03	1.46	1.53
86	Ab	71	A	C5-C4	6.02	1.43	1.38
86	Ab	26	C	N1-C6	6.02	1.40	1.37
1	Ad	113	A	O4'-C1'	6.01	1.49	1.41
1	Ad	1352	A	C2'-C1'	6.01	1.59	1.53
1	Ad	1408	G	O3'-P	-6.01	1.53	1.61
1	Ad	1768	U	C2'-C1'	-6.01	1.46	1.53
1	Ad	1249	G	C2'-C1'	-6.01	1.46	1.53
84	Aa	289	C	P-O5'	-6.01	1.53	1.59
1	Ad	1222	G	O4'-C1'	6.00	1.49	1.41
1	Ad	700	C	C2'-C1'	-6.00	1.46	1.53
1	Ad	1204	G	P-O5'	-6.00	1.53	1.59
86	Ab	44	C	C4-C5	6.00	1.47	1.43
86	Ab	69	A	N7-C5	-6.00	1.35	1.39
3	Af	15	A	C2'-C1'	-6.00	1.46	1.53
86	Ab	1	G	C6-N1	6.00	1.43	1.39
1	Ad	621	U	O4'-C1'	6.00	1.49	1.41
86	Ab	86	G	C5-C4	6.00	1.42	1.38
1	Ad	1203	G	C5'-C4'	6.00	1.58	1.51
1	Ad	46	A	C2'-C1'	-6.00	1.46	1.53
1	Ad	1679	A	O4'-C1'	5.99	1.49	1.41
84	Aa	1673	A	N7-C5	-5.99	1.35	1.39
1	Ad	1400	G	C2'-C1'	-5.99	1.46	1.53
86	Ab	93	U	C3'-C2'	-5.99	1.46	1.52
1	Ad	1718	C	C2'-C1'	-5.98	1.46	1.53
1	Ad	578	G	O4'-C1'	-5.98	1.33	1.41
1	Ad	1632	C	O3'-P	-5.98	1.53	1.61
86	Ab	57	C	C4-N4	5.98	1.39	1.33
86	Ab	69	A	N3-C4	-5.98	1.31	1.34
1	Ad	594	C	C2'-C1'	-5.98	1.46	1.53
1	Ad	189	U	O4'-C1'	-5.97	1.33	1.41
1	Ad	984	A	C2'-C1'	-5.97	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1569	U	C2'-C1'	5.97	1.59	1.53
86	Ab	58	G	C2-N3	5.97	1.37	1.32
1	Ad	1158	G	O4'-C1'	5.97	1.49	1.41
1	Ad	743	G	O4'-C1'	5.96	1.49	1.41
86	Ab	75	G	C5-C4	5.95	1.42	1.38
1	Ad	1194	C	C5'-C4'	5.95	1.58	1.51
1	Ad	243	U	O4'-C1'	-5.95	1.33	1.41
1	Ad	356	G	C5'-C4'	5.95	1.58	1.51
1	Ad	636	U	O4'-C1'	5.94	1.49	1.41
1	Ad	949	A	C2'-C1'	-5.94	1.46	1.53
1	Ad	1682	U	P-O5'	-5.94	1.53	1.59
2	Ae	65	U	C2'-C1'	-5.94	1.46	1.53
84	Aa	2132	A	N7-C5	-5.94	1.35	1.39
1	Ad	58	U	O4'-C1'	5.94	1.49	1.41
86	Ab	83	A	C6-N1	5.94	1.39	1.35
86	Ab	21	U	N3-C4	5.93	1.43	1.38
1	Ad	1320	C	P-O5'	-5.93	1.53	1.59
1	Ad	29	U	C2'-C1'	5.93	1.59	1.53
1	Ad	304	A	O4'-C1'	5.93	1.49	1.41
1	Ad	1577	A	C2'-C1'	-5.93	1.46	1.53
1	Ad	706	U	C2'-C1'	-5.92	1.46	1.53
84	Aa	860	G	N7-C5	-5.92	1.35	1.39
1	Ad	1791	A	O4'-C1'	5.92	1.49	1.41
1	Ad	1445	C	C2'-C1'	-5.91	1.46	1.53
1	Ad	112	U	C2'-C1'	-5.90	1.46	1.53
1	Ad	400	G	C2'-C1'	5.90	1.59	1.53
1	Ad	325	C	O4'-C1'	-5.90	1.33	1.41
86	Ab	119	C	C4-N4	5.90	1.39	1.33
1	Ad	112	U	O4'-C1'	5.89	1.49	1.41
1	Ad	374	A	O4'-C1'	5.89	1.49	1.41
1	Ad	563	C	O4'-C1'	5.89	1.49	1.41
1	Ad	1505	U	O4'-C1'	5.89	1.49	1.41
1	Ad	145	A	C2'-C1'	5.89	1.59	1.53
84	Aa	512	G	C2-N3	5.89	1.37	1.32
1	Ad	800	U	O3'-P	-5.88	1.54	1.61
86	Ab	71	A	N3-C4	5.88	1.38	1.34
1	Ad	90	G	O4'-C1'	5.88	1.49	1.41
1	Ad	382	A	C2'-C1'	-5.88	1.46	1.53
86	Ab	11	A	N9-C4	5.88	1.41	1.37
1	Ad	1086	A	O3'-P	-5.88	1.54	1.61
1	Ad	1156	A	O4'-C1'	5.87	1.49	1.41
1	Ad	1308	G	O4'-C1'	5.87	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	265	A	C2'-C1'	-5.87	1.46	1.53
1	Ad	1108	U	O3'-P	-5.87	1.54	1.61
1	Ad	981	G	C2'-C1'	-5.87	1.46	1.53
1	Ad	1638	U	C5'-C4'	5.87	1.58	1.51
2	Ae	69	G	O4'-C1'	5.87	1.49	1.41
1	Ad	1220	C	O3'-P	-5.86	1.54	1.61
1	Ad	1149	U	C2'-C1'	-5.86	1.47	1.53
1	Ad	103	U	O4'-C1'	5.86	1.49	1.41
1	Ad	604	U	O4'-C1'	5.86	1.49	1.41
84	Aa	494	C	C4'-C3'	5.86	1.59	1.53
1	Ad	1205	G	O4'-C1'	-5.86	1.34	1.41
84	Aa	97	G	C2-N3	5.85	1.37	1.32
86	Ab	83	A	C2'-C1'	-5.85	1.47	1.53
2	Ae	2	C	O4'-C1'	5.85	1.49	1.41
1	Ad	574	A	O4'-C1'	5.85	1.49	1.41
2	Ae	28	G	P-O5'	-5.84	1.53	1.59
1	Ad	621	U	C2'-C1'	-5.84	1.47	1.53
1	Ad	1276	U	O4'-C1'	5.84	1.49	1.41
2	Ae	33	U	O4'-C1'	5.84	1.49	1.41
1	Ad	1371	U	C2'-C1'	-5.83	1.47	1.53
1	Ad	1494	G	C5'-C4'	5.83	1.58	1.51
1	Ad	1709	U	O4'-C1'	5.83	1.49	1.41
1	Ad	1536	U	O3'-P	-5.83	1.54	1.61
84	Aa	1188	C	P-O5'	-5.83	1.53	1.59
1	Ad	618	C	O4'-C1'	5.83	1.49	1.41
1	Ad	928	A	C2'-C1'	-5.83	1.47	1.53
1	Ad	1588	C	C2'-C1'	-5.83	1.47	1.53
86	Ab	90	A	N7-C5	-5.83	1.35	1.39
1	Ad	137	A	C5'-C4'	5.82	1.58	1.51
84	Aa	2683	A	N7-C5	-5.82	1.35	1.39
1	Ad	1668	A	O4'-C1'	5.81	1.49	1.41
1	Ad	445	A	P-O5'	-5.80	1.53	1.59
1	Ad	1773	A	C2'-C1'	-5.80	1.47	1.53
1	Ad	1781	U	O4'-C1'	5.80	1.49	1.41
1	Ad	451	U	C2'-C1'	-5.80	1.47	1.53
84	Aa	2183	A	N7-C5	-5.80	1.35	1.39
1	Ad	227	G	O4'-C1'	5.80	1.49	1.41
1	Ad	1075	G	C5'-C4'	5.80	1.58	1.51
1	Ad	1175	G	C2'-C1'	-5.79	1.47	1.53
1	Ad	832	C	C5'-C4'	5.79	1.58	1.51
86	Ab	8	A	N7-C5	-5.79	1.35	1.39
1	Ad	816	U	O4'-C1'	5.79	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	890	G	O4'-C1'	5.79	1.49	1.41
86	Ab	50	A	N3-C4	-5.78	1.31	1.34
1	Ad	930	G	C2'-C1'	5.78	1.59	1.53
1	Ad	925	U	C2'-C1'	-5.78	1.47	1.53
1	Ad	1079	G	O4'-C1'	5.77	1.49	1.41
86	Ab	15	C	C5'-C4'	5.77	1.58	1.51
1	Ad	782	G	O4'-C1'	5.77	1.49	1.41
84	Aa	2569	G	P-O5'	-5.77	1.53	1.59
1	Ad	19	A	C2'-C1'	5.77	1.59	1.53
1	Ad	1643	A	O4'-C1'	-5.76	1.34	1.41
1	Ad	253	C	C4'-C3'	5.76	1.59	1.53
1	Ad	167	A	O4'-C1'	-5.76	1.34	1.41
1	Ad	870	A	O4'-C1'	-5.76	1.34	1.41
84	Aa	641	C	C4'-C3'	5.76	1.59	1.53
1	Ad	126	U	P-O5'	-5.76	1.53	1.59
1	Ad	1603	U	C2'-C1'	5.76	1.59	1.53
2	Ae	28	G	O4'-C1'	5.76	1.49	1.41
84	Aa	2527	G	C2-N3	5.75	1.37	1.32
1	Ad	98	C	O3'-P	-5.75	1.54	1.61
86	Ab	9	U	N3-C4	5.75	1.43	1.38
1	Ad	602	U	O4'-C1'	5.75	1.49	1.41
1	Ad	1714	G	C2'-C1'	-5.75	1.47	1.53
1	Ad	32	U	C2'-C1'	5.75	1.59	1.53
1	Ad	1009	U	C2'-C1'	5.74	1.59	1.53
1	Ad	401	A	O4'-C1'	5.74	1.49	1.41
84	Aa	721	A	P-O5'	-5.74	1.54	1.59
1	Ad	594	C	O4'-C1'	5.74	1.49	1.41
1	Ad	991	G	C2'-C1'	-5.74	1.47	1.53
1	Ad	6	G	C4'-C3'	5.73	1.59	1.53
1	Ad	104	A	O4'-C1'	-5.73	1.34	1.41
86	Ab	72	G	N7-C5	-5.73	1.35	1.39
84	Aa	2376	G	N1-C2	5.73	1.42	1.37
1	Ad	749	G	C2'-C1'	-5.72	1.47	1.53
2	Ae	72	G	C5'-C4'	5.72	1.58	1.51
84	Aa	1928	A	N7-C5	-5.72	1.35	1.39
1	Ad	377	G	O4'-C1'	5.72	1.49	1.41
1	Ad	1007	G	O3'-P	-5.72	1.54	1.61
1	Ad	1505	U	C2'-C1'	-5.72	1.47	1.53
1	Ad	1407	A	P-O5'	-5.72	1.54	1.59
84	Aa	2162	C	C2'-C1'	-5.72	1.47	1.53
84	Aa	2905	A	N7-C5	-5.71	1.35	1.39
1	Ad	911	A	O4'-C1'	5.71	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	271	C	O3'-P	-5.71	1.54	1.61
1	Ad	235	C	O3'-P	-5.71	1.54	1.61
1	Ad	745	C	O4'-C1'	5.71	1.49	1.41
86	Ab	99	G	C8-N7	-5.70	1.27	1.30
1	Ad	1484	U	O4'-C1'	5.70	1.49	1.41
1	Ad	1660	C	C5'-C4'	5.70	1.58	1.51
1	Ad	789	C	O4'-C1'	5.70	1.49	1.41
84	Aa	53	C	C2'-C1'	-5.70	1.47	1.53
1	Ad	914	U	P-O5'	-5.70	1.54	1.59
1	Ad	1456	U	C5'-C4'	5.70	1.58	1.51
1	Ad	335	A	O4'-C1'	5.69	1.49	1.41
1	Ad	837	G	C2'-C1'	-5.69	1.47	1.53
1	Ad	1489	A	O4'-C1'	5.69	1.49	1.41
1	Ad	1701	G	C2'-C1'	-5.69	1.47	1.53
1	Ad	1786	A	C3'-C2'	-5.69	1.46	1.52
86	Ab	36	C	N1-C6	5.69	1.40	1.37
1	Ad	83	U	O4'-C1'	5.68	1.49	1.41
1	Ad	566	G	O4'-C1'	5.68	1.49	1.41
1	Ad	780	A	C5'-C4'	5.68	1.58	1.51
85	Ac	5	U	P-O5'	-5.68	1.54	1.59
1	Ad	375	G	C2'-C1'	-5.68	1.47	1.53
1	Ad	1745	U	O4'-C1'	5.68	1.49	1.41
84	Aa	3335	G	C2-N3	5.68	1.37	1.32
1	Ad	750	U	O4'-C1'	5.68	1.49	1.41
1	Ad	928	A	O4'-C1'	5.68	1.49	1.41
1	Ad	1568	U	O4'-C1'	-5.68	1.34	1.41
1	Ad	1382	C	C2'-C1'	-5.67	1.47	1.53
1	Ad	51	A	C2'-C1'	-5.67	1.47	1.53
1	Ad	126	U	C5'-C4'	5.67	1.58	1.51
1	Ad	1000	A	O4'-C1'	5.67	1.49	1.41
1	Ad	1264	U	O4'-C1'	5.67	1.49	1.41
84	Aa	279	G	P-O5'	-5.67	1.54	1.59
1	Ad	101	A	O4'-C1'	5.66	1.49	1.41
1	Ad	1044	A	O3'-P	-5.66	1.54	1.61
1	Ad	987	U	C5'-C4'	5.65	1.58	1.51
1	Ad	1515	G	O4'-C1'	5.65	1.49	1.41
1	Ad	815	A	O4'-C1'	5.65	1.49	1.41
1	Ad	990	G	C4'-C3'	5.65	1.59	1.53
1	Ad	1544	G	O4'-C1'	5.65	1.49	1.41
84	Aa	716	A	N7-C5	-5.65	1.35	1.39
1	Ad	549	A	P-O5'	-5.65	1.54	1.59
1	Ad	1516	C	O4'-C1'	5.65	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	240	U	O4'-C1'	5.64	1.49	1.41
1	Ad	337	A	C5'-C4'	5.64	1.58	1.51
1	Ad	1604	C	O4'-C1'	-5.64	1.34	1.41
84	Aa	2095	C	O3'-P	-5.64	1.54	1.61
1	Ad	800	U	O4'-C1'	-5.63	1.34	1.41
1	Ad	1101	C	C2'-C1'	-5.63	1.47	1.53
84	Aa	694	U	P-O5'	-5.63	1.54	1.59
1	Ad	1302	C	C2'-C1'	-5.63	1.47	1.53
84	Aa	2196	G	C2-N3	5.63	1.37	1.32
1	Ad	116	G	C5'-C4'	5.63	1.58	1.51
1	Ad	1494	G	O3'-P	-5.63	1.54	1.61
1	Ad	59	G	C2'-C1'	-5.62	1.47	1.53
1	Ad	438	G	O3'-P	-5.62	1.54	1.61
1	Ad	981	G	O4'-C1'	5.61	1.49	1.41
1	Ad	1005	C	C2'-C1'	5.61	1.59	1.53
1	Ad	1209	C	O3'-P	-5.61	1.54	1.61
86	Ab	120	C	N1-C6	5.61	1.40	1.37
1	Ad	251	U	C2'-C1'	5.61	1.59	1.53
1	Ad	463	G	O4'-C1'	5.61	1.49	1.41
1	Ad	731	G	C2'-C1'	5.60	1.59	1.53
84	Aa	198	A	P-O5'	-5.60	1.54	1.59
86	Ab	99	G	C5'-C4'	5.60	1.58	1.51
1	Ad	1668	A	C2'-C1'	-5.60	1.47	1.53
86	Ab	100	A	N9-C4	-5.60	1.34	1.37
1	Ad	1264	U	C2'-C1'	-5.60	1.47	1.53
1	Ad	35	U	P-O5'	-5.60	1.54	1.59
1	Ad	76	U	O4'-C1'	5.60	1.49	1.41
1	Ad	377	G	C2'-C1'	-5.59	1.47	1.53
84	Aa	2354	G	C2-N3	5.59	1.37	1.32
1	Ad	719	C	C2'-C1'	-5.59	1.47	1.53
1	Ad	1153	C	C2'-C1'	-5.58	1.47	1.53
1	Ad	1634	U	O4'-C1'	5.58	1.49	1.41
1	Ad	828	G	O4'-C1'	-5.58	1.34	1.41
1	Ad	1016	C	C2'-C1'	-5.57	1.47	1.53
1	Ad	466	G	C5'-C4'	5.57	1.58	1.51
1	Ad	1705	C	C5'-C4'	5.57	1.58	1.51
1	Ad	184	C	C2'-C1'	-5.57	1.47	1.53
1	Ad	579	C	O4'-C1'	5.57	1.48	1.41
1	Ad	1575	U	C2'-C1'	5.57	1.59	1.53
1	Ad	446	C	O4'-C1'	5.57	1.48	1.41
2	Ae	14	A	C2'-C1'	-5.57	1.47	1.53
1	Ad	449	A	O4'-C1'	5.56	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1132	G	C4'-C3'	5.55	1.59	1.53
1	Ad	1632	C	O4'-C1'	5.55	1.48	1.41
1	Ad	1206	A	C4'-C3'	5.55	1.59	1.53
1	Ad	1498	A	C4'-O4'	-5.55	1.38	1.45
84	Aa	2266	A	N7-C5	-5.55	1.35	1.39
1	Ad	291	G	O4'-C1'	-5.54	1.34	1.41
86	Ab	107	C	C4-N4	5.54	1.39	1.33
1	Ad	852	A	C2'-C1'	-5.54	1.47	1.53
1	Ad	1056	A	O4'-C1'	-5.54	1.34	1.41
84	Aa	2163	G	C2-N3	5.54	1.37	1.32
1	Ad	1276	U	C2'-C1'	-5.54	1.47	1.53
1	Ad	1634	U	C2'-C1'	-5.54	1.47	1.53
1	Ad	508	U	O4'-C1'	5.53	1.48	1.41
1	Ad	708	G	C2'-C1'	-5.53	1.47	1.53
1	Ad	1724	U	O4'-C1'	5.53	1.48	1.41
85	Ac	70	G	O3'-P	-5.53	1.54	1.61
1	Ad	282	C	O5'-C5'	-5.53	1.33	1.42
84	Aa	1	G	N7-C5	-5.53	1.35	1.39
86	Ab	48	G	N7-C5	-5.53	1.35	1.39
84	Aa	773	G	P-O5'	-5.53	1.54	1.59
84	Aa	2513	U	C5'-C4'	-5.53	1.44	1.51
1	Ad	567	U	O4'-C1'	5.53	1.48	1.41
1	Ad	484	A	C2'-C1'	-5.52	1.47	1.53
1	Ad	1808	U	C5'-C4'	5.52	1.57	1.51
84	Aa	2634	U	P-O5'	-5.52	1.54	1.59
1	Ad	62	A	C5'-C4'	5.52	1.57	1.51
1	Ad	931	A	C5'-C4'	5.52	1.57	1.51
1	Ad	1286	U	O4'-C1'	5.52	1.48	1.41
1	Ad	1136	A	C3'-C2'	-5.52	1.46	1.52
1	Ad	1431	A	O4'-C1'	5.52	1.48	1.41
1	Ad	724	U	C2'-C1'	5.52	1.59	1.53
84	Aa	76	A	C6-N6	5.52	1.38	1.33
84	Aa	1356	G	C2-N3	5.51	1.37	1.32
1	Ad	1645	C	C2'-C1'	5.51	1.59	1.53
1	Ad	1383	U	C2'-C1'	5.51	1.59	1.53
84	Aa	935	U	C2-N3	5.51	1.41	1.37
86	Ab	90	A	C6-N6	5.51	1.38	1.33
1	Ad	200	C	C5'-C4'	5.50	1.57	1.51
1	Ad	905	A	O3'-P	-5.50	1.54	1.61
1	Ad	1235	U	O4'-C1'	5.50	1.48	1.41
84	Aa	2356	A	N7-C5	-5.50	1.35	1.39
84	Aa	2513	U	O5'-C5'	-5.50	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	Ab	72	G	O3'-P	-5.50	1.54	1.61
1	Ad	1018	A	O4'-C1'	5.49	1.48	1.41
1	Ad	1242	A	O4'-C1'	5.49	1.48	1.41
2	Ae	44	A	C2'-C1'	5.49	1.59	1.53
84	Aa	2167	G	C4'-O4'	-5.49	1.38	1.45
1	Ad	1479	U	O3'-P	-5.49	1.54	1.61
1	Ad	1570	G	O3'-P	-5.48	1.54	1.61
1	Ad	325	C	C5'-C4'	5.48	1.57	1.51
2	Ae	42	C	C4'-C3'	5.48	1.59	1.53
1	Ad	1121	A	C2'-C1'	-5.48	1.47	1.53
1	Ad	201	G	O4'-C1'	5.47	1.48	1.41
2	Ae	28	G	C5'-C4'	5.47	1.57	1.51
86	Ab	54	A	C2'-C1'	-5.47	1.47	1.53
1	Ad	283	G	P-O5'	-5.47	1.54	1.59
1	Ad	756	U	C2'-C1'	-5.47	1.47	1.53
1	Ad	53	G	O4'-C1'	5.47	1.48	1.41
1	Ad	868	A	C2'-C1'	5.47	1.59	1.53
84	Aa	1177	G	N3-C4	-5.47	1.31	1.35
1	Ad	758	A	O4'-C1'	5.47	1.48	1.41
1	Ad	1362	A	O3'-P	-5.47	1.54	1.61
1	Ad	550	U	C2'-C1'	-5.46	1.47	1.53
1	Ad	830	U	O4'-C1'	5.46	1.48	1.41
1	Ad	1766	A	O3'-P	-5.46	1.54	1.61
1	Ad	571	A	C3'-C2'	-5.46	1.46	1.52
1	Ad	1585	A	C2'-C1'	-5.46	1.47	1.53
1	Ad	1623	C	C2'-C1'	5.46	1.59	1.53
1	Ad	1479	U	O4'-C1'	-5.45	1.34	1.41
84	Aa	475	U	O3'-P	-5.45	1.54	1.61
1	Ad	303	A	C2'-C1'	5.45	1.59	1.53
1	Ad	802	A	C2'-C1'	-5.45	1.47	1.53
1	Ad	79	A	C5'-C4'	5.45	1.57	1.51
1	Ad	766	A	C2'-C1'	-5.45	1.47	1.53
1	Ad	1312	G	O4'-C1'	5.44	1.48	1.41
1	Ad	236	U	O3'-P	-5.44	1.54	1.61
84	Aa	1356	G	N7-C5	-5.44	1.35	1.39
84	Aa	836	G	N7-C5	-5.44	1.35	1.39
84	Aa	307	C	P-O5'	-5.44	1.54	1.59
1	Ad	1180	U	O4'-C1'	5.44	1.48	1.41
84	Aa	2806	A	N7-C5	-5.43	1.35	1.39
1	Ad	756	U	O4'-C1'	5.43	1.48	1.41
1	Ad	954	C	C3'-C2'	-5.43	1.46	1.52
1	Ad	1792	A	O4'-C1'	5.43	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	Aa	1319	U	P-O5'	-5.43	1.54	1.59
86	Ab	3	A	N9-C4	-5.43	1.34	1.37
1	Ad	429	A	O4'-C1'	5.42	1.48	1.41
1	Ad	970	U	O4'-C1'	5.42	1.48	1.41
1	Ad	1183	G	C4'-C3'	5.42	1.59	1.53
1	Ad	811	U	O4'-C1'	5.42	1.48	1.41
84	Aa	2566	C	O3'-P	-5.42	1.54	1.61
84	Aa	2756	G	C2-N3	5.42	1.37	1.32
86	Ab	42	A	N7-C5	-5.42	1.35	1.39
84	Aa	527	G	C2-N3	5.42	1.37	1.32
1	Ad	189	U	O3'-P	-5.41	1.54	1.61
1	Ad	485	A	C2'-C1'	-5.41	1.47	1.53
1	Ad	705	A	O3'-P	-5.41	1.54	1.61
1	Ad	1334	G	O4'-C1'	5.41	1.48	1.41
84	Aa	334	A	C6-N6	5.41	1.38	1.33
86	Ab	22	A	N9-C4	-5.41	1.34	1.37
1	Ad	1377	G	C5'-C4'	5.41	1.57	1.51
1	Ad	1247	G	O4'-C1'	-5.41	1.34	1.41
1	Ad	952	U	O4'-C1'	5.41	1.48	1.41
1	Ad	491	G	O4'-C1'	-5.40	1.34	1.41
86	Ab	3	A	C6-N6	5.40	1.38	1.33
1	Ad	60	C	O4'-C1'	5.40	1.48	1.41
84	Aa	2969	A	N7-C5	-5.40	1.36	1.39
85	Ac	15	G	P-O5'	-5.40	1.54	1.59
1	Ad	624	A	C2'-C1'	5.39	1.59	1.53
1	Ad	1629	U	O4'-C1'	5.39	1.48	1.41
1	Ad	1687	G	C4'-C3'	-5.39	1.47	1.52
1	Ad	405	A	O4'-C1'	5.39	1.48	1.41
1	Ad	739	U	O4'-C1'	5.39	1.48	1.41
1	Ad	1277	G	O4'-C1'	-5.39	1.34	1.41
86	Ab	56	G	C2-N3	5.39	1.37	1.32
84	Aa	2801	A	C6-N6	5.39	1.38	1.33
84	Aa	2502	U	O3'-P	-5.39	1.54	1.61
2	Ae	70	G	C5'-C4'	5.38	1.57	1.51
84	Aa	5	G	C2-N3	5.38	1.37	1.32
84	Aa	2513	U	O3'-P	-5.38	1.54	1.61
84	Aa	3177	A	C6-N6	5.38	1.38	1.33
1	Ad	1418	G	C5'-C4'	5.38	1.57	1.51
1	Ad	1176	A	O4'-C1'	5.38	1.48	1.41
1	Ad	100	C	O4'-C1'	5.38	1.48	1.41
1	Ad	206	U	O3'-P	-5.38	1.54	1.61
1	Ad	794	G	C2'-C1'	-5.37	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1669	U	O4'-C1'	5.37	1.48	1.41
1	Ad	519	A	C4'-C3'	5.37	1.59	1.53
84	Aa	1600	A	P-O5'	-5.37	1.54	1.59
1	Ad	543	G	O4'-C1'	5.37	1.48	1.41
1	Ad	545	A	C2'-C1'	-5.37	1.47	1.53
84	Aa	1317	G	C2'-C1'	-5.37	1.47	1.53
1	Ad	64	U	C2'-C1'	5.37	1.59	1.53
1	Ad	1807	A	C2'-C1'	5.37	1.59	1.53
84	Aa	2552	U	O3'-P	-5.37	1.54	1.61
1	Ad	323	U	O4'-C1'	5.37	1.48	1.41
1	Ad	778	G	O4'-C1'	-5.37	1.34	1.41
84	Aa	1309	U	O3'-P	-5.37	1.54	1.61
84	Aa	2610	G	O3'-P	-5.36	1.54	1.61
1	Ad	1143	A	O4'-C1'	5.36	1.48	1.41
1	Ad	99	U	O4'-C1'	5.36	1.48	1.41
1	Ad	901	U	C2'-C1'	-5.36	1.47	1.53
1	Ad	139	U	P-O5'	-5.36	1.54	1.59
1	Ad	405	A	C2'-C1'	-5.36	1.47	1.53
1	Ad	529	A	C2'-C1'	-5.35	1.47	1.53
1	Ad	1182	C	P-O5'	-5.35	1.54	1.59
1	Ad	1389	G	C2'-C1'	-5.34	1.47	1.53
1	Ad	1442	A	O3'-P	-5.34	1.54	1.61
1	Ad	1642	C	C2'-C1'	-5.34	1.47	1.53
84	Aa	2290	A	N7-C5	-5.34	1.36	1.39
1	Ad	1091	A	C4'-C3'	5.34	1.59	1.53
1	Ad	1309	U	O4'-C1'	-5.34	1.34	1.41
84	Aa	567	G	N7-C5	-5.34	1.36	1.39
84	Aa	87	A	C6-N6	5.33	1.38	1.33
1	Ad	1805	U	C5'-C4'	5.33	1.57	1.51
86	Ab	15	C	N3-C4	5.33	1.37	1.33
84	Aa	747	A	N7-C5	-5.33	1.36	1.39
1	Ad	418	C	O4'-C1'	5.32	1.48	1.41
1	Ad	479	A	C2'-C1'	-5.32	1.47	1.53
1	Ad	824	U	P-O5'	-5.32	1.54	1.59
1	Ad	1546	U	O4'-C1'	5.32	1.48	1.41
1	Ad	1132	G	P-O5'	-5.32	1.54	1.59
1	Ad	1525	U	C4'-C3'	5.32	1.59	1.53
84	Aa	73	A	N7-C5	-5.32	1.36	1.39
84	Aa	2216	G	C6-N1	5.32	1.43	1.39
1	Ad	630	U	O4'-C1'	5.32	1.48	1.41
1	Ad	790	U	O4'-C1'	5.32	1.48	1.41
84	Aa	144	A	N7-C5	-5.32	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	500	G	O3'-P	-5.31	1.54	1.61
2	Ae	4	G	P-O5'	-5.31	1.54	1.59
2	Ae	8	U	C2'-C1'	5.31	1.59	1.53
86	Ab	108	G	C2-N3	5.31	1.36	1.32
1	Ad	1805	U	C2'-C1'	-5.31	1.47	1.53
84	Aa	2178	G	O3'-P	-5.31	1.54	1.61
1	Ad	1576	C	C2'-C1'	5.31	1.59	1.53
86	Ab	27	A	N9-C8	5.31	1.42	1.37
1	Ad	338	G	O4'-C1'	-5.31	1.34	1.41
84	Aa	3135	A	N7-C5	-5.31	1.36	1.39
84	Aa	935	U	O3'-P	-5.30	1.54	1.61
84	Aa	2178	G	C3'-O3'	-5.30	1.34	1.42
1	Ad	318	C	O3'-P	-5.29	1.54	1.61
1	Ad	1478	C	O4'-C1'	5.29	1.48	1.41
1	Ad	493	C	O4'-C1'	5.29	1.48	1.41
84	Aa	267	G	N7-C5	-5.29	1.36	1.39
1	Ad	1738	U	P-O5'	-5.29	1.54	1.59
86	Ab	119	C	C3'-C2'	-5.29	1.47	1.52
84	Aa	1747	A	N7-C5	-5.29	1.36	1.39
86	Ab	93	U	N1-C2	5.29	1.43	1.38
1	Ad	1437	C	C4'-C3'	5.29	1.58	1.53
84	Aa	3177	A	N7-C5	-5.29	1.36	1.39
86	Ab	52	U	C2'-C1'	-5.28	1.47	1.53
1	Ad	752	A	O4'-C1'	5.28	1.48	1.41
1	Ad	527	C	C2'-C1'	-5.28	1.47	1.53
1	Ad	1295	G	C2'-C1'	-5.28	1.47	1.53
1	Ad	642	C	C3'-C2'	5.28	1.58	1.52
84	Aa	1310	G	N7-C5	-5.28	1.36	1.39
86	Ab	26	C	P-O5'	-5.28	1.54	1.59
1	Ad	1711	G	C2'-C1'	-5.27	1.47	1.53
84	Aa	2163	G	C2'-C1'	-5.27	1.47	1.53
1	Ad	160	A	C2'-C1'	-5.27	1.47	1.53
1	Ad	327	A	O3'-P	-5.27	1.54	1.61
86	Ab	111	U	C2-N3	5.27	1.41	1.37
1	Ad	1265	A	O4'-C1'	5.27	1.48	1.41
84	Aa	1250	G	C2'-C1'	-5.27	1.47	1.53
1	Ad	23	G	O3'-P	-5.27	1.54	1.61
1	Ad	168	U	C5'-C4'	5.26	1.57	1.51
1	Ad	775	A	O4'-C1'	5.26	1.48	1.41
86	Ab	12	U	C2-N3	5.26	1.41	1.37
1	Ad	1608	A	O4'-C1'	5.26	1.48	1.41
1	Ad	1786	A	O4'-C1'	5.26	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1251	U	O4'-C1'	5.26	1.48	1.41
1	Ad	1347	U	O4'-C1'	5.26	1.48	1.41
84	Aa	1241	G	O3'-P	-5.26	1.54	1.61
86	Ab	30	G	C6-N1	5.26	1.43	1.39
1	Ad	867	A	P-O5'	-5.25	1.54	1.59
1	Ad	240	U	C5'-C4'	5.25	1.57	1.51
1	Ad	266	C	C5'-C4'	5.25	1.57	1.51
1	Ad	827	C	O4'-C1'	5.25	1.48	1.41
1	Ad	9	U	O4'-C1'	5.25	1.48	1.41
1	Ad	1411	C	O4'-C1'	5.25	1.48	1.41
84	Aa	553	C	O3'-P	-5.25	1.54	1.61
1	Ad	926	G	O4'-C1'	5.25	1.48	1.41
1	Ad	1522	U	O4'-C1'	-5.25	1.34	1.41
84	Aa	294	A	N7-C5	-5.25	1.36	1.39
84	Aa	252	A	N7-C5	-5.24	1.36	1.39
1	Ad	8	U	C2'-C1'	5.24	1.59	1.53
1	Ad	951	U	O4'-C1'	5.24	1.48	1.41
1	Ad	539	A	O4'-C1'	5.24	1.48	1.41
1	Ad	545	A	O4'-C1'	-5.24	1.34	1.41
84	Aa	2239	A	N7-C5	-5.24	1.36	1.39
86	Ab	108	G	C5-C6	-5.24	1.37	1.42
1	Ad	1036	U	O4'-C1'	5.24	1.48	1.41
1	Ad	1799	G	C2'-C1'	-5.24	1.47	1.53
84	Aa	372	A	O3'-P	-5.23	1.54	1.61
84	Aa	2943	A	N7-C5	-5.23	1.36	1.39
1	Ad	1584	A	P-O5'	-5.23	1.54	1.59
1	Ad	1771	U	C2'-C1'	-5.23	1.47	1.53
86	Ab	64	G	C5-C4	5.23	1.42	1.38
1	Ad	131	C	O3'-P	-5.23	1.54	1.61
1	Ad	764	U	O4'-C1'	5.23	1.48	1.41
86	Ab	26	C	N3-C4	5.23	1.37	1.33
1	Ad	1114	G	O4'-C1'	5.23	1.48	1.41
1	Ad	1029	U	O4'-C1'	5.23	1.48	1.41
84	Aa	99	A	N7-C5	-5.23	1.36	1.39
84	Aa	2502	U	C2'-C1'	-5.23	1.47	1.53
1	Ad	215	A	O3'-P	-5.22	1.54	1.61
1	Ad	864	A	C5'-C4'	5.22	1.57	1.51
84	Aa	1062	G	P-O5'	-5.22	1.54	1.59
85	Ac	85	G	C2-N3	5.22	1.36	1.32
1	Ad	205	U	P-O5'	-5.22	1.54	1.59
84	Aa	1676	A	N7-C5	-5.22	1.36	1.39
1	Ad	1446	C	O3'-P	-5.22	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	1795	U	O4'-C1'	5.22	1.48	1.41
1	Ad	129	U	C2'-C1'	5.21	1.59	1.53
1	Ad	1078	G	C2'-C1'	-5.21	1.47	1.53
1	Ad	597	U	O4'-C1'	5.21	1.48	1.41
1	Ad	1217	G	O4'-C1'	-5.21	1.34	1.41
1	Ad	1729	A	C5'-C4'	5.21	1.57	1.51
84	Aa	819	A	O3'-P	-5.21	1.54	1.61
1	Ad	894	U	O3'-P	-5.21	1.54	1.61
2	Ae	2	C	C2'-C1'	-5.21	1.47	1.53
86	Ab	1	G	N7-C5	-5.21	1.36	1.39
1	Ad	1021	C	C2'-C1'	-5.21	1.47	1.53
1	Ad	1202	G	C5'-C4'	5.21	1.57	1.51
84	Aa	610	G	N7-C5	-5.21	1.36	1.39
1	Ad	597	U	C2'-C1'	-5.20	1.47	1.53
84	Aa	265	G	C2-N3	5.20	1.36	1.32
1	Ad	1314	U	O4'-C1'	5.20	1.48	1.41
1	Ad	811	U	C2'-C1'	-5.20	1.47	1.53
1	Ad	1337	C	C2'-C1'	-5.20	1.47	1.53
1	Ad	611	G	P-O5'	-5.19	1.54	1.59
84	Aa	1486	G	C2-N3	5.19	1.36	1.32
1	Ad	150	U	O3'-P	-5.19	1.54	1.61
1	Ad	793	G	O4'-C1'	5.19	1.48	1.41
84	Aa	1649	G	C2-N3	5.19	1.36	1.32
1	Ad	262	U	O3'-P	-5.19	1.54	1.61
1	Ad	909	G	C2'-C1'	-5.19	1.47	1.53
85	Ac	150	G	C2'-C1'	-5.18	1.47	1.53
1	Ad	1025	A	O4'-C1'	5.18	1.48	1.41
1	Ad	1296	G	O3'-P	-5.18	1.54	1.61
1	Ad	1098	A	P-O5'	5.18	1.65	1.59
1	Ad	1262	U	O4'-C1'	-5.18	1.34	1.41
1	Ad	845	C	O3'-P	-5.18	1.54	1.61
1	Ad	1360	G	C2'-C1'	5.18	1.59	1.53
1	Ad	1528	U	C2'-C1'	5.18	1.59	1.53
1	Ad	542	A	C4'-C3'	5.18	1.58	1.53
1	Ad	874	A	O4'-C1'	5.17	1.48	1.41
1	Ad	1116	G	O4'-C1'	-5.17	1.34	1.41
84	Aa	2968	G	O3'-P	-5.17	1.54	1.61
86	Ab	19	A	N3-C4	-5.17	1.31	1.34
1	Ad	211	G	O4'-C1'	5.17	1.48	1.41
1	Ad	517	U	C5'-C4'	5.17	1.57	1.51
1	Ad	945	A	C5'-C4'	5.17	1.57	1.51
1	Ad	1307	U	O4'-C1'	5.17	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	318	C	C2'-C1'	-5.17	1.47	1.53
1	Ad	1064	U	O3'-P	-5.17	1.54	1.61
1	Ad	898	U	O4'-C1'	5.16	1.48	1.41
1	Ad	1527	U	C2'-C1'	5.16	1.59	1.53
1	Ad	1658	U	C2'-C1'	-5.16	1.47	1.53
1	Ad	728	C	O3'-P	-5.16	1.54	1.61
1	Ad	1198	A	O4'-C1'	5.16	1.48	1.41
1	Ad	123	U	P-O5'	-5.16	1.54	1.59
1	Ad	446	C	C2'-C1'	-5.16	1.47	1.53
84	Aa	2093	G	C2-N3	5.16	1.36	1.32
86	Ab	51	G	C3'-C2'	5.16	1.58	1.52
1	Ad	838	U	C5'-C4'	5.16	1.57	1.51
1	Ad	1309	U	C2'-C1'	5.16	1.59	1.53
1	Ad	20	G	C5'-C4'	5.16	1.57	1.51
1	Ad	379	U	C2'-C1'	5.16	1.59	1.53
1	Ad	1155	G	C5'-C4'	5.16	1.57	1.51
1	Ad	1546	U	C2'-C1'	5.15	1.59	1.53
84	Aa	2494	A	N7-C5	-5.15	1.36	1.39
84	Aa	2523	G	O3'-P	-5.15	1.54	1.61
1	Ad	143	A	O3'-P	-5.15	1.54	1.61
1	Ad	732	G	C2'-C1'	5.15	1.59	1.53
84	Aa	3364	A	P-O5'	-5.15	1.54	1.59
1	Ad	231	U	O4'-C1'	5.15	1.48	1.41
84	Aa	1958	G	O3'-P	-5.15	1.54	1.61
86	Ab	114	C	N1-C6	5.15	1.40	1.37
1	Ad	726	G	C2'-C1'	-5.14	1.47	1.53
1	Ad	564	U	O4'-C1'	5.14	1.48	1.41
84	Aa	723	G	C4'-C3'	5.14	1.58	1.53
84	Aa	16	A	P-O5'	-5.14	1.54	1.59
84	Aa	641	C	C5'-C4'	5.14	1.57	1.51
1	Ad	133	U	O3'-P	-5.14	1.54	1.61
1	Ad	469	G	O4'-C1'	5.13	1.48	1.41
1	Ad	586	U	O4'-C1'	5.13	1.48	1.41
1	Ad	1320	C	O4'-C1'	5.13	1.48	1.41
1	Ad	161	G	C2'-C1'	5.13	1.58	1.53
84	Aa	1677	G	C2-N3	5.13	1.36	1.32
84	Aa	2374	G	N1-C2	5.13	1.41	1.37
1	Ad	536	U	O3'-P	-5.13	1.54	1.61
1	Ad	1440	U	C5'-C4'	5.13	1.57	1.51
84	Aa	579	G	C2-N3	5.12	1.36	1.32
86	Ab	71	A	N7-C5	-5.12	1.36	1.39
86	Ab	82	G	N9-C4	-5.12	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	522	A	C2'-C1'	-5.12	1.47	1.53
1	Ad	1011	C	O4'-C1'	5.12	1.48	1.41
1	Ad	1605	A	O4'-C1'	5.12	1.48	1.41
84	Aa	752	U	P-O5'	-5.12	1.54	1.59
1	Ad	440	A	C2'-C1'	5.12	1.58	1.53
86	Ab	47	C	N3-C4	5.12	1.37	1.33
1	Ad	1067	A	C2'-C1'	5.12	1.58	1.53
1	Ad	1356	A	C2'-C1'	-5.12	1.47	1.53
84	Aa	1945	A	O3'-P	-5.12	1.55	1.61
1	Ad	1493	A	C4'-C3'	5.11	1.58	1.53
1	Ad	1527	U	O4'-C1'	5.11	1.48	1.41
1	Ad	1544	G	C2'-C1'	-5.11	1.47	1.53
1	Ad	1770	G	C2'-C1'	-5.11	1.47	1.53
84	Aa	1274	A	N7-C5	-5.11	1.36	1.39
1	Ad	518	G	O3'-P	-5.11	1.55	1.61
84	Aa	2393	G	C2'-C1'	-5.11	1.47	1.53
1	Ad	1022	U	C2'-C1'	-5.11	1.47	1.53
86	Ab	38	U	C2'-C1'	-5.11	1.47	1.53
1	Ad	1132	G	C2'-C1'	5.11	1.58	1.53
1	Ad	235	C	C5'-C4'	5.10	1.57	1.51
1	Ad	1153	C	O4'-C1'	5.10	1.48	1.41
84	Aa	1674	A	C6-N6	5.10	1.38	1.33
1	Ad	1118	A	C2'-C1'	-5.10	1.47	1.53
1	Ad	279	C	C2'-C1'	5.10	1.58	1.53
1	Ad	532	U	O4'-C1'	5.10	1.48	1.41
1	Ad	833	U	C2'-C1'	-5.10	1.47	1.53
1	Ad	1481	A	O4'-C1'	5.10	1.48	1.41
1	Ad	1068	G	C5'-C4'	5.10	1.57	1.51
1	Ad	1228	G	O4'-C1'	5.10	1.48	1.41
1	Ad	1464	G	O4'-C1'	5.10	1.48	1.41
86	Ab	87	G	C6-N1	5.09	1.43	1.39
1	Ad	348	A	O4'-C1'	5.09	1.48	1.41
1	Ad	995	C	O3'-P	-5.09	1.55	1.61
1	Ad	1708	U	C2'-C1'	-5.09	1.47	1.53
84	Aa	1796	A	N7-C5	-5.09	1.36	1.39
1	Ad	925	U	O4'-C1'	5.09	1.48	1.41
1	Ad	298	C	O3'-P	-5.09	1.55	1.61
2	Ae	5	U	P-O5'	-5.09	1.54	1.59
84	Aa	2770	U	P-O5'	-5.09	1.54	1.59
86	Ab	6	C	O3'-P	-5.09	1.55	1.61
1	Ad	414	A	O4'-C1'	5.09	1.48	1.41
84	Aa	1676	A	C6-N6	5.09	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	Aa	2291	A	N7-C5	-5.09	1.36	1.39
84	Aa	2503	A	C6-N6	5.09	1.38	1.33
1	Ad	1017	U	O3'-P	-5.08	1.55	1.61
1	Ad	1350	C	P-O5'	5.08	1.64	1.59
84	Aa	1600	A	N7-C5	-5.08	1.36	1.39
84	Aa	2307	A	N7-C5	-5.08	1.36	1.39
86	Ab	86	G	C6-N1	5.08	1.43	1.39
1	Ad	414	A	C3'-C2'	-5.08	1.47	1.52
1	Ad	648	C	O3'-P	-5.08	1.55	1.61
2	Ae	13	U	O4'-C1'	5.08	1.48	1.41
1	Ad	532	U	C4'-C3'	5.08	1.58	1.53
84	Aa	936	A	N7-C5	-5.08	1.36	1.39
84	Aa	122	A	N7-C5	-5.08	1.36	1.39
84	Aa	2174	C	C2'-C1'	-5.08	1.47	1.53
84	Aa	2751	A	N7-C5	-5.08	1.36	1.39
1	Ad	10	G	O4'-C1'	5.08	1.48	1.41
2	Ae	57	A	C5'-C4'	5.08	1.57	1.51
84	Aa	293	A	N7-C5	-5.08	1.36	1.39
2	Ae	5	U	C2'-C1'	5.07	1.58	1.53
86	Ab	24	G	P-O5'	-5.07	1.54	1.59
1	Ad	1182	C	O4'-C1'	5.07	1.48	1.41
84	Aa	1486	G	N7-C5	-5.07	1.36	1.39
86	Ab	98	G	N1-C2	5.07	1.41	1.37
1	Ad	941	G	C2'-C1'	-5.07	1.47	1.53
1	Ad	1194	C	O3'-P	-5.07	1.55	1.61
84	Aa	1310	G	C2-N3	5.07	1.36	1.32
86	Ab	48	G	N1-C2	5.07	1.41	1.37
1	Ad	487	A	P-O5'	-5.07	1.54	1.59
1	Ad	1218	U	C2'-C1'	5.06	1.58	1.53
1	Ad	815	A	P-O5'	-5.06	1.54	1.59
1	Ad	489	C	O4'-C1'	5.06	1.48	1.41
1	Ad	89	U	O4'-C1'	5.06	1.48	1.41
1	Ad	897	A	C2'-C1'	5.06	1.58	1.53
1	Ad	917	U	O4'-C1'	5.06	1.48	1.41
86	Ab	26	C	C4-N4	5.06	1.38	1.33
1	Ad	618	C	C2'-C1'	-5.05	1.47	1.53
84	Aa	2515	C	O3'-P	-5.05	1.55	1.61
1	Ad	809	G	C5'-C4'	5.05	1.57	1.51
1	Ad	349	U	C3'-C2'	-5.05	1.47	1.52
86	Ab	32	A	C6-N1	5.05	1.39	1.35
1	Ad	358	C	C2'-C1'	-5.05	1.47	1.53
84	Aa	2622	G	C2-N3	5.05	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Ad	247	A	O4'-C1'	-5.04	1.35	1.41
1	Ad	722	A	O3'-P	-5.04	1.55	1.61
86	Ab	91	C	N1-C6	5.04	1.40	1.37
1	Ad	729	C	O4'-C1'	5.04	1.48	1.41
1	Ad	1340	A	C4'-C3'	-5.04	1.47	1.52
86	Ab	79	A	N3-C4	-5.04	1.31	1.34
1	Ad	281	U	C3'-O3'	-5.04	1.35	1.42
1	Ad	1690	U	C4'-O4'	5.04	1.52	1.45
1	Ad	1305	U	C2'-C1'	5.04	1.58	1.53
84	Aa	478	G	C2-N3	5.04	1.36	1.32
84	Aa	3234	G	C2-N3	5.04	1.36	1.32
1	Ad	1526	C	C4'-C3'	5.04	1.58	1.53
84	Aa	75	G	C2-N3	5.03	1.36	1.32
86	Ab	1	G	C2'-C1'	-5.03	1.47	1.53
1	Ad	1439	G	O3'-P	-5.03	1.55	1.61
1	Ad	1791	A	C4'-C3'	5.03	1.58	1.53
84	Aa	423	C	O3'-P	-5.03	1.55	1.61
1	Ad	1651	U	C5'-C4'	5.03	1.57	1.51
1	Ad	256	G	C2'-C1'	-5.03	1.47	1.53
1	Ad	415	C	P-O5'	-5.03	1.54	1.59
1	Ad	581	G	C2'-C1'	-5.03	1.47	1.53
1	Ad	821	G	C5'-C4'	5.03	1.57	1.51
1	Ad	1229	C	C5'-C4'	5.03	1.57	1.51
1	Ad	371	A	O4'-C1'	5.02	1.48	1.41
84	Aa	2109	G	C2-N3	5.02	1.36	1.32
1	Ad	1806	C	C5'-C4'	5.02	1.57	1.51
85	Ac	88	A	N7-C5	-5.02	1.36	1.39
1	Ad	763	A	O3'-P	-5.02	1.55	1.61
1	Ad	866	U	C2'-C1'	-5.01	1.47	1.53
1	Ad	943	G	O3'-P	-5.01	1.55	1.61
1	Ad	1204	G	C4'-C3'	5.01	1.58	1.53
86	Ab	66	G	C6-N1	5.01	1.43	1.39
84	Aa	2604	A	N7-C5	-5.01	1.36	1.39
86	Ab	39	C	C2-O2	5.01	1.28	1.24
1	Ad	1711	G	O4'-C1'	5.01	1.48	1.41
2	Ae	57	A	C4'-C3'	5.01	1.58	1.53
84	Aa	3109	G	C2-N3	5.01	1.36	1.32
84	Aa	1644	A	N7-C5	-5.01	1.36	1.39
84	Aa	3070	G	C2-N3	5.00	1.36	1.32
84	Aa	543	C	P-O5'	-5.00	1.54	1.59
84	Aa	1892	A	N7-C5	-5.00	1.36	1.39
1	Ad	1619	A	C2'-C1'	-5.00	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	Aa	2460	A	N7-C5	-5.00	1.36	1.39

