Full wwPDB X-ray Structure Validation Report (i)

Nov 11, 2024 – 07:14 PM EST

PDB ID	:	9DFD
Title	:	Crystal structure of the wild-type Thermus thermophilus 70S ribosome in complex with lasso peptide lariocidin B, mRNA, aminoacylated A-site Phe-tRNAphe, aminoacylated P-site fMet-tRNAmet, and deacylated E-site tRNAphe at 2.60A 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	:	2.60 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:

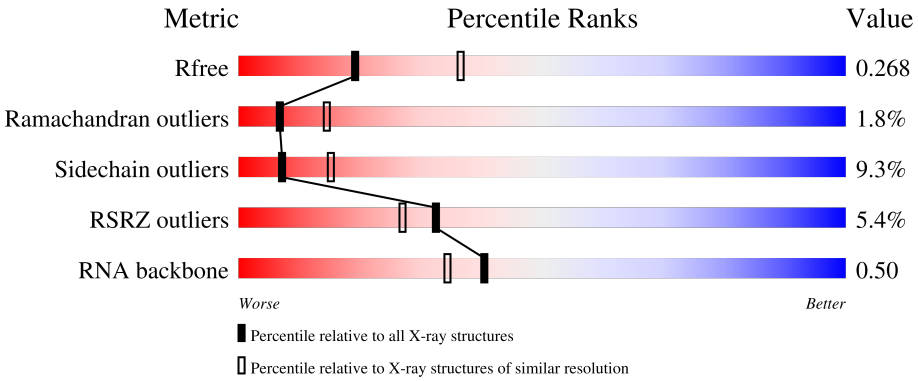
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.20.1
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)

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 2.60 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	3775 (2.60-2.60)
Ramachandran outliers	177936	4129 (2.60-2.60)
Sidechain outliers	177891	4129 (2.60-2.60)
RSRZ outliers	164620	3775 (2.60-2.60)
RNA backbone	3690	1025 (2.88-2.32)

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	7% 64% 30% 5%
1	2A	2915	6% 72% 21%
2	1B	121	77% 20%

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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	2% 79% 18%
3	1D	276	95%
3	2D	276	2% 94% 5%
4	1E	206	95%
4	2E	206	% 94% 5%
5	1F	210	88% 8%
5	2F	210	% 91% 5%
6	1G	182	4% 91% 9%
6	2G	182	4% 90% 8%
7	1H	180	2% 90% 7%
7	2H	180	20% 87% 10%
8	1I	148	% 83% 15%
8	2I	148	5% 84% 14%
9	1N	140	91% 9%
9	2N	140	4% 93% 7%
10	1O	122	98%
10	2O	122	2% 94% 6%
11	1P	150	92% 7%
11	2P	150	% 94% 5%
12	1Q	141	% 98%
12	2Q	141	3% 96%
13	1R	118	97%
13	2R	118	96%
14	1S	112	95%
14	2S	112	% 83% 15%

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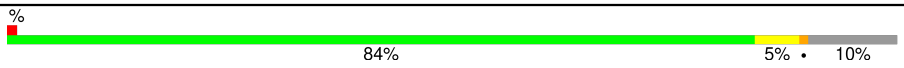
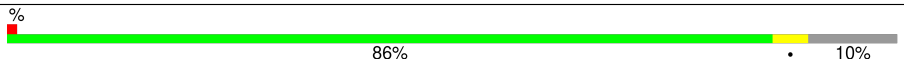
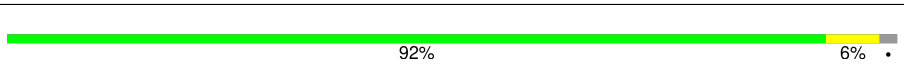
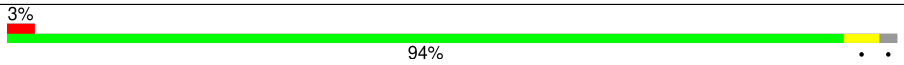
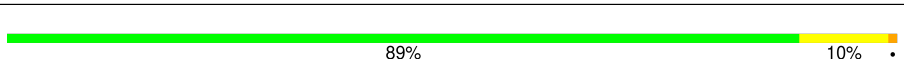
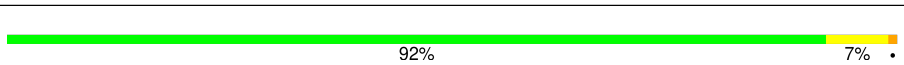
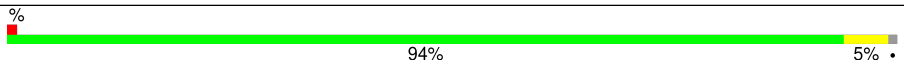
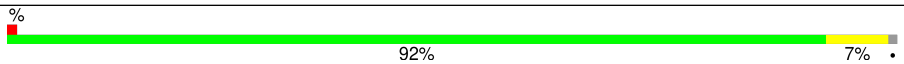
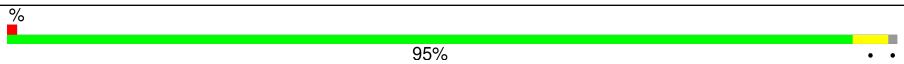
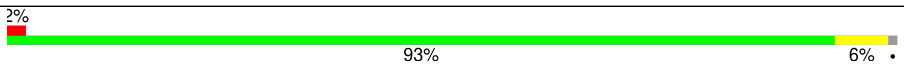
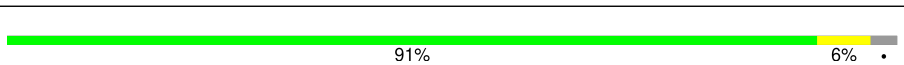
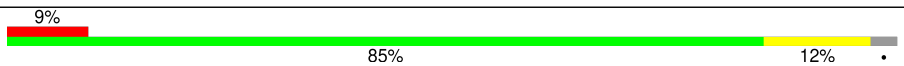
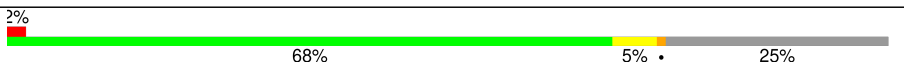
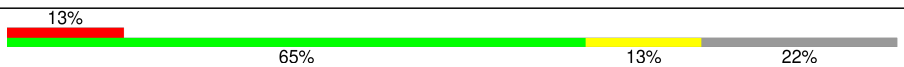
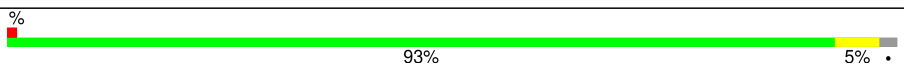
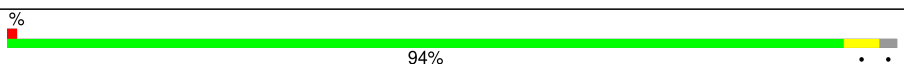
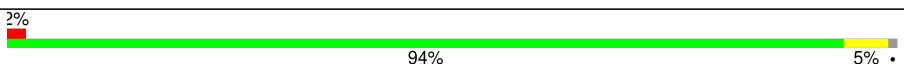
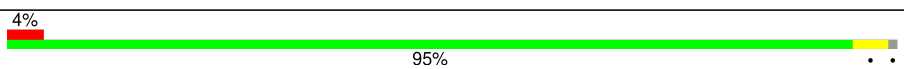
Mol	Chain	Length	Quality of chain
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
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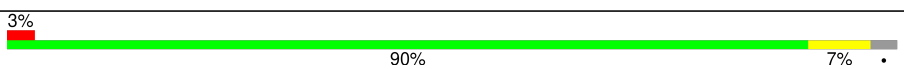
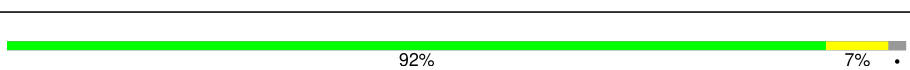
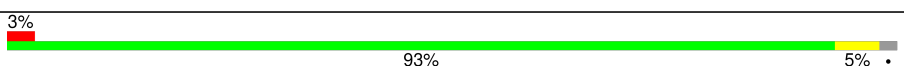
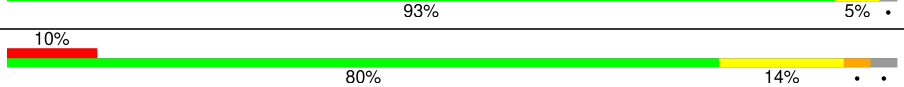
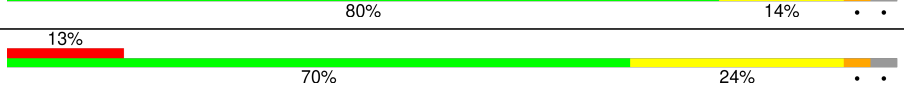
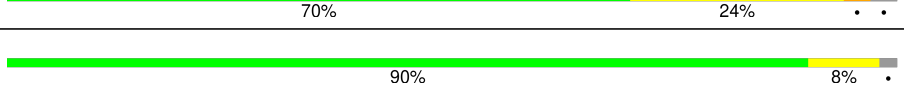
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	

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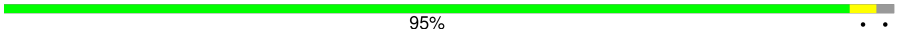
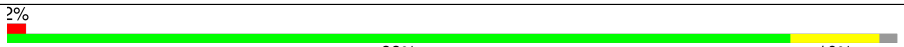
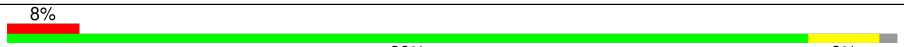
Mol	Chain	Length	Quality of chain
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	

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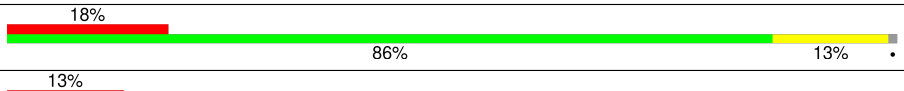
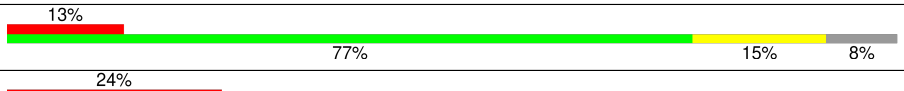
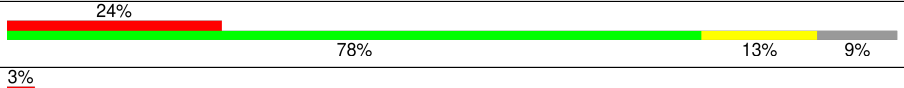
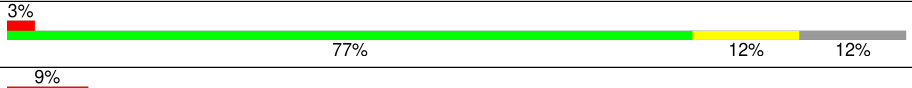
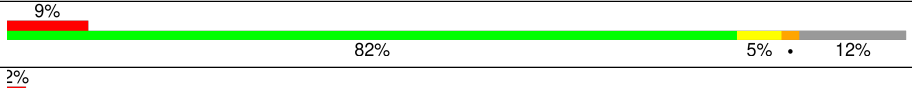
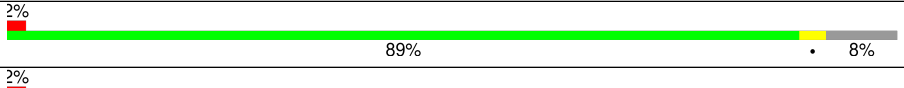
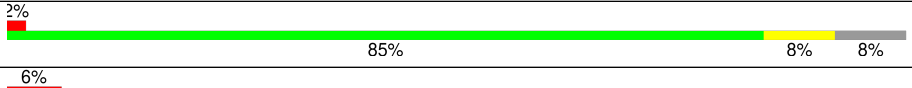
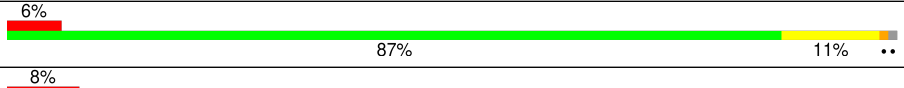
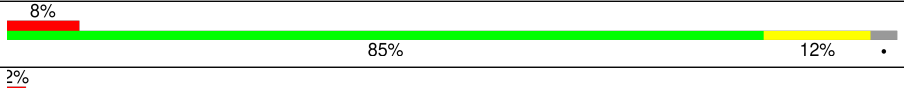
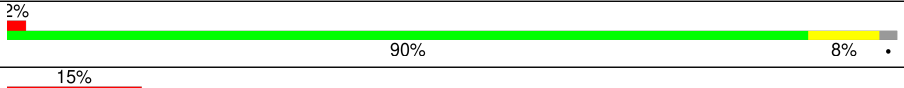
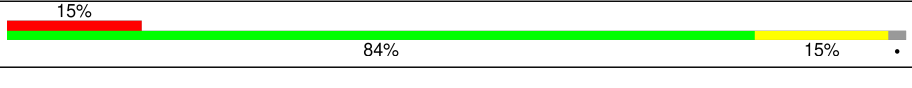
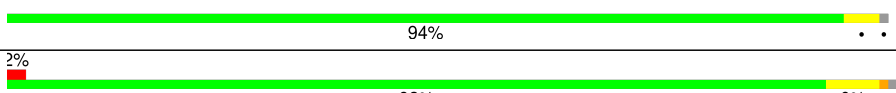
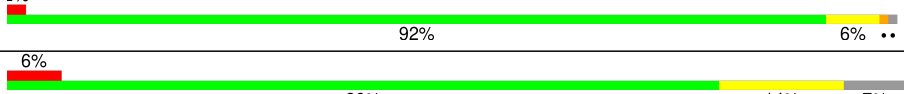
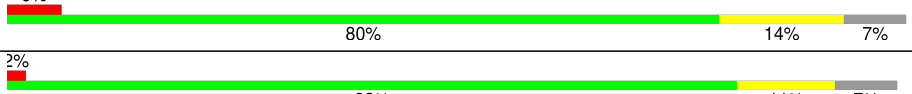
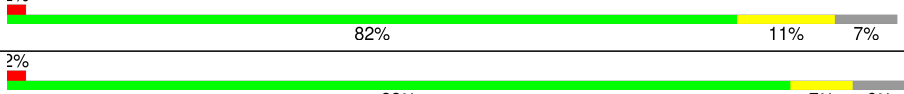
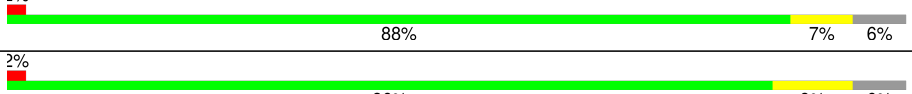
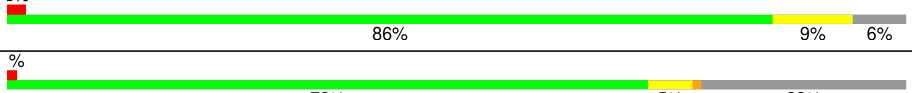
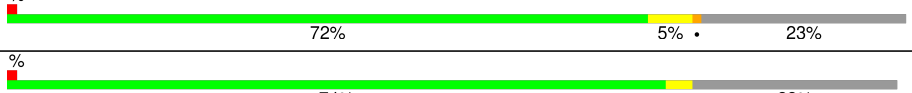
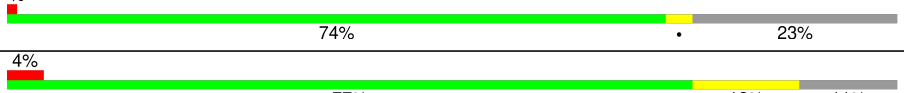
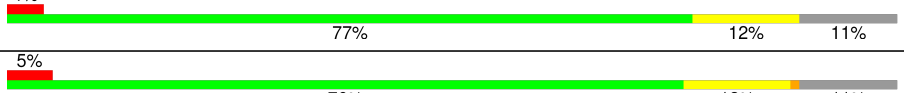
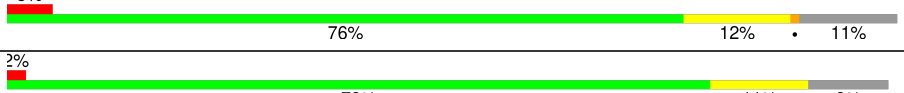
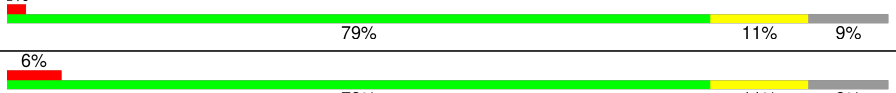
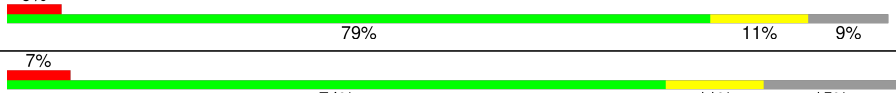
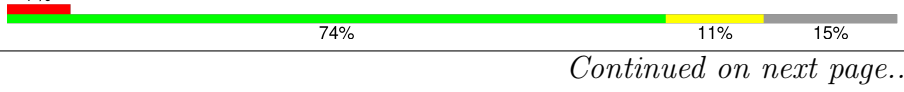
Mol	Chain	Length	Quality of chain
40	1i	128	
40	2i	128	
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	

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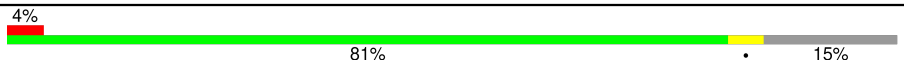
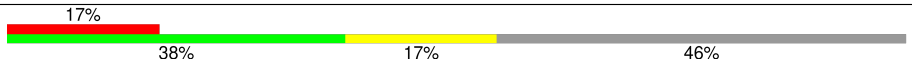
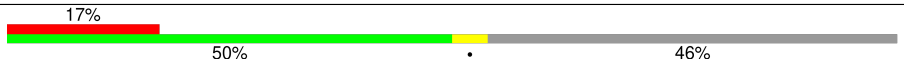
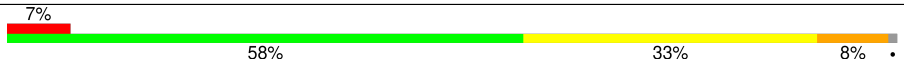
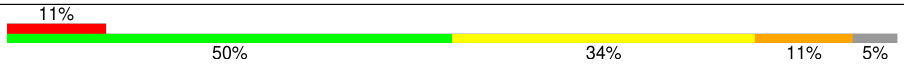
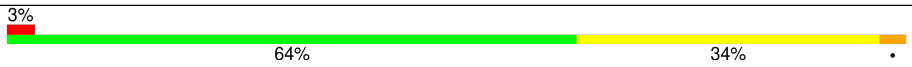
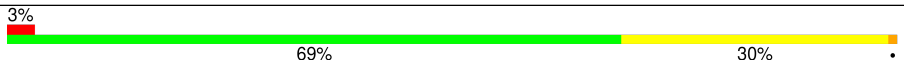
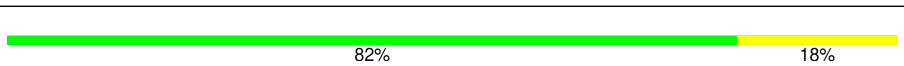
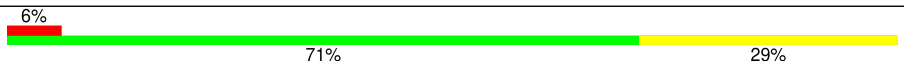
Mol	Chain	Length	Quality of chain
52	2u	27	
53	1v	24	
53	2v	24	
54	1w	76	
54	2w	76	
55	1x	77	
55	2x	77	
56	1y	76	
56	2y	76	
57	1z	17	
57	2z	17	

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	29	101	-	-	-	X

2 Entry composition (i)

There are 62 unique types of molecules in this entry. The entry contains 300583 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 B.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
57	1z	17	Total	C	N	O	0	0	0
			127	79	28	20			
57	2z	17	Total	C	N	O	0	0	0
			127	79	28	20			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1A	1105	Total	Mg	0	0
			1105	1105		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1B	37	Total Mg 37 37	0	0
58	1D	12	Total Mg 12 12	0	0
58	1E	14	Total Mg 14 14	0	0
58	1F	13	Total Mg 13 13	0	0
58	1G	5	Total Mg 5 5	0	0
58	1I	1	Total Mg 1 1	0	0
58	1N	7	Total Mg 7 7	0	0
58	1O	5	Total Mg 5 5	0	0
58	1P	4	Total Mg 4 4	0	0
58	1Q	7	Total Mg 7 7	0	0
58	1R	4	Total Mg 4 4	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	7	Total Mg 7 7	0	0
58	1W	8	Total Mg 8 8	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	9	Total Mg 9 9	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	15	9	Total Mg 9 9	0	0
58	16	2	Total Mg 2 2	0	0
58	17	3	Total Mg 3 3	0	0
58	18	5	Total Mg 5 5	0	0
58	19	1	Total Mg 1 1	0	0
58	1a	218	Total Mg 218 218	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	1p	1	Total Mg 1 1	0	0
58	1s	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	8	Total Mg 8 8	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1x	13	Total Mg 13 13	0	0
58	1y	1	Total Mg 1 1	0	0
58	2A	883	Total Mg 883 883	0	0
58	2B	19	Total Mg 19 19	0	0
58	2D	7	Total Mg 7 7	0	0
58	2E	11	Total Mg 11 11	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	3	Total Mg 3 3	0	0
58	2S	1	Total Mg 1 1	0	0
58	2T	3	Total Mg 3 3	0	0
58	2U	2	Total Mg 2 2	0	0
58	2V	2	Total Mg 2 2	0	0
58	2W	2	Total Mg 2 2	0	0
58	2X	1	Total Mg 1 1	0	0
58	2Z	1	Total Mg 1 1	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	3	Total Mg 3 3	0	0
58	28	4	Total Mg 4 4	0	0
58	29	1	Total Mg 1 1	0	0
58	2a	242	Total Mg 242 242	0	0
58	2d	1	Total Mg 1 1	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	2i	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	2p	1	Total Mg 1 1	0	0
58	2q	2	Total Mg 2 2	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	5	Total Mg 5 5	0	0
58	2y	6	Total Mg 6 6	0	0

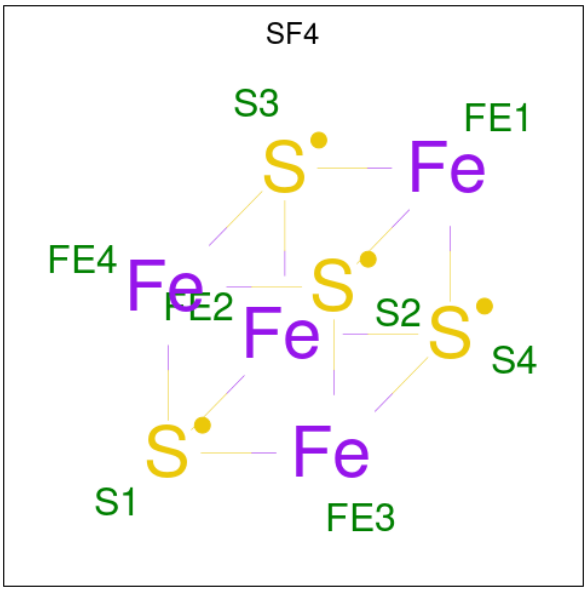
- Molecule 59 is POTASSIUM ION (three-letter code: K) (formula: K).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1A	1	Total K 1 1	0	0
59	2x	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	2019	Total O 2019 2019	0	0
62	1B	63	Total O 63 63	0	0
62	1D	24	Total O 24 24	0	0
62	1E	24	Total O 24 24	0	0
62	1F	15	Total O 15 15	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	5	Total O 5 5	0	0
62	1O	6	Total O 6 6	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1P	19	Total O 19 19	0	0
62	1Q	8	Total O 8 8	0	0
62	1R	12	Total O 12 12	0	0
62	1S	5	Total O 5 5	0	0
62	1T	9	Total O 9 9	0	0
62	1U	15	Total O 15 15	0	0
62	1V	8	Total O 8 8	0	0
62	1W	9	Total O 9 9	0	0
62	1X	4	Total O 4 4	0	0
62	1Y	3	Total O 3 3	0	0
62	1Z	1	Total O 1 1	0	0
62	10	13	Total O 13 13	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	7	Total O 7 7	0	0
62	18	9	Total O 9 9	0	0
62	1a	388	Total O 388 388	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	1b	1	Total O 1 1	0	0
62	1f	1	Total O 1 1	0	0
62	1l	8	Total O 8 8	0	0
62	1m	2	Total O 2 2	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	6	Total O 6 6	0	0
62	1w	20	Total O 20 20	0	0
62	1x	15	Total O 15 15	0	0
62	1y	2	Total O 2 2	0	0
62	1z	1	Total O 1 1	0	0
62	2A	1153	Total O 1153 1153	0	0
62	2B	23	Total O 23 23	0	0
62	2D	24	Total O 24 24	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
62	2N	3	Total O 3 3	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	2O	3	Total O 3 3	0	0
62	2P	14	Total O 14 14	0	0
62	2Q	3	Total O 3 3	0	0
62	2R	3	Total O 3 3	0	0
62	2T	4	Total O 4 4	0	0
62	2U	2	Total O 2 2	0	0
62	2W	2	Total O 2 2	0	0
62	2X	2	Total O 2 2	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	13	Total O 13 13	0	0
62	23	1	Total O 1 1	0	0
62	25	1	Total O 1 1	0	0
62	27	5	Total O 5 5	0	0
62	28	4	Total O 4 4	0	0
62	29	1	Total O 1 1	0	0
62	2a	283	Total O 283 283	0	0
62	2c	2	Total O 2 2	0	0
62	2d	2	Total O 2 2	0	0
62	2e	1	Total O 1 1	0	0

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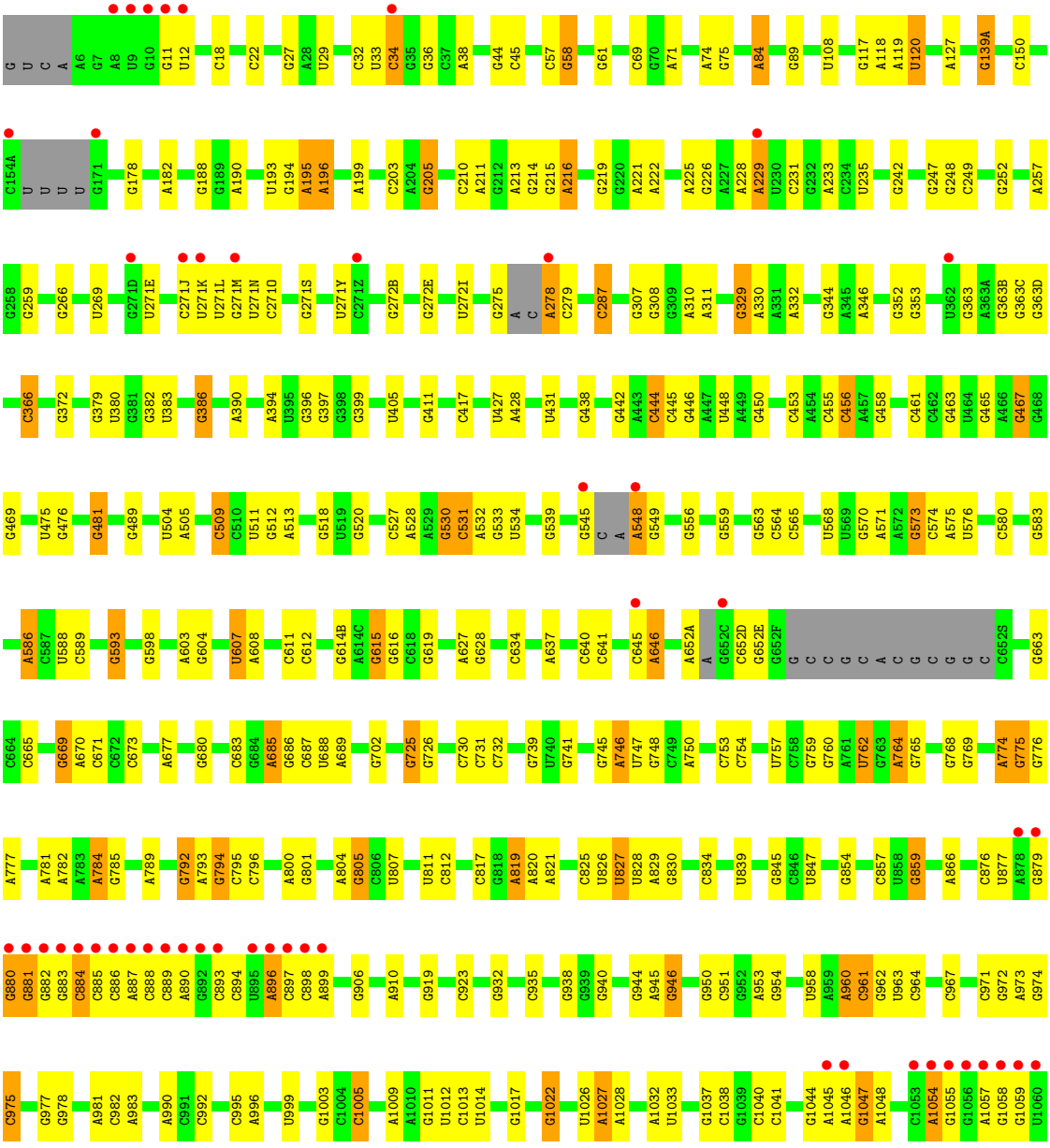
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
62	2j	3	Total O 3 3	0	0
62	2l	6	Total O 6 6	0	0
62	2p	1	Total O 1 1	0	0
62	2r	1	Total O 1 1	0	0
62	2t	1	Total O 1 1	0	0
62	2v	2	Total O 2 2	0	0
62	2w	10	Total O 10 10	0	0
62	2x	6	Total O 6 6	0	0
62	2y	9	Total O 9 9	0	0

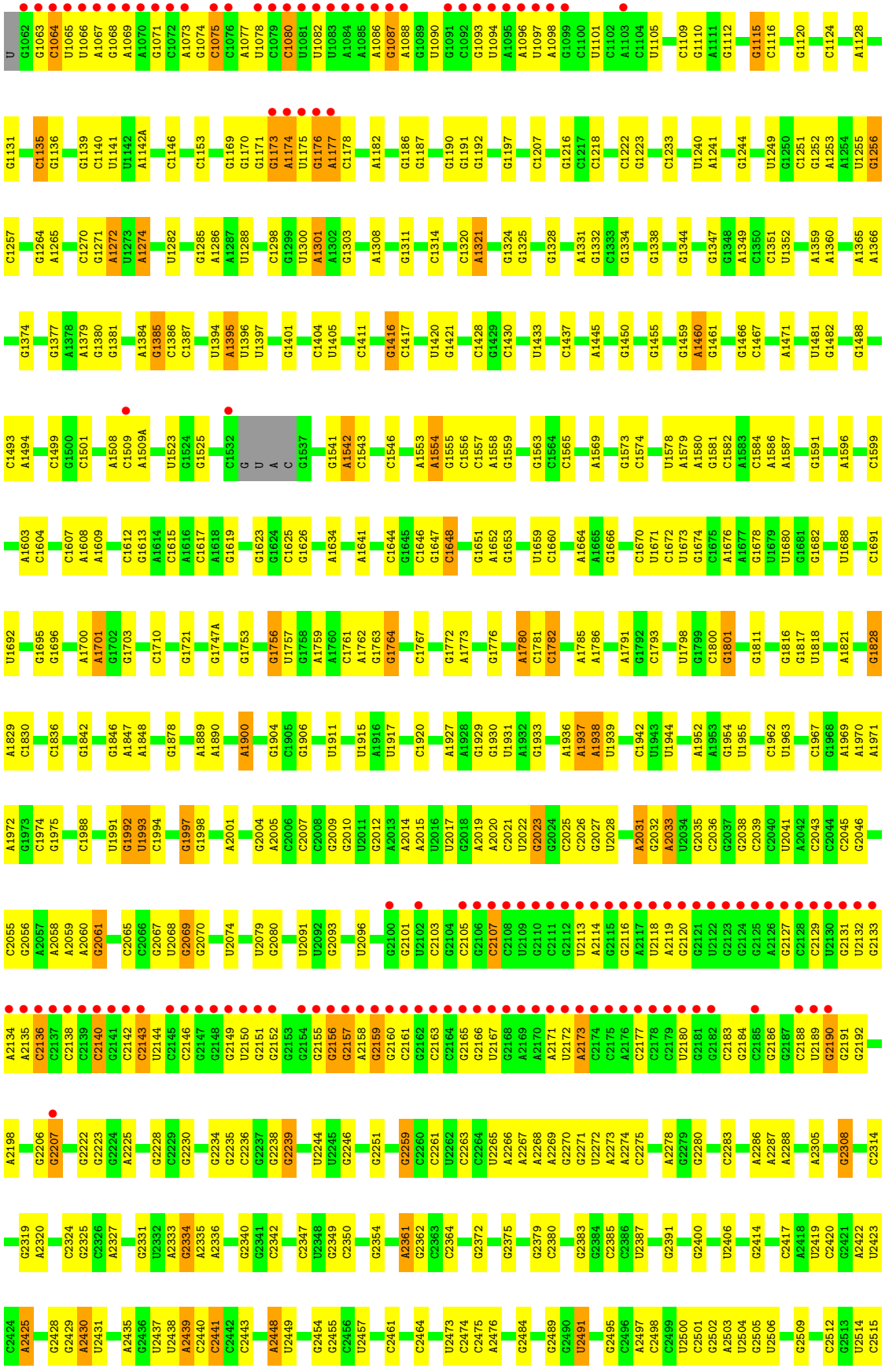
3 Residue-property plots (i)

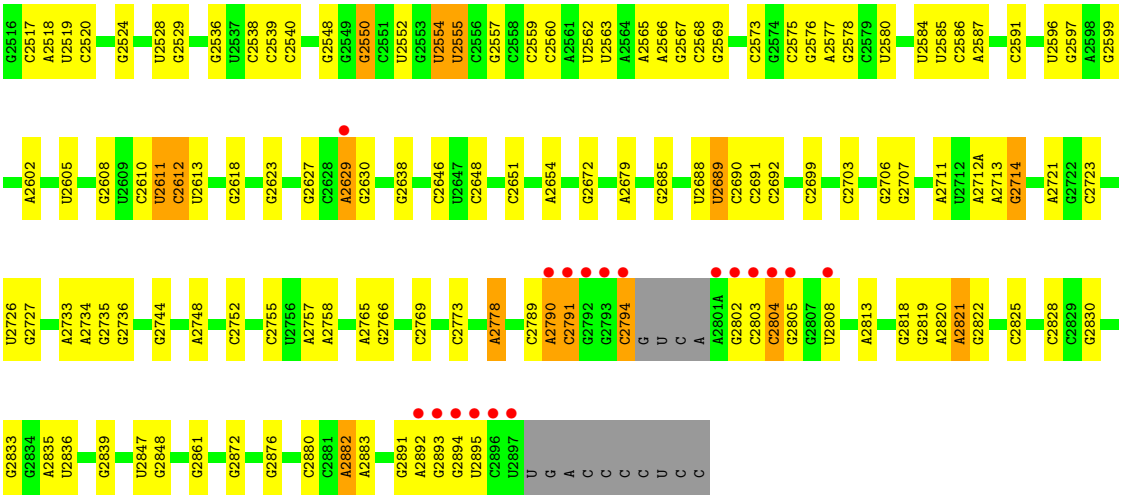
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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:

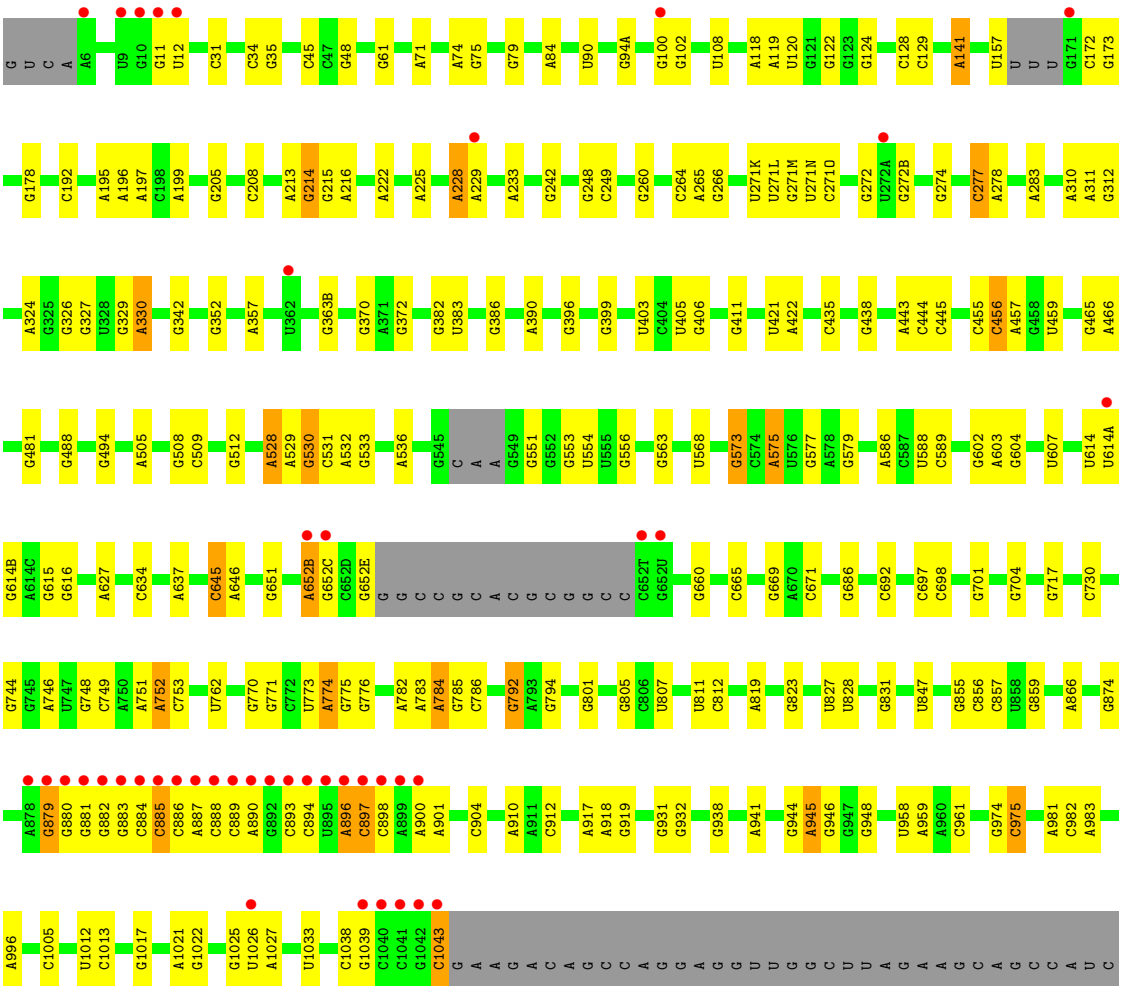


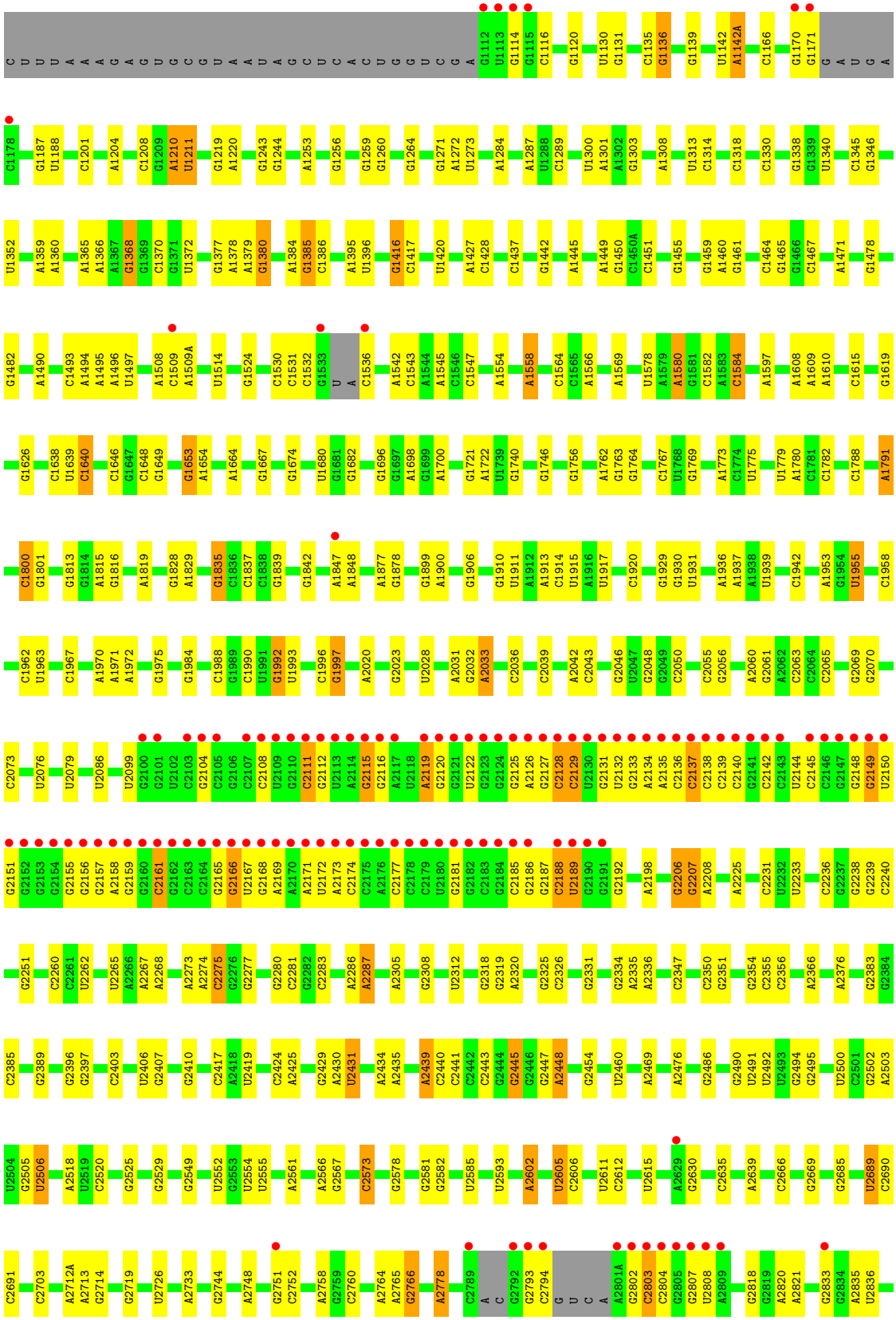


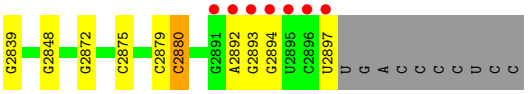


• Molecule 1: 23S Ribosomal RNA

Chain 2A:







• Molecule 2: 5S Ribosomal RNA

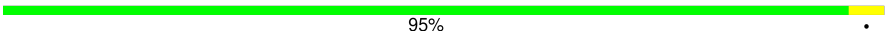
Chain 1B:

• Molecule 2: 5S Ribosomal RNA

Chain 2B:

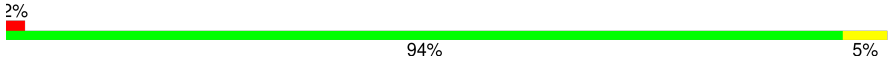
• Molecule 3: 50S ribosomal protein L2

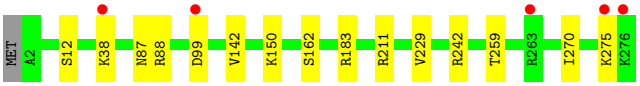
Chain 1D:



• Molecule 3: 50S ribosomal protein L2

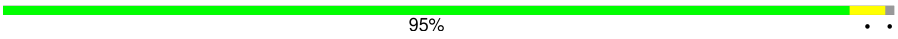
Chain 2D:

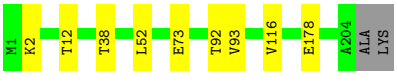




• Molecule 4: 50S ribosomal protein L3

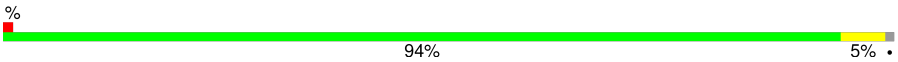
Chain 1E:

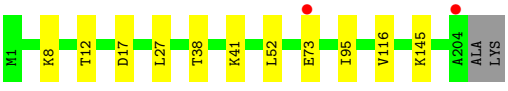




• Molecule 4: 50S ribosomal protein L3

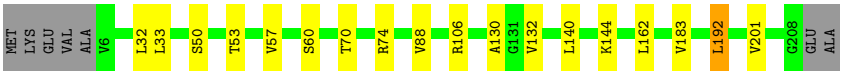
Chain 2E:





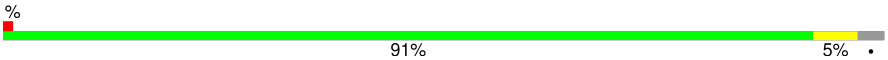
• Molecule 5: 50S ribosomal protein L4

Chain 1F:



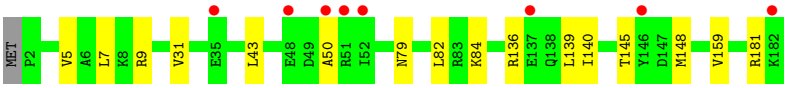
• Molecule 5: 50S ribosomal protein L4

Chain 2F:



• Molecule 6: 50S ribosomal protein L5

Chain 1G:

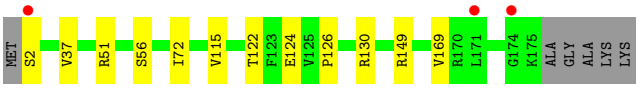


• Molecule 6: 50S ribosomal protein L5

Chain 2G:

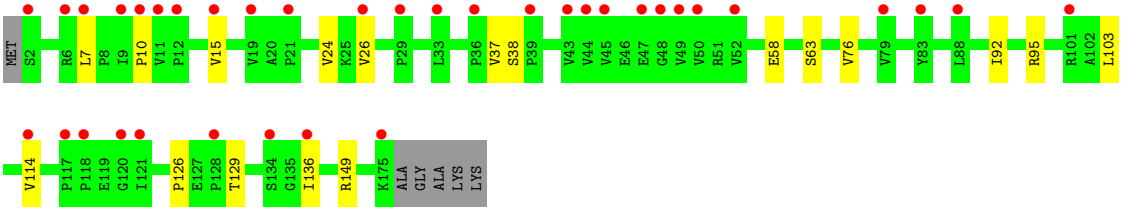
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



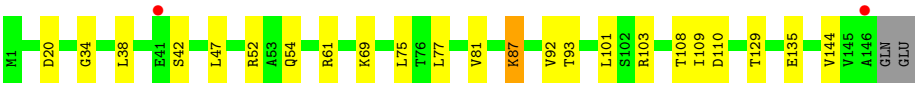
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



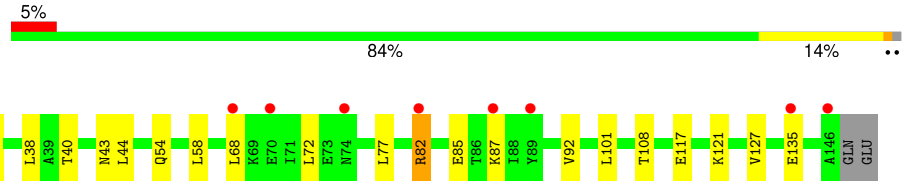
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



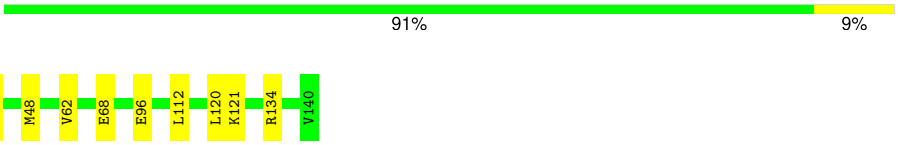
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



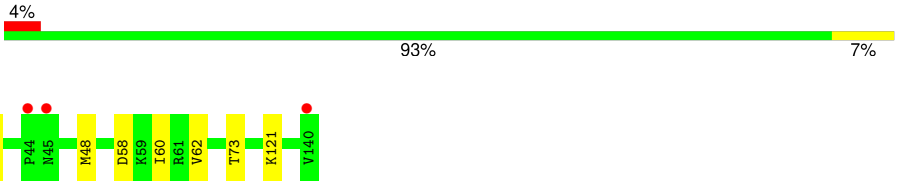
• Molecule 9: 50S ribosomal protein L13

Chain 1N:



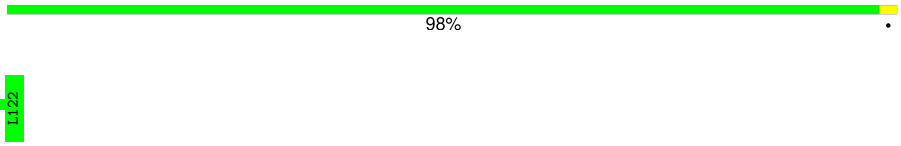
• Molecule 9: 50S ribosomal protein L13

Chain 2N:



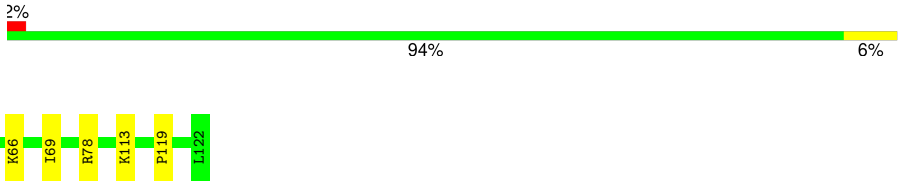
• Molecule 10: 50S ribosomal protein L14

Chain 1O:



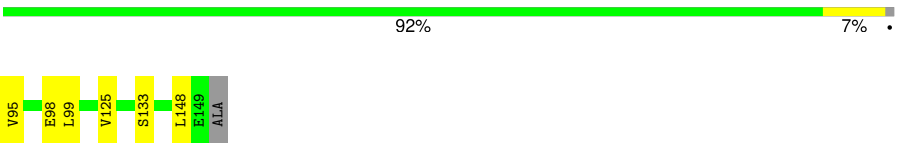
• Molecule 10: 50S ribosomal protein L14

Chain 2O:



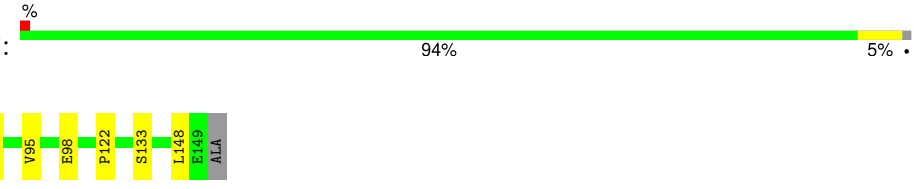
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



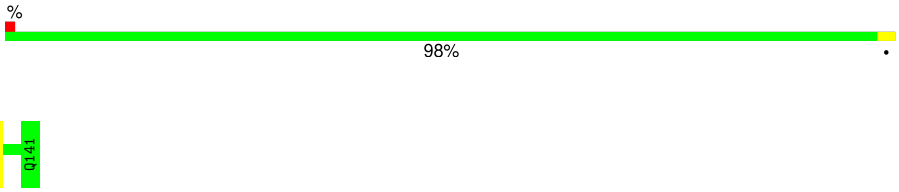
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



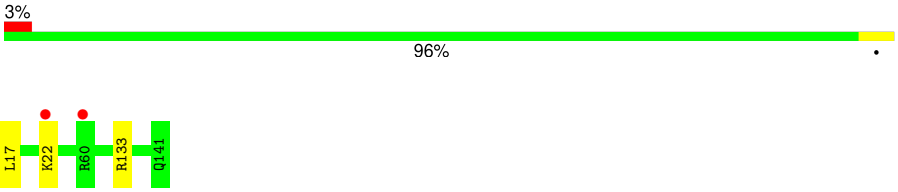
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



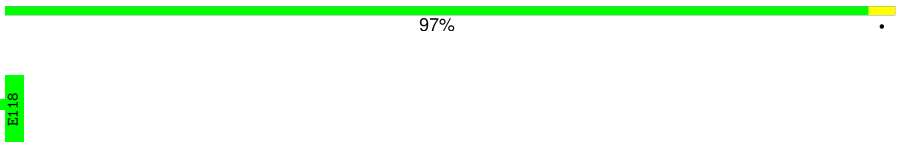
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



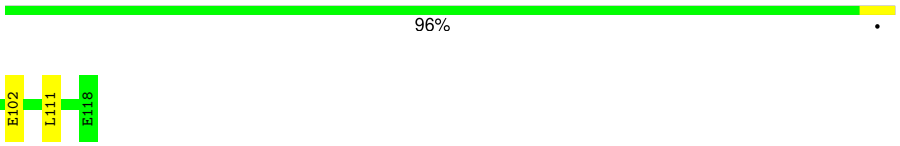
• Molecule 13: 50S ribosomal protein L17

Chain 1R:



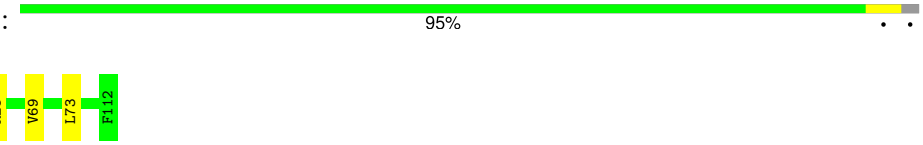
• Molecule 13: 50S ribosomal protein L17

Chain 2R:



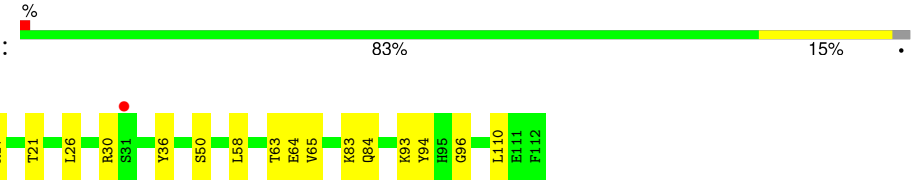
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



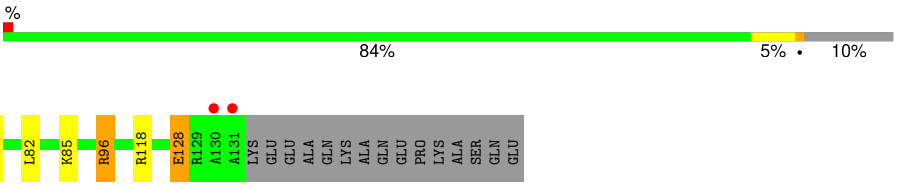
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



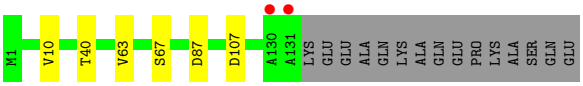
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



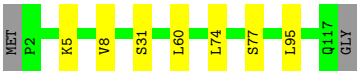
• Molecule 15: 50S ribosomal protein L19

Chain 2T:



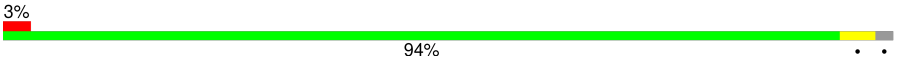
• Molecule 16: 50S ribosomal protein L20

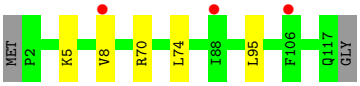
Chain 1U:



• Molecule 16: 50S ribosomal protein L20

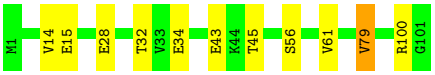
Chain 2U:





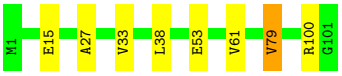
• Molecule 17: 50S ribosomal protein L21

Chain 1V:



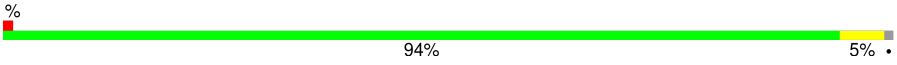
• Molecule 17: 50S ribosomal protein L21

Chain 2V:



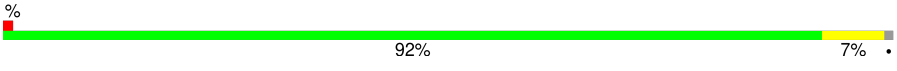
• Molecule 18: 50S ribosomal protein L22

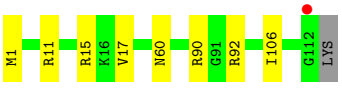
Chain 1W:



• Molecule 18: 50S ribosomal protein L22

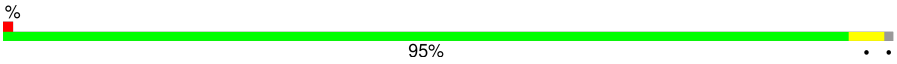
Chain 2W:

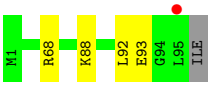




• Molecule 19: 50S ribosomal protein L23

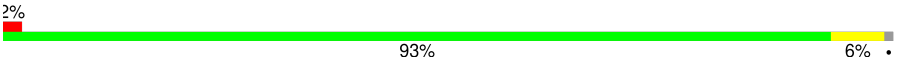
Chain 1X:





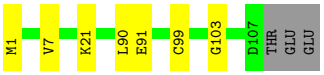
• Molecule 19: 50S ribosomal protein L23

Chain 2X:



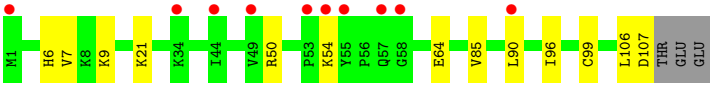
• Molecule 20: 50S ribosomal protein L24

Chain 1Y:



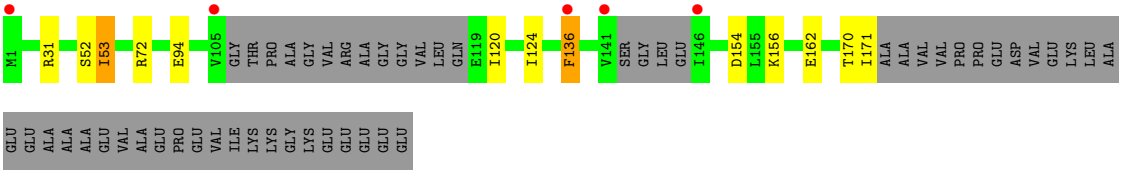
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



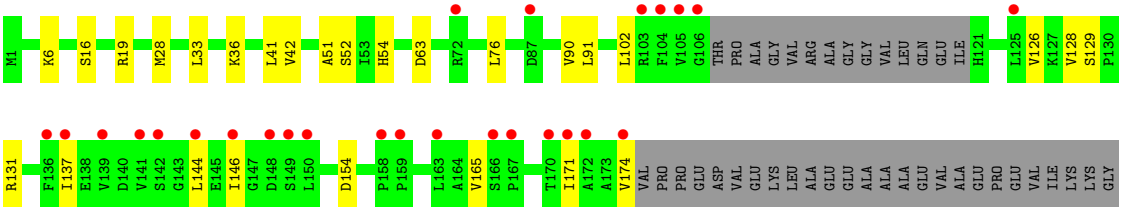
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



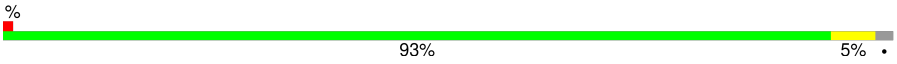
• Molecule 21: 50S ribosomal protein L25

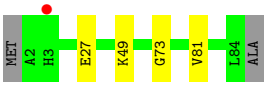
Chain 2Z:



• Molecule 22: 50S ribosomal protein L27

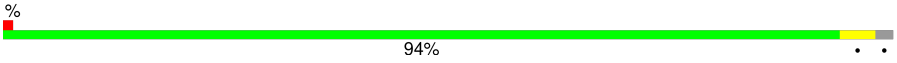
Chain 10:

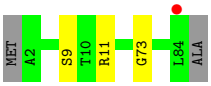




• Molecule 22: 50S ribosomal protein L27

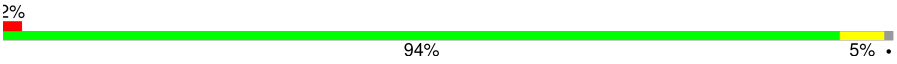
Chain 20:

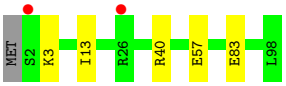




• Molecule 23: 50S ribosomal protein L28

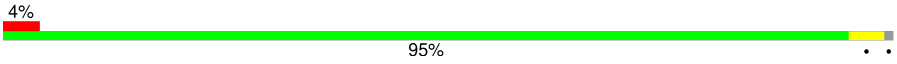
Chain 11:

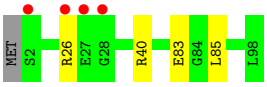




• Molecule 23: 50S ribosomal protein L28

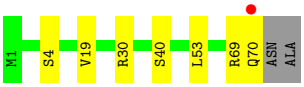
Chain 21:





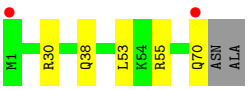
• Molecule 24: 50S ribosomal protein L29

Chain 12:



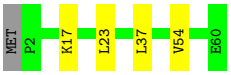
• Molecule 24: 50S ribosomal protein L29

Chain 22:



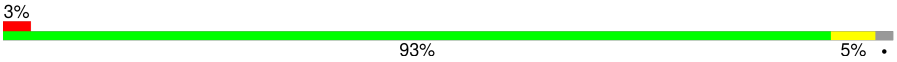
• Molecule 25: 50S ribosomal protein L30

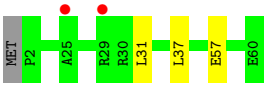
Chain 13:



• Molecule 25: 50S ribosomal protein L30

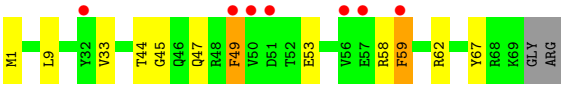
Chain 23:





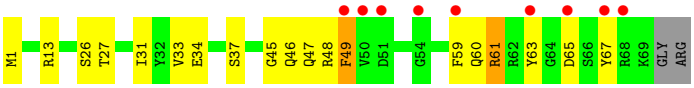
• Molecule 26: 50S ribosomal protein L31

Chain 14:



• Molecule 26: 50S ribosomal protein L31

Chain 24:

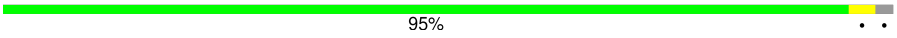


• Molecule 27: 50S ribosomal protein L32

Chain 15:

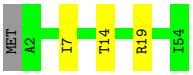
• Molecule 27: 50S ribosomal protein L32

Chain 25:



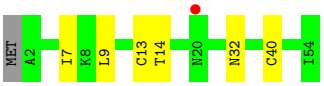
• Molecule 28: 50S ribosomal protein L33

Chain 16:



• Molecule 28: 50S ribosomal protein L33

Chain 26:

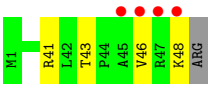


• Molecule 29: 50S ribosomal protein L34

Chain 17:

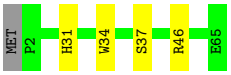
• Molecule 29: 50S ribosomal protein L34

Chain 27:



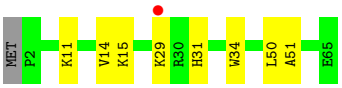
• Molecule 30: 50S ribosomal protein L35

Chain 18:



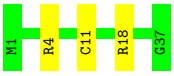
• Molecule 30: 50S ribosomal protein L35

Chain 28:



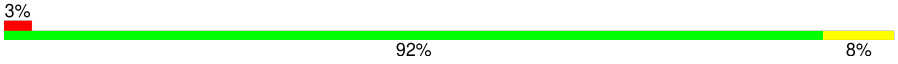
• Molecule 31: 50S ribosomal protein L36

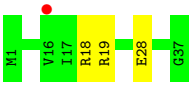
Chain 19:



• Molecule 31: 50S ribosomal protein L36

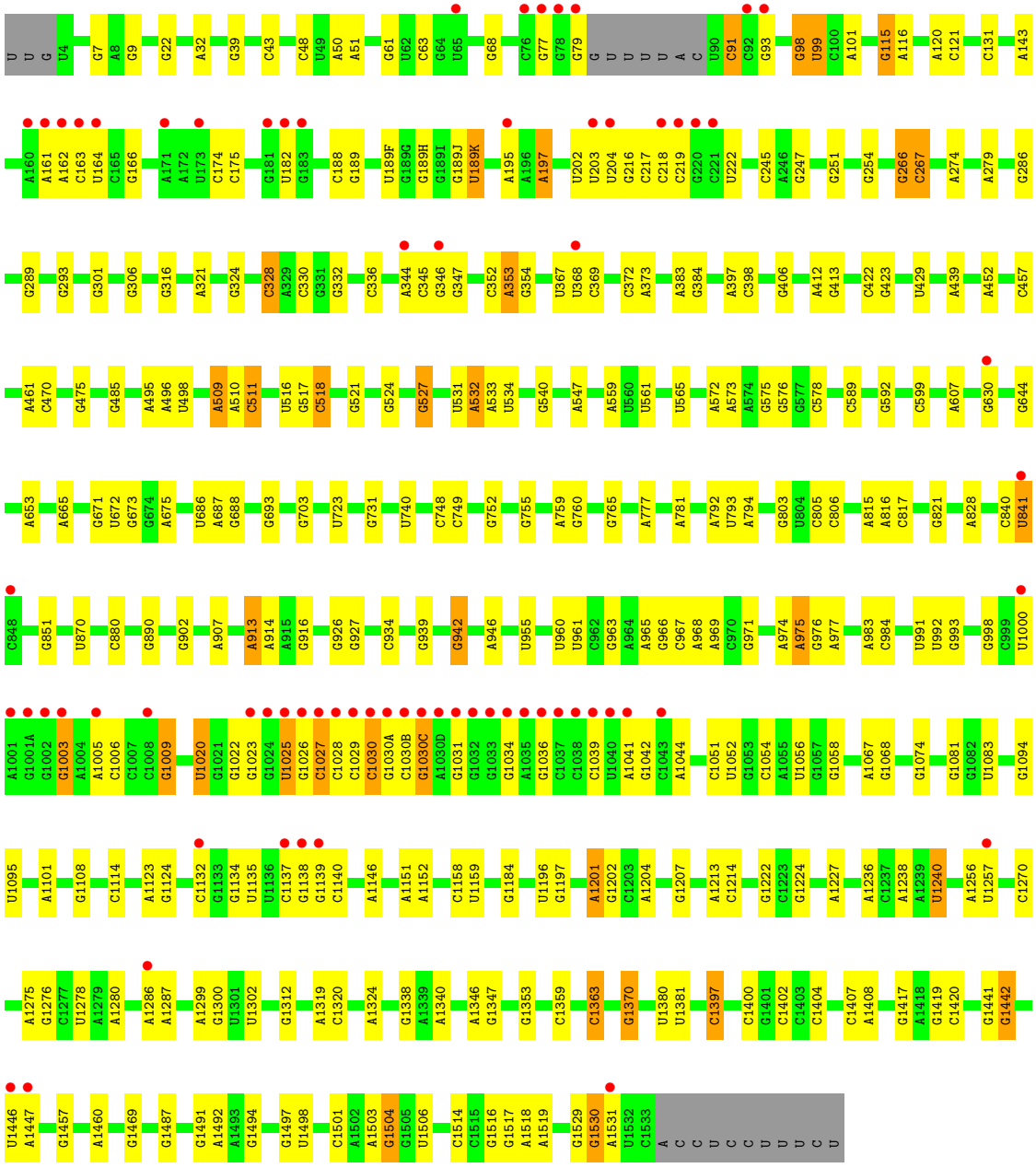
Chain 29:





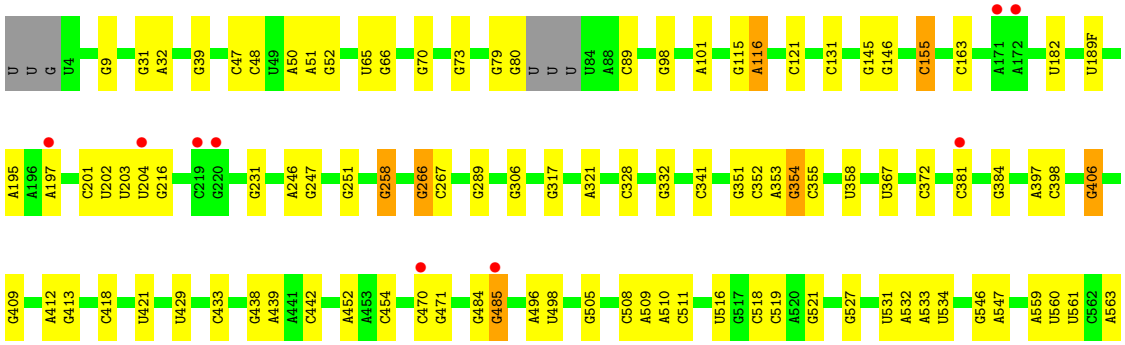
• Molecule 32: 16S Ribosomal RNA

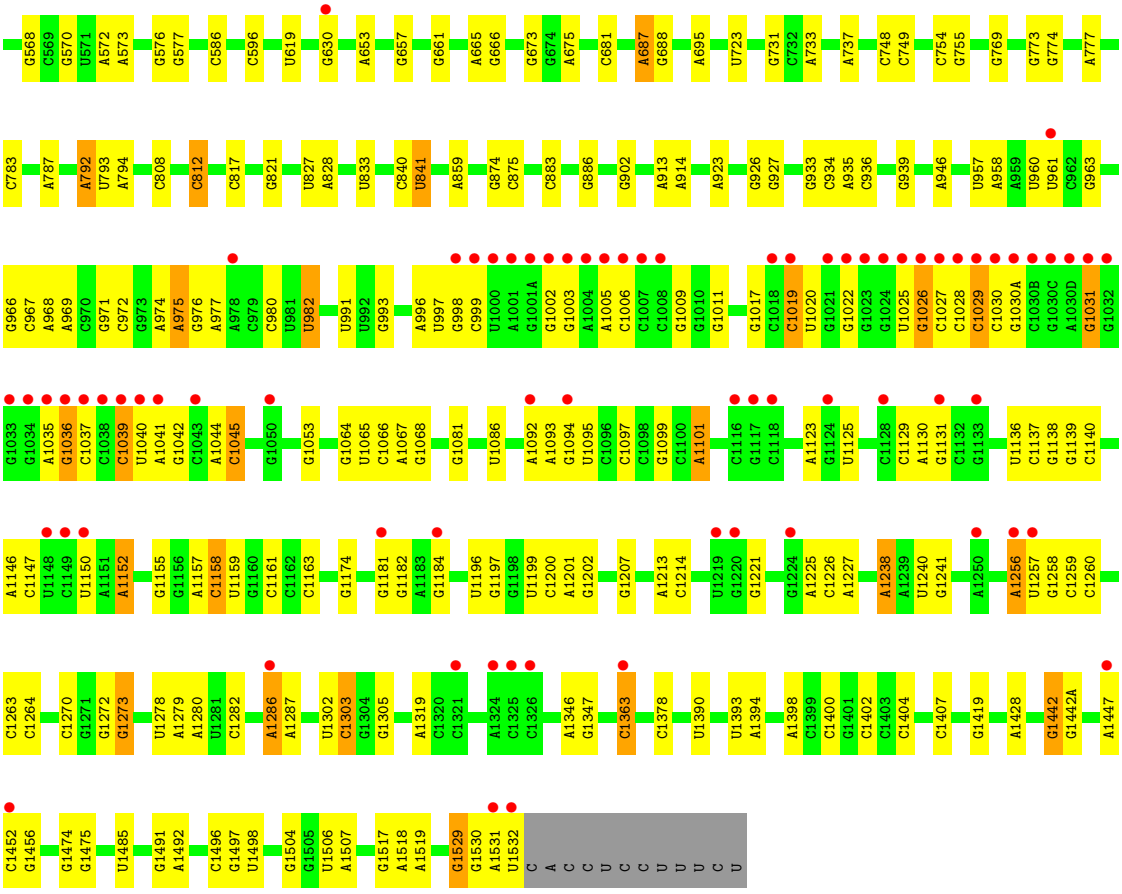
Chain 1a:



• Molecule 32: 16S Ribosomal RNA

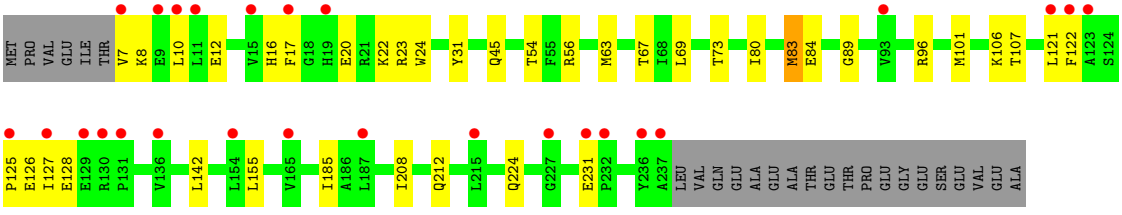
Chain 2a:





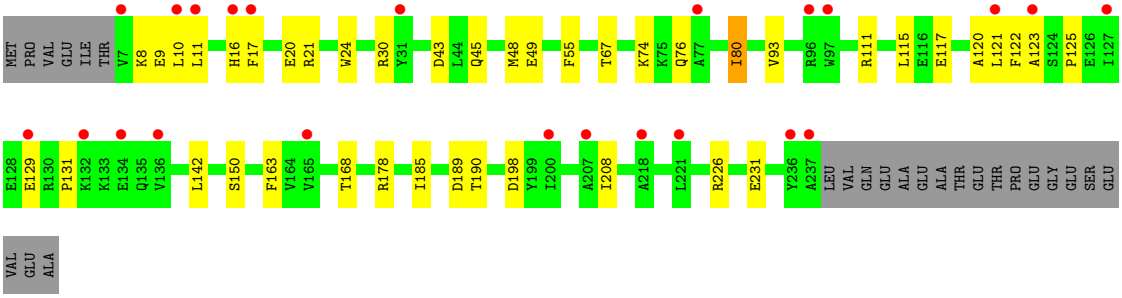
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



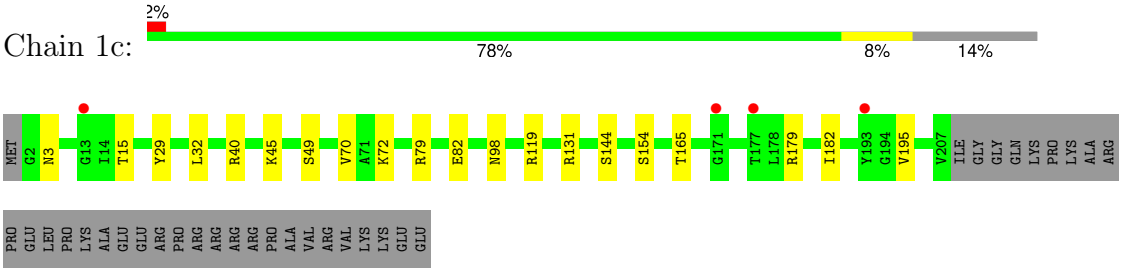
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



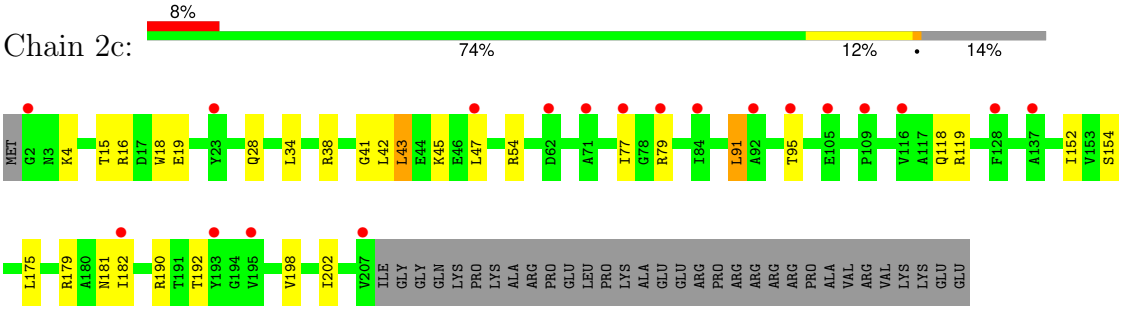
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



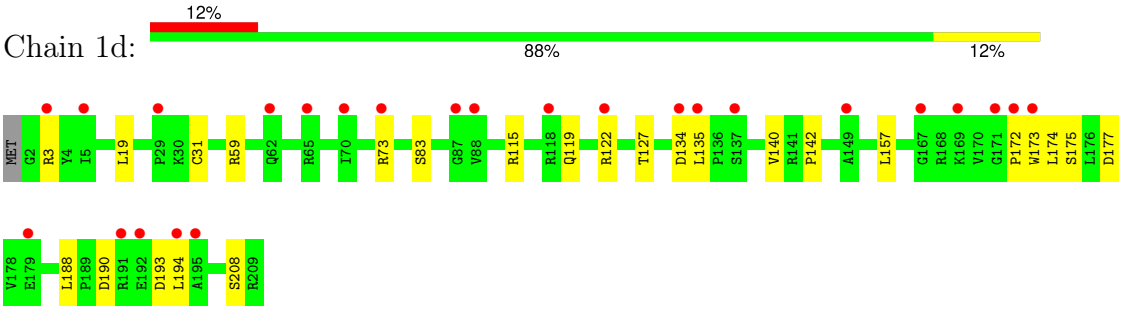
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



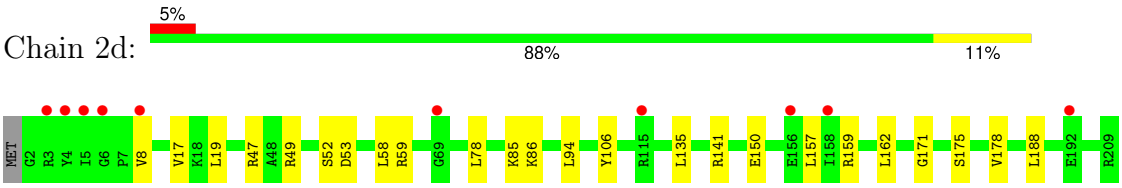
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



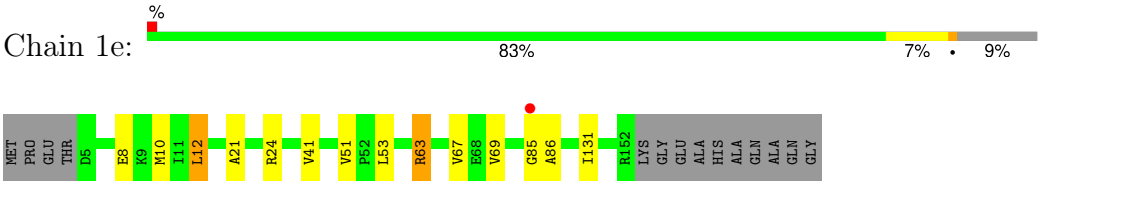
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



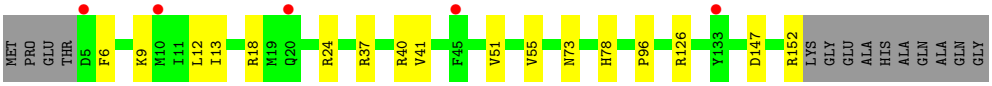
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



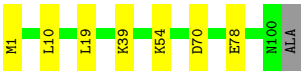
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



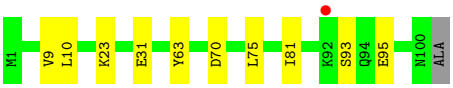
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



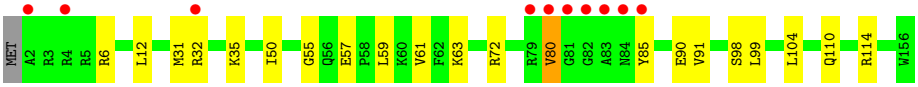
• Molecule 37: 30S ribosomal protein S6

Chain 2f:



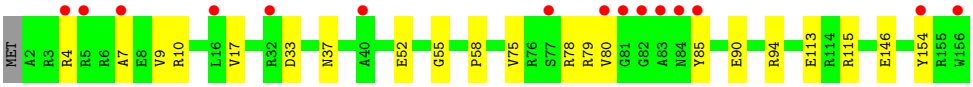
• Molecule 38: 30S ribosomal protein S7

Chain 1g:



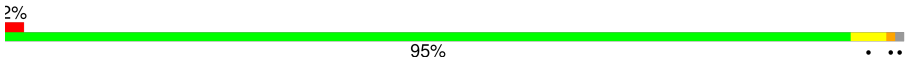
• Molecule 38: 30S ribosomal protein S7

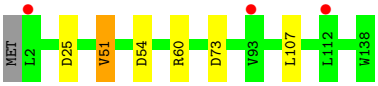
Chain 2g:



• Molecule 39: 30S ribosomal protein S8

Chain 1h:



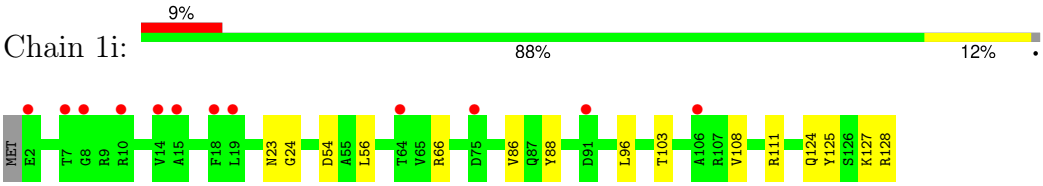


• Molecule 39: 30S ribosomal protein S8

Chain 2h:

