Full wwPDB X-ray Structure Validation Report (i)

Nov 11, 2024 – 07:52 PM EST

PDB ID	:	9DFE
Title	:	Crystal structure of the wild-type Thermus thermophilus 70S ribosome in complex with lasso peptide lariocidin and protein Y 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 (i)) were used in the production of this report:

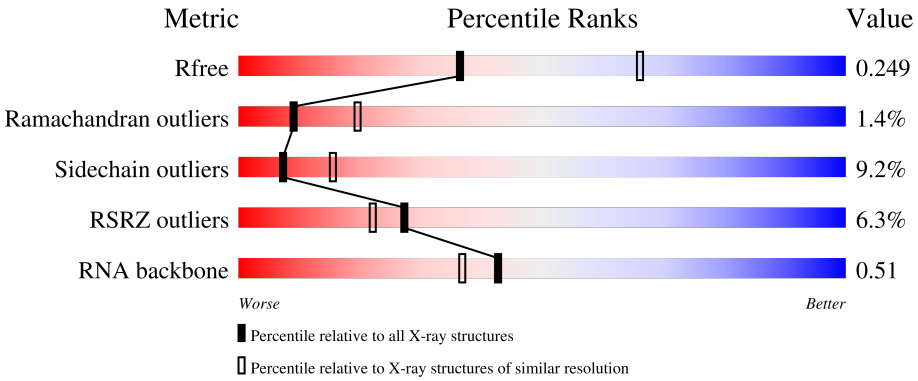
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.20.1
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

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% 62% 31% 6%
1	2A	2915	7% 69% 26%
2	1B	121	2% 74% 23%
2	2B	121	2% 75% 21%

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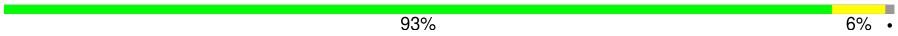
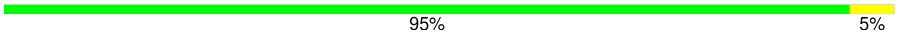
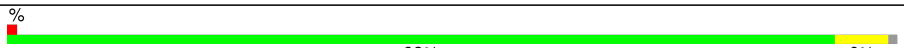
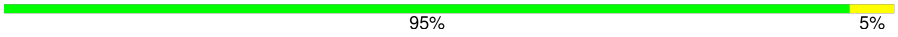
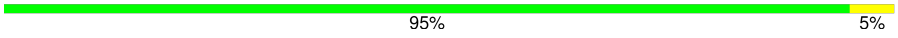
Mol	Chain	Length	Quality of chain
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
5	2F	210	
6	1G	182	
6	2G	182	
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	
14	2S	112	
15	1T	146	

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Mol	Chain	Length	Quality of chain
15	2T	146	2% 84% 5% 10%
16	1U	118	91% 8%
16	2U	118	94%
17	1V	101	94% 5%
17	2V	101	% 90% 9%
18	1W	113	% 92% 7%
18	2W	113	% 94% 5%
19	1X	96	% 94% 5%
19	2X	96	2% 95%
20	1Y	110	% 85% 13%
20	2Y	110	9% 86% 11%
21	1Z	206	4% 91% 7%
21	2Z	206	4% 84% 13%
22	10	85	87% 9%
22	20	85	% 85% 6% 9%
23	11	98	2% 94%
23	21	98	4% 88% 11%
24	12	72	% 94%
24	22	72	3% 88% 10%
25	13	60	2% 90% 8%
25	23	60	3% 92% 7%
26	14	71	20% 76% 18%
26	24	71	34% 85% 13%
27	15	60	93% 5%
27	25	60	90% 8%

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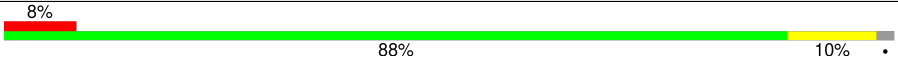
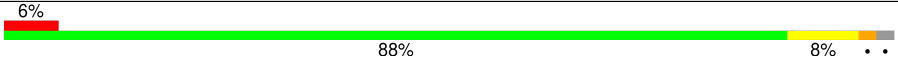
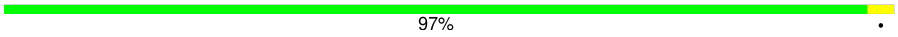
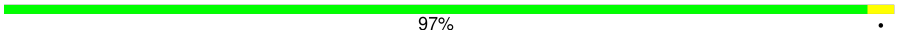
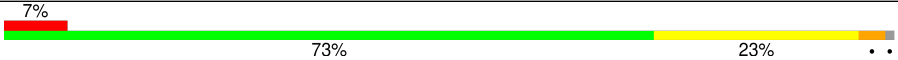
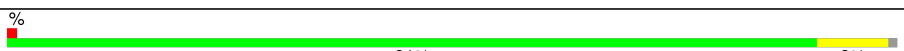
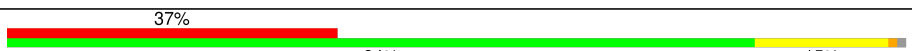
Mol	Chain	Length	Quality of chain
28	16	54	
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	
40	1i	128	

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Mol	Chain	Length	Quality of chain
40	2i	128	40% 87% 12%
41	1j	105	26% 84% 8% 8%
41	2j	105	39% 79% 11% 9%
42	1k	129	5% 81% 7% 12%
42	2k	129	3% 83% 5% 12%
43	1l	132	% 85% 8% 8%
43	2l	132	2% 84% 8% 8%
44	1m	126	7% 86% 6% 8%
44	2m	126	10% 83% 8% 10%
45	1n	61	10% 84% 15%
45	2n	61	31% 92% 7%
46	1o	89	3% 92% 7%
46	2o	89	4% 92% 7%
47	1p	88	11% 81% 13% 7%
47	2p	88	7% 82% 11% 7%
48	1q	105	2% 86% 9% 6%
48	2q	105	% 86% 9% 6%
49	1r	88	3% 73% 5% 23%
49	2r	88	% 73% 5% 23%
50	1s	93	17% 82% 8% 11%
50	2s	93	24% 82% 8% 11%
51	1t	106	9% 83% 7% 9%
51	2t	106	8% 86% 6% 8%
52	1u	27	15% 81% 15%
52	2u	27	48% 81% 15%

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Mol	Chain	Length	Quality of chain
53	1y	113	4% 78% 8% 14%
53	2y	113	11% 79% 6% 15%
54	1z	18	11% 94% 6%
54	2z	18	28% 83% 11% 6%

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
55	MG	1A	3275	-	-	-	X
55	MG	1A	3756	-	-	-	X
55	MG	1a	3003	-	-	-	X
55	MG	1a	3238	-	-	-	X
55	MG	2A	3105	-	-	-	X
55	MG	2A	3639	-	-	-	X

2 Entry composition

There are 60 unique types of molecules in this entry. The entry contains 298738 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	2872	Total	C	N	O	P	0	0	0
			61869	27540	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61758	27491	11552	19850	2865			

- 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
			2572	1145	476	832	119			
2	2B	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

- 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
			2131	1346	422	360	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
			1426	916	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1424	912	259	249	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	173	Total	C	N	O	S	0	0	0
			1324	842	247	234	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	147	Total	C	N	O	S	0	0	0
			1094	699	191	203	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1076	687	186	202	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
			1121	722	208	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 877	C 553	N 175	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
			775	498	141	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
			810	520	153	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			810	519	153	132	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	203	Total	C	N	O	S	0	0	0
			1587	1011	282	292	2			
21	2Z	201	Total	C	N	O	S	0	0	0
			1557	995	274	286	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			
22	20	77	Total	C	N	O	S	0	0	0
			608	375	129	103	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
			754	475	148	130	1			
23	21	97	Total	C	N	O	S	0	0	0
			759	478	149	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
			592	368	119	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
			546	346	96	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			536	342	98	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
			459	288	90	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	1504	Total	C	N	O	P	0	0	0
			32331	14396	5990	10441	1504			

- 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
			1842	1175	330	332	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
			1558	979	305	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
			1665	1043	329	286	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1668	1047	330	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
			1133	716	214	199	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
			814	516	144	151	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
			1235	769	244	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1229	766	241	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
			1098	694	210	192	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
			986	625	193	168			
40	2i	126	Total	C	N	O	0	0	0
			966	613	186	167			

- 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
			719	446	142	131			
41	2j	96	Total	C	N	O	0	0	0
			710	442	137	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
			834	520	156	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	116	Total	C	N	O	S	0	0	0
			914	564	189	159	2			
44	2m	114	Total	C	N	O	S	0	0	0
			895	550	186	157	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
			648	415	120	111	2			
50	2s	83	Total	C	N	O	S	0	0	0
			645	410	118	115	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
			732	449	157	124	2			
51	2t	98	Total	C	N	O	S	0	0	0
			733	451	154	126	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 protein called Ribosome-associated inhibitor A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1y	97	Total 764	C 478	N 144	O 139	S 3	0	0	0
53	2y	96	Total 749	C 468	N 141	O 137	S 3	0	0	0

- Molecule 54 is a protein called Lasso peptide lariocidin.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
54	1z	18	Total 132	C 81	N 29	O 22	0	0	0
54	2z	18	Total 132	C 81	N 29	O 22	0	0	0

- Molecule 55 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	1A	1026	Total 1026	Mg 1026	0	0
55	1B	31	Total 31	Mg 31	0	0
55	1D	18	Total 18	Mg 18	0	0
55	1E	9	Total 9	Mg 9	0	0
55	1F	20	Total 20	Mg 20	0	0
55	1G	4	Total 4	Mg 4	0	0
55	1H	2	Total 2	Mg 2	0	0
55	1N	4	Total 4	Mg 4	0	0
55	1O	1	Total 1	Mg 1	0	0
55	1P	5	Total 5	Mg 5	0	0
55	1Q	5	Total 5	Mg 5	0	0
55	1R	5	Total 5	Mg 5	0	0
55	1S	1	Total 1	Mg 1	0	0
55	1T	5	Total 5	Mg 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	1U	8	Total Mg 8 8	0	0
55	1V	7	Total Mg 7 7	0	0
55	1W	2	Total Mg 2 2	0	0
55	1X	1	Total Mg 1 1	0	0
55	1Y	1	Total Mg 1 1	0	0
55	1Z	1	Total Mg 1 1	0	0
55	10	7	Total Mg 7 7	0	0
55	11	5	Total Mg 5 5	0	0
55	13	3	Total Mg 3 3	0	0
55	15	8	Total Mg 8 8	0	0
55	17	6	Total Mg 6 6	0	0
55	18	1	Total Mg 1 1	0	0
55	19	2	Total Mg 2 2	0	0
55	1a	277	Total Mg 277 277	0	0
55	1b	1	Total Mg 1 1	0	0
55	1d	5	Total Mg 5 5	0	0
55	1e	6	Total Mg 6 6	0	0
55	1f	1	Total Mg 1 1	0	0
55	1g	2	Total Mg 2 2	0	0
55	1h	1	Total Mg 1 1	0	0
55	1i	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	1k	1	Total Mg 1 1	0	0
55	1l	2	Total Mg 2 2	0	0
55	1m	2	Total Mg 2 2	0	0
55	1n	1	Total Mg 1 1	0	0
55	1o	2	Total Mg 2 2	0	0
55	1r	1	Total Mg 1 1	0	0
55	1t	1	Total Mg 1 1	0	0
55	1y	3	Total Mg 3 3	0	0
55	1z	1	Total Mg 1 1	0	0
55	2A	745	Total Mg 745 745	0	0
55	2B	20	Total Mg 20 20	0	0
55	2D	12	Total Mg 12 12	0	0
55	2E	7	Total Mg 7 7	0	0
55	2F	4	Total Mg 4 4	0	0
55	2G	3	Total Mg 3 3	0	0
55	2I	1	Total Mg 1 1	0	0
55	2N	1	Total Mg 1 1	0	0
55	2O	1	Total Mg 1 1	0	0
55	2P	1	Total Mg 1 1	0	0
55	2Q	4	Total Mg 4 4	0	0
55	2R	2	Total Mg 2 2	0	0

