Full wwPDB X-ray Structure Validation Report (i)

Nov 11, 2024 – 07:25 PM EST

PDB ID	:	9DFC
Title	:	Crystal structure of the wild-type Thermus thermophilus 70S ribosome in complex with lasso peptide lariocidin, mRNA, aminoacylated A-site Phe-tRNAphe, aminoacylated P-site fMet-tRNAmet, and deacylated E-site tRNAphe at 2.50A resolution
Authors	:	Aleksandrova, E.V.; Travin, D.Y.; Jangra, M.; Kaur, M.; Darwish, L.; Koteva, K.; Klepacki, D.; Wang, W.; Tiffany, M.; Sokaribo, A.; Coombes, B.K.; Vazquez-Laslop, N.; Wright, G.D.; Mankin, A.S.; Polikanov, Y.S.
Deposited on	:	2024-08-29
Resolution	:	2.50 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

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

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

The following versions of software and data (see references (1)) were used in the production of this report:

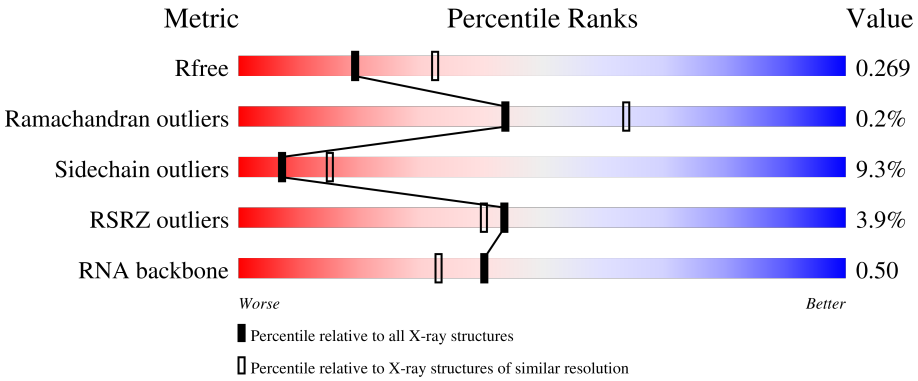
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.20.1
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.50 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	5504 (2.50-2.50)
Ramachandran outliers	177936	6191 (2.50-2.50)
Sidechain outliers	177891	6193 (2.50-2.50)
RSRZ outliers	164620	5504 (2.50-2.50)
RNA backbone	3690	1181 (2.80-2.20)

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

Mol	Chain	Length	Quality of chain
1	1A	2915	5% 63% 31% 5%
1	2A	2915	4% 71% 22%
2	1B	121	77% 21%

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Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.39

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Mol	Chain	Length	Quality of chain
2	2B	121	77% 19%
3	1D	276	94% 6%
3	2D	276	95% 5%
4	1E	206	93% 6%
4	2E	206	95%
5	1F	210	85% 11%
5	2F	210	90% 7%
6	1G	182	4% 89% 10%
6	2G	182	4% 87% 13%
7	1H	180	90% 7%
7	2H	180	13% 88% 8%
8	1I	148	82% 16%
8	2I	148	87% 11%
9	1N	140	95% 5%
9	2N	140	94% 6%
10	1O	122	99%
10	2O	122	97%
11	1P	150	92% 7%
11	2P	150	3% 92% 7%
12	1Q	141	96%
12	2Q	141	4% 96%
13	1R	118	96%
13	2R	118	96%
14	1S	112	95%
14	2S	112	86% 12%

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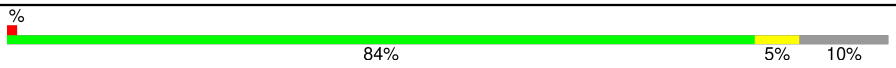
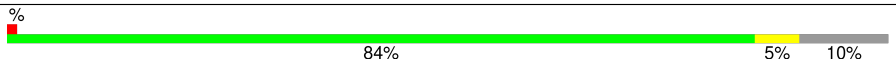
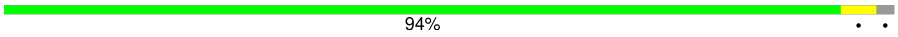
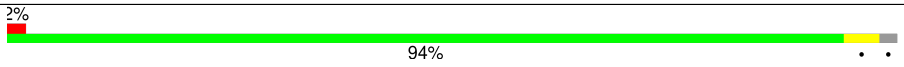
Mol	Chain	Length	Quality of chain
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
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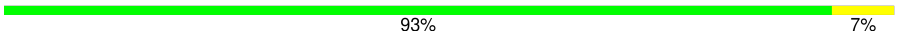
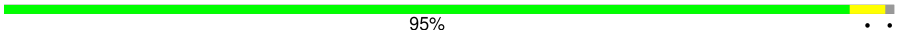
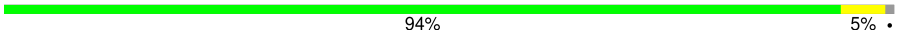
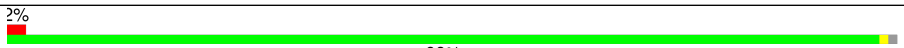
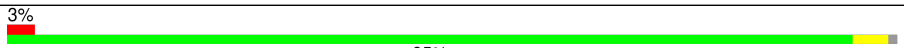
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
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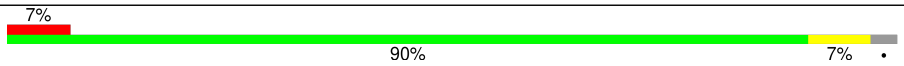
20	2Y	110	
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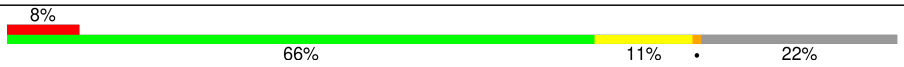
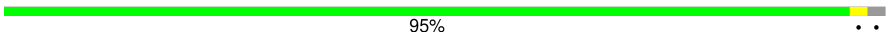
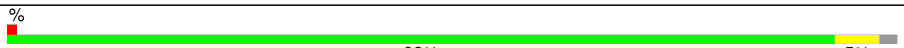
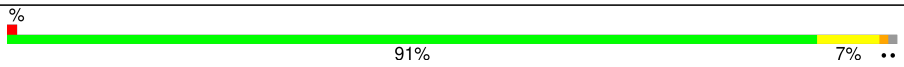
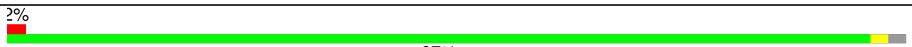
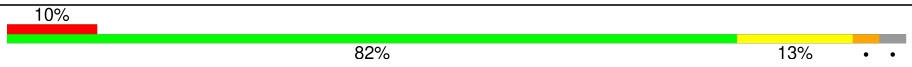
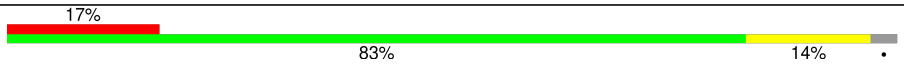
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	

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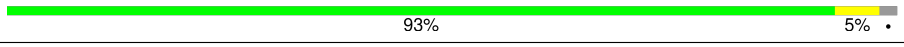
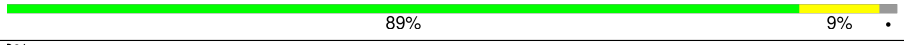
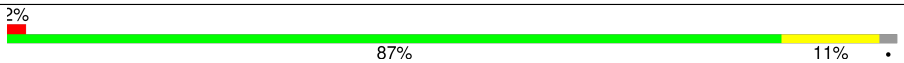
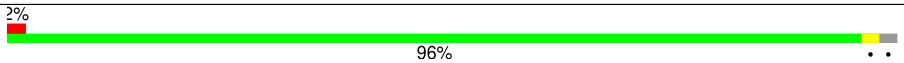
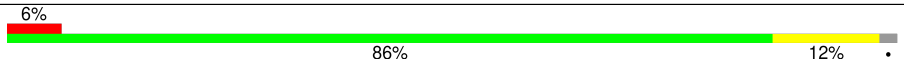
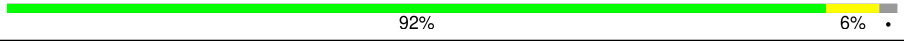
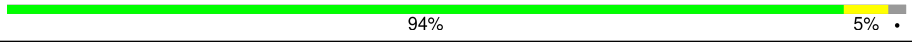
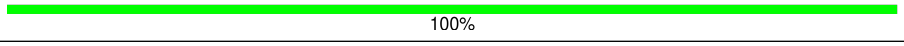
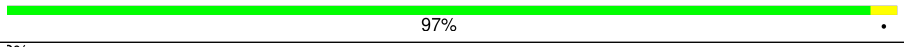
Mol	Chain	Length	Quality of chain
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	

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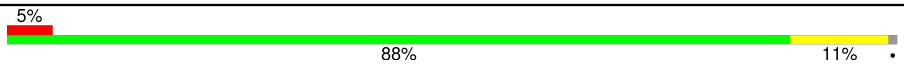
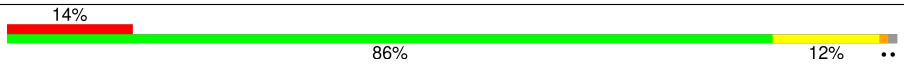
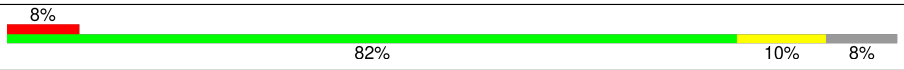
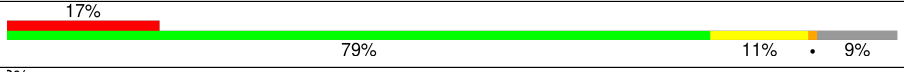
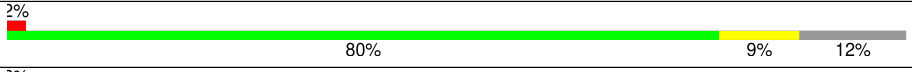
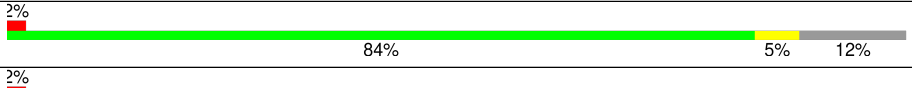
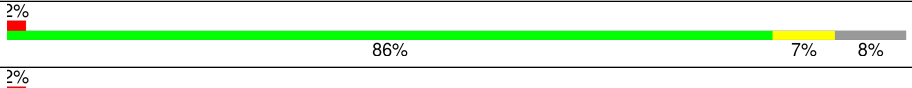
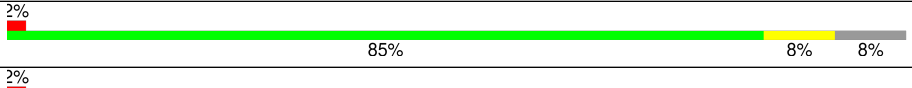
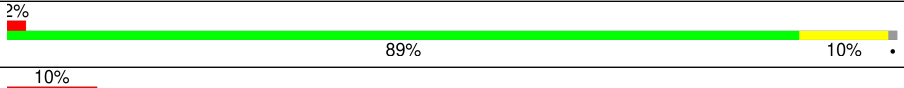
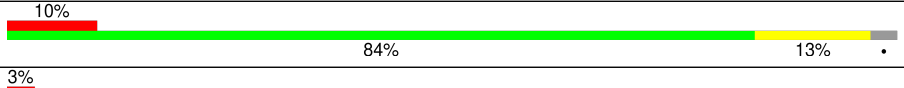
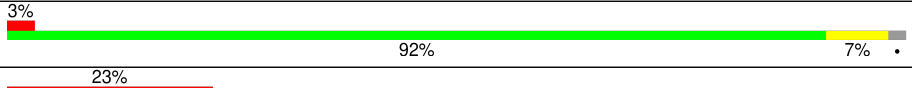
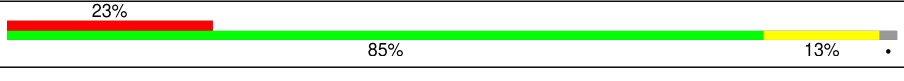
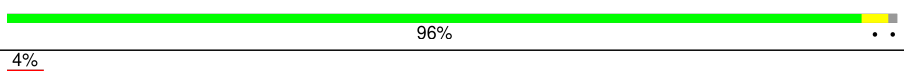
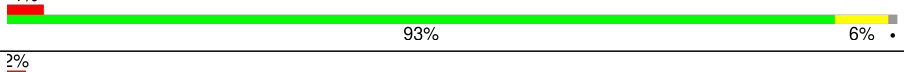
Mol	Chain	Length	Quality of chain
40	1i	128	
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
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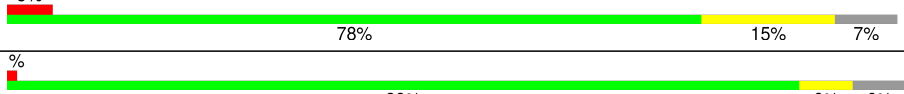
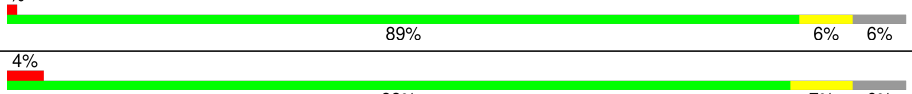
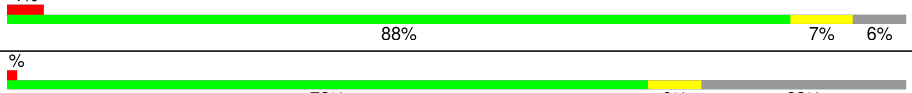
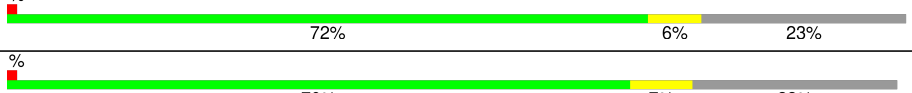
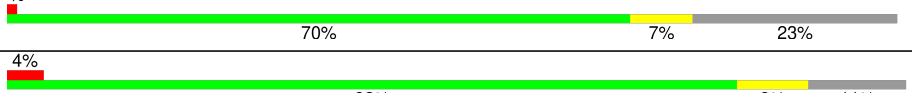
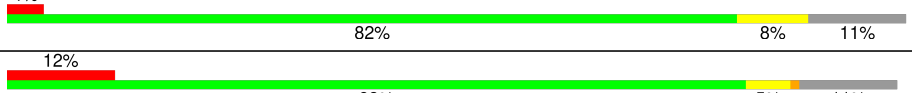
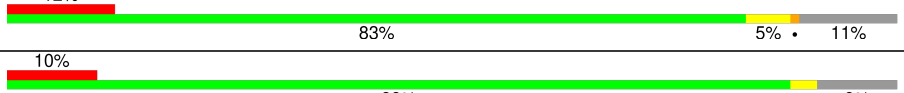
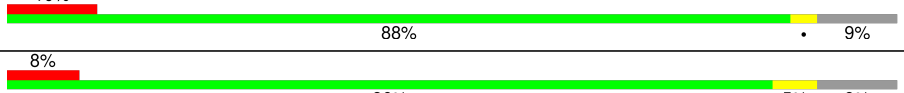
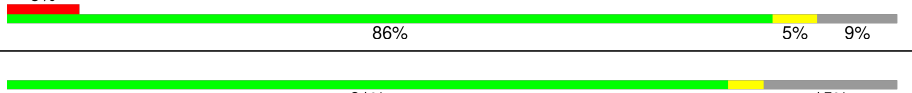
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	

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Mol	Chain	Length	Quality of chain
52	2u	27	19% 85% 15%
53	1v	24	8% 38% 12% 46%
53	2v	24	8% 38% 17% 46%
54	1w	76	4% 51% 45%
54	2w	76	5% 51% 33% 11% 5%
55	1x	77	% 71% 27%
55	2x	77	% 75% 22%
56	1y	76	34% 46% 41% 11%
56	2y	76	38% 43% 50%
57	1z	18	6% 83% 17%
57	2z	18	11% 78% 22%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	1A	3418	-	-	-	X
58	MG	1U	211	-	-	-	X
58	MG	2a	1634	-	-	-	X

2 Entry composition (i)

There are 62 unique types of molecules in this entry. The entry contains 300593 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1A	2871	Total	C	N	O	P	0	0	0
			61852	27531	11572	19878	2871			
1	2A	2800	Total	C	N	O	P	0	0	0
			60322	26848	11284	19390	2800			

- Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1B	120	Total	C	N	O	P	0	0	0
			2577	1146	476	835	120			
2	2B	120	Total	C	N	O	P	0	0	0
			2575	1146	476	833	120			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	1D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	1E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			
4	2E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	1F	203	Total	C	N	O	S	0	0	1
			1584	1009	298	275	2			
5	2F	203	Total	C	N	O	S	0	0	1
			1580	1007	297	274	2			

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1423	913	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1428	913	258	253	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	1H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			
7	2H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	146	Total	C	N	O	S	0	0	0
			1097	701	191	204	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1064	681	186	196	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	1N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			
9	2N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total 933	C 588	N 171	O 170	S 4	0	0	0

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	1P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0
11	2P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	1Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0
12	2Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	1R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0
13	2R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total 873	C 550	N 174	O 149	0	0	0
14	2S	110	Total 870	C 549	N 173	O 148	0	0	0

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	1T	131	Total 1091	C 680	N 225	O 185	S 1	0	0	0
15	2T	131	Total 1083	C 675	N 224	O 183	S 1	0	0	0

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	1U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
16	2U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	1V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			
17	2V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	1W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			
18	2W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	1X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			
19	2X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	1Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			806	517	152	131	6			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	154	Total	C	N	O	S	0	0	0
			1240	795	222	220	3			
21	2Z	160	Total	C	N	O	S	0	0	0
			1271	814	228	227	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			
22	20	83	Total	C	N	O	S	0	0	0
			653	404	139	109	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			
23	21	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	13	59	Total	C	N	O	0	0	0
			469	298	90	81			
25	23	59	Total	C	N	O	0	0	0
			464	296	90	78			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			552	349	99	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			532	339	97	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	16	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
28	26	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	17	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
29	27	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	18	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			
30	28	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 31 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	19	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
31	29	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 32 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1503	Total	C	N	O	P	0	0	0
			32327	14396	5990	10438	1503			

- Molecule 33 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1846	1179	331	331	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

- Molecule 34 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1548	973	301	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

- Molecule 35 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1655	1038	326	284	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1674	1050	333	284	7			

- Molecule 36 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1e	148	Total	C	N	O	S	0	0	0
			1129	714	213	198	4			
36	2e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			

- Molecule 37 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			810	514	144	149	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

- Molecule 38 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1231	766	243	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			

- Molecule 39 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

- Molecule 40 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			983	623	193	167			
40	2i	127	Total	C	N	O	0	0	0
			978	619	190	169			

- Molecule 41 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			709	440	138	131			
41	2j	96	Total	C	N	O	0	0	0
			714	445	138	131			

- Molecule 42 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			829	516	155	155	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	2k	114	Total	C	N	O	S	0	0	0
			833	519	156	155	3			

- Molecule 43 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	1l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			
43	2l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			

- Molecule 44 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	125	Total	C	N	O	S	0	0	0
			979	604	204	169	2			
44	2m	122	Total	C	N	O	S	0	0	0
			950	586	197	165	2			

- Molecule 45 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	1n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
45	2n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 46 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	1o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			
46	2o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			

- Molecule 47 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	1p	82	Total	C	N	O	S	0	0	0
			681	433	134	113	1			
47	2p	82	Total	C	N	O	S	0	0	0
			677	430	133	113	1			

- Molecule 48 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	1q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
48	2q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 49 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	1r	68	Total	C	N	O	0	0	0
			555	355	108	92			
49	2r	68	Total	C	N	O	0	0	0
			555	355	108	92			

- Molecule 50 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			652	417	120	113	2			
50	2s	83	Total	C	N	O	S	0	0	0
			646	412	119	113	2			

- Molecule 51 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			728	446	156	124	2			
51	2t	96	Total	C	N	O	S	0	0	0
			727	446	155	124	2			

- Molecule 52 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
52	1u	23	Total	C	N	O	0	0	0
			199	122	48	29			
52	2u	23	Total	C	N	O	0	0	0
			199	122	48	29			

- Molecule 53 is a RNA chain called MET-PHE-mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			
53	2v	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			

- Molecule 54 is a RNA chain called A-site Aminoacylated Phe-tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
54	1w	75	Total	C	N	O	P	S	0	0	0
			1623	731	289	526	75	2			
54	2w	72	Total	C	N	O	P	S	0	0	0
			1555	699	280	502	72	2			

- Molecule 55 is a RNA chain called P-site Aminoacylated fMet-tRNAmet.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	1x	77	Total	C	N	O	P	S	0	0	0
			1656	740	299	538	77	2			
55	2x	77	Total	C	N	O	P	S	0	0	0
			1656	740	299	538	77	2			

- Molecule 56 is a RNA chain called E-site Deacylated tRNAphe.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
56	1y	74	Total	C	N	O	P	S	0	0	0
			1585	707	285	518	74	1			
56	2y	73	Total	C	N	O	P	S	0	0	0
			1565	698	283	510	73	1			

- Molecule 57 is a protein called Lasso peptide lariocidin.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
57	1z	18	Total	C	N	O	0	0	0
			132	81	29	22			
57	2z	18	Total	C	N	O	0	0	0
			132	81	29	22			

- Molecule 58 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1A	1108	Total	Mg	0	0
			1108	1108		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1B	39	Total Mg 39 39	0	0
58	1D	13	Total Mg 13 13	0	0
58	1E	14	Total Mg 14 14	0	0
58	1F	12	Total Mg 12 12	0	0
58	1G	5	Total Mg 5 5	0	0
58	1I	1	Total Mg 1 1	0	0
58	1N	5	Total Mg 5 5	0	0
58	1O	5	Total Mg 5 5	0	0
58	1P	4	Total Mg 4 4	0	0
58	1Q	6	Total Mg 6 6	0	0
58	1R	5	Total Mg 5 5	0	0
58	1S	3	Total Mg 3 3	0	0
58	1T	3	Total Mg 3 3	0	0
58	1U	11	Total Mg 11 11	0	0
58	1V	9	Total Mg 9 9	0	0
58	1W	6	Total Mg 6 6	0	0
58	1X	6	Total Mg 6 6	0	0
58	1Y	3	Total Mg 3 3	0	0
58	1Z	3	Total Mg 3 3	0	0
58	10	10	Total Mg 10 10	0	0
58	11	6	Total Mg 6 6	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	12	2	Total Mg 2 2	0	0
58	13	3	Total Mg 3 3	0	0
58	14	1	Total Mg 1 1	0	0
58	15	7	Total Mg 7 7	0	0
58	16	2	Total Mg 2 2	0	0
58	17	4	Total Mg 4 4	0	0
58	18	3	Total Mg 3 3	0	0
58	19	1	Total Mg 1 1	0	0
58	1a	216	Total Mg 216 216	0	0
58	1b	1	Total Mg 1 1	0	0
58	1d	1	Total Mg 1 1	0	0
58	1e	2	Total Mg 2 2	0	0
58	1f	2	Total Mg 2 2	0	0
58	1h	1	Total Mg 1 1	0	0
58	1l	2	Total Mg 2 2	0	0
58	1m	1	Total Mg 1 1	0	0
58	1n	1	Total Mg 1 1	0	0
58	1t	1	Total Mg 1 1	0	0
58	1v	2	Total Mg 2 2	0	0
58	1w	9	Total Mg 9 9	0	0
58	1x	13	Total Mg 13 13	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1y	1	Total Mg 1 1	0	0
58	1z	1	Total Mg 1 1	0	0
58	2A	882	Total Mg 882 882	0	0
58	2B	20	Total Mg 20 20	0	0
58	2D	7	Total Mg 7 7	0	0
58	2E	10	Total Mg 10 10	0	0
58	2F	9	Total Mg 9 9	0	0
58	2G	1	Total Mg 1 1	0	0
58	2N	1	Total Mg 1 1	0	0
58	2O	1	Total Mg 1 1	0	0
58	2Q	3	Total Mg 3 3	0	0
58	2R	2	Total Mg 2 2	0	0
58	2T	4	Total Mg 4 4	0	0
58	2U	1	Total Mg 1 1	0	0
58	2V	2	Total Mg 2 2	0	0
58	2W	1	Total Mg 1 1	0	0
58	2X	1	Total Mg 1 1	0	0
58	2Z	1	Total Mg 1 1	0	0
58	20	3	Total Mg 3 3	0	0
58	21	1	Total Mg 1 1	0	0
58	23	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	25	4	Total Mg 4 4	0	0
58	26	1	Total Mg 1 1	0	0
58	27	2	Total Mg 2 2	0	0
58	28	4	Total Mg 4 4	0	0
58	2a	240	Total Mg 240 240	0	0
58	2d	2	Total Mg 2 2	0	0
58	2e	1	Total Mg 1 1	0	0
58	2f	2	Total Mg 2 2	0	0
58	2g	1	Total Mg 1 1	0	0
58	2j	1	Total Mg 1 1	0	0
58	2l	5	Total Mg 5 5	0	0
58	2n	1	Total Mg 1 1	0	0
58	2p	1	Total Mg 1 1	0	0
58	2q	3	Total Mg 3 3	0	0
58	2r	1	Total Mg 1 1	0	0
58	2t	1	Total Mg 1 1	0	0
58	2v	3	Total Mg 3 3	0	0
58	2w	12	Total Mg 12 12	0	0
58	2x	8	Total Mg 8 8	0	0
58	2y	6	Total Mg 6 6	0	0

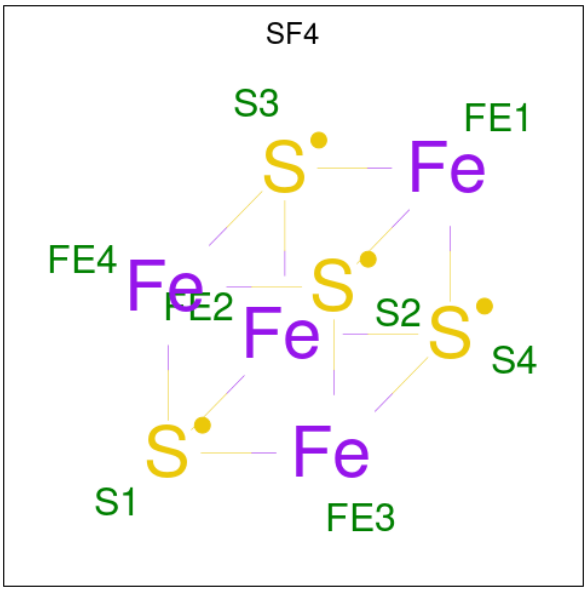
- Molecule 59 is POTASSIUM ION (three-letter code: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1A	1	Total K 1 1	0	0
59	2A	1	Total K 1 1	0	0

- Molecule 60 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1Y	1	Total Zn 1 1	0	0
60	14	1	Total Zn 1 1	0	0
60	15	1	Total Zn 1 1	0	0
60	16	1	Total Zn 1 1	0	0
60	19	1	Total Zn 1 1	0	0
60	1n	1	Total Zn 1 1	0	0
60	2Y	1	Total Zn 1 1	0	0
60	24	1	Total Zn 1 1	0	0
60	25	1	Total Zn 1 1	0	0
60	26	1	Total Zn 1 1	0	0
60	29	1	Total Zn 1 1	0	0
60	2n	1	Total Zn 1 1	0	0

- Molecule 61 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1d	1	Total Fe S 8 4 4	0	0
61	2d	1	Total Fe S 8 4 4	0	0

- Molecule 62 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1A	2017	Total O 2017 2017	0	0
62	1B	63	Total O 63 63	0	0
62	1D	28	Total O 28 28	0	0
62	1E	29	Total O 29 29	0	0
62	1F	14	Total O 14 14	0	0
62	1G	2	Total O 2 2	0	0
62	1H	2	Total O 2 2	0	0
62	1I	1	Total O 1 1	0	0
62	1N	6	Total O 6 6	0	0
62	1O	6	Total O 6 6	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1P	20	Total O 20 20	0	0
62	1Q	7	Total O 7 7	0	0
62	1R	11	Total O 11 11	0	0
62	1S	5	Total O 5 5	0	0
62	1T	9	Total O 9 9	0	0
62	1U	13	Total O 13 13	0	0
62	1V	8	Total O 8 8	0	0
62	1W	6	Total O 6 6	0	0
62	1X	6	Total O 6 6	0	0
62	1Y	2	Total O 2 2	0	0
62	1Z	1	Total O 1 1	0	0
62	10	11	Total O 11 11	0	0
62	11	11	Total O 11 11	0	0
62	12	4	Total O 4 4	0	0
62	13	5	Total O 5 5	0	0
62	14	1	Total O 1 1	0	0
62	15	5	Total O 5 5	0	0
62	16	4	Total O 4 4	0	0
62	17	9	Total O 9 9	0	0
62	18	8	Total O 8 8	0	0
62	1a	386	Total O 386 386	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1b	1	Total O 1 1	0	0
62	1g	1	Total O 1 1	0	0
62	1i	1	Total O 1 1	0	0
62	1l	9	Total O 9 9	0	0
62	1m	1	Total O 1 1	0	0
62	1n	1	Total O 1 1	0	0
62	1o	1	Total O 1 1	0	0
62	1p	1	Total O 1 1	0	0
62	1q	2	Total O 2 2	0	0
62	1u	1	Total O 1 1	0	0
62	1v	5	Total O 5 5	0	0
62	1w	21	Total O 21 21	0	0
62	1x	15	Total O 15 15	0	0
62	1y	1	Total O 1 1	0	0
62	1z	1	Total O 1 1	0	0
62	2A	1165	Total O 1165 1165	0	0
62	2B	22	Total O 22 22	0	0
62	2D	22	Total O 22 22	0	0
62	2E	14	Total O 14 14	0	0
62	2F	13	Total O 13 13	0	0
62	2I	2	Total O 2 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	2N	1	Total O 1 1	0	0
62	2O	3	Total O 3 3	0	0
62	2P	15	Total O 15 15	0	0
62	2Q	1	Total O 1 1	0	0
62	2R	4	Total O 4 4	0	0
62	2T	4	Total O 4 4	0	0
62	2U	2	Total O 2 2	0	0
62	2V	1	Total O 1 1	0	0
62	2X	1	Total O 1 1	0	0
62	2Y	1	Total O 1 1	0	0
62	2Z	1	Total O 1 1	0	0
62	20	3	Total O 3 3	0	0
62	21	12	Total O 12 12	0	0
62	23	2	Total O 2 2	0	0
62	25	1	Total O 1 1	0	0
62	27	5	Total O 5 5	0	0
62	28	3	Total O 3 3	0	0
62	29	1	Total O 1 1	0	0
62	2a	283	Total O 283 283	0	0
62	2c	1	Total O 1 1	0	0
62	2d	2	Total O 2 2	0	0

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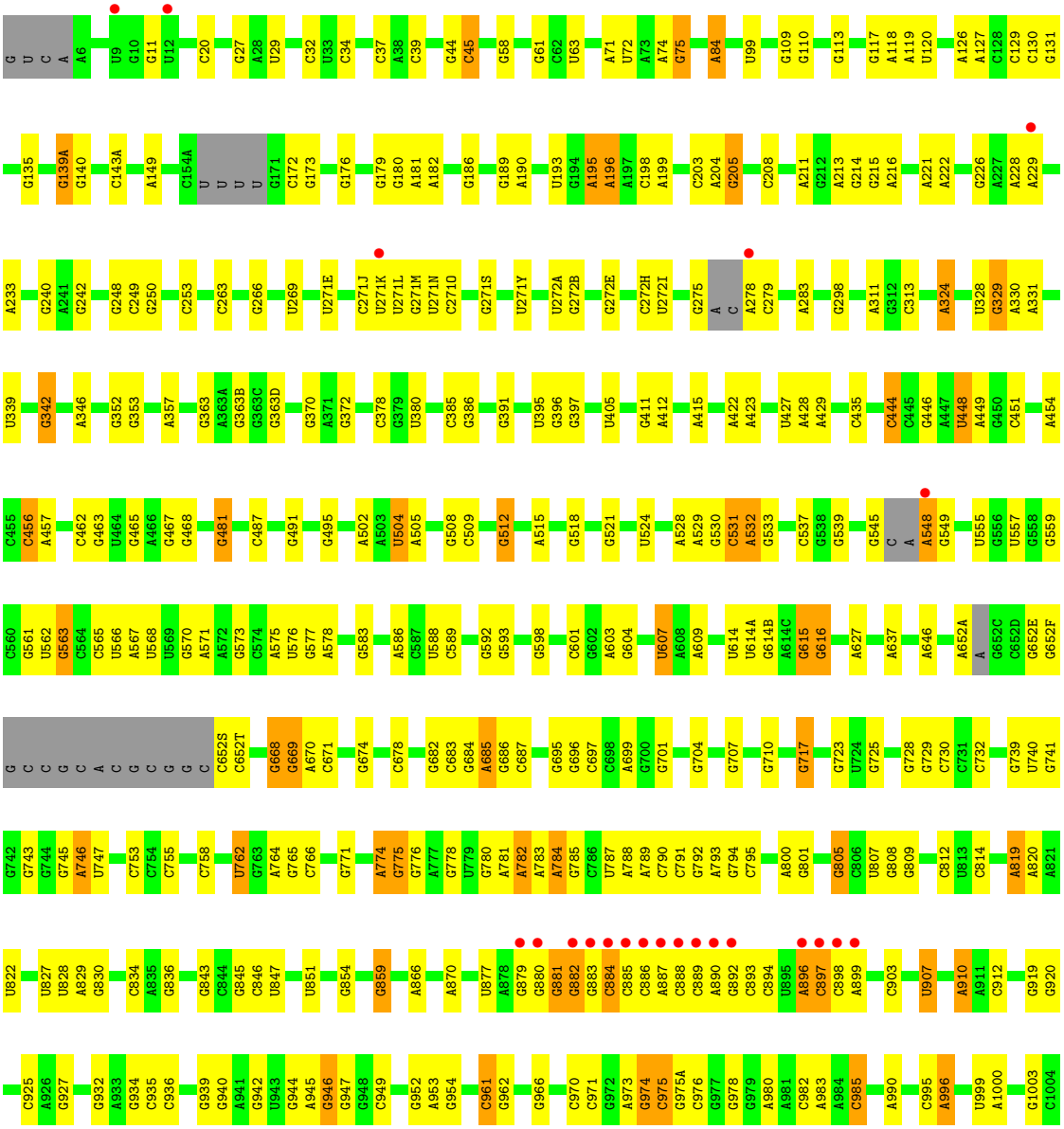
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	2e	1	Total O 1 1	0	0
62	2g	1	Total O 1 1	0	0
62	2i	1	Total O 1 1	0	0
62	2j	3	Total O 3 3	0	0
62	2l	6	Total O 6 6	0	0
62	2p	1	Total O 1 1	0	0
62	2r	1	Total O 1 1	0	0
62	2t	1	Total O 1 1	0	0
62	2v	2	Total O 2 2	0	0
62	2w	7	Total O 7 7	0	0
62	2x	8	Total O 8 8	0	0
62	2y	6	Total O 6 6	0	0

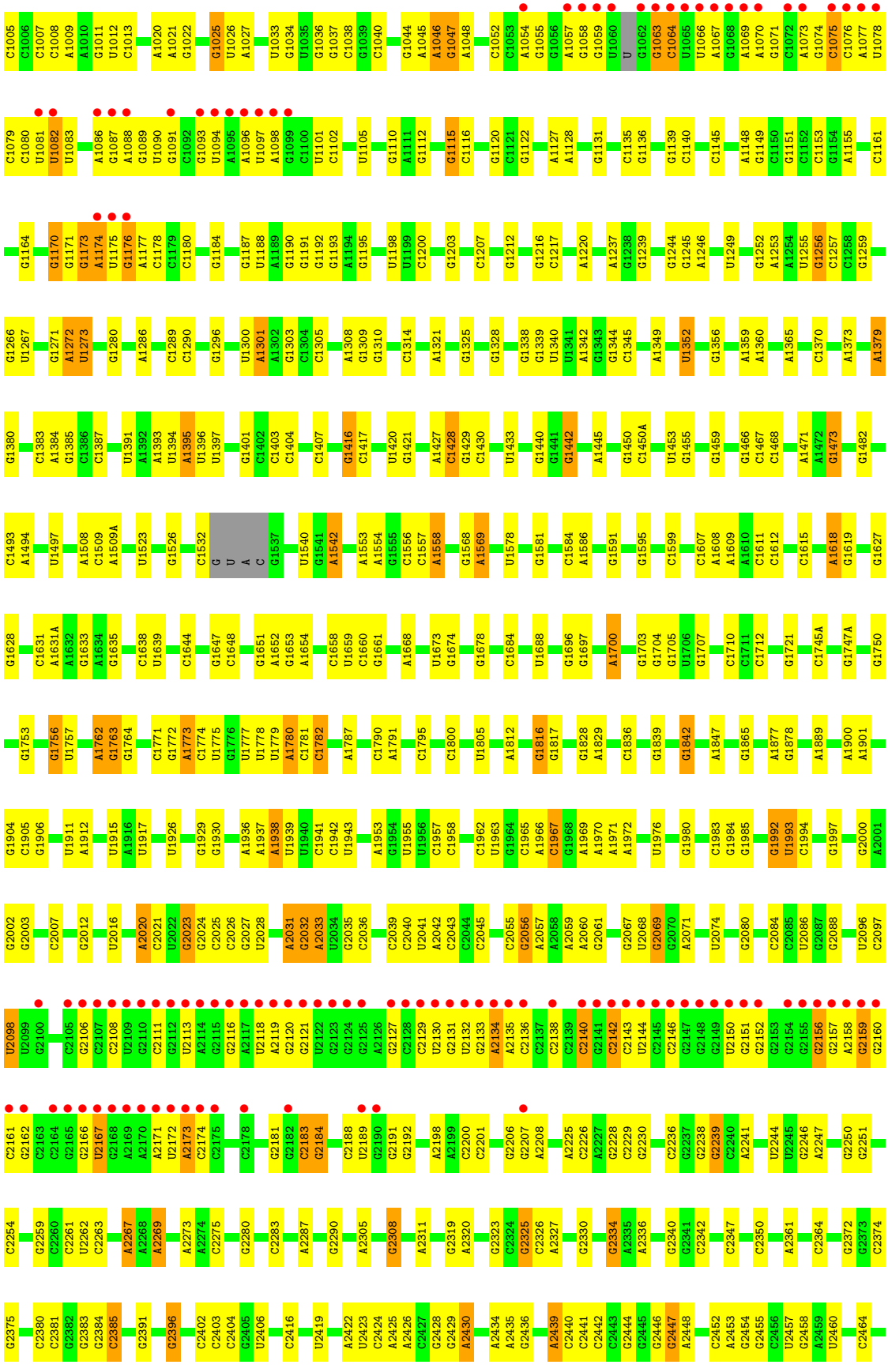
3 Residue-property plots (i)

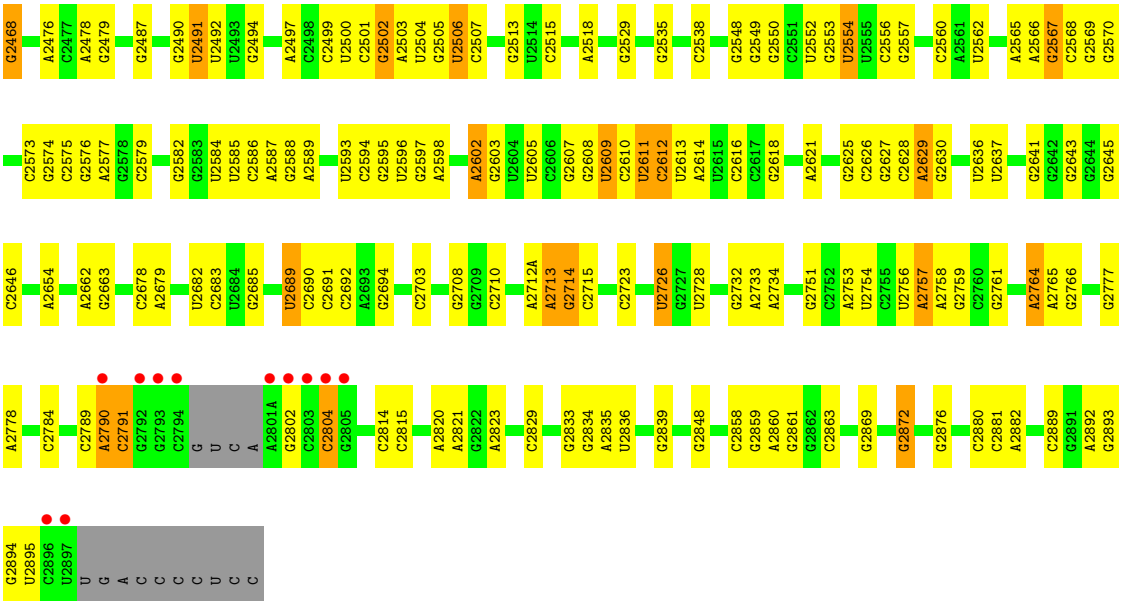
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

- Molecule 1: 23S Ribosomal RNA

Chain 1A:

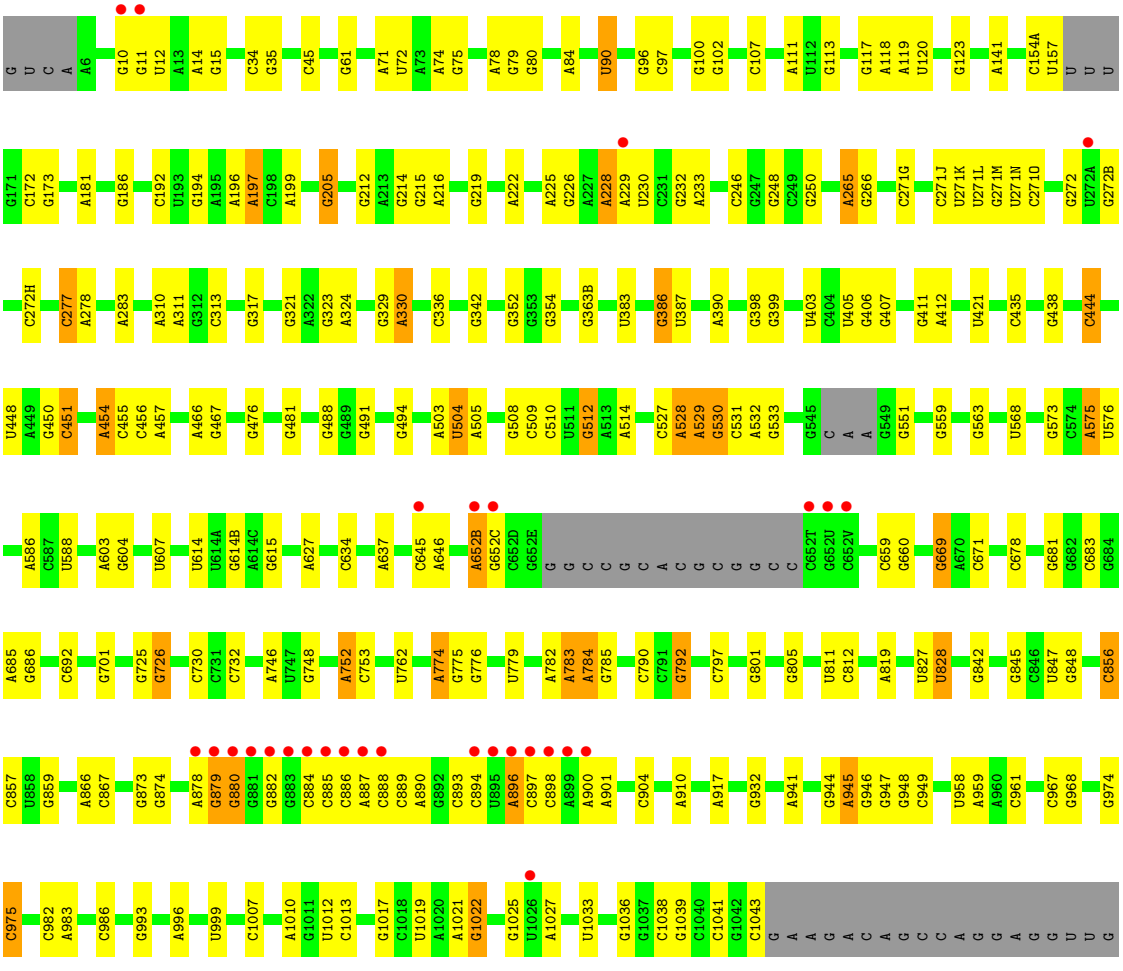


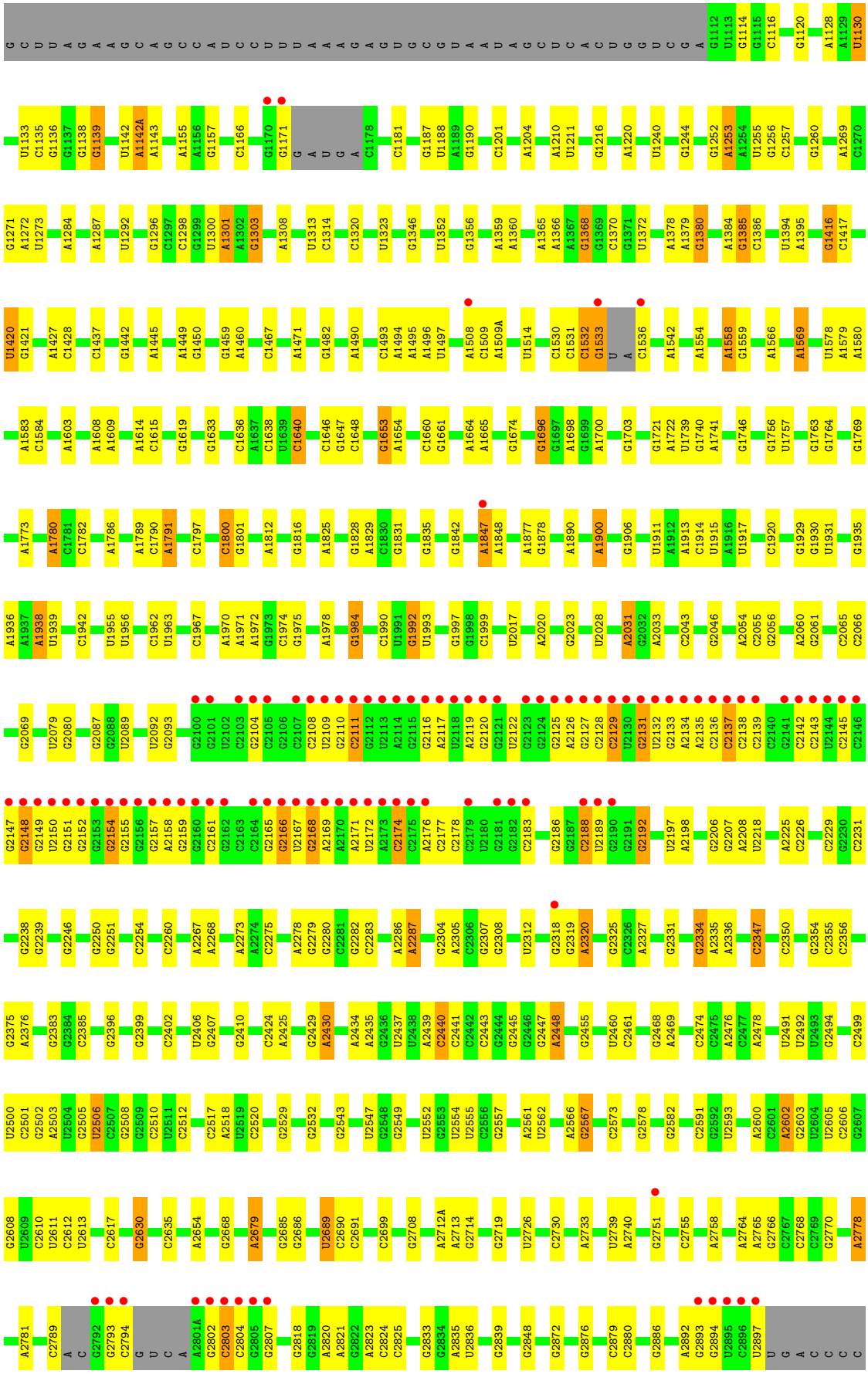

C1005 C1006 C1007 C1008 A1009 A1010 G1011 U1012 C1013 A1020 A1021 G1022 G1025 U1026 A1027 U1033 G1034 U1035 G1036 G1037 C1038 G1039 C1040 G1044 A1045 A1046 G1047 A1048 C1052 C1053 A1054 G1055 G1056 A1057 G1058 G1059 U1060 U G1062 G1063 C1064 U1065 U1066 A1067 G1068 A1069 A1070 G1071 C1072 A1073 G1074 C1075 C1076 A1077 U1078
C1079 C1080 U1081 U1082 U1083 A1086 G1087 A1088 G1089 U1090 G1091 C1092 G1093 U1094 A1095 A1096 U1097 A1098 G1099 C1100 U1101 C1102 U1105 G1110 A1111 G1112 G1115 C1116 G1120 C1121 G1122 A1127 A1128 G1131 C1135 G1136 G1139 C1140 C1145 A1148 G1149 C1150 G1151 C1152 C1153 G1154 A1155 C1161
G1164 G1170 G1171 G1173 A1174 U1175 G1176 A1177 C1178 C1179 C1180 G1184 G1187 U1188 A1189 G1190 C1191 G1192 G1193 A1194 G1195 U1198 U1199 C1200 G1203 G1207 G1212 G1216 C1217 A1220 A1237 G1238 G1239 G1244 G1245 A1246 U1249 G1252 A1253 A1254 U1255 G1256 C1257 C1258 G1259
G1266 U1267 G1271 A1272 U1273 G1280 A1286 C1289 C1290 G1296 U1300 A1301 A1302 G1303 C1304 C1305 A1308 G1309 G1310 C1314 A1321 G1325 G1328 G1338 G1339 U1340 U1341 A1342 G1343 G1344 C1345 A1349 U1352 G1356 A1359 A1360 A1365 C1370 A1373 A1379
G1380 C1383 A1384 G1385 C1386 C1387 U1391 A1392 A1393 U1394 A1395 U1396 U1397 G1401 C1402 C1403 C1404 C1407 G1416 C1417 U1420 G1421 A1427 C1428 G1429 C1430 U1433 G1440 G1441 G1442 A1445 G1450 C1450A U1453 G1455 G1459 G1466 C1467 C1468 A1471 A1472 G1473 G1482
C1493 A1494 U1497 A1508 C1509 A1509A U1523 G1526 C1532 G U A C G1537 U1540 G1541 A1542 A1553 A1554 G1555 C1556 C1557 A1558 G1568 A1569 U1578 G1581 C1584 A1586 G1591 G1595 C1599 C1607 A1608 A1609 A1610 C1611 C1612 C1615 A1618 G1619 G1627
G1628 C1631 A1631A A1632 G1633 A1634 G1635 C1638 U1639 C1644 G1647 C1648 G1651 A1652 G1653 A1654 C1658 U1659 C1660 G1661 A1668 U1673 G1674 G1678 C1684 U1688 G1696 G1697 A1700 G1703 G1704 G1705 U1706 G1707 C1710 C1711 C1712 G1721 C1745A G1747A G1750
G1753 G1756 U1757 A1762 G1763 G1764 C1771 G1772 A1773 C1774 U1775 G1776 U1777 U1778 U1779 A1780 C1781 C1782 A1787 C1790 A1791 C1795 C1800 U1805 A1812 G1816 G1817 G1828 A1829 C1836 G1839 G1842 A1847 G1865 A1877 G1878 A1889 A1900 A1901
G1904 C1905 C1906 U1911 A1912 U1915 A1916 U1917 U1926 G1929 G1930 A1936 A1937 A1938 U1939 U1940 C1941 C1942 U1943 A1953 G1954 U1955 U1956 C1957 C1958 C1962 U1963 G1964 C1965 A1966 C1967 G1968 A1969 A1970 A1971 A1972 U1976 G1980 C1983 G1984 G1985 G1992 U1993 C1994 G1997 G2000 A2001
G2002 G2003 C2007 G2012 U2016 A2020 C2021 U2022 G2023 G2024 C2025 C2026 G2027 U2028 A2031 G2032 A2033 U2034 G2035 C2036 C2039 C2040 U2041 A2042 C2043 C2044 C2045 C2055 G2056 A2057 A2058 A2059 A2060 G2061 G2067 U2068 G2069 G2070 A2071 U2074 G2080 C2084 C2085 U2086 G2087 G2088 U2096 C2097
U2098 U2099 C2100 C2105 G2106 C2107 C2108 U2109 G2110 C2111 G2112 U2113 A2114 G2115 G2116 A2117 U2118 A2119 G2120 G2121 U2122 G2123 G2124 G2125 A2126 G2127 C2128 C2129 U2130 G2131 U2132 G2133 A2134 A2135 C2136 C2137 C2138 C2139 C2140 G2141 C2142 C2143 U2144 C2145 C2146 G2147 G2148 G2149 U2150 G2151 G2152 G2153 G2154 G2155 G2156 G2157 A2158 G2159 G2160
C2161 G2162 C2163 C2164 G2165 G2166 U2167 G2168 A2169 A2170 A2171 U2172 A2173 C2174 C2175 C2178 G2181 G2182 C2183 G2184 C2188 U2189 G2190 G2191 G2192 A2198 A2199 C2200 C2201 G2206 G2207 A2208 A2225 C2226 A2227 G2228 C2229 G2230 C2236 G2237 G2238 G2239 C2240 A2241 U2244 U2245 G2246 A2247 G2250 G2251
C2254 G2259 C2260 C2261 U2262 C2263 A2267 A2268 A2269 A2273 A2274 C2275 G2280 C2283 A2287 G2290 A2305 G2308 A2311 G2319 A2320 G2323 C2324 G2325 C2326 A2327 G2330 G2334 A2335 A2336 G2340 G2341 C2342 C2347 C2350 A2361 C2364 G2372 G2373 C2374
G2375 C2380 C2381 G2382 G2383 G2384 C2385 G2391 G2396 C2402 C2403 C2404 G2405 U2406 C2416 U2419 A2422 U2423 C2424 A2425 A2426 C2427 G2428 G2429 A2430 A2434 A2435 G2436 A2439 C2440 C2441 C2442 C2443 G2444 G2445 G2446 G2447 A2448 C2452 A2453 G2454 G2455 C2456 U2457 G2458 A2459 U2460 C2464



• Molecule 1: 23S Ribosomal RNA

Chain 2A:



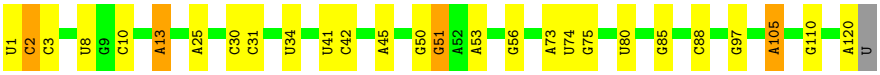


• Molecule 2: 5S Ribosomal RNA

Chain 1B:

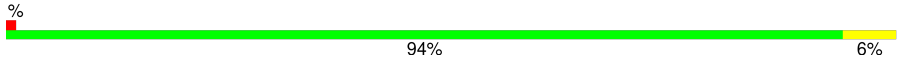
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



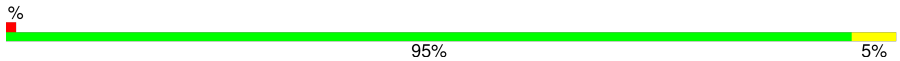
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



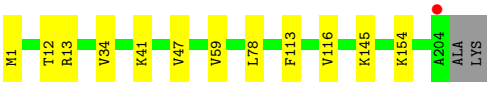
• Molecule 3: 50S ribosomal protein L2

Chain 2D:



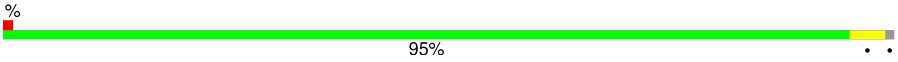
• Molecule 4: 50S ribosomal protein L3

Chain 1E:



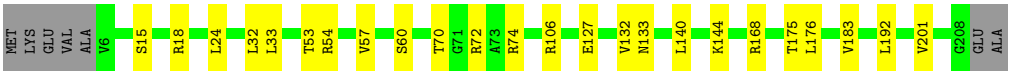
• Molecule 4: 50S ribosomal protein L3

Chain 2E:

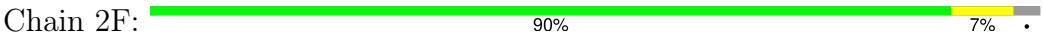


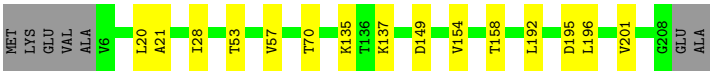
• Molecule 5: 50S ribosomal protein L4

Chain 1F:

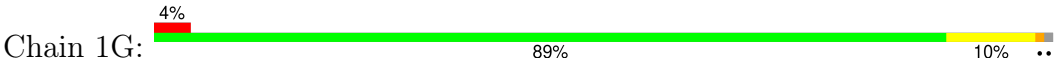


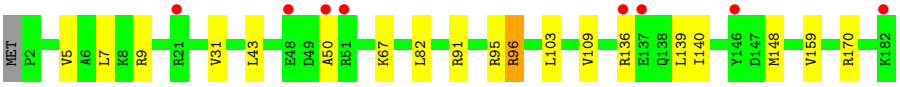
• Molecule 5: 50S ribosomal protein L4



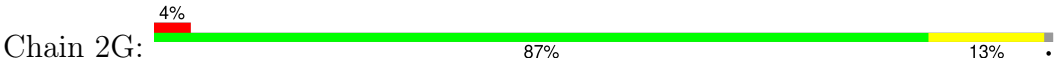


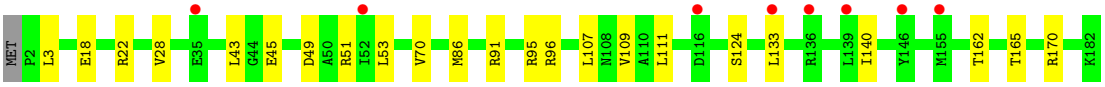
• Molecule 6: 50S ribosomal protein L5



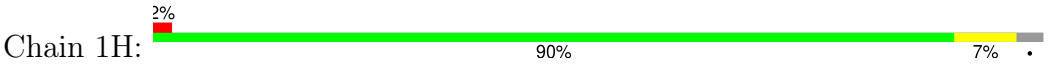


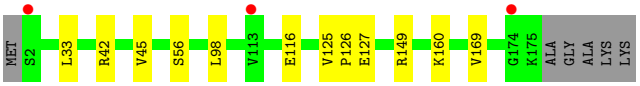
• Molecule 6: 50S ribosomal protein L5



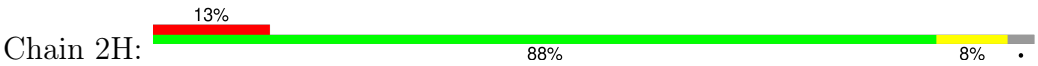


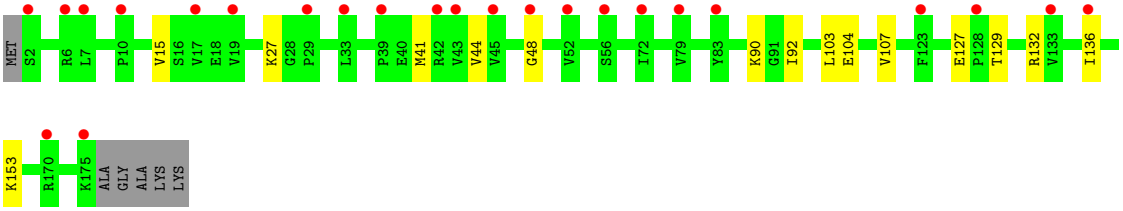
• Molecule 7: 50S ribosomal protein L6



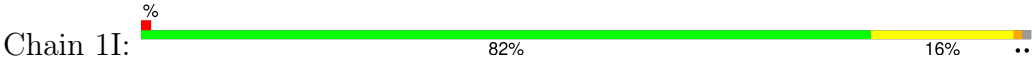


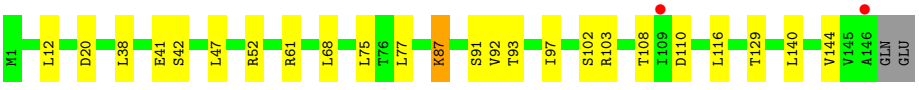
• Molecule 7: 50S ribosomal protein L6





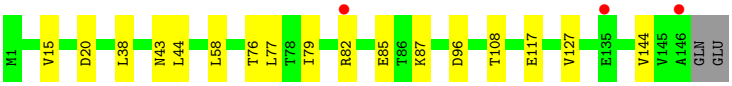
• Molecule 8: 50S ribosomal protein L9





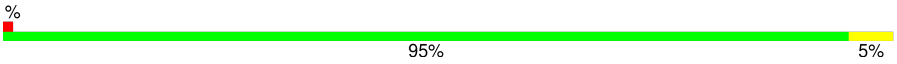
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



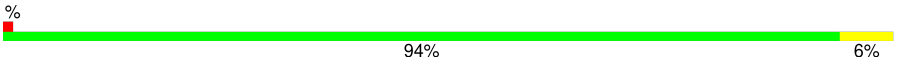
• Molecule 9: 50S ribosomal protein L13

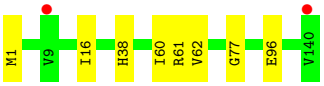
Chain 1N:



• Molecule 9: 50S ribosomal protein L13

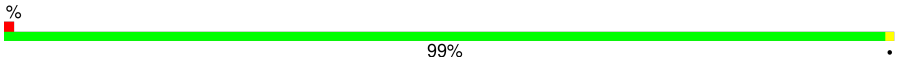
Chain 2N:





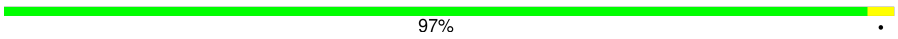
• Molecule 10: 50S ribosomal protein L14

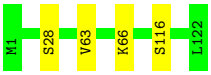
Chain 1O:



• Molecule 10: 50S ribosomal protein L14

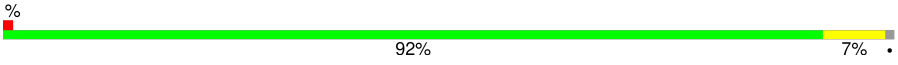
Chain 2O:

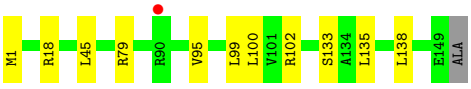




• Molecule 11: 50S ribosomal protein L15

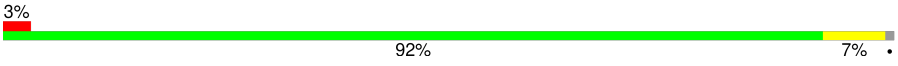
Chain 1P:

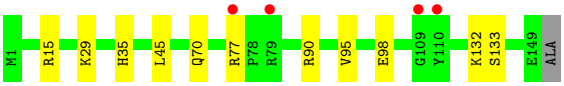




• Molecule 11: 50S ribosomal protein L15

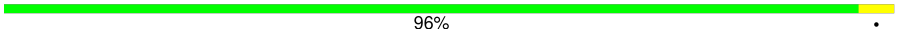
Chain 2P:

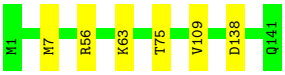




• Molecule 12: 50S ribosomal protein L16

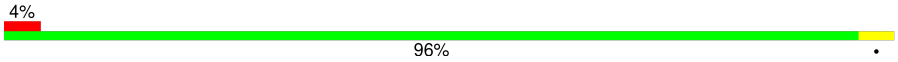
Chain 1Q:

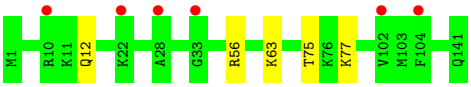




• Molecule 12: 50S ribosomal protein L16

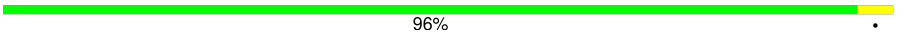
Chain 2Q:

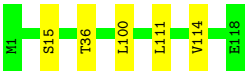




• Molecule 13: 50S ribosomal protein L17

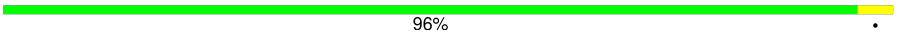
Chain 1R:

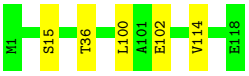




• Molecule 13: 50S ribosomal protein L17

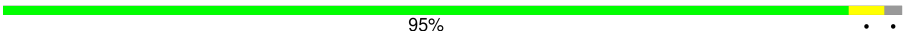
Chain 2R:





• Molecule 14: 50S ribosomal protein L18

Chain 1S:

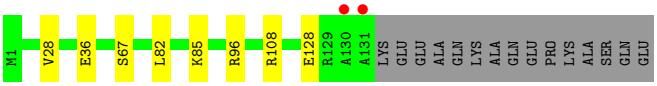


• Molecule 14: 50S ribosomal protein L18

Chain 2S:

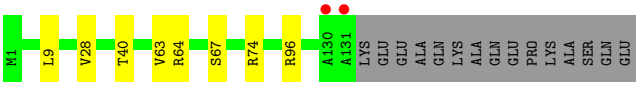
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



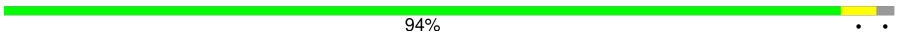
• Molecule 15: 50S ribosomal protein L19

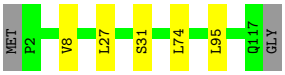
Chain 2T:



• Molecule 16: 50S ribosomal protein L20

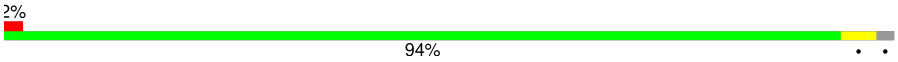
Chain 1U:

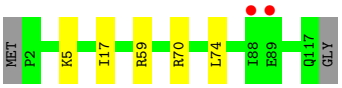




• Molecule 16: 50S ribosomal protein L20

Chain 2U:



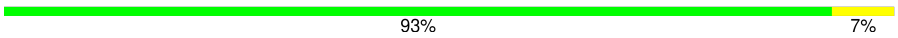


• Molecule 17: 50S ribosomal protein L21

Chain 1V:

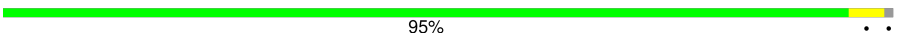
• Molecule 17: 50S ribosomal protein L21

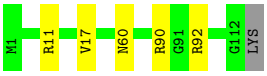
Chain 2V:



• Molecule 18: 50S ribosomal protein L22

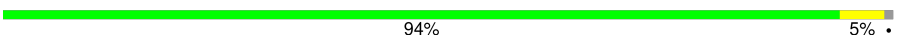
Chain 1W:

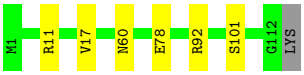




• Molecule 18: 50S ribosomal protein L22

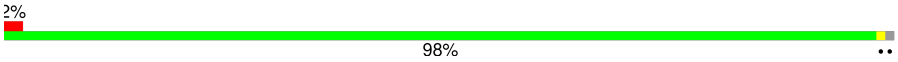
Chain 2W:

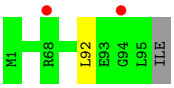




• Molecule 19: 50S ribosomal protein L23

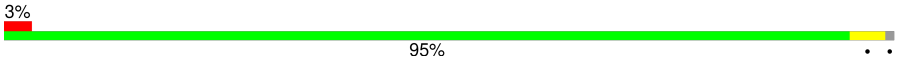
Chain 1X:

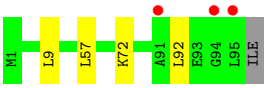




• Molecule 19: 50S ribosomal protein L23

Chain 2X:



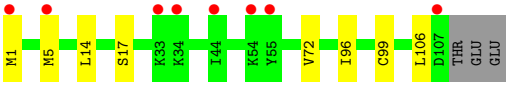


• Molecule 20: 50S ribosomal protein L24

Chain 1Y:

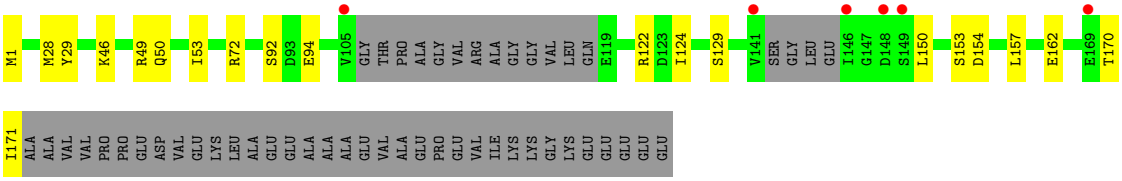
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



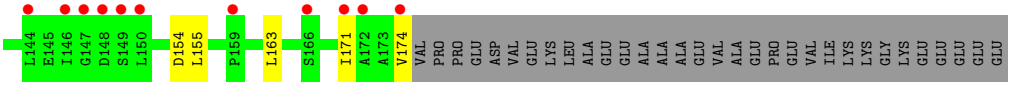
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



• Molecule 21: 50S ribosomal protein L25

Chain 2Z:

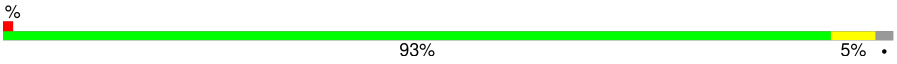


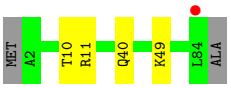
• Molecule 22: 50S ribosomal protein L27

Chain 10:

• Molecule 22: 50S ribosomal protein L27

Chain 20:



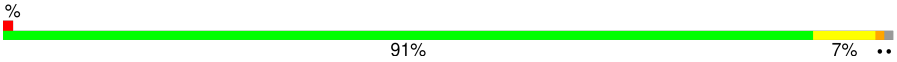


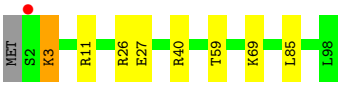
• Molecule 23: 50S ribosomal protein L28

Chain 11:

• Molecule 23: 50S ribosomal protein L28

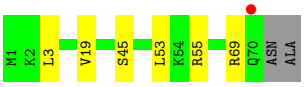
Chain 21:





• Molecule 24: 50S ribosomal protein L29

Chain 12:

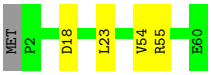


• Molecule 24: 50S ribosomal protein L29

Chain 22:

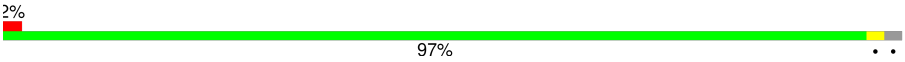
• Molecule 25: 50S ribosomal protein L30

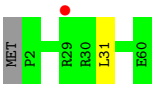
Chain 13:



• Molecule 25: 50S ribosomal protein L30

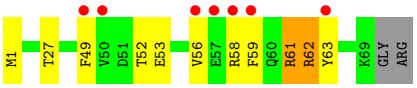
Chain 23:





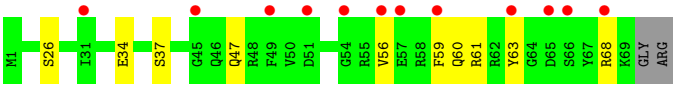
• Molecule 26: 50S ribosomal protein L31

Chain 14:



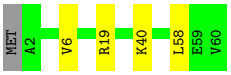
• Molecule 26: 50S ribosomal protein L31

Chain 24:



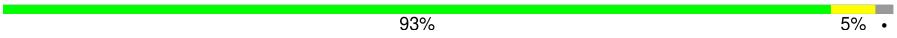
• Molecule 27: 50S ribosomal protein L32

Chain 15:



• Molecule 27: 50S ribosomal protein L32

Chain 25:

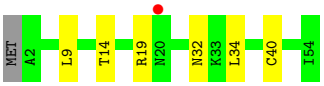


• Molecule 28: 50S ribosomal protein L33

Chain 16:

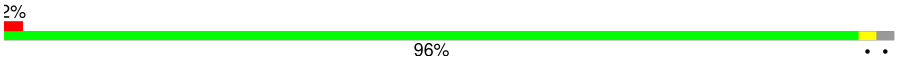
• Molecule 28: 50S ribosomal protein L33

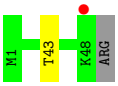
Chain 26:



• Molecule 29: 50S ribosomal protein L34

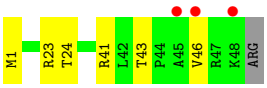
Chain 17:





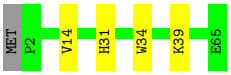
• Molecule 29: 50S ribosomal protein L34

Chain 27:



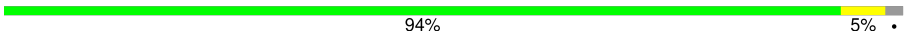
• Molecule 30: 50S ribosomal protein L35

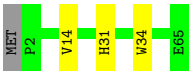
Chain 18:



• Molecule 30: 50S ribosomal protein L35

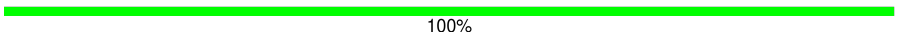
Chain 28:





• Molecule 31: 50S ribosomal protein L36

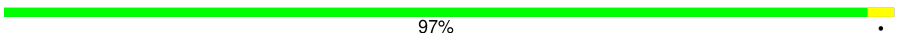
Chain 19:



There are no outlier residues recorded for this chain.