All (12710) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1005	C	O4'-C1'-N1	31.46	133.37	108.20
1	Ad	1462	C	O4'-C1'-N1	29.23	131.58	108.20
1	Ad	547	C	O4'-C1'-N1	28.96	131.37	108.20
1	Ad	1765	A	O4'-C1'-N9	28.77	131.22	108.20
84	Aa	2162	C	P-O3'-C3'	27.64	152.86	119.70
1	Ad	784	C	O4'-C1'-N1	27.46	130.17	108.20
1	Ad	511	U	O4'-C1'-N1	27.31	130.05	108.20
1	Ad	1580	G	O4'-C1'-N9	27.17	129.94	108.20
1	Ad	1604	C	O4'-C1'-N1	26.94	129.75	108.20
1	Ad	1064	U	O4'-C1'-N1	26.80	129.64	108.20
1	Ad	1368	C	O4'-C1'-N1	25.86	128.88	108.20
1	Ad	787	C	O4'-C1'-N1	25.30	128.44	108.20
1	Ad	67	G	N9-C1'-C2'	25.28	146.87	114.00
1	Ad	384	U	O4'-C1'-N1	24.94	128.15	108.20
1	Ad	1262	U	O4'-C1'-N1	24.71	127.97	108.20
1	Ad	1404	U	O4'-C1'-N1	24.63	127.90	108.20
1	Ad	835	U	O4'-C1'-N1	24.55	127.84	108.20
1	Ad	546	U	O4'-C1'-N1	24.37	127.69	108.20
1	Ad	1408	G	P-O3'-C3'	23.90	148.38	119.70
1	Ad	1622	A	O4'-C1'-N9	23.88	127.30	108.20
1	Ad	282	C	O4'-C1'-N1	23.75	127.20	108.20
1	Ad	1311	U	O4'-C1'-N1	23.61	127.09	108.20
1	Ad	1479	U	O4'-C1'-N1	23.55	127.04	108.20
1	Ad	1066	U	O4'-C1'-N1	23.14	126.71	108.20
2	Ae	73	C	P-O3'-C3'	22.96	147.25	119.70
1	Ad	1511	A	O4'-C1'-N9	22.82	126.45	108.20
1	Ad	869	U	O4'-C1'-N1	22.67	126.34	108.20
1	Ad	801	U	O4'-C1'-N1	22.63	126.31	108.20
1	Ad	1250	C	O4'-C1'-N1	22.52	126.21	108.20
1	Ad	1067	A	O4'-C1'-N9	22.18	125.94	108.20
1	Ad	823	A	P-O3'-C3'	21.59	145.61	119.70
1	Ad	1568	U	O4'-C1'-N1	21.57	125.46	108.20
1	Ad	1522	U	O4'-C1'-N1	21.30	125.24	108.20
1	Ad	325	C	O4'-C1'-N1	21.26	125.20	108.20
2	Ae	72	G	O4'-C1'-N9	21.26	125.20	108.20
1	Ad	1259	G	O4'-C1'-N9	21.24	125.19	108.20
1	Ad	1590	U	O4'-C1'-N1	21.23	125.19	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2502	U	P-O3'-C3'	21.14	145.07	119.70
1	Ad	189	U	O4'-C1'-N1	20.90	124.92	108.20
84	Aa	1957	G	C4'-C3'-O3'	20.90	154.79	113.00
1	Ad	1766	A	O4'-C1'-N9	20.80	124.84	108.20
84	Aa	1559	G	P-O3'-C3'	-20.79	94.76	119.70
84	Aa	2084	G	C4'-C3'-O3'	20.67	154.34	113.00
1	Ad	161	G	O4'-C1'-N9	20.64	124.71	108.20
1	Ad	1350	C	O4'-C1'-N1	20.53	124.63	108.20
84	Aa	641	C	P-O5'-C5'	20.30	153.39	120.90
1	Ad	1162	A	O4'-C1'-N9	20.18	124.34	108.20
1	Ad	1542	G	O4'-C1'-N9	20.15	124.32	108.20
1	Ad	1775	A	O4'-C1'-N9	20.10	124.28	108.20
1	Ad	363	G	O4'-C1'-N9	19.94	124.15	108.20
1	Ad	643	U	O4'-C1'-N1	19.78	124.03	108.20
1	Ad	773	U	O4'-C1'-N1	19.71	123.97	108.20
1	Ad	1531	G	O4'-C1'-N9	19.27	123.61	108.20
1	Ad	780	A	O4'-C1'-N9	19.18	123.55	108.20
1	Ad	456	A	O4'-C1'-N9	19.14	123.52	108.20
84	Aa	570	G	P-O3'-C3'	19.09	142.61	119.70
1	Ad	800	U	O4'-C1'-N1	19.07	123.46	108.20
1	Ad	457	C	N1-C1'-C2'	19.00	138.69	114.00
84	Aa	3182	A	P-O3'-C3'	18.92	142.41	119.70
1	Ad	861	A	O4'-C1'-C2'	-18.79	87.01	105.80
1	Ad	202	C	P-O3'-C3'	18.75	142.20	119.70
1	Ad	137	A	O4'-C1'-N9	18.72	123.17	108.20
84	Aa	1747	A	N1-C6-N6	18.69	129.82	118.60
1	Ad	76	U	P-O3'-C3'	18.55	141.96	119.70
1	Ad	1248	A	O4'-C1'-N9	18.43	122.94	108.20
1	Ad	1501	G	O4'-C1'-N9	18.23	122.78	108.20
1	Ad	1420	U	O4'-C1'-N1	18.12	122.69	108.20
1	Ad	1771	U	O4'-C1'-N1	18.08	122.67	108.20
1	Ad	585	U	O4'-C1'-N1	18.06	122.64	108.20
1	Ad	179	A	O4'-C1'-N9	-18.04	93.77	108.20
84	Aa	1576	C	P-O3'-C3'	17.78	141.03	119.70
1	Ad	1057	U	O4'-C1'-N1	17.68	122.34	108.20
84	Aa	2384	G	P-O3'-C3'	17.67	140.90	119.70
84	Aa	2216	G	N1-C6-O6	17.51	130.41	119.90
84	Aa	434	C	P-O3'-C3'	17.46	140.65	119.70
1	Ad	1802	G	O4'-C1'-N9	17.42	122.14	108.20
1	Ad	391	A	O4'-C1'-N9	17.35	122.08	108.20
1	Ad	939	C	O4'-C1'-N1	17.34	122.07	108.20
1	Ad	828	G	O4'-C1'-N9	17.19	121.95	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1567	G	O4'-C1'-N9	17.19	121.95	108.20
1	Ad	1496	A	O4'-C1'-N9	17.17	121.93	108.20
1	Ad	133	U	P-O3'-C3'	17.14	140.27	119.70
1	Ad	1309	U	O4'-C1'-N1	17.03	121.83	108.20
84	Aa	1950	G	P-O3'-C3'	16.98	140.07	119.70
1	Ad	821	G	N9-C1'-C2'	16.94	136.03	114.00
84	Aa	1263	A	N1-C6-N6	16.88	128.73	118.60
84	Aa	2086	A	O5'-P-OP1	16.79	130.85	110.70
84	Aa	506	U	P-O3'-C3'	16.76	139.82	119.70
84	Aa	2216	G	C5-C6-O6	-16.73	118.56	128.60
1	Ad	1086	A	P-O3'-C3'	16.73	139.77	119.70
1	Ad	1497	U	O4'-C1'-N1	16.69	121.56	108.20
84	Aa	423	C	P-O3'-C3'	16.66	139.69	119.70
1	Ad	394	G	O4'-C1'-N9	16.59	121.47	108.20
1	Ad	1203	G	O4'-C1'-N9	16.49	121.39	108.20
1	Ad	280	U	P-O3'-C3'	-16.48	99.92	119.70
84	Aa	158	A	P-O3'-C3'	16.41	139.39	119.70
1	Ad	396	G	O4'-C1'-N9	16.38	121.31	108.20
86	Ab	16	A	N1-C6-N6	16.37	128.42	118.60
1	Ad	1592	G	O4'-C1'-N9	16.36	121.28	108.20
1	Ad	1203	G	C1'-O4'-C4'	16.35	122.98	109.90
1	Ad	1353	G	P-O3'-C3'	16.33	139.30	119.70
1	Ad	906	G	O4'-C1'-N9	16.33	121.26	108.20
1	Ad	1619	A	O4'-C1'-N9	16.32	121.26	108.20
1	Ad	732	G	O4'-C1'-N9	16.26	121.21	108.20
1	Ad	1498	A	O4'-C1'-N9	16.20	121.16	108.20
1	Ad	1623	C	P-O3'-C3'	16.16	139.09	119.70
1	Ad	1405	U	O4'-C1'-N1	16.08	121.06	108.20
1	Ad	730	G	O4'-C1'-N9	16.00	121.00	108.20
86	Ab	115	A	N1-C6-N6	15.98	128.19	118.60
86	Ab	80	A	N1-C6-N6	15.96	128.18	118.60
84	Aa	144	A	N1-C6-N6	15.89	128.14	118.60
84	Aa	1019	A	N1-C6-N6	15.88	128.13	118.60
86	Ab	19	A	N1-C6-N6	15.84	128.11	118.60
86	Ab	31	G	N1-C6-O6	15.83	129.40	119.90
84	Aa	1726	G	P-O3'-C3'	15.73	138.58	119.70
1	Ad	83	U	O4'-C1'-N1	15.62	120.70	108.20
1	Ad	139	U	O4'-C1'-N1	15.62	120.69	108.20
1	Ad	1149	U	O4'-C1'-N1	15.59	120.67	108.20
1	Ad	1245	G	O4'-C1'-N9	15.52	120.62	108.20
1	Ad	800	U	P-O3'-C3'	15.47	138.27	119.70
1	Ad	458	A	O4'-C1'-N9	15.46	120.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1487	A	P-O3'-C3'	15.45	138.25	119.70
84	Aa	3153	U	P-O3'-C3'	15.41	138.19	119.70
1	Ad	444	U	O4'-C1'-N1	15.39	120.52	108.20
1	Ad	1205	G	O4'-C1'-N9	15.39	120.51	108.20
1	Ad	1220	C	P-O3'-C3'	15.35	138.12	119.70
1	Ad	792	U	O4'-C1'-N1	15.35	120.48	108.20
86	Ab	55	A	N1-C6-N6	15.35	127.81	118.60
84	Aa	2152	A	P-O3'-C3'	15.34	138.11	119.70
3	Af	12	A	O4'-C1'-N9	15.21	120.36	108.20
84	Aa	2167	G	C5-C6-O6	-15.19	119.48	128.60
84	Aa	571	G	P-O3'-C3'	15.18	137.91	119.70
84	Aa	2178	G	C4'-C3'-O3'	-15.15	77.58	109.40
84	Aa	3182	A	O4'-C1'-N9	15.14	120.31	108.20
1	Ad	707	C	O4'-C1'-N1	15.12	120.30	108.20
1	Ad	860	A	O4'-C1'-N9	15.12	120.30	108.20
1	Ad	344	U	O4'-C1'-N1	15.09	120.27	108.20
84	Aa	939	A	N1-C6-N6	15.05	127.63	118.60
84	Aa	2085	A	P-O5'-C5'	15.02	144.94	120.90
2	Ae	58	U	O4'-C1'-N1	15.01	120.21	108.20
1	Ad	1102	U	O4'-C1'-N1	15.00	120.20	108.20
86	Ab	79	A	C5-C6-N1	-14.95	110.22	117.70
1	Ad	845	C	P-O3'-C3'	14.92	137.61	119.70
84	Aa	1308	A	N1-C6-N6	14.92	127.55	118.60
84	Aa	1811	U	P-O3'-C3'	14.90	137.58	119.70
84	Aa	2086	A	O5'-P-OP2	-14.89	92.30	105.70
1	Ad	208	U	P-O3'-C3'	14.89	137.56	119.70
1	Ad	559	A	P-O3'-C3'	14.88	137.56	119.70
1	Ad	156	U	O4'-C1'-N1	14.87	120.10	108.20
84	Aa	1322	A	N1-C6-N6	14.87	127.52	118.60
86	Ab	43	A	N1-C6-N6	14.87	127.52	118.60
1	Ad	1344	U	O4'-C1'-N1	14.84	120.07	108.20
84	Aa	2100	A	P-O3'-C3'	14.78	137.43	119.70
1	Ad	1019	G	O4'-C1'-N9	14.77	120.02	108.20
1	Ad	80	C	P-O3'-C3'	14.77	137.42	119.70
2	Ae	12	U	O4'-C1'-N1	14.77	120.01	108.20
1	Ad	1226	U	O4'-C1'-N1	14.77	120.01	108.20
84	Aa	2086	A	C2'-C3'-O3'	14.70	141.84	109.50
1	Ad	1377	G	O4'-C1'-N9	14.69	119.95	108.20
1	Ad	1044	A	O4'-C1'-N9	14.66	119.93	108.20
84	Aa	2708	A	N1-C6-N6	14.65	127.39	118.60
1	Ad	261	C	N1-C1'-C2'	14.64	133.03	114.00
84	Aa	1057	A	N1-C6-N6	14.62	127.37	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1796	A	N1-C6-N6	14.60	127.36	118.60
85	Ac	71	A	N1-C6-N6	14.56	127.34	118.60
84	Aa	1526	A	N1-C6-N6	14.56	127.33	118.60
1	Ad	516	A	P-O3'-C3'	14.55	137.16	119.70
84	Aa	563	C	P-O3'-C3'	14.54	137.14	119.70
1	Ad	372	U	O4'-C1'-N1	14.53	119.83	108.20
84	Aa	3221	A	P-O3'-C3'	14.51	137.11	119.70
1	Ad	215	A	P-O3'-C3'	14.49	137.09	119.70
84	Aa	64	A	N1-C6-N6	14.48	127.29	118.60
84	Aa	51	A	N1-C6-N6	14.45	127.27	118.60
1	Ad	828	G	P-O3'-C3'	14.43	137.02	119.70
1	Ad	1675	G	O4'-C1'-N9	14.41	119.73	108.20
1	Ad	1492	G	O4'-C1'-N9	14.40	119.72	108.20
1	Ad	1169	G	O4'-C1'-N9	14.37	119.70	108.20
86	Ab	79	A	N1-C6-N6	14.37	127.22	118.60
84	Aa	2072	U	P-O3'-C3'	14.36	136.93	119.70
84	Aa	349	A	N1-C6-N6	14.35	127.21	118.60
1	Ad	1206	A	N9-C1'-C2'	14.34	132.64	114.00
1	Ad	843	G	C3'-C2'-C1'	14.32	112.96	101.50
1	Ad	131	C	P-O3'-C3'	14.30	136.86	119.70
84	Aa	3308	A	P-O3'-C3'	14.28	136.84	119.70
86	Ab	42	A	N1-C6-N6	14.27	127.16	118.60
1	Ad	707	C	C1'-O4'-C4'	14.27	121.31	109.90
84	Aa	2286	A	N1-C6-N6	14.27	127.16	118.60
1	Ad	1504	U	O4'-C1'-N1	14.26	119.61	108.20
1	Ad	1694	G	O4'-C1'-N9	14.25	119.60	108.20
84	Aa	3001	G	O4'-C1'-N9	14.24	119.59	108.20
84	Aa	2461	A	P-O3'-C3'	14.20	136.74	119.70
86	Ab	50	A	N1-C6-N6	14.19	127.11	118.60
1	Ad	851	G	O4'-C1'-N9	14.19	119.55	108.20
84	Aa	587	A	N1-C6-N6	14.19	127.11	118.60
84	Aa	2494	A	N1-C6-N6	14.18	127.11	118.60
84	Aa	2932	A	N1-C6-N6	14.14	127.08	118.60
84	Aa	1146	A	N1-C6-N6	14.10	127.06	118.60
1	Ad	1371	U	O4'-C1'-N1	14.09	119.47	108.20
84	Aa	716	A	N1-C6-N6	14.07	127.04	118.60
84	Aa	2053	A	P-O3'-C3'	14.06	136.57	119.70
84	Aa	849	A	N1-C6-N6	14.05	127.03	118.60
1	Ad	215	A	O4'-C1'-N9	14.05	119.44	108.20
1	Ad	150	U	O4'-C1'-N1	14.04	119.43	108.20
86	Ab	47	C	P-O3'-C3'	14.04	136.54	119.70
1	Ad	1421	U	O4'-C1'-N1	14.03	119.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	87	A	C1'-O4'-C4'	14.03	121.12	109.90
1	Ad	786	U	O4'-C1'-N1	14.03	119.42	108.20
84	Aa	3175	C	P-O3'-C3'	14.03	136.54	119.70
1	Ad	501	U	P-O3'-C3'	14.02	136.53	119.70
84	Aa	168	A	N1-C6-N6	14.02	127.01	118.60
1	Ad	349	U	O4'-C1'-N1	14.01	119.41	108.20
1	Ad	1621	U	O4'-C1'-N1	14.00	119.40	108.20
1	Ad	63	G	O4'-C1'-N9	14.00	119.40	108.20
1	Ad	1440	U	O4'-C1'-N1	14.00	119.40	108.20
1	Ad	502	G	P-O3'-C3'	13.98	136.47	119.70
84	Aa	2167	G	N1-C6-O6	13.97	128.28	119.90
84	Aa	3025	A	N1-C6-N6	13.93	126.96	118.60
84	Aa	1088	A	N1-C6-N6	13.93	126.96	118.60
84	Aa	488	U	P-O3'-C3'	13.92	136.40	119.70
1	Ad	1643	A	O4'-C1'-N9	13.91	119.33	108.20
84	Aa	2528	U	P-O3'-C3'	13.90	136.38	119.70
1	Ad	1464	G	N9-C1'-C2'	13.89	132.06	114.00
84	Aa	1812	A	P-O3'-C3'	13.88	136.36	119.70
1	Ad	884	G	O4'-C1'-N9	13.87	119.30	108.20
84	Aa	2143	A	N1-C6-N6	13.86	126.92	118.60
84	Aa	2311	A	N1-C6-N6	13.84	126.90	118.60
84	Aa	159	G	N1-C6-O6	13.80	128.18	119.90
1	Ad	1807	A	O4'-C1'-N9	13.80	119.24	108.20
84	Aa	1136	A	N1-C6-N6	13.79	126.88	118.60
1	Ad	1550	G	O4'-C1'-N9	13.78	119.22	108.20
84	Aa	2646	A	N1-C6-N6	13.78	126.87	118.60
84	Aa	686	A	N1-C6-N6	13.77	126.86	118.60
1	Ad	562	U	O4'-C1'-N1	13.77	119.21	108.20
1	Ad	744	G	O4'-C1'-N9	13.72	119.18	108.20
84	Aa	1694	A	N1-C6-N6	13.71	126.83	118.60
1	Ad	1101	C	O4'-C1'-N1	13.70	119.16	108.20
1	Ad	1387	U	O4'-C1'-N1	13.67	119.13	108.20
1	Ad	1810	G	C3'-C2'-C1'	13.67	112.43	101.50
1	Ad	79	A	O4'-C1'-N9	13.66	119.13	108.20
84	Aa	525	A	N1-C6-N6	13.66	126.79	118.60
84	Aa	1538	A	N1-C6-N6	13.66	126.79	118.60
86	Ab	11	A	N1-C6-N6	13.65	126.79	118.60
1	Ad	722	A	P-O3'-C3'	13.64	136.07	119.70
84	Aa	657	A	N1-C6-N6	13.64	126.78	118.60
1	Ad	1583	G	O4'-C1'-N9	13.64	119.11	108.20
1	Ad	1763	A	O4'-C1'-N9	13.61	119.09	108.20
86	Ab	3	A	N1-C6-N6	13.60	126.76	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2237	A	N1-C6-N6	13.59	126.75	118.60
84	Aa	2165	A	N1-C6-N6	13.58	126.75	118.60
84	Aa	304	A	N1-C6-N6	13.57	126.74	118.60
84	Aa	2142	A	N1-C6-N6	13.57	126.74	118.60
84	Aa	1463	A	N1-C6-N6	13.55	126.73	118.60
36	BH	117	ARG	NE-CZ-NH1	-13.55	113.53	120.30
1	Ad	139	U	P-O3'-C3'	13.55	135.96	119.70
84	Aa	2177	U	C4'-C3'-O3'	-13.52	81.01	109.40
85	Ac	85	G	P-O3'-C3'	13.52	135.92	119.70
1	Ad	1655	U	O4'-C1'-N1	13.51	119.00	108.20
84	Aa	119	A	N1-C6-N6	13.51	126.70	118.60
84	Aa	1644	A	N1-C6-N6	13.49	126.69	118.60
1	Ad	815	A	P-O3'-C3'	13.49	135.88	119.70
1	Ad	918	G	P-O3'-C3'	13.48	135.88	119.70
1	Ad	1343	C	P-O3'-C3'	13.48	135.88	119.70
1	Ad	29	U	O4'-C1'-N1	13.47	118.98	108.20
84	Aa	3057	A	N1-C6-N6	13.47	126.69	118.60
84	Aa	3211	C	P-O3'-C3'	13.46	135.86	119.70
84	Aa	3143	A	N1-C6-N6	13.46	126.68	118.60
1	Ad	185	G	P-O3'-C3'	13.46	135.85	119.70
1	Ad	336	U	O4'-C1'-N1	13.44	118.95	108.20
1	Ad	999	G	C1'-O4'-C4'	-13.43	99.15	109.90
84	Aa	3220	A	N1-C6-N6	13.43	126.66	118.60
84	Aa	1344	A	N1-C6-N6	13.42	126.65	118.60
1	Ad	461	G	O4'-C1'-N9	13.41	118.93	108.20
84	Aa	50	A	N1-C6-N6	13.41	126.65	118.60
84	Aa	540	G	N1-C6-O6	13.40	127.94	119.90
84	Aa	2751	A	N1-C6-N6	13.37	126.62	118.60
1	Ad	276	G	O4'-C1'-N9	13.37	118.89	108.20
84	Aa	920	A	N1-C6-N6	13.36	126.61	118.60
1	Ad	1162	A	P-O3'-C3'	13.35	135.72	119.70
86	Ab	68	G	N1-C6-O6	13.35	127.91	119.90
84	Aa	2313	U	P-O3'-C3'	13.34	135.71	119.70
84	Aa	2905	A	N1-C6-N6	13.33	126.60	118.60
84	Aa	1456	A	N1-C6-N6	13.31	126.58	118.60
84	Aa	1855	A	N1-C6-N6	13.30	126.58	118.60
84	Aa	73	A	N1-C6-N6	13.29	126.57	118.60
2	Ae	73	C	N1-C1'-C2'	13.28	131.27	114.00
1	Ad	145	A	O4'-C1'-N9	13.28	118.82	108.20
84	Aa	353	A	N1-C6-N6	13.28	126.57	118.60
1	Ad	1183	G	O4'-C1'-N9	13.27	118.82	108.20
84	Aa	747	A	N1-C6-N6	13.27	126.56	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2948	A	N1-C6-N6	13.27	126.56	118.60
84	Aa	3315	A	N1-C6-N6	13.26	126.55	118.60
84	Aa	1490	A	N1-C6-N6	13.25	126.55	118.60
84	Aa	454	A	N1-C6-N6	13.25	126.55	118.60
1	Ad	1367	U	O4'-C1'-N1	13.24	118.79	108.20
84	Aa	3351	A	N1-C6-N6	13.23	126.54	118.60
1	Ad	930	G	O4'-C1'-N9	13.22	118.78	108.20
84	Aa	2503	A	P-O3'-C3'	13.21	135.55	119.70
84	Aa	217	A	N1-C6-N6	13.21	126.53	118.60
84	Aa	2504	A	P-O3'-C3'	13.21	135.55	119.70
84	Aa	3012	A	N1-C6-N6	13.21	126.52	118.60
84	Aa	2483	A	N1-C6-N6	13.21	126.52	118.60
84	Aa	2125	A	N1-C6-N6	13.20	126.52	118.60
1	Ad	167	A	O4'-C1'-N9	13.19	118.75	108.20
84	Aa	2996	A	N1-C6-N6	13.19	126.51	118.60
1	Ad	1581	A	P-O3'-C3'	13.19	135.52	119.70
1	Ad	32	U	O4'-C1'-N1	13.18	118.75	108.20
84	Aa	1501	A	N1-C6-N6	13.18	126.51	118.60
84	Aa	2513	U	C5'-C4'-C3'	-13.18	94.92	116.00
84	Aa	2849	A	N1-C6-N6	13.17	126.50	118.60
1	Ad	723	A	O4'-C1'-N9	13.16	118.73	108.20
84	Aa	1704	A	N1-C6-N6	13.15	126.49	118.60
84	Aa	332	A	N1-C6-N6	13.15	126.49	118.60
1	Ad	634	A	O4'-C1'-N9	13.13	118.70	108.20
84	Aa	2898	A	N1-C6-N6	13.13	126.48	118.60
84	Aa	830	A	N1-C6-N6	13.12	126.47	118.60
1	Ad	2	A	O4'-C1'-N9	13.11	118.69	108.20
84	Aa	774	A	N1-C6-N6	13.10	126.46	118.60
85	Ac	52	A	N1-C6-N6	13.09	126.46	118.60
1	Ad	1134	U	O4'-C1'-N1	13.09	118.67	108.20
1	Ad	235	C	O4'-C1'-C2'	-13.09	92.72	105.80
84	Aa	1334	A	N1-C6-N6	13.07	126.44	118.60
84	Aa	1224	A	N1-C6-N6	13.03	126.42	118.60
84	Aa	3113	G	N1-C6-O6	13.03	127.72	119.90
85	Ac	12	A	N1-C6-N6	13.00	126.40	118.60
84	Aa	2989	A	N1-C6-N6	13.00	126.40	118.60
84	Aa	2331	A	N1-C6-N6	13.00	126.40	118.60
84	Aa	3136	A	N1-C6-N6	13.00	126.40	118.60
84	Aa	1838	A	N1-C6-N6	12.99	126.39	118.60
84	Aa	2351	A	N1-C6-N6	12.98	126.39	118.60
84	Aa	1123	A	N1-C6-N6	12.98	126.39	118.60
1	Ad	1254	U	P-O3'-C3'	12.96	135.25	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1195	C	P-O3'-C3'	12.96	135.25	119.70
84	Aa	2788	A	N1-C6-N6	12.96	126.37	118.60
84	Aa	1061	A	N1-C6-N6	12.95	126.37	118.60
84	Aa	2538	G	P-O3'-C3'	12.95	135.23	119.70
1	Ad	1376	A	O4'-C1'-N9	12.94	118.56	108.20
2	Ae	47	U	O4'-C1'-N1	12.94	118.55	108.20
84	Aa	723	G	O4'-C1'-N9	12.94	118.55	108.20
84	Aa	156	A	N1-C6-N6	12.93	126.36	118.60
84	Aa	2984	A	N1-C6-N6	12.93	126.36	118.60
84	Aa	2098	A	N1-C6-N6	12.92	126.35	118.60
1	Ad	486	U	O4'-C1'-N1	12.91	118.53	108.20
84	Aa	1367	A	N1-C6-N6	12.91	126.35	118.60
84	Aa	573	A	N1-C6-N6	12.91	126.35	118.60
84	Aa	1274	A	N1-C6-N6	12.91	126.34	118.60
84	Aa	3382	A	N1-C6-N6	12.90	126.34	118.60
84	Aa	2810	A	N1-C6-N6	12.90	126.34	118.60
84	Aa	2943	A	N1-C6-N6	12.90	126.34	118.60
84	Aa	697	A	N1-C6-N6	12.89	126.34	118.60
84	Aa	3336	A	N1-C6-N6	12.89	126.33	118.60
84	Aa	672	A	N1-C6-N6	12.87	126.32	118.60
2	Ae	55	C	N1-C1'-C2'	12.87	130.74	114.00
1	Ad	788	G	P-O3'-C3'	12.87	135.15	119.70
1	Ad	379	U	O4'-C1'-N1	12.87	118.49	108.20
84	Aa	2171	A	N1-C6-N6	12.86	126.31	118.60
84	Aa	294	A	N1-C6-N6	12.85	126.31	118.60
84	Aa	2679	A	N1-C6-N6	12.85	126.31	118.60
1	Ad	404	A	O4'-C1'-N9	12.83	118.46	108.20
84	Aa	2561	A	N1-C6-N6	12.81	126.29	118.60
84	Aa	2372	A	N1-C6-N6	12.81	126.28	118.60
1	Ad	1241	G	O4'-C1'-N9	12.80	118.44	108.20
84	Aa	1819	A	N1-C6-N6	12.80	126.28	118.60
84	Aa	2640	A	N1-C6-N6	12.80	126.28	118.60
1	Ad	1406	U	O4'-C1'-N1	12.80	118.44	108.20
1	Ad	557	G	O4'-C1'-N9	12.80	118.44	108.20
84	Aa	499	A	P-O3'-C3'	12.80	135.06	119.70
84	Aa	1727	A	P-O3'-C3'	12.79	135.05	119.70
84	Aa	1843	A	N1-C6-N6	12.79	126.28	118.60
84	Aa	1904	A	N1-C6-N6	12.79	126.27	118.60
84	Aa	2787	A	N1-C6-N6	12.79	126.27	118.60
1	Ad	1460	G	O4'-C1'-N9	12.78	118.42	108.20
1	Ad	1248	A	P-O3'-C3'	12.78	135.03	119.70
84	Aa	1225	A	N1-C6-N6	12.77	126.26	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2139	A	N1-C6-N6	12.77	126.26	118.60
84	Aa	3271	A	N1-C6-N6	12.77	126.26	118.60
84	Aa	56	A	N1-C6-N6	12.77	126.26	118.60
84	Aa	262	A	N1-C6-N6	12.77	126.26	118.60
84	Aa	1349	G	N1-C6-O6	12.76	127.56	119.90
84	Aa	385	A	N1-C6-N6	12.76	126.25	118.60
1	Ad	219	G	O4'-C1'-N9	12.75	118.40	108.20
84	Aa	121	A	N1-C6-N6	12.74	126.25	118.60
84	Aa	3041	A	N1-C6-N6	12.74	126.24	118.60
86	Ab	77	A	N1-C6-N6	12.74	126.24	118.60
1	Ad	1203	G	N9-C1'-C2'	-12.73	97.44	114.00
84	Aa	982	U	P-O3'-C3'	12.73	134.98	119.70
1	Ad	1689	A	O4'-C1'-N9	12.73	118.38	108.20
84	Aa	1114	A	N1-C6-N6	12.73	126.24	118.60
84	Aa	426	A	N1-C6-N6	12.73	126.24	118.60
1	Ad	1659	A	O4'-C1'-N9	12.72	118.38	108.20
84	Aa	39	A	N1-C6-N6	12.72	126.23	118.60
84	Aa	1918	A	N1-C6-N6	12.71	126.23	118.60
1	Ad	1688	G	O4'-C1'-N9	12.71	118.37	108.20
84	Aa	1221	A	N1-C6-N6	12.71	126.22	118.60
1	Ad	761	A	P-O3'-C3'	12.71	134.95	119.70
84	Aa	3045	A	N1-C6-N6	12.70	126.22	118.60
84	Aa	2396	A	N1-C6-N6	12.70	126.22	118.60
84	Aa	3358	A	N1-C6-N6	12.70	126.22	118.60
84	Aa	2562	A	N1-C6-N6	12.69	126.21	118.60
84	Aa	2385	A	N1-C6-N6	12.68	126.21	118.60
1	Ad	176	A	O4'-C1'-N9	12.68	118.34	108.20
85	Ac	157	A	N1-C6-N6	12.68	126.20	118.60
84	Aa	792	A	N1-C6-N6	12.67	126.20	118.60
84	Aa	886	A	N1-C6-N6	12.67	126.20	118.60
84	Aa	3113	G	C5-C6-O6	-12.67	121.00	128.60
85	Ac	126	A	N1-C6-N6	12.67	126.20	118.60
84	Aa	929	A	N1-C6-N6	12.66	126.20	118.60
84	Aa	2074	C	P-O3'-C3'	12.66	134.90	119.70
84	Aa	2512	U	C2'-C3'-O3'	12.66	137.35	109.50
2	Ae	28	G	C1'-O4'-C4'	-12.64	99.78	109.90
85	Ac	41	A	N1-C6-N6	12.64	126.19	118.60
84	Aa	3177	A	N1-C6-N6	12.63	126.18	118.60
1	Ad	878	U	O4'-C1'-N1	12.63	118.30	108.20
86	Ab	99	G	N1-C6-O6	12.62	127.47	119.90
84	Aa	395	A	N1-C6-N6	12.62	126.17	118.60
84	Aa	2491	A	N1-C6-N6	12.62	126.17	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2969	A	N1-C6-N6	12.61	126.17	118.60
84	Aa	3049	A	N1-C6-N6	12.61	126.17	118.60
1	Ad	1753	U	O4'-C1'-N1	12.61	118.29	108.20
84	Aa	1282	A	N1-C6-N6	12.61	126.16	118.60
84	Aa	322	A	N1-C6-N6	12.60	126.16	118.60
85	Ac	33	A	N1-C6-N6	12.60	126.16	118.60
84	Aa	2357	A	N1-C6-N6	12.59	126.16	118.60
1	Ad	635	G	O4'-C1'-N9	12.59	118.27	108.20
84	Aa	2439	A	N1-C6-N6	12.59	126.16	118.60
84	Aa	1024	G	N1-C6-O6	12.58	127.45	119.90
1	Ad	300	U	O4'-C1'-N1	12.58	118.26	108.20
84	Aa	2993	A	N1-C6-N6	12.58	126.14	118.60
84	Aa	2805	A	N1-C6-N6	12.57	126.14	118.60
84	Aa	2294	A	N1-C6-N6	12.57	126.14	118.60
84	Aa	3306	A	N1-C6-N6	12.57	126.14	118.60
84	Aa	481	G	P-O3'-C3'	12.56	134.78	119.70
84	Aa	1153	A	N1-C6-N6	12.56	126.14	118.60
84	Aa	1753	A	N1-C6-N6	12.56	126.14	118.60
84	Aa	1359	A	N1-C6-N6	12.56	126.14	118.60
84	Aa	586	A	N1-C6-N6	12.55	126.13	118.60
1	Ad	1041	A	O4'-C1'-N9	12.55	118.24	108.20
84	Aa	2645	A	N1-C6-N6	12.54	126.12	118.60
84	Aa	499	A	N1-C6-N6	12.53	126.11	118.60
84	Aa	1000	A	N1-C6-N6	12.53	126.12	118.60
84	Aa	1438	A	N1-C6-N6	12.53	126.12	118.60
84	Aa	1336	A	N1-C6-N6	12.52	126.11	118.60
84	Aa	2904	A	N1-C6-N6	12.52	126.11	118.60
84	Aa	1927	A	N1-C6-N6	12.52	126.11	118.60
84	Aa	1590	A	N1-C6-N6	12.51	126.11	118.60
84	Aa	65	A	N1-C6-N6	12.50	126.10	118.60
1	Ad	1014	U	O4'-C1'-N1	12.49	118.19	108.20
84	Aa	811	A	N1-C6-N6	12.49	126.09	118.60
84	Aa	1013	A	N1-C6-N6	12.49	126.09	118.60
84	Aa	2638	A	N1-C6-N6	12.49	126.09	118.60
84	Aa	3114	A	N1-C6-N6	12.49	126.09	118.60
84	Aa	99	A	N1-C6-N6	12.48	126.09	118.60
84	Aa	1640	A	N1-C6-N6	12.48	126.09	118.60
84	Aa	1398	A	N1-C6-N6	12.48	126.09	118.60
2	Ae	74	C	C1'-O4'-C4'	12.47	119.88	109.90
84	Aa	2356	A	N1-C6-N6	12.47	126.08	118.60
85	Ac	40	A	N1-C6-N6	12.47	126.08	118.60
84	Aa	887	A	N1-C6-N6	12.47	126.08	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	159	G	C5-C6-O6	-12.47	121.12	128.60
84	Aa	33	A	N1-C6-N6	12.46	126.08	118.60
84	Aa	721	A	N1-C6-N6	12.46	126.08	118.60
84	Aa	2630	A	N1-C6-N6	12.46	126.08	118.60
84	Aa	1002	A	N1-C6-N6	12.46	126.07	118.60
84	Aa	526	A	P-O5'-C5'	12.45	140.82	120.90
84	Aa	3092	A	N1-C6-N6	12.45	126.07	118.60
84	Aa	2958	A	N1-C6-N6	12.45	126.07	118.60
84	Aa	1929	A	N1-C6-N6	12.44	126.06	118.60
1	Ad	891	U	O4'-C1'-N1	12.44	118.15	108.20
1	Ad	45	U	C3'-C2'-C1'	12.44	111.45	101.50
1	Ad	845	C	C1'-O4'-C4'	12.44	119.85	109.90
84	Aa	2014	A	N1-C6-N6	12.44	126.06	118.60
84	Aa	2482	A	N1-C6-N6	12.43	126.06	118.60
84	Aa	746	C	O4'-C1'-N1	12.43	118.14	108.20
84	Aa	1831	A	N1-C6-N6	12.42	126.05	118.60
1	Ad	583	A	O4'-C1'-N9	12.42	118.14	108.20
84	Aa	3148	A	N1-C6-N6	12.42	126.05	118.60
84	Aa	2214	A	N1-C6-N6	12.41	126.05	118.60
84	Aa	3221	A	N1-C6-N6	12.41	126.05	118.60
1	Ad	190	C	P-O3'-C3'	12.41	134.59	119.70
84	Aa	879	A	N1-C6-N6	12.41	126.05	118.60
84	Aa	1932	A	N1-C6-N6	12.41	126.05	118.60
1	Ad	197	G	O4'-C1'-N9	12.40	118.12	108.20
84	Aa	985	C	P-O3'-C3'	12.40	134.58	119.70
86	Ab	112	U	O4'-C1'-N1	12.40	118.12	108.20
84	Aa	705	A	N1-C6-N6	12.40	126.04	118.60
1	Ad	986	U	O4'-C1'-N1	12.39	118.11	108.20
84	Aa	1040	A	N1-C6-N6	12.39	126.04	118.60
84	Aa	2912	A	N1-C6-N6	12.39	126.04	118.60
84	Aa	1157	A	N1-C6-N6	12.39	126.03	118.60
84	Aa	3201	A	N1-C6-N6	12.39	126.03	118.60
84	Aa	2695	A	N1-C6-N6	12.38	126.03	118.60
84	Aa	61	A	N1-C6-N6	12.38	126.03	118.60
84	Aa	3104	A	N1-C6-N6	12.38	126.03	118.60
1	Ad	1100	U	O4'-C1'-N1	12.38	118.10	108.20
84	Aa	1232	A	N1-C6-N6	12.37	126.02	118.60
84	Aa	1494	A	N1-C6-N6	12.37	126.02	118.60
84	Aa	2935	A	N1-C6-N6	12.36	126.02	118.60
1	Ad	1690	U	O4'-C1'-N1	12.36	118.09	108.20
84	Aa	2276	A	N1-C6-N6	12.36	126.02	118.60
84	Aa	487	C	P-O3'-C3'	12.35	134.53	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	49	A	N1-C6-N6	12.35	126.01	118.60
84	Aa	2344	A	N1-C6-N6	12.35	126.01	118.60
84	Aa	2397	A	N1-C6-N6	12.35	126.01	118.60
84	Aa	1731	A	N1-C6-N6	12.35	126.01	118.60
86	Ab	110	G	N1-C6-O6	12.35	127.31	119.90
85	Ac	54	A	N1-C6-N6	12.34	126.00	118.60
85	Ac	110	A	N1-C6-N6	12.34	126.00	118.60
84	Aa	2101	A	N1-C6-N6	12.33	126.00	118.60
84	Aa	639	A	N1-C6-N6	12.33	126.00	118.60
84	Aa	2889	A	N1-C6-N6	12.33	126.00	118.60
84	Aa	216	G	C5-C6-O6	-12.32	121.21	128.60
84	Aa	846	A	N1-C6-N6	12.32	125.99	118.60
2	Ae	37	G	P-O3'-C3'	12.32	134.48	119.70
1	Ad	315	U	O4'-C1'-N1	12.31	118.05	108.20
84	Aa	373	A	N1-C6-N6	12.31	125.99	118.60
84	Aa	2400	A	N1-C6-N6	12.31	125.99	118.60
84	Aa	393	A	N1-C6-N6	12.31	125.99	118.60
84	Aa	1512	A	N1-C6-N6	12.31	125.99	118.60
84	Aa	1097	A	N1-C6-N6	12.31	125.98	118.60
84	Aa	2670	A	N1-C6-N6	12.31	125.98	118.60
2	Ae	36	C	N1-C1'-C2'	12.30	130.00	114.00
84	Aa	2503	A	N1-C6-N6	12.30	125.98	118.60
1	Ad	383	U	O4'-C1'-N1	12.30	118.04	108.20
84	Aa	2389	A	N1-C6-N6	12.30	125.98	118.60
84	Aa	282	A	N1-C6-N6	12.30	125.98	118.60
84	Aa	2730	A	N1-C6-N6	12.29	125.98	118.60
2	Ae	50	G	O4'-C1'-N9	12.29	118.03	108.20
84	Aa	2223	A	N1-C6-N6	12.29	125.98	118.60
84	Aa	1651	A	N1-C6-N6	12.28	125.97	118.60
86	Ab	81	G	N1-C6-O6	12.28	127.27	119.90
84	Aa	2217	A	N1-C6-N6	12.27	125.96	118.60
1	Ad	331	U	O4'-C1'-N1	12.27	118.02	108.20
1	Ad	1537	U	O4'-C1'-N1	12.27	118.02	108.20
84	Aa	6	A	N1-C6-N6	12.27	125.96	118.60
84	Aa	661	A	N1-C6-N6	12.27	125.96	118.60
84	Aa	118	G	N1-C6-O6	12.27	127.26	119.90
84	Aa	1106	G	P-O3'-C3'	12.27	134.42	119.70
84	Aa	196	A	N1-C6-N6	12.26	125.96	118.60
1	Ad	842	G	O4'-C1'-N9	12.26	118.00	108.20
84	Aa	1370	A	N1-C6-N6	12.26	125.95	118.60
84	Aa	2210	A	N1-C6-N6	12.25	125.95	118.60
84	Aa	2724	A	N1-C6-N6	12.25	125.95	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	778	G	O4'-C1'-N9	12.24	118.00	108.20
84	Aa	2138	A	N1-C6-N6	12.24	125.95	118.60
84	Aa	1928	A	N1-C6-N6	12.23	125.94	118.60
84	Aa	2152	A	N1-C6-N6	12.23	125.94	118.60
84	Aa	2239	A	N1-C6-N6	12.23	125.94	118.60
84	Aa	3034	A	N1-C6-N6	12.23	125.94	118.60
84	Aa	64	A	P-O3'-C3'	12.23	134.38	119.70
1	Ad	1278	C	O4'-C1'-N1	12.23	117.98	108.20
84	Aa	3110	A	N1-C6-N6	12.22	125.93	118.60
1	Ad	606	U	O4'-C1'-N1	12.22	117.97	108.20
84	Aa	266	A	N1-C6-N6	12.21	125.93	118.60
84	Aa	2266	A	N1-C6-N6	12.21	125.93	118.60
84	Aa	3272	A	N1-C6-N6	12.21	125.93	118.60
84	Aa	3017	A	N1-C6-N6	12.21	125.93	118.60
84	Aa	2082	A	N1-C6-N6	12.20	125.92	118.60
84	Aa	2290	A	N1-C6-N6	12.20	125.92	118.60
1	Ad	507	G	P-O3'-C3'	12.20	134.34	119.70
84	Aa	2804	A	N1-C6-N6	12.19	125.91	118.60
84	Aa	917	A	N1-C6-N6	12.19	125.91	118.60
84	Aa	2089	A	N1-C6-N6	12.18	125.91	118.60
84	Aa	2487	A	N1-C6-N6	12.18	125.91	118.60
84	Aa	1882	A	N1-C6-N6	12.17	125.91	118.60
84	Aa	1373	A	N1-C6-N6	12.17	125.90	118.60
84	Aa	3087	A	N1-C6-N6	12.17	125.90	118.60
84	Aa	364	A	N1-C6-N6	12.16	125.90	118.60
84	Aa	3078	A	N1-C6-N6	12.16	125.90	118.60
1	Ad	1780	U	O4'-C1'-N1	12.16	117.93	108.20
84	Aa	383	A	N1-C6-N6	12.16	125.90	118.60
84	Aa	2100	A	N1-C6-N6	12.16	125.89	118.60
1	Ad	294	G	O4'-C1'-N9	12.15	117.92	108.20
84	Aa	955	A	N1-C6-N6	12.15	125.89	118.60
84	Aa	2227	A	N1-C6-N6	12.15	125.89	118.60
84	Aa	3018	A	N1-C6-N6	12.15	125.89	118.60
84	Aa	3107	A	N1-C6-N6	12.15	125.89	118.60
85	Ac	13	A	N1-C6-N6	12.15	125.89	118.60
1	Ad	1810	G	O4'-C1'-N9	-12.14	98.49	108.20
84	Aa	968	A	N1-C6-N6	12.14	125.89	118.60
84	Aa	1172	A	N1-C6-N6	12.14	125.89	118.60
84	Aa	1835	A	N1-C6-N6	12.13	125.88	118.60
84	Aa	3299	A	N1-C6-N6	12.13	125.88	118.60
84	Aa	2114	A	N1-C6-N6	12.13	125.88	118.60
84	Aa	2371	A	N1-C6-N6	12.13	125.88	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1506	A	N1-C6-N6	12.12	125.87	118.60
1	Ad	263	C	O4'-C1'-N1	12.12	117.90	108.20
84	Aa	2677	A	N1-C6-N6	12.10	125.86	118.60
84	Aa	158	A	N1-C6-N6	12.10	125.86	118.60
84	Aa	1249	A	N1-C6-N6	12.10	125.86	118.60
86	Ab	74	A	N1-C6-N6	12.10	125.86	118.60
84	Aa	440	U	P-O3'-C3'	12.10	134.22	119.70
84	Aa	1599	A	N1-C6-N6	12.10	125.86	118.60
84	Aa	2706	A	N1-C6-N6	12.10	125.86	118.60
84	Aa	2674	A	N1-C6-N6	12.09	125.86	118.60
84	Aa	3213	A	N1-C6-N6	12.09	125.86	118.60
84	Aa	2662	A	N1-C6-N6	12.09	125.86	118.60
84	Aa	154	G	N1-C6-O6	12.09	127.15	119.90
84	Aa	2545	C	P-O3'-C3'	12.09	134.21	119.70
84	Aa	3310	A	N1-C6-N6	12.09	125.85	118.60
1	Ad	492	G	O4'-C1'-N9	12.08	117.87	108.20
1	Ad	1580	G	C1'-O4'-C4'	12.08	119.56	109.90
84	Aa	143	A	N1-C6-N6	12.08	125.85	118.60
84	Aa	1755	A	N1-C6-N6	12.08	125.85	118.60
84	Aa	2971	A	N1-C6-N6	12.08	125.85	118.60
84	Aa	2228	A	N1-C6-N6	12.08	125.85	118.60
84	Aa	2853	A	N1-C6-N6	12.07	125.84	118.60
84	Aa	197	A	N1-C6-N6	12.07	125.84	118.60
2	Ae	13	U	O4'-C1'-N1	12.07	117.86	108.20
1	Ad	1574	U	O4'-C1'-N1	12.07	117.85	108.20
84	Aa	540	G	C5-C6-O6	-12.06	121.36	128.60
84	Aa	1291	A	N1-C6-N6	12.06	125.84	118.60
84	Aa	87	A	N1-C6-N6	12.06	125.84	118.60
84	Aa	46	A	N1-C6-N6	12.06	125.83	118.60
84	Aa	292	A	N1-C6-N6	12.06	125.83	118.60
84	Aa	738	A	N1-C6-N6	12.05	125.83	118.60
84	Aa	186	A	N1-C6-N6	12.05	125.83	118.60
84	Aa	2694	A	N1-C6-N6	12.05	125.83	118.60
84	Aa	924	A	N1-C6-N6	12.04	125.83	118.60
84	Aa	2386	A	N1-C6-N6	12.04	125.82	118.60
84	Aa	2458	A	N1-C6-N6	12.04	125.83	118.60
84	Aa	1492	A	N1-C6-N6	12.04	125.82	118.60
84	Aa	1410	A	N1-C6-N6	12.03	125.82	118.60
84	Aa	1653	A	N1-C6-N6	12.03	125.82	118.60
1	Ad	1804	A	O4'-C1'-N9	12.03	117.82	108.20
84	Aa	1305	A	N1-C6-N6	12.03	125.82	118.60
84	Aa	2978	A	N1-C6-N6	12.03	125.82	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1485	A	N1-C6-N6	12.03	125.81	118.60
84	Aa	94	A	N1-C6-N6	12.02	125.81	118.60
84	Aa	1307	A	N1-C6-N6	12.02	125.81	118.60
84	Aa	219	A	N1-C6-N6	12.02	125.81	118.60
84	Aa	2733	A	N1-C6-N6	12.02	125.81	118.60
84	Aa	2429	A	N1-C6-N6	12.02	125.81	118.60
86	Ab	27	A	N1-C6-N6	12.02	125.81	118.60
1	Ad	279	C	O4'-C1'-N1	12.01	117.81	108.20
84	Aa	820	A	N1-C6-N6	12.01	125.81	118.60
84	Aa	1200	A	N1-C6-N6	12.01	125.81	118.60
84	Aa	1610	A	N1-C6-N6	12.00	125.80	118.60
84	Aa	3073	A	N1-C6-N6	12.00	125.80	118.60
84	Aa	2088	C	O4'-C1'-N1	11.99	117.80	108.20
84	Aa	2107	A	N1-C6-N6	11.99	125.80	118.60
84	Aa	1353	A	N1-C6-N6	11.99	125.79	118.60
84	Aa	1139	A	N1-C6-N6	11.98	125.79	118.60
84	Aa	2016	A	N1-C6-N6	11.98	125.79	118.60
84	Aa	660	A	N1-C6-N6	11.97	125.78	118.60
84	Aa	1138	A	N1-C6-N6	11.97	125.78	118.60
84	Aa	1306	A	N1-C6-N6	11.97	125.78	118.60
84	Aa	420	A	N1-C6-N6	11.96	125.78	118.60
84	Aa	1192	A	N1-C6-N6	11.96	125.77	118.60
84	Aa	1256	A	N1-C6-N6	11.95	125.77	118.60
1	Ad	1028	A	O4'-C1'-N9	11.95	117.76	108.20
84	Aa	62	A	N1-C6-N6	11.95	125.77	118.60
84	Aa	873	A	N1-C6-N6	11.95	125.77	118.60
84	Aa	1311	G	P-O3'-C3'	11.95	134.04	119.70
84	Aa	1790	A	N1-C6-N6	11.95	125.77	118.60
84	Aa	3173	A	N1-C6-N6	11.94	125.77	118.60
84	Aa	766	C	P-O3'-C3'	11.94	134.03	119.70
84	Aa	1395	A	N1-C6-N6	11.94	125.76	118.60
84	Aa	2718	A	N1-C6-N6	11.94	125.76	118.60
84	Aa	839	A	N1-C6-N6	11.94	125.76	118.60
84	Aa	2449	A	N1-C6-N6	11.94	125.76	118.60
1	Ad	1664	U	O4'-C1'-N1	11.93	117.75	108.20
84	Aa	730	A	N1-C6-N6	11.93	125.75	118.60
84	Aa	2244	G	P-O3'-C3'	11.92	134.01	119.70
84	Aa	1206	A	N1-C6-N6	11.92	125.75	118.60
84	Aa	1520	A	N1-C6-N6	11.92	125.75	118.60
84	Aa	3074	A	N1-C6-N6	11.92	125.75	118.60
84	Aa	1254	A	N1-C6-N6	11.91	125.75	118.60
84	Aa	1543	A	N1-C6-N6	11.91	125.75	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1846	A	N1-C6-N6	11.91	125.74	118.60
84	Aa	2574	A	N1-C6-N6	11.91	125.74	118.60
84	Aa	3022	A	N1-C6-N6	11.91	125.74	118.60
84	Aa	113	A	N1-C6-N6	11.90	125.74	118.60
84	Aa	2247	A	N1-C6-N6	11.90	125.74	118.60
84	Aa	1568	A	N1-C6-N6	11.90	125.74	118.60
84	Aa	1676	A	N1-C6-N6	11.90	125.74	118.60
84	Aa	1906	A	N1-C6-N6	11.90	125.74	118.60
84	Aa	2533	A	N1-C6-N6	11.88	125.73	118.60
85	Ac	104	A	N1-C6-N6	11.88	125.73	118.60
85	Ac	44	A	N1-C6-N6	11.88	125.73	118.60
84	Aa	1802	A	N1-C6-N6	11.88	125.73	118.60
84	Aa	1030	A	N1-C6-N6	11.87	125.72	118.60
84	Aa	2086	A	P-O5'-C5'	11.88	139.90	120.90
84	Aa	2761	A	N1-C6-N6	11.87	125.72	118.60
84	Aa	3123	A	N1-C6-N6	11.87	125.72	118.60
1	Ad	271	C	P-O3'-C3'	11.87	133.94	119.70
85	Ac	92	A	N1-C6-N6	11.87	125.72	118.60
84	Aa	98	A	N1-C6-N6	11.87	125.72	118.60
84	Aa	2681	A	N1-C6-N6	11.86	125.72	118.60
84	Aa	813	A	N1-C6-N6	11.85	125.71	118.60
84	Aa	1295	A	N1-C6-N6	11.85	125.71	118.60
84	Aa	1917	A	N1-C6-N6	11.85	125.71	118.60
84	Aa	1227	A	N1-C6-N6	11.85	125.71	118.60
84	Aa	2665	A	N1-C6-N6	11.84	125.71	118.60
84	Aa	3071	A	N1-C6-N6	11.84	125.71	118.60
84	Aa	376	A	N1-C6-N6	11.84	125.70	118.60
84	Aa	3312	G	N1-C6-O6	11.84	127.00	119.90
84	Aa	382	A	N1-C6-N6	11.84	125.70	118.60
84	Aa	1875	A	N1-C6-N6	11.84	125.70	118.60
84	Aa	2794	A	N1-C6-N6	11.83	125.70	118.60
84	Aa	1905	A	N1-C6-N6	11.83	125.70	118.60
84	Aa	2815	A	N1-C6-N6	11.83	125.70	118.60
84	Aa	439	A	N1-C6-N6	11.82	125.69	118.60
84	Aa	2774	A	N1-C6-N6	11.82	125.69	118.60
84	Aa	2203	A	N1-C6-N6	11.81	125.69	118.60
1	Ad	1788	G	O4'-C1'-N9	11.81	117.65	108.20
84	Aa	1255	A	N1-C6-N6	11.81	125.69	118.60
84	Aa	1970	A	N1-C6-N6	11.81	125.69	118.60
84	Aa	2839	A	N1-C6-N6	11.81	125.69	118.60
84	Aa	3135	A	N1-C6-N6	11.81	125.69	118.60
85	Ac	109	A	N1-C6-N6	11.81	125.69	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2092	C	O4'-C1'-N1	11.81	117.65	108.20
84	Aa	3088	A	N1-C6-N6	11.81	125.69	118.60
1	Ad	749	G	O4'-C1'-N9	11.81	117.65	108.20
84	Aa	1713	A	N1-C6-N6	11.80	125.68	118.60
84	Aa	1793	A	N1-C6-N6	11.80	125.68	118.60
86	Ab	22	A	N1-C6-N6	11.80	125.68	118.60
84	Aa	1809	A	N1-C6-N6	11.80	125.68	118.60
1	Ad	333	G	O4'-C1'-N9	11.80	117.64	108.20
84	Aa	928	A	N1-C6-N6	11.80	125.68	118.60
84	Aa	1455	A	N1-C6-N6	11.80	125.68	118.60
84	Aa	394	A	N1-C6-N6	11.80	125.68	118.60
84	Aa	2518	A	N1-C6-N6	11.79	125.68	118.60
84	Aa	3342	C	P-O3'-C3'	11.79	133.85	119.70
85	Ac	105	A	N1-C6-N6	11.79	125.67	118.60
84	Aa	1207	A	N1-C6-N6	11.79	125.67	118.60
84	Aa	1727	A	N1-C6-N6	11.79	125.67	118.60
1	Ad	1162	A	C1'-O4'-C4'	11.78	119.33	109.90
84	Aa	1812	A	N1-C6-N6	11.78	125.67	118.60
1	Ad	252	U	O4'-C1'-N1	11.78	117.62	108.20
84	Aa	844	A	N1-C6-N6	11.78	125.67	118.60
84	Aa	3028	A	N1-C6-N6	11.78	125.67	118.60
84	Aa	1560	A	P-O5'-C5'	11.78	139.75	120.90
1	Ad	505	U	O4'-C1'-N1	11.78	117.62	108.20
84	Aa	23	A	N1-C6-N6	11.78	125.67	118.60
1	Ad	1293	U	O4'-C1'-N1	11.77	117.62	108.20
84	Aa	216	G	N1-C6-O6	11.77	126.96	119.90
84	Aa	1330	A	N1-C6-N6	11.77	125.66	118.60
84	Aa	1376	A	N1-C6-N6	11.77	125.66	118.60
84	Aa	363	A	N1-C6-N6	11.77	125.66	118.60
84	Aa	698	A	N1-C6-N6	11.77	125.66	118.60
1	Ad	1524	A	O4'-C1'-N9	11.76	117.61	108.20
84	Aa	783	A	N1-C6-N6	11.76	125.66	118.60
84	Aa	1863	A	N1-C6-N6	11.76	125.66	118.60
84	Aa	2781	A	N1-C6-N6	11.76	125.66	118.60
84	Aa	2113	A	N1-C6-N6	11.76	125.66	118.60
84	Aa	416	A	N1-C6-N6	11.76	125.66	118.60
1	Ad	1190	U	O4'-C1'-N1	11.76	117.61	108.20
84	Aa	711	A	N1-C6-N6	11.75	125.65	118.60
84	Aa	2596	A	P-O3'-C3'	11.75	133.81	119.70
84	Aa	327	A	N1-C6-N6	11.75	125.65	118.60
84	Aa	1162	A	N1-C6-N6	11.75	125.65	118.60
84	Aa	2193	A	N1-C6-N6	11.75	125.65	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	564	A	N1-C6-N6	11.75	125.65	118.60
84	Aa	1674	A	N1-C6-N6	11.75	125.65	118.60
84	Aa	365	A	N1-C6-N6	11.74	125.64	118.60
84	Aa	287	A	N1-C6-N6	11.74	125.64	118.60
1	Ad	1782	C	P-O3'-C3'	11.73	133.78	119.70
84	Aa	149	A	N1-C6-N6	11.73	125.64	118.60
84	Aa	3362	A	N1-C6-N6	11.72	125.64	118.60
1	Ad	284	U	P-O3'-C3'	11.72	133.77	119.70
84	Aa	2298	A	N1-C6-N6	11.72	125.63	118.60
85	Ac	121	A	N1-C6-N6	11.72	125.63	118.60
84	Aa	2141	A	N1-C6-N6	11.72	125.63	118.60
84	Aa	1468	A	N1-C6-N6	11.72	125.63	118.60
84	Aa	1643	A	N1-C6-N6	11.72	125.63	118.60
84	Aa	3115	A	N1-C6-N6	11.72	125.63	118.60
84	Aa	1602	A	N1-C6-N6	11.71	125.63	118.60
1	Ad	1617	U	O4'-C1'-N1	11.71	117.57	108.20
84	Aa	1193	A	N1-C6-N6	11.71	125.63	118.60
84	Aa	3327	A	N1-C6-N6	11.71	125.62	118.60
84	Aa	2749	A	N1-C6-N6	11.71	125.62	118.60
84	Aa	3235	A	N1-C6-N6	11.70	125.62	118.60
1	Ad	608	U	O4'-C1'-N1	11.70	117.56	108.20
84	Aa	1312	A	N1-C6-N6	11.70	125.62	118.60
84	Aa	1837	A	N1-C6-N6	11.70	125.62	118.60
84	Aa	1065	A	N1-C6-N6	11.70	125.62	118.60
84	Aa	1883	A	N1-C6-N6	11.70	125.62	118.60
1	Ad	95	U	O4'-C1'-N1	11.69	117.56	108.20
84	Aa	3072	A	N1-C6-N6	11.69	125.62	118.60
1	Ad	282	C	C1'-O4'-C4'	11.69	119.25	109.90
84	Aa	3386	A	N1-C6-N6	11.69	125.61	118.60
1	Ad	612	U	N1-C1'-C2'	11.68	129.18	114.00
84	Aa	850	A	N1-C6-N6	11.68	125.61	118.60
84	Aa	2111	A	N1-C6-N6	11.68	125.61	118.60
1	Ad	903	A	O4'-C1'-N9	11.67	117.54	108.20
84	Aa	1204	A	N1-C6-N6	11.67	125.60	118.60
84	Aa	2006	A	N1-C6-N6	11.67	125.60	118.60
86	Ab	66	G	N1-C6-O6	11.67	126.90	119.90
1	Ad	57	G	O4'-C1'-N9	11.66	117.53	108.20
84	Aa	572	U	P-O3'-C3'	11.66	133.69	119.70
84	Aa	2218	A	N1-C6-N6	11.66	125.59	118.60
84	Aa	1861	A	N1-C6-N6	11.65	125.59	118.60
84	Aa	325	A	N1-C6-N6	11.65	125.59	118.60
84	Aa	1591	A	N1-C6-N6	11.63	125.58	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1056	A	P-O3'-C3'	11.63	133.66	119.70
84	Aa	2251	A	N1-C6-N6	11.63	125.58	118.60
84	Aa	2960	A	N1-C6-N6	11.63	125.58	118.60
84	Aa	2765	A	N1-C6-N6	11.63	125.58	118.60
84	Aa	681	A	N1-C6-N6	11.63	125.58	118.60
1	Ad	282	C	P-O3'-C3'	11.62	133.65	119.70
84	Aa	1397	A	N1-C6-N6	11.62	125.57	118.60
84	Aa	1880	A	N1-C6-N6	11.62	125.57	118.60
84	Aa	2366	A	N1-C6-N6	11.61	125.57	118.60
84	Aa	249	A	N1-C6-N6	11.61	125.57	118.60
84	Aa	1926	A	N1-C6-N6	11.61	125.57	118.60
1	Ad	1267	G	O4'-C1'-N9	11.61	117.49	108.20
84	Aa	1738	A	N1-C6-N6	11.61	125.57	118.60
1	Ad	1582	G	C3'-C2'-C1'	11.61	110.78	101.50
84	Aa	981	A	N1-C6-N6	11.61	125.56	118.60
86	Ab	83	A	N1-C6-N6	11.61	125.56	118.60
84	Aa	1220	G	N1-C6-O6	11.60	126.86	119.90
85	Ac	89	A	N1-C6-N6	11.60	125.56	118.60
84	Aa	2736	A	N1-C6-N6	11.60	125.56	118.60
84	Aa	1278	A	N1-C6-N6	11.60	125.56	118.60
84	Aa	2840	A	N1-C6-N6	11.60	125.56	118.60
1	Ad	54	C	O4'-C1'-C2'	-11.59	94.21	105.80
84	Aa	2772	A	N1-C6-N6	11.59	125.55	118.60
84	Aa	2921	A	N1-C6-N6	11.59	125.55	118.60
1	Ad	1323	U	O4'-C1'-N1	11.58	117.47	108.20
84	Aa	1101	A	N1-C6-N6	11.58	125.55	118.60
2	Ae	65	U	O4'-C1'-N1	11.58	117.46	108.20
2	Ae	59	U	O4'-C1'-N1	11.57	117.46	108.20
1	Ad	817	C	P-O3'-C3'	11.57	133.59	119.70
84	Aa	2120	A	N1-C6-N6	11.57	125.54	118.60
84	Aa	1507	A	N1-C6-N6	11.57	125.54	118.60
1	Ad	1276	U	O4'-C1'-N1	11.56	117.45	108.20
1	Ad	743	G	O4'-C1'-N9	11.56	117.45	108.20
84	Aa	775	A	N1-C6-N6	11.56	125.54	118.60
84	Aa	2532	A	N1-C6-N6	11.56	125.54	118.60
84	Aa	53	C	O4'-C1'-N1	11.56	117.45	108.20
84	Aa	1571	A	N1-C6-N6	11.56	125.54	118.60
84	Aa	2835	A	N1-C6-N6	11.56	125.53	118.60
1	Ad	112	U	O4'-C1'-N1	11.55	117.44	108.20
84	Aa	932	A	N1-C6-N6	11.55	125.53	118.60
84	Aa	2474	A	N1-C6-N6	11.55	125.53	118.60
1	Ad	553	G	O4'-C1'-N9	11.55	117.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	355	U	O4'-C1'-N1	11.55	117.44	108.20
1	Ad	74	U	O4'-C1'-N1	11.54	117.44	108.20
2	Ae	42	C	O4'-C1'-N1	11.54	117.43	108.20
84	Aa	2054	A	N1-C6-N6	11.54	125.52	118.60
1	Ad	1576	C	P-O3'-C3'	11.54	133.54	119.70
84	Aa	2514	A	P-O3'-C3'	11.54	133.54	119.70
84	Aa	2412	A	N1-C6-N6	11.53	125.52	118.60
84	Aa	2202	A	N1-C6-N6	11.53	125.52	118.60
84	Aa	452	G	C4'-C3'-O3'	-11.53	85.20	109.40
84	Aa	3033	A	N1-C6-N6	11.53	125.52	118.60
84	Aa	1795	A	N1-C6-N6	11.52	125.51	118.60
86	Ab	20	C	N3-C4-C5	-11.52	117.29	121.90
84	Aa	2641	A	N1-C6-N6	11.51	125.50	118.60
85	Ac	53	A	N1-C6-N6	11.51	125.50	118.60
84	Aa	47	A	N1-C6-N6	11.50	125.50	118.60
1	Ad	1395	C	N1-C1'-C2'	11.50	128.95	114.00
1	Ad	509	A	C3'-C2'-C1'	11.50	110.70	101.50
84	Aa	1748	A	N1-C6-N6	11.50	125.50	118.60
1	Ad	156	U	P-O3'-C3'	11.50	133.50	119.70
84	Aa	122	A	N1-C6-N6	11.50	125.50	118.60
84	Aa	72	A	N1-C6-N6	11.50	125.50	118.60
84	Aa	1518	A	N1-C6-N6	11.50	125.50	118.60
84	Aa	885	A	N1-C6-N6	11.49	125.50	118.60
1	Ad	360	G	O4'-C1'-N9	11.49	117.39	108.20
84	Aa	550	C	P-O3'-C3'	11.49	133.49	119.70
84	Aa	1459	A	N1-C6-N6	11.49	125.49	118.60
84	Aa	2137	A	N1-C6-N6	11.49	125.49	118.60
84	Aa	670	A	N1-C6-N6	11.49	125.49	118.60
84	Aa	2813	A	N1-C6-N6	11.49	125.49	118.60
1	Ad	176	A	C1'-O4'-C4'	11.48	119.09	109.90
84	Aa	1163	A	N1-C6-N6	11.48	125.49	118.60
1	Ad	1556	U	O4'-C1'-N1	11.48	117.39	108.20
84	Aa	1860	A	N1-C6-N6	11.48	125.49	118.60
84	Aa	1107	G	N1-C6-O6	11.48	126.79	119.90
84	Aa	2250	A	N1-C6-N6	11.47	125.48	118.60
84	Aa	696	A	N1-C6-N6	11.46	125.48	118.60
84	Aa	2304	A	N1-C6-N6	11.46	125.48	118.60
1	Ad	744	G	N9-C1'-C2'	-11.46	99.10	114.00
85	Ac	135	A	N1-C6-N6	11.46	125.48	118.60
1	Ad	80	C	N1-C1'-C2'	11.45	128.89	114.00
1	Ad	262	U	O4'-C1'-N1	11.45	117.36	108.20
84	Aa	2527	G	N1-C6-O6	11.45	126.77	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1691	C	O4'-C1'-C2'	-11.45	94.35	105.80
84	Aa	210	G	N1-C6-O6	11.45	126.77	119.90
84	Aa	1391	A	N1-C6-N6	11.44	125.47	118.60
84	Aa	861	A	N1-C6-N6	11.44	125.46	118.60
84	Aa	2081	C	P-O3'-C3'	11.43	133.42	119.70
84	Aa	1550	A	N1-C6-N6	11.43	125.46	118.60
84	Aa	2215	A	N1-C6-N6	11.43	125.46	118.60
84	Aa	2750	A	N1-C6-N6	11.43	125.46	118.60
84	Aa	1464	A	N1-C6-N6	11.43	125.45	118.60
84	Aa	2275	A	N1-C6-N6	11.43	125.46	118.60
84	Aa	3309	U	P-O3'-C3'	11.42	133.41	119.70
85	Ac	48	A	N1-C6-N6	11.42	125.45	118.60
1	Ad	845	C	O4'-C1'-C2'	-11.42	94.38	105.80
1	Ad	1580	G	N9-C1'-C2'	-11.42	99.16	114.00
1	Ad	1388	A	O4'-C1'-N9	11.41	117.33	108.20
86	Ab	89	G	O4'-C1'-N9	11.41	117.33	108.20
1	Ad	1361	G	O4'-C1'-N9	11.41	117.33	108.20
84	Aa	66	A	N1-C6-N6	11.41	125.44	118.60
84	Aa	2162	C	O4'-C1'-N1	11.41	117.33	108.20
84	Aa	1805	A	N1-C6-N6	11.40	125.44	118.60
86	Ab	90	A	N1-C6-N6	11.40	125.44	118.60
84	Aa	875	A	N1-C6-N6	11.40	125.44	118.60
84	Aa	1584	A	N1-C6-N6	11.40	125.44	118.60
84	Aa	1629	A	N1-C6-N6	11.39	125.44	118.60
84	Aa	758	A	N1-C6-N6	11.39	125.44	118.60
84	Aa	2502	U	O4'-C1'-N1	11.39	117.31	108.20
1	Ad	846	U	N1-C1'-C2'	11.39	128.80	114.00
84	Aa	970	A	N1-C6-N6	11.39	125.43	118.60
84	Aa	2312	A	N1-C6-N6	11.39	125.43	118.60
84	Aa	976	A	N1-C6-N6	11.39	125.43	118.60
1	Ad	860	A	N9-C1'-C2'	-11.38	99.20	114.00
84	Aa	48	A	N1-C6-N6	11.38	125.43	118.60
1	Ad	1259	G	O4'-C1'-C2'	11.37	117.84	107.60
84	Aa	869	A	N1-C6-N6	11.37	125.42	118.60
86	Ab	72	G	P-O3'-C3'	11.37	133.34	119.70
86	Ab	97	G	C5-C6-O6	-11.37	121.78	128.60
84	Aa	2699	A	N1-C6-N6	11.37	125.42	118.60
84	Aa	1199	A	N1-C6-N6	11.37	125.42	118.60
84	Aa	2631	A	N1-C6-N6	11.37	125.42	118.60
84	Aa	405	A	N1-C6-N6	11.36	125.42	118.60
84	Aa	2367	A	N1-C6-N6	11.36	125.42	118.60
84	Aa	2819	A	N1-C6-N6	11.36	125.42	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	211	A	N1-C6-N6	11.35	125.41	118.60
84	Aa	585	A	N1-C6-N6	11.35	125.41	118.60
84	Aa	2596	A	N1-C6-N6	11.35	125.41	118.60
1	Ad	54	C	O4'-C1'-N1	11.34	117.27	108.20
84	Aa	2175	A	N1-C6-N6	11.34	125.41	118.60
84	Aa	1874	A	N1-C6-N6	11.34	125.40	118.60
84	Aa	2709	G	N1-C6-O6	11.34	126.70	119.90
84	Aa	1527	A	N1-C6-N6	11.34	125.40	118.60
84	Aa	2362	A	N1-C6-N6	11.33	125.40	118.60
84	Aa	2074	C	O4'-C1'-N1	11.33	117.26	108.20
1	Ad	155	A	O4'-C1'-N9	11.32	117.26	108.20
84	Aa	1024	G	C5-C6-O6	-11.32	121.81	128.60
84	Aa	2316	A	N1-C6-N6	11.32	125.39	118.60
84	Aa	2047	A	N1-C6-N6	11.32	125.39	118.60
84	Aa	2208	A	N1-C6-N6	11.32	125.39	118.60
84	Aa	918	A	N1-C6-N6	11.31	125.39	118.60
84	Aa	1229	A	N1-C6-N6	11.31	125.39	118.60
84	Aa	3345	G	P-O3'-C3'	11.31	133.28	119.70
1	Ad	1238	A	P-O3'-C3'	11.31	133.27	119.70
1	Ad	132	G	O4'-C1'-N9	11.31	117.25	108.20
84	Aa	3128	A	N1-C6-N6	11.31	125.39	118.60
86	Ab	51	G	P-O3'-C3'	11.31	133.27	119.70
84	Aa	916	A	N1-C6-N6	11.30	125.38	118.60
84	Aa	1600	A	N1-C6-N6	11.30	125.38	118.60
84	Aa	3236	A	N1-C6-N6	11.30	125.38	118.60
1	Ad	1810	G	O4'-C1'-C2'	-11.30	94.50	105.80
84	Aa	2053	A	N1-C6-N6	11.30	125.38	118.60
84	Aa	2542	U	P-O3'-C3'	11.30	133.26	119.70
1	Ad	964	U	N1-C1'-C2'	11.29	128.68	114.00
84	Aa	1990	A	N1-C6-N6	11.29	125.37	118.60
1	Ad	1009	U	O4'-C1'-N1	11.29	117.23	108.20
84	Aa	1264	A	N1-C6-N6	11.29	125.37	118.60
84	Aa	2973	A	N1-C6-N6	11.29	125.37	118.60
84	Aa	1457	A	N1-C6-N6	11.28	125.37	118.60
84	Aa	651	A	N1-C6-N6	11.27	125.36	118.60
84	Aa	1182	A	N1-C6-N6	11.27	125.36	118.60
1	Ad	1466	A	O4'-C1'-C2'	11.27	117.74	107.60
84	Aa	1971	A	N1-C6-N6	11.27	125.36	118.60
84	Aa	3009	A	N1-C6-N6	11.27	125.36	118.60
84	Aa	1747	A	C5-C6-N6	-11.26	114.69	123.70
1	Ad	491	G	O4'-C1'-N9	11.26	117.21	108.20
84	Aa	1044	A	N1-C6-N6	11.26	125.36	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2822	A	N1-C6-N6	11.26	125.35	118.60
84	Aa	704	G	N1-C6-O6	11.25	126.65	119.90
1	Ad	1589	C	C3'-C2'-C1'	11.25	110.50	101.50
84	Aa	789	A	N1-C6-N6	11.25	125.35	118.60
1	Ad	52	U	O4'-C1'-N1	11.25	117.20	108.20
84	Aa	567	G	N1-C6-O6	11.25	126.65	119.90
84	Aa	1937	C	P-O3'-C3'	11.25	133.19	119.70
84	Aa	1059	A	N1-C6-N6	11.24	125.35	118.60
84	Aa	1703	C	O4'-C1'-N1	11.24	117.19	108.20
1	Ad	1029	U	O4'-C1'-N1	11.24	117.19	108.20
1	Ad	71	C	P-O3'-C3'	11.23	133.18	119.70
84	Aa	1275	A	N1-C6-N6	11.23	125.34	118.60
84	Aa	2489	A	N1-C6-N6	11.23	125.34	118.60
1	Ad	907	G	O4'-C1'-N9	11.22	117.18	108.20
84	Aa	2612	A	N1-C6-N6	11.22	125.33	118.60
84	Aa	3007	A	N1-C6-N6	11.22	125.33	118.60
1	Ad	64	U	O4'-C1'-N1	11.22	117.17	108.20
84	Aa	70	A	N1-C6-N6	11.22	125.33	118.60
1	Ad	1681	G	O4'-C1'-N9	11.22	117.17	108.20
84	Aa	1689	G	N1-C6-O6	11.21	126.63	119.90
84	Aa	527	G	P-O5'-C5'	11.20	138.83	120.90
1	Ad	613	U	O4'-C1'-C2'	-11.20	94.60	105.80
84	Aa	731	G	N1-C6-O6	11.20	126.62	119.90
84	Aa	954	A	N1-C6-N6	11.20	125.32	118.60
84	Aa	3297	A	N1-C6-N6	11.20	125.32	118.60
1	Ad	1409	G	P-O5'-C5'	11.18	138.79	120.90
1	Ad	1389	G	O4'-C1'-N9	11.18	117.14	108.20
85	Ac	61	A	N1-C6-N6	11.18	125.31	118.60
1	Ad	578	G	O4'-C1'-N9	11.18	117.14	108.20
84	Aa	1026	A	N1-C6-N6	11.17	125.30	118.60
84	Aa	167	C	P-O3'-C3'	11.16	133.10	119.70
86	Ab	31	G	C5-C6-O6	-11.16	121.90	128.60
84	Aa	2149	G	P-O3'-C3'	11.16	133.09	119.70
84	Aa	616	A	N1-C6-N6	11.16	125.30	118.60
84	Aa	2509	A	N1-C6-N6	11.15	125.29	118.60
1	Ad	525	A	O4'-C1'-N9	11.15	117.12	108.20
84	Aa	767	U	P-O3'-C3'	11.15	133.08	119.70
84	Aa	1716	G	N1-C6-O6	11.15	126.59	119.90
84	Aa	868	A	N1-C6-N6	11.14	125.29	118.60
84	Aa	1052	A	N1-C6-N6	11.14	125.29	118.60
84	Aa	76	A	N1-C6-N6	11.14	125.28	118.60
84	Aa	2764	G	N1-C6-O6	11.14	126.58	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	Af	19	U	O4'-C1'-N1	11.14	117.11	108.20
84	Aa	2737	A	N1-C6-N6	11.13	125.28	118.60
84	Aa	1235	A	N1-C6-N6	11.13	125.28	118.60
1	Ad	888	U	O4'-C1'-N1	11.13	117.10	108.20
84	Aa	293	A	N1-C6-N6	11.13	125.28	118.60
1	Ad	284	U	O4'-C1'-N1	11.12	117.10	108.20
86	Ab	100	A	N1-C6-N6	11.12	125.28	118.60
84	Aa	3287	A	N1-C6-N6	11.12	125.27	118.60
84	Aa	3308	A	N1-C6-N6	11.11	125.27	118.60
84	Aa	1321	A	N1-C6-N6	11.11	125.27	118.60
84	Aa	2132	A	N1-C6-N6	11.10	125.26	118.60
84	Aa	3167	G	P-O3'-C3'	11.10	133.02	119.70
84	Aa	198	A	N1-C6-N6	11.10	125.26	118.60
84	Aa	2792	A	N1-C6-N6	11.09	125.26	118.60
84	Aa	3140	A	N1-C6-N6	11.09	125.26	118.60
1	Ad	67	G	P-O3'-C3'	11.09	133.00	119.70
84	Aa	387	A	N1-C6-N6	11.09	125.25	118.60
1	Ad	241	G	P-O3'-C3'	11.09	133.00	119.70
84	Aa	2705	A	N1-C6-N6	11.08	125.25	118.60
84	Aa	2928	A	N1-C6-N6	11.08	125.25	118.60
86	Ab	45	U	O4'-C1'-N1	11.08	117.06	108.20
1	Ad	1081	A	O4'-C1'-N9	11.08	117.06	108.20
84	Aa	2881	C	O4'-C1'-N1	11.08	117.06	108.20
1	Ad	1247	G	O4'-C1'-N9	11.07	117.06	108.20
84	Aa	653	A	N1-C6-N6	11.06	125.24	118.60
85	Ac	82	C	P-O3'-C3'	11.06	132.97	119.70
84	Aa	650	A	N1-C6-N6	11.06	125.23	118.60
1	Ad	316	A	O4'-C1'-N9	11.05	117.04	108.20
85	Ac	88	A	N1-C6-N6	11.05	125.23	118.60
84	Aa	2938	A	N1-C6-N6	11.04	125.22	118.60
1	Ad	1186	U	O4'-C1'-N1	11.04	117.03	108.20
1	Ad	1195	U	O4'-C1'-N1	11.04	117.03	108.20
84	Aa	2796	G	N1-C6-O6	11.04	126.52	119.90
84	Aa	1577	A	N1-C6-N6	11.03	125.22	118.60
84	Aa	2568	G	N1-C6-O6	11.03	126.52	119.90
1	Ad	985	G	O4'-C1'-N9	11.03	117.03	108.20
1	Ad	724	U	O4'-C1'-N1	11.03	117.02	108.20
1	Ad	1085	U	O4'-C1'-N1	11.02	117.02	108.20
86	Ab	110	G	C5-C6-O6	-11.02	121.99	128.60
1	Ad	1125	U	O4'-C1'-N1	11.02	117.01	108.20
84	Aa	2660	A	N1-C6-N6	11.01	125.21	118.60
1	Ad	1357	U	O4'-C1'-N1	11.01	117.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	350	A	N1-C6-N6	11.01	125.20	118.60
84	Aa	1115	A	N1-C6-N6	10.99	125.20	118.60
1	Ad	262	U	C1'-O4'-C4'	10.99	118.69	109.90
1	Ad	1658	U	O4'-C1'-N1	10.99	116.99	108.20
1	Ad	621	U	O4'-C1'-N1	10.98	116.99	108.20
86	Ab	79	A	C4-C5-C6	10.98	122.49	117.00
84	Aa	2325	A	N1-C6-N6	10.98	125.19	118.60
84	Aa	340	A	N1-C6-N6	10.98	125.19	118.60
84	Aa	984	A	N1-C6-N6	10.98	125.19	118.60
84	Aa	2079	A	N1-C6-N6	10.97	125.18	118.60
84	Aa	2094	A	C4'-C3'-O3'	-10.97	86.36	109.40
84	Aa	1635	A	N1-C6-N6	10.96	125.18	118.60
86	Ab	60	G	N1-C6-O6	10.96	126.47	119.90
1	Ad	940	U	O4'-C1'-N1	10.96	116.97	108.20
84	Aa	1051	A	N1-C6-N6	10.95	125.17	118.60
84	Aa	306	A	N1-C6-N6	10.95	125.17	118.60
84	Aa	288	G	N1-C6-O6	10.95	126.47	119.90
85	Ac	140	A	N1-C6-N6	10.95	125.17	118.60
84	Aa	615	A	N1-C6-N6	10.94	125.16	118.60
84	Aa	819	A	N1-C6-N6	10.93	125.16	118.60
85	Ac	79	A	N1-C6-N6	10.93	125.16	118.60
1	Ad	968	A	O4'-C1'-N9	10.92	116.94	108.20
85	Ac	77	A	N1-C6-N6	10.91	125.15	118.60
84	Aa	16	A	N1-C6-N6	10.91	125.15	118.60
84	Aa	3124	A	N1-C6-N6	10.91	125.14	118.60
84	Aa	1015	A	N1-C6-N6	10.91	125.14	118.60
85	Ac	129	C	P-O3'-C3'	10.90	132.78	119.70
1	Ad	107	U	O4'-C1'-N1	10.90	116.92	108.20
84	Aa	2661	G	N1-C6-O6	10.90	126.44	119.90
1	Ad	1625	U	O4'-C1'-N1	10.89	116.91	108.20
84	Aa	397	A	N1-C6-N6	10.89	125.14	118.60
84	Aa	1798	C	P-O3'-C3'	10.89	132.77	119.70
84	Aa	2936	A	N1-C6-N6	10.89	125.13	118.60
85	Ac	80	A	N1-C6-N6	10.89	125.13	118.60
1	Ad	212	A	C3'-C2'-C1'	10.89	110.21	101.50
84	Aa	2398	A	N1-C6-N6	10.88	125.13	118.60
84	Aa	2514	A	N1-C6-N6	10.88	125.13	118.60
84	Aa	2707	A	N1-C6-N6	10.88	125.13	118.60
1	Ad	870	A	O4'-C1'-N9	10.88	116.90	108.20
84	Aa	2254	A	N1-C6-N6	10.88	125.13	118.60
84	Aa	2307	A	N1-C6-N6	10.87	125.12	118.60
1	Ad	334	G	O4'-C1'-N9	10.86	116.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	72	A	P-O3'-C3'	10.86	132.73	119.70
86	Ab	65	G	N1-C6-O6	10.86	126.42	119.90
1	Ad	1635	U	O4'-C1'-N1	10.86	116.89	108.20
84	Aa	3368	A	N1-C6-N6	10.86	125.11	118.60
1	Ad	476	U	O4'-C1'-N1	10.85	116.88	108.20
86	Ab	103	U	O4'-C1'-N1	10.85	116.88	108.20
84	Aa	1537	A	N1-C6-N6	10.85	125.11	118.60
86	Ab	32	A	N1-C6-N6	10.85	125.11	118.60
84	Aa	1415	G	N1-C6-O6	10.84	126.40	119.90
2	Ae	40	U	O4'-C1'-N1	10.84	116.87	108.20
1	Ad	1808	U	P-O3'-C3'	10.83	132.70	119.70
1	Ad	77	G	O4'-C1'-N9	10.83	116.86	108.20
84	Aa	1712	A	N1-C6-N6	10.83	125.10	118.60
84	Aa	1470	A	N1-C6-N6	10.82	125.09	118.60
84	Aa	1714	A	N1-C6-N6	10.82	125.09	118.60
84	Aa	2246	G	N1-C6-O6	10.82	126.39	119.90
85	Ac	85	G	N1-C6-O6	10.82	126.39	119.90
84	Aa	1181	A	N1-C6-N6	10.82	125.09	118.60
84	Aa	1361	G	N1-C6-O6	10.82	126.39	119.90
1	Ad	1386	U	N1-C1'-C2'	10.81	128.06	114.00
84	Aa	3188	G	N1-C6-O6	10.81	126.39	119.90
84	Aa	1478	A	N1-C6-N6	10.80	125.08	118.60
85	Ac	151	G	N1-C6-O6	10.80	126.38	119.90
1	Ad	498	U	O4'-C1'-N1	10.80	116.84	108.20
84	Aa	1720	C	O4'-C1'-N1	10.80	116.84	108.20
84	Aa	2270	A	N1-C6-N6	10.80	125.08	118.60
1	Ad	824	U	P-O5'-C5'	10.80	138.18	120.90
1	Ad	1603	U	O4'-C1'-N1	10.80	116.84	108.20
84	Aa	2224	A	N1-C6-N6	10.80	125.08	118.60
1	Ad	241	G	O4'-C1'-N9	10.79	116.83	108.20
1	Ad	1535	U	O4'-C1'-N1	10.79	116.83	108.20
84	Aa	1705	A	N1-C6-N6	10.78	125.07	118.60
84	Aa	1197	A	N1-C6-N6	10.78	125.07	118.60
84	Aa	1569	U	P-O3'-C3'	10.78	132.63	119.70
84	Aa	118	G	C5-C6-O6	-10.77	122.14	128.60
85	Ac	17	A	N1-C6-N6	10.76	125.06	118.60
1	Ad	1745	U	O4'-C1'-N1	10.76	116.81	108.20
84	Aa	3282	G	N1-C6-O6	10.76	126.36	119.90
84	Aa	171	G	N1-C6-O6	10.76	126.36	119.90
1	Ad	39	A	O4'-C1'-N9	10.75	116.80	108.20
1	Ad	1637	G	O4'-C1'-C2'	10.75	117.28	107.60
84	Aa	1741	G	N1-C6-O6	10.75	126.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	336	A	N1-C6-N6	10.74	125.05	118.60
1	Ad	1065	A	O4'-C1'-N9	10.74	116.79	108.20
84	Aa	2588	G	N1-C6-O6	10.74	126.34	119.90
1	Ad	987	U	O4'-C1'-N1	10.73	116.79	108.20
1	Ad	421	A	P-O3'-C3'	10.73	132.57	119.70
84	Aa	88	A	N1-C6-N6	10.73	125.04	118.60
1	Ad	421	A	O4'-C1'-C2'	-10.72	95.08	105.80
84	Aa	1294	A	N1-C6-N6	10.72	125.03	118.60
85	Ac	122	G	N1-C6-O6	10.71	126.33	119.90
84	Aa	2119	A	N1-C6-N6	10.71	125.03	118.60
84	Aa	2423	A	N1-C6-N6	10.71	125.03	118.60
84	Aa	323	A	N1-C6-N6	10.70	125.02	118.60
84	Aa	899	A	N1-C6-N6	10.70	125.02	118.60
1	Ad	1290	U	O4'-C1'-N1	10.70	116.76	108.20
2	Ae	32	U	O4'-C1'-N1	10.70	116.76	108.20
84	Aa	2020	G	P-O3'-C3'	10.69	132.53	119.70
1	Ad	772	C	N1-C1'-C2'	10.68	127.89	114.00
84	Aa	372	A	N1-C6-N6	10.68	125.01	118.60
84	Aa	1477	A	N1-C6-N6	10.68	125.01	118.60
1	Ad	739	U	O4'-C1'-N1	10.68	116.74	108.20
84	Aa	1007	A	N1-C6-N6	10.68	125.01	118.60
84	Aa	2291	A	N1-C6-N6	10.68	125.01	118.60
84	Aa	2671	A	N1-C6-N6	10.68	125.01	118.60
86	Ab	37	G	N1-C6-O6	10.67	126.30	119.90
1	Ad	129	U	O4'-C1'-N1	10.66	116.73	108.20
1	Ad	633	U	P-O3'-C3'	10.66	132.50	119.70
84	Aa	384	A	N1-C6-N6	10.66	125.00	118.60
84	Aa	1593	C	O4'-C1'-N1	10.66	116.73	108.20
84	Aa	3131	A	N1-C6-N6	10.66	125.00	118.60
84	Aa	2892	A	N1-C6-N6	10.66	125.00	118.60
84	Aa	3200	A	N1-C6-N6	10.66	124.99	118.60
86	Ab	8	A	N1-C6-N6	10.64	124.99	118.60
84	Aa	1544	G	P-O3'-C3'	10.64	132.47	119.70
84	Aa	154	G	C5-C6-O6	-10.64	122.22	128.60
84	Aa	172	A	N1-C6-N6	10.64	124.98	118.60
86	Ab	92	C	N3-C4-C5	-10.63	117.65	121.90
84	Aa	967	G	N1-C6-O6	10.62	126.27	119.90
84	Aa	1320	G	N1-C6-O6	10.62	126.27	119.90
84	Aa	362	G	N1-C6-O6	10.62	126.27	119.90
84	Aa	718	C	O4'-C1'-N1	10.62	116.69	108.20
84	Aa	1911	A	N1-C6-N6	10.62	124.97	118.60
84	Aa	2623	G	N1-C6-O6	10.62	126.27	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1435	G	O4'-C1'-N9	10.61	116.69	108.20
84	Aa	105	A	N1-C6-N6	10.61	124.97	118.60
84	Aa	1887	A	N1-C6-N6	10.61	124.97	118.60
84	Aa	1237	G	N1-C6-O6	10.61	126.26	119.90
84	Aa	2593	A	N1-C6-N6	10.60	124.96	118.60
84	Aa	1248	A	N1-C6-N6	10.59	124.96	118.60
84	Aa	1943	G	C4'-C3'-O3'	10.59	134.18	113.00
84	Aa	1286	G	N1-C6-O6	10.58	126.25	119.90
84	Aa	1680	A	N1-C6-N6	10.58	124.95	118.60
84	Aa	2743	A	N1-C6-N6	10.58	124.95	118.60
1	Ad	1202	G	O4'-C1'-C2'	10.57	117.12	107.60
84	Aa	2354	G	N1-C6-O6	10.57	126.24	119.90
84	Aa	2360	A	N1-C6-N6	10.57	124.94	118.60
1	Ad	33	U	O4'-C1'-N1	10.57	116.65	108.20
84	Aa	1471	A	N1-C6-N6	10.57	124.94	118.60
84	Aa	3261	C	C4'-C3'-O3'	10.57	134.13	113.00
86	Ab	43	A	C5-C6-N6	-10.57	115.25	123.70
1	Ad	1255	U	O4'-C1'-N1	10.56	116.64	108.20
84	Aa	237	C	P-O3'-C3'	10.56	132.37	119.70
86	Ab	41	G	N1-C6-O6	10.55	126.23	119.90
84	Aa	1891	A	N1-C6-N6	10.55	124.93	118.60
1	Ad	1231	A	N9-C1'-C2'	10.54	127.70	114.00
84	Aa	138	G	N1-C6-O6	10.54	126.22	119.90
84	Aa	876	C	P-O3'-C3'	10.54	132.35	119.70
1	Ad	1336	C	N1-C1'-C2'	10.54	127.70	114.00
84	Aa	84	A	N1-C6-N6	10.54	124.92	118.60
1	Ad	715	U	O4'-C1'-N1	10.54	116.63	108.20
1	Ad	866	U	O4'-C1'-N1	10.53	116.63	108.20
84	Aa	2942	A	N1-C6-N6	10.54	124.92	118.60
86	Ab	19	A	C5-C6-N1	-10.54	112.43	117.70
84	Aa	1856	G	N1-C6-O6	10.53	126.22	119.90
84	Aa	1092	G	N1-C6-O6	10.53	126.22	119.90
84	Aa	1586	A	N1-C6-N6	10.53	124.92	118.60
1	Ad	764	U	O4'-C1'-N1	10.52	116.62	108.20
1	Ad	1105	G	N9-C1'-C2'	10.52	127.68	114.00
84	Aa	1585	A	N1-C6-N6	10.52	124.91	118.60
84	Aa	1047	C	O4'-C1'-N1	10.52	116.62	108.20
84	Aa	2605	G	N1-C6-O6	10.52	126.21	119.90
84	Aa	2801	A	N1-C6-N6	10.51	124.91	118.60
84	Aa	3047	A	N1-C6-N6	10.51	124.91	118.60
1	Ad	1321	C	C1'-O4'-C4'	-10.51	101.50	109.90
84	Aa	1322	A	C5-C6-N6	-10.50	115.30	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2265	A	N1-C6-N6	10.50	124.90	118.60
84	Aa	2919	G	N1-C6-O6	10.50	126.20	119.90
84	Aa	1217	G	N1-C6-O6	10.50	126.20	119.90
84	Aa	2222	C	P-O3'-C3'	10.49	132.29	119.70
84	Aa	2739	A	N1-C6-N6	10.49	124.89	118.60
1	Ad	831	C	O4'-C1'-N1	10.49	116.59	108.20
84	Aa	2319	A	N1-C6-N6	10.49	124.89	118.60
1	Ad	130	A	O4'-C1'-N9	10.48	116.59	108.20
84	Aa	346	A	N1-C6-N6	10.48	124.89	118.60
84	Aa	2136	A	N1-C6-N6	10.48	124.89	118.60
1	Ad	1162	A	N9-C1'-C2'	-10.48	100.38	114.00
84	Aa	1998	A	N1-C6-N6	10.48	124.89	118.60
84	Aa	723	G	C5'-C4'-O4'	-10.47	96.54	109.10
84	Aa	1019	A	C5-C6-N6	-10.47	115.32	123.70
1	Ad	872	G	O4'-C1'-N9	10.46	116.56	108.20
84	Aa	2697	A	N1-C6-N6	10.46	124.87	118.60
1	Ad	110	G	O4'-C1'-N9	10.45	116.56	108.20
1	Ad	1328	G	O4'-C1'-N9	10.45	116.56	108.20
84	Aa	359	A	N1-C6-N6	10.45	124.87	118.60
84	Aa	2374	G	N1-C6-O6	10.44	126.17	119.90
84	Aa	3225	G	N1-C6-O6	10.43	126.16	119.90
1	Ad	970	U	N1-C1'-C2'	10.43	127.56	114.00
1	Ad	1220	C	O4'-C1'-C2'	-10.43	95.37	105.80
84	Aa	2174	C	O4'-C1'-N1	10.43	116.54	108.20
1	Ad	1487	U	P-O3'-C3'	10.43	132.21	119.70
84	Aa	2513	U	C2'-C3'-O3'	10.43	132.44	109.50
86	Ab	86	G	N1-C6-O6	10.42	126.15	119.90
1	Ad	1161	C	N1-C1'-C2'	10.42	127.54	114.00
1	Ad	846	U	C1'-O4'-C4'	-10.41	101.57	109.90
1	Ad	731	G	O4'-C1'-N9	10.41	116.53	108.20
84	Aa	3179	G	N1-C6-O6	10.41	126.15	119.90
84	Aa	2257	A	N1-C6-N6	10.41	124.85	118.60
84	Aa	553	C	C4'-C3'-O3'	10.40	133.81	113.00
84	Aa	1523	G	N1-C6-O6	10.40	126.14	119.90
84	Aa	2150	C	O4'-C1'-N1	10.40	116.52	108.20
84	Aa	641	C	O4'-C1'-N1	10.40	116.52	108.20
84	Aa	436	G	N1-C6-O6	10.40	126.14	119.90
1	Ad	330	G	O4'-C1'-N9	10.40	116.52	108.20
84	Aa	1493	A	N1-C6-N6	10.39	124.84	118.60
84	Aa	26	A	N1-C6-N6	10.39	124.83	118.60
84	Aa	808	G	N1-C6-O6	10.39	126.13	119.90
1	Ad	1806	C	C3'-C2'-C1'	10.38	109.81	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2006	A	P-O3'-C3'	10.38	132.16	119.70
84	Aa	2132	A	O4'-C1'-N9	10.38	116.50	108.20
86	Ab	107	C	O4'-C1'-N1	10.38	116.50	108.20
1	Ad	707	C	N1-C1'-C2'	-10.38	100.51	114.00
1	Ad	1120	U	O4'-C1'-N1	10.37	116.50	108.20
84	Aa	1617	A	N1-C6-N6	10.37	124.82	118.60
84	Aa	2166	U	P-O3'-C3'	10.37	132.14	119.70
84	Aa	3334	A	N1-C6-N6	10.37	124.82	118.60
1	Ad	144	U	O4'-C1'-N1	10.37	116.49	108.20
1	Ad	712	U	O4'-C1'-N1	10.37	116.49	108.20
84	Aa	2306	G	N1-C6-O6	10.37	126.12	119.90
84	Aa	3307	A	N1-C6-N6	10.37	124.82	118.60
86	Ab	13	A	O4'-C1'-N9	10.36	116.49	108.20
1	Ad	1303	G	C1'-O4'-C4'	-10.36	101.61	109.90
84	Aa	843	C	O4'-C1'-N1	10.36	116.49	108.20
1	Ad	1297	U	O4'-C1'-N1	10.35	116.48	108.20
1	Ad	1358	G	N9-C1'-C2'	10.34	127.44	114.00
84	Aa	1879	A	N1-C6-N6	10.34	124.80	118.60
84	Aa	721	A	O4'-C1'-N9	10.34	116.47	108.20
84	Aa	1902	G	N1-C6-O6	10.34	126.10	119.90
1	Ad	1640	C	N1-C1'-C2'	10.33	127.43	114.00
85	Ac	59	A	N1-C6-N6	10.33	124.80	118.60
85	Ac	43	A	N1-C6-N6	10.33	124.80	118.60
84	Aa	316	A	N1-C6-N6	10.33	124.80	118.60
84	Aa	2850	G	N1-C6-O6	10.33	126.10	119.90
84	Aa	3013	A	N1-C6-N6	10.33	124.80	118.60
84	Aa	3333	C	O4'-C1'-N1	10.31	116.45	108.20
84	Aa	1349	G	C5-C6-O6	-10.30	122.42	128.60
1	Ad	172	U	O4'-C1'-N1	10.30	116.44	108.20
84	Aa	3248	G	N1-C6-O6	10.30	126.08	119.90
1	Ad	1520	G	O4'-C1'-N9	10.29	116.44	108.20
1	Ad	1757	G	O4'-C1'-N9	10.29	116.44	108.20
84	Aa	1316	C	O4'-C1'-N1	10.29	116.44	108.20
84	Aa	1870	G	N1-C6-O6	10.29	126.08	119.90
84	Aa	389	A	N1-C6-N6	10.29	124.77	118.60
84	Aa	1542	A	N1-C6-N6	10.29	124.77	118.60
84	Aa	1813	C	O4'-C1'-N1	10.29	116.43	108.20
84	Aa	2238	A	N1-C6-N6	10.29	124.77	118.60
84	Aa	3244	G	N1-C6-O6	10.29	126.07	119.90
84	Aa	2058	C	O4'-C1'-N1	10.29	116.43	108.20
84	Aa	2558	U	O4'-C1'-N1	10.28	116.43	108.20
86	Ab	37	G	C5-C6-O6	-10.28	122.43	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	754	U	O4'-C1'-N1	10.28	116.42	108.20
84	Aa	2583	A	N1-C6-N6	10.28	124.77	118.60
84	Aa	1031	A	N1-C6-N6	10.27	124.76	118.60
1	Ad	496	A	O4'-C1'-N9	10.27	116.41	108.20
84	Aa	1105	G	N1-C6-O6	10.27	126.06	119.90
1	Ad	870	A	N9-C1'-C2'	-10.26	100.66	114.00
1	Ad	1261	U	O4'-C1'-N1	10.26	116.41	108.20
84	Aa	1744	C	O4'-C1'-N1	10.26	116.41	108.20
84	Aa	339	G	N1-C6-O6	10.26	126.06	119.90
84	Aa	3030	A	N1-C6-N6	10.26	124.76	118.60
84	Aa	3175	C	O4'-C1'-N1	10.25	116.40	108.20
84	Aa	965	A	N1-C6-N6	10.25	124.75	118.60
86	Ab	19	A	C4-C5-C6	10.25	122.12	117.00
84	Aa	473	G	C4'-C3'-O3'	10.25	133.49	113.00
1	Ad	1004	U	O4'-C1'-N1	10.24	116.39	108.20
84	Aa	3288	A	N1-C6-N6	10.24	124.74	118.60
84	Aa	2909	A	N1-C6-N6	10.24	124.74	118.60
84	Aa	3253	C	O4'-C1'-N1	10.24	116.39	108.20
85	Ac	65	G	N1-C6-O6	10.24	126.04	119.90
1	Ad	281	U	P-O3'-C3'	10.23	131.98	119.70
1	Ad	73	A	N9-C1'-C2'	-10.23	100.70	114.00
84	Aa	1006	A	N1-C6-N6	10.23	124.74	118.60
84	Aa	2682	A	N1-C6-N6	10.22	124.73	118.60
86	Ab	8	A	C5-C6-N1	-10.22	112.59	117.70
84	Aa	1486	G	O4'-C1'-N9	10.22	116.37	108.20
84	Aa	2376	G	N1-C6-O6	10.22	126.03	119.90
1	Ad	7	G	O4'-C1'-N9	10.21	116.37	108.20
2	Ae	69	G	C1'-O4'-C4'	-10.21	101.73	109.90
84	Aa	2698	A	N1-C6-N6	10.21	124.73	118.60
1	Ad	1683	G	O4'-C1'-N9	10.20	116.36	108.20
84	Aa	634	A	N1-C6-N6	10.20	124.72	118.60
84	Aa	2442	A	N1-C6-N6	10.19	124.72	118.60
84	Aa	804	A	N1-C6-N6	10.19	124.72	118.60
84	Aa	1677	G	N1-C6-O6	10.19	126.01	119.90
1	Ad	457	C	C1'-O4'-C4'	-10.18	101.75	109.90
84	Aa	2515	C	P-O3'-C3'	10.18	131.92	119.70
84	Aa	1663	G	N1-C6-O6	10.18	126.01	119.90
84	Aa	275	G	N1-C6-O6	10.18	126.01	119.90
84	Aa	1017	G	N1-C6-O6	10.17	126.00	119.90
84	Aa	1832	C	O4'-C1'-N1	10.17	116.33	108.20
84	Aa	1389	C	O4'-C1'-N1	10.16	116.33	108.20
84	Aa	810	A	N1-C6-N6	10.16	124.70	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	925	U	O4'-C1'-N1	10.16	116.33	108.20
1	Ad	1582	G	O4'-C1'-N9	-10.15	100.08	108.20
1	Ad	707	C	O4'-C1'-C2'	-10.14	95.66	105.80
1	Ad	235	C	P-O3'-C3'	10.14	131.87	119.70
85	Ac	37	A	N1-C6-N6	10.14	124.68	118.60
84	Aa	2501	U	P-O3'-C3'	10.14	131.86	119.70
84	Aa	157	G	N1-C6-O6	10.13	125.98	119.90
84	Aa	297	G	N1-C6-O6	10.13	125.98	119.90
86	Ab	44	C	N3-C4-C5	-10.13	117.85	121.90
1	Ad	1414	G	C1'-O4'-C4'	-10.13	101.80	109.90
1	Ad	430	G	O4'-C1'-N9	10.12	116.30	108.20
84	Aa	2447	A	N1-C6-N6	10.12	124.67	118.60
84	Aa	3086	G	N1-C6-O6	10.12	125.97	119.90
84	Aa	3185	G	N1-C6-O6	10.12	125.97	119.90
84	Aa	315	A	N1-C6-N6	10.12	124.67	118.60
84	Aa	2998	A	N1-C6-N6	10.12	124.67	118.60
84	Aa	2133	A	N1-C6-N6	10.12	124.67	118.60
84	Aa	1897	A	N1-C6-N6	10.10	124.66	118.60
84	Aa	919	G	P-O3'-C3'	10.10	131.82	119.70
84	Aa	2516	U	P-O3'-C3'	10.10	131.82	119.70
84	Aa	59	A	N1-C6-N6	10.10	124.66	118.60
1	Ad	247	A	O4'-C1'-N9	10.10	116.28	108.20
1	Ad	1210	U	O4'-C1'-N1	10.10	116.28	108.20
1	Ad	1801	A	N9-C1'-C2'	-10.10	100.88	114.00
84	Aa	637	C	O4'-C1'-N1	10.10	116.28	108.20
1	Ad	616	U	O4'-C1'-N1	10.09	116.27	108.20
84	Aa	909	A	N1-C6-N6	10.09	124.65	118.60
84	Aa	2693	G	N1-C6-O6	10.09	125.95	119.90
84	Aa	494	C	C5'-C4'-C3'	10.08	132.13	116.00
1	Ad	1759	A	O4'-C1'-N9	10.08	116.27	108.20
84	Aa	2231	G	N1-C6-O6	10.08	125.95	119.90
1	Ad	1505	U	O4'-C1'-N1	10.07	116.26	108.20
3	Af	16	G	C3'-C2'-C1'	10.07	109.56	101.50
84	Aa	3130	A	N1-C6-N6	10.07	124.64	118.60
86	Ab	67	C	N3-C4-N4	10.07	125.05	118.00
1	Ad	1203	G	O4'-C1'-C2'	-10.07	95.73	105.80
84	Aa	1559	G	O3'-P-O5'	10.07	123.13	104.00
84	Aa	1717	G	N1-C6-O6	10.07	125.94	119.90
84	Aa	1721	A	O4'-C1'-N9	10.06	116.25	108.20
1	Ad	1315	U	O4'-C1'-N1	10.05	116.24	108.20
1	Ad	1565	U	O4'-C1'-N1	10.05	116.24	108.20
84	Aa	2659	A	N1-C6-N6	10.05	124.63	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3194	G	N1-C6-O6	10.05	125.93	119.90
1	Ad	504	C	C3'-C2'-C1'	10.04	109.53	101.50
84	Aa	108	A	N1-C6-N6	10.04	124.63	118.60
84	Aa	2177	U	P-O3'-C3'	10.04	131.75	119.70
84	Aa	3190	U	O4'-C1'-N1	10.04	116.23	108.20
1	Ad	1254	U	O4'-C1'-N1	10.03	116.23	108.20
84	Aa	1532	A	N1-C6-N6	10.03	124.62	118.60
1	Ad	235	C	C1'-O4'-C4'	10.03	117.92	109.90
84	Aa	1333	C	P-O3'-C3'	10.03	131.74	119.70
84	Aa	3318	G	N1-C6-O6	10.03	125.92	119.90
84	Aa	30	C	O4'-C1'-N1	10.03	116.22	108.20
84	Aa	2349	C	O4'-C1'-N1	10.03	116.22	108.20
84	Aa	2347	A	N1-C6-N6	10.02	124.61	118.60
84	Aa	3380	G	P-O3'-C3'	10.02	131.73	119.70
84	Aa	2242	G	N1-C6-O6	10.02	125.91	119.90
84	Aa	2504	A	N1-C6-N6	10.02	124.61	118.60
84	Aa	3385	G	O4'-C1'-N9	10.02	116.22	108.20
85	Ac	72	A	N1-C6-N6	10.02	124.61	118.60
84	Aa	2587	G	N1-C6-O6	10.02	125.91	119.90
84	Aa	1892	A	N1-C6-N6	10.01	124.61	118.60
1	Ad	66	U	O4'-C1'-N1	10.01	116.21	108.20
1	Ad	843	G	O4'-C1'-C2'	-10.01	95.79	105.80
84	Aa	840	A	N1-C6-N6	10.01	124.61	118.60
84	Aa	2970	G	N1-C6-O6	10.01	125.90	119.90
1	Ad	944	A	C3'-C2'-C1'	10.00	109.50	101.50
84	Aa	1412	C	O4'-C1'-N1	10.00	116.20	108.20
85	Ac	134	G	N1-C6-O6	10.00	125.90	119.90
84	Aa	878	G	N1-C6-O6	10.00	125.90	119.90
1	Ad	220	C	C3'-C2'-C1'	10.00	109.50	101.50
1	Ad	224	C	O4'-C1'-C2'	-9.99	95.81	105.80
84	Aa	1449	A	N1-C6-N6	9.99	124.59	118.60
84	Aa	2194	G	N1-C6-O6	9.99	125.89	119.90
1	Ad	1005	C	C3'-C2'-C1'	-9.98	93.51	101.50
84	Aa	2873	G	N1-C6-O6	9.98	125.89	119.90
84	Aa	2992	G	N1-C6-O6	9.98	125.89	119.90
86	Ab	41	G	C5-C6-O6	-9.98	122.61	128.60
1	Ad	1216	G	O4'-C1'-N9	9.97	116.18	108.20
84	Aa	3317	G	N1-C6-O6	9.97	125.89	119.90
1	Ad	1119	G	O4'-C1'-N9	9.97	116.18	108.20
84	Aa	431	G	N1-C6-O6	9.96	125.88	119.90
1	Ad	717	G	O4'-C1'-N9	-9.96	100.23	108.20
1	Ad	91	C	O4'-C1'-N1	9.95	116.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2639	A	N1-C6-N6	9.95	124.57	118.60
85	Ac	143	C	O4'-C1'-N1	9.95	116.16	108.20
1	Ad	1495	U	O4'-C1'-N1	9.94	116.15	108.20
84	Aa	11	A	N1-C6-N6	9.94	124.56	118.60
84	Aa	1421	A	N1-C6-N6	9.94	124.56	118.60
84	Aa	2084	G	C2'-C3'-O3'	-9.93	87.65	109.50
86	Ab	24	G	N1-C6-O6	9.93	125.86	119.90
84	Aa	1436	A	N1-C6-N6	9.92	124.56	118.60
84	Aa	2538	G	N1-C6-O6	9.92	125.85	119.90
85	Ac	131	G	N1-C6-O6	9.92	125.85	119.90
84	Aa	1383	G	N1-C6-O6	9.92	125.85	119.90
84	Aa	2523	G	N1-C6-O6	9.92	125.85	119.90
1	Ad	1575	U	O4'-C1'-N1	9.91	116.13	108.20
84	Aa	1396	A	N1-C6-N6	9.91	124.55	118.60
1	Ad	1797	C	O4'-C1'-N1	9.91	116.13	108.20
84	Aa	263	A	N1-C6-N6	9.91	124.55	118.60
84	Aa	1889	G	N1-C6-O6	9.91	125.85	119.90
84	Aa	3032	G	N1-C6-O6	9.91	125.85	119.90
84	Aa	993	A	N1-C6-N6	9.91	124.54	118.60
84	Aa	2650	A	N1-C6-N6	9.91	124.54	118.60
84	Aa	1211	G	N1-C6-O6	9.90	125.84	119.90
84	Aa	1298	A	N1-C6-N6	9.90	124.54	118.60
84	Aa	2619	C	O4'-C1'-N1	9.90	116.12	108.20
1	Ad	209	U	O4'-C1'-N1	9.90	116.12	108.20
1	Ad	468	A	O4'-C1'-N9	9.90	116.12	108.20
84	Aa	649	A	N1-C6-N6	9.89	124.54	118.60
1	Ad	243	U	O4'-C1'-N1	9.89	116.11	108.20
1	Ad	310	U	O4'-C1'-N1	9.89	116.11	108.20
84	Aa	425	G	N1-C6-O6	9.89	125.83	119.90
1	Ad	587	C	N1-C1'-C2'	9.89	126.85	114.00
84	Aa	974	G	N1-C6-O6	9.89	125.83	119.90
84	Aa	3375	G	N1-C6-O6	9.89	125.83	119.90
84	Aa	1723	C	P-O3'-C3'	9.88	131.55	119.70
84	Aa	398	G	N1-C6-O6	9.87	125.83	119.90
84	Aa	2443	C	O4'-C1'-N1	9.87	116.10	108.20
84	Aa	1487	A	N1-C6-N6	9.87	124.52	118.60
84	Aa	1901	G	N1-C6-O6	9.87	125.82	119.90
1	Ad	1498	A	P-O3'-C3'	9.87	131.54	119.70
84	Aa	253	G	O4'-C1'-N9	9.87	116.09	108.20
84	Aa	521	G	N1-C6-O6	9.87	125.82	119.90
84	Aa	1486	G	N1-C6-O6	9.87	125.82	119.90
1	Ad	1060	U	O4'-C1'-N1	9.86	116.09	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1455	U	O4'-C1'-N1	9.86	116.09	108.20
84	Aa	3067	G	N1-C6-O6	9.86	125.82	119.90
84	Aa	542	G	N1-C6-O6	9.86	125.82	119.90
1	Ad	536	U	N1-C1'-C2'	9.86	126.81	114.00
84	Aa	1452	A	N1-C6-N6	9.85	124.51	118.60
84	Aa	845	G	N1-C6-O6	9.85	125.81	119.90
84	Aa	911	G	N1-C6-O6	9.85	125.81	119.90
84	Aa	1958	G	O4'-C4'-C3'	-9.85	94.15	104.00
84	Aa	549	G	N1-C6-O6	9.85	125.81	119.90
84	Aa	579	G	N1-C6-O6	9.85	125.81	119.90
1	Ad	208	U	O4'-C1'-N1	9.84	116.07	108.20
84	Aa	283	A	N1-C6-N6	9.84	124.50	118.60
1	Ad	516	A	O4'-C1'-N9	9.84	116.07	108.20
84	Aa	1649	G	N1-C6-O6	9.84	125.80	119.90
84	Aa	1094	G	N1-C6-O6	9.83	125.80	119.90
84	Aa	1673	A	N1-C6-N6	9.83	124.50	118.60
1	Ad	219	G	N9-C1'-C2'	-9.82	101.19	112.00
84	Aa	2610	G	N1-C6-O6	9.81	125.78	119.90
1	Ad	820	A	O4'-C1'-N9	9.81	116.05	108.20
1	Ad	851	G	C3'-C2'-C1'	-9.80	93.66	101.50
1	Ad	924	A	O4'-C1'-N9	9.80	116.04	108.20
84	Aa	936	A	N1-C6-N6	9.80	124.48	118.60
84	Aa	2384	G	N1-C6-O6	9.81	125.78	119.90
84	Aa	2073	U	O4'-C1'-N1	9.80	116.04	108.20
84	Aa	2363	G	N1-C6-O6	9.80	125.78	119.90
84	Aa	1786	G	N1-C6-O6	9.79	125.78	119.90
1	Ad	916	U	O4'-C1'-N1	9.79	116.03	108.20
84	Aa	1746	G	N1-C6-O6	9.79	125.78	119.90
86	Ab	26	C	O4'-C1'-N1	9.79	116.03	108.20
84	Aa	1317	G	N1-C6-O6	9.79	125.78	119.90
86	Ab	60	G	O4'-C1'-N9	9.79	116.03	108.20
1	Ad	579	C	O4'-C1'-N1	9.79	116.03	108.20
1	Ad	1375	C	C3'-C2'-C1'	9.79	109.33	101.50
84	Aa	3099	G	N1-C6-O6	9.79	125.77	119.90
1	Ad	1462	C	C3'-C2'-C1'	-9.79	93.67	101.50
84	Aa	1359	A	P-O3'-C3'	9.79	131.44	119.70
84	Aa	2163	G	N1-C6-O6	9.78	125.77	119.90
84	Aa	1721	A	N1-C6-N6	9.78	124.47	118.60
1	Ad	1671	G	O4'-C1'-N9	9.78	116.02	108.20
84	Aa	388	G	N1-C6-O6	9.78	125.77	119.90
84	Aa	3345	G	N1-C6-O6	9.78	125.77	119.90
1	Ad	1771	U	P-O3'-C3'	9.77	131.43	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	526	A	N1-C6-N6	9.77	124.46	118.60
2	Ae	73	C	C1'-O4'-C4'	-9.77	102.08	109.90
84	Aa	3377	G	N1-C6-O6	9.77	125.76	119.90
84	Aa	3181	U	P-O3'-C3'	9.77	131.42	119.70
1	Ad	512	U	O4'-C1'-N1	9.77	116.01	108.20
1	Ad	1022	U	O4'-C1'-N1	9.77	116.01	108.20
84	Aa	2181	U	O4'-C1'-N1	9.77	116.01	108.20
84	Aa	2830	G	N1-C6-O6	9.77	125.76	119.90
86	Ab	24	G	C5-C6-O6	-9.76	122.74	128.60
84	Aa	618	G	N1-C6-O6	9.76	125.76	119.90
84	Aa	2172	C	O4'-C1'-N1	9.76	116.01	108.20
84	Aa	1352	G	N1-C6-O6	9.76	125.75	119.90
84	Aa	1446	G	N1-C6-O6	9.76	125.75	119.90
84	Aa	2234	G	N1-C6-O6	9.76	125.75	119.90
84	Aa	3278	G	N1-C6-O6	9.76	125.75	119.90
84	Aa	3354	A	N1-C6-N6	9.75	124.45	118.60
1	Ad	780	A	C3'-C2'-C1'	-9.75	93.70	101.50
1	Ad	1008	A	O4'-C1'-N9	9.75	116.00	108.20
84	Aa	2604	A	N1-C6-N6	9.75	124.45	118.60
86	Ab	108	G	N1-C6-O6	9.75	125.75	119.90
1	Ad	87	A	N9-C1'-C2'	-9.74	101.28	112.00
1	Ad	1322	G	O4'-C1'-N9	9.74	115.99	108.20
1	Ad	1200	A	O4'-C1'-N9	9.74	115.99	108.20
1	Ad	158	C	N1-C1'-C2'	9.74	126.66	114.00
84	Aa	2090	G	N1-C6-O6	9.73	125.74	119.90
84	Aa	334	A	N1-C6-N6	9.73	124.44	118.60
84	Aa	2302	G	N1-C6-O6	9.73	125.74	119.90
1	Ad	1657	C	O4'-C1'-N1	9.73	115.98	108.20
84	Aa	2692	G	N1-C6-O6	9.73	125.74	119.90
1	Ad	1382	C	O4'-C1'-N1	9.73	115.98	108.20
84	Aa	1923	G	N1-C6-O6	9.73	125.74	119.90
84	Aa	2613	G	N1-C6-O6	9.73	125.74	119.90
84	Aa	2069	G	N1-C6-O6	9.72	125.73	119.90
1	Ad	437	C	N1-C1'-C2'	9.72	126.64	114.00
84	Aa	3153	U	O4'-C1'-N1	9.72	115.98	108.20
85	Ac	130	G	N1-C6-O6	9.72	125.73	119.90
1	Ad	351	G	C1'-O4'-C4'	-9.72	102.13	109.90
84	Aa	2902	A	N1-C6-N6	9.72	124.43	118.60
84	Aa	1428	G	N1-C6-O6	9.71	125.73	119.90
1	Ad	503	U	O4'-C1'-N1	9.71	115.96	108.20
84	Aa	1756	C	O4'-C1'-N1	9.71	115.96	108.20
85	Ac	11	C	O4'-C1'-N1	9.71	115.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	251	U	O4'-C1'-N1	9.70	115.96	108.20
84	Aa	1801	G	N1-C6-O6	9.70	125.72	119.90
84	Aa	648	G	N1-C6-O6	9.69	125.72	119.90
84	Aa	907	A	N1-C6-N6	9.69	124.42	118.60
84	Aa	125	G	N1-C6-O6	9.69	125.72	119.90
84	Aa	423	C	N3-C4-N4	9.69	124.78	118.00
1	Ad	1684	U	O4'-C1'-N1	9.69	115.95	108.20
84	Aa	502	G	N1-C6-O6	9.69	125.71	119.90
84	Aa	2803	A	N1-C6-N6	9.69	124.41	118.60
84	Aa	133	G	N1-C6-O6	9.69	125.71	119.90
84	Aa	560	C	O4'-C1'-N1	9.68	115.95	108.20
84	Aa	2741	G	N1-C6-O6	9.68	125.71	119.90
1	Ad	841	U	O4'-C1'-N1	9.68	115.94	108.20
84	Aa	2945	G	N1-C6-O6	9.68	125.71	119.90
1	Ad	342	C	N1-C1'-C2'	9.67	126.58	114.00
1	Ad	505	U	P-O3'-C3'	9.67	131.30	119.70
84	Aa	1594	G	N1-C6-O6	9.67	125.70	119.90
84	Aa	474	G	O4'-C1'-N9	9.67	115.93	108.20
1	Ad	1806	C	O4'-C1'-C2'	-9.67	96.13	105.80
1	Ad	362	U	O4'-C1'-N1	9.66	115.93	108.20
86	Ab	70	G	N1-C6-O6	9.66	125.70	119.90
1	Ad	1257	U	O4'-C1'-N1	9.66	115.93	108.20
2	Ae	39	G	O4'-C1'-N9	9.66	115.93	108.20
84	Aa	753	G	N1-C6-O6	9.66	125.70	119.90
1	Ad	1500	A	O4'-C1'-N9	9.66	115.93	108.20
1	Ad	1084	U	O4'-C1'-N1	9.65	115.92	108.20
84	Aa	1650	G	N1-C6-O6	9.65	125.69	119.90
1	Ad	1176	A	O4'-C1'-N9	9.65	115.92	108.20
85	Ac	95	G	N1-C6-O6	9.64	125.69	119.90
1	Ad	854	C	O4'-C1'-C2'	-9.64	96.16	105.80
84	Aa	2146	A	N1-C6-N6	9.64	124.38	118.60
84	Aa	2174	C	P-O5'-C5'	9.64	136.32	120.90
84	Aa	764	A	N1-C6-N6	9.63	124.38	118.60
84	Aa	1772	G	N1-C6-O6	9.63	125.68	119.90
85	Ac	97	G	N1-C6-O6	9.63	125.68	119.90
1	Ad	887	U	O4'-C1'-N1	9.62	115.90	108.20
1	Ad	1560	U	O4'-C1'-N1	9.62	115.90	108.20
1	Ad	233	U	O4'-C1'-N1	9.62	115.90	108.20
84	Aa	1450	G	N1-C6-O6	9.62	125.67	119.90
84	Aa	1290	A	N1-C6-N6	9.62	124.37	118.60
1	Ad	1311	U	C1'-O4'-C4'	9.62	117.59	109.90
84	Aa	841	G	N1-C6-O6	9.61	125.67	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	Ae	74	C	O4'-C1'-N1	9.61	115.88	108.20
84	Aa	1309	U	P-O3'-C3'	9.61	131.23	119.70
84	Aa	3364	A	N1-C6-N6	9.61	124.36	118.60
84	Aa	3206	C	O4'-C1'-N1	9.61	115.88	108.20
84	Aa	2244	G	N1-C6-O6	9.60	125.66	119.90
84	Aa	3243	C	O4'-C1'-N1	9.60	115.88	108.20
84	Aa	1250	G	O4'-C1'-N9	9.60	115.88	108.20
1	Ad	1096	A	O4'-C1'-C2'	9.60	116.24	107.60
84	Aa	2361	C	O4'-C1'-N1	9.60	115.88	108.20
1	Ad	1031	A	O4'-C1'-N9	9.60	115.88	108.20
1	Ad	1448	U	O4'-C1'-N1	9.60	115.88	108.20
84	Aa	1092	G	C5-C6-O6	-9.60	122.84	128.60
84	Aa	851	A	N1-C6-N6	9.60	124.36	118.60
84	Aa	202	G	N1-C6-O6	9.59	125.65	119.90
84	Aa	1132	A	N1-C6-N6	9.59	124.35	118.60
2	Ae	49	G	O4'-C1'-N9	9.59	115.87	108.20
84	Aa	949	C	O4'-C1'-N1	9.59	115.87	108.20
84	Aa	1774	G	N1-C6-O6	9.59	125.65	119.90
86	Ab	42	A	C5-C6-N6	-9.59	116.03	123.70
86	Ab	116	U	O4'-C1'-N1	9.59	115.87	108.20
84	Aa	2087	A	N9-C1'-C2'	9.58	126.46	114.00
84	Aa	2525	G	P-O3'-C3'	9.58	131.20	119.70
1	Ad	1407	A	O4'-C1'-N9	9.58	115.86	108.20
84	Aa	1025	G	N1-C6-O6	9.58	125.65	119.90
84	Aa	1479	G	N1-C6-O6	9.58	125.65	119.90
84	Aa	2323	A	N1-C6-N6	9.58	124.35	118.60
1	Ad	35	U	O4'-C1'-N1	9.57	115.86	108.20
84	Aa	2473	C	O4'-C1'-N1	9.57	115.86	108.20
1	Ad	238	G	P-O3'-C3'	9.57	131.18	119.70
84	Aa	2093	G	N1-C6-O6	9.57	125.64	119.90
1	Ad	745	C	C1'-O4'-C4'	9.57	117.55	109.90
84	Aa	816	G	N1-C6-O6	9.57	125.64	119.90
84	Aa	953	G	N1-C6-O6	9.57	125.64	119.90
84	Aa	664	A	N1-C6-N6	9.56	124.34	118.60
84	Aa	1272	G	N1-C6-O6	9.56	125.64	119.90
84	Aa	2403	A	N1-C6-N6	9.56	124.34	118.60
84	Aa	3328	A	N1-C6-N6	9.56	124.34	118.60
86	Ab	76	U	O4'-C1'-N1	9.56	115.85	108.20
86	Ab	101	A	N1-C6-N6	9.56	124.34	118.60
84	Aa	662	G	N1-C6-O6	9.56	125.64	119.90
84	Aa	857	G	N1-C6-O6	9.56	125.64	119.90
84	Aa	423	C	C5-C4-N4	-9.55	113.51	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2011	G	P-O3'-C3'	9.55	131.16	119.70
84	Aa	740	G	N1-C6-O6	9.55	125.63	119.90
84	Aa	1384	G	N1-C6-O6	9.55	125.63	119.90
84	Aa	1480	G	N1-C6-O6	9.55	125.63	119.90
84	Aa	1562	A	P-O3'-C3'	9.55	131.16	119.70
1	Ad	582	U	O4'-C1'-N1	9.54	115.84	108.20
1	Ad	1067	A	C3'-C2'-C1'	-9.54	93.87	101.50
1	Ad	1765	A	N9-C1'-C2'	-9.54	101.51	112.00
85	Ac	107	G	N1-C6-O6	9.54	125.62	119.90
2	Ae	11	U	O4'-C1'-N1	9.53	115.83	108.20
84	Aa	2078	G	N1-C6-O6	9.53	125.62	119.90
1	Ad	238	G	N9-C1'-C2'	9.53	126.39	114.00
84	Aa	1244	A	N1-C6-N6	9.53	124.32	118.60
84	Aa	1946	C	O4'-C1'-N1	9.53	115.82	108.20
84	Aa	1244	A	P-O3'-C3'	9.52	131.13	119.70
1	Ad	87	A	O4'-C1'-C2'	-9.52	96.28	105.80
1	Ad	952	U	O4'-C1'-N1	9.52	115.81	108.20
84	Aa	3302	A	N1-C6-N6	9.52	124.31	118.60
86	Ab	54	A	N1-C6-N6	9.52	124.31	118.60
84	Aa	328	G	N1-C6-O6	9.52	125.61	119.90
84	Aa	1423	C	O4'-C1'-N1	9.52	115.81	108.20
1	Ad	868	A	P-O3'-C3'	9.51	131.12	119.70
84	Aa	1390	G	N1-C6-O6	9.50	125.60	119.90
84	Aa	2308	A	N1-C6-N6	9.50	124.30	118.60
84	Aa	430	G	N1-C6-O6	9.50	125.60	119.90
84	Aa	1431	G	N1-C6-O6	9.50	125.60	119.90
1	Ad	1637	G	C1'-O4'-C4'	-9.49	102.30	109.90
84	Aa	1750	A	N1-C6-N6	9.49	124.30	118.60
1	Ad	1691	C	O4'-C1'-N1	9.49	115.79	108.20
1	Ad	1765	A	C3'-C2'-C1'	-9.49	93.91	101.50
1	Ad	1475	A	C3'-C2'-C1'	9.49	109.09	101.50
84	Aa	235	G	N1-C6-O6	9.49	125.59	119.90
84	Aa	1955	G	N1-C6-O6	9.49	125.59	119.90
84	Aa	2462	G	O4'-C1'-N9	9.49	115.79	108.20
84	Aa	3254	C	O4'-C1'-N1	9.49	115.79	108.20
1	Ad	1730	G	O4'-C1'-C2'	-9.49	96.31	105.80
84	Aa	695	G	N1-C6-O6	9.49	125.59	119.90
84	Aa	456	G	N1-C6-O6	9.48	125.59	119.90
84	Aa	2690	G	N1-C6-O6	9.48	125.59	119.90
1	Ad	205	U	C1'-O4'-C4'	9.48	117.48	109.90
1	Ad	1656	C	C3'-C2'-C1'	9.48	109.08	101.50
84	Aa	590	C	C4'-C3'-O3'	9.48	131.96	113.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	862	G	N1-C6-O6	9.48	125.59	119.90
84	Aa	367	A	N1-C6-N6	9.47	124.28	118.60
84	Aa	627	G	N1-C6-O6	9.47	125.58	119.90
1	Ad	1310	C	C3'-C2'-C1'	9.47	109.08	101.50
84	Aa	514	G	N1-C6-O6	9.47	125.58	119.90
84	Aa	2764	G	C5-C6-O6	-9.47	122.92	128.60
1	Ad	1739	U	O4'-C1'-N1	9.47	115.78	108.20
2	Ae	67	G	O4'-C1'-N9	9.47	115.77	108.20
84	Aa	1641	G	N1-C6-O6	9.47	125.58	119.90
1	Ad	1608	A	O4'-C1'-N9	9.46	115.77	108.20
84	Aa	171	G	C5-C6-O6	-9.46	122.92	128.60
84	Aa	1247	G	N1-C6-O6	9.46	125.58	119.90
84	Aa	1652	G	N1-C6-O6	9.46	125.58	119.90
84	Aa	678	G	N1-C6-O6	9.46	125.58	119.90
1	Ad	1096	A	O4'-C1'-N9	9.46	115.77	108.20
84	Aa	449	G	N1-C6-O6	9.46	125.57	119.90
1	Ad	1200	A	P-O3'-C3'	9.45	131.04	119.70
84	Aa	1539	G	N1-C6-O6	9.46	125.57	119.90
84	Aa	1677	G	C5-C6-O6	-9.46	122.93	128.60
84	Aa	517	G	N1-C6-O6	9.45	125.57	119.90
84	Aa	1907	A	N1-C6-N6	9.45	124.27	118.60
84	Aa	1847	G	N1-C6-O6	9.45	125.57	119.90
1	Ad	1304	A	O4'-C1'-N9	9.45	115.76	108.20
84	Aa	1664	G	N1-C6-O6	9.45	125.57	119.90
1	Ad	921	U	O4'-C1'-N1	9.44	115.75	108.20
84	Aa	731	G	C5-C6-O6	-9.45	122.93	128.60
84	Aa	1130	G	N1-C6-O6	9.44	125.57	119.90
84	Aa	178	C	O4'-C1'-N1	9.44	115.75	108.20
84	Aa	3149	C	O4'-C1'-N1	9.44	115.75	108.20
86	Ab	51	G	N1-C6-O6	9.44	125.56	119.90
84	Aa	42	A	N1-C6-N6	9.44	124.26	118.60
84	Aa	1140	C	O4'-C1'-N1	9.44	115.75	108.20
84	Aa	1958	G	O4'-C1'-N9	9.44	115.75	108.20
84	Aa	318	G	N1-C6-O6	9.43	125.56	119.90
84	Aa	2295	G	N1-C6-O6	9.43	125.56	119.90
84	Aa	3371	C	O4'-C1'-N1	9.43	115.75	108.20
84	Aa	2661	G	C5-C6-O6	-9.43	122.94	128.60
84	Aa	3102	G	N1-C6-O6	9.43	125.56	119.90
86	Ab	105	C	O4'-C1'-N1	9.43	115.74	108.20
84	Aa	1089	G	N1-C6-O6	9.43	125.56	119.90
84	Aa	3157	C	O4'-C1'-N1	9.43	115.74	108.20
85	Ac	136	G	N1-C6-O6	9.43	125.56	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3390	G	N1-C6-O6	9.42	125.55	119.90
84	Aa	1243	C	O4'-C1'-N1	9.42	115.73	108.20
1	Ad	1397	A	N9-C1'-C2'	9.41	126.24	114.00
84	Aa	809	A	N1-C6-N6	9.41	124.25	118.60
1	Ad	588	C	N1-C1'-C2'	9.41	126.23	114.00
84	Aa	2183	A	N1-C6-N6	9.41	124.25	118.60
1	Ad	548	C	N1-C1'-C2'	9.41	126.23	114.00
1	Ad	947	G	O4'-C1'-N9	9.40	115.72	108.20
1	Ad	1039	C	O4'-C1'-N1	9.40	115.72	108.20
1	Ad	1271	G	O4'-C1'-N9	9.40	115.72	108.20
84	Aa	285	G	N1-C6-O6	9.40	125.54	119.90
84	Aa	38	A	N1-C6-N6	9.40	124.24	118.60
1	Ad	994	U	O4'-C1'-N1	9.39	115.72	108.20
84	Aa	21	G	N1-C6-O6	9.39	125.54	119.90
84	Aa	3312	G	C5-C6-O6	-9.39	122.96	128.60
1	Ad	104	A	O4'-C1'-N9	9.39	115.71	108.20
84	Aa	566	G	N1-C6-O6	9.39	125.53	119.90
84	Aa	432	G	N1-C6-O6	9.39	125.53	119.90
84	Aa	1066	G	N1-C6-O6	9.39	125.53	119.90
84	Aa	1145	G	N1-C6-O6	9.39	125.53	119.90
84	Aa	2087	A	O4'-C1'-N9	9.39	115.71	108.20
86	Ab	92	C	N3-C4-N4	9.39	124.57	118.00
1	Ad	785	A	C3'-C2'-C1'	9.39	109.01	101.50
84	Aa	1236	C	O4'-C1'-N1	9.38	115.71	108.20
84	Aa	2879	G	N1-C6-O6	9.38	125.53	119.90
84	Aa	3190	U	P-O3'-C3'	9.38	130.96	119.70
84	Aa	2392	G	N1-C6-O6	9.38	125.53	119.90
84	Aa	581	G	N1-C6-O6	9.38	125.53	119.90
84	Aa	1769	C	O4'-C1'-N1	9.38	115.70	108.20
1	Ad	1692	G	O4'-C1'-N9	9.38	115.70	108.20
1	Ad	1803	G	O4'-C1'-C2'	-9.38	96.42	105.80
84	Aa	836	G	N1-C6-O6	9.38	125.53	119.90
86	Ab	20	C	O4'-C1'-N1	9.38	115.70	108.20
84	Aa	3298	G	N1-C6-O6	9.38	125.53	119.90
84	Aa	213	G	N1-C6-O6	9.38	125.53	119.90
84	Aa	798	G	N1-C6-O6	9.38	125.53	119.90
84	Aa	1263	A	C5-C6-N6	-9.37	116.20	123.70
84	Aa	1675	G	N1-C6-O6	9.37	125.52	119.90
84	Aa	1780	C	O4'-C1'-N1	9.37	115.70	108.20
84	Aa	2525	G	N1-C6-O6	9.37	125.52	119.90
84	Aa	2278	G	N1-C6-O6	9.37	125.52	119.90
1	Ad	119	U	O4'-C1'-N1	9.37	115.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	937	A	O4'-C1'-N9	9.37	115.69	108.20
1	Ad	1570	G	O4'-C1'-N9	9.36	115.69	108.20
85	Ac	3	A	O4'-C1'-N9	9.36	115.69	108.20
84	Aa	548	G	N1-C6-O6	9.36	125.51	119.90
84	Aa	794	G	N1-C6-O6	9.35	125.51	119.90
84	Aa	2219	A	N1-C6-N6	9.35	124.21	118.60
84	Aa	1524	G	N1-C6-O6	9.35	125.51	119.90
3	Af	16	G	O4'-C1'-C2'	-9.35	96.45	105.80
1	Ad	459	C	O4'-C1'-C2'	-9.34	96.46	105.80
1	Ad	1334	G	O4'-C1'-C2'	-9.34	96.46	105.80
84	Aa	302	G	N1-C6-O6	9.34	125.50	119.90
86	Ab	87	G	N1-C6-O6	9.34	125.50	119.90
84	Aa	623	G	N1-C6-O6	9.33	125.50	119.90
84	Aa	2550	C	O4'-C1'-N1	9.33	115.67	108.20
84	Aa	1356	G	P-O3'-C3'	9.33	130.90	119.70
1	Ad	1301	G	O4'-C1'-N9	9.33	115.66	108.20
1	Ad	1129	A	O4'-C1'-N9	9.33	115.66	108.20
84	Aa	1575	G	N1-C6-O6	9.33	125.50	119.90
86	Ab	90	A	C8-N9-C4	-9.33	102.07	105.80
84	Aa	1220	G	C5-C6-O6	-9.32	123.01	128.60
84	Aa	2577	G	N1-C6-O6	9.32	125.49	119.90
1	Ad	1384	U	O4'-C1'-N1	9.32	115.66	108.20
84	Aa	1188	C	O4'-C1'-N1	9.32	115.66	108.20
84	Aa	509	G	N1-C6-O6	9.32	125.49	119.90
84	Aa	1106	G	N1-C6-O6	9.32	125.49	119.90
84	Aa	2701	G	N1-C6-O6	9.32	125.49	119.90
85	Ac	111	G	N1-C6-O6	9.31	125.49	119.90
84	Aa	2320	A	N1-C6-N6	9.31	124.19	118.60
1	Ad	50	C	O4'-C1'-N1	9.30	115.64	108.20
1	Ad	111	U	O4'-C1'-N1	9.30	115.64	108.20
84	Aa	2149	G	O4'-C1'-N9	9.30	115.64	108.20
2	Ae	5	U	O4'-C1'-N1	9.30	115.64	108.20
84	Aa	1208	A	N1-C6-N6	9.30	124.18	118.60
84	Aa	866	C	O4'-C1'-N1	9.29	115.63	108.20
84	Aa	2382	C	O4'-C1'-N1	9.29	115.63	108.20
86	Ab	97	G	N1-C6-O6	9.29	125.47	119.90
1	Ad	180	A	O4'-C1'-N9	9.29	115.63	108.20
1	Ad	894	U	O4'-C1'-N1	9.29	115.63	108.20
84	Aa	1107	G	C5-C6-O6	-9.29	123.03	128.60
86	Ab	108	G	C5-C6-O6	-9.29	123.03	128.60
1	Ad	192	G	C1'-O4'-C4'	-9.28	102.47	109.90
84	Aa	241	G	N1-C6-O6	9.28	125.47	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2453	G	N1-C6-O6	9.28	125.47	119.90
84	Aa	1375	G	N1-C6-O6	9.28	125.47	119.90
1	Ad	239	C	C3'-C2'-C1'	9.28	108.92	101.50
1	Ad	1509	C	O4'-C1'-N1	9.28	115.62	108.20
84	Aa	966	G	N1-C6-O6	9.28	125.47	119.90
1	Ad	1758	G	O4'-C1'-C2'	9.28	115.95	107.60
84	Aa	137	C	O4'-C1'-N1	9.28	115.62	108.20
84	Aa	682	G	N1-C6-O6	9.28	125.47	119.90
84	Aa	1277	A	N1-C6-N6	9.27	124.16	118.60
84	Aa	1814	C	O4'-C1'-N1	9.27	115.62	108.20
84	Aa	2151	G	N1-C6-O6	9.27	125.46	119.90
84	Aa	2652	G	N1-C6-O6	9.27	125.46	119.90
1	Ad	740	U	O4'-C1'-N1	9.27	115.62	108.20
84	Aa	2273	C	O4'-C1'-N1	9.27	115.62	108.20
86	Ab	109	U	O4'-C1'-N1	9.27	115.62	108.20
84	Aa	421	A	N1-C6-N6	9.27	124.16	118.60
84	Aa	2418	A	N1-C6-N6	9.27	124.16	118.60
84	Aa	3178	C	O4'-C1'-N1	9.27	115.61	108.20
84	Aa	724	A	N1-C6-N6	9.27	124.16	118.60
84	Aa	1374	G	N1-C6-O6	9.27	125.46	119.90
84	Aa	1595	G	N1-C6-O6	9.27	125.46	119.90
84	Aa	2796	G	C5-C6-O6	-9.26	123.04	128.60
1	Ad	745	C	O4'-C1'-C2'	-9.26	96.54	105.80
84	Aa	32	G	N1-C6-O6	9.26	125.46	119.90
84	Aa	823	A	N1-C6-N6	9.26	124.15	118.60
84	Aa	996	A	N1-C6-N6	9.26	124.15	118.60
85	Ac	70	G	N1-C6-O6	9.26	125.45	119.90
84	Aa	89	C	O4'-C1'-N1	9.25	115.60	108.20
84	Aa	1545	G	N1-C6-O6	9.25	125.45	119.90
84	Aa	2685	C	O4'-C1'-N1	9.25	115.60	108.20
1	Ad	121	U	N1-C1'-C2'	9.25	126.03	114.00
84	Aa	447	C	O4'-C1'-N1	9.25	115.60	108.20
84	Aa	1416	G	N1-C6-O6	9.25	125.45	119.90
1	Ad	1612	C	C3'-C2'-C1'	9.25	108.90	101.50
84	Aa	1545	G	P-O3'-C3'	9.25	130.79	119.70
84	Aa	2461	A	N1-C6-N6	9.25	124.15	118.60
1	Ad	647	G	O4'-C1'-N9	9.24	115.59	108.20
84	Aa	1253	G	N1-C6-O6	9.24	125.45	119.90
84	Aa	1286	G	C5-C6-O6	-9.24	123.05	128.60
1	Ad	1375	C	P-O3'-C3'	9.24	130.79	119.70
84	Aa	1469	G	N1-C6-O6	9.24	125.45	119.90
84	Aa	1993	G	N1-C6-O6	9.24	125.44	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3204	G	N1-C6-O6	9.24	125.44	119.90
1	Ad	1113	G	O4'-C1'-N9	9.23	115.59	108.20
84	Aa	2529	C	O4'-C1'-N1	9.23	115.59	108.20
85	Ac	150	G	N1-C6-O6	9.23	125.44	119.90
84	Aa	370	A	N1-C6-N6	9.23	124.14	118.60
84	Aa	593	G	N1-C6-O6	9.23	125.44	119.90
86	Ab	2	G	C5-C6-O6	-9.23	123.06	128.60
84	Aa	180	G	N1-C6-O6	9.23	125.44	119.90
84	Aa	288	G	C5-C6-O6	-9.23	123.06	128.60
84	Aa	281	G	N1-C6-O6	9.23	125.44	119.90
84	Aa	2345	C	O4'-C1'-N1	9.23	115.58	108.20
1	Ad	642	C	O4'-C1'-N1	9.23	115.58	108.20
84	Aa	3117	G	N1-C6-O6	9.23	125.44	119.90
1	Ad	893	U	O4'-C1'-N1	9.23	115.58	108.20
1	Ad	1029	U	C1'-O4'-C4'	9.23	117.28	109.90
1	Ad	102	U	O4'-C1'-N1	9.22	115.58	108.20
84	Aa	107	C	O4'-C1'-N1	9.22	115.58	108.20
84	Aa	530	C	O4'-C1'-N1	9.22	115.58	108.20
84	Aa	1260	G	N1-C6-O6	9.22	125.43	119.90
84	Aa	2353	C	O4'-C1'-N1	9.22	115.58	108.20
85	Ac	85	G	C5-C6-O6	-9.22	123.06	128.60
84	Aa	1116	G	N1-C6-O6	9.22	125.43	119.90
86	Ab	14	C	O4'-C1'-N1	9.22	115.58	108.20
84	Aa	2104	G	N1-C6-O6	9.22	125.43	119.90
84	Aa	3050	A	N1-C6-N6	9.22	124.13	118.60
86	Ab	28	U	O4'-C1'-N1	9.22	115.57	108.20
84	Aa	104	G	N1-C6-O6	9.22	125.43	119.90
84	Aa	3094	C	O4'-C1'-N1	9.22	115.57	108.20
84	Aa	979	C	O4'-C1'-N1	9.21	115.57	108.20
84	Aa	1169	G	N1-C6-O6	9.21	125.43	119.90
84	Aa	1386	G	N1-C6-O6	9.21	125.43	119.90
84	Aa	2036	C	O4'-C1'-N1	9.21	115.57	108.20
84	Aa	1377	G	N1-C6-O6	9.21	125.43	119.90
84	Aa	1622	G	N1-C6-O6	9.21	125.43	119.90
1	Ad	1056	A	N9-C1'-C2'	-9.21	101.87	112.00
84	Aa	1867	U	O4'-C1'-N1	9.21	115.57	108.20
84	Aa	512	G	N1-C6-O6	9.21	125.42	119.90
84	Aa	1799	C	O4'-C1'-N1	9.20	115.56	108.20
84	Aa	3127	C	O4'-C1'-N1	9.20	115.56	108.20
84	Aa	1662	G	N1-C6-O6	9.20	125.42	119.90
84	Aa	2950	C	O4'-C1'-N1	9.20	115.56	108.20
85	Ac	63	C	O4'-C1'-N1	9.20	115.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3010	G	N1-C6-O6	9.20	125.42	119.90
84	Aa	129	G	N1-C6-O6	9.19	125.42	119.90
84	Aa	1829	G	N1-C6-O6	9.19	125.42	119.90
84	Aa	601	G	N1-C6-O6	9.19	125.42	119.90
84	Aa	2334	G	N1-C6-O6	9.19	125.42	119.90
86	Ab	57	C	O4'-C1'-N1	9.19	115.55	108.20
84	Aa	375	G	N1-C6-O6	9.19	125.41	119.90
84	Aa	1658	G	N1-C6-O6	9.19	125.41	119.90
1	Ad	1456	U	O4'-C1'-N1	9.19	115.55	108.20
84	Aa	1770	C	O4'-C1'-N1	9.19	115.55	108.20
86	Ab	115	A	C5-C6-N6	-9.19	116.35	123.70
1	Ad	495	C	O4'-C1'-N1	9.18	115.55	108.20
84	Aa	1958	G	C4'-C3'-O3'	-9.18	90.11	109.40
1	Ad	138	C	O4'-C1'-C2'	-9.18	96.62	105.80
84	Aa	1661	G	N1-C6-O6	9.18	125.41	119.90
2	Ae	16	U	O4'-C1'-N1	9.18	115.54	108.20
1	Ad	871	G	O4'-C1'-N9	9.18	115.54	108.20
1	Ad	1172	G	N9-C1'-C2'	9.18	125.93	114.00
86	Ab	15	C	O4'-C1'-N1	9.18	115.54	108.20
84	Aa	904	G	N1-C6-O6	9.17	125.40	119.90
84	Aa	1774	G	P-O3'-C3'	9.17	130.71	119.70
84	Aa	317	G	N1-C6-O6	9.17	125.40	119.90
84	Aa	1133	A	N1-C6-N6	9.17	124.10	118.60
84	Aa	1820	C	O4'-C1'-N1	9.17	115.54	108.20
84	Aa	1931	G	N1-C6-O6	9.17	125.40	119.90
84	Aa	2182	G	N1-C6-O6	9.17	125.40	119.90
84	Aa	2314	G	O4'-C1'-N9	9.17	115.53	108.20
84	Aa	424	G	N1-C6-O6	9.16	125.40	119.90
86	Ab	49	A	C5-C6-N6	-9.16	116.37	123.70
1	Ad	1045	G	C1'-O4'-C4'	-9.16	102.57	109.90
84	Aa	2538	G	O4'-C1'-N9	9.16	115.53	108.20
84	Aa	1698	C	O4'-C1'-N1	9.16	115.53	108.20
84	Aa	1637	G	N1-C6-O6	9.15	125.39	119.90
84	Aa	2352	G	N1-C6-O6	9.15	125.39	119.90
84	Aa	2527	G	C5-C6-O6	-9.15	123.11	128.60
84	Aa	2700	A	N1-C6-N6	9.15	124.09	118.60
85	Ac	15	G	N1-C6-O6	9.15	125.39	119.90
85	Ac	56	G	N1-C6-O6	9.15	125.39	119.90
84	Aa	2092	C	O3'-P-O5'	-9.15	86.61	104.00
84	Aa	1708	C	O4'-C1'-N1	9.15	115.52	108.20
84	Aa	1556	G	N1-C6-O6	9.14	125.39	119.90
84	Aa	2752	G	N1-C6-O6	9.14	125.39	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	65	G	C5-C6-O6	-9.14	123.11	128.60
1	Ad	535	C	N1-C1'-C2'	9.14	125.88	114.00
1	Ad	1058	G	O4'-C1'-N9	9.14	115.51	108.20
84	Aa	2196	G	N1-C6-O6	9.14	125.38	119.90
84	Aa	210	G	C5-C6-O6	-9.14	123.12	128.60
84	Aa	3379	C	O4'-C1'-N1	9.14	115.51	108.20
86	Ab	69	A	N1-C6-N6	9.14	124.08	118.60
1	Ad	1500	A	N9-C1'-C2'	-9.13	101.95	112.00
84	Aa	2746	G	N1-C6-O6	9.14	125.38	119.90
84	Aa	1818	C	O4'-C1'-N1	9.13	115.51	108.20
84	Aa	3286	G	N1-C6-O6	9.13	125.38	119.90
1	Ad	611	G	O4'-C1'-N9	9.13	115.50	108.20
2	Ae	50	G	N9-C1'-C2'	-9.13	101.96	112.00
84	Aa	2800	C	O4'-C1'-N1	9.13	115.50	108.20
84	Aa	2818	G	N1-C6-O6	9.13	125.38	119.90
84	Aa	390	G	N1-C6-O6	9.13	125.38	119.90
84	Aa	1935	G	N1-C6-O6	9.13	125.38	119.90
84	Aa	2122	C	O4'-C1'-N1	9.13	115.50	108.20
84	Aa	2834	C	O4'-C1'-N1	9.13	115.50	108.20
84	Aa	265	G	N1-C6-O6	9.12	125.38	119.90
84	Aa	1710	G	N1-C6-O6	9.13	125.38	119.90
84	Aa	3040	G	N1-C6-O6	9.13	125.38	119.90
84	Aa	1356	G	N1-C6-O6	9.12	125.37	119.90
84	Aa	2086	A	C4-N9-C1'	9.12	142.72	126.30
84	Aa	3147	G	N1-C6-O6	9.12	125.37	119.90
1	Ad	824	U	O4'-C1'-N1	9.12	115.50	108.20
1	Ad	1484	U	O4'-C1'-N1	9.12	115.50	108.20
84	Aa	2789	G	N1-C6-O6	9.12	125.37	119.90
84	Aa	583	C	O4'-C1'-N1	9.12	115.49	108.20
84	Aa	2401	A	N1-C6-N6	9.12	124.07	118.60
1	Ad	914	U	C1'-O4'-C4'	-9.11	102.61	109.90
84	Aa	1693	A	N1-C6-N6	9.11	124.07	118.60
85	Ac	96	A	N1-C6-N6	9.11	124.07	118.60
84	Aa	90	G	N1-C6-O6	9.11	125.36	119.90
84	Aa	1076	G	N1-C6-O6	9.11	125.36	119.90
84	Aa	2390	G	N1-C6-O6	9.11	125.36	119.90
84	Aa	3264	C	O4'-C1'-N1	9.11	115.49	108.20
84	Aa	1167	G	N1-C6-O6	9.11	125.36	119.90
84	Aa	943	G	N1-C6-O6	9.10	125.36	119.90
84	Aa	2370	G	N1-C6-O6	9.10	125.36	119.90
84	Aa	3281	G	N1-C6-O6	9.10	125.36	119.90
84	Aa	1810	G	N1-C6-O6	9.10	125.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3156	G	N1-C6-O6	9.10	125.36	119.90
1	Ad	1280	U	O4'-C1'-N1	9.10	115.48	108.20
84	Aa	2073	U	P-O3'-C3'	-9.10	108.78	119.70
84	Aa	2076	C	O4'-C1'-N1	9.10	115.48	108.20
84	Aa	1058	A	N1-C6-N6	9.10	124.06	118.60
84	Aa	270	G	N1-C6-O6	9.09	125.36	119.90
1	Ad	1372	C	P-O3'-C3'	9.09	130.61	119.70
84	Aa	771	G	N1-C6-O6	9.09	125.35	119.90
84	Aa	3129	G	N1-C6-O6	9.09	125.35	119.90
84	Aa	2537	G	O4'-C1'-N9	9.09	115.47	108.20
1	Ad	41	A	O4'-C1'-C2'	-9.09	96.71	105.80
1	Ad	96	G	C1'-O4'-C4'	-9.09	102.63	109.90
1	Ad	843	G	O4'-C1'-N9	-9.09	100.93	108.20
84	Aa	3177	A	O4'-C1'-N9	9.09	115.47	108.20
1	Ad	1116	G	O4'-C1'-N9	9.09	115.47	108.20
84	Aa	1465	A	N1-C6-N6	9.09	124.05	118.60
84	Aa	760	C	O4'-C1'-N1	9.08	115.46	108.20
84	Aa	1233	G	N1-C6-O6	9.08	125.35	119.90
84	Aa	1729	G	N1-C6-O6	9.08	125.35	119.90
2	Ae	74	C	O4'-C1'-C2'	-9.08	96.72	105.80
84	Aa	1413	C	O4'-C1'-N1	9.08	115.46	108.20
84	Aa	2245	G	N1-C6-O6	9.07	125.34	119.90
84	Aa	638	G	N1-C6-O6	9.07	125.34	119.90
84	Aa	1561	U	O3'-P-O5'	9.07	121.23	104.00
84	Aa	3279	G	N1-C6-O6	9.07	125.34	119.90
84	Aa	1776	G	N1-C6-O6	9.07	125.34	119.90
1	Ad	1530	G	P-O3'-C3'	9.07	130.58	119.70
84	Aa	310	C	O4'-C1'-N1	9.07	115.45	108.20
84	Aa	1189	G	N1-C6-O6	9.07	125.34	119.90
84	Aa	1144	C	O4'-C1'-N1	9.06	115.45	108.20
84	Aa	1645	G	N1-C6-O6	9.06	125.34	119.90
1	Ad	633	U	O4'-C1'-N1	9.06	115.45	108.20
84	Aa	3001	G	N1-C6-O6	9.06	125.34	119.90
84	Aa	508	G	N1-C6-O6	9.06	125.33	119.90
84	Aa	1553	C	O4'-C1'-N1	9.06	115.44	108.20
84	Aa	1379	G	N1-C6-O6	9.05	125.33	119.90
84	Aa	1625	G	N1-C6-O6	9.05	125.33	119.90
84	Aa	2903	G	N1-C6-O6	9.05	125.33	119.90
1	Ad	817	C	O4'-C1'-N1	9.05	115.44	108.20
1	Ad	255	U	O4'-C1'-N1	9.05	115.44	108.20
84	Aa	96	C	O4'-C1'-N1	9.05	115.44	108.20
84	Aa	2023	C	O4'-C1'-N1	9.05	115.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	231	C	O4'-C1'-N1	9.05	115.44	108.20
84	Aa	1794	A	N1-C6-N6	9.05	124.03	118.60
1	Ad	1390	A	O4'-C1'-N9	9.04	115.44	108.20
1	Ad	845	C	C5'-C4'-C3'	9.04	130.47	116.00
1	Ad	1447	C	N1-C1'-C2'	9.04	125.76	114.00
1	Ad	1449	U	O4'-C1'-N1	9.04	115.43	108.20
84	Aa	3322	A	N1-C6-N6	9.04	124.03	118.60
84	Aa	2594	A	N1-C6-N6	9.04	124.03	118.60
85	Ac	36	G	N1-C6-O6	9.04	125.33	119.90
84	Aa	342	A	N1-C6-N6	9.04	124.02	118.60
84	Aa	971	G	N1-C6-O6	9.04	125.32	119.90
84	Aa	1168	G	N1-C6-O6	9.04	125.32	119.90
84	Aa	2589	G	N1-C6-O6	9.04	125.32	119.90
1	Ad	737	G	C4'-C3'-O3'	9.04	131.07	113.00
84	Aa	19	C	O4'-C1'-N1	9.04	115.43	108.20
84	Aa	485	G	N1-C6-O6	9.04	125.32	119.90
84	Aa	1985	G	N1-C6-O6	9.03	125.32	119.90
84	Aa	763	G	N1-C6-O6	9.03	125.32	119.90
84	Aa	2522	C	O4'-C1'-N1	9.03	115.42	108.20
1	Ad	1740	G	O4'-C1'-N9	9.03	115.42	108.20
84	Aa	1467	G	N1-C6-O6	9.03	125.32	119.90
1	Ad	1591	A	O4'-C1'-N9	9.03	115.42	108.20
84	Aa	725	G	N1-C6-O6	9.03	125.31	119.90
84	Aa	1447	G	N1-C6-O6	9.03	125.31	119.90
84	Aa	2383	G	N1-C6-O6	9.03	125.31	119.90
1	Ad	862	U	O4'-C1'-N1	9.02	115.42	108.20
1	Ad	1047	G	C1'-O4'-C4'	-9.02	102.68	109.90
84	Aa	700	C	O4'-C1'-N1	9.02	115.42	108.20
1	Ad	1748	U	O4'-C1'-N1	9.02	115.42	108.20
84	Aa	1226	G	N1-C6-O6	9.02	125.31	119.90
1	Ad	1782	C	O4'-C1'-N1	9.02	115.42	108.20
84	Aa	1443	G	N1-C6-O6	9.02	125.31	119.90
84	Aa	1798	C	O4'-C1'-N1	9.02	115.42	108.20
84	Aa	2170	G	N1-C6-O6	9.02	125.31	119.90
84	Aa	2676	A	N1-C6-N6	9.02	124.01	118.60
1	Ad	41	A	O4'-C1'-N9	9.02	115.41	108.20
1	Ad	270	U	O4'-C1'-N1	9.02	115.41	108.20
84	Aa	742	G	N1-C6-O6	9.02	125.31	119.90
84	Aa	497	G	N1-C6-O6	9.02	125.31	119.90
84	Aa	3357	C	O4'-C1'-N1	9.02	115.41	108.20
1	Ad	1206	A	O4'-C1'-N9	-9.01	100.99	108.20
84	Aa	1276	C	O4'-C1'-N1	9.01	115.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1303	C	O4'-C1'-N1	9.01	115.41	108.20
84	Aa	1631	G	N1-C6-O6	9.01	125.31	119.90
84	Aa	956	G	N1-C6-O6	9.01	125.31	119.90
86	Ab	33	U	O4'-C1'-N1	9.01	115.41	108.20
84	Aa	1893	G	N1-C6-O6	9.01	125.30	119.90
84	Aa	2527	G	O4'-C1'-N9	9.01	115.41	108.20
84	Aa	3325	G	N1-C6-O6	9.01	125.30	119.90
84	Aa	12	G	P-O3'-C3'	9.00	130.50	119.70
84	Aa	1547	G	N1-C6-O6	9.00	125.30	119.90
84	Aa	1725	G	N1-C6-O6	9.00	125.30	119.90
84	Aa	2855	G	N1-C6-O6	9.00	125.30	119.90
86	Ab	11	A	N1-C2-N3	9.00	133.80	129.30
84	Aa	998	G	N1-C6-O6	9.00	125.30	119.90
84	Aa	1909	G	N1-C6-O6	9.00	125.30	119.90
84	Aa	2085	A	P-O3'-C3'	-9.00	108.90	119.70
84	Aa	2656	C	O4'-C1'-N1	9.00	115.40	108.20
84	Aa	1583	G	N1-C6-O6	8.99	125.30	119.90
84	Aa	1950	G	O4'-C1'-N9	8.99	115.39	108.20
85	Ac	82	C	O4'-C1'-N1	8.99	115.39	108.20
86	Ab	58	G	C5-C6-O6	-8.99	123.20	128.60
84	Aa	890	G	N1-C6-O6	8.99	125.29	119.90
84	Aa	2825	G	N1-C6-O6	8.99	125.30	119.90
84	Aa	1	G	N1-C6-O6	8.99	125.29	119.90
1	Ad	824	U	P-O3'-C3'	8.98	130.48	119.70
1	Ad	1306	U	O4'-C1'-N1	8.98	115.39	108.20
1	Ad	1546	U	O4'-C1'-N1	8.98	115.39	108.20
84	Aa	17	G	N1-C6-O6	8.98	125.29	119.90
84	Aa	2236	U	O4'-C1'-N1	8.98	115.39	108.20
84	Aa	3331	G	N1-C6-O6	8.98	125.29	119.90
84	Aa	491	G	N1-C6-O6	8.98	125.29	119.90
84	Aa	2963	G	N1-C6-O6	8.98	125.29	119.90
84	Aa	927	G	N1-C6-O6	8.98	125.29	119.90
85	Ac	46	G	N1-C6-O6	8.98	125.29	119.90
1	Ad	1006	A	O4'-C1'-C2'	-8.98	96.82	105.80
1	Ad	1065	A	C1'-O4'-C4'	-8.98	102.72	109.90
84	Aa	3075	G	N1-C6-O6	8.97	125.28	119.90
84	Aa	1476	G	N1-C6-O6	8.97	125.28	119.90
84	Aa	1967	C	O4'-C1'-N1	8.97	115.38	108.20
84	Aa	803	G	N1-C6-O6	8.97	125.28	119.90
84	Aa	2213	G	N1-C6-O6	8.97	125.28	119.90
1	Ad	306	U	O4'-C1'-N1	8.96	115.37	108.20
84	Aa	1697	G	N1-C6-O6	8.96	125.28	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2204	U	P-O3'-C3'	8.96	130.46	119.70
84	Aa	522	C	O4'-C1'-N1	8.96	115.37	108.20
84	Aa	1619	G	N1-C6-O6	8.96	125.28	119.90
84	Aa	386	G	N1-C6-O6	8.96	125.28	119.90
84	Aa	2283	G	N1-C6-O6	8.96	125.28	119.90
85	Ac	120	G	N1-C6-O6	8.96	125.28	119.90
84	Aa	1978	G	N1-C6-O6	8.96	125.27	119.90
84	Aa	3029	G	N1-C6-O6	8.96	125.27	119.90
1	Ad	271	C	O4'-C1'-N1	8.96	115.36	108.20
84	Aa	584	G	N1-C6-O6	8.96	125.27	119.90
84	Aa	1001	A	N1-C6-N6	8.96	123.97	118.60
84	Aa	1764	G	N1-C6-O6	8.96	125.27	119.90
84	Aa	2428	G	N1-C6-O6	8.96	125.27	119.90
1	Ad	636	U	O4'-C1'-N1	8.95	115.36	108.20
84	Aa	1381	G	N1-C6-O6	8.95	125.27	119.90
84	Aa	1803	G	N1-C6-O6	8.95	125.27	119.90
84	Aa	2723	G	N1-C6-O6	8.95	125.27	119.90
1	Ad	1348	A	P-O3'-C3'	8.95	130.44	119.70
84	Aa	1601	G	N1-C6-O6	8.94	125.27	119.90
84	Aa	2086	A	C8-N9-C1'	-8.94	111.60	127.70
84	Aa	3367	C	O4'-C1'-N1	8.94	115.36	108.20
84	Aa	1143	G	N1-C6-O6	8.94	125.27	119.90
1	Ad	221	U	O4'-C1'-N1	8.94	115.35	108.20
84	Aa	2024	G	N1-C6-O6	8.94	125.26	119.90
84	Aa	176	A	N1-C6-N6	8.94	123.96	118.60
84	Aa	1716	G	C5-C6-O6	-8.94	123.24	128.60
84	Aa	3141	G	N1-C6-O6	8.94	125.26	119.90
84	Aa	3106	U	O4'-C1'-N1	8.94	115.35	108.20
1	Ad	174	C	O4'-C1'-N1	8.93	115.35	108.20
84	Aa	1621	G	N1-C6-O6	8.93	125.26	119.90
1	Ad	393	G	O4'-C1'-N9	8.93	115.35	108.20
1	Ad	1796	G	C1'-O4'-C4'	-8.93	102.75	109.90
84	Aa	1979	G	N1-C6-O6	8.93	125.26	119.90
85	Ac	114	G	N1-C6-O6	8.93	125.26	119.90
1	Ad	880	G	O4'-C1'-N9	8.93	115.34	108.20
1	Ad	1805	U	O4'-C1'-N1	8.93	115.34	108.20
84	Aa	97	G	N1-C6-O6	8.93	125.26	119.90
84	Aa	1411	G	N1-C6-O6	8.93	125.26	119.90
84	Aa	2657	C	O4'-C1'-N1	8.93	115.34	108.20
1	Ad	836	U	C3'-C2'-C1'	8.93	108.64	101.50
84	Aa	1898	G	N1-C6-O6	8.93	125.25	119.90
84	Aa	1915	G	N1-C6-O6	8.93	125.25	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	16	A	C5-C6-N1	-8.93	113.24	117.70
84	Aa	194	G	N1-C6-O6	8.92	125.25	119.90
84	Aa	3079	G	N1-C6-O6	8.92	125.25	119.90
84	Aa	986	G	N1-C6-O6	8.92	125.25	119.90
84	Aa	1348	G	N1-C6-O6	8.92	125.25	119.90
84	Aa	2189	G	N1-C6-O6	8.92	125.25	119.90
84	Aa	3188	G	C5-C6-O6	-8.92	123.25	128.60
84	Aa	3222	G	N1-C6-O6	8.92	125.25	119.90
1	Ad	518	G	P-O3'-C3'	8.92	130.40	119.70
84	Aa	542	G	P-O3'-C3'	8.92	130.40	119.70
84	Aa	2105	G	N1-C6-O6	8.92	125.25	119.90
1	Ad	500	G	O4'-C1'-N9	8.91	115.33	108.20
1	Ad	944	A	O4'-C1'-C2'	-8.91	96.89	105.80
1	Ad	1513	A	C1'-O4'-C4'	8.91	117.03	109.90
84	Aa	450	C	O4'-C1'-N1	8.91	115.33	108.20
84	Aa	867	G	N1-C6-O6	8.91	125.25	119.90
85	Ac	75	G	N1-C6-O6	8.91	125.25	119.90
85	Ac	149	U	O4'-C1'-N1	8.91	115.33	108.20
84	Aa	2874	A	N1-C6-N6	8.91	123.95	118.60
1	Ad	989	G	O4'-C1'-N9	8.91	115.33	108.20
84	Aa	1589	G	P-O3'-C3'	8.91	130.39	119.70
85	Ac	148	C	O4'-C1'-N1	8.91	115.33	108.20
86	Ab	23	A	N1-C6-N6	8.91	123.94	118.60
2	Ae	74	C	C3'-C2'-C1'	8.91	108.62	101.50
84	Aa	486	G	N1-C6-O6	8.91	125.24	119.90
84	Aa	1567	G	N1-C6-O6	8.91	125.24	119.90
84	Aa	2897	G	N1-C6-O6	8.91	125.24	119.90
1	Ad	1766	A	P-O3'-C3'	8.90	130.38	119.70
84	Aa	2731	G	N1-C6-O6	8.90	125.24	119.90
84	Aa	3282	G	C5-C6-O6	-8.90	123.26	128.60
1	Ad	517	U	O4'-C1'-N1	8.90	115.32	108.20
84	Aa	1823	C	O4'-C1'-N1	8.90	115.32	108.20
84	Aa	2487	A	O4'-C1'-N9	8.90	115.32	108.20
84	Aa	3264	C	P-O3'-C3'	8.90	130.38	119.70
84	Aa	1822	C	O4'-C1'-N1	8.90	115.32	108.20
84	Aa	894	G	N1-C6-O6	8.90	125.24	119.90
84	Aa	1990	A	P-O3'-C3'	8.90	130.38	119.70
84	Aa	2376	G	O4'-C1'-N9	8.90	115.32	108.20
84	Aa	3242	G	N1-C6-O6	8.90	125.24	119.90
84	Aa	434	C	O4'-C1'-N1	8.89	115.32	108.20
84	Aa	2601	G	N1-C6-O6	8.89	125.24	119.90
84	Aa	2651	G	N1-C6-O6	8.89	125.24	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2712	C	O4'-C1'-N1	8.89	115.31	108.20
86	Ab	119	C	O4'-C1'-N1	8.89	115.31	108.20
1	Ad	1343	C	O4'-C1'-N1	8.89	115.31	108.20
84	Aa	870	G	N1-C6-O6	8.89	125.23	119.90
84	Aa	2086	A	N9-C1'-C2'	8.89	125.56	114.00
84	Aa	590	C	P-O3'-C3'	-8.88	109.04	119.70
84	Aa	1329	G	N1-C6-O6	8.88	125.23	119.90
84	Aa	495	G	O5'-P-OP2	-8.88	97.71	105.70
84	Aa	1405	G	N1-C6-O6	8.88	125.23	119.90
84	Aa	2068	G	N1-C6-O6	8.88	125.23	119.90
84	Aa	3183	G	N1-C6-O6	8.88	125.23	119.90
84	Aa	1403	G	N1-C6-O6	8.88	125.23	119.90
84	Aa	1419	G	N1-C6-O6	8.88	125.23	119.90
84	Aa	2416	U	O4'-C1'-N1	8.88	115.31	108.20
1	Ad	38	C	O4'-C1'-N1	8.88	115.30	108.20
84	Aa	2300	G	N1-C6-O6	8.88	125.23	119.90
84	Aa	362	G	C5-C6-O6	-8.88	123.27	128.60
84	Aa	381	G	N1-C6-O6	8.88	125.23	119.90
84	Aa	2966	G	N1-C6-O6	8.87	125.22	119.90
84	Aa	3037	G	N1-C6-O6	8.87	125.22	119.90
84	Aa	3372	C	O4'-C1'-N1	8.87	115.30	108.20
1	Ad	1202	G	O4'-C1'-N9	8.87	115.30	108.20
84	Aa	3164	C	O4'-C1'-N1	8.87	115.30	108.20
85	Ac	25	G	N1-C6-O6	8.87	125.22	119.90
1	Ad	770	U	O4'-C1'-N1	8.87	115.30	108.20
84	Aa	1142	G	N1-C6-O6	8.87	125.22	119.90
85	Ac	31	G	N1-C6-O6	8.87	125.22	119.90
1	Ad	488	C	N1-C1'-C2'	8.87	125.53	114.00
84	Aa	1808	G	N1-C6-O6	8.87	125.22	119.90
84	Aa	2465	G	N1-C6-O6	8.87	125.22	119.90
84	Aa	2475	C	C4'-C3'-O3'	8.87	130.74	113.00
84	Aa	8	C	O4'-C1'-N1	8.87	115.29	108.20
1	Ad	1375	C	O4'-C1'-C2'	-8.86	96.94	105.80
1	Ad	281	U	O4'-C1'-C2'	-8.86	96.94	105.80
1	Ad	637	U	O4'-C1'-N1	8.86	115.29	108.20
84	Aa	796	C	O4'-C1'-N1	8.86	115.29	108.20
84	Aa	859	G	N1-C6-O6	8.86	125.22	119.90
84	Aa	1161	G	N1-C6-O6	8.86	125.21	119.90
84	Aa	2404	C	O4'-C1'-N1	8.86	115.29	108.20
84	Aa	937	G	N1-C6-O6	8.85	125.21	119.90
84	Aa	2466	G	N1-C6-O6	8.85	125.21	119.90
84	Aa	3066	G	N1-C6-O6	8.85	125.21	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3206	C	C2-N1-C1'	8.85	128.54	118.80
86	Ab	38	U	O4'-C1'-N1	8.85	115.28	108.20
1	Ad	422	G	O4'-C1'-N9	8.85	115.28	108.20
1	Ad	1651	U	P-O3'-C3'	8.85	130.32	119.70
84	Aa	1304	G	N1-C6-O6	8.85	125.21	119.90
84	Aa	1696	G	N1-C6-O6	8.85	125.21	119.90
1	Ad	1101	C	N1-C1'-C2'	8.85	125.50	114.00
1	Ad	1586	U	O4'-C1'-N1	8.85	115.28	108.20
84	Aa	787	G	N1-C6-O6	8.85	125.21	119.90
84	Aa	1785	G	N1-C6-O6	8.85	125.21	119.90
84	Aa	1587	G	N1-C6-O6	8.85	125.21	119.90
84	Aa	277	U	O4'-C1'-N1	8.84	115.27	108.20
84	Aa	1079	G	N1-C6-O6	8.84	125.21	119.90
84	Aa	1231	C	O4'-C1'-N1	8.84	115.27	108.20
84	Aa	2995	G	N1-C6-O6	8.84	125.21	119.90
85	Ac	76	C	O4'-C1'-N1	8.84	115.28	108.20
84	Aa	2802	G	N1-C6-O6	8.84	125.20	119.90
84	Aa	2886	C	O4'-C1'-N1	8.84	115.27	108.20
84	Aa	3210	G	N1-C6-O6	8.84	125.20	119.90
1	Ad	836	U	O4'-C1'-C2'	-8.84	96.96	105.80
1	Ad	1094	U	N1-C1'-C2'	8.84	125.49	114.00
84	Aa	714	G	N1-C6-O6	8.84	125.20	119.90
84	Aa	1289	G	N1-C6-O6	8.83	125.20	119.90
84	Aa	1960	C	O4'-C1'-N1	8.83	115.27	108.20
1	Ad	903	A	C3'-C2'-C1'	-8.83	94.44	101.50
84	Aa	2057	G	N1-C6-O6	8.83	125.20	119.90
84	Aa	44	A	N1-C6-N6	8.83	123.90	118.60
84	Aa	915	G	N1-C6-O6	8.83	125.20	119.90
84	Aa	1300	C	O4'-C1'-N1	8.83	115.26	108.20
84	Aa	1540	G	N1-C6-O6	8.83	125.20	119.90
86	Ab	62	U	O4'-C1'-N1	8.83	115.26	108.20
84	Aa	784	G	N1-C6-O6	8.82	125.19	119.90
84	Aa	2648	G	N1-C6-O6	8.82	125.19	119.90
1	Ad	196	G	N9-C1'-C2'	8.82	125.47	114.00
84	Aa	1936	G	N1-C6-O6	8.82	125.19	119.90
1	Ad	1	U	O4'-C1'-C2'	-8.82	96.98	105.80
84	Aa	206	C	O4'-C1'-N1	8.82	115.25	108.20
84	Aa	392	C	O4'-C1'-N1	8.82	115.26	108.20
84	Aa	2368	G	N1-C6-O6	8.82	125.19	119.90
84	Aa	3356	C	O4'-C1'-N1	8.82	115.25	108.20
84	Aa	602	G	N1-C6-O6	8.82	125.19	119.90
84	Aa	2664	G	N1-C6-O6	8.82	125.19	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2812	C	O4'-C1'-N1	8.82	115.25	108.20
84	Aa	1999	G	N1-C6-O6	8.81	125.19	119.90
84	Aa	2748	G	N1-C6-O6	8.81	125.19	119.90
1	Ad	1626	C	C3'-C2'-C1'	8.81	108.55	101.50
84	Aa	1402	G	N1-C6-O6	8.81	125.19	119.90
1	Ad	143	A	O4'-C1'-N9	8.81	115.25	108.20
84	Aa	1175	G	N1-C6-O6	8.81	125.19	119.90
84	Aa	22	G	N1-C6-O6	8.81	125.18	119.90
84	Aa	665	G	N1-C6-O6	8.81	125.18	119.90
84	Aa	2337	C	O4'-C1'-N1	8.81	115.25	108.20
84	Aa	2582	G	N1-C6-O6	8.81	125.18	119.90
84	Aa	431	G	C5-C6-O6	-8.80	123.32	128.60
84	Aa	1496	G	N1-C6-O6	8.81	125.18	119.90
84	Aa	2627	G	N1-C6-O6	8.80	125.18	119.90
84	Aa	2959	G	N1-C6-O6	8.80	125.18	119.90
84	Aa	3298	G	O4'-C1'-N9	8.80	115.24	108.20
1	Ad	806	U	O4'-C1'-N1	8.80	115.24	108.20
84	Aa	1417	G	N1-C6-O6	8.80	125.18	119.90
86	Ab	60	G	C5-C6-O6	-8.80	123.32	128.60
1	Ad	32	U	N1-C1'-C2'	-8.80	102.32	112.00
84	Aa	1800	G	N1-C6-O6	8.80	125.18	119.90
84	Aa	2462	G	N1-C6-O6	8.80	125.18	119.90
84	Aa	3314	G	N1-C6-O6	8.80	125.18	119.90
1	Ad	222	G	O4'-C1'-N9	8.79	115.24	108.20
84	Aa	413	G	N1-C6-O6	8.80	125.18	119.90
84	Aa	445	C	O4'-C1'-N1	8.79	115.24	108.20
84	Aa	663	G	N1-C6-O6	8.79	125.18	119.90
84	Aa	2205	G	N1-C6-O6	8.80	125.18	119.90
84	Aa	3230	G	N1-C6-O6	8.80	125.18	119.90
84	Aa	60	G	N1-C6-O6	8.79	125.18	119.90
84	Aa	881	G	N1-C6-O6	8.79	125.17	119.90
84	Aa	1474	U	O4'-C1'-N1	8.79	115.23	108.20
84	Aa	2235	G	N1-C6-O6	8.79	125.18	119.90
84	Aa	3369	G	N1-C6-O6	8.79	125.17	119.90
84	Aa	429	G	N1-C6-O6	8.79	125.17	119.90
84	Aa	729	G	N1-C6-O6	8.79	125.17	119.90
84	Aa	2274	A	N1-C6-N6	8.79	123.87	118.60
84	Aa	3171	C	O4'-C1'-N1	8.79	115.23	108.20
84	Aa	640	C	P-O3'-C3'	-8.79	109.16	119.70
1	Ad	1016	C	N1-C1'-C2'	8.78	125.42	114.00
84	Aa	3027	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	272	G	N1-C6-O6	8.78	125.17	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1432	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	1588	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	3237	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	1354	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	1925	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	2878	C	O4'-C1'-N1	8.78	115.22	108.20
84	Aa	3172	G	O4'-C1'-N9	8.78	115.22	108.20
1	Ad	79	A	N9-C1'-C2'	-8.78	102.34	112.00
84	Aa	703	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	1258	C	O4'-C1'-N1	8.78	115.22	108.20
84	Aa	1483	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	2256	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	2413	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	2740	C	O4'-C1'-N1	8.78	115.22	108.20
84	Aa	3150	G	N1-C6-O6	8.78	125.17	119.90
84	Aa	3224	C	O4'-C1'-N1	8.78	115.22	108.20
84	Aa	3186	G	N1-C6-O6	8.77	125.16	119.90
84	Aa	3335	G	N1-C6-O6	8.77	125.16	119.90
1	Ad	201	G	N9-C1'-C2'	8.77	125.40	114.00
1	Ad	1432	C	O4'-C1'-N1	8.77	115.22	108.20
1	Ad	1778	G	N9-C1'-C2'	8.77	125.40	114.00
84	Aa	245	C	O4'-C1'-N1	8.77	115.22	108.20
84	Aa	1271	U	O4'-C1'-N1	8.77	115.21	108.20
84	Aa	1988	G	N1-C6-O6	8.77	125.16	119.90
84	Aa	3332	G	N1-C6-O6	8.77	125.16	119.90
85	Ac	159	G	P-O3'-C3'	8.77	130.22	119.70
84	Aa	534	G	N1-C6-O6	8.77	125.16	119.90
84	Aa	2258	C	O4'-C1'-N1	8.76	115.21	108.20
84	Aa	3384	G	N1-C6-O6	8.76	125.16	119.90
85	Ac	28	C	O4'-C1'-N1	8.76	115.21	108.20
84	Aa	438	G	N1-C6-O6	8.76	125.16	119.90
84	Aa	2115	G	N1-C6-O6	8.76	125.16	119.90
84	Aa	2578	G	N1-C6-O6	8.76	125.16	119.90
1	Ad	999	G	O4'-C1'-C2'	8.76	115.48	107.60
1	Ad	1191	U	O4'-C1'-N1	8.76	115.21	108.20
84	Aa	1134	G	N1-C6-O6	8.76	125.15	119.90
84	Aa	1283	C	O4'-C1'-N1	8.76	115.20	108.20
84	Aa	1699	C	O4'-C1'-N1	8.76	115.20	108.20
84	Aa	2012	C	P-O3'-C3'	8.76	130.21	119.70
84	Aa	2617	G	N1-C6-O6	8.76	125.15	119.90
84	Aa	3311	C	O4'-C1'-N1	8.76	115.20	108.20
85	Ac	158	C	O4'-C1'-N1	8.76	115.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1407	G	N1-C6-O6	8.75	125.15	119.90
84	Aa	1500	C	O4'-C1'-N1	8.75	115.20	108.20
84	Aa	2541	A	N1-C6-N6	8.75	123.85	118.60
84	Aa	3062	G	N1-C6-O6	8.75	125.15	119.90
1	Ad	281	U	O3'-P-O5'	-8.75	87.38	104.00
84	Aa	754	G	N1-C6-O6	8.75	125.15	119.90
84	Aa	773	G	N1-C6-O6	8.75	125.15	119.90
84	Aa	2375	G	N1-C6-O6	8.75	125.15	119.90
84	Aa	2979	G	N1-C6-O6	8.75	125.15	119.90
84	Aa	3084	G	N1-C6-O6	8.75	125.15	119.90
84	Aa	3337	G	N1-C6-O6	8.75	125.15	119.90
84	Aa	1100	G	N1-C6-O6	8.75	125.15	119.90
84	Aa	2780	G	N1-C6-O6	8.75	125.15	119.90
1	Ad	898	U	O4'-C1'-N1	8.74	115.20	108.20
84	Aa	114	G	N1-C6-O6	8.74	125.15	119.90
84	Aa	1728	G	N1-C6-O6	8.74	125.14	119.90
84	Aa	2838	C	O4'-C1'-N1	8.74	115.19	108.20
86	Ab	5	G	N1-C6-O6	8.74	125.14	119.90
1	Ad	756	U	O4'-C1'-N1	8.74	115.19	108.20
1	Ad	796	U	O4'-C1'-N1	8.74	115.19	108.20
84	Aa	199	G	N1-C6-O6	8.74	125.14	119.90
84	Aa	669	G	N1-C6-O6	8.74	125.14	119.90
84	Aa	2667	C	O4'-C1'-N1	8.74	115.19	108.20
84	Aa	944	G	N1-C6-O6	8.74	125.14	119.90
1	Ad	1170	G	O4'-C1'-N9	8.74	115.19	108.20
84	Aa	136	C	O4'-C1'-N1	8.74	115.19	108.20
84	Aa	2598	A	N1-C6-N6	8.74	123.84	118.60
84	Aa	126	G	N1-C6-O6	8.74	125.14	119.90
84	Aa	1299	G	N1-C6-O6	8.74	125.14	119.90
1	Ad	1325	A	C1'-O4'-C4'	-8.73	102.91	109.90
84	Aa	57	G	N1-C6-O6	8.73	125.14	119.90
84	Aa	2075	C	O4'-C1'-N1	8.73	115.19	108.20
84	Aa	2021	G	N1-C6-O6	8.73	125.14	119.90
85	Ac	24	G	N1-C6-O6	8.73	125.14	119.90
1	Ad	1061	G	O4'-C1'-N9	8.73	115.19	108.20
1	Ad	1474	U	O4'-C1'-N1	8.73	115.19	108.20
84	Aa	82	C	O4'-C1'-N1	8.73	115.18	108.20
84	Aa	531	G	N1-C6-O6	8.73	125.14	119.90
84	Aa	1982	G	N1-C6-O6	8.73	125.14	119.90
84	Aa	2540	C	O4'-C1'-N1	8.73	115.18	108.20
84	Aa	2448	G	N1-C6-O6	8.73	125.14	119.90
84	Aa	2128	G	N1-C6-O6	8.72	125.14	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1986	G	N1-C6-O6	8.72	125.13	119.90
1	Ad	67	G	O4'-C1'-N9	-8.72	101.22	108.20
84	Aa	208	G	N1-C6-O6	8.72	125.13	119.90
84	Aa	212	G	N1-C6-O6	8.72	125.13	119.90
84	Aa	357	C	O4'-C1'-N1	8.72	115.18	108.20
84	Aa	1767	G	N1-C6-O6	8.72	125.13	119.90
84	Aa	2067	G	N1-C6-O6	8.72	125.13	119.90
84	Aa	2112	C	O4'-C1'-N1	8.72	115.18	108.20
84	Aa	2231	G	C5-C6-O6	-8.72	123.37	128.60
84	Aa	2968	G	N1-C6-O6	8.72	125.13	119.90
84	Aa	358	G	N1-C6-O6	8.72	125.13	119.90
84	Aa	431	G	P-O3'-C3'	8.72	130.16	119.70
84	Aa	87	A	C4-C5-C6	8.71	121.36	117.00
84	Aa	790	G	N1-C6-O6	8.71	125.13	119.90
1	Ad	392	G	O4'-C1'-N9	8.71	115.17	108.20
1	Ad	870	A	C1'-O4'-C4'	8.71	116.87	109.90
84	Aa	100	C	O4'-C1'-N1	8.71	115.17	108.20
84	Aa	1701	G	N1-C6-O6	8.71	125.13	119.90
84	Aa	3295	G	N1-C6-O6	8.71	125.13	119.90
85	Ac	159	G	N1-C6-O6	8.71	125.13	119.90
84	Aa	2034	G	N1-C6-O6	8.71	125.13	119.90
84	Aa	3103	G	N1-C6-O6	8.71	125.13	119.90
84	Aa	3274	G	N1-C6-O6	8.71	125.13	119.90
1	Ad	1776	A	O4'-C1'-N9	8.71	115.17	108.20
84	Aa	545	C	O4'-C1'-N1	8.71	115.17	108.20
84	Aa	1779	C	O4'-C1'-N1	8.71	115.17	108.20
84	Aa	2763	C	O4'-C1'-N1	8.71	115.17	108.20
86	Ab	118	C	O4'-C1'-N1	8.71	115.17	108.20
1	Ad	1593	U	N1-C1'-C2'	8.71	125.32	114.00
84	Aa	1085	G	N1-C6-O6	8.70	125.12	119.90
84	Aa	1119	G	N1-C6-O6	8.71	125.12	119.90
84	Aa	1572	C	O4'-C1'-N1	8.71	115.16	108.20
84	Aa	2493	C	O4'-C1'-N1	8.71	115.17	108.20
1	Ad	4	C	C1'-O4'-C4'	-8.70	102.94	109.90
84	Aa	493	G	N1-C6-O6	8.70	125.12	119.90
84	Aa	2728	C	O4'-C1'-N1	8.70	115.16	108.20
84	Aa	2860	U	O4'-C1'-N1	8.70	115.16	108.20
84	Aa	757	G	N1-C6-O6	8.70	125.12	119.90
85	Ac	39	G	N1-C6-O6	8.70	125.12	119.90
84	Aa	441	G	N1-C6-O6	8.70	125.12	119.90
84	Aa	1825	G	N1-C6-O6	8.70	125.12	119.90
84	Aa	2450	G	P-O3'-C3'	8.70	130.14	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	454	U	O4'-C1'-N1	8.70	115.16	108.20
1	Ad	811	U	O4'-C1'-N1	8.70	115.16	108.20
84	Aa	741	G	N1-C6-O6	8.70	125.12	119.90
84	Aa	2271	G	N1-C6-O6	8.70	125.12	119.90
84	Aa	1213	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	3083	C	O4'-C1'-N1	8.69	115.15	108.20
84	Aa	3343	U	P-O3'-C3'	8.69	130.13	119.70
84	Aa	713	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	782	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	838	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	1670	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	2589	G	P-O3'-C3'	8.69	130.12	119.70
84	Aa	2735	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	1268	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	3023	G	N1-C6-O6	8.69	125.11	119.90
1	Ad	753	C	N1-C1'-C2'	8.69	125.29	114.00
84	Aa	1949	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	1954	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	3301	G	N1-C6-O6	8.69	125.11	119.90
84	Aa	3329	G	N1-C6-O6	8.69	125.11	119.90
1	Ad	787	C	C3'-C2'-C1'	-8.68	94.55	101.50
1	Ad	956	A	N9-C1'-C2'	-8.68	102.45	112.00
84	Aa	1404	G	N1-C6-O6	8.68	125.11	119.90
1	Ad	206	U	O4'-C1'-N1	8.68	115.15	108.20
84	Aa	1100	G	P-O3'-C3'	8.68	130.12	119.70
84	Aa	1941	G	N1-C6-O6	8.68	125.11	119.90
1	Ad	1363	G	C3'-C2'-C1'	-8.68	94.56	101.50
84	Aa	356	G	N1-C6-O6	8.68	125.11	119.90
84	Aa	720	G	N1-C6-O6	8.68	125.11	119.90
84	Aa	667	C	O4'-C1'-N1	8.68	115.14	108.20
84	Aa	988	G	N1-C6-O6	8.68	125.11	119.90
84	Aa	1723	C	O4'-C1'-N1	8.68	115.14	108.20
84	Aa	1804	G	N1-C6-O6	8.68	125.11	119.90
84	Aa	2048	C	O4'-C1'-N1	8.68	115.14	108.20
84	Aa	2865	G	N1-C6-O6	8.68	125.11	119.90
84	Aa	3172	G	N1-C6-O6	8.68	125.11	119.90
84	Aa	527	G	N1-C6-O6	8.67	125.10	119.90
84	Aa	745	G	N1-C6-O6	8.67	125.10	119.90
1	Ad	28	A	O4'-C1'-N9	8.67	115.14	108.20
84	Aa	200	G	N1-C6-O6	8.67	125.10	119.90
84	Aa	732	G	N1-C6-O6	8.67	125.10	119.90
84	Aa	802	G	N1-C6-O6	8.67	125.10	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1238	G	O5'-P-OP1	-8.67	97.90	105.70
84	Aa	1877	G	N1-C6-O6	8.67	125.10	119.90
84	Aa	2858	G	N1-C6-O6	8.67	125.10	119.90
84	Aa	2488	A	N1-C6-N6	8.67	123.80	118.60
1	Ad	136	U	O4'-C1'-N1	8.67	115.13	108.20
84	Aa	3245	G	N1-C6-O6	8.67	125.10	119.90
84	Aa	112	C	O4'-C1'-N1	8.67	115.13	108.20
84	Aa	3361	G	N1-C6-O6	8.67	125.10	119.90
84	Aa	535	G	N1-C6-O6	8.66	125.10	119.90
84	Aa	150	G	N1-C6-O6	8.66	125.10	119.90
84	Aa	1555	G	N1-C6-O6	8.66	125.10	119.90
84	Aa	1807	C	O4'-C1'-N1	8.66	115.13	108.20
84	Aa	2051	G	N1-C6-O6	8.66	125.10	119.90
1	Ad	165	U	N1-C1'-C2'	8.66	125.26	114.00
1	Ad	617	G	O4'-C1'-N9	-8.66	101.27	108.20
84	Aa	404	G	O4'-C1'-N9	8.66	115.13	108.20
84	Aa	1689	G	C5-C6-O6	-8.66	123.40	128.60
84	Aa	1759	C	O4'-C1'-N1	8.66	115.13	108.20
84	Aa	1826	G	N1-C6-O6	8.66	125.10	119.90
84	Aa	1980	C	O4'-C1'-N1	8.66	115.13	108.20
84	Aa	2031	G	N1-C6-O6	8.66	125.09	119.90
84	Aa	124	C	O4'-C1'-N1	8.66	115.12	108.20
84	Aa	142	G	N1-C6-O6	8.66	125.09	119.90
84	Aa	1340	G	N1-C6-O6	8.66	125.09	119.90
84	Aa	2703	G	N1-C6-O6	8.66	125.09	119.90
84	Aa	1974	C	O4'-C1'-N1	8.65	115.12	108.20
84	Aa	3167	G	O4'-C1'-N9	8.65	115.12	108.20
1	Ad	1029	U	O4'-C1'-C2'	-8.65	97.15	105.80
84	Aa	490	G	N1-C6-O6	8.65	125.09	119.90
84	Aa	1129	G	N1-C6-O6	8.65	125.09	119.90
84	Aa	2355	A	N1-C6-N6	8.65	123.79	118.60
1	Ad	1473	C	O4'-C1'-N1	8.65	115.12	108.20
84	Aa	613	G	N1-C6-O6	8.65	125.09	119.90
84	Aa	691	U	O4'-C1'-N1	8.65	115.12	108.20
84	Aa	1245	U	P-O5'-C5'	8.65	134.74	120.90
84	Aa	2050	G	N1-C6-O6	8.65	125.09	119.90
84	Aa	253	G	N1-C6-O6	8.64	125.09	119.90
84	Aa	254	G	N1-C6-O6	8.64	125.09	119.90
84	Aa	834	G	N1-C6-O6	8.64	125.09	119.90
84	Aa	2017	G	N1-C6-O6	8.64	125.09	119.90
84	Aa	2673	G	N1-C6-O6	8.64	125.09	119.90
84	Aa	2732	U	O4'-C1'-N1	8.64	115.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3077	C	O4'-C1'-N1	8.64	115.11	108.20
84	Aa	521	G	P-O3'-C3'	8.64	130.07	119.70
84	Aa	477	C	O4'-C1'-N1	8.64	115.11	108.20
84	Aa	2399	G	N1-C6-O6	8.64	125.08	119.90
84	Aa	2539	G	N1-C6-O6	8.64	125.08	119.90
1	Ad	438	G	O4'-C1'-N9	8.63	115.11	108.20
84	Aa	863	G	N1-C6-O6	8.63	125.08	119.90
84	Aa	2002	G	N1-C6-O6	8.63	125.08	119.90
84	Aa	3231	G	N1-C6-O6	8.63	125.08	119.90
86	Ab	57	C	N3-C4-N4	8.64	124.05	118.00
1	Ad	969	U	N1-C1'-C2'	8.63	125.22	114.00
84	Aa	567	G	C5-C6-O6	-8.63	123.42	128.60
84	Aa	1914	C	O4'-C1'-N1	8.63	115.11	108.20
84	Aa	2027	G	N1-C6-O6	8.63	125.08	119.90
84	Aa	2536	G	N1-C6-O6	8.63	125.08	119.90
84	Aa	748	C	O4'-C1'-N1	8.63	115.10	108.20
84	Aa	1544	G	N1-C6-O6	8.63	125.08	119.90
84	Aa	2411	G	N1-C6-O6	8.63	125.08	119.90
84	Aa	2924	G	N1-C6-O6	8.63	125.08	119.90
1	Ad	351	G	O4'-C1'-N9	8.63	115.10	108.20
84	Aa	1859	G	N1-C6-O6	8.62	125.08	119.90
84	Aa	2505	C	O4'-C1'-N1	8.62	115.10	108.20
1	Ad	1636	U	O4'-C1'-N1	8.62	115.10	108.20
2	Ae	8	U	O4'-C1'-N1	8.62	115.10	108.20
84	Aa	837	C	O4'-C1'-N1	8.62	115.10	108.20
84	Aa	1655	G	N1-C6-O6	8.62	125.07	119.90
84	Aa	2624	G	N1-C6-O6	8.62	125.07	119.90
84	Aa	512	G	O4'-C1'-N9	8.62	115.10	108.20
84	Aa	1263	A	O4'-C1'-N9	8.62	115.10	108.20
1	Ad	124	G	O4'-C1'-N9	8.62	115.09	108.20
1	Ad	748	C	P-O3'-C3'	8.62	130.04	119.70
84	Aa	2795	G	N1-C6-O6	8.62	125.07	119.90
84	Aa	3160	G	N1-C6-O6	8.62	125.07	119.90
84	Aa	3353	G	N1-C6-O6	8.62	125.07	119.90
85	Ac	156	C	O4'-C1'-N1	8.62	115.09	108.20
84	Aa	2441	G	N1-C6-O6	8.62	125.07	119.90
1	Ad	399	U	O4'-C1'-N1	8.62	115.09	108.20
84	Aa	351	G	N1-C6-O6	8.62	125.07	119.90
84	Aa	464	G	O4'-C1'-N9	8.62	115.09	108.20
84	Aa	685	G	N1-C6-O6	8.61	125.07	119.90
84	Aa	422	G	N1-C6-O6	8.61	125.07	119.90
84	Aa	469	U	O4'-C1'-N1	8.61	115.09	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	546	C	O4'-C1'-N1	8.61	115.09	108.20
84	Aa	3026	C	O4'-C1'-N1	8.61	115.09	108.20
84	Aa	914	C	O4'-C1'-N1	8.61	115.09	108.20
84	Aa	3349	C	O4'-C1'-N1	8.61	115.09	108.20
84	Aa	860	G	N1-C6-O6	8.61	125.07	119.90
84	Aa	3275	G	N1-C6-O6	8.61	125.07	119.90
84	Aa	625	G	C4'-C3'-O3'	8.61	130.22	113.00
84	Aa	2011	G	N1-C6-O6	8.61	125.06	119.90
84	Aa	2709	G	C5-C6-O6	-8.61	123.44	128.60
84	Aa	2811	C	O4'-C1'-N1	8.61	115.09	108.20
1	Ad	769	G	O4'-C1'-N9	8.61	115.08	108.20
1	Ad	1232	G	N9-C1'-C2'	8.61	125.19	114.00
68	Ch	74	TYR	CB-CG-CD1	-8.61	115.84	121.00
84	Aa	135	G	N1-C6-O6	8.61	125.06	119.90
84	Aa	680	G	N1-C6-O6	8.61	125.06	119.90
84	Aa	1361	G	C5-C6-O6	-8.61	123.44	128.60
84	Aa	1760	G	N1-C6-O6	8.61	125.06	119.90
84	Aa	1975	G	N1-C6-O6	8.61	125.06	119.90
84	Aa	2457	G	N1-C6-O6	8.61	125.06	119.90
84	Aa	3240	C	O4'-C1'-N1	8.61	115.08	108.20
84	Aa	1425	G	N1-C6-O6	8.60	125.06	119.90
84	Aa	1762	G	N1-C6-O6	8.60	125.06	119.90
86	Ab	5	G	O4'-C1'-N9	8.60	115.08	108.20
84	Aa	2459	U	P-O3'-C3'	8.60	130.02	119.70
84	Aa	2381	G	N1-C6-O6	8.60	125.06	119.90
84	Aa	2080	G	N1-C6-O6	8.60	125.06	119.90
1	Ad	1080	C	C1'-O4'-C4'	-8.60	103.02	109.90
84	Aa	1885	G	N1-C6-O6	8.60	125.06	119.90
85	Ac	115	C	O4'-C1'-N1	8.60	115.08	108.20
1	Ad	1545	A	C1'-O4'-C4'	8.59	116.78	109.90
84	Aa	1523	G	C5-C6-O6	-8.59	123.44	128.60
84	Aa	2543	G	N1-C6-O6	8.59	125.06	119.90
1	Ad	725	U	O4'-C1'-N1	8.59	115.07	108.20
3	Af	14	A	O4'-C1'-N9	8.59	115.07	108.20
84	Aa	543	C	C5'-C4'-O4'	8.59	119.41	109.10
84	Aa	831	G	N1-C6-O6	8.59	125.05	119.90
1	Ad	1163	C	O4'-C1'-C2'	-8.59	97.21	105.80
2	Ae	54	U	O4'-C1'-N1	8.59	115.07	108.20
84	Aa	975	G	N1-C6-O6	8.59	125.05	119.90
84	Aa	1371	G	N1-C6-O6	8.59	125.05	119.90
84	Aa	1696	G	O4'-C1'-N9	8.59	115.07	108.20
84	Aa	1717	G	C5-C6-O6	-8.59	123.45	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	366	G	N1-C6-O6	8.59	125.05	119.90
84	Aa	919	G	N1-C6-O6	8.59	125.05	119.90
84	Aa	2039	G	N1-C6-O6	8.59	125.05	119.90
84	Aa	2742	A	N1-C6-N6	8.59	123.75	118.60
84	Aa	600	G	N1-C6-O6	8.58	125.05	119.90
84	Aa	1510	G	N1-C6-O6	8.58	125.05	119.90
84	Aa	2118	G	N1-C6-O6	8.58	125.05	119.90
84	Aa	2985	C	O4'-C1'-N1	8.58	115.07	108.20
84	Aa	2066	G	N1-C6-O6	8.58	125.05	119.90
86	Ab	108	G	N3-C2-N2	8.58	125.91	119.90
84	Aa	3284	C	O4'-C1'-N1	8.58	115.06	108.20
1	Ad	1107	G	O4'-C1'-N9	8.58	115.06	108.20
84	Aa	396	G	N1-C6-O6	8.58	125.05	119.90
84	Aa	498	G	N1-C6-O6	8.58	125.05	119.90
84	Aa	1301	C	O4'-C1'-N1	8.58	115.06	108.20
84	Aa	2248	G	N1-C6-O6	8.58	125.05	119.90
84	Aa	1230	G	N1-C6-O6	8.57	125.05	119.90
1	Ad	434	G	O4'-C1'-N9	8.57	115.06	108.20
1	Ad	629	C	O4'-C1'-N1	8.57	115.06	108.20
84	Aa	1095	C	O4'-C1'-N1	8.57	115.06	108.20
84	Aa	2405	C	O4'-C1'-N1	8.57	115.06	108.20
84	Aa	1084	G	N1-C6-O6	8.57	125.04	119.90
85	Ac	142	G	N1-C6-O6	8.57	125.04	119.90
1	Ad	184	C	O4'-C1'-N1	8.57	115.06	108.20
84	Aa	2595	G	N1-C6-O6	8.57	125.04	119.90
84	Aa	3208	G	N1-C6-O6	8.57	125.04	119.90
1	Ad	966	U	N1-C1'-C2'	8.56	125.13	114.00
84	Aa	1736	C	O4'-C1'-N1	8.56	115.05	108.20
84	Aa	374	G	N1-C6-O6	8.56	125.04	119.90
84	Aa	1482	C	O4'-C1'-N1	8.56	115.05	108.20
84	Aa	1783	G	N1-C6-O6	8.56	125.04	119.90
84	Aa	2477	G	C4'-C3'-O3'	8.56	130.12	113.00
84	Aa	2914	G	N1-C6-O6	8.56	125.04	119.90
1	Ad	1466	A	N9-C1'-C2'	8.56	125.13	114.00
1	Ad	162	A	C1'-O4'-C4'	-8.56	103.05	109.90
84	Aa	85	G	N1-C6-O6	8.56	125.03	119.90
86	Ab	66	G	C5-C6-O6	-8.56	123.47	128.60
84	Aa	833	G	N1-C6-O6	8.55	125.03	119.90
84	Aa	1888	G	N1-C6-O6	8.56	125.03	119.90
84	Aa	2666	G	N1-C6-O6	8.55	125.03	119.90
84	Aa	5	G	N1-C6-O6	8.55	125.03	119.90
84	Aa	2608	G	N1-C6-O6	8.55	125.03	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	75	G	O4'-C1'-N9	8.55	115.04	108.20
84	Aa	2717	G	N1-C6-O6	8.55	125.03	119.90
84	Aa	3380	G	N3-C2-N2	8.55	125.89	119.90
84	Aa	2744	C	O4'-C1'-N1	8.55	115.04	108.20
84	Aa	1857	G	N1-C6-O6	8.55	125.03	119.90
84	Aa	2013	G	N1-C6-O6	8.55	125.03	119.90
84	Aa	2093	G	C5-C6-O6	-8.55	123.47	128.60
84	Aa	2109	G	N1-C6-O6	8.55	125.03	119.90
85	Ac	6	C	O4'-C1'-N1	8.55	115.04	108.20
1	Ad	290	C	C3'-C2'-C1'	8.55	108.34	101.50
1	Ad	1395	C	C1'-O4'-C4'	-8.55	103.06	109.90
84	Aa	880	C	O4'-C1'-N1	8.54	115.04	108.20
84	Aa	3277	C	O4'-C1'-N1	8.54	115.04	108.20
1	Ad	118	U	O4'-C1'-N1	8.54	115.03	108.20
84	Aa	3195	C	O4'-C1'-N1	8.54	115.03	108.20
84	Aa	1919	C	O4'-C1'-N1	8.54	115.03	108.20
1	Ad	218	G	C1'-O4'-C4'	-8.54	103.07	109.90
84	Aa	2315	G	N1-C6-O6	8.54	125.02	119.90
84	Aa	2920	G	N1-C6-O6	8.54	125.02	119.90
86	Ab	104	C	O4'-C1'-N1	8.54	115.03	108.20
84	Aa	1711	G	N1-C6-O6	8.54	125.02	119.90
84	Aa	2045	G	N1-C6-O6	8.54	125.02	119.90
85	Ac	133	C	O4'-C1'-N1	8.54	115.03	108.20
86	Ab	99	G	C5-C6-O6	-8.54	123.48	128.60
1	Ad	220	C	N1-C1'-C2'	8.54	125.10	114.00
1	Ad	1128	C	C3'-C2'-C1'	8.53	108.33	101.50
84	Aa	1420	G	N1-C6-O6	8.53	125.02	119.90
1	Ad	1425	G	O4'-C1'-N9	8.53	115.03	108.20
84	Aa	1067	G	N1-C6-O6	8.53	125.02	119.90
84	Aa	1726	G	N1-C6-O6	8.53	125.02	119.90
1	Ad	1065	A	O4'-C1'-C2'	8.53	115.28	107.60
85	Ac	3	A	N1-C6-N6	8.53	123.72	118.60
84	Aa	1335	C	O4'-C1'-N1	8.53	115.02	108.20
84	Aa	1966	C	O4'-C1'-N1	8.53	115.02	108.20
84	Aa	2229	G	N1-C6-O6	8.53	125.02	119.90
1	Ad	1706	G	O4'-C1'-N9	8.53	115.02	108.20
86	Ab	55	A	C4-C5-C6	8.53	121.26	117.00
1	Ad	266	C	O4'-C1'-N1	8.52	115.02	108.20
84	Aa	1751	G	N1-C6-O6	8.52	125.01	119.90
84	Aa	2417	G	N1-C6-O6	8.52	125.02	119.90
86	Ab	93	U	O4'-C1'-N1	8.52	115.02	108.20
84	Aa	160	G	N1-C6-O6	8.52	125.01	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1118	G	N1-C6-O6	8.52	125.01	119.90
84	Aa	2916	G	N1-C6-O6	8.52	125.01	119.90
84	Aa	2556	G	N1-C6-O6	8.52	125.01	119.90
1	Ad	1363	G	O4'-C1'-N9	8.52	115.01	108.20
84	Aa	179	G	N1-C6-O6	8.52	125.01	119.90
84	Aa	1771	G	N1-C6-O6	8.52	125.01	119.90
85	Ac	124	C	O4'-C1'-N1	8.52	115.02	108.20
84	Aa	557	C	O4'-C1'-N1	8.52	115.01	108.20
86	Ab	13	A	N1-C6-N6	8.52	123.71	118.60
1	Ad	386	C	O4'-C1'-N1	8.51	115.01	108.20
84	Aa	187	G	N1-C6-O6	8.51	125.01	119.90
84	Aa	876	C	O4'-C1'-N1	8.51	115.01	108.20
84	Aa	1968	C	O4'-C1'-N1	8.51	115.01	108.20
84	Aa	2029	G	N1-C6-O6	8.51	125.01	119.90
84	Aa	2038	G	N1-C6-O6	8.51	125.00	119.90
84	Aa	2102	C	O4'-C1'-N1	8.51	115.01	108.20
84	Aa	2207	C	O4'-C1'-N1	8.51	115.01	108.20
84	Aa	3252	G	N1-C6-O6	8.51	125.01	119.90
84	Aa	905	G	N1-C6-O6	8.51	125.00	119.90
84	Aa	345	G	N1-C6-O6	8.51	125.00	119.90
84	Aa	400	G	N1-C6-O6	8.51	125.00	119.90
84	Aa	1241	G	N1-C6-O6	8.51	125.00	119.90
84	Aa	1996	C	O4'-C1'-N1	8.51	115.01	108.20
84	Aa	2099	G	N1-C6-O6	8.51	125.00	119.90
84	Aa	756	C	O4'-C1'-N1	8.51	115.00	108.20
84	Aa	848	G	N1-C6-O6	8.51	125.00	119.90
84	Aa	1077	C	O4'-C1'-N1	8.51	115.00	108.20
84	Aa	1242	U	O4'-C1'-N1	8.51	115.00	108.20
84	Aa	1973	C	O4'-C1'-N1	8.51	115.00	108.20
84	Aa	3006	G	N1-C6-O6	8.51	125.00	119.90
1	Ad	1665	U	O4'-C1'-C2'	-8.50	97.30	105.80
84	Aa	1113	C	O4'-C1'-N1	8.50	115.00	108.20
84	Aa	1165	C	O4'-C1'-N1	8.50	115.00	108.20
84	Aa	1614	G	N1-C6-O6	8.50	125.00	119.90
85	Ac	47	U	O4'-C1'-N1	8.50	115.00	108.20
1	Ad	1131	G	O4'-C1'-N9	8.50	115.00	108.20
1	Ad	1729	A	O4'-C1'-N9	8.50	115.00	108.20
84	Aa	3089	G	N1-C6-O6	8.50	125.00	119.90
84	Aa	1491	G	N1-C6-O6	8.49	125.00	119.90
84	Aa	2402	G	N1-C6-O6	8.49	125.00	119.90
84	Aa	2563	G	N1-C6-O6	8.49	125.00	119.90
1	Ad	41	A	C1'-O4'-C4'	8.49	116.69	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	55	G	N1-C6-O6	8.49	125.00	119.90
84	Aa	805	C	O4'-C1'-N1	8.49	114.99	108.20
84	Aa	2689	U	O4'-C1'-N1	8.49	114.99	108.20
84	Aa	2754	G	N1-C6-O6	8.49	125.00	119.90
84	Aa	1608	C	O4'-C1'-N1	8.49	114.99	108.20
84	Aa	2526	G	N1-C6-O6	8.49	124.99	119.90
84	Aa	778	G	N1-C6-O6	8.49	124.99	119.90
84	Aa	109	G	N1-C6-O6	8.48	124.99	119.90
84	Aa	689	G	N1-C6-O6	8.48	124.99	119.90
84	Aa	2306	G	C5-C6-O6	-8.48	123.51	128.60
86	Ab	1	G	O4'-C1'-N9	8.48	114.99	108.20
1	Ad	599	G	O4'-C1'-N9	8.48	114.99	108.20
84	Aa	940	G	N1-C6-O6	8.48	124.99	119.90
84	Aa	2364	C	O4'-C1'-N1	8.48	114.99	108.20
84	Aa	1022	G	O4'-C1'-N9	8.48	114.98	108.20
84	Aa	2322	G	N1-C6-O6	8.48	124.99	119.90
84	Aa	2654	G	N1-C6-O6	8.48	124.99	119.90
1	Ad	968	A	C1'-O4'-C4'	8.48	116.68	109.90
84	Aa	619	C	O4'-C1'-N1	8.48	114.98	108.20
84	Aa	1666	C	O4'-C1'-N1	8.48	114.98	108.20
84	Aa	1895	G	N1-C6-O6	8.48	124.99	119.90
84	Aa	1210	G	N1-C6-O6	8.48	124.99	119.90
84	Aa	2714	U	O4'-C1'-N1	8.48	114.98	108.20
85	Ac	141	C	O4'-C1'-N1	8.48	114.98	108.20
84	Aa	446	C	O4'-C1'-N1	8.47	114.98	108.20
84	Aa	2025	C	O4'-C1'-N1	8.47	114.98	108.20
86	Ab	101	A	C4-C5-C6	8.47	121.24	117.00
1	Ad	782	G	C1'-O4'-C4'	-8.47	103.12	109.90
84	Aa	1186	C	O4'-C1'-N1	8.47	114.98	108.20
84	Aa	3234	G	N1-C6-O6	8.47	124.98	119.90
84	Aa	611	C	O4'-C1'-N1	8.47	114.98	108.20
84	Aa	2841	G	N1-C6-O6	8.47	124.98	119.90
85	Ac	16	G	N1-C6-O6	8.47	124.98	119.90
84	Aa	1977	C	O4'-C1'-N1	8.47	114.97	108.20
84	Aa	2486	G	N1-C6-O6	8.47	124.98	119.90
1	Ad	902	C	O4'-C1'-C2'	-8.47	97.33	105.80
84	Aa	230	G	N1-C6-O6	8.47	124.98	119.90
84	Aa	1997	G	N1-C6-O6	8.47	124.98	119.90
84	Aa	3109	G	N1-C6-O6	8.47	124.98	119.90
1	Ad	1380	A	O4'-C1'-N9	8.46	114.97	108.20
84	Aa	544	C	O4'-C1'-N1	8.46	114.97	108.20
84	Aa	829	G	N1-C6-O6	8.46	124.98	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1519	C	O4'-C1'-N1	8.47	114.97	108.20
1	Ad	1724	U	O4'-C1'-N1	8.46	114.97	108.20
84	Aa	256	G	N1-C6-O6	8.46	124.98	119.90
84	Aa	579	G	C5-C6-O6	-8.46	123.52	128.60
84	Aa	3090	C	O4'-C1'-N1	8.46	114.97	108.20
1	Ad	15	U	O4'-C1'-N1	8.46	114.97	108.20
84	Aa	195	G	N1-C6-O6	8.46	124.97	119.90
84	Aa	1665	G	N1-C6-O6	8.46	124.97	119.90
1	Ad	1646	G	C1'-O4'-C4'	-8.46	103.14	109.90
84	Aa	2642	G	N1-C6-O6	8.46	124.97	119.90
84	Aa	1318	C	O4'-C1'-N1	8.45	114.96	108.20
85	Ac	150	G	O4'-C1'-N9	8.46	114.96	108.20
1	Ad	839	G	P-O5'-C5'	8.45	134.42	120.90
1	Ad	1717	C	O4'-C1'-N1	8.45	114.96	108.20
84	Aa	1408	C	O4'-C1'-N1	8.45	114.96	108.20
84	Aa	20	G	N1-C6-O6	8.45	124.97	119.90
84	Aa	1686	U	O4'-C1'-N1	8.45	114.96	108.20
84	Aa	2622	G	N1-C6-O6	8.45	124.97	119.90
84	Aa	3100	C	P-O3'-C3'	8.45	129.84	119.70
84	Aa	1606	C	O4'-C1'-N1	8.45	114.96	108.20
1	Ad	328	U	O4'-C1'-N1	8.45	114.96	108.20
84	Aa	144	A	C5-C6-N6	-8.45	116.94	123.70
84	Aa	221	C	O4'-C1'-N1	8.45	114.96	108.20
84	Aa	707	G	N1-C6-O6	8.45	124.97	119.90
84	Aa	749	C	O4'-C1'-N1	8.45	114.96	108.20
84	Aa	882	U	O4'-C1'-N1	8.45	114.96	108.20
84	Aa	2108	C	O4'-C1'-N1	8.45	114.96	108.20
84	Aa	2173	G	O4'-C1'-N9	8.45	114.96	108.20
1	Ad	1155	G	C1'-O4'-C4'	-8.44	103.14	109.90
84	Aa	3198	C	O4'-C1'-N1	8.44	114.95	108.20
84	Aa	2033	C	O4'-C1'-N1	8.44	114.95	108.20
84	Aa	2086	A	C4'-C3'-O3'	-8.44	91.68	109.40
84	Aa	612	U	P-O3'-C3'	8.44	129.82	119.70
84	Aa	1281	C	O4'-C1'-N1	8.44	114.95	108.20
1	Ad	1492	G	N9-C1'-C2'	-8.44	102.72	112.00
84	Aa	2821	U	O4'-C1'-N1	8.43	114.95	108.20
84	Aa	471	C	O4'-C1'-N1	8.43	114.94	108.20
84	Aa	275	G	C5-C6-O6	-8.43	123.54	128.60
84	Aa	2535	C	O4'-C1'-N1	8.43	114.94	108.20
84	Aa	639	A	P-O3'-C3'	8.43	129.81	119.70
84	Aa	2555	G	N1-C6-O6	8.43	124.96	119.90
84	Aa	3053	G	N1-C6-O6	8.42	124.95	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1634	G	N1-C6-O6	8.42	124.95	119.90
84	Aa	2144	G	N1-C6-O6	8.42	124.95	119.90
85	Ac	144	C	O4'-C1'-N1	8.42	114.94	108.20
84	Aa	2940	G	N1-C6-O6	8.42	124.95	119.90
84	Aa	102	G	N1-C6-O6	8.42	124.95	119.90
84	Aa	1444	G	N1-C6-O6	8.42	124.95	119.90
1	Ad	296	A	N9-C1'-C2'	8.41	124.93	114.00
1	Ad	513	G	O4'-C1'-N9	8.41	114.93	108.20
1	Ad	733	U	O4'-C1'-N1	8.41	114.93	108.20
84	Aa	24	C	O4'-C1'-N1	8.41	114.93	108.20
1	Ad	1744	C	O4'-C1'-N1	8.40	114.92	108.20
1	Ad	88	C	O4'-C1'-N1	8.40	114.92	108.20
1	Ad	919	G	N9-C1'-C2'	-8.40	102.76	112.00
1	Ad	1103	U	O4'-C1'-N1	8.40	114.92	108.20
84	Aa	244	G	O4'-C1'-N9	8.40	114.92	108.20
84	Aa	1984	C	O4'-C1'-N1	8.40	114.92	108.20
1	Ad	1604	C	C3'-C2'-C1'	-8.40	94.78	101.50
84	Aa	52	G	N1-C6-O6	8.40	124.94	119.90
84	Aa	103	G	N1-C6-O6	8.40	124.94	119.90
84	Aa	1872	C	O4'-C1'-N1	8.40	114.92	108.20
84	Aa	1913	C	O4'-C1'-N1	8.40	114.92	108.20
1	Ad	407	G	O4'-C1'-N9	8.40	114.92	108.20
85	Ac	152	G	N1-C6-O6	8.40	124.94	119.90
1	Ad	224	C	O4'-C1'-N1	8.39	114.92	108.20
1	Ad	1593	U	C1'-O4'-C4'	-8.39	103.18	109.90
84	Aa	1150	G	N1-C6-O6	8.39	124.94	119.90
84	Aa	2299	C	O4'-C1'-N1	8.39	114.92	108.20
84	Aa	3350	C	O4'-C1'-N1	8.39	114.91	108.20
84	Aa	290	C	O4'-C1'-N1	8.39	114.91	108.20
1	Ad	1665	U	C1'-O4'-C4'	8.39	116.61	109.90
84	Aa	3203	G	N1-C6-O6	8.39	124.94	119.90
84	Aa	1415	G	C5-C6-O6	-8.39	123.57	128.60
84	Aa	1596	G	N1-C6-O6	8.39	124.93	119.90
1	Ad	164	C	N1-C1'-C2'	8.38	124.90	114.00
84	Aa	1562	A	C5'-C4'-C3'	8.38	129.42	116.00
84	Aa	2464	G	N1-C6-O6	8.38	124.93	119.90
1	Ad	1725	C	O4'-C1'-C2'	-8.38	97.42	105.80
84	Aa	1685	U	O4'-C1'-N1	8.38	114.91	108.20
84	Aa	3182	A	N1-C6-N6	8.38	123.63	118.60
84	Aa	1782	G	N1-C6-O6	8.38	124.93	119.90
84	Aa	3134	C	O4'-C1'-N1	8.38	114.90	108.20
1	Ad	571	A	O4'-C1'-N9	8.38	114.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2592	G	N1-C6-O6	8.38	124.93	119.90
1	Ad	1752	U	O4'-C1'-N1	8.38	114.90	108.20
84	Aa	1841	G	N1-C6-O6	8.38	124.93	119.90
86	Ab	23	A	C4-C5-C6	8.38	121.19	117.00
1	Ad	1466	A	C1'-O4'-C4'	-8.38	103.20	109.90
84	Aa	361	G	N1-C6-O6	8.38	124.93	119.90
84	Aa	305	G	N1-C6-O6	8.37	124.92	119.90
84	Aa	437	C	O4'-C1'-N1	8.37	114.90	108.20
86	Ab	51	G	C5-C6-O6	-8.38	123.58	128.60
1	Ad	5	U	O4'-C1'-N1	8.37	114.90	108.20
84	Aa	1422	G	N1-C6-O6	8.37	124.92	119.90
1	Ad	409	C	N1-C1'-C2'	8.37	124.88	114.00
84	Aa	3167	G	N1-C6-O6	8.37	124.92	119.90
86	Ab	118	C	N3-C4-N4	8.37	123.86	118.00
1	Ad	291	G	O4'-C1'-N9	8.37	114.89	108.20
84	Aa	80	C	O4'-C1'-N1	8.37	114.89	108.20
84	Aa	307	C	O4'-C1'-N1	8.37	114.89	108.20
84	Aa	2032	C	O4'-C1'-N1	8.37	114.89	108.20
84	Aa	2040	G	N1-C6-O6	8.37	124.92	119.90
1	Ad	67	G	C1'-O4'-C4'	-8.37	103.21	109.90
1	Ad	212	A	N9-C1'-C2'	8.37	124.87	114.00
1	Ad	1235	U	O4'-C1'-N1	8.37	114.89	108.20
84	Aa	162	G	N1-C6-O6	8.37	124.92	119.90
84	Aa	1042	C	O4'-C1'-N1	8.37	114.89	108.20
84	Aa	1573	G	N1-C6-O6	8.37	124.92	119.90
84	Aa	2246	G	C5-C6-O6	-8.37	123.58	128.60
84	Aa	2911	C	O4'-C1'-N1	8.37	114.89	108.20
84	Aa	2154	G	N1-C6-O6	8.36	124.92	119.90
84	Aa	3199	C	O4'-C1'-N1	8.37	114.89	108.20
1	Ad	249	G	N9-C1'-C2'	8.36	124.87	114.00
1	Ad	1622	A	C3'-C2'-C1'	-8.36	94.81	101.50
84	Aa	3054	G	N1-C6-O6	8.36	124.92	119.90
84	Aa	3063	C	O4'-C1'-N1	8.36	114.89	108.20
84	Aa	487	C	O4'-C1'-N1	8.36	114.89	108.20
84	Aa	575	C	C4'-C3'-O3'	-8.36	91.85	109.40
84	Aa	2628	C	O4'-C1'-N1	8.36	114.89	108.20
84	Aa	1323	G	N1-C6-O6	8.36	124.92	119.90
84	Aa	1632	G	N1-C6-O6	8.36	124.92	119.90
84	Aa	209	G	N1-C6-O6	8.36	124.91	119.90
84	Aa	433	C	O4'-C1'-N1	8.36	114.88	108.20
84	Aa	898	G	N1-C6-O6	8.35	124.91	119.90
1	Ad	570	C	N1-C1'-C2'	8.35	124.86	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	343	G	N1-C6-O6	8.35	124.91	119.90
84	Aa	3046	C	O4'-C1'-N1	8.35	114.88	108.20
84	Aa	1241	G	O4'-C1'-N9	8.35	114.88	108.20
84	Aa	2000	C	O4'-C1'-N1	8.35	114.88	108.20
84	Aa	470	G	N1-C6-O6	8.35	124.91	119.90
84	Aa	3317	G	C5-C6-O6	-8.35	123.59	128.60
84	Aa	3323	U	O4'-C1'-N1	8.35	114.88	108.20
1	Ad	1394	A	P-O3'-C3'	8.35	129.72	119.70
84	Aa	1628	G	N1-C6-O6	8.35	124.91	119.90
84	Aa	2597	C	O4'-C1'-N1	8.34	114.88	108.20
84	Aa	64	A	C5-C6-N6	-8.34	117.03	123.70
84	Aa	95	G	N1-C6-O6	8.34	124.91	119.90
84	Aa	2953	G	N1-C6-O6	8.34	124.91	119.90
84	Aa	516	C	O4'-C1'-N1	8.34	114.87	108.20
84	Aa	3068	U	O4'-C1'-N1	8.34	114.87	108.20
84	Aa	690	G	N1-C6-O6	8.34	124.90	119.90
84	Aa	3163	G	N1-C6-O6	8.34	124.90	119.90
1	Ad	1510	G	O4'-C1'-N9	8.34	114.87	108.20
2	Ae	31	C	C3'-C2'-C1'	8.34	108.17	101.50
84	Aa	835	G	N1-C6-O6	8.34	124.90	119.90
84	Aa	2511	U	C4'-C3'-O3'	-8.34	91.90	109.40
1	Ad	1321	C	N1-C1'-C2'	8.33	124.83	114.00
84	Aa	225	G	N1-C6-O6	8.33	124.90	119.90
84	Aa	2065	G	N1-C6-O6	8.33	124.90	119.90
85	Ac	118	C	O4'-C1'-N1	8.33	114.87	108.20
86	Ab	67	C	O4'-C1'-N1	8.33	114.87	108.20
84	Aa	1424	G	N1-C6-O6	8.33	124.90	119.90
84	Aa	165	C	O4'-C1'-N1	8.33	114.86	108.20
1	Ad	988	G	O4'-C1'-N9	8.33	114.86	108.20
84	Aa	902	U	O4'-C1'-N1	8.33	114.86	108.20
84	Aa	2163	G	O4'-C1'-N9	8.33	114.86	108.20
86	Ab	34	C	O4'-C1'-N1	8.33	114.86	108.20
84	Aa	704	G	C5-C6-O6	-8.32	123.61	128.60
84	Aa	872	G	N1-C6-O6	8.32	124.89	119.90
84	Aa	2097	C	O4'-C1'-N1	8.32	114.86	108.20
84	Aa	2786	G	N1-C6-O6	8.32	124.89	119.90
85	Ac	154	G	N1-C6-O6	8.32	124.89	119.90
84	Aa	3205	C	O4'-C1'-N1	8.32	114.86	108.20
1	Ad	1784	G	O4'-C1'-N9	8.32	114.86	108.20
84	Aa	3226	G	P-O3'-C3'	8.32	129.69	119.70
1	Ad	358	C	C3'-C2'-C1'	8.32	108.16	101.50
1	Ad	834	A	C1'-O4'-C4'	8.32	116.56	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	443	G	N1-C6-O6	8.32	124.89	119.90
84	Aa	448	G	N1-C6-O6	8.32	124.89	119.90
84	Aa	1029	C	O4'-C1'-N1	8.32	114.86	108.20
84	Aa	1571	A	O4'-C1'-N9	8.32	114.86	108.20
84	Aa	2621	G	N1-C6-O6	8.32	124.89	119.90
84	Aa	3211	C	O4'-C1'-N1	8.32	114.86	108.20
1	Ad	597	U	O4'-C1'-N1	8.32	114.85	108.20
84	Aa	1014	G	N1-C6-O6	8.32	124.89	119.90
84	Aa	1418	C	O4'-C1'-N1	8.32	114.86	108.20
84	Aa	3179	G	C5-C6-O6	-8.32	123.61	128.60
84	Aa	2426	C	O4'-C1'-N1	8.32	114.85	108.20
84	Aa	3060	G	N1-C6-O6	8.32	124.89	119.90
85	Ac	124	C	P-O3'-C3'	8.32	129.68	119.70
84	Aa	1016	G	N1-C6-O6	8.31	124.89	119.90
84	Aa	1741	G	C5-C6-O6	-8.31	123.61	128.60
84	Aa	2990	C	O4'-C1'-N1	8.31	114.85	108.20
84	Aa	3339	G	N1-C6-O6	8.31	124.89	119.90
86	Ab	31	G	C6-C5-N7	-8.31	125.41	130.40
1	Ad	962	G	O4'-C1'-N9	8.31	114.85	108.20
1	Ad	1599	C	C3'-C2'-C1'	8.31	108.15	101.50
84	Aa	1151	G	N1-C6-O6	8.31	124.89	119.90
84	Aa	2297	G	N1-C6-O6	8.31	124.89	119.90
84	Aa	827	C	O4'-C1'-N1	8.31	114.85	108.20
84	Aa	3126	U	O4'-C1'-N1	8.31	114.85	108.20
84	Aa	733	C	O4'-C1'-N1	8.31	114.85	108.20
84	Aa	1053	C	O4'-C1'-N1	8.31	114.85	108.20
84	Aa	2124	G	N1-C6-O6	8.31	124.89	119.90
84	Aa	478	G	N1-C6-O6	8.31	124.88	119.90
84	Aa	1989	G	N1-C6-O6	8.31	124.88	119.90
84	Aa	2460	A	N1-C6-N6	8.31	123.58	118.60
84	Aa	2511	U	C2'-C3'-O3'	8.31	127.78	109.50
84	Aa	3176	C	O4'-C1'-N1	8.31	114.85	108.20
84	Aa	3276	G	N1-C6-O6	8.31	124.88	119.90
84	Aa	761	C	O4'-C1'-N1	8.31	114.84	108.20
85	Ac	151	G	C5-C6-O6	-8.31	123.62	128.60
1	Ad	1608	A	N9-C1'-C2'	8.30	124.80	114.00
84	Aa	10	C	O4'-C1'-N1	8.30	114.84	108.20
84	Aa	832	C	O4'-C1'-N1	8.30	114.84	108.20
84	Aa	1742	G	N1-C6-O6	8.30	124.88	119.90
84	Aa	1864	G	N1-C6-O6	8.30	124.88	119.90
1	Ad	1045	G	O4'-C1'-N9	8.30	114.84	108.20
84	Aa	2049	C	O4'-C1'-N1	8.30	114.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2268	G	N1-C6-O6	8.30	124.88	119.90
84	Aa	2623	G	C5-C6-O6	-8.30	123.62	128.60
84	Aa	2378	U	O4'-C1'-N1	8.30	114.84	108.20
85	Ac	30	C	O4'-C1'-N1	8.30	114.84	108.20
84	Aa	40	G	N1-C6-O6	8.30	124.88	119.90
84	Aa	2328	C	O4'-C1'-N1	8.30	114.84	108.20
84	Aa	2940	G	O4'-C1'-N9	8.30	114.84	108.20
84	Aa	562	G	N1-C6-O6	8.29	124.88	119.90
84	Aa	585	A	O4'-C1'-N9	8.29	114.84	108.20
84	Aa	1612	C	O4'-C1'-N1	8.29	114.83	108.20
84	Aa	1824	C	O4'-C1'-N1	8.29	114.83	108.20
84	Aa	2474	A	O4'-C1'-N9	8.29	114.83	108.20
84	Aa	2588	G	C5-C6-O6	-8.29	123.63	128.60
1	Ad	152	G	O4'-C1'-N9	8.29	114.83	108.20
84	Aa	369	G	N1-C6-O6	8.29	124.87	119.90
84	Aa	751	C	O4'-C1'-N1	8.29	114.83	108.20
84	Aa	1994	C	O4'-C1'-N1	8.29	114.83	108.20
84	Aa	2546	C	O4'-C1'-N1	8.29	114.83	108.20
85	Ac	71	A	C5-C6-N6	-8.29	117.07	123.70
85	Ac	91	C	O4'-C1'-N1	8.29	114.83	108.20
84	Aa	14	U	O4'-C1'-N1	8.29	114.83	108.20
84	Aa	1552	C	O4'-C1'-N1	8.28	114.83	108.20
84	Aa	2864	U	O4'-C1'-N1	8.29	114.83	108.20
86	Ab	94	C	O4'-C1'-N1	8.29	114.83	108.20
84	Aa	3303	C	O4'-C1'-N1	8.28	114.83	108.20
85	Ac	138	G	N1-C6-O6	8.28	124.87	119.90
1	Ad	817	C	O4'-C1'-C2'	-8.28	97.52	105.80
1	Ad	1544	G	O4'-C1'-N9	8.28	114.83	108.20
84	Aa	2847	A	N1-C6-N6	8.28	123.57	118.60
84	Aa	3061	C	O4'-C1'-N1	8.28	114.83	108.20
84	Aa	3342	C	O4'-C1'-N1	8.28	114.83	108.20
85	Ac	126	A	O4'-C1'-N9	8.28	114.83	108.20
1	Ad	37	U	O4'-C1'-N1	8.28	114.82	108.20
84	Aa	633	C	O4'-C1'-N1	8.28	114.82	108.20
84	Aa	2196	G	C5-C6-O6	-8.28	123.63	128.60
85	Ac	153	C	O4'-C1'-N1	8.28	114.82	108.20
84	Aa	515	C	O4'-C1'-N1	8.28	114.82	108.20
84	Aa	1081	U	O4'-C1'-N1	8.28	114.82	108.20
84	Aa	2076	C	P-O3'-C3'	8.28	129.63	119.70
84	Aa	2927	C	O4'-C1'-N1	8.28	114.82	108.20
84	Aa	2985	C	C2-N1-C1'	8.28	127.90	118.80
1	Ad	1445	C	C3'-C2'-C1'	8.27	108.12	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1757	G	N1-C6-O6	8.27	124.86	119.90
84	Aa	993	A	O4'-C1'-N9	8.27	114.82	108.20
84	Aa	1759	C	C2-N1-C1'	8.27	127.90	118.80
1	Ad	1758	G	C1'-O4'-C4'	-8.27	103.29	109.90
84	Aa	2059	C	O4'-C1'-N1	8.27	114.81	108.20
84	Aa	2501	U	O4'-C1'-N1	8.27	114.82	108.20
85	Ac	134	G	C5-C6-O6	-8.27	123.64	128.60
84	Aa	1331	C	O4'-C1'-N1	8.27	114.81	108.20
84	Aa	1732	G	N1-C6-O6	8.27	124.86	119.90
85	Ac	50	C	O4'-C1'-N1	8.27	114.81	108.20
1	Ad	450	A	O4'-C1'-C2'	-8.26	97.54	105.80
84	Aa	331	G	N1-C6-O6	8.26	124.86	119.90
84	Aa	727	G	N1-C6-O6	8.26	124.86	119.90
84	Aa	2046	G	N1-C6-O6	8.26	124.86	119.90
1	Ad	1032	A	N9-C1'-C2'	-8.26	102.91	112.00
84	Aa	1434	G	N1-C6-O6	8.26	124.86	119.90
84	Aa	1495	G	N1-C6-O6	8.26	124.86	119.90
84	Aa	1706	C	O4'-C1'-N1	8.26	114.81	108.20
84	Aa	800	C	O4'-C1'-N1	8.26	114.81	108.20
84	Aa	3044	C	O4'-C1'-N1	8.26	114.81	108.20
1	Ad	509	A	O4'-C1'-C2'	-8.26	97.55	105.80
84	Aa	3187	C	O4'-C1'-N1	8.26	114.80	108.20
84	Aa	259	G	N1-C6-O6	8.25	124.85	119.90
84	Aa	1102	A	N1-C6-N6	8.25	123.55	118.60
84	Aa	592	U	O4'-C1'-N1	8.25	114.80	108.20
84	Aa	1245	U	O4'-C1'-N1	8.25	114.80	108.20
84	Aa	2010	G	N1-C6-O6	8.25	124.85	119.90
84	Aa	155	G	N1-C6-O6	8.25	124.85	119.90
84	Aa	354	C	O4'-C1'-N1	8.25	114.80	108.20
84	Aa	1350	G	N1-C6-O6	8.25	124.85	119.90
84	Aa	2814	C	O4'-C1'-N1	8.25	114.80	108.20
84	Aa	101	C	O4'-C1'-N1	8.25	114.80	108.20
84	Aa	147	G	N1-C6-O6	8.25	124.85	119.90
84	Aa	1449	A	O4'-C1'-N9	8.25	114.80	108.20
1	Ad	25	C	C3'-C2'-C1'	8.25	108.10	101.50
84	Aa	1656	C	O4'-C1'-N1	8.25	114.80	108.20
84	Aa	1930	G	N1-C6-O6	8.25	124.85	119.90
85	Ac	51	G	N1-C6-O6	8.25	124.85	119.90
84	Aa	1185	G	N1-C6-O6	8.24	124.85	119.90
84	Aa	1667	C	O4'-C1'-N1	8.24	114.79	108.20
84	Aa	3249	G	N1-C6-O6	8.24	124.84	119.90
1	Ad	615	U	O4'-C1'-N1	8.24	114.79	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1141	U	O4'-C1'-N1	8.24	114.79	108.20
1	Ad	1345	G	C1'-O4'-C4'	-8.24	103.31	109.90
84	Aa	1642	G	N1-C6-O6	8.24	124.84	119.90
84	Aa	1609	G	O4'-C1'-N9	8.23	114.79	108.20
84	Aa	1854	A	N1-C6-N6	8.23	123.54	118.60
84	Aa	9	C	O4'-C1'-N1	8.23	114.78	108.20
84	Aa	2028	C	O4'-C1'-N1	8.23	114.78	108.20
84	Aa	2393	G	N1-C6-O6	8.23	124.84	119.90
1	Ad	748	C	C3'-C2'-C1'	8.23	108.08	101.50
85	Ac	2	G	N1-C6-O6	8.23	124.84	119.90
84	Aa	1947	U	O4'-C1'-N1	8.22	114.78	108.20
85	Ac	103	G	N1-C6-O6	8.22	124.83	119.90
85	Ac	49	G	N1-C6-O6	8.22	124.83	119.90
85	Ac	58	G	N1-C6-O6	8.22	124.83	119.90
1	Ad	416	A	O4'-C1'-N9	8.22	114.78	108.20
84	Aa	737	C	O4'-C1'-N1	8.22	114.77	108.20
84	Aa	1856	G	C5-C6-O6	-8.22	123.67	128.60
84	Aa	2093	G	O4'-C1'-N9	8.22	114.77	108.20
84	Aa	2568	G	C5-C6-O6	-8.22	123.67	128.60
1	Ad	1664	U	P-O3'-C3'	8.22	129.56	119.70
84	Aa	505	G	N1-C6-O6	8.21	124.83	119.90
84	Aa	960	C	O4'-C1'-N1	8.21	114.77	108.20
84	Aa	1414	C	O4'-C1'-N1	8.21	114.77	108.20
1	Ad	6	G	O4'-C1'-N9	8.21	114.77	108.20
1	Ad	84	G	O4'-C1'-N9	8.21	114.77	108.20
1	Ad	277	G	C3'-C2'-C1'	8.21	108.07	101.50
1	Ad	1301	G	N9-C1'-C2'	-8.21	102.97	112.00
84	Aa	398	G	C5-C6-O6	-8.21	123.67	128.60
84	Aa	655	G	N1-C6-O6	8.21	124.83	119.90
1	Ad	1774	C	O4'-C1'-N1	8.21	114.77	108.20
84	Aa	201	G	N1-C6-O6	8.21	124.83	119.90
84	Aa	1636	C	O4'-C1'-N1	8.21	114.77	108.20
84	Aa	1659	G	N1-C6-O6	8.21	124.83	119.90
84	Aa	2103	U	O4'-C1'-N1	8.21	114.77	108.20
84	Aa	3210	G	O4'-C1'-N9	8.21	114.77	108.20
84	Aa	3319	G	N1-C6-O6	8.21	124.83	119.90
84	Aa	558	G	N1-C6-O6	8.21	124.83	119.90
85	Ac	45	C	O4'-C1'-N1	8.21	114.77	108.20
1	Ad	373	U	O4'-C1'-N1	8.21	114.76	108.20
1	Ad	1069	G	O4'-C1'-N9	8.21	114.76	108.20
84	Aa	549	G	C5-C6-O6	-8.21	123.68	128.60
84	Aa	569	C	O4'-C1'-N1	8.21	114.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2908	C	O4'-C1'-N1	8.21	114.77	108.20
84	Aa	1112	C	O4'-C1'-N1	8.20	114.76	108.20
86	Ab	104	C	N3-C4-N4	8.20	123.74	118.00
18	BN	128	TYR	CB-CG-CD1	-8.20	116.08	121.00
84	Aa	1784	C	O4'-C1'-N1	8.20	114.76	108.20
3	Af	13	A	O4'-C1'-N9	8.20	114.76	108.20
84	Aa	218	G	N1-C6-O6	8.20	124.82	119.90
84	Aa	1075	G	N1-C6-O6	8.20	124.82	119.90
84	Aa	1660	C	O4'-C1'-N1	8.20	114.76	108.20
84	Aa	1963	G	N1-C6-O6	8.20	124.82	119.90
1	Ad	244	C	O4'-C1'-N1	8.20	114.76	108.20
1	Ad	492	G	P-O5'-C5'	8.20	134.01	120.90
84	Aa	91	G	N1-C6-O6	8.20	124.82	119.90
84	Aa	2041	G	N1-C6-O6	8.20	124.82	119.90
84	Aa	2450	G	N1-C6-O6	8.19	124.82	119.90
85	Ac	65	G	C5-C6-O6	-8.19	123.68	128.60
1	Ad	366	G	O4'-C1'-N9	8.19	114.75	108.20
84	Aa	164	C	O4'-C1'-N1	8.19	114.75	108.20
84	Aa	532	G	N1-C6-O6	8.19	124.81	119.90
84	Aa	1369	G	N1-C6-O6	8.19	124.81	119.90
84	Aa	3387	U	O4'-C1'-N1	8.19	114.75	108.20
86	Ab	2	G	N1-C6-O6	8.19	124.82	119.90
86	Ab	7	G	N1-C6-O6	8.19	124.82	119.90
84	Aa	1378	G	N1-C6-O6	8.19	124.81	119.90
1	Ad	1731	A	C3'-C2'-C1'	8.19	108.05	101.50
84	Aa	267	G	N1-C6-O6	8.19	124.81	119.90
84	Aa	2857	U	O4'-C1'-N1	8.19	114.75	108.20
2	Ae	57	A	O4'-C1'-N9	8.19	114.75	108.20
84	Aa	523	C	O4'-C1'-N1	8.19	114.75	108.20
84	Aa	2342	C	O4'-C1'-N1	8.18	114.75	108.20
84	Aa	3324	U	O4'-C1'-N1	8.18	114.75	108.20
1	Ad	324	U	O4'-C1'-N1	8.18	114.74	108.20
84	Aa	536	C	O4'-C1'-N1	8.18	114.74	108.20
84	Aa	641	C	C5'-C4'-C3'	8.18	129.09	116.00
84	Aa	744	C	O4'-C1'-N1	8.18	114.75	108.20
84	Aa	2816	G	N1-C6-O6	8.18	124.81	119.90
84	Aa	1735	U	O4'-C1'-N1	8.18	114.74	108.20
84	Aa	1972	C	O4'-C1'-N1	8.18	114.74	108.20
84	Aa	3207	C	O4'-C1'-N1	8.18	114.74	108.20
84	Aa	3239	G	N1-C6-O6	8.18	124.81	119.90
86	Ab	8	A	C4-C5-C6	8.18	121.09	117.00
86	Ab	75	G	N1-C6-O6	8.18	124.81	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	75	U	O4'-C1'-N1	8.18	114.74	108.20
84	Aa	1346	C	O4'-C1'-N1	8.17	114.74	108.20
84	Aa	1566	C	O4'-C1'-N1	8.17	114.74	108.20
84	Aa	2019	G	N1-C6-O6	8.17	124.80	119.90
84	Aa	2388	C	O4'-C1'-N1	8.17	114.74	108.20
84	Aa	3118	C	O4'-C1'-N1	8.17	114.74	108.20
84	Aa	2183	A	C5-C6-N1	-8.17	113.61	117.70
84	Aa	2187	C	O4'-C1'-N1	8.17	114.74	108.20
1	Ad	1127	G	N9-C1'-C2'	-8.17	103.01	112.00
84	Aa	1889	G	C5-C6-O6	-8.17	123.70	128.60
1	Ad	532	U	O4'-C1'-N1	8.17	114.73	108.20
84	Aa	2891	C	O4'-C1'-N1	8.17	114.73	108.20
2	Ae	3	C	O4'-C1'-N1	8.17	114.73	108.20
84	Aa	946	U	O4'-C1'-N1	8.17	114.73	108.20
84	Aa	1965	C	O4'-C1'-N1	8.17	114.73	108.20
84	Aa	2222	C	O4'-C1'-N1	8.17	114.73	108.20
86	Ab	67	C	C5-C4-N4	-8.17	114.48	120.20
84	Aa	1284	C	O4'-C1'-N1	8.16	114.73	108.20
84	Aa	2332	C	O4'-C1'-N1	8.16	114.73	108.20
84	Aa	98	A	O4'-C1'-N9	8.16	114.73	108.20
84	Aa	140	C	O4'-C1'-N1	8.16	114.73	108.20
84	Aa	684	C	O4'-C1'-N1	8.16	114.73	108.20
84	Aa	1038	C	O4'-C1'-N1	8.16	114.73	108.20
84	Aa	642	C	C5'-C4'-C3'	8.16	129.05	116.00
84	Aa	1156	A	N1-C6-N6	8.16	123.50	118.60
84	Aa	2003	C	O4'-C1'-N1	8.16	114.73	108.20
84	Aa	588	G	N1-C6-O6	8.16	124.79	119.90
84	Aa	1690	C	O4'-C1'-N1	8.16	114.73	108.20
84	Aa	2869	C	O4'-C1'-N1	8.16	114.72	108.20
84	Aa	3263	C	P-O5'-C5'	8.16	133.95	120.90
1	Ad	73	A	O4'-C1'-N9	8.15	114.72	108.20
84	Aa	1096	C	O4'-C1'-N1	8.15	114.72	108.20
84	Aa	1259	C	O4'-C1'-N1	8.15	114.72	108.20
84	Aa	2148	U	O4'-C1'-N1	8.15	114.72	108.20
84	Aa	2672	C	O4'-C1'-N1	8.15	114.72	108.20
1	Ad	1072	U	O4'-C1'-N1	8.15	114.72	108.20
84	Aa	582	C	O4'-C1'-N1	8.15	114.72	108.20
84	Aa	1959	U	P-O5'-C5'	-8.15	107.86	120.90
84	Aa	2569	G	N1-C6-O6	8.15	124.79	119.90
1	Ad	617	G	N9-C1'-C2'	8.15	124.59	114.00
84	Aa	1174	G	N1-C6-O6	8.15	124.79	119.90
84	Aa	1848	G	N1-C6-O6	8.15	124.79	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	131	C	O4'-C1'-N1	8.15	114.72	108.20
84	Aa	1695	C	N3-C4-C5	-8.15	118.64	121.90
84	Aa	3192	G	N1-C6-O6	8.14	124.79	119.90
86	Ab	11	A	C5-C6-N6	-8.14	117.18	123.70
1	Ad	481	A	O4'-C1'-N9	8.14	114.71	108.20
84	Aa	3004	G	N1-C6-O6	8.14	124.78	119.90
1	Ad	1047	G	O4'-C1'-N9	8.14	114.71	108.20
84	Aa	913	G	N1-C6-O6	8.14	124.78	119.90
84	Aa	1962	C	O4'-C1'-N1	8.14	114.71	108.20
1	Ad	189	U	P-O3'-C3'	8.14	129.46	119.70
1	Ad	836	U	N1-C1'-C2'	8.13	124.58	114.00
84	Aa	3216	G	N1-C6-O6	8.14	124.78	119.90
85	Ac	94	C	O4'-C1'-N1	8.13	114.71	108.20
84	Aa	520	G	N1-C6-O6	8.13	124.78	119.90
84	Aa	2241	G	N1-C6-O6	8.13	124.78	119.90
84	Aa	2402	G	P-O3'-C3'	8.13	129.46	119.70
84	Aa	2588	G	O4'-C1'-N9	8.13	114.70	108.20
84	Aa	2807	G	N1-C6-O6	8.13	124.78	119.90
1	Ad	903	A	N9-C1'-C2'	-8.13	103.06	112.00
86	Ab	69	A	C5-C6-N1	-8.13	113.64	117.70
84	Aa	777	G	N1-C6-O6	8.12	124.77	119.90
84	Aa	3184	G	N1-C6-O6	8.12	124.77	119.90
86	Ab	100	A	C5-C6-N1	-8.12	113.64	117.70
1	Ad	1711	G	O4'-C1'-N9	8.12	114.70	108.20
84	Aa	631	C	O4'-C1'-N1	8.12	114.70	108.20
84	Aa	1448	U	O4'-C1'-N1	8.12	114.70	108.20
84	Aa	3316	C	O4'-C1'-N1	8.12	114.70	108.20
86	Ab	72	G	O4'-C1'-N9	8.12	114.70	108.20
1	Ad	913	U	O4'-C1'-N1	8.12	114.69	108.20
84	Aa	1522	G	N1-C6-O6	8.12	124.77	119.90
85	Ac	1	C	O4'-C1'-N1	8.12	114.70	108.20
1	Ad	1139	C	C3'-C2'-C1'	8.12	107.99	101.50
84	Aa	621	C	O4'-C1'-N1	8.12	114.69	108.20
84	Aa	710	C	O4'-C1'-N1	8.11	114.69	108.20
84	Aa	570	G	N1-C6-O6	8.11	124.77	119.90
84	Aa	1615	G	N1-C6-O6	8.11	124.77	119.90
84	Aa	278	U	O4'-C1'-N1	8.11	114.69	108.20
84	Aa	1672	G	N1-C6-O6	8.11	124.77	119.90
84	Aa	2484	G	N1-C6-O6	8.11	124.77	119.90
84	Aa	3082	G	N1-C6-O6	8.11	124.77	119.90
84	Aa	3365	U	O4'-C1'-N1	8.11	114.69	108.20
1	Ad	193	G	C1'-O4'-C4'	-8.11	103.41	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2880	G	N1-C6-O6	8.11	124.77	119.90
84	Aa	2161	G	N1-C6-O6	8.11	124.76	119.90
84	Aa	2380	G	N1-C6-O6	8.11	124.76	119.90
84	Aa	2734	C	O4'-C1'-N1	8.11	114.69	108.20
84	Aa	2838	C	C2-N1-C1'	8.11	127.72	118.80
84	Aa	1969	G	N1-C6-O6	8.10	124.76	119.90
84	Aa	204	G	N1-C6-O6	8.10	124.76	119.90
84	Aa	3138	C	O4'-C1'-N1	8.10	114.68	108.20
84	Aa	1240	G	N1-C6-O6	8.10	124.76	119.90
84	Aa	1453	G	N1-C6-O6	8.10	124.76	119.90
84	Aa	2615	U	O4'-C1'-N1	8.10	114.68	108.20
1	Ad	158	C	C1'-O4'-C4'	-8.10	103.42	109.90
1	Ad	1062	C	O4'-C1'-N1	8.10	114.68	108.20
84	Aa	404	G	N1-C6-O6	8.10	124.76	119.90
86	Ab	82	G	C4-C5-C6	8.10	123.66	118.80
1	Ad	254	A	N9-C1'-C2'	8.10	124.53	114.00
84	Aa	3278	G	C5-C6-O6	-8.10	123.74	128.60
1	Ad	452	C	O4'-C1'-N1	8.10	114.68	108.20
84	Aa	2688	G	N1-C6-O6	8.10	124.76	119.90
1	Ad	617	G	C1'-O4'-C4'	-8.09	103.42	109.90
1	Ad	1513	A	O4'-C1'-N9	8.09	114.67	108.20
84	Aa	781	C	O4'-C1'-N1	8.09	114.67	108.20
84	Aa	2753	C	O4'-C1'-N1	8.09	114.67	108.20
84	Aa	3375	G	C5-C6-O6	-8.09	123.74	128.60
84	Aa	415	G	N1-C6-O6	8.09	124.75	119.90
84	Aa	596	C	O4'-C1'-N1	8.09	114.67	108.20
84	Aa	643	G	N1-C6-O6	8.09	124.75	119.90
84	Aa	1609	G	N1-C6-O6	8.09	124.75	119.90
84	Aa	2026	C	O4'-C1'-N1	8.09	114.67	108.20
84	Aa	2585	C	O4'-C1'-N1	8.09	114.67	108.20
1	Ad	393	G	C1'-O4'-C4'	-8.09	103.43	109.90
84	Aa	251	G	N1-C6-O6	8.09	124.75	119.90
84	Aa	511	C	O4'-C1'-N1	8.09	114.67	108.20
84	Aa	1827	U	O4'-C1'-N1	8.09	114.67	108.20
84	Aa	2826	G	N1-C6-O6	8.09	124.75	119.90
84	Aa	2687	C	O4'-C1'-N1	8.09	114.67	108.20
84	Aa	2837	C	O4'-C1'-N1	8.09	114.67	108.20
84	Aa	2913	A	N1-C6-N6	8.09	123.45	118.60
85	Ac	9	G	N1-C6-O6	8.09	124.75	119.90
1	Ad	765	U	O4'-C1'-N1	8.08	114.67	108.20
84	Aa	260	U	O4'-C1'-N1	8.08	114.67	108.20
84	Aa	1261	C	N3-C4-N4	8.08	123.66	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	746	C	C5'-C4'-O4'	8.08	118.80	109.10
84	Aa	977	G	N1-C6-O6	8.08	124.75	119.90
1	Ad	8	U	O4'-C1'-N1	8.08	114.66	108.20
1	Ad	1080	C	N1-C1'-C2'	8.08	124.50	114.00
84	Aa	442	C	O4'-C1'-N1	8.08	114.66	108.20
84	Aa	645	C	O4'-C1'-N1	8.08	114.67	108.20
84	Aa	2324	G	N1-C6-O6	8.08	124.75	119.90
84	Aa	3269	C	O4'-C1'-N1	8.08	114.66	108.20
86	Ab	66	G	C4-C5-C6	8.08	123.65	118.80
84	Aa	2408	G	N1-C6-O6	8.08	124.75	119.90
1	Ad	231	U	O4'-C1'-N1	8.07	114.66	108.20
1	Ad	1721	A	O4'-C1'-N9	8.07	114.66	108.20
84	Aa	233	C	O4'-C1'-N1	8.07	114.66	108.20
84	Aa	1173	C	O4'-C1'-N1	8.07	114.66	108.20
84	Aa	2123	C	O4'-C1'-N1	8.07	114.66	108.20
1	Ad	1588	C	N1-C1'-C2'	8.07	124.49	114.00
1	Ad	1685	U	C1'-O4'-C4'	-8.07	103.44	109.90
84	Aa	504	U	O4'-C1'-N1	8.07	114.66	108.20
84	Aa	565	C	O4'-C1'-N1	8.07	114.66	108.20
84	Aa	621	C	C2-N1-C1'	8.07	127.68	118.80
84	Aa	701	U	O4'-C1'-N1	8.07	114.66	108.20
84	Aa	1603	U	O4'-C1'-N1	8.07	114.66	108.20
84	Aa	717	G	N1-C6-O6	8.07	124.74	119.90
84	Aa	1878	G	N1-C6-O6	8.07	124.74	119.90
84	Aa	2117	G	N1-C6-O6	8.07	124.74	119.90
84	Aa	31	U	O4'-C1'-N1	8.07	114.65	108.20
84	Aa	1734	G	N1-C6-O6	8.07	124.74	119.90
84	Aa	2987	C	O4'-C1'-N1	8.07	114.66	108.20
85	Ac	123	G	N1-C6-O6	8.07	124.74	119.90
84	Aa	335	G	N1-C6-O6	8.06	124.74	119.90
84	Aa	461	A	C4'-C3'-O3'	8.06	129.13	113.00
84	Aa	597	C	O4'-C1'-N1	8.06	114.65	108.20
84	Aa	788	G	N1-C6-O6	8.06	124.74	119.90
84	Aa	1209	G	N1-C6-O6	8.06	124.74	119.90
84	Aa	337	C	O4'-C1'-N1	8.06	114.65	108.20
84	Aa	911	G	C5-C6-O6	-8.06	123.76	128.60
84	Aa	3189	C	O4'-C1'-N1	8.06	114.65	108.20
84	Aa	298	G	N1-C6-O6	8.06	124.74	119.90
84	Aa	436	G	C5-C6-O6	-8.06	123.76	128.60
84	Aa	419	G	N1-C6-O6	8.06	124.73	119.90
84	Aa	3158	C	O4'-C1'-N1	8.06	114.65	108.20
1	Ad	840	U	O4'-C1'-N1	8.06	114.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	735	C	O4'-C1'-N1	8.06	114.65	108.20
84	Aa	2713	G	N1-C6-O6	8.06	124.73	119.90
84	Aa	495	G	N1-C6-O6	8.05	124.73	119.90
84	Aa	2614	U	O4'-C1'-N1	8.05	114.64	108.20
84	Aa	571	G	N1-C6-O6	8.05	124.73	119.90
84	Aa	2191	C	O4'-C1'-N1	8.05	114.64	108.20
1	Ad	1049	U	O4'-C1'-N1	8.05	114.64	108.20
1	Ad	1496	A	P-O3'-C3'	8.05	129.36	119.70
1	Ad	1521	G	O4'-C1'-N9	8.05	114.64	108.20
84	Aa	1714	A	P-O3'-C3'	8.05	129.36	119.70
1	Ad	238	G	C3'-C2'-C1'	8.05	107.94	101.50
84	Aa	3183	G	P-O5'-C5'	8.05	133.77	120.90
1	Ad	1482	U	O4'-C1'-N1	8.04	114.64	108.20
84	Aa	400	G	C5-C6-O6	-8.04	123.77	128.60
84	Aa	519	C	O4'-C1'-N1	8.04	114.63	108.20
84	Aa	3086	G	C5-C6-O6	-8.04	123.78	128.60
84	Aa	3145	G	N1-C6-O6	8.04	124.72	119.90
1	Ad	288	G	C1'-O4'-C4'	-8.04	103.47	109.90
84	Aa	138	G	C5-C6-O6	-8.04	123.78	128.60
84	Aa	961	C	O4'-C1'-N1	8.04	114.63	108.20
84	Aa	1311	G	O4'-C1'-N9	8.04	114.63	108.20
84	Aa	1345	U	O4'-C1'-N1	8.04	114.63	108.20
84	Aa	2551	U	O4'-C1'-N1	8.04	114.63	108.20
84	Aa	1068	A	P-O3'-C3'	8.03	129.34	119.70
84	Aa	1087	G	N1-C6-O6	8.04	124.72	119.90
84	Aa	2278	G	C5-C6-O6	-8.04	123.78	128.60
84	Aa	3154	G	N1-C6-O6	8.04	124.72	119.90
85	Ac	57	C	O4'-C1'-N1	8.03	114.63	108.20
1	Ad	468	A	N9-C1'-C2'	-8.03	103.16	112.00
84	Aa	1725	G	O4'-C1'-N9	8.03	114.63	108.20
84	Aa	2711	U	O4'-C1'-N1	8.03	114.63	108.20
84	Aa	2941	G	N1-C6-O6	8.03	124.72	119.90
84	Aa	1733	G	N1-C6-O6	8.03	124.72	119.90
84	Aa	2329	C	O4'-C1'-N1	8.03	114.62	108.20
85	Ac	154	G	O4'-C1'-N9	8.03	114.62	108.20
84	Aa	1579	C	O4'-C1'-N1	8.03	114.62	108.20
84	Aa	1646	U	O4'-C1'-N1	8.03	114.62	108.20
1	Ad	619	A	O4'-C1'-N9	8.03	114.62	108.20
1	Ad	1260	A	N9-C1'-C2'	8.03	124.44	114.00
1	Ad	1499	U	O4'-C1'-N1	8.03	114.62	108.20
84	Aa	1217	G	C5-C6-O6	-8.03	123.78	128.60
84	Aa	2363	G	C5-C6-O6	-8.03	123.78	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2919	G	C5-C6-O6	-8.03	123.78	128.60
85	Ac	66	G	N1-C6-O6	8.03	124.72	119.90
84	Aa	1961	C	O4'-C1'-N1	8.02	114.62	108.20
1	Ad	1571	G	O4'-C1'-N9	8.02	114.62	108.20
84	Aa	174	G	N1-C6-O6	8.02	124.71	119.90
84	Aa	281	G	C5-C6-O6	-8.02	123.79	128.60
84	Aa	1071	G	N1-C6-O6	8.02	124.71	119.90
1	Ad	1434	G	C1'-O4'-C4'	-8.02	103.48	109.90
84	Aa	2233	G	N1-C6-O6	8.02	124.71	119.90
1	Ad	9	U	O4'-C1'-N1	8.02	114.61	108.20
1	Ad	928	A	O4'-C1'-N9	8.02	114.61	108.20
84	Aa	492	G	C5'-C4'-O4'	8.02	118.72	109.10
84	Aa	533	G	N1-C6-O6	8.02	124.71	119.90
84	Aa	2848	U	O4'-C1'-N1	8.02	114.61	108.20
85	Ac	132	C	O4'-C1'-N1	8.02	114.61	108.20
1	Ad	808	G	O4'-C1'-N9	8.02	114.61	108.20
84	Aa	795	C	O4'-C1'-N1	8.02	114.61	108.20
84	Aa	2243	C	O4'-C1'-N1	8.02	114.61	108.20
84	Aa	2579	G	N1-C6-O6	8.02	124.71	119.90
84	Aa	3256	C	O4'-C1'-N1	8.02	114.61	108.20
84	Aa	1775	C	O4'-C1'-N1	8.01	114.61	108.20
84	Aa	1908	C	O4'-C1'-N1	8.01	114.61	108.20
1	Ad	98	C	N1-C1'-C2'	8.01	124.42	114.00
84	Aa	2513	U	C5'-C4'-O4'	-8.01	99.49	109.10
84	Aa	2843	G	N1-C6-O6	8.01	124.71	119.90
84	Aa	412	C	O4'-C1'-N1	8.01	114.61	108.20
84	Aa	1327	G	N1-C6-O6	8.01	124.71	119.90
84	Aa	250	C	O4'-C1'-N1	8.01	114.61	108.20
84	Aa	1383	G	O4'-C1'-N9	8.01	114.61	108.20
84	Aa	1649	G	C5-C6-O6	-8.01	123.80	128.60
84	Aa	2359	C	O4'-C1'-N1	8.01	114.61	108.20
1	Ad	1472	G	C1'-O4'-C4'	-8.01	103.50	109.90
84	Aa	2850	G	C5-C6-O6	-8.01	123.80	128.60
84	Aa	127	G	N1-C6-O6	8.00	124.70	119.90
84	Aa	49	U	O4'-C1'-N1	8.00	114.60	108.20
1	Ad	954	C	C1'-O4'-C4'	-8.00	103.50	109.90
84	Aa	63	G	N1-C6-O6	8.00	124.70	119.90
84	Aa	1821	G	N1-C6-O6	8.00	124.70	119.90
84	Aa	2549	C	O4'-C1'-N1	8.00	114.60	108.20
86	Ab	119	C	N3-C4-C5	-8.00	118.70	121.90
1	Ad	19	A	O4'-C1'-N9	8.00	114.60	108.20
84	Aa	1035	C	O4'-C1'-N1	8.00	114.60	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1923	G	C5-C6-O6	-8.00	123.80	128.60
86	Ab	19	A	O4'-C1'-N9	7.99	114.59	108.20
1	Ad	945	A	O4'-C1'-N9	7.99	114.59	108.20
84	Aa	1110	C	O4'-C1'-N1	7.99	114.59	108.20
84	Aa	1338	C	O4'-C1'-N1	7.99	114.59	108.20
84	Aa	1787	C	O4'-C1'-N1	7.99	114.59	108.20
84	Aa	2086	A	O4'-C1'-N9	7.99	114.59	108.20
84	Aa	801	G	N1-C6-O6	7.99	124.69	119.90
1	Ad	89	U	O4'-C1'-N1	7.99	114.59	108.20
1	Ad	1576	C	C1'-O4'-C4'	7.99	116.29	109.90
1	Ad	1263	C	N1-C1'-C2'	7.98	124.38	114.00
84	Aa	694	U	O4'-C1'-N1	7.98	114.59	108.20
84	Aa	852	C	O4'-C1'-N1	7.98	114.59	108.20
84	Aa	161	C	O4'-C1'-N1	7.98	114.58	108.20
84	Aa	750	G	N1-C6-O6	7.98	124.69	119.90
84	Aa	1647	C	O4'-C1'-N1	7.98	114.58	108.20
84	Aa	2015	G	N1-C6-O6	7.98	124.69	119.90
84	Aa	2873	G	C5-C6-O6	-7.98	123.81	128.60
84	Aa	1033	G	N1-C6-O6	7.98	124.69	119.90
84	Aa	1080	C	O4'-C1'-N1	7.98	114.58	108.20
84	Aa	1194	C	O4'-C1'-N1	7.98	114.58	108.20
84	Aa	1293	C	O4'-C1'-N1	7.98	114.58	108.20
84	Aa	1362	C	O4'-C1'-N1	7.98	114.58	108.20
84	Aa	712	A	N1-C6-N6	7.98	123.39	118.60
84	Aa	967	G	C5-C6-O6	-7.97	123.81	128.60
84	Aa	1111	U	O4'-C1'-N1	7.97	114.58	108.20
1	Ad	1011	C	O4'-C1'-N1	7.97	114.58	108.20
84	Aa	1511	C	O4'-C1'-N1	7.97	114.58	108.20
84	Aa	2625	C	O4'-C1'-N1	7.97	114.58	108.20
84	Aa	3132	U	O4'-C1'-N1	7.97	114.58	108.20
85	Ac	97	G	C5-C6-O6	-7.97	123.82	128.60
1	Ad	14	C	N1-C1'-C2'	7.97	124.36	114.00
84	Aa	2061	C	O4'-C1'-N1	7.97	114.57	108.20
84	Aa	3032	G	C5-C6-O6	-7.97	123.82	128.60
84	Aa	1743	C	O4'-C1'-N1	7.96	114.57	108.20
84	Aa	1752	C	O4'-C1'-N1	7.96	114.57	108.20
1	Ad	1653	G	O4'-C1'-N9	7.96	114.57	108.20
1	Ad	1766	A	C1'-O4'-C4'	7.96	116.27	109.90
1	Ad	1202	G	C1'-O4'-C4'	-7.96	103.53	109.90
84	Aa	1383	G	C5-C6-O6	-7.96	123.82	128.60
84	Aa	2759	C	O4'-C1'-N1	7.96	114.57	108.20
84	Aa	1796	A	C5-C6-N6	-7.96	117.33	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	Ac	137	G	N1-C6-O6	7.96	124.68	119.90
1	Ad	1731	A	O4'-C1'-C2'	-7.96	97.84	105.80
84	Aa	1486	G	C5-C6-O6	-7.96	123.83	128.60
84	Aa	2499	U	O4'-C1'-N1	7.96	114.57	108.20
84	Aa	604	C	O4'-C1'-N1	7.96	114.57	108.20
84	Aa	3020	C	O4'-C1'-N1	7.96	114.56	108.20
84	Aa	1160	G	N1-C6-O6	7.96	124.67	119.90
84	Aa	1983	U	O4'-C1'-N1	7.96	114.56	108.20
84	Aa	2618	G	N1-C6-O6	7.96	124.67	119.90
84	Aa	952	C	O4'-C1'-N1	7.95	114.56	108.20
84	Aa	3197	C	O4'-C1'-N1	7.95	114.56	108.20
85	Ac	116	G	N1-C6-O6	7.95	124.67	119.90
84	Aa	2419	C	O4'-C1'-N1	7.95	114.56	108.20
84	Aa	2715	U	O4'-C1'-N1	7.95	114.56	108.20
84	Aa	1549	A	N1-C6-N6	7.95	123.37	118.60
84	Aa	878	G	C5-C6-O6	-7.95	123.83	128.60
84	Aa	2272	C	O4'-C1'-N1	7.95	114.56	108.20
80	Cf	107	TYR	CB-CG-CD2	-7.94	116.23	121.00
84	Aa	2581	C	O4'-C1'-N1	7.94	114.56	108.20
84	Aa	3269	C	C2-N1-C1'	7.94	127.54	118.80
84	Aa	1901	G	C5-C6-O6	-7.94	123.83	128.60
84	Aa	2225	C	O4'-C1'-N1	7.94	114.55	108.20
84	Aa	3111	C	O4'-C1'-N1	7.94	114.55	108.20
1	Ad	1194	C	O4'-C1'-C2'	-7.94	97.86	105.80
1	Ad	269	A	O4'-C1'-N9	7.94	114.55	108.20
41	CA	69	TYR	N-CA-CB	7.94	124.89	110.60
84	Aa	3244	G	C5-C6-O6	-7.94	123.84	128.60
84	Aa	603	G	O4'-C1'-N9	7.94	114.55	108.20
84	Aa	1070	G	N1-C6-O6	7.94	124.66	119.90
84	Aa	1390	G	O4'-C1'-N9	7.94	114.55	108.20
84	Aa	3385	G	N1-C6-O6	7.94	124.66	119.90
84	Aa	604	C	N3-C4-C5	-7.93	118.73	121.90
84	Aa	2260	C	O4'-C1'-N1	7.93	114.55	108.20
84	Aa	3031	G	N1-C6-O6	7.93	124.66	119.90
84	Aa	2952	G	N1-C6-O6	7.93	124.66	119.90
1	Ad	937	A	C1'-O4'-C4'	7.93	116.24	109.90
84	Aa	822	U	O4'-C1'-N1	7.93	114.54	108.20
84	Aa	1352	G	C5-C6-O6	-7.93	123.84	128.60
84	Aa	1648	C	O4'-C1'-N1	7.93	114.54	108.20
84	Aa	3214	U	O4'-C1'-N1	7.93	114.54	108.20
84	Aa	2833	G	N1-C6-O6	7.93	124.66	119.90
84	Aa	347	A	N1-C6-N6	7.93	123.36	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	676	G	N1-C6-O6	7.93	124.66	119.90
84	Aa	1853	C	O4'-C1'-N1	7.93	114.54	108.20
84	Aa	2092	C	O4'-C4'-C3'	-7.93	96.07	104.00
84	Aa	2975	G	N1-C6-O6	7.93	124.66	119.90
84	Aa	3019	C	O4'-C1'-N1	7.93	114.54	108.20
86	Ab	48	G	N1-C6-O6	7.93	124.66	119.90
1	Ad	1113	G	O4'-C1'-C2'	7.92	114.73	107.60
84	Aa	580	C	P-O3'-C3'	7.92	129.21	119.70
84	Aa	1306	A	O4'-C1'-N9	7.92	114.54	108.20
84	Aa	1700	U	O4'-C1'-N1	7.92	114.54	108.20
84	Aa	2064	C	O4'-C1'-N1	7.92	114.54	108.20
84	Aa	2491	A	P-O3'-C3'	7.92	129.21	119.70
84	Aa	2523	G	C5-C6-O6	-7.92	123.85	128.60
84	Aa	3143	A	C5-C6-N6	-7.92	117.36	123.70
84	Aa	2177	U	N1-C1'-C2'	7.92	124.30	114.00
84	Aa	2531	G	N1-C6-O6	7.92	124.65	119.90
84	Aa	3223	C	O4'-C1'-N1	7.92	114.54	108.20
86	Ab	14	C	C5-C6-N1	7.92	124.96	121.00
86	Ab	44	C	C2-N3-C4	7.92	123.86	119.90
1	Ad	1056	A	O4'-C1'-N9	7.92	114.53	108.20
84	Aa	32	G	C5-C6-O6	-7.92	123.85	128.60
1	Ad	281	U	C3'-C2'-C1'	-7.92	95.17	101.50
84	Aa	311	G	N1-C6-O6	7.92	124.65	119.90
85	Ac	93	U	O4'-C1'-N1	7.92	114.53	108.20
1	Ad	821	G	C3'-C2'-C1'	7.91	107.83	101.50
84	Aa	75	G	N1-C6-O6	7.91	124.65	119.90
84	Aa	3119	C	O4'-C1'-N1	7.91	114.53	108.20
84	Aa	4	C	O4'-C1'-N1	7.91	114.53	108.20
84	Aa	489	C	O4'-C1'-N1	7.91	114.53	108.20
84	Aa	2463	U	O4'-C1'-N1	7.91	114.53	108.20
84	Aa	2992	G	C5-C6-O6	-7.91	123.85	128.60
1	Ad	1568	U	C1'-O4'-C4'	7.91	116.23	109.90
84	Aa	182	C	O4'-C1'-N1	7.91	114.53	108.20
84	Aa	2008	G	N1-C6-O6	7.91	124.64	119.90
84	Aa	2321	C	O4'-C1'-N1	7.91	114.53	108.20
84	Aa	2866	A	N1-C6-N6	7.91	123.34	118.60
84	Aa	205	C	O4'-C1'-N1	7.91	114.53	108.20
1	Ad	183	C	N1-C1'-C2'	7.90	124.27	114.00
1	Ad	1128	C	P-O5'-C5'	7.90	133.54	120.90
84	Aa	3	G	N1-C6-O6	7.90	124.64	119.90
84	Aa	1707	C	O4'-C1'-N1	7.90	114.52	108.20
84	Aa	2167	G	C5'-C4'-C3'	7.90	128.65	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	339	G	C1'-O4'-C4'	-7.90	103.58	109.90
84	Aa	1108	U	O4'-C1'-N1	7.90	114.52	108.20
84	Aa	1320	G	C5-C6-O6	-7.90	123.86	128.60
1	Ad	96	G	N9-C1'-C2'	7.90	124.27	114.00
1	Ad	1218	U	C1'-O4'-C4'	7.90	116.22	109.90
84	Aa	1580	C	O4'-C1'-N1	7.90	114.52	108.20
84	Aa	2851	C	O4'-C1'-N1	7.90	114.52	108.20
1	Ad	321	C	C3'-C2'-C1'	7.90	107.82	101.50
1	Ad	369	G	O4'-C1'-C2'	-7.90	97.90	105.80
84	Aa	3232	C	O4'-C1'-N1	7.90	114.52	108.20
1	Ad	834	A	O4'-C1'-C2'	-7.89	97.91	105.80
84	Aa	54	G	N1-C6-O6	7.89	124.64	119.90
1	Ad	565	G	O4'-C1'-N9	7.89	114.51	108.20
1	Ad	1594	A	O4'-C1'-C2'	-7.89	97.91	105.80
84	Aa	191	C	O4'-C1'-N1	7.89	114.51	108.20
84	Aa	521	G	C5-C6-O6	-7.89	123.86	128.60
84	Aa	1131	U	O4'-C1'-N1	7.89	114.51	108.20
84	Aa	1197	A	O4'-C1'-N9	7.89	114.51	108.20
84	Aa	1613	C	O4'-C1'-N1	7.89	114.51	108.20
84	Aa	2494	A	C5-C6-N6	-7.89	117.39	123.70
84	Aa	3373	C	O4'-C1'-N1	7.89	114.51	108.20
84	Aa	285	G	C5-C6-O6	-7.89	123.86	128.60
84	Aa	1287	C	O4'-C1'-N1	7.89	114.51	108.20
84	Aa	500	C	O4'-C1'-N1	7.89	114.51	108.20
84	Aa	1328	C	O4'-C1'-N1	7.89	114.51	108.20
84	Aa	3289	U	O4'-C1'-N1	7.89	114.51	108.20
1	Ad	825	U	O4'-C1'-N1	7.89	114.51	108.20
1	Ad	1205	G	N9-C1'-C2'	-7.89	103.33	112.00
1	Ad	1755	G	O4'-C1'-N9	7.89	114.51	108.20
84	Aa	2037	C	O4'-C1'-N1	7.89	114.51	108.20
84	Aa	3283	G	N1-C6-O6	7.89	124.63	119.90
1	Ad	535	C	C3'-C2'-C1'	7.88	107.81	101.50
84	Aa	543	C	C2'-C3'-O3'	7.88	126.85	109.50
84	Aa	587	A	C4-C5-C6	7.88	120.94	117.00
1	Ad	176	A	N9-C1'-C2'	-7.88	103.33	112.00
84	Aa	743	C	O4'-C1'-N1	7.88	114.50	108.20
84	Aa	1722	G	P-O3'-C3'	7.88	129.16	119.70
84	Aa	2534	G	N1-C6-O6	7.88	124.63	119.90
84	Aa	2870	U	O4'-C1'-N1	7.88	114.51	108.20
84	Aa	458	G	N1-C6-O6	7.88	124.63	119.90
1	Ad	743	G	O4'-C1'-C2'	-7.88	97.92	105.80
84	Aa	1246	G	N1-C6-O6	7.88	124.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	275	C	O4'-C1'-N1	7.88	114.50	108.20
84	Aa	640	C	C6-N1-C2	-7.88	117.15	120.30
84	Aa	856	G	N1-C6-O6	7.88	124.63	119.90
84	Aa	3246	U	O4'-C1'-N1	7.88	114.50	108.20
1	Ad	1397	A	C1'-O4'-C4'	-7.87	103.60	109.90
84	Aa	2773	G	N1-C6-O6	7.87	124.62	119.90
84	Aa	2997	C	O4'-C1'-N1	7.87	114.50	108.20
84	Aa	1017	G	C5-C6-O6	-7.87	123.88	128.60
84	Aa	1364	C	O4'-C1'-N1	7.87	114.50	108.20
84	Aa	2643	A	N1-C6-N6	7.87	123.32	118.60
84	Aa	3213	A	O4'-C1'-N9	7.87	114.50	108.20
1	Ad	14	C	C1'-O4'-C4'	-7.87	103.60	109.90
1	Ad	1096	A	C1'-O4'-C4'	-7.87	103.60	109.90
84	Aa	244	G	N1-C6-O6	7.87	124.62	119.90
84	Aa	334	A	C5-C6-N1	-7.87	113.77	117.70
84	Aa	1574	C	O4'-C1'-N1	7.87	114.49	108.20
84	Aa	2906	U	O4'-C1'-N1	7.87	114.49	108.20
2	Ae	74	C	P-O3'-C3'	7.87	129.14	119.70
84	Aa	391	U	O4'-C1'-N1	7.87	114.49	108.20
84	Aa	912	G	N1-C6-O6	7.87	124.62	119.90
1	Ad	214	A	C1'-O4'-C4'	7.86	116.19	109.90
1	Ad	1041	A	N9-C1'-C2'	-7.86	103.35	112.00
1	Ad	1645	C	O4'-C1'-C2'	-7.86	97.94	105.80
84	Aa	2859	C	O4'-C1'-N1	7.86	114.49	108.20
85	Ac	19	A	N1-C6-N6	7.86	123.32	118.60
1	Ad	784	C	C3'-C2'-C1'	-7.86	95.21	101.50
84	Aa	227	C	O4'-C1'-N1	7.86	114.49	108.20
84	Aa	584	G	P-O3'-C3'	7.86	129.13	119.70
84	Aa	1162	A	O4'-C1'-N9	7.86	114.49	108.20
84	Aa	1976	U	O4'-C1'-N1	7.86	114.49	108.20
84	Aa	1530	C	O4'-C1'-N1	7.86	114.48	108.20
84	Aa	2145	C	O4'-C1'-N1	7.86	114.48	108.20
84	Aa	2895	G	N1-C6-O6	7.86	124.61	119.90
84	Aa	3341	C	O4'-C1'-N1	7.86	114.48	108.20
84	Aa	2143	A	C5-C6-N6	-7.85	117.42	123.70
84	Aa	1382	C	O4'-C1'-N1	7.85	114.48	108.20
84	Aa	1939	C	O4'-C1'-N1	7.85	114.48	108.20
84	Aa	2391	C	O4'-C1'-N1	7.85	114.48	108.20
84	Aa	3200	A	P-O3'-C3'	7.85	129.12	119.70
85	Ac	95	G	C5-C6-O6	-7.85	123.89	128.60
84	Aa	985	C	O4'-C1'-N1	7.85	114.48	108.20
84	Aa	2354	G	C5-C6-O6	-7.85	123.89	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	628	G	O4'-C1'-N9	7.85	114.48	108.20
84	Aa	559	U	O4'-C1'-N1	7.85	114.48	108.20
84	Aa	767	U	O4'-C1'-N1	7.85	114.48	108.20
84	Aa	1687	C	O4'-C1'-N1	7.85	114.48	108.20
84	Aa	2018	C	O4'-C1'-N1	7.85	114.48	108.20
84	Aa	2692	G	C5-C6-O6	-7.85	123.89	128.60
84	Aa	3390	G	C5-C6-O6	-7.85	123.89	128.60
84	Aa	2610	G	C5-C6-O6	-7.85	123.89	128.60
84	Aa	3025	A	C5-C6-N6	-7.85	117.42	123.70
1	Ad	367	G	O4'-C1'-N9	7.84	114.47	108.20
84	Aa	34	G	N1-C6-O6	7.84	124.61	119.90
84	Aa	1105	G	C5-C6-O6	-7.84	123.89	128.60
84	Aa	2506	G	O4'-C1'-N9	7.84	114.47	108.20
85	Ac	117	C	O4'-C1'-N1	7.84	114.48	108.20
84	Aa	674	G	N1-C6-O6	7.84	124.61	119.90
84	Aa	2587	G	C5-C6-O6	-7.84	123.89	128.60
1	Ad	833	U	O4'-C1'-N1	7.84	114.47	108.20
1	Ad	1730	G	C3'-C2'-C1'	7.84	107.77	101.50
84	Aa	130	G	N1-C6-O6	7.84	124.61	119.90
84	Aa	280	G	O4'-C1'-N9	7.84	114.47	108.20
84	Aa	1023	G	N1-C6-O6	7.84	124.61	119.90
84	Aa	1641	G	C5-C6-O6	-7.84	123.89	128.60
84	Aa	3225	G	C5-C6-O6	-7.84	123.89	128.60
84	Aa	759	C	O4'-C1'-N1	7.84	114.47	108.20
1	Ad	1432	C	N1-C1'-C2'	-7.84	103.38	112.00
84	Aa	1541	G	N1-C6-O6	7.84	124.60	119.90
2	Ae	6	G	N9-C1'-C2'	7.84	124.19	114.00
84	Aa	27	C	O4'-C1'-N1	7.84	114.47	108.20
84	Aa	2056	C	P-O3'-C3'	7.84	129.10	119.70
84	Aa	2626	G	N1-C6-O6	7.84	124.60	119.90
86	Ab	100	A	C4-C5-C6	7.84	120.92	117.00
84	Aa	51	A	C5-C6-N6	-7.83	117.43	123.70
84	Aa	2343	U	O4'-C1'-N1	7.83	114.47	108.20
1	Ad	430	G	C1'-O4'-C4'	-7.83	103.63	109.90
1	Ad	1789	U	O4'-C1'-N1	7.83	114.47	108.20
84	Aa	2831	U	O4'-C1'-N1	7.83	114.47	108.20
1	Ad	1027	C	N1-C1'-C2'	7.83	124.18	114.00
1	Ad	1698	A	O4'-C1'-N9	7.83	114.47	108.20
84	Aa	2005	C	O4'-C1'-N1	7.83	114.47	108.20
84	Aa	3291	C	O4'-C1'-N1	7.83	114.47	108.20
84	Aa	1694	A	C5-C6-N6	-7.83	117.44	123.70
85	Ac	68	G	N1-C6-O6	7.83	124.60	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	44	C	N3-C4-N4	7.83	123.48	118.00
1	Ad	1700	G	C1'-O4'-C4'	-7.83	103.64	109.90
84	Aa	2605	G	C5-C6-O6	-7.83	123.90	128.60
1	Ad	205	U	O4'-C1'-N1	7.83	114.46	108.20
84	Aa	871	C	O4'-C1'-N1	7.83	114.46	108.20
84	Aa	1073	G	N1-C6-O6	7.83	124.59	119.90
84	Aa	1089	G	C5-C6-O6	-7.83	123.90	128.60
84	Aa	2456	G	N1-C6-O6	7.83	124.59	119.90
84	Aa	2567	C	O4'-C1'-N1	7.83	114.46	108.20
84	Aa	1616	G	N1-C6-O6	7.82	124.59	119.90
84	Aa	2384	G	C5-C6-O6	-7.82	123.91	128.60
1	Ad	834	A	P-O3'-C3'	7.82	129.09	119.70
84	Aa	203	C	O4'-C1'-N1	7.82	114.46	108.20
1	Ad	612	U	C1'-O4'-C4'	-7.82	103.64	109.90
84	Aa	373	A	P-O3'-C3'	7.82	129.08	119.70
84	Aa	2525	G	C5-C6-O6	-7.82	123.91	128.60
84	Aa	28	C	O4'-C1'-N1	7.82	114.45	108.20
84	Aa	3257	G	N1-C6-O6	7.82	124.59	119.90
86	Ab	87	G	C5-C6-O6	-7.82	123.91	128.60
1	Ad	563	C	N1-C1'-C2'	7.82	124.16	114.00
1	Ad	1436	U	O4'-C1'-N1	7.82	114.45	108.20
84	Aa	1037	U	O4'-C1'-N1	7.81	114.45	108.20
84	Aa	3366	C	O4'-C1'-N1	7.81	114.45	108.20
1	Ad	243	U	P-O3'-C3'	7.81	129.08	119.70
84	Aa	2410	U	O4'-C1'-N1	7.81	114.45	108.20
84	Aa	3217	G	N1-C6-O6	7.81	124.59	119.90
84	Aa	3251	C	O4'-C1'-N1	7.81	114.45	108.20
84	Aa	2440	U	O4'-C1'-N1	7.81	114.45	108.20
86	Ab	21	U	O4'-C1'-N1	7.81	114.45	108.20
84	Aa	335	G	O4'-C1'-N9	7.81	114.45	108.20
85	Ac	122	G	C5-C6-O6	-7.81	123.92	128.60
84	Aa	296	C	O4'-C1'-N1	7.81	114.44	108.20
84	Aa	1575	G	O4'-C1'-N9	7.81	114.44	108.20
1	Ad	895	U	O4'-C1'-N1	7.80	114.44	108.20
1	Ad	1746	U	O4'-C1'-N1	7.80	114.44	108.20
85	Ac	59	A	C4-C5-C6	7.80	120.90	117.00
1	Ad	1185	U	O4'-C1'-N1	7.80	114.44	108.20
1	Ad	1338	U	O4'-C1'-N1	7.80	114.44	108.20
1	Ad	1528	U	O4'-C1'-N1	7.80	114.44	108.20
84	Aa	806	C	O4'-C1'-N1	7.80	114.44	108.20
84	Aa	3340	G	N1-C6-O6	7.80	124.58	119.90
84	Aa	1953	C	O4'-C1'-N1	7.80	114.44	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	17	G	C5-C6-O6	-7.80	123.92	128.60
84	Aa	1121	C	O4'-C1'-N1	7.80	114.44	108.20
84	Aa	1937	C	O4'-C1'-N1	7.80	114.44	108.20
84	Aa	302	G	O4'-C1'-N9	7.80	114.44	108.20
84	Aa	828	U	O4'-C1'-N1	7.80	114.44	108.20
84	Aa	1237	G	C5-C6-O6	-7.80	123.92	128.60
84	Aa	3196	C	O4'-C1'-N1	7.80	114.44	108.20
84	Aa	3351	A	C5-C6-N6	-7.80	117.46	123.70
84	Aa	479	C	O4'-C1'-N1	7.79	114.44	108.20
84	Aa	2729	C	O4'-C1'-N1	7.79	114.44	108.20
1	Ad	814	C	N1-C1'-C2'	7.79	124.13	114.00
84	Aa	125	G	C5-C6-O6	-7.79	123.92	128.60
84	Aa	268	U	O4'-C1'-N1	7.79	114.44	108.20
84	Aa	1009	G	N1-C6-O6	7.79	124.58	119.90
1	Ad	743	G	P-O3'-C3'	7.79	129.05	119.70
1	Ad	1017	U	O4'-C1'-N1	7.79	114.43	108.20
84	Aa	561	G	N1-C6-O6	7.79	124.57	119.90
84	Aa	1772	G	C5-C6-O6	-7.79	123.93	128.60
84	Aa	2242	G	C5-C6-O6	-7.79	123.93	128.60
84	Aa	2339	U	O4'-C1'-N1	7.79	114.43	108.20
84	Aa	2779	G	N1-C6-O6	7.79	124.57	119.90
1	Ad	1511	A	C3'-C2'-C1'	-7.79	95.27	101.50
84	Aa	2164	G	N1-C6-O6	7.79	124.57	119.90
84	Aa	1754	C	O4'-C1'-N1	7.78	114.43	108.20
84	Aa	234	G	N1-C6-O6	7.78	124.57	119.90
84	Aa	2077	C	O4'-C1'-N1	7.78	114.42	108.20
84	Aa	3112	U	O4'-C1'-N1	7.78	114.43	108.20
84	Aa	2279	C	O4'-C1'-N1	7.78	114.42	108.20
84	Aa	2616	U	O4'-C1'-N1	7.78	114.42	108.20
84	Aa	2766	U	O4'-C1'-N1	7.78	114.42	108.20
84	Aa	1308	A	C5-C6-N6	-7.78	117.48	123.70
1	Ad	401	A	P-O5'-C5'	-7.77	108.47	120.90
1	Ad	1471	C	C1'-O4'-C4'	-7.77	103.68	109.90
84	Aa	355	C	O4'-C1'-N1	7.77	114.42	108.20
84	Aa	2167	G	C5'-C4'-O4'	7.77	118.43	109.10
1	Ad	1761	G	O4'-C1'-N9	7.77	114.41	108.20
84	Aa	874	U	O4'-C1'-N1	7.77	114.41	108.20
84	Aa	1135	C	O4'-C1'-N1	7.77	114.41	108.20
84	Aa	1749	G	N1-C6-O6	7.77	124.56	119.90
84	Aa	1057	A	C5-C6-N6	-7.77	117.49	123.70
84	Aa	1987	C	O4'-C1'-N1	7.76	114.41	108.20
85	Ac	131	G	C5-C6-O6	-7.76	123.94	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	97	G	N3-C2-N2	7.76	125.33	119.90
1	Ad	567	U	O4'-C1'-N1	7.76	114.41	108.20
84	Aa	257	C	O4'-C1'-N1	7.76	114.41	108.20
84	Aa	734	C	O4'-C1'-N1	7.76	114.41	108.20
84	Aa	1873	C	O4'-C1'-N1	7.76	114.41	108.20
84	Aa	3388	U	O4'-C1'-N1	7.76	114.41	108.20
85	Ac	26	C	O4'-C1'-N1	7.76	114.41	108.20
84	Aa	1951	C	O4'-C1'-N1	7.76	114.41	108.20
1	Ad	785	A	C1'-O4'-C4'	7.76	116.11	109.90
84	Aa	93	G	N1-C6-O6	7.76	124.55	119.90
84	Aa	497	G	C5-C6-O6	-7.76	123.95	128.60
84	Aa	2830	G	C5-C6-O6	-7.76	123.95	128.60
84	Aa	3345	G	C5-C6-O6	-7.76	123.95	128.60
84	Aa	2052	G	N1-C6-O6	7.75	124.55	119.90
1	Ad	435	C	O4'-C1'-N1	7.75	114.40	108.20
1	Ad	1574	U	N1-C1'-C2'	-7.75	103.47	112.00
84	Aa	522	C	C5'-C4'-O4'	7.75	118.40	109.10
84	Aa	594	C	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	1582	C	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	2696	C	O4'-C1'-N1	7.75	114.40	108.20
1	Ad	900	G	N9-C1'-C2'	7.75	124.08	114.00
1	Ad	1576	C	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	673	U	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	2962	C	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	2988	U	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	1740	U	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	3247	C	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	192	C	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	229	G	N1-C6-O6	7.75	124.55	119.90
1	Ad	1450	A	C3'-C2'-C1'	7.75	107.70	101.50
1	Ad	1734	U	O4'-C1'-N1	7.75	114.40	108.20
85	Ac	147	C	O4'-C1'-N1	7.75	114.40	108.20
84	Aa	648	G	C5-C6-O6	-7.74	123.95	128.60
84	Aa	1219	C	O4'-C1'-N1	7.74	114.39	108.20
1	Ad	239	C	P-O3'-C3'	7.74	128.99	119.70
84	Aa	755	C	O4'-C1'-N1	7.74	114.39	108.20
84	Aa	2363	G	O4'-C1'-N9	7.74	114.39	108.20
85	Ac	108	C	O4'-C1'-N1	7.74	114.39	108.20
1	Ad	867	A	O4'-C1'-N9	7.74	114.39	108.20
84	Aa	1159	C	O4'-C1'-N1	7.74	114.39	108.20
84	Aa	2012	C	O4'-C1'-N1	7.74	114.39	108.20
84	Aa	2607	U	O4'-C1'-N1	7.74	114.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	803	G	O4'-C1'-N9	7.73	114.39	108.20
84	Aa	1082	U	O4'-C1'-N1	7.73	114.39	108.20
86	Ab	40	A	N1-C6-N6	7.73	123.24	118.60
1	Ad	1193	A	O4'-C1'-N9	7.73	114.38	108.20
84	Aa	654	C	O4'-C1'-N1	7.73	114.38	108.20
84	Aa	2406	C	O4'-C1'-N1	7.73	114.38	108.20
84	Aa	2425	U	O4'-C1'-N1	7.73	114.39	108.20
2	Ae	52	G	O4'-C1'-N9	7.73	114.38	108.20
84	Aa	1650	G	C5-C6-O6	-7.73	123.96	128.60
84	Aa	2201	G	N1-C6-O6	7.73	124.54	119.90
1	Ad	644	U	C1'-O4'-C4'	-7.73	103.72	109.90
84	Aa	2186	U	O4'-C1'-N1	7.73	114.38	108.20
84	Aa	3043	U	O4'-C1'-N1	7.73	114.38	108.20
84	Aa	2020	G	N1-C6-O6	7.73	124.53	119.90
85	Ac	55	U	O4'-C1'-N1	7.73	114.38	108.20
84	Aa	79	C	O4'-C1'-N1	7.72	114.38	108.20
84	Aa	939	A	C5-C6-N6	-7.72	117.52	123.70
84	Aa	1870	G	C5-C6-O6	-7.72	123.97	128.60
84	Aa	1778	C	O4'-C1'-N1	7.72	114.38	108.20
84	Aa	2508	U	O4'-C1'-N1	7.72	114.38	108.20
84	Aa	2669	C	O4'-C1'-N1	7.72	114.38	108.20
84	Aa	3233	C	O4'-C1'-N1	7.72	114.38	108.20
84	Aa	1388	C	O4'-C1'-N1	7.72	114.38	108.20
84	Aa	1828	C	O4'-C1'-N1	7.72	114.38	108.20
85	Ac	69	U	O4'-C1'-N1	7.72	114.38	108.20
1	Ad	1648	C	C3'-C2'-C1'	7.72	107.68	101.50
84	Aa	2340	G	N1-C6-O6	7.72	124.53	119.90
84	Aa	481	G	N1-C6-O6	7.72	124.53	119.90
84	Aa	1190	C	O4'-C1'-N1	7.72	114.37	108.20
84	Aa	2575	C	O4'-C1'-N1	7.72	114.37	108.20
1	Ad	829	G	O4'-C1'-N9	7.71	114.37	108.20
1	Ad	1046	G	C1'-O4'-C4'	-7.71	103.73	109.90
84	Aa	2394	G	N1-C6-O6	7.71	124.53	119.90
1	Ad	1610	C	O4'-C1'-N1	7.71	114.37	108.20
84	Aa	276	U	O4'-C1'-N1	7.71	114.37	108.20
84	Aa	1427	C	O4'-C1'-N1	7.71	114.37	108.20
84	Aa	1671	G	N1-C6-O6	7.71	124.53	119.90
85	Ac	5	U	O4'-C1'-N1	7.71	114.37	108.20
1	Ad	985	G	C3'-C2'-C1'	-7.71	95.33	101.50
1	Ad	1363	G	C1'-O4'-C4'	-7.71	103.73	109.90
84	Aa	1940	U	O4'-C1'-N1	7.71	114.37	108.20
84	Aa	2887	C	O4'-C1'-N1	7.71	114.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1764	G	O4'-C1'-N9	7.71	114.36	108.20
84	Aa	702	G	N1-C6-O6	7.71	124.52	119.90
86	Ab	98	G	O4'-C1'-N9	7.71	114.36	108.20
1	Ad	832	C	N1-C1'-C2'	7.70	124.01	114.00
84	Aa	2999	G	N1-C6-O6	7.70	124.52	119.90
1	Ad	595	A	O4'-C1'-N9	7.70	114.36	108.20
84	Aa	948	C	O4'-C1'-N1	7.70	114.36	108.20
1	Ad	507	G	C1'-O4'-C4'	-7.69	103.75	109.90
1	Ad	1350	C	O4'-C1'-C2'	7.69	114.52	107.60
84	Aa	699	C	O4'-C1'-N1	7.69	114.35	108.20
84	Aa	1466	U	O4'-C1'-N1	7.69	114.35	108.20
84	Aa	2057	G	O4'-C1'-N9	7.69	114.36	108.20
1	Ad	428	C	N1-C1'-C2'	7.69	124.00	114.00
1	Ad	785	A	O4'-C1'-C2'	-7.69	98.11	105.80
1	Ad	888	U	C1'-O4'-C4'	-7.69	103.75	109.90
84	Aa	978	C	O4'-C1'-N1	7.69	114.35	108.20
84	Aa	1400	C	O4'-C1'-N1	7.69	114.35	108.20
84	Aa	2507	U	O4'-C1'-N1	7.69	114.35	108.20
1	Ad	1275	G	O4'-C1'-N9	7.69	114.35	108.20
1	Ad	1781	U	O4'-C1'-N1	7.69	114.35	108.20
84	Aa	1562	A	C2'-C3'-O3'	-7.69	92.59	109.50
84	Aa	2422	U	O4'-C1'-N1	7.69	114.35	108.20
1	Ad	1601	A	O4'-C1'-N9	7.68	114.35	108.20
84	Aa	502	G	C5-C6-O6	-7.68	123.99	128.60
86	Ab	61	C	O4'-C1'-N1	7.68	114.35	108.20
86	Ab	102	G	O4'-C1'-N9	7.68	114.35	108.20
84	Aa	1145	G	O4'-C1'-N9	7.68	114.35	108.20
84	Aa	1611	G	N1-C6-O6	7.68	124.51	119.90
84	Aa	169	G	N1-C6-O6	7.68	124.51	119.90
1	Ad	869	U	C1'-O4'-C4'	7.68	116.04	109.90
84	Aa	169	G	O4'-C1'-N9	7.68	114.34	108.20
84	Aa	1120	G	N1-C6-O6	7.68	124.51	119.90
84	Aa	3085	C	O4'-C1'-N1	7.68	114.34	108.20
84	Aa	25	U	O4'-C1'-N1	7.68	114.34	108.20
1	Ad	511	U	P-O3'-C3'	7.68	128.91	119.70
84	Aa	2899	A	N1-C6-N6	7.68	123.21	118.60
1	Ad	482	A	O4'-C1'-N9	7.67	114.34	108.20
1	Ad	1795	U	O4'-C1'-N1	7.67	114.34	108.20
84	Aa	542	G	C5-C6-O6	-7.67	124.00	128.60
84	Aa	1737	C	O4'-C1'-N1	7.67	114.34	108.20
84	Aa	2910	C	O4'-C1'-N1	7.67	114.34	108.20
84	Aa	2985	C	C6-N1-C1'	-7.67	111.59	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1317	G	C5-C6-O6	-7.67	124.00	128.60
84	Aa	2538	G	C5-C6-O6	-7.67	124.00	128.60
84	Aa	2879	G	C5-C6-O6	-7.67	124.00	128.60
1	Ad	142	G	O4'-C1'-N9	7.67	114.33	108.20
84	Aa	175	G	N1-C6-O6	7.67	124.50	119.90
84	Aa	1663	G	C5-C6-O6	-7.67	124.00	128.60
84	Aa	2557	C	O4'-C1'-N1	7.67	114.33	108.20
84	Aa	1607	C	O4'-C1'-N1	7.67	114.33	108.20
84	Aa	1894	G	N1-C6-O6	7.67	124.50	119.90
1	Ad	1082	C	C1'-O4'-C4'	-7.66	103.77	109.90
1	Ad	1310	C	N1-C1'-C2'	7.66	123.96	114.00
84	Aa	291	C	O4'-C1'-N1	7.66	114.33	108.20
84	Aa	1265	G	O4'-C1'-N9	7.66	114.33	108.20
84	Aa	1840	C	O4'-C1'-N1	7.66	114.33	108.20
84	Aa	2110	G	N1-C6-O6	7.66	124.50	119.90
84	Aa	2445	U	O4'-C1'-N1	7.66	114.33	108.20
84	Aa	2544	C	O4'-C1'-N1	7.66	114.33	108.20
84	Aa	189	C	O4'-C1'-N1	7.66	114.33	108.20
84	Aa	696	A	O4'-C1'-N9	7.66	114.33	108.20
1	Ad	1112	G	C1'-O4'-C4'	-7.66	103.77	109.90
84	Aa	2702	G	N1-C6-O6	7.66	124.50	119.90
84	Aa	3079	G	O4'-C1'-N9	7.66	114.33	108.20
84	Aa	120	G	N1-C6-O6	7.66	124.50	119.90
84	Aa	1473	U	O4'-C1'-N1	7.66	114.33	108.20
1	Ad	999	G	N9-C1'-C2'	7.66	123.95	114.00
84	Aa	240	U	P-O3'-C3'	7.66	128.89	119.70
84	Aa	309	C	O4'-C1'-N1	7.66	114.32	108.20
84	Aa	2565	C	O4'-C1'-N1	7.66	114.33	108.20
84	Aa	2721	C	O4'-C1'-N1	7.66	114.33	108.20
84	Aa	2158	C	O4'-C1'-N1	7.65	114.32	108.20
84	Aa	3222	G	O4'-C1'-N9	7.65	114.32	108.20
1	Ad	94	A	O4'-C1'-N9	7.65	114.32	108.20
84	Aa	652	C	O4'-C1'-N1	7.65	114.32	108.20
84	Aa	1964	G	N1-C6-O6	7.65	124.49	119.90
84	Aa	892	U	O4'-C1'-N1	7.65	114.32	108.20
84	Aa	58	G	N1-C6-O6	7.65	124.49	119.90
84	Aa	1834	C	O4'-C1'-N1	7.65	114.32	108.20
84	Aa	2007	C	O4'-C1'-N1	7.65	114.32	108.20
85	Ac	72	A	O4'-C1'-N9	7.65	114.32	108.20
1	Ad	157	U	O4'-C1'-N1	7.65	114.32	108.20
1	Ad	1650	G	C1'-O4'-C4'	-7.65	103.78	109.90
84	Aa	300	C	O4'-C1'-N1	7.65	114.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2586	C	O4'-C1'-N1	7.65	114.32	108.20
1	Ad	950	U	O4'-C1'-N1	7.64	114.32	108.20
1	Ad	1219	C	C5'-C4'-O4'	7.64	118.27	109.10
2	Ae	30	G	N9-C1'-C2'	7.64	123.94	114.00
84	Aa	190	C	O4'-C1'-N1	7.64	114.32	108.20
84	Aa	352	U	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	1351	C	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	1715	C	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	3321	C	O4'-C1'-N1	7.64	114.31	108.20
86	Ab	91	C	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	167	C	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	679	C	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	1399	C	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	1678	U	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	1900	C	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	2001	U	O4'-C1'-N1	7.64	114.31	108.20
1	Ad	302	C	O4'-C1'-N1	7.64	114.31	108.20
1	Ad	1629	U	O4'-C1'-N1	7.64	114.31	108.20
84	Aa	1768	U	O4'-C1'-N1	7.64	114.31	108.20
1	Ad	1654	C	C3'-C2'-C1'	7.63	107.61	101.50
84	Aa	2547	C	O4'-C1'-N1	7.63	114.31	108.20
84	Aa	2675	G	N1-C6-O6	7.63	124.48	119.90
84	Aa	3206	C	C6-N1-C1'	-7.63	111.64	120.80
1	Ad	494	G	O4'-C1'-N9	7.63	114.31	108.20
84	Aa	1902	G	C5-C6-O6	-7.63	124.02	128.60
84	Aa	1674	A	C5-C6-N1	-7.63	113.89	117.70
84	Aa	457	C	O4'-C1'-N1	7.63	114.30	108.20
84	Aa	492	G	N1-C6-O6	7.62	124.47	119.90
1	Ad	1027	C	C3'-C2'-C1'	7.62	107.60	101.50
84	Aa	264	C	O4'-C1'-N1	7.62	114.30	108.20
84	Aa	237	C	O4'-C1'-N1	7.62	114.30	108.20
86	Ab	16	A	C4-C5-C6	7.62	120.81	117.00
1	Ad	3	C	O4'-C1'-N1	7.62	114.30	108.20
1	Ad	80	C	C3'-C2'-C1'	7.62	107.59	101.50
84	Aa	1536	U	O4'-C1'-N1	7.62	114.29	108.20
84	Aa	2611	G	N1-C6-O6	7.62	124.47	119.90
1	Ad	1454	G	O4'-C1'-N9	7.62	114.29	108.20
84	Aa	308	U	O4'-C1'-N1	7.62	114.29	108.20
84	Aa	2125	A	C5-C6-N1	-7.62	113.89	117.70
1	Ad	338	G	O4'-C1'-N9	7.61	114.29	108.20
1	Ad	1645	C	C1'-O4'-C4'	7.61	115.99	109.90
84	Aa	2074	C	C5'-C4'-C3'	7.61	128.18	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	825	G	N1-C6-O6	7.61	124.47	119.90
84	Aa	847	G	N1-C6-O6	7.61	124.47	119.90
84	Aa	482	C	O4'-C1'-N1	7.61	114.29	108.20
84	Aa	630	C	O4'-C1'-N1	7.61	114.29	108.20
84	Aa	1214	U	O4'-C1'-N1	7.61	114.29	108.20
84	Aa	2092	C	C5'-C4'-C3'	7.61	128.18	116.00
84	Aa	2252	C	O4'-C1'-N1	7.61	114.29	108.20
84	Aa	1325	G	N1-C6-O6	7.61	124.47	119.90
84	Aa	3230	G	O4'-C1'-N9	7.61	114.29	108.20
1	Ad	155	A	C1'-O4'-C4'	7.61	115.99	109.90
1	Ad	395	A	O4'-C1'-N9	7.61	114.29	108.20
84	Aa	841	G	C5-C6-O6	-7.61	124.03	128.60
84	Aa	3105	U	O4'-C1'-N1	7.61	114.29	108.20
1	Ad	1286	U	O4'-C1'-N1	7.61	114.28	108.20
84	Aa	1426	C	O4'-C1'-N1	7.61	114.28	108.20
84	Aa	1533	U	O4'-C1'-N1	7.61	114.28	108.20
85	Ac	100	U	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	1127	U	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	1341	G	N1-C6-O6	7.60	124.46	119.90
84	Aa	1682	C	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	3154	G	P-O3'-C3'	7.60	128.82	119.70
84	Aa	3163	G	O4'-C1'-N9	7.60	114.28	108.20
86	Ab	111	U	C5-C6-N1	7.60	126.50	122.70
1	Ad	1124	G	C1'-O4'-C4'	-7.60	103.82	109.90
1	Ad	1153	C	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	261	C	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	1806	C	O4'-C1'-N1	7.60	114.28	108.20
1	Ad	917	U	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	263	A	O4'-C1'-N9	7.60	114.28	108.20
84	Aa	652	C	N3-C4-C5	-7.60	118.86	121.90
84	Aa	2767	C	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	2827	C	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	3183	G	O4'-C1'-N9	7.60	114.28	108.20
84	Aa	1746	G	C5-C6-O6	-7.60	124.04	128.60
84	Aa	2603	C	O4'-C1'-N1	7.60	114.28	108.20
85	Ac	27	U	O4'-C1'-N1	7.60	114.28	108.20
84	Aa	185	A	N1-C6-N6	7.59	123.16	118.60
84	Aa	495	G	O4'-C1'-N9	7.59	114.28	108.20
84	Aa	1992	U	O4'-C1'-N1	7.59	114.28	108.20
84	Aa	2259	U	O4'-C1'-N1	7.59	114.28	108.20
84	Aa	1068	A	N1-C6-N6	7.59	123.16	118.60
84	Aa	1118	G	C5-C6-O6	-7.59	124.05	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1594	G	C5-C6-O6	-7.59	124.05	128.60
86	Ab	68	G	C5-C6-N1	-7.59	107.70	111.50
1	Ad	1554	G	O4'-C1'-N9	7.59	114.27	108.20
84	Aa	3219	U	O4'-C1'-N1	7.59	114.27	108.20
84	Aa	512	G	C5-C6-O6	-7.59	124.05	128.60
84	Aa	2713	G	O4'-C1'-N9	7.58	114.27	108.20
84	Aa	3070	G	N1-C6-O6	7.58	124.45	119.90
84	Aa	3271	A	C5-C6-N6	-7.58	117.63	123.70
84	Aa	444	C	O4'-C1'-N1	7.58	114.27	108.20
84	Aa	2087	A	C5'-C4'-O4'	7.58	118.20	109.10
84	Aa	2609	G	N1-C6-O6	7.58	124.45	119.90
84	Aa	889	C	O4'-C1'-N1	7.58	114.26	108.20
1	Ad	73	A	C1'-O4'-C4'	7.58	115.96	109.90
1	Ad	1445	C	N1-C1'-C2'	7.58	123.85	114.00
2	Ae	30	G	C1'-O4'-C4'	-7.58	103.84	109.90
84	Aa	2701	G	O4'-C1'-N9	7.58	114.26	108.20
84	Aa	2269	U	O4'-C1'-N1	7.58	114.26	108.20
84	Aa	492	G	C2'-C3'-O3'	7.58	126.17	109.50
84	Aa	1461	U	O4'-C1'-N1	7.58	114.26	108.20
84	Aa	2806	A	N1-C6-N6	7.58	123.14	118.60
1	Ad	27	U	O4'-C1'-N1	7.57	114.26	108.20
1	Ad	1308	G	C1'-O4'-C4'	-7.57	103.84	109.90
68	Ch	74	TYR	CB-CG-CD2	7.57	125.54	121.00
84	Aa	1005	C	O4'-C1'-N1	7.57	114.26	108.20
84	Aa	2832	G	N1-C6-O6	7.57	124.44	119.90
84	Aa	1314	G	N1-C6-O6	7.57	124.44	119.90
84	Aa	1247	G	C5-C6-O6	-7.57	124.06	128.60
86	Ab	22	A	C4-C5-C6	7.57	120.78	117.00
84	Aa	1366	G	N1-C6-O6	7.57	124.44	119.90
84	Aa	3194	G	C5-C6-O6	-7.57	124.06	128.60
1	Ad	1178	C	C3'-C2'-C1'	7.57	107.55	101.50
84	Aa	1109	G	N1-C6-O6	7.57	124.44	119.90
1	Ad	860	A	C1'-O4'-C4'	7.57	115.95	109.90
1	Ad	873	G	O4'-C1'-N9	7.57	114.25	108.20
1	Ad	935	A	O4'-C1'-N9	7.57	114.25	108.20
84	Aa	717	G	O4'-C1'-N9	7.56	114.25	108.20
84	Aa	1122	C	O4'-C1'-N1	7.56	114.25	108.20
84	Aa	2576	C	O4'-C1'-N1	7.56	114.25	108.20
84	Aa	388	G	C5-C6-O6	-7.56	124.06	128.60
84	Aa	2974	G	N1-C6-O6	7.56	124.44	119.90
84	Aa	3263	C	C4'-C3'-O3'	7.56	128.12	113.00
1	Ad	290	C	O4'-C1'-C2'	-7.56	98.24	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	448	C	O4'-C1'-C2'	-7.56	98.24	105.80
84	Aa	2286	A	C5-C6-N6	-7.56	117.65	123.70
84	Aa	2823	C	O4'-C1'-N1	7.56	114.25	108.20
1	Ad	1051	G	O4'-C1'-N9	7.56	114.25	108.20
84	Aa	338	C	O4'-C1'-N1	7.56	114.25	108.20
84	Aa	1347	U	O4'-C1'-N1	7.56	114.25	108.20
1	Ad	1140	U	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	215	U	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	314	C	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	595	C	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	1141	U	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	128	C	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	726	C	O4'-C1'-N1	7.55	114.24	108.20
1	Ad	12	U	C1'-O4'-C4'	-7.55	103.86	109.90
84	Aa	2330	C	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	3091	U	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	983	U	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	1581	C	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	2421	C	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	1039	G	N1-C6-O6	7.55	124.43	119.90
1	Ad	983	A	C1'-O4'-C4'	7.55	115.94	109.90
1	Ad	1453	U	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	1440	C	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	3300	C	O4'-C1'-N1	7.55	114.24	108.20
84	Aa	1995	U	P-O3'-C3'	7.54	128.75	119.70
84	Aa	3346	C	O4'-C1'-N1	7.54	114.24	108.20
80	Cf	107	TYR	CB-CG-CD1	7.54	125.53	121.00
84	Aa	2580	C	O4'-C1'-N1	7.54	114.23	108.20
84	Aa	2828	U	O4'-C1'-N1	7.54	114.23	108.20
85	Ac	99	C	O4'-C1'-N1	7.54	114.23	108.20
84	Aa	414	G	N1-C6-O6	7.54	124.42	119.90
84	Aa	1551	C	O4'-C1'-N1	7.54	114.23	108.20
84	Aa	2844	U	O4'-C1'-N1	7.54	114.23	108.20
1	Ad	1294	U	O4'-C1'-N1	7.54	114.23	108.20
1	Ad	1471	C	N1-C1'-C2'	7.54	123.80	114.00
2	Ae	25	U	O4'-C1'-N1	7.54	114.23	108.20
1	Ad	487	A	O4'-C1'-N9	7.54	114.23	108.20
84	Aa	215	U	P-O3'-C3'	7.54	128.74	119.70
84	Aa	824	U	O4'-C1'-N1	7.54	114.23	108.20
84	Aa	285	G	O4'-C1'-N9	7.53	114.23	108.20
84	Aa	618	G	C5-C6-O6	-7.53	124.08	128.60
84	Aa	716	A	C4-C5-C6	7.53	120.77	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1094	G	C5-C6-O6	-7.53	124.08	128.60
84	Aa	2498	C	O4'-C1'-N1	7.53	114.23	108.20
84	Aa	1145	G	C5-C6-O6	-7.53	124.08	128.60
84	Aa	2327	U	O4'-C1'-N1	7.53	114.23	108.20
1	Ad	1634	U	O4'-C1'-N1	7.53	114.22	108.20
84	Aa	753	G	C5-C6-O6	-7.53	124.08	128.60
1	Ad	552	G	O4'-C1'-N9	7.53	114.22	108.20
1	Ad	860	A	P-O3'-C3'	-7.53	110.67	119.70
84	Aa	2009	C	O4'-C1'-N1	7.53	114.22	108.20
84	Aa	2556	G	O4'-C1'-N9	7.53	114.22	108.20
84	Aa	632	C	O4'-C1'-N1	7.53	114.22	108.20
1	Ad	130	A	O4'-C1'-C2'	-7.52	98.28	105.80
1	Ad	1670	G	O4'-C1'-C2'	7.52	114.37	107.60
84	Aa	1928	A	C4-C5-C6	7.52	120.76	117.00
84	Aa	2782	G	N1-C6-O6	7.52	124.41	119.90
1	Ad	757	G	C1'-O4'-C4'	-7.52	103.89	109.90
1	Ad	953	G	O4'-C1'-N9	7.52	114.22	108.20
1	Ad	1801	A	C1'-O4'-C4'	7.52	115.92	109.90
84	Aa	1028	G	N1-C6-O6	7.52	124.41	119.90
84	Aa	1546	G	N1-C6-O6	7.52	124.41	119.90
85	Ac	10	G	N1-C6-O6	7.52	124.41	119.90
1	Ad	501	U	O4'-C1'-N1	7.52	114.21	108.20
84	Aa	938	U	O4'-C1'-N1	7.52	114.21	108.20
84	Aa	1363	C	O4'-C1'-N1	7.52	114.21	108.20
85	Ac	8	C	O4'-C1'-N1	7.52	114.21	108.20
84	Aa	372	A	O4'-C1'-N9	7.51	114.21	108.20
84	Aa	2577	G	C5-C6-O6	-7.51	124.09	128.60
84	Aa	3153	U	C2-N1-C1'	7.51	126.72	117.70
84	Aa	8	C	C2-N1-C1'	7.51	127.06	118.80
84	Aa	1146	A	C5-C6-N6	-7.51	117.69	123.70
84	Aa	2716	U	O4'-C1'-N1	7.51	114.21	108.20
84	Aa	3024	U	O4'-C1'-N1	7.51	114.21	108.20
84	Aa	2503	A	C4-C5-C6	7.51	120.75	117.00
84	Aa	3121	C	O4'-C1'-N1	7.51	114.21	108.20
84	Aa	2957	U	O4'-C1'-N1	7.51	114.21	108.20
1	Ad	394	G	C1'-O4'-C4'	7.51	115.91	109.90
1	Ad	990	G	O4'-C1'-N9	7.51	114.20	108.20
1	Ad	1145	G	O4'-C1'-N9	7.51	114.20	108.20
84	Aa	1326	C	O4'-C1'-N1	7.51	114.21	108.20
1	Ad	1512	C	N1-C1'-C2'	7.50	123.76	114.00
84	Aa	658	C	O4'-C1'-N1	7.50	114.20	108.20
84	Aa	896	C	O4'-C1'-N1	7.50	114.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2584	U	O4'-C1'-N1	7.50	114.20	108.20
1	Ad	1231	A	P-O3'-C3'	7.50	128.70	119.70
1	Ad	1500	A	C1'-O4'-C4'	7.50	115.90	109.90
84	Aa	617	C	O4'-C1'-N1	7.50	114.20	108.20
84	Aa	1409	G	N1-C6-O6	7.50	124.40	119.90
84	Aa	2178	G	C5'-C4'-O4'	7.50	118.10	109.10
84	Aa	2262	C	O4'-C1'-N1	7.50	114.20	108.20
84	Aa	1288	C	O4'-C1'-N1	7.50	114.20	108.20
1	Ad	114	U	C3'-C2'-C1'	7.50	107.50	101.50
1	Ad	755	U	N1-C1'-C2'	7.50	123.75	114.00
84	Aa	430	G	C5-C6-O6	-7.50	124.10	128.60
84	Aa	1130	G	C5-C6-O6	-7.50	124.10	128.60
84	Aa	2295	G	C5-C6-O6	-7.50	124.10	128.60
84	Aa	808	G	C5-C6-O6	-7.49	124.10	128.60
1	Ad	329	G	O4'-C1'-N9	7.49	114.19	108.20
84	Aa	449	G	C5-C6-O6	-7.49	124.11	128.60
84	Aa	1535	C	O4'-C1'-N1	7.49	114.19	108.20
1	Ad	23	G	O4'-C1'-N9	7.49	114.19	108.20
84	Aa	1865	C	O4'-C1'-N1	7.49	114.19	108.20
84	Aa	3290	C	O4'-C1'-N1	7.49	114.19	108.20
2	Ae	47	U	N1-C1'-C2'	-7.49	103.76	112.00
84	Aa	1850	C	O4'-C1'-N1	7.49	114.19	108.20
84	Aa	2157	C	O4'-C1'-N1	7.49	114.19	108.20
1	Ad	369	G	C1'-O4'-C4'	7.49	115.89	109.90
1	Ad	373	U	C5'-C4'-O4'	7.49	118.08	109.10
1	Ad	499	A	O4'-C1'-N9	7.49	114.19	108.20
84	Aa	375	G	C5-C6-O6	-7.49	124.11	128.60
84	Aa	464	G	N1-C6-O6	7.49	124.39	119.90
84	Aa	739	C	O4'-C1'-N1	7.49	114.19	108.20
84	Aa	2155	G	N1-C6-O6	7.49	124.39	119.90
84	Aa	339	G	C5-C6-O6	-7.48	124.11	128.60
84	Aa	1406	C	O4'-C1'-N1	7.48	114.19	108.20
84	Aa	2954	G	N1-C6-O6	7.48	124.39	119.90
84	Aa	1981	U	O4'-C1'-N1	7.48	114.19	108.20
1	Ad	648	C	O4'-C1'-C2'	-7.48	98.32	105.80
84	Aa	1428	G	C5-C6-O6	-7.48	124.11	128.60
84	Aa	3137	G	N1-C6-O6	7.48	124.39	119.90
84	Aa	815	G	N1-C6-O6	7.48	124.39	119.90
84	Aa	1503	G	N1-C6-O6	7.48	124.39	119.90
1	Ad	1063	U	O4'-C1'-N1	7.48	114.18	108.20
84	Aa	168	A	C5-C6-N6	-7.48	117.72	123.70
84	Aa	1344	A	O4'-C1'-N9	7.48	114.18	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1560	A	N9-C1'-C2'	7.48	123.72	114.00
84	Aa	2147	U	O4'-C1'-N1	7.48	114.18	108.20
84	Aa	1589	G	O4'-C1'-N9	7.48	114.18	108.20
1	Ad	1409	G	O4'-C1'-C2'	7.47	114.33	107.60
84	Aa	659	C	O4'-C1'-N1	7.47	114.18	108.20
84	Aa	1178	C	O4'-C1'-N1	7.47	114.18	108.20
84	Aa	2637	U	O4'-C1'-N1	7.47	114.18	108.20
84	Aa	3159	C	O4'-C1'-N1	7.47	114.18	108.20
86	Ab	56	G	N1-C6-O6	7.47	124.38	119.90
86	Ab	80	A	C4-C5-C6	7.47	120.74	117.00
84	Aa	1750	A	O4'-C1'-N9	7.47	114.18	108.20
84	Aa	895	U	O4'-C1'-N1	7.47	114.17	108.20
84	Aa	1211	G	C5-C6-O6	-7.47	124.12	128.60
84	Aa	3241	C	O4'-C1'-N1	7.47	114.17	108.20
1	Ad	146	A	C1'-O4'-C4'	7.47	115.88	109.90
84	Aa	2710	C	O4'-C1'-N1	7.47	114.17	108.20
84	Aa	425	G	C5-C6-O6	-7.47	124.12	128.60
84	Aa	628	C	O4'-C1'-N1	7.47	114.17	108.20
84	Aa	1125	U	O4'-C1'-N1	7.47	114.17	108.20
84	Aa	3218	C	O4'-C1'-N1	7.47	114.17	108.20
1	Ad	1192	G	O4'-C1'-N9	7.46	114.17	108.20
84	Aa	537	U	P-O3'-C3'	7.46	128.66	119.70
84	Aa	1695	C	O4'-C1'-N1	7.46	114.17	108.20
84	Aa	2557	C	C2-N1-C1'	7.46	127.01	118.80
1	Ad	1194	C	O4'-C1'-N1	7.46	114.17	108.20
1	Ad	67	G	C3'-C2'-C1'	7.46	107.47	101.50
1	Ad	1441	C	C3'-C2'-C1'	7.46	107.47	101.50
84	Aa	1249	A	O4'-C1'-N9	7.46	114.17	108.20
1	Ad	390	G	O4'-C1'-N9	7.46	114.17	108.20
1	Ad	1266	U	O4'-C1'-N1	7.46	114.17	108.20
84	Aa	1045	U	O4'-C1'-N1	7.46	114.17	108.20
84	Aa	3348	G	O4'-C1'-N9	7.46	114.17	108.20
84	Aa	2234	G	C5-C6-O6	-7.46	124.13	128.60
1	Ad	1082	C	N1-C1'-C2'	7.46	123.69	114.00
84	Aa	1489	G	N1-C6-O6	7.46	124.37	119.90
84	Aa	2195	U	O4'-C1'-N1	7.46	114.16	108.20
84	Aa	2519	U	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	547	C	O4'-C1'-N1	7.45	114.16	108.20
1	Ad	93	A	C1'-O4'-C4'	7.45	115.86	109.90
84	Aa	1056	U	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	2358	C	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	2	C	O4'-C1'-N1	7.45	114.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	166	U	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	344	C	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	2167	G	C1'-O4'-C4'	-7.45	103.94	109.90
84	Aa	2717	G	O4'-C1'-N9	7.45	114.16	108.20
84	Aa	1164	G	N1-C6-O6	7.45	124.37	119.90
84	Aa	2521	C	O4'-C1'-N1	7.45	114.16	108.20
1	Ad	804	C	N1-C1'-C2'	7.45	123.68	114.00
1	Ad	819	U	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	2063	U	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	2072	U	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	2600	U	O4'-C1'-N1	7.45	114.16	108.20
84	Aa	236	A	N1-C6-N6	7.44	123.07	118.60
1	Ad	1467	C	O4'-C1'-N1	7.44	114.15	108.20
84	Aa	893	C	O4'-C1'-N1	7.44	114.15	108.20
84	Aa	1781	C	O4'-C1'-N1	7.44	114.15	108.20
84	Aa	1218	U	O4'-C1'-N1	7.44	114.15	108.20
4	BY	41	SER	N-CA-CB	7.44	121.66	110.50
84	Aa	724	A	O4'-C1'-N9	7.44	114.15	108.20
1	Ad	163	G	O4'-C1'-N9	7.44	114.15	108.20
1	Ad	701	C	O4'-C1'-N1	7.44	114.15	108.20
84	Aa	518	G	N1-C6-O6	7.44	124.36	119.90
84	Aa	556	U	O4'-C1'-N1	7.44	114.15	108.20
84	Aa	2476	G	C4'-C3'-O3'	-7.44	93.78	109.40
1	Ad	1723	G	C1'-O4'-C4'	-7.43	103.95	109.90
84	Aa	1252	C	O4'-C1'-N1	7.43	114.15	108.20
84	Aa	2069	G	C5-C6-O6	-7.43	124.14	128.60
84	Aa	2824	U	O4'-C1'-N1	7.43	114.15	108.20
84	Aa	2965	C	O4'-C1'-N1	7.43	114.15	108.20
84	Aa	1063	G	N1-C6-O6	7.43	124.36	119.90
84	Aa	1657	C	O4'-C1'-N1	7.43	114.15	108.20
1	Ad	1234	A	O4'-C1'-N9	7.43	114.14	108.20
3	Af	18	C	C3'-C2'-C1'	7.43	107.44	101.50
84	Aa	1957	G	C2'-C3'-O3'	-7.43	93.15	109.50
84	Aa	2244	G	C5-C6-O6	-7.43	124.14	128.60
1	Ad	1334	G	C1'-O4'-C4'	7.43	115.84	109.90
84	Aa	297	G	C5-C6-O6	-7.43	124.14	128.60
84	Aa	641	C	N3-C4-C5	-7.43	118.93	121.90
84	Aa	930	C	O4'-C1'-N1	7.43	114.14	108.20
84	Aa	2237	A	C5-C6-N6	-7.43	117.76	123.70
84	Aa	1724	C	O4'-C1'-N1	7.43	114.14	108.20
1	Ad	1665	U	C3'-C2'-C1'	7.42	107.44	101.50
84	Aa	318	G	O4'-C1'-N9	7.42	114.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1481	C	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	2236	U	P-O3'-C3'	7.42	128.61	119.70