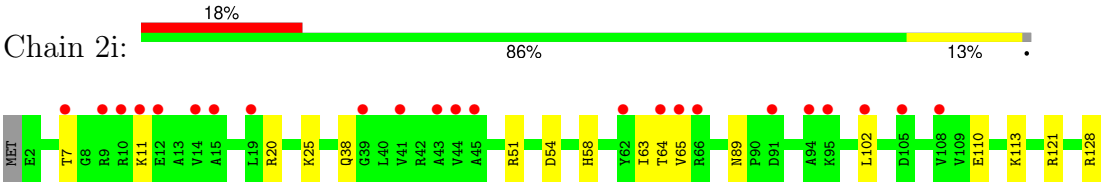
• Molecule 40: 30S ribosomal protein S9

Chain 1i:



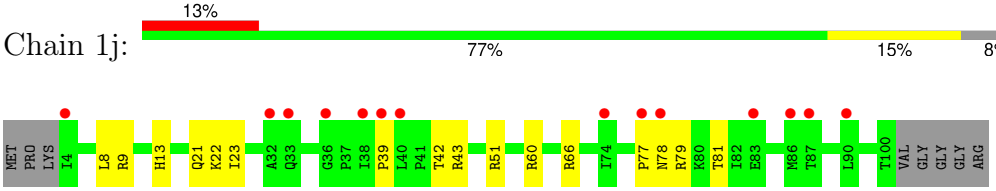
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



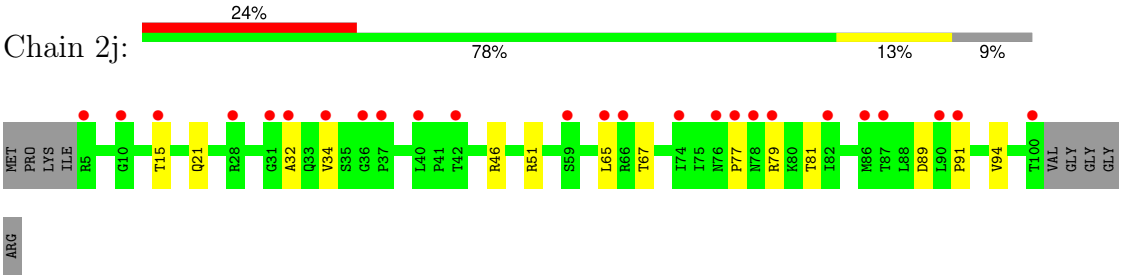
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



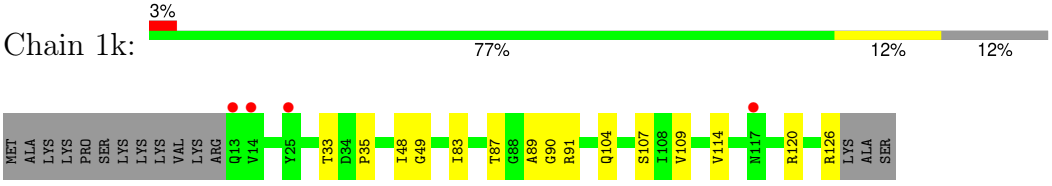
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



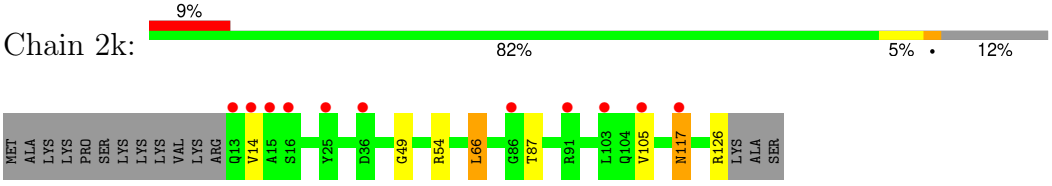
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



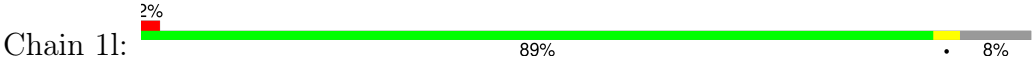
• Molecule 42: 30S ribosomal protein S11

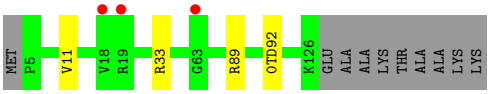
Chain 2k:



• Molecule 43: 30S ribosomal protein S12

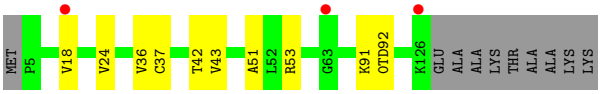
Chain 1l:





• Molecule 43: 30S ribosomal protein S12

Chain 2l:

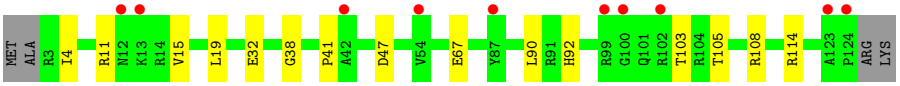


• Molecule 44: 30S ribosomal protein S13

Chain 1m:

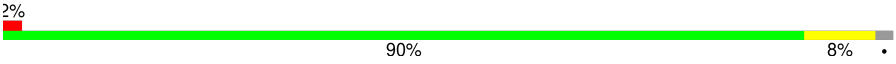
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



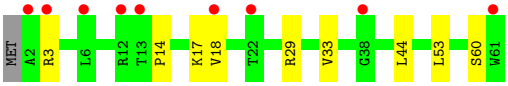
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



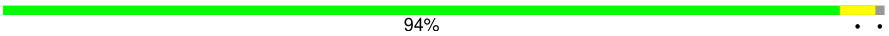
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



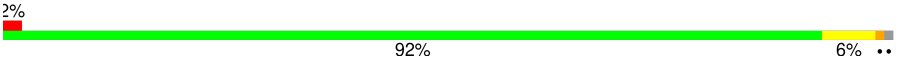
• Molecule 46: 30S ribosomal protein S15

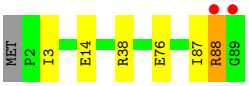
Chain 1o:



• Molecule 46: 30S ribosomal protein S15

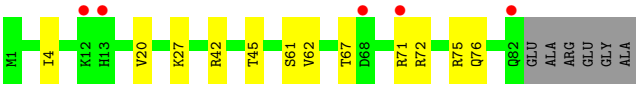
Chain 2o:





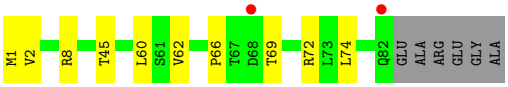
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



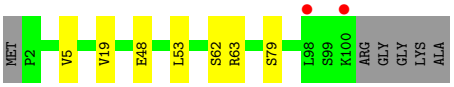
• Molecule 47: 30S ribosomal protein S16

Chain 2p:



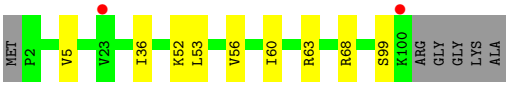
• Molecule 48: 30S ribosomal protein S17

Chain 1q:



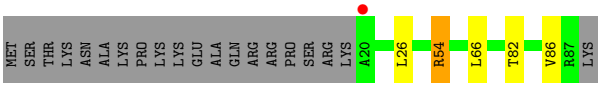
• Molecule 48: 30S ribosomal protein S17

Chain 2q:



• Molecule 49: 30S ribosomal protein S18

Chain 1r:

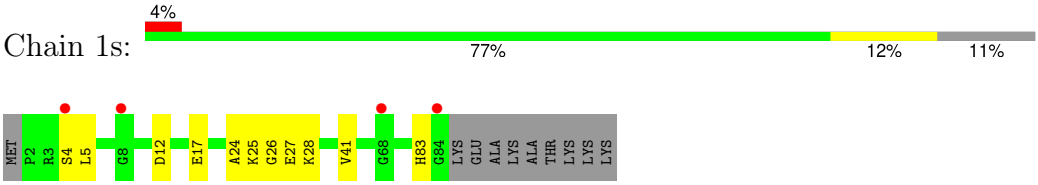


• Molecule 49: 30S ribosomal protein S18

Chain 2r:

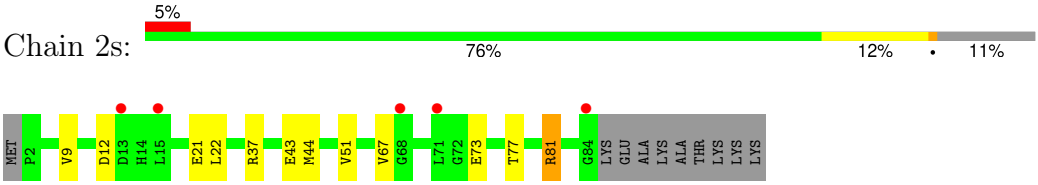
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



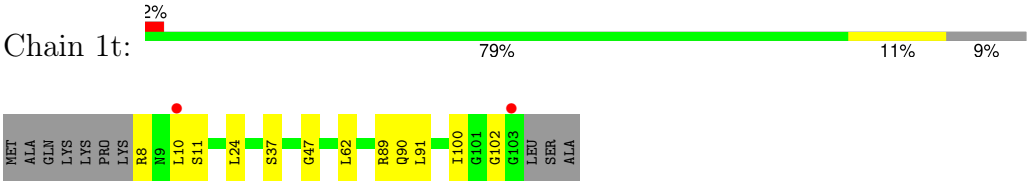
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



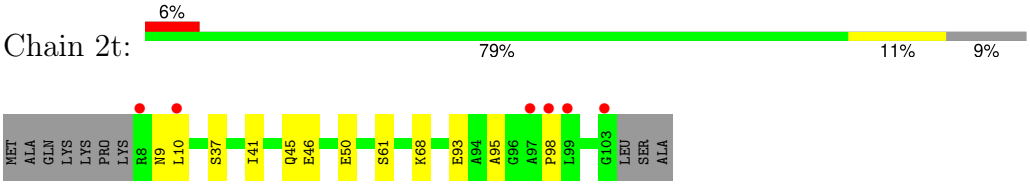
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



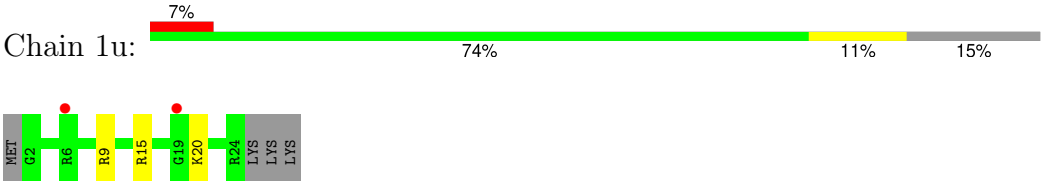
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



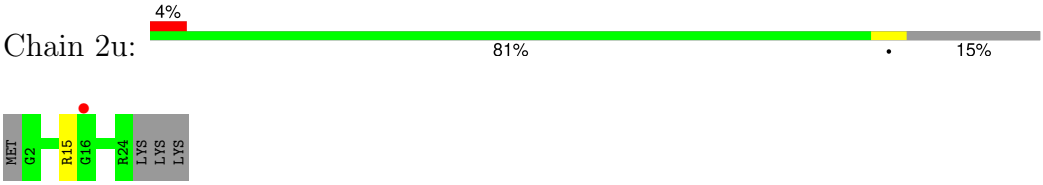
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



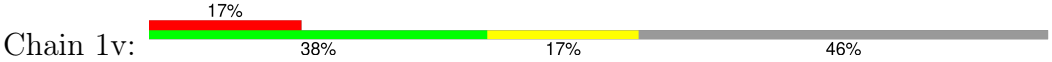
• Molecule 52: 30S ribosomal protein Thx

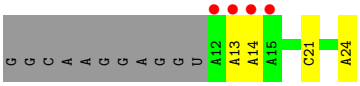
Chain 2u:



• Molecule 53: MET-PHE-mRNA

Chain 1v:



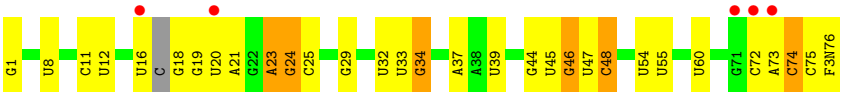


• Molecule 53: MET-PHE-mRNA

Chain 2v:

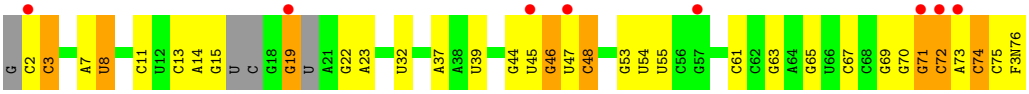
• Molecule 54: A-site Aminoacylated Phe-tRNAphe

Chain 1w:



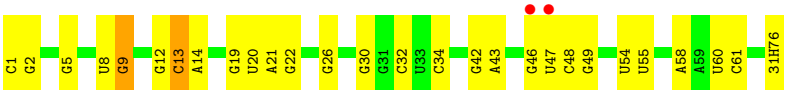
• Molecule 54: A-site Aminoacylated Phe-tRNAphe

Chain 2w:



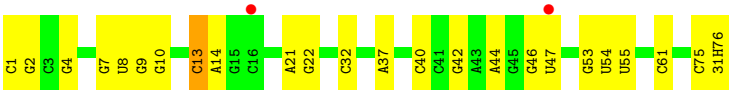
• Molecule 55: P-site Aminoacylated fMet-tRNAmet

Chain 1x:



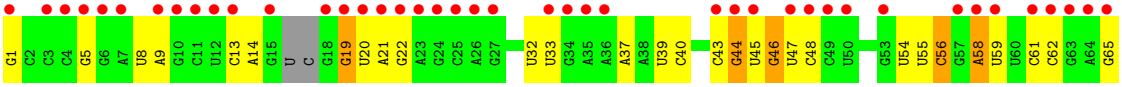
• Molecule 55: P-site Aminoacylated fMet-tRNAmet

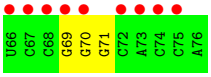
Chain 2x:



• Molecule 56: E-site Deacylated tRNAphe

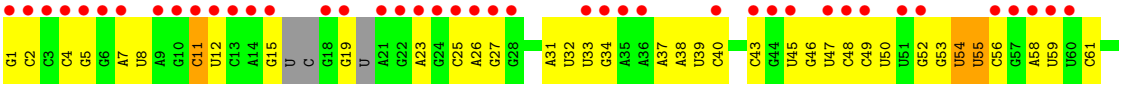
Chain 1y:

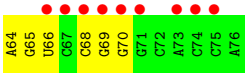




• Molecule 56: E-site Deacylated tRNAphe

Chain 2y:



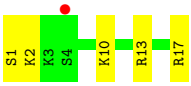


• Molecule 57: Lasso peptide lariocidin B

Chain 1z:

• Molecule 57: Lasso peptide lariocidin B

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	210.29Å 450.05Å 626.34Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	365.48 – 2.60 365.48 – 2.60	Depositor EDS
% Data completeness (in resolution range)	99.7 (365.48-2.60) 99.8 (365.48-2.60)	Depositor EDS
R_{merge}	0.26	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.25 (at 2.62Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.215 , 0.266 0.221 , 0.268	Depositor DCC
R_{free} test set	90129 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	45.8	Xtriage
Anisotropy	0.141	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.39 , 93.0	EDS
L-test for twinning[2]	$< \|L\| > = 0.41$, $< L^2 > = 0.24$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.88	EDS
Total number of atoms	300583	wwPDB-VP
Average B, all atoms (Å^2)	47.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.52% 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: M2G, ZN, 0TD, 5MC, UR3, OMU, MG, MA6, 4OC, K, OMC, 4SU, OMG, SF4, 2MA, MIA, 31H, G7M, PSU, 5MU, F3N, 2MG

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	1.00	37/69011 (0.1%)	1.52	984/107720 (0.9%)
1	2A	0.79	7/67295 (0.0%)	1.31	402/105042 (0.4%)
2	1B	0.83	1/2882 (0.0%)	1.40	22/4494 (0.5%)
2	2B	0.71	1/2879 (0.0%)	1.27	10/4487 (0.2%)
3	1D	0.57	0/2186	0.74	0/2944
3	2D	0.51	0/2186	0.66	0/2944
4	1E	0.53	0/1592	0.69	0/2149
4	2E	0.43	0/1592	0.63	0/2149
5	1F	0.57	0/1619	0.75	2/2193 (0.1%)
5	2F	0.49	0/1615	0.63	0/2188
6	1G	0.50	0/1448	0.65	0/1957
6	2G	0.42	0/1453	0.59	0/1963
7	1H	0.54	0/1356	0.66	0/1834
7	2H	0.41	0/1356	0.54	0/1834
8	1I	0.45	0/1112	0.60	0/1514
8	2I	0.40	0/1079	0.64	1/1475 (0.1%)
9	1N	0.55	0/1144	0.68	0/1543
9	2N	0.46	0/1144	0.59	0/1543
10	1O	0.58	0/943	0.70	0/1269
10	2O	0.47	0/943	0.62	0/1269
11	1P	0.54	0/1152	0.75	1/1533 (0.1%)
11	2P	0.48	0/1152	0.70	0/1533
12	1Q	0.55	0/1143	0.70	0/1527
12	2Q	0.46	0/1143	0.61	0/1527
13	1R	0.57	0/982	0.74	0/1312
13	2R	0.43	0/982	0.67	0/1312
14	1S	0.50	0/883	0.71	0/1176
14	2S	0.44	0/880	0.64	0/1172
15	1T	0.52	0/1105	0.71	2/1477 (0.1%)
15	2T	0.45	0/1097	0.59	0/1468
16	1U	0.61	0/977	0.73	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.46	0/977	0.61	0/1301
17	1V	0.63	1/782 (0.1%)	0.73	0/1049
17	2V	0.47	0/782	0.66	0/1049
18	1W	0.61	0/897	0.74	1/1205 (0.1%)
18	2W	0.49	0/897	0.62	0/1205
19	1X	0.60	0/764	0.72	0/1025
19	2X	0.49	0/764	0.64	0/1025
20	1Y	0.51	0/819	0.65	0/1095
20	2Y	0.48	0/819	0.61	0/1095
21	1Z	0.49	0/1267	0.65	0/1717
21	2Z	0.44	0/1299	0.61	0/1763
22	10	0.54	0/662	0.74	0/881
22	20	0.43	0/662	0.67	0/881
23	11	0.58	0/762	0.66	0/1014
23	21	0.47	0/762	0.63	0/1014
24	12	0.56	0/590	0.69	0/781
24	22	0.44	0/590	0.56	0/781
25	13	0.53	0/474	0.70	0/635
25	23	0.43	0/469	0.60	0/630
26	14	0.55	0/565	0.64	0/761
26	24	0.46	0/545	0.68	0/737
27	15	0.57	0/469	0.76	1/635 (0.2%)
27	25	0.45	0/469	0.66	0/635
28	16	0.56	0/460	0.66	0/613
28	26	0.50	0/456	0.63	0/608
29	17	0.61	0/426	0.78	1/561 (0.2%)
29	27	0.54	0/426	0.73	0/561
30	18	0.52	0/525	0.74	0/691
30	28	0.47	0/525	0.66	0/691
31	19	0.56	0/310	0.70	0/407
31	29	0.41	0/310	0.70	0/407
32	1a	0.73	0/35795	1.27	174/55864 (0.3%)
32	2a	0.68	3/35886 (0.0%)	1.24	141/56005 (0.3%)
33	1b	0.42	0/1881	0.64	1/2542 (0.0%)
33	2b	0.50	1/1860 (0.1%)	0.59	1/2518 (0.0%)
34	1c	0.45	0/1572	0.60	0/2126
34	2c	0.44	0/1566	0.58	0/2119
35	1d	0.44	0/1685	0.61	0/2262
35	2d	0.44	0/1704	0.59	0/2284
36	1e	0.45	0/1145	0.66	1/1543 (0.1%)
36	2e	0.45	0/1149	0.63	0/1548
37	1f	0.44	0/823	0.63	0/1115
37	2f	0.45	0/829	0.63	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.40	0/1250	0.56	0/1679
38	2g	0.43	0/1254	0.55	0/1683
39	1h	0.41	0/1108	0.61	0/1494
39	2h	0.38	0/1108	0.56	0/1494
40	1i	0.40	0/1002	0.60	1/1346 (0.1%)
40	2i	0.43	0/997	0.61	0/1343
41	1j	0.42	0/722	0.59	0/982
41	2j	0.42	0/727	0.64	1/988 (0.1%)
42	1k	0.43	0/844	0.60	0/1145
42	2k	0.44	0/848	0.64	0/1149
43	1l	0.48	0/937	0.63	0/1260
43	2l	0.47	1/937 (0.1%)	0.62	1/1260 (0.1%)
44	1m	0.46	0/990	0.64	0/1327
44	2m	0.41	0/961	0.60	0/1291
45	1n	0.49	0/501	0.61	0/664
45	2n	0.48	0/501	0.62	0/664
46	1o	0.44	0/739	0.55	0/985
46	2o	0.41	0/739	0.56	0/985
47	1p	0.43	0/697	0.61	0/939
47	2p	0.41	0/693	0.62	0/935
48	1q	0.45	0/836	0.58	0/1117
48	2q	0.45	0/836	0.61	0/1117
49	1r	0.45	0/560	0.59	0/746
49	2r	0.44	0/560	0.59	0/746
50	1s	0.44	0/667	0.64	0/900
50	2s	0.44	0/661	0.65	0/893
51	1t	0.43	0/730	0.62	0/965
51	2t	0.44	0/729	0.59	0/965
52	1u	0.40	0/203	0.60	0/266
52	2u	0.41	0/203	0.58	0/266
53	1v	0.94	0/310	1.38	1/480 (0.2%)
53	2v	0.82	0/310	1.16	0/480
54	1w	0.84	1/1603 (0.1%)	1.46	24/2492 (1.0%)
54	2w	0.77	0/1531	1.42	16/2379 (0.7%)
55	1x	0.95	7/1723 (0.4%)	1.57	32/2684 (1.2%)
55	2x	0.82	7/1723 (0.4%)	1.44	31/2684 (1.2%)
56	1y	1.11	1/1606 (0.1%)	1.32	8/2497 (0.3%)
56	2y	1.09	1/1583 (0.1%)	1.48	14/2459 (0.6%)
57	1z	0.40	0/128	0.75	0/163
57	2z	0.42	0/128	0.73	0/163
All	All	0.75	69/316935 (0.0%)	1.22	1874/474426 (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
15	1T	0	1
21	1Z	0	1
26	14	0	1
26	24	0	1
33	1b	0	1
40	2i	0	1
44	2m	0	1
47	1p	0	1
All	All	0	8

All (69) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1272	G	C6-N1	-10.68	1.32	1.39
55	1x	1	C	OP3-P	-10.59	1.48	1.61
54	1w	1	G	OP3-P	-9.86	1.49	1.61
2	2B	1	U	OP3-P	-9.82	1.49	1.61
55	2x	1	C	OP3-P	-9.64	1.49	1.61
32	2a	1272	G	N1-C2	-9.49	1.30	1.37
56	1y	1	G	OP3-P	-9.39	1.49	1.61
2	1B	1	U	OP3-P	-9.25	1.50	1.61
33	2b	129	GLU	C-N	9.22	1.55	1.34
56	2y	1	G	OP3-P	-9.08	1.50	1.61
17	1V	34	GLU	C-N	-8.68	1.14	1.34
55	1x	14	A	C8-N7	-7.68	1.26	1.31
1	2A	945	A	N9-C4	-7.24	1.33	1.37
55	1x	46	G	N1-C2	6.92	1.43	1.37
1	2A	1142(A)	A	N9-C4	-6.66	1.33	1.37
1	1A	2790	A	N9-C4	6.63	1.41	1.37
55	2x	22	G	N7-C5	6.57	1.43	1.39
1	1A	570	G	C6-O6	-6.52	1.18	1.24
55	1x	46	G	C6-N1	6.51	1.44	1.39
55	1x	22	G	N7-C5	6.50	1.43	1.39
55	1x	14	A	N7-C5	-6.47	1.35	1.39
1	1A	2019	A	C6-N1	-6.45	1.31	1.35
55	2x	14	A	N9-C4	6.34	1.41	1.37
32	2a	1263	C	N1-C2	6.29	1.46	1.40
55	1x	22	G	C8-N7	6.24	1.34	1.30
1	1A	896	A	N9-C4	6.13	1.41	1.37
1	1A	442	G	N7-C5	-6.09	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	804	A	N9-C4	-6.06	1.34	1.37
1	1A	450	G	C6-O6	-5.89	1.18	1.24
1	1A	2033	A	P-OP1	-5.82	1.39	1.49
1	1A	2419	U	C4-O4	-5.82	1.19	1.23
1	1A	1009	A	N9-C4	-5.80	1.34	1.37
1	1A	2613	U	C2-N3	-5.74	1.33	1.37
1	1A	2005	A	N9-C4	-5.71	1.34	1.37
1	1A	229	A	N9-C4	5.71	1.41	1.37
1	1A	568	U	C4-O4	-5.64	1.19	1.23
1	1A	2319	G	N9-C4	-5.63	1.33	1.38
43	2l	37	CYS	CB-SG	-5.62	1.72	1.81
1	1A	1652	A	N3-C4	-5.59	1.31	1.34
55	2x	46	G	C6-N1	5.58	1.43	1.39
55	2x	22	G	C8-N7	5.54	1.34	1.30
1	2A	652(B)	A	N9-C4	5.52	1.41	1.37
1	1A	2025	C	C2-O2	-5.50	1.19	1.24
1	1A	139(A)	G	N7-C5	-5.42	1.35	1.39
1	1A	2114	A	N9-C4	5.40	1.41	1.37
1	1A	960	A	N7-C5	-5.39	1.36	1.39
1	1A	777	A	C6-N1	-5.37	1.31	1.35
1	1A	1785	A	N7-C5	-5.37	1.36	1.39
1	2A	896	A	N9-C4	5.34	1.41	1.37
1	1A	975	C	N1-C6	-5.33	1.33	1.37
1	2A	1142(A)	A	N3-C4	-5.30	1.31	1.34
1	2A	530	G	C2-N3	-5.29	1.28	1.32
1	1A	2455	G	N7-C5	-5.26	1.36	1.39
1	1A	2419	U	C2-N3	-5.23	1.34	1.37
1	1A	2808	U	C2-N3	5.22	1.41	1.37
55	2x	46	G	N1-C2	5.22	1.42	1.37
1	1A	1187	G	C6-N1	-5.21	1.35	1.39
1	1A	1331	A	N9-C4	-5.19	1.34	1.37
1	1A	652(A)	A	N9-C4	5.18	1.41	1.37
1	1A	777	A	N3-C4	-5.17	1.31	1.34
1	1A	1274	A	N7-C5	-5.16	1.36	1.39
1	1A	829	A	C8-N7	-5.13	1.27	1.31
55	2x	14	A	C8-N7	-5.11	1.27	1.31
1	1A	2009	G	N7-C5	-5.09	1.36	1.39
1	2A	2173	A	N9-C4	5.08	1.40	1.37
1	1A	741	G	C6-O6	-5.06	1.19	1.24
1	1A	2596	U	C2-N3	-5.01	1.34	1.37
1	1A	2613	U	N3-C4	-5.01	1.33	1.38
1	1A	1767	C	N3-C4	-5.00	1.30	1.33