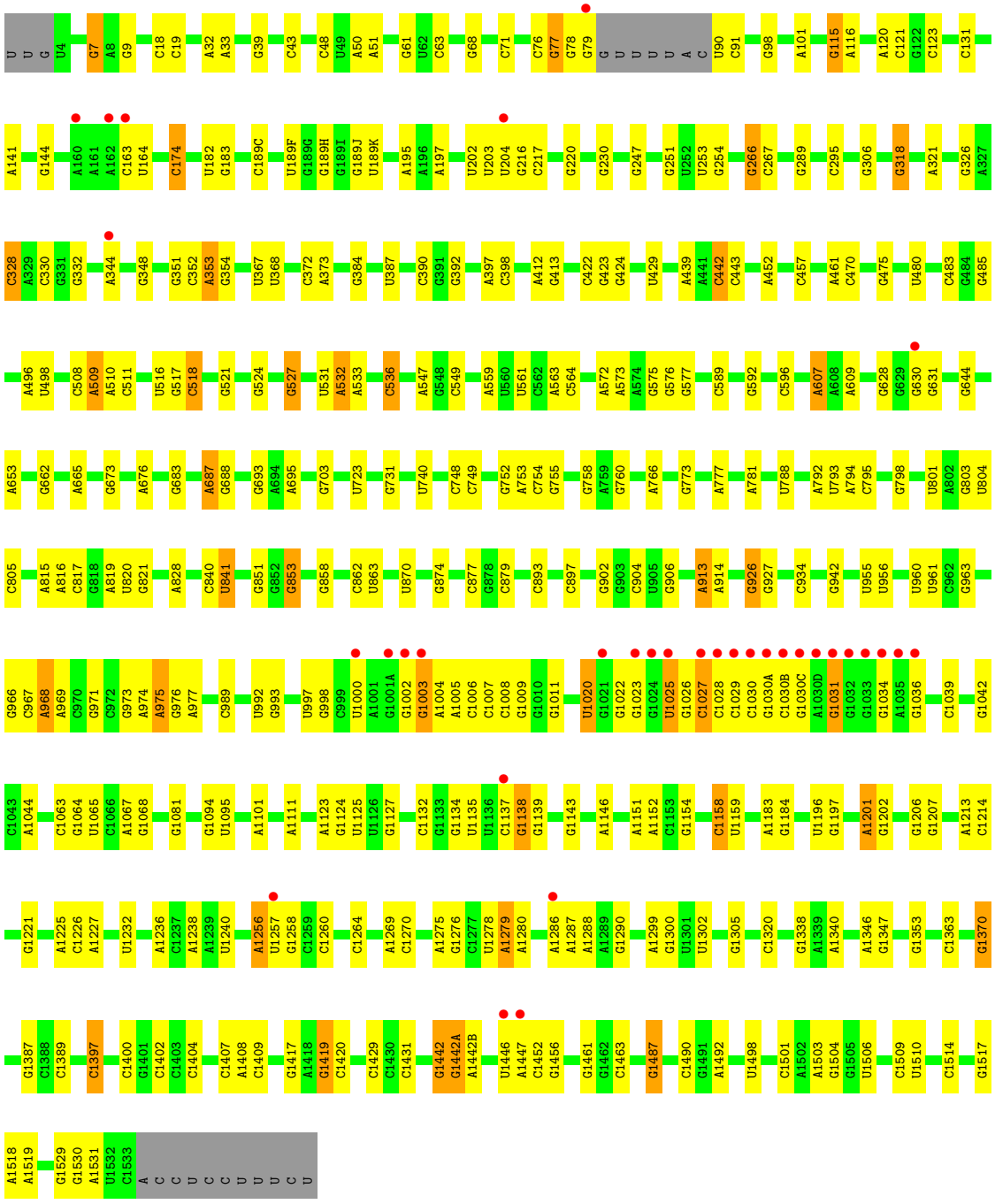
• Molecule 31: 50S ribosomal protein L36

Chain 29:



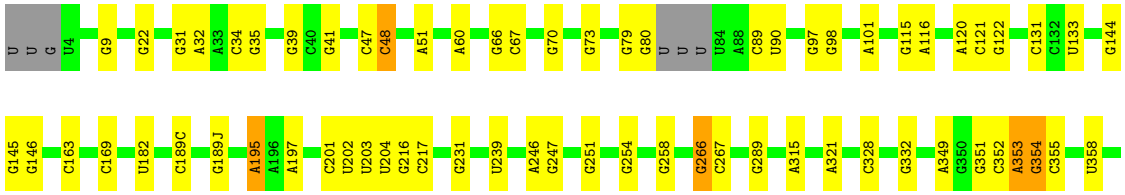
• Molecule 32: 16S Ribosomal RNA

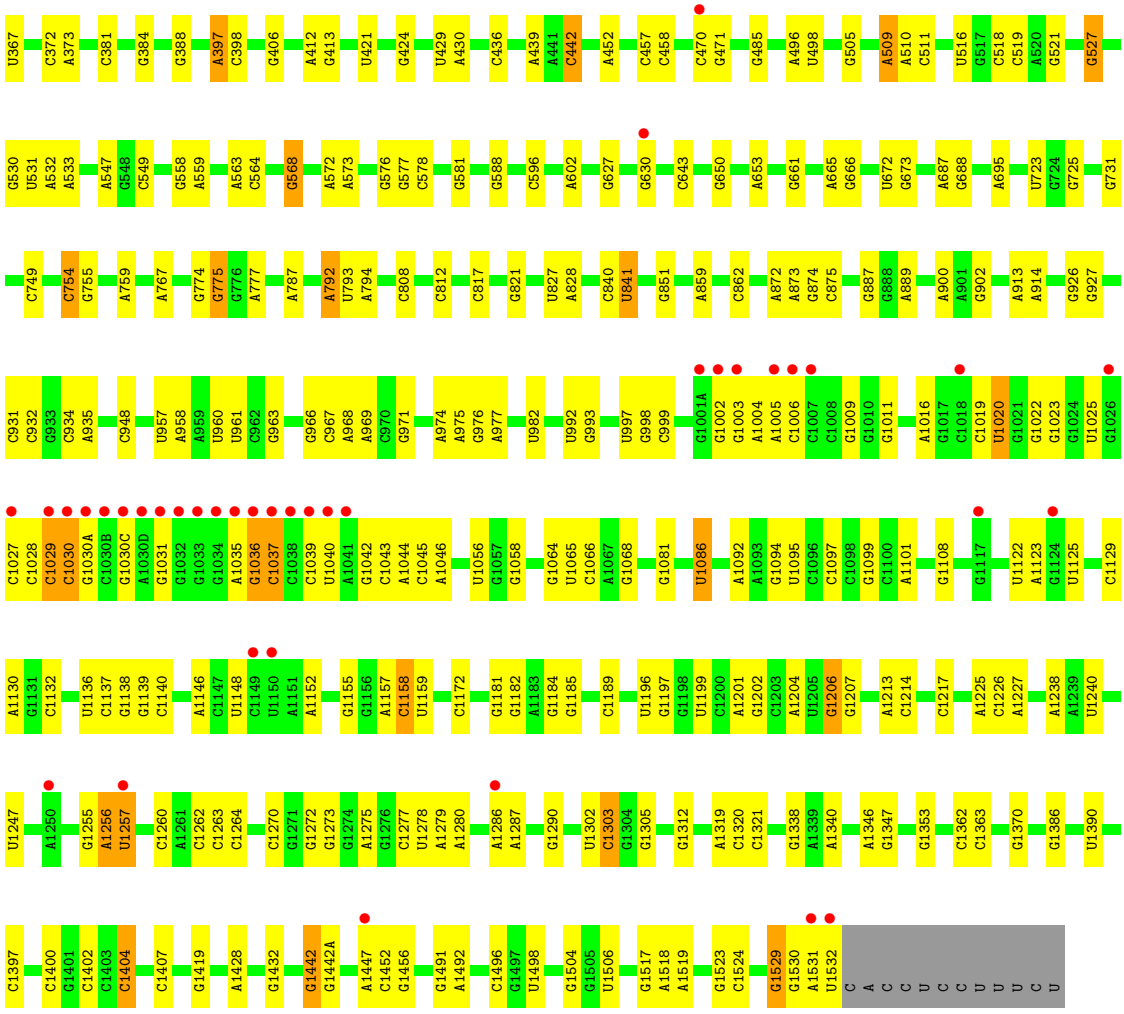
Chain 1a:



• Molecule 32: 16S Ribosomal RNA

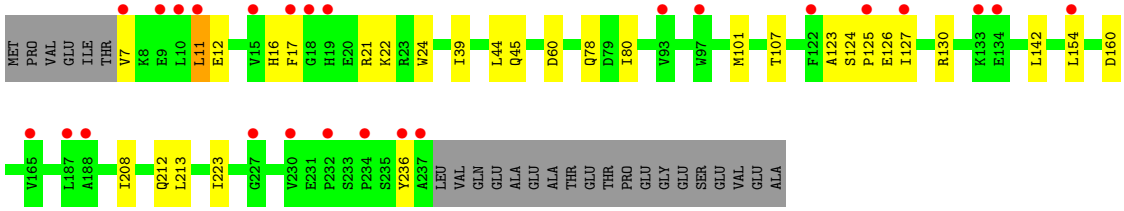
Chain 2a:





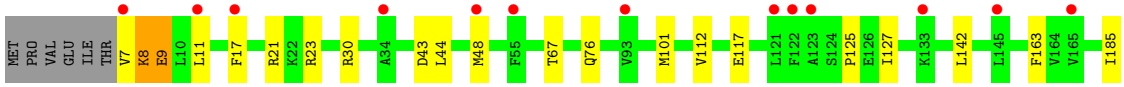
• Molecule 33: 30S ribosomal protein S2

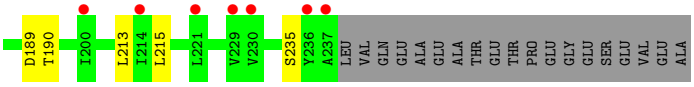
Chain 1b:



• Molecule 33: 30S ribosomal protein S2

Chain 2b:



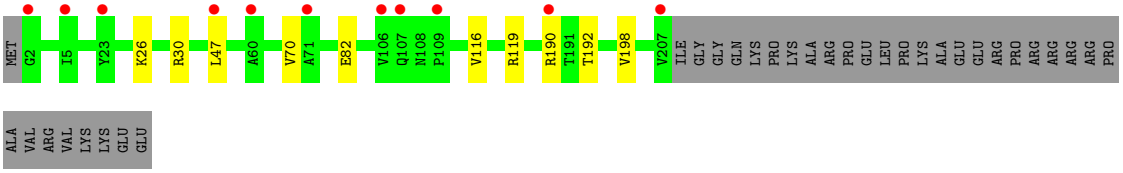


• Molecule 34: 30S ribosomal protein S3

Chain 1c:

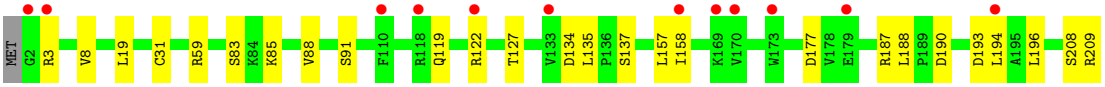
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



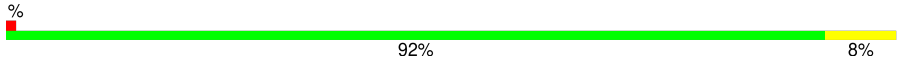
• Molecule 35: 30S ribosomal protein S4

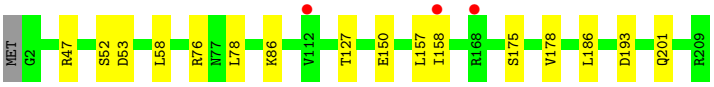
Chain 1d:



• Molecule 35: 30S ribosomal protein S4

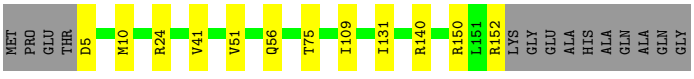
Chain 2d:





• Molecule 36: 30S ribosomal protein S5

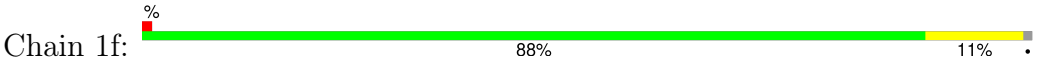
Chain 1e:

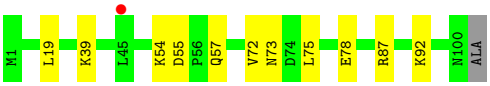


• Molecule 36: 30S ribosomal protein S5

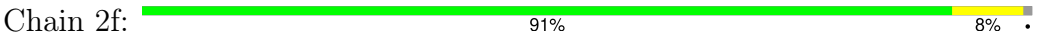
Chain 2e:

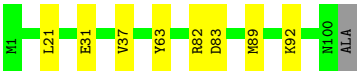
• Molecule 37: 30S ribosomal protein S6



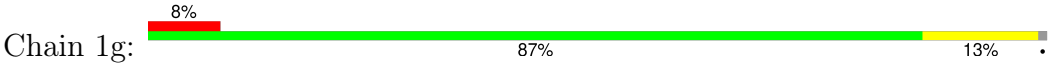


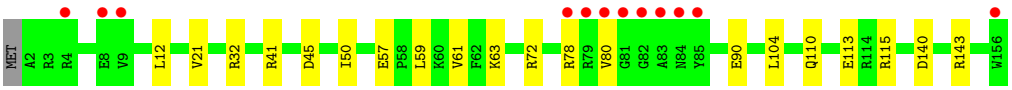
• Molecule 37: 30S ribosomal protein S6



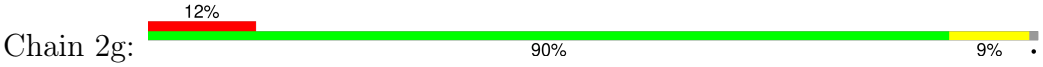


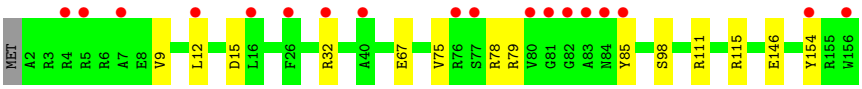
• Molecule 38: 30S ribosomal protein S7



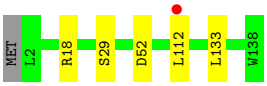


• Molecule 38: 30S ribosomal protein S7

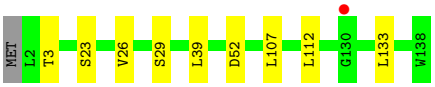




• Molecule 39: 30S ribosomal protein S8

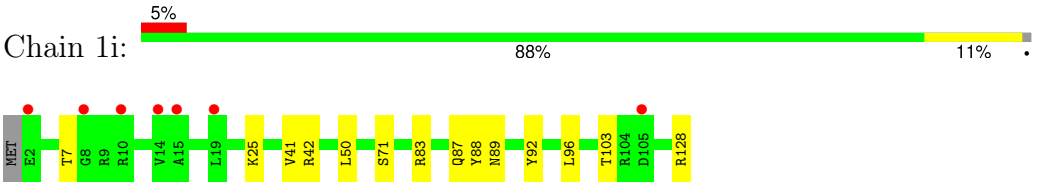


• Molecule 39: 30S ribosomal protein S8



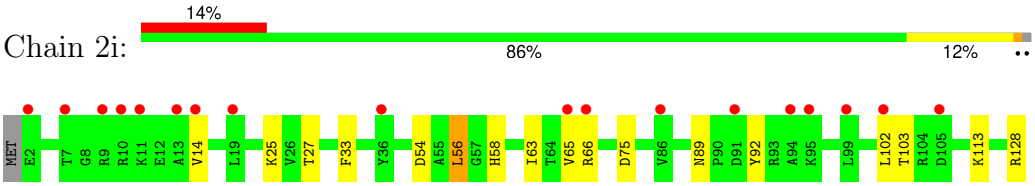
• Molecule 40: 30S ribosomal protein S9

Chain 1i:



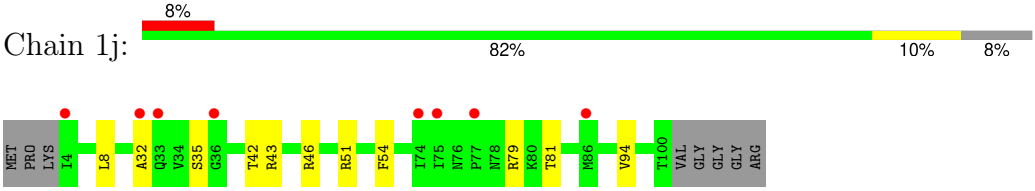
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



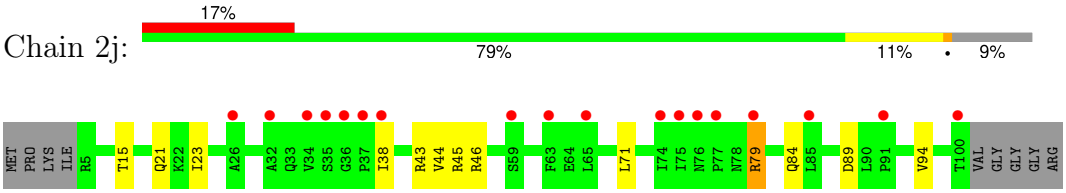
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



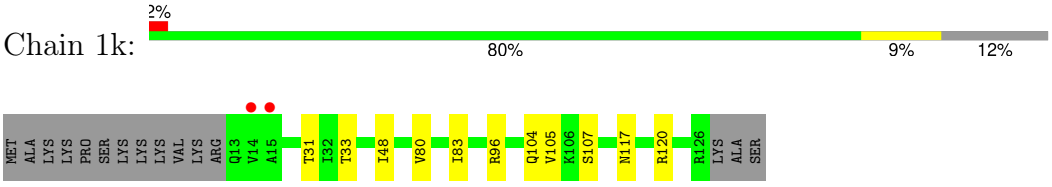
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



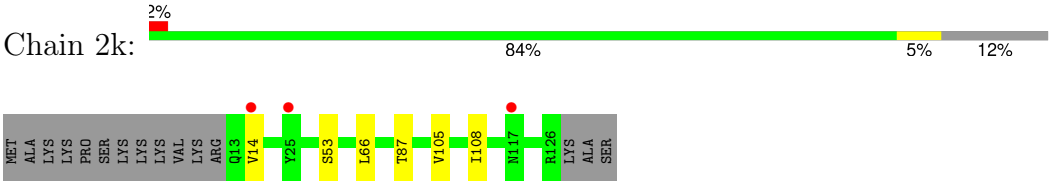
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



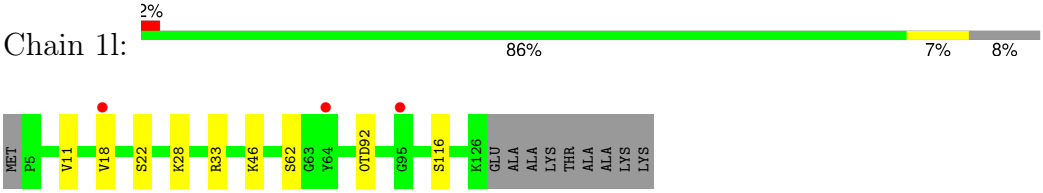
• Molecule 42: 30S ribosomal protein S11

Chain 2k:



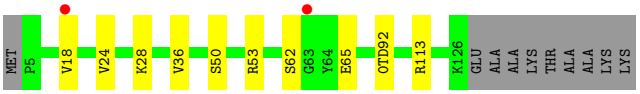
• Molecule 43: 30S ribosomal protein S12

Chain 1l:



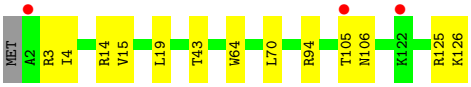
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



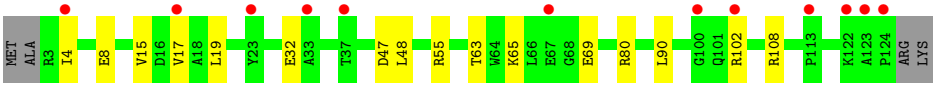
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



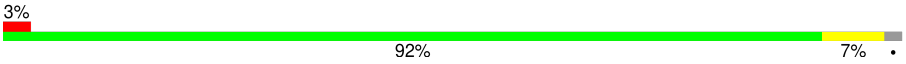
• Molecule 44: 30S ribosomal protein S13

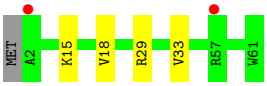
Chain 2m:



• Molecule 45: 30S ribosomal protein S14 type Z

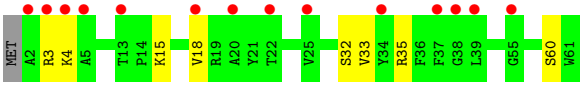
Chain 1n:





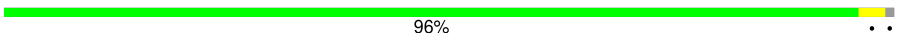
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



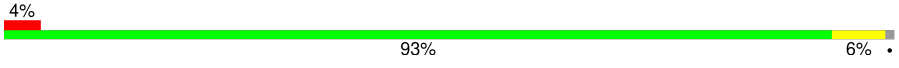
• Molecule 46: 30S ribosomal protein S15

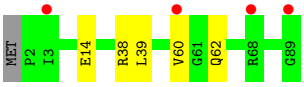
Chain 1o:



• Molecule 46: 30S ribosomal protein S15

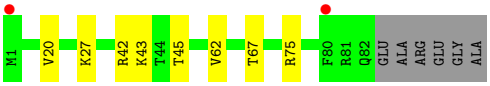
Chain 2o:





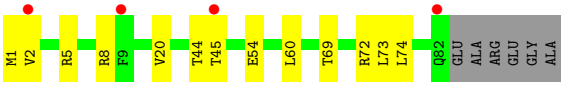
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



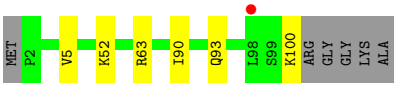
• Molecule 47: 30S ribosomal protein S16

Chain 2p:



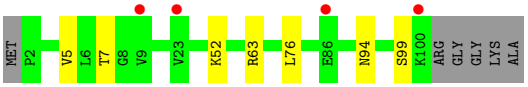
• Molecule 48: 30S ribosomal protein S17

Chain 1q:



• Molecule 48: 30S ribosomal protein S17

Chain 2q:

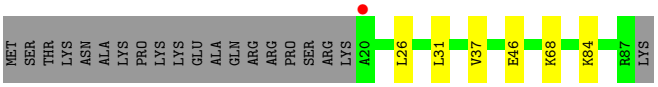


• Molecule 49: 30S ribosomal protein S18

Chain 1r:

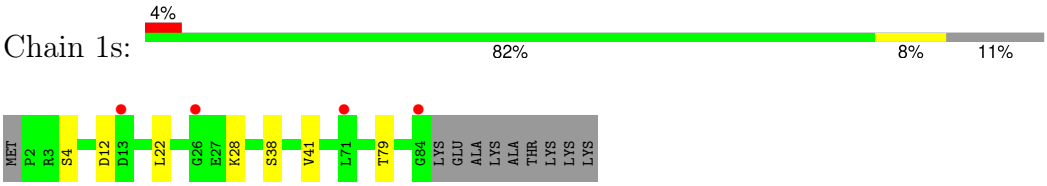
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



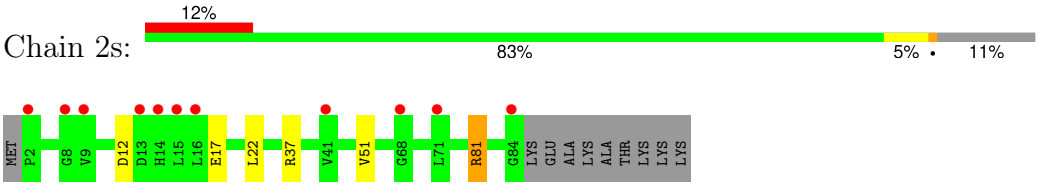
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



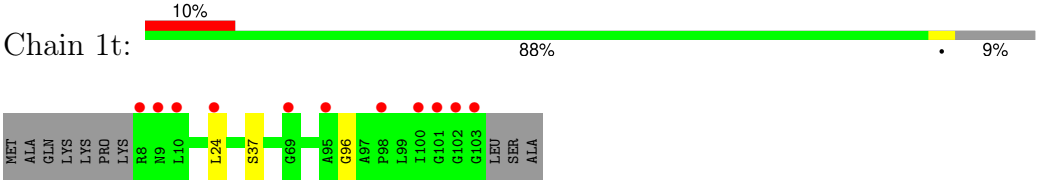
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



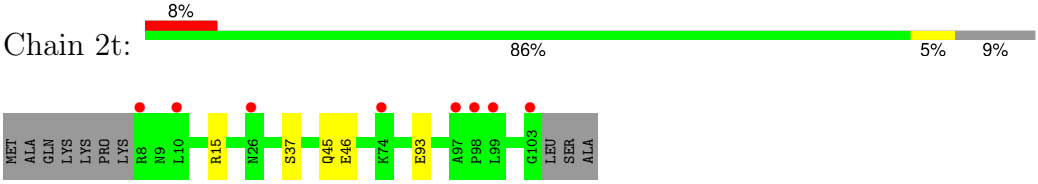
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



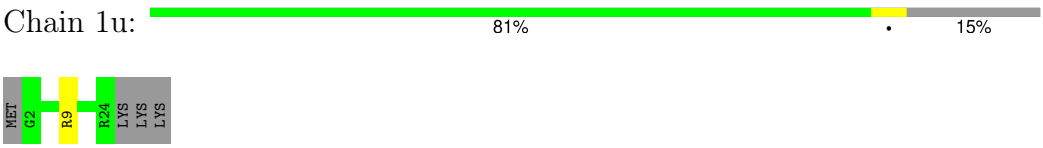
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



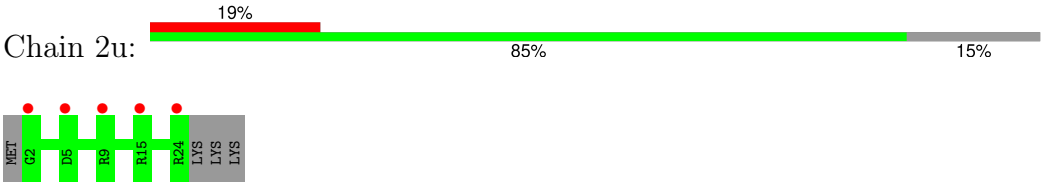
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



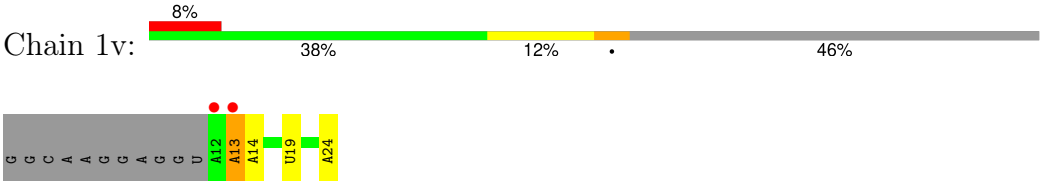
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



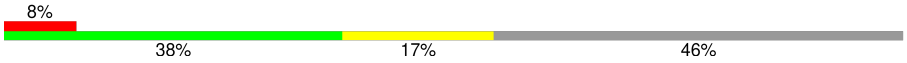
• Molecule 53: MET-PHE-mRNA

Chain 1v:



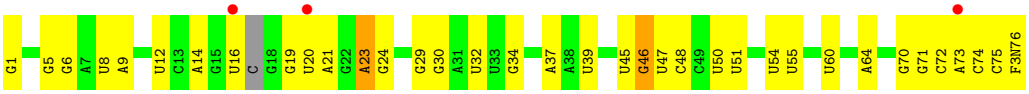
• Molecule 53: MET-PHE-mRNA

Chain 2v:



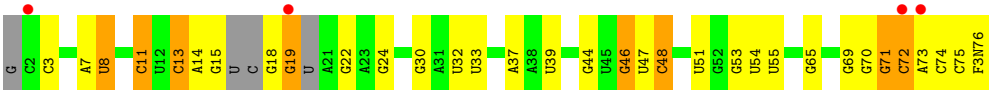
• Molecule 54: A-site Aminoacylated Phe-tRNAphe

Chain 1w:



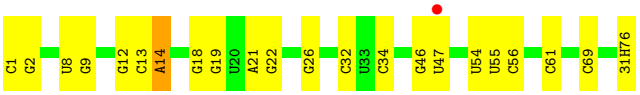
• Molecule 54: A-site Aminoacylated Phe-tRNAphe

Chain 2w:



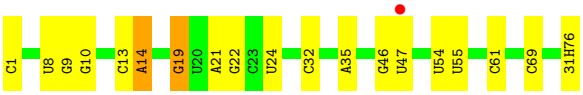
• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 1x:



• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 2x:

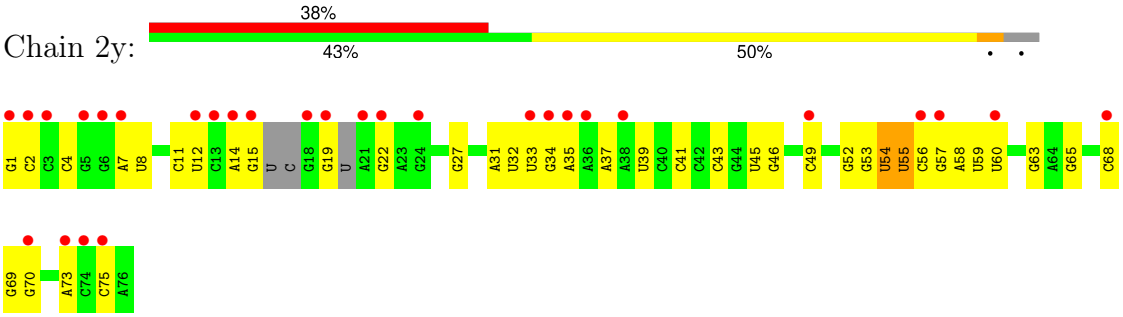


• Molecule 56: E-site Deacylated tRNAphe

Chain 1y:

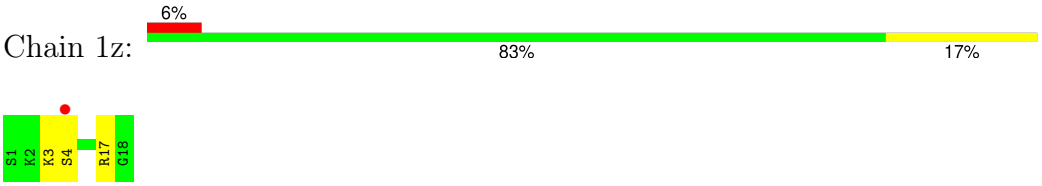
• Molecule 56: E-site Deacylated tRNAphe

Chain 2y:



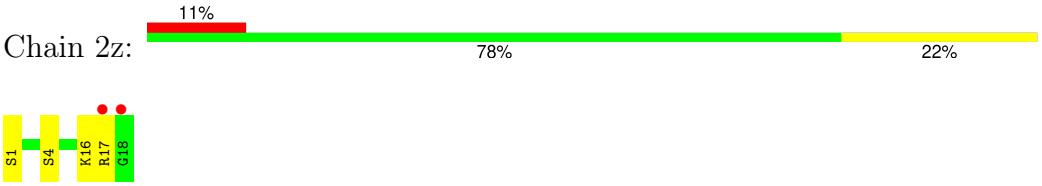
• Molecule 57: Lasso peptide lariocidin

Chain 1z:



• Molecule 57: Lasso peptide lariocidin

Chain 2z:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	210.10Å 451.03Å 622.03Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.62 – 2.50 48.62 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.9 (48.62-2.50) 100.0 (48.62-2.50)	Depositor EDS
R_{merge}	0.33	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.23 (at 2.52Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.216 , 0.265 0.224 , 0.269	Depositor DCC
R_{free} test set	100645 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	46.2	Xtriage
Anisotropy	0.125	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.31 , 51.2	EDS
L-test for twinning[2]	$< \|L\| > = 0.38$, $< L^2 > = 0.20$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	300593	wwPDB-VP
Average B, all atoms (Å^2)	51.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.56% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: OMG, 31H, K, 2MA, OMC, 2MG, 4SU, SF4, OMU, 4OC, 0TD, F3N, ZN, G7M, 5MU, UR3, M2G, PSU, MIA, MA6, 5MC, MG

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	1A	0.99	28/69011 (0.0%)	1.56	1080/107720 (1.0%)
1	2A	0.79	9/67295 (0.0%)	1.34	475/105042 (0.5%)
2	1B	0.82	1/2882 (0.0%)	1.41	21/4494 (0.5%)
2	2B	0.72	1/2879 (0.0%)	1.26	12/4487 (0.3%)
3	1D	0.58	0/2186	0.76	1/2944 (0.0%)
3	2D	0.50	0/2186	0.67	0/2944
4	1E	0.56	0/1592	0.75	1/2149 (0.0%)
4	2E	0.44	0/1592	0.64	0/2149
5	1F	0.56	0/1619	0.76	2/2193 (0.1%)
5	2F	0.47	0/1615	0.63	0/2188
6	1G	0.47	0/1448	0.66	1/1957 (0.1%)
6	2G	0.43	0/1453	0.61	1/1963 (0.1%)
7	1H	0.53	1/1356 (0.1%)	0.63	0/1834
7	2H	0.43	0/1356	0.55	0/1834
8	1I	0.46	0/1112	0.64	0/1514
8	2I	0.42	0/1079	0.63	0/1475
9	1N	0.56	0/1144	0.71	0/1543
9	2N	0.44	0/1144	0.60	1/1543 (0.1%)
10	1O	0.53	0/943	0.68	0/1269
10	2O	0.45	0/943	0.65	0/1269
11	1P	0.50	0/1152	0.82	2/1533 (0.1%)
11	2P	0.46	0/1152	0.69	0/1533
12	1Q	0.53	0/1143	0.68	0/1527
12	2Q	0.46	0/1143	0.63	0/1527
13	1R	0.57	0/982	0.76	0/1312
13	2R	0.42	0/982	0.66	0/1312
14	1S	0.50	0/883	0.70	0/1176
14	2S	0.42	0/880	0.62	0/1172
15	1T	0.49	0/1105	0.71	0/1477
15	2T	0.46	0/1097	0.61	0/1468
16	1U	0.61	0/977	0.78	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.46	0/977	0.60	0/1301
17	1V	0.56	0/782	0.75	0/1049
17	2V	0.45	0/782	0.62	0/1049
18	1W	0.58	0/897	0.72	0/1205
18	2W	0.47	0/897	0.64	0/1205
19	1X	0.61	0/764	0.74	0/1025
19	2X	0.47	0/764	0.67	0/1025
20	1Y	0.53	0/819	0.66	0/1095
20	2Y	0.49	0/819	0.63	0/1095
21	1Z	0.50	0/1267	0.67	0/1717
21	2Z	0.47	0/1299	0.63	0/1763
22	10	0.56	0/662	0.73	0/881
22	20	0.46	0/662	0.62	0/881
23	11	0.54	0/762	0.66	0/1014
23	21	0.48	0/762	0.65	0/1014
24	12	0.53	0/590	0.66	0/781
24	22	0.42	0/590	0.55	0/781
25	13	0.56	0/474	0.71	0/635
25	23	0.41	0/469	0.62	0/630
26	14	0.53	0/565	0.68	0/761
26	24	0.47	0/545	0.62	0/737
27	15	0.54	0/469	0.74	1/635 (0.2%)
27	25	0.48	0/469	0.63	0/635
28	16	0.52	0/460	0.71	0/613
28	26	0.44	0/456	0.65	0/608
29	17	0.63	0/426	0.81	0/561
29	27	0.49	0/426	0.66	0/561
30	18	0.53	0/525	0.77	0/691
30	28	0.46	0/525	0.66	0/691
31	19	0.49	0/310	0.74	0/407
31	29	0.36	0/310	0.64	0/407
32	1a	0.74	2/35795 (0.0%)	1.31	215/55864 (0.4%)
32	2a	0.69	4/35886 (0.0%)	1.25	142/56005 (0.3%)
33	1b	0.45	0/1881	0.65	1/2542 (0.0%)
33	2b	0.46	0/1860	0.61	0/2518
34	1c	0.46	0/1572	0.57	0/2126
34	2c	0.44	0/1566	0.59	0/2119
35	1d	0.44	0/1685	0.59	0/2262
35	2d	0.42	0/1704	0.61	0/2284
36	1e	0.45	0/1145	0.64	0/1543
36	2e	0.46	0/1149	0.64	0/1548
37	1f	0.44	0/823	0.64	1/1115 (0.1%)
37	2f	0.44	0/829	0.61	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.41	0/1250	0.56	0/1679
38	2g	0.45	0/1254	0.58	0/1683
39	1h	0.44	0/1108	0.59	0/1494
39	2h	0.38	0/1108	0.55	0/1494
40	1i	0.42	0/1002	0.64	0/1346
40	2i	0.42	0/997	0.63	1/1343 (0.1%)
41	1j	0.41	0/722	0.59	0/982
41	2j	0.43	0/727	0.61	0/988
42	1k	0.44	0/844	0.60	0/1145
42	2k	0.41	0/848	0.60	0/1149
43	1l	0.49	0/937	0.66	0/1260
43	2l	0.45	0/937	0.69	0/1260
44	1m	0.49	0/990	0.65	0/1327
44	2m	0.41	0/961	0.63	0/1291
45	1n	0.48	0/501	0.61	0/664
45	2n	0.46	0/501	0.61	0/664
46	1o	0.46	0/739	0.60	0/985
46	2o	0.40	0/739	0.57	0/985
47	1p	0.40	0/697	0.64	0/939
47	2p	0.42	0/693	0.63	0/935
48	1q	0.47	0/836	0.62	0/1117
48	2q	0.44	0/836	0.63	0/1117
49	1r	0.44	0/560	0.63	0/746
49	2r	0.38	0/560	0.59	0/746
50	1s	0.41	0/667	0.65	0/900
50	2s	0.45	0/661	0.69	0/893
51	1t	0.41	0/730	0.63	0/965
51	2t	0.44	0/729	0.62	0/965
52	1u	0.42	0/203	0.60	0/266
52	2u	0.39	0/203	0.58	0/266
53	1v	0.97	0/310	1.37	3/480 (0.6%)
53	2v	0.87	1/310 (0.3%)	1.12	0/480
54	1w	0.87	1/1603 (0.1%)	1.43	19/2492 (0.8%)
54	2w	0.75	0/1531	1.38	12/2379 (0.5%)
55	1x	0.94	7/1723 (0.4%)	1.57	28/2684 (1.0%)
55	2x	0.82	7/1723 (0.4%)	1.43	25/2684 (0.9%)
56	1y	1.08	1/1606 (0.1%)	1.38	16/2497 (0.6%)
56	2y	1.08	1/1583 (0.1%)	1.43	17/2459 (0.7%)
57	1z	0.45	0/133	0.82	0/168
57	2z	0.48	0/133	0.85	1/168 (0.6%)
All	All	0.75	64/316945 (0.0%)	1.24	2079/474436 (0.4%)

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
3	2D	0	1
5	2F	0	2
6	1G	0	2
6	2G	0	1
21	1Z	0	1
21	2Z	0	2
23	11	0	1
23	21	0	1
26	14	0	1
26	24	0	1
33	1b	0	3
33	2b	0	1
41	1j	0	2
41	2j	0	1
44	2m	0	1
All	All	0	21

All (64) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1272	G	C6-N1	-12.00	1.31	1.39
55	1x	1	C	OP3-P	-10.17	1.49	1.61
32	2a	1272	G	N1-C2	-9.96	1.29	1.37
55	2x	1	C	OP3-P	-9.75	1.49	1.61
2	2B	1	U	OP3-P	-9.74	1.49	1.61
2	1B	1	U	OP3-P	-9.61	1.49	1.61
56	1y	1	G	OP3-P	-9.61	1.49	1.61
1	1A	570	G	C6-O6	-9.56	1.15	1.24
54	1w	1	G	OP3-P	-9.54	1.49	1.61
56	2y	1	G	OP3-P	-9.34	1.50	1.61
55	1x	14	A	N7-C5	-7.47	1.34	1.39
55	1x	22	G	N7-C5	7.44	1.43	1.39
55	1x	14	A	C8-N7	-7.44	1.26	1.31
1	1A	975(A)	G	C6-O6	-7.34	1.17	1.24
7	1H	126	PRO	C-N	-7.23	1.17	1.34
1	1A	896	A	N9-C4	7.17	1.42	1.37
1	1A	2790	A	N9-C4	7.07	1.42	1.37
55	2x	22	G	N7-C5	6.78	1.43	1.39
55	1x	22	G	C8-N7	6.73	1.34	1.30
1	2A	466	A	N9-C4	6.68	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	2502	G	N7-C5	-6.65	1.35	1.39
55	1x	46	G	C6-N1	6.62	1.44	1.39
1	1A	1259	G	N7-C5	6.62	1.43	1.39
1	1A	2593	U	C4-O4	-6.61	1.18	1.23
1	2A	652(B)	A	N9-C4	6.50	1.41	1.37
1	2A	1021	A	N9-C4	-6.46	1.33	1.37
55	2x	46	G	C6-N1	6.32	1.44	1.39
32	2a	1263	C	N1-C2	6.28	1.46	1.40
1	2A	1142(A)	A	N9-C4	-6.18	1.34	1.37
1	2A	2320	A	N9-C4	6.15	1.41	1.37
55	1x	46	G	N1-C2	5.94	1.42	1.37
1	2A	945	A	N9-C4	-5.92	1.34	1.37
1	1A	2613	U	C2-N3	-5.77	1.33	1.37
1	1A	2057	A	P-OP2	-5.76	1.39	1.49
1	1A	975	C	C2-O2	-5.76	1.19	1.24
55	2x	22	G	C8-N7	5.75	1.34	1.30
1	2A	1142(A)	A	N3-C4	-5.71	1.31	1.34
1	1A	2613	U	C2-O2	-5.68	1.17	1.22
1	1A	2319	G	N9-C4	-5.59	1.33	1.38
1	1A	949	C	N3-C4	-5.58	1.30	1.33
55	2x	14	A	C8-N7	-5.57	1.27	1.31
55	2x	14	A	N9-C4	5.54	1.41	1.37
1	1A	2458	G	N3-C4	-5.51	1.31	1.35
1	1A	2419	U	C2-N3	-5.46	1.33	1.37
1	1A	1239	G	C6-N1	-5.44	1.35	1.39
32	2a	1272	G	C5-C4	5.41	1.42	1.38
55	2x	46	G	N1-C2	5.40	1.42	1.37
1	1A	1308	A	N3-C4	-5.39	1.31	1.34
1	1A	2621	A	N9-C4	-5.36	1.34	1.37
1	1A	2033	A	N3-C4	5.33	1.38	1.34
1	1A	2585	U	C2-O2	-5.31	1.17	1.22
1	1A	568	U	C4-O4	-5.29	1.19	1.23
1	1A	578	A	N7-C5	-5.28	1.36	1.39
1	1A	800	A	C8-N7	5.26	1.35	1.31
1	1A	699	A	N9-C4	-5.25	1.34	1.37
32	1a	1003	G	N9-C4	5.13	1.42	1.38
1	2A	896	A	N9-C4	5.13	1.41	1.37
1	1A	27	G	N1-C2	-5.13	1.33	1.37
1	1A	1569	A	N3-C4	-5.13	1.31	1.34
1	1A	2598	A	N3-C4	-5.05	1.31	1.34
32	1a	1030(B)	C	N1-C2	5.04	1.45	1.40
1	2A	2154	G	C6-N1	5.02	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	2v	12	A	N9-C4	5.01	1.40	1.37
1	1A	829	A	N7-C5	-5.00	1.36	1.39