86	Ab	57	C	C5-C4-N4	-7.42	115.00	120.20
86	Ab	80	A	C5-C6-N6	-7.42	117.76	123.70
84	Aa	900	C	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	2454	U	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	2842	C	O4'-C1'-N1	7.42	114.14	108.20
1	Ad	410	U	O4'-C1'-N1	7.42	114.14	108.20
1	Ad	1128	C	C5'-C4'-O4'	7.42	118.01	109.10
84	Aa	774	A	C5-C6-N6	-7.42	117.76	123.70
84	Aa	799	U	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	1274	A	C4-C5-C6	7.42	120.71	117.00
84	Aa	2560	C	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	2686	U	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	1008	U	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	1027	C	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	1316	C	C6-N1-C2	-7.42	117.33	120.30
1	Ad	1168	A	C3'-C2'-C1'	7.42	107.44	101.50
84	Aa	133	G	C5-C6-O6	-7.42	124.15	128.60
84	Aa	506	U	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	1311	G	N1-C6-O6	7.42	124.35	119.90
84	Aa	2768	C	O4'-C1'-N1	7.42	114.14	108.20
84	Aa	541	C	O4'-C1'-N1	7.42	114.13	108.20
84	Aa	3352	C	O4'-C1'-N1	7.42	114.13	108.20
84	Aa	328	G	C5-C6-O6	-7.42	124.15	128.60
84	Aa	353	A	C5-C6-N6	-7.41	117.77	123.70
84	Aa	408	U	O4'-C1'-N1	7.41	114.13	108.20
84	Aa	2261	U	O4'-C1'-N1	7.41	114.13	108.20
84	Aa	3161	C	O4'-C1'-N1	7.41	114.13	108.20
85	Ac	150	G	C5-C6-O6	-7.41	124.15	128.60
84	Aa	289	C	O4'-C1'-N1	7.41	114.13	108.20
86	Ab	71	A	N1-C6-N6	7.41	123.05	118.60
84	Aa	1633	C	O4'-C1'-N1	7.41	114.13	108.20
85	Ac	42	G	N1-C6-O6	7.41	124.35	119.90
1	Ad	215	A	N9-C1'-C2'	-7.41	103.85	112.00
84	Aa	3248	G	C5-C6-O6	-7.41	124.16	128.60
84	Aa	3202	G	N1-C6-O6	7.41	124.34	119.90
84	Aa	777	G	O4'-C1'-N9	7.41	114.12	108.20
84	Aa	2729	C	C2-N1-C1'	7.41	126.94	118.80
85	Ac	4	C	O4'-C1'-N1	7.41	114.12	108.20
84	Aa	1272	G	C5-C6-O6	-7.40	124.16	128.60
84	Aa	2071	U	O4'-C1'-N1	7.40	114.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2951	U	O4'-C1'-N1	7.40	114.12	108.20
84	Aa	3294	U	P-O3'-C3'	7.40	128.59	119.70
1	Ad	413	C	C3'-C2'-C1'	7.40	107.42	101.50
84	Aa	1201	C	O4'-C1'-N1	7.40	114.12	108.20
84	Aa	3138	C	N3-C4-C5	-7.40	118.94	121.90
84	Aa	1442	U	O4'-C1'-N1	7.40	114.12	108.20
84	Aa	2106	U	O4'-C1'-N1	7.40	114.12	108.20
84	Aa	2431	U	O4'-C1'-N1	7.40	114.12	108.20
84	Aa	92	C	O4'-C1'-N1	7.40	114.12	108.20
84	Aa	2211	G	N1-C6-O6	7.40	124.34	119.90
1	Ad	1196	C	C3'-C2'-C1'	7.40	107.42	101.50
84	Aa	3191	U	O4'-C1'-N1	7.40	114.12	108.20
1	Ad	1209	C	O4'-C1'-N1	7.40	114.12	108.20
84	Aa	1262	U	O4'-C1'-N1	7.39	114.11	108.20
84	Aa	1575	G	C5-C6-O6	-7.39	124.16	128.60
1	Ad	391	A	N9-C1'-C2'	-7.39	103.87	112.00
84	Aa	246	C	O4'-C1'-N1	7.39	114.11	108.20
84	Aa	1324	C	O4'-C1'-N1	7.39	114.11	108.20
84	Aa	1384	G	C5-C6-O6	-7.39	124.17	128.60
84	Aa	1760	G	O4'-C1'-N9	7.39	114.11	108.20
84	Aa	1935	G	C5-C6-O6	-7.39	124.17	128.60
84	Aa	2035	G	N1-C6-O6	7.39	124.34	119.90
86	Ab	3	A	C5-C6-N1	-7.39	114.00	117.70
1	Ad	1104	U	O4'-C1'-N1	7.39	114.11	108.20
1	Ad	1189	U	N1-C1'-C2'	7.39	123.61	114.00
84	Aa	1049	C	O4'-C1'-N1	7.39	114.11	108.20
84	Aa	867	G	C5-C6-O6	-7.39	124.17	128.60
84	Aa	2209	A	N1-C6-N6	7.39	123.03	118.60
1	Ad	105	A	O4'-C1'-C2'	-7.39	98.41	105.80
84	Aa	2194	G	C5-C6-O6	-7.39	124.17	128.60
84	Aa	3359	C	O4'-C1'-N1	7.39	114.11	108.20
1	Ad	1734	U	N1-C1'-C2'	7.38	123.60	114.00
2	Ae	10	G	C3'-C2'-C1'	7.38	107.41	101.50
84	Aa	2030	U	O4'-C1'-N1	7.38	114.11	108.20
84	Aa	2226	C	O4'-C1'-N1	7.38	114.11	108.20
84	Aa	2285	C	O4'-C1'-N1	7.38	114.11	108.20
84	Aa	2939	G	N1-C6-O6	7.38	124.33	119.90
1	Ad	900	G	C1'-O4'-C4'	-7.38	103.99	109.90
84	Aa	845	G	C5-C6-O6	-7.38	124.17	128.60
84	Aa	1620	U	O4'-C1'-N1	7.38	114.11	108.20
84	Aa	3177	A	C4-C5-C6	7.38	120.69	117.00
84	Aa	3228	C	O4'-C1'-N1	7.38	114.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1103	U	O4'-C1'-N1	7.38	114.11	108.20
84	Aa	1556	G	O4'-C1'-N9	7.38	114.11	108.20
84	Aa	1623	C	O4'-C1'-N1	7.38	114.11	108.20
1	Ad	1108	U	O4'-C1'-N1	7.38	114.10	108.20
84	Aa	318	G	C5-C6-O6	-7.38	124.17	128.60
1	Ad	148	C	O4'-C1'-N1	7.38	114.10	108.20
84	Aa	1952	U	O4'-C1'-N1	7.38	114.10	108.20
84	Aa	3133	C	O4'-C1'-N1	7.38	114.10	108.20
84	Aa	2785	U	O4'-C1'-N1	7.38	114.10	108.20
84	Aa	2845	U	O4'-C1'-N1	7.37	114.10	108.20
84	Aa	2970	G	C5-C6-O6	-7.37	124.18	128.60
84	Aa	3099	G	C5-C6-O6	-7.37	124.18	128.60
1	Ad	1193	A	C1'-O4'-C4'	7.37	115.80	109.90
84	Aa	2752	G	C5-C6-O6	-7.37	124.18	128.60
84	Aa	525	A	C5-C6-N6	-7.37	117.80	123.70
84	Aa	857	G	C5-C6-O6	-7.37	124.18	128.60
84	Aa	2175	A	O4'-C1'-N9	7.37	114.09	108.20
85	Ac	68	G	O4'-C1'-N9	7.37	114.09	108.20
1	Ad	271	C	O4'-C1'-C2'	-7.37	98.43	105.80
1	Ad	1669	U	O4'-C1'-N1	7.37	114.09	108.20
84	Aa	329	G	N1-C6-O6	7.37	124.32	119.90
84	Aa	465	C	O4'-C1'-N1	7.36	114.09	108.20
84	Aa	867	G	O4'-C1'-N9	7.36	114.09	108.20
84	Aa	1193	A	C4-C5-C6	7.36	120.68	117.00
84	Aa	2090	G	C5-C6-O6	-7.36	124.18	128.60
84	Aa	1062	G	N1-C6-O6	7.36	124.32	119.90
84	Aa	3185	G	C5-C6-O6	-7.36	124.18	128.60
84	Aa	1597	U	O4'-C1'-N1	7.36	114.09	108.20
84	Aa	1798	C	O3'-P-O5'	-7.36	90.02	104.00
84	Aa	1626	U	O4'-C1'-N1	7.36	114.09	108.20
84	Aa	2062	U	O4'-C1'-N1	7.36	114.09	108.20
84	Aa	110	C	O4'-C1'-N1	7.36	114.08	108.20
84	Aa	682	G	C5-C6-O6	-7.36	124.19	128.60
84	Aa	2221	U	O4'-C1'-N1	7.36	114.08	108.20
84	Aa	2636	U	O4'-C1'-N1	7.35	114.08	108.20
84	Aa	1604	U	P-O3'-C3'	7.35	128.52	119.70
84	Aa	1534	C	O4'-C1'-N1	7.35	114.08	108.20
1	Ad	834	A	C2'-C3'-O3'	7.35	125.67	109.50
84	Aa	514	G	C5-C6-O6	-7.35	124.19	128.60
84	Aa	991	C	O4'-C1'-N1	7.35	114.08	108.20
84	Aa	2771	U	O4'-C1'-N1	7.35	114.08	108.20
84	Aa	3267	U	O4'-C1'-N1	7.35	114.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	213	G	C5-C6-O6	-7.35	124.19	128.60
84	Aa	1462	C	O4'-C1'-N1	7.35	114.08	108.20
2	Ae	61	C	N1-C1'-C2'	7.35	123.55	114.00
1	Ad	348	A	O4'-C1'-N9	7.34	114.08	108.20
84	Aa	940	G	C5-C6-O6	-7.34	124.19	128.60
84	Aa	2571	C	O4'-C1'-N1	7.34	114.08	108.20
84	Aa	1137	G	N1-C6-O6	7.34	124.31	119.90
1	Ad	1409	G	N9-C1'-C2'	7.34	123.54	114.00
1	Ad	1735	C	C3'-C2'-C1'	7.34	107.37	101.50
84	Aa	302	G	C5-C6-O6	-7.34	124.20	128.60
84	Aa	1624	G	N1-C6-O6	7.34	124.30	119.90
84	Aa	1866	C	O4'-C1'-N1	7.34	114.07	108.20
84	Aa	2690	G	C5-C6-O6	-7.34	124.20	128.60
85	Ac	87	G	N1-C6-O6	7.34	124.30	119.90
86	Ab	58	G	N1-C6-O6	7.34	124.30	119.90
1	Ad	356	G	O4'-C1'-C2'	-7.34	98.46	105.80
1	Ad	1574	U	O4'-C1'-C2'	-7.34	98.46	105.80
84	Aa	647	U	O4'-C1'-N1	7.34	114.07	108.20
84	Aa	1505	G	N1-C6-O6	7.34	124.30	119.90
84	Aa	1774	G	C5-C6-O6	-7.34	124.20	128.60
1	Ad	1616	U	O4'-C1'-N1	7.34	114.07	108.20
84	Aa	1124	U	O4'-C1'-N1	7.34	114.07	108.20
84	Aa	1446	G	C5-C6-O6	-7.34	124.20	128.60
84	Aa	2303	C	O4'-C1'-N1	7.34	114.07	108.20
1	Ad	1685	U	N1-C1'-C2'	7.33	123.53	114.00
84	Aa	974	G	C5-C6-O6	-7.33	124.20	128.60
84	Aa	1093	U	O4'-C1'-N1	7.33	114.07	108.20
84	Aa	1216	G	O4'-C1'-N9	7.33	114.07	108.20
84	Aa	1270	G	N1-C6-O6	7.33	124.30	119.90
1	Ad	1514	G	O4'-C1'-N9	7.33	114.06	108.20
84	Aa	2652	G	C5-C6-O6	-7.33	124.20	128.60
84	Aa	2854	C	N3-C4-N4	7.33	123.13	118.00
84	Aa	766	C	O4'-C1'-N1	7.33	114.06	108.20
84	Aa	2168	C	O4'-C1'-N1	7.33	114.06	108.20
84	Aa	3035	C	O4'-C1'-N1	7.33	114.06	108.20
84	Aa	1337	C	O4'-C1'-N1	7.33	114.06	108.20
84	Aa	1890	C	O4'-C1'-N1	7.33	114.06	108.20
84	Aa	2326	U	O4'-C1'-N1	7.33	114.06	108.20
1	Ad	1255	U	O4'-C1'-C2'	-7.32	98.48	105.80
84	Aa	2060	C	O4'-C1'-N1	7.32	114.06	108.20
84	Aa	3036	C	O4'-C1'-N1	7.32	114.06	108.20
84	Aa	360	G	N1-C6-O6	7.32	124.29	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	695	G	C5-C6-O6	-7.32	124.21	128.60
84	Aa	2280	C	O4'-C1'-N1	7.32	114.06	108.20
84	Aa	636	C	O4'-C1'-N1	7.32	114.06	108.20
84	Aa	2682	A	O4'-C1'-N9	7.32	114.06	108.20
85	Ac	130	G	C5-C6-O6	-7.32	124.21	128.60
84	Aa	1390	G	C5-C6-O6	-7.32	124.21	128.60
84	Aa	2202	A	O4'-C1'-N9	7.32	114.06	108.20
1	Ad	1458	U	O4'-C1'-N1	7.32	114.05	108.20
84	Aa	177	C	O4'-C1'-N1	7.32	114.06	108.20
84	Aa	1205	C	O4'-C1'-N1	7.32	114.06	108.20
86	Ab	81	G	C5-C6-N1	-7.32	107.84	111.50
84	Aa	141	C	O4'-C1'-N1	7.32	114.05	108.20
84	Aa	716	A	O4'-C1'-N9	7.32	114.05	108.20
86	Ab	110	G	O4'-C1'-N9	7.32	114.05	108.20
84	Aa	773	G	C5-C6-O6	-7.31	124.21	128.60
84	Aa	2633	C	O4'-C1'-N1	7.31	114.05	108.20
84	Aa	2717	G	C5-C6-O6	-7.31	124.21	128.60
84	Aa	623	G	O4'-C1'-N9	7.31	114.05	108.20
84	Aa	3082	G	O4'-C1'-N9	7.31	114.05	108.20
1	Ad	349	U	N1-C1'-C2'	-7.31	103.96	112.00
84	Aa	1180	C	C2-N1-C1'	7.31	126.84	118.80
85	Ac	20	U	O4'-C1'-N1	7.31	114.05	108.20
84	Aa	87	A	C5-C6-N1	-7.31	114.05	117.70
84	Aa	106	G	N1-C6-O6	7.31	124.28	119.90
84	Aa	2809	U	O4'-C1'-N1	7.31	114.05	108.20
84	Aa	922	U	O4'-C1'-N1	7.30	114.04	108.20
84	Aa	1371	G	O4'-C1'-N9	7.30	114.04	108.20
84	Aa	2925	U	O4'-C1'-N1	7.30	114.04	108.20
1	Ad	398	C	N1-C1'-C2'	7.30	123.49	114.00
1	Ad	1801	A	O4'-C1'-N9	7.30	114.04	108.20
84	Aa	568	C	O4'-C1'-N1	7.30	114.04	108.20
84	Aa	662	G	C5-C6-O6	-7.30	124.22	128.60
1	Ad	1470	G	O4'-C1'-N9	7.30	114.04	108.20
84	Aa	3100	C	O4'-C1'-N1	7.30	114.04	108.20
86	Ab	80	A	C5-C6-N1	-7.30	114.05	117.70
84	Aa	826	C	O4'-C1'-N1	7.30	114.04	108.20
84	Aa	2106	U	P-O3'-C3'	7.30	128.46	119.70
84	Aa	2230	C	O4'-C1'-N1	7.30	114.04	108.20
85	Ac	4	C	N3-C4-N4	7.30	123.11	118.00
85	Ac	43	A	O4'-C1'-N9	7.30	114.04	108.20
84	Aa	468	U	O4'-C1'-N1	7.30	114.04	108.20
84	Aa	980	C	O4'-C1'-N1	7.30	114.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2934	C	O4'-C1'-N1	7.30	114.04	108.20
86	Ab	48	G	O4'-C1'-N9	7.30	114.04	108.20
84	Aa	139	U	O4'-C1'-N1	7.29	114.03	108.20
84	Aa	271	G	N1-C6-O6	7.29	124.28	119.90
84	Aa	1072	C	O4'-C1'-N1	7.29	114.03	108.20
1	Ad	1623	C	O4'-C1'-C2'	-7.29	98.51	105.80
1	Ad	1709	U	C3'-C2'-C1'	7.29	107.33	101.50
84	Aa	526	A	P-O3'-C3'	7.29	128.45	119.70
84	Aa	770	U	O4'-C1'-N1	7.29	114.03	108.20
84	Aa	3097	G	O4'-C1'-N9	7.29	114.03	108.20
86	Ab	55	A	C5-C6-N6	-7.29	117.87	123.70
84	Aa	36	U	O4'-C1'-N1	7.29	114.03	108.20
84	Aa	525	A	O4'-C1'-N9	7.29	114.03	108.20
84	Aa	1339	C	O4'-C1'-N1	7.29	114.03	108.20
84	Aa	517	G	C5-C6-O6	-7.29	124.23	128.60
84	Aa	1763	C	O4'-C1'-N1	7.29	114.03	108.20
84	Aa	2929	C	O4'-C1'-N1	7.29	114.03	108.20
1	Ad	996	G	O4'-C1'-N9	7.28	114.03	108.20
84	Aa	254	G	O4'-C1'-N9	7.28	114.03	108.20
84	Aa	2121	U	O4'-C1'-N1	7.28	114.03	108.20
84	Aa	267	G	O4'-C1'-N9	7.28	114.03	108.20
84	Aa	1701	G	C5-C6-O6	-7.28	124.23	128.60
84	Aa	2392	G	C5-C6-O6	-7.28	124.23	128.60
84	Aa	35	U	O4'-C1'-N1	7.28	114.02	108.20
84	Aa	2784	U	O4'-C1'-N1	7.28	114.03	108.20
84	Aa	3377	G	C5-C6-O6	-7.28	124.23	128.60
84	Aa	651	A	P-O3'-C3'	7.28	128.44	119.70
84	Aa	2035	G	O4'-C1'-N9	7.28	114.02	108.20
84	Aa	1504	U	O4'-C1'-N1	7.28	114.02	108.20
84	Aa	1565	G	P-O5'-C5'	7.28	132.54	120.90
84	Aa	1938	U	O4'-C1'-N1	7.28	114.02	108.20
84	Aa	2941	G	O4'-C1'-N9	7.28	114.02	108.20
84	Aa	72	A	O4'-C1'-N9	7.28	114.02	108.20
84	Aa	1722	G	N1-C6-O6	7.28	124.27	119.90
84	Aa	2267	G	N1-C6-O6	7.28	124.27	119.90
84	Aa	326	C	O4'-C1'-N1	7.27	114.02	108.20
84	Aa	773	G	O4'-C1'-N9	7.27	114.02	108.20
84	Aa	2316	A	O4'-C1'-N9	7.27	114.02	108.20
84	Aa	3318	G	C5-C6-O6	-7.27	124.24	128.60
84	Aa	2530	G	N1-C6-O6	7.27	124.26	119.90
1	Ad	137	A	P-O3'-C3'	7.27	128.42	119.70
84	Aa	3202	G	O4'-C1'-N9	7.27	114.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1149	C	O4'-C1'-N1	7.27	114.01	108.20
84	Aa	1327	G	O4'-C1'-N9	7.27	114.01	108.20
84	Aa	1431	G	C5-C6-O6	-7.27	124.24	128.60
84	Aa	1614	G	O4'-C1'-N9	7.27	114.01	108.20
86	Ab	31	G	O4'-C1'-N9	7.27	114.01	108.20
1	Ad	508	U	O4'-C1'-N1	7.26	114.01	108.20
1	Ad	1062	C	O4'-C1'-C2'	-7.26	98.53	105.80
84	Aa	1665	G	O4'-C1'-N9	7.26	114.01	108.20
86	Ab	66	G	C6-C5-N7	-7.26	126.04	130.40
1	Ad	826	C	O4'-C1'-C2'	-7.26	98.54	105.80
84	Aa	1827	U	C5'-C4'-C3'	-7.26	104.38	116.00
71	CB	265	TYR	CB-CG-CD2	-7.26	116.64	121.00
84	Aa	2966	G	C5-C6-O6	-7.26	124.24	128.60
1	Ad	1472	G	N9-C1'-C2'	7.26	123.44	114.00
84	Aa	1995	U	O4'-C1'-N1	7.26	114.01	108.20
84	Aa	2926	U	O4'-C1'-N1	7.26	114.01	108.20
85	Ac	29	U	O4'-C1'-N1	7.26	114.01	108.20
84	Aa	202	G	C5-C6-O6	-7.26	124.25	128.60
1	Ad	945	A	N9-C1'-C2'	-7.26	104.02	112.00
84	Aa	18	G	N1-C6-O6	7.26	124.25	119.90
84	Aa	463	G	N1-C6-O6	7.26	124.25	119.90
84	Aa	1385	C	O4'-C1'-N1	7.26	114.00	108.20
84	Aa	2481	C	O4'-C1'-N1	7.26	114.00	108.20
84	Aa	3059	C	C2-N1-C1'	7.26	126.78	118.80
1	Ad	1372	C	C3'-C2'-C1'	7.25	107.30	101.50
84	Aa	173	C	O4'-C1'-N1	7.25	114.00	108.20
84	Aa	807	C	O4'-C1'-N1	7.25	114.00	108.20
84	Aa	2394	G	O4'-C1'-N9	7.25	114.00	108.20
84	Aa	2116	G	N1-C6-O6	7.25	124.25	119.90
84	Aa	2379	U	O4'-C1'-N1	7.25	114.00	108.20
1	Ad	1464	G	C1'-O4'-C4'	-7.25	104.10	109.90
85	Ac	111	G	C5-C6-O6	-7.25	124.25	128.60
1	Ad	1250	C	C3'-C2'-C1'	-7.25	95.70	101.50
84	Aa	44	A	O4'-C1'-N9	7.25	114.00	108.20
84	Aa	614	C	O4'-C1'-N1	7.25	114.00	108.20
84	Aa	1171	U	O4'-C1'-N1	7.25	114.00	108.20
84	Aa	2356	A	C4-C5-C6	7.25	120.62	117.00
84	Aa	2727	U	O4'-C1'-N1	7.25	114.00	108.20
86	Ab	18	C	N3-C4-N4	7.25	123.07	118.00
84	Aa	794	G	C5-C6-O6	-7.25	124.25	128.60
84	Aa	865	U	O4'-C1'-N1	7.24	113.99	108.20
1	Ad	26	A	O4'-C1'-N9	7.24	113.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	744	G	O4'-C4'-C3'	-7.24	96.76	104.00
1	Ad	1523	A	O4'-C1'-C2'	-7.24	98.56	105.80
84	Aa	2335	U	O4'-C1'-N1	7.24	113.99	108.20
84	Aa	2775	C	O4'-C1'-N1	7.24	113.99	108.20
1	Ad	352	U	O4'-C1'-N1	7.24	113.99	108.20
1	Ad	1105	G	O4'-C1'-C2'	7.24	114.11	107.60
18	BN	128	TYR	CB-CG-CD2	7.24	125.34	121.00
84	Aa	1085	G	O4'-C1'-N9	7.24	113.99	108.20
84	Aa	2515	C	O4'-C1'-N1	7.24	113.99	108.20
84	Aa	2770	U	O4'-C1'-N1	7.24	113.99	108.20
1	Ad	1429	U	O4'-C1'-N1	7.24	113.99	108.20
1	Ad	1235	U	C3'-C2'-C1'	7.24	107.29	101.50
1	Ad	1339	C	O4'-C1'-N1	7.24	113.99	108.20
1	Ad	1647	C	C3'-C2'-C1'	7.24	107.29	101.50
84	Aa	747	A	C5-C6-N6	-7.24	117.91	123.70
84	Aa	1425	G	O4'-C1'-N9	7.24	113.99	108.20
84	Aa	403	U	O4'-C1'-N1	7.23	113.99	108.20
84	Aa	1090	C	O4'-C1'-N1	7.23	113.99	108.20
84	Aa	1187	G	N1-C6-O6	7.23	124.24	119.90
84	Aa	1198	G	N1-C6-O6	7.23	124.24	119.90
84	Aa	2492	C	O4'-C1'-N1	7.23	113.99	108.20
84	Aa	2959	G	C5-C6-O6	-7.23	124.26	128.60
84	Aa	90	G	C5-C6-O6	-7.23	124.26	128.60
84	Aa	816	G	C5-C6-O6	-7.23	124.26	128.60
84	Aa	1924	G	O4'-C1'-N9	7.23	113.98	108.20
84	Aa	2446	G	N1-C6-O6	7.23	124.24	119.90
84	Aa	2604	A	C5-C6-N1	-7.23	114.08	117.70
1	Ad	54	C	N1-C1'-C2'	-7.23	104.05	112.00
1	Ad	1391	G	C1'-O4'-C4'	-7.23	104.12	109.90
84	Aa	2708	A	C5-C6-N6	-7.23	117.92	123.70
84	Aa	3016	C	O4'-C1'-N1	7.23	113.98	108.20
1	Ad	1444	G	C3'-C2'-C1'	7.23	107.28	101.50
84	Aa	2293	U	O4'-C1'-N1	7.23	113.98	108.20
1	Ad	1121	A	O4'-C1'-N9	7.22	113.98	108.20
84	Aa	1652	G	C5-C6-O6	-7.22	124.27	128.60
84	Aa	2407	U	O4'-C1'-N1	7.22	113.98	108.20
42	CJ	70	TYR	CB-CG-CD2	7.22	125.33	121.00
84	Aa	45	U	O4'-C1'-N1	7.22	113.98	108.20
84	Aa	220	G	N1-C6-O6	7.22	124.23	119.90
84	Aa	333	G	N1-C6-O6	7.22	124.23	119.90
84	Aa	675	C	O4'-C1'-N1	7.22	113.98	108.20
84	Aa	2180	G	O4'-C1'-N9	7.22	113.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
71	CB	197	TYR	CB-CG-CD1	-7.22	116.67	121.00
1	Ad	412	C	C3'-C2'-C1'	7.22	107.28	101.50
84	Aa	379	U	O4'-C1'-N1	7.22	113.98	108.20
84	Aa	526	A	C5'-C4'-C3'	-7.22	104.45	116.00
84	Aa	270	G	O4'-C1'-N9	7.22	113.97	108.20
84	Aa	708	C	O4'-C1'-N1	7.22	113.97	108.20
84	Aa	1055	U	O4'-C1'-N1	7.22	113.97	108.20
1	Ad	123	U	O4'-C1'-N1	7.22	113.97	108.20
84	Aa	467	C	O4'-C1'-N1	7.22	113.97	108.20
84	Aa	603	G	N1-C6-O6	7.22	124.23	119.90
84	Aa	1510	G	O4'-C1'-N9	7.22	113.97	108.20
84	Aa	2376	G	C5-C6-O6	-7.22	124.27	128.60
84	Aa	2646	A	C5-C6-N6	-7.22	117.93	123.70
84	Aa	1469	G	C5-C6-O6	-7.21	124.27	128.60
86	Ab	7	G	O4'-C1'-N9	7.21	113.97	108.20
84	Aa	834	G	O4'-C1'-N9	7.21	113.97	108.20
84	Aa	2566	C	N3-C4-N4	7.21	123.05	118.00
1	Ad	334	G	O4'-C1'-C2'	7.21	114.09	107.60
84	Aa	836	G	C5'-C4'-C3'	-7.21	104.46	116.00
84	Aa	2289	U	O4'-C1'-N1	7.21	113.97	108.20
85	Ac	15	G	C5-C6-O6	-7.21	124.27	128.60
1	Ad	919	G	O4'-C1'-N9	7.21	113.97	108.20
1	Ad	1303	G	O4'-C1'-C2'	7.21	114.09	107.60
84	Aa	86	U	O4'-C1'-N1	7.21	113.97	108.20
84	Aa	2589	G	C5-C6-O6	-7.21	124.28	128.60
84	Aa	2779	G	P-O3'-C3'	7.21	128.35	119.70
84	Aa	1401	C	O4'-C1'-N1	7.21	113.97	108.20
84	Aa	1764	G	C5-C6-O6	-7.21	124.28	128.60
1	Ad	1218	U	O4'-C1'-N1	7.21	113.96	108.20
84	Aa	50	A	C5-C6-N6	-7.21	117.94	123.70
84	Aa	1060	U	O4'-C1'-N1	7.20	113.96	108.20
84	Aa	2483	A	C5-C6-N6	-7.20	117.94	123.70
84	Aa	2997	C	C2-N1-C1'	7.20	126.72	118.80
84	Aa	3255	U	O4'-C1'-N1	7.20	113.96	108.20
84	Aa	390	G	C5-C6-O6	-7.20	124.28	128.60
84	Aa	771	G	C5-C6-O6	-7.20	124.28	128.60
84	Aa	862	G	C5-C6-O6	-7.20	124.28	128.60
84	Aa	3389	C	O4'-C1'-N1	7.20	113.96	108.20
86	Ab	70	G	C5-C6-O6	-7.20	124.28	128.60
1	Ad	645	G	O4'-C1'-N9	7.20	113.96	108.20
84	Aa	989	U	O4'-C1'-N1	7.20	113.96	108.20
84	Aa	1018	C	O4'-C1'-N1	7.20	113.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	163	U	O4'-C1'-N1	7.20	113.96	108.20
84	Aa	971	G	C5-C6-O6	-7.20	124.28	128.60
84	Aa	3250	C	O4'-C1'-N1	7.20	113.96	108.20
86	Ab	14	C	N3-C4-C5	-7.20	119.02	121.90
84	Aa	514	G	O4'-C1'-N9	7.20	113.96	108.20
84	Aa	1484	A	N1-C6-N6	7.20	122.92	118.60
84	Aa	1718	U	O4'-C1'-N1	7.20	113.96	108.20
84	Aa	2557	C	N3-C4-C5	-7.20	119.02	121.90
84	Aa	3000	U	O4'-C1'-N1	7.20	113.96	108.20
85	Ac	32	C	O4'-C1'-N1	7.20	113.96	108.20
86	Ab	113	G	O4'-C1'-N9	7.20	113.96	108.20
84	Aa	3354	A	O4'-C1'-N9	7.19	113.96	108.20
84	Aa	496	U	O4'-C1'-N1	7.19	113.95	108.20
1	Ad	1672	U	O4'-C1'-N1	7.19	113.95	108.20
84	Aa	97	G	C5-C6-O6	-7.19	124.28	128.60
84	Aa	1241	G	C5-C6-O6	-7.19	124.29	128.60
84	Aa	1265	G	N1-C6-O6	7.19	124.21	119.90
84	Aa	1380	C	O4'-C1'-N1	7.19	113.95	108.20
84	Aa	2453	G	C5-C6-O6	-7.19	124.28	128.60
84	Aa	3067	G	C5-C6-O6	-7.19	124.29	128.60
84	Aa	566	G	C5-C6-O6	-7.19	124.29	128.60
1	Ad	865	U	O4'-C1'-N1	7.19	113.95	108.20
84	Aa	1074	C	O4'-C1'-N1	7.19	113.95	108.20
1	Ad	1330	A	O4'-C1'-N9	7.19	113.95	108.20
84	Aa	313	C	O4'-C1'-N1	7.19	113.95	108.20
84	Aa	1329	G	O4'-C1'-N9	7.19	113.95	108.20
84	Aa	994	U	O4'-C1'-N1	7.18	113.95	108.20
84	Aa	2955	U	O4'-C1'-N1	7.18	113.95	108.20
84	Aa	2427	C	O4'-C1'-N1	7.18	113.95	108.20
84	Aa	2972	C	O4'-C1'-N1	7.18	113.95	108.20
86	Ab	55	A	O4'-C1'-N9	7.18	113.95	108.20
84	Aa	1250	G	N1-C6-O6	7.18	124.21	119.90
84	Aa	1402	G	O4'-C1'-N9	7.18	113.94	108.20
84	Aa	2613	G	C5-C6-O6	-7.18	124.29	128.60
86	Ab	72	G	C8-N9-C4	-7.18	103.53	106.40
84	Aa	2725	U	O4'-C1'-N1	7.18	113.94	108.20
84	Aa	2915	U	O4'-C1'-N1	7.18	113.94	108.20
84	Aa	713	G	O4'-C1'-N9	7.18	113.94	108.20
84	Aa	934	C	O4'-C1'-N1	7.18	113.94	108.20
84	Aa	1935	G	O4'-C1'-N9	7.18	113.94	108.20
1	Ad	1316	A	N9-C1'-C2'	7.17	123.33	114.00
84	Aa	1142	G	O4'-C1'-N9	7.17	113.94	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2994	U	O4'-C1'-N1	7.17	113.94	108.20
1	Ad	426	G	O4'-C1'-N9	7.17	113.94	108.20
57	Ce	67	TYR	CB-CG-CD2	-7.17	116.70	121.00
84	Aa	432	G	C5-C6-O6	-7.17	124.30	128.60
84	Aa	1041	C	O4'-C1'-N1	7.17	113.94	108.20
84	Aa	1521	U	O4'-C1'-N1	7.17	113.94	108.20
1	Ad	406	C	C3'-C2'-C1'	7.17	107.24	101.50
1	Ad	1569	U	O4'-C1'-N1	7.17	113.93	108.20
1	Ad	1720	G	P-O3'-C3'	7.17	128.30	119.70
84	Aa	1697	G	O4'-C1'-N9	7.17	113.93	108.20
84	Aa	1705	A	O4'-C1'-N9	7.17	113.93	108.20
84	Aa	1975	G	O4'-C1'-N9	7.17	113.93	108.20
1	Ad	1554	G	O4'-C1'-C2'	7.17	114.05	107.60
84	Aa	410	G	O4'-C1'-N9	7.17	113.93	108.20
84	Aa	2004	U	O4'-C1'-N1	7.17	113.93	108.20
1	Ad	1796	G	N9-C1'-C2'	7.16	123.31	114.00
84	Aa	1034	U	O4'-C1'-N1	7.16	113.93	108.20
84	Aa	2245	G	C5-C6-O6	-7.16	124.30	128.60
84	Aa	3042	U	O4'-C1'-N1	7.16	113.93	108.20
84	Aa	41	C	O4'-C1'-N1	7.16	113.93	108.20
84	Aa	752	U	O4'-C1'-N1	7.16	113.93	108.20
86	Ab	44	C	O4'-C1'-N1	7.16	113.93	108.20
1	Ad	117	U	O4'-C1'-N1	7.16	113.93	108.20
1	Ad	149	G	O4'-C1'-N9	7.16	113.93	108.20
84	Aa	671	C	O4'-C1'-N1	7.16	113.93	108.20
84	Aa	891	U	O4'-C1'-N1	7.16	113.93	108.20
84	Aa	2253	U	O4'-C1'-N1	7.16	113.93	108.20
1	Ad	1663	A	O4'-C1'-C2'	-7.16	98.64	105.80
84	Aa	311	G	O4'-C1'-N9	7.16	113.93	108.20
84	Aa	1232	A	C5-C6-N1	-7.16	114.12	117.70
84	Aa	1433	U	O4'-C1'-N1	7.16	113.93	108.20
84	Aa	1959	U	O4'-C1'-N1	7.16	113.93	108.20
1	Ad	708	G	O4'-C1'-N9	-7.16	102.47	108.20
84	Aa	2395	G	N1-C6-O6	7.16	124.19	119.90
84	Aa	1676	A	C5-C6-N1	-7.16	114.12	117.70
84	Aa	2333	U	O4'-C1'-N1	7.16	113.92	108.20
1	Ad	475	A	P-O3'-C3'	7.15	128.28	119.70
84	Aa	581	G	C5-C6-O6	-7.15	124.31	128.60
84	Aa	1064	U	O4'-C1'-N1	7.15	113.92	108.20
84	Aa	1531	G	N1-C6-O6	7.15	124.19	119.90
84	Aa	2302	G	C5-C6-O6	-7.15	124.31	128.60
1	Ad	710	G	O4'-C1'-N9	7.15	113.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3108	U	O4'-C1'-N1	7.15	113.92	108.20
84	Aa	1302	C	O4'-C1'-N1	7.15	113.92	108.20
84	Aa	1315	G	N1-C6-O6	7.15	124.19	119.90
84	Aa	2070	C	O4'-C1'-N1	7.15	113.92	108.20
84	Aa	3304	U	O4'-C1'-N1	7.15	113.92	108.20
1	Ad	242	A	O4'-C1'-N9	7.15	113.92	108.20
84	Aa	2220	U	O4'-C1'-N1	7.15	113.92	108.20
1	Ad	800	U	C3'-C2'-C1'	-7.15	95.78	101.50
84	Aa	706	U	O4'-C1'-N1	7.15	113.92	108.20
84	Aa	1786	G	C5-C6-O6	-7.15	124.31	128.60
84	Aa	2945	G	C5-C6-O6	-7.15	124.31	128.60
1	Ad	164	C	O4'-C1'-N1	7.15	113.92	108.20
1	Ad	1260	A	C3'-C2'-C1'	7.15	107.22	101.50
84	Aa	2092	C	N3-C4-C5	-7.15	119.04	121.90
86	Ab	4	U	O4'-C1'-N1	7.15	113.92	108.20
84	Aa	2346	U	O4'-C1'-N1	7.14	113.92	108.20
84	Aa	2383	G	C5-C6-O6	-7.14	124.31	128.60
1	Ad	1194	C	P-O3'-C3'	7.14	128.27	119.70
84	Aa	720	G	C5-C6-O6	-7.14	124.31	128.60
1	Ad	31	C	C3'-C2'-C1'	7.14	107.21	101.50
1	Ad	339	G	N9-C1'-C2'	7.14	123.28	114.00
84	Aa	554	C	C4'-C3'-O3'	7.14	127.28	113.00
84	Aa	2868	C	O4'-C1'-N1	7.14	113.91	108.20
84	Aa	3225	G	O4'-C1'-N9	7.14	113.91	108.20
1	Ad	258	U	O4'-C1'-N1	7.14	113.91	108.20
1	Ad	593	C	O4'-C1'-N1	7.14	113.91	108.20
1	Ad	1042	C	N1-C1'-C2'	7.14	123.28	114.00
84	Aa	1265	G	C5-C6-O6	-7.14	124.32	128.60
1	Ad	308	U	O4'-C1'-N1	7.14	113.91	108.20
84	Aa	157	G	C5-C6-O6	-7.14	124.32	128.60
84	Aa	330	C	O4'-C1'-N1	7.14	113.91	108.20
84	Aa	2451	G	O4'-C1'-N9	7.14	113.91	108.20
84	Aa	1494	A	O4'-C1'-N9	7.13	113.91	108.20
84	Aa	2307	A	C5-C6-N1	-7.13	114.13	117.70
84	Aa	3301	G	C5-C6-O6	-7.13	124.32	128.60
1	Ad	1587	G	O4'-C1'-N9	7.13	113.91	108.20
84	Aa	1948	G	O4'-C1'-N9	7.13	113.91	108.20
84	Aa	570	G	O4'-C1'-N9	7.13	113.90	108.20
84	Aa	2077	C	P-O3'-C3'	7.13	128.25	119.70
84	Aa	2310	G	N1-C6-O6	7.13	124.18	119.90
84	Aa	2081	C	C2'-C3'-O3'	7.13	125.18	109.50
85	Ac	21	C	O4'-C1'-N1	7.13	113.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1248	A	C3'-C2'-C1'	-7.13	95.80	101.50
1	Ad	1725	C	O4'-C1'-N1	7.13	113.90	108.20
84	Aa	2905	A	C4-C5-C6	7.13	120.56	117.00
1	Ad	1528	U	C1'-O4'-C4'	7.12	115.60	109.90
84	Aa	2093	G	C4-N9-C1'	-7.12	117.24	126.50
84	Aa	2341	U	O4'-C1'-N1	7.12	113.90	108.20
84	Aa	3170	C	O4'-C1'-N1	7.12	113.90	108.20
84	Aa	223	C	O4'-C1'-N1	7.12	113.90	108.20
84	Aa	2836	G	N1-C6-O6	7.12	124.17	119.90
1	Ad	530	A	P-O3'-C3'	7.12	128.25	119.70
84	Aa	2856	U	O4'-C1'-N1	7.12	113.90	108.20
1	Ad	1647	C	O4'-C1'-C2'	-7.12	98.68	105.80
84	Aa	321	A	N1-C6-N6	7.12	122.87	118.60
84	Aa	931	C	O4'-C1'-N1	7.12	113.89	108.20
85	Ac	52	A	C5-C6-N6	-7.12	118.01	123.70
84	Aa	1948	G	N1-C6-O6	7.12	124.17	119.90
84	Aa	1439	U	O4'-C1'-N1	7.12	113.89	108.20
84	Aa	2242	G	O4'-C1'-N9	7.12	113.89	108.20
84	Aa	2528	U	O4'-C1'-N1	7.12	113.89	108.20
84	Aa	3029	G	O4'-C1'-N9	7.12	113.89	108.20
84	Aa	3333	C	C5'-C4'-O4'	7.12	117.64	109.10
84	Aa	1556	G	C5-C6-O6	-7.11	124.33	128.60
84	Aa	2801	A	C5-C6-N1	-7.11	114.14	117.70
84	Aa	3286	G	C5-C6-O6	-7.11	124.33	128.60
84	Aa	2434	G	N1-C6-O6	7.11	124.17	119.90
84	Aa	745	G	O4'-C1'-N9	7.11	113.89	108.20
84	Aa	1538	A	C5-C6-N6	-7.11	118.01	123.70
84	Aa	2385	A	C4-C5-C6	7.11	120.56	117.00
84	Aa	2611	G	O4'-C1'-N9	7.11	113.89	108.20
84	Aa	2701	G	C5-C6-O6	-7.11	124.33	128.60
1	Ad	99	U	N1-C1'-C2'	7.11	123.24	114.00
1	Ad	414	A	C1'-O4'-C4'	-7.11	104.21	109.90
1	Ad	716	A	C4'-C3'-O3'	-7.11	94.47	109.40
1	Ad	323	U	P-O3'-C3'	7.11	128.23	119.70
1	Ad	1184	C	C3'-C2'-C1'	7.11	107.19	101.50
3	Af	21	C	O4'-C1'-C2'	-7.11	98.69	105.80
84	Aa	456	G	C5-C6-O6	-7.11	124.34	128.60
84	Aa	1280	U	O4'-C1'-N1	7.11	113.89	108.20
1	Ad	391	A	C1'-O4'-C4'	7.10	115.58	109.90
84	Aa	765	U	O4'-C1'-N1	7.10	113.88	108.20
86	Ab	82	G	N3-C2-N2	7.10	124.87	119.90
84	Aa	513	C	C5'-C4'-O4'	7.10	117.62	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1372	U	O4'-C1'-N1	7.10	113.88	108.20
84	Aa	1650	G	O4'-C1'-N9	7.10	113.88	108.20
84	Aa	1662	G	C5-C6-O6	-7.10	124.34	128.60
1	Ad	480	U	N1-C1'-C2'	7.10	123.23	114.00
84	Aa	1350	G	O4'-C1'-N9	7.10	113.88	108.20
84	Aa	637	C	P-O3'-C3'	-7.10	111.19	119.70
1	Ad	1313	G	O4'-C1'-N9	7.09	113.88	108.20
84	Aa	1358	C	O4'-C1'-N1	7.09	113.88	108.20
84	Aa	2838	C	C6-N1-C1'	-7.09	112.29	120.80
84	Aa	3179	G	O4'-C1'-N9	7.09	113.88	108.20
86	Ab	73	U	C5'-C4'-O4'	7.09	117.61	109.10
84	Aa	455	U	O4'-C1'-N1	7.09	113.87	108.20
84	Aa	476	C	O4'-C1'-N1	7.09	113.87	108.20
84	Aa	1683	U	O4'-C1'-N1	7.09	113.87	108.20
84	Aa	2430	C	O4'-C1'-N1	7.09	113.87	108.20
84	Aa	2746	G	O4'-C1'-N9	7.09	113.87	108.20
1	Ad	151	A	O4'-C1'-N9	7.09	113.87	108.20
1	Ad	1154	G	O4'-C1'-C2'	7.09	113.98	107.60
84	Aa	293	A	O4'-C1'-N9	7.09	113.87	108.20
84	Aa	1088	A	C5-C6-N6	-7.09	118.03	123.70
84	Aa	1526	A	C4-C5-C6	7.09	120.54	117.00
84	Aa	3200	A	O4'-C1'-N9	7.09	113.87	108.20
86	Ab	71	A	C5-N7-C8	7.09	107.44	103.90
84	Aa	1924	G	N1-C6-O6	7.08	124.15	119.90
1	Ad	1172	G	C1'-O4'-C4'	-7.08	104.23	109.90
1	Ad	1376	A	C1'-O4'-C4'	7.08	115.57	109.90
84	Aa	1304	G	C5-C6-O6	-7.08	124.35	128.60
85	Ac	119	C	O4'-C1'-N1	7.08	113.87	108.20
84	Aa	440	U	O4'-C1'-N1	7.08	113.86	108.20
84	Aa	1526	A	C5-C6-N1	-7.08	114.16	117.70
84	Aa	3165	C	O4'-C1'-N1	7.08	113.86	108.20
1	Ad	76	U	O4'-C1'-N1	7.08	113.86	108.20
1	Ad	161	G	C3'-C2'-C1'	-7.08	95.84	101.50
84	Aa	510	C	O4'-C1'-N1	7.08	113.86	108.20
1	Ad	223	A	C1'-O4'-C4'	-7.08	104.24	109.90
84	Aa	644	U	O4'-C1'-N1	7.08	113.86	108.20
84	Aa	2078	G	C5-C6-O6	-7.08	124.35	128.60
84	Aa	3369	G	C5-C6-O6	-7.08	124.35	128.60
1	Ad	742	C	O4'-C1'-N1	7.08	113.86	108.20
1	Ad	1667	A	O4'-C1'-N9	7.08	113.86	108.20
1	Ad	792	U	N1-C1'-C2'	-7.08	104.22	112.00
84	Aa	921	C	O4'-C1'-N1	7.08	113.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1036	C	O4'-C1'-N1	7.08	113.86	108.20
84	Aa	1539	G	C5-C6-O6	-7.08	124.36	128.60
84	Aa	1649	G	O4'-C1'-N9	7.08	113.86	108.20
1	Ad	526	U	O4'-C1'-N1	7.07	113.86	108.20
84	Aa	666	U	O4'-C1'-N1	7.07	113.86	108.20
84	Aa	687	C	N3-C4-N4	7.07	122.95	118.00
84	Aa	2099	G	O4'-C1'-N9	7.07	113.86	108.20
84	Aa	377	C	O4'-C1'-N1	7.07	113.86	108.20
1	Ad	213	U	O4'-C1'-N1	7.07	113.86	108.20
1	Ad	535	C	C1'-O4'-C4'	-7.07	104.24	109.90
84	Aa	1025	G	C5-C6-O6	-7.07	124.36	128.60
84	Aa	1645	G	C5-C6-O6	-7.07	124.36	128.60
84	Aa	1729	G	C5-C6-O6	-7.07	124.36	128.60
1	Ad	1392	G	O4'-C1'-C2'	7.07	113.96	107.60
84	Aa	564	A	O4'-C1'-N9	7.07	113.85	108.20
84	Aa	574	C	O4'-C1'-N1	7.07	113.85	108.20
84	Aa	2903	G	C5-C6-O6	-7.07	124.36	128.60
1	Ad	1033	C	N1-C1'-C2'	7.06	123.18	114.00
86	Ab	78	C	C6-N1-C2	-7.06	117.47	120.30
86	Ab	86	G	O4'-C1'-N9	7.06	113.85	108.20
84	Aa	2340	G	O4'-C1'-N9	7.06	113.85	108.20
1	Ad	758	A	N9-C1'-C2'	7.06	123.18	114.00
58	Cj	84	ALA	N-CA-CB	7.06	119.98	110.10
84	Aa	247	C	O4'-C1'-N1	7.06	113.85	108.20
84	Aa	1909	G	C5-C6-O6	-7.06	124.36	128.60
84	Aa	2756	G	N3-C2-N2	7.06	124.84	119.90
84	Aa	2949	G	O4'-C1'-N9	7.06	113.85	108.20
1	Ad	430	G	O4'-C1'-C2'	7.06	113.95	107.60
1	Ad	1019	G	O4'-C1'-C2'	7.06	113.95	107.60
1	Ad	1235	U	O4'-C1'-C2'	-7.06	98.74	105.80
1	Ad	1255	U	N1-C1'-C2'	-7.06	104.24	112.00
84	Aa	299	G	N1-C6-O6	7.06	124.14	119.90
84	Aa	621	C	C6-N1-C1'	-7.06	112.33	120.80
84	Aa	1318	C	N3-C4-C5	-7.06	119.08	121.90
84	Aa	2444	U	O4'-C1'-N1	7.06	113.85	108.20
84	Aa	623	G	C5-C6-O6	-7.06	124.37	128.60
84	Aa	686	A	C5-C6-N6	-7.05	118.06	123.70
84	Aa	791	C	O4'-C1'-N1	7.05	113.84	108.20
84	Aa	3264	C	C2-N1-C1'	7.05	126.56	118.80
84	Aa	2336	C	O4'-C1'-N1	7.05	113.84	108.20
84	Aa	3237	G	C5-C6-O6	-7.05	124.37	128.60
84	Aa	818	G	N1-C6-O6	7.05	124.13	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1228	C	O4'-C1'-N1	7.05	113.84	108.20
84	Aa	1422	G	O4'-C1'-N9	7.05	113.84	108.20
84	Aa	2552	U	O4'-C1'-N1	7.05	113.84	108.20
84	Aa	870	G	C5-C6-O6	-7.05	124.37	128.60
84	Aa	1202	C	O4'-C1'-N1	7.05	113.84	108.20
84	Aa	1601	G	C5-C6-O6	-7.05	124.37	128.60
84	Aa	616	A	O4'-C1'-N9	7.05	113.84	108.20
1	Ad	1725	C	C1'-O4'-C4'	7.05	115.54	109.90
84	Aa	884	C	O4'-C1'-N1	7.05	113.84	108.20
84	Aa	1126	U	O4'-C1'-N1	7.05	113.84	108.20
84	Aa	2793	G	N1-C6-O6	7.04	124.13	119.90
1	Ad	176	A	O4'-C1'-C2'	-7.04	98.76	105.80
84	Aa	1513	C	O4'-C1'-N1	7.04	113.83	108.20
84	Aa	2163	G	C5'-C4'-O4'	-7.04	100.65	109.10
84	Aa	2635	G	N1-C6-O6	7.04	124.12	119.90
84	Aa	2932	A	C5-C6-N6	-7.04	118.07	123.70
84	Aa	1664	G	C5-C6-O6	-7.04	124.38	128.60
1	Ad	567	U	N1-C1'-C2'	7.04	123.15	114.00
84	Aa	1325	G	O4'-C1'-N9	7.04	113.83	108.20
84	Aa	1509	G	N1-C6-O6	7.04	124.12	119.90
84	Aa	1868	C	N3-C4-C5	-7.04	119.08	121.90
86	Ab	68	G	C5-C6-O6	-7.04	124.38	128.60
84	Aa	193	U	O4'-C1'-N1	7.04	113.83	108.20
84	Aa	1898	G	C5-C6-O6	-7.04	124.38	128.60
84	Aa	3075	G	C5-C6-O6	-7.04	124.38	128.60
1	Ad	1584	A	C3'-C2'-C1'	7.04	107.13	101.50
84	Aa	1282	A	O4'-C1'-N9	7.04	113.83	108.20
84	Aa	2536	G	C5-C6-O6	-7.04	124.38	128.60
1	Ad	478	A	O4'-C1'-N9	7.03	113.83	108.20
84	Aa	2602	U	O4'-C1'-N1	7.03	113.83	108.20
84	Aa	1563	G	P-O3'-C3'	7.03	128.14	119.70
84	Aa	2208	A	O4'-C1'-N9	7.03	113.83	108.20
84	Aa	3079	G	C5-C6-O6	-7.03	124.38	128.60
84	Aa	740	G	C5-C6-O6	-7.03	124.38	128.60
84	Aa	1851	U	O4'-C1'-N1	7.03	113.82	108.20
86	Ab	90	A	C4-C5-C6	7.03	120.52	117.00
84	Aa	992	U	O4'-C1'-N1	7.03	113.82	108.20
84	Aa	1258	C	N3-C4-C5	-7.03	119.09	121.90
84	Aa	1869	U	O4'-C1'-N1	7.03	113.82	108.20
86	Ab	17	G	N1-C6-O6	7.03	124.12	119.90
48	CD	183	PHE	CB-CG-CD1	-7.03	115.88	120.80
84	Aa	512	G	N3-C2-N2	7.03	124.82	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1989	G	O4'-C1'-N9	7.03	113.82	108.20
84	Aa	2524	U	O4'-C1'-N1	7.03	113.82	108.20
84	Aa	2570	U	O4'-C1'-N1	7.03	113.82	108.20
84	Aa	2573	U	O4'-C1'-N1	7.03	113.82	108.20
85	Ac	90	C	O4'-C1'-N1	7.03	113.82	108.20
84	Aa	956	G	C5-C6-O6	-7.02	124.39	128.60
84	Aa	2188	U	O4'-C1'-N1	7.02	113.82	108.20
1	Ad	351	G	C3'-C2'-C1'	-7.02	95.88	101.50
84	Aa	1669	C	O4'-C1'-N1	7.02	113.82	108.20
84	Aa	2088	C	N3-C4-C5	-7.02	119.09	121.90
84	Aa	2190	C	O4'-C1'-N1	7.02	113.82	108.20
84	Aa	3146	C	O4'-C1'-N1	7.02	113.82	108.20
1	Ad	1088	G	O4'-C1'-N9	7.02	113.82	108.20
84	Aa	951	C	O4'-C1'-N1	7.02	113.82	108.20
84	Aa	1079	G	C5-C6-O6	-7.02	124.39	128.60
84	Aa	1106	G	C5-C6-O6	-7.02	124.39	128.60
1	Ad	1	U	O4'-C1'-N1	7.02	113.81	108.20
84	Aa	239	C	O4'-C1'-N1	7.02	113.81	108.20
84	Aa	972	C	O4'-C1'-N1	7.02	113.82	108.20
84	Aa	1993	G	C5-C6-O6	-7.02	124.39	128.60
84	Aa	74	G	N1-C6-O6	7.02	124.11	119.90
84	Aa	1170	U	O4'-C1'-N1	7.02	113.81	108.20
84	Aa	1187	G	O4'-C1'-N9	7.02	113.81	108.20
84	Aa	1548	U	O4'-C1'-N1	7.02	113.81	108.20
84	Aa	1625	G	C5-C6-O6	-7.02	124.39	128.60
84	Aa	2080	G	O4'-C1'-N9	7.02	113.81	108.20
84	Aa	3274	G	O4'-C1'-N9	7.02	113.81	108.20
85	Ac	35	C	O4'-C1'-N1	7.02	113.81	108.20
85	Ac	78	G	N1-C6-O6	7.02	124.11	119.90
1	Ad	372	U	N1-C1'-C2'	-7.01	104.28	112.00
1	Ad	904	G	O4'-C1'-N9	7.01	113.81	108.20
84	Aa	539	C	O4'-C1'-N1	7.01	113.81	108.20
84	Aa	1528	G	N1-C6-O6	7.01	124.11	119.90
84	Aa	2964	U	O4'-C1'-N1	7.01	113.81	108.20
84	Aa	3279	G	C5-C6-O6	-7.01	124.39	128.60
84	Aa	181	G	N1-C6-O6	7.01	124.11	119.90
84	Aa	331	G	O4'-C1'-N9	7.01	113.81	108.20
84	Aa	507	C	N3-C4-N4	7.01	122.91	118.00
85	Ac	56	G	C5-C6-O6	-7.01	124.39	128.60
86	Ab	118	C	C2-N3-C4	7.01	123.41	119.90
1	Ad	1124	G	O4'-C1'-C2'	7.01	113.91	107.60
1	Ad	1489	A	O4'-C1'-N9	7.01	113.81	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1567	G	C3'-C2'-C1'	-7.01	95.89	101.50
84	Aa	678	G	C5-C6-O6	-7.01	124.39	128.60
84	Aa	815	G	O4'-C1'-N9	7.01	113.81	108.20
84	Aa	1991	U	O4'-C1'-N1	7.01	113.81	108.20
84	Aa	2151	G	C5-C6-O6	-7.01	124.39	128.60
84	Aa	2466	G	C5-C6-O6	-7.01	124.39	128.60
84	Aa	1730	U	O4'-C1'-N1	7.01	113.81	108.20
57	Ce	26	TYR	CB-CG-CD2	-7.01	116.80	121.00
84	Aa	835	G	C5-C6-O6	-7.01	124.40	128.60
84	Aa	2789	G	C5-C6-O6	-7.01	124.40	128.60
85	Ac	24	G	O4'-C1'-N9	7.01	113.81	108.20
86	Ab	36	C	O4'-C1'-N1	7.01	113.81	108.20
1	Ad	1164	C	O4'-C1'-N1	7.00	113.80	108.20
84	Aa	2726	U	O4'-C1'-N1	7.00	113.80	108.20
84	Aa	2956	U	O4'-C1'-N1	7.00	113.80	108.20
1	Ad	975	A	C3'-C2'-C1'	7.00	107.10	101.50
1	Ad	1080	C	C3'-C2'-C1'	7.00	107.10	101.50
84	Aa	152	C	O4'-C1'-N1	7.00	113.80	108.20
84	Aa	275	G	N3-C2-N2	7.00	124.80	119.90
85	Ac	7	U	O4'-C1'-N1	7.00	113.80	108.20
84	Aa	106	G	O4'-C1'-N9	7.00	113.80	108.20
84	Aa	3384	G	C5-C6-O6	-7.00	124.40	128.60
85	Ac	107	G	C5-C6-O6	-7.00	124.40	128.60
84	Aa	720	G	P-O3'-C3'	-7.00	111.30	119.70
1	Ad	179	A	C3'-C2'-C1'	7.00	107.10	101.50
84	Aa	2163	G	C5-C6-O6	-6.99	124.40	128.60
84	Aa	2206	U	O4'-C1'-N1	6.99	113.79	108.20
84	Aa	1722	G	O4'-C1'-N9	6.99	113.79	108.20
84	Aa	2947	G	N1-C6-O6	6.99	124.09	119.90
84	Aa	1445	U	O4'-C1'-N1	6.99	113.79	108.20
84	Aa	1853	C	N3-C4-C5	-6.99	119.10	121.90
1	Ad	1405	U	C5'-C4'-C3'	-6.99	104.82	116.00
84	Aa	627	G	C5-C6-O6	-6.99	124.41	128.60
84	Aa	2914	G	O4'-C1'-N9	6.99	113.79	108.20
84	Aa	1829	G	C5-C6-O6	-6.99	124.41	128.60
1	Ad	873	G	N9-C1'-C2'	-6.99	104.32	112.00
84	Aa	709	G	N1-C6-O6	6.99	124.09	119.90
84	Aa	787	G	O4'-C1'-N9	6.99	113.79	108.20
84	Aa	1076	G	O4'-C1'-N9	6.99	113.79	108.20
84	Aa	3180	U	O4'-C1'-N1	6.99	113.79	108.20
84	Aa	3014	U	O4'-C1'-N1	6.98	113.79	108.20
84	Aa	2398	A	O4'-C1'-N9	6.98	113.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	317	G	C5-C6-O6	-6.98	124.41	128.60
84	Aa	814	U	O4'-C1'-N1	6.98	113.78	108.20
84	Aa	2871	U	O4'-C1'-N1	6.98	113.78	108.20
84	Aa	3150	G	C5-C6-O6	-6.98	124.41	128.60
84	Aa	1119	G	C5-C6-O6	-6.98	124.41	128.60
86	Ab	82	G	N1-C2-N3	-6.98	119.71	123.90
1	Ad	1432	C	C1'-O4'-C4'	6.98	115.48	109.90
42	CJ	70	TYR	CB-CG-CD1	-6.98	116.81	121.00
84	Aa	51	A	C4-C5-C6	6.98	120.49	117.00
84	Aa	104	G	C5-C6-O6	-6.98	124.41	128.60
84	Aa	241	G	C5-C6-O6	-6.98	124.41	128.60
84	Aa	1387	G	N1-C6-O6	6.98	124.09	119.90
84	Aa	2439	A	O4'-C1'-N9	6.98	113.78	108.20
84	Aa	2510	U	O4'-C1'-N1	6.98	113.78	108.20
84	Aa	3378	U	O4'-C1'-N1	6.98	113.78	108.20
1	Ad	64	U	O4'-C1'-C2'	-6.98	98.82	105.80
84	Aa	728	G	N1-C6-O6	6.98	124.09	119.90
84	Aa	1368	U	O4'-C1'-N1	6.98	113.78	108.20
84	Aa	1622	G	C5-C6-O6	-6.98	124.41	128.60
84	Aa	2846	C	O4'-C1'-N1	6.98	113.78	108.20
1	Ad	1549	G	C3'-C2'-C1'	6.97	107.08	101.50
2	Ae	29	C	C3'-C2'-C1'	6.97	107.08	101.50
84	Aa	1091	C	O4'-C1'-N1	6.97	113.78	108.20
84	Aa	1673	A	C5-C6-N1	-6.97	114.21	117.70
84	Aa	1605	U	O4'-C1'-N1	6.97	113.78	108.20
84	Aa	3298	G	C5-C6-O6	-6.97	124.42	128.60
84	Aa	625	G	P-O3'-C3'	6.97	128.07	119.70
1	Ad	627	A	O4'-C1'-N9	6.97	113.78	108.20
1	Ad	746	A	C1'-O4'-C4'	6.97	115.47	109.90
1	Ad	1683	G	C3'-C2'-C1'	-6.97	95.92	101.50
84	Aa	279	G	N1-C6-O6	6.97	124.08	119.90
86	Ab	90	A	C5-C6-N1	-6.97	114.22	117.70
1	Ad	711	C	O4'-C1'-N1	6.97	113.78	108.20
84	Aa	350	A	O4'-C1'-N9	6.97	113.77	108.20
84	Aa	1563	G	C2'-C3'-O3'	6.97	124.85	113.70
84	Aa	3217	G	O4'-C1'-N9	6.97	113.77	108.20
86	Ab	10	C	N3-C4-N4	6.97	122.88	118.00
1	Ad	385	C	C3'-C2'-C1'	6.96	107.07	101.50
1	Ad	726	G	O4'-C1'-N9	6.96	113.77	108.20
84	Aa	1169	G	C5-C6-O6	-6.96	124.42	128.60
84	Aa	1630	C	O4'-C1'-N1	6.96	113.77	108.20
84	Aa	2169	U	O4'-C1'-N1	6.96	113.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3370	U	O4'-C1'-N1	6.96	113.77	108.20
84	Aa	3376	C	O4'-C1'-N1	6.96	113.77	108.20
1	Ad	751	U	O4'-C1'-N1	6.96	113.77	108.20
84	Aa	2255	U	O4'-C1'-N1	6.96	113.77	108.20
1	Ad	1735	C	N1-C1'-C2'	6.96	123.05	114.00
84	Aa	1085	G	C5-C6-O6	-6.96	124.42	128.60
84	Aa	1264	A	O4'-C1'-N9	6.96	113.77	108.20
84	Aa	2566	C	O4'-C1'-N1	6.96	113.77	108.20
84	Aa	1726	G	O4'-C1'-N9	6.96	113.77	108.20
84	Aa	2485	U	O4'-C1'-N1	6.96	113.77	108.20
84	Aa	3178	C	C2-N1-C1'	6.96	126.46	118.80
1	Ad	1787	G	C4'-C3'-C2'	-6.96	95.64	102.60
84	Aa	1577	A	O4'-C1'-N9	6.96	113.77	108.20
1	Ad	1512	C	O4'-C1'-N1	6.96	113.77	108.20
84	Aa	380	U	O4'-C1'-N1	6.96	113.77	108.20
84	Aa	750	G	O4'-C1'-N9	6.96	113.77	108.20
84	Aa	1288	C	N3-C4-C5	-6.96	119.12	121.90
84	Aa	2693	G	C5-C6-O6	-6.96	124.43	128.60
1	Ad	246	G	O4'-C1'-N9	6.96	113.76	108.20
84	Aa	425	G	O4'-C1'-N9	6.96	113.76	108.20
84	Aa	1884	U	O4'-C1'-N1	6.96	113.76	108.20
84	Aa	3334	A	C5-C6-N1	-6.96	114.22	117.70
86	Ab	82	G	C6-C5-N7	-6.96	126.23	130.40
84	Aa	1010	A	N1-C6-N6	6.95	122.77	118.60
84	Aa	1259	C	N3-C4-C5	-6.95	119.12	121.90
84	Aa	3177	A	C5-C6-N1	-6.95	114.22	117.70
84	Aa	3300	C	N3-C4-N4	6.95	122.87	118.00
84	Aa	2598	A	O4'-C1'-N9	6.95	113.76	108.20
1	Ad	54	C	C1'-O4'-C4'	6.95	115.46	109.90
1	Ad	173	G	O4'-C1'-N9	6.95	113.76	108.20
1	Ad	856	G	O4'-C1'-C2'	6.95	113.86	107.60
84	Aa	607	U	O4'-C1'-N1	6.95	113.76	108.20
84	Aa	1419	G	C5-C6-O6	-6.95	124.43	128.60
1	Ad	1538	C	C3'-C2'-C1'	6.95	107.06	101.50
84	Aa	1773	U	O4'-C1'-N1	6.95	113.76	108.20
84	Aa	1803	G	C5-C6-O6	-6.95	124.43	128.60
86	Ab	23	A	C5-C6-N1	-6.95	114.23	117.70
1	Ad	1202	G	C3'-C2'-C1'	-6.95	95.94	101.50
84	Aa	1104	C	O4'-C1'-N1	6.95	113.76	108.20
84	Aa	1719	U	O4'-C1'-N1	6.95	113.76	108.20
84	Aa	2599	U	O4'-C1'-N1	6.95	113.76	108.20
84	Aa	3281	G	C5-C6-O6	-6.95	124.43	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	47	C	N3-C4-N4	6.95	122.86	118.00
84	Aa	1234	G	N1-C6-O6	6.94	124.07	119.90
84	Aa	1618	U	O4'-C1'-N1	6.94	113.75	108.20
1	Ad	1448	U	C4'-C3'-C2'	-6.94	95.66	102.60
6	BK	87	VAL	CA-C-N	6.94	136.54	117.10
84	Aa	1261	C	O4'-C1'-N1	6.94	113.75	108.20
84	Aa	2695	A	O4'-C1'-N9	6.94	113.75	108.20
84	Aa	2808	U	O4'-C1'-N1	6.94	113.75	108.20
84	Aa	3142	C	O4'-C1'-N1	6.94	113.75	108.20
1	Ad	631	C	C1'-O4'-C4'	-6.94	104.35	109.90
84	Aa	252	A	N1-C6-N6	6.94	122.77	118.60
84	Aa	301	G	N1-C6-O6	6.94	124.06	119.90
84	Aa	428	G	N1-C6-O6	6.94	124.06	119.90
84	Aa	1847	G	C5-C6-O6	-6.94	124.44	128.60
84	Aa	1876	U	O4'-C1'-N1	6.94	113.75	108.20
84	Aa	2457	G	P-O3'-C3'	6.94	128.03	119.70
84	Aa	2659	A	C5-C6-N1	-6.94	114.23	117.70
84	Aa	2876	G	N1-C6-O6	6.94	124.06	119.90
1	Ad	1237	G	O4'-C1'-N9	6.94	113.75	108.20
84	Aa	150	G	C5-C6-O6	-6.94	124.44	128.60
84	Aa	1033	G	O4'-C1'-N9	6.94	113.75	108.20
84	Aa	3325	G	O4'-C1'-N9	6.94	113.75	108.20
85	Ac	136	G	C5-C6-O6	-6.94	124.44	128.60
1	Ad	1150	U	O4'-C1'-N1	6.94	113.75	108.20
52	CW	54	THR	N-CA-CB	6.94	123.48	110.30
1	Ad	914	U	N1-C1'-C2'	6.94	123.02	114.00
1	Ad	1062	C	C1'-O4'-C4'	6.93	115.45	109.90
1	Ad	1273	U	O4'-C1'-N1	6.93	113.75	108.20
1	Ad	1519	G	O4'-C1'-N9	6.93	113.75	108.20
85	Ac	70	G	C5-C6-O6	-6.93	124.44	128.60
84	Aa	1728	G	C5-C6-O6	-6.93	124.44	128.60
84	Aa	1348	G	O4'-C1'-N9	6.93	113.75	108.20
84	Aa	2022	U	O4'-C1'-N1	6.93	113.75	108.20
84	Aa	2142	A	C5-C6-N6	-6.93	118.16	123.70
84	Aa	745	G	C5-C6-O6	-6.93	124.44	128.60
84	Aa	2338	C	O4'-C1'-N1	6.93	113.74	108.20
84	Aa	2377	C	O4'-C1'-N1	6.93	113.74	108.20
84	Aa	2415	U	O4'-C1'-N1	6.93	113.74	108.20
84	Aa	2683	A	C4-C5-C6	6.93	120.46	117.00
1	Ad	229	G	O4'-C1'-N9	6.93	113.74	108.20
84	Aa	699	C	N3-C4-C5	-6.93	119.13	121.90
84	Aa	797	U	O4'-C1'-N1	6.93	113.74	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	977	G	O4'-C1'-N9	6.92	113.74	108.20
84	Aa	78	U	O4'-C1'-N1	6.92	113.74	108.20
84	Aa	2760	U	O4'-C1'-N1	6.92	113.74	108.20
84	Aa	653	A	O4'-C1'-N9	6.92	113.74	108.20
84	Aa	984	A	O4'-C1'-N9	6.92	113.74	108.20
84	Aa	3125	G	N1-C6-O6	6.92	124.05	119.90
1	Ad	1154	G	C1'-O4'-C4'	-6.92	104.36	109.90
84	Aa	1336	A	C4-C5-C6	6.92	120.46	117.00
84	Aa	1341	G	O4'-C1'-N9	6.92	113.74	108.20
84	Aa	3048	C	O4'-C1'-N1	6.92	113.74	108.20
84	Aa	289	C	N3-C4-C5	-6.92	119.13	121.90
84	Aa	1226	G	C5-C6-O6	-6.92	124.45	128.60
86	Ab	6	C	O4'-C1'-N1	6.92	113.74	108.20
84	Aa	622	U	O4'-C1'-N1	6.92	113.73	108.20
84	Aa	1801	G	C5-C6-O6	-6.92	124.45	128.60
84	Aa	15	C	N3-C4-N4	6.92	122.84	118.00
84	Aa	2961	C	O4'-C1'-N1	6.92	113.73	108.20
84	Aa	494	C	O4'-C1'-N1	6.92	113.73	108.20
84	Aa	1137	G	O4'-C1'-N9	6.91	113.73	108.20
84	Aa	1158	C	N3-C4-C5	-6.91	119.13	121.90
84	Aa	1430	C	O4'-C1'-N1	6.91	113.73	108.20
84	Aa	2568	G	O4'-C1'-N9	6.91	113.73	108.20
84	Aa	554	C	C2'-C3'-O3'	-6.91	94.29	109.50
84	Aa	1279	C	O4'-C1'-N1	6.91	113.73	108.20
1	Ad	1486	U	O4'-C1'-N1	6.91	113.73	108.20
84	Aa	381	G	C5-C6-O6	-6.91	124.45	128.60
84	Aa	2958	A	C5-C6-N6	-6.91	118.17	123.70
84	Aa	2997	C	C6-N1-C1'	-6.91	112.51	120.80
84	Aa	3215	U	O4'-C1'-N1	6.91	113.73	108.20
84	Aa	18	G	O4'-C1'-N9	6.91	113.73	108.20
84	Aa	638	G	C5-C6-O6	-6.91	124.45	128.60
84	Aa	2490	U	O4'-C1'-N1	6.91	113.73	108.20
86	Ab	55	A	C5-C6-N1	-6.91	114.25	117.70
84	Aa	487	C	N3-C4-N4	6.91	122.83	118.00
84	Aa	2818	G	C5-C6-O6	-6.91	124.46	128.60
1	Ad	179	A	C1'-O4'-C4'	-6.91	104.38	109.90
1	Ad	212	A	O4'-C1'-N9	-6.91	102.68	108.20
1	Ad	273	C	N1-C1'-C2'	6.91	122.98	114.00
84	Aa	1562	A	C5'-C4'-O4'	6.91	117.39	109.10
84	Aa	400	G	O4'-C1'-N9	6.90	113.72	108.20
84	Aa	3059	C	O4'-C1'-N1	6.90	113.72	108.20
1	Ad	1092	A	N9-C1'-C2'	6.90	122.97	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1658	G	C5-C6-O6	-6.90	124.46	128.60
1	Ad	729	C	O4'-C1'-N1	6.90	113.72	108.20
1	Ad	738	U	O4'-C1'-N1	6.90	113.72	108.20
1	Ad	1434	G	N9-C1'-C2'	6.90	122.97	114.00
84	Aa	3286	G	O4'-C1'-N9	6.90	113.72	108.20
85	Ac	120	G	C5-C6-O6	-6.90	124.46	128.60
1	Ad	473	C	N1-C1'-C2'	6.90	122.97	114.00
1	Ad	1327	C	C3'-C2'-C1'	6.90	107.02	101.50
84	Aa	640	C	O3'-P-O5'	6.90	117.11	104.00
84	Aa	1612	C	N3-C4-C5	-6.90	119.14	121.90
85	Ac	66	G	O4'-C1'-N9	6.90	113.72	108.20
1	Ad	295	C	C3'-C2'-C1'	6.90	107.02	101.50
84	Aa	22	G	C5-C6-O6	-6.90	124.46	128.60
84	Aa	1621	G	O4'-C1'-N9	6.90	113.72	108.20
84	Aa	3315	A	C5-C6-N6	-6.90	118.18	123.70
85	Ac	42	G	O4'-C1'-N9	6.90	113.72	108.20
86	Ab	77	A	C5-C6-N6	-6.90	118.18	123.70
1	Ad	1309	U	C1'-O4'-C4'	6.89	115.42	109.90
84	Aa	926	C	O4'-C1'-N1	6.89	113.72	108.20
1	Ad	883	G	O4'-C1'-N9	6.89	113.72	108.20
84	Aa	1677	G	O4'-C1'-N9	6.89	113.71	108.20
84	Aa	2564	G	N1-C6-O6	6.89	124.03	119.90
1	Ad	433	G	O4'-C1'-N9	6.89	113.71	108.20
84	Aa	284	U	O4'-C1'-N1	6.89	113.71	108.20
84	Aa	552	G	C4'-C3'-O3'	-6.89	94.93	109.40
84	Aa	1066	G	C5-C6-O6	-6.89	124.47	128.60
84	Aa	2202	A	C4-C5-C6	6.89	120.44	117.00
84	Aa	3243	C	N3-C4-N4	6.89	122.82	118.00
84	Aa	3361	G	C5-C6-O6	-6.89	124.47	128.60
84	Aa	151	U	O4'-C1'-N1	6.89	113.71	108.20
84	Aa	295	U	O4'-C1'-N1	6.89	113.71	108.20
84	Aa	883	G	N1-C6-O6	6.89	124.03	119.90
1	Ad	1445	C	O4'-C1'-C2'	-6.89	98.91	105.80
2	Ae	47	U	C1'-O4'-C4'	6.89	115.41	109.90
84	Aa	60	G	C5-C6-O6	-6.89	124.47	128.60
84	Aa	663	G	C5-C6-O6	-6.89	124.47	128.60
84	Aa	859	G	C5-C6-O6	-6.89	124.47	128.60
84	Aa	1644	A	C4-C5-C6	6.89	120.44	117.00
86	Ab	73	U	C1'-O4'-C4'	-6.88	104.39	109.90
1	Ad	1464	G	C3'-C2'-C1'	-6.88	96.00	101.50
84	Aa	563	C	O4'-C1'-N1	6.88	113.70	108.20
84	Aa	1189	G	C5-C6-O6	-6.88	124.47	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1904	A	C5-C6-N6	-6.88	118.19	123.70
1	Ad	881	G	O4'-C1'-N9	6.88	113.70	108.20
84	Aa	1432	G	C5-C6-O6	-6.88	124.47	128.60
84	Aa	3138	C	N3-C4-N4	6.88	122.82	118.00
84	Aa	787	G	C5-C6-O6	-6.88	124.47	128.60
84	Aa	3008	U	O4'-C1'-N1	6.88	113.70	108.20
84	Aa	3054	G	O4'-C1'-N9	6.88	113.70	108.20
84	Aa	3076	C	N3-C4-N4	6.88	122.81	118.00
84	Aa	531	G	O4'-C1'-N9	6.88	113.70	108.20
84	Aa	927	G	C5-C6-O6	-6.88	124.47	128.60
84	Aa	2170	G	C5-C6-O6	-6.88	124.47	128.60
1	Ad	1212	A	O4'-C1'-N9	6.88	113.70	108.20
1	Ad	1618	G	C1'-O4'-C4'	-6.88	104.40	109.90
73	CO	117	TYR	CB-CG-CD2	-6.88	116.88	121.00
1	Ad	273	C	O4'-C1'-N1	6.87	113.70	108.20
84	Aa	121	A	O4'-C1'-N9	6.87	113.70	108.20
84	Aa	1925	G	C5-C6-O6	-6.87	124.48	128.60
1	Ad	1152	A	C3'-C2'-C1'	6.87	107.00	101.50
84	Aa	485	G	O4'-C1'-N9	6.87	113.70	108.20
84	Aa	533	G	O4'-C1'-N9	6.87	113.70	108.20
84	Aa	2417	G	O4'-C1'-N9	6.87	113.70	108.20
84	Aa	3320	G	O4'-C1'-N9	6.87	113.70	108.20
85	Ac	159	G	C5-C6-O6	-6.87	124.48	128.60
84	Aa	763	G	C5-C6-O6	-6.87	124.48	128.60
84	Aa	1878	G	O4'-C1'-N9	6.87	113.69	108.20
84	Aa	2313	U	O4'-C1'-N1	6.87	113.70	108.20
84	Aa	2455	A	N1-C6-N6	6.87	122.72	118.60
84	Aa	2854	C	O4'-C1'-N1	6.87	113.69	108.20
84	Aa	1292	U	O4'-C1'-N1	6.87	113.69	108.20
84	Aa	3042	U	P-O5'-C5'	6.87	131.89	120.90
84	Aa	3027	G	C5-C6-O6	-6.87	124.48	128.60
84	Aa	3046	C	N3-C4-C5	-6.87	119.15	121.90
84	Aa	3236	A	O4'-C1'-N9	6.87	113.69	108.20
86	Ab	98	G	N1-C2-N3	-6.87	119.78	123.90
1	Ad	1613	G	C1'-O4'-C4'	-6.86	104.41	109.90
84	Aa	1537	A	O4'-C1'-N9	6.86	113.69	108.20
84	Aa	1912	U	O4'-C1'-N1	6.86	113.69	108.20
84	Aa	2089	A	O4'-C1'-N9	6.86	113.69	108.20
84	Aa	2149	G	N1-C6-O6	6.86	124.02	119.90
84	Aa	2438	A	O4'-C1'-N9	6.86	113.69	108.20
86	Ab	69	A	C4-C5-C6	6.86	120.43	117.00
84	Aa	692	U	O4'-C1'-N1	6.86	113.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	580	C	O4'-C1'-N1	6.86	113.69	108.20
84	Aa	962	C	O4'-C1'-N1	6.86	113.69	108.20
84	Aa	1116	G	C5-C6-O6	-6.86	124.48	128.60
84	Aa	2802	G	C5-C6-O6	-6.86	124.48	128.60
84	Aa	2986	C	O4'-C1'-N1	6.86	113.69	108.20
84	Aa	3208	G	C5-C6-O6	-6.86	124.48	128.60
84	Aa	3363	G	O4'-C1'-N9	6.86	113.69	108.20
1	Ad	1172	G	O4'-C1'-C2'	6.86	113.77	107.60
85	Ac	41	A	C5-C6-N6	-6.86	118.21	123.70
1	Ad	1677	U	O4'-C1'-N1	6.86	113.69	108.20
84	Aa	1810	G	C5-C6-O6	-6.86	124.48	128.60
1	Ad	848	C	O4'-C1'-C2'	-6.86	98.94	105.80
84	Aa	527	G	C5-C6-O6	-6.86	124.49	128.60
1	Ad	1190	U	N1-C1'-C2'	-6.85	104.46	112.00
1	Ad	1213	C	N1-C1'-C2'	6.85	122.91	114.00
2	Ae	9	A	O4'-C1'-C2'	-6.85	98.95	105.80
84	Aa	119	A	C5-C6-N6	-6.85	118.22	123.70
84	Aa	1134	G	C5-C6-O6	-6.85	124.49	128.60
84	Aa	1822	C	N3-C4-C5	-6.85	119.16	121.90
84	Aa	2115	G	C5-C6-O6	-6.85	124.49	128.60
84	Aa	2996	A	P-O3'-C3'	6.85	127.92	119.70
1	Ad	356	G	C3'-C2'-C1'	6.85	106.98	101.50
84	Aa	2292	U	O4'-C1'-N1	6.85	113.68	108.20
84	Aa	294	A	C4-C5-C6	6.85	120.42	117.00
84	Aa	964	C	O4'-C1'-N1	6.85	113.68	108.20
84	Aa	1411	G	O4'-C1'-N9	6.85	113.68	108.20
84	Aa	1524	G	C5-C6-O6	-6.85	124.49	128.60
84	Aa	2212	U	O4'-C1'-N1	6.85	113.68	108.20
86	Ab	47	C	O4'-C1'-N1	6.85	113.68	108.20
84	Aa	265	G	C5-C6-O6	-6.85	124.49	128.60
84	Aa	1545	G	O4'-C1'-N9	6.85	113.68	108.20
1	Ad	60	C	N1-C1'-C2'	6.85	122.90	114.00
84	Aa	2791	U	O4'-C1'-N1	6.85	113.68	108.20
1	Ad	719	C	C3'-C2'-C1'	6.84	106.97	101.50
1	Ad	1221	A	C1'-O4'-C4'	6.84	115.38	109.90
1	Ad	1582	G	O4'-C1'-C2'	-6.84	98.95	105.80
84	Aa	798	G	C5-C6-O6	-6.84	124.49	128.60
1	Ad	1112	G	O4'-C1'-C2'	6.84	113.76	107.60
1	Ad	25	C	P-O3'-C3'	6.84	127.91	119.70
84	Aa	3005	C	O4'-C1'-N1	6.84	113.67	108.20
1	Ad	706	U	C5'-C4'-C3'	-6.84	105.06	116.00
84	Aa	881	G	C5-C6-O6	-6.84	124.50	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1825	G	O4'-C1'-N9	6.84	113.67	108.20
84	Aa	2078	G	O4'-C1'-N9	6.84	113.67	108.20
1	Ad	1251	U	O4'-C1'-N1	6.84	113.67	108.20
84	Aa	2995	G	C5-C6-O6	-6.84	124.50	128.60
1	Ad	339	G	C3'-C2'-C1'	-6.84	96.03	101.50
1	Ad	1680	A	C3'-C2'-C1'	6.84	106.97	101.50
84	Aa	2348	U	O4'-C1'-N1	6.84	113.67	108.20
84	Aa	2652	G	O4'-C1'-N9	6.84	113.67	108.20
84	Aa	2949	G	N1-C6-O6	6.84	124.00	119.90
1	Ad	351	G	O4'-C1'-C2'	6.83	113.75	107.60
1	Ad	1324	U	O4'-C1'-N1	6.83	113.67	108.20
84	Aa	37	U	O4'-C1'-N1	6.83	113.67	108.20
84	Aa	1760	G	C5-C6-O6	-6.83	124.50	128.60
84	Aa	3144	U	O4'-C1'-N1	6.83	113.67	108.20
84	Aa	3245	G	C5-C6-O6	-6.83	124.50	128.60
1	Ad	728	C	N1-C1'-C2'	6.83	122.88	114.00
84	Aa	1871	G	N1-C6-O6	6.83	124.00	119.90
84	Aa	2832	G	O4'-C1'-N9	6.83	113.67	108.20
84	Aa	2898	A	C5-C6-N1	-6.83	114.28	117.70
84	Aa	3102	G	O4'-C1'-N9	6.83	113.67	108.20
1	Ad	262	U	N1-C1'-C2'	-6.83	104.49	112.00
1	Ad	929	A	O4'-C1'-N9	6.83	113.66	108.20
84	Aa	2171	A	C5-C6-N6	-6.83	118.24	123.70
86	Ab	74	A	C4-C5-C6	6.83	120.41	117.00
84	Aa	848	G	C5-C6-O6	-6.83	124.50	128.60
84	Aa	2246	G	O4'-C1'-N9	6.83	113.66	108.20
1	Ad	971	A	O4'-C1'-C2'	-6.83	98.97	105.80
84	Aa	355	C	N3-C4-C5	-6.83	119.17	121.90
84	Aa	1759	C	C6-N1-C1'	-6.83	112.61	120.80
84	Aa	1958	G	C5'-C4'-C3'	-6.83	105.08	116.00
84	Aa	2305	U	O4'-C1'-N1	6.83	113.66	108.20
84	Aa	2506	G	N1-C6-O6	6.83	124.00	119.90
1	Ad	416	A	C1'-O4'-C4'	6.82	115.36	109.90
1	Ad	1143	A	O4'-C1'-N9	6.82	113.66	108.20
84	Aa	241	G	O4'-C1'-N9	6.82	113.66	108.20
84	Aa	1161	G	C5-C6-O6	-6.82	124.51	128.60
84	Aa	2182	G	C5-C6-O6	-6.82	124.50	128.60
84	Aa	2640	A	C4-C5-C6	6.82	120.41	117.00
86	Ab	27	A	C5-N7-C8	6.82	107.31	103.90
86	Ab	75	G	C5-C6-O6	-6.82	124.51	128.60
1	Ad	1590	U	C1'-O4'-C4'	6.82	115.36	109.90
84	Aa	849	A	C5-C6-N6	-6.82	118.24	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1502	U	O4'-C1'-N1	6.82	113.66	108.20
84	Aa	2657	C	N3-C4-C5	-6.82	119.17	121.90
1	Ad	419	C	O4'-C1'-C2'	-6.82	98.98	105.80
1	Ad	1212	A	O4'-C1'-C2'	6.82	113.74	107.60
84	Aa	1100	G	C5-C6-O6	-6.82	124.51	128.60
84	Aa	1357	C	N3-C4-C5	-6.82	119.17	121.90
84	Aa	2735	G	C5-C6-O6	-6.82	124.51	128.60
85	Ac	83	C	O4'-C1'-N1	6.82	113.66	108.20
84	Aa	3348	G	N1-C6-O6	6.82	123.99	119.90
84	Aa	263	A	P-O3'-C3'	6.82	127.88	119.70
84	Aa	1260	G	C5-C6-O6	-6.82	124.51	128.60
86	Ab	50	A	C5-C6-N6	-6.82	118.25	123.70
1	Ad	804	C	O4'-C1'-N1	6.81	113.65	108.20
1	Ad	936	C	C3'-C2'-C1'	6.81	106.95	101.50
1	Ad	1593	U	O4'-C1'-C2'	6.81	113.73	107.60
48	CD	2	SER	N-CA-CB	6.81	120.72	110.50
84	Aa	1269	U	O4'-C1'-N1	6.81	113.65	108.20
86	Ab	58	G	N3-C2-N2	6.81	124.67	119.90
1	Ad	498	U	O4'-C1'-C2'	-6.81	98.99	105.80
84	Aa	683	U	O4'-C1'-N1	6.81	113.65	108.20
1	Ad	79	A	O4'-C4'-C3'	-6.81	97.19	104.00
84	Aa	123	U	O4'-C1'-N1	6.81	113.65	108.20
84	Aa	2867	U	O4'-C1'-N1	6.81	113.65	108.20
1	Ad	1193	A	O4'-C1'-C2'	-6.81	98.99	105.80
84	Aa	2582	G	C5-C6-O6	-6.81	124.52	128.60
84	Aa	3263	C	C5'-C4'-O4'	6.81	117.27	109.10
1	Ad	171	G	O4'-C1'-N9	6.81	113.64	108.20
1	Ad	762	A	O4'-C1'-C2'	-6.81	98.99	105.80
84	Aa	12	G	O4'-C1'-N9	6.81	113.64	108.20
84	Aa	1407	G	C5-C6-O6	-6.81	124.52	128.60
84	Aa	1547	G	C5-C6-O6	-6.81	124.52	128.60
1	Ad	59	G	O4'-C1'-N9	6.80	113.64	108.20
1	Ad	1434	G	O4'-C1'-C2'	6.80	113.72	107.60
84	Aa	800	C	N3-C4-C5	-6.80	119.18	121.90
84	Aa	998	G	C5-C6-O6	-6.80	124.52	128.60
84	Aa	1016	G	O4'-C1'-N9	6.80	113.64	108.20
85	Ac	72	A	C4-C5-C6	6.80	120.40	117.00
84	Aa	3103	G	O4'-C1'-N9	6.80	113.64	108.20
85	Ac	139	C	O4'-C1'-N1	6.80	113.64	108.20
84	Aa	76	A	C5-C6-N1	-6.80	114.30	117.70
84	Aa	808	G	P-O3'-C3'	6.80	127.86	119.70
84	Aa	1158	C	O4'-C1'-N1	6.80	113.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2745	C	O4'-C1'-N1	6.80	113.64	108.20
61	CM	6	PHE	CB-CG-CD2	6.80	125.56	120.80
84	Aa	170	C	N3-C4-N4	6.80	122.76	118.00
84	Aa	413	G	C5-C6-O6	-6.80	124.52	128.60
84	Aa	1561	U	P-O3'-C3'	6.80	127.86	119.70
84	Aa	1600	A	O4'-C1'-N9	6.80	113.64	108.20
84	Aa	2146	A	C5-C6-N1	-6.80	114.30	117.70
84	Aa	3184	G	O4'-C1'-N9	6.80	113.64	108.20
84	Aa	1762	G	C5-C6-O6	-6.80	124.52	128.60
84	Aa	2520	U	O4'-C1'-N1	6.80	113.64	108.20
1	Ad	351	G	N9-C1'-C2'	6.80	122.83	114.00
2	Ae	24	A	O4'-C1'-N9	6.80	113.64	108.20
84	Aa	1931	G	C5-C6-O6	-6.80	124.52	128.60
84	Aa	2948	A	C5-C6-N6	-6.80	118.26	123.70
1	Ad	214	A	P-O3'-C3'	6.79	127.85	119.70
1	Ad	442	A	O4'-C1'-N9	6.79	113.64	108.20
84	Aa	1525	U	O4'-C1'-N1	6.79	113.64	108.20
84	Aa	3001	G	C5-C6-O6	-6.79	124.52	128.60
1	Ad	1046	G	O4'-C1'-N9	6.79	113.63	108.20
84	Aa	3336	A	C5-C6-N6	-6.79	118.27	123.70
86	Ab	36	C	C6-N1-C2	-6.79	117.58	120.30
86	Ab	73	U	O4'-C1'-N1	6.79	113.63	108.20
84	Aa	1136	A	C5-C6-N6	-6.79	118.27	123.70
84	Aa	1216	G	N1-C6-O6	6.79	123.97	119.90
85	Ac	28	C	N3-C4-C5	-6.79	119.18	121.90
1	Ad	963	U	O4'-C1'-N1	6.79	113.63	108.20
84	Aa	3355	U	O4'-C1'-N1	6.79	113.63	108.20
86	Ab	11	A	C4-C5-C6	6.79	120.39	117.00
1	Ad	1184	C	N1-C1'-C2'	6.79	122.83	114.00
1	Ad	1698	A	P-O3'-C3'	6.79	127.85	119.70
84	Aa	429	G	C5-C6-O6	-6.79	124.53	128.60
84	Aa	1054	U	O4'-C1'-N1	6.79	113.63	108.20
84	Aa	2301	C	O4'-C1'-N1	6.79	113.63	108.20
84	Aa	3129	G	C5-C6-O6	-6.79	124.53	128.60
84	Aa	152	C	N3-C4-N4	6.79	122.75	118.00
84	Aa	2849	A	C5-C6-N6	-6.79	118.27	123.70
84	Aa	208	G	C5-C6-O6	-6.79	124.53	128.60
84	Aa	629	U	O4'-C1'-N1	6.79	113.63	108.20
84	Aa	1676	A	C4-C5-C6	6.79	120.39	117.00
84	Aa	2309	U	O4'-C1'-N1	6.79	113.63	108.20
84	Aa	2678	C	O4'-C1'-N1	6.79	113.63	108.20
84	Aa	2989	A	C5-C6-N6	-6.79	118.27	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3382	A	C4-C5-C6	6.79	120.39	117.00
86	Ab	81	G	O4'-C1'-N9	6.79	113.63	108.20
84	Aa	2663	U	O4'-C1'-N1	6.78	113.63	108.20
84	Aa	2935	A	C4-C5-C6	6.78	120.39	117.00
84	Aa	3183	G	C5-C6-O6	-6.78	124.53	128.60
1	Ad	1125	U	C1'-O4'-C4'	6.78	115.33	109.90
84	Aa	73	A	C5-C6-N1	-6.78	114.31	117.70
84	Aa	435	G	O4'-C1'-N9	6.78	113.62	108.20
84	Aa	776	G	O4'-C1'-N9	6.78	113.62	108.20
84	Aa	833	G	C5-C6-O6	-6.78	124.53	128.60
84	Aa	1508	C	O4'-C1'-N1	6.78	113.62	108.20
84	Aa	3353	G	C5-C6-O6	-6.78	124.53	128.60
1	Ad	1363	G	O4'-C1'-C2'	6.78	113.70	107.60
84	Aa	3273	C	O4'-C1'-N1	6.78	113.62	108.20
1	Ad	81	U	O4'-C1'-N1	6.78	113.62	108.20
1	Ad	1660	C	O4'-C1'-N1	6.78	113.62	108.20
84	Aa	207	U	O4'-C1'-N1	6.78	113.62	108.20
84	Aa	1480	G	C5-C6-O6	-6.78	124.53	128.60
84	Aa	1547	G	O4'-C1'-N9	6.78	113.62	108.20
84	Aa	2170	G	O4'-C1'-N9	6.78	113.62	108.20
86	Ab	7	G	C5-C6-N1	-6.78	108.11	111.50
84	Aa	324	U	O4'-C1'-N1	6.78	113.62	108.20
84	Aa	2331	A	C5-C6-N6	-6.78	118.28	123.70
84	Aa	2748	G	C5-C6-O6	-6.78	124.53	128.60
2	Ae	1	U	O4'-C1'-N1	6.77	113.62	108.20
84	Aa	480	C	O4'-C1'-N1	6.77	113.62	108.20
84	Aa	1299	G	O4'-C1'-N9	6.77	113.62	108.20
84	Aa	1352	G	O4'-C1'-N9	6.77	113.62	108.20
84	Aa	1675	G	O4'-C1'-N9	6.77	113.62	108.20
84	Aa	2140	C	O4'-C1'-N1	6.77	113.62	108.20
84	Aa	2375	G	C5-C6-O6	-6.77	124.54	128.60
1	Ad	1013	G	C1'-O4'-C4'	-6.77	104.48	109.90
71	CB	197	TYR	CB-CG-CD2	6.77	125.06	121.00
84	Aa	105	A	O4'-C1'-N9	6.77	113.62	108.20
1	Ad	524	A	C1'-O4'-C4'	-6.77	104.48	109.90
71	CB	118	PHE	CB-CG-CD1	6.77	125.54	120.80
84	Aa	17	G	C5-C6-O6	-6.77	124.54	128.60
84	Aa	85	G	C5-C6-O6	-6.77	124.54	128.60
84	Aa	156	A	C5-C6-N6	-6.77	118.28	123.70
84	Aa	368	U	O4'-C1'-N1	6.77	113.62	108.20
84	Aa	386	G	C5-C6-O6	-6.77	124.54	128.60
84	Aa	1374	G	C5-C6-O6	-6.77	124.54	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1573	G	O4'-C1'-N9	6.77	113.61	108.20
84	Aa	2393	G	O4'-C1'-N9	6.77	113.61	108.20
84	Aa	2943	A	C4-C5-C6	6.77	120.38	117.00
84	Aa	271	G	O4'-C1'-N9	6.77	113.61	108.20
84	Aa	2031	G	O4'-C1'-N9	6.77	113.61	108.20
84	Aa	2991	U	O4'-C1'-N1	6.77	113.61	108.20
1	Ad	1192	G	O4'-C1'-C2'	6.76	113.69	107.60
84	Aa	1918	A	C5-C6-N6	-6.76	118.29	123.70
84	Aa	2537	G	N1-C6-O6	6.76	123.96	119.90
84	Aa	3178	C	C6-N1-C1'	-6.76	112.68	120.80
84	Aa	1283	C	N3-C4-C5	-6.76	119.19	121.90
84	Aa	3015	U	O4'-C1'-N1	6.76	113.61	108.20
84	Aa	2574	A	O4'-C1'-N9	6.76	113.61	108.20
84	Aa	3076	C	O4'-C1'-N1	6.76	113.61	108.20
84	Aa	3210	G	C5-C6-O6	-6.76	124.54	128.60
1	Ad	922	U	N1-C1'-C2'	6.76	122.79	114.00
84	Aa	1180	C	C6-N1-C1'	-6.76	112.69	120.80
84	Aa	1588	G	C5-C6-O6	-6.76	124.54	128.60
84	Aa	2465	G	O4'-C1'-N9	6.76	113.61	108.20
84	Aa	2893	U	O4'-C1'-N1	6.76	113.61	108.20
84	Aa	719	U	O4'-C1'-N1	6.76	113.61	108.20
84	Aa	2563	G	C5-C6-O6	-6.76	124.55	128.60
1	Ad	1728	G	P-O5'-C5'	6.76	131.71	120.90
84	Aa	1688	U	O4'-C1'-N1	6.76	113.61	108.20
86	Ab	37	G	N3-C2-N2	6.76	124.63	119.90
1	Ad	264	G	O4'-C1'-N9	6.75	113.60	108.20
1	Ad	1013	G	O4'-C1'-N9	6.75	113.60	108.20
84	Aa	180	G	C5-C6-O6	-6.75	124.55	128.60
84	Aa	43	U	O4'-C1'-N1	6.75	113.60	108.20
84	Aa	594	C	N3-C4-C5	-6.75	119.20	121.90
84	Aa	600	G	C5-C6-O6	-6.75	124.55	128.60
84	Aa	986	G	O4'-C1'-N9	6.75	113.60	108.20
84	Aa	1004	C	N3-C4-C5	-6.75	119.20	121.90
84	Aa	1949	G	C5-C6-O6	-6.75	124.55	128.60
84	Aa	2370	G	C5-C6-O6	-6.75	124.55	128.60
84	Aa	2608	G	C5-C6-O6	-6.75	124.55	128.60
84	Aa	3315	A	O4'-C1'-N9	6.75	113.60	108.20
1	Ad	1596	G	O4'-C1'-C2'	-6.75	99.05	105.80
84	Aa	919	G	C5-C6-O6	-6.75	124.55	128.60
86	Ab	85	G	O4'-C1'-N9	6.75	113.60	108.20
1	Ad	789	C	P-O3'-C3'	6.75	127.80	119.70
84	Aa	1808	G	C5-C6-O6	-6.75	124.55	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3160	G	C5-C6-O6	-6.75	124.55	128.60
1	Ad	189	U	C1'-O4'-C4'	6.75	115.30	109.90
84	Aa	715	A	N1-C6-N6	6.75	122.65	118.60
84	Aa	2787	A	C5-C6-N6	-6.75	118.30	123.70
63	CU	92	TYR	CB-CG-CD2	-6.75	116.95	121.00
84	Aa	627	G	O4'-C1'-N9	6.75	113.60	108.20
84	Aa	1076	G	C5-C6-O6	-6.75	124.55	128.60
84	Aa	3182	A	O5'-C5'-C4'	6.75	124.52	111.70
84	Aa	736	U	O4'-C1'-N1	6.75	113.60	108.20
84	Aa	838	G	C5-C6-O6	-6.75	124.55	128.60
84	Aa	2731	G	C5-C6-O6	-6.75	124.55	128.60
84	Aa	2968	G	C5-C6-O6	-6.75	124.55	128.60
1	Ad	1547	G	O4'-C1'-N9	6.74	113.59	108.20
1	Ad	1687	G	N9-C1'-C2'	6.74	122.77	114.00
84	Aa	2420	U	O4'-C1'-N1	6.74	113.59	108.20
85	Ac	36	G	C5-C6-O6	-6.74	124.55	128.60
84	Aa	2555	G	C5-C6-O6	-6.74	124.56	128.60
1	Ad	79	A	O4'-C1'-C2'	-6.74	99.06	105.80
84	Aa	226	U	O4'-C1'-N1	6.74	113.59	108.20
84	Aa	1659	G	O4'-C1'-N9	6.74	113.59	108.20
84	Aa	2021	G	C5-C6-O6	-6.74	124.56	128.60
84	Aa	2266	A	C4-C5-C6	6.74	120.37	117.00
84	Aa	3064	U	O4'-C1'-N1	6.74	113.59	108.20
84	Aa	3102	G	C5-C6-O6	-6.74	124.56	128.60
84	Aa	610	G	C8-N9-C4	-6.74	103.70	106.40
84	Aa	901	U	O4'-C1'-N1	6.74	113.59	108.20
84	Aa	1604	U	O4'-C1'-N1	6.74	113.59	108.20
84	Aa	1933	U	O4'-C1'-N1	6.74	113.59	108.20
84	Aa	2526	G	O4'-C1'-N9	6.74	113.59	108.20
1	Ad	295	C	O4'-C1'-N1	6.74	113.59	108.20
1	Ad	789	C	O4'-C1'-C2'	-6.74	99.06	105.80
84	Aa	441	G	C5-C6-O6	-6.74	124.56	128.60
84	Aa	587	A	C5-C6-N6	-6.74	118.31	123.70
84	Aa	1375	G	C5-C6-O6	-6.74	124.56	128.60
86	Ab	16	A	C5-C6-N6	-6.74	118.31	123.70
84	Aa	1212	U	O4'-C1'-N1	6.73	113.59	108.20
84	Aa	2126	C	O4'-C1'-N1	6.73	113.59	108.20
84	Aa	2434	G	O4'-C1'-N9	6.73	113.59	108.20
84	Aa	57	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	214	G	N1-C6-O6	6.73	123.94	119.90
84	Aa	581	G	O4'-C1'-N9	6.73	113.59	108.20
84	Aa	2014	A	C4-C5-C6	6.73	120.37	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2217	A	C4-C5-C6	6.73	120.37	117.00
84	Aa	3204	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	508	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	703	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	1529	C	N3-C4-C5	-6.73	119.21	121.90
84	Aa	1583	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	2465	G	C5-C6-O6	-6.73	124.56	128.60
1	Ad	1809	U	O4'-C1'-N1	6.73	113.58	108.20
84	Aa	81	C	O4'-C1'-N1	6.73	113.58	108.20
84	Aa	949	C	N3-C4-C5	-6.73	119.21	121.90
84	Aa	2013	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	2758	C	N3-C4-C5	-6.73	119.21	121.90
84	Aa	3066	G	O4'-C1'-N9	6.73	113.58	108.20
84	Aa	404	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	1102	A	O4'-C1'-N9	6.73	113.58	108.20
84	Aa	1555	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	1567	G	O4'-C1'-N9	6.73	113.58	108.20
84	Aa	2624	G	C5-C6-O6	-6.73	124.56	128.60
84	Aa	2901	C	C2-N1-C1'	6.73	126.20	118.80
84	Aa	100	C	C2-N1-C1'	6.72	126.20	118.80
84	Aa	890	G	C5-C6-O6	-6.72	124.56	128.60
84	Aa	1550	A	O4'-C1'-N9	6.72	113.58	108.20
1	Ad	445	A	O4'-C1'-N9	6.72	113.58	108.20
1	Ad	956	A	O4'-C1'-C2'	-6.72	99.08	105.80
84	Aa	265	G	P-O3'-C3'	6.72	127.77	119.70
84	Aa	333	G	O4'-C1'-N9	6.72	113.58	108.20
84	Aa	349	A	C5-C6-N6	-6.72	118.32	123.70
84	Aa	2345	C	P-O5'-C5'	6.72	131.66	120.90
84	Aa	2621	G	O4'-C1'-N9	6.72	113.58	108.20
1	Ad	1589	C	N1-C1'-C2'	6.72	122.74	114.00
84	Aa	2653	U	O4'-C1'-N1	6.72	113.58	108.20
84	Aa	3325	G	C5-C6-O6	-6.72	124.57	128.60
84	Aa	1510	G	C5-C6-O6	-6.72	124.57	128.60
84	Aa	1681	U	O4'-C1'-N1	6.72	113.58	108.20
84	Aa	2741	G	C5-C6-O6	-6.72	124.57	128.60
86	Ab	10	C	N3-C4-C5	-6.72	119.21	121.90
84	Aa	1671	G	O4'-C1'-N9	6.72	113.58	108.20
84	Aa	2648	G	C5-C6-O6	-6.72	124.57	128.60
84	Aa	612	U	O4'-C1'-N1	6.72	113.57	108.20
84	Aa	1116	G	O4'-C1'-N9	6.72	113.57	108.20
84	Aa	1668	U	O4'-C1'-N1	6.72	113.57	108.20
84	Aa	2052	G	O4'-C1'-N9	6.72	113.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3021	U	O4'-C1'-N1	6.72	113.57	108.20
1	Ad	717	G	N9-C1'-C2'	6.71	122.73	114.00
1	Ad	868	A	O4'-C1'-C2'	-6.71	99.09	105.80
84	Aa	1544	G	C5-C6-O6	-6.71	124.57	128.60
84	Aa	2399	G	C5-C6-O6	-6.71	124.57	128.60
1	Ad	562	U	C1'-O4'-C4'	-6.71	104.53	109.90
84	Aa	1065	A	C5-C6-N1	-6.71	114.34	117.70
84	Aa	2413	G	C5-C6-O6	-6.71	124.57	128.60
84	Aa	2924	G	C5-C6-O6	-6.71	124.57	128.60
84	Aa	172	A	C5-C6-N1	-6.71	114.34	117.70
84	Aa	1844	U	O4'-C1'-N1	6.71	113.57	108.20
84	Aa	3320	G	N1-C6-O6	6.71	123.93	119.90
86	Ab	39	C	O4'-C1'-N1	6.71	113.57	108.20
84	Aa	601	G	C5-C6-O6	-6.71	124.57	128.60
1	Ad	955	C	C3'-C2'-C1'	6.71	106.87	101.50
1	Ad	1114	G	O4'-C1'-N9	6.71	113.57	108.20
84	Aa	2073	U	C2-N1-C1'	6.71	125.75	117.70
84	Aa	2539	G	C5-C6-O6	-6.71	124.58	128.60
84	Aa	2827	C	N3-C4-N4	6.71	122.69	118.00
84	Aa	3363	G	N1-C6-O6	6.71	123.92	119.90
1	Ad	1538	C	O4'-C1'-N1	6.71	113.56	108.20
84	Aa	68	U	O4'-C1'-N1	6.71	113.57	108.20
84	Aa	593	G	O4'-C1'-N9	6.71	113.56	108.20
84	Aa	1176	U	O4'-C1'-N1	6.71	113.56	108.20
84	Aa	3065	U	O4'-C1'-N1	6.71	113.56	108.20
1	Ad	225	G	N9-C1'-C2'	6.70	122.72	114.00
1	Ad	613	U	C3'-C2'-C1'	6.70	106.86	101.50
84	Aa	1084	G	C5-C6-O6	-6.70	124.58	128.60
84	Aa	2738	U	O4'-C1'-N1	6.70	113.56	108.20
84	Aa	3242	G	O4'-C1'-N9	6.70	113.56	108.20
84	Aa	1801	G	O4'-C1'-N9	6.70	113.56	108.20
2	Ae	35	U	N1-C1'-C2'	6.70	122.71	114.00
84	Aa	1177	G	N1-C6-O6	6.70	123.92	119.90
84	Aa	1765	G	N1-C6-O6	6.70	123.92	119.90
84	Aa	1893	G	O4'-C1'-N9	6.70	113.56	108.20
84	Aa	2482	A	O4'-C1'-N9	6.70	113.56	108.20
1	Ad	363	G	N9-C1'-C2'	-6.70	104.63	112.00
1	Ad	1472	G	C3'-C2'-C1'	-6.70	96.14	101.50
84	Aa	117	U	O4'-C1'-N1	6.70	113.56	108.20
84	Aa	304	A	C5-C6-N6	-6.70	118.34	123.70
84	Aa	2447	A	O4'-C1'-N9	6.70	113.56	108.20
84	Aa	2865	G	C5-C6-O6	-6.70	124.58	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3023	G	C5-C6-O6	-6.70	124.58	128.60
1	Ad	327	A	C3'-C2'-C1'	6.70	106.86	101.50
84	Aa	1545	G	C5-C6-O6	-6.70	124.58	128.60
84	Aa	1897	A	C4-C5-C6	6.70	120.35	117.00
86	Ab	7	G	N1-C2-N3	-6.70	119.88	123.90
1	Ad	968	A	N9-C1'-C2'	-6.70	104.64	112.00
84	Aa	601	G	O4'-C1'-N9	6.70	113.56	108.20
84	Aa	1344	A	C5-C6-N6	-6.70	118.34	123.70
84	Aa	2182	G	O4'-C1'-N9	6.70	113.56	108.20
84	Aa	995	C	O4'-C1'-N1	6.69	113.56	108.20
1	Ad	209	U	P-O3'-C3'	-6.69	111.67	119.70
84	Aa	548	G	C5-C6-O6	-6.69	124.58	128.60
84	Aa	1843	A	O4'-C1'-N9	6.69	113.55	108.20
84	Aa	1852	C	O4'-C1'-N1	6.69	113.55	108.20
84	Aa	2130	U	O4'-C1'-N1	6.69	113.55	108.20
84	Aa	3026	C	N3-C4-C5	-6.69	119.22	121.90
1	Ad	990	G	C1'-O4'-C4'	-6.69	104.55	109.90
1	Ad	1045	G	O4'-C1'-C2'	6.69	113.62	107.60
84	Aa	269	C	O4'-C1'-N1	6.69	113.55	108.20
84	Aa	1834	C	N3-C4-N4	6.69	122.68	118.00
84	Aa	1895	G	O4'-C1'-N9	6.69	113.55	108.20
84	Aa	2034	G	O4'-C1'-N9	6.69	113.55	108.20
84	Aa	965	A	C5-C6-N1	-6.69	114.36	117.70
84	Aa	1881	C	O4'-C1'-N1	6.69	113.55	108.20
1	Ad	551	U	O4'-C1'-N1	6.69	113.55	108.20
84	Aa	273	U	O4'-C1'-N1	6.69	113.55	108.20
84	Aa	1693	A	C4-C5-C6	6.69	120.34	117.00
84	Aa	179	G	O4'-C1'-N9	6.69	113.55	108.20
84	Aa	2459	U	O4'-C1'-N1	6.68	113.55	108.20
84	Aa	3117	G	C5-C6-O6	-6.68	124.59	128.60
86	Ab	10	C	O4'-C1'-N1	6.68	113.55	108.20
1	Ad	1618	G	O4'-C1'-C2'	6.68	113.61	107.60
84	Aa	1354	G	C5-C6-O6	-6.68	124.59	128.60
84	Aa	2039	G	O4'-C1'-N9	6.68	113.55	108.20
84	Aa	2091	U	O4'-C1'-N1	6.68	113.55	108.20
84	Aa	2530	G	O4'-C1'-N9	6.68	113.55	108.20
84	Aa	775	A	C5-C6-N6	-6.68	118.36	123.70
84	Aa	1724	C	N3-C4-C5	-6.68	119.23	121.90
84	Aa	3361	G	O4'-C1'-N9	6.68	113.54	108.20
84	Aa	1589	G	N1-C6-O6	6.68	123.91	119.90
84	Aa	1910	G	N1-C6-O6	6.68	123.91	119.90
1	Ad	287	C	N1-C1'-C2'	6.68	122.68	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1221	A	O4'-C1'-N9	6.68	113.54	108.20
84	Aa	929	A	C4-C5-C6	6.68	120.34	117.00
84	Aa	945	U	O4'-C1'-N1	6.68	113.54	108.20
84	Aa	1044	A	C5-C6-N1	-6.68	114.36	117.70
84	Aa	1148	G	N1-C6-O6	6.68	123.91	119.90
84	Aa	1411	G	C5-C6-O6	-6.68	124.59	128.60
84	Aa	2024	G	O4'-C1'-N9	6.68	113.54	108.20
33	BJ	8	TYR	N-CA-CB	6.67	122.61	110.60
84	Aa	780	U	O4'-C1'-N1	6.67	113.54	108.20
84	Aa	1624	G	P-O3'-C3'	6.67	127.71	119.70
84	Aa	3168	C	O4'-C1'-N1	6.67	113.54	108.20
1	Ad	721	U	C4'-C3'-O3'	6.67	126.35	113.00
1	Ad	1069	G	O4'-C1'-C2'	6.67	113.61	107.60
1	Ad	1199	C	N1-C1'-C2'	6.67	122.67	114.00
84	Aa	243	C	O4'-C1'-N1	6.67	113.54	108.20
84	Aa	1223	U	O4'-C1'-N1	6.67	113.54	108.20
86	Ab	2	G	O4'-C1'-N9	6.67	113.54	108.20
84	Aa	252	A	C5-C6-N1	-6.67	114.36	117.70
84	Aa	537	U	O4'-C1'-N1	6.67	113.54	108.20
84	Aa	1386	G	O4'-C1'-N9	6.67	113.54	108.20
84	Aa	1670	G	O4'-C1'-N9	6.67	113.54	108.20
84	Aa	1747	A	O4'-C1'-N9	6.67	113.54	108.20
84	Aa	1897	A	C5-C6-N1	-6.67	114.36	117.70
84	Aa	1920	U	O4'-C1'-N1	6.67	113.54	108.20
84	Aa	2896	C	O4'-C1'-N1	6.67	113.54	108.20
84	Aa	1268	G	C5-C6-O6	-6.67	124.60	128.60
84	Aa	2904	A	P-O3'-C3'	6.67	127.70	119.70
85	Ac	107	G	O4'-C1'-N9	6.67	113.54	108.20
84	Aa	942	U	O4'-C1'-N1	6.67	113.53	108.20
84	Aa	2245	G	O4'-C1'-N9	6.67	113.53	108.20
84	Aa	3242	G	C5-C6-O6	-6.67	124.60	128.60
1	Ad	1198	A	O4'-C1'-N9	6.67	113.53	108.20
84	Aa	279	G	O4'-C1'-N9	6.67	113.53	108.20
84	Aa	714	G	C5-C6-O6	-6.67	124.60	128.60
84	Aa	803	G	C5-C6-O6	-6.67	124.60	128.60
84	Aa	2406	C	N3-C4-C5	-6.67	119.23	121.90
84	Aa	3252	G	O4'-C1'-N9	6.67	113.53	108.20
84	Aa	144	A	C4-C5-C6	6.67	120.33	117.00
84	Aa	2543	G	C5-C6-O6	-6.67	124.60	128.60
84	Aa	2666	G	O4'-C1'-N9	6.67	113.53	108.20
1	Ad	1450	A	O4'-C1'-C2'	-6.66	99.14	105.80
84	Aa	1387	G	O4'-C1'-N9	6.66	113.53	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1710	G	C5-C6-O6	-6.66	124.60	128.60
84	Aa	2617	G	C5-C6-O6	-6.66	124.60	128.60
1	Ad	794	G	O4'-C1'-N9	6.66	113.53	108.20
84	Aa	509	G	C5-C6-O6	-6.66	124.60	128.60
79	CE	74	THR	N-CA-CB	6.66	122.96	110.30
84	Aa	1043	U	O4'-C1'-N1	6.66	113.53	108.20
84	Aa	3029	G	C5-C6-O6	-6.66	124.60	128.60
85	Ac	16	G	O4'-C1'-N9	6.66	113.53	108.20
84	Aa	1207	A	C5-C6-N6	-6.66	118.37	123.70
84	Aa	1615	G	O4'-C1'-N9	6.66	113.53	108.20
84	Aa	1621	G	C5-C6-O6	-6.66	124.60	128.60
84	Aa	1826	G	C5-C6-O6	-6.66	124.60	128.60
1	Ad	1406	U	N1-C1'-C2'	6.66	122.65	114.00
84	Aa	395	A	C5-C6-N6	-6.66	118.38	123.70
84	Aa	2931	C	O4'-C1'-N1	6.66	113.53	108.20
84	Aa	3010	G	C5-C6-O6	-6.66	124.61	128.60
1	Ad	744	G	C1'-O4'-C4'	6.66	115.22	109.90
84	Aa	56	A	C5-C6-N6	-6.66	118.38	123.70
84	Aa	2556	G	C5-C6-O6	-6.66	124.61	128.60
1	Ad	260	A	C1'-O4'-C4'	-6.65	104.58	109.90
72	CC	305	SER	N-CA-CB	6.65	120.48	110.50
84	Aa	256	G	C5-C6-O6	-6.65	124.61	128.60
84	Aa	426	A	C5-C6-N1	-6.65	114.37	117.70
84	Aa	776	G	N1-C6-O6	6.65	123.89	119.90
84	Aa	1071	G	O4'-C1'-N9	6.65	113.52	108.20
84	Aa	1330	A	O4'-C1'-N9	6.65	113.52	108.20
84	Aa	3299	A	C4-C5-C6	6.65	120.33	117.00
86	Ab	86	G	C5-C6-O6	-6.65	124.61	128.60
1	Ad	604	U	O4'-C1'-N1	6.65	113.52	108.20
1	Ad	773	U	C3'-C2'-C1'	-6.65	96.18	101.50
84	Aa	6	A	O4'-C1'-N9	6.65	113.52	108.20
84	Aa	730	A	O4'-C1'-N9	6.65	113.52	108.20
84	Aa	1476	G	C5-C6-O6	-6.65	124.61	128.60
84	Aa	2529	C	N3-C4-C5	-6.65	119.24	121.90
84	Aa	2706	A	C4-C5-C6	6.65	120.33	117.00
86	Ab	17	G	N1-C2-N3	-6.65	119.91	123.90
84	Aa	2630	A	C4-C5-C6	6.65	120.33	117.00
2	Ae	10	G	O4'-C1'-C2'	-6.65	99.15	105.80
84	Aa	501	U	O4'-C1'-N1	6.65	113.52	108.20
84	Aa	1435	C	O4'-C1'-N1	6.65	113.52	108.20
84	Aa	2943	A	C5-C6-N6	-6.65	118.38	123.70
84	Aa	3040	G	C5-C6-O6	-6.65	124.61	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3109	G	O4'-C1'-N9	6.65	113.52	108.20
84	Aa	1697	G	C5-C6-O6	-6.65	124.61	128.60
84	Aa	2833	G	O4'-C1'-N9	6.65	113.52	108.20
84	Aa	2979	G	C5-C6-O6	-6.65	124.61	128.60
1	Ad	1411	C	N1-C1'-C2'	6.64	122.64	114.00
84	Aa	402	U	O4'-C1'-N1	6.64	113.52	108.20
84	Aa	617	C	N3-C4-N4	6.64	122.65	118.00
84	Aa	898	G	C5-C6-O6	-6.64	124.61	128.60
84	Aa	2457	G	C5-C6-O6	-6.64	124.61	128.60
84	Aa	1046	U	O4'-C1'-N1	6.64	113.51	108.20
84	Aa	3173	A	O4'-C1'-N9	6.64	113.51	108.20
84	Aa	3383	C	O4'-C1'-N1	6.64	113.51	108.20
84	Aa	364	A	C4-C5-C6	6.64	120.32	117.00
84	Aa	580	C	N3-C4-C5	-6.64	119.25	121.90
84	Aa	1355	U	C2-N1-C1'	6.64	125.67	117.70
84	Aa	1496	G	C5-C6-O6	-6.64	124.62	128.60
84	Aa	3037	G	C5-C6-O6	-6.64	124.62	128.60
84	Aa	3076	C	P-O3'-C3'	6.64	127.67	119.70
84	Aa	906	U	O4'-C1'-N1	6.64	113.51	108.20
84	Aa	3174	C	O4'-C1'-N1	6.64	113.51	108.20
1	Ad	125	A	N9-C1'-C2'	6.64	122.63	114.00
84	Aa	438	G	C5-C6-O6	-6.64	124.62	128.60
84	Aa	1011	U	O4'-C1'-N1	6.64	113.51	108.20
84	Aa	1833	U	O4'-C1'-N1	6.64	113.51	108.20
84	Aa	3081	G	N1-C6-O6	6.64	123.88	119.90
84	Aa	224	C	O4'-C1'-N1	6.63	113.51	108.20
84	Aa	793	C	O4'-C1'-N1	6.63	113.51	108.20
84	Aa	1154	U	O4'-C1'-N1	6.63	113.51	108.20
84	Aa	1289	G	C5-C6-O6	-6.63	124.62	128.60
84	Aa	3294	U	O4'-C1'-N1	6.63	113.51	108.20
1	Ad	838	U	C5'-C4'-O4'	6.63	117.06	109.10
84	Aa	2491	A	C5-C6-N6	-6.63	118.39	123.70
1	Ad	127	G	O4'-C1'-C2'	-6.63	99.17	105.80
1	Ad	205	U	O4'-C1'-C2'	-6.63	99.17	105.80
1	Ad	1159	G	O4'-C1'-N9	6.63	113.50	108.20
1	Ad	1179	C	N1-C1'-C2'	6.63	122.62	114.00
84	Aa	414	G	O4'-C1'-N9	6.63	113.50	108.20
84	Aa	491	G	C5-C6-O6	-6.63	124.62	128.60
84	Aa	788	G	C5-C6-O6	-6.63	124.62	128.60
84	Aa	915	G	C5-C6-O6	-6.63	124.62	128.60
84	Aa	1739	G	O4'-C1'-N9	6.63	113.50	108.20
84	Aa	1747	A	C3'-C2'-C1'	-6.63	96.19	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3092	A	C4-C5-C6	6.63	120.31	117.00
1	Ad	1443	U	O4'-C1'-N1	6.63	113.50	108.20
1	Ad	1395	C	O4'-C1'-N1	6.63	113.50	108.20
84	Aa	127	G	O4'-C1'-N9	6.63	113.50	108.20
84	Aa	620	C	O4'-C1'-N1	6.63	113.50	108.20
84	Aa	839	A	C4-C5-C6	6.63	120.31	117.00
84	Aa	1503	G	O4'-C1'-N9	6.63	113.50	108.20
84	Aa	1887	A	C5-C6-N1	-6.63	114.39	117.70
84	Aa	1897	A	O4'-C1'-N9	6.63	113.50	108.20
1	Ad	1747	A	O4'-C1'-N9	6.63	113.50	108.20
84	Aa	409	U	O4'-C1'-N1	6.63	113.50	108.20
84	Aa	925	U	O4'-C1'-N1	6.63	113.50	108.20
84	Aa	1839	C	O4'-C1'-N1	6.63	113.50	108.20
84	Aa	1955	G	C5-C6-O6	-6.63	124.62	128.60
84	Aa	2758	C	O4'-C1'-N1	6.63	113.50	108.20
84	Aa	3226	G	N1-C6-O6	6.63	123.88	119.90
84	Aa	2264	U	O4'-C1'-N1	6.62	113.50	108.20
84	Aa	2390	G	C5-C6-O6	-6.62	124.62	128.60
84	Aa	3120	U	O4'-C1'-N1	6.62	113.50	108.20
1	Ad	438	G	N9-C1'-C2'	-6.62	104.71	112.00
84	Aa	195	G	C5-C6-O6	-6.62	124.62	128.60
84	Aa	286	C	O4'-C1'-N1	6.62	113.50	108.20
84	Aa	643	G	O4'-C1'-N9	6.62	113.50	108.20
84	Aa	973	U	O4'-C1'-N1	6.62	113.50	108.20
84	Aa	1528	G	O4'-C1'-N9	6.62	113.50	108.20
84	Aa	2595	G	C5-C6-O6	-6.62	124.63	128.60
84	Aa	3141	G	C5-C6-O6	-6.62	124.63	128.60
63	CU	84	TYR	CB-CG-CD2	-6.62	117.03	121.00
84	Aa	235	G	C5-C6-O6	-6.62	124.63	128.60
84	Aa	307	C	N3-C4-C5	-6.62	119.25	121.90
84	Aa	1112	C	N3-C4-C5	-6.62	119.25	121.90
84	Aa	1751	G	O4'-C1'-N9	6.62	113.50	108.20
84	Aa	2104	G	C5-C6-O6	-6.62	124.63	128.60
84	Aa	2486	G	C5-C6-O6	-6.62	124.63	128.60
84	Aa	2776	U	O4'-C1'-N1	6.62	113.50	108.20
84	Aa	345	G	C5-C6-O6	-6.62	124.63	128.60
84	Aa	1402	G	C5-C6-O6	-6.62	124.63	128.60
1	Ad	1273	U	N1-C1'-C2'	6.62	122.61	114.00
1	Ad	187	C	N1-C1'-C2'	6.62	122.60	114.00
1	Ad	474	A	O4'-C1'-C2'	-6.62	99.18	105.80
84	Aa	463	G	O4'-C1'-N9	6.62	113.49	108.20
1	Ad	856	G	C1'-O4'-C4'	-6.62	104.61	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	BL	116	PHE	CB-CG-CD1	6.62	125.43	120.80
84	Aa	1243	C	C5'-C4'-O4'	6.62	117.04	109.10
84	Aa	2017	G	O4'-C1'-N9	6.62	113.49	108.20
84	Aa	3018	A	C4-C5-C6	6.62	120.31	117.00
84	Aa	3264	C	C6-N1-C1'	-6.62	112.86	120.80
1	Ad	1110	C	N1-C1'-C2'	6.61	122.60	114.00
84	Aa	10	C	N3-C4-N4	6.61	122.63	118.00
84	Aa	1526	A	C5-C6-N6	-6.61	118.41	123.70
86	Ab	113	G	N1-C2-N3	-6.61	119.93	123.90
84	Aa	2095	C	C2'-C3'-O3'	6.61	124.28	113.70
84	Aa	2369	G	O4'-C1'-N9	6.61	113.49	108.20
1	Ad	59	G	O4'-C1'-C2'	6.61	113.55	107.60
74	Cp	14	TYR	CB-CG-CD2	-6.61	117.03	121.00
84	Aa	76	A	C4-C5-C6	6.61	120.31	117.00
84	Aa	417	G	O4'-C1'-N9	6.61	113.49	108.20
84	Aa	2172	C	P-O3'-C3'	6.61	127.63	119.70
84	Aa	2981	U	O4'-C1'-N1	6.61	113.49	108.20
84	Aa	3194	G	O4'-C1'-N9	6.61	113.49	108.20
85	Ac	39	G	C5-C6-O6	-6.61	124.63	128.60
84	Aa	503	U	O4'-C1'-N1	6.61	113.49	108.20
84	Aa	716	A	C5-C6-N6	-6.61	118.41	123.70
84	Aa	785	U	O4'-C1'-N1	6.61	113.49	108.20
84	Aa	3336	A	O4'-C1'-N9	6.61	113.49	108.20
1	Ad	94	A	O4'-C1'-C2'	6.61	113.55	107.60
2	Ae	34	G	N9-C1'-C2'	6.61	122.59	114.00
84	Aa	2307	A	C4-C5-C6	6.61	120.30	117.00
85	Ac	75	G	C5-C6-O6	-6.61	124.64	128.60
1	Ad	87	A	O4'-C1'-N9	6.61	113.48	108.20
1	Ad	1593	U	C3'-C2'-C1'	-6.61	96.22	101.50
84	Aa	650	A	O4'-C1'-N9	6.61	113.48	108.20
1	Ad	110	G	C1'-O4'-C4'	-6.60	104.62	109.90
84	Aa	2372	A	O4'-C1'-N9	6.60	113.48	108.20
84	Aa	2984	A	C5-C6-N6	-6.60	118.42	123.70
1	Ad	41	A	N9-C1'-C2'	-6.60	104.74	112.00
1	Ad	1012	C	O4'-C1'-N1	6.60	113.48	108.20
84	Aa	12	G	N3-C2-N2	6.60	124.52	119.90
84	Aa	974	G	O4'-C1'-N9	6.60	113.48	108.20
84	Aa	1467	G	C5-C6-O6	-6.60	124.64	128.60
84	Aa	3269	C	C6-N1-C1'	-6.60	112.88	120.80
84	Aa	3330	U	O4'-C1'-N1	6.60	113.48	108.20
84	Aa	13	G	N1-C6-O6	6.60	123.86	119.90
84	Aa	885	A	C4-C5-C6	6.60	120.30	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2642	G	C5-C6-O6	-6.60	124.64	128.60
86	Ab	50	A	C5-C6-N1	-6.60	114.40	117.70
84	Aa	2283	G	C5-C6-O6	-6.60	124.64	128.60
84	Aa	2531	G	O4'-C1'-N9	6.60	113.48	108.20
84	Aa	2777	U	O4'-C1'-N1	6.60	113.48	108.20
84	Aa	2820	U	O4'-C1'-N1	6.60	113.48	108.20
84	Aa	3070	G	N3-C2-N2	6.60	124.52	119.90
1	Ad	208	U	C4'-C3'-C2'	-6.60	96.00	102.60
1	Ad	449	A	C3'-C2'-C1'	6.60	106.78	101.50
1	Ad	1117	G	N9-C1'-C2'	6.60	122.58	114.00
1	Ad	1189	U	O4'-C1'-N1	6.60	113.48	108.20
86	Ab	26	C	N3-C4-C5	-6.60	119.26	121.90
84	Aa	351	G	C5-C6-O6	-6.59	124.64	128.60
84	Aa	1723	C	N3-C4-N4	6.59	122.62	118.00
84	Aa	2360	A	C4-C5-C6	6.59	120.30	117.00
1	Ad	1662	G	O4'-C1'-N9	6.59	113.47	108.20
84	Aa	122	A	C4-C5-C6	6.59	120.30	117.00
84	Aa	2038	G	C5-C6-O6	-6.59	124.64	128.60
84	Aa	2417	G	C5-C6-O6	-6.59	124.64	128.60
1	Ad	1189	U	P-O3'-C3'	6.59	127.61	119.70
84	Aa	1	G	O4'-C1'-N9	6.59	113.47	108.20
84	Aa	943	G	C5-C6-O6	-6.59	124.64	128.60
84	Aa	1792	G	N1-C6-O6	6.59	123.86	119.90
84	Aa	2020	G	O4'-C1'-N9	6.59	113.47	108.20
84	Aa	3364	A	O4'-C1'-N9	6.59	113.47	108.20
85	Ac	96	A	C5-C6-N1	-6.59	114.40	117.70
84	Aa	888	U	O4'-C1'-N1	6.59	113.47	108.20
84	Aa	1783	G	C5-C6-O6	-6.59	124.65	128.60
84	Aa	1837	A	O4'-C1'-N9	6.59	113.47	108.20
86	Ab	40	A	O4'-C1'-N9	6.59	113.47	108.20
84	Aa	378	U	O4'-C1'-N1	6.59	113.47	108.20
84	Aa	2117	G	O4'-C1'-N9	6.59	113.47	108.20
84	Aa	2187	C	N3-C4-C5	-6.59	119.27	121.90
84	Aa	2210	A	C4-C5-C6	6.59	120.29	117.00
84	Aa	61	A	C4-C5-C6	6.58	120.29	117.00
84	Aa	2141	A	C4-C5-C6	6.58	120.29	117.00
84	Aa	2697	A	C5-C6-N1	-6.58	114.41	117.70
84	Aa	3012	A	C5-C6-N6	-6.58	118.43	123.70
84	Aa	337	C	N3-C4-C5	-6.58	119.27	121.90
84	Aa	520	G	O4'-C1'-N9	6.58	113.47	108.20
84	Aa	3087	A	C4-C5-C6	6.58	120.29	117.00
84	Aa	1153	A	C4-C5-C6	6.58	120.29	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1506	A	O4'-C1'-N9	6.58	113.47	108.20
84	Aa	3362	A	C4-C5-C6	6.58	120.29	117.00
84	Aa	1596	G	O4'-C1'-N9	6.58	113.46	108.20
84	Aa	1985	G	C5-C6-O6	-6.58	124.65	128.60
84	Aa	2396	A	C5-C6-N6	-6.58	118.44	123.70
1	Ad	753	C	C1'-O4'-C4'	-6.58	104.64	109.90
1	Ad	1274	G	C1'-O4'-C4'	-6.58	104.64	109.90
57	Ce	26	TYR	CB-CG-CD1	6.58	124.95	121.00
84	Aa	1175	G	C5-C6-O6	-6.58	124.65	128.60
84	Aa	1540	G	O4'-C1'-N9	6.58	113.46	108.20
84	Aa	2601	G	C5-C6-O6	-6.58	124.65	128.60
84	Aa	2944	C	O4'-C1'-N1	6.58	113.46	108.20
84	Aa	3237	G	O4'-C1'-N9	6.58	113.46	108.20
84	Aa	396	G	C5-C6-O6	-6.58	124.65	128.60
84	Aa	430	G	O4'-C1'-N9	6.58	113.46	108.20
1	Ad	110	G	C3'-C2'-C1'	-6.58	96.24	101.50
1	Ad	250	A	C1'-O4'-C4'	6.58	115.16	109.90
1	Ad	648	C	C3'-C2'-C1'	6.58	106.76	101.50
84	Aa	94	A	C4-C5-C6	6.58	120.29	117.00
84	Aa	1166	C	O4'-C1'-N1	6.58	113.46	108.20
84	Aa	2229	G	C5-C6-O6	-6.58	124.65	128.60
84	Aa	2769	U	O4'-C1'-N1	6.58	113.46	108.20
1	Ad	256	G	O4'-C1'-C2'	-6.57	99.23	105.80
1	Ad	632	G	N9-C1'-C2'	6.57	122.55	114.00
1	Ad	750	U	O4'-C1'-N1	6.57	113.46	108.20
1	Ad	905	A	O4'-C1'-N9	6.57	113.46	108.20
84	Aa	424	G	C4-N9-C1'	6.57	135.05	126.50
84	Aa	1167	G	C5-C6-O6	-6.57	124.66	128.60
84	Aa	1224	A	C5-C6-N6	-6.57	118.44	123.70
84	Aa	1691	U	O4'-C1'-N1	6.57	113.46	108.20
84	Aa	1766	U	O4'-C1'-N1	6.57	113.46	108.20
84	Aa	1870	G	O4'-C1'-N9	6.57	113.46	108.20
84	Aa	2618	G	O4'-C1'-N9	6.57	113.46	108.20
84	Aa	2914	G	C5-C6-O6	-6.57	124.66	128.60
86	Ab	59	U	C5-C6-N1	6.57	125.99	122.70
84	Aa	685	G	O4'-C1'-N9	6.57	113.46	108.20
84	Aa	1163	A	C5-C6-N1	-6.57	114.41	117.70
84	Aa	1777	C	O4'-C1'-N1	6.57	113.46	108.20
85	Ac	88	A	C4-C5-C6	6.57	120.29	117.00
1	Ad	1702	G	C1'-O4'-C4'	-6.57	104.64	109.90
73	CO	117	TYR	CB-CG-CD1	6.57	124.94	121.00
84	Aa	21	G	O4'-C1'-N9	6.57	113.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	685	G	C5-C6-O6	-6.57	124.66	128.60
84	Aa	1266	G	N1-C6-O6	6.57	123.84	119.90
84	Aa	2606	G	O4'-C1'-N9	6.57	113.46	108.20
84	Aa	2700	A	C5-C6-N1	-6.57	114.42	117.70
84	Aa	2778	C	O4'-C1'-N1	6.57	113.46	108.20
35	BG	160	ASN	N-CA-CB	6.57	122.42	110.60
84	Aa	613	G	C5-C6-O6	-6.57	124.66	128.60
84	Aa	1371	G	C5-C6-O6	-6.57	124.66	128.60
84	Aa	2132	A	C5-C6-N1	-6.57	114.42	117.70
84	Aa	2989	A	C4-C5-C6	6.57	120.28	117.00
1	Ad	1615	G	C1'-O4'-C4'	-6.57	104.64	109.90
84	Aa	1091	C	N3-C4-N4	6.57	122.60	118.00
84	Aa	1267	A	O4'-C1'-N9	6.57	113.45	108.20
84	Aa	1454	C	O4'-C1'-N1	6.57	113.45	108.20
84	Aa	1916	U	O4'-C1'-N1	6.57	113.45	108.20
84	Aa	2146	A	O4'-C1'-N9	6.57	113.45	108.20
84	Aa	1600	A	C4-C5-C6	6.57	120.28	117.00
84	Aa	1982	G	C5-C6-O6	-6.57	124.66	128.60
84	Aa	2621	G	C5-C6-O6	-6.57	124.66	128.60
84	Aa	2894	U	O4'-C1'-N1	6.57	113.45	108.20
84	Aa	3253	C	N3-C4-C5	-6.57	119.27	121.90
84	Aa	729	G	O4'-C1'-N9	6.56	113.45	108.20
84	Aa	1595	G	C5-C6-O6	-6.56	124.66	128.60
84	Aa	3147	G	C5-C6-O6	-6.56	124.66	128.60
84	Aa	697	A	O4'-C1'-N9	6.56	113.45	108.20
84	Aa	2381	G	O4'-C1'-N9	6.56	113.45	108.20
84	Aa	532	G	O4'-C1'-N9	6.56	113.45	108.20
84	Aa	607	U	C5'-C4'-O4'	6.56	116.97	109.10
84	Aa	1420	G	C5-C6-O6	-6.56	124.66	128.60
84	Aa	1540	G	C5-C6-O6	-6.56	124.66	128.60
1	Ad	467	U	O4'-C1'-N1	6.56	113.45	108.20
1	Ad	720	U	P-O3'-C3'	-6.56	111.83	119.70
84	Aa	2066	G	C5-C6-O6	-6.56	124.66	128.60
84	Aa	2074	C	N3-C4-N4	6.56	122.59	118.00
84	Aa	1643	A	O4'-C1'-N9	6.56	113.44	108.20
84	Aa	1839	C	N3-C4-C5	-6.56	119.28	121.90
84	Aa	1979	G	O4'-C1'-N9	6.56	113.45	108.20
84	Aa	2877	U	O4'-C1'-N1	6.56	113.45	108.20
86	Ab	5	G	C5-C6-O6	-6.56	124.67	128.60
84	Aa	2665	A	O4'-C1'-N9	6.56	113.44	108.20
85	Ac	8	C	N3-C4-N4	6.56	122.59	118.00
84	Aa	707	G	C5-C6-O6	-6.55	124.67	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1531	G	O4'-C1'-N9	6.55	113.44	108.20
84	Aa	1725	G	C5-C6-O6	-6.55	124.67	128.60
85	Ac	108	C	N3-C4-C5	-6.55	119.28	121.90
86	Ab	29	C	O4'-C1'-N1	6.55	113.44	108.20
1	Ad	1304	A	C1'-O4'-C4'	6.55	115.14	109.90
1	Ad	1720	G	C1'-O4'-C4'	-6.55	104.66	109.90
84	Aa	1290	A	O4'-C1'-N9	6.55	113.44	108.20
84	Aa	1083	C	O4'-C1'-N1	6.55	113.44	108.20
84	Aa	1321	A	C5-C6-N1	-6.55	114.42	117.70
84	Aa	1786	G	O4'-C1'-N9	6.55	113.44	108.20
84	Aa	1845	C	N3-C4-N4	6.55	122.59	118.00
84	Aa	2664	G	O4'-C1'-N9	6.55	113.44	108.20
84	Aa	3154	G	O4'-C1'-N9	6.55	113.44	108.20
84	Aa	599	C	O4'-C1'-N1	6.55	113.44	108.20
84	Aa	1143	G	C5-C6-O6	-6.55	124.67	128.60
84	Aa	1679	U	O4'-C1'-N1	6.55	113.44	108.20
84	Aa	2165	A	C5-C6-N1	-6.55	114.42	117.70
84	Aa	2498	C	N3-C4-C5	-6.55	119.28	121.90
84	Aa	2939	G	O4'-C1'-N9	6.55	113.44	108.20
84	Aa	2723	G	C5-C6-O6	-6.55	124.67	128.60
84	Aa	3183	G	O4'-C4'-C3'	-6.55	97.45	104.00
1	Ad	1211	U	O4'-C1'-N1	6.55	113.44	108.20
84	Aa	234	G	O4'-C1'-N9	6.55	113.44	108.20
84	Aa	1318	C	N3-C4-N4	6.55	122.58	118.00
84	Aa	1579	C	N3-C4-C5	-6.55	119.28	121.90
84	Aa	1874	A	C4-C5-C6	6.55	120.27	117.00
84	Aa	2290	A	C4-C5-C6	6.55	120.27	117.00
84	Aa	3384	G	O4'-C1'-N9	6.55	113.44	108.20
84	Aa	904	G	C5-C6-O6	-6.54	124.67	128.60
84	Aa	713	G	C5-C6-O6	-6.54	124.67	128.60
84	Aa	1963	G	O4'-C1'-N9	6.54	113.44	108.20
84	Aa	2260	C	N3-C4-C5	-6.54	119.28	121.90
84	Aa	2311	A	C5-C6-N1	-6.54	114.43	117.70
84	Aa	3052	U	O4'-C1'-N1	6.54	113.44	108.20
84	Aa	909	A	C5-C6-N6	-6.54	118.47	123.70
84	Aa	1479	G	C5-C6-O6	-6.54	124.67	128.60
85	Ac	130	G	O4'-C1'-N9	6.54	113.43	108.20
86	Ab	100	A	N9-C4-C5	6.54	108.42	105.80
1	Ad	411	A	O4'-C1'-N9	6.54	113.43	108.20
1	Ad	749	G	O4'-C1'-C2'	6.54	113.49	107.60
2	Ae	36	C	C1'-O4'-C4'	-6.54	104.67	109.90
84	Aa	1452	A	C4-C5-C6	6.54	120.27	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2424	G	N3-C2-N2	6.54	124.48	119.90
84	Aa	3238	U	O4'-C1'-N1	6.54	113.43	108.20
1	Ad	913	U	N1-C1'-C2'	6.54	122.50	114.00
84	Aa	258	C	O4'-C1'-N1	6.54	113.43	108.20
84	Aa	1798	C	C5'-C4'-C3'	6.54	126.46	116.00
84	Aa	2982	U	O4'-C1'-N1	6.54	113.43	108.20
84	Aa	3216	G	O4'-C1'-N9	6.54	113.43	108.20
1	Ad	640	A	O4'-C1'-N9	6.54	113.43	108.20
1	Ad	642	C	N1-C1'-C2'	6.54	122.50	114.00
1	Ad	1594	A	O4'-C1'-N9	6.54	113.43	108.20
84	Aa	228	C	O4'-C1'-N1	6.54	113.43	108.20
84	Aa	1838	A	C5-C6-N6	-6.54	118.47	123.70
86	Ab	56	G	O4'-C1'-N9	6.54	113.43	108.20
86	Ab	92	C	C6-N1-C2	-6.54	117.69	120.30
84	Aa	2423	A	O4'-C1'-N9	6.53	113.43	108.20
84	Aa	2775	C	N3-C4-C5	-6.53	119.29	121.90
84	Aa	852	C	N3-C4-C5	-6.53	119.29	121.90
84	Aa	2933	C	N3-C4-N4	6.53	122.57	118.00
1	Ad	288	G	O4'-C1'-C2'	6.53	113.48	107.60
84	Aa	555	G	N1-C6-O6	6.53	123.82	119.90
84	Aa	1919	C	N3-C4-C5	-6.53	119.29	121.90
84	Aa	3005	C	N3-C4-C5	-6.53	119.29	121.90
84	Aa	3190	U	C2-N1-C1'	6.53	125.54	117.70
84	Aa	3182	A	P-O5'-C5'	-6.53	110.45	120.90
71	CB	123	CYS	N-CA-CB	6.53	122.35	110.60
84	Aa	255	C	O4'-C1'-N1	6.53	113.42	108.20
84	Aa	259	G	C5-C6-O6	-6.53	124.68	128.60
84	Aa	615	A	C5-C6-N1	-6.53	114.44	117.70
84	Aa	2677	A	C5-C6-N6	-6.53	118.48	123.70
84	Aa	2996	A	C4-C5-C6	6.53	120.26	117.00
1	Ad	1003	A	C3'-C2'-C1'	6.53	106.72	101.50
84	Aa	40	G	C5-C6-O6	-6.53	124.68	128.60
84	Aa	1488	G	N3-C2-N2	6.53	124.47	119.90
84	Aa	2409	U	O4'-C1'-N1	6.53	113.42	108.20
84	Aa	1993	G	O4'-C1'-N9	6.52	113.42	108.20
84	Aa	2746	G	C5-C6-O6	-6.52	124.69	128.60
1	Ad	448	C	N1-C1'-C2'	6.52	122.48	114.00
18	BN	81	ALA	N-CA-CB	6.52	119.23	110.10
84	Aa	1067	G	C5-C6-O6	-6.52	124.69	128.60
84	Aa	1261	C	C5-C4-N4	-6.52	115.63	120.20
84	Aa	2165	A	C5'-C4'-C3'	-6.52	105.56	116.00
84	Aa	2736	A	C5-C6-N1	-6.52	114.44	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1243	C	N3-C4-C5	-6.52	119.29	121.90
84	Aa	1941	G	O4'-C1'-N9	6.52	113.42	108.20
84	Aa	385	A	C5-C6-N1	-6.52	114.44	117.70
1	Ad	1809	U	P-O3'-C3'	6.52	127.52	119.70
84	Aa	266	A	C5-C6-N6	-6.52	118.49	123.70
84	Aa	970	A	O4'-C1'-N9	6.52	113.41	108.20
1	Ad	201	G	C1'-O4'-C4'	-6.52	104.69	109.90
1	Ad	546	U	P-O3'-C3'	6.52	127.52	119.70
84	Aa	59	A	O4'-C1'-N9	6.52	113.41	108.20
84	Aa	421	A	O4'-C1'-N9	6.52	113.41	108.20
84	Aa	1726	G	C5-C6-O6	-6.52	124.69	128.60
86	Ab	96	U	O4'-C1'-N1	6.52	113.41	108.20
1	Ad	1382	C	C1'-O4'-C4'	-6.51	104.69	109.90
84	Aa	1340	G	O4'-C1'-N9	6.51	113.41	108.20
84	Aa	1532	A	C5-C6-N1	-6.51	114.44	117.70
84	Aa	1936	G	C5-C6-O6	-6.51	124.69	128.60
84	Aa	1950	G	N1-C6-O6	6.51	123.81	119.90
86	Ab	18	C	O4'-C1'-N1	6.51	113.41	108.20
1	Ad	240	U	N1-C1'-C2'	6.51	122.47	114.00
84	Aa	1441	U	O4'-C1'-N1	6.51	113.41	108.20
84	Aa	67	C	O4'-C1'-N1	6.51	113.41	108.20
84	Aa	125	G	O4'-C1'-N9	6.51	113.41	108.20
84	Aa	263	A	C4-C5-C6	6.51	120.26	117.00
84	Aa	1308	A	C4-C5-C6	6.51	120.26	117.00
84	Aa	2086	A	P-O3'-C3'	6.51	127.51	119.70
84	Aa	2721	C	N3-C4-C5	-6.51	119.30	121.90
84	Aa	259	G	O4'-C1'-N9	6.51	113.41	108.20
84	Aa	1836	U	O4'-C1'-N1	6.51	113.41	108.20
84	Aa	1922	C	O4'-C1'-N1	6.51	113.41	108.20
84	Aa	2263	U	O4'-C1'-N1	6.51	113.41	108.20
84	Aa	2539	G	O4'-C1'-N9	6.51	113.41	108.20
84	Aa	3380	G	O4'-C1'-N9	6.51	113.41	108.20
1	Ad	55	A	N9-C1'-C2'	6.51	122.46	114.00
84	Aa	1855	A	C4-C5-C6	6.51	120.25	117.00
1	Ad	1679	A	C3'-C2'-C1'	6.51	106.70	101.50
84	Aa	972	C	N3-C4-C5	-6.51	119.30	121.90
84	Aa	1632	G	C5-C6-O6	-6.51	124.70	128.60
84	Aa	1849	U	O4'-C1'-N1	6.51	113.41	108.20
84	Aa	2029	G	C5-C6-O6	-6.51	124.70	128.60
84	Aa	2669	C	N3-C4-C5	-6.51	119.30	121.90
84	Aa	3143	A	O4'-C1'-N9	6.51	113.41	108.20
1	Ad	1624	G	C5'-C4'-O4'	6.50	116.91	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BZ	108	ALA	N-CA-CB	6.50	119.21	110.10
84	Aa	941	C	O4'-C1'-N1	6.50	113.40	108.20
84	Aa	2173	G	C5-C6-O6	-6.50	124.70	128.60
84	Aa	1964	G	O4'-C1'-N9	6.50	113.40	108.20
84	Aa	2344	A	C5-C6-N1	-6.50	114.45	117.70
84	Aa	2756	G	N1-C6-O6	6.50	123.80	119.90
1	Ad	141	G	C3'-C2'-C1'	6.50	106.70	101.50
1	Ad	1058	G	C1'-O4'-C4'	-6.50	104.70	109.90
84	Aa	670	A	O4'-C1'-N9	6.50	113.40	108.20
84	Aa	988	G	C5-C6-O6	-6.50	124.70	128.60
84	Aa	2040	G	O4'-C1'-N9	6.50	113.40	108.20
84	Aa	2080	G	C5-C6-O6	-6.50	124.70	128.60
84	Aa	2855	G	C5-C6-O6	-6.50	124.70	128.60
84	Aa	155	G	C5-C6-O6	-6.50	124.70	128.60
84	Aa	2353	C	N3-C4-C5	-6.50	119.30	121.90
1	Ad	998	A	C1'-O4'-C4'	-6.50	104.70	109.90
2	Ae	41	G	O4'-C1'-N9	6.50	113.40	108.20
84	Aa	758	A	C5-C6-N1	-6.50	114.45	117.70
84	Aa	1506	A	C5-C6-N6	-6.50	118.50	123.70
2	Ae	5	U	C3'-C2'-C1'	6.50	106.70	101.50
84	Aa	1	G	C5-C6-O6	-6.50	124.70	128.60
84	Aa	290	C	N3-C4-C5	-6.50	119.30	121.90
84	Aa	1063	G	O4'-C1'-N9	6.50	113.40	108.20
84	Aa	1365	C	N3-C4-N4	6.50	122.55	118.00
84	Aa	2790	C	O4'-C1'-N1	6.50	113.40	108.20
1	Ad	1041	A	C1'-O4'-C4'	6.50	115.10	109.90
84	Aa	358	G	C5-C6-O6	-6.50	124.70	128.60
84	Aa	2315	G	C5-C6-O6	-6.50	124.70	128.60
1	Ad	850	G	O4'-C1'-N9	6.49	113.39	108.20
1	Ad	919	G	C1'-O4'-C4'	6.49	115.09	109.90
84	Aa	742	G	C5-C6-O6	-6.49	124.70	128.60
1	Ad	1036	U	O4'-C1'-C2'	-6.49	99.31	105.80
1	Ad	1467	C	C1'-O4'-C4'	-6.49	104.71	109.90
84	Aa	997	G	N1-C6-O6	6.49	123.80	119.90
84	Aa	1625	G	O4'-C1'-N9	6.49	113.39	108.20
84	Aa	2523	G	C5'-C4'-O4'	6.49	116.89	109.10
84	Aa	2724	A	O4'-C1'-N9	6.49	113.39	108.20
84	Aa	99	A	C4-C5-C6	6.49	120.25	117.00
84	Aa	744	C	N3-C4-C5	-6.49	119.31	121.90
84	Aa	1485	A	C4-C5-C6	6.49	120.24	117.00
84	Aa	1997	G	C5-C6-O6	-6.49	124.71	128.60
84	Aa	2368	G	C5-C6-O6	-6.49	124.71	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2426	C	N3-C4-C5	-6.49	119.30	121.90
84	Aa	2797	U	O4'-C1'-N1	6.49	113.39	108.20
84	Aa	3226	G	O4'-C1'-N9	6.49	113.39	108.20
86	Ab	22	A	O4'-C1'-N9	6.49	113.39	108.20
86	Ab	27	A	C5-C6-N6	-6.49	118.51	123.70
84	Aa	918	A	C4-C5-C6	6.49	120.24	117.00
84	Aa	2284	U	O4'-C1'-N1	6.49	113.39	108.20
1	Ad	922	U	C1'-O4'-C4'	-6.49	104.71	109.90
1	Ad	1268	G	O4'-C1'-N9	6.49	113.39	108.20
84	Aa	51	A	C5'-C4'-O4'	6.49	116.88	109.10
84	Aa	958	U	O4'-C1'-N1	6.49	113.39	108.20
84	Aa	1235	A	O4'-C1'-N9	6.49	113.39	108.20
84	Aa	1978	G	C5-C6-O6	-6.49	124.71	128.60
84	Aa	2591	G	N1-C6-O6	6.49	123.79	119.90
84	Aa	3152	C	P-O3'-C3'	6.49	127.48	119.70
84	Aa	184	C	O4'-C1'-N1	6.48	113.39	108.20
84	Aa	944	G	C5-C6-O6	-6.48	124.71	128.60
1	Ad	11	A	O4'-C1'-C2'	-6.48	99.32	105.80
1	Ad	1679	A	O4'-C1'-C2'	-6.48	99.32	105.80
72	CC	330	VAL	N-CA-C	-6.48	93.50	111.00
84	Aa	2365	C	O4'-C1'-N1	6.48	113.39	108.20
84	Aa	2977	U	O4'-C1'-N1	6.48	113.39	108.20
84	Aa	3006	G	C5-C6-O6	-6.48	124.71	128.60
1	Ad	714	C	O4'-C1'-N1	6.48	113.39	108.20
84	Aa	791	C	N3-C4-C5	-6.48	119.31	121.90
84	Aa	1377	G	C5-C6-O6	-6.48	124.71	128.60
84	Aa	1680	A	O4'-C1'-N9	6.48	113.39	108.20
86	Ab	92	C	C2-N3-C4	6.48	123.14	119.90
84	Aa	369	G	C5-C6-O6	-6.48	124.71	128.60
84	Aa	1308	A	P-O3'-C3'	-6.48	111.92	119.70
1	Ad	255	U	C1'-O4'-C4'	6.48	115.08	109.90
50	CP	167	ALA	N-CA-CB	6.48	119.17	110.10
84	Aa	253	G	C5-C6-O6	-6.48	124.71	128.60
84	Aa	1648	C	N3-C4-C5	-6.48	119.31	121.90
84	Aa	2898	A	O4'-C1'-N9	6.48	113.38	108.20
84	Aa	3193	C	O4'-C1'-N1	6.48	113.38	108.20
1	Ad	1259	G	C3'-C2'-C1'	-6.48	96.32	101.50
84	Aa	3231	G	O4'-C1'-N9	6.48	113.38	108.20
84	Aa	217	A	C5-C6-N6	-6.47	118.52	123.70
84	Aa	1617	A	C5-C6-N1	-6.47	114.46	117.70
84	Aa	1893	G	C5-C6-O6	-6.47	124.72	128.60
1	Ad	1180	U	O4'-C1'-N1	6.47	113.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1282	A	P-O3'-C3'	6.47	127.47	119.70
84	Aa	3128	A	O4'-C1'-N9	6.47	113.38	108.20
86	Ab	50	A	C4-C5-C6	6.47	120.24	117.00
1	Ad	245	C	C1'-O4'-C4'	-6.47	104.72	109.90
1	Ad	108	C	N1-C1'-C2'	6.47	122.41	114.00
84	Aa	1233	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	3084	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	3313	C	O4'-C1'-N1	6.47	113.38	108.20
85	Ac	67	U	O4'-C1'-N1	6.47	113.38	108.20
86	Ab	9	U	O4'-C1'-N1	6.47	113.38	108.20
86	Ab	50	A	O4'-C1'-N9	6.47	113.38	108.20
1	Ad	194	G	O4'-C1'-C2'	-6.47	99.33	105.80
84	Aa	1450	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	2065	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	2119	A	C5-C6-N1	-6.47	114.47	117.70
1	Ad	536	U	O4'-C1'-C2'	6.47	113.42	107.60
84	Aa	5	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	209	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	986	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	1142	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	1334	A	C5-C6-N6	-6.47	118.53	123.70
84	Aa	1841	G	C5-C6-O6	-6.47	124.72	128.60
84	Aa	2173	G	N1-C6-O6	6.47	123.78	119.90
85	Ac	89	A	C5-C6-N1	-6.47	114.47	117.70
85	Ac	102	U	O4'-C1'-N1	6.47	113.37	108.20
1	Ad	521	U	O4'-C1'-N1	6.46	113.37	108.20
84	Aa	923	A	N1-C6-N6	6.46	122.48	118.60
84	Aa	1655	G	C5-C6-O6	-6.46	124.72	128.60
84	Aa	2461	A	C4-C5-C6	6.46	120.23	117.00
1	Ad	926	G	C5'-C4'-O4'	6.46	116.86	109.10
1	Ad	1502	C	N1-C1'-C2'	6.46	122.40	114.00
84	Aa	1757	G	C5-C6-O6	-6.46	124.72	128.60
1	Ad	357	A	C3'-C2'-C1'	6.46	106.67	101.50
84	Aa	349	A	C5-C6-N1	-6.46	114.47	117.70
84	Aa	682	G	O4'-C1'-N9	6.46	113.37	108.20
84	Aa	1123	A	C5-C6-N1	-6.46	114.47	117.70
84	Aa	1356	G	C5-C6-O6	-6.46	124.72	128.60
84	Aa	1634	G	C5-C6-O6	-6.46	124.72	128.60
84	Aa	1895	G	C5-C6-O6	-6.46	124.72	128.60
84	Aa	3107	A	C4-C5-C6	6.46	120.23	117.00
85	Ac	2	G	O4'-C1'-N9	6.46	113.37	108.20
86	Ab	83	A	C5-C6-N6	-6.46	118.53	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	778	G	O4'-C1'-N9	6.46	113.37	108.20
84	Aa	991	C	N3-C4-N4	6.46	122.52	118.00
84	Aa	1353	A	C4-C5-C6	6.46	120.23	117.00
84	Aa	2688	G	O4'-C1'-N9	6.46	113.37	108.20
84	Aa	3276	G	O4'-C1'-N9	6.46	113.37	108.20
1	Ad	79	A	C1'-O4'-C4'	6.46	115.07	109.90
1	Ad	749	G	C1'-O4'-C4'	-6.46	104.73	109.90
1	Ad	1727	C	N1-C1'-C2'	6.46	122.39	114.00
1	Ad	1792	A	O4'-C1'-N9	6.46	113.37	108.20
2	Ae	7	A	P-O3'-C3'	6.46	127.45	119.70
84	Aa	478	G	C5-C6-O6	-6.46	124.72	128.60
84	Aa	1096	C	N3-C4-C5	-6.46	119.32	121.90
84	Aa	1883	A	C4-C5-C6	6.46	120.23	117.00
84	Aa	2024	G	C5-C6-O6	-6.46	124.72	128.60
84	Aa	2126	C	N3-C4-C5	-6.46	119.32	121.90
84	Aa	3017	A	C4-C5-C6	6.46	120.23	117.00
84	Aa	28	C	N3-C4-C5	-6.46	119.32	121.90
84	Aa	1758	U	O4'-C1'-N1	6.46	113.36	108.20
84	Aa	2050	G	O4'-C1'-N9	6.46	113.37	108.20
84	Aa	2138	A	C5-C6-N6	-6.46	118.53	123.70
84	Aa	2290	A	C5-C6-N1	-6.46	114.47	117.70
84	Aa	3156	G	C5-C6-O6	-6.46	124.73	128.60
85	Ac	140	A	C5-C6-N1	-6.46	114.47	117.70
86	Ab	42	A	N9-C4-C5	6.46	108.38	105.80
86	Ab	101	A	C8-N9-C4	-6.46	103.22	105.80
86	Ab	12	U	O4'-C1'-N1	6.46	113.36	108.20
1	Ad	139	U	N1-C1'-C2'	6.45	122.39	114.00
1	Ad	1806	C	C1'-O4'-C4'	6.45	115.06	109.90
84	Aa	84	A	O4'-C1'-N9	6.45	113.36	108.20
84	Aa	1188	C	P-O5'-C5'	6.45	131.22	120.90
84	Aa	2577	G	O4'-C1'-N9	6.45	113.36	108.20
84	Aa	2967	U	O4'-C1'-N1	6.45	113.36	108.20
1	Ad	398	C	O4'-C1'-N1	6.45	113.36	108.20
84	Aa	674	G	O4'-C1'-N9	6.45	113.36	108.20
84	Aa	2683	A	C5-C6-N1	-6.45	114.47	117.70
84	Aa	2729	C	C6-N1-C1'	-6.45	113.06	120.80
84	Aa	2922	U	O4'-C1'-N1	6.45	113.36	108.20
85	Ac	157	A	C5-C6-N6	-6.45	118.54	123.70
1	Ad	329	G	C1'-O4'-C4'	-6.45	104.74	109.90
73	CO	136	PRO	CB-CA-C	6.45	128.13	112.00
84	Aa	754	G	C5-C6-O6	-6.45	124.73	128.60
84	Aa	957	U	O4'-C1'-N1	6.45	113.36	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2105	G	C5-C6-O6	-6.45	124.73	128.60
84	Aa	3110	A	C4-C5-C6	6.45	120.23	117.00
84	Aa	3316	C	N3-C4-N4	6.45	122.52	118.00
85	Ac	16	G	C5-C6-O6	-6.45	124.73	128.60
1	Ad	1450	A	C1'-O4'-C4'	6.45	115.06	109.90
1	Ad	1530	G	O4'-C1'-C2'	-6.45	99.35	105.80
84	Aa	363	A	C4-C5-C6	6.45	120.22	117.00
84	Aa	486	G	C5-C6-O6	-6.45	124.73	128.60
84	Aa	518	G	O4'-C1'-N9	6.45	113.36	108.20
84	Aa	937	G	C5-C6-O6	-6.45	124.73	128.60
84	Aa	941	C	N3-C4-C5	-6.45	119.32	121.90
84	Aa	1397	A	C4-C5-C6	6.45	120.22	117.00
84	Aa	1802	A	O4'-C1'-N9	6.45	113.36	108.20
84	Aa	2461	A	C5-C6-N1	-6.45	114.48	117.70
84	Aa	3130	A	O4'-C1'-N9	6.45	113.36	108.20
84	Aa	3227	U	O4'-C1'-N1	6.45	113.36	108.20
1	Ad	166	A	C3'-C2'-C1'	6.45	106.66	101.50
1	Ad	1638	U	O4'-C1'-N1	6.45	113.36	108.20
84	Aa	2550	C	N3-C4-C5	-6.45	119.32	121.90
1	Ad	834	A	N9-C1'-C2'	-6.45	104.91	112.00
84	Aa	436	G	O4'-C1'-N9	6.45	113.36	108.20
84	Aa	1313	U	O4'-C1'-N1	6.45	113.36	108.20
84	Aa	1344	A	C4-C5-C6	6.45	120.22	117.00
84	Aa	1367	A	O4'-C1'-N9	6.45	113.36	108.20
84	Aa	1472	C	O4'-C1'-N1	6.45	113.36	108.20
84	Aa	2494	A	C4-C5-C6	6.45	120.22	117.00
1	Ad	1589	C	O4'-C1'-C2'	-6.44	99.36	105.80
84	Aa	1366	G	O4'-C1'-N9	6.44	113.36	108.20
84	Aa	2324	G	O4'-C1'-N9	6.44	113.36	108.20
86	Ab	42	A	C8-N9-C4	-6.44	103.22	105.80
84	Aa	1180	C	O4'-C1'-N1	6.44	113.35	108.20
84	Aa	1296	C	O4'-C1'-N1	6.44	113.36	108.20
84	Aa	1447	G	C5-C6-O6	-6.44	124.73	128.60
84	Aa	2002	G	O4'-C1'-N9	6.44	113.35	108.20
84	Aa	3041	A	C5-C6-N1	-6.44	114.48	117.70
84	Aa	3095	G	N1-C6-O6	6.44	123.77	119.90
1	Ad	1783	C	C1'-O4'-C4'	-6.44	104.75	109.90
72	CC	91	ALA	N-CA-CB	6.44	119.12	110.10
84	Aa	111	C	O4'-C1'-N1	6.44	113.35	108.20
84	Aa	505	G	C5-C6-O6	-6.44	124.73	128.60
84	Aa	966	G	C5-C6-O6	-6.44	124.74	128.60
84	Aa	1516	G	N1-C6-O6	6.44	123.76	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1006	A	C3'-C2'-C1'	6.44	106.65	101.50
1	Ad	1648	C	O4'-C1'-C2'	-6.44	99.36	105.80
2	Ae	30	G	O4'-C1'-C2'	6.44	113.39	107.60
84	Aa	2875	U	O4'-C1'-N1	6.44	113.35	108.20
1	Ad	21	U	O4'-C1'-N1	6.44	113.35	108.20
1	Ad	1186	U	C1'-O4'-C4'	6.44	115.05	109.90
57	Ce	67	TYR	CB-CG-CD1	6.44	124.86	121.00
84	Aa	1106	G	O4'-C1'-N9	6.44	113.35	108.20
84	Aa	1379	G	C5-C6-O6	-6.44	124.74	128.60
84	Aa	2235	G	C5-C6-O6	-6.44	124.74	128.60
86	Ab	88	U	O4'-C1'-N1	6.44	113.35	108.20
84	Aa	920	A	C5-C6-N6	-6.44	118.55	123.70
84	Aa	2414	C	O4'-C1'-N1	6.44	113.35	108.20
84	Aa	2518	A	C4-C5-C6	6.44	120.22	117.00
84	Aa	894	G	C5-C6-O6	-6.43	124.74	128.60
84	Aa	1181	A	C4-C5-C6	6.43	120.22	117.00
84	Aa	1913	C	N3-C4-C5	-6.43	119.33	121.90
84	Aa	2486	G	O4'-C1'-N9	6.43	113.35	108.20
84	Aa	2932	A	O4'-C1'-N9	6.43	113.35	108.20
1	Ad	1508	C	N1-C1'-C2'	6.43	122.36	114.00
84	Aa	908	U	O4'-C1'-N1	6.43	113.35	108.20
84	Aa	1707	C	N3-C4-C5	-6.43	119.33	121.90
84	Aa	2496	U	C4'-C3'-O3'	-6.43	95.89	109.40
84	Aa	3222	G	C5-C6-O6	-6.43	124.74	128.60
1	Ad	1305	U	O4'-C1'-N1	6.43	113.34	108.20
84	Aa	2960	A	C5-C6-N1	-6.43	114.48	117.70
84	Aa	3013	A	C5-C6-N1	-6.43	114.48	117.70
84	Aa	2239	A	C4-C5-C6	6.43	120.22	117.00
84	Aa	3220	A	C5-C6-N6	-6.43	118.56	123.70
1	Ad	1572	U	C1'-O4'-C4'	-6.43	104.76	109.90
84	Aa	65	A	C5-C6-N6	-6.43	118.56	123.70
84	Aa	3172	G	C5-C6-O6	-6.43	124.74	128.60
59	Cl	39	ALA	N-CA-CB	6.43	119.10	110.10
84	Aa	83	U	O4'-C1'-N1	6.43	113.34	108.20
84	Aa	177	C	N3-C4-C5	-6.43	119.33	121.90
84	Aa	959	U	O4'-C1'-N1	6.43	113.34	108.20
84	Aa	1070	G	O4'-C1'-N9	6.43	113.34	108.20
84	Aa	2723	G	O4'-C1'-N9	6.43	113.34	108.20
3	Af	12	A	O4'-C1'-C2'	6.42	113.38	107.60
84	Aa	232	C	O4'-C1'-N1	6.42	113.34	108.20
84	Aa	429	G	O4'-C1'-N9	6.42	113.34	108.20
84	Aa	598	U	O4'-C1'-N1	6.42	113.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1370	A	C4-C5-C6	6.42	120.21	117.00
84	Aa	1642	G	O4'-C1'-N9	6.42	113.34	108.20
84	Aa	1982	G	O4'-C1'-N9	6.42	113.34	108.20
84	Aa	2286	A	C4-C5-C6	6.42	120.21	117.00
84	Aa	2514	A	C5-C6-N1	-6.42	114.49	117.70
86	Ab	111	U	C6-N1-C2	-6.42	117.15	121.00
84	Aa	997	G	O4'-C1'-N9	6.42	113.34	108.20
84	Aa	1333	C	O4'-C1'-N1	6.42	113.34	108.20
84	Aa	1519	C	N3-C4-C5	-6.42	119.33	121.90
84	Aa	2388	C	N3-C4-N4	6.42	122.50	118.00
84	Aa	2930	C	O4'-C1'-N1	6.42	113.34	108.20
1	Ad	237	C	C1'-O4'-C4'	-6.42	104.76	109.90
84	Aa	639	A	C4-C5-C6	6.42	120.21	117.00
84	Aa	1386	G	C5-C6-O6	-6.42	124.75	128.60
84	Aa	2159	U	O4'-C1'-N1	6.42	113.34	108.20
85	Ac	17	A	O4'-C1'-N9	6.42	113.34	108.20
84	Aa	3322	A	C5-C6-N1	-6.42	114.49	117.70
85	Ac	142	G	C5-C6-O6	-6.42	124.75	128.60
1	Ad	314	C	O4'-C1'-N1	6.42	113.33	108.20
84	Aa	34	G	O4'-C1'-N9	6.42	113.33	108.20
84	Aa	294	A	C5-C6-N6	-6.42	118.57	123.70
84	Aa	746	C	C1'-O4'-C4'	-6.42	104.77	109.90
84	Aa	1443	G	C5-C6-O6	-6.42	124.75	128.60
84	Aa	2334	G	C5-C6-O6	-6.42	124.75	128.60
84	Aa	3332	G	O4'-C1'-N9	6.42	113.33	108.20
1	Ad	363	G	C3'-C2'-C1'	-6.42	96.37	101.50
84	Aa	593	G	C5-C6-O6	-6.42	124.75	128.60
84	Aa	2256	G	C5-C6-O6	-6.42	124.75	128.60
84	Aa	2679	A	C4-C5-C6	6.42	120.21	117.00
84	Aa	2817	G	O4'-C1'-N9	6.42	113.33	108.20
84	Aa	3044	C	N3-C4-C5	-6.42	119.33	121.90
1	Ad	474	A	C3'-C2'-C1'	6.42	106.63	101.50
1	Ad	196	G	C1'-O4'-C4'	-6.41	104.77	109.90
84	Aa	829	G	C5-C6-O6	-6.41	124.75	128.60
84	Aa	1661	G	C5-C6-O6	-6.41	124.75	128.60
84	Aa	3230	G	C5-C6-O6	-6.41	124.75	128.60
71	CB	265	TYR	CB-CG-CD1	6.41	124.85	121.00
84	Aa	2463	U	C5'-C4'-O4'	6.41	116.80	109.10
86	Ab	43	A	O4'-C1'-N9	6.41	113.33	108.20
86	Ab	68	G	O4'-C1'-N9	6.41	113.33	108.20
84	Aa	270	G	C5-C6-O6	-6.41	124.75	128.60
84	Aa	969	U	O4'-C1'-N1	6.41	113.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2057	G	C5-C6-O6	-6.41	124.75	128.60
84	Aa	2698	A	C5-C6-N1	-6.41	114.49	117.70
86	Ab	27	A	C4-C5-C6	6.41	120.20	117.00
84	Aa	1184	U	C5-C4-O4	-6.41	122.06	125.90
84	Aa	1954	G	O4'-C1'-N9	6.41	113.33	108.20
63	CU	92	TYR	CB-CG-CD1	6.41	124.84	121.00
84	Aa	1816	U	O4'-C1'-N1	6.41	113.33	108.20
84	Aa	1886	U	O4'-C1'-N1	6.41	113.33	108.20
85	Ac	126	A	C4-C5-C6	6.41	120.20	117.00
1	Ad	100	C	O4'-C1'-N1	6.41	113.33	108.20
1	Ad	151	A	C1'-O4'-C4'	6.41	115.03	109.90
1	Ad	1020	U	C3'-C2'-C1'	6.41	106.62	101.50
20	BT	51	TYR	CB-CG-CD2	6.41	124.84	121.00
84	Aa	1416	G	C5-C6-O6	-6.41	124.76	128.60
84	Aa	1595	G	O4'-C1'-N9	6.41	113.32	108.20
84	Aa	3057	A	C5-C6-N1	-6.41	114.50	117.70
86	Ab	68	G	C6-C5-N7	-6.41	126.56	130.40
45	CN	81	TYR	CB-CG-CD1	-6.40	117.16	121.00
1	Ad	529	A	P-O3'-C3'	6.40	127.38	119.70
1	Ad	60	C	P-O3'-C3'	-6.40	112.02	119.70
84	Aa	242	U	O4'-C1'-N1	6.40	113.32	108.20
84	Aa	288	G	P-O3'-C3'	6.40	127.38	119.70
84	Aa	733	C	N3-C4-C5	-6.40	119.34	121.90
84	Aa	1809	A	C4-C5-C6	6.40	120.20	117.00
84	Aa	2722	U	O4'-C1'-N1	6.40	113.32	108.20
84	Aa	657	A	C5-C6-N6	-6.40	118.58	123.70
84	Aa	1918	A	O4'-C1'-N9	6.40	113.32	108.20
84	Aa	2743	A	C4-C5-C6	6.40	120.20	117.00
1	Ad	1541	C	C3'-C2'-C1'	6.40	106.62	101.50
79	CE	124	TYR	CB-CG-CD2	-6.40	117.16	121.00
84	Aa	2076	C	N3-C4-C5	-6.40	119.34	121.90
84	Aa	2228	A	C4-C5-C6	6.40	120.20	117.00
84	Aa	2232	C	O4'-C1'-N1	6.40	113.32	108.20
84	Aa	2889	A	C4-C5-C6	6.40	120.20	117.00
84	Aa	3059	C	C6-N1-C1'	-6.40	113.12	120.80
1	Ad	593	C	O4'-C1'-C2'	-6.40	99.40	105.80
1	Ad	1409	G	C1'-O4'-C4'	-6.40	104.78	109.90
84	Aa	405	A	C4-C5-C6	6.40	120.20	117.00
84	Aa	1451	U	O4'-C1'-N1	6.40	113.32	108.20
85	Ac	103	G	C5-C6-O6	-6.40	124.76	128.60
84	Aa	250	C	P-O3'-C3'	6.39	127.37	119.70
84	Aa	729	G	C5-C6-O6	-6.39	124.76	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	947	C	O4'-C1'-N1	6.39	113.32	108.20
84	Aa	1447	G	O4'-C1'-N9	6.39	113.31	108.20
84	Aa	1865	C	N3-C4-C5	-6.39	119.34	121.90
84	Aa	1979	G	C5-C6-O6	-6.39	124.76	128.60
84	Aa	2134	U	O4'-C1'-N1	6.39	113.32	108.20
85	Ac	123	G	O4'-C1'-N9	6.39	113.32	108.20
84	Aa	2239	A	O4'-C1'-N9	6.39	113.31	108.20
84	Aa	1219	C	N3-C4-N4	6.39	122.47	118.00
84	Aa	1299	G	C5-C6-O6	-6.39	124.77	128.60
1	Ad	287	C	C3'-C2'-C1'	6.39	106.61	101.50
1	Ad	1073	C	C3'-C2'-C1'	6.39	106.61	101.50
84	Aa	239	C	N3-C4-N4	6.39	122.47	118.00
84	Aa	300	C	N3-C4-C5	-6.39	119.34	121.90
84	Aa	571	G	C5-C6-O6	-6.39	124.77	128.60
84	Aa	578	C	N3-C4-C5	-6.39	119.34	121.90
84	Aa	844	A	C5-C6-N1	-6.39	114.50	117.70
84	Aa	3284	C	N3-C4-N4	6.39	122.47	118.00
84	Aa	128	C	N3-C4-C5	-6.39	119.34	121.90
84	Aa	1032	C	O4'-C1'-N1	6.39	113.31	108.20
1	Ad	356	G	P-O3'-C3'	6.39	127.36	119.70
84	Aa	2319	A	C4-C5-C6	6.39	120.19	117.00
1	Ad	68	A	C1'-O4'-C4'	-6.38	104.79	109.90
1	Ad	651	G	N9-C1'-C2'	6.38	122.30	114.00
84	Aa	196	A	C4-C5-C6	6.38	120.19	117.00
84	Aa	978	C	N3-C4-C5	-6.38	119.35	121.90
84	Aa	1138	A	C5-C6-N1	-6.38	114.51	117.70
84	Aa	1757	G	O4'-C1'-N9	6.38	113.31	108.20
84	Aa	2050	G	C5-C6-O6	-6.38	124.77	128.60
84	Aa	2258	C	N3-C4-C5	-6.38	119.35	121.90
84	Aa	3303	C	N3-C4-C5	-6.38	119.35	121.90
1	Ad	483	C	N1-C1'-C2'	6.38	122.30	114.00
2	Ae	50	G	C1'-O4'-C4'	6.38	115.01	109.90
84	Aa	2909	A	C5-C6-N1	-6.38	114.51	117.70
85	Ac	2	G	C5-C6-O6	-6.38	124.77	128.60
1	Ad	350	G	O4'-C1'-N9	6.38	113.31	108.20
1	Ad	382	A	O4'-C1'-N9	6.38	113.31	108.20
18	BN	151	ALA	N-CA-CB	6.38	119.03	110.10
84	Aa	1348	G	C5-C6-O6	-6.38	124.77	128.60
84	Aa	2450	G	P-O5'-C5'	6.38	131.11	120.90
84	Aa	2472	U	O4'-C1'-N1	6.38	113.31	108.20
84	Aa	129	G	C5-C6-O6	-6.38	124.77	128.60
84	Aa	530	C	N3-C4-C5	-6.38	119.35	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1230	G	C5-C6-O6	-6.38	124.77	128.60
84	Aa	1901	G	O4'-C1'-N9	6.38	113.30	108.20
1	Ad	1538	C	O4'-C1'-C2'	-6.38	99.42	105.80
84	Aa	354	C	N3-C4-C5	-6.38	119.35	121.90
84	Aa	477	C	N3-C4-C5	-6.38	119.35	121.90
84	Aa	1631	G	C5-C6-O6	-6.38	124.77	128.60
84	Aa	2405	C	N3-C4-C5	-6.38	119.35	121.90
84	Aa	3121	C	N3-C4-N4	6.38	122.47	118.00
84	Aa	3139	U	O4'-C1'-N1	6.38	113.30	108.20
1	Ad	1314	U	O4'-C1'-N1	6.38	113.30	108.20
84	Aa	422	G	C5-C6-O6	-6.38	124.77	128.60
84	Aa	442	C	N3-C4-C5	-6.38	119.35	121.90
84	Aa	1341	G	N3-C2-N2	6.38	124.36	119.90
84	Aa	310	C	N3-C4-C5	-6.38	119.35	121.90
3	Af	17	A	N9-C1'-C2'	6.37	122.29	114.00
84	Aa	424	G	C5-C6-O6	-6.37	124.78	128.60
84	Aa	1281	C	N3-C4-C5	-6.37	119.35	121.90
84	Aa	2747	U	O4'-C1'-N1	6.37	113.30	108.20
1	Ad	227	G	O3'-P-O5'	6.37	116.11	104.00
1	Ad	236	U	O4'-C1'-N1	6.37	113.30	108.20
1	Ad	784	C	N1-C1'-C2'	-6.37	104.99	112.00
79	CE	50	PHE	CB-CG-CD1	6.37	125.26	120.80
84	Aa	254	G	C5-C6-O6	-6.37	124.78	128.60
84	Aa	282	A	C5-C6-N6	-6.37	118.60	123.70
84	Aa	868	A	C4-C5-C6	6.37	120.19	117.00
84	Aa	2168	C	P-O3'-C3'	6.37	127.35	119.70
84	Aa	2435	U	O4'-C1'-N1	6.37	113.30	108.20
84	Aa	2500	U	O4'-C1'-N1	6.37	113.30	108.20
84	Aa	3167	G	C5-C6-O6	-6.37	124.78	128.60
85	Ac	18	U	O4'-C1'-N1	6.37	113.30	108.20
84	Aa	322	A	C4-C5-C6	6.37	120.19	117.00
84	Aa	2695	A	C4-C5-C6	6.37	120.19	117.00
1	Ad	82	G	O4'-C1'-N9	6.37	113.29	108.20
84	Aa	356	G	C5-C6-O6	-6.37	124.78	128.60
84	Aa	811	A	C5-C6-N6	-6.37	118.61	123.70
84	Aa	817	U	O4'-C1'-N1	6.37	113.30	108.20
84	Aa	1297	U	O4'-C1'-N1	6.37	113.29	108.20
84	Aa	2139	A	C4-C5-C6	6.37	120.18	117.00
84	Aa	2164	G	O4'-C1'-N9	6.37	113.30	108.20
84	Aa	3084	G	O4'-C1'-N9	6.37	113.29	108.20
84	Aa	3333	C	C1'-O4'-C4'	-6.37	104.81	109.90
84	Aa	29	G	N3-C2-N2	6.37	124.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	130	G	O4'-C1'-N9	6.37	113.29	108.20
84	Aa	1855	A	C5-C6-N6	-6.37	118.61	123.70
84	Aa	584	G	C5-C6-O6	-6.37	124.78	128.60
84	Aa	1282	A	C4-C5-C6	6.37	120.18	117.00
84	Aa	1796	A	C4-C5-C6	6.37	120.18	117.00
84	Aa	2211	G	O4'-C1'-N9	6.37	113.29	108.20
84	Aa	2969	A	C5-C6-N1	-6.37	114.52	117.70
84	Aa	3140	A	O4'-C1'-N9	6.37	113.29	108.20
85	Ac	46	G	C5-C6-O6	-6.37	124.78	128.60
85	Ac	133	C	N3-C4-C5	-6.37	119.35	121.90
71	CB	55	HIS	CA-CB-CG	6.36	124.42	113.60
84	Aa	488	U	O4'-C1'-N1	6.36	113.29	108.20
84	Aa	855	U	O4'-C1'-N1	6.36	113.29	108.20
84	Aa	2626	G	O4'-C1'-N9	6.36	113.29	108.20
84	Aa	2719	U	O4'-C1'-N1	6.36	113.29	108.20
84	Aa	3062	G	C5-C6-O6	-6.36	124.78	128.60
84	Aa	3331	G	C5-C6-O6	-6.36	124.78	128.60
84	Aa	3335	G	C5-C6-O6	-6.36	124.78	128.60
84	Aa	2783	U	O4'-C1'-N1	6.36	113.29	108.20
1	Ad	1452	A	O4'-C1'-N9	6.36	113.29	108.20
84	Aa	1155	G	N1-C6-O6	6.36	123.72	119.90
84	Aa	1330	A	C4-C5-C6	6.36	120.18	117.00
84	Aa	1338	C	N3-C4-C5	-6.36	119.36	121.90
84	Aa	2976	U	O4'-C1'-N1	6.36	113.29	108.20
84	Aa	2984	A	C4-C5-C6	6.36	120.18	117.00
84	Aa	3062	G	O4'-C1'-N9	6.36	113.29	108.20
84	Aa	3197	C	N3-C4-C5	-6.36	119.36	121.90
84	Aa	3066	G	C5-C6-O6	-6.36	124.78	128.60
84	Aa	21	G	C5-C6-O6	-6.36	124.79	128.60
84	Aa	728	G	O4'-C1'-N9	6.36	113.29	108.20
84	Aa	2685	C	N3-C4-C5	-6.36	119.36	121.90
86	Ab	91	C	C2-N3-C4	6.36	123.08	119.90
1	Ad	381	G	C1'-O4'-C4'	-6.36	104.82	109.90
84	Aa	650	A	C4-C5-C6	6.36	120.18	117.00
1	Ad	235	C	C3'-C2'-C1'	6.35	106.58	101.50
84	Aa	2127	U	O4'-C1'-N1	6.35	113.28	108.20
84	Aa	3100	C	N3-C4-N4	6.35	122.45	118.00
84	Aa	987	A	C4-C5-C6	6.35	120.18	117.00
84	Aa	1824	C	N3-C4-C5	-6.35	119.36	121.90
84	Aa	1852	C	N3-C4-C5	-6.35	119.36	121.90
84	Aa	1915	G	C5-C6-O6	-6.35	124.79	128.60
84	Aa	2487	A	C4-C5-C6	6.35	120.18	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2853	A	C4-C5-C6	6.35	120.18	117.00
1	Ad	61	A	P-O5'-C5'	-6.35	110.74	120.90
84	Aa	665	G	C5-C6-O6	-6.35	124.79	128.60
84	Aa	3178	C	N3-C4-N4	6.35	122.44	118.00
1	Ad	1477	A	O4'-C1'-C2'	-6.35	99.45	105.80
33	BJ	85	TYR	CB-CG-CD2	-6.35	117.19	121.00
84	Aa	63	G	C5-C6-O6	-6.35	124.79	128.60
84	Aa	97	G	N3-C2-N2	6.35	124.34	119.90
84	Aa	684	C	N3-C4-C5	-6.35	119.36	121.90
84	Aa	771	G	C4'-C3'-C2'	6.35	108.95	102.60
84	Aa	784	G	C5-C6-O6	-6.35	124.79	128.60
84	Aa	1454	C	N3-C4-C5	-6.35	119.36	121.90
84	Aa	2247	A	C4-C5-C6	6.35	120.17	117.00
1	Ad	1210	U	O4'-C1'-C2'	-6.35	99.45	105.80
1	Ad	1295	G	O4'-C1'-N9	6.35	113.28	108.20
84	Aa	2885	U	O5'-P-OP1	-6.35	99.99	105.70
84	Aa	3135	A	C5-C6-N1	-6.35	114.53	117.70
85	Ac	40	A	C5-C6-N6	-6.35	118.62	123.70
1	Ad	1507	G	O4'-C1'-N9	6.34	113.28	108.20
84	Aa	319	C	N3-C4-N4	6.34	122.44	118.00
84	Aa	393	A	C4-C5-C6	6.34	120.17	117.00
84	Aa	1168	G	C5-C6-O6	-6.34	124.79	128.60
84	Aa	1501	A	C5-C6-N6	-6.34	118.62	123.70
84	Aa	2954	G	O4'-C1'-N9	6.34	113.28	108.20
85	Ac	137	G	O4'-C1'-N9	6.34	113.28	108.20
84	Aa	1385	C	N3-C4-C5	-6.34	119.36	121.90
84	Aa	1490	A	C5-C6-N6	-6.34	118.63	123.70
84	Aa	1518	A	C4-C5-C6	6.34	120.17	117.00
84	Aa	2199	C	N3-C4-C5	-6.34	119.36	121.90
1	Ad	1187	A	N9-C1'-C2'	6.34	122.24	114.00
2	Ae	58	U	C1'-O4'-C4'	6.34	114.97	109.90
84	Aa	2045	G	O4'-C1'-N9	6.34	113.27	108.20
84	Aa	2389	A	C4-C5-C6	6.34	120.17	117.00
85	Ac	154	G	C5-C6-O6	-6.34	124.80	128.60
84	Aa	70	A	C5-C6-N1	-6.34	114.53	117.70
84	Aa	747	A	C4-C5-C6	6.34	120.17	117.00
84	Aa	960	C	N3-C4-C5	-6.34	119.36	121.90
84	Aa	1426	C	N3-C4-C5	-6.34	119.36	121.90
84	Aa	2645	A	C4-C5-C6	6.34	120.17	117.00
1	Ad	594	C	O4'-C1'-N1	6.34	113.27	108.20
48	CD	260	GLU	N-CA-CB	6.34	122.01	110.60
84	Aa	2681	A	C4-C5-C6	6.34	120.17	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	412	C	N3-C4-N4	6.34	122.44	118.00
84	Aa	1457	A	O4'-C1'-N9	6.34	113.27	108.20
84	Aa	1647	C	N3-C4-C5	-6.34	119.37	121.90
84	Aa	2051	G	O4'-C1'-N9	6.34	113.27	108.20
84	Aa	2128	G	C5-C6-O6	-6.34	124.80	128.60
84	Aa	426	A	C4-C5-C6	6.33	120.17	117.00
84	Aa	1363	C	N3-C4-C5	-6.33	119.37	121.90
84	Aa	2606	G	N1-C6-O6	6.33	123.70	119.90
1	Ad	1693	C	O4'-C1'-N1	6.33	113.27	108.20
84	Aa	8	C	C6-N1-C1'	-6.33	113.20	120.80
84	Aa	131	C	N3-C4-C5	-6.33	119.37	121.90
84	Aa	213	G	O4'-C1'-N9	6.33	113.27	108.20
84	Aa	561	G	O4'-C1'-N9	6.33	113.27	108.20
84	Aa	1741	G	O4'-C1'-N9	6.33	113.27	108.20
84	Aa	1823	C	N3-C4-C5	-6.33	119.37	121.90
84	Aa	2613	G	O4'-C1'-N9	6.33	113.27	108.20
84	Aa	2694	A	O4'-C1'-N9	6.33	113.27	108.20
85	Ac	57	C	N3-C4-C5	-6.33	119.37	121.90
1	Ad	1508	C	O4'-C1'-N1	6.33	113.27	108.20
84	Aa	114	G	C5-C6-O6	-6.33	124.80	128.60
84	Aa	190	C	N3-C4-C5	-6.33	119.37	121.90
84	Aa	841	G	O4'-C1'-N9	6.33	113.27	108.20
84	Aa	1696	G	C5-C6-O6	-6.33	124.80	128.60
84	Aa	1929	A	C4-C5-C6	6.33	120.17	117.00
84	Aa	2046	G	O4'-C1'-N9	6.33	113.27	108.20
84	Aa	2132	A	C4-C5-C6	6.33	120.17	117.00
84	Aa	2191	C	N3-C4-C5	-6.33	119.37	121.90
85	Ac	106	C	O4'-C1'-N1	6.33	113.26	108.20
84	Aa	292	A	C4-C5-C6	6.33	120.17	117.00
84	Aa	1312	A	C5-C6-N1	-6.33	114.53	117.70
84	Aa	3053	G	O4'-C1'-N9	6.33	113.26	108.20
84	Aa	316	A	O4'-C1'-N9	6.33	113.26	108.20
84	Aa	1129	G	C5-C6-O6	-6.33	124.80	128.60
84	Aa	1653	A	C5-C6-N6	-6.33	118.64	123.70
84	Aa	1713	A	C4-C5-C6	6.33	120.16	117.00
84	Aa	1204	A	C4-C5-C6	6.33	120.16	117.00
84	Aa	1367	A	C5-C6-N6	-6.33	118.64	123.70
84	Aa	1750	A	C4-C5-C6	6.33	120.16	117.00
84	Aa	2997	C	P-O3'-C3'	6.33	127.29	119.70
1	Ad	602	U	O4'-C1'-N1	6.33	113.26	108.20
84	Aa	1049	C	N3-C4-C5	-6.33	119.37	121.90
84	Aa	1295	A	C5-C6-N1	-6.33	114.54	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2096	U	P-O5'-C5'	-6.33	110.78	120.90
84	Aa	2534	G	O4'-C1'-N9	6.33	113.26	108.20
84	Aa	2849	A	C4-C5-C6	6.33	120.16	117.00
84	Aa	1227	A	C4-C5-C6	6.32	120.16	117.00
84	Aa	2189	G	C5-C6-O6	-6.32	124.81	128.60
84	Aa	2412	A	O4'-C1'-N9	6.32	113.26	108.20
84	Aa	2942	A	C4-C5-C6	6.32	120.16	117.00
85	Ac	110	A	C4-C5-C6	6.32	120.16	117.00
1	Ad	531	A	O4'-C1'-N9	6.32	113.26	108.20
84	Aa	297	G	O4'-C1'-N9	6.32	113.26	108.20
84	Aa	538	C	O4'-C1'-N1	6.32	113.26	108.20
84	Aa	1159	C	N3-C4-C5	-6.32	119.37	121.90
84	Aa	1417	G	C5-C6-O6	-6.32	124.81	128.60
84	Aa	2021	G	O4'-C1'-N9	6.32	113.26	108.20
84	Aa	2300	G	C5-C6-O6	-6.32	124.81	128.60
1	Ad	227	G	O4'-C1'-N9	6.32	113.26	108.20
84	Aa	286	C	N3-C4-N4	6.32	122.42	118.00
84	Aa	716	A	C5-C6-N1	-6.32	114.54	117.70
84	Aa	726	C	N3-C4-C5	-6.32	119.37	121.90
84	Aa	1298	A	C5-C6-N1	-6.32	114.54	117.70
84	Aa	1776	G	C5-C6-O6	-6.32	124.81	128.60
84	Aa	419	G	C5-C6-O6	-6.32	124.81	128.60
84	Aa	3168	C	N3-C4-C5	-6.32	119.37	121.90
1	Ad	244	C	C3'-C2'-C1'	6.32	106.56	101.50
1	Ad	1137	A	C3'-C2'-C1'	6.32	106.55	101.50
84	Aa	792	A	C5-C6-N6	-6.32	118.65	123.70
84	Aa	1023	G	O4'-C1'-N9	6.32	113.25	108.20
84	Aa	1664	G	O4'-C1'-N9	6.32	113.25	108.20
84	Aa	2077	C	N3-C4-C5	-6.32	119.37	121.90
84	Aa	2111	A	C4-C5-C6	6.32	120.16	117.00
84	Aa	2300	G	O4'-C1'-N9	6.32	113.25	108.20
84	Aa	2428	G	C5-C6-O6	-6.32	124.81	128.60
84	Aa	3136	A	C4-C5-C6	6.32	120.16	117.00
1	Ad	558	C	C3'-C2'-C1'	6.32	106.55	101.50
84	Aa	1135	C	N3-C4-C5	-6.32	119.37	121.90
84	Aa	2336	C	N3-C4-C5	-6.32	119.37	121.90
84	Aa	3053	G	C5-C6-O6	-6.32	124.81	128.60
1	Ad	728	C	C3'-C2'-C1'	6.31	106.55	101.50
84	Aa	258	C	N3-C4-C5	-6.31	119.37	121.90
84	Aa	1086	U	O4'-C1'-N1	6.31	113.25	108.20
84	Aa	2297	G	O4'-C1'-N9	6.31	113.25	108.20
84	Aa	2534	G	C5-C6-O6	-6.31	124.81	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	BS	83	PHE	CB-CG-CD2	6.31	125.22	120.80
84	Aa	1191	U	O4'-C1'-N1	6.31	113.25	108.20
84	Aa	1463	A	C5-C6-N6	-6.31	118.65	123.70
84	Aa	1553	C	N3-C4-C5	-6.31	119.38	121.90
84	Aa	490	G	C5-C6-O6	-6.31	124.81	128.60
84	Aa	507	C	O4'-C1'-N1	6.31	113.25	108.20
84	Aa	1013	A	C5-C6-N1	-6.31	114.55	117.70
84	Aa	2651	G	C5-C6-O6	-6.31	124.81	128.60
84	Aa	2657	C	P-O3'-C3'	6.31	127.27	119.70
84	Aa	550	C	C4'-C3'-O3'	6.31	125.62	113.00
84	Aa	680	G	C5-C6-O6	-6.31	124.81	128.60
84	Aa	1403	G	C5-C6-O6	-6.31	124.81	128.60
84	Aa	1576	C	O4'-C1'-N1	6.31	113.25	108.20
84	Aa	1613	C	N3-C4-C5	-6.31	119.38	121.90
84	Aa	2474	A	C4-C5-C6	6.31	120.16	117.00
84	Aa	2585	C	N3-C4-C5	-6.31	119.38	121.90
84	Aa	2668	U	O4'-C1'-N1	6.31	113.25	108.20
84	Aa	3187	C	N3-C4-N4	6.31	122.42	118.00
1	Ad	344	U	O4'-C1'-C2'	-6.31	99.49	105.80
45	CN	4	TYR	CB-CG-CD1	-6.31	117.22	121.00
84	Aa	141	C	N3-C4-N4	6.31	122.42	118.00
84	Aa	786	U	O4'-C1'-N1	6.31	113.25	108.20
84	Aa	1015	A	O4'-C1'-N9	6.31	113.25	108.20
84	Aa	1310	G	N1-C6-O6	6.31	123.69	119.90
84	Aa	1859	G	C5-C6-O6	-6.31	124.82	128.60
84	Aa	2291	A	C5-C6-N1	-6.31	114.55	117.70
84	Aa	2780	G	C5-C6-O6	-6.31	124.82	128.60
84	Aa	3229	C	O4'-C1'-N1	6.31	113.25	108.20
84	Aa	3319	G	O4'-C1'-N9	6.31	113.25	108.20
84	Aa	2973	A	O4'-C1'-N9	6.31	113.25	108.20
84	Aa	2983	U	O4'-C1'-N1	6.31	113.25	108.20
1	Ad	1783	C	N1-C1'-C2'	6.30	122.20	114.00
84	Aa	838	G	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	1188	C	N3-C4-C5	-6.30	119.38	121.90
84	Aa	2509	A	C5-C6-N1	-6.30	114.55	117.70
84	Aa	3136	A	C5-C6-N1	-6.30	114.55	117.70
84	Aa	3281	G	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	2017	G	C5-C6-O6	-6.30	124.82	128.60
84	Aa	2561	A	C5-C6-N6	-6.30	118.66	123.70
1	Ad	614	G	P-O3'-C3'	6.30	127.26	119.70
2	Ae	46	A	O4'-C1'-N9	6.30	113.24	108.20
41	CA	67	PHE	N-CA-CB	6.30	121.94	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	456	G	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	621	C	N3-C4-N4	6.30	122.41	118.00
84	Aa	1332	C	O4'-C1'-N1	6.30	113.24	108.20
84	Aa	1662	G	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	2027	G	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	2199	C	O4'-C1'-N1	6.30	113.24	108.20
84	Aa	2307	A	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	2311	A	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	3247	C	N3-C4-C5	-6.30	119.38	121.90
85	Ac	125	C	O4'-C1'-N1	6.30	113.24	108.20
85	Ac	157	A	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	428	G	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	1675	G	C5-C6-O6	-6.30	124.82	128.60
86	Ab	85	G	N1-C6-O6	6.30	123.68	119.90
84	Aa	1637	G	C5-C6-O6	-6.30	124.82	128.60
84	Aa	2162	C	O4'-C4'-C3'	-6.30	97.70	104.00
1	Ad	353	G	O4'-C1'-N9	6.30	113.24	108.20
48	CD	262	ALA	N-CA-CB	6.30	118.92	110.10
84	Aa	875	A	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	1936	G	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	2257	A	O4'-C1'-N9	6.30	113.24	108.20
84	Aa	2294	A	C4-C5-C6	6.30	120.15	117.00
84	Aa	2345	C	N3-C4-C5	-6.30	119.38	121.90
84	Aa	121	A	C4-C5-C6	6.29	120.15	117.00
84	Aa	1340	G	N3-C2-N2	6.29	124.31	119.90
84	Aa	2730	A	C4-C5-C6	6.29	120.15	117.00
84	Aa	2985	C	N3-C4-C5	-6.29	119.38	121.90
1	Ad	1237	G	O4'-C1'-C2'	6.29	113.26	107.60
84	Aa	401	C	N3-C4-C5	-6.29	119.38	121.90
84	Aa	415	G	C5-C6-O6	-6.29	124.82	128.60
84	Aa	573	A	C5-C6-N6	-6.29	118.67	123.70
84	Aa	886	A	C4-C5-C6	6.29	120.15	117.00
84	Aa	2053	A	C4-C5-C6	6.29	120.15	117.00
84	Aa	2144	G	C5-C6-O6	-6.29	124.82	128.60
84	Aa	2798	G	N1-C6-O6	6.29	123.68	119.90
84	Aa	3124	A	C4-C5-C6	6.29	120.15	117.00
1	Ad	1232	G	C1'-O4'-C4'	-6.29	104.87	109.90
84	Aa	8	C	N3-C4-C5	-6.29	119.38	121.90
84	Aa	761	C	N3-C4-C5	-6.29	119.38	121.90
84	Aa	782	G	C5-C6-O6	-6.29	124.83	128.60
84	Aa	2332	C	N3-C4-C5	-6.29	119.38	121.90
84	Aa	2907	U	O4'-C1'-N1	6.29	113.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3287	A	O4'-C1'-N9	6.29	113.23	108.20
84	Aa	1427	C	N3-C4-C5	-6.29	119.38	121.90
84	Aa	2122	C	N3-C4-C5	-6.29	119.38	121.90
84	Aa	3263	C	C5'-C4'-C3'	6.29	126.06	116.00
84	Aa	124	C	N3-C4-C5	-6.29	119.38	121.90
84	Aa	535	G	C5-C6-O6	-6.29	124.83	128.60
84	Aa	719	U	P-O5'-C5'	6.29	130.96	120.90
84	Aa	1695	C	C2-N3-C4	6.29	123.04	119.90
84	Aa	2114	A	C4-C5-C6	6.29	120.14	117.00
84	Aa	2311	A	C5-C6-N6	-6.29	118.67	123.70
84	Aa	3166	C	O4'-C1'-N1	6.29	113.23	108.20
86	Ab	108	G	C4-C5-N7	-6.29	108.28	110.80
1	Ad	901	U	O4'-C1'-N1	6.29	113.23	108.20
84	Aa	1264	A	C4-C5-C6	6.29	120.14	117.00
84	Aa	2357	A	C5-C6-N6	-6.29	118.67	123.70
84	Aa	3089	G	C5-C6-O6	-6.29	124.83	128.60
1	Ad	252	U	O4'-C1'-C2'	-6.29	99.51	105.80
1	Ad	561	G	O4'-C1'-N9	-6.29	103.17	108.20
1	Ad	744	G	P-O5'-C5'	6.29	130.96	120.90
1	Ad	1112	G	N9-C1'-C2'	6.29	122.17	114.00
46	Ca	52	TYR	CB-CG-CD2	-6.29	117.23	121.00
84	Aa	700	C	N3-C4-C5	-6.29	119.39	121.90
84	Aa	830	A	C5-C6-N1	-6.29	114.56	117.70
84	Aa	1729	G	O4'-C1'-N9	6.29	113.23	108.20
84	Aa	1999	G	C5-C6-O6	-6.29	124.83	128.60
84	Aa	2427	C	N3-C4-C5	-6.29	119.39	121.90
84	Aa	2923	U	O4'-C1'-N1	6.29	113.23	108.20
84	Aa	3049	A	C5-C6-N6	-6.29	118.67	123.70
85	Ac	58	G	O4'-C1'-N9	6.29	113.23	108.20
1	Ad	1354	C	O4'-C1'-N1	6.28	113.23	108.20
1	Ad	1524	A	P-O3'-C3'	6.28	127.24	119.70
50	CP	4	TYR	CB-CG-CD2	-6.28	117.23	121.00
84	Aa	138	G	O4'-C1'-N9	6.28	113.23	108.20
84	Aa	359	A	C5-C6-N1	-6.28	114.56	117.70
84	Aa	1057	A	C4-C5-C6	6.28	120.14	117.00
84	Aa	1436	A	C4-C5-C6	6.28	120.14	117.00
84	Aa	1481	C	N3-C4-C5	-6.28	119.39	121.90
84	Aa	2412	A	C5-C6-N1	-6.28	114.56	117.70
84	Aa	2548	U	O4'-C1'-N1	6.28	113.23	108.20
84	Aa	2990	C	N3-C4-C5	-6.28	119.39	121.90
85	Ac	152	G	C5-C6-O6	-6.28	124.83	128.60
84	Aa	47	A	O4'-C1'-N9	6.28	113.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1162	A	C4-C5-C6	6.28	120.14	117.00
84	Aa	1206	A	C4-C5-C6	6.28	120.14	117.00
84	Aa	1501	A	C4-C5-C6	6.28	120.14	117.00
84	Aa	1986	G	O4'-C1'-N9	6.28	113.23	108.20
1	Ad	318	C	C3'-C2'-C1'	6.28	106.52	101.50
84	Aa	20	G	O4'-C1'-N9	6.28	113.22	108.20
84	Aa	1222	U	O4'-C1'-N1	6.28	113.22	108.20
84	Aa	1267	A	N1-C6-N6	6.28	122.37	118.60
84	Aa	2892	A	O4'-C1'-N9	6.28	113.22	108.20
1	Ad	1292	G	O4'-C1'-N9	6.28	113.22	108.20
84	Aa	218	G	O4'-C1'-N9	6.28	113.22	108.20
84	Aa	1619	G	C5-C6-O6	-6.28	124.83	128.60
84	Aa	3391	U	O4'-C1'-N1	6.28	113.22	108.20
1	Ad	976	A	O4'-C1'-N9	6.28	113.22	108.20
84	Aa	466	U	O4'-C1'-N1	6.28	113.22	108.20
84	Aa	485	G	C5-C6-O6	-6.28	124.83	128.60
84	Aa	2751	A	C5-C6-N6	-6.28	118.68	123.70
84	Aa	2781	A	C5-C6-N1	-6.28	114.56	117.70
84	Aa	3195	C	N3-C4-N4	6.28	122.39	118.00
1	Ad	162	A	O4'-C1'-N9	6.28	113.22	108.20
84	Aa	1139	A	O4'-C1'-N9	6.28	113.22	108.20
84	Aa	1477	A	C5-C6-N1	-6.28	114.56	117.70
84	Aa	1495	G	O4'-C1'-N9	6.28	113.22	108.20
84	Aa	1657	C	N3-C4-C5	-6.28	119.39	121.90
84	Aa	3266	U	O4'-C1'-N1	6.28	113.22	108.20
85	Ac	13	A	C5-C6-N1	-6.28	114.56	117.70
85	Ac	60	U	O4'-C1'-N1	6.28	113.22	108.20
85	Ac	114	G	O4'-C1'-N9	6.28	113.22	108.20
84	Aa	510	C	N3-C4-C5	-6.27	119.39	121.90
84	Aa	968	A	C4-C5-C6	6.27	120.14	117.00
84	Aa	1567	G	C5-C6-O6	-6.27	124.84	128.60
84	Aa	2735	G	O4'-C1'-N9	6.27	113.22	108.20
84	Aa	2395	G	O4'-C1'-N9	6.27	113.22	108.20
84	Aa	2562	A	C4-C5-C6	6.27	120.14	117.00
84	Aa	2795	G	C5-C6-O6	-6.27	124.84	128.60
84	Aa	723	G	O3'-P-O5'	6.27	115.92	104.00
84	Aa	3107	A	O4'-C1'-N9	6.27	113.22	108.20
1	Ad	931	A	O4'-C1'-N9	6.27	113.22	108.20
84	Aa	143	A	C4-C5-C6	6.27	120.13	117.00
84	Aa	751	C	N3-C4-C5	-6.27	119.39	121.90
84	Aa	835	G	C5'-C4'-C3'	6.27	126.03	116.00
1	Ad	719	C	O4'-C1'-C2'	-6.27	99.53	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	73	A	C4-C5-C6	6.27	120.13	117.00
84	Aa	1278	A	C4-C5-C6	6.27	120.13	117.00
84	Aa	2113	A	C4-C5-C6	6.27	120.13	117.00
84	Aa	2354	G	O4'-C1'-N9	6.27	113.22	108.20
84	Aa	2687	C	N3-C4-C5	-6.27	119.39	121.90
84	Aa	3055	U	O4'-C1'-N1	6.27	113.22	108.20
84	Aa	3133	C	N3-C4-C5	-6.27	119.39	121.90
84	Aa	3299	A	C5-C6-N1	-6.27	114.57	117.70
84	Aa	3337	G	C5-C6-O6	-6.27	124.84	128.60
1	Ad	1421	U	C1'-O4'-C4'	-6.27	104.89	109.90
84	Aa	2254	A	C4-C5-C6	6.27	120.13	117.00
84	Aa	2493	C	N3-C4-C5	-6.27	119.39	121.90
1	Ad	788	G	O4'-C1'-N9	-6.26	103.19	108.20
1	Ad	888	U	C3'-C2'-C1'	-6.26	96.49	101.50
84	Aa	77	U	O4'-C1'-N1	6.26	113.21	108.20
84	Aa	132	U	O4'-C1'-N1	6.26	113.21	108.20
84	Aa	401	C	O4'-C1'-N1	6.26	113.21	108.20
84	Aa	508	G	O4'-C1'-N9	6.26	113.21	108.20
84	Aa	640	C	N3-C4-C5	-6.26	119.39	121.90
84	Aa	949	C	N3-C4-N4	6.26	122.39	118.00
84	Aa	1039	G	O4'-C1'-N9	6.26	113.21	108.20
84	Aa	1806	C	N3-C4-C5	-6.26	119.39	121.90
84	Aa	1985	G	O4'-C1'-N9	6.26	113.21	108.20
84	Aa	3152	C	O4'-C1'-N1	6.26	113.21	108.20
85	Ac	51	G	C5-C6-O6	-6.26	124.84	128.60
1	Ad	1217	G	O4'-C1'-N9	6.26	113.21	108.20
84	Aa	489	C	N3-C4-N4	6.26	122.38	118.00
84	Aa	931	C	N3-C4-C5	-6.26	119.39	121.90
84	Aa	2034	G	C5-C6-O6	-6.26	124.84	128.60
84	Aa	2316	A	C4-C5-C6	6.26	120.13	117.00
63	CU	84	TYR	CB-CG-CD1	6.26	124.76	121.00
71	CB	118	PHE	CB-CG-CD2	-6.26	116.42	120.80
84	Aa	420	A	C4-C5-C6	6.26	120.13	117.00
84	Aa	795	C	N3-C4-C5	-6.26	119.39	121.90
84	Aa	912	G	O4'-C1'-N9	6.26	113.21	108.20
84	Aa	929	A	C5-C6-N6	-6.26	118.69	123.70
84	Aa	1880	A	O4'-C1'-N9	6.26	113.21	108.20
84	Aa	3314	G	C5-C6-O6	-6.26	124.84	128.60
1	Ad	174	C	O4'-C1'-C2'	-6.26	99.54	105.80
1	Ad	417	U	O4'-C1'-N1	6.26	113.21	108.20
1	Ad	1732	A	O4'-C1'-C2'	-6.26	99.54	105.80
84	Aa	287	A	C5-C6-N1	-6.26	114.57	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	864	C	N3-C4-C5	-6.26	119.40	121.90
84	Aa	866	C	N3-C4-C5	-6.26	119.40	121.90
84	Aa	1000	A	C4-C5-C6	6.26	120.13	117.00
84	Aa	2157	C	N3-C4-C5	-6.26	119.40	121.90
84	Aa	2372	A	C5-C6-N6	-6.26	118.69	123.70
84	Aa	2800	C	N3-C4-C5	-6.26	119.40	121.90
1	Ad	975	A	O4'-C1'-C2'	-6.26	99.54	105.80
1	Ad	1123	G	O4'-C1'-N9	6.26	113.21	108.20
1	Ad	368	A	O4'-C1'-N9	6.26	113.20	108.20
84	Aa	212	G	C5-C6-O6	-6.26	124.85	128.60
84	Aa	962	C	P-O3'-C3'	6.26	127.21	119.70
84	Aa	1405	G	C5-C6-O6	-6.26	124.85	128.60
84	Aa	2358	C	N3-C4-C5	-6.26	119.40	121.90
84	Aa	2804	A	C4-C5-C6	6.26	120.13	117.00
1	Ad	94	A	C1'-O4'-C4'	-6.25	104.90	109.90
1	Ad	957	A	O4'-C1'-N9	6.25	113.20	108.20
1	Ad	1157	A	O4'-C1'-N9	6.25	113.20	108.20
84	Aa	536	C	N3-C4-C5	-6.25	119.40	121.90
84	Aa	733	C	N3-C4-N4	6.25	122.38	118.00
84	Aa	1783	G	O4'-C1'-N9	6.25	113.20	108.20
84	Aa	1932	A	C5-C6-N1	-6.25	114.57	117.70
84	Aa	2213	G	C5-C6-O6	-6.25	124.85	128.60
84	Aa	2325	A	C5-C6-N1	-6.25	114.57	117.70
1	Ad	1722	C	O4'-C1'-N1	6.25	113.20	108.20
16	BO	72	ALA	N-CA-CB	6.25	118.85	110.10
84	Aa	836	G	C5-C6-O6	-6.25	124.85	128.60
84	Aa	2008	G	O4'-C1'-N9	6.25	113.20	108.20
84	Aa	2742	A	C5-C6-N1	-6.25	114.57	117.70
84	Aa	3347	U	O4'-C1'-N1	6.25	113.20	108.20
85	Ac	11	C	N3-C4-N4	6.25	122.38	118.00
84	Aa	614	C	N3-C4-N4	6.25	122.38	118.00
84	Aa	1724	C	N3-C4-N4	6.25	122.38	118.00
84	Aa	2256	G	O4'-C1'-N9	6.25	113.20	108.20
85	Ac	24	G	C5-C6-O6	-6.25	124.85	128.60
84	Aa	980	C	N3-C4-C5	-6.25	119.40	121.90
84	Aa	1539	G	O4'-C1'-N9	6.25	113.20	108.20
84	Aa	1799	C	N3-C4-N4	6.25	122.37	118.00
84	Aa	2627	G	C5-C6-O6	-6.25	124.85	128.60
28	BA	43	TYR	CB-CG-CD2	-6.25	117.25	121.00
84	Aa	1804	G	C5-C6-O6	-6.25	124.85	128.60
84	Aa	1843	A	C5-C6-N6	-6.25	118.70	123.70
85	Ac	43	A	C5-C6-N1	-6.25	114.58	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	498	G	C5-C6-O6	-6.25	124.85	128.60
84	Aa	587	A	C5-C6-N1	-6.25	114.58	117.70
84	Aa	2609	G	C5-C6-O6	-6.25	124.85	128.60
84	Aa	3111	C	N3-C4-C5	-6.25	119.40	121.90
1	Ad	842	G	C3'-C2'-C1'	-6.24	96.51	101.50
1	Ad	1525	U	O4'-C1'-N1	6.24	113.19	108.20
84	Aa	454	A	C5-C6-N1	-6.24	114.58	117.70
84	Aa	1644	A	C5-C6-N1	-6.24	114.58	117.70
84	Aa	2108	C	N3-C4-C5	-6.24	119.40	121.90
84	Aa	2638	A	C5-C6-N6	-6.24	118.70	123.70
85	Ac	31	G	C5-C6-O6	-6.24	124.85	128.60
15	BU	3	ALA	N-CA-CB	6.24	118.84	110.10
84	Aa	583	C	N3-C4-C5	-6.24	119.40	121.90
84	Aa	661	A	C5-C6-N1	-6.24	114.58	117.70
84	Aa	1101	A	C5-C6-N1	-6.24	114.58	117.70
84	Aa	1989	G	C5-C6-O6	-6.24	124.86	128.60
84	Aa	2418	A	C4-C5-C6	6.24	120.12	117.00
84	Aa	2712	C	N3-C4-C5	-6.24	119.40	121.90
84	Aa	2898	A	C4-C5-C6	6.24	120.12	117.00
1	Ad	397	C	O4'-C1'-C2'	-6.24	99.56	105.80
84	Aa	50	A	C4-C5-C6	6.24	120.12	117.00
84	Aa	1072	C	N3-C4-N4	6.24	122.37	118.00
84	Aa	1554	C	N3-C4-C5	-6.24	119.40	121.90
84	Aa	2051	G	C5-C6-O6	-6.24	124.86	128.60
84	Aa	2401	A	C4-C5-C6	6.24	120.12	117.00
85	Ac	59	A	C5-C6-N1	-6.24	114.58	117.70
1	Ad	1074	C	C3'-C2'-C1'	6.24	106.49	101.50
1	Ad	1465	C	O4'-C1'-C2'	-6.24	99.56	105.80
38	CT	19	PHE	CB-CG-CD1	6.24	125.17	120.80
84	Aa	642	C	C2-N1-C1'	6.24	125.66	118.80
84	Aa	1200	A	C4-C5-C6	6.24	120.12	117.00
84	Aa	2144	G	O4'-C1'-N9	6.24	113.19	108.20
84	Aa	2619	C	N3-C4-C5	-6.24	119.40	121.90
85	Ac	92	A	C4-C5-C6	6.24	120.12	117.00
41	CA	76	PHE	CB-CG-CD1	6.24	125.17	120.80
84	Aa	2291	A	C4-C5-C6	6.24	120.12	117.00
84	Aa	2765	A	C4-C5-C6	6.24	120.12	117.00
84	Aa	3382	A	C5-C6-N6	-6.24	118.71	123.70
1	Ad	1787	G	O4'-C1'-N9	6.24	113.19	108.20
84	Aa	1172	A	C5-C6-N6	-6.24	118.71	123.70
84	Aa	2011	G	C5-C6-O6	-6.24	124.86	128.60
84	Aa	2720	U	O4'-C1'-N1	6.24	113.19	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2882	U	O4'-C1'-N1	6.24	113.19	108.20
84	Aa	2905	A	C5-C6-N6	-6.24	118.71	123.70
84	Aa	3203	G	O4'-C1'-N9	6.24	113.19	108.20
84	Aa	1640	A	C4-C5-C6	6.23	120.12	117.00
84	Aa	2109	G	C5-C6-O6	-6.23	124.86	128.60
1	Ad	1461	G	C1'-O4'-C4'	-6.23	104.92	109.90
84	Aa	1704	A	C5-C6-N6	-6.23	118.71	123.70
84	Aa	2956	U	P-O3'-C3'	6.23	127.18	119.70
84	Aa	3057	A	C5-C6-N6	-6.23	118.71	123.70
86	Ab	7	G	C6-N1-C2	6.23	128.84	125.10
84	Aa	1279	C	N3-C4-C5	-6.23	119.41	121.90
84	Aa	1572	C	N3-C4-C5	-6.23	119.41	121.90
84	Aa	2129	U	O4'-C1'-N1	6.23	113.18	108.20
84	Aa	2265	A	O4'-C1'-N9	6.23	113.19	108.20
84	Aa	2996	A	C5-C6-N6	-6.23	118.72	123.70
84	Aa	214	G	O4'-C1'-N9	6.23	113.18	108.20
84	Aa	1281	C	P-O3'-C3'	6.23	127.17	119.70
84	Aa	1779	C	N3-C4-C5	-6.23	119.41	121.90
84	Aa	1860	A	O4'-C1'-N9	6.23	113.18	108.20
1	Ad	429	A	O4'-C1'-N9	6.23	113.18	108.20
1	Ad	510	A	C1'-O4'-C4'	6.23	114.88	109.90
1	Ad	951	U	O4'-C1'-N1	6.23	113.18	108.20
84	Aa	419	G	O4'-C1'-N9	6.23	113.18	108.20
84	Aa	486	G	O4'-C1'-N9	6.23	113.18	108.20
84	Aa	718	C	C5'-C4'-O4'	6.23	116.57	109.10
84	Aa	853	U	O4'-C1'-N1	6.23	113.18	108.20
84	Aa	1705	A	C5-C6-N1	-6.23	114.59	117.70
84	Aa	1880	A	C4-C5-C6	6.23	120.11	117.00
84	Aa	2774	A	C4-C5-C6	6.23	120.11	117.00
84	Aa	2918	U	O4'-C1'-N1	6.23	113.18	108.20
86	Ab	1	G	N1-C6-O6	6.23	123.64	119.90
84	Aa	357	C	N3-C4-N4	6.23	122.36	118.00
84	Aa	657	A	C4-C5-C6	6.23	120.11	117.00
84	Aa	985	C	N3-C4-N4	6.23	122.36	118.00
84	Aa	1075	G	C5-C6-O6	-6.23	124.86	128.60
84	Aa	2070	C	N3-C4-C5	-6.23	119.41	121.90
84	Aa	3090	C	N3-C4-C5	-6.23	119.41	121.90
1	Ad	277	G	N9-C1'-C2'	6.22	122.09	114.00
84	Aa	109	G	C5-C6-O6	-6.22	124.86	128.60
84	Aa	1000	A	C5-C6-N6	-6.22	118.72	123.70
84	Aa	1714	A	C4-C5-C6	6.22	120.11	117.00
84	Aa	1805	A	O4'-C1'-N9	6.22	113.18	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2098	A	C5-C6-N6	-6.22	118.72	123.70
84	Aa	2484	G	C5-C6-O6	-6.22	124.86	128.60
84	Aa	2670	A	C5-C6-N6	-6.22	118.72	123.70
1	Ad	223	A	N9-C1'-C2'	6.22	122.09	114.00
1	Ad	1503	C	N1-C1'-C2'	6.22	122.09	114.00
1	Ad	1581	A	C3'-C2'-C1'	6.22	106.48	101.50
84	Aa	1644	A	C5-C6-N6	-6.22	118.72	123.70
84	Aa	3201	A	C4-C5-C6	6.22	120.11	117.00
1	Ad	1543	U	C3'-C2'-C1'	6.22	106.48	101.50
84	Aa	2483	A	O4'-C1'-N9	6.22	113.18	108.20
1	Ad	1501	G	P-O3'-C3'	6.22	127.16	119.70
1	Ad	1670	G	O4'-C1'-N9	6.22	113.17	108.20
84	Aa	1294	A	O4'-C1'-N9	6.22	113.17	108.20
84	Aa	1928	A	C5-C6-N1	-6.22	114.59	117.70
84	Aa	2542	U	O4'-C1'-N1	6.22	113.17	108.20
84	Aa	2676	A	C5-C6-N1	-6.22	114.59	117.70
84	Aa	2859	C	N3-C4-C5	-6.22	119.41	121.90
84	Aa	3333	C	N3-C4-C5	-6.22	119.41	121.90
84	Aa	568	C	N3-C4-C5	-6.22	119.41	121.90
84	Aa	842	C	N3-C4-C5	-6.22	119.41	121.90
84	Aa	1157	A	C5-C6-N1	-6.22	114.59	117.70
84	Aa	1282	A	C5-C6-N6	-6.22	118.73	123.70
1	Ad	1303	G	P-O3'-C3'	6.22	127.16	119.70
84	Aa	640	C	C5'-C4'-O4'	6.22	116.56	109.10
84	Aa	1381	G	C5-C6-O6	-6.22	124.87	128.60
84	Aa	1819	A	O4'-C1'-N9	6.22	113.17	108.20
84	Aa	1902	G	O4'-C1'-N9	6.22	113.17	108.20
84	Aa	2205	G	C5-C6-O6	-6.22	124.87	128.60
84	Aa	2448	G	C5-C6-O6	-6.22	124.87	128.60
84	Aa	2645	A	C5-C6-N6	-6.22	118.73	123.70
84	Aa	2679	A	C5-C6-N6	-6.22	118.73	123.70
84	Aa	262	A	C4-C5-C6	6.21	120.11	117.00
84	Aa	1089	G	O4'-C1'-N9	6.21	113.17	108.20
84	Aa	1097	A	C4-C5-C6	6.21	120.11	117.00
84	Aa	1754	C	N3-C4-C5	-6.21	119.41	121.90
84	Aa	1927	A	C5-C6-N6	-6.21	118.73	123.70
84	Aa	2087	A	C1'-O4'-C4'	-6.21	104.93	109.90
84	Aa	2899	A	C5-C6-N1	-6.21	114.59	117.70
84	Aa	3003	C	O4'-C1'-N1	6.21	113.17	108.20
85	Ac	58	G	C5-C6-O6	-6.21	124.87	128.60
1	Ad	750	U	N1-C1'-C2'	6.21	122.08	114.00
84	Aa	721	A	C5-C6-N6	-6.21	118.73	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1114	A	O4'-C1'-N9	6.21	113.17	108.20
84	Aa	1273	U	C2-N1-C1'	6.21	125.16	117.70
1	Ad	1687	G	P-O3'-C3'	6.21	127.16	119.70
84	Aa	1036	C	N3-C4-C5	-6.21	119.42	121.90
84	Aa	1713	A	O4'-C1'-N9	6.21	113.17	108.20
84	Aa	2350	C	O4'-C1'-N1	6.21	113.17	108.20
84	Aa	3295	G	C5-C6-O6	-6.21	124.87	128.60
84	Aa	3332	G	C5-C6-O6	-6.21	124.87	128.60
84	Aa	433	C	N3-C4-C5	-6.21	119.42	121.90
84	Aa	513	C	P-O3'-C3'	6.21	127.15	119.70
84	Aa	1149	C	N3-C4-C5	-6.21	119.42	121.90
84	Aa	1978	G	O4'-C1'-N9	6.21	113.17	108.20
84	Aa	48	A	C4-C5-C6	6.21	120.10	117.00
84	Aa	586	A	C4-C5-C6	6.21	120.10	117.00
84	Aa	1814	C	N3-C4-N4	6.21	122.35	118.00
84	Aa	2268	G	C5-C6-O6	-6.21	124.87	128.60
84	Aa	2319	A	O4'-C1'-N9	6.21	113.17	108.20
84	Aa	2402	G	C5-C6-O6	-6.21	124.88	128.60
1	Ad	1163	C	C3'-C2'-C1'	6.21	106.47	101.50
84	Aa	834	G	C5-C6-O6	-6.21	124.88	128.60
84	Aa	887	A	C4-C5-C6	6.21	120.10	117.00
84	Aa	2436	G	C2'-C3'-O3'	-6.21	95.84	109.50
84	Aa	2667	C	N3-C4-C5	-6.21	119.42	121.90
84	Aa	3254	C	N3-C4-C5	-6.21	119.42	121.90
86	Ab	49	A	O4'-C1'-N9	6.21	113.17	108.20
1	Ad	303	A	O4'-C1'-C2'	-6.21	99.59	105.80
1	Ad	402	G	C3'-C2'-C1'	6.21	106.46	101.50
84	Aa	1224	A	C4-C5-C6	6.21	120.10	117.00
84	Aa	1930	G	O4'-C1'-N9	6.21	113.16	108.20
84	Aa	2572	U	O4'-C1'-N1	6.21	113.16	108.20
84	Aa	385	A	C4-C5-C6	6.20	120.10	117.00
84	Aa	1117	U	O4'-C1'-N1	6.20	113.16	108.20
84	Aa	1850	C	N3-C4-C5	-6.20	119.42	121.90
84	Aa	2411	G	C5-C6-O6	-6.20	124.88	128.60
84	Aa	2810	A	C5-C6-N6	-6.20	118.74	123.70
84	Aa	219	A	C4-C5-C6	6.20	120.10	117.00
84	Aa	1403	G	O4'-C1'-N9	6.20	113.16	108.20
1	Ad	24	U	O4'-C1'-N1	6.20	113.16	108.20
1	Ad	1755	G	C3'-C2'-C1'	-6.20	96.54	101.50
10	Bg	342	SER	N-CA-CB	6.20	119.80	110.50
84	Aa	516	C	N3-C4-C5	-6.20	119.42	121.90
84	Aa	663	G	O4'-C1'-N9	6.20	113.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1113	C	N3-C4-C5	-6.20	119.42	121.90
84	Aa	1892	A	C4-C5-C6	6.20	120.10	117.00
84	Aa	3232	C	N3-C4-C5	-6.20	119.42	121.90
84	Aa	3244	G	O4'-C1'-N9	6.20	113.16	108.20
84	Aa	3356	C	N3-C4-C5	-6.20	119.42	121.90
85	Ac	148	C	N3-C4-N4	6.20	122.34	118.00
1	Ad	27	U	C5'-C4'-O4'	6.20	116.54	109.10
1	Ad	357	A	C1'-O4'-C4'	6.20	114.86	109.90
1	Ad	1487	U	O4'-C1'-N1	6.20	113.16	108.20
84	Aa	186	A	C4-C5-C6	6.20	120.10	117.00
84	Aa	724	A	C5-C6-N1	-6.20	114.60	117.70
84	Aa	951	C	N3-C4-C5	-6.20	119.42	121.90
84	Aa	1030	A	C4-C5-C6	6.20	120.10	117.00
84	Aa	1285	U	O4'-C1'-N1	6.20	113.16	108.20
84	Aa	1514	U	O4'-C1'-N1	6.20	113.16	108.20
84	Aa	1517	C	C2-N1-C1'	6.20	125.62	118.80
84	Aa	2418	A	C5-C6-N1	-6.20	114.60	117.70
84	Aa	2869	C	N3-C4-C5	-6.20	119.42	121.90
85	Ac	157	A	C4-C5-C6	6.20	120.10	117.00
1	Ad	954	C	N1-C1'-C2'	6.20	122.06	114.00
2	Ae	20	C	O4'-C1'-N1	6.20	113.16	108.20
84	Aa	1246	G	C5-C6-O6	-6.20	124.88	128.60
1	Ad	934	A	P-O3'-C3'	6.20	127.13	119.70
1	Ad	1360	G	O4'-C1'-N9	6.20	113.16	108.20
84	Aa	32	G	O4'-C1'-N9	6.20	113.16	108.20
84	Aa	289	C	N3-C4-N4	6.20	122.34	118.00
84	Aa	1225	A	C5-C6-N6	-6.20	118.74	123.70
84	Aa	1840	C	N3-C4-C5	-6.20	119.42	121.90
84	Aa	2887	C	N3-C4-C5	-6.20	119.42	121.90
84	Aa	3135	A	C4-C5-C6	6.20	120.10	117.00
1	Ad	498	U	N1-C1'-C2'	-6.19	105.19	112.00
84	Aa	2904	A	C5-C6-N6	-6.19	118.74	123.70
84	Aa	850	A	C4-C5-C6	6.19	120.10	117.00
84	Aa	1687	C	N3-C4-C5	-6.19	119.42	121.90
84	Aa	2079	A	C5-C6-N1	-6.19	114.60	117.70
84	Aa	2912	A	C4-C5-C6	6.19	120.10	117.00
84	Aa	2978	A	C4-C5-C6	6.19	120.10	117.00
84	Aa	3220	A	C4-C5-C6	6.19	120.10	117.00
1	Ad	899	A	P-O3'-C3'	6.19	127.13	119.70
1	Ad	1663	A	C3'-C2'-C1'	6.19	106.45	101.50
84	Aa	199	G	C5-C6-O6	-6.19	124.89	128.60
84	Aa	645	C	N3-C4-C5	-6.19	119.42	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1405	G	O4'-C1'-N9	6.19	113.15	108.20
84	Aa	1733	G	O4'-C1'-N9	6.19	113.15	108.20
84	Aa	3386	A	C5-C6-N1	-6.19	114.61	117.70
86	Ab	118	C	N3-C4-C5	-6.19	119.42	121.90
84	Aa	968	A	C5-C6-N1	-6.19	114.61	117.70
84	Aa	1284	C	N3-C4-C5	-6.19	119.42	121.90
1	Ad	470	U	O4'-C1'-N1	6.19	113.15	108.20
84	Aa	98	A	C4-C5-C6	6.19	120.09	117.00
84	Aa	1095	C	N3-C4-C5	-6.19	119.42	121.90
84	Aa	1868	C	O4'-C1'-N1	6.19	113.15	108.20
84	Aa	3115	A	O4'-C1'-N9	6.19	113.15	108.20
1	Ad	1127	G	O4'-C1'-N9	6.19	113.15	108.20
61	CM	6	PHE	CB-CG-CD1	-6.19	116.47	120.80
84	Aa	1232	A	C4-C5-C6	6.19	120.09	117.00
84	Aa	1863	A	C4-C5-C6	6.19	120.09	117.00
84	Aa	3274	G	C5-C6-O6	-6.19	124.89	128.60
84	Aa	348	C	N3-C4-N4	6.18	122.33	118.00
84	Aa	802	G	O4'-C1'-N9	6.18	113.15	108.20
84	Aa	1068	A	C4-C5-C6	6.18	120.09	117.00
84	Aa	1818	C	N3-C4-C5	-6.18	119.43	121.90
84	Aa	1861	A	C4-C5-C6	6.18	120.09	117.00
84	Aa	1892	A	C5-C6-N1	-6.18	114.61	117.70
84	Aa	1986	G	C5-C6-O6	-6.18	124.89	128.60
84	Aa	2963	G	C5-C6-O6	-6.18	124.89	128.60
84	Aa	3386	A	O4'-C1'-N9	6.18	113.15	108.20
1	Ad	943	G	O4'-C1'-N9	6.18	113.15	108.20
84	Aa	88	A	C5-C6-N1	-6.18	114.61	117.70
84	Aa	262	A	C5-C6-N6	-6.18	118.75	123.70
84	Aa	304	A	C4-C5-C6	6.18	120.09	117.00
84	Aa	1917	A	C4-C5-C6	6.18	120.09	117.00
84	Aa	1929	A	C5-C6-N6	-6.18	118.75	123.70
84	Aa	2480	G	P-O5'-C5'	6.18	130.79	120.90
84	Aa	2921	A	C5-C6-N1	-6.18	114.61	117.70
84	Aa	849	A	C4-C5-C6	6.18	120.09	117.00
84	Aa	3009	A	C4-C5-C6	6.18	120.09	117.00
1	Ad	201	G	O4'-C1'-C2'	6.18	113.16	107.60
1	Ad	715	U	P-O5'-C5'	6.18	130.79	120.90
84	Aa	122	A	C5-C6-N1	-6.18	114.61	117.70
84	Aa	995	C	N3-C4-C5	-6.18	119.43	121.90
84	Aa	1478	A	C5-C6-N1	-6.18	114.61	117.70
84	Aa	1791	U	O4'-C1'-N1	6.18	113.14	108.20
84	Aa	3384	G	P-O3'-C3'	6.18	127.11	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	81	G	C5-C6-O6	-6.18	124.89	128.60
84	Aa	192	C	N3-C4-C5	-6.18	119.43	121.90
85	Ac	31	G	O4'-C1'-N9	6.18	113.14	108.20
1	Ad	1690	U	N1-C1'-C2'	-6.18	105.20	112.00
84	Aa	137	C	N3-C4-C5	-6.18	119.43	121.90
84	Aa	1031	A	C4-C5-C6	6.18	120.09	117.00
84	Aa	1249	A	C4-C5-C6	6.18	120.09	117.00
84	Aa	1523	G	O4'-C1'-N9	6.18	113.14	108.20
84	Aa	2015	G	O4'-C1'-N9	6.18	113.14	108.20
1	Ad	902	C	C3'-C2'-C1'	6.17	106.44	101.50
1	Ad	1206	A	C3'-C2'-C1'	6.17	106.44	101.50
84	Aa	127	G	C5-C6-O6	-6.17	124.89	128.60
84	Aa	634	A	C5-C6-N1	-6.17	114.61	117.70
84	Aa	1107	G	O4'-C1'-N9	6.17	113.14	108.20
84	Aa	1888	G	C5-C6-O6	-6.17	124.89	128.60
86	Ab	20	C	C2-N3-C4	6.17	122.99	119.90
1	Ad	541	G	O4'-C1'-N9	6.17	113.14	108.20
1	Ad	835	U	C4'-C3'-C2'	-6.17	96.43	102.60
84	Aa	7	C	O4'-C1'-N1	6.17	113.14	108.20
84	Aa	39	A	C5-C6-N6	-6.17	118.76	123.70
84	Aa	1359	A	C5-C6-N6	-6.17	118.76	123.70
84	Aa	1400	C	N3-C4-C5	-6.17	119.43	121.90
1	Ad	225	G	C1'-O4'-C4'	-6.17	104.96	109.90
1	Ad	1346	C	N1-C1'-C2'	6.17	122.02	114.00
1	Ad	1392	G	C1'-O4'-C4'	-6.17	104.96	109.90
84	Aa	160	G	C5-C6-O6	-6.17	124.90	128.60
84	Aa	228	C	N3-C4-C5	-6.17	119.43	121.90
84	Aa	448	G	O4'-C1'-N9	6.17	113.14	108.20
84	Aa	585	A	C4-C5-C6	6.17	120.08	117.00
84	Aa	687	C	O4'-C1'-N1	6.17	113.14	108.20
84	Aa	903	G	N1-C6-O6	6.17	123.60	119.90
84	Aa	3302	A	C4-C5-C6	6.17	120.09	117.00
1	Ad	1461	G	O4'-C1'-C2'	6.17	113.15	107.60
84	Aa	2068	G	C5-C6-O6	-6.17	124.90	128.60
84	Aa	2933	C	O4'-C1'-N1	6.17	113.14	108.20
85	Ac	139	C	N3-C4-C5	-6.17	119.43	121.90
84	Aa	424	G	C8-N9-C1'	-6.17	118.98	127.00
84	Aa	1790	A	C4-C5-C6	6.17	120.08	117.00
84	Aa	3089	G	O4'-C1'-N9	6.17	113.14	108.20
84	Aa	3277	C	C5'-C4'-O4'	6.17	116.50	109.10
1	Ad	630	U	O4'-C1'-N1	6.17	113.13	108.20
84	Aa	596	C	N3-C4-C5	-6.17	119.43	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	812	G	N1-C6-O6	6.17	123.60	119.90
84	Aa	840	A	O4'-C1'-N9	6.17	113.13	108.20
84	Aa	1326	C	N3-C4-C5	-6.17	119.43	121.90
84	Aa	2250	A	C4-C5-C6	6.17	120.08	117.00
84	Aa	2482	A	C5-C6-N6	-6.17	118.77	123.70
84	Aa	2659	A	C4-C5-C6	6.17	120.08	117.00
84	Aa	3302	A	C5-C6-N1	-6.17	114.62	117.70
84	Aa	1201	C	N3-C4-N4	6.17	122.31	118.00
1	Ad	1547	G	C3'-C2'-C1'	6.16	106.43	101.50
84	Aa	454	A	C4-C5-C6	6.16	120.08	117.00
84	Aa	1463	A	C5-C6-N1	-6.16	114.62	117.70
84	Aa	1794	A	C5-C6-N1	-6.16	114.62	117.70
84	Aa	1899	U	O4'-C1'-N1	6.16	113.13	108.20
84	Aa	2664	G	C5-C6-O6	-6.16	124.90	128.60
84	Aa	2673	G	O4'-C1'-N9	6.16	113.13	108.20
84	Aa	2737	A	C4-C5-C6	6.16	120.08	117.00
84	Aa	2858	G	C5-C6-O6	-6.16	124.90	128.60
84	Aa	3074	A	C4-C5-C6	6.16	120.08	117.00
1	Ad	292	A	C3'-C2'-C1'	6.16	106.43	101.50
1	Ad	1135	G	O4'-C1'-N9	6.16	113.13	108.20
84	Aa	519	C	N3-C4-C5	-6.16	119.44	121.90
84	Aa	1001	A	O4'-C1'-N9	6.16	113.13	108.20
84	Aa	1984	C	N3-C4-C5	-6.16	119.44	121.90
84	Aa	1988	G	C5-C6-O6	-6.16	124.90	128.60
84	Aa	2092	C	C6-N1-C2	-6.16	117.83	120.30
84	Aa	2708	A	C5-C6-N1	-6.16	114.62	117.70
86	Ab	25	G	N1-C6-O6	6.16	123.60	119.90
1	Ad	1682	U	O4'-C1'-C2'	-6.16	99.64	105.80
1	Ad	1697	G	O4'-C1'-N9	6.16	113.13	108.20
1	Ad	1728	G	OP1-P-OP2	-6.16	110.36	119.60
84	Aa	470	G	O4'-C1'-N9	6.16	113.13	108.20
84	Aa	632	C	N3-C4-C5	-6.16	119.44	121.90
84	Aa	879	A	C4-C5-C6	6.16	120.08	117.00
84	Aa	1732	G	O4'-C1'-N9	6.16	113.13	108.20
84	Aa	2917	U	O4'-C1'-N1	6.16	113.13	108.20
84	Aa	2930	C	N3-C4-C5	-6.16	119.44	121.90
84	Aa	3292	U	O4'-C1'-N1	6.16	113.13	108.20
86	Ab	5	G	N1-C2-N3	-6.16	120.20	123.90
1	Ad	847	U	C1'-O4'-C4'	-6.16	104.97	109.90
1	Ad	848	C	C3'-C2'-C1'	6.16	106.43	101.50
84	Aa	126	G	O4'-C1'-N9	6.16	113.13	108.20
84	Aa	1255	A	C4-C5-C6	6.16	120.08	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1398	A	C5-C6-N6	-6.16	118.77	123.70
84	Aa	1456	A	C5-C6-N1	-6.16	114.62	117.70
84	Aa	3269	C	N3-C4-N4	6.16	122.31	118.00
1	Ad	27	U	C3'-C2'-C1'	6.16	106.43	101.50
84	Aa	531	G	C5-C6-O6	-6.16	124.91	128.60
84	Aa	1012	U	O4'-C1'-N1	6.16	113.12	108.20
84	Aa	3003	C	N3-C4-C5	-6.16	119.44	121.90
85	Ac	73	U	O4'-C1'-N1	6.16	113.13	108.20
1	Ad	47	A	N9-C1'-C2'	6.16	122.00	114.00
1	Ad	79	A	C5'-C4'-O4'	6.16	116.49	109.10
84	Aa	1234	G	O4'-C1'-N9	6.16	113.12	108.20
84	Aa	1699	C	N3-C4-C5	-6.16	119.44	121.90
84	Aa	1805	A	C4-C5-C6	6.16	120.08	117.00
84	Aa	2037	C	N3-C4-N4	6.16	122.31	118.00
84	Aa	2458	A	C4-C5-C6	6.16	120.08	117.00
84	Aa	2852	G	N1-C6-O6	6.16	123.59	119.90
84	Aa	2987	C	N3-C4-C5	-6.16	119.44	121.90
1	Ad	228	G	O4'-C1'-C2'	-6.15	99.65	105.80
84	Aa	104	G	O4'-C1'-N9	6.15	113.12	108.20
84	Aa	56	A	C4-C5-C6	6.15	120.08	117.00
84	Aa	322	A	C5-C6-N6	-6.15	118.78	123.70
84	Aa	1336	A	C5-C6-N1	-6.15	114.62	117.70
84	Aa	1373	A	C4-C5-C6	6.15	120.08	117.00
84	Aa	1690	C	N3-C4-C5	-6.15	119.44	121.90
84	Aa	2013	G	O4'-C1'-N9	6.15	113.12	108.20
84	Aa	2993	A	C5-C6-N1	-6.15	114.62	117.70
1	Ad	17	C	C3'-C2'-C1'	6.15	106.42	101.50
1	Ad	1732	A	O4'-C1'-N9	6.15	113.12	108.20
47	CQ	53	PHE	CB-CG-CD2	-6.15	116.49	120.80
84	Aa	255	C	N3-C4-N4	6.15	122.31	118.00
84	Aa	365	A	C4-C5-C6	6.15	120.08	117.00
84	Aa	382	A	C4-C5-C6	6.15	120.08	117.00
84	Aa	749	C	N3-C4-C5	-6.15	119.44	121.90
84	Aa	933	U	O4'-C1'-N1	6.15	113.12	108.20
84	Aa	1246	G	O4'-C1'-N9	6.15	113.12	108.20
84	Aa	1666	C	N3-C4-C5	-6.15	119.44	121.90
84	Aa	2093	G	N3-C2-N2	6.15	124.20	119.90
84	Aa	660	A	C5-C6-N1	-6.15	114.62	117.70
84	Aa	2154	G	N3-C2-N2	6.15	124.20	119.90
1	Ad	1745	U	O4'-C1'-C2'	-6.15	99.65	105.80
84	Aa	225	G	C5-C6-O6	-6.15	124.91	128.60
84	Aa	981	A	C4-C5-C6	6.15	120.07	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2826	G	C5-C6-O6	-6.15	124.91	128.60
84	Aa	2069	G	O4'-C1'-N9	6.15	113.12	108.20
84	Aa	2331	A	C4-C5-C6	6.15	120.07	117.00
84	Aa	3072	A	C4-C5-C6	6.15	120.07	117.00
1	Ad	700	C	O4'-C1'-C2'	-6.14	99.66	105.80
84	Aa	970	A	C5-C6-N1	-6.14	114.63	117.70
84	Aa	1225	A	C4-C5-C6	6.14	120.07	117.00
84	Aa	1301	C	N3-C4-N4	6.14	122.30	118.00
84	Aa	1843	A	C4-C5-C6	6.14	120.07	117.00
84	Aa	2066	G	O4'-C1'-N9	6.14	113.11	108.20
84	Aa	2662	A	O4'-C1'-N9	6.14	113.12	108.20
84	Aa	2825	G	C5-C6-O6	-6.14	124.91	128.60
84	Aa	3205	C	N3-C4-N4	6.14	122.30	118.00
63	CU	107	ALA	N-CA-CB	6.14	118.70	110.10
84	Aa	162	G	C5-C6-O6	-6.14	124.91	128.60
84	Aa	370	A	O4'-C1'-N9	6.14	113.11	108.20
84	Aa	371	A	C4-C5-C6	6.14	120.07	117.00
84	Aa	1149	C	N3-C4-N4	6.14	122.30	118.00
84	Aa	1812	A	C5-C6-N1	-6.14	114.63	117.70
84	Aa	2549	C	N3-C4-C5	-6.14	119.44	121.90
84	Aa	3051	U	O4'-C1'-N1	6.14	113.11	108.20
86	Ab	14	C	C6-N1-C2	-6.14	117.84	120.30
84	Aa	1240	G	C5-C6-O6	-6.14	124.92	128.60
1	Ad	1165	A	O4'-C1'-N9	6.14	113.11	108.20
84	Aa	669	G	O4'-C1'-N9	6.14	113.11	108.20
84	Aa	790	G	C5-C6-O6	-6.14	124.92	128.60
84	Aa	1815	G	N1-C6-O6	6.14	123.58	119.90
84	Aa	2656	C	N3-C4-C5	-6.14	119.44	121.90
84	Aa	3073	A	C4-C5-C6	6.14	120.07	117.00
63	CU	57	GLY	C-N-CA	6.14	137.04	121.70
84	Aa	94	A	C5-C6-N1	-6.14	114.63	117.70
84	Aa	864	C	O4'-C1'-N1	6.14	113.11	108.20
84	Aa	2561	A	C4-C5-C6	6.14	120.07	117.00
84	Aa	3005	C	C5'-C4'-C3'	-6.14	106.18	116.00
1	Ad	1162	A	O4'-C1'-C2'	-6.14	99.66	105.80
9	BX	60	GLN	CB-CA-C	6.14	122.67	110.40
84	Aa	1040	A	C5-C6-N6	-6.14	118.79	123.70
84	Aa	1293	C	N3-C4-C5	-6.14	119.44	121.90
84	Aa	1401	C	N3-C4-C5	-6.14	119.44	121.90
84	Aa	1456	A	C5-C6-N6	-6.14	118.79	123.70
84	Aa	1532	A	C4-C5-C6	6.14	120.07	117.00
84	Aa	1965	C	N3-C4-N4	6.14	122.30	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2098	A	O4'-C1'-N9	6.14	113.11	108.20
1	Ad	822	G	C5'-C4'-O4'	6.13	116.46	109.10
1	Ad	932	C	N1-C1'-C2'	6.13	121.98	114.00
1	Ad	1342	C	N1-C1'-C2'	6.13	121.98	114.00
84	Aa	65	A	C4-C5-C6	6.13	120.07	117.00
84	Aa	481	G	O4'-C1'-N9	6.13	113.11	108.20
84	Aa	657	A	C5-C6-N1	-6.13	114.63	117.70
84	Aa	1543	A	C4-C5-C6	6.13	120.07	117.00
84	Aa	1807	C	N3-C4-C5	-6.13	119.45	121.90
84	Aa	1828	C	N3-C4-C5	-6.13	119.45	121.90
84	Aa	2366	A	C5-C6-N1	-6.13	114.63	117.70
84	Aa	2647	C	N3-C4-C5	-6.13	119.45	121.90
84	Aa	2886	C	N3-C4-C5	-6.13	119.45	121.90
84	Aa	115	C	P-O3'-C3'	6.13	127.06	119.70
84	Aa	660	A	O4'-C1'-N9	6.13	113.11	108.20
84	Aa	711	A	C5-C6-N1	-6.13	114.63	117.70
84	Aa	1328	C	N3-C4-C5	-6.13	119.45	121.90
84	Aa	2357	A	C4-C5-C6	6.13	120.07	117.00
84	Aa	2835	A	O4'-C1'-N9	6.13	113.11	108.20
84	Aa	3047	A	C5-C6-N1	-6.13	114.63	117.70
84	Aa	3109	G	C5-C6-O6	-6.13	124.92	128.60
1	Ad	291	G	C3'-C2'-C1'	-6.13	96.59	101.50
84	Aa	376	A	C4-C5-C6	6.13	120.07	117.00
84	Aa	802	G	C5-C6-O6	-6.13	124.92	128.60
84	Aa	1075	G	O4'-C1'-N9	6.13	113.11	108.20
84	Aa	1831	A	P-O3'-C3'	6.13	127.06	119.70
84	Aa	2092	C	C2-N1-C1'	-6.13	112.05	118.80
84	Aa	2580	C	N3-C4-C5	-6.13	119.45	121.90
84	Aa	2739	A	O4'-C1'-N9	6.13	113.11	108.20
84	Aa	2904	A	O4'-C1'-N9	6.13	113.11	108.20
1	Ad	146	A	O4'-C1'-C2'	-6.13	99.67	105.80
84	Aa	158	A	C4-C5-C6	6.13	120.06	117.00
84	Aa	170	C	O4'-C1'-N1	6.13	113.10	108.20
84	Aa	366	G	C5-C6-O6	-6.13	124.92	128.60
84	Aa	543	C	O5'-C5'-C4'	-6.13	100.05	111.70
84	Aa	1607	C	N3-C4-C5	-6.13	119.45	121.90
84	Aa	1798	C	C1'-O4'-C4'	-6.13	105.00	109.90
84	Aa	3095	G	O4'-C1'-N9	6.13	113.10	108.20
84	Aa	3154	G	C5-C6-O6	-6.13	124.92	128.60
1	Ad	185	G	O4'-C1'-N9	6.13	113.10	108.20
1	Ad	641	C	O4'-C1'-N1	6.13	113.10	108.20
84	Aa	305	G	O4'-C1'-N9	6.13	113.10	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1670	G	C5-C6-O6	-6.13	124.92	128.60
84	Aa	1744	C	C5'-C4'-O4'	6.13	116.45	109.10
84	Aa	2167	G	P-O3'-C3'	6.13	127.05	119.70
84	Aa	2397	A	C5-C6-N1	-6.13	114.64	117.70
84	Aa	2413	G	O4'-C1'-N9	6.13	113.10	108.20
84	Aa	3368	A	O4'-C1'-N9	6.13	113.10	108.20
84	Aa	376	A	O4'-C1'-N9	6.13	113.10	108.20
84	Aa	383	A	C4-C5-C6	6.13	120.06	117.00
84	Aa	717	G	C5-C6-O6	-6.13	124.92	128.60
84	Aa	1538	A	C4-C5-C6	6.13	120.06	117.00
84	Aa	2878	C	N3-C4-C5	-6.13	119.45	121.90
84	Aa	1026	A	O4'-C1'-N9	6.12	113.10	108.20
84	Aa	2442	A	O4'-C1'-N9	6.12	113.10	108.20
84	Aa	280	G	N1-C6-O6	6.12	123.57	119.90
84	Aa	932	A	O4'-C1'-N9	6.12	113.10	108.20
84	Aa	1123	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	1367	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	1413	C	N3-C4-C5	-6.12	119.45	121.90
84	Aa	2232	C	N3-C4-C5	-6.12	119.45	121.90
85	Ac	25	G	C5-C6-O6	-6.12	124.92	128.60
85	Ac	48	A	C5-C6-N1	-6.12	114.64	117.70
86	Ab	38	U	N3-C4-O4	6.12	123.69	119.40
1	Ad	152	G	C3'-C2'-C1'	-6.12	96.60	101.50
84	Aa	470	G	C5-C6-O6	-6.12	124.93	128.60
84	Aa	588	G	O4'-C1'-N9	6.12	113.10	108.20
84	Aa	842	C	N3-C4-N4	6.12	122.28	118.00
84	Aa	987	A	N1-C6-N6	6.12	122.27	118.60
84	Aa	1133	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	1969	G	P-O3'-C3'	6.12	127.05	119.70
85	Ac	64	U	O4'-C1'-N1	6.12	113.10	108.20
1	Ad	96	G	O4'-C1'-C2'	6.12	113.11	107.60
84	Aa	252	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	920	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	2089	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	2948	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	3016	C	N3-C4-C5	-6.12	119.45	121.90
1	Ad	791	C	N1-C1'-C2'	6.12	121.95	114.00
1	Ad	1424	G	O4'-C1'-N9	6.12	113.10	108.20
56	Cd	33	PHE	CB-CG-CD1	6.12	125.08	120.80
84	Aa	711	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	1161	G	O4'-C1'-N9	6.12	113.09	108.20
84	Aa	1475	U	O4'-C1'-N1	6.12	113.09	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1980	C	N3-C4-C5	-6.12	119.45	121.90
84	Aa	2744	C	N3-C4-N4	6.12	122.28	118.00
84	Aa	369	G	O4'-C1'-N9	6.12	113.09	108.20
84	Aa	665	G	O4'-C1'-N9	6.12	113.09	108.20
84	Aa	1490	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	2084	G	O3'-P-O5'	-6.12	92.38	104.00
84	Aa	2843	G	C5-C6-O6	-6.12	124.93	128.60
85	Ac	54	A	C5-C6-N6	-6.12	118.81	123.70
1	Ad	296	A	O4'-C1'-N9	-6.12	103.31	108.20
1	Ad	298	C	C1'-O4'-C4'	-6.12	105.01	109.90
1	Ad	1555	A	O4'-C1'-N9	6.12	113.09	108.20
84	Aa	1004	C	O4'-C1'-N1	6.12	113.09	108.20
84	Aa	1711	G	C5-C6-O6	-6.12	124.93	128.60
84	Aa	1738	A	O4'-C1'-N9	6.12	113.09	108.20
84	Aa	1967	C	N3-C4-C5	-6.12	119.45	121.90
84	Aa	2367	A	C5-C6-N1	-6.12	114.64	117.70
84	Aa	2397	A	C4-C5-C6	6.12	120.06	117.00
84	Aa	2514	A	O4'-C1'-N9	6.12	113.09	108.20
84	Aa	2618	G	C5-C6-O6	-6.12	124.93	128.60
84	Aa	3277	C	N3-C4-C5	-6.12	119.45	121.90
86	Ab	105	C	C2-N3-C4	6.12	122.96	119.90
1	Ad	425	A	O4'-C1'-N9	6.11	113.09	108.20
1	Ad	967	C	C1'-O4'-C4'	-6.11	105.01	109.90
14	BQ	102	TYR	CB-CG-CD2	-6.11	117.33	121.00
25	Bd	47	ALA	N-CA-CB	6.11	118.66	110.10
84	Aa	1389	C	N3-C4-C5	-6.11	119.45	121.90
84	Aa	1793	A	C4-C5-C6	6.11	120.06	117.00
84	Aa	1888	G	O4'-C1'-N9	6.11	113.09	108.20
84	Aa	2479	C	O5'-C5'-C4'	-6.11	100.08	111.70
84	Aa	2750	A	C4-C5-C6	6.11	120.06	117.00
84	Aa	2889	A	C5-C6-N6	-6.11	118.81	123.70
84	Aa	3236	A	C4-C5-C6	6.11	120.06	117.00
2	Ae	17	G	C3'-C2'-C1'	6.11	106.39	101.50
84	Aa	602	G	C5-C6-O6	-6.11	124.93	128.60
84	Aa	2910	C	N3-C4-C5	-6.11	119.45	121.90
1	Ad	1120	U	N1-C1'-C2'	6.11	121.94	114.00
1	Ad	1576	C	C5'-C4'-C3'	-6.11	106.22	116.00
84	Aa	642	C	O4'-C1'-N1	6.11	113.09	108.20
84	Aa	1061	A	C5-C6-N6	-6.11	118.81	123.70
84	Aa	2366	A	C4-C5-C6	6.11	120.06	117.00
84	Aa	2371	A	C4-C5-C6	6.11	120.06	117.00
84	Aa	2512	U	P-O5'-C5'	-6.11	111.12	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3150	G	O4'-C1'-N9	6.11	113.09	108.20
84	Aa	3213	A	C5-C6-N6	-6.11	118.81	123.70
84	Aa	3270	C	C2-N1-C1'	6.11	125.52	118.80
85	Ac	35	C	N3-C4-C5	-6.11	119.46	121.90
85	Ac	117	C	N3-C4-C5	-6.11	119.45	121.90
84	Aa	1333	C	N3-C4-N4	6.11	122.28	118.00
84	Aa	1746	G	P-O5'-C5'	-6.11	111.13	120.90
84	Aa	2271	G	C5-C6-O6	-6.11	124.94	128.60
84	Aa	3158	C	N3-C4-C5	-6.11	119.46	121.90
51	CX	140	TYR	CB-CG-CD1	-6.11	117.33	121.00
84	Aa	498	G	P-O3'-C3'	6.11	127.03	119.70
84	Aa	1305	A	C4-C5-C6	6.11	120.05	117.00
84	Aa	1316	C	N3-C4-C5	-6.11	119.46	121.90
84	Aa	2432	U	O4'-C1'-N1	6.11	113.08	108.20
84	Aa	2482	A	C4-C5-C6	6.11	120.05	117.00
84	Aa	3342	C	N3-C4-C5	-6.11	119.46	121.90
46	Ca	52	TYR	CB-CG-CD1	6.11	124.66	121.00
84	Aa	498	G	O4'-C1'-N9	6.11	113.08	108.20
84	Aa	573	A	C4-C5-C6	6.11	120.05	117.00
84	Aa	2730	A	C5-C6-N1	-6.11	114.65	117.70
84	Aa	3071	A	C4-C5-C6	6.11	120.05	117.00
84	Aa	3231	G	C5-C6-O6	-6.11	124.94	128.60
84	Aa	3338	U	O4'-C1'-N1	6.11	113.08	108.20
84	Aa	1704	A	C4-C5-C6	6.10	120.05	117.00
84	Aa	2755	U	O4'-C1'-N1	6.10	113.08	108.20
84	Aa	1438	A	C5-C6-N6	-6.10	118.82	123.70
86	Ab	29	C	N3-C4-C5	-6.10	119.46	121.90
84	Aa	1500	C	N3-C4-C5	-6.10	119.46	121.90
84	Aa	3349	C	N3-C4-C5	-6.10	119.46	121.90
84	Aa	722	C	O4'-C1'-N1	6.10	113.08	108.20
84	Aa	725	G	C5-C6-O6	-6.10	124.94	128.60
84	Aa	1194	C	N3-C4-N4	6.10	122.27	118.00
84	Aa	2238	A	C5-C6-N1	-6.10	114.65	117.70
84	Aa	2962	C	N3-C4-C5	-6.10	119.46	121.90
84	Aa	3156	G	O4'-C1'-N9	6.10	113.08	108.20
1	Ad	609	A	O4'-C1'-N9	6.10	113.08	108.20
19	BL	116	PHE	CB-CG-CD2	-6.10	116.53	120.80
84	Aa	293	A	C4-C5-C6	6.10	120.05	117.00
84	Aa	332	A	C5-C6-N6	-6.10	118.82	123.70
84	Aa	443	G	O4'-C1'-N9	6.10	113.08	108.20
84	Aa	2010	G	C5-C6-O6	-6.10	124.94	128.60
84	Aa	2101	A	C4-C5-C6	6.10	120.05	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2400	A	C4-C5-C6	6.10	120.05	117.00
84	Aa	2484	G	O4'-C1'-N9	6.10	113.08	108.20
84	Aa	2803	A	C5-C6-N1	-6.10	114.65	117.70
84	Aa	2806	A	C5-C6-N1	-6.10	114.65	117.70
84	Aa	3280	U	O4'-C1'-N1	6.10	113.08	108.20
1	Ad	621	U	N1-C1'-C2'	6.10	121.92	114.00
1	Ad	1652	C	C1'-O4'-C4'	-6.10	105.02	109.90
84	Aa	20	G	C5-C6-O6	-6.10	124.94	128.60
84	Aa	2023	C	N3-C4-C5	-6.10	119.46	121.90
84	Aa	2786	G	C5-C6-O6	-6.10	124.94	128.60
1	Ad	838	U	O4'-C1'-N1	6.09	113.08	108.20
63	CU	106	ALA	N-CA-CB	6.09	118.63	110.10
84	Aa	628	C	N3-C4-N4	6.09	122.27	118.00
84	Aa	1435	C	N3-C4-C5	-6.09	119.46	121.90
84	Aa	1535	C	N3-C4-C5	-6.09	119.46	121.90
84	Aa	1663	G	O4'-C1'-N9	6.09	113.08	108.20
84	Aa	2879	G	O4'-C1'-N9	6.09	113.08	108.20
1	Ad	581	G	O4'-C1'-N9	6.09	113.07	108.20
84	Aa	534	G	C5-C6-O6	-6.09	124.94	128.60
84	Aa	3088	A	C4-C5-C6	6.09	120.05	117.00
84	Aa	3092	A	C5-C6-N1	-6.09	114.65	117.70
1	Ad	605	A	O4'-C1'-N9	6.09	113.07	108.20
1	Ad	1513	A	N9-C1'-C2'	-6.09	105.30	112.00
84	Aa	54	G	O4'-C1'-N9	6.09	113.07	108.20
84	Aa	493	G	O4'-C1'-N9	6.09	113.07	108.20
84	Aa	1846	A	C4-C5-C6	6.09	120.05	117.00
84	Aa	2165	A	C5-C6-N6	-6.09	118.83	123.70
84	Aa	2172	C	N3-C4-C5	-6.09	119.46	121.90
84	Aa	2678	C	N3-C4-N4	6.09	122.26	118.00
84	Aa	3041	A	C4-C5-C6	6.09	120.05	117.00
84	Aa	3103	G	C5-C6-O6	-6.09	124.94	128.60
84	Aa	3146	C	N3-C4-C5	-6.09	119.46	121.90
84	Aa	3241	C	N3-C4-C5	-6.09	119.46	121.90
85	Ac	153	C	N3-C4-N4	6.09	122.26	118.00
84	Aa	507	C	N3-C4-C5	-6.09	119.46	121.90
84	Aa	721	A	C4-C5-C6	6.09	120.05	117.00
84	Aa	1424	G	O4'-C1'-N9	6.09	113.07	108.20
84	Aa	1763	C	N3-C4-N4	6.09	122.26	118.00
84	Aa	2081	C	N3-C4-N4	6.09	122.26	118.00
84	Aa	1153	A	C5-C6-N6	-6.09	118.83	123.70
84	Aa	1291	A	C4-C5-C6	6.09	120.04	117.00
85	Ac	54	A	C4-C5-C6	6.09	120.04	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	489	C	O4'-C1'-N1	6.09	113.07	108.20
1	Ad	607	U	O4'-C1'-N1	6.09	113.07	108.20
39	CZ	77	PHE	CB-CG-CD2	-6.09	116.54	120.80
84	Aa	991	C	N3-C4-C5	-6.09	119.47	121.90
84	Aa	1248	A	C5-C6-N1	-6.09	114.66	117.70
84	Aa	1769	C	N3-C4-C5	-6.09	119.47	121.90
84	Aa	1996	C	N3-C4-C5	-6.09	119.47	121.90
84	Aa	2082	A	C4-C5-C6	6.09	120.04	117.00
84	Aa	2622	G	C5-C6-O6	-6.09	124.95	128.60
84	Aa	3371	C	N3-C4-C5	-6.09	119.47	121.90
84	Aa	458	G	O4'-C1'-N9	6.08	113.07	108.20
84	Aa	1295	A	O4'-C1'-N9	6.08	113.07	108.20
84	Aa	2360	A	O4'-C1'-N9	6.08	113.07	108.20
84	Aa	2430	C	N3-C4-C5	-6.08	119.47	121.90
84	Aa	2466	G	O4'-C1'-N9	6.08	113.07	108.20
84	Aa	3166	C	N3-C4-C5	-6.08	119.47	121.90
1	Ad	537	U	N1-C1'-C2'	6.08	121.91	114.00
84	Aa	126	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	1463	A	C4-C5-C6	6.08	120.04	117.00
84	Aa	1464	A	O4'-C1'-N9	6.08	113.07	108.20
84	Aa	1939	C	N3-C4-C5	-6.08	119.47	121.90
84	Aa	2190	C	N3-C4-N4	6.08	122.26	118.00
84	Aa	3221	A	C5-C6-N6	-6.08	118.83	123.70
84	Aa	3386	A	C4-C5-C6	6.08	120.04	117.00
86	Ab	24	G	C6-C5-N7	-6.08	126.75	130.40
1	Ad	475	A	O4'-C1'-N9	6.08	113.07	108.20
1	Ad	528	U	O4'-C1'-N1	6.08	113.06	108.20
49	CR	55	GLN	N-CA-CB	6.08	121.55	110.60
84	Aa	88	A	C4-C5-C6	6.08	120.04	117.00
84	Aa	279	G	N3-C2-N2	6.08	124.16	119.90
84	Aa	905	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	2897	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	2928	A	C5-C6-N1	-6.08	114.66	117.70
84	Aa	3049	A	C4-C5-C6	6.08	120.04	117.00
2	Ae	45	G	C3'-C2'-C1'	6.08	106.36	101.50
79	CE	39	ALA	N-CA-CB	6.08	118.61	110.10
84	Aa	439	A	C4-C5-C6	6.08	120.04	117.00
84	Aa	541	C	N3-C4-N4	6.08	122.26	118.00
84	Aa	2377	C	C1'-O4'-C4'	6.08	114.76	109.90
84	Aa	2773	G	O4'-C1'-N9	6.08	113.06	108.20
1	Ad	1699	C	O4'-C1'-C2'	-6.08	99.72	105.80
1	Ad	1741	A	C5'-C4'-O4'	6.08	116.39	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	33	A	C4-C5-C6	6.08	120.04	117.00
84	Aa	642	C	C6-N1-C2	-6.08	117.87	120.30
84	Aa	725	G	O4'-C1'-N9	6.08	113.06	108.20
84	Aa	904	G	O4'-C1'-N9	6.08	113.06	108.20
84	Aa	1251	U	O4'-C1'-N1	6.08	113.06	108.20
84	Aa	1665	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	1812	A	O4'-C1'-N9	6.08	113.06	108.20
84	Aa	1975	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	2266	A	C5-C6-N1	-6.08	114.66	117.70
84	Aa	2276	A	C5-C6-N6	-6.08	118.84	123.70
84	Aa	2380	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	3329	G	O4'-C1'-N9	6.08	113.06	108.20
85	Ac	145	U	O4'-C1'-N1	6.08	113.06	108.20
85	Ac	155	U	O4'-C1'-N1	6.08	113.06	108.20
86	Ab	18	C	C2-N3-C4	6.08	122.94	119.90
1	Ad	815	A	C4'-C3'-C2'	-6.08	96.52	102.60
84	Aa	55	G	O4'-C1'-N9	6.08	113.06	108.20
84	Aa	110	C	N3-C4-C5	-6.08	119.47	121.90
84	Aa	187	G	O4'-C1'-N9	6.08	113.06	108.20
84	Aa	732	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	778	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	1346	C	N3-C4-C5	-6.08	119.47	121.90
84	Aa	1826	G	O4'-C1'-N9	6.08	113.06	108.20
84	Aa	2093	G	C8-N9-C1'	6.08	134.90	127.00
1	Ad	760	G	O4'-C1'-C2'	6.08	113.07	107.60
1	Ad	825	U	P-O5'-C5'	6.08	130.62	120.90
84	Aa	194	G	C5-C6-O6	-6.08	124.95	128.60
84	Aa	1619	G	O4'-C1'-N9	6.08	113.06	108.20
84	Aa	2163	G	N3-C2-N2	6.08	124.15	119.90
84	Aa	2651	G	O4'-C1'-N9	6.08	113.06	108.20
84	Aa	2666	G	C5-C6-O6	-6.08	124.95	128.60
85	Ac	11	C	N3-C4-C5	-6.08	119.47	121.90
84	Aa	394	A	C4-C5-C6	6.07	120.04	117.00
84	Aa	671	C	N3-C4-C5	-6.07	119.47	121.90
84	Aa	827	C	N3-C4-C5	-6.07	119.47	121.90
84	Aa	1658	G	O4'-C1'-N9	6.07	113.06	108.20
84	Aa	2193	A	O4'-C1'-N9	6.07	113.06	108.20
84	Aa	2908	C	N3-C4-C5	-6.07	119.47	121.90
1	Ad	1733	G	N9-C1'-C2'	6.07	121.89	114.00
84	Aa	2161	G	C5-C6-O6	-6.07	124.96	128.60
84	Aa	2920	G	C5'-C4'-C3'	-6.07	106.28	116.00
84	Aa	3123	A	C4-C5-C6	6.07	120.04	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1194	C	C1'-O4'-C4'	6.07	114.76	109.90
1	Ad	1726	G	O4'-C1'-N9	6.07	113.06	108.20
84	Aa	427	U	O4'-C1'-N1	6.07	113.06	108.20
84	Aa	1115	A	O4'-C1'-N9	6.07	113.06	108.20
84	Aa	1175	G	N3-C2-N2	6.07	124.15	119.90
84	Aa	1953	C	N3-C4-C5	-6.07	119.47	121.90
84	Aa	248	C	N3-C4-C5	-6.07	119.47	121.90
84	Aa	1050	A	N1-C6-N6	6.07	122.24	118.60
84	Aa	2521	C	N3-C4-C5	-6.07	119.47	121.90
84	Aa	2950	C	N3-C4-C5	-6.07	119.47	121.90
85	Ac	40	A	O4'-C1'-N9	6.07	113.06	108.20
86	Ab	111	U	O4'-C1'-N1	6.07	113.06	108.20
78	CL	25	PHE	CB-CG-CD1	6.07	125.05	120.80
84	Aa	103	G	C5-C6-O6	-6.07	124.96	128.60
84	Aa	686	A	C4-C5-C6	6.07	120.03	117.00
84	Aa	1590	A	C5-C6-N6	-6.07	118.85	123.70
84	Aa	2778	C	N3-C4-C5	-6.07	119.47	121.90
85	Ac	110	A	O4'-C1'-N9	6.07	113.05	108.20
1	Ad	958	G	O4'-C1'-N9	6.07	113.05	108.20
1	Ad	1225	A	C3'-C2'-C1'	6.07	106.35	101.50
1	Ad	1597	C	C3'-C2'-C1'	6.07	106.35	101.50
84	Aa	205	C	N3-C4-C5	-6.07	119.47	121.90
84	Aa	616	A	C5-C6-N1	-6.07	114.67	117.70
84	Aa	710	C	N3-C4-C5	-6.07	119.47	121.90
84	Aa	1186	C	N3-C4-C5	-6.07	119.47	121.90
84	Aa	1253	G	O4'-C1'-N9	6.07	113.05	108.20
84	Aa	1376	A	C5-C6-N1	-6.07	114.67	117.70
84	Aa	1795	A	C4-C5-C6	6.07	120.03	117.00
84	Aa	3034	A	C4-C5-C6	6.07	120.03	117.00
84	Aa	3251	C	N3-C4-N4	6.07	122.25	118.00
84	Aa	1456	A	C4-C5-C6	6.06	120.03	117.00
84	Aa	1818	C	N3-C4-N4	6.06	122.25	118.00
1	Ad	637	U	O4'-C1'-C2'	-6.06	99.74	105.80
36	BH	17	SER	N-CA-CB	6.06	119.59	110.50
84	Aa	523	C	N3-C4-N4	6.06	122.24	118.00
84	Aa	529	C	N3-C4-N4	6.06	122.24	118.00
84	Aa	1376	A	C4-C5-C6	6.06	120.03	117.00
84	Aa	1388	C	N3-C4-C5	-6.06	119.47	121.90
84	Aa	2624	G	O4'-C1'-N9	6.06	113.05	108.20
84	Aa	2779	G	C5-C6-O6	-6.06	124.96	128.60
84	Aa	3240	C	N3-C4-C5	-6.06	119.47	121.90
84	Aa	3310	A	C4-C5-C6	6.06	120.03	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1728	G	O4'-C1'-N9	6.06	113.05	108.20
84	Aa	1925	G	O4'-C1'-N9	6.06	113.05	108.20
84	Aa	2429	A	C5-C6-N1	-6.06	114.67	117.70
1	Ad	11	A	C3'-C2'-C1'	6.06	106.35	101.50
1	Ad	470	U	N1-C1'-C2'	6.06	121.88	114.00
1	Ad	914	U	P-O5'-C5'	6.06	130.59	120.90
84	Aa	12	G	C2-N3-C4	6.06	114.93	111.90
84	Aa	377	C	N3-C4-N4	6.06	122.24	118.00
84	Aa	595	C	N3-C4-C5	-6.06	119.48	121.90
84	Aa	830	A	C4-C5-C6	6.06	120.03	117.00
84	Aa	879	A	C5-C6-N1	-6.06	114.67	117.70
84	Aa	1040	A	C4-C5-C6	6.06	120.03	117.00
84	Aa	1253	G	C5-C6-O6	-6.06	124.96	128.60
84	Aa	2201	G	O4'-C1'-N9	6.06	113.05	108.20
84	Aa	2578	G	C5-C6-O6	-6.06	124.97	128.60
84	Aa	2838	C	N3-C4-C5	-6.06	119.48	121.90
84	Aa	2866	A	C4-C5-C6	6.06	120.03	117.00
84	Aa	3033	A	C4-C5-C6	6.06	120.03	117.00
84	Aa	3176	C	N3-C4-C5	-6.06	119.48	121.90
85	Ac	126	A	C5-C6-N6	-6.06	118.85	123.70
1	Ad	889	C	O4'-C1'-N1	6.06	113.05	108.20
2	Ae	60	C	N1-C1'-C2'	6.06	121.88	114.00
84	Aa	738	A	C4-C5-C6	6.06	120.03	117.00
84	Aa	1015	A	C5-C6-N1	-6.06	114.67	117.70
84	Aa	1359	A	C4-C5-C6	6.06	120.03	117.00
84	Aa	1364	C	N3-C4-C5	-6.06	119.48	121.90
84	Aa	1751	G	C5-C6-O6	-6.06	124.97	128.60
84	Aa	1752	C	N3-C4-C5	-6.06	119.48	121.90
84	Aa	2364	C	N3-C4-N4	6.06	122.24	118.00
84	Aa	2954	G	C5-C6-O6	-6.06	124.97	128.60
84	Aa	3239	G	O4'-C1'-N9	6.06	113.05	108.20
84	Aa	688	G	N1-C6-O6	6.06	123.53	119.90
84	Aa	820	A	C5-C6-N6	-6.06	118.86	123.70
84	Aa	1337	C	N3-C4-C5	-6.06	119.48	121.90
84	Aa	2097	C	N3-C4-C5	-6.06	119.48	121.90
84	Aa	2753	C	N3-C4-C5	-6.06	119.48	121.90
85	Ac	32	C	N3-C4-C5	-6.06	119.48	121.90
1	Ad	1059	U	N1-C1'-C2'	6.05	121.87	114.00
1	Ad	1700	G	N9-C1'-C2'	6.05	121.87	114.00
84	Aa	528	C	C4'-C3'-O3'	6.05	125.11	113.00
84	Aa	1041	C	N3-C4-C5	-6.05	119.48	121.90
84	Aa	2398	A	C5-C6-N1	-6.05	114.67	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2462	G	C5-C6-O6	-6.05	124.97	128.60
84	Aa	2557	C	C6-N1-C1'	-6.05	113.53	120.80
84	Aa	2751	A	C5-C6-N1	-6.05	114.67	117.70
84	Aa	2813	A	C4-C5-C6	6.05	120.03	117.00
85	Ac	30	C	N3-C4-C5	-6.05	119.48	121.90
2	Ae	17	G	N9-C1'-C2'	6.05	121.87	114.00
84	Aa	563	C	C2'-C3'-O3'	6.05	123.38	113.70
84	Aa	734	C	N3-C4-C5	-6.05	119.48	121.90
84	Aa	953	G	N3-C2-N2	6.05	124.14	119.90
84	Aa	2240	C	N3-C4-N4	6.05	122.24	118.00
84	Aa	3123	A	O4'-C1'-N9	6.05	113.04	108.20
84	Aa	3306	A	C4-C5-C6	6.05	120.03	117.00
1	Ad	257	A	O4'-C1'-N9	-6.05	103.36	108.20
84	Aa	513	C	N3-C4-N4	6.05	122.23	118.00
84	Aa	1819	A	C4-C5-C6	6.05	120.03	117.00
84	Aa	1831	A	C5-C6-N1	-6.05	114.67	117.70
84	Aa	2509	A	O4'-C1'-N9	6.05	113.04	108.20
84	Aa	2805	A	C5-C6-N1	-6.05	114.67	117.70
84	Aa	315	A	C4-C5-C6	6.05	120.02	117.00
84	Aa	1002	A	C5-C6-N6	-6.05	118.86	123.70
84	Aa	2328	C	N3-C4-C5	-6.05	119.48	121.90
85	Ac	12	A	C5-C6-N6	-6.05	118.86	123.70
84	Aa	142	G	C5-C6-O6	-6.05	124.97	128.60
84	Aa	1404	G	O4'-C1'-N9	6.05	113.04	108.20
84	Aa	1484	A	C5-C6-N1	-6.05	114.68	117.70
84	Aa	1492	A	C5-C6-N6	-6.05	118.86	123.70
84	Aa	2038	G	O4'-C1'-N9	6.05	113.04	108.20
84	Aa	2503	A	C5-C6-N1	-6.05	114.68	117.70
84	Aa	2522	C	N3-C4-C5	-6.05	119.48	121.90
84	Aa	2640	A	C5-C6-N6	-6.05	118.86	123.70
84	Aa	3147	G	O4'-C1'-N9	6.05	113.04	108.20
86	Ab	99	G	C5-C6-N1	-6.05	108.48	111.50
84	Aa	1879	A	O4'-C1'-N9	6.04	113.04	108.20
84	Aa	2086	A	O5'-C5'-C4'	-6.04	100.21	111.70
84	Aa	2737	A	C5-C6-N1	-6.04	114.68	117.70
1	Ad	594	C	N1-C1'-C2'	6.04	121.86	114.00
1	Ad	1627	C	C3'-C2'-C1'	6.04	106.33	101.50
84	Aa	231	C	N3-C4-C5	-6.04	119.48	121.90
84	Aa	251	G	C5-C6-O6	-6.04	124.97	128.60
84	Aa	586	A	P-O3'-C3'	6.04	126.95	119.70
84	Aa	1028	G	C5-C6-O6	-6.04	124.97	128.60
84	Aa	1139	A	C5-C6-N1	-6.04	114.68	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1152	G	N1-C6-O6	6.04	123.53	119.90
84	Aa	1832	C	N3-C4-C5	-6.04	119.48	121.90
84	Aa	2180	G	N1-C6-O6	6.04	123.53	119.90
84	Aa	2697	A	O4'-C1'-N9	6.04	113.03	108.20
84	Aa	2840	A	O4'-C1'-N9	6.04	113.03	108.20
85	Ac	77	A	O4'-C1'-N9	6.04	113.03	108.20
85	Ac	118	C	N3-C4-C5	-6.04	119.48	121.90
1	Ad	357	A	O4'-C1'-C2'	-6.04	99.76	105.80
1	Ad	1502	C	C3'-C2'-C1'	6.04	106.33	101.50
47	CQ	123	PHE	CB-CG-CD1	6.04	125.03	120.80
84	Aa	849	A	C5-C6-N1	-6.04	114.68	117.70
84	Aa	854	C	N3-C4-C5	-6.04	119.48	121.90
84	Aa	955	A	C4-C5-C6	6.04	120.02	117.00
84	Aa	1182	A	C5-C6-N1	-6.04	114.68	117.70
84	Aa	1362	C	N3-C4-C5	-6.04	119.48	121.90
84	Aa	1998	A	O4'-C1'-N9	6.04	113.03	108.20
84	Aa	2032	C	N3-C4-C5	-6.04	119.48	121.90
84	Aa	2781	A	C4-C5-C6	6.04	120.02	117.00
84	Aa	3136	A	O4'-C1'-N9	6.04	113.03	108.20
1	Ad	1127	G	C1'-O4'-C4'	6.04	114.73	109.90
2	Ae	17	G	C5'-C4'-O4'	6.04	116.35	109.10
84	Aa	57	G	O4'-C1'-N9	6.04	113.03	108.20
84	Aa	187	G	C5-C6-O6	-6.04	124.98	128.60
84	Aa	2389	A	C5-C6-N1	-6.04	114.68	117.70
84	Aa	2754	G	C5-C6-O6	-6.04	124.98	128.60
85	Ac	81	U	O4'-C1'-N1	6.04	113.03	108.20
1	Ad	1803	G	O4'-C1'-N9	-6.04	103.37	108.20
14	BQ	149	ARG	N-CA-CB	6.04	121.47	110.60
84	Aa	534	G	O4'-C1'-N9	6.04	113.03	108.20
84	Aa	2019	G	O4'-C1'-N9	6.04	113.03	108.20
84	Aa	2251	A	C4-C5-C6	6.04	120.02	117.00
1	Ad	1210	U	C1'-O4'-C4'	6.04	114.73	109.90
1	Ad	1736	C	C3'-C2'-C1'	6.04	106.33	101.50
41	CA	76	PHE	CB-CG-CD2	-6.04	116.57	120.80
84	Aa	990	U	O4'-C1'-N1	6.04	113.03	108.20
84	Aa	1468	A	O4'-C1'-N9	6.04	113.03	108.20
84	Aa	2670	A	C4-C5-C6	6.04	120.02	117.00
84	Aa	3310	A	O4'-C1'-N9	6.04	113.03	108.20
84	Aa	33	A	C5-C6-N6	-6.04	118.87	123.70
84	Aa	471	C	N3-C4-C5	-6.04	119.49	121.90
84	Aa	2396	A	C4-C5-C6	6.04	120.02	117.00
84	Aa	2424	G	O4'-C1'-N9	6.04	113.03	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2695	A	C5-C6-N6	-6.04	118.87	123.70
84	Aa	2952	G	C5-C6-O6	-6.04	124.98	128.60
84	Aa	3265	C	N3-C4-N4	6.04	122.22	118.00
84	Aa	454	A	C5-C6-N6	-6.03	118.87	123.70
84	Aa	1340	G	C5-C6-O6	-6.03	124.98	128.60
84	Aa	1422	G	C5-C6-O6	-6.03	124.98	128.60
84	Aa	2562	A	C5-C6-N6	-6.03	118.87	123.70
1	Ad	1493	A	O4'-C1'-N9	6.03	113.03	108.20
84	Aa	544	C	N3-C4-C5	-6.03	119.49	121.90
84	Aa	2393	G	C5-C6-O6	-6.03	124.98	128.60
84	Aa	2806	A	C4-C5-C6	6.03	120.02	117.00
86	Ab	119	C	N3-C4-N4	6.03	122.22	118.00
1	Ad	455	G	O4'-C1'-N9	6.03	113.02	108.20
1	Ad	795	A	C3'-C2'-C1'	6.03	106.33	101.50
84	Aa	27	C	N3-C4-C5	-6.03	119.49	121.90
84	Aa	359	A	C4-C5-C6	6.03	120.02	117.00
84	Aa	672	A	C5-C6-N1	-6.03	114.69	117.70
84	Aa	1298	A	O4'-C1'-N9	6.03	113.03	108.20
84	Aa	1656	C	N3-C4-C5	-6.03	119.49	121.90
84	Aa	2285	C	N3-C4-C5	-6.03	119.49	121.90
84	Aa	2342	C	N3-C4-C5	-6.03	119.49	121.90
84	Aa	3383	C	N3-C4-N4	6.03	122.22	118.00
85	Ac	114	G	C5-C6-O6	-6.03	124.98	128.60
84	Aa	343	G	C5-C6-O6	-6.03	124.98	128.60
84	Aa	831	G	C5-C6-O6	-6.03	124.98	128.60
1	Ad	378	U	O4'-C1'-N1	6.03	113.02	108.20
1	Ad	1312	G	C1'-O4'-C4'	-6.03	105.08	109.90
84	Aa	444	C	N3-C4-C5	-6.03	119.49	121.90
84	Aa	579	G	N3-C2-N2	6.03	124.12	119.90
84	Aa	586	A	C5-C6-N6	-6.03	118.88	123.70
84	Aa	1221	A	C4-C5-C6	6.03	120.01	117.00
84	Aa	2696	C	N3-C4-C5	-6.03	119.49	121.90
86	Ab	70	G	C8-N9-C4	-6.03	103.99	106.40
1	Ad	1124	G	O4'-C1'-N9	6.03	113.02	108.20
84	Aa	89	C	N3-C4-C5	-6.03	119.49	121.90
84	Aa	179	G	C5-C6-O6	-6.03	124.98	128.60
84	Aa	312	U	O4'-C1'-N1	6.03	113.02	108.20
84	Aa	798	G	O4'-C1'-N9	6.03	113.02	108.20
84	Aa	1767	G	C5-C6-O6	-6.03	124.98	128.60
84	Aa	2884	U	O4'-C1'-N1	6.03	113.02	108.20
84	Aa	3114	A	C4-C5-C6	6.03	120.01	117.00
85	Ac	14	C	O4'-C1'-N1	6.03	113.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	58	G	O4'-C1'-N9	6.03	113.02	108.20
1	Ad	771	G	O4'-C1'-N9	6.02	113.02	108.20
1	Ad	1077	C	C3'-C2'-C1'	6.02	106.32	101.50
84	Aa	1727	A	C4-C5-C6	6.02	120.01	117.00
84	Aa	1873	C	N3-C4-C5	-6.02	119.49	121.90
86	Ab	120	C	N3-C4-N4	6.02	122.22	118.00
1	Ad	196	G	O4'-C1'-N9	6.02	113.02	108.20
1	Ad	792	U	C1'-O4'-C4'	6.02	114.72	109.90
9	BX	40	PHE	CB-CG-CD1	6.02	125.02	120.80
84	Aa	305	G	C5-C6-O6	-6.02	124.99	128.60
84	Aa	332	A	C5-C6-N1	-6.02	114.69	117.70
84	Aa	1946	C	N3-C4-C5	-6.02	119.49	121.90
84	Aa	2436	G	P-O3'-C3'	6.02	126.93	119.70
84	Aa	2905	A	C5-C6-N1	-6.02	114.69	117.70
85	Ac	50	C	N3-C4-C5	-6.02	119.49	121.90
85	Ac	131	G	O4'-C1'-N9	6.02	113.02	108.20
84	Aa	1777	C	N3-C4-C5	-6.02	119.49	121.90
84	Aa	2441	G	C5-C6-O6	-6.02	124.99	128.60
84	Aa	690	G	C5-C6-O6	-6.02	124.99	128.60
84	Aa	975	G	O4'-C1'-N9	6.02	113.02	108.20
84	Aa	1144	C	N3-C4-C5	-6.02	119.49	121.90
84	Aa	1507	A	C4-C5-C6	6.02	120.01	117.00
84	Aa	2514	A	C4-C5-C6	6.02	120.01	117.00
84	Aa	2902	A	C5-C6-N1	-6.02	114.69	117.70
84	Aa	3123	A	C5-C6-N1	-6.02	114.69	117.70
84	Aa	3224	C	N3-C4-C5	-6.02	119.49	121.90
1	Ad	853	U	O4'-C1'-N1	6.02	113.01	108.20
2	Ae	69	G	N9-C1'-C2'	6.02	121.82	114.00
17	BS	98	VAL	N-CA-C	-6.02	94.75	111.00
84	Aa	168	A	C4-C5-C6	6.02	120.01	117.00
84	Aa	1635	A	C4-C5-C6	6.02	120.01	117.00
84	Aa	2100	A	C4-C5-C6	6.02	120.01	117.00
84	Aa	2788	A	C5-C6-N6	-6.02	118.89	123.70
85	Ac	87	G	O4'-C1'-N9	6.02	113.01	108.20
1	Ad	533	C	P-O5'-C5'	-6.02	111.28	120.90
84	Aa	515	C	N3-C4-C5	-6.02	119.49	121.90
1	Ad	619	A	N9-C1'-C2'	-6.01	105.38	112.00
1	Ad	1054	G	O4'-C1'-N9	6.01	113.01	108.20
84	Aa	920	A	O4'-C1'-N9	6.01	113.01	108.20
84	Aa	1155	G	O4'-C1'-N9	6.01	113.01	108.20
84	Aa	2275	A	C4-C5-C6	6.01	120.01	117.00
84	Aa	2380	G	O4'-C1'-N9	6.01	113.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	393	G	N9-C1'-C2'	6.01	121.82	114.00
1	Ad	1520	G	C1'-O4'-C4'	-6.01	105.09	109.90
84	Aa	875	A	C4-C5-C6	6.01	120.01	117.00
84	Aa	876	C	N3-C4-C5	-6.01	119.50	121.90
84	Aa	1941	G	C5-C6-O6	-6.01	124.99	128.60
1	Ad	1181	G	O4'-C1'-N9	6.01	113.01	108.20
1	Ad	1778	G	O4'-C1'-N9	-6.01	103.39	108.20
84	Aa	697	A	C5-C6-N6	-6.01	118.89	123.70
84	Aa	1221	A	C5-C6-N6	-6.01	118.89	123.70
84	Aa	1470	A	C5-C6-N6	-6.01	118.89	123.70
84	Aa	1486	G	N3-C2-N2	6.01	124.11	119.90
84	Aa	1596	G	C5-C6-O6	-6.01	124.99	128.60
84	Aa	1954	G	C5-C6-O6	-6.01	124.99	128.60
84	Aa	2118	G	C5-C6-O6	-6.01	124.99	128.60
84	Aa	2175	A	C4-C5-C6	6.01	120.00	117.00
84	Aa	2222	C	N3-C4-C5	-6.01	119.50	121.90
84	Aa	2276	A	O4'-C1'-N9	6.01	113.01	108.20
84	Aa	2351	A	C5-C6-N6	-6.01	118.89	123.70
84	Aa	2381	G	C5-C6-O6	-6.01	124.99	128.60
84	Aa	2805	A	C4-C5-C6	6.01	120.01	117.00
84	Aa	3275	G	C5-C6-O6	-6.01	124.99	128.60
85	Ac	91	C	N3-C4-C5	-6.01	119.50	121.90
1	Ad	1331	C	O4'-C1'-N1	6.01	113.01	108.20
1	Ad	1526	C	O4'-C1'-N1	6.01	113.01	108.20
3	Af	16	G	N9-C1'-C2'	-6.01	105.39	112.00
84	Aa	361	G	O4'-C1'-N9	6.01	113.01	108.20
84	Aa	639	A	C5-C6-N1	-6.01	114.69	117.70
84	Aa	650	A	C5-C6-N1	-6.01	114.69	117.70
84	Aa	1552	C	N3-C4-C5	-6.01	119.50	121.90
84	Aa	1723	C	N3-C4-C5	-6.01	119.50	121.90
84	Aa	1944	G	C5'-C4'-C3'	6.01	125.61	116.00
84	Aa	2010	G	O4'-C1'-N9	6.01	113.01	108.20
84	Aa	2638	A	C4-C5-C6	6.01	120.00	117.00
84	Aa	2863	U	O4'-C1'-N1	6.01	113.01	108.20
84	Aa	3009	A	C5-C6-N1	-6.01	114.69	117.70
84	Aa	3077	C	N3-C4-C5	-6.01	119.50	121.90
85	Ac	115	C	N3-C4-C5	-6.01	119.50	121.90
1	Ad	451	U	O4'-C1'-N1	6.01	113.01	108.20
84	Aa	1274	A	C5-C6-N1	-6.01	114.70	117.70
84	Aa	1894	G	O4'-C1'-N9	6.01	113.01	108.20
84	Aa	2027	G	C5-C6-O6	-6.01	125.00	128.60
84	Aa	2142	A	C4-C5-C6	6.01	120.00	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2276	A	C4-C5-C6	6.01	120.00	117.00
84	Aa	374	G	C5-C6-O6	-6.01	125.00	128.60
84	Aa	482	C	N3-C4-N4	6.01	122.20	118.00
84	Aa	570	G	C5-C6-O6	-6.01	125.00	128.60
84	Aa	1629	A	C5-C6-N1	-6.01	114.70	117.70
84	Aa	2270	A	O4'-C1'-N9	6.01	113.00	108.20
1	Ad	164	C	C3'-C2'-C1'	6.00	106.30	101.50
84	Aa	961	C	N3-C4-C5	-6.00	119.50	121.90
84	Aa	1749	G	O3'-P-O5'	-6.00	92.59	104.00
84	Aa	2149	G	C4-N9-C1'	6.00	134.31	126.50
84	Aa	2587	G	N1-C2-N3	-6.00	120.30	123.90
84	Aa	3218	C	N3-C4-C5	-6.00	119.50	121.90
1	Ad	367	G	C3'-C2'-C1'	-6.00	96.70	101.50
84	Aa	432	G	O4'-C1'-N9	6.00	113.00	108.20
84	Aa	903	G	O4'-C1'-N9	6.00	113.00	108.20
84	Aa	1296	C	N3-C4-C5	-6.00	119.50	121.90
84	Aa	1609	G	C5-C6-O6	-6.00	125.00	128.60
84	Aa	1812	A	C4-C5-C6	6.00	120.00	117.00
84	Aa	2369	G	N1-C6-O6	6.00	123.50	119.90
84	Aa	2579	G	C5-C6-O6	-6.00	125.00	128.60
84	Aa	2835	A	C4-C5-C6	6.00	120.00	117.00
85	Ac	51	G	O4'-C1'-N9	6.00	113.00	108.20
1	Ad	193	G	N9-C1'-C2'	6.00	121.80	114.00
84	Aa	93	G	C5-C6-O6	-6.00	125.00	128.60
84	Aa	670	A	C5-C6-N1	-6.00	114.70	117.70
84	Aa	2412	A	C4-C5-C6	6.00	120.00	117.00
84	Aa	2429	A	C4-C5-C6	6.00	120.00	117.00
84	Aa	474	G	O5'-C5'-C4'	6.00	123.10	111.70
17	BS	100	SER	N-CA-CB	6.00	119.50	110.50
84	Aa	675	C	N3-C4-C5	-6.00	119.50	121.90
84	Aa	872	G	O4'-C1'-N9	6.00	113.00	108.20
84	Aa	2039	G	C5-C6-O6	-6.00	125.00	128.60
84	Aa	2533	A	C4-C5-C6	6.00	120.00	117.00
84	Aa	2750	A	C5-C6-N1	-6.00	114.70	117.70
84	Aa	2822	A	C4-C5-C6	6.00	120.00	117.00
84	Aa	3186	G	C5-C6-O6	-6.00	125.00	128.60
1	Ad	86	A	N9-C1'-C2'	6.00	121.80	114.00
1	Ad	782	G	N9-C1'-C2'	6.00	121.80	114.00
1	Ad	1475	A	O4'-C1'-C2'	-6.00	99.80	105.80
84	Aa	1438	A	C4-C5-C6	6.00	120.00	117.00
84	Aa	2019	G	C5-C6-O6	-6.00	125.00	128.60
84	Aa	2100	A	C5-C6-N1	-6.00	114.70	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2139	A	C5-C6-N1	-6.00	114.70	117.70
84	Aa	2706	A	C5-C6-N1	-6.00	114.70	117.70
84	Aa	2790	C	N3-C4-N4	6.00	122.20	118.00
84	Aa	3372	C	N3-C4-C5	-6.00	119.50	121.90
84	Aa	916	A	C4-C5-C6	6.00	120.00	117.00
84	Aa	2643	A	O4'-C1'-N9	6.00	113.00	108.20
84	Aa	3335	G	N3-C2-N2	6.00	124.10	119.90
1	Ad	318	C	C5'-C4'-O4'	5.99	116.29	109.10
84	Aa	156	A	C4-C5-C6	5.99	120.00	117.00
84	Aa	411	C	O4'-C1'-N1	5.99	113.00	108.20
84	Aa	511	C	N3-C4-C5	-5.99	119.50	121.90
84	Aa	1317	G	O4'-C1'-N9	5.99	113.00	108.20
84	Aa	1749	G	C5-C6-O6	-5.99	125.00	128.60
84	Aa	1877	G	C5-C6-O6	-5.99	125.00	128.60
84	Aa	1960	C	N3-C4-C5	-5.99	119.50	121.90
84	Aa	2274	A	C4-C5-C6	5.99	120.00	117.00
84	Aa	2632	U	O4'-C1'-N1	5.99	112.99	108.20
84	Aa	3131	A	C4-C5-C6	5.99	120.00	117.00
1	Ad	1016	C	C3'-C2'-C1'	5.99	106.29	101.50
84	Aa	206	C	N3-C4-C5	-5.99	119.50	121.90
84	Aa	810	A	C4-C5-C6	5.99	120.00	117.00
84	Aa	1659	G	C5-C6-O6	-5.99	125.00	128.60
86	Ab	105	C	N3-C4-N4	5.99	122.19	118.00
1	Ad	569	C	O4'-C1'-C2'	-5.99	99.81	105.80
84	Aa	81	C	N3-C4-C5	-5.99	119.50	121.90
84	Aa	119	A	C4-C5-C6	5.99	120.00	117.00
84	Aa	1846	A	O4'-C1'-N9	5.99	112.99	108.20
84	Aa	2079	A	O4'-C1'-N9	5.99	112.99	108.20
84	Aa	2338	C	N3-C4-N4	5.99	122.19	118.00
84	Aa	3350	C	N3-C4-C5	-5.99	119.50	121.90
36	BH	117	ARG	N-CA-CB	5.99	121.38	110.60
63	CU	100	ASP	N-CA-CB	5.99	121.38	110.60
84	Aa	69	U	O4'-C1'-N1	5.99	112.99	108.20
84	Aa	420	A	O4'-C1'-N9	5.99	112.99	108.20
84	Aa	800	C	C2-N3-C4	5.99	122.89	119.90
84	Aa	900	C	N3-C4-C5	-5.99	119.50	121.90
84	Aa	1210	G	C5-C6-O6	-5.99	125.01	128.60
84	Aa	1825	G	C5-C6-O6	-5.99	125.01	128.60
84	Aa	2152	A	C5-C6-N6	-5.99	118.91	123.70
84	Aa	2455	A	C5-C6-N1	-5.99	114.71	117.70
84	Aa	2773	G	C5-C6-O6	-5.99	125.01	128.60
84	Aa	3157	C	N3-C4-C5	-5.99	119.50	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	113	A	C5-C6-N6	-5.99	118.91	123.70
84	Aa	696	A	C4-C5-C6	5.99	119.99	117.00
84	Aa	887	A	C5-C6-N6	-5.99	118.91	123.70
84	Aa	1213	G	C5-C6-O6	-5.99	125.01	128.60
84	Aa	1602	A	C5-C6-N6	-5.99	118.91	123.70
84	Aa	2502	U	O3'-P-O5'	-5.99	92.63	104.00
84	Aa	2801	A	C4-C5-C6	5.99	119.99	117.00
84	Aa	16	A	C5-C6-N1	-5.99	114.71	117.70
84	Aa	2745	C	N3-C4-C5	-5.99	119.51	121.90
1	Ad	762	A	C3'-C2'-C1'	5.98	106.29	101.50
84	Aa	917	A	C4-C5-C6	5.98	119.99	117.00
84	Aa	1087	G	C5-C6-O6	-5.98	125.01	128.60
84	Aa	2029	G	O4'-C1'-N9	5.98	112.99	108.20
84	Aa	2047	A	C4-C5-C6	5.98	119.99	117.00
84	Aa	3223	C	N3-C4-C5	-5.98	119.51	121.90
1	Ad	614	G	P-O5'-C5'	-5.98	111.33	120.90
1	Ad	1305	U	O4'-C1'-C2'	-5.98	99.82	105.80
13	BF	148	TYR	CB-CG-CD2	-5.98	117.41	121.00
84	Aa	705	A	C5-C6-N6	-5.98	118.91	123.70
84	Aa	890	G	O4'-C1'-N9	5.98	112.99	108.20
1	Ad	614	G	O4'-C1'-N9	5.98	112.98	108.20
23	Bc	8	ALA	N-CA-CB	5.98	118.47	110.10
84	Aa	218	G	C5-C6-O6	-5.98	125.01	128.60
84	Aa	1546	G	O4'-C1'-N9	5.98	112.98	108.20
84	Aa	2681	A	O4'-C1'-N9	5.98	112.98	108.20
84	Aa	72	A	C4-C5-C6	5.98	119.99	117.00
84	Aa	948	C	N3-C4-C5	-5.98	119.51	121.90
84	Aa	1307	A	C4-C5-C6	5.98	119.99	117.00
84	Aa	1444	G	O4'-C1'-N9	5.98	112.98	108.20
84	Aa	2031	G	C5-C6-O6	-5.98	125.01	128.60
2	Ae	72	G	P-O3'-C3'	-5.98	112.53	119.70
84	Aa	1923	G	O4'-C1'-N9	5.98	112.98	108.20
84	Aa	2145	C	N3-C4-C5	-5.98	119.51	121.90
84	Aa	2224	A	C5-C6-N1	-5.98	114.71	117.70
84	Aa	2439	A	C5-C6-N6	-5.98	118.92	123.70
84	Aa	3044	C	N3-C4-N4	5.98	122.18	118.00
84	Aa	3045	A	C5-C6-N6	-5.98	118.92	123.70
84	Aa	3114	A	C5-C6-N6	-5.98	118.92	123.70
85	Ac	45	C	N3-C4-C5	-5.98	119.51	121.90
1	Ad	755	U	O4'-C1'-N1	5.98	112.98	108.20
84	Aa	499	A	C5-C6-N6	-5.98	118.92	123.70
84	Aa	1747	A	C4-C5-C6	5.98	119.99	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2098	A	C4-C5-C6	5.98	119.99	117.00
85	Ac	41	A	O4'-C1'-N9	5.98	112.98	108.20
1	Ad	868	A	N9-C1'-C2'	-5.97	105.43	112.00
1	Ad	1090	G	O4'-C1'-N9	5.97	112.98	108.20
84	Aa	522	C	N3-C4-C5	-5.97	119.51	121.90
84	Aa	653	A	C4-C5-C6	5.97	119.99	117.00
84	Aa	792	A	C4-C5-C6	5.97	119.99	117.00
84	Aa	1306	A	C4-C5-C6	5.97	119.99	117.00
84	Aa	1630	C	N3-C4-C5	-5.97	119.51	121.90
84	Aa	1650	G	N3-C2-N2	5.97	124.08	119.90
84	Aa	2505	C	N3-C4-N4	5.97	122.18	118.00
84	Aa	2152	A	C4-C5-C6	5.97	119.99	117.00
84	Aa	3327	A	C4-C5-C6	5.97	119.99	117.00
1	Ad	949	A	C3'-C2'-C1'	5.97	106.28	101.50
2	Ae	28	G	O4'-C1'-C2'	5.97	112.97	107.60
1	Ad	244	C	O4'-C1'-C2'	-5.97	99.83	105.80
84	Aa	387	A	C5-C6-N1	-5.97	114.72	117.70
84	Aa	697	A	C5-C6-N1	-5.97	114.72	117.70
84	Aa	1199	A	C5-C6-N1	-5.97	114.72	117.70
84	Aa	1373	A	O4'-C1'-N9	5.97	112.98	108.20
84	Aa	1484	A	P-O3'-C3'	5.97	126.86	119.70
84	Aa	1970	A	C4-C5-C6	5.97	119.98	117.00
84	Aa	2107	A	C4-C5-C6	5.97	119.98	117.00
84	Aa	2312	A	C4-C5-C6	5.97	119.98	117.00
1	Ad	741	C	O4'-C1'-N1	5.97	112.97	108.20
84	Aa	66	A	C5-C6-N1	-5.97	114.72	117.70
84	Aa	1968	C	N3-C4-C5	-5.97	119.51	121.90
84	Aa	2067	G	C5-C6-O6	-5.97	125.02	128.60
84	Aa	3328	A	C4-C5-C6	5.97	119.98	117.00
1	Ad	238	G	O4'-C1'-C2'	-5.97	99.83	105.80
51	CX	140	TYR	CB-CG-CD2	5.97	124.58	121.00
84	Aa	62	A	C4-C5-C6	5.97	119.98	117.00
84	Aa	754	G	O4'-C1'-N9	5.97	112.97	108.20
84	Aa	1048	U	O4'-C1'-N1	5.97	112.97	108.20
84	Aa	2120	A	C4-C5-C6	5.97	119.98	117.00
84	Aa	3013	A	C4-C5-C6	5.97	119.98	117.00
84	Aa	3101	C	N3-C4-N4	5.97	122.18	118.00
84	Aa	3249	G	O4'-C1'-N9	5.97	112.97	108.20
1	Ad	1574	U	C1'-O4'-C4'	5.96	114.67	109.90
84	Aa	50	A	O4'-C1'-N9	5.96	112.97	108.20
84	Aa	1393	G	N1-C6-O6	5.96	123.48	119.90
84	Aa	1698	C	N3-C4-C5	-5.96	119.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1706	C	N3-C4-C5	-5.96	119.52	121.90
84	Aa	1879	A	C5-C6-N1	-5.96	114.72	117.70
84	Aa	1972	C	N3-C4-C5	-5.96	119.51	121.90
84	Aa	2059	C	N3-C4-C5	-5.96	119.51	121.90
84	Aa	2165	A	C4-C5-C6	5.96	119.98	117.00
84	Aa	2337	C	N3-C4-C5	-5.96	119.51	121.90
84	Aa	2943	A	O4'-C1'-N9	5.96	112.97	108.20
84	Aa	3288	A	C5-C6-N1	-5.96	114.72	117.70
84	Aa	3310	A	C5-C6-N6	-5.96	118.93	123.70
84	Aa	3340	G	O4'-C1'-N9	5.96	112.97	108.20
1	Ad	61	A	O4'-C4'-C3'	-5.96	98.04	104.00
1	Ad	70	C	O4'-C1'-N1	5.96	112.97	108.20
2	Ae	43	C	O4'-C1'-N1	5.96	112.97	108.20
84	Aa	743	C	N3-C4-C5	-5.96	119.52	121.90
84	Aa	1566	C	N3-C4-C5	-5.96	119.52	121.90
85	Ac	56	G	O4'-C1'-N9	5.96	112.97	108.20
84	Aa	178	C	N3-C4-C5	-5.96	119.52	121.90
84	Aa	543	C	N3-C4-N4	5.96	122.17	118.00
84	Aa	655	G	C5-C6-O6	-5.96	125.02	128.60
84	Aa	813	A	C5-C6-N1	-5.96	114.72	117.70
84	Aa	987	A	O4'-C1'-N9	5.96	112.97	108.20
84	Aa	1450	G	C4'-C3'-C2'	-5.96	96.64	102.60
84	Aa	1499	C	O4'-C1'-N1	5.96	112.97	108.20
84	Aa	2156	U	O4'-C1'-N1	5.96	112.97	108.20
84	Aa	2351	A	C5-C6-N1	-5.96	114.72	117.70
84	Aa	564	A	C5-C6-N1	-5.96	114.72	117.70
84	Aa	656	G	O4'-C1'-N9	5.96	112.97	108.20
84	Aa	1136	A	C4-C5-C6	5.96	119.98	117.00
84	Aa	1365	C	O4'-C1'-N1	5.96	112.97	108.20
85	Ac	14	C	N3-C4-N4	5.96	122.17	118.00
1	Ad	788	G	P-O5'-C5'	-5.96	111.37	120.90
39	CZ	77	PHE	CB-CG-CD1	5.96	124.97	120.80
47	CQ	53	PHE	CB-CG-CD1	5.96	124.97	120.80
84	Aa	47	A	C5-C6-N6	-5.96	118.93	123.70
84	Aa	646	U	O4'-C1'-N1	5.96	112.97	108.20
84	Aa	1114	A	C5-C6-N6	-5.96	118.93	123.70
84	Aa	1378	G	O4'-C1'-N9	5.96	112.97	108.20
84	Aa	2641	A	C4-C5-C6	5.96	119.98	117.00
84	Aa	3173	A	C4-C5-C6	5.96	119.98	117.00
84	Aa	3352	C	N3-C4-C5	-5.96	119.52	121.90
1	Ad	1587	G	C1'-O4'-C4'	-5.96	105.14	109.90
84	Aa	1073	G	O4'-C1'-N9	5.96	112.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1882	A	O4'-C1'-N9	5.96	112.97	108.20
84	Aa	2047	A	C5-C6-N1	-5.96	114.72	117.70
84	Aa	2227	A	C4-C5-C6	5.96	119.98	117.00
84	Aa	3028	A	C4-C5-C6	5.96	119.98	117.00
84	Aa	3381	C	N3-C4-N4	5.96	122.17	118.00
85	Ac	119	C	N3-C4-C5	-5.96	119.52	121.90
1	Ad	237	C	N1-C1'-C2'	5.96	121.74	114.00
84	Aa	541	C	N3-C4-C5	-5.96	119.52	121.90
84	Aa	944	G	O4'-C1'-N9	5.96	112.96	108.20
84	Aa	2296	U	O4'-C1'-N1	5.96	112.96	108.20
84	Aa	2662	A	C4-C5-C6	5.96	119.98	117.00
84	Aa	2792	A	C4-C5-C6	5.96	119.98	117.00
84	Aa	3357	C	N3-C4-C5	-5.96	119.52	121.90
1	Ad	1035	A	C3'-C2'-C1'	5.95	106.26	101.50
1	Ad	1163	C	O4'-C1'-N1	-5.95	103.44	108.20
41	CA	69	TYR	CB-CG-CD1	5.95	124.57	121.00
84	Aa	1254	A	C4-C5-C6	5.95	119.98	117.00
84	Aa	1315	G	O4'-C1'-N9	5.95	112.96	108.20
84	Aa	1785	G	C5-C6-O6	-5.95	125.03	128.60
84	Aa	2428	G	O4'-C1'-N9	5.95	112.96	108.20
84	Aa	2665	A	C4-C5-C6	5.95	119.98	117.00
84	Aa	2921	A	C4-C5-C6	5.95	119.98	117.00
84	Aa	3104	A	C4-C5-C6	5.95	119.98	117.00
84	Aa	3331	G	O4'-C1'-N9	5.95	112.96	108.20
85	Ac	92	A	C5-C6-N1	-5.95	114.72	117.70
84	Aa	1684	U	P-O3'-C3'	-5.95	112.56	119.70
84	Aa	2002	G	C5-C6-O6	-5.95	125.03	128.60
84	Aa	2110	G	O4'-C1'-N9	5.95	112.96	108.20
85	Ac	88	A	O4'-C1'-N9	5.95	112.96	108.20
1	Ad	153	U	C3'-C2'-C1'	5.95	106.26	101.50
1	Ad	885	C	C3'-C2'-C1'	5.95	106.26	101.50
1	Ad	1179	C	C3'-C2'-C1'	5.95	106.26	101.50
84	Aa	704	G	N3-C2-N2	5.95	124.07	119.90
84	Aa	782	G	O4'-C1'-N9	5.95	112.96	108.20
84	Aa	1288	C	N3-C4-N4	5.95	122.17	118.00
84	Aa	1459	A	C4-C5-C6	5.95	119.97	117.00
84	Aa	1785	G	O4'-C1'-N9	5.95	112.96	108.20
84	Aa	2350	C	N3-C4-C5	-5.95	119.52	121.90
84	Aa	3297	A	C4-C5-C6	5.95	119.98	117.00
85	Ac	33	A	C5-C6-N6	-5.95	118.94	123.70
84	Aa	1183	C	N3-C4-C5	-5.95	119.52	121.90
84	Aa	2354	G	N3-C2-N2	5.95	124.06	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2998	A	C5-C6-N1	-5.95	114.73	117.70
84	Aa	1819	A	C5-C6-N6	-5.95	118.94	123.70
1	Ad	1231	A	C3'-C2'-C1'	5.95	106.26	101.50
2	Ae	2	C	O4'-C1'-N1	5.95	112.96	108.20
84	Aa	111	C	P-O3'-C3'	5.95	126.84	119.70
84	Aa	143	A	C5-C6-N1	-5.95	114.73	117.70
84	Aa	836	G	C8-N9-C4	-5.95	104.02	106.40
84	Aa	1944	G	O3'-P-O5'	-5.95	92.70	104.00
84	Aa	2193	A	C4-C5-C6	5.95	119.97	117.00
84	Aa	2456	G	O4'-C1'-N9	5.95	112.96	108.20
84	Aa	2993	A	C4-C5-C6	5.95	119.97	117.00
84	Aa	3019	C	N3-C4-C5	-5.95	119.52	121.90
1	Ad	904	G	O4'-C1'-C2'	5.94	112.95	107.60
84	Aa	1731	A	C5-C6-N1	-5.94	114.73	117.70
84	Aa	416	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	547	C	N3-C4-C5	-5.94	119.52	121.90
84	Aa	660	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	936	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	2674	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	2697	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	2788	A	C5-C6-N1	-5.94	114.73	117.70
85	Ac	12	A	C5-C6-N1	-5.94	114.73	117.70
2	Ae	2	C	N1-C1'-C2'	5.94	121.72	114.00
84	Aa	947	C	N3-C4-C5	-5.94	119.52	121.90
84	Aa	993	A	C5-C6-N1	-5.94	114.73	117.70
84	Aa	1010	A	C5-C6-N1	-5.94	114.73	117.70
84	Aa	1459	A	C5-C6-N1	-5.94	114.73	117.70
84	Aa	2161	G	O4'-C1'-N9	5.94	112.95	108.20
84	Aa	2227	A	O4'-C1'-N9	5.94	112.95	108.20
84	Aa	2682	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	2812	C	N3-C4-C5	-5.94	119.52	121.90
84	Aa	2815	A	C5-C6-N1	-5.94	114.73	117.70
84	Aa	3336	A	C4-C5-C6	5.94	119.97	117.00
1	Ad	807	G	O4'-C1'-N9	5.94	112.95	108.20
84	Aa	327	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	1576	C	N3-C4-N4	5.94	122.16	118.00
1	Ad	562	U	O4'-C1'-C2'	5.94	112.94	107.60
1	Ad	1524	A	C3'-C2'-C1'	-5.94	96.75	101.50
84	Aa	1499	C	N3-C4-C5	-5.94	119.53	121.90
84	Aa	1673	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	1864	G	C5-C6-O6	-5.94	125.04	128.60
84	Aa	2006	A	C4-C5-C6	5.94	119.97	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2352	G	C5-C6-O6	-5.94	125.04	128.60
1	Ad	633	U	P-O5'-C5'	-5.94	111.40	120.90
1	Ad	1545	A	O4'-C1'-N9	5.94	112.95	108.20
84	Aa	75	G	C5-C6-O6	-5.94	125.04	128.60
84	Aa	2208	A	C4-C5-C6	5.94	119.97	117.00
84	Aa	2772	A	C4-C5-C6	5.94	119.97	117.00
85	Ac	75	G	O4'-C1'-N9	5.94	112.95	108.20
1	Ad	971	A	C3'-C2'-C1'	5.93	106.25	101.50
1	Ad	1480	G	O4'-C1'-N9	5.93	112.95	108.20
84	Aa	261	C	N3-C4-C5	-5.93	119.53	121.90
84	Aa	2087	A	O4'-C1'-C2'	5.93	112.94	107.60
84	Aa	3083	C	N3-C4-C5	-5.93	119.53	121.90
85	Ac	120	G	O4'-C1'-N9	5.93	112.95	108.20
1	Ad	139	U	P-O5'-C5'	5.93	130.39	120.90
1	Ad	184	C	N1-C1'-C2'	5.93	121.71	114.00
1	Ad	626	A	P-O3'-C3'	5.93	126.82	119.70
84	Aa	517	G	O4'-C1'-N9	5.93	112.94	108.20
84	Aa	557	C	N3-C4-C5	-5.93	119.53	121.90
84	Aa	630	C	N3-C4-N4	5.93	122.15	118.00
84	Aa	1192	A	C4-C5-C6	5.93	119.97	117.00
84	Aa	1294	A	C5-C6-N1	-5.93	114.73	117.70
84	Aa	1395	A	C4-C5-C6	5.93	119.97	117.00
84	Aa	1896	A	N1-C6-N6	5.93	122.16	118.60
84	Aa	1999	G	O4'-C1'-N9	5.93	112.95	108.20
84	Aa	2503	A	O4'-C1'-N9	5.93	112.95	108.20
84	Aa	2737	A	O4'-C1'-N9	5.93	112.94	108.20
84	Aa	2810	A	C4-C5-C6	5.93	119.97	117.00
84	Aa	2841	G	C5-C6-O6	-5.93	125.04	128.60
84	Aa	2997	C	N3-C4-N4	5.93	122.15	118.00
56	Cd	33	PHE	CB-CG-CD2	-5.93	116.65	120.80
84	Aa	1058	A	C4-C5-C6	5.93	119.97	117.00
84	Aa	1229	A	C4-C5-C6	5.93	119.97	117.00
84	Aa	2003	C	N3-C4-C5	-5.93	119.53	121.90
85	Ac	1	C	N3-C4-N4	5.93	122.15	118.00
1	Ad	493	C	C3'-C2'-C1'	5.93	106.24	101.50
1	Ad	1733	G	O4'-C1'-N9	5.93	112.94	108.20
84	Aa	174	G	C5-C6-O6	-5.93	125.04	128.60
84	Aa	319	C	N3-C4-C5	-5.93	119.53	121.90
84	Aa	1192	A	C5-C6-N1	-5.93	114.73	117.70
84	Aa	1534	C	N3-C4-C5	-5.93	119.53	121.90
84	Aa	1750	A	C5-C6-N1	-5.93	114.73	117.70
84	Aa	2377	C	N3-C4-C5	-5.93	119.53	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2700	A	C4-C5-C6	5.93	119.96	117.00
84	Aa	2855	G	O4'-C1'-N9	5.93	112.94	108.20
84	Aa	3153	U	C6-N1-C1'	-5.93	112.90	121.20
79	CE	205	ARG	N-CA-CB	5.93	121.27	110.60
84	Aa	928	A	O4'-C1'-N9	5.93	112.94	108.20
84	Aa	2248	G	C5-C6-O6	-5.93	125.04	128.60
84	Aa	2357	A	O4'-C1'-N9	5.93	112.94	108.20
84	Aa	3057	A	C4-C5-C6	5.93	119.96	117.00
85	Ac	76	C	N3-C4-C5	-5.93	119.53	121.90
1	Ad	215	A	C1'-O4'-C4'	5.93	114.64	109.90
84	Aa	1274	A	C5-C6-N6	-5.93	118.96	123.70
84	Aa	1339	C	N3-C4-C5	-5.93	119.53	121.90
84	Aa	1493	A	C5-C6-N1	-5.93	114.74	117.70
84	Aa	1977	C	N3-C4-C5	-5.93	119.53	121.90
84	Aa	2197	C	O4'-C1'-N1	5.93	112.94	108.20
84	Aa	2273	C	N3-C4-N4	5.93	122.15	118.00
84	Aa	2368	G	O4'-C1'-N9	5.93	112.94	108.20
84	Aa	2594	A	C4-C5-C6	5.93	119.96	117.00
84	Aa	3115	A	C4-C5-C6	5.93	119.96	117.00
84	Aa	3148	A	C5-C6-N6	-5.93	118.96	123.70
2	Ae	75	A	O4'-C1'-N9	5.92	112.94	108.20
84	Aa	224	C	N3-C4-N4	5.92	122.15	118.00
84	Aa	387	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	2065	G	O4'-C1'-N9	5.92	112.94	108.20
84	Aa	2385	A	C5-C6-N1	-5.92	114.74	117.70
84	Aa	2385	A	P-O5'-C5'	5.92	130.38	120.90
84	Aa	2958	A	O4'-C1'-N9	5.92	112.94	108.20
84	Aa	3007	A	C4-C5-C6	5.92	119.96	117.00
85	Ac	62	C	N3-C4-C5	-5.92	119.53	121.90
85	Ac	106	C	N3-C4-C5	-5.92	119.53	121.90
84	Aa	103	G	O4'-C1'-N9	5.92	112.94	108.20
84	Aa	407	A	P-O5'-C5'	5.92	130.38	120.90
84	Aa	3028	A	O4'-C1'-N9	5.92	112.94	108.20
1	Ad	541	G	P-O3'-C3'	5.92	126.81	119.70
84	Aa	26	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	939	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	1455	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	2449	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	2840	A	C5-C6-N6	-5.92	118.96	123.70
84	Aa	3012	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	3329	G	C5-C6-O6	-5.92	125.05	128.60
84	Aa	272	G	C5-C6-O6	-5.92	125.05	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	783	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	1044	A	O4'-C1'-N9	5.92	112.94	108.20
84	Aa	1484	A	C4-C5-C6	5.92	119.96	117.00
1	Ad	1629	U	N1-C1'-C2'	5.92	121.69	114.00
84	Aa	23	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	183	C	O4'-C1'-N1	5.92	112.93	108.20
84	Aa	314	C	N3-C4-C5	-5.92	119.53	121.90
84	Aa	412	C	N3-C4-C5	-5.92	119.53	121.90
84	Aa	494	C	N3-C4-C5	-5.92	119.53	121.90
84	Aa	558	G	O4'-C1'-N9	5.92	112.94	108.20
84	Aa	996	A	C5-C6-N1	-5.92	114.74	117.70
84	Aa	1009	G	O4'-C1'-N9	5.92	112.93	108.20
84	Aa	1355	U	N1-C1'-C2'	5.92	121.69	114.00
84	Aa	1382	C	N3-C4-N4	5.92	122.14	118.00
84	Aa	2751	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	3134	C	N3-C4-C5	-5.92	119.53	121.90
1	Ad	371	A	P-O5'-C5'	-5.92	111.43	120.90
84	Aa	175	G	O4'-C1'-N9	5.92	112.93	108.20
84	Aa	1406	C	N3-C4-C5	-5.92	119.53	121.90
84	Aa	1410	A	C4-C5-C6	5.92	119.96	117.00
84	Aa	1951	C	N3-C4-N4	5.92	122.14	118.00
84	Aa	2048	C	N3-C4-C5	-5.92	119.53	121.90
84	Aa	2294	A	C5-C6-N6	-5.92	118.97	123.70
84	Aa	2359	C	N3-C4-C5	-5.92	119.53	121.90
84	Aa	2601	G	O4'-C1'-N9	5.92	112.93	108.20
84	Aa	2829	U	O4'-C1'-N1	5.92	112.93	108.20
84	Aa	3063	C	N3-C4-C5	-5.92	119.53	121.90
85	Ac	160	C	N3-C4-N4	5.92	122.14	118.00
84	Aa	1452	A	C5-C6-N1	-5.92	114.74	117.70
84	Aa	2532	A	C5-C6-N1	-5.92	114.74	117.70
45	CN	30	TYR	CB-CG-CD2	-5.91	117.45	121.00
84	Aa	91	G	C5-C6-O6	-5.91	125.05	128.60
84	Aa	301	G	O4'-C1'-N9	5.91	112.93	108.20
84	Aa	574	C	N3-C4-N4	5.91	122.14	118.00
84	Aa	830	A	C5-C6-N6	-5.91	118.97	123.70
84	Aa	1114	A	C4-C5-C6	5.91	119.96	117.00
84	Aa	1512	A	C4-C5-C6	5.91	119.96	117.00
84	Aa	2016	A	O4'-C1'-N9	5.91	112.93	108.20
84	Aa	2935	A	C5-C6-N6	-5.91	118.97	123.70
84	Aa	3086	G	O4'-C1'-N9	5.91	112.93	108.20
84	Aa	3306	A	C5-C6-N1	-5.91	114.74	117.70
1	Ad	1284	C	O4'-C1'-N1	5.91	112.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	732	G	O4'-C1'-N9	5.91	112.93	108.20
84	Aa	921	C	N3-C4-C5	-5.91	119.53	121.90
84	Aa	1027	C	N3-C4-C5	-5.91	119.53	121.90
84	Aa	3069	U	O4'-C1'-N1	5.91	112.93	108.20
84	Aa	3228	C	N3-C4-C5	-5.91	119.53	121.90
84	Aa	3358	A	C5-C6-N6	-5.91	118.97	123.70
1	Ad	93	A	O4'-C1'-C2'	-5.91	99.89	105.80
84	Aa	886	A	C5-C6-N6	-5.91	118.97	123.70
84	Aa	1042	C	N3-C4-C5	-5.91	119.54	121.90
84	Aa	1180	C	N3-C4-N4	5.91	122.14	118.00
84	Aa	1835	A	C5-C6-N6	-5.91	118.97	123.70
84	Aa	2026	C	N3-C4-C5	-5.91	119.54	121.90
84	Aa	3339	G	O4'-C1'-N9	5.91	112.93	108.20
1	Ad	1229	C	C3'-C2'-C1'	5.91	106.23	101.50
1	Ad	1732	A	C1'-O4'-C4'	5.91	114.63	109.90
84	Aa	217	A	C4-C5-C6	5.91	119.95	117.00
84	Aa	323	A	C5-C6-N1	-5.91	114.75	117.70
84	Aa	346	A	C4-C5-C6	5.91	119.95	117.00
84	Aa	480	C	N3-C4-N4	5.91	122.14	118.00
84	Aa	748	C	N3-C4-C5	-5.91	119.54	121.90
84	Aa	1052	A	C5-C6-N6	-5.91	118.97	123.70
84	Aa	2694	A	C4-C5-C6	5.91	119.95	117.00
84	Aa	2944	C	N3-C4-N4	5.91	122.14	118.00
84	Aa	3050	A	O4'-C1'-N9	5.91	112.93	108.20
85	Ac	37	A	C4-C5-C6	5.91	119.95	117.00
48	CD	125	GLU	N-CA-CB	5.91	121.23	110.60
84	Aa	230	G	O4'-C1'-N9	5.91	112.92	108.20
84	Aa	121	A	C5-C6-N1	-5.91	114.75	117.70
84	Aa	313	C	N3-C4-C5	-5.91	119.54	121.90
84	Aa	847	G	O4'-C1'-N9	5.91	112.92	108.20
84	Aa	2370	G	O4'-C1'-N9	5.91	112.92	108.20
84	Aa	3287	A	C5-C6-N1	-5.91	114.75	117.70
1	Ad	892	A	C1'-O4'-C4'	5.90	114.62	109.90
84	Aa	1464	A	C4-C5-C6	5.90	119.95	117.00
1	Ad	487	A	O4'-C1'-C2'	5.90	112.91	107.60
1	Ad	749	G	C3'-C2'-C1'	-5.90	96.78	101.50
84	Aa	711	A	O4'-C1'-N9	5.90	112.92	108.20
84	Aa	924	A	C5-C6-N6	-5.90	118.98	123.70
84	Aa	953	G	C5-C6-O6	-5.90	125.06	128.60
84	Aa	955	A	C5-C6-N6	-5.90	118.98	123.70
84	Aa	1770	C	N3-C4-C5	-5.90	119.54	121.90
84	Aa	2364	C	N3-C4-C5	-5.90	119.54	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2423	A	C4-C5-C6	5.90	119.95	117.00
85	Ac	43	A	C4-C5-C6	5.90	119.95	117.00
1	Ad	136	U	N1-C1'-C2'	5.90	121.67	114.00
1	Ad	716	A	C2'-C3'-O3'	5.90	123.14	113.70
84	Aa	244	G	C5-C6-O6	-5.90	125.06	128.60
84	Aa	360	G	O4'-C1'-N9	5.90	112.92	108.20
84	Aa	1136	A	O4'-C1'-N9	5.90	112.92	108.20
84	Aa	1283	C	N3-C4-N4	5.90	122.13	118.00
84	Aa	2110	G	C5-C6-O6	-5.90	125.06	128.60
1	Ad	85	A	O4'-C1'-C2'	-5.90	99.90	105.80
84	Aa	2012	C	N3-C4-C5	-5.90	119.54	121.90
84	Aa	2631	A	C5-C6-N1	-5.90	114.75	117.70
84	Aa	2643	A	C5-C6-N1	-5.90	114.75	117.70
1	Ad	1285	G	O4'-C1'-N9	5.90	112.92	108.20
1	Ad	1408	G	C2'-C3'-O3'	5.90	123.14	113.70
84	Aa	410	G	N3-C2-N2	5.90	124.03	119.90
84	Aa	758	A	O4'-C1'-N9	5.90	112.92	108.20
84	Aa	1074	C	N3-C4-C5	-5.90	119.54	121.90
84	Aa	1098	U	O4'-C1'-N1	5.90	112.92	108.20
84	Aa	1674	A	C4-C5-C6	5.90	119.95	117.00
84	Aa	2011	G	O4'-C1'-N9	5.90	112.92	108.20
84	Aa	2055	U	O4'-C1'-N1	5.90	112.92	108.20
84	Aa	2655	U	O4'-C1'-N1	5.90	112.92	108.20
84	Aa	2839	A	C4-C5-C6	5.90	119.95	117.00
84	Aa	2998	A	C4-C5-C6	5.90	119.95	117.00
84	Aa	3030	A	O4'-C1'-N9	5.90	112.92	108.20
84	Aa	3305	U	O4'-C1'-N1	5.90	112.92	108.20
84	Aa	161	C	N3-C4-N4	5.90	122.13	118.00
84	Aa	1987	C	N3-C4-C5	-5.90	119.54	121.90
84	Aa	2795	G	O4'-C1'-N9	5.90	112.92	108.20
84	Aa	3234	G	C5-C6-O6	-5.90	125.06	128.60
1	Ad	1368	C	C3'-C2'-C1'	-5.89	96.78	101.50
84	Aa	325	A	C4-C5-C6	5.89	119.95	117.00
84	Aa	529	C	O4'-C1'-N1	5.89	112.92	108.20
84	Aa	658	C	N3-C4-C5	-5.89	119.54	121.90