All (1874) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1263	C	N1-C2-O2	28.14	135.78	118.90
32	2a	1272	G	N1-C2-N2	-23.34	95.19	116.20
32	2a	1272	G	N3-C2-N2	22.38	135.57	119.90
32	2a	1272	G	C5-C6-O6	19.69	140.41	128.60
32	2a	1263	C	N3-C2-O2	-17.15	109.90	121.90
1	2A	1368	G	O5'-P-OP2	-15.38	91.86	105.70
32	2a	1263	C	C2-N3-C4	15.03	127.42	119.90
1	1A	1086	A	N1-C6-N6	-14.73	109.76	118.60
55	1x	46	G	C6-N1-C2	-14.51	116.40	125.10
55	2x	46	G	C6-N1-C2	-14.46	116.43	125.10
1	1A	1187	G	N1-C6-O6	-14.24	111.36	119.90
55	1x	14	A	C5-N7-C8	13.38	110.59	103.90
1	2A	2136	C	N1-C2-O2	13.11	126.77	118.90
1	1A	1997	G	O5'-P-OP2	-12.95	94.05	105.70
2	2B	80	U	O4'-C1'-N1	12.83	118.46	108.20
32	2a	1263	C	C5-C6-N1	12.56	127.28	121.00
55	1x	22	G	C5-N7-C8	-12.54	98.03	104.30
1	1A	946	G	O5'-P-OP1	-12.22	94.70	105.70
32	2a	1272	G	N1-C6-O6	-11.93	112.74	119.90
32	1a	1025	U	N1-C2-O2	11.72	131.01	122.80
1	2A	945	A	C5-N7-C8	-11.60	98.10	103.90
55	2x	14	A	C5-N7-C8	11.51	109.66	103.90
1	1A	1140	C	C6-N1-C2	-11.42	115.73	120.30
55	2x	22	G	C5-N7-C8	-11.09	98.75	104.30
32	2a	1263	C	C2-N1-C1'	10.82	130.71	118.80
1	2A	422	A	O5'-P-OP2	-10.70	96.07	105.70
32	2a	1272	G	C2-N3-C4	-10.57	106.62	111.90
1	1A	512	G	O4'-C1'-N9	10.48	116.58	108.20
32	2a	1272	G	C4-N9-C1'	10.46	140.10	126.50
1	1A	2554	U	O5'-P-OP1	-10.37	96.37	105.70
32	1a	1036	G	N3-C2-N2	-10.36	112.64	119.90
32	2a	1272	G	C8-N9-C1'	-10.36	113.53	127.00
1	1A	1063	G	C5-C6-O6	10.24	134.74	128.60
1	2A	885	C	C5-C6-N1	10.23	126.12	121.00
1	2A	885	C	C6-N1-C2	-10.09	116.26	120.30
1	1A	2882	A	O5'-P-OP2	-10.06	96.64	105.70
1	1A	1265	A	O5'-P-OP2	-10.05	96.66	105.70
1	2A	1698	A	N1-C6-N6	10.03	124.62	118.60
1	2A	945	A	C2-N3-C4	-9.93	105.63	110.60
1	1A	1187	G	C5-C6-O6	9.86	134.52	128.60
55	1x	22	G	C4-C5-N7	9.76	114.70	110.80
32	2a	1263	C	C6-N1-C2	-9.53	116.49	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2319	G	N3-C4-C5	9.53	133.36	128.60
1	1A	2489	G	C5-C6-O6	-9.52	122.89	128.60
54	2w	48	C	N1-C2-O2	9.49	124.59	118.90
1	2A	945	A	N1-C6-N6	9.47	124.28	118.60
55	1x	46	G	C5-C6-N1	9.46	116.23	111.50
1	2A	2136	C	N3-C2-O2	-9.40	115.32	121.90
1	1A	446	G	C5-C6-O6	-9.38	122.97	128.60
32	2a	1272	G	C5-C6-N1	-9.38	106.81	111.50
1	1A	446	G	N1-C6-O6	9.29	125.48	119.90
55	1x	46	G	N3-C2-N2	-9.28	113.40	119.90
55	2x	14	A	C4-C5-C6	9.20	121.60	117.00
1	1A	574	C	O5'-P-OP2	-9.13	97.48	105.70
2	1B	79	C	C6-N1-C2	-9.12	116.65	120.30
1	2A	2318	G	O4'-C1'-N9	9.12	115.49	108.20
1	1A	961	C	O5'-P-OP2	-9.10	97.51	105.70
1	2A	1021	A	C2-N3-C4	-9.09	106.06	110.60
1	1A	819	A	O5'-P-OP1	-9.00	97.60	105.70
1	1A	1904	G	N1-C6-O6	-8.99	114.51	119.90
55	1x	14	A	C4-C5-C6	8.98	121.49	117.00
32	2a	1256	A	C8-N9-C4	8.98	109.39	105.80
1	2A	945	A	C4-C5-N7	8.92	115.16	110.70
32	2a	1272	G	N1-C2-N3	8.90	129.24	123.90
1	1A	2319	G	C5-N7-C8	-8.88	99.86	104.30
1	1A	793	A	O5'-P-OP2	-8.82	97.76	105.70
55	2x	46	G	C5-C6-N1	8.80	115.90	111.50
1	2A	2318	G	C8-N9-C4	-8.78	102.89	106.40
1	2A	1698	A	C6-C5-N7	-8.74	126.18	132.30
1	2A	1800	C	N1-C2-O2	8.73	124.14	118.90
2	1B	6	C	C6-N1-C2	8.72	123.79	120.30
1	1A	528	A	O5'-P-OP2	-8.68	97.89	105.70
1	2A	1698	A	C4-C5-N7	8.67	115.03	110.70
2	1B	56	G	C8-N9-C4	-8.66	102.94	106.40
1	1A	1673	U	N1-C2-O2	-8.56	116.81	122.80
1	1A	687	C	C6-N1-C2	-8.55	116.88	120.30
1	1A	2319	G	N3-C4-N9	-8.55	120.87	126.00
1	1A	1377	G	O5'-P-OP2	-8.52	98.03	105.70
1	1A	576	U	O5'-P-OP1	-8.51	98.04	105.70
1	1A	2428	G	N1-C6-O6	-8.48	114.81	119.90
1	2A	1698	A	C2-N3-C4	-8.47	106.36	110.60
55	1x	22	G	C5-C6-N1	8.46	115.73	111.50
1	2A	1558	A	C2-N3-C4	-8.44	106.38	110.60
55	2x	14	A	C4-C5-N7	-8.43	106.49	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1255	U	C5-C4-O4	-8.41	120.86	125.90
1	1A	1325	G	N9-C4-C5	8.40	108.76	105.40
32	1a	841	U	C5-C6-N1	8.36	126.88	122.70
1	1A	919	G	N1-C6-O6	8.35	124.91	119.90
1	1A	954	G	N1-C6-O6	-8.34	114.89	119.90
1	1A	139(A)	G	C5-N7-C8	8.33	108.47	104.30
1	1A	29	U	O5'-P-OP2	-8.32	98.21	105.70
1	1A	194	G	C8-N9-C4	-8.31	103.08	106.40
1	1A	531	C	O5'-P-OP2	-8.27	98.26	105.70
1	2A	792	G	N3-C4-N9	8.26	130.96	126.00
1	1A	1063	G	N1-C6-O6	-8.26	114.95	119.90
1	1A	677	A	O5'-P-OP2	-8.23	98.30	105.70
32	2a	1029	C	C5-C6-N1	8.23	125.11	121.00
1	1A	967	C	N3-C4-N4	-8.21	112.25	118.00
1	2A	141	A	N7-C8-N9	8.19	117.89	113.80
1	2A	1698	A	C5-N7-C8	-8.18	99.81	103.90
32	1a	1025	U	N3-C2-O2	-8.18	116.47	122.20
1	1A	1082	U	N3-C4-O4	-8.17	113.68	119.40
1	1A	1994	C	O5'-P-OP2	-8.15	98.36	105.70
32	1a	368	U	N1-C2-N3	-8.13	110.02	114.90
1	2A	2129	C	N1-C2-O2	8.13	123.78	118.90
1	1A	2228	G	N1-C6-O6	-8.11	115.04	119.90
1	1A	1011	G	O5'-P-OP2	-8.10	98.41	105.70
1	1A	2228	G	C5-C6-O6	8.10	133.46	128.60
1	1A	568	U	N3-C4-C5	8.09	119.46	114.60
1	1A	2438	U	C5-C6-N1	-8.08	118.66	122.70
1	1A	226	G	O4'-C1'-N9	8.06	114.65	108.20
32	2a	754	C	C2-N1-C1'	8.04	127.64	118.80
1	1A	36	G	C5-C6-O6	8.02	133.41	128.60
54	1w	75	C	C6-N1-C2	8.02	123.51	120.30
1	1A	1992	G	P-O3'-C3'	8.01	129.31	119.70
1	1A	2646	C	C6-N1-C2	-8.00	117.10	120.30
55	2x	46	G	N3-C4-C5	-7.99	124.61	128.60
1	1A	1395	A	N7-C8-N9	-7.97	109.81	113.80
1	1A	1776	G	O5'-P-OP2	-7.96	98.54	105.70
1	2A	975	C	N1-C2-O2	7.96	123.67	118.90
1	2A	1953	A	O5'-P-OP1	-7.96	98.54	105.70
32	2a	1263	C	C4-C5-C6	-7.95	113.43	117.40
1	1A	999	U	O5'-P-OP2	-7.94	98.56	105.70
32	1a	1531	A	N7-C8-N9	7.93	117.77	113.80
1	1A	683	C	N3-C4-C5	7.93	125.07	121.90
32	1a	1027	C	C2-N3-C4	7.92	123.86	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	975	C	C2-N3-C4	-7.91	115.95	119.90
1	1A	2685	G	N1-C6-O6	-7.90	115.16	119.90
1	2A	1990	C	N3-C2-O2	-7.90	116.37	121.90
1	1A	528	A	O5'-P-OP1	7.89	120.17	110.70
33	1b	89	GLY	C-N-CA	7.89	141.41	121.70
56	1y	33	U	C2-N1-C1'	7.89	127.16	117.70
1	1A	801	G	O5'-P-OP2	-7.87	98.62	105.70
55	1x	22	G	C4-C5-C6	-7.87	114.08	118.80
1	1A	2584	U	C5-C4-O4	7.85	130.61	125.90
1	1A	2778	A	O5'-P-OP2	-7.84	98.65	105.70
1	2A	2207	G	C6-C5-N7	-7.84	125.70	130.40
1	2A	2689	U	P-O3'-C3'	7.84	129.10	119.70
1	1A	775	G	C4-C5-N7	7.83	113.93	110.80
32	2a	406	G	O5'-P-OP1	-7.83	98.65	105.70
55	1x	60	U	O5'-P-OP2	-7.83	98.65	105.70
1	1A	210	C	C6-N1-C2	7.80	123.42	120.30
1	1A	954	G	C5-C6-O6	7.80	133.28	128.60
1	1A	431	U	O5'-P-OP1	-7.79	98.69	105.70
1	1A	859	G	C8-N9-C4	7.77	109.51	106.40
1	2A	94(A)	G	N1-C6-O6	7.75	124.55	119.90
1	1A	1993	U	C2-N3-C4	-7.75	122.35	127.00
1	1A	754	C	N3-C2-O2	-7.75	116.48	121.90
1	2A	748	G	C5-C6-N1	7.72	115.36	111.50
1	1A	2448	A	O5'-P-OP1	-7.72	98.75	105.70
32	2a	1428	A	C8-N9-C4	-7.71	102.72	105.80
1	2A	1698	A	O4'-C1'-N9	7.69	114.35	108.20
1	1A	2575	C	N1-C2-O2	7.69	123.51	118.90
1	1A	1047	G	N3-C4-C5	-7.68	124.76	128.60
55	2x	22	G	C4-C5-C6	-7.68	114.19	118.80
1	1A	1395	A	C8-N9-C4	7.67	108.87	105.80
1	2A	1800	C	N3-C2-O2	-7.67	116.53	121.90
1	1A	1005	C	N3-C4-C5	7.66	124.97	121.90
1	1A	2501	C	C6-N1-C2	7.66	123.36	120.30
1	2A	945	A	N7-C8-N9	7.66	117.63	113.80
1	1A	2428	G	C5-C6-O6	7.66	133.19	128.60
1	1A	1075	C	N1-C2-O2	7.64	123.48	118.90
1	1A	2364	C	N3-C4-N4	-7.63	112.66	118.00
1	1A	1993	U	C5-C6-N1	-7.62	118.89	122.70
32	1a	368	U	O4'-C1'-N1	7.61	114.29	108.20
1	1A	272(E)	G	N1-C6-O6	7.61	124.47	119.90
1	2A	823	G	N1-C6-O6	-7.61	115.34	119.90
1	1A	1691	C	N3-C2-O2	-7.59	116.59	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2714	G	O5'-P-OP2	-7.58	98.88	105.70
1	1A	2275	C	N1-C2-O2	-7.58	114.35	118.90
1	1A	22	C	O5'-P-OP2	-7.58	98.88	105.70
1	2A	2492	U	O5'-P-OP1	-7.57	98.89	105.70
1	1A	1190	G	C5-N7-C8	7.57	108.08	104.30
1	1A	834	C	N1-C2-O2	-7.56	114.36	118.90
1	1A	1676	A	O5'-P-OP2	-7.55	98.90	105.70
55	1x	14	A	C5-C6-N1	-7.55	113.93	117.70
1	1A	973	A	N1-C2-N3	-7.54	125.53	129.30
32	2a	754	C	N1-C2-O2	7.53	123.42	118.90
1	1A	1599	C	N3-C4-N4	-7.53	112.73	118.00
54	2w	19	G	C8-N9-C4	-7.51	103.39	106.40
1	2A	129	C	O5'-P-OP2	-7.50	98.95	105.70
1	1A	2021	C	C6-N1-C2	7.50	123.30	120.30
1	2A	141	A	C8-N9-C4	-7.50	102.80	105.80
1	1A	2443	C	N3-C2-O2	-7.50	116.65	121.90
1	2A	2275	C	N1-C2-O2	-7.49	114.40	118.90
1	2A	2318	G	N3-C4-C5	-7.49	124.86	128.60
1	2A	330	A	C2-N3-C4	-7.49	106.86	110.60
55	1x	14	A	C4-C5-N7	-7.48	106.96	110.70
1	2A	2231	C	C6-N1-C2	7.47	123.29	120.30
55	2x	14	A	C5-C6-N1	-7.46	113.97	117.70
1	1A	1385	G	O4'-C1'-N9	7.46	114.17	108.20
1	1A	589	C	O5'-P-OP2	-7.43	99.01	105.70
1	1A	1404	C	O5'-P-OP2	-7.43	99.02	105.70
1	1A	1190	G	N7-C8-N9	-7.42	109.39	113.10
1	1A	1660	C	O5'-P-OP2	-7.42	99.02	105.70
1	1A	2638	G	N3-C4-C5	-7.42	124.89	128.60
1	2A	1201	C	C6-N1-C2	7.42	123.27	120.30
1	1A	2428	G	N9-C4-C5	7.41	108.36	105.40
32	1a	1009	G	C5-C6-O6	-7.41	124.15	128.60
1	2A	2155	G	N3-C2-N2	7.40	125.08	119.90
1	1A	2065	C	C5-C4-N4	-7.40	115.02	120.20
1	1A	973	A	C2-N3-C4	7.40	114.30	110.60
1	1A	2431	U	O5'-P-OP2	-7.39	99.05	105.70
1	1A	1086	A	C5-C6-N6	7.39	129.61	123.70
1	1A	1952	A	O5'-P-OP2	-7.39	99.05	105.70
1	2A	2028	U	N3-C4-O4	-7.38	114.23	119.40
1	1A	139(A)	G	N1-C6-O6	7.38	124.33	119.90
1	2A	2260	C	N3-C4-C5	-7.38	118.95	121.90
1	1A	825	C	C2-N3-C4	-7.36	116.22	119.90
1	1A	1014	U	O5'-P-OP2	-7.36	99.08	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1615	C	N1-C2-O2	7.35	123.31	118.90
55	2x	22	G	N7-C8-N9	7.35	116.78	113.10
1	1A	1974	C	O5'-P-OP1	-7.35	99.08	105.70
1	1A	1993	U	O5'-P-OP1	-7.34	99.09	105.70
1	1A	975	C	O5'-P-OP1	-7.32	99.11	105.70
1	1A	467	G	C5-C6-O6	7.32	132.99	128.60
1	2A	1142(A)	A	C2-N3-C4	-7.31	106.94	110.60
1	1A	2515	C	C5-C4-N4	-7.31	115.09	120.20
1	1A	739	G	C5-C6-O6	-7.30	124.22	128.60
1	1A	2319	G	C4-C5-N7	7.29	113.72	110.80
1	1A	58	G	O5'-P-OP1	7.29	119.45	110.70
1	1A	565	C	C6-N1-C2	-7.28	117.39	120.30
1	1A	990	A	O5'-P-OP1	-7.28	99.15	105.70
1	1A	382	G	C5-N7-C8	7.27	107.94	104.30
1	1A	2074	U	C5-C6-N1	-7.27	119.06	122.70
1	1A	445	C	C6-N1-C2	-7.27	117.39	120.30
32	2a	754	C	C6-N1-C1'	-7.27	112.08	120.80
1	1A	1265	A	N7-C8-N9	-7.26	110.17	113.80
1	1A	588	U	C4-C5-C6	-7.26	115.34	119.70
1	2A	536	A	N1-C6-N6	7.25	122.95	118.60
32	2a	1039	C	N1-C2-O2	7.24	123.25	118.90
55	1x	22	G	N7-C8-N9	7.24	116.72	113.10
1	1A	768	G	N1-C6-O6	-7.24	115.56	119.90
1	1A	982	C	N1-C2-O2	-7.24	114.56	118.90
1	1A	2419	U	N1-C2-O2	7.23	127.86	122.80
1	2A	2137	C	C6-N1-C2	-7.23	117.41	120.30
1	1A	975	C	N1-C2-O2	-7.22	114.57	118.90
2	1B	114	C	O5'-P-OP1	-7.22	99.20	105.70
1	1A	1574	C	C6-N1-C2	7.19	123.18	120.30
1	1A	2455	G	N3-C4-N9	7.19	130.31	126.00
1	1A	2629	A	P-O3'-C3'	7.18	128.32	119.70
32	2a	1226	C	N1-C2-O2	-7.18	114.59	118.90
32	2a	1272	G	N3-C4-N9	7.17	130.30	126.00
1	1A	775	G	N3-C2-N2	7.17	124.92	119.90
1	1A	2428	G	C8-N9-C4	-7.16	103.53	106.40
1	1A	1387	C	C6-N1-C2	-7.16	117.44	120.30
55	2x	22	G	C5-C6-N1	7.16	115.08	111.50
1	1A	2822	G	N1-C6-O6	7.15	124.19	119.90
1	1A	386	G	O4'-C1'-N9	7.15	113.92	108.20
56	2y	26	A	N1-C6-N6	7.15	122.89	118.60
1	1A	753	C	C6-N1-C2	-7.15	117.44	120.30
1	1A	1828	G	C5-C6-O6	-7.14	124.31	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	530	G	C6-C5-N7	-7.14	126.12	130.40
1	1A	1471	A	O5'-P-OP1	-7.14	99.28	105.70
1	1A	36	G	O5'-P-OP2	-7.13	99.28	105.70
1	1A	397	G	N1-C6-O6	-7.12	115.63	119.90
55	2x	22	G	C4-C5-N7	7.11	113.64	110.80
32	1a	913	A	P-O3'-C3'	7.10	128.22	119.70
1	1A	150	C	N3-C2-O2	-7.10	116.93	121.90
1	1A	1710	C	C6-N1-C2	7.08	123.13	120.30
1	1A	2577	A	N1-C6-N6	-7.08	114.35	118.60
1	1A	568	U	C5-C4-O4	-7.08	121.65	125.90
1	1A	2173	A	C8-N9-C4	7.08	108.63	105.80
1	2A	2048	G	N1-C6-O6	-7.08	115.65	119.90
1	1A	2744	G	O5'-P-OP2	-7.08	99.33	105.70
1	2A	2582	G	C4-N9-C1'	7.07	135.70	126.50
1	1A	1394	U	C5-C4-O4	-7.07	121.66	125.90
1	1A	1328	G	N3-C4-N9	7.06	130.24	126.00
32	1a	368	U	C2-N3-C4	7.05	131.23	127.00
1	1A	954	G	C4-C5-N7	-7.05	107.98	110.80
1	1A	2608	G	C5-C6-O6	-7.04	124.37	128.60
1	1A	2272	U	O5'-P-OP2	-7.04	99.36	105.70
1	1A	271(Y)	U	O4'-C1'-N1	7.04	113.83	108.20
1	1A	1192	G	N7-C8-N9	-7.04	109.58	113.10
1	1A	2586	C	C6-N1-C2	-7.04	117.48	120.30
1	1A	2308	G	C4-C5-N7	7.03	113.61	110.80
1	1A	2689	U	P-O3'-C3'	7.03	128.14	119.70
1	1A	683	C	N1-C2-O2	7.03	123.12	118.90
1	2A	897	C	C2-N1-C1'	7.02	126.52	118.80
1	2A	1698	A	N9-C4-C5	-7.02	102.99	105.80
1	1A	641	C	C6-N1-C2	-7.00	117.50	120.30
32	1a	188	C	C6-N1-C2	-7.00	117.50	120.30
32	1a	1417	G	C5-C6-N1	7.00	115.00	111.50
1	2A	1837	C	O5'-P-OP1	-7.00	99.40	105.70
1	2A	2065	C	N1-C2-O2	7.00	123.10	118.90
32	1a	254	G	O5'-P-OP1	-7.00	99.40	105.70
32	2a	1067	A	C8-N9-C4	-6.99	103.00	105.80
1	2A	1638	C	C6-N1-C2	6.98	123.09	120.30
55	2x	46	G	N1-C2-N3	6.98	128.09	123.90
32	2a	1263	C	N1-C2-N3	-6.97	114.32	119.20
1	1A	2484	G	C5-C6-O6	6.96	132.78	128.60
1	2A	1992	G	O4'-C1'-N9	-6.96	102.64	108.20
1	2A	2260	C	C5-C4-N4	6.95	125.06	120.20
1	2A	2318	G	N7-C8-N9	6.94	116.57	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1793	C	C6-N1-C2	-6.93	117.53	120.30
1	2A	242	G	N1-C6-O6	-6.93	115.74	119.90
1	1A	1264	G	N3-C2-N2	-6.93	115.05	119.90
32	1a	1051	C	C6-N1-C2	-6.93	117.53	120.30
1	2A	1640	C	C5-C6-N1	6.93	124.46	121.00
8	2I	82	ARG	NE-CZ-NH1	-6.92	116.84	120.30
1	1A	1075	C	N3-C4-C5	-6.92	119.13	121.90
1	1A	2495	G	N3-C4-C5	6.92	132.06	128.60
1	1A	1672	C	C6-N1-C2	-6.92	117.53	120.30
1	1A	1325	G	C8-N9-C4	-6.91	103.64	106.40
1	2A	1260	G	N1-C6-O6	-6.91	115.75	119.90
1	2A	2048	G	C5-C6-O6	6.91	132.75	128.60
1	1A	1433	U	O5'-P-OP2	-6.91	99.48	105.70
1	1A	1818	U	O5'-P-OP2	-6.91	99.49	105.70
1	1A	2578	G	N3-C2-N2	6.90	124.73	119.90
32	1a	368	U	N1-C2-O2	6.89	127.62	122.80
1	1A	1563	G	C8-N9-C4	-6.88	103.65	106.40
32	1a	675	A	C8-N9-C4	6.88	108.55	105.80
1	2A	897	C	C5-C6-N1	6.87	124.44	121.00
32	1a	1027	C	N3-C4-C5	-6.87	119.15	121.90
54	1w	12	U	C2-N3-C4	-6.86	122.88	127.00
54	1w	23	A	C5-C6-N6	-6.86	118.21	123.70
56	2y	4	C	N1-C2-O2	6.85	123.01	118.90
1	1A	1591	G	N1-C6-O6	-6.85	115.79	119.90
1	1A	1556	C	C6-N1-C2	-6.84	117.56	120.30
1	2A	2447	G	N1-C6-O6	-6.84	115.79	119.90
1	1A	2236	C	C5-C6-N1	-6.84	117.58	121.00
1	2A	2582	G	N3-C4-C5	-6.84	125.18	128.60
1	1A	1394	U	C5-C6-N1	6.83	126.11	122.70
1	1A	2419	U	N3-C4-C5	6.82	118.69	114.60
32	2a	1029	C	C5-C4-N4	-6.82	115.42	120.20
1	1A	768	G	C5-C6-O6	6.82	132.69	128.60
1	1A	2848	G	O4'-C1'-N9	6.82	113.65	108.20
1	1A	1197	G	C5-C6-O6	6.81	132.69	128.60
32	1a	1054	C	N3-C4-N4	-6.80	113.24	118.00
1	1A	1753	G	N3-C2-N2	6.80	124.66	119.90
1	2A	2128	C	C2-N1-C1'	6.80	126.28	118.80
32	2a	1256	A	N7-C8-N9	-6.80	110.40	113.80
1	1A	616	G	O5'-P-OP2	-6.80	99.58	105.70
1	2A	2207	G	N1-C6-O6	6.80	123.98	119.90
54	1w	23	A	C6-N1-C2	-6.79	114.53	118.60
32	1a	368	U	C4-C5-C6	-6.79	115.63	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1276	G	N3-C4-N9	6.79	130.07	126.00
1	1A	1257	C	N3-C2-O2	-6.79	117.15	121.90
1	1A	2430	A	O5'-P-OP2	-6.78	99.60	105.70
1	1A	2156	G	C8-N9-C4	-6.78	103.69	106.40
54	1w	75	C	N3-C4-C5	6.78	124.61	121.90
32	1a	1222	G	O5'-P-OP2	-6.77	99.61	105.70
1	1A	680	G	O5'-P-OP1	-6.76	99.61	105.70
32	1a	266	G	N3-C4-C5	-6.76	125.22	128.60
1	2A	698	C	N1-C2-O2	6.76	122.95	118.90
32	2a	1273	G	N3-C4-N9	6.75	130.05	126.00
1	2A	1958	C	O5'-P-OP2	6.75	118.80	110.70
2	1B	102	A	N7-C8-N9	-6.75	110.43	113.80
32	1a	1204	A	N1-C6-N6	-6.75	114.55	118.60
1	1A	1047	G	N3-C4-N9	6.75	130.05	126.00
55	1x	46	G	C5-C6-O6	-6.74	124.56	128.60
32	1a	532	A	O4'-C1'-N9	6.74	113.59	108.20
1	1A	2070	G	O5'-P-OP2	-6.74	99.64	105.70
1	1A	2538	C	C6-N1-C2	6.73	122.99	120.30
1	2A	1524	G	N1-C6-O6	-6.72	115.86	119.90
1	2A	2188	C	C5-C6-N1	6.72	124.36	121.00
1	1A	1678	G	C8-N9-C4	-6.71	103.71	106.40
32	1a	1204	A	C5-C6-N6	6.71	129.07	123.70
1	2A	553	G	N1-C6-O6	6.71	123.93	119.90
32	1a	219	C	C6-N1-C2	-6.71	117.62	120.30
1	1A	1223	G	C5-C6-N1	6.70	114.85	111.50
1	1A	2692	C	C6-N1-C2	-6.70	117.62	120.30
1	1A	923	C	N1-C2-O2	-6.70	114.88	118.90
1	1A	2244	U	N1-C2-N3	6.69	118.92	114.90
1	1A	372	G	O4'-C1'-N9	6.69	113.55	108.20
1	1A	1187	G	N3-C2-N2	6.69	124.58	119.90
1	1A	2791	C	C6-N1-C2	-6.69	117.62	120.30
1	2A	2635	C	N1-C2-O2	6.69	122.91	118.90
1	1A	774	A	C8-N9-C4	-6.68	103.13	105.80
1	2A	31	C	C6-N1-C2	-6.68	117.63	120.30
32	2a	1390	U	N1-C2-O2	-6.68	118.12	122.80
54	1w	72	C	C2-N1-C1'	6.68	126.15	118.80
55	1x	46	G	N9-C4-C5	6.68	108.07	105.40
1	2A	784	A	OP1-P-O3'	6.68	119.90	105.20
32	1a	816	A	O5'-P-OP2	-6.68	99.69	105.70
1	1A	2159	G	N3-C4-N9	6.68	130.01	126.00
1	1A	475	U	N3-C2-O2	-6.68	117.53	122.20
1	1A	2065	C	N3-C4-N4	6.68	122.67	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2319	G	N1-C6-O6	6.67	123.91	119.90
1	1A	1265	A	C5-N7-C8	6.66	107.23	103.90
32	2a	1263	C	C6-N1-C1'	-6.66	112.80	120.80
1	1A	117	G	O5'-P-OP2	-6.66	99.71	105.70
54	1w	12	U	C5-C4-O4	-6.66	121.91	125.90
32	1a	368	U	C5-C6-N1	6.65	126.03	122.70
1	1A	242	G	N3-C4-C5	6.65	131.92	128.60
1	1A	1599	C	C5-C4-N4	6.65	124.85	120.20
32	1a	266	G	P-O3'-C3'	6.65	127.67	119.70
2	1B	102	A	C5-N7-C8	6.64	107.22	103.90
1	1A	1139	G	N1-C6-O6	-6.64	115.92	119.90
1	2A	945	A	C6-C5-N7	-6.64	127.65	132.30
1	1A	2563	U	O5'-P-OP1	-6.64	99.73	105.70
32	1a	1417	G	N1-C6-O6	-6.64	115.92	119.90
1	1A	2501	C	N3-C4-C5	6.63	124.55	121.90
1	1A	1557	C	N3-C2-O2	-6.62	117.26	121.90
1	1A	1207	C	C5-C4-N4	6.62	124.83	120.20
1	2A	2286	A	C5-N7-C8	-6.62	100.59	103.90
1	1A	271(J)	C	C6-N1-C2	6.61	122.94	120.30
1	2A	881	G	N3-C4-N9	6.61	129.96	126.00
1	1A	427	U	O5'-P-OP1	-6.60	99.76	105.70
1	1A	2364	C	N3-C2-O2	-6.60	117.28	121.90
1	1A	2612	C	O5'-P-OP2	-6.59	99.77	105.70
32	1a	975	A	O4'-C1'-N9	-6.59	102.92	108.20
1	2A	1187	G	C8-N9-C4	-6.59	103.76	106.40
32	2a	546	G	N1-C6-O6	-6.59	115.94	119.90
1	1A	2327	A	N1-C6-N6	-6.59	114.64	118.60
1	1A	1599	C	N3-C2-O2	-6.59	117.29	121.90
1	2A	1791	A	O5'-P-OP1	-6.59	99.77	105.70
1	1A	139(A)	G	N7-C8-N9	-6.58	109.81	113.10
1	1A	2273	A	O5'-P-OP2	-6.58	99.78	105.70
1	1A	1785	A	O5'-P-OP2	-6.58	99.78	105.70
1	1A	1140	C	N3-C2-O2	-6.57	117.30	121.90
1	1A	513	A	N1-C6-N6	6.56	122.54	118.60
1	1A	344	G	N1-C6-O6	6.56	123.83	119.90
32	2a	913	A	P-O3'-C3'	6.56	127.57	119.70
1	1A	683	C	C6-N1-C2	6.56	122.92	120.30
1	1A	231	C	N3-C4-C5	-6.56	119.28	121.90
1	1A	571	A	C2-N3-C4	6.55	113.87	110.60
1	2A	945	A	N3-C4-C5	6.55	131.38	126.80
1	2A	2593	U	N3-C4-O4	-6.54	114.82	119.40
1	2A	2593	U	N3-C4-C5	6.54	118.53	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	75	C	C5-C6-N1	-6.54	117.73	121.00
1	1A	1992	G	C2'-C3'-O3'	6.54	124.16	113.70
1	1A	2773	C	C6-N1-C2	6.54	122.92	120.30
32	2a	1067	A	C2-N3-C4	6.53	113.87	110.60
32	2a	1263	C	C5-C4-N4	6.53	124.77	120.20
1	2A	2685	G	N1-C6-O6	-6.53	115.98	119.90
1	1A	2022	U	N1-C2-O2	-6.53	118.23	122.80
1	1A	195	A	OP1-P-OP2	-6.52	109.82	119.60
1	1A	2550	G	N3-C2-N2	-6.52	115.34	119.90
32	2a	534	U	C5-C4-O4	6.52	129.81	125.90
1	1A	1488	G	C8-N9-C4	-6.51	103.79	106.40
1	1A	1992	G	O4'-C1'-N9	-6.51	102.99	108.20
1	1A	2627	G	C8-N9-C4	6.51	109.00	106.40
1	1A	1063	G	N3-C2-N2	6.50	124.45	119.90
1	1A	308	G	O5'-P-OP2	-6.49	99.86	105.70
1	1A	1721	G	N1-C6-O6	6.49	123.80	119.90
1	2A	383	U	O4'-C1'-N1	6.49	113.39	108.20
1	2A	2137	C	C5-C6-N1	6.49	124.24	121.00
1	1A	272(E)	G	C5-C6-O6	-6.48	124.71	128.60
1	1A	746	A	O4'-C1'-N9	6.48	113.39	108.20
1	1A	196	A	O4'-C1'-N9	6.48	113.38	108.20
32	1a	1531	A	C8-N9-C4	-6.48	103.21	105.80
32	2a	783	C	C6-N1-C2	-6.47	117.71	120.30
54	1w	34	G	N3-C4-C5	-6.46	125.37	128.60
2	2B	13	A	C8-N9-C4	6.46	108.39	105.80
1	2A	1564	C	C6-N1-C2	6.46	122.89	120.30
1	1A	195	A	O5'-P-OP2	6.46	118.45	110.70
1	2A	1558	A	N1-C2-N3	6.46	132.53	129.30
32	1a	1240	U	C2-N1-C1'	-6.45	109.96	117.70
55	2x	46	G	N9-C4-C5	6.45	107.98	105.40
1	1A	1607	C	N1-C2-O2	-6.45	115.03	118.90
32	1a	1312	G	C8-N9-C4	-6.44	103.82	106.40
32	2a	923	A	C6-N1-C2	-6.44	114.73	118.60
1	2A	912	C	C6-N1-C2	-6.44	117.72	120.30
1	1A	2364	C	N3-C4-C5	6.44	124.47	121.90
55	2x	46	G	N3-C2-N2	-6.44	115.39	119.90
1	1A	1670	C	C6-N1-C2	6.43	122.87	120.30
1	1A	971	C	N3-C4-C5	-6.43	119.33	121.90
1	1A	390	A	N1-C6-N6	6.42	122.45	118.60
1	1A	2727	G	O5'-P-OP2	-6.42	99.92	105.70
1	1A	34	C	N1-C2-O2	6.42	122.75	118.90
1	1A	2041	U	OP2-P-O3'	6.42	119.31	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2618	G	N3-C4-C5	-6.42	125.39	128.60
1	1A	1264	G	N9-C4-C5	6.41	107.97	105.40
1	2A	178	G	N1-C6-O6	-6.41	116.05	119.90
1	2A	2155	G	N9-C4-C5	-6.41	102.84	105.40
1	1A	2861	G	N1-C6-O6	6.41	123.75	119.90
1	1A	2236	C	C6-N1-C2	6.41	122.86	120.30
1	1A	1075	C	C2-N3-C4	6.40	123.10	119.90
32	1a	907	A	N1-C6-N6	6.40	122.44	118.60
55	2x	46	G	C4-C5-N7	-6.40	108.24	110.80
1	1A	646	A	N1-C6-N6	-6.40	114.76	118.60
1	1A	663	G	C4-C5-N7	-6.40	108.24	110.80
1	2A	2065	C	N3-C2-O2	-6.39	117.42	121.90
32	1a	942	G	C5-C6-O6	6.39	132.44	128.60
1	1A	2259	G	N3-C2-N2	6.39	124.37	119.90
1	2A	265	A	O4'-C1'-N9	6.39	113.31	108.20
1	1A	2506	U	C2-N3-C4	-6.38	123.17	127.00
1	2A	784	A	O4'-C1'-N9	6.38	113.31	108.20
1	2A	2286	A	N1-C6-N6	6.38	122.43	118.60
1	1A	2509	G	N1-C6-O6	-6.38	116.08	119.90
1	1A	967	C	C5-C4-N4	6.37	124.66	120.20
1	1A	1075	C	C5-C4-N4	6.37	124.66	120.20
2	2B	1	U	C2-N1-C1'	6.37	125.34	117.70
32	2a	1099	G	C8-N9-C4	-6.37	103.85	106.40
1	1A	944	G	C8-N9-C1'	-6.36	118.73	127.00
1	1A	1105	U	C5-C4-O4	-6.36	122.08	125.90
1	2A	1204	A	C2-N3-C4	-6.36	107.42	110.60
1	1A	2331	G	N3-C2-N2	6.36	124.35	119.90
1	1A	1286	A	O5'-P-OP2	-6.35	99.98	105.70
1	1A	2540	C	C6-N1-C2	6.35	122.84	120.30
1	1A	527	C	N3-C4-C5	-6.34	119.36	121.90
1	1A	1395	A	C5-N7-C8	6.34	107.07	103.90
1	1A	1756	G	N3-C2-N2	-6.34	115.46	119.90
1	1A	1197	G	N1-C6-O6	-6.33	116.10	119.90
1	2A	214	G	O4'-C1'-N9	6.33	113.27	108.20
1	2A	2893	G	C5-C6-O6	-6.33	124.80	128.60
1	1A	1695	G	N3-C4-N9	6.33	129.80	126.00
55	2x	14	A	C4-N9-C1'	6.33	137.69	126.30
1	2A	528	A	C2-N3-C4	-6.33	107.44	110.60
1	1A	271(J)	C	N3-C2-O2	6.33	126.33	121.90
1	1A	33	U	O5'-P-OP2	-6.32	100.01	105.70
1	1A	951	C	N3-C4-C5	6.32	124.43	121.90
1	2A	2149	G	C5-C6-O6	-6.32	124.81	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1573	G	C5-C6-O6	-6.32	124.81	128.60
1	2A	1638	C	N3-C4-C5	6.32	124.43	121.90
1	2A	1021	A	N1-C2-N3	6.32	132.46	129.30
1	2A	2136	C	C2-N1-C1'	6.32	125.75	118.80
1	1A	1349	A	C2-N3-C4	6.32	113.76	110.60
56	2y	4	C	C2-N3-C4	6.31	123.05	119.90
1	1A	379	G	C5-C6-O6	6.31	132.38	128.60
1	1A	1836	C	N1-C2-O2	6.30	122.68	118.90
1	2A	879	G	N3-C4-C5	-6.30	125.45	128.60
32	1a	816	A	O5'-P-OP1	6.30	118.26	110.70
55	1x	14	A	N7-C8-N9	-6.29	110.65	113.80
1	2A	1260	G	C5-C6-O6	6.29	132.38	128.60
1	1A	2489	G	N1-C6-O6	6.29	123.67	119.90
1	1A	1233	C	C5-C4-N4	-6.28	115.80	120.20
1	1A	1646	C	N3-C4-N4	-6.28	113.60	118.00
1	1A	1821	A	C8-N9-C4	-6.28	103.29	105.80
1	1A	2342	C	C6-N1-C2	-6.28	117.79	120.30
1	2A	390	A	N1-C6-N6	6.28	122.37	118.60
56	2y	50	U	C2-N3-C4	6.28	130.77	127.00
32	2a	1272	G	C6-N1-C2	6.28	128.87	125.10
1	2A	811	U	C5-C4-O4	6.28	129.66	125.90
1	1A	745	G	N3-C2-N2	6.27	124.29	119.90
1	1A	1753	G	N1-C6-O6	-6.27	116.14	119.90
1	1A	977	G	C5-C6-O6	6.27	132.36	128.60
1	1A	2105	C	C6-N1-C2	-6.27	117.79	120.30
1	1A	1634	A	C8-N9-C4	-6.27	103.29	105.80
1	1A	2443	C	N1-C2-O2	6.26	122.66	118.90
1	1A	1140	C	N1-C2-N3	6.26	123.58	119.20
1	1A	1192	G	C5-N7-C8	6.26	107.43	104.30
1	2A	141	A	O4'-C1'-N9	6.26	113.21	108.20
32	2a	1029	C	N3-C4-N4	6.26	122.38	118.00
54	1w	34	G	N1-C6-O6	-6.26	116.14	119.90
1	1A	2155	G	N1-C6-O6	-6.26	116.15	119.90
1	1A	1192	G	C8-N9-C4	6.25	108.90	106.40
1	2A	1992	G	P-O3'-C3'	6.25	127.20	119.70
1	1A	108	U	N3-C2-O2	-6.25	117.83	122.20
1	1A	489	G	N1-C6-O6	6.25	123.65	119.90
1	1A	1005	C	N3-C2-O2	-6.25	117.53	121.90
1	1A	467	G	C4-C5-N7	-6.25	108.30	110.80
1	2A	823	G	C5-C6-O6	6.24	132.35	128.60
1	1A	1349	A	C8-N9-C4	-6.24	103.30	105.80
1	2A	698	C	N3-C2-O2	-6.24	117.53	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2286	A	C2-N3-C4	-6.24	107.48	110.60
1	1A	417	C	O5'-P-OP1	-6.24	100.08	105.70
1	2A	2155	G	N3-C4-N9	6.24	129.74	126.00
1	2A	589	C	C6-N1-C2	-6.23	117.81	120.30
2	2B	80	U	C5'-C4'-O4'	6.23	116.58	109.10
1	1A	1780	A	C8-N9-C4	-6.23	103.31	105.80
1	2A	2582	G	C8-N9-C1'	-6.23	118.90	127.00
1	1A	2501	C	N3-C2-O2	6.23	126.26	121.90
1	1A	61	G	N1-C6-O6	6.23	123.64	119.90
1	1A	1257	C	C6-N1-C2	-6.22	117.81	120.30
1	1A	1944	U	C5-C4-O4	-6.22	122.17	125.90
1	1A	1937	A	O4'-C1'-N9	6.21	113.17	108.20
1	1A	2706	G	N7-C8-N9	-6.21	109.99	113.10
1	1A	1065	U	C6-N1-C2	-6.21	117.27	121.00
1	1A	1047	G	C4-N9-C1'	6.21	134.57	126.50
1	2A	752	A	C8-N9-C4	-6.21	103.32	105.80
54	2w	72	C	C5-C6-N1	6.21	124.10	121.00
32	1a	955	U	C2-N3-C4	6.20	130.72	127.00
1	1A	839	U	N3-C2-O2	-6.20	117.86	122.20
1	2A	1615	C	C6-N1-C2	-6.20	117.82	120.30
1	1A	2577	A	C2-N3-C4	6.19	113.70	110.60
32	1a	1151	A	O5'-P-OP2	-6.19	100.13	105.70
55	1x	34	C	C6-N1-C2	-6.19	117.82	120.30
1	2A	786	C	OP2-P-O3'	6.19	118.82	105.20
1	1A	2244	U	C6-N1-C2	-6.18	117.29	121.00
1	1A	1615	C	N3-C2-O2	-6.18	117.57	121.90
32	1a	115	G	P-O3'-C3'	6.18	127.11	119.70
32	1a	693	G	N1-C6-O6	-6.18	116.19	119.90
1	1A	884	C	C2-N1-C1'	6.18	125.59	118.80
1	1A	1759	A	N1-C6-N6	6.18	122.31	118.60
32	2a	115	G	P-O3'-C3'	6.18	127.11	119.70
32	2a	1256	A	C4-C5-C6	-6.18	113.91	117.00
1	1A	1659	U	C6-N1-C2	-6.17	117.30	121.00
1	1A	573	G	C8-N9-C4	-6.17	103.93	106.40
1	2A	528	A	P-O3'-C3'	6.17	127.10	119.70
1	1A	139(A)	G	C4-C5-C6	6.17	122.50	118.80
1	1A	2611	U	N3-C2-O2	6.16	126.51	122.20
1	1A	2723	C	C6-N1-C2	-6.16	117.84	120.30
1	1A	2046	G	N1-C6-O6	-6.15	116.21	119.90
1	1A	1064	C	C6-N1-C2	-6.15	117.84	120.30
32	1a	1036	G	C8-N9-C4	-6.15	103.94	106.40
1	2A	1380	G	O5'-P-OP2	-6.15	100.16	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	141	A	C5-N7-C8	-6.15	100.83	103.90
1	2A	1377	G	N1-C6-O6	-6.15	116.21	119.90
1	1A	1075	C	N3-C2-O2	-6.15	117.60	121.90
1	1A	481	G	O5'-P-OP2	-6.14	100.17	105.70
1	2A	1767	C	C6-N1-C2	-6.14	117.84	120.30
1	1A	2610	C	N1-C2-O2	6.14	122.58	118.90
1	1A	120	U	OP1-P-OP2	-6.13	110.40	119.60
1	1A	1032	A	C8-N9-C4	6.13	108.25	105.80
1	2A	748	G	O4'-C1'-N9	6.13	113.11	108.20
32	2a	534	U	N3-C4-O4	-6.13	115.11	119.40
32	1a	1276	G	N3-C4-C5	-6.13	125.53	128.60
1	1A	800	A	O5'-P-OP1	-6.13	100.19	105.70
54	2w	3	C	C2-N1-C1'	6.13	125.54	118.80
1	1A	687	C	N1-C2-O2	-6.13	115.22	118.90
32	2a	748	C	C6-N1-C2	-6.13	117.85	120.30
1	1A	127	A	O5'-P-OP2	-6.12	100.19	105.70
1	1A	1651	G	N1-C6-O6	6.12	123.57	119.90
1	2A	651	G	C6-C5-N7	-6.12	126.73	130.40
1	2A	277	C	C6-N1-C2	-6.12	117.85	120.30
1	1A	944	G	C4-N9-C1'	6.12	134.46	126.50
32	1a	1034	G	N3-C4-N9	-6.12	122.33	126.00
1	2A	792	G	N3-C4-C5	-6.12	125.54	128.60
1	2A	1536	C	C6-N1-C2	-6.12	117.85	120.30
56	2y	43	C	C2-N1-C1'	6.12	125.53	118.80
1	1A	445	C	N3-C4-C5	-6.12	119.45	121.90
1	1A	2079	U	C2-N3-C4	-6.11	123.33	127.00
1	1A	2548	G	N1-C6-O6	-6.11	116.23	119.90
1	1A	1265	A	C8-N9-C4	6.11	108.24	105.80
1	1A	2501	C	C2-N1-C1'	-6.11	112.08	118.80
1	1A	2822	G	C5-C6-O6	-6.11	124.94	128.60
1	1A	1374	G	N1-C6-O6	6.11	123.56	119.90
32	1a	1009	G	N1-C6-O6	6.10	123.56	119.90
1	1A	1607	C	OP1-P-O3'	6.10	118.62	105.20
32	1a	983	A	N1-C6-N6	-6.10	114.94	118.60
1	1A	2091	U	N1-C2-N3	6.09	118.56	114.90
1	2A	614	U	N3-C2-O2	-6.09	117.93	122.20
32	2a	769	G	N3-C4-C5	-6.09	125.55	128.60
1	1A	1282	U	N1-C2-N3	6.09	118.56	114.90
1	1A	1786	A	C8-N9-C4	6.09	108.24	105.80
1	1A	36	G	N1-C6-O6	-6.09	116.25	119.90
1	1A	1174	A	P-O3'-C3'	6.09	127.01	119.70
32	1a	1158	C	N1-C2-O2	6.09	122.55	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1363	C	N1-C2-O2	-6.09	115.25	118.90
1	2A	2606	C	N1-C2-O2	-6.09	115.25	118.90
1	1A	906	G	C5-C6-O6	6.09	132.25	128.60
1	1A	586	A	C2-N3-C4	6.09	113.64	110.60
1	1A	2140	C	C2-N3-C4	6.09	122.94	119.90
1	2A	2286	A	C6-C5-N7	-6.09	128.04	132.30
32	1a	1420	C	C6-N1-C2	-6.08	117.87	120.30
1	1A	1080	C	N1-C2-O2	6.08	122.55	118.90
1	2A	912	C	N3-C2-O2	-6.08	117.64	121.90
1	1A	611	C	OP1-P-OP2	6.08	128.72	119.60
1	1A	958	U	O5'-P-OP1	6.08	117.99	110.70
32	1a	63	C	N1-C2-O2	6.07	122.54	118.90
32	1a	880	C	O5'-P-OP2	-6.07	100.23	105.70
1	2A	1524	G	C5-C6-O6	6.07	132.24	128.60
1	1A	2575	C	N3-C2-O2	-6.06	117.66	121.90
1	2A	1984	G	C8-N9-C4	-6.06	103.97	106.40
11	1P	35	HIS	C-N-CA	-6.06	106.55	121.70
32	2a	923	A	N1-C2-N3	6.06	132.33	129.30
32	1a	509	A	C8-N9-C4	-6.06	103.38	105.80
32	2a	1241	G	C2-N3-C4	6.06	114.93	111.90
32	1a	330	C	N1-C2-O2	6.05	122.53	118.90
1	2A	1990	C	N1-C2-O2	6.05	122.53	118.90
1	1A	1207	C	N3-C4-N4	-6.05	113.76	118.00
1	2A	1243	G	N3-C4-N9	-6.05	122.37	126.00
1	1A	981	A	N9-C4-C5	6.04	108.22	105.80
1	2A	958	U	C6-N1-C2	-6.04	117.37	121.00
32	2a	1272	G	C4-C5-C6	6.04	122.43	118.80
1	1A	2364	C	N1-C2-O2	6.04	122.53	118.90
1	1A	2575	C	C5-C6-N1	6.04	124.02	121.00
32	2a	354	G	C4-N9-C1'	6.04	134.35	126.50
1	1A	775	G	N1-C2-N2	-6.04	110.76	116.20
1	2A	1208	C	O5'-P-OP1	-6.04	100.27	105.70
1	1A	817	C	C4-C5-C6	6.03	120.42	117.40
32	1a	748	C	P-O3'-C3'	6.03	126.94	119.70
1	1A	839	U	N1-C2-O2	6.03	127.02	122.80
1	2A	1416	G	O4'-C1'-N9	6.03	113.02	108.20
2	2B	2	C	C6-N1-C2	-6.03	117.89	120.30
1	1A	981	A	C2-N3-C4	6.02	113.61	110.60
1	1A	1055	G	N3-C4-N9	6.02	129.61	126.00
1	2A	2207	G	C4-N9-C1'	6.02	134.33	126.50
1	2A	1653	G	N3-C4-C5	-6.02	125.59	128.60
1	1A	2025	C	C6-N1-C2	-6.02	117.89	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1074	G	C4-N9-C1'	6.01	134.32	126.50
1	1A	1764	G	N1-C6-O6	-6.01	116.29	119.90
1	1A	2449	U	O5'-P-OP2	-6.01	100.29	105.70
1	2A	879	G	N3-C4-N9	6.01	129.61	126.00
1	2A	975	C	N3-C2-O2	-6.01	117.69	121.90
1	2A	1308	A	N1-C6-N6	-6.01	114.99	118.60
1	1A	150	C	N1-C2-O2	6.01	122.50	118.90
1	1A	2611	U	N1-C2-O2	-6.01	118.59	122.80
32	1a	806	C	C6-N1-C2	-6.01	117.90	120.30
1	1A	1599	C	N1-C2-O2	6.01	122.50	118.90
1	2A	1021	A	C5-N7-C8	-6.01	100.90	103.90
1	1A	512	G	N9-C4-C5	-6.00	103.00	105.40
1	2A	2582	G	N3-C4-N9	6.00	129.60	126.00
1	2A	2766	G	C5-C6-O6	-6.00	125.00	128.60
1	1A	663	G	O5'-P-OP2	-6.00	100.30	105.70
1	1A	760	G	C6-C5-N7	-6.00	126.80	130.40
1	1A	1696	G	O5'-P-OP2	-6.00	100.30	105.70
1	1A	1648	C	O5'-P-OP1	-5.99	100.31	105.70
1	1A	512	G	C5-C6-O6	-5.99	125.00	128.60
1	1A	670	A	C8-N9-C4	5.99	108.20	105.80
1	1A	1074	G	C6-C5-N7	-5.99	126.81	130.40
55	1x	43	A	C5-C6-N6	-5.99	118.91	123.70
1	1A	665	C	N3-C4-N4	-5.99	113.81	118.00
32	1a	955	U	N3-C4-C5	-5.99	111.01	114.60
1	2A	2447	G	C5-C6-O6	5.99	132.19	128.60
1	1A	1653	G	N3-C4-N9	5.99	129.59	126.00
1	1A	1757	U	C6-N1-C2	5.98	124.59	121.00
1	1A	2439	A	N1-C6-N6	5.98	122.19	118.60
1	1A	2587	A	OP1-P-O3'	5.98	118.36	105.20
1	1A	556	G	O5'-P-OP1	-5.98	100.32	105.70
1	1A	2001	A	OP2-P-O3'	5.97	118.34	105.20
29	17	33	ARG	NE-CZ-NH1	-5.97	117.31	120.30
55	1x	26	G	O5'-P-OP1	-5.97	100.33	105.70
1	1A	518	G	N1-C6-O6	-5.97	116.32	119.90
1	1A	1591	G	C5-C6-O6	5.97	132.18	128.60
1	1A	764	A	C8-N9-C4	-5.96	103.41	105.80
1	1A	450	G	N1-C6-O6	-5.96	116.32	119.90
1	1A	2031	A	C2-N3-C4	5.96	113.58	110.60
1	1A	2387	U	C4-C5-C6	5.96	123.28	119.70
1	2A	2189	U	C5-C6-N1	5.95	125.68	122.70
32	2a	1272	G	C6-C5-N7	-5.95	126.83	130.40
54	2w	19	G	N3-C4-C5	-5.95	125.62	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1187	G	C6-C5-N7	5.95	133.97	130.40
1	2A	372	G	O4'-C1'-N9	5.95	112.96	108.20
1	1A	2576	G	N1-C6-O6	-5.95	116.33	119.90
32	2a	812	C	C2-N1-C1'	-5.95	112.26	118.80
1	1A	2711	A	O5'-P-OP1	-5.95	100.35	105.70
1	1A	1022	G	C5-C6-N1	-5.95	108.53	111.50
1	1A	1395	A	O5'-P-OP1	-5.95	100.35	105.70
1	1A	2207	G	N1-C6-O6	5.95	123.47	119.90
1	1A	2789	C	C5-C6-N1	-5.95	118.03	121.00
1	2A	2766	G	N1-C6-O6	5.95	123.47	119.90
1	1A	1553	A	C5-N7-C8	5.94	106.87	103.90
1	1A	2271	G	N3-C2-N2	5.94	124.06	119.90
1	2A	579	G	N3-C2-N2	-5.94	115.74	119.90
32	1a	1034	G	N3-C4-C5	5.94	131.57	128.60
1	1A	1135	C	C5-C6-N1	-5.94	118.03	121.00
1	1A	2568	C	OP2-P-O3'	5.94	118.26	105.20
2	1B	9	G	OP2-P-O3'	5.93	118.26	105.20
1	1A	219	G	C5-C6-N1	5.93	114.47	111.50
1	1A	247	G	C5-C6-O6	-5.93	125.04	128.60
32	2a	438	G	N3-C4-C5	-5.93	125.63	128.60
1	1A	2484	G	N1-C6-O6	-5.93	116.34	119.90
1	1A	2539	C	C6-N1-C2	5.93	122.67	120.30
1	2A	1264	G	C8-N9-C4	5.93	108.77	106.40
32	2a	1393	U	C5-C4-O4	-5.93	122.34	125.90
1	1A	1430	C	C5-C6-N1	5.92	123.96	121.00
1	1A	1721	G	C5-C6-O6	-5.92	125.05	128.60
1	1A	1781	C	C6-N1-C2	5.92	122.67	120.30
32	1a	63	C	C6-N1-C2	-5.92	117.93	120.30
32	1a	197	A	N1-C6-N6	-5.92	115.05	118.60
1	1A	2138	C	C6-N1-C2	-5.92	117.93	120.30
1	1A	2319	G	N7-C8-N9	5.92	116.06	113.10
1	1A	2420	C	N1-C2-O2	-5.92	115.35	118.90
1	1A	1554	A	O5'-P-OP2	-5.92	100.38	105.70
1	2A	2206	G	C4-N9-C1'	-5.92	118.81	126.50
1	1A	548	A	P-O3'-C3'	5.91	126.80	119.70
1	2A	1653	G	N1-C6-O6	-5.91	116.35	119.90
1	1A	278	A	N7-C8-N9	5.91	116.76	113.80
55	2x	14	A	C8-N9-C1'	-5.91	117.06	127.70
1	1A	1170	G	N7-C8-N9	5.90	116.05	113.10
1	1A	1176	G	OP1-P-O3'	5.90	118.19	105.20
1	2A	1769	G	N1-C6-O6	5.90	123.44	119.90
54	1w	75	C	C2-N1-C1'	-5.90	112.31	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	981	A	C2-N3-C4	5.90	113.55	110.60
1	2A	1459	G	C8-N9-C4	-5.90	104.04	106.40
1	1A	2821	A	N1-C6-N6	5.90	122.14	118.60
1	2A	466	A	N1-C6-N6	-5.90	115.06	118.60
54	2w	71	G	P-O3'-C3'	5.90	126.78	119.70
1	2A	2431	U	N3-C2-O2	-5.89	118.07	122.20
1	1A	1757	U	C5-C6-N1	-5.89	119.75	122.70
1	1A	1673	U	N3-C2-O2	5.89	126.32	122.20
1	1A	2136	C	C2-N3-C4	5.89	122.84	119.90
1	2A	2137	C	O4'-C1'-N1	5.89	112.91	108.20
1	2A	1682	G	N3-C4-N9	-5.89	122.47	126.00
1	1A	2159	G	C4-N9-C1'	5.89	134.15	126.50
1	1A	1256	G	N9-C4-C5	-5.88	103.05	105.40
1	1A	1557	C	C6-N1-C2	-5.88	117.95	120.30
1	1A	1141	U	C5-C6-N1	-5.88	119.76	122.70
1	1A	760	G	N3-C4-N9	5.88	129.53	126.00
1	2A	1043	C	C6-N1-C2	-5.88	117.95	120.30
32	1a	1009	G	N9-C4-C5	-5.87	103.05	105.40
32	2a	980	C	N1-C2-O2	5.87	122.42	118.90
1	1A	527	C	O5'-P-OP2	-5.87	100.42	105.70
1	1A	2437	U	N1-C2-O2	-5.87	118.69	122.80
1	2A	530	G	N3-C4-N9	-5.87	122.48	126.00
1	2A	1330	C	C6-N1-C2	5.87	122.65	120.30
1	2A	2028	U	C5-C6-N1	-5.87	119.77	122.70
1	1A	1672	C	N3-C4-C5	-5.87	119.55	121.90
1	1A	2555	U	N1-C2-O2	-5.87	118.69	122.80
1	2A	1626	G	C8-N9-C4	-5.87	104.05	106.40
1	2A	2281	C	C6-N1-C2	-5.87	117.95	120.30
1	1A	1301	A	O5'-P-OP1	-5.86	100.42	105.70
1	1A	1401	G	O5'-P-OP2	-5.86	100.42	105.70
1	1A	1604	C	C5-C6-N1	-5.86	118.07	121.00
1	1A	2448	A	O5'-P-OP2	5.86	117.73	110.70
1	1A	213	A	OP2-P-O3'	5.86	118.10	105.20
1	2A	645	C	N1-C2-O2	5.86	122.42	118.90
1	2A	2689	U	N3-C2-O2	-5.86	118.10	122.20
1	1A	190	A	O5'-P-OP2	-5.86	100.43	105.70
1	2A	2028	U	C5-C4-O4	5.86	129.41	125.90
56	2y	33	U	C5-C6-N1	5.86	125.63	122.70
1	1A	272(E)	G	N9-C4-C5	-5.85	103.06	105.40
1	1A	1761	C	C5-C6-N1	-5.85	118.07	121.00
1	2A	128	C	C6-N1-C2	-5.85	117.96	120.30
1	2A	530	G	C8-N9-C4	-5.85	104.06	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1233	C	N3-C4-N4	5.85	122.09	118.00
1	1A	1671	U	N1-C2-O2	5.84	126.89	122.80
15	1T	18	ASP	C-N-CA	-5.84	107.09	121.70
1	1A	2679	A	O5'-P-OP2	-5.84	100.44	105.70
32	1a	589	C	C6-N1-C2	-5.84	117.96	120.30
1	1A	1074	G	N3-C4-N9	5.84	129.50	126.00
56	1y	56	C	N3-C4-C5	-5.84	119.57	121.90
1	2A	208	C	N3-C4-C5	5.84	124.23	121.90
1	2A	847	U	C2-N1-C1'	5.84	124.70	117.70
1	1A	1086	A	C5-C6-N1	5.83	120.62	117.70
1	1A	2804	C	C6-N1-C2	-5.83	117.97	120.30
1	2A	2073	C	N3-C4-N4	-5.83	113.92	118.00
1	1A	257	A	O5'-P-OP2	-5.83	100.46	105.70
1	1A	476	G	C8-N9-C4	5.83	108.73	106.40
1	1A	1660	C	N1-C2-O2	5.83	122.39	118.90
1	2A	2351	G	N3-C4-C5	-5.82	125.69	128.60
1	1A	2335	A	O4'-C1'-N9	5.82	112.86	108.20
1	2A	2159	G	N9-C4-C5	-5.82	103.07	105.40
1	1A	2610	C	N3-C2-O2	-5.82	117.83	121.90
1	2A	488	G	C8-N9-C4	5.82	108.73	106.40
1	1A	2012	G	N9-C4-C5	5.82	107.73	105.40
1	1A	2015	A	N3-C4-C5	-5.82	122.73	126.80
1	1A	2847	U	C5-C6-N1	-5.82	119.79	122.70
1	1A	489	G	C5-C6-O6	-5.82	125.11	128.60
1	1A	2068	U	C2-N3-C4	-5.82	123.51	127.00
1	2A	2086	U	O5'-P-OP2	-5.81	100.47	105.70
32	2a	1099	G	N9-C4-C5	5.81	107.73	105.40
1	1A	89	G	C8-N9-C4	-5.81	104.08	106.40
1	1A	1542	A	O5'-P-OP1	-5.81	100.47	105.70
1	1A	2334	G	OP2-P-O3'	5.81	117.99	105.20
2	1B	97	G	C5-C6-O6	-5.81	125.11	128.60
1	2A	2766	G	C4-C5-N7	5.81	113.12	110.80
32	2a	1099	G	C4-C5-N7	-5.81	108.48	110.80
1	1A	1954	G	N3-C4-C5	-5.81	125.69	128.60
1	2A	1597	A	N1-C6-N6	-5.81	115.11	118.60
1	1A	2438	U	OP2-P-O3'	5.81	117.98	105.20
56	2y	11	C	C5-C6-N1	5.81	123.90	121.00
1	1A	1037	G	C5-C6-O6	-5.81	125.12	128.60
1	1A	44	G	C5-C6-O6	-5.80	125.12	128.60
32	1a	99	U	C6-N1-C2	-5.80	117.52	121.00
1	2A	665	C	C6-N1-C2	-5.80	117.98	120.30
1	1A	193	U	N3-C4-O4	5.80	123.46	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1190	G	C4-C5-N7	-5.80	108.48	110.80
1	1A	1641	A	C8-N9-C4	-5.80	103.48	105.80
1	2A	2286	A	N7-C8-N9	5.80	116.70	113.80
55	2x	14	A	C5-C6-N6	5.80	128.34	123.70
32	1a	644	G	C4-N9-C1'	-5.79	118.97	126.50
1	1A	2475	C	N3-C4-C5	-5.79	119.58	121.90
1	1A	139(A)	G	C5-C6-O6	-5.79	125.12	128.60
1	1A	2461	C	O5'-P-OP2	-5.79	100.49	105.70
1	2A	1264	G	N9-C4-C5	-5.79	103.08	105.40
1	2A	2287	A	O4'-C1'-N9	5.79	112.83	108.20
1	1A	1173	G	O4'-C1'-N9	5.79	112.83	108.20
32	1a	346	G	C2-N3-C4	5.79	114.79	111.90
1	2A	1698	A	N7-C8-N9	5.79	116.69	113.80
1	1A	2425	A	C8-N9-C4	-5.79	103.49	105.80
32	2a	946	A	N1-C2-N3	5.79	132.19	129.30
32	2a	1428	A	N9-C4-C5	5.79	108.11	105.80
1	1A	2613	U	N3-C4-O4	-5.78	115.35	119.40
1	1A	2861	G	C6-C5-N7	-5.78	126.93	130.40
1	2A	897	C	C6-N1-C1'	-5.78	113.86	120.80
1	1A	2267	A	O5'-P-OP1	-5.78	100.50	105.70
32	2a	1199	U	N1-C2-O2	5.78	126.84	122.80
1	1A	669	G	OP1-P-OP2	-5.77	110.94	119.60
1	1A	1501	C	C6-N1-C2	-5.77	117.99	120.30
32	1a	760	G	C5-C6-O6	-5.77	125.14	128.60
54	2w	13	C	P-O3'-C3'	5.77	126.63	119.70
56	2y	64	A	C6-N1-C2	5.77	122.06	118.60
1	1A	2017	U	C5-C6-N1	-5.77	119.81	122.70
1	2A	141	A	C2-N3-C4	-5.77	107.72	110.60
32	1a	1027	C	N1-C2-O2	5.77	122.36	118.90
32	1a	1042	G	C4-N9-C1'	-5.77	119.00	126.50
32	2a	841	U	C5-C6-N1	5.76	125.58	122.70
32	1a	1020	U	C2-N1-C1'	5.76	124.61	117.70
1	2A	265	A	C2-N3-C4	-5.76	107.72	110.60
1	1A	759	G	C5-C6-O6	-5.76	125.14	128.60
1	2A	1142	U	N1-C2-O2	5.76	126.83	122.80
1	1A	2375	G	C5-C6-O6	-5.76	125.14	128.60
1	1A	671	C	C6-N1-C2	-5.76	118.00	120.30
1	1A	954	G	C5-N7-C8	5.76	107.18	104.30
55	2x	7	G	N3-C4-C5	-5.76	125.72	128.60
1	1A	1186	G	N1-C6-O6	-5.75	116.45	119.90
1	1A	805	G	N1-C2-N3	-5.75	120.45	123.90
1	1A	967	C	N3-C2-O2	-5.75	117.88	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1328	G	N3-C4-C5	-5.75	125.73	128.60
32	2a	1475	G	N1-C6-O6	5.74	123.35	119.90
54	2w	75	C	C6-N1-C2	5.74	122.60	120.30
1	1A	754	C	C6-N1-C2	-5.74	118.00	120.30
1	1A	854	G	N9-C4-C5	5.74	107.70	105.40
1	1A	741	G	C5-C6-N1	5.74	114.37	111.50
1	2A	1775	U	OP1-P-O3'	5.74	117.83	105.20
1	2A	919	G	C8-N9-C4	-5.74	104.11	106.40
1	1A	992	C	O5'-P-OP2	-5.74	100.54	105.70
1	2A	2046	G	N9-C4-C5	-5.74	103.11	105.40
54	2w	63	G	C5-C6-O6	5.73	132.04	128.60
1	1A	2246	G	OP2-P-O3'	5.73	117.80	105.20
1	1A	2536	G	C5-C6-N1	-5.73	108.64	111.50
32	1a	575	G	N1-C6-O6	-5.73	116.46	119.90
1	1A	1325	G	O4'-C1'-N9	5.73	112.78	108.20
1	1A	2491	U	OP1-P-O3'	5.73	117.80	105.20
1	2A	1997	G	O5'-P-OP1	-5.73	100.55	105.70
2	2B	30	C	C6-N1-C2	-5.73	118.01	120.30
1	1A	1682	G	OP2-P-O3'	5.72	117.80	105.20
56	1y	19	G	N1-C6-O6	-5.72	116.47	119.90
1	2A	2274	A	N1-C6-N6	-5.72	115.17	118.60
1	1A	2627	G	N9-C4-C5	-5.72	103.11	105.40
1	2A	2267	A	N1-C6-N6	5.72	122.03	118.60
32	2a	737	A	C8-N9-C4	-5.72	103.51	105.80
1	1A	211	A	C8-N9-C4	5.72	108.09	105.80
1	1A	2528	U	N3-C4-O4	5.72	123.40	119.40
55	1x	14	A	C8-N9-C1'	-5.72	117.41	127.70
1	2A	2286	A	C4-C5-N7	5.72	113.56	110.70
32	1a	218	C	C6-N1-C2	-5.71	118.01	120.30
32	2a	1303	C	N1-C2-O2	5.71	122.33	118.90
1	1A	580	C	O5'-P-OP1	-5.71	100.56	105.70
1	1A	1170	G	C8-N9-C4	-5.71	104.12	106.40
1	2A	2042	A	O5'-P-OP2	-5.71	100.56	105.70
1	1A	1366	A	C5-N7-C8	5.71	106.75	103.90
32	1a	162	A	N7-C8-N9	5.71	116.66	113.80
1	1A	795	C	N3-C2-O2	-5.71	117.91	121.90
55	1x	46	G	N1-C2-N3	5.71	127.32	123.90
1	2A	2685	G	C6-C5-N7	5.71	133.82	130.40
56	2y	5	G	C4-N9-C1'	-5.71	119.08	126.50
1	1A	438	G	C8-N9-C4	-5.71	104.12	106.40
2	1B	98	G	O5'-P-OP2	-5.70	100.57	105.70
1	1A	513	A	C5-C6-N6	-5.70	119.14	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	775	G	N3-C4-N9	5.70	129.42	126.00
1	1A	1338	G	N1-C6-O6	-5.70	116.48	119.90
1	2A	2189	U	C6-N1-C2	-5.70	117.58	121.00
1	1A	820	A	O5'-P-OP1	-5.70	100.57	105.70
1	1A	2575	C	C6-N1-C2	-5.70	118.02	120.30
1	1A	906	G	N1-C6-O6	-5.69	116.48	119.90
1	1A	1074	G	C8-N9-C1'	-5.69	119.60	127.00
1	1A	2263	C	N3-C4-N4	-5.69	114.02	118.00
32	1a	1240	U	N3-C4-O4	-5.69	115.42	119.40
1	2A	2443	C	N3-C2-O2	-5.69	117.92	121.90
1	1A	399	G	C8-N9-C4	5.69	108.68	106.40
1	1A	2618	G	C8-N9-C4	-5.69	104.12	106.40
1	1A	762	U	C5-C4-O4	-5.69	122.49	125.90
1	1A	845	G	O4'-C1'-N9	5.69	112.75	108.20
1	2A	748	G	N1-C6-O6	-5.68	116.49	119.90
1	1A	750	A	OP1-P-O3'	5.68	117.70	105.20
1	1A	1944	U	C2-N3-C4	-5.68	123.59	127.00
54	1w	48	C	C6-N1-C2	5.68	122.57	120.30
32	1a	1501	C	N1-C2-O2	-5.68	115.49	118.90
1	1A	1223	G	C5-C6-O6	-5.67	125.19	128.60
1	1A	1612	C	C6-N1-C2	5.67	122.57	120.30
1	2A	573	G	C2-N3-C4	5.67	114.74	111.90
1	2A	1120	G	N3-C4-C5	5.67	131.44	128.60
1	1A	1991	U	N3-C2-O2	-5.67	118.23	122.20
1	2A	704	G	N1-C6-O6	5.67	123.30	119.90
1	1A	732	C	C6-N1-C2	-5.67	118.03	120.30
1	1A	2757	A	C8-N9-C4	-5.67	103.53	105.80
32	2a	79	G	C5-C6-O6	5.67	132.00	128.60
1	1A	1022	G	C6-N1-C2	5.67	128.50	125.10
1	2A	214	G	N1-C6-O6	-5.67	116.50	119.90
1	2A	651	G	N1-C6-O6	5.67	123.30	119.90
1	1A	2023	G	O5'-P-OP1	-5.67	100.60	105.70
1	1A	2651	C	C6-N1-C2	-5.67	118.03	120.30
54	1w	72	C	C6-N1-C2	-5.67	118.03	120.30
1	1A	463	G	N9-C4-C5	5.66	107.67	105.40
1	1A	2517	C	O4'-C1'-N1	5.66	112.73	108.20
1	2A	2836	U	N3-C2-O2	-5.66	118.24	122.20
1	2A	646	A	O4'-C1'-N9	5.66	112.73	108.20
1	2A	2318	G	C4-N9-C1'	5.66	133.85	126.50
1	1A	1555	G	C4-N9-C1'	5.66	133.85	126.50
1	2A	536	A	C5-C6-N6	-5.66	119.17	123.70
1	2A	1142	U	C2-N1-C1'	5.66	124.49	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	546	G	C5-C6-O6	5.65	131.99	128.60
1	1A	1933	G	O5'-P-OP1	-5.65	100.61	105.70
32	1a	266	G	C4-N9-C1'	5.65	133.85	126.50
32	1a	267	C	O5'-P-OP1	-5.65	100.61	105.70
32	1a	1056	U	C2-N3-C4	5.65	130.39	127.00
1	2A	108	U	C6-N1-C2	5.65	124.39	121.00
1	2A	1813	G	O5'-P-OP1	-5.65	100.62	105.70
1	1A	394	A	N1-C6-N6	-5.65	115.21	118.60
1	1A	2080	G	O5'-P-OP1	-5.65	100.62	105.70
1	2A	2128	C	N1-C2-O2	5.65	122.29	118.90
1	1A	1032	A	N7-C8-N9	-5.64	110.98	113.80
1	1A	827	U	O5'-P-OP2	-5.64	100.62	105.70
1	1A	2091	U	N1-C2-O2	-5.64	118.85	122.80
1	1A	2685	G	C6-C5-N7	5.64	133.78	130.40
1	2A	1289	C	N3-C2-O2	-5.64	117.95	121.90
1	2A	2207	G	C8-N9-C1'	-5.64	119.66	127.00
1	2A	2445	G	N1-C6-O6	-5.64	116.51	119.90
1	2A	1788	C	C6-N1-C2	-5.64	118.04	120.30
1	1A	329	G	C8-N9-C4	5.64	108.66	106.40
1	1A	1285	G	O5'-P-OP1	-5.64	100.62	105.70
1	1A	775	G	N9-C4-C5	-5.64	103.15	105.40
1	1A	1320	C	C5-C4-N4	5.63	124.14	120.20
1	1A	1767	C	C5-C6-N1	-5.63	118.18	121.00
54	1w	11	C	C6-N1-C2	5.63	122.55	120.30
1	2A	466	A	N9-C4-C5	5.63	108.05	105.80
1	1A	781	A	C6-N1-C2	-5.63	115.22	118.60
32	1a	1504	G	O5'-P-OP1	-5.63	100.64	105.70
1	1A	573	G	N3-C4-C5	-5.63	125.79	128.60
1	1A	1082	U	C2-N3-C4	-5.63	123.62	127.00
1	1A	1692	U	C5-C6-N1	-5.63	119.89	122.70
32	1a	353	A	OP2-P-O3'	5.63	117.58	105.20
1	1A	830	G	N3-C4-N9	-5.62	122.62	126.00
1	1A	1131	G	O4'-C1'-N9	5.62	112.70	108.20
32	1a	518	C	N1-C2-O2	5.62	122.28	118.90
32	1a	1034	G	C6-N1-C2	5.62	128.47	125.10
1	2A	2804	C	C6-N1-C2	-5.62	118.05	120.30
1	1A	2349	G	N3-C2-N2	5.62	123.83	119.90
1	2A	2397	G	N9-C4-C5	-5.62	103.15	105.40
1	1A	444	C	C5-C6-N1	-5.61	118.19	121.00
1	1A	919	G	C5-C6-O6	-5.61	125.23	128.60
1	1A	923	C	N3-C2-O2	5.61	125.83	121.90
1	2A	773	U	C5-C6-N1	-5.61	119.89	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1303	C	N3-C2-O2	-5.61	117.97	121.90
1	1A	962	G	N9-C4-C5	5.61	107.64	105.40
1	2A	2448	A	O5'-P-OP1	-5.61	100.65	105.70
1	1A	249	C	C6-N1-C2	5.61	122.54	120.30
1	1A	1324	G	C4-C5-N7	-5.61	108.56	110.80
1	1A	677	A	OP1-P-OP2	5.61	128.01	119.60
1	1A	1308	A	N9-C4-C5	5.61	108.04	105.80
1	2A	744	G	O5'-P-OP2	-5.60	100.66	105.70
1	2A	2128	C	C6-N1-C1'	-5.60	114.08	120.80
1	1A	2159	G	C8-N9-C1'	-5.60	119.72	127.00
1	1A	2519	U	N3-C2-O2	-5.60	118.28	122.20
1	1A	2789	C	C6-N1-C2	5.60	122.54	120.30
1	1A	1037	G	N1-C6-O6	5.60	123.26	119.90
1	1A	1671	U	N3-C2-O2	-5.60	118.28	122.20
1	2A	1988	C	C6-N1-C2	5.60	122.54	120.30
1	1A	1691	C	N1-C2-O2	5.59	122.26	118.90
1	1A	571	A	N1-C2-N3	-5.59	126.50	129.30
1	2A	1975	G	C8-N9-C4	5.59	108.64	106.40
1	1A	2438	U	C2-N3-C4	-5.59	123.65	127.00
1	1A	857	C	C6-N1-C2	-5.59	118.06	120.30
1	1A	1416	G	O5'-P-OP2	-5.59	100.67	105.70
1	1A	2379	G	C5-C6-O6	-5.59	125.25	128.60
54	1w	48	C	C2-N3-C4	-5.59	117.11	119.90
1	1A	854	G	C5-C6-O6	5.58	131.95	128.60
1	1A	1830	C	N3-C4-C5	-5.58	119.67	121.90
56	1y	33	U	N1-C2-O2	5.58	126.71	122.80
1	2A	1649	G	N1-C6-O6	-5.58	116.55	119.90
1	1A	608	A	C8-N9-C4	-5.58	103.57	105.80
1	1A	1767	C	N3-C4-N4	-5.58	114.09	118.00
1	2A	2335	A	O4'-C1'-N9	5.58	112.66	108.20
32	2a	792	A	C8-N9-C4	5.58	108.03	105.80
1	1A	2361	A	C5-C6-N1	-5.58	114.91	117.70
56	1y	58	A	P-O3'-C3'	5.58	126.39	119.70
1	1A	1904	G	C5-C6-O6	5.57	131.94	128.60
32	1a	1054	C	C5-C4-N4	5.57	124.10	120.20
32	1a	1442	G	N3-C4-N9	5.57	129.34	126.00
55	2x	75	C	N3-C4-C5	5.57	124.13	121.90
1	1A	725	G	N3-C4-C5	-5.57	125.81	128.60
1	1A	2157	G	C4-N9-C1'	-5.57	119.26	126.50
1	1A	2265	U	C4-C5-C6	5.57	123.04	119.70
1	2A	192	C	OP1-P-OP2	5.57	127.96	119.60
1	2A	794	G	O5'-P-OP2	-5.57	100.69	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1158	C	C2-N1-C1'	5.57	124.92	118.80
1	2A	770	G	C5-C6-O6	-5.56	125.26	128.60
1	1A	570	G	C5-C6-N1	5.56	114.28	111.50
1	2A	1385	G	O4'-C1'-N9	5.56	112.65	108.20
1	1A	2497	A	N1-C6-N6	-5.56	115.26	118.60
1	1A	383	U	C2-N1-C1'	-5.56	111.03	117.70
1	1A	859	G	N9-C4-C5	-5.56	103.18	105.40
1	1A	1142(A)	A	OP2-P-O3'	5.56	117.43	105.20
32	1a	532	A	C5-N7-C8	-5.56	101.12	103.90
1	1A	475	U	C5-C4-O4	5.56	129.23	125.90
32	1a	293	G	C8-N9-C4	-5.56	104.18	106.40
1	1A	593	G	C5-C6-O6	5.55	131.93	128.60
1	1A	2882	A	O5'-P-OP1	5.55	117.36	110.70
32	1a	189(K)	U	N1-C2-O2	5.55	126.69	122.80
32	2a	1067	A	P-O3'-C3'	5.55	126.36	119.70
56	2y	5	G	C8-N9-C1'	5.55	134.22	127.00
1	1A	1405	U	C4-C5-C6	-5.55	116.37	119.70
56	2y	5	G	C6-C5-N7	5.55	133.73	130.40
1	1A	2648	C	N3-C2-O2	-5.55	118.02	121.90
1	1A	2755	C	N1-C2-O2	5.54	122.23	118.90
1	1A	2319	G	O4'-C1'-N9	5.54	112.64	108.20
1	1A	977	G	N1-C6-O6	-5.54	116.58	119.90
1	1A	2015	A	N9-C4-C5	5.54	108.02	105.80
1	1A	120	U	N1-C2-O2	-5.54	118.92	122.80
1	1A	382	G	N3-C4-N9	5.54	129.32	126.00
1	1A	216	A	O5'-P-OP2	-5.54	100.72	105.70
1	1A	748	G	O4'-C1'-N9	5.54	112.63	108.20
1	1A	2028	U	N3-C4-O4	-5.54	115.52	119.40
32	1a	942	G	N1-C6-O6	-5.54	116.58	119.90
1	1A	2067	G	N3-C4-C5	-5.54	125.83	128.60
1	1A	2136	C	N1-C2-O2	5.54	122.22	118.90
1	2A	1259	G	OP2-P-O3'	5.54	117.38	105.20
1	2A	2159	G	C4-C5-N7	5.54	113.01	110.80
1	1A	446	G	C4-C5-N7	5.53	113.01	110.80
1	1A	1673	U	C2-N3-C4	-5.53	123.68	127.00
1	1A	2380	C	N1-C2-O2	-5.53	115.58	118.90
1	2A	438	G	C8-N9-C4	-5.53	104.19	106.40
1	2A	1990	C	C5-C4-N4	5.53	124.07	120.20
32	2a	1152	A	O4'-C1'-N9	5.53	112.62	108.20
1	1A	825	C	C5-C6-N1	-5.53	118.24	121.00
1	1A	1347	G	N9-C4-C5	5.53	107.61	105.40
1	2A	774	A	O5'-P-OP2	-5.53	100.72	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	2y	66	U	C5-C4-O4	5.53	129.22	125.90
1	2A	1313	U	O4'-C1'-N1	5.53	112.62	108.20
1	2A	2108	C	C6-N1-C2	-5.53	118.09	120.30
1	2A	2803	C	C6-N1-C2	-5.53	118.09	120.30
1	1A	382	G	N3-C4-C5	-5.52	125.84	128.60
1	1A	1170	G	N1-C6-O6	5.52	123.21	119.90
1	1A	2569	G	C5-C6-O6	5.52	131.91	128.60
32	1a	1397	C	N1-C2-O2	5.52	122.21	118.90
1	1A	1936	A	O4'-C1'-N9	5.52	112.62	108.20
1	1A	2548	G	C5-C6-O6	5.52	131.91	128.60
1	1A	2569	G	C6-N1-C2	5.52	128.41	125.10
1	2A	1564	C	C2-N1-C1'	-5.52	112.73	118.80
32	2a	1256	A	C4-N9-C1'	-5.52	116.36	126.30
54	2w	15	G	C6-N1-C2	-5.52	121.79	125.10
32	1a	1074	G	C5-C6-O6	-5.52	125.29	128.60
1	1A	1325	G	C2-N3-C4	5.52	114.66	111.90
53	1v	21	C	N1-C2-O2	-5.52	115.59	118.90
1	2A	2036	C	O5'-P-OP2	-5.51	100.74	105.70
1	2A	1204	A	O4'-C1'-N9	5.51	112.61	108.20
32	1a	1003	G	C2-N3-C4	5.51	114.66	111.90
1	1A	805	G	C2-N3-C4	5.51	114.66	111.90
1	2A	2129	C	N3-C2-O2	-5.51	118.04	121.90
1	2A	2417	C	C6-N1-C2	-5.51	118.10	120.30
27	15	19	ARG	NE-CZ-NH2	-5.50	117.55	120.30
1	1A	2012	G	C6-N1-C2	-5.50	121.80	125.10
1	1A	397	G	C5-C6-O6	5.50	131.90	128.60
1	1A	1191	G	N1-C6-O6	-5.50	116.60	119.90
1	1A	1634	A	N9-C4-C5	5.50	108.00	105.80
1	1A	1828	G	N1-C6-O6	5.50	123.20	119.90
2	1B	41	U	C5-C6-N1	-5.50	119.95	122.70
1	1A	2069	G	O5'-P-OP2	-5.50	100.75	105.70
1	1A	745	G	N1-C2-N2	-5.50	111.25	116.20
1	1A	1573	G	N1-C6-O6	5.50	123.20	119.90
1	1A	1579	A	N9-C4-C5	5.50	108.00	105.80
54	1w	34	G	C4-C5-N7	-5.50	108.60	110.80
1	2A	2050	C	N1-C2-O2	-5.50	115.60	118.90
1	1A	1933	G	N3-C2-N2	-5.50	116.05	119.90
32	1a	1359	C	C6-N1-C2	-5.50	118.10	120.30
1	1A	2417	C	C6-N1-C2	-5.50	118.10	120.30
1	2A	1372	U	N3-C4-O4	5.50	123.25	119.40
32	2a	1039	C	C6-N1-C1'	-5.50	114.21	120.80
1	2A	2407	G	C4-N9-C1'	5.49	133.64	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2010	G	O5'-P-OP2	-5.49	100.76	105.70
1	2A	573	G	C5-C6-N1	5.49	114.25	111.50
32	2a	560	U	C2-N1-C1'	5.49	124.29	117.70
32	1a	328	C	O5'-P-OP1	-5.49	100.76	105.70
32	2a	1225	A	C5-C6-N6	5.49	128.09	123.70
1	1A	2177	C	C6-N1-C2	-5.49	118.11	120.30
1	2A	512	G	O4'-C1'-N9	5.49	112.59	108.20
1	1A	194	G	N9-C4-C5	5.49	107.59	105.40
1	1A	1721	G	C4-C5-N7	5.49	112.99	110.80
1	1A	1288	U	C5-C6-N1	-5.48	119.96	122.70
1	2A	2188	C	C6-N1-C2	-5.48	118.11	120.30
1	1A	2559	C	C6-N1-C2	5.48	122.49	120.30
32	1a	1201	A	P-O3'-C3'	5.48	126.28	119.70
1	2A	242	G	C6-C5-N7	5.48	133.69	130.40
1	2A	881	G	N9-C4-C5	-5.48	103.21	105.40
1	1A	769	G	N3-C2-N2	5.48	123.74	119.90
43	2l	43	VAL	C-N-CA	-5.48	108.00	121.70
1	1A	1003	G	N3-C4-C5	-5.48	125.86	128.60
1	1A	1900	A	C2-N3-C4	5.48	113.34	110.60
32	1a	1397	C	C6-N1-C1'	-5.48	114.23	120.80
32	1a	1460	A	C8-N9-C4	5.48	107.99	105.80
1	2A	1819	A	C8-N9-C4	5.48	107.99	105.80
1	1A	465	G	C8-N9-C4	-5.48	104.21	106.40
1	1A	1311	G	N1-C6-O6	-5.48	116.61	119.90
1	1A	2036	C	O5'-P-OP1	-5.48	100.77	105.70
32	1a	1074	G	N1-C6-O6	5.48	123.19	119.90
1	1A	1680	U	C5-C4-O4	5.47	129.18	125.90
1	1A	1695	G	C6-C5-N7	-5.47	127.12	130.40
1	1A	2464	C	N1-C2-O2	5.47	122.19	118.90
1	1A	687	C	N3-C4-C5	-5.47	119.71	121.90
1	2A	1779	U	O5'-P-OP1	-5.47	100.78	105.70
1	2A	2079	U	N1-C2-O2	-5.47	118.97	122.80
1	1A	1688	U	O5'-P-OP2	-5.47	100.78	105.70
1	1A	2391	G	C5-C6-O6	5.47	131.88	128.60
1	1A	1761	C	C6-N1-C2	5.47	122.49	120.30
56	2y	11	C	N1-C2-O2	5.47	122.18	118.90
32	1a	22	G	O5'-P-OP2	-5.47	100.78	105.70
32	1a	998	G	C4-N9-C1'	-5.47	119.39	126.50
1	2A	382	G	O5'-P-OP2	-5.47	100.78	105.70
32	2a	681	C	C6-N1-C2	-5.47	118.11	120.30
1	1A	2015	A	C4-C5-C6	5.46	119.73	117.00
1	2A	577	G	N9-C4-C5	-5.46	103.22	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	354	G	N3-C4-N9	5.46	129.28	126.00
1	1A	308	G	C8-N9-C4	-5.46	104.22	106.40
1	1A	2308	G	C5-N7-C8	-5.46	101.57	104.30
1	1A	1120	G	C5-C6-O6	5.46	131.87	128.60
1	1A	2454	G	N3-C4-C5	-5.46	125.87	128.60
1	2A	945	A	C5-C6-N1	-5.46	114.97	117.70
1	1A	1801	G	C5-C6-O6	-5.45	125.33	128.60
1	2A	1580	A	C8-N9-C4	-5.45	103.62	105.80
1	1A	2560	C	N1-C2-O2	-5.45	115.63	118.90
1	1A	1272	A	O4'-C1'-N9	5.45	112.56	108.20
1	1A	1298	C	N3-C4-N4	-5.45	114.19	118.00
32	1a	939	G	O5'-P-OP2	-5.45	100.80	105.70
1	1A	2188	C	C6-N1-C2	-5.45	118.12	120.30
1	1A	2557	G	C5-C6-O6	-5.45	125.33	128.60
1	1A	534	U	N3-C2-O2	-5.45	118.39	122.20
1	1A	2266	A	C8-N9-C4	5.45	107.98	105.80
1	2A	1813	G	C4-C5-N7	-5.45	108.62	110.80
32	1a	965	A	C8-N9-C4	5.44	107.98	105.80
56	2y	47	U	O4'-C1'-N1	5.44	112.55	108.20
1	2A	465	G	N7-C8-N9	5.44	115.82	113.10
1	2A	1142	U	C6-N1-C1'	-5.44	113.58	121.20
1	1A	242	G	N3-C4-N9	-5.44	122.74	126.00
1	1A	2015	A	C5-N7-C8	5.44	106.62	103.90
1	1A	2893	G	C8-N9-C4	5.44	108.58	106.40
32	1a	495	A	OP1-P-O3'	5.44	117.16	105.20
56	1y	58	A	OP1-P-O3'	5.44	117.16	105.20
1	1A	2692	C	N3-C2-O2	-5.43	118.10	121.90
1	1A	509	C	N3-C4-C5	-5.43	119.73	121.90
1	1A	607	U	OP1-P-OP2	-5.43	111.45	119.60
1	1A	1660	C	O5'-P-OP1	5.43	117.22	110.70
1	1A	1696	G	C4-C5-N7	-5.43	108.63	110.80
1	1A	2735	G	N1-C6-O6	-5.43	116.64	119.90
32	1a	686	U	O4'-C1'-N1	5.43	112.55	108.20
1	1A	688	U	N1-C2-O2	-5.43	119.00	122.80
1	1A	2500	U	O4'-C1'-N1	5.43	112.54	108.20
1	2A	1767	C	N3-C2-O2	-5.43	118.10	121.90
1	2A	2260	C	C6-N1-C2	-5.43	118.13	120.30
32	2a	1039	C	C2-N1-C1'	5.43	124.77	118.80
1	1A	2156	G	N7-C8-N9	5.43	115.81	113.10
1	2A	792	G	N3-C2-N2	5.43	123.70	119.90
1	1A	84	A	O4'-C1'-N9	5.43	112.54	108.20
1	1A	463	G	N3-C4-C5	-5.43	125.89	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	2w	19	G	N7-C8-N9	5.43	115.81	113.10
1	1A	2015	A	C2-N3-C4	5.42	113.31	110.60
32	2a	266	G	P-O3'-C3'	5.42	126.21	119.70
54	1w	60	U	N3-C2-O2	-5.42	118.40	122.20
1	1A	1331	A	N9-C4-C5	5.42	107.97	105.80
1	1A	1579	A	N1-C6-N6	-5.42	115.35	118.60
1	1A	2308	G	O4'-C1'-N9	-5.42	103.86	108.20
1	2A	1131	G	O4'-C1'-N9	5.42	112.53	108.20
2	1B	100	A	C8-N9-C4	5.42	107.97	105.80
1	2A	881	G	C8-N9-C1'	-5.42	119.96	127.00
1	1A	332	A	N1-C6-N6	-5.42	115.35	118.60
1	1A	1991	U	N1-C2-N3	5.41	118.15	114.90
1	1A	1301	A	OP1-P-OP2	5.41	127.72	119.60
1	1A	1054	A	C6-N1-C2	-5.41	115.35	118.60
1	1A	1603	A	OP1-P-O3'	5.41	117.10	105.20
32	1a	1370	G	C8-N9-C4	-5.41	104.23	106.40
32	2a	246	A	O4'-C1'-N9	5.41	112.53	108.20
1	1A	2550	G	C5-C6-O6	-5.41	125.36	128.60
32	1a	1067	A	P-O3'-C3'	5.41	126.19	119.70
1	2A	1260	G	OP2-P-O3'	5.41	117.09	105.20
32	2a	1529	G	C4-N9-C1'	5.41	133.53	126.50
1	1A	726	G	N1-C6-O6	-5.40	116.66	119.90
1	1A	2155	G	C5-C6-O6	5.40	131.84	128.60
1	1A	38	A	C6-N1-C2	-5.40	115.36	118.60
1	1A	548	A	C8-N9-C4	-5.40	103.64	105.80
36	1e	12	LEU	CA-CB-CG	5.40	127.72	115.30
2	1B	56	G	O5'-P-OP2	-5.40	100.84	105.70
1	2A	553	G	C5-C6-O6	-5.40	125.36	128.60
54	2w	45	U	C5-C6-N1	5.40	125.40	122.70
1	1A	1481	U	O5'-P-OP2	-5.40	100.84	105.70
1	2A	465	G	C8-N9-C4	-5.40	104.24	106.40
32	2a	1067	A	N3-C4-C5	-5.40	123.02	126.80
1	1A	760	G	N9-C4-C5	-5.40	103.24	105.40
1	1A	1612	C	OP2-P-O3'	5.40	117.07	105.20
32	1a	266	G	C8-N9-C4	-5.39	104.24	106.40
1	1A	2685	G	C5-C6-N1	5.39	114.20	111.50
2	2B	1	U	C5-C6-N1	5.39	125.40	122.70
32	1a	324	G	N1-C6-O6	5.39	123.14	119.90
1	1A	1607	C	N3-C4-N4	5.39	121.77	118.00
1	2A	660	G	C5-C6-O6	5.39	131.83	128.60
1	1A	1124	C	C2-N3-C4	-5.39	117.21	119.90
1	1A	1385	G	C4-C5-N7	-5.39	108.64	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1378	A	N9-C4-C5	5.38	107.95	105.80
1	1A	564	C	N1-C2-O2	-5.38	115.67	118.90
1	1A	1249	U	O5'-P-OP1	-5.38	100.86	105.70
32	1a	518	C	N3-C2-O2	-5.38	118.13	121.90
32	2a	1019	C	C5-C6-N1	5.38	123.69	121.00
1	1A	898	C	N1-C2-O2	5.38	122.13	118.90
1	2A	898	C	C6-N1-C2	-5.38	118.15	120.30
32	2a	1263	C	N3-C4-N4	-5.38	114.23	118.00
1	1A	509	C	C2-N3-C4	5.38	122.59	119.90
1	1A	2440	C	N1-C2-O2	5.38	122.13	118.90
32	1a	841	U	C6-N1-C2	-5.38	117.77	121.00
1	2A	1366	A	O5'-P-OP2	-5.38	100.86	105.70
1	1A	2584	U	N3-C4-O4	-5.37	115.64	119.40
32	1a	765	G	N1-C6-O6	5.37	123.12	119.90
32	1a	1083	U	OP1-P-OP2	-5.37	111.54	119.60
1	2A	2719	G	C8-N9-C4	-5.37	104.25	106.40
1	2A	2593	U	C4-C5-C6	-5.37	116.48	119.70
1	1A	1619	G	N1-C6-O6	-5.37	116.68	119.90
55	1x	46	G	N3-C4-C5	-5.37	125.92	128.60
1	2A	1204	A	N9-C1'-C2'	5.37	120.98	114.00
1	1A	450	G	C5-C6-N1	5.37	114.18	111.50
1	1A	2263	C	C5-C4-N4	5.37	123.96	120.20
32	1a	1034	G	C5-C6-O6	5.37	131.82	128.60
1	2A	1166	C	N1-C2-O2	-5.37	115.68	118.90
1	1A	2688	U	C5-C4-O4	-5.37	122.68	125.90
32	2a	570	G	C4-N9-C1'	5.37	133.48	126.50
1	1A	2489	G	C6-C5-N7	-5.37	127.18	130.40
1	2A	1955	U	N1-C2-O2	-5.37	119.04	122.80
33	2b	129	GLU	C-N-CA	5.36	135.11	121.70
1	1A	2692	C	O5'-P-OP2	-5.36	100.87	105.70
32	1a	286	G	C5-C6-O6	5.36	131.82	128.60
32	1a	805	C	N1-C2-O2	5.36	122.12	118.90
56	1y	44	G	C4-N9-C1'	5.36	133.47	126.50
1	1A	859	G	N1-C6-O6	5.36	123.12	119.90
1	1A	2239	G	OP2-P-O3'	5.36	116.99	105.20
32	2a	1273	G	N3-C4-C5	-5.36	125.92	128.60
32	2a	1221	G	C5-C6-O6	5.35	131.81	128.60
1	1A	1944	U	N1-C2-O2	-5.35	119.05	122.80
1	1A	2455	G	N3-C4-C5	-5.35	125.92	128.60
1	1A	598	G	O5'-P-OP2	-5.35	100.89	105.70
1	1A	1623	G	N1-C6-O6	-5.35	116.69	119.90
2	1B	10	C	O5'-P-OP2	-5.35	100.89	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1497	G	O5'-P-OP2	-5.35	100.89	105.70
1	1A	1565	C	C4-C5-C6	5.35	120.07	117.40
1	1A	2599	G	C5-C6-N1	5.35	114.17	111.50
1	1A	564	C	C6-N1-C2	-5.34	118.16	120.30
1	1A	2706	G	C8-N9-C4	5.34	108.54	106.40
1	2A	2140	C	N1-C2-O2	5.34	122.11	118.90
1	1A	784	A	OP1-P-O3'	5.34	116.95	105.20
1	1A	1377	G	OP1-P-OP2	5.34	127.61	119.60
1	1A	1938	A	O4'-C1'-N9	5.34	112.47	108.20
2	1B	92	C	C2-N1-C1'	5.34	124.68	118.80
32	1a	1530	G	N1-C6-O6	5.34	123.11	119.90
1	2A	1136	G	C4-C5-N7	5.34	112.94	110.80
32	2a	1264	C	N1-C2-O2	5.34	122.10	118.90
1	2A	575	A	O5'-P-OP1	-5.34	100.90	105.70
1	1A	465	G	N7-C8-N9	5.34	115.77	113.10
1	1A	628	G	N1-C6-O6	-5.34	116.70	119.90
1	1A	2597	G	C6-C5-N7	-5.34	127.20	130.40
1	2A	459	U	N3-C4-O4	-5.34	115.66	119.40
1	2A	2848	G	O4'-C1'-N9	5.34	112.47	108.20
1	1A	1334	G	C5-C6-O6	5.33	131.80	128.60
1	1A	383	U	O4'-C1'-N1	5.33	112.47	108.20
32	1a	274	A	C8-N9-C4	5.33	107.93	105.80
1	2A	1990	C	C6-N1-C2	-5.33	118.17	120.30
1	2A	2033	A	N9-C4-C5	5.33	107.93	105.80
1	1A	753	C	C5-C4-N4	5.33	123.93	120.20
32	1a	346	G	N1-C6-O6	-5.33	116.70	119.90
1	2A	692	C	N1-C2-O2	-5.33	115.70	118.90
1	1A	444	C	C6-N1-C2	5.33	122.43	120.30
1	1A	757	U	C4-C5-C6	5.33	122.90	119.70
1	1A	775	G	C5-C6-N1	5.33	114.16	111.50
1	1A	807	U	OP1-P-OP2	5.33	127.59	119.60
54	1w	23	A	N1-C6-N6	5.33	121.80	118.60
55	2x	46	G	C8-N9-C4	-5.33	104.27	106.40
1	1A	463	G	C6-N1-C2	-5.33	121.91	125.10
1	1A	906	G	N9-C4-C5	5.33	107.53	105.40
1	1A	1321	A	C5-C6-N6	-5.33	119.44	123.70
1	1A	2015	A	C4-C5-N7	-5.33	108.04	110.70
32	1a	1324	A	O5'-P-OP1	-5.33	100.91	105.70
32	2a	875	C	N3-C2-O2	-5.33	118.17	121.90
1	1A	1063	G	N1-C2-N2	-5.32	111.41	116.20
1	1A	1596	A	C5-C6-N1	5.32	120.36	117.70
32	1a	1408	A	N1-C6-N6	5.32	121.80	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	124	G	N9-C4-C5	5.32	107.53	105.40
1	1A	821	A	O5'-P-OP2	-5.32	100.91	105.70
32	1a	511	C	C6-N1-C2	5.32	122.43	120.30
32	2a	975	A	C2-N3-C4	-5.32	107.94	110.60
1	1A	1574	C	N3-C4-C5	5.32	124.03	121.90
1	1A	2560	C	C6-N1-C2	-5.32	118.17	120.30
1	1A	2638	G	C8-N9-C4	-5.32	104.27	106.40
1	1A	1135	C	C2-N3-C4	-5.32	117.24	119.90
1	1A	2333	A	P-O3'-C3'	5.32	126.08	119.70
1	1A	1174	A	OP1-P-O3'	5.32	116.89	105.20
1	1A	2190	G	C8-N9-C4	-5.32	104.27	106.40
55	1x	42	G	C5-C6-N1	5.31	114.16	111.50
1	1A	940	G	O5'-P-OP1	-5.31	100.92	105.70
1	2A	651	G	N9-C4-C5	-5.31	103.28	105.40
1	1A	511	U	C5-C4-O4	5.31	129.09	125.90
1	1A	854	G	C4-C5-N7	-5.31	108.68	110.80
1	1A	2259	G	C4-C5-N7	5.31	112.92	110.80
1	1A	1068	G	N3-C4-C5	-5.31	125.95	128.60
1	1A	1177	A	N7-C8-N9	5.31	116.45	113.80
1	1A	1430	C	C2-N1-C1'	5.31	124.64	118.80
32	1a	1030	C	C2-N3-C4	5.31	122.55	119.90
55	1x	46	G	C8-N9-C4	-5.31	104.28	106.40
1	1A	1653	G	N3-C4-C5	-5.31	125.95	128.60
32	1a	99	U	N3-C2-O2	-5.31	118.49	122.20
55	1x	13	C	N3-C2-O2	-5.31	118.19	121.90
1	2A	2602	A	C5-C6-N1	-5.30	115.05	117.70
1	1A	252	G	C8-N9-C4	-5.30	104.28	106.40
1	1A	1264	G	C8-N9-C4	-5.30	104.28	106.40
1	1A	1437	C	C6-N1-C2	-5.30	118.18	120.30
1	1A	2091	U	C4-C5-C6	5.30	122.88	119.70
1	1A	2278	A	OP2-P-O3'	5.30	116.86	105.20
1	1A	2103	C	C5-C4-N4	5.30	123.91	120.20
1	2A	2119	A	P-O3'-C3'	5.30	126.06	119.70
32	2a	1256	A	O4'-C1'-N9	-5.30	103.96	108.20
32	1a	578	C	O5'-P-OP1	-5.30	100.93	105.70
1	2A	746	A	O4'-C1'-N9	5.30	112.44	108.20
1	1A	2027	G	C2-N3-C4	5.29	114.55	111.90
1	1A	935	C	C6-N1-C2	5.29	122.42	120.30
1	1A	2230	G	N3-C2-N2	-5.29	116.19	119.90
32	1a	43	C	C6-N1-C2	5.29	122.42	120.30
32	1a	1530	G	N3-C4-C5	5.29	131.25	128.60
32	2a	1031	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	1394	U	O5'-P-OP1	-5.29	100.94	105.70
1	1A	1904	G	OP2-P-O3'	5.29	116.84	105.20
55	1x	14	A	C4-N9-C1'	5.29	135.83	126.30
1	2A	762	U	N1-C2-O2	5.29	126.50	122.80
1	1A	1546	C	O5'-P-OP2	5.29	117.05	110.70
32	1a	98	G	C4-N9-C1'	5.29	133.37	126.50
1	2A	1340	U	O5'-P-OP1	-5.29	100.94	105.70
32	2a	70	G	N1-C6-O6	5.29	123.07	119.90
1	1A	36	G	C4-C5-N7	-5.29	108.69	110.80
2	1B	23	G	C8-N9-C4	-5.29	104.29	106.40
1	1A	287	C	N1-C2-O2	5.28	122.07	118.90
1	1A	2501	C	N1-C2-O2	-5.28	115.73	118.90
1	1A	2623	G	C2-N3-C4	5.28	114.54	111.90
1	2A	2331	G	N1-C6-O6	5.28	123.07	119.90
1	1A	188	G	N1-C6-O6	-5.28	116.73	119.90
32	2a	946	A	C6-N1-C2	-5.28	115.43	118.60
1	1A	366	C	O5'-P-OP2	-5.28	100.95	105.70
1	1A	431	U	N3-C2-O2	-5.28	118.50	122.20
1	1A	1798	U	OP2-P-O3'	5.28	116.81	105.20
32	1a	175	C	C6-N1-C2	-5.28	118.19	120.30
1	1A	1065	U	N3-C2-O2	-5.28	118.51	122.20
55	1x	43	A	N1-C6-N6	5.28	121.77	118.60
1	2A	178	G	C4-C5-N7	-5.28	108.69	110.80
32	2a	354	G	C8-N9-C1'	-5.28	120.14	127.00
32	1a	1036	G	C6-N1-C2	-5.28	121.94	125.10
1	1A	1252	G	C4-N9-C1'	-5.27	119.64	126.50
1	2A	242	G	N7-C8-N9	-5.27	110.46	113.10
1	1A	615	G	N1-C6-O6	-5.27	116.74	119.90
1	1A	27	G	O4'-C1'-N9	5.27	112.42	108.20
1	1A	2246	G	C5-N7-C8	5.27	106.94	104.30
1	1A	2506	U	C5-C6-N1	-5.27	120.07	122.70
1	2A	1021	A	N7-C8-N9	5.27	116.44	113.80
55	2x	46	G	C5-C6-O6	-5.27	125.44	128.60
1	2A	792	G	C8-N9-C1'	-5.27	120.15	127.00
1	2A	881	G	C5-C6-O6	-5.27	125.44	128.60
32	2a	1238	A	N1-C2-N3	5.27	131.93	129.30
1	1A	467	G	C5-C6-N1	-5.27	108.87	111.50
1	1A	1047	G	C8-N9-C1'	-5.27	120.15	127.00
1	2A	1639	U	O5'-P-OP2	-5.27	100.96	105.70
1	2A	2076	U	OP1-P-OP2	-5.27	111.70	119.60
1	2A	90	U	N3-C2-O2	-5.26	118.51	122.20
1	1A	2361	A	C2-N3-C4	-5.26	107.97	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1673	U	C5-C6-N1	-5.26	120.07	122.70
1	2A	1210	A	P-O3'-C3'	5.26	126.01	119.70
1	1A	2441	C	N3-C2-O2	-5.26	118.22	121.90
18	1W	15	ARG	NE-CZ-NH2	-5.26	117.67	120.30
1	2A	2046	G	C8-N9-C4	5.26	108.50	106.40
2	2B	6	C	N1-C2-O2	-5.26	115.75	118.90
32	1a	245	C	N1-C2-O2	-5.26	115.75	118.90
1	2A	2161	C	C5-C6-N1	5.26	123.63	121.00
32	1a	1036	G	N9-C4-C5	5.25	107.50	105.40
1	1A	1187	G	C5-C6-N1	5.25	114.13	111.50
32	1a	188	C	C5-C6-N1	5.25	123.63	121.00
56	1y	33	U	C6-N1-C1'	-5.25	113.84	121.20
1	2A	326	G	O5'-P-OP2	-5.25	100.97	105.70
1	2A	1187	G	N9-C4-C5	5.25	107.50	105.40
1	1A	731	C	N3-C4-N4	-5.25	114.33	118.00
1	1A	1182	A	C8-N9-C4	-5.25	103.70	105.80
1	1A	1764	G	C5-C6-O6	5.25	131.75	128.60
32	1a	63	C	N3-C2-O2	-5.25	118.23	121.90
1	2A	1308	A	N9-C4-C5	5.25	107.90	105.80
1	1A	1282	U	C2-N3-C4	-5.25	123.85	127.00
1	2A	2880	C	N3-C2-O2	-5.25	118.23	121.90
1	1A	431	U	C5-C4-O4	5.24	129.05	125.90
1	1A	463	G	C2-N3-C4	5.24	114.52	111.90
1	1A	571	A	C5-C6-N1	5.24	120.32	117.70
1	1A	670	A	C4-C5-C6	-5.24	114.38	117.00
1	2A	403	U	N3-C2-O2	-5.24	118.53	122.20
32	2a	409	G	C8-N9-C4	5.24	108.50	106.40
32	2a	883	C	C6-N1-C2	-5.24	118.20	120.30
1	1A	2157	G	C8-N9-C1'	5.24	133.81	127.00
1	2A	2500	U	N3-C2-O2	-5.24	118.53	122.20
32	2a	1256	A	N1-C2-N3	-5.24	126.68	129.30
55	2x	14	A	N1-C2-N3	5.24	131.92	129.30
1	1A	1115	G	N1-C6-O6	5.24	123.04	119.90
2	1B	82	G	N1-C6-O6	-5.24	116.76	119.90
1	2A	948	G	N9-C4-C5	5.24	107.50	105.40
1	2A	2236	C	N1-C2-O2	-5.24	115.76	118.90
1	2A	881	G	C4-N9-C1'	5.24	133.31	126.50
1	2A	1187	G	N1-C6-O6	-5.24	116.76	119.90
1	2A	1842	G	O5'-P-OP2	-5.24	100.99	105.70
1	2A	2115	G	C8-N9-C4	-5.24	104.31	106.40
32	2a	1161	C	C6-N1-C2	-5.24	118.21	120.30
1	1A	944	G	C6-C5-N7	-5.23	127.26	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1811	G	C5-C6-O6	5.23	131.74	128.60
1	1A	1975	G	N1-C6-O6	5.23	123.04	119.90
1	1A	2565	A	C8-N9-C4	5.23	107.89	105.80
1	1A	513	A	O4'-C1'-N9	-5.23	104.02	108.20
1	1A	2791	C	C5-C6-N1	5.23	123.61	121.00
55	2x	4	G	C8-N9-C4	-5.23	104.31	106.40
1	1A	2819	G	C4-C5-N7	5.23	112.89	110.80
1	2A	1910	G	C8-N9-C4	5.23	108.49	106.40
1	1A	954	G	C6-C5-N7	5.23	133.54	130.40
1	1A	1142(A)	A	O4'-C1'-N9	5.23	112.38	108.20
1	1A	1695	G	C4-C5-N7	5.23	112.89	110.80
1	1A	1695	G	N9-C4-C5	-5.22	103.31	105.40
32	1a	971	G	O5'-P-OP2	-5.22	101.00	105.70
1	2A	465	G	C5-N7-C8	-5.22	101.69	104.30
1	2A	2581	G	C8-N9-C4	-5.22	104.31	106.40
1	1A	847	U	O5'-P-OP1	-5.22	101.00	105.70
1	1A	2314	C	O5'-P-OP2	-5.22	101.00	105.70
32	1a	1514	C	N1-C2-O2	-5.22	115.77	118.90
1	2A	801	G	C8-N9-C4	5.22	108.49	106.40
1	1A	2565	A	N7-C8-N9	-5.22	111.19	113.80
1	1A	612	C	OP2-P-O3'	5.22	116.68	105.20
1	1A	1124	C	C5-C6-N1	-5.22	118.39	121.00
1	1A	1176	G	N3-C4-N9	5.22	129.13	126.00
1	1A	2514	U	N3-C4-O4	-5.22	115.75	119.40
1	1A	2580	U	C5-C6-N1	-5.22	120.09	122.70
1	1A	2830	G	N3-C4-C5	-5.22	125.99	128.60
32	1a	781	A	OP2-P-O3'	5.22	116.68	105.20
1	1A	559	G	N3-C4-C5	5.21	131.21	128.60
1	1A	1772	G	N9-C1'-C2'	-5.21	106.26	112.00
1	1A	2417	C	C5-C4-N4	5.21	123.85	120.20
2	1B	82	G	C5-C6-O6	5.21	131.73	128.60
54	1w	74	C	C5-C4-N4	-5.21	116.55	120.20
1	2A	1318	C	C6-N1-C2	-5.21	118.22	120.30
54	2w	13	C	C2-N1-C1'	5.21	124.54	118.80
1	2A	1243	G	N3-C4-C5	5.21	131.21	128.60
1	2A	2331	G	C5-C6-O6	-5.21	125.47	128.60
1	1A	1251	C	C5-C6-N1	5.21	123.61	121.00
32	2a	883	C	C2-N1-C1'	5.21	124.53	118.80
32	2a	1442	G	C2-N3-C4	5.21	114.50	111.90
1	1A	2387	U	C5-C6-N1	-5.21	120.09	122.70
1	1A	834	C	C2-N3-C4	-5.21	117.30	119.90
1	1A	1009	A	OP1-P-OP2	-5.21	111.79	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2261	C	OP2-P-O3'	5.21	116.66	105.20
32	1a	369	C	C2-N1-C1'	5.21	124.53	118.80
1	2A	277	C	OP2-P-O3'	5.21	116.66	105.20
32	2a	116	A	N1-C6-N6	5.21	121.72	118.60
55	2x	22	G	C8-N9-C1'	5.21	133.77	127.00
1	1A	344	G	C4-C5-N7	5.21	112.88	110.80
32	2a	1045	C	C6-N1-C2	5.21	122.38	120.30
1	1A	2059	A	O4'-C1'-N9	5.21	112.36	108.20
32	1a	760	G	N1-C6-O6	5.21	123.02	119.90
1	1A	461	C	C4-C5-C6	5.20	120.00	117.40
1	2A	554	U	N3-C2-O2	-5.20	118.56	122.20
1	2A	2669	G	C4-N9-C1'	-5.20	119.73	126.50
1	1A	1772	G	C8-N9-C4	5.20	108.48	106.40
1	1A	1830	C	N1-C2-O2	-5.20	115.78	118.90
1	1A	670	A	N9-C4-C5	-5.20	103.72	105.80
1	1A	1969	A	OP1-P-O3'	5.20	116.64	105.20
1	2A	2639	A	O5'-P-OP1	-5.20	101.02	105.70
1	1A	1255	U	N3-C4-O4	5.20	123.04	119.40
1	1A	2597	G	C8-N9-C4	-5.20	104.32	106.40
55	1x	5	G	C4-N9-C1'	-5.20	119.74	126.50
1	1A	2443	C	C6-N1-C2	-5.20	118.22	120.30
1	1A	2515	C	C2-N3-C4	-5.20	117.30	119.90
1	2A	11	G	C8-N9-C4	-5.20	104.32	106.40
32	2a	1282	C	C6-N1-C2	-5.20	118.22	120.30
1	1A	242	G	C4-N9-C1'	-5.19	119.75	126.50
1	1A	1998	G	O5'-P-OP1	-5.19	101.03	105.70
1	1A	1988	C	C6-N1-C2	-5.19	118.22	120.30
1	1A	2473	U	C2-N1-C1'	5.19	123.93	117.70
1	1A	2577	A	C5-N7-C8	5.19	106.50	103.90
1	1A	203	C	C2-N1-C1'	-5.19	113.09	118.80
1	2A	1996	C	OP1-P-O3'	5.19	116.61	105.20
32	2a	1259	C	C5-C6-N1	5.19	123.59	121.00
32	1a	1319	A	C8-N9-C4	5.19	107.87	105.80
1	1A	205	G	O5'-P-OP2	-5.18	101.03	105.70
40	1i	125	TYR	CA-CB-CG	5.18	123.25	113.40
1	2A	2233	U	OP2-P-O3'	5.18	116.60	105.20
1	1A	1678	G	N7-C8-N9	5.18	115.69	113.10
32	1a	1417	G	N3-C2-N2	5.18	123.53	119.90
1	2A	751	A	OP1-P-OP2	-5.18	111.83	119.60
1	2A	1835	G	O5'-P-OP1	-5.18	101.04	105.70
32	2a	1485	U	O5'-P-OP2	-5.18	101.04	105.70
1	1A	972	G	C4-C5-N7	-5.18	108.73	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1811	G	C4-C5-N7	-5.18	108.73	110.80
32	2a	886	G	N1-C6-O6	5.18	123.01	119.90
32	2a	733	A	C8-N9-C4	5.18	107.87	105.80
1	1A	753	C	C5-C6-N1	5.18	123.59	121.00
1	1A	762	U	C2-N1-C1'	5.18	123.91	117.70
32	1a	540	G	OP2-P-O3'	5.18	116.59	105.20
1	2A	2439	A	C5-N7-C8	-5.18	101.31	103.90
32	2a	1272	G	N3-C4-C5	-5.18	126.01	128.60
1	1A	12	U	N3-C2-O2	-5.17	118.58	122.20
1	1A	1644	C	N3-C2-O2	-5.17	118.28	121.90
1	1A	2417	C	C6-N1-C1'	5.17	127.01	120.80
32	1a	565	U	N1-C2-O2	5.17	126.42	122.80
1	1A	1282	U	N3-C2-O2	-5.17	118.58	122.20
1	1A	2143	C	C6-N1-C2	-5.17	118.23	120.30
1	1A	1017	G	C8-N9-C4	-5.17	104.33	106.40
1	1A	796	C	C6-N1-C2	-5.17	118.23	120.30
1	1A	1256	G	C8-N9-C1'	-5.17	120.28	127.00
1	1A	1759	A	N9-C4-C5	-5.17	103.73	105.80
1	1A	2274	A	C5-C6-N6	-5.17	119.57	123.70
1	1A	2610	C	C6-N1-C2	-5.17	118.23	120.30
32	1a	1158	C	C2-N1-C1'	5.17	124.48	118.80
1	2A	897	C	N1-C2-O2	5.17	122.00	118.90
1	1A	344	G	C5-C6-O6	-5.17	125.50	128.60
1	1A	2891	G	N1-C6-O6	5.17	123.00	119.90
2	1B	56	G	N9-C4-C5	5.17	107.47	105.40
32	1a	1224	G	N1-C6-O6	-5.17	116.80	119.90
1	1A	178	G	N7-C8-N9	-5.16	110.52	113.10
1	1A	880	G	C8-N9-C4	-5.16	104.33	106.40
1	1A	1842	G	N1-C6-O6	-5.16	116.80	119.90
1	1A	2417	C	N1-C2-O2	-5.16	115.80	118.90
32	2a	563	A	O4'-C1'-N9	5.16	112.33	108.20
32	1a	346	G	N3-C4-C5	-5.16	126.02	128.60
1	2A	1653	G	P-O3'-C3'	5.16	125.89	119.70
1	1A	2591	C	N3-C4-C5	5.16	123.96	121.90
1	2A	831	G	N3-C4-N9	-5.16	122.90	126.00
1	1A	1381	G	O5'-P-OP2	-5.16	101.06	105.70
32	2a	812	C	C6-N1-C1'	5.16	126.99	120.80
55	2x	40	C	C6-N1-C2	-5.16	118.24	120.30
1	1A	769	G	C4-C5-N7	5.16	112.86	110.80
1	1A	1992	G	C2-N3-C4	5.16	114.48	111.90
1	1A	2270	G	C8-N9-C4	5.16	108.46	106.40
55	1x	22	G	C8-N9-C1'	5.16	133.70	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2699	C	N3-C2-O2	-5.15	118.29	121.90
1	2A	124	G	C8-N9-C4	-5.15	104.34	106.40
1	2A	918	A	O5'-P-OP1	-5.15	101.06	105.70
1	1A	1351	C	N1-C2-N3	5.15	122.81	119.20
32	1a	532	A	C2-N3-C4	-5.15	108.03	110.60
1	2A	438	G	N9-C4-C5	5.15	107.46	105.40
1	1A	2157	G	C6-C5-N7	5.15	133.49	130.40
54	1w	24	G	N3-C4-N9	5.15	129.09	126.00
1	2A	213	A	C5-N7-C8	-5.15	101.33	103.90
1	1A	2014	A	N7-C8-N9	-5.15	111.23	113.80
1	2A	1338	G	C8-N9-C4	5.15	108.46	106.40
1	2A	2265	U	O5'-P-OP1	-5.15	101.07	105.70
1	1A	1625	C	C6-N1-C2	-5.14	118.24	120.30
2	1B	28	C	C6-N1-C2	-5.14	118.24	120.30
32	2a	1241	G	N1-C6-O6	-5.14	116.81	119.90
55	2x	7	G	N3-C4-N9	5.14	129.09	126.00
1	1A	583	G	O5'-P-OP2	-5.14	101.07	105.70
1	1A	995	C	N3-C4-N4	5.14	121.60	118.00
1	1A	1153	C	O5'-P-OP2	-5.14	101.07	105.70
1	1A	2035	G	N9-C4-C5	-5.14	103.34	105.40
1	1A	520	G	C5-C6-O6	-5.14	125.52	128.60
1	1A	1087	G	N9-C4-C5	5.14	107.46	105.40
1	1A	386	G	N1-C6-O6	-5.14	116.82	119.90
1	1A	1385	G	N9-C4-C5	5.14	107.45	105.40
32	1a	890	G	O4'-C1'-N9	5.14	112.31	108.20
55	1x	9	G	C4-C5-N7	-5.14	108.75	110.80
1	2A	671	C	N3-C4-C5	-5.14	119.84	121.90
32	2a	258	G	C6-C5-N7	-5.14	127.32	130.40
1	1A	881	G	C8-N9-C4	-5.13	104.35	106.40
1	1A	1027	A	OP2-P-O3'	5.13	116.50	105.20
32	2a	586	C	C2-N1-C1'	-5.13	113.15	118.80
32	2a	1474	G	C6-C5-N7	5.13	133.48	130.40
54	2w	2	C	C2-N1-C1'	5.13	124.45	118.80
1	1A	1626	G	C5-C6-N1	5.13	114.07	111.50
1	1A	2454	G	C6-N1-C2	-5.13	122.02	125.10
1	1A	607	U	O5'-P-OP2	5.13	116.86	110.70
1	2A	1558	A	O4'-C1'-N9	5.13	112.31	108.20
1	2A	1958	C	O5'-P-OP1	-5.13	101.08	105.70
1	1A	2019	A	C2-N3-C4	-5.13	108.03	110.60
1	1A	2058	A	C8-N9-C4	-5.13	103.75	105.80
55	1x	12	G	C8-N9-C4	5.13	108.45	106.40
1	2A	1837	C	N1-C2-O2	5.13	121.98	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1397	U	N3-C4-O4	5.13	122.99	119.40
1	1A	2007	C	N3-C2-O2	-5.13	118.31	121.90
32	1a	120	A	O4'-C1'-N9	-5.13	104.10	108.20
1	2A	2144	U	C5-C6-N1	5.13	125.26	122.70
1	1A	689	A	N1-C6-N6	-5.13	115.52	118.60
1	1A	881	G	N7-C8-N9	5.13	115.66	113.10
1	1A	2107	C	C6-N1-C2	-5.13	118.25	120.30
32	1a	1030	C	C5-C6-N1	5.13	123.56	121.00
1	2A	1646	C	N3-C4-C5	-5.13	119.85	121.90
1	2A	2454	G	C8-N9-C4	-5.13	104.35	106.40
2	2B	13	A	N7-C8-N9	-5.13	111.24	113.80
1	1A	382	G	N7-C8-N9	-5.12	110.54	113.10
1	1A	1218	C	N3-C4-C5	-5.12	119.85	121.90
1	1A	2828	C	N1-C2-O2	5.12	121.97	118.90
32	1a	1516	G	N9-C4-C5	5.12	107.45	105.40
32	2a	982	U	N3-C2-O2	-5.12	118.61	122.20
1	1A	559	G	C4-N9-C1'	-5.12	119.84	126.50
1	1A	689	A	C5-N7-C8	5.12	106.46	103.90
1	1A	975	C	C2-N1-C1'	-5.12	113.17	118.80
1	1A	1003	G	C6-N1-C2	-5.12	122.03	125.10
1	1A	2562	U	N3-C2-O2	-5.12	118.61	122.20
32	1a	524	G	N3-C4-C5	-5.12	126.04	128.60
32	2a	317	G	C8-N9-C4	-5.12	104.35	106.40
1	2A	1698	A	C5-C6-N1	-5.12	115.14	117.70
1	1A	673	C	C5-C4-N4	-5.12	116.62	120.20
1	1A	1086	A	C6-N1-C2	-5.12	115.53	118.60
1	1A	2428	G	O4'-C1'-N9	5.12	112.30	108.20
1	1A	2688	U	N3-C2-O2	5.12	125.78	122.20
1	2A	326	G	N3-C4-N9	-5.12	122.93	126.00
1	1A	530	G	C4-C5-N7	5.12	112.85	110.80
1	1A	1314	C	C4-C5-C6	5.12	119.96	117.40
1	1A	1460	A	C8-N9-C4	5.12	107.85	105.80
1	1A	2234	G	C2-N3-C4	5.12	114.46	111.90
1	2A	1308	A	C4-C5-N7	-5.12	108.14	110.70
1	1A	252	G	N3-C2-N2	-5.11	116.32	119.90
1	1A	1141	U	C2-N3-C4	-5.11	123.93	127.00
1	1A	2608	G	C6-N1-C2	-5.11	122.03	125.10
1	2A	456	C	C6-N1-C2	5.11	122.34	120.30
1	2A	697	C	N3-C2-O2	-5.11	118.32	121.90
1	2A	1815	A	OP1-P-O3'	5.11	116.45	105.20
32	2a	155	C	N1-C2-O2	5.11	121.97	118.90
1	1A	2706	G	C5-N7-C8	5.11	106.86	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	983	A	C5-C6-N6	5.11	127.79	123.70
1	1A	2319	G	C2-N3-C4	-5.11	109.34	111.90
1	1A	2794	C	N1-C2-O2	5.11	121.97	118.90
1	2A	1114	G	O4'-C1'-N9	5.11	112.29	108.20
1	1A	2014	A	C8-N9-C4	5.11	107.84	105.80
1	1A	456	C	C5-C6-N1	5.11	123.55	121.00
1	1A	1222	C	C5-C4-N4	5.11	123.78	120.20
32	1a	1397	C	C6-N1-C2	5.11	122.34	120.30
54	1w	48	C	C5-C6-N1	-5.11	118.45	121.00
32	2a	1036	G	N3-C4-C5	-5.11	126.05	128.60
32	2a	1496	C	O5'-P-OP2	-5.11	101.11	105.70
32	1a	1224	G	C4-C5-N7	-5.10	108.76	110.80
1	1A	442	G	C6-C5-N7	-5.10	127.34	130.40
1	1A	1349	A	N3-C4-C5	-5.10	123.23	126.80
32	1a	1151	A	OP1-P-OP2	5.10	127.25	119.60
1	2A	2188	C	C2-N3-C4	5.10	122.45	119.90
1	1A	235	U	N3-C2-O2	5.10	125.77	122.20
1	1A	1252	G	N3-C4-N9	-5.10	122.94	126.00
1	1A	2457	U	OP2-P-O3'	5.10	116.42	105.20
1	2A	749	C	C6-N1-C1'	-5.10	114.68	120.80
1	2A	2561	A	C4-C5-C6	-5.10	114.45	117.00
1	1A	640	C	N3-C4-C5	-5.09	119.86	121.90
1	1A	2272	U	OP2-P-O3'	5.09	116.41	105.20
32	1a	1041	A	N1-C6-N6	5.09	121.66	118.60
1	2A	94(A)	G	C5-C6-O6	-5.09	125.54	128.60
1	2A	786	C	C2-N3-C4	5.09	122.45	119.90
1	1A	1270	C	N1-C2-O2	-5.09	115.84	118.90
1	2A	141	A	C6-C5-N7	-5.09	128.74	132.30
32	1a	91	C	N1-C2-O2	5.09	121.95	118.90
1	1A	750	A	O5'-P-OP2	-5.09	101.12	105.70
1	1A	1190	G	C8-N9-C4	5.09	108.44	106.40
1	1A	469	G	N9-C4-C5	5.09	107.43	105.40
1	1A	588	U	C5-C6-N1	5.09	125.24	122.70
1	1A	792	G	O4'-C1'-N9	-5.09	104.13	108.20
1	1A	1140	C	O5'-P-OP2	-5.09	101.12	105.70
1	2A	807	U	C5-C6-N1	-5.09	120.16	122.70
1	2A	2039	C	C5-C6-N1	5.09	123.54	121.00
1	1A	1607	C	N3-C4-C5	-5.08	119.87	121.90
1	2A	1532	C	C6-N1-C2	-5.08	118.27	120.30
5	1F	32	LEU	CA-CB-CG	-5.08	103.61	115.30
1	2A	2880	C	C6-N1-C2	-5.08	118.27	120.30
32	2a	1286	A	N7-C8-N9	5.08	116.34	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2580	U	N3-C4-O4	-5.08	115.84	119.40
32	1a	162	A	C8-N9-C4	-5.08	103.77	105.80
32	1a	1036	G	N1-C2-N2	5.08	120.77	116.20
1	1A	1325	G	C8-N9-C1'	5.08	133.60	127.00
1	1A	1328	G	C5-C6-N1	5.08	114.04	111.50
32	1a	803	G	N1-C6-O6	-5.08	116.85	119.90
1	2A	1378	A	N1-C6-N6	-5.08	115.55	118.60
32	2a	675	A	C8-N9-C4	5.08	107.83	105.80
1	1A	2222	G	C8-N9-C4	5.08	108.43	106.40
1	1A	753	C	N3-C4-N4	-5.08	114.45	118.00
1	1A	1022	G	C2-N3-C4	-5.08	109.36	111.90
1	1A	1933	G	N3-C4-N9	-5.08	122.95	126.00
32	1a	946	A	C8-N9-C4	-5.08	103.77	105.80
32	1a	98	G	C6-C5-N7	-5.07	127.36	130.40
1	2A	1899	G	C5-C6-O6	-5.07	125.56	128.60
32	2a	1131	G	C8-N9-C4	-5.07	104.37	106.40
1	1A	2748	A	N1-C6-N6	5.07	121.64	118.60
1	1A	685	A	O4'-C1'-N9	5.07	112.26	108.20
1	1A	2061	G	N1-C6-O6	5.07	122.94	119.90
1	1A	2825	C	C4-C5-C6	5.07	119.94	117.40
1	2A	982	C	N1-C2-O2	5.07	121.94	118.90
32	2a	687	A	P-O3'-C3'	5.07	125.78	119.70
55	2x	13	C	C5-C4-N4	-5.07	116.65	120.20
1	2A	2070	G	C4-C5-N7	-5.07	108.77	110.80
1	1A	18	C	N1-C2-O2	5.07	121.94	118.90
1	1A	34	C	N3-C2-O2	-5.07	118.35	121.90
1	1A	512	G	N1-C6-O6	5.07	122.94	119.90
1	1A	1028	A	OP2-P-O3'	5.07	116.35	105.20
32	1a	687	A	P-O3'-C3'	5.07	125.78	119.70
1	2A	2326	C	C6-N1-C2	-5.07	118.27	120.30
1	1A	458	G	O4'-C1'-N9	5.07	112.25	108.20
1	1A	2026	C	OP2-P-O3'	5.07	116.34	105.20
1	1A	453	C	N1-C2-N3	5.06	122.74	119.20
32	1a	1009	G	C4-C5-N7	5.06	112.83	110.80
54	1w	18	G	C8-N9-C4	5.06	108.42	106.40
32	2a	1101	A	C8-N9-C4	5.06	107.83	105.80
1	1A	2613	U	O5'-P-OP1	-5.06	101.14	105.70
1	2A	122	G	N3-C4-C5	-5.06	126.07	128.60
1	2A	2111	C	C6-N1-C2	-5.06	118.28	120.30
1	1A	683	C	C6-N1-C1'	-5.06	114.73	120.80
1	1A	1666	G	N9-C4-C5	5.06	107.42	105.40
41	2j	65	LEU	CA-CB-CG	5.06	126.94	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2319	G	N3-C2-N2	-5.06	116.36	119.90
1	2A	2240	C	N3-C4-N4	5.06	121.54	118.00
32	2a	485	G	N3-C2-N2	-5.06	116.36	119.90
1	1A	278	A	C8-N9-C4	-5.06	103.78	105.80
1	1A	794	G	N1-C6-O6	-5.06	116.86	119.90
1	1A	1411	C	N3-C4-N4	-5.06	114.46	118.00
1	1A	1603	A	N1-C6-N6	5.06	121.64	118.60
32	2a	70	G	C5-C6-O6	-5.06	125.57	128.60
1	1A	1782	C	N1-C2-O2	-5.06	115.87	118.90
1	1A	363(C)	G	C8-N9-C4	5.05	108.42	106.40
1	1A	2239	G	C2-N3-C4	5.05	114.43	111.90
32	2a	1026	G	N3-C4-N9	5.05	129.03	126.00
32	1a	306	G	O5'-P-OP1	-5.05	101.15	105.70
1	1A	1613	G	C6-N1-C2	-5.05	122.07	125.10
1	2A	2166	G	C5-C6-O6	-5.05	125.57	128.60
1	1A	2688	U	N1-C2-N3	-5.05	111.87	114.90
1	2A	528	A	C5-C6-N1	-5.05	115.17	117.70
1	2A	1187	G	C5-C6-O6	5.05	131.63	128.60
32	2a	1099	G	C5-C6-O6	5.05	131.63	128.60
32	2a	1123	A	C5-C6-N6	5.05	127.74	123.70
1	1A	226	G	C2-N3-C4	5.05	114.42	111.90
1	1A	950	G	OP1-P-OP2	-5.05	112.03	119.60
32	1a	740	U	C5-C6-N1	-5.05	120.18	122.70
1	1A	2223	G	N1-C6-O6	5.05	122.93	119.90
1	1A	2439	A	C6-C5-N7	-5.05	128.77	132.30
1	1A	2455	G	C8-N9-C1'	-5.05	120.44	127.00
1	2A	885	C	C2-N3-C4	5.05	122.42	119.90
1	1A	2714	G	N1-C6-O6	-5.04	116.87	119.90
32	2a	341	C	C5-C6-N1	5.04	123.52	121.00
1	1A	259	G	N3-C4-C5	-5.04	126.08	128.60
1	1A	2004	G	N3-C4-C5	5.04	131.12	128.60
32	2a	1303	C	C5-C4-N4	5.04	123.73	120.20
1	1A	958	U	C6-N1-C2	-5.04	117.97	121.00
1	1A	978	G	N9-C4-C5	5.04	107.42	105.40
1	1A	919	G	C4-C5-N7	5.04	112.82	110.80
1	2A	2573	C	C5-C4-N4	-5.04	116.67	120.20
1	1A	539	G	OP2-P-O3'	5.04	116.28	105.20
1	2A	1201	C	C5-C6-N1	-5.04	118.48	121.00
2	1B	106	G	C5-N7-C8	-5.04	101.78	104.30
5	1F	192	LEU	CA-CB-CG	5.04	126.88	115.30
32	1a	1380	U	C5-C4-O4	5.04	128.92	125.90
55	1x	58	A	C2-N3-C4	5.04	113.12	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1303	C	N3-C4-N4	-5.04	114.47	118.00
1	1A	57	C	OP2-P-O3'	5.03	116.28	105.20
1	1A	1187	G	C4-C5-C6	-5.03	115.78	118.80
1	1A	2721	A	N1-C2-N3	-5.03	126.78	129.30
32	2a	1067	A	O4'-C1'-N9	-5.03	104.17	108.20
1	2A	1931	U	O5'-P-OP2	-5.03	101.17	105.70
32	1a	336	C	C6-N1-C2	5.03	122.31	120.30
1	2A	260	G	C8-N9-C4	-5.03	104.39	106.40
1	2A	1451	C	N1-C2-O2	-5.03	115.88	118.90
55	2x	46	G	C2-N3-C4	5.03	114.42	111.90
1	1A	32	C	N3-C4-C5	-5.03	119.89	121.90
32	1a	1003	G	N3-C4-C5	-5.03	126.09	128.60
32	1a	1240	U	C6-N1-C1'	5.03	128.24	121.20
1	2A	2778	A	N9-C4-C5	5.03	107.81	105.80
1	1A	444	C	O5'-P-OP1	5.03	116.73	110.70
1	1A	2437	U	N3-C2-O2	5.03	125.72	122.20
15	1T	96	ARG	NE-CZ-NH2	-5.03	117.79	120.30
1	2A	2356	C	C6-N1-C2	-5.03	118.29	120.30
1	1A	2495	G	N3-C4-N9	-5.03	122.98	126.00
1	2A	749	C	N1-C2-O2	5.03	121.92	118.90
1	1A	961	C	C2-N3-C4	-5.02	117.39	119.90
1	1A	1216	G	C4-C5-N7	5.02	112.81	110.80
1	1A	1786	A	N7-C8-N9	-5.02	111.29	113.80
1	1A	2014	A	N1-C6-N6	5.02	121.61	118.60
1	1A	2045	C	C2-N3-C4	-5.02	117.39	119.90
32	1a	1052	U	N1-C2-O2	5.02	126.32	122.80
1	1A	1146	C	C2-N1-C1'	-5.02	113.28	118.80
32	1a	266	G	C4-C5-C6	5.02	121.81	118.80
2	2B	24	G	C8-N9-C4	5.02	108.41	106.40
2	1B	79	C	C5-C6-N1	5.02	123.51	121.00
1	2A	958	U	C5-C6-N1	5.02	125.21	122.70
1	1A	2038	G	N1-C6-O6	-5.02	116.89	119.90
1	2A	1346	G	C8-N9-C4	5.02	108.41	106.40
32	2a	561	U	O5'-P-OP1	-5.02	101.18	105.70
1	1A	2191	G	C6-N1-C2	-5.02	122.09	125.10
1	2A	1142(A)	A	C5-N7-C8	-5.02	101.39	103.90
1	2A	1170	G	C4-C5-N7	5.02	112.81	110.80
1	1A	665	C	N3-C2-O2	-5.01	118.39	121.90
1	2A	1211	U	C5-C4-O4	-5.01	122.89	125.90
1	1A	2638	G	N3-C4-N9	5.01	129.01	126.00
1	2A	2506	U	C5-C6-N1	-5.01	120.19	122.70
1	2A	1996	C	C5-C6-N1	-5.01	118.49	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	972	G	N1-C6-O6	-5.01	116.89	119.90
1	2A	228	A	N1-C6-N6	5.01	121.61	118.60
32	2a	1067	A	N9-C4-C5	5.01	107.80	105.80
54	2w	74	C	N1-C2-O2	5.01	121.91	118.90
55	2x	22	G	N1-C6-O6	-5.01	116.89	119.90
1	1A	2362	G	OP2-P-O3'	5.01	116.22	105.20
32	1a	1058	G	N9-C4-C5	-5.01	103.40	105.40
1	2A	1619	G	C5-C6-O6	-5.01	125.59	128.60
1	1A	1701	A	O5'-P-OP2	-5.01	101.19	105.70
32	1a	1030(C)	G	O4'-C1'-N9	5.01	112.20	108.20
1	2A	1584	C	O4'-C1'-N1	5.01	112.20	108.20
32	2a	1363	C	C2-N1-C1'	-5.01	113.29	118.80
1	1A	1332	G	C5-C6-O6	-5.00	125.60	128.60
1	1A	1721	G	C5-N7-C8	-5.00	101.80	104.30
32	1a	1516	G	N3-C4-N9	-5.00	123.00	126.00
1	1A	794	G	C8-N9-C4	5.00	108.40	106.40
1	1A	826	U	C2-N1-C1'	-5.00	111.70	117.70
1	1A	992	C	C6-N1-C2	-5.00	118.30	120.30
2	1B	77	U	C2-N3-C4	-5.00	124.00	127.00
54	1w	72	C	C5-C6-N1	5.00	123.50	121.00
54	2w	3	C	C6-N1-C1'	-5.00	114.80	120.80
1	1A	329	G	O4'-C1'-N9	-5.00	104.20	108.20
1	1A	1075	C	C6-N1-C2	-5.00	118.30	120.30
1	1A	2489	G	N3-C4-N9	5.00	129.00	126.00
54	1w	29	G	C8-N9-C4	5.00	108.40	106.40
32	2a	748	C	P-O3'-C3'	5.00	125.70	119.70

There are no chirality outliers.