All (2079) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1263	C	N1-C2-O2	27.38	135.32	118.90
32	2a	1272	G	N1-C2-N2	-26.50	92.34	116.20
32	2a	1272	G	N3-C2-N2	25.23	137.56	119.90
32	2a	1272	G	C5-C6-O6	23.93	142.96	128.60
32	2a	1263	C	N3-C2-O2	-17.95	109.33	121.90
55	1x	22	G	C5-N7-C8	-14.50	97.05	104.30
1	2A	2136	C	N1-C2-O2	14.49	127.59	118.90
32	2a	1272	G	N1-C6-O6	-14.00	111.50	119.90
55	1x	46	G	C6-N1-C2	-14.00	116.70	125.10
1	1A	1063	G	C5-C6-O6	13.75	136.85	128.60
55	2x	46	G	C6-N1-C2	-13.65	116.91	125.10
32	2a	1272	G	C2-N3-C4	-13.41	105.19	111.90
32	2a	1263	C	C2-N3-C4	12.96	126.38	119.90
1	2A	1368	G	O5'-P-OP2	-12.94	94.05	105.70
1	1A	1086	A	N1-C6-N6	-12.83	110.90	118.60
55	2x	14	A	C5-N7-C8	12.62	110.21	103.90
55	2x	22	G	C5-N7-C8	-12.61	97.99	104.30
55	1x	14	A	C5-N7-C8	12.20	110.00	103.90
32	2a	1272	G	C5-C6-N1	-11.97	105.51	111.50
1	2A	1021	A	C2-N3-C4	-11.90	104.65	110.60
1	1A	946	G	O5'-P-OP1	-11.78	95.10	105.70
1	1A	2714	G	O5'-P-OP2	-11.70	95.17	105.70
1	2A	945	A	C2-N3-C4	-11.33	104.94	110.60
1	1A	27	G	O5'-P-OP2	-11.18	95.64	105.70
1	2A	1791	A	O5'-P-OP1	-11.17	95.65	105.70
32	2a	1272	G	C4-N9-C1'	11.02	140.83	126.50
1	1A	2689	U	P-O3'-C3'	11.02	132.93	119.70
1	1A	1140	C	C6-N1-C2	-10.93	115.93	120.30
1	2A	790	C	O5'-P-OP2	-10.88	95.91	105.70
32	2a	1272	G	C8-N9-C1'	-10.85	112.89	127.00
55	1x	14	A	C4-C5-C6	10.76	122.38	117.00
1	1A	2685	G	N1-C6-O6	-10.66	113.50	119.90
1	2A	801	G	O5'-P-OP2	-10.56	96.19	105.70
1	2A	945	A	N1-C6-N6	10.51	124.91	118.60
1	2A	2136	C	N3-C2-O2	-10.50	114.55	121.90
55	1x	22	G	C4-C5-N7	10.47	114.99	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1030(B)	C	N1-C2-O2	10.44	125.16	118.90
1	1A	2023	G	O5'-P-OP1	-10.39	96.34	105.70
32	2a	1272	G	N1-C2-N3	10.32	130.09	123.90
1	1A	198	C	O5'-P-OP2	-10.28	96.45	105.70
1	1A	1660	C	O5'-P-OP2	-10.25	96.47	105.70
32	2a	1263	C	C2-N1-C1'	10.01	129.81	118.80
1	1A	1187	G	N1-C6-O6	-9.96	113.92	119.90
1	1A	1200	C	N1-C2-O2	-9.87	112.98	118.90
1	1A	701	G	O5'-P-OP2	-9.84	96.84	105.70
1	1A	2375	G	C5-C6-O6	-9.77	122.73	128.60
32	1a	254	G	O5'-P-OP1	-9.73	96.94	105.70
1	1A	1352	U	O5'-P-OP1	-9.66	97.00	105.70
1	2A	2129	C	N1-C2-O2	9.64	124.69	118.90
1	1A	1025	G	O5'-P-OP1	-9.54	97.12	105.70
32	1a	1030(B)	C	C2-N1-C1'	9.52	129.27	118.80
1	1A	999	U	O5'-P-OP2	-9.47	97.18	105.70
2	2B	80	U	O4'-C1'-N1	9.45	115.76	108.20
1	1A	2554	U	O5'-P-OP1	-9.41	97.23	105.70
32	1a	1025	U	N1-C2-O2	9.36	129.35	122.80
1	1A	512	G	O4'-C1'-N9	9.36	115.69	108.20
1	1A	2273	A	O5'-P-OP2	-9.29	97.33	105.70
1	2A	885	C	C5-C6-N1	9.26	125.63	121.00
1	1A	2319	G	N3-C4-C5	9.25	133.22	128.60
1	1A	1011	G	O5'-P-OP2	-9.24	97.38	105.70
1	1A	1063	G	N1-C6-O6	-9.18	114.39	119.90
1	2A	2492	U	O5'-P-OP1	-9.16	97.45	105.70
1	1A	372	G	O4'-C1'-N9	9.14	115.51	108.20
1	2A	1558	A	C2-N3-C4	-9.13	106.04	110.60
1	1A	2319	G	N3-C4-N9	-9.12	120.53	126.00
1	1A	570	G	C5-C6-O6	-9.11	123.14	128.60
1	1A	27	G	C5-C6-O6	8.96	133.97	128.60
1	1A	27	G	N1-C6-O6	-8.93	114.54	119.90
1	1A	570	G	C5-C6-N1	8.90	115.95	111.50
1	1A	2882	A	O5'-P-OP2	-8.90	97.69	105.70
1	1A	1075	C	C2-N3-C4	8.89	124.35	119.90
32	2a	1263	C	C5-C6-N1	8.84	125.42	121.00
2	1B	56	G	C8-N9-C4	-8.84	102.86	106.40
1	1A	512	G	C5-C6-O6	-8.83	123.30	128.60
1	1A	531	C	O5'-P-OP2	-8.80	97.78	105.70
55	2x	22	G	N7-C8-N9	8.80	117.50	113.10
56	1y	48	C	N1-C2-O2	-8.79	113.63	118.90
1	1A	1272	A	O5'-P-OP2	-8.77	97.81	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2028	U	N3-C4-O4	-8.75	113.28	119.40
55	1x	22	G	C4-C5-C6	-8.74	113.56	118.80
1	1A	2086	U	N1-C2-O2	8.73	128.91	122.80
1	1A	674	G	C5-C6-O6	-8.72	123.37	128.60
1	1A	847	U	O5'-P-OP1	-8.71	97.86	105.70
1	2A	1769	G	N1-C6-O6	8.69	125.11	119.90
55	1x	46	G	N3-C2-N2	-8.69	113.82	119.90
1	2A	1142(A)	A	C2-N3-C4	-8.65	106.28	110.60
1	2A	2318	G	N7-C8-N9	8.64	117.42	113.10
32	2a	1286	A	N7-C8-N9	8.64	118.12	113.80
1	1A	2021	C	C6-N1-C2	8.62	123.75	120.30
1	1A	2428	G	N1-C6-O6	-8.61	114.73	119.90
55	1x	46	G	C5-C6-N1	8.61	115.80	111.50
1	1A	1308	A	N9-C4-C5	8.60	109.24	105.80
32	1a	1030(B)	C	C6-N1-C2	-8.60	116.86	120.30
55	1x	14	A	C5-C6-N1	-8.59	113.41	117.70
1	1A	1075	C	C5-C4-N4	8.57	126.20	120.20
1	1A	589	C	O5'-P-OP2	-8.54	98.01	105.70
32	1a	1143	G	N1-C6-O6	8.54	125.03	119.90
1	1A	1082	U	N3-C4-O4	-8.54	113.42	119.40
55	1x	22	G	N7-C8-N9	8.54	117.37	113.10
1	1A	1170	G	N7-C8-N9	8.52	117.36	113.10
1	1A	607	U	O5'-P-OP1	-8.51	98.04	105.70
55	2x	22	G	C4-C5-C6	-8.50	113.70	118.80
1	1A	2689	U	OP2-P-O3'	8.49	123.89	105.20
1	1A	2028	U	C5-C4-O4	8.49	130.99	125.90
1	1A	370	G	O5'-P-OP2	-8.45	98.10	105.70
32	1a	575	G	N1-C6-O6	-8.43	114.84	119.90
55	1x	26	G	O5'-P-OP1	-8.42	98.12	105.70
32	2a	841	U	C5-C6-N1	8.41	126.90	122.70
1	1A	1170	G	C8-N9-C4	-8.38	103.05	106.40
1	1A	1198	U	O5'-P-OP2	-8.38	98.16	105.70
11	1P	18	ARG	NE-CZ-NH1	-8.36	116.12	120.30
1	2A	885	C	C6-N1-C2	-8.34	116.97	120.30
1	1A	978	G	N9-C4-C5	8.33	108.73	105.40
1	1A	1325	G	N1-C6-O6	-8.33	114.90	119.90
32	1a	1034	G	C6-N1-C2	8.33	130.10	125.10
1	1A	793	A	O5'-P-OP2	-8.32	98.21	105.70
1	1A	1836	C	N1-C2-O2	8.32	123.89	118.90
32	2a	1272	G	C6-N1-C2	8.32	130.09	125.10
2	1B	56	G	O5'-P-OP2	-8.31	98.22	105.70
55	2x	14	A	C4-C5-C6	8.31	121.16	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	870	A	O5'-P-OP2	-8.30	98.23	105.70
32	1a	902	G	O5'-P-OP2	-8.30	98.23	105.70
1	1A	1992	G	P-O3'-C3'	8.29	129.64	119.70
1	2A	2318	G	C8-N9-C4	-8.27	103.09	106.40
1	1A	746	A	O4'-C1'-N9	8.27	114.82	108.20
32	2a	1263	C	C6-N1-C2	-8.27	116.99	120.30
32	1a	816	A	O5'-P-OP1	8.27	120.62	110.70
1	1A	1787	A	C8-N9-C4	8.25	109.10	105.80
1	2A	1790	C	N3-C4-C5	-8.24	118.61	121.90
55	1x	22	G	C5-C6-N1	8.23	115.61	111.50
1	1A	687	C	N3-C4-C5	-8.21	118.62	121.90
1	2A	1380	G	O5'-P-OP2	-8.19	98.33	105.70
32	1a	1036	G	N3-C2-N2	-8.19	114.17	119.90
1	1A	467	G	C4-C5-N7	-8.18	107.53	110.80
56	1y	33	U	N1-C2-O2	8.18	128.52	122.80
1	2A	1346	G	C8-N9-C4	8.16	109.67	106.40
1	1A	615	G	N1-C6-O6	-8.16	115.01	119.90
1	2A	1698	A	N1-C6-N6	8.13	123.48	118.60
1	1A	961	C	O5'-P-OP2	-8.07	98.44	105.70
1	1A	674	G	N1-C6-O6	8.05	124.73	119.90
1	1A	1063	G	C6-N1-C2	8.05	129.93	125.10
55	2x	46	G	C5-C6-N1	8.05	115.52	111.50
1	1A	1198	U	N1-C2-O2	-8.04	117.17	122.80
1	1A	919	G	C5-C6-O6	-8.03	123.78	128.60
1	2A	575	A	O5'-P-OP1	-8.03	98.48	105.70
32	2a	1263	C	C5-C4-N4	8.01	125.80	120.20
1	1A	2138	C	C6-N1-C2	-7.98	117.11	120.30
1	2A	945	A	C5-N7-C8	-7.98	99.91	103.90
1	1A	2080	G	O5'-P-OP1	-7.97	98.52	105.70
1	1A	415	A	C8-N9-C4	7.97	108.99	105.80
32	1a	841	U	C5-C6-N1	7.97	126.68	122.70
1	2A	2318	G	O4'-C1'-N9	7.95	114.56	108.20
32	2a	1264	C	N1-C2-O2	7.95	123.67	118.90
2	2B	1	U	C2-N1-C1'	7.93	127.22	117.70
1	1A	190	A	C8-N9-C4	-7.92	102.63	105.80
32	1a	1158	C	N1-C2-O2	7.90	123.64	118.90
1	1A	1542	A	O5'-P-OP1	-7.90	98.59	105.70
1	1A	395	U	O4'-C1'-N1	7.89	114.52	108.20
1	1A	2682	U	O5'-P-OP2	-7.89	98.60	105.70
1	2A	1780	A	O5'-P-OP1	-7.86	98.62	105.70
1	2A	762	U	N1-C2-O2	7.86	128.30	122.80
32	1a	805	C	N1-C2-O2	7.86	123.61	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	14	A	C4-C5-N7	-7.84	106.78	110.70
1	1A	1249	U	C5-C6-N1	-7.82	118.79	122.70
32	1a	1463	C	N3-C2-O2	-7.81	116.43	121.90
55	1x	46	G	C5-C6-O6	-7.81	123.91	128.60
1	1A	1994	C	O5'-P-OP2	-7.79	98.69	105.70
2	2B	2	C	C6-N1-C2	-7.79	117.19	120.30
1	1A	2402	C	C6-N1-C2	7.77	123.41	120.30
1	1A	1187	G	C5-C6-O6	7.77	133.26	128.60
32	1a	1030(B)	C	N3-C2-O2	-7.77	116.46	121.90
1	1A	446	G	C5-C6-O6	-7.77	123.94	128.60
1	2A	2689	U	P-O3'-C3'	7.77	129.02	119.70
1	2A	2602	A	O5'-P-OP1	-7.76	98.72	105.70
1	2A	2803	C	C6-N1-C2	-7.75	117.20	120.30
1	1A	774	A	C8-N9-C4	-7.75	102.70	105.80
1	1A	1397	U	C5-C4-O4	-7.74	121.25	125.90
1	1A	2501	C	N3-C4-C5	7.72	124.99	121.90
1	1A	961	C	C2-N3-C4	-7.72	116.04	119.90
1	1A	2863	C	O5'-P-OP2	-7.71	98.76	105.70
1	2A	1021	A	N1-C2-N3	7.71	133.16	129.30
1	1A	2713	A	N1-C6-N6	7.71	123.23	118.60
1	1A	84	A	O4'-C1'-N9	7.71	114.37	108.20
32	1a	1442	G	C2-N3-C4	7.71	115.75	111.90
1	2A	2320	A	C2-N3-C4	7.70	114.45	110.60
1	1A	2086	U	N3-C2-O2	-7.70	116.81	122.20
1	2A	1615	C	C6-N1-C2	-7.70	117.22	120.30
1	2A	945	A	C4-C5-N7	7.67	114.53	110.70
1	2A	90	U	N3-C2-O2	-7.66	116.84	122.20
1	1A	2501	C	C6-N1-C2	7.66	123.36	120.30
1	1A	1615	C	N1-C2-O2	7.66	123.50	118.90
1	2A	1698	A	O4'-C1'-N9	7.66	114.33	108.20
1	1A	859	G	C8-N9-C4	7.66	109.46	106.40
1	1A	1325	G	C5-C6-O6	7.66	133.19	128.60
1	1A	1430	C	C6-N1-C2	-7.64	117.24	120.30
1	1A	2434	A	C8-N9-C4	-7.63	102.75	105.80
1	1A	919	G	N1-C6-O6	7.62	124.47	119.90
1	1A	2595	G	O5'-P-OP2	-7.61	98.85	105.70
1	1A	149	A	O5'-P-OP1	-7.61	98.85	105.70
1	1A	1607	C	C6-N1-C2	-7.60	117.26	120.30
1	2A	2282	G	N1-C6-O6	7.60	124.46	119.90
1	2A	1346	G	N3-C4-C5	7.60	132.40	128.60
32	1a	1509	C	C6-N1-C2	7.60	123.34	120.30
1	1A	242	G	C8-N9-C4	7.58	109.43	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	46	G	N3-C2-N2	-7.58	114.60	119.90
1	1A	774	A	N7-C8-N9	7.57	117.59	113.80
1	1A	2453	A	C8-N9-C4	7.56	108.82	105.80
1	2A	2893	G	C5-C6-O6	-7.56	124.06	128.60
32	2a	1256	A	C8-N9-C4	7.54	108.82	105.80
1	1A	2025	C	C6-N1-C2	-7.54	117.29	120.30
32	1a	1531	A	N7-C8-N9	7.53	117.56	113.80
1	2A	528	A	P-O3'-C3'	7.53	128.74	119.70
2	1B	6	C	C6-N1-C2	7.52	123.31	120.30
1	1A	2290	G	O5'-P-OP1	-7.51	98.94	105.70
55	2x	22	G	C4-C5-N7	7.51	113.80	110.80
1	1A	1556	C	C6-N1-C2	-7.51	117.30	120.30
1	1A	1198	U	N1-C2-N3	7.50	119.40	114.90
1	1A	2582	G	O5'-P-OP2	-7.48	98.96	105.70
1	1A	2586	C	C6-N1-C2	-7.45	117.32	120.30
1	1A	805	G	N9-C4-C5	-7.45	102.42	105.40
1	1A	2593	U	N3-C4-O4	-7.43	114.20	119.40
1	1A	800	A	N9-C4-C5	7.43	108.77	105.80
1	1A	2603	G	C5-C6-O6	-7.42	124.14	128.60
1	1A	1816	G	O5'-P-OP1	-7.42	99.03	105.70
55	2x	46	G	N1-C2-N3	7.40	128.34	123.90
1	1A	949	C	N3-C4-N4	-7.40	112.82	118.00
1	1A	1397	U	N3-C4-O4	7.39	124.58	119.40
1	2A	1569	A	O5'-P-OP2	-7.39	99.05	105.70
1	1A	2627	G	C8-N9-C4	7.39	109.36	106.40
1	1A	1836	C	N3-C2-O2	-7.39	116.73	121.90
1	1A	728	G	C5-N7-C8	7.38	107.99	104.30
32	1a	77	G	C4-N9-C1'	-7.38	116.91	126.50
1	1A	2723	C	C6-N1-C2	-7.38	117.35	120.30
1	1A	975	C	C2-N3-C4	-7.36	116.22	119.90
56	1y	33	U	N3-C2-O2	-7.36	117.05	122.20
32	2a	254	G	O5'-P-OP1	-7.35	99.09	105.70
1	1A	528	A	O5'-P-OP2	-7.34	99.09	105.70
1	1A	250	G	C8-N9-C4	-7.33	103.47	106.40
1	2A	2136	C	C2-N1-C1'	7.33	126.87	118.80
1	2A	1696	G	O5'-P-OP2	-7.33	99.11	105.70
1	1A	1993	U	O5'-P-OP1	-7.32	99.11	105.70
1	1A	682	G	C5-C6-O6	-7.32	124.21	128.60
1	1A	2419	U	N3-C4-O4	-7.31	114.28	119.40
1	2A	2593	U	N3-C4-O4	-7.31	114.28	119.40
1	1A	741	G	O5'-P-OP1	-7.29	99.14	105.70
1	1A	1195	G	N1-C6-O6	-7.29	115.53	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	1y	33	U	C2-N1-C1'	7.29	126.44	117.70
1	1A	2618	G	C4-C5-N7	-7.28	107.89	110.80
32	1a	904	C	O5'-P-OP2	-7.28	99.14	105.70
1	1A	2330	G	O5'-P-OP1	-7.28	99.15	105.70
32	2a	1030	C	C2-N3-C4	7.26	123.53	119.90
1	1A	1192	G	N7-C8-N9	-7.25	109.47	113.10
1	2A	1698	A	C2-N3-C4	-7.24	106.98	110.60
1	1A	830	G	C5-C6-O6	7.24	132.94	128.60
1	2A	1614	A	O5'-P-OP1	-7.24	99.18	105.70
32	1a	968	A	N1-C6-N6	7.24	122.94	118.60
1	1A	139(A)	G	C5-N7-C8	7.24	107.92	104.30
32	1a	975	A	O4'-C1'-N9	-7.23	102.41	108.20
1	1A	1993	U	C5-C6-N1	-7.23	119.08	122.70
1	1A	2319	G	C5-N7-C8	-7.23	100.68	104.30
32	1a	803	G	C5-C6-O6	7.22	132.93	128.60
1	1A	2584	U	C5-C4-O4	7.21	130.23	125.90
1	1A	2507	C	N3-C4-C5	-7.19	119.02	121.90
1	1A	570	G	C6-N1-C2	-7.19	120.79	125.10
1	1A	975(A)	G	C5-C6-N1	7.18	115.09	111.50
1	1A	1938	A	O5'-P-OP1	-7.18	99.23	105.70
1	1A	743	G	C5-C6-N1	7.18	115.09	111.50
1	1A	2024	G	C5-C6-O6	-7.17	124.30	128.60
32	2a	568	G	C8-N9-C4	-7.17	103.53	106.40
1	1A	1553	A	C5-N7-C8	7.16	107.48	103.90
1	1A	2494	G	N9-C4-C5	7.16	108.27	105.40
54	2w	48	C	N1-C2-O2	7.16	123.20	118.90
1	1A	745	G	C5-C6-O6	-7.16	124.31	128.60
1	1A	947	G	C4-C5-N7	-7.16	107.94	110.80
1	2A	1975	G	C8-N9-C4	7.14	109.26	106.40
1	1A	2167	U	C2-N1-C1'	7.13	126.25	117.70
1	1A	1075	C	N3-C4-C5	-7.12	119.05	121.90
1	1A	1700	A	O5'-P-OP2	7.12	119.24	110.70
1	1A	1627	G	N1-C6-O6	-7.12	115.63	119.90
1	1A	465	G	C8-N9-C4	-7.11	103.56	106.40
1	1A	1619	G	C5-C6-N1	7.10	115.05	111.50
1	1A	205	G	O5'-P-OP2	-7.08	99.32	105.70
1	1A	881	G	C8-N9-C4	-7.08	103.57	106.40
54	1w	23	A	N1-C6-N6	7.08	122.84	118.60
1	1A	762	U	C5-C4-O4	-7.07	121.66	125.90
32	2a	754	C	N1-C2-O2	7.06	123.14	118.90
1	1A	1966	A	C8-N9-C4	7.05	108.62	105.80
1	1A	537	C	OP1-P-OP2	-7.05	109.03	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2042	A	O5'-P-OP2	-7.05	99.36	105.70
1	1A	1063	G	N3-C2-N2	7.05	124.83	119.90
1	2A	512	G	O4'-C1'-N9	7.04	113.83	108.20
32	2a	1263	C	N3-C4-N4	-7.04	113.07	118.00
32	1a	693	G	N1-C6-O6	-7.04	115.68	119.90
1	1A	240	G	N3-C2-N2	-7.03	114.98	119.90
1	1A	1976	U	N3-C2-O2	7.03	127.12	122.20
32	1a	1158	C	C2-N1-C1'	7.03	126.53	118.80
1	1A	2455	G	N3-C4-C5	-7.03	125.09	128.60
1	1A	2479	G	C5-C6-O6	7.02	132.81	128.60
2	2B	30	C	C6-N1-C2	-7.02	117.49	120.30
32	2a	97	G	N3-C4-N9	-7.02	121.79	126.00
1	2A	2286	A	N7-C8-N9	7.01	117.31	113.80
1	2A	1420	U	P-O3'-C3'	7.01	128.11	119.70
1	1A	2789	C	N1-C2-O2	-7.01	114.69	118.90
56	2y	4	C	C6-N1-C2	-7.00	117.50	120.30
1	1A	1192	G	C5-N7-C8	7.00	107.80	104.30
1	1A	2267	A	O4'-C1'-N9	-7.00	102.60	108.20
1	1A	2156	G	C8-N9-C4	-6.99	103.60	106.40
32	2a	1037	C	C6-N1-C2	-6.99	117.50	120.30
1	1A	755	C	C4-C5-C6	6.99	120.89	117.40
1	1A	2159	G	N3-C4-N9	6.99	130.19	126.00
1	1A	2685	G	C6-C5-N7	6.98	134.59	130.40
2	1B	79	C	C6-N1-C2	-6.98	117.51	120.30
1	1A	131	G	C5-C6-N1	6.97	114.99	111.50
1	2A	2512	C	C6-N1-C2	6.97	123.09	120.30
2	2B	1	U	C5-C6-N1	6.96	126.18	122.70
1	1A	487	C	C6-N1-C2	6.96	123.08	120.30
1	2A	945	A	C6-C5-N7	-6.96	127.43	132.30
1	1A	1404	C	C5-C6-N1	-6.96	117.52	121.00
32	1a	174	C	C6-N1-C2	-6.96	117.52	120.30
1	1A	775	G	C5-C6-N1	6.96	114.98	111.50
1	1A	975	C	N1-C2-N3	6.96	124.07	119.20
1	1A	2455	G	N3-C4-N9	6.96	130.17	126.00
1	2A	1698	A	C4-C5-N7	6.96	114.18	110.70
1	1A	1969	A	OP1-P-O3'	6.95	120.50	105.20
1	1A	2069	G	O5'-P-OP2	-6.95	99.44	105.70
1	2A	797	C	C6-N1-C2	-6.95	117.52	120.30
1	2A	2137	C	C5-C6-N1	6.95	124.48	121.00
1	2A	1638	C	C6-N1-C2	6.95	123.08	120.30
1	1A	444	C	O5'-P-OP1	6.95	119.04	110.70
32	1a	754	C	C2-N1-C1'	6.95	126.44	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2380	C	N1-C2-O2	-6.94	114.73	118.90
1	1A	728	G	C5-C6-O6	6.94	132.76	128.60
1	1A	518	G	C4-C5-N7	-6.94	108.02	110.80
1	2A	2129	C	N3-C2-O2	-6.94	117.04	121.90
1	1A	775	G	C4-C5-N7	6.93	113.57	110.80
1	1A	1153	C	N3-C2-O2	6.93	126.75	121.90
1	1A	2515	C	C5-C4-N4	-6.93	115.35	120.20
1	1A	2629	A	P-O3'-C3'	6.93	128.01	119.70
32	1a	816	A	O5'-P-OP2	-6.93	99.47	105.70
1	2A	784	A	OP1-P-O3'	6.93	120.44	105.20
1	2A	1542	A	O5'-P-OP1	-6.92	99.47	105.70
1	2A	2231	C	C6-N1-C2	6.91	123.06	120.30
1	2A	2282	G	C5-C6-O6	-6.91	124.45	128.60
1	1A	2228	G	C5-C6-O6	6.90	132.74	128.60
1	2A	197	A	C8-N9-C4	-6.90	103.04	105.80
1	1A	1272	A	O5'-P-OP1	6.90	118.98	110.70
1	1A	2507	C	N1-C2-O2	-6.90	114.76	118.90
32	1a	1111	A	O5'-P-OP2	-6.89	99.50	105.70
1	1A	1139	G	N3-C2-N2	6.89	124.72	119.90
1	1A	2575	C	N3-C4-N4	-6.88	113.18	118.00
1	1A	2791	C	C6-N1-C2	-6.88	117.55	120.30
1	2A	1800	C	N3-C2-O2	-6.88	117.09	121.90
32	1a	1143	G	C5-C6-O6	-6.87	124.48	128.60
1	1A	1607	C	N3-C4-C5	-6.87	119.15	121.90
1	1A	2593	U	N3-C4-C5	6.86	118.72	114.60
2	1B	33	G	O5'-P-OP2	-6.86	99.53	105.70
1	1A	2453	A	N7-C8-N9	-6.85	110.38	113.80
1	1A	2024	G	N1-C6-O6	6.85	124.01	119.90
1	1A	2130	U	C5-C6-N1	6.85	126.12	122.70
1	1A	504	U	N3-C2-O2	-6.84	117.41	122.20
32	1a	1531	A	C8-N9-C4	-6.83	103.07	105.80
1	2A	2143	C	C2-N3-C4	6.83	123.31	119.90
1	1A	186	G	C8-N9-C4	6.82	109.13	106.40
1	1A	1568	G	C8-N9-C1'	6.82	135.87	127.00
1	1A	728	G	C4-C5-N7	-6.82	108.07	110.80
32	1a	368	U	C5-C4-O4	-6.82	121.81	125.90
1	1A	616	G	O5'-P-OP2	-6.81	99.57	105.70
1	1A	2646	C	C6-N1-C2	-6.81	117.58	120.30
1	1A	704	G	O4'-C1'-N9	6.80	113.64	108.20
1	1A	2323	G	C5-C6-O6	-6.80	124.52	128.60
54	1w	71	G	N3-C4-N9	-6.80	121.92	126.00
1	1A	1217	C	C6-N1-C2	-6.80	117.58	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1030(B)	C	C5-C6-N1	6.80	124.40	121.00
32	2a	90	U	N1-C2-O2	-6.80	118.04	122.80
1	1A	784	A	OP1-P-O3'	6.80	120.16	105.20
1	1A	2002	G	N7-C8-N9	-6.79	109.70	113.10
32	1a	1206	G	N3-C4-N9	6.79	130.07	126.00
1	1A	2607	G	C5-C6-O6	-6.79	124.53	128.60
1	1A	1395	A	C8-N9-C4	6.79	108.52	105.80
1	2A	2129	C	C2-N3-C4	6.79	123.29	119.90
1	1A	2645	G	N3-C4-N9	-6.79	121.93	126.00
1	1A	468	G	N9-C4-C5	6.78	108.11	105.40
1	1A	2228	G	N1-C6-O6	-6.78	115.83	119.90
1	2A	1260	G	N1-C6-O6	-6.78	115.83	119.90
1	2A	1661	G	O5'-P-OP2	-6.78	99.60	105.70
1	2A	2679	A	O5'-P-OP2	-6.77	99.61	105.70
1	1A	2035	G	C5-C6-O6	-6.77	124.54	128.60
32	1a	760	G	N1-C6-O6	6.77	123.96	119.90
1	2A	2443	C	N3-C2-O2	-6.77	117.16	121.90
1	1A	682	G	N1-C6-O6	6.76	123.96	119.90
1	1A	117	G	O5'-P-OP2	-6.76	99.61	105.70
1	1A	975	C	N1-C2-O2	-6.76	114.84	118.90
1	1A	1009	A	OP1-P-OP2	-6.76	109.46	119.60
1	1A	1391	U	N3-C2-O2	-6.76	117.47	122.20
54	1w	23	A	C5-C6-N6	-6.76	118.29	123.70
1	2A	2440	C	O5'-P-OP1	-6.76	99.62	105.70
32	2a	315	A	N1-C6-N6	6.75	122.65	118.60
1	2A	528	A	C5-N7-C8	-6.75	100.52	103.90
1	2A	1356	G	N3-C2-N2	-6.75	115.17	119.90
1	2A	1698	A	C6-C5-N7	-6.75	127.57	132.30
55	2x	22	G	C5-C6-N1	6.75	114.88	111.50
1	1A	1259	G	C8-N9-C4	6.75	109.10	106.40
1	1A	1345	C	C5-C6-N1	-6.75	117.63	121.00
32	2a	1272	G	N3-C4-N9	6.75	130.05	126.00
32	1a	1225	A	C5-C6-N6	6.74	129.09	123.70
1	1A	444	C	C2-N1-C1'	-6.74	111.39	118.80
1	1A	1148	A	C8-N9-C4	6.74	108.49	105.80
1	1A	1842	G	N1-C6-O6	-6.73	115.86	119.90
32	1a	115	G	P-O3'-C3'	6.73	127.78	119.70
32	2a	1272	G	C4-C5-C6	6.73	122.84	118.80
32	2a	1204	A	C6-N1-C2	6.73	122.64	118.60
1	1A	272(E)	G	N1-C6-O6	6.73	123.94	119.90
54	1w	75	C	C6-N1-C2	6.73	122.99	120.30
1	1A	1395	A	N7-C8-N9	-6.72	110.44	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2084	C	C6-N1-C2	-6.72	117.61	120.30
1	2A	856	C	C6-N1-C2	-6.72	117.61	120.30
1	2A	2286	A	C5-N7-C8	-6.72	100.54	103.90
1	2A	1831	G	C5-C6-O6	6.71	132.63	128.60
1	1A	598	G	O5'-P-OP2	-6.71	99.66	105.70
1	2A	1372	U	N3-C4-O4	6.71	124.10	119.40
1	2A	528	A	C2-N3-C4	-6.71	107.25	110.60
1	1A	226	G	O4'-C1'-N9	6.70	113.56	108.20
1	1A	1190	G	C5-N7-C8	6.70	107.65	104.30
32	1a	1417	G	C5-C6-N1	6.70	114.85	111.50
1	2A	897	C	N1-C2-O2	6.70	122.92	118.90
55	2x	14	A	C5-C6-N1	-6.70	114.35	117.70
54	1w	12	U	C2-N3-C4	-6.70	122.98	127.00
1	1A	2444	G	N7-C8-N9	-6.70	109.75	113.10
9	2N	77	GLY	C-N-CA	6.69	138.44	121.70
1	1A	725	G	N3-C4-C5	-6.69	125.25	128.60
1	1A	1790	C	C2-N3-C4	6.69	123.24	119.90
2	1B	98	G	O5'-P-OP2	-6.68	99.69	105.70
1	1A	339	U	C5-C4-O4	6.67	129.90	125.90
32	2a	1056	U	C2-N3-C4	6.67	131.00	127.00
1	1A	1139	G	N1-C2-N2	-6.67	110.20	116.20
1	1A	242	G	N7-C8-N9	-6.67	109.77	113.10
1	2A	1204	A	C2-N3-C4	-6.66	107.27	110.60
1	1A	1257	C	N3-C4-C5	-6.66	119.24	121.90
1	1A	2848	G	O4'-C1'-N9	6.66	113.53	108.20
1	2A	2407	G	C6-C5-N7	-6.66	126.41	130.40
1	1A	1967	C	C6-N1-C2	-6.65	117.64	120.30
32	1a	1034	G	C5-C6-O6	6.65	132.59	128.60
32	2a	1189	C	N1-C2-O2	6.65	122.89	118.90
1	2A	1296	G	N1-C6-O6	-6.65	115.91	119.90
1	2A	1790	C	C2-N3-C4	6.64	123.22	119.90
1	1A	952	G	C5-C6-O6	-6.64	124.61	128.60
32	1a	1389	C	C6-N1-C2	6.64	122.96	120.30
1	1A	1184	G	O5'-P-OP2	-6.64	99.73	105.70
1	1A	1391	U	C5-C4-O4	6.64	129.88	125.90
1	1A	2612	C	O5'-P-OP2	-6.63	99.73	105.70
1	2A	186	G	N9-C4-C5	6.63	108.05	105.40
1	1A	1075	C	N1-C2-O2	6.63	122.88	118.90
1	2A	2254	C	O5'-P-OP1	-6.63	99.73	105.70
55	2x	22	G	N3-C4-N9	-6.63	122.02	126.00
1	1A	1005	C	N3-C4-C5	6.62	124.55	121.90
1	2A	141	A	N7-C8-N9	6.62	117.11	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1063	C	N1-C2-O2	-6.61	114.93	118.90
32	1a	1151	A	O5'-P-OP2	-6.61	99.75	105.70
1	2A	1366	A	O5'-P-OP2	-6.61	99.75	105.70
32	1a	1067	A	P-O3'-C3'	6.61	127.63	119.70
1	1A	843	G	N1-C6-O6	-6.60	115.94	119.90
1	1A	385	C	C6-N1-C2	6.59	122.94	120.30
1	1A	518	G	C6-C5-N7	6.59	134.35	130.40
1	1A	1036	G	C8-N9-C4	6.59	109.04	106.40
1	1A	780	G	N1-C6-O6	-6.59	115.95	119.90
1	1A	1778	U	C5-C6-N1	6.59	125.99	122.70
1	1A	422	A	O5'-P-OP2	-6.58	99.78	105.70
1	1A	563	G	C5-C6-O6	6.58	132.55	128.60
1	1A	2754	U	OP2-P-O3'	6.58	119.67	105.20
32	1a	328	C	O5'-P-OP1	-6.58	99.78	105.70
54	1w	12	U	C5-C4-O4	-6.58	121.95	125.90
1	1A	1170	G	C6-C5-N7	-6.57	126.46	130.40
32	1a	906	G	N1-C6-O6	6.57	123.84	119.90
1	1A	1180	C	C6-N1-C2	6.57	122.93	120.30
1	2A	2593	U	N3-C4-C5	6.56	118.54	114.60
32	2a	1256	A	O4'-C1'-N9	-6.56	102.95	108.20
1	1A	529	A	C5-N7-C8	-6.56	100.62	103.90
1	1A	1795	C	N3-C4-C5	6.55	124.52	121.90
1	1A	2023	G	O5'-P-OP2	6.55	118.56	110.70
1	1A	978	G	C8-N9-C4	-6.55	103.78	106.40
1	2A	897	C	C5-C6-N1	6.55	124.27	121.00
1	1A	2140	C	C2-N3-C4	6.55	123.17	119.90
1	2A	2499	C	O5'-P-OP2	-6.54	99.81	105.70
1	2A	2804	C	C6-N1-C2	-6.54	117.69	120.30
1	2A	726	G	N1-C6-O6	-6.54	115.98	119.90
1	1A	468	G	C4-C5-N7	-6.53	108.19	110.80
1	1A	1174	A	P-O3'-C3'	6.53	127.54	119.70
1	1A	1356	G	C5-C6-O6	-6.53	124.68	128.60
32	1a	254	G	O5'-P-OP2	6.53	118.54	110.70
1	1A	143(A)	C	OP1-P-OP2	-6.53	109.81	119.60
1	2A	2437	U	N3-C2-O2	-6.53	117.63	122.20
1	1A	37	C	N1-C2-O2	-6.52	114.99	118.90
1	1A	462	C	N1-C2-O2	-6.52	114.99	118.90
1	2A	774	A	C8-N9-C4	-6.51	103.19	105.80
1	2A	2755	C	C5-C6-N1	6.51	124.25	121.00
55	2x	22	G	N1-C6-O6	-6.51	115.99	119.90
1	1A	1198	U	C2-N3-C4	-6.51	123.09	127.00
1	1A	2385	C	C6-N1-C2	6.51	122.90	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2491	U	OP1-P-O3'	6.50	119.51	105.20
1	1A	884	C	C5-C6-N1	6.50	124.25	121.00
1	1A	2430	A	O5'-P-OP2	-6.50	99.85	105.70
1	2A	2089	U	N3-C2-O2	6.50	126.75	122.20
1	1A	881	G	N7-C8-N9	6.50	116.35	113.10
55	1x	22	G	C8-N9-C1'	6.50	135.44	127.00
1	2A	2267	A	N1-C6-N6	6.50	122.50	118.60
1	1A	2364	C	N3-C4-C5	6.49	124.50	121.90
1	1A	2261	C	C6-N1-C2	6.49	122.90	120.30
32	2a	1004	A	N1-C6-N6	6.48	122.49	118.60
1	1A	1339	G	C5-C6-O6	-6.48	124.71	128.60
1	1A	794	G	C8-N9-C4	6.47	108.99	106.40
1	1A	1289	C	N3-C4-C5	-6.47	119.31	121.90
1	1A	1216	G	C8-N9-C4	-6.47	103.81	106.40
1	1A	982	C	N1-C2-O2	-6.47	115.02	118.90
1	1A	2757	A	C8-N9-C4	-6.46	103.22	105.80
32	1a	1221	G	C6-N1-C2	6.46	128.98	125.10
56	2y	4	C	C2-N3-C4	6.46	123.13	119.90
6	1G	140	ILE	C-N-CA	6.46	137.85	121.70
1	1A	2560	C	C6-N1-C2	-6.46	117.72	120.30
1	2A	466	A	N3-C4-C5	-6.46	122.28	126.80
1	2A	746	A	O4'-C1'-N9	6.45	113.36	108.20
1	1A	1611	C	N3-C4-C5	-6.45	119.32	121.90
1	2A	2111	C	C6-N1-C2	-6.45	117.72	120.30
1	1A	2861	G	N1-C6-O6	6.44	123.77	119.90
1	1A	1684	C	N1-C2-O2	-6.44	115.04	118.90
1	1A	1266	G	C8-N9-C4	6.44	108.97	106.40
1	2A	488	G	N1-C6-O6	6.44	123.76	119.90
1	1A	2374	C	C6-N1-C2	6.43	122.87	120.30
1	2A	2307	G	N3-C4-N9	6.43	129.86	126.00
1	2A	1992	G	P-O3'-C3'	6.43	127.42	119.70
1	1A	2501	C	C2-N1-C1'	-6.43	111.73	118.80
1	1A	2577	A	C5-N7-C8	6.42	107.11	103.90
1	1A	1003	G	N3-C4-C5	-6.42	125.39	128.60
1	2A	2685	G	N1-C6-O6	-6.42	116.05	119.90
1	1A	1286	A	O5'-P-OP2	-6.41	99.93	105.70
1	1A	1697	G	C5-C6-O6	-6.41	124.75	128.60
1	1A	2130	U	C6-N1-C2	-6.41	117.16	121.00
1	1A	781	A	O5'-P-OP1	-6.41	99.94	105.70
1	1A	576	U	O5'-P-OP1	-6.40	99.94	105.70
1	2A	265	A	O4'-C1'-N9	6.40	113.32	108.20
1	2A	1978	A	O5'-P-OP2	-6.40	99.94	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1003	G	C6-N1-C2	-6.40	121.26	125.10
32	1a	1221	G	C5-C6-N1	-6.40	108.30	111.50
32	2a	578	C	O5'-P-OP2	-6.39	99.95	105.70
1	2A	2108	C	C6-N1-C2	-6.38	117.75	120.30
1	1A	131	G	C6-N1-C2	-6.38	121.27	125.10
1	1A	1338	G	C2-N3-C4	-6.38	108.71	111.90
32	2a	1031	G	N3-C4-C5	6.38	131.79	128.60
1	2A	1769	G	C6-C5-N7	-6.38	126.57	130.40
54	2w	11	C	C2-N1-C1'	6.38	125.82	118.80
1	1A	446	G	N1-C6-O6	6.38	123.72	119.90
1	1A	2002	G	C5-N7-C8	6.37	107.49	104.30
55	2x	46	G	C5-C6-O6	-6.37	124.78	128.60
2	1B	30	C	C6-N1-C2	-6.37	117.75	120.30
32	1a	1370	G	C8-N9-C4	-6.37	103.85	106.40
32	2a	115	G	O5'-P-OP2	-6.37	99.97	105.70
56	2y	31	A	C6-N1-C2	6.37	122.42	118.60
56	1y	27	G	N3-C2-N2	-6.37	115.44	119.90
1	1A	982	C	C6-N1-C2	-6.36	117.75	120.30
1	1A	1188	U	N1-C2-O2	6.36	127.25	122.80
32	1a	968	A	C5-C6-N6	-6.36	118.61	123.70
1	2A	2148	G	C6-N1-C2	6.36	128.91	125.10
1	1A	975(A)	G	N1-C6-O6	-6.36	116.09	119.90
1	1A	2036	C	O5'-P-OP1	-6.35	99.98	105.70
1	1A	2384	G	N1-C6-O6	6.35	123.71	119.90
1	1A	32	C	C5-C4-N4	6.35	124.65	120.20
1	1A	99	U	O5'-P-OP2	-6.35	99.98	105.70
1	1A	1000	A	N1-C6-N6	-6.35	114.79	118.60
1	1A	1440	G	O5'-P-OP2	-6.35	99.99	105.70
1	2A	1640	C	C5-C6-N1	6.35	124.17	121.00
32	2a	1263	C	C6-N1-C1'	-6.35	113.18	120.80
1	1A	1558	A	O5'-P-OP1	-6.34	99.99	105.70
1	1A	1710	C	C6-N1-C2	6.34	122.84	120.30
1	1A	2584	U	N3-C4-O4	-6.34	114.96	119.40
1	2A	1269	A	N1-C6-N6	6.34	122.41	118.60
1	2A	2286	A	C6-C5-N7	-6.34	127.86	132.30
1	1A	1704	G	N3-C4-C5	6.34	131.77	128.60
1	1A	2007	C	N3-C2-O2	-6.34	117.46	121.90
55	1x	14	A	C4-C5-N7	-6.34	107.53	110.70
1	2A	2848	G	O4'-C1'-N9	6.34	113.27	108.20
1	1A	1936	A	O4'-C1'-N9	6.33	113.27	108.20
1	1A	45	C	N3-C4-N4	-6.33	113.57	118.00
1	1A	127	A	O5'-P-OP2	-6.33	100.00	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2479	G	N1-C6-O6	-6.33	116.10	119.90
32	2a	1286	A	C8-N9-C4	-6.33	103.27	105.80
1	1A	939	G	C2-N3-C4	6.33	115.06	111.90
1	1A	966	G	N1-C6-O6	-6.33	116.11	119.90
2	1B	102	A	C8-N9-C4	6.33	108.33	105.80
32	1a	230	G	C8-N9-C4	-6.32	103.87	106.40
32	2a	1286	A	C5-N7-C8	-6.32	100.74	103.90
1	1A	2789	C	C6-N1-C2	6.32	122.83	120.30
1	2A	1938	A	O5'-P-OP2	-6.32	100.01	105.70
1	1A	2602	A	OP1-P-OP2	-6.32	110.12	119.60
1	1A	2708	G	O5'-P-OP2	-6.32	100.02	105.70
1	1A	1992	G	O4'-C1'-N9	-6.31	103.15	108.20
32	2a	563	A	O4'-C1'-N9	6.31	113.25	108.20
1	1A	1984	G	N3-C2-N2	-6.31	115.48	119.90
1	2A	1187	G	C8-N9-C4	-6.31	103.88	106.40
1	1A	1187	G	N3-C2-N2	6.30	124.31	119.90
1	1A	2012	G	O5'-P-OP2	-6.30	100.03	105.70
1	1A	2494	G	C4-C5-N7	-6.30	108.28	110.80
1	1A	2764	A	O5'-P-OP1	-6.30	100.03	105.70
1	1A	729	G	N9-C4-C5	6.30	107.92	105.40
1	2A	2407	G	N3-C4-N9	6.29	129.78	126.00
1	2A	1558	A	N1-C2-N3	6.29	132.44	129.30
1	2A	967	C	N1-C2-O2	-6.28	115.13	118.90
1	1A	809	G	C2-N3-C4	-6.28	108.76	111.90
1	1A	495	G	N1-C6-O6	6.28	123.67	119.90
1	2A	945	A	C5-C6-N1	-6.28	114.56	117.70
1	1A	2239	G	O5'-P-OP1	-6.27	100.05	105.70
1	2A	330	A	C2-N3-C4	-6.27	107.46	110.60
32	1a	1225	A	C6-N1-C2	6.27	122.36	118.60
1	1A	1037	G	N1-C6-O6	6.26	123.66	119.90
32	1a	1264	C	C6-N1-C2	6.26	122.81	120.30
32	1a	760	G	C5-C6-O6	-6.25	124.85	128.60
1	1A	1442	G	C8-N9-C4	-6.25	103.90	106.40
1	1A	1176	G	OP1-P-O3'	6.25	118.95	105.20
55	1x	12	G	N3-C4-N9	6.25	129.75	126.00
1	1A	2391	G	C8-N9-C4	6.25	108.90	106.40
1	1A	2074	U	C5-C4-O4	6.25	129.65	125.90
1	1A	2342	C	N1-C2-O2	-6.25	115.15	118.90
1	1A	2568	C	N1-C2-O2	-6.25	115.15	118.90
1	1A	378	C	C5-C4-N4	-6.24	115.83	120.20
1	1A	925	C	C6-N1-C2	6.24	122.80	120.30
1	1A	1772	G	N9-C1'-C2'	-6.24	105.14	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1497	U	O5'-P-OP1	-6.23	100.09	105.70
1	2A	1800	C	N1-C2-O2	6.23	122.64	118.90
1	2A	2500	U	C5-C4-O4	6.23	129.64	125.90
1	1A	2538	C	C6-N1-C2	6.23	122.79	120.30
32	2a	1226	C	N1-C2-O2	-6.22	115.17	118.90
1	2A	2267	A	OP1-P-OP2	6.22	128.93	119.60
1	1A	674	G	C4-C5-N7	6.22	113.29	110.80
1	1A	1591	G	N1-C6-O6	-6.22	116.17	119.90
1	2A	336	C	O5'-P-OP2	-6.22	100.10	105.70
40	2i	56	LEU	CA-CB-CG	6.22	129.60	115.30
1	1A	533	G	C5-C6-O6	-6.22	124.87	128.60
1	1A	1772	G	C8-N9-C4	6.22	108.89	106.40
1	1A	671	C	C5-C4-N4	6.21	124.55	120.20
1	1A	2032	G	C5-N7-C8	6.21	107.41	104.30
1	1A	2350	C	C6-N1-C2	6.21	122.79	120.30
1	2A	265	A	N7-C8-N9	6.21	116.91	113.80
1	2A	2155	G	N3-C2-N2	6.21	124.25	119.90
1	2A	90	U	N1-C2-O2	6.21	127.15	122.80
1	1A	784	A	O4'-C1'-N9	6.21	113.17	108.20
32	1a	77	G	C6-C5-N7	6.21	134.12	130.40
32	2a	1428	A	C8-N9-C4	-6.21	103.32	105.80
32	1a	841	U	C6-N1-C2	-6.20	117.28	121.00
32	2a	458	C	C6-N1-C2	-6.20	117.82	120.30
1	1A	396	G	O5'-P-OP1	-6.20	100.12	105.70
1	1A	990	A	N1-C6-N6	6.20	122.32	118.60
33	1b	11	LEU	CA-CB-CG	6.19	129.54	115.30
56	1y	15	G	N3-C2-N2	6.19	124.23	119.90
1	1A	2610	C	N3-C2-O2	-6.19	117.57	121.90
1	2A	1579	A	N1-C6-N6	6.18	122.31	118.60
1	1A	819	A	O5'-P-OP1	-6.18	100.14	105.70
1	1A	2685	G	C5-C6-O6	6.18	132.31	128.60
54	1w	71	G	N3-C2-N2	-6.18	115.57	119.90
1	2A	1633	G	C8-N9-C4	-6.18	103.93	106.40
2	2B	80	U	C5'-C4'-O4'	6.18	116.52	109.10
32	1a	1027	C	C2-N1-C1'	-6.18	112.00	118.80
32	1a	589	C	C6-N1-C2	-6.18	117.83	120.30
1	1A	1308	A	N1-C6-N6	-6.17	114.89	118.60
1	2A	1128	A	N7-C8-N9	-6.17	110.71	113.80
1	1A	481	G	O4'-C1'-N9	6.17	113.14	108.20
1	2A	792	G	N3-C4-N9	6.17	129.70	126.00
32	2a	530	G	C8-N9-C4	-6.17	103.93	106.40
1	1A	1661	G	C8-N9-C4	6.17	108.87	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1052	C	C6-N1-C2	-6.16	117.83	120.30
1	2A	614	U	N3-C2-O2	-6.16	117.89	122.20
1	2A	779	U	C5-C4-O4	-6.16	122.20	125.90
1	1A	1568	G	N3-C4-N9	-6.16	122.30	126.00
1	2A	1984	G	N9-C4-C5	6.16	107.86	105.40
1	1A	463	G	C4-C5-N7	-6.16	108.34	110.80
32	1a	266	G	P-O3'-C3'	6.15	127.08	119.70
56	1y	44	G	C5-C6-O6	-6.15	124.91	128.60
1	2A	2229	C	N3-C4-C5	-6.15	119.44	121.90
1	1A	250	G	N9-C4-C5	6.15	107.86	105.40
32	1a	676	A	C8-N9-C4	-6.15	103.34	105.80
1	1A	1453	U	C5-C4-O4	-6.15	122.21	125.90
1	1A	563	G	N1-C6-O6	-6.15	116.21	119.90
1	1A	652(T)	C	C6-N1-C2	-6.15	117.84	120.30
1	1A	1865	G	N1-C6-O6	6.15	123.59	119.90
32	1a	1034	G	C5-C6-N1	-6.15	108.43	111.50
32	2a	79	G	C5-C6-O6	6.14	132.29	128.60
1	2A	514	A	C8-N9-C4	6.14	108.26	105.80
1	2A	387	U	OP1-P-O3'	6.14	118.71	105.20
1	2A	1698	A	C5-N7-C8	-6.14	100.83	103.90
1	2A	2318	G	C4-N9-C1'	6.14	134.48	126.50
1	1A	515	A	C2-N3-C4	6.14	113.67	110.60
1	1A	2610	C	N1-C2-O2	6.14	122.58	118.90
1	1A	2679	A	O5'-P-OP2	-6.14	100.18	105.70
2	1B	100	A	C8-N9-C4	6.13	108.25	105.80
1	1A	2439	A	N1-C6-N6	6.13	122.28	118.60
32	1a	1417	G	N3-C4-N9	6.13	129.68	126.00
1	1A	794	G	N9-C4-C5	-6.13	102.95	105.40
1	1A	2134	A	P-O3'-C3'	6.13	127.05	119.70
1	1A	2444	G	C8-N9-C4	6.13	108.85	106.40
1	1A	2513	G	C8-N9-C4	-6.13	103.95	106.40
32	1a	1509	C	C2-N1-C1'	-6.13	112.06	118.80
1	2A	450	G	C5-C6-N1	6.12	114.56	111.50
1	1A	1394	U	C5-C4-O4	-6.12	122.23	125.90
1	1A	1647	G	O4'-C1'-N9	-6.12	103.30	108.20
32	1a	913	A	N9-C4-C5	6.12	108.25	105.80
1	2A	2148	G	N3-C4-C5	6.12	131.66	128.60
1	1A	2598	A	O5'-P-OP1	-6.12	100.19	105.70
1	1A	2035	G	N1-C6-O6	6.12	123.57	119.90
1	1A	976	C	O5'-P-OP2	-6.11	100.20	105.70
1	1A	1025	G	N1-C6-O6	-6.11	116.23	119.90
1	1A	1777	U	C5-C4-O4	6.11	129.57	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	1B	102	A	N7-C8-N9	-6.11	110.75	113.80
1	1A	190	A	N7-C8-N9	6.11	116.85	113.80
1	1A	2016	U	N3-C2-O2	6.11	126.48	122.20
1	1A	2715	C	N3-C4-C5	6.11	124.34	121.90
1	1A	529	A	N7-C8-N9	6.10	116.85	113.80
32	1a	1463	C	N1-C2-O2	6.10	122.56	118.90
55	1x	22	G	N3-C4-C5	6.10	131.65	128.60
32	2a	1030	C	C5-C6-N1	6.10	124.05	121.00
1	1A	897	C	N3-C2-O2	6.10	126.17	121.90
1	2A	2286	A	C2-N3-C4	-6.10	107.55	110.60
1	2A	2286	A	C8-N9-C4	-6.10	103.36	105.80
32	2a	775	G	N1-C6-O6	6.10	123.56	119.90
1	1A	2033	A	O5'-P-OP1	-6.10	100.21	105.70
1	2A	975	C	N3-C2-O2	-6.09	117.63	121.90
1	2A	2142	C	N1-C2-O2	6.09	122.56	118.90
1	1A	1627	G	C5-C6-N1	6.09	114.55	111.50
1	1A	27	G	O4'-C1'-N9	6.09	113.07	108.20
1	1A	2229	C	N3-C4-N4	-6.08	113.74	118.00
1	1A	2597	G	C5-C6-O6	-6.08	124.95	128.60
1	1A	1842	G	C5-C6-O6	6.07	132.24	128.60
2	1B	79	C	N3-C2-O2	-6.07	117.65	121.90
32	2a	48	C	O5'-P-OP2	-6.07	100.24	105.70
32	1a	1514	C	C6-N1-C2	-6.06	117.88	120.30
1	2A	80	G	O5'-P-OP1	-6.06	100.25	105.70
1	2A	2730	C	C6-N1-C2	-6.06	117.88	120.30
1	1A	2247	A	N1-C2-N3	6.06	132.33	129.30
1	1A	2446	G	C2-N3-C4	6.06	114.93	111.90
32	1a	1004	A	N1-C6-N6	-6.06	114.97	118.60
1	1A	743	G	C2-N3-C4	6.05	114.93	111.90
32	1a	897	C	C6-N1-C2	6.05	122.72	120.30
1	2A	2226	C	C6-N1-C2	-6.05	117.88	120.30
1	1A	1190	G	C4-C5-N7	-6.05	108.38	110.80
1	1A	1314	C	C2-N3-C4	-6.05	116.87	119.90
1	2A	748	G	O4'-C1'-N9	6.05	113.04	108.20
1	1A	1086	A	C5-C6-N6	6.05	128.54	123.70
32	1a	1419	G	C8-N9-C4	-6.05	103.98	106.40
1	2A	2608	G	N1-C6-O6	6.05	123.53	119.90
1	1A	2732	G	O5'-P-OP2	-6.05	100.26	105.70
32	1a	609	A	C8-N9-C4	-6.05	103.38	105.80
1	1A	524	U	N3-C4-O4	-6.05	115.17	119.40
56	1y	3	C	N1-C2-O2	6.05	122.53	118.90
1	2A	1298	C	O5'-P-OP2	-6.05	100.26	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	754	C	C2-N1-C1'	6.05	125.45	118.80
54	2w	33	U	C2-N1-C1'	-6.05	110.44	117.70
1	1A	1064	C	C6-N1-C2	-6.04	117.88	120.30
1	2A	1308	A	O5'-P-OP2	-6.04	100.26	105.70
1	1A	2618	G	N9-C4-C5	6.04	107.81	105.40
32	1a	1158	C	N3-C2-O2	-6.04	117.67	121.90
32	1a	1225	A	N1-C6-N6	-6.03	114.98	118.60
1	2A	1296	G	C5-C6-O6	6.03	132.22	128.60
1	2A	467	G	O5'-P-OP2	-6.03	100.27	105.70
1	1A	1036	G	N9-C4-C5	-6.03	102.99	105.40
1	2A	246	C	N1-C2-O2	-6.02	115.29	118.90
1	1A	1780	A	O5'-P-OP1	-6.01	100.29	105.70
1	2A	1999	C	C6-N1-C2	6.01	122.71	120.30
1	1A	196	A	N1-C6-N6	-6.01	114.99	118.60
1	1A	978	G	N3-C2-N2	-6.01	115.69	119.90
32	1a	295	C	N3-C2-O2	-6.01	117.69	121.90
1	2A	2608	G	C5-C6-O6	-6.01	124.99	128.60
1	2A	466	A	C8-N9-C4	-6.00	103.40	105.80
1	1A	578	A	N7-C8-N9	6.00	116.80	113.80
32	1a	1509	C	C5-C6-N1	-6.00	118.00	121.00
55	2x	22	G	C8-N9-C1'	6.00	134.80	127.00
1	1A	936	C	O5'-P-OP2	-6.00	100.31	105.70
1	2A	945	A	N3-C4-C5	6.00	131.00	126.80
1	1A	2250	G	N3-C4-N9	5.99	129.60	126.00
1	2A	2440	C	OP1-P-O3'	5.99	118.39	105.20
1	2A	671	C	N3-C4-C5	-5.99	119.50	121.90
1	1A	298	G	C5-N7-C8	5.99	107.30	104.30
1	1A	2608	G	C8-N9-C4	5.99	108.80	106.40
1	1A	684	G	N3-C4-C5	-5.99	125.61	128.60
1	1A	985	C	O5'-P-OP2	-5.99	100.31	105.70
1	1A	1047	G	N3-C4-C5	-5.99	125.61	128.60
1	1A	1697	G	C8-N9-C4	5.99	108.80	106.40
1	1A	2040	C	N3-C4-N4	-5.99	113.81	118.00
1	1A	2790	A	C2-N3-C4	5.98	113.59	110.60
1	2A	1900	A	C2-N3-C4	5.98	113.59	110.60
1	1A	2326	C	N1-C2-O2	-5.98	115.31	118.90
1	1A	448	U	C5-C4-O4	-5.98	122.31	125.90
1	1A	449	A	N1-C2-N3	-5.98	126.31	129.30
1	1A	2608	G	C5-C6-O6	-5.98	125.01	128.60
55	2x	46	G	N3-C4-C5	-5.98	125.61	128.60
1	2A	692	C	N1-C2-O2	-5.97	115.32	118.90
1	1A	2586	C	N3-C4-C5	-5.97	119.51	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	955	U	N3-C4-C5	-5.97	111.02	114.60
1	1A	444	C	C5-C4-N4	5.97	124.38	120.20
1	2A	2093	G	N9-C4-C5	5.97	107.79	105.40
32	2a	22	G	N3-C4-C5	-5.97	125.62	128.60
1	1A	601	C	N3-C2-O2	-5.96	117.73	121.90
1	1A	1627	G	C2-N3-C4	5.96	114.88	111.90
32	1a	804	U	O5'-P-OP2	-5.96	100.33	105.70
1	1A	685	A	C8-N9-C4	-5.96	103.42	105.80
32	2a	1272	G	C6-C5-N7	-5.96	126.83	130.40
32	2a	1286	A	C5-C6-N1	-5.96	114.72	117.70
1	2A	265	A	C6-C5-N7	-5.96	128.13	132.30
1	1A	845	G	O4'-C1'-N9	5.95	112.96	108.20
1	1A	975	C	C6-N1-C1'	5.95	127.94	120.80
1	1A	947	G	C5-N7-C8	5.95	107.28	104.30
1	1A	1036	G	N3-C2-N2	5.95	124.06	119.90
32	1a	1138	G	N1-C6-O6	-5.95	116.33	119.90
1	1A	2088	G	O5'-P-OP1	-5.95	100.35	105.70
1	1A	1139	G	N1-C6-O6	-5.94	116.33	119.90
1	1A	1188	U	N3-C2-O2	-5.94	118.04	122.20
1	1A	1651	G	N1-C6-O6	5.94	123.47	119.90
1	2A	530	G	N3-C4-N9	-5.94	122.43	126.00
1	1A	1473	G	N3-C4-C5	-5.94	125.63	128.60
32	1a	1031	G	C5-C6-O6	5.94	132.16	128.60
1	1A	2191	G	C5-C6-O6	-5.94	125.04	128.60
1	1A	271(J)	C	C6-N1-C2	5.94	122.67	120.30
1	2A	1201	C	C6-N1-C2	5.94	122.67	120.30
1	1A	788	A	C8-N9-C4	5.93	108.17	105.80
1	2A	1660	C	N3-C4-N4	-5.93	113.85	118.00
1	2A	1022	G	N3-C4-N9	-5.93	122.44	126.00
1	2A	1204	A	O4'-C1'-N9	5.93	112.94	108.20
1	1A	139(A)	G	N7-C8-N9	-5.92	110.14	113.10
1	1A	1344	G	N1-C6-O6	-5.92	116.35	119.90
1	1A	2804	C	C6-N1-C2	-5.92	117.93	120.30
32	1a	820	U	N1-C2-O2	5.92	126.95	122.80
32	1a	955	U	C5-C4-O4	5.92	129.45	125.90
1	1A	2889	C	N1-C2-O2	5.92	122.45	118.90
32	2a	1158	C	C2-N1-C1'	5.92	125.31	118.80
1	1A	1836	C	C6-N1-C2	-5.92	117.93	120.30
32	1a	913	A	N1-C6-N6	-5.92	115.05	118.60
1	1A	2553	G	N3-C4-N9	5.92	129.55	126.00
32	1a	266	G	O5'-P-OP2	-5.92	100.38	105.70
1	1A	1345	C	C6-N1-C2	5.92	122.67	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	683	C	N3-C4-C5	5.91	124.27	121.90
1	1A	652(S)	C	C6-N1-C2	-5.91	117.94	120.30
1	1A	2789	C	C2-N1-C1'	-5.91	112.30	118.80
1	2A	1638	C	C5-C6-N1	-5.91	118.05	121.00
1	2A	1984	G	C8-N9-C4	-5.91	104.04	106.40
1	1A	1661	G	N7-C8-N9	-5.90	110.15	113.10
1	1A	135	G	C8-N9-C4	5.90	108.76	106.40
1	1A	1599	C	N3-C4-N4	-5.90	113.87	118.00
1	2A	2825	C	O5'-P-OP2	-5.90	100.39	105.70
1	1A	710	G	N1-C6-O6	5.90	123.44	119.90
32	1a	801	U	C5-C6-N1	-5.90	119.75	122.70
1	2A	265	A	C5-N7-C8	-5.90	100.95	103.90
1	1A	189	G	OP1-P-OP2	5.89	128.44	119.60
32	1a	1030(B)	C	C6-N1-C1'	-5.89	113.73	120.80
32	1a	1256	A	C8-N9-C4	-5.89	103.44	105.80
1	1A	1246	A	N1-C2-N3	-5.89	126.36	129.30
1	1A	2577	A	N7-C8-N9	-5.89	110.86	113.80
1	1A	975	C	C2-N1-C1'	-5.88	112.33	118.80
1	1A	548	A	P-O3'-C3'	5.88	126.76	119.70
32	1a	443	C	C6-N1-C2	5.88	122.65	120.30
1	2A	678	C	C6-N1-C2	5.88	122.65	120.30
32	1a	442	C	C2-N1-C1'	5.88	125.27	118.80
1	2A	2407	G	N1-C6-O6	5.88	123.43	119.90
1	1A	788	A	N7-C8-N9	-5.88	110.86	113.80
1	1A	1468	C	C2-N1-C1'	-5.88	112.33	118.80
1	1A	2241	A	N9-C4-C5	5.88	108.15	105.80
1	2A	1646	C	N3-C4-C5	-5.88	119.55	121.90
1	1A	1153	C	N1-C2-O2	-5.88	115.37	118.90
1	1A	2275	C	N1-C2-O2	-5.88	115.37	118.90
1	1A	565	C	C6-N1-C2	-5.87	117.95	120.30
1	2A	2803	C	C5-C6-N1	5.87	123.94	121.00
1	1A	2067	G	N3-C4-C5	-5.87	125.67	128.60
1	1A	1328	G	N3-C4-N9	5.87	129.52	126.00
1	1A	2000	G	N9-C1'-C2'	-5.87	105.55	112.00
1	1A	695	G	O5'-P-OP2	-5.86	100.43	105.70
1	1A	669	G	OP1-P-OP2	-5.86	110.81	119.60
1	2A	669	G	C8-N9-C4	5.86	108.74	106.40
32	2a	354	G	C6-C5-N7	-5.85	126.89	130.40
1	1A	725	G	C4-N9-C1'	5.85	134.11	126.50
1	1A	140	G	C5-C6-O6	-5.85	125.09	128.60
1	1A	1659	U	C6-N1-C2	-5.85	117.49	121.00
1	1A	2608	G	C5-C6-N1	5.85	114.42	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	754	C	C6-N1-C2	-5.85	117.96	120.30
1	1A	1153	C	C6-N1-C2	5.85	122.64	120.30
1	1A	2500	U	O4'-C1'-N1	5.85	112.88	108.20
2	2B	13	A	C8-N9-C4	5.85	108.14	105.80
1	1A	1003	G	N3-C4-N9	5.85	129.51	126.00
1	1A	1688	U	C2-N1-C1'	-5.84	110.69	117.70
1	1A	2430	A	O4'-C1'-N9	5.84	112.87	108.20
1	1A	1795	C	N3-C4-N4	-5.84	113.91	118.00
32	1a	1027	C	C6-N1-C1'	5.83	127.80	120.80
1	1A	2041	U	OP2-P-O3'	5.83	118.03	105.20
53	1v	13	A	N7-C8-N9	5.83	116.72	113.80
1	2A	250	G	C8-N9-C4	-5.83	104.07	106.40
1	2A	1420	U	C2-N1-C1'	5.83	124.70	117.70
1	1A	954	G	C4-C5-N7	-5.83	108.47	110.80
1	1A	2588	G	C5-C6-O6	-5.83	125.10	128.60
32	1a	913	A	P-O3'-C3'	5.83	126.69	119.70
1	2A	669	G	C5-C6-O6	-5.83	125.10	128.60
1	1A	129	C	N3-C2-O2	5.82	125.98	121.90
1	1A	2589	A	C8-N9-C4	5.82	108.13	105.80
54	1w	9	A	N1-C6-N6	-5.82	115.11	118.60
1	2A	2065	C	N3-C2-O2	-5.82	117.83	121.90
1	1A	1985	G	C8-N9-C4	5.82	108.73	106.40
1	2A	2561	A	N1-C2-N3	-5.82	126.39	129.30
32	2a	1290	G	C6-N1-C2	5.81	128.59	125.10
1	1A	1619	G	N3-C4-N9	5.81	129.49	126.00
1	1A	1707	G	C8-N9-C4	5.81	108.72	106.40
1	1A	1771	C	C2-N3-C4	-5.81	116.99	119.90
1	1A	2603	G	O5'-P-OP1	-5.81	100.47	105.70
54	1w	34	G	N1-C2-N3	5.81	127.39	123.90
1	1A	1599	C	C5-C4-N4	5.81	124.27	120.20
1	1A	2246	G	OP2-P-O3'	5.81	117.98	105.20
1	1A	211	A	C8-N9-C4	5.81	108.12	105.80
1	1A	996	A	O5'-P-OP2	5.80	117.67	110.70
55	2x	19	G	O4'-C1'-N9	-5.80	103.56	108.20
1	1A	1557	C	N3-C2-O2	-5.80	117.84	121.90
1	2A	1974	C	N1-C2-O2	5.80	122.38	118.90
1	1A	1256	G	N9-C4-C5	-5.80	103.08	105.40
56	2y	22	G	C4-C5-C6	5.80	122.28	118.80
1	1A	995	C	N3-C4-N4	5.79	122.06	118.00
1	1A	1145	C	C5-C4-N4	5.79	124.26	120.20
32	1a	975	A	N7-C8-N9	5.79	116.70	113.80
32	2a	354	G	N3-C4-N9	5.79	129.47	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1320	C	C6-N1-C2	5.79	122.61	120.30
32	2a	266	G	P-O3'-C3'	5.79	126.64	119.70
1	1A	571	A	N7-C8-N9	-5.78	110.91	113.80
1	2A	669	G	N1-C6-O6	5.78	123.37	119.90
1	1A	2080	G	N1-C6-O6	-5.78	116.43	119.90
1	1A	2327	A	N1-C6-N6	-5.78	115.13	118.60
1	1A	139(A)	G	N1-C6-O6	5.78	123.37	119.90
1	1A	678	C	C5-C6-N1	5.78	123.89	121.00
1	1A	912	C	C6-N1-C2	-5.78	117.99	120.30
1	1A	778	G	C5-C6-O6	5.78	132.07	128.60
32	1a	536	C	C6-N1-C2	-5.77	117.99	120.30
1	2A	1252	G	C5-C6-O6	-5.77	125.14	128.60
1	1A	652(S)	C	C5-C6-N1	5.77	123.89	121.00
32	1a	518	C	N3-C2-O2	-5.77	117.86	121.90
32	2a	812	C	C6-N1-C1'	5.77	127.73	120.80
32	1a	253	U	O5'-P-OP2	5.77	117.62	110.70
1	1A	1383	C	N1-C2-O2	5.77	122.36	118.90
1	1A	940	G	O5'-P-OP1	-5.77	100.51	105.70
1	1A	1349	A	C8-N9-C4	-5.77	103.49	105.80
1	2A	2131	G	C4-N9-C1'	5.77	134.00	126.50
1	2A	2286	A	N1-C6-N6	5.76	122.06	118.60
32	1a	442	C	C6-N1-C2	-5.76	118.00	120.30
1	1A	884	C	C2-N1-C1'	5.76	125.14	118.80
1	2A	527	C	C5-C4-N4	5.76	124.23	120.20
1	1A	2629	A	C2-N3-C4	-5.76	107.72	110.60
1	1A	1635	G	C5-C6-O6	-5.76	125.15	128.60
1	2A	186	G	N3-C2-N2	-5.76	115.87	119.90
1	2A	2500	U	N3-C2-O2	-5.76	118.17	122.20
1	1A	1705	G	N1-C6-O6	-5.75	116.45	119.90
32	2a	1247	U	N1-C2-O2	-5.75	118.78	122.80
2	1B	25	A	C8-N9-C4	5.75	108.10	105.80
1	2A	811	U	C5-C6-N1	-5.75	119.83	122.70
1	2A	2159	G	C6-N1-C2	5.75	128.55	125.10
32	1a	509	A	C8-N9-C4	-5.75	103.50	105.80
1	2A	559	G	C4-C5-N7	-5.75	108.50	110.80
1	2A	2781	A	N1-C6-N6	-5.75	115.15	118.60
32	1a	18	C	OP2-P-O3'	5.75	117.84	105.20
1	1A	753	C	O5'-P-OP1	-5.74	100.53	105.70
1	1A	2611	U	C6-N1-C2	5.74	124.44	121.00
32	1a	77	G	C8-N9-C1'	5.74	134.46	127.00
1	1A	378	C	N3-C4-N4	5.74	122.02	118.00
1	1A	263	C	N1-C2-O2	5.74	122.34	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	512	G	N7-C8-N9	-5.74	110.23	113.10
1	1A	822	U	OP2-P-O3'	5.73	117.81	105.20
1	1A	1155	A	C8-N9-C4	-5.73	103.51	105.80
1	1A	934	G	C5-C6-O6	5.73	132.04	128.60
1	2A	2407	G	C8-N9-C1'	-5.73	119.56	127.00
1	1A	1619	G	C6-N1-C2	-5.73	121.66	125.10
1	1A	949	C	C5-C4-N4	5.72	124.21	120.20
1	1A	1595	G	C5-C6-O6	5.72	132.03	128.60
1	1A	1842	G	N3-C2-N2	5.72	123.91	119.90
1	1A	743	G	N1-C6-O6	-5.72	116.47	119.90
1	1A	907	U	OP2-P-O3'	5.72	117.78	105.20
1	1A	2710	C	O5'-P-OP1	-5.72	100.55	105.70
1	2A	885	C	C2-N3-C4	5.72	122.76	119.90
1	1A	2457	U	N1-C2-O2	-5.72	118.80	122.80
1	1A	739	G	C5-C6-O6	-5.71	125.17	128.60
1	1A	1105	U	C5-C4-O4	-5.71	122.47	125.90
1	1A	2033	A	N9-C4-C5	-5.71	103.52	105.80
1	1A	1063	G	C8-N9-C4	-5.71	104.11	106.40
1	2A	1603	A	C5-C6-N1	5.71	120.56	117.70
1	2A	2092	U	N3-C2-O2	5.71	126.20	122.20
1	1A	1391	U	N3-C4-O4	-5.71	115.40	119.40
1	1A	44	G	N1-C6-O6	5.71	123.32	119.90
1	1A	801	G	O5'-P-OP2	-5.71	100.56	105.70
1	1A	1325	G	N9-C4-C5	5.71	107.68	105.40
1	1A	1983	C	C6-N1-C2	-5.71	118.02	120.30
1	2A	725	G	C8-N9-C4	-5.71	104.12	106.40
1	1A	1836	C	C2-N1-C1'	5.70	125.07	118.80
1	1A	2594	C	N3-C4-C5	-5.70	119.62	121.90
32	1a	1288	A	N1-C6-N6	-5.70	115.18	118.60
32	1a	1461	G	C5-C6-O6	-5.70	125.18	128.60
1	1A	457	A	C6-N1-C2	5.70	122.02	118.60
1	1A	578	A	C8-N9-C4	-5.70	103.52	105.80
1	1A	2442	C	C5-C6-N1	-5.70	118.15	121.00
1	1A	583	G	O5'-P-OP2	-5.70	100.57	105.70
1	1A	1618	A	N1-C6-N6	-5.70	115.18	118.60
1	1A	2167	U	N3-C2-O2	-5.70	118.21	122.20
1	2A	949	C	N1-C2-O2	-5.70	115.48	118.90
1	2A	2046	G	C8-N9-C1'	-5.70	119.59	127.00
32	1a	575	G	C6-C5-N7	5.70	133.82	130.40
32	1a	968	A	N9-C4-C5	-5.70	103.52	105.80
32	1a	1408	A	N1-C6-N6	5.70	122.02	118.60
54	1w	75	C	C5-C6-N1	-5.70	118.15	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	22	G	N3-C4-C5	5.70	131.45	128.60
1	1A	1086	A	C5-C6-N1	5.69	120.55	117.70
1	2A	2610	C	N3-C2-O2	-5.69	117.92	121.90
1	2A	1797	C	N3-C2-O2	-5.69	117.92	121.90
1	1A	2254	C	C6-N1-C2	-5.69	118.02	120.30
1	2A	1157	G	N1-C6-O6	5.69	123.31	119.90
54	2w	18	G	O4'-C1'-N9	5.69	112.75	108.20
1	1A	2263	C	C5-C6-N1	-5.68	118.16	121.00
32	2a	1256	A	C4-N9-C1'	-5.68	116.07	126.30
32	1a	607	A	N1-C6-N6	5.68	122.01	118.60
1	2A	1021	A	N3-C4-C5	5.68	130.78	126.80
56	2y	63	G	C5-C6-O6	5.68	132.01	128.60
1	1A	1599	C	N3-C2-O2	-5.68	117.92	121.90
1	1A	1757	U	C5-C6-N1	-5.68	119.86	122.70
1	2A	1653	G	C8-N9-C4	-5.68	104.13	106.40
2	2B	1	U	C6-N1-C1'	-5.68	113.25	121.20
1	1A	2447	G	OP2-P-O3'	5.68	117.69	105.20
1	2A	226	G	N3-C4-N9	-5.67	122.59	126.00
32	2a	1020	U	N1-C2-O2	5.67	126.77	122.80
1	1A	2613	U	C5-C6-N1	-5.67	119.86	122.70
1	1A	2579	C	C5-C4-N4	-5.67	116.23	120.20
1	1A	1036	G	N1-C2-N2	-5.67	111.10	116.20
1	1A	2308	G	C5-N7-C8	-5.67	101.47	104.30
1	1A	2589	A	N7-C8-N9	-5.67	110.97	113.80
55	1x	46	G	N1-C2-N3	5.67	127.30	123.90
1	2A	2166	G	C5-C6-O6	-5.67	125.20	128.60
32	2a	1206	G	C5-C6-O6	-5.67	125.20	128.60
1	1A	1427	A	C4-C5-C6	5.67	119.83	117.00
1	1A	2246	G	C8-N9-C4	5.67	108.67	106.40
1	2A	192	C	OP1-P-OP2	5.67	128.10	119.60
1	2A	762	U	C2-N1-C1'	5.67	124.50	117.70
1	1A	110	G	O5'-P-OP2	-5.66	100.60	105.70
1	1A	1774	C	C6-N1-C2	5.66	122.56	120.30
32	1a	575	G	C5-C6-O6	5.66	132.00	128.60
32	1a	758	G	N3-C4-N9	-5.66	122.60	126.00
32	1a	781	A	OP2-P-O3'	5.66	117.66	105.20
1	2A	1999	C	C5-C6-N1	-5.66	118.17	121.00
1	1A	555	U	O4'-C1'-N1	5.66	112.73	108.20
1	1A	562	U	C5-C6-N1	-5.66	119.87	122.70
1	1A	186	G	N7-C8-N9	-5.66	110.27	113.10
1	1A	740	U	O5'-P-OP2	-5.66	100.61	105.70
1	1A	809	G	N3-C4-C5	5.66	131.43	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	32	C	N3-C4-C5	-5.66	119.64	121.90
1	1A	652(A)	A	C8-N9-C4	-5.66	103.54	105.80
1	1A	2861	G	C5-C6-O6	-5.66	125.20	128.60
32	1a	1487	G	O5'-P-OP2	-5.66	100.61	105.70
1	2A	879	G	N3-C4-N9	5.66	129.40	126.00
1	2A	2606	C	N3-C2-O2	5.66	125.86	121.90
2	1B	119	G	N3-C4-C5	5.66	131.43	128.60
32	2a	315	A	C5-C6-N6	-5.66	119.17	123.70
1	1A	2452	C	C5-C4-N4	5.65	124.16	120.20
1	2A	2562	U	O5'-P-OP2	-5.65	100.61	105.70
1	1A	771	G	C8-N9-C4	5.65	108.66	106.40
1	1A	1207	C	N3-C2-O2	-5.65	117.94	121.90
1	1A	2584	U	N3-C2-O2	-5.65	118.24	122.20
32	1a	1232	U	N3-C2-O2	-5.65	118.25	122.20
32	2a	1257	U	C5-C6-N1	5.65	125.52	122.70
1	1A	203	C	N3-C4-N4	-5.65	114.05	118.00
1	1A	1653	G	N3-C4-C5	-5.64	125.78	128.60
32	1a	1226	C	N1-C2-O2	-5.64	115.51	118.90
54	1w	29	G	C8-N9-C4	5.64	108.66	106.40
1	1A	1047	G	C8-N9-C4	-5.64	104.14	106.40
1	1A	1193	G	C5-N7-C8	5.64	107.12	104.30
1	1A	2416	C	N1-C2-O2	-5.64	115.52	118.90
1	1A	2553	G	N3-C4-C5	-5.64	125.78	128.60
1	1A	2715	C	C6-N1-C2	5.64	122.56	120.30
1	1A	1338	G	N1-C2-N2	-5.64	111.12	116.20
1	1A	2557	G	O5'-P-OP2	-5.64	100.62	105.70
1	1A	454	A	N9-C4-C5	5.63	108.05	105.80
1	1A	2487	G	C8-N9-C4	5.63	108.65	106.40
1	1A	1296	G	N3-C2-N2	5.63	123.84	119.90
1	1A	847	U	C2-N1-C1'	5.63	124.46	117.70
1	1A	1639	U	O5'-P-OP2	-5.63	100.63	105.70
1	2A	2407	G	C4-N9-C1'	5.63	133.82	126.50
1	2A	2506	U	O4'-C1'-N1	5.63	112.70	108.20
32	2a	913	A	P-O3'-C3'	5.63	126.46	119.70
1	1A	211	A	N7-C8-N9	-5.63	110.98	113.80
1	1A	739	G	O5'-P-OP2	-5.63	100.63	105.70
1	1A	1404	C	N3-C4-N4	-5.63	114.06	118.00
1	1A	444	C	C6-N1-C1'	5.63	127.55	120.80
1	2A	1021	A	C5-N7-C8	-5.63	101.09	103.90
1	1A	854	G	N1-C6-O6	-5.63	116.52	119.90
1	1A	2325	G	C8-N9-C4	5.62	108.65	106.40
32	2a	1256	A	C4-C5-C6	-5.62	114.19	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1652	A	C8-N9-C4	-5.62	103.55	105.80
55	2x	22	G	C8-N9-C4	-5.62	104.15	106.40
1	1A	910	A	O5'-P-OP1	-5.62	100.64	105.70
37	1f	19	LEU	CA-CB-CG	5.62	128.23	115.30
1	1A	32	C	C6-N1-C1'	5.62	127.54	120.80
1	1A	75	G	O5'-P-OP1	-5.62	100.64	105.70
1	1A	329	G	O5'-P-OP1	-5.62	100.64	105.70
1	1A	2494	G	C5-C6-O6	5.62	131.97	128.60
1	1A	2556	C	N1-C2-O2	-5.62	115.53	118.90
32	2a	1099	G	C4-C5-N7	-5.62	108.55	110.80
1	1A	1249	U	C2-N3-C4	-5.62	123.63	127.00
1	2A	383	U	O4'-C1'-N1	5.62	112.69	108.20
1	1A	126	A	C8-N9-C4	-5.61	103.56	105.80
1	2A	2356	C	N1-C2-O2	-5.61	115.53	118.90
1	2A	2699	C	O5'-P-OP2	-5.61	100.65	105.70
1	1A	954	G	N9-C4-C5	5.61	107.64	105.40
32	2a	79	G	C6-N1-C2	5.61	128.47	125.10
1	1A	944	G	C4-N9-C1'	5.61	133.79	126.50
1	2A	510	C	N1-C2-O2	5.61	122.27	118.90
32	2a	948	C	C6-N1-C2	5.61	122.54	120.30
56	2y	11	C	C5-C6-N1	5.61	123.80	121.00
1	1A	253	C	N3-C4-C5	5.61	124.14	121.90
1	1A	1941	C	C6-N1-C2	-5.61	118.06	120.30
1	1A	2609	U	C5-C6-N1	-5.61	119.90	122.70
56	1y	70	G	N9-C4-C5	-5.61	103.16	105.40
1	1A	836	G	C8-N9-C4	5.60	108.64	106.40
55	2x	14	A	N7-C8-N9	-5.60	111.00	113.80
1	1A	2692	C	OP2-P-O3'	5.60	117.52	105.20
32	1a	998	G	C4-N9-C1'	-5.60	119.22	126.50
32	1a	1201	A	P-O3'-C3'	5.60	126.42	119.70
1	1A	1904	G	N1-C6-O6	-5.60	116.54	119.90
1	2A	2708	G	N1-C6-O6	5.60	123.26	119.90
1	1A	1781	C	C6-N1-C2	5.60	122.54	120.30
1	1A	1450(A)	C	C6-N1-C2	5.59	122.54	120.30
1	1A	172	C	C6-N1-C2	-5.59	118.06	120.30
1	1A	2548	G	C4-C5-N7	-5.59	108.56	110.80
1	2A	2375	G	C8-N9-C4	5.59	108.64	106.40
56	2y	4	C	C5-C6-N1	5.59	123.80	121.00
1	1A	2188	C	C6-N1-C2	-5.59	118.06	120.30
1	2A	383	U	C2-N1-C1'	-5.59	110.99	117.70
1	2A	947	G	N3-C4-C5	-5.59	125.81	128.60
32	2a	1390	U	N1-C2-O2	-5.59	118.89	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	942	G	C8-N9-C4	5.59	108.64	106.40
1	1A	2597	G	C4-C5-N7	5.59	113.04	110.80
1	2A	2430	A	O4'-C1'-N9	5.59	112.67	108.20
1	1A	1568	G	C4-N9-C1'	-5.59	119.24	126.50
1	1A	774	A	C5-N7-C8	-5.59	101.11	103.90
1	1A	1976	U	N1-C2-O2	-5.59	118.89	122.80
1	1A	2419	U	N3-C4-C5	5.59	117.95	114.60
1	2A	880	G	C4-N9-C1'	-5.59	119.24	126.50
1	2A	975	C	N1-C2-O2	5.59	122.25	118.90
1	1A	1393	A	N1-C6-N6	-5.58	115.25	118.60
1	2A	1558	A	C5-C6-N1	-5.58	114.91	117.70
1	1A	1387	C	C6-N1-C2	-5.58	118.07	120.30
32	1a	424	G	C8-N9-C4	-5.58	104.17	106.40
1	2A	1139	G	O5'-P-OP2	-5.58	100.68	105.70
32	2a	1029	C	N1-C2-O2	5.58	122.25	118.90
1	1A	1055	G	N3-C4-N9	5.58	129.35	126.00
1	1A	1164	G	O5'-P-OP2	-5.58	100.68	105.70
1	1A	2618	G	N3-C4-C5	-5.58	125.81	128.60
32	1a	1269	A	N1-C2-N3	5.58	132.09	129.30
1	1A	1433	U	O5'-P-OP2	-5.58	100.68	105.70
1	2A	2893	G	C5-C6-N1	5.58	114.29	111.50
1	1A	1395	A	C5-N7-C8	5.57	106.69	103.90
32	1a	740	U	C5-C6-N1	-5.57	119.91	122.70
1	1A	1607	C	C2-N1-C1'	5.57	124.93	118.80
1	1A	2452	C	C6-N1-C2	-5.57	118.07	120.30
1	1A	2587	A	C2-N3-C4	5.57	113.39	110.60
1	1A	2241	A	C4-C5-N7	-5.57	107.92	110.70
1	1A	2627	G	N7-C8-N9	-5.57	110.32	113.10
32	1a	326	G	N1-C6-O6	-5.57	116.56	119.90
1	1A	1193	G	N1-C6-O6	-5.56	116.56	119.90
55	2x	35	A	O5'-P-OP1	-5.56	100.69	105.70
32	1a	1417	G	C8-N9-C4	5.56	108.62	106.40
1	1A	2056	G	C4-C5-N7	5.56	113.02	110.80
32	1a	63	C	C6-N1-C2	-5.56	118.08	120.30
1	2A	1021	A	N3-C4-N9	-5.56	122.95	127.40
1	1A	1170	G	N1-C6-O6	5.56	123.23	119.90
32	1a	798	G	N1-C6-O6	-5.56	116.56	119.90
1	1A	508	G	C8-N9-C4	-5.55	104.18	106.40
1	1A	1628	G	C4-C5-N7	-5.55	108.58	110.80
1	2A	669	G	N9-C4-C5	-5.55	103.18	105.40
1	2A	1204	A	N9-C1'-C2'	5.55	121.22	114.00
1	2A	1638	C	C2-N3-C4	-5.55	117.12	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2719	G	C8-N9-C4	-5.55	104.18	106.40
1	1A	435	C	OP1-P-OP2	5.55	127.93	119.60
1	1A	1245	G	C8-N9-C4	5.55	108.62	106.40
1	1A	1273	U	N3-C2-O2	-5.55	118.31	122.20
1	1A	2550	G	C8-N9-C4	-5.55	104.18	106.40
1	2A	2046	G	C4-N9-C1'	5.55	133.72	126.50
1	1A	1308	A	C8-N9-C4	-5.55	103.58	105.80
1	2A	880	G	N3-C4-C5	5.55	131.38	128.60
1	2A	1416	G	O4'-C1'-N9	5.55	112.64	108.20
1	2A	1739	U	C2-N1-C1'	-5.55	111.04	117.70
1	2A	2174	C	C6-N1-C2	-5.55	118.08	120.30
1	1A	682	G	C8-N9-C1'	-5.55	119.79	127.00
1	1A	2460	U	C5-C4-O4	5.55	129.23	125.90
1	2A	504	U	N1-C2-O2	5.55	126.69	122.80
1	2A	1157	G	N9-C4-C5	-5.55	103.18	105.40
1	2A	1255	U	N3-C4-O4	-5.55	115.52	119.40
1	2A	2455	G	C8-N9-C4	-5.55	104.18	106.40
32	2a	872	A	O4'-C1'-N9	5.55	112.64	108.20
1	1A	882	G	C8-N9-C4	-5.55	104.18	106.40
32	1a	956	U	C6-N1-C2	-5.55	117.67	121.00
32	1a	1007	C	C5-C6-N1	5.55	123.77	121.00
1	2A	97	C	N1-C2-O2	5.55	122.23	118.90
1	2A	265	A	N1-C6-N6	5.55	121.93	118.60
1	1A	707	G	C2-N3-C4	5.54	114.67	111.90
1	1A	1193	G	OP2-P-O3'	5.54	117.39	105.20
1	1A	2562	U	N3-C2-O2	-5.54	118.32	122.20
1	2A	117	G	C5-C6-O6	-5.54	125.27	128.60
1	2A	1142(A)	A	C5-N7-C8	-5.54	101.13	103.90
1	2A	2407	G	N9-C4-C5	-5.54	103.18	105.40
32	2a	34	C	N3-C4-C5	-5.54	119.68	121.90
32	1a	862	C	O5'-P-OP2	-5.54	100.71	105.70
1	2A	1975	G	N9-C4-C5	-5.54	103.18	105.40
1	2A	2668	G	N1-C6-O6	-5.54	116.58	119.90
32	2a	1524	C	N1-C2-O2	-5.54	115.58	118.90
32	1a	644	G	C4-N9-C1'	-5.54	119.30	126.50
1	1A	668	G	OP2-P-O3'	5.53	117.37	105.20
1	1A	2497	A	N1-C6-N6	-5.53	115.28	118.60
1	1A	2823	A	N1-C6-N6	-5.53	115.28	118.60
1	2A	1647	G	O4'-C1'-N9	-5.53	103.78	108.20
1	2A	1356	G	N1-C6-O6	5.53	123.22	119.90
1	2A	1533	G	C8-N9-C4	-5.53	104.19	106.40
1	2A	2155	G	N1-C2-N3	-5.53	120.58	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1958	C	O5'-P-OP1	5.53	117.33	110.70
32	1a	266	G	C4-N9-C1'	5.53	133.69	126.50
32	2a	115	G	P-O3'-C3'	5.53	126.33	119.70
1	1A	1164	G	C5-C6-N1	5.53	114.26	111.50
1	1A	2570	G	N3-C2-N2	-5.53	116.03	119.90
32	2a	812	C	C2-N1-C1'	-5.53	112.72	118.80
32	2a	1263	C	N1-C2-N3	-5.53	115.33	119.20
1	1A	807	U	C5-C6-N1	-5.53	119.94	122.70
1	1A	2027	G	C2-N3-C4	5.53	114.66	111.90
1	1A	2426	A	C2-N3-C4	5.53	113.36	110.60
1	1A	2662	A	C8-N9-C4	-5.53	103.59	105.80
32	1a	442	C	C5-C6-N1	5.53	123.76	121.00
56	1y	19	G	N1-C6-O6	-5.53	116.58	119.90
1	1A	1034	G	C4-C5-N7	-5.52	108.59	110.80
1	2A	783	A	C2-N3-C4	5.52	113.36	110.60
1	2A	2501	C	C6-N1-C2	5.52	122.51	120.30
1	1A	342	G	N1-C6-O6	-5.52	116.59	119.90
1	1A	2454	G	C6-N1-C2	-5.52	121.79	125.10
2	1B	42	C	C6-N1-C2	5.52	122.51	120.30
32	1a	748	C	P-O3'-C3'	5.52	126.32	119.70
32	2a	1286	A	C2-N3-C4	-5.52	107.84	110.60
1	1A	1148	A	C5-C6-N1	5.52	120.46	117.70
2	1B	76	G	C6-N1-C2	5.52	128.41	125.10
1	2A	466	A	C2-N3-C4	5.52	113.36	110.60
1	2A	1786	A	O4'-C1'-N9	5.52	112.61	108.20
1	1A	109	G	C4-C5-N7	-5.52	108.59	110.80
1	1A	2499	C	C2-N3-C4	5.52	122.66	119.90
1	1A	2823	A	C5-C6-N6	5.51	128.11	123.70
1	1A	851	U	N3-C4-O4	-5.51	115.54	119.40
1	1A	272(E)	G	C6-C5-N7	-5.51	127.09	130.40
1	1A	805	G	C8-N9-C4	5.51	108.61	106.40
54	2w	13	C	P-O3'-C3'	5.51	126.31	119.70
32	1a	973	G	N3-C4-C5	-5.51	125.84	128.60
1	2A	1956	U	N3-C4-O4	-5.51	115.55	119.40
1	1A	732	C	C5-C4-N4	5.51	124.05	120.20
32	1a	1030(B)	C	C2-N3-C4	5.51	122.65	119.90
56	1y	65	G	N3-C4-N9	-5.51	122.70	126.00
1	2A	438	G	C4-C5-N7	-5.51	108.60	110.80
1	2A	321	G	C8-N9-C4	5.50	108.60	106.40
32	1a	801	U	N3-C4-O4	-5.50	115.55	119.40
1	2A	958	U	C6-N1-C2	-5.50	117.70	121.00
1	1A	903	C	C6-N1-C2	5.50	122.50	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2452	C	C6-N1-C1'	5.50	127.40	120.80
1	1A	467	G	C5-C6-O6	5.50	131.90	128.60
54	2w	72	C	C5-C6-N1	5.50	123.75	121.00
32	1a	819	A	C4-C5-C6	5.50	119.75	117.00
32	2a	1031	G	C6-N1-C2	5.50	128.40	125.10
1	1A	2439	A	OP1-P-O3'	5.49	117.28	105.20
1	2A	646	A	O4'-C1'-N9	5.49	112.59	108.20
1	1A	20	C	C2-N3-C4	-5.49	117.15	119.90
1	1A	521	G	C2-N3-C4	5.49	114.64	111.90
1	1A	2589	A	N9-C1'-C2'	-5.49	105.96	112.00
1	1A	1252	G	N3-C4-N9	-5.49	122.71	126.00
1	1A	2059	A	O4'-C1'-N9	5.49	112.59	108.20
32	1a	1034	G	N3-C4-C5	5.49	131.34	128.60
1	2A	692	C	C5-C4-N4	-5.49	116.36	120.20
1	1A	794	G	N3-C2-N2	5.49	123.74	119.90
1	1A	1063	G	C5-C6-N1	-5.49	108.76	111.50
1	1A	1256	G	C8-N9-C4	5.49	108.59	106.40
1	1A	2239	G	N9-C4-C5	5.49	107.59	105.40
1	2A	2347	C	N1-C2-O2	5.49	122.19	118.90
1	1A	2567	G	C8-N9-C4	5.48	108.59	106.40
1	1A	2016	U	N1-C2-O2	-5.48	118.96	122.80
1	2A	1240	U	C5-C4-O4	-5.48	122.61	125.90
55	1x	22	G	N3-C4-N9	-5.48	122.71	126.00
32	2a	1086	U	N3-C4-O4	5.48	123.23	119.40
1	1A	576	U	N1-C2-O2	-5.48	118.97	122.80
1	1A	1005	C	C4-C5-C6	-5.48	114.66	117.40
1	1A	1790	C	N3-C4-C5	-5.47	119.71	121.90
1	1A	2364	C	C2-N3-C4	-5.47	117.16	119.90
32	1a	480	U	C5-C6-N1	-5.47	119.96	122.70
32	2a	315	A	N9-C4-C5	-5.47	103.61	105.80
1	1A	843	G	C5-C6-O6	5.47	131.88	128.60
1	1A	1266	G	OP1-P-O3'	5.47	117.24	105.20
1	1A	2872	G	N9-C4-C5	5.47	107.59	105.40
56	1y	56	C	N3-C4-C5	-5.47	119.71	121.90
32	1a	913	A	C8-N9-C4	-5.47	103.61	105.80
1	1A	2759	G	N3-C2-N2	-5.47	116.07	119.90
1	1A	2375	G	C5-C6-N1	5.47	114.23	111.50
1	1A	2860	A	OP2-P-O3'	5.47	117.22	105.20
1	1A	328	U	C5-C6-N1	-5.46	119.97	122.70
1	1A	559	G	OP1-P-OP2	-5.46	111.40	119.60
1	1A	684	G	C5-C6-N1	5.46	114.23	111.50
1	1A	1037	G	C5-C6-O6	-5.46	125.32	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	7	G	O4'-C1'-N9	5.46	112.57	108.20
32	1a	754	C	N1-C2-O2	5.46	122.18	118.90
32	2a	354	G	C4-N9-C1'	5.46	133.60	126.50
1	1A	934	G	N1-C2-N2	-5.46	111.28	116.20
4	1E	13	ARG	NE-CZ-NH1	-5.46	117.57	120.30
32	1a	877	C	C6-N1-C2	5.46	122.48	120.30
32	2a	436	C	O5'-P-OP1	-5.46	100.78	105.70
1	2A	277	C	OP2-P-O3'	5.46	117.21	105.20
1	2A	313	C	N1-C2-O2	-5.46	115.62	118.90
1	1A	467	G	C5-N7-C8	5.46	107.03	104.30
1	1A	925	C	C2-N1-C1'	-5.46	112.80	118.80
32	1a	1501	C	N1-C2-O2	-5.46	115.62	118.90
1	2A	1253	A	N7-C8-N9	-5.46	111.07	113.80
1	1A	1198	U	OP1-P-OP2	5.46	127.78	119.60
1	1A	1842	G	N1-C2-N2	-5.46	111.29	116.20
1	2A	386	G	N1-C2-N3	-5.46	120.63	123.90
1	2A	2617	C	C5-C6-N1	-5.46	118.27	121.00
1	1A	1170	G	C5-N7-C8	-5.45	101.57	104.30
1	1A	1967	C	N3-C2-O2	-5.45	118.08	121.90
1	1A	2444	G	C5-N7-C8	5.45	107.03	104.30
1	1A	729	G	C8-N9-C4	-5.45	104.22	106.40
1	2A	514	A	O5'-P-OP2	-5.45	100.79	105.70
1	1A	1267	U	OP1-P-OP2	-5.45	111.42	119.60
1	1A	1905	C	N1-C2-O2	5.45	122.17	118.90
1	2A	438	G	C5-C6-O6	5.45	131.87	128.60
1	1A	830	G	N1-C6-O6	-5.45	116.63	119.90
1	1A	1658	C	OP1-P-OP2	-5.45	111.43	119.60
1	2A	986	C	C6-N1-C2	-5.45	118.12	120.30
1	1A	176	G	N1-C2-N2	-5.45	111.30	116.20
1	1A	2490	G	O5'-P-OP2	-5.45	100.80	105.70
32	2a	1263	C	C4-C5-C6	-5.44	114.68	117.40
1	1A	2311	A	O5'-P-OP1	-5.44	100.80	105.70
32	1a	1279	A	C8-N9-C4	-5.44	103.62	105.80
32	2a	549	C	O5'-P-OP2	-5.44	100.80	105.70
1	1A	427	U	O5'-P-OP1	-5.44	100.80	105.70
1	1A	1170	G	C4-N9-C1'	5.44	133.57	126.50
1	1A	2071	A	O5'-P-OP2	-5.44	100.80	105.70
1	1A	2403	C	N1-C2-O2	-5.44	115.64	118.90
32	1a	863	U	OP1-P-O3'	5.44	117.17	105.20
1	1A	512	G	C8-N9-C4	5.44	108.58	106.40
1	1A	196	A	C2-N3-C4	5.44	113.32	110.60
1	1A	834	C	C5-C6-N1	-5.44	118.28	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1607	C	N3-C4-N4	5.44	121.81	118.00
32	1a	1025	U	N3-C2-O2	-5.44	118.39	122.20
1	2A	1532	C	C6-N1-C2	-5.44	118.12	120.30
1	2A	1797	C	N1-C2-O2	5.44	122.16	118.90
1	1A	1301	A	OP1-P-OP2	5.43	127.75	119.60
1	1A	2789	C	C5-C6-N1	-5.43	118.28	121.00
32	1a	1397	C	C6-N1-C1'	-5.43	114.28	120.80
1	2A	2689	U	N3-C2-O2	-5.43	118.39	122.20
1	2A	2079	U	N3-C4-C5	-5.43	111.34	114.60
32	2a	34	C	C6-N1-C2	-5.43	118.13	120.30
1	1A	193	U	N3-C4-O4	5.43	123.20	119.40
1	1A	1775	U	N3-C4-O4	-5.43	115.60	119.40
1	1A	2893	G	N9-C4-C5	-5.43	103.23	105.40
32	2a	122	G	N1-C6-O6	-5.43	116.64	119.90
1	1A	1430	C	C5-C6-N1	5.43	123.71	121.00
1	1A	2381	C	C2-N3-C4	-5.43	117.19	119.90
1	2A	2188	C	C5-C6-N1	5.43	123.71	121.00
1	1A	1638	C	N3-C4-N4	5.42	121.80	118.00
1	2A	1636	C	C6-N1-C2	-5.42	118.13	120.30
55	2x	46	G	C4-C5-N7	-5.42	108.63	110.80
1	1A	1075	C	C6-N1-C2	-5.42	118.13	120.30
1	2A	2142	C	C2-N1-C1'	5.42	124.76	118.80
32	2a	1442	G	C2-N3-C4	5.42	114.61	111.90
54	1w	60	U	N3-C2-O2	-5.42	118.41	122.20
1	1A	687	C	C6-N1-C1'	5.42	127.30	120.80
1	1A	1631(A)	A	O5'-P-OP2	5.42	117.20	110.70
1	2A	1757	U	C5-C6-N1	-5.42	119.99	122.70
1	1A	539	G	C5-C6-O6	5.42	131.85	128.60
32	1a	1143	G	C6-C5-N7	-5.42	127.15	130.40
1	2A	748	G	C5-C6-N1	5.42	114.21	111.50
1	1A	2726	U	N3-C4-O4	-5.42	115.61	119.40
2	2B	51	G	N1-C6-O6	5.42	123.15	119.90
54	1w	23	A	N9-C4-C5	-5.41	103.64	105.80
1	1A	1007	C	C6-N1-C2	5.41	122.47	120.30
1	1A	1249	U	N1-C2-N3	5.41	118.15	114.90
32	2a	1199	U	N1-C2-O2	5.41	126.59	122.80
1	2A	194	G	O5'-P-OP2	-5.41	100.83	105.70
1	2A	1665	A	C8-N9-C4	-5.41	103.64	105.80
1	2A	2610	C	O5'-P-OP1	-5.41	100.83	105.70
1	1A	2596	U	OP1-P-OP2	5.41	127.71	119.60
55	1x	12	G	N3-C4-C5	-5.41	125.90	128.60
1	2A	828	U	C5-C6-N1	-5.41	120.00	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2600	A	C5-N7-C8	5.41	106.60	103.90
56	2y	31	A	C5-C6-N6	5.41	128.03	123.70
1	1A	561	G	OP2-P-O3'	5.40	117.09	105.20
1	2A	141	A	C5-N7-C8	-5.40	101.20	103.90
1	1A	888	C	C6-N1-C2	-5.40	118.14	120.30
1	1A	1638	C	C5-C4-N4	-5.40	116.42	120.20
32	1a	387	U	N3-C2-O2	-5.40	118.42	122.20
1	1A	2614	A	OP2-P-O3'	5.40	117.08	105.20
1	1A	456	C	C5-C4-N4	-5.40	116.42	120.20
32	1a	955	U	C2-N3-C4	5.40	130.24	127.00
1	1A	934	G	N1-C6-O6	-5.40	116.66	119.90
1	1A	974	G	N3-C2-N2	5.40	123.68	119.90
1	1A	1305	C	C6-N1-C2	-5.40	118.14	120.30
2	1B	80	U	O5'-P-OP2	-5.39	100.85	105.70
1	1A	502	A	O5'-P-OP1	-5.39	100.85	105.70
1	1A	2694	G	N1-C6-O6	-5.39	116.67	119.90
1	1A	2834	G	N3-C4-N9	5.39	129.24	126.00
1	2A	444	C	O5'-P-OP1	5.39	117.17	110.70
1	2A	1120	G	N3-C4-C5	5.39	131.29	128.60
1	2A	2231	C	C2-N1-C1'	-5.39	112.87	118.80
1	1A	1310	G	O4'-C1'-N9	5.39	112.51	108.20
32	1a	390	C	N3-C4-C5	5.39	124.06	121.90
1	2A	2335	A	O4'-C1'-N9	5.39	112.51	108.20
1	1A	782	A	C5-N7-C8	5.38	106.59	103.90
1	1A	2444	G	C5-C6-O6	5.38	131.83	128.60
1	1A	2479	G	C5-N7-C8	5.38	106.99	104.30
1	2A	2028	U	C5-C4-O4	5.38	129.13	125.90
32	2a	1529	G	C4-N9-C1'	5.38	133.50	126.50
32	1a	90	U	C6-N1-C2	-5.38	117.77	121.00
56	2y	4	C	N3-C4-C5	-5.38	119.75	121.90
32	1a	781	A	N1-C2-N3	-5.38	126.61	129.30
1	1A	920	G	O5'-P-OP1	-5.38	100.86	105.70
1	2A	2197	U	N1-C2-O2	-5.38	119.04	122.80
1	2A	1142(A)	A	C5-C6-N1	-5.38	115.01	117.70
32	1a	174	C	C5-C6-N1	5.37	123.69	121.00
32	1a	795	C	N1-C2-O2	-5.37	115.68	118.90
1	2A	683	C	C5-C6-N1	-5.37	118.31	121.00
56	2y	60	U	N3-C2-O2	-5.37	118.44	122.20
1	1A	2031	A	C2-N3-C4	5.37	113.29	110.60
1	2A	848	G	N3-C4-C5	-5.37	125.92	128.60
1	2A	897	C	C2-N3-C4	5.37	122.59	119.90
1	2A	2287	A	O4'-C1'-N9	5.37	112.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	2w	71	G	P-O3'-C3'	5.37	126.15	119.70
1	1A	2569	G	C5-C6-O6	5.37	131.82	128.60
1	2A	2561	A	C6-N1-C2	5.37	121.82	118.60
1	1A	1678	G	C8-N9-C4	-5.37	104.25	106.40
1	2A	982	C	N1-C2-O2	5.37	122.12	118.90
1	2A	1138	G	N3-C4-C5	-5.37	125.92	128.60
1	1A	2084	C	C5-C4-N4	5.37	123.96	120.20
1	1A	2468	G	C4-C5-N7	-5.37	108.65	110.80
1	1A	342	G	C8-N9-C4	-5.37	104.25	106.40
1	2A	1990	C	N3-C2-O2	-5.36	118.14	121.90
1	1A	140	G	N3-C4-N9	5.36	129.22	126.00
1	2A	2500	U	N3-C4-O4	-5.36	115.65	119.40
1	1A	2504	U	N1-C2-O2	5.36	126.55	122.80
1	1A	2685	G	C5-C6-N1	5.36	114.18	111.50
1	1A	2020	A	N1-C6-N6	-5.36	115.39	118.60
1	2A	1021	A	C5-C6-N1	-5.36	115.02	117.70
32	1a	804	U	O5'-P-OP1	5.36	117.13	110.70
55	1x	22	G	C4-N9-C1'	-5.36	119.54	126.50
1	2A	451	C	N1-C2-O2	5.36	122.11	118.90
1	2A	1257	C	C5-C4-N4	5.36	123.95	120.20
1	1A	2603	G	N1-C6-O6	5.35	123.11	119.90
1	1A	1082	U	N3-C4-C5	5.35	117.81	114.60
1	1A	2244	U	C6-N1-C2	-5.35	117.79	121.00
1	2A	1847	A	O5'-P-OP2	-5.35	100.88	105.70
1	2A	2686	G	C8-N9-C4	-5.35	104.26	106.40
1	1A	2500	U	N1-C2-O2	5.35	126.55	122.80
1	2A	2517	C	O4'-C1'-N1	5.35	112.48	108.20
1	1A	975(A)	G	N3-C2-N2	5.35	123.64	119.90
32	2a	1058	G	C5-C6-O6	-5.35	125.39	128.60
1	1A	110	G	N1-C6-O6	-5.34	116.69	119.90
1	1A	696	G	C8-N9-C4	-5.34	104.26	106.40
1	2A	2630	G	N3-C4-C5	5.34	131.27	128.60
1	1A	795	C	N3-C2-O2	-5.34	118.16	121.90
1	1A	927	G	C8-N9-C4	-5.34	104.26	106.40
1	1A	2613	U	N3-C2-O2	-5.34	118.46	122.20
1	2A	205	G	O5'-P-OP2	-5.34	100.89	105.70
1	2A	1394	U	N3-C2-O2	-5.34	118.46	122.20
1	2A	2591	C	N3-C2-O2	5.34	125.64	121.90
32	2a	1496	C	O5'-P-OP2	-5.34	100.89	105.70
1	1A	830	G	N3-C4-N9	-5.34	122.80	126.00
1	1A	2454	G	C5-C6-N1	5.34	114.17	111.50
32	1a	754	C	N3-C2-O2	-5.34	118.16	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1397	C	C6-N1-C2	5.34	122.44	120.30
1	2A	271(G)	C	C6-N1-C2	-5.34	118.16	120.30
1	1A	1207	C	C5-C4-N4	5.34	123.94	120.20
1	1A	1379	A	C8-N9-C4	5.34	107.94	105.80
1	1A	1532	C	C6-N1-C2	-5.34	118.16	120.30
1	2A	847	U	C2-N1-C1'	5.34	124.11	117.70
1	2A	2129	C	C6-N1-C2	-5.34	118.16	120.30
1	1A	820	A	C8-N9-C4	-5.34	103.67	105.80
2	1B	98	G	C5-C6-O6	5.34	131.80	128.60
1	2A	2447	G	N1-C6-O6	-5.34	116.70	119.90
32	2a	1491	G	N1-C6-O6	-5.34	116.70	119.90
1	1A	2045	C	C2-N3-C4	-5.34	117.23	119.90
1	1A	2575	C	C4-C5-C6	-5.34	114.73	117.40
32	2a	1264	C	N3-C2-O2	-5.34	118.16	121.90
1	1A	2167	U	C6-N1-C2	-5.33	117.80	121.00
1	1A	2455	G	C4-N9-C1'	5.33	133.43	126.50
1	1A	271(Y)	U	O4'-C1'-N1	5.33	112.47	108.20
1	1A	571	A	C5-N7-C8	5.33	106.56	103.90
1	1A	2859	G	N3-C4-C5	5.33	131.26	128.60
32	1a	853	G	C4-C5-N7	5.33	112.93	110.80
1	2A	2591	C	N3-C4-N4	5.33	121.73	118.00
1	2A	107	C	N3-C4-C5	5.33	124.03	121.90
1	2A	219	G	OP2-P-O3'	5.33	116.93	105.20
1	1A	1255	U	N1-C2-N3	5.33	118.10	114.90
1	2A	898	C	N1-C2-O2	-5.33	115.70	118.90
32	2a	775	G	C5-C6-O6	-5.33	125.40	128.60
1	2A	2087	G	N1-C6-O6	5.33	123.10	119.90
1	1A	670	A	O4'-C1'-N9	-5.33	103.94	108.20
1	1A	1034	G	C5-N7-C8	5.33	106.96	104.30
1	1A	2173	A	C8-N9-C4	5.33	107.93	105.80
1	1A	2613	U	N1-C2-N3	5.33	118.09	114.90
55	1x	46	G	C4-C5-N7	-5.33	108.67	110.80
1	1A	1140	C	C5-C6-N1	5.32	123.66	121.00
1	2A	842	G	N3-C4-N9	-5.32	122.81	126.00
1	2A	2635	C	N1-C2-O2	5.32	122.09	118.90
1	1A	2246	G	N7-C8-N9	-5.32	110.44	113.10
1	2A	528	A	C5-C6-N1	-5.32	115.04	117.70
1	1A	1161	C	C6-N1-C2	-5.32	118.17	120.30
1	1A	130	C	C4-C5-C6	5.32	120.06	117.40
1	1A	179	G	C5-C6-O6	5.32	131.79	128.60
1	1A	457	A	N1-C2-N3	-5.32	126.64	129.30
1	1A	263	C	N3-C2-O2	-5.32	118.18	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	324	A	O5'-P-OP2	-5.32	100.92	105.70
1	1A	707	G	N3-C4-C5	-5.32	125.94	128.60
1	1A	415	A	N7-C8-N9	-5.31	111.14	113.80
1	1A	563	G	C2-N3-C4	5.31	114.56	111.90
32	2a	1042	G	C8-N9-C4	5.31	108.53	106.40
1	1A	935	C	C4-C5-C6	5.31	120.06	117.40
1	2A	454	A	C8-N9-C4	5.31	107.92	105.80
1	2A	968	G	C8-N9-C4	5.31	108.53	106.40
32	1a	1206	G	C5-C6-O6	-5.31	125.41	128.60
32	1a	1442(A)	G	C5-C6-O6	-5.31	125.41	128.60
1	2A	117	G	N1-C6-O6	5.31	123.09	119.90
1	1A	391	G	C8-N9-C4	5.31	108.52	106.40
1	1A	1149	G	C8-N9-C4	-5.31	104.28	106.40
1	1A	2167	U	N1-C2-O2	5.31	126.52	122.80
1	1A	2678	C	N3-C4-C5	-5.31	119.78	121.90
32	1a	1431	C	N3-C4-C5	5.31	124.02	121.90
1	1A	1212	G	N3-C4-N9	5.31	129.18	126.00
1	1A	1782	C	O5'-P-OP1	-5.31	100.92	105.70
32	1a	1305	G	N9-C4-C5	5.31	107.52	105.40
1	2A	2399	G	N1-C6-O6	-5.31	116.72	119.90
27	15	19	ARG	NE-CZ-NH2	-5.31	117.65	120.30
1	1A	775	G	C5-C6-O6	-5.30	125.42	128.60
1	1A	2246	G	N3-C2-N2	5.30	123.61	119.90
1	1A	2713	A	C5-C6-N6	-5.30	119.46	123.70
32	1a	1442	G	N3-C4-C5	-5.30	125.95	128.60
1	2A	1142	U	N1-C2-O2	5.30	126.51	122.80
1	1A	781	A	P-O3'-C3'	5.30	126.06	119.70
1	1A	944	G	C8-N9-C1'	-5.30	120.11	127.00
55	1x	14	A	C8-N9-C1'	-5.30	118.16	127.70
1	2A	2461	C	N1-C2-O2	-5.30	115.72	118.90
1	1A	491	G	OP1-P-OP2	-5.30	111.65	119.60
1	1A	1805	U	C5-C6-N1	-5.30	120.05	122.70
1	1A	518	G	C5-N7-C8	5.30	106.95	104.30
1	1A	2506	U	C5-C6-N1	-5.30	120.05	122.70
1	1A	1595	G	C4-C5-N7	-5.29	108.68	110.80
1	1A	2507	C	C4-C5-C6	5.29	120.05	117.40
56	2y	22	G	C4-N9-C1'	5.29	133.38	126.50
1	1A	1149	G	C2-N3-C4	5.29	114.55	111.90
1	1A	1342	A	N1-C2-N3	5.29	131.95	129.30
56	2y	33	U	C5-C6-N1	5.29	125.35	122.70
1	1A	2275	C	C6-N1-C2	-5.29	118.18	120.30
32	2a	35	G	N3-C4-C5	5.29	131.25	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	717	G	N3-C4-C5	5.29	131.24	128.60
1	1A	2829	C	C2-N1-C1'	-5.29	112.98	118.80
1	2A	2567	G	C5-C6-O6	-5.29	125.43	128.60
32	2a	60	A	C5-N7-C8	5.29	106.54	103.90
32	1a	63	C	N3-C2-O2	-5.29	118.20	121.90
1	2A	504	U	N3-C2-O2	-5.29	118.50	122.20
1	1A	113	G	N3-C2-N2	-5.29	116.20	119.90
1	1A	2492	U	C6-N1-C2	-5.29	117.83	121.00
32	1a	926	G	C8-N9-C4	-5.29	104.29	106.40
1	2A	1142(A)	A	N3-C4-N9	-5.29	123.17	127.40
2	2B	105	A	O5'-P-OP2	-5.29	100.94	105.70
1	1A	807	U	C6-N1-C2	5.28	124.17	121.00
1	1A	2430	A	C8-N9-C4	5.28	107.91	105.80
1	2A	528	A	N7-C8-N9	5.28	116.44	113.80
1	1A	2012	G	N9-C4-C5	5.28	107.51	105.40
1	2A	390	A	N1-C6-N6	5.28	121.77	118.60
1	1A	2068	U	C2-N3-C4	-5.28	123.83	127.00
1	1A	2565	A	N1-C6-N6	-5.28	115.43	118.60
32	1a	1064	G	C5-C6-O6	5.28	131.77	128.60
1	2A	1536	C	C6-N1-C2	-5.28	118.19	120.30
1	1A	939	G	C8-N9-C4	-5.28	104.29	106.40
1	1A	682	G	C4-N9-C1'	5.28	133.36	126.50
1	1A	1633	G	C5-C6-O6	-5.28	125.43	128.60
1	1A	2183	C	P-O3'-C3'	5.28	126.03	119.70
32	1a	989	C	N1-C2-O2	5.28	122.07	118.90
1	1A	775	G	N3-C2-N2	5.28	123.59	119.90
1	1A	272(H)	C	N1-C2-O2	5.27	122.06	118.90
1	1A	467	G	N9-C4-C5	5.27	107.51	105.40
1	1A	468	G	C5-C6-O6	5.27	131.76	128.60
1	1A	1638	C	N1-C2-O2	-5.27	115.74	118.90
1	1A	2033	A	C8-N9-C4	5.27	107.91	105.80
1	1A	559	G	C8-N9-C4	5.27	108.51	106.40
1	1A	2616	C	C6-N1-C2	-5.27	118.19	120.30
1	2A	1313	U	O4'-C1'-N1	5.27	112.42	108.20
1	1A	800	A	N1-C6-N6	-5.27	115.44	118.60
1	2A	407	G	N3-C4-N9	-5.27	122.84	126.00
1	1A	29	U	C5-C4-O4	-5.27	122.74	125.90
1	1A	820	A	O5'-P-OP1	-5.27	100.96	105.70
1	1A	1148	A	N7-C8-N9	-5.27	111.17	113.80
1	1A	2626	C	C2-N1-C1'	-5.27	113.01	118.80
32	1a	318	G	N1-C6-O6	-5.27	116.74	119.90
1	1A	135	G	N7-C8-N9	-5.26	110.47	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	791	C	OP2-P-O3'	5.26	116.78	105.20
1	1A	204	A	N7-C8-N9	-5.26	111.17	113.80
1	1A	725	G	N3-C4-N9	5.26	129.16	126.00
1	2A	383	U	C5-C6-N1	-5.26	120.07	122.70
1	2A	2617	C	C6-N1-C2	5.26	122.40	120.30
1	1A	2111	C	C2-N1-C1'	5.26	124.58	118.80
1	2A	2582	G	C4-N9-C1'	5.26	133.34	126.50
1	2A	2778	A	N9-C4-C5	5.26	107.90	105.80
1	1A	213	A	OP2-P-O3'	5.26	116.76	105.20
53	1v	19	U	N3-C2-O2	-5.26	118.52	122.20
1	2A	2304	G	N3-C2-N2	-5.26	116.22	119.90
32	1a	1442	G	C8-N9-C4	-5.25	104.30	106.40
1	2A	272(H)	C	C5-C6-N1	-5.25	118.37	121.00
1	1A	896	A	C8-N9-C4	-5.25	103.70	105.80
1	1A	973	A	C2-N3-C4	5.25	113.23	110.60
1	1A	1628	G	N9-C4-C5	5.25	107.50	105.40
1	1A	2167	U	C5-C6-N1	5.25	125.33	122.70
1	1A	588	U	C4-C5-C6	-5.25	116.55	119.70
1	1A	717	G	C8-N9-C4	5.25	108.50	106.40
1	1A	2625	G	N1-C6-O6	-5.25	116.75	119.90
1	2A	576	U	O5'-P-OP1	-5.25	100.97	105.70
1	2A	2152	G	C5-C6-O6	-5.25	125.45	128.60
32	1a	1065	U	O5'-P-OP2	-5.25	100.97	105.70
56	2y	4	C	N1-C2-O2	5.25	122.05	118.90
1	1A	1345	C	C2-N3-C4	-5.25	117.28	119.90
1	2A	614	U	N1-C2-N3	5.25	118.05	114.90
32	2a	588	G	N1-C6-O6	-5.25	116.75	119.90
55	1x	34	C	C6-N1-C2	-5.25	118.20	120.30
32	1a	174	C	N3-C2-O2	-5.25	118.23	121.90
2	1B	25	A	N9-C4-C5	-5.24	103.70	105.80
32	2a	1058	G	N3-C4-N9	5.24	129.15	126.00
1	1A	2040	C	C5-C4-N4	5.24	123.87	120.20
1	1A	2056	G	O4'-C1'-N9	-5.24	104.01	108.20
1	1A	1901	A	OP2-P-O3'	5.24	116.73	105.20
1	1A	2507	C	C6-N1-C2	-5.24	118.20	120.30
32	1a	803	G	N1-C6-O6	-5.24	116.76	119.90
1	1A	27	G	N3-C2-N2	5.24	123.57	119.90
1	1A	2492	U	OP1-P-OP2	-5.24	111.74	119.60
32	1a	174	C	N1-C2-O2	5.24	122.04	118.90
1	1A	2385	C	N3-C4-C5	5.24	123.99	121.90
1	1A	2436	G	C8-N9-C4	-5.24	104.31	106.40
1	1A	2506	U	C2-N3-C4	-5.24	123.86	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	11	G	C8-N9-C4	-5.24	104.31	106.40
56	1y	11	C	C2-N3-C4	5.23	122.52	119.90
1	1A	444	C	C5-C6-N1	-5.23	118.38	121.00
1	1A	512	G	OP2-P-O3'	5.23	116.71	105.20
1	1A	2263	C	C4-C5-C6	5.23	120.02	117.40
1	1A	820	A	N9-C4-C5	5.23	107.89	105.80
1	1A	589	C	N1-C2-O2	-5.23	115.76	118.90
1	1A	973	A	N1-C2-N3	-5.23	126.69	129.30
1	1A	1308	A	O5'-P-OP2	-5.23	101.00	105.70
1	1A	2129	C	C2-N1-C1'	5.23	124.55	118.80
55	2x	24	U	C5-C4-O4	5.23	129.04	125.90
32	1a	564	C	O5'-P-OP1	-5.22	101.00	105.70
1	2A	141	A	C8-N9-C4	-5.22	103.71	105.80
1	2A	1653	G	P-O3'-C3'	5.22	125.97	119.70
1	2A	2437	U	N1-C2-O2	5.22	126.46	122.80
1	2A	2893	G	N9-C4-C5	-5.22	103.31	105.40
32	2a	97	G	C5-C6-O6	5.22	131.73	128.60
54	2w	15	G	C6-N1-C2	-5.22	121.97	125.10
32	1a	518	C	N1-C2-O2	5.22	122.03	118.90
1	2A	2017	U	C5-C6-N1	-5.22	120.09	122.70
32	2a	530	G	N9-C4-C5	5.22	107.49	105.40
1	1A	1404	C	C2-N1-C1'	-5.22	113.06	118.80
1	1A	2106	G	C8-N9-C4	-5.22	104.31	106.40
32	1a	71	C	N1-C2-O2	5.22	122.03	118.90
32	2a	509	A	C8-N9-C4	-5.22	103.71	105.80
1	1A	186	G	C5-N7-C8	5.22	106.91	104.30
32	2a	1036	G	C8-N9-C4	-5.22	104.31	106.40
1	1A	2003	G	N1-C6-O6	-5.21	116.77	119.90
2	1B	56	G	N3-C4-C5	-5.21	125.99	128.60
1	2A	228	A	P-O3'-C3'	5.21	125.96	119.70
1	2A	1992	G	O4'-C1'-N9	-5.21	104.03	108.20
54	2w	33	U	C6-N1-C1'	5.21	128.50	121.20
1	1A	2375	G	N1-C6-O6	5.21	123.03	119.90
5	1F	32	LEU	CA-CB-CG	-5.21	103.31	115.30
1	2A	2543	G	N1-C6-O6	-5.21	116.77	119.90
56	2y	22	G	C5-N7-C8	5.21	106.91	104.30
32	2a	266	G	N3-C4-C5	-5.21	126.00	128.60
1	1A	1619	G	N3-C4-C5	-5.21	126.00	128.60
1	1A	2628	C	C5-C4-N4	5.21	123.84	120.20
1	2A	993	G	OP1-P-OP2	-5.21	111.79	119.60
1	1A	193	U	N1-C2-N3	5.21	118.02	114.90
1	1A	593	G	O5'-P-OP2	-5.21	101.01	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1750	G	C8-N9-C4	5.21	108.48	106.40
1	2A	1303	G	O5'-P-OP2	-5.21	101.01	105.70
1	2A	2080	G	N9-C4-C5	-5.21	103.32	105.40
32	2a	354	G	C5-C6-O6	-5.21	125.48	128.60
5	1F	54	ARG	NE-CZ-NH2	-5.21	117.70	120.30
1	1A	1391	U	N1-C2-O2	5.20	126.44	122.80
1	1A	1774	C	C2-N1-C1'	-5.20	113.08	118.80
1	1A	2457	U	C5-C4-O4	-5.20	122.78	125.90
32	1a	1510	U	OP1-P-OP2	5.20	127.40	119.60
1	1A	1007	C	N3-C2-O2	5.20	125.54	121.90
32	1a	43	C	N3-C2-O2	5.20	125.54	121.90
32	1a	1036	G	C6-N1-C2	-5.20	121.98	125.10
1	2A	2823	A	C8-N9-C4	5.20	107.88	105.80
1	1A	1612	C	C2-N3-C4	-5.20	117.30	119.90
1	1A	1654	A	O5'-P-OP1	-5.20	101.02	105.70
1	1A	2458	G	N3-C2-N2	-5.20	116.26	119.90
32	1a	266	G	N3-C4-C5	-5.20	126.00	128.60
32	1a	1490	C	N3-C4-C5	5.20	123.98	121.90
1	1A	1912	A	C8-N9-C4	5.20	107.88	105.80
1	1A	2607	G	C6-N1-C2	-5.20	121.98	125.10
54	2w	19	G	C8-N9-C4	-5.20	104.32	106.40
1	1A	732	C	C6-N1-C2	-5.19	118.22	120.30
1	1A	1705	G	C5-C6-O6	5.19	131.72	128.60
1	1A	515	A	C5-C6-N1	5.19	120.30	117.70
1	1A	577	G	C5-N7-C8	5.19	106.90	104.30
1	1A	884	C	N3-C4-N4	5.19	121.64	118.00
1	1A	1252	G	C6-C5-N7	5.19	133.52	130.40
55	1x	46	G	N9-C4-C5	5.19	107.48	105.40
1	1A	456	C	C6-N1-C1'	-5.19	114.57	120.80
1	1A	701	G	C8-N9-C4	5.19	108.48	106.40
1	2A	491	G	N1-C6-O6	5.19	123.01	119.90
1	2A	2136	C	C6-N1-C1'	-5.19	114.57	120.80
1	2A	2246	G	C8-N9-C4	-5.19	104.32	106.40
1	2A	2508	G	C5-C6-N1	5.19	114.09	111.50
1	1A	313	C	C6-N1-C2	5.19	122.38	120.30
1	1A	423	A	C8-N9-C4	5.19	107.88	105.80
1	1A	1403	C	N3-C4-C5	5.19	123.97	121.90
1	1A	1773	A	OP2-P-O3'	5.19	116.61	105.20
1	2A	1142	U	C2-N1-C1'	5.19	123.92	117.70
1	1A	2479	G	C4-C5-N7	-5.18	108.73	110.80
54	1w	64	A	N1-C6-N6	-5.18	115.49	118.60
32	2a	1204	A	N1-C2-N3	-5.18	126.71	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2515	C	N3-C4-C5	5.18	123.97	121.90
1	1A	179	G	N3-C2-N2	5.18	123.53	119.90
32	2a	900	A	C8-N9-C4	5.18	107.87	105.80
32	1a	183	G	N3-C4-N9	5.18	129.11	126.00
1	2A	797	C	C5-C6-N1	5.18	123.59	121.00
32	2a	353	A	OP2-P-O3'	5.18	116.59	105.20
1	1A	971	C	N3-C4-C5	-5.17	119.83	121.90
1	1A	1289	C	C6-N1-C2	-5.17	118.23	120.30
1	2A	1301	A	O4'-C1'-N9	5.17	112.34	108.20
1	2A	2770	G	C8-N9-C4	5.17	108.47	106.40
1	1A	208	C	N3-C4-C5	-5.17	119.83	121.90
1	1A	1237	A	O5'-P-OP1	-5.17	101.05	105.70
1	1A	2159	G	C4-N9-C1'	5.17	133.22	126.50
1	2A	530	G	N3-C4-C5	5.17	131.19	128.60
1	2A	1216	G	N1-C6-O6	5.17	123.00	119.90
1	2A	1532	C	C5-C6-N1	5.17	123.58	121.00
1	1A	1203	G	N3-C4-N9	5.17	129.10	126.00
1	1A	1980	G	N3-C2-N2	-5.17	116.28	119.90
55	1x	14	A	C4-N9-C1'	5.17	135.60	126.30
1	1A	1122	G	C2-N3-C4	5.17	114.48	111.90
1	1A	2259	G	C5-C6-O6	-5.17	125.50	128.60
1	2A	323	G	N3-C4-N9	5.17	129.10	126.00
32	1a	687	A	P-O3'-C3'	5.17	125.90	119.70
32	2a	79	G	C5-C6-N1	-5.17	108.92	111.50
1	1A	1471	A	O5'-P-OP1	-5.16	101.05	105.70
32	1a	1221	G	N1-C6-O6	5.16	123.00	119.90
1	2A	228	A	N1-C6-N6	5.16	121.70	118.60
1	2A	398	G	C8-N9-C4	5.16	108.47	106.40
1	2A	762	U	C6-N1-C1'	-5.16	113.97	121.20
1	2A	1420	U	C6-N1-C1'	-5.16	113.97	121.20
32	2a	875	C	N3-C2-O2	-5.16	118.29	121.90
1	2A	1789	A	N9-C4-C5	5.16	107.86	105.80
2	2B	10	C	N1-C2-O2	5.16	122.00	118.90
1	1A	456	C	N3-C4-N4	5.16	121.61	118.00
1	1A	1631	C	N1-C2-N3	5.16	122.81	119.20
1	1A	1721	G	N1-C6-O6	5.16	123.00	119.90
32	1a	1409	C	N1-C2-O2	5.16	122.00	118.90
56	1y	70	G	N3-C4-N9	5.16	129.10	126.00
1	2A	2136	C	C2-N3-C4	5.16	122.48	119.90
1	1A	614	U	O4'-C1'-N1	5.16	112.33	108.20
32	1a	879	C	C2-N1-C1'	-5.16	113.13	118.80
1	2A	1653	G	C5-C6-O6	5.16	131.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	518	G	N7-C8-N9	-5.16	110.52	113.10
1	1A	788	A	N1-C2-N3	-5.16	126.72	129.30
1	1A	2815	C	C6-N1-C2	-5.16	118.24	120.30
32	1a	1397	C	C5-C4-N4	-5.16	116.59	120.20
1	1A	970	C	OP1-P-OP2	-5.15	111.87	119.60
1	1A	2455	G	OP1-P-OP2	-5.15	111.87	119.60
1	2A	2593	U	C4-C5-C6	-5.15	116.61	119.70
32	1a	532	A	O4'-C1'-N9	5.15	112.32	108.20
1	2A	2131	G	C8-N9-C4	-5.15	104.34	106.40
32	2a	1217	C	C2-N3-C4	-5.15	117.33	119.90
32	1a	1063	C	N3-C2-O2	5.15	125.50	121.90
1	2A	1831	G	N1-C6-O6	-5.15	116.81	119.90
1	1A	559	G	N1-C2-N3	-5.15	120.81	123.90
1	1A	1207	C	N3-C4-N4	-5.15	114.40	118.00
1	1A	2643	G	C8-N9-C4	-5.15	104.34	106.40
32	1a	1279	A	N7-C8-N9	5.15	116.37	113.80
1	2A	1459	G	C8-N9-C4	-5.15	104.34	106.40
1	1A	518	G	N1-C6-O6	-5.14	116.81	119.90
1	1A	1080	C	N3-C2-O2	-5.14	118.30	121.90
32	1a	758	G	N9-C4-C5	5.14	107.46	105.40
1	2A	2054	A	N1-C6-N6	-5.14	115.51	118.60
1	2A	2279	G	C8-N9-C4	5.14	108.46	106.40
32	1a	90	U	N1-C2-N3	5.14	117.98	114.90
1	2A	2824	C	N3-C4-C5	-5.14	119.84	121.90
1	1A	1021	A	O5'-P-OP1	-5.14	101.07	105.70
1	2A	2768	C	C6-N1-C2	-5.14	118.24	120.30
1	1A	2236	C	C5-C4-N4	-5.14	116.60	120.20
1	1A	2327	A	C5-N7-C8	5.14	106.47	103.90
1	1A	2636	U	C4-C5-C6	-5.14	116.62	119.70
32	1a	644	G	C8-N9-C4	5.14	108.46	106.40
32	2a	754	C	C6-N1-C1'	-5.14	114.63	120.80
32	1a	1531	A	C5-C6-N1	-5.14	115.13	117.70
1	2A	1133	U	C2-N1-C1'	-5.14	111.54	117.70
1	2A	1825	A	C5-N7-C8	5.14	106.47	103.90
1	2A	2740	A	N1-C6-N6	-5.14	115.52	118.60
1	2A	2886	G	N3-C2-N2	-5.14	116.31	119.90
1	1A	346	A	N1-C6-N6	5.13	121.68	118.60
1	1A	1992	G	C2'-C3'-O3'	5.13	121.92	113.70
32	1a	19	C	OP2-P-O3'	5.13	116.50	105.20
1	2A	2778	A	C5-C6-N6	5.13	127.81	123.70
1	1A	566	U	N1-C2-N3	5.13	117.98	114.90
1	1A	396	G	N1-C6-O6	5.13	122.98	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1992	G	N3-C4-C5	-5.13	126.03	128.60
32	1a	1034	G	N3-C4-N9	-5.13	122.92	126.00
54	1w	50	U	N1-C2-N3	-5.13	111.82	114.90
55	1x	56	C	N1-C2-O2	5.13	121.98	118.90
1	2A	1130	U	N3-C4-O4	-5.13	115.81	119.40
1	2A	2066	C	O5'-P-OP1	-5.13	101.08	105.70
1	1A	962	G	N3-C4-C5	-5.13	126.04	128.60
1	1A	2184	G	N3-C4-C5	5.13	131.16	128.60
1	1A	2226	C	C6-N1-C2	5.13	122.35	120.30
1	1A	2576	G	C5-C6-N1	5.13	114.06	111.50
1	1A	2618	G	C5-N7-C8	5.13	106.86	104.30
32	1a	123	C	N1-C2-O2	-5.13	115.82	118.90
32	1a	1417	G	N9-C4-C5	-5.13	103.35	105.40
1	2A	2320	A	N1-C6-N6	-5.12	115.53	118.60
1	1A	788	A	C5-N7-C8	5.12	106.46	103.90
1	1A	808	G	C5-C6-N1	5.12	114.06	111.50
1	1A	2319	G	N9-C1'-C2'	5.12	120.66	114.00
32	1a	1387	G	N1-C6-O6	-5.12	116.83	119.90
32	1a	1420	C	C6-N1-C2	-5.12	118.25	120.30
54	1w	23	A	C6-N1-C2	-5.12	115.53	118.60
54	1w	71	G	C8-N9-C1'	5.12	133.66	127.00
1	1A	2098	U	N1-C2-O2	5.12	126.38	122.80
1	1A	2364	C	C6-N1-C2	5.12	122.35	120.30
1	1A	1052	C	N3-C4-C5	-5.12	119.85	121.90
1	2A	845	G	O4'-C1'-N9	5.12	112.30	108.20
1	2A	2630	G	N3-C4-N9	-5.12	122.93	126.00
57	2z	4	SER	C-N-CA	5.12	134.50	121.70
1	1A	2262	U	N3-C4-O4	-5.12	115.82	119.40
32	2a	239	U	C6-N1-C2	-5.12	117.93	121.00
1	1A	2396	G	N1-C6-O6	-5.12	116.83	119.90
1	2A	659	C	N3-C4-N4	-5.12	114.42	118.00
1	1A	397	G	O5'-P-OP2	-5.11	101.10	105.70
1	1A	1021	A	C2-N3-C4	5.11	113.16	110.60
1	1A	1762	A	O5'-P-OP2	-5.11	101.10	105.70
1	2A	2318	G	N3-C4-C5	-5.11	126.04	128.60
1	2A	748	G	C8-N9-C1'	5.11	133.65	127.00
1	2A	2250	G	N3-C4-C5	-5.11	126.04	128.60
32	2a	1303	C	N3-C4-N4	-5.11	114.42	118.00
1	1A	2364	C	C5-C6-N1	-5.11	118.44	121.00
1	1A	444	C	N1-C2-O2	-5.11	115.83	118.90
1	1A	2861	G	C4-C5-N7	5.11	112.84	110.80
1	1A	456	C	C2-N1-C1'	5.11	124.42	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	1B	7	G	O5'-P-OP2	-5.11	101.10	105.70
54	1w	30	G	N3-C2-N2	-5.11	116.32	119.90
56	1y	65	G	C8-N9-C1'	5.11	133.64	127.00
1	2A	1569	A	N1-C6-N6	-5.11	115.53	118.60
1	2A	2334	G	N3-C4-N9	5.11	129.06	126.00
1	1A	2269	A	C8-N9-C4	5.11	107.84	105.80
2	1B	30	C	N3-C4-C5	-5.11	119.86	121.90
3	1D	237	GLU	C-N-CA	-5.11	111.58	122.30
11	1P	18	ARG	NE-CZ-NH2	5.11	122.85	120.30
32	1a	1003	G	N3-C4-C5	-5.11	126.05	128.60
1	2A	752	A	P-O3'-C3'	5.11	125.83	119.70
1	2A	948	G	C5-C6-O6	5.11	131.66	128.60
1	1A	834	C	C4-C5-C6	5.10	119.95	117.40
1	1A	1790	C	OP1-P-O3'	5.10	116.42	105.20
32	2a	643	C	N1-C2-O2	5.10	121.96	118.90
1	1A	1003	G	C5-C6-O6	-5.10	125.54	128.60
1	1A	2753	A	C5-C6-N6	-5.10	119.62	123.70
32	1a	63	C	N1-C2-O2	5.10	121.96	118.90
1	1A	1700	A	O5'-P-OP1	-5.10	101.11	105.70
1	1A	2613	U	N3-C4-O4	-5.10	115.83	119.40
1	1A	2777	G	N3-C2-N2	-5.10	116.33	119.90
1	2A	1166	C	N1-C2-O2	-5.10	115.84	118.90
1	2A	1257	C	N3-C4-N4	-5.10	114.43	118.00
1	1A	2230	G	N3-C2-N2	-5.10	116.33	119.90
1	1A	2881	C	C2-N1-C1'	-5.10	113.19	118.80
1	2A	111	A	C8-N9-C4	5.10	107.84	105.80
56	2y	31	A	C5-C6-N1	-5.10	115.15	117.70
1	1A	1115	G	C8-N9-C4	5.10	108.44	106.40
1	1A	1782	C	N3-C4-C5	-5.10	119.86	121.90
32	2a	1004	A	C5-C6-N6	-5.10	119.62	123.70
54	2w	15	G	C5-C6-N1	5.10	114.05	111.50
1	1A	2026	C	O5'-P-OP2	-5.09	101.12	105.70
1	1A	2308	G	C4-C5-N7	5.09	112.84	110.80
1	1A	2464	C	N1-C2-O2	5.09	121.96	118.90
1	2A	1769	G	C5-C6-O6	-5.09	125.54	128.60
1	2A	2192	G	N3-C4-N9	5.09	129.06	126.00
1	1A	699	A	C2-N3-C4	-5.09	108.05	110.60
1	1A	1325	G	O4'-C1'-N9	5.09	112.27	108.20
1	1A	1673	U	C5-C6-N1	-5.09	120.15	122.70
1	1A	2869	G	C5-C6-N1	-5.09	108.95	111.50
1	1A	1340	U	C5-C6-N1	-5.09	120.15	122.70
1	1A	2607	G	N3-C2-N2	-5.09	116.34	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	858	G	N3-C4-N9	5.09	129.06	126.00
32	2a	1199	U	C5-C4-O4	5.09	128.95	125.90
1	1A	1627	G	N3-C4-C5	-5.09	126.06	128.60
1	1A	2593	U	C2-N3-C4	-5.09	123.95	127.00
32	2a	70	G	N1-C6-O6	5.09	122.95	119.90
32	2a	397	A	N3-C4-C5	-5.09	123.24	126.80
32	2a	792	A	O4'-C1'-N9	5.09	112.27	108.20
32	2a	808	C	C5-C4-N4	5.09	123.76	120.20
1	1A	687	C	C6-N1-C2	-5.09	118.27	120.30
1	1A	1200	C	N3-C2-O2	5.09	125.46	121.90
1	2A	1142(A)	A	N1-C2-N3	5.09	131.84	129.30
1	2A	660	G	C5-C6-O6	5.08	131.65	128.60
1	1A	1328	G	N3-C4-C5	-5.08	126.06	128.60
1	1A	1779	U	O4'-C1'-N1	5.08	112.27	108.20
32	1a	326	G	N3-C4-C5	-5.08	126.06	128.60
32	1a	1276	G	N3-C4-N9	5.08	129.05	126.00
1	2A	1825	A	N1-C6-N6	-5.08	115.55	118.60
1	1A	140	G	N9-C4-C5	-5.08	103.37	105.40
1	1A	1020	A	N1-C6-N6	5.08	121.65	118.60
32	2a	1362	C	N3-C2-O2	-5.08	118.34	121.90
1	1A	609	A	N7-C8-N9	-5.08	111.26	113.80
1	1A	2889	C	N3-C2-O2	-5.08	118.34	121.90
1	2A	2031	A	N1-C6-N6	5.08	121.65	118.60
1	1A	39	C	C2-N3-C4	-5.08	117.36	119.90
1	2A	503	A	N9-C4-C5	5.08	107.83	105.80
1	2A	762	U	N3-C2-O2	-5.08	118.64	122.20
1	2A	2168	G	N7-C8-N9	5.08	115.64	113.10
1	1A	195	A	P-O3'-C3'	5.08	125.79	119.70
1	1A	674	G	N9-C4-C5	-5.08	103.37	105.40
1	1A	1252	G	C8-N9-C1'	5.08	133.60	127.00
32	1a	77	G	C8-N9-C4	5.08	108.43	106.40
1	2A	246	C	N3-C4-N4	5.07	121.55	118.00
1	2A	1010	A	OP2-P-O3'	5.07	116.36	105.20
1	1A	1340	U	N3-C4-O4	-5.07	115.85	119.40
1	2A	2448	A	N9-C4-C5	-5.07	103.77	105.80
1	1A	1526	G	N9-C4-C5	-5.07	103.37	105.40
1	1A	1839	G	N3-C4-N9	5.07	129.04	126.00
1	2A	1984	G	N1-C6-O6	-5.07	116.86	119.90
1	1A	1953	A	C8-N9-C4	5.07	107.83	105.80
32	1a	1031	G	C4-C5-N7	-5.07	108.77	110.80
56	1y	58	A	P-O3'-C3'	5.07	125.78	119.70
1	2A	2152	G	N1-C6-O6	5.07	122.94	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	512	G	N1-C6-O6	5.07	122.94	119.90
1	1A	1127	A	N1-C2-N3	-5.07	126.77	129.30
1	1A	2751	G	C8-N9-C1'	-5.07	120.41	127.00
1	2A	123	G	O5'-P-OP2	-5.07	101.14	105.70
1	2A	828	U	C2-N3-C4	-5.07	123.96	127.00
1	2A	2532	G	C8-N9-C1'	-5.07	120.42	127.00
1	1A	532	A	O4'-C1'-N9	5.06	112.25	108.20
1	1A	204	A	C5-N7-C8	5.06	106.43	103.90
1	1A	1553	A	C4-C5-N7	-5.06	108.17	110.70
1	1A	1712	C	C6-N1-C2	5.06	122.33	120.30
32	1a	508	C	N3-C2-O2	5.06	125.44	121.90
32	1a	853	G	N1-C6-O6	5.06	122.94	119.90
1	2A	1007	C	N3-C4-C5	5.06	123.92	121.90
32	2a	246	A	O4'-C1'-N9	5.06	112.25	108.20
32	2a	643	C	N3-C2-O2	-5.06	118.36	121.90
1	1A	2751	G	C6-C5-N7	-5.06	127.36	130.40
1	1A	2784	C	N3-C2-O2	-5.06	118.36	121.90
32	2a	862	C	N3-C2-O2	-5.06	118.36	121.90
1	1A	396	G	O5'-P-OP2	5.06	116.77	110.70
1	1A	896	A	C2-N3-C4	5.06	113.13	110.60
1	1A	1173	G	O4'-C1'-N9	5.06	112.25	108.20
1	1A	1212	G	O4'-C1'-N9	5.06	112.25	108.20
32	1a	968	A	C4-C5-N7	5.06	113.23	110.70
32	1a	1240	U	C2-N1-C1'	-5.06	111.63	117.70
32	1a	1429	C	C6-N1-C2	-5.06	118.28	120.30
1	1A	567	A	O5'-P-OP1	-5.06	101.15	105.70
1	1A	897	C	C6-N1-C2	5.06	122.32	120.30
1	1A	1772	G	C4-N9-C1'	-5.06	119.93	126.50
1	2A	510	C	N3-C2-O2	-5.06	118.36	121.90
1	2A	748	G	C6-C5-N7	5.06	133.43	130.40
1	2A	897	C	C4-C5-C6	-5.06	114.87	117.40
1	1A	1349	A	C2-N3-C4	5.05	113.13	110.60
1	2A	503	A	N1-C6-N6	-5.05	115.57	118.60
32	2a	22	G	C8-N9-C4	-5.05	104.38	106.40
32	2a	1432	G	N1-C6-O6	5.05	122.93	119.90
1	1A	2201	C	N3-C2-O2	-5.05	118.36	121.90
32	2a	1123	A	N1-C6-N6	-5.05	115.57	118.60
1	1A	697	C	C2-N3-C4	-5.05	117.37	119.90
1	1A	801	G	C5-C6-O6	5.05	131.63	128.60
1	1A	1631	C	C6-N1-C2	-5.05	118.28	120.30
1	2A	945	A	N1-C2-N3	5.05	131.83	129.30
1	2A	1190	G	N1-C6-O6	-5.05	116.87	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2260	C	N3-C4-C5	-5.05	119.88	121.90
1	1A	758	C	OP2-P-O3'	5.05	116.31	105.20
54	1w	51	U	C5-C4-O4	5.05	128.93	125.90
1	2A	1757	U	C6-N1-C2	5.05	124.03	121.00
32	2a	397	A	C4-C5-C6	5.05	119.53	117.00
32	2a	442	C	C2-N1-C1'	5.05	124.35	118.80
1	1A	766	C	C5-C4-N4	5.05	123.73	120.20
1	1A	1046	A	O4'-C1'-N9	5.05	112.24	108.20
1	1A	1943	U	N1-C2-N3	5.05	117.93	114.90
1	1A	2246	G	N3-C4-N9	5.05	129.03	126.00
32	1a	443	C	C5-C6-N1	-5.05	118.48	121.00
1	2A	1157	G	C5-C6-O6	-5.05	125.57	128.60
1	2A	1181	C	C6-N1-C2	5.05	122.32	120.30
1	2A	1890	A	C8-N9-C4	5.05	107.82	105.80
1	1A	454	A	C8-N9-C4	-5.04	103.78	105.80
1	1A	2548	G	C5-N7-C8	5.04	106.82	104.30
1	2A	2331	G	N1-C6-O6	5.04	122.93	119.90
1	1A	728	G	N1-C6-O6	-5.04	116.87	119.90
1	1A	1753	G	C8-N9-C4	5.04	108.42	106.40
1	1A	481	G	N1-C6-O6	-5.04	116.88	119.90
1	2A	212	G	O5'-P-OP2	-5.04	101.16	105.70
1	1A	2200	C	C6-N1-C2	-5.04	118.28	120.30
53	1v	13	A	C5-N7-C8	-5.04	101.38	103.90
32	2a	195	A	N9-C4-C5	5.04	107.82	105.80
32	2a	1523	G	N9-C4-C5	5.04	107.42	105.40
1	1A	557	U	N3-C4-C5	5.04	117.62	114.60
1	1A	788	A	C2-N3-C4	5.04	113.12	110.60
1	1A	2588	G	C5-C6-N1	5.04	114.02	111.50
32	1a	1063	C	C2-N1-C1'	-5.04	113.26	118.80
1	2A	1313	U	C2-N1-C1'	5.04	123.75	117.70
1	2A	2603	G	C2-N3-C4	5.04	114.42	111.90
6	2G	53	LEU	CA-CB-CG	-5.04	103.71	115.30
1	1A	814	C	C5-C6-N1	5.04	123.52	121.00
1	1A	1782	C	O5'-P-OP2	5.04	116.74	110.70
1	1A	2375	G	C2-N3-C4	5.04	114.42	111.90
32	1a	1020	U	C2-N1-C1'	5.04	123.74	117.70
55	1x	22	G	C5-C6-O6	-5.04	125.58	128.60
1	2A	476	G	O5'-P-OP2	-5.04	101.17	105.70
1	2A	529	A	N7-C8-N9	5.04	116.32	113.80
1	1A	2319	G	C2-N3-C4	-5.04	109.38	111.90
1	2A	205	G	OP1-P-OP2	5.04	127.15	119.60
1	2A	792	G	C8-N9-C1'	-5.04	120.45	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2510	C	N3-C4-N4	-5.04	114.48	118.00
1	1A	1416	G	O4'-C1'-N9	5.03	112.22	108.20
1	2A	1114	G	O4'-C1'-N9	5.03	112.23	108.20
1	1A	1763	G	C8-N9-C4	5.03	108.41	106.40
1	2A	856	C	C5-C6-N1	5.03	123.51	121.00
1	2A	1385	G	O4'-C1'-N9	5.03	112.22	108.20
1	1A	370	G	O4'-C1'-N9	-5.03	104.18	108.20
1	1A	539	G	C4-C5-N7	-5.03	108.79	110.80
1	1A	1957	C	O5'-P-OP1	5.03	116.73	110.70
1	2A	2606	C	N1-C2-O2	-5.03	115.88	118.90
1	1A	2728	U	C5-C4-O4	5.03	128.91	125.90
32	1a	989	C	N3-C2-O2	-5.03	118.38	121.90
1	2A	1619	G	OP1-P-O3'	5.03	116.26	105.20
56	2y	22	G	C8-N9-C1'	-5.02	120.47	127.00
1	1A	723	G	N1-C6-O6	-5.02	116.89	119.90
1	1A	2159	G	C8-N9-C1'	-5.02	120.47	127.00
1	1A	2334	G	OP2-P-O3'	5.02	116.25	105.20
1	2A	113	G	C2-N3-C4	-5.02	109.39	111.90
1	2A	186	G	C2-N3-C4	5.02	114.41	111.90
1	2A	1292	U	C5-C4-O4	-5.02	122.89	125.90
1	2A	2591	C	N1-C2-O2	-5.02	115.89	118.90
1	1A	1191	G	C2-N3-C4	5.02	114.41	111.90
1	2A	1142(A)	A	N3-C4-C5	5.02	130.31	126.80
32	2a	1225	A	C8-N9-C4	-5.02	103.79	105.80
1	1A	980	A	N7-C8-N9	-5.02	111.29	113.80
1	1A	1373	A	N7-C8-N9	-5.02	111.29	113.80
1	1A	1668	A	OP1-P-O3'	5.02	116.24	105.20
1	1A	2430	A	N1-C2-N3	-5.02	126.79	129.30
32	2a	354	G	C8-N9-C1'	-5.02	120.47	127.00
32	2a	754	C	N3-C2-O2	-5.02	118.39	121.90
1	1A	1756	G	C5-C6-N1	-5.02	108.99	111.50
1	1A	2142	C	C2-N3-C4	5.02	122.41	119.90
1	1A	180	G	N3-C4-C5	-5.02	126.09	128.60
1	1A	934	G	N3-C2-N2	5.02	123.41	119.90
1	1A	1252	G	C4-N9-C1'	-5.01	119.98	126.50
1	1A	1401	G	N1-C6-O6	-5.01	116.89	119.90
1	1A	2455	G	C8-N9-C1'	-5.01	120.48	127.00
1	2A	448	U	C2-N3-C4	-5.01	123.99	127.00
32	2a	672	U	O4'-C1'-N1	5.01	112.21	108.20
1	1A	846	C	C6-N1-C2	5.01	122.30	120.30
1	1A	1309	G	C6-N1-C2	-5.01	122.09	125.10
1	1A	1428	C	N3-C4-C5	-5.01	119.89	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2694	G	N3-C4-C5	-5.01	126.09	128.60
32	1a	330	C	C6-N1-C2	-5.01	118.30	120.30
1	2A	398	G	N7-C8-N9	-5.01	110.59	113.10
1	2A	2137	C	C2-N1-C1'	5.01	124.31	118.80
1	2A	2567	G	N1-C6-O6	5.01	122.91	119.90
54	2w	75	C	C5-C6-N1	-5.01	118.49	121.00
1	1A	1249	U	C4-C5-C6	5.01	122.71	119.70
1	1A	2618	G	N1-C6-O6	-5.01	116.89	119.90
1	1A	2685	G	N7-C8-N9	-5.01	110.60	113.10
32	1a	893	C	N1-C2-O2	5.01	121.91	118.90
1	2A	2543	G	C5-C6-O6	5.01	131.60	128.60
2	2B	50	G	OP2-P-O3'	5.01	116.22	105.20
32	2a	1262	C	N1-C2-O2	5.01	121.91	118.90
32	1a	353	A	OP2-P-O3'	5.01	116.22	105.20
1	1A	1305	C	N3-C4-N4	5.01	121.50	118.00
1	1A	2452	C	N1-C2-N3	5.01	122.70	119.20
1	2A	685	A	C8-N9-C4	-5.01	103.80	105.80
1	1A	787	U	O5'-P-OP1	-5.00	101.20	105.70
1	2A	681	G	N9-C4-C5	-5.00	103.40	105.40
1	2A	2448	A	C8-N9-C4	5.00	107.80	105.80
1	1A	2181	G	N3-C4-N9	5.00	129.00	126.00
1	2A	2506	U	C5'-C4'-O4'	5.00	115.10	109.10
56	2y	22	G	N3-C4-N9	5.00	129.00	126.00
1	1A	444	C	N3-C4-N4	-5.00	114.50	118.00
1	1A	2757	A	N1-C6-N6	-5.00	115.60	118.60
1	2A	503	A	N1-C2-N3	5.00	131.80	129.30
1	2A	2131	G	N3-C4-C5	-5.00	126.10	128.60