84	Aa	1649	G	N3-C2-N2	5.89	124.03	119.90
84	Aa	2590	C	N3-C4-N4	5.89	122.13	118.00
84	Aa	2665	A	C5-C6-N1	-5.89	114.75	117.70
84	Aa	3373	C	N3-C4-C5	-5.89	119.54	121.90
1	Ad	1345	G	O4'-C1'-C2'	5.89	112.90	107.60
9	BX	128	SER	N-CA-CB	5.89	119.34	110.50
71	CB	120	LYS	N-CA-C	-5.89	95.09	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	790	G	O4'-C1'-N9	5.89	112.91	108.20
84	Aa	1640	A	C5-C6-N6	-5.89	118.99	123.70
84	Aa	1882	A	C4-C5-C6	5.89	119.95	117.00
84	Aa	2014	A	C5-C6-N1	-5.89	114.75	117.70
84	Aa	2593	A	O4'-C1'-N9	5.89	112.91	108.20
84	Aa	2667	C	C2-N3-C4	5.89	122.85	119.90
84	Aa	2934	C	N3-C4-N4	5.89	122.12	118.00
84	Aa	3211	C	N3-C4-N4	5.89	122.12	118.00
1	Ad	1342	C	O4'-C1'-N1	5.89	112.91	108.20
84	Aa	46	A	C4-C5-C6	5.89	119.94	117.00
84	Aa	2386	A	C5-C6-N1	-5.89	114.75	117.70
85	Ac	124	C	N3-C4-C5	-5.89	119.54	121.90
1	Ad	1047	G	O4'-C1'-C2'	5.89	112.90	107.60
84	Aa	140	C	N3-C4-C5	-5.89	119.54	121.90
84	Aa	631	C	N3-C4-N4	5.89	122.12	118.00
84	Aa	856	G	O4'-C1'-N9	5.89	112.91	108.20
84	Aa	1300	C	N3-C4-C5	-5.89	119.54	121.90
84	Aa	1905	A	O4'-C1'-N9	5.89	112.91	108.20
84	Aa	2060	C	N3-C4-C5	-5.89	119.54	121.90
84	Aa	2123	C	N3-C4-C5	-5.89	119.54	121.90
84	Aa	2532	A	C4-C5-C6	5.89	119.94	117.00
84	Aa	373	A	C5-C6-N6	-5.89	118.99	123.70
84	Aa	672	A	C5-C6-N6	-5.89	118.99	123.70
84	Aa	2281	U	O4'-C1'-N1	5.89	112.91	108.20
84	Aa	2759	C	N3-C4-C5	-5.89	119.55	121.90
84	Aa	491	G	O4'-C1'-N9	5.89	112.91	108.20
84	Aa	1440	C	N3-C4-C5	-5.89	119.55	121.90
84	Aa	2349	C	N3-C4-C5	-5.89	119.55	121.90
84	Aa	2846	C	N3-C4-N4	5.89	122.12	118.00
85	Ac	87	G	C5-C6-O6	-5.89	125.07	128.60
86	Ab	30	G	N1-C6-O6	5.89	123.43	119.90
1	Ad	1012	C	C3'-C2'-C1'	5.88	106.21	101.50
1	Ad	1023	C	C3'-C2'-C1'	5.88	106.21	101.50
1	Ad	1042	C	O4'-C1'-C2'	-5.88	99.92	105.80
84	Aa	1580	C	N3-C4-C5	-5.88	119.55	121.90
84	Aa	2090	G	O4'-C1'-N9	5.88	112.91	108.20
84	Aa	2794	A	C5-C6-N1	-5.88	114.76	117.70
1	Ad	1710	C	C3'-C2'-C1'	5.88	106.21	101.50
20	BT	51	TYR	CB-CG-CD1	-5.88	117.47	121.00
84	Aa	1263	A	C4-C5-C6	5.88	119.94	117.00
84	Aa	2351	A	C4-C5-C6	5.88	119.94	117.00
84	Aa	2718	A	C4-C5-C6	5.88	119.94	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	BK	64	TYR	CB-CG-CD2	-5.88	117.47	121.00
41	CA	68	ARG	N-CA-CB	5.88	121.19	110.60
84	Aa	1035	C	N3-C4-C5	-5.88	119.55	121.90
84	Aa	842	C	O4'-C1'-N1	5.88	112.90	108.20
84	Aa	869	A	C5-C6-N6	-5.88	119.00	123.70
84	Aa	2762	U	O4'-C1'-N1	5.88	112.90	108.20
84	Aa	2813	A	O4'-C1'-N9	5.88	112.90	108.20
1	Ad	535	C	P-O5'-C5'	5.88	130.31	120.90
1	Ad	1705	C	C1'-O4'-C4'	-5.88	105.20	109.90
84	Aa	9	C	N3-C4-C5	-5.88	119.55	121.90
84	Aa	846	A	C5-C6-N1	-5.88	114.76	117.70
84	Aa	2045	G	C5-C6-O6	-5.88	125.07	128.60
84	Aa	3321	C	N3-C4-N4	5.88	122.11	118.00
1	Ad	1670	G	C1'-O4'-C4'	-5.88	105.20	109.90
25	Bd	53	ILE	C-N-CA	5.88	136.39	121.70
84	Aa	6	A	C5-C6-N6	-5.88	119.00	123.70
84	Aa	1002	A	C4-C5-C6	5.88	119.94	117.00
84	Aa	1866	C	N3-C4-C5	-5.88	119.55	121.90
84	Aa	2102	C	N3-C4-N4	5.88	122.11	118.00
1	Ad	413	C	O4'-C1'-C2'	-5.88	99.92	105.80
84	Aa	46	A	C5-C6-N6	-5.88	119.00	123.70
84	Aa	99	A	C5-C6-N6	-5.88	119.00	123.70
84	Aa	1731	A	C4-C5-C6	5.88	119.94	117.00
84	Aa	2491	A	C4-C5-C6	5.88	119.94	117.00
84	Aa	2581	C	N3-C4-C5	-5.88	119.55	121.90
84	Aa	2969	A	C4-C5-C6	5.88	119.94	117.00
84	Aa	3189	C	N3-C4-C5	-5.88	119.55	121.90
85	Ac	109	A	C4-C5-C6	5.88	119.94	117.00
1	Ad	152	G	C1'-O4'-C4'	-5.87	105.20	109.90
1	Ad	1299	G	C1'-O4'-C4'	5.87	114.60	109.90
1	Ad	1624	G	O4'-C1'-C2'	5.87	112.89	107.60
84	Aa	95	G	C5-C6-O6	-5.87	125.08	128.60
84	Aa	610	G	N1-C6-O6	5.87	123.42	119.90
84	Aa	730	A	C5-C6-N6	-5.87	119.00	123.70
84	Aa	1278	A	O4'-C1'-N9	5.87	112.90	108.20
84	Aa	1582	C	N3-C4-N4	5.87	122.11	118.00
84	Aa	1623	C	N3-C4-N4	5.87	122.11	118.00
84	Aa	1802	A	C4-C5-C6	5.87	119.94	117.00
84	Aa	2630	A	C5-C6-N6	-5.87	119.00	123.70
84	Aa	2851	C	N3-C4-C5	-5.87	119.55	121.90
84	Aa	2942	A	O4'-C1'-N9	5.87	112.90	108.20
84	Aa	3085	C	N3-C4-C5	-5.87	119.55	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	Ac	12	A	P-O5'-C5'	-5.87	111.50	120.90
1	Ad	1143	A	C3'-C2'-C1'	5.87	106.20	101.50
84	Aa	320	U	O4'-C1'-N1	5.87	112.90	108.20
84	Aa	566	G	C4'-C3'-C2'	-5.87	96.73	102.60
84	Aa	615	A	O4'-C1'-N9	5.87	112.90	108.20
84	Aa	1110	C	N3-C4-C5	-5.87	119.55	121.90
84	Aa	1568	A	C4-C5-C6	5.87	119.94	117.00
84	Aa	1788	C	N3-C4-C5	-5.87	119.55	121.90
84	Aa	2101	A	C5-C6-N1	-5.87	114.76	117.70
84	Aa	2724	A	C4-C5-C6	5.87	119.94	117.00
84	Aa	2996	A	C5-C6-N1	-5.87	114.77	117.70
84	Aa	3221	A	C4-C5-C6	5.87	119.94	117.00
84	Aa	3235	A	C4-C5-C6	5.87	119.94	117.00
85	Ac	79	A	C4-C5-C6	5.87	119.94	117.00
1	Ad	941	G	O4'-C1'-N9	5.87	112.90	108.20
1	Ad	1109	U	P-O5'-C5'	5.87	130.29	120.90
84	Aa	861	A	C4-C5-C6	5.87	119.94	117.00
84	Aa	3271	A	C4-C5-C6	5.87	119.94	117.00
86	Ab	30	G	C8-N9-C4	-5.87	104.05	106.40
1	Ad	326	G	P-O3'-C3'	5.87	126.74	119.70
84	Aa	434	C	N3-C4-C5	-5.87	119.55	121.90
84	Aa	474	G	O3'-P-O5'	-5.87	92.85	104.00
84	Aa	1097	A	C5-C6-N6	-5.87	119.01	123.70
84	Aa	1629	A	C4-C5-C6	5.87	119.93	117.00
84	Aa	2503	A	P-O5'-C5'	5.87	130.29	120.90
84	Aa	2692	G	C4-N9-C1'	5.87	134.13	126.50
84	Aa	2749	A	C4-C5-C6	5.87	119.93	117.00
84	Aa	3228	C	N3-C4-N4	5.87	122.11	118.00
84	Aa	3291	C	N3-C4-N4	5.87	122.11	118.00
84	Aa	121	A	C5-C6-N6	-5.87	119.01	123.70
84	Aa	200	G	C5-C6-O6	-5.87	125.08	128.60
84	Aa	1007	A	C4-C5-C6	5.87	119.93	117.00
85	Ac	144	C	N3-C4-N4	5.87	122.11	118.00
1	Ad	203	A	C1'-O4'-C4'	-5.87	105.21	109.90
48	CD	245	ALA	N-CA-CB	5.87	118.31	110.10
84	Aa	212	G	N3-C2-N2	5.87	124.01	119.90
84	Aa	811	A	O4'-C1'-N9	5.87	112.89	108.20
84	Aa	2329	C	N3-C4-C5	-5.87	119.55	121.90
84	Aa	2671	A	C4-C5-C6	5.87	119.93	117.00
86	Ab	7	G	C6-C5-N7	-5.87	126.88	130.40
1	Ad	263	C	O4'-C1'-C2'	-5.86	99.94	105.80
84	Aa	956	G	O4'-C1'-N9	5.86	112.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1398	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	1600	A	C5-C6-N1	-5.86	114.77	117.70
84	Aa	2054	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	2713	G	C5-C6-O6	-5.86	125.08	128.60
84	Aa	62	A	C5-C6-N6	-5.86	119.01	123.70
84	Aa	149	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	349	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	569	C	N3-C4-C5	-5.86	119.56	121.90
84	Aa	1590	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	2374	G	C5-C6-O6	-5.86	125.08	128.60
84	Aa	2375	G	O4'-C1'-N9	5.86	112.89	108.20
85	Ac	19	A	O4'-C1'-N9	5.86	112.89	108.20
85	Ac	125	C	N3-C4-C5	-5.86	119.56	121.90
62	CS	6	PHE	N-CA-CB	5.86	121.15	110.60
84	Aa	367	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	897	U	O4'-C1'-N1	5.86	112.89	108.20
84	Aa	2009	C	N3-C4-C5	-5.86	119.56	121.90
84	Aa	2803	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	3003	C	N3-C4-N4	5.86	122.10	118.00
85	Ac	9	G	C5-C6-O6	-5.86	125.08	128.60
84	Aa	1797	U	C5'-C4'-O4'	5.86	116.13	109.10
84	Aa	2586	C	N3-C4-C5	-5.86	119.56	121.90
1	Ad	827	C	O4'-C1'-N1	5.86	112.89	108.20
84	Aa	134	U	O4'-C1'-N1	5.86	112.89	108.20
84	Aa	1582	C	N3-C4-C5	-5.86	119.56	121.90
84	Aa	1951	C	N3-C4-C5	-5.86	119.56	121.90
84	Aa	2116	G	O4'-C1'-N9	5.86	112.89	108.20
84	Aa	2733	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	2912	A	C5-C6-N6	-5.86	119.01	123.70
84	Aa	2974	G	O4'-C1'-N9	5.86	112.89	108.20
84	Aa	3116	C	O4'-C1'-N1	5.86	112.89	108.20
1	Ad	1237	G	C1'-O4'-C4'	-5.86	105.22	109.90
1	Ad	1794	C	N1-C1'-C2'	5.86	121.61	114.00
84	Aa	309	C	N3-C4-C5	-5.86	119.56	121.90
84	Aa	707	G	O4'-C1'-N9	5.86	112.88	108.20
84	Aa	1157	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	1392	U	O4'-C1'-N1	5.86	112.89	108.20
84	Aa	1487	A	O4'-C1'-N9	5.86	112.88	108.20
84	Aa	2223	A	C4-C5-C6	5.86	119.93	117.00
84	Aa	2356	A	C5-C6-N1	-5.86	114.77	117.70
84	Aa	3119	C	N3-C4-C5	-5.86	119.56	121.90
85	Ac	50	C	N3-C4-N4	5.86	122.10	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1412	A	C1'-O4'-C4'	-5.85	105.22	109.90
70	Cq	140	PHE	CB-CG-CD1	5.85	124.90	120.80
84	Aa	100	C	C6-N1-C1'	-5.85	113.78	120.80
84	Aa	221	C	N3-C4-C5	-5.85	119.56	121.90
85	Ac	38	U	O4'-C1'-N1	5.85	112.88	108.20
85	Ac	144	C	N3-C4-C5	-5.85	119.56	121.90
1	Ad	1182	C	O4'-C1'-N1	5.85	112.88	108.20
84	Aa	741	G	C5-C6-O6	-5.85	125.09	128.60
84	Aa	1178	C	N3-C4-C5	-5.85	119.56	121.90
84	Aa	1516	G	O4'-C1'-N9	5.85	112.88	108.20
84	Aa	2077	C	N3-C4-N4	5.85	122.10	118.00
84	Aa	2227	A	C5-C6-N6	-5.85	119.02	123.70
84	Aa	2443	C	N3-C4-C5	-5.85	119.56	121.90
84	Aa	2683	A	N1-C6-N6	5.85	122.11	118.60
84	Aa	2708	A	C4-C5-C6	5.85	119.93	117.00
1	Ad	1391	G	O4'-C1'-C2'	5.85	112.87	107.60
84	Aa	1128	U	O4'-C1'-N1	5.85	112.88	108.20
84	Aa	1969	G	C5-C6-O6	-5.85	125.09	128.60
84	Aa	2053	A	C5-C6-N1	-5.85	114.77	117.70
84	Aa	2650	A	C5-C6-N1	-5.85	114.78	117.70
1	Ad	805	A	O4'-C1'-N9	5.85	112.88	108.20
82	Cb	39	PHE	N-CA-CB	5.85	121.13	110.60
84	Aa	438	G	O4'-C1'-N9	5.85	112.88	108.20
84	Aa	854	C	O4'-C1'-N1	5.85	112.88	108.20
84	Aa	952	C	N3-C4-C5	-5.85	119.56	121.90
84	Aa	1109	G	O4'-C1'-N9	5.85	112.88	108.20
84	Aa	1308	A	O4'-C1'-N9	5.85	112.88	108.20
84	Aa	2124	G	C5-C6-O6	-5.85	125.09	128.60
84	Aa	2400	A	C5-C6-N6	-5.85	119.02	123.70
84	Aa	2739	A	C5-C6-N1	-5.85	114.78	117.70
84	Aa	2883	C	N3-C4-C5	-5.85	119.56	121.90
14	BQ	102	TYR	CB-CG-CD1	5.85	124.51	121.00
35	BG	28	PHE	CB-CG-CD1	5.85	124.89	120.80
84	Aa	355	C	C5'-C4'-C3'	-5.85	106.64	116.00
84	Aa	634	A	C5'-C4'-C3'	-5.85	106.64	116.00
84	Aa	1819	A	C5-C6-N1	-5.85	114.78	117.70
84	Aa	2099	G	C5-C6-O6	-5.85	125.09	128.60
85	Ac	121	A	C5-C6-N6	-5.85	119.02	123.70
1	Ad	530	A	C3'-C2'-C1'	5.85	106.18	101.50
84	Aa	249	A	C4-C5-C6	5.85	119.92	117.00
84	Aa	366	G	O4'-C1'-N9	5.85	112.88	108.20
84	Aa	1324	C	N3-C4-C5	-5.85	119.56	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1494	A	C4-C5-C6	5.85	119.92	117.00
84	Aa	1660	C	N3-C4-C5	-5.85	119.56	121.90
84	Aa	2209	A	O4'-C1'-N9	5.85	112.88	108.20
84	Aa	3164	C	N3-C4-C5	-5.85	119.56	121.90
84	Aa	489	C	N3-C4-C5	-5.84	119.56	121.90
84	Aa	634	A	O4'-C1'-N9	5.84	112.88	108.20
84	Aa	984	A	C4-C5-C6	5.84	119.92	117.00
84	Aa	1373	A	C5-C6-N6	-5.84	119.03	123.70
84	Aa	1961	C	N3-C4-C5	-5.84	119.56	121.90
84	Aa	2214	A	C5-C6-N1	-5.84	114.78	117.70
84	Aa	2631	A	C4-C5-C6	5.84	119.92	117.00
84	Aa	2971	A	O4'-C1'-N9	5.84	112.88	108.20
85	Ac	146	G	O4'-C1'-N9	5.84	112.88	108.20
86	Ab	17	G	O4'-C1'-N9	5.84	112.88	108.20
1	Ad	1075	G	O4'-C1'-N9	5.84	112.87	108.20
84	Aa	148	U	O4'-C1'-N1	5.84	112.87	108.20
84	Aa	323	A	O4'-C1'-N9	5.84	112.87	108.20
84	Aa	2150	C	C5'-C4'-O4'	5.84	116.11	109.10
84	Aa	3203	G	C5-C6-O6	-5.84	125.09	128.60
85	Ac	138	G	O4'-C1'-N9	5.84	112.87	108.20
1	Ad	1492	G	C1'-O4'-C4'	5.84	114.57	109.90
84	Aa	257	C	N3-C4-C5	-5.84	119.56	121.90
84	Aa	662	G	O4'-C1'-N9	5.84	112.87	108.20
84	Aa	1704	A	C5-C6-N1	-5.84	114.78	117.70
84	Aa	1781	C	N3-C4-C5	-5.84	119.56	121.90
84	Aa	2082	A	C5-C6-N1	-5.84	114.78	117.70
84	Aa	2411	G	O4'-C1'-N9	5.84	112.87	108.20
1	Ad	432	A	C5'-C4'-O4'	5.84	116.11	109.10
1	Ad	1544	G	P-O3'-C3'	5.84	126.71	119.70
84	Aa	2627	G	O4'-C1'-N9	5.84	112.87	108.20
84	Aa	3011	U	O4'-C1'-N1	5.84	112.87	108.20
84	Aa	832	C	N3-C4-N4	5.84	122.09	118.00
84	Aa	1365	C	N3-C4-C5	-5.84	119.56	121.90
84	Aa	1629	A	O4'-C1'-N9	5.84	112.87	108.20
84	Aa	2591	G	O4'-C1'-N9	5.84	112.87	108.20
84	Aa	3210	G	P-O3'-C3'	5.84	126.70	119.70
84	Aa	3283	G	O4'-C1'-N9	5.84	112.87	108.20
1	Ad	202	C	O4'-C1'-N1	5.84	112.87	108.20
1	Ad	526	U	N1-C1'-C2'	5.84	121.59	114.00
1	Ad	861	A	O4'-C1'-N9	-5.84	103.53	108.20
1	Ad	969	U	C3'-C2'-C1'	5.84	106.17	101.50
1	Ad	1386	U	C1'-O4'-C4'	-5.84	105.23	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	129	G	O4'-C1'-N9	5.84	112.87	108.20
84	Aa	212	G	O4'-C1'-N9	5.84	112.87	108.20
84	Aa	739	C	N3-C4-N4	5.84	122.09	118.00
84	Aa	1904	A	C4-C5-C6	5.84	119.92	117.00
84	Aa	1905	A	C5-C6-N1	-5.84	114.78	117.70
84	Aa	1927	A	C4-C5-C6	5.84	119.92	117.00
84	Aa	2183	A	C4-C5-C6	5.84	119.92	117.00
84	Aa	2203	A	C4-C5-C6	5.84	119.92	117.00
84	Aa	2567	C	N3-C4-N4	5.84	122.09	118.00
84	Aa	2826	G	O4'-C1'-N9	5.84	112.87	108.20
85	Ac	26	C	N3-C4-C5	-5.84	119.56	121.90
84	Aa	26	A	C5-C6-N1	-5.83	114.78	117.70
84	Aa	709	G	P-O3'-C3'	5.83	126.70	119.70
84	Aa	2016	A	C4-C5-C6	5.83	119.92	117.00
84	Aa	3220	A	C5-C6-N1	-5.83	114.78	117.70
1	Ad	288	G	O4'-C1'-N9	5.83	112.87	108.20
1	Ad	1342	C	C1'-O4'-C4'	-5.83	105.23	109.90
84	Aa	111	C	N3-C4-C5	-5.83	119.57	121.90
84	Aa	1573	G	C5-C6-O6	-5.83	125.10	128.60
84	Aa	2674	A	C5-C6-N1	-5.83	114.78	117.70
84	Aa	3201	A	C5-C6-N6	-5.83	119.03	123.70
1	Ad	135	C	N1-C1'-C2'	5.83	121.58	114.00
1	Ad	854	C	O4'-C1'-N1	5.83	112.86	108.20
1	Ad	993	C	C3'-C2'-C1'	5.83	106.16	101.50
3	Af	15	A	O4'-C1'-N9	5.83	112.86	108.20
84	Aa	191	C	N3-C4-C5	-5.83	119.57	121.90
84	Aa	913	G	O4'-C1'-N9	5.83	112.86	108.20
84	Aa	1911	A	C5-C6-N1	-5.83	114.78	117.70
84	Aa	2139	A	C5-C6-N6	-5.83	119.03	123.70
84	Aa	2272	C	N3-C4-C5	-5.83	119.57	121.90
84	Aa	2421	C	N3-C4-C5	-5.83	119.57	121.90
84	Aa	2813	A	C5-C6-N1	-5.83	114.78	117.70
84	Aa	2837	C	N3-C4-C5	-5.83	119.57	121.90
86	Ab	74	A	C5-C6-N1	-5.83	114.78	117.70
1	Ad	58	U	O4'-C1'-N1	5.83	112.86	108.20
84	Aa	2733	A	C5-C6-N6	-5.83	119.04	123.70
84	Aa	196	A	C5-C6-N6	-5.83	119.04	123.70
84	Aa	1570	C	N3-C4-N4	5.83	122.08	118.00
84	Aa	1599	A	C5-C6-N6	-5.83	119.04	123.70
84	Aa	2120	A	C5-C6-N1	-5.83	114.78	117.70
84	Aa	2311	A	C4-C5-C6	5.83	119.91	117.00
84	Aa	2892	A	C5-C6-N1	-5.83	114.78	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3071	A	C5-C6-N1	-5.83	114.79	117.70
84	Aa	3334	A	O4'-C1'-N9	5.83	112.86	108.20
84	Aa	3374	C	C2-N1-C1'	5.83	125.21	118.80
86	Ab	108	G	N1-C2-N3	-5.83	120.40	123.90
1	Ad	1647	C	C1'-O4'-C4'	5.83	114.56	109.90
84	Aa	2140	C	N3-C4-C5	-5.83	119.57	121.90
84	Aa	2322	G	C5-C6-O6	-5.83	125.10	128.60
84	Aa	2344	A	C4-C5-C6	5.83	119.91	117.00
85	Ac	147	C	N3-C4-C5	-5.83	119.57	121.90
1	Ad	214	A	O4'-C1'-N9	5.83	112.86	108.20
1	Ad	1159	G	C3'-C2'-C1'	-5.83	96.84	101.50
84	Aa	1610	A	C5-C6-N1	-5.83	114.79	117.70
84	Aa	1974	C	N3-C4-C5	-5.83	119.57	121.90
84	Aa	2312	A	C5-C6-N1	-5.83	114.79	117.70
84	Aa	2704	U	O4'-C1'-N1	5.83	112.86	108.20
84	Aa	2895	G	O4'-C1'-N9	5.83	112.86	108.20
84	Aa	3045	A	C4-C5-C6	5.83	119.91	117.00
84	Aa	3078	A	C5-C6-N6	-5.83	119.04	123.70
84	Aa	569	C	N3-C4-N4	5.82	122.08	118.00
84	Aa	735	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	1129	G	O4'-C1'-N9	5.82	112.86	108.20
84	Aa	1483	G	C5-C6-O6	-5.82	125.11	128.60
84	Aa	2233	G	O4'-C1'-N9	5.82	112.86	108.20
84	Aa	2265	A	C4-C5-C6	5.82	119.91	117.00
84	Aa	2901	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	3174	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	3175	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	290	C	N3-C4-N4	5.82	122.08	118.00
84	Aa	912	G	C5-C6-O6	-5.82	125.11	128.60
84	Aa	1359	A	O4'-C1'-N9	5.82	112.86	108.20
84	Aa	2557	C	N3-C4-N4	5.82	122.08	118.00
84	Aa	2960	A	C4-C5-C6	5.82	119.91	117.00
84	Aa	3252	G	C5-C6-O6	-5.82	125.11	128.60
1	Ad	1414	G	O4'-C1'-N9	5.82	112.86	108.20
1	Ad	1528	U	O4'-C1'-C2'	-5.82	99.98	105.80
84	Aa	1330	A	C5-C6-N1	-5.82	114.79	117.70
84	Aa	1574	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	1753	A	C5-C6-N1	-5.82	114.79	117.70
84	Aa	2772	A	O4'-C1'-N9	5.82	112.86	108.20
85	Ac	71	A	C4-C5-C6	5.82	119.91	117.00
84	Aa	6	A	C4-C5-C6	5.82	119.91	117.00
84	Aa	447	C	N3-C4-C5	-5.82	119.57	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	628	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	1494	A	C5-C6-N6	-5.82	119.05	123.70
84	Aa	2761	A	C4-C5-C6	5.82	119.91	117.00
84	Aa	3159	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	144	A	C5-C6-N1	-5.82	114.79	117.70
84	Aa	642	C	P-O5'-C5'	5.82	130.21	120.90
84	Aa	1512	A	C5-C6-N6	-5.82	119.05	123.70
84	Aa	1651	A	C5-C6-N1	-5.82	114.79	117.70
84	Aa	2634	U	O4'-C1'-N1	5.82	112.85	108.20
85	Ac	44	A	C4-C5-C6	5.82	119.91	117.00
85	Ac	140	A	O4'-C1'-N9	5.82	112.85	108.20
86	Ab	11	A	C8-N9-C4	-5.82	103.47	105.80
1	Ad	507	G	O4'-C1'-N9	5.82	112.85	108.20
84	Aa	55	G	C5-C6-O6	-5.82	125.11	128.60
84	Aa	448	G	C5-C6-O6	-5.82	125.11	128.60
84	Aa	1323	G	C5-C6-O6	-5.82	125.11	128.60
84	Aa	1391	A	O4'-C1'-N9	5.82	112.85	108.20
84	Aa	1708	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	1973	C	N3-C4-C5	-5.82	119.57	121.90
84	Aa	2304	A	C4-C5-C6	5.82	119.91	117.00
84	Aa	2367	A	O4'-C1'-N9	5.82	112.85	108.20
84	Aa	3249	G	C5-C6-O6	-5.82	125.11	128.60
1	Ad	247	A	C5'-C4'-O4'	5.81	116.08	109.10
84	Aa	550	C	O3'-P-O5'	-5.81	92.95	104.00
84	Aa	971	G	O4'-C1'-N9	5.81	112.85	108.20
84	Aa	1396	A	C4-C5-C6	5.81	119.91	117.00
84	Aa	2016	A	C5-C6-N1	-5.81	114.79	117.70
84	Aa	2385	A	C5-C6-N6	-5.81	119.05	123.70
84	Aa	2554	U	O4'-C1'-N1	5.81	112.85	108.20
1	Ad	11	A	C1'-O4'-C4'	5.81	114.55	109.90
1	Ad	415	C	C5'-C4'-O4'	5.81	116.07	109.10
1	Ad	618	C	O4'-C1'-N1	5.81	112.85	108.20
1	Ad	1097	A	O4'-C1'-N9	5.81	112.85	108.20
1	Ad	1615	G	N9-C1'-C2'	5.81	121.56	114.00
24	BW	128	PHE	CB-CG-CD2	-5.81	116.73	120.80
84	Aa	672	A	C4-C5-C6	5.81	119.91	117.00
84	Aa	730	A	C4-C5-C6	5.81	119.91	117.00
84	Aa	1115	A	C4-C5-C6	5.81	119.91	117.00
84	Aa	1295	A	C4-C5-C6	5.81	119.91	117.00
84	Aa	1424	G	C5-C6-O6	-5.81	125.11	128.60
84	Aa	2113	A	C5-C6-N1	-5.81	114.79	117.70
86	Ab	64	G	C4-C5-C6	5.81	122.29	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	98	G	N3-C2-N2	5.81	123.97	119.90
1	Ad	1386	U	O4'-C1'-N1	5.81	112.85	108.20
48	CD	291	SER	N-CA-CB	5.81	119.22	110.50
84	Aa	851	A	C4-C5-C6	5.81	119.91	117.00
84	Aa	2178	G	P-O3'-C3'	5.81	126.67	119.70
84	Aa	2214	A	C4-C5-C6	5.81	119.91	117.00
84	Aa	2931	C	N3-C4-C5	-5.81	119.58	121.90
1	Ad	1497	U	C3'-C2'-C1'	-5.81	96.85	101.50
38	CT	19	PHE	CB-CG-CD2	-5.81	116.73	120.80
84	Aa	211	A	C5-C6-N6	-5.81	119.05	123.70
84	Aa	509	G	O4'-C1'-N9	5.81	112.85	108.20
84	Aa	532	G	C5-C6-O6	-5.81	125.11	128.60
84	Aa	607	U	N1-C1'-C2'	5.81	121.55	114.00
84	Aa	756	C	N3-C4-C5	-5.81	119.58	121.90
84	Aa	1617	A	C4-C5-C6	5.81	119.91	117.00
84	Aa	2872	C	N3-C4-N4	5.81	122.07	118.00
85	Ac	122	G	O4'-C1'-N9	5.81	112.85	108.20
1	Ad	1034	G	O4'-C1'-N9	5.81	112.85	108.20
1	Ad	1258	U	O4'-C1'-N1	5.81	112.85	108.20
84	Aa	17	G	O4'-C1'-N9	5.81	112.84	108.20
84	Aa	135	G	C5-C6-O6	-5.81	125.11	128.60
84	Aa	272	G	O4'-C1'-N9	5.81	112.85	108.20
84	Aa	823	A	C4-C5-C6	5.81	119.90	117.00
84	Aa	978	C	C2-N3-C4	5.81	122.80	119.90
84	Aa	1370	A	C5-C6-N6	-5.81	119.05	123.70
84	Aa	3060	G	C5-C6-O6	-5.81	125.11	128.60
84	Aa	3136	A	C5-C6-N6	-5.81	119.05	123.70
84	Aa	3210	G	C4-N9-C1'	5.81	134.05	126.50
48	CD	183	PHE	CB-CG-CD2	5.81	124.86	120.80
84	Aa	1256	A	C4-C5-C6	5.81	119.90	117.00
84	Aa	2025	C	N3-C4-C5	-5.81	119.58	121.90
84	Aa	2483	A	C4-C5-C6	5.81	119.90	117.00
84	Aa	3213	A	C4-C5-C6	5.81	119.90	117.00
1	Ad	310	U	C5'-C4'-O4'	5.80	116.06	109.10
1	Ad	493	C	O4'-C1'-N1	5.80	112.84	108.20
1	Ad	627	A	P-O3'-C3'	5.80	126.67	119.70
1	Ad	1388	A	N9-C1'-C2'	-5.80	105.62	112.00
48	CD	7	PHE	CB-CG-CD1	5.80	124.86	120.80
84	Aa	539	C	N3-C4-N4	5.80	122.06	118.00
84	Aa	610	G	P-O5'-C5'	5.80	130.19	120.90
84	Aa	715	A	C5-C6-N1	-5.80	114.80	117.70
84	Aa	1335	C	N3-C4-C5	-5.80	119.58	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1636	C	N3-C4-C5	-5.80	119.58	121.90
84	Aa	2574	A	C4-C5-C6	5.80	119.90	117.00
84	Aa	2734	C	N3-C4-N4	5.80	122.06	118.00
84	Aa	2835	A	C5-C6-N1	-5.80	114.80	117.70
84	Aa	2892	A	C4-C5-C6	5.80	119.90	117.00
84	Aa	2946	U	O4'-C1'-N1	5.80	112.84	108.20
84	Aa	3308	A	C4-C5-C6	5.80	119.90	117.00
85	Ac	77	A	C4-C5-C6	5.80	119.90	117.00
86	Ab	61	C	N3-C4-C5	-5.80	119.58	121.90
1	Ad	197	G	P-O3'-C3'	5.80	126.66	119.70
84	Aa	70	A	P-O3'-C3'	5.80	126.66	119.70
84	Aa	1380	C	N3-C4-C5	-5.80	119.58	121.90
84	Aa	1520	A	C4-C5-C6	5.80	119.90	117.00
84	Aa	2657	C	C2-N3-C4	5.80	122.80	119.90
84	Aa	3142	C	N3-C4-N4	5.80	122.06	118.00
24	BW	15	TYR	CB-CG-CD2	-5.80	117.52	121.00
84	Aa	875	A	C5-C6-N1	-5.80	114.80	117.70
84	Aa	2112	C	N3-C4-N4	5.80	122.06	118.00
84	Aa	2460	A	C5-C6-N1	-5.80	114.80	117.70
84	Aa	2736	A	C4-C5-C6	5.80	119.90	117.00
85	Ac	66	G	C5-C6-O6	-5.80	125.12	128.60
1	Ad	36	C	C3'-C2'-C1'	5.80	106.14	101.50
1	Ad	1214	C	P-O3'-C3'	-5.80	112.74	119.70
84	Aa	61	A	C5-C6-N6	-5.80	119.06	123.70
84	Aa	158	A	C5-C6-N1	-5.80	114.80	117.70
84	Aa	1156	A	C4-C5-C6	5.80	119.90	117.00
84	Aa	2386	A	C4-C5-C6	5.80	119.90	117.00
84	Aa	2629	C	N3-C4-N4	5.80	122.06	118.00
84	Aa	2658	U	O4'-C1'-N1	5.80	112.84	108.20
84	Aa	2662	A	C5-C6-N1	-5.80	114.80	117.70
84	Aa	3022	A	C4-C5-C6	5.80	119.90	117.00
1	Ad	1052	G	O4'-C1'-N9	5.80	112.84	108.20
78	CL	64	LYS	N-CA-CB	5.80	121.04	110.60
84	Aa	1932	A	O4'-C1'-N9	5.80	112.84	108.20
84	Aa	2273	C	N3-C4-C5	-5.80	119.58	121.90
85	Ac	106	C	N3-C4-N4	5.80	122.06	118.00
86	Ab	48	G	N3-C2-N2	5.80	123.96	119.90
1	Ad	966	U	C1'-O4'-C4'	-5.80	105.26	109.90
84	Aa	80	C	N3-C4-C5	-5.80	119.58	121.90
84	Aa	171	G	O4'-C1'-N9	5.80	112.84	108.20
84	Aa	555	G	O4'-C1'-N9	5.80	112.84	108.20
84	Aa	1643	A	C4-C5-C6	5.80	119.90	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2903	G	O4'-C1'-N9	5.80	112.84	108.20
84	Aa	2932	A	C5-C6-N1	-5.80	114.80	117.70
84	Aa	2934	C	P-O3'-C3'	5.80	126.66	119.70
84	Aa	3275	G	O4'-C1'-N9	5.80	112.84	108.20
1	Ad	83	U	N1-C1'-C2'	-5.79	105.62	112.00
1	Ad	547	C	P-O3'-C3'	5.79	126.65	119.70
84	Aa	793	C	N3-C4-C5	-5.79	119.58	121.90
84	Aa	1006	A	C4-C5-C6	5.79	119.90	117.00
84	Aa	1026	A	C5-C6-N1	-5.79	114.80	117.70
1	Ad	539	A	C1'-O4'-C4'	-5.79	105.27	109.90
84	Aa	480	C	N3-C4-C5	-5.79	119.58	121.90
84	Aa	920	A	C5-C6-N1	-5.79	114.80	117.70
84	Aa	3257	G	C5-C6-O6	-5.79	125.12	128.60
85	Ac	109	A	O4'-C1'-N9	5.79	112.84	108.20
85	Ac	158	C	N3-C4-N4	5.79	122.06	118.00
1	Ad	1283	C	O4'-C1'-N1	5.79	112.83	108.20
84	Aa	372	A	C4-C5-C6	5.79	119.90	117.00
84	Aa	493	G	C5-C6-O6	-5.79	125.12	128.60
84	Aa	708	C	N3-C4-N4	5.79	122.06	118.00
84	Aa	1061	A	C4-C5-C6	5.79	119.90	117.00
84	Aa	2671	A	C5-C6-N1	-5.79	114.80	117.70
84	Aa	2998	A	O4'-C1'-N9	5.79	112.83	108.20
1	Ad	104	A	P-O3'-C3'	5.79	126.65	119.70
1	Ad	496	A	P-O3'-C3'	-5.79	112.75	119.70
72	CC	336	TYR	CB-CG-CD2	5.79	124.47	121.00
84	Aa	1550	A	C4-C5-C6	5.79	119.89	117.00
86	Ab	82	G	C5-C6-N1	-5.79	108.61	111.50
1	Ad	1233	G	C3'-C2'-C1'	5.79	106.13	101.50
84	Aa	58	G	O4'-C1'-N9	5.79	112.83	108.20
84	Aa	693	C	N3-C4-C5	-5.79	119.58	121.90
84	Aa	954	A	C4-C5-C6	5.79	119.89	117.00
84	Aa	995	C	N3-C4-N4	5.79	122.05	118.00
84	Aa	1875	A	O4'-C1'-N9	5.79	112.83	108.20
84	Aa	2847	A	O4'-C1'-N9	5.79	112.83	108.20
84	Aa	3095	G	N3-C2-N2	5.79	123.95	119.90
86	Ab	68	G	C4-C5-C6	5.79	122.27	118.80
1	Ad	714	C	C3'-C2'-C1'	5.79	106.13	101.50
84	Aa	265	G	N3-C2-N2	5.79	123.95	119.90
84	Aa	492	G	C4'-C3'-C2'	5.79	108.39	102.60
84	Aa	907	A	C4-C5-C6	5.79	119.89	117.00
1	Ad	574	A	C5'-C4'-O4'	5.79	116.04	109.10
1	Ad	1705	C	C3'-C2'-C1'	5.79	106.13	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	267	G	C5-C6-O6	-5.79	125.13	128.60
84	Aa	393	A	C5-C6-N6	-5.79	119.07	123.70
84	Aa	1468	A	C4-C5-C6	5.79	119.89	117.00
84	Aa	1753	A	C5-C6-N6	-5.79	119.07	123.70
84	Aa	2678	C	N3-C4-C5	-5.79	119.59	121.90
84	Aa	2836	G	N3-C2-N2	5.79	123.95	119.90
84	Aa	2850	G	O4'-C1'-N9	5.79	112.83	108.20
84	Aa	3250	C	N3-C4-C5	-5.79	119.59	121.90
84	Aa	3251	C	N3-C4-C5	-5.79	119.59	121.90
1	Ad	131	C	C4'-C3'-C2'	-5.78	96.82	102.60
1	Ad	1192	G	C1'-O4'-C4'	-5.78	105.27	109.90
1	Ad	1755	G	C1'-O4'-C4'	-5.78	105.27	109.90
84	Aa	181	G	O4'-C1'-N9	5.78	112.83	108.20
84	Aa	2487	A	C5-C6-N1	-5.78	114.81	117.70
84	Aa	2672	C	N3-C4-C5	-5.78	119.59	121.90
84	Aa	3358	A	C4-C5-C6	5.78	119.89	117.00
84	Aa	932	A	C5-C6-N1	-5.78	114.81	117.70
84	Aa	2961	C	N3-C4-C5	-5.78	119.59	121.90
85	Ac	110	A	C5-C6-N6	-5.78	119.08	123.70
1	Ad	285	G	N9-C1'-C2'	5.78	121.51	114.00
1	Ad	1573	C	O4'-C1'-N1	5.78	112.82	108.20
61	CM	89	TRP	N-CA-CB	5.78	121.00	110.60
84	Aa	224	C	N3-C4-C5	-5.78	119.59	121.90
84	Aa	1087	G	O4'-C1'-N9	5.78	112.82	108.20
84	Aa	1132	A	C4-C5-C6	5.78	119.89	117.00
84	Aa	1581	C	N3-C4-C5	-5.78	119.59	121.90
84	Aa	1855	A	C5-C6-N1	-5.78	114.81	117.70
84	Aa	2177	U	C2'-C3'-O3'	5.78	122.95	113.70
84	Aa	2509	A	C4-C5-C6	5.78	119.89	117.00
84	Aa	2822	A	C5-C6-N1	-5.78	114.81	117.70
84	Aa	3100	C	N3-C4-C5	-5.78	119.59	121.90
1	Ad	344	U	C1'-O4'-C4'	5.78	114.52	109.90
1	Ad	1597	C	O4'-C1'-N1	5.78	112.82	108.20
84	Aa	1890	C	N3-C4-C5	-5.78	119.59	121.90
84	Aa	1943	G	P-O3'-C3'	-5.78	112.77	119.70
84	Aa	2237	A	C4-C5-C6	5.78	119.89	117.00
84	Aa	2321	C	N3-C4-C5	-5.78	119.59	121.90
86	Ab	75	G	C3'-C2'-C1'	-5.78	96.88	101.50
1	Ad	860	A	P-O5'-C5'	-5.78	111.66	120.90
1	Ad	949	A	O4'-C1'-C2'	-5.78	100.02	105.80
1	Ad	1254	U	C1'-O4'-C4'	5.78	114.52	109.90
41	CA	67	PHE	CB-CG-CD1	-5.78	116.76	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	120	G	O4'-C1'-N9	5.78	112.82	108.20
84	Aa	1418	C	N3-C4-N4	5.78	122.04	118.00
84	Aa	1599	A	C4-C5-C6	5.78	119.89	117.00
84	Aa	1875	A	C4-C5-C6	5.78	119.89	117.00
84	Aa	2119	A	C4-C5-C6	5.78	119.89	117.00
84	Aa	2250	A	C5-C6-N1	-5.78	114.81	117.70
84	Aa	2456	G	C5-C6-O6	-5.78	125.13	128.60
84	Aa	2792	A	C5-C6-N1	-5.78	114.81	117.70
84	Aa	565	C	C2-N3-C4	5.78	122.79	119.90
84	Aa	805	C	N3-C4-C5	-5.78	119.59	121.90
84	Aa	1203	C	N3-C4-C5	-5.78	119.59	121.90
84	Aa	1208	A	C4-C5-C6	5.78	119.89	117.00
84	Aa	1778	C	N3-C4-C5	-5.78	119.59	121.90
84	Aa	2757	G	N1-C6-O6	5.78	123.36	119.90
84	Aa	3017	A	C5-C6-N6	-5.78	119.08	123.70
84	Aa	3212	C	N3-C4-N4	5.78	122.04	118.00
84	Aa	3358	A	C5-C6-N1	-5.78	114.81	117.70
1	Ad	10	G	O4'-C1'-N9	5.77	112.82	108.20
1	Ad	312	C	C3'-C2'-C1'	5.77	106.12	101.50
84	Aa	2288	C	O4'-C1'-N1	5.77	112.82	108.20
84	Aa	2400	A	O4'-C1'-N9	5.77	112.82	108.20
85	Ac	135	A	C4-C5-C6	5.77	119.89	117.00
84	Aa	26	A	O4'-C1'-N9	5.77	112.82	108.20
84	Aa	232	C	N3-C4-C5	-5.77	119.59	121.90
84	Aa	354	C	N3-C4-N4	5.77	122.04	118.00
84	Aa	2210	A	C5-C6-N6	-5.77	119.08	123.70
84	Aa	2347	A	O4'-C1'-N9	5.77	112.82	108.20
84	Aa	2847	A	C4-C5-C6	5.77	119.89	117.00
84	Aa	2880	G	O4'-C1'-N9	5.77	112.82	108.20
86	Ab	65	G	N1-C2-N3	-5.77	120.44	123.90
84	Aa	160	G	O4'-C1'-N9	5.77	112.82	108.20
84	Aa	189	C	N3-C4-C5	-5.77	119.59	121.90
84	Aa	1016	G	C5-C6-O6	-5.77	125.14	128.60
84	Aa	1291	A	C5-C6-N1	-5.77	114.81	117.70
84	Aa	1492	A	C4-C5-C6	5.77	119.89	117.00
84	Aa	1635	A	C5-C6-N1	-5.77	114.81	117.70
84	Aa	2896	C	N3-C4-N4	5.77	122.04	118.00
84	Aa	3140	A	C5-C6-N1	-5.77	114.81	117.70
1	Ad	586	U	O4'-C1'-N1	5.77	112.81	108.20
2	Ae	68	C	N1-C1'-C2'	5.77	121.50	114.00
84	Aa	197	A	C5-C6-N6	-5.77	119.08	123.70
84	Aa	1490	A	C5-C6-N1	-5.77	114.81	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2973	A	C4-C5-C6	5.77	119.89	117.00
84	Aa	3206	C	N3-C4-C5	-5.77	119.59	121.90
84	Aa	3302	A	O4'-C1'-N9	5.77	112.82	108.20
86	Ab	34	C	C2-N3-C4	5.77	122.78	119.90
1	Ad	206	U	P-O3'-C3'	5.77	126.62	119.70
1	Ad	961	U	O4'-C1'-N1	5.77	112.81	108.20
34	BC	146	ASN	N-CA-CB	5.77	120.98	110.60
84	Aa	545	C	N3-C4-C5	-5.77	119.59	121.90
84	Aa	871	C	N3-C4-C5	-5.77	119.59	121.90
84	Aa	1061	A	C5-C6-N1	-5.77	114.82	117.70
84	Aa	1361	G	O4'-C1'-N9	5.77	112.81	108.20
84	Aa	1472	C	N3-C4-C5	-5.77	119.59	121.90
84	Aa	1755	A	C5-C6-N6	-5.77	119.08	123.70
84	Aa	2623	G	O4'-C1'-N9	5.77	112.81	108.20
84	Aa	3272	A	C5-C6-N6	-5.77	119.09	123.70
84	Aa	3288	A	O4'-C1'-N9	5.77	112.81	108.20
1	Ad	1132	G	O4'-C1'-N9	5.77	112.81	108.20
1	Ad	1341	G	P-O3'-C3'	5.77	126.62	119.70
84	Aa	147	G	C5-C6-O6	-5.77	125.14	128.60
84	Aa	873	A	C4-C5-C6	5.77	119.88	117.00
84	Aa	1305	A	C5-C6-N6	-5.77	119.09	123.70
84	Aa	2092	C	C3'-C2'-C1'	-5.77	96.89	101.50
84	Aa	2244	G	O4'-C1'-N9	5.77	112.81	108.20
1	Ad	646	G	O4'-C1'-C2'	5.76	112.79	107.60
1	Ad	1352	A	O4'-C1'-N9	5.76	112.81	108.20
1	Ad	1369	C	N1-C1'-C2'	5.76	121.49	114.00
1	Ad	1502	C	O4'-C1'-C2'	-5.76	100.03	105.80
1	Ad	1507	G	C1'-O4'-C4'	-5.76	105.29	109.90
84	Aa	821	C	O4'-C1'-N1	5.76	112.81	108.20
84	Aa	2243	C	N3-C4-C5	-5.76	119.59	121.90
84	Aa	826	C	N3-C4-C5	-5.76	119.59	121.90
84	Aa	2238	A	C4-C5-C6	5.76	119.88	117.00
84	Aa	2442	A	C4-C5-C6	5.76	119.88	117.00
1	Ad	965	U	O4'-C1'-C2'	-5.76	100.04	105.80
1	Ad	1005	C	C5'-C4'-O4'	5.76	116.01	109.10
48	CD	122	GLY	N-CA-C	-5.76	98.70	113.10
84	Aa	3	G	C5-C6-O6	-5.76	125.14	128.60
84	Aa	1460	U	O4'-C1'-N1	5.76	112.81	108.20
84	Aa	1491	G	C5-C6-O6	-5.76	125.14	128.60
84	Aa	1577	A	C4-C5-C6	5.76	119.88	117.00
84	Aa	2439	A	P-O5'-C5'	-5.76	111.68	120.90
84	Aa	2928	A	C4-C5-C6	5.76	119.88	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2932	A	C4-C5-C6	5.76	119.88	117.00
84	Aa	3199	C	N3-C4-C5	-5.76	119.60	121.90
1	Ad	1687	G	C3'-C2'-C1'	5.76	106.11	101.50
2	Ae	10	G	C1'-O4'-C4'	5.76	114.51	109.90
56	Cd	87	ARG	N-CA-CB	5.76	120.97	110.60
84	Aa	73	A	C5-C6-N6	-5.76	119.09	123.70
84	Aa	976	A	O4'-C1'-N9	5.76	112.81	108.20
84	Aa	1059	A	O4'-C1'-N9	5.76	112.81	108.20
84	Aa	1885	G	C5-C6-O6	-5.76	125.14	128.60
84	Aa	2571	C	N3-C4-C5	-5.76	119.60	121.90
84	Aa	3104	A	C5-C6-N6	-5.76	119.09	123.70
84	Aa	38	A	O4'-C1'-N9	5.76	112.81	108.20
84	Aa	917	A	C5-C6-N6	-5.76	119.09	123.70
84	Aa	1477	A	C4-C5-C6	5.76	119.88	117.00
84	Aa	1622	G	O4'-C1'-N9	5.76	112.81	108.20
84	Aa	2699	A	C4-C5-C6	5.76	119.88	117.00
84	Aa	2834	C	N3-C4-C5	-5.76	119.60	121.90
1	Ad	1250	C	O4'-C1'-C2'	5.76	112.78	107.60
84	Aa	93	G	O4'-C1'-N9	5.76	112.81	108.20
84	Aa	654	C	N3-C4-C5	-5.76	119.60	121.90
84	Aa	905	G	O4'-C1'-N9	5.76	112.81	108.20
84	Aa	1190	C	N3-C4-C5	-5.76	119.60	121.90
84	Aa	1412	C	N3-C4-C5	-5.76	119.60	121.90
84	Aa	1848	G	O4'-C1'-N9	5.76	112.81	108.20
84	Aa	1887	A	O4'-C1'-N9	5.76	112.81	108.20
84	Aa	1926	A	C5-C6-N6	-5.76	119.09	123.70
84	Aa	2137	A	C4-C5-C6	5.76	119.88	117.00
85	Ac	11	C	C4'-C3'-C2'	-5.76	96.84	102.60
85	Ac	104	A	C4-C5-C6	5.76	119.88	117.00
33	BJ	85	TYR	CB-CG-CD1	5.75	124.45	121.00
71	CB	351	SER	N-CA-CB	5.75	119.13	110.50
84	Aa	1062	G	O4'-C1'-N9	5.75	112.80	108.20
84	Aa	2041	G	O4'-C1'-N9	5.75	112.80	108.20
84	Aa	2081	C	O4'-C1'-N1	5.75	112.80	108.20
84	Aa	2125	A	C4-C5-C6	5.75	119.88	117.00
84	Aa	3037	G	O4'-C1'-N9	5.75	112.80	108.20
86	Ab	90	A	O4'-C1'-N9	5.75	112.80	108.20
1	Ad	1091	A	N9-C1'-C2'	5.75	121.48	114.00
84	Aa	659	C	N3-C4-C5	-5.75	119.60	121.90
84	Aa	1838	A	C4-C5-C6	5.75	119.88	117.00
84	Aa	1908	C	N3-C4-N4	5.75	122.03	118.00
84	Aa	2365	C	N3-C4-C5	-5.75	119.60	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2794	A	C4-C5-C6	5.75	119.88	117.00
84	Aa	2799	U	O4'-C1'-N1	5.75	112.80	108.20
84	Aa	3165	C	N3-C4-C5	-5.75	119.60	121.90
84	Aa	3235	A	C5-C6-N6	-5.75	119.10	123.70
84	Aa	3360	U	O4'-C1'-N1	5.75	112.80	108.20
85	Ac	96	A	C4-C5-C6	5.75	119.88	117.00
34	BC	235	PHE	N-CA-CB	5.75	120.95	110.60
84	Aa	886	A	C5-C6-N1	-5.75	114.83	117.70
84	Aa	1256	A	C5-C6-N6	-5.75	119.10	123.70
84	Aa	1748	A	C5-C6-N6	-5.75	119.10	123.70
84	Aa	1771	G	C5-C6-O6	-5.75	125.15	128.60
84	Aa	3368	A	C4-C5-C6	5.75	119.88	117.00
86	Ab	3	A	C5-C6-N6	-5.75	119.10	123.70
1	Ad	1155	G	N9-C1'-C2'	5.75	121.47	114.00
84	Aa	1114	A	C5-C6-N1	-5.75	114.83	117.70
84	Aa	1450	G	C5'-C4'-O4'	5.75	116.00	109.10
84	Aa	2786	G	O4'-C1'-N9	5.75	112.80	108.20
1	Ad	419	C	O4'-C1'-N1	5.75	112.80	108.20
1	Ad	1802	G	O4'-C1'-C2'	5.75	112.77	107.60
11	BD	184	ILE	N-CA-CB	5.75	124.02	110.80
14	BQ	135	PHE	CB-CG-CD2	5.75	124.82	120.80
33	BJ	9	SER	N-CA-CB	5.75	119.12	110.50
84	Aa	338	C	N3-C4-C5	-5.75	119.60	121.90
84	Aa	383	A	C5-C6-N6	-5.75	119.10	123.70
84	Aa	760	C	N3-C4-C5	-5.75	119.60	121.90
84	Aa	873	A	C5-C6-N6	-5.75	119.10	123.70
84	Aa	1882	A	C5-C6-N6	-5.75	119.10	123.70
84	Aa	2215	A	C4-C5-C6	5.75	119.88	117.00
84	Aa	3193	C	N3-C4-N4	5.75	122.02	118.00
1	Ad	559	A	O4'-C1'-C2'	-5.75	100.05	105.80
84	Aa	818	G	C5-C6-O6	-5.75	125.15	128.60
84	Aa	1378	G	C5-C6-O6	-5.75	125.15	128.60
84	Aa	2124	G	O4'-C1'-N9	5.75	112.80	108.20
84	Aa	2223	A	C5-C6-N1	-5.75	114.83	117.70
84	Aa	2598	A	C4-C5-C6	5.75	119.87	117.00
84	Aa	19	C	O5'-P-OP2	-5.75	100.53	105.70
84	Aa	976	A	C5-C6-N1	-5.75	114.83	117.70
84	Aa	1872	C	N3-C4-N4	5.75	122.02	118.00
84	Aa	2280	C	N3-C4-N4	5.75	122.02	118.00
1	Ad	518	G	O4'-C1'-N9	5.74	112.80	108.20
1	Ad	936	C	O4'-C1'-C2'	-5.74	100.06	105.80
84	Aa	216	G	O4'-C1'-N9	5.74	112.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1259	C	N3-C4-N4	5.74	122.02	118.00
84	Aa	1404	G	C5-C6-O6	-5.74	125.15	128.60
84	Aa	1628	G	C5-C6-O6	-5.74	125.15	128.60
84	Aa	2596	A	C4-C5-C6	5.74	119.87	117.00
84	Aa	3101	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	970	A	C4-C5-C6	5.74	119.87	117.00
84	Aa	1414	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	1694	A	C4-C5-C6	5.74	119.87	117.00
84	Aa	2140	C	N3-C4-N4	5.74	122.02	118.00
1	Ad	1074	C	O4'-C1'-C2'	-5.74	100.06	105.80
84	Aa	120	G	C5-C6-O6	-5.74	125.16	128.60
84	Aa	164	C	N3-C4-N4	5.74	122.02	118.00
84	Aa	246	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	813	A	O4'-C1'-N9	5.74	112.79	108.20
84	Aa	2000	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	2018	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	2033	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	2049	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	2288	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	2442	A	C5-C6-N1	-5.74	114.83	117.70
84	Aa	2593	A	C5-C6-N1	-5.74	114.83	117.70
84	Aa	2971	A	C4-C5-C6	5.74	119.87	117.00
1	Ad	217	A	P-O5'-C5'	5.74	130.08	120.90
84	Aa	233	C	N3-C4-C5	-5.74	119.60	121.90
84	Aa	715	A	O4'-C1'-N9	5.74	112.79	108.20
84	Aa	1018	C	N3-C4-N4	5.74	122.02	118.00
84	Aa	1667	C	N3-C4-C5	-5.74	119.61	121.90
84	Aa	2107	A	C5-C6-N6	-5.74	119.11	123.70
84	Aa	2133	A	C4-C5-C6	5.74	119.87	117.00
84	Aa	2223	A	O4'-C1'-N9	5.74	112.79	108.20
84	Aa	2676	A	C4-C5-C6	5.74	119.87	117.00
84	Aa	2920	G	C5-C6-O6	-5.74	125.16	128.60
84	Aa	3359	C	N3-C4-C5	-5.74	119.61	121.90
1	Ad	1083	C	C3'-C2'-C1'	5.74	106.09	101.50
1	Ad	1220	C	C3'-C2'-C1'	5.74	106.09	101.50
48	CD	238	SER	N-CA-CB	5.74	119.11	110.50
84	Aa	1994	C	N3-C4-C5	-5.74	119.61	121.90
84	Aa	2971	A	C5-C6-N1	-5.74	114.83	117.70
84	Aa	3375	G	O4'-C1'-N9	5.74	112.79	108.20
1	Ad	1159	G	P-O3'-C3'	-5.74	112.82	119.70
1	Ad	1699	C	C3'-C2'-C1'	5.74	106.09	101.50
84	Aa	2168	C	N3-C4-C5	-5.74	119.61	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2788	A	C4-C5-C6	5.74	119.87	117.00
84	Aa	2928	A	O4'-C1'-N9	5.74	112.79	108.20
84	Aa	363	A	O4'-C1'-N9	5.73	112.79	108.20
84	Aa	505	G	O4'-C1'-N9	5.73	112.79	108.20
84	Aa	1354	G	O4'-C1'-N9	5.73	112.79	108.20
86	Ab	34	C	N3-C4-C5	-5.73	119.61	121.90
1	Ad	554	A	O4'-C1'-N9	5.73	112.79	108.20
1	Ad	910	A	O4'-C1'-N9	5.73	112.79	108.20
84	Aa	200	G	O4'-C1'-N9	5.73	112.78	108.20
84	Aa	1066	G	O4'-C1'-N9	5.73	112.79	108.20
84	Aa	1206	A	O4'-C1'-N9	5.73	112.78	108.20
84	Aa	2215	A	C5-C6-N1	-5.73	114.83	117.70
84	Aa	2224	A	C4-C5-C6	5.73	119.87	117.00
84	Aa	2619	C	N3-C4-N4	5.73	122.01	118.00
84	Aa	2757	G	O4'-C1'-N9	5.73	112.79	108.20
1	Ad	1193	A	C3'-C2'-C1'	5.73	106.08	101.50
1	Ad	1451	G	N9-C1'-C2'	5.73	121.45	114.00
84	Aa	293	A	C5-C6-N1	-5.73	114.83	117.70
84	Aa	1193	A	C5-C6-N6	-5.73	119.11	123.70
84	Aa	1835	A	C4-C5-C6	5.73	119.86	117.00
84	Aa	1857	G	C5-C6-O6	-5.73	125.16	128.60
84	Aa	2088	C	C5'-C4'-C3'	5.73	125.17	116.00
84	Aa	2218	A	C5-C6-N6	-5.73	119.12	123.70
84	Aa	3306	A	C5-C6-N6	-5.73	119.12	123.70
84	Aa	3389	C	N3-C4-C5	-5.73	119.61	121.90
1	Ad	281	U	C4'-C3'-C2'	-5.73	96.87	102.60
85	Ac	89	A	C4-C5-C6	5.73	119.86	117.00
1	Ad	827	C	O4'-C1'-C2'	-5.73	100.07	105.80
84	Aa	346	A	O4'-C1'-N9	5.73	112.78	108.20
84	Aa	1508	C	N3-C4-C5	-5.73	119.61	121.90
84	Aa	1782	G	O4'-C1'-N9	5.73	112.78	108.20
84	Aa	2603	C	N3-C4-C5	-5.73	119.61	121.90
84	Aa	2673	G	C5-C6-O6	-5.73	125.16	128.60
84	Aa	3162	C	N3-C4-N4	5.73	122.01	118.00
1	Ad	64	U	C4'-C3'-C2'	-5.73	96.87	102.60
84	Aa	16	A	C4-C5-C6	5.73	119.86	117.00
84	Aa	1290	A	C5-C6-N1	-5.73	114.84	117.70
1	Ad	1125	U	O4'-C1'-C2'	-5.72	100.08	105.80
1	Ad	1591	A	O4'-C1'-C2'	-5.72	100.08	105.80
84	Aa	848	G	O4'-C1'-N9	5.72	112.78	108.20
86	Ab	2	G	N9-C4-C5	-5.72	103.11	105.40
1	Ad	174	C	C5'-C4'-O4'	5.72	115.97	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	760	G	O4'-C1'-N9	5.72	112.78	108.20
84	Aa	813	A	C4-C5-C6	5.72	119.86	117.00
84	Aa	1588	G	O4'-C1'-N9	5.72	112.78	108.20
84	Aa	1969	G	O4'-C1'-N9	5.72	112.78	108.20
84	Aa	2790	C	N3-C4-C5	-5.72	119.61	121.90
84	Aa	2881	C	N3-C4-C5	-5.72	119.61	121.90
84	Aa	3206	C	N3-C4-N4	5.72	122.01	118.00
84	Aa	3322	A	C4-C5-C6	5.72	119.86	117.00
85	Ac	129	C	N3-C4-C5	-5.72	119.61	121.90
84	Aa	1444	G	C5-C6-O6	-5.72	125.17	128.60
84	Aa	2504	A	C4-C5-C6	5.72	119.86	117.00
84	Aa	2992	G	O4'-C1'-N9	5.72	112.78	108.20
84	Aa	3087	A	C5-C6-N6	-5.72	119.12	123.70
1	Ad	232	C	C3'-C2'-C1'	5.72	106.08	101.50
1	Ad	491	G	N9-C1'-C2'	-5.72	105.71	112.00
84	Aa	1375	G	O4'-C1'-N9	5.72	112.78	108.20
84	Aa	2043	A	C4'-C3'-O3'	5.72	124.44	113.00
84	Aa	2694	A	C5-C6-N6	-5.72	119.12	123.70
84	Aa	3061	C	N3-C4-C5	-5.72	119.61	121.90
84	Aa	757	G	C5-C6-O6	-5.72	125.17	128.60
84	Aa	1342	C	N3-C4-C5	-5.72	119.61	121.90
84	Aa	1584	A	C4-C5-C6	5.72	119.86	117.00
84	Aa	2133	A	O4'-C1'-N9	5.72	112.77	108.20
84	Aa	3059	C	N3-C4-N4	5.72	122.00	118.00
84	Aa	3293	U	O4'-C1'-N1	5.72	112.78	108.20
1	Ad	488	C	O4'-C1'-C2'	-5.72	100.08	105.80
1	Ad	1488	C	C3'-C2'-C1'	5.72	106.07	101.50
84	Aa	159	G	O4'-C1'-N9	5.72	112.77	108.20
84	Aa	1208	A	O4'-C1'-N9	5.72	112.77	108.20
84	Aa	1511	C	N3-C4-C5	-5.72	119.61	121.90
84	Aa	1571	A	C4-C5-C6	5.72	119.86	117.00
84	Aa	2941	G	C5-C6-O6	-5.72	125.17	128.60
85	Ac	44	A	C5-C6-N6	-5.72	119.13	123.70
1	Ad	490	G	N9-C1'-C2'	5.71	121.43	114.00
1	Ad	978	A	O4'-C1'-N9	5.71	112.77	108.20
84	Aa	136	C	N3-C4-C5	-5.71	119.61	121.90
84	Aa	1236	C	N3-C4-C5	-5.71	119.61	121.90
84	Aa	2325	A	C4-C5-C6	5.71	119.86	117.00
84	Aa	2612	A	C5-C6-N1	-5.71	114.84	117.70
85	Ac	65	G	P-O5'-C5'	-5.71	111.76	120.90
1	Ad	250	A	O4'-C1'-C2'	-5.71	100.09	105.80
1	Ad	372	U	C1'-O4'-C4'	5.71	114.47	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	325	A	O4'-C1'-N9	5.71	112.77	108.20
84	Aa	667	C	N3-C4-C5	-5.71	119.61	121.90
84	Aa	1693	A	C5-C6-N1	-5.71	114.84	117.70
86	Ab	3	A	C4-C5-C6	5.71	119.86	117.00
1	Ad	397	C	C3'-C2'-C1'	5.71	106.07	101.50
1	Ad	431	C	C3'-C2'-C1'	5.71	106.07	101.50
1	Ad	561	G	C3'-C2'-C1'	5.71	106.07	101.50
84	Aa	105	A	C5-C6-N1	-5.71	114.84	117.70
84	Aa	604	C	C6-N1-C2	-5.71	118.02	120.30
84	Aa	1374	G	O4'-C1'-N9	5.71	112.77	108.20
84	Aa	2742	A	C4-C5-C6	5.71	119.86	117.00
85	Ac	156	C	N3-C4-C5	-5.71	119.61	121.90
1	Ad	742	C	P-O3'-C3'	5.71	126.55	119.70
84	Aa	2963	G	O4'-C1'-N9	5.71	112.77	108.20
85	Ac	123	G	C5-C6-O6	-5.71	125.17	128.60
86	Ab	42	A	O4'-C1'-N9	5.71	112.77	108.20
84	Aa	755	C	N3-C4-C5	-5.71	119.62	121.90
84	Aa	928	A	C4-C5-C6	5.71	119.86	117.00
84	Aa	977	G	C5-C6-O6	-5.71	125.17	128.60
84	Aa	1591	A	C4-C5-C6	5.71	119.85	117.00
84	Aa	1767	G	O4'-C1'-N9	5.71	112.77	108.20
84	Aa	2767	C	N3-C4-N4	5.71	122.00	118.00
84	Aa	2792	A	O4'-C1'-N9	5.71	112.77	108.20
84	Aa	2916	G	C5-C6-O6	-5.71	125.17	128.60
84	Aa	3362	A	O4'-C1'-N9	5.71	112.77	108.20
1	Ad	405	A	O4'-C1'-C2'	-5.71	100.09	105.80
1	Ad	1088	G	C4'-C3'-C2'	-5.71	96.89	102.60
84	Aa	546	C	N3-C4-C5	-5.71	119.62	121.90
84	Aa	939	A	C5-C6-N1	-5.71	114.85	117.70
84	Aa	1122	C	N3-C4-C5	-5.71	119.62	121.90
84	Aa	1862	C	N3-C4-N4	5.71	122.00	118.00
84	Aa	2401	A	C5-C6-N1	-5.71	114.85	117.70
84	Aa	2449	A	C5-C6-N1	-5.71	114.85	117.70
84	Aa	2488	A	C4-C5-C6	5.71	119.85	117.00
84	Aa	2929	C	N3-C4-N4	5.71	121.99	118.00
84	Aa	3114	A	C5'-C4'-O4'	5.71	115.95	109.10
84	Aa	16	A	O4'-C1'-N9	5.71	112.76	108.20
84	Aa	738	A	C5-C6-N6	-5.71	119.14	123.70
84	Aa	2301	C	C2-N1-C1'	5.71	125.08	118.80
84	Aa	2640	A	C5-C6-N1	-5.71	114.85	117.70
84	Aa	2753	C	C5'-C4'-C3'	5.71	125.13	116.00
1	Ad	637	U	C1'-O4'-C4'	5.70	114.46	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1116	G	C3'-C2'-C1'	-5.70	96.94	101.50
1	Ad	1221	A	P-O3'-C3'	5.70	126.54	119.70
1	Ad	1665	U	O4'-C1'-N1	5.70	112.76	108.20
50	CP	31	GLU	N-CA-CB	5.70	120.86	110.60
84	Aa	670	A	C4-C5-C6	5.70	119.85	117.00
84	Aa	1101	A	C4-C5-C6	5.70	119.85	117.00
84	Aa	1150	G	C5-C6-O6	-5.70	125.18	128.60
84	Aa	1905	A	C4-C5-C6	5.70	119.85	117.00
84	Aa	1962	C	N3-C4-C5	-5.70	119.62	121.90
84	Aa	2361	C	N3-C4-C5	-5.70	119.62	121.90
84	Aa	3154	G	C1'-O4'-C4'	-5.70	105.34	109.90
84	Aa	3290	C	N3-C4-C5	-5.70	119.62	121.90
84	Aa	1151	G	C5-C6-O6	-5.70	125.18	128.60
84	Aa	1477	A	O4'-C1'-N9	5.70	112.76	108.20
84	Aa	2032	C	N3-C4-N4	5.70	121.99	118.00
84	Aa	2056	C	N3-C4-N4	5.70	121.99	118.00
1	Ad	1097	A	O4'-C1'-C2'	5.70	112.73	107.60
45	CN	30	TYR	CB-CG-CD1	5.70	124.42	121.00
84	Aa	201	G	O4'-C1'-N9	5.70	112.76	108.20
84	Aa	1123	A	C5-C6-N6	-5.70	119.14	123.70
84	Aa	1610	A	C4-C5-C6	5.70	119.85	117.00
84	Aa	1863	A	C5-C6-N6	-5.70	119.14	123.70
84	Aa	2080	G	P-O3'-C3'	5.70	126.54	119.70
84	Aa	2230	C	N3-C4-C5	-5.70	119.62	121.90
84	Aa	2356	A	C5-C6-N6	-5.70	119.14	123.70
84	Aa	2978	A	C5-C6-N6	-5.70	119.14	123.70
1	Ad	575	G	C1'-O4'-C4'	5.70	114.46	109.90
84	Aa	7	C	N3-C4-C5	-5.70	119.62	121.90
84	Aa	394	A	C5-C6-N6	-5.70	119.14	123.70
84	Aa	450	C	N3-C4-C5	-5.70	119.62	121.90
84	Aa	766	C	N3-C4-C5	-5.70	119.62	121.90
84	Aa	873	A	O4'-C1'-N9	5.70	112.76	108.20
84	Aa	1227	A	C5-C6-N1	-5.70	114.85	117.70
84	Aa	1409	G	O4'-C1'-N9	5.70	112.76	108.20
84	Aa	1906	A	C4-C5-C6	5.70	119.85	117.00
84	Aa	3209	U	P-O3'-C3'	5.70	126.54	119.70
1	Ad	1600	G	C3'-C2'-C1'	5.70	106.06	101.50
84	Aa	1217	G	O4'-C1'-N9	5.70	112.76	108.20
84	Aa	1501	A	O4'-C1'-N9	5.70	112.76	108.20
84	Aa	1907	A	C4-C5-C6	5.70	119.85	117.00
84	Aa	1930	G	C5-C6-O6	-5.70	125.18	128.60
84	Aa	3110	A	C5-C6-N1	-5.70	114.85	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3149	C	N3-C4-C5	-5.70	119.62	121.90
86	Ab	50	A	C5-N7-C8	5.70	106.75	103.90
1	Ad	1426	C	O4'-C1'-C2'	-5.70	100.10	105.80
17	BS	83	PHE	CB-CG-CD1	-5.70	116.81	120.80
42	CJ	1	MET	C-N-CA	5.70	135.94	121.70
78	CL	48	ARG	N-CA-CB	5.70	120.85	110.60
84	Aa	102	G	C5-C6-O6	-5.70	125.18	128.60
84	Aa	420	A	C5-C6-N1	-5.70	114.85	117.70
84	Aa	617	C	N3-C4-C5	-5.70	119.62	121.90
84	Aa	1392	U	P-O5'-C5'	-5.70	111.79	120.90
84	Aa	2079	A	C4-C5-C6	5.70	119.85	117.00
84	Aa	2594	A	C5-C6-N1	-5.70	114.85	117.70
84	Aa	292	A	C5-C6-N1	-5.69	114.85	117.70
84	Aa	1267	A	C4-C5-C6	5.69	119.85	117.00
84	Aa	1395	A	C5-C6-N6	-5.69	119.14	123.70
84	Aa	1837	A	C4-C5-C6	5.69	119.85	117.00
84	Aa	3027	G	O4'-C1'-N9	5.69	112.75	108.20
84	Aa	3034	A	C5-C6-N6	-5.69	119.14	123.70
84	Aa	3288	A	C4-C5-C6	5.69	119.85	117.00
84	Aa	257	C	N3-C4-N4	5.69	121.98	118.00
84	Aa	377	C	N3-C4-C5	-5.69	119.62	121.90
84	Aa	389	A	C4-C5-C6	5.69	119.85	117.00
84	Aa	679	C	N3-C4-C5	-5.69	119.62	121.90
84	Aa	709	G	C5-C6-O6	-5.69	125.18	128.60
84	Aa	1146	A	P-O5'-C5'	-5.69	111.79	120.90
84	Aa	1197	A	C4-C5-C6	5.69	119.85	117.00
84	Aa	1485	A	C5-C6-N6	-5.69	119.15	123.70
84	Aa	1715	C	N3-C4-C5	-5.69	119.62	121.90
84	Aa	1842	C	N3-C4-N4	5.69	121.98	118.00
84	Aa	1904	A	O4'-C1'-N9	5.69	112.75	108.20
84	Aa	2639	A	C4-C5-C6	5.69	119.85	117.00
84	Aa	2804	A	C5-C6-N6	-5.69	119.14	123.70
61	CM	17	TYR	N-CA-CB	5.69	120.84	110.60
84	Aa	331	G	C5-C6-O6	-5.69	125.19	128.60
84	Aa	615	A	C4-C5-C6	5.69	119.85	117.00
84	Aa	690	G	O4'-C1'-N9	5.69	112.75	108.20
84	Aa	1038	C	N3-C4-C5	-5.69	119.62	121.90
84	Aa	1434	G	C5-C6-O6	-5.69	125.19	128.60
84	Aa	2239	A	C5-C6-N1	-5.69	114.86	117.70
84	Aa	3054	G	C5-C6-O6	-5.69	125.19	128.60
85	Ac	121	A	C4-C5-C6	5.69	119.84	117.00
84	Aa	702	G	O4'-C1'-N9	5.69	112.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1593	C	N3-C4-C5	-5.69	119.62	121.90
84	Aa	2817	G	N1-C6-O6	5.69	123.31	119.90
1	Ad	71	C	O4'-C1'-C2'	-5.69	100.11	105.80
84	Aa	269	C	N3-C4-N4	5.69	121.98	118.00
84	Aa	416	A	O4'-C1'-N9	5.69	112.75	108.20
84	Aa	812	G	O4'-C1'-N9	5.69	112.75	108.20
84	Aa	907	A	C5-C6-N1	-5.69	114.86	117.70
84	Aa	1799	C	N3-C4-C5	-5.69	119.62	121.90
84	Aa	1914	C	N3-C4-C5	-5.69	119.62	121.90
84	Aa	2743	A	C5-C6-N1	-5.69	114.86	117.70
84	Aa	2815	A	C4-C5-C6	5.69	119.84	117.00
84	Aa	2975	G	C5-C6-O6	-5.69	125.19	128.60
84	Aa	3187	C	N3-C4-C5	-5.69	119.62	121.90
85	Ac	49	G	O4'-C1'-N9	5.69	112.75	108.20
84	Aa	337	C	N3-C4-N4	5.69	121.98	118.00
84	Aa	1136	A	C5-C6-N1	-5.69	114.86	117.70
84	Aa	2224	A	O4'-C1'-N9	5.69	112.75	108.20
84	Aa	2671	A	O4'-C1'-N9	5.69	112.75	108.20
84	Aa	2819	A	C5-C6-N1	-5.69	114.86	117.70
84	Aa	3385	G	C5-C6-O6	-5.69	125.19	128.60
84	Aa	1509	G	C5-C6-O6	-5.68	125.19	128.60
84	Aa	2089	A	C5-C6-N6	-5.68	119.15	123.70
84	Aa	2190	C	N3-C4-C5	-5.68	119.63	121.90
1	Ad	912	A	O4'-C1'-N9	5.68	112.75	108.20
1	Ad	1374	G	O4'-C1'-N9	5.68	112.75	108.20
84	Aa	228	C	N3-C4-N4	5.68	121.98	118.00
84	Aa	294	A	O4'-C1'-N9	5.68	112.75	108.20
84	Aa	3045	A	C5-C6-N1	-5.68	114.86	117.70
86	Ab	74	A	O4'-C1'-N9	5.68	112.75	108.20
84	Aa	210	G	O4'-C1'-N9	5.68	112.75	108.20
84	Aa	2564	G	O4'-C1'-N9	5.68	112.75	108.20
84	Aa	2575	C	N3-C4-N4	5.68	121.98	118.00
84	Aa	3264	C	N3-C4-C5	-5.68	119.63	121.90
1	Ad	801	U	C3'-C2'-C1'	-5.68	96.96	101.50
84	Aa	889	C	N3-C4-C5	-5.68	119.63	121.90
84	Aa	1249	A	C5-C6-N1	-5.68	114.86	117.70
84	Aa	1953	C	N3-C4-N4	5.68	121.98	118.00
84	Aa	1990	A	C4-C5-C6	5.68	119.84	117.00
84	Aa	2592	G	C5-C6-O6	-5.68	125.19	128.60
84	Aa	2703	G	C5-C6-O6	-5.68	125.19	128.60
84	Aa	2718	A	C5-C6-N6	-5.68	119.16	123.70
84	Aa	2868	C	N3-C4-N4	5.68	121.97	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3272	A	C4-C5-C6	5.68	119.84	117.00
50	CP	4	TYR	CB-CG-CD1	5.68	124.41	121.00
84	Aa	22	G	O4'-C1'-N9	5.68	112.74	108.20
84	Aa	1789	C	N3-C4-N4	5.68	121.97	118.00
84	Aa	3364	A	C5-C6-N1	-5.68	114.86	117.70
84	Aa	24	C	N3-C4-C5	-5.68	119.63	121.90
84	Aa	3067	G	O4'-C1'-N9	5.68	112.74	108.20
2	Ae	47	U	O4'-C1'-C2'	-5.67	100.13	105.80
71	CB	373	ARG	N-CA-CB	5.67	120.82	110.60
84	Aa	364	A	C5-C6-N6	-5.67	119.16	123.70
84	Aa	449	G	O4'-C1'-N9	5.67	112.74	108.20
84	Aa	893	C	N3-C4-C5	-5.67	119.63	121.90
84	Aa	1118	G	C4-N9-C1'	5.67	133.88	126.50
84	Aa	1134	G	O4'-C1'-N9	5.67	112.74	108.20
84	Aa	1793	A	C5-C6-N6	-5.67	119.16	123.70
84	Aa	1883	A	O4'-C1'-N9	5.67	112.74	108.20
84	Aa	2217	A	C5-C6-N6	-5.67	119.16	123.70
85	Ac	140	A	C4-C5-C6	5.67	119.84	117.00
84	Aa	235	G	O4'-C1'-N9	5.67	112.74	108.20
84	Aa	361	G	C5-C6-O6	-5.67	125.20	128.60
84	Aa	363	A	C5-C6-N1	-5.67	114.86	117.70
84	Aa	2175	A	C5-C6-N1	-5.67	114.86	117.70
84	Aa	2489	A	C5-C6-N6	-5.67	119.16	123.70
84	Aa	2655	U	C5'-C4'-C3'	-5.67	106.92	116.00
84	Aa	3078	A	C4-C5-C6	5.67	119.84	117.00
1	Ad	1598	G	C5'-C4'-O4'	5.67	115.91	109.10
84	Aa	999	U	O4'-C1'-N1	5.67	112.74	108.20
84	Aa	1872	C	N3-C4-C5	-5.67	119.63	121.90
85	Ac	52	A	C4-C5-C6	5.67	119.84	117.00
86	Ab	15	C	N3-C4-C5	-5.67	119.63	121.90
84	Aa	1570	C	N3-C4-C5	-5.67	119.63	121.90
84	Aa	2650	A	C4-C5-C6	5.67	119.83	117.00
84	Aa	2761	A	C5-C6-N6	-5.67	119.16	123.70
1	Ad	815	A	O4'-C1'-N9	5.67	112.73	108.20
84	Aa	211	A	O4'-C1'-N9	5.67	112.73	108.20
84	Aa	698	A	C4-C5-C6	5.67	119.83	117.00
84	Aa	1156	A	C5-C6-N1	-5.67	114.86	117.70
84	Aa	1254	A	O4'-C1'-N9	5.67	112.73	108.20
84	Aa	2320	A	O4'-C1'-N9	5.67	112.73	108.20
84	Aa	3152	C	N3-C4-N4	5.67	121.97	118.00
1	Ad	847	U	C5'-C4'-O4'	5.67	115.90	109.10
84	Aa	578	C	O4'-C1'-N1	5.67	112.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	661	A	O4'-C1'-N9	5.67	112.73	108.20
84	Aa	975	G	C5-C6-O6	-5.67	125.20	128.60
84	Aa	1926	A	C4-C5-C6	5.67	119.83	117.00
84	Aa	2214	A	C5-C6-N6	-5.67	119.17	123.70
84	Aa	2724	A	C5-C6-N1	-5.67	114.87	117.70
84	Aa	2807	G	C5-C6-O6	-5.67	125.20	128.60
84	Aa	2942	A	C5-C6-N1	-5.67	114.87	117.70
84	Aa	3122	U	P-O3'-C3'	5.67	126.50	119.70
1	Ad	1226	U	C1'-O4'-C4'	5.67	114.43	109.90
84	Aa	437	C	N3-C4-C5	-5.67	119.63	121.90
84	Aa	758	A	C4-C5-C6	5.67	119.83	117.00
84	Aa	883	G	O4'-C1'-N9	5.67	112.73	108.20
1	Ad	289	G	O4'-C1'-C2'	5.66	112.70	107.60
1	Ad	936	C	N1-C1'-C2'	5.66	121.36	114.00
1	Ad	1753	U	N1-C1'-C2'	-5.66	105.77	112.00
84	Aa	71	C	N3-C4-N4	5.66	121.96	118.00
84	Aa	393	A	O4'-C1'-N9	5.66	112.73	108.20
84	Aa	1332	C	N3-C4-C5	-5.66	119.64	121.90
84	Aa	1397	A	C5-C6-N1	-5.66	114.87	117.70
84	Aa	1496	G	O4'-C1'-N9	5.66	112.73	108.20
84	Aa	1543	A	C5-C6-N1	-5.66	114.87	117.70
84	Aa	1883	A	C5-C6-N1	-5.66	114.87	117.70
84	Aa	2247	A	C5-C6-N6	-5.66	119.17	123.70
84	Aa	2458	A	O4'-C1'-N9	5.66	112.73	108.20
85	Ac	21	C	N3-C4-C5	-5.66	119.63	121.90
84	Aa	1306	A	C5-C6-N6	-5.66	119.17	123.70
84	Aa	1587	G	C5-C6-O6	-5.66	125.20	128.60
1	Ad	548	C	O4'-C1'-N1	5.66	112.73	108.20
84	Aa	563	C	N3-C4-N4	5.66	121.96	118.00
84	Aa	1501	A	C5-C6-N1	-5.66	114.87	117.70
84	Aa	1906	A	O4'-C1'-N9	5.66	112.73	108.20
84	Aa	1918	A	C4-C5-C6	5.66	119.83	117.00
84	Aa	1971	A	O4'-C1'-N9	5.66	112.73	108.20
1	Ad	297	U	C1'-O4'-C4'	-5.66	105.37	109.90
84	Aa	1643	A	C5-C6-N6	-5.66	119.17	123.70
84	Aa	1794	A	O4'-C1'-N9	5.66	112.73	108.20
84	Aa	1800	G	C5-C6-O6	-5.66	125.20	128.60
84	Aa	2347	A	C4-C5-C6	5.66	119.83	117.00
84	Aa	2518	A	C5-C6-N6	-5.66	119.17	123.70
84	Aa	2899	A	O4'-C1'-N9	5.66	112.73	108.20
84	Aa	2975	G	O4'-C1'-N9	5.66	112.73	108.20
85	Ac	61	A	C4-C5-C6	5.66	119.83	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1727	A	C5-C6-N6	-5.66	119.17	123.70
84	Aa	1971	A	C4-C5-C6	5.66	119.83	117.00
84	Aa	2330	C	N3-C4-C5	-5.66	119.64	121.90
84	Aa	2367	A	C4-C5-C6	5.66	119.83	117.00
84	Aa	3162	C	N3-C4-C5	-5.66	119.64	121.90
1	Ad	1768	U	C1'-O4'-C4'	-5.66	105.38	109.90
84	Aa	66	A	C4-C5-C6	5.66	119.83	117.00
84	Aa	371	A	C5-C6-N1	-5.66	114.87	117.70
84	Aa	413	G	O4'-C1'-N9	5.66	112.72	108.20
84	Aa	907	A	O4'-C1'-N9	5.66	112.72	108.20
84	Aa	1001	A	C4-C5-C6	5.66	119.83	117.00
84	Aa	1026	A	C4-C5-C6	5.66	119.83	117.00
84	Aa	1255	A	C5-C6-N1	-5.66	114.87	117.70
84	Aa	1318	C	C5-C6-N1	5.66	123.83	121.00
1	Ad	1688	G	C1'-O4'-C4'	5.65	114.42	109.90
84	Aa	39	A	C4-C5-C6	5.65	119.83	117.00
84	Aa	1576	C	N3-C4-C5	-5.65	119.64	121.90
84	Aa	2427	C	N3-C4-N4	5.65	121.96	118.00
1	Ad	1258	U	C5'-C4'-O4'	5.65	115.88	109.10
79	CE	124	TYR	CB-CG-CD1	5.65	124.39	121.00
84	Aa	203	C	N3-C4-C5	-5.65	119.64	121.90
84	Aa	465	C	N3-C4-C5	-5.65	119.64	121.90
84	Aa	2462	G	C5'-C4'-C3'	5.65	125.05	116.00
84	Aa	2574	A	C5-C6-N6	-5.65	119.18	123.70
84	Aa	2700	A	O4'-C1'-N9	5.65	112.72	108.20
84	Aa	3104	A	C5-C6-N1	-5.65	114.87	117.70
84	Aa	3196	C	N3-C4-C5	-5.65	119.64	121.90
1	Ad	108	C	C1'-O4'-C4'	-5.65	105.38	109.90
1	Ad	336	U	C1'-O4'-C4'	5.65	114.42	109.90
1	Ad	1614	C	C1'-O4'-C4'	-5.65	105.38	109.90
84	Aa	1562	A	O5'-C5'-C4'	-5.65	100.97	111.70
84	Aa	1879	A	C4-C5-C6	5.65	119.83	117.00
84	Aa	1949	G	O4'-C1'-N9	5.65	112.72	108.20
84	Aa	2058	C	N3-C4-C5	-5.65	119.64	121.90
84	Aa	2217	A	C5-C6-N1	-5.65	114.88	117.70
84	Aa	2228	A	C5-C6-N6	-5.65	119.18	123.70
84	Aa	2819	A	C4-C5-C6	5.65	119.83	117.00
84	Aa	3362	A	C5-C6-N1	-5.65	114.88	117.70
85	Ac	109	A	C5-C6-N6	-5.65	119.18	123.70
55	Cc	102	SER	N-CA-CB	5.65	118.97	110.50
84	Aa	1248	A	C4-C5-C6	5.65	119.83	117.00
84	Aa	2114	A	C5-C6-N6	-5.65	119.18	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2372	A	C4-C5-C6	5.65	119.82	117.00
84	Aa	3020	C	N3-C4-C5	-5.65	119.64	121.90
1	Ad	595	A	C1'-O4'-C4'	5.65	114.42	109.90
1	Ad	624	A	O4'-C1'-N9	5.65	112.72	108.20
79	CE	50	PHE	CB-CG-CD2	-5.65	116.85	120.80
84	Aa	1321	A	C4-C5-C6	5.65	119.82	117.00
84	Aa	1642	G	C5-C6-O6	-5.65	125.21	128.60
84	Aa	1680	A	C4-C5-C6	5.65	119.82	117.00
84	Aa	1775	C	N3-C4-N4	5.65	121.95	118.00
84	Aa	2272	C	N3-C4-N4	5.65	121.95	118.00
84	Aa	2805	A	C5-C6-N6	-5.65	119.18	123.70
84	Aa	3107	A	C5-C6-N6	-5.65	119.18	123.70
85	Ac	14	C	N3-C4-C5	-5.65	119.64	121.90
85	Ac	111	G	O4'-C1'-N9	5.65	112.72	108.20
1	Ad	158	C	C4'-C3'-C2'	-5.65	96.95	102.60
1	Ad	1294	U	O4'-C1'-C2'	-5.65	100.15	105.80
1	Ad	1768	U	O4'-C1'-N1	5.65	112.72	108.20
1	Ad	1801	A	O4'-C1'-C2'	-5.65	100.15	105.80
1	Ad	216	A	O4'-C1'-C2'	5.64	112.68	107.60
1	Ad	979	A	O4'-C1'-N9	5.64	112.72	108.20
84	Aa	112	C	N3-C4-N4	5.64	121.95	118.00
84	Aa	579	G	O4'-C1'-N9	5.64	112.72	108.20
84	Aa	788	G	O4'-C1'-N9	5.64	112.72	108.20
84	Aa	846	A	C4-C5-C6	5.64	119.82	117.00
84	Aa	1100	G	O4'-C1'-N9	5.64	112.72	108.20
84	Aa	1204	A	C5-C6-N6	-5.64	119.19	123.70
84	Aa	1304	G	O4'-C1'-N9	5.64	112.72	108.20
84	Aa	1633	C	N3-C4-N4	5.64	121.95	118.00
84	Aa	2014	A	C5-C6-N6	-5.64	119.18	123.70
84	Aa	2724	A	C5-C6-N6	-5.64	119.18	123.70
84	Aa	2814	C	N3-C4-C5	-5.64	119.64	121.90
84	Aa	3346	C	N3-C4-N4	5.64	121.95	118.00
1	Ad	923	U	C3'-C2'-C1'	5.64	106.01	101.50
84	Aa	219	A	C5-C6-N6	-5.64	119.19	123.70
84	Aa	863	G	C5-C6-O6	-5.64	125.22	128.60
84	Aa	1917	A	O4'-C1'-N9	5.64	112.71	108.20
84	Aa	2909	A	O4'-C1'-N9	5.64	112.72	108.20
84	Aa	3269	C	N3-C4-C5	-5.64	119.64	121.90
86	Ab	94	C	C6-N1-C2	5.64	122.56	120.30
48	CD	199	ILE	N-CA-CB	5.64	123.78	110.80
84	Aa	558	G	C5-C6-O6	-5.64	125.22	128.60
84	Aa	886	A	O4'-C1'-N9	5.64	112.71	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1318	C	C6-N1-C2	-5.64	118.04	120.30
1	Ad	205	U	N1-C1'-C2'	-5.64	105.80	112.00
84	Aa	108	A	P-O3'-C3'	5.64	126.47	119.70
84	Aa	923	A	C4-C5-C6	5.64	119.82	117.00
84	Aa	1015	A	C4-C5-C6	5.64	119.82	117.00
84	Aa	2371	A	C5-C6-N1	-5.64	114.88	117.70
84	Aa	2492	C	N3-C4-N4	5.64	121.95	118.00
86	Ab	36	C	N3-C4-N4	5.64	121.95	118.00
1	Ad	820	A	O4'-C1'-C2'	5.64	112.67	107.60
84	Aa	2304	A	O4'-C1'-N9	5.64	112.71	108.20
84	Aa	2598	A	C5-C6-N1	-5.64	114.88	117.70
85	Ac	97	G	O4'-C1'-N9	5.64	112.71	108.20
1	Ad	203	A	O4'-C1'-N9	5.64	112.71	108.20
1	Ad	329	G	C4'-C3'-C2'	-5.64	96.96	102.60
84	Aa	560	C	N3-C4-N4	5.64	121.95	118.00
84	Aa	631	C	N3-C4-C5	-5.64	119.64	121.90
84	Aa	1084	G	O4'-C1'-N9	5.64	112.71	108.20
84	Aa	1160	G	C5-C6-O6	-5.64	125.22	128.60
84	Aa	1551	C	N3-C4-N4	5.64	121.95	118.00
84	Aa	2088	C	O4'-C4'-C3'	-5.64	98.36	104.00
84	Aa	2853	A	C5-C6-N6	-5.64	119.19	123.70
84	Aa	3022	A	C5-C6-N6	-5.64	119.19	123.70
1	Ad	465	G	C3'-C2'-C1'	5.63	106.01	101.50
1	Ad	507	G	O4'-C1'-C2'	5.63	112.67	107.60
1	Ad	1675	G	N9-C1'-C2'	-5.63	105.80	112.00
84	Aa	446	C	N3-C4-C5	-5.63	119.65	121.90
84	Aa	502	G	O4'-C1'-N9	5.63	112.71	108.20
84	Aa	563	C	N3-C4-C5	-5.63	119.65	121.90
84	Aa	1109	G	C5-C6-O6	-5.63	125.22	128.60
84	Aa	1329	G	C5-C6-O6	-5.63	125.22	128.60
84	Aa	1534	C	N3-C4-N4	5.63	121.94	118.00
84	Aa	1714	A	C5-C6-N1	-5.63	114.88	117.70
84	Aa	1934	U	O4'-C1'-N1	5.63	112.71	108.20
84	Aa	2756	G	O4'-C1'-N9	5.63	112.71	108.20
84	Aa	1860	A	C4-C5-C6	5.63	119.82	117.00
84	Aa	1861	A	O4'-C1'-N9	5.63	112.71	108.20
84	Aa	3034	A	O4'-C1'-N9	5.63	112.71	108.20
1	Ad	732	G	N9-C1'-C2'	-5.63	105.81	112.00
1	Ad	1159	G	C5'-C4'-O4'	5.63	115.86	109.10
84	Aa	633	C	N3-C4-N4	5.63	121.94	118.00
84	Aa	1182	A	C4-C5-C6	5.63	119.82	117.00
84	Aa	1206	A	C5-C6-N1	-5.63	114.88	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1221	A	C5-C6-N1	-5.63	114.89	117.70
84	Aa	1784	C	N3-C4-C5	-5.63	119.65	121.90
84	Aa	3077	C	N3-C4-N4	5.63	121.94	118.00
86	Ab	78	C	C5-C6-N1	5.63	123.82	121.00
1	Ad	276	G	C4'-C3'-C2'	-5.63	96.97	102.60
84	Aa	10	C	N3-C4-C5	-5.63	119.65	121.90
84	Aa	60	G	O4'-C1'-N9	5.63	112.70	108.20
84	Aa	291	C	N3-C4-C5	-5.63	119.65	121.90
84	Aa	880	C	N3-C4-N4	5.63	121.94	118.00
84	Aa	1732	G	C5-C6-O6	-5.63	125.22	128.60
84	Aa	1900	C	N3-C4-N4	5.63	121.94	118.00
84	Aa	2223	A	C5-C6-N6	-5.63	119.20	123.70
24	BW	15	TYR	CB-CG-CD1	5.63	124.38	121.00
84	Aa	222	C	O4'-C1'-N1	5.63	112.70	108.20
84	Aa	317	G	O4'-C1'-N9	5.63	112.70	108.20
84	Aa	669	G	C5-C6-O6	-5.63	125.22	128.60
84	Aa	919	G	O4'-C1'-N9	5.63	112.70	108.20
84	Aa	2040	G	C5-C6-O6	-5.63	125.22	128.60
84	Aa	2741	G	O4'-C1'-N9	5.63	112.70	108.20
84	Aa	3327	A	O4'-C1'-N9	5.63	112.70	108.20
1	Ad	141	G	N9-C1'-C2'	5.63	121.32	114.00
22	BZ	34	LYS	N-CA-CB	5.63	120.73	110.60
84	Aa	1079	G	N3-C2-N2	5.63	123.84	119.90
84	Aa	1542	A	O4'-C1'-N9	5.63	112.70	108.20
84	Aa	2173	G	C4-N9-C1'	-5.63	119.19	126.50
84	Aa	2203	A	C5-C6-N6	-5.63	119.20	123.70
84	Aa	2629	C	N3-C4-C5	-5.63	119.65	121.90
84	Aa	2740	C	N3-C4-N4	5.63	121.94	118.00
84	Aa	3079	G	P-O3'-C3'	5.63	126.45	119.70
84	Aa	3128	A	C5-C6-N1	-5.63	114.89	117.70
80	Cf	1	MET	CG-SD-CE	-5.62	91.20	100.20
84	Aa	651	A	C4-C5-C6	5.62	119.81	117.00
84	Aa	2058	C	N3-C4-N4	5.62	121.94	118.00
85	Ac	129	C	O4'-C1'-N1	5.62	112.70	108.20
41	CA	119	HIS	N-CA-CB	5.62	120.72	110.60
84	Aa	2743	A	O4'-C1'-N9	5.62	112.70	108.20
85	Ac	33	A	C5-C6-N1	-5.62	114.89	117.70
1	Ad	249	G	C1'-O4'-C4'	-5.62	105.40	109.90
1	Ad	448	C	C1'-O4'-C4'	5.62	114.40	109.90
1	Ad	1053	C	O4'-C1'-N1	5.62	112.70	108.20
1	Ad	1272	G	O4'-C1'-N9	5.62	112.70	108.20
1	Ad	1569	U	C1'-O4'-C4'	5.62	114.40	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1785	U	O4'-C1'-N1	5.62	112.70	108.20
84	Aa	230	G	C5-C6-O6	-5.62	125.23	128.60
84	Aa	232	C	N3-C4-N4	5.62	121.94	118.00
84	Aa	687	C	N3-C4-C5	-5.62	119.65	121.90
84	Aa	1051	A	C4-C5-C6	5.62	119.81	117.00
84	Aa	1099	G	N1-C6-O6	5.62	123.27	119.90
84	Aa	1742	G	C5-C6-O6	-5.62	125.23	128.60
84	Aa	1846	A	C5-C6-N6	-5.62	119.20	123.70
84	Aa	2306	G	O4'-C1'-N9	5.62	112.70	108.20
84	Aa	3141	G	O4'-C1'-N9	5.62	112.70	108.20
84	Aa	3339	G	C5-C6-O6	-5.62	125.23	128.60
86	Ab	1	G	C4-C5-C6	5.62	122.17	118.80
1	Ad	187	C	O4'-C1'-C2'	-5.62	100.18	105.80
60	Co	59	HIS	N-CA-CB	5.62	120.72	110.60
84	Aa	58	G	C5-C6-O6	-5.62	125.23	128.60
84	Aa	79	C	N3-C4-C5	-5.62	119.65	121.90
84	Aa	2414	C	N3-C4-C5	-5.62	119.65	121.90
84	Aa	3173	A	C5-C6-N6	-5.62	119.20	123.70
1	Ad	488	C	P-O3'-C3'	5.62	126.44	119.70
84	Aa	681	A	C5-C6-N6	-5.62	119.20	123.70
84	Aa	2239	A	C5-C6-N6	-5.62	119.20	123.70
84	Aa	2633	C	N3-C4-C5	-5.62	119.65	121.90
84	Aa	3171	C	C2-N1-C1'	5.62	124.98	118.80
85	Ac	154	G	P-O5'-C5'	5.62	129.89	120.90
84	Aa	298	G	O4'-C1'-N9	5.62	112.69	108.20
84	Aa	1182	A	O4'-C1'-N9	5.62	112.69	108.20
84	Aa	1651	A	C5-C6-N6	-5.62	119.21	123.70
84	Aa	1932	A	C4-C5-C6	5.62	119.81	117.00
84	Aa	2254	A	O4'-C1'-N9	5.62	112.69	108.20
84	Aa	2294	A	C5-C6-N1	-5.62	114.89	117.70
1	Ad	1780	U	C1'-O4'-C4'	5.62	114.39	109.90
70	Cq	140	PHE	CB-CG-CD2	-5.62	116.87	120.80
84	Aa	1065	A	C4-C5-C6	5.62	119.81	117.00
84	Aa	1274	A	O4'-C1'-N9	5.62	112.69	108.20
84	Aa	2750	A	O4'-C1'-N9	5.62	112.69	108.20
84	Aa	2945	G	O4'-C1'-N9	5.62	112.69	108.20
86	Ab	74	A	C5-C6-N6	-5.62	119.21	123.70
1	Ad	970	U	O4'-C1'-N1	5.61	112.69	108.20
1	Ad	1013	G	O4'-C1'-C2'	5.61	112.65	107.60
71	CB	353	LEU	N-CA-C	-5.61	95.84	111.00
84	Aa	198	A	C4-C5-C6	5.61	119.81	117.00
84	Aa	238	C	N3-C4-N4	5.61	121.93	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	854	C	N3-C4-N4	5.61	121.93	118.00
84	Aa	913	G	C5-C6-O6	-5.61	125.23	128.60
84	Aa	1028	G	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	1143	G	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	1260	G	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	1385	C	N3-C4-N4	5.61	121.93	118.00
84	Aa	2119	A	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	2297	G	C5-C6-O6	-5.61	125.23	128.60
84	Aa	3268	C	O4'-C1'-N1	5.61	112.69	108.20
85	Ac	90	C	N3-C4-N4	5.61	121.93	118.00
84	Aa	696	A	C5-C6-N6	-5.61	119.21	123.70
84	Aa	1104	C	N3-C4-N4	5.61	121.93	118.00
84	Aa	1343	C	O4'-C1'-N1	5.61	112.69	108.20
84	Aa	1511	C	N3-C4-N4	5.61	121.93	118.00
84	Aa	2436	G	O4'-C1'-N9	5.61	112.69	108.20
1	Ad	523	C	C3'-C2'-C1'	5.61	105.99	101.50
1	Ad	639	G	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	382	A	C5-C6-N6	-5.61	119.21	123.70
84	Aa	928	A	C5-C6-N6	-5.61	119.21	123.70
84	Aa	1174	G	N3-C2-N2	5.61	123.83	119.90
84	Aa	1436	A	C5-C6-N1	-5.61	114.89	117.70
84	Aa	1937	C	N3-C4-N4	5.61	121.93	118.00
84	Aa	2219	A	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	2800	C	N3-C4-N4	5.61	121.93	118.00
84	Aa	3018	A	C5-C6-N1	-5.61	114.89	117.70
84	Aa	3018	A	C5-C6-N6	-5.61	119.21	123.70
84	Aa	3169	C	N3-C4-N4	5.61	121.93	118.00
84	Aa	3276	G	C5-C6-O6	-5.61	125.23	128.60
1	Ad	1005	C	N1-C1'-C2'	-5.61	105.83	112.00
1	Ad	1385	C	O3'-P-O5'	-5.61	93.34	104.00
1	Ad	1516	C	N1-C1'-C2'	5.61	121.29	114.00
84	Aa	34	G	C5-C6-O6	-5.61	125.23	128.60
84	Aa	1462	C	N3-C4-C5	-5.61	119.66	121.90
85	Ac	158	C	N3-C4-C5	-5.61	119.66	121.90
84	Aa	714	G	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	1146	A	C4-C5-C6	5.61	119.80	117.00
84	Aa	1443	G	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	1772	G	O4'-C1'-N9	5.61	112.69	108.20
84	Aa	1809	A	C5-C6-N6	-5.61	119.21	123.70
84	Aa	3110	A	C5-C6-N6	-5.61	119.21	123.70
86	Ab	97	G	C8-N9-C4	-5.61	104.16	106.40
84	Aa	253	G	N1-C2-N3	-5.61	120.54	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1252	C	N3-C4-C5	-5.61	119.66	121.90
84	Aa	1353	A	C5-C6-N6	-5.61	119.22	123.70
84	Aa	2589	G	O4'-C1'-N9	5.61	112.68	108.20
84	Aa	3056	C	O4'-C1'-N1	5.61	112.69	108.20
84	Aa	3074	A	C5-C6-N6	-5.61	119.22	123.70
85	Ac	33	A	C4-C5-C6	5.61	119.80	117.00
1	Ad	923	U	P-O3'-C3'	5.60	126.42	119.70
22	BZ	18	SER	C-N-CA	5.60	134.07	122.30
84	Aa	741	G	O4'-C1'-N9	5.60	112.68	108.20
84	Aa	862	G	O4'-C1'-N9	5.60	112.68	108.20
84	Aa	1820	C	N3-C4-N4	5.60	121.92	118.00
85	Ac	88	A	C5-C6-N1	-5.60	114.90	117.70
86	Ab	31	G	C5-C6-N1	-5.60	108.70	111.50
1	Ad	283	G	P-O3'-C3'	5.60	126.42	119.70
37	CG	233	VAL	N-CA-CB	5.60	123.83	111.50
84	Aa	411	C	N3-C4-C5	-5.60	119.66	121.90
84	Aa	457	C	N3-C4-N4	5.60	121.92	118.00
84	Aa	608	G	P-O5'-C5'	5.60	129.86	120.90
84	Aa	633	C	N3-C4-C5	-5.60	119.66	121.90
84	Aa	899	A	C4-C5-C6	5.60	119.80	117.00
84	Aa	1813	C	N3-C4-C5	-5.60	119.66	121.90
84	Aa	2458	A	C5-C6-N6	-5.60	119.22	123.70
86	Ab	41	G	N3-C2-N2	5.60	123.82	119.90
1	Ad	333	G	O4'-C1'-C2'	5.60	112.64	107.60
23	Bc	2	ASP	N-CA-CB	5.60	120.68	110.60
84	Aa	23	A	C5-C6-N6	-5.60	119.22	123.70
84	Aa	99	A	C5-C6-N1	-5.60	114.90	117.70
84	Aa	229	G	N3-C2-N2	5.60	123.82	119.90
84	Aa	574	C	N3-C4-C5	-5.60	119.66	121.90
84	Aa	1353	A	O4'-C1'-N9	5.60	112.68	108.20
84	Aa	1527	A	C5-C6-N6	-5.60	119.22	123.70
56	Cd	102	THR	N-CA-CB	5.60	120.94	110.30
84	Aa	1200	A	C5-C6-N6	-5.60	119.22	123.70
84	Aa	1790	A	O4'-C1'-N9	5.60	112.68	108.20
84	Aa	2141	A	C5-C6-N1	-5.60	114.90	117.70
84	Aa	2533	A	C5-C6-N6	-5.60	119.22	123.70
84	Aa	3232	C	N3-C4-N4	5.60	121.92	118.00
84	Aa	3353	G	O4'-C1'-N9	5.60	112.68	108.20
84	Aa	3382	A	O4'-C1'-N9	5.60	112.68	108.20
1	Ad	71	C	O4'-C1'-N1	5.60	112.68	108.20
24	BW	65	LEU	N-CA-CB	5.60	121.59	110.40
25	Bd	33	LYS	N-CA-CB	5.60	120.67	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	306	A	C5-C6-N1	-5.60	114.90	117.70
84	Aa	467	C	N3-C4-N4	5.60	121.92	118.00
84	Aa	1112	C	C2-N3-C4	5.60	122.70	119.90
84	Aa	1788	C	O4'-C1'-N1	5.60	112.68	108.20
84	Aa	2390	G	O4'-C1'-N9	5.60	112.68	108.20
84	Aa	2544	C	N3-C4-N4	5.60	121.92	118.00
84	Aa	2938	A	C4-C5-C6	5.60	119.80	117.00
84	Aa	738	A	O4'-C1'-N9	5.60	112.68	108.20
84	Aa	1962	C	N3-C4-N4	5.60	121.92	118.00
84	Aa	2230	C	N3-C4-N4	5.60	121.92	118.00
84	Aa	3034	A	C5-C6-N1	-5.60	114.90	117.70
1	Ad	462	G	O4'-C1'-C2'	5.59	112.64	107.60
1	Ad	1707	G	O4'-C1'-N9	5.59	112.68	108.20
71	CB	70	LYS	N-CA-CB	5.59	120.67	110.60
84	Aa	173	C	N3-C4-C5	-5.59	119.66	121.90
84	Aa	1485	A	P-O5'-C5'	-5.59	111.95	120.90
84	Aa	1988	G	O4'-C1'-N9	5.59	112.68	108.20
85	Ac	132	C	N3-C4-C5	-5.59	119.66	121.90
2	Ae	28	G	C4'-C3'-C2'	-5.59	97.01	102.60
84	Aa	1044	A	C4-C5-C6	5.59	119.80	117.00
84	Aa	2504	A	C5-C6-N1	-5.59	114.90	117.70
85	Ac	53	A	C4-C5-C6	5.59	119.80	117.00
86	Ab	77	A	O4'-C1'-N9	5.59	112.67	108.20
86	Ab	104	C	N3-C4-C5	-5.59	119.66	121.90
84	Aa	619	C	N3-C4-N4	5.59	121.91	118.00
84	Aa	676	G	C5-C6-O6	-5.59	125.25	128.60
84	Aa	914	C	N3-C4-N4	5.59	121.91	118.00
84	Aa	1321	A	O4'-C1'-N9	5.59	112.67	108.20
84	Aa	1889	G	O4'-C1'-N9	5.59	112.67	108.20
84	Aa	2005	C	N3-C4-N4	5.59	121.91	118.00
84	Aa	2056	C	N3-C4-C5	-5.59	119.66	121.90
84	Aa	2298	A	C5-C6-N1	-5.59	114.91	117.70
84	Aa	3073	A	C5-C6-N6	-5.59	119.23	123.70
1	Ad	757	G	O4'-C1'-C2'	5.59	112.63	107.60
1	Ad	1772	A	O4'-C1'-C2'	-5.59	100.21	105.80
71	CB	61	GLU	N-CA-CB	5.59	120.66	110.60
84	Aa	245	C	N3-C4-C5	-5.59	119.66	121.90
84	Aa	304	A	C5-C6-N1	-5.59	114.91	117.70
84	Aa	384	A	C4-C5-C6	5.59	119.80	117.00
84	Aa	1270	G	C5-C6-O6	-5.59	125.25	128.60
84	Aa	1324	C	N3-C4-N4	5.59	121.91	118.00
84	Aa	1880	A	C5-C6-N1	-5.59	114.91	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2151	G	P-O3'-C3'	5.59	126.41	119.70
84	Aa	2546	C	N3-C4-N4	5.59	121.91	118.00
84	Aa	2898	A	C5-C6-N6	-5.59	119.23	123.70
84	Aa	2993	A	C5-C6-N6	-5.59	119.23	123.70
1	Ad	1252	C	N1-C1'-C2'	5.59	121.27	114.00
1	Ad	1418	G	O4'-C1'-C2'	-5.59	100.21	105.80
75	CI	119	PHE	N-CA-CB	5.59	120.66	110.60
84	Aa	543	C	N3-C4-C5	-5.59	119.67	121.90
86	Ab	16	A	O4'-C1'-N9	5.59	112.67	108.20
1	Ad	42	G	O4'-C1'-N9	5.59	112.67	108.20
1	Ad	174	C	N1-C1'-C2'	-5.59	105.86	112.00
1	Ad	1345	G	O4'-C1'-N9	5.59	112.67	108.20
84	Aa	186	A	C5-C6-N6	-5.59	119.23	123.70
84	Aa	405	A	C5-C6-N1	-5.59	114.91	117.70
84	Aa	490	G	O4'-C1'-N9	5.59	112.67	108.20
84	Aa	520	G	C5-C6-O6	-5.59	125.25	128.60
84	Aa	562	G	C5-C6-O6	-5.59	125.25	128.60
84	Aa	695	G	O4'-C1'-N9	5.59	112.67	108.20
84	Aa	703	G	O4'-C1'-N9	5.59	112.67	108.20
84	Aa	860	G	C5-C6-O6	-5.59	125.25	128.60
84	Aa	1003	G	O4'-C1'-N9	5.59	112.67	108.20
84	Aa	2036	C	N3-C4-C5	-5.59	119.67	121.90
84	Aa	2193	A	C5-C6-N6	-5.59	119.23	123.70
84	Aa	2201	G	C5-C6-O6	-5.58	125.25	128.60
84	Aa	2545	C	O4'-C1'-N1	5.58	112.67	108.20
14	BQ	32	ARG	N-CA-CB	5.58	120.65	110.60
84	Aa	384	A	O4'-C1'-N9	5.58	112.67	108.20
84	Aa	688	G	N3-C2-N2	5.58	123.81	119.90
84	Aa	801	G	C5-C6-O6	-5.58	125.25	128.60
84	Aa	1072	C	N3-C4-C5	-5.58	119.67	121.90
84	Aa	1418	C	N3-C4-C5	-5.58	119.67	121.90
84	Aa	1906	A	C5-C6-N6	-5.58	119.23	123.70
84	Aa	2208	A	C5-C6-N1	-5.58	114.91	117.70
1	Ad	287	C	O4'-C1'-C2'	-5.58	100.22	105.80
1	Ad	455	G	C3'-C2'-C1'	-5.58	97.03	101.50
1	Ad	1311	U	N1-C1'-C2'	-5.58	105.86	112.00
1	Ad	1616	U	P-O3'-C3'	5.58	126.40	119.70
41	CA	67	PHE	CB-CG-CD2	5.58	124.71	120.80
84	Aa	568	C	N3-C4-N4	5.58	121.91	118.00
84	Aa	1254	A	C5-C6-N6	-5.58	119.23	123.70
84	Aa	1784	C	N3-C4-N4	5.58	121.91	118.00
84	Aa	2101	A	C5-C6-N6	-5.58	119.23	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2360	A	C5-C6-N1	-5.58	114.91	117.70
84	Aa	2904	A	C4-C5-C6	5.58	119.79	117.00
85	Ac	143	C	N3-C4-C5	-5.58	119.67	121.90
84	Aa	122	A	O4'-C1'-N9	5.58	112.66	108.20
84	Aa	2439	A	C5-C6-N1	-5.58	114.91	117.70
86	Ab	72	G	C4-N9-C1'	5.58	133.75	126.50
1	Ad	76	U	C2'-C3'-O3'	5.58	122.62	113.70
1	Ad	1301	G	C1'-O4'-C4'	5.58	114.36	109.90
84	Aa	303	U	O4'-C1'-N1	5.58	112.66	108.20
84	Aa	705	A	C4-C5-C6	5.58	119.79	117.00
84	Aa	1820	C	N3-C4-C5	-5.58	119.67	121.90
85	Ac	95	G	O4'-C1'-N9	5.58	112.66	108.20
1	Ad	926	G	C1'-O4'-C4'	-5.58	105.44	109.90
1	Ad	1132	G	P-O5'-C5'	5.58	129.82	120.90
84	Aa	19	C	N3-C4-C5	-5.58	119.67	121.90
84	Aa	61	A	C5-C6-N1	-5.58	114.91	117.70
84	Aa	108	A	C4-C5-C6	5.58	119.79	117.00
84	Aa	364	A	C5-C6-N1	-5.58	114.91	117.70
84	Aa	1410	A	C5-C6-N6	-5.58	119.24	123.70
84	Aa	2371	A	C5-C6-N6	-5.58	119.24	123.70
84	Aa	2571	C	N3-C4-N4	5.58	121.90	118.00
84	Aa	2973	A	C5-C6-N6	-5.58	119.24	123.70
84	Aa	3207	C	N3-C4-N4	5.58	121.90	118.00
84	Aa	3268	C	N3-C4-N4	5.58	121.90	118.00
84	Aa	3311	C	N3-C4-C5	-5.58	119.67	121.90
1	Ad	798	C	O4'-C1'-N1	5.57	112.66	108.20
84	Aa	106	G	C5-C6-O6	-5.57	125.26	128.60
84	Aa	513	C	N3-C4-C5	-5.57	119.67	121.90
84	Aa	1107	G	P-O5'-C5'	5.57	129.82	120.90
84	Aa	1350	G	C5-C6-O6	-5.57	125.26	128.60
84	Aa	1606	C	N3-C4-C5	-5.57	119.67	121.90
84	Aa	1922	C	N3-C4-N4	5.57	121.90	118.00
84	Aa	2515	C	N3-C4-C5	-5.57	119.67	121.90
84	Aa	2639	A	C5-C6-N1	-5.57	114.91	117.70
84	Aa	3207	C	N3-C4-C5	-5.57	119.67	121.90
1	Ad	242	A	P-O3'-C3'	5.57	126.39	119.70
1	Ad	393	G	O4'-C1'-C2'	5.57	112.61	107.60
84	Aa	453	U	C5'-C4'-C3'	5.57	124.92	116.00
84	Aa	881	G	O4'-C1'-N9	5.57	112.66	108.20
84	Aa	916	A	C5-C6-N1	-5.57	114.91	117.70
84	Aa	1090	C	N3-C4-N4	5.57	121.90	118.00
84	Aa	1351	C	N3-C4-C5	-5.57	119.67	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1790	A	C5-C6-N6	-5.57	119.24	123.70
84	Aa	3240	C	N3-C4-N4	5.57	121.90	118.00
1	Ad	63	G	C5'-C4'-C3'	5.57	124.91	116.00
1	Ad	135	C	C3'-C2'-C1'	5.57	105.96	101.50
1	Ad	1181	G	C1'-O4'-C4'	-5.57	105.44	109.90
1	Ad	1731	A	C4'-C3'-C2'	-5.57	97.03	102.60
7	BM	96	SER	N-CA-CB	5.57	118.86	110.50
84	Aa	274	U	O4'-C1'-N1	5.57	112.66	108.20
84	Aa	1410	A	C5-C6-N1	-5.57	114.92	117.70
84	Aa	2883	C	O4'-C1'-N1	5.57	112.66	108.20
84	Aa	3155	C	N3-C4-C5	-5.57	119.67	121.90
85	Ac	40	A	C4-C5-C6	5.57	119.78	117.00
1	Ad	1527	U	O4'-C1'-N1	5.57	112.66	108.20
84	Aa	831	G	O4'-C1'-N9	5.57	112.66	108.20
84	Aa	846	A	C5-C6-N6	-5.57	119.25	123.70
84	Aa	2562	A	C5-C6-N1	-5.57	114.92	117.70
84	Aa	2810	A	C5-C6-N1	-5.57	114.92	117.70
1	Ad	1378	C	N1-C1'-C2'	5.57	121.24	114.00
9	BX	40	PHE	CB-CG-CD2	-5.57	116.90	120.80
84	Aa	79	C	N3-C4-N4	5.57	121.90	118.00
84	Aa	1782	G	C5-C6-O6	-5.57	125.26	128.60
84	Aa	2936	A	C5-C6-N6	-5.57	119.25	123.70
84	Aa	3127	C	N3-C4-C5	-5.57	119.67	121.90
84	Aa	3128	A	C4-C5-C6	5.57	119.78	117.00
84	Aa	3148	A	C4-C5-C6	5.57	119.78	117.00
1	Ad	30	G	C1'-O4'-C4'	-5.57	105.45	109.90
1	Ad	311	G	O4'-C1'-N9	5.57	112.65	108.20
1	Ad	646	G	C1'-O4'-C4'	-5.57	105.45	109.90
10	Bg	98	SER	N-CA-CB	5.57	118.85	110.50
78	CL	25	PHE	CB-CG-CD2	-5.57	116.90	120.80
84	Aa	567	G	N3-C2-N2	5.57	123.80	119.90
84	Aa	2068	G	O4'-C1'-N9	5.57	112.65	108.20
84	Aa	2354	G	C4-C5-C6	5.57	122.14	118.80
84	Aa	3257	G	O4'-C1'-N9	5.57	112.65	108.20
84	Aa	3367	C	N3-C4-N4	5.57	121.90	118.00
1	Ad	358	C	O4'-C1'-C2'	-5.56	100.24	105.80
84	Aa	292	A	C5-C6-N6	-5.56	119.25	123.70
84	Aa	1052	A	O4'-C1'-N9	5.56	112.65	108.20
1	Ad	886	A	O4'-C1'-N9	5.56	112.65	108.20
48	CD	236	MET	N-CA-CB	5.56	120.61	110.60
63	CU	111	ARG	N-CA-CB	5.56	120.61	110.60
84	Aa	183	C	N3-C4-C5	-5.56	119.67	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	186	A	C5-C6-N1	-5.56	114.92	117.70
84	Aa	548	G	O4'-C1'-N9	5.56	112.65	108.20
84	Aa	612	U	C4'-C3'-C2'	5.56	108.16	102.60
84	Aa	894	G	O4'-C1'-N9	5.56	112.65	108.20
84	Aa	1875	A	C5-C6-N6	-5.56	119.25	123.70
84	Aa	2020	G	C5-C6-O6	-5.56	125.26	128.60
84	Aa	2547	C	N3-C4-N4	5.56	121.89	118.00
84	Aa	2628	C	N3-C4-C5	-5.56	119.67	121.90
84	Aa	3163	G	C5-C6-O6	-5.56	125.26	128.60
85	Ac	84	C	N3-C4-N4	5.56	121.89	118.00
85	Ac	110	A	C5-C6-N1	-5.56	114.92	117.70
84	Aa	112	C	N3-C4-C5	-5.56	119.68	121.90
84	Aa	884	C	N3-C4-N4	5.56	121.89	118.00
84	Aa	1715	C	N3-C4-N4	5.56	121.89	118.00
84	Aa	2593	A	C4-C5-C6	5.56	119.78	117.00
1	Ad	78	A	C5'-C4'-O4'	5.56	115.77	109.10
84	Aa	149	A	C5-C6-N6	-5.56	119.25	123.70
84	Aa	860	G	O4'-C1'-N9	5.56	112.65	108.20
84	Aa	1431	G	O4'-C1'-N9	5.56	112.65	108.20
84	Aa	1881	C	N3-C4-N4	5.56	121.89	118.00
84	Aa	1994	C	N3-C4-N4	5.56	121.89	118.00
86	Ab	2	G	N7-C8-N9	5.56	115.88	113.10
86	Ab	85	G	C6-C5-N7	-5.56	127.06	130.40
1	Ad	591	C	N1-C1'-C2'	5.56	121.22	114.00
69	CF	151	TYR	CB-CG-CD1	-5.56	117.67	121.00
84	Aa	445	C	N3-C4-C5	-5.56	119.68	121.90
84	Aa	1614	G	C5-C6-O6	-5.56	125.27	128.60
84	Aa	1669	C	N3-C4-C5	-5.56	119.68	121.90
84	Aa	1705	A	C4-C5-C6	5.56	119.78	117.00
84	Aa	1747	A	C5'-C4'-O4'	5.56	115.77	109.10
84	Aa	1885	G	O4'-C1'-N9	5.56	112.65	108.20
84	Aa	2604	A	O4'-C1'-N9	5.56	112.65	108.20
84	Aa	3159	C	N3-C4-N4	5.56	121.89	118.00
84	Aa	3171	C	N3-C4-N4	5.56	121.89	118.00
84	Aa	3341	C	N3-C4-C5	-5.56	119.68	121.90
85	Ac	104	A	C5-C6-N6	-5.56	119.25	123.70
84	Aa	1640	A	C5-C6-N1	-5.56	114.92	117.70
84	Aa	1641	G	O4'-C1'-N9	5.56	112.64	108.20
84	Aa	1917	A	C5-C6-N1	-5.56	114.92	117.70
84	Aa	1970	A	C5-C6-N6	-5.56	119.25	123.70
84	Aa	2028	C	N3-C4-C5	-5.56	119.68	121.90
84	Aa	2098	A	C5-C6-N1	-5.56	114.92	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2837	C	N3-C4-N4	5.56	121.89	118.00
1	Ad	59	G	C1'-O4'-C4'	-5.55	105.46	109.90
1	Ad	453	C	C3'-C2'-C1'	5.55	105.94	101.50
84	Aa	4	C	N3-C4-N4	5.55	121.89	118.00
84	Aa	256	G	O4'-C1'-N9	5.55	112.64	108.20
84	Aa	614	C	N3-C4-C5	-5.55	119.68	121.90
84	Aa	1030	A	C5-C6-N6	-5.55	119.26	123.70
84	Aa	1302	C	N3-C4-C5	-5.55	119.68	121.90
84	Aa	1307	A	C5-C6-N6	-5.55	119.26	123.70
84	Aa	1482	C	N3-C4-C5	-5.55	119.68	121.90
84	Aa	1692	U	O4'-C1'-N1	5.55	112.64	108.20
84	Aa	1702	C	N3-C4-N4	5.55	121.89	118.00
84	Aa	2252	C	N3-C4-N4	5.55	121.89	118.00
84	Aa	2630	A	C5-C6-N1	-5.55	114.92	117.70
84	Aa	3210	G	C5'-C4'-O4'	5.55	115.77	109.10
85	Ac	63	C	N3-C4-N4	5.55	121.89	118.00
1	Ad	403	A	O4'-C1'-N9	5.55	112.64	108.20
85	Ac	19	A	C4-C5-C6	5.55	119.78	117.00
86	Ab	48	G	C5-C6-O6	-5.55	125.27	128.60
1	Ad	193	G	O4'-C1'-N9	5.55	112.64	108.20
1	Ad	610	A	O4'-C1'-N9	5.55	112.64	108.20
84	Aa	97	G	O4'-C1'-N9	5.55	112.64	108.20
84	Aa	110	C	N3-C4-N4	5.55	121.89	118.00
84	Aa	560	C	N3-C4-C5	-5.55	119.68	121.90
84	Aa	576	C	O4'-C1'-N1	5.55	112.64	108.20
84	Aa	722	C	N3-C4-C5	-5.55	119.68	121.90
84	Aa	1343	C	N3-C4-N4	5.55	121.89	118.00
84	Aa	2779	G	O4'-C1'-N9	5.55	112.64	108.20
84	Aa	2944	C	N3-C4-C5	-5.55	119.68	121.90
1	Ad	1426	C	O4'-C1'-N1	5.55	112.64	108.20
6	BK	64	TYR	CB-CG-CD1	5.55	124.33	121.00
84	Aa	1025	G	O4'-C1'-N9	5.55	112.64	108.20
84	Aa	1574	C	N3-C4-N4	5.55	121.89	118.00
84	Aa	3023	G	O4'-C1'-N9	5.55	112.64	108.20
86	Ab	71	A	C4-C5-N7	-5.55	107.92	110.70
1	Ad	1160	G	C5'-C4'-O4'	5.55	115.76	109.10
84	Aa	580	C	N3-C4-N4	5.55	121.88	118.00
84	Aa	1031	A	C5-C6-N1	-5.55	114.93	117.70
84	Aa	1624	G	O4'-C1'-N9	5.55	112.64	108.20
84	Aa	1753	A	C4-C5-C6	5.55	119.77	117.00
85	Ac	17	A	C4-C5-C6	5.55	119.77	117.00
1	Ad	298	C	N1-C1'-C2'	5.55	121.21	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	507	G	C3'-C2'-C1'	-5.55	97.06	101.50
1	Ad	1793	C	O4'-C1'-C2'	-5.55	100.25	105.80
72	CC	336	TYR	CB-CG-CD1	-5.55	117.67	121.00
84	Aa	4	C	N3-C4-C5	-5.55	119.68	121.90
84	Aa	325	A	C5-C6-N6	-5.55	119.26	123.70
84	Aa	1336	A	C5-C6-N6	-5.55	119.26	123.70
84	Aa	1568	A	C5-C6-N6	-5.55	119.26	123.70
84	Aa	1731	A	C5-C6-N6	-5.55	119.26	123.70
84	Aa	1787	C	N3-C4-C5	-5.55	119.68	121.90
84	Aa	1987	C	N3-C4-N4	5.55	121.88	118.00
84	Aa	2018	C	N3-C4-N4	5.55	121.88	118.00
84	Aa	2303	C	N3-C4-C5	-5.55	119.68	121.90
84	Aa	3201	A	C5-C6-N1	-5.55	114.93	117.70
84	Aa	2219	A	C5-C6-N1	-5.54	114.93	117.70
84	Aa	2249	U	O4'-C1'-N1	5.54	112.64	108.20
84	Aa	3107	A	C5-C6-N1	-5.54	114.93	117.70
86	Ab	89	G	N1-C6-O6	5.54	123.23	119.90
84	Aa	1156	A	O4'-C1'-N9	5.54	112.63	108.20
84	Aa	1738	A	C4-C5-C6	5.54	119.77	117.00
84	Aa	2046	G	C5-C6-O6	-5.54	125.27	128.60
84	Aa	2408	G	C5-C6-O6	-5.54	125.27	128.60
84	Aa	2839	A	C5-C6-N6	-5.54	119.27	123.70
84	Aa	3056	C	N3-C4-C5	-5.54	119.68	121.90
84	Aa	3327	A	C5-C6-N6	-5.54	119.27	123.70
85	Ac	13	A	C4-C5-C6	5.54	119.77	117.00
86	Ab	35	C	O4'-C1'-N1	5.54	112.63	108.20
84	Aa	1745	G	O4'-C1'-N9	5.54	112.63	108.20
84	Aa	2447	A	C4-C5-C6	5.54	119.77	117.00
84	Aa	2647	C	O4'-C1'-N1	5.54	112.63	108.20
84	Aa	2901	C	C6-N1-C1'	-5.54	114.15	120.80
84	Aa	3169	C	N3-C4-C5	-5.54	119.68	121.90
86	Ab	22	A	C5-C6-N1	-5.54	114.93	117.70
1	Ad	1032	A	C1'-O4'-C4'	5.54	114.33	109.90
1	Ad	1792	A	P-O3'-C3'	5.54	126.35	119.70
84	Aa	348	C	N3-C4-C5	-5.54	119.68	121.90
84	Aa	976	A	C4-C5-C6	5.54	119.77	117.00
84	Aa	1307	A	C5-C6-N1	-5.54	114.93	117.70
84	Aa	2262	C	N3-C4-C5	-5.54	119.68	121.90
84	Aa	2517	U	O4'-C1'-N1	5.54	112.63	108.20
84	Aa	2565	C	N3-C4-N4	5.54	121.88	118.00
1	Ad	599	G	C5'-C4'-O4'	5.54	115.75	109.10
84	Aa	98	A	C5-C6-N6	-5.54	119.27	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	837	C	N3-C4-C5	-5.54	119.69	121.90
84	Aa	839	A	C5-C6-N1	-5.54	114.93	117.70
84	Aa	876	C	N3-C4-N4	5.54	121.88	118.00
84	Aa	1094	G	O4'-C1'-N9	5.54	112.63	108.20
84	Aa	1138	A	C4-C5-C6	5.54	119.77	117.00
84	Aa	1279	C	N3-C4-N4	5.54	121.88	118.00
84	Aa	1343	C	N3-C4-C5	-5.54	119.69	121.90
84	Aa	2947	G	C5-C6-O6	-5.54	125.28	128.60
1	Ad	1444	G	N9-C1'-C2'	5.54	121.20	114.00
73	CO	69	THR	N-CA-CB	5.54	120.82	110.30
84	Aa	698	A	C5-C6-N1	-5.54	114.93	117.70
84	Aa	868	A	C5-C6-N1	-5.54	114.93	117.70
84	Aa	1493	A	C4-C5-C6	5.54	119.77	117.00
84	Aa	1493	A	O4'-C1'-N9	5.54	112.63	108.20
84	Aa	1775	C	N3-C4-C5	-5.54	119.69	121.90
84	Aa	1831	A	C5-C6-N6	-5.54	119.27	123.70
84	Aa	1958	G	C5'-C4'-O4'	5.54	115.74	109.10
84	Aa	2104	G	O4'-C1'-N9	5.54	112.63	108.20
84	Aa	3155	C	O4'-C1'-N1	5.54	112.63	108.20
84	Aa	3245	G	O4'-C1'-N9	5.54	112.63	108.20
84	Aa	3272	A	O4'-C1'-N9	5.54	112.63	108.20
1	Ad	573	C	C3'-C2'-C1'	5.54	105.93	101.50
48	CD	219	PHE	CB-CG-CD1	5.54	124.67	120.80
62	CS	152	PRO	CA-N-CD	-5.54	103.75	111.50
84	Aa	21	G	P-O3'-C3'	-5.54	113.06	119.70
84	Aa	439	A	C5-C6-N6	-5.54	119.27	123.70
84	Aa	640	C	N3-C4-N4	5.54	121.88	118.00
84	Aa	781	C	N3-C4-C5	-5.54	119.69	121.90
84	Aa	872	G	C5-C6-O6	-5.54	125.28	128.60
84	Aa	1464	A	C5-C6-N1	-5.54	114.93	117.70
84	Aa	2547	C	N3-C4-C5	-5.54	119.69	121.90
84	Aa	2936	A	O4'-C1'-N9	5.54	112.63	108.20
86	Ab	92	C	C4-C5-C6	5.54	120.17	117.40
6	BK	54	TYR	CB-CG-CD1	-5.53	117.68	121.00
64	Ci	56	TYR	CB-CG-CD2	-5.53	117.68	121.00
84	Aa	289	C	C5-C6-N1	5.53	123.77	121.00
84	Aa	806	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	843	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	1013	A	C4-C5-C6	5.53	119.77	117.00
84	Aa	1249	A	C5-C6-N6	-5.53	119.27	123.70
84	Aa	1264	A	C5-C6-N1	-5.53	114.93	117.70
84	Aa	1080	C	N3-C4-C5	-5.53	119.69	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1468	A	C5-C6-N6	-5.53	119.27	123.70
84	Aa	2064	C	N3-C4-N4	5.53	121.87	118.00
84	Aa	2110	G	P-O5'-C5'	-5.53	112.05	120.90
84	Aa	2160	C	N3-C4-N4	5.53	121.87	118.00
85	Ac	159	G	O4'-C1'-N9	5.53	112.62	108.20
1	Ad	159	U	C1'-O4'-C4'	-5.53	105.47	109.90
1	Ad	799	A	O4'-C1'-N9	5.53	112.62	108.20
1	Ad	1745	U	C1'-O4'-C4'	5.53	114.33	109.90
84	Aa	393	A	C5-C6-N1	-5.53	114.94	117.70
84	Aa	1494	A	C5-C6-N1	-5.53	114.94	117.70
84	Aa	1517	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	1922	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	2301	C	N3-C4-N4	5.53	121.87	118.00
84	Aa	3092	A	C5-C6-N6	-5.53	119.28	123.70
84	Aa	3104	A	O4'-C1'-N9	5.53	112.62	108.20
84	Aa	3178	C	P-O3'-C3'	5.53	126.34	119.70
1	Ad	462	G	C1'-O4'-C4'	-5.53	105.48	109.90
1	Ad	1431	A	O4'-C1'-N9	5.53	112.62	108.20
2	Ae	22	G	C1'-O4'-C4'	-5.53	105.48	109.90
84	Aa	1033	G	C5-C6-O6	-5.53	125.28	128.60
84	Aa	2804	A	C5-C6-N1	-5.53	114.94	117.70
1	Ad	147	C	C3'-C2'-C1'	5.53	105.92	101.50
1	Ad	369	G	N9-C1'-C2'	-5.53	105.92	112.00
1	Ad	1439	G	N9-C1'-C2'	5.53	121.19	114.00
84	Aa	611	C	N3-C4-N4	5.53	121.87	118.00
84	Aa	759	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	783	A	C5-C6-N6	-5.53	119.28	123.70
84	Aa	1276	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	1455	A	C5-C6-N6	-5.53	119.28	123.70
84	Aa	1635	A	O4'-C1'-N9	5.53	112.62	108.20
84	Aa	2391	C	N3-C4-N4	5.53	121.87	118.00
84	Aa	2710	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	3233	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	111	C	N3-C4-N4	5.53	121.87	118.00
84	Aa	1148	G	C5-C6-O6	-5.53	125.28	128.60
84	Aa	1275	A	C5-C6-N6	-5.53	119.28	123.70
84	Aa	1415	G	O4'-C1'-N9	5.53	112.62	108.20
84	Aa	1805	A	C5-C6-N1	-5.53	114.94	117.70
84	Aa	1990	A	O4'-C1'-N9	5.53	112.62	108.20
84	Aa	2728	C	N3-C4-C5	-5.53	119.69	121.90
84	Aa	3041	A	C5-C6-N6	-5.53	119.28	123.70
85	Ac	152	G	O4'-C1'-N9	5.53	112.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1564	A	O3'-P-O5'	-5.52	93.50	104.00
50	CP	140	TYR	CB-CG-CD1	5.52	124.31	121.00
84	Aa	2207	C	N3-C4-C5	-5.52	119.69	121.90
84	Aa	2698	A	C4-C5-C6	5.52	119.76	117.00
84	Aa	327	A	C5-C6-N6	-5.52	119.28	123.70
84	Aa	376	A	C5-C6-N6	-5.52	119.28	123.70
84	Aa	656	G	N1-C6-O6	5.52	123.21	119.90
84	Aa	1053	C	N3-C4-N4	5.52	121.86	118.00
84	Aa	1308	A	C5-C6-N1	-5.52	114.94	117.70
84	Aa	1522	G	O4'-C1'-N9	5.52	112.62	108.20
84	Aa	1802	A	C5-C6-N1	-5.52	114.94	117.70
84	Aa	2935	A	C5-C6-N1	-5.52	114.94	117.70
86	Ab	31	G	C4-C5-N7	5.52	113.01	110.80
42	CJ	113	ASP	N-CA-CB	5.52	120.54	110.60
84	Aa	639	A	C5-C6-N6	-5.52	119.28	123.70
84	Aa	879	A	C5-C6-N6	-5.52	119.28	123.70
85	Ac	98	U	O4'-C1'-N1	5.52	112.62	108.20
85	Ac	134	G	O4'-C1'-N9	5.52	112.62	108.20
1	Ad	236	U	N1-C1'-C2'	5.52	121.18	114.00
84	Aa	250	C	N3-C4-N4	5.52	121.86	118.00
84	Aa	1276	C	N3-C4-N4	5.52	121.86	118.00
84	Aa	1657	C	N3-C4-N4	5.52	121.86	118.00
84	Aa	1721	A	C4'-C3'-C2'	-5.52	97.08	102.60
84	Aa	1738	A	C5-C6-N6	-5.52	119.28	123.70
84	Aa	2331	A	O4'-C1'-N9	5.52	112.62	108.20
84	Aa	2460	A	C4-C5-C6	5.52	119.76	117.00
84	Aa	2487	A	C5-C6-N6	-5.52	119.28	123.70
84	Aa	3382	A	C5-C6-N1	-5.52	114.94	117.70
1	Ad	200	C	C3'-C2'-C1'	5.52	105.91	101.50
84	Aa	2160	C	N3-C4-C5	-5.52	119.69	121.90
84	Aa	2352	G	N3-C2-N2	5.52	123.76	119.90
84	Aa	2526	G	C5-C6-O6	-5.52	125.29	128.60
84	Aa	2774	A	C5-C6-N6	-5.52	119.29	123.70
84	Aa	1166	C	N3-C4-C5	-5.52	119.69	121.90
84	Aa	2114	A	C5-C6-N1	-5.52	114.94	117.70
1	Ad	1361	G	C4'-C3'-C2'	-5.51	97.08	102.60
42	CJ	58	SER	N-CA-CB	5.51	118.77	110.50
48	CD	187	GLU	N-CA-CB	5.51	120.53	110.60
84	Aa	385	A	C5-C6-N6	-5.51	119.29	123.70
84	Aa	416	A	C5-C6-N6	-5.51	119.29	123.70
84	Aa	1102	A	C4-C5-C6	5.51	119.76	117.00
84	Aa	1335	C	N3-C4-N4	5.51	121.86	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1399	C	N3-C4-C5	-5.51	119.69	121.90
84	Aa	1417	G	O4'-C1'-N9	5.51	112.61	108.20
84	Aa	2089	A	C5-C6-N1	-5.51	114.94	117.70
84	Aa	2832	G	C5-C6-O6	-5.51	125.29	128.60
85	Ac	83	C	N3-C4-N4	5.51	121.86	118.00
1	Ad	1713	C	O4'-C1'-N1	5.51	112.61	108.20
84	Aa	499	A	C4-C5-C6	5.51	119.76	117.00
84	Aa	1542	A	C5-C6-N6	-5.51	119.29	123.70
84	Aa	2174	C	N3-C4-N4	5.51	121.86	118.00
84	Aa	2940	G	C5-C6-O6	-5.51	125.29	128.60
63	CU	34	LYS	N-CA-CB	5.51	120.52	110.60
84	Aa	95	G	P-O5'-C5'	5.51	129.72	120.90
84	Aa	1911	A	C4-C5-C6	5.51	119.76	117.00
84	Aa	2226	C	N3-C4-C5	-5.51	119.69	121.90
84	Aa	2251	A	C5-C6-N6	-5.51	119.29	123.70
84	Aa	2559	C	N3-C4-C5	-5.51	119.69	121.90
85	Ac	44	A	O4'-C1'-N9	5.51	112.61	108.20
85	Ac	126	A	C5-C6-N1	-5.51	114.94	117.70
1	Ad	165	U	O4'-C1'-N1	5.51	112.61	108.20
1	Ad	1409	G	C3'-C2'-C1'	-5.51	97.09	101.50
84	Aa	421	A	C4-C5-C6	5.51	119.75	117.00
84	Aa	564	A	C4-C5-C6	5.51	119.75	117.00
84	Aa	869	A	O4'-C1'-N9	5.51	112.61	108.20
84	Aa	1520	A	C5-C6-N6	-5.51	119.29	123.70
84	Aa	2681	A	C5-C6-N6	-5.51	119.29	123.70
84	Aa	3028	A	C5-C6-N6	-5.51	119.29	123.70
84	Aa	3170	C	N3-C4-C5	-5.51	119.70	121.90
10	Bg	202	SER	N-CA-CB	5.51	118.76	110.50
84	Aa	2641	A	O4'-C1'-N9	5.51	112.61	108.20
84	Aa	3073	A	C5-C6-N1	-5.51	114.95	117.70
1	Ad	360	G	C3'-C2'-C1'	-5.51	97.09	101.50
1	Ad	1388	A	O4'-C1'-C2'	-5.51	100.29	105.80
50	CP	140	TYR	CB-CG-CD2	-5.51	117.70	121.00
84	Aa	82	C	N3-C4-N4	5.51	121.86	118.00
84	Aa	643	G	C5-C6-O6	-5.51	125.30	128.60
84	Aa	839	A	C5-C6-N6	-5.51	119.30	123.70
84	Aa	1455	A	O4'-C1'-N9	5.51	112.61	108.20
84	Aa	2111	A	C5-C6-N1	-5.51	114.95	117.70
6	BK	82	LEU	CA-C-N	5.50	132.51	117.10
84	Aa	1059	A	C5-C6-N6	-5.50	119.30	123.70
84	Aa	2740	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	2912	A	C5-C6-N1	-5.50	114.95	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	Ab	20	C	C6-N1-C2	5.50	122.50	120.30
1	Ad	315	U	O4'-C1'-C2'	-5.50	100.30	105.80
84	Aa	582	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	914	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	1181	A	C5-C6-N1	-5.50	114.95	117.70
84	Aa	2158	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	2254	A	C5-C6-N1	-5.50	114.95	117.70
84	Aa	2545	C	N3-C4-C5	-5.50	119.70	121.90
85	Ac	105	A	C5-C6-N1	-5.50	114.95	117.70
1	Ad	600	C	O4'-C1'-N1	5.50	112.60	108.20
84	Aa	661	A	C4-C5-C6	5.50	119.75	117.00
84	Aa	769	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	1721	A	C5-C6-N1	-5.50	114.95	117.70
84	Aa	2082	A	C5-C6-N6	-5.50	119.30	123.70
84	Aa	2361	C	N3-C4-N4	5.50	121.85	118.00
84	Aa	2749	A	C5-C6-N1	-5.50	114.95	117.70
84	Aa	2949	G	N3-C2-N2	5.50	123.75	119.90
84	Aa	3088	A	C5-C6-N6	-5.50	119.30	123.70
84	Aa	3137	G	C5-C6-O6	-5.50	125.30	128.60
85	Ac	124	C	N3-C4-N4	5.50	121.85	118.00
86	Ab	66	G	O4'-C1'-N9	5.50	112.60	108.20
1	Ad	1442	A	C1'-O4'-C4'	-5.50	105.50	109.90
84	Aa	243	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	2323	A	C4-C5-C6	5.50	119.75	117.00
84	Aa	2359	C	N3-C4-N4	5.50	121.85	118.00
1	Ad	191	U	C4'-C3'-C2'	-5.50	97.10	102.60
1	Ad	462	G	O4'-C1'-N9	5.50	112.60	108.20
1	Ad	1044	A	P-O3'-C3'	5.50	126.30	119.70
1	Ad	1428	A	O4'-C1'-N9	5.50	112.60	108.20
30	BB	49	SER	N-CA-CB	5.50	118.75	110.50
84	Aa	108	A	O4'-C1'-N9	5.50	112.60	108.20
84	Aa	1471	A	C4-C5-C6	5.50	119.75	117.00
84	Aa	2025	C	N3-C4-N4	5.50	121.85	118.00
84	Aa	2650	A	O4'-C1'-N9	5.50	112.60	108.20
84	Aa	2899	A	C4-C5-C6	5.50	119.75	117.00
84	Aa	3200	A	C4-C5-C6	5.50	119.75	117.00
1	Ad	536	U	C1'-O4'-C4'	-5.50	105.50	109.90
84	Aa	306	A	O4'-C1'-N9	5.50	112.60	108.20
84	Aa	588	G	C5-C6-O6	-5.50	125.30	128.60
84	Aa	1512	A	C5-C6-N1	-5.50	114.95	117.70
84	Aa	1632	G	O4'-C1'-N9	5.50	112.60	108.20
84	Aa	2075	C	N3-C4-C5	-5.50	119.70	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2374	G	C5-C6-N1	-5.50	108.75	111.50
84	Aa	2540	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	2733	A	O4'-C1'-N9	5.50	112.60	108.20
84	Aa	3161	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	2566	C	N3-C4-C5	-5.50	119.70	121.90
84	Aa	3115	A	C5-C6-N6	-5.50	119.30	123.70
84	Aa	3297	A	O4'-C1'-N9	5.50	112.60	108.20
84	Aa	833	G	O4'-C1'-N9	5.49	112.59	108.20
84	Aa	954	A	C5-C6-N1	-5.49	114.95	117.70
84	Aa	1023	G	C5-C6-O6	-5.49	125.30	128.60
84	Aa	1554	C	O4'-C1'-N1	5.49	112.59	108.20
84	Aa	1963	G	C5-C6-O6	-5.49	125.30	128.60
84	Aa	158	A	C5-C6-N6	-5.49	119.31	123.70
84	Aa	217	A	C5-C6-N1	-5.49	114.95	117.70
84	Aa	365	A	C5-C6-N6	-5.49	119.31	123.70
1	Ad	546	U	C3'-C2'-C1'	-5.49	97.11	101.50
1	Ad	1111	C	O4'-C1'-N1	5.49	112.59	108.20
84	Aa	136	C	N3-C4-N4	5.49	121.84	118.00
84	Aa	952	C	N3-C4-N4	5.49	121.84	118.00
84	Aa	1425	G	C5-C6-O6	-5.49	125.31	128.60
84	Aa	1429	U	O4'-C1'-N1	5.49	112.59	108.20
84	Aa	2304	A	C5-C6-N1	-5.49	114.95	117.70
84	Aa	2458	A	C5-C6-N1	-5.49	114.95	117.70
84	Aa	3072	A	C5-C6-N6	-5.49	119.31	123.70
84	Aa	3075	G	O4'-C1'-N9	5.49	112.59	108.20
1	Ad	960	A	O4'-C1'-N9	5.49	112.59	108.20
1	Ad	1796	G	O4'-C1'-C2'	5.49	112.54	107.60
36	BH	135	GLU	N-CA-CB	5.49	120.48	110.60
37	CG	47	PHE	CB-CG-CD1	5.49	124.64	120.80
72	CC	345	THR	N-CA-CB	5.49	120.73	110.30
84	Aa	1520	A	C5-C6-N1	-5.49	114.95	117.70
84	Aa	1842	C	N3-C4-C5	-5.49	119.70	121.90
84	Aa	2265	A	C5-C6-N1	-5.49	114.95	117.70
84	Aa	2527	G	C4-C5-C6	5.49	122.09	118.80
1	Ad	13	C	O4'-C1'-N1	5.49	112.59	108.20
84	Aa	1199	A	C4-C5-C6	5.49	119.74	117.00
84	Aa	1358	C	N3-C4-N4	5.49	121.84	118.00
84	Aa	1887	A	C4-C5-C6	5.49	119.74	117.00
84	Aa	2772	A	C5-C6-N1	-5.49	114.96	117.70
85	Ac	53	A	C5-C6-N6	-5.49	119.31	123.70
85	Ac	135	A	C5-C6-N1	-5.49	114.96	117.70
84	Aa	264	C	N3-C4-N4	5.49	121.84	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	525	A	C4-C5-C6	5.49	119.74	117.00
84	Aa	742	G	O4'-C1'-N9	5.49	112.59	108.20
84	Aa	870	G	O4'-C1'-N9	5.49	112.59	108.20
84	Aa	1382	C	N3-C4-C5	-5.49	119.71	121.90
84	Aa	1858	U	O4'-C1'-N1	5.49	112.59	108.20
84	Aa	1861	A	C5-C6-N1	-5.49	114.96	117.70
84	Aa	884	C	N3-C4-C5	-5.48	119.71	121.90
84	Aa	1586	A	C5-C6-N6	-5.48	119.31	123.70
84	Aa	2659	A	O4'-C1'-N9	5.48	112.59	108.20
84	Aa	2927	C	N3-C4-N4	5.48	121.84	118.00
84	Aa	173	C	N3-C4-N4	5.48	121.84	118.00
84	Aa	330	C	N3-C4-C5	-5.48	119.71	121.90
84	Aa	640	C	P-O5'-C5'	5.48	129.67	120.90
84	Aa	782	G	O3'-P-O5'	-5.48	93.58	104.00
84	Aa	1565	G	O5'-C5'-C4'	-5.48	101.28	111.70
84	Aa	1739	G	N1-C6-O6	5.48	123.19	119.90
84	Aa	2969	A	C5-C6-N6	-5.48	119.31	123.70
84	Aa	3198	C	N3-C4-C5	-5.48	119.71	121.90
85	Ac	116	G	O4'-C1'-N9	5.48	112.59	108.20
1	Ad	178	A	O4'-C1'-C2'	-5.48	100.32	105.80
1	Ad	869	U	O4'-C1'-C2'	-5.48	100.32	105.80
1	Ad	1506	G	O4'-C1'-N9	5.48	112.58	108.20
84	Aa	1467	G	O4'-C1'-N9	5.48	112.58	108.20
84	Aa	1637	G	O4'-C1'-N9	5.48	112.58	108.20
84	Aa	2319	A	C5-C6-N6	-5.48	119.31	123.70
84	Aa	2402	G	O4'-C1'-N9	5.48	112.58	108.20
84	Aa	2971	A	C5-C6-N6	-5.48	119.32	123.70
84	Aa	2979	G	O4'-C1'-N9	5.48	112.58	108.20
84	Aa	3087	A	O4'-C1'-N9	5.48	112.58	108.20
85	Ac	23	C	N3-C4-C5	-5.48	119.71	121.90
1	Ad	1360	G	P-O3'-C3'	5.48	126.28	119.70
84	Aa	1073	G	C5-C6-O6	-5.48	125.31	128.60
84	Aa	1167	G	O4'-C1'-N9	5.48	112.58	108.20
84	Aa	1874	A	O4'-C1'-N9	5.48	112.58	108.20
84	Aa	2210	A	C5-C6-N1	-5.48	114.96	117.70
84	Aa	2279	C	N3-C4-N4	5.48	121.83	118.00
84	Aa	2840	A	C4-C5-C6	5.48	119.74	117.00
86	Ab	102	G	N1-C6-O6	5.48	123.19	119.90
48	CD	7	PHE	CB-CG-CD2	-5.48	116.97	120.80
84	Aa	321	A	C4-C5-C6	5.48	119.74	117.00
84	Aa	722	C	N3-C4-N4	5.48	121.83	118.00
84	Aa	917	A	O4'-C1'-N9	5.48	112.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1287	C	N3-C4-C5	-5.48	119.71	121.90
84	Aa	1495	G	C5-C6-O6	-5.48	125.31	128.60
84	Aa	3351	A	C4-C5-C6	5.48	119.74	117.00
1	Ad	839	G	C1'-O4'-C4'	-5.47	105.52	109.90
84	Aa	1172	A	C4-C5-C6	5.47	119.74	117.00
84	Aa	1499	C	N3-C4-N4	5.47	121.83	118.00
84	Aa	1713	A	C5-C6-N6	-5.47	119.32	123.70
84	Aa	2117	G	C5-C6-O6	-5.47	125.31	128.60
84	Aa	2362	A	C4-C5-C6	5.47	119.74	117.00
84	Aa	2384	G	O4'-C1'-N9	5.47	112.58	108.20
84	Aa	2705	A	C4-C5-C6	5.47	119.74	117.00
84	Aa	2768	C	N3-C4-C5	-5.47	119.71	121.90
85	Ac	54	A	O4'-C1'-N9	5.47	112.58	108.20
1	Ad	487	A	C3'-C2'-C1'	-5.47	97.12	101.50
29	BR	1	MET	C-N-CA	5.47	133.79	122.30
46	Ca	8	ASN	N-CA-C	-5.47	96.23	111.00
48	CD	119	GLU	N-CA-CB	5.47	120.45	110.60
84	Aa	59	A	C4-C5-C6	5.47	119.74	117.00
84	Aa	96	C	N3-C4-C5	-5.47	119.71	121.90
84	Aa	415	G	O4'-C1'-N9	5.47	112.58	108.20
84	Aa	476	C	N3-C4-C5	-5.47	119.71	121.90
84	Aa	481	G	C5-C6-O6	-5.47	125.32	128.60
84	Aa	1039	G	C5-C6-O6	-5.47	125.32	128.60
84	Aa	1275	A	O4'-C1'-N9	5.47	112.58	108.20
84	Aa	1854	A	C5-C6-N1	-5.47	114.96	117.70
84	Aa	1944	G	O4'-C4'-C3'	5.47	110.48	106.10
84	Aa	2391	C	N3-C4-C5	-5.47	119.71	121.90
84	Aa	2679	A	C5-C6-N1	-5.47	114.96	117.70
84	Aa	3389	C	N3-C4-N4	5.47	121.83	118.00
86	Ab	22	A	C5-C6-N6	-5.47	119.32	123.70
86	Ab	95	U	O4'-C1'-N1	5.47	112.58	108.20
84	Aa	258	C	N3-C4-N4	5.47	121.83	118.00
84	Aa	454	A	O4'-C1'-N9	5.47	112.58	108.20
84	Aa	723	G	C4'-C3'-C2'	-5.47	97.13	102.60
84	Aa	2433	U	O4'-C1'-N1	5.47	112.58	108.20
84	Aa	2823	C	N3-C4-N4	5.47	121.83	118.00
84	Aa	2853	A	C5-C6-N1	-5.47	114.97	117.70
86	Ab	91	C	N3-C4-C5	-5.47	119.71	121.90
1	Ad	1580	G	C3'-C2'-C1'	-5.47	97.12	101.50
84	Aa	499	A	C5-C6-N1	-5.47	114.97	117.70
84	Aa	1105	G	P-O3'-C3'	5.47	126.26	119.70
84	Aa	1476	G	N3-C2-N2	5.47	123.73	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1563	G	C5'-C4'-O4'	-5.47	102.54	109.10
84	Aa	1712	A	C4-C5-C6	5.47	119.73	117.00
84	Aa	3076	C	N3-C4-C5	-5.47	119.71	121.90
84	Aa	3155	C	N3-C4-N4	5.47	121.83	118.00
86	Ab	37	G	O4'-C1'-N9	5.47	112.58	108.20
86	Ab	43	A	C4-C5-C6	5.47	119.73	117.00
84	Aa	1185	G	O4'-C1'-N9	5.47	112.58	108.20
84	Aa	1795	A	C5-C6-N1	-5.47	114.97	117.70
84	Aa	2901	C	N3-C4-N4	5.47	121.83	118.00
1	Ad	717	G	C2'-C3'-O3'	5.47	122.45	113.70
1	Ad	826	C	O4'-C1'-N1	5.47	112.57	108.20
71	CB	121	ASN	N-CA-CB	5.47	120.44	110.60
84	Aa	101	C	N3-C4-C5	-5.47	119.71	121.90
84	Aa	810	A	O4'-C1'-N9	5.47	112.57	108.20
84	Aa	2138	A	C4-C5-C6	5.47	119.73	117.00
84	Aa	2654	G	C5-C6-O6	-5.47	125.32	128.60
85	Ac	119	C	N3-C4-N4	5.47	121.83	118.00
1	Ad	724	U	C1'-O4'-C4'	5.46	114.27	109.90
1	Ad	1232	G	C5'-C4'-O4'	5.46	115.66	109.10
84	Aa	12	G	C4'-C3'-C2'	-5.46	97.14	102.60
84	Aa	677	U	O4'-C1'-N1	5.46	112.57	108.20
84	Aa	1174	G	C5-C6-O6	-5.46	125.32	128.60
84	Aa	1225	A	C5-C6-N1	-5.46	114.97	117.70
84	Aa	1409	G	C5-C6-O6	-5.46	125.32	128.60
84	Aa	2389	A	C5-C6-N6	-5.46	119.33	123.70
84	Aa	2493	C	N3-C4-N4	5.46	121.83	118.00
84	Aa	3036	C	N3-C4-C5	-5.46	119.71	121.90
85	Ac	49	G	C5-C6-O6	-5.46	125.32	128.60
84	Aa	353	A	P-O5'-C5'	-5.46	112.16	120.90
1	Ad	706	U	O4'-C1'-N1	5.46	112.57	108.20
1	Ad	1092	A	O4'-C1'-N9	5.46	112.57	108.20
84	Aa	1709	U	O4'-C1'-N1	5.46	112.57	108.20
84	Aa	2662	A	C5-C6-N6	-5.46	119.33	123.70
85	Ac	105	A	C5-C6-N6	-5.46	119.33	123.70
84	Aa	2105	G	O4'-C1'-N9	5.46	112.57	108.20
84	Aa	2174	C	N3-C4-C5	-5.46	119.72	121.90
84	Aa	3182	A	C4'-C3'-C2'	-5.46	97.14	102.60
1	Ad	333	G	C3'-C2'-C1'	-5.46	97.13	101.50
84	Aa	1185	G	C5-C6-O6	-5.46	125.33	128.60
84	Aa	1195	C	N3-C4-N4	5.46	121.82	118.00
84	Aa	1802	A	C5-C6-N6	-5.46	119.33	123.70
84	Aa	2298	A	C4-C5-C6	5.46	119.73	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2807	G	O4'-C1'-N9	5.46	112.57	108.20
84	Aa	2972	C	N3-C4-C5	-5.46	119.72	121.90
84	Aa	3030	A	C4-C5-C6	5.46	119.73	117.00
85	Ac	80	A	C4-C5-C6	5.46	119.73	117.00
1	Ad	468	A	C5'-C4'-O4'	5.46	115.65	109.10
1	Ad	1316	A	C1'-O4'-C4'	-5.46	105.53	109.90
1	Ad	1515	G	O4'-C1'-N9	5.46	112.57	108.20
35	BG	28	PHE	CB-CG-CD2	-5.46	116.98	120.80
84	Aa	1	G	C4-N9-C1'	5.46	133.59	126.50
84	Aa	109	G	O4'-C1'-N9	5.46	112.57	108.20
84	Aa	223	C	N3-C4-N4	5.46	121.82	118.00
84	Aa	573	A	C5-C6-N1	-5.46	114.97	117.70
84	Aa	619	C	N3-C4-C5	-5.46	119.72	121.90
84	Aa	823	A	O4'-C1'-N9	5.46	112.57	108.20
84	Aa	972	C	N3-C4-N4	5.46	121.82	118.00
84	Aa	1200	A	C5-C6-N1	-5.46	114.97	117.70
84	Aa	1235	A	C4-C5-C6	5.46	119.73	117.00
84	Aa	1854	A	C4-C5-C6	5.46	119.73	117.00
84	Aa	1915	G	O4'-C1'-N9	5.46	112.56	108.20
84	Aa	2228	A	C5-C6-N1	-5.46	114.97	117.70
84	Aa	2933	C	C5'-C4'-O4'	5.46	115.65	109.10
84	Aa	330	C	N3-C4-N4	5.46	121.82	118.00
84	Aa	943	G	N3-C2-N2	5.46	123.72	119.90
84	Aa	2999	G	N3-C2-N2	5.46	123.72	119.90
1	Ad	768	A	OP1-P-OP2	-5.45	111.42	119.60
84	Aa	249	A	C5-C6-N1	-5.45	114.97	117.70
84	Aa	620	C	N3-C4-C5	-5.45	119.72	121.90
84	Aa	1438	A	O4'-C1'-N9	5.45	112.56	108.20
84	Aa	1878	G	C5-C6-O6	-5.45	125.33	128.60
84	Aa	2026	C	N3-C4-N4	5.45	121.82	118.00
84	Aa	2149	G	C8-N9-C1'	-5.45	119.91	127.00
84	Aa	2450	G	C5-C6-O6	-5.45	125.33	128.60
84	Aa	2985	C	C5'-C4'-O4'	5.45	115.64	109.10
84	Aa	3087	A	C5-C6-N1	-5.45	114.97	117.70
85	Ac	23	C	N3-C4-N4	5.45	121.82	118.00
1	Ad	267	G	O4'-C1'-N9	5.45	112.56	108.20
84	Aa	162	G	O4'-C1'-N9	5.45	112.56	108.20
84	Aa	1744	C	P-O3'-C3'	-5.45	113.16	119.70
84	Aa	2158	C	N3-C4-N4	5.45	121.82	118.00
84	Aa	2185	U	C5'-C4'-C3'	-5.45	107.28	116.00
1	Ad	934	A	C3'-C2'-C1'	5.45	105.86	101.50
84	Aa	199	G	O4'-C1'-N9	5.45	112.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	712	A	C4-C5-C6	5.45	119.72	117.00
84	Aa	889	C	N3-C4-N4	5.45	121.81	118.00
84	Aa	985	C	N3-C4-C5	-5.45	119.72	121.90
84	Aa	2503	A	C5-C6-N6	-5.45	119.34	123.70
84	Aa	2660	A	O4'-C1'-N9	5.45	112.56	108.20
84	Aa	3082	G	C5-C6-O6	-5.45	125.33	128.60
84	Aa	3341	C	N3-C4-N4	5.45	121.81	118.00
1	Ad	922	U	O4'-C1'-N1	5.45	112.56	108.20
1	Ad	1226	U	O4'-C1'-C2'	-5.45	100.35	105.80
84	Aa	689	G	C5-C6-O6	-5.45	125.33	128.60
84	Aa	777	G	C5-C6-O6	-5.45	125.33	128.60
84	Aa	1789	C	N3-C4-C5	-5.45	119.72	121.90
84	Aa	2789	G	C2'-C3'-O3'	5.45	122.42	113.70
84	Aa	2885	U	C4'-C3'-C2'	-5.45	97.15	102.60
86	Ab	51	G	C6-C5-N7	-5.45	127.13	130.40
1	Ad	140	C	O4'-C1'-C2'	-5.45	100.35	105.80
1	Ad	1512	C	C3'-C2'-C1'	5.45	105.86	101.50
84	Aa	332	A	C4-C5-C6	5.45	119.72	117.00
84	Aa	769	C	N3-C4-N4	5.45	121.81	118.00
84	Aa	1157	A	C5-C6-N6	-5.45	119.34	123.70
84	Aa	2033	C	N3-C4-N4	5.45	121.81	118.00
1	Ad	1365	C	O4'-C1'-N1	5.45	112.56	108.20
28	BA	43	TYR	CB-CG-CD1	5.45	124.27	121.00
84	Aa	803	G	O4'-C1'-N9	5.45	112.56	108.20
84	Aa	1139	A	C4-C5-C6	5.45	119.72	117.00
84	Aa	1160	G	O4'-C1'-N9	5.45	112.56	108.20
84	Aa	1752	C	N3-C4-N4	5.45	121.81	118.00
84	Aa	2625	C	N3-C4-N4	5.45	121.81	118.00
84	Aa	3140	A	C4-C5-C6	5.45	119.72	117.00
84	Aa	3251	C	P-O3'-C3'	5.45	126.23	119.70
85	Ac	79	A	C5-C6-N6	-5.45	119.34	123.70
1	Ad	29	U	O4'-C1'-C2'	-5.44	100.36	105.80
1	Ad	179	A	C4'-C3'-C2'	5.44	108.04	102.60
84	Aa	1990	A	C5-C6-N6	-5.44	119.34	123.70
85	Ac	61	A	O4'-C1'-N9	5.44	112.56	108.20
1	Ad	100	C	C1'-O4'-C4'	5.44	114.25	109.90
1	Ad	1618	G	N9-C1'-C2'	5.44	121.07	114.00
1	Ad	1776	A	C3'-C2'-C1'	-5.44	97.14	101.50
73	CO	136	PRO	CA-N-CD	-5.44	103.88	111.50
84	Aa	24	C	N3-C4-N4	5.44	121.81	118.00
84	Aa	640	C	O4'-C1'-N1	5.44	112.55	108.20
84	Aa	1162	A	C5-C6-N6	-5.44	119.35	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1520	A	O4'-C1'-N9	5.44	112.55	108.20
84	Aa	1862	C	N3-C4-C5	-5.44	119.72	121.90
84	Aa	2184	U	O4'-C1'-N1	5.44	112.55	108.20
48	CD	180	PHE	CB-CG-CD1	5.44	124.61	120.80
84	Aa	5	G	C4-N9-C1'	5.44	133.57	126.50
84	Aa	727	G	C5-C6-O6	-5.44	125.34	128.60
84	Aa	1291	A	C5-C6-N6	-5.44	119.35	123.70
84	Aa	1480	G	O4'-C1'-N9	5.44	112.55	108.20
84	Aa	1744	C	N3-C4-C5	-5.44	119.72	121.90
85	Ac	81	U	P-O3'-C3'	5.44	126.23	119.70
84	Aa	418	G	O4'-C1'-N9	5.44	112.55	108.20
84	Aa	1998	A	C4-C5-C6	5.44	119.72	117.00
1	Ad	450	A	C3'-C2'-C1'	5.44	105.85	101.50
22	BZ	89	ALA	N-CA-CB	5.44	117.71	110.10
70	Cq	52	SER	N-CA-CB	5.44	118.66	110.50
84	Aa	2	C	N3-C4-C5	-5.44	119.72	121.90
84	Aa	237	C	N3-C4-C5	-5.44	119.72	121.90
84	Aa	450	C	N3-C4-N4	5.44	121.81	118.00
84	Aa	949	C	C5-C6-N1	5.44	123.72	121.00
84	Aa	2225	C	N3-C4-N4	5.44	121.81	118.00
84	Aa	2373	C	C5'-C4'-O4'	-5.44	102.58	109.10
84	Aa	3007	A	C5-C6-N6	-5.44	119.35	123.70
84	Aa	3192	G	C5-C6-O6	-5.44	125.34	128.60
84	Aa	3205	C	N3-C4-C5	-5.44	119.72	121.90
84	Aa	3287	A	C4-C5-C6	5.44	119.72	117.00
86	Ab	29	C	C5-C6-N1	5.44	123.72	121.00
1	Ad	1234	A	C1'-O4'-C4'	5.44	114.25	109.90
70	Cq	9	GLU	N-CA-C	-5.44	96.32	111.00
84	Aa	3350	C	N3-C4-N4	5.44	121.81	118.00
85	Ac	62	C	P-O5'-C5'	-5.44	112.20	120.90
1	Ad	879	C	N1-C1'-C2'	5.43	121.06	114.00
1	Ad	1507	G	C3'-C2'-C1'	-5.43	97.15	101.50
84	Aa	262	A	C5-C6-N1	-5.43	114.98	117.70
84	Aa	342	A	O4'-C1'-N9	5.43	112.55	108.20
84	Aa	898	G	C4-N9-C1'	5.43	133.57	126.50
84	Aa	1229	A	C5-C6-N6	-5.43	119.35	123.70
84	Aa	2950	C	N3-C4-N4	5.43	121.80	118.00
84	Aa	3212	C	N3-C4-C5	-5.43	119.73	121.90
84	Aa	479	C	N3-C4-C5	-5.43	119.73	121.90
84	Aa	792	A	O4'-C1'-N9	5.43	112.55	108.20
84	Aa	1907	A	C5-C6-N1	-5.43	114.98	117.70
84	Aa	2061	C	N3-C4-N4	5.43	121.80	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2397	A	C5-C6-N6	-5.43	119.36	123.70
84	Aa	3094	C	N3-C4-N4	5.43	121.80	118.00
84	Aa	3319	G	C5-C6-O6	-5.43	125.34	128.60
84	Aa	3366	C	N3-C4-C5	-5.43	119.73	121.90
69	CF	77	PHE	CB-CG-CD1	5.43	124.60	120.80
84	Aa	712	A	O4'-C1'-N9	5.43	112.55	108.20
84	Aa	883	G	C5-C6-O6	-5.43	125.34	128.60
84	Aa	1088	A	C5-C6-N1	-5.43	114.98	117.70
84	Aa	2481	C	N3-C4-N4	5.43	121.80	118.00
84	Aa	2660	A	C5-C6-N1	-5.43	114.98	117.70
1	Ad	58	U	P-O5'-C5'	5.43	129.59	120.90
84	Aa	343	G	O4'-C1'-N9	5.43	112.54	108.20
84	Aa	1312	A	C4-C5-C6	5.43	119.72	117.00
84	Aa	1591	A	C5-C6-N6	-5.43	119.36	123.70
84	Aa	1761	C	N3-C4-C5	-5.43	119.73	121.90
1	Ad	1799	G	O4'-C1'-N9	5.43	112.54	108.20
84	Aa	1206	A	C5-C6-N6	-5.43	119.36	123.70
84	Aa	1850	C	N3-C4-N4	5.43	121.80	118.00
84	Aa	2048	C	N3-C4-N4	5.43	121.80	118.00
84	Aa	3070	G	C5-C6-O6	-5.43	125.34	128.60
84	Aa	84	A	C4-C5-C6	5.43	119.71	117.00
84	Aa	1228	C	N3-C4-C5	-5.43	119.73	121.90
84	Aa	1369	G	C5-C6-O6	-5.43	125.34	128.60
84	Aa	1790	A	C5-C6-N1	-5.43	114.99	117.70
84	Aa	3017	A	C5-C6-N1	-5.43	114.99	117.70
84	Aa	3272	A	C5-C6-N1	-5.43	114.99	117.70
85	Ac	10	G	O4'-C1'-N9	5.43	112.54	108.20
1	Ad	969	U	P-O3'-C3'	5.42	126.21	119.70
1	Ad	1133	C	O4'-C1'-N1	5.42	112.54	108.20
1	Ad	1752	U	C3'-C2'-C1'	-5.42	97.16	101.50
84	Aa	130	G	C5-C6-O6	-5.42	125.34	128.60
84	Aa	373	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	603	G	P-O5'-C5'	5.42	129.58	120.90
84	Aa	1013	A	C5-C6-N6	-5.42	119.36	123.70
84	Aa	1278	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	1513	C	N3-C4-C5	-5.42	119.73	121.90
84	Aa	2674	A	C5-C6-N6	-5.42	119.36	123.70
84	Aa	3263	C	O4'-C4'-C3'	5.42	110.44	106.10
1	Ad	281	U	O4'-C4'-C3'	-5.42	98.58	104.00
1	Ad	1010	A	O4'-C1'-N9	5.42	112.54	108.20
84	Aa	586	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	850	A	C5-C6-N6	-5.42	119.36	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1353	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	2400	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	3088	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	3088	A	O4'-C1'-N9	5.42	112.54	108.20
84	Aa	3114	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	3148	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	477	C	N3-C4-N4	5.42	121.80	118.00
84	Aa	771	G	N1-C2-N3	-5.42	120.65	123.90
84	Aa	1911	A	O4'-C1'-N9	5.42	112.54	108.20
84	Aa	2028	C	N3-C4-N4	5.42	121.80	118.00
84	Aa	2533	A	O4'-C1'-N9	5.42	112.54	108.20
84	Aa	3033	A	O4'-C1'-N9	5.42	112.54	108.20
85	Ac	34	U	O4'-C1'-N1	5.42	112.54	108.20
1	Ad	1177	G	C1'-O4'-C4'	-5.42	105.56	109.90
84	Aa	114	G	P-O3'-C3'	5.42	126.20	119.70
84	Aa	932	A	C4-C5-C6	5.42	119.71	117.00
84	Aa	1370	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	2457	G	O4'-C1'-N9	5.42	112.54	108.20
1	Ad	61	A	C4'-C3'-O3'	-5.42	98.02	109.40
1	Ad	238	G	O4'-C1'-N9	-5.42	103.86	108.20
1	Ad	262	U	O4'-C1'-C2'	-5.42	100.38	105.80
84	Aa	1277	A	C4-C5-C6	5.42	119.71	117.00
84	Aa	1490	A	O4'-C1'-N9	5.42	112.53	108.20
84	Aa	1937	C	N3-C4-C5	-5.42	119.73	121.90
84	Aa	2603	C	N3-C4-N4	5.42	121.79	118.00
84	Aa	2681	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	2961	C	N3-C4-N4	5.42	121.79	118.00
84	Aa	3248	G	O4'-C1'-N9	5.42	112.53	108.20
1	Ad	144	U	P-O3'-C3'	-5.42	113.20	119.70
1	Ad	1355	U	N1-C1'-C2'	5.42	121.04	114.00
1	Ad	1790	G	C1'-O4'-C4'	-5.42	105.57	109.90
21	BP	70	ARG	N-CA-CB	5.42	120.35	110.60
84	Aa	710	C	N3-C4-N4	5.42	121.79	118.00
84	Aa	857	G	O4'-C1'-N9	5.42	112.53	108.20
84	Aa	1231	C	N3-C4-N4	5.42	121.79	118.00
84	Aa	1568	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	1713	A	C5-C6-N1	-5.42	114.99	117.70
84	Aa	1917	A	C5-C6-N6	-5.42	119.37	123.70
84	Aa	1977	C	N3-C4-N4	5.42	121.79	118.00
84	Aa	2612	A	C4-C5-C6	5.42	119.71	117.00
84	Aa	227	C	N3-C4-C5	-5.42	119.73	121.90
84	Aa	1397	A	O4'-C1'-N9	5.42	112.53	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1507	A	C5-C6-N6	-5.42	119.37	123.70
84	Aa	1516	G	N3-C2-N2	5.42	123.69	119.90
84	Aa	2136	A	C5-C6-N6	-5.42	119.37	123.70
84	Aa	2635	G	O4'-C1'-N9	5.42	112.53	108.20
86	Ab	88	U	C5-C6-N1	5.42	125.41	122.70
1	Ad	902	C	P-O3'-C3'	5.41	126.20	119.70
1	Ad	968	A	C3'-C2'-C1'	-5.41	97.17	101.50
1	Ad	1620	C	C3'-C2'-C1'	5.41	105.83	101.50
84	Aa	2	C	N3-C4-N4	5.41	121.79	118.00
84	Aa	72	A	C5-C6-N1	-5.41	114.99	117.70
84	Aa	197	A	C4-C5-C6	5.41	119.71	117.00
84	Aa	201	G	C5-C6-O6	-5.41	125.35	128.60
84	Aa	298	G	C5-C6-O6	-5.41	125.35	128.60
84	Aa	316	A	C4-C5-C6	5.41	119.71	117.00
84	Aa	917	A	C5-C6-N1	-5.41	114.99	117.70
84	Aa	1272	G	O4'-C1'-N9	5.41	112.53	108.20
84	Aa	1471	A	O4'-C1'-N9	5.41	112.53	108.20
84	Aa	1594	G	O4'-C1'-N9	5.41	112.53	108.20
84	Aa	1743	C	N3-C4-C5	-5.41	119.73	121.90
84	Aa	1882	A	C5-C6-N1	-5.41	114.99	117.70
84	Aa	2575	C	N3-C4-C5	-5.41	119.73	121.90
84	Aa	2822	A	O4'-C1'-N9	5.41	112.53	108.20
84	Aa	3110	A	O4'-C1'-N9	5.41	112.53	108.20
84	Aa	3321	C	N3-C4-C5	-5.41	119.73	121.90
1	Ad	1465	C	C5'-C4'-O4'	5.41	115.59	109.10
84	Aa	1029	C	N3-C4-C5	-5.41	119.73	121.90
84	Aa	2558	U	C2-N1-C1'	5.41	124.19	117.70
84	Aa	3364	A	C4-C5-C6	5.41	119.71	117.00
84	Aa	3374	C	O4'-C1'-N1	5.41	112.53	108.20
1	Ad	1234	A	O4'-C1'-C2'	-5.41	100.39	105.80
84	Aa	420	A	C5-C6-N6	-5.41	119.37	123.70
84	Aa	1465	A	O4'-C1'-N9	5.41	112.53	108.20
84	Aa	1837	A	C5-C6-N1	-5.41	115.00	117.70
84	Aa	2081	C	N3-C4-C5	-5.41	119.74	121.90
84	Aa	2924	G	O4'-C1'-N9	5.41	112.53	108.20
84	Aa	3025	A	C4-C5-C6	5.41	119.71	117.00
1	Ad	315	U	C4'-C3'-C2'	-5.41	97.19	102.60
1	Ad	573	C	O4'-C1'-C2'	-5.41	100.39	105.80
1	Ad	1347	U	O4'-C1'-N1	5.41	112.53	108.20
84	Aa	708	C	N3-C4-C5	-5.41	119.74	121.90
84	Aa	1571	A	C5-C6-N6	-5.41	119.37	123.70
84	Aa	2202	A	C5-C6-N1	-5.41	115.00	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2279	C	N3-C4-C5	-5.41	119.74	121.90
84	Aa	3059	C	N3-C4-C5	-5.41	119.74	121.90
85	Ac	53	A	O4'-C1'-N9	5.41	112.53	108.20
85	Ac	146	G	N1-C2-N3	-5.41	120.66	123.90
86	Ab	95	U	N3-C4-O4	5.41	123.19	119.40
1	Ad	317	U	C3'-C2'-C1'	5.41	105.83	101.50
1	Ad	1641	A	O4'-C1'-N9	5.41	112.53	108.20
84	Aa	533	G	C5-C6-O6	-5.41	125.36	128.60
1	Ad	311	G	P-O5'-C5'	-5.41	112.25	120.90
84	Aa	383	A	C5-C6-N1	-5.41	115.00	117.70
84	Aa	1002	A	O4'-C1'-N9	5.41	112.52	108.20
84	Aa	1312	A	O4'-C1'-N9	5.41	112.52	108.20
84	Aa	2006	A	C5-C6-N6	-5.41	119.38	123.70
84	Aa	2052	G	C5-C6-O6	-5.41	125.36	128.60
84	Aa	2299	C	N3-C4-C5	-5.41	119.74	121.90
84	Aa	2730	A	C5-C6-N6	-5.41	119.38	123.70
84	Aa	2768	C	N3-C4-N4	5.41	121.78	118.00
1	Ad	1327	C	N1-C1'-C2'	5.40	121.03	114.00
84	Aa	222	C	N3-C4-C5	-5.40	119.74	121.90
84	Aa	414	G	C5-C6-O6	-5.40	125.36	128.60
84	Aa	664	A	O4'-C1'-N9	5.40	112.52	108.20
84	Aa	1005	C	N3-C4-N4	5.40	121.78	118.00
84	Aa	3039	U	O4'-C1'-N1	5.40	112.52	108.20
86	Ab	18	C	N3-C4-C5	-5.40	119.74	121.90
86	Ab	56	G	N1-C2-N3	-5.40	120.66	123.90
84	Aa	213	G	N3-C2-N2	5.40	123.68	119.90
84	Aa	720	G	C5'-C4'-O4'	5.40	115.58	109.10
84	Aa	820	A	C4-C5-C6	5.40	119.70	117.00
84	Aa	2260	C	C2-N3-C4	5.40	122.60	119.90
84	Aa	2388	C	N3-C4-C5	-5.40	119.74	121.90
84	Aa	2595	G	O4'-C1'-N9	5.40	112.52	108.20
84	Aa	2596	A	O4'-C1'-N9	5.40	112.52	108.20
84	Aa	3048	C	N3-C4-C5	-5.40	119.74	121.90
85	Ac	101	U	O4'-C1'-N1	5.40	112.52	108.20
1	Ad	289	G	C1'-O4'-C4'	-5.40	105.58	109.90
1	Ad	1543	U	N1-C1'-C2'	5.40	121.02	114.00
1	Ad	1553	A	N9-C1'-C2'	5.40	121.02	114.00
1	Ad	1751	U	N1-C1'-C2'	5.40	121.02	114.00
84	Aa	224	C	C4'-C3'-C2'	-5.40	97.20	102.60
84	Aa	1209	G	C5-C6-O6	-5.40	125.36	128.60
84	Aa	2365	C	N3-C4-N4	5.40	121.78	118.00
84	Aa	2729	C	N3-C4-C5	-5.40	119.74	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	39	A	C5-C6-N1	-5.40	115.00	117.70
84	Aa	523	C	N3-C4-C5	-5.40	119.74	121.90
84	Aa	1831	A	P-O5'-C5'	5.40	129.54	120.90
84	Aa	2086	A	O4'-C1'-C2'	5.40	112.46	107.60
1	Ad	792	U	O4'-C1'-C2'	-5.40	100.40	105.80
1	Ad	1758	G	N9-C1'-C2'	5.40	121.02	114.00
53	CY	8	THR	N-CA-CB	5.40	120.56	110.30
84	Aa	219	A	C5-C6-N1	-5.40	115.00	117.70
84	Aa	823	A	C5-C6-N1	-5.40	115.00	117.70
84	Aa	1174	G	O4'-C1'-N9	5.40	112.52	108.20
84	Aa	1864	G	O4'-C1'-N9	5.40	112.52	108.20
84	Aa	1932	A	C5-C6-N6	-5.40	119.38	123.70
84	Aa	2301	C	N3-C4-C5	-5.40	119.74	121.90
84	Aa	2643	A	C4-C5-C6	5.40	119.70	117.00
84	Aa	2767	C	N3-C4-C5	-5.40	119.74	121.90
84	Aa	2836	G	O4'-C1'-N9	5.40	112.52	108.20
1	Ad	1792	A	C3'-C2'-C1'	5.40	105.82	101.50
84	Aa	176	A	C4-C5-C6	5.40	119.70	117.00
84	Aa	539	C	N3-C4-C5	-5.40	119.74	121.90
84	Aa	731	G	O4'-C1'-N9	5.40	112.52	108.20
84	Aa	1543	A	C5-C6-N6	-5.40	119.38	123.70
84	Aa	1586	A	O4'-C1'-N9	5.40	112.52	108.20
64	Ci	38	LYS	N-CA-CB	5.39	120.31	110.60
84	Aa	578	C	P-O3'-C3'	5.39	126.17	119.70
84	Aa	651	A	C5-C6-N1	-5.39	115.00	117.70
84	Aa	2449	A	C5-C6-N6	-5.39	119.38	123.70
84	Aa	2464	G	C5-C6-O6	-5.39	125.36	128.60
84	Aa	2739	A	P-O5'-C5'	-5.39	112.27	120.90
85	Ac	104	A	C5-C6-N1	-5.39	115.00	117.70
84	Aa	19	C	N3-C4-N4	5.39	121.78	118.00
84	Aa	157	G	O4'-C1'-N9	5.39	112.51	108.20
84	Aa	196	A	C5-C6-N1	-5.39	115.00	117.70
84	Aa	616	A	C4-C5-C6	5.39	119.70	117.00
84	Aa	981	A	C5-C6-N1	-5.39	115.00	117.70
84	Aa	1063	G	C5-C6-O6	-5.39	125.36	128.60
84	Aa	1090	C	N3-C4-C5	-5.39	119.74	121.90
84	Aa	1344	A	C5-C6-N1	-5.39	115.00	117.70
84	Aa	1837	A	C5-C6-N6	-5.39	119.39	123.70
84	Aa	2816	G	C5-C6-O6	-5.39	125.36	128.60
84	Aa	2874	A	O4'-C1'-N9	5.39	112.51	108.20
84	Aa	3299	A	O4'-C1'-N9	5.39	112.51	108.20
84	Aa	3328	A	O4'-C1'-N9	5.39	112.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	Ac	113	U	O4'-C1'-N1	5.39	112.51	108.20
85	Ac	129	C	N3-C4-N4	5.39	121.78	118.00
84	Aa	1970	A	O4'-C1'-N9	5.39	112.51	108.20
84	Aa	3142	C	N3-C4-C5	-5.39	119.74	121.90
86	Ab	1	G	C6-C5-N7	-5.39	127.17	130.40
1	Ad	365	C	N1-C1'-C2'	5.39	121.01	114.00
1	Ad	555	G	C1'-O4'-C4'	-5.39	105.59	109.90
1	Ad	1305	U	C1'-O4'-C4'	5.39	114.21	109.90
1	Ad	1632	C	P-O3'-C3'	5.39	126.17	119.70
84	Aa	426	A	C5-C6-N6	-5.39	119.39	123.70
84	Aa	1010	A	C4-C5-C6	5.39	119.69	117.00
84	Aa	1162	A	C5-C6-N1	-5.39	115.00	117.70
84	Aa	1602	A	C4-C5-C6	5.39	119.69	117.00
84	Aa	1761	C	N3-C4-N4	5.39	121.77	118.00
84	Aa	2882	U	P-O3'-C3'	5.39	126.17	119.70
1	Ad	1069	G	C1'-O4'-C4'	-5.39	105.59	109.90
84	Aa	70	A	C4-C5-C6	5.39	119.69	117.00
84	Aa	2960	A	O4'-C1'-N9	5.39	112.51	108.20
1	Ad	1015	C	O4'-C1'-N1	5.39	112.51	108.20
1	Ad	1665	U	P-O3'-C3'	5.39	126.16	119.70
84	Aa	582	C	N3-C4-N4	5.39	121.77	118.00
84	Aa	918	A	C5-C6-N1	-5.39	115.01	117.70
84	Aa	1337	C	N3-C4-N4	5.39	121.77	118.00
84	Aa	1537	A	C4-C5-C6	5.39	119.69	117.00
84	Aa	1584	A	C5-C6-N1	-5.39	115.01	117.70
84	Aa	1797	U	C5'-C4'-C3'	-5.39	107.38	116.00
84	Aa	2070	C	N3-C4-N4	5.39	121.77	118.00
84	Aa	2430	C	N3-C4-N4	5.39	121.77	118.00
84	Aa	2596	A	C5-C6-N6	-5.39	119.39	123.70
84	Aa	2710	C	N3-C4-N4	5.39	121.77	118.00
84	Aa	2758	C	C2-N3-C4	5.39	122.59	119.90
84	Aa	3334	A	C5'-C4'-C3'	-5.39	107.38	116.00
1	Ad	346	C	C3'-C2'-C1'	5.38	105.81	101.50
1	Ad	1400	G	O4'-C1'-N9	5.38	112.51	108.20
84	Aa	389	A	C5-C6-N1	-5.38	115.01	117.70
84	Aa	1029	C	N3-C4-N4	5.38	121.77	118.00
84	Aa	1097	A	C5-C6-N1	-5.38	115.01	117.70
84	Aa	1780	C	N3-C4-N4	5.38	121.77	118.00
84	Aa	2041	G	C5-C6-O6	-5.38	125.37	128.60
84	Aa	2605	G	O4'-C1'-N9	5.38	112.51	108.20
84	Aa	2952	G	O4'-C1'-N9	5.38	112.51	108.20
84	Aa	3004	G	C5-C6-O6	-5.38	125.37	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3376	C	N3-C4-N4	5.38	121.77	118.00
1	Ad	1063	U	P-O3'-C3'	5.38	126.16	119.70
1	Ad	1074	C	O4'-C1'-N1	5.38	112.50	108.20
84	Aa	825	G	C5-C6-O6	-5.38	125.37	128.60
84	Aa	887	A	C5-C6-N1	-5.38	115.01	117.70
84	Aa	2021	G	P-O3'-C3'	5.38	126.16	119.70
84	Aa	2404	C	N3-C4-N4	5.38	121.77	118.00
84	Aa	2694	A	C5-C6-N1	-5.38	115.01	117.70
84	Aa	2765	A	C5-C6-N1	-5.38	115.01	117.70
84	Aa	2909	A	C4-C5-C6	5.38	119.69	117.00
84	Aa	2986	C	N3-C4-C5	-5.38	119.75	121.90
85	Ac	99	C	N3-C4-N4	5.38	121.77	118.00
86	Ab	101	A	C5-C6-N1	-5.38	115.01	117.70
1	Ad	844	C	O4'-C1'-C2'	-5.38	100.42	105.80
84	Aa	2781	A	O4'-C1'-N9	5.38	112.50	108.20
84	Aa	3193	C	N3-C4-C5	-5.38	119.75	121.90
1	Ad	82	G	C1'-O4'-C4'	-5.38	105.60	109.90
1	Ad	980	C	O4'-C1'-N1	5.38	112.50	108.20
24	BW	128	PHE	CB-CG-CD1	5.38	124.56	120.80
84	Aa	98	A	C5-C6-N1	-5.38	115.01	117.70
84	Aa	323	A	C4-C5-C6	5.38	119.69	117.00
84	Aa	1195	C	N3-C4-C5	-5.38	119.75	121.90
84	Aa	1759	C	N3-C4-C5	-5.38	119.75	121.90
84	Aa	2545	C	N3-C4-N4	5.38	121.77	118.00
84	Aa	2641	A	C5-C6-N6	-5.38	119.40	123.70
1	Ad	719	C	O4'-C1'-N1	5.38	112.50	108.20
1	Ad	1137	A	O4'-C1'-C2'	-5.38	100.42	105.80
1	Ad	1207	A	O4'-C1'-N9	-5.38	103.90	108.20
1	Ad	1655	U	C1'-O4'-C4'	5.38	114.20	109.90
84	Aa	474	G	C2'-C3'-O3'	-5.38	97.67	109.50
84	Aa	1331	C	N3-C4-N4	5.38	121.76	118.00
84	Aa	1717	G	O4'-C1'-N9	5.38	112.50	108.20
84	Aa	2308	A	C4-C5-C6	5.38	119.69	117.00
84	Aa	2372	A	C5-C6-N1	-5.38	115.01	117.70
84	Aa	3103	G	N3-C2-N2	5.38	123.66	119.90
84	Aa	3270	C	O4'-C1'-N1	5.38	112.50	108.20
86	Ab	118	C	C5-C4-N4	-5.38	116.44	120.20
84	Aa	447	C	N3-C4-N4	5.38	121.76	118.00
84	Aa	996	A	C4-C5-C6	5.38	119.69	117.00
84	Aa	2429	A	O4'-C1'-N9	5.38	112.50	108.20
1	Ad	253	C	N1-C1'-C2'	5.37	120.99	114.00
1	Ad	385	C	C1'-O4'-C4'	-5.37	105.60	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	319	C	O4'-C1'-N1	5.37	112.50	108.20
84	Aa	1552	C	N3-C4-N4	5.37	121.76	118.00
84	Aa	1841	G	O4'-C1'-N9	5.37	112.50	108.20
84	Aa	2000	C	N3-C4-N4	5.37	121.76	118.00
84	Aa	2005	C	N3-C4-C5	-5.37	119.75	121.90
84	Aa	2318	U	O4'-C1'-N1	5.37	112.50	108.20
84	Aa	3098	U	O4'-C1'-N1	5.37	112.50	108.20
84	Aa	3116	C	N3-C4-C5	-5.37	119.75	121.90
85	Ac	156	C	N3-C4-N4	5.37	121.76	118.00
86	Ab	43	A	N1-C2-N3	5.37	131.99	129.30
1	Ad	164	C	C4'-C3'-C2'	-5.37	97.23	102.60
1	Ad	227	G	P-O3'-C3'	5.37	126.15	119.70
1	Ad	323	U	C3'-C2'-C1'	5.37	105.80	101.50
84	Aa	113	A	C4-C5-C6	5.37	119.69	117.00
84	Aa	338	C	N3-C4-N4	5.37	121.76	118.00
84	Aa	376	A	C5-C6-N1	-5.37	115.01	117.70
84	Aa	636	C	N3-C4-C5	-5.37	119.75	121.90
84	Aa	698	A	C5-C6-N6	-5.37	119.40	123.70
84	Aa	821	C	N3-C4-N4	5.37	121.76	118.00
84	Aa	1518	A	C5-C6-N1	-5.37	115.01	117.70
84	Aa	1583	G	N3-C2-N2	5.37	123.66	119.90
84	Aa	1795	A	O4'-C1'-N9	5.37	112.50	108.20
84	Aa	2100	A	C5-C6-N6	-5.37	119.40	123.70
84	Aa	2436	G	C4'-C3'-O3'	5.37	123.74	113.00
84	Aa	2451	G	N1-C6-O6	5.37	123.12	119.90
84	Aa	2576	C	N3-C4-C5	-5.37	119.75	121.90
84	Aa	2815	A	O4'-C1'-N9	5.37	112.50	108.20
84	Aa	2891	C	N3-C4-C5	-5.37	119.75	121.90
86	Ab	90	A	N7-C8-N9	5.37	116.49	113.80
1	Ad	1203	G	C5'-C4'-O4'	5.37	115.54	109.10
3	Af	21	C	C1'-O4'-C4'	5.37	114.20	109.90
84	Aa	1367	A	C5-C6-N1	-5.37	115.02	117.70
1	Ad	153	U	O4'-C1'-C2'	-5.37	100.43	105.80
84	Aa	347	A	C4-C5-C6	5.37	119.68	117.00
84	Aa	518	G	C5-C6-O6	-5.37	125.38	128.60
84	Aa	926	C	N3-C4-C5	-5.37	119.75	121.90
84	Aa	1030	A	C5-C6-N1	-5.37	115.02	117.70
84	Aa	1723	C	C4'-C3'-C2'	-5.37	97.23	102.60
84	Aa	2729	C	N3-C4-N4	5.37	121.76	118.00
85	Ac	42	G	C5-C6-O6	-5.37	125.38	128.60
85	Ac	105	A	O4'-C1'-N9	5.37	112.50	108.20
84	Aa	618	G	O4'-C1'-N9	5.37	112.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1071	G	C5-C6-O6	-5.37	125.38	128.60
84	Aa	2515	C	N3-C4-N4	5.37	121.76	118.00
86	Ab	51	G	N1-C2-N3	-5.37	120.68	123.90
1	Ad	134	G	O4'-C1'-N9	-5.37	103.91	108.20
1	Ad	761	A	C1'-O4'-C4'	-5.37	105.61	109.90
78	CL	156	ILE	N-CA-CB	5.37	123.14	110.80
84	Aa	54	G	C5-C6-O6	-5.37	125.38	128.60
84	Aa	238	C	N3-C4-C5	-5.37	119.75	121.90
84	Aa	826	C	N3-C4-N4	5.37	121.75	118.00
84	Aa	993	A	C4-C5-C6	5.37	119.68	117.00
84	Aa	1377	G	O4'-C1'-N9	5.37	112.49	108.20
84	Aa	1743	C	N3-C4-N4	5.37	121.76	118.00
84	Aa	2257	A	C4-C5-C6	5.37	119.68	117.00
84	Aa	2529	C	C5'-C4'-O4'	5.37	115.54	109.10
84	Aa	3346	C	N3-C4-C5	-5.37	119.75	121.90
85	Ac	84	C	N3-C4-C5	-5.37	119.75	121.90
1	Ad	542	A	N9-C1'-C2'	-5.36	106.10	112.00
2	Ae	44	A	C4'-C3'-C2'	-5.36	97.24	102.60
84	Aa	1254	A	C5-C6-N1	-5.36	115.02	117.70
84	Aa	1394	C	N3-C4-N4	5.36	121.75	118.00
84	Aa	1843	A	C5-C6-N1	-5.36	115.02	117.70
84	Aa	2266	A	C5-C6-N6	-5.36	119.41	123.70
84	Aa	2388	C	C2-N3-C4	5.36	122.58	119.90
84	Aa	3229	C	N3-C4-C5	-5.36	119.75	121.90
86	Ab	95	U	C5-C4-O4	-5.36	122.68	125.90
1	Ad	466	G	O4'-C1'-N9	5.36	112.49	108.20
1	Ad	852	A	O4'-C1'-N9	5.36	112.49	108.20
13	BF	41	HIS	N-CA-CB	5.36	120.25	110.60
84	Aa	371	A	N1-C6-N6	5.36	121.82	118.60
84	Aa	2900	G	N3-C2-N2	5.36	123.65	119.90
84	Aa	3239	G	C5-C6-O6	-5.36	125.38	128.60
1	Ad	282	C	P-O5'-C5'	-5.36	112.32	120.90
1	Ad	965	U	O4'-C1'-N1	5.36	112.49	108.20
1	Ad	1742	A	O4'-C1'-N9	5.36	112.49	108.20
84	Aa	1579	C	C2-N3-C4	5.36	122.58	119.90
84	Aa	1610	A	C5-C6-N6	-5.36	119.41	123.70
84	Aa	1906	A	C5-C6-N1	-5.36	115.02	117.70
84	Aa	2527	G	C6-C5-N7	-5.36	127.18	130.40
84	Aa	2578	G	N3-C2-N2	5.36	123.65	119.90
84	Aa	2774	A	C5-C6-N1	-5.36	115.02	117.70
84	Aa	2810	A	O4'-C1'-N9	5.36	112.49	108.20
84	Aa	1391	A	C5-C6-N1	-5.36	115.02	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1616	G	O4'-C1'-N9	5.36	112.49	108.20
84	Aa	1813	C	N3-C4-N4	5.36	121.75	118.00
84	Aa	2007	C	N3-C4-N4	5.36	121.75	118.00
84	Aa	2765	A	C5-C6-N6	-5.36	119.41	123.70
1	Ad	361	G	O4'-C1'-N9	5.36	112.49	108.20
1	Ad	1769	C	O4'-C1'-C2'	-5.36	100.44	105.80
84	Aa	1040	A	O4'-C1'-N9	5.36	112.48	108.20
84	Aa	1067	G	O4'-C1'-N9	5.36	112.49	108.20
84	Aa	1080	C	N3-C4-N4	5.36	121.75	118.00
84	Aa	1205	C	N3-C4-N4	5.36	121.75	118.00
84	Aa	2141	A	O4'-C1'-N9	5.36	112.48	108.20
84	Aa	2698	A	O4'-C1'-N9	5.36	112.49	108.20
84	Aa	2938	A	C5-C6-N1	-5.36	115.02	117.70
84	Aa	3129	G	O4'-C1'-N9	5.36	112.48	108.20
84	Aa	3211	C	N3-C4-C5	-5.36	119.76	121.90
84	Aa	3264	C	N3-C4-N4	5.36	121.75	118.00
1	Ad	403	A	C1'-O4'-C4'	5.36	114.18	109.90
1	Ad	457	C	C3'-C2'-C1'	-5.36	97.22	101.50
1	Ad	1355	U	O4'-C1'-N1	5.36	112.48	108.20
2	Ae	19	U	O4'-C1'-N1	-5.36	103.92	108.20
84	Aa	239	C	N3-C4-C5	-5.36	119.76	121.90
84	Aa	943	G	O4'-C1'-N9	5.36	112.48	108.20
84	Aa	1238	G	N1-C6-O6	5.36	123.11	119.90
84	Aa	1333	C	N3-C4-C5	-5.36	119.76	121.90
84	Aa	1334	A	C5-C6-N1	-5.36	115.02	117.70
84	Aa	1891	A	C5-C6-N1	-5.36	115.02	117.70
84	Aa	1971	A	C5-C6-N6	-5.36	119.42	123.70
84	Aa	2006	A	C5-C6-N1	-5.36	115.02	117.70
84	Aa	2386	A	C5-C6-N6	-5.36	119.42	123.70
84	Aa	2474	A	C5-C6-N6	-5.36	119.42	123.70
84	Aa	3130	A	C4-C5-C6	5.36	119.68	117.00
1	Ad	72	A	C5'-C4'-O4'	5.35	115.53	109.10
1	Ad	596	A	C3'-C2'-C1'	5.35	105.78	101.50
2	Ae	66	C	O4'-C1'-N1	5.35	112.48	108.20
84	Aa	434	C	N3-C4-N4	5.35	121.75	118.00
84	Aa	493	G	O3'-P-O5'	5.35	114.17	104.00
84	Aa	1311	G	C5-C6-O6	-5.35	125.39	128.60
84	Aa	1734	G	O4'-C1'-N9	5.35	112.48	108.20
84	Aa	2015	G	C5-C6-O6	-5.35	125.39	128.60
84	Aa	2543	G	O4'-C1'-N9	5.35	112.48	108.20
1	Ad	760	G	C1'-O4'-C4'	-5.35	105.62	109.90
84	Aa	167	C	C4'-C3'-C2'	5.35	107.95	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	198	A	C5-C6-N1	-5.35	115.02	117.70
84	Aa	296	C	N3-C4-N4	5.35	121.75	118.00
84	Aa	1241	G	C5'-C4'-C3'	5.35	124.56	116.00
84	Aa	1734	G	C5-C6-O6	-5.35	125.39	128.60
84	Aa	1852	C	N3-C4-N4	5.35	121.75	118.00
84	Aa	2101	A	O4'-C1'-N9	5.35	112.48	108.20
1	Ad	1359	C	P-O3'-C3'	5.35	126.12	119.70
24	BW	97	ARG	N-CA-CB	5.35	120.23	110.60
84	Aa	1209	G	O4'-C1'-N9	5.35	112.48	108.20
84	Aa	2016	A	C5-C6-N6	-5.35	119.42	123.70
84	Aa	2745	C	N3-C4-N4	5.35	121.75	118.00
86	Ab	46	C	O4'-C1'-N1	5.35	112.48	108.20
1	Ad	1164	C	C3'-C2'-C1'	5.35	105.78	101.50
1	Ad	1239	C	C3'-C2'-C1'	5.35	105.78	101.50
1	Ad	1503	C	C3'-C2'-C1'	5.35	105.78	101.50
84	Aa	779	U	O4'-C1'-N1	5.35	112.48	108.20
84	Aa	3028	A	C5-C6-N1	-5.35	115.03	117.70
84	Aa	3173	A	C5-C6-N1	-5.35	115.03	117.70
84	Aa	3216	G	C5-C6-O6	-5.35	125.39	128.60
84	Aa	3256	C	N3-C4-C5	-5.35	119.76	121.90
86	Ab	59	U	O4'-C1'-N1	5.35	112.48	108.20
1	Ad	164	C	C1'-O4'-C4'	-5.35	105.62	109.90
1	Ad	1288	C	O4'-C1'-N1	5.35	112.48	108.20
41	CA	40	TYR	CB-CG-CD2	-5.35	117.79	121.00
48	CD	289	ASN	N-CA-CB	5.35	120.22	110.60
84	Aa	1314	G	N3-C2-N2	5.35	123.64	119.90
84	Aa	1363	C	C2-N3-C4	5.35	122.57	119.90
84	Aa	1500	C	N3-C4-N4	5.35	121.74	118.00
84	Aa	1509	G	N3-C2-N2	5.35	123.64	119.90
84	Aa	2604	A	C4-C5-C6	5.35	119.67	117.00
84	Aa	3296	C	N3-C4-N4	5.35	121.74	118.00
86	Ab	75	G	P-O3'-C3'	5.35	126.12	119.70
1	Ad	926	G	C3'-C2'-C1'	-5.35	97.22	101.50
1	Ad	1007	G	C1'-O4'-C4'	-5.35	105.62	109.90
84	Aa	143	A	C5-C6-N6	-5.35	119.42	123.70
84	Aa	482	C	N3-C4-C5	-5.35	119.76	121.90
84	Aa	1868	C	C2-N3-C4	5.35	122.57	119.90
84	Aa	1945	A	P-O5'-C5'	-5.35	112.35	120.90
84	Aa	3182	A	C5'-C4'-C3'	5.35	124.55	116.00
1	Ad	886	A	C5'-C4'-O4'	5.34	115.51	109.10
30	BB	134	MET	CG-SD-CE	-5.34	91.65	100.20
84	Aa	738	A	C5-C6-N1	-5.34	115.03	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1831	A	C4-C5-C6	5.34	119.67	117.00
84	Aa	2473	C	N3-C4-N4	5.34	121.74	118.00
84	Aa	3322	A	O4'-C1'-N9	5.34	112.48	108.20
1	Ad	153	U	O4'-C1'-N1	5.34	112.47	108.20
84	Aa	2178	G	C2'-C3'-O3'	-5.34	97.74	109.50
84	Aa	2749	A	C5-C6-N6	-5.34	119.43	123.70
1	Ad	844	C	C5'-C4'-O4'	5.34	115.51	109.10
49	CR	188	SER	N-CA-CB	5.34	118.51	110.50
84	Aa	392	C	N3-C4-C5	-5.34	119.76	121.90
84	Aa	885	A	C5-C6-N1	-5.34	115.03	117.70
84	Aa	1018	C	N3-C4-C5	-5.34	119.76	121.90
84	Aa	1153	A	C5-C6-N1	-5.34	115.03	117.70
84	Aa	1264	A	C5'-C4'-O4'	5.34	115.51	109.10
84	Aa	2083	U	C5'-C4'-C3'	5.34	124.55	116.00
84	Aa	2118	G	O4'-C1'-N9	5.34	112.47	108.20
84	Aa	2439	A	C4-C5-C6	5.34	119.67	117.00
84	Aa	2576	C	N3-C4-N4	5.34	121.74	118.00
84	Aa	2620	U	O4'-C1'-N1	5.34	112.47	108.20
84	Aa	3033	A	C5-C6-N6	-5.34	119.43	123.70
2	Ae	53	U	O4'-C1'-N1	5.34	112.47	108.20
84	Aa	6	A	C5-C6-N1	-5.34	115.03	117.70
84	Aa	439	A	C5-C6-N1	-5.34	115.03	117.70
84	Aa	785	U	P-O3'-C3'	5.34	126.11	119.70
84	Aa	981	A	C5-C6-N6	-5.34	119.43	123.70
84	Aa	1104	C	N3-C4-C5	-5.34	119.76	121.90
84	Aa	2054	A	C5-C6-N1	-5.34	115.03	117.70
84	Aa	2481	C	N3-C4-C5	-5.34	119.76	121.90
84	Aa	2611	G	C5-C6-O6	-5.34	125.40	128.60
84	Aa	3038	U	O4'-C1'-N1	5.34	112.47	108.20
1	Ad	255	U	O4'-C1'-C2'	-5.34	100.46	105.80
84	Aa	33	A	C5-C6-N1	-5.34	115.03	117.70
84	Aa	1255	A	C5-C6-N6	-5.34	119.43	123.70
84	Aa	1780	C	N3-C4-C5	-5.34	119.77	121.90
86	Ab	68	G	C6-N1-C2	5.34	128.30	125.10
1	Ad	831	C	C1'-O4'-C4'	5.34	114.17	109.90
1	Ad	973	U	N1-C1'-C2'	5.34	120.94	114.00
1	Ad	1115	G	C3'-C2'-C1'	5.34	105.77	101.50
1	Ad	1203	G	P-O3'-C3'	-5.34	113.30	119.70
84	Aa	150	G	P-O5'-C5'	-5.34	112.36	120.90
84	Aa	180	G	O4'-C1'-N9	5.34	112.47	108.20
84	Aa	679	C	N3-C4-N4	5.34	121.73	118.00
84	Aa	844	A	C4-C5-C6	5.34	119.67	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1364	C	N3-C4-N4	5.34	121.74	118.00
84	Aa	1607	C	C2-N3-C4	5.34	122.57	119.90
84	Aa	2699	A	C5-C6-N6	-5.34	119.43	123.70
84	Aa	3074	A	C5-C6-N1	-5.34	115.03	117.70
84	Aa	114	G	C4'-C3'-C2'	-5.33	97.27	102.60
84	Aa	642	C	O5'-C5'-C4'	5.33	121.84	111.70
84	Aa	727	G	O4'-C1'-N9	5.33	112.47	108.20
84	Aa	850	A	C5-C6-N1	-5.33	115.03	117.70
84	Aa	467	C	N3-C4-C5	-5.33	119.77	121.90
84	Aa	558	G	P-O5'-C5'	-5.33	112.37	120.90
84	Aa	737	C	N3-C4-C5	-5.33	119.77	121.90
84	Aa	744	C	C2-N3-C4	5.33	122.57	119.90
84	Aa	1541	G	C5-C6-O6	-5.33	125.40	128.60
84	Aa	2197	C	N3-C4-N4	5.33	121.73	118.00
84	Aa	2320	A	C4-C5-C6	5.33	119.67	117.00
84	Aa	3236	A	C5-C6-N6	-5.33	119.43	123.70
84	Aa	3284	C	N3-C4-C5	-5.33	119.77	121.90
1	Ad	381	G	O4'-C1'-C2'	5.33	112.40	107.60
1	Ad	1133	C	N1-C1'-C2'	5.33	120.93	114.00
20	BT	56	TYR	CB-CG-CD2	-5.33	117.80	121.00
84	Aa	195	G	O4'-C1'-N9	5.33	112.47	108.20
84	Aa	442	C	N3-C4-N4	5.33	121.73	118.00
84	Aa	599	C	N3-C4-C5	-5.33	119.77	121.90
84	Aa	775	A	C4-C5-C6	5.33	119.67	117.00
84	Aa	789	A	C5-C6-N6	-5.33	119.44	123.70
84	Aa	1027	C	N3-C4-N4	5.33	121.73	118.00
84	Aa	1727	A	O4'-C1'-N9	5.33	112.47	108.20
84	Aa	1794	A	C4-C5-C6	5.33	119.67	117.00
84	Aa	2132	A	C4'-C3'-C2'	-5.33	97.27	102.60
84	Aa	2252	C	N3-C4-C5	-5.33	119.77	121.90
84	Aa	2705	A	C5-C6-N1	-5.33	115.03	117.70
84	Aa	2883	C	N3-C4-N4	5.33	121.73	118.00
85	Ac	103	G	O4'-C1'-N9	5.33	112.47	108.20
86	Ab	28	U	C5-C4-O4	-5.33	122.70	125.90
84	Aa	1303	C	N3-C4-C5	-5.33	119.77	121.90
84	Aa	2532	A	O4'-C1'-N9	5.33	112.46	108.20
84	Aa	3012	A	C5-C6-N1	-5.33	115.03	117.70
1	Ad	180	A	O4'-C1'-C2'	-5.33	100.47	105.80
1	Ad	821	G	C1'-O4'-C4'	-5.33	105.64	109.90
1	Ad	1522	U	O4'-C1'-C2'	5.33	112.40	107.60
1	Ad	1606	U	O4'-C1'-N1	5.33	112.46	108.20
84	Aa	306	A	C4-C5-C6	5.33	119.66	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	783	A	C5-C6-N1	-5.33	115.04	117.70
84	Aa	1255	A	O4'-C1'-N9	5.33	112.46	108.20
84	Aa	1263	A	C5-C6-N1	-5.33	115.04	117.70
84	Aa	1676	A	O4'-C1'-N9	5.33	112.46	108.20
84	Aa	2789	G	C5'-C4'-C3'	-5.33	107.47	116.00
86	Ab	113	G	N1-C6-O6	5.33	123.10	119.90
1	Ad	1186	U	O4'-C1'-C2'	-5.33	100.47	105.80
1	Ad	1456	U	N1-C1'-C2'	5.33	120.92	114.00
84	Aa	1227	A	C5-C6-N6	-5.33	119.44	123.70
84	Aa	2102	C	N3-C4-C5	-5.33	119.77	121.90
84	Aa	3073	A	O4'-C1'-N9	5.33	112.46	108.20
84	Aa	3093	C	N3-C4-N4	5.33	121.73	118.00
84	Aa	3168	C	C6-N1-C2	-5.33	118.17	120.30
84	Aa	3278	G	P-O3'-C3'	5.33	126.09	119.70
1	Ad	41	A	C3'-C2'-C1'	5.33	105.76	101.50
1	Ad	229	G	P-O3'-C3'	5.33	126.09	119.70
1	Ad	1161	C	C3'-C2'-C1'	5.33	105.76	101.50
84	Aa	699	C	N3-C4-N4	5.33	121.73	118.00
84	Aa	1485	A	C5-C6-N1	-5.33	115.04	117.70
84	Aa	1580	C	N3-C4-N4	5.33	121.73	118.00
84	Aa	2706	A	C5-C6-N6	-5.33	119.44	123.70
84	Aa	2880	G	C5-C6-O6	-5.33	125.41	128.60
1	Ad	1650	G	O4'-C1'-C2'	5.32	112.39	107.60
84	Aa	326	C	N3-C4-C5	-5.32	119.77	121.90
84	Aa	680	G	O4'-C1'-N9	5.32	112.46	108.20
84	Aa	681	A	C4-C5-C6	5.32	119.66	117.00
84	Aa	1486	G	C6-C5-N7	-5.32	127.20	130.40
84	Aa	1633	C	N3-C4-C5	-5.32	119.77	121.90
84	Aa	2780	G	O4'-C1'-N9	5.32	112.46	108.20
84	Aa	2978	A	C5-C6-N1	-5.32	115.04	117.70
1	Ad	1109	U	N1-C1'-C2'	5.32	120.92	114.00
86	Ab	25	G	C5-C6-O6	-5.32	125.41	128.60
1	Ad	94	A	C5'-C4'-C3'	-5.32	107.49	116.00
1	Ad	194	G	P-O3'-C3'	5.32	126.08	119.70
1	Ad	261	C	C1'-O4'-C4'	-5.32	105.64	109.90
84	Aa	1551	C	N3-C4-C5	-5.32	119.77	121.90
84	Aa	1565	G	C5'-C4'-C3'	5.32	124.51	116.00
84	Aa	2044	C	C5'-C4'-C3'	-5.32	107.49	116.00
84	Aa	2455	A	O4'-C1'-N9	5.32	112.46	108.20
84	Aa	3152	C	C3'-C2'-C1'	5.32	105.76	101.50
84	Aa	819	A	C4-C5-C6	5.32	119.66	117.00
84	Aa	869	A	C4-C5-C6	5.32	119.66	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1457	A	C5-C6-N6	-5.32	119.44	123.70
84	Aa	1860	A	C5-C6-N1	-5.32	115.04	117.70
84	Aa	2137	A	C5-C6-N1	-5.32	115.04	117.70
85	Ac	25	G	O4'-C1'-N9	5.32	112.45	108.20
86	Ab	19	A	C5-C6-N6	-5.32	119.44	123.70
1	Ad	1281	G	N9-C1'-C2'	5.32	120.91	114.00
84	Aa	880	C	N3-C4-C5	-5.32	119.77	121.90
84	Aa	1208	A	C5-C6-N1	-5.32	115.04	117.70
84	Aa	1455	A	C5-C6-N1	-5.32	115.04	117.70
84	Aa	1806	C	C5'-C4'-O4'	5.32	115.48	109.10
84	Aa	2054	A	C5-C6-N6	-5.32	119.45	123.70
84	Aa	2061	C	N3-C4-C5	-5.32	119.77	121.90
84	Aa	2111	A	C5-C6-N6	-5.32	119.45	123.70
84	Aa	2150	C	N3-C4-N4	5.32	121.72	118.00
84	Aa	2874	A	C4-C5-C6	5.32	119.66	117.00
85	Ac	142	G	O4'-C1'-N9	5.32	112.45	108.20
1	Ad	1252	C	O4'-C1'-N1	5.32	112.45	108.20
1	Ad	1401	C	N1-C1'-C2'	5.32	120.91	114.00
47	CQ	161	SER	N-CA-C	-5.32	96.65	111.00
60	Co	48	SER	N-CA-CB	5.32	118.47	110.50
84	Aa	33	A	O4'-C1'-N9	5.32	112.45	108.20
84	Aa	316	A	C5-C6-N1	-5.32	115.04	117.70
84	Aa	763	G	O4'-C1'-N9	5.32	112.45	108.20
84	Aa	936	A	C5-C6-N1	-5.32	115.04	117.70
84	Aa	1763	C	N3-C4-C5	-5.32	119.77	121.90
84	Aa	2691	U	O4'-C1'-N1	5.32	112.45	108.20
84	Aa	3050	A	C5-C6-N6	-5.32	119.45	123.70
84	Aa	3121	C	N3-C4-C5	-5.32	119.77	121.90
84	Aa	3169	C	O4'-C1'-N1	5.32	112.45	108.20
84	Aa	202	G	O4'-C1'-N9	5.31	112.45	108.20
84	Aa	347	A	C5-C6-N1	-5.31	115.04	117.70
84	Aa	500	C	N3-C4-N4	5.31	121.72	118.00
84	Aa	1970	A	C5-C6-N1	-5.31	115.04	117.70
84	Aa	2801	A	O4'-C1'-N9	5.31	112.45	108.20
84	Aa	3134	C	N3-C4-N4	5.31	121.72	118.00
1	Ad	1091	A	C1'-O4'-C4'	-5.31	105.65	109.90
46	Ca	9	ARG	N-CA-CB	5.31	120.16	110.60
84	Aa	329	G	O4'-C1'-N9	5.31	112.45	108.20
84	Aa	1120	G	O4'-C1'-N9	5.31	112.45	108.20
84	Aa	1192	A	C5-C6-N6	-5.31	119.45	123.70
84	Aa	1856	G	O4'-C1'-N9	5.31	112.45	108.20
84	Aa	3311	C	N3-C4-N4	5.31	121.72	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	Ae	19	U	C3'-C2'-C1'	5.31	105.75	101.50
47	CQ	123	PHE	CB-CG-CD2	-5.31	117.08	120.80
84	Aa	1645	G	O4'-C1'-N9	5.31	112.45	108.20
84	Aa	1861	A	C5-C6-N6	-5.31	119.45	123.70
84	Aa	3253	C	N3-C4-N4	5.31	121.72	118.00
85	Ac	128	C	N3-C4-C5	-5.31	119.78	121.90
1	Ad	865	U	N1-C1'-C2'	5.31	120.90	114.00
1	Ad	1173	U	O4'-C1'-N1	5.31	112.45	108.20
84	Aa	286	C	C4'-C3'-C2'	-5.31	97.29	102.60
84	Aa	365	A	C5-C6-N1	-5.31	115.05	117.70
84	Aa	794	G	O4'-C1'-N9	5.31	112.45	108.20
84	Aa	806	C	N3-C4-N4	5.31	121.72	118.00
84	Aa	1051	A	C5-C6-N6	-5.31	119.45	123.70
84	Aa	1278	A	C5-C6-N6	-5.31	119.45	123.70
84	Aa	1396	A	O4'-C1'-N9	5.31	112.45	108.20
84	Aa	1590	A	C5-C6-N1	-5.31	115.05	117.70
84	Aa	3011	U	C5'-C4'-C3'	5.31	124.50	116.00
2	Ae	74	C	N1-C1'-C2'	-5.31	106.16	112.00
84	Aa	705	A	C5-C6-N1	-5.31	115.05	117.70
84	Aa	1896	A	O4'-C1'-N9	5.31	112.44	108.20
84	Aa	2092	C	C4'-C3'-C2'	5.31	107.91	102.60
84	Aa	3033	A	C5-C6-N1	-5.31	115.05	117.70
84	Aa	3165	C	N3-C4-N4	5.31	121.72	118.00
84	Aa	1306	A	C5-C6-N1	-5.31	115.05	117.70
84	Aa	1865	C	N3-C4-N4	5.31	121.71	118.00
84	Aa	2035	G	C5-C6-O6	-5.31	125.42	128.60
84	Aa	2037	C	N3-C4-C5	-5.31	119.78	121.90
1	Ad	167	A	N9-C1'-C2'	-5.30	106.17	112.00
1	Ad	941	G	P-O3'-C3'	5.30	126.07	119.70
1	Ad	995	C	O4'-C1'-N1	5.30	112.44	108.20
1	Ad	1511	A	O4'-C1'-C2'	5.30	112.37	107.60
1	Ad	1701	G	C3'-C2'-C1'	-5.30	97.26	101.50
53	CY	10	SER	N-CA-CB	5.30	118.45	110.50
84	Aa	11	A	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	249	A	C5-C6-N6	-5.30	119.46	123.70
84	Aa	363	A	C5-C6-N6	-5.30	119.46	123.70
84	Aa	1233	G	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	1290	A	C4-C5-C6	5.30	119.65	117.00
84	Aa	1961	C	N3-C4-N4	5.30	121.71	118.00
84	Aa	2059	C	N3-C4-N4	5.30	121.71	118.00
84	Aa	2167	G	C6-C5-N7	-5.30	127.22	130.40
84	Aa	2533	A	C5-C6-N1	-5.30	115.05	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2839	A	C5-C6-N1	-5.30	115.05	117.70
84	Aa	3184	G	C5-C6-O6	-5.30	125.42	128.60
85	Ac	21	C	N3-C4-N4	5.30	121.71	118.00
85	Ac	48	A	C4-C5-C6	5.30	119.65	117.00
85	Ac	53	A	C5-C6-N1	-5.30	115.05	117.70
86	Ab	3	A	O4'-C1'-N9	5.30	112.44	108.20
86	Ab	7	G	N3-C2-N2	5.30	123.61	119.90
84	Aa	296	C	N3-C4-C5	-5.30	119.78	121.90
84	Aa	535	G	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	2462	G	O4'-C4'-C3'	-5.30	98.70	104.00
84	Aa	2902	A	C4-C5-C6	5.30	119.65	117.00
84	Aa	336	A	C5-C6-N1	-5.30	115.05	117.70
84	Aa	661	A	C5-C6-N6	-5.30	119.46	123.70
84	Aa	859	G	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	1517	C	C6-N1-C1'	-5.30	114.44	120.80
84	Aa	1875	A	C5-C6-N1	-5.30	115.05	117.70
84	Aa	2146	A	C4-C5-C6	5.30	119.65	117.00
84	Aa	2325	A	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	2774	A	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	2896	C	N3-C4-C5	-5.30	119.78	121.90
84	Aa	3022	A	C5-C6-N1	-5.30	115.05	117.70
8	Bf	56	PHE	CB-CG-CD2	5.30	124.51	120.80
84	Aa	416	A	C5-C6-N1	-5.30	115.05	117.70
84	Aa	632	C	N3-C4-N4	5.30	121.71	118.00
84	Aa	924	A	C4-C5-C6	5.30	119.65	117.00
84	Aa	1207	A	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	1550	A	C5-C6-N6	-5.30	119.46	123.70
84	Aa	2135	U	O4'-C1'-N1	5.30	112.44	108.20
84	Aa	2240	C	O4'-C1'-N1	5.30	112.44	108.20
84	Aa	2298	A	C5-C6-N6	-5.30	119.46	123.70
84	Aa	804	A	C4-C5-C6	5.30	119.65	117.00
84	Aa	1006	A	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	2441	G	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	2474	A	C5-C6-N1	-5.30	115.05	117.70
1	Ad	721	U	P-O5'-C5'	-5.30	112.42	120.90
1	Ad	746	A	N9-C1'-C2'	-5.30	106.17	112.00
1	Ad	1270	U	C1'-O4'-C4'	-5.30	105.66	109.90
2	Ae	70	G	O4'-C1'-N9	5.30	112.44	108.20
11	BD	78	ASN	N-CA-CB	5.30	120.13	110.60
84	Aa	12	G	C5-C6-O6	-5.30	125.42	128.60
84	Aa	167	C	N3-C4-C5	-5.30	119.78	121.90
84	Aa	410	G	N1-C6-O6	5.30	123.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	720	G	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	819	A	C5-C6-N1	-5.30	115.05	117.70
84	Aa	928	A	C5-C6-N1	-5.30	115.05	117.70
84	Aa	949	C	C2-N3-C4	5.30	122.55	119.90
84	Aa	1036	C	C2-N3-C4	5.30	122.55	119.90
84	Aa	1267	A	C5-C6-N1	-5.30	115.05	117.70
84	Aa	1323	G	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	1608	C	N3-C4-N4	5.30	121.71	118.00
84	Aa	2141	A	C5-C6-N6	-5.30	119.46	123.70
84	Aa	2399	G	O4'-C1'-N9	5.30	112.44	108.20
84	Aa	3162	C	P-O3'-C3'	5.30	126.06	119.70
84	Aa	3256	C	N3-C4-N4	5.30	121.71	118.00
84	Aa	3336	A	C1'-O4'-C4'	-5.30	105.66	109.90
84	Aa	597	C	N3-C4-N4	5.29	121.71	118.00
84	Aa	1430	C	N3-C4-C5	-5.29	119.78	121.90
84	Aa	1846	A	C5-C6-N1	-5.29	115.05	117.70
84	Aa	3072	A	C5-C6-N1	-5.29	115.05	117.70
84	Aa	2064	C	N3-C4-C5	-5.29	119.78	121.90
84	Aa	2137	A	C5-C6-N6	-5.29	119.47	123.70
84	Aa	2185	U	O4'-C1'-N1	5.29	112.44	108.20
84	Aa	2561	A	C5-C6-N1	-5.29	115.05	117.70
84	Aa	3078	A	C5-C6-N1	-5.29	115.05	117.70
1	Ad	1079	G	N9-C1'-C2'	5.29	120.88	114.00
1	Ad	1299	G	O4'-C4'-C3'	-5.29	98.71	104.00
2	Ae	5	U	O4'-C1'-C2'	-5.29	100.51	105.80
84	Aa	143	A	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	825	G	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	1172	A	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	1800	G	P-O3'-C3'	5.29	126.05	119.70
84	Aa	1860	A	C5-C6-N6	-5.29	119.47	123.70
84	Aa	2885	U	O4'-C1'-N1	5.29	112.43	108.20
84	Aa	3186	G	O4'-C1'-N9	5.29	112.43	108.20
85	Ac	94	C	N3-C4-N4	5.29	121.70	118.00
3	Af	20	U	N1-C1'-C2'	5.29	120.88	114.00
84	Aa	1177	G	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	1577	A	C5-C6-N1	-5.29	115.06	117.70
84	Aa	3166	C	N3-C4-N4	5.29	121.70	118.00
84	Aa	3168	C	N3-C4-N4	5.29	121.70	118.00
85	Ac	22	U	O4'-C1'-N1	5.29	112.43	108.20
86	Ab	5	G	N3-C2-N2	5.29	123.60	119.90
1	Ad	281	U	C5'-C4'-O4'	-5.29	102.75	109.10
1	Ad	1185	U	N1-C1'-C2'	5.29	120.87	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	Ae	57	A	O4'-C1'-C2'	-5.29	100.51	105.80
84	Aa	1351	C	C2-N3-C4	5.29	122.54	119.90
84	Aa	1438	A	C5-C6-N1	-5.29	115.06	117.70
84	Aa	1512	A	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	1928	A	C5-C6-N6	-5.29	119.47	123.70
84	Aa	2120	A	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	2815	A	C5'-C4'-C3'	5.29	124.46	116.00
84	Aa	3270	C	C6-N1-C1'	-5.29	114.45	120.80
84	Aa	3307	A	C5-C6-N1	-5.29	115.06	117.70
85	Ac	153	C	N3-C4-C5	-5.29	119.78	121.90
86	Ab	38	U	C5-C4-O4	-5.29	122.73	125.90
1	Ad	236	U	P-O3'-C3'	5.29	126.05	119.70
84	Aa	177	C	C2-N3-C4	5.29	122.54	119.90
84	Aa	381	G	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	759	C	N3-C4-N4	5.29	121.70	118.00
84	Aa	1119	G	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	2104	G	N1-C2-N3	-5.29	120.73	123.90
84	Aa	2316	A	C5-C6-N1	-5.29	115.06	117.70
84	Aa	52	G	C5'-C4'-C3'	-5.29	107.54	116.00
84	Aa	149	A	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	407	A	C2'-C3'-O3'	5.29	122.16	113.70
84	Aa	861	A	C5-C6-N1	-5.29	115.06	117.70
84	Aa	885	A	C5-C6-N6	-5.29	119.47	123.70
84	Aa	966	G	O4'-C1'-N9	5.29	112.43	108.20
84	Aa	1360	U	P-O3'-C3'	5.29	126.04	119.70
84	Aa	1726	G	C1'-O4'-C4'	-5.29	105.67	109.90
84	Aa	2449	A	O4'-C1'-N9	5.29	112.43	108.20
85	Ac	139	C	N3-C4-N4	5.29	121.70	118.00
86	Ab	11	A	N3-C4-C5	-5.29	123.10	126.80
1	Ad	1657	C	C5'-C4'-O4'	5.28	115.44	109.10
84	Aa	636	C	N3-C4-N4	5.28	121.70	118.00
84	Aa	664	A	C4-C5-C6	5.28	119.64	117.00
84	Aa	1032	C	N3-C4-N4	5.28	121.70	118.00
84	Aa	2275	A	C5-C6-N6	-5.28	119.47	123.70
84	Aa	2323	A	C5-C6-N1	-5.28	115.06	117.70
84	Aa	2763	C	N3-C4-N4	5.28	121.70	118.00
84	Aa	3351	A	O4'-C1'-N9	5.28	112.43	108.20
85	Ac	12	A	C4-C5-C6	5.28	119.64	117.00
1	Ad	17	C	N1-C1'-C2'	5.28	120.87	114.00
84	Aa	322	A	C5-C6-N1	-5.28	115.06	117.70
84	Aa	1341	G	C5-C6-O6	-5.28	125.43	128.60
84	Aa	2229	G	O4'-C1'-N9	5.28	112.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	3	C	C1'-O4'-C4'	5.28	114.12	109.90
1	Ad	1355	U	C3'-C2'-C1'	5.28	105.72	101.50
84	Aa	97	G	P-O5'-C5'	-5.28	112.45	120.90
84	Aa	737	C	N3-C4-N4	5.28	121.70	118.00
84	Aa	861	A	C5-C6-N6	-5.28	119.47	123.70
84	Aa	2214	A	O4'-C1'-N9	5.28	112.42	108.20
84	Aa	2772	A	C5-C6-N6	-5.28	119.47	123.70
84	Aa	3241	C	N3-C4-N4	5.28	121.70	118.00
1	Ad	1311	U	O4'-C1'-C2'	-5.28	100.52	105.80
1	Ad	1478	C	O4'-C1'-C2'	-5.28	100.52	105.80
54	Cr	93	ARG	N-CA-CB	5.28	120.10	110.60
84	Aa	74	G	N3-C2-N2	5.28	123.59	119.90
84	Aa	1173	C	N3-C4-C5	-5.28	119.79	121.90
84	Aa	1302	C	N3-C4-N4	5.28	121.69	118.00
84	Aa	30	C	N3-C4-C5	-5.28	119.79	121.90
84	Aa	96	C	N3-C4-N4	5.28	121.69	118.00
84	Aa	345	G	O4'-C1'-N9	5.28	112.42	108.20
84	Aa	443	G	C5-C6-O6	-5.28	125.43	128.60
84	Aa	1755	A	C5-C6-N1	-5.28	115.06	117.70
84	Aa	1848	G	C5-C6-O6	-5.28	125.43	128.60
84	Aa	3152	C	N3-C4-C5	-5.28	119.79	121.90
86	Ab	27	A	N7-C8-N9	-5.28	111.16	113.80
1	Ad	843	G	P-O5'-C5'	5.28	129.34	120.90
2	Ae	27	G	C3'-C2'-C1'	-5.28	97.28	101.50
84	Aa	48	A	C5-C6-N6	-5.28	119.48	123.70
84	Aa	397	A	C5-C6-N1	-5.28	115.06	117.70
84	Aa	1002	A	C5-C6-N1	-5.28	115.06	117.70
84	Aa	1041	C	N3-C4-N4	5.28	121.69	118.00
84	Aa	1135	C	N3-C4-N4	5.28	121.69	118.00
84	Aa	1591	A	C5-C6-N1	-5.28	115.06	117.70
84	Aa	1736	C	N3-C4-C5	-5.28	119.79	121.90
84	Aa	2222	C	N3-C4-N4	5.28	121.69	118.00
84	Aa	2560	C	N3-C4-C5	-5.28	119.79	121.90
84	Aa	2718	A	C5-C6-N1	-5.28	115.06	117.70
84	Aa	2778	C	N3-C4-N4	5.28	121.69	118.00
84	Aa	2911	C	N3-C4-N4	5.28	121.69	118.00
1	Ad	73	A	O4'-C1'-C2'	-5.27	100.53	105.80
1	Ad	153	U	N1-C1'-C2'	-5.27	106.20	112.00
1	Ad	238	G	C5'-C4'-O4'	5.27	115.43	109.10
84	Aa	8	C	N3-C4-N4	5.27	121.69	118.00
84	Aa	1213	G	O4'-C1'-N9	5.27	112.42	108.20
84	Aa	1595	G	N3-C2-N2	5.27	123.59	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2492	C	N3-C4-C5	-5.27	119.79	121.90
84	Aa	2504	A	O4'-C1'-N9	5.27	112.42	108.20
84	Aa	2891	C	C2-N3-C4	5.27	122.54	119.90
86	Ab	103	U	N3-C4-O4	5.27	123.09	119.40
1	Ad	322	U	C3'-C2'-C1'	5.27	105.72	101.50
1	Ad	1808	U	C3'-C2'-C1'	5.27	105.72	101.50
51	CX	50	LYS	N-CA-CB	5.27	120.09	110.60
84	Aa	684	C	C2-N3-C4	5.27	122.54	119.90
84	Aa	896	C	N3-C4-N4	5.27	121.69	118.00
84	Aa	948	C	N3-C4-N4	5.27	121.69	118.00
84	Aa	1014	G	C5-C6-O6	-5.27	125.44	128.60
84	Aa	1097	A	O4'-C1'-N9	5.27	112.42	108.20
84	Aa	1908	C	N3-C4-C5	-5.27	119.79	121.90
84	Aa	2202	A	C5-C6-N6	-5.27	119.48	123.70
84	Aa	2434	G	C5-C6-O6	-5.27	125.44	128.60
84	Aa	3151	C	O4'-C1'-N1	5.27	112.42	108.20
84	Aa	3308	A	C5-C6-N1	-5.27	115.06	117.70
84	Aa	810	A	C5-C6-N1	-5.27	115.06	117.70
84	Aa	2324	G	C5-C6-O6	-5.27	125.44	128.60
84	Aa	2688	G	C5-C6-O6	-5.27	125.44	128.60
84	Aa	3362	A	C5-C6-N6	-5.27	119.48	123.70
1	Ad	18	C	O4'-C1'-N1	5.27	112.42	108.20
1	Ad	1038	C	C3'-C2'-C1'	5.27	105.72	101.50
1	Ad	1763	A	N9-C1'-C2'	-5.27	106.20	112.00
84	Aa	1518	A	C5-C6-N6	-5.27	119.48	123.70
84	Aa	2225	C	N3-C4-C5	-5.27	119.79	121.90
84	Aa	2966	G	O4'-C1'-N9	5.27	112.42	108.20
84	Aa	3115	A	C5-C6-N1	-5.27	115.06	117.70
86	Ab	99	G	N3-C2-N2	5.27	123.59	119.90
84	Aa	1358	C	N3-C4-C5	-5.27	119.79	121.90
84	Aa	1399	C	N3-C4-N4	5.27	121.69	118.00
85	Ac	128	C	N3-C4-N4	5.27	121.69	118.00
85	Ac	148	C	N3-C4-C5	-5.27	119.79	121.90
1	Ad	646	G	O4'-C1'-N9	5.27	112.41	108.20
84	Aa	220	G	O4'-C1'-N9	5.27	112.41	108.20
84	Aa	1675	G	C3'-C2'-C1'	-5.27	97.29	101.50
84	Aa	2660	A	C4-C5-C6	5.27	119.63	117.00
85	Ac	160	C	N3-C4-C5	-5.27	119.79	121.90
84	Aa	327	A	C5-C6-N1	-5.26	115.07	117.70
84	Aa	1219	C	N3-C4-C5	-5.26	119.79	121.90
84	Aa	1373	A	C5-C6-N1	-5.26	115.07	117.70
84	Aa	1468	A	C5-C6-N1	-5.26	115.07	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2765	A	O4'-C1'-N9	5.26	112.41	108.20
84	Aa	3147	G	N3-C2-N2	5.26	123.58	119.90
86	Ab	29	C	N3-C4-N4	5.26	121.69	118.00
1	Ad	1086	A	C3'-C2'-C1'	5.26	105.71	101.50
28	BA	108	THR	N-CA-CB	5.26	120.30	110.30
84	Aa	1088	A	C4-C5-C6	5.26	119.63	117.00
86	Ab	39	C	N3-C4-N4	5.26	121.68	118.00
34	BC	39	THR	N-CA-CB	5.26	120.30	110.30
84	Aa	197	A	C5-C6-N1	-5.26	115.07	117.70
84	Aa	250	C	N3-C4-C5	-5.26	119.80	121.90
84	Aa	529	C	C6-N1-C2	-5.26	118.20	120.30
84	Aa	1507	A	O4'-C1'-N9	5.26	112.41	108.20
84	Aa	2985	C	N3-C4-N4	5.26	121.68	118.00
84	Aa	3316	C	N3-C4-C5	-5.26	119.80	121.90
85	Ac	94	C	N3-C4-C5	-5.26	119.80	121.90
1	Ad	388	G	N9-C1'-C2'	5.26	120.84	114.00
1	Ad	1065	A	C3'-C2'-C1'	-5.26	97.29	101.50
65	CK	95	LYS	C-N-CA	5.26	134.85	121.70
84	Aa	165	C	N3-C4-N4	5.26	121.68	118.00
84	Aa	424	G	N3-C2-N2	5.26	123.58	119.90
84	Aa	764	A	O4'-C1'-N9	5.26	112.41	108.20
84	Aa	1682	C	N3-C4-N4	5.26	121.68	118.00
84	Aa	2075	C	N3-C4-N4	5.26	121.68	118.00
84	Aa	2943	A	C5-C6-N1	-5.26	115.07	117.70
86	Ab	87	G	C6-C5-N7	-5.26	127.24	130.40
1	Ad	877	G	O4'-C1'-N9	5.26	112.41	108.20
84	Aa	48	A	C5-C6-N1	-5.26	115.07	117.70
84	Aa	2275	A	C5-C6-N1	-5.26	115.07	117.70
1	Ad	230	C	O4'-C1'-C2'	-5.26	100.54	105.80
1	Ad	1314	U	O4'-C4'-C3'	-5.26	98.74	104.00
37	CG	47	PHE	CB-CG-CD2	-5.26	117.12	120.80
45	CN	4	TYR	CB-CG-CD2	5.26	124.15	121.00
84	Aa	392	C	N3-C4-N4	5.26	121.68	118.00
84	Aa	594	C	C2-N3-C4	5.26	122.53	119.90
84	Aa	724	A	C5'-C4'-C3'	5.26	124.41	116.00
84	Aa	840	A	C4-C5-C6	5.26	119.63	117.00
84	Aa	1301	C	N3-C4-C5	-5.26	119.80	121.90
84	Aa	1707	C	N3-C4-N4	5.26	121.68	118.00
84	Aa	1874	A	C5-C6-N1	-5.26	115.07	117.70
84	Aa	1900	C	N3-C4-C5	-5.26	119.80	121.90
84	Aa	2362	A	O4'-C1'-N9	5.26	112.41	108.20
84	Aa	2398	A	C4-C5-C6	5.26	119.63	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2868	C	P-O3'-C3'	5.26	126.01	119.70
84	Aa	3151	C	N3-C4-C5	-5.26	119.80	121.90
84	Aa	3170	C	N3-C4-N4	5.26	121.68	118.00
84	Aa	3312	G	O4'-C1'-N9	5.26	112.41	108.20
1	Ad	439	C	C3'-C2'-C1'	5.25	105.70	101.50
84	Aa	165	C	N3-C4-C5	-5.25	119.80	121.90
84	Aa	344	C	N3-C4-C5	-5.25	119.80	121.90
84	Aa	2173	G	C8-N9-C1'	5.25	133.83	127.00
84	Aa	3268	C	N3-C4-C5	-5.25	119.80	121.90
1	Ad	1693	C	C3'-C2'-C1'	5.25	105.70	101.50
84	Aa	318	G	N3-C2-N2	5.25	123.58	119.90
84	Aa	697	A	C4-C5-C6	5.25	119.63	117.00
84	Aa	2544	C	N3-C4-C5	-5.25	119.80	121.90
84	Aa	3067	G	C5'-C4'-O4'	5.25	115.40	109.10
84	Aa	3096	U	O4'-C1'-N1	5.25	112.40	108.20
1	Ad	831	C	O4'-C1'-C2'	-5.25	100.55	105.80
1	Ad	1448	U	C3'-C2'-C1'	5.25	105.70	101.50
1	Ad	1517	C	N1-C1'-C2'	5.25	120.83	114.00
84	Aa	113	A	O4'-C1'-N9	5.25	112.40	108.20
84	Aa	585	A	C5-C6-N1	-5.25	115.08	117.70
84	Aa	686	A	C5-C6-N1	-5.25	115.07	117.70
84	Aa	774	A	C4-C5-C6	5.25	119.62	117.00
84	Aa	1655	G	O4'-C1'-N9	5.25	112.40	108.20
84	Aa	2023	C	N3-C4-N4	5.25	121.68	118.00
84	Aa	2182	G	P-O3'-C3'	5.25	126.00	119.70
84	Aa	2197	C	N3-C4-C5	-5.25	119.80	121.90
84	Aa	3071	A	C5-C6-N6	-5.25	119.50	123.70
84	Aa	3171	C	C6-N1-C1'	-5.25	114.50	120.80
85	Ac	116	G	C5-C6-O6	-5.25	125.45	128.60
1	Ad	974	C	C3'-C2'-C1'	5.25	105.70	101.50
84	Aa	1499	C	C6-N1-C2	-5.25	118.20	120.30
84	Aa	3006	G	O4'-C1'-N9	5.25	112.40	108.20
72	CC	90	ARG	N-CA-CB	5.25	120.05	110.60
84	Aa	382	A	C5-C6-N1	-5.25	115.08	117.70
84	Aa	1291	A	O4'-C1'-N9	5.25	112.40	108.20
84	Aa	1607	C	N3-C4-N4	5.25	121.67	118.00
84	Aa	2113	A	C5-C6-N6	-5.25	119.50	123.70
84	Aa	2414	C	N3-C4-N4	5.25	121.67	118.00
84	Aa	2642	G	O4'-C1'-N9	5.25	112.40	108.20
84	Aa	3356	C	N3-C4-N4	5.25	121.67	118.00
84	Aa	3374	C	N3-C4-N4	5.25	121.67	118.00
1	Ad	1188	A	C1'-O4'-C4'	5.25	114.10	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	124	C	N3-C4-N4	5.25	121.67	118.00
84	Aa	340	A	C4-C5-C6	5.25	119.62	117.00
84	Aa	1316	C	C2-N1-C1'	5.25	124.57	118.80
84	Aa	1704	A	O4'-C1'-N9	5.25	112.40	108.20
84	Aa	1733	G	C5-C6-O6	-5.25	125.45	128.60
84	Aa	2248	G	O4'-C1'-N9	5.25	112.40	108.20
1	Ad	1806	C	C5'-C4'-O4'	5.25	115.39	109.10
2	Ae	58	U	P-O5'-C5'	5.25	129.29	120.90
53	CY	73	TYR	CB-CG-CD1	-5.25	117.85	121.00
84	Aa	82	C	N3-C4-C5	-5.25	119.80	121.90
84	Aa	119	A	C5-C6-N1	-5.25	115.08	117.70
84	Aa	620	C	N3-C4-N4	5.25	121.67	118.00
84	Aa	964	C	N3-C4-N4	5.25	121.67	118.00
84	Aa	2574	A	C5-C6-N1	-5.25	115.08	117.70
86	Ab	104	C	C5-C4-N4	-5.25	116.53	120.20
1	Ad	25	C	C1'-O4'-C4'	-5.24	105.70	109.90
1	Ad	104	A	O4'-C1'-C2'	-5.24	100.56	105.80
2	Ae	44	A	C1'-O4'-C4'	5.24	114.09	109.90
84	Aa	1196	U	O4'-C1'-N1	5.24	112.39	108.20
84	Aa	1391	A	C5-C6-N6	-5.24	119.51	123.70
84	Aa	1587	G	O4'-C1'-N9	5.24	112.39	108.20
84	Aa	3109	G	N3-C2-N2	5.24	123.57	119.90
1	Ad	927	A	C4'-C3'-C2'	-5.24	97.36	102.60
1	Ad	1263	C	P-O3'-C3'	5.24	125.99	119.70
1	Ad	1410	C	C3'-C2'-C1'	5.24	105.69	101.50
1	Ad	1627	C	N1-C1'-C2'	5.24	120.81	114.00
84	Aa	72	A	C5-C6-N6	-5.24	119.51	123.70
84	Aa	458	G	C5-C6-O6	-5.24	125.45	128.60
84	Aa	497	G	O4'-C1'-N9	5.24	112.39	108.20
84	Aa	962	C	N3-C4-N4	5.24	121.67	118.00
84	Aa	968	A	C5-C6-N6	-5.24	119.51	123.70
84	Aa	1421	A	C4-C5-C6	5.24	119.62	117.00
84	Aa	1550	A	C5-C6-N1	-5.24	115.08	117.70
15	BU	11	PRO	C-N-CA	5.24	134.80	121.70
84	Aa	585	A	C5-C6-N6	-5.24	119.51	123.70
84	Aa	678	G	O4'-C1'-N9	5.24	112.39	108.20
84	Aa	1047	C	N3-C4-C5	-5.24	119.80	121.90
84	Aa	1052	A	C4-C5-C6	5.24	119.62	117.00
84	Aa	3290	C	N3-C4-N4	5.24	121.67	118.00
1	Ad	269	A	C3'-C2'-C1'	-5.24	97.31	101.50
1	Ad	560	A	O4'-C1'-N9	5.24	112.39	108.20
84	Aa	12	G	N1-C6-O6	5.24	123.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	353	A	C4-C5-C6	5.24	119.62	117.00
84	Aa	426	A	O4'-C1'-N9	5.24	112.39	108.20
84	Aa	486	G	N3-C2-N2	5.24	123.57	119.90
84	Aa	2648	G	O4'-C1'-N9	5.24	112.39	108.20
84	Aa	2931	C	N3-C4-N4	5.24	121.67	118.00
84	Aa	3061	C	N3-C4-N4	5.24	121.67	118.00
72	CC	110	LYS	N-CA-CB	5.24	120.03	110.60
84	Aa	2277	U	O4'-C1'-N1	5.24	112.39	108.20
84	Aa	2362	A	C5-C6-N6	-5.24	119.51	123.70
84	Aa	2531	G	C5-C6-O6	-5.24	125.46	128.60
84	Aa	2958	A	C4-C5-C6	5.24	119.62	117.00
1	Ad	138	C	O4'-C1'-N1	5.24	112.39	108.20
1	Ad	700	C	O4'-C1'-N1	5.24	112.39	108.20
84	Aa	464	G	P-O3'-C3'	5.24	125.98	119.70
84	Aa	693	C	N3-C4-N4	5.24	121.67	118.00
84	Aa	962	C	N3-C4-C5	-5.24	119.81	121.90
84	Aa	1568	A	O4'-C1'-N9	5.24	112.39	108.20
84	Aa	1697	G	N3-C2-N2	5.24	123.56	119.90
84	Aa	2133	A	C5-C6-N6	-5.24	119.51	123.70
84	Aa	2496	U	C2'-C3'-O3'	5.24	122.08	113.70
84	Aa	2874	A	C5-C6-N1	-5.24	115.08	117.70
84	Aa	3047	A	C4-C5-C6	5.24	119.62	117.00
85	Ac	36	G	O4'-C1'-N9	5.24	112.39	108.20
86	Ab	120	C	N1-C2-O2	5.24	122.04	118.90
1	Ad	401	A	O4'-C1'-N9	5.23	112.39	108.20
84	Aa	2227	A	C5-C6-N1	-5.23	115.08	117.70
1	Ad	991	G	C4'-C3'-C2'	-5.23	97.37	102.60
1	Ad	1210	U	P-O3'-C3'	5.23	125.98	119.70
37	CG	222	PHE	CB-CG-CD2	5.23	124.46	120.80
69	CF	77	PHE	CB-CG-CD2	-5.23	117.14	120.80
84	Aa	142	G	O4'-C1'-N9	5.23	112.39	108.20
84	Aa	527	G	O4'-C1'-N9	5.23	112.39	108.20
84	Aa	1874	A	C5-C6-N6	-5.23	119.51	123.70
84	Aa	1883	A	C5-C6-N6	-5.23	119.52	123.70
84	Aa	1958	G	N9-C1'-C2'	-5.23	106.25	112.00
84	Aa	2498	C	N3-C4-N4	5.23	121.66	118.00
84	Aa	2597	C	N3-C4-C5	-5.23	119.81	121.90
84	Aa	2695	A	C5-C6-N1	-5.23	115.08	117.70
1	Ad	776	A	C1'-O4'-C4'	5.23	114.08	109.90
1	Ad	1676	G	O4'-C1'-N9	5.23	112.39	108.20
7	BM	117	GLU	N-CA-CB	5.23	120.01	110.60
64	Ci	95	SER	N-CA-C	-5.23	96.88	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	965	A	C4-C5-C6	5.23	119.62	117.00
1	Ad	1494	G	P-O3'-C3'	5.23	125.97	119.70
84	Aa	38	A	C4-C5-C6	5.23	119.61	117.00
84	Aa	1905	A	C5-C6-N6	-5.23	119.52	123.70
84	Aa	2247	A	C5-C6-N1	-5.23	115.08	117.70
84	Aa	3190	U	C6-N1-C1'	-5.23	113.88	121.20
1	Ad	1256	C	O4'-C1'-N1	5.23	112.38	108.20
84	Aa	326	C	N3-C4-N4	5.23	121.66	118.00
84	Aa	562	G	O4'-C1'-N9	5.23	112.38	108.20
84	Aa	1139	A	C5-C6-N6	-5.23	119.52	123.70
84	Aa	1423	C	N3-C4-C5	-5.23	119.81	121.90
84	Aa	2007	C	N3-C4-C5	-5.23	119.81	121.90
84	Aa	2429	A	C5-C6-N6	-5.23	119.52	123.70
1	Ad	100	C	N1-C1'-C2'	-5.23	106.25	112.00
84	Aa	512	G	N1-C2-N3	-5.23	120.76	123.90
84	Aa	1179	C	N3-C4-C5	-5.23	119.81	121.90
84	Aa	1458	U	O4'-C1'-N1	5.23	112.38	108.20
84	Aa	1744	C	N3-C4-N4	5.23	121.66	118.00
84	Aa	2262	C	N3-C4-N4	5.23	121.66	118.00
84	Aa	3374	C	N3-C4-C5	-5.23	119.81	121.90
86	Ab	74	A	P-O3'-C3'	5.23	125.97	119.70
84	Aa	967	G	C5'-C4'-C3'	-5.22	107.64	116.00
84	Aa	1007	A	O4'-C1'-N9	5.22	112.38	108.20
84	Aa	1440	C	N3-C4-N4	5.22	121.66	118.00
84	Aa	1615	G	C5-C6-O6	-5.22	125.47	128.60
84	Aa	1795	A	C5-C6-N6	-5.22	119.52	123.70
84	Aa	2209	A	C4-C5-C6	5.22	119.61	117.00
84	Aa	2565	C	N3-C4-C5	-5.22	119.81	121.90
84	Aa	3307	A	C4-C5-C6	5.22	119.61	117.00
86	Ab	29	C	C2'-C3'-O3'	5.22	122.06	113.70
1	Ad	420	A	O4'-C1'-N9	5.22	112.38	108.20
1	Ad	545	A	P-O5'-C5'	-5.22	112.54	120.90
1	Ad	649	C	O4'-C1'-N1	5.22	112.38	108.20
1	Ad	1672	U	N1-C1'-C2'	5.22	120.79	114.00
84	Aa	510	C	N3-C4-N4	5.22	121.66	118.00
84	Aa	750	G	C5-C6-O6	-5.22	125.47	128.60
84	Aa	979	C	N3-C4-N4	5.22	121.66	118.00
84	Aa	1258	C	P-O5'-C5'	-5.22	112.55	120.90
84	Aa	1376	A	O4'-C1'-N9	5.22	112.38	108.20
84	Aa	1408	C	N3-C4-N4	5.22	121.66	118.00
84	Aa	2590	C	N3-C4-C5	-5.22	119.81	121.90
1	Ad	906	G	O4'-C1'-C2'	5.22	112.30	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1594	A	C5'-C4'-O4'	5.22	115.36	109.10
84	Aa	981	A	O4'-C1'-N9	5.22	112.38	108.20
84	Aa	1571	A	C5-C6-N1	-5.22	115.09	117.70
84	Aa	1880	A	C5-C6-N6	-5.22	119.52	123.70
84	Aa	1950	G	O3'-P-O5'	5.22	113.92	104.00
84	Aa	2473	C	N3-C4-C5	-5.22	119.81	121.90
84	Aa	3334	A	C4-C5-C6	5.22	119.61	117.00
1	Ad	162	A	O4'-C1'-C2'	5.22	112.30	107.60
1	Ad	521	U	C4'-C3'-C2'	-5.22	97.38	102.60
1	Ad	534	C	O4'-C1'-N1	5.22	112.38	108.20
3	Af	16	G	C4'-C3'-C2'	-5.22	97.38	102.60
69	CF	110	LEU	N-CA-C	-5.22	96.91	111.00
84	Aa	721	A	P-O5'-C5'	5.22	129.25	120.90
84	Aa	1010	A	O4'-C1'-N9	5.22	112.38	108.20
84	Aa	1737	C	N3-C4-C5	-5.22	119.81	121.90
84	Aa	2953	G	C5-C6-O6	-5.22	125.47	128.60
1	Ad	1184	C	P-O3'-C3'	5.22	125.96	119.70
84	Aa	791	C	N3-C4-N4	5.22	121.65	118.00
84	Aa	1578	U	O4'-C1'-N1	5.22	112.38	108.20
84	Aa	5	G	N3-C2-N2	5.22	123.55	119.90
84	Aa	565	C	C4'-C3'-C2'	-5.22	97.38	102.60
84	Aa	597	C	N3-C4-C5	-5.22	119.81	121.90
84	Aa	1395	A	C5-C6-N1	-5.22	115.09	117.70
84	Aa	1407	G	O4'-C1'-N9	5.22	112.37	108.20
84	Aa	1759	C	N3-C4-N4	5.22	121.65	118.00
84	Aa	2216	G	C6-C5-N7	-5.22	127.27	130.40
84	Aa	2233	G	C5-C6-O6	-5.22	125.47	128.60
84	Aa	2291	A	O4'-C1'-N9	5.22	112.37	108.20
84	Aa	2362	A	C5-C6-N1	-5.22	115.09	117.70
84	Aa	2865	G	O4'-C1'-N9	5.22	112.37	108.20
84	Aa	2902	A	O4'-C1'-N9	5.22	112.37	108.20
84	Aa	424	G	C6-C5-N7	-5.21	127.27	130.40
84	Aa	454	A	P-O5'-C5'	5.21	129.24	120.90
84	Aa	1507	A	C5-C6-N1	-5.21	115.09	117.70
84	Aa	1566	C	N3-C4-N4	5.21	121.65	118.00
84	Aa	2178	G	N9-C1'-C2'	-5.21	106.26	112.00
84	Aa	2524	U	C4'-C3'-C2'	-5.21	97.39	102.60
84	Aa	2641	A	C5-C6-N1	-5.21	115.09	117.70
84	Aa	3195	C	N3-C4-C5	-5.21	119.81	121.90
84	Aa	1581	C	N3-C4-N4	5.21	121.65	118.00
84	Aa	2707	A	C5-C6-N6	-5.21	119.53	123.70
84	Aa	3124	A	C5-C6-N1	-5.21	115.09	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	716	A	O3'-P-O5'	5.21	113.90	104.00
1	Ad	1035	A	O4'-C1'-C2'	-5.21	100.59	105.80
1	Ad	1167	C	O4'-C1'-N1	5.21	112.37	108.20
18	BN	129	TYR	CB-CG-CD2	-5.21	117.87	121.00
30	BB	188	PHE	CB-CG-CD2	-5.21	117.15	120.80
84	Aa	237	C	N3-C4-N4	5.21	121.65	118.00
84	Aa	964	C	N3-C4-C5	-5.21	119.82	121.90
84	Aa	1720	C	N3-C4-C5	-5.21	119.81	121.90
84	Aa	2086	A	O3'-P-O5'	5.21	113.90	104.00
84	Aa	2207	C	N3-C4-N4	5.21	121.65	118.00
84	Aa	2546	C	N3-C4-C5	-5.21	119.82	121.90
2	Ae	37	G	O4'-C1'-C2'	5.21	112.29	107.60
40	Cz	167	ALA	N-CA-CB	5.21	117.39	110.10
84	Aa	851	A	C5-C6-N1	-5.21	115.09	117.70
84	Aa	2107	A	C5-C6-N1	-5.21	115.09	117.70
86	Ab	53	U	C5-C6-N1	5.21	125.31	122.70
1	Ad	269	A	P-O5'-C5'	5.21	129.23	120.90
1	Ad	839	G	N9-C1'-C2'	5.21	120.77	114.00
1	Ad	857	A	O4'-C1'-N9	5.21	112.37	108.20
1	Ad	1624	G	C1'-O4'-C4'	-5.21	105.73	109.90
84	Aa	128	C	C2-N3-C4	5.21	122.50	119.90
84	Aa	140	C	N3-C4-N4	5.21	121.65	118.00
84	Aa	795	C	N3-C4-N4	5.21	121.65	118.00
84	Aa	1007	A	C5-C6-N6	-5.21	119.53	123.70
84	Aa	1305	A	C5-C6-N1	-5.21	115.10	117.70
84	Aa	1599	A	P-O5'-C5'	-5.21	112.57	120.90
84	Aa	2286	A	C5'-C4'-C3'	5.21	124.33	116.00
84	Aa	2373	C	N3-C4-C5	-5.21	119.82	121.90
84	Aa	3349	C	N3-C4-N4	5.21	121.65	118.00
85	Ac	80	A	C5-C6-N6	-5.21	119.53	123.70
1	Ad	983	A	O4'-C1'-N9	5.21	112.36	108.20
1	Ad	1442	A	C5'-C4'-O4'	5.21	115.35	109.10
1	Ad	1492	G	C3'-C2'-C1'	-5.21	97.33	101.50
49	CR	159	PHE	CB-CG-CD1	5.21	124.44	120.80
84	Aa	386	G	O4'-C1'-N9	5.21	112.36	108.20
84	Aa	1457	A	C4-C5-C6	5.21	119.60	117.00
84	Aa	1537	A	C5-C6-N6	-5.21	119.53	123.70
2	Ae	21	A	P-O5'-C5'	5.21	129.23	120.90
19	BL	54	TYR	CB-CG-CD2	-5.21	117.88	121.00
84	Aa	189	C	N3-C4-N4	5.21	121.64	118.00
84	Aa	1491	G	O4'-C1'-N9	5.21	112.36	108.20
84	Aa	3217	G	C5-C6-O6	-5.21	125.48	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	329	G	P-O3'-C3'	5.20	125.94	119.70
1	Ad	547	C	C4'-C3'-C2'	-5.20	97.40	102.60
1	Ad	933	G	O4'-C1'-N9	5.20	112.36	108.20
1	Ad	1609	G	O4'-C1'-C2'	5.20	112.28	107.60
84	Aa	1020	U	O4'-C1'-N1	5.20	112.36	108.20
84	Aa	1359	A	C5-C6-N1	-5.20	115.10	117.70
84	Aa	1599	A	C5-C6-N1	-5.20	115.10	117.70
84	Aa	2344	A	C5-C6-N6	-5.20	119.54	123.70
84	Aa	3116	C	N3-C4-N4	5.20	121.64	118.00
84	Aa	3297	A	C5-C6-N6	-5.20	119.54	123.70
85	Ac	123	G	N3-C2-N2	5.20	123.54	119.90
64	Ci	42	PHE	N-CA-CB	5.20	119.96	110.60
84	Aa	2446	G	O4'-C1'-N9	5.20	112.36	108.20
84	Aa	2786	G	N3-C2-N2	5.20	123.54	119.90
84	Aa	2916	G	O4'-C1'-N9	5.20	112.36	108.20
85	Ac	108	C	C2-N3-C4	5.20	122.50	119.90
1	Ad	823	A	N9-C1'-C2'	5.20	120.76	114.00
1	Ad	1071	C	C5'-C4'-O4'	5.20	115.34	109.10
84	Aa	383	A	O4'-C1'-N9	5.20	112.36	108.20
84	Aa	739	C	N3-C4-C5	-5.20	119.82	121.90
84	Aa	1330	A	C5-C6-N6	-5.20	119.54	123.70
84	Aa	2047	A	O4'-C1'-N9	5.20	112.36	108.20
84	Aa	2646	A	C4-C5-C6	5.20	119.60	117.00
1	Ad	489	C	O4'-C1'-C2'	-5.20	100.60	105.80
1	Ad	578	G	C3'-C2'-C1'	-5.20	97.34	101.50
1	Ad	1110	C	C1'-O4'-C4'	-5.20	105.74	109.90
84	Aa	1179	C	O4'-C1'-N1	5.20	112.36	108.20
84	Aa	1369	G	N3-C2-N2	5.20	123.54	119.90
84	Aa	1859	G	O4'-C1'-N9	5.20	112.36	108.20
84	Aa	2635	G	N3-C2-N2	5.20	123.54	119.90
84	Aa	2665	A	C5-C6-N6	-5.20	119.54	123.70
84	Aa	2736	A	O4'-C1'-N9	5.20	112.36	108.20
84	Aa	2761	A	C5-C6-N1	-5.20	115.10	117.70
1	Ad	1698	A	N9-C1'-C2'	5.20	120.76	114.00
63	CU	87	TYR	CB-CG-CD1	5.20	124.12	121.00
84	Aa	1199	A	O4'-C1'-N9	5.20	112.36	108.20
84	Aa	1736	C	N3-C4-N4	5.20	121.64	118.00
84	Aa	2093	G	N1-C2-N3	-5.20	120.78	123.90
84	Aa	2794	A	C5-C6-N6	-5.20	119.54	123.70
84	Aa	3125	G	O4'-C1'-N9	5.20	112.36	108.20
85	Ac	72	A	C5'-C4'-O4'	5.20	115.34	109.10
1	Ad	82	G	O4'-C1'-C2'	5.20	112.28	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	700	C	N1-C1'-C2'	5.20	120.75	114.00
1	Ad	1645	C	C5'-C4'-O4'	5.20	115.33	109.10
1	Ad	1771	U	C4'-C3'-C2'	5.20	107.80	102.60
84	Aa	609	C	C5'-C4'-O4'	5.20	115.34	109.10
84	Aa	1809	A	C5-C6-N1	-5.20	115.10	117.70
84	Aa	2131	U	O4'-C1'-N1	5.20	112.36	108.20
84	Aa	2251	A	O4'-C1'-N9	5.20	112.36	108.20
84	Aa	2715	U	C5'-C4'-C3'	-5.20	107.69	116.00
1	Ad	1147	A	O4'-C1'-N9	5.19	112.36	108.20
84	Aa	774	A	O4'-C1'-N9	5.19	112.36	108.20
84	Aa	811	A	C4-C5-C6	5.19	119.60	117.00
84	Aa	1261	C	P-O5'-C5'	5.19	129.21	120.90
84	Aa	3381	C	N3-C4-C5	-5.19	119.82	121.90
85	Ac	138	G	C5-C6-O6	-5.19	125.48	128.60
35	BG	159	VAL	C-N-CA	5.19	134.68	121.70
84	Aa	2179	U	C5'-C4'-O4'	5.19	115.33	109.10
84	Aa	2283	G	O4'-C1'-N9	5.19	112.35	108.20
86	Ab	69	A	C6-C5-N7	-5.19	128.66	132.30
1	Ad	581	G	C1'-O4'-C4'	-5.19	105.75	109.90
1	Ad	982	A	O4'-C1'-N9	5.19	112.35	108.20
2	Ae	60	C	O4'-C1'-N1	5.19	112.35	108.20
84	Aa	395	A	C4-C5-C6	5.19	119.60	117.00
84	Aa	653	A	C5-C6-N6	-5.19	119.55	123.70
84	Aa	878	G	O4'-C1'-N9	5.19	112.35	108.20
84	Aa	929	A	C5-C6-N1	-5.19	115.11	117.70
84	Aa	1379	G	O4'-C1'-N9	5.19	112.35	108.20
84	Aa	2142	A	C5-C6-N1	-5.19	115.10	117.70
84	Aa	2316	A	C5-C6-N6	-5.19	119.55	123.70
84	Aa	3148	A	O4'-C1'-N9	5.19	112.35	108.20
84	Aa	3354	A	C4-C5-C6	5.19	119.59	117.00
86	Ab	70	G	C4-C5-C6	5.19	121.92	118.80
86	Ab	89	G	C5-C6-O6	-5.19	125.49	128.60
84	Aa	567	G	C6-C5-N7	-5.19	127.29	130.40
84	Aa	1115	A	C5-C6-N6	-5.19	119.55	123.70
84	Aa	1327	G	C5-C6-O6	-5.19	125.49	128.60
84	Aa	1847	G	O4'-C1'-N9	5.19	112.35	108.20
84	Aa	3299	A	C5-C6-N6	-5.19	119.55	123.70
1	Ad	1001	C	O4'-C1'-C2'	-5.19	100.61	105.80
1	Ad	1097	A	N9-C1'-C2'	5.19	120.74	114.00
70	Cq	14	TYR	CB-CG-CD2	-5.19	117.89	121.00
82	Cb	25	LYS	N-CA-CB	5.19	119.94	110.60
84	Aa	94	A	C5-C6-N6	-5.19	119.55	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	827	C	N3-C4-N4	5.19	121.63	118.00
84	Aa	1284	C	N3-C4-N4	5.19	121.63	118.00
84	Aa	1594	G	N3-C2-N2	5.19	123.53	119.90
84	Aa	1793	A	O4'-C1'-N9	5.19	112.35	108.20
84	Aa	2677	A	O4'-C1'-N9	5.19	112.35	108.20
85	Ac	13	A	C5-C6-N6	-5.19	119.55	123.70
85	Ac	61	A	C5-C6-N6	-5.19	119.55	123.70
86	Ab	44	C	P-O5'-C5'	-5.19	112.60	120.90
1	Ad	72	A	C3'-C2'-C1'	5.19	105.65	101.50
1	Ad	428	C	C1'-O4'-C4'	-5.19	105.75	109.90
84	Aa	435	G	N1-C6-O6	5.19	123.01	119.90
84	Aa	547	C	N3-C4-N4	5.19	121.63	118.00
84	Aa	2203	A	C5-C6-N1	-5.19	115.11	117.70
84	Aa	2210	A	O4'-C1'-N9	5.19	112.35	108.20
84	Aa	3327	A	C5-C6-N1	-5.19	115.11	117.70
85	Ac	3	A	C4-C5-C6	5.19	119.59	117.00
1	Ad	813	A	C1'-O4'-C4'	5.18	114.05	109.90
1	Ad	965	U	P-O5'-C5'	-5.18	112.60	120.90
1	Ad	1137	A	O4'-C1'-N9	5.18	112.35	108.20
84	Aa	1293	C	C2-N3-C4	5.18	122.49	119.90
84	Aa	2707	A	C4-C5-C6	5.18	119.59	117.00
84	Aa	2744	C	N3-C4-C5	-5.18	119.83	121.90
86	Ab	75	G	C5'-C4'-O4'	5.18	115.32	109.10
1	Ad	874	A	O4'-C1'-C2'	-5.18	100.62	105.80
1	Ad	1556	U	C1'-O4'-C4'	5.18	114.05	109.90
30	BB	188	PHE	CB-CG-CD1	5.18	124.43	120.80
84	Aa	23	A	C5-C6-N1	-5.18	115.11	117.70
84	Aa	334	A	C4-C5-C6	5.18	119.59	117.00
84	Aa	899	A	C5-C6-N6	-5.18	119.55	123.70
84	Aa	1244	A	O4'-C1'-N9	5.18	112.35	108.20
84	Aa	1397	A	C5-C6-N6	-5.18	119.55	123.70
84	Aa	1787	C	N3-C4-N4	5.18	121.63	118.00
84	Aa	1965	C	N3-C4-C5	-5.18	119.83	121.90
84	Aa	2529	C	C2-N3-C4	5.18	122.49	119.90
84	Aa	2625	C	N3-C4-C5	-5.18	119.83	121.90
84	Aa	2900	G	N1-C6-O6	5.18	123.01	119.90
84	Aa	3124	A	O4'-C1'-N9	5.18	112.35	108.20
85	Ac	92	A	C5-C6-N6	-5.18	119.55	123.70
85	Ac	137	G	C5-C6-O6	-5.18	125.49	128.60
84	Aa	1137	G	C5-C6-O6	-5.18	125.49	128.60
84	Aa	1584	A	C5-C6-N6	-5.18	119.56	123.70
1	Ad	517	U	C5'-C4'-O4'	5.18	115.32	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1538	C	C1'-O4'-C4'	5.18	114.04	109.90
1	Ad	1584	A	O4'-C1'-C2'	-5.18	100.62	105.80
84	Aa	789	A	C4-C5-C6	5.18	119.59	117.00
84	Aa	804	A	C5-C6-N6	-5.18	119.56	123.70
84	Aa	871	C	N3-C4-N4	5.18	121.62	118.00
84	Aa	1282	A	C5-C6-N1	-5.18	115.11	117.70
84	Aa	1356	G	O4'-C1'-N9	5.18	112.34	108.20
84	Aa	1926	A	O4'-C1'-N9	5.18	112.34	108.20
84	Aa	2193	A	C5-C6-N1	-5.18	115.11	117.70
85	Ac	80	A	O4'-C1'-N9	5.18	112.34	108.20
85	Ac	125	C	N3-C4-N4	5.18	121.62	118.00
84	Aa	227	C	N3-C4-N4	5.18	121.62	118.00
84	Aa	1030	A	O4'-C1'-N9	5.18	112.34	108.20
84	Aa	1850	C	C2-N3-C4	5.18	122.49	119.90
1	Ad	177	C	O4'-C1'-C2'	-5.18	100.62	105.80
1	Ad	260	A	N9-C1'-C2'	5.18	120.73	114.00
1	Ad	1538	C	P-O5'-C5'	5.18	129.18	120.90
1	Ad	1699	C	O4'-C1'-N1	5.18	112.34	108.20
2	Ae	56	A	C3'-C2'-C1'	5.18	105.64	101.50
78	CL	66	ASN	N-CA-CB	5.18	119.92	110.60
84	Aa	149	A	C5-C6-N1	-5.18	115.11	117.70
84	Aa	672	A	O4'-C1'-N9	5.18	112.34	108.20
84	Aa	1513	C	N3-C4-N4	5.18	121.62	118.00
84	Aa	2388	C	C5'-C4'-C3'	5.18	124.28	116.00
84	Aa	2649	C	N3-C4-C5	-5.18	119.83	121.90
1	Ad	511	U	C1'-O4'-C4'	5.17	114.04	109.90
84	Aa	382	A	O4'-C1'-N9	5.17	112.34	108.20
84	Aa	1140	C	N3-C4-N4	5.17	121.62	118.00
84	Aa	2179	U	C4'-C3'-O3'	-5.17	98.53	109.40
84	Aa	2280	C	N3-C4-C5	-5.17	119.83	121.90
84	Aa	2356	A	O4'-C1'-N9	5.17	112.34	108.20
84	Aa	3367	C	N3-C4-C5	-5.17	119.83	121.90
86	Ab	78	C	O4'-C1'-N1	5.17	112.34	108.20
1	Ad	409	C	O4'-C1'-N1	5.17	112.34	108.20
1	Ad	774	C	C3'-C2'-C1'	5.17	105.64	101.50
1	Ad	961	U	C3'-C2'-C1'	5.17	105.64	101.50
84	Aa	67	C	N3-C4-N4	5.17	121.62	118.00
84	Aa	813	A	C5-C6-N6	-5.17	119.56	123.70
1	Ad	29	U	C1'-O4'-C4'	5.17	114.04	109.90
84	Aa	1654	C	O4'-C1'-N1	5.17	112.34	108.20
84	Aa	1898	G	O4'-C1'-N9	5.17	112.34	108.20
84	Aa	2770	U	C5'-C4'-C3'	-5.17	107.73	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2869	C	N3-C4-N4	5.17	121.62	118.00
84	Aa	3099	G	O4'-C1'-N9	5.17	112.34	108.20
84	Aa	3123	A	C5-C6-N6	-5.17	119.56	123.70
1	Ad	1808	U	O4'-C1'-C2'	-5.17	100.63	105.80
22	BZ	18	SER	N-CA-CB	5.17	118.25	110.50
84	Aa	1482	C	N3-C4-N4	5.17	121.62	118.00
84	Aa	2401	A	O4'-C1'-N9	5.17	112.34	108.20
84	Aa	3196	C	N3-C4-N4	5.17	121.62	118.00
1	Ad	222	G	OP1-P-OP2	-5.17	111.85	119.60
1	Ad	576	C	C3'-C2'-C1'	5.17	105.64	101.50
1	Ad	1497	U	C5'-C4'-O4'	5.17	115.30	109.10
1	Ad	1798	G	C5'-C4'-O4'	5.17	115.30	109.10
84	Aa	565	C	N3-C4-C5	-5.17	119.83	121.90
84	Aa	630	C	N3-C4-C5	-5.17	119.83	121.90
84	Aa	655	G	O4'-C1'-N9	5.17	112.33	108.20
84	Aa	1230	G	O4'-C1'-N9	5.17	112.33	108.20
84	Aa	2013	G	C5'-C4'-O4'	5.17	115.30	109.10
84	Aa	2541	A	C4-C5-C6	5.17	119.58	117.00
84	Aa	2674	A	O4'-C1'-N9	5.17	112.33	108.20
84	Aa	2815	A	C5-C6-N6	-5.17	119.56	123.70
84	Aa	2869	C	C2-N3-C4	5.17	122.48	119.90
84	Aa	3048	C	N3-C4-N4	5.17	121.62	118.00
86	Ab	56	G	C6-C5-N7	-5.17	127.30	130.40
86	Ab	82	G	N1-C6-O6	5.17	123.00	119.90
1	Ad	1793	C	O4'-C1'-N1	5.17	112.33	108.20
11	BD	120	TYR	CB-CG-CD1	-5.17	117.90	121.00
84	Aa	1334	A	C4-C5-C6	5.17	119.58	117.00
84	Aa	2304	A	C5-C6-N6	-5.17	119.57	123.70
84	Aa	2699	A	C5-C6-N1	-5.17	115.12	117.70
84	Aa	2841	G	O4'-C1'-N9	5.17	112.33	108.20
84	Aa	3220	A	O4'-C1'-N9	5.17	112.33	108.20
85	Ac	135	A	C5-C6-N6	-5.17	119.57	123.70
1	Ad	231	U	N1-C1'-C2'	5.17	120.72	114.00
1	Ad	265	A	C4'-C3'-C2'	-5.17	97.44	102.60
1	Ad	473	C	C3'-C2'-C1'	5.17	105.63	101.50
84	Aa	105	A	C4-C5-C6	5.17	119.58	117.00
85	Ac	129	C	C6-N1-C2	-5.17	118.23	120.30
1	Ad	1191	U	N1-C1'-C2'	5.16	120.71	114.00
1	Ad	1280	U	O4'-C1'-C2'	-5.16	100.64	105.80
84	Aa	236	A	C4-C5-C6	5.16	119.58	117.00
84	Aa	282	A	O5'-C5'-C4'	5.16	121.51	111.70
84	Aa	724	A	C4-C5-C6	5.16	119.58	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1506	A	C4-C5-C6	5.16	119.58	117.00
84	Aa	3221	A	C5-C6-N1	-5.16	115.12	117.70
84	Aa	3333	C	N3-C4-N4	5.16	121.61	118.00
86	Ab	50	A	N1-C2-N3	5.16	131.88	129.30
84	Aa	101	C	N3-C4-N4	5.16	121.61	118.00
84	Aa	263	A	C5-C6-N1	-5.16	115.12	117.70
84	Aa	638	G	P-O5'-C5'	5.16	129.16	120.90
84	Aa	299	G	O4'-C1'-N9	5.16	112.33	108.20
84	Aa	1469	G	O4'-C1'-N9	5.16	112.33	108.20
84	Aa	2270	A	C5-C6-N6	-5.16	119.57	123.70
84	Aa	3094	C	N3-C4-C5	-5.16	119.84	121.90
1	Ad	451	U	N1-C1'-C2'	5.16	120.70	114.00
1	Ad	485	A	N9-C1'-C2'	5.16	120.71	114.00
1	Ad	1326	A	O4'-C1'-N9	5.16	112.33	108.20
84	Aa	94	A	O4'-C1'-N9	5.16	112.33	108.20
84	Aa	519	C	N3-C4-N4	5.16	121.61	118.00
84	Aa	1395	A	O4'-C1'-N9	5.16	112.33	108.20
84	Aa	1424	G	N3-C2-N2	5.16	123.51	119.90
84	Aa	2288	C	N3-C4-N4	5.16	121.61	118.00
84	Aa	3321	C	P-O3'-C3'	5.16	125.89	119.70
84	Aa	2709	G	O4'-C1'-N9	5.16	112.33	108.20
84	Aa	3332	G	P-O3'-C3'	5.16	125.89	119.70
1	Ad	758	A	C1'-O4'-C4'	-5.16	105.78	109.90
84	Aa	294	A	C5-C6-N1	-5.16	115.12	117.70
84	Aa	1092	G	O4'-C1'-N9	5.16	112.33	108.20
84	Aa	1140	C	N3-C4-C5	-5.16	119.84	121.90
84	Aa	1585	A	C4-C5-C6	5.16	119.58	117.00
84	Aa	1638	U	O4'-C1'-N1	5.16	112.32	108.20
84	Aa	1907	A	O4'-C1'-N9	5.16	112.33	108.20
84	Aa	2754	G	O4'-C1'-N9	5.16	112.32	108.20
84	Aa	2868	C	N3-C4-C5	-5.16	119.84	121.90
86	Ab	48	G	C2-N3-C4	-5.16	109.32	111.90
84	Aa	832	C	N3-C4-C5	-5.15	119.84	121.90
84	Aa	1450	G	C4-C5-C6	5.15	121.89	118.80
84	Aa	350	A	C5-C6-N1	-5.15	115.12	117.70
84	Aa	771	G	O4'-C1'-N9	5.15	112.32	108.20
84	Aa	1731	A	O4'-C1'-N9	5.15	112.32	108.20
84	Aa	1913	C	N3-C4-N4	5.15	121.61	118.00
84	Aa	2282	C	N3-C4-C5	-5.15	119.84	121.90
84	Aa	3279	G	O4'-C1'-N9	5.15	112.32	108.20
85	Ac	6	C	N3-C4-C5	-5.15	119.84	121.90
85	Ac	41	A	C4-C5-C6	5.15	119.58	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	938	A	O4'-C1'-C2'	5.15	112.24	107.60
1	Ad	1626	C	O4'-C1'-C2'	-5.15	100.65	105.80
84	Aa	1256	A	C5-C6-N1	-5.15	115.12	117.70
84	Aa	2386	A	O4'-C1'-N9	5.15	112.32	108.20
84	Aa	3127	C	N3-C4-N4	5.15	121.61	118.00
85	Ac	77	A	C5-C6-N6	-5.15	119.58	123.70
85	Ac	99	C	N3-C4-C5	-5.15	119.84	121.90
84	Aa	311	G	C5-C6-O6	-5.15	125.51	128.60
84	Aa	1560	A	C5'-C4'-O4'	5.15	115.28	109.10
84	Aa	1894	G	C5-C6-O6	-5.15	125.51	128.60
85	Ac	132	C	N3-C4-N4	5.15	121.61	118.00
1	Ad	506	G	C1'-O4'-C4'	-5.15	105.78	109.90
1	Ad	593	C	C3'-C2'-C1'	5.15	105.62	101.50
2	Ae	61	C	O4'-C1'-N1	5.15	112.32	108.20
84	Aa	11	A	C4-C5-C6	5.15	119.57	117.00
84	Aa	1224	A	C5-C6-N1	-5.15	115.13	117.70
84	Aa	1401	C	C2-N3-C4	5.15	122.47	119.90
84	Aa	1435	C	N3-C4-N4	5.15	121.60	118.00
84	Aa	1660	C	N3-C4-N4	5.15	121.60	118.00
84	Aa	1771	G	N3-C2-N2	5.15	123.50	119.90
84	Aa	1998	A	C5-C6-N1	-5.15	115.13	117.70
84	Aa	2125	A	C5-C6-N6	-5.15	119.58	123.70
84	Aa	2251	A	C5-C6-N1	-5.15	115.13	117.70
84	Aa	2374	G	O4'-C1'-N9	5.15	112.32	108.20
84	Aa	2849	A	O4'-C1'-N9	5.15	112.32	108.20
42	CJ	63	ARG	N-CA-CB	5.15	119.86	110.60
84	Aa	1019	A	O4'-C1'-N9	5.15	112.32	108.20
84	Aa	2290	A	C5-C6-N6	-5.15	119.58	123.70
1	Ad	8	U	O4'-C1'-C2'	-5.14	100.66	105.80
1	Ad	1548	G	C3'-C2'-C1'	-5.14	97.38	101.50
1	Ad	1716	C	N1-C1'-C2'	5.14	120.69	114.00
84	Aa	660	A	C5-C6-N6	-5.14	119.58	123.70
84	Aa	873	A	C5-C6-N1	-5.14	115.13	117.70
84	Aa	2235	G	N3-C2-N2	5.14	123.50	119.90
84	Aa	3172	G	C4-N9-C1'	5.14	133.19	126.50
84	Aa	3209	U	O4'-C1'-N1	5.14	112.31	108.20
86	Ab	26	C	N3-C4-N4	5.14	121.60	118.00
2	Ae	58	U	N1-C1'-C2'	-5.14	106.34	112.00
71	CB	2	SER	N-CA-C	-5.14	97.11	111.00
84	Aa	396	G	O4'-C1'-N9	5.14	112.31	108.20
84	Aa	955	A	C5-C6-N1	-5.14	115.13	117.70
84	Aa	1083	C	N3-C4-C5	-5.14	119.84	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2434	G	P-O3'-C3'	-5.14	113.53	119.70
84	Aa	3317	G	N3-C2-N2	5.14	123.50	119.90
84	Aa	384	A	C5-C6-N1	-5.14	115.13	117.70
1	Ad	405	A	O4'-C1'-N9	5.14	112.31	108.20
63	CU	108	ASN	N-CA-CB	5.14	119.85	110.60
84	Aa	500	C	N3-C4-C5	-5.14	119.84	121.90
84	Aa	1193	A	C8-N9-C4	-5.14	103.75	105.80
84	Aa	1235	A	C5-C6-N1	-5.14	115.13	117.70
84	Aa	1400	C	N3-C4-N4	5.14	121.60	118.00
84	Aa	1838	A	C5-C6-N1	-5.14	115.13	117.70
84	Aa	2569	G	C5-C6-O6	-5.14	125.52	128.60
84	Aa	2814	C	N3-C4-N4	5.14	121.60	118.00
84	Aa	3313	C	N3-C4-C5	-5.14	119.84	121.90
1	Ad	66	U	C2'-C3'-O3'	5.14	121.92	113.70
84	Aa	1960	C	N3-C4-N4	5.14	121.60	118.00
84	Aa	2358	C	N3-C4-N4	5.14	121.60	118.00
84	Aa	2834	C	N3-C4-N4	5.14	121.60	118.00
1	Ad	400	G	P-O3'-C3'	-5.14	113.53	119.70
1	Ad	1105	G	C1'-O4'-C4'	-5.14	105.79	109.90
16	BO	66	ASP	N-CA-CB	5.14	119.84	110.60
84	Aa	554	C	C5'-C4'-O4'	5.14	115.26	109.10
84	Aa	963	U	O4'-C1'-N1	5.14	112.31	108.20
84	Aa	1235	A	C5-C6-N6	-5.14	119.59	123.70
84	Aa	1560	A	O5'-P-OP1	-5.14	101.08	105.70
84	Aa	1927	A	C5-C6-N1	-5.14	115.13	117.70
85	Ac	83	C	N3-C4-C5	-5.14	119.84	121.90
86	Ab	47	C	C5-C4-N4	-5.14	116.61	120.20
1	Ad	802	A	O4'-C1'-N9	5.13	112.31	108.20
25	Bd	14	TYR	N-CA-CB	5.13	119.84	110.60
60	Co	102	THR	N-CA-CB	5.13	120.06	110.30
84	Aa	186	A	O4'-C1'-N9	5.13	112.31	108.20
84	Aa	674	G	C5-C6-O6	-5.13	125.52	128.60
84	Aa	2073	U	C6-N1-C1'	-5.13	114.01	121.20
84	Aa	2276	A	C5-C6-N1	-5.13	115.13	117.70
84	Aa	2804	A	O4'-C1'-N9	5.13	112.31	108.20
1	Ad	45	U	N1-C1'-C2'	5.13	120.67	114.00
84	Aa	341	U	O4'-C1'-N1	5.13	112.31	108.20
84	Aa	1059	A	C4-C5-C6	5.13	119.57	117.00
84	Aa	1132	A	O4'-C1'-N9	5.13	112.31	108.20
84	Aa	1151	G	O4'-C1'-N9	5.13	112.31	108.20
84	Aa	1946	C	N3-C4-N4	5.13	121.59	118.00
84	Aa	3177	A	C5-C6-N6	-5.13	119.59	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
85	Ac	131	G	N3-C2-N2	5.13	123.49	119.90
1	Ad	515	A	C3'-C2'-C1'	5.13	105.61	101.50
1	Ad	642	C	C3'-C2'-C1'	5.13	105.61	101.50
1	Ad	732	G	C3'-C2'-C1'	-5.13	97.39	101.50
2	Ae	53	U	O4'-C1'-C2'	-5.13	100.67	105.80
84	Aa	62	A	O4'-C1'-N9	5.13	112.31	108.20
84	Aa	724	A	P-O5'-C5'	5.13	129.11	120.90
84	Aa	1275	A	C4-C5-C6	5.13	119.56	117.00
84	Aa	1370	A	O4'-C1'-N9	5.13	112.31	108.20
84	Aa	1462	C	N3-C4-N4	5.13	121.59	118.00
84	Aa	2009	C	N3-C4-N4	5.13	121.59	118.00
84	Aa	2152	A	C5-C6-N1	-5.13	115.13	117.70
84	Aa	2752	G	O4'-C1'-N9	5.13	112.31	108.20
84	Aa	3259	A	C4'-C3'-O3'	-5.13	98.63	109.40
84	Aa	1077	C	N3-C4-N4	5.13	121.59	118.00
84	Aa	2929	C	N3-C4-C5	-5.13	119.85	121.90
85	Ac	109	A	C5-C6-N1	-5.13	115.14	117.70
1	Ad	34	G	N9-C1'-C2'	5.13	120.67	114.00
1	Ad	838	U	O4'-C4'-C3'	-5.13	98.87	104.00
14	BQ	135	PHE	CB-CG-CD1	-5.13	117.21	120.80
84	Aa	1239	U	O4'-C1'-N1	5.13	112.30	108.20
84	Aa	1298	A	C4-C5-C6	5.13	119.56	117.00
84	Aa	1487	A	C5-C6-N1	-5.13	115.14	117.70
84	Aa	3188	G	O4'-C1'-N9	5.13	112.30	108.20
84	Aa	3376	C	N3-C4-C5	-5.13	119.85	121.90
84	Aa	283	A	C4-C5-C6	5.13	119.56	117.00
84	Aa	910	G	N1-C6-O6	5.13	122.98	119.90
84	Aa	916	A	O4'-C1'-N9	5.13	112.30	108.20
84	Aa	960	C	C2-N3-C4	5.13	122.46	119.90
84	Aa	2241	G	C5-C6-O6	-5.13	125.52	128.60
84	Aa	2282	C	N3-C4-N4	5.13	121.59	118.00
84	Aa	251	G	N3-C2-N2	5.12	123.49	119.90
84	Aa	584	G	O4'-C1'-N9	5.12	112.30	108.20
84	Aa	1398	A	C5-C6-N1	-5.12	115.14	117.70
84	Aa	1651	A	C4-C5-C6	5.12	119.56	117.00
84	Aa	1742	G	O4'-C1'-N9	5.12	112.30	108.20
1	Ad	426	G	P-O3'-C3'	5.12	125.85	119.70
84	Aa	29	G	O4'-C1'-N9	5.12	112.30	108.20
84	Aa	561	G	C5-C6-O6	-5.12	125.53	128.60
84	Aa	980	C	N3-C4-N4	5.12	121.59	118.00
84	Aa	1651	A	O4'-C1'-N9	5.12	112.30	108.20
84	Aa	1723	C	C5'-C4'-O4'	5.12	115.25	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1984	C	N3-C4-N4	5.12	121.59	118.00
84	Aa	2049	C	N3-C4-N4	5.12	121.59	118.00
84	Aa	2287	U	O4'-C1'-N1	5.12	112.30	108.20
84	Aa	2347	A	C5-C6-N1	-5.12	115.14	117.70
85	Ac	61	A	C5-C6-N1	-5.12	115.14	117.70
85	Ac	86	U	O4'-C1'-N1	5.12	112.30	108.20
1	Ad	288	G	C4'-C3'-C2'	-5.12	97.48	102.60
1	Ad	946	A	O4'-C1'-N9	5.12	112.30	108.20
2	Ae	59	U	O4'-C1'-C2'	-5.12	100.68	105.80
15	BU	81	GLU	N-CA-CB	5.12	119.82	110.60
84	Aa	1057	A	C5-C6-N1	-5.12	115.14	117.70
84	Aa	2895	G	C5-C6-O6	-5.12	125.53	128.60
85	Ac	44	A	C5-C6-N1	-5.12	115.14	117.70
85	Ac	59	A	C5-N7-C8	5.12	106.46	103.90
1	Ad	1359	C	O4'-C1'-N1	5.12	112.30	108.20
84	Aa	340	A	C5-C6-N6	-5.12	119.61	123.70
84	Aa	918	A	C5-C6-N6	-5.12	119.60	123.70
84	Aa	1608	C	N3-C4-C5	-5.12	119.85	121.90
84	Aa	1892	A	C8-N9-C4	-5.12	103.75	105.80
84	Aa	3297	A	C5-C6-N1	-5.12	115.14	117.70
1	Ad	114	U	C1'-O4'-C4'	-5.12	105.81	109.90
1	Ad	1576	C	C3'-C2'-C1'	5.12	105.59	101.50
84	Aa	2070	C	P-O5'-C5'	5.12	129.09	120.90
84	Aa	2904	A	C5-C6-N1	-5.12	115.14	117.70
84	Aa	3315	A	C4-C5-C6	5.12	119.56	117.00
1	Ad	550	U	O4'-C1'-N1	5.12	112.29	108.20
1	Ad	631	C	N1-C1'-C2'	5.12	120.65	114.00
1	Ad	1151	G	O4'-C1'-C2'	5.12	112.20	107.60
3	Af	21	C	C3'-C2'-C1'	5.12	105.59	101.50
62	CS	72	THR	N-CA-CB	5.12	120.02	110.30
84	Aa	27	C	N3-C4-N4	5.12	121.58	118.00
84	Aa	437	C	N3-C4-N4	5.12	121.58	118.00
84	Aa	1391	A	C4-C5-C6	5.12	119.56	117.00
84	Aa	2559	C	N3-C4-N4	5.12	121.58	118.00
1	Ad	1274	G	C5'-C4'-O4'	5.11	115.23	109.10
64	Ci	95	SER	N-CA-CB	5.11	118.17	110.50
84	Aa	550	C	C2'-C3'-O3'	-5.11	98.25	109.50
84	Aa	595	C	N3-C4-N4	5.11	121.58	118.00
84	Aa	1323	G	N3-C2-N2	5.11	123.48	119.90
84	Aa	2226	C	N3-C4-N4	5.11	121.58	118.00
84	Aa	2270	A	C4-C5-C6	5.11	119.56	117.00
1	Ad	858	G	N9-C1'-C2'	5.11	120.64	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1310	G	C4-N9-C1'	5.11	133.15	126.50
84	Aa	1738	A	C5-C6-N1	-5.11	115.14	117.70
84	Aa	2451	G	N3-C2-N2	5.11	123.48	119.90
84	Aa	2733	A	C5-C6-N1	-5.11	115.14	117.70
84	Aa	3004	G	O4'-C1'-N9	5.11	112.29	108.20
84	Aa	3171	C	N3-C4-C5	-5.11	119.86	121.90
1	Ad	458	A	P-O3'-C3'	5.11	125.83	119.70
1	Ad	837	G	O4'-C1'-N9	5.11	112.29	108.20
1	Ad	1066	U	C3'-C2'-C1'	-5.11	97.41	101.50
84	Aa	59	A	C5-C6-N1	-5.11	115.14	117.70
84	Aa	298	G	N3-C2-N2	5.11	123.48	119.90
84	Aa	325	A	C5-C6-N1	-5.11	115.14	117.70
84	Aa	1005	C	N3-C4-C5	-5.11	119.86	121.90
84	Aa	1464	A	C5-C6-N6	-5.11	119.61	123.70
84	Aa	1807	C	N3-C4-N4	5.11	121.58	118.00
84	Aa	2677	A	C4-C5-C6	5.11	119.56	117.00
1	Ad	1143	A	O4'-C1'-C2'	-5.11	100.69	105.80
1	Ad	1735	C	O4'-C1'-C2'	-5.11	100.69	105.80
84	Aa	493	G	P-O3'-C3'	-5.11	113.57	119.70
84	Aa	495	G	C5-C6-O6	-5.11	125.53	128.60
84	Aa	1032	C	N3-C4-C5	-5.11	119.86	121.90
84	Aa	2377	C	N3-C4-N4	5.11	121.58	118.00
84	Aa	2434	G	C4'-C3'-C2'	-5.11	97.49	102.60
1	Ad	93	A	C3'-C2'-C1'	5.11	105.59	101.50
1	Ad	1616	U	C1'-O4'-C4'	5.11	113.99	109.90
84	Aa	651	A	C5-C6-N6	-5.11	119.61	123.70
84	Aa	1077	C	N3-C4-C5	-5.11	119.86	121.90
84	Aa	1396	A	C5-C6-N1	-5.11	115.15	117.70
84	Aa	1804	G	O4'-C1'-N9	5.11	112.29	108.20
84	Aa	1866	C	C2-N3-C4	5.11	122.45	119.90
84	Aa	2082	A	O4'-C1'-N9	5.11	112.29	108.20
1	Ad	169	A	C3'-C2'-C1'	5.11	105.58	101.50
1	Ad	1134	U	C1'-O4'-C4'	5.11	113.98	109.90
84	Aa	247	C	N3-C4-N4	5.11	121.57	118.00
84	Aa	764	A	C4-C5-C6	5.11	119.55	117.00
84	Aa	1109	G	N1-C2-N3	-5.11	120.84	123.90
84	Aa	1760	G	P-O3'-C3'	-5.11	113.57	119.70
84	Aa	1779	C	C2-N3-C4	5.11	122.45	119.90
84	Aa	1966	C	N3-C4-C5	-5.11	119.86	121.90
84	Aa	2518	A	C5-C6-N1	-5.11	115.15	117.70
84	Aa	2645	A	C5-C6-N1	-5.11	115.15	117.70
84	Aa	2986	C	N3-C4-N4	5.11	121.57	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3066	G	N3-C2-N2	5.11	123.47	119.90
84	Aa	3310	A	C5-C6-N1	-5.11	115.15	117.70
85	Ac	3	A	C5-C6-N1	-5.11	115.15	117.70
85	Ac	4	C	N3-C4-C5	-5.11	119.86	121.90
2	Ae	67	G	C4'-C3'-C2'	-5.10	97.50	102.60
84	Aa	1356	G	C4-C5-C6	5.10	121.86	118.80
84	Aa	1427	C	C2-N3-C4	5.10	122.45	119.90
84	Aa	565	C	N3-C4-N4	5.10	121.57	118.00
84	Aa	792	A	C5-C6-N1	-5.10	115.15	117.70
84	Aa	1248	A	O4'-C1'-N9	5.10	112.28	108.20
84	Aa	1739	G	N3-C2-N2	5.10	123.47	119.90
84	Aa	1835	A	C5-C6-N1	-5.10	115.15	117.70
84	Aa	3085	C	N3-C4-N4	5.10	121.57	118.00
49	CR	159	PHE	CB-CG-CD2	-5.10	117.23	120.80
84	Aa	941	C	N3-C4-N4	5.10	121.57	118.00
84	Aa	1805	A	C5-C6-N6	-5.10	119.62	123.70
86	Ab	44	C	C5'-C4'-O4'	5.10	115.22	109.10
1	Ad	747	U	N1-C1'-C2'	5.10	120.63	114.00
11	BD	107	TYR	CB-CG-CD1	-5.10	117.94	121.00
84	Aa	87	A	C8-N9-C4	-5.10	103.76	105.80
84	Aa	172	A	C4-C5-C6	5.10	119.55	117.00
84	Aa	175	G	C5-C6-O6	-5.10	125.54	128.60
84	Aa	452	G	C5'-C4'-O4'	5.10	115.22	109.10
84	Aa	513	C	O4'-C1'-N1	5.10	112.28	108.20
84	Aa	793	C	N3-C4-N4	5.10	121.57	118.00
84	Aa	1437	G	O4'-C1'-N9	5.10	112.28	108.20
84	Aa	2008	G	C5-C6-O6	-5.10	125.54	128.60
84	Aa	2852	G	O4'-C1'-N9	5.10	112.28	108.20
1	Ad	340	G	O4'-C1'-N9	5.10	112.28	108.20
1	Ad	1408	G	O3'-P-O5'	5.10	113.68	104.00
28	BA	36	PHE	CB-CG-CD1	5.10	124.37	120.80
84	Aa	255	C	N3-C4-C5	-5.10	119.86	121.90
84	Aa	397	A	C4-C5-C6	5.10	119.55	117.00
84	Aa	399	U	O4'-C1'-N1	5.10	112.28	108.20
84	Aa	1197	A	C5-C6-N6	-5.10	119.62	123.70
84	Aa	2286	A	C5-C6-N1	-5.10	115.15	117.70
84	Aa	2816	G	O4'-C1'-N9	5.10	112.28	108.20
84	Aa	2913	A	C5-C6-N1	-5.10	115.15	117.70
84	Aa	3160	G	O4'-C1'-N9	5.10	112.28	108.20
84	Aa	650	A	C3'-C2'-C1'	5.10	105.58	101.50
1	Ad	226	C	O4'-C1'-N1	5.09	112.28	108.20
84	Aa	796	C	N3-C4-N4	5.09	121.57	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	1394	C	N3-C4-C5	-5.09	119.86	121.90
84	Aa	1727	A	C5-C6-N1	-5.09	115.15	117.70
84	Aa	2699	A	O4'-C1'-N9	5.09	112.28	108.20
1	Ad	700	C	C3'-C2'-C1'	5.09	105.58	101.50
48	CD	144	ALA	N-CA-CB	5.09	117.23	110.10
84	Aa	1538	A	C5-C6-N1	-5.09	115.15	117.70
84	Aa	1793	A	C5-C6-N1	-5.09	115.15	117.70
1	Ad	776	A	O4'-C1'-N9	5.09	112.27	108.20
84	Aa	479	C	N3-C4-N4	5.09	121.56	118.00
84	Aa	753	G	O4'-C1'-N9	5.09	112.27	108.20
84	Aa	1637	G	N3-C2-N2	5.09	123.47	119.90
84	Aa	1871	G	O4'-C1'-N9	5.09	112.27	108.20
84	Aa	2247	A	O4'-C1'-N9	5.09	112.27	108.20
85	Ac	17	A	C5-C6-N6	-5.09	119.63	123.70
86	Ab	32	A	C5-C6-N1	-5.09	115.15	117.70
1	Ad	100	C	O4'-C1'-C2'	-5.09	100.71	105.80
1	Ad	207	A	N9-C1'-C2'	-5.09	106.40	112.00
1	Ad	307	U	O4'-C1'-N1	5.09	112.27	108.20
1	Ad	954	C	C3'-C2'-C1'	5.09	105.57	101.50
6	BK	54	TYR	CB-CG-CD2	5.09	124.05	121.00
84	Aa	457	C	N3-C4-C5	-5.09	119.86	121.90
84	Aa	552	G	C2'-C3'-O3'	5.09	121.84	113.70
84	Aa	1355	U	C6-N1-C1'	-5.09	114.07	121.20
84	Aa	1383	G	N1-C2-N3	-5.09	120.85	123.90
84	Aa	1693	A	C5-N7-C8	5.09	106.44	103.90
84	Aa	2529	C	C5'-C4'-C3'	-5.09	107.86	116.00
1	Ad	1701	G	O4'-C1'-N9	5.09	112.27	108.20
1	Ad	851	G	O4'-C1'-C2'	5.09	112.18	107.60
1	Ad	1395	C	O4'-C1'-C2'	5.09	112.18	107.60
1	Ad	1701	G	O4'-C1'-C2'	5.09	112.18	107.60
84	Aa	203	C	N3-C4-N4	5.09	121.56	118.00
84	Aa	512	G	C5'-C4'-C3'	5.09	124.14	116.00
84	Aa	564	A	C5-C6-N6	-5.09	119.63	123.70
84	Aa	984	A	C5-C6-N6	-5.09	119.63	123.70
84	Aa	1236	C	N3-C4-N4	5.09	121.56	118.00
84	Aa	1966	C	N3-C4-N4	5.09	121.56	118.00
84	Aa	2782	G	O4'-C1'-N9	5.09	112.27	108.20
84	Aa	3031	G	O4'-C1'-N9	5.09	112.27	108.20
1	Ad	592	U	O4'-C1'-N1	5.08	112.27	108.20
22	BZ	26	LYS	N-CA-CB	5.08	119.75	110.60
84	Aa	421	A	C5-C6-N1	-5.08	115.16	117.70
1	Ad	176	A	P-O3'-C3'	5.08	125.80	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	621	U	C1'-O4'-C4'	-5.08	105.83	109.90
1	Ad	784	C	O4'-C1'-C2'	5.08	112.17	107.60
1	Ad	1155	G	O4'-C1'-C2'	5.08	112.18	107.60
84	Aa	46	A	C5-C6-N1	-5.08	115.16	117.70
84	Aa	282	A	C4-C5-C6	5.08	119.54	117.00
84	Aa	1000	A	C5-C6-N1	-5.08	115.16	117.70
84	Aa	1310	G	N3-C2-N2	5.08	123.46	119.90
84	Aa	1526	A	O4'-C1'-N9	5.08	112.27	108.20
84	Aa	1702	C	N3-C4-C5	-5.08	119.87	121.90
84	Aa	2241	G	C5'-C4'-C3'	-5.08	107.87	116.00
2	Ae	9	A	O4'-C1'-N9	-5.08	104.14	108.20
2	Ae	72	G	C3'-C2'-C1'	-5.08	97.44	101.50
84	Aa	1393	G	O4'-C1'-N9	5.08	112.27	108.20
84	Aa	1421	A	C5-C6-N1	-5.08	115.16	117.70
84	Aa	2512	U	O4'-C4'-C3'	5.08	110.17	106.10
84	Aa	2833	G	C5-C6-O6	-5.08	125.55	128.60
84	Aa	3265	C	N3-C4-C5	-5.08	119.87	121.90
1	Ad	93	A	N9-C1'-C2'	-5.08	106.41	112.00
1	Ad	542	A	O4'-C1'-N9	5.08	112.26	108.20
1	Ad	1752	U	C1'-O4'-C4'	-5.08	105.84	109.90
84	Aa	211	A	C4-C5-C6	5.08	119.54	117.00
1	Ad	718	C	C4'-C3'-O3'	5.08	123.16	113.00
1	Ad	1487	U	C1'-O4'-C4'	5.08	113.96	109.90
1	Ad	1633	C	O4'-C1'-N1	5.08	112.26	108.20
84	Aa	287	A	C4-C5-C6	5.08	119.54	117.00
84	Aa	1671	G	C5-C6-O6	-5.08	125.55	128.60
84	Aa	2647	C	N3-C4-N4	5.08	121.56	118.00
84	Aa	3049	A	C5-C6-N1	-5.08	115.16	117.70
1	Ad	1554	G	C3'-C2'-C1'	-5.08	97.44	101.50
84	Aa	764	A	C5-C6-N1	-5.08	115.16	117.70
84	Aa	1969	G	N3-C2-N2	5.08	123.45	119.90
84	Aa	3036	C	N3-C4-N4	5.08	121.55	118.00
1	Ad	948	C	N1-C1'-C2'	5.08	120.60	114.00
1	Ad	1549	G	O4'-C1'-N9	-5.08	104.14	108.20
84	Aa	3	G	O4'-C1'-N9	5.08	112.26	108.20
84	Aa	279	G	C5-C6-O6	-5.08	125.55	128.60
84	Aa	1546	G	C5'-C4'-O4'	5.08	115.19	109.10
84	Aa	1712	A	C5-C6-N6	-5.08	119.64	123.70
84	Aa	2092	C	C5'-C4'-O4'	-5.08	103.01	109.10
84	Aa	2527	G	N3-C2-N2	5.08	123.45	119.90
84	Aa	2638	A	C5-C6-N1	-5.08	115.16	117.70
84	Aa	3252	G	C5'-C4'-C3'	-5.08	107.88	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Ad	1664	U	C1'-O4'-C4'	5.07	113.96	109.90
13	BF	148	TYR	CB-CG-CD1	5.07	124.04	121.00
37	CG	222	PHE	CB-CG-CD1	-5.07	117.25	120.80
42	CJ	2	SER	N-CA-C	5.07	124.70	111.00
84	Aa	289	C	C6-N1-C2	-5.07	118.27	120.30
84	Aa	356	G	O4'-C1'-N9	5.07	112.26	108.20
84	Aa	2330	C	N3-C4-N4	5.07	121.55	118.00
1	Ad	960	A	O4'-C1'-C2'	-5.07	100.73	105.80
1	Ad	1390	A	C3'-C2'-C1'	-5.07	97.44	101.50
84	Aa	84	A	C5-C6-N6	-5.07	119.64	123.70
84	Aa	264	C	N3-C4-C5	-5.07	119.87	121.90
84	Aa	315	A	C5-C6-N1	-5.07	115.17	117.70
84	Aa	705	A	O4'-C1'-N9	5.07	112.26	108.20
84	Aa	1040	A	C5-C6-N1	-5.07	115.17	117.70
84	Aa	1808	G	O4'-C1'-N9	5.07	112.26	108.20
84	Aa	1839	C	N3-C4-N4	5.07	121.55	118.00
84	Aa	2382	C	N3-C4-C5	-5.07	119.87	121.90
84	Aa	2675	G	O4'-C1'-N9	5.07	112.26	108.20
84	Aa	2745	C	C2-N3-C4	5.07	122.44	119.90
84	Aa	2992	G	N1-C2-N3	-5.07	120.86	123.90
84	Aa	3060	G	N3-C2-N2	5.07	123.45	119.90
84	Aa	3118	C	N3-C4-N4	5.07	121.55	118.00
86	Ab	81	G	C5-N7-C8	5.07	106.83	104.30
79	CE	26	TRP	N-CA-CB	5.07	119.72	110.60
84	Aa	975	G	N3-C2-N2	5.07	123.45	119.90
84	Aa	2274	A	O4'-C1'-N9	5.07	112.25	108.20
84	Aa	3296	C	N3-C4-C5	-5.07	119.87	121.90
84	Aa	1434	G	O4'-C1'-N9	5.07	112.25	108.20
84	Aa	2204	U	O4'-C1'-N1	5.07	112.25	108.20
84	Aa	3035	C	N3-C4-C5	-5.07	119.87	121.90
84	Aa	3166	C	C2-N3-C4	5.07	122.43	119.90
84	Aa	3273	C	N3-C4-C5	-5.07	119.87	121.90
85	Ac	6	C	N3-C4-N4	5.07	121.55	118.00
22	BZ	28	TRP	N-CA-CB	5.07	119.72	110.60
84	Aa	493	G	C1'-O4'-C4'	-5.07	105.85	109.90
84	Aa	932	A	C5-C6-N6	-5.07	119.65	123.70
84	Aa	1207	A	C4-C5-C6	5.07	119.53	117.00
84	Aa	2450	G	O4'-C1'-N9	5.07	112.25	108.20
84	Aa	3010	G	N3-C2-N2	5.07	123.45	119.90
84	Aa	3131	A	C5-C6-N6	-5.07	119.65	123.70
84	Aa	3236	A	C5-C6-N1	-5.07	115.17	117.70
84	Aa	405	A	C5-C6-N6	-5.06	119.65	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	463	G	C5-C6-O6	-5.06	125.56	128.60
84	Aa	1682	C	N3-C4-C5	-5.06	119.87	121.90
84	Aa	141	C	N3-C4-C5	-5.06	119.88	121.90
84	Aa	1079	G	C5'-C4'-O4'	5.06	115.17	109.10
84	Aa	1661	G	O4'-C1'-N9	5.06	112.25	108.20
84	Aa	1190	C	N3-C4-N4	5.06	121.54	118.00
86	Ab	79	A	C4-C5-N7	-5.06	108.17	110.70
84	Aa	15	C	N3-C4-C5	-5.06	119.88	121.90
84	Aa	97	G	C6-C5-N7	-5.06	127.36	130.40
84	Aa	115	C	C1'-O4'-C4'	-5.06	105.85	109.90
84	Aa	169	G	C5-C6-O6	-5.06	125.56	128.60
84	Aa	1443	G	N3-C2-N2	5.06	123.44	119.90
84	Aa	2446	G	C5-C6-O6	-5.06	125.56	128.60
1	Ad	176	A	C3'-C2'-C1'	5.06	105.55	101.50
17	BS	83	PHE	N-CA-CB	5.06	119.70	110.60
84	Aa	572	U	O4'-C1'-N1	5.06	112.25	108.20
84	Aa	594	C	N3-C4-N4	5.06	121.54	118.00
84	Aa	796	C	N3-C4-C5	-5.06	119.88	121.90
84	Aa	1588	G	C5'-C4'-C3'	5.06	124.09	116.00
84	Aa	2074	C	C5'-C4'-O4'	-5.06	103.03	109.10
84	Aa	2303	C	N3-C4-N4	5.06	121.54	118.00
1	Ad	1443	U	N1-C1'-C2'	5.06	120.57	114.00
1	Ad	1169	G	C5'-C4'-O4'	5.05	115.17	109.10
84	Aa	478	G	O4'-C1'-N9	5.05	112.24	108.20
84	Aa	645	C	C2-N3-C4	5.05	122.43	119.90
84	Aa	1457	A	C5-C6-N1	-5.05	115.17	117.70
84	Aa	2295	G	O4'-C1'-N9	5.05	112.24	108.20
84	Aa	2357	A	C5-C6-N1	-5.05	115.17	117.70
1	Ad	838	U	C3'-C2'-C1'	5.05	105.54	101.50
84	Aa	350	A	C5-C6-N6	-5.05	119.66	123.70
1	Ad	182	C	C3'-C2'-C1'	5.05	105.54	101.50
84	Aa	161	C	N3-C4-C5	-5.05	119.88	121.90
84	Aa	1318	C	P-O5'-C5'	5.05	128.98	120.90
84	Aa	2557	C	C6-N1-C2	-5.05	118.28	120.30
84	Aa	2617	G	O4'-C1'-N9	5.05	112.24	108.20
84	Aa	3229	C	N3-C4-N4	5.05	121.54	118.00
85	Ac	85	G	C6-C5-N7	-5.05	127.37	130.40
86	Ab	3	A	C6-N1-C2	5.05	121.63	118.60
1	Ad	529	A	O4'-C1'-N9	5.05	112.24	108.20
1	Ad	1151	G	C5'-C4'-O4'	5.05	115.16	109.10
84	Aa	156	A	O4'-C1'-N9	5.05	112.24	108.20
84	Aa	2482	A	C5-C6-N1	-5.05	115.18	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2586	C	N3-C4-N4	5.05	121.53	118.00
1	Ad	780	A	O4'-C1'-C2'	5.05	112.14	107.60
84	Aa	64	A	O4'-C1'-N9	5.05	112.24	108.20
84	Aa	858	U	O4'-C1'-N1	5.05	112.24	108.20
84	Aa	2835	A	C5-C6-N6	-5.05	119.66	123.70
86	Ab	54	A	C5-C6-N6	-5.05	119.66	123.70
1	Ad	299	A	C1'-O4'-C4'	-5.05	105.86	109.90
1	Ad	421	A	C3'-C2'-C1'	5.05	105.54	101.50
1	Ad	1071	C	C1'-O4'-C4'	-5.05	105.86	109.90
84	Aa	52	G	C5-C6-O6	-5.05	125.57	128.60
84	Aa	124	C	C2-N3-C4	5.05	122.42	119.90
84	Aa	715	A	C4-C5-C6	5.05	119.52	117.00
84	Aa	1365	C	C2-N3-C4	5.05	122.42	119.90
84	Aa	2124	G	N3-C2-N2	5.05	123.43	119.90
84	Aa	2198	U	C5'-C4'-C3'	-5.05	107.92	116.00
84	Aa	2948	A	C5-C6-N1	-5.05	115.18	117.70
1	Ad	1268	G	C3'-C2'-C1'	5.04	105.54	101.50
2	Ae	1	U	P-O3'-C3'	5.04	125.75	119.70
86	Ab	115	A	O4'-C1'-N9	5.04	112.24	108.20
1	Ad	334	G	C1'-O4'-C4'	-5.04	105.86	109.90
1	Ad	1368	C	P-O3'-C3'	5.04	125.75	119.70
84	Aa	182	C	N3-C4-C5	-5.04	119.88	121.90
84	Aa	394	A	C5-C6-N1	-5.04	115.18	117.70
84	Aa	417	G	N1-C6-O6	5.04	122.93	119.90
84	Aa	1051	A	C5-C6-N1	-5.04	115.18	117.70
84	Aa	2014	A	P-O3'-C3'	5.04	125.75	119.70
84	Aa	2086	A	C4'-C3'-C2'	5.04	107.64	102.60
84	Aa	3308	A	C5-C6-N6	-5.04	119.67	123.70
1	Ad	838	U	P-O3'-C3'	5.04	125.75	119.70
84	Aa	1478	A	C4-C5-C6	5.04	119.52	117.00
84	Aa	1753	A	O4'-C1'-N9	5.04	112.23	108.20
84	Aa	3278	G	N3-C2-N2	5.04	123.43	119.90
1	Ad	735	G	N9-C1'-C2'	5.04	120.55	114.00
84	Aa	2152	A	C2'-C3'-O3'	5.04	121.76	113.70
1	Ad	239	C	O4'-C1'-N1	5.04	112.23	108.20
1	Ad	934	A	N9-C1'-C2'	5.04	120.55	114.00
84	Aa	61	A	O4'-C1'-N9	5.04	112.23	108.20
84	Aa	1050	A	C5-C6-N1	-5.04	115.18	117.70
84	Aa	1239	U	P-O3'-C3'	5.04	125.75	119.70
84	Aa	1376	A	C5-C6-N6	-5.04	119.67	123.70
84	Aa	1929	A	C5-C6-N1	-5.04	115.18	117.70
84	Aa	1974	C	N3-C4-N4	5.04	121.53	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2646	A	C5-C6-N1	-5.04	115.18	117.70
84	Aa	2690	G	O4'-C1'-N9	5.04	112.23	108.20
84	Aa	3374	C	C6-N1-C1'	-5.04	114.75	120.80
86	Ab	8	A	O4'-C1'-N9	5.04	112.23	108.20
1	Ad	774	C	N1-C1'-C2'	5.04	120.55	114.00
1	Ad	961	U	O4'-C1'-C2'	-5.04	100.76	105.80
1	Ad	1040	G	C1'-O4'-C4'	-5.04	105.87	109.90
48	CD	219	PHE	CB-CG-CD2	-5.04	117.27	120.80
84	Aa	135	G	O4'-C1'-N9	5.04	112.23	108.20
84	Aa	164	C	N3-C4-C5	-5.04	119.89	121.90
84	Aa	3368	A	C5-C6-N6	-5.04	119.67	123.70
1	Ad	1024	A	O4'-C1'-N9	5.04	112.23	108.20
84	Aa	319	C	C2-N3-C4	5.04	122.42	119.90
84	Aa	1369	G	O4'-C1'-N9	5.04	112.23	108.20
84	Aa	1631	G	N3-C2-N2	5.04	123.42	119.90
84	Aa	2164	G	C5-C6-O6	-5.04	125.58	128.60
84	Aa	2941	G	N3-C2-N2	5.04	123.42	119.90
85	Ac	9	G	N1-C2-N3	-5.04	120.88	123.90
1	Ad	219	G	O4'-C1'-C2'	-5.03	100.77	105.80
1	Ad	651	G	C1'-O4'-C4'	-5.03	105.87	109.90
1	Ad	1465	C	O4'-C1'-N1	5.03	112.23	108.20
48	CD	280	SER	N-CA-CB	5.03	118.05	110.50
84	Aa	309	C	N3-C4-N4	5.03	121.52	118.00
84	Aa	441	G	O4'-C1'-N9	5.03	112.23	108.20
84	Aa	526	A	C5-C6-N1	-5.03	115.18	117.70
84	Aa	573	A	O4'-C1'-N9	5.03	112.23	108.20
84	Aa	860	G	C4-C5-C6	5.03	121.82	118.80
84	Aa	984	A	C5-C6-N1	-5.03	115.18	117.70
84	Aa	1157	A	O4'-C1'-N9	5.03	112.23	108.20
84	Aa	2120	A	C5-C6-N6	-5.03	119.67	123.70
84	Aa	2266	A	O4'-C1'-N9	5.03	112.23	108.20
84	Aa	2540	C	N3-C4-N4	5.03	121.52	118.00
1	Ad	279	C	C1'-O4'-C4'	5.03	113.93	109.90
84	Aa	2853	A	O4'-C1'-N9	5.03	112.22	108.20
84	Aa	3290	C	P-O3'-C3'	5.03	125.74	119.70
1	Ad	30	G	O4'-C1'-C2'	5.03	112.13	107.60
1	Ad	446	C	C3'-C2'-C1'	5.03	105.52	101.50
84	Aa	333	G	C8-N9-C1'	5.03	133.54	127.00
84	Aa	934	C	N3-C4-C5	-5.03	119.89	121.90
84	Aa	996	A	O4'-C1'-N9	5.03	112.22	108.20
84	Aa	2165	A	O4'-C1'-N9	5.03	112.22	108.20
84	Aa	2489	A	C4-C5-C6	5.03	119.52	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2518	A	O4'-C1'-N9	5.03	112.22	108.20
84	Aa	2842	C	N3-C4-C5	-5.03	119.89	121.90
84	Aa	1042	C	N3-C4-N4	5.03	121.52	118.00
84	Aa	3182	A	O4'-C4'-C3'	-5.03	98.97	104.00
84	Aa	232	C	C5'-C4'-O4'	5.03	115.13	109.10
84	Aa	389	A	O4'-C1'-N9	5.03	112.22	108.20
84	Aa	721	A	C5-C6-N1	-5.03	115.19	117.70
84	Aa	1465	A	C4-C5-C6	5.03	119.51	117.00
84	Aa	1490	A	P-O3'-C3'	5.03	125.73	119.70
84	Aa	1509	G	O4'-C1'-N9	5.03	112.22	108.20
84	Aa	1968	C	N3-C4-N4	5.03	121.52	118.00
84	Aa	2622	G	N3-C2-N2	5.03	123.42	119.90
84	Aa	3139	U	P-O3'-C3'	5.03	125.73	119.70
1	Ad	78	A	O4'-C1'-N9	5.03	112.22	108.20
1	Ad	1466	A	P-O3'-C3'	5.03	125.73	119.70
84	Aa	300	C	C2-N3-C4	5.03	122.41	119.90
84	Aa	492	G	N3-C2-N2	5.03	123.42	119.90
84	Aa	3283	G	C5-C6-O6	-5.03	125.58	128.60
85	Ac	78	G	O4'-C1'-N9	5.03	112.22	108.20
85	Ac	90	C	N3-C4-C5	-5.03	119.89	121.90
86	Ab	83	A	C4-C5-C6	5.03	119.51	117.00
1	Ad	403	A	N9-C1'-C2'	-5.02	106.47	112.00
1	Ad	1343	C	C5'-C4'-C3'	-5.02	107.96	116.00
84	Aa	553	C	P-O3'-C3'	5.02	125.73	119.70
84	Aa	2205	G	N3-C2-N2	5.02	123.42	119.90
85	Ac	74	U	O4'-C1'-N1	5.02	112.22	108.20
1	Ad	619	A	C1'-O4'-C4'	5.02	113.92	109.90
1	Ad	1652	C	O4'-C1'-N1	5.02	112.22	108.20
84	Aa	1330	A	C4'-C3'-C2'	-5.02	97.58	102.60
84	Aa	1522	G	C5-C6-O6	-5.02	125.59	128.60
84	Aa	2858	G	O4'-C1'-N9	5.02	112.22	108.20
85	Ac	54	A	C5-C6-N1	-5.02	115.19	117.70
1	Ad	1280	U	C1'-O4'-C4'	5.02	113.92	109.90
2	Ae	4	G	C1'-O4'-C4'	-5.02	105.88	109.90
84	Aa	544	C	N3-C4-N4	5.02	121.52	118.00
84	Aa	1389	C	N3-C4-N4	5.02	121.52	118.00
84	Aa	2872	C	N3-C4-C5	-5.02	119.89	121.90
1	Ad	601	G	O4'-C1'-N9	5.02	112.22	108.20
21	BP	71	LYS	N-CA-CB	5.02	119.63	110.60
84	Aa	1006	A	C5-C6-N1	-5.02	115.19	117.70
84	Aa	1070	G	C5-C6-O6	-5.02	125.59	128.60
84	Aa	1967	C	N3-C4-N4	5.02	121.51	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	2866	A	O4'-C1'-N9	5.02	112.22	108.20
85	Ac	15	G	N3-C2-N2	5.02	123.41	119.90
1	Ad	1488	C	O4'-C1'-C2'	-5.02	100.78	105.80
73	CO	134	LEU	C-N-CA	5.02	134.24	121.70
84	Aa	951	C	N3-C4-N4	5.02	121.51	118.00
84	Aa	1452	A	O4'-C1'-N9	5.02	112.22	108.20
84	Aa	1479	G	N3-C2-N2	5.02	123.41	119.90
84	Aa	1643	A	C5-C6-N1	-5.02	115.19	117.70
84	Aa	1781	C	N3-C4-N4	5.02	121.51	118.00
84	Aa	1806	C	N3-C4-N4	5.02	121.51	118.00
84	Aa	2216	G	N1-C2-N3	-5.02	120.89	123.90
84	Aa	2502	U	P-O5'-C5'	5.02	128.93	120.90
84	Aa	2889	A	C5-C6-N1	-5.02	115.19	117.70
84	Aa	3114	A	O4'-C1'-N9	5.02	112.21	108.20
84	Aa	3275	G	N3-C2-N2	5.02	123.41	119.90
1	Ad	1405	U	C5'-C4'-O4'	5.02	115.12	109.10
84	Aa	204	G	O4'-C1'-N9	5.02	112.21	108.20
84	Aa	924	A	C5-C6-N1	-5.02	115.19	117.70
84	Aa	2208	A	C5-C6-N6	-5.02	119.69	123.70
1	Ad	1715	C	N1-C1'-C2'	5.01	120.52	114.00
2	Ae	64	G	C1'-O4'-C4'	-5.01	105.89	109.90
53	CY	9	SER	N-CA-CB	5.01	118.02	110.50
84	Aa	621	C	N3-C4-C5	-5.01	119.89	121.90
84	Aa	2267	G	C5-C6-O6	-5.01	125.59	128.60
86	Ab	101	A	C6-C5-N7	-5.01	128.79	132.30
84	Aa	328	G	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	3056	C	N3-C4-N4	5.01	121.51	118.00
84	Aa	1017	G	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	1454	C	C2-N3-C4	5.01	122.41	119.90
84	Aa	2285	C	N3-C4-N4	5.01	121.51	118.00
84	Aa	2387	U	O4'-C1'-N1	5.01	112.21	108.20
84	Aa	2919	G	N3-C2-N2	5.01	123.41	119.90
1	Ad	649	C	N1-C1'-C2'	5.01	120.51	114.00
84	Aa	397	A	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	801	G	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	1018	C	P-O3'-C3'	5.01	125.71	119.70
84	Aa	1065	A	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	1264	A	C5-C6-N6	-5.01	119.69	123.70
84	Aa	1311	G	C2'-C3'-O3'	5.01	121.72	113.70
84	Aa	1877	G	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	2088	C	C4'-C3'-C2'	-5.01	97.59	102.60
84	Aa	2505	C	N3-C4-C5	-5.01	119.90	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	Aa	3030	A	C5-C6-N6	-5.01	119.69	123.70
1	Ad	559	A	C1'-O4'-C4'	5.01	113.91	109.90
45	CN	53	TYR	CB-CG-CD1	-5.01	118.00	121.00
84	Aa	204	G	C5-C6-O6	-5.01	125.60	128.60
84	Aa	820	A	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	1024	G	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	1130	G	O4'-C1'-N9	5.01	112.20	108.20
84	Aa	2301	C	C6-N1-C1'	-5.01	114.79	120.80
84	Aa	2649	C	N3-C4-N4	5.01	121.50	118.00
84	Aa	3072	A	O4'-C1'-N9	5.01	112.21	108.20
84	Aa	3203	G	N3-C2-N2	5.01	123.40	119.90
84	Aa	3337	G	O4'-C1'-N9	5.01	112.20	108.20
84	Aa	789	A	C5-C6-N1	-5.00	115.20	117.70
84	Aa	1675	G	C8-N9-C1'	5.00	133.51	127.00
84	Aa	1774	G	N3-C2-N2	5.00	123.40	119.90
86	Ab	64	G	N1-C6-O6	5.00	122.90	119.90
1	Ad	19	A	O4'-C1'-C2'	-5.00	100.80	105.80
1	Ad	1349	A	N9-C1'-C2'	5.00	120.51	114.00
2	Ae	26	G	O4'-C1'-N9	5.00	112.20	108.20
84	Aa	348	C	O4'-C1'-N1	5.00	112.20	108.20
84	Aa	1722	G	C5-C6-O6	-5.00	125.60	128.60
1	Ad	56	U	P-O3'-C3'	5.00	125.70	119.70
1	Ad	341	G	O4'-C1'-N9	-5.00	104.20	108.20
1	Ad	550	U	C3'-C2'-C1'	5.00	105.50	101.50
1	Ad	783	C	O4'-C1'-N1	5.00	112.20	108.20
84	Aa	245	C	N3-C4-N4	5.00	121.50	118.00
84	Aa	617	C	C5-C6-N1	5.00	123.50	121.00
84	Aa	980	C	C2-N3-C4	5.00	122.40	119.90
84	Aa	2143	A	C4-C5-C6	5.00	119.50	117.00
84	Aa	2185	U	C5-C6-N1	5.00	125.20	122.70
84	Aa	2959	G	O4'-C1'-N9	5.00	112.20	108.20