All (8) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	14	67	TYR	Peptide
15	1T	128	GLU	Peptide
21	1Z	136	PHE	Peptide
33	1b	122	PHE	Peptide
47	1p	4	ILE	Peptide
26	24	67	TYR	Peptide
40	2i	20	ARG	Peptide
44	2m	105	THR	Peptide

5.2 Too-close contacts

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

5.3 Torsion angles

5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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%)	257 (94%)	14 (5%)	2 (1%)	19	38
3	2D	273/276 (99%)	257 (94%)	15 (6%)	1 (0%)	30	52
4	1E	202/206 (98%)	188 (93%)	12 (6%)	2 (1%)	13	29
4	2E	202/206 (98%)	189 (94%)	11 (5%)	2 (1%)	13	29
5	1F	201/210 (96%)	193 (96%)	7 (4%)	1 (0%)	25	47
5	2F	201/210 (96%)	184 (92%)	13 (6%)	4 (2%)	6	12
6	1G	179/182 (98%)	163 (91%)	14 (8%)	2 (1%)	12	26
6	2G	179/182 (98%)	151 (84%)	24 (13%)	4 (2%)	5	10
7	1H	172/180 (96%)	162 (94%)	9 (5%)	1 (1%)	22	43
7	2H	172/180 (96%)	151 (88%)	17 (10%)	4 (2%)	5	10
8	1I	144/148 (97%)	120 (83%)	20 (14%)	4 (3%)	4	7
8	2I	144/148 (97%)	120 (83%)	22 (15%)	2 (1%)	9	19
9	1N	138/140 (99%)	133 (96%)	3 (2%)	2 (1%)	9	19
9	2N	138/140 (99%)	129 (94%)	9 (6%)	0	100	100
10	1O	120/122 (98%)	111 (92%)	9 (8%)	0	100	100
10	2O	120/122 (98%)	110 (92%)	9 (8%)	1 (1%)	16	34
11	1P	147/150 (98%)	133 (90%)	12 (8%)	2 (1%)	9	19
11	2P	147/150 (98%)	133 (90%)	11 (8%)	3 (2%)	6	12
12	1Q	139/141 (99%)	127 (91%)	12 (9%)	0	100	100
12	2Q	139/141 (99%)	124 (89%)	13 (9%)	2 (1%)	9	19
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
13	2R	116/118 (98%)	106 (91%)	10 (9%)	0	100 100
14	1S	108/112 (96%)	97 (90%)	11 (10%)	0	100 100
14	2S	108/112 (96%)	97 (90%)	8 (7%)	3 (3%)	4 7
15	1T	129/146 (88%)	119 (92%)	7 (5%)	3 (2%)	5 10
15	2T	129/146 (88%)	119 (92%)	10 (8%)	0	100 100
16	1U	114/118 (97%)	114 (100%)	0	0	100 100
16	2U	114/118 (97%)	112 (98%)	2 (2%)	0	100 100
17	1V	99/101 (98%)	94 (95%)	3 (3%)	2 (2%)	6 12
17	2V	99/101 (98%)	91 (92%)	6 (6%)	2 (2%)	6 12
18	1W	110/113 (97%)	108 (98%)	2 (2%)	0	100 100
18	2W	110/113 (97%)	105 (96%)	5 (4%)	0	100 100
19	1X	93/96 (97%)	89 (96%)	3 (3%)	1 (1%)	12 26
19	2X	93/96 (97%)	85 (91%)	7 (8%)	1 (1%)	12 26
20	1Y	105/110 (96%)	97 (92%)	7 (7%)	1 (1%)	13 29
20	2Y	105/110 (96%)	98 (93%)	6 (6%)	1 (1%)	13 29
21	1Z	148/206 (72%)	131 (88%)	14 (10%)	3 (2%)	6 12
21	2Z	156/206 (76%)	130 (83%)	22 (14%)	4 (3%)	4 7
22	10	81/85 (95%)	77 (95%)	3 (4%)	1 (1%)	11 24
22	20	81/85 (95%)	77 (95%)	3 (4%)	1 (1%)	11 24
23	11	95/98 (97%)	90 (95%)	4 (4%)	1 (1%)	12 26
23	21	95/98 (97%)	92 (97%)	3 (3%)	0	100 100
24	12	68/72 (94%)	66 (97%)	1 (2%)	1 (2%)	8 18
24	22	68/72 (94%)	66 (97%)	2 (3%)	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	52 (91%)	5 (9%)	0	100 100
26	14	67/71 (94%)	51 (76%)	10 (15%)	6 (9%)	0 0
26	24	67/71 (94%)	48 (72%)	12 (18%)	7 (10%)	0 0
27	15	57/60 (95%)	53 (93%)	4 (7%)	0	100 100
27	25	57/60 (95%)	51 (90%)	6 (10%)	0	100 100
28	16	51/54 (94%)	48 (94%)	3 (6%)	0	100 100
28	26	51/54 (94%)	47 (92%)	4 (8%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
29	17	46/49 (94%)	46 (100%)	0	0	100 100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	58 (94%)	3 (5%)	1 (2%)	8 17
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%)	183 (80%)	32 (14%)	14 (6%)	1 1
33	2b	229/256 (90%)	185 (81%)	29 (13%)	15 (7%)	1 1
34	1c	204/239 (85%)	185 (91%)	17 (8%)	2 (1%)	13 29
34	2c	204/239 (85%)	162 (79%)	32 (16%)	10 (5%)	2 2
35	1d	206/209 (99%)	184 (89%)	19 (9%)	3 (2%)	8 18
35	2d	206/209 (99%)	184 (89%)	20 (10%)	2 (1%)	13 29
36	1e	146/162 (90%)	133 (91%)	8 (6%)	5 (3%)	3 5
36	2e	146/162 (90%)	128 (88%)	15 (10%)	3 (2%)	5 11
37	1f	98/101 (97%)	93 (95%)	4 (4%)	1 (1%)	13 29
37	2f	98/101 (97%)	95 (97%)	3 (3%)	0	100 100
38	1g	153/156 (98%)	136 (89%)	14 (9%)	3 (2%)	6 12
38	2g	153/156 (98%)	130 (85%)	15 (10%)	8 (5%)	1 2
39	1h	135/138 (98%)	121 (90%)	11 (8%)	3 (2%)	5 10
39	2h	135/138 (98%)	124 (92%)	9 (7%)	2 (2%)	8 18
40	1i	125/128 (98%)	105 (84%)	17 (14%)	3 (2%)	5 9
40	2i	125/128 (98%)	103 (82%)	21 (17%)	1 (1%)	16 34
41	1j	95/105 (90%)	81 (85%)	8 (8%)	6 (6%)	1 1
41	2j	94/105 (90%)	74 (79%)	15 (16%)	5 (5%)	1 1
42	1k	112/129 (87%)	100 (89%)	8 (7%)	4 (4%)	3 4
42	2k	112/129 (87%)	99 (88%)	9 (8%)	4 (4%)	3 4
43	1l	119/132 (90%)	112 (94%)	7 (6%)	0	100 100
43	2l	119/132 (90%)	108 (91%)	9 (8%)	2 (2%)	7 16
44	1m	123/126 (98%)	110 (89%)	11 (9%)	2 (2%)	8 17
44	2m	120/126 (95%)	100 (83%)	16 (13%)	4 (3%)	3 5
45	1n	58/61 (95%)	49 (84%)	8 (14%)	1 (2%)	7 16

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
45	2n	58/61 (95%)	50 (86%)	6 (10%)	2 (3%)	3 5
46	1o	86/89 (97%)	78 (91%)	7 (8%)	1 (1%)	11 24
46	2o	86/89 (97%)	82 (95%)	3 (4%)	1 (1%)	11 24
47	1p	80/88 (91%)	71 (89%)	8 (10%)	1 (1%)	10 21
47	2p	80/88 (91%)	71 (89%)	8 (10%)	1 (1%)	10 21
48	1q	97/105 (92%)	90 (93%)	7 (7%)	0	100 100
48	2q	97/105 (92%)	89 (92%)	7 (7%)	1 (1%)	13 29
49	1r	66/88 (75%)	57 (86%)	8 (12%)	1 (2%)	8 18
49	2r	66/88 (75%)	63 (96%)	3 (4%)	0	100 100
50	1s	81/93 (87%)	70 (86%)	6 (7%)	5 (6%)	1 1
50	2s	81/93 (87%)	67 (83%)	11 (14%)	3 (4%)	2 4
51	1t	94/106 (89%)	84 (89%)	6 (6%)	4 (4%)	2 3
51	2t	94/106 (89%)	82 (87%)	8 (8%)	4 (4%)	2 3
52	1u	21/27 (78%)	19 (90%)	2 (10%)	0	100 100
52	2u	21/27 (78%)	19 (90%)	2 (10%)	0	100 100
57	1z	15/17 (88%)	13 (87%)	2 (13%)	0	100 100
57	2z	15/17 (88%)	10 (67%)	5 (33%)	0	100 100
All	All	11402/12162 (94%)	10291 (90%)	906 (8%)	205 (2%)	7 14

All (205) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
6	1G	50	ALA
15	1T	55	ASN
23	11	3	LYS
33	1b	8	LYS
33	1b	17	PHE
35	1d	173	TRP
38	1g	35	LYS
42	1k	89	ALA
44	1m	67	GLU
50	1s	24	ALA
5	2F	130	ALA
11	2P	90	ARG
21	2Z	52	SER

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Mol	Chain	Res	Type
21	2Z	146	ILE
33	2b	9	GLU
33	2b	17	PHE
33	2b	123	ALA
38	2g	7	ALA
38	2g	55	GLY
38	2g	80	VAL
41	2j	79	ARG
42	2k	49	GLY
51	2t	68	LYS
51	2t	95	ALA
3	1D	3	VAL
8	1I	34	GLY
11	1P	93	GLY
15	1T	37	GLY
17	1V	79	VAL
19	1X	93	GLU
21	1Z	53	ILE
26	14	44	THR
26	14	45	GLY
26	14	47	GLN
26	14	49	PHE
26	14	59	PHE
26	14	62	ARG
33	1b	31	TYR
34	1c	79	ARG
35	1d	172	PRO
36	1e	63	ARG
36	1e	85	GLY
38	1g	55	GLY
39	1h	54	ASP
41	1j	79	ARG
49	1r	54	ARG
51	1t	47	GLY
51	1t	100	ILE
5	2F	17	ARG
6	2G	28	VAL
6	2G	51	ARG
11	2P	39	LYS
17	2V	27	ALA
17	2V	79	VAL
19	2X	93	GLU

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Mol	Chain	Res	Type
26	24	46	GLN
26	24	47	GLN
26	24	61	ARG
33	2b	10	LEU
33	2b	74	LYS
33	2b	121	LEU
34	2c	42	LEU
34	2c	43	LEU
34	2c	95	THR
38	2g	52	GLU
40	2i	11	LYS
41	2j	32	ALA
44	2m	11	ARG
44	2m	38	GLY
44	2m	67	GLU
48	2q	68	ARG
3	1D	31	LYS
4	1E	178	GLU
6	1G	84	LYS
7	1H	126	PRO
8	1I	42	SER
15	1T	118	ARG
17	1V	43	GLU
21	1Z	156	LYS
33	1b	22	LYS
33	1b	106	LYS
33	1b	126	GLU
33	1b	155	LEU
36	1e	21	ALA
36	1e	86	ALA
40	1i	56	LEU
42	1k	90	GLY
44	1m	106	ASN
45	1n	58	LYS
47	1p	75	ARG
50	1s	25	LYS
50	1s	26	GLY
50	1s	27	GLU
3	2D	150	LYS
4	2E	52	LEU
7	2H	126	PRO
11	2P	122	PRO

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Mol	Chain	Res	Type
14	2S	84	GLN
21	2Z	51	ALA
26	24	49	PHE
30	28	51	ALA
33	2b	20	GLU
33	2b	226	ARG
34	2c	38	ARG
34	2c	41	GLY
34	2c	181	ASN
46	2o	88	ARG
50	2s	9	VAL
50	2s	73	GLU
4	1E	52	LEU
8	1I	69	LYS
8	1I	135	GLU
24	12	69	ARG
33	1b	10	LEU
33	1b	20	GLU
33	1b	63	MET
33	1b	83	MET
33	1b	84	GLU
33	1b	231	GLU
34	1c	144	SER
36	1e	69	VAL
37	1f	19	LEU
40	1i	127	LYS
41	1j	22	LYS
5	2F	18	ARG
5	2F	21	ALA
6	2G	43	LEU
7	2H	58	GLU
8	2I	40	THR
14	2S	94	TYR
26	24	48	ARG
26	24	65	ASP
33	2b	125	PRO
34	2c	47	LEU
34	2c	79	ARG
34	2c	91	LEU
34	2c	179	ARG
36	2e	37	ARG
38	2g	4	ARG

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Mol	Chain	Res	Type
38	2g	33	ASP
41	2j	51	ARG
42	2k	54	ARG
42	2k	117	ASN
43	2l	51	ALA
43	2l	91	LYS
45	2n	44	LEU
50	2s	81	ARG
51	2t	10	LEU
9	1N	2	LYS
9	1N	23	LEU
22	10	73	GLY
41	1j	21	GLN
41	1j	78	ASN
51	1t	89	ARG
4	2E	17	ASP
8	2I	135	GLU
12	2Q	16	ARG
20	2Y	54	LYS
33	2b	120	ALA
33	2b	122	PHE
36	2e	73	ASN
36	2e	96	PRO
41	2j	77	PRO
47	2p	66	PRO
46	1o	23	GLY
50	1s	83	HIS
51	1t	102	GLY
10	2O	119	PRO
12	2Q	15	GLY
22	20	73	GLY
26	24	45	GLY
33	2b	21	ARG
33	2b	131	PRO
35	2d	159	ARG
39	2h	22	GLU
42	2k	66	LEU
45	2n	14	PRO
35	1d	142	PRO
42	1k	35	PRO
14	2S	96	GLY
33	2b	231	GLU

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Mol	Chain	Res	Type
39	2h	73	ASP
20	1Y	103	GLY
21	1Z	120	ILE
21	2Z	165	VAL
38	2g	17	VAL
38	2g	58	PRO
41	2j	91	PRO
11	1P	47	ASP
39	1h	51	VAL
41	1j	39	PRO
42	1k	49	GLY
7	2H	10	PRO
7	2H	92	ILE
40	1i	24	GLY
41	1j	77	PRO
6	2G	109	VAL
35	2d	171	GLY
44	2m	41	PRO
38	1g	80	VAL
39	1h	73	ASP
33	2b	80	ILE
51	2t	98	PRO
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%)	203 (94%)	12 (6%)	17 38
3	2D	215/218 (99%)	201 (94%)	14 (6%)	14 31
4	1E	164/166 (99%)	157 (96%)	7 (4%)	25 49
4	2E	164/166 (99%)	155 (94%)	9 (6%)	18 38
5	1F	160/166 (96%)	144 (90%)	16 (10%)	6 13
5	2F	159/166 (96%)	151 (95%)	8 (5%)	20 43

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
6	1G	143/156 (92%)	129 (90%)	14 (10%)	6 13
6	2G	143/156 (92%)	126 (88%)	17 (12%)	4 8
7	1H	144/148 (97%)	133 (92%)	11 (8%)	11 23
7	2H	144/148 (97%)	130 (90%)	14 (10%)	6 14
8	1I	113/124 (91%)	94 (83%)	19 (17%)	1 3
8	2I	105/124 (85%)	85 (81%)	20 (19%)	1 2
9	1N	118/119 (99%)	107 (91%)	11 (9%)	7 15
9	2N	118/119 (99%)	108 (92%)	10 (8%)	8 18
10	1O	100/100 (100%)	97 (97%)	3 (3%)	36 63
10	2O	100/100 (100%)	94 (94%)	6 (6%)	16 35
11	1P	115/116 (99%)	107 (93%)	8 (7%)	12 27
11	2P	115/116 (99%)	110 (96%)	5 (4%)	25 49
12	1Q	111/111 (100%)	108 (97%)	3 (3%)	40 66
12	2Q	111/111 (100%)	107 (96%)	4 (4%)	30 56
13	1R	101/101 (100%)	98 (97%)	3 (3%)	36 63
13	2R	101/101 (100%)	96 (95%)	5 (5%)	20 43
14	1S	86/88 (98%)	82 (95%)	4 (5%)	22 45
14	2S	85/88 (97%)	71 (84%)	14 (16%)	2 3
15	1T	115/127 (91%)	110 (96%)	5 (4%)	25 49
15	2T	113/127 (89%)	107 (95%)	6 (5%)	19 40
16	1U	93/94 (99%)	86 (92%)	7 (8%)	11 24
16	2U	93/94 (99%)	88 (95%)	5 (5%)	18 39
17	1V	80/82 (98%)	71 (89%)	9 (11%)	4 9
17	2V	80/82 (98%)	73 (91%)	7 (9%)	8 17
18	1W	90/92 (98%)	85 (94%)	5 (6%)	17 38
18	2W	90/92 (98%)	82 (91%)	8 (9%)	8 17
19	1X	77/78 (99%)	74 (96%)	3 (4%)	27 53
19	2X	77/78 (99%)	72 (94%)	5 (6%)	14 31
20	1Y	85/91 (93%)	79 (93%)	6 (7%)	12 26
20	2Y	85/91 (93%)	73 (86%)	12 (14%)	3 5
21	1Z	135/179 (75%)	124 (92%)	11 (8%)	9 20

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
21	2Z	137/179 (76%)	114 (83%)	23 (17%)	1 3
22	10	65/67 (97%)	62 (95%)	3 (5%)	23 46
22	20	65/67 (97%)	63 (97%)	2 (3%)	35 62
23	11	80/83 (96%)	76 (95%)	4 (5%)	20 43
23	21	80/83 (96%)	76 (95%)	4 (5%)	20 43
24	12	65/67 (97%)	59 (91%)	6 (9%)	7 15
24	22	65/67 (97%)	60 (92%)	5 (8%)	10 22
25	13	51/52 (98%)	47 (92%)	4 (8%)	10 22
25	23	50/52 (96%)	47 (94%)	3 (6%)	16 35
26	14	59/63 (94%)	52 (88%)	7 (12%)	4 8
26	24	53/63 (84%)	40 (76%)	13 (24%)	0 1
27	15	50/52 (96%)	46 (92%)	4 (8%)	10 21
27	25	50/52 (96%)	48 (96%)	2 (4%)	27 52
28	16	51/52 (98%)	48 (94%)	3 (6%)	16 35
28	26	50/52 (96%)	44 (88%)	6 (12%)	4 8
29	17	41/42 (98%)	37 (90%)	4 (10%)	6 13
29	27	41/42 (98%)	37 (90%)	4 (10%)	6 13
30	18	54/55 (98%)	50 (93%)	4 (7%)	11 24
30	28	54/55 (98%)	47 (87%)	7 (13%)	3 6
31	19	34/34 (100%)	31 (91%)	3 (9%)	8 17
31	29	34/34 (100%)	31 (91%)	3 (9%)	8 17
33	1b	192/220 (87%)	168 (88%)	24 (12%)	3 7
33	2b	187/220 (85%)	160 (86%)	27 (14%)	2 5
34	1c	142/188 (76%)	124 (87%)	18 (13%)	3 7
34	2c	140/188 (74%)	118 (84%)	22 (16%)	2 3
35	1d	169/181 (93%)	147 (87%)	22 (13%)	3 6
35	2d	173/181 (96%)	151 (87%)	22 (13%)	3 7
36	1e	113/123 (92%)	103 (91%)	10 (9%)	8 17
36	2e	114/123 (93%)	100 (88%)	14 (12%)	4 8
37	1f	84/90 (93%)	78 (93%)	6 (7%)	12 26
37	2f	85/90 (94%)	75 (88%)	10 (12%)	4 8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
38	1g	119/127 (94%)	100 (84%)	19 (16%)	2 3
38	2g	120/127 (94%)	107 (89%)	13 (11%)	5 10
39	1h	114/119 (96%)	110 (96%)	4 (4%)	31 57
39	2h	114/119 (96%)	100 (88%)	14 (12%)	4 8
40	1i	90/99 (91%)	79 (88%)	11 (12%)	4 8
40	2i	89/99 (90%)	74 (83%)	15 (17%)	1 3
41	1j	66/92 (72%)	56 (85%)	10 (15%)	2 4
41	2j	69/92 (75%)	61 (88%)	8 (12%)	4 9
42	1k	82/99 (83%)	71 (87%)	11 (13%)	3 6
42	2k	83/99 (84%)	77 (93%)	6 (7%)	12 26
43	1l	96/108 (89%)	93 (97%)	3 (3%)	35 62
43	2l	96/108 (89%)	91 (95%)	5 (5%)	19 41
44	1m	95/101 (94%)	81 (85%)	14 (15%)	2 4
44	2m	92/101 (91%)	82 (89%)	10 (11%)	5 10
45	1n	49/50 (98%)	45 (92%)	4 (8%)	9 20
45	2n	49/50 (98%)	42 (86%)	7 (14%)	2 5
46	1o	78/80 (98%)	75 (96%)	3 (4%)	28 54
46	2o	78/80 (98%)	72 (92%)	6 (8%)	10 22
47	1p	69/74 (93%)	59 (86%)	10 (14%)	2 4
47	2p	68/74 (92%)	59 (87%)	9 (13%)	3 6
48	1q	94/97 (97%)	87 (93%)	7 (7%)	11 24
48	2q	94/97 (97%)	86 (92%)	8 (8%)	8 18
49	1r	59/77 (77%)	54 (92%)	5 (8%)	8 18
49	2r	59/77 (77%)	56 (95%)	3 (5%)	20 42
50	1s	69/80 (86%)	63 (91%)	6 (9%)	8 17
50	2s	67/80 (84%)	57 (85%)	10 (15%)	2 4
51	1t	70/82 (85%)	62 (89%)	8 (11%)	4 9
51	2t	70/82 (85%)	62 (89%)	8 (11%)	4 9
52	1u	18/22 (82%)	15 (83%)	3 (17%)	2 3
52	2u	18/22 (82%)	17 (94%)	1 (6%)	17 38
57	1z	13/13 (100%)	10 (77%)	3 (23%)	0 1

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
57	2z	13/13 (100%)	8 (62%)	5 (38%)	0 0
All	All	9331/10090 (92%)	8467 (91%)	864 (9%)	7 15

All (864) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	4	LYS
3	1D	88	ARG
3	1D	99	ASP
3	1D	142	VAL
3	1D	154	LYS
3	1D	212	SER
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	264	LYS
3	1D	273	ARG
4	1E	2	LYS
4	1E	12	THR
4	1E	38	THR
4	1E	73	GLU
4	1E	92	THR
4	1E	93	VAL
4	1E	116	VAL
5	1F	33	LEU
5	1F	50	SER
5	1F	53	THR
5	1F	57	VAL
5	1F	60	SER
5	1F	70	THR
5	1F	74	ARG
5	1F	88	VAL
5	1F	106	ARG
5	1F	132	VAL
5	1F	140	LEU
5	1F	144	LYS
5	1F	162	LEU
5	1F	183	VAL
5	1F	192	LEU
5	1F	201	VAL
6	1G	5	VAL

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Mol	Chain	Res	Type
6	1G	7	LEU
6	1G	9	ARG
6	1G	31	VAL
6	1G	43	LEU
6	1G	79	ASN
6	1G	82	LEU
6	1G	136	ARG
6	1G	139	LEU
6	1G	140	ILE
6	1G	145	THR
6	1G	148	MET
6	1G	159	VAL
6	1G	181	ARG
7	1H	2	SER
7	1H	37	VAL
7	1H	51	ARG
7	1H	56	SER
7	1H	72	ILE
7	1H	115	VAL
7	1H	122	THR
7	1H	124	GLU
7	1H	130	ARG
7	1H	149	ARG
7	1H	169	VAL
8	1I	20	ASP
8	1I	38	LEU
8	1I	47	LEU
8	1I	52	ARG
8	1I	54	GLN
8	1I	61	ARG
8	1I	75	LEU
8	1I	77	LEU
8	1I	81	VAL
8	1I	87	LYS
8	1I	92	VAL
8	1I	93	THR
8	1I	101	LEU
8	1I	103	ARG
8	1I	108	THR
8	1I	109	ILE
8	1I	110	ASP
8	1I	129	THR

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Mol	Chain	Res	Type
8	1I	144	VAL
9	1N	1	MET
9	1N	9	VAL
9	1N	37	LYS
9	1N	48	MET
9	1N	62	VAL
9	1N	68	GLU
9	1N	96	GLU
9	1N	112	LEU
9	1N	120	LEU
9	1N	121	LYS
9	1N	134	ARG
10	1O	42	SER
10	1O	47	ILE
10	1O	69	ILE
11	1P	1	MET
11	1P	94	GLU
11	1P	95	VAL
11	1P	98	GLU
11	1P	99	LEU
11	1P	125	VAL
11	1P	133	SER
11	1P	148	LEU
12	1Q	21	THR
12	1Q	22	LYS
12	1Q	109	VAL
13	1R	36	THR
13	1R	67	LEU
13	1R	114	VAL
14	1S	8	GLU
14	1S	25	ARG
14	1S	69	VAL
14	1S	73	LEU
15	1T	36	GLU
15	1T	82	LEU
15	1T	85	LYS
15	1T	96	ARG
15	1T	128	GLU
16	1U	5	LYS
16	1U	8	VAL
16	1U	31	SER
16	1U	60	LEU

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Mol	Chain	Res	Type
16	1U	74	LEU
16	1U	77	SER
16	1U	95	LEU
17	1V	14	VAL
17	1V	15	GLU
17	1V	28	GLU
17	1V	32	THR
17	1V	45	THR
17	1V	56	SER
17	1V	61	VAL
17	1V	79	VAL
17	1V	100	ARG
18	1W	4	LYS
18	1W	11	ARG
18	1W	68	ARG
18	1W	90	ARG
18	1W	92	ARG
19	1X	68	ARG
19	1X	88	LYS
19	1X	92	LEU
20	1Y	1	MET
20	1Y	7	VAL
20	1Y	21	LYS
20	1Y	90	LEU
20	1Y	91	GLU
20	1Y	99	CYS
21	1Z	31	ARG
21	1Z	52	SER
21	1Z	53	ILE
21	1Z	72	ARG
21	1Z	94	GLU
21	1Z	124	ILE
21	1Z	136	PHE
21	1Z	154	ASP
21	1Z	162	GLU
21	1Z	170	THR
21	1Z	171	ILE
22	10	27	GLU
22	10	49	LYS
22	10	81	VAL
23	11	13	ILE
23	11	40	ARG

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Mol	Chain	Res	Type
23	11	57	GLU
23	11	83	GLU
24	12	4	SER
24	12	19	VAL
24	12	30	ARG
24	12	40	SER
24	12	53	LEU
24	12	70	GLN
25	13	17	LYS
25	13	23	LEU
25	13	37	LEU
25	13	54	VAL
26	14	1	MET
26	14	9	LEU
26	14	33	VAL
26	14	49	PHE
26	14	53	GLU
26	14	58	ARG
26	14	59	PHE
27	15	6	VAL
27	15	55	ARG
27	15	57	VAL
27	15	58	LEU
28	16	7	ILE
28	16	14	THR
28	16	19	ARG
29	17	1	MET
29	17	43	THR
29	17	46	VAL
29	17	48	LYS
30	18	31	HIS
30	18	34	TRP
30	18	37	SER
30	18	46	ARG
31	19	4	ARG
31	19	11	CYS
31	19	18	ARG
33	1b	7	VAL
33	1b	12	GLU
33	1b	16	HIS
33	1b	23	ARG
33	1b	24	TRP

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Mol	Chain	Res	Type
33	1b	45	GLN
33	1b	54	THR
33	1b	56	ARG
33	1b	67	THR
33	1b	69	LEU
33	1b	73	THR
33	1b	80	ILE
33	1b	83	MET
33	1b	96	ARG
33	1b	101	MET
33	1b	107	THR
33	1b	121	LEU
33	1b	127	ILE
33	1b	128	GLU
33	1b	142	LEU
33	1b	185	ILE
33	1b	208	ILE
33	1b	212	GLN
33	1b	224	GLN
34	1c	3	ASN
34	1c	15	THR
34	1c	29	TYR
34	1c	32	LEU
34	1c	40	ARG
34	1c	45	LYS
34	1c	49	SER
34	1c	70	VAL
34	1c	72	LYS
34	1c	82	GLU
34	1c	98	ASN
34	1c	119	ARG
34	1c	131	ARG
34	1c	154	SER
34	1c	165	THR
34	1c	179	ARG
34	1c	182	ILE
34	1c	195	VAL
35	1d	3	ARG
35	1d	19	LEU
35	1d	31	CYS
35	1d	59	ARG
35	1d	73	ARG

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Mol	Chain	Res	Type
35	1d	83	SER
35	1d	115	ARG
35	1d	119	GLN
35	1d	122	ARG
35	1d	127	THR
35	1d	134	ASP
35	1d	135	LEU
35	1d	140	VAL
35	1d	157	LEU
35	1d	174	LEU
35	1d	175	SER
35	1d	177	ASP
35	1d	188	LEU
35	1d	190	ASP
35	1d	193	ASP
35	1d	194	LEU
35	1d	208	SER
36	1e	8	GLU
36	1e	10	MET
36	1e	12	LEU
36	1e	24	ARG
36	1e	41	VAL
36	1e	51	VAL
36	1e	53	LEU
36	1e	63	ARG
36	1e	67	VAL
36	1e	131	ILE
37	1f	1	MET
37	1f	10	LEU
37	1f	39	LYS
37	1f	54	LYS
37	1f	70	ASP
37	1f	78	GLU
38	1g	6	ARG
38	1g	12	LEU
38	1g	31	MET
38	1g	32	ARG
38	1g	50	ILE
38	1g	57	GLU
38	1g	59	LEU
38	1g	61	VAL
38	1g	63	LYS

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Mol	Chain	Res	Type
38	1g	72	ARG
38	1g	80	VAL
38	1g	85	TYR
38	1g	90	GLU
38	1g	91	VAL
38	1g	98	SER
38	1g	99	LEU
38	1g	104	LEU
38	1g	110	GLN
38	1g	114	ARG
39	1h	25	ASP
39	1h	51	VAL
39	1h	60	ARG
39	1h	107	LEU
40	1i	23	ASN
40	1i	54	ASP
40	1i	66	ARG
40	1i	86	VAL
40	1i	88	TYR
40	1i	96	LEU
40	1i	103	THR
40	1i	108	VAL
40	1i	111	ARG
40	1i	124	GLN
40	1i	128	ARG
41	1j	8	LEU
41	1j	9	ARG
41	1j	13	HIS
41	1j	23	ILE
41	1j	42	THR
41	1j	43	ARG
41	1j	51	ARG
41	1j	60	ARG
41	1j	66	ARG
41	1j	81	THR
42	1k	33	THR
42	1k	48	ILE
42	1k	83	ILE
42	1k	87	THR
42	1k	91	ARG
42	1k	104	GLN
42	1k	107	SER

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Mol	Chain	Res	Type
42	1k	109	VAL
42	1k	114	VAL
42	1k	120	ARG
42	1k	126	ARG
43	1l	11	VAL
43	1l	33	ARG
43	1l	89	ARG
44	1m	3	ARG
44	1m	4	ILE
44	1m	15	VAL
44	1m	43	THR
44	1m	45	VAL
44	1m	64	TRP
44	1m	67	GLU
44	1m	70	LEU
44	1m	73	GLU
44	1m	109	THR
44	1m	114	ARG
44	1m	121	LYS
44	1m	125	ARG
44	1m	126	LYS
45	1n	9	LYS
45	1n	18	VAL
45	1n	35	ARG
45	1n	60	SER
46	1o	3	ILE
46	1o	76	GLU
46	1o	87	ILE
47	1p	20	VAL
47	1p	27	LYS
47	1p	42	ARG
47	1p	45	THR
47	1p	61	SER
47	1p	62	VAL
47	1p	67	THR
47	1p	71	ARG
47	1p	72	ARG
47	1p	76	GLN
48	1q	5	VAL
48	1q	19	VAL
48	1q	48	GLU
48	1q	53	LEU

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Mol	Chain	Res	Type
48	1q	62	SER
48	1q	63	ARG
48	1q	79	SER
49	1r	26	LEU
49	1r	54	ARG
49	1r	66	LEU
49	1r	82	THR
49	1r	86	VAL
50	1s	4	SER
50	1s	5	LEU
50	1s	12	ASP
50	1s	17	GLU
50	1s	28	LYS
50	1s	41	VAL
51	1t	8	ARG
51	1t	10	LEU
51	1t	11	SER
51	1t	24	LEU
51	1t	37	SER
51	1t	62	LEU
51	1t	90	GLN
51	1t	91	LEU
52	1u	9	ARG
52	1u	15	ARG
52	1u	20	LYS
57	1z	2	LYS
57	1z	4	SER
57	1z	17	ARG
3	2D	12	SER
3	2D	38	LYS
3	2D	87	ASN
3	2D	88	ARG
3	2D	99	ASP
3	2D	142	VAL
3	2D	162	SER
3	2D	183	ARG
3	2D	211	ARG
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	270	ILE
3	2D	275	LYS

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Mol	Chain	Res	Type
4	2E	8	LYS
4	2E	12	THR
4	2E	27	LEU
4	2E	38	THR
4	2E	41	LYS
4	2E	73	GLU
4	2E	95	ILE
4	2E	116	VAL
4	2E	145	LYS
5	2F	12	LEU
5	2F	17	ARG
5	2F	53	THR
5	2F	57	VAL
5	2F	74	ARG
5	2F	149	ASP
5	2F	162	LEU
5	2F	192	LEU
6	2G	5	VAL
6	2G	18	GLU
6	2G	28	VAL
6	2G	43	LEU
6	2G	45	GLU
6	2G	49	ASP
6	2G	91	ARG
6	2G	107	LEU
6	2G	109	VAL
6	2G	111	LEU
6	2G	124	SER
6	2G	126	ASP
6	2G	130	ASN
6	2G	133	LEU
6	2G	140	ILE
6	2G	146	TYR
6	2G	165	THR
7	2H	7	LEU
7	2H	15	VAL
7	2H	24	VAL
7	2H	26	VAL
7	2H	37	VAL
7	2H	38	SER
7	2H	63	SER
7	2H	76	VAL

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Mol	Chain	Res	Type
7	2H	95	ARG
7	2H	103	LEU
7	2H	114	VAL
7	2H	129	THR
7	2H	136	ILE
7	2H	149	ARG
8	2I	6	LEU
8	2I	15	VAL
8	2I	20	ASP
8	2I	38	LEU
8	2I	43	ASN
8	2I	44	LEU
8	2I	54	GLN
8	2I	58	LEU
8	2I	68	LEU
8	2I	72	LEU
8	2I	77	LEU
8	2I	82	ARG
8	2I	85	GLU
8	2I	87	LYS
8	2I	92	VAL
8	2I	101	LEU
8	2I	108	THR
8	2I	117	GLU
8	2I	121	LYS
8	2I	127	VAL
9	2N	1	MET
9	2N	10	GLU
9	2N	25	ARG
9	2N	38	HIS
9	2N	48	MET
9	2N	58	ASP
9	2N	60	ILE
9	2N	62	VAL
9	2N	73	THR
9	2N	121	LYS
10	2O	13	ASN
10	2O	28	SER
10	2O	66	LYS
10	2O	69	ILE
10	2O	78	ARG
10	2O	113	LYS

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Mol	Chain	Res	Type
11	2P	71	VAL
11	2P	95	VAL
11	2P	98	GLU
11	2P	133	SER
11	2P	148	LEU
12	2Q	10	ARG
12	2Q	17	LEU
12	2Q	22	LYS
12	2Q	133	ARG
13	2R	6	SER
13	2R	15	SER
13	2R	36	THR
13	2R	102	GLU
13	2R	111	LEU
14	2S	15	ARG
14	2S	17	ARG
14	2S	21	THR
14	2S	26	LEU
14	2S	30	ARG
14	2S	36	TYR
14	2S	50	SER
14	2S	58	LEU
14	2S	63	THR
14	2S	64	GLU
14	2S	65	VAL
14	2S	83	LYS
14	2S	93	LYS
14	2S	110	LEU
15	2T	10	VAL
15	2T	40	THR
15	2T	63	VAL
15	2T	67	SER
15	2T	87	ASP
15	2T	107	ASP
16	2U	5	LYS
16	2U	8	VAL
16	2U	70	ARG
16	2U	74	LEU
16	2U	95	LEU
17	2V	15	GLU
17	2V	33	VAL
17	2V	38	LEU

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Mol	Chain	Res	Type
17	2V	53	GLU
17	2V	61	VAL
17	2V	79	VAL
17	2V	100	ARG
18	2W	1	MET
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	60	ASN
18	2W	90	ARG
18	2W	92	ARG
18	2W	106	ILE
19	2X	57	LEU
19	2X	72	LYS
19	2X	81	VAL
19	2X	88	LYS
19	2X	92	LEU
20	2Y	6	HIS
20	2Y	7	VAL
20	2Y	9	LYS
20	2Y	21	LYS
20	2Y	50	ARG
20	2Y	64	GLU
20	2Y	85	VAL
20	2Y	90	LEU
20	2Y	96	ILE
20	2Y	99	CYS
20	2Y	106	LEU
20	2Y	107	ASP
21	2Z	6	LYS
21	2Z	16	SER
21	2Z	19	ARG
21	2Z	28	MET
21	2Z	33	LEU
21	2Z	36	LYS
21	2Z	41	LEU
21	2Z	42	VAL
21	2Z	54	HIS
21	2Z	63	ASP
21	2Z	76	LEU
21	2Z	90	VAL
21	2Z	91	LEU

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Mol	Chain	Res	Type
21	2Z	102	LEU
21	2Z	126	VAL
21	2Z	128	VAL
21	2Z	129	SER
21	2Z	131	ARG
21	2Z	137	ILE
21	2Z	144	LEU
21	2Z	154	ASP
21	2Z	171	ILE
21	2Z	174	VAL
22	20	9	SER
22	20	11	ARG
23	21	26	ARG
23	21	40	ARG
23	21	83	GLU
23	21	85	LEU
24	22	30	ARG
24	22	38	GLN
24	22	53	LEU
24	22	55	ARG
24	22	70	GLN
25	23	31	LEU
25	23	37	LEU
25	23	57	GLU
26	24	1	MET
26	24	13	ARG
26	24	26	SER
26	24	27	THR
26	24	31	ILE
26	24	33	VAL
26	24	34	GLU
26	24	37	SER
26	24	49	PHE
26	24	59	PHE
26	24	60	GLN
26	24	61	ARG
26	24	63	TYR
27	25	6	VAL
27	25	55	ARG
28	26	7	ILE
28	26	9	LEU
28	26	13	CYS

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Mol	Chain	Res	Type
28	26	14	THR
28	26	32	ASN
28	26	40	CYS
29	27	41	ARG
29	27	43	THR
29	27	46	VAL
29	27	48	LYS
30	28	11	LYS
30	28	14	VAL
30	28	15	LYS
30	28	29	LYS
30	28	31	HIS
30	28	34	TRP
30	28	50	LEU
31	29	18	ARG
31	29	19	ARG
31	29	28	GLU
33	2b	8	LYS
33	2b	11	LEU
33	2b	16	HIS
33	2b	24	TRP
33	2b	30	ARG
33	2b	43	ASP
33	2b	45	GLN
33	2b	48	MET
33	2b	49	GLU
33	2b	55	PHE
33	2b	67	THR
33	2b	76	GLN
33	2b	80	ILE
33	2b	93	VAL
33	2b	111	ARG
33	2b	115	LEU
33	2b	117	GLU
33	2b	142	LEU
33	2b	150	SER
33	2b	163	PHE
33	2b	168	THR
33	2b	178	ARG
33	2b	185	ILE
33	2b	189	ASP
33	2b	190	THR

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Mol	Chain	Res	Type
33	2b	198	ASP
33	2b	208	ILE
34	2c	4	LYS
34	2c	15	THR
34	2c	16	ARG
34	2c	18	TRP
34	2c	19	GLU
34	2c	28	GLN
34	2c	34	LEU
34	2c	43	LEU
34	2c	45	LYS
34	2c	54	ARG
34	2c	77	ILE
34	2c	91	LEU
34	2c	118	GLN
34	2c	119	ARG
34	2c	152	ILE
34	2c	154	SER
34	2c	175	LEU
34	2c	182	ILE
34	2c	190	ARG
34	2c	192	THR
34	2c	198	VAL
34	2c	202	ILE
35	2d	8	VAL
35	2d	17	VAL
35	2d	19	LEU
35	2d	47	ARG
35	2d	49	ARG
35	2d	52	SER
35	2d	53	ASP
35	2d	58	LEU
35	2d	59	ARG
35	2d	78	LEU
35	2d	85	LYS
35	2d	86	LYS
35	2d	94	LEU
35	2d	106	TYR
35	2d	135	LEU
35	2d	141	ARG
35	2d	150	GLU
35	2d	157	LEU

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Mol	Chain	Res	Type
35	2d	162	LEU
35	2d	175	SER
35	2d	178	VAL
35	2d	188	LEU
36	2e	6	PHE
36	2e	9	LYS
36	2e	12	LEU
36	2e	13	ILE
36	2e	18	ARG
36	2e	24	ARG
36	2e	40	ARG
36	2e	41	VAL
36	2e	51	VAL
36	2e	55	VAL
36	2e	78	HIS
36	2e	126	ARG
36	2e	147	ASP
36	2e	152	ARG
37	2f	9	VAL
37	2f	10	LEU
37	2f	23	LYS
37	2f	31	GLU
37	2f	63	TYR
37	2f	70	ASP
37	2f	75	LEU
37	2f	81	ILE
37	2f	93	SER
37	2f	95	GLU
38	2g	9	VAL
38	2g	10	ARG
38	2g	37	ASN
38	2g	75	VAL
38	2g	78	ARG
38	2g	79	ARG
38	2g	85	TYR
38	2g	90	GLU
38	2g	94	ARG
38	2g	113	GLU
38	2g	115	ARG
38	2g	146	GLU
38	2g	154	TYR
39	2h	17	THR

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Mol	Chain	Res	Type
39	2h	23	SER
39	2h	26	VAL
39	2h	29	SER
39	2h	37	ARG
39	2h	42	GLU
39	2h	45	ILE
39	2h	48	TYR
39	2h	51	VAL
39	2h	52	ASP
39	2h	107	LEU
39	2h	120	THR
39	2h	133	LEU
39	2h	138	TRP
40	2i	7	THR
40	2i	25	LYS
40	2i	38	GLN
40	2i	51	ARG
40	2i	54	ASP
40	2i	58	HIS
40	2i	63	ILE
40	2i	64	THR
40	2i	65	VAL
40	2i	89	ASN
40	2i	102	LEU
40	2i	110	GLU
40	2i	113	LYS
40	2i	121	ARG
40	2i	128	ARG
41	2j	15	THR
41	2j	21	GLN
41	2j	34	VAL
41	2j	46	ARG
41	2j	67	THR
41	2j	81	THR
41	2j	89	ASP
41	2j	94	VAL
42	2k	14	VAL
42	2k	66	LEU
42	2k	87	THR
42	2k	105	VAL
42	2k	117	ASN
42	2k	126	ARG

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Mol	Chain	Res	Type
43	2l	18	VAL
43	2l	24	VAL
43	2l	36	VAL
43	2l	42	THR
43	2l	53	ARG
44	2m	4	ILE
44	2m	15	VAL
44	2m	19	LEU
44	2m	32	GLU
44	2m	47	ASP
44	2m	90	LEU
44	2m	92	HIS
44	2m	103	THR
44	2m	108	ARG
44	2m	114	ARG
45	2n	3	ARG
45	2n	17	LYS
45	2n	18	VAL
45	2n	29	ARG
45	2n	33	VAL
45	2n	53	LEU
45	2n	60	SER
46	2o	3	ILE
46	2o	14	GLU
46	2o	38	ARG
46	2o	76	GLU
46	2o	87	ILE
46	2o	88	ARG
47	2p	1	MET
47	2p	2	VAL
47	2p	8	ARG
47	2p	45	THR
47	2p	60	LEU
47	2p	62	VAL
47	2p	69	THR
47	2p	72	ARG
47	2p	74	LEU
48	2q	5	VAL
48	2q	36	ILE
48	2q	52	LYS
48	2q	53	LEU
48	2q	56	VAL

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Mol	Chain	Res	Type
48	2q	60	ILE
48	2q	63	ARG
48	2q	99	SER
49	2r	26	LEU
49	2r	47	THR
49	2r	82	THR
50	2s	12	ASP
50	2s	21	GLU
50	2s	22	LEU
50	2s	37	ARG
50	2s	43	GLU
50	2s	44	MET
50	2s	51	VAL
50	2s	67	VAL
50	2s	77	THR
50	2s	81	ARG
51	2t	9	ASN
51	2t	37	SER
51	2t	41	ILE
51	2t	45	GLN
51	2t	46	GLU
51	2t	50	GLU
51	2t	61	SER
51	2t	93	GLU
52	2u	15	ARG
57	2z	1	SER
57	2z	2	LYS
57	2z	10	LYS
57	2z	13	ARG
57	2z	17	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (123) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
4	1E	48	GLN
4	1E	143	ASN
4	1E	180	ASN
5	1F	8	GLN
5	1F	69	HIS
5	1F	204	ASN
6	1G	26	GLN

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Mol	Chain	Res	Type
8	1I	133	HIS
10	1O	3	GLN
12	1Q	12	GLN
12	1Q	57	HIS
13	1R	71	GLN
14	1S	68	GLN
15	1T	58	ASN
16	1U	81	HIS
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
21	1Z	54	HIS
21	1Z	73	GLN
21	1Z	151	HIS
22	10	3	HIS
25	13	32	GLN
27	15	4	HIS
33	1b	40	HIS
33	1b	45	GLN
33	1b	94	ASN
33	1b	110	GLN
33	1b	212	GLN
34	1c	6	HIS
34	1c	37	GLN
34	1c	104	GLN
34	1c	162	GLN
34	1c	181	ASN
35	1d	116	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
39	1h	82	HIS
40	1i	23	ASN
40	1i	31	GLN
40	1i	34	ASN
40	1i	89	ASN
40	1i	124	GLN
41	1j	56	HIS
43	1l	80	HIS

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Mol	Chain	Res	Type
43	1l	99	HIS
46	1o	9	GLN
46	1o	46	HIS
49	1r	63	GLN
50	1s	23	ASN
50	1s	47	HIS
50	1s	83	HIS
51	1t	90	GLN
3	2D	87	ASN
4	2E	48	GLN
5	2F	40	GLN
5	2F	69	HIS
8	2I	104	GLN
8	2I	133	HIS
10	2O	3	GLN
10	2O	5	GLN
11	2P	27	HIS
12	2Q	12	GLN
12	2Q	57	HIS
12	2Q	123	HIS
14	2S	38	GLN
16	2U	94	ASN
18	2W	60	ASN
19	2X	31	HIS
21	2Z	34	ASN
21	2Z	55	HIS
21	2Z	73	GLN
21	2Z	132	ASN
22	20	35	ASN
25	23	32	GLN
26	24	46	GLN
33	2b	37	ASN
33	2b	45	GLN
33	2b	76	GLN
33	2b	94	ASN
33	2b	95	GLN
33	2b	146	GLN
33	2b	224	GLN
34	2c	6	HIS
34	2c	118	GLN
34	2c	162	GLN
34	2c	181	ASN

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Mol	Chain	Res	Type
35	2d	77	ASN
35	2d	116	GLN
35	2d	125	HIS
36	2e	141	GLN
37	2f	100	ASN
38	2g	37	ASN
38	2g	86	GLN
40	2i	3	GLN
40	2i	31	GLN
40	2i	89	ASN
41	2j	13	HIS
41	2j	33	GLN
41	2j	62	HIS
42	2k	22	HIS
42	2k	38	ASN
42	2k	104	GLN
42	2k	116	HIS
43	2l	99	HIS
44	2m	40	ASN
44	2m	92	HIS
45	2n	49	HIS
47	2p	16	HIS
48	2q	93	GLN
49	2r	63	GLN
50	2s	14	HIS
50	2s	23	ASN
50	2s	47	HIS
50	2s	69	HIS
50	2s	83	HIS
51	2t	18	GLN
51	2t	75	ASN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2863/2915 (98%)	474 (16%)	35 (1%)
1	2A	2790/2915 (95%)	481 (17%)	30 (1%)
2	1B	119/121 (98%)	12 (10%)	0
2	2B	118/121 (97%)	19 (16%)	0
32	1a	1494/1521 (98%)	234 (15%)	0
32	2a	1498/1521 (98%)	261 (17%)	0

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
53	1v	12/24 (50%)	3 (25%)	0
53	2v	12/24 (50%)	1 (8%)	0
54	1w	71/76 (93%)	16 (22%)	0
54	2w	67/76 (88%)	22 (32%)	0
55	1x	75/77 (97%)	11 (14%)	0
55	2x	75/77 (97%)	11 (14%)	0
56	1y	71/76 (93%)	24 (33%)	0
56	2y	69/76 (90%)	28 (40%)	0
All	All	9334/9620 (97%)	1597 (17%)	65 (0%)

All (1597) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	11	G
1	1A	34	C
1	1A	45	C
1	1A	58	G
1	1A	69	C
1	1A	71	A
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	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	225	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

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Mol	Chain	Res	Type
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(B)	G
1	1A	272(I)	U
1	1A	275	G
1	1A	279	C
1	1A	287	C
1	1A	307	G
1	1A	311	A
1	1A	329	G
1	1A	330	A
1	1A	346	A
1	1A	352	G
1	1A	353	G
1	1A	363	G
1	1A	363(B)	G
1	1A	363(D)	G
1	1A	366	C
1	1A	380	U
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	428	A
1	1A	444	C
1	1A	448	U
1	1A	455	C
1	1A	456	C
1	1A	467	G
1	1A	481	G
1	1A	504	U
1	1A	505	A
1	1A	509	C
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G

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Mol	Chain	Res	Type
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	593	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	619	G
1	1A	627	A
1	1A	634	C
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(D)	C
1	1A	652(E)	G
1	1A	669	G
1	1A	686	G
1	1A	702	G
1	1A	725	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	774	A
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	789	A
1	1A	792	G
1	1A	794	G
1	1A	805	G
1	1A	811	U
1	1A	812	C
1	1A	819	A

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Mol	Chain	Res	Type
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	876	C
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
1	1A	887	A
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	893	C
1	1A	894	C
1	1A	896	A
1	1A	897	C
1	1A	899	A
1	1A	910	A
1	1A	932	G
1	1A	938	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	961	C
1	1A	963	U
1	1A	964	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1005	C
1	1A	1012	U
1	1A	1013	C
1	1A	1022	G
1	1A	1026	U
1	1A	1027	A

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Mol	Chain	Res	Type
1	1A	1033	U
1	1A	1038	C
1	1A	1040	C
1	1A	1041	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	1064	C
1	1A	1066	U
1	1A	1069	A
1	1A	1071	G
1	1A	1073	A
1	1A	1075	C
1	1A	1077	A
1	1A	1078	U
1	1A	1080	C
1	1A	1087	G
1	1A	1088	A
1	1A	1090	U
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	1109	C
1	1A	1110	G
1	1A	1112	G
1	1A	1115	G
1	1A	1116	C
1	1A	1128	A
1	1A	1135	C
1	1A	1136	G
1	1A	1169	G
1	1A	1171	G
1	1A	1173	G

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Mol	Chain	Res	Type
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1241	A
1	1A	1244	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1274	A
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1321	A
1	1A	1344	G
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1386	C
1	1A	1395	A
1	1A	1396	U
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1455	G
1	1A	1459	G
1	1A	1460	A
1	1A	1461	G
1	1A	1466	G
1	1A	1467	C
1	1A	1482	G
1	1A	1493	C

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Mol	Chain	Res	Type
1	1A	1494	A
1	1A	1499	C
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1523	U
1	1A	1525	G
1	1A	1541	G
1	1A	1542	A
1	1A	1543	C
1	1A	1554	A
1	1A	1558	A
1	1A	1559	G
1	1A	1569	A
1	1A	1578	U
1	1A	1580	A
1	1A	1581	G
1	1A	1582	C
1	1A	1584	C
1	1A	1586	A
1	1A	1587	A
1	1A	1608	A
1	1A	1609	A
1	1A	1617	C
1	1A	1647	G
1	1A	1648	C
1	1A	1664	A
1	1A	1674	G
1	1A	1700	A
1	1A	1701	A
1	1A	1703	G
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	1801	G

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Mol	Chain	Res	Type
1	1A	1816	G
1	1A	1817	G
1	1A	1828	G
1	1A	1829	A
1	1A	1846	G
1	1A	1847	A
1	1A	1848	A
1	1A	1878	G
1	1A	1889	A
1	1A	1890	A
1	1A	1900	A
1	1A	1906	G
1	1A	1927	A
1	1A	1929	G
1	1A	1930	G
1	1A	1931	U
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
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	2093	G
1	1A	2096	U
1	1A	2101	G

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Mol	Chain	Res	Type
1	1A	2107	C
1	1A	2113	U
1	1A	2116	G
1	1A	2118	U
1	1A	2119	A
1	1A	2120	G
1	1A	2127	G
1	1A	2129	C
1	1A	2131	G
1	1A	2132	U
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	2149	G
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	2163	C
1	1A	2165	G
1	1A	2166	G
1	1A	2167	U
1	1A	2171	A
1	1A	2172	U
1	1A	2173	A
1	1A	2180	U
1	1A	2183	C
1	1A	2184	G
1	1A	2186	G
1	1A	2189	U
1	1A	2190	G

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Mol	Chain	Res	Type
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2225	A
1	1A	2235	G
1	1A	2238	G
1	1A	2239	G
1	1A	2259	G
1	1A	2268	A
1	1A	2269	A
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2288	A
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2324	C
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2340	G
1	1A	2347	C
1	1A	2350	C
1	1A	2354	G
1	1A	2361	A
1	1A	2372	G
1	1A	2383	G
1	1A	2385	C
1	1A	2400	G
1	1A	2406	U
1	1A	2414	G
1	1A	2422	A
1	1A	2423	U
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A

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Mol	Chain	Res	Type
1	1A	2474	C
1	1A	2476	A
1	1A	2491	U
1	1A	2498	C
1	1A	2502	G
1	1A	2504	U
1	1A	2505	G
1	1A	2512	C
1	1A	2518	A
1	1A	2520	C
1	1A	2524	G
1	1A	2529	G
1	1A	2550	G
1	1A	2554	U
1	1A	2555	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2585	U
1	1A	2602	A
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2672	G
1	1A	2689	U
1	1A	2690	C
1	1A	2691	C
1	1A	2703	C
1	1A	2707	G
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	2736	G
1	1A	2752	C
1	1A	2758	A
1	1A	2765	A
1	1A	2766	G

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Mol	Chain	Res	Type
1	1A	2769	C
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2794	C
1	1A	2802	G
1	1A	2803	C
1	1A	2804	C
1	1A	2805	G
1	1A	2813	A
1	1A	2818	G
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	2872	G
1	1A	2876	G
1	1A	2880	C
1	1A	2882	A
1	1A	2883	A
1	1A	2892	A
1	1A	2894	G
1	1A	2895	U
2	1B	2	C
2	1B	10	C
2	1B	12	C
2	1B	13	A
2	1B	25	A
2	1B	42	C
2	1B	56	G
2	1B	66	A
2	1B	67	G
2	1B	73	A
2	1B	92	C
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	48	C

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Mol	Chain	Res	Type
32	1a	50	A
32	1a	51	A
32	1a	61	G
32	1a	68	G
32	1a	77	G
32	1a	79	G
32	1a	91	C
32	1a	93	G
32	1a	98	G
32	1a	99	U
32	1a	101	A
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	143	A
32	1a	161	A
32	1a	163	C
32	1a	164	U
32	1a	166	G
32	1a	174	C
32	1a	182	U
32	1a	189	G
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	222	U
32	1a	247	G
32	1a	251	G
32	1a	266	G
32	1a	267	C
32	1a	279	A
32	1a	289	G
32	1a	301	G

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Mol	Chain	Res	Type
32	1a	316	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	344	A
32	1a	345	C
32	1a	347	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	383	A
32	1a	384	G
32	1a	397	A
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	429	U
32	1a	439	A
32	1a	452	A
32	1a	457	C
32	1a	461	A
32	1a	470	C
32	1a	475	G
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	527	G7M
32	1a	531	U
32	1a	532	A
32	1a	533	A

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Mol	Chain	Res	Type
32	1a	534	U
32	1a	547	A
32	1a	559	A
32	1a	561	U
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	592	G
32	1a	599	C
32	1a	607	A
32	1a	630	G
32	1a	653	A
32	1a	665	A
32	1a	671	G
32	1a	672	U
32	1a	673	G
32	1a	688	G
32	1a	703	G
32	1a	723	U
32	1a	731	G
32	1a	749	C
32	1a	752	G
32	1a	755	G
32	1a	759	A
32	1a	777	A
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	870	U
32	1a	902	G
32	1a	913	A
32	1a	914	A
32	1a	916	G
32	1a	926	G
32	1a	927	G

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Mol	Chain	Res	Type
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
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	984	C
32	1a	991	U
32	1a	992	U
32	1a	993	G
32	1a	1000	U
32	1a	1003	G
32	1a	1005	A
32	1a	1006	C
32	1a	1009	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(B)	C
32	1a	1030(C)	G
32	1a	1031	G
32	1a	1039	C
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	1108	G
32	1a	1114	C

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Mol	Chain	Res	Type
32	1a	1123	A
32	1a	1124	G
32	1a	1132	C
32	1a	1134	G
32	1a	1135	U
32	1a	1137	C
32	1a	1138	G
32	1a	1139	G
32	1a	1140	C
32	1a	1146	A
32	1a	1152	A
32	1a	1159	U
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	1240	U
32	1a	1256	A
32	1a	1257	U
32	1a	1270	C
32	1a	1275	A
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
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
32	1a	1370	G

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Mol	Chain	Res	Type
32	1a	1381	U
32	1a	1397	C
32	1a	1419	G
32	1a	1441	G
32	1a	1442	G
32	1a	1446	U
32	1a	1447	A
32	1a	1457	G
32	1a	1469	G
32	1a	1487	G
32	1a	1491	G
32	1a	1492	A
32	1a	1494	G
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	16	U
54	1w	19	G
54	1w	20	U
54	1w	21	A
54	1w	23	A
54	1w	24	G
54	1w	25	C
54	1w	33	U
54	1w	34	G
54	1w	44	G
54	1w	45	U
54	1w	46	G7M
54	1w	47	U
54	1w	48	C
54	1w	73	A
54	1w	74	C
55	1x	2	G
55	1x	9	G
55	1x	13	C
55	1x	19	G

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Mol	Chain	Res	Type
55	1x	20	U
55	1x	21	A
55	1x	30	G
55	1x	47	U
55	1x	48	C
55	1x	49	G
55	1x	61	C
56	1y	5	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	22	G
56	1y	40	C
56	1y	43	C
56	1y	44	G
56	1y	45	U
56	1y	46	G7M
56	1y	47	U
56	1y	48	C
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	69	G
56	1y	70	G
56	1y	71	G
1	2A	12	U
1	2A	34	C
1	2A	35	G
1	2A	45	C
1	2A	48	G
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	79	G
1	2A	84	A

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Mol	Chain	Res	Type
1	2A	100	G
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	141	A
1	2A	157	U
1	2A	172	C
1	2A	173	G
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	233	A
1	2A	248	G
1	2A	264	C
1	2A	266	G
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
1	2A	272(B)	G
1	2A	274	G
1	2A	277	C
1	2A	278	A
1	2A	283	A
1	2A	311	A
1	2A	312	G
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	342	G

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Mol	Chain	Res	Type
1	2A	352	G
1	2A	357	A
1	2A	363(B)	G
1	2A	370	G
1	2A	386	G
1	2A	396	G
1	2A	399	G
1	2A	405	U
1	2A	406	G
1	2A	411	G
1	2A	421	U
1	2A	435	C
1	2A	443	A
1	2A	444	C
1	2A	445	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	481	G
1	2A	494	G
1	2A	505	A
1	2A	508	G
1	2A	509	C
1	2A	529	A
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	551	G
1	2A	556	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	602	G
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(A)	U
1	2A	614(B)	G

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Mol	Chain	Res	Type
1	2A	615	G
1	2A	616	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	652(E)	G
1	2A	669	G
1	2A	686	G
1	2A	701	G
1	2A	717	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	771	G
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	855	G
1	2A	856	C
1	2A	857	C
1	2A	859	G
1	2A	866	A
1	2A	874	G
1	2A	879	G
1	2A	880	G
1	2A	882	G
1	2A	883	G
1	2A	884	C
1	2A	885	C
1	2A	886	C

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Mol	Chain	Res	Type
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	897	C
1	2A	900	A
1	2A	901	A
1	2A	904	C
1	2A	910	A
1	2A	917	A
1	2A	931	G
1	2A	932	G
1	2A	938	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	1005	C
1	2A	1012	U
1	2A	1013	C
1	2A	1017	G
1	2A	1022	G
1	2A	1025	G
1	2A	1026	U
1	2A	1027	A
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1043	C
1	2A	1116	C
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G

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Mol	Chain	Res	Type
1	2A	1139	G
1	2A	1171	G
1	2A	1188	U
1	2A	1211	U
1	2A	1219	G
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	1345	C
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	1379	A
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1395	A
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
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	1455	G
1	2A	1460	A

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Mol	Chain	Res	Type
1	2A	1461	G
1	2A	1464	C
1	2A	1465	G
1	2A	1467	C
1	2A	1471	A
1	2A	1478	G
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	1542	A
1	2A	1543	C
1	2A	1545	A
1	2A	1547	C
1	2A	1554	A
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1582	C
1	2A	1584	C
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1648	C
1	2A	1653	G
1	2A	1654	A
1	2A	1664	A
1	2A	1667	G
1	2A	1674	G
1	2A	1680	U
1	2A	1696	G

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Mol	Chain	Res	Type
1	2A	1700	A
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1746	G
1	2A	1756	G
1	2A	1762	A
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	1816	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1839	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	1936	A
1	2A	1937	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A

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Mol	Chain	Res	Type
1	2A	2023	G
1	2A	2031	A
1	2A	2032	G
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	2063	C
1	2A	2069	G
1	2A	2099	U
1	2A	2104	G
1	2A	2111	C
1	2A	2112	G
1	2A	2115	G
1	2A	2116	G
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	2142	C
1	2A	2145	C
1	2A	2148	G
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2156	G
1	2A	2157	G
1	2A	2158	A

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Mol	Chain	Res	Type
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	2177	C
1	2A	2181	G
1	2A	2185	C
1	2A	2186	G
1	2A	2187	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	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2262	U
1	2A	2268	A
1	2A	2273	A
1	2A	2275	C
1	2A	2277	G
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
1	2A	2334	G
1	2A	2336	A
1	2A	2347	C
1	2A	2350	C

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Mol	Chain	Res	Type
1	2A	2354	G
1	2A	2355	C
1	2A	2366	A
1	2A	2376	A
1	2A	2383	G
1	2A	2385	C
1	2A	2389	G
1	2A	2396	G
1	2A	2403	C
1	2A	2406	U
1	2A	2410	G
1	2A	2419	U
1	2A	2424	C
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2431	U
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	2469	A
1	2A	2476	A
1	2A	2486	G
1	2A	2490	G
1	2A	2491	U
1	2A	2494	G
1	2A	2495	G
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2520	C
1	2A	2525	G
1	2A	2529	G
1	2A	2549	G
1	2A	2554	U
1	2A	2555	U

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Mol	Chain	Res	Type
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2585	U
1	2A	2602	A
1	2A	2605	PSU
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2630	G
1	2A	2666	C
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2744	G
1	2A	2748	A
1	2A	2751	G
1	2A	2752	C
1	2A	2758	A
1	2A	2760	C
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2793	G
1	2A	2794	C
1	2A	2802	G
1	2A	2803	C
1	2A	2807	G
1	2A	2808	U
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A

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Mol	Chain	Res	Type
1	2A	2839	G
1	2A	2872	G
1	2A	2875	C
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	9	G
2	2B	13	A
2	2B	34	U
2	2B	41	U
2	2B	42	C
2	2B	44	G
2	2B	45	A
2	2B	51	G
2	2B	53	A
2	2B	54	G
2	2B	56	G
2	2B	73	A
2	2B	74	U
2	2B	75	G
2	2B	88	C
2	2B	110	G
2	2B	111	G
2	2B	120	A
32	2a	9	G
32	2a	31	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	52	G
32	2a	65	U
32	2a	66	G
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	121	C
32	2a	131	C
32	2a	145	G
32	2a	146	G
32	2a	155	C
32	2a	163	C
32	2a	182	U
32	2a	189(F)	U
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	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	306	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
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	381	C
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G

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Mol	Chain	Res	Type
32	2a	418	C
32	2a	421	U
32	2a	429	U
32	2a	433	C
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	454	C
32	2a	470	C
32	2a	471	G
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	508	C
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	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	568	G
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	619	U
32	2a	630	G
32	2a	653	A
32	2a	657	G
32	2a	661	G
32	2a	665	A
32	2a	666	G
32	2a	673	G
32	2a	687	A

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Mol	Chain	Res	Type
32	2a	688	G
32	2a	695	A
32	2a	723	U
32	2a	731	G
32	2a	749	C
32	2a	755	G
32	2a	773	G
32	2a	774	G
32	2a	777	A
32	2a	787	A
32	2a	792	A
32	2a	793	U
32	2a	794	A
32	2a	808	C
32	2a	812	C
32	2a	817	C
32	2a	821	G
32	2a	827	U
32	2a	828	A
32	2a	833	U
32	2a	840	C
32	2a	841	U
32	2a	859	A
32	2a	874	G
32	2a	902	G
32	2a	914	A
32	2a	926	G
32	2a	927	G
32	2a	933	G
32	2a	934	C
32	2a	935	A
32	2a	936	C
32	2a	939	G
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	972	C

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Mol	Chain	Res	Type
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	982	U
32	2a	991	U
32	2a	993	G
32	2a	996	A
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	1017	G
32	2a	1019	C
32	2a	1020	U
32	2a	1022	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1031	G
32	2a	1035	A
32	2a	1036	G
32	2a	1037	C
32	2a	1039	C
32	2a	1040	U
32	2a	1041	A
32	2a	1042	G
32	2a	1044	A
32	2a	1045	C
32	2a	1053	G
32	2a	1064	G
32	2a	1065	U
32	2a	1066	C

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Mol	Chain	Res	Type
32	2a	1068	G
32	2a	1081	G
32	2a	1086	U
32	2a	1092	A
32	2a	1093	A
32	2a	1094	G
32	2a	1095	U
32	2a	1097	C
32	2a	1101	A
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
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	1147	C
32	2a	1150	U
32	2a	1152	A
32	2a	1155	G
32	2a	1157	A
32	2a	1158	C
32	2a	1159	U
32	2a	1163	C
32	2a	1174	G
32	2a	1181	G
32	2a	1182	G
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1200	C
32	2a	1201	A
32	2a	1202	G
32	2a	1213	A
32	2a	1214	C
32	2a	1227	A
32	2a	1238	A
32	2a	1240	U
32	2a	1256	A
32	2a	1257	U

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Mol	Chain	Res	Type
32	2a	1258	G
32	2a	1260	C
32	2a	1270	C
32	2a	1273	G
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1286	A
32	2a	1287	A
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G
32	2a	1319	A
32	2a	1346	A
32	2a	1347	G
32	2a	1363	C
32	2a	1378	C
32	2a	1394	A
32	2a	1398	A
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1491	G
32	2a	1492	A
32	2a	1497	G
32	2a	1504	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A
32	2a	1532	U
53	2v	24	A
54	2w	3	C
54	2w	7	A
54	2w	8	4SU
54	2w	11	C
54	2w	14	A

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Mol	Chain	Res	Type
54	2w	19	G
54	2w	22	G
54	2w	23	A
54	2w	44	G
54	2w	46	G7M
54	2w	47	U
54	2w	48	C
54	2w	53	G
54	2w	61	C
54	2w	65	G
54	2w	67	C
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	2	G
55	2x	9	G
55	2x	10	G
55	2x	13	C
55	2x	21	A
55	2x	37	A
55	2x	42	G
55	2x	44	A
55	2x	47	U
55	2x	53	G
55	2x	61	C
56	2y	2	C
56	2y	7	A
56	2y	11	C
56	2y	12	U
56	2y	15	G
56	2y	19	G
56	2y	23	A
56	2y	25	C
56	2y	27	G
56	2y	31	A
56	2y	34	G
56	2y	38	A
56	2y	40	C
56	2y	45	U

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Mol	Chain	Res	Type
56	2y	48	C
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	58	A
56	2y	59	U
56	2y	61	C
56	2y	65	G
56	2y	68	C
56	2y	69	G
56	2y	70	G

All (65) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	195	A
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	310	A
1	1A	548	A
1	1A	669	G
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	896	A
1	1A	960	A
1	1A	974	G
1	1A	1047	G
1	1A	1067	A
1	1A	1174	A
1	1A	1176	G
1	1A	1240	U
1	1A	1379	A
1	1A	1420	U

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Mol	Chain	Res	Type
1	1A	1508	A
1	1A	1608	A
1	1A	1762	A
1	1A	1992	G
1	1A	2183	C
1	1A	2286	A
1	1A	2406	U
1	1A	2430	A
1	1A	2439	A
1	1A	2629	A
1	1A	2689	U
1	2A	195	A
1	2A	196	A
1	2A	228	A
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	310	A
1	2A	528	A
1	2A	669	G
1	2A	752	A
1	2A	774	A
1	2A	827	U
1	2A	856	C
1	2A	900	A
1	2A	1142(A)	A
1	2A	1210	A
1	2A	1379	A
1	2A	1396	U
1	2A	1442	G
1	2A	1530	C
1	2A	1608	A
1	2A	1653	G
1	2A	1913	A
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	1,58	19,22,23	1.10	2 (10%)	25,31,34	1.81	5 (20%)
54	PSU	2w	39	54	18,21,22	1.41	2 (11%)	21,30,33	1.51	2 (9%)
56	PSU	2y	32	56	18,21,22	1.40	2 (11%)	21,30,33	1.92	3 (14%)
32	2MG	2a	1207	58,32	18,26,27	0.98	1 (5%)	16,38,41	1.58	3 (18%)
1	PSU	1A	2605	1,58	18,21,22	1.54	5 (27%)	21,30,33	1.96	5 (23%)
56	5MU	1y	54	56	19,22,23	1.58	4 (21%)	27,32,35	1.87	7 (25%)
54	F3N	2w	76	1	29,36,37	1.48	5 (17%)	28,51,54	1.44	1 (3%)
32	5MC	1a	1407	32	19,22,23	1.43	2 (10%)	26,32,35	1.07	4 (15%)
54	PSU	1w	55	54	18,21,22	1.39	2 (11%)	21,30,33	1.82	4 (19%)
1	5MU	1A	1915	1	19,22,23	1.39	4 (21%)	27,32,35	2.67	10 (37%)
1	5MU	1A	1939	1,58	19,22,23	1.70	6 (31%)	27,32,35	2.33	6 (22%)
32	MA6	1a	1518	32	19,26,27	1.10	2 (10%)	18,38,41	1.71	3 (16%)
55	5MU	1x	54	55	19,22,23	1.49	5 (26%)	27,32,35	2.04	6 (22%)
1	OMC	2A	1920	1	19,22,23	0.86	1 (5%)	25,31,34	1.11	2 (8%)
32	G7M	2a	527	58,32	20,26,27	1.16	1 (5%)	16,39,42	0.70	0
56	PSU	1y	39	56	18,21,22	1.55	2 (11%)	21,30,33	1.74	3 (14%)
56	MIA	2y	37	56	17,24,32	1.13	1 (5%)	16,35,47	1.31	2 (12%)
1	5MU	2A	1915	1	19,22,23	1.38	5 (26%)	27,32,35	2.43	6 (22%)
56	G7M	2y	46	56	20,26,27	1.52	2 (10%)	16,39,42	0.76	0
1	OMG	1A	2251	1,58,55	19,26,27	1.16	1 (5%)	21,38,41	1.17	3 (14%)
1	5MU	2A	1939	1,58	19,22,23	1.52	4 (21%)	27,32,35	2.31	7 (25%)
54	MIA	1w	37	54	24,31,32	2.27	2 (8%)	22,44,47	2.57	7 (31%)
43	0TD	2l	92	43	8,9,10	5.12	2 (25%)	6,11,13	2.48	1 (16%)
32	MA6	1a	1519	32	19,26,27	1.08	2 (10%)	18,38,41	1.82	3 (16%)
55	5MC	2x	32	55	19,22,23	1.57	3 (15%)	26,32,35	1.56	6 (23%)
56	MIA	1y	37	56	17,24,32	1.16	1 (5%)	16,35,47	1.48	1 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	M2G	1a	966	32	20,27,28	1.56	3 (15%)	19,40,43	1.25	2 (10%)
32	5MC	1a	1400	32	19,22,23	1.38	3 (15%)	26,32,35	1.34	4 (15%)
54	PSU	1w	32	54	18,21,22	1.35	3 (16%)	21,30,33	1.81	4 (19%)
32	MA6	2a	1518	32	19,26,27	0.98	2 (10%)	18,38,41	2.05	4 (22%)
55	PSU	1x	55	55	18,21,22	1.47	3 (16%)	21,30,33	1.78	4 (19%)
32	5MC	1a	1404	32	19,22,23	1.16	3 (15%)	26,32,35	1.25	3 (11%)
54	4SU	1w	8	54	18,21,22	1.89	4 (22%)	25,30,33	1.87	6 (24%)
32	MA6	2a	1519	32	19,26,27	1.04	2 (10%)	18,38,41	2.07	4 (22%)
55	4SU	2x	8	55	18,21,22	1.92	5 (27%)	25,30,33	1.18	3 (12%)
1	PSU	1A	1911	1	18,21,22	1.43	3 (16%)	21,30,33	2.04	3 (14%)
43	0TD	1l	92	43	8,9,10	3.92	2 (25%)	6,11,13	5.45	2 (33%)
54	G7M	1w	46	54	20,26,27	1.33	2 (10%)	16,39,42	0.64	0
1	5MC	2A	1942	1	19,22,23	1.20	3 (15%)	26,32,35	1.10	2 (7%)
1	5MC	1A	1962	1,58	19,22,23	1.90	4 (21%)	26,32,35	1.39	5 (19%)
1	2MA	2A	2503	1,58	17,25,26	1.05	1 (5%)	16,37,40	1.40	4 (25%)
54	PSU	1w	39	54	18,21,22	1.42	3 (16%)	21,30,33	2.03	4 (19%)
54	5MU	1w	54	54	19,22,23	1.48	4 (21%)	27,32,35	2.14	5 (18%)
55	31H	1x	76	58,55	27,34,35	1.20	3 (11%)	22,47,50	2.69	6 (27%)
1	PSU	2A	1911	1	18,21,22	1.44	2 (11%)	21,30,33	2.05	3 (14%)
32	PSU	2a	516	32	18,21,22	1.31	2 (11%)	21,30,33	2.06	5 (23%)
56	5MU	2y	54	56	19,22,23	1.56	3 (15%)	27,32,35	2.14	8 (29%)
55	5MC	1x	32	55	19,22,23	1.78	3 (15%)	26,32,35	1.44	3 (11%)
54	4SU	2w	8	54	18,21,22	1.84	4 (22%)	25,30,33	2.43	5 (20%)
32	4OC	2a	1402	32	20,23,24	0.82	0	25,32,35	0.93	1 (4%)
55	31H	2x	76	59,58,55	27,34,35	1.10	3 (11%)	22,47,50	3.58	6 (27%)
32	2MG	1a	1207	58,32	18,26,27	1.00	1 (5%)	16,38,41	1.47	3 (18%)
32	PSU	1a	516	32	18,21,22	1.46	3 (16%)	21,30,33	1.79	4 (19%)
1	OMC	1A	1920	1	19,22,23	0.80	0	25,31,34	1.08	2 (8%)
54	G7M	2w	46	54	20,26,27	1.16	1 (5%)	16,39,42	0.95	1 (6%)
32	5MC	1a	967	32	19,22,23	1.77	2 (10%)	26,32,35	1.29	2 (7%)
32	5MC	2a	967	32	19,22,23	1.59	2 (10%)	26,32,35	1.30	4 (15%)
56	4SU	2y	8	56,58	18,21,22	1.71	5 (27%)	25,30,33	2.10	5 (20%)
1	5MC	1A	1942	1,58	19,22,23	1.26	2 (10%)	26,32,35	1.50	5 (19%)
32	UR3	2a	1498	32	19,22,23	1.29	2 (10%)	26,32,35	1.84	5 (19%)
1	PSU	2A	2605	1	18,21,22	1.34	3 (16%)	21,30,33	2.28	4 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
56	PSU	2y	39	56	18,21,22	1.41	2 (11%)	21,30,33	1.58	3 (14%)
32	5MC	2a	1404	32	19,22,23	1.87	3 (15%)	26,32,35	1.21	4 (15%)
56	PSU	2y	55	56	18,21,22	1.43	2 (11%)	21,30,33	2.17	4 (19%)
1	2MA	1A	2503	1,58	17,25,26	1.11	2 (11%)	16,37,40	1.51	3 (18%)
32	4OC	1a	1402	32	20,23,24	0.76	0	25,32,35	1.20	4 (16%)
54	5MU	2w	54	54	19,22,23	1.22	3 (15%)	27,32,35	2.37	8 (29%)
55	5MU	2x	54	55	19,22,23	1.37	2 (10%)	27,32,35	2.26	6 (22%)
32	G7M	1a	527	32	20,26,27	1.19	2 (10%)	16,39,42	0.64	0
56	G7M	1y	46	56	20,26,27	1.37	1 (5%)	16,39,42	0.69	0
32	5MC	2a	1400	32	19,22,23	1.74	3 (15%)	26,32,35	1.38	2 (7%)
54	MIA	2w	37	54	19,27,32	1.88	3 (15%)	18,39,47	1.59	4 (22%)
55	4SU	1x	8	55	18,21,22	2.24	5 (27%)	25,30,33	1.80	6 (24%)
56	PSU	1y	32	56	18,21,22	1.43	2 (11%)	21,30,33	1.80	4 (19%)
56	4SU	1y	8	56	18,21,22	1.56	5 (27%)	25,30,33	1.51	4 (16%)
1	OMG	2A	2251	1,58,55	19,26,27	1.09	1 (5%)	21,38,41	1.02	2 (9%)
54	F3N	1w	76	1	29,36,37	1.40	5 (17%)	28,51,54	1.55	3 (10%)
56	PSU	1y	55	56	18,21,22	1.51	3 (16%)	21,30,33	2.02	4 (19%)
32	5MC	2a	1407	58,32	19,22,23	1.59	3 (15%)	26,32,35	1.45	4 (15%)
54	PSU	2w	55	54	18,21,22	1.47	2 (11%)	21,30,33	2.06	4 (19%)
1	PSU	1A	1917	1	18,21,22	1.33	3 (16%)	21,30,33	2.06	5 (23%)
32	M2G	2a	966	32	20,27,28	1.27	3 (15%)	19,40,43	1.16	1 (5%)
32	UR3	1a	1498	32	19,22,23	0.95	1 (5%)	26,32,35	1.73	5 (19%)
1	OMU	1A	2552	1,58	19,22,23	1.30	3 (15%)	25,31,34	2.05	5 (20%)
54	PSU	2w	32	54	18,21,22	1.41	2 (11%)	21,30,33	2.06	5 (23%)
1	5MC	2A	1962	1,58	19,22,23	1.49	3 (15%)	26,32,35	1.11	2 (7%)
55	PSU	2x	55	55	18,21,22	1.36	3 (16%)	21,30,33	1.99	5 (23%)
1	PSU	2A	1917	1	18,21,22	1.42	2 (11%)	21,30,33	1.81	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	1,58	-	0/9/27/28	0/2/2/2
54	PSU	2w	39	54	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	PSU	2y	32	56	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	58,32	-	1/5/27/28	0/3/3/3
1	PSU	1A	2605	1,58	-	0/7/25/26	0/2/2/2
56	5MU	1y	54	56	-	0/7/25/26	0/2/2/2
54	F3N	2w	76	1	-	4/15/37/38	0/4/4/4
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	55	54	-	2/7/25/26	0/2/2/2
1	5MU	1A	1915	1	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	1,58	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
55	5MU	1x	54	55	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	G7M	2a	527	58,32	-	2/3/25/26	0/3/3/3
56	PSU	1y	39	56	-	0/7/25/26	0/2/2/2
56	MIA	2y	37	56	-	2/3/25/34	0/3/3/3
1	5MU	2A	1915	1	-	0/7/25/26	0/2/2/2
56	G7M	2y	46	56	-	0/3/25/26	0/3/3/3
1	OMG	1A	2251	1,58,55	-	1/5/27/28	0/3/3/3
1	5MU	2A	1939	1,58	-	0/7/25/26	0/2/2/2
54	MIA	1w	37	54	-	4/11/33/34	0/3/3/3
43	0TD	2l	92	43	-	3/7/12/14	-
32	MA6	1a	1519	32	-	2/7/29/30	0/3/3/3
55	5MC	2x	32	55	-	0/7/25/26	0/2/2/2
56	MIA	1y	37	56	-	3/3/25/34	0/3/3/3
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
54	PSU	1w	32	54	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
55	PSU	1x	55	55	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
54	4SU	1w	8	54	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
55	4SU	2x	8	55	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	4/7/12/14	-
54	G7M	1w	46	54	-	1/3/25/26	0/3/3/3
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1,58	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	1,58	-	1/3/25/26	0/3/3/3
54	PSU	1w	39	54	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
54	5MU	1w	54	54	-	0/7/25/26	0/2/2/2
55	31H	1x	76	58,55	-	4/18/40/41	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	32	-	0/7/25/26	0/2/2/2
56	5MU	2y	54	56	-	2/7/25/26	0/2/2/2
55	5MC	1x	32	55	-	0/7/25/26	0/2/2/2
54	4SU	2w	8	54	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	0/9/29/30	0/2/2/2
55	31H	2x	76	59,58,55	-	4/18/40/41	0/3/3/3
32	2MG	1a	1207	58,32	-	0/5/27/28	0/3/3/3
32	PSU	1a	516	32	-	1/7/25/26	0/2/2/2
1	OMC	1A	1920	1	-	0/9/27/28	0/2/2/2
54	G7M	2w	46	54	-	3/3/25/26	0/3/3/3
32	5MC	1a	967	32	-	1/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
56	4SU	2y	8	56,58	-	1/7/25/26	0/2/2/2
1	5MC	1A	1942	1,58	-	0/7/25/26	0/2/2/2
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
56	PSU	2y	39	56	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
56	PSU	2y	55	56	-	1/7/25/26	0/2/2/2
1	2MA	1A	2503	1,58	-	1/3/25/26	0/3/3/3
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
54	5MU	2w	54	54	-	0/7/25/26	0/2/2/2
55	5MU	2x	54	55	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	32	-	3/3/25/26	0/3/3/3
56	G7M	1y	46	56	-	2/3/25/26	0/3/3/3
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
54	MIA	2w	37	54	-	2/7/29/34	0/3/3/3
55	4SU	1x	8	55	-	0/7/25/26	0/2/2/2
56	PSU	1y	32	56	-	0/7/25/26	0/2/2/2
56	4SU	1y	8	56	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	1,58,55	-	0/5/27/28	0/3/3/3
54	F3N	1w	76	1	-	2/15/37/38	0/4/4/4
56	PSU	1y	55	56	-	1/7/25/26	0/2/2/2
32	5MC	2a	1407	58,32	-	0/7/25/26	0/2/2/2
54	PSU	2w	55	54	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	OMU	1A	2552	1,58	-	0/9/27/28	0/2/2/2
54	PSU	2w	32	54	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	1,58	-	0/7/25/26	0/2/2/2
55	PSU	2x	55	55	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2