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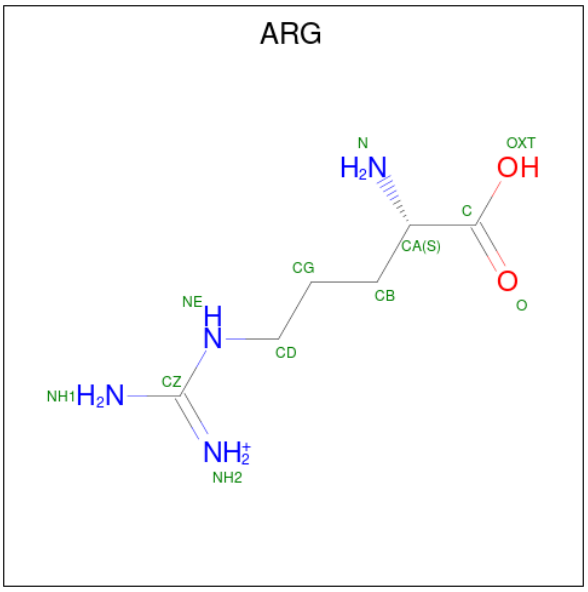
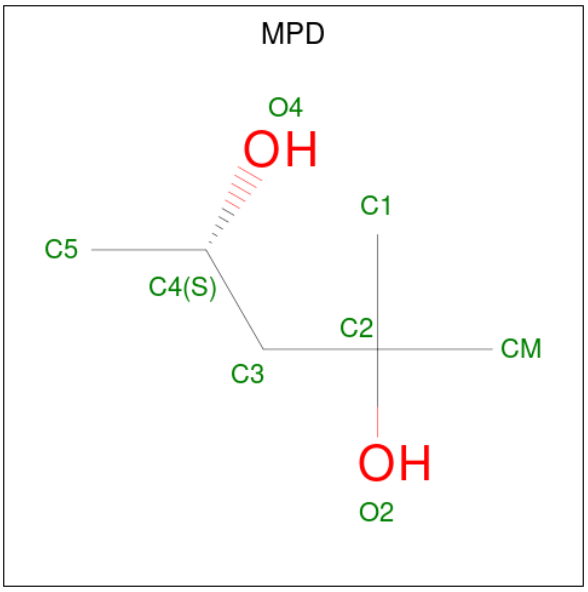
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	2T	4	Total Mg 4 4	0	0
55	2V	3	Total Mg 3 3	0	0
55	2W	3	Total Mg 3 3	0	0
55	20	1	Total Mg 1 1	0	0
55	21	1	Total Mg 1 1	0	0
55	23	2	Total Mg 2 2	0	0
55	25	3	Total Mg 3 3	0	0
55	27	1	Total Mg 1 1	0	0
55	28	2	Total Mg 2 2	0	0
55	2a	193	Total Mg 193 193	0	0
55	2e	1	Total Mg 1 1	0	0
55	2f	1	Total Mg 1 1	0	0
55	2h	1	Total Mg 1 1	0	0
55	2j	1	Total Mg 1 1	0	0
55	2k	1	Total Mg 1 1	0	0
55	2n	1	Total Mg 1 1	0	0
55	2p	1	Total Mg 1 1	0	0
55	2r	1	Total Mg 1 1	0	0
55	2t	1	Total Mg 1 1	0	0
55	2y	1	Total Mg 1 1	0	0

- Molecule 56 is ARGININE (three-letter code: ARG) (formula: $C_6H_{15}N_4O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1B	1	Total C N O 12 6 4 2	0	0

- Molecule 57 is (4S)-2-METHYL-2,4-PENTANEDIOL (three-letter code: MPD) (formula: $C_6H_{14}O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	1T	1	Total C O 8 6 2	0	0
57	18	1	Total C O 8 6 2	0	0

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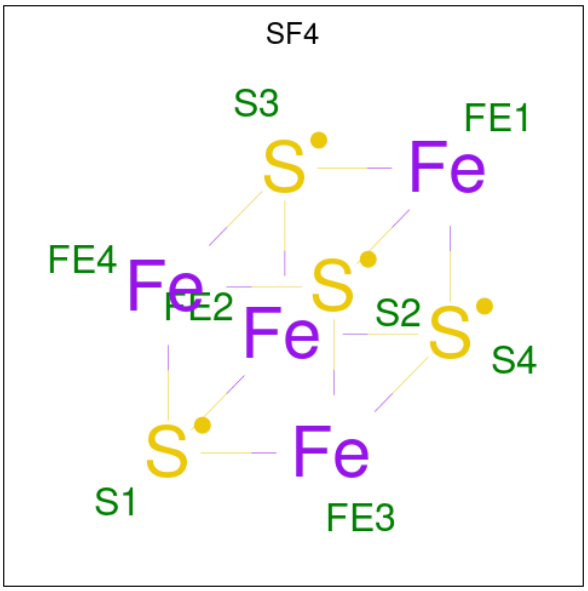
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	2A	1	Total C O 8 6 2	0	0

- Molecule 58 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1Y	1	Total Zn 1 1	0	0
58	14	1	Total Zn 1 1	0	0
58	15	1	Total Zn 1 1	0	0
58	16	1	Total Zn 1 1	0	0
58	19	1	Total Zn 1 1	0	0
58	1n	1	Total Zn 1 1	0	0
58	2Y	1	Total Zn 1 1	0	0
58	24	1	Total Zn 1 1	0	0
58	25	1	Total Zn 1 1	0	0
58	26	1	Total Zn 1 1	0	0
58	29	1	Total Zn 1 1	0	0
58	2n	1	Total Zn 1 1	0	0

- Molecule 59 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1d	1	Total Fe S 8 4 4	0	0
59	2d	1	Total Fe S 8 4 4	0	0

- Molecule 60 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1A	4144	Total O 4144 4144	0	0
60	1B	113	Total O 113 113	0	0
60	1D	128	Total O 128 128	0	0
60	1E	79	Total O 79 79	0	0
60	1F	64	Total O 64 64	0	0
60	1G	22	Total O 22 22	0	0
60	1H	16	Total O 16 16	0	0
60	1I	8	Total O 8 8	0	0
60	1N	55	Total O 55 55	0	0
60	1O	31	Total O 31 31	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1P	64	Total O 64 64	0	0
60	1Q	43	Total O 43 43	0	0
60	1R	34	Total O 34 34	0	0
60	1S	14	Total O 14 14	0	0
60	1T	40	Total O 40 40	0	0
60	1U	47	Total O 47 47	0	0
60	1V	39	Total O 39 39	0	0
60	1W	26	Total O 26 26	0	0
60	1X	24	Total O 24 24	0	0
60	1Y	15	Total O 15 15	0	0
60	1Z	12	Total O 12 12	0	0
60	10	26	Total O 26 26	0	0
60	11	26	Total O 26 26	0	0
60	12	16	Total O 16 16	0	0
60	13	23	Total O 23 23	0	0
60	14	2	Total O 2 2	0	0
60	15	26	Total O 26 26	0	0
60	16	24	Total O 24 24	0	0
60	17	17	Total O 17 17	0	0
60	18	32	Total O 32 32	0	0
60	19	9	Total O 9 9	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1a	606	Total O 606 606	0	0
60	1b	1	Total O 1 1	0	0
60	1d	9	Total O 9 9	0	0
60	1e	5	Total O 5 5	0	0
60	1f	2	Total O 2 2	0	0
60	1g	1	Total O 1 1	0	0
60	1h	1	Total O 1 1	0	0
60	1j	1	Total O 1 1	0	0
60	1l	6	Total O 6 6	0	0
60	1m	2	Total O 2 2	0	0
60	1n	2	Total O 2 2	0	0
60	1o	6	Total O 6 6	0	0
60	1p	2	Total O 2 2	0	0
60	1t	1	Total O 1 1	0	0
60	1u	2	Total O 2 2	0	0
60	1y	7	Total O 7 7	0	0
60	1z	1	Total O 1 1	0	0
60	2A	2652	Total O 2652 2652	0	0
60	2B	72	Total O 72 72	0	0
60	2D	58	Total O 58 58	0	0
60	2E	35	Total O 35 35	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	2F	23	Total O 23 23	0	0
60	2G	8	Total O 8 8	0	0
60	2H	4	Total O 4 4	0	0
60	2I	7	Total O 7 7	0	0
60	2N	7	Total O 7 7	0	0
60	2O	21	Total O 21 21	0	0
60	2P	28	Total O 28 28	0	0
60	2Q	29	Total O 29 29	0	0
60	2R	26	Total O 26 26	0	0
60	2S	8	Total O 8 8	0	0
60	2T	12	Total O 12 12	0	0
60	2U	18	Total O 18 18	0	0
60	2V	6	Total O 6 6	0	0
60	2W	22	Total O 22 22	0	0
60	2X	9	Total O 9 9	0	0
60	2Y	5	Total O 5 5	0	0
60	2Z	15	Total O 15 15	0	0
60	20	17	Total O 17 17	0	0
60	21	22	Total O 22 22	0	0
60	22	5	Total O 5 5	0	0
60	23	3	Total O 3 3	0	0

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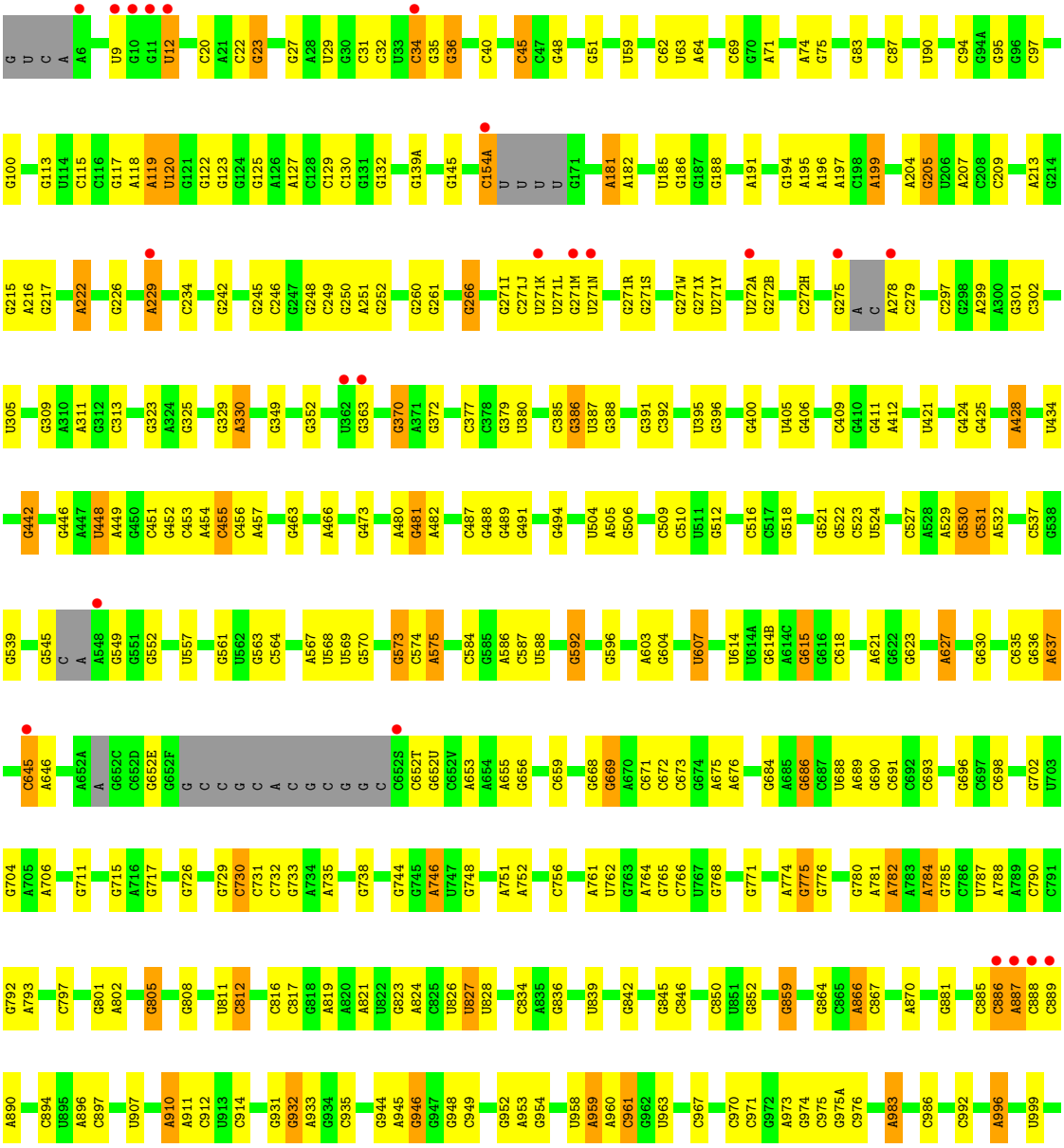
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	24	3	Total O 3 3	0	0
60	25	8	Total O 8 8	0	0
60	26	6	Total O 6 6	0	0
60	27	11	Total O 11 11	0	0
60	28	17	Total O 17 17	0	0
60	29	2	Total O 2 2	0	0
60	2a	465	Total O 465 465	0	0
60	2d	4	Total O 4 4	0	0
60	2e	2	Total O 2 2	0	0
60	2f	1	Total O 1 1	0	0
60	2j	2	Total O 2 2	0	0
60	2l	3	Total O 3 3	0	0
60	2n	1	Total O 1 1	0	0
60	2o	2	Total O 2 2	0	0
60	2p	2	Total O 2 2	0	0
60	2q	1	Total O 1 1	0	0
60	2r	5	Total O 5 5	0	0
60	2t	2	Total O 2 2	0	0
60	2y	6	Total O 6 6	0	0