There are no chirality outliers.

All (21) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
23	11	3	LYS	Peptide
26	14	61	ARG	Peptide
6	1G	50	ALA	Peptide
6	1G	95	ARG	Peptide
21	1Z	29	TYR	Peptide
33	1b	123	ALA	Peptide
33	1b	126	GLU	Peptide
33	1b	21	ARG	Peptide
41	1j	32	ALA	Peptide
41	1j	54	PHE	Peptide

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Mol	Chain	Res	Type	Group
23	21	3	LYS	Peptide
26	24	60	GLN	Peptide
3	2D	275	LYS	Peptide
5	2F	20	LEU	Peptide
5	2F	21	ALA	Peptide
6	2G	95	ARG	Peptide
21	2Z	51	ALA	Peptide
21	2Z	52	SER	Peptide
33	2b	8	LYS	Peptide
41	2j	79	ARG	Peptide
44	2m	65	LYS	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 X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	259 (95%)	14 (5%)	0	100	100
3	2D	273/276 (99%)	254 (93%)	19 (7%)	0	100	100
4	1E	202/206 (98%)	187 (93%)	15 (7%)	0	100	100
4	2E	202/206 (98%)	191 (95%)	10 (5%)	1 (0%)	25	44
5	1F	201/210 (96%)	195 (97%)	6 (3%)	0	100	100
5	2F	201/210 (96%)	188 (94%)	13 (6%)	0	100	100
6	1G	179/182 (98%)	164 (92%)	14 (8%)	1 (1%)	22	39
6	2G	179/182 (98%)	154 (86%)	24 (13%)	1 (1%)	22	39
7	1H	172/180 (96%)	163 (95%)	9 (5%)	0	100	100
7	2H	172/180 (96%)	153 (89%)	18 (10%)	1 (1%)	22	39

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
8	1I	144/148 (97%)	122 (85%)	22 (15%)	0	100	100
8	2I	144/148 (97%)	125 (87%)	19 (13%)	0	100	100
9	1N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
9	2N	138/140 (99%)	126 (91%)	12 (9%)	0	100	100
10	1O	120/122 (98%)	114 (95%)	6 (5%)	0	100	100
10	2O	120/122 (98%)	114 (95%)	6 (5%)	0	100	100
11	1P	147/150 (98%)	137 (93%)	10 (7%)	0	100	100
11	2P	147/150 (98%)	134 (91%)	13 (9%)	0	100	100
12	1Q	139/141 (99%)	132 (95%)	7 (5%)	0	100	100
12	2Q	139/141 (99%)	126 (91%)	13 (9%)	0	100	100
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
13	2R	116/118 (98%)	109 (94%)	7 (6%)	0	100	100
14	1S	108/112 (96%)	104 (96%)	4 (4%)	0	100	100
14	2S	108/112 (96%)	98 (91%)	10 (9%)	0	100	100
15	1T	129/146 (88%)	119 (92%)	10 (8%)	0	100	100
15	2T	129/146 (88%)	124 (96%)	5 (4%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	114 (100%)	0	0	100	100
17	1V	99/101 (98%)	92 (93%)	7 (7%)	0	100	100
17	2V	99/101 (98%)	90 (91%)	9 (9%)	0	100	100
18	1W	110/113 (97%)	109 (99%)	1 (1%)	0	100	100
18	2W	110/113 (97%)	106 (96%)	4 (4%)	0	100	100
19	1X	93/96 (97%)	90 (97%)	3 (3%)	0	100	100
19	2X	93/96 (97%)	88 (95%)	5 (5%)	0	100	100
20	1Y	105/110 (96%)	99 (94%)	6 (6%)	0	100	100
20	2Y	105/110 (96%)	95 (90%)	10 (10%)	0	100	100
21	1Z	148/206 (72%)	129 (87%)	18 (12%)	1 (1%)	19	35
21	2Z	156/206 (76%)	133 (85%)	21 (14%)	2 (1%)	10	19
22	10	81/85 (95%)	77 (95%)	4 (5%)	0	100	100
22	20	81/85 (95%)	81 (100%)	0	0	100	100
23	11	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	12	23

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	12 23
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100 100
24	22	68/72 (94%)	68 (100%)	0	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100 100
26	14	67/71 (94%)	51 (76%)	14 (21%)	2 (3%)	3 5
26	24	67/71 (94%)	50 (75%)	16 (24%)	1 (2%)	8 16
27	15	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
28	16	51/54 (94%)	47 (92%)	4 (8%)	0	100 100
28	26	51/54 (94%)	51 (100%)	0	0	100 100
29	17	46/49 (94%)	46 (100%)	0	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	60 (97%)	2 (3%)	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100 100
33	1b	229/256 (90%)	192 (84%)	34 (15%)	3 (1%)	10 19
33	2b	229/256 (90%)	190 (83%)	36 (16%)	3 (1%)	10 19
34	1c	204/239 (85%)	189 (93%)	15 (7%)	0	100 100
34	2c	204/239 (85%)	175 (86%)	29 (14%)	0	100 100
35	1d	206/209 (99%)	185 (90%)	21 (10%)	0	100 100
35	2d	206/209 (99%)	188 (91%)	18 (9%)	0	100 100
36	1e	146/162 (90%)	132 (90%)	14 (10%)	0	100 100
36	2e	146/162 (90%)	137 (94%)	9 (6%)	0	100 100
37	1f	98/101 (97%)	96 (98%)	2 (2%)	0	100 100
37	2f	98/101 (97%)	94 (96%)	4 (4%)	0	100 100
38	1g	153/156 (98%)	139 (91%)	14 (9%)	0	100 100
38	2g	153/156 (98%)	138 (90%)	15 (10%)	0	100 100
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100 100
39	2h	135/138 (98%)	128 (95%)	7 (5%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
40	1i	125/128 (98%)	109 (87%)	16 (13%)	0	100	100
40	2i	125/128 (98%)	102 (82%)	23 (18%)	0	100	100
41	1j	95/105 (90%)	85 (90%)	9 (10%)	1 (1%)	12	23
41	2j	94/105 (90%)	84 (89%)	9 (10%)	1 (1%)	12	23
42	1k	112/129 (87%)	101 (90%)	10 (9%)	1 (1%)	14	28
42	2k	112/129 (87%)	99 (88%)	13 (12%)	0	100	100
43	1l	119/132 (90%)	110 (92%)	9 (8%)	0	100	100
43	2l	119/132 (90%)	111 (93%)	8 (7%)	0	100	100
44	1m	123/126 (98%)	107 (87%)	15 (12%)	1 (1%)	16	31
44	2m	120/126 (95%)	107 (89%)	13 (11%)	0	100	100
45	1n	58/61 (95%)	54 (93%)	4 (7%)	0	100	100
45	2n	58/61 (95%)	50 (86%)	8 (14%)	0	100	100
46	1o	86/89 (97%)	81 (94%)	5 (6%)	0	100	100
46	2o	86/89 (97%)	81 (94%)	5 (6%)	0	100	100
47	1p	80/88 (91%)	75 (94%)	5 (6%)	0	100	100
47	2p	80/88 (91%)	72 (90%)	8 (10%)	0	100	100
48	1q	97/105 (92%)	90 (93%)	7 (7%)	0	100	100
48	2q	97/105 (92%)	91 (94%)	6 (6%)	0	100	100
49	1r	66/88 (75%)	61 (92%)	5 (8%)	0	100	100
49	2r	66/88 (75%)	62 (94%)	4 (6%)	0	100	100
50	1s	81/93 (87%)	69 (85%)	12 (15%)	0	100	100
50	2s	81/93 (87%)	70 (86%)	10 (12%)	1 (1%)	11	21
51	1t	94/106 (89%)	80 (85%)	13 (14%)	1 (1%)	12	23
51	2t	94/106 (89%)	83 (88%)	11 (12%)	0	100	100
52	1u	21/27 (78%)	19 (90%)	2 (10%)	0	100	100
52	2u	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
57	1z	16/18 (89%)	12 (75%)	3 (19%)	1 (6%)	1	1
57	2z	16/18 (89%)	11 (69%)	5 (31%)	0	100	100
All	All	11404/12164 (94%)	10474 (92%)	905 (8%)	25 (0%)	44	64

All (25) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
21	1Z	53	ILE
57	1z	4	SER
21	2Z	52	SER
33	2b	9	GLU
33	2b	17	PHE
23	11	3	LYS
41	1j	79	ARG
44	1m	106	ASN
21	2Z	51	ALA
41	2j	79	ARG
33	1b	17	PHE
23	21	3	LYS
6	1G	96	ARG
26	14	62	ARG
33	1b	22	LYS
26	24	47	GLN
50	2s	81	ARG
33	2b	21	ARG
26	14	61	ARG
6	2G	96	ARG
4	2E	52	LEU
42	1k	105	VAL
51	1t	96	GLY
7	2H	48	GLY
33	1b	125	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	1D	215/218 (99%)	200 (93%)	15 (7%)	12 26
3	2D	215/218 (99%)	203 (94%)	12 (6%)	17 36
4	1E	164/166 (99%)	153 (93%)	11 (7%)	13 28
4	2E	164/166 (99%)	157 (96%)	7 (4%)	25 48
5	1F	160/166 (96%)	138 (86%)	22 (14%)	3 5

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
5	2F	159/166 (96%)	146 (92%)	13 (8%)	9 19
6	1G	143/156 (92%)	127 (89%)	16 (11%)	5 10
6	2G	143/156 (92%)	123 (86%)	20 (14%)	3 5
7	1H	144/148 (97%)	133 (92%)	11 (8%)	11 22
7	2H	144/148 (97%)	130 (90%)	14 (10%)	6 14
8	1I	113/124 (91%)	89 (79%)	24 (21%)	1 1
8	2I	105/124 (85%)	88 (84%)	17 (16%)	2 3
9	1N	118/119 (99%)	111 (94%)	7 (6%)	16 33
9	2N	118/119 (99%)	111 (94%)	7 (6%)	16 33
10	1O	100/100 (100%)	99 (99%)	1 (1%)	73 88
10	2O	100/100 (100%)	96 (96%)	4 (4%)	27 51
11	1P	115/116 (99%)	105 (91%)	10 (9%)	8 17
11	2P	115/116 (99%)	104 (90%)	11 (10%)	7 14
12	1Q	111/111 (100%)	105 (95%)	6 (5%)	18 37
12	2Q	111/111 (100%)	106 (96%)	5 (4%)	23 46
13	1R	101/101 (100%)	96 (95%)	5 (5%)	20 41
13	2R	101/101 (100%)	96 (95%)	5 (5%)	20 41
14	1S	86/88 (98%)	82 (95%)	4 (5%)	22 44
14	2S	85/88 (97%)	71 (84%)	14 (16%)	2 3
15	1T	115/127 (91%)	107 (93%)	8 (7%)	12 26
15	2T	113/127 (89%)	105 (93%)	8 (7%)	12 25
16	1U	93/94 (99%)	88 (95%)	5 (5%)	18 37
16	2U	93/94 (99%)	88 (95%)	5 (5%)	18 37
17	1V	80/82 (98%)	70 (88%)	10 (12%)	3 7
17	2V	80/82 (98%)	73 (91%)	7 (9%)	8 17
18	1W	90/92 (98%)	85 (94%)	5 (6%)	17 36
18	2W	90/92 (98%)	84 (93%)	6 (7%)	13 28
19	1X	77/78 (99%)	76 (99%)	1 (1%)	65 85
19	2X	77/78 (99%)	73 (95%)	4 (5%)	19 39
20	1Y	85/91 (93%)	75 (88%)	10 (12%)	4 9
20	2Y	85/91 (93%)	77 (91%)	8 (9%)	7 15

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
21	1Z	135/179 (75%)	117 (87%)	18 (13%)	3 6
21	2Z	137/179 (76%)	115 (84%)	22 (16%)	2 3
22	10	65/67 (97%)	63 (97%)	2 (3%)	35 62
22	20	65/67 (97%)	61 (94%)	4 (6%)	15 31
23	11	80/83 (96%)	74 (92%)	6 (8%)	11 23
23	21	80/83 (96%)	73 (91%)	7 (9%)	8 17
24	12	65/67 (97%)	59 (91%)	6 (9%)	7 15
24	22	65/67 (97%)	61 (94%)	4 (6%)	15 31
25	13	51/52 (98%)	47 (92%)	4 (8%)	10 21
25	23	50/52 (96%)	49 (98%)	1 (2%)	50 75
26	14	59/63 (94%)	49 (83%)	10 (17%)	1 3
26	24	53/63 (84%)	45 (85%)	8 (15%)	2 4
27	15	50/52 (96%)	47 (94%)	3 (6%)	16 33
27	25	50/52 (96%)	47 (94%)	3 (6%)	16 33
28	16	51/52 (98%)	46 (90%)	5 (10%)	6 13
28	26	50/52 (96%)	44 (88%)	6 (12%)	4 8
29	17	41/42 (98%)	40 (98%)	1 (2%)	44 70
29	27	41/42 (98%)	35 (85%)	6 (15%)	2 5
30	18	54/55 (98%)	50 (93%)	4 (7%)	11 23
30	28	54/55 (98%)	51 (94%)	3 (6%)	17 36
31	19	34/34 (100%)	34 (100%)	0	100 100
31	29	34/34 (100%)	33 (97%)	1 (3%)	37 64
33	1b	192/220 (87%)	168 (88%)	24 (12%)	3 7
33	2b	187/220 (85%)	163 (87%)	24 (13%)	3 7
34	1c	142/188 (76%)	129 (91%)	13 (9%)	7 15
34	2c	140/188 (74%)	130 (93%)	10 (7%)	12 25
35	1d	169/181 (93%)	143 (85%)	26 (15%)	2 4
35	2d	173/181 (96%)	157 (91%)	16 (9%)	7 15
36	1e	113/123 (92%)	101 (89%)	12 (11%)	5 11
36	2e	114/123 (93%)	97 (85%)	17 (15%)	2 4
37	1f	84/90 (93%)	74 (88%)	10 (12%)	4 8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
37	2f	85/90 (94%)	77 (91%)	8 (9%)	7 15
38	1g	119/127 (94%)	99 (83%)	20 (17%)	1 3
38	2g	120/127 (94%)	106 (88%)	14 (12%)	4 9
39	1h	114/119 (96%)	109 (96%)	5 (4%)	24 47
39	2h	114/119 (96%)	105 (92%)	9 (8%)	10 21
40	1i	90/99 (91%)	76 (84%)	14 (16%)	2 4
40	2i	89/99 (90%)	72 (81%)	17 (19%)	1 2
41	1j	66/92 (72%)	58 (88%)	8 (12%)	4 8
41	2j	69/92 (75%)	57 (83%)	12 (17%)	1 3
42	1k	82/99 (83%)	72 (88%)	10 (12%)	4 8
42	2k	83/99 (84%)	77 (93%)	6 (7%)	12 24
43	1l	96/108 (89%)	88 (92%)	8 (8%)	9 19
43	2l	96/108 (89%)	87 (91%)	9 (9%)	7 15
44	1m	95/101 (94%)	83 (87%)	12 (13%)	3 7
44	2m	92/101 (91%)	77 (84%)	15 (16%)	2 3
45	1n	49/50 (98%)	45 (92%)	4 (8%)	9 19
45	2n	49/50 (98%)	41 (84%)	8 (16%)	2 3
46	1o	78/80 (98%)	75 (96%)	3 (4%)	28 53
46	2o	78/80 (98%)	73 (94%)	5 (6%)	14 30
47	1p	69/74 (93%)	61 (88%)	8 (12%)	4 9
47	2p	68/74 (92%)	55 (81%)	13 (19%)	1 2
48	1q	94/97 (97%)	88 (94%)	6 (6%)	14 30
48	2q	94/97 (97%)	87 (93%)	7 (7%)	11 23
49	1r	59/77 (77%)	54 (92%)	5 (8%)	8 18
49	2r	59/77 (77%)	53 (90%)	6 (10%)	6 12
50	1s	69/80 (86%)	62 (90%)	7 (10%)	6 12
50	2s	67/80 (84%)	61 (91%)	6 (9%)	8 16
51	1t	70/82 (85%)	68 (97%)	2 (3%)	37 64
51	2t	70/82 (85%)	65 (93%)	5 (7%)	12 25
52	1u	18/22 (82%)	17 (94%)	1 (6%)	17 36
52	2u	18/22 (82%)	18 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
57	1z	13/13 (100%)	11 (85%)	2 (15%)	2 4
57	2z	13/13 (100%)	10 (77%)	3 (23%)	0 1
All	All	9331/10090 (92%)	8459 (91%)	872 (9%)	7 15

All (872) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	7	LYS
3	1D	14	ARG
3	1D	32	SER
3	1D	38	LYS
3	1D	88	ARG
3	1D	106	ILE
3	1D	126	GLN
3	1D	155	LEU
3	1D	211	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	264	LYS
3	1D	273	ARG
4	1E	1	MET
4	1E	12	THR
4	1E	34	VAL
4	1E	41	LYS
4	1E	47	VAL
4	1E	59	VAL
4	1E	78	LEU
4	1E	113	PHE
4	1E	116	VAL
4	1E	145	LYS
4	1E	154	LYS
5	1F	15	SER
5	1F	18	ARG
5	1F	24	LEU
5	1F	33	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	60	SER
5	1F	70	THR

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Mol	Chain	Res	Type
5	1F	72	ARG
5	1F	74	ARG
5	1F	106	ARG
5	1F	127	GLU
5	1F	132	VAL
5	1F	133	ASN
5	1F	140	LEU
5	1F	144	LYS
5	1F	168	ARG
5	1F	175	THR
5	1F	176	LEU
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
6	1G	5	VAL
6	1G	7	LEU
6	1G	9	ARG
6	1G	31	VAL
6	1G	43	LEU
6	1G	67	LYS
6	1G	82	LEU
6	1G	91	ARG
6	1G	96	ARG
6	1G	103	LEU
6	1G	109	VAL
6	1G	136	ARG
6	1G	139	LEU
6	1G	148	MET
6	1G	159	VAL
6	1G	170	ARG
7	1H	33	LEU
7	1H	42	ARG
7	1H	45	VAL
7	1H	56	SER
7	1H	98	LEU
7	1H	116	GLU
7	1H	125	VAL
7	1H	127	GLU
7	1H	149	ARG
7	1H	160	LYS
7	1H	169	VAL
8	1I	12	LEU

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Mol	Chain	Res	Type
8	1I	20	ASP
8	1I	38	LEU
8	1I	41	GLU
8	1I	42	SER
8	1I	47	LEU
8	1I	52	ARG
8	1I	61	ARG
8	1I	68	LEU
8	1I	75	LEU
8	1I	77	LEU
8	1I	87	LYS
8	1I	91	SER
8	1I	92	VAL
8	1I	93	THR
8	1I	97	ILE
8	1I	102	SER
8	1I	103	ARG
8	1I	108	THR
8	1I	110	ASP
8	1I	116	LEU
8	1I	129	THR
8	1I	140	LEU
8	1I	144	VAL
9	1N	1	MET
9	1N	9	VAL
9	1N	28	THR
9	1N	48	MET
9	1N	62	VAL
9	1N	83	LYS
9	1N	96	GLU
10	1O	106	LEU
11	1P	1	MET
11	1P	45	LEU
11	1P	79	ARG
11	1P	95	VAL
11	1P	99	LEU
11	1P	100	LEU
11	1P	102	ARG
11	1P	133	SER
11	1P	135	LEU
11	1P	138	LEU
12	1Q	7	MET

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Mol	Chain	Res	Type
12	1Q	56	ARG
12	1Q	63	LYS
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	138	ASP
13	1R	15	SER
13	1R	36	THR
13	1R	100	LEU
13	1R	111	LEU
13	1R	114	VAL
14	1S	25	ARG
14	1S	73	LEU
14	1S	85	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	36	GLU
15	1T	67	SER
15	1T	82	LEU
15	1T	85	LYS
15	1T	96	ARG
15	1T	108	ARG
15	1T	128	GLU
16	1U	8	VAL
16	1U	27	LEU
16	1U	31	SER
16	1U	74	LEU
16	1U	95	LEU
17	1V	1	MET
17	1V	6	LYS
17	1V	10	LYS
17	1V	20	LEU
17	1V	38	LEU
17	1V	56	SER
17	1V	79	VAL
17	1V	85	LYS
17	1V	97	LYS
17	1V	100	ARG
18	1W	11	ARG
18	1W	17	VAL
18	1W	60	ASN
18	1W	90	ARG
18	1W	92	ARG

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Mol	Chain	Res	Type
19	1X	92	LEU
20	1Y	1	MET
20	1Y	8	LYS
20	1Y	17	SER
20	1Y	31	LEU
20	1Y	47	LYS
20	1Y	50	ARG
20	1Y	72	VAL
20	1Y	91	GLU
20	1Y	99	CYS
20	1Y	106	LEU
21	1Z	1	MET
21	1Z	28	MET
21	1Z	46	LYS
21	1Z	49	ARG
21	1Z	50	GLN
21	1Z	72	ARG
21	1Z	92	SER
21	1Z	94	GLU
21	1Z	122	ARG
21	1Z	124	ILE
21	1Z	129	SER
21	1Z	150	LEU
21	1Z	153	SER
21	1Z	154	ASP
21	1Z	157	LEU
21	1Z	162	GLU
21	1Z	170	THR
21	1Z	171	ILE
22	10	11	ARG
22	10	49	LYS
23	11	40	ARG
23	11	52	ARG
23	11	57	GLU
23	11	69	LYS
23	11	80	LEU
23	11	85	LEU
24	12	3	LEU
24	12	19	VAL
24	12	45	SER
24	12	53	LEU
24	12	55	ARG

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Mol	Chain	Res	Type
24	12	69	ARG
25	13	18	ASP
25	13	23	LEU
25	13	54	VAL
25	13	55	ARG
26	14	1	MET
26	14	27	THR
26	14	49	PHE
26	14	52	THR
26	14	53	GLU
26	14	56	VAL
26	14	58	ARG
26	14	59	PHE
26	14	62	ARG
26	14	63	TYR
27	15	6	VAL
27	15	40	LYS
27	15	58	LEU
28	16	9	LEU
28	16	14	THR
28	16	19	ARG
28	16	28	ARG
28	16	48	VAL
29	17	43	THR
30	18	14	VAL
30	18	31	HIS
30	18	34	TRP
30	18	39	LYS
33	1b	7	VAL
33	1b	11	LEU
33	1b	12	GLU
33	1b	16	HIS
33	1b	24	TRP
33	1b	39	ILE
33	1b	44	LEU
33	1b	45	GLN
33	1b	60	ASP
33	1b	78	GLN
33	1b	80	ILE
33	1b	101	MET
33	1b	107	THR
33	1b	124	SER

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Mol	Chain	Res	Type
33	1b	127	ILE
33	1b	130	ARG
33	1b	142	LEU
33	1b	154	LEU
33	1b	160	ASP
33	1b	208	ILE
33	1b	212	GLN
33	1b	213	LEU
33	1b	223	ILE
33	1b	236	TYR
34	1c	3	ASN
34	1c	5	ILE
34	1c	15	THR
34	1c	21	ARG
34	1c	45	LYS
34	1c	82	GLU
34	1c	87	LEU
34	1c	98	ASN
34	1c	175	LEU
34	1c	179	ARG
34	1c	190	ARG
34	1c	193	TYR
34	1c	195	VAL
35	1d	3	ARG
35	1d	8	VAL
35	1d	19	LEU
35	1d	31	CYS
35	1d	59	ARG
35	1d	83	SER
35	1d	85	LYS
35	1d	88	VAL
35	1d	91	SER
35	1d	119	GLN
35	1d	122	ARG
35	1d	127	THR
35	1d	134	ASP
35	1d	135	LEU
35	1d	137	SER
35	1d	157	LEU
35	1d	158	ILE
35	1d	177	ASP
35	1d	187	ARG

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Mol	Chain	Res	Type
35	1d	188	LEU
35	1d	190	ASP
35	1d	193	ASP
35	1d	194	LEU
35	1d	196	LEU
35	1d	208	SER
35	1d	209	ARG
36	1e	5	ASP
36	1e	10	MET
36	1e	24	ARG
36	1e	41	VAL
36	1e	51	VAL
36	1e	56	GLN
36	1e	75	THR
36	1e	109	ILE
36	1e	131	ILE
36	1e	140	ARG
36	1e	150	ARG
36	1e	152	ARG
37	1f	39	LYS
37	1f	54	LYS
37	1f	55	ASP
37	1f	57	GLN
37	1f	72	VAL
37	1f	73	ASN
37	1f	75	LEU
37	1f	78	GLU
37	1f	87	ARG
37	1f	92	LYS
38	1g	12	LEU
38	1g	21	VAL
38	1g	32	ARG
38	1g	41	ARG
38	1g	45	ASP
38	1g	50	ILE
38	1g	57	GLU
38	1g	59	LEU
38	1g	61	VAL
38	1g	63	LYS
38	1g	72	ARG
38	1g	78	ARG
38	1g	80	VAL

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Mol	Chain	Res	Type
38	1g	90	GLU
38	1g	104	LEU
38	1g	110	GLN
38	1g	113	GLU
38	1g	115	ARG
38	1g	140	ASP
38	1g	143	ARG
39	1h	18	ARG
39	1h	29	SER
39	1h	52	ASP
39	1h	112	LEU
39	1h	133	LEU
40	1i	7	THR
40	1i	25	LYS
40	1i	41	VAL
40	1i	42	ARG
40	1i	50	LEU
40	1i	71	SER
40	1i	83	ARG
40	1i	87	GLN
40	1i	88	TYR
40	1i	89	ASN
40	1i	92	TYR
40	1i	96	LEU
40	1i	103	THR
40	1i	128	ARG
41	1j	8	LEU
41	1j	35	SER
41	1j	42	THR
41	1j	43	ARG
41	1j	46	ARG
41	1j	51	ARG
41	1j	81	THR
41	1j	94	VAL
42	1k	31	THR
42	1k	33	THR
42	1k	48	ILE
42	1k	80	VAL
42	1k	83	ILE
42	1k	96	ARG
42	1k	104	GLN
42	1k	107	SER

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Mol	Chain	Res	Type
42	1k	117	ASN
42	1k	120	ARG
43	1l	11	VAL
43	1l	18	VAL
43	1l	22	SER
43	1l	28	LYS
43	1l	33	ARG
43	1l	46	LYS
43	1l	62	SER
43	1l	116	SER
44	1m	3	ARG
44	1m	4	ILE
44	1m	14	ARG
44	1m	15	VAL
44	1m	19	LEU
44	1m	43	THR
44	1m	64	TRP
44	1m	70	LEU
44	1m	94	ARG
44	1m	105	THR
44	1m	125	ARG
44	1m	126	LYS
45	1n	15	LYS
45	1n	18	VAL
45	1n	29	ARG
45	1n	33	VAL
46	1o	14	GLU
46	1o	27	VAL
46	1o	39	LEU
47	1p	20	VAL
47	1p	27	LYS
47	1p	42	ARG
47	1p	43	LYS
47	1p	45	THR
47	1p	62	VAL
47	1p	67	THR
47	1p	75	ARG
48	1q	5	VAL
48	1q	52	LYS
48	1q	63	ARG
48	1q	90	ILE
48	1q	93	GLN

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Mol	Chain	Res	Type
48	1q	100	LYS
49	1r	26	LEU
49	1r	31	LEU
49	1r	35	ARG
49	1r	37	VAL
49	1r	66	LEU
50	1s	4	SER
50	1s	12	ASP
50	1s	22	LEU
50	1s	28	LYS
50	1s	38	SER
50	1s	41	VAL
50	1s	79	THR
51	1t	24	LEU
51	1t	37	SER
52	1u	9	ARG
57	1z	3	LYS
57	1z	17	ARG
3	2D	14	ARG
3	2D	38	LYS
3	2D	88	ARG
3	2D	89	SER
3	2D	99	ASP
3	2D	142	VAL
3	2D	157	ARG
3	2D	211	ARG
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	260	ARG
4	2E	12	THR
4	2E	27	LEU
4	2E	69	LYS
4	2E	113	PHE
4	2E	116	VAL
4	2E	119	ARG
4	2E	145	LYS
5	2F	28	ILE
5	2F	53	THR
5	2F	57	VAL
5	2F	70	THR
5	2F	135	LYS

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Mol	Chain	Res	Type
5	2F	137	LYS
5	2F	149	ASP
5	2F	154	VAL
5	2F	158	THR
5	2F	192	LEU
5	2F	195	ASP
5	2F	196	LEU
5	2F	201	VAL
6	2G	3	LEU
6	2G	18	GLU
6	2G	22	ARG
6	2G	28	VAL
6	2G	43	LEU
6	2G	45	GLU
6	2G	49	ASP
6	2G	51	ARG
6	2G	70	VAL
6	2G	86	MET
6	2G	91	ARG
6	2G	107	LEU
6	2G	109	VAL
6	2G	111	LEU
6	2G	124	SER
6	2G	133	LEU
6	2G	140	ILE
6	2G	162	THR
6	2G	165	THR
6	2G	170	ARG
7	2H	15	VAL
7	2H	27	LYS
7	2H	41	MET
7	2H	44	VAL
7	2H	90	LYS
7	2H	92	ILE
7	2H	103	LEU
7	2H	104	GLU
7	2H	107	VAL
7	2H	127	GLU
7	2H	129	THR
7	2H	132	ARG
7	2H	136	ILE
7	2H	153	LYS

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Mol	Chain	Res	Type
8	2I	15	VAL
8	2I	20	ASP
8	2I	38	LEU
8	2I	43	ASN
8	2I	44	LEU
8	2I	58	LEU
8	2I	76	THR
8	2I	77	LEU
8	2I	79	ILE
8	2I	82	ARG
8	2I	85	GLU
8	2I	87	LYS
8	2I	96	ASP
8	2I	108	THR
8	2I	117	GLU
8	2I	127	VAL
8	2I	144	VAL
9	2N	1	MET
9	2N	16	ILE
9	2N	38	HIS
9	2N	60	ILE
9	2N	61	ARG
9	2N	62	VAL
9	2N	96	GLU
10	2O	28	SER
10	2O	63	VAL
10	2O	66	LYS
10	2O	116	SER
11	2P	15	ARG
11	2P	29	LYS
11	2P	35	HIS
11	2P	45	LEU
11	2P	70	GLN
11	2P	77	ARG
11	2P	90	ARG
11	2P	95	VAL
11	2P	98	GLU
11	2P	132	LYS
11	2P	133	SER
12	2Q	12	GLN
12	2Q	56	ARG
12	2Q	63	LYS

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Mol	Chain	Res	Type
12	2Q	75	THR
12	2Q	77	LYS
13	2R	15	SER
13	2R	36	THR
13	2R	100	LEU
13	2R	102	GLU
13	2R	114	VAL
14	2S	15	ARG
14	2S	20	ARG
14	2S	27	SER
14	2S	30	ARG
14	2S	35	ILE
14	2S	43	GLU
14	2S	48	LEU
14	2S	53	SER
14	2S	58	LEU
14	2S	63	THR
14	2S	64	GLU
14	2S	83	LYS
14	2S	103	GLU
14	2S	110	LEU
15	2T	9	LEU
15	2T	28	VAL
15	2T	40	THR
15	2T	63	VAL
15	2T	64	ARG
15	2T	67	SER
15	2T	74	ARG
15	2T	96	ARG
16	2U	5	LYS
16	2U	17	ILE
16	2U	59	ARG
16	2U	70	ARG
16	2U	74	LEU
17	2V	1	MET
17	2V	7	THR
17	2V	28	GLU
17	2V	38	LEU
17	2V	46	VAL
17	2V	73	SER
17	2V	79	VAL
18	2W	11	ARG

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Mol	Chain	Res	Type
18	2W	17	VAL
18	2W	60	ASN
18	2W	78	GLU
18	2W	92	ARG
18	2W	101	SER
19	2X	9	LEU
19	2X	57	LEU
19	2X	72	LYS
19	2X	92	LEU
20	2Y	1	MET
20	2Y	5	MET
20	2Y	14	LEU
20	2Y	17	SER
20	2Y	72	VAL
20	2Y	96	ILE
20	2Y	99	CYS
20	2Y	106	LEU
21	2Z	5	LEU
21	2Z	11	GLU
21	2Z	31	ARG
21	2Z	33	LEU
21	2Z	41	LEU
21	2Z	42	VAL
21	2Z	54	HIS
21	2Z	71	VAL
21	2Z	72	ARG
21	2Z	90	VAL
21	2Z	96	VAL
21	2Z	98	MET
21	2Z	100	VAL
21	2Z	122	ARG
21	2Z	126	VAL
21	2Z	129	SER
21	2Z	131	ARG
21	2Z	154	ASP
21	2Z	155	LEU
21	2Z	163	LEU
21	2Z	171	ILE
21	2Z	174	VAL
22	20	10	THR
22	20	11	ARG
22	20	40	GLN

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Mol	Chain	Res	Type
22	20	49	LYS
23	21	11	ARG
23	21	26	ARG
23	21	27	GLU
23	21	40	ARG
23	21	59	THR
23	21	69	LYS
23	21	85	LEU
24	22	3	LEU
24	22	19	VAL
24	22	53	LEU
24	22	70	GLN
25	23	31	LEU
26	24	26	SER
26	24	34	GLU
26	24	37	SER
26	24	56	VAL
26	24	59	PHE
26	24	61	ARG
26	24	63	TYR
26	24	68	ARG
27	25	6	VAL
27	25	15	ARG
27	25	33	CYS
28	26	9	LEU
28	26	14	THR
28	26	19	ARG
28	26	32	ASN
28	26	34	LEU
28	26	40	CYS
29	27	1	MET
29	27	23	ARG
29	27	24	THR
29	27	41	ARG
29	27	43	THR
29	27	46	VAL
30	28	14	VAL
30	28	31	HIS
30	28	34	TRP
31	29	28	GLU
33	2b	7	VAL
33	2b	8	LYS

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Mol	Chain	Res	Type
33	2b	9	GLU
33	2b	11	LEU
33	2b	23	ARG
33	2b	30	ARG
33	2b	43	ASP
33	2b	44	LEU
33	2b	48	MET
33	2b	67	THR
33	2b	76	GLN
33	2b	101	MET
33	2b	112	VAL
33	2b	117	GLU
33	2b	125	PRO
33	2b	127	ILE
33	2b	142	LEU
33	2b	163	PHE
33	2b	185	ILE
33	2b	189	ASP
33	2b	190	THR
33	2b	213	LEU
33	2b	215	LEU
33	2b	235	SER
34	2c	26	LYS
34	2c	30	ARG
34	2c	47	LEU
34	2c	70	VAL
34	2c	82	GLU
34	2c	116	VAL
34	2c	119	ARG
34	2c	190	ARG
34	2c	192	THR
34	2c	198	VAL
35	2d	47	ARG
35	2d	52	SER
35	2d	53	ASP
35	2d	58	LEU
35	2d	76	ARG
35	2d	78	LEU
35	2d	86	LYS
35	2d	127	THR
35	2d	150	GLU
35	2d	157	LEU

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Mol	Chain	Res	Type
35	2d	158	ILE
35	2d	175	SER
35	2d	178	VAL
35	2d	186	LEU
35	2d	193	ASP
35	2d	201	GLN
36	2e	6	PHE
36	2e	12	LEU
36	2e	13	ILE
36	2e	18	ARG
36	2e	20	GLN
36	2e	41	VAL
36	2e	47	LYS
36	2e	51	VAL
36	2e	53	LEU
36	2e	66	MET
36	2e	73	ASN
36	2e	78	HIS
36	2e	81	GLU
36	2e	87	SER
36	2e	101	ILE
36	2e	149	GLU
36	2e	150	ARG
37	2f	21	LEU
37	2f	31	GLU
37	2f	37	VAL
37	2f	63	TYR
37	2f	82	ARG
37	2f	83	ASP
37	2f	89	MET
37	2f	92	LYS
38	2g	9	VAL
38	2g	12	LEU
38	2g	15	ASP
38	2g	32	ARG
38	2g	67	GLU
38	2g	75	VAL
38	2g	78	ARG
38	2g	79	ARG
38	2g	85	TYR
38	2g	98	SER
38	2g	111	ARG

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Mol	Chain	Res	Type
38	2g	115	ARG
38	2g	146	GLU
38	2g	154	TYR
39	2h	3	THR
39	2h	23	SER
39	2h	26	VAL
39	2h	29	SER
39	2h	39	LEU
39	2h	52	ASP
39	2h	107	LEU
39	2h	112	LEU
39	2h	133	LEU
40	2i	14	VAL
40	2i	25	LYS
40	2i	27	THR
40	2i	33	PHE
40	2i	54	ASP
40	2i	56	LEU
40	2i	58	HIS
40	2i	63	ILE
40	2i	65	VAL
40	2i	66	ARG
40	2i	75	ASP
40	2i	89	ASN
40	2i	92	TYR
40	2i	102	LEU
40	2i	103	THR
40	2i	113	LYS
40	2i	128	ARG
41	2j	15	THR
41	2j	21	GLN
41	2j	23	ILE
41	2j	38	ILE
41	2j	43	ARG
41	2j	44	VAL
41	2j	45	ARG
41	2j	46	ARG
41	2j	71	LEU
41	2j	84	GLN
41	2j	89	ASP
41	2j	94	VAL
42	2k	14	VAL

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Mol	Chain	Res	Type
42	2k	53	SER
42	2k	66	LEU
42	2k	87	THR
42	2k	105	VAL
42	2k	108	ILE
43	2l	18	VAL
43	2l	24	VAL
43	2l	28	LYS
43	2l	36	VAL
43	2l	50	SER
43	2l	53	ARG
43	2l	62	SER
43	2l	65	GLU
43	2l	113	ARG
44	2m	4	ILE
44	2m	8	GLU
44	2m	15	VAL
44	2m	17	VAL
44	2m	19	LEU
44	2m	32	GLU
44	2m	47	ASP
44	2m	48	LEU
44	2m	55	ARG
44	2m	63	THR
44	2m	69	GLU
44	2m	80	ARG
44	2m	90	LEU
44	2m	102	ARG
44	2m	108	ARG
45	2n	3	ARG
45	2n	4	LYS
45	2n	15	LYS
45	2n	18	VAL
45	2n	32	SER
45	2n	33	VAL
45	2n	35	ARG
45	2n	60	SER
46	2o	14	GLU
46	2o	38	ARG
46	2o	39	LEU
46	2o	60	VAL
46	2o	62	GLN

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Mol	Chain	Res	Type
47	2p	1	MET
47	2p	2	VAL
47	2p	5	ARG
47	2p	8	ARG
47	2p	20	VAL
47	2p	44	THR
47	2p	45	THR
47	2p	54	GLU
47	2p	60	LEU
47	2p	69	THR
47	2p	72	ARG
47	2p	73	LEU
47	2p	74	LEU
48	2q	5	VAL
48	2q	7	THR
48	2q	52	LYS
48	2q	63	ARG
48	2q	76	LEU
48	2q	94	ASN
48	2q	99	SER
49	2r	26	LEU
49	2r	31	LEU
49	2r	37	VAL
49	2r	46	GLU
49	2r	68	LYS
49	2r	84	LYS
50	2s	12	ASP
50	2s	17	GLU
50	2s	22	LEU
50	2s	37	ARG
50	2s	51	VAL
50	2s	81	ARG
51	2t	15	ARG
51	2t	37	SER
51	2t	45	GLN
51	2t	46	GLU
51	2t	93	GLU
57	2z	1	SER
57	2z	16	LYS
57	2z	17	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (100) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	126	GLN
4	1E	48	GLN
4	1E	143	ASN
5	1F	69	HIS
6	1G	26	GLN
8	1I	74	ASN
8	1I	133	HIS
10	1O	3	GLN
12	1Q	12	GLN
14	1S	68	GLN
15	1T	43	GLN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
21	1Z	73	GLN
21	1Z	132	ASN
25	13	32	GLN
33	1b	40	HIS
33	1b	78	GLN
33	1b	135	GLN
33	1b	212	GLN
34	1c	6	HIS
34	1c	162	GLN
35	1d	116	GLN
35	1d	123	HIS
35	1d	125	HIS
35	1d	201	GLN
36	1e	20	GLN
36	1e	78	HIS
37	1f	73	ASN
37	1f	100	ASN
38	1g	13	GLN
38	1g	28	ASN
40	1i	3	GLN
40	1i	23	ASN
40	1i	34	ASN
40	1i	89	ASN
40	1i	124	GLN
41	1j	56	HIS
43	1l	99	HIS
44	1m	92	HIS
46	1o	9	GLN
46	1o	46	HIS

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Mol	Chain	Res	Type
47	1p	13	HIS
49	1r	63	GLN
50	1s	83	HIS
51	1t	90	GLN
3	2D	116	GLN
4	2E	48	GLN
6	2G	41	GLN
6	2G	132	ASN
8	2I	104	GLN
10	2O	3	GLN
10	2O	5	GLN
11	2P	70	GLN
12	2Q	12	GLN
12	2Q	123	HIS
14	2S	38	GLN
15	2T	123	GLN
16	2U	81	HIS
16	2U	117	GLN
19	2X	31	HIS
19	2X	82	GLN
21	2Z	34	ASN
21	2Z	55	HIS
21	2Z	73	GLN
21	2Z	121	HIS
23	21	56	GLN
31	29	20	HIS
33	2b	37	ASN
33	2b	140	HIS
33	2b	224	GLN
34	2c	6	HIS
34	2c	37	GLN
34	2c	98	ASN
34	2c	102	ASN
34	2c	162	GLN
34	2c	170	GLN
35	2d	116	GLN
35	2d	125	HIS
36	2e	72	GLN
36	2e	73	ASN
37	2f	100	ASN
38	2g	68	ASN
38	2g	148	ASN

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Mol	Chain	Res	Type
40	2i	3	GLN
40	2i	31	GLN
41	2j	13	HIS
41	2j	33	GLN
41	2j	62	HIS
42	2k	116	HIS
43	2l	99	HIS
45	2n	49	HIS
49	2r	63	GLN
50	2s	23	ASN
50	2s	47	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	45	GLN
51	2t	75	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2863/2915 (98%)	469 (16%)	37 (1%)
1	2A	2790/2915 (95%)	477 (17%)	32 (1%)
2	1B	119/121 (98%)	14 (11%)	0
2	2B	118/121 (97%)	22 (18%)	0
32	1a	1494/1521 (98%)	252 (16%)	0
32	2a	1498/1521 (98%)	277 (18%)	0
53	1v	12/24 (50%)	3 (25%)	0
53	2v	12/24 (50%)	3 (25%)	0
54	1w	71/76 (93%)	17 (23%)	0
54	2w	67/76 (88%)	23 (34%)	0
55	1x	75/77 (97%)	10 (13%)	0
55	2x	75/77 (97%)	9 (12%)	0
56	1y	71/76 (93%)	27 (38%)	0
56	2y	69/76 (90%)	27 (39%)	0
All	All	9334/9620 (97%)	1630 (17%)	69 (0%)

All (1630) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	11	G
1	1A	34	C
1	1A	45	C

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Mol	Chain	Res	Type
1	1A	58	G
1	1A	61	G
1	1A	63	U
1	1A	71	A
1	1A	72	U
1	1A	74	A
1	1A	75	G
1	1A	84	A
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	139(A)	G
1	1A	173	G
1	1A	181	A
1	1A	182	A
1	1A	196	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	228	A
1	1A	229	A
1	1A	233	A
1	1A	248	G
1	1A	269	U
1	1A	271(E)	U
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	271(S)	G
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	283	A
1	1A	311	A

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Mol	Chain	Res	Type
1	1A	324	A
1	1A	329	G
1	1A	330	A
1	1A	331	A
1	1A	342	G
1	1A	352	G
1	1A	353	G
1	1A	357	A
1	1A	363	G
1	1A	363(B)	G
1	1A	363(D)	G
1	1A	380	U
1	1A	386	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	428	A
1	1A	429	A
1	1A	444	C
1	1A	448	U
1	1A	451	C
1	1A	456	C
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	512	G
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(A)	U
1	1A	614(B)	G

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Mol	Chain	Res	Type
1	1A	615	G
1	1A	616	G
1	1A	627	A
1	1A	637	A
1	1A	646	A
1	1A	652(E)	G
1	1A	652(F)	G
1	1A	668	G
1	1A	669	G
1	1A	686	G
1	1A	717	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	762	U
1	1A	764	A
1	1A	765	G
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	783	A
1	1A	784	A
1	1A	785	G
1	1A	789	A
1	1A	790	C
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	819	A
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	877	U
1	1A	879	G
1	1A	880	G
1	1A	881	G
1	1A	882	G
1	1A	883	G
1	1A	884	C
1	1A	885	C
1	1A	886	C

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Mol	Chain	Res	Type
1	1A	887	A
1	1A	889	C
1	1A	890	A
1	1A	892	G
1	1A	893	C
1	1A	894	C
1	1A	896	A
1	1A	897	C
1	1A	898	C
1	1A	899	A
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	985	C
1	1A	996	A
1	1A	1008	C
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1025	G
1	1A	1026	U
1	1A	1027	A
1	1A	1033	U
1	1A	1038	C
1	1A	1040	C
1	1A	1044	G
1	1A	1045	A
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A
1	1A	1057	A
1	1A	1058	G
1	1A	1059	G
1	1A	1063	G

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Mol	Chain	Res	Type
1	1A	1064	C
1	1A	1066	U
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1081	U
1	1A	1082	U
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1091	G
1	1A	1093	G
1	1A	1094	U
1	1A	1096	A
1	1A	1097	U
1	1A	1098	A
1	1A	1101	U
1	1A	1102	C
1	1A	1110	G
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1120	G
1	1A	1131	G
1	1A	1135	C
1	1A	1136	G
1	1A	1151	G
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G

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Mol	Chain	Res	Type
1	1A	1177	A
1	1A	1178	C
1	1A	1220	A
1	1A	1244	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1280	G
1	1A	1290	C
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1321	A
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
1	1A	1396	U
1	1A	1407	C
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1429	G
1	1A	1445	A
1	1A	1450	G
1	1A	1455	G
1	1A	1459	G
1	1A	1466	G
1	1A	1467	C
1	1A	1473	G
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A

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Mol	Chain	Res	Type
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1523	U
1	1A	1540	U
1	1A	1542	A
1	1A	1554	A
1	1A	1558	A
1	1A	1569	A
1	1A	1578	U
1	1A	1581	G
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1644	C
1	1A	1648	C
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1703	G
1	1A	1745(A)	C
1	1A	1747(A)	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1812	A
1	1A	1816	G
1	1A	1817	G
1	1A	1828	G
1	1A	1829	A
1	1A	1842	G
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A

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Mol	Chain	Res	Type
1	1A	1900	A
1	1A	1906	G
1	1A	1926	U
1	1A	1929	G
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2039	C
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2096	U
1	1A	2097	C
1	1A	2098	U
1	1A	2108	C
1	1A	2113	U
1	1A	2116	G
1	1A	2118	U
1	1A	2119	A
1	1A	2120	G
1	1A	2121	G
1	1A	2127	G
1	1A	2131	G
1	1A	2132	U

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Mol	Chain	Res	Type
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C
1	1A	2140	C
1	1A	2142	C
1	1A	2143	C
1	1A	2144	U
1	1A	2146	C
1	1A	2150	U
1	1A	2151	G
1	1A	2152	G
1	1A	2156	G
1	1A	2157	G
1	1A	2158	A
1	1A	2159	G
1	1A	2160	G
1	1A	2161	C
1	1A	2162	G
1	1A	2166	G
1	1A	2167	U
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2174	C
1	1A	2183	C
1	1A	2184	G
1	1A	2189	U
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2267	A
1	1A	2269	A
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2305	A

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Mol	Chain	Res	Type
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2340	G
1	1A	2347	C
1	1A	2361	A
1	1A	2372	G
1	1A	2383	G
1	1A	2385	C
1	1A	2396	G
1	1A	2404	C
1	1A	2406	U
1	1A	2422	A
1	1A	2423	U
1	1A	2424	C
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2435	A
1	1A	2439	A
1	1A	2440	C
1	1A	2441	C
1	1A	2447	G
1	1A	2448	A
1	1A	2468	G
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2549	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2574	G

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Mol	Chain	Res	Type
1	1A	2602	A
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2637	U
1	1A	2641	G
1	1A	2654	A
1	1A	2663	G
1	1A	2683	C
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2734	A
1	1A	2757	A
1	1A	2758	A
1	1A	2761	G
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2804	C
1	1A	2814	C
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2836	U
1	1A	2839	G
1	1A	2858	C
1	1A	2872	G
1	1A	2876	G

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Mol	Chain	Res	Type
1	1A	2880	C
1	1A	2892	A
1	1A	2894	G
1	1A	2895	U
2	1B	2	C
2	1B	12	C
2	1B	25	A
2	1B	32	C
2	1B	35	U
2	1B	45	A
2	1B	56	G
2	1B	57	A
2	1B	66	A
2	1B	67	G
2	1B	73	A
2	1B	85	G
2	1B	91	C
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	33	A
32	1a	39	G
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	68	G
32	1a	76	C
32	1a	77	G
32	1a	78	G
32	1a	79	G
32	1a	91	C
32	1a	98	G
32	1a	101	A
32	1a	115	G
32	1a	116	A
32	1a	120	A
32	1a	121	C
32	1a	131	C
32	1a	141	A
32	1a	144	G

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Mol	Chain	Res	Type
32	1a	163	C
32	1a	164	U
32	1a	174	C
32	1a	182	U
32	1a	189(C)	C
32	1a	189(F)	U
32	1a	189(H)	G
32	1a	189(J)	G
32	1a	189(K)	U
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	217	C
32	1a	220	G
32	1a	247	G
32	1a	251	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	306	G
32	1a	318	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	344	A
32	1a	348	G
32	1a	351	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	392	G
32	1a	397	A
32	1a	398	C
32	1a	412	A
32	1a	413	G

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Mol	Chain	Res	Type
32	1a	422	C
32	1a	423	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	457	C
32	1a	461	A
32	1a	470	C
32	1a	475	G
32	1a	483	C
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	517	G
32	1a	518	C
32	1a	521	G
32	1a	524	G
32	1a	527	G7M
32	1a	531	U
32	1a	532	A
32	1a	533	A
32	1a	536	C
32	1a	547	A
32	1a	549	C
32	1a	559	A
32	1a	561	U
32	1a	563	A
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	592	G
32	1a	596	C
32	1a	607	A
32	1a	628	G
32	1a	630	G
32	1a	631	G
32	1a	653	A

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Mol	Chain	Res	Type
32	1a	662	G
32	1a	665	A
32	1a	673	G
32	1a	683	G
32	1a	687	A
32	1a	688	G
32	1a	695	A
32	1a	703	G
32	1a	723	U
32	1a	731	G
32	1a	749	C
32	1a	752	G
32	1a	753	A
32	1a	755	G
32	1a	766	A
32	1a	773	G
32	1a	777	A
32	1a	788	U
32	1a	792	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	853	G
32	1a	870	U
32	1a	874	G
32	1a	913	A
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	942	G
32	1a	960	U
32	1a	961	U
32	1a	963	G
32	1a	968	A
32	1a	969	A

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Mol	Chain	Res	Type
32	1a	971	G
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	997	U
32	1a	1000	U
32	1a	1002	G
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1008	C
32	1a	1009	G
32	1a	1011	G
32	1a	1020	U
32	1a	1022	G
32	1a	1023	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1039	C
32	1a	1042	G
32	1a	1044	A
32	1a	1068	G
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1123	A
32	1a	1124	G
32	1a	1125	U
32	1a	1127	G
32	1a	1132	C
32	1a	1134	G

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Mol	Chain	Res	Type
32	1a	1135	U
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1146	A
32	1a	1152	A
32	1a	1154	G
32	1a	1158	C
32	1a	1159	U
32	1a	1183	A
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1213	A
32	1a	1214	C
32	1a	1227	A
32	1a	1236	A
32	1a	1238	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1260	C
32	1a	1270	C
32	1a	1275	A
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1290	G
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1320	C
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C

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Mol	Chain	Res	Type
32	1a	1370	G
32	1a	1397	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1442(B)	A
32	1a	1446	U
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1487	G
32	1a	1492	A
32	1a	1503	A
32	1a	1504	G
32	1a	1506	U
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
53	1v	13	A
53	1v	14	A
53	1v	24	A
54	1w	5	G
54	1w	6	G
54	1w	14	A
54	1w	16	U
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	70	G
54	1w	72	C
54	1w	73	A
54	1w	74	C
55	1x	2	G
55	1x	9	G
55	1x	13	C
55	1x	14	A

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Mol	Chain	Res	Type
55	1x	18	G
55	1x	19	G
55	1x	21	A
55	1x	47	U
55	1x	61	C
55	1x	69	C
56	1y	2	C
56	1y	5	G
56	1y	6	G
56	1y	9	A
56	1y	13	C
56	1y	14	A
56	1y	19	G
56	1y	20	U
56	1y	21	A
56	1y	23	A
56	1y	35	A
56	1y	40	C
56	1y	44	G
56	1y	45	U
56	1y	46	G7M
56	1y	47	U
56	1y	48	C
56	1y	52	G
56	1y	56	C
56	1y	58	A
56	1y	59	U
56	1y	61	C
56	1y	62	C
56	1y	65	G
56	1y	66	U
56	1y	70	G
56	1y	71	G
1	2A	10	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	61	G
1	2A	71	A

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Mol	Chain	Res	Type
1	2A	72	U
1	2A	74	A
1	2A	75	G
1	2A	78	A
1	2A	79	G
1	2A	84	A
1	2A	90	U
1	2A	96	G
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	154(A)	C
1	2A	157	U
1	2A	172	C
1	2A	173	G
1	2A	181	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	205	G
1	2A	214	G
1	2A	215	G
1	2A	216	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	232	G
1	2A	233	A
1	2A	248	G
1	2A	265	A
1	2A	266	G
1	2A	271(J)	C
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272	G

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Mol	Chain	Res	Type
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	283	A
1	2A	310	A
1	2A	311	A
1	2A	317	G
1	2A	324	A
1	2A	329	G
1	2A	330	A
1	2A	342	G
1	2A	352	G
1	2A	354	G
1	2A	363(B)	G
1	2A	386	G
1	2A	399	G
1	2A	403	U
1	2A	405	U
1	2A	406	G
1	2A	411	G
1	2A	412	A
1	2A	421	U
1	2A	435	C
1	2A	444	C
1	2A	451	C
1	2A	454	A
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	504	U
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	512	G
1	2A	528	A
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G

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Mol	Chain	Res	Type
1	2A	551	G
1	2A	563	G
1	2A	568	U
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	588	U
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	615	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	669	G
1	2A	686	G
1	2A	701	G
1	2A	726	G
1	2A	730	C
1	2A	732	C
1	2A	752	A
1	2A	753	C
1	2A	774	A
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	783	A
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	819	A
1	2A	827	U
1	2A	828	U
1	2A	856	C
1	2A	857	C
1	2A	859	G

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Mol	Chain	Res	Type
1	2A	866	A
1	2A	867	C
1	2A	873	G
1	2A	874	G
1	2A	878	A
1	2A	879	G
1	2A	880	G
1	2A	882	G
1	2A	884	C
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	894	C
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	904	C
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	941	A
1	2A	944	G
1	2A	945	A
1	2A	946	G
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	999	U
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1019	U
1	2A	1022	G
1	2A	1025	G
1	2A	1027	A
1	2A	1033	U

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Mol	Chain	Res	Type
1	2A	1036	G
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1043	C
1	2A	1116	C
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1139	G
1	2A	1143	A
1	2A	1155	A
1	2A	1171	G
1	2A	1188	U
1	2A	1210	A
1	2A	1211	U
1	2A	1220	A
1	2A	1244	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1284	A
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1323	U
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1370	C
1	2A	1378	A
1	2A	1379	A
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C

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Mol	Chain	Res	Type
1	2A	1395	A
1	2A	1416	G
1	2A	1417	C
1	2A	1421	G
1	2A	1427	A
1	2A	1428	C
1	2A	1437	C
1	2A	1445	A
1	2A	1449	A
1	2A	1450	G
1	2A	1460	A
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1495	A
1	2A	1496	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1514	U
1	2A	1531	C
1	2A	1532	C
1	2A	1533	G
1	2A	1554	A
1	2A	1558	A
1	2A	1559	G
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1608	A
1	2A	1609	A
1	2A	1640	C
1	2A	1648	C
1	2A	1654	A
1	2A	1664	A

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Mol	Chain	Res	Type
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1741	A
1	2A	1746	G
1	2A	1756	G
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1812	A
1	2A	1816	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1842	G
1	2A	1847	A
1	2A	1848	A
1	2A	1877	A
1	2A	1878	G
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1929	G
1	2A	1930	G
1	2A	1931	U
1	2A	1936	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A

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Mol	Chain	Res	Type
1	2A	1972	A
1	2A	1984	G
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2104	G
1	2A	2109	U
1	2A	2110	G
1	2A	2111	C
1	2A	2116	G
1	2A	2117	A
1	2A	2119	A
1	2A	2120	G
1	2A	2122	U
1	2A	2125	G
1	2A	2126	A
1	2A	2127	G
1	2A	2128	C
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2137	C
1	2A	2138	C
1	2A	2139	C
1	2A	2145	C
1	2A	2147	G
1	2A	2148	G
1	2A	2149	G
1	2A	2150	U

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Mol	Chain	Res	Type
1	2A	2151	G
1	2A	2154	G
1	2A	2157	G
1	2A	2158	A
1	2A	2161	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2168	G
1	2A	2169	A
1	2A	2171	A
1	2A	2172	U
1	2A	2174	C
1	2A	2176	A
1	2A	2177	C
1	2A	2178	C
1	2A	2183	C
1	2A	2186	G
1	2A	2188	C
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2268	A
1	2A	2273	A
1	2A	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2305	A
1	2A	2308	G
1	2A	2312	U
1	2A	2319	G
1	2A	2320	A
1	2A	2325	G

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Mol	Chain	Res	Type
1	2A	2327	A
1	2A	2334	G
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2355	C
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2396	G
1	2A	2402	C
1	2A	2406	U
1	2A	2410	G
1	2A	2424	C
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2434	A
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2445	G
1	2A	2448	A
1	2A	2460	U
1	2A	2468	G
1	2A	2469	A
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2491	U
1	2A	2494	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2547	U
1	2A	2549	G
1	2A	2554	U