All (229) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-13.70	1.68	1.82
43	1l	92	0TD	CB-SB	-10.44	1.71	1.82
54	1w	37	MIA	C2-S10	-7.76	1.69	1.75
1	1A	1962	5MC	C5-C4	6.84	1.49	1.44
54	1w	37	MIA	C13-C14	6.80	1.52	1.32
32	2a	1404	5MC	C5-C4	6.57	1.49	1.44
54	2w	37	MIA	C2-S10	-6.54	1.70	1.75
55	1x	32	5MC	C5-C4	6.44	1.49	1.44
32	1a	967	5MC	C5-C4	6.26	1.48	1.44
32	2a	1400	5MC	C5-C4	6.22	1.48	1.44
32	2a	967	5MC	C5-C4	5.84	1.48	1.44
32	2a	1407	5MC	C5-C4	5.75	1.48	1.44
55	1x	8	4SU	C4-N3	-5.54	1.31	1.37
55	2x	32	5MC	C5-C4	5.50	1.48	1.44
56	1y	39	PSU	C6-C5	5.29	1.41	1.35
55	1x	8	4SU	C2-N3	-5.26	1.28	1.38
54	2w	8	4SU	C4-S4	-5.21	1.59	1.68
1	2A	1962	5MC	C5-C4	5.08	1.48	1.44
54	2w	76	F3N	CB-CG	-4.96	1.39	1.51
56	1y	55	PSU	C6-C5	4.79	1.40	1.35
32	1a	1407	5MC	C5-C4	4.76	1.47	1.44
32	1a	966	M2G	C2-N3	4.66	1.37	1.30
54	1w	8	4SU	C4-S4	-4.64	1.60	1.68
54	2w	55	PSU	C6-C5	4.64	1.40	1.35
56	2y	46	G7M	C5-C4	4.61	1.48	1.39
56	2y	32	PSU	C6-C5	4.54	1.40	1.35
56	1y	32	PSU	C6-C5	4.54	1.40	1.35
55	2x	8	4SU	C4-N3	-4.49	1.33	1.37
56	2y	8	4SU	C4-S4	-4.31	1.61	1.68
1	2A	1911	PSU	C6-C5	4.26	1.40	1.35
1	1A	1911	PSU	C6-C5	4.26	1.40	1.35
32	1a	1400	5MC	C5-C4	4.17	1.47	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	2y	39	PSU	C6-C5	4.16	1.39	1.35
56	1y	46	G7M	C5-C4	4.14	1.47	1.39
54	1w	8	4SU	C4-N3	-4.12	1.33	1.37
32	1a	516	PSU	C6-C5	4.06	1.39	1.35
54	1w	76	F3N	CB-CG	-4.03	1.41	1.51
55	2x	8	4SU	C2-N3	-4.00	1.31	1.38
54	2w	32	PSU	C6-C5	3.98	1.39	1.35
32	2a	516	PSU	C6-C5	3.97	1.39	1.35
54	1w	46	G7M	C5-C4	3.95	1.47	1.39
1	1A	1942	5MC	C5-C4	3.82	1.47	1.44
54	1w	55	PSU	C6-C5	3.81	1.39	1.35
56	1y	8	4SU	C4-S4	-3.76	1.62	1.68
32	2a	1404	5MC	C6-C5	3.75	1.40	1.34
1	2A	1939	5MU	C6-C5	3.71	1.40	1.34
32	2a	527	G7M	C5-C4	3.70	1.46	1.39
1	2A	1942	5MC	C5-C4	3.63	1.46	1.44
56	2y	55	PSU	C6-C5	3.62	1.39	1.35
1	2A	1917	PSU	C6-C5	3.62	1.39	1.35
32	2a	966	M2G	C2-N3	3.58	1.35	1.30
32	1a	527	G7M	C5-C4	3.55	1.46	1.39
55	2x	8	4SU	C4-S4	-3.54	1.62	1.68
55	1x	8	4SU	C4-S4	-3.53	1.62	1.68
1	1A	1915	5MU	C2-N1	3.51	1.44	1.38
1	2A	2605	PSU	C6-C5	3.48	1.39	1.35
54	2w	46	G7M	C5-C4	3.48	1.46	1.39
56	2y	54	5MU	C2-N1	3.44	1.43	1.38
54	2w	39	PSU	C6-C5	3.43	1.39	1.35
1	2A	2251	OMG	C6-N1	-3.41	1.32	1.37
43	2l	92	0TD	CB-CA	3.36	1.55	1.54
1	1A	1939	5MU	C4-C5	3.35	1.50	1.44
54	2w	76	F3N	O4'-C1'	3.34	1.45	1.40
32	2a	1498	UR3	C2-N1	3.34	1.43	1.38
55	2x	55	PSU	C6-C5	3.33	1.39	1.35
32	1a	967	5MC	C6-C5	3.31	1.40	1.34
56	2y	54	5MU	C6-C5	3.31	1.40	1.34
56	2y	37	MIA	C2-N3	3.29	1.37	1.32
32	1a	966	M2G	C6-N1	-3.29	1.32	1.37
54	2w	8	4SU	C5-C4	-3.28	1.38	1.42
1	1A	1942	5MC	C6-N1	-3.28	1.32	1.38
1	1A	1917	PSU	C6-C5	3.27	1.38	1.35
1	1A	2605	PSU	C6-C5	3.27	1.38	1.35
54	1w	32	PSU	C6-C5	3.22	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	1w	54	5MU	C6-C5	3.21	1.39	1.34
55	2x	76	31H	C4-N3	-3.18	1.31	1.35
1	1A	2251	OMG	C6-N1	-3.18	1.32	1.37
54	1w	39	PSU	C6-C5	3.16	1.38	1.35
1	2A	1939	5MU	C4-N3	-3.16	1.32	1.38
56	2y	54	5MU	C4-C5	3.16	1.50	1.44
32	1a	1404	5MC	C5-C4	3.15	1.46	1.44
56	1y	54	5MU	C2-N1	3.14	1.43	1.38
56	2y	8	4SU	C2-N1	3.14	1.43	1.38
55	2x	76	31H	C5-N7	-3.12	1.28	1.39
54	1w	76	F3N	O4'-C1'	3.09	1.45	1.40
56	1y	37	MIA	C2-N3	3.09	1.36	1.32
56	1y	54	5MU	C6-C5	3.09	1.39	1.34
55	2x	54	5MU	C6-C5	3.09	1.39	1.34
55	1x	54	5MU	C4-N3	-3.07	1.33	1.38
1	1A	1939	5MU	C2-N1	3.06	1.43	1.38
54	1w	54	5MU	C2-N1	3.05	1.43	1.38
32	1a	1407	5MC	C6-C5	3.04	1.39	1.34
1	1A	1939	5MU	C4-N3	-3.00	1.33	1.38
55	1x	54	5MU	C6-C5	3.00	1.39	1.34
54	1w	39	PSU	C4-N3	-3.00	1.33	1.38
55	1x	55	PSU	C6-C5	2.97	1.38	1.35
56	1y	54	5MU	C4-C5	2.97	1.49	1.44
55	1x	32	5MC	C6-N1	-2.95	1.33	1.38
55	1x	76	31H	C6-C5	-2.87	1.32	1.43
1	2A	1915	5MU	C6-C5	2.86	1.39	1.34
54	2w	37	MIA	C6-C5	2.85	1.49	1.44
54	2w	8	4SU	C4-N3	-2.83	1.34	1.37
54	1w	8	4SU	C5-C4	-2.83	1.39	1.42
1	1A	1917	PSU	C4-N3	-2.82	1.33	1.38
54	2w	32	PSU	C4-N3	-2.81	1.33	1.38
1	1A	1962	5MC	C6-C5	2.80	1.39	1.34
54	2w	39	PSU	C4-N3	-2.79	1.33	1.38
1	1A	1939	5MU	C6-C5	2.78	1.39	1.34
54	1w	32	PSU	C4-N3	-2.78	1.33	1.38
56	2y	8	4SU	C4-N3	-2.74	1.34	1.37
55	2x	54	5MU	C4-C5	2.73	1.49	1.44
54	1w	55	PSU	C4-N3	-2.72	1.33	1.38
32	2a	967	5MC	C6-N1	-2.71	1.33	1.38
1	1A	1939	5MU	C2-N3	-2.70	1.33	1.38
32	1a	1400	5MC	C6-C5	2.69	1.39	1.34
1	2A	1942	5MC	C6-N1	-2.69	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1x	8	4SU	C5-C4	-2.68	1.39	1.42
1	1A	2552	OMU	C4-N3	-2.68	1.34	1.38
54	2w	76	F3N	C2'-C3'	-2.67	1.49	1.53
54	1w	8	4SU	C2-N3	-2.67	1.33	1.38
55	2x	55	PSU	C4-N3	-2.67	1.33	1.38
32	2a	1400	5MC	C6-C5	2.65	1.38	1.34
1	2A	1962	5MC	C6-C5	2.64	1.38	1.34
32	1a	1400	5MC	C6-N1	-2.64	1.33	1.38
55	1x	55	PSU	C4-N3	-2.63	1.33	1.38
1	2A	1917	PSU	C4-N3	-2.62	1.33	1.38
32	1a	966	M2G	C2-N2	2.60	1.39	1.35
55	2x	32	5MC	C6-N1	-2.60	1.33	1.38
32	1a	1519	MA6	C6-C5	-2.57	1.40	1.44
1	1A	1915	5MU	C4-C5	2.57	1.49	1.44
55	1x	54	5MU	C4-C5	2.54	1.49	1.44
1	2A	1939	5MU	C2-N3	-2.53	1.33	1.38
32	1a	516	PSU	C4-N3	-2.53	1.34	1.38
54	2w	76	F3N	C6-C5	-2.53	1.34	1.43
54	2w	54	5MU	C6-N1	-2.53	1.33	1.38
55	2x	8	4SU	C5-C4	-2.52	1.39	1.42
32	1a	1518	MA6	C6-C5	-2.52	1.41	1.44
1	1A	2605	PSU	O4'-C1'	-2.50	1.40	1.43
1	2A	1939	5MU	C2-N1	2.49	1.42	1.38
1	2A	1962	5MC	C6-N1	-2.48	1.33	1.38
1	2A	1915	5MU	C2-N1	2.48	1.42	1.38
55	2x	32	5MC	C6-C5	2.48	1.38	1.34
56	2y	55	PSU	C4-N3	-2.47	1.34	1.38
55	1x	8	4SU	C6-C5	2.47	1.40	1.35
1	1A	1939	5MU	C6-N1	-2.47	1.33	1.38
1	2A	1911	PSU	C4-N3	-2.45	1.34	1.38
56	1y	54	5MU	C4-N3	-2.45	1.34	1.38
56	1y	8	4SU	C4-N3	-2.44	1.35	1.37
54	1w	76	F3N	C6-C5	-2.44	1.34	1.43
54	1w	76	F3N	C3'-N3'	2.43	1.49	1.45
32	2a	1207	2MG	C6-N1	-2.43	1.34	1.37
1	1A	2605	PSU	C2-N1	-2.42	1.33	1.36
55	1x	55	PSU	C2-N3	-2.42	1.33	1.37
32	2a	1407	5MC	C6-N1	-2.42	1.33	1.38
32	2a	1400	5MC	C6-N1	-2.41	1.33	1.38
1	1A	2605	PSU	C4-N3	-2.40	1.34	1.38
1	1A	2503	2MA	C6-N1	-2.37	1.33	1.37
56	1y	8	4SU	C2-N1	2.37	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	1404	5MC	C6-C5	2.36	1.38	1.34
32	2a	966	M2G	C2-N2	2.36	1.39	1.35
32	2a	1518	MA6	C6-C5	-2.36	1.41	1.44
54	1w	54	5MU	C4-N3	-2.36	1.34	1.38
55	2x	8	4SU	C6-C5	2.34	1.40	1.35
1	2A	1920	OMC	C6-C5	2.34	1.40	1.35
32	2a	1519	MA6	C6-C5	-2.34	1.41	1.44
54	2w	54	5MU	C4-N3	-2.34	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.34	1.34	1.38
55	1x	76	31H	C5-N7	-2.33	1.31	1.39
54	2w	55	PSU	C4-N3	-2.33	1.34	1.38
56	2y	39	PSU	C4-N3	-2.32	1.34	1.38
32	1a	1207	2MG	C6-N1	-2.32	1.34	1.37
1	2A	1915	5MU	C4-N3	-2.31	1.34	1.38
55	1x	32	5MC	C6-C5	2.31	1.38	1.34
32	1a	527	G7M	C6-N1	-2.30	1.34	1.37
43	1l	92	0TD	CSB-SB	-2.28	1.75	1.79
56	1y	8	4SU	O2-C2	2.25	1.27	1.23
1	1A	1962	5MC	C6-N1	-2.25	1.34	1.38
54	2w	76	F3N	C5-N7	-2.24	1.31	1.39
56	1y	55	PSU	C4-C5	2.23	1.50	1.44
1	1A	2552	OMU	C5-C4	-2.23	1.38	1.43
32	2a	966	M2G	C6-N1	-2.23	1.34	1.37
56	1y	8	4SU	C6-C5	2.21	1.40	1.35
32	1a	516	PSU	C2-N3	-2.21	1.33	1.37
1	2A	2552	OMU	C5-C4	-2.20	1.38	1.43
54	1w	39	PSU	C2-N3	-2.20	1.33	1.37
32	1a	1404	5MC	C6-N1	-2.19	1.34	1.38
1	1A	1911	PSU	C4-N3	-2.19	1.34	1.38
1	1A	1915	5MU	C6-N1	-2.18	1.34	1.38
1	1A	1917	PSU	C2-N3	-2.17	1.33	1.37
56	2y	8	4SU	C6-C5	2.17	1.40	1.35
1	2A	1915	5MU	C4-C5	2.17	1.48	1.44
1	1A	1915	5MU	C6-C5	2.16	1.38	1.34
54	1w	76	F3N	C5-N7	-2.16	1.32	1.39
1	2A	2503	2MA	C6-N1	-2.16	1.33	1.37
56	2y	46	G7M	C2-N3	2.14	1.38	1.33
32	2a	1498	UR3	O2-C2	2.14	1.26	1.22
1	2A	2552	OMU	C6-C5	2.14	1.40	1.35
54	1w	32	PSU	C2-N3	-2.13	1.34	1.37
32	2a	1407	5MC	C6-C5	2.13	1.38	1.34
54	2w	37	MIA	C2-N3	2.13	1.37	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	1518	MA6	C6-N1	2.13	1.35	1.32
1	2A	1915	5MU	C6-N1	-2.12	1.34	1.38
55	1x	76	31H	O4'-C4'	-2.11	1.40	1.45
55	1x	54	5MU	C6-N1	-2.11	1.34	1.38
56	1y	55	PSU	C4-N3	-2.11	1.34	1.38
32	1a	1498	UR3	C2-N1	2.09	1.41	1.38
55	2x	55	PSU	C4-C5	2.09	1.50	1.44
56	2y	32	PSU	C4-C5	2.09	1.50	1.44
54	2w	8	4SU	C2-N1	2.08	1.41	1.38
1	1A	2605	PSU	C2-N3	-2.07	1.34	1.37
55	1x	54	5MU	C2-N1	2.07	1.41	1.38
32	2a	1518	MA6	C6-N1	2.07	1.35	1.32
56	2y	8	4SU	O2-C2	2.06	1.26	1.23
1	1A	2552	OMU	C2-N1	2.05	1.41	1.38
54	2w	54	5MU	C4-C5	2.05	1.48	1.44
1	1A	1962	5MC	C2-N1	2.05	1.44	1.40
54	1w	54	5MU	C2-N3	-2.04	1.34	1.38
1	2A	2605	PSU	C4-N3	-2.04	1.35	1.38
32	2a	1519	MA6	C6-N1	2.03	1.35	1.32
1	1A	2503	2MA	C2-N3	2.03	1.36	1.31
55	2x	76	31H	C6-C5	-2.03	1.35	1.43
54	1w	46	G7M	C6-N1	-2.03	1.34	1.37
1	1A	1911	PSU	O4'-C1'	-2.03	1.41	1.43
32	1a	1519	MA6	C6-N1	2.03	1.35	1.32
56	1y	39	PSU	C4-N3	-2.02	1.35	1.38
1	2A	1942	5MC	C6-C5	2.02	1.37	1.34
32	2a	516	PSU	C4-N3	-2.01	1.35	1.38
1	2A	2605	PSU	C2-N3	-2.01	1.34	1.37
56	1y	32	PSU	C4-C5	2.00	1.49	1.44

All (332) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-12.53	79.84	102.36
55	2x	76	31H	O4'-C1'-N9	-10.23	95.18	108.75
55	2x	76	31H	C4'-O4'-C1'	-9.67	101.06	109.92
54	1w	37	MIA	C12-C13-C14	-9.06	110.74	127.01
55	1x	76	31H	C4'-O4'-C1'	-8.93	101.75	109.92
32	2a	1498	UR3	C4-N3-C2	-7.12	118.85	124.58
56	2y	55	PSU	N1-C2-N3	6.86	122.41	115.17
55	2x	76	31H	N3-C2-N1	-6.82	119.41	128.67
32	1a	1498	UR3	C4-N3-C2	-6.80	119.11	124.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2605	PSU	N1-C2-N3	6.80	122.34	115.17
54	2w	8	4SU	C4-N3-C2	-6.59	120.99	127.31
54	2w	8	4SU	C5-C4-N3	6.55	120.84	114.75
54	2w	76	F3N	N3-C2-N1	-6.45	119.91	128.67
54	1w	76	F3N	N3-C2-N1	-6.43	119.94	128.67
1	2A	1911	PSU	N1-C2-N3	6.41	121.94	115.17
54	1w	39	PSU	N1-C2-N3	6.28	121.79	115.17
1	1A	1911	PSU	N1-C2-N3	6.26	121.78	115.17
56	1y	55	PSU	N1-C2-N3	6.26	121.77	115.17
1	2A	1939	5MU	N3-C2-N1	6.20	122.96	114.89
1	1A	1939	5MU	C5-C4-N3	6.17	120.68	115.32
54	2w	32	PSU	N1-C2-N3	6.15	121.66	115.17
55	2x	55	PSU	N1-C2-N3	6.13	121.64	115.17
56	2y	8	4SU	C4-N3-C2	-6.05	121.52	127.31
1	2A	1915	5MU	O4-C4-C5	-6.03	118.02	124.92
1	1A	1915	5MU	N3-C2-N1	6.02	122.72	114.89
54	2w	55	PSU	N1-C2-N3	6.00	121.50	115.17
32	2a	516	PSU	N1-C2-N3	5.94	121.43	115.17
1	1A	2552	OMU	C4-N3-C2	-5.93	119.26	126.61
55	1x	55	PSU	N1-C2-N3	5.87	121.36	115.17
32	2a	1518	MA6	N3-C2-N1	-5.86	120.72	128.67
56	2y	32	PSU	N1-C2-N3	5.85	121.34	115.17
1	1A	1939	5MU	C4-N3-C2	-5.78	119.76	127.34
43	2l	92	0TD	CSB-SB-CB	-5.73	92.06	102.36
1	2A	1915	5MU	C4-N3-C2	-5.71	119.86	127.34
1	1A	1917	PSU	N1-C2-N3	5.68	121.16	115.17
55	1x	76	31H	N3-C2-N1	-5.64	121.02	128.67
1	1A	1915	5MU	C4-N3-C2	-5.60	120.00	127.34
55	2x	54	5MU	N3-C2-N1	5.58	122.15	114.89
32	1a	1519	MA6	N3-C2-N1	-5.52	121.18	128.67
54	2w	54	5MU	C4-N3-C2	-5.52	120.11	127.34
1	2A	1917	PSU	N1-C2-N3	5.51	120.98	115.17
1	1A	1915	5MU	O4-C4-C5	-5.50	118.63	124.92
1	2A	1939	5MU	C4-N3-C2	-5.46	120.18	127.34
1	1A	2605	PSU	N1-C2-N3	5.45	120.92	115.17
54	1w	54	5MU	O4-C4-C5	-5.45	118.69	124.92
54	2w	54	5MU	O4-C4-C5	-5.43	118.70	124.92
54	1w	55	PSU	N1-C2-N3	5.38	120.85	115.17
32	2a	1519	MA6	N3-C2-N1	-5.37	121.38	128.67
32	1a	516	PSU	N1-C2-N3	5.34	120.80	115.17
55	2x	54	5MU	C4-N3-C2	-5.29	120.41	127.34
54	2w	8	4SU	C5-C4-S4	-5.27	118.29	124.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1915	5MU	C5-C4-N3	5.26	119.90	115.32
1	2A	1915	5MU	N3-C2-N1	5.22	121.68	114.89
54	2w	54	5MU	C5-C4-N3	5.19	119.83	115.32
56	2y	54	5MU	C5-C4-N3	5.08	119.73	115.32
56	2y	54	5MU	C4-N3-C2	-5.07	120.69	127.34
56	2y	8	4SU	C5-C4-N3	5.07	119.46	114.75
55	2x	54	5MU	O4-C4-C5	-4.98	119.22	124.92
56	2y	39	PSU	N1-C2-N3	4.92	120.35	115.17
32	2a	1518	MA6	C2-N1-C6	4.91	121.66	116.84
1	2A	2552	OMU	O2-C2-N1	-4.90	116.41	122.80
56	1y	39	PSU	N1-C2-N3	4.87	120.31	115.17
56	1y	37	MIA	N3-C2-N1	-4.86	122.08	128.67
1	2A	1939	5MU	C5-C4-N3	4.86	119.55	115.32
1	1A	1939	5MU	C5-C6-N1	-4.85	118.05	123.31
55	1x	54	5MU	N3-C2-N1	4.82	121.16	114.89
32	1a	1518	MA6	N3-C2-N1	-4.78	122.19	128.67
1	2A	2605	PSU	C4-N3-C2	-4.75	119.83	126.37
55	1x	32	5MC	C5-C6-N1	-4.72	118.18	123.31
54	1w	8	4SU	C4-N3-C2	-4.71	122.80	127.31
54	2w	32	PSU	C4-N3-C2	-4.70	119.90	126.37
54	1w	54	5MU	C4-N3-C2	-4.69	121.19	127.34
55	1x	54	5MU	C4-N3-C2	-4.68	121.21	127.34
56	1y	32	PSU	N1-C2-N3	4.67	120.10	115.17
32	2a	1519	MA6	C2-N1-C6	4.67	121.42	116.84
1	1A	1915	5MU	C1'-N1-C2	4.63	125.91	117.59
1	1A	1939	5MU	N3-C2-N1	4.60	120.88	114.89
56	2y	54	5MU	N3-C2-N1	4.58	120.85	114.89
55	1x	8	4SU	O2-C2-N1	4.52	128.68	122.80
54	2w	54	5MU	N3-C2-N1	4.52	120.77	114.89
1	1A	2552	OMU	N3-C2-N1	4.51	120.77	114.89
32	1a	967	5MC	C5-C6-N1	-4.49	118.43	123.31
56	2y	54	5MU	O4-C4-C5	-4.43	119.85	124.92
54	1w	8	4SU	C5-C4-N3	4.40	118.84	114.75
54	2w	39	PSU	N1-C2-N3	4.39	119.80	115.17
54	1w	54	5MU	C5-C6-N1	-4.39	118.55	123.31
54	1w	37	MIA	C15-C14-C13	-4.36	109.56	122.66
55	2x	54	5MU	O2-C2-N1	-4.36	117.12	122.80
54	1w	32	PSU	N1-C2-N3	4.35	119.75	115.17
56	2y	55	PSU	O2-C2-N1	-4.35	118.31	122.79
54	2w	37	MIA	C12-N6-C6	-4.34	118.83	122.85
54	1w	54	5MU	C5-C4-N3	4.34	119.09	115.32
1	2A	1911	PSU	O2-C2-N1	-4.32	118.33	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	1w	54	5MU	N3-C2-N1	4.32	120.52	114.89
1	1A	1917	PSU	C4-N3-C2	-4.27	120.50	126.37
56	1y	8	4SU	C4-N3-C2	-4.26	123.23	127.31
56	1y	54	5MU	N3-C2-N1	4.24	120.41	114.89
1	1A	2552	OMU	C5-C4-N3	4.24	120.74	114.80
55	2x	55	PSU	C4-N3-C2	-4.22	120.56	126.37
55	2x	32	5MC	C5-C4-N3	-4.21	117.44	121.75
1	1A	1911	PSU	C4-N3-C2	-4.11	120.70	126.37
1	2A	1939	5MU	O4-C4-C5	-4.07	120.27	124.92
32	2a	516	PSU	C4-N3-C2	-4.06	120.78	126.37
56	2y	32	PSU	C4-N3-C2	-4.05	120.79	126.37
1	1A	1917	PSU	O2-C2-N1	-4.04	118.62	122.79
56	2y	8	4SU	N3-C2-N1	4.01	120.12	114.89
55	1x	54	5MU	C5-C6-N1	-3.99	118.98	123.31
32	2a	1400	5MC	C5-C6-N1	-3.98	118.98	123.31
56	1y	54	5MU	C5-C4-N3	3.98	118.78	115.32
1	1A	2605	PSU	C4-N3-C2	-3.98	120.89	126.37
56	2y	55	PSU	C4-N3-C2	-3.97	120.90	126.37
54	1w	8	4SU	N3-C2-N1	3.97	120.06	114.89
54	2w	55	PSU	C4-N3-C2	-3.95	120.93	126.37
1	2A	2552	OMU	C4-N3-C2	-3.92	121.75	126.61
56	1y	54	5MU	C4-N3-C2	-3.90	122.22	127.34
55	1x	54	5MU	C5-C4-N3	3.90	118.71	115.32
54	1w	39	PSU	O2-C2-N1	-3.89	118.78	122.79
1	2A	2605	PSU	O2-C2-N1	-3.88	118.79	122.79
55	1x	8	4SU	C4-N3-C2	3.85	131.00	127.31
32	1a	1519	MA6	C2-N1-C6	3.84	120.60	116.84
56	1y	32	PSU	C6-C5-C4	-3.82	115.59	118.17
56	1y	8	4SU	C5-C4-N3	3.81	118.29	114.75
54	2w	8	4SU	N3-C2-N1	3.80	119.84	114.89
54	2w	54	5MU	O2-C2-N1	-3.80	117.85	122.80
1	1A	1911	PSU	O2-C2-N1	-3.79	118.88	122.79
1	2A	1939	5MU	C5-C6-N1	-3.78	119.20	123.31
56	1y	55	PSU	C4-N3-C2	-3.77	121.17	126.37
55	1x	8	4SU	C6-C5-C4	-3.76	116.70	119.95
54	1w	39	PSU	C4-N3-C2	-3.75	121.20	126.37
56	2y	37	MIA	N3-C2-N1	-3.75	123.58	128.67
55	2x	54	5MU	C5-C4-N3	3.71	118.55	115.32
55	1x	76	31H	O2'-C2'-C3'	3.71	120.24	111.16
54	1w	32	PSU	C4-N3-C2	-3.69	121.29	126.37
32	2a	1207	2MG	N1-C2-N2	3.68	120.32	116.56
32	2a	516	PSU	O2-C2-N1	-3.67	119.01	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	1y	39	PSU	C6-C5-C4	-3.66	115.70	118.17
1	2A	1917	PSU	C4-N3-C2	-3.65	121.34	126.37
32	2a	1404	5MC	C5-C6-N1	-3.65	119.35	123.31
43	1l	92	0TD	OD2-CG-CB	3.64	121.01	113.15
1	2A	2552	OMU	N3-C2-N1	3.62	119.61	114.89
54	1w	55	PSU	C4-N3-C2	-3.61	121.40	126.37
55	1x	32	5MC	C5-C4-N3	-3.60	118.06	121.75
32	1a	1518	MA6	C2-N1-C6	3.60	120.37	116.84
1	1A	1915	5MU	C5-C4-N3	3.58	118.43	115.32
1	2A	1911	PSU	C4-N3-C2	-3.57	121.46	126.37
32	2a	1400	5MC	O2-C2-N3	-3.56	116.72	122.33
32	1a	516	PSU	C4-N3-C2	-3.56	121.47	126.37
54	2w	55	PSU	C6-C5-C4	-3.52	115.80	118.17
1	1A	2503	2MA	C8-N7-C5	3.52	108.54	102.55
55	1x	54	5MU	O2-C2-N1	-3.51	118.23	122.80
32	2a	1207	2MG	N2-C2-N3	-3.49	116.07	120.51
55	2x	76	31H	CA-N-CN	-3.48	117.48	122.82
1	1A	1915	5MU	C6-N1-C2	-3.45	117.87	121.30
56	1y	32	PSU	O2-C2-N1	-3.42	119.26	122.79
32	2a	1407	5MC	C5-C6-N1	-3.42	119.60	123.31
1	1A	1942	5MC	C5-C4-N3	-3.42	118.25	121.75
32	2a	1407	5MC	O2-C2-N3	-3.41	116.95	122.33
32	1a	1207	2MG	C8-N7-C5	3.40	108.34	102.55
1	2A	1915	5MU	C5-C6-N1	-3.39	119.63	123.31
1	1A	1942	5MC	C1'-N1-C6	-3.37	115.60	121.15
1	2A	1962	5MC	C5-C4-N3	-3.37	118.30	121.75
32	2a	1407	5MC	C5-C4-N3	-3.34	118.33	121.75
1	1A	2251	OMG	C8-N7-C5	3.33	108.22	102.55
54	1w	32	PSU	C6-C5-C4	-3.33	115.93	118.17
1	1A	2552	OMU	O4-C4-C5	-3.30	119.47	125.16
55	1x	55	PSU	C4-N3-C2	-3.29	121.84	126.37
54	1w	8	4SU	C5-C4-S4	-3.27	120.58	124.31
55	1x	8	4SU	S4-C4-N3	-3.26	116.80	120.20
55	1x	54	5MU	O4-C4-C5	-3.25	121.19	124.92
1	1A	1942	5MC	CM5-C5-C6	-3.25	118.45	122.85
56	1y	55	PSU	O2-C2-N1	-3.25	119.43	122.79
54	2w	54	5MU	C5M-C5-C4	3.24	122.24	118.78
56	1y	8	4SU	N3-C2-N1	3.24	119.11	114.89
32	2a	1519	MA6	C4-C5-N7	-3.24	105.91	109.34
56	1y	54	5MU	O4-C4-C5	-3.24	121.21	124.92
54	1w	37	MIA	C16-C14-C13	-3.21	113.01	122.66
1	1A	1915	5MU	C5M-C5-C4	3.21	122.21	118.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	1x	76	31H	O4'-C1'-N9	-3.20	104.50	108.75
32	2a	1498	UR3	C5-C4-N3	3.19	119.25	115.04
32	1a	966	M2G	C8-N7-C5	3.19	107.97	102.55
1	1A	1939	5MU	O4-C4-C5	-3.19	121.27	124.92
1	2A	1942	5MC	C5-C6-N1	-3.16	119.88	123.31
32	1a	1404	5MC	C5-C4-N3	-3.14	118.54	121.75
55	2x	32	5MC	C5-C6-N1	-3.13	119.91	123.31
56	1y	39	PSU	C4-N3-C2	-3.11	122.09	126.37
55	2x	76	31H	O2'-C2'-C3'	3.09	118.73	111.16
1	1A	2605	PSU	O2-C2-N1	-3.07	119.62	122.79
1	1A	2503	2MA	C5-C6-N1	3.07	119.84	114.12
55	1x	76	31H	CA-N-CN	-3.07	118.10	122.82
32	1a	1400	5MC	C5-C4-N3	-3.07	118.61	121.75
1	2A	2503	2MA	O4'-C1'-N9	-3.07	104.68	108.75
1	2A	1917	PSU	O2-C2-N1	-3.06	119.63	122.79
32	2a	1404	5MC	C5-C4-N3	-3.06	118.62	121.75
1	1A	1915	5MU	C5M-C5-C6	-3.06	118.71	122.85
32	2a	966	M2G	C8-N7-C5	3.05	107.74	102.55
55	2x	54	5MU	C5-C6-N1	-3.03	120.02	123.31
32	1a	1400	5MC	C5-C6-N1	-3.03	120.02	123.31
32	1a	1519	MA6	C4-C5-N7	-3.02	106.14	109.34
56	1y	32	PSU	C4-N3-C2	-3.01	122.22	126.37
54	2w	37	MIA	C2-N1-C6	3.01	122.77	117.42
1	1A	1915	5MU	C1'-N1-C6	-3.00	116.20	121.15
54	2w	55	PSU	O2-C2-N1	-3.00	119.69	122.79
32	2a	516	PSU	C6-C5-C4	-3.00	116.15	118.17
1	1A	1962	5MC	O2-C2-N3	-3.00	117.61	122.33
1	2A	1962	5MC	C5-C6-N1	-2.99	120.06	123.31
32	2a	967	5MC	C1'-N1-C6	-2.98	116.25	121.15
1	2A	1915	5MU	O2-C2-N1	-2.98	118.92	122.80
55	2x	32	5MC	CM5-C5-C6	-2.97	118.83	122.85
32	2a	967	5MC	C5-C6-N1	-2.96	120.09	123.31
1	2A	2552	OMU	O4-C4-C5	-2.93	120.10	125.16
32	1a	1404	5MC	C5-C6-N1	-2.92	120.14	123.31
1	1A	2552	OMU	O2-C2-N1	-2.92	118.99	122.80
54	1w	37	MIA	C2-N1-C6	2.92	122.61	117.42
1	2A	2552	OMU	C5-C4-N3	2.91	118.88	114.80
56	2y	8	4SU	C5-C4-S4	-2.88	121.01	124.31
54	2w	54	5MU	C5-C6-N1	-2.86	120.20	123.31
1	1A	1920	OMC	O2-C2-N3	-2.86	117.82	122.33
56	2y	32	PSU	O2-C2-N1	-2.86	119.84	122.79
32	1a	1498	UR3	C5-C4-N3	2.86	118.80	115.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1518	MA6	C4-C5-N7	-2.84	106.34	109.34
54	2w	37	MIA	C4-C5-N7	-2.83	106.35	109.34
56	1y	54	5MU	C5M-C5-C4	2.81	121.78	118.78
55	2x	8	4SU	C6-C5-C4	-2.81	117.52	119.95
1	2A	1939	5MU	O2-C2-N3	-2.79	116.34	121.49
32	1a	1407	5MC	O2-C2-N3	-2.78	117.95	122.33
32	1a	1402	4OC	C6-C5-C4	2.78	120.34	117.00
32	1a	1207	2MG	N2-C2-N3	-2.77	116.98	120.51
54	2w	39	PSU	C4-N3-C2	-2.76	122.57	126.37
54	2w	32	PSU	C5-C6-N1	-2.75	118.32	122.14
32	2a	967	5MC	CM5-C5-C6	-2.75	119.13	122.85
56	2y	39	PSU	C4-N3-C2	-2.72	122.62	126.37
55	1x	76	31H	OCN-CN-N	-2.72	118.28	125.32
56	2y	54	5MU	C5-C6-N1	-2.71	120.37	123.31
55	1x	8	4SU	O2-C2-N3	-2.70	116.51	121.49
56	1y	55	PSU	C6-C5-C4	-2.70	116.35	118.17
54	1w	37	MIA	N3-C2-N1	-2.70	122.09	127.03
55	2x	32	5MC	C1'-N1-C6	-2.69	116.71	121.15
1	1A	1915	5MU	O2-C2-N1	-2.69	119.30	122.80
1	2A	1942	5MC	C5-C4-N3	-2.68	119.00	121.75
1	1A	1962	5MC	C5-C6-N1	-2.67	120.42	123.31
1	1A	1962	5MC	CM5-C5-C6	-2.66	119.25	122.85
32	2a	1498	UR3	C1'-N1-C2	2.65	121.38	117.04
55	1x	8	4SU	C5-C4-S4	2.63	127.30	124.31
32	1a	1498	UR3	C3U-N3-C4	2.62	121.50	117.87
1	2A	2251	OMG	C8-N7-C5	2.60	106.98	102.55
1	1A	1962	5MC	C5-C4-N3	-2.60	119.09	121.75
56	2y	37	MIA	C4-C5-N7	-2.57	106.62	109.34
1	1A	2605	PSU	C6-C5-C4	-2.57	116.44	118.17
32	1a	1402	4OC	C5-C6-N1	-2.56	117.67	121.84
55	2x	8	4SU	O2-C2-N1	2.56	126.12	122.80
32	2a	1207	2MG	C8-N7-C5	2.54	106.88	102.55
32	1a	1407	5MC	C5-C6-N1	-2.54	120.55	123.31
32	1a	1400	5MC	C1'-N1-C6	-2.53	116.99	121.15
32	1a	1400	5MC	O2-C2-N3	-2.53	118.34	122.33
1	2A	2503	2MA	C5-C6-N1	2.50	118.79	114.12
54	1w	37	MIA	C11-S10-C2	2.49	104.12	102.25
32	1a	516	PSU	C5-C6-N1	-2.49	118.69	122.14
54	1w	76	F3N	O2'-C2'-C3'	-2.48	105.10	111.16
55	1x	55	PSU	O2-C2-N3	-2.47	117.47	121.86
1	2A	2503	2MA	C8-N7-C5	2.47	106.75	102.55
1	1A	1939	5MU	O2-C2-N3	-2.46	116.95	121.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1942	5MC	C1'-N1-C2	2.46	123.86	118.44
56	1y	54	5MU	C1'-N1-C2	2.45	122.00	117.59
55	2x	55	PSU	O2-C2-N1	-2.44	120.27	122.79
32	2a	967	5MC	C5-C4-N3	-2.44	119.26	121.75
1	1A	1920	OMC	CM2-O2'-C2'	-2.43	108.23	114.47
54	1w	55	PSU	O2-C2-N1	-2.43	120.28	122.79
32	1a	1518	MA6	C4-C5-N7	-2.40	106.80	109.34
1	2A	1920	OMC	CM2-O2'-C2'	-2.40	108.32	114.47
32	1a	1402	4OC	CM4-N4-C4	-2.37	117.82	122.45
1	1A	1942	5MC	C5-C6-N1	-2.37	120.74	123.31
32	1a	1207	2MG	N1-C2-N2	2.36	118.97	116.56
1	1A	1917	PSU	C5-C6-N1	-2.35	118.88	122.14
55	2x	76	31H	OCN-CN-N	-2.35	119.26	125.32
54	1w	76	F3N	O4'-C4'-C3'	2.33	107.52	104.13
54	1w	32	PSU	O4-C4-C5	-2.33	118.22	124.01
1	1A	2251	OMG	O4'-C1'-N9	-2.33	105.66	108.75
54	2w	32	PSU	O2-C2-N3	-2.33	117.72	121.86
56	1y	54	5MU	C5-C6-N1	-2.33	120.79	123.31
32	2a	1519	MA6	C1'-N9-C4	-2.32	122.56	126.64
32	2a	1498	UR3	C3U-N3-C2	2.30	121.33	117.33
54	1w	8	4SU	C6-N1-C2	-2.29	118.21	121.00
55	2x	55	PSU	C5-C6-N1	-2.27	118.99	122.14
1	2A	2251	OMG	C5-C6-N1	2.27	118.39	114.07
55	1x	55	PSU	C5-C6-N1	-2.26	119.00	122.14
32	2a	1518	MA6	C10-N6-C6	2.25	125.61	119.40
1	1A	2503	2MA	C4-N3-C2	-2.23	121.58	123.30
1	1A	2251	OMG	C5-C6-N1	2.23	118.31	114.07
55	2x	32	5MC	C1'-N1-C2	2.22	123.34	118.44
55	2x	8	4SU	C4-N3-C2	2.21	129.44	127.31
54	1w	37	MIA	C4-C5-N7	-2.21	107.00	109.34
32	2a	1402	4OC	C6-C5-C4	2.21	119.66	117.00
56	2y	8	4SU	O3'-C3'-C4'	2.21	117.42	111.08
1	2A	2605	PSU	O4-C4-C5	-2.19	118.56	124.01
56	2y	54	5MU	C1'-N1-C2	2.19	121.52	117.59
56	1y	8	4SU	C5-C4-S4	-2.18	121.81	124.31
32	1a	516	PSU	O2-C2-N3	-2.18	118.00	121.86
1	1A	2605	PSU	O4-C4-C5	-2.17	118.61	124.01
32	1a	1402	4OC	O2-C2-N3	-2.17	118.91	122.33
32	1a	967	5MC	C5-C4-N3	-2.16	119.54	121.75
32	2a	1404	5MC	O2-C2-N3	-2.14	118.95	122.33
1	1A	1962	5MC	C1'-N1-C6	-2.14	117.62	121.15
54	2w	37	MIA	N3-C2-N1	-2.14	123.11	127.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1407	5MC	CM5-C5-C6	-2.14	119.96	122.85
55	2x	32	5MC	O2-C2-N3	-2.14	118.96	122.33
54	2w	46	G7M	N2-C2-N1	2.13	121.27	116.76
1	1A	1917	PSU	O4'-C1'-C2'	2.13	108.09	105.15
54	1w	55	PSU	C6-C5-C4	-2.13	116.74	118.17
55	2x	55	PSU	O2-C2-N3	-2.13	118.08	121.86
56	2y	54	5MU	C5M-C5-C4	2.12	121.05	118.78
1	2A	2503	2MA	CM2-C2-N1	2.11	120.66	116.27
32	2a	1404	5MC	N1-C2-N3	2.11	122.46	118.80
54	2w	32	PSU	O2-C2-N1	-2.11	120.61	122.79
32	1a	1498	UR3	O2-C2-N3	-2.10	118.43	121.33
54	2w	54	5MU	C5M-C5-C6	-2.09	120.02	122.85
32	1a	1498	UR3	C6-N1-C2	-2.09	120.09	121.80
32	1a	1407	5MC	C5-C4-N3	-2.08	119.62	121.75
32	2a	1498	UR3	C6-N1-C2	-2.07	120.11	121.80
56	2y	54	5MU	C1'-N1-C6	-2.07	117.75	121.15
32	1a	966	M2G	C5-C6-N1	2.06	118.00	114.07
56	2y	39	PSU	O2-C2-N3	-2.06	118.20	121.86
54	1w	8	4SU	C1'-N1-C2	2.06	121.29	117.59
1	2A	1917	PSU	C5-C6-N1	-2.05	119.30	122.14
54	2w	8	4SU	C6-N1-C2	-2.05	118.51	121.00
32	1a	1407	5MC	N1-C2-N3	2.04	122.34	118.80
1	2A	1920	OMC	C2'-C1'-N1	-2.04	110.37	114.24
32	1a	1404	5MC	N4-C4-N3	2.03	122.19	118.51
32	2a	516	PSU	O4'-C1'-C2'	2.03	107.95	105.15
56	2y	55	PSU	O4'-C1'-C2'	2.03	107.95	105.15
1	2A	1939	5MU	C6-N1-C2	-2.03	119.28	121.30
54	1w	39	PSU	C5-C6-N1	-2.02	119.34	122.14
55	1x	32	5MC	O2-C2-N3	-2.02	119.15	122.33

There are no chirality outliers.

All (61) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	2251	OMG	C1'-C2'-O2'-CM2
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	CA-CB-SB-CSB
43	1l	92	0TD	CG-CB-SB-CSB
54	1w	37	MIA	C12-C13-C14-C15
54	1w	37	MIA	C12-C13-C14-C16
56	1y	46	G7M	C4'-C5'-O5'-P
32	2a	1207	2MG	N3-C2-N2-CM2

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Mol	Chain	Res	Type	Atoms
43	2l	92	0TD	CA-CB-SB-CSB
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'
55	2x	76	31H	O4'-C4'-C5'-O5'
56	2y	54	5MU	O4'-C4'-C5'-O5'
55	2x	76	31H	C3'-C4'-C5'-O5'
56	1y	37	MIA	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
54	2w	46	G7M	C3'-C4'-C5'-O5'
54	2w	76	F3N	O4'-C4'-C5'-O5'
56	2y	37	MIA	C3'-C4'-C5'-O5'
56	2y	54	5MU	C3'-C4'-C5'-O5'
55	1x	76	31H	CB-CG-SD-CE
55	1x	76	31H	C3'-C4'-C5'-O5'
55	1x	76	31H	O4'-C4'-C5'-O5'
56	1y	37	MIA	O4'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
55	2x	76	31H	CB-CG-SD-CE
32	2a	527	G7M	C3'-C4'-C5'-O5'
54	2w	46	G7M	C4'-C5'-O5'-P
56	2y	37	MIA	O4'-C4'-C5'-O5'
54	2w	76	F3N	N-CA-CB-CG
32	2a	1519	MA6	C3'-C4'-C5'-O5'
54	1w	37	MIA	N1-C6-N6-C12
54	2w	76	F3N	C3'-C4'-C5'-O5'
32	1a	967	5MC	O4'-C4'-C5'-O5'
54	1w	76	F3N	C3'-C4'-C5'-O5'
54	1w	37	MIA	C5-C6-N6-C12
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
32	1a	527	G7M	O4'-C4'-C5'-O5'
55	1x	76	31H	C4'-C5'-O5'-P
55	2x	76	31H	C4'-C5'-O5'-P
54	1w	55	PSU	O4'-C1'-C5-C4
56	1y	55	PSU	O4'-C1'-C5-C4
56	2y	55	PSU	O4'-C1'-C5-C4
54	1w	46	G7M	C4'-C5'-O5'-P
32	1a	527	G7M	C4'-C5'-O5'-P
32	2a	1519	MA6	C4'-C5'-O5'-P

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Mol	Chain	Res	Type	Atoms
43	1l	92	0TD	SB-CB-CG-OD2
54	2w	76	F3N	C-CA-CB-CG
54	1w	55	PSU	O4'-C1'-C5-C6
54	1w	76	F3N	O4'-C4'-C5'-O5'
56	1y	46	G7M	C3'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
32	1a	516	PSU	O4'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
56	1y	37	MIA	C4'-C5'-O5'-P
56	2y	8	4SU	C2'-C1'-N1-C2

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	302	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	302	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	2w	1
54	1w	1
17	1V	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	2w	75:C	O3'	76:F3N	P	2.56
1	1w	75:C	O3'	76:F3N	P	2.32
1	1V	34:GLU	C	35:LEU	N	1.14

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%)	-0.60	193 (6%) 25 20	11, 27, 82, 92	0
1	2A	2789/2915 (95%)	-0.11	163 (5%) 30 24	23, 44, 80, 96	0
2	1B	120/121 (99%)	-0.43	0 100 100	21, 39, 54, 74	0
2	2B	120/121 (99%)	0.27	2 (1%) 69 64	43, 57, 66, 80	0
3	1D	275/276 (99%)	-0.50	1 (0%) 89 86	13, 28, 42, 71	0
3	2D	275/276 (99%)	-0.22	5 (1%) 67 62	21, 38, 50, 68	0
4	1E	204/206 (99%)	-0.49	0 100 100	12, 30, 49, 65	0
4	2E	204/206 (99%)	0.07	2 (0%) 79 75	26, 48, 60, 69	0
5	1F	203/210 (96%)	-0.46	0 100 100	12, 31, 54, 69	0
5	2F	203/210 (96%)	0.20	3 (1%) 71 67	24, 52, 65, 71	0
6	1G	181/182 (99%)	0.15	8 (4%) 39 33	28, 44, 59, 72	0
6	2G	181/182 (99%)	0.55	8 (4%) 39 33	48, 58, 68, 76	0
7	1H	174/180 (96%)	0.02	3 (1%) 69 64	29, 43, 55, 64	0
7	2H	174/180 (96%)	1.37	36 (20%) 3 2	59, 71, 78, 88	0
8	1I	146/148 (98%)	0.46	2 (1%) 73 68	34, 59, 67, 70	0
8	2I	146/148 (98%)	0.64	8 (5%) 32 26	42, 59, 69, 73	0
9	1N	140/140 (100%)	-0.44	0 100 100	18, 28, 46, 61	0
9	2N	140/140 (100%)	0.38	5 (3%) 46 40	36, 50, 67, 73	0
10	1O	122/122 (100%)	-0.41	0 100 100	19, 31, 48, 53	0
10	2O	122/122 (100%)	0.13	2 (1%) 70 65	35, 48, 58, 62	0
11	1P	149/150 (99%)	-0.28	0 100 100	14, 37, 55, 62	0
11	2P	149/150 (99%)	0.25	1 (0%) 84 81	28, 52, 66, 73	0
12	1Q	141/141 (100%)	-0.30	1 (0%) 84 81	17, 30, 48, 62	0
12	2Q	141/141 (100%)	0.32	4 (2%) 55 49	34, 50, 62, 67	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.67	0 100 100	17, 25, 38, 44	0
13	2R	118/118 (100%)	-0.09	0 100 100	31, 42, 54, 61	0
14	1S	110/112 (98%)	-0.17	0 100 100	26, 39, 51, 53	0
14	2S	110/112 (98%)	0.39	1 (0%) 81 77	45, 54, 62, 68	0
15	1T	131/146 (89%)	-0.28	2 (1%) 71 67	23, 35, 56, 69	0
15	2T	131/146 (89%)	0.34	2 (1%) 71 67	40, 50, 62, 68	0
16	1U	116/118 (98%)	-0.74	0 100 100	15, 21, 34, 47	0
16	2U	116/118 (98%)	0.21	3 (2%) 57 51	30, 47, 59, 64	0
17	1V	101/101 (100%)	-0.55	0 100 100	14, 27, 47, 56	0
17	2V	101/101 (100%)	0.40	0 100 100	29, 56, 62, 66	0
18	1W	112/113 (99%)	-0.65	1 (0%) 81 77	13, 22, 39, 66	0
18	2W	112/113 (99%)	-0.15	1 (0%) 81 77	30, 38, 56, 75	0
19	1X	95/96 (98%)	-0.42	1 (1%) 77 74	16, 29, 50, 65	0
19	2X	95/96 (98%)	0.08	2 (2%) 63 58	34, 44, 61, 71	0
20	1Y	107/110 (97%)	-0.12	0 100 100	24, 39, 55, 65	0
20	2Y	107/110 (97%)	0.71	10 (9%) 16 13	45, 57, 69, 75	0
21	1Z	154/206 (74%)	0.52	5 (3%) 50 45	26, 52, 70, 76	0
21	2Z	160/206 (77%)	1.14	26 (16%) 5 4	53, 66, 76, 79	0
22	10	83/85 (97%)	-0.37	1 (1%) 76 72	15, 26, 40, 51	0
22	20	83/85 (97%)	0.29	1 (1%) 76 72	35, 45, 54, 62	0
23	11	97/98 (98%)	-0.04	2 (2%) 63 58	19, 37, 58, 65	0
23	21	97/98 (98%)	0.24	4 (4%) 42 36	29, 45, 61, 67	0
24	12	70/72 (97%)	-0.17	1 (1%) 73 68	23, 37, 47, 63	0
24	22	70/72 (97%)	0.54	2 (2%) 54 48	42, 54, 64, 70	0
25	13	59/60 (98%)	-0.32	0 100 100	15, 26, 49, 62	0
25	23	59/60 (98%)	0.31	2 (3%) 48 42	40, 50, 61, 68	0
26	14	69/71 (97%)	0.60	7 (10%) 14 12	38, 59, 74, 78	0
26	24	69/71 (97%)	1.05	9 (13%) 9 6	56, 68, 76, 79	0
27	15	59/60 (98%)	-0.63	0 100 100	12, 22, 39, 46	0
27	25	59/60 (98%)	-0.05	0 100 100	28, 39, 54, 70	0
28	16	53/54 (98%)	-0.33	0 100 100	24, 32, 47, 53	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.26	1 (1%) 66 61	37, 46, 54, 60	0
29	17	48/49 (97%)	-0.63	1 (2%) 63 58	14, 19, 43, 50	0
29	27	48/49 (97%)	-0.12	4 (8%) 19 15	24, 31, 51, 59	0
30	18	64/65 (98%)	-0.67	0 100 100	20, 25, 32, 46	0
30	28	64/65 (98%)	-0.06	1 (1%) 70 65	33, 40, 46, 54	0
31	19	37/37 (100%)	-0.45	0 100 100	19, 29, 45, 51	0
31	29	37/37 (100%)	0.69	1 (2%) 56 50	44, 54, 66, 68	0
32	1a	1488/1521 (97%)	0.20	70 (4%) 37 32	25, 52, 79, 94	0
32	2a	1491/1521 (98%)	0.41	83 (5%) 31 25	34, 58, 79, 96	0
33	1b	231/256 (90%)	0.91	26 (11%) 11 9	50, 64, 74, 78	0
33	2b	231/256 (90%)	1.03	23 (9%) 14 12	51, 68, 75, 79	0
34	1c	206/239 (86%)	0.56	4 (1%) 66 61	43, 56, 69, 75	0
34	2c	206/239 (86%)	1.02	19 (9%) 16 13	56, 64, 73, 77	0
35	1d	208/209 (99%)	0.98	25 (12%) 10 8	44, 56, 66, 75	0
35	2d	208/209 (99%)	0.57	10 (4%) 36 31	45, 54, 63, 71	0
36	1e	148/162 (91%)	0.29	1 (0%) 84 81	35, 51, 61, 68	0
36	2e	148/162 (91%)	0.49	5 (3%) 48 42	45, 57, 65, 75	0
37	1f	100/101 (99%)	0.46	0 100 100	43, 55, 63, 68	0
37	2f	100/101 (99%)	0.37	1 (1%) 79 75	41, 52, 60, 70	0
38	1g	155/156 (99%)	0.55	10 (6%) 26 21	47, 57, 72, 77	0
38	2g	155/156 (99%)	0.80	15 (9%) 15 12	54, 63, 72, 76	0
39	1h	137/138 (99%)	0.30	3 (2%) 62 57	42, 53, 59, 65	0
39	2h	137/138 (99%)	0.36	2 (1%) 71 67	49, 58, 64, 69	0
40	1i	127/128 (99%)	0.84	12 (9%) 15 13	41, 61, 70, 74	0
40	2i	127/128 (99%)	1.27	23 (18%) 4 3	52, 68, 73, 75	0
41	1j	97/105 (92%)	1.11	14 (14%) 7 5	43, 63, 71, 76	0
41	2j	96/105 (91%)	1.51	25 (26%) 2 2	55, 68, 76, 78	0
42	1k	114/129 (88%)	0.33	4 (3%) 47 41	33, 52, 63, 67	0
42	2k	114/129 (88%)	0.75	11 (9%) 15 12	38, 56, 67, 74	0
43	1l	121/132 (91%)	-0.03	3 (2%) 58 53	33, 40, 53, 64	0
43	2l	121/132 (91%)	0.41	3 (2%) 58 53	42, 50, 61, 67	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	125/126 (99%)	0.45	8 (6%) 27 21	38, 52, 61, 66	0
44	2m	122/126 (96%)	0.77	10 (8%) 19 16	47, 61, 67, 69	0
45	1n	60/61 (98%)	0.60	1 (1%) 69 64	45, 52, 58, 64	0
45	2n	60/61 (98%)	1.28	9 (15%) 6 5	59, 63, 69, 75	0
46	1o	88/89 (98%)	0.17	0 100 100	36, 51, 63, 66	0
46	2o	88/89 (98%)	0.39	2 (2%) 61 55	45, 54, 67, 69	0
47	1p	82/88 (93%)	0.83	5 (6%) 28 23	41, 56, 64, 70	0
47	2p	82/88 (93%)	0.56	2 (2%) 59 54	47, 56, 64, 66	0
48	1q	99/105 (94%)	0.43	2 (2%) 64 59	41, 54, 63, 64	0
48	2q	99/105 (94%)	0.50	2 (2%) 64 59	48, 57, 66, 68	0
49	1r	68/88 (77%)	0.47	1 (1%) 71 67	44, 52, 64, 67	0
49	2r	68/88 (77%)	0.18	1 (1%) 71 67	46, 52, 61, 67	0
50	1s	83/93 (89%)	0.55	4 (4%) 36 31	46, 54, 64, 68	0
50	2s	83/93 (89%)	1.04	5 (6%) 29 23	53, 64, 73, 76	0
51	1t	96/106 (90%)	0.59	2 (2%) 63 58	46, 57, 68, 71	0
51	2t	96/106 (90%)	0.55	6 (6%) 27 22	47, 56, 67, 72	0
52	1u	23/27 (85%)	0.80	2 (8%) 17 14	46, 52, 57, 58	0
52	2u	23/27 (85%)	1.02	1 (4%) 40 34	54, 62, 65, 72	0
53	1v	13/24 (54%)	0.60	4 (30%) 1 1	32, 39, 82, 89	0
53	2v	13/24 (54%)	0.93	4 (30%) 1 1	47, 53, 81, 93	0
54	1w	67/76 (88%)	0.53	5 (7%) 22 17	18, 63, 78, 85	0
54	2w	64/76 (84%)	0.94	8 (12%) 9 7	36, 71, 80, 87	0
55	1x	72/77 (93%)	-0.02	2 (2%) 55 49	16, 48, 66, 79	0
55	2x	72/77 (93%)	0.27	2 (2%) 55 49	31, 56, 70, 87	0
56	1y	67/76 (88%)	2.51	51 (76%) 0 0	50, 85, 89, 90	0
56	2y	66/76 (86%)	2.61	51 (77%) 0 0	56, 86, 91, 93	0
57	1z	17/17 (100%)	0.03	0 100 100	40, 45, 51, 52	0
57	2z	17/17 (100%)	0.64	1 (5%) 29 24	56, 59, 65, 68	0
All	All	20910/21782 (95%)	0.13	1121 (5%) 32 27	11, 49, 74, 96	0

All (1121) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	2A	2174	C	9.2
45	1n	2	ALA	8.5
1	1A	2174	C	8.4
1	1A	2129	C	8.2
1	2A	2802	G	7.9
1	1A	2130	U	7.9
1	1A	1096	A	7.4
1	1A	2175	C	7.4
1	1A	897	C	6.8
1	2A	2128	C	6.8
1	1A	2173	A	6.7
45	2n	2	ALA	6.7
1	2A	2173	A	6.6
1	1A	1059	G	6.2
1	1A	2135	A	6.2
1	1A	2160	G	6.2
1	2A	2175	C	6.1
1	2A	2803	C	6.1
1	2A	2125	G	6.0
32	1a	1003	G	6.0
1	1A	2161	C	5.9
1	2A	2160	G	5.8
7	1H	2	SER	5.8
32	2a	1032	G	5.8
55	2x	47	U	5.7
1	1A	2133	G	5.6
32	2a	1001(A)	G	5.6
1	2A	2896	C	5.6
1	1A	2162	G	5.5
1	1A	2159	G	5.5
32	2a	1002	G	5.5
21	1Z	141	VAL	5.5
1	2A	2138	C	5.5
1	1A	2121	G	5.4
1	2A	2123	G	5.4
1	2A	1536	C	5.4
1	1A	2128	C	5.4
1	1A	2134	A	5.4
1	1A	2116	G	5.3
33	1b	127	ILE	5.3
29	27	48	LYS	5.3
1	1A	2803	C	5.3
32	2a	1039	C	5.3

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Mol	Chain	Res	Type	RSRZ
1	1A	2170	A	5.3
1	2A	2129	C	5.2
1	1A	896	A	5.2
1	2A	883	G	5.2
1	1A	2801(A)	A	5.2
1	2A	2117	A	5.2
1	1A	2115	G	5.1
7	2H	2	SER	5.1
1	2A	2126	A	5.1
33	2b	237	ALA	5.1
1	1A	2802	G	5.1
1	2A	2127	G	5.1
1	2A	2113	U	5.0
1	1A	1095	A	5.0
1	2A	2116	G	5.0
1	1A	1094	U	5.0
1	1A	2108	C	4.9
1	1A	2136	C	4.9
1	2A	2139	C	4.9
56	1y	35	A	4.9
1	2A	2894	G	4.8
54	1w	20	U	4.8
1	2A	882	G	4.8
33	1b	237	ALA	4.8
32	2a	1027	C	4.8
1	1A	2110	G	4.7
1	1A	2131	G	4.7
1	1A	2127	G	4.7
32	2a	1033	G	4.7
1	1A	2117	A	4.6
1	2A	2114	A	4.6
38	1g	80	VAL	4.6
1	1A	2172	U	4.6
1	1A	2169	A	4.6
1	2A	2161	C	4.6
1	2A	2137	C	4.5
32	1a	1002	G	4.5
1	2A	2130	U	4.5
1	1A	884	C	4.5
40	1i	8	GLY	4.5
1	1A	1057	A	4.5
32	1a	1035	A	4.5

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Mol	Chain	Res	Type	RSRZ
1	1A	898	C	4.4
1	1A	1097	U	4.4
1	2A	2122	U	4.4
26	14	56	VAL	4.4
32	1a	344	A	4.4
3	1D	276	LYS	4.4
1	2A	896	A	4.4
1	1A	2151	G	4.4
1	2A	2112	G	4.4
38	2g	82	GLY	4.4
1	1A	2171	A	4.3
32	2a	1035	A	4.3
1	1A	885	C	4.3
1	1A	1081	U	4.3
1	1A	2892	A	4.3
1	1A	2120	G	4.3
1	2A	2115	G	4.3
20	2Y	1	MET	4.3
56	1y	15	G	4.3
41	2j	32	ALA	4.3
1	1A	1098	A	4.3
1	1A	2112	G	4.3
1	2A	10	G	4.3
1	2A	2124	G	4.3
1	1A	1060	U	4.3
1	2A	2801(A)	A	4.3
21	2Z	174	VAL	4.2
33	2b	236	TYR	4.2
1	1A	1082	U	4.2
49	1r	20	ALA	4.2
47	2p	82	GLN	4.2
44	1m	2	ALA	4.2
1	2A	2111	C	4.2
1	2A	2136	C	4.2
1	1A	1058	G	4.2
56	1y	34	G	4.2
1	2A	2135	A	4.2
1	2A	2169	A	4.2
35	2d	5	ILE	4.1
44	2m	102	ARG	4.1
23	21	2	SER	4.1
56	1y	75	C	4.1

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Mol	Chain	Res	Type	RSRZ
1	2A	11	G	4.1
1	2A	2121	G	4.1
56	2y	36	A	4.1
1	1A	2107	C	4.1
1	1A	1069	A	4.1
1	2A	2119	A	4.1
21	1Z	146	ILE	4.1
1	1A	2109	U	4.0
1	2A	2150	U	4.0
1	1A	2138	C	4.0
1	2A	2149	G	4.0
32	2a	1036	G	4.0
56	2y	6	G	4.0
1	1A	1064	C	4.0
40	2i	9	ARG	4.0
1	1A	879	G	4.0
1	1A	2168	G	4.0
1	2A	2134	A	4.0
1	2A	2154	G	4.0
32	2a	1034	G	4.0
46	2o	89	GLY	4.0
54	2w	72	C	4.0
53	2v	12	A	4.0
1	1A	2149	G	4.0
32	2a	1024	G	4.0
1	1A	2132	U	4.0
7	1H	174	GLY	3.9
21	2Z	146	ILE	3.9
41	2j	74	ILE	3.9
1	2A	2170	A	3.9
32	2a	1004	A	3.9
38	1g	79	ARG	3.9
1	1A	2893	G	3.9
32	1a	1024	G	3.9
32	1a	1031	G	3.9
1	1A	1070	A	3.9
1	1A	2114	A	3.9
54	2w	73	A	3.9
56	2y	14	A	3.9
32	1a	1023	G	3.9
32	2a	1003	G	3.9
15	2T	131	ALA	3.9

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Mol	Chain	Res	Type	RSRZ
1	1A	2145	C	3.9
32	2a	1150	U	3.9
1	1A	2894	G	3.8
32	1a	1034	G	3.8
32	2a	1030	C	3.8
35	2d	6	GLY	3.8
35	1d	70	ILE	3.8
56	2y	7	A	3.8
1	2A	2167	U	3.8
1	1A	1068	G	3.8
1	1A	2123	G	3.8
1	1A	2125	G	3.8
1	2A	881	G	3.8
32	1a	1030(A)	G	3.8
32	2a	1030(A)	G	3.8
32	1a	1028	C	3.8
1	1A	882	G	3.8
1	2A	2153	G	3.8
32	2a	1117	G	3.8
1	2A	888	C	3.8
32	2a	1030(B)	C	3.8
32	1a	1025	U	3.8
50	1s	84	GLY	3.8
8	1I	146	ALA	3.7
56	2y	15	G	3.7
56	2y	44	G	3.7
32	2a	1038	C	3.7
50	2s	84	GLY	3.7
1	2A	2176	A	3.7
53	1v	13	A	3.7
33	2b	134	GLU	3.7
1	1A	880	G	3.7
1	2A	2133	G	3.7
1	2A	2151	G	3.7
1	2A	2162	G	3.7
7	2H	120	GLY	3.7
32	1a	1026	G	3.7
44	2m	100	GLY	3.7
1	1A	2111	C	3.7
43	2l	18	VAL	3.7
56	1y	27	G	3.7
1	1A	2189	U	3.7

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Mol	Chain	Res	Type	RSRZ
32	1a	1027	C	3.7
1	1A	1084	A	3.7
32	2a	1005	A	3.7
21	1Z	1	MET	3.7
22	20	84	LEU	3.6
33	2b	121	LEU	3.6
32	1a	1001(A)	G	3.6
1	1A	2178	C	3.6
1	2A	897	C	3.6
32	1a	163	C	3.6
1	2A	2629	A	3.6
35	1d	194	LEU	3.6
56	1y	45	U	3.6
1	2A	2110	G	3.6
32	1a	346	G	3.6
32	2a	1031	G	3.6
1	1A	1072	C	3.6
32	2a	1149	C	3.6
1	2A	2895	U	3.6
1	2A	892	G	3.6
56	2y	75	C	3.6
35	1d	118	ARG	3.6
1	1A	1066	U	3.5
33	1b	125	PRO	3.5
1	2A	899	A	3.5
1	2A	2120	G	3.5
1	2A	2155	G	3.5
1	2A	2893	G	3.5
1	1A	2180	U	3.5
43	2l	63	GLY	3.5
21	2Z	136	PHE	3.5
1	1A	2119	A	3.5
1	2A	652(B)	A	3.5
53	2v	13	A	3.5
56	1y	67	C	3.5
1	1A	2181	G	3.5
1	2A	2100	G	3.5
1	2A	2172	U	3.5
34	1c	177	THR	3.5
42	2k	25	TYR	3.5
1	1A	2896	C	3.5
1	2A	885	C	3.5

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Mol	Chain	Res	Type	RSRZ
32	2a	1029	C	3.5
1	1A	1063	G	3.5
1	1A	2166	G	3.5
1	2A	2190	G	3.5
55	1x	47	U	3.5
7	2H	6	ARG	3.4
32	1a	1030(D)	A	3.4
1	2A	2107	C	3.4
1	2A	2179	C	3.4
1	1A	1093	G	3.4
56	1y	44	G	3.4
18	1W	112	GLY	3.4
41	1j	36	GLY	3.4
1	1A	1177	A	3.4
1	1A	2804	C	3.4
1	2A	2152	G	3.4
41	1j	87	THR	3.4
40	2i	11	LYS	3.4
1	1A	1073	A	3.4
56	1y	36	A	3.4
7	2H	29	PRO	3.4
1	1A	888	C	3.4
1	2A	898	C	3.4
32	1a	1257	U	3.4
56	2y	12	U	3.4
32	2a	1026	G	3.4
56	2y	19	G	3.4
41	2j	91	PRO	3.3
42	2k	14	VAL	3.3
1	2A	884	C	3.3
19	2X	94	GLY	3.3
28	26	20	ASN	3.3
32	2a	1006	C	3.3
34	2c	2	GLY	3.3
1	1A	2124	G	3.3
56	1y	57	G	3.3
35	2d	8	VAL	3.3
54	1w	73	A	3.3
23	11	2	SER	3.3
56	2y	45	U	3.3
51	2t	103	GLY	3.3
38	2g	32	ARG	3.3

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Mol	Chain	Res	Type	RSRZ
1	1A	2163	C	3.3
6	1G	50	ALA	3.3
6	2G	52	ILE	3.3
38	2g	81	GLY	3.3
29	27	47	ARG	3.3
1	1A	2152	G	3.3
1	2A	1533	G	3.3
32	2a	485	G	3.3
56	2y	22	G	3.3
1	1A	1088	A	3.2
53	1v	12	A	3.2
38	2g	85	TYR	3.2
1	2A	362	U	3.2
32	2a	1040	U	3.2
3	2D	99	ASP	3.2
1	2A	886	C	3.2
32	1a	221	C	3.2
56	1y	68	C	3.2
34	2c	207	VAL	3.2
35	2d	4	TYR	3.2
1	2A	2892	A	3.2
35	1d	122	ARG	3.2
1	1A	9	U	3.2
1	1A	2122	U	3.2
32	2a	1257	U	3.2
32	2a	1532	U	3.2
1	2A	2164	C	3.2
1	2A	2804	C	3.2
7	2H	134	SER	3.2
29	17	48	LYS	3.2
1	1A	883	G	3.2
1	1A	2141	G	3.2
1	1A	2165	G	3.2
32	1a	1030(C)	G	3.2
32	1a	1036	G	3.2
56	2y	57	G	3.2
1	1A	2150	U	3.2
1	2A	2109	U	3.2
56	1y	12	U	3.2
56	2y	67	C	3.2
6	1G	146	TYR	3.2
33	2b	17	PHE	3.2

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Mol	Chain	Res	Type	RSRZ
43	1l	63	GLY	3.2
32	1a	1139	G	3.1
56	1y	24	G	3.1
1	2A	2189	U	3.1
1	2A	2809	A	3.1
1	2A	2897	U	3.1
33	2b	11	LEU	3.1
7	2H	52	VAL	3.1
38	2g	80	VAL	3.1
1	1A	886	C	3.1
1	1A	2137	C	3.1
21	2Z	106	GLY	3.1
32	2a	1018	C	3.1
26	14	51	ASP	3.1
47	1p	13	HIS	3.1
40	2i	102	LEU	3.1
51	2t	99	LEU	3.1
41	1j	32	ALA	3.1
1	1A	2207	G	3.1
32	1a	630	G	3.1
56	1y	20	U	3.1
1	1A	2164	C	3.1
1	2A	2140	C	3.1
32	1a	1029	C	3.1
56	1y	49	C	3.1
1	1A	1078	U	3.1
1	2A	9	U	3.1
1	2A	2168	G	3.1
32	1a	1033	G	3.1
32	2a	1023	G	3.1
32	2a	1286	A	3.1
42	1k	25	TYR	3.1
6	1G	182	LYS	3.1
20	2Y	54	LYS	3.1
38	2g	84	ASN	3.1
56	1y	74	C	3.1
40	1i	18	PHE	3.1
1	2A	12	U	3.0
1	2A	895	U	3.0
26	14	57	GLU	3.0
41	2j	87	THR	3.0
1	1A	2156	G	3.0

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Mol	Chain	Res	Type	RSRZ
56	2y	70	G	3.0
1	1A	1076	C	3.0
1	2A	2108	C	3.0
20	2Y	90	LEU	3.0
26	24	51	ASP	3.0
33	2b	96	ARG	3.0
1	2A	878	A	3.0
32	1a	162	A	3.0
1	2A	2148	G	3.0
1	2A	2165	G	3.0
32	1a	1032	G	3.0
32	2a	630	G	3.0
35	2d	69	GLY	3.0
1	2A	2794	C	3.0
56	1y	11	C	3.0
21	2Z	87	ASP	3.0
7	2H	19	VAL	3.0
7	2H	26	VAL	3.0
15	2T	130	ALA	3.0
33	2b	165	VAL	3.0
42	2k	117	ASN	3.0
56	1y	59	U	3.0
41	1j	33	GLN	3.0
1	2A	2171	A	3.0
32	1a	160	A	3.0
41	1j	77	PRO	3.0
1	1A	171	G	3.0
1	1A	2106	G	3.0
1	1A	2155	G	3.0
1	2A	171	G	3.0
1	2A	2159	G	3.0
32	2a	220	G	3.0
32	2a	1030(C)	G	3.0
35	2d	156	GLU	3.0
51	1t	10	LEU	3.0
56	1y	1	G	3.0
56	2y	5	G	3.0
56	2y	24	G	3.0
38	1g	4	ARG	3.0
41	2j	86	MET	3.0
1	2A	894	C	3.0
56	1y	61	C	3.0

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Mol	Chain	Res	Type	RSRZ
56	2y	68	C	3.0
33	1b	122	PHE	3.0
38	1g	82	GLY	3.0
44	2m	124	PRO	3.0
32	2a	1531	A	2.9
40	1i	2	GLU	2.9
56	2y	23	A	2.9
41	1j	4	ILE	2.9
32	1a	220	G	2.9
56	1y	22	G	2.9
56	2y	18	G	2.9
42	2k	13	GLN	2.9
21	2Z	166	SER	2.9
41	2j	59	SER	2.9
56	2y	59	U	2.9
34	2c	105	GLU	2.9
41	1j	38	ILE	2.9
21	2Z	103	ARG	2.9
25	23	29	ARG	2.9
35	2d	115	ARG	2.9
32	1a	1041	A	2.9
15	1T	131	ALA	2.9
39	1h	93	VAL	2.9
7	2H	118	PRO	2.9
1	1A	1087	G	2.9
1	2A	2147	G	2.9
19	2X	95	LEU	2.9
1	1A	2794	C	2.9
3	2D	276	LYS	2.9
21	2Z	172	ALA	2.9
50	2s	13	ASP	2.9
32	1a	1447	A	2.9
32	2a	1447	A	2.9
56	2y	9	A	2.9
1	1A	2148	G	2.9
1	2A	652(U)	G	2.9
1	2A	879	G	2.9
1	2A	1171	G	2.9
1	2A	2104	G	2.9
1	1A	2177	C	2.9
1	1A	2897	U	2.9
56	1y	47	U	2.9

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Mol	Chain	Res	Type	RSRZ
56	2y	13	C	2.9
56	2y	48	C	2.9
56	2y	74	C	2.9
44	2m	123	ALA	2.9
41	2j	37	PRO	2.9
41	2j	78	ASN	2.9
1	1A	2126	A	2.9
7	2H	7	LEU	2.9
53	1v	14	A	2.9
53	2v	14	A	2.9
8	2I	82	ARG	2.8
51	2t	8	ARG	2.8
21	1Z	105	VAL	2.8
56	1y	10	G	2.8
32	1a	1038	C	2.8
56	1y	62	C	2.8
56	2y	43	C	2.8
16	2U	88	ILE	2.8
35	1d	73	ARG	2.8
56	2y	21	A	2.8
20	2Y	55	TYR	2.8
47	1p	82	GLN	2.8
9	2N	44	PRO	2.8
18	2W	112	GLY	2.8
40	2i	19	LEU	2.8
1	1A	1065	U	2.8
1	1A	2113	U	2.8
1	1A	2895	U	2.8
54	1w	16	U	2.8
56	2y	47	U	2.8
33	1b	130	ARG	2.8
1	2A	100	G	2.8
1	2A	880	G	2.8
1	2A	2792	G	2.8
56	1y	5	G	2.8
56	2y	27	G	2.8
1	1A	2179	C	2.8
1	2A	889	C	2.8
32	1a	1039	C	2.8
32	2a	1037	C	2.8
56	1y	13	C	2.8
43	1l	18	VAL	2.8

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Mol	Chain	Res	Type	RSRZ
1	2A	2158	A	2.8
32	2a	1001	A	2.8
56	2y	35	A	2.8
38	1g	85	TYR	2.8
44	2m	87	TYR	2.8
21	2Z	150	LEU	2.8
1	1A	2190	G	2.8
1	2A	2141	G	2.8
1	2A	2805	G	2.8
32	2a	1325	C	2.8
38	2g	156	TRP	2.8
56	2y	34	G	2.8
40	2i	7	THR	2.8
26	24	63	TYR	2.8
34	2c	47	LEU	2.8
35	1d	135	LEU	2.8
32	1a	161	A	2.8
9	2N	45	ASN	2.7
35	1d	137	SER	2.7
15	1T	130	ALA	2.7
43	2l	126	LYS	2.7
1	1A	2139	C	2.7
41	2j	36	GLY	2.7
1	1A	11	G	2.7
1	1A	2157	G	2.7
1	2A	1114	G	2.7
1	2A	2793	G	2.7
32	2a	1094	G	2.7
56	1y	19	G	2.7
56	1y	63	G	2.7
56	1y	65	G	2.7
56	2y	69	G	2.7
9	2N	9	VAL	2.7
6	2G	182	LYS	2.7
8	2I	146	ALA	2.7
24	12	70	GLN	2.7
1	1A	2808	U	2.7
7	2H	39	PRO	2.7
32	1a	1040	U	2.7
56	2y	33	U	2.7
38	1g	81	GLY	2.7
1	1A	2142	C	2.7