There are no chirality outliers.

All (486) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
84	Aa	1004	C	Sidechain
84	Aa	1010	A	Sidechain
84	Aa	1019	A	Sidechain
84	Aa	1022	G	Sidechain
84	Aa	1028	G	Sidechain
84	Aa	1051	A	Sidechain

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Mol	Chain	Res	Type	Group
84	Aa	106	G	Sidechain
84	Aa	1073	G	Sidechain
84	Aa	108	A	Sidechain
84	Aa	1083	C	Sidechain
84	Aa	11	A	Sidechain
84	Aa	1102	A	Sidechain
84	Aa	1109	G	Sidechain
84	Aa	111	C	Sidechain
84	Aa	1116	G	Sidechain
84	Aa	1118	G	Sidechain
84	Aa	1119	G	Sidechain
84	Aa	114	G	Sidechain
84	Aa	1150	G	Sidechain
84	Aa	1156	A	Sidechain
84	Aa	1157	A	Sidechain
84	Aa	1163	A	Sidechain
84	Aa	1164	G	Sidechain
84	Aa	1167	G	Sidechain
84	Aa	1177	G	Sidechain
84	Aa	1184	U	Sidechain
84	Aa	1187	G	Sidechain
84	Aa	120	G	Sidechain
84	Aa	1216	G	Sidechain
84	Aa	1230	G	Sidechain
84	Aa	1237	G	Sidechain
84	Aa	1241	G	Sidechain
84	Aa	1247	G	Sidechain
84	Aa	126	G	Sidechain
84	Aa	1262	U	Sidechain
84	Aa	1267	A	Sidechain
84	Aa	1275	A	Sidechain
84	Aa	1297	U	Sidechain
84	Aa	1298	A	Sidechain
84	Aa	13	G	Sidechain
84	Aa	1308	A	Sidechain
84	Aa	1312	A	Sidechain
84	Aa	1313	U	Sidechain
84	Aa	1320	G	Sidechain
84	Aa	1322	A	Sidechain
84	Aa	1323	G	Sidechain
84	Aa	1335	C	Sidechain
84	Aa	1341	G	Sidechain