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Mol	Chain	Res	Type
1	2A	2555	U
1	2A	2557	G
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2602	A
1	2A	2611	U
1	2A	2612	C
1	2A	2613	U
1	2A	2630	G
1	2A	2654	A
1	2A	2679	A
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2739	U
1	2A	2751	G
1	2A	2758	A
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2789	C
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2803	C
1	2A	2807	G
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2836	U
1	2A	2839	G
1	2A	2872	G

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Mol	Chain	Res	Type
1	2A	2876	G
1	2A	2879	C
1	2A	2880	C
1	2A	2892	A
1	2A	2894	G
1	2A	2897	U
2	2B	2	C
2	2B	3	C
2	2B	8	U
2	2B	13	A
2	2B	25	A
2	2B	31	C
2	2B	34	U
2	2B	41	U
2	2B	42	C
2	2B	45	A
2	2B	51	G
2	2B	53	A
2	2B	56	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	85	G
2	2B	88	C
2	2B	97	G
2	2B	105	A
2	2B	110	G
2	2B	120	A
32	2a	9	G
32	2a	31	G
32	2a	32	A
32	2a	39	G
32	2a	41	G
32	2a	47	C
32	2a	48	C
32	2a	51	A
32	2a	66	G
32	2a	67	C
32	2a	73	G
32	2a	80	G
32	2a	89	C
32	2a	98	G

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Mol	Chain	Res	Type
32	2a	101	A
32	2a	116	A
32	2a	120	A
32	2a	121	C
32	2a	131	C
32	2a	133	U
32	2a	144	G
32	2a	145	G
32	2a	146	G
32	2a	163	C
32	2a	169	C
32	2a	182	U
32	2a	189(C)	C
32	2a	189(J)	G
32	2a	195	A
32	2a	197	A
32	2a	201	C
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	217	C
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	349	A
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	355	C
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	381	C

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Mol	Chain	Res	Type
32	2a	384	G
32	2a	388	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	457	C
32	2a	470	C
32	2a	471	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	519	C
32	2a	521	G
32	2a	527	G7M
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	558	G
32	2a	559	A
32	2a	564	C
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	581	G
32	2a	596	C

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Mol	Chain	Res	Type
32	2a	602	A
32	2a	627	G
32	2a	630	G
32	2a	650	G
32	2a	653	A
32	2a	661	G
32	2a	665	A
32	2a	666	G
32	2a	673	G
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	723	U
32	2a	725	G
32	2a	731	G
32	2a	749	C
32	2a	754	C
32	2a	755	G
32	2a	759	A
32	2a	767	A
32	2a	774	G
32	2a	775	G
32	2a	777	A
32	2a	787	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	817	C
32	2a	821	G
32	2a	827	U
32	2a	828	A
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	859	A
32	2a	873	A
32	2a	874	G
32	2a	887	G
32	2a	889	A
32	2a	902	G
32	2a	914	A
32	2a	926	G

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Mol	Chain	Res	Type
32	2a	927	G
32	2a	931	C
32	2a	932	C
32	2a	934	C
32	2a	935	A
32	2a	957	U
32	2a	958	A
32	2a	960	U
32	2a	961	U
32	2a	963	G
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	982	U
32	2a	992	U
32	2a	993	G
32	2a	997	U
32	2a	998	G
32	2a	999	C
32	2a	1002	G
32	2a	1003	G
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1011	G
32	2a	1016	A
32	2a	1019	C
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1030(C)	G
32	2a	1035	A

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Mol	Chain	Res	Type
32	2a	1036	G
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1043	C
32	2a	1044	A
32	2a	1045	C
32	2a	1046	A
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1081	G
32	2a	1086	U
32	2a	1092	A
32	2a	1094	G
32	2a	1095	U
32	2a	1097	C
32	2a	1101	A
32	2a	1108	G
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1146	A
32	2a	1148	U
32	2a	1152	A
32	2a	1155	G
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1172	C
32	2a	1181	G
32	2a	1182	G
32	2a	1184	G
32	2a	1185	G

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Mol	Chain	Res	Type
32	2a	1196	U
32	2a	1197	G
32	2a	1201	A
32	2a	1202	G
32	2a	1206	G
32	2a	1213	A
32	2a	1214	C
32	2a	1227	A
32	2a	1238	A
32	2a	1240	U
32	2a	1255	G
32	2a	1256	A
32	2a	1257	U
32	2a	1260	C
32	2a	1270	C
32	2a	1273	G
32	2a	1275	A
32	2a	1277	C
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1287	A
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1312	G
32	2a	1319	A
32	2a	1320	C
32	2a	1321	C
32	2a	1338	G
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1363	C
32	2a	1370	G
32	2a	1386	G
32	2a	1397	C
32	2a	1404	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G

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Mol	Chain	Res	Type
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1492	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	13	A
53	2v	17	U
53	2v	24	A
54	2w	3	C
54	2w	7	A
54	2w	8	4SU
54	2w	11	C
54	2w	13	C
54	2w	14	A
54	2w	19	G
54	2w	22	G
54	2w	24	G
54	2w	30	G
54	2w	44	G
54	2w	46	G7M
54	2w	47	U
54	2w	48	C
54	2w	51	U
54	2w	53	G
54	2w	65	G
54	2w	69	G
54	2w	70	G
54	2w	71	G
54	2w	72	C
54	2w	73	A
54	2w	74	C
55	2x	9	G
55	2x	10	G
55	2x	13	C
55	2x	14	A
55	2x	19	G

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Mol	Chain	Res	Type
55	2x	21	A
55	2x	47	U
55	2x	61	C
55	2x	69	C
56	2y	2	C
56	2y	7	A
56	2y	12	U
56	2y	14	A
56	2y	15	G
56	2y	19	G
56	2y	27	G
56	2y	34	G
56	2y	35	A
56	2y	41	C
56	2y	43	C
56	2y	45	U
56	2y	49	C
56	2y	52	G
56	2y	53	G
56	2y	54	5MU
56	2y	55	PSU
56	2y	56	C
56	2y	57	G
56	2y	58	A
56	2y	59	U
56	2y	65	G
56	2y	68	C
56	2y	69	G
56	2y	70	G
56	2y	73	A
56	2y	75	C

All (69) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	195	A
1	1A	196	A
1	1A	249	C
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	548	A

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Mol	Chain	Res	Type
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	776	G
1	1A	827	U
1	1A	974	G
1	1A	1047	G
1	1A	1067	A
1	1A	1128	A
1	1A	1174	A
1	1A	1176	G
1	1A	1301	A
1	1A	1379	A
1	1A	1420	U
1	1A	1442	G
1	1A	1508	A
1	1A	1608	A
1	1A	1618	A
1	1A	1762	A
1	1A	1992	G
1	1A	2134	A
1	1A	2183	C
1	1A	2406	U
1	1A	2422	A
1	1A	2439	A
1	1A	2611	U
1	1A	2629	A
1	1A	2689	U
1	1A	2756	U
1	2A	196	A
1	2A	228	A
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	310	A
1	2A	528	A
1	2A	752	A
1	2A	774	A
1	2A	827	U
1	2A	856	C
1	2A	900	A

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Mol	Chain	Res	Type
1	2A	974	G
1	2A	1142(A)	A
1	2A	1210	A
1	2A	1301	A
1	2A	1378	A
1	2A	1379	A
1	2A	1420	U
1	2A	1442	G
1	2A	1493	C
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
1	2A	1935	G
1	2A	1992	G
1	2A	2119	A
1	2A	2126	A
1	2A	2406	U
1	2A	2439	A
1	2A	2689	U

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

88 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
1	OMU	2A	2552	1	19,22,23	1.06	2 (10%)	25,31,34	1.98	5 (20%)
54	4SU	1w	8	54	18,21,22	2.02	4 (22%)	25,30,33	1.64	6 (24%)
1	5MC	2A	1942	1	19,22,23	1.48	3 (15%)	26,32,35	1.23	3 (11%)
1	5MU	1A	1915	1	19,22,23	1.32	4 (21%)	27,32,35	2.40	8 (29%)
54	MIA	1w	37	54	24,31,32	2.01	3 (12%)	22,44,47	2.92	5 (22%)
54	G7M	2w	46	54	20,26,27	1.20	1 (5%)	16,39,42	0.80	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	MA6	2a	1518	32	19,26,27	1.02	2 (10%)	18,38,41	1.94	3 (16%)
54	PSU	2w	32	54	18,21,22	1.41	3 (16%)	21,30,33	2.09	5 (23%)
32	2MG	2a	1207	32	18,26,27	1.04	1 (5%)	16,38,41	1.56	4 (25%)
56	MIA	2y	37	56	17,24,32	1.07	1 (5%)	16,35,47	1.34	2 (12%)
1	PSU	1A	1917	1	18,21,22	1.40	2 (11%)	21,30,33	2.11	6 (28%)
56	5MU	1y	54	56	19,22,23	1.50	5 (26%)	27,32,35	2.02	8 (29%)
54	MIA	2w	37	54	19,27,32	1.62	2 (10%)	18,39,47	1.40	4 (22%)
1	OMC	2A	1920	1	19,22,23	0.85	0	25,31,34	1.09	2 (8%)
1	PSU	1A	2605	1,58	18,21,22	1.70	4 (22%)	21,30,33	2.08	4 (19%)
32	MA6	1a	1519	32	19,26,27	1.05	1 (5%)	18,38,41	1.74	3 (16%)
54	4SU	2w	8	54	18,21,22	1.83	3 (16%)	25,30,33	2.34	5 (20%)
1	PSU	1A	1911	1	18,21,22	1.46	2 (11%)	21,30,33	1.94	5 (23%)
1	PSU	2A	1911	1	18,21,22	1.44	2 (11%)	21,30,33	2.29	3 (14%)
56	PSU	2y	32	56	18,21,22	1.32	2 (11%)	21,30,33	2.05	4 (19%)
54	PSU	2w	39	54	18,21,22	1.42	3 (16%)	21,30,33	1.89	4 (19%)
32	4OC	2a	1402	32	20,23,24	0.86	0	25,32,35	0.89	1 (4%)
1	5MU	2A	1939	1,58	19,22,23	1.31	3 (15%)	27,32,35	2.64	6 (22%)
55	4SU	1x	8	55	18,21,22	2.30	6 (33%)	25,30,33	2.44	6 (24%)
54	F3N	1w	76	1	29,36,37	1.38	4 (13%)	28,51,54	1.47	2 (7%)
43	0TD	1l	92	43	8,9,10	4.52	4 (50%)	6,11,13	6.34	3 (50%)
32	M2G	2a	966	32	20,27,28	1.31	3 (15%)	19,40,43	1.07	1 (5%)
1	2MA	1A	2503	1,58	17,25,26	1.11	1 (5%)	16,37,40	1.33	3 (18%)
55	5MU	1x	54	55,58	19,22,23	1.52	4 (21%)	27,32,35	2.08	6 (22%)
55	5MC	2x	32	55	19,22,23	1.76	3 (15%)	26,32,35	1.42	3 (11%)
56	G7M	1y	46	56	20,26,27	1.38	1 (5%)	16,39,42	0.77	0
56	G7M	2y	46	56	20,26,27	1.60	4 (20%)	16,39,42	0.88	1 (6%)
32	PSU	1a	516	32	18,21,22	1.42	3 (16%)	21,30,33	2.00	5 (23%)
54	5MU	2w	54	54	19,22,23	1.16	2 (10%)	27,32,35	1.90	6 (22%)
56	PSU	2y	39	56	18,21,22	1.63	3 (16%)	21,30,33	1.45	2 (9%)
1	PSU	2A	2605	1	18,21,22	1.26	1 (5%)	21,30,33	2.14	4 (19%)
54	PSU	2w	55	54	18,21,22	1.50	2 (11%)	21,30,33	2.23	5 (23%)
55	PSU	2x	55	55	18,21,22	1.45	3 (16%)	21,30,33	2.00	5 (23%)
32	MA6	1a	1518	32	19,26,27	1.05	2 (10%)	18,38,41	2.22	4 (22%)
56	PSU	1y	39	56	18,21,22	1.44	1 (5%)	21,30,33	1.88	4 (19%)
55	5MU	2x	54	55	19,22,23	1.45	5 (26%)	27,32,35	2.21	6 (22%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	5MC	2a	1400	32	19,22,23	1.58	3 (15%)	26,32,35	1.36	3 (11%)
32	M2G	1a	966	32	20,27,28	1.47	3 (15%)	19,40,43	1.18	2 (10%)
32	UR3	1a	1498	32	19,22,23	0.97	1 (5%)	26,32,35	1.78	3 (11%)
1	5MU	2A	1915	1	19,22,23	1.48	4 (21%)	27,32,35	2.50	9 (33%)
54	F3N	2w	76	1,54	29,36,37	1.48	5 (17%)	28,51,54	1.43	1 (3%)
54	PSU	1w	32	54	18,21,22	1.30	2 (11%)	21,30,33	1.99	4 (19%)
54	PSU	1w	39	54	18,21,22	1.33	2 (11%)	21,30,33	1.99	4 (19%)
32	2MG	1a	1207	32	18,26,27	1.00	1 (5%)	16,38,41	1.38	3 (18%)
56	5MU	2y	54	56	19,22,23	1.59	5 (26%)	27,32,35	1.89	5 (18%)
32	5MC	1a	1404	32	19,22,23	1.39	3 (15%)	26,32,35	1.30	4 (15%)
56	PSU	1y	55	56	18,21,22	1.40	2 (11%)	21,30,33	2.02	3 (14%)
1	PSU	2A	1917	1	18,21,22	1.44	2 (11%)	21,30,33	2.13	4 (19%)
1	5MC	1A	1942	1	19,22,23	1.57	3 (15%)	26,32,35	1.48	4 (15%)
32	G7M	2a	527	32,58	20,26,27	1.15	2 (10%)	16,39,42	0.61	0
1	OMU	1A	2552	1,58	19,22,23	1.17	1 (5%)	25,31,34	1.73	4 (16%)
1	OMG	1A	2251	1,55,58	19,26,27	1.13	1 (5%)	21,38,41	1.10	2 (9%)
1	OMC	1A	1920	1	19,22,23	0.78	0	25,31,34	0.84	0
54	G7M	1w	46	54	20,26,27	1.32	2 (10%)	16,39,42	0.79	0
32	G7M	1a	527	32	20,26,27	1.25	2 (10%)	16,39,42	0.73	0
1	5MU	1A	1939	1,58	19,22,23	1.62	6 (31%)	27,32,35	2.36	8 (29%)
32	4OC	1a	1402	32	20,23,24	0.77	0	25,32,35	1.05	4 (16%)
32	PSU	2a	516	32	18,21,22	1.35	2 (11%)	21,30,33	2.14	4 (19%)
55	PSU	1x	55	55	18,21,22	1.44	2 (11%)	21,30,33	1.93	5 (23%)
56	4SU	2y	8	56	18,21,22	1.72	5 (27%)	25,30,33	2.10	8 (32%)
32	5MC	1a	967	32	19,22,23	1.56	2 (10%)	26,32,35	1.17	1 (3%)
1	2MA	2A	2503	1,58	17,25,26	1.12	3 (17%)	16,37,40	1.27	3 (18%)
54	5MU	1w	54	54	19,22,23	1.54	4 (21%)	27,32,35	1.88	6 (22%)
56	PSU	2y	55	56	18,21,22	1.46	2 (11%)	21,30,33	2.02	4 (19%)
43	0TD	2l	92	43	8,9,10	5.05	1 (12%)	6,11,13	5.38	2 (33%)
32	5MC	1a	1407	32	19,22,23	1.53	2 (10%)	26,32,35	1.21	3 (11%)
32	5MC	1a	1400	32	19,22,23	1.51	3 (15%)	26,32,35	1.30	3 (11%)
32	5MC	2a	1407	32,58	19,22,23	1.57	3 (15%)	26,32,35	1.33	4 (15%)
55	31H	1x	76	55,58	27,34,35	1.08	2 (7%)	22,47,50	2.77	6 (27%)
32	5MC	2a	967	32,58	19,22,23	1.60	2 (10%)	26,32,35	1.08	2 (7%)
32	5MC	2a	1404	32	19,22,23	1.75	3 (15%)	26,32,35	1.25	3 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	MA6	2a	1519	32	19,26,27	1.03	1 (5%)	18,38,41	1.93	4 (22%)
1	OMG	2A	2251	1,55,58	19,26,27	1.07	1 (5%)	21,38,41	1.19	3 (14%)
1	5MC	1A	1962	1,58	19,22,23	1.82	3 (15%)	26,32,35	1.57	7 (26%)
1	5MC	2A	1962	1,58	19,22,23	1.56	3 (15%)	26,32,35	1.16	2 (7%)
54	PSU	1w	55	54	18,21,22	1.38	2 (11%)	21,30,33	2.11	3 (14%)
32	UR3	2a	1498	32	19,22,23	1.15	2 (10%)	26,32,35	1.80	4 (15%)
56	4SU	1y	8	56	18,21,22	1.55	4 (22%)	25,30,33	1.28	3 (12%)
55	4SU	2x	8	55	18,21,22	2.06	5 (27%)	25,30,33	1.38	6 (24%)
56	MIA	1y	37	56	17,24,32	1.10	1 (5%)	16,35,47	1.46	2 (12%)
55	5MC	1x	32	55	19,22,23	1.56	3 (15%)	26,32,35	1.44	4 (15%)
55	31H	2x	76	55,58	27,34,35	0.91	2 (7%)	22,47,50	2.95	6 (27%)
56	PSU	1y	32	56	18,21,22	1.38	3 (16%)	21,30,33	1.84	4 (19%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	OMU	2A	2552	1	-	0/9/27/28	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	1/11/33/34	0/3/3/3
54	G7M	2w	46	54	-	3/3/25/26	0/3/3/3
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
56	MIA	2y	37	56	-	1/3/25/34	0/3/3/3
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
56	5MU	1y	54	56	-	0/7/25/26	0/2/2/2
54	MIA	2w	37	54	-	2/7/29/34	0/3/3/3
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
1	PSU	1A	2605	1,58	-	0/7/25/26	0/2/2/2
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
56	PSU	2y	32	56	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	0/9/29/30	0/2/2/2
1	5MU	2A	1939	1,58	-	0/7/25/26	0/2/2/2
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
54	F3N	1w	76	1	-	2/15/37/38	0/4/4/4
43	0TD	1l	92	43	-	3/7/12/14	-
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
1	2MA	1A	2503	1,58	-	1/3/25/26	0/3/3/3
55	5MU	1x	54	55,58	-	0/7/25/26	0/2/2/2
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
56	G7M	1y	46	56	-	1/3/25/26	0/3/3/3
56	G7M	2y	46	56	-	0/3/25/26	0/3/3/3
32	PSU	1a	516	32	-	0/7/25/26	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
56	PSU	2y	39	56	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
56	PSU	1y	39	56	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
54	F3N	2w	76	1,54	-	2/15/37/38	0/4/4/4
54	PSU	1w	32	54	-	0/7/25/26	0/2/2/2
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/5/27/28	0/3/3/3
56	5MU	2y	54	56	-	2/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
56	PSU	1y	55	56	-	1/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
32	G7M	2a	527	32,58	-	3/3/25/26	0/3/3/3
1	OMU	1A	2552	1,58	-	0/9/27/28	0/2/2/2
1	OMG	1A	2251	1,55,58	-	1/5/27/28	0/3/3/3
1	OMC	1A	1920	1	-	0/9/27/28	0/2/2/2
54	G7M	1w	46	54	-	2/3/25/26	0/3/3/3
32	G7M	1a	527	32	-	3/3/25/26	0/3/3/3
1	5MU	1A	1939	1,58	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
56	4SU	2y	8	56	-	2/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	1,58	-	2/3/25/26	0/3/3/3
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
56	PSU	2y	55	56	-	2/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	3/7/12/14	-
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
32	5MC	2a	1407	32,58	-	0/7/25/26	0/2/2/2
55	31H	1x	76	55,58	-	4/18/40/41	0/3/3/3
32	5MC	2a	967	32,58	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
1	OMG	2A	2251	1,55,58	-	0/5/27/28	0/3/3/3
1	5MC	1A	1962	1,58	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	1,58	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
56	4SU	1y	8	56	-	0/7/25/26	0/2/2/2
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
56	MIA	1y	37	56	-	2/3/25/34	0/3/3/3
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
55	31H	2x	76	55,58	-	4/18/40/41	0/3/3/3
56	PSU	1y	32	56	-	0/7/25/26	0/2/2/2

All (221) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-13.85	1.68	1.82
43	1l	92	0TD	CB-SB	-11.51	1.70	1.82
1	1A	1962	5MC	C5-C4	6.95	1.49	1.44
54	1w	37	MIA	C13-C14	6.44	1.51	1.32
55	2x	32	5MC	C5-C4	6.41	1.49	1.44
32	2a	1404	5MC	C5-C4	6.24	1.48	1.44
55	1x	8	4SU	C4-N3	-6.05	1.31	1.37
32	2a	967	5MC	C5-C4	5.98	1.48	1.44
54	1w	37	MIA	C2-S10	-5.91	1.70	1.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	967	5MC	C5-C4	5.76	1.48	1.44
32	2a	1400	5MC	C5-C4	5.69	1.48	1.44
32	2a	1407	5MC	C5-C4	5.61	1.48	1.44
32	1a	1407	5MC	C5-C4	5.53	1.48	1.44
54	2w	37	MIA	C2-S10	-5.38	1.71	1.75
1	2A	1962	5MC	C5-C4	5.35	1.48	1.44
55	1x	32	5MC	C5-C4	5.28	1.48	1.44
1	1A	1942	5MC	C5-C4	5.20	1.48	1.44
56	2y	39	PSU	C6-C5	5.20	1.41	1.35
54	2w	8	4SU	C4-S4	-5.16	1.59	1.68
32	1a	1400	5MC	C5-C4	5.11	1.48	1.44
1	2A	1942	5MC	C5-C4	5.11	1.48	1.44
55	2x	8	4SU	C4-N3	-5.06	1.32	1.37
54	2w	76	F3N	CB-CG	-5.00	1.39	1.51
54	1w	8	4SU	C4-N3	-4.98	1.32	1.37
55	1x	8	4SU	C2-N3	-4.90	1.29	1.38
54	1w	8	4SU	C4-S4	-4.72	1.60	1.68
56	1y	39	PSU	C6-C5	4.71	1.40	1.35
54	2w	55	PSU	C6-C5	4.70	1.40	1.35
56	2y	46	G7M	C5-C4	4.66	1.48	1.39
56	1y	46	G7M	C5-C4	4.31	1.47	1.39
1	1A	1911	PSU	C6-C5	4.26	1.40	1.35
55	2x	8	4SU	C4-S4	-4.24	1.61	1.68
56	1y	32	PSU	C6-C5	4.23	1.40	1.35
56	1y	55	PSU	C6-C5	4.21	1.40	1.35
32	1a	966	M2G	C2-N3	4.20	1.36	1.30
54	1w	76	F3N	CB-CG	-4.14	1.41	1.51
56	2y	8	4SU	C4-S4	-4.09	1.61	1.68
56	2y	32	PSU	C6-C5	4.09	1.39	1.35
56	2y	55	PSU	C6-C5	4.06	1.39	1.35
55	2x	55	PSU	C6-C5	4.04	1.39	1.35
32	2a	516	PSU	C6-C5	4.00	1.39	1.35
54	1w	55	PSU	C6-C5	3.95	1.39	1.35
32	1a	1404	5MC	C5-C4	3.94	1.47	1.44
1	1A	1917	PSU	C6-C5	3.90	1.39	1.35
1	2A	1917	PSU	C6-C5	3.89	1.39	1.35
56	2y	8	4SU	C2-N1	3.87	1.44	1.38
54	1w	46	G7M	C5-C4	3.84	1.46	1.39
1	1A	2605	PSU	C6-C5	3.82	1.39	1.35
54	2w	46	G7M	C5-C4	3.81	1.46	1.39
1	2A	1911	PSU	C6-C5	3.80	1.39	1.35
32	1a	516	PSU	C6-C5	3.73	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	527	G7M	C5-C4	3.70	1.46	1.39
55	2x	8	4SU	C2-N3	-3.66	1.31	1.38
54	2w	32	PSU	C6-C5	3.64	1.39	1.35
1	1A	2251	OMG	C6-N1	-3.62	1.32	1.37
32	2a	527	G7M	C5-C4	3.62	1.46	1.39
54	2w	76	F3N	O4'-C1'	3.61	1.45	1.40
55	1x	8	4SU	C4-S4	-3.58	1.62	1.68
32	2a	966	M2G	C2-N3	3.57	1.35	1.30
56	1y	8	4SU	C4-S4	-3.50	1.62	1.68
54	2w	8	4SU	C5-C4	-3.47	1.38	1.42
54	1w	39	PSU	C6-C5	3.44	1.39	1.35
56	2y	54	5MU	C6-C5	3.41	1.40	1.34
55	1x	55	PSU	C6-C5	3.37	1.39	1.35
43	1l	92	0TD	CB-CG	3.37	1.57	1.52
55	1x	54	5MU	C6-C5	3.36	1.40	1.34
54	2w	39	PSU	C6-C5	3.30	1.38	1.35
54	1w	54	5MU	C6-C5	3.27	1.39	1.34
1	2A	1915	5MU	C2-N1	3.24	1.43	1.38
1	2A	2605	PSU	C6-C5	3.24	1.38	1.35
56	1y	54	5MU	C4-C5	3.24	1.50	1.44
56	2y	54	5MU	C2-N1	3.23	1.43	1.38
32	2a	1404	5MC	C6-C5	3.21	1.39	1.34
55	1x	32	5MC	C6-N1	-3.20	1.32	1.38
55	2x	54	5MU	C6-C5	3.17	1.39	1.34
55	1x	54	5MU	C4-N3	-3.17	1.32	1.38
1	1A	1942	5MC	C6-C5	3.11	1.39	1.34
55	1x	8	4SU	C5-C4	-3.11	1.38	1.42
1	2A	1911	PSU	C4-N3	-3.10	1.33	1.38
54	1w	8	4SU	C5-C4	-3.09	1.38	1.42
54	1w	32	PSU	C4-N3	-3.04	1.33	1.38
32	1a	966	M2G	C6-N1	-3.03	1.33	1.37
1	1A	1939	5MU	C2-N3	-3.03	1.32	1.38
54	1w	54	5MU	C2-N1	3.03	1.43	1.38
1	2A	1939	5MU	C6-C5	3.02	1.39	1.34
56	1y	54	5MU	C6-C5	3.01	1.39	1.34
1	1A	2605	PSU	C4-N3	-3.01	1.33	1.38
56	1y	8	4SU	C4-N3	-3.01	1.34	1.37
1	1A	1939	5MU	C4-C5	3.01	1.49	1.44
1	2A	2251	OMG	C6-N1	-2.99	1.33	1.37
1	2A	1915	5MU	C6-C5	2.97	1.39	1.34
1	2A	1917	PSU	C4-N3	-2.96	1.33	1.38
32	1a	966	M2G	C2-N2	2.95	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	2y	37	MIA	C2-N3	2.95	1.36	1.32
54	2w	32	PSU	C4-N3	-2.93	1.33	1.38
1	1A	1939	5MU	C2-N1	2.93	1.43	1.38
56	1y	37	MIA	C2-N3	2.90	1.36	1.32
56	2y	54	5MU	C4-C5	2.89	1.49	1.44
1	1A	2605	PSU	C2-N3	-2.88	1.32	1.37
32	1a	527	G7M	C6-N1	-2.86	1.33	1.37
1	2A	1939	5MU	C4-N3	-2.79	1.33	1.38
55	2x	32	5MC	C6-C5	2.77	1.39	1.34
1	1A	1915	5MU	C6-C5	2.75	1.39	1.34
1	2A	1942	5MC	C6-C5	2.74	1.39	1.34
1	2A	1915	5MU	C4-C5	2.74	1.49	1.44
54	1w	54	5MU	C2-N3	-2.74	1.33	1.38
32	2a	1498	UR3	C2-N1	2.72	1.42	1.38
43	1l	92	0TD	CB-CA	2.72	1.55	1.54
32	1a	1407	5MC	C6-C5	2.70	1.39	1.34
54	1w	76	F3N	O4'-C1'	2.69	1.44	1.40
32	1a	1404	5MC	C6-N1	-2.68	1.33	1.38
55	2x	76	31H	C6-C5	-2.68	1.33	1.43
54	1w	54	5MU	C4-N3	-2.67	1.33	1.38
54	2w	8	4SU	C4-N3	-2.66	1.34	1.37
32	1a	516	PSU	C4-N3	-2.66	1.33	1.38
1	1A	1911	PSU	C4-N3	-2.65	1.33	1.38
1	1A	1939	5MU	C6-C5	2.65	1.38	1.34
32	2a	1207	2MG	C6-N1	-2.64	1.33	1.37
54	2w	39	PSU	C4-N3	-2.62	1.33	1.38
1	2A	1962	5MC	C6-C5	2.61	1.38	1.34
54	1w	8	4SU	C2-N3	-2.61	1.33	1.38
32	1a	1207	2MG	C6-N1	-2.60	1.33	1.37
55	2x	54	5MU	C4-C5	2.59	1.49	1.44
1	2A	1962	5MC	C6-N1	-2.59	1.33	1.38
55	2x	8	4SU	C5-C4	-2.58	1.39	1.42
32	1a	1400	5MC	C6-C5	2.57	1.38	1.34
54	1w	39	PSU	C4-N3	-2.57	1.34	1.38
43	1l	92	0TD	CSB-SB	-2.56	1.74	1.79
56	2y	39	PSU	C4-N3	-2.55	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.54	1.33	1.38
32	2a	1400	5MC	C6-N1	-2.53	1.33	1.38
54	1w	37	MIA	C6-N1	2.53	1.36	1.33
1	1A	2605	PSU	O4'-C1'	-2.53	1.40	1.43
1	1A	1915	5MU	C2-N1	2.51	1.42	1.38
1	1A	1915	5MU	C4-C5	2.50	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	55	PSU	C4-N3	-2.50	1.34	1.38
32	2a	966	M2G	C2-N2	2.50	1.39	1.35
1	1A	1917	PSU	C4-N3	-2.49	1.34	1.38
55	2x	54	5MU	C4-N3	-2.48	1.34	1.38
55	2x	32	5MC	C6-N1	-2.47	1.33	1.38
54	2w	37	MIA	C6-C5	2.47	1.48	1.44
55	1x	76	31H	C6-C5	-2.46	1.34	1.43
32	2a	1407	5MC	C6-N1	-2.45	1.33	1.38
32	1a	1519	MA6	C6-C5	-2.45	1.41	1.44
1	1A	1942	5MC	C6-N1	-2.44	1.33	1.38
32	2a	967	5MC	C6-C5	2.44	1.38	1.34
56	1y	8	4SU	C6-C5	2.43	1.40	1.35
32	1a	967	5MC	C6-C5	2.43	1.38	1.34
55	2x	54	5MU	C2-N1	2.42	1.42	1.38
1	1A	1939	5MU	C4-N3	-2.41	1.34	1.38
54	2w	76	F3N	C6-C5	-2.41	1.34	1.43
55	1x	54	5MU	C2-N3	-2.39	1.33	1.38
32	2a	966	M2G	C6-N1	-2.38	1.34	1.37
1	1A	1939	5MU	C6-N1	-2.38	1.34	1.38
32	1a	1518	MA6	C6-C5	-2.37	1.41	1.44
56	1y	55	PSU	C4-N3	-2.37	1.34	1.38
32	2a	1407	5MC	C6-C5	2.37	1.38	1.34
56	2y	8	4SU	C4-N3	-2.36	1.35	1.37
55	2x	55	PSU	C4-N3	-2.35	1.34	1.38
54	1w	76	F3N	C5-N7	-2.35	1.31	1.39
1	1A	1962	5MC	C6-C5	2.35	1.38	1.34
56	1y	54	5MU	C2-N1	2.34	1.42	1.38
56	2y	46	G7M	C6-N1	-2.34	1.34	1.37
32	1a	1400	5MC	C6-N1	-2.33	1.34	1.38
32	2a	1400	5MC	C6-C5	2.33	1.38	1.34
56	1y	8	4SU	C2-N3	-2.33	1.33	1.38
32	2a	1518	MA6	C6-C5	-2.31	1.41	1.44
55	1x	32	5MC	C6-C5	2.31	1.38	1.34
56	2y	8	4SU	O2-C2	2.30	1.27	1.23
55	2x	55	PSU	C4-C5	2.30	1.50	1.44
54	2w	54	5MU	C4-N3	-2.29	1.34	1.38
55	1x	8	4SU	C6-C5	2.29	1.40	1.35
1	2A	1939	5MU	C6-N1	-2.29	1.34	1.38
56	2y	54	5MU	C4-N3	-2.28	1.34	1.38
54	2w	55	PSU	C4-N3	-2.28	1.34	1.38
1	1A	2503	2MA	C6-N1	-2.26	1.33	1.37
1	2A	1942	5MC	C6-N1	-2.26	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	55	PSU	C4-N3	-2.26	1.34	1.38
54	1w	32	PSU	C2-N1	-2.26	1.33	1.36
32	2a	1519	MA6	C6-C5	-2.25	1.41	1.44
55	1x	8	4SU	O2-C2	2.25	1.27	1.23
1	1A	1962	5MC	C6-N1	-2.24	1.34	1.38
1	2A	2552	OMU	C2-N3	-2.23	1.34	1.38
55	2x	8	4SU	C6-C5	2.22	1.40	1.35
55	1x	54	5MU	C4-C5	2.22	1.48	1.44
54	1w	76	F3N	C6-C5	-2.22	1.35	1.43
56	2y	39	PSU	O2-C2	2.21	1.28	1.23
1	2A	2503	2MA	C2-N3	2.21	1.36	1.31
55	1x	76	31H	C5-N7	-2.20	1.32	1.39
54	2w	76	F3N	C3'-N3'	2.19	1.49	1.45
56	2y	55	PSU	C4-N3	-2.19	1.34	1.38
55	2x	76	31H	C5-N7	-2.19	1.32	1.39
56	2y	8	4SU	C6-C5	2.18	1.40	1.35
56	2y	46	G7M	C8-N9	2.15	1.37	1.33
54	2w	76	F3N	C5-N7	-2.15	1.32	1.39
56	1y	54	5MU	C4-N3	-2.15	1.34	1.38
54	2w	32	PSU	C2-N3	-2.15	1.33	1.37
54	2w	39	PSU	C2-N3	-2.13	1.34	1.37
1	2A	2552	OMU	C6-C5	2.13	1.40	1.35
56	2y	46	G7M	C2-N3	2.13	1.38	1.33
1	2A	2503	2MA	C6-N1	-2.12	1.33	1.37
56	1y	32	PSU	C4-C5	2.12	1.50	1.44
56	2y	54	5MU	C2-N3	-2.12	1.34	1.38
32	2a	1518	MA6	C6-N1	2.11	1.35	1.32
1	1A	2552	OMU	O4-C4	2.10	1.28	1.24
56	1y	54	5MU	C2-N3	-2.09	1.34	1.38
32	2a	1498	UR3	O2-C2	2.09	1.26	1.22
56	1y	32	PSU	C4-N3	-2.08	1.35	1.38
1	2A	1915	5MU	C6-N1	-2.07	1.34	1.38
32	1a	1518	MA6	C6-N1	2.07	1.35	1.32
32	1a	1498	UR3	C6-C5	2.07	1.39	1.35
54	1w	46	G7M	C6-N1	-2.07	1.34	1.37
32	2a	527	G7M	C6-N1	-2.06	1.34	1.37
56	2y	32	PSU	C4-N3	-2.04	1.35	1.38
1	1A	1915	5MU	C4-N3	-2.04	1.35	1.38
32	2a	516	PSU	C4-C5	2.03	1.49	1.44
55	2x	54	5MU	C2-N3	-2.02	1.34	1.38
1	2A	2503	2MA	C6-N6	2.02	1.35	1.27
32	1a	1404	5MC	C6-C5	2.02	1.37	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	2w	54	5MU	C6-N1	-2.00	1.34	1.38
32	1a	516	PSU	O4'-C1'	-2.00	1.41	1.43

All (331) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-14.82	75.72	102.36
43	2l	92	0TD	CSB-SB-CB	-12.88	79.21	102.36
55	2x	76	31H	C4'-O4'-C1'	-10.76	100.07	109.92
54	1w	37	MIA	C12-C13-C14	-10.75	107.71	127.01
55	1x	76	31H	C4'-O4'-C1'	-7.96	102.63	109.92
32	1a	1498	UR3	C4-N3-C2	-7.22	118.77	124.58
1	2A	1911	PSU	N1-C2-N3	7.19	122.76	115.17
32	2a	1498	UR3	C4-N3-C2	-6.96	118.98	124.58
54	2w	55	PSU	N1-C2-N3	6.85	122.40	115.17
55	1x	76	31H	N3-C2-N1	-6.75	119.51	128.67
1	2A	1939	5MU	O4-C4-C5	-6.57	117.40	124.92
1	2A	1917	PSU	N1-C2-N3	6.56	122.09	115.17
55	2x	76	31H	N3-C2-N1	-6.55	119.78	128.67
54	2w	8	4SU	C5-C4-N3	6.53	120.82	114.75
54	2w	32	PSU	N1-C2-N3	6.49	122.02	115.17
1	2A	1939	5MU	C5-C4-N3	6.47	120.94	115.32
54	2w	76	F3N	N3-C2-N1	-6.46	119.90	128.67
56	1y	55	PSU	N1-C2-N3	6.42	121.94	115.17
54	2w	8	4SU	C4-N3-C2	-6.29	121.28	127.31
54	1w	76	F3N	N3-C2-N1	-6.29	120.14	128.67
54	1w	55	PSU	N1-C2-N3	6.26	121.77	115.17
55	1x	55	PSU	N1-C2-N3	6.21	121.72	115.17
1	2A	1939	5MU	C4-N3-C2	-6.13	119.30	127.34
1	1A	2605	PSU	N1-C2-N3	6.12	121.62	115.17
32	2a	516	PSU	N1-C2-N3	6.12	121.62	115.17
56	2y	32	PSU	N1-C2-N3	6.04	121.54	115.17
32	1a	1518	MA6	N3-C2-N1	-6.02	120.50	128.67
55	1x	8	4SU	C4-N3-C2	6.01	133.07	127.31
1	1A	1911	PSU	N1-C2-N3	5.91	121.40	115.17
56	2y	55	PSU	N1-C2-N3	5.91	121.40	115.17
54	1w	39	PSU	N1-C2-N3	5.91	121.40	115.17
32	1a	516	PSU	N1-C2-N3	5.82	121.31	115.17
54	2w	39	PSU	N1-C2-N3	5.80	121.28	115.17
1	1A	1939	5MU	C5-C4-N3	5.76	120.33	115.32
55	2x	55	PSU	N1-C2-N3	5.76	121.25	115.17
1	2A	2605	PSU	N1-C2-N3	5.75	121.24	115.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	2y	8	4SU	C4-N3-C2	-5.74	121.81	127.31
55	1x	8	4SU	C6-C5-C4	-5.71	115.01	119.95
1	2A	1915	5MU	C4-N3-C2	-5.63	119.95	127.34
1	2A	1915	5MU	O4-C4-C5	-5.57	118.54	124.92
56	1y	39	PSU	N1-C2-N3	5.56	121.03	115.17
54	2w	8	4SU	C5-C4-S4	-5.56	117.96	124.31
1	2A	1915	5MU	C5-C4-N3	5.53	120.13	115.32
1	1A	1915	5MU	O4-C4-C5	-5.53	118.59	124.92
1	1A	1915	5MU	C4-N3-C2	-5.53	120.09	127.34
55	2x	54	5MU	N3-C2-N1	5.51	122.06	114.89
1	1A	1915	5MU	N3-C2-N1	5.46	122.00	114.89
55	1x	8	4SU	O2-C2-N1	5.44	129.87	122.80
32	2a	1518	MA6	N3-C2-N1	-5.43	121.30	128.67
1	1A	1917	PSU	N1-C2-N3	5.42	120.88	115.17
1	1A	1939	5MU	C4-N3-C2	-5.37	120.30	127.34
32	1a	1518	MA6	C2-N1-C6	5.34	122.07	116.84
1	1A	1939	5MU	C5-C6-N1	-5.34	117.52	123.31
56	1y	32	PSU	N1-C2-N3	5.33	120.79	115.17
55	2x	54	5MU	C4-N3-C2	-5.31	120.37	127.34
32	2a	1519	MA6	N3-C2-N1	-5.30	121.48	128.67
1	2A	1939	5MU	N3-C2-N1	5.12	121.56	114.89
54	1w	55	PSU	O2-C2-N1	-5.04	117.59	122.79
54	1w	54	5MU	C5-C4-N3	4.90	119.58	115.32
32	2a	516	PSU	O2-C2-N1	-4.89	117.75	122.79
1	2A	1915	5MU	N3-C2-N1	4.85	121.21	114.89
1	2A	2552	OMU	C4-N3-C2	-4.84	120.60	126.61
55	1x	54	5MU	C5-C4-N3	4.84	119.53	115.32
56	2y	54	5MU	C5-C4-N3	4.84	119.53	115.32
55	2x	32	5MC	C5-C6-N1	-4.80	118.10	123.31
56	1y	54	5MU	N3-C2-N1	4.78	121.11	114.89
56	1y	54	5MU	C4-N3-C2	-4.75	121.11	127.34
54	1w	54	5MU	O4-C4-C5	-4.75	119.48	124.92
55	1x	54	5MU	C4-N3-C2	-4.74	121.12	127.34
32	1a	1519	MA6	N3-C2-N1	-4.71	122.28	128.67
56	1y	37	MIA	N3-C2-N1	-4.67	122.33	128.67
1	2A	1911	PSU	O2-C2-N1	-4.67	117.97	122.79
1	2A	2605	PSU	C4-N3-C2	-4.61	120.02	126.37
55	1x	54	5MU	N3-C2-N1	4.59	120.86	114.89
1	2A	1917	PSU	C4-N3-C2	-4.57	120.07	126.37
1	1A	1917	PSU	O2-C2-N1	-4.57	118.08	122.79
1	1A	1915	5MU	C5-C4-N3	4.56	119.29	115.32
54	2w	54	5MU	O4-C4-C5	-4.54	119.72	124.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	37	MIA	C15-C14-C13	-4.53	109.05	122.66
32	2a	1518	MA6	C2-N1-C6	4.53	121.29	116.84
1	1A	1942	5MC	C5-C6-N1	-4.53	118.39	123.31
54	2w	55	PSU	O2-C2-N1	-4.51	118.14	122.79
56	2y	8	4SU	C5-C4-N3	4.49	118.93	114.75
54	2w	32	PSU	C4-N3-C2	-4.48	120.20	126.37
55	1x	54	5MU	C5-C6-N1	-4.48	118.45	123.31
1	1A	2552	OMU	O2-C2-N1	-4.45	117.01	122.80
1	2A	2552	OMU	O2-C2-N1	-4.44	117.02	122.80
55	2x	55	PSU	C4-N3-C2	-4.42	120.28	126.37
56	2y	32	PSU	C4-N3-C2	-4.41	120.30	126.37
55	1x	76	31H	O4'-C1'-N9	4.40	114.58	108.75
32	1a	516	PSU	C4-N3-C2	-4.38	120.34	126.37
55	2x	54	5MU	O4-C4-C5	-4.37	119.92	124.92
54	1w	32	PSU	O2-C2-N1	-4.36	118.30	122.79
1	1A	1917	PSU	C4-N3-C2	-4.34	120.39	126.37
56	1y	54	5MU	C5-C4-N3	4.34	119.09	115.32
55	1x	8	4SU	S4-C4-N3	-4.34	115.67	120.20
54	1w	32	PSU	N1-C2-N3	4.32	119.72	115.17
55	2x	54	5MU	C5-C6-N1	-4.26	118.69	123.31
32	1a	967	5MC	C5-C6-N1	-4.23	118.72	123.31
1	2A	2552	OMU	N3-C2-N1	4.22	120.39	114.89
56	2y	54	5MU	C4-N3-C2	-4.22	121.81	127.34
32	2a	1404	5MC	C5-C6-N1	-4.20	118.75	123.31
1	1A	1911	PSU	C4-N3-C2	-4.20	120.58	126.37
1	1A	2552	OMU	N3-C2-N1	4.19	120.34	114.89
1	1A	2605	PSU	C4-N3-C2	-4.18	120.61	126.37
1	2A	1911	PSU	C4-N3-C2	-4.18	120.61	126.37
54	1w	8	4SU	C5-C4-N3	4.18	118.64	114.75
56	2y	54	5MU	N3-C2-N1	4.12	120.25	114.89
54	1w	32	PSU	C4-N3-C2	-4.10	120.72	126.37
56	2y	54	5MU	O4-C4-C5	-4.10	120.23	124.92
55	1x	54	5MU	O4-C4-C5	-4.09	120.24	124.92
32	2a	516	PSU	C4-N3-C2	-4.08	120.76	126.37
55	2x	54	5MU	C5-C4-N3	4.04	118.84	115.32
54	1w	37	MIA	C16-C14-C13	-4.02	110.59	122.66
54	2w	54	5MU	C5-C4-N3	4.00	118.80	115.32
56	2y	8	4SU	N3-C2-N1	4.00	120.09	114.89
54	2w	54	5MU	C4-N3-C2	-3.99	122.10	127.34
1	2A	2605	PSU	O2-C2-N1	-3.99	118.68	122.79
32	2a	1400	5MC	C5-C6-N1	-3.95	119.02	123.31
55	1x	32	5MC	C5-C6-N1	-3.95	119.02	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	1y	39	PSU	C4-N3-C2	-3.94	120.94	126.37
55	1x	32	5MC	C5-C4-N3	-3.94	117.72	121.75
1	1A	1939	5MU	N3-C2-N1	3.92	119.99	114.89
56	2y	55	PSU	O2-C2-N1	-3.91	118.75	122.79
54	1w	8	4SU	C4-N3-C2	-3.91	123.57	127.31
56	2y	37	MIA	N3-C2-N1	-3.90	123.37	128.67
54	2w	39	PSU	C4-N3-C2	-3.89	121.02	126.37
32	2a	1519	MA6	C2-N1-C6	3.87	120.64	116.84
1	2A	2552	OMU	C5-C4-N3	3.87	120.22	114.80
1	2A	1939	5MU	C5-C6-N1	-3.85	119.13	123.31
1	1A	1915	5MU	O2-C2-N1	-3.83	117.81	122.80
32	2a	1407	5MC	C5-C6-N1	-3.80	119.18	123.31
54	2w	54	5MU	N3-C2-N1	3.80	119.83	114.89
54	2w	55	PSU	C4-N3-C2	-3.77	121.18	126.37
54	1w	39	PSU	C4-N3-C2	-3.76	121.19	126.37
1	1A	1939	5MU	O4-C4-C5	-3.75	120.63	124.92
54	1w	54	5MU	N3-C2-N1	3.74	119.76	114.89
56	2y	55	PSU	C4-N3-C2	-3.73	121.23	126.37
1	2A	1942	5MC	C5-C6-N1	-3.73	119.27	123.31
32	1a	1519	MA6	C2-N1-C6	3.72	120.49	116.84
56	1y	55	PSU	C4-N3-C2	-3.72	121.25	126.37
32	1a	1400	5MC	C5-C4-N3	-3.71	117.95	121.75
1	2A	1939	5MU	O2-C2-N1	-3.71	117.97	122.80
54	1w	55	PSU	C4-N3-C2	-3.70	121.27	126.37
1	1A	1962	5MC	O2-C2-N3	-3.70	116.49	122.33
1	1A	1942	5MC	C5-C4-N3	-3.69	117.97	121.75
54	1w	39	PSU	O2-C2-N1	-3.67	119.00	122.79
56	2y	39	PSU	N1-C2-N3	3.67	119.04	115.17
32	1a	1404	5MC	C5-C4-N3	-3.66	118.01	121.75
54	1w	54	5MU	C4-N3-C2	-3.63	122.58	127.34
56	1y	55	PSU	O2-C2-N1	-3.61	119.06	122.79
1	1A	2552	OMU	C4-N3-C2	-3.60	122.15	126.61
32	1a	1407	5MC	C5-C6-N1	-3.59	119.41	123.31
55	1x	8	4SU	C5-C4-S4	3.58	128.39	124.31
55	1x	55	PSU	C4-N3-C2	-3.56	121.47	126.37
32	2a	1498	UR3	C5-C4-N3	3.52	119.67	115.04
56	1y	32	PSU	C4-N3-C2	-3.50	121.54	126.37
43	1l	92	0TD	OD2-CG-CB	3.50	120.72	113.15
32	1a	1400	5MC	C5-C6-N1	-3.49	119.52	123.31
56	2y	32	PSU	O2-C2-N1	-3.49	119.19	122.79
54	1w	8	4SU	N3-C2-N1	3.47	119.41	114.89
1	1A	2605	PSU	C5-C6-N1	-3.47	117.33	122.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	32	PSU	C6-C5-C4	-3.45	115.85	118.17
55	1x	76	31H	CA-N-CN	-3.43	117.55	122.82
56	1y	32	PSU	O2-C2-N1	-3.42	119.26	122.79
1	2A	1917	PSU	O2-C2-N1	-3.41	119.27	122.79
32	2a	1207	2MG	N2-C2-N3	-3.39	116.19	120.51
32	1a	1404	5MC	C5-C6-N1	-3.38	119.64	123.31
54	1w	37	MIA	N3-C2-N1	-3.34	120.91	127.03
32	1a	1519	MA6	C4-C5-N7	-3.34	105.81	109.34
1	1A	2605	PSU	O2-C2-N3	-3.34	115.93	121.86
32	2a	1407	5MC	C5-C4-N3	-3.31	118.36	121.75
54	2w	37	MIA	C4-C5-N7	-3.30	105.85	109.34
1	2A	2552	OMU	O4-C4-C5	-3.29	119.49	125.16
32	1a	966	M2G	C8-N7-C5	3.29	108.14	102.55
1	2A	1962	5MC	C5-C4-N3	-3.27	118.40	121.75
32	1a	1518	MA6	C1'-N9-C4	-3.24	120.95	126.64
1	2A	1915	5MU	C1'-N1-C6	-3.23	115.83	121.15
32	2a	966	M2G	C8-N7-C5	3.23	108.05	102.55
55	2x	8	4SU	O2-C2-N1	3.22	126.98	122.80
32	2a	967	5MC	C5-C6-N1	-3.21	119.82	123.31
1	2A	1915	5MU	C1'-N1-C2	3.21	123.35	117.59
55	1x	76	31H	OCN-CN-N	-3.20	117.05	125.32
56	2y	8	4SU	C1'-N1-C2	3.20	123.33	117.59
1	1A	2503	2MA	C4-N3-C2	-3.19	120.85	123.30
1	1A	1962	5MC	CM5-C5-C6	-3.18	118.54	122.85
56	1y	8	4SU	N3-C2-N1	3.17	119.02	114.89
54	2w	8	4SU	N3-C2-N1	3.17	119.02	114.89
56	1y	54	5MU	O4-C4-C5	-3.14	121.33	124.92
1	1A	1962	5MC	C5-C6-N1	-3.14	119.91	123.31
56	1y	54	5MU	C5M-C5-C4	3.12	122.11	118.78
32	2a	1404	5MC	C5-C4-N3	-3.11	118.56	121.75
55	2x	54	5MU	O2-C2-N1	-3.10	118.76	122.80
1	2A	1962	5MC	C5-C6-N1	-3.10	119.94	123.31
32	1a	516	PSU	C5-C6-N1	-3.09	117.85	122.14
32	1a	1207	2MG	C8-N7-C5	3.09	107.80	102.55
56	1y	8	4SU	C4-N3-C2	-3.08	124.36	127.31
56	1y	8	4SU	C5-C4-N3	3.08	117.61	114.75
1	2A	2251	OMG	C8-N7-C5	3.06	107.76	102.55
32	1a	1498	UR3	C5-C4-N3	3.05	119.06	115.04
56	2y	54	5MU	C5-C6-N1	-3.05	120.00	123.31
56	1y	54	5MU	C5-C6-N1	-3.04	120.01	123.31
32	2a	1207	2MG	C8-N7-C5	3.04	107.72	102.55
54	2w	54	5MU	C5M-C5-C4	3.03	122.02	118.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	54	5MU	C5-C6-N1	-3.02	120.04	123.31
32	2a	1519	MA6	C4-C5-N7	-3.00	106.17	109.34
55	2x	76	31H	CA-N-CN	-2.99	118.22	122.82
1	2A	1915	5MU	C5-C6-N1	-2.97	120.08	123.31
1	1A	2251	OMG	C8-N7-C5	2.97	107.60	102.55
32	2a	1518	MA6	C4-C5-N7	-2.96	106.21	109.34
56	2y	39	PSU	O2-C2-N3	-2.95	116.62	121.86
1	1A	2503	2MA	C8-N7-C5	2.94	107.56	102.55
55	2x	32	5MC	C5-C4-N3	-2.94	118.74	121.75
1	2A	2605	PSU	C6-C5-C4	-2.93	116.19	118.17
55	1x	76	31H	O2'-C2'-C3'	2.93	118.33	111.16
55	2x	8	4SU	C6-C5-C4	-2.91	117.43	119.95
1	2A	1942	5MC	C5-C4-N3	-2.91	118.77	121.75
1	1A	1939	5MU	C1'-N1-C6	-2.87	116.43	121.15
54	2w	37	MIA	C2-N1-C6	2.86	122.50	117.42
1	2A	1915	5MU	C5M-C5-C4	2.85	121.82	118.78
55	1x	54	5MU	O2-C2-N1	-2.83	119.12	122.80
32	2a	1207	2MG	N1-C2-N2	2.80	119.42	116.56
54	1w	37	MIA	C2-N1-C6	2.79	122.38	117.42
56	2y	55	PSU	C6-C5-C4	-2.79	116.29	118.17
32	2a	1407	5MC	O2-C2-N3	-2.76	117.98	122.33
32	2a	1400	5MC	C1'-N1-C6	-2.75	116.62	121.15
54	2w	39	PSU	O2-C2-N1	-2.74	119.96	122.79
56	2y	8	4SU	C5-C4-S4	-2.73	121.18	124.31
54	2w	32	PSU	O2-C2-N1	-2.73	119.97	122.79
1	2A	2503	2MA	C8-N7-C5	2.73	107.19	102.55
54	2w	55	PSU	C6-C5-C4	-2.70	116.35	118.17
32	2a	1402	4OC	CM4-N4-C4	-2.70	117.18	122.45
56	1y	39	PSU	O2-C2-N1	-2.67	120.03	122.79
1	1A	1915	5MU	C5M-C5-C4	2.67	121.63	118.78
1	1A	2251	OMG	C5-C6-N1	2.61	119.06	114.07
56	1y	32	PSU	C6-C5-C4	-2.60	116.42	118.17
32	1a	1518	MA6	C4-C5-N7	-2.58	106.61	109.34
1	2A	2503	2MA	C4-N3-C2	-2.58	121.31	123.30
54	2w	32	PSU	C5-C6-N1	-2.58	118.56	122.14
55	1x	55	PSU	O2-C2-N1	-2.57	120.14	122.79
32	2a	1400	5MC	O2-C2-N3	-2.57	118.28	122.33
55	2x	55	PSU	O2-C2-N3	-2.56	117.31	121.86
1	1A	2552	OMU	O4-C4-C5	-2.54	120.78	125.16
54	2w	54	5MU	O2-C2-N1	-2.53	119.50	122.80
55	2x	32	5MC	CM5-C5-C6	-2.52	119.44	122.85
55	2x	8	4SU	S4-C4-N3	-2.52	117.57	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1962	5MC	C1'-N1-C6	-2.50	117.03	121.15
55	2x	55	PSU	C6-C5-C4	-2.49	116.50	118.17
32	2a	516	PSU	C6-C5-C4	-2.49	116.50	118.17
1	1A	1939	5MU	O2-C2-N3	-2.48	116.91	121.49
1	1A	1917	PSU	C5-C6-N1	-2.48	118.69	122.14
32	1a	1402	4OC	C6-C5-C4	2.48	119.98	117.00
55	2x	76	31H	OCN-CN-N	-2.46	118.96	125.32
32	1a	516	PSU	O2-C2-N3	-2.46	117.49	121.86
1	2A	1917	PSU	C5-C6-N1	-2.45	118.74	122.14
54	1w	8	4SU	C5-C4-S4	-2.44	121.52	124.31
1	1A	1942	5MC	O2-C2-N3	-2.41	118.53	122.33
54	2w	37	MIA	N3-C2-N1	-2.41	122.62	127.03
56	2y	37	MIA	C4-C5-N7	-2.40	106.80	109.34
55	2x	55	PSU	C5-C6-N1	-2.40	118.81	122.14
32	2a	1407	5MC	CM5-C5-C6	-2.38	119.63	122.85
55	1x	55	PSU	C5-C6-N1	-2.37	118.85	122.14
56	1y	37	MIA	C4-C5-N7	-2.37	106.84	109.34
1	1A	1942	5MC	N1-C2-N3	2.36	122.91	118.80
1	1A	1915	5MU	C5-C6-N1	-2.35	120.76	123.31
56	1y	54	5MU	O2-C2-N1	-2.34	119.75	122.80
54	1w	39	PSU	C6-C5-C4	-2.32	116.61	118.17
32	1a	1400	5MC	O2-C2-N3	-2.32	118.68	122.33
1	1A	1962	5MC	C5-C4-N3	-2.31	119.38	121.75
1	1A	1962	5MC	N1-C2-N3	2.30	122.80	118.80
1	2A	1920	OMC	CM2-O2'-C2'	-2.30	108.58	114.47
55	1x	32	5MC	N4-C4-N3	2.29	122.66	118.51
56	1y	39	PSU	C6-C5-C4	-2.28	116.64	118.17
54	2w	37	MIA	C12-N6-C6	-2.28	120.74	122.85
1	1A	1939	5MU	C6-N1-C2	2.27	123.57	121.30
54	1w	76	F3N	O4'-C1'-N9	2.27	111.75	108.75
55	2x	76	31H	O4'-C1'-N9	-2.27	105.74	108.75
1	2A	2503	2MA	C5-C6-N1	2.25	118.32	114.12
56	2y	46	G7M	N2-C2-N3	2.25	124.07	119.67
55	1x	8	4SU	O2-C2-N3	-2.25	117.34	121.49
56	2y	8	4SU	C6-N1-C2	-2.24	118.27	121.00
32	2a	1498	UR3	C3U-N3-C4	2.24	120.97	117.87
32	1a	1207	2MG	N2-C2-N3	-2.24	117.66	120.51
1	2A	2251	OMG	CM2-O2'-C2'	-2.23	108.76	114.47
32	1a	1498	UR3	C3U-N3-C4	2.22	120.95	117.87
32	1a	1402	4OC	C2'-C1'-N1	-2.20	110.07	114.24
54	1w	8	4SU	C6-N1-C2	-2.20	118.32	121.00
1	2A	2251	OMG	C5-C6-N1	2.19	118.25	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1942	5MC	O2-C2-N3	-2.19	118.88	122.33
32	2a	967	5MC	C5-C4-N3	-2.18	119.52	121.75
54	2w	39	PSU	C5-C6-N1	-2.17	119.12	122.14
55	2x	76	31H	O2'-C2'-C3'	2.17	116.48	111.16
54	2w	32	PSU	O2-C2-N3	-2.17	118.01	121.86
54	2w	55	PSU	C6-N1-C2	-2.17	120.68	122.69
1	1A	1911	PSU	O2-C2-N3	-2.17	118.01	121.86
56	2y	8	4SU	O2-C2-N3	-2.16	117.50	121.49
32	1a	516	PSU	O4'-C1'-C2'	2.16	108.14	105.15
32	2a	1498	UR3	C1'-N1-C2	2.16	120.58	117.04
32	2a	1404	5MC	CM5-C5-C6	-2.16	119.93	122.85
32	2a	1207	2MG	CM2-N2-C2	-2.15	119.04	123.65
56	2y	32	PSU	C5-C6-N1	-2.14	119.17	122.14
1	1A	1917	PSU	O4-C4-C5	-2.14	118.70	124.01
1	1A	1911	PSU	O2-C2-N1	-2.13	120.59	122.79
55	1x	32	5MC	O2-C2-N3	-2.12	118.98	122.33
1	1A	1962	5MC	C1'-N1-C2	2.12	123.13	118.44
32	1a	1404	5MC	CM5-C5-C6	-2.12	119.98	122.85
32	1a	1207	2MG	N1-C2-N2	2.12	118.72	116.56
1	1A	1917	PSU	C6-C5-C4	-2.12	116.75	118.17
54	2w	8	4SU	C6-C5-C4	-2.11	118.12	119.95
32	1a	1407	5MC	C5-C4-N3	-2.10	119.60	121.75
32	2a	1519	MA6	C1'-N9-C4	-2.10	122.96	126.64
55	1x	55	PSU	O2-C2-N3	-2.10	118.14	121.86
32	1a	1404	5MC	C1'-N1-C6	-2.10	117.70	121.15
56	2y	8	4SU	O3'-C3'-C4'	2.10	117.10	111.08
32	1a	1402	4OC	CM4-N4-C4	-2.08	118.38	122.45
43	2l	92	0TD	OD2-CG-CB	2.08	117.65	113.15
32	1a	1402	4OC	C5-C6-N1	-2.07	118.48	121.84
32	1a	1407	5MC	N1-C2-N3	2.07	122.39	118.80
32	1a	966	M2G	C5-C6-N1	2.07	118.01	114.07
43	1l	92	0TD	OD2-CG-OD1	-2.05	119.43	124.08
1	1A	2503	2MA	C5-C6-N1	2.05	117.94	114.12
55	2x	8	4SU	C5-C4-N3	2.04	116.65	114.75
1	1A	1915	5MU	C5M-C5-C6	-2.04	120.09	122.85
1	2A	1920	OMC	C2'-C1'-N1	-2.04	110.37	114.24
1	2A	1915	5MU	O2-C2-N3	-2.04	117.73	121.49
56	1y	54	5MU	C5M-C5-C6	-2.04	120.10	122.85
55	2x	8	4SU	C4-N3-C2	2.03	129.26	127.31
1	1A	1911	PSU	C5-C6-N1	-2.01	119.35	122.14
54	1w	8	4SU	O2-C2-N1	-2.01	120.18	122.80
54	1w	54	5MU	O2-C2-N3	-2.00	117.80	121.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	2x	8	4SU	C1'-N1-C2	2.00	121.19	117.59

There are no chirality outliers.

All (56) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	2251	OMG	C1'-C2'-O2'-CM2
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB
54	1w	37	MIA	C12-C13-C14-C16
54	1w	76	F3N	C3'-C4'-C5'-O5'
54	1w	76	F3N	O4'-C4'-C5'-O5'
55	1x	76	31H	C3'-C4'-C5'-O5'
56	1y	46	G7M	C4'-C5'-O5'-P
43	2l	92	0TD	CG-CB-SB-CSB
54	2w	37	MIA	C5-C6-N6-C12
54	2w	37	MIA	N1-C6-N6-C12
54	2w	46	G7M	O4'-C4'-C5'-O5'
54	2w	46	G7M	C3'-C4'-C5'-O5'
55	2x	76	31H	C3'-C4'-C5'-O5'
55	2x	76	31H	O4'-C4'-C5'-O5'
56	2y	54	5MU	O4'-C4'-C5'-O5'
32	1a	1519	MA6	O4'-C4'-C5'-O5'
56	1y	37	MIA	C3'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
56	2y	54	5MU	C3'-C4'-C5'-O5'
54	1w	46	G7M	O4'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
56	1y	37	MIA	O4'-C4'-C5'-O5'
32	2a	1404	5MC	O4'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
54	1w	46	G7M	C3'-C4'-C5'-O5'
55	1x	76	31H	CB-CG-SD-CE
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	2w	76	F3N	N-CA-CB-CG
1	2A	2503	2MA	C3'-C4'-C5'-O5'
56	2y	55	PSU	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
55	1x	76	31H	C4'-C5'-O5'-P
56	1y	55	PSU	O4'-C1'-C5-C4
56	2y	55	PSU	O4'-C1'-C5-C4
32	2a	1519	MA6	C4'-C5'-O5'-P
32	1a	1519	MA6	C4'-C5'-O5'-P
32	2a	527	G7M	C4'-C5'-O5'-P
56	2y	8	4SU	C2'-C1'-N1-C2
32	1a	527	G7M	C4'-C5'-O5'-P
54	2w	46	G7M	C4'-C5'-O5'-P
43	2l	92	0TD	CA-CB-SB-CSB
54	2w	76	F3N	C-CA-CB-CG
56	2y	8	4SU	C2'-C1'-N1-C6
56	2y	37	MIA	C3'-C4'-C5'-O5'
55	2x	76	31H	CB-CG-SD-CE
1	1A	2503	2MA	C4'-C5'-O5'-P
32	1a	527	G7M	O4'-C4'-C5'-O5'
32	1a	1400	5MC	O4'-C4'-C5'-O5'
55	2x	76	31H	C4'-C5'-O5'-P

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2820 ligands modelled in this entry, 2818 are monoatomic - leaving 2 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
61	SF4	1d	302	35	0,12,12	-	-	-		
61	SF4	2d	303	35	0,12,12	-	-	-		

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
61	SF4	1d	302	35	-	-	0/6/5/5
61	SF4	2d	303	35	-	-	0/6/5/5

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
54	1w	1
7	1H	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	1w	75:C	O3'	76:F3N	P	2.35
1	1H	126:PRO	C	127:GLU	N	1.17

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2860/2915 (98%)	-0.72	141 (4%) 36 33	16, 32, 85, 95	0
1	2A	2789/2915 (95%)	-0.28	130 (4%) 37 34	28, 49, 84, 96	0
2	1B	120/121 (99%)	-0.60	0 100 100	26, 44, 58, 81	0
2	2B	120/121 (99%)	0.12	0 100 100	51, 63, 71, 83	0
3	1D	275/276 (99%)	-0.49	2 (0%) 84 81	16, 33, 47, 73	0
3	2D	275/276 (99%)	-0.16	3 (1%) 77 74	28, 44, 55, 76	0
4	1E	204/206 (99%)	-0.43	1 (0%) 87 85	15, 37, 56, 69	0
4	2E	204/206 (99%)	0.16	2 (0%) 79 76	30, 53, 65, 76	0
5	1F	203/210 (96%)	-0.32	0 100 100	17, 37, 61, 72	0
5	2F	203/210 (96%)	0.18	0 100 100	31, 58, 68, 75	0
6	1G	181/182 (99%)	0.23	8 (4%) 39 36	36, 50, 65, 76	0
6	2G	181/182 (99%)	0.81	8 (4%) 39 36	53, 65, 73, 82	0
7	1H	174/180 (96%)	0.13	3 (1%) 69 65	36, 49, 62, 66	0
7	2H	174/180 (96%)	1.20	24 (13%) 8 7	61, 73, 80, 84	0
8	1I	146/148 (98%)	0.50	2 (1%) 73 70	43, 62, 73, 76	0
8	2I	146/148 (98%)	0.62	3 (2%) 63 60	48, 64, 72, 77	0
9	1N	140/140 (100%)	-0.36	2 (1%) 73 70	23, 35, 53, 64	0
9	2N	140/140 (100%)	0.40	2 (1%) 73 70	41, 56, 71, 78	0
10	1O	122/122 (100%)	-0.36	1 (0%) 82 79	24, 37, 54, 59	0
10	2O	122/122 (100%)	0.10	0 100 100	39, 52, 63, 67	0
11	1P	149/150 (99%)	-0.17	1 (0%) 84 81	18, 42, 62, 68	0
11	2P	149/150 (99%)	0.34	4 (2%) 56 52	33, 57, 71, 78	0
12	1Q	141/141 (100%)	-0.26	0 100 100	23, 36, 50, 63	0
12	2Q	141/141 (100%)	0.44	6 (4%) 40 37	40, 56, 66, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.48	0 100 100	22, 30, 46, 49	0
13	2R	118/118 (100%)	0.05	0 100 100	38, 47, 57, 64	0
14	1S	110/112 (98%)	-0.17	0 100 100	33, 44, 56, 60	0
14	2S	110/112 (98%)	0.57	1 (0%) 81 78	50, 60, 68, 73	0
15	1T	131/146 (89%)	-0.10	2 (1%) 71 68	31, 41, 61, 72	0
15	2T	131/146 (89%)	0.18	2 (1%) 71 68	45, 54, 65, 69	0
16	1U	116/118 (98%)	-0.70	0 100 100	16, 26, 40, 54	0
16	2U	116/118 (98%)	0.27	2 (1%) 69 65	34, 52, 65, 69	0
17	1V	101/101 (100%)	-0.62	0 100 100	18, 31, 50, 59	0
17	2V	101/101 (100%)	0.42	0 100 100	39, 60, 70, 78	0
18	1W	112/113 (99%)	-0.64	0 100 100	17, 27, 45, 75	0
18	2W	112/113 (99%)	0.00	0 100 100	34, 44, 58, 83	0
19	1X	95/96 (98%)	-0.24	2 (2%) 63 60	22, 35, 56, 73	0
19	2X	95/96 (98%)	0.23	3 (3%) 50 47	41, 52, 66, 75	0
20	1Y	107/110 (97%)	-0.06	0 100 100	30, 45, 58, 69	0
20	2Y	107/110 (97%)	0.81	8 (7%) 22 20	51, 61, 71, 79	0
21	1Z	154/206 (74%)	0.47	6 (3%) 44 40	32, 56, 71, 81	0
21	2Z	160/206 (77%)	1.08	17 (10%) 13 12	55, 70, 79, 81	0
22	10	83/85 (97%)	-0.41	0 100 100	18, 33, 44, 56	0
22	20	83/85 (97%)	0.29	1 (1%) 76 73	38, 51, 61, 66	0
23	11	97/98 (98%)	-0.10	0 100 100	24, 43, 63, 72	0
23	21	97/98 (98%)	0.18	1 (1%) 79 76	33, 50, 64, 69	0
24	12	70/72 (97%)	-0.03	1 (1%) 73 70	29, 43, 56, 67	0
24	22	70/72 (97%)	0.43	0 100 100	48, 59, 67, 74	0
25	13	59/60 (98%)	-0.45	0 100 100	21, 30, 54, 66	0
25	23	59/60 (98%)	0.29	1 (1%) 69 65	48, 55, 68, 76	0
26	14	69/71 (97%)	0.70	7 (10%) 14 13	46, 65, 76, 79	0
26	24	69/71 (97%)	1.15	12 (17%) 5 5	59, 73, 81, 82	0
27	15	59/60 (98%)	-0.70	0 100 100	17, 27, 45, 48	0
27	25	59/60 (98%)	-0.13	0 100 100	29, 43, 61, 69	0
28	16	53/54 (98%)	-0.39	0 100 100	32, 40, 54, 59	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.14	1 (1%) 66 63	44, 52, 60, 64	0
29	17	48/49 (97%)	-0.66	1 (2%) 63 60	17, 24, 44, 55	0
29	27	48/49 (97%)	-0.15	3 (6%) 27 25	29, 35, 58, 63	0
30	18	64/65 (98%)	-0.46	0 100 100	24, 30, 36, 55	0
30	28	64/65 (98%)	0.05	0 100 100	41, 46, 52, 59	0
31	19	37/37 (100%)	-0.40	0 100 100	24, 33, 48, 56	0
31	29	37/37 (100%)	0.54	0 100 100	49, 57, 67, 73	0
32	1a	1488/1521 (97%)	-0.04	34 (2%) 61 58	31, 56, 82, 97	0
32	2a	1491/1521 (98%)	0.16	38 (2%) 58 55	42, 63, 82, 96	0
33	1b	231/256 (90%)	0.97	25 (10%) 12 11	53, 67, 76, 82	0
33	2b	231/256 (90%)	1.03	20 (8%) 17 16	59, 71, 78, 84	0
34	1c	206/239 (86%)	0.55	4 (1%) 66 63	50, 61, 72, 81	0
34	2c	206/239 (86%)	0.93	11 (5%) 33 31	61, 70, 77, 81	0
35	1d	208/209 (99%)	0.69	12 (5%) 30 28	48, 60, 69, 74	0
35	2d	208/209 (99%)	0.53	3 (1%) 73 70	51, 61, 68, 73	0
36	1e	148/162 (91%)	0.24	0 100 100	44, 56, 65, 70	0
36	2e	148/162 (91%)	0.59	5 (3%) 48 45	53, 64, 71, 79	0
37	1f	100/101 (99%)	0.41	1 (1%) 79 76	47, 58, 67, 69	0
37	2f	100/101 (99%)	0.31	0 100 100	51, 59, 66, 73	0
38	1g	155/156 (99%)	0.59	12 (7%) 21 20	51, 60, 74, 81	0
38	2g	155/156 (99%)	0.87	18 (11%) 11 10	58, 67, 75, 79	0
39	1h	137/138 (99%)	0.35	1 (0%) 84 81	46, 57, 65, 69	0
39	2h	137/138 (99%)	0.64	1 (0%) 84 81	56, 64, 70, 74	0
40	1i	127/128 (99%)	0.89	7 (5%) 32 29	41, 65, 72, 74	0
40	2i	127/128 (99%)	1.21	18 (14%) 7 7	57, 72, 77, 80	0
41	1j	97/105 (92%)	0.97	8 (8%) 19 18	49, 66, 75, 77	0
41	2j	96/105 (91%)	1.28	18 (18%) 4 4	59, 73, 79, 81	0
42	1k	114/129 (88%)	0.24	2 (1%) 67 64	37, 57, 67, 76	0
42	2k	114/129 (88%)	0.59	3 (2%) 57 54	48, 62, 71, 73	0
43	1l	121/132 (91%)	0.07	3 (2%) 58 55	39, 45, 56, 67	0
43	2l	121/132 (91%)	0.32	2 (1%) 69 65	47, 54, 64, 72	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	125/126 (99%)	0.46	3 (2%) 59 56	44, 57, 64, 72	0
44	2m	122/126 (96%)	1.09	12 (9%) 14 13	55, 67, 72, 74	0
45	1n	60/61 (98%)	0.53	2 (3%) 49 46	50, 57, 63, 68	0
45	2n	60/61 (98%)	1.43	14 (23%) 2 3	62, 69, 72, 73	0
46	1o	88/89 (98%)	0.33	0 100 100	41, 55, 64, 72	0
46	2o	88/89 (98%)	0.49	4 (4%) 39 36	49, 60, 70, 73	0
47	1p	82/88 (93%)	0.79	2 (2%) 59 56	47, 62, 68, 73	0
47	2p	82/88 (93%)	0.62	4 (4%) 36 33	51, 59, 68, 69	0
48	1q	99/105 (94%)	0.55	1 (1%) 79 76	48, 58, 66, 71	0
48	2q	99/105 (94%)	0.69	4 (4%) 43 39	50, 61, 71, 78	0
49	1r	68/88 (77%)	0.31	1 (1%) 71 68	47, 57, 68, 70	0
49	2r	68/88 (77%)	0.20	1 (1%) 71 68	53, 60, 68, 74	0
50	1s	83/93 (89%)	0.55	4 (4%) 36 34	48, 59, 66, 73	0
50	2s	83/93 (89%)	1.20	11 (13%) 8 8	60, 69, 75, 81	0
51	1t	96/106 (90%)	0.88	11 (11%) 11 10	53, 61, 69, 74	0
51	2t	96/106 (90%)	0.75	8 (8%) 19 18	51, 60, 70, 75	0
52	1u	23/27 (85%)	0.97	0 100 100	53, 57, 61, 62	0
52	2u	23/27 (85%)	1.53	5 (21%) 3 3	61, 67, 71, 74	0
53	1v	13/24 (54%)	0.48	2 (15%) 6 6	38, 45, 83, 90	0
53	2v	13/24 (54%)	0.83	2 (15%) 6 6	52, 58, 84, 93	0
54	1w	67/76 (88%)	0.24	3 (4%) 39 36	26, 66, 82, 86	0
54	2w	64/76 (84%)	0.59	4 (6%) 27 25	39, 76, 85, 89	0
55	1x	72/77 (93%)	-0.22	1 (1%) 73 70	21, 53, 69, 83	0
55	2x	72/77 (93%)	-0.04	1 (1%) 73 70	36, 63, 76, 90	0
56	1y	67/76 (88%)	1.79	26 (38%) 1 1	55, 87, 91, 92	0
56	2y	66/76 (86%)	1.86	29 (43%) 1 1	60, 89, 92, 94	0
57	1z	18/18 (100%)	0.61	1 (5%) 31 29	48, 54, 65, 65	0
57	2z	18/18 (100%)	1.07	2 (11%) 12 11	62, 65, 72, 86	0
All	All	20912/21784 (95%)	0.07	818 (3%) 44 40	15, 55, 77, 97	0

All (818) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	2A	2802	G	7.2
45	1n	2	ALA	6.5
1	2A	2113	U	6.5
38	1g	80	VAL	5.5
21	1Z	141	VAL	5.3
1	1A	884	C	5.3
1	1A	2170	A	5.1
45	2n	2	ALA	5.0
1	2A	883	G	5.0
32	2a	1030(B)	C	4.9
1	2A	2174	C	4.9
38	1g	79	ARG	4.9
1	1A	2113	U	4.8
1	2A	2111	C	4.8
1	1A	2130	U	4.8
1	1A	885	C	4.7
44	2m	124	PRO	4.7
26	14	56	VAL	4.7
1	2A	2145	C	4.7
38	1g	81	GLY	4.7
1	2A	2128	C	4.7
1	1A	1096	A	4.7
1	2A	2803	C	4.6
3	1D	276	LYS	4.6
7	2H	6	ARG	4.5
3	2D	276	LYS	4.5
1	2A	2896	C	4.5
1	2A	2112	G	4.5
1	2A	896	A	4.5
33	1b	237	ALA	4.4
7	1H	2	SER	4.4
1	1A	2114	A	4.4
1	1A	2117	A	4.4
1	2A	2155	G	4.4
1	1A	2115	G	4.3
1	1A	2133	G	4.3
32	1a	1030(A)	G	4.3
42	2k	25	TYR	4.3
4	2E	204	ALA	4.3
1	2A	2114	A	4.3
1	1A	2174	C	4.3
1	2A	2160	G	4.3
56	1y	15	G	4.3

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Mol	Chain	Res	Type	RSRZ
1	1A	2112	G	4.2
1	1A	2793	G	4.2
1	2A	2117	A	4.2
1	1A	2111	C	4.2
1	2A	888	C	4.2
1	1A	2173	A	4.2
33	2b	237	ALA	4.1
1	1A	2145	C	4.1
1	2A	2173	A	4.1
56	2y	36	A	4.1
26	24	65	ASP	4.1
1	2A	652(U)	G	4.1
32	2a	1030(A)	G	4.1
54	2w	73	A	4.1
1	1A	1064	C	4.1
1	1A	2129	C	4.1
1	1A	2135	A	4.1
34	2c	2	GLY	4.0
1	1A	888	C	4.0
1	1A	2803	C	4.0
1	2A	2119	A	4.0
1	1A	2143	C	4.0
21	2Z	146	ILE	4.0
1	2A	2115	G	4.0
1	1A	2169	A	4.0
40	2i	102	LEU	4.0
7	2H	2	SER	4.0
38	2g	154	TYR	3.9
1	1A	2159	G	3.9
1	1A	1176	G	3.9
1	1A	2131	G	3.9
1	2A	2116	G	3.9
1	1A	1057	A	3.8
7	2H	7	LEU	3.8
51	1t	103	GLY	3.8
34	2c	47	LEU	3.8
1	1A	2119	A	3.8
1	2A	885	C	3.8
1	2A	2126	A	3.8
32	2a	1030	C	3.8
34	1c	81	GLY	3.8
57	2z	18	GLY	3.7

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Mol	Chain	Res	Type	RSRZ
1	1A	897	C	3.7
1	1A	1073	A	3.7
1	1A	886	C	3.7
54	2w	72	C	3.7
1	2A	2894	G	3.7
1	2A	2134	A	3.7
1	2A	2169	A	3.7
1	2A	884	C	3.7
1	2A	2893	G	3.7
1	1A	2128	C	3.6
1	1A	2160	G	3.6
1	2A	2125	G	3.6
1	2A	2127	G	3.6
1	2A	2170	A	3.6
1	1A	2136	C	3.6
1	1A	2161	C	3.6
1	1A	1059	G	3.6
38	2g	80	VAL	3.6
41	2j	74	ILE	3.6
1	2A	2146	C	3.6
1	1A	2168	G	3.6
1	1A	2138	C	3.5
50	2s	2	PRO	3.5
32	1a	1031	G	3.5
33	2b	236	TYR	3.5
1	1A	896	A	3.5
1	1A	2801(A)	A	3.5
54	1w	73	A	3.5
41	1j	36	GLY	3.5
15	1T	131	ALA	3.5
38	1g	83	ALA	3.5
1	2A	2147	G	3.5
26	24	49	PHE	3.5
1	2A	1536	C	3.5
1	2A	2175	C	3.5
21	2Z	172	ALA	3.5
32	1a	1030(B)	C	3.5
1	2A	2149	G	3.5
1	2A	2159	G	3.5
1	1A	1095	A	3.5
1	1A	2171	A	3.5
35	1d	194	LEU	3.4

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Mol	Chain	Res	Type	RSRZ
1	1A	879	G	3.4
1	2A	2133	G	3.4
1	2A	2805	G	3.4
40	1i	8	GLY	3.4
1	1A	898	C	3.4
1	2A	2108	C	3.4
1	2A	2804	C	3.4
42	1k	14	VAL	3.4
32	1a	1030(C)	G	3.4
38	2g	83	ALA	3.4
1	1A	2189	U	3.4
23	21	2	SER	3.4
1	1A	2141	G	3.4
1	2A	882	G	3.4
1	2A	2100	G	3.4
40	1i	2	GLU	3.4
53	2v	12	A	3.4
1	1A	1081	U	3.4
32	2a	1257	U	3.4
21	2Z	144	LEU	3.3
1	1A	2802	G	3.3
56	1y	35	A	3.3
38	1g	82	GLY	3.3
54	1w	16	U	3.3
51	1t	10	LEU	3.3
47	2p	82	GLN	3.3
32	1a	1003	G	3.3
32	2a	1032	G	3.3
38	2g	84	ASN	3.3
1	1A	1058	G	3.3
1	1A	2805	G	3.3
1	2A	2135	A	3.3
32	2a	1002	G	3.3
44	2m	123	ALA	3.3
1	2A	2167	U	3.3
21	1Z	146	ILE	3.2
1	2A	2148	G	3.2
1	2A	2156	G	3.2
32	2a	1033	G	3.2
1	1A	2108	C	3.2
1	1A	2150	U	3.2
1	2A	2801(A)	A	3.2