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Mol	Chain	Res	Type	RSRZ
1	1A	2146	C	2.7
1	1A	2154	G	2.7
1	2A	1115	G	2.7
1	2A	2157	G	2.7
56	1y	6	G	2.7
1	1A	2176	A	2.7
56	1y	7	A	2.7
37	2f	92	LYS	2.7
6	2G	50	ALA	2.7
33	1b	11	LEU	2.7
39	1h	112	LEU	2.7
35	1d	171	GLY	2.7
56	2y	66	U	2.7
21	2Z	137	ILE	2.7
33	2b	127	ILE	2.7
1	1A	1092	C	2.7
32	1a	848	C	2.7
54	1w	72	C	2.7
38	2g	83	ALA	2.7
42	1k	13	GLN	2.7
21	1Z	136	PHE	2.7
51	2t	98	PRO	2.7
1	2A	2101	G	2.7
32	2a	1131	G	2.7
38	1g	32	ARG	2.7
26	24	65	ASP	2.6
25	23	25	ALA	2.6
1	1A	154(A)	C	2.6
32	1a	1137	C	2.6
32	2a	1028	C	2.6
32	2a	1116	C	2.6
1	1A	1054	A	2.6
32	1a	1001	A	2.6
32	1a	1005	A	2.6
32	2a	1030(D)	A	2.6
56	2y	26	A	2.6
56	2y	73	A	2.6
1	1A	271(M)	G	2.6
1	1A	1055	G	2.6
40	2i	62	TYR	2.6
12	2Q	22	LYS	2.6
34	2c	62	ASP	2.6

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Mol	Chain	Res	Type	RSRZ
32	1a	841	U	2.6
21	2Z	163	LEU	2.6
33	2b	136	VAL	2.6
39	2h	112	LEU	2.6
40	2i	14	VAL	2.6
41	2j	34	VAL	2.6
1	1A	2188	C	2.6
32	1a	219	C	2.6
32	2a	1007	C	2.6
56	1y	3	C	2.6
56	1y	73	A	2.6
1	2A	2131	G	2.6
33	1b	93	VAL	2.6
35	1d	172	PRO	2.6
39	1h	2	LEU	2.6
56	2y	10	G	2.6
1	1A	1175	U	2.6
21	2Z	104	PHE	2.6
26	14	49	PHE	2.6
32	2a	1148	U	2.6
7	2H	136	ILE	2.6
34	2c	193	TYR	2.6
33	2b	7	VAL	2.6
38	1g	84	ASN	2.6
40	1i	19	LEU	2.6
41	2j	76	ASN	2.6
1	2A	1040	C	2.6
1	2A	1041	C	2.6
7	2H	12	PRO	2.6
7	2H	117	PRO	2.6
7	2H	128	PRO	2.6
56	1y	43	C	2.6
56	2y	2	C	2.6
26	14	59	PHE	2.6
38	2g	7	ALA	2.6
1	1A	1086	A	2.6
1	1A	2158	A	2.6
32	1a	195	A	2.6
32	2a	1041	A	2.6
32	1a	1000	U	2.6
33	1b	227	GLY	2.6
34	1c	13	GLY	2.6

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Mol	Chain	Res	Type	RSRZ
1	1A	10	G	2.6
1	1A	881	G	2.6
32	2a	1224	G	2.6
56	2y	1	G	2.6
21	2Z	148	ASP	2.5
47	2p	68	ASP	2.5
10	2O	29	ASN	2.5
31	29	16	VAL	2.5
26	24	68	ARG	2.5
45	2n	3	ARG	2.5
35	1d	149	ALA	2.5
21	2Z	170	THR	2.5
1	2A	1178	C	2.5
1	2A	2145	C	2.5
35	1d	87	GLY	2.5
35	1d	167	GLY	2.5
56	2y	40	C	2.5
1	1A	2629	A	2.5
56	1y	21	A	2.5
1	1A	2167	U	2.5
6	2G	29	TRP	2.5
9	2N	10	GLU	2.5
32	2a	961	U	2.5
57	2z	4	SER	2.5
1	1A	271(D)	G	2.5
1	1A	545	G	2.5
32	2a	1220	G	2.5
33	1b	121	LEU	2.5
7	2H	21	PRO	2.5
6	2G	147	ASP	2.5
9	2N	140	VAL	2.5
21	2Z	72	ARG	2.5
21	2Z	141	VAL	2.5
44	1m	125	ARG	2.5
33	1b	19	HIS	2.5
41	2j	82	ILE	2.5
23	21	28	GLY	2.5
7	2H	47	GLU	2.5
35	1d	192	GLU	2.5
1	1A	1509	C	2.5
1	1A	2140	C	2.5
1	2A	2146	C	2.5

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Mol	Chain	Res	Type	RSRZ
32	1a	1008	C	2.5
56	2y	49	C	2.5
1	1A	278	A	2.5
1	1A	1045	A	2.5
1	1A	1103	A	2.5
1	2A	887	A	2.5
1	2A	900	A	2.5
56	2y	58	A	2.5
1	1A	271(K)	U	2.5
1	1A	1083	U	2.5
32	1a	173	U	2.5
32	1a	182	U	2.5
41	2j	65	LEU	2.5
56	2y	60	U	2.5
6	1G	51	ARG	2.5
33	1b	136	VAL	2.5
35	1d	191	ARG	2.5
43	1l	19	ARG	2.5
33	1b	17	PHE	2.5
1	2A	2751	G	2.5
54	2w	19	G	2.5
56	1y	18	G	2.5
56	1y	69	G	2.5
8	2I	87	LYS	2.5
44	2m	13	LYS	2.5
41	2j	10	GLY	2.5
8	2I	135	GLU	2.5
33	1b	9	GLU	2.5
33	2b	221	LEU	2.5
23	21	26	ARG	2.5
40	2i	66	ARG	2.5
46	2o	88	ARG	2.5
33	1b	7	VAL	2.5
42	1k	14	VAL	2.5
1	1A	362	U	2.5
1	1A	895	U	2.5
1	1A	899	A	2.5
1	2A	890	A	2.5
1	2A	1847	A	2.5
1	2A	2177	C	2.5
1	2A	2183	C	2.5
1	2A	2789	C	2.5

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Mol	Chain	Res	Type	RSRZ
32	1a	203	U	2.5
32	2a	470	C	2.5
32	2a	1025	U	2.5
32	2a	1250	A	2.5
32	2a	1363	C	2.5
53	1v	15	A	2.5
54	2w	47	U	2.5
40	1i	15	ALA	2.5
7	2H	48	GLY	2.5
10	2O	27	GLY	2.5
1	1A	1071	G	2.4
1	2A	2833	G	2.4
32	2a	1124	G	2.4
33	1b	129	GLU	2.4
45	2n	6	LEU	2.4
33	1b	15	VAL	2.4
36	2e	20	GLN	2.4
7	2H	175	LYS	2.4
20	2Y	34	LYS	2.4
26	24	49	PHE	2.4
41	1j	86	MET	2.4
44	2m	42	ALA	2.4
1	2A	272(A)	U	2.4
1	1A	229	A	2.4
1	1A	878	A	2.4
1	1A	889	C	2.4
32	1a	1030(B)	C	2.4
32	2a	1019	C	2.4
44	1m	100	GLY	2.4
51	1t	103	GLY	2.4
56	1y	48	C	2.4
56	2y	56	C	2.4
33	2b	10	LEU	2.4
1	1A	1176	G	2.4
1	2A	1170	G	2.4
1	2A	2166	G	2.4
1	2A	2191	G	2.4
7	2H	43	VAL	2.4
40	2i	41	VAL	2.4
33	2b	16	HIS	2.4
56	2y	52	G	2.4
36	2e	5	ASP	2.4

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Mol	Chain	Res	Type	RSRZ
50	1s	68	GLY	2.4
1	1A	2118	U	2.4
56	1y	33	U	2.4
40	2i	12	GLU	2.4
1	1A	887	A	2.4
1	1A	1067	A	2.4
2	2B	59	A	2.4
1	2A	2105	C	2.4
1	2A	2142	C	2.4
32	1a	1037	C	2.4
32	2a	1326	C	2.4
56	1y	25	C	2.4
56	2y	25	C	2.4
41	2j	77	PRO	2.4
33	1b	123	ALA	2.4
44	1m	25	ILE	2.4
7	2H	83	TYR	2.4
8	2I	89	TYR	2.4
20	2Y	58	GLY	2.4
40	1i	75	ASP	2.4
1	2A	652(C)	G	2.4
1	2A	1039	G	2.4
32	1a	79	G	2.4
32	1a	183	G	2.4
56	1y	53	G	2.4
6	2G	48	GLU	2.4
7	2H	88	LEU	2.4
33	1b	10	LEU	2.4
33	2b	129	GLU	2.4
32	2a	204	U	2.4
3	2D	275	LYS	2.4
33	2b	132	LYS	2.4
48	1q	100	LYS	2.4
21	2Z	105	VAL	2.4
53	2v	15	A	2.4
1	1A	1080	C	2.4
1	1A	2105	C	2.4
1	2A	2188	C	2.4
32	1a	218	C	2.4
32	2a	999	C	2.4
36	2e	45	PHE	2.4
56	1y	72	C	2.4

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Mol	Chain	Res	Type	RSRZ
21	2Z	171	ILE	2.4
33	2b	123	ALA	2.4
33	2b	200	ILE	2.4
38	1g	83	ALA	2.4
40	1i	106	ALA	2.4
26	24	54	GLY	2.4
50	2s	68	GLY	2.4
35	1d	134	ASP	2.4
21	2Z	144	LEU	2.3
40	1i	10	ARG	2.3
24	22	1	MET	2.3
1	1A	1099	G	2.3
1	1A	2100	G	2.3
1	1A	2805	G	2.3
1	2A	2181	G	2.3
7	2H	10	PRO	2.3
33	1b	232	PRO	2.3
56	2y	71	G	2.3
1	2A	1026	U	2.3
1	2A	2132	U	2.3
20	2Y	57	GLN	2.3
32	1a	164	U	2.3
32	2a	1000	U	2.3
40	2i	44	VAL	2.3
45	2n	61	TRP	2.3
4	2E	204	ALA	2.3
34	2c	71	ALA	2.3
40	2i	43	ALA	2.3
1	1A	548	A	2.3
1	1A	1085	A	2.3
56	1y	26	A	2.3
56	1y	64	A	2.3
1	1A	1075	C	2.3
1	2A	893	C	2.3
1	2A	2163	C	2.3
32	1a	1030	C	2.3
38	2g	154	TYR	2.3
54	2w	2	C	2.3
41	2j	100	THR	2.3
23	21	27	GLU	2.3
35	1d	29	PRO	2.3
24	22	70	GLN	2.3

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Mol	Chain	Res	Type	RSRZ
45	2n	18	VAL	2.3
1	1A	652(C)	G	2.3
1	2A	2186	G	2.3
32	1a	65	U	2.3
32	1a	93	G	2.3
33	2b	77	ALA	2.3
38	2g	40	ALA	2.3
54	2w	71	G	2.3
56	1y	66	U	2.3
41	2j	31	GLY	2.3
50	1s	8	GLY	2.3
33	1b	236	TYR	2.3
1	2A	6	A	2.3
32	1a	1286	A	2.3
33	1b	231	GLU	2.3
45	2n	13	THR	2.3
41	2j	79	ARG	2.3
45	2n	12	ARG	2.3
47	1p	12	LYS	2.3
56	1y	9	A	2.3
56	1y	58	A	2.3
12	1Q	60	ARG	2.3
52	1u	6	ARG	2.3
1	2A	2178	C	2.3
56	2y	4	C	2.3
33	1b	165	VAL	2.3
35	1d	173	TRP	2.3
34	2c	92	ALA	2.3
45	2n	38	GLY	2.3
6	2G	53	LEU	2.3
21	2Z	125	LEU	2.3
32	2a	1219	U	2.3
41	2j	90	LEU	2.3
48	1q	98	LEU	2.3
50	2s	71	LEU	2.3
3	2D	38	LYS	2.3
35	1d	169	LYS	2.3
1	2A	2156	G	2.3
1	2A	2182	G	2.3
1	2A	2807	G	2.3
11	2P	90	ARG	2.3
12	2Q	60	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
26	24	67	TYR	2.3
34	1c	193	TYR	2.3
1	1A	1091	G	2.3
32	1a	1138	G	2.3
40	2i	64	THR	2.3
40	2i	105	ASP	2.3
41	1j	83	GLU	2.3
44	1m	105	THR	2.3
47	1p	71	ARG	2.3
1	1A	2790	A	2.3
1	2A	1509	C	2.3
1	2A	2185	C	2.3
35	1d	5	ILE	2.3
33	2b	207	ALA	2.3
12	2Q	15	GLY	2.3
44	1m	26	GLY	2.3
50	1s	4	SER	2.3
41	2j	28	ARG	2.2
8	2I	74	ASN	2.2
40	1i	7	THR	2.2
32	1a	1446	U	2.2
22	10	3	HIS	2.2
1	1A	1062	G	2.2
1	1A	1173	G	2.2
1	2A	1042	G	2.2
1	2A	1112	G	2.2
1	2A	2184	G	2.2
32	1a	77	G	2.2
32	2a	1181	G	2.2
44	2m	54	VAL	2.2
56	1y	70	G	2.2
34	2c	84	ILE	2.2
32	1a	171	A	2.2
32	2a	1256	A	2.2
30	28	29	LYS	2.2
1	1A	645	C	2.2
1	1A	893	C	2.2
1	2A	2143	C	2.2
32	1a	1043	C	2.2
32	2a	1043	C	2.2
38	2g	5	ARG	2.2
42	2k	91	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
6	1G	35	GLU	2.2
8	2I	70	GLU	2.2
1	1A	2102	U	2.2
7	2H	79	VAL	2.2
29	27	46	VAL	2.2
7	2H	9	ILE	2.2
7	2H	121	ILE	2.2
16	2U	106	PHE	2.2
35	1d	62	GLN	2.2
29	27	45	ALA	2.2
48	2q	100	LYS	2.2
52	1u	19	GLY	2.2
1	1A	1056	G	2.2
1	1A	2147	G	2.2
1	1A	2793	G	2.2
1	2A	2891	G	2.2
32	1a	78	G	2.2
32	2a	1022	G	2.2
32	2a	171	A	2.2
34	2c	79	ARG	2.2
55	1x	46	G	2.2
1	1A	8	A	2.2
1	1A	1174	A	2.2
4	2E	73	GLU	2.2
45	2n	22	THR	2.2
1	1A	1053	C	2.2
1	2A	652(T)	C	2.2
32	2a	1128	C	2.2
44	2m	12	ASN	2.2
56	1y	4	C	2.2
7	2H	15	VAL	2.2
7	2H	44	VAL	2.2
7	2H	50	VAL	2.2
7	2H	114	VAL	2.2
26	24	59	PHE	2.2
40	2i	65	VAL	2.2
34	2c	182	ILE	2.2
1	2A	1113	U	2.2
32	1a	204	U	2.2
40	2i	15	ALA	2.2
44	1m	5	ALA	2.2
49	2r	20	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
19	1X	95	LEU	2.2
41	1j	40	LEU	2.2
35	1d	65	ARG	2.2
44	1m	24	GLY	2.2
8	1I	41	GLU	2.2
35	1d	179	GLU	2.2
1	1A	890	A	2.2
1	1A	1046	A	2.2
32	2a	197	A	2.2
32	2a	978	A	2.2
1	1A	2182	G	2.2
26	14	32	TYR	2.2
36	2e	133	TYR	2.2
42	1k	117	ASN	2.2
7	2H	11	VAL	2.2
1	1A	2185	C	2.2
32	1a	92	C	2.2
32	2a	1118	C	2.2
36	2e	10	MET	2.2
7	1H	171	LEU	2.2
33	2b	218	ALA	2.2
38	2g	16	LEU	2.2
40	2i	45	ALA	2.2
42	2k	15	ALA	2.2
34	1c	171	GLY	2.2
42	2k	86	GLY	2.2
56	1y	50	U	2.1
20	2Y	53	PRO	2.1
35	2d	192	GLU	2.1
21	2Z	142	SER	2.1
16	2U	8	VAL	2.1
26	24	50	VAL	2.1
34	2c	195	VAL	2.1
35	1d	88	VAL	2.1
56	1y	23	A	2.1
1	1A	2792	G	2.1
32	2a	998	G	2.1
32	2a	1021	G	2.1
3	2D	263	ARG	2.1
38	2g	4	ARG	2.1
41	2j	5	ARG	2.1
40	2i	39	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
52	2u	16	GLY	2.1
1	1A	2143	C	2.1
56	2y	11	C	2.1
21	2Z	158	PRO	2.1
21	2Z	167	PRO	2.1
32	1a	368	U	2.1
56	2y	51	U	2.1
5	2F	169	ASN	2.1
6	2G	146	TYR	2.1
20	2Y	44	ILE	2.1
26	14	50	VAL	2.1
34	2c	77	ILE	2.1
8	2I	68	LEU	2.1
33	1b	215	LEU	2.1
41	2j	40	LEU	2.1
50	2s	15	LEU	2.1
34	2c	137	ALA	2.1
35	1d	3	ARG	2.1
38	1g	2	ALA	2.1
51	2t	97	ALA	2.1
36	1e	85	GLY	2.1
5	2F	171	PRO	2.1
32	1a	181	G	2.1
34	2c	109	PRO	2.1
54	1w	71	G	2.1
56	2y	28	G	2.1
1	1A	34	C	2.1
1	1A	271(Z)	C	2.1
1	2A	1043	C	2.1
1	2A	2103	C	2.1
32	2a	1008	C	2.1
32	2a	1452	C	2.1
34	2c	95	THR	2.1
40	1i	64	THR	2.1
1	2A	2180	U	2.1
20	2Y	49	VAL	2.1
42	2k	105	VAL	2.1
33	2b	31	TYR	2.1
40	1i	91	ASP	2.1
42	2k	36	ASP	2.1
41	1j	90	LEU	2.1
42	2k	103	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
23	11	26	ARG	2.1
33	1b	131	PRO	2.1
1	2A	229	A	2.1
41	2j	42	THR	2.1
6	1G	52	ILE	2.1
14	2S	31	SER	2.1
21	2Z	149	SER	2.1
41	1j	74	ILE	2.1
1	1A	892	G	2.1
32	2a	1050	G	2.1
32	2a	1184	G	2.1
34	2c	116	VAL	2.1
34	2c	128	PHE	2.1
48	2q	23	VAL	2.1
1	1A	1079	C	2.1
1	1A	1532	C	2.1
1	1A	2791	C	2.1
32	2a	219	C	2.1
32	2a	381	C	2.1
33	1b	154	LEU	2.1
51	2t	10	LEU	2.1
1	2A	2808	U	2.1
7	2H	101	ARG	2.1
12	2Q	5	ARG	2.1
35	2d	3	ARG	2.1
40	2i	91	ASP	2.1
41	2j	66	ARG	2.1
39	2h	130	GLY	2.1
7	2H	36	PRO	2.0
6	1G	48	GLU	2.0
6	1G	137	GLU	2.0
41	2j	15	THR	2.0
7	2H	49	VAL	2.0
21	2Z	139	VAL	2.0
32	2a	172	A	2.0
32	2a	1324	A	2.0
40	2i	108	VAL	2.0
7	2H	33	LEU	2.0
44	2m	99	ARG	2.0
34	2c	23	TYR	2.0
40	2i	94	ALA	2.0
1	1A	12	U	2.0