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Mol	Chain	Res	Type	Group
84	Aa	1354	G	Sidechain
84	Aa	1409	G	Sidechain
84	Aa	144	A	Sidechain
84	Aa	1449	A	Sidechain
84	Aa	1457	A	Sidechain
84	Aa	147	G	Sidechain
84	Aa	1476	G	Sidechain
84	Aa	1482	C	Sidechain
84	Aa	1486	G	Sidechain
84	Aa	1489	G	Sidechain
84	Aa	1528	G	Sidechain
84	Aa	1531	G	Sidechain
84	Aa	1538	A	Sidechain
84	Aa	1542	A	Sidechain
84	Aa	158	A	Sidechain
84	Aa	1586	A	Sidechain
84	Aa	159	G	Sidechain
84	Aa	1594	G	Sidechain
84	Aa	1598	U	Sidechain
84	Aa	1601	G	Sidechain
84	Aa	1609	G	Sidechain
84	Aa	1611	G	Sidechain
84	Aa	1618	U	Sidechain
84	Aa	1619	G	Sidechain
84	Aa	1634	G	Sidechain
84	Aa	1635	A	Sidechain
84	Aa	1638	U	Sidechain
84	Aa	1653	A	Sidechain
84	Aa	1671	G	Sidechain
84	Aa	1672	G	Sidechain
84	Aa	1678	U	Sidechain
84	Aa	1689	G	Sidechain
84	Aa	1711	G	Sidechain
84	Aa	1716	G	Sidechain
84	Aa	1721	A	Sidechain
84	Aa	1723	C	Sidechain
84	Aa	1725	G	Sidechain
84	Aa	1728	G	Sidechain
84	Aa	1746	G	Sidechain
84	Aa	1747	A	Sidechain
84	Aa	1749	G	Sidechain
84	Aa	1750	A	Sidechain