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Mol	Chain	Res	Type	RSRZ
1	1A	2110	G	3.2
1	1A	2165	G	3.2
1	2A	652(T)	C	3.2
54	2w	2	C	3.2
38	2g	85	TYR	3.2
38	1g	156	TRP	3.2
41	1j	77	PRO	3.2
57	1z	4	SER	3.2
1	1A	2792	G	3.2
1	2A	2154	G	3.2
44	2m	122	LYS	3.2
1	2A	2129	C	3.2
15	1T	130	ALA	3.2
40	1i	15	ALA	3.2
44	1m	2	ALA	3.2
1	1A	2172	U	3.2
1	1A	2897	U	3.2
7	1H	174	GLY	3.1
1	1A	2125	G	3.1
1	1A	2175	C	3.1
1	1A	2804	C	3.1
1	2A	2793	G	3.1
21	2Z	174	VAL	3.1
1	2A	2897	U	3.1
33	2b	121	LEU	3.1
41	2j	37	PRO	3.1
1	1A	2121	G	3.1
1	1A	2146	C	3.1
1	2A	886	C	3.1
33	1b	11	LEU	3.1
1	1A	1054	A	3.1
49	1r	20	ALA	3.1
1	1A	2142	C	3.1
1	1A	2120	G	3.1
1	2A	2110	G	3.1
32	1a	1036	G	3.1
19	2X	94	GLY	3.1
1	1A	1066	U	3.1
54	1w	20	U	3.1
36	2e	20	GLN	3.1
52	2u	24	ARG	3.1
32	2a	1149	C	3.1

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Mol	Chain	Res	Type	RSRZ
1	2A	2104	G	3.0
1	2A	2123	G	3.0
46	2o	89	GLY	3.0
1	1A	1065	U	3.0
32	1a	204	U	3.0
19	2X	91	ALA	3.0
35	1d	169	LYS	3.0
32	2a	1038	C	3.0
33	2b	17	PHE	3.0
1	1A	1068	G	3.0
1	1A	2116	G	3.0
1	2A	2807	G	3.0
26	24	51	ASP	3.0
50	2s	13	ASP	3.0
40	2i	11	LYS	3.0
40	2i	14	VAL	3.0
1	1A	1078	U	3.0
1	1A	2109	U	3.0
1	2A	895	U	3.0
1	2A	2130	U	3.0
20	2Y	1	MET	3.0
53	1v	12	A	3.0
33	1b	187	LEU	3.0
32	2a	1027	C	3.0
26	24	66	SER	3.0
38	2g	156	TRP	3.0
1	1A	2107	C	3.0
1	2A	2161	C	3.0
41	2j	32	ALA	3.0
1	1A	2132	U	3.0
1	1A	2162	G	3.0
1	1A	2190	G	3.0
1	2A	11	G	3.0
1	2A	2121	G	3.0
1	2A	2190	G	3.0
56	1y	34	G	3.0
6	1G	146	TYR	2.9
20	2Y	55	TYR	2.9
38	1g	85	TYR	2.9
7	2H	17	VAL	2.9
8	1I	146	ALA	2.9
38	1g	84	ASN	2.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2178	C	2.9
1	1A	2896	C	2.9
1	2A	2136	C	2.9
1	2A	2143	C	2.9
32	1a	1029	C	2.9
1	1A	2149	G	2.9
1	2A	2168	G	2.9
50	1s	84	GLY	2.9
25	23	29	ARG	2.9
32	1a	1035	A	2.9
32	2a	1035	A	2.9
48	2q	9	VAL	2.9
50	1s	13	ASP	2.9
1	1A	889	C	2.9
1	1A	2794	C	2.9
1	1A	2167	U	2.9
32	1a	1257	U	2.9
35	1d	110	PHE	2.9
56	1y	18	G	2.9
56	2y	15	G	2.9
9	2N	9	VAL	2.9
1	1A	887	A	2.9
1	2A	2109	U	2.9
16	2U	88	ILE	2.9
11	2P	79	ARG	2.9
46	2o	68	ARG	2.9
50	2s	68	GLY	2.9
50	2s	84	GLY	2.9
26	14	63	TYR	2.9
26	24	63	TYR	2.9
33	1b	9	GLU	2.9
32	2a	1030(C)	G	2.9
56	2y	1	G	2.9
56	2y	19	G	2.9
20	2Y	54	LYS	2.9
42	2k	117	ASN	2.9
34	1c	87	LEU	2.8
56	2y	14	A	2.8
1	1A	9	U	2.8
33	1b	227	GLY	2.8
51	1t	69	GLY	2.8
56	2y	33	U	2.8

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Mol	Chain	Res	Type	RSRZ
1	1A	2140	C	2.8
1	2A	2164	C	2.8
32	1a	1030	C	2.8
38	2g	40	ALA	2.8
45	2n	20	ALA	2.8
1	1A	882	G	2.8
1	2A	2120	G	2.8
32	2a	1036	G	2.8
56	2y	57	G	2.8
1	2A	887	A	2.8
7	2H	136	ILE	2.8
44	2m	113	PRO	2.8
26	14	57	GLU	2.8
56	1y	20	U	2.8
1	1A	1075	C	2.8
1	2A	2139	C	2.8
32	1a	1028	C	2.8
32	2a	1039	C	2.8
7	2H	52	VAL	2.8
33	2b	165	VAL	2.8
34	2c	207	VAL	2.8
38	2g	7	ALA	2.8
41	1j	32	ALA	2.8
6	2G	133	LEU	2.8
1	1A	883	G	2.8
1	1A	2127	G	2.8
1	2A	2101	G	2.8
1	2A	2162	G	2.8
35	1d	158	ILE	2.8
35	2d	158	ILE	2.8
1	2A	652(B)	A	2.8
32	1a	1286	A	2.8
53	1v	13	A	2.8
1	2A	2150	U	2.8
7	2H	19	VAL	2.8
33	1b	188	ALA	2.8
44	2m	33	ALA	2.8
8	2I	82	ARG	2.8
26	24	31	ILE	2.8
34	1c	2	GLY	2.8
33	1b	17	PHE	2.8
1	2A	652(C)	G	2.8

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Mol	Chain	Res	Type	RSRZ
1	2A	2165	G	2.8
56	2y	18	G	2.8
1	2A	1847	A	2.8
7	2H	175	LYS	2.7
21	2Z	136	PHE	2.7
21	2Z	149	SER	2.7
1	2A	229	A	2.7
1	2A	1533	G	2.7
1	2A	2151	G	2.7
15	2T	131	ALA	2.7
1	1A	2164	C	2.7
1	2A	2138	C	2.7
41	1j	74	ILE	2.7
33	1b	10	LEU	2.7
1	2A	878	A	2.7
55	2x	47	U	2.7
56	1y	36	A	2.7
1	2A	2792	G	2.7
32	2a	1026	G	2.7
40	2i	91	ASP	2.7
33	1b	127	ILE	2.7
41	2j	38	ILE	2.7
44	1m	122	LYS	2.7
38	2g	82	GLY	2.7
1	2A	894	C	2.7
38	2g	16	LEU	2.7
8	2I	146	ALA	2.7
1	2A	2118	U	2.7
32	1a	1025	U	2.7
1	1A	2152	G	2.7
1	1A	2156	G	2.7
1	2A	2124	G	2.7
32	1a	1001(A)	G	2.7
32	1a	1024	G	2.7
32	2a	1031	G	2.7
56	1y	19	G	2.7
41	2j	36	GLY	2.7
1	2A	652(V)	C	2.7
1	2A	897	C	2.7
19	1X	68	ARG	2.6
33	2b	145	LEU	2.6
40	2i	10	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
45	2n	3	ARG	2.6
7	2H	29	PRO	2.6
55	1x	47	U	2.6
41	1j	4	ILE	2.6
4	2E	73	GLU	2.6
32	1a	344	A	2.6
51	1t	101	GLY	2.6
34	2c	107	GLN	2.6
1	1A	1063	G	2.6
33	1b	97	TRP	2.6
6	1G	21	ARG	2.6
1	2A	898	C	2.6
6	2G	146	TYR	2.6
21	2Z	171	ILE	2.6
33	1b	125	PRO	2.6
32	2a	1532	U	2.6
35	1d	179	GLU	2.6
1	1A	278	A	2.6
32	1a	1030(D)	A	2.6
38	2g	32	ARG	2.6
1	1A	2151	G	2.6
1	2A	2131	G	2.6
1	2A	2182	G	2.6
33	1b	93	VAL	2.6
29	27	48	LYS	2.6
51	2t	74	LYS	2.6
1	1A	1076	C	2.6
29	27	45	ALA	2.6
33	1b	19	HIS	2.6
6	2G	52	ILE	2.6
6	2G	116	ASP	2.6
1	1A	1060	U	2.6
1	2A	2895	U	2.6
19	1X	94	GLY	2.6
50	2s	8	GLY	2.6
52	2u	2	GLY	2.6
26	14	59	PHE	2.6
35	1d	118	ARG	2.6
1	1A	229	A	2.6
1	1A	1098	A	2.6
1	1A	2790	A	2.6
56	2y	35	A	2.6

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Mol	Chain	Res	Type	RSRZ
54	2w	19	G	2.6
56	1y	57	G	2.6
56	2y	34	G	2.6
1	2A	2107	C	2.6
41	2j	75	ILE	2.6
44	2m	100	GLY	2.6
1	1A	1094	U	2.6
1	2A	2132	U	2.6
51	2t	8	ARG	2.6
3	2D	275	LYS	2.5
22	20	84	LEU	2.5
51	2t	99	LEU	2.5
1	2A	899	A	2.5
32	2a	1531	A	2.5
21	1Z	105	VAL	2.5
33	2b	230	VAL	2.5
38	2g	77	SER	2.5
41	2j	35	SER	2.5
34	2c	5	ILE	2.5
32	2a	1034	G	2.5
1	2A	2142	C	2.5
1	2A	2794	C	2.5
45	2n	55	GLY	2.5
51	2t	103	GLY	2.5
56	2y	75	C	2.5
38	2g	26	PHE	2.5
33	1b	165	VAL	2.5
33	2b	7	VAL	2.5
35	1d	133	VAL	2.5
40	2i	65	VAL	2.5
11	2P	109	GLY	2.5
6	1G	51	ARG	2.5
26	14	58	ARG	2.5
35	1d	3	ARG	2.5
1	1A	2166	G	2.5
1	2A	1170	G	2.5
47	2p	9	PHE	2.5
32	1a	1027	C	2.5
33	1b	154	LEU	2.5
1	1A	271(K)	U	2.5
1	2A	1026	U	2.5
1	2A	2172	U	2.5

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Mol	Chain	Res	Type	RSRZ
26	24	56	VAL	2.5
33	1b	15	VAL	2.5
7	2H	128	PRO	2.5
1	1A	890	A	2.5
1	1A	899	A	2.5
1	2A	2158	A	2.5
1	2A	2171	A	2.5
32	2a	1030(D)	A	2.5
11	2P	77	ARG	2.5
36	2e	5	ASP	2.5
38	2g	4	ARG	2.5
40	1i	10	ARG	2.5
45	2n	38	GLY	2.5
50	1s	26	GLY	2.5
7	2H	33	LEU	2.5
19	2X	95	LEU	2.5
56	2y	6	G	2.5
41	2j	34	VAL	2.5
33	2b	34	ALA	2.5
6	1G	182	LYS	2.5
44	2m	102	ARG	2.5
1	2A	2176	A	2.5
43	1l	95	GLY	2.5
33	2b	11	LEU	2.4
1	1A	1072	C	2.4
1	1A	1091	G	2.4
1	1A	1175	U	2.4
1	1A	2147	G	2.4
1	1A	2154	G	2.4
1	2A	2144	U	2.4
32	1a	1446	U	2.4
34	2c	106	VAL	2.4
56	1y	75	C	2.4
56	2y	56	C	2.4
56	1y	24	G	2.4
20	2Y	33	LYS	2.4
26	24	68	ARG	2.4
20	2Y	107	ASP	2.4
1	1A	2134	A	2.4
45	2n	34	TYR	2.4
53	2v	13	A	2.4
56	2y	21	A	2.4

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Mol	Chain	Res	Type	RSRZ
50	2s	14	HIS	2.4
7	2H	43	VAL	2.4
33	1b	7	VAL	2.4
48	2q	23	VAL	2.4
32	1a	1000	U	2.4
40	2i	9	ARG	2.4
1	2A	881	G	2.4
1	2A	1171	G	2.4
32	1a	630	G	2.4
32	1a	1023	G	2.4
32	1a	1032	G	2.4
44	2m	37	THR	2.4
21	1Z	148	ASP	2.4
50	2s	16	LEU	2.4
32	1a	1447	A	2.4
32	2a	1447	A	2.4
33	2b	123	ALA	2.4
41	1j	86	MET	2.4
7	2H	72	ILE	2.4
1	1A	1097	U	2.4
1	2A	2137	C	2.4
7	2H	48	GLY	2.4
21	2Z	147	GLY	2.4
38	2g	81	GLY	2.4
45	2n	13	THR	2.4
1	1A	2155	G	2.4
1	2A	2153	G	2.4
33	2b	221	LEU	2.4
40	2i	99	LEU	2.4
41	2j	85	LEU	2.4
56	1y	1	G	2.4
26	14	50	VAL	2.4
33	2b	229	VAL	2.4
40	2i	86	VAL	2.4
51	1t	8	ARG	2.4
51	1t	95	ALA	2.4
32	2a	1018	C	2.3
56	2y	2	C	2.3
56	2y	68	C	2.3
1	1A	2100	G	2.3
1	1A	2124	G	2.3
1	2A	879	G	2.3

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Mol	Chain	Res	Type	RSRZ
32	2a	630	G	2.3
3	2D	38	LYS	2.3
7	2H	45	VAL	2.3
7	2H	133	VAL	2.3
16	2U	89	GLU	2.3
40	2i	2	GLU	2.3
40	2i	66	ARG	2.3
50	2s	41	VAL	2.3
57	2z	17	ARG	2.3
1	2A	1508	A	2.3
33	2b	200	ILE	2.3
41	1j	33	GLN	2.3
1	1A	2118	U	2.3
32	2a	1040	U	2.3
43	2l	63	GLY	2.3
41	2j	65	LEU	2.3
45	2n	39	LEU	2.3
50	2s	71	LEU	2.3
32	2a	1037	C	2.3
3	1D	38	LYS	2.3
41	2j	77	PRO	2.3
1	1A	880	G	2.3
1	2A	2157	G	2.3
21	1Z	169	GLU	2.3
32	2a	1001(A)	G	2.3
56	2y	5	G	2.3
45	2n	18	VAL	2.3
8	1I	109	ILE	2.3
1	1A	1088	A	2.3
1	1A	2158	A	2.3
32	1a	160	A	2.3
45	2n	4	LYS	2.3
32	1a	1137	C	2.3
32	2a	1007	C	2.3
38	2g	5	ARG	2.3
33	1b	236	TYR	2.3
56	1y	13	C	2.3
21	2Z	105	VAL	2.3
40	1i	14	VAL	2.3
12	2Q	28	ALA	2.3
1	1A	1093	G	2.3
1	1A	1099	G	2.3

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Mol	Chain	Res	Type	RSRZ
1	2A	10	G	2.3
32	2a	1117	G	2.3
56	1y	5	G	2.3
21	2Z	26	GLY	2.3
21	2Z	166	SER	2.3
1	1A	1069	A	2.3
56	2y	73	A	2.3
1	1A	12	U	2.3
26	14	49	PHE	2.3
56	1y	47	U	2.3
1	2A	2105	C	2.3
1	2A	2188	C	2.3
32	2a	1006	C	2.3
45	2n	25	VAL	2.3
56	1y	25	C	2.3
56	1y	67	C	2.3
42	1k	15	ALA	2.3
6	2G	139	LEU	2.2
26	24	54	GLY	2.2
12	2Q	22	LYS	2.2
29	17	48	LYS	2.2
32	1a	1033	G	2.2
56	1y	27	G	2.2
32	2a	1005	A	2.2
1	1A	2144	U	2.2
21	2Z	148	ASP	2.2
40	1i	105	ASP	2.2
52	2u	5	ASP	2.2
28	26	20	ASN	2.2
56	1y	12	U	2.2
14	2S	36	TYR	2.2
34	2c	23	TYR	2.2
35	1d	170	VAL	2.2
40	2i	13	ALA	2.2
40	2i	94	ALA	2.2
45	2n	5	ALA	2.2
56	2y	49	C	2.2
33	1b	18	GLY	2.2
50	2s	15	LEU	2.2
44	1m	105	THR	2.2
33	1b	122	PHE	2.2
41	2j	63	PHE	2.2

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Mol	Chain	Res	Type	RSRZ
45	2n	37	PHE	2.2
34	2c	190	ARG	2.2
1	1A	1062	G	2.2
1	2A	2751	G	2.2
1	1A	1082	U	2.2
1	1A	1174	A	2.2
21	2Z	159	PRO	2.2
20	2Y	44	ILE	2.2
35	2d	112	VAL	2.2
38	1g	9	VAL	2.2
43	1l	64	TYR	2.2
21	2Z	150	LEU	2.2
40	2i	95	LYS	2.2
35	1d	2	GLY	2.2
32	1a	163	C	2.2
32	2a	1029	C	2.2
47	1p	1	MET	2.2
56	1y	49	C	2.2
56	2y	13	C	2.2
56	2y	74	C	2.2
21	1Z	149	SER	2.2
41	2j	59	SER	2.2
52	2u	9	ARG	2.2
1	1A	1077	A	2.2
1	2A	880	G	2.2
1	2A	2318	G	2.2
56	2y	22	G	2.2
12	2Q	102	VAL	2.2
33	2b	93	VAL	2.2
44	2m	17	VAL	2.2
47	2p	2	VAL	2.2
4	1E	204	ALA	2.2
41	2j	26	ALA	2.2
44	2m	23	TYR	2.2
39	1h	112	LEU	2.2
51	2t	10	LEU	2.2
6	2G	155	MET	2.2
33	2b	48	MET	2.2
51	1t	102	GLY	2.2
38	1g	4	ARG	2.2
40	2i	7	THR	2.2
41	2j	100	THR	2.2

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Mol	Chain	Res	Type	RSRZ
45	2n	22	THR	2.2
47	2p	45	THR	2.2
12	2Q	104	PHE	2.2
56	2y	3	C	2.2
51	2t	98	PRO	2.2
6	2G	35	GLU	2.2
33	1b	134	GLU	2.2
38	1g	8	GLU	2.2
40	2i	105	ASP	2.2
1	2A	272(A)	U	2.2
32	2a	1150	U	2.2
36	2e	51	VAL	2.2
1	1A	548	A	2.2
1	1A	1070	A	2.2
1	1A	2123	G	2.2
1	2A	900	A	2.2
32	1a	1021	G	2.2
32	1a	1034	G	2.2
32	2a	1003	G	2.2
32	2a	1124	G	2.2
56	2y	7	A	2.2
37	1f	45	LEU	2.1
40	1i	19	LEU	2.1
40	2i	19	LEU	2.1
50	1s	71	LEU	2.1
20	2Y	5	MET	2.1
39	2h	130	GLY	2.1
6	2G	136	ARG	2.1
7	2H	42	ARG	2.1
38	2g	76	ARG	2.1
9	1N	8	GLN	2.1
26	24	57	GLU	2.1
32	2a	470	C	2.1
33	2b	214	ILE	2.1
7	1H	113	VAL	2.1
21	2Z	74	VAL	2.1
43	1l	18	VAL	2.1
1	2A	2189	U	2.1
56	2y	60	U	2.1
1	1A	1067	A	2.1
1	1A	1086	A	2.1
11	2P	110	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
32	2a	1286	A	2.1
56	2y	38	A	2.1
38	1g	78	ARG	2.1
1	1A	1087	G	2.1
1	2A	2141	G	2.1
1	2A	2166	G	2.1
56	2y	70	G	2.1
7	2H	123	PHE	2.1
21	2Z	89	PHE	2.1
26	24	59	PHE	2.1
33	2b	55	PHE	2.1
6	1G	48	GLU	2.1
41	1j	75	ILE	2.1
46	2o	3	ILE	2.1
56	1y	56	C	2.1
29	27	46	VAL	2.1
42	2k	14	VAL	2.1
34	2c	60	ALA	2.1
34	2c	71	ALA	2.1
38	2g	12	LEU	2.1
12	2Q	33	GLY	2.1
36	2e	85	GLY	2.1
7	2H	83	TYR	2.1
40	2i	36	TYR	2.1
32	2a	1250	A	2.1
7	2H	10	PRO	2.1
1	1A	2207	G	2.1
1	2A	2152	G	2.1
1	2A	2181	G	2.1
56	1y	63	G	2.1
56	2y	24	G	2.1
8	2I	135	GLU	2.1
33	2b	133	LYS	2.1
9	1N	9	VAL	2.1
33	1b	230	VAL	2.1
46	2o	60	VAL	2.1
1	2A	2103	C	2.1
51	2t	97	ALA	2.1
56	1y	4	C	2.1
11	1P	90	ARG	2.1
35	2d	168	ARG	2.1
26	24	45	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
56	1y	33	U	2.1
56	2y	12	U	2.1
7	2H	39	PRO	2.1
33	1b	234	PRO	2.1
51	1t	98	PRO	2.1
32	2a	1041	A	2.1
33	1b	133	LYS	2.1
44	2m	67	GLU	2.1
48	2q	100	LYS	2.1
7	2H	56	SER	2.1
1	1A	892	G	2.1
1	1A	2106	G	2.1
1	1A	2148	G	2.1
1	1A	2157	G	2.1
1	1A	2182	G	2.1
32	1a	79	G	2.1
56	1y	22	G	2.1
56	1y	69	G	2.1
10	1O	47	ILE	2.1
41	2j	76	ASN	2.1
44	2m	4	ILE	2.1
51	1t	100	ILE	2.1
7	2H	79	VAL	2.0
9	2N	140	VAL	2.0
43	2l	18	VAL	2.0
7	2H	170	ARG	2.0
12	2Q	10	ARG	2.0
21	2Z	131	ARG	2.0
35	1d	122	ARG	2.0
45	1n	57	ARG	2.0
49	2r	20	ALA	2.0
35	1d	173	TRP	2.0
1	2A	2183	C	2.0
1	1A	2122	U	2.0
56	1y	59	U	2.0
34	2c	109	PRO	2.0
36	2e	133	TYR	2.0
20	2Y	34	LYS	2.0
33	2b	122	PHE	2.0
6	1G	137	GLU	2.0
24	12	70	GLN	2.0
48	2q	86	GLU	2.0

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Mol	Chain	Res	Type	RSRZ
32	1a	162	A	2.0
51	1t	9	ASN	2.0
51	2t	26	ASN	2.0
48	1q	98	LEU	2.0
51	1t	24	LEU	2.0
50	2s	9	VAL	2.0
52	2u	15	ARG	2.0
32	1a	1002	G	2.0
6	1G	50	ALA	2.0
15	2T	130	ALA	2.0
1	1A	2105	C	2.0
1	2A	645	C	2.0
1	2A	2179	C	2.0
33	1b	232	PRO	2.0
41	2j	91	PRO	2.0
47	1p	80	PHE	2.0
34	1c	39	ILE	2.0
6	1G	136	ARG	2.0
41	2j	79	ARG	2.0

6.2 Non-standard residues in protein, DNA, RNA chains (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	G7M	2y	46	24/25	0.48	0.17	80,89,94,111	0
56	4SU	2y	8	20/21	0.50	0.18	85,93,100,111	0
56	5MU	2y	54	21/22	0.55	0.16	70,84,93,107	0
56	4SU	1y	8	20/21	0.56	0.16	82,87,93,106	0
56	G7M	1y	46	24/25	0.57	0.17	77,89,95,101	0
56	PSU	1y	55	20/21	0.58	0.15	84,87,95,109	0
56	5MU	1y	54	21/22	0.64	0.14	79,84,91,101	0
56	PSU	2y	39	20/21	0.64	0.17	74,83,95,105	0
56	MIA	1y	37	22/30	0.67	0.17	77,84,91,100	0
56	PSU	2y	55	20/21	0.69	0.13	76,85,93,93	0
56	MIA	2y	37	22/30	0.73	0.17	71,86,101,112	0
54	G7M	1w	46	24/25	0.74	0.14	64,72,88,102	0
56	PSU	2y	32	20/21	0.77	0.13	75,84,91,98	0
56	PSU	1y	32	20/21	0.79	0.14	76,83,88,98	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	G7M	2w	46	24/25	0.80	0.12	73,78,90,103	0
56	PSU	1y	39	20/21	0.82	0.12	72,80,85,88	0
54	PSU	2w	55	20/21	0.88	0.12	68,73,80,81	0
54	4SU	2w	8	20/21	0.88	0.12	68,75,81,89	0
55	5MU	2x	54	21/22	0.91	0.12	64,68,71,72	0
55	5MU	1x	54	21/22	0.91	0.11	53,59,62,67	0
1	5MU	2A	1915	21/22	0.92	0.10	50,53,57,60	0
32	2MG	2a	1207	24/25	0.92	0.09	64,69,73,74	0
43	0TD	2l	92	10/11	0.92	0.13	52,55,63,64	0
55	4SU	2x	8	20/21	0.92	0.12	59,71,76,77	0
55	PSU	2x	55	20/21	0.93	0.09	60,65,70,72	0
43	0TD	1l	92	10/11	0.93	0.12	42,46,49,58	0
55	PSU	1x	55	20/21	0.93	0.08	46,52,63,65	0
54	5MU	2w	54	21/22	0.93	0.10	61,66,71,75	0
32	G7M	2a	527	24/25	0.94	0.10	52,57,64,65	0
54	4SU	1w	8	20/21	0.94	0.09	54,64,70,70	0
32	5MC	2a	1400	21/22	0.94	0.11	54,57,64,69	0
54	PSU	1w	55	20/21	0.94	0.09	43,59,67,68	0
55	5MC	2x	32	21/22	0.94	0.11	55,60,63,64	0
32	PSU	2a	516	20/21	0.94	0.09	54,59,64,65	0
54	PSU	2w	32	20/21	0.94	0.10	58,63,68,69	0
32	M2G	2a	966	25/26	0.95	0.11	50,59,66,74	0
32	5MC	2a	967	21/22	0.95	0.10	53,60,63,66	0
1	PSU	2A	1917	20/21	0.95	0.09	44,53,61,61	0
54	MIA	2w	37	25/30	0.95	0.09	46,57,61,63	0
1	5MC	2A	1942	21/22	0.95	0.09	43,49,57,62	0
32	4OC	2a	1402	22/23	0.95	0.10	44,50,53,56	0
32	2MG	1a	1207	24/25	0.96	0.07	48,54,57,58	0
1	5MU	1A	1915	21/22	0.96	0.09	39,47,49,51	0
1	PSU	1A	1917	20/21	0.96	0.08	36,43,48,50	0
54	PSU	1w	32	20/21	0.96	0.09	38,45,53,58	0
1	5MC	1A	1942	21/22	0.96	0.08	26,33,39,40	0
54	5MU	1w	54	21/22	0.96	0.07	35,47,51,53	0
32	G7M	1a	527	24/25	0.96	0.09	36,41,45,48	0
55	4SU	1x	8	20/21	0.96	0.08	44,51,57,59	0
32	MA6	2a	1519	24/25	0.96	0.09	45,50,53,56	0
1	PSU	2A	1911	20/21	0.96	0.07	41,50,54,61	0
55	5MC	1x	32	21/22	0.96	0.08	43,45,49,53	0
32	M2G	1a	966	25/26	0.96	0.09	40,45,48,51	0
1	OMC	2A	1920	21/22	0.96	0.08	44,49,53,55	0
54	PSU	2w	39	20/21	0.96	0.09	45,57,63,67	0
1	OMU	2A	2552	21/22	0.97	0.07	32,41,44,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	PSU	2A	2605	20/21	0.97	0.06	30,34,40,40	0
32	4OC	1a	1402	22/23	0.97	0.07	35,39,41,43	0
32	5MC	1a	1404	21/22	0.97	0.07	27,33,37,38	0
1	PSU	1A	1911	20/21	0.97	0.07	35,41,47,47	0
54	F3N	2w	76	33/34	0.97	0.08	27,34,37,38	0
1	5MC	1A	1962	21/22	0.97	0.06	24,31,35,39	0
32	5MC	1a	967	21/22	0.97	0.08	41,46,53,54	0
55	31H	1x	76	32/33	0.97	0.07	14,19,26,33	10
54	PSU	1w	39	20/21	0.97	0.07	34,43,50,53	0
55	31H	2x	76	32/33	0.97	0.08	28,36,42,43	0
32	5MC	2a	1407	21/22	0.97	0.07	40,45,49,52	0
32	UR3	2a	1498	21/22	0.97	0.09	38,47,51,55	0
32	MA6	2a	1518	24/25	0.97	0.07	45,48,51,52	0
32	PSU	1a	516	20/21	0.97	0.07	33,47,51,55	0
1	5MU	2A	1939	21/22	0.97	0.07	30,34,39,40	0
32	5MC	1a	1400	21/22	0.97	0.08	34,42,49,51	0
1	5MC	2A	1962	21/22	0.97	0.07	37,40,47,55	0
32	MA6	1a	1519	24/25	0.98	0.07	27,35,39,41	0
1	PSU	1A	2605	20/21	0.98	0.05	18,22,24,27	0
54	F3N	1w	76	33/34	0.98	0.07	14,19,23,24	0
1	OMC	1A	1920	21/22	0.98	0.06	33,40,44,46	0
1	5MU	1A	1939	21/22	0.98	0.06	20,26,30,32	0
54	MIA	1w	37	29/30	0.98	0.08	29,41,53,53	0
1	OMG	2A	2251	24/25	0.98	0.07	31,34,38,41	0
32	5MC	2a	1404	21/22	0.98	0.07	36,44,48,50	0
1	2MA	2A	2503	23/24	0.98	0.07	28,33,37,44	0
32	5MC	1a	1407	21/22	0.98	0.07	29,35,40,41	0
32	MA6	1a	1518	24/25	0.98	0.06	25,34,37,38	0
32	UR3	1a	1498	21/22	0.99	0.05	26,35,36,42	0
1	2MA	1A	2503	23/24	0.99	0.05	11,18,22,23	0
1	OMU	1A	2552	21/22	0.99	0.06	19,25,29,31	0
1	OMG	1A	2251	24/25	0.99	0.04	18,21,23,24	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum,