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Mol	Chain	Res	Type	RSRZ
1	2A	614(A)	U	2.0
32	2a	1133	G	2.0
54	2w	45	U	2.0
54	2w	57	G	2.0
1	1A	271(J)	C	2.0
32	1a	76	C	2.0
32	1a	1132	C	2.0
32	2a	1321	C	2.0
55	2x	16	C	2.0
56	2y	3	C	2.0
21	2Z	159	PRO	2.0
41	1j	39	PRO	2.0
40	2i	95	LYS	2.0
33	2b	97	TRP	2.0
35	2d	158	ILE	2.0
7	2H	45	VAL	2.0
33	1b	187	LEU	2.0
40	1i	14	VAL	2.0
5	2F	168	ARG	2.0
38	2g	77	SER	2.0
40	2i	10	ARG	2.0
42	2k	16	SER	2.0
41	1j	78	ASN	2.0
2	2B	120	A	2.0
32	1a	1531	A	2.0
32	2a	1092	A	2.0
35	1d	195	ALA	2.0
47	1p	68	ASP	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	4SU	2y	8	20/21	0.46	0.20	84,89,100,114	0
56	G7M	2y	46	24/25	0.47	0.18	75,85,92,101	0
56	5MU	2y	54	21/22	0.48	0.17	78,86,96,113	0
56	5MU	1y	54	21/22	0.51	0.18	77,85,93,112	0
56	G7M	1y	46	24/25	0.52	0.19	81,86,94,100	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	4SU	1y	8	20/21	0.57	0.18	83,88,92,103	0
56	PSU	1y	55	20/21	0.66	0.18	83,87,96,107	0
56	MIA	1y	37	22/30	0.67	0.18	74,79,86,90	0
56	MIA	2y	37	22/30	0.68	0.17	65,84,90,108	0
56	PSU	2y	39	20/21	0.68	0.16	76,80,88,100	0
56	PSU	2y	32	20/21	0.71	0.16	79,83,88,104	0
56	PSU	2y	55	20/21	0.74	0.14	79,86,95,97	0
54	G7M	1w	46	24/25	0.77	0.14	58,66,85,96	0
56	PSU	1y	39	20/21	0.80	0.13	68,76,80,85	0
54	G7M	2w	46	24/25	0.82	0.12	69,73,87,98	0
56	PSU	1y	32	20/21	0.82	0.14	72,76,84,94	0
54	PSU	2w	55	20/21	0.86	0.13	63,68,77,78	0
54	4SU	2w	8	20/21	0.88	0.11	68,73,76,88	0
55	PSU	2x	55	20/21	0.91	0.11	54,58,63,65	0
54	5MU	2w	54	21/22	0.91	0.12	55,61,67,72	0
54	PSU	1w	55	20/21	0.91	0.11	42,57,69,69	0
55	4SU	2x	8	20/21	0.91	0.12	55,64,69,81	0
54	PSU	2w	32	20/21	0.92	0.12	47,58,63,66	0
55	5MU	2x	54	21/22	0.92	0.15	55,61,63,65	0
32	2MG	2a	1207	24/25	0.92	0.10	53,61,65,68	0
43	0TD	2l	92	10/11	0.92	0.16	45,53,56,61	0
55	5MU	1x	54	21/22	0.92	0.13	48,54,59,60	0
43	0TD	1l	92	10/11	0.93	0.11	35,41,45,48	0
32	5MC	2a	1400	21/22	0.93	0.11	43,50,55,58	0
32	PSU	2a	516	20/21	0.93	0.09	46,56,61,62	0
54	PSU	1w	32	20/21	0.94	0.09	38,41,47,49	0
55	PSU	1x	55	20/21	0.94	0.09	38,46,56,61	0
32	G7M	2a	527	24/25	0.94	0.10	47,52,59,60	0
32	M2G	2a	966	25/26	0.94	0.10	43,48,60,65	0
55	5MC	2x	32	21/22	0.94	0.11	45,52,57,59	0
32	5MC	2a	967	21/22	0.94	0.10	45,52,60,61	0
54	MIA	2w	37	25/30	0.94	0.09	29,50,59,65	0
55	5MC	1x	32	21/22	0.95	0.10	37,43,47,57	0
54	4SU	1w	8	20/21	0.95	0.09	55,63,67,67	0
32	5MC	1a	967	21/22	0.95	0.09	35,40,49,53	0
1	5MU	2A	1915	21/22	0.95	0.09	40,47,52,53	0
1	PSU	2A	1917	20/21	0.95	0.08	46,50,57,66	0
1	5MC	2A	1942	21/22	0.95	0.11	39,46,50,59	0
32	2MG	1a	1207	24/25	0.95	0.08	41,53,57,57	0
54	5MU	1w	54	21/22	0.95	0.10	38,46,51,52	0
1	PSU	1A	1917	20/21	0.95	0.10	34,38,46,47	0
55	4SU	1x	8	20/21	0.95	0.10	45,49,55,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	5MU	1A	1915	21/22	0.96	0.09	29,38,41,43	0
32	4OC	2a	1402	22/23	0.96	0.08	37,44,47,49	0
32	5MC	2a	1407	21/22	0.96	0.07	33,39,42,45	0
32	UR3	2a	1498	21/22	0.96	0.09	37,41,46,49	0
55	31H	2x	76	32/33	0.96	0.09	27,32,37,40	0
1	5MC	2A	1962	21/22	0.96	0.09	35,41,48,56	0
1	OMU	2A	2552	21/22	0.96	0.08	29,34,39,41	0
1	PSU	2A	1911	20/21	0.96	0.08	36,44,48,53	0
32	G7M	1a	527	24/25	0.96	0.07	32,37,41,44	0
32	M2G	1a	966	25/26	0.96	0.08	34,39,46,48	0
1	OMC	2A	1920	21/22	0.96	0.09	40,45,49,52	0
1	5MU	2A	1939	21/22	0.96	0.08	29,32,37,38	0
32	PSU	1a	516	20/21	0.97	0.07	32,41,45,46	0
32	MA6	2a	1518	24/25	0.97	0.08	35,43,48,49	0
32	MA6	2a	1519	24/25	0.97	0.09	31,43,47,49	0
32	5MC	1a	1400	21/22	0.97	0.10	32,36,40,42	0
54	MIA	1w	37	29/30	0.97	0.08	25,37,48,53	0
32	4OC	1a	1402	22/23	0.97	0.07	26,31,35,40	0
55	31H	1x	76	32/33	0.97	0.07	10,14,18,23	10
54	PSU	2w	39	20/21	0.97	0.08	37,49,59,61	0
32	5MC	1a	1407	21/22	0.97	0.09	26,32,35,40	0
32	5MC	2a	1404	21/22	0.97	0.07	34,37,40,42	0
1	5MC	1A	1942	21/22	0.97	0.08	23,28,31,35	0
54	F3N	2w	76	33/34	0.97	0.09	22,31,36,37	0
1	2MA	2A	2503	23/24	0.98	0.07	19,28,33,33	0
1	PSU	1A	1911	20/21	0.98	0.07	26,35,39,42	0
1	PSU	2A	2605	20/21	0.98	0.06	24,26,30,30	0
1	5MC	1A	1962	21/22	0.98	0.06	20,26,30,34	0
32	5MC	1a	1404	21/22	0.98	0.06	23,27,30,35	0
54	PSU	1w	39	20/21	0.98	0.07	28,39,42,45	0
1	2MA	1A	2503	23/24	0.98	0.05	10,15,18,20	0
32	UR3	1a	1498	21/22	0.98	0.06	22,32,34,40	0
32	MA6	1a	1519	24/25	0.98	0.07	24,28,30,31	0
54	F3N	1w	76	33/34	0.98	0.07	10,14,18,25	0
1	OMC	1A	1920	21/22	0.98	0.07	27,33,37,39	0
1	OMG	2A	2251	24/25	0.98	0.06	24,27,32,39	0
1	PSU	1A	2605	20/21	0.99	0.05	13,16,21,23	0
1	OMG	1A	2251	24/25	0.99	0.05	11,15,18,18	0
1	5MU	1A	1939	21/22	0.99	0.05	14,19,23,27	0
32	MA6	1a	1518	24/25	0.99	0.06	19,27,30,31	0
1	OMU	1A	2552	21/22	0.99	0.05	15,18,21,24	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	3272	1/1	0.41	0.35	78,78,78,78	0
58	MG	2A	3686	1/1	0.44	0.26	77,77,77,77	0
58	MG	2B	219	1/1	0.45	0.28	78,78,78,78	0
58	MG	2A	3253	1/1	0.47	0.16	76,76,76,76	0
58	MG	18	105	1/1	0.47	0.23	70,70,70,70	0
58	MG	1y	101	1/1	0.59	0.17	78,78,78,78	0
58	MG	2a	1626	1/1	0.61	0.28	65,65,65,65	0
58	MG	2a	1631	1/1	0.62	0.19	78,78,78,78	0
58	MG	2a	1810	1/1	0.62	0.18	76,76,76,76	0
58	MG	2w	102	1/1	0.62	0.16	73,73,73,73	0
58	MG	1A	3988	1/1	0.63	0.18	66,66,66,66	0
58	MG	2a	1745	1/1	0.64	0.17	71,71,71,71	0
58	MG	2a	1780	1/1	0.64	0.21	66,66,66,66	0
58	MG	2A	3850	1/1	0.64	0.37	65,65,65,65	0
58	MG	2A	3810	1/1	0.64	0.27	62,62,62,62	0
58	MG	2A	3701	1/1	0.65	0.19	69,69,69,69	0
58	MG	1A	4094	1/1	0.66	0.19	71,71,71,71	0
58	MG	1a	1741	1/1	0.66	0.21	67,67,67,67	0
58	MG	1A	4038	1/1	0.67	0.19	49,49,49,49	0
58	MG	2y	104	1/1	0.67	0.28	80,80,80,80	0
58	MG	2A	3608	1/1	0.68	0.24	73,73,73,73	0
58	MG	2a	1749	1/1	0.69	0.17	66,66,66,66	0
58	MG	1A	3478	1/1	0.69	0.16	52,52,52,52	0
58	MG	1B	222	1/1	0.69	0.20	57,57,57,57	0
58	MG	1D	311	1/1	0.69	0.24	59,59,59,59	0
58	MG	2A	3681	1/1	0.69	0.20	58,58,58,58	0
58	MG	1a	1779	1/1	0.70	0.15	48,48,48,48	0
58	MG	1a	1714	1/1	0.70	0.32	57,57,57,57	0
58	MG	1A	3793	1/1	0.70	0.21	72,72,72,72	0
58	MG	2A	3266	1/1	0.70	0.16	70,70,70,70	0
58	MG	1O	205	1/1	0.71	0.26	62,62,62,62	0
58	MG	29	101	1/1	0.71	0.56	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1796	1/1	0.72	0.20	69,69,69,69	0
58	MG	2A	3176	1/1	0.72	0.34	60,60,60,60	0
58	MG	2e	201	1/1	0.72	0.12	59,59,59,59	0
58	MG	2A	3390	1/1	0.72	0.18	62,62,62,62	0
58	MG	2A	3778	1/1	0.72	0.27	51,51,51,51	0
58	MG	2A	3361	1/1	0.73	0.27	70,70,70,70	0
58	MG	1A	3426	1/1	0.73	0.34	58,58,58,58	0
58	MG	2a	1817	1/1	0.73	0.29	66,66,66,66	0
58	MG	1A	3750	1/1	0.73	0.19	60,60,60,60	0
58	MG	2A	3768	1/1	0.73	0.20	48,48,48,48	0
58	MG	2A	3769	1/1	0.73	0.24	58,58,58,58	0
58	MG	2A	3724	1/1	0.74	0.18	69,69,69,69	0
58	MG	1A	4023	1/1	0.74	0.20	55,55,55,55	0
58	MG	2A	3291	1/1	0.74	0.25	64,64,64,64	0
58	MG	2A	3344	1/1	0.74	0.17	72,72,72,72	0
58	MG	2A	3800	1/1	0.74	0.15	52,52,52,52	0
58	MG	1a	1769	1/1	0.75	0.15	70,70,70,70	0
58	MG	10	107	1/1	0.75	0.31	59,59,59,59	0
58	MG	1A	3684	1/1	0.75	0.26	67,67,67,67	0
58	MG	2A	3074	1/1	0.75	0.27	66,66,66,66	0
58	MG	2r	101	1/1	0.75	0.14	65,65,65,65	0
58	MG	1A	3803	1/1	0.75	0.20	54,54,54,54	0
58	MG	1A	4100	1/1	0.75	0.14	60,60,60,60	0
58	MG	2A	3404	1/1	0.76	0.18	64,64,64,64	0
58	MG	2A	3582	1/1	0.76	0.25	70,70,70,70	0
58	MG	2A	3838	1/1	0.76	0.17	33,33,33,33	0
58	MG	2A	3340	1/1	0.76	0.19	58,58,58,58	0
58	MG	2A	3373	1/1	0.76	0.24	76,76,76,76	0
58	MG	2w	103	1/1	0.76	0.20	73,73,73,73	0
58	MG	2A	3281	1/1	0.76	0.19	66,66,66,66	0
58	MG	2j	201	1/1	0.77	0.14	64,64,64,64	0
58	MG	2l	201	1/1	0.77	0.28	63,63,63,63	0
58	MG	2A	3755	1/1	0.77	0.14	33,33,33,33	0
58	MG	2A	3710	1/1	0.77	0.17	50,50,50,50	0
58	MG	2A	3257	1/1	0.77	0.17	55,55,55,55	0
58	MG	2A	3775	1/1	0.77	0.18	71,71,71,71	0
58	MG	2a	1779	1/1	0.78	0.17	68,68,68,68	0
58	MG	1A	3212	1/1	0.78	0.26	66,66,66,66	0
58	MG	2w	105	1/1	0.78	0.12	61,61,61,61	0
58	MG	2B	202	1/1	0.78	0.20	69,69,69,69	0
58	MG	2a	1757	1/1	0.79	0.17	68,68,68,68	0
58	MG	2A	3682	1/1	0.79	0.24	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	3238	1/1	0.79	0.15	70,70,70,70	0
58	MG	1B	230	1/1	0.79	0.18	69,69,69,69	0
58	MG	1A	3773	1/1	0.79	0.13	16,16,16,16	0
58	MG	1A	3421	1/1	0.79	0.17	54,54,54,54	0
58	MG	2a	1818	1/1	0.79	0.18	63,63,63,63	0
58	MG	1B	212	1/1	0.79	0.28	46,46,46,46	0
58	MG	2A	3761	1/1	0.79	0.14	42,42,42,42	0
58	MG	2a	1610	1/1	0.79	0.14	54,54,54,54	0
58	MG	2A	3576	1/1	0.79	0.14	43,43,43,43	0
58	MG	1A	4093	1/1	0.79	0.21	55,55,55,55	0
58	MG	2a	1708	1/1	0.79	0.21	59,59,59,59	0
58	MG	1a	1705	1/1	0.79	0.19	51,51,51,51	0
58	MG	2y	101	1/1	0.79	0.19	79,79,79,79	0
58	MG	1a	1713	1/1	0.79	0.23	39,39,39,39	0
58	MG	2a	1795	1/1	0.80	0.17	64,64,64,64	0
58	MG	2A	3871	1/1	0.80	0.12	62,62,62,62	0
58	MG	1A	3951	1/1	0.80	0.14	57,57,57,57	0
58	MG	2A	3088	1/1	0.80	0.28	62,62,62,62	0
58	MG	2A	3658	1/1	0.80	0.18	41,41,41,41	0
58	MG	2a	1835	1/1	0.80	0.23	51,51,51,51	0
58	MG	1A	3585	1/1	0.80	0.19	66,66,66,66	0
58	MG	2A	3773	1/1	0.80	0.17	38,38,38,38	0
58	MG	2A	3204	1/1	0.80	0.34	66,66,66,66	0
58	MG	2A	3221	1/1	0.80	0.17	49,49,49,49	0
58	MG	2A	3690	1/1	0.80	0.15	46,46,46,46	0
58	MG	1A	3774	1/1	0.80	0.13	54,54,54,54	0
58	MG	2A	3556	1/1	0.80	0.18	59,59,59,59	0
58	MG	2A	3846	1/1	0.80	0.13	60,60,60,60	0
58	MG	2A	3307	1/1	0.80	0.26	61,61,61,61	0
58	MG	2A	3709	1/1	0.81	0.24	62,62,62,62	0
58	MG	2a	1649	1/1	0.81	0.21	70,70,70,70	0
58	MG	1A	3062	1/1	0.81	0.14	56,56,56,56	0
58	MG	1A	3688	1/1	0.81	0.14	49,49,49,49	0
58	MG	2A	3097	1/1	0.81	0.15	61,61,61,61	0
58	MG	2A	3101	1/1	0.81	0.24	64,64,64,64	0
58	MG	2A	3118	1/1	0.81	0.18	47,47,47,47	0
58	MG	1a	1625	1/1	0.81	0.29	61,61,61,61	0
58	MG	1A	3740	1/1	0.81	0.11	51,51,51,51	0
58	MG	2A	3405	1/1	0.81	0.18	56,56,56,56	0
58	MG	2a	1804	1/1	0.81	0.22	64,64,64,64	0
58	MG	1B	208	1/1	0.81	0.14	60,60,60,60	0
58	MG	2A	3224	1/1	0.81	0.15	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	1A	3330	1/1	0.81	0.19	55,55,55,55	0
58	MG	2A	3597	1/1	0.81	0.20	62,62,62,62	0
58	MG	1A	4010	1/1	0.81	0.10	73,73,73,73	0
58	MG	1a	1761	1/1	0.81	0.16	51,51,51,51	0
58	MG	2A	3860	1/1	0.81	0.23	56,56,56,56	0
58	MG	1A	3566	1/1	0.81	0.09	44,44,44,44	0
58	MG	1A	3199	1/1	0.81	0.25	44,44,44,44	0
58	MG	2A	3278	1/1	0.81	0.16	51,51,51,51	0
58	MG	1a	1814	1/1	0.81	0.29	64,64,64,64	0
58	MG	1A	4043	1/1	0.81	0.12	27,27,27,27	0
58	MG	2A	3708	1/1	0.81	0.11	29,29,29,29	0
58	MG	2a	1698	1/1	0.82	0.19	47,47,47,47	0
58	MG	2A	3268	1/1	0.82	0.20	56,56,56,56	0
58	MG	1a	1641	1/1	0.82	0.19	60,60,60,60	0
58	MG	1A	3665	1/1	0.82	0.14	47,47,47,47	0
58	MG	1A	3506	1/1	0.82	0.20	63,63,63,63	0
58	MG	1A	3548	1/1	0.82	0.50	52,52,52,52	0
58	MG	2A	3303	1/1	0.82	0.33	56,56,56,56	0
58	MG	1a	1733	1/1	0.82	0.17	50,50,50,50	0
58	MG	2A	3172	1/1	0.82	0.12	71,71,71,71	0
58	MG	1A	4034	1/1	0.82	0.13	35,35,35,35	0
58	MG	1A	3358	1/1	0.82	0.23	58,58,58,58	0
58	MG	1A	3831	1/1	0.82	0.13	38,38,38,38	0
58	MG	2A	3385	1/1	0.82	0.14	61,61,61,61	0
58	MG	2E	301	1/1	0.82	0.22	57,57,57,57	0
58	MG	28	101	1/1	0.82	0.37	60,60,60,60	0
58	MG	1A	3924	1/1	0.82	0.17	68,68,68,68	0
58	MG	1A	3489	1/1	0.82	0.14	53,53,53,53	0
58	MG	2a	1625	1/1	0.82	0.15	63,63,63,63	0
58	MG	1t	201	1/1	0.82	0.14	51,51,51,51	0
58	MG	2a	1629	1/1	0.82	0.14	59,59,59,59	0
58	MG	1A	3955	1/1	0.82	0.13	53,53,53,53	0
58	MG	2A	3064	1/1	0.82	0.10	56,56,56,56	0
58	MG	2a	1696	1/1	0.82	0.20	64,64,64,64	0
58	MG	2a	1609	1/1	0.83	0.13	64,64,64,64	0
58	MG	1A	3549	1/1	0.83	0.16	53,53,53,53	0
58	MG	2A	3358	1/1	0.83	0.23	54,54,54,54	0
58	MG	1A	3957	1/1	0.83	0.22	69,69,69,69	0
58	MG	2A	3234	1/1	0.83	0.17	50,50,50,50	0
58	MG	1B	215	1/1	0.83	0.12	44,44,44,44	0
58	MG	2a	1632	1/1	0.83	0.39	71,71,71,71	0
58	MG	2A	3752	1/1	0.83	0.19	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	1655	1/1	0.83	0.15	66,66,66,66	0
58	MG	1A	3848	1/1	0.83	0.12	41,41,41,41	0
58	MG	1A	4046	1/1	0.83	0.10	44,44,44,44	0
58	MG	1A	4009	1/1	0.83	0.11	62,62,62,62	0
58	MG	2A	3432	1/1	0.83	0.28	60,60,60,60	0
58	MG	2a	1748	1/1	0.83	0.19	75,75,75,75	0
58	MG	2A	3477	1/1	0.83	0.26	68,68,68,68	0
58	MG	2A	3491	1/1	0.83	0.18	58,58,58,58	0
58	MG	2a	1762	1/1	0.83	0.11	76,76,76,76	0
58	MG	1A	3475	1/1	0.83	0.17	46,46,46,46	0
58	MG	2A	3100	1/1	0.83	0.18	62,62,62,62	0
58	MG	1U	211	1/1	0.83	0.69	64,64,64,64	0
58	MG	2A	3822	1/1	0.83	0.11	42,42,42,42	0
58	MG	1Y	202	1/1	0.83	0.10	57,57,57,57	0
58	MG	2a	1808	1/1	0.83	0.12	51,51,51,51	0
58	MG	1A	3725	1/1	0.83	0.19	48,48,48,48	0
58	MG	2A	3848	1/1	0.83	0.14	61,61,61,61	0
58	MG	2A	3616	1/1	0.83	0.14	31,31,31,31	0
58	MG	2a	1820	1/1	0.83	0.24	66,66,66,66	0
58	MG	2A	3645	1/1	0.83	0.20	46,46,46,46	0
58	MG	2A	3869	1/1	0.83	0.15	52,52,52,52	0
58	MG	2A	3302	1/1	0.83	0.18	55,55,55,55	0
58	MG	2A	3670	1/1	0.83	0.22	55,55,55,55	0
58	MG	16	102	1/1	0.83	0.12	40,40,40,40	0
58	MG	2A	3191	1/1	0.83	0.14	52,52,52,52	0
58	MG	2U	202	1/1	0.83	0.09	40,40,40,40	0
58	MG	1a	1798	1/1	0.83	0.18	66,66,66,66	0
58	MG	2A	3342	1/1	0.83	0.33	68,68,68,68	0
58	MG	2a	1602	1/1	0.83	0.17	68,68,68,68	0
58	MG	2A	3697	1/1	0.84	0.14	57,57,57,57	0
58	MG	2A	3122	1/1	0.84	0.20	70,70,70,70	0
58	MG	1A	3837	1/1	0.84	0.11	30,30,30,30	0
58	MG	1W	208	1/1	0.84	0.18	33,33,33,33	0
58	MG	1Y	201	1/1	0.84	0.19	58,58,58,58	0
58	MG	2A	3718	1/1	0.84	0.17	50,50,50,50	0
58	MG	2A	3720	1/1	0.84	0.14	44,44,44,44	0
58	MG	2A	3195	1/1	0.84	0.18	62,62,62,62	0
58	MG	2a	1651	1/1	0.84	0.14	50,50,50,50	0
58	MG	1B	203	1/1	0.84	0.25	51,51,51,51	0
58	MG	2A	3212	1/1	0.84	0.14	64,64,64,64	0
58	MG	1a	1790	1/1	0.84	0.16	74,74,74,74	0
58	MG	2A	3767	1/1	0.84	0.16	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	2A	3403	1/1	0.84	0.19	65,65,65,65	0
58	MG	1a	1797	1/1	0.84	0.13	55,55,55,55	0
58	MG	1A	3474	1/1	0.84	0.21	52,52,52,52	0
58	MG	1a	1809	1/1	0.84	0.12	63,63,63,63	0
58	MG	2A	3444	1/1	0.84	0.12	68,68,68,68	0
58	MG	2A	3465	1/1	0.84	0.17	62,62,62,62	0
58	MG	2A	3244	1/1	0.84	0.18	56,56,56,56	0
58	MG	2a	1793	1/1	0.84	0.17	56,56,56,56	0
58	MG	11	103	1/1	0.84	0.24	56,56,56,56	0
58	MG	2A	3519	1/1	0.84	0.18	57,57,57,57	0
58	MG	1A	3711	1/1	0.84	0.14	31,31,31,31	0
58	MG	1x	105	1/1	0.84	0.21	59,59,59,59	0
58	MG	1A	3589	1/1	0.84	0.48	54,54,54,54	0
58	MG	2A	3271	1/1	0.84	0.11	52,52,52,52	0
58	MG	1B	221	1/1	0.84	0.11	39,39,39,39	0
58	MG	1A	3505	1/1	0.84	0.15	49,49,49,49	0
58	MG	2A	3877	1/1	0.84	0.11	71,71,71,71	0
58	MG	2A	3879	1/1	0.84	0.16	49,49,49,49	0
58	MG	2A	3882	1/1	0.84	0.17	59,59,59,59	0
58	MG	1a	1687	1/1	0.84	0.19	62,62,62,62	0
58	MG	2A	3286	1/1	0.84	0.24	58,58,58,58	0
58	MG	1A	3828	1/1	0.84	0.10	25,25,25,25	0
58	MG	1A	3568	1/1	0.84	0.37	48,48,48,48	0
58	MG	1A	3836	1/1	0.84	0.13	57,57,57,57	0
58	MG	1S	203	1/1	0.84	0.09	61,61,61,61	0
58	MG	2y	103	1/1	0.84	0.22	70,70,70,70	0
58	MG	2A	3334	1/1	0.84	0.15	60,60,60,60	0
58	MG	2a	1620	1/1	0.85	0.19	80,80,80,80	0
58	MG	2A	3384	1/1	0.85	0.14	50,50,50,50	0
58	MG	1s	101	1/1	0.85	0.17	54,54,54,54	0
58	MG	2A	3236	1/1	0.85	0.18	57,57,57,57	0
58	MG	2A	3237	1/1	0.85	0.22	53,53,53,53	0
58	MG	2A	3759	1/1	0.85	0.16	47,47,47,47	0
58	MG	1a	1605	1/1	0.85	0.13	62,62,62,62	0
58	MG	1A	3401	1/1	0.85	0.24	64,64,64,64	0
58	MG	2A	3250	1/1	0.85	0.15	57,57,57,57	0
58	MG	2a	1661	1/1	0.85	0.16	55,55,55,55	0
58	MG	2a	1666	1/1	0.85	0.22	53,53,53,53	0
58	MG	1A	3089	1/1	0.85	0.10	30,30,30,30	0
58	MG	1A	3511	1/1	0.85	0.12	59,59,59,59	0
58	MG	2a	1704	1/1	0.85	0.15	52,52,52,52	0
58	MG	1a	1688	1/1	0.85	0.20	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1726	1/1	0.85	0.14	65,65,65,65	0
58	MG	2A	3488	1/1	0.85	0.18	63,63,63,63	0
58	MG	1A	3260	1/1	0.85	0.09	57,57,57,57	0
58	MG	1A	3839	1/1	0.85	0.15	45,45,45,45	0
58	MG	2a	1755	1/1	0.85	0.11	68,68,68,68	0
58	MG	2A	3817	1/1	0.85	0.14	51,51,51,51	0
58	MG	1A	3459	1/1	0.85	0.25	41,41,41,41	0
58	MG	1A	3274	1/1	0.85	0.26	62,62,62,62	0
58	MG	2A	3105	1/1	0.85	0.15	51,51,51,51	0
58	MG	2A	3283	1/1	0.85	0.30	54,54,54,54	0
58	MG	2a	1794	1/1	0.85	0.17	42,42,42,42	0
58	MG	2A	3114	1/1	0.85	0.18	57,57,57,57	0
58	MG	2A	3853	1/1	0.85	0.16	60,60,60,60	0
58	MG	2a	1799	1/1	0.85	0.16	51,51,51,51	0
58	MG	2a	1800	1/1	0.85	0.13	59,59,59,59	0
58	MG	1U	210	1/1	0.85	0.19	43,43,43,43	0
58	MG	2A	3626	1/1	0.85	0.16	55,55,55,55	0
58	MG	2a	1809	1/1	0.85	0.20	58,58,58,58	0
58	MG	2A	3293	1/1	0.85	0.12	53,53,53,53	0
58	MG	2A	3872	1/1	0.85	0.13	62,62,62,62	0
58	MG	1a	1747	1/1	0.85	0.17	60,60,60,60	0
58	MG	1A	4058	1/1	0.85	0.11	13,13,13,13	0
58	MG	1A	4068	1/1	0.85	0.11	41,41,41,41	0
58	MG	1A	3943	1/1	0.85	0.14	51,51,51,51	0
58	MG	2g	201	1/1	0.85	0.15	63,63,63,63	0
58	MG	2A	3338	1/1	0.85	0.11	63,63,63,63	0
58	MG	1A	3303	1/1	0.85	0.31	52,52,52,52	0
58	MG	1A	3476	1/1	0.85	0.26	66,66,66,66	0
58	MG	2A	3209	1/1	0.85	0.21	57,57,57,57	0
58	MG	1A	3102	1/1	0.85	0.18	50,50,50,50	0
58	MG	1A	3970	1/1	0.85	0.15	34,34,34,34	0
58	MG	2x	105	1/1	0.85	0.42	58,58,58,58	0
58	MG	2A	3363	1/1	0.85	0.11	51,51,51,51	0
58	MG	1A	3074	1/1	0.85	0.26	54,54,54,54	0
58	MG	2a	1616	1/1	0.85	0.15	60,60,60,60	0
58	MG	2A	3504	1/1	0.86	0.20	57,57,57,57	0
58	MG	1a	1607	1/1	0.86	0.09	50,50,50,50	0
58	MG	2A	3310	1/1	0.86	0.26	53,53,53,53	0
58	MG	2A	3575	1/1	0.86	0.19	64,64,64,64	0
58	MG	2a	1701	1/1	0.86	0.29	66,66,66,66	0
58	MG	2A	3316	1/1	0.86	0.22	67,67,67,67	0
58	MG	2A	3320	1/1	0.86	0.17	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2a	1722	1/1	0.86	0.27	66,66,66,66	0
58	MG	2A	3324	1/1	0.86	0.18	59,59,59,59	0
58	MG	1A	3840	1/1	0.86	0.15	43,43,43,43	0
58	MG	1A	3841	1/1	0.86	0.17	50,50,50,50	0
58	MG	1a	1645	1/1	0.86	0.12	55,55,55,55	0
58	MG	2A	3629	1/1	0.86	0.12	52,52,52,52	0
58	MG	2A	3636	1/1	0.86	0.15	31,31,31,31	0
58	MG	2A	3243	1/1	0.86	0.16	59,59,59,59	0
58	MG	2A	3655	1/1	0.86	0.21	44,44,44,44	0
58	MG	1a	1663	1/1	0.86	0.15	53,53,53,53	0
58	MG	1a	1676	1/1	0.86	0.10	54,54,54,54	0
58	MG	2A	3113	1/1	0.86	0.18	44,44,44,44	0
58	MG	1a	1685	1/1	0.86	0.10	47,47,47,47	0
58	MG	1A	3842	1/1	0.86	0.12	42,42,42,42	0
58	MG	2A	3383	1/1	0.86	0.20	54,54,54,54	0
58	MG	2B	211	1/1	0.86	0.17	64,64,64,64	0
58	MG	1A	3554	1/1	0.86	0.18	60,60,60,60	0
58	MG	1A	3852	1/1	0.86	0.17	53,53,53,53	0
58	MG	2A	3704	1/1	0.86	0.09	65,65,65,65	0
58	MG	1A	3856	1/1	0.86	0.19	59,59,59,59	0
58	MG	2A	3275	1/1	0.86	0.11	55,55,55,55	0
58	MG	1v	101	1/1	0.86	0.23	65,65,65,65	0
58	MG	2a	1606	1/1	0.86	0.18	49,49,49,49	0
58	MG	2a	1827	1/1	0.86	0.27	66,66,66,66	0
58	MG	1A	3555	1/1	0.86	0.10	51,51,51,51	0
58	MG	2d	301	1/1	0.86	0.35	61,61,61,61	0
58	MG	1A	3805	1/1	0.86	0.12	47,47,47,47	0
58	MG	2A	3721	1/1	0.86	0.10	43,43,43,43	0
58	MG	2A	3207	1/1	0.86	0.22	65,65,65,65	0
58	MG	2A	3733	1/1	0.86	0.17	59,59,59,59	0
58	MG	2A	3058	1/1	0.86	0.15	60,60,60,60	0
58	MG	2A	3472	1/1	0.86	0.16	67,67,67,67	0
58	MG	2A	3473	1/1	0.86	0.11	52,52,52,52	0
58	MG	1A	3026	1/1	0.86	0.14	45,45,45,45	0
58	MG	2a	1633	1/1	0.86	0.23	60,60,60,60	0
58	MG	2A	3065	1/1	0.86	0.15	44,44,44,44	0
58	MG	2A	3070	1/1	0.86	0.25	47,47,47,47	0
58	MG	2A	3498	1/1	0.86	0.22	42,42,42,42	0
58	MG	1x	101	1/1	0.87	0.22	48,48,48,48	0
58	MG	2A	3214	1/1	0.87	0.23	60,60,60,60	0
58	MG	2A	3218	1/1	0.87	0.15	53,53,53,53	0
58	MG	1A	3172	1/1	0.87	0.17	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	2a	1621	1/1	0.87	0.15	52,52,52,52	0
58	MG	1E	309	1/1	0.87	0.13	48,48,48,48	0
58	MG	2A	3054	1/1	0.87	0.29	53,53,53,53	0
58	MG	1A	4035	1/1	0.87	0.10	35,35,35,35	0
58	MG	1A	3816	1/1	0.87	0.14	54,54,54,54	0
58	MG	1A	3901	1/1	0.87	0.15	26,26,26,26	0
58	MG	1A	3906	1/1	0.87	0.13	49,49,49,49	0
58	MG	2a	1640	1/1	0.87	0.19	53,53,53,53	0
58	MG	2A	3393	1/1	0.87	0.22	61,61,61,61	0
58	MG	2A	3400	1/1	0.87	0.09	59,59,59,59	0
58	MG	2A	3401	1/1	0.87	0.13	57,57,57,57	0
58	MG	1A	3405	1/1	0.87	0.19	38,38,38,38	0
58	MG	2A	3082	1/1	0.87	0.13	50,50,50,50	0
58	MG	2A	3734	1/1	0.87	0.13	51,51,51,51	0
58	MG	2A	3745	1/1	0.87	0.13	39,39,39,39	0
58	MG	2A	3251	1/1	0.87	0.17	57,57,57,57	0
58	MG	2A	3406	1/1	0.87	0.14	52,52,52,52	0
58	MG	2A	3409	1/1	0.87	0.12	54,54,54,54	0
58	MG	2A	3411	1/1	0.87	0.12	49,49,49,49	0
58	MG	2A	3421	1/1	0.87	0.26	38,38,38,38	0
58	MG	2a	1733	1/1	0.87	0.14	62,62,62,62	0
58	MG	1A	3830	1/1	0.87	0.14	40,40,40,40	0
58	MG	2A	3090	1/1	0.87	0.11	65,65,65,65	0
58	MG	2A	3096	1/1	0.87	0.15	61,61,61,61	0
58	MG	1A	3356	1/1	0.87	0.17	53,53,53,53	0
58	MG	1a	1758	1/1	0.87	0.11	40,40,40,40	0
58	MG	2A	3781	1/1	0.87	0.12	61,61,61,61	0
58	MG	1A	3726	1/1	0.87	0.09	33,33,33,33	0
58	MG	1A	3527	1/1	0.87	0.33	61,61,61,61	0
58	MG	2A	3277	1/1	0.87	0.18	58,58,58,58	0
58	MG	2A	3819	1/1	0.87	0.11	74,74,74,74	0
58	MG	2A	3493	1/1	0.87	0.12	44,44,44,44	0
58	MG	2A	3825	1/1	0.87	0.10	42,42,42,42	0
58	MG	1A	3540	1/1	0.87	0.21	46,46,46,46	0
58	MG	1A	3985	1/1	0.87	0.16	58,58,58,58	0
58	MG	2A	3116	1/1	0.87	0.15	48,48,48,48	0
58	MG	2A	3524	1/1	0.87	0.16	52,52,52,52	0
58	MG	1A	3987	1/1	0.87	0.20	58,58,58,58	0
58	MG	1B	214	1/1	0.87	0.26	56,56,56,56	0
58	MG	2A	3127	1/1	0.87	0.09	55,55,55,55	0
58	MG	1A	3544	1/1	0.87	0.36	56,56,56,56	0
58	MG	2A	3593	1/1	0.87	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	2a	1822	1/1	0.87	0.21	55,55,55,55	0
58	MG	2a	1824	1/1	0.87	0.14	59,59,59,59	0
58	MG	2a	1825	1/1	0.87	0.14	62,62,62,62	0
58	MG	1A	3267	1/1	0.87	0.17	49,49,49,49	0
58	MG	1h	201	1/1	0.87	0.10	55,55,55,55	0
58	MG	2a	1841	1/1	0.87	0.21	60,60,60,60	0
58	MG	2A	3192	1/1	0.87	0.21	62,62,62,62	0
58	MG	2A	3883	1/1	0.87	0.17	59,59,59,59	0
58	MG	1l	201	1/1	0.87	0.15	64,64,64,64	0
58	MG	1A	3669	1/1	0.87	0.09	25,25,25,25	0
58	MG	2A	3206	1/1	0.87	0.12	45,45,45,45	0
58	MG	1B	226	1/1	0.87	0.13	49,49,49,49	0
58	MG	2v	102	1/1	0.87	0.12	42,42,42,42	0
58	MG	2A	3647	1/1	0.87	0.16	53,53,53,53	0
58	MG	2W	201	1/1	0.87	0.23	67,67,67,67	0
58	MG	2A	3336	1/1	0.87	0.30	52,52,52,52	0
58	MG	2x	102	1/1	0.87	0.22	40,40,40,40	0
58	MG	2A	3208	1/1	0.87	0.11	53,53,53,53	0
58	MG	1A	3359	1/1	0.87	0.20	64,64,64,64	0
58	MG	2A	3674	1/1	0.87	0.17	38,38,38,38	0
58	MG	2a	1607	1/1	0.87	0.28	63,63,63,63	0
58	MG	2y	105	1/1	0.87	0.24	68,68,68,68	0
58	MG	1A	3998	1/1	0.88	0.22	53,53,53,53	0
58	MG	1a	1670	1/1	0.88	0.27	60,60,60,60	0
58	MG	1a	1674	1/1	0.88	0.22	52,52,52,52	0
58	MG	2A	3581	1/1	0.88	0.10	48,48,48,48	0
58	MG	21	101	1/1	0.88	0.12	59,59,59,59	0
58	MG	25	104	1/1	0.88	0.11	55,55,55,55	0
58	MG	1A	3368	1/1	0.88	0.10	42,42,42,42	0
58	MG	1A	3599	1/1	0.88	0.17	61,61,61,61	0
58	MG	1B	223	1/1	0.88	0.10	40,40,40,40	0
58	MG	2A	3292	1/1	0.88	0.32	63,63,63,63	0
58	MG	1A	3611	1/1	0.88	0.11	43,43,43,43	0
58	MG	2A	3295	1/1	0.88	0.18	56,56,56,56	0
58	MG	2A	3298	1/1	0.88	0.14	61,61,61,61	0
58	MG	2a	1615	1/1	0.88	0.21	62,62,62,62	0
58	MG	1a	1695	1/1	0.88	0.30	48,48,48,48	0
58	MG	1a	1702	1/1	0.88	0.16	52,52,52,52	0
58	MG	2A	3306	1/1	0.88	0.10	47,47,47,47	0
58	MG	1A	4027	1/1	0.88	0.11	53,53,53,53	0
58	MG	1a	1710	1/1	0.88	0.16	49,49,49,49	0
58	MG	2A	3660	1/1	0.88	0.12	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	234	1/1	0.88	0.12	63,63,63,63	0
58	MG	1A	3872	1/1	0.88	0.16	34,34,34,34	0
58	MG	2A	3675	1/1	0.88	0.15	46,46,46,46	0
58	MG	1A	3895	1/1	0.88	0.11	24,24,24,24	0
58	MG	2a	1646	1/1	0.88	0.27	56,56,56,56	0
58	MG	2A	3154	1/1	0.88	0.13	61,61,61,61	0
58	MG	2A	3170	1/1	0.88	0.10	60,60,60,60	0
58	MG	1a	1738	1/1	0.88	0.15	47,47,47,47	0
58	MG	1G	204	1/1	0.88	0.12	47,47,47,47	0
58	MG	2a	1662	1/1	0.88	0.23	56,56,56,56	0
58	MG	2A	3179	1/1	0.88	0.23	41,41,41,41	0
58	MG	2A	3703	1/1	0.88	0.13	59,59,59,59	0
58	MG	2A	3190	1/1	0.88	0.13	58,58,58,58	0
58	MG	2A	3351	1/1	0.88	0.21	52,52,52,52	0
58	MG	2A	3357	1/1	0.88	0.18	52,52,52,52	0
58	MG	1O	201	1/1	0.88	0.15	62,62,62,62	0
58	MG	1A	3470	1/1	0.88	0.14	53,53,53,53	0
58	MG	1A	3543	1/1	0.88	0.22	46,46,46,46	0
58	MG	2a	1730	1/1	0.88	0.35	60,60,60,60	0
58	MG	1A	3381	1/1	0.88	0.24	45,45,45,45	0
58	MG	2a	1741	1/1	0.88	0.23	34,34,34,34	0
58	MG	2A	3375	1/1	0.88	0.32	62,62,62,62	0
58	MG	1A	4056	1/1	0.88	0.12	46,46,46,46	0
58	MG	1a	1782	1/1	0.88	0.12	49,49,49,49	0
58	MG	2a	1752	1/1	0.88	0.13	61,61,61,61	0
58	MG	2A	3742	1/1	0.88	0.13	32,32,32,32	0
58	MG	2A	3744	1/1	0.88	0.23	56,56,56,56	0
58	MG	1W	202	1/1	0.88	0.20	40,40,40,40	0
58	MG	2A	3746	1/1	0.88	0.10	62,62,62,62	0
58	MG	1A	3314	1/1	0.88	0.10	47,47,47,47	0
58	MG	2A	3391	1/1	0.88	0.14	53,53,53,53	0
58	MG	1A	4063	1/1	0.88	0.18	30,30,30,30	0
58	MG	2A	3760	1/1	0.88	0.22	40,40,40,40	0
58	MG	1a	1802	1/1	0.88	0.08	46,46,46,46	0
58	MG	2A	3216	1/1	0.88	0.13	52,52,52,52	0
58	MG	1A	3266	1/1	0.88	0.20	60,60,60,60	0
58	MG	1A	4090	1/1	0.88	0.27	46,46,46,46	0
58	MG	2a	1805	1/1	0.88	0.15	63,63,63,63	0
58	MG	2A	3222	1/1	0.88	0.27	55,55,55,55	0
58	MG	1A	3413	1/1	0.88	0.33	46,46,46,46	0
58	MG	11	105	1/1	0.88	0.08	59,59,59,59	0
58	MG	2a	1816	1/1	0.88	0.21	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3334	1/1	0.88	0.09	41,41,41,41	0
58	MG	2A	3794	1/1	0.88	0.17	73,73,73,73	0
58	MG	2A	3797	1/1	0.88	0.12	56,56,56,56	0
58	MG	1A	3362	1/1	0.88	0.11	56,56,56,56	0
58	MG	2A	3809	1/1	0.88	0.12	63,63,63,63	0
58	MG	1a	1604	1/1	0.88	0.11	48,48,48,48	0
58	MG	1A	3455	1/1	0.88	0.24	51,51,51,51	0
58	MG	2A	3445	1/1	0.88	0.15	44,44,44,44	0
58	MG	2A	3451	1/1	0.88	0.23	47,47,47,47	0
58	MG	2A	3455	1/1	0.88	0.24	58,58,58,58	0
58	MG	2A	3464	1/1	0.88	0.14	43,43,43,43	0
58	MG	1A	3752	1/1	0.88	0.07	27,27,27,27	0
58	MG	1a	1612	1/1	0.88	0.12	58,58,58,58	0
58	MG	2A	3024	1/1	0.88	0.13	36,36,36,36	0
58	MG	2l	205	1/1	0.88	0.15	52,52,52,52	0
58	MG	2A	3252	1/1	0.88	0.20	62,62,62,62	0
58	MG	2t	201	1/1	0.88	0.11	52,52,52,52	0
58	MG	2A	3482	1/1	0.88	0.14	38,38,38,38	0
58	MG	2A	3484	1/1	0.88	0.13	51,51,51,51	0
58	MG	2A	3051	1/1	0.88	0.09	35,35,35,35	0
58	MG	1B	209	1/1	0.88	0.11	54,54,54,54	0
58	MG	2w	109	1/1	0.88	0.33	66,66,66,66	0
58	MG	1a	1635	1/1	0.88	0.15	48,48,48,48	0
58	MG	1a	1638	1/1	0.88	0.12	61,61,61,61	0
58	MG	1A	3457	1/1	0.88	0.29	41,41,41,41	0
58	MG	1a	1644	1/1	0.88	0.16	47,47,47,47	0
58	MG	1A	3995	1/1	0.88	0.08	25,25,25,25	0
58	MG	2A	3526	1/1	0.88	0.10	51,51,51,51	0
58	MG	1A	3973	1/1	0.89	0.13	34,34,34,34	0
58	MG	2A	3273	1/1	0.89	0.19	54,54,54,54	0
58	MG	2A	3420	1/1	0.89	0.20	45,45,45,45	0
58	MG	1A	3728	1/1	0.89	0.10	47,47,47,47	0
58	MG	1A	3412	1/1	0.89	0.16	53,53,53,53	0
58	MG	2A	3434	1/1	0.89	0.18	58,58,58,58	0
58	MG	2A	3437	1/1	0.89	0.20	42,42,42,42	0
58	MG	1A	3480	1/1	0.89	0.12	50,50,50,50	0
58	MG	2a	1639	1/1	0.89	0.13	48,48,48,48	0
58	MG	2A	3736	1/1	0.89	0.10	37,37,37,37	0
58	MG	1A	3603	1/1	0.89	0.09	31,31,31,31	0
58	MG	2a	1647	1/1	0.89	0.14	50,50,50,50	0
58	MG	1B	218	1/1	0.89	0.10	43,43,43,43	0
58	MG	2A	3454	1/1	0.89	0.19	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	3388	1/1	0.89	0.10	55,55,55,55	0
58	MG	2A	3750	1/1	0.89	0.13	67,67,67,67	0
58	MG	1A	3612	1/1	0.89	0.10	19,19,19,19	0
58	MG	2A	3174	1/1	0.89	0.16	63,63,63,63	0
58	MG	2A	3468	1/1	0.89	0.14	63,63,63,63	0
58	MG	1A	3496	1/1	0.89	0.09	39,39,39,39	0
58	MG	2a	1700	1/1	0.89	0.14	62,62,62,62	0
58	MG	1A	3861	1/1	0.89	0.13	53,53,53,53	0
58	MG	1A	3865	1/1	0.89	0.11	51,51,51,51	0
58	MG	1B	232	1/1	0.89	0.36	58,58,58,58	0
58	MG	1a	1651	1/1	0.89	0.17	55,55,55,55	0
58	MG	2a	1725	1/1	0.89	0.12	54,54,54,54	0
58	MG	2A	3487	1/1	0.89	0.11	51,51,51,51	0
58	MG	1a	1652	1/1	0.89	0.21	53,53,53,53	0
58	MG	2A	3777	1/1	0.89	0.15	60,60,60,60	0
58	MG	2a	1734	1/1	0.89	0.12	57,57,57,57	0
58	MG	2A	3202	1/1	0.89	0.20	50,50,50,50	0
58	MG	2A	3203	1/1	0.89	0.13	39,39,39,39	0
58	MG	2A	3314	1/1	0.89	0.15	49,49,49,49	0
58	MG	1a	1656	1/1	0.89	0.19	52,52,52,52	0
58	MG	2A	3799	1/1	0.89	0.12	71,71,71,71	0
58	MG	2A	3516	1/1	0.89	0.17	49,49,49,49	0
58	MG	2A	3318	1/1	0.89	0.14	49,49,49,49	0
58	MG	1w	107	1/1	0.89	0.15	51,51,51,51	0
58	MG	2a	1764	1/1	0.89	0.13	67,67,67,67	0
58	MG	2A	3322	1/1	0.89	0.14	56,56,56,56	0
58	MG	2A	3542	1/1	0.89	0.18	45,45,45,45	0
58	MG	2a	1785	1/1	0.89	0.11	33,33,33,33	0
58	MG	1A	3666	1/1	0.89	0.13	36,36,36,36	0
58	MG	1A	3876	1/1	0.89	0.18	22,22,22,22	0
58	MG	1x	106	1/1	0.89	0.27	51,51,51,51	0
58	MG	1A	3259	1/1	0.89	0.14	55,55,55,55	0
58	MG	1G	203	1/1	0.89	0.11	51,51,51,51	0
58	MG	2A	3849	1/1	0.89	0.09	22,22,22,22	0
58	MG	2A	3215	1/1	0.89	0.16	56,56,56,56	0
58	MG	2A	3045	1/1	0.89	0.08	55,55,55,55	0
58	MG	2A	3347	1/1	0.89	0.13	58,58,58,58	0
58	MG	1A	4042	1/1	0.89	0.10	35,35,35,35	0
58	MG	2A	3870	1/1	0.89	0.10	52,52,52,52	0
58	MG	1A	3811	1/1	0.89	0.09	37,37,37,37	0
58	MG	1A	3298	1/1	0.89	0.20	57,57,57,57	0
58	MG	1a	1692	1/1	0.89	0.35	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	3913	1/1	0.89	0.18	48,48,48,48	0
58	MG	2A	3364	1/1	0.89	0.10	46,46,46,46	0
58	MG	2A	3369	1/1	0.89	0.10	52,52,52,52	0
58	MG	2A	3067	1/1	0.89	0.14	52,52,52,52	0
58	MG	2B	204	1/1	0.89	0.17	62,62,62,62	0
58	MG	1A	3817	1/1	0.89	0.14	52,52,52,52	0
58	MG	1A	4062	1/1	0.89	0.11	49,49,49,49	0
58	MG	2A	3671	1/1	0.89	0.12	65,65,65,65	0
58	MG	2E	303	1/1	0.89	0.09	46,46,46,46	0
58	MG	2G	201	1/1	0.89	0.18	59,59,59,59	0
58	MG	2Q	202	1/1	0.89	0.14	38,38,38,38	0
58	MG	2A	3241	1/1	0.89	0.14	50,50,50,50	0
58	MG	1A	3932	1/1	0.89	0.09	40,40,40,40	0
58	MG	1A	3508	1/1	0.89	0.13	58,58,58,58	0
58	MG	1A	3438	1/1	0.89	0.09	40,40,40,40	0
58	MG	2A	3091	1/1	0.89	0.17	54,54,54,54	0
58	MG	1A	3714	1/1	0.89	0.12	40,40,40,40	0
58	MG	2A	3694	1/1	0.89	0.14	25,25,25,25	0
58	MG	2a	1604	1/1	0.89	0.16	56,56,56,56	0
58	MG	1A	3407	1/1	0.89	0.21	56,56,56,56	0
58	MG	2w	111	1/1	0.89	0.14	60,60,60,60	0
58	MG	2w	112	1/1	0.89	0.12	56,56,56,56	0
58	MG	1A	3966	1/1	0.89	0.13	38,38,38,38	0
58	MG	2A	3702	1/1	0.89	0.11	43,43,43,43	0
58	MG	1A	3537	1/1	0.89	0.15	51,51,51,51	0
58	MG	1a	1751	1/1	0.89	0.09	50,50,50,50	0
58	MG	15	109	1/1	0.89	0.11	42,42,42,42	0
58	MG	2a	1617	1/1	0.89	0.09	57,57,57,57	0
58	MG	2A	3490	1/1	0.90	0.08	44,44,44,44	0
58	MG	2A	3039	1/1	0.90	0.12	50,50,50,50	0
58	MG	1a	1614	1/1	0.90	0.10	48,48,48,48	0
58	MG	1A	4075	1/1	0.90	0.10	13,13,13,13	0
58	MG	1A	3349	1/1	0.90	0.26	65,65,65,65	0
58	MG	1A	3881	1/1	0.90	0.17	24,24,24,24	0
58	MG	1A	3265	1/1	0.90	0.13	50,50,50,50	0
58	MG	2B	207	1/1	0.90	0.12	53,53,53,53	0
58	MG	2B	210	1/1	0.90	0.07	56,56,56,56	0
58	MG	2A	3520	1/1	0.90	0.12	52,52,52,52	0
58	MG	2B	212	1/1	0.90	0.22	56,56,56,56	0
58	MG	1A	4095	1/1	0.90	0.14	50,50,50,50	0
58	MG	2D	307	1/1	0.90	0.23	44,44,44,44	0
58	MG	2A	3525	1/1	0.90	0.09	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	4099	1/1	0.90	0.10	41,41,41,41	0
58	MG	2E	309	1/1	0.90	0.10	38,38,38,38	0
58	MG	2E	311	1/1	0.90	0.14	57,57,57,57	0
58	MG	2F	301	1/1	0.90	0.13	37,37,37,37	0
58	MG	2F	306	1/1	0.90	0.09	44,44,44,44	0
58	MG	1A	3541	1/1	0.90	0.14	32,32,32,32	0
58	MG	2A	3073	1/1	0.90	0.12	46,46,46,46	0
58	MG	2Q	203	1/1	0.90	0.34	56,56,56,56	0
58	MG	2T	202	1/1	0.90	0.14	61,61,61,61	0
58	MG	1A	3448	1/1	0.90	0.14	35,35,35,35	0
58	MG	2A	3077	1/1	0.90	0.17	43,43,43,43	0
58	MG	2W	202	1/1	0.90	0.12	61,61,61,61	0
58	MG	1A	3191	1/1	0.90	0.11	43,43,43,43	0
58	MG	1A	3921	1/1	0.90	0.14	32,32,32,32	0
58	MG	2A	3592	1/1	0.90	0.09	58,58,58,58	0
58	MG	1a	1666	1/1	0.90	0.12	45,45,45,45	0
58	MG	2A	3300	1/1	0.90	0.09	44,44,44,44	0
58	MG	2A	3600	1/1	0.90	0.13	42,42,42,42	0
58	MG	1A	3115	1/1	0.90	0.19	32,32,32,32	0
58	MG	1A	3927	1/1	0.90	0.10	46,46,46,46	0
58	MG	2A	3624	1/1	0.90	0.07	23,23,23,23	0
58	MG	1a	1675	1/1	0.90	0.25	56,56,56,56	0
58	MG	2a	1612	1/1	0.90	0.24	58,58,58,58	0
58	MG	2A	3627	1/1	0.90	0.15	42,42,42,42	0
58	MG	1A	3271	1/1	0.90	0.17	33,33,33,33	0
58	MG	1a	1678	1/1	0.90	0.22	51,51,51,51	0
58	MG	2A	3642	1/1	0.90	0.12	55,55,55,55	0
58	MG	2A	3102	1/1	0.90	0.23	50,50,50,50	0
58	MG	2a	1624	1/1	0.90	0.14	56,56,56,56	0
58	MG	1a	1679	1/1	0.90	0.23	48,48,48,48	0
58	MG	2A	3111	1/1	0.90	0.11	46,46,46,46	0
58	MG	2A	3657	1/1	0.90	0.17	58,58,58,58	0
58	MG	1A	3552	1/1	0.90	0.19	45,45,45,45	0
58	MG	1A	3364	1/1	0.90	0.16	56,56,56,56	0
58	MG	2A	3664	1/1	0.90	0.14	55,55,55,55	0
58	MG	1A	3272	1/1	0.90	0.20	52,52,52,52	0
58	MG	2A	3326	1/1	0.90	0.11	58,58,58,58	0
58	MG	2a	1641	1/1	0.90	0.24	53,53,53,53	0
58	MG	1A	3378	1/1	0.90	0.16	41,41,41,41	0
58	MG	1a	1693	1/1	0.90	0.22	41,41,41,41	0
58	MG	2a	1648	1/1	0.90	0.14	56,56,56,56	0
58	MG	2A	3679	1/1	0.90	0.11	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	2A	3337	1/1	0.90	0.18	60,60,60,60	0
58	MG	2a	1653	1/1	0.90	0.31	54,54,54,54	0
58	MG	1A	3804	1/1	0.90	0.09	27,27,27,27	0
58	MG	2A	3683	1/1	0.90	0.17	59,59,59,59	0
58	MG	2A	3146	1/1	0.90	0.23	60,60,60,60	0
58	MG	1A	3567	1/1	0.90	0.11	45,45,45,45	0
58	MG	2a	1679	1/1	0.90	0.17	43,43,43,43	0
58	MG	2a	1684	1/1	0.90	0.13	43,43,43,43	0
58	MG	2A	3691	1/1	0.90	0.13	49,49,49,49	0
58	MG	1A	3211	1/1	0.90	0.09	39,39,39,39	0
58	MG	1A	3167	1/1	0.90	0.14	39,39,39,39	0
58	MG	2A	3699	1/1	0.90	0.17	44,44,44,44	0
58	MG	2A	3349	1/1	0.90	0.20	52,52,52,52	0
58	MG	2A	3350	1/1	0.90	0.14	53,53,53,53	0
58	MG	2a	1715	1/1	0.90	0.15	53,53,53,53	0
58	MG	2a	1718	1/1	0.90	0.12	51,51,51,51	0
58	MG	1A	3235	1/1	0.90	0.16	43,43,43,43	0
58	MG	2A	3355	1/1	0.90	0.11	56,56,56,56	0
58	MG	1A	3594	1/1	0.90	0.14	30,30,30,30	0
58	MG	1E	312	1/1	0.90	0.15	44,44,44,44	0
58	MG	2A	3181	1/1	0.90	0.23	58,58,58,58	0
58	MG	2A	3186	1/1	0.90	0.13	49,49,49,49	0
58	MG	2A	3719	1/1	0.90	0.08	38,38,38,38	0
58	MG	2a	1743	1/1	0.90	0.17	52,52,52,52	0
58	MG	1A	3488	1/1	0.90	0.20	24,24,24,24	0
58	MG	2A	3365	1/1	0.90	0.10	57,57,57,57	0
58	MG	2A	3723	1/1	0.90	0.10	46,46,46,46	0
58	MG	2A	3366	1/1	0.90	0.10	51,51,51,51	0
58	MG	2a	1753	1/1	0.90	0.13	77,77,77,77	0
58	MG	1A	3313	1/1	0.90	0.17	61,61,61,61	0
58	MG	1A	4003	1/1	0.90	0.12	23,23,23,23	0
58	MG	1a	1750	1/1	0.90	0.12	45,45,45,45	0
58	MG	2A	3201	1/1	0.90	0.17	47,47,47,47	0
58	MG	1O	204	1/1	0.90	0.18	49,49,49,49	0
58	MG	1a	1757	1/1	0.90	0.09	47,47,47,47	0
58	MG	1A	3834	1/1	0.90	0.11	55,55,55,55	0
58	MG	1S	201	1/1	0.90	0.48	43,43,43,43	0
58	MG	1A	3491	1/1	0.90	0.09	33,33,33,33	0
58	MG	1A	3251	1/1	0.90	0.14	51,51,51,51	0
58	MG	1A	4024	1/1	0.90	0.11	51,51,51,51	0
58	MG	1V	207	1/1	0.90	0.12	43,43,43,43	0
58	MG	2A	3213	1/1	0.90	0.24	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	3763	1/1	0.90	0.12	47,47,47,47	0
58	MG	1A	3639	1/1	0.90	0.08	43,43,43,43	0
58	MG	1A	3644	1/1	0.90	0.14	53,53,53,53	0
58	MG	1A	3651	1/1	0.90	0.10	41,41,41,41	0
58	MG	1A	3659	1/1	0.90	0.12	45,45,45,45	0
58	MG	2A	3416	1/1	0.90	0.24	44,44,44,44	0
58	MG	2A	3776	1/1	0.90	0.19	63,63,63,63	0
58	MG	1A	3327	1/1	0.90	0.11	47,47,47,47	0
58	MG	1a	1817	1/1	0.90	0.11	47,47,47,47	0
58	MG	1e	201	1/1	0.90	0.12	54,54,54,54	0
58	MG	2A	3788	1/1	0.90	0.15	60,60,60,60	0
58	MG	2A	3792	1/1	0.90	0.11	46,46,46,46	0
58	MG	2A	3433	1/1	0.90	0.24	50,50,50,50	0
58	MG	2a	1834	1/1	0.90	0.20	68,68,68,68	0
58	MG	1A	3850	1/1	0.90	0.09	49,49,49,49	0
58	MG	1A	4045	1/1	0.90	0.21	45,45,45,45	0
58	MG	1A	3069	1/1	0.90	0.09	36,36,36,36	0
58	MG	1A	4051	1/1	0.90	0.09	26,26,26,26	0
58	MG	2A	3449	1/1	0.90	0.16	52,52,52,52	0
58	MG	2A	3811	1/1	0.90	0.10	63,63,63,63	0
58	MG	17	103	1/1	0.90	0.09	49,49,49,49	0
58	MG	2A	3452	1/1	0.90	0.32	50,50,50,50	0
58	MG	1A	3416	1/1	0.90	0.10	46,46,46,46	0
58	MG	1w	108	1/1	0.90	0.13	60,60,60,60	0
58	MG	2v	101	1/1	0.90	0.20	56,56,56,56	0
58	MG	2A	3826	1/1	0.90	0.09	31,31,31,31	0
58	MG	2A	3837	1/1	0.90	0.10	47,47,47,47	0
58	MG	1a	1602	1/1	0.90	0.18	57,57,57,57	0
58	MG	1x	103	1/1	0.90	0.13	46,46,46,46	0
58	MG	2w	107	1/1	0.90	0.20	60,60,60,60	0
58	MG	1A	3185	1/1	0.90	0.14	53,53,53,53	0
58	MG	1A	3523	1/1	0.90	0.15	55,55,55,55	0
58	MG	2A	3255	1/1	0.90	0.17	61,61,61,61	0
58	MG	2A	3256	1/1	0.90	0.25	49,49,49,49	0
58	MG	2x	104	1/1	0.90	0.14	49,49,49,49	0
58	MG	1A	3871	1/1	0.90	0.09	34,34,34,34	0
58	MG	2A	3868	1/1	0.90	0.12	39,39,39,39	0
58	MG	2y	102	1/1	0.90	0.13	62,62,62,62	0
58	MG	2A	3260	1/1	0.90	0.13	47,47,47,47	0
58	MG	1A	3424	1/1	0.90	0.10	39,39,39,39	0
58	MG	2A	3267	1/1	0.90	0.15	53,53,53,53	0
58	MG	2y	106	1/1	0.90	0.18	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	3559	1/1	0.91	0.15	25,25,25,25	0
58	MG	1A	3458	1/1	0.91	0.11	56,56,56,56	0
58	MG	2E	306	1/1	0.91	0.15	46,46,46,46	0
58	MG	1A	3316	1/1	0.91	0.18	47,47,47,47	0
58	MG	1a	1706	1/1	0.91	0.19	61,61,61,61	0
58	MG	1A	3757	1/1	0.91	0.08	18,18,18,18	0
58	MG	2A	3586	1/1	0.91	0.12	43,43,43,43	0
58	MG	2A	3589	1/1	0.91	0.08	25,25,25,25	0
58	MG	2A	3104	1/1	0.91	0.10	39,39,39,39	0
58	MG	2A	3301	1/1	0.91	0.20	40,40,40,40	0
58	MG	2S	201	1/1	0.91	0.22	64,64,64,64	0
58	MG	1A	3619	1/1	0.91	0.10	5,5,5,5	0
58	MG	1A	3628	1/1	0.91	0.08	31,31,31,31	0
58	MG	2V	201	1/1	0.91	0.35	44,44,44,44	0
58	MG	2A	3601	1/1	0.91	0.15	44,44,44,44	0
58	MG	1a	1716	1/1	0.91	0.27	48,48,48,48	0
58	MG	2A	3610	1/1	0.91	0.08	26,26,26,26	0
58	MG	1a	1722	1/1	0.91	0.27	52,52,52,52	0
58	MG	2A	3621	1/1	0.91	0.15	60,60,60,60	0
58	MG	28	104	1/1	0.91	0.15	44,44,44,44	0
58	MG	2A	3622	1/1	0.91	0.11	34,34,34,34	0
58	MG	2A	3309	1/1	0.91	0.35	39,39,39,39	0
58	MG	1a	1726	1/1	0.91	0.24	56,56,56,56	0
58	MG	2A	3312	1/1	0.91	0.09	55,55,55,55	0
58	MG	1a	1729	1/1	0.91	0.11	53,53,53,53	0
58	MG	1A	3551	1/1	0.91	0.16	46,46,46,46	0
58	MG	1a	1734	1/1	0.91	0.10	53,53,53,53	0
58	MG	2A	3133	1/1	0.91	0.10	53,53,53,53	0
58	MG	2a	1613	1/1	0.91	0.26	61,61,61,61	0
58	MG	2a	1614	1/1	0.91	0.20	53,53,53,53	0
58	MG	2A	3137	1/1	0.91	0.12	49,49,49,49	0
58	MG	1A	3904	1/1	0.91	0.10	37,37,37,37	0
58	MG	2A	3656	1/1	0.91	0.12	42,42,42,42	0
58	MG	2A	3147	1/1	0.91	0.15	47,47,47,47	0
58	MG	2A	3328	1/1	0.91	0.16	46,46,46,46	0
58	MG	2A	3332	1/1	0.91	0.33	59,59,59,59	0
58	MG	2A	3152	1/1	0.91	0.16	49,49,49,49	0
58	MG	1A	3029	1/1	0.91	0.09	30,30,30,30	0
58	MG	2A	3163	1/1	0.91	0.19	45,45,45,45	0
58	MG	2a	1630	1/1	0.91	0.19	43,43,43,43	0
58	MG	2A	3165	1/1	0.91	0.14	40,40,40,40	0
58	MG	2A	3166	1/1	0.91	0.26	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3341	1/1	0.91	0.37	72,72,72,72	0
58	MG	10	106	1/1	0.91	0.10	48,48,48,48	0
58	MG	1A	3396	1/1	0.91	0.44	41,41,41,41	0
58	MG	10	109	1/1	0.91	0.08	42,42,42,42	0
58	MG	1A	3658	1/1	0.91	0.09	36,36,36,36	0
58	MG	2A	3687	1/1	0.91	0.12	39,39,39,39	0
58	MG	1A	4085	1/1	0.91	0.10	23,23,23,23	0
58	MG	1a	1759	1/1	0.91	0.14	55,55,55,55	0
58	MG	2A	3352	1/1	0.91	0.14	51,51,51,51	0
58	MG	2A	3182	1/1	0.91	0.16	38,38,38,38	0
58	MG	2a	1654	1/1	0.91	0.16	47,47,47,47	0
58	MG	11	106	1/1	0.91	0.11	45,45,45,45	0
58	MG	1A	3100	1/1	0.91	0.11	44,44,44,44	0
58	MG	1A	3429	1/1	0.91	0.17	41,41,41,41	0
58	MG	1A	3268	1/1	0.91	0.07	37,37,37,37	0
58	MG	2a	1678	1/1	0.91	0.17	50,50,50,50	0
58	MG	1a	1787	1/1	0.91	0.14	49,49,49,49	0
58	MG	2a	1682	1/1	0.91	0.12	51,51,51,51	0
58	MG	2A	3198	1/1	0.91	0.17	60,60,60,60	0
58	MG	1A	3933	1/1	0.91	0.07	25,25,25,25	0
58	MG	1A	3822	1/1	0.91	0.10	31,31,31,31	0
58	MG	2A	3711	1/1	0.91	0.19	53,53,53,53	0
58	MG	2A	3372	1/1	0.91	0.19	46,46,46,46	0
58	MG	2a	1702	1/1	0.91	0.26	51,51,51,51	0
58	MG	1A	3531	1/1	0.91	0.33	50,50,50,50	0
58	MG	2a	1706	1/1	0.91	0.11	60,60,60,60	0
58	MG	1A	3574	1/1	0.91	0.15	46,46,46,46	0
58	MG	2a	1713	1/1	0.91	0.17	59,59,59,59	0
58	MG	1A	3582	1/1	0.91	0.09	28,28,28,28	0
58	MG	2a	1717	1/1	0.91	0.14	56,56,56,56	0
58	MG	1a	1811	1/1	0.91	0.11	53,53,53,53	0
58	MG	1A	3702	1/1	0.91	0.10	47,47,47,47	0
58	MG	2A	3388	1/1	0.91	0.31	56,56,56,56	0
58	MG	1A	3002	1/1	0.91	0.10	41,41,41,41	0
58	MG	2A	3210	1/1	0.91	0.11	64,64,64,64	0
58	MG	1b	301	1/1	0.91	0.09	53,53,53,53	0
58	MG	2A	3395	1/1	0.91	0.13	45,45,45,45	0
58	MG	2A	3397	1/1	0.91	0.16	53,53,53,53	0
58	MG	1a	1617	1/1	0.91	0.12	53,53,53,53	0
58	MG	1A	3713	1/1	0.91	0.10	45,45,45,45	0
58	MG	2A	3402	1/1	0.91	0.09	63,63,63,63	0
58	MG	1a	1627	1/1	0.91	0.16	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1632	1/1	0.91	0.14	53,53,53,53	0
58	MG	1A	3979	1/1	0.91	0.11	62,62,62,62	0
58	MG	1A	3981	1/1	0.91	0.09	35,35,35,35	0
58	MG	2A	3407	1/1	0.91	0.10	44,44,44,44	0
58	MG	2A	3766	1/1	0.91	0.11	46,46,46,46	0
58	MG	1A	3454	1/1	0.91	0.11	31,31,31,31	0
58	MG	1A	3715	1/1	0.91	0.11	49,49,49,49	0
58	MG	2A	3225	1/1	0.91	0.11	47,47,47,47	0
58	MG	2a	1784	1/1	0.91	0.10	59,59,59,59	0
58	MG	2A	3228	1/1	0.91	0.14	52,52,52,52	0
58	MG	2a	1788	1/1	0.91	0.10	37,37,37,37	0
58	MG	2A	3230	1/1	0.91	0.16	40,40,40,40	0
58	MG	2A	3431	1/1	0.91	0.11	43,43,43,43	0
58	MG	1A	3716	1/1	0.91	0.19	44,44,44,44	0
58	MG	1a	1647	1/1	0.91	0.28	60,60,60,60	0
58	MG	1A	3236	1/1	0.91	0.24	42,42,42,42	0
58	MG	1B	229	1/1	0.91	0.10	44,44,44,44	0
58	MG	2A	3438	1/1	0.91	0.20	47,47,47,47	0
58	MG	2A	3240	1/1	0.91	0.13	34,34,34,34	0
58	MG	1A	3598	1/1	0.91	0.23	53,53,53,53	0
58	MG	2A	3005	1/1	0.91	0.27	55,55,55,55	0
58	MG	1A	3379	1/1	0.91	0.10	41,41,41,41	0
58	MG	2A	3802	1/1	0.91	0.10	34,34,34,34	0
58	MG	2A	3032	1/1	0.91	0.10	30,30,30,30	0
58	MG	1A	3736	1/1	0.91	0.08	40,40,40,40	0
58	MG	1B	235	1/1	0.91	0.22	56,56,56,56	0
58	MG	2A	3812	1/1	0.91	0.10	60,60,60,60	0
58	MG	2A	3813	1/1	0.91	0.08	35,35,35,35	0
58	MG	1a	1671	1/1	0.91	0.14	50,50,50,50	0
58	MG	1a	1673	1/1	0.91	0.13	49,49,49,49	0
58	MG	2a	1828	1/1	0.91	0.16	50,50,50,50	0
58	MG	2a	1829	1/1	0.91	0.15	50,50,50,50	0
58	MG	2A	3057	1/1	0.91	0.13	43,43,43,43	0
58	MG	1A	3737	1/1	0.91	0.09	58,58,58,58	0
58	MG	2a	1839	1/1	0.91	0.17	50,50,50,50	0
58	MG	1E	306	1/1	0.91	0.10	38,38,38,38	0
58	MG	2A	3474	1/1	0.91	0.24	45,45,45,45	0
58	MG	2A	3475	1/1	0.91	0.15	53,53,53,53	0
58	MG	2A	3261	1/1	0.91	0.24	55,55,55,55	0
58	MG	2A	3479	1/1	0.91	0.13	54,54,54,54	0
58	MG	1A	3859	1/1	0.91	0.12	19,19,19,19	0
58	MG	2l	204	1/1	0.91	0.09	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3860	1/1	0.91	0.07	24,24,24,24	0
58	MG	2A	3485	1/1	0.91	0.15	44,44,44,44	0
58	MG	1F	312	1/1	0.91	0.13	39,39,39,39	0
58	MG	2A	3071	1/1	0.91	0.14	46,46,46,46	0
58	MG	1a	1680	1/1	0.91	0.13	47,47,47,47	0
58	MG	2w	101	1/1	0.91	0.12	49,49,49,49	0
58	MG	1A	3494	1/1	0.91	0.10	45,45,45,45	0
58	MG	1A	3744	1/1	0.91	0.07	11,11,11,11	0
58	MG	2w	104	1/1	0.91	0.10	65,65,65,65	0
58	MG	2A	3276	1/1	0.91	0.14	54,54,54,54	0
58	MG	2A	3502	1/1	0.91	0.15	37,37,37,37	0
58	MG	2A	3079	1/1	0.91	0.11	37,37,37,37	0
58	MG	2w	110	1/1	0.91	0.10	58,58,58,58	0
58	MG	1A	3867	1/1	0.91	0.12	43,43,43,43	0
58	MG	2A	3280	1/1	0.91	0.15	59,59,59,59	0
58	MG	2B	201	1/1	0.91	0.14	56,56,56,56	0
58	MG	1a	1689	1/1	0.91	0.08	50,50,50,50	0
58	MG	1A	3868	1/1	0.91	0.17	65,65,65,65	0
58	MG	1A	4040	1/1	0.91	0.06	26,26,26,26	0
58	MG	2A	3289	1/1	0.91	0.19	57,57,57,57	0
58	MG	2A	3534	1/1	0.91	0.09	24,24,24,24	0
58	MG	2A	3290	1/1	0.91	0.22	53,53,53,53	0
58	MG	2A	3552	1/1	0.91	0.08	33,33,33,33	0
58	MG	1A	3870	1/1	0.91	0.14	34,34,34,34	0
58	MG	1a	1665	1/1	0.92	0.09	56,56,56,56	0
58	MG	2E	308	1/1	0.92	0.07	54,54,54,54	0
58	MG	2A	3562	1/1	0.92	0.10	42,42,42,42	0
58	MG	1A	3900	1/1	0.92	0.07	20,20,20,20	0
58	MG	1A	3735	1/1	0.92	0.16	63,63,63,63	0
58	MG	2A	3299	1/1	0.92	0.15	64,64,64,64	0
58	MG	2F	309	1/1	0.92	0.10	47,47,47,47	0
58	MG	1A	3275	1/1	0.92	0.10	35,35,35,35	0
58	MG	2N	201	1/1	0.92	0.19	55,55,55,55	0
58	MG	2A	3584	1/1	0.92	0.11	48,48,48,48	0
58	MG	1A	3363	1/1	0.92	0.12	49,49,49,49	0
58	MG	2R	201	1/1	0.92	0.13	57,57,57,57	0
58	MG	1A	3911	1/1	0.92	0.09	41,41,41,41	0
58	MG	1B	216	1/1	0.92	0.08	38,38,38,38	0
58	MG	1A	3066	1/1	0.92	0.12	36,36,36,36	0
58	MG	1A	3254	1/1	0.92	0.09	45,45,45,45	0
58	MG	1A	3747	1/1	0.92	0.06	12,12,12,12	0
58	MG	1A	3371	1/1	0.92	0.21	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	2Z	301	1/1	0.92	0.10	58,58,58,58	0
58	MG	2A	3607	1/1	0.92	0.11	41,41,41,41	0
58	MG	2A	3311	1/1	0.92	0.15	60,60,60,60	0
58	MG	2A	3609	1/1	0.92	0.08	43,43,43,43	0
58	MG	1a	1682	1/1	0.92	0.10	63,63,63,63	0
58	MG	1a	1683	1/1	0.92	0.19	54,54,54,54	0
58	MG	1B	225	1/1	0.92	0.09	40,40,40,40	0
58	MG	2A	3317	1/1	0.92	0.09	37,37,37,37	0
58	MG	2a	1605	1/1	0.92	0.14	52,52,52,52	0
58	MG	1a	1686	1/1	0.92	0.26	46,46,46,46	0
58	MG	1A	3928	1/1	0.92	0.09	37,37,37,37	0
58	MG	2a	1608	1/1	0.92	0.20	47,47,47,47	0
58	MG	1A	3929	1/1	0.92	0.11	18,18,18,18	0
58	MG	1A	3377	1/1	0.92	0.13	43,43,43,43	0
58	MG	2A	3630	1/1	0.92	0.11	26,26,26,26	0
58	MG	1A	3473	1/1	0.92	0.17	47,47,47,47	0
58	MG	2A	3327	1/1	0.92	0.24	44,44,44,44	0
58	MG	2A	3644	1/1	0.92	0.11	36,36,36,36	0
58	MG	1A	3764	1/1	0.92	0.08	13,13,13,13	0
58	MG	1A	3948	1/1	0.92	0.15	54,54,54,54	0
58	MG	1A	3312	1/1	0.92	0.15	39,39,39,39	0
58	MG	2A	3335	1/1	0.92	0.17	45,45,45,45	0
58	MG	1a	1704	1/1	0.92	0.13	41,41,41,41	0
58	MG	1A	3001	1/1	0.92	0.08	29,29,29,29	0
58	MG	2A	3659	1/1	0.92	0.08	53,53,53,53	0
58	MG	1A	3051	1/1	0.92	0.14	20,20,20,20	0
58	MG	2A	3663	1/1	0.92	0.08	55,55,55,55	0
58	MG	1A	3964	1/1	0.92	0.08	12,12,12,12	0
58	MG	2A	3669	1/1	0.92	0.11	47,47,47,47	0
58	MG	2A	3143	1/1	0.92	0.12	38,38,38,38	0
58	MG	2A	3144	1/1	0.92	0.14	29,29,29,29	0
58	MG	2A	3343	1/1	0.92	0.21	55,55,55,55	0
58	MG	1A	3795	1/1	0.92	0.12	38,38,38,38	0
58	MG	2a	1642	1/1	0.92	0.39	58,58,58,58	0
58	MG	2a	1644	1/1	0.92	0.11	54,54,54,54	0
58	MG	1A	3477	1/1	0.92	0.22	43,43,43,43	0
58	MG	1a	1715	1/1	0.92	0.17	37,37,37,37	0
58	MG	1A	3202	1/1	0.92	0.10	25,25,25,25	0
58	MG	2A	3161	1/1	0.92	0.11	44,44,44,44	0
58	MG	2a	1650	1/1	0.92	0.08	51,51,51,51	0
58	MG	1A	3978	1/1	0.92	0.12	51,51,51,51	0
58	MG	2A	3353	1/1	0.92	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	1A	3321	1/1	0.92	0.19	49,49,49,49	0
58	MG	1A	3980	1/1	0.92	0.11	62,62,62,62	0
58	MG	2A	3168	1/1	0.92	0.14	35,35,35,35	0
58	MG	2A	3359	1/1	0.92	0.25	56,56,56,56	0
58	MG	1A	3483	1/1	0.92	0.06	32,32,32,32	0
58	MG	2A	3700	1/1	0.92	0.15	52,52,52,52	0
58	MG	1A	3815	1/1	0.92	0.09	42,42,42,42	0
58	MG	1T	201	1/1	0.92	0.17	46,46,46,46	0
58	MG	1T	203	1/1	0.92	0.22	44,44,44,44	0
58	MG	2a	1686	1/1	0.92	0.16	42,42,42,42	0
58	MG	2a	1691	1/1	0.92	0.26	49,49,49,49	0
58	MG	1a	1742	1/1	0.92	0.12	45,45,45,45	0
58	MG	1U	202	1/1	0.92	0.17	47,47,47,47	0
58	MG	2A	3371	1/1	0.92	0.12	48,48,48,48	0
58	MG	1U	204	1/1	0.92	0.11	27,27,27,27	0
58	MG	1A	3986	1/1	0.92	0.10	48,48,48,48	0
58	MG	2A	3717	1/1	0.92	0.17	57,57,57,57	0
58	MG	1a	1753	1/1	0.92	0.10	59,59,59,59	0
58	MG	2a	1707	1/1	0.92	0.13	45,45,45,45	0
58	MG	1A	3604	1/1	0.92	0.12	28,28,28,28	0
58	MG	1A	3027	1/1	0.92	0.10	61,61,61,61	0
58	MG	1A	3171	1/1	0.92	0.21	27,27,27,27	0
58	MG	1A	3823	1/1	0.92	0.08	22,22,22,22	0
58	MG	1a	1766	1/1	0.92	0.18	45,45,45,45	0
58	MG	2a	1719	1/1	0.92	0.12	62,62,62,62	0
58	MG	1a	1768	1/1	0.92	0.11	54,54,54,54	0
58	MG	1A	3095	1/1	0.92	0.16	47,47,47,47	0
58	MG	2A	3394	1/1	0.92	0.26	64,64,64,64	0
58	MG	2a	1728	1/1	0.92	0.24	52,52,52,52	0
58	MG	1a	1773	1/1	0.92	0.10	57,57,57,57	0
58	MG	1A	3335	1/1	0.92	0.12	47,47,47,47	0
58	MG	1A	3342	1/1	0.92	0.07	40,40,40,40	0
58	MG	2a	1737	1/1	0.92	0.21	40,40,40,40	0
58	MG	2a	1739	1/1	0.92	0.12	66,66,66,66	0
58	MG	1A	3641	1/1	0.92	0.15	42,42,42,42	0
58	MG	10	108	1/1	0.92	0.14	51,51,51,51	0
58	MG	1A	3835	1/1	0.92	0.08	39,39,39,39	0
58	MG	2A	3211	1/1	0.92	0.10	44,44,44,44	0
58	MG	1A	3642	1/1	0.92	0.07	8,8,8,8	0
58	MG	1A	4031	1/1	0.92	0.11	56,56,56,56	0
58	MG	1a	1804	1/1	0.92	0.08	62,62,62,62	0
58	MG	1A	4032	1/1	0.92	0.13	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1810	1/1	0.92	0.16	48,48,48,48	0
58	MG	1A	3346	1/1	0.92	0.08	37,37,37,37	0
58	MG	1a	1812	1/1	0.92	0.14	42,42,42,42	0
58	MG	2a	1771	1/1	0.92	0.08	57,57,57,57	0
58	MG	2a	1772	1/1	0.92	0.09	54,54,54,54	0
58	MG	1A	3645	1/1	0.92	0.10	69,69,69,69	0
58	MG	2A	3426	1/1	0.92	0.15	46,46,46,46	0
58	MG	2A	3223	1/1	0.92	0.37	52,52,52,52	0
58	MG	1A	3648	1/1	0.92	0.08	27,27,27,27	0
58	MG	1A	3269	1/1	0.92	0.11	45,45,45,45	0
58	MG	1A	3353	1/1	0.92	0.08	34,34,34,34	0
58	MG	2A	3780	1/1	0.92	0.09	39,39,39,39	0
58	MG	1A	3509	1/1	0.92	0.14	38,38,38,38	0
58	MG	1A	3425	1/1	0.92	0.14	34,34,34,34	0
58	MG	2A	3790	1/1	0.92	0.11	52,52,52,52	0
58	MG	2A	3441	1/1	0.92	0.17	43,43,43,43	0
58	MG	2a	1802	1/1	0.92	0.09	49,49,49,49	0
58	MG	2a	1803	1/1	0.92	0.23	53,53,53,53	0
58	MG	1l	202	1/1	0.92	0.07	49,49,49,49	0
58	MG	1A	3516	1/1	0.92	0.20	47,47,47,47	0
58	MG	1a	1608	1/1	0.92	0.23	44,44,44,44	0
58	MG	1A	3176	1/1	0.92	0.11	28,28,28,28	0
58	MG	1w	101	1/1	0.92	0.11	43,43,43,43	0
58	MG	2a	1813	1/1	0.92	0.22	50,50,50,50	0
58	MG	2a	1815	1/1	0.92	0.10	43,43,43,43	0
58	MG	2A	3806	1/1	0.92	0.09	48,48,48,48	0
58	MG	1A	3682	1/1	0.92	0.10	47,47,47,47	0
58	MG	1a	1615	1/1	0.92	0.09	61,61,61,61	0
58	MG	1A	3428	1/1	0.92	0.28	41,41,41,41	0
58	MG	1x	102	1/1	0.92	0.22	51,51,51,51	0
58	MG	2A	3467	1/1	0.92	0.13	49,49,49,49	0
58	MG	1A	3357	1/1	0.92	0.10	44,44,44,44	0
58	MG	1x	104	1/1	0.92	0.24	45,45,45,45	0
58	MG	1A	3533	1/1	0.92	0.08	41,41,41,41	0
58	MG	1a	1630	1/1	0.92	0.23	39,39,39,39	0
58	MG	1x	107	1/1	0.92	0.21	49,49,49,49	0
58	MG	2A	3258	1/1	0.92	0.14	44,44,44,44	0
58	MG	2a	1837	1/1	0.92	0.18	42,42,42,42	0
58	MG	1x	108	1/1	0.92	0.10	18,18,18,18	0
58	MG	2A	3841	1/1	0.92	0.09	41,41,41,41	0
58	MG	2a	1842	1/1	0.92	0.10	64,64,64,64	0
58	MG	2A	3481	1/1	0.92	0.27	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	1A	3433	1/1	0.92	0.14	35,35,35,35	0
58	MG	2A	3262	1/1	0.92	0.12	52,52,52,52	0
58	MG	1A	3435	1/1	0.92	0.22	57,57,57,57	0
58	MG	2A	3007	1/1	0.92	0.10	44,44,44,44	0
58	MG	2l	202	1/1	0.92	0.10	48,48,48,48	0
58	MG	2A	3017	1/1	0.92	0.13	28,28,28,28	0
58	MG	2A	3867	1/1	0.92	0.09	49,49,49,49	0
58	MG	2p	101	1/1	0.92	0.24	57,57,57,57	0
58	MG	2A	3270	1/1	0.92	0.13	56,56,56,56	0
58	MG	1A	4076	1/1	0.92	0.10	55,55,55,55	0
58	MG	1a	1640	1/1	0.92	0.10	51,51,51,51	0
58	MG	2A	3036	1/1	0.92	0.16	51,51,51,51	0
58	MG	1A	3249	1/1	0.92	0.14	41,41,41,41	0
58	MG	1A	3442	1/1	0.92	0.32	51,51,51,51	0
58	MG	2A	3515	1/1	0.92	0.10	12,12,12,12	0
58	MG	2A	3047	1/1	0.92	0.15	53,53,53,53	0
58	MG	1A	3444	1/1	0.92	0.24	55,55,55,55	0
58	MG	2w	106	1/1	0.92	0.13	36,36,36,36	0
58	MG	2A	3052	1/1	0.92	0.09	44,44,44,44	0
58	MG	1A	3445	1/1	0.92	0.14	39,39,39,39	0
58	MG	2B	203	1/1	0.92	0.12	57,57,57,57	0
58	MG	1A	3250	1/1	0.92	0.28	45,45,45,45	0
58	MG	1A	3885	1/1	0.92	0.09	33,33,33,33	0
58	MG	2B	209	1/1	0.92	0.11	43,43,43,43	0
58	MG	1A	3889	1/1	0.92	0.07	20,20,20,20	0
58	MG	2A	3535	1/1	0.92	0.12	45,45,45,45	0
58	MG	2A	3538	1/1	0.92	0.10	45,45,45,45	0
58	MG	2B	214	1/1	0.92	0.10	43,43,43,43	0
58	MG	1A	3452	1/1	0.92	0.11	32,32,32,32	0
58	MG	1a	1664	1/1	0.92	0.16	46,46,46,46	0
58	MG	2A	3068	1/1	0.92	0.07	36,36,36,36	0
58	MG	2A	3557	1/1	0.92	0.07	27,27,27,27	0
58	MG	2A	3511	1/1	0.93	0.13	42,42,42,42	0
58	MG	2A	3008	1/1	0.93	0.19	44,44,44,44	0
58	MG	2A	3010	1/1	0.93	0.13	41,41,41,41	0
58	MG	1A	3550	1/1	0.93	0.18	48,48,48,48	0
58	MG	2B	217	1/1	0.93	0.08	47,47,47,47	0
58	MG	2A	3022	1/1	0.93	0.13	37,37,37,37	0
58	MG	1A	3024	1/1	0.93	0.10	39,39,39,39	0
58	MG	2A	3031	1/1	0.93	0.12	38,38,38,38	0
58	MG	1A	3888	1/1	0.93	0.06	15,15,15,15	0
58	MG	1A	3382	1/1	0.93	0.07	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	1A	4096	1/1	0.93	0.12	45,45,45,45	0
58	MG	2A	3536	1/1	0.93	0.17	48,48,48,48	0
58	MG	2A	3042	1/1	0.93	0.12	38,38,38,38	0
58	MG	2A	3540	1/1	0.93	0.14	36,36,36,36	0
58	MG	2A	3043	1/1	0.93	0.12	52,52,52,52	0
58	MG	2A	3549	1/1	0.93	0.11	35,35,35,35	0
58	MG	1A	3890	1/1	0.93	0.13	27,27,27,27	0
58	MG	1a	1658	1/1	0.93	0.19	41,41,41,41	0
58	MG	1a	1659	1/1	0.93	0.22	47,47,47,47	0
58	MG	1a	1660	1/1	0.93	0.16	53,53,53,53	0
58	MG	1a	1661	1/1	0.93	0.12	46,46,46,46	0
58	MG	2A	3563	1/1	0.93	0.14	48,48,48,48	0
58	MG	2A	3572	1/1	0.93	0.15	46,46,46,46	0
58	MG	1A	3891	1/1	0.93	0.08	28,28,28,28	0
58	MG	1A	4103	1/1	0.93	0.10	40,40,40,40	0
58	MG	2V	202	1/1	0.93	0.09	54,54,54,54	0
58	MG	2A	3061	1/1	0.93	0.11	37,37,37,37	0
58	MG	2A	3063	1/1	0.93	0.09	69,69,69,69	0
58	MG	1A	3464	1/1	0.93	0.14	37,37,37,37	0
58	MG	1A	3467	1/1	0.93	0.07	51,51,51,51	0
58	MG	2A	3066	1/1	0.93	0.18	49,49,49,49	0
58	MG	26	101	1/1	0.93	0.12	45,45,45,45	0
58	MG	1a	1669	1/1	0.93	0.16	42,42,42,42	0
58	MG	1A	3557	1/1	0.93	0.20	48,48,48,48	0
58	MG	1A	3560	1/1	0.93	0.13	41,41,41,41	0
58	MG	1A	3468	1/1	0.93	0.13	45,45,45,45	0
58	MG	1A	3385	1/1	0.93	0.12	43,43,43,43	0
58	MG	1A	3751	1/1	0.93	0.13	31,31,31,31	0
58	MG	2A	3313	1/1	0.93	0.13	49,49,49,49	0
58	MG	1A	3919	1/1	0.93	0.06	15,15,15,15	0
58	MG	1A	3386	1/1	0.93	0.14	37,37,37,37	0
58	MG	1A	3328	1/1	0.93	0.09	29,29,29,29	0
58	MG	1A	3760	1/1	0.93	0.08	32,32,32,32	0
58	MG	2A	3319	1/1	0.93	0.30	64,64,64,64	0
58	MG	2A	3623	1/1	0.93	0.13	53,53,53,53	0
58	MG	1A	3053	1/1	0.93	0.27	48,48,48,48	0
58	MG	1A	3400	1/1	0.93	0.26	50,50,50,50	0
58	MG	1A	3195	1/1	0.93	0.09	43,43,43,43	0
58	MG	2A	3325	1/1	0.93	0.09	60,60,60,60	0
58	MG	1A	3776	1/1	0.93	0.06	14,14,14,14	0
58	MG	1A	3784	1/1	0.93	0.14	42,42,42,42	0
58	MG	2A	3637	1/1	0.93	0.14	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	1B	233	1/1	0.93	0.09	43,43,43,43	0
58	MG	2A	3329	1/1	0.93	0.25	46,46,46,46	0
58	MG	2a	1628	1/1	0.93	0.10	53,53,53,53	0
58	MG	2A	3330	1/1	0.93	0.13	55,55,55,55	0
58	MG	2A	3646	1/1	0.93	0.09	28,28,28,28	0
58	MG	1A	3945	1/1	0.93	0.08	19,19,19,19	0
58	MG	2A	3649	1/1	0.93	0.10	43,43,43,43	0
58	MG	2A	3333	1/1	0.93	0.13	57,57,57,57	0
58	MG	2a	1635	1/1	0.93	0.19	40,40,40,40	0
58	MG	2a	1636	1/1	0.93	0.23	44,44,44,44	0
58	MG	1a	1690	1/1	0.93	0.21	39,39,39,39	0
58	MG	1A	3101	1/1	0.93	0.15	48,48,48,48	0
58	MG	1A	3597	1/1	0.93	0.13	38,38,38,38	0
58	MG	1A	3479	1/1	0.93	0.14	47,47,47,47	0
58	MG	1a	1696	1/1	0.93	0.21	38,38,38,38	0
58	MG	2a	1645	1/1	0.93	0.09	52,52,52,52	0
58	MG	2A	3662	1/1	0.93	0.14	43,43,43,43	0
58	MG	1A	3337	1/1	0.93	0.24	53,53,53,53	0
58	MG	1a	1703	1/1	0.93	0.12	36,36,36,36	0
58	MG	2A	3666	1/1	0.93	0.10	47,47,47,47	0
58	MG	1A	3961	1/1	0.93	0.06	34,34,34,34	0
58	MG	2A	3125	1/1	0.93	0.13	37,37,37,37	0
58	MG	1F	310	1/1	0.93	0.10	51,51,51,51	0
58	MG	1A	3409	1/1	0.93	0.13	39,39,39,39	0
58	MG	1a	1707	1/1	0.93	0.15	48,48,48,48	0
58	MG	2a	1658	1/1	0.93	0.11	55,55,55,55	0
58	MG	1a	1709	1/1	0.93	0.18	56,56,56,56	0
58	MG	1A	3005	1/1	0.93	0.09	36,36,36,36	0
58	MG	1A	3968	1/1	0.93	0.06	31,31,31,31	0
58	MG	2a	1670	1/1	0.93	0.20	51,51,51,51	0
58	MG	2a	1671	1/1	0.93	0.22	46,46,46,46	0
58	MG	2a	1677	1/1	0.93	0.16	50,50,50,50	0
58	MG	1N	203	1/1	0.93	0.13	40,40,40,40	0
58	MG	2A	3354	1/1	0.93	0.14	56,56,56,56	0
58	MG	1N	206	1/1	0.93	0.25	38,38,38,38	0
58	MG	2A	3688	1/1	0.93	0.14	51,51,51,51	0
58	MG	2A	3356	1/1	0.93	0.09	51,51,51,51	0
58	MG	2a	1687	1/1	0.93	0.11	38,38,38,38	0
58	MG	2a	1688	1/1	0.93	0.08	42,42,42,42	0
58	MG	1A	3103	1/1	0.93	0.08	46,46,46,46	0
58	MG	2a	1695	1/1	0.93	0.09	56,56,56,56	0
58	MG	2A	3692	1/1	0.93	0.09	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	1720	1/1	0.93	0.10	48,48,48,48	0
58	MG	2a	1699	1/1	0.93	0.24	57,57,57,57	0
58	MG	1A	3106	1/1	0.93	0.30	40,40,40,40	0
58	MG	1A	3615	1/1	0.93	0.09	40,40,40,40	0
58	MG	1A	3228	1/1	0.93	0.09	34,34,34,34	0
58	MG	1S	202	1/1	0.93	0.13	39,39,39,39	0
58	MG	2A	3169	1/1	0.93	0.08	43,43,43,43	0
58	MG	1A	3495	1/1	0.93	0.17	55,55,55,55	0
58	MG	1A	3825	1/1	0.93	0.10	24,24,24,24	0
58	MG	2A	3707	1/1	0.93	0.09	55,55,55,55	0
58	MG	1T	202	1/1	0.93	0.14	47,47,47,47	0
58	MG	1A	3019	1/1	0.93	0.10	30,30,30,30	0
58	MG	1a	1743	1/1	0.93	0.10	51,51,51,51	0
58	MG	2A	3180	1/1	0.93	0.16	50,50,50,50	0
58	MG	2A	3379	1/1	0.93	0.08	38,38,38,38	0
58	MG	2A	3380	1/1	0.93	0.08	51,51,51,51	0
58	MG	1A	3122	1/1	0.93	0.15	28,28,28,28	0
58	MG	1A	3297	1/1	0.93	0.20	37,37,37,37	0
58	MG	1A	3833	1/1	0.93	0.10	44,44,44,44	0
58	MG	2a	1731	1/1	0.93	0.27	48,48,48,48	0
58	MG	2A	3188	1/1	0.93	0.12	54,54,54,54	0
58	MG	1a	1752	1/1	0.93	0.13	53,53,53,53	0
58	MG	2a	1736	1/1	0.93	0.28	47,47,47,47	0
58	MG	2A	3727	1/1	0.93	0.14	52,52,52,52	0
58	MG	2A	3730	1/1	0.93	0.08	40,40,40,40	0
58	MG	2a	1740	1/1	0.93	0.16	51,51,51,51	0
58	MG	1A	3140	1/1	0.93	0.23	36,36,36,36	0
58	MG	1V	206	1/1	0.93	0.11	39,39,39,39	0
58	MG	2A	3194	1/1	0.93	0.19	55,55,55,55	0
58	MG	2a	1746	1/1	0.93	0.30	50,50,50,50	0
58	MG	2A	3741	1/1	0.93	0.08	42,42,42,42	0
58	MG	1A	3997	1/1	0.93	0.15	40,40,40,40	0
58	MG	1A	3020	1/1	0.93	0.08	37,37,37,37	0
58	MG	2A	3398	1/1	0.93	0.14	54,54,54,54	0
58	MG	2a	1754	1/1	0.93	0.11	50,50,50,50	0
58	MG	2A	3399	1/1	0.93	0.08	52,52,52,52	0
58	MG	2a	1756	1/1	0.93	0.12	64,64,64,64	0
58	MG	2A	3199	1/1	0.93	0.23	51,51,51,51	0
58	MG	2A	3200	1/1	0.93	0.16	46,46,46,46	0
58	MG	2A	3753	1/1	0.93	0.11	47,47,47,47	0
58	MG	1a	1760	1/1	0.93	0.10	47,47,47,47	0
58	MG	1A	3307	1/1	0.93	0.15	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	1777	1/1	0.93	0.09	59,59,59,59	0
58	MG	1A	3311	1/1	0.93	0.14	48,48,48,48	0
58	MG	1A	3654	1/1	0.93	0.10	34,34,34,34	0
58	MG	1Y	203	1/1	0.93	0.21	47,47,47,47	0
58	MG	1Z	3700	1/1	0.93	0.08	44,44,44,44	0
58	MG	1Z	3701	1/1	0.93	0.08	45,45,45,45	0
58	MG	1a	1781	1/1	0.93	0.09	48,48,48,48	0
58	MG	2A	3413	1/1	0.93	0.17	41,41,41,41	0
58	MG	10	102	1/1	0.93	0.14	39,39,39,39	0
58	MG	2A	3419	1/1	0.93	0.16	28,28,28,28	0
58	MG	2a	1798	1/1	0.93	0.13	36,36,36,36	0
58	MG	10	105	1/1	0.93	0.12	41,41,41,41	0
58	MG	1a	1788	1/1	0.93	0.10	51,51,51,51	0
58	MG	2A	3423	1/1	0.93	0.22	52,52,52,52	0
58	MG	1A	4021	1/1	0.93	0.09	30,30,30,30	0
58	MG	2A	3429	1/1	0.93	0.23	53,53,53,53	0
58	MG	2A	3787	1/1	0.93	0.09	49,49,49,49	0
58	MG	1A	3517	1/1	0.93	0.08	54,54,54,54	0
58	MG	1A	3367	1/1	0.93	0.10	46,46,46,46	0
58	MG	1A	4026	1/1	0.93	0.11	43,43,43,43	0
58	MG	1A	3524	1/1	0.93	0.09	47,47,47,47	0
58	MG	1A	3846	1/1	0.93	0.10	62,62,62,62	0
58	MG	1A	3049	1/1	0.93	0.06	8,8,8,8	0
58	MG	2A	3440	1/1	0.93	0.09	50,50,50,50	0
58	MG	15	103	1/1	0.93	0.28	37,37,37,37	0
58	MG	2A	3803	1/1	0.93	0.15	45,45,45,45	0
58	MG	2A	3804	1/1	0.93	0.10	43,43,43,43	0
58	MG	1A	3529	1/1	0.93	0.07	37,37,37,37	0
58	MG	1A	3369	1/1	0.93	0.10	42,42,42,42	0
58	MG	2A	3447	1/1	0.93	0.14	49,49,49,49	0
58	MG	2A	3227	1/1	0.93	0.10	52,52,52,52	0
58	MG	1A	3370	1/1	0.93	0.18	39,39,39,39	0
58	MG	2a	1830	1/1	0.93	0.11	52,52,52,52	0
58	MG	1A	3252	1/1	0.93	0.08	37,37,37,37	0
58	MG	1A	3539	1/1	0.93	0.18	41,41,41,41	0
58	MG	1e	202	1/1	0.93	0.20	55,55,55,55	0
58	MG	2A	3461	1/1	0.93	0.23	32,32,32,32	0
58	MG	2A	3462	1/1	0.93	0.10	54,54,54,54	0
58	MG	1A	3449	1/1	0.93	0.16	34,34,34,34	0
58	MG	2A	3835	1/1	0.93	0.06	43,43,43,43	0
58	MG	1A	3863	1/1	0.93	0.12	36,36,36,36	0
58	MG	1A	3077	1/1	0.93	0.20	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	2A	3839	1/1	0.93	0.07	47,47,47,47	0
58	MG	1A	4049	1/1	0.93	0.10	25,25,25,25	0
58	MG	2A	3844	1/1	0.93	0.13	61,61,61,61	0
58	MG	1A	3453	1/1	0.93	0.17	49,49,49,49	0
58	MG	1A	4052	1/1	0.93	0.07	40,40,40,40	0
58	MG	1A	3256	1/1	0.93	0.09	49,49,49,49	0
58	MG	1w	103	1/1	0.93	0.29	50,50,50,50	0
58	MG	1A	3050	1/1	0.93	0.10	40,40,40,40	0
58	MG	2A	3855	1/1	0.93	0.10	35,35,35,35	0
58	MG	1a	1619	1/1	0.93	0.10	36,36,36,36	0
58	MG	1a	1621	1/1	0.93	0.12	45,45,45,45	0
58	MG	1a	1622	1/1	0.93	0.10	41,41,41,41	0
58	MG	1A	3718	1/1	0.93	0.15	47,47,47,47	0
58	MG	1A	3723	1/1	0.93	0.11	28,28,28,28	0
58	MG	1a	1628	1/1	0.93	0.15	50,50,50,50	0
58	MG	1A	4067	1/1	0.93	0.08	35,35,35,35	0
58	MG	1A	3873	1/1	0.93	0.10	25,25,25,25	0
58	MG	2A	3878	1/1	0.93	0.14	52,52,52,52	0
58	MG	2A	3265	1/1	0.93	0.12	47,47,47,47	0
58	MG	1A	3875	1/1	0.93	0.04	27,27,27,27	0
58	MG	1A	3380	1/1	0.93	0.08	36,36,36,36	0
58	MG	2A	3499	1/1	0.93	0.23	44,44,44,44	0
58	MG	2A	3500	1/1	0.93	0.11	39,39,39,39	0
58	MG	1A	4083	1/1	0.93	0.07	37,37,37,37	0
58	MG	1A	3878	1/1	0.93	0.24	27,27,27,27	0
58	MG	2B	205	1/1	0.93	0.15	51,51,51,51	0
58	MG	2B	206	1/1	0.93	0.16	53,53,53,53	0
58	MG	2A	3508	1/1	0.93	0.09	39,39,39,39	0
58	MG	2B	208	1/1	0.93	0.26	50,50,50,50	0
58	MG	2A	3509	1/1	0.93	0.11	38,38,38,38	0
60	ZN	24	501	1/1	0.93	0.10	113,113,113,113	0
58	MG	2A	3483	1/1	0.94	0.09	50,50,50,50	0
58	MG	2A	3876	1/1	0.94	0.14	36,36,36,36	0
58	MG	2A	3239	1/1	0.94	0.09	41,41,41,41	0
58	MG	1A	3117	1/1	0.94	0.17	28,28,28,28	0
58	MG	2A	3486	1/1	0.94	0.07	32,32,32,32	0
58	MG	1n	101	1/1	0.94	0.07	34,34,34,34	0
58	MG	1a	1609	1/1	0.94	0.25	56,56,56,56	0
58	MG	1A	3209	1/1	0.94	0.16	33,33,33,33	0
58	MG	2A	3246	1/1	0.94	0.07	45,45,45,45	0
58	MG	1A	3668	1/1	0.94	0.07	17,17,17,17	0
58	MG	2A	3494	1/1	0.94	0.13	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	1A	3092	1/1	0.94	0.08	40,40,40,40	0
58	MG	1A	4054	1/1	0.94	0.08	34,34,34,34	0
58	MG	1w	106	1/1	0.94	0.13	44,44,44,44	0
58	MG	1a	1618	1/1	0.94	0.09	43,43,43,43	0
58	MG	1A	3126	1/1	0.94	0.10	43,43,43,43	0
58	MG	2A	3505	1/1	0.94	0.07	40,40,40,40	0
58	MG	1A	3437	1/1	0.94	0.06	36,36,36,36	0
58	MG	1A	4061	1/1	0.94	0.12	34,34,34,34	0
58	MG	1A	3530	1/1	0.94	0.28	55,55,55,55	0
58	MG	1a	1626	1/1	0.94	0.14	50,50,50,50	0
58	MG	1A	3693	1/1	0.94	0.08	15,15,15,15	0
58	MG	2D	304	1/1	0.94	0.06	39,39,39,39	0
58	MG	2A	3264	1/1	0.94	0.27	49,49,49,49	0
58	MG	1A	3699	1/1	0.94	0.07	20,20,20,20	0
58	MG	2E	302	1/1	0.94	0.14	47,47,47,47	0
58	MG	2A	3522	1/1	0.94	0.08	49,49,49,49	0
58	MG	1a	1629	1/1	0.94	0.31	45,45,45,45	0
58	MG	1A	3273	1/1	0.94	0.26	41,41,41,41	0
58	MG	1x	109	1/1	0.94	0.09	43,43,43,43	0
58	MG	2A	3533	1/1	0.94	0.11	46,46,46,46	0
58	MG	1x	111	1/1	0.94	0.10	39,39,39,39	0
58	MG	2F	302	1/1	0.94	0.14	45,45,45,45	0
58	MG	2F	303	1/1	0.94	0.10	59,59,59,59	0
58	MG	2F	304	1/1	0.94	0.25	48,48,48,48	0
58	MG	1A	3709	1/1	0.94	0.10	39,39,39,39	0
58	MG	2A	3001	1/1	0.94	0.17	37,37,37,37	0
58	MG	2A	3003	1/1	0.94	0.15	44,44,44,44	0
58	MG	2A	3539	1/1	0.94	0.13	41,41,41,41	0
58	MG	2O	201	1/1	0.94	0.20	43,43,43,43	0
58	MG	2Q	201	1/1	0.94	0.18	48,48,48,48	0
58	MG	1a	1634	1/1	0.94	0.19	53,53,53,53	0
58	MG	1A	3441	1/1	0.94	0.15	31,31,31,31	0
58	MG	2A	3544	1/1	0.94	0.08	28,28,28,28	0
58	MG	2R	202	1/1	0.94	0.19	38,38,38,38	0
58	MG	1A	4079	1/1	0.94	0.08	37,37,37,37	0
58	MG	1A	4082	1/1	0.94	0.09	36,36,36,36	0
58	MG	2U	201	1/1	0.94	0.28	41,41,41,41	0
58	MG	2A	3279	1/1	0.94	0.19	56,56,56,56	0
58	MG	1A	3535	1/1	0.94	0.29	28,28,28,28	0
58	MG	2A	3018	1/1	0.94	0.18	48,48,48,48	0
58	MG	1a	1642	1/1	0.94	0.24	54,54,54,54	0
58	MG	2A	3023	1/1	0.94	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	3569	1/1	0.94	0.15	22,22,22,22	0
58	MG	1A	3536	1/1	0.94	0.16	25,25,25,25	0
58	MG	2A	3029	1/1	0.94	0.17	49,49,49,49	0
58	MG	1A	3221	1/1	0.94	0.08	40,40,40,40	0
58	MG	27	103	1/1	0.94	0.12	44,44,44,44	0
58	MG	1A	3443	1/1	0.94	0.15	52,52,52,52	0
58	MG	2A	3033	1/1	0.94	0.13	32,32,32,32	0
58	MG	2A	3294	1/1	0.94	0.15	49,49,49,49	0
58	MG	2a	1601	1/1	0.94	0.12	54,54,54,54	0
58	MG	1a	1650	1/1	0.94	0.12	45,45,45,45	0
58	MG	2A	3588	1/1	0.94	0.13	49,49,49,49	0
58	MG	2A	3297	1/1	0.94	0.30	52,52,52,52	0
58	MG	1A	3227	1/1	0.94	0.12	31,31,31,31	0
58	MG	1A	3882	1/1	0.94	0.12	23,23,23,23	0
58	MG	2A	3594	1/1	0.94	0.12	43,43,43,43	0
58	MG	1A	3719	1/1	0.94	0.09	26,26,26,26	0
58	MG	2A	3598	1/1	0.94	0.13	49,49,49,49	0
58	MG	2a	1611	1/1	0.94	0.17	55,55,55,55	0
58	MG	1A	3720	1/1	0.94	0.13	47,47,47,47	0
58	MG	2A	3046	1/1	0.94	0.07	38,38,38,38	0
58	MG	2A	3604	1/1	0.94	0.10	54,54,54,54	0
58	MG	2A	3605	1/1	0.94	0.16	47,47,47,47	0
58	MG	1A	3722	1/1	0.94	0.08	35,35,35,35	0
58	MG	2A	3304	1/1	0.94	0.12	46,46,46,46	0
58	MG	2a	1618	1/1	0.94	0.18	58,58,58,58	0
58	MG	2A	3048	1/1	0.94	0.14	39,39,39,39	0
58	MG	2A	3050	1/1	0.94	0.26	53,53,53,53	0
58	MG	2A	3611	1/1	0.94	0.08	45,45,45,45	0
58	MG	2A	3615	1/1	0.94	0.10	24,24,24,24	0
58	MG	2A	3308	1/1	0.94	0.08	47,47,47,47	0
58	MG	1A	4101	1/1	0.94	0.07	41,41,41,41	0
58	MG	1A	3292	1/1	0.94	0.13	33,33,33,33	0
58	MG	1a	1662	1/1	0.94	0.23	44,44,44,44	0
58	MG	1A	3447	1/1	0.94	0.16	43,43,43,43	0
58	MG	1B	204	1/1	0.94	0.07	34,34,34,34	0
58	MG	1A	3366	1/1	0.94	0.10	39,39,39,39	0
58	MG	2A	3315	1/1	0.94	0.09	59,59,59,59	0
58	MG	1A	3547	1/1	0.94	0.15	34,34,34,34	0
58	MG	2a	1637	1/1	0.94	0.15	52,52,52,52	0
58	MG	1A	3004	1/1	0.94	0.11	18,18,18,18	0
58	MG	1B	213	1/1	0.94	0.20	43,43,43,43	0
58	MG	1A	3230	1/1	0.94	0.14	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	1A	3300	1/1	0.94	0.07	39,39,39,39	0
58	MG	2a	1643	1/1	0.94	0.20	54,54,54,54	0
58	MG	1A	3908	1/1	0.94	0.09	24,24,24,24	0
58	MG	1A	3302	1/1	0.94	0.11	36,36,36,36	0
58	MG	1A	3741	1/1	0.94	0.09	40,40,40,40	0
58	MG	1a	1677	1/1	0.94	0.10	52,52,52,52	0
58	MG	1A	3234	1/1	0.94	0.12	34,34,34,34	0
58	MG	2A	3075	1/1	0.94	0.16	40,40,40,40	0
58	MG	1A	3920	1/1	0.94	0.08	18,18,18,18	0
58	MG	1A	3456	1/1	0.94	0.07	40,40,40,40	0
58	MG	1A	3749	1/1	0.94	0.07	47,47,47,47	0
58	MG	1A	3375	1/1	0.94	0.07	37,37,37,37	0
58	MG	2A	3089	1/1	0.94	0.11	44,44,44,44	0
58	MG	2a	1656	1/1	0.94	0.08	64,64,64,64	0
58	MG	2a	1657	1/1	0.94	0.08	46,46,46,46	0
58	MG	1a	1684	1/1	0.94	0.07	47,47,47,47	0
58	MG	1A	3304	1/1	0.94	0.09	36,36,36,36	0
58	MG	1A	3146	1/1	0.94	0.14	34,34,34,34	0
58	MG	2a	1664	1/1	0.94	0.11	55,55,55,55	0
58	MG	2A	3668	1/1	0.94	0.06	37,37,37,37	0
58	MG	1A	3931	1/1	0.94	0.09	36,36,36,36	0
58	MG	2A	3339	1/1	0.94	0.08	52,52,52,52	0
58	MG	2a	1672	1/1	0.94	0.16	45,45,45,45	0