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Mol	Chain	Res	Type	Group
84	Aa	1756	C	Sidechain
84	Aa	176	A	Sidechain
84	Aa	1767	G	Sidechain
84	Aa	18	G	Sidechain
84	Aa	1804	G	Sidechain
84	Aa	1816	U	Sidechain
84	Aa	1821	G	Sidechain
84	Aa	1842	C	Sidechain
84	Aa	1853	C	Sidechain
84	Aa	1857	G	Sidechain
84	Aa	1859	G	Sidechain
84	Aa	186	A	Sidechain
84	Aa	188	U	Sidechain
84	Aa	1892	A	Sidechain
84	Aa	1903	C	Sidechain
84	Aa	1910	G	Sidechain
84	Aa	1912	U	Sidechain
84	Aa	1921	U	Sidechain
84	Aa	1923	G	Sidechain
84	Aa	1935	G	Sidechain
84	Aa	20	G	Sidechain
84	Aa	2075	C	Sidechain
84	Aa	2077	C	Sidechain
84	Aa	2088	C	Sidechain
84	Aa	2092	C	Sidechain
84	Aa	2093	G	Sidechain
84	Aa	2104	G	Sidechain
84	Aa	2113	A	Sidechain
84	Aa	2132	A	Sidechain
84	Aa	214	G	Sidechain
84	Aa	2149	G	Sidechain
84	Aa	2150	C	Sidechain
84	Aa	2167	G	Sidechain
84	Aa	2171	A	Sidechain
84	Aa	218	G	Sidechain
84	Aa	2189	G	Sidechain
84	Aa	2192	C	Sidechain
84	Aa	2218	A	Sidechain
84	Aa	2242	G	Sidechain
84	Aa	2269	U	Sidechain
84	Aa	2270	A	Sidechain
84	Aa	2290	A	Sidechain