median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1634	1/1	0.24	0.54	93,93,93,93	0
58	MG	2A	3209	1/1	0.45	0.24	86,86,86,86	0
58	MG	10	108	1/1	0.57	0.32	60,60,60,60	0
58	MG	2y	104	1/1	0.59	0.22	82,82,82,82	0
58	MG	2A	3272	1/1	0.60	0.23	74,74,74,74	0
58	MG	1B	232	1/1	0.62	0.22	85,85,85,85	0
58	MG	2a	1791	1/1	0.62	0.26	68,68,68,68	0
58	MG	2A	3364	1/1	0.62	0.34	83,83,83,83	0
58	MG	1A	3571	1/1	0.66	0.26	73,73,73,73	0
58	MG	2a	1747	1/1	0.66	0.16	80,80,80,80	0
58	MG	2A	3756	1/1	0.66	0.27	61,61,61,61	0
58	MG	2B	214	1/1	0.66	0.20	72,72,72,72	0
58	MG	1A	4103	1/1	0.68	0.20	60,60,60,60	0
58	MG	1A	3480	1/1	0.68	0.24	64,64,64,64	0
58	MG	2v	102	1/1	0.68	0.29	76,76,76,76	0
58	MG	1A	3795	1/1	0.68	0.21	79,79,79,79	0
58	MG	20	102	1/1	0.69	0.34	67,67,67,67	0
58	MG	2A	3334	1/1	0.69	0.35	74,74,74,74	0
58	MG	1h	201	1/1	0.69	0.16	68,68,68,68	0
58	MG	2A	3813	1/1	0.70	0.21	62,62,62,62	0
58	MG	2A	3345	1/1	0.71	0.26	71,71,71,71	0
58	MG	1A	4100	1/1	0.72	0.19	66,66,66,66	0
58	MG	2a	1742	1/1	0.72	0.18	63,63,63,63	0
58	MG	1A	3520	1/1	0.73	0.16	55,55,55,55	0
58	MG	2E	301	1/1	0.73	0.22	62,62,62,62	0
58	MG	1B	203	1/1	0.73	0.32	62,62,62,62	0
58	MG	21	101	1/1	0.73	0.21	73,73,73,73	0
58	MG	1A	3418	1/1	0.73	0.43	82,82,82,82	0
58	MG	1A	4090	1/1	0.74	0.26	46,46,46,46	0
58	MG	2A	3299	1/1	0.74	0.14	71,71,71,71	0
58	MG	2A	3370	1/1	0.74	0.17	78,78,78,78	0
58	MG	2a	1822	1/1	0.74	0.21	63,63,63,63	0
58	MG	2A	3253	1/1	0.74	0.19	70,70,70,70	0
58	MG	2w	103	1/1	0.74	0.18	75,75,75,75	0
58	MG	2A	3342	1/1	0.74	0.29	75,75,75,75	0
58	MG	2A	3064	1/1	0.75	0.16	65,65,65,65	0
58	MG	2A	3625	1/1	0.75	0.18	66,66,66,66	0
58	MG	2A	3705	1/1	0.75	0.15	64,64,64,64	0
58	MG	1B	231	1/1	0.75	0.18	70,70,70,70	0
58	MG	2a	1633	1/1	0.75	0.20	83,83,83,83	0
58	MG	1A	3885	1/1	0.75	0.22	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2w	105	1/1	0.75	0.19	79,79,79,79	0
58	MG	2a	1706	1/1	0.75	0.21	66,66,66,66	0
58	MG	2A	3803	1/1	0.76	0.14	60,60,60,60	0
58	MG	2a	1802	1/1	0.76	0.36	76,76,76,76	0
58	MG	1A	3753	1/1	0.76	0.18	63,63,63,63	0
58	MG	2A	3675	1/1	0.76	0.19	63,63,63,63	0
58	MG	2B	220	1/1	0.76	0.28	69,69,69,69	0
58	MG	1A	3235	1/1	0.76	0.29	74,74,74,74	0
58	MG	2A	3193	1/1	0.76	0.19	71,71,71,71	0
58	MG	2a	1820	1/1	0.77	0.19	57,57,57,57	0
58	MG	2A	3395	1/1	0.77	0.20	63,63,63,63	0
58	MG	2A	3586	1/1	0.77	0.18	75,75,75,75	0
58	MG	1a	1739	1/1	0.77	0.20	65,65,65,65	0
58	MG	2A	3353	1/1	0.77	0.26	62,62,62,62	0
58	MG	2A	3373	1/1	0.77	0.16	66,66,66,66	0
58	MG	2a	1628	1/1	0.78	0.32	76,76,76,76	0
58	MG	2a	1813	1/1	0.78	0.20	61,61,61,61	0
58	MG	1A	3714	1/1	0.78	0.17	43,43,43,43	0
58	MG	1A	4038	1/1	0.78	0.19	57,57,57,57	0
58	MG	1A	3540	1/1	0.78	0.15	66,66,66,66	0
58	MG	1A	3299	1/1	0.78	0.34	69,69,69,69	0
58	MG	2A	3096	1/1	0.78	0.23	65,65,65,65	0
58	MG	1U	211	1/1	0.78	0.61	81,81,81,81	0
58	MG	1A	4082	1/1	0.79	0.21	63,63,63,63	0
58	MG	1a	1696	1/1	0.79	0.23	69,69,69,69	0
58	MG	1A	3988	1/1	0.79	0.14	62,62,62,62	0
58	MG	2a	1679	1/1	0.79	0.31	64,64,64,64	0
58	MG	2A	3749	1/1	0.79	0.15	49,49,49,49	0
58	MG	2A	3469	1/1	0.79	0.26	70,70,70,70	0
58	MG	1A	4096	1/1	0.79	0.21	63,63,63,63	0
58	MG	2a	1604	1/1	0.79	0.13	62,62,62,62	0
58	MG	2A	3473	1/1	0.80	0.16	68,68,68,68	0
58	MG	2A	3835	1/1	0.80	0.10	69,69,69,69	0
58	MG	2A	3869	1/1	0.80	0.14	60,60,60,60	0
58	MG	2A	3871	1/1	0.80	0.14	65,65,65,65	0
58	MG	2A	3477	1/1	0.80	0.14	75,75,75,75	0
58	MG	2A	3537	1/1	0.80	0.14	55,55,55,55	0
58	MG	1A	4097	1/1	0.80	0.14	75,75,75,75	0
58	MG	1a	1724	1/1	0.80	0.18	60,60,60,60	0
58	MG	1A	3852	1/1	0.80	0.14	61,61,61,61	0
58	MG	1A	4032	1/1	0.80	0.17	47,47,47,47	0
58	MG	2A	3398	1/1	0.80	0.15	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3400	1/1	0.80	0.15	72,72,72,72	0
58	MG	1A	3959	1/1	0.80	0.25	76,76,76,76	0
58	MG	2a	1606	1/1	0.81	0.28	66,66,66,66	0
58	MG	2a	1607	1/1	0.81	0.30	67,67,67,67	0
58	MG	1A	3373	1/1	0.81	0.30	54,54,54,54	0
58	MG	2A	3274	1/1	0.81	0.21	64,64,64,64	0
58	MG	2A	3289	1/1	0.81	0.12	67,67,67,67	0
58	MG	2A	3797	1/1	0.81	0.16	55,55,55,55	0
58	MG	2A	3291	1/1	0.81	0.14	68,68,68,68	0
58	MG	2A	3404	1/1	0.81	0.19	67,67,67,67	0
58	MG	2A	3455	1/1	0.81	0.25	68,68,68,68	0
58	MG	1a	1629	1/1	0.81	0.19	58,58,58,58	0
58	MG	2A	3165	1/1	0.81	0.39	70,70,70,70	0
58	MG	2A	3881	1/1	0.81	0.19	65,65,65,65	0
58	MG	1a	1749	1/1	0.81	0.13	55,55,55,55	0
58	MG	1a	1808	1/1	0.81	0.19	71,71,71,71	0
58	MG	1A	3998	1/1	0.81	0.14	59,59,59,59	0
58	MG	2A	3257	1/1	0.81	0.17	58,58,58,58	0
58	MG	2A	3268	1/1	0.81	0.33	65,65,65,65	0
58	MG	2A	3690	1/1	0.81	0.14	66,66,66,66	0
58	MG	2a	1623	1/1	0.82	0.14	55,55,55,55	0
58	MG	2A	3175	1/1	0.82	0.31	70,70,70,70	0
58	MG	1A	3485	1/1	0.82	0.19	47,47,47,47	0
58	MG	1A	4023	1/1	0.82	0.13	60,60,60,60	0
58	MG	2A	3337	1/1	0.82	0.17	71,71,71,71	0
58	MG	1a	1780	1/1	0.82	0.14	49,49,49,49	0
58	MG	2a	1727	1/1	0.82	0.16	54,54,54,54	0
58	MG	2A	3255	1/1	0.82	0.24	73,73,73,73	0
58	MG	1A	3807	1/1	0.82	0.14	49,49,49,49	0
58	MG	1a	1671	1/1	0.82	0.23	63,63,63,63	0
58	MG	1A	3572	1/1	0.82	0.18	61,61,61,61	0
58	MG	1a	1719	1/1	0.82	0.33	72,72,72,72	0
58	MG	2A	3281	1/1	0.82	0.17	54,54,54,54	0
58	MG	2A	3704	1/1	0.82	0.20	58,58,58,58	0
58	MG	2v	101	1/1	0.82	0.18	62,62,62,62	0
58	MG	2A	3397	1/1	0.82	0.28	69,69,69,69	0
58	MG	2w	101	1/1	0.82	0.23	68,68,68,68	0
58	MG	2A	3728	1/1	0.82	0.12	64,64,64,64	0
58	MG	2A	3741	1/1	0.82	0.15	54,54,54,54	0
58	MG	2x	101	1/1	0.82	0.22	52,52,52,52	0
58	MG	1A	4099	1/1	0.82	0.19	59,59,59,59	0
58	MG	2a	1645	1/1	0.83	0.41	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1664	1/1	0.83	0.26	62,62,62,62	0
58	MG	2a	1668	1/1	0.83	0.19	55,55,55,55	0
58	MG	2A	3685	1/1	0.83	0.19	57,57,57,57	0
58	MG	2A	3409	1/1	0.83	0.12	62,62,62,62	0
58	MG	2A	3411	1/1	0.83	0.16	63,63,63,63	0
58	MG	1A	3440	1/1	0.83	0.15	40,40,40,40	0
58	MG	2A	3707	1/1	0.83	0.14	66,66,66,66	0
58	MG	2A	3713	1/1	0.83	0.24	64,64,64,64	0
58	MG	2A	3721	1/1	0.83	0.24	64,64,64,64	0
58	MG	2A	3338	1/1	0.83	0.16	72,72,72,72	0
58	MG	2a	1818	1/1	0.83	0.17	61,61,61,61	0
58	MG	2A	3393	1/1	0.83	0.21	63,63,63,63	0
58	MG	1B	217	1/1	0.83	0.15	58,58,58,58	0
58	MG	2A	3090	1/1	0.83	0.14	70,70,70,70	0
58	MG	2a	1609	1/1	0.83	0.22	59,59,59,59	0
58	MG	1A	4003	1/1	0.83	0.14	37,37,37,37	0
58	MG	2a	1627	1/1	0.83	0.18	68,68,68,68	0
58	MG	2A	3358	1/1	0.83	0.28	56,56,56,56	0
58	MG	2A	3652	1/1	0.83	0.22	56,56,56,56	0
58	MG	2A	3136	1/1	0.83	0.38	68,68,68,68	0
58	MG	2A	3390	1/1	0.84	0.19	67,67,67,67	0
58	MG	2a	1610	1/1	0.84	0.17	66,66,66,66	0
58	MG	2a	1615	1/1	0.84	0.31	64,64,64,64	0
58	MG	1a	1668	1/1	0.84	0.26	62,62,62,62	0
58	MG	1l	202	1/1	0.84	0.10	56,56,56,56	0
58	MG	2A	3057	1/1	0.84	0.19	61,61,61,61	0
58	MG	1A	3991	1/1	0.84	0.09	26,26,26,26	0
58	MG	1a	1690	1/1	0.84	0.32	59,59,59,59	0
58	MG	1B	208	1/1	0.84	0.11	55,55,55,55	0
58	MG	2a	1658	1/1	0.84	0.38	71,71,71,71	0
58	MG	2A	3101	1/1	0.84	0.22	72,72,72,72	0
58	MG	2A	3759	1/1	0.84	0.14	37,37,37,37	0
58	MG	2A	3770	1/1	0.84	0.18	68,68,68,68	0
58	MG	2A	3110	1/1	0.84	0.30	60,60,60,60	0
58	MG	2A	3314	1/1	0.84	0.14	60,60,60,60	0
58	MG	2A	3328	1/1	0.84	0.16	55,55,55,55	0
58	MG	1A	3589	1/1	0.84	0.12	68,68,68,68	0
58	MG	2a	1777	1/1	0.84	0.13	58,58,58,58	0
58	MG	1A	3793	1/1	0.84	0.08	41,41,41,41	0
58	MG	1A	3942	1/1	0.84	0.16	60,60,60,60	0
58	MG	2a	1808	1/1	0.84	0.19	66,66,66,66	0
58	MG	2A	3190	1/1	0.84	0.19	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2B	204	1/1	0.84	0.20	71,71,71,71	0
58	MG	2A	3601	1/1	0.84	0.14	66,66,66,66	0
58	MG	2A	3192	1/1	0.84	0.28	67,67,67,67	0
58	MG	1A	3615	1/1	0.84	0.12	59,59,59,59	0
58	MG	2E	303	1/1	0.84	0.14	52,52,52,52	0
58	MG	2A	3668	1/1	0.84	0.14	59,59,59,59	0
58	MG	1A	3515	1/1	0.84	0.24	62,62,62,62	0
58	MG	2A	3250	1/1	0.84	0.18	64,64,64,64	0
58	MG	1a	1805	1/1	0.84	0.23	59,59,59,59	0
58	MG	1A	4043	1/1	0.84	0.17	46,46,46,46	0
58	MG	2y	105	1/1	0.84	0.33	70,70,70,70	0
58	MG	2E	304	1/1	0.85	0.32	58,58,58,58	0
58	MG	2A	3223	1/1	0.85	0.32	63,63,63,63	0
58	MG	2A	3630	1/1	0.85	0.20	60,60,60,60	0
58	MG	2a	1603	1/1	0.85	0.14	64,64,64,64	0
58	MG	2A	3249	1/1	0.85	0.15	68,68,68,68	0
58	MG	2A	3653	1/1	0.85	0.10	50,50,50,50	0
58	MG	1A	3648	1/1	0.85	0.15	55,55,55,55	0
58	MG	2A	3361	1/1	0.85	0.16	62,62,62,62	0
58	MG	2A	3252	1/1	0.85	0.19	65,65,65,65	0
58	MG	2A	3058	1/1	0.85	0.33	71,71,71,71	0
58	MG	2A	3699	1/1	0.85	0.12	73,73,73,73	0
58	MG	1A	3479	1/1	0.85	0.31	62,62,62,62	0
58	MG	2A	3073	1/1	0.85	0.11	46,46,46,46	0
58	MG	2A	3391	1/1	0.85	0.20	63,63,63,63	0
58	MG	1O	205	1/1	0.85	0.18	60,60,60,60	0
58	MG	1a	1733	1/1	0.85	0.13	53,53,53,53	0
58	MG	1A	3261	1/1	0.85	0.08	64,64,64,64	0
58	MG	1A	3028	1/1	0.85	0.11	70,70,70,70	0
58	MG	2A	3745	1/1	0.85	0.11	59,59,59,59	0
58	MG	1A	3429	1/1	0.85	0.13	54,54,54,54	0
58	MG	1a	1788	1/1	0.85	0.11	74,74,74,74	0
58	MG	2a	1708	1/1	0.85	0.19	60,60,60,60	0
58	MG	2a	1710	1/1	0.85	0.21	64,64,64,64	0
58	MG	2A	3405	1/1	0.85	0.17	61,61,61,61	0
58	MG	2A	3406	1/1	0.85	0.11	62,62,62,62	0
58	MG	2A	3173	1/1	0.85	0.25	75,75,75,75	0
58	MG	2A	3798	1/1	0.85	0.10	45,45,45,45	0
58	MG	2a	1778	1/1	0.85	0.13	69,69,69,69	0
58	MG	2a	1781	1/1	0.85	0.14	59,59,59,59	0
58	MG	1a	1657	1/1	0.85	0.21	62,62,62,62	0
58	MG	2A	3812	1/1	0.85	0.12	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3325	1/1	0.85	0.18	66,66,66,66	0
58	MG	2a	1811	1/1	0.85	0.21	49,49,49,49	0
58	MG	2A	3815	1/1	0.85	0.11	68,68,68,68	0
58	MG	2A	3820	1/1	0.85	0.13	51,51,51,51	0
58	MG	1A	4073	1/1	0.85	0.15	47,47,47,47	0
58	MG	2A	3849	1/1	0.85	0.12	64,64,64,64	0
58	MG	2A	3191	1/1	0.85	0.18	61,61,61,61	0
58	MG	1A	3344	1/1	0.85	0.22	51,51,51,51	0
58	MG	2A	3499	1/1	0.85	0.20	59,59,59,59	0
58	MG	1A	3850	1/1	0.85	0.18	45,45,45,45	0
58	MG	2A	3553	1/1	0.85	0.14	39,39,39,39	0
58	MG	2A	3560	1/1	0.85	0.15	61,61,61,61	0
58	MG	2A	3340	1/1	0.85	0.15	58,58,58,58	0
58	MG	1x	113	1/1	0.85	0.18	58,58,58,58	0
58	MG	1B	225	1/1	0.86	0.13	46,46,46,46	0
58	MG	2a	1616	1/1	0.86	0.28	65,65,65,65	0
58	MG	1A	3546	1/1	0.86	0.28	60,60,60,60	0
58	MG	1A	3805	1/1	0.86	0.13	52,52,52,52	0
58	MG	1E	311	1/1	0.86	0.15	55,55,55,55	0
58	MG	2A	3185	1/1	0.86	0.29	63,63,63,63	0
58	MG	2A	3448	1/1	0.86	0.34	60,60,60,60	0
58	MG	2A	3330	1/1	0.86	0.26	62,62,62,62	0
58	MG	2a	1652	1/1	0.86	0.26	65,65,65,65	0
58	MG	1a	1750	1/1	0.86	0.24	62,62,62,62	0
58	MG	1A	3547	1/1	0.86	0.28	57,57,57,57	0
58	MG	1A	3844	1/1	0.86	0.15	56,56,56,56	0
58	MG	2A	3494	1/1	0.86	0.18	58,58,58,58	0
58	MG	1A	3404	1/1	0.86	0.13	68,68,68,68	0
58	MG	17	104	1/1	0.86	0.13	54,54,54,54	0
58	MG	2A	3215	1/1	0.86	0.16	71,71,71,71	0
58	MG	2A	3347	1/1	0.86	0.15	71,71,71,71	0
58	MG	2a	1728	1/1	0.86	0.12	50,50,50,50	0
58	MG	2A	3563	1/1	0.86	0.22	48,48,48,48	0
58	MG	2A	3350	1/1	0.86	0.13	63,63,63,63	0
58	MG	1A	4009	1/1	0.86	0.09	61,61,61,61	0
58	MG	2A	3607	1/1	0.86	0.14	72,72,72,72	0
58	MG	1A	3728	1/1	0.86	0.14	54,54,54,54	0
58	MG	1v	101	1/1	0.86	0.23	69,69,69,69	0
58	MG	2A	3651	1/1	0.86	0.12	58,58,58,58	0
58	MG	2B	218	1/1	0.86	0.19	74,74,74,74	0
58	MG	1a	1661	1/1	0.86	0.14	60,60,60,60	0
58	MG	1A	3441	1/1	0.86	0.17	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1814	1/1	0.86	0.30	58,58,58,58	0
58	MG	1A	4034	1/1	0.86	0.15	44,44,44,44	0
58	MG	2A	3672	1/1	0.86	0.14	54,54,54,54	0
58	MG	2F	306	1/1	0.86	0.11	49,49,49,49	0
58	MG	2j	201	1/1	0.86	0.15	63,63,63,63	0
58	MG	2A	3380	1/1	0.86	0.11	49,49,49,49	0
58	MG	1a	1673	1/1	0.86	0.31	65,65,65,65	0
58	MG	1a	1681	1/1	0.86	0.26	62,62,62,62	0
58	MG	1a	1686	1/1	0.86	0.21	57,57,57,57	0
58	MG	2w	104	1/1	0.86	0.13	68,68,68,68	0
58	MG	1A	3929	1/1	0.86	0.14	59,59,59,59	0
58	MG	2A	3279	1/1	0.86	0.15	61,61,61,61	0
58	MG	2y	103	1/1	0.86	0.20	70,70,70,70	0
58	MG	1B	209	1/1	0.86	0.12	52,52,52,52	0
58	MG	1A	3476	1/1	0.86	0.13	45,45,45,45	0
58	MG	1A	3530	1/1	0.87	0.12	68,68,68,68	0
58	MG	1A	3908	1/1	0.87	0.18	54,54,54,54	0
58	MG	1A	4046	1/1	0.87	0.09	50,50,50,50	0
58	MG	2A	3709	1/1	0.87	0.20	64,64,64,64	0
58	MG	2a	1620	1/1	0.87	0.15	59,59,59,59	0
58	MG	1a	1731	1/1	0.87	0.15	47,47,47,47	0
58	MG	2A	3306	1/1	0.87	0.11	56,56,56,56	0
58	MG	2A	3112	1/1	0.87	0.18	49,49,49,49	0
58	MG	2A	3739	1/1	0.87	0.20	64,64,64,64	0
58	MG	2A	3433	1/1	0.87	0.28	55,55,55,55	0
58	MG	2A	3445	1/1	0.87	0.28	61,61,61,61	0
58	MG	2A	3746	1/1	0.87	0.12	40,40,40,40	0
58	MG	2a	1654	1/1	0.87	0.23	59,59,59,59	0
58	MG	2a	1655	1/1	0.87	0.14	68,68,68,68	0
58	MG	2a	1657	1/1	0.87	0.35	72,72,72,72	0
58	MG	1A	3913	1/1	0.87	0.09	40,40,40,40	0
58	MG	1a	1735	1/1	0.87	0.18	67,67,67,67	0
58	MG	1A	3249	1/1	0.87	0.17	52,52,52,52	0
58	MG	1A	3478	1/1	0.87	0.24	69,69,69,69	0
58	MG	2a	1704	1/1	0.87	0.30	56,56,56,56	0
58	MG	2A	3779	1/1	0.87	0.19	67,67,67,67	0
58	MG	2A	3794	1/1	0.87	0.11	35,35,35,35	0
58	MG	1A	3417	1/1	0.87	0.18	55,55,55,55	0
58	MG	2a	1721	1/1	0.87	0.13	62,62,62,62	0
58	MG	2A	3481	1/1	0.87	0.34	65,65,65,65	0
58	MG	1A	3986	1/1	0.87	0.15	60,60,60,60	0
58	MG	2A	3497	1/1	0.87	0.20	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1634	1/1	0.87	0.23	65,65,65,65	0
58	MG	1a	1795	1/1	0.87	0.11	59,59,59,59	0
58	MG	1A	3333	1/1	0.87	0.17	47,47,47,47	0
58	MG	1A	3106	1/1	0.87	0.17	50,50,50,50	0
58	MG	2a	1786	1/1	0.87	0.24	54,54,54,54	0
58	MG	1d	301	1/1	0.87	0.27	55,55,55,55	0
58	MG	2A	3853	1/1	0.87	0.16	67,67,67,67	0
58	MG	2A	3580	1/1	0.87	0.15	46,46,46,46	0
58	MG	2A	3220	1/1	0.87	0.11	54,54,54,54	0
58	MG	2A	3874	1/1	0.87	0.17	65,65,65,65	0
58	MG	2A	3596	1/1	0.87	0.16	65,65,65,65	0
58	MG	1A	3275	1/1	0.87	0.12	51,51,51,51	0
58	MG	1A	3390	1/1	0.87	0.12	63,63,63,63	0
58	MG	1A	3529	1/1	0.87	0.23	65,65,65,65	0
58	MG	2a	1825	1/1	0.87	0.32	70,70,70,70	0
58	MG	2A	3626	1/1	0.87	0.17	49,49,49,49	0
58	MG	2l	205	1/1	0.87	0.12	66,66,66,66	0
58	MG	2A	3251	1/1	0.87	0.30	66,66,66,66	0
58	MG	1A	3687	1/1	0.87	0.20	60,60,60,60	0
58	MG	2A	3374	1/1	0.87	0.19	70,70,70,70	0
58	MG	1y	101	1/1	0.87	0.11	71,71,71,71	0
58	MG	2A	3023	1/1	0.87	0.27	57,57,57,57	0
58	MG	2A	3050	1/1	0.87	0.13	57,57,57,57	0
58	MG	1a	1685	1/1	0.87	0.22	57,57,57,57	0
58	MG	1A	3858	1/1	0.87	0.19	74,74,74,74	0
58	MG	1A	3873	1/1	0.87	0.12	42,42,42,42	0
58	MG	1a	1692	1/1	0.87	0.25	47,47,47,47	0
58	MG	2B	211	1/1	0.88	0.23	73,73,73,73	0
58	MG	2A	3041	1/1	0.88	0.26	55,55,55,55	0
58	MG	2A	3293	1/1	0.88	0.23	55,55,55,55	0
58	MG	2A	3294	1/1	0.88	0.28	62,62,62,62	0
58	MG	1A	3662	1/1	0.88	0.11	39,39,39,39	0
58	MG	1a	1670	1/1	0.88	0.15	49,49,49,49	0
58	MG	2A	3309	1/1	0.88	0.23	63,63,63,63	0
58	MG	2E	309	1/1	0.88	0.12	45,45,45,45	0
58	MG	1A	3183	1/1	0.88	0.24	49,49,49,49	0
58	MG	2F	309	1/1	0.88	0.12	54,54,54,54	0
58	MG	2T	202	1/1	0.88	0.16	66,66,66,66	0
58	MG	1A	3511	1/1	0.88	0.09	67,67,67,67	0
58	MG	1a	1677	1/1	0.88	0.20	47,47,47,47	0
58	MG	2A	3085	1/1	0.88	0.14	45,45,45,45	0
58	MG	1A	3211	1/1	0.88	0.13	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3612	1/1	0.88	0.21	68,68,68,68	0
58	MG	1A	3419	1/1	0.88	0.15	57,57,57,57	0
58	MG	1A	3425	1/1	0.88	0.11	55,55,55,55	0
58	MG	1a	1688	1/1	0.88	0.27	47,47,47,47	0
58	MG	1A	3269	1/1	0.88	0.09	43,43,43,43	0
58	MG	2A	3344	1/1	0.88	0.12	78,78,78,78	0
58	MG	1A	3350	1/1	0.88	0.17	64,64,64,64	0
58	MG	2a	1621	1/1	0.88	0.23	72,72,72,72	0
58	MG	2A	3661	1/1	0.88	0.15	65,65,65,65	0
58	MG	2A	3153	1/1	0.88	0.10	62,62,62,62	0
58	MG	1A	3270	1/1	0.88	0.11	62,62,62,62	0
58	MG	2a	1630	1/1	0.88	0.11	58,58,58,58	0
58	MG	1B	215	1/1	0.88	0.20	65,65,65,65	0
58	MG	2A	3679	1/1	0.88	0.18	56,56,56,56	0
58	MG	2a	1636	1/1	0.88	0.14	63,63,63,63	0
58	MG	2a	1644	1/1	0.88	0.29	58,58,58,58	0
58	MG	2A	3682	1/1	0.88	0.11	41,41,41,41	0
58	MG	2a	1651	1/1	0.88	0.21	69,69,69,69	0
58	MG	1A	3833	1/1	0.88	0.22	43,43,43,43	0
58	MG	1B	223	1/1	0.88	0.11	53,53,53,53	0
58	MG	2A	3694	1/1	0.88	0.16	47,47,47,47	0
58	MG	2A	3698	1/1	0.88	0.16	37,37,37,37	0
58	MG	1a	1732	1/1	0.88	0.11	60,60,60,60	0
58	MG	1A	4010	1/1	0.88	0.09	72,72,72,72	0
58	MG	1A	3841	1/1	0.88	0.12	42,42,42,42	0
58	MG	1A	4027	1/1	0.88	0.09	57,57,57,57	0
58	MG	2a	1698	1/1	0.88	0.19	56,56,56,56	0
58	MG	2A	3376	1/1	0.88	0.18	56,56,56,56	0
58	MG	2A	3195	1/1	0.88	0.22	49,49,49,49	0
58	MG	1D	312	1/1	0.88	0.15	59,59,59,59	0
58	MG	2a	1709	1/1	0.88	0.22	59,59,59,59	0
58	MG	1A	3447	1/1	0.88	0.13	62,62,62,62	0
58	MG	1a	1777	1/1	0.88	0.11	56,56,56,56	0
58	MG	2a	1722	1/1	0.88	0.34	65,65,65,65	0
58	MG	1G	203	1/1	0.88	0.13	60,60,60,60	0
58	MG	2A	3396	1/1	0.88	0.26	50,50,50,50	0
58	MG	2a	1737	1/1	0.88	0.24	52,52,52,52	0
58	MG	2A	3228	1/1	0.88	0.23	59,59,59,59	0
58	MG	2a	1745	1/1	0.88	0.17	58,58,58,58	0
58	MG	2A	3243	1/1	0.88	0.13	55,55,55,55	0
58	MG	1A	3468	1/1	0.88	0.26	40,40,40,40	0
58	MG	1Q	203	1/1	0.88	0.09	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3760	1/1	0.88	0.12	61,61,61,61	0
58	MG	1A	3273	1/1	0.88	0.09	52,52,52,52	0
58	MG	2A	3773	1/1	0.88	0.15	54,54,54,54	0
58	MG	2a	1792	1/1	0.88	0.12	60,60,60,60	0
58	MG	2a	1795	1/1	0.88	0.17	65,65,65,65	0
58	MG	1A	3074	1/1	0.88	0.21	53,53,53,53	0
58	MG	2A	3407	1/1	0.88	0.10	66,66,66,66	0
58	MG	2a	1810	1/1	0.88	0.14	63,63,63,63	0
58	MG	1a	1815	1/1	0.88	0.24	65,65,65,65	0
58	MG	15	102	1/1	0.88	0.17	35,35,35,35	0
58	MG	2A	3431	1/1	0.88	0.22	60,60,60,60	0
58	MG	1A	3410	1/1	0.88	0.17	55,55,55,55	0
58	MG	1a	1606	1/1	0.88	0.25	59,59,59,59	0
58	MG	1A	4047	1/1	0.88	0.10	41,41,41,41	0
58	MG	2A	3449	1/1	0.88	0.16	57,57,57,57	0
58	MG	2A	3273	1/1	0.88	0.20	63,63,63,63	0
58	MG	2l	201	1/1	0.88	0.16	60,60,60,60	0
58	MG	2A	3841	1/1	0.88	0.11	29,29,29,29	0
58	MG	2A	3842	1/1	0.88	0.12	58,58,58,58	0
58	MG	1A	4067	1/1	0.88	0.10	41,41,41,41	0
58	MG	1A	3616	1/1	0.88	0.10	27,27,27,27	0
58	MG	1A	3416	1/1	0.88	0.21	46,46,46,46	0
58	MG	2A	3288	1/1	0.88	0.11	57,57,57,57	0
58	MG	2A	3487	1/1	0.88	0.20	48,48,48,48	0
58	MG	2w	112	1/1	0.88	0.16	65,65,65,65	0
58	MG	2A	3877	1/1	0.88	0.20	76,76,76,76	0
58	MG	2y	102	1/1	0.88	0.16	69,69,69,69	0
58	MG	2A	3491	1/1	0.88	0.12	55,55,55,55	0
58	MG	2B	202	1/1	0.88	0.12	62,62,62,62	0
58	MG	2A	3024	1/1	0.88	0.17	57,57,57,57	0
58	MG	2A	3204	1/1	0.89	0.13	62,62,62,62	0
58	MG	2N	201	1/1	0.89	0.07	54,54,54,54	0
58	MG	2A	3208	1/1	0.89	0.17	51,51,51,51	0
58	MG	2U	201	1/1	0.89	0.19	42,42,42,42	0
58	MG	1A	3729	1/1	0.89	0.11	40,40,40,40	0
58	MG	2A	3656	1/1	0.89	0.10	38,38,38,38	0
58	MG	1A	3859	1/1	0.89	0.12	57,57,57,57	0
58	MG	1A	4018	1/1	0.89	0.08	35,35,35,35	0
58	MG	1l	201	1/1	0.89	0.12	68,68,68,68	0
58	MG	1A	3744	1/1	0.89	0.13	57,57,57,57	0
58	MG	2A	3678	1/1	0.89	0.16	53,53,53,53	0
58	MG	2A	3237	1/1	0.89	0.16	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3383	1/1	0.89	0.21	56,56,56,56	0
58	MG	2A	3238	1/1	0.89	0.17	55,55,55,55	0
58	MG	2a	1618	1/1	0.89	0.23	61,61,61,61	0
58	MG	2A	3686	1/1	0.89	0.18	60,60,60,60	0
58	MG	1A	3507	1/1	0.89	0.12	51,51,51,51	0
58	MG	2A	3245	1/1	0.89	0.11	60,60,60,60	0
58	MG	1w	109	1/1	0.89	0.15	65,65,65,65	0
58	MG	1x	105	1/1	0.89	0.11	59,59,59,59	0
58	MG	2A	3703	1/1	0.89	0.15	50,50,50,50	0
58	MG	1a	1674	1/1	0.89	0.10	50,50,50,50	0
58	MG	1A	4030	1/1	0.89	0.10	65,65,65,65	0
58	MG	2A	3017	1/1	0.89	0.13	38,38,38,38	0
58	MG	2a	1642	1/1	0.89	0.25	62,62,62,62	0
58	MG	2A	3403	1/1	0.89	0.13	59,59,59,59	0
58	MG	1a	1678	1/1	0.89	0.19	62,62,62,62	0
58	MG	2a	1647	1/1	0.89	0.19	61,61,61,61	0
58	MG	2A	3715	1/1	0.89	0.21	54,54,54,54	0
58	MG	1A	3907	1/1	0.89	0.14	42,42,42,42	0
58	MG	2A	3723	1/1	0.89	0.10	43,43,43,43	0
58	MG	2A	3724	1/1	0.89	0.10	47,47,47,47	0
58	MG	2A	3260	1/1	0.89	0.12	50,50,50,50	0
58	MG	1a	1682	1/1	0.89	0.09	64,64,64,64	0
58	MG	1A	3050	1/1	0.89	0.17	47,47,47,47	0
58	MG	2A	3743	1/1	0.89	0.10	57,57,57,57	0
58	MG	1A	3354	1/1	0.89	0.11	48,48,48,48	0
58	MG	2a	1688	1/1	0.89	0.21	53,53,53,53	0
58	MG	2a	1697	1/1	0.89	0.14	66,66,66,66	0
58	MG	2A	3413	1/1	0.89	0.21	54,54,54,54	0
58	MG	2A	3747	1/1	0.89	0.10	53,53,53,53	0
58	MG	1A	4042	1/1	0.89	0.17	47,47,47,47	0
58	MG	2A	3754	1/1	0.89	0.18	71,71,71,71	0
58	MG	1A	3557	1/1	0.89	0.14	53,53,53,53	0
58	MG	2A	3434	1/1	0.89	0.20	58,58,58,58	0
58	MG	1A	4045	1/1	0.89	0.12	43,43,43,43	0
58	MG	2A	3765	1/1	0.89	0.11	38,38,38,38	0
58	MG	2A	3767	1/1	0.89	0.13	59,59,59,59	0
58	MG	1E	308	1/1	0.89	0.18	63,63,63,63	0
58	MG	2a	1735	1/1	0.89	0.16	58,58,58,58	0
58	MG	1A	3806	1/1	0.89	0.07	38,38,38,38	0
58	MG	2A	3774	1/1	0.89	0.12	45,45,45,45	0
58	MG	2A	3093	1/1	0.89	0.23	54,54,54,54	0
58	MG	1A	3953	1/1	0.89	0.12	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1760	1/1	0.89	0.09	81,81,81,81	0
58	MG	1A	4050	1/1	0.89	0.09	18,18,18,18	0
58	MG	2A	3104	1/1	0.89	0.18	59,59,59,59	0
58	MG	2A	3480	1/1	0.89	0.19	56,56,56,56	0
58	MG	2A	3811	1/1	0.89	0.17	63,63,63,63	0
58	MG	2A	3302	1/1	0.89	0.23	49,49,49,49	0
58	MG	1A	3668	1/1	0.89	0.11	53,53,53,53	0
58	MG	2a	1793	1/1	0.89	0.22	61,61,61,61	0
58	MG	1A	3314	1/1	0.89	0.17	60,60,60,60	0
58	MG	2A	3131	1/1	0.89	0.11	58,58,58,58	0
58	MG	2A	3496	1/1	0.89	0.18	63,63,63,63	0
58	MG	1Y	202	1/1	0.89	0.08	62,62,62,62	0
58	MG	1A	4074	1/1	0.89	0.09	38,38,38,38	0
58	MG	1a	1740	1/1	0.89	0.16	52,52,52,52	0
58	MG	2A	3542	1/1	0.89	0.11	46,46,46,46	0
58	MG	2a	1816	1/1	0.89	0.18	66,66,66,66	0
58	MG	2A	3543	1/1	0.89	0.14	52,52,52,52	0
58	MG	2A	3169	1/1	0.89	0.12	68,68,68,68	0
58	MG	1A	3691	1/1	0.89	0.14	53,53,53,53	0
58	MG	2a	1824	1/1	0.89	0.22	67,67,67,67	0
58	MG	16	102	1/1	0.89	0.14	41,41,41,41	0
58	MG	2A	3879	1/1	0.89	0.12	39,39,39,39	0
58	MG	2A	3579	1/1	0.89	0.16	62,62,62,62	0
58	MG	2l	204	1/1	0.89	0.13	59,59,59,59	0
58	MG	2A	3882	1/1	0.89	0.29	55,55,55,55	0
58	MG	2p	101	1/1	0.89	0.17	64,64,64,64	0
58	MG	1A	3696	1/1	0.89	0.10	24,24,24,24	0
58	MG	1A	4093	1/1	0.89	0.21	57,57,57,57	0
58	MG	2B	205	1/1	0.89	0.19	59,59,59,59	0
58	MG	1A	3995	1/1	0.89	0.09	34,34,34,34	0
58	MG	1A	3448	1/1	0.89	0.12	48,48,48,48	0
58	MG	1A	3349	1/1	0.89	0.14	54,54,54,54	0
58	MG	2A	3194	1/1	0.89	0.35	63,63,63,63	0
58	MG	2A	3351	1/1	0.89	0.30	64,64,64,64	0
58	MG	2y	101	1/1	0.89	0.14	73,73,73,73	0
58	MG	2A	3352	1/1	0.89	0.11	50,50,50,50	0
58	MG	1a	1660	1/1	0.89	0.20	55,55,55,55	0
58	MG	2A	3633	1/1	0.89	0.16	46,46,46,46	0
58	MG	2A	3640	1/1	0.89	0.13	35,35,35,35	0
58	MG	2A	3315	1/1	0.90	0.13	59,59,59,59	0
58	MG	2A	3318	1/1	0.90	0.14	53,53,53,53	0
58	MG	1A	3101	1/1	0.90	0.12	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3326	1/1	0.90	0.11	57,57,57,57	0
58	MG	2A	3608	1/1	0.90	0.12	45,45,45,45	0
58	MG	1A	3842	1/1	0.90	0.12	54,54,54,54	0
58	MG	1A	3843	1/1	0.90	0.17	53,53,53,53	0
58	MG	2A	3333	1/1	0.90	0.14	62,62,62,62	0
58	MG	2A	3627	1/1	0.90	0.13	63,63,63,63	0
58	MG	26	101	1/1	0.90	0.24	58,58,58,58	0
58	MG	2A	3100	1/1	0.90	0.24	58,58,58,58	0
58	MG	1B	214	1/1	0.90	0.21	56,56,56,56	0
58	MG	1A	4017	1/1	0.90	0.09	41,41,41,41	0
58	MG	2A	3647	1/1	0.90	0.12	35,35,35,35	0
58	MG	2A	3649	1/1	0.90	0.13	45,45,45,45	0
58	MG	1A	3671	1/1	0.90	0.09	32,32,32,32	0
58	MG	1B	220	1/1	0.90	0.09	45,45,45,45	0
58	MG	2A	3343	1/1	0.90	0.20	52,52,52,52	0
58	MG	2A	3113	1/1	0.90	0.26	63,63,63,63	0
58	MG	1a	1710	1/1	0.90	0.28	60,60,60,60	0
58	MG	1a	1713	1/1	0.90	0.27	50,50,50,50	0
58	MG	2A	3349	1/1	0.90	0.31	56,56,56,56	0
58	MG	1A	3382	1/1	0.90	0.21	46,46,46,46	0
58	MG	1a	1720	1/1	0.90	0.27	54,54,54,54	0
58	MG	1A	4026	1/1	0.90	0.12	48,48,48,48	0
58	MG	1B	229	1/1	0.90	0.09	42,42,42,42	0
58	MG	2A	3354	1/1	0.90	0.19	65,65,65,65	0
58	MG	1A	3062	1/1	0.90	0.10	52,52,52,52	0
58	MG	2a	1639	1/1	0.90	0.26	53,53,53,53	0
58	MG	2A	3178	1/1	0.90	0.14	47,47,47,47	0
58	MG	1A	3131	1/1	0.90	0.11	58,58,58,58	0
58	MG	1A	4031	1/1	0.90	0.08	46,46,46,46	0
58	MG	2A	3372	1/1	0.90	0.13	53,53,53,53	0
58	MG	2a	1650	1/1	0.90	0.21	58,58,58,58	0
58	MG	1A	3255	1/1	0.90	0.08	53,53,53,53	0
58	MG	1A	3716	1/1	0.90	0.14	66,66,66,66	0
58	MG	1A	4035	1/1	0.90	0.10	44,44,44,44	0
58	MG	1A	3482	1/1	0.90	0.14	61,61,61,61	0
58	MG	2a	1656	1/1	0.90	0.35	62,62,62,62	0
58	MG	1a	1761	1/1	0.90	0.11	73,73,73,73	0
58	MG	2A	3385	1/1	0.90	0.10	59,59,59,59	0
58	MG	2A	3196	1/1	0.90	0.22	60,60,60,60	0
58	MG	1a	1772	1/1	0.90	0.12	64,64,64,64	0
58	MG	2A	3207	1/1	0.90	0.10	53,53,53,53	0
58	MG	2a	1683	1/1	0.90	0.11	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3394	1/1	0.90	0.09	59,59,59,59	0
58	MG	2A	3725	1/1	0.90	0.11	53,53,53,53	0
58	MG	1a	1775	1/1	0.90	0.12	64,64,64,64	0
58	MG	2a	1700	1/1	0.90	0.16	46,46,46,46	0
58	MG	2A	3738	1/1	0.90	0.16	53,53,53,53	0
58	MG	1A	3893	1/1	0.90	0.09	32,32,32,32	0
58	MG	2A	3211	1/1	0.90	0.14	62,62,62,62	0
58	MG	1A	3901	1/1	0.90	0.21	64,64,64,64	0
58	MG	1V	209	1/1	0.90	0.09	49,49,49,49	0
58	MG	2a	1718	1/1	0.90	0.28	62,62,62,62	0
58	MG	2a	1720	1/1	0.90	0.17	56,56,56,56	0
58	MG	1A	3903	1/1	0.90	0.17	33,33,33,33	0
58	MG	1Z	3700	1/1	0.90	0.18	55,55,55,55	0
58	MG	1A	3412	1/1	0.90	0.11	44,44,44,44	0
58	MG	14	101	1/1	0.90	0.21	62,62,62,62	0
58	MG	2a	1734	1/1	0.90	0.27	52,52,52,52	0
58	MG	1A	3731	1/1	0.90	0.15	57,57,57,57	0
58	MG	1A	3498	1/1	0.90	0.20	51,51,51,51	0
58	MG	2A	3248	1/1	0.90	0.15	71,71,71,71	0
58	MG	2a	1744	1/1	0.90	0.33	58,58,58,58	0
58	MG	1A	4063	1/1	0.90	0.14	38,38,38,38	0
58	MG	2a	1746	1/1	0.90	0.34	63,63,63,63	0
58	MG	2A	3420	1/1	0.90	0.17	52,52,52,52	0
58	MG	2a	1751	1/1	0.90	0.13	85,85,85,85	0
58	MG	2a	1755	1/1	0.90	0.15	63,63,63,63	0
58	MG	2A	3426	1/1	0.90	0.17	57,57,57,57	0
58	MG	2A	3771	1/1	0.90	0.14	53,53,53,53	0
58	MG	1A	3926	1/1	0.90	0.12	70,70,70,70	0
58	MG	2A	3432	1/1	0.90	0.12	55,55,55,55	0
58	MG	1a	1609	1/1	0.90	0.27	58,58,58,58	0
58	MG	1w	102	1/1	0.90	0.17	49,49,49,49	0
58	MG	2A	3435	1/1	0.90	0.21	52,52,52,52	0
58	MG	1w	108	1/1	0.90	0.19	52,52,52,52	0
58	MG	2a	1794	1/1	0.90	0.16	67,67,67,67	0
58	MG	1A	4068	1/1	0.90	0.11	45,45,45,45	0
58	MG	2a	1796	1/1	0.90	0.17	42,42,42,42	0
58	MG	2A	3807	1/1	0.90	0.10	41,41,41,41	0
58	MG	1A	3504	1/1	0.90	0.22	74,74,74,74	0
58	MG	1a	1648	1/1	0.90	0.19	66,66,66,66	0
58	MG	1A	3931	1/1	0.90	0.07	24,24,24,24	0
58	MG	2a	1812	1/1	0.90	0.15	67,67,67,67	0
58	MG	1A	3080	1/1	0.90	0.12	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3510	1/1	0.90	0.10	47,47,47,47	0
58	MG	2a	1815	1/1	0.90	0.25	64,64,64,64	0
58	MG	1A	4091	1/1	0.90	0.13	43,43,43,43	0
58	MG	2A	3277	1/1	0.90	0.15	64,64,64,64	0
58	MG	2A	3482	1/1	0.90	0.12	55,55,55,55	0
58	MG	2A	3845	1/1	0.90	0.10	35,35,35,35	0
58	MG	2A	3847	1/1	0.90	0.12	67,67,67,67	0
58	MG	2A	3029	1/1	0.90	0.24	60,60,60,60	0
58	MG	2a	1833	1/1	0.90	0.19	54,54,54,54	0
58	MG	2a	1835	1/1	0.90	0.21	45,45,45,45	0
58	MG	2a	1837	1/1	0.90	0.25	56,56,56,56	0
58	MG	1A	3804	1/1	0.90	0.11	34,34,34,34	0
58	MG	2A	3493	1/1	0.90	0.09	55,55,55,55	0
58	MG	1A	3300	1/1	0.90	0.16	57,57,57,57	0
58	MG	1A	3512	1/1	0.90	0.12	69,69,69,69	0
58	MG	1A	4098	1/1	0.90	0.14	60,60,60,60	0
58	MG	2A	3059	1/1	0.90	0.19	51,51,51,51	0
58	MG	2A	3520	1/1	0.90	0.17	47,47,47,47	0
58	MG	2A	3062	1/1	0.90	0.23	50,50,50,50	0
58	MG	2A	3883	1/1	0.90	0.22	74,74,74,74	0
58	MG	2A	3541	1/1	0.90	0.15	46,46,46,46	0
58	MG	2A	3295	1/1	0.90	0.10	65,65,65,65	0
58	MG	2w	109	1/1	0.90	0.34	72,72,72,72	0
58	MG	2w	110	1/1	0.90	0.18	57,57,57,57	0
58	MG	1A	3655	1/1	0.90	0.11	59,59,59,59	0
58	MG	2A	3548	1/1	0.90	0.10	32,32,32,32	0
58	MG	2A	3070	1/1	0.90	0.16	51,51,51,51	0
58	MG	2A	3071	1/1	0.90	0.19	48,48,48,48	0
58	MG	1A	3821	1/1	0.90	0.12	55,55,55,55	0
58	MG	2A	3311	1/1	0.90	0.14	54,54,54,54	0
58	MG	1A	3458	1/1	0.90	0.14	61,61,61,61	0
58	MG	1B	216	1/1	0.91	0.10	57,57,57,57	0
58	MG	2V	202	1/1	0.91	0.10	58,58,58,58	0
58	MG	2A	3619	1/1	0.91	0.11	30,30,30,30	0
58	MG	2A	3102	1/1	0.91	0.15	50,50,50,50	0
58	MG	1A	3839	1/1	0.91	0.11	35,35,35,35	0
58	MG	2a	1602	1/1	0.91	0.10	53,53,53,53	0
58	MG	1A	3527	1/1	0.91	0.13	55,55,55,55	0
58	MG	1a	1698	1/1	0.91	0.14	51,51,51,51	0
58	MG	1a	1703	1/1	0.91	0.14	57,57,57,57	0
58	MG	1a	1705	1/1	0.91	0.12	49,49,49,49	0
58	MG	2a	1608	1/1	0.91	0.38	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	4019	1/1	0.91	0.08	33,33,33,33	0
58	MG	2A	3146	1/1	0.91	0.19	50,50,50,50	0
58	MG	2a	1612	1/1	0.91	0.11	60,60,60,60	0
58	MG	1a	1712	1/1	0.91	0.19	50,50,50,50	0
58	MG	2A	3162	1/1	0.91	0.18	49,49,49,49	0
58	MG	1A	3184	1/1	0.91	0.17	43,43,43,43	0
58	MG	1A	4024	1/1	0.91	0.09	55,55,55,55	0
58	MG	2A	3171	1/1	0.91	0.15	56,56,56,56	0
58	MG	2A	3664	1/1	0.91	0.15	61,61,61,61	0
58	MG	2a	1626	1/1	0.91	0.12	56,56,56,56	0
58	MG	1A	3402	1/1	0.91	0.12	52,52,52,52	0
58	MG	1A	3689	1/1	0.91	0.09	39,39,39,39	0
58	MG	2A	3365	1/1	0.91	0.14	66,66,66,66	0
58	MG	2a	1632	1/1	0.91	0.26	56,56,56,56	0
58	MG	2A	3369	1/1	0.91	0.10	57,57,57,57	0
58	MG	1a	1726	1/1	0.91	0.10	57,57,57,57	0
58	MG	1B	233	1/1	0.91	0.11	62,62,62,62	0
58	MG	2A	3683	1/1	0.91	0.10	51,51,51,51	0
58	MG	1A	3532	1/1	0.91	0.09	54,54,54,54	0
58	MG	1A	3303	1/1	0.91	0.21	44,44,44,44	0
58	MG	1A	3709	1/1	0.91	0.12	44,44,44,44	0
58	MG	2A	3693	1/1	0.91	0.12	61,61,61,61	0
58	MG	2a	1648	1/1	0.91	0.21	59,59,59,59	0
58	MG	1A	3494	1/1	0.91	0.19	49,49,49,49	0
58	MG	1G	205	1/1	0.91	0.12	41,41,41,41	0
58	MG	1A	3870	1/1	0.91	0.14	56,56,56,56	0
58	MG	1A	3496	1/1	0.91	0.17	52,52,52,52	0
58	MG	2A	3199	1/1	0.91	0.22	64,64,64,64	0
58	MG	2A	3392	1/1	0.91	0.20	50,50,50,50	0
58	MG	2A	3706	1/1	0.91	0.08	51,51,51,51	0
58	MG	1a	1756	1/1	0.91	0.11	42,42,42,42	0
58	MG	2a	1660	1/1	0.91	0.12	61,61,61,61	0
58	MG	1A	3717	1/1	0.91	0.10	40,40,40,40	0
58	MG	1a	1767	1/1	0.91	0.11	66,66,66,66	0
58	MG	2a	1670	1/1	0.91	0.16	70,70,70,70	0
58	MG	1A	3892	1/1	0.91	0.14	29,29,29,29	0
58	MG	1X	106	1/1	0.91	0.10	48,48,48,48	0
58	MG	2a	1686	1/1	0.91	0.15	51,51,51,51	0
58	MG	2A	3212	1/1	0.91	0.28	54,54,54,54	0
58	MG	2A	3213	1/1	0.91	0.15	60,60,60,60	0
58	MG	1A	3719	1/1	0.91	0.18	56,56,56,56	0
58	MG	1A	3552	1/1	0.91	0.21	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1703	1/1	0.91	0.24	59,59,59,59	0
58	MG	1a	1781	1/1	0.91	0.09	58,58,58,58	0
58	MG	2A	3227	1/1	0.91	0.13	51,51,51,51	0
58	MG	1a	1786	1/1	0.91	0.07	56,56,56,56	0
58	MG	1A	3554	1/1	0.91	0.14	54,54,54,54	0
58	MG	10	110	1/1	0.91	0.07	43,43,43,43	0
58	MG	11	102	1/1	0.91	0.12	60,60,60,60	0
58	MG	1A	3198	1/1	0.91	0.22	44,44,44,44	0
58	MG	1A	3738	1/1	0.91	0.14	72,72,72,72	0
58	MG	1A	3739	1/1	0.91	0.13	52,52,52,52	0
58	MG	2a	1724	1/1	0.91	0.25	59,59,59,59	0
58	MG	1A	3921	1/1	0.91	0.08	21,21,21,21	0
58	MG	19	101	1/1	0.91	0.16	46,46,46,46	0
58	MG	1a	1602	1/1	0.91	0.10	61,61,61,61	0
58	MG	1t	201	1/1	0.91	0.14	55,55,55,55	0
58	MG	2A	3441	1/1	0.91	0.16	54,54,54,54	0
58	MG	1a	1603	1/1	0.91	0.14	64,64,64,64	0
58	MG	2A	3447	1/1	0.91	0.14	57,57,57,57	0
58	MG	2A	3772	1/1	0.91	0.10	51,51,51,51	0
58	MG	1A	3502	1/1	0.91	0.11	44,44,44,44	0
58	MG	1A	3329	1/1	0.91	0.17	45,45,45,45	0
58	MG	1A	4081	1/1	0.91	0.09	47,47,47,47	0
58	MG	2A	3458	1/1	0.91	0.19	52,52,52,52	0
58	MG	2A	3462	1/1	0.91	0.28	62,62,62,62	0
58	MG	1x	101	1/1	0.91	0.18	57,57,57,57	0
58	MG	2A	3800	1/1	0.91	0.10	61,61,61,61	0
58	MG	1A	3767	1/1	0.91	0.10	27,27,27,27	0
58	MG	1a	1638	1/1	0.91	0.24	56,56,56,56	0
58	MG	2A	3809	1/1	0.91	0.12	66,66,66,66	0
58	MG	1a	1647	1/1	0.91	0.11	49,49,49,49	0
58	MG	1A	3413	1/1	0.91	0.13	47,47,47,47	0
58	MG	1A	3415	1/1	0.91	0.12	52,52,52,52	0
58	MG	2A	3283	1/1	0.91	0.21	60,60,60,60	0
58	MG	2A	3816	1/1	0.91	0.09	44,44,44,44	0
58	MG	1A	3955	1/1	0.91	0.07	59,59,59,59	0
58	MG	2a	1803	1/1	0.91	0.12	59,59,59,59	0
58	MG	2a	1807	1/1	0.91	0.22	59,59,59,59	0
58	MG	2A	3825	1/1	0.91	0.11	39,39,39,39	0
58	MG	1A	4095	1/1	0.91	0.12	53,53,53,53	0
58	MG	2A	3039	1/1	0.91	0.17	62,62,62,62	0
58	MG	1a	1662	1/1	0.91	0.14	59,59,59,59	0
58	MG	2A	3045	1/1	0.91	0.15	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1667	1/1	0.91	0.17	45,45,45,45	0
58	MG	2A	3503	1/1	0.91	0.13	46,46,46,46	0
58	MG	2A	3509	1/1	0.91	0.13	61,61,61,61	0
58	MG	2A	3856	1/1	0.91	0.11	52,52,52,52	0
58	MG	2A	3512	1/1	0.91	0.08	48,48,48,48	0
58	MG	2A	3514	1/1	0.91	0.13	29,29,29,29	0
58	MG	2a	1823	1/1	0.91	0.11	59,59,59,59	0
58	MG	1A	3370	1/1	0.91	0.16	54,54,54,54	0
58	MG	2A	3528	1/1	0.91	0.17	63,63,63,63	0
58	MG	2a	1827	1/1	0.91	0.21	51,51,51,51	0
58	MG	2A	3300	1/1	0.91	0.11	69,69,69,69	0
58	MG	1A	3982	1/1	0.91	0.08	55,55,55,55	0
58	MG	1A	3983	1/1	0.91	0.09	68,68,68,68	0
58	MG	2a	1838	1/1	0.91	0.09	73,73,73,73	0
58	MG	2d	301	1/1	0.91	0.27	50,50,50,50	0
58	MG	1A	3617	1/1	0.91	0.11	49,49,49,49	0
58	MG	2A	3546	1/1	0.91	0.16	48,48,48,48	0
58	MG	1A	3174	1/1	0.91	0.16	42,42,42,42	0
58	MG	1a	1675	1/1	0.91	0.22	60,60,60,60	0
58	MG	1A	3342	1/1	0.91	0.09	49,49,49,49	0
58	MG	2r	101	1/1	0.91	0.16	64,64,64,64	0
58	MG	1A	4106	1/1	0.91	0.22	55,55,55,55	0
58	MG	2B	216	1/1	0.91	0.21	58,58,58,58	0
58	MG	2B	217	1/1	0.91	0.11	46,46,46,46	0
58	MG	2A	3074	1/1	0.91	0.14	58,58,58,58	0
58	MG	1A	3660	1/1	0.91	0.07	34,34,34,34	0
58	MG	1A	3830	1/1	0.91	0.09	34,34,34,34	0
58	MG	1A	3386	1/1	0.91	0.10	39,39,39,39	0
58	MG	2A	3094	1/1	0.91	0.16	40,40,40,40	0
58	MG	2A	3605	1/1	0.91	0.15	47,47,47,47	0
58	MG	2F	302	1/1	0.91	0.14	51,51,51,51	0
58	MG	2A	3606	1/1	0.91	0.08	31,31,31,31	0
58	MG	1A	3837	1/1	0.91	0.13	52,52,52,52	0
58	MG	2G	201	1/1	0.91	0.15	60,60,60,60	0
58	MG	1A	3838	1/1	0.91	0.12	62,62,62,62	0
58	MG	2A	3609	1/1	0.91	0.27	48,48,48,48	0
58	MG	1A	3985	1/1	0.92	0.09	60,60,60,60	0
58	MG	1A	3765	1/1	0.92	0.13	40,40,40,40	0
58	MG	2B	206	1/1	0.92	0.20	54,54,54,54	0
58	MG	2B	207	1/1	0.92	0.10	66,66,66,66	0
58	MG	1A	3555	1/1	0.92	0.19	53,53,53,53	0
58	MG	2B	212	1/1	0.92	0.14	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1B	235	1/1	0.92	0.15	47,47,47,47	0
58	MG	1B	236	1/1	0.92	0.15	72,72,72,72	0
58	MG	2A	3219	1/1	0.92	0.18	61,61,61,61	0
58	MG	2A	3489	1/1	0.92	0.20	54,54,54,54	0
58	MG	2B	219	1/1	0.92	0.26	65,65,65,65	0
58	MG	1a	1741	1/1	0.92	0.14	51,51,51,51	0
58	MG	2D	304	1/1	0.92	0.27	57,57,57,57	0
58	MG	2D	307	1/1	0.92	0.23	49,49,49,49	0
58	MG	1a	1744	1/1	0.92	0.07	51,51,51,51	0
58	MG	2A	3224	1/1	0.92	0.10	57,57,57,57	0
58	MG	1a	1745	1/1	0.92	0.15	63,63,63,63	0
58	MG	2E	306	1/1	0.92	0.16	54,54,54,54	0
58	MG	1A	3019	1/1	0.92	0.10	44,44,44,44	0
58	MG	1A	3993	1/1	0.92	0.06	20,20,20,20	0
58	MG	2F	303	1/1	0.92	0.16	56,56,56,56	0
58	MG	2F	304	1/1	0.92	0.12	58,58,58,58	0
58	MG	1a	1755	1/1	0.92	0.10	62,62,62,62	0
58	MG	1A	3226	1/1	0.92	0.12	38,38,38,38	0
58	MG	1a	1759	1/1	0.92	0.10	56,56,56,56	0
58	MG	1A	3360	1/1	0.92	0.19	55,55,55,55	0
58	MG	2Q	202	1/1	0.92	0.15	45,45,45,45	0
58	MG	1a	1764	1/1	0.92	0.15	55,55,55,55	0
58	MG	1A	3999	1/1	0.92	0.09	46,46,46,46	0
58	MG	1a	1770	1/1	0.92	0.08	71,71,71,71	0
58	MG	2Z	301	1/1	0.92	0.16	64,64,64,64	0
58	MG	2A	3540	1/1	0.92	0.20	58,58,58,58	0
58	MG	1A	3491	1/1	0.92	0.10	41,41,41,41	0
58	MG	25	104	1/1	0.92	0.10	48,48,48,48	0
58	MG	1A	3592	1/1	0.92	0.15	52,52,52,52	0
58	MG	2A	3254	1/1	0.92	0.10	58,58,58,58	0
58	MG	1R	202	1/1	0.92	0.14	47,47,47,47	0
58	MG	1a	1779	1/1	0.92	0.10	61,61,61,61	0
58	MG	1U	205	1/1	0.92	0.05	33,33,33,33	0
58	MG	2A	3267	1/1	0.92	0.12	52,52,52,52	0
58	MG	1A	3597	1/1	0.92	0.12	35,35,35,35	0
58	MG	2A	3567	1/1	0.92	0.12	61,61,61,61	0
58	MG	1A	3814	1/1	0.92	0.16	51,51,51,51	0
58	MG	1W	202	1/1	0.92	0.19	41,41,41,41	0
58	MG	2A	3585	1/1	0.92	0.10	55,55,55,55	0
58	MG	1A	3603	1/1	0.92	0.20	53,53,53,53	0
58	MG	2a	1617	1/1	0.92	0.28	57,57,57,57	0
58	MG	1A	3364	1/1	0.92	0.10	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3597	1/1	0.92	0.10	61,61,61,61	0
58	MG	2A	3598	1/1	0.92	0.18	65,65,65,65	0
58	MG	1a	1807	1/1	0.92	0.19	57,57,57,57	0
58	MG	2a	1624	1/1	0.92	0.16	66,66,66,66	0
58	MG	2A	3604	1/1	0.92	0.17	54,54,54,54	0
58	MG	2A	3280	1/1	0.92	0.16	59,59,59,59	0
58	MG	1A	3832	1/1	0.92	0.15	46,46,46,46	0
58	MG	1a	1810	1/1	0.92	0.12	58,58,58,58	0
58	MG	1a	1813	1/1	0.92	0.17	53,53,53,53	0
58	MG	10	106	1/1	0.92	0.12	57,57,57,57	0
58	MG	2A	3610	1/1	0.92	0.10	49,49,49,49	0
58	MG	1A	3365	1/1	0.92	0.21	60,60,60,60	0
58	MG	2a	1637	1/1	0.92	0.22	48,48,48,48	0
58	MG	1A	3497	1/1	0.92	0.13	56,56,56,56	0
58	MG	2A	3624	1/1	0.92	0.12	39,39,39,39	0
58	MG	1A	3640	1/1	0.92	0.11	44,44,44,44	0
58	MG	12	101	1/1	0.92	0.12	48,48,48,48	0
58	MG	2A	3298	1/1	0.92	0.26	56,56,56,56	0
58	MG	1A	4029	1/1	0.92	0.07	39,39,39,39	0
58	MG	2a	1649	1/1	0.92	0.20	61,61,61,61	0
58	MG	1A	3367	1/1	0.92	0.17	58,58,58,58	0
58	MG	16	101	1/1	0.92	0.16	51,51,51,51	0
58	MG	1A	3649	1/1	0.92	0.09	65,65,65,65	0
58	MG	1A	3501	1/1	0.92	0.11	50,50,50,50	0
58	MG	1A	3145	1/1	0.92	0.10	40,40,40,40	0
58	MG	1x	104	1/1	0.92	0.10	50,50,50,50	0
58	MG	1A	3661	1/1	0.92	0.12	44,44,44,44	0
58	MG	2A	3316	1/1	0.92	0.12	61,61,61,61	0
58	MG	2A	3317	1/1	0.92	0.11	51,51,51,51	0
58	MG	1x	107	1/1	0.92	0.13	56,56,56,56	0
58	MG	2a	1665	1/1	0.92	0.15	61,61,61,61	0
58	MG	2a	1666	1/1	0.92	0.13	59,59,59,59	0
58	MG	2A	3666	1/1	0.92	0.13	49,49,49,49	0
58	MG	2A	3320	1/1	0.92	0.11	64,64,64,64	0
58	MG	2a	1672	1/1	0.92	0.17	57,57,57,57	0
58	MG	2a	1673	1/1	0.92	0.21	57,57,57,57	0
58	MG	2A	3322	1/1	0.92	0.11	53,53,53,53	0
58	MG	1A	3432	1/1	0.92	0.20	54,54,54,54	0
58	MG	2a	1685	1/1	0.92	0.10	49,49,49,49	0
58	MG	1A	3165	1/1	0.92	0.20	48,48,48,48	0
58	MG	2A	3006	1/1	0.92	0.22	58,58,58,58	0
58	MG	2a	1696	1/1	0.92	0.30	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3329	1/1	0.92	0.18	51,51,51,51	0
58	MG	2A	3012	1/1	0.92	0.08	40,40,40,40	0
58	MG	1A	3853	1/1	0.92	0.11	37,37,37,37	0
58	MG	2a	1702	1/1	0.92	0.19	68,68,68,68	0
58	MG	2A	3019	1/1	0.92	0.09	43,43,43,43	0
58	MG	1a	1618	1/1	0.92	0.07	44,44,44,44	0
58	MG	1a	1626	1/1	0.92	0.19	50,50,50,50	0
58	MG	1A	3854	1/1	0.92	0.08	43,43,43,43	0
58	MG	2A	3036	1/1	0.92	0.15	61,61,61,61	0
58	MG	1A	3669	1/1	0.92	0.08	41,41,41,41	0
58	MG	2a	1715	1/1	0.92	0.30	60,60,60,60	0
58	MG	2a	1717	1/1	0.92	0.14	54,54,54,54	0
58	MG	1A	3251	1/1	0.92	0.12	44,44,44,44	0
58	MG	2A	3043	1/1	0.92	0.10	60,60,60,60	0
58	MG	1a	1643	1/1	0.92	0.12	63,63,63,63	0
58	MG	1A	3865	1/1	0.92	0.10	46,46,46,46	0
58	MG	2a	1723	1/1	0.92	0.22	57,57,57,57	0
58	MG	2A	3052	1/1	0.92	0.14	64,64,64,64	0
58	MG	1A	4052	1/1	0.92	0.06	42,42,42,42	0
58	MG	1a	1654	1/1	0.92	0.08	44,44,44,44	0
58	MG	2a	1730	1/1	0.92	0.18	61,61,61,61	0
58	MG	1a	1656	1/1	0.92	0.26	55,55,55,55	0
58	MG	2A	3716	1/1	0.92	0.11	43,43,43,43	0
58	MG	1A	3868	1/1	0.92	0.14	46,46,46,46	0
58	MG	2a	1740	1/1	0.92	0.17	52,52,52,52	0
58	MG	1a	1659	1/1	0.92	0.12	49,49,49,49	0
58	MG	2a	1743	1/1	0.92	0.32	60,60,60,60	0
58	MG	2A	3066	1/1	0.92	0.23	52,52,52,52	0
58	MG	1A	3318	1/1	0.92	0.14	47,47,47,47	0
58	MG	2A	3727	1/1	0.92	0.10	42,42,42,42	0
58	MG	1A	3092	1/1	0.92	0.10	37,37,37,37	0
58	MG	2A	3734	1/1	0.92	0.10	61,61,61,61	0
58	MG	2A	3366	1/1	0.92	0.11	57,57,57,57	0
58	MG	2A	3367	1/1	0.92	0.29	46,46,46,46	0
58	MG	2A	3740	1/1	0.92	0.10	42,42,42,42	0
58	MG	1A	3455	1/1	0.92	0.13	38,38,38,38	0
58	MG	1a	1663	1/1	0.92	0.13	51,51,51,51	0
58	MG	2A	3080	1/1	0.92	0.09	41,41,41,41	0
58	MG	2a	1788	1/1	0.92	0.11	50,50,50,50	0
58	MG	1A	3886	1/1	0.92	0.10	34,34,34,34	0
58	MG	1A	3519	1/1	0.92	0.15	56,56,56,56	0
58	MG	1A	3456	1/1	0.92	0.10	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3095	1/1	0.92	0.09	47,47,47,47	0
58	MG	1A	3902	1/1	0.92	0.08	30,30,30,30	0
58	MG	2A	3384	1/1	0.92	0.13	52,52,52,52	0
58	MG	2a	1798	1/1	0.92	0.09	58,58,58,58	0
58	MG	1A	3461	1/1	0.92	0.12	54,54,54,54	0
58	MG	1A	3462	1/1	0.92	0.18	39,39,39,39	0
58	MG	1a	1676	1/1	0.92	0.17	56,56,56,56	0
58	MG	1A	3464	1/1	0.92	0.09	51,51,51,51	0
58	MG	1A	3912	1/1	0.92	0.10	54,54,54,54	0
58	MG	1a	1679	1/1	0.92	0.11	52,52,52,52	0
58	MG	1A	3726	1/1	0.92	0.14	38,38,38,38	0
58	MG	2A	3124	1/1	0.92	0.15	50,50,50,50	0
58	MG	2A	3777	1/1	0.92	0.12	36,36,36,36	0
58	MG	1A	3536	1/1	0.92	0.14	44,44,44,44	0
58	MG	1A	3923	1/1	0.92	0.13	41,41,41,41	0
58	MG	1A	4101	1/1	0.92	0.11	48,48,48,48	0
58	MG	2A	3401	1/1	0.92	0.08	64,64,64,64	0
58	MG	2A	3152	1/1	0.92	0.21	51,51,51,51	0
58	MG	1a	1687	1/1	0.92	0.09	55,55,55,55	0
58	MG	2A	3161	1/1	0.92	0.23	67,67,67,67	0
58	MG	1A	3925	1/1	0.92	0.07	27,27,27,27	0
58	MG	1A	3338	1/1	0.92	0.10	45,45,45,45	0
58	MG	2a	1828	1/1	0.92	0.12	54,54,54,54	0
58	MG	1A	3473	1/1	0.92	0.10	60,60,60,60	0
58	MG	1a	1694	1/1	0.92	0.24	53,53,53,53	0
58	MG	2A	3814	1/1	0.92	0.10	57,57,57,57	0
58	MG	1a	1695	1/1	0.92	0.25	54,54,54,54	0
58	MG	2A	3417	1/1	0.92	0.23	44,44,44,44	0
58	MG	2f	202	1/1	0.92	0.13	65,65,65,65	0
58	MG	2A	3817	1/1	0.92	0.10	54,54,54,54	0
58	MG	1A	3067	1/1	0.92	0.08	39,39,39,39	0
58	MG	1A	3548	1/1	0.92	0.20	41,41,41,41	0
58	MG	2A	3180	1/1	0.92	0.14	53,53,53,53	0
58	MG	1B	212	1/1	0.92	0.08	46,46,46,46	0
58	MG	2A	3189	1/1	0.92	0.09	62,62,62,62	0
58	MG	1A	3027	1/1	0.92	0.16	51,51,51,51	0
58	MG	1a	1707	1/1	0.92	0.10	50,50,50,50	0
58	MG	2A	3440	1/1	0.92	0.14	59,59,59,59	0
58	MG	2A	3851	1/1	0.92	0.08	53,53,53,53	0
58	MG	1A	3745	1/1	0.92	0.10	56,56,56,56	0
58	MG	1A	3208	1/1	0.92	0.21	45,45,45,45	0
58	MG	2w	106	1/1	0.92	0.15	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3967	1/1	0.92	0.09	48,48,48,48	0
58	MG	1a	1718	1/1	0.92	0.19	65,65,65,65	0
58	MG	1A	3971	1/1	0.92	0.11	40,40,40,40	0
58	MG	2A	3452	1/1	0.92	0.12	50,50,50,50	0
58	MG	2x	103	1/1	0.92	0.16	55,55,55,55	0
58	MG	2x	106	1/1	0.92	0.28	64,64,64,64	0
58	MG	1A	3977	1/1	0.92	0.10	62,62,62,62	0
58	MG	1B	224	1/1	0.92	0.12	49,49,49,49	0
58	MG	1A	3758	1/1	0.92	0.12	31,31,31,31	0
58	MG	2A	3466	1/1	0.92	0.11	68,68,68,68	0
58	MG	1A	3763	1/1	0.92	0.12	38,38,38,38	0
58	MG	2A	3230	1/1	0.93	0.19	46,46,46,46	0
58	MG	2A	3234	1/1	0.93	0.12	57,57,57,57	0
58	MG	1A	3260	1/1	0.93	0.09	50,50,50,50	0
58	MG	2B	208	1/1	0.93	0.14	50,50,50,50	0
58	MG	2A	3485	1/1	0.93	0.27	65,65,65,65	0
58	MG	1A	3755	1/1	0.93	0.06	30,30,30,30	0
58	MG	1a	1611	1/1	0.93	0.10	51,51,51,51	0
58	MG	1A	4076	1/1	0.93	0.10	57,57,57,57	0
58	MG	2A	3246	1/1	0.93	0.09	49,49,49,49	0
58	MG	1a	1812	1/1	0.93	0.11	58,58,58,58	0
58	MG	1a	1621	1/1	0.93	0.26	55,55,55,55	0
58	MG	1A	4079	1/1	0.93	0.09	44,44,44,44	0
58	MG	1a	1627	1/1	0.93	0.16	36,36,36,36	0
58	MG	1f	202	1/1	0.93	0.23	50,50,50,50	0
58	MG	1A	3756	1/1	0.93	0.09	55,55,55,55	0
58	MG	2A	3511	1/1	0.93	0.10	63,63,63,63	0
58	MG	1A	3186	1/1	0.93	0.19	64,64,64,64	0
58	MG	2A	3513	1/1	0.93	0.07	44,44,44,44	0
58	MG	1a	1635	1/1	0.93	0.12	49,49,49,49	0
58	MG	2A	3516	1/1	0.93	0.14	57,57,57,57	0
58	MG	2A	3256	1/1	0.93	0.17	51,51,51,51	0
58	MG	1a	1637	1/1	0.93	0.17	54,54,54,54	0
58	MG	2A	3533	1/1	0.93	0.09	32,32,32,32	0
58	MG	1A	4086	1/1	0.93	0.10	21,21,21,21	0
58	MG	2A	3262	1/1	0.93	0.10	53,53,53,53	0
58	MG	1A	3762	1/1	0.93	0.09	43,43,43,43	0
58	MG	1a	1644	1/1	0.93	0.14	54,54,54,54	0
58	MG	1A	3928	1/1	0.93	0.08	41,41,41,41	0
58	MG	1A	3267	1/1	0.93	0.12	59,59,59,59	0
58	MG	1A	3421	1/1	0.93	0.16	34,34,34,34	0
58	MG	2W	201	1/1	0.93	0.09	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2X	101	1/1	0.93	0.11	56,56,56,56	0
58	MG	1A	3194	1/1	0.93	0.11	47,47,47,47	0
58	MG	1A	3945	1/1	0.93	0.09	52,52,52,52	0
58	MG	1x	109	1/1	0.93	0.06	63,63,63,63	0
58	MG	1A	3950	1/1	0.93	0.10	55,55,55,55	0
58	MG	2A	3577	1/1	0.93	0.10	60,60,60,60	0
58	MG	28	101	1/1	0.93	0.22	61,61,61,61	0
58	MG	28	104	1/1	0.93	0.24	53,53,53,53	0
58	MG	1A	3777	1/1	0.93	0.07	53,53,53,53	0
58	MG	2A	3286	1/1	0.93	0.20	56,56,56,56	0
58	MG	2A	3581	1/1	0.93	0.12	40,40,40,40	0
58	MG	2a	1605	1/1	0.93	0.23	50,50,50,50	0
58	MG	2A	3584	1/1	0.93	0.11	48,48,48,48	0
58	MG	2A	3003	1/1	0.93	0.21	47,47,47,47	0
58	MG	1A	3598	1/1	0.93	0.22	49,49,49,49	0
58	MG	2A	3590	1/1	0.93	0.11	44,44,44,44	0
58	MG	1A	3602	1/1	0.93	0.22	58,58,58,58	0
58	MG	2A	3292	1/1	0.93	0.20	49,49,49,49	0
58	MG	1A	3965	1/1	0.93	0.07	40,40,40,40	0
58	MG	1a	1664	1/1	0.93	0.10	60,60,60,60	0
58	MG	2A	3022	1/1	0.93	0.13	42,42,42,42	0
58	MG	1A	3801	1/1	0.93	0.11	26,26,26,26	0
58	MG	2a	1619	1/1	0.93	0.16	58,58,58,58	0
58	MG	1A	3125	1/1	0.93	0.23	50,50,50,50	0
58	MG	1A	3016	1/1	0.93	0.19	56,56,56,56	0
58	MG	1A	3979	1/1	0.93	0.12	71,71,71,71	0
58	MG	2A	3305	1/1	0.93	0.09	48,48,48,48	0
58	MG	2A	3037	1/1	0.93	0.14	48,48,48,48	0
58	MG	1A	3041	1/1	0.93	0.15	55,55,55,55	0
58	MG	2A	3617	1/1	0.93	0.10	64,64,64,64	0
58	MG	1A	3503	1/1	0.93	0.21	60,60,60,60	0
58	MG	2A	3620	1/1	0.93	0.09	39,39,39,39	0
58	MG	2A	3042	1/1	0.93	0.18	50,50,50,50	0
58	MG	1A	3096	1/1	0.93	0.11	48,48,48,48	0
58	MG	2a	1635	1/1	0.93	0.24	70,70,70,70	0
58	MG	1A	3819	1/1	0.93	0.16	63,63,63,63	0
58	MG	1A	3987	1/1	0.93	0.14	53,53,53,53	0
58	MG	2a	1638	1/1	0.93	0.26	46,46,46,46	0
58	MG	1A	3443	1/1	0.93	0.16	38,38,38,38	0
58	MG	2A	3319	1/1	0.93	0.13	62,62,62,62	0
58	MG	1A	3444	1/1	0.93	0.14	42,42,42,42	0
58	MG	2A	3645	1/1	0.93	0.10	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3321	1/1	0.93	0.09	62,62,62,62	0
58	MG	1A	3366	1/1	0.93	0.15	42,42,42,42	0
58	MG	2A	3324	1/1	0.93	0.20	55,55,55,55	0
58	MG	1A	3173	1/1	0.93	0.23	50,50,50,50	0
58	MG	1A	3248	1/1	0.93	0.11	46,46,46,46	0
58	MG	2A	3654	1/1	0.93	0.23	57,57,57,57	0
58	MG	1A	3304	1/1	0.93	0.31	58,58,58,58	0
58	MG	2A	3657	1/1	0.93	0.11	51,51,51,51	0
58	MG	2A	3658	1/1	0.93	0.14	48,48,48,48	0
58	MG	1A	3309	1/1	0.93	0.31	48,48,48,48	0
58	MG	2A	3662	1/1	0.93	0.15	55,55,55,55	0
58	MG	2a	1659	1/1	0.93	0.12	74,74,74,74	0
58	MG	2A	3067	1/1	0.93	0.20	49,49,49,49	0
58	MG	2a	1661	1/1	0.93	0.13	60,60,60,60	0
58	MG	2a	1662	1/1	0.93	0.23	69,69,69,69	0
58	MG	2A	3332	1/1	0.93	0.16	61,61,61,61	0
58	MG	1A	3522	1/1	0.93	0.22	35,35,35,35	0
58	MG	1A	3459	1/1	0.93	0.13	54,54,54,54	0
58	MG	2a	1667	1/1	0.93	0.11	64,64,64,64	0
58	MG	2A	3673	1/1	0.93	0.09	48,48,48,48	0
58	MG	2A	3674	1/1	0.93	0.11	49,49,49,49	0
58	MG	1A	3066	1/1	0.93	0.10	35,35,35,35	0
58	MG	2A	3677	1/1	0.93	0.17	56,56,56,56	0
58	MG	1a	1693	1/1	0.93	0.28	46,46,46,46	0
58	MG	2a	1680	1/1	0.93	0.20	54,54,54,54	0
58	MG	2a	1682	1/1	0.93	0.20	55,55,55,55	0
58	MG	1B	239	1/1	0.93	0.08	38,38,38,38	0
58	MG	2A	3341	1/1	0.93	0.28	68,68,68,68	0
58	MG	2A	3082	1/1	0.93	0.16	51,51,51,51	0
58	MG	1D	302	1/1	0.93	0.18	51,51,51,51	0
58	MG	1A	3387	1/1	0.93	0.09	53,53,53,53	0
58	MG	2A	3687	1/1	0.93	0.08	54,54,54,54	0
58	MG	2A	3091	1/1	0.93	0.12	53,53,53,53	0
58	MG	1D	313	1/1	0.93	0.16	31,31,31,31	0
58	MG	1a	1700	1/1	0.93	0.29	57,57,57,57	0
58	MG	2A	3697	1/1	0.93	0.14	44,44,44,44	0
58	MG	1A	3531	1/1	0.93	0.13	72,72,72,72	0
58	MG	1a	1704	1/1	0.93	0.15	55,55,55,55	0
58	MG	1E	309	1/1	0.93	0.06	24,24,24,24	0
58	MG	1A	3315	1/1	0.93	0.11	53,53,53,53	0
58	MG	1F	304	1/1	0.93	0.09	54,54,54,54	0
58	MG	2a	1711	1/1	0.93	0.09	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3357	1/1	0.93	0.14	51,51,51,51	0
58	MG	2A	3109	1/1	0.93	0.07	63,63,63,63	0
58	MG	2A	3708	1/1	0.93	0.08	60,60,60,60	0
58	MG	1a	1711	1/1	0.93	0.13	42,42,42,42	0
58	MG	2A	3363	1/1	0.93	0.18	63,63,63,63	0
58	MG	1F	311	1/1	0.93	0.18	29,29,29,29	0
58	MG	1A	3707	1/1	0.93	0.06	22,22,22,22	0
58	MG	2A	3114	1/1	0.93	0.20	51,51,51,51	0
58	MG	2A	3722	1/1	0.93	0.09	44,44,44,44	0
58	MG	2A	3121	1/1	0.93	0.10	58,58,58,58	0
58	MG	2A	3368	1/1	0.93	0.30	62,62,62,62	0
58	MG	2A	3122	1/1	0.93	0.11	49,49,49,49	0
58	MG	1G	204	1/1	0.93	0.07	53,53,53,53	0
58	MG	2a	1736	1/1	0.93	0.24	47,47,47,47	0
58	MG	2A	3127	1/1	0.93	0.15	50,50,50,50	0
58	MG	1A	3087	1/1	0.93	0.21	38,38,38,38	0
58	MG	1N	202	1/1	0.93	0.12	41,41,41,41	0
58	MG	2A	3139	1/1	0.93	0.16	48,48,48,48	0
58	MG	2A	3378	1/1	0.93	0.13	45,45,45,45	0
58	MG	2A	3379	1/1	0.93	0.10	48,48,48,48	0
58	MG	2A	3742	1/1	0.93	0.16	66,66,66,66	0
58	MG	1N	205	1/1	0.93	0.12	45,45,45,45	0
58	MG	2A	3744	1/1	0.93	0.10	48,48,48,48	0
58	MG	2a	1753	1/1	0.93	0.07	75,75,75,75	0
58	MG	2a	1754	1/1	0.93	0.09	62,62,62,62	0
58	MG	2A	3151	1/1	0.93	0.18	50,50,50,50	0
58	MG	1O	201	1/1	0.93	0.15	63,63,63,63	0
58	MG	2a	1770	1/1	0.93	0.07	50,50,50,50	0
58	MG	2a	1773	1/1	0.93	0.08	63,63,63,63	0
58	MG	2a	1775	1/1	0.93	0.09	59,59,59,59	0
58	MG	1O	204	1/1	0.93	0.07	44,44,44,44	0
58	MG	2A	3154	1/1	0.93	0.11	44,44,44,44	0
58	MG	1A	3711	1/1	0.93	0.08	21,21,21,21	0
58	MG	2a	1782	1/1	0.93	0.12	56,56,56,56	0
58	MG	2a	1785	1/1	0.93	0.15	40,40,40,40	0
58	MG	1A	3320	1/1	0.93	0.07	32,32,32,32	0
58	MG	2A	3757	1/1	0.93	0.10	64,64,64,64	0
58	MG	1A	3863	1/1	0.93	0.09	50,50,50,50	0
58	MG	2A	3166	1/1	0.93	0.24	52,52,52,52	0
58	MG	2A	3764	1/1	0.93	0.32	43,43,43,43	0
58	MG	2A	3167	1/1	0.93	0.14	41,41,41,41	0
58	MG	1a	1736	1/1	0.93	0.12	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3542	1/1	0.93	0.20	45,45,45,45	0
58	MG	1A	3544	1/1	0.93	0.14	36,36,36,36	0
58	MG	2A	3174	1/1	0.93	0.18	52,52,52,52	0
58	MG	1A	3253	1/1	0.93	0.17	47,47,47,47	0
58	MG	2a	1806	1/1	0.93	0.09	45,45,45,45	0
58	MG	1A	3723	1/1	0.93	0.12	58,58,58,58	0
58	MG	1A	3477	1/1	0.93	0.09	42,42,42,42	0
58	MG	2A	3183	1/1	0.93	0.12	45,45,45,45	0
58	MG	2A	3785	1/1	0.93	0.10	73,73,73,73	0
58	MG	1A	3122	1/1	0.93	0.09	33,33,33,33	0
58	MG	2A	3795	1/1	0.93	0.09	45,45,45,45	0
58	MG	2A	3796	1/1	0.93	0.12	56,56,56,56	0
58	MG	2A	3187	1/1	0.93	0.24	63,63,63,63	0
58	MG	1A	3889	1/1	0.93	0.08	18,18,18,18	0
58	MG	1a	1751	1/1	0.93	0.07	54,54,54,54	0
58	MG	1a	1754	1/1	0.93	0.18	49,49,49,49	0
58	MG	2A	3806	1/1	0.93	0.13	47,47,47,47	0
58	MG	2A	3416	1/1	0.93	0.22	51,51,51,51	0
58	MG	1Z	3701	1/1	0.93	0.05	56,56,56,56	0
58	MG	1A	4044	1/1	0.93	0.06	24,24,24,24	0
58	MG	2A	3421	1/1	0.93	0.15	39,39,39,39	0
58	MG	1a	1758	1/1	0.93	0.17	57,57,57,57	0
58	MG	2a	1829	1/1	0.93	0.14	55,55,55,55	0
58	MG	2A	3427	1/1	0.93	0.23	46,46,46,46	0
58	MG	2A	3429	1/1	0.93	0.26	59,59,59,59	0
58	MG	2A	3430	1/1	0.93	0.25	53,53,53,53	0
58	MG	1A	3551	1/1	0.93	0.19	49,49,49,49	0
58	MG	1A	3335	1/1	0.93	0.06	49,49,49,49	0
58	MG	2e	201	1/1	0.93	0.05	69,69,69,69	0
58	MG	11	101	1/1	0.93	0.32	34,34,34,34	0
58	MG	1A	3732	1/1	0.93	0.14	44,44,44,44	0
58	MG	2A	3838	1/1	0.93	0.07	53,53,53,53	0
58	MG	2A	3206	1/1	0.93	0.20	61,61,61,61	0
58	MG	11	106	1/1	0.93	0.10	49,49,49,49	0
58	MG	1a	1771	1/1	0.93	0.11	58,58,58,58	0
58	MG	2q	201	1/1	0.93	0.35	71,71,71,71	0
58	MG	2A	3444	1/1	0.93	0.08	52,52,52,52	0
58	MG	2t	201	1/1	0.93	0.18	47,47,47,47	0
58	MG	1A	3735	1/1	0.93	0.07	44,44,44,44	0
58	MG	1A	3257	1/1	0.93	0.09	53,53,53,53	0
58	MG	1A	4054	1/1	0.93	0.07	45,45,45,45	0
58	MG	1A	4058	1/1	0.93	0.07	12,12,12,12	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3860	1/1	0.93	0.09	36,36,36,36	0
58	MG	1A	4062	1/1	0.93	0.09	50,50,50,50	0
58	MG	2A	3870	1/1	0.93	0.13	59,59,59,59	0
58	MG	1A	3339	1/1	0.93	0.15	42,42,42,42	0
58	MG	2A	3872	1/1	0.93	0.11	64,64,64,64	0
58	MG	1A	4064	1/1	0.93	0.17	51,51,51,51	0
58	MG	1A	3483	1/1	0.93	0.18	41,41,41,41	0
58	MG	2A	3463	1/1	0.93	0.07	52,52,52,52	0
58	MG	2x	105	1/1	0.93	0.08	50,50,50,50	0
58	MG	1A	3558	1/1	0.93	0.08	69,69,69,69	0
58	MG	2A	3226	1/1	0.93	0.13	58,58,58,58	0
58	MG	1a	1796	1/1	0.93	0.10	54,54,54,54	0
58	MG	2B	201	1/1	0.93	0.14	58,58,58,58	0
58	MG	2A	3476	1/1	0.93	0.09	60,60,60,60	0
58	MG	1a	1797	1/1	0.93	0.07	69,69,69,69	0
58	MG	1A	3103	1/1	0.94	0.24	57,57,57,57	0
58	MG	1A	4049	1/1	0.94	0.09	26,26,26,26	0
58	MG	2A	3232	1/1	0.94	0.18	44,44,44,44	0
58	MG	1A	3878	1/1	0.94	0.10	29,29,29,29	0
58	MG	2A	3235	1/1	0.94	0.12	49,49,49,49	0
58	MG	2A	3236	1/1	0.94	0.26	60,60,60,60	0
58	MG	1A	3332	1/1	0.94	0.28	56,56,56,56	0
58	MG	1A	3718	1/1	0.94	0.09	65,65,65,65	0
58	MG	2A	3242	1/1	0.94	0.10	48,48,48,48	0
58	MG	1a	1809	1/1	0.94	0.18	48,48,48,48	0
58	MG	2B	213	1/1	0.94	0.17	48,48,48,48	0
58	MG	1A	4057	1/1	0.94	0.11	59,59,59,59	0
58	MG	1A	3888	1/1	0.94	0.09	44,44,44,44	0
58	MG	2A	3506	1/1	0.94	0.11	42,42,42,42	0
58	MG	2A	3508	1/1	0.94	0.10	50,50,50,50	0
58	MG	2A	3247	1/1	0.94	0.20	55,55,55,55	0
58	MG	1A	3550	1/1	0.94	0.18	43,43,43,43	0
58	MG	1A	3891	1/1	0.94	0.08	28,28,28,28	0
58	MG	1a	1614	1/1	0.94	0.10	48,48,48,48	0
58	MG	1A	3149	1/1	0.94	0.24	36,36,36,36	0
58	MG	2A	3515	1/1	0.94	0.21	47,47,47,47	0
58	MG	1a	1619	1/1	0.94	0.09	46,46,46,46	0
58	MG	1A	3265	1/1	0.94	0.10	45,45,45,45	0
58	MG	2E	308	1/1	0.94	0.14	61,61,61,61	0
58	MG	2A	3526	1/1	0.94	0.10	55,55,55,55	0
58	MG	1a	1622	1/1	0.94	0.09	47,47,47,47	0
58	MG	2A	3529	1/1	0.94	0.06	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3532	1/1	0.94	0.09	50,50,50,50	0
58	MG	1a	1624	1/1	0.94	0.20	51,51,51,51	0
58	MG	1a	1625	1/1	0.94	0.14	54,54,54,54	0
58	MG	1A	3898	1/1	0.94	0.09	24,24,24,24	0
58	MG	1w	105	1/1	0.94	0.09	54,54,54,54	0
58	MG	2A	3261	1/1	0.94	0.18	54,54,54,54	0
58	MG	2R	202	1/1	0.94	0.09	45,45,45,45	0
58	MG	1A	3900	1/1	0.94	0.07	15,15,15,15	0
58	MG	2T	203	1/1	0.94	0.18	55,55,55,55	0
58	MG	2A	3264	1/1	0.94	0.40	64,64,64,64	0
58	MG	1a	1628	1/1	0.94	0.09	48,48,48,48	0
58	MG	2A	3551	1/1	0.94	0.09	40,40,40,40	0
58	MG	1A	3553	1/1	0.94	0.28	54,54,54,54	0
58	MG	2A	3270	1/1	0.94	0.10	56,56,56,56	0
58	MG	2A	3271	1/1	0.94	0.06	56,56,56,56	0
58	MG	1a	1631	1/1	0.94	0.28	53,53,53,53	0
58	MG	25	101	1/1	0.94	0.09	46,46,46,46	0
58	MG	2A	3575	1/1	0.94	0.07	30,30,30,30	0
58	MG	1A	3266	1/1	0.94	0.09	47,47,47,47	0
58	MG	1x	106	1/1	0.94	0.15	51,51,51,51	0
58	MG	2A	3276	1/1	0.94	0.13	42,42,42,42	0
58	MG	1A	3153	1/1	0.94	0.15	42,42,42,42	0
58	MG	1a	1636	1/1	0.94	0.08	39,39,39,39	0
58	MG	1A	3486	1/1	0.94	0.07	34,34,34,34	0
58	MG	1A	3733	1/1	0.94	0.11	57,57,57,57	0
58	MG	2A	3588	1/1	0.94	0.11	44,44,44,44	0
58	MG	1a	1639	1/1	0.94	0.14	45,45,45,45	0
58	MG	2A	3285	1/1	0.94	0.11	42,42,42,42	0
58	MG	1a	1640	1/1	0.94	0.15	53,53,53,53	0
58	MG	2A	3287	1/1	0.94	0.09	55,55,55,55	0
58	MG	2a	1611	1/1	0.94	0.22	56,56,56,56	0
58	MG	2A	3007	1/1	0.94	0.10	49,49,49,49	0
58	MG	2a	1613	1/1	0.94	0.26	59,59,59,59	0
58	MG	2A	3011	1/1	0.94	0.17	47,47,47,47	0
58	MG	1a	1641	1/1	0.94	0.22	54,54,54,54	0
58	MG	1A	3268	1/1	0.94	0.12	46,46,46,46	0
58	MG	1A	3568	1/1	0.94	0.16	37,37,37,37	0
58	MG	1A	3493	1/1	0.94	0.07	39,39,39,39	0
58	MG	1A	3159	1/1	0.94	0.07	48,48,48,48	0
58	MG	2A	3296	1/1	0.94	0.08	52,52,52,52	0
58	MG	2a	1622	1/1	0.94	0.11	71,71,71,71	0
58	MG	2A	3611	1/1	0.94	0.16	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1653	1/1	0.94	0.09	45,45,45,45	0
58	MG	2A	3614	1/1	0.94	0.10	37,37,37,37	0
58	MG	2A	3615	1/1	0.94	0.11	58,58,58,58	0
58	MG	2A	3616	1/1	0.94	0.15	53,53,53,53	0
58	MG	1A	3422	1/1	0.94	0.16	53,53,53,53	0
58	MG	2A	3031	1/1	0.94	0.10	57,57,57,57	0
58	MG	2A	3301	1/1	0.94	0.15	56,56,56,56	0
58	MG	2A	3622	1/1	0.94	0.14	38,38,38,38	0
58	MG	1a	1655	1/1	0.94	0.22	50,50,50,50	0
58	MG	1A	3751	1/1	0.94	0.18	52,52,52,52	0
58	MG	1A	3927	1/1	0.94	0.08	37,37,37,37	0
58	MG	2A	3308	1/1	0.94	0.13	61,61,61,61	0
58	MG	1A	3345	1/1	0.94	0.14	53,53,53,53	0
58	MG	2A	3631	1/1	0.94	0.17	51,51,51,51	0
58	MG	2a	1643	1/1	0.94	0.19	55,55,55,55	0
58	MG	1A	3093	1/1	0.94	0.08	50,50,50,50	0
58	MG	2A	3312	1/1	0.94	0.13	59,59,59,59	0
58	MG	2a	1646	1/1	0.94	0.13	57,57,57,57	0
58	MG	1A	3169	1/1	0.94	0.20	35,35,35,35	0
58	MG	1A	3935	1/1	0.94	0.08	42,42,42,42	0
58	MG	2A	3648	1/1	0.94	0.11	41,41,41,41	0
58	MG	1A	3233	1/1	0.94	0.12	43,43,43,43	0
58	MG	2A	3650	1/1	0.94	0.10	36,36,36,36	0
58	MG	1A	3358	1/1	0.94	0.10	54,54,54,54	0
58	MG	2A	3053	1/1	0.94	0.10	50,50,50,50	0
58	MG	2A	3054	1/1	0.94	0.09	57,57,57,57	0
58	MG	1a	1665	1/1	0.94	0.13	50,50,50,50	0
58	MG	1A	4107	1/1	0.94	0.21	55,55,55,55	0
58	MG	1A	3605	1/1	0.94	0.16	35,35,35,35	0
58	MG	2A	3060	1/1	0.94	0.18	54,54,54,54	0
58	MG	1B	204	1/1	0.94	0.10	44,44,44,44	0
58	MG	1B	207	1/1	0.94	0.23	46,46,46,46	0
58	MG	2A	3663	1/1	0.94	0.09	54,54,54,54	0
58	MG	2a	1663	1/1	0.94	0.06	57,57,57,57	0
58	MG	1a	1672	1/1	0.94	0.21	48,48,48,48	0
58	MG	2A	3665	1/1	0.94	0.07	48,48,48,48	0
58	MG	1A	3952	1/1	0.94	0.05	42,42,42,42	0
58	MG	1A	3608	1/1	0.94	0.08	39,39,39,39	0
58	MG	1A	3611	1/1	0.94	0.10	49,49,49,49	0
58	MG	1A	3956	1/1	0.94	0.12	57,57,57,57	0
58	MG	1A	3957	1/1	0.94	0.06	51,51,51,51	0
58	MG	2A	3336	1/1	0.94	0.11	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3079	1/1	0.94	0.08	39,39,39,39	0
58	MG	1A	3772	1/1	0.94	0.11	27,27,27,27	0
58	MG	2a	1681	1/1	0.94	0.14	53,53,53,53	0
58	MG	1A	3962	1/1	0.94	0.10	46,46,46,46	0
58	MG	1B	218	1/1	0.94	0.09	51,51,51,51	0
58	MG	2A	3088	1/1	0.94	0.14	50,50,50,50	0
58	MG	2A	3684	1/1	0.94	0.13	48,48,48,48	0
58	MG	1A	3775	1/1	0.94	0.05	25,25,25,25	0
58	MG	2a	1690	1/1	0.94	0.14	55,55,55,55	0
58	MG	2a	1692	1/1	0.94	0.20	40,40,40,40	0
58	MG	1a	1684	1/1	0.94	0.23	50,50,50,50	0
58	MG	1A	3966	1/1	0.94	0.07	24,24,24,24	0
58	MG	2A	3346	1/1	0.94	0.12	66,66,66,66	0
58	MG	1A	3276	1/1	0.94	0.07	34,34,34,34	0
58	MG	1A	3787	1/1	0.94	0.12	48,48,48,48	0
58	MG	2A	3696	1/1	0.94	0.08	40,40,40,40	0
58	MG	2A	3097	1/1	0.94	0.14	58,58,58,58	0
58	MG	2a	1705	1/1	0.94	0.17	48,48,48,48	0
58	MG	1B	227	1/1	0.94	0.07	47,47,47,47	0
58	MG	1B	228	1/1	0.94	0.09	42,42,42,42	0
58	MG	1A	3973	1/1	0.94	0.13	48,48,48,48	0
58	MG	1A	3361	1/1	0.94	0.17	63,63,63,63	0
58	MG	2A	3356	1/1	0.94	0.10	56,56,56,56	0
58	MG	2A	3105	1/1	0.94	0.18	60,60,60,60	0
58	MG	1A	3978	1/1	0.94	0.09	57,57,57,57	0
58	MG	1A	3298	1/1	0.94	0.15	41,41,41,41	0
58	MG	2a	1719	1/1	0.94	0.14	59,59,59,59	0
58	MG	1B	234	1/1	0.94	0.10	58,58,58,58	0
58	MG	2A	3712	1/1	0.94	0.07	27,27,27,27	0
58	MG	1A	3626	1/1	0.94	0.10	54,54,54,54	0
58	MG	1A	3170	1/1	0.94	0.14	50,50,50,50	0
58	MG	2A	3115	1/1	0.94	0.21	54,54,54,54	0
58	MG	1a	1702	1/1	0.94	0.10	47,47,47,47	0
58	MG	1A	3645	1/1	0.94	0.14	42,42,42,42	0
58	MG	2a	1729	1/1	0.94	0.13	50,50,50,50	0
58	MG	2A	3123	1/1	0.94	0.16	47,47,47,47	0
58	MG	2a	1733	1/1	0.94	0.17	58,58,58,58	0
58	MG	1A	3451	1/1	0.94	0.12	35,35,35,35	0
58	MG	1D	303	1/1	0.94	0.20	44,44,44,44	0
58	MG	2A	3129	1/1	0.94	0.12	45,45,45,45	0
58	MG	1A	3246	1/1	0.94	0.13	38,38,38,38	0
58	MG	1a	1708	1/1	0.94	0.19	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3813	1/1	0.94	0.09	45,45,45,45	0
58	MG	2A	3141	1/1	0.94	0.23	48,48,48,48	0
58	MG	2A	3142	1/1	0.94	0.14	40,40,40,40	0
58	MG	2A	3145	1/1	0.94	0.27	68,68,68,68	0
58	MG	1E	307	1/1	0.94	0.12	50,50,50,50	0
58	MG	2A	3147	1/1	0.94	0.12	44,44,44,44	0
58	MG	1A	3653	1/1	0.94	0.08	19,19,19,19	0
58	MG	1A	3818	1/1	0.94	0.16	62,62,62,62	0
58	MG	1A	3172	1/1	0.94	0.14	39,39,39,39	0
58	MG	1E	313	1/1	0.94	0.10	42,42,42,42	0
58	MG	2a	1757	1/1	0.94	0.10	56,56,56,56	0
58	MG	2A	3748	1/1	0.94	0.16	50,50,50,50	0
58	MG	2a	1762	1/1	0.94	0.08	63,63,63,63	0
58	MG	2a	1764	1/1	0.94	0.13	53,53,53,53	0
58	MG	2A	3156	1/1	0.94	0.21	51,51,51,51	0
58	MG	2a	1771	1/1	0.94	0.07	78,78,78,78	0
58	MG	2A	3750	1/1	0.94	0.09	64,64,64,64	0
58	MG	2A	3752	1/1	0.94	0.10	60,60,60,60	0
58	MG	2A	3160	1/1	0.94	0.07	51,51,51,51	0
58	MG	2A	3755	1/1	0.94	0.24	50,50,50,50	0
58	MG	2a	1779	1/1	0.94	0.15	62,62,62,62	0
58	MG	1A	3996	1/1	0.94	0.15	52,52,52,52	0
58	MG	1a	1721	1/1	0.94	0.12	48,48,48,48	0
58	MG	1F	310	1/1	0.94	0.11	55,55,55,55	0
58	MG	2A	3399	1/1	0.94	0.11	51,51,51,51	0
58	MG	2a	1787	1/1	0.94	0.15	57,57,57,57	0
58	MG	2A	3762	1/1	0.94	0.07	34,34,34,34	0
58	MG	2A	3763	1/1	0.94	0.16	55,55,55,55	0
58	MG	1A	3004	1/1	0.94	0.08	23,23,23,23	0
58	MG	1A	3827	1/1	0.94	0.08	22,22,22,22	0
58	MG	1A	4000	1/1	0.94	0.11	42,42,42,42	0
58	MG	1A	4002	1/1	0.94	0.09	49,49,49,49	0
58	MG	1A	3305	1/1	0.94	0.10	45,45,45,45	0
58	MG	1A	3524	1/1	0.94	0.16	39,39,39,39	0
58	MG	1A	3665	1/1	0.94	0.05	22,22,22,22	0
58	MG	2A	3176	1/1	0.94	0.09	56,56,56,56	0
58	MG	1A	4011	1/1	0.94	0.07	30,30,30,30	0
58	MG	1A	3835	1/1	0.94	0.22	59,59,59,59	0
58	MG	2A	3781	1/1	0.94	0.12	67,67,67,67	0
58	MG	2a	1809	1/1	0.94	0.22	60,60,60,60	0
58	MG	2A	3414	1/1	0.94	0.12	31,31,31,31	0
58	MG	2A	3789	1/1	0.94	0.07	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3791	1/1	0.94	0.11	50,50,50,50	0
58	MG	2A	3792	1/1	0.94	0.09	59,59,59,59	0
58	MG	2A	3793	1/1	0.94	0.09	53,53,53,53	0
58	MG	2A	3181	1/1	0.94	0.13	51,51,51,51	0
58	MG	1P	202	1/1	0.94	0.09	23,23,23,23	0
58	MG	2A	3419	1/1	0.94	0.18	28,28,28,28	0
58	MG	1A	3460	1/1	0.94	0.20	48,48,48,48	0
58	MG	1a	1748	1/1	0.94	0.15	57,57,57,57	0
58	MG	2A	3799	1/1	0.94	0.07	55,55,55,55	0
58	MG	2A	3422	1/1	0.94	0.21	39,39,39,39	0
58	MG	2A	3801	1/1	0.94	0.12	45,45,45,45	0
58	MG	2A	3423	1/1	0.94	0.24	50,50,50,50	0
58	MG	2A	3804	1/1	0.94	0.12	48,48,48,48	0
58	MG	1A	3090	1/1	0.94	0.13	41,41,41,41	0
58	MG	1R	205	1/1	0.94	0.12	29,29,29,29	0
58	MG	1T	201	1/1	0.94	0.12	54,54,54,54	0
58	MG	1A	3182	1/1	0.94	0.09	34,34,34,34	0
58	MG	1A	3672	1/1	0.94	0.06	31,31,31,31	0
58	MG	2a	1839	1/1	0.94	0.20	52,52,52,52	0
58	MG	1V	202	1/1	0.94	0.11	38,38,38,38	0
58	MG	1A	3674	1/1	0.94	0.08	27,27,27,27	0
58	MG	1A	3684	1/1	0.94	0.20	49,49,49,49	0
58	MG	1A	3686	1/1	0.94	0.06	30,30,30,30	0
58	MG	2A	3437	1/1	0.94	0.32	53,53,53,53	0
58	MG	2A	3819	1/1	0.94	0.05	44,44,44,44	0
58	MG	2A	3201	1/1	0.94	0.13	43,43,43,43	0
58	MG	2n	101	1/1	0.94	0.36	61,61,61,61	0
58	MG	1Y	201	1/1	0.94	0.14	41,41,41,41	0
58	MG	2A	3443	1/1	0.94	0.22	47,47,47,47	0
58	MG	2q	203	1/1	0.94	0.13	67,67,67,67	0
58	MG	2A	3205	1/1	0.94	0.18	54,54,54,54	0
58	MG	2A	3840	1/1	0.94	0.10	55,55,55,55	0
58	MG	1A	3846	1/1	0.94	0.14	46,46,46,46	0
58	MG	1a	1768	1/1	0.94	0.07	50,50,50,50	0
58	MG	1A	3129	1/1	0.94	0.12	48,48,48,48	0
58	MG	2w	102	1/1	0.94	0.07	82,82,82,82	0
58	MG	1A	3316	1/1	0.94	0.15	47,47,47,47	0
58	MG	2A	3451	1/1	0.94	0.26	52,52,52,52	0
58	MG	1A	4033	1/1	0.94	0.07	35,35,35,35	0
58	MG	1A	3469	1/1	0.94	0.09	46,46,46,46	0
58	MG	1A	3537	1/1	0.94	0.16	45,45,45,45	0
58	MG	2A	3460	1/1	0.94	0.11	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3214	1/1	0.94	0.22	65,65,65,65	0
58	MG	1A	3697	1/1	0.94	0.08	27,27,27,27	0
58	MG	2x	102	1/1	0.94	0.15	43,43,43,43	0
58	MG	1A	3471	1/1	0.94	0.14	63,63,63,63	0
58	MG	2x	104	1/1	0.94	0.19	71,71,71,71	0
58	MG	1A	3256	1/1	0.94	0.09	57,57,57,57	0
58	MG	2A	3470	1/1	0.94	0.14	45,45,45,45	0
58	MG	2A	3876	1/1	0.94	0.10	35,35,35,35	0
58	MG	1A	3001	1/1	0.94	0.07	32,32,32,32	0
58	MG	1A	3713	1/1	0.94	0.14	40,40,40,40	0
58	MG	1a	1791	1/1	0.94	0.12	59,59,59,59	0
58	MG	1A	3322	1/1	0.94	0.09	46,46,46,46	0
58	MG	2y	106	1/1	0.94	0.11	66,66,66,66	0
60	ZN	24	501	1/1	0.94	0.10	111,111,111,111	0
58	MG	2A	3475	1/1	0.95	0.10	53,53,53,53	0
58	MG	1Q	204	1/1	0.95	0.08	52,52,52,52	0
58	MG	1a	1757	1/1	0.95	0.09	52,52,52,52	0
58	MG	2A	3478	1/1	0.95	0.19	41,41,41,41	0
58	MG	1Q	205	1/1	0.95	0.09	47,47,47,47	0
58	MG	1A	3438	1/1	0.95	0.09	58,58,58,58	0
58	MG	1A	3508	1/1	0.95	0.09	32,32,32,32	0
58	MG	2A	3483	1/1	0.95	0.29	58,58,58,58	0
58	MG	1a	1762	1/1	0.95	0.16	45,45,45,45	0
58	MG	1S	203	1/1	0.95	0.07	61,61,61,61	0
58	MG	2A	3488	1/1	0.95	0.18	41,41,41,41	0
58	MG	1a	1766	1/1	0.95	0.07	49,49,49,49	0
58	MG	2A	3490	1/1	0.95	0.11	49,49,49,49	0
58	MG	1A	3817	1/1	0.95	0.07	52,52,52,52	0
58	MG	2A	3492	1/1	0.95	0.09	35,35,35,35	0