58	MG	1A	3755	1/1	0.94	0.10	28,28,28,28	0
58	MG	1A	3166	1/1	0.94	0.16	44,44,44,44	0
58	MG	1A	3759	1/1	0.94	0.09	33,33,33,33	0
58	MG	2A	3676	1/1	0.94	0.17	53,53,53,53	0
58	MG	2A	3677	1/1	0.94	0.15	26,26,26,26	0
58	MG	1A	3944	1/1	0.94	0.08	37,37,37,37	0
58	MG	1A	3248	1/1	0.94	0.11	35,35,35,35	0
58	MG	2A	3106	1/1	0.94	0.21	57,57,57,57	0
58	MG	2a	1689	1/1	0.94	0.13	47,47,47,47	0
58	MG	2a	1690	1/1	0.94	0.19	33,33,33,33	0
58	MG	2A	3108	1/1	0.94	0.26	40,40,40,40	0
58	MG	2a	1692	1/1	0.94	0.16	48,48,48,48	0
58	MG	2A	3110	1/1	0.94	0.08	58,58,58,58	0
58	MG	1E	310	1/1	0.94	0.07	21,21,21,21	0
58	MG	2A	3112	1/1	0.94	0.14	28,28,28,28	0
58	MG	1A	3946	1/1	0.94	0.08	17,17,17,17	0
58	MG	1a	1698	1/1	0.94	0.11	56,56,56,56	0
58	MG	1a	1701	1/1	0.94	0.17	44,44,44,44	0
58	MG	1F	307	1/1	0.94	0.10	19,19,19,19	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3695	1/1	0.94	0.08	51,51,51,51	0
58	MG	1A	3096	1/1	0.94	0.09	41,41,41,41	0
58	MG	2A	3123	1/1	0.94	0.07	43,43,43,43	0
58	MG	1A	3765	1/1	0.94	0.06	19,19,19,19	0
58	MG	1F	313	1/1	0.94	0.14	42,42,42,42	0
58	MG	2a	1714	1/1	0.94	0.19	58,58,58,58	0
58	MG	2A	3362	1/1	0.94	0.19	56,56,56,56	0
58	MG	2a	1716	1/1	0.94	0.19	49,49,49,49	0
58	MG	1A	3169	1/1	0.94	0.18	30,30,30,30	0
58	MG	1A	3047	1/1	0.94	0.06	27,27,27,27	0
58	MG	2A	3705	1/1	0.94	0.12	54,54,54,54	0
58	MG	2a	1720	1/1	0.94	0.21	34,34,34,34	0
58	MG	2a	1721	1/1	0.94	0.16	43,43,43,43	0
58	MG	2A	3140	1/1	0.94	0.08	54,54,54,54	0
58	MG	1G	205	1/1	0.94	0.11	44,44,44,44	0
58	MG	1A	3319	1/1	0.94	0.07	28,28,28,28	0
58	MG	2A	3145	1/1	0.94	0.14	37,37,37,37	0
58	MG	1A	3962	1/1	0.94	0.07	36,36,36,36	0
58	MG	2A	3712	1/1	0.94	0.11	40,40,40,40	0
58	MG	1A	3052	1/1	0.94	0.15	21,21,21,21	0
58	MG	1O	203	1/1	0.94	0.11	34,34,34,34	0
58	MG	2A	3376	1/1	0.94	0.11	38,38,38,38	0
58	MG	1A	3786	1/1	0.94	0.08	47,47,47,47	0
58	MG	2a	1738	1/1	0.94	0.11	59,59,59,59	0
58	MG	2A	3155	1/1	0.94	0.11	43,43,43,43	0
58	MG	2A	3382	1/1	0.94	0.27	42,42,42,42	0
58	MG	2A	3157	1/1	0.94	0.15	38,38,38,38	0
58	MG	2A	3158	1/1	0.94	0.15	32,32,32,32	0
58	MG	2A	3159	1/1	0.94	0.14	42,42,42,42	0
58	MG	1A	3787	1/1	0.94	0.11	33,33,33,33	0
58	MG	2a	1747	1/1	0.94	0.20	51,51,51,51	0
58	MG	2A	3162	1/1	0.94	0.29	56,56,56,56	0
58	MG	2A	3735	1/1	0.94	0.11	49,49,49,49	0
58	MG	1P	201	1/1	0.94	0.35	30,30,30,30	0
58	MG	2A	3737	1/1	0.94	0.11	53,53,53,53	0
58	MG	1Q	207	1/1	0.94	0.09	30,30,30,30	0
58	MG	1a	1728	1/1	0.94	0.09	49,49,49,49	0
58	MG	2A	3743	1/1	0.94	0.10	47,47,47,47	0
58	MG	2A	3167	1/1	0.94	0.13	44,44,44,44	0
58	MG	2a	1759	1/1	0.94	0.10	52,52,52,52	0
58	MG	1R	201	1/1	0.94	0.07	38,38,38,38	0
58	MG	1A	3322	1/1	0.94	0.24	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	3972	1/1	0.94	0.09	42,42,42,42	0
58	MG	1a	1737	1/1	0.94	0.15	53,53,53,53	0
58	MG	2a	1776	1/1	0.94	0.17	43,43,43,43	0
58	MG	1A	3595	1/1	0.94	0.06	31,31,31,31	0
58	MG	2A	3754	1/1	0.94	0.14	49,49,49,49	0
58	MG	1A	3976	1/1	0.94	0.10	44,44,44,44	0
58	MG	2a	1782	1/1	0.94	0.12	57,57,57,57	0
58	MG	2A	3756	1/1	0.94	0.07	40,40,40,40	0
58	MG	2A	3758	1/1	0.94	0.09	20,20,20,20	0
58	MG	2A	3177	1/1	0.94	0.13	52,52,52,52	0
58	MG	2a	1790	1/1	0.94	0.23	54,54,54,54	0
58	MG	1A	3398	1/1	0.94	0.12	51,51,51,51	0
58	MG	1A	3326	1/1	0.94	0.07	34,34,34,34	0
58	MG	2A	3762	1/1	0.94	0.08	46,46,46,46	0
58	MG	1A	3175	1/1	0.94	0.14	30,30,30,30	0
58	MG	1A	3601	1/1	0.94	0.14	36,36,36,36	0
58	MG	2A	3183	1/1	0.94	0.10	44,44,44,44	0
58	MG	1U	207	1/1	0.94	0.33	27,27,27,27	0
58	MG	1A	3983	1/1	0.94	0.23	62,62,62,62	0
58	MG	2A	3770	1/1	0.94	0.09	41,41,41,41	0
58	MG	2A	3772	1/1	0.94	0.06	31,31,31,31	0
58	MG	1A	3402	1/1	0.94	0.26	30,30,30,30	0
58	MG	2a	1807	1/1	0.94	0.18	54,54,54,54	0
58	MG	2A	3417	1/1	0.94	0.17	40,40,40,40	0
58	MG	1a	1756	1/1	0.94	0.14	41,41,41,41	0
58	MG	1A	3255	1/1	0.94	0.10	46,46,46,46	0
58	MG	2a	1811	1/1	0.94	0.14	48,48,48,48	0
58	MG	1A	3607	1/1	0.94	0.09	39,39,39,39	0
58	MG	2A	3779	1/1	0.94	0.07	46,46,46,46	0
58	MG	1A	3487	1/1	0.94	0.10	29,29,29,29	0
58	MG	1A	3025	1/1	0.94	0.26	35,35,35,35	0
58	MG	2A	3427	1/1	0.94	0.19	45,45,45,45	0
58	MG	1A	3996	1/1	0.94	0.10	41,41,41,41	0
58	MG	2A	3789	1/1	0.94	0.07	55,55,55,55	0
58	MG	1a	1763	1/1	0.94	0.07	49,49,49,49	0
58	MG	1A	3184	1/1	0.94	0.14	37,37,37,37	0
58	MG	2a	1826	1/1	0.94	0.11	55,55,55,55	0
58	MG	1A	3410	1/1	0.94	0.10	37,37,37,37	0
58	MG	1A	4000	1/1	0.94	0.11	38,38,38,38	0
58	MG	2A	3435	1/1	0.94	0.28	55,55,55,55	0
58	MG	1A	3829	1/1	0.94	0.14	27,27,27,27	0
58	MG	2A	3801	1/1	0.94	0.09	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	4008	1/1	0.94	0.08	51,51,51,51	0
58	MG	2A	3439	1/1	0.94	0.19	52,52,52,52	0
58	MG	1A	3624	1/1	0.94	0.07	24,24,24,24	0
58	MG	2a	1840	1/1	0.94	0.12	69,69,69,69	0
58	MG	2A	3805	1/1	0.94	0.09	56,56,56,56	0
58	MG	1A	3492	1/1	0.94	0.30	38,38,38,38	0
58	MG	2A	3442	1/1	0.94	0.19	49,49,49,49	0
58	MG	1A	3060	1/1	0.94	0.16	41,41,41,41	0
58	MG	1A	3640	1/1	0.94	0.10	30,30,30,30	0
58	MG	1A	3263	1/1	0.94	0.10	29,29,29,29	0
58	MG	1A	4025	1/1	0.94	0.16	44,44,44,44	0
58	MG	2A	3815	1/1	0.94	0.08	57,57,57,57	0
58	MG	1A	3340	1/1	0.94	0.16	41,41,41,41	0
58	MG	1a	1801	1/1	0.94	0.09	62,62,62,62	0
58	MG	2A	3820	1/1	0.94	0.11	32,32,32,32	0
58	MG	2A	3453	1/1	0.94	0.23	40,40,40,40	0
58	MG	1A	3502	1/1	0.94	0.21	25,25,25,25	0
58	MG	1A	3838	1/1	0.94	0.06	22,22,22,22	0
58	MG	2A	3827	1/1	0.94	0.09	36,36,36,36	0
58	MG	2A	3832	1/1	0.94	0.07	56,56,56,56	0
58	MG	2A	3456	1/1	0.94	0.22	49,49,49,49	0
58	MG	2A	3459	1/1	0.94	0.09	32,32,32,32	0
58	MG	1a	1807	1/1	0.94	0.16	38,38,38,38	0
58	MG	2A	3219	1/1	0.94	0.15	44,44,44,44	0
58	MG	2A	3840	1/1	0.94	0.07	31,31,31,31	0
58	MG	2A	3463	1/1	0.94	0.16	57,57,57,57	0
58	MG	2w	108	1/1	0.94	0.08	53,53,53,53	0
58	MG	2A	3842	1/1	0.94	0.10	32,32,32,32	0
58	MG	15	106	1/1	0.94	0.16	37,37,37,37	0
58	MG	15	108	1/1	0.94	0.15	34,34,34,34	0
58	MG	1A	3419	1/1	0.94	0.09	42,42,42,42	0
58	MG	1A	3088	1/1	0.94	0.22	29,29,29,29	0
58	MG	2x	103	1/1	0.94	0.34	65,65,65,65	0
58	MG	2A	3470	1/1	0.94	0.09	34,34,34,34	0
58	MG	1a	1813	1/1	0.94	0.10	52,52,52,52	0
58	MG	2x	106	1/1	0.94	0.15	43,43,43,43	0
58	MG	1A	3423	1/1	0.94	0.09	38,38,38,38	0
58	MG	1A	3109	1/1	0.94	0.20	37,37,37,37	0
58	MG	1A	3844	1/1	0.94	0.12	42,42,42,42	0
58	MG	1A	3656	1/1	0.94	0.06	17,17,17,17	0
58	MG	1A	3348	1/1	0.94	0.12	43,43,43,43	0
58	MG	1a	1606	1/1	0.94	0.11	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	1A	3061	1/1	0.94	0.12	25,25,25,25	0
58	MG	2A	3862	1/1	0.95	0.13	47,47,47,47	0
58	MG	2A	3863	1/1	0.95	0.09	36,36,36,36	0
58	MG	1A	3977	1/1	0.95	0.13	55,55,55,55	0
58	MG	1A	3247	1/1	0.95	0.19	38,38,38,38	0
58	MG	1A	3779	1/1	0.95	0.06	31,31,31,31	0
58	MG	1A	3484	1/1	0.95	0.08	36,36,36,36	0
58	MG	1a	1793	1/1	0.95	0.11	55,55,55,55	0
58	MG	1W	207	1/1	0.95	0.14	14,14,14,14	0
58	MG	2A	3873	1/1	0.95	0.06	37,37,37,37	0
58	MG	2A	3874	1/1	0.95	0.17	45,45,45,45	0
58	MG	1A	3188	1/1	0.95	0.06	28,28,28,28	0
58	MG	1a	1799	1/1	0.95	0.07	62,62,62,62	0
58	MG	2A	3220	1/1	0.95	0.09	49,49,49,49	0
58	MG	1A	3982	1/1	0.95	0.05	45,45,45,45	0
58	MG	2A	3880	1/1	0.95	0.09	53,53,53,53	0
58	MG	2A	3881	1/1	0.95	0.08	48,48,48,48	0
58	MG	1A	3602	1/1	0.95	0.13	48,48,48,48	0
58	MG	1a	1803	1/1	0.95	0.07	37,37,37,37	0
58	MG	1A	3417	1/1	0.95	0.17	32,32,32,32	0
58	MG	2A	3489	1/1	0.95	0.07	39,39,39,39	0
58	MG	1A	3299	1/1	0.95	0.07	43,43,43,43	0
58	MG	1A	3800	1/1	0.95	0.07	11,11,11,11	0
58	MG	1A	3490	1/1	0.95	0.09	44,44,44,44	0
58	MG	1A	3991	1/1	0.95	0.06	23,23,23,23	0
58	MG	2A	3495	1/1	0.95	0.12	29,29,29,29	0
58	MG	2A	3231	1/1	0.95	0.16	46,46,46,46	0
58	MG	1A	3610	1/1	0.95	0.06	23,23,23,23	0
58	MG	2A	3235	1/1	0.95	0.15	41,41,41,41	0
58	MG	1A	3189	1/1	0.95	0.09	24,24,24,24	0
58	MG	2A	3503	1/1	0.95	0.07	54,54,54,54	0
58	MG	1A	3422	1/1	0.95	0.06	35,35,35,35	0
58	MG	2B	216	1/1	0.95	0.13	54,54,54,54	0
58	MG	1a	1815	1/1	0.95	0.09	44,44,44,44	0
58	MG	1a	1816	1/1	0.95	0.10	43,43,43,43	0
58	MG	2D	301	1/1	0.95	0.11	35,35,35,35	0
58	MG	2D	303	1/1	0.95	0.14	46,46,46,46	0
58	MG	1A	3812	1/1	0.95	0.10	35,35,35,35	0
58	MG	1a	1818	1/1	0.95	0.13	42,42,42,42	0
58	MG	2A	3512	1/1	0.95	0.08	50,50,50,50	0
58	MG	2A	3242	1/1	0.95	0.28	32,32,32,32	0
58	MG	11	102	1/1	0.95	0.10	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	1A	3999	1/1	0.95	0.08	35,35,35,35	0
58	MG	1A	3814	1/1	0.95	0.07	35,35,35,35	0
58	MG	2A	3249	1/1	0.95	0.10	54,54,54,54	0
58	MG	1f	202	1/1	0.95	0.14	44,44,44,44	0
58	MG	1A	3613	1/1	0.95	0.10	41,41,41,41	0
58	MG	12	101	1/1	0.95	0.07	43,43,43,43	0
58	MG	2A	3529	1/1	0.95	0.07	28,28,28,28	0
58	MG	12	102	1/1	0.95	0.12	33,33,33,33	0
58	MG	2F	305	1/1	0.95	0.12	40,40,40,40	0
58	MG	1m	3001	1/1	0.95	0.07	38,38,38,38	0
58	MG	15	102	1/1	0.95	0.12	23,23,23,23	0
58	MG	1A	4005	1/1	0.95	0.23	22,22,22,22	0
58	MG	2A	3537	1/1	0.95	0.09	50,50,50,50	0
58	MG	1A	3150	1/1	0.95	0.08	27,27,27,27	0
58	MG	1A	3151	1/1	0.95	0.33	32,32,32,32	0
58	MG	1A	3622	1/1	0.95	0.12	38,38,38,38	0
58	MG	1A	4012	1/1	0.95	0.06	23,23,23,23	0
58	MG	2A	3543	1/1	0.95	0.08	43,43,43,43	0
58	MG	1A	4018	1/1	0.95	0.05	27,27,27,27	0
58	MG	2R	203	1/1	0.95	0.14	42,42,42,42	0
58	MG	1A	3623	1/1	0.95	0.12	23,23,23,23	0
58	MG	2T	201	1/1	0.95	0.11	52,52,52,52	0
58	MG	2A	3550	1/1	0.95	0.07	34,34,34,34	0
58	MG	19	101	1/1	0.95	0.11	38,38,38,38	0
58	MG	1a	1601	1/1	0.95	0.27	48,48,48,48	0
58	MG	1A	4022	1/1	0.95	0.06	40,40,40,40	0
58	MG	1a	1603	1/1	0.95	0.09	38,38,38,38	0
58	MG	2A	3560	1/1	0.95	0.09	42,42,42,42	0
58	MG	2A	3561	1/1	0.95	0.06	24,24,24,24	0
58	MG	2X	101	1/1	0.95	0.09	51,51,51,51	0
58	MG	1A	3360	1/1	0.95	0.10	32,32,32,32	0
58	MG	1A	3361	1/1	0.95	0.05	41,41,41,41	0
58	MG	23	101	1/1	0.95	0.17	47,47,47,47	0
58	MG	25	103	1/1	0.95	0.06	34,34,34,34	0
58	MG	1A	3636	1/1	0.95	0.11	44,44,44,44	0
58	MG	2A	3571	1/1	0.95	0.06	28,28,28,28	0
58	MG	27	102	1/1	0.95	0.15	41,41,41,41	0
58	MG	1A	3503	1/1	0.95	0.06	38,38,38,38	0
58	MG	1A	3153	1/1	0.95	0.18	31,31,31,31	0
58	MG	28	103	1/1	0.95	0.07	39,39,39,39	0
58	MG	1A	3083	1/1	0.95	0.14	34,34,34,34	0
58	MG	2A	3577	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	3579	1/1	0.95	0.06	26,26,26,26	0
58	MG	2A	3580	1/1	0.95	0.12	36,36,36,36	0
58	MG	1A	3507	1/1	0.95	0.07	53,53,53,53	0
58	MG	1A	3432	1/1	0.95	0.07	32,32,32,32	0
58	MG	2A	3583	1/1	0.95	0.08	20,20,20,20	0
58	MG	1A	3308	1/1	0.95	0.15	36,36,36,36	0
58	MG	1a	1616	1/1	0.95	0.15	41,41,41,41	0
58	MG	2A	3282	1/1	0.95	0.16	46,46,46,46	0
58	MG	1A	3203	1/1	0.95	0.18	18,18,18,18	0
58	MG	2A	3284	1/1	0.95	0.07	40,40,40,40	0
58	MG	2A	3006	1/1	0.95	0.13	51,51,51,51	0
58	MG	2A	3287	1/1	0.95	0.05	55,55,55,55	0
58	MG	1A	3512	1/1	0.95	0.08	46,46,46,46	0
58	MG	1A	3121	1/1	0.95	0.14	35,35,35,35	0
58	MG	1A	3655	1/1	0.95	0.07	22,22,22,22	0
58	MG	2A	3016	1/1	0.95	0.15	51,51,51,51	0
58	MG	2A	3603	1/1	0.95	0.11	49,49,49,49	0
58	MG	2a	1619	1/1	0.95	0.12	51,51,51,51	0
58	MG	1A	4044	1/1	0.95	0.06	24,24,24,24	0
58	MG	1A	3210	1/1	0.95	0.08	29,29,29,29	0
58	MG	2a	1623	1/1	0.95	0.08	45,45,45,45	0
58	MG	2A	3606	1/1	0.95	0.07	42,42,42,42	0
58	MG	1A	3657	1/1	0.95	0.06	28,28,28,28	0
58	MG	1A	3843	1/1	0.95	0.05	31,31,31,31	0
58	MG	1A	3520	1/1	0.95	0.39	34,34,34,34	0
58	MG	2A	3028	1/1	0.95	0.19	45,45,45,45	0
58	MG	1A	3439	1/1	0.95	0.25	28,28,28,28	0
58	MG	2A	3612	1/1	0.95	0.07	51,51,51,51	0
58	MG	1A	3847	1/1	0.95	0.06	50,50,50,50	0
58	MG	1A	3660	1/1	0.95	0.06	20,20,20,20	0
58	MG	2a	1634	1/1	0.95	0.18	37,37,37,37	0
58	MG	2A	3619	1/1	0.95	0.07	34,34,34,34	0
58	MG	1A	3663	1/1	0.95	0.07	19,19,19,19	0
58	MG	2A	3035	1/1	0.95	0.12	23,23,23,23	0
58	MG	1A	4059	1/1	0.95	0.12	55,55,55,55	0
58	MG	1A	3440	1/1	0.95	0.19	32,32,32,32	0
58	MG	2A	3040	1/1	0.95	0.08	42,42,42,42	0
58	MG	2A	3041	1/1	0.95	0.27	43,43,43,43	0
58	MG	1A	3853	1/1	0.95	0.19	39,39,39,39	0
58	MG	1A	3526	1/1	0.95	0.26	54,54,54,54	0
58	MG	1A	4064	1/1	0.95	0.09	44,44,44,44	0
58	MG	1a	1643	1/1	0.95	0.14	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3641	1/1	0.95	0.08	37,37,37,37	0
58	MG	1A	3857	1/1	0.95	0.06	42,42,42,42	0
58	MG	1A	3858	1/1	0.95	0.09	13,13,13,13	0
58	MG	1A	3084	1/1	0.95	0.12	22,22,22,22	0
58	MG	1a	1649	1/1	0.95	0.10	47,47,47,47	0
58	MG	1A	3528	1/1	0.95	0.11	66,66,66,66	0
58	MG	2A	3053	1/1	0.95	0.12	49,49,49,49	0
58	MG	2A	3650	1/1	0.95	0.15	46,46,46,46	0
58	MG	2A	3654	1/1	0.95	0.17	49,49,49,49	0
58	MG	1A	4077	1/1	0.95	0.08	34,34,34,34	0
58	MG	2A	3321	1/1	0.95	0.07	45,45,45,45	0
58	MG	1A	3672	1/1	0.95	0.07	20,20,20,20	0
58	MG	1A	4081	1/1	0.95	0.10	31,31,31,31	0
58	MG	2A	3060	1/1	0.95	0.18	44,44,44,44	0
58	MG	1A	3676	1/1	0.95	0.06	11,11,11,11	0
58	MG	2a	1667	1/1	0.95	0.15	28,28,28,28	0
58	MG	2a	1668	1/1	0.95	0.10	48,48,48,48	0
58	MG	2A	3062	1/1	0.95	0.25	52,52,52,52	0
58	MG	1A	3681	1/1	0.95	0.13	37,37,37,37	0
58	MG	1A	4084	1/1	0.95	0.10	22,22,22,22	0
58	MG	2a	1673	1/1	0.95	0.07	32,32,32,32	0
58	MG	2A	3665	1/1	0.95	0.10	44,44,44,44	0
58	MG	1A	3866	1/1	0.95	0.07	34,34,34,34	0
58	MG	1A	3315	1/1	0.95	0.10	32,32,32,32	0
58	MG	1A	3015	1/1	0.95	0.08	23,23,23,23	0
58	MG	1A	3374	1/1	0.95	0.09	39,39,39,39	0
58	MG	2a	1685	1/1	0.95	0.09	47,47,47,47	0
58	MG	1A	3264	1/1	0.95	0.12	36,36,36,36	0
58	MG	1A	3694	1/1	0.95	0.06	22,22,22,22	0
58	MG	2A	3072	1/1	0.95	0.06	42,42,42,42	0
58	MG	1a	1668	1/1	0.95	0.09	44,44,44,44	0
58	MG	1A	3446	1/1	0.95	0.16	26,26,26,26	0
58	MG	1A	3874	1/1	0.95	0.13	23,23,23,23	0
58	MG	1A	3214	1/1	0.95	0.15	34,34,34,34	0
58	MG	2a	1693	1/1	0.95	0.15	37,37,37,37	0
58	MG	1a	1672	1/1	0.95	0.12	37,37,37,37	0
58	MG	1A	4102	1/1	0.95	0.12	39,39,39,39	0
58	MG	2a	1697	1/1	0.95	0.18	30,30,30,30	0
58	MG	2A	3685	1/1	0.95	0.10	36,36,36,36	0
58	MG	2A	3084	1/1	0.95	0.11	42,42,42,42	0
58	MG	2A	3345	1/1	0.95	0.06	35,35,35,35	0
58	MG	2A	3346	1/1	0.95	0.08	54,54,54,54	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	0.95	0.12	40,40,40,40	0
58	MG	1A	3131	1/1	0.95	0.12	52,52,52,52	0
58	MG	1A	4104	1/1	0.95	0.28	44,44,44,44	0
58	MG	1A	3710	1/1	0.95	0.10	28,28,28,28	0
58	MG	1A	3174	1/1	0.95	0.16	41,41,41,41	0
58	MG	2A	3092	1/1	0.95	0.29	36,36,36,36	0
58	MG	1A	3712	1/1	0.95	0.07	34,34,34,34	0
58	MG	1A	3883	1/1	0.95	0.10	57,57,57,57	0
58	MG	2A	3099	1/1	0.95	0.16	44,44,44,44	0
58	MG	1A	3137	1/1	0.95	0.15	26,26,26,26	0
58	MG	1A	3138	1/1	0.95	0.09	41,41,41,41	0
58	MG	1A	3329	1/1	0.95	0.14	35,35,35,35	0
58	MG	2A	3360	1/1	0.95	0.10	53,53,53,53	0
58	MG	1A	3016	1/1	0.95	0.09	34,34,34,34	0
58	MG	1A	3331	1/1	0.95	0.24	36,36,36,36	0
58	MG	2a	1723	1/1	0.95	0.08	38,38,38,38	0
58	MG	2a	1724	1/1	0.95	0.25	45,45,45,45	0
58	MG	1A	3091	1/1	0.95	0.10	44,44,44,44	0
58	MG	1A	3896	1/1	0.95	0.07	16,16,16,16	0
58	MG	1A	3897	1/1	0.95	0.06	12,12,12,12	0
58	MG	1A	3899	1/1	0.95	0.15	55,55,55,55	0
58	MG	2A	3716	1/1	0.95	0.07	34,34,34,34	0
58	MG	2a	1732	1/1	0.95	0.11	42,42,42,42	0
58	MG	1A	3391	1/1	0.95	0.08	39,39,39,39	0
58	MG	2A	3370	1/1	0.95	0.09	57,57,57,57	0
58	MG	2a	1735	1/1	0.95	0.21	48,48,48,48	0
58	MG	1a	1691	1/1	0.95	0.18	33,33,33,33	0
58	MG	1A	3393	1/1	0.95	0.16	15,15,15,15	0
58	MG	1A	3461	1/1	0.95	0.08	51,51,51,51	0
58	MG	2A	3374	1/1	0.95	0.23	67,67,67,67	0
58	MG	1a	1694	1/1	0.95	0.17	30,30,30,30	0
58	MG	2A	3119	1/1	0.95	0.17	53,53,53,53	0
58	MG	2a	1742	1/1	0.95	0.18	53,53,53,53	0
58	MG	2A	3378	1/1	0.95	0.20	48,48,48,48	0
58	MG	2a	1744	1/1	0.95	0.24	48,48,48,48	0
58	MG	1A	3395	1/1	0.95	0.10	48,48,48,48	0
58	MG	1A	3553	1/1	0.95	0.11	38,38,38,38	0
58	MG	1a	1697	1/1	0.95	0.16	45,45,45,45	0
58	MG	1A	3909	1/1	0.95	0.29	15,15,15,15	0
58	MG	2A	3128	1/1	0.95	0.10	54,54,54,54	0
58	MG	2A	3738	1/1	0.95	0.21	64,64,64,64	0
58	MG	2A	3131	1/1	0.95	0.10	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3386	1/1	0.95	0.10	51,51,51,51	0
58	MG	2A	3387	1/1	0.95	0.09	58,58,58,58	0
58	MG	2A	3132	1/1	0.95	0.09	42,42,42,42	0
58	MG	2A	3389	1/1	0.95	0.07	36,36,36,36	0
58	MG	1a	1700	1/1	0.95	0.12	48,48,48,48	0
58	MG	2a	1761	1/1	0.95	0.08	71,71,71,71	0
58	MG	2A	3748	1/1	0.95	0.07	47,47,47,47	0
58	MG	2a	1763	1/1	0.95	0.09	59,59,59,59	0
58	MG	2A	3749	1/1	0.95	0.25	41,41,41,41	0
58	MG	2A	3134	1/1	0.95	0.10	45,45,45,45	0
58	MG	2A	3392	1/1	0.95	0.15	39,39,39,39	0
58	MG	2a	1773	1/1	0.95	0.06	66,66,66,66	0
58	MG	1A	3727	1/1	0.95	0.08	42,42,42,42	0
58	MG	1A	3466	1/1	0.95	0.07	43,43,43,43	0
58	MG	1A	3187	1/1	0.95	0.12	49,49,49,49	0
58	MG	1D	312	1/1	0.95	0.14	23,23,23,23	0
58	MG	2a	1781	1/1	0.95	0.07	54,54,54,54	0
58	MG	2A	3757	1/1	0.95	0.08	43,43,43,43	0
58	MG	1A	3237	1/1	0.95	0.32	39,39,39,39	0
58	MG	1E	307	1/1	0.95	0.07	24,24,24,24	0
58	MG	2a	1787	1/1	0.95	0.16	37,37,37,37	0
58	MG	1A	3399	1/1	0.95	0.09	52,52,52,52	0
58	MG	2a	1789	1/1	0.95	0.14	52,52,52,52	0
58	MG	2A	3148	1/1	0.95	0.16	34,34,34,34	0
58	MG	2A	3151	1/1	0.95	0.15	34,34,34,34	0
58	MG	1A	3923	1/1	0.95	0.06	17,17,17,17	0
58	MG	1E	311	1/1	0.95	0.07	16,16,16,16	0
58	MG	1a	1712	1/1	0.95	0.26	45,45,45,45	0
58	MG	2a	1797	1/1	0.95	0.08	55,55,55,55	0
58	MG	1A	3738	1/1	0.95	0.07	51,51,51,51	0
58	MG	1E	314	1/1	0.95	0.20	45,45,45,45	0
58	MG	2A	3408	1/1	0.95	0.22	38,38,38,38	0
58	MG	1A	3563	1/1	0.95	0.19	34,34,34,34	0
58	MG	2A	3410	1/1	0.95	0.06	42,42,42,42	0
58	MG	1A	3338	1/1	0.95	0.22	42,42,42,42	0
58	MG	1a	1718	1/1	0.95	0.15	32,32,32,32	0
58	MG	2A	3414	1/1	0.95	0.20	35,35,35,35	0
58	MG	1F	311	1/1	0.95	0.17	20,20,20,20	0
58	MG	1a	1721	1/1	0.95	0.14	48,48,48,48	0
58	MG	2A	3418	1/1	0.95	0.17	34,34,34,34	0
58	MG	1A	3339	1/1	0.95	0.08	39,39,39,39	0
58	MG	2a	1812	1/1	0.95	0.07	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	2A	3783	1/1	0.95	0.07	61,61,61,61	0
58	MG	2A	3785	1/1	0.95	0.13	50,50,50,50	0
58	MG	1a	1725	1/1	0.95	0.11	54,54,54,54	0
58	MG	1A	3745	1/1	0.95	0.12	24,24,24,24	0
58	MG	2A	3422	1/1	0.95	0.30	40,40,40,40	0
58	MG	2a	1819	1/1	0.95	0.14	51,51,51,51	0
58	MG	1A	3238	1/1	0.95	0.11	47,47,47,47	0
58	MG	1A	3748	1/1	0.95	0.12	39,39,39,39	0
58	MG	2A	3793	1/1	0.95	0.11	58,58,58,58	0
58	MG	2A	3171	1/1	0.95	0.06	50,50,50,50	0
58	MG	2A	3795	1/1	0.95	0.06	32,32,32,32	0
58	MG	1A	3570	1/1	0.95	0.07	30,30,30,30	0
58	MG	2A	3798	1/1	0.95	0.07	38,38,38,38	0
58	MG	2A	3430	1/1	0.95	0.13	40,40,40,40	0
58	MG	2A	3173	1/1	0.95	0.08	41,41,41,41	0
58	MG	2a	1831	1/1	0.95	0.10	49,49,49,49	0
58	MG	1N	201	1/1	0.95	0.10	44,44,44,44	0
58	MG	1A	3572	1/1	0.95	0.06	12,12,12,12	0
58	MG	2a	1836	1/1	0.95	0.07	52,52,52,52	0
58	MG	1A	3280	1/1	0.95	0.07	40,40,40,40	0
58	MG	1A	3580	1/1	0.95	0.26	32,32,32,32	0
58	MG	2A	3436	1/1	0.95	0.22	39,39,39,39	0
58	MG	1O	202	1/1	0.95	0.10	42,42,42,42	0
58	MG	2A	3807	1/1	0.95	0.12	49,49,49,49	0
58	MG	1A	3753	1/1	0.95	0.07	44,44,44,44	0
58	MG	1a	1746	1/1	0.95	0.08	37,37,37,37	0
58	MG	1A	3343	1/1	0.95	0.18	42,42,42,42	0
58	MG	2A	3184	1/1	0.95	0.09	39,39,39,39	0
58	MG	1A	3246	1/1	0.95	0.23	31,31,31,31	0
58	MG	2A	3443	1/1	0.95	0.15	42,42,42,42	0
58	MG	2l	203	1/1	0.95	0.08	42,42,42,42	0
58	MG	1A	3956	1/1	0.95	0.07	30,30,30,30	0
58	MG	2A	3818	1/1	0.95	0.09	44,44,44,44	0
58	MG	1Q	201	1/1	0.95	0.09	29,29,29,29	0
58	MG	2q	202	1/1	0.95	0.11	49,49,49,49	0
58	MG	2A	3446	1/1	0.95	0.07	33,33,33,33	0
58	MG	1A	3347	1/1	0.95	0.13	26,26,26,26	0
58	MG	1A	3959	1/1	0.95	0.07	36,36,36,36	0
58	MG	1R	202	1/1	0.95	0.12	36,36,36,36	0
58	MG	1A	3960	1/1	0.95	0.11	46,46,46,46	0
58	MG	2A	3196	1/1	0.95	0.10	48,48,48,48	0
58	MG	2A	3834	1/1	0.95	0.08	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	3590	1/1	0.95	0.09	41,41,41,41	0
58	MG	1A	3762	1/1	0.95	0.09	37,37,37,37	0
58	MG	1A	3592	1/1	0.95	0.24	37,37,37,37	0
58	MG	2A	3457	1/1	0.95	0.22	50,50,50,50	0
58	MG	2A	3458	1/1	0.95	0.19	50,50,50,50	0
58	MG	1A	3293	1/1	0.95	0.11	38,38,38,38	0
58	MG	1A	3766	1/1	0.95	0.06	22,22,22,22	0
58	MG	1A	3768	1/1	0.95	0.07	18,18,18,18	0
58	MG	2A	3845	1/1	0.95	0.07	52,52,52,52	0
58	MG	1U	203	1/1	0.95	0.14	21,21,21,21	0
58	MG	2A	3847	1/1	0.95	0.07	51,51,51,51	0
58	MG	2A	3205	1/1	0.95	0.10	53,53,53,53	0
58	MG	1A	3770	1/1	0.95	0.06	29,29,29,29	0
58	MG	1a	1774	1/1	0.95	0.07	48,48,48,48	0
58	MG	1a	1778	1/1	0.95	0.08	33,33,33,33	0
58	MG	2A	3854	1/1	0.95	0.06	34,34,34,34	0
58	MG	1A	3481	1/1	0.95	0.15	32,32,32,32	0
58	MG	2A	3857	1/1	0.95	0.08	30,30,30,30	0
58	MG	2A	3859	1/1	0.95	0.05	46,46,46,46	0
58	MG	1A	3482	1/1	0.95	0.09	40,40,40,40	0
58	MG	2A	3861	1/1	0.95	0.16	60,60,60,60	0
58	MG	1A	3802	1/1	0.96	0.11	30,30,30,30	0
58	MG	1A	3521	1/1	0.96	0.16	27,27,27,27	0
58	MG	1a	1699	1/1	0.96	0.20	44,44,44,44	0
58	MG	2T	203	1/1	0.96	0.14	46,46,46,46	0
58	MG	2A	3633	1/1	0.96	0.06	35,35,35,35	0
58	MG	2A	3634	1/1	0.96	0.08	43,43,43,43	0
58	MG	1A	3132	1/1	0.96	0.05	25,25,25,25	0
58	MG	1A	3647	1/1	0.96	0.06	24,24,24,24	0
58	MG	2A	3639	1/1	0.96	0.06	44,44,44,44	0
58	MG	2A	3107	1/1	0.96	0.04	35,35,35,35	0
58	MG	1A	3963	1/1	0.96	0.06	39,39,39,39	0
58	MG	2A	3643	1/1	0.96	0.08	20,20,20,20	0
58	MG	1A	3807	1/1	0.96	0.06	10,10,10,10	0
58	MG	1A	3186	1/1	0.96	0.05	46,46,46,46	0
58	MG	25	101	1/1	0.96	0.13	37,37,37,37	0
58	MG	25	102	1/1	0.96	0.08	38,38,38,38	0
58	MG	1A	3525	1/1	0.96	0.07	35,35,35,35	0
58	MG	1G	201	1/1	0.96	0.10	30,30,30,30	0
58	MG	1G	202	1/1	0.96	0.15	43,43,43,43	0
58	MG	1a	1708	1/1	0.96	0.11	45,45,45,45	0
58	MG	2A	3651	1/1	0.96	0.24	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	3652	1/1	0.96	0.07	32,32,32,32	0
58	MG	1A	3813	1/1	0.96	0.05	34,34,34,34	0
58	MG	1A	3133	1/1	0.96	0.12	48,48,48,48	0
58	MG	1A	3310	1/1	0.96	0.07	25,25,25,25	0
58	MG	1A	3974	1/1	0.96	0.10	36,36,36,36	0
58	MG	1N	202	1/1	0.96	0.12	31,31,31,31	0
58	MG	2a	1603	1/1	0.96	0.08	56,56,56,56	0
58	MG	1A	3975	1/1	0.96	0.06	41,41,41,41	0
58	MG	1A	3134	1/1	0.96	0.09	25,25,25,25	0
58	MG	2A	3661	1/1	0.96	0.07	47,47,47,47	0
58	MG	2A	3367	1/1	0.96	0.16	41,41,41,41	0
58	MG	1N	207	1/1	0.96	0.10	40,40,40,40	0
58	MG	1A	3043	1/1	0.96	0.23	29,29,29,29	0
58	MG	1A	3818	1/1	0.96	0.08	22,22,22,22	0
58	MG	1A	3819	1/1	0.96	0.07	46,46,46,46	0
58	MG	2A	3135	1/1	0.96	0.20	37,37,37,37	0
58	MG	1A	3820	1/1	0.96	0.32	26,26,26,26	0
58	MG	1A	3372	1/1	0.96	0.10	45,45,45,45	0
58	MG	1A	3054	1/1	0.96	0.07	38,38,38,38	0
58	MG	1P	203	1/1	0.96	0.30	24,24,24,24	0
58	MG	1a	1732	1/1	0.96	0.08	30,30,30,30	0
58	MG	1A	3067	1/1	0.96	0.09	30,30,30,30	0
58	MG	1Q	204	1/1	0.96	0.08	43,43,43,43	0
58	MG	1a	1735	1/1	0.96	0.06	38,38,38,38	0
58	MG	2A	3680	1/1	0.96	0.13	50,50,50,50	0
58	MG	1Q	205	1/1	0.96	0.09	40,40,40,40	0
58	MG	1A	3826	1/1	0.96	0.06	24,24,24,24	0
58	MG	1a	1739	1/1	0.96	0.05	22,22,22,22	0
58	MG	1A	3661	1/1	0.96	0.06	18,18,18,18	0
58	MG	2a	1627	1/1	0.96	0.21	54,54,54,54	0
58	MG	1A	3534	1/1	0.96	0.25	31,31,31,31	0
58	MG	1R	203	1/1	0.96	0.15	27,27,27,27	0
58	MG	1a	1744	1/1	0.96	0.07	38,38,38,38	0
58	MG	1R	204	1/1	0.96	0.17	29,29,29,29	0
58	MG	1A	3142	1/1	0.96	0.20	38,38,38,38	0
58	MG	1a	1748	1/1	0.96	0.17	38,38,38,38	0
58	MG	2A	3164	1/1	0.96	0.09	43,43,43,43	0
58	MG	1A	3989	1/1	0.96	0.11	47,47,47,47	0
58	MG	2A	3396	1/1	0.96	0.15	50,50,50,50	0
58	MG	2A	3698	1/1	0.96	0.07	48,48,48,48	0
58	MG	2a	1638	1/1	0.96	0.14	53,53,53,53	0
58	MG	1A	3201	1/1	0.96	0.14	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	3993	1/1	0.96	0.06	11,11,11,11	0
58	MG	1A	3832	1/1	0.96	0.10	31,31,31,31	0
58	MG	1a	1755	1/1	0.96	0.08	38,38,38,38	0
58	MG	1A	3451	1/1	0.96	0.19	33,33,33,33	0
58	MG	1A	3317	1/1	0.96	0.12	40,40,40,40	0
58	MG	1A	3318	1/1	0.96	0.18	43,43,43,43	0
58	MG	2A	3706	1/1	0.96	0.07	49,49,49,49	0
58	MG	1A	3257	1/1	0.96	0.22	36,36,36,36	0
58	MG	1U	205	1/1	0.96	0.20	27,27,27,27	0
58	MG	1A	3320	1/1	0.96	0.07	42,42,42,42	0
58	MG	1A	4002	1/1	0.96	0.08	48,48,48,48	0
58	MG	1A	3384	1/1	0.96	0.07	34,34,34,34	0
58	MG	2a	1652	1/1	0.96	0.07	57,57,57,57	0
58	MG	1a	1767	1/1	0.96	0.14	60,60,60,60	0
58	MG	1V	203	1/1	0.96	0.18	24,24,24,24	0
58	MG	1A	4004	1/1	0.96	0.05	9,9,9,9	0
58	MG	1A	3683	1/1	0.96	0.05	16,16,16,16	0
58	MG	1A	3545	1/1	0.96	0.12	27,27,27,27	0
58	MG	2A	3415	1/1	0.96	0.15	38,38,38,38	0
58	MG	2A	3185	1/1	0.96	0.09	24,24,24,24	0
58	MG	1W	203	1/1	0.96	0.09	42,42,42,42	0
58	MG	2a	1663	1/1	0.96	0.09	55,55,55,55	0
58	MG	1W	205	1/1	0.96	0.09	35,35,35,35	0
58	MG	1A	3686	1/1	0.96	0.08	27,27,27,27	0
58	MG	1A	3546	1/1	0.96	0.06	18,18,18,18	0
58	MG	1a	1783	1/1	0.96	0.05	36,36,36,36	0
58	MG	2A	3193	1/1	0.96	0.09	46,46,46,46	0
58	MG	1X	101	1/1	0.96	0.13	28,28,28,28	0
58	MG	1X	103	1/1	0.96	0.17	29,29,29,29	0
58	MG	1A	3691	1/1	0.96	0.09	29,29,29,29	0
58	MG	2A	3428	1/1	0.96	0.15	41,41,41,41	0
58	MG	2A	3197	1/1	0.96	0.27	43,43,43,43	0
58	MG	1A	4013	1/1	0.96	0.05	17,17,17,17	0
58	MG	2a	1681	1/1	0.96	0.08	41,41,41,41	0
58	MG	1a	1795	1/1	0.96	0.13	67,67,67,67	0
58	MG	1A	4015	1/1	0.96	0.07	20,20,20,20	0
58	MG	1A	4017	1/1	0.96	0.06	29,29,29,29	0
58	MG	1A	3258	1/1	0.96	0.09	21,21,21,21	0
58	MG	1Z	3702	1/1	0.96	0.08	34,34,34,34	0
58	MG	1A	3845	1/1	0.96	0.08	27,27,27,27	0
58	MG	10	104	1/1	0.96	0.16	39,39,39,39	0
58	MG	1A	3059	1/1	0.96	0.07	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1806	1/1	0.96	0.14	35,35,35,35	0
58	MG	1A	3695	1/1	0.96	0.07	56,56,56,56	0
58	MG	1A	3697	1/1	0.96	0.08	35,35,35,35	0
58	MG	1A	3698	1/1	0.96	0.10	34,34,34,34	0
58	MG	1A	3323	1/1	0.96	0.15	23,23,23,23	0
58	MG	1A	3389	1/1	0.96	0.07	32,32,32,32	0
58	MG	1A	4028	1/1	0.96	0.08	48,48,48,48	0
58	MG	1A	4029	1/1	0.96	0.05	33,33,33,33	0
58	MG	1A	4030	1/1	0.96	0.08	62,62,62,62	0
58	MG	1A	3704	1/1	0.96	0.06	14,14,14,14	0
58	MG	1A	3708	1/1	0.96	0.10	19,19,19,19	0
58	MG	2a	1703	1/1	0.96	0.13	42,42,42,42	0
58	MG	1A	3462	1/1	0.96	0.10	53,53,53,53	0
58	MG	1A	3390	1/1	0.96	0.12	42,42,42,42	0
58	MG	1d	301	1/1	0.96	0.28	49,49,49,49	0
58	MG	1A	3465	1/1	0.96	0.06	34,34,34,34	0
58	MG	2a	1709	1/1	0.96	0.07	50,50,50,50	0
58	MG	2a	1710	1/1	0.96	0.06	38,38,38,38	0
58	MG	2a	1711	1/1	0.96	0.08	45,45,45,45	0
58	MG	2a	1712	1/1	0.96	0.09	49,49,49,49	0
58	MG	1A	3090	1/1	0.96	0.14	43,43,43,43	0
58	MG	1f	201	1/1	0.96	0.16	34,34,34,34	0
58	MG	1A	3262	1/1	0.96	0.05	33,33,33,33	0
58	MG	2A	3774	1/1	0.96	0.07	50,50,50,50	0
58	MG	16	101	1/1	0.96	0.06	32,32,32,32	0
58	MG	2A	3460	1/1	0.96	0.11	47,47,47,47	0
58	MG	1A	3556	1/1	0.96	0.09	48,48,48,48	0
58	MG	2A	3229	1/1	0.96	0.07	47,47,47,47	0
58	MG	1A	3206	1/1	0.96	0.10	42,42,42,42	0
58	MG	18	101	1/1	0.96	0.38	49,49,49,49	0
58	MG	2A	3232	1/1	0.96	0.10	39,39,39,39	0
58	MG	1A	3469	1/1	0.96	0.16	27,27,27,27	0
58	MG	2A	3784	1/1	0.96	0.19	46,46,46,46	0
58	MG	1A	3207	1/1	0.96	0.07	13,13,13,13	0
58	MG	1A	4048	1/1	0.96	0.08	25,25,25,25	0
58	MG	2A	3471	1/1	0.96	0.13	45,45,45,45	0
58	MG	1A	3108	1/1	0.96	0.06	23,23,23,23	0
58	MG	1A	4050	1/1	0.96	0.06	14,14,14,14	0
58	MG	2A	3791	1/1	0.96	0.07	21,21,21,21	0
58	MG	1A	3012	1/1	0.96	0.07	23,23,23,23	0
58	MG	1A	3332	1/1	0.96	0.08	41,41,41,41	0
58	MG	1A	3160	1/1	0.96	0.09	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	3161	1/1	0.96	0.05	43,43,43,43	0
58	MG	1A	3404	1/1	0.96	0.16	25,25,25,25	0
58	MG	1A	3575	1/1	0.96	0.20	34,34,34,34	0
58	MG	1A	3165	1/1	0.96	0.26	26,26,26,26	0
58	MG	2A	3247	1/1	0.96	0.10	47,47,47,47	0
58	MG	1A	3880	1/1	0.96	0.11	35,35,35,35	0
58	MG	1A	3406	1/1	0.96	0.07	40,40,40,40	0
58	MG	1A	3076	1/1	0.96	0.06	25,25,25,25	0
58	MG	1A	4065	1/1	0.96	0.04	26,26,26,26	0
58	MG	1A	3222	1/1	0.96	0.09	31,31,31,31	0
58	MG	2A	3254	1/1	0.96	0.09	45,45,45,45	0
58	MG	1A	3884	1/1	0.96	0.06	28,28,28,28	0
58	MG	1a	1620	1/1	0.96	0.06	38,38,38,38	0
58	MG	1x	112	1/1	0.96	0.15	39,39,39,39	0
58	MG	1x	113	1/1	0.96	0.18	45,45,45,45	0
58	MG	1A	4072	1/1	0.96	0.06	29,29,29,29	0
58	MG	1A	3225	1/1	0.96	0.09	22,22,22,22	0
58	MG	2A	3814	1/1	0.96	0.08	42,42,42,42	0
58	MG	1A	3341	1/1	0.96	0.04	34,34,34,34	0
58	MG	2A	3816	1/1	0.96	0.05	41,41,41,41	0
58	MG	2A	3004	1/1	0.96	0.15	41,41,41,41	0
58	MG	1A	3116	1/1	0.96	0.06	30,30,30,30	0
58	MG	1A	3093	1/1	0.96	0.09	42,42,42,42	0
58	MG	1A	3277	1/1	0.96	0.14	21,21,21,21	0
58	MG	2a	1765	1/1	0.96	0.06	55,55,55,55	0
58	MG	2A	3507	1/1	0.96	0.08	50,50,50,50	0
58	MG	1A	3893	1/1	0.96	0.07	32,32,32,32	0
58	MG	1A	3894	1/1	0.96	0.09	12,12,12,12	0
58	MG	2A	3510	1/1	0.96	0.09	22,22,22,22	0
58	MG	2A	3011	1/1	0.96	0.07	36,36,36,36	0
58	MG	1a	1631	1/1	0.96	0.15	42,42,42,42	0
58	MG	1A	3418	1/1	0.96	0.11	23,23,23,23	0
58	MG	1A	3170	1/1	0.96	0.08	31,31,31,31	0
58	MG	2A	3518	1/1	0.96	0.07	31,31,31,31	0
58	MG	2A	3020	1/1	0.96	0.27	47,47,47,47	0
58	MG	1A	4088	1/1	0.96	0.10	34,34,34,34	0
58	MG	2a	1786	1/1	0.96	0.05	45,45,45,45	0
58	MG	1A	4089	1/1	0.96	0.08	33,33,33,33	0
58	MG	1a	1639	1/1	0.96	0.06	34,34,34,34	0
58	MG	2A	3025	1/1	0.96	0.07	35,35,35,35	0
58	MG	2A	3026	1/1	0.96	0.13	36,36,36,36	0
58	MG	2A	3528	1/1	0.96	0.05	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	3600	1/1	0.96	0.13	37,37,37,37	0
58	MG	2A	3531	1/1	0.96	0.06	22,22,22,22	0
58	MG	1A	4092	1/1	0.96	0.07	31,31,31,31	0
58	MG	1A	3281	1/1	0.96	0.09	25,25,25,25	0
58	MG	1A	3283	1/1	0.96	0.12	22,22,22,22	0
58	MG	1A	3289	1/1	0.96	0.11	37,37,37,37	0
58	MG	2A	3288	1/1	0.96	0.18	54,54,54,54	0
58	MG	2a	1801	1/1	0.96	0.14	53,53,53,53	0
58	MG	1A	3355	1/1	0.96	0.18	29,29,29,29	0
58	MG	2A	3858	1/1	0.96	0.14	43,43,43,43	0
58	MG	1A	4097	1/1	0.96	0.10	53,53,53,53	0
58	MG	1a	1648	1/1	0.96	0.11	41,41,41,41	0
58	MG	1A	4098	1/1	0.96	0.13	44,44,44,44	0
58	MG	1A	3905	1/1	0.96	0.11	33,33,33,33	0
58	MG	1A	3606	1/1	0.96	0.05	23,23,23,23	0
58	MG	2A	3864	1/1	0.96	0.09	45,45,45,45	0
58	MG	2A	3865	1/1	0.96	0.08	40,40,40,40	0
58	MG	2A	3866	1/1	0.96	0.13	43,43,43,43	0
58	MG	2A	3546	1/1	0.96	0.06	32,32,32,32	0
58	MG	1A	3498	1/1	0.96	0.12	37,37,37,37	0
58	MG	2A	3296	1/1	0.96	0.12	54,54,54,54	0
58	MG	1A	3758	1/1	0.96	0.10	51,51,51,51	0
58	MG	1A	3499	1/1	0.96	0.09	38,38,38,38	0
58	MG	1A	3500	1/1	0.96	0.09	31,31,31,31	0
58	MG	1A	3290	1/1	0.96	0.11	26,26,26,26	0
58	MG	2a	1821	1/1	0.96	0.06	58,58,58,58	0
58	MG	1A	3232	1/1	0.96	0.19	25,25,25,25	0
58	MG	2a	1823	1/1	0.96	0.10	50,50,50,50	0
58	MG	2A	3875	1/1	0.96	0.18	53,53,53,53	0
58	MG	1B	205	1/1	0.96	0.25	47,47,47,47	0
58	MG	1B	206	1/1	0.96	0.06	41,41,41,41	0
58	MG	1A	3427	1/1	0.96	0.07	40,40,40,40	0
58	MG	2A	3305	1/1	0.96	0.09	48,48,48,48	0
58	MG	1A	3616	1/1	0.96	0.16	37,37,37,37	0
58	MG	2A	3056	1/1	0.96	0.11	60,60,60,60	0
58	MG	2A	3573	1/1	0.96	0.14	52,52,52,52	0
58	MG	2a	1832	1/1	0.96	0.16	44,44,44,44	0
58	MG	2a	1833	1/1	0.96	0.11	57,57,57,57	0
58	MG	2A	3574	1/1	0.96	0.05	37,37,37,37	0
58	MG	1B	210	1/1	0.96	0.09	38,38,38,38	0
58	MG	1a	1667	1/1	0.96	0.11	38,38,38,38	0
58	MG	1A	3618	1/1	0.96	0.05	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3925	1/1	0.96	0.10	39,39,39,39	0
58	MG	1A	3926	1/1	0.96	0.09	36,36,36,36	0
58	MG	1A	3094	1/1	0.96	0.08	17,17,17,17	0
58	MG	1A	3011	1/1	0.96	0.06	31,31,31,31	0
58	MG	1A	3430	1/1	0.96	0.13	32,32,32,32	0
58	MG	1A	3930	1/1	0.96	0.06	35,35,35,35	0
58	MG	2f	202	1/1	0.96	0.09	51,51,51,51	0
58	MG	1A	3775	1/1	0.96	0.07	23,23,23,23	0
58	MG	2i	201	1/1	0.96	0.06	41,41,41,41	0
58	MG	2A	3587	1/1	0.96	0.14	40,40,40,40	0
58	MG	1A	3431	1/1	0.96	0.11	24,24,24,24	0
58	MG	1A	3123	1/1	0.96	0.20	37,37,37,37	0
58	MG	1A	3934	1/1	0.96	0.05	5,5,5,5	0
58	MG	1A	3940	1/1	0.96	0.07	41,41,41,41	0
58	MG	2B	218	1/1	0.96	0.11	53,53,53,53	0
58	MG	1A	3782	1/1	0.96	0.08	22,22,22,22	0
58	MG	2q	201	1/1	0.96	0.07	55,55,55,55	0
58	MG	2A	3323	1/1	0.96	0.06	35,35,35,35	0
58	MG	1a	1681	1/1	0.96	0.09	55,55,55,55	0
58	MG	1B	231	1/1	0.96	0.08	57,57,57,57	0
58	MG	1A	3783	1/1	0.96	0.06	38,38,38,38	0
58	MG	2A	3602	1/1	0.96	0.07	26,26,26,26	0
58	MG	2v	103	1/1	0.96	0.14	41,41,41,41	0
58	MG	1A	3630	1/1	0.96	0.07	39,39,39,39	0
58	MG	2A	3080	1/1	0.96	0.09	41,41,41,41	0
58	MG	2E	304	1/1	0.96	0.14	39,39,39,39	0
58	MG	2A	3081	1/1	0.96	0.16	35,35,35,35	0
58	MG	2E	307	1/1	0.96	0.08	29,29,29,29	0
58	MG	1A	3081	1/1	0.96	0.10	23,23,23,23	0
58	MG	1A	3947	1/1	0.96	0.11	37,37,37,37	0
58	MG	2A	3085	1/1	0.96	0.17	40,40,40,40	0
58	MG	1D	305	1/1	0.96	0.09	33,33,33,33	0
58	MG	2A	3087	1/1	0.96	0.06	36,36,36,36	0
58	MG	1D	307	1/1	0.96	0.08	23,23,23,23	0
58	MG	1D	309	1/1	0.96	0.12	37,37,37,37	0
58	MG	2A	3613	1/1	0.96	0.07	45,45,45,45	0
58	MG	2A	3614	1/1	0.96	0.07	18,18,18,18	0
58	MG	1A	3515	1/1	0.96	0.35	34,34,34,34	0
58	MG	1A	3127	1/1	0.96	0.19	26,26,26,26	0
58	MG	2A	3617	1/1	0.96	0.06	38,38,38,38	0
58	MG	1A	3952	1/1	0.96	0.06	53,53,53,53	0
58	MG	2A	3620	1/1	0.96	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	2A	3095	1/1	0.96	0.08	31,31,31,31	0
58	MG	1A	3240	1/1	0.96	0.11	22,22,22,22	0
58	MG	1E	308	1/1	0.96	0.09	43,43,43,43	0
58	MG	1A	3796	1/1	0.96	0.09	36,36,36,36	0
58	MG	1A	3098	1/1	0.96	0.07	25,25,25,25	0
58	MG	2A	3014	1/1	0.97	0.06	30,30,30,30	0
58	MG	2E	310	1/1	0.97	0.07	30,30,30,30	0
58	MG	1A	3700	1/1	0.97	0.11	16,16,16,16	0
58	MG	2A	3585	1/1	0.97	0.15	37,37,37,37	0
58	MG	1A	3701	1/1	0.97	0.06	12,12,12,12	0
58	MG	1A	4066	1/1	0.97	0.05	13,13,13,13	0
58	MG	2A	3019	1/1	0.97	0.07	30,30,30,30	0
58	MG	1A	3065	1/1	0.97	0.07	30,30,30,30	0
58	MG	2A	3590	1/1	0.97	0.09	40,40,40,40	0
58	MG	2F	307	1/1	0.97	0.22	35,35,35,35	0
58	MG	1a	1623	1/1	0.97	0.05	37,37,37,37	0
58	MG	1a	1624	1/1	0.97	0.15	42,42,42,42	0
58	MG	1A	3703	1/1	0.97	0.09	19,19,19,19	0
58	MG	1A	3205	1/1	0.97	0.16	30,30,30,30	0
58	MG	1A	3044	1/1	0.97	0.14	25,25,25,25	0
58	MG	1A	3139	1/1	0.97	0.16	22,22,22,22	0
58	MG	1A	3877	1/1	0.97	0.17	21,21,21,21	0
58	MG	1A	3450	1/1	0.97	0.17	27,27,27,27	0
58	MG	1A	4080	1/1	0.97	0.07	35,35,35,35	0
58	MG	1A	3879	1/1	0.97	0.23	25,25,25,25	0
58	MG	1a	1633	1/1	0.97	0.10	45,45,45,45	0
58	MG	1A	3365	1/1	0.97	0.07	37,37,37,37	0
58	MG	2A	3037	1/1	0.97	0.06	31,31,31,31	0
58	MG	2A	3038	1/1	0.97	0.11	13,13,13,13	0
58	MG	1A	3284	1/1	0.97	0.25	37,37,37,37	0
58	MG	1a	1637	1/1	0.97	0.10	43,43,43,43	0
58	MG	1A	3208	1/1	0.97	0.13	23,23,23,23	0
58	MG	1A	3097	1/1	0.97	0.10	28,28,28,28	0
58	MG	1A	4087	1/1	0.97	0.06	30,30,30,30	0
58	MG	1A	3291	1/1	0.97	0.11	30,30,30,30	0
58	MG	1A	3141	1/1	0.97	0.13	27,27,27,27	0
58	MG	1A	3886	1/1	0.97	0.07	38,38,38,38	0
58	MG	1A	4091	1/1	0.97	0.06	30,30,30,30	0
58	MG	2A	3618	1/1	0.97	0.12	28,28,28,28	0
58	MG	1A	3887	1/1	0.97	0.05	11,11,11,11	0
58	MG	1a	1646	1/1	0.97	0.11	60,60,60,60	0
58	MG	1A	3008	1/1	0.97	0.05	13,13,13,13	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3294	1/1	0.97	0.08	45,45,45,45	0
58	MG	1A	3373	1/1	0.97	0.17	35,35,35,35	0
58	MG	27	101	1/1	0.97	0.14	28,28,28,28	0
58	MG	2A	3055	1/1	0.97	0.06	38,38,38,38	0
58	MG	1A	3721	1/1	0.97	0.08	36,36,36,36	0
58	MG	1A	3558	1/1	0.97	0.13	26,26,26,26	0
58	MG	28	102	1/1	0.97	0.13	39,39,39,39	0
58	MG	1A	3295	1/1	0.97	0.15	15,15,15,15	0
58	MG	2A	3059	1/1	0.97	0.11	35,35,35,35	0
58	MG	2A	3632	1/1	0.97	0.08	26,26,26,26	0
58	MG	1A	3562	1/1	0.97	0.18	18,18,18,18	0
58	MG	1a	1657	1/1	0.97	0.05	42,42,42,42	0
58	MG	1A	3144	1/1	0.97	0.04	5,5,5,5	0
58	MG	1A	3463	1/1	0.97	0.12	30,30,30,30	0
58	MG	1A	3898	1/1	0.97	0.07	11,11,11,11	0
58	MG	1A	3376	1/1	0.97	0.07	31,31,31,31	0
58	MG	1A	3729	1/1	0.97	0.04	24,24,24,24	0
58	MG	1A	4105	1/1	0.97	0.20	41,41,41,41	0
58	MG	1A	3730	1/1	0.97	0.12	45,45,45,45	0
58	MG	1A	3903	1/1	0.97	0.06	15,15,15,15	0
58	MG	1A	3731	1/1	0.97	0.07	40,40,40,40	0
58	MG	1A	3732	1/1	0.97	0.06	25,25,25,25	0
58	MG	1B	207	1/1	0.97	0.21	33,33,33,33	0
58	MG	1A	3733	1/1	0.97	0.06	16,16,16,16	0
58	MG	1A	3022	1/1	0.97	0.18	27,27,27,27	0
58	MG	1A	3220	1/1	0.97	0.13	20,20,20,20	0
58	MG	2A	3653	1/1	0.97	0.10	44,44,44,44	0
58	MG	1B	211	1/1	0.97	0.26	34,34,34,34	0
58	MG	1A	3910	1/1	0.97	0.06	46,46,46,46	0
58	MG	2A	3348	1/1	0.97	0.08	44,44,44,44	0
58	MG	1A	3571	1/1	0.97	0.13	21,21,21,21	0
58	MG	2a	1622	1/1	0.97	0.06	60,60,60,60	0
58	MG	1A	3147	1/1	0.97	0.12	37,37,37,37	0
58	MG	1A	3914	1/1	0.97	0.06	31,31,31,31	0
58	MG	1A	3915	1/1	0.97	0.20	21,21,21,21	0
58	MG	1B	217	1/1	0.97	0.06	37,37,37,37	0
58	MG	1A	3916	1/1	0.97	0.14	15,15,15,15	0
58	MG	1A	3739	1/1	0.97	0.08	30,30,30,30	0
58	MG	1A	3071	1/1	0.97	0.04	6,6,6,6	0
58	MG	1A	3223	1/1	0.97	0.08	41,41,41,41	0
58	MG	1A	3577	1/1	0.97	0.14	32,32,32,32	0
58	MG	2A	3667	1/1	0.97	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	1A	3028	1/1	0.97	0.17	15,15,15,15	0
58	MG	2A	3093	1/1	0.97	0.19	36,36,36,36	0
58	MG	2A	3094	1/1	0.97	0.13	33,33,33,33	0
58	MG	1B	228	1/1	0.97	0.05	30,30,30,30	0
58	MG	2A	3673	1/1	0.97	0.06	37,37,37,37	0
58	MG	1A	3581	1/1	0.97	0.08	27,27,27,27	0
58	MG	1A	3471	1/1	0.97	0.38	35,35,35,35	0
58	MG	2A	3098	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3472	1/1	0.97	0.13	33,33,33,33	0
58	MG	2A	3678	1/1	0.97	0.08	25,25,25,25	0
58	MG	1A	3588	1/1	0.97	0.09	37,37,37,37	0
58	MG	2A	3368	1/1	0.97	0.08	43,43,43,43	0
58	MG	1A	3017	1/1	0.97	0.10	43,43,43,43	0
58	MG	1A	3155	1/1	0.97	0.12	23,23,23,23	0
58	MG	2A	3103	1/1	0.97	0.09	22,22,22,22	0
58	MG	2A	3684	1/1	0.97	0.08	32,32,32,32	0
58	MG	1A	3591	1/1	0.97	0.07	35,35,35,35	0
58	MG	1B	236	1/1	0.97	0.06	35,35,35,35	0
58	MG	1A	3158	1/1	0.97	0.09	37,37,37,37	0
58	MG	1A	3593	1/1	0.97	0.25	27,27,27,27	0
58	MG	2A	3689	1/1	0.97	0.07	46,46,46,46	0
58	MG	1A	3387	1/1	0.97	0.20	18,18,18,18	0
58	MG	2A	3109	1/1	0.97	0.12	32,32,32,32	0
58	MG	1D	310	1/1	0.97	0.25	19,19,19,19	0
58	MG	1A	3935	1/1	0.97	0.06	21,21,21,21	0
58	MG	2A	3381	1/1	0.97	0.17	31,31,31,31	0
58	MG	2a	1659	1/1	0.97	0.30	44,44,44,44	0
58	MG	1A	3936	1/1	0.97	0.08	57,57,57,57	0
58	MG	1A	3938	1/1	0.97	0.06	30,30,30,30	0
58	MG	1A	3159	1/1	0.97	0.34	31,31,31,31	0
58	MG	2A	3115	1/1	0.97	0.12	36,36,36,36	0
58	MG	2a	1665	1/1	0.97	0.07	54,54,54,54	0
58	MG	1A	3104	1/1	0.97	0.08	15,15,15,15	0
58	MG	1A	3761	1/1	0.97	0.09	8,8,8,8	0
58	MG	1A	3030	1/1	0.97	0.17	14,14,14,14	0
58	MG	2a	1669	1/1	0.97	0.06	44,44,44,44	0
58	MG	2A	3121	1/1	0.97	0.17	39,39,39,39	0
58	MG	1A	3162	1/1	0.97	0.17	20,20,20,20	0
58	MG	1A	3392	1/1	0.97	0.21	18,18,18,18	0
58	MG	2A	3124	1/1	0.97	0.14	45,45,45,45	0
58	MG	2a	1676	1/1	0.97	0.06	36,36,36,36	0
58	MG	1A	3107	1/1	0.97	0.12	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	2A	3126	1/1	0.97	0.04	36,36,36,36	0
58	MG	1F	304	1/1	0.97	0.05	43,43,43,43	0
58	MG	2a	1680	1/1	0.97	0.10	37,37,37,37	0
58	MG	1F	305	1/1	0.97	0.08	25,25,25,25	0
58	MG	2A	3129	1/1	0.97	0.15	47,47,47,47	0
58	MG	2a	1683	1/1	0.97	0.06	40,40,40,40	0
58	MG	2A	3713	1/1	0.97	0.09	38,38,38,38	0
58	MG	2A	3715	1/1	0.97	0.07	20,20,20,20	0
58	MG	2A	3130	1/1	0.97	0.11	38,38,38,38	0
58	MG	1A	3949	1/1	0.97	0.07	45,45,45,45	0
58	MG	1F	309	1/1	0.97	0.05	32,32,32,32	0
58	MG	1A	3767	1/1	0.97	0.06	25,25,25,25	0
58	MG	1A	3394	1/1	0.97	0.13	16,16,16,16	0
58	MG	1A	3953	1/1	0.97	0.05	48,48,48,48	0
58	MG	1A	3954	1/1	0.97	0.07	37,37,37,37	0
58	MG	2A	3138	1/1	0.97	0.22	34,34,34,34	0
58	MG	2a	1694	1/1	0.97	0.26	35,35,35,35	0
58	MG	2A	3725	1/1	0.97	0.10	29,29,29,29	0
58	MG	1a	1717	1/1	0.97	0.15	40,40,40,40	0
58	MG	2A	3141	1/1	0.97	0.16	31,31,31,31	0
58	MG	2A	3142	1/1	0.97	0.13	40,40,40,40	0
58	MG	1A	3079	1/1	0.97	0.05	18,18,18,18	0
58	MG	1A	3485	1/1	0.97	0.07	33,33,33,33	0
58	MG	1A	3605	1/1	0.97	0.05	16,16,16,16	0
58	MG	1A	3958	1/1	0.97	0.10	43,43,43,43	0
58	MG	1a	1724	1/1	0.97	0.12	49,49,49,49	0
58	MG	1A	3239	1/1	0.97	0.13	21,21,21,21	0
58	MG	2A	3150	1/1	0.97	0.05	27,27,27,27	0
58	MG	1I	201	1/1	0.97	0.05	48,48,48,48	0
58	MG	1a	1727	1/1	0.97	0.06	44,44,44,44	0
58	MG	2A	3153	1/1	0.97	0.17	53,53,53,53	0
58	MG	1A	3080	1/1	0.97	0.11	40,40,40,40	0
58	MG	1A	3608	1/1	0.97	0.08	17,17,17,17	0
58	MG	2A	3156	1/1	0.97	0.05	43,43,43,43	0
58	MG	1A	3781	1/1	0.97	0.04	15,15,15,15	0
58	MG	1N	204	1/1	0.97	0.04	27,27,27,27	0
58	MG	1N	205	1/1	0.97	0.27	41,41,41,41	0
58	MG	1A	3241	1/1	0.97	0.09	31,31,31,31	0
58	MG	1a	1736	1/1	0.97	0.07	46,46,46,46	0
58	MG	1A	3242	1/1	0.97	0.08	22,22,22,22	0
58	MG	1A	3965	1/1	0.97	0.10	51,51,51,51	0
58	MG	1A	3243	1/1	0.97	0.05	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3245	1/1	0.97	0.14	18,18,18,18	0
58	MG	1A	3493	1/1	0.97	0.06	45,45,45,45	0
58	MG	1A	3789	1/1	0.97	0.04	28,28,28,28	0
58	MG	1A	3791	1/1	0.97	0.05	35,35,35,35	0
58	MG	1A	3110	1/1	0.97	0.31	27,27,27,27	0
58	MG	2A	3764	1/1	0.97	0.06	46,46,46,46	0
58	MG	2a	1727	1/1	0.97	0.10	39,39,39,39	0
58	MG	1A	3794	1/1	0.97	0.10	38,38,38,38	0
58	MG	1Q	203	1/1	0.97	0.11	26,26,26,26	0
58	MG	1A	3617	1/1	0.97	0.05	13,13,13,13	0
58	MG	1A	3324	1/1	0.97	0.07	50,50,50,50	0
58	MG	2A	3175	1/1	0.97	0.12	43,43,43,43	0
58	MG	2A	3771	1/1	0.97	0.08	30,30,30,30	0
58	MG	1Q	206	1/1	0.97	0.10	45,45,45,45	0
58	MG	1A	3797	1/1	0.97	0.05	15,15,15,15	0
58	MG	1A	3798	1/1	0.97	0.04	17,17,17,17	0
58	MG	1A	3325	1/1	0.97	0.17	25,25,25,25	0
58	MG	1A	3497	1/1	0.97	0.15	35,35,35,35	0
58	MG	2A	3448	1/1	0.97	0.20	40,40,40,40	0
58	MG	1A	3032	1/1	0.97	0.21	20,20,20,20	0
58	MG	1A	3034	1/1	0.97	0.20	25,25,25,25	0
58	MG	1A	3625	1/1	0.97	0.05	18,18,18,18	0
58	MG	1A	3806	1/1	0.97	0.04	13,13,13,13	0
58	MG	2A	3782	1/1	0.97	0.09	33,33,33,33	0
58	MG	1A	3626	1/1	0.97	0.05	29,29,29,29	0
58	MG	1a	1764	1/1	0.97	0.07	42,42,42,42	0
58	MG	1A	3808	1/1	0.97	0.04	33,33,33,33	0
58	MG	2A	3786	1/1	0.97	0.05	30,30,30,30	0
58	MG	2a	1750	1/1	0.97	0.06	42,42,42,42	0
58	MG	2a	1751	1/1	0.97	0.05	58,58,58,58	0
58	MG	1A	3055	1/1	0.97	0.09	37,37,37,37	0
58	MG	1A	3501	1/1	0.97	0.12	24,24,24,24	0
58	MG	1A	3631	1/1	0.97	0.04	19,19,19,19	0
58	MG	1a	1770	1/1	0.97	0.07	49,49,49,49	0
58	MG	1a	1772	1/1	0.97	0.06	58,58,58,58	0
58	MG	1A	3994	1/1	0.97	0.04	16,16,16,16	0
58	MG	1A	3634	1/1	0.97	0.04	20,20,20,20	0
58	MG	1a	1776	1/1	0.97	0.06	56,56,56,56	0
58	MG	1A	3635	1/1	0.97	0.04	13,13,13,13	0
58	MG	1A	3411	1/1	0.97	0.13	49,49,49,49	0
58	MG	1A	3637	1/1	0.97	0.05	20,20,20,20	0
58	MG	2A	3469	1/1	0.97	0.25	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	1766	1/1	0.97	0.12	32,32,32,32	0
58	MG	2a	1770	1/1	0.97	0.05	46,46,46,46	0
58	MG	1V	201	1/1	0.97	0.14	15,15,15,15	0
58	MG	1A	3118	1/1	0.97	0.28	31,31,31,31	0
58	MG	1a	1784	1/1	0.97	0.05	57,57,57,57	0
58	MG	2a	1774	1/1	0.97	0.10	43,43,43,43	0
58	MG	2a	1775	1/1	0.97	0.05	56,56,56,56	0
58	MG	1a	1786	1/1	0.97	0.05	44,44,44,44	0
58	MG	1A	3504	1/1	0.97	0.14	31,31,31,31	0
58	MG	1A	4001	1/1	0.97	0.04	31,31,31,31	0
58	MG	1a	1789	1/1	0.97	0.05	36,36,36,36	0
58	MG	1W	201	1/1	0.97	0.06	41,41,41,41	0
58	MG	2A	3808	1/1	0.97	0.09	48,48,48,48	0
58	MG	2a	1783	1/1	0.97	0.07	39,39,39,39	0
58	MG	2A	3480	1/1	0.97	0.09	35,35,35,35	0
58	MG	1a	1792	1/1	0.97	0.04	33,33,33,33	0
58	MG	1A	3119	1/1	0.97	0.16	22,22,22,22	0
58	MG	1A	3821	1/1	0.97	0.07	35,35,35,35	0
58	MG	1W	204	1/1	0.97	0.10	22,22,22,22	0
58	MG	1A	3415	1/1	0.97	0.10	33,33,33,33	0
58	MG	1A	3086	1/1	0.97	0.39	26,26,26,26	0
58	MG	2a	1791	1/1	0.97	0.15	47,47,47,47	0
58	MG	1A	3178	1/1	0.97	0.22	25,25,25,25	0
58	MG	1A	3333	1/1	0.97	0.06	31,31,31,31	0
58	MG	1X	102	1/1	0.97	0.08	27,27,27,27	0
58	MG	1A	3827	1/1	0.97	0.05	29,29,29,29	0
58	MG	1X	106	1/1	0.97	0.07	57,57,57,57	0
58	MG	2A	3492	1/1	0.97	0.14	45,45,45,45	0
58	MG	2A	3824	1/1	0.97	0.08	19,19,19,19	0
58	MG	1A	4011	1/1	0.97	0.11	31,31,31,31	0
58	MG	1a	1808	1/1	0.97	0.16	51,51,51,51	0
58	MG	1A	3181	1/1	0.97	0.11	16,16,16,16	0
58	MG	2A	3828	1/1	0.97	0.10	45,45,45,45	0
58	MG	2A	3829	1/1	0.97	0.07	28,28,28,28	0
58	MG	2A	3497	1/1	0.97	0.11	32,32,32,32	0
58	MG	2a	1806	1/1	0.97	0.07	43,43,43,43	0
58	MG	1A	3649	1/1	0.97	0.06	10,10,10,10	0
58	MG	2A	3226	1/1	0.97	0.20	30,30,30,30	0
58	MG	2A	3836	1/1	0.97	0.05	54,54,54,54	0
58	MG	1A	3183	1/1	0.97	0.10	29,29,29,29	0
58	MG	2A	3501	1/1	0.97	0.05	61,61,61,61	0
58	MG	1A	3513	1/1	0.97	0.16	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	3514	1/1	0.97	0.12	37,37,37,37	0
58	MG	2a	1814	1/1	0.97	0.06	46,46,46,46	0
58	MG	10	101	1/1	0.97	0.09	28,28,28,28	0
58	MG	1A	4019	1/1	0.97	0.05	30,30,30,30	0
58	MG	2A	3506	1/1	0.97	0.07	30,30,30,30	0
58	MG	1A	3336	1/1	0.97	0.18	38,38,38,38	0
58	MG	1A	3087	1/1	0.97	0.22	30,30,30,30	0
58	MG	1A	3057	1/1	0.97	0.08	31,31,31,31	0
58	MG	1A	3518	1/1	0.97	0.36	21,21,21,21	0
58	MG	1A	3035	1/1	0.97	0.08	41,41,41,41	0
58	MG	1A	3040	1/1	0.97	0.12	43,43,43,43	0
58	MG	2A	3852	1/1	0.97	0.07	21,21,21,21	0
58	MG	2A	3514	1/1	0.97	0.08	36,36,36,36	0
58	MG	11	101	1/1	0.97	0.25	23,23,23,23	0
58	MG	1A	3261	1/1	0.97	0.12	16,16,16,16	0
58	MG	2A	3517	1/1	0.97	0.13	34,34,34,34	0
58	MG	1A	3664	1/1	0.97	0.04	12,12,12,12	0
58	MG	1A	3128	1/1	0.97	0.10	25,25,25,25	0
58	MG	1A	3130	1/1	0.97	0.32	25,25,25,25	0
58	MG	1A	3344	1/1	0.97	0.17	48,48,48,48	0
58	MG	1A	3041	1/1	0.97	0.06	22,22,22,22	0
58	MG	13	102	1/1	0.97	0.12	32,32,32,32	0
58	MG	2A	3248	1/1	0.97	0.07	47,47,47,47	0
58	MG	1p	101	1/1	0.97	0.11	54,54,54,54	0
58	MG	1A	3192	1/1	0.97	0.15	30,30,30,30	0
58	MG	1A	3193	1/1	0.97	0.09	28,28,28,28	0
58	MG	15	104	1/1	0.97	0.15	20,20,20,20	0
58	MG	15	105	1/1	0.97	0.27	41,41,41,41	0
58	MG	1w	102	1/1	0.97	0.07	34,34,34,34	0
58	MG	1A	4037	1/1	0.97	0.05	38,38,38,38	0
58	MG	1w	105	1/1	0.97	0.06	41,41,41,41	0
58	MG	2f	201	1/1	0.97	0.18	35,35,35,35	0
58	MG	1A	3677	1/1	0.97	0.07	12,12,12,12	0
58	MG	1A	4039	1/1	0.97	0.13	27,27,27,27	0
58	MG	1A	3678	1/1	0.97	0.04	12,12,12,12	0
58	MG	2A	3541	1/1	0.97	0.06	38,38,38,38	0
58	MG	1A	4041	1/1	0.97	0.08	36,36,36,36	0
58	MG	1A	3849	1/1	0.97	0.07	41,41,41,41	0
58	MG	1A	3194	1/1	0.97	0.21	20,20,20,20	0
58	MG	2A	3545	1/1	0.97	0.05	41,41,41,41	0
58	MG	1A	3851	1/1	0.97	0.05	40,40,40,40	0
58	MG	2A	3547	1/1	0.97	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	2A	3548	1/1	0.97	0.06	37,37,37,37	0
58	MG	1A	3436	1/1	0.97	0.06	35,35,35,35	0
58	MG	1A	3350	1/1	0.97	0.14	33,33,33,33	0
58	MG	1A	4047	1/1	0.97	0.05	27,27,27,27	0
58	MG	2A	3553	1/1	0.97	0.09	27,27,27,27	0
58	MG	1A	3855	1/1	0.97	0.11	30,30,30,30	0
58	MG	1A	3352	1/1	0.97	0.18	28,28,28,28	0
58	MG	1x	110	1/1	0.97	0.12	43,43,43,43	0
58	MG	1A	3685	1/1	0.97	0.06	11,11,11,11	0
58	MG	2A	3274	1/1	0.97	0.07	38,38,38,38	0
58	MG	1A	3006	1/1	0.97	0.08	31,31,31,31	0
58	MG	1A	3196	1/1	0.97	0.26	27,27,27,27	0
58	MG	2A	3564	1/1	0.97	0.06	41,41,41,41	0
58	MG	2B	213	1/1	0.97	0.05	40,40,40,40	0
58	MG	2A	3566	1/1	0.97	0.04	38,38,38,38	0
58	MG	2A	3568	1/1	0.97	0.06	26,26,26,26	0
58	MG	1A	4053	1/1	0.97	0.04	25,25,25,25	0
58	MG	2A	3570	1/1	0.97	0.05	26,26,26,26	0
58	MG	1A	3197	1/1	0.97	0.32	18,18,18,18	0
58	MG	1a	1611	1/1	0.97	0.07	34,34,34,34	0
58	MG	1A	3538	1/1	0.97	0.21	35,35,35,35	0
58	MG	1a	1613	1/1	0.97	0.12	21,21,21,21	0
58	MG	2D	306	1/1	0.97	0.25	30,30,30,30	0
58	MG	1A	3063	1/1	0.97	0.27	44,44,44,44	0
58	MG	1A	3200	1/1	0.97	0.08	25,25,25,25	0
58	MG	1A	3064	1/1	0.97	0.10	33,33,33,33	0
58	MG	2A	3578	1/1	0.97	0.07	26,26,26,26	0
58	MG	1A	3542	1/1	0.97	0.18	33,33,33,33	0
58	MG	1A	3135	1/1	0.97	0.11	20,20,20,20	0
58	MG	2A	3012	1/1	0.97	0.06	30,30,30,30	0
59	K	2x	101	1/1	0.97	0.05	41,41,41,41	0
58	MG	2A	3013	1/1	0.97	0.07	39,39,39,39	0
58	MG	1A	3296	1/1	0.98	0.07	23,23,23,23	0
58	MG	2A	3747	1/1	0.98	0.05	33,33,33,33	0
58	MG	1B	201	1/1	0.98	0.07	36,36,36,36	0
58	MG	1B	202	1/1	0.98	0.12	34,34,34,34	0
58	MG	1a	1749	1/1	0.98	0.06	37,37,37,37	0
58	MG	2A	3751	1/1	0.98	0.11	40,40,40,40	0
58	MG	1A	3967	1/1	0.98	0.07	30,30,30,30	0
58	MG	13	101	1/1	0.98	0.11	18,18,18,18	0
58	MG	1A	3734	1/1	0.98	0.04	13,13,13,13	0
58	MG	13	103	1/1	0.98	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	1a	1754	1/1	0.98	0.04	41,41,41,41	0
58	MG	15	101	1/1	0.98	0.24	28,28,28,28	0
58	MG	1A	3969	1/1	0.98	0.08	17,17,17,17	0
58	MG	1A	3629	1/1	0.98	0.04	11,11,11,11	0
58	MG	2A	3513	1/1	0.98	0.07	24,24,24,24	0
58	MG	1A	3414	1/1	0.98	0.05	39,39,39,39	0
58	MG	1A	3354	1/1	0.98	0.22	19,19,19,19	0
58	MG	1A	3632	1/1	0.98	0.03	25,25,25,25	0
58	MG	15	107	1/1	0.98	0.04	18,18,18,18	0
58	MG	2A	3765	1/1	0.98	0.04	39,39,39,39	0
58	MG	1a	1762	1/1	0.98	0.05	40,40,40,40	0
58	MG	1A	3633	1/1	0.98	0.05	13,13,13,13	0
58	MG	1A	3198	1/1	0.98	0.15	28,28,28,28	0
58	MG	2A	3521	1/1	0.98	0.06	39,39,39,39	0
58	MG	1a	1765	1/1	0.98	0.10	40,40,40,40	0
58	MG	2A	3523	1/1	0.98	0.05	25,25,25,25	0
58	MG	1A	3163	1/1	0.98	0.15	25,25,25,25	0
58	MG	1A	3854	1/1	0.98	0.10	14,14,14,14	0
58	MG	17	101	1/1	0.98	0.12	23,23,23,23	0
58	MG	2a	1660	1/1	0.98	0.06	52,52,52,52	0
58	MG	1A	3742	1/1	0.98	0.06	50,50,50,50	0
58	MG	1A	3164	1/1	0.98	0.17	21,21,21,21	0
58	MG	1a	1771	1/1	0.98	0.04	49,49,49,49	0
58	MG	2A	3532	1/1	0.98	0.07	39,39,39,39	0
58	MG	18	103	1/1	0.98	0.10	33,33,33,33	0
58	MG	18	104	1/1	0.98	0.04	28,28,28,28	0
58	MG	1A	3113	1/1	0.98	0.14	25,25,25,25	0
58	MG	1A	3746	1/1	0.98	0.06	10,10,10,10	0
58	MG	1a	1777	1/1	0.98	0.05	56,56,56,56	0
58	MG	1A	3420	1/1	0.98	0.06	34,34,34,34	0
58	MG	1B	219	1/1	0.98	0.09	21,21,21,21	0
58	MG	1a	1780	1/1	0.98	0.05	40,40,40,40	0
58	MG	2A	3117	1/1	0.98	0.06	39,39,39,39	0
58	MG	2a	1674	1/1	0.98	0.05	29,29,29,29	0
58	MG	2a	1675	1/1	0.98	0.14	35,35,35,35	0
58	MG	1B	220	1/1	0.98	0.04	24,24,24,24	0
58	MG	1A	3301	1/1	0.98	0.11	28,28,28,28	0
58	MG	1A	3114	1/1	0.98	0.15	21,21,21,21	0
58	MG	1A	3862	1/1	0.98	0.19	29,29,29,29	0
58	MG	1a	1785	1/1	0.98	0.06	40,40,40,40	0
58	MG	1B	224	1/1	0.98	0.06	45,45,45,45	0
58	MG	1A	3486	1/1	0.98	0.06	21,21,21,21	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3864	1/1	0.98	0.05	35,35,35,35	0
58	MG	2A	3796	1/1	0.98	0.04	37,37,37,37	0
58	MG	2A	3331	1/1	0.98	0.08	38,38,38,38	0
58	MG	2A	3551	1/1	0.98	0.03	25,25,25,25	0
58	MG	1a	1610	1/1	0.98	0.05	34,34,34,34	0
58	MG	1B	227	1/1	0.98	0.04	26,26,26,26	0
58	MG	2A	3554	1/1	0.98	0.06	22,22,22,22	0
58	MG	2A	3555	1/1	0.98	0.07	35,35,35,35	0
58	MG	1a	1791	1/1	0.98	0.04	53,53,53,53	0
58	MG	1A	3643	1/1	0.98	0.06	9,9,9,9	0
58	MG	2A	3558	1/1	0.98	0.08	20,20,20,20	0
58	MG	1A	3136	1/1	0.98	0.07	32,32,32,32	0
58	MG	1a	1794	1/1	0.98	0.03	51,51,51,51	0
58	MG	1A	3168	1/1	0.98	0.12	26,26,26,26	0
58	MG	1a	1796	1/1	0.98	0.04	54,54,54,54	0
58	MG	1A	3754	1/1	0.98	0.04	25,25,25,25	0
58	MG	2A	3136	1/1	0.98	0.05	34,34,34,34	0
58	MG	1A	3869	1/1	0.98	0.12	19,19,19,19	0
58	MG	2A	3567	1/1	0.98	0.05	24,24,24,24	0
58	MG	1A	3646	1/1	0.98	0.07	12,12,12,12	0
58	MG	2A	3139	1/1	0.98	0.10	27,27,27,27	0
58	MG	1a	1800	1/1	0.98	0.08	52,52,52,52	0
58	MG	2a	1705	1/1	0.98	0.05	49,49,49,49	0
58	MG	1A	3085	1/1	0.98	0.10	22,22,22,22	0
58	MG	1A	3253	1/1	0.98	0.26	31,31,31,31	0
58	MG	1A	3309	1/1	0.98	0.12	41,41,41,41	0
58	MG	1B	237	1/1	0.98	0.04	25,25,25,25	0
58	MG	2A	3821	1/1	0.98	0.06	22,22,22,22	0
58	MG	1a	1805	1/1	0.98	0.06	47,47,47,47	0
58	MG	1D	301	1/1	0.98	0.17	22,22,22,22	0
58	MG	1A	3650	1/1	0.98	0.04	18,18,18,18	0
58	MG	1A	3018	1/1	0.98	0.10	20,20,20,20	0
58	MG	2A	3149	1/1	0.98	0.12	27,27,27,27	0
58	MG	1D	308	1/1	0.98	0.14	38,38,38,38	0
58	MG	1A	3652	1/1	0.98	0.04	30,30,30,30	0
58	MG	1A	3763	1/1	0.98	0.04	20,20,20,20	0
58	MG	1A	3561	1/1	0.98	0.12	21,21,21,21	0
58	MG	1A	4006	1/1	0.98	0.05	13,13,13,13	0
58	MG	1E	303	1/1	0.98	0.08	18,18,18,18	0
58	MG	1E	304	1/1	0.98	0.14	22,22,22,22	0
58	MG	1A	3099	1/1	0.98	0.12	10,10,10,10	0
58	MG	1A	3010	1/1	0.98	0.05	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1A	3564	1/1	0.98	0.23	26,26,26,26	0
58	MG	2A	3160	1/1	0.98	0.12	37,37,37,37	0
58	MG	2A	3591	1/1	0.98	0.04	48,48,48,48	0
58	MG	1A	3565	1/1	0.98	0.14	23,23,23,23	0
58	MG	2a	1729	1/1	0.98	0.13	33,33,33,33	0
58	MG	1a	1636	1/1	0.98	0.08	23,23,23,23	0
58	MG	1A	3769	1/1	0.98	0.06	17,17,17,17	0
58	MG	1A	3173	1/1	0.98	0.10	6,6,6,6	0
58	MG	1A	4014	1/1	0.98	0.03	15,15,15,15	0
58	MG	2A	3599	1/1	0.98	0.06	33,33,33,33	0
58	MG	1A	3771	1/1	0.98	0.07	17,17,17,17	0
58	MG	2A	3851	1/1	0.98	0.04	36,36,36,36	0
58	MG	1F	301	1/1	0.98	0.08	27,27,27,27	0
58	MG	1F	302	1/1	0.98	0.09	13,13,13,13	0
58	MG	1F	303	1/1	0.98	0.17	26,26,26,26	0
58	MG	1A	4016	1/1	0.98	0.08	15,15,15,15	0
58	MG	2A	3856	1/1	0.98	0.04	34,34,34,34	0
58	MG	1A	3772	1/1	0.98	0.04	21,21,21,21	0
58	MG	2A	3377	1/1	0.98	0.03	39,39,39,39	0
58	MG	1A	3075	1/1	0.98	0.04	23,23,23,23	0
58	MG	1F	308	1/1	0.98	0.17	18,18,18,18	0
58	MG	1A	3046	1/1	0.98	0.03	18,18,18,18	0
58	MG	1A	3213	1/1	0.98	0.06	32,32,32,32	0
58	MG	1v	102	1/1	0.98	0.05	37,37,37,37	0
58	MG	1A	3036	1/1	0.98	0.09	21,21,21,21	0
58	MG	2A	3178	1/1	0.98	0.08	19,19,19,19	0
58	MG	1A	3778	1/1	0.98	0.05	40,40,40,40	0
58	MG	1A	3892	1/1	0.98	0.08	43,43,43,43	0
58	MG	1w	104	1/1	0.98	0.05	51,51,51,51	0
58	MG	1a	1653	1/1	0.98	0.03	36,36,36,36	0
58	MG	1a	1654	1/1	0.98	0.13	33,33,33,33	0
58	MG	1a	1655	1/1	0.98	0.09	39,39,39,39	0
58	MG	1A	3216	1/1	0.98	0.03	20,20,20,20	0
58	MG	2a	1758	1/1	0.98	0.06	50,50,50,50	0
58	MG	1A	3217	1/1	0.98	0.12	36,36,36,36	0
58	MG	2A	3187	1/1	0.98	0.10	40,40,40,40	0
58	MG	1A	3218	1/1	0.98	0.06	33,33,33,33	0
58	MG	1A	3219	1/1	0.98	0.14	32,32,32,32	0
58	MG	2A	3625	1/1	0.98	0.04	25,25,25,25	0
58	MG	1A	3671	1/1	0.98	0.06	19,19,19,19	0
58	MG	1A	3785	1/1	0.98	0.04	17,17,17,17	0
58	MG	2a	1768	1/1	0.98	0.12	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	3628	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3578	1/1	0.98	0.11	24,24,24,24	0
58	MG	1A	3675	1/1	0.98	0.07	16,16,16,16	0
58	MG	2A	3631	1/1	0.98	0.07	39,39,39,39	0
58	MG	1A	4033	1/1	0.98	0.04	31,31,31,31	0
58	MG	1A	3788	1/1	0.98	0.05	27,27,27,27	0
58	MG	1A	3902	1/1	0.98	0.05	31,31,31,31	0
58	MG	1A	3579	1/1	0.98	0.16	23,23,23,23	0
58	MG	2a	1778	1/1	0.98	0.05	54,54,54,54	0
58	MG	1A	3145	1/1	0.98	0.05	38,38,38,38	0
58	MG	2A	3638	1/1	0.98	0.04	27,27,27,27	0
58	MG	1A	3792	1/1	0.98	0.05	14,14,14,14	0
58	MG	1A	3179	1/1	0.98	0.07	19,19,19,19	0
58	MG	1A	3907	1/1	0.98	0.06	35,35,35,35	0
58	MG	2A	3002	1/1	0.98	0.23	35,35,35,35	0
58	MG	1A	3680	1/1	0.98	0.05	21,21,21,21	0
58	MG	1A	3056	1/1	0.98	0.04	24,24,24,24	0
58	MG	1A	3584	1/1	0.98	0.35	30,30,30,30	0
58	MG	1P	202	1/1	0.98	0.23	20,20,20,20	0
58	MG	2B	215	1/1	0.98	0.11	44,44,44,44	0
58	MG	2A	3648	1/1	0.98	0.08	44,44,44,44	0
58	MG	1A	3182	1/1	0.98	0.08	28,28,28,28	0
58	MG	2a	1792	1/1	0.98	0.11	43,43,43,43	0
58	MG	1A	3586	1/1	0.98	0.05	28,28,28,28	0
58	MG	2A	3009	1/1	0.98	0.05	29,29,29,29	0
58	MG	1A	3799	1/1	0.98	0.07	10,10,10,10	0
58	MG	2D	302	1/1	0.98	0.15	38,38,38,38	0
58	MG	1A	3587	1/1	0.98	0.07	25,25,25,25	0
58	MG	1A	3801	1/1	0.98	0.06	24,24,24,24	0
58	MG	1A	3224	1/1	0.98	0.08	25,25,25,25	0
58	MG	1A	3383	1/1	0.98	0.15	21,21,21,21	0
58	MG	2A	3015	1/1	0.98	0.11	38,38,38,38	0
58	MG	2A	3217	1/1	0.98	0.14	37,37,37,37	0
58	MG	2A	3425	1/1	0.98	0.10	27,27,27,27	0
58	MG	1A	3124	1/1	0.98	0.14	26,26,26,26	0
58	MG	2E	305	1/1	0.98	0.09	35,35,35,35	0
58	MG	1A	3922	1/1	0.98	0.10	42,42,42,42	0
58	MG	1A	3692	1/1	0.98	0.09	9,9,9,9	0
58	MG	1A	4055	1/1	0.98	0.04	19,19,19,19	0
58	MG	1A	3226	1/1	0.98	0.07	30,30,30,30	0
58	MG	2A	3021	1/1	0.98	0.07	16,16,16,16	0
58	MG	1A	4057	1/1	0.98	0.08	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	3149	1/1	0.98	0.23	18,18,18,18	0
58	MG	1A	3125	1/1	0.98	0.06	34,34,34,34	0
58	MG	1A	4060	1/1	0.98	0.12	44,44,44,44	0
58	MG	1A	3810	1/1	0.98	0.22	18,18,18,18	0
58	MG	2A	3027	1/1	0.98	0.12	24,24,24,24	0
58	MG	2A	3672	1/1	0.98	0.12	37,37,37,37	0
58	MG	1A	3276	1/1	0.98	0.04	31,31,31,31	0
58	MG	2F	308	1/1	0.98	0.11	35,35,35,35	0
58	MG	1A	3105	1/1	0.98	0.11	31,31,31,31	0
58	MG	2A	3030	1/1	0.98	0.12	33,33,33,33	0
58	MG	2A	3233	1/1	0.98	0.06	38,38,38,38	0
58	MG	1A	3596	1/1	0.98	0.13	23,23,23,23	0
58	MG	1A	3278	1/1	0.98	0.07	31,31,31,31	0
58	MG	1U	206	1/1	0.98	0.13	29,29,29,29	0
58	MG	2A	3034	1/1	0.98	0.10	32,32,32,32	0
58	MG	1A	3279	1/1	0.98	0.09	28,28,28,28	0
58	MG	1U	208	1/1	0.98	0.12	21,21,21,21	0
58	MG	1A	3519	1/1	0.98	0.20	27,27,27,27	0
58	MG	1A	3152	1/1	0.98	0.24	23,23,23,23	0
58	MG	2A	3450	1/1	0.98	0.20	28,28,28,28	0
58	MG	1A	4071	1/1	0.98	0.07	6,6,6,6	0
58	MG	1V	202	1/1	0.98	0.19	30,30,30,30	0
58	MG	1A	3038	1/1	0.98	0.11	28,28,28,28	0
58	MG	2A	3245	1/1	0.98	0.19	37,37,37,37	0
58	MG	1V	204	1/1	0.98	0.25	22,22,22,22	0
58	MG	1A	4074	1/1	0.98	0.11	27,27,27,27	0
58	MG	2a	1838	1/1	0.98	0.07	49,49,49,49	0
58	MG	2A	3044	1/1	0.98	0.04	35,35,35,35	0
58	MG	2A	3693	1/1	0.98	0.07	44,44,44,44	0
58	MG	1A	3707	1/1	0.98	0.07	18,18,18,18	0
58	MG	1A	3522	1/1	0.98	0.19	26,26,26,26	0
58	MG	1A	3939	1/1	0.98	0.07	18,18,18,18	0
58	MG	1A	4078	1/1	0.98	0.04	19,19,19,19	0
58	MG	2A	3049	1/1	0.98	0.11	14,14,14,14	0
58	MG	1A	3282	1/1	0.98	0.14	21,21,21,21	0
58	MG	1A	3942	1/1	0.98	0.03	48,48,48,48	0
58	MG	1A	3154	1/1	0.98	0.27	20,20,20,20	0
58	MG	1A	3190	1/1	0.98	0.14	23,23,23,23	0
58	MG	1A	3460	1/1	0.98	0.14	32,32,32,32	0
58	MG	2A	3259	1/1	0.98	0.04	48,48,48,48	0
58	MG	1A	3285	1/1	0.98	0.11	16,16,16,16	0
58	MG	1A	3286	1/1	0.98	0.25	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	1719	1/1	0.98	0.07	30,30,30,30	0
58	MG	2A	3263	1/1	0.98	0.06	50,50,50,50	0
58	MG	1X	104	1/1	0.98	0.16	33,33,33,33	0
58	MG	1X	105	1/1	0.98	0.03	25,25,25,25	0
58	MG	2A	3476	1/1	0.98	0.06	39,39,39,39	0
58	MG	1A	3287	1/1	0.98	0.30	20,20,20,20	0
58	MG	2A	3478	1/1	0.98	0.08	16,16,16,16	0
58	MG	1A	3288	1/1	0.98	0.21	31,31,31,31	0
58	MG	1A	3950	1/1	0.98	0.04	33,33,33,33	0
58	MG	2A	3269	1/1	0.98	0.07	35,35,35,35	0
58	MG	1A	3717	1/1	0.98	0.05	7,7,7,7	0
58	MG	1A	3009	1/1	0.98	0.03	18,18,18,18	0
58	MG	1A	3532	1/1	0.98	0.09	39,39,39,39	0
58	MG	2A	3722	1/1	0.98	0.06	40,40,40,40	0
58	MG	1A	3614	1/1	0.98	0.08	25,25,25,25	0
58	MG	1A	3403	1/1	0.98	0.04	26,26,26,26	0
58	MG	1A	3345	1/1	0.98	0.09	31,31,31,31	0
58	MG	2A	3069	1/1	0.98	0.04	23,23,23,23	0
58	MG	2A	3728	1/1	0.98	0.05	28,28,28,28	0
58	MG	2A	3729	1/1	0.98	0.04	26,26,26,26	0
58	MG	1A	3156	1/1	0.98	0.04	26,26,26,26	0
58	MG	2A	3732	1/1	0.98	0.11	37,37,37,37	0
58	MG	1A	3129	1/1	0.98	0.26	29,29,29,29	0
58	MG	1A	3082	1/1	0.98	0.16	22,22,22,22	0
58	MG	1A	3620	1/1	0.98	0.04	18,18,18,18	0
58	MG	1A	3408	1/1	0.98	0.13	36,36,36,36	0
58	MG	1A	3033	1/1	0.98	0.24	20,20,20,20	0
58	MG	1A	3070	1/1	0.98	0.08	14,14,14,14	0
58	MG	2A	3740	1/1	0.98	0.05	36,36,36,36	0
58	MG	2A	3496	1/1	0.98	0.12	35,35,35,35	0
58	MG	1A	3351	1/1	0.98	0.30	26,26,26,26	0
58	MG	2A	3285	1/1	0.98	0.10	44,44,44,44	0
59	K	1A	3569	1/1	0.98	0.04	29,29,29,29	0
58	MG	1A	3111	1/1	0.98	0.22	22,22,22,22	0
60	ZN	14	501	1/1	0.98	0.05	79,79,79,79	0
60	ZN	2Y	501	1/1	0.98	0.04	70,70,70,70	0
58	MG	11	104	1/1	0.98	0.06	30,30,30,30	0
58	MG	1W	206	1/1	0.99	0.03	22,22,22,22	0
58	MG	1A	3689	1/1	0.99	0.03	11,11,11,11	0
58	MG	1a	1740	1/1	0.99	0.06	23,23,23,23	0
58	MG	1E	301	1/1	0.99	0.26	20,20,20,20	0
58	MG	1E	302	1/1	0.99	0.09	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	2a	1767	1/1	0.99	0.05	28,28,28,28	0
58	MG	1A	3809	1/1	0.99	0.04	14,14,14,14	0
58	MG	2a	1769	1/1	0.99	0.04	46,46,46,46	0
58	MG	1A	3690	1/1	0.99	0.04	16,16,16,16	0
58	MG	2A	3635	1/1	0.99	0.04	27,27,27,27	0
58	MG	2A	3412	1/1	0.99	0.06	24,24,24,24	0
58	MG	1a	1745	1/1	0.99	0.03	44,44,44,44	0
58	MG	1E	305	1/1	0.99	0.14	21,21,21,21	0
58	MG	1A	3638	1/1	0.99	0.03	12,12,12,12	0
58	MG	2A	3640	1/1	0.99	0.06	26,26,26,26	0
58	MG	1A	3204	1/1	0.99	0.08	24,24,24,24	0
58	MG	1A	3231	1/1	0.99	0.15	19,19,19,19	0
58	MG	2A	3527	1/1	0.99	0.03	20,20,20,20	0
58	MG	1A	3937	1/1	0.99	0.03	16,16,16,16	0
58	MG	1A	4007	1/1	0.99	0.03	22,22,22,22	0
58	MG	2A	3530	1/1	0.99	0.06	30,30,30,30	0
58	MG	1A	3013	1/1	0.99	0.06	12,12,12,12	0
58	MG	1A	3559	1/1	0.99	0.17	22,22,22,22	0
58	MG	1E	313	1/1	0.99	0.08	25,25,25,25	0
58	MG	1A	3696	1/1	0.99	0.06	12,12,12,12	0
58	MG	2A	3424	1/1	0.99	0.06	25,25,25,25	0
58	MG	1A	4086	1/1	0.99	0.04	16,16,16,16	0
58	MG	10	103	1/1	0.99	0.15	28,28,28,28	0
58	MG	1A	3941	1/1	0.99	0.05	18,18,18,18	0
58	MG	1A	3233	1/1	0.99	0.22	24,24,24,24	0
58	MG	1A	3120	1/1	0.99	0.17	25,25,25,25	0
58	MG	1A	3058	1/1	0.99	0.02	16,16,16,16	0
58	MG	1F	306	1/1	0.99	0.03	28,28,28,28	0
58	MG	1A	3072	1/1	0.99	0.22	21,21,21,21	0
58	MG	1A	3073	1/1	0.99	0.05	8,8,8,8	0
58	MG	2D	305	1/1	0.99	0.07	26,26,26,26	0
58	MG	1A	3037	1/1	0.99	0.09	15,15,15,15	0
58	MG	1A	3143	1/1	0.99	0.10	20,20,20,20	0
58	MG	1A	3824	1/1	0.99	0.05	25,25,25,25	0
58	MG	1A	4020	1/1	0.99	0.02	21,21,21,21	0
58	MG	1A	3048	1/1	0.99	0.16	25,25,25,25	0
58	MG	1A	3705	1/1	0.99	0.03	5,5,5,5	0
58	MG	2A	3120	1/1	0.99	0.04	16,16,16,16	0
58	MG	1A	3706	1/1	0.99	0.04	32,32,32,32	0
58	MG	1A	3270	1/1	0.99	0.05	30,30,30,30	0
58	MG	1A	3609	1/1	0.99	0.09	31,31,31,31	0
58	MG	1A	3653	1/1	0.99	0.04	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	MG	1a	1775	1/1	0.99	0.03	42,42,42,42	0
58	MG	1A	3397	1/1	0.99	0.10	22,22,22,22	0
58	MG	1A	3031	1/1	0.99	0.13	20,20,20,20	0
58	MG	1A	3039	1/1	0.99	0.28	22,22,22,22	0
58	MG	1A	4106	1/1	0.99	0.04	42,42,42,42	0
58	MG	1A	3573	1/1	0.99	0.14	31,31,31,31	0
58	MG	1A	3215	1/1	0.99	0.22	23,23,23,23	0
58	MG	1A	3434	1/1	0.99	0.06	34,34,34,34	0
58	MG	1A	3576	1/1	0.99	0.19	32,32,32,32	0
58	MG	2A	3565	1/1	0.99	0.06	24,24,24,24	0
58	MG	1A	3244	1/1	0.99	0.24	23,23,23,23	0
58	MG	1A	3662	1/1	0.99	0.05	14,14,14,14	0
58	MG	1A	3305	1/1	0.99	0.05	19,19,19,19	0
58	MG	1A	3306	1/1	0.99	0.06	18,18,18,18	0
58	MG	17	102	1/1	0.99	0.21	31,31,31,31	0
58	MG	1A	3078	1/1	0.99	0.17	24,24,24,24	0
58	MG	1A	3621	1/1	0.99	0.03	19,19,19,19	0
58	MG	18	102	1/1	0.99	0.11	24,24,24,24	0
58	MG	1A	3667	1/1	0.99	0.06	21,21,21,21	0
58	MG	1A	3148	1/1	0.99	0.14	14,14,14,14	0
58	MG	1P	204	1/1	0.99	0.05	23,23,23,23	0
58	MG	1A	3971	1/1	0.99	0.05	22,22,22,22	0
58	MG	2A	3466	1/1	0.99	0.07	14,14,14,14	0
58	MG	1Q	202	1/1	0.99	0.07	22,22,22,22	0
58	MG	2A	3696	1/1	0.99	0.10	21,21,21,21	0
58	MG	1A	3021	1/1	0.99	0.11	15,15,15,15	0
58	MG	1A	3670	1/1	0.99	0.03	10,10,10,10	0
58	MG	1A	3583	1/1	0.99	0.22	24,24,24,24	0
58	MG	1A	3112	1/1	0.99	0.05	29,29,29,29	0
58	MG	1A	3790	1/1	0.99	0.03	22,22,22,22	0
58	MG	2A	3823	1/1	0.99	0.07	25,25,25,25	0
58	MG	1A	3673	1/1	0.99	0.04	27,27,27,27	0
58	MG	1A	3912	1/1	0.99	0.04	32,32,32,32	0
58	MG	1A	3674	1/1	0.99	0.05	12,12,12,12	0
58	MG	1A	3510	1/1	0.99	0.04	26,26,26,26	0
58	MG	1A	3627	1/1	0.99	0.12	39,39,39,39	0
58	MG	1A	3007	1/1	0.99	0.04	29,29,29,29	0
58	MG	2A	3830	1/1	0.99	0.07	25,25,25,25	0
58	MG	2A	3831	1/1	0.99	0.04	36,36,36,36	0
58	MG	1A	3917	1/1	0.99	0.03	26,26,26,26	0
58	MG	2A	3833	1/1	0.99	0.03	43,43,43,43	0
58	MG	1A	3984	1/1	0.99	0.03	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	3918	1/1	0.99	0.03	20,20,20,20	0
58	MG	1A	3042	1/1	0.99	0.13	13,13,13,13	0
58	MG	2A	3595	1/1	0.99	0.06	29,29,29,29	0
58	MG	2A	3596	1/1	0.99	0.03	27,27,27,27	0
58	MG	1a	1711	1/1	0.99	0.08	29,29,29,29	0
58	MG	1U	201	1/1	0.99	0.20	16,16,16,16	0
58	MG	1A	3679	1/1	0.99	0.03	11,11,11,11	0
58	MG	1A	3023	1/1	0.99	0.06	6,6,6,6	0
58	MG	2A	3843	1/1	0.99	0.04	21,21,21,21	0
58	MG	1A	3003	1/1	0.99	0.06	19,19,19,19	0
58	MG	1A	3990	1/1	0.99	0.05	14,14,14,14	0
58	MG	1A	3068	1/1	0.99	0.03	19,19,19,19	0
58	MG	1A	3992	1/1	0.99	0.08	24,24,24,24	0
58	MG	1A	3177	1/1	0.99	0.14	21,21,21,21	0
58	MG	1U	209	1/1	0.99	0.23	24,24,24,24	0
58	MG	1A	3045	1/1	0.99	0.06	23,23,23,23	0
58	MG	2A	3726	1/1	0.99	0.11	26,26,26,26	0
58	MG	1A	3157	1/1	0.99	0.13	22,22,22,22	0
58	MG	1a	1723	1/1	0.99	0.04	42,42,42,42	0
58	MG	1A	3743	1/1	0.99	0.03	39,39,39,39	0
58	MG	1D	302	1/1	0.99	0.06	31,31,31,31	0
58	MG	2A	3731	1/1	0.99	0.03	24,24,24,24	0
58	MG	1D	303	1/1	0.99	0.05	25,25,25,25	0
58	MG	1D	304	1/1	0.99	0.04	7,7,7,7	0
58	MG	1V	205	1/1	0.99	0.10	17,17,17,17	0
58	MG	1A	4069	1/1	0.99	0.03	27,27,27,27	0
58	MG	2A	3076	1/1	0.99	0.16	28,28,28,28	0
58	MG	1a	1730	1/1	0.99	0.04	22,22,22,22	0
58	MG	2A	3078	1/1	0.99	0.11	20,20,20,20	0
58	MG	2A	3739	1/1	0.99	0.06	38,38,38,38	0
58	MG	1a	1731	1/1	0.99	0.10	25,25,25,25	0
58	MG	1D	306	1/1	0.99	0.04	19,19,19,19	0
58	MG	1A	4070	1/1	0.99	0.04	34,34,34,34	0
58	MG	1A	3180	1/1	0.99	0.06	21,21,21,21	0
58	MG	2A	3083	1/1	0.99	0.05	44,44,44,44	0
58	MG	2A	3189	1/1	0.99	0.09	37,37,37,37	0
58	MG	1A	3687	1/1	0.99	0.04	17,17,17,17	0
60	ZN	1Y	204	1/1	0.99	0.03	54,54,54,54	0
58	MG	1A	4073	1/1	0.99	0.04	12,12,12,12	0
60	ZN	19	102	1/1	0.99	0.03	31,31,31,31	0
60	ZN	1n	102	1/1	0.99	0.03	47,47,47,47	0
58	MG	2a	1760	1/1	0.99	0.03	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	1A	3229	1/1	0.99	0.12	30,30,30,30	0
60	ZN	25	105	1/1	0.99	0.06	50,50,50,50	0
60	ZN	29	102	1/1	0.99	0.03	62,62,62,62	0
60	ZN	2n	501	1/1	0.99	0.03	68,68,68,68	0
61	SF4	1d	302	8/8	0.99	0.04	45,51,56,57	0
61	SF4	2d	302	8/8	0.99	0.03	45,53,60,64	0
58	MG	1A	3724	1/1	1.00	0.04	5,5,5,5	0
58	MG	1A	3780	1/1	1.00	0.02	21,21,21,21	0
58	MG	1A	4036	1/1	1.00	0.02	13,13,13,13	0
58	MG	1A	3014	1/1	1.00	0.08	16,16,16,16	0
58	MG	1A	3777	1/1	1.00	0.02	23,23,23,23	0
60	ZN	26	102	1/1	1.00	0.02	43,43,43,43	0
58	MG	2A	3714	1/1	1.00	0.04	13,13,13,13	0
58	MG	1A	3756	1/1	1.00	0.04	10,10,10,10	0
60	ZN	15	110	1/1	1.00	0.04	28,28,28,28	0
60	ZN	16	103	1/1	1.00	0.02	30,30,30,30	0

6.5 Other polymers (i)

There are no such residues in this entry.