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Mol	Chain	Res	Type	Group
84	Aa	2303	C	Sidechain
84	Aa	2348	U	Sidechain
84	Aa	235	G	Sidechain
84	Aa	2352	G	Sidechain
84	Aa	2354	G	Sidechain
84	Aa	2375	G	Sidechain
84	Aa	2376	G	Sidechain
84	Aa	2380	G	Sidechain
84	Aa	2381	G	Sidechain
84	Aa	2416	U	Sidechain
84	Aa	2424	G	Sidechain
84	Aa	244	G	Sidechain
84	Aa	2444	U	Sidechain
84	Aa	2451	G	Sidechain
84	Aa	2491	A	Sidechain
84	Aa	2502	U	Sidechain
84	Aa	2506	G	Sidechain
84	Aa	2508	U	Sidechain
84	Aa	2526	G	Sidechain
84	Aa	2528	U	Sidechain
84	Aa	2529	C	Sidechain
84	Aa	2537	G	Sidechain
84	Aa	2538	G	Sidechain
84	Aa	2539	G	Sidechain
84	Aa	2542	U	Sidechain
84	Aa	2543	G	Sidechain
84	Aa	2552	U	Sidechain
84	Aa	2557	C	Sidechain
84	Aa	2558	U	Sidechain
84	Aa	2583	A	Sidechain
84	Aa	2588	G	Sidechain
84	Aa	2591	G	Sidechain
84	Aa	2610	G	Sidechain
84	Aa	2623	G	Sidechain
84	Aa	2627	G	Sidechain
84	Aa	2639	A	Sidechain
84	Aa	2648	G	Sidechain
84	Aa	265	G	Sidechain
84	Aa	2666	G	Sidechain
84	Aa	2673	G	Sidechain
84	Aa	2677	A	Sidechain
84	Aa	2697	A	Sidechain

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Mol	Chain	Res	Type	Group
84	Aa	2709	G	Sidechain
84	Aa	2732	U	Sidechain
84	Aa	2733	A	Sidechain
84	Aa	2751	A	Sidechain
84	Aa	2789	G	Sidechain
84	Aa	279	G	Sidechain
84	Aa	2801	A	Sidechain
84	Aa	2807	G	Sidechain
84	Aa	2815	A	Sidechain
84	Aa	2820	U	Sidechain
84	Aa	2843	G	Sidechain
84	Aa	2877	U	Sidechain
84	Aa	2882	U	Sidechain
84	Aa	2888	U	Sidechain
84	Aa	2918	U	Sidechain
84	Aa	2932	A	Sidechain
84	Aa	2935	A	Sidechain
84	Aa	2936	A	Sidechain
84	Aa	2966	G	Sidechain
84	Aa	2967	U	Sidechain
84	Aa	2968	G	Sidechain
84	Aa	2992	G	Sidechain
84	Aa	3002	U	Sidechain
84	Aa	3006	G	Sidechain
84	Aa	3007	A	Sidechain
84	Aa	3012	A	Sidechain
84	Aa	302	G	Sidechain
84	Aa	3035	C	Sidechain
84	Aa	3057	A	Sidechain
84	Aa	3067	G	Sidechain
84	Aa	3097	G	Sidechain
84	Aa	3123	A	Sidechain
84	Aa	3125	G	Sidechain
84	Aa	3137	G	Sidechain
84	Aa	3143	A	Sidechain
84	Aa	3171	C	Sidechain
84	Aa	3179	G	Sidechain
84	Aa	318	G	Sidechain
84	Aa	3204	G	Sidechain
84	Aa	3208	G	Sidechain
84	Aa	321	A	Sidechain
84	Aa	3219	U	Sidechain

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Mol	Chain	Res	Type	Group
84	Aa	3220	A	Sidechain
84	Aa	3222	G	Sidechain
84	Aa	3242	G	Sidechain
84	Aa	3248	G	Sidechain
84	Aa	3252	G	Sidechain
84	Aa	3264	C	Sidechain
84	Aa	3267	U	Sidechain
84	Aa	3269	C	Sidechain
84	Aa	3271	A	Sidechain
84	Aa	3276	G	Sidechain
84	Aa	3286	G	Sidechain
84	Aa	3294	U	Sidechain
84	Aa	3295	G	Sidechain
84	Aa	3309	U	Sidechain
84	Aa	3312	G	Sidechain
84	Aa	3314	G	Sidechain
84	Aa	3315	A	Sidechain
84	Aa	3320	G	Sidechain
84	Aa	3334	A	Sidechain
84	Aa	3340	G	Sidechain
84	Aa	3345	G	Sidechain
84	Aa	3361	G	Sidechain
84	Aa	3377	G	Sidechain
84	Aa	3379	C	Sidechain
84	Aa	3380	G	Sidechain
84	Aa	339	G	Sidechain
84	Aa	342	A	Sidechain
84	Aa	352	U	Sidechain
84	Aa	370	A	Sidechain
84	Aa	372	A	Sidechain
84	Aa	373	A	Sidechain
84	Aa	404	G	Sidechain
84	Aa	413	G	Sidechain
84	Aa	424	G	Sidechain
84	Aa	425	G	Sidechain
84	Aa	431	G	Sidechain
84	Aa	436	G	Sidechain
84	Aa	492	G	Sidechain
84	Aa	493	G	Sidechain
84	Aa	497	G	Sidechain
84	Aa	522	C	Sidechain
84	Aa	526	A	Sidechain

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Mol	Chain	Res	Type	Group
84	Aa	527	G	Sidechain
84	Aa	53	C	Sidechain
84	Aa	566	G	Sidechain
84	Aa	602	G	Sidechain
84	Aa	603	G	Sidechain
84	Aa	604	C	Sidechain
84	Aa	62	A	Sidechain
84	Aa	647	U	Sidechain
84	Aa	666	U	Sidechain
84	Aa	669	G	Sidechain
84	Aa	67	C	Sidechain
84	Aa	676	G	Sidechain
84	Aa	688	G	Sidechain
84	Aa	693	C	Sidechain
84	Aa	713	G	Sidechain
84	Aa	723	G	Sidechain
84	Aa	732	G	Sidechain
84	Aa	736	U	Sidechain
84	Aa	746	C	Sidechain
84	Aa	75	G	Sidechain
84	Aa	757	G	Sidechain
84	Aa	763	G	Sidechain
84	Aa	765	U	Sidechain
84	Aa	768	U	Sidechain
84	Aa	771	G	Sidechain
84	Aa	772	U	Sidechain
84	Aa	773	G	Sidechain
84	Aa	775	A	Sidechain
84	Aa	779	U	Sidechain
84	Aa	783	A	Sidechain
84	Aa	787	G	Sidechain
84	Aa	801	G	Sidechain
84	Aa	808	G	Sidechain
84	Aa	818	G	Sidechain
84	Aa	825	G	Sidechain
84	Aa	835	G	Sidechain
84	Aa	838	G	Sidechain
84	Aa	844	A	Sidechain
84	Aa	849	A	Sidechain
84	Aa	85	G	Sidechain
84	Aa	858	U	Sidechain
84	Aa	861	A	Sidechain

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Mol	Chain	Res	Type	Group
84	Aa	877	U	Sidechain
84	Aa	886	A	Sidechain
84	Aa	911	G	Sidechain
84	Aa	93	G	Sidechain
84	Aa	936	A	Sidechain
84	Aa	966	G	Sidechain
84	Aa	97	G	Sidechain
84	Aa	977	G	Sidechain
84	Aa	997	G	Sidechain
86	Ab	104	C	Sidechain
86	Ab	117	U	Sidechain
86	Ab	17	G	Sidechain
86	Ab	30	G	Sidechain
86	Ab	33	U	Sidechain
86	Ab	37	G	Sidechain
86	Ab	40	A	Sidechain
86	Ab	42	A	Sidechain
86	Ab	46	C	Sidechain
86	Ab	56	G	Sidechain
86	Ab	61	C	Sidechain
86	Ab	62	U	Sidechain
86	Ab	79	A	Sidechain
86	Ab	83	A	Sidechain
86	Ab	88	U	Sidechain
86	Ab	9	U	Sidechain
86	Ab	90	A	Sidechain
86	Ab	96	U	Sidechain
86	Ab	97	G	Sidechain
85	Ac	100	U	Sidechain
85	Ac	105	A	Sidechain
85	Ac	146	G	Sidechain
85	Ac	147	C	Sidechain
85	Ac	149	U	Sidechain
85	Ac	16	G	Sidechain
85	Ac	22	U	Sidechain
85	Ac	34	U	Sidechain
85	Ac	49	G	Sidechain
85	Ac	51	G	Sidechain
85	Ac	53	A	Sidechain
85	Ac	60	U	Sidechain
85	Ac	64	U	Sidechain
85	Ac	69	U	Sidechain

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Mol	Chain	Res	Type	Group
85	Ac	70	G	Sidechain
85	Ac	74	U	Sidechain
85	Ac	87	G	Sidechain
85	Ac	9	G	Sidechain
30	BB	157	GLN	Peptide
11	BD	112	GLY	Peptide
11	BD	211	HIS	Peptide
11	BD	212	PRO	Peptide
12	BE	132	GLY	Peptide
12	BE	240	LYS	Peptide
13	BF	138	SER	Peptide
13	BF	44	TYR	Sidechain
35	BG	182	ARG	Peptide
36	BH	105	PRO	Peptide
36	BH	114	PRO	Peptide
36	BH	117	ARG	Sidechain
36	BH	184	PHE	Peptide
6	BK	22	TYR	Sidechain
6	BK	83	PRO	Peptide
6	BK	86	ILE	Peptide
6	BK	87	VAL	Peptide
19	BL	98	TYR	Sidechain
7	BM	92	CYS	Peptide
14	BQ	131	GLU	Peptide
29	BR	2	GLY	Peptide
17	BS	142	ARG	Sidechain
20	BT	37	VAL	Peptide
20	BT	46	LYS	Peptide
20	BT	91	ARG	Sidechain
20	BT	92	PRO	Peptide
15	BU	10	PRO	Peptide
15	BU	78	PRO	Peptide
24	BW	62	VAL	Peptide
4	BY	48	LYS	Peptide
32	Ba	87	ARG	Sidechain
26	Bb	29	SER	Peptide
26	Bb	3	LEU	Peptide
23	Bc	21	GLY	Peptide
25	Bd	13	ASN	Peptide
8	Bf	52	GLY	Peptide
10	Bg	301	VAL	Peptide
41	CA	122	ASP	Peptide

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Mol	Chain	Res	Type	Group
41	CA	244	GLY	Peptide
41	CA	63	PHE	Peptide
41	CA	70	LYS	Peptide
71	CB	117	ARG	Peptide
71	CB	119	TYR	Sidechain
71	CB	259	HIS	Sidechain
71	CB	291	SER	Peptide
71	CB	303	ASP	Peptide
71	CB	349	GLN	Peptide
71	CB	357	GLU	Peptide
71	CB	365	THR	Peptide
71	CB	42	HIS	Peptide
72	CC	201	ARG	Sidechain
72	CC	215	TYR	Sidechain
72	CC	24	SER	Peptide
72	CC	95	ALA	Peptide
48	CD	114	ARG	Peptide
48	CD	121	GLU	Peptide
48	CD	139	ARG	Peptide
48	CD	187	GLU	Peptide
48	CD	201	GLY	Peptide
48	CD	21	GLN	Peptide
48	CD	217	GLU	Peptide
48	CD	218	LYS	Peptide
48	CD	235	GLY	Peptide
48	CD	238	SER	Peptide
48	CD	244	HIS	Peptide
48	CD	257	THR	Peptide
48	CD	261	PRO	Peptide
79	CE	20	TYR	Sidechain
79	CE	27	ALA	Peptide
79	CE	36	LEU	Peptide
79	CE	48	PRO	Peptide
79	CE	49	LYS	Peptide
79	CE	51	TYR	Peptide
79	CE	71	LEU	Peptide
69	CF	204	LEU	Peptide
69	CF	35	GLU	Peptide
69	CF	77	PHE	Peptide
37	CG	50	TRP	Peptide
37	CG	74	ASN	Peptide
43	CH	168	ASN	Peptide

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Mol	Chain	Res	Type	Group
43	CH	169	LYS	Peptide
43	CH	183	LYS	Peptide
75	CI	110	ARG	Peptide
75	CI	172	GLY	Peptide
75	CI	29	PRO	Peptide
75	CI	88	ARG	Sidechain
42	CJ	2	SER	Peptide
42	CJ	9	ASN	Peptide
65	CK	75	VAL	Peptide
65	CK	76	PRO	Peptide
78	CL	12	HIS	Peptide
78	CL	13	PHE	Peptide,Sidechain
78	CL	20	TYR	Sidechain
78	CL	65	TYR	Sidechain
61	CM	17	TYR	Sidechain
61	CM	18	GLY	Peptide
61	CM	40	ALA	Peptide
61	CM	6	PHE	Peptide
45	CN	81	TYR	Sidechain
73	CO	115	PRO	Peptide
73	CO	125	ILE	Peptide
73	CO	152	TRP	Peptide
73	CO	70	LYS	Peptide
50	CP	3	LYS	Peptide
47	CQ	14	THR	Peptide
47	CQ	156	PRO	Peptide
47	CQ	157	GLY	Peptide
47	CQ	158	VAL	Peptide
47	CQ	16	ARG	Peptide
47	CQ	59	ARG	Sidechain
49	CR	73	GLY	Peptide
49	CR	84	THR	Peptide
49	CR	89	LEU	Peptide
62	CS	139	ASP	Peptide
62	CS	151	PHE	Peptide
62	CS	82	ARG	Sidechain
63	CU	100	ASP	Peptide
63	CU	55	LYS	Peptide
51	CX	133	TYR	Sidechain
46	Ca	103	TYR	Sidechain
46	Ca	116	ARG	Peptide
46	Ca	137	GLY	Peptide

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Mol	Chain	Res	Type	Group
46	Ca	39	HIS	Peptide
46	Ca	5	PHE	Peptide
46	Ca	60	TYR	Peptide
46	Ca	8	ASN	Peptide
55	Cc	52	CYS	Peptide
57	Ce	13	LYS	Peptide
80	Cf	20	TYR	Sidechain
80	Cf	4	ARG	Sidechain
83	Cg	1	MET	Peptide
68	Ch	90	ARG	Peptide
58	Cj	88	LYS	Peptide
59	Cl	3	SER	Peptide
60	Co	32	LYS	Peptide
60	Co	87	ARG	Sidechain
74	Cp	35	SER	Peptide
70	Cq	7	LYS	Peptide
70	Cq	9	GLU	Peptide

## 5.2 Too-close contacts [i](#)

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

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

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	
4	BY	136/138 (99%)	118 (87%)	8 (6%)	10 (7%)	1	13
5	BI	64/220 (29%)	61 (95%)	2 (3%)	1 (2%)	9	43
6	BK	94/183 (51%)	66 (70%)	17 (18%)	11 (12%)	0	6
7	BM	121/171 (71%)	84 (69%)	20 (16%)	17 (14%)	0	4
8	Bf	69/155 (44%)	46 (67%)	10 (14%)	13 (19%)	0	2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	BX	140/142 (99%)	124 (89%)	11 (8%)	5 (4%)	3	25
10	Bg	378/380 (100%)	334 (88%)	26 (7%)	18 (5%)	2	21
11	BD	206/208 (99%)	125 (61%)	34 (16%)	47 (23%)	0	1
12	BE	198/265 (75%)	173 (87%)	16 (8%)	9 (4%)	2	22
13	BF	189/191 (99%)	162 (86%)	20 (11%)	7 (4%)	3	25
14	BQ	124/149 (83%)	93 (75%)	15 (12%)	16 (13%)	0	5
15	BU	126/128 (98%)	102 (81%)	14 (11%)	10 (8%)	1	12
16	BO	117/151 (78%)	91 (78%)	12 (10%)	14 (12%)	0	6
17	BS	150/152 (99%)	109 (73%)	16 (11%)	25 (17%)	0	3
18	BN	119/151 (79%)	92 (77%)	14 (12%)	13 (11%)	0	8
19	BL	83/160 (52%)	61 (74%)	16 (19%)	6 (7%)	1	14
20	BT	144/146 (99%)	123 (85%)	13 (9%)	8 (6%)	2	18
21	BP	89/154 (58%)	69 (78%)	12 (14%)	8 (9%)	1	11
22	BZ	98/108 (91%)	75 (76%)	10 (10%)	13 (13%)	0	4
23	Bc	56/65 (86%)	40 (71%)	5 (9%)	11 (20%)	0	2
24	BW	128/130 (98%)	101 (79%)	16 (12%)	11 (9%)	1	11
25	Bd	46/56 (82%)	29 (63%)	6 (13%)	11 (24%)	0	1
26	Bb	84/86 (98%)	75 (89%)	6 (7%)	3 (4%)	3	25
27	Be	58/62 (94%)	49 (84%)	5 (9%)	4 (7%)	1	14
28	BA	195/260 (75%)	176 (90%)	10 (5%)	9 (5%)	2	21
29	BR	114/141 (81%)	89 (78%)	15 (13%)	10 (9%)	1	11
30	BB	209/262 (80%)	153 (73%)	31 (15%)	25 (12%)	0	6
31	BV	74/82 (90%)	62 (84%)	9 (12%)	3 (4%)	3	22
32	Ba	91/133 (68%)	65 (71%)	13 (14%)	13 (14%)	0	4
33	BJ	185/195 (95%)	162 (88%)	16 (9%)	7 (4%)	3	24
34	BC	212/263 (81%)	189 (89%)	16 (8%)	7 (3%)	4	26
35	BG	227/245 (93%)	211 (93%)	10 (4%)	6 (3%)	5	31
36	BH	182/189 (96%)	154 (85%)	10 (6%)	18 (10%)	0	9
37	CG	235/257 (91%)	205 (87%)	24 (10%)	6 (3%)	5	31
38	CT	158/164 (96%)	137 (87%)	6 (4%)	15 (10%)	0	10
39	CZ	134/136 (98%)	123 (92%)	10 (8%)	1 (1%)	22	62

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
40	Cz	214/216 (99%)	197 (92%)	9 (4%)	8 (4%)	3	25
41	CA	253/261 (97%)	219 (87%)	19 (8%)	15 (6%)	1	17
42	CJ	168/180 (93%)	132 (79%)	14 (8%)	22 (13%)	0	4
43	CH	188/190 (99%)	167 (89%)	16 (8%)	5 (3%)	5	31
44	CV	138/140 (99%)	124 (90%)	7 (5%)	7 (5%)	2	19
45	CN	192/200 (96%)	168 (88%)	18 (9%)	6 (3%)	4	27
46	Ca	142/144 (99%)	101 (71%)	24 (17%)	17 (12%)	0	6
47	CQ	161/188 (86%)	127 (79%)	18 (11%)	16 (10%)	0	9
48	CD	302/304 (99%)	213 (70%)	35 (12%)	54 (18%)	0	3
49	CR	187/209 (90%)	163 (87%)	14 (8%)	10 (5%)	2	19
50	CP	169/171 (99%)	140 (83%)	12 (7%)	17 (10%)	0	9
51	CX	120/152 (79%)	100 (83%)	17 (14%)	3 (2%)	5	32
52	CW	73/162 (45%)	55 (75%)	12 (16%)	6 (8%)	1	12
53	CY	128/150 (85%)	114 (89%)	8 (6%)	6 (5%)	2	21
54	Cr	71/147 (48%)	49 (69%)	13 (18%)	9 (13%)	0	5
55	Cc	110/112 (98%)	96 (87%)	10 (9%)	4 (4%)	3	25
56	Cd	118/123 (96%)	98 (83%)	8 (7%)	12 (10%)	0	8
57	Ce	131/133 (98%)	113 (86%)	10 (8%)	8 (6%)	1	16
58	Cj	92/94 (98%)	58 (63%)	19 (21%)	15 (16%)	0	3
59	Cl	49/51 (96%)	36 (74%)	8 (16%)	5 (10%)	0	8
60	Co	103/105 (98%)	76 (74%)	13 (13%)	14 (14%)	0	4
61	CM	132/134 (98%)	101 (76%)	14 (11%)	17 (13%)	0	5
62	CS	165/178 (93%)	122 (74%)	20 (12%)	23 (14%)	0	4
63	CU	106/130 (82%)	76 (72%)	13 (12%)	17 (16%)	0	3
64	Ci	75/112 (67%)	59 (79%)	5 (7%)	11 (15%)	0	4
65	CK	126/166 (76%)	94 (75%)	17 (14%)	15 (12%)	0	6
66	Cu	56/110 (51%)	54 (96%)	1 (2%)	1 (2%)	8	40
66	Cv	56/110 (51%)	53 (95%)	2 (4%)	1 (2%)	8	40
67	Cs	57/113 (50%)	54 (95%)	3 (5%)	0	100	100
67	Ct	57/113 (50%)	54 (95%)	3 (5%)	0	100	100
68	Ch	122/124 (98%)	103 (84%)	11 (9%)	8 (7%)	1	15

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
69	CF	242/244 (99%)	217 (90%)	16 (7%)	9 (4%)	3	25
70	Cq	260/319 (82%)	233 (90%)	15 (6%)	12 (5%)	2	21
71	CB	387/389 (100%)	307 (79%)	43 (11%)	37 (10%)	0	9
72	CC	368/405 (91%)	311 (84%)	27 (7%)	30 (8%)	1	12
73	CO	204/206 (99%)	179 (88%)	14 (7%)	11 (5%)	2	19
74	Cp	90/92 (98%)	81 (90%)	7 (8%)	2 (2%)	6	35
75	CI	182/224 (81%)	147 (81%)	24 (13%)	11 (6%)	1	16
76	Cn	23/25 (92%)	21 (91%)	1 (4%)	1 (4%)	2	22
77	Cm	50/53 (94%)	46 (92%)	3 (6%)	1 (2%)	7	37
78	CL	206/208 (99%)	168 (82%)	13 (6%)	25 (12%)	0	5
79	CE	217/219 (99%)	177 (82%)	14 (6%)	26 (12%)	0	6
80	Cf	109/111 (98%)	103 (94%)	5 (5%)	1 (1%)	17	56
81	Ck	67/69 (97%)	63 (94%)	2 (3%)	2 (3%)	4	28
82	Cb	56/60 (93%)	48 (86%)	4 (7%)	4 (7%)	1	14
83	Cg	108/119 (91%)	96 (89%)	8 (7%)	4 (4%)	3	25
All	All	11663/13543 (86%)	9641 (83%)	1083 (9%)	939 (8%)	2	12

All (939) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	BY	2	ALA
4	BY	39	ASN
4	BY	41	SER
4	BY	46	LYS
4	BY	49	LEU
4	BY	68	THR
6	BK	82	LEU
6	BK	87	VAL
6	BK	88	PRO
6	BK	89	ALA
7	BM	79	VAL
7	BM	81	SER
7	BM	96	SER
8	Bf	26	VAL
9	BX	60	GLN
9	BX	128	SER
10	Bg	2	ALA

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Mol	Chain	Res	Type
10	Bg	149	VAL
10	Bg	216	LEU
10	Bg	342	SER
10	Bg	343	HIS
11	BD	32	ASP
11	BD	48	ILE
11	BD	90	LYS
11	BD	96	LEU
11	BD	99	ILE
11	BD	111	GLY
11	BD	125	PHE
11	BD	126	VAL
11	BD	131	ALA
11	BD	156	TYR
11	BD	162	GLN
11	BD	183	GLY
11	BD	184	ILE
11	BD	197	LYS
11	BD	200	PRO
11	BD	213	PRO
11	BD	215	GLU
11	BD	216	GLU
11	BD	217	ASN
11	BD	218	GLU
12	BE	58	TYR
12	BE	153	ILE
12	BE	154	ILE
13	BF	41	HIS
13	BF	57	PHE
13	BF	63	PRO
13	BF	77	ARG
14	BQ	45	ILE
14	BQ	76	ARG
14	BQ	90	ALA
14	BQ	91	ILE
14	BQ	142	ALA
15	BU	3	ALA
15	BU	7	ALA
15	BU	9	ALA
15	BU	12	MET
15	BU	81	GLU
16	BO	66	ASP

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Mol	Chain	Res	Type
16	BO	72	ALA
16	BO	97	ARG
16	BO	134	VAL
16	BO	148	ARG
17	BS	5	ALA
17	BS	8	GLU
17	BS	9	PHE
17	BS	17	ASN
17	BS	74	PRO
17	BS	80	PRO
17	BS	87	LYS
17	BS	99	VAL
17	BS	100	SER
17	BS	149	SER
18	BN	42	LYS
18	BN	57	GLN
18	BN	69	SER
18	BN	81	ALA
18	BN	86	GLU
18	BN	109	LYS
18	BN	137	PRO
19	BL	55	ILE
19	BL	109	PRO
19	BL	110	ALA
19	BL	120	GLU
20	BT	34	PRO
20	BT	40	VAL
21	BP	66	ILE
21	BP	70	ARG
21	BP	71	LYS
21	BP	139	ARG
22	BZ	18	SER
22	BZ	19	GLY
22	BZ	24	LYS
22	BZ	26	LYS
22	BZ	28	TRP
22	BZ	33	GLN
23	Bc	2	ASP
23	Bc	16	ARG
23	Bc	17	THR
23	Bc	24	THR
24	BW	4	VAL

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Mol	Chain	Res	Type
24	BW	52	PHE
24	BW	53	VAL
24	BW	65	LEU
24	BW	97	ARG
25	Bd	11	PRO
25	Bd	14	TYR
25	Bd	54	LYS
26	Bb	64	VAL
27	Be	57	PRO
28	BA	10	ARG
28	BA	100	ALA
29	BR	2	GLY
29	BR	88	LYS
29	BR	93	VAL
29	BR	101	GLU
29	BR	115	PRO
30	BB	49	SER
30	BB	113	LEU
30	BB	148	ASN
30	BB	179	CYS
30	BB	182	LYS
30	BB	206	PRO
31	BV	22	ARG
32	Ba	45	VAL
32	Ba	63	VAL
32	Ba	86	VAL
33	BJ	5	PRO
33	BJ	8	TYR
34	BC	146	ASN
35	BG	20	ASP
35	BG	87	TYR
35	BG	160	ASN
36	BH	17	SER
36	BH	34	ASN
36	BH	104	PRO
36	BH	105	PRO
36	BH	106	LYS
36	BH	118	THR
37	CG	48	VAL
37	CG	225	VAL
37	CG	233	VAL
38	CT	8	ARG

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Mol	Chain	Res	Type
38	CT	70	ARG
38	CT	141	VAL
38	CT	151	PRO
40	Cz	150	THR
40	Cz	167	ALA
40	Cz	197	TRP
40	Cz	198	GLN
41	CA	28	ARG
41	CA	67	PHE
41	CA	68	ARG
41	CA	119	HIS
42	CJ	2	SER
42	CJ	3	THR
42	CJ	7	GLN
42	CJ	58	SER
42	CJ	94	LEU
42	CJ	113	ASP
43	CH	140	LYS
43	CH	185	THR
43	CH	186	ILE
44	CV	13	LYS
44	CV	36	ASN
45	CN	122	ASN
45	CN	185	ARG
46	Ca	9	ARG
46	Ca	10	LYS
46	Ca	15	VAL
46	Ca	22	ILE
46	Ca	28	HIS
46	Ca	109	LYS
46	Ca	128	VAL
47	CQ	13	ARG
47	CQ	20	LYS
47	CQ	156	PRO
47	CQ	159	PRO
48	CD	2	SER
48	CD	16	TYR
48	CD	74	ILE
48	CD	116	LEU
48	CD	138	GLU
48	CD	188	LYS
48	CD	191	ASP

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Mol	Chain	Res	Type
48	CD	199	ILE
48	CD	204	VAL
48	CD	218	LYS
48	CD	236	MET
48	CD	239	LEU
48	CD	260	GLU
48	CD	262	ALA
48	CD	284	ARG
48	CD	285	LEU
48	CD	289	ASN
48	CD	290	SER
48	CD	291	SER
49	CR	55	GLN
49	CR	56	LYS
49	CR	59	SER
49	CR	188	SER
50	CP	112	THR
50	CP	167	ALA
51	CX	34	LYS
51	CX	46	LYS
51	CX	50	LYS
52	CW	54	THR
52	CW	72	LYS
53	CY	8	THR
53	CY	9	SER
53	CY	10	SER
54	Cr	110	ASN
55	Cc	102	SER
56	Cd	8	ALA
56	Cd	27	ARG
56	Cd	87	ARG
56	Cd	101	VAL
56	Cd	102	THR
56	Cd	119	VAL
57	Ce	13	LYS
57	Ce	131	GLU
58	Cj	4	GLY
58	Cj	41	ALA
58	Cj	51	VAL
58	Cj	84	ALA
58	Cj	90	ALA
59	Cl	4	HIS

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Mol	Chain	Res	Type
59	Cl	34	THR
59	Cl	38	ASN
60	Co	48	SER
60	Co	97	LYS
61	CM	6	PHE
61	CM	7	VAL
61	CM	17	TYR
61	CM	23	ARG
61	CM	66	PRO
61	CM	80	VAL
61	CM	89	TRP
61	CM	102	LEU
62	CS	4	PHE
62	CS	6	PHE
62	CS	17	PRO
62	CS	23	HIS
62	CS	35	ASN
62	CS	54	LYS
62	CS	70	ASN
62	CS	71	PRO
62	CS	73	THR
62	CS	87	THR
62	CS	117	ARG
62	CS	138	ARG
62	CS	151	PHE
62	CS	152	PRO
62	CS	161	PRO
63	CU	31	VAL
63	CU	32	GLU
63	CU	34	LYS
63	CU	58	ASN
63	CU	79	ALA
63	CU	100	ASP
63	CU	101	TRP
63	CU	104	VAL
63	CU	105	ILE
63	CU	106	ALA
63	CU	111	ARG
64	Ci	38	LYS
64	Ci	40	VAL
64	Ci	95	SER
65	CK	15	VAL

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Mol	Chain	Res	Type
65	CK	32	ILE
65	CK	37	LEU
65	CK	76	PRO
65	CK	95	LYS
65	CK	96	VAL
65	CK	132	GLU
65	CK	133	ILE
66	Cu	62	VAL
66	Cv	62	VAL
68	Ch	117	GLN
68	Ch	119	LYS
69	CF	109	ARG
69	CF	159	ASN
69	CF	205	TRP
70	Cq	63	ARG
70	Cq	208	ASP
70	Cq	212	ASP
71	CB	4	ARG
71	CB	60	VAL
71	CB	61	GLU
71	CB	63	PRO
71	CB	123	CYS
71	CB	129	ALA
71	CB	292	GLY
71	CB	296	HIS
71	CB	335	PRO
71	CB	350	THR
71	CB	351	SER
71	CB	358	ILE
72	CC	3	THR
72	CC	17	ASP
72	CC	21	ASP
72	CC	24	SER
72	CC	62	ALA
72	CC	90	ARG
72	CC	107	ALA
72	CC	108	PRO
72	CC	110	LYS
72	CC	202	ASN
72	CC	305	SER
72	CC	348	GLU
72	CC	349	ALA

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Mol	Chain	Res	Type
73	CO	11	ARG
73	CO	71	PRO
73	CO	126	PRO
73	CO	132	LEU
73	CO	135	GLN
73	CO	136	PRO
75	CI	18	PRO
75	CI	39	LYS
75	CI	113	THR
75	CI	115	MET
78	CL	13	PHE
78	CL	21	VAL
78	CL	46	PHE
78	CL	48	ARG
78	CL	62	THR
78	CL	64	LYS
78	CL	66	ASN
78	CL	127	PRO
78	CL	154	MET
78	CL	156	ILE
79	CE	26	TRP
79	CE	28	ILE
79	CE	37	PRO
79	CE	39	ALA
79	CE	40	GLU
79	CE	41	LYS
79	CE	44	ALA
79	CE	51	TYR
79	CE	52	PRO
79	CE	73	SER
79	CE	74	THR
79	CE	159	GLU
79	CE	166	ASP
80	Cf	7	GLN
82	Cb	21	ILE
82	Cb	39	PHE
83	Cg	11	HIS
83	Cg	65	PRO
6	BK	53	GLU
6	BK	61	TRP
7	BM	115	GLY
7	BM	117	GLU

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Mol	Chain	Res	Type
8	Bf	13	LYS
8	Bf	16	LYS
8	Bf	19	HIS
9	BX	86	ASN
10	Bg	202	SER
10	Bg	203	GLY
10	Bg	271	GLY
11	BD	36	GLY
11	BD	63	GLY
11	BD	80	LEU
11	BD	81	GLU
11	BD	91	VAL
11	BD	98	ALA
11	BD	113	LEU
11	BD	140	GLY
11	BD	152	PHE
11	BD	195	LYS
12	BE	53	LYS
12	BE	163	ASP
12	BE	217	GLN
13	BF	178	LYS
14	BQ	26	SER
14	BQ	36	LYS
14	BQ	138	ARG
15	BU	13	LYS
15	BU	30	ARG
15	BU	58	LYS
16	BO	75	LEU
16	BO	94	ILE
16	BO	138	SER
17	BS	15	VAL
17	BS	75	ARG
17	BS	91	LYS
17	BS	95	PHE
17	BS	151	LYS
18	BN	149	LEU
19	BL	121	GLY
20	BT	45	PHE
21	BP	116	ILE
22	BZ	11	PRO
22	BZ	34	LYS
22	BZ	89	ALA

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Mol	Chain	Res	Type
23	Bc	19	SER
23	Bc	25	GLN
24	BW	23	ARG
24	BW	50	PHE
24	BW	92	ARG
24	BW	96	SER
25	Bd	19	ARG
25	Bd	20	VAL
25	Bd	33	LYS
25	Bd	53	ILE
28	BA	32	LYS
28	BA	71	ALA
29	BR	86	PRO
29	BR	95	GLU
29	BR	112	ALA
30	BB	93	GLY
30	BB	177	SER
30	BB	221	PRO
31	BV	7	GLN
32	Ba	10	ARG
32	Ba	19	LYS
32	Ba	62	TYR
33	BJ	123	SER
33	BJ	136	ILE
33	BJ	152	VAL
34	BC	148	ILE
36	BH	67	TYR
36	BH	77	HIS
36	BH	111	VAL
36	BH	135	GLU
37	CG	121	GLU
38	CT	5	HIS
38	CT	10	ARG
38	CT	159	ASP
40	Cz	73	VAL
40	Cz	98	LEU
40	Cz	134	PRO
41	CA	34	PHE
42	CJ	33	THR
42	CJ	63	ARG
42	CJ	88	VAL
42	CJ	108	ILE

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Mol	Chain	Res	Type
42	CJ	124	ILE
42	CJ	127	MET
44	CV	5	GLY
44	CV	9	SER
44	CV	12	ASN
45	CN	2	GLY
45	CN	56	LYS
46	Ca	7	LYS
46	Ca	8	ASN
46	Ca	11	LYS
46	Ca	124	LEU
47	CQ	94	GLU
47	CQ	98	MET
47	CQ	160	HIS
48	CD	3	LEU
48	CD	14	HIS
48	CD	59	LYS
48	CD	73	ASP
48	CD	89	LEU
48	CD	117	ASP
48	CD	119	GLU
48	CD	125	GLU
48	CD	144	ALA
48	CD	183	PHE
48	CD	187	GLU
48	CD	200	TYR
48	CD	203	HIS
48	CD	238	SER
48	CD	248	ARG
48	CD	249	ALA
49	CR	54	PRO
50	CP	2	VAL
50	CP	9	ASN
50	CP	31	GLU
50	CP	38	LYS
50	CP	68	GLY
50	CP	70	THR
50	CP	74	LYS
50	CP	128	ARG
50	CP	166	ILE
50	CP	169	ARG
52	CW	63	LYS

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Mol	Chain	Res	Type
54	Cr	90	SER
54	Cr	91	VAL
56	Cd	2	SER
57	Ce	120	VAL
58	Cj	76	SER
58	Cj	79	ARG
58	Cj	87	ARG
59	Cl	39	ALA
60	Co	34	SER
60	Co	37	ALA
61	CM	3	PHE
61	CM	32	ASP
62	CS	52	LYS
63	CU	37	GLU
64	Ci	42	PHE
64	Ci	66	VAL
64	Ci	94	SER
65	CK	94	LYS
65	CK	137	CYS
69	CF	36	LYS
70	Cq	52	SER
71	CB	2	SER
71	CB	124	LYS
71	CB	126	LYS
71	CB	131	THR
71	CB	215	ASP
71	CB	301	GLU
71	CB	303	ASP
71	CB	359	LYS
71	CB	373	ARG
71	CB	374	PHE
72	CC	19	ALA
72	CC	91	ALA
72	CC	151	VAL
72	CC	208	ARG
72	CC	345	THR
74	Cp	6	LYS
74	Cp	18	TYR
75	CI	99	ILE
75	CI	110	ARG
75	CI	118	ALA
78	CL	12	HIS

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Mol	Chain	Res	Type
78	CL	49	PRO
78	CL	67	MET
78	CL	70	ARG
78	CL	130	ALA
79	CE	12	LYS
79	CE	54	ASP
79	CE	75	ILE
79	CE	172	ASN
79	CE	205	ARG
79	CE	209	ARG
81	Ck	20	ALA
82	Cb	25	LYS
83	Cg	10	ARG
4	BY	16	LYS
5	BI	161	GLN
6	BK	34	GLN
7	BM	10	GLU
7	BM	44	LYS
7	BM	72	HIS
7	BM	89	ALA
8	Bf	12	PRO
8	Bf	30	TYR
10	Bg	98	SER
10	Bg	150	SER
10	Bg	151	ARG
10	Bg	180	GLN
10	Bg	301	VAL
10	Bg	366	LYS
11	BD	62	LYS
11	BD	78	ASN
11	BD	93	ASN
11	BD	173	ARG
11	BD	211	HIS
12	BE	94	LYS
12	BE	213	ALA
14	BQ	32	ARG
14	BQ	81	THR
14	BQ	92	ALA
14	BQ	118	TYR
14	BQ	146	LYS
16	BO	93	HIS
16	BO	109	PRO

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Mol	Chain	Res	Type
16	BO	149	ARG
17	BS	49	ASP
17	BS	140	GLY
18	BN	78	HIS
18	BN	87	ASP
20	BT	11	ASP
22	BZ	101	ILE
23	Bc	8	ALA
24	BW	95	PRO
25	Bd	15	GLY
25	Bd	47	ALA
26	Bb	19	LEU
26	Bb	65	LEU
28	BA	44	LYS
30	BB	55	LYS
32	Ba	46	GLU
32	Ba	82	HIS
36	BH	57	ASN
36	BH	89	SER
36	BH	132	TYR
37	CG	153	VAL
37	CG	232	GLY
38	CT	80	VAL
39	CZ	103	THR
41	CA	11	GLY
41	CA	71	HIS
41	CA	245	ARG
42	CJ	65	GLU
42	CJ	89	LYS
42	CJ	145	ARG
46	Ca	66	ASN
46	Ca	114	PRO
47	CQ	11	ASN
47	CQ	119	GLU
47	CQ	142	PRO
48	CD	23	LYS
48	CD	52	LYS
48	CD	55	PHE
48	CD	132	TYR
48	CD	141	PRO
48	CD	197	LYS
48	CD	212	ALA

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Mol	Chain	Res	Type
48	CD	261	PRO
48	CD	287	ALA
48	CD	288	LEU
48	CD	292	ALA
48	CD	293	GLY
50	CP	8	ALA
50	CP	63	TYR
50	CP	79	ASN
50	CP	168	ALA
54	Cr	87	TYR
54	Cr	93	ARG
56	Cd	4	LYS
56	Cd	11	ARG
56	Cd	26	LYS
58	Cj	26	SER
58	Cj	77	ASN
59	Cl	47	THR
60	Co	14	ASN
60	Co	56	PRO
60	Co	76	SER
60	Co	91	PHE
60	Co	94	GLY
60	Co	98	LYS
60	Co	102	THR
61	CM	31	VAL
61	CM	88	SER
61	CM	105	PHE
62	CS	139	ASP
62	CS	162	THR
63	CU	29	LYS
63	CU	97	ASN
63	CU	107	ALA
63	CU	108	ASN
64	Ci	39	ARG
64	Ci	80	LEU
65	CK	134	LEU
68	Ch	99	ASP
68	Ch	113	VAL
69	CF	35	GLU
69	CF	62	LYS
69	CF	167	ASN
70	Cq	73	THR

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Mol	Chain	Res	Type
70	Cq	209	LEU
70	Cq	210	THR
70	Cq	211	GLU
71	CB	40	PRO
71	CB	103	ASN
71	CB	137	TYR
71	CB	158	THR
71	CB	262	ARG
71	CB	375	GLN
71	CB	386	ARG
72	CC	4	GLN
72	CC	330	VAL
73	CO	42	ARG
73	CO	69	THR
76	Cn	24	SER
78	CL	22	LYS
78	CL	128	ARG
78	CL	134	LYS
78	CL	142	GLU
78	CL	148	GLN
78	CL	152	ASP
79	CE	157	LYS
4	BY	11	THR
4	BY	48	LYS
6	BK	30	ALA
6	BK	60	SER
6	BK	64	TYR
7	BM	30	GLY
7	BM	94	ILE
7	BM	106	CYS
7	BM	107	SER
8	Bf	14	LYS
8	Bf	21	LYS
8	Bf	34	ASP
8	Bf	72	THR
9	BX	64	ALA
11	BD	30	ALA
11	BD	61	GLU
11	BD	64	ARG
11	BD	71	SER
11	BD	172	VAL
12	BE	149	TYR

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Mol	Chain	Res	Type
13	BF	56	ARG
15	BU	25	VAL
16	BO	53	VAL
16	BO	73	ALA
16	BO	142	LYS
17	BS	6	GLY
17	BS	7	GLU
17	BS	79	VAL
17	BS	83	PHE
17	BS	94	ARG
17	BS	139	THR
18	BN	41	ALA
18	BN	58	HIS
19	BL	61	PHE
20	BT	48	LEU
22	BZ	13	SER
22	BZ	96	HIS
23	Bc	3	THR
23	Bc	4	GLN
25	Bd	16	ALA
28	BA	108	THR
29	BR	100	LYS
30	BB	35	PRO
30	BB	79	GLN
30	BB	82	ARG
30	BB	176	ALA
31	BV	59	ARG
32	Ba	36	ILE
32	Ba	64	LEU
32	Ba	65	PRO
34	BC	35	TRP
34	BC	36	VAL
34	BC	106	ASP
34	BC	150	GLN
34	BC	235	PHE
35	BG	69	THR
36	BH	102	VAL
36	BH	141	VAL
36	BH	157	PRO
38	CT	124	GLU
38	CT	125	VAL
41	CA	38	ASN

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Mol	Chain	Res	Type
41	CA	115	ASN
41	CA	127	ALA
42	CJ	6	LYS
42	CJ	10	PRO
42	CJ	32	LEU
42	CJ	74	ARG
43	CH	49	GLU
43	CH	126	ASP
44	CV	6	ARG
45	CN	78	GLY
45	CN	148	ILE
46	Ca	4	ARG
46	Ca	108	GLY
46	Ca	117	PRO
46	Ca	134	LYS
47	CQ	78	ASN
47	CQ	139	LEU
47	CQ	148	ALA
47	CQ	157	GLY
47	CQ	158	VAL
48	CD	17	PHE
48	CD	90	GLU
48	CD	118	GLN
48	CD	245	ALA
48	CD	259	LYS
52	CW	66	HIS
53	CY	4	ASN
53	CY	21	ALA
55	Cc	31	TYR
55	Cc	89	TYR
57	Ce	46	LYS
57	Ce	90	ASN
57	Ce	132	ASP
58	Cj	10	LYS
58	Cj	37	CYS
58	Cj	39	TYR
58	Cj	61	THR
60	Co	35	LEU
61	CM	65	VAL
61	CM	67	LYS
62	CS	15	GLY
62	CS	16	LEU

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Mol	Chain	Res	Type
62	CS	19	PRO
62	CS	86	ARG
64	Ci	41	HIS
68	Ch	80	ALA
69	CF	206	PRO
70	Cq	12	VAL
70	Cq	74	GLY
71	CB	204	LYS
71	CB	205	GLU
71	CB	270	ALA
72	CC	22	ASN
72	CC	87	GLY
72	CC	154	LEU
72	CC	331	LEU
72	CC	346	LEU
72	CC	389	SER
75	CI	84	ALA
75	CI	85	PHE
75	CI	93	PRO
78	CL	65	TYR
81	Ck	26	LYS
82	Cb	23	LYS
4	BY	45	LEU
7	BM	91	LEU
7	BM	113	ASP
8	Bf	43	ARG
9	BX	9	ALA
10	Bg	111	VAL
17	BS	137	LYS
17	BS	150	LYS
20	BT	53	PRO
21	BP	117	LYS
21	BP	118	PRO
23	Bc	57	SER
24	BW	79	PHE
27	Be	4	VAL
27	Be	48	VAL
28	BA	163	ILE
29	BR	92	GLU
30	BB	38	PHE
30	BB	54	THR
30	BB	58	SER

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Mol	Chain	Res	Type
30	BB	62	LYS
30	BB	63	HIS
30	BB	64	ARG
30	BB	210	VAL
30	BB	213	ARG
33	BJ	142	ILE
35	BG	154	ASP
36	BH	113	ARG
41	CA	66	PRO
41	CA	69	TYR
41	CA	140	ASN
42	CJ	9	ASN
47	CQ	149	VAL
48	CD	140	ARG
48	CD	294	ALA
49	CR	185	PRO
50	CP	162	PRO
52	CW	45	ARG
53	CY	49	ILE
54	Cr	72	LEU
54	Cr	108	SER
56	Cd	90	GLU
57	Ce	66	HIS
60	Co	59	HIS
60	Co	80	TYR
61	CM	78	ALA
61	CM	79	ASP
63	CU	55	LYS
65	CK	75	VAL
65	CK	78	ALA
65	CK	91	ARG
68	Ch	45	LEU
68	Ch	90	ARG
69	CF	160	LYS
70	Cq	145	ASN
71	CB	70	LYS
71	CB	111	SER
72	CC	18	MET
72	CC	109	THR
72	CC	343	MET
73	CO	131	VAL
73	CO	152	TRP

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Mol	Chain	Res	Type
73	CO	193	LYS
77	Cm	2	ILE
78	CL	60	CYS
79	CE	29	LYS
79	CE	69	THR
7	BM	95	ASP
8	Bf	11	LYS
10	Bg	237	ILE
10	Bg	340	GLN
11	BD	31	GLU
11	BD	84	VAL
11	BD	194	PRO
11	BD	206	ASP
11	BD	212	PRO
14	BQ	47	PRO
20	BT	90	SER
21	BP	63	MET
22	BZ	44	ASP
23	Bc	34	GLN
25	Bd	38	CYS
28	BA	193	ILE
30	BB	37	VAL
30	BB	207	LEU
33	BJ	4	ALA
35	BG	159	VAL
38	CT	43	LYS
41	CA	73	LYS
42	CJ	25	VAL
44	CV	49	LEU
49	CR	91	THR
49	CR	137	VAL
52	CW	71	LYS
54	Cr	67	ASP
57	Ce	121	THR
62	CS	166	LYS
64	Ci	81	GLY
65	CK	87	LYS
70	Cq	136	SER
71	CB	69	LYS
71	CB	242	PRO
71	CB	297	GLU
78	CL	126	PHE

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Mol	Chain	Res	Type
79	CE	11	ILE
14	BQ	31	GLY
27	Be	56	GLY
32	Ba	84	VAL
38	CT	123	GLY
49	CR	57	ILE
79	CE	45	ILE
79	CE	117	ILE
83	Cg	2	VAL
13	BF	137	ILE
14	BQ	46	ARG
18	BN	66	VAL
38	CT	84	ILE
38	CT	146	ILE
49	CR	73	GLY
54	Cr	61	GLN
7	BM	103	VAL
10	Bg	127	GLY
11	BD	95	GLY
20	BT	33	LEU
28	BA	122	GLU
32	Ba	75	VAL
40	Cz	55	PRO
42	CJ	60	GLY
64	Ci	43	VAL
68	Ch	97	SER
78	CL	2	VAL
6	BK	83	PRO
15	BU	66	PRO
30	BB	215	VAL
36	BH	156	ASP
38	CT	126	ILE
56	Cd	16	VAL
75	CI	42	GLY
8	Bf	15	ILE
11	BD	202	THR
55	Cc	79	VAL
58	Cj	38	GLY
72	CC	386	ILE
79	CE	36	LEU

### 5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	
4	BY	116/116 (100%)	110 (95%)	6 (5%)	23	49
5	BI	56/179 (31%)	53 (95%)	3 (5%)	22	49
6	BK	90/146 (62%)	88 (98%)	2 (2%)	52	71
7	BM	101/142 (71%)	101 (100%)	0	100	100
8	Bf	62/135 (46%)	60 (97%)	2 (3%)	39	61
9	BX	113/113 (100%)	111 (98%)	2 (2%)	59	77
10	Bg	323/323 (100%)	310 (96%)	13 (4%)	31	56
11	BD	175/175 (100%)	170 (97%)	5 (3%)	42	64
12	BE	176/225 (78%)	172 (98%)	4 (2%)	50	70
13	BF	159/159 (100%)	153 (96%)	6 (4%)	33	57
14	BQ	103/120 (86%)	97 (94%)	6 (6%)	20	46
15	BU	113/113 (100%)	107 (95%)	6 (5%)	22	49
16	BO	94/120 (78%)	90 (96%)	4 (4%)	29	54
17	BS	133/133 (100%)	125 (94%)	8 (6%)	19	46
18	BN	106/130 (82%)	101 (95%)	5 (5%)	26	52
19	BL	74/135 (55%)	70 (95%)	4 (5%)	22	49
20	BT	121/121 (100%)	115 (95%)	6 (5%)	24	50
21	BP	77/130 (59%)	71 (92%)	6 (8%)	12	38
22	BZ	87/93 (94%)	84 (97%)	3 (3%)	37	60
23	Bc	52/58 (90%)	48 (92%)	4 (8%)	13	39
24	BW	113/113 (100%)	109 (96%)	4 (4%)	36	60
25	Bd	40/47 (85%)	39 (98%)	1 (2%)	47	68
26	Bb	78/78 (100%)	78 (100%)	0	100	100
27	Be	47/49 (96%)	46 (98%)	1 (2%)	53	72
28	BA	161/204 (79%)	153 (95%)	8 (5%)	24	50
29	BR	105/127 (83%)	103 (98%)	2 (2%)	57	75

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
30	BB	188/226 (83%)	186 (99%)	2 (1%)	73	84
31	BV	63/68 (93%)	59 (94%)	4 (6%)	18	44
32	Ba	80/107 (75%)	78 (98%)	2 (2%)	47	68
33	BJ	160/167 (96%)	157 (98%)	3 (2%)	57	75
34	BC	182/211 (86%)	177 (97%)	5 (3%)	44	65
35	BG	201/210 (96%)	192 (96%)	9 (4%)	27	53
36	BH	164/168 (98%)	157 (96%)	7 (4%)	29	54
37	CG	205/220 (93%)	194 (95%)	11 (5%)	22	49
38	CT	139/141 (99%)	135 (97%)	4 (3%)	42	64
39	CZ	113/113 (100%)	109 (96%)	4 (4%)	36	60
40	Cz	192/192 (100%)	182 (95%)	10 (5%)	23	49
41	CA	195/199 (98%)	184 (94%)	11 (6%)	21	47
42	CJ	149/157 (95%)	139 (93%)	10 (7%)	16	42
43	CH	164/164 (100%)	158 (96%)	6 (4%)	34	58
44	CV	109/109 (100%)	106 (97%)	3 (3%)	43	65
45	CN	167/173 (96%)	161 (96%)	6 (4%)	35	59
46	Ca	110/110 (100%)	101 (92%)	9 (8%)	11	36
47	CQ	138/160 (86%)	132 (96%)	6 (4%)	29	54
48	CD	251/251 (100%)	234 (93%)	17 (7%)	16	42
49	CR	166/183 (91%)	154 (93%)	12 (7%)	14	41
50	CP	144/144 (100%)	139 (96%)	5 (4%)	36	60
51	CX	109/130 (84%)	102 (94%)	7 (6%)	17	44
52	CW	66/133 (50%)	65 (98%)	1 (2%)	65	80
53	CY	115/128 (90%)	110 (96%)	5 (4%)	29	54
54	Cr	64/131 (49%)	61 (95%)	3 (5%)	26	52
55	Cc	98/98 (100%)	94 (96%)	4 (4%)	30	55
56	Cd	103/106 (97%)	98 (95%)	5 (5%)	25	51
57	Ce	122/122 (100%)	116 (95%)	6 (5%)	25	51
58	Cj	77/77 (100%)	74 (96%)	3 (4%)	32	57
59	Cl	48/48 (100%)	47 (98%)	1 (2%)	53	72
60	Co	94/94 (100%)	87 (93%)	7 (7%)	13	40

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
61	CM	116/116 (100%)	110 (95%)	6 (5%)	23	49
62	CS	153/163 (94%)	145 (95%)	8 (5%)	23	49
63	CU	94/106 (89%)	86 (92%)	8 (8%)	10	35
64	Ci	62/92 (67%)	59 (95%)	3 (5%)	25	52
65	CK	105/139 (76%)	98 (93%)	7 (7%)	16	42
66	Cu	46/77 (60%)	45 (98%)	1 (2%)	52	71
66	Cv	46/77 (60%)	46 (100%)	0	100	100
67	Cs	48/82 (58%)	47 (98%)	1 (2%)	53	72
67	Ct	48/82 (58%)	46 (96%)	2 (4%)	30	54
68	Ch	109/109 (100%)	103 (94%)	6 (6%)	21	48
69	CF	206/206 (100%)	199 (97%)	7 (3%)	37	60
70	Cq	222/265 (84%)	216 (97%)	6 (3%)	44	65
71	CB	335/335 (100%)	315 (94%)	20 (6%)	19	46
72	CC	302/329 (92%)	286 (95%)	16 (5%)	22	49
73	CO	173/173 (100%)	160 (92%)	13 (8%)	13	39
74	Cp	73/73 (100%)	72 (99%)	1 (1%)	67	80
75	CI	156/183 (85%)	152 (97%)	4 (3%)	46	67
76	Cn	24/24 (100%)	23 (96%)	1 (4%)	30	54
77	Cm	47/48 (98%)	46 (98%)	1 (2%)	53	72
78	CL	175/175 (100%)	166 (95%)	9 (5%)	24	50
79	CE	185/185 (100%)	169 (91%)	16 (9%)	10	34
80	Cf	96/96 (100%)	93 (97%)	3 (3%)	40	62
81	Ck	63/63 (100%)	58 (92%)	5 (8%)	12	38
82	Cb	51/53 (96%)	51 (100%)	0	100	100
83	Cg	98/107 (92%)	91 (93%)	7 (7%)	14	41
All	All	10084/11382 (89%)	9634 (96%)	450 (4%)	31	53

All (450) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	BY	21	ARG
4	BY	37	ARG
4	BY	47	GLU

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Mol	Chain	Res	Type
4	BY	95	TYR
4	BY	123	ILE
4	BY	127	LYS
5	BI	151	ASN
5	BI	201	LYS
5	BI	209	LYS
6	BK	54	TYR
6	BK	92	LYS
8	Bf	59	ASN
8	Bf	65	TYR
9	BX	60	GLN
9	BX	141	ARG
10	Bg	15	THR
10	Bg	52	ASN
10	Bg	62	LEU
10	Bg	78	LYS
10	Bg	107	HIS
10	Bg	112	MET
10	Bg	128	LEU
10	Bg	143	ARG
10	Bg	166	VAL
10	Bg	230	VAL
10	Bg	246	HIS
10	Bg	255	VAL
10	Bg	263	ARG
11	BD	40	ARG
11	BD	91	VAL
11	BD	99	ILE
11	BD	124	ARG
11	BD	207	LEU
12	BE	80	LYS
12	BE	149	TYR
12	BE	168	LYS
12	BE	208	ILE
13	BF	10	GLN
13	BF	51	ARG
13	BF	58	ARG
13	BF	113	ILE
13	BF	132	ARG
13	BF	178	LYS
14	BQ	53	LYS
14	BQ	66	PHE

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Mol	Chain	Res	Type
14	BQ	129	ARG
14	BQ	135	PHE
14	BQ	143	ARG
14	BQ	149	ARG
15	BU	12	MET
15	BU	30	ARG
15	BU	75	ARG
15	BU	86	TRP
15	BU	87	ASP
15	BU	92	ARG
16	BO	49	ARG
16	BO	65	ARG
16	BO	67	GLU
16	BO	87	LEU
17	BS	25	LYS
17	BS	36	VAL
17	BS	55	ARG
17	BS	78	LYS
17	BS	79	VAL
17	BS	108	ARG
17	BS	135	HIS
17	BS	136	THR
18	BN	70	LYS
18	BN	83	GLU
18	BN	108	ASP
18	BN	117	LEU
18	BN	124	ARG
19	BL	86	ILE
19	BL	96	LYS
19	BL	100	ARG
19	BL	116	PHE
20	BT	34	PRO
20	BT	46	LYS
20	BT	51	TYR
20	BT	91	ARG
20	BT	93	PRO
20	BT	106	ILE
21	BP	59	LYS
21	BP	60	ARG
21	BP	99	ILE
21	BP	116	ILE
21	BP	124	TYR

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Mol	Chain	Res	Type
21	BP	139	ARG
22	BZ	39	ASN
22	BZ	68	GLU
22	BZ	104	ARG
23	Bc	1	MET
23	Bc	16	ARG
23	Bc	41	ASN
23	Bc	47	ARG
24	BW	22	LYS
24	BW	51	GLU
24	BW	69	LEU
24	BW	113	HIS
25	Bd	55	TYR
27	Be	26	LYS
28	BA	37	GLN
28	BA	40	ARG
28	BA	52	ILE
28	BA	68	VAL
28	BA	76	GLN
28	BA	108	THR
28	BA	126	LEU
28	BA	159	ARG
29	BR	85	VAL
29	BR	105	MET
30	BB	105	PHE
30	BB	231	VAL
31	BV	20	THR
31	BV	41	GLU
31	BV	63	ASP
31	BV	72	TRP
32	Ba	45	VAL
32	Ba	70	LYS
33	BJ	18	ARG
33	BJ	23	LYS
33	BJ	70	ARG
34	BC	90	THR
34	BC	113	LEU
34	BC	148	ILE
34	BC	196	VAL
34	BC	216	ASP
35	BG	4	ASN
35	BG	7	ASN

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Mol	Chain	Res	Type
35	BG	32	ILE
35	BG	44	GLU
35	BG	74	ARG
35	BG	87	TYR
35	BG	130	GLU
35	BG	144	ARG
35	BG	228	ARG
36	BH	32	ASN
36	BH	36	GLU
36	BH	117	ARG
36	BH	130	VAL
36	BH	158	LYS
36	BH	167	LEU
36	BH	182	VAL
37	CG	61	ARG
37	CG	68	LYS
37	CG	82	LYS
37	CG	126	ILE
37	CG	132	LEU
37	CG	177	LYS
37	CG	189	LYS
37	CG	193	VAL
37	CG	214	ILE
37	CG	217	ASN
37	CG	221	LYS
38	CT	27	LEU
38	CT	30	TYR
38	CT	60	ARG
38	CT	63	ARG
39	CZ	29	PHE
39	CZ	34	ARG
39	CZ	84	ARG
39	CZ	136	PHE
40	Cz	9	VAL
40	Cz	33	LEU
40	Cz	46	LYS
40	Cz	61	LYS
40	Cz	102	LEU
40	Cz	129	LYS
40	Cz	140	GLN
40	Cz	182	ILE
40	Cz	206	LYS

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Mol	Chain	Res	Type
40	Cz	211	LYS
41	CA	1	MET
41	CA	5	ILE
41	CA	30	ARG
41	CA	37	ARG
41	CA	69	TYR
41	CA	74	GLU
41	CA	158	VAL
41	CA	177	LYS
41	CA	193	ARG
41	CA	227	ARG
41	CA	247	ARG
42	CJ	2	SER
42	CJ	31	ARG
42	CJ	34	ARG
42	CJ	51	LYS
42	CJ	70	TYR
42	CJ	82	LEU
42	CJ	89	LYS
42	CJ	93	LEU
42	CJ	94	LEU
42	CJ	142	ARG
43	CH	39	LYS
43	CH	41	LEU
43	CH	70	ARG
43	CH	141	ASP
43	CH	143	LEU
43	CH	185	THR
44	CV	39	ILE
44	CV	62	MET
44	CV	92	ASP
45	CN	97	ASN
45	CN	116	LEU
45	CN	123	GLU
45	CN	160	GLU
45	CN	175	ARG
45	CN	180	THR
46	Ca	21	ARG
46	Ca	26	ARG
46	Ca	41	HIS
46	Ca	47	LYS
46	Ca	62	HIS

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Mol	Chain	Res	Type
46	Ca	111	MET
46	Ca	121	LYS
46	Ca	123	LYS
46	Ca	142	LEU
47	CQ	4	ASP
47	CQ	56	LYS
47	CQ	77	LYS
47	CQ	91	ARG
47	CQ	139	LEU
47	CQ	156	PRO
48	CD	19	ARG
48	CD	23	LYS
48	CD	52	LYS
48	CD	61	ILE
48	CD	142	PHE
48	CD	158	ARG
48	CD	190	LEU
48	CD	200	TYR
48	CD	203	HIS
48	CD	208	MET
48	CD	219	PHE
48	CD	236	MET
48	CD	241	LYS
48	CD	242	LYS
48	CD	261	PRO
48	CD	281	LEU
48	CD	285	LEU
49	CR	1	MET
49	CR	6	LEU
49	CR	9	ARG
49	CR	56	LYS
49	CR	58	HIS
49	CR	84	THR
49	CR	86	GLU
49	CR	91	THR
49	CR	131	MET
49	CR	135	LYS
49	CR	151	ARG
49	CR	153	LYS
50	CP	4	TYR
50	CP	16	LYS
50	CP	22	LEU

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Mol	Chain	Res	Type
50	CP	61	ARG
50	CP	81	GLN
51	CX	46	LYS
51	CX	47	THR
51	CX	48	LEU
51	CX	66	LYS
51	CX	80	GLU
51	CX	98	LEU
51	CX	149	ILE
52	CW	45	ARG
53	CY	1	MET
53	CY	27	ARG
53	CY	86	ARG
53	CY	114	ARG
53	CY	129	LYS
54	Cr	87	TYR
54	Cr	92	MET
54	Cr	115	ASP
55	Cc	14	ILE
55	Cc	57	LYS
55	Cc	91	VAL
55	Cc	104	ILE
56	Cd	45	ARG
56	Cd	63	LEU
56	Cd	85	ARG
56	Cd	102	THR
56	Cd	105	GLU
57	Ce	24	ASP
57	Ce	44	ARG
57	Ce	91	ARG
57	Ce	120	VAL
57	Ce	121	THR
57	Ce	126	ARG
58	Cj	1	MET
58	Cj	14	LYS
58	Cj	30	GLN
59	Cl	23	ILE
60	Co	2	VAL
60	Co	16	GLU
60	Co	53	GLN
60	Co	61	LYS
60	Co	78	LYS

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Mol	Chain	Res	Type
60	Co	83	HIS
60	Co	102	THR
61	CM	5	ARG
61	CM	6	PHE
61	CM	8	GLU
61	CM	42	ASP
61	CM	63	LYS
61	CM	102	LEU
62	CS	38	ARG
62	CS	55	LYS
62	CS	69	LYS
62	CS	71	PRO
62	CS	75	LYS
62	CS	115	ARG
62	CS	119	ARG
62	CS	161	PRO
63	CU	41	LEU
63	CU	48	ARG
63	CU	55	LYS
63	CU	85	LEU
63	CU	95	LYS
63	CU	101	TRP
63	CU	102	LEU
63	CU	114	TYR
64	Ci	88	LYS
64	Ci	96	VAL
64	Ci	99	LYS
65	CK	16	ARG
65	CK	32	ILE
65	CK	41	LYS
65	CK	42	ILE
65	CK	55	LYS
65	CK	58	ARG
65	CK	76	PRO
66	Cu	10	LEU
67	Cs	8	LEU
67	Ct	1	MET
67	Ct	8	LEU
68	Ch	7	LYS
68	Ch	16	LYS
68	Ch	35	ILE
68	Ch	37	LYS

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Mol	Chain	Res	Type
68	Ch	75	LYS
68	Ch	90	ARG
69	CF	68	LYS
69	CF	69	ARG
69	CF	72	ARG
69	CF	115	ASN
69	CF	143	LEU
69	CF	144	LYS
69	CF	190	ILE
70	Cq	59	ASN
70	Cq	92	ILE
70	Cq	98	LEU
70	Cq	155	VAL
70	Cq	209	LEU
70	Cq	210	THR
71	CB	4	ARG
71	CB	20	LYS
71	CB	30	LYS
71	CB	39	LYS
71	CB	55	HIS
71	CB	60	VAL
71	CB	94	LYS
71	CB	101	THR
71	CB	118	PHE
71	CB	123	CYS
71	CB	162	VAL
71	CB	169	ARG
71	CB	182	MET
71	CB	201	PHE
71	CB	244	LYS
71	CB	259	HIS
71	CB	306	GLU
71	CB	327	MET
71	CB	347	LEU
71	CB	348	LYS
72	CC	8	LEU
72	CC	20	THR
72	CC	53	ARG
72	CC	60	ARG
72	CC	108	PRO
72	CC	109	THR
72	CC	154	LEU

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Mol	Chain	Res	Type
72	CC	200	MET
72	CC	215	TYR
72	CC	233	ASP
72	CC	313	GLU
72	CC	319	LYS
72	CC	345	THR
72	CC	346	LEU
72	CC	352	ILE
72	CC	357	GLU
73	CO	11	ARG
73	CO	37	ARG
73	CO	44	GLU
73	CO	54	ARG
73	CO	57	MET
73	CO	66	ARG
73	CO	76	ILE
73	CO	126	PRO
73	CO	134	LEU
73	CO	152	TRP
73	CO	181	LYS
73	CO	185	LYS
73	CO	193	LYS
74	Cp	73	THR
75	CI	57	LYS
75	CI	65	LEU
75	CI	141	LYS
75	CI	179	GLU
76	Cn	25	LYS
77	Cm	23	CYS
78	CL	10	ASN
78	CL	12	HIS
78	CL	54	LEU
78	CL	63	LEU
78	CL	102	LYS
78	CL	120	LYS
78	CL	148	GLN
78	CL	183	ARG
78	CL	204	LYS
79	CE	22	ARG
79	CE	36	LEU
79	CE	38	LYS
79	CE	50	PHE

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Mol	Chain	Res	Type
79	CE	51	TYR
79	CE	52	PRO
79	CE	75	ILE
79	CE	92	ARG
79	CE	118	ARG
79	CE	149	ARG
79	CE	152	LYS
79	CE	161	GLU
79	CE	180	ASP
79	CE	184	ILE
79	CE	209	ARG
79	CE	217	MET
80	Cf	4	ARG
80	Cf	5	GLN
80	Cf	9	VAL
81	Ck	1	MET
81	Ck	19	ASP
81	Ck	33	LYS
81	Ck	56	LEU
81	Ck	58	GLN
83	Cg	9	LYS
83	Cg	32	TYR
83	Cg	50	LYS
83	Cg	51	ILE
83	Cg	63	LYS
83	Cg	66	ARG
83	Cg	72	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (129) such sidechains are listed below:

Mol	Chain	Res	Type
4	BY	39	ASN
5	BI	151	ASN
5	BI	152	HIS
5	BI	189	GLN
6	BK	32	HIS
9	BX	20	GLN
9	BX	60	GLN
9	BX	109	HIS
10	Bg	63	GLN
10	Bg	217	ASN
10	Bg	219	ASN

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Mol	Chain	Res	Type
10	Bg	282	HIS
10	Bg	343	HIS
10	Bg	367	ASN
11	BD	162	GLN
13	BF	91	HIS
15	BU	84	ASN
17	BS	42	ASN
17	BS	72	HIS
17	BS	120	HIS
17	BS	125	HIS
18	BN	58	HIS
18	BN	101	HIS
19	BL	77	HIS
19	BL	105	HIS
19	BL	123	HIS
20	BT	15	HIS
21	BP	112	ASN
22	BZ	99	GLN
24	BW	42	GLN
24	BW	44	HIS
24	BW	113	HIS
25	Bd	28	HIS
26	Bb	51	HIS
29	BR	56	HIS
30	BB	99	ASN
30	BB	232	HIS
31	BV	38	HIS
31	BV	73	GLN
32	Ba	7	ASN
32	Ba	11	ASN
32	Ba	73	HIS
32	Ba	80	HIS
32	Ba	82	HIS
33	BJ	125	HIS
33	BJ	178	ASN
35	BG	34	GLN
35	BG	59	GLN
35	BG	160	ASN
37	CG	57	GLN
37	CG	134	HIS
38	CT	54	HIS
38	CT	58	HIS

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Mol	Chain	Res	Type
38	CT	90	HIS
40	Cz	75	GLN
41	CA	65	HIS
41	CA	139	HIS
41	CA	187	HIS
41	CA	209	HIS
41	CA	211	HIS
41	CA	216	HIS
41	CA	218	HIS
41	CA	221	HIS
41	CA	233	GLN
42	CJ	17	GLN
42	CJ	153	HIS
43	CH	40	HIS
45	CN	87	GLN
45	CN	95	GLN
45	CN	97	ASN
45	CN	182	HIS
46	Ca	19	HIS
46	Ca	69	HIS
48	CD	14	HIS
48	CD	43	GLN
48	CD	157	ASN
49	CR	58	HIS
49	CR	121	HIS
49	CR	143	HIS
50	CP	9	ASN
50	CP	25	HIS
50	CP	54	HIS
50	CP	56	GLN
50	CP	117	HIS
50	CP	121	ASN
50	CP	146	HIS
51	CX	43	HIS
51	CX	69	GLN
51	CX	89	ASN
51	CX	121	ASN
52	CW	61	HIS
53	CY	99	HIS
57	Ce	22	HIS
58	Cj	28	HIS
58	Cj	94	ASN

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Mol	Chain	Res	Type
59	Cl	20	ASN
62	CS	132	HIS
64	Ci	83	HIS
68	Ch	46	ASN
68	Ch	66	GLN
68	Ch	117	GLN
70	Cq	40	GLN
70	Cq	59	ASN
71	CB	121	ASN
71	CB	165	HIS
71	CB	259	HIS
71	CB	276	HIS
71	CB	282	ASN
72	CC	64	HIS
72	CC	120	ASN
72	CC	146	HIS
72	CC	250	HIS
73	CO	18	HIS
73	CO	138	HIS
73	CO	145	GLN
75	CI	14	ASN
78	CL	99	HIS
79	CE	18	HIS
79	CE	21	HIS
79	CE	67	HIS
79	CE	100	GLN
80	Cf	26	ASN
80	Cf	27	GLN
82	Cb	6	ASN
82	Cb	10	HIS
82	Cb	17	HIS
82	Cb	42	ASN
82	Cb	49	HIS
83	Cg	11	HIS

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	Ad	1760/1810 (97%)	458 (26%)	0
2	Ae	74/75 (98%)	19 (25%)	0
3	Af	10/11 (90%)	2 (20%)	0

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
84	Aa	3389/3391 (99%)	748 (22%)	0
85	Ac	159/160 (99%)	35 (22%)	0
86	Ab	119/120 (99%)	23 (19%)	0
All	All	5511/5567 (98%)	1285 (23%)	0

All (1285) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	Ad	4	C
1	Ad	8	U
1	Ad	16	G
1	Ad	25	C
1	Ad	26	A
1	Ad	27	U
1	Ad	34	G
1	Ad	46	A
1	Ad	47	A
1	Ad	50	C
1	Ad	55	A
1	Ad	56	U
1	Ad	57	G
1	Ad	58	U
1	Ad	59	G
1	Ad	60	C
1	Ad	65	A
1	Ad	68	A
1	Ad	72	A
1	Ad	73	A
1	Ad	75	U
1	Ad	76	U
1	Ad	77	G
1	Ad	78	A
1	Ad	79	A
1	Ad	80	C
1	Ad	81	U
1	Ad	103	U
1	Ad	105	A
1	Ad	112	U
1	Ad	115	A
1	Ad	127	G
1	Ad	128	G
1	Ad	132	G

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Mol	Chain	Res	Type
1	Ad	133	U
1	Ad	134	G
1	Ad	135	C
1	Ad	136	U
1	Ad	137	A
1	Ad	138	C
1	Ad	139	U
1	Ad	140	C
1	Ad	142	G
1	Ad	143	A
1	Ad	144	U
1	Ad	151	A
1	Ad	157	U
1	Ad	158	C
1	Ad	164	C
1	Ad	175	A
1	Ad	176	A
1	Ad	177	C
1	Ad	179	A
1	Ad	183	C
1	Ad	184	C
1	Ad	185	G
1	Ad	186	A
1	Ad	187	C
1	Ad	189	U
1	Ad	190	C
1	Ad	191	U
1	Ad	192	G
1	Ad	193	G
1	Ad	194	G
1	Ad	195	A
1	Ad	198	G
1	Ad	203	A
1	Ad	209	U
1	Ad	212	A
1	Ad	215	A
1	Ad	216	A
1	Ad	220	C
1	Ad	222	G
1	Ad	223	A
1	Ad	224	C
1	Ad	225	G

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Mol	Chain	Res	Type
1	Ad	226	C
1	Ad	229	G
1	Ad	230	C
1	Ad	231	U
1	Ad	235	C
1	Ad	236	U
1	Ad	237	C
1	Ad	238	G
1	Ad	239	C
1	Ad	240	U
1	Ad	241	G
1	Ad	242	A
1	Ad	243	U
1	Ad	244	C
1	Ad	245	C
1	Ad	251	U
1	Ad	252	U
1	Ad	253	C
1	Ad	263	C
1	Ad	264	G
1	Ad	265	A
1	Ad	268	G
1	Ad	269	A
1	Ad	270	U
1	Ad	271	C
1	Ad	272	G
1	Ad	277	G
1	Ad	278	C
1	Ad	279	C
1	Ad	282	C
1	Ad	283	G
1	Ad	284	U
1	Ad	285	G
1	Ad	292	A
1	Ad	303	A
1	Ad	318	C
1	Ad	320	A
1	Ad	324	U
1	Ad	337	A
1	Ad	341	G
1	Ad	342	C
1	Ad	345	A

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Mol	Chain	Res	Type
1	Ad	352	U
1	Ad	356	G
1	Ad	364	A
1	Ad	365	C
1	Ad	373	U
1	Ad	384	U
1	Ad	403	A
1	Ad	405	A
1	Ad	406	C
1	Ad	408	G
1	Ad	415	C
1	Ad	420	A
1	Ad	421	A
1	Ad	422	G
1	Ad	428	C
1	Ad	429	A
1	Ad	430	G
1	Ad	432	A
1	Ad	438	G
1	Ad	443	U
1	Ad	448	C
1	Ad	450	A
1	Ad	452	C
1	Ad	458	A
1	Ad	474	A
1	Ad	479	A
1	Ad	481	A
1	Ad	488	C
1	Ad	489	C
1	Ad	490	G
1	Ad	491	G
1	Ad	492	G
1	Ad	498	U
1	Ad	500	G
1	Ad	501	U
1	Ad	502	G
1	Ad	503	U
1	Ad	506	G
1	Ad	507	G
1	Ad	508	U
1	Ad	509	A
1	Ad	510	A

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Mol	Chain	Res	Type
1	Ad	512	U
1	Ad	514	G
1	Ad	515	A
1	Ad	517	U
1	Ad	519	A
1	Ad	520	G
1	Ad	523	C
1	Ad	529	A
1	Ad	531	A
1	Ad	535	C
1	Ad	536	U
1	Ad	545	A
1	Ad	547	C
1	Ad	548	C
1	Ad	549	A
1	Ad	552	G
1	Ad	560	A
1	Ad	561	G
1	Ad	562	U
1	Ad	569	C
1	Ad	572	G
1	Ad	574	A
1	Ad	579	C
1	Ad	584	A
1	Ad	589	A
1	Ad	598	A
1	Ad	599	G
1	Ad	601	G
1	Ad	610	A
1	Ad	611	G
1	Ad	613	U
1	Ad	615	U
1	Ad	623	A
1	Ad	626	A
1	Ad	628	G
1	Ad	634	A
1	Ad	642	C
1	Ad	643	U
1	Ad	644	U
1	Ad	705	A
1	Ad	708	G
1	Ad	722	A

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Mol	Chain	Res	Type
1	Ad	723	A
1	Ad	732	G
1	Ad	733	U
1	Ad	744	G
1	Ad	745	C
1	Ad	749	G
1	Ad	760	G
1	Ad	761	A
1	Ad	762	A
1	Ad	771	G
1	Ad	772	C
1	Ad	780	A
1	Ad	781	A
1	Ad	784	C
1	Ad	789	C
1	Ad	790	U
1	Ad	791	C
1	Ad	793	G
1	Ad	795	A
1	Ad	800	U
1	Ad	801	U
1	Ad	812	A
1	Ad	816	U
1	Ad	817	C
1	Ad	818	A
1	Ad	821	G
1	Ad	822	G
1	Ad	824	U
1	Ad	825	U
1	Ad	826	C
1	Ad	828	G
1	Ad	829	G
1	Ad	834	A
1	Ad	835	U
1	Ad	836	U
1	Ad	838	U
1	Ad	839	G
1	Ad	842	G
1	Ad	843	G
1	Ad	845	C
1	Ad	851	G
1	Ad	854	C

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Mol	Chain	Res	Type
1	Ad	857	A
1	Ad	859	U
1	Ad	867	A
1	Ad	868	A
1	Ad	878	U
1	Ad	881	G
1	Ad	903	A
1	Ad	917	U
1	Ad	918	G
1	Ad	919	G
1	Ad	926	G
1	Ad	933	G
1	Ad	934	A
1	Ad	935	A
1	Ad	937	A
1	Ad	938	A
1	Ad	940	U
1	Ad	947	G
1	Ad	949	A
1	Ad	956	A
1	Ad	964	U
1	Ad	965	U
1	Ad	966	U
1	Ad	971	A
1	Ad	973	U
1	Ad	987	U
1	Ad	997	A
1	Ad	998	A
1	Ad	1000	A
1	Ad	1002	G
1	Ad	1009	U
1	Ad	1010	A
1	Ad	1025	A
1	Ad	1026	C
1	Ad	1031	A
1	Ad	1033	C
1	Ad	1044	A
1	Ad	1045	G
1	Ad	1057	U
1	Ad	1058	G
1	Ad	1064	U
1	Ad	1077	C

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Mol	Chain	Res	Type
1	Ad	1079	G
1	Ad	1084	U
1	Ad	1087	U
1	Ad	1089	A
1	Ad	1091	A
1	Ad	1096	A
1	Ad	1097	A
1	Ad	1101	C
1	Ad	1103	U
1	Ad	1105	G
1	Ad	1109	U
1	Ad	1114	G
1	Ad	1116	G
1	Ad	1128	C
1	Ad	1143	A
1	Ad	1144	A
1	Ad	1151	G
1	Ad	1154	G
1	Ad	1156	A
1	Ad	1157	A
1	Ad	1160	G
1	Ad	1162	A
1	Ad	1163	C
1	Ad	1165	A
1	Ad	1169	G
1	Ad	1172	G
1	Ad	1184	C
1	Ad	1189	U
1	Ad	1192	G
1	Ad	1195	U
1	Ad	1197	A
1	Ad	1198	A
1	Ad	1200	A
1	Ad	1201	C
1	Ad	1203	G
1	Ad	1204	G
1	Ad	1205	G
1	Ad	1206	A
1	Ad	1211	U
1	Ad	1221	A
1	Ad	1222	G
1	Ad	1232	G

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Mol	Chain	Res	Type
1	Ad	1233	G
1	Ad	1247	G
1	Ad	1248	A
1	Ad	1249	G
1	Ad	1254	U
1	Ad	1255	U
1	Ad	1258	U
1	Ad	1260	A
1	Ad	1261	U
1	Ad	1262	U
1	Ad	1264	U
1	Ad	1273	U
1	Ad	1292	G
1	Ad	1305	U
1	Ad	1318	U
1	Ad	1319	U
1	Ad	1325	A
1	Ad	1326	A
1	Ad	1344	U
1	Ad	1345	G
1	Ad	1348	A
1	Ad	1349	A
1	Ad	1354	C
1	Ad	1358	G
1	Ad	1359	C
1	Ad	1366	A
1	Ad	1369	C
1	Ad	1373	C
1	Ad	1376	A
1	Ad	1377	G
1	Ad	1381	G
1	Ad	1382	C
1	Ad	1388	A
1	Ad	1394	A
1	Ad	1395	C
1	Ad	1396	U
1	Ad	1404	U
1	Ad	1405	U
1	Ad	1408	G
1	Ad	1409	G
1	Ad	1418	G
1	Ad	1419	U

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Mol	Chain	Res	Type
1	Ad	1421	U
1	Ad	1433	A
1	Ad	1434	G
1	Ad	1437	C
1	Ad	1452	A
1	Ad	1454	G
1	Ad	1463	C
1	Ad	1464	G
1	Ad	1465	C
1	Ad	1466	A
1	Ad	1468	G
1	Ad	1477	A
1	Ad	1479	U
1	Ad	1480	G
1	Ad	1481	A
1	Ad	1484	U
1	Ad	1488	C
1	Ad	1494	G
1	Ad	1496	A
1	Ad	1497	U
1	Ad	1499	U
1	Ad	1500	A
1	Ad	1501	G
1	Ad	1502	C
1	Ad	1507	G
1	Ad	1508	C
1	Ad	1514	G
1	Ad	1522	U
1	Ad	1524	A
1	Ad	1526	C
1	Ad	1529	G
1	Ad	1531	G
1	Ad	1542	G
1	Ad	1543	U
1	Ad	1544	G
1	Ad	1545	A
1	Ad	1546	U
1	Ad	1547	G
1	Ad	1548	G
1	Ad	1565	U
1	Ad	1567	G
1	Ad	1577	A

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Mol	Chain	Res	Type
1	Ad	1581	A
1	Ad	1582	G
1	Ad	1591	A
1	Ad	1592	G
1	Ad	1598	G
1	Ad	1609	G
1	Ad	1624	G
1	Ad	1627	C
1	Ad	1632	C
1	Ad	1639	A
1	Ad	1642	C
1	Ad	1643	A
1	Ad	1652	C
1	Ad	1664	U
1	Ad	1665	U
1	Ad	1666	G
1	Ad	1691	C
1	Ad	1692	G
1	Ad	1694	G
1	Ad	1698	A
1	Ad	1699	C
1	Ad	1708	U
1	Ad	1725	C
1	Ad	1726	G
1	Ad	1728	G
1	Ad	1737	A
1	Ad	1739	U
1	Ad	1764	G
1	Ad	1765	A
1	Ad	1766	A
1	Ad	1767	G
1	Ad	1769	C
1	Ad	1770	G
1	Ad	1771	U
1	Ad	1772	A
1	Ad	1776	A
1	Ad	1779	U
1	Ad	1780	U
1	Ad	1783	C
1	Ad	1793	C
1	Ad	1799	G
1	Ad	1802	G

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Mol	Chain	Res	Type
1	Ad	1804	A
1	Ad	1806	C
1	Ad	1807	A
1	Ad	1809	U
2	Ae	8	U
2	Ae	17	G
2	Ae	19	U
2	Ae	20	C
2	Ae	21	A
2	Ae	22	G
2	Ae	33	U
2	Ae	37	G
2	Ae	38	C
2	Ae	41	G
2	Ae	42	C
2	Ae	45	G
2	Ae	47	U
2	Ae	51	G
2	Ae	60	C
2	Ae	68	C
2	Ae	72	G
2	Ae	74	C
2	Ae	75	A
3	Af	13	A
3	Af	14	A
84	Aa	2	C
84	Aa	3	G
84	Aa	6	A
84	Aa	12	G
84	Aa	13	G
84	Aa	15	C
84	Aa	25	U
84	Aa	39	A
84	Aa	41	C
84	Aa	48	A
84	Aa	58	G
84	Aa	59	A
84	Aa	64	A
84	Aa	65	A
84	Aa	73	A
84	Aa	74	G
84	Aa	75	G

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Mol	Chain	Res	Type
84	Aa	84	A
84	Aa	85	G
84	Aa	91	G
84	Aa	92	C
84	Aa	98	A
84	Aa	108	A
84	Aa	109	G
84	Aa	112	C
84	Aa	115	C
84	Aa	116	U
84	Aa	121	A
84	Aa	134	U
84	Aa	135	G
84	Aa	153	U
84	Aa	155	G
84	Aa	156	A
84	Aa	159	G
84	Aa	164	C
84	Aa	167	C
84	Aa	168	A
84	Aa	171	G
84	Aa	180	G
84	Aa	188	U
84	Aa	189	C
84	Aa	190	C
84	Aa	198	A
84	Aa	208	G
84	Aa	212	G
84	Aa	216	G
84	Aa	217	A
84	Aa	232	C
84	Aa	233	C
84	Aa	236	A
84	Aa	238	C
84	Aa	239	C
84	Aa	241	G
84	Aa	242	U
84	Aa	243	C
84	Aa	247	C
84	Aa	248	C
84	Aa	249	A
84	Aa	250	C

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Mol	Chain	Res	Type
84	Aa	251	G
84	Aa	263	A
84	Aa	267	G
84	Aa	281	G
84	Aa	284	U
84	Aa	293	A
84	Aa	296	C
84	Aa	305	G
84	Aa	321	A
84	Aa	327	A
84	Aa	336	A
84	Aa	337	C
84	Aa	347	A
84	Aa	348	C
84	Aa	349	A
84	Aa	368	U
84	Aa	370	A
84	Aa	371	A
84	Aa	374	G
84	Aa	393	A
84	Aa	395	A
84	Aa	396	G
84	Aa	397	A
84	Aa	399	U
84	Aa	400	G
84	Aa	401	C
84	Aa	404	G
84	Aa	419	G
84	Aa	421	A
84	Aa	422	G
84	Aa	424	G
84	Aa	432	G
84	Aa	435	G
84	Aa	438	G
84	Aa	440	U
84	Aa	441	G
84	Aa	464	G
84	Aa	465	C
84	Aa	466	U
84	Aa	467	C
84	Aa	469	U
84	Aa	479	C

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Mol	Chain	Res	Type
84	Aa	482	C
84	Aa	488	U
84	Aa	489	C
84	Aa	492	G
84	Aa	493	G
84	Aa	499	A
84	Aa	500	C
84	Aa	507	C
84	Aa	521	G
84	Aa	522	C
84	Aa	523	C
84	Aa	524	A
84	Aa	543	C
84	Aa	544	C
84	Aa	549	G
84	Aa	550	C
84	Aa	555	G
84	Aa	564	A
84	Aa	571	G
84	Aa	572	U
84	Aa	573	A
84	Aa	574	C
84	Aa	575	C
84	Aa	581	G
84	Aa	585	A
84	Aa	588	G
84	Aa	598	U
84	Aa	601	G
84	Aa	612	U
84	Aa	613	G
84	Aa	621	C
84	Aa	623	G
84	Aa	639	A
84	Aa	640	C
84	Aa	642	C
84	Aa	651	A
84	Aa	652	C
84	Aa	653	A
84	Aa	660	A
84	Aa	664	A
84	Aa	681	A
84	Aa	685	G

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Mol	Chain	Res	Type
84	Aa	697	A
84	Aa	703	G
84	Aa	709	G
84	Aa	712	A
84	Aa	716	A
84	Aa	718	C
84	Aa	719	U
84	Aa	720	G
84	Aa	722	C
84	Aa	723	G
84	Aa	724	A
84	Aa	729	G
84	Aa	736	U
84	Aa	746	C
84	Aa	747	A
84	Aa	761	C
84	Aa	767	U
84	Aa	768	U
84	Aa	769	C
84	Aa	770	U
84	Aa	779	U
84	Aa	784	G
84	Aa	787	G
84	Aa	788	G
84	Aa	804	A
84	Aa	809	A
84	Aa	810	A
84	Aa	820	A
84	Aa	840	A
84	Aa	852	C
84	Aa	864	C
84	Aa	877	U
84	Aa	882	U
84	Aa	886	A
84	Aa	899	A
84	Aa	900	C
84	Aa	910	G
84	Aa	911	G
84	Aa	917	A
84	Aa	919	G
84	Aa	920	A
84	Aa	923	A

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Mol	Chain	Res	Type
84	Aa	924	A
84	Aa	926	C
84	Aa	928	A
84	Aa	937	G
84	Aa	940	G
84	Aa	947	C
84	Aa	950	U
84	Aa	962	C
84	Aa	963	U
84	Aa	965	A
84	Aa	977	G
84	Aa	982	U
84	Aa	983	U
84	Aa	984	A
84	Aa	985	C
84	Aa	986	G
84	Aa	997	G
84	Aa	998	G
84	Aa	1005	C
84	Aa	1006	A
84	Aa	1007	A
84	Aa	1010	A
84	Aa	1014	G
84	Aa	1018	C
84	Aa	1019	A
84	Aa	1020	U
84	Aa	1022	G
84	Aa	1024	G
84	Aa	1025	G
84	Aa	1028	G
84	Aa	1033	G
84	Aa	1036	C
84	Aa	1040	A
84	Aa	1041	C
84	Aa	1051	A
84	Aa	1053	C
84	Aa	1056	U
84	Aa	1061	A
84	Aa	1068	A
84	Aa	1069	U
84	Aa	1075	G
84	Aa	1076	G

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Mol	Chain	Res	Type
84	Aa	1085	G
84	Aa	1086	U
84	Aa	1087	G
84	Aa	1097	A
84	Aa	1098	U
84	Aa	1099	G
84	Aa	1101	A
84	Aa	1107	G
84	Aa	1120	G
84	Aa	1134	G
84	Aa	1146	A
84	Aa	1147	U
84	Aa	1156	A
84	Aa	1162	A
84	Aa	1183	C
84	Aa	1184	U
84	Aa	1185	G
84	Aa	1188	C
84	Aa	1194	C
84	Aa	1196	U
84	Aa	1205	C
84	Aa	1206	A
84	Aa	1213	G
84	Aa	1217	G
84	Aa	1220	G
84	Aa	1222	U
84	Aa	1226	G
84	Aa	1229	A
84	Aa	1231	C
84	Aa	1236	C
84	Aa	1237	G
84	Aa	1240	G
84	Aa	1241	G
84	Aa	1242	U
84	Aa	1243	C
84	Aa	1245	U
84	Aa	1246	G
84	Aa	1247	G
84	Aa	1248	A
84	Aa	1249	A
84	Aa	1250	G
84	Aa	1252	C

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Mol	Chain	Res	Type
84	Aa	1253	G
84	Aa	1255	A
84	Aa	1257	U
84	Aa	1262	U
84	Aa	1264	A
84	Aa	1266	G
84	Aa	1267	A
84	Aa	1268	G
84	Aa	1269	U
84	Aa	1270	G
84	Aa	1271	U
84	Aa	1273	U
84	Aa	1274	A
84	Aa	1275	A
84	Aa	1276	C
84	Aa	1281	C
84	Aa	1282	A
84	Aa	1283	C
84	Aa	1285	U
84	Aa	1289	G
84	Aa	1291	A
84	Aa	1296	C
84	Aa	1309	U
84	Aa	1311	G
84	Aa	1312	A
84	Aa	1313	U
84	Aa	1317	G
84	Aa	1329	G
84	Aa	1334	A
84	Aa	1349	G
84	Aa	1352	G
84	Aa	1355	U
84	Aa	1356	G
84	Aa	1357	C
84	Aa	1360	U
84	Aa	1361	G
84	Aa	1365	C
84	Aa	1402	G
84	Aa	1403	G
84	Aa	1404	G
84	Aa	1417	G
84	Aa	1421	A

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Mol	Chain	Res	Type
84	Aa	1422	G
84	Aa	1431	G
84	Aa	1436	A
84	Aa	1437	G
84	Aa	1440	C
84	Aa	1446	G
84	Aa	1449	A
84	Aa	1452	A
84	Aa	1453	G
84	Aa	1455	A
84	Aa	1481	C
84	Aa	1484	A
84	Aa	1488	G
84	Aa	1491	G
84	Aa	1511	C
84	Aa	1526	A
84	Aa	1529	C
84	Aa	1530	C
84	Aa	1531	G
84	Aa	1542	A
84	Aa	1545	G
84	Aa	1546	G
84	Aa	1550	A
84	Aa	1554	C
84	Aa	1556	G
84	Aa	1566	C
84	Aa	1567	G
84	Aa	1568	A
84	Aa	1570	C
84	Aa	1572	C
84	Aa	1577	A
84	Aa	1578	U
84	Aa	1584	A
84	Aa	1586	A
84	Aa	1602	A
84	Aa	1605	U
84	Aa	1618	U
84	Aa	1625	G
84	Aa	1640	A
84	Aa	1642	G
84	Aa	1652	G
84	Aa	1654	C

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Mol	Chain	Res	Type
84	Aa	1680	A
84	Aa	1703	C
84	Aa	1714	A
84	Aa	1715	C
84	Aa	1720	C
84	Aa	1721	A
84	Aa	1722	G
84	Aa	1723	C
84	Aa	1724	C
84	Aa	1726	G
84	Aa	1727	A
84	Aa	1728	G
84	Aa	1729	G
84	Aa	1734	G
84	Aa	1740	U
84	Aa	1748	A
84	Aa	1749	G
84	Aa	1758	U
84	Aa	1760	G
84	Aa	1761	C
84	Aa	1762	G
84	Aa	1766	U
84	Aa	1775	C
84	Aa	1776	G
84	Aa	1777	C
84	Aa	1793	A
84	Aa	1806	C
84	Aa	1808	G
84	Aa	1809	A
84	Aa	1810	G
84	Aa	1812	A
84	Aa	1813	C
84	Aa	1815	G
84	Aa	1816	U
84	Aa	1817	U
84	Aa	1830	U
84	Aa	1831	A
84	Aa	1835	A
84	Aa	1836	U
84	Aa	1837	A
84	Aa	1838	A
84	Aa	1842	C

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Mol	Chain	Res	Type
84	Aa	1845	C
84	Aa	1846	A
84	Aa	1851	U
84	Aa	1862	C
84	Aa	1872	C
84	Aa	1874	A
84	Aa	1875	A
84	Aa	1876	U
84	Aa	1882	A
84	Aa	1897	A
84	Aa	1901	G
84	Aa	1902	G
84	Aa	1926	A
84	Aa	1938	U
84	Aa	1951	C
84	Aa	1970	A
84	Aa	1991	U
84	Aa	1996	C
84	Aa	1997	G
84	Aa	1999	G
84	Aa	2003	C
84	Aa	2004	U
84	Aa	2006	A
84	Aa	2007	C
84	Aa	2008	G
84	Aa	2012	C
84	Aa	2013	G
84	Aa	2015	G
84	Aa	2021	G
84	Aa	2042	G
84	Aa	2054	A
84	Aa	2056	C
84	Aa	2057	G
84	Aa	2058	C
84	Aa	2071	U
84	Aa	2073	U
84	Aa	2075	C
84	Aa	2077	C
84	Aa	2081	C
84	Aa	2082	A
84	Aa	2084	G
84	Aa	2088	C

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Mol	Chain	Res	Type
84	Aa	2101	A
84	Aa	2107	A
84	Aa	2108	C
84	Aa	2115	G
84	Aa	2116	G
84	Aa	2125	A
84	Aa	2134	U
84	Aa	2150	C
84	Aa	2151	G
84	Aa	2152	A
84	Aa	2153	U
84	Aa	2154	G
84	Aa	2160	C
84	Aa	2161	G
84	Aa	2162	C
84	Aa	2163	G
84	Aa	2167	G
84	Aa	2168	C
84	Aa	2170	G
84	Aa	2183	A
84	Aa	2188	U
84	Aa	2196	G
84	Aa	2200	U
84	Aa	2203	A
84	Aa	2205	G
84	Aa	2223	A
84	Aa	2239	A
84	Aa	2244	G
84	Aa	2245	G
84	Aa	2247	A
84	Aa	2248	G
84	Aa	2250	A
84	Aa	2251	A
84	Aa	2267	G
84	Aa	2268	G
84	Aa	2276	A
84	Aa	2277	U
84	Aa	2278	G
84	Aa	2279	C
84	Aa	2283	G
84	Aa	2287	U
84	Aa	2302	G

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Mol	Chain	Res	Type
84	Aa	2303	C
84	Aa	2304	A
84	Aa	2305	U
84	Aa	2308	A
84	Aa	2309	U
84	Aa	2310	G
84	Aa	2314	G
84	Aa	2315	G
84	Aa	2317	U
84	Aa	2319	A
84	Aa	2335	U
84	Aa	2372	A
84	Aa	2373	C
84	Aa	2374	G
84	Aa	2384	G
84	Aa	2385	A
84	Aa	2387	U
84	Aa	2392	G
84	Aa	2396	A
84	Aa	2401	A
84	Aa	2402	G
84	Aa	2403	A
84	Aa	2405	C
84	Aa	2410	U
84	Aa	2443	C
84	Aa	2445	U
84	Aa	2450	G
84	Aa	2451	G
84	Aa	2452	U
84	Aa	2453	G
84	Aa	2454	U
84	Aa	2458	A
84	Aa	2460	A
84	Aa	2461	A
84	Aa	2462	G
84	Aa	2465	G
84	Aa	2467	A
84	Aa	2473	C
84	Aa	2474	A
84	Aa	2481	C
84	Aa	2483	A
84	Aa	2485	U

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Mol	Chain	Res	Type
84	Aa	2490	U
84	Aa	2491	A
84	Aa	2492	C
84	Aa	2493	C
84	Aa	2494	A
84	Aa	2498	C
84	Aa	2499	U
84	Aa	2501	U
84	Aa	2502	U
84	Aa	2503	A
84	Aa	2504	A
84	Aa	2505	C
84	Aa	2506	G
84	Aa	2510	U
84	Aa	2511	U
84	Aa	2515	C
84	Aa	2516	U
84	Aa	2517	U
84	Aa	2518	A
84	Aa	2524	U
84	Aa	2526	G
84	Aa	2528	U
84	Aa	2529	C
84	Aa	2532	A
84	Aa	2534	G
84	Aa	2535	C
84	Aa	2536	G
84	Aa	2537	G
84	Aa	2539	G
84	Aa	2542	U
84	Aa	2543	G
84	Aa	2546	C
84	Aa	2547	C
84	Aa	2548	U
84	Aa	2549	C
84	Aa	2550	C
84	Aa	2552	U
84	Aa	2553	U
84	Aa	2559	C
84	Aa	2565	C
84	Aa	2566	C
84	Aa	2573	U

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Mol	Chain	Res	Type
84	Aa	2574	A
84	Aa	2579	G
84	Aa	2584	U
84	Aa	2585	C
84	Aa	2588	G
84	Aa	2590	C
84	Aa	2596	A
84	Aa	2597	C
84	Aa	2609	G
84	Aa	2610	G
84	Aa	2617	G
84	Aa	2629	C
84	Aa	2655	U
84	Aa	2659	A
84	Aa	2675	G
84	Aa	2677	A
84	Aa	2680	G
84	Aa	2681	A
84	Aa	2684	U
84	Aa	2692	G
84	Aa	2693	G
84	Aa	2694	A
84	Aa	2696	C
84	Aa	2697	A
84	Aa	2699	A
84	Aa	2702	G
84	Aa	2708	A
84	Aa	2717	G
84	Aa	2731	G
84	Aa	2732	U
84	Aa	2755	U
84	Aa	2756	G
84	Aa	2765	A
84	Aa	2774	A
84	Aa	2779	G
84	Aa	2780	G
84	Aa	2781	A
84	Aa	2798	G
84	Aa	2801	A
84	Aa	2802	G
84	Aa	2803	A
84	Aa	2804	A

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Mol	Chain	Res	Type
84	Aa	2812	C
84	Aa	2818	G
84	Aa	2819	A
84	Aa	2820	U
84	Aa	2831	U
84	Aa	2844	U
84	Aa	2847	A
84	Aa	2851	C
84	Aa	2869	C
84	Aa	2873	G
84	Aa	2874	A
84	Aa	2875	U
84	Aa	2877	U
84	Aa	2880	G
84	Aa	2881	C
84	Aa	2889	A
84	Aa	2891	C
84	Aa	2898	A
84	Aa	2899	A
84	Aa	2900	G
84	Aa	2901	C
84	Aa	2916	G
84	Aa	2925	U
84	Aa	2929	C
84	Aa	2937	U
84	Aa	2938	A
84	Aa	2939	G
84	Aa	2944	C
84	Aa	2949	G
84	Aa	2953	G
84	Aa	2957	U
84	Aa	2959	G
84	Aa	2973	A
84	Aa	2985	C
84	Aa	2992	G
84	Aa	2994	U
84	Aa	2997	C
84	Aa	2998	A
84	Aa	3013	A
84	Aa	3050	A
84	Aa	3058	U
84	Aa	3059	C

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Mol	Chain	Res	Type
84	Aa	3060	G
84	Aa	3079	G
84	Aa	3080	U
84	Aa	3081	G
84	Aa	3087	A
84	Aa	3093	C
84	Aa	3114	A
84	Aa	3120	U
84	Aa	3123	A
84	Aa	3129	G
84	Aa	3131	A
84	Aa	3132	U
84	Aa	3140	A
84	Aa	3143	A
84	Aa	3144	U
84	Aa	3152	C
84	Aa	3153	U
84	Aa	3154	G
84	Aa	3155	C
84	Aa	3162	C
84	Aa	3163	G
84	Aa	3166	C
84	Aa	3167	G
84	Aa	3168	C
84	Aa	3169	C
84	Aa	3170	C
84	Aa	3171	C
84	Aa	3172	G
84	Aa	3174	C
84	Aa	3176	C
84	Aa	3177	A
84	Aa	3178	C
84	Aa	3182	A
84	Aa	3190	U
84	Aa	3191	U
84	Aa	3192	G
84	Aa	3193	C
84	Aa	3201	A
84	Aa	3202	G
84	Aa	3208	G
84	Aa	3209	U
84	Aa	3210	G

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Mol	Chain	Res	Type
84	Aa	3211	C
84	Aa	3212	C
84	Aa	3213	A
84	Aa	3222	G
84	Aa	3227	U
84	Aa	3230	G
84	Aa	3231	G
84	Aa	3234	G
84	Aa	3235	A
84	Aa	3236	A
84	Aa	3237	G
84	Aa	3239	G
84	Aa	3245	G
84	Aa	3251	C
84	Aa	3252	G
84	Aa	3264	C
84	Aa	3265	C
84	Aa	3266	U
84	Aa	3268	C
84	Aa	3271	A
84	Aa	3273	C
84	Aa	3274	G
84	Aa	3278	G
84	Aa	3279	G
84	Aa	3281	G
84	Aa	3286	G
84	Aa	3287	A
84	Aa	3295	G
84	Aa	3296	C
84	Aa	3305	U
84	Aa	3308	A
84	Aa	3309	U
84	Aa	3310	A
84	Aa	3320	G
84	Aa	3322	A
84	Aa	3324	U
84	Aa	3328	A
84	Aa	3333	C
84	Aa	3334	A
84	Aa	3337	G
84	Aa	3339	G
84	Aa	3340	G

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Mol	Chain	Res	Type
84	Aa	3341	C
84	Aa	3342	C
84	Aa	3343	U
84	Aa	3344	U
84	Aa	3345	G
84	Aa	3346	C
84	Aa	3347	U
84	Aa	3348	G
84	Aa	3361	G
84	Aa	3367	C
84	Aa	3370	U
84	Aa	3374	C
84	Aa	3381	C
84	Aa	3382	A
84	Aa	3383	C
84	Aa	3385	G
84	Aa	3391	U
85	Ac	23	C
85	Ac	34	U
85	Ac	47	U
85	Ac	48	A
85	Ac	49	G
85	Ac	52	A
85	Ac	59	A
85	Ac	62	C
85	Ac	63	C
85	Ac	73	U
85	Ac	80	A
85	Ac	81	U
85	Ac	82	C
85	Ac	83	C
85	Ac	85	G
85	Ac	86	U
85	Ac	87	G
85	Ac	90	C
85	Ac	92	A
85	Ac	93	U
85	Ac	95	G
85	Ac	104	A
85	Ac	105	A
85	Ac	106	C
85	Ac	111	G

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Mol	Chain	Res	Type
85	Ac	113	U
85	Ac	125	C
85	Ac	128	C
85	Ac	129	C
85	Ac	130	G
85	Ac	140	A
85	Ac	150	G
85	Ac	155	U
85	Ac	159	G
85	Ac	160	C
86	Ab	11	A
86	Ab	13	A
86	Ab	14	C
86	Ab	22	A
86	Ab	26	C
86	Ab	41	G
86	Ab	42	A
86	Ab	48	G
86	Ab	49	A
86	Ab	50	A
86	Ab	52	U
86	Ab	53	U
86	Ab	63	U
86	Ab	64	G
86	Ab	73	U
86	Ab	75	G
86	Ab	93	U
86	Ab	100	A
86	Ab	101	A
86	Ab	108	G
86	Ab	110	G
86	Ab	113	G
86	Ab	119	C

There are no RNA pucker outliers to report.

## 5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

There are no non-standard protein/DNA/RNA residues in this entry.

## 5.5 Carbohydrates [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](#)

There are no chain breaks in this entry.

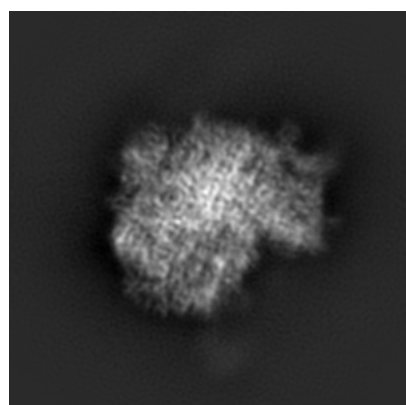
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-1780. These allow visual inspection of the internal detail of the map and identification of artifacts.

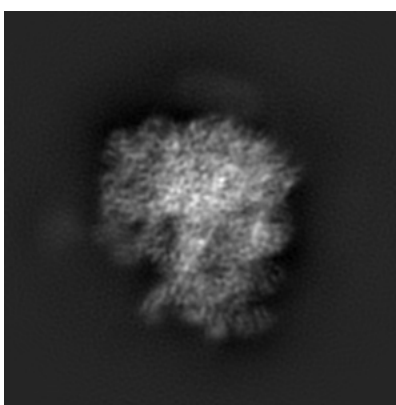
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

### 6.1 Orthogonal projections [i](#)

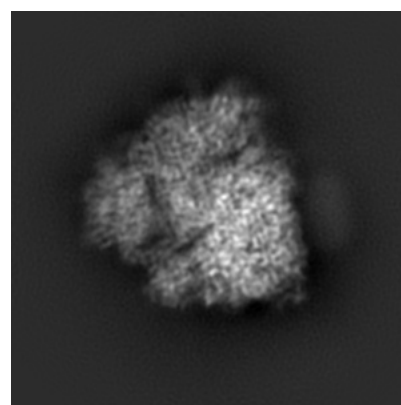
#### 6.1.1 Primary map



X



Y

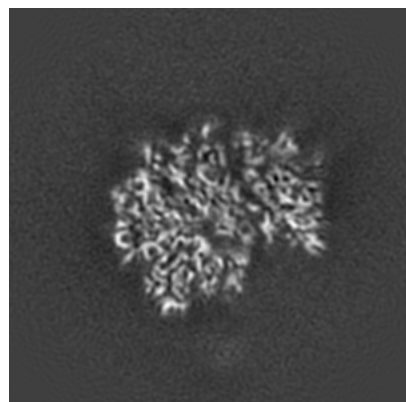


Z

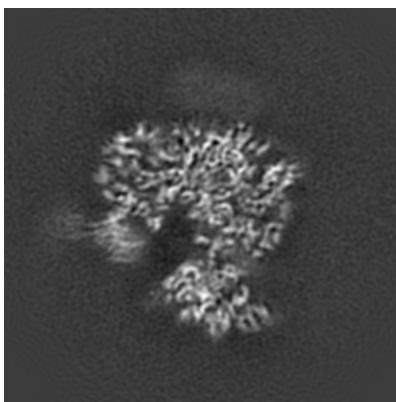
The images above show the map projected in three orthogonal directions.

### 6.2 Central slices [i](#)

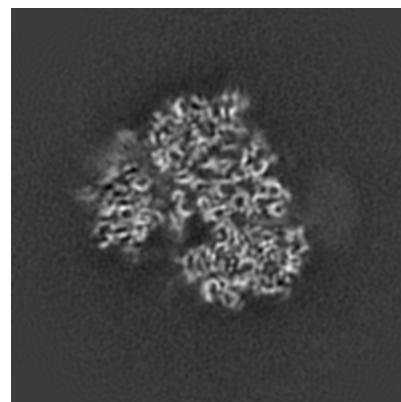
#### 6.2.1 Primary map



X Index: 184



Y Index: 184

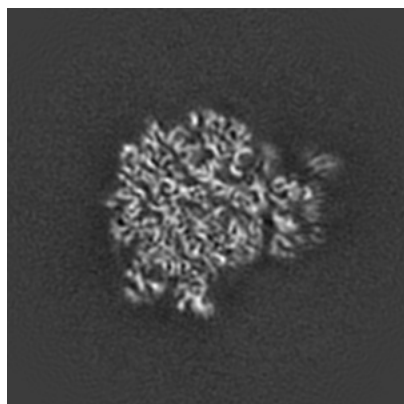


Z Index: 184

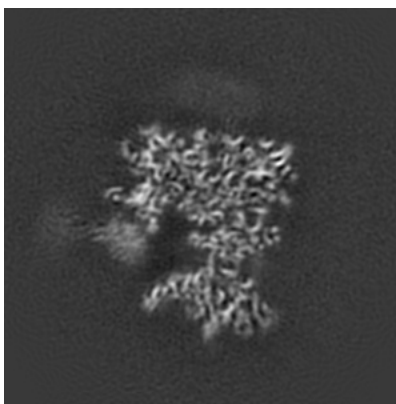
The images above show central slices of the map in three orthogonal directions.

## 6.3 Largest variance slices [i](#)

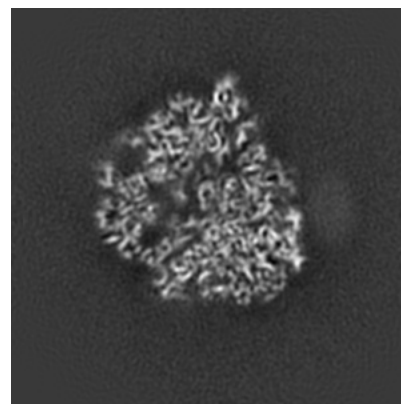
### 6.3.1 Primary map



X Index: 213



Y Index: 193

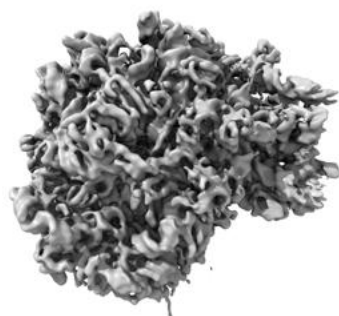


Z Index: 173

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 0.11. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

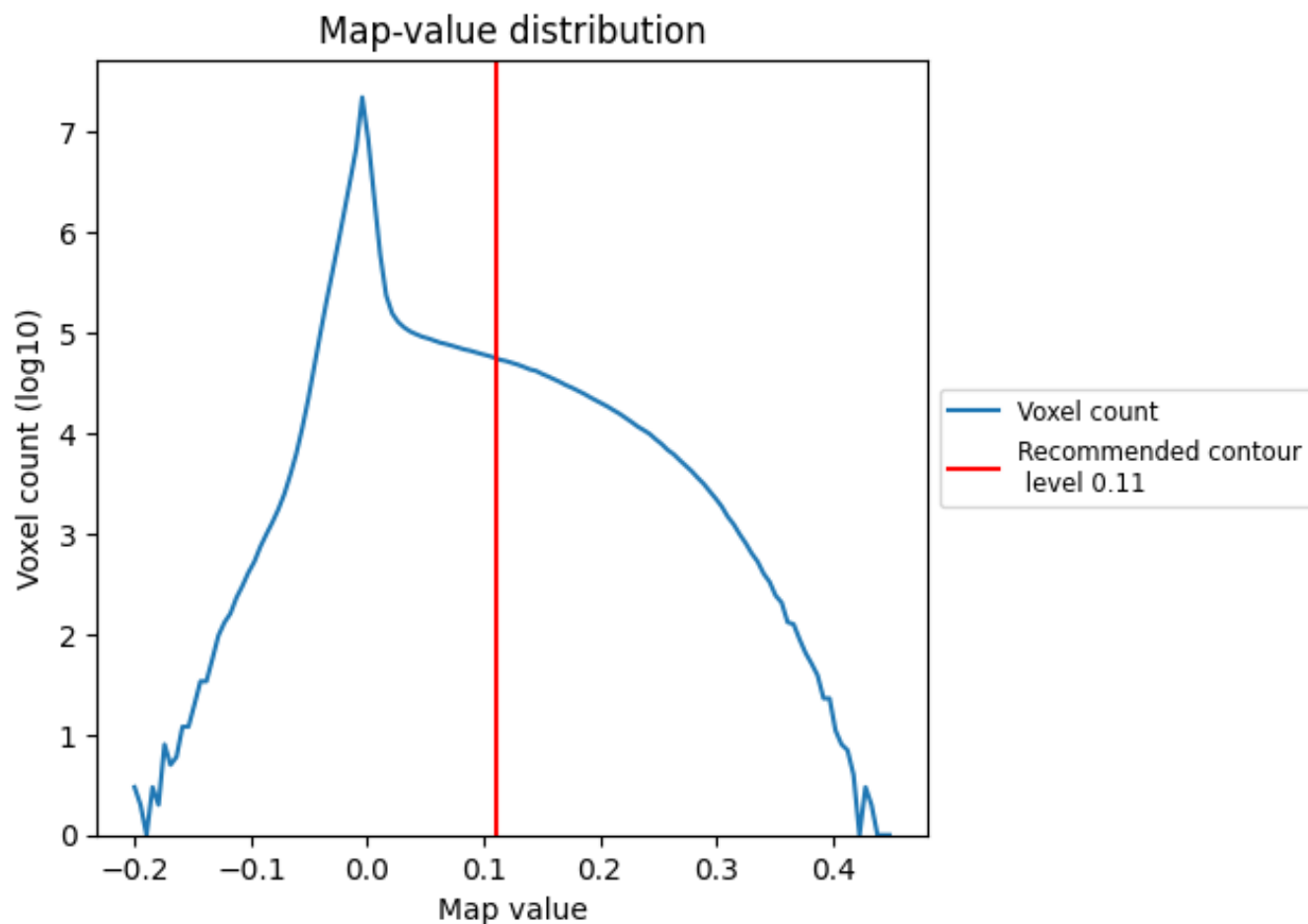
## 6.5 Mask visualisation

This section was not generated. No masks/segmentation were deposited.

## 7 Map analysis [i](#)

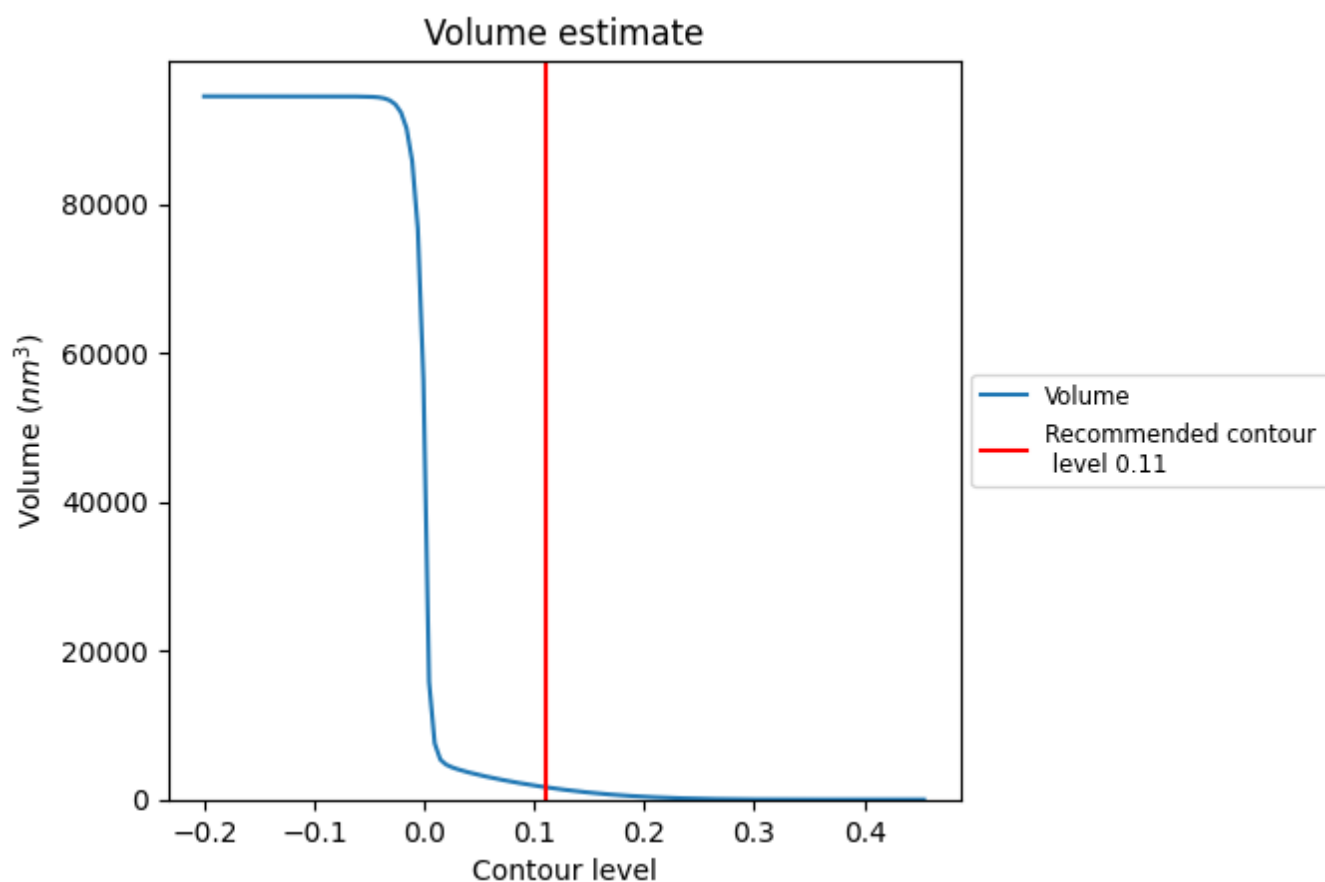
This section contains the results of statistical analysis of the map.

### 7.1 Map-value distribution [i](#)



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.

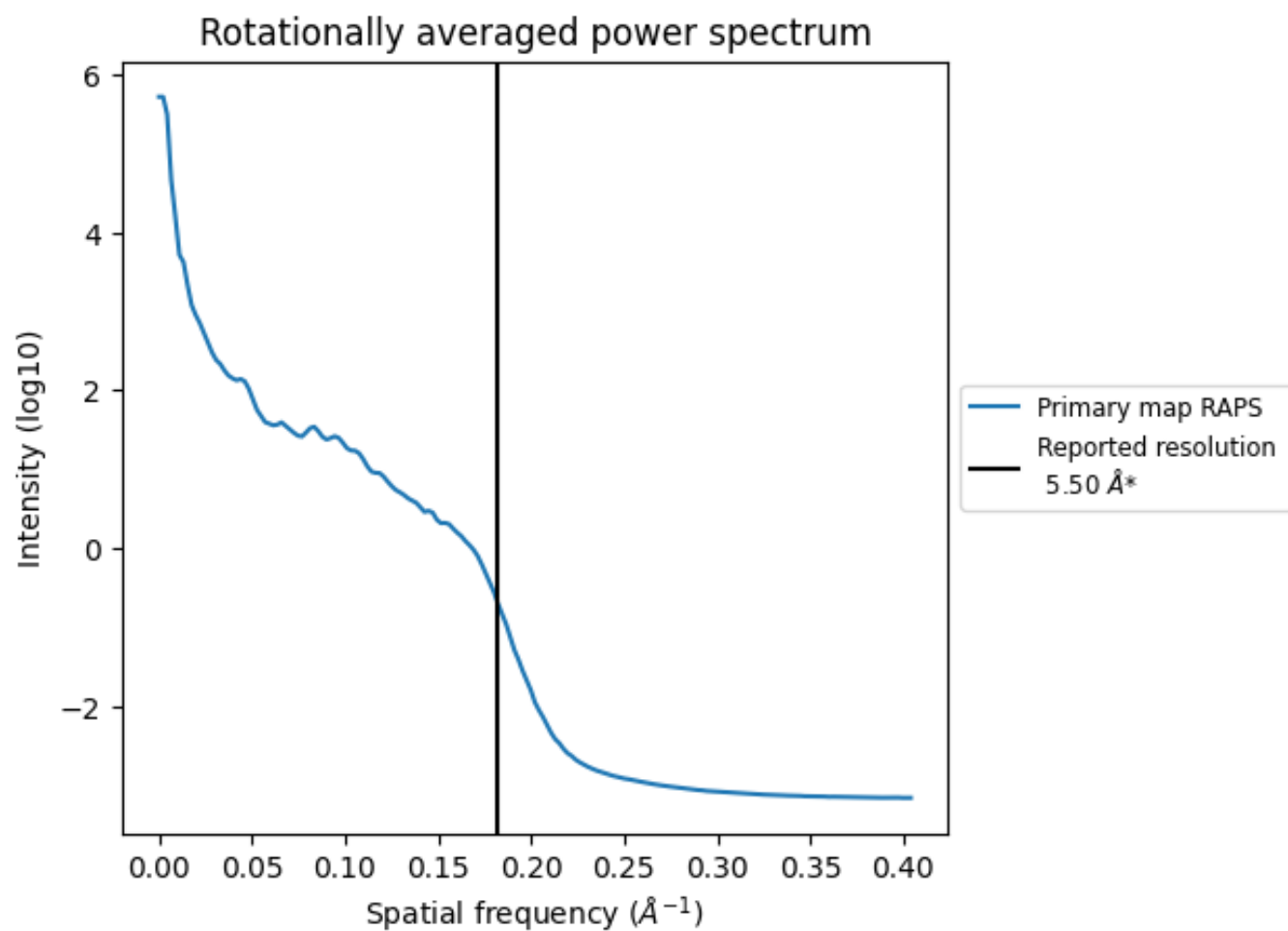
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1668 nm<sup>3</sup>; this corresponds to an approximate mass of 1506 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 ⓘ



\*Reported resolution corresponds to spatial frequency of 0.182  $\text{\AA}^{-1}$

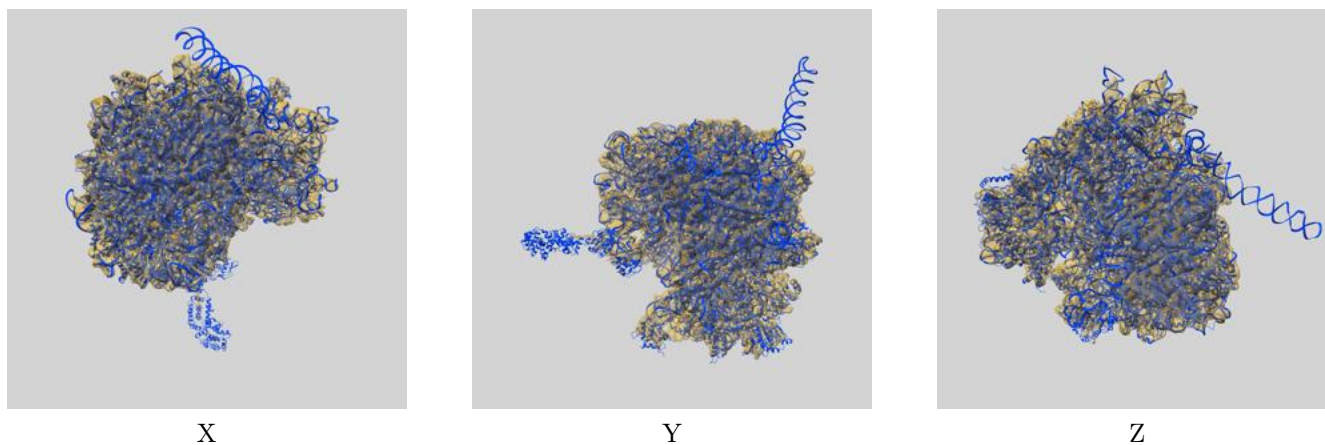
## 8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

## 9 Map-model fit [i](#)

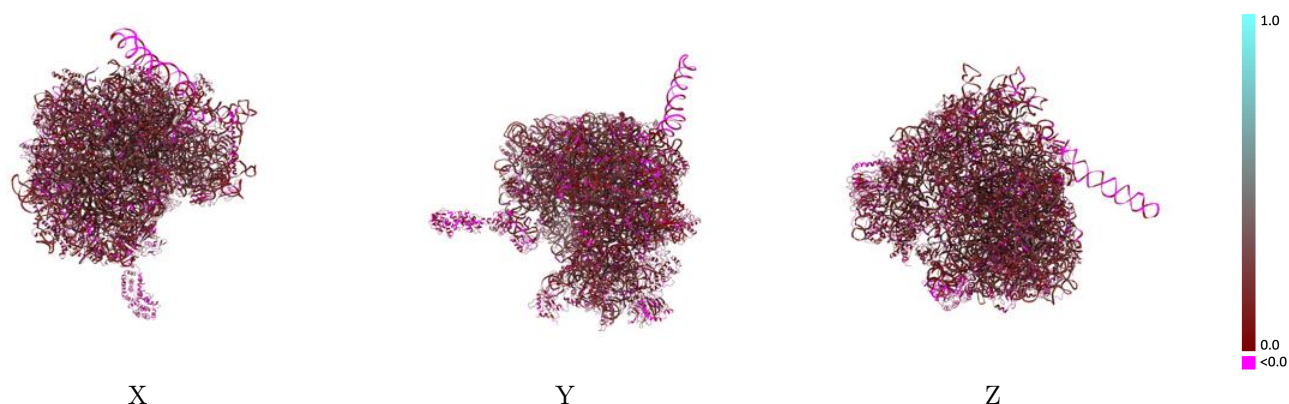
This section contains information regarding the fit between EMDB map EMD-1780 and PDB model 4V7E. Per-residue inclusion information can be found in [section 3](#) on [page 20](#).

### 9.1 Map-model overlay [i](#)



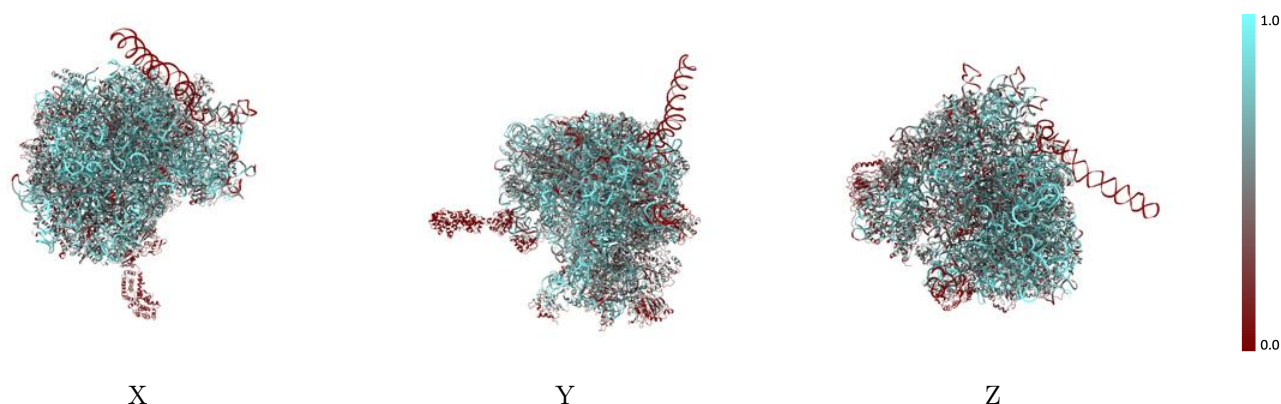
The images above show the 3D surface view of the map at the recommended contour level 0.11 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

## 9.2 Q-score mapped to coordinate model [i](#)



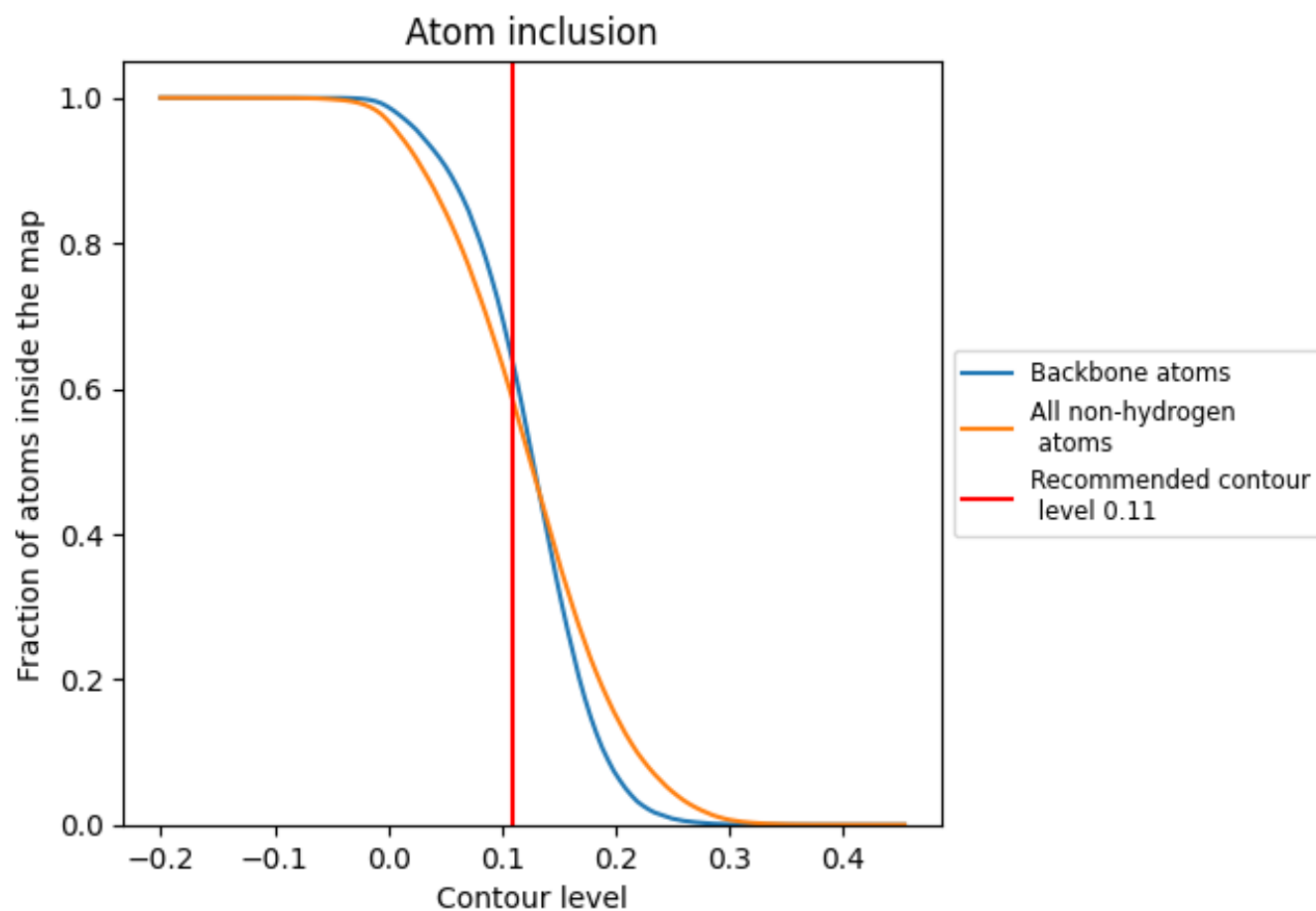
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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](#)



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 (0.11).







































































## 9.4 Atom inclusion ⓘ



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 (0.11) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.5826	 0.1550
Aa	 0.7377	 0.1940
Ab	 0.8528	 0.2080
Ac	 0.7934	 0.2070
Ad	 0.7396	 0.1960
Ae	 0.4915	 0.1860
Af	 0.1293	 0.0800
BA	 0.3804	 0.1240
BB	 0.4210	 0.1260
BC	 0.3646	 0.1210
BD	 0.3293	 0.1190
BE	 0.4311	 0.1040
BF	 0.4542	 0.1280
BG	 0.4302	 0.1120
BH	 0.3666	 0.1230
BI	 0.4139	 0.1110
BJ	 0.4894	 0.1170
BK	 0.4180	 0.0950
BL	 0.3153	 0.1070
BM	 0.2871	 0.0870
BN	 0.3866	 0.0980
BO	 0.3839	 0.1130
BP	 0.4370	 0.1110
BQ	 0.3975	 0.0950
BR	 0.3454	 0.1130
BS	 0.4000	 0.1130
BT	 0.4459	 0.1070
BU	 0.3075	 0.0920
BV	 0.3601	 0.1050
BW	 0.3448	 0.0840
BX	 0.4157	 0.1190
BY	 0.4148	 0.0740
BZ	 0.3447	 0.0990
Ba	 0.4599	 0.1350
Bb	 0.4000	 0.1200



























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Chain	Atom inclusion	Q-score
Bc	 0.3077	 0.0630
Bd	 0.3736	 0.0680
Be	 0.3031	 0.0730
Bf	 0.3569	 0.0730
Bg	 0.2151	 0.0850
CA	 0.3965	 0.1150
CB	 0.4292	 0.1080
CC	 0.4029	 0.1160
CD	 0.4762	 0.1050
CE	 0.3678	 0.0960
CF	 0.4640	 0.1200
CG	 0.4751	 0.1180
CH	 0.4758	 0.1140
CI	 0.4448	 0.1210
CJ	 0.4656	 0.1300
CK	 0.0583	 0.0530
CL	 0.4417	 0.1020
CM	 0.4739	 0.1230
CN	 0.4819	 0.1090
CO	 0.4495	 0.1070
CP	 0.4274	 0.1150
CQ	 0.4246	 0.1150
CR	 0.4299	 0.1140
CS	 0.4637	 0.1040
CT	 0.3952	 0.1130
CU	 0.3175	 0.0650
CV	 0.2652	 0.1300
CW	 0.2757	 0.1230
CX	 0.3930	 0.1120
CY	 0.5448	 0.1270
CZ	 0.5066	 0.1270
Ca	 0.4074	 0.0920
Cb	 0.3613	 0.0940
Cc	 0.4303	 0.1090
Cd	 0.4082	 0.0930
Ce	 0.3661	 0.1060
Cf	 0.4198	 0.0960
Cg	 0.4448	 0.1210
Ch	 0.4536	 0.0910
Ci	 0.4105	 0.0870
Cj	 0.4672	 0.1040
Ck	 0.4709	 0.1140

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Chain	Atom inclusion	Q-score
Cl	 0.4312	 0.1180
Cm	 0.5290	 0.1580
Cn	 0.2831	 -0.0170
Co	 0.3911	 0.0940
Cp	 0.3991	 0.1240
Cq	 0.0737	 0.0580
Cr	 0.4893	 0.1140
Cs	 0.0137	 0.0590
Ct	 0.0000	 0.0300
Cu	 0.0000	 0.0430
Cv	 0.0000	 0.0280
Cz	 0.0260	 0.0410