58	MG	1T	202	1/1	0.95	0.10	45,45,45,45	0
58	MG	1a	1769	1/1	0.95	0.07	59,59,59,59	0
58	MG	1A	3646	1/1	0.95	0.05	12,12,12,12	0
58	MG	1A	3509	1/1	0.95	0.10	46,46,46,46	0
58	MG	2B	215	1/1	0.95	0.15	49,49,49,49	0
58	MG	2A	3221	1/1	0.95	0.21	49,49,49,49	0
58	MG	1A	3439	1/1	0.95	0.07	44,44,44,44	0
58	MG	2A	3504	1/1	0.95	0.06	43,43,43,43	0
58	MG	1V	207	1/1	0.95	0.09	33,33,33,33	0
58	MG	1V	208	1/1	0.95	0.12	58,58,58,58	0
58	MG	2D	301	1/1	0.95	0.08	40,40,40,40	0
58	MG	1A	3822	1/1	0.95	0.19	25,25,25,25	0
58	MG	1A	3823	1/1	0.95	0.08	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3652	1/1	0.95	0.07	23,23,23,23	0
58	MG	1A	4008	1/1	0.95	0.10	54,54,54,54	0
58	MG	1a	1787	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3133	1/1	0.95	0.11	32,32,32,32	0
58	MG	2E	307	1/1	0.95	0.06	33,33,33,33	0
58	MG	1A	3831	1/1	0.95	0.06	32,32,32,32	0
58	MG	2A	3519	1/1	0.95	0.10	17,17,17,17	0
58	MG	2E	310	1/1	0.95	0.10	32,32,32,32	0
58	MG	1a	1794	1/1	0.95	0.09	69,69,69,69	0
58	MG	2A	3524	1/1	0.95	0.12	50,50,50,50	0
58	MG	1A	3301	1/1	0.95	0.07	41,41,41,41	0
58	MG	2A	3240	1/1	0.95	0.12	55,55,55,55	0
58	MG	1Z	3702	1/1	0.95	0.13	43,43,43,43	0
58	MG	10	102	1/1	0.95	0.16	41,41,41,41	0
58	MG	1a	1800	1/1	0.95	0.06	50,50,50,50	0
58	MG	1a	1802	1/1	0.95	0.07	58,58,58,58	0
58	MG	2Q	203	1/1	0.95	0.17	47,47,47,47	0
58	MG	2R	201	1/1	0.95	0.15	58,58,58,58	0
58	MG	2A	3539	1/1	0.95	0.11	63,63,63,63	0
58	MG	1A	3656	1/1	0.95	0.09	44,44,44,44	0
58	MG	1A	3513	1/1	0.95	0.09	34,34,34,34	0
58	MG	1A	3097	1/1	0.95	0.16	31,31,31,31	0
58	MG	1A	4021	1/1	0.95	0.12	41,41,41,41	0
58	MG	2A	3544	1/1	0.95	0.11	40,40,40,40	0
58	MG	1A	3517	1/1	0.95	0.07	48,48,48,48	0
58	MG	1A	3100	1/1	0.95	0.09	39,39,39,39	0
58	MG	2A	3550	1/1	0.95	0.08	36,36,36,36	0
58	MG	1A	3666	1/1	0.95	0.06	18,18,18,18	0
58	MG	1a	1814	1/1	0.95	0.06	47,47,47,47	0
58	MG	25	102	1/1	0.95	0.20	47,47,47,47	0
58	MG	13	102	1/1	0.95	0.10	38,38,38,38	0
58	MG	2A	3561	1/1	0.95	0.10	33,33,33,33	0
58	MG	1b	301	1/1	0.95	0.09	53,53,53,53	0
58	MG	28	102	1/1	0.95	0.23	49,49,49,49	0
58	MG	1A	3083	1/1	0.95	0.13	44,44,44,44	0
58	MG	2A	3258	1/1	0.95	0.13	41,41,41,41	0
58	MG	2A	3576	1/1	0.95	0.14	49,49,49,49	0
58	MG	2A	3259	1/1	0.95	0.08	52,52,52,52	0
58	MG	1e	201	1/1	0.95	0.09	55,55,55,55	0
58	MG	1A	3308	1/1	0.95	0.17	39,39,39,39	0
58	MG	1A	3450	1/1	0.95	0.22	49,49,49,49	0
58	MG	2A	3263	1/1	0.95	0.08	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3845	1/1	0.95	0.07	35,35,35,35	0
58	MG	2A	3265	1/1	0.95	0.20	53,53,53,53	0
58	MG	2A	3587	1/1	0.95	0.05	22,22,22,22	0
58	MG	2A	3266	1/1	0.95	0.12	59,59,59,59	0
58	MG	17	103	1/1	0.95	0.12	30,30,30,30	0
58	MG	2a	1614	1/1	0.95	0.21	53,53,53,53	0
58	MG	2A	3591	1/1	0.95	0.10	50,50,50,50	0
58	MG	1A	3526	1/1	0.95	0.06	41,41,41,41	0
58	MG	1A	3848	1/1	0.95	0.07	55,55,55,55	0
58	MG	1a	1601	1/1	0.95	0.08	55,55,55,55	0
58	MG	1w	104	1/1	0.95	0.25	53,53,53,53	0
58	MG	2A	3603	1/1	0.95	0.08	49,49,49,49	0
58	MG	1A	3190	1/1	0.95	0.15	46,46,46,46	0
58	MG	1A	3851	1/1	0.95	0.09	48,48,48,48	0
58	MG	1A	3368	1/1	0.95	0.13	44,44,44,44	0
58	MG	1A	3191	1/1	0.95	0.14	40,40,40,40	0
58	MG	2A	3278	1/1	0.95	0.09	51,51,51,51	0
58	MG	1x	103	1/1	0.95	0.05	45,45,45,45	0
58	MG	1A	3025	1/1	0.95	0.09	41,41,41,41	0
58	MG	1a	1613	1/1	0.95	0.20	52,52,52,52	0
58	MG	1A	3376	1/1	0.95	0.10	52,52,52,52	0
58	MG	2A	3613	1/1	0.95	0.07	54,54,54,54	0
58	MG	2A	3284	1/1	0.95	0.05	38,38,38,38	0
58	MG	1A	3534	1/1	0.95	0.10	43,43,43,43	0
58	MG	1A	3695	1/1	0.95	0.11	22,22,22,22	0
58	MG	1A	3380	1/1	0.95	0.26	46,46,46,46	0
58	MG	1A	3867	1/1	0.95	0.07	48,48,48,48	0
58	MG	1a	1623	1/1	0.95	0.09	43,43,43,43	0
58	MG	1A	3381	1/1	0.95	0.19	57,57,57,57	0
58	MG	1A	3869	1/1	0.95	0.10	44,44,44,44	0
58	MG	2A	3008	1/1	0.95	0.09	54,54,54,54	0
58	MG	1A	3698	1/1	0.95	0.09	55,55,55,55	0
58	MG	1A	3702	1/1	0.95	0.08	29,29,29,29	0
58	MG	2A	3013	1/1	0.95	0.07	40,40,40,40	0
58	MG	1A	3874	1/1	0.95	0.11	32,32,32,32	0
58	MG	1A	4059	1/1	0.95	0.11	61,61,61,61	0
58	MG	2A	3634	1/1	0.95	0.11	38,38,38,38	0
58	MG	2A	3637	1/1	0.95	0.06	36,36,36,36	0
58	MG	1A	4061	1/1	0.95	0.09	34,34,34,34	0
58	MG	2a	1653	1/1	0.95	0.17	57,57,57,57	0
58	MG	2A	3643	1/1	0.95	0.07	45,45,45,45	0
58	MG	1A	3875	1/1	0.95	0.12	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3646	1/1	0.95	0.12	51,51,51,51	0
58	MG	1A	3877	1/1	0.95	0.04	29,29,29,29	0
58	MG	1A	3705	1/1	0.95	0.11	47,47,47,47	0
58	MG	1A	3880	1/1	0.95	0.22	28,28,28,28	0
58	MG	2A	3032	1/1	0.95	0.09	33,33,33,33	0
58	MG	2A	3033	1/1	0.95	0.18	42,42,42,42	0
58	MG	1A	3882	1/1	0.95	0.11	38,38,38,38	0
58	MG	1A	3164	1/1	0.95	0.27	49,49,49,49	0
58	MG	1A	3317	1/1	0.95	0.17	53,53,53,53	0
58	MG	1A	3543	1/1	0.95	0.14	50,50,50,50	0
58	MG	1a	1642	1/1	0.95	0.12	53,53,53,53	0
58	MG	1A	3204	1/1	0.95	0.10	34,34,34,34	0
58	MG	2A	3660	1/1	0.95	0.10	47,47,47,47	0
58	MG	1A	4080	1/1	0.95	0.10	49,49,49,49	0
58	MG	2a	1671	1/1	0.95	0.07	51,51,51,51	0
58	MG	2A	3048	1/1	0.95	0.13	43,43,43,43	0
58	MG	1a	1645	1/1	0.95	0.15	43,43,43,43	0
58	MG	1A	3890	1/1	0.95	0.05	18,18,18,18	0
58	MG	1A	3263	1/1	0.95	0.05	20,20,20,20	0
58	MG	2A	3323	1/1	0.95	0.07	39,39,39,39	0
58	MG	1a	1649	1/1	0.95	0.20	53,53,53,53	0
58	MG	1a	1652	1/1	0.95	0.07	51,51,51,51	0
58	MG	2a	1684	1/1	0.95	0.13	54,54,54,54	0
58	MG	1A	4083	1/1	0.95	0.12	46,46,46,46	0
58	MG	1A	4085	1/1	0.95	0.08	43,43,43,43	0
58	MG	1A	3470	1/1	0.95	0.09	45,45,45,45	0
58	MG	2a	1689	1/1	0.95	0.13	51,51,51,51	0
58	MG	2A	3061	1/1	0.95	0.09	37,37,37,37	0
58	MG	2a	1691	1/1	0.95	0.19	51,51,51,51	0
58	MG	1A	3396	1/1	0.95	0.22	35,35,35,35	0
58	MG	1A	3895	1/1	0.95	0.06	34,34,34,34	0
58	MG	2A	3065	1/1	0.95	0.23	53,53,53,53	0
58	MG	1A	3896	1/1	0.95	0.08	12,12,12,12	0
58	MG	1A	3264	1/1	0.95	0.07	31,31,31,31	0
58	MG	2A	3068	1/1	0.95	0.08	34,34,34,34	0
58	MG	1A	3899	1/1	0.95	0.07	23,23,23,23	0
58	MG	1A	3475	1/1	0.95	0.11	33,33,33,33	0
58	MG	2A	3072	1/1	0.95	0.06	46,46,46,46	0
58	MG	2A	3692	1/1	0.95	0.10	51,51,51,51	0
58	MG	2a	1707	1/1	0.95	0.16	51,51,51,51	0
58	MG	1A	3205	1/1	0.95	0.09	44,44,44,44	0
58	MG	1A	3405	1/1	0.95	0.19	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3407	1/1	0.95	0.15	29,29,29,29	0
58	MG	1a	1666	1/1	0.95	0.20	50,50,50,50	0
58	MG	2a	1713	1/1	0.95	0.08	64,64,64,64	0
58	MG	2a	1714	1/1	0.95	0.17	57,57,57,57	0
58	MG	2A	3081	1/1	0.95	0.10	47,47,47,47	0
58	MG	2a	1716	1/1	0.95	0.13	58,58,58,58	0
58	MG	2A	3348	1/1	0.95	0.11	55,55,55,55	0
58	MG	2A	3701	1/1	0.95	0.07	56,56,56,56	0
58	MG	1A	3905	1/1	0.95	0.09	26,26,26,26	0
58	MG	2A	3083	1/1	0.95	0.09	51,51,51,51	0
58	MG	1A	3906	1/1	0.95	0.07	39,39,39,39	0
58	MG	1a	1669	1/1	0.95	0.18	53,53,53,53	0
58	MG	2A	3089	1/1	0.95	0.09	48,48,48,48	0
58	MG	1A	3408	1/1	0.95	0.14	46,46,46,46	0
58	MG	2a	1726	1/1	0.95	0.17	43,43,43,43	0
58	MG	2A	3355	1/1	0.95	0.13	62,62,62,62	0
58	MG	2A	3711	1/1	0.95	0.10	58,58,58,58	0
58	MG	1A	3026	1/1	0.95	0.14	31,31,31,31	0
58	MG	1A	3910	1/1	0.95	0.09	40,40,40,40	0
58	MG	2a	1731	1/1	0.95	0.13	38,38,38,38	0
58	MG	1A	3210	1/1	0.95	0.07	43,43,43,43	0
58	MG	1B	205	1/1	0.95	0.28	55,55,55,55	0
58	MG	2A	3719	1/1	0.95	0.08	26,26,26,26	0
58	MG	2A	3720	1/1	0.95	0.07	31,31,31,31	0
58	MG	1A	3559	1/1	0.95	0.08	47,47,47,47	0
58	MG	2a	1739	1/1	0.95	0.17	58,58,58,58	0
58	MG	1A	3915	1/1	0.95	0.19	37,37,37,37	0
58	MG	2a	1741	1/1	0.95	0.28	36,36,36,36	0
58	MG	1A	3916	1/1	0.95	0.08	35,35,35,35	0
58	MG	1B	210	1/1	0.95	0.07	37,37,37,37	0
58	MG	1A	3566	1/1	0.95	0.10	36,36,36,36	0
58	MG	1a	1680	1/1	0.95	0.08	55,55,55,55	0
58	MG	1A	3922	1/1	0.95	0.08	28,28,28,28	0
58	MG	1A	3115	1/1	0.95	0.13	37,37,37,37	0
58	MG	2a	1748	1/1	0.95	0.07	55,55,55,55	0
58	MG	2A	3737	1/1	0.95	0.11	60,60,60,60	0
58	MG	2A	3371	1/1	0.95	0.16	60,60,60,60	0
58	MG	1A	3484	1/1	0.95	0.13	51,51,51,51	0
58	MG	1A	3743	1/1	0.95	0.06	50,50,50,50	0
58	MG	2a	1756	1/1	0.95	0.09	58,58,58,58	0
58	MG	1A	3213	1/1	0.95	0.12	39,39,39,39	0
58	MG	2A	3375	1/1	0.95	0.34	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3578	1/1	0.95	0.11	44,44,44,44	0
58	MG	2A	3117	1/1	0.95	0.08	41,41,41,41	0
58	MG	2a	1765	1/1	0.95	0.07	42,42,42,42	0
58	MG	2a	1769	1/1	0.95	0.10	62,62,62,62	0
58	MG	2A	3118	1/1	0.95	0.14	63,63,63,63	0
58	MG	1A	3747	1/1	0.95	0.07	17,17,17,17	0
58	MG	2A	3382	1/1	0.95	0.35	52,52,52,52	0
58	MG	1A	3749	1/1	0.95	0.06	14,14,14,14	0
58	MG	1a	1691	1/1	0.95	0.20	37,37,37,37	0
58	MG	1A	3932	1/1	0.95	0.06	39,39,39,39	0
58	MG	2A	3751	1/1	0.95	0.10	45,45,45,45	0
58	MG	2a	1780	1/1	0.95	0.13	54,54,54,54	0
58	MG	2A	3387	1/1	0.95	0.08	61,61,61,61	0
58	MG	2A	3389	1/1	0.95	0.13	47,47,47,47	0
58	MG	2a	1783	1/1	0.95	0.09	41,41,41,41	0
58	MG	2a	1784	1/1	0.95	0.07	53,53,53,53	0
58	MG	2A	3125	1/1	0.95	0.09	49,49,49,49	0
58	MG	2A	3126	1/1	0.95	0.10	58,58,58,58	0
58	MG	1B	226	1/1	0.95	0.10	53,53,53,53	0
58	MG	2A	3758	1/1	0.95	0.16	59,59,59,59	0
58	MG	2a	1790	1/1	0.95	0.14	48,48,48,48	0
58	MG	1A	3015	1/1	0.95	0.07	36,36,36,36	0
58	MG	1A	3940	1/1	0.95	0.05	34,34,34,34	0
58	MG	2A	3132	1/1	0.95	0.08	58,58,58,58	0
58	MG	2A	3134	1/1	0.95	0.20	48,48,48,48	0
58	MG	1A	3752	1/1	0.95	0.10	55,55,55,55	0
58	MG	2A	3137	1/1	0.95	0.14	39,39,39,39	0
58	MG	2a	1797	1/1	0.95	0.15	43,43,43,43	0
58	MG	1a	1697	1/1	0.95	0.33	54,54,54,54	0
58	MG	2a	1799	1/1	0.95	0.15	57,57,57,57	0
58	MG	2a	1801	1/1	0.95	0.12	52,52,52,52	0
58	MG	1B	230	1/1	0.95	0.07	32,32,32,32	0
58	MG	1A	3489	1/1	0.95	0.20	34,34,34,34	0
58	MG	2a	1804	1/1	0.95	0.09	51,51,51,51	0
58	MG	2a	1805	1/1	0.95	0.12	53,53,53,53	0
58	MG	1a	1701	1/1	0.95	0.18	48,48,48,48	0
58	MG	1A	3594	1/1	0.95	0.23	32,32,32,32	0
58	MG	1A	3227	1/1	0.95	0.13	41,41,41,41	0
58	MG	1A	3005	1/1	0.95	0.09	40,40,40,40	0
58	MG	2A	3778	1/1	0.95	0.07	54,54,54,54	0
58	MG	1A	3954	1/1	0.95	0.09	64,64,64,64	0
58	MG	1a	1706	1/1	0.95	0.16	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3782	1/1	0.95	0.09	45,45,45,45	0
58	MG	2A	3784	1/1	0.95	0.13	46,46,46,46	0
58	MG	1A	3761	1/1	0.95	0.09	50,50,50,50	0
58	MG	2A	3155	1/1	0.95	0.07	44,44,44,44	0
58	MG	1A	3599	1/1	0.95	0.10	48,48,48,48	0
58	MG	2a	1819	1/1	0.95	0.07	52,52,52,52	0
58	MG	2A	3415	1/1	0.95	0.25	42,42,42,42	0
58	MG	2A	3159	1/1	0.95	0.11	52,52,52,52	0
58	MG	1A	3006	1/1	0.95	0.07	38,38,38,38	0
58	MG	2A	3418	1/1	0.95	0.17	41,41,41,41	0
58	MG	1A	3348	1/1	0.95	0.10	36,36,36,36	0
58	MG	2a	1826	1/1	0.95	0.15	47,47,47,47	0
58	MG	1D	304	1/1	0.95	0.17	32,32,32,32	0
58	MG	1A	3604	1/1	0.95	0.09	54,54,54,54	0
58	MG	1A	3294	1/1	0.95	0.08	43,43,43,43	0
58	MG	2a	1831	1/1	0.95	0.10	47,47,47,47	0
58	MG	1E	306	1/1	0.95	0.08	35,35,35,35	0
58	MG	1A	3773	1/1	0.95	0.08	35,35,35,35	0
58	MG	2A	3802	1/1	0.95	0.09	73,73,73,73	0
58	MG	2A	3170	1/1	0.95	0.07	58,58,58,58	0
58	MG	1A	3606	1/1	0.95	0.12	48,48,48,48	0
58	MG	2a	1840	1/1	0.95	0.07	71,71,71,71	0
58	MG	1A	3607	1/1	0.95	0.07	43,43,43,43	0
58	MG	1a	1725	1/1	0.95	0.07	47,47,47,47	0
58	MG	1A	3972	1/1	0.95	0.09	46,46,46,46	0
58	MG	1A	3786	1/1	0.95	0.08	41,41,41,41	0
58	MG	1A	3424	1/1	0.95	0.08	48,48,48,48	0
58	MG	2l	203	1/1	0.95	0.10	52,52,52,52	0
58	MG	2A	3179	1/1	0.95	0.22	59,59,59,59	0
58	MG	1A	3049	1/1	0.95	0.07	15,15,15,15	0
58	MG	1A	3351	1/1	0.95	0.11	37,37,37,37	0
58	MG	2A	3182	1/1	0.95	0.07	46,46,46,46	0
58	MG	2A	3442	1/1	0.95	0.19	42,42,42,42	0
58	MG	2q	202	1/1	0.95	0.07	63,63,63,63	0
58	MG	1G	202	1/1	0.95	0.09	45,45,45,45	0
58	MG	1A	3980	1/1	0.95	0.12	59,59,59,59	0
58	MG	2A	3823	1/1	0.95	0.11	35,35,35,35	0
58	MG	2A	3186	1/1	0.95	0.07	45,45,45,45	0
58	MG	2A	3831	1/1	0.95	0.13	48,48,48,48	0
58	MG	2v	103	1/1	0.95	0.26	54,54,54,54	0
58	MG	1A	3981	1/1	0.95	0.09	40,40,40,40	0
58	MG	1A	3797	1/1	0.95	0.09	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1742	1/1	0.95	0.07	49,49,49,49	0
58	MG	1A	3430	1/1	0.95	0.08	38,38,38,38	0
58	MG	1A	3247	1/1	0.95	0.08	47,47,47,47	0
58	MG	2A	3844	1/1	0.95	0.07	45,45,45,45	0
58	MG	2w	108	1/1	0.95	0.10	46,46,46,46	0
58	MG	1A	3506	1/1	0.95	0.11	25,25,25,25	0
58	MG	1O	202	1/1	0.95	0.25	44,44,44,44	0
58	MG	1A	3630	1/1	0.95	0.11	32,32,32,32	0
58	MG	2A	3850	1/1	0.95	0.08	64,64,64,64	0
58	MG	1A	3632	1/1	0.95	0.08	47,47,47,47	0
58	MG	2A	3852	1/1	0.95	0.07	23,23,23,23	0
58	MG	1A	3989	1/1	0.95	0.13	55,55,55,55	0
58	MG	2A	3855	1/1	0.95	0.09	31,31,31,31	0
58	MG	2A	3465	1/1	0.95	0.20	50,50,50,50	0
58	MG	2x	107	1/1	0.95	0.07	31,31,31,31	0
58	MG	2A	3200	1/1	0.95	0.12	46,46,46,46	0
58	MG	2A	3864	1/1	0.95	0.10	56,56,56,56	0
58	MG	2A	3865	1/1	0.95	0.07	54,54,54,54	0
58	MG	2A	3868	1/1	0.95	0.09	47,47,47,47	0
58	MG	1A	3990	1/1	0.95	0.07	16,16,16,16	0
58	MG	2A	3202	1/1	0.95	0.17	62,62,62,62	0
59	K	2A	3467	1/1	0.95	0.08	50,50,50,50	0
58	MG	2A	3203	1/1	0.95	0.09	53,53,53,53	0
58	MG	2B	209	1/1	0.96	0.14	50,50,50,50	0
58	MG	2A	3518	1/1	0.96	0.09	36,36,36,36	0
58	MG	1W	206	1/1	0.96	0.16	24,24,24,24	0
58	MG	1X	104	1/1	0.96	0.13	35,35,35,35	0
58	MG	2A	3523	1/1	0.96	0.11	52,52,52,52	0
58	MG	1A	3789	1/1	0.96	0.06	66,66,66,66	0
58	MG	2A	3525	1/1	0.96	0.13	44,44,44,44	0
58	MG	1A	3790	1/1	0.96	0.07	42,42,42,42	0
58	MG	1A	3002	1/1	0.96	0.07	46,46,46,46	0
58	MG	1a	1811	1/1	0.96	0.12	50,50,50,50	0
58	MG	1A	3130	1/1	0.96	0.08	44,44,44,44	0
58	MG	1A	3595	1/1	0.96	0.10	46,46,46,46	0
58	MG	2A	3535	1/1	0.96	0.06	29,29,29,29	0
58	MG	1A	3997	1/1	0.96	0.07	41,41,41,41	0
58	MG	2A	3538	1/1	0.96	0.05	26,26,26,26	0
58	MG	10	101	1/1	0.96	0.13	39,39,39,39	0
58	MG	1A	3020	1/1	0.96	0.17	49,49,49,49	0
58	MG	10	105	1/1	0.96	0.18	53,53,53,53	0
58	MG	1A	3802	1/1	0.96	0.09	16,16,16,16	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1e	202	1/1	0.96	0.21	56,56,56,56	0
58	MG	1A	3803	1/1	0.96	0.07	32,32,32,32	0
58	MG	1A	3069	1/1	0.96	0.06	40,40,40,40	0
58	MG	2F	301	1/1	0.96	0.08	38,38,38,38	0
58	MG	2A	3547	1/1	0.96	0.06	40,40,40,40	0
58	MG	1A	3195	1/1	0.96	0.21	38,38,38,38	0
58	MG	1A	4004	1/1	0.96	0.06	10,10,10,10	0
58	MG	1n	101	1/1	0.96	0.07	33,33,33,33	0
58	MG	2F	308	1/1	0.96	0.15	44,44,44,44	0
58	MG	2A	3552	1/1	0.96	0.08	42,42,42,42	0
58	MG	1A	3362	1/1	0.96	0.14	33,33,33,33	0
58	MG	1A	3363	1/1	0.96	0.06	39,39,39,39	0
58	MG	2Q	201	1/1	0.96	0.10	48,48,48,48	0
58	MG	1w	101	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3562	1/1	0.96	0.12	27,27,27,27	0
58	MG	1A	3812	1/1	0.96	0.21	16,16,16,16	0
58	MG	1A	3136	1/1	0.96	0.09	48,48,48,48	0
58	MG	2A	3574	1/1	0.96	0.10	40,40,40,40	0
58	MG	1A	4012	1/1	0.96	0.04	24,24,24,24	0
58	MG	2T	204	1/1	0.96	0.06	58,58,58,58	0
58	MG	1w	107	1/1	0.96	0.11	47,47,47,47	0
58	MG	2V	201	1/1	0.96	0.15	46,46,46,46	0
58	MG	15	107	1/1	0.96	0.09	50,50,50,50	0
58	MG	2A	3578	1/1	0.96	0.05	33,33,33,33	0
58	MG	1A	3201	1/1	0.96	0.07	30,30,30,30	0
58	MG	1A	3138	1/1	0.96	0.28	35,35,35,35	0
58	MG	1A	3272	1/1	0.96	0.11	40,40,40,40	0
58	MG	20	103	1/1	0.96	0.13	58,58,58,58	0
58	MG	1A	3144	1/1	0.96	0.08	39,39,39,39	0
58	MG	18	101	1/1	0.96	0.42	46,46,46,46	0
58	MG	1A	3610	1/1	0.96	0.06	27,27,27,27	0
58	MG	1A	3369	1/1	0.96	0.08	52,52,52,52	0
58	MG	1A	3207	1/1	0.96	0.09	26,26,26,26	0
58	MG	1x	110	1/1	0.96	0.05	48,48,48,48	0
58	MG	1x	112	1/1	0.96	0.13	49,49,49,49	0
58	MG	28	103	1/1	0.96	0.09	42,42,42,42	0
58	MG	2A	3594	1/1	0.96	0.09	52,52,52,52	0
58	MG	1A	3824	1/1	0.96	0.07	23,23,23,23	0
58	MG	1a	1604	1/1	0.96	0.10	55,55,55,55	0
58	MG	2A	3282	1/1	0.96	0.12	52,52,52,52	0
58	MG	2A	3001	1/1	0.96	0.20	43,43,43,43	0
58	MG	1A	3481	1/1	0.96	0.10	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3005	1/1	0.96	0.19	52,52,52,52	0
58	MG	1A	3828	1/1	0.96	0.07	37,37,37,37	0
58	MG	1A	3829	1/1	0.96	0.04	29,29,29,29	0
58	MG	1a	1612	1/1	0.96	0.07	63,63,63,63	0
58	MG	1A	3371	1/1	0.96	0.08	44,44,44,44	0
58	MG	2A	3290	1/1	0.96	0.09	45,45,45,45	0
58	MG	1A	3619	1/1	0.96	0.07	35,35,35,35	0
58	MG	1a	1615	1/1	0.96	0.06	50,50,50,50	0
58	MG	2A	3015	1/1	0.96	0.09	41,41,41,41	0
58	MG	1a	1616	1/1	0.96	0.09	33,33,33,33	0
58	MG	2A	3018	1/1	0.96	0.13	49,49,49,49	0
58	MG	1A	3623	1/1	0.96	0.11	10,10,10,10	0
58	MG	2A	3020	1/1	0.96	0.10	52,52,52,52	0
58	MG	1A	3372	1/1	0.96	0.26	33,33,33,33	0
58	MG	2A	3618	1/1	0.96	0.07	23,23,23,23	0
58	MG	1A	3834	1/1	0.96	0.18	39,39,39,39	0
58	MG	1A	4040	1/1	0.96	0.05	38,38,38,38	0
58	MG	2A	3621	1/1	0.96	0.08	41,41,41,41	0
58	MG	1A	3628	1/1	0.96	0.06	31,31,31,31	0
58	MG	2A	3304	1/1	0.96	0.14	55,55,55,55	0
58	MG	1A	3836	1/1	0.96	0.07	49,49,49,49	0
58	MG	2a	1629	1/1	0.96	0.20	62,62,62,62	0
58	MG	1A	3011	1/1	0.96	0.10	38,38,38,38	0
58	MG	2a	1631	1/1	0.96	0.10	66,66,66,66	0
58	MG	2A	3307	1/1	0.96	0.06	54,54,54,54	0
58	MG	1A	3374	1/1	0.96	0.10	45,45,45,45	0
58	MG	1A	3634	1/1	0.96	0.06	48,48,48,48	0
58	MG	1A	3635	1/1	0.96	0.04	26,26,26,26	0
58	MG	1A	3637	1/1	0.96	0.07	18,18,18,18	0
58	MG	2A	3313	1/1	0.96	0.08	55,55,55,55	0
58	MG	2A	3639	1/1	0.96	0.06	35,35,35,35	0
58	MG	1A	3281	1/1	0.96	0.06	36,36,36,36	0
58	MG	2a	1640	1/1	0.96	0.17	51,51,51,51	0
58	MG	2a	1641	1/1	0.96	0.11	50,50,50,50	0
58	MG	1A	3642	1/1	0.96	0.05	15,15,15,15	0
58	MG	1A	3643	1/1	0.96	0.08	42,42,42,42	0
58	MG	1A	3644	1/1	0.96	0.08	33,33,33,33	0
58	MG	2A	3046	1/1	0.96	0.11	42,42,42,42	0
58	MG	1A	3379	1/1	0.96	0.09	47,47,47,47	0
58	MG	1A	3490	1/1	0.96	0.10	34,34,34,34	0
58	MG	2A	3051	1/1	0.96	0.07	45,45,45,45	0
58	MG	1A	3075	1/1	0.96	0.06	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3492	1/1	0.96	0.13	50,50,50,50	0
58	MG	1A	3297	1/1	0.96	0.06	31,31,31,31	0
58	MG	2A	3055	1/1	0.96	0.11	45,45,45,45	0
58	MG	1A	3151	1/1	0.96	0.11	30,30,30,30	0
58	MG	2A	3327	1/1	0.96	0.16	47,47,47,47	0
58	MG	1A	3495	1/1	0.96	0.08	42,42,42,42	0
58	MG	2A	3659	1/1	0.96	0.10	40,40,40,40	0
58	MG	1A	3152	1/1	0.96	0.10	28,28,28,28	0
58	MG	1A	3862	1/1	0.96	0.07	33,33,33,33	0
58	MG	1a	1646	1/1	0.96	0.13	49,49,49,49	0
58	MG	1A	3215	1/1	0.96	0.05	34,34,34,34	0
58	MG	1A	4075	1/1	0.96	0.08	14,14,14,14	0
58	MG	2A	3335	1/1	0.96	0.12	51,51,51,51	0
58	MG	1A	3388	1/1	0.96	0.06	33,33,33,33	0
58	MG	2A	3667	1/1	0.96	0.10	51,51,51,51	0
58	MG	1A	3217	1/1	0.96	0.06	44,44,44,44	0
58	MG	2A	3669	1/1	0.96	0.14	54,54,54,54	0
58	MG	2A	3670	1/1	0.96	0.11	60,60,60,60	0
58	MG	2A	3671	1/1	0.96	0.06	31,31,31,31	0
58	MG	1A	3664	1/1	0.96	0.05	25,25,25,25	0
58	MG	2A	3339	1/1	0.96	0.15	55,55,55,55	0
58	MG	1A	3393	1/1	0.96	0.14	58,58,58,58	0
58	MG	1A	3220	1/1	0.96	0.08	37,37,37,37	0
58	MG	2a	1674	1/1	0.96	0.14	39,39,39,39	0
58	MG	2a	1677	1/1	0.96	0.21	52,52,52,52	0
58	MG	1A	3667	1/1	0.96	0.03	14,14,14,14	0
58	MG	1A	4084	1/1	0.96	0.08	44,44,44,44	0
58	MG	1a	1658	1/1	0.96	0.07	46,46,46,46	0
58	MG	2A	3680	1/1	0.96	0.08	56,56,56,56	0
58	MG	1A	3400	1/1	0.96	0.23	36,36,36,36	0
58	MG	2A	3076	1/1	0.96	0.16	42,42,42,42	0
58	MG	2A	3077	1/1	0.96	0.08	49,49,49,49	0
58	MG	1A	3505	1/1	0.96	0.12	26,26,26,26	0
58	MG	2a	1687	1/1	0.96	0.17	52,52,52,52	0
58	MG	1A	3876	1/1	0.96	0.18	29,29,29,29	0
58	MG	1A	3401	1/1	0.96	0.08	53,53,53,53	0
58	MG	2A	3688	1/1	0.96	0.09	36,36,36,36	0
58	MG	2A	3689	1/1	0.96	0.07	35,35,35,35	0
58	MG	1A	3221	1/1	0.96	0.12	35,35,35,35	0
58	MG	2A	3691	1/1	0.96	0.11	42,42,42,42	0
58	MG	1A	3879	1/1	0.96	0.13	28,28,28,28	0
58	MG	1A	3222	1/1	0.96	0.15	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3086	1/1	0.96	0.06	44,44,44,44	0
58	MG	2a	1701	1/1	0.96	0.22	51,51,51,51	0
58	MG	2A	3087	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3675	1/1	0.96	0.06	34,34,34,34	0
58	MG	1A	3676	1/1	0.96	0.08	38,38,38,38	0
58	MG	1A	3680	1/1	0.96	0.05	15,15,15,15	0
58	MG	2A	3700	1/1	0.96	0.09	30,30,30,30	0
58	MG	1A	3306	1/1	0.96	0.08	25,25,25,25	0
58	MG	2A	3362	1/1	0.96	0.08	57,57,57,57	0
58	MG	1A	3223	1/1	0.96	0.10	38,38,38,38	0
58	MG	1A	4102	1/1	0.96	0.08	38,38,38,38	0
58	MG	1A	3053	1/1	0.96	0.09	32,32,32,32	0
58	MG	1A	3310	1/1	0.96	0.15	38,38,38,38	0
58	MG	1A	3411	1/1	0.96	0.07	45,45,45,45	0
58	MG	1A	4108	1/1	0.96	0.15	43,43,43,43	0
58	MG	1A	3694	1/1	0.96	0.09	33,33,33,33	0
58	MG	1A	3156	1/1	0.96	0.07	39,39,39,39	0
58	MG	1A	3102	1/1	0.96	0.09	43,43,43,43	0
58	MG	2A	3714	1/1	0.96	0.09	45,45,45,45	0
58	MG	2A	3107	1/1	0.96	0.22	41,41,41,41	0
58	MG	1A	3057	1/1	0.96	0.10	37,37,37,37	0
58	MG	1A	3236	1/1	0.96	0.08	46,46,46,46	0
58	MG	2A	3111	1/1	0.96	0.16	39,39,39,39	0
58	MG	1A	3237	1/1	0.96	0.13	33,33,33,33	0
58	MG	1A	3704	1/1	0.96	0.06	12,12,12,12	0
58	MG	1A	3523	1/1	0.96	0.27	32,32,32,32	0
58	MG	1A	3319	1/1	0.96	0.09	45,45,45,45	0
58	MG	2A	3381	1/1	0.96	0.22	40,40,40,40	0
58	MG	1A	3525	1/1	0.96	0.15	26,26,26,26	0
58	MG	1A	3239	1/1	0.96	0.21	25,25,25,25	0
58	MG	2a	1732	1/1	0.96	0.16	48,48,48,48	0
58	MG	2A	3731	1/1	0.96	0.10	55,55,55,55	0
58	MG	2A	3120	1/1	0.96	0.08	33,33,33,33	0
58	MG	2A	3736	1/1	0.96	0.11	46,46,46,46	0
58	MG	1A	3420	1/1	0.96	0.08	41,41,41,41	0
58	MG	2A	3386	1/1	0.96	0.08	60,60,60,60	0
58	MG	1a	1689	1/1	0.96	0.20	44,44,44,44	0
58	MG	1A	3061	1/1	0.96	0.07	28,28,28,28	0
58	MG	1B	219	1/1	0.96	0.09	41,41,41,41	0
58	MG	1A	3323	1/1	0.96	0.13	29,29,29,29	0
58	MG	1A	3911	1/1	0.96	0.23	15,15,15,15	0
58	MG	1A	3324	1/1	0.96	0.18	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3325	1/1	0.96	0.06	48,48,48,48	0
58	MG	2A	3130	1/1	0.96	0.15	46,46,46,46	0
58	MG	1A	3533	1/1	0.96	0.09	56,56,56,56	0
58	MG	1A	3721	1/1	0.96	0.10	50,50,50,50	0
58	MG	2a	1750	1/1	0.96	0.07	59,59,59,59	0
58	MG	1A	3917	1/1	0.96	0.08	28,28,28,28	0
58	MG	2a	1752	1/1	0.96	0.06	55,55,55,55	0
58	MG	1A	3918	1/1	0.96	0.13	23,23,23,23	0
58	MG	1A	3920	1/1	0.96	0.05	28,28,28,28	0
58	MG	1A	3428	1/1	0.96	0.11	39,39,39,39	0
58	MG	2A	3402	1/1	0.96	0.07	54,54,54,54	0
58	MG	1A	3535	1/1	0.96	0.10	49,49,49,49	0
58	MG	1A	3327	1/1	0.96	0.08	41,41,41,41	0
58	MG	2A	3144	1/1	0.96	0.12	42,42,42,42	0
58	MG	1A	3167	1/1	0.96	0.13	29,29,29,29	0
58	MG	1A	3431	1/1	0.96	0.07	42,42,42,42	0
58	MG	1A	3331	1/1	0.96	0.25	48,48,48,48	0
58	MG	2A	3150	1/1	0.96	0.14	42,42,42,42	0
58	MG	1A	3434	1/1	0.96	0.07	32,32,32,32	0
58	MG	2a	1772	1/1	0.96	0.09	41,41,41,41	0
58	MG	1A	3109	1/1	0.96	0.18	39,39,39,39	0
58	MG	2a	1774	1/1	0.96	0.13	53,53,53,53	0
58	MG	1A	3110	1/1	0.96	0.20	32,32,32,32	0
58	MG	2A	3766	1/1	0.96	0.08	57,57,57,57	0
58	MG	1A	3114	1/1	0.96	0.12	32,32,32,32	0
58	MG	2A	3768	1/1	0.96	0.06	47,47,47,47	0
58	MG	1D	310	1/1	0.96	0.07	37,37,37,37	0
58	MG	1a	1714	1/1	0.96	0.25	52,52,52,52	0
58	MG	1A	3742	1/1	0.96	0.07	26,26,26,26	0
58	MG	1A	3938	1/1	0.96	0.06	57,57,57,57	0
58	MG	1E	305	1/1	0.96	0.14	45,45,45,45	0
58	MG	1A	3336	1/1	0.96	0.21	46,46,46,46	0
58	MG	2A	3163	1/1	0.96	0.13	48,48,48,48	0
58	MG	1a	1723	1/1	0.96	0.09	52,52,52,52	0
58	MG	1A	3442	1/1	0.96	0.09	35,35,35,35	0
58	MG	1A	3337	1/1	0.96	0.09	41,41,41,41	0
58	MG	2A	3783	1/1	0.96	0.06	56,56,56,56	0
58	MG	1A	3947	1/1	0.96	0.05	15,15,15,15	0
58	MG	1E	310	1/1	0.96	0.08	21,21,21,21	0
58	MG	2A	3787	1/1	0.96	0.06	65,65,65,65	0
58	MG	1A	3948	1/1	0.96	0.07	18,18,18,18	0
58	MG	2A	3172	1/1	0.96	0.10	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3088	1/1	0.96	0.16	29,29,29,29	0
58	MG	1E	314	1/1	0.96	0.07	40,40,40,40	0
58	MG	1A	3446	1/1	0.96	0.09	53,53,53,53	0
58	MG	2a	1800	1/1	0.96	0.07	52,52,52,52	0
58	MG	2A	3439	1/1	0.96	0.20	55,55,55,55	0
58	MG	1F	307	1/1	0.96	0.08	20,20,20,20	0
58	MG	1F	309	1/1	0.96	0.06	41,41,41,41	0
58	MG	1A	3750	1/1	0.96	0.04	9,9,9,9	0
58	MG	1A	3254	1/1	0.96	0.17	34,34,34,34	0
58	MG	1a	1743	1/1	0.96	0.09	44,44,44,44	0
58	MG	1A	3119	1/1	0.96	0.15	27,27,27,27	0
58	MG	1A	3449	1/1	0.96	0.12	33,33,33,33	0
58	MG	1A	3754	1/1	0.96	0.12	40,40,40,40	0
58	MG	1A	3958	1/1	0.96	0.06	44,44,44,44	0
58	MG	1I	201	1/1	0.96	0.06	62,62,62,62	0
58	MG	1A	3343	1/1	0.96	0.07	48,48,48,48	0
58	MG	2A	3808	1/1	0.96	0.07	57,57,57,57	0
58	MG	1a	1753	1/1	0.96	0.09	46,46,46,46	0
58	MG	2A	3456	1/1	0.96	0.23	42,42,42,42	0
58	MG	2A	3457	1/1	0.96	0.29	54,54,54,54	0
58	MG	1A	3036	1/1	0.96	0.10	46,46,46,46	0
58	MG	2A	3459	1/1	0.96	0.08	34,34,34,34	0
58	MG	1A	3063	1/1	0.96	0.15	42,42,42,42	0
58	MG	2a	1821	1/1	0.96	0.10	57,57,57,57	0
58	MG	2A	3461	1/1	0.96	0.20	38,38,38,38	0
58	MG	1A	3567	1/1	0.96	0.15	41,41,41,41	0
58	MG	1O	203	1/1	0.96	0.11	42,42,42,42	0
58	MG	2A	3464	1/1	0.96	0.15	43,43,43,43	0
58	MG	2A	3822	1/1	0.96	0.06	60,60,60,60	0
58	MG	1A	3346	1/1	0.96	0.07	41,41,41,41	0
58	MG	2A	3824	1/1	0.96	0.07	26,26,26,26	0
58	MG	1A	3569	1/1	0.96	0.20	45,45,45,45	0
58	MG	2a	1830	1/1	0.96	0.14	42,42,42,42	0
58	MG	2A	3829	1/1	0.96	0.08	30,30,30,30	0
58	MG	2a	1832	1/1	0.96	0.23	67,67,67,67	0
58	MG	2A	3197	1/1	0.96	0.20	53,53,53,53	0
58	MG	2a	1834	1/1	0.96	0.08	63,63,63,63	0
58	MG	1A	3457	1/1	0.96	0.10	33,33,33,33	0
58	MG	2A	3837	1/1	0.96	0.07	44,44,44,44	0
58	MG	2A	3471	1/1	0.96	0.06	42,42,42,42	0
58	MG	1A	3127	1/1	0.96	0.12	32,32,32,32	0
58	MG	1A	3975	1/1	0.96	0.08	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1765	1/1	0.96	0.06	68,68,68,68	0
58	MG	1A	3976	1/1	0.96	0.13	41,41,41,41	0
58	MG	1R	201	1/1	0.96	0.10	28,28,28,28	0
58	MG	2g	201	1/1	0.96	0.13	56,56,56,56	0
58	MG	2A	3479	1/1	0.96	0.20	45,45,45,45	0
58	MG	2A	3848	1/1	0.96	0.06	51,51,51,51	0
58	MG	1A	3768	1/1	0.96	0.08	38,38,38,38	0
58	MG	1A	3769	1/1	0.96	0.05	20,20,20,20	0
58	MG	1S	201	1/1	0.96	0.22	40,40,40,40	0
58	MG	1S	202	1/1	0.96	0.08	44,44,44,44	0
58	MG	1A	3771	1/1	0.96	0.07	23,23,23,23	0
58	MG	2A	3854	1/1	0.96	0.05	49,49,49,49	0
58	MG	1A	3573	1/1	0.96	0.26	45,45,45,45	0
58	MG	1a	1776	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3857	1/1	0.96	0.07	33,33,33,33	0
58	MG	1A	3185	1/1	0.96	0.10	56,56,56,56	0
58	MG	2A	3861	1/1	0.96	0.11	49,49,49,49	0
58	MG	2A	3862	1/1	0.96	0.08	42,42,42,42	0
58	MG	2A	3863	1/1	0.96	0.11	43,43,43,43	0
58	MG	1T	203	1/1	0.96	0.15	48,48,48,48	0
58	MG	1U	203	1/1	0.96	0.11	35,35,35,35	0
58	MG	2A	3217	1/1	0.96	0.13	40,40,40,40	0
58	MG	1U	204	1/1	0.96	0.14	28,28,28,28	0
58	MG	1a	1785	1/1	0.96	0.07	53,53,53,53	0
58	MG	2A	3495	1/1	0.96	0.06	47,47,47,47	0
58	MG	1A	3580	1/1	0.96	0.10	40,40,40,40	0
58	MG	2A	3873	1/1	0.96	0.07	42,42,42,42	0
58	MG	2A	3222	1/1	0.96	0.18	41,41,41,41	0
58	MG	2w	111	1/1	0.96	0.07	53,53,53,53	0
58	MG	2A	3875	1/1	0.96	0.11	50,50,50,50	0
58	MG	1A	3776	1/1	0.96	0.06	14,14,14,14	0
58	MG	2A	3501	1/1	0.96	0.12	33,33,33,33	0
58	MG	2A	3878	1/1	0.96	0.13	50,50,50,50	0
58	MG	1A	3585	1/1	0.96	0.05	27,27,27,27	0
58	MG	1V	206	1/1	0.96	0.13	40,40,40,40	0
58	MG	1a	1793	1/1	0.96	0.06	71,71,71,71	0
58	MG	1A	3779	1/1	0.96	0.06	22,22,22,22	0
58	MG	2A	3229	1/1	0.96	0.13	44,44,44,44	0
58	MG	1A	3782	1/1	0.96	0.07	39,39,39,39	0
58	MG	2B	203	1/1	0.96	0.09	56,56,56,56	0
58	MG	1A	3262	1/1	0.96	0.09	21,21,21,21	0
58	MG	1A	3591	1/1	0.96	0.11	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1W	203	1/1	0.96	0.07	46,46,46,46	0
58	MG	1W	205	1/1	0.96	0.14	38,38,38,38	0
58	MG	1a	1803	1/1	0.96	0.06	53,53,53,53	0
58	MG	2D	305	1/1	0.97	0.04	22,22,22,22	0
58	MG	2A	3275	1/1	0.97	0.06	51,51,51,51	0
58	MG	1A	3022	1/1	0.97	0.07	40,40,40,40	0
58	MG	2A	3004	1/1	0.97	0.23	48,48,48,48	0
58	MG	1A	3538	1/1	0.97	0.16	32,32,32,32	0
58	MG	1A	3042	1/1	0.97	0.05	34,34,34,34	0
58	MG	1A	3871	1/1	0.97	0.06	19,19,19,19	0
58	MG	1A	4071	1/1	0.97	0.05	14,14,14,14	0
58	MG	2A	3010	1/1	0.97	0.12	43,43,43,43	0
58	MG	2A	3583	1/1	0.97	0.08	32,32,32,32	0
58	MG	1A	3699	1/1	0.97	0.10	26,26,26,26	0
58	MG	1A	3700	1/1	0.97	0.06	35,35,35,35	0
58	MG	1A	3541	1/1	0.97	0.18	38,38,38,38	0
58	MG	1A	3111	1/1	0.97	0.15	27,27,27,27	0
58	MG	2F	305	1/1	0.97	0.06	41,41,41,41	0
58	MG	1A	4077	1/1	0.97	0.06	38,38,38,38	0
58	MG	2F	307	1/1	0.97	0.15	39,39,39,39	0
58	MG	1A	3112	1/1	0.97	0.05	37,37,37,37	0
58	MG	1a	1632	1/1	0.97	0.20	55,55,55,55	0
58	MG	2A	3592	1/1	0.97	0.09	52,52,52,52	0
58	MG	1a	1633	1/1	0.97	0.15	29,29,29,29	0
58	MG	2O	201	1/1	0.97	0.12	50,50,50,50	0
58	MG	2A	3595	1/1	0.97	0.07	53,53,53,53	0
58	MG	1A	3706	1/1	0.97	0.07	25,25,25,25	0
58	MG	1A	3048	1/1	0.97	0.11	34,34,34,34	0
58	MG	1A	3708	1/1	0.97	0.04	8,8,8,8	0
58	MG	2A	3025	1/1	0.97	0.07	48,48,48,48	0
58	MG	2A	3602	1/1	0.97	0.08	52,52,52,52	0
58	MG	1A	3881	1/1	0.97	0.27	36,36,36,36	0
58	MG	1A	3545	1/1	0.97	0.24	45,45,45,45	0
58	MG	2A	3297	1/1	0.97	0.09	45,45,45,45	0
58	MG	1A	3883	1/1	0.97	0.10	24,24,24,24	0
58	MG	1A	3884	1/1	0.97	0.11	24,24,24,24	0
58	MG	2A	3035	1/1	0.97	0.09	30,30,30,30	0
58	MG	1A	4087	1/1	0.97	0.06	17,17,17,17	0
58	MG	1A	3157	1/1	0.97	0.21	28,28,28,28	0
58	MG	20	101	1/1	0.97	0.05	55,55,55,55	0
58	MG	1A	3091	1/1	0.97	0.08	28,28,28,28	0
58	MG	1A	4092	1/1	0.97	0.10	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3445	1/1	0.97	0.17	40,40,40,40	0
58	MG	1A	3161	1/1	0.97	0.08	25,25,25,25	0
58	MG	2A	3044	1/1	0.97	0.06	44,44,44,44	0
58	MG	1A	3357	1/1	0.97	0.18	48,48,48,48	0
58	MG	2A	3310	1/1	0.97	0.20	42,42,42,42	0
58	MG	1A	3274	1/1	0.97	0.23	49,49,49,49	0
58	MG	2A	3047	1/1	0.97	0.26	54,54,54,54	0
58	MG	1A	3359	1/1	0.97	0.09	48,48,48,48	0
58	MG	2A	3049	1/1	0.97	0.13	21,21,21,21	0
58	MG	1a	1650	1/1	0.97	0.07	42,42,42,42	0
58	MG	2A	3623	1/1	0.97	0.10	33,33,33,33	0
58	MG	1a	1651	1/1	0.97	0.12	37,37,37,37	0
58	MG	1A	3216	1/1	0.97	0.15	34,34,34,34	0
58	MG	1A	3722	1/1	0.97	0.06	23,23,23,23	0
58	MG	1A	3163	1/1	0.97	0.25	28,28,28,28	0
58	MG	1A	3725	1/1	0.97	0.08	37,37,37,37	0
58	MG	2A	3056	1/1	0.97	0.18	52,52,52,52	0
58	MG	2A	3632	1/1	0.97	0.05	37,37,37,37	0
58	MG	1A	3452	1/1	0.97	0.14	29,29,29,29	0
58	MG	1A	4105	1/1	0.97	0.07	48,48,48,48	0
58	MG	2A	3635	1/1	0.97	0.08	53,53,53,53	0
58	MG	1A	3454	1/1	0.97	0.15	35,35,35,35	0
58	MG	2A	3638	1/1	0.97	0.10	49,49,49,49	0
58	MG	1A	3218	1/1	0.97	0.14	35,35,35,35	0
58	MG	1A	3730	1/1	0.97	0.05	38,38,38,38	0
58	MG	2A	3641	1/1	0.97	0.07	30,30,30,30	0
58	MG	2A	3642	1/1	0.97	0.05	31,31,31,31	0
58	MG	1B	202	1/1	0.97	0.17	48,48,48,48	0
58	MG	2A	3063	1/1	0.97	0.06	58,58,58,58	0
58	MG	1A	3561	1/1	0.97	0.12	33,33,33,33	0
58	MG	1A	3563	1/1	0.97	0.09	47,47,47,47	0
58	MG	1A	3286	1/1	0.97	0.13	30,30,30,30	0
58	MG	2a	1625	1/1	0.97	0.07	46,46,46,46	0
58	MG	1A	3288	1/1	0.97	0.31	26,26,26,26	0
58	MG	1A	3736	1/1	0.97	0.07	21,21,21,21	0
58	MG	1A	3289	1/1	0.97	0.11	34,34,34,34	0
58	MG	1A	3291	1/1	0.97	0.14	31,31,31,31	0
58	MG	1A	3740	1/1	0.97	0.07	44,44,44,44	0
58	MG	1A	3741	1/1	0.97	0.04	42,42,42,42	0
58	MG	1A	3292	1/1	0.97	0.07	42,42,42,42	0
58	MG	2A	3075	1/1	0.97	0.07	41,41,41,41	0
58	MG	1A	3293	1/1	0.97	0.08	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3118	1/1	0.97	0.20	42,42,42,42	0
58	MG	1A	3295	1/1	0.97	0.08	53,53,53,53	0
58	MG	1A	3465	1/1	0.97	0.07	45,45,45,45	0
58	MG	1A	3582	1/1	0.97	0.16	44,44,44,44	0
58	MG	1A	3296	1/1	0.97	0.17	22,22,22,22	0
58	MG	1A	3064	1/1	0.97	0.14	39,39,39,39	0
58	MG	2A	3084	1/1	0.97	0.07	38,38,38,38	0
58	MG	1A	3166	1/1	0.97	0.11	30,30,30,30	0
58	MG	1A	3121	1/1	0.97	0.15	41,41,41,41	0
58	MG	1A	3472	1/1	0.97	0.07	28,28,28,28	0
58	MG	1A	3224	1/1	0.97	0.08	31,31,31,31	0
58	MG	1A	3596	1/1	0.97	0.31	42,42,42,42	0
58	MG	1A	3225	1/1	0.97	0.10	34,34,34,34	0
58	MG	1A	3012	1/1	0.97	0.05	21,21,21,21	0
58	MG	1A	3933	1/1	0.97	0.08	35,35,35,35	0
58	MG	1A	3934	1/1	0.97	0.06	29,29,29,29	0
58	MG	2A	3095	1/1	0.97	0.07	39,39,39,39	0
58	MG	2A	3676	1/1	0.97	0.07	35,35,35,35	0
58	MG	2A	3359	1/1	0.97	0.17	48,48,48,48	0
58	MG	1A	3123	1/1	0.97	0.12	44,44,44,44	0
58	MG	1A	3937	1/1	0.97	0.05	32,32,32,32	0
58	MG	2A	3099	1/1	0.97	0.07	42,42,42,42	0
58	MG	1A	3228	1/1	0.97	0.07	34,34,34,34	0
58	MG	1B	237	1/1	0.97	0.09	44,44,44,44	0
58	MG	1A	3764	1/1	0.97	0.09	14,14,14,14	0
58	MG	1A	3941	1/1	0.97	0.07	26,26,26,26	0
58	MG	1A	3383	1/1	0.97	0.16	41,41,41,41	0
58	MG	2A	3106	1/1	0.97	0.09	42,42,42,42	0
58	MG	1A	3944	1/1	0.97	0.04	53,53,53,53	0
58	MG	1D	306	1/1	0.97	0.07	31,31,31,31	0
58	MG	1D	307	1/1	0.97	0.06	28,28,28,28	0
58	MG	1a	1699	1/1	0.97	0.17	41,41,41,41	0
58	MG	1A	3384	1/1	0.97	0.07	49,49,49,49	0
58	MG	1A	3385	1/1	0.97	0.17	31,31,31,31	0
58	MG	1A	3229	1/1	0.97	0.12	40,40,40,40	0
58	MG	2A	3695	1/1	0.97	0.14	51,51,51,51	0
58	MG	1E	303	1/1	0.97	0.14	28,28,28,28	0
58	MG	2A	3116	1/1	0.97	0.07	40,40,40,40	0
58	MG	1A	3231	1/1	0.97	0.15	25,25,25,25	0
58	MG	1A	3951	1/1	0.97	0.05	49,49,49,49	0
58	MG	1A	3029	1/1	0.97	0.18	25,25,25,25	0
58	MG	1A	3389	1/1	0.97	0.19	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3702	1/1	0.97	0.06	55,55,55,55	0
58	MG	1A	3774	1/1	0.97	0.08	19,19,19,19	0
58	MG	1A	3051	1/1	0.97	0.09	24,24,24,24	0
58	MG	1A	3612	1/1	0.97	0.07	22,22,22,22	0
58	MG	1A	3391	1/1	0.97	0.06	37,37,37,37	0
58	MG	2A	3388	1/1	0.97	0.30	60,60,60,60	0
58	MG	1A	3392	1/1	0.97	0.06	34,34,34,34	0
58	MG	1F	302	1/1	0.97	0.15	24,24,24,24	0
58	MG	2A	3710	1/1	0.97	0.07	49,49,49,49	0
58	MG	2A	3128	1/1	0.97	0.06	45,45,45,45	0
58	MG	1a	1715	1/1	0.97	0.16	40,40,40,40	0
58	MG	1F	303	1/1	0.97	0.12	25,25,25,25	0
58	MG	2a	1693	1/1	0.97	0.23	53,53,53,53	0
58	MG	2a	1694	1/1	0.97	0.19	52,52,52,52	0
58	MG	2a	1695	1/1	0.97	0.12	42,42,42,42	0
58	MG	1A	3781	1/1	0.97	0.06	54,54,54,54	0
58	MG	1A	3960	1/1	0.97	0.10	51,51,51,51	0
58	MG	1A	3312	1/1	0.97	0.10	46,46,46,46	0
58	MG	2a	1699	1/1	0.97	0.14	31,31,31,31	0
58	MG	1a	1722	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3963	1/1	0.97	0.04	44,44,44,44	0
58	MG	1A	3618	1/1	0.97	0.06	31,31,31,31	0
58	MG	1F	312	1/1	0.97	0.09	42,42,42,42	0
58	MG	1G	201	1/1	0.97	0.11	34,34,34,34	0
58	MG	1a	1727	1/1	0.97	0.05	39,39,39,39	0
58	MG	1a	1729	1/1	0.97	0.10	27,27,27,27	0
58	MG	1a	1730	1/1	0.97	0.09	32,32,32,32	0
58	MG	1A	3128	1/1	0.97	0.20	29,29,29,29	0
58	MG	2A	3729	1/1	0.97	0.07	36,36,36,36	0
58	MG	2A	3148	1/1	0.97	0.14	28,28,28,28	0
58	MG	2A	3732	1/1	0.97	0.07	29,29,29,29	0
58	MG	2a	1712	1/1	0.97	0.05	45,45,45,45	0
58	MG	2A	3733	1/1	0.97	0.06	31,31,31,31	0
58	MG	1A	3788	1/1	0.97	0.06	22,22,22,22	0
58	MG	1A	3969	1/1	0.97	0.05	30,30,30,30	0
58	MG	1a	1734	1/1	0.97	0.06	53,53,53,53	0
58	MG	2A	3412	1/1	0.97	0.09	34,34,34,34	0
58	MG	1A	3970	1/1	0.97	0.09	20,20,20,20	0
58	MG	1A	3620	1/1	0.97	0.09	38,38,38,38	0
58	MG	1A	3622	1/1	0.97	0.05	29,29,29,29	0
58	MG	1A	3397	1/1	0.97	0.07	21,21,21,21	0
58	MG	2A	3157	1/1	0.97	0.12	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3158	1/1	0.97	0.05	42,42,42,42	0
58	MG	1A	3794	1/1	0.97	0.05	16,16,16,16	0
58	MG	1A	3030	1/1	0.97	0.05	27,27,27,27	0
58	MG	1A	3627	1/1	0.97	0.10	25,25,25,25	0
58	MG	1A	3800	1/1	0.97	0.05	16,16,16,16	0
58	MG	1A	3238	1/1	0.97	0.07	51,51,51,51	0
58	MG	2A	3425	1/1	0.97	0.10	40,40,40,40	0
58	MG	2A	3164	1/1	0.97	0.04	33,33,33,33	0
58	MG	1A	3098	1/1	0.97	0.11	35,35,35,35	0
58	MG	2A	3428	1/1	0.97	0.31	54,54,54,54	0
58	MG	1P	204	1/1	0.97	0.09	38,38,38,38	0
58	MG	1A	3631	1/1	0.97	0.07	44,44,44,44	0
58	MG	1A	3403	1/1	0.97	0.22	52,52,52,52	0
58	MG	1A	3240	1/1	0.97	0.09	23,23,23,23	0
58	MG	1Q	206	1/1	0.97	0.10	33,33,33,33	0
58	MG	1A	3499	1/1	0.97	0.13	44,44,44,44	0
58	MG	2A	3761	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3500	1/1	0.97	0.10	35,35,35,35	0
58	MG	2A	3436	1/1	0.97	0.22	53,53,53,53	0
58	MG	1A	3811	1/1	0.97	0.05	18,18,18,18	0
58	MG	2A	3438	1/1	0.97	0.13	47,47,47,47	0
58	MG	1A	3638	1/1	0.97	0.05	20,20,20,20	0
58	MG	1A	3241	1/1	0.97	0.09	37,37,37,37	0
58	MG	1A	3641	1/1	0.97	0.07	29,29,29,29	0
58	MG	1A	3815	1/1	0.97	0.05	28,28,28,28	0
58	MG	1A	3816	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3242	1/1	0.97	0.11	26,26,26,26	0
58	MG	1U	202	1/1	0.97	0.14	42,42,42,42	0
58	MG	2A	3446	1/1	0.97	0.11	36,36,36,36	0
58	MG	2A	3776	1/1	0.97	0.08	37,37,37,37	0
58	MG	1A	3321	1/1	0.97	0.14	49,49,49,49	0
58	MG	2A	3184	1/1	0.97	0.13	35,35,35,35	0
58	MG	2a	1759	1/1	0.97	0.08	62,62,62,62	0
58	MG	1A	3409	1/1	0.97	0.13	39,39,39,39	0
58	MG	2A	3780	1/1	0.97	0.05	54,54,54,54	0
58	MG	2a	1763	1/1	0.97	0.06	60,60,60,60	0
58	MG	1A	3820	1/1	0.97	0.08	22,22,22,22	0
58	MG	1U	206	1/1	0.97	0.13	39,39,39,39	0
58	MG	2A	3453	1/1	0.97	0.20	41,41,41,41	0
58	MG	2A	3454	1/1	0.97	0.23	44,44,44,44	0
58	MG	2A	3188	1/1	0.97	0.05	43,43,43,43	0
58	MG	1U	207	1/1	0.97	0.16	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3055	1/1	0.97	0.09	40,40,40,40	0
58	MG	2A	3790	1/1	0.97	0.06	54,54,54,54	0
58	MG	1a	1774	1/1	0.97	0.06	56,56,56,56	0
58	MG	2a	1776	1/1	0.97	0.09	57,57,57,57	0
58	MG	1A	3077	1/1	0.97	0.18	41,41,41,41	0
58	MG	1V	203	1/1	0.97	0.21	27,27,27,27	0
58	MG	1V	204	1/1	0.97	0.30	37,37,37,37	0
58	MG	1a	1778	1/1	0.97	0.07	53,53,53,53	0
58	MG	1A	4001	1/1	0.97	0.05	43,43,43,43	0
58	MG	1A	3021	1/1	0.97	0.07	20,20,20,20	0
58	MG	2A	3198	1/1	0.97	0.15	50,50,50,50	0
58	MG	1A	3187	1/1	0.97	0.07	32,32,32,32	0
58	MG	1a	1783	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3825	1/1	0.97	0.04	18,18,18,18	0
58	MG	1A	4005	1/1	0.97	0.18	23,23,23,23	0
58	MG	1A	3650	1/1	0.97	0.05	13,13,13,13	0
58	MG	2a	1789	1/1	0.97	0.20	51,51,51,51	0
58	MG	1A	3651	1/1	0.97	0.06	24,24,24,24	0
58	MG	2A	3805	1/1	0.97	0.10	35,35,35,35	0
58	MG	1A	3059	1/1	0.97	0.06	29,29,29,29	0
58	MG	1a	1792	1/1	0.97	0.04	56,56,56,56	0
58	MG	1A	3328	1/1	0.97	0.06	40,40,40,40	0
58	MG	1X	105	1/1	0.97	0.05	36,36,36,36	0
58	MG	2A	3810	1/1	0.97	0.11	55,55,55,55	0
58	MG	1A	3139	1/1	0.97	0.07	34,34,34,34	0
58	MG	2A	3210	1/1	0.97	0.08	41,41,41,41	0
58	MG	1A	4013	1/1	0.97	0.06	11,11,11,11	0
58	MG	1A	4015	1/1	0.97	0.07	24,24,24,24	0
58	MG	1a	1799	1/1	0.97	0.04	63,63,63,63	0
58	MG	1A	4016	1/1	0.97	0.06	16,16,16,16	0
58	MG	1a	1801	1/1	0.97	0.05	57,57,57,57	0
58	MG	2A	3818	1/1	0.97	0.06	54,54,54,54	0
58	MG	1A	3330	1/1	0.97	0.10	30,30,30,30	0
58	MG	2A	3218	1/1	0.97	0.09	38,38,38,38	0
58	MG	2A	3821	1/1	0.97	0.07	45,45,45,45	0
58	MG	1A	3658	1/1	0.97	0.08	35,35,35,35	0
58	MG	1A	3192	1/1	0.97	0.12	28,28,28,28	0
58	MG	1a	1806	1/1	0.97	0.18	41,41,41,41	0
58	MG	1A	3140	1/1	0.97	0.10	41,41,41,41	0
58	MG	2A	3828	1/1	0.97	0.05	38,38,38,38	0
58	MG	10	103	1/1	0.97	0.05	33,33,33,33	0
58	MG	2A	3830	1/1	0.97	0.07	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	10	104	1/1	0.97	0.14	28,28,28,28	0
58	MG	2A	3833	1/1	0.97	0.10	33,33,33,33	0
58	MG	1A	3516	1/1	0.97	0.12	16,16,16,16	0
58	MG	2A	3498	1/1	0.97	0.19	46,46,46,46	0
58	MG	1A	3663	1/1	0.97	0.06	25,25,25,25	0
58	MG	2A	3839	1/1	0.97	0.07	58,58,58,58	0
58	MG	2A	3500	1/1	0.97	0.12	51,51,51,51	0
58	MG	10	107	1/1	0.97	0.05	35,35,35,35	0
58	MG	2A	3502	1/1	0.97	0.14	36,36,36,36	0
58	MG	1A	3143	1/1	0.97	0.06	43,43,43,43	0
58	MG	1A	3334	1/1	0.97	0.06	33,33,33,33	0
58	MG	2A	3231	1/1	0.97	0.13	42,42,42,42	0
58	MG	1A	4028	1/1	0.97	0.07	56,56,56,56	0
58	MG	2A	3233	1/1	0.97	0.13	36,36,36,36	0
58	MG	2A	3510	1/1	0.97	0.05	28,28,28,28	0
58	MG	1a	1816	1/1	0.97	0.14	38,38,38,38	0
58	MG	1A	3840	1/1	0.97	0.05	30,30,30,30	0
58	MG	11	103	1/1	0.97	0.04	28,28,28,28	0
58	MG	11	105	1/1	0.97	0.05	46,46,46,46	0
58	MG	1A	3423	1/1	0.97	0.07	38,38,38,38	0
58	MG	2a	1836	1/1	0.97	0.09	55,55,55,55	0
58	MG	1A	3521	1/1	0.97	0.19	29,29,29,29	0
58	MG	2A	3517	1/1	0.97	0.11	32,32,32,32	0
58	MG	2A	3858	1/1	0.97	0.07	52,52,52,52	0
58	MG	2A	3859	1/1	0.97	0.07	29,29,29,29	0
58	MG	1A	3196	1/1	0.97	0.28	29,29,29,29	0
58	MG	2d	302	1/1	0.97	0.07	65,65,65,65	0
58	MG	1A	3259	1/1	0.97	0.07	26,26,26,26	0
58	MG	2f	201	1/1	0.97	0.11	42,42,42,42	0
58	MG	1A	3426	1/1	0.97	0.15	49,49,49,49	0
58	MG	2A	3521	1/1	0.97	0.09	33,33,33,33	0
58	MG	15	104	1/1	0.97	0.14	28,28,28,28	0
58	MG	1A	3427	1/1	0.97	0.16	43,43,43,43	0
58	MG	2A	3866	1/1	0.97	0.09	39,39,39,39	0
58	MG	2A	3867	1/1	0.97	0.06	53,53,53,53	0
58	MG	1A	3104	1/1	0.97	0.10	27,27,27,27	0
58	MG	1v	102	1/1	0.97	0.07	47,47,47,47	0
58	MG	1A	3199	1/1	0.97	0.05	32,32,32,32	0
58	MG	1A	4041	1/1	0.97	0.06	43,43,43,43	0
58	MG	2A	3530	1/1	0.97	0.07	49,49,49,49	0
58	MG	2A	3531	1/1	0.97	0.06	26,26,26,26	0
58	MG	1w	103	1/1	0.97	0.11	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3528	1/1	0.97	0.06	39,39,39,39	0
58	MG	1A	3200	1/1	0.97	0.09	31,31,31,31	0
58	MG	1A	3341	1/1	0.97	0.10	41,41,41,41	0
58	MG	1A	3084	1/1	0.97	0.07	24,24,24,24	0
58	MG	1A	3856	1/1	0.97	0.09	18,18,18,18	0
58	MG	2A	3880	1/1	0.97	0.07	46,46,46,46	0
58	MG	1A	3857	1/1	0.97	0.11	46,46,46,46	0
58	MG	1x	102	1/1	0.97	0.12	48,48,48,48	0
58	MG	1A	3433	1/1	0.97	0.15	42,42,42,42	0
58	MG	1A	3688	1/1	0.97	0.06	15,15,15,15	0
58	MG	2w	107	1/1	0.97	0.14	57,57,57,57	0
58	MG	1a	1608	1/1	0.97	0.14	40,40,40,40	0
58	MG	1A	4051	1/1	0.97	0.04	29,29,29,29	0
58	MG	1A	3860	1/1	0.97	0.08	15,15,15,15	0
58	MG	1A	3861	1/1	0.97	0.09	20,20,20,20	0
58	MG	2A	3549	1/1	0.97	0.04	46,46,46,46	0
58	MG	1A	3203	1/1	0.97	0.08	37,37,37,37	0
58	MG	1x	111	1/1	0.97	0.10	49,49,49,49	0
58	MG	1A	3435	1/1	0.97	0.09	38,38,38,38	0
58	MG	2A	3269	1/1	0.97	0.08	47,47,47,47	0
58	MG	2A	3556	1/1	0.97	0.08	38,38,38,38	0
58	MG	1A	3864	1/1	0.97	0.30	39,39,39,39	0
58	MG	1A	3436	1/1	0.97	0.07	35,35,35,35	0
58	MG	2x	108	1/1	0.97	0.08	51,51,51,51	0
58	MG	1z	101	1/1	0.97	0.06	59,59,59,59	0
58	MG	1A	3437	1/1	0.97	0.09	41,41,41,41	0
58	MG	2A	3565	1/1	0.97	0.07	26,26,26,26	0
58	MG	2A	3566	1/1	0.97	0.11	35,35,35,35	0
58	MG	2A	3002	1/1	0.97	0.23	44,44,44,44	0
58	MG	2A	3570	1/1	0.97	0.06	53,53,53,53	0
58	MG	2A	3571	1/1	0.97	0.05	34,34,34,34	0
58	MG	2A	3573	1/1	0.97	0.08	30,30,30,30	0
58	MG	1A	3685	1/1	0.98	0.04	48,48,48,48	0
58	MG	1A	3033	1/1	0.98	0.20	23,23,23,23	0
58	MG	1A	3076	1/1	0.98	0.04	20,20,20,20	0
58	MG	2A	3103	1/1	0.98	0.07	26,26,26,26	0
58	MG	1a	1709	1/1	0.98	0.08	33,33,33,33	0
58	MG	1A	3052	1/1	0.98	0.14	26,26,26,26	0
58	MG	2A	3644	1/1	0.98	0.05	34,34,34,34	0
58	MG	1A	3560	1/1	0.98	0.07	47,47,47,47	0
58	MG	1A	3690	1/1	0.98	0.04	24,24,24,24	0
58	MG	2A	3360	1/1	0.98	0.13	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3108	1/1	0.98	0.10	43,43,43,43	0
58	MG	23	101	1/1	0.98	0.08	43,43,43,43	0
58	MG	1A	3992	1/1	0.98	0.11	32,32,32,32	0
58	MG	1A	3258	1/1	0.98	0.08	43,43,43,43	0
58	MG	25	103	1/1	0.98	0.05	41,41,41,41	0
58	MG	1A	3693	1/1	0.98	0.05	23,23,23,23	0
58	MG	1a	1716	1/1	0.98	0.12	32,32,32,32	0
58	MG	27	101	1/1	0.98	0.18	40,40,40,40	0
58	MG	27	102	1/1	0.98	0.07	40,40,40,40	0
58	MG	1a	1717	1/1	0.98	0.05	32,32,32,32	0
58	MG	1A	3474	1/1	0.98	0.21	37,37,37,37	0
58	MG	2A	3655	1/1	0.98	0.10	40,40,40,40	0
58	MG	1N	201	1/1	0.98	0.11	28,28,28,28	0
58	MG	2a	1601	1/1	0.98	0.06	47,47,47,47	0
58	MG	1A	3564	1/1	0.98	0.11	26,26,26,26	0
58	MG	1N	203	1/1	0.98	0.04	36,36,36,36	0
58	MG	1N	204	1/1	0.98	0.14	37,37,37,37	0
58	MG	2A	3119	1/1	0.98	0.05	31,31,31,31	0
58	MG	1A	3565	1/1	0.98	0.14	24,24,24,24	0
58	MG	1A	3394	1/1	0.98	0.17	49,49,49,49	0
58	MG	1A	3395	1/1	0.98	0.17	24,24,24,24	0
58	MG	1A	3202	1/1	0.98	0.12	18,18,18,18	0
58	MG	1A	3148	1/1	0.98	0.05	27,27,27,27	0
58	MG	1a	1728	1/1	0.98	0.04	31,31,31,31	0
58	MG	1A	3398	1/1	0.98	0.06	42,42,42,42	0
58	MG	1P	201	1/1	0.98	0.17	29,29,29,29	0
58	MG	1A	3703	1/1	0.98	0.07	20,20,20,20	0
58	MG	1A	3847	1/1	0.98	0.08	28,28,28,28	0
58	MG	1A	3399	1/1	0.98	0.28	39,39,39,39	0
58	MG	1A	3107	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3575	1/1	0.98	0.11	27,27,27,27	0
58	MG	2A	3133	1/1	0.98	0.04	35,35,35,35	0
58	MG	1A	3576	1/1	0.98	0.03	15,15,15,15	0
58	MG	2A	3135	1/1	0.98	0.04	40,40,40,40	0
58	MG	1a	1738	1/1	0.98	0.08	34,34,34,34	0
58	MG	1A	3577	1/1	0.98	0.17	29,29,29,29	0
58	MG	2A	3138	1/1	0.98	0.07	37,37,37,37	0
58	MG	1A	3326	1/1	0.98	0.08	30,30,30,30	0
58	MG	2A	3681	1/1	0.98	0.11	40,40,40,40	0
58	MG	2A	3140	1/1	0.98	0.13	33,33,33,33	0
58	MG	1R	203	1/1	0.98	0.13	27,27,27,27	0
58	MG	1A	4014	1/1	0.98	0.04	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3143	1/1	0.98	0.08	32,32,32,32	0
58	MG	1A	3855	1/1	0.98	0.07	35,35,35,35	0
58	MG	1A	3710	1/1	0.98	0.05	22,22,22,22	0
58	MG	1A	3579	1/1	0.98	0.13	33,33,33,33	0
58	MG	1a	1746	1/1	0.98	0.12	40,40,40,40	0
58	MG	1A	3712	1/1	0.98	0.05	32,32,32,32	0
58	MG	2A	3149	1/1	0.98	0.04	26,26,26,26	0
58	MG	1A	3150	1/1	0.98	0.15	29,29,29,29	0
58	MG	1A	4020	1/1	0.98	0.08	33,33,33,33	0
58	MG	1U	201	1/1	0.98	0.14	23,23,23,23	0
58	MG	1a	1752	1/1	0.98	0.06	49,49,49,49	0
58	MG	2A	3408	1/1	0.98	0.17	41,41,41,41	0
58	MG	1A	3108	1/1	0.98	0.05	24,24,24,24	0
58	MG	2A	3410	1/1	0.98	0.14	44,44,44,44	0
58	MG	1A	3715	1/1	0.98	0.05	44,44,44,44	0
58	MG	1A	3078	1/1	0.98	0.07	24,24,24,24	0
58	MG	1A	4025	1/1	0.98	0.07	40,40,40,40	0
58	MG	1A	3587	1/1	0.98	0.12	35,35,35,35	0
58	MG	1A	3588	1/1	0.98	0.18	32,32,32,32	0
58	MG	1U	209	1/1	0.98	0.16	26,26,26,26	0
58	MG	1a	1760	1/1	0.98	0.04	49,49,49,49	0
58	MG	1U	210	1/1	0.98	0.17	22,22,22,22	0
58	MG	1A	3209	1/1	0.98	0.09	39,39,39,39	0
58	MG	1a	1763	1/1	0.98	0.06	45,45,45,45	0
58	MG	1V	201	1/1	0.98	0.10	25,25,25,25	0
58	MG	1A	3866	1/1	0.98	0.07	36,36,36,36	0
58	MG	1A	3720	1/1	0.98	0.03	10,10,10,10	0
58	MG	2A	3424	1/1	0.98	0.07	30,30,30,30	0
58	MG	2A	3168	1/1	0.98	0.07	44,44,44,44	0
58	MG	1A	3590	1/1	0.98	0.13	39,39,39,39	0
58	MG	1A	3487	1/1	0.98	0.06	33,33,33,33	0
58	MG	1A	3488	1/1	0.98	0.09	34,34,34,34	0
58	MG	2A	3717	1/1	0.98	0.13	44,44,44,44	0
58	MG	1A	3724	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3872	1/1	0.98	0.07	37,37,37,37	0
58	MG	1W	201	1/1	0.98	0.08	38,38,38,38	0
58	MG	1A	4037	1/1	0.98	0.04	44,44,44,44	0
58	MG	1A	3079	1/1	0.98	0.05	24,24,24,24	0
58	MG	1A	4039	1/1	0.98	0.05	34,34,34,34	0
58	MG	2a	1669	1/1	0.98	0.13	38,38,38,38	0
58	MG	1A	3154	1/1	0.98	0.09	28,28,28,28	0
58	MG	1X	101	1/1	0.98	0.10	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1X	103	1/1	0.98	0.16	32,32,32,32	0
58	MG	1A	3212	1/1	0.98	0.12	36,36,36,36	0
58	MG	2A	3730	1/1	0.98	0.09	39,39,39,39	0
58	MG	2a	1675	1/1	0.98	0.14	42,42,42,42	0
58	MG	2a	1676	1/1	0.98	0.09	34,34,34,34	0
58	MG	1A	3034	1/1	0.98	0.18	23,23,23,23	0
58	MG	2a	1678	1/1	0.98	0.06	41,41,41,41	0
58	MG	1A	3081	1/1	0.98	0.07	24,24,24,24	0
58	MG	1A	3158	1/1	0.98	0.07	36,36,36,36	0
58	MG	1A	3600	1/1	0.98	0.14	27,27,27,27	0
58	MG	1Y	203	1/1	0.98	0.14	45,45,45,45	0
58	MG	1A	3113	1/1	0.98	0.09	26,26,26,26	0
58	MG	1A	3414	1/1	0.98	0.07	46,46,46,46	0
58	MG	1A	4048	1/1	0.98	0.07	26,26,26,26	0
58	MG	1A	3035	1/1	0.98	0.26	30,30,30,30	0
58	MG	1A	3056	1/1	0.98	0.05	29,29,29,29	0
58	MG	1A	3340	1/1	0.98	0.05	36,36,36,36	0
58	MG	2A	3450	1/1	0.98	0.21	42,42,42,42	0
58	MG	1A	3116	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	4053	1/1	0.98	0.04	34,34,34,34	0
58	MG	1A	3277	1/1	0.98	0.05	40,40,40,40	0
58	MG	1A	4055	1/1	0.98	0.06	23,23,23,23	0
58	MG	1A	4056	1/1	0.98	0.07	47,47,47,47	0
58	MG	10	109	1/1	0.98	0.06	44,44,44,44	0
58	MG	1A	3887	1/1	0.98	0.04	38,38,38,38	0
58	MG	1a	1804	1/1	0.98	0.16	40,40,40,40	0
58	MG	1A	3278	1/1	0.98	0.07	21,21,21,21	0
58	MG	1A	3279	1/1	0.98	0.05	31,31,31,31	0
58	MG	1A	4060	1/1	0.98	0.09	50,50,50,50	0
58	MG	11	104	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3280	1/1	0.98	0.11	34,34,34,34	0
58	MG	1A	3614	1/1	0.98	0.07	25,25,25,25	0
58	MG	1A	3117	1/1	0.98	0.17	31,31,31,31	0
58	MG	12	102	1/1	0.98	0.09	36,36,36,36	0
58	MG	2A	3468	1/1	0.98	0.09	24,24,24,24	0
58	MG	1A	3748	1/1	0.98	0.08	26,26,26,26	0
58	MG	13	103	1/1	0.98	0.05	38,38,38,38	0
58	MG	1A	4066	1/1	0.98	0.04	13,13,13,13	0
58	MG	2A	3472	1/1	0.98	0.17	40,40,40,40	0
58	MG	1A	3894	1/1	0.98	0.05	43,43,43,43	0
58	MG	2A	3474	1/1	0.98	0.12	40,40,40,40	0
58	MG	15	103	1/1	0.98	0.14	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3769	1/1	0.98	0.04	49,49,49,49	0
58	MG	1A	3347	1/1	0.98	0.16	41,41,41,41	0
58	MG	2A	3216	1/1	0.98	0.09	38,38,38,38	0
58	MG	15	105	1/1	0.98	0.05	23,23,23,23	0
58	MG	15	106	1/1	0.98	0.11	35,35,35,35	0
58	MG	1f	201	1/1	0.98	0.14	46,46,46,46	0
58	MG	2A	3775	1/1	0.98	0.05	27,27,27,27	0
58	MG	1A	4069	1/1	0.98	0.04	32,32,32,32	0
58	MG	1A	4070	1/1	0.98	0.05	39,39,39,39	0
58	MG	1A	3282	1/1	0.98	0.09	34,34,34,34	0
58	MG	2A	3484	1/1	0.98	0.03	19,19,19,19	0
58	MG	2a	1725	1/1	0.98	0.12	42,42,42,42	0
58	MG	17	101	1/1	0.98	0.08	24,24,24,24	0
58	MG	2A	3486	1/1	0.98	0.09	34,34,34,34	0
58	MG	1m	3001	1/1	0.98	0.04	51,51,51,51	0
58	MG	2A	3225	1/1	0.98	0.20	30,30,30,30	0
58	MG	1A	3897	1/1	0.98	0.07	25,25,25,25	0
58	MG	1A	3284	1/1	0.98	0.07	22,22,22,22	0
58	MG	2A	3786	1/1	0.98	0.09	41,41,41,41	0
58	MG	1A	3285	1/1	0.98	0.18	36,36,36,36	0
58	MG	18	102	1/1	0.98	0.14	32,32,32,32	0
58	MG	18	103	1/1	0.98	0.08	34,34,34,34	0
58	MG	1A	3085	1/1	0.98	0.13	33,33,33,33	0
58	MG	1A	3621	1/1	0.98	0.06	20,20,20,20	0
58	MG	2a	1738	1/1	0.98	0.17	52,52,52,52	0
58	MG	1A	3352	1/1	0.98	0.21	28,28,28,28	0
58	MG	1A	3353	1/1	0.98	0.20	28,28,28,28	0
58	MG	1A	3904	1/1	0.98	0.06	36,36,36,36	0
58	MG	1a	1605	1/1	0.98	0.09	43,43,43,43	0
58	MG	1A	3625	1/1	0.98	0.05	28,28,28,28	0
58	MG	1A	3759	1/1	0.98	0.05	17,17,17,17	0
58	MG	2A	3239	1/1	0.98	0.05	37,37,37,37	0
58	MG	1A	3760	1/1	0.98	0.05	23,23,23,23	0
58	MG	2A	3241	1/1	0.98	0.19	42,42,42,42	0
58	MG	2A	3505	1/1	0.98	0.07	56,56,56,56	0
58	MG	2a	1749	1/1	0.98	0.05	58,58,58,58	0
58	MG	1a	1610	1/1	0.98	0.09	23,23,23,23	0
58	MG	2A	3507	1/1	0.98	0.06	56,56,56,56	0
58	MG	1A	3287	1/1	0.98	0.22	27,27,27,27	0
58	MG	2A	3244	1/1	0.98	0.07	36,36,36,36	0
58	MG	1A	3909	1/1	0.98	0.08	41,41,41,41	0
58	MG	1A	3355	1/1	0.98	0.17	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	4088	1/1	0.98	0.03	26,26,26,26	0
58	MG	1x	108	1/1	0.98	0.06	18,18,18,18	0
58	MG	2a	1758	1/1	0.98	0.04	61,61,61,61	0
58	MG	1A	4089	1/1	0.98	0.04	30,30,30,30	0
58	MG	1A	3356	1/1	0.98	0.13	31,31,31,31	0
58	MG	2a	1761	1/1	0.98	0.07	56,56,56,56	0
58	MG	1a	1617	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3013	1/1	0.98	0.09	18,18,18,18	0
58	MG	1A	3518	1/1	0.98	0.09	43,43,43,43	0
58	MG	1a	1620	1/1	0.98	0.05	36,36,36,36	0
58	MG	2a	1766	1/1	0.98	0.15	48,48,48,48	0
58	MG	2a	1767	1/1	0.98	0.04	54,54,54,54	0
58	MG	1A	3037	1/1	0.98	0.07	31,31,31,31	0
58	MG	1A	4094	1/1	0.98	0.08	42,42,42,42	0
58	MG	2A	3522	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3633	1/1	0.98	0.06	18,18,18,18	0
58	MG	1A	3290	1/1	0.98	0.05	34,34,34,34	0
58	MG	1A	3770	1/1	0.98	0.04	33,33,33,33	0
58	MG	1A	3089	1/1	0.98	0.05	32,32,32,32	0
58	MG	2A	3527	1/1	0.98	0.07	33,33,33,33	0
58	MG	1A	3636	1/1	0.98	0.04	31,31,31,31	0
58	MG	2A	3826	1/1	0.98	0.10	37,37,37,37	0
58	MG	2A	3827	1/1	0.98	0.06	25,25,25,25	0
58	MG	1A	3060	1/1	0.98	0.10	40,40,40,40	0
58	MG	1A	3039	1/1	0.98	0.17	27,27,27,27	0
58	MG	1a	1630	1/1	0.98	0.15	53,53,53,53	0
58	MG	1A	3924	1/1	0.98	0.07	39,39,39,39	0
58	MG	2A	3832	1/1	0.98	0.04	34,34,34,34	0
58	MG	1A	3040	1/1	0.98	0.12	28,28,28,28	0
58	MG	2A	3834	1/1	0.98	0.04	38,38,38,38	0
58	MG	1A	4104	1/1	0.98	0.06	48,48,48,48	0
58	MG	2A	3536	1/1	0.98	0.06	51,51,51,51	0
58	MG	1A	3230	1/1	0.98	0.12	27,27,27,27	0
58	MG	2A	3016	1/1	0.98	0.12	55,55,55,55	0
58	MG	1A	3175	1/1	0.98	0.05	32,32,32,32	0
58	MG	1A	3778	1/1	0.98	0.04	14,14,14,14	0
58	MG	1A	3179	1/1	0.98	0.07	23,23,23,23	0
58	MG	2A	3843	1/1	0.98	0.05	38,38,38,38	0
58	MG	1A	3930	1/1	0.98	0.05	42,42,42,42	0
58	MG	1A	3234	1/1	0.98	0.15	33,33,33,33	0
58	MG	1A	3181	1/1	0.98	0.11	32,32,32,32	0
58	MG	2A	3545	1/1	0.98	0.05	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3783	1/1	0.98	0.05	25,25,25,25	0
58	MG	1B	206	1/1	0.98	0.04	44,44,44,44	0
58	MG	2A	3026	1/1	0.98	0.08	36,36,36,36	0
58	MG	2A	3027	1/1	0.98	0.07	32,32,32,32	0
58	MG	2A	3028	1/1	0.98	0.29	46,46,46,46	0
58	MG	1A	3785	1/1	0.98	0.07	20,20,20,20	0
58	MG	1A	3017	1/1	0.98	0.05	40,40,40,40	0
58	MG	1A	3647	1/1	0.98	0.05	11,11,11,11	0
58	MG	2A	3555	1/1	0.98	0.06	31,31,31,31	0
58	MG	1A	3094	1/1	0.98	0.05	23,23,23,23	0
58	MG	2A	3557	1/1	0.98	0.12	28,28,28,28	0
58	MG	2A	3034	1/1	0.98	0.06	38,38,38,38	0
58	MG	1B	211	1/1	0.98	0.09	40,40,40,40	0
58	MG	1A	3939	1/1	0.98	0.05	33,33,33,33	0
58	MG	1B	213	1/1	0.98	0.06	30,30,30,30	0
58	MG	2A	3564	1/1	0.98	0.08	42,42,42,42	0
58	MG	2A	3038	1/1	0.98	0.12	22,22,22,22	0
58	MG	1A	3302	1/1	0.98	0.05	24,24,24,24	0
58	MG	2a	1817	1/1	0.98	0.19	48,48,48,48	0
58	MG	2A	3040	1/1	0.98	0.06	44,44,44,44	0
58	MG	2A	3568	1/1	0.98	0.04	44,44,44,44	0
58	MG	2A	3569	1/1	0.98	0.07	29,29,29,29	0
58	MG	1A	3018	1/1	0.98	0.09	24,24,24,24	0
58	MG	1A	3791	1/1	0.98	0.04	31,31,31,31	0
58	MG	1A	3943	1/1	0.98	0.05	26,26,26,26	0
58	MG	1A	3792	1/1	0.98	0.03	26,26,26,26	0
58	MG	1A	3046	1/1	0.98	0.03	22,22,22,22	0
58	MG	1A	3946	1/1	0.98	0.06	38,38,38,38	0
58	MG	1B	221	1/1	0.98	0.10	31,31,31,31	0
58	MG	1B	222	1/1	0.98	0.05	29,29,29,29	0
58	MG	1A	3132	1/1	0.98	0.12	29,29,29,29	0
58	MG	1A	3024	1/1	0.98	0.11	36,36,36,36	0
58	MG	1A	3949	1/1	0.98	0.10	44,44,44,44	0
58	MG	2A	3582	1/1	0.98	0.06	34,34,34,34	0
58	MG	2A	3303	1/1	0.98	0.06	44,44,44,44	0
58	MG	1A	3796	1/1	0.98	0.08	44,44,44,44	0
58	MG	1A	3654	1/1	0.98	0.04	26,26,26,26	0
58	MG	1A	3798	1/1	0.98	0.06	40,40,40,40	0
58	MG	1A	3453	1/1	0.98	0.11	40,40,40,40	0
58	MG	1A	3377	1/1	0.98	0.09	31,31,31,31	0
58	MG	2A	3589	1/1	0.98	0.16	46,46,46,46	0
58	MG	1A	3657	1/1	0.98	0.07	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3539	1/1	0.98	0.18	37,37,37,37	0
58	MG	1A	3659	1/1	0.98	0.04	30,30,30,30	0
58	MG	1A	3378	1/1	0.98	0.11	27,27,27,27	0
58	MG	2B	210	1/1	0.98	0.04	50,50,50,50	0
58	MG	1A	3188	1/1	0.98	0.10	32,32,32,32	0
58	MG	1A	3244	1/1	0.98	0.12	25,25,25,25	0
58	MG	1A	3961	1/1	0.98	0.05	35,35,35,35	0
58	MG	1A	3809	1/1	0.98	0.05	13,13,13,13	0
58	MG	2l	202	1/1	0.98	0.11	55,55,55,55	0
58	MG	2A	3600	1/1	0.98	0.04	30,30,30,30	0
58	MG	1D	301	1/1	0.98	0.12	23,23,23,23	0
58	MG	1A	3134	1/1	0.98	0.05	35,35,35,35	0
58	MG	1A	3964	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3311	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3007	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	3313	1/1	0.98	0.21	41,41,41,41	0
58	MG	2D	303	1/1	0.98	0.17	40,40,40,40	0
58	MG	1D	308	1/1	0.98	0.13	30,30,30,30	0
58	MG	1A	3968	1/1	0.98	0.05	37,37,37,37	0
58	MG	2D	306	1/1	0.98	0.27	35,35,35,35	0
58	MG	1a	1683	1/1	0.98	0.06	51,51,51,51	0
58	MG	1D	311	1/1	0.98	0.14	29,29,29,29	0
58	MG	2E	302	1/1	0.98	0.07	50,50,50,50	0
58	MG	1A	3137	1/1	0.98	0.11	24,24,24,24	0
58	MG	1A	3463	1/1	0.98	0.19	39,39,39,39	0
58	MG	2E	305	1/1	0.98	0.09	41,41,41,41	0
58	MG	2A	3078	1/1	0.98	0.09	27,27,27,27	0
58	MG	1E	301	1/1	0.98	0.07	32,32,32,32	0
58	MG	1E	302	1/1	0.98	0.07	23,23,23,23	0
58	MG	1A	3549	1/1	0.98	0.07	19,19,19,19	0
58	MG	1A	3070	1/1	0.98	0.10	16,16,16,16	0
58	MG	1A	3072	1/1	0.98	0.15	27,27,27,27	0
58	MG	1A	3974	1/1	0.98	0.07	36,36,36,36	0
58	MG	1A	3673	1/1	0.98	0.05	19,19,19,19	0
58	MG	1A	3466	1/1	0.98	0.07	42,42,42,42	0
58	MG	1A	3467	1/1	0.98	0.14	43,43,43,43	0
58	MG	1A	3032	1/1	0.98	0.07	28,28,28,28	0
58	MG	1E	312	1/1	0.98	0.08	31,31,31,31	0
58	MG	1A	3677	1/1	0.98	0.05	19,19,19,19	0
58	MG	1A	3678	1/1	0.98	0.04	18,18,18,18	0
58	MG	2A	3092	1/1	0.98	0.17	38,38,38,38	0
58	MG	2A	3628	1/1	0.98	0.06	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1F	301	1/1	0.98	0.08	19,19,19,19	0
58	MG	1A	3826	1/1	0.98	0.04	27,27,27,27	0
58	MG	1A	3141	1/1	0.98	0.07	31,31,31,31	0
58	MG	1A	3681	1/1	0.98	0.03	22,22,22,22	0
58	MG	1F	305	1/1	0.98	0.03	25,25,25,25	0
58	MG	2A	3098	1/1	0.98	0.10	36,36,36,36	0
58	MG	2A	3636	1/1	0.98	0.07	30,30,30,30	0
60	ZN	14	102	1/1	0.98	0.06	96,96,96,96	0
60	ZN	2Y	501	1/1	0.98	0.04	79,79,79,79	0
58	MG	1A	3556	1/1	0.98	0.05	39,39,39,39	0
58	MG	1A	3058	1/1	0.99	0.05	15,15,15,15	0
58	MG	1w	106	1/1	0.99	0.05	51,51,51,51	0
58	MG	17	102	1/1	0.99	0.15	28,28,28,28	0
58	MG	1A	3808	1/1	0.99	0.03	18,18,18,18	0
58	MG	1F	306	1/1	0.99	0.03	30,30,30,30	0
58	MG	1A	4078	1/1	0.99	0.04	28,28,28,28	0
58	MG	1F	308	1/1	0.99	0.11	26,26,26,26	0
58	MG	1A	3586	1/1	0.99	0.12	24,24,24,24	0
58	MG	1A	3810	1/1	0.99	0.04	38,38,38,38	0
58	MG	1A	3984	1/1	0.99	0.03	34,34,34,34	0
58	MG	1A	3727	1/1	0.99	0.06	19,19,19,19	0
58	MG	1A	3008	1/1	0.99	0.04	16,16,16,16	0
58	MG	1A	3142	1/1	0.99	0.04	9,9,9,9	0
58	MG	1A	3176	1/1	0.99	0.20	28,28,28,28	0
58	MG	1A	3219	1/1	0.99	0.17	32,32,32,32	0
58	MG	1a	1607	1/1	0.99	0.04	40,40,40,40	0
58	MG	1A	3177	1/1	0.99	0.18	20,20,20,20	0
58	MG	1A	3178	1/1	0.99	0.04	31,31,31,31	0
58	MG	1A	3734	1/1	0.99	0.04	30,30,30,30	0
58	MG	1A	3593	1/1	0.99	0.04	34,34,34,34	0
58	MG	1A	3994	1/1	0.99	0.06	21,21,21,21	0
58	MG	2A	3534	1/1	0.99	0.04	36,36,36,36	0
58	MG	1A	3047	1/1	0.99	0.09	32,32,32,32	0
58	MG	1A	3737	1/1	0.99	0.04	22,22,22,22	0
58	MG	1A	3271	1/1	0.99	0.08	33,33,33,33	0
58	MG	1A	3180	1/1	0.99	0.10	18,18,18,18	0
58	MG	1A	3375	1/1	0.99	0.12	33,33,33,33	0
58	MG	2a	1768	1/1	0.99	0.05	53,53,53,53	0
58	MG	1A	3023	1/1	0.99	0.04	10,10,10,10	0
58	MG	1A	3009	1/1	0.99	0.03	17,17,17,17	0
58	MG	2A	3009	1/1	0.99	0.04	34,34,34,34	0
58	MG	1a	1737	1/1	0.99	0.03	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3146	1/1	0.99	0.15	24,24,24,24	0
58	MG	1A	3601	1/1	0.99	0.20	30,30,30,30	0
58	MG	1P	203	1/1	0.99	0.10	23,23,23,23	0
58	MG	2A	3836	1/1	0.99	0.04	48,48,48,48	0
58	MG	2A	3014	1/1	0.99	0.07	36,36,36,36	0
58	MG	1A	3914	1/1	0.99	0.04	32,32,32,32	0
58	MG	1Q	201	1/1	0.99	0.10	32,32,32,32	0
58	MG	1Q	202	1/1	0.99	0.05	29,29,29,29	0
58	MG	1A	3147	1/1	0.99	0.17	25,25,25,25	0
58	MG	1A	4006	1/1	0.99	0.04	14,14,14,14	0
58	MG	1A	4007	1/1	0.99	0.02	25,25,25,25	0
58	MG	2A	3554	1/1	0.99	0.09	39,39,39,39	0
58	MG	2A	3021	1/1	0.99	0.05	19,19,19,19	0
58	MG	2A	3846	1/1	0.99	0.06	29,29,29,29	0
58	MG	1a	1747	1/1	0.99	0.04	40,40,40,40	0
58	MG	1A	3746	1/1	0.99	0.06	41,41,41,41	0
58	MG	2A	3558	1/1	0.99	0.04	30,30,30,30	0
58	MG	2A	3559	1/1	0.99	0.06	45,45,45,45	0
58	MG	1A	3670	1/1	0.99	0.07	26,26,26,26	0
58	MG	1A	3120	1/1	0.99	0.14	29,29,29,29	0
58	MG	1A	3919	1/1	0.99	0.04	24,24,24,24	0
58	MG	1R	204	1/1	0.99	0.05	22,22,22,22	0
58	MG	1A	4109	1/1	0.99	0.04	45,45,45,45	0
58	MG	1B	201	1/1	0.99	0.06	37,37,37,37	0
58	MG	2A	3030	1/1	0.99	0.11	36,36,36,36	0
58	MG	1A	3099	1/1	0.99	0.10	13,13,13,13	0
58	MG	1A	3031	1/1	0.99	0.14	22,22,22,22	0
58	MG	1A	3014	1/1	0.99	0.04	17,17,17,17	0
58	MG	1A	3232	1/1	0.99	0.10	19,19,19,19	0
58	MG	1A	3189	1/1	0.99	0.09	30,30,30,30	0
58	MG	2A	3572	1/1	0.99	0.05	33,33,33,33	0
58	MG	1A	3609	1/1	0.99	0.04	17,17,17,17	0
58	MG	1A	3283	1/1	0.99	0.09	21,21,21,21	0
58	MG	1A	3679	1/1	0.99	0.03	15,15,15,15	0
58	MG	2A	3718	1/1	0.99	0.03	25,25,25,25	0
58	MG	1A	3757	1/1	0.99	0.04	37,37,37,37	0
58	MG	1A	3124	1/1	0.99	0.05	30,30,30,30	0
58	MG	1A	4022	1/1	0.99	0.04	51,51,51,51	0
58	MG	1A	3082	1/1	0.99	0.08	29,29,29,29	0
58	MG	1U	208	1/1	0.99	0.20	29,29,29,29	0
58	MG	1A	3682	1/1	0.99	0.03	21,21,21,21	0
58	MG	1A	3683	1/1	0.99	0.05	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3726	1/1	0.99	0.03	42,42,42,42	0
58	MG	2A	3177	1/1	0.99	0.06	24,24,24,24	0
58	MG	1A	3613	1/1	0.99	0.07	34,34,34,34	0
58	MG	1A	3126	1/1	0.99	0.17	24,24,24,24	0
58	MG	1A	3193	1/1	0.99	0.15	33,33,33,33	0
58	MG	1a	1773	1/1	0.99	0.03	45,45,45,45	0
58	MG	1A	3936	1/1	0.99	0.04	8,8,8,8	0
58	MG	1A	3849	1/1	0.99	0.03	48,48,48,48	0
58	MG	1V	205	1/1	0.99	0.05	17,17,17,17	0
58	MG	2A	3735	1/1	0.99	0.05	30,30,30,30	0
58	MG	1A	3155	1/1	0.99	0.05	27,27,27,27	0
58	MG	1A	3766	1/1	0.99	0.06	31,31,31,31	0
58	MG	2A	3593	1/1	0.99	0.05	32,32,32,32	0
58	MG	1A	3065	1/1	0.99	0.12	33,33,33,33	0
58	MG	1A	3010	1/1	0.99	0.04	22,22,22,22	0
58	MG	1A	3197	1/1	0.99	0.18	26,26,26,26	0
58	MG	1a	1782	1/1	0.99	0.04	59,59,59,59	0
58	MG	1A	4036	1/1	0.99	0.02	16,16,16,16	0
58	MG	2A	3599	1/1	0.99	0.08	31,31,31,31	0
58	MG	1a	1784	1/1	0.99	0.02	41,41,41,41	0
58	MG	1A	3105	1/1	0.99	0.07	33,33,33,33	0
58	MG	1W	204	1/1	0.99	0.14	23,23,23,23	0
58	MG	1A	3692	1/1	0.99	0.06	17,17,17,17	0
58	MG	1A	3243	1/1	0.99	0.04	27,27,27,27	0
58	MG	1a	1789	1/1	0.99	0.04	49,49,49,49	0
58	MG	1a	1790	1/1	0.99	0.02	33,33,33,33	0
58	MG	2A	3331	1/1	0.99	0.07	40,40,40,40	0
58	MG	2A	3753	1/1	0.99	0.10	33,33,33,33	0
58	MG	1A	3003	1/1	0.99	0.07	23,23,23,23	0
58	MG	1X	102	1/1	0.99	0.05	39,39,39,39	0
58	MG	2D	302	1/1	0.99	0.18	46,46,46,46	0
58	MG	2A	3069	1/1	0.99	0.02	23,23,23,23	0
58	MG	1A	3245	1/1	0.99	0.18	25,25,25,25	0
58	MG	1A	3624	1/1	0.99	0.04	27,27,27,27	0
58	MG	1A	3160	1/1	0.99	0.07	26,26,26,26	0
58	MG	1A	3086	1/1	0.99	0.19	28,28,28,28	0
58	MG	1A	3162	1/1	0.99	0.13	22,22,22,22	0
58	MG	1a	1798	1/1	0.99	0.04	59,59,59,59	0
58	MG	1A	3562	1/1	0.99	0.12	24,24,24,24	0
58	MG	1A	3780	1/1	0.99	0.04	36,36,36,36	0
58	MG	1B	238	1/1	0.99	0.04	34,34,34,34	0
58	MG	1A	3701	1/1	0.99	0.06	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3629	1/1	0.99	0.06	22,22,22,22	0
58	MG	1A	3068	1/1	0.99	0.07	25,25,25,25	0
58	MG	1A	3784	1/1	0.99	0.04	16,16,16,16	0
58	MG	1A	3250	1/1	0.99	0.07	45,45,45,45	0
58	MG	1D	305	1/1	0.99	0.03	11,11,11,11	0
58	MG	1A	3054	1/1	0.99	0.06	40,40,40,40	0
58	MG	1A	3252	1/1	0.99	0.16	31,31,31,31	0
58	MG	1A	3406	1/1	0.99	0.04	22,22,22,22	0
58	MG	2A	3629	1/1	0.99	0.05	30,30,30,30	0
58	MG	1D	309	1/1	0.99	0.04	41,41,41,41	0
58	MG	1A	3043	1/1	0.99	0.12	17,17,17,17	0
58	MG	1A	3514	1/1	0.99	0.05	39,39,39,39	0
58	MG	1A	3570	1/1	0.99	0.16	30,30,30,30	0
58	MG	1A	3206	1/1	0.99	0.03	12,12,12,12	0
58	MG	1A	3639	1/1	0.99	0.06	11,11,11,11	0
58	MG	1A	3135	1/1	0.99	0.06	29,29,29,29	0
58	MG	1A	3071	1/1	0.99	0.05	10,10,10,10	0
58	MG	1E	304	1/1	0.99	0.11	26,26,26,26	0
58	MG	1A	3307	1/1	0.99	0.05	19,19,19,19	0
58	MG	1A	3168	1/1	0.99	0.05	28,28,28,28	0
58	MG	13	101	1/1	0.99	0.06	21,21,21,21	0
58	MG	2T	201	1/1	0.99	0.03	47,47,47,47	0
58	MG	2A	3788	1/1	0.99	0.05	45,45,45,45	0
58	MG	1A	4065	1/1	0.99	0.03	26,26,26,26	0
58	MG	1A	3044	1/1	0.99	0.16	26,26,26,26	0
58	MG	1A	3799	1/1	0.99	0.04	10,10,10,10	0
58	MG	15	101	1/1	0.99	0.15	20,20,20,20	0
58	MG	1A	3073	1/1	0.99	0.03	10,10,10,10	0
58	MG	1A	3171	1/1	0.99	0.04	13,13,13,13	0
58	MG	1A	3045	1/1	0.99	0.04	26,26,26,26	0
58	MG	1A	3581	1/1	0.99	0.20	30,30,30,30	0
58	MG	1A	4072	1/1	0.99	0.07	20,20,20,20	0
59	K	1A	3574	1/1	0.99	0.04	38,38,38,38	0
58	MG	1A	3214	1/1	0.99	0.18	26,26,26,26	0
60	ZN	1Y	204	1/1	0.99	0.03	52,52,52,52	0
58	MG	1A	3583	1/1	0.99	0.06	30,30,30,30	0
60	ZN	16	103	1/1	0.99	0.02	39,39,39,39	0
60	ZN	19	102	1/1	0.99	0.04	37,37,37,37	0
60	ZN	1n	102	1/1	0.99	0.03	55,55,55,55	0
58	MG	1A	3584	1/1	0.99	0.09	25,25,25,25	0
58	MG	2A	3377	1/1	0.99	0.03	30,30,30,30	0
60	ZN	25	105	1/1	0.99	0.04	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
60	ZN	26	102	1/1	0.99	0.03	54,54,54,54	0
60	ZN	29	501	1/1	0.99	0.03	71,71,71,71	0
60	ZN	2n	102	1/1	0.99	0.03	77,77,77,77	0
61	SF4	1d	302	8/8	0.99	0.05	52,55,58,66	0
61	SF4	2d	303	8/8	0.99	0.04	60,65,68,76	0
60	ZN	15	108	1/1	1.00	0.02	36,36,36,36	0
58	MG	1A	3038	1/1	1.00	0.09	14,14,14,14	0

6.5 Other polymers

There are no such residues in this entry.