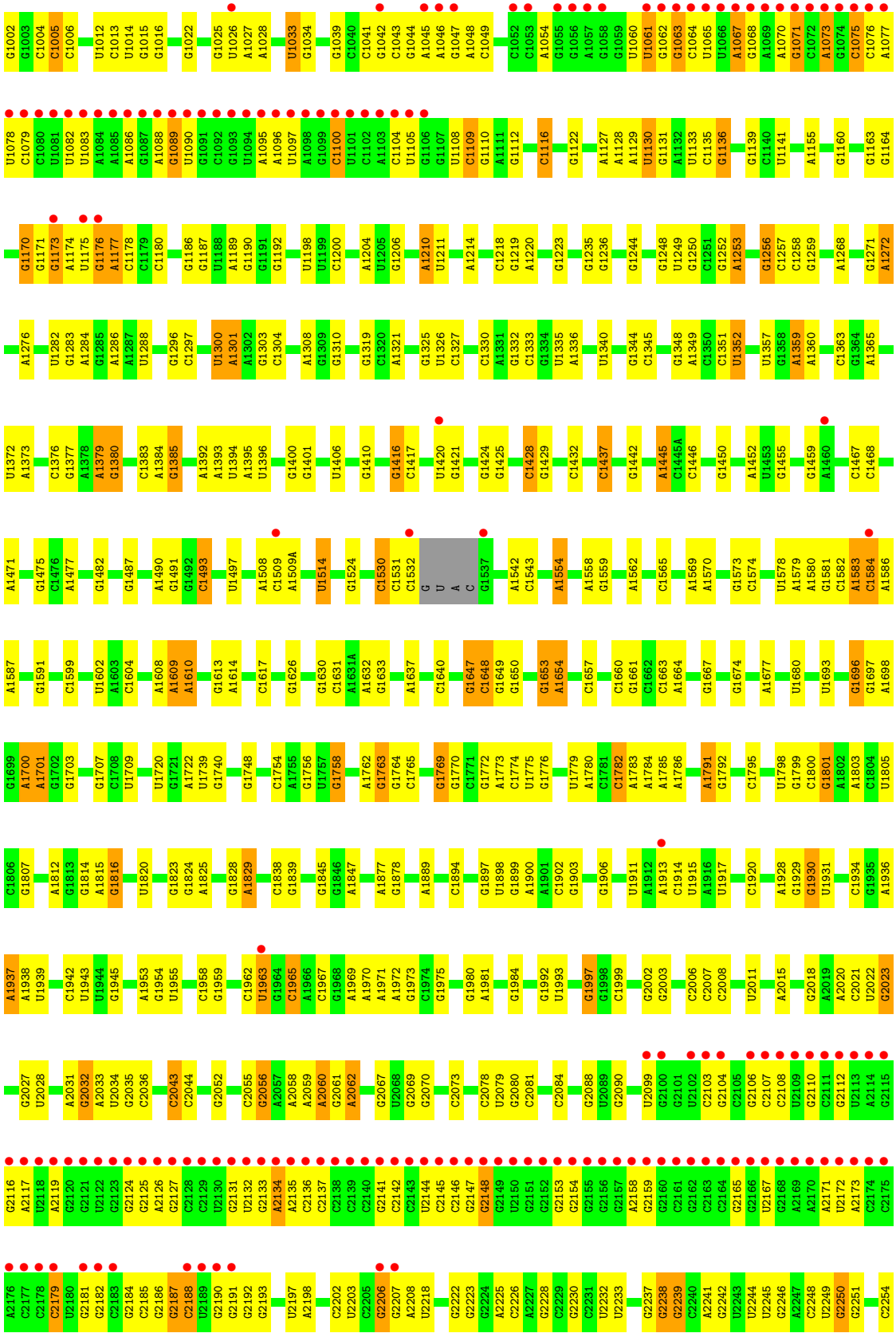
3 Residue-property plots (i)

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

- Molecule 1: 23S Ribosomal RNA

Chain 1A:




G1002 G1003 C1004 C1005 C1006 U1012 C1013 U1014 G1015 G1016 G1022 G1025 U1026 A1027 A1028 U1033 G1034 G1039 C1040 C1041 G1042 C1043 G1044 A1045 A1046 G1047 A1048 C1049 C1052 C1053 A1054 G1055 C1056 A1057 G1058 G1059 U1060 U1061 G1062 G1063 C1064 U1065 U1066 A1067 G1068 A1069 A1070 G1071 C1072 A1073 G1074 C1075 C1076 A1077
U1078 C1079 C1080 U1081 U1082 U1083 A1084 A1085 A1086 G1087 A1088 G1089 U1090 G1091 C1092 G1093 U1094 A1095 A1096 U1097 A1098 G1099 C1100 U1101 C1102 A1103 C1104 U1105 G1106 G1107 U1108 C1109 G1110 A1111 G1112 C1116 G1122 A1127 A1128 A1129 U1130 G1131 A1132 U1133 C1135 G1136 G1139 C1140 U1141 A1155 G1160 G1163 G1164
G1170 G1171 G1173 A1174 U1175 G1176 A1177 C1178 C1179 C1180 G1186 G1187 U1188 A1189 G1190 C1191 G1192 U1198 U1199 C1200 A1204 U1205 G1206 A1210 U1211 A1214 C1218 G1219 A1220 G1223 G1235 G1236 G1244 G1248 U1249 G1250 C1251 G1252 A1253 G1256 C1257 C1258 G1259 A1268 G1271 A1272
A1276 U1282 G1283 A1284 G1285 A1286 A1287 U1288 G1296 C1297 U1300 A1301 A1302 G1303 C1304 A1308 G1309 G1310 G1319 C1320 A1321 G1325 U1326 C1327 C1330 A1331 G1332 C1333 G1334 U1335 A1336 U1340 G1344 C1345 G1348 A1349 C1350 C1351 U1352 U1357 G1358 A1359 A1360 C1363 G1364 A1365
U1372 A1373 C1376 G1377 A1378 A1379 G1380 C1383 A1384 G1385 A1392 A1393 U1394 A1395 U1396 G1400 G1401 U1406 G1410 G1416 C1417 U1420 G1421 G1424 G1425 C1428 G1429 C1432 C1437 G1442 A1445 C1445A C1446 G1450 A1452 U1453 G1455 G1459 A1460 C1467 C1468
A1471 G1475 C1476 A1477 G1482 G1487 A1490 G1491 G1492 C1493 U1497 A1508 C1509 A1509A U1514 G1524 C1530 C1531 C1532 G U A C G1537 A1542 C1543 A1554 A1558 G1559 A1562 C1565 A1569 A1570 G1573 C1574 U1578 A1579 A1580 G1581 C1582 A1583 C1584 A1586
A1587 G1591 C1599 U1602 A1603 C1604 A1608 A1609 A1610 G1613 A1614 C1617 G1626 G1630 C1631 A1631A A1632 G1633 A1637 C1640 G1647 C1648 G1649 G1650 G1653 A1654 C1657 C1660 G1661 C1662 C1663 A1664 G1667 G1674 A1677 U1680 U1693 G1696 G1697 A1698
G1699 A1700 A1701 G1702 G1703 G1707 C1708 U1709 U1720 G1721 A1722 U1739 G1740 G1748 C1754 A1755 G1756 U1757 G1758 A1762 G1763 G1764 C1765 G1769 G1770 C1771 G1772 A1773 C1774 U1775 G1776 U1779 A1780 C1781 C1782 A1783 A1784 A1785 A1786 A1791 G1792 C1795 U1798 G1799 C1800 G1801 A1802 A1803 C1804 U1805
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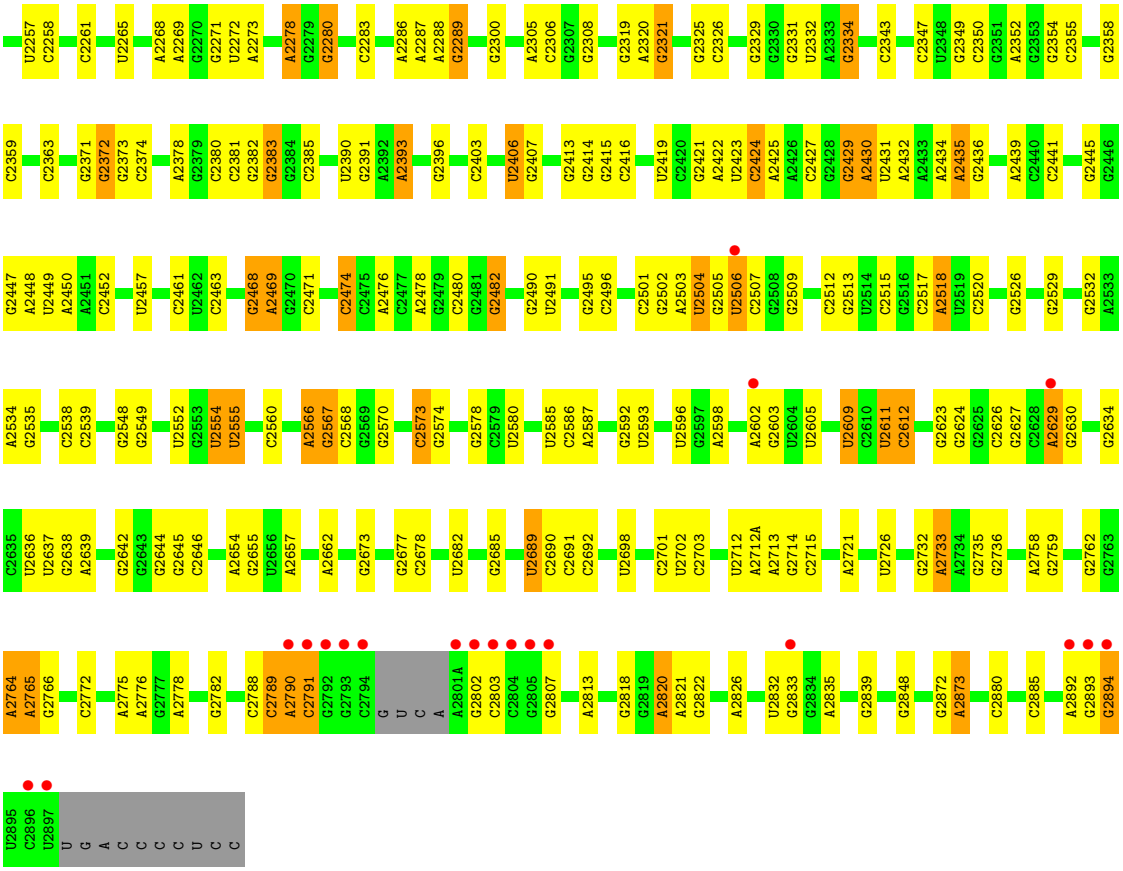
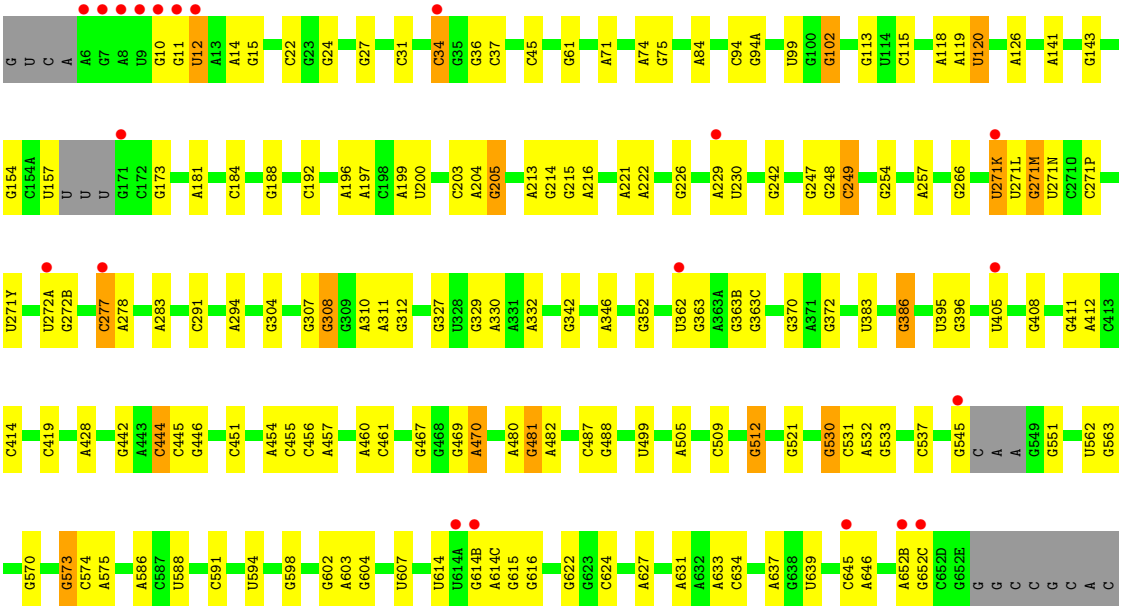
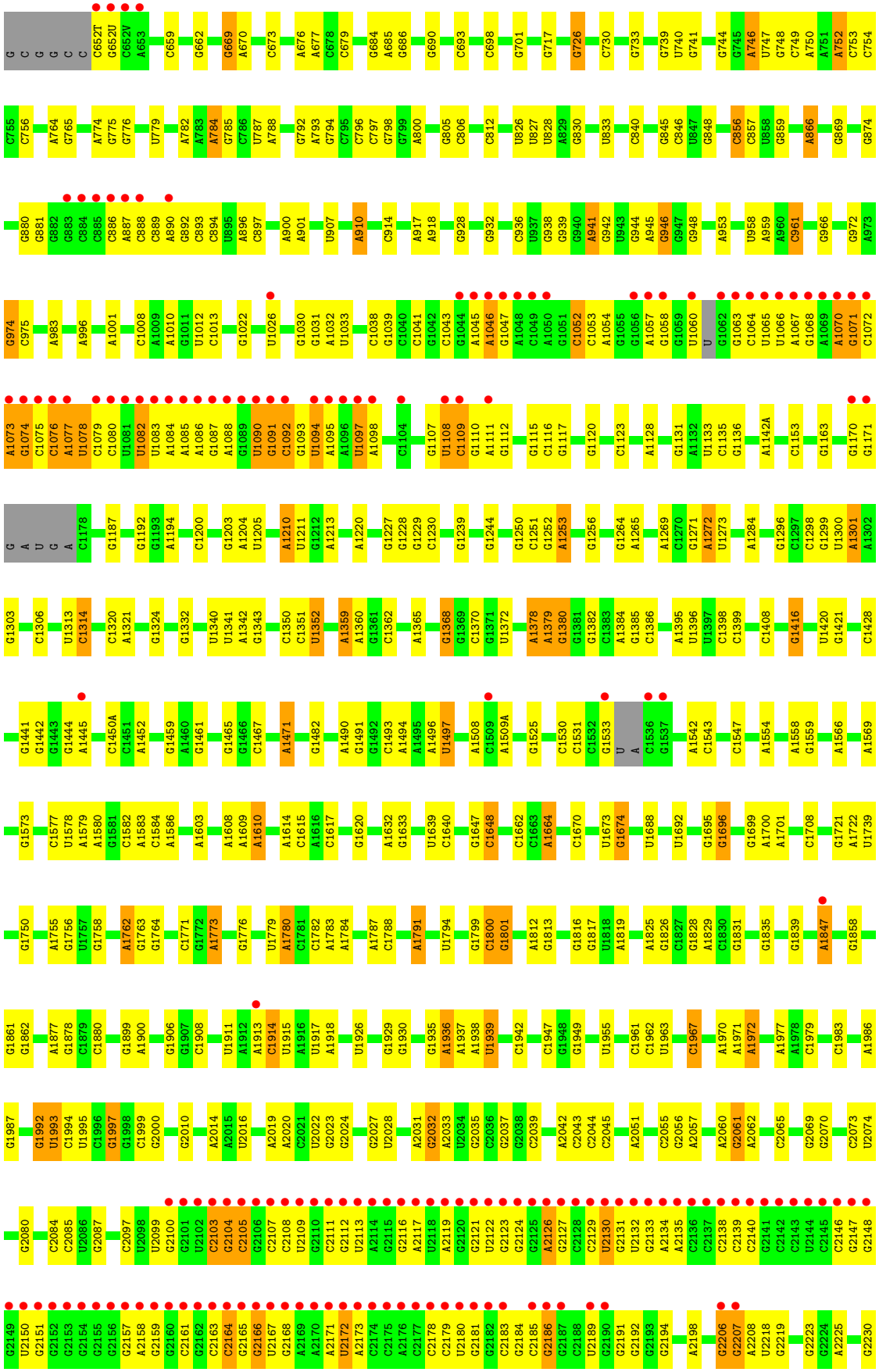
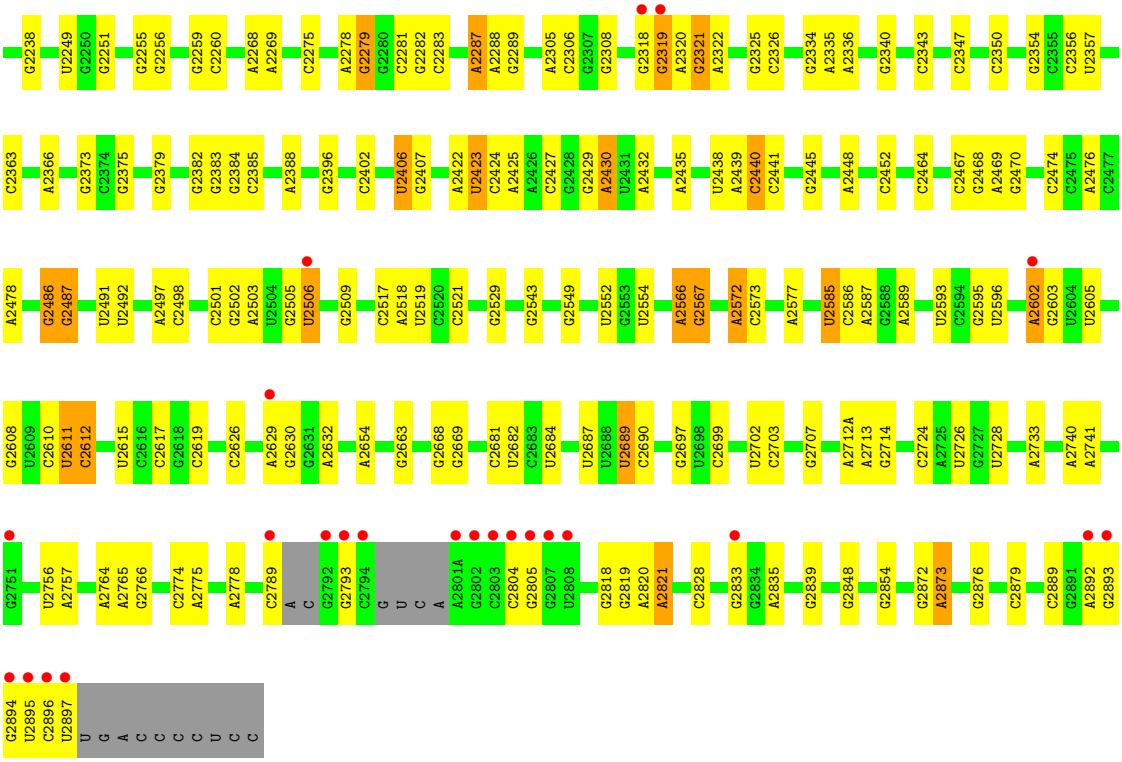


• Molecule 1: 23S Ribosomal RNA

Chain 2A:

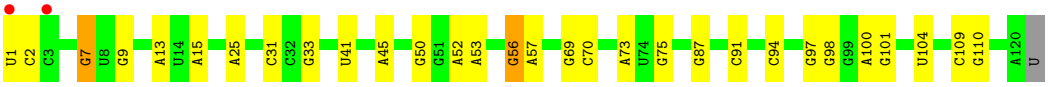






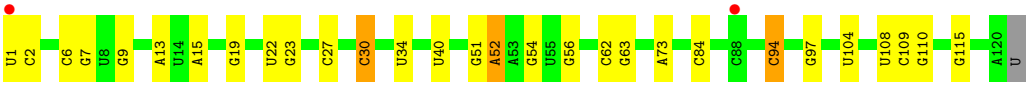
• Molecule 2: 5S Ribosomal RNA

Chain 1B:



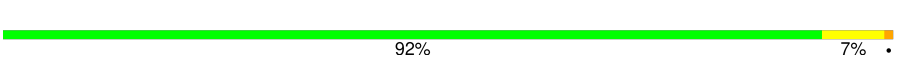
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



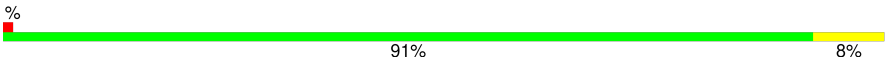
• Molecule 3: 50S ribosomal protein L2

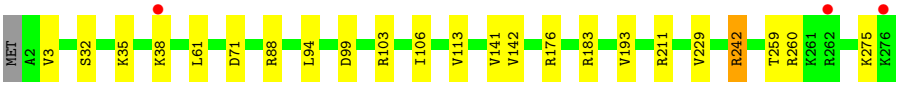
Chain 1D:



• Molecule 3: 50S ribosomal protein L2

Chain 2D:



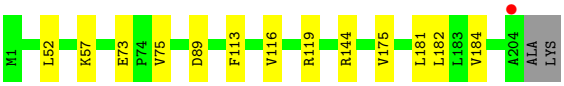


• Molecule 4: 50S ribosomal protein L3

Chain 1E:

• Molecule 4: 50S ribosomal protein L3

Chain 2E:



• Molecule 5: 50S ribosomal protein L4

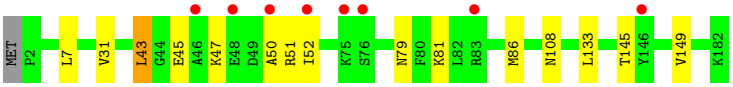
Chain 1F:

• Molecule 5: 50S ribosomal protein L4

Chain 2F:

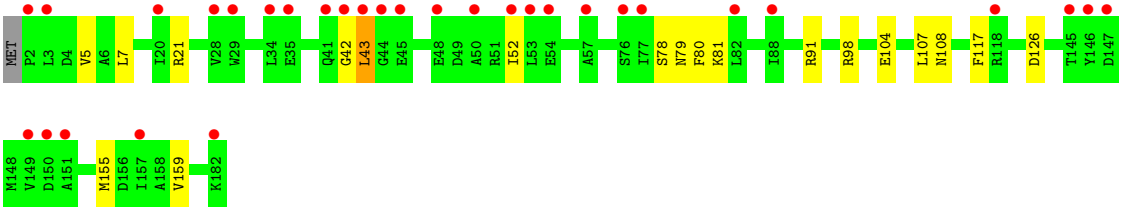
• Molecule 6: 50S ribosomal protein L5

Chain 1G:



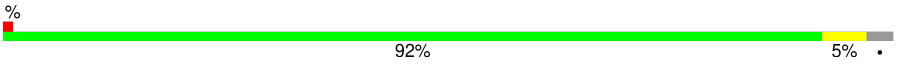
• Molecule 6: 50S ribosomal protein L5

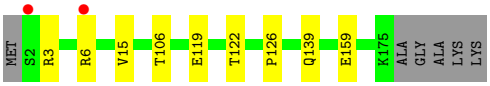
Chain 2G:



• Molecule 7: 50S ribosomal protein L6

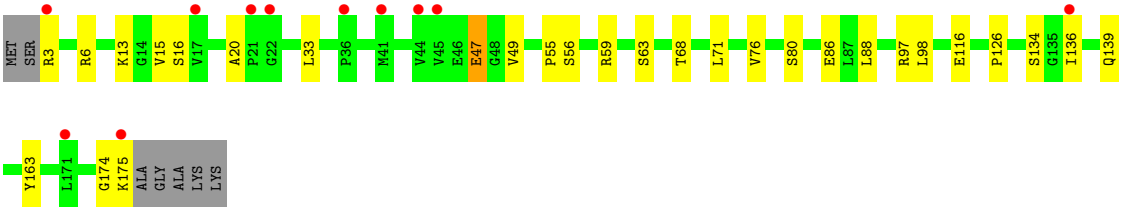
Chain 1H:





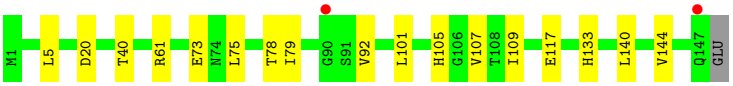
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



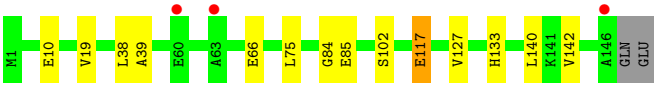
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



• Molecule 8: 50S ribosomal protein L9

Chain 2I:

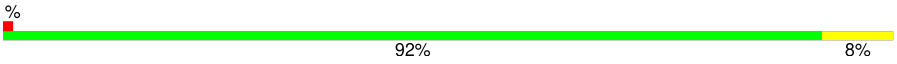


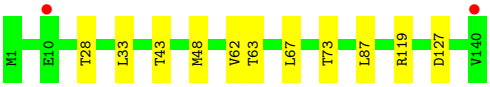
• Molecule 9: 50S ribosomal protein L13

Chain 1N:

• Molecule 9: 50S ribosomal protein L13

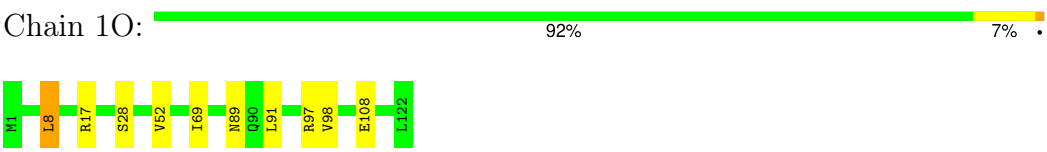
Chain 2N:





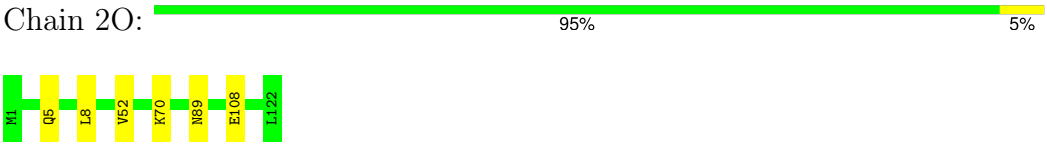
• Molecule 10: 50S ribosomal protein L14

Chain 1O:



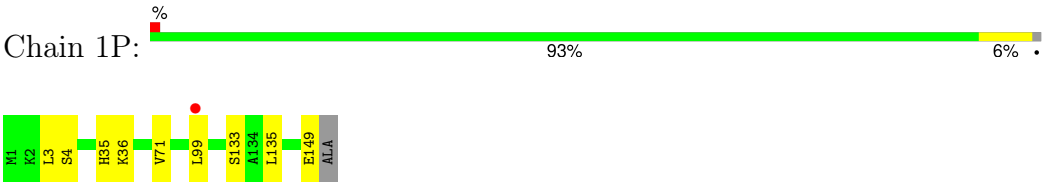
• Molecule 10: 50S ribosomal protein L14

Chain 2O:



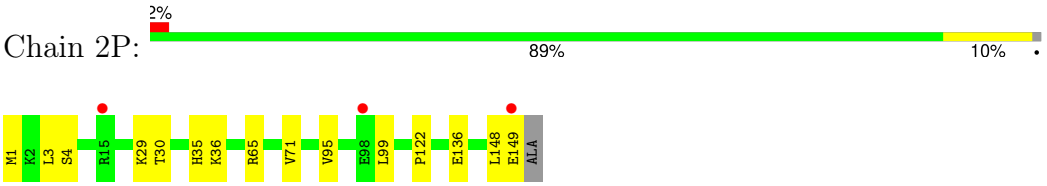
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



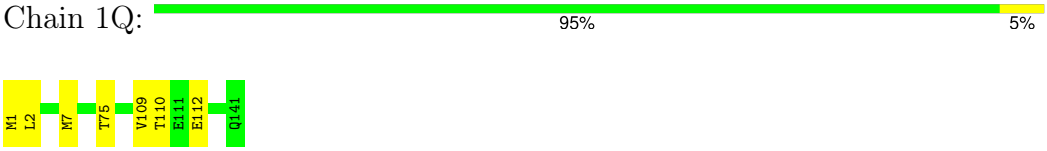
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



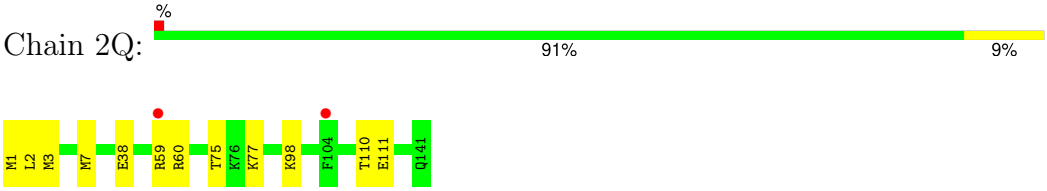
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



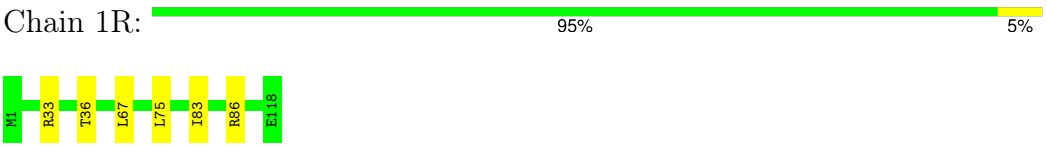
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



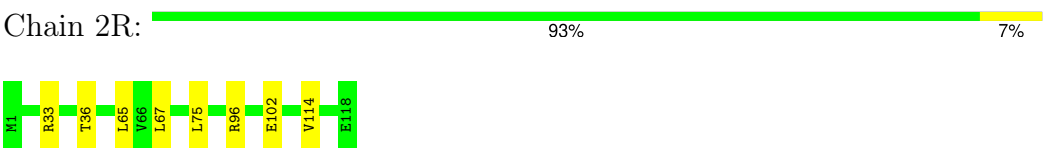
• Molecule 13: 50S ribosomal protein L17

Chain 1R:



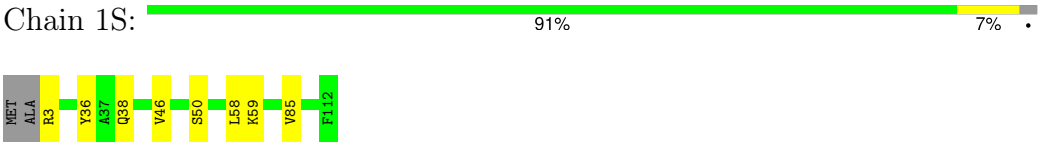
• Molecule 13: 50S ribosomal protein L17

Chain 2R:



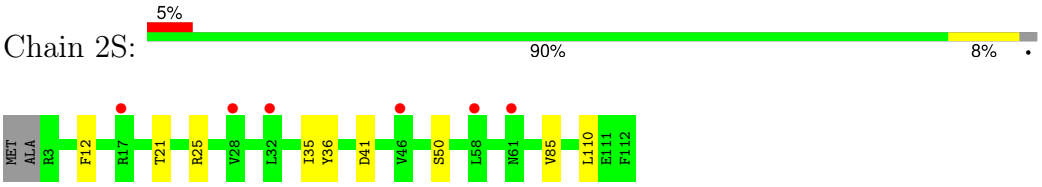
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



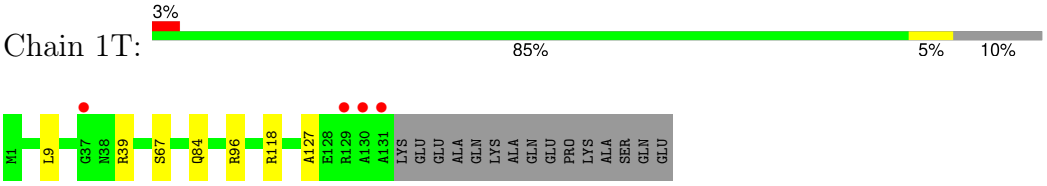
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



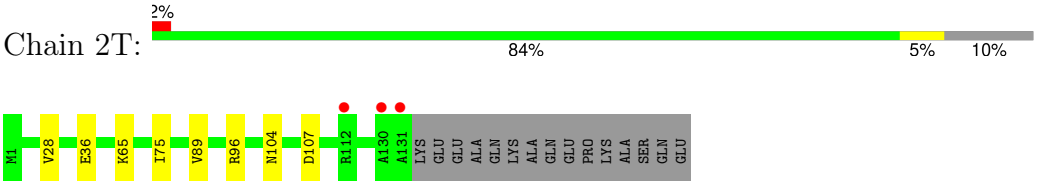
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



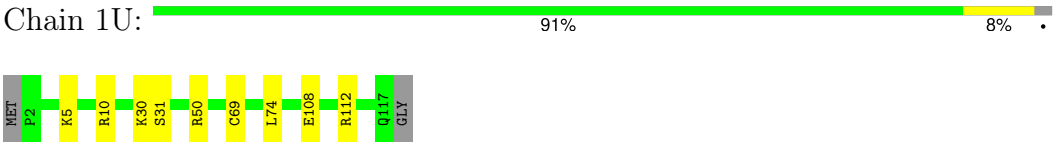
• Molecule 15: 50S ribosomal protein L19

Chain 2T:



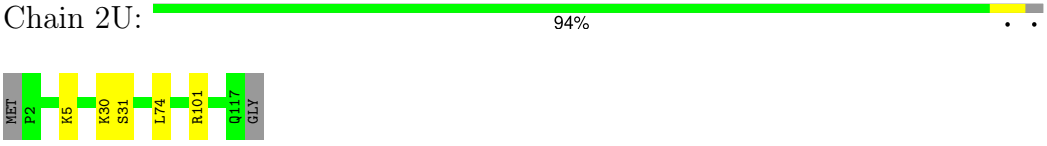
• Molecule 16: 50S ribosomal protein L20

Chain 1U:



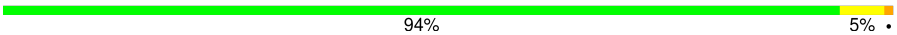
• Molecule 16: 50S ribosomal protein L20

Chain 2U:



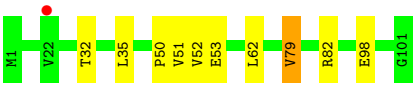
• Molecule 17: 50S ribosomal protein L21

Chain 1V:



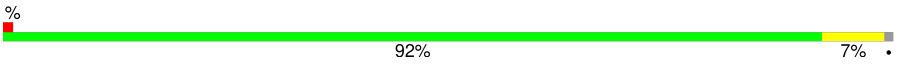
• Molecule 17: 50S ribosomal protein L21

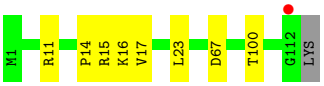
Chain 2V:



• Molecule 18: 50S ribosomal protein L22

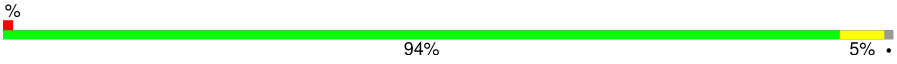
Chain 1W:

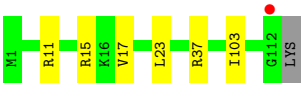




• Molecule 18: 50S ribosomal protein L22

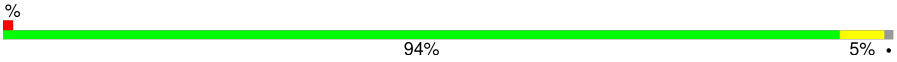
Chain 2W:





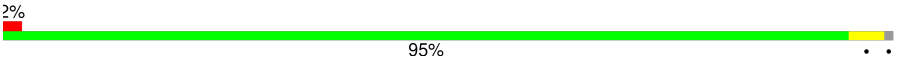
• Molecule 19: 50S ribosomal protein L23

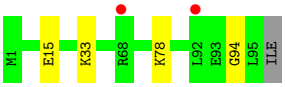
Chain 1X:



• Molecule 19: 50S ribosomal protein L23

Chain 2X:



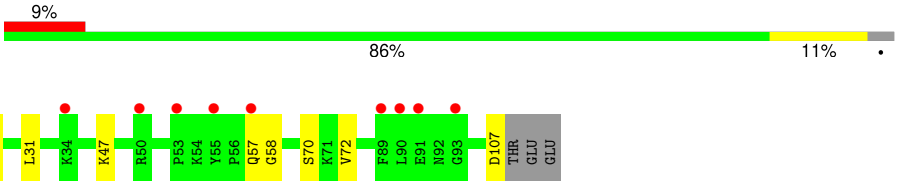


• Molecule 20: 50S ribosomal protein L24

Chain 1Y:

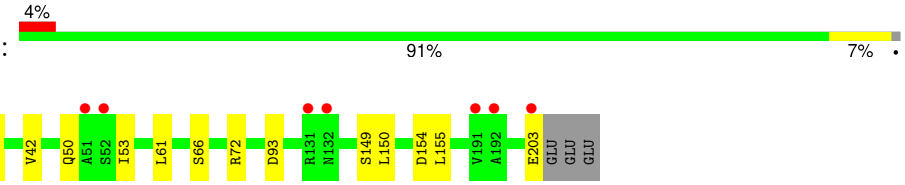
• Molecule 20: 50S ribosomal protein L24

Chain 2Y:



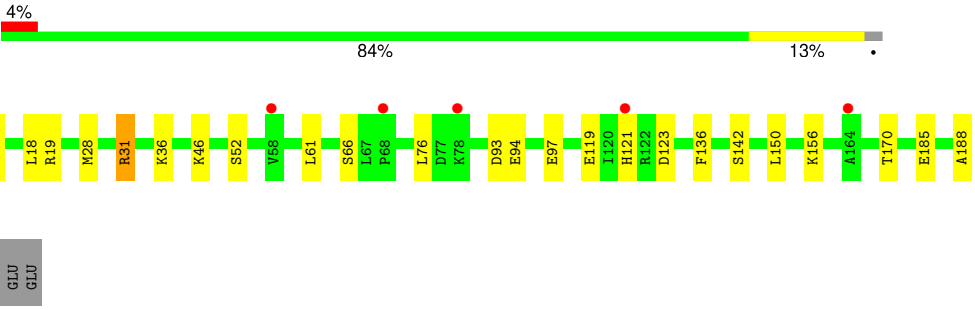
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



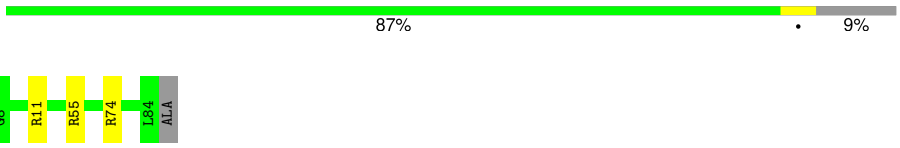
• Molecule 21: 50S ribosomal protein L25

Chain 2Z:



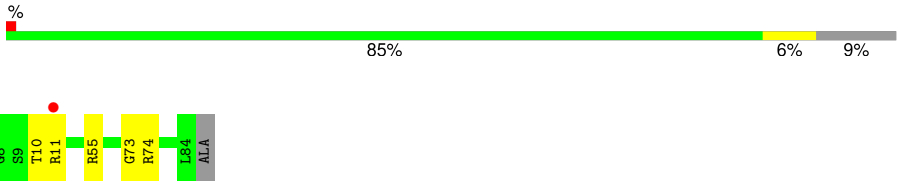
• Molecule 22: 50S ribosomal protein L27

Chain 10:



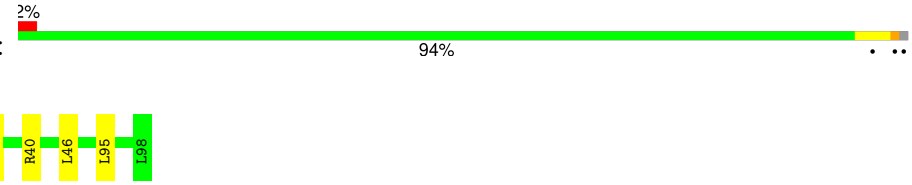
• Molecule 22: 50S ribosomal protein L27

Chain 20:



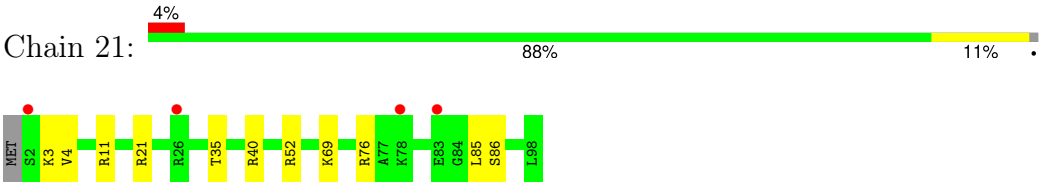
• Molecule 23: 50S ribosomal protein L28

Chain 11:



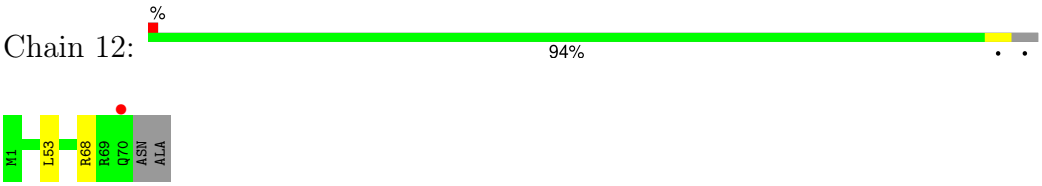
• Molecule 23: 50S ribosomal protein L28

Chain 21:



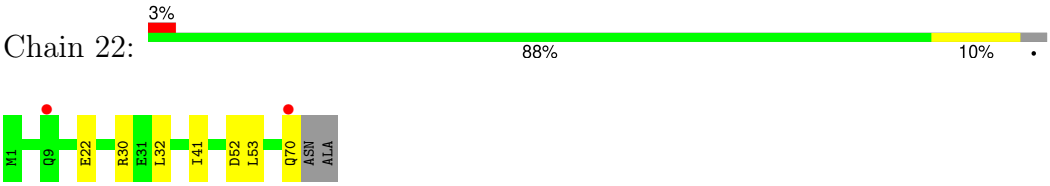
• Molecule 24: 50S ribosomal protein L29

Chain 12:



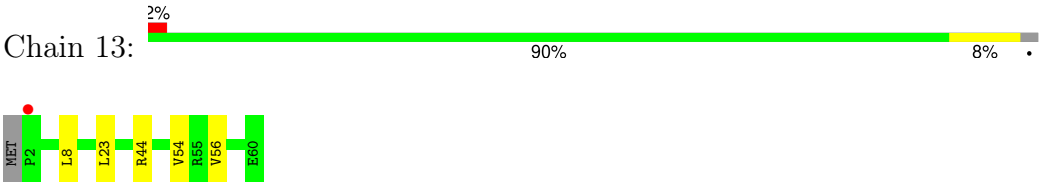
• Molecule 24: 50S ribosomal protein L29

Chain 22:



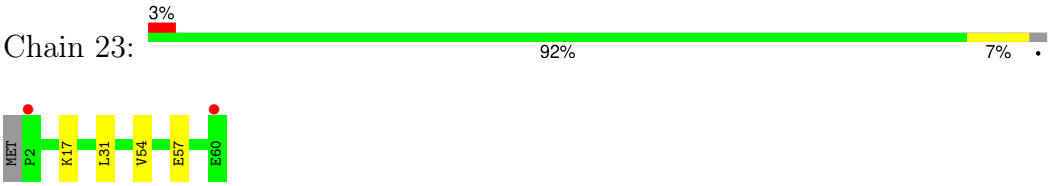
• Molecule 25: 50S ribosomal protein L30

Chain 13:



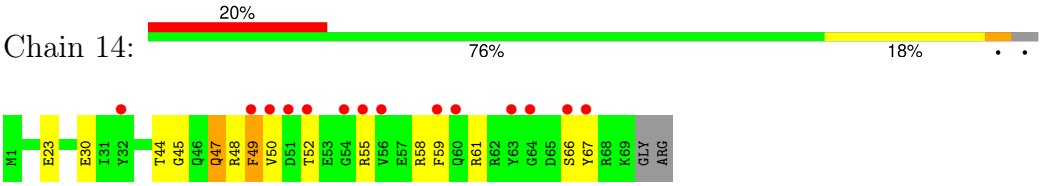
• Molecule 25: 50S ribosomal protein L30

Chain 23:



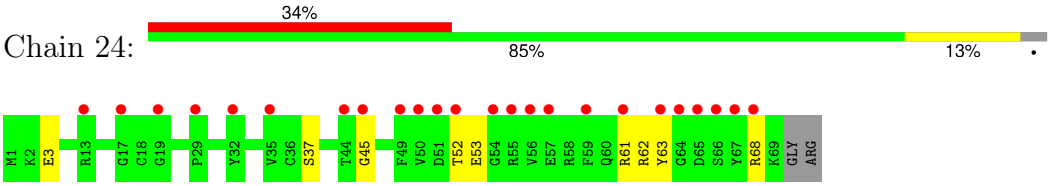
• Molecule 26: 50S ribosomal protein L31

Chain 14:



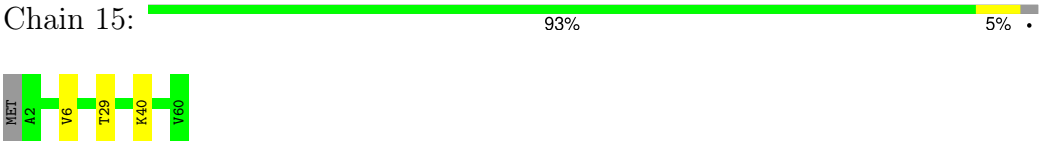
• Molecule 26: 50S ribosomal protein L31

Chain 24:



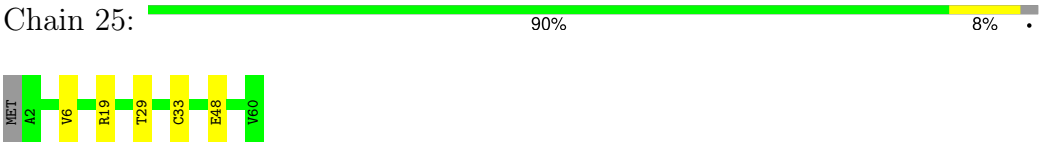
• Molecule 27: 50S ribosomal protein L32

Chain 15:



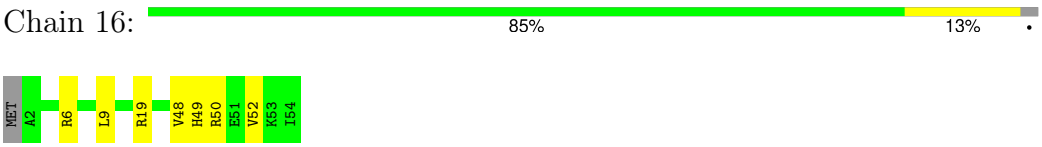
• Molecule 27: 50S ribosomal protein L32

Chain 25:



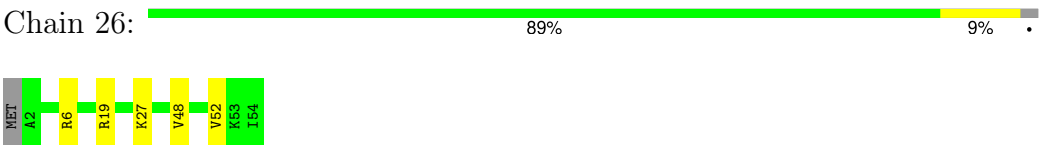
• Molecule 28: 50S ribosomal protein L33

Chain 16:



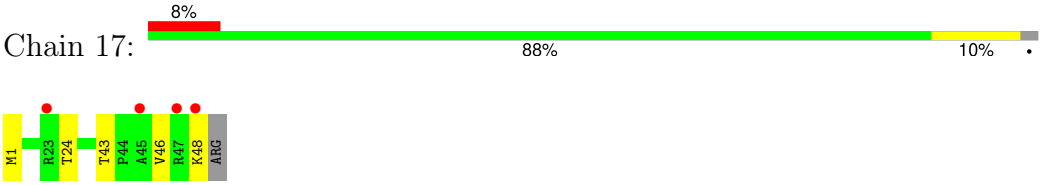
• Molecule 28: 50S ribosomal protein L33

Chain 26:



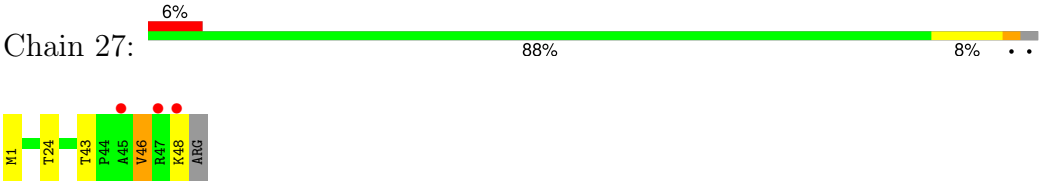
• Molecule 29: 50S ribosomal protein L34

Chain 17:



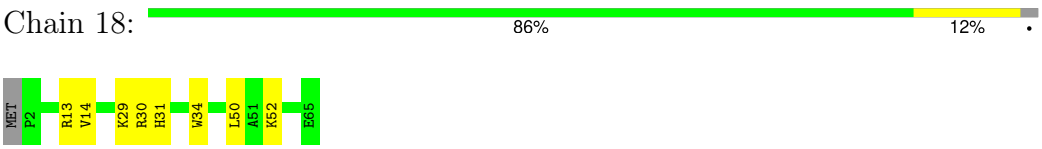
• Molecule 29: 50S ribosomal protein L34

Chain 27:



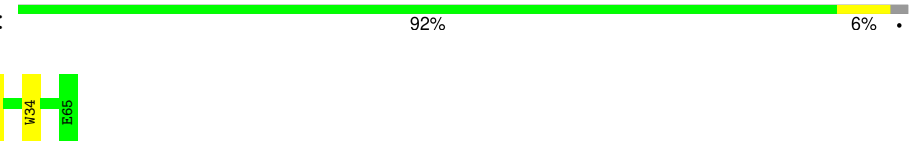
• Molecule 30: 50S ribosomal protein L35

Chain 18:



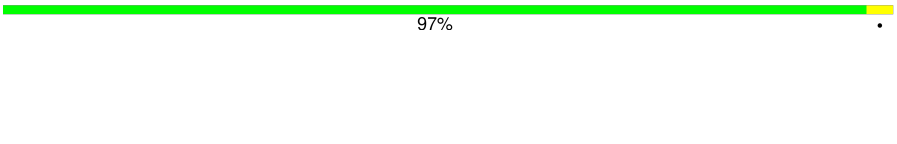
• Molecule 30: 50S ribosomal protein L35

Chain 28:



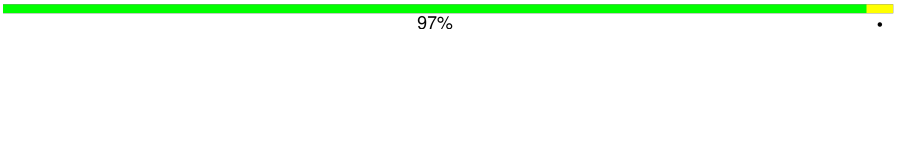
• Molecule 31: 50S ribosomal protein L36

Chain 19:



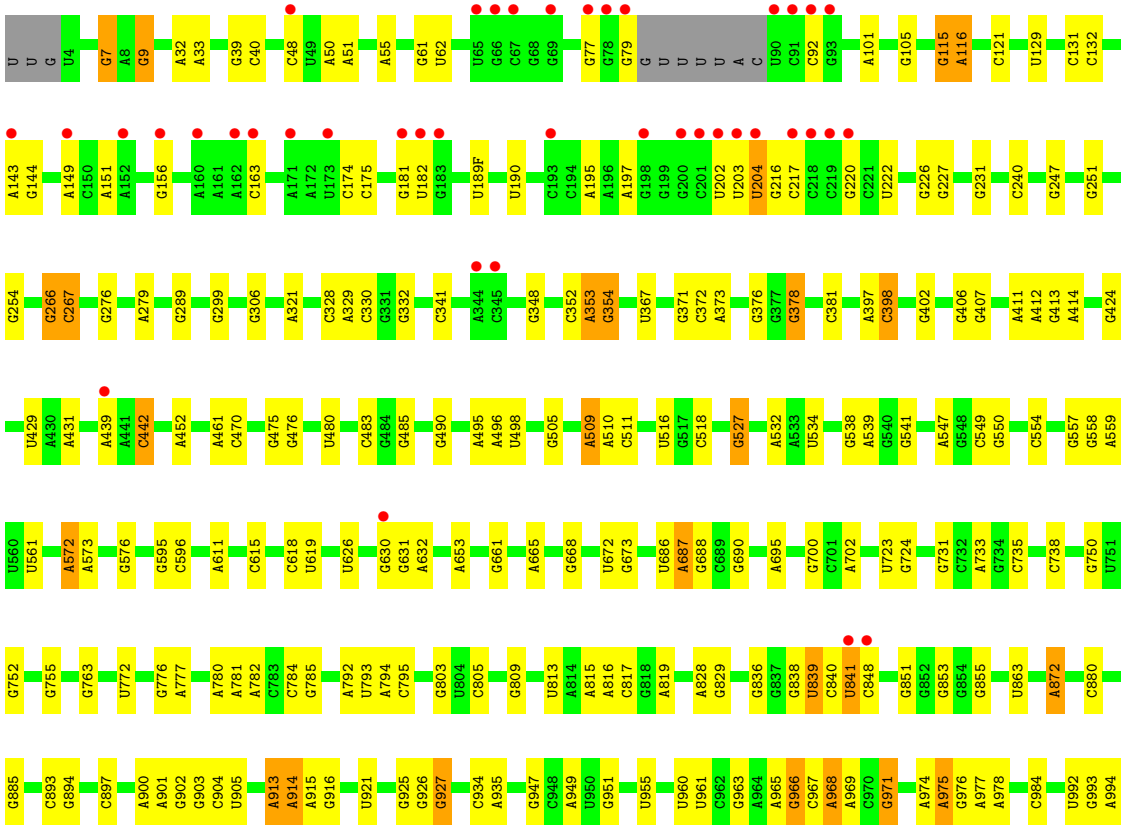
• Molecule 31: 50S ribosomal protein L36

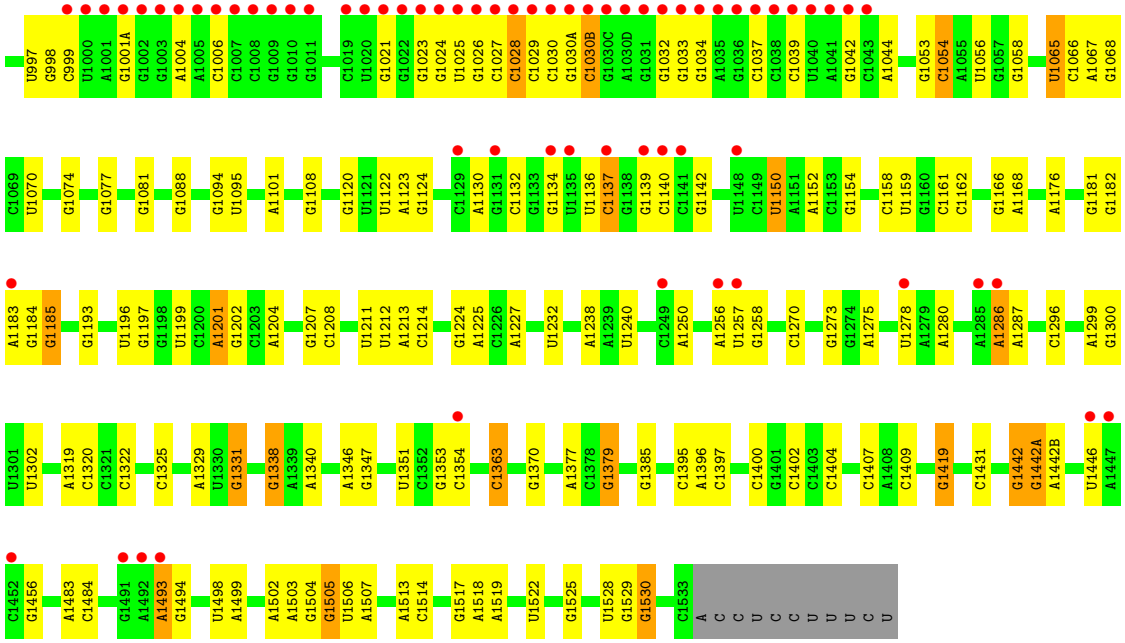
Chain 29:



• Molecule 32: 16S Ribosomal RNA

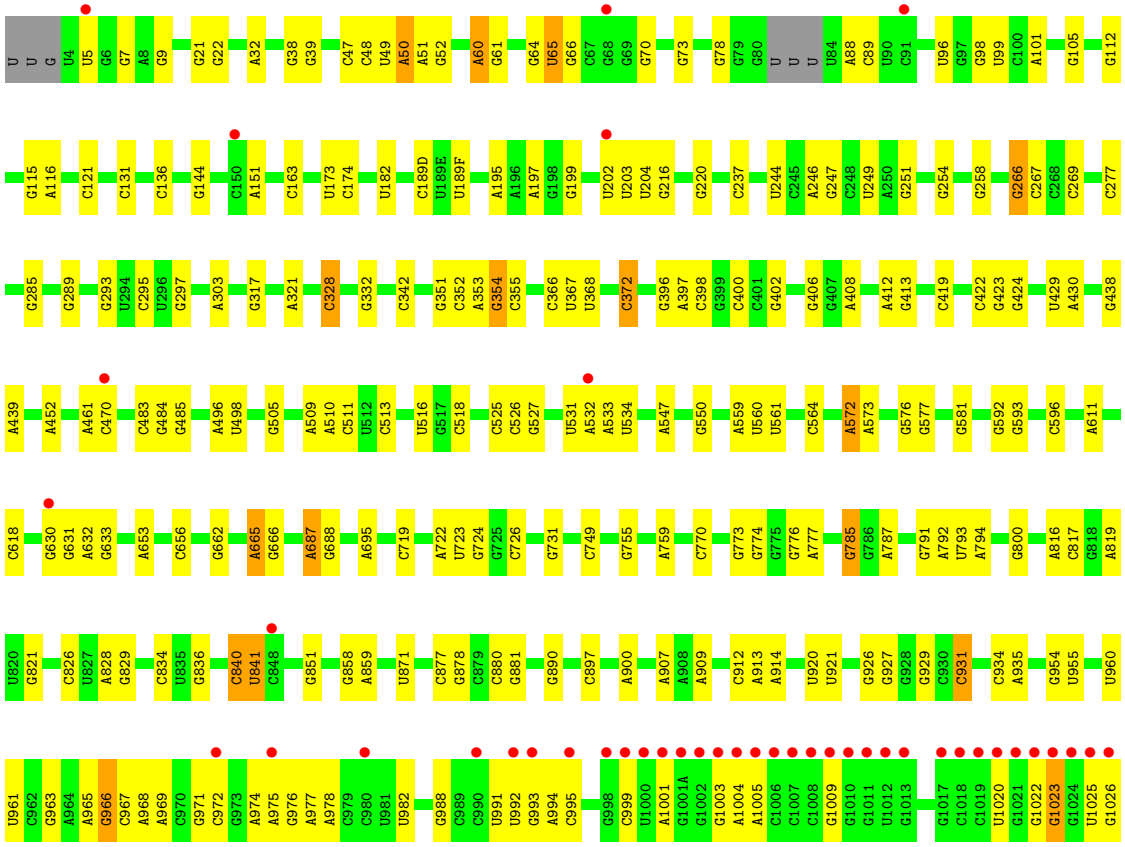
Chain 1a:





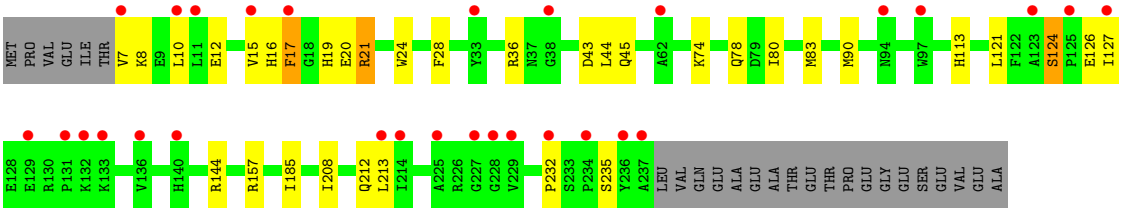
• Molecule 32: 16S Ribosomal RNA

Chain 2a:



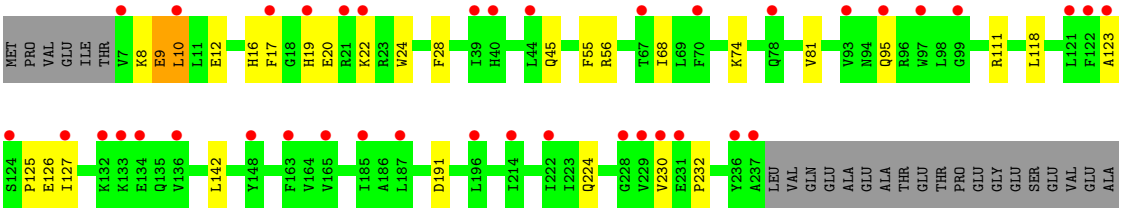
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



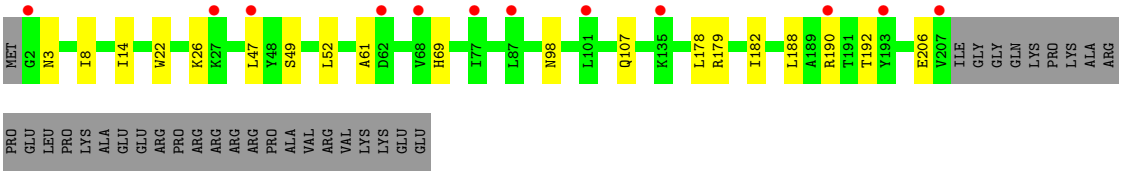
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



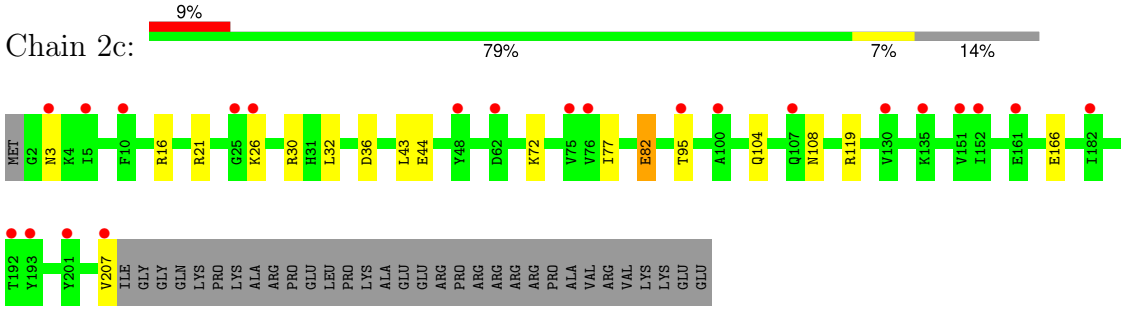
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



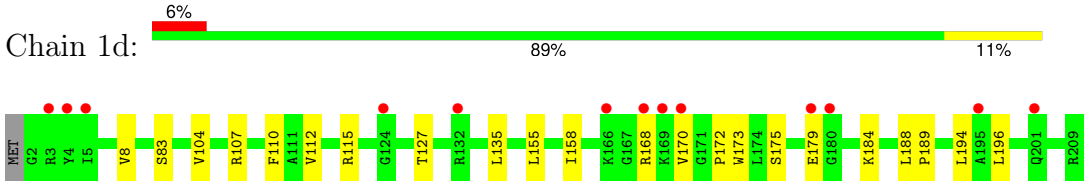
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



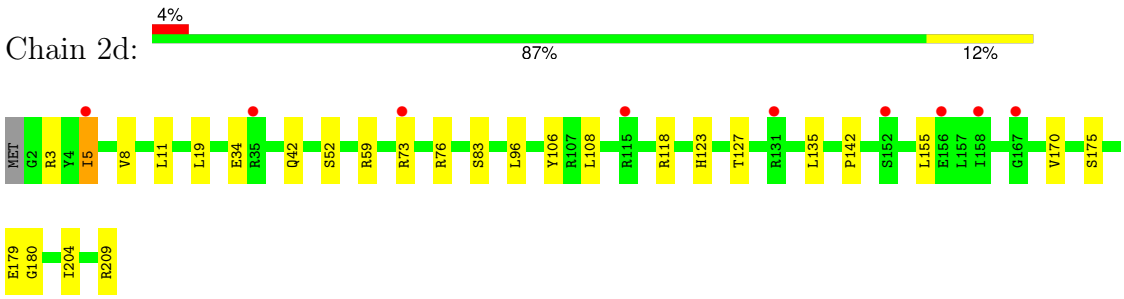
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



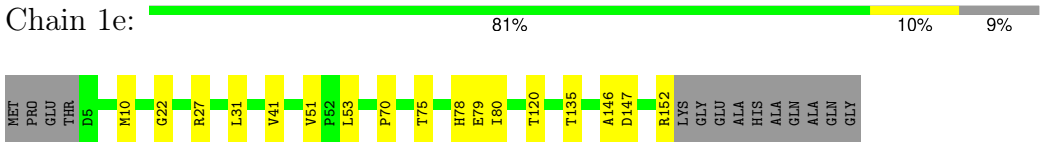
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



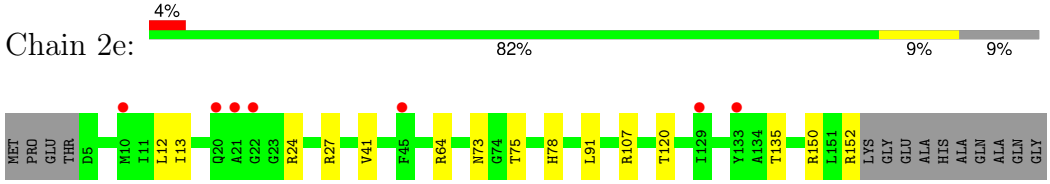
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



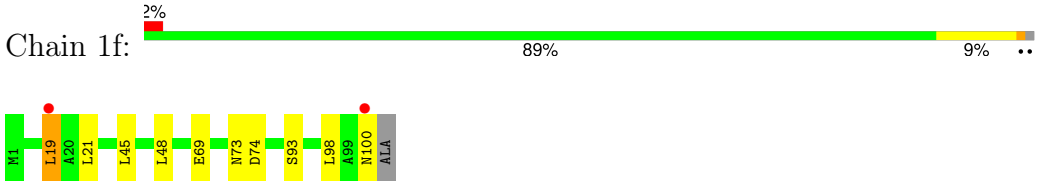
• Molecule 36: 30S ribosomal protein S5

Chain 2e:



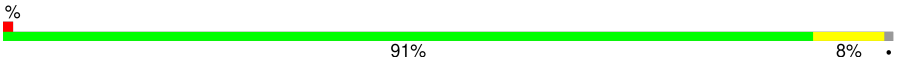
• Molecule 37: 30S ribosomal protein S6

Chain 1f:



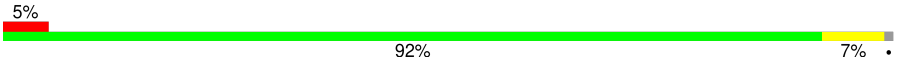
• Molecule 37: 30S ribosomal protein S6

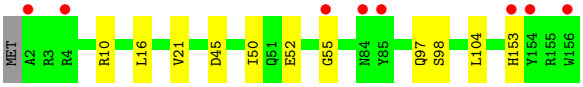
Chain 2f:



• Molecule 38: 30S ribosomal protein S7

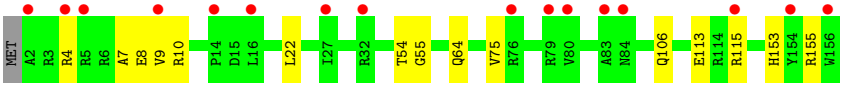
Chain 1g:





• Molecule 38: 30S ribosomal protein S7

Chain 2g:

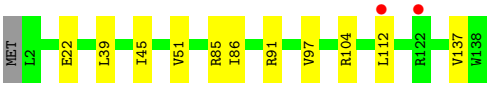


• Molecule 39: 30S ribosomal protein S8

Chain 1h:

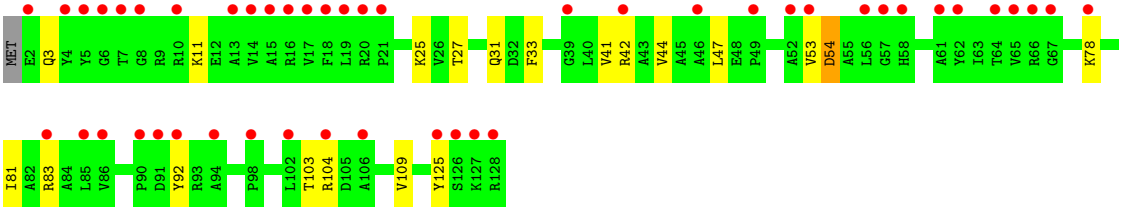
• Molecule 39: 30S ribosomal protein S8

Chain 2h:



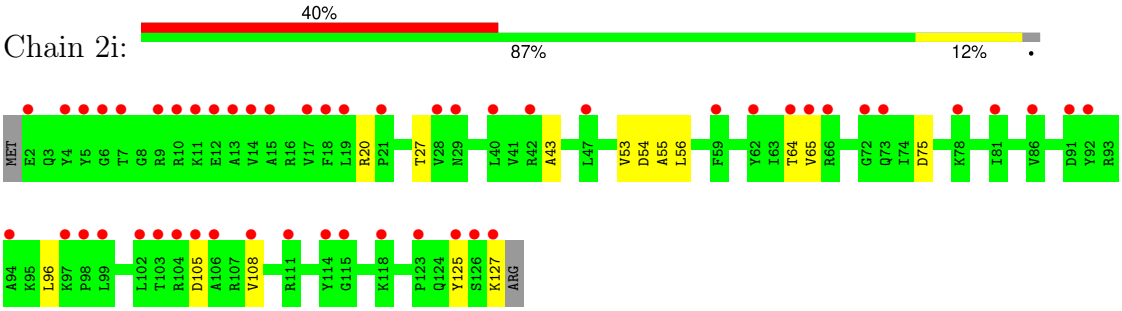
• Molecule 40: 30S ribosomal protein S9

Chain 1i:



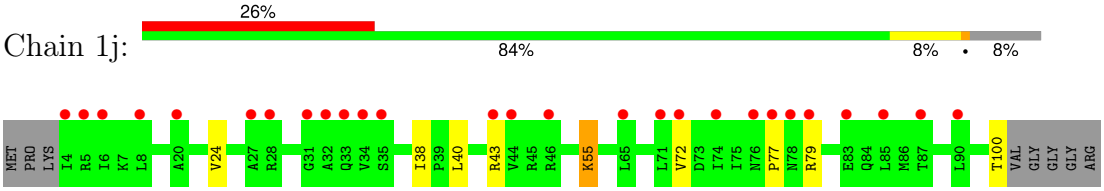
• Molecule 40: 30S ribosomal protein S9

Chain 2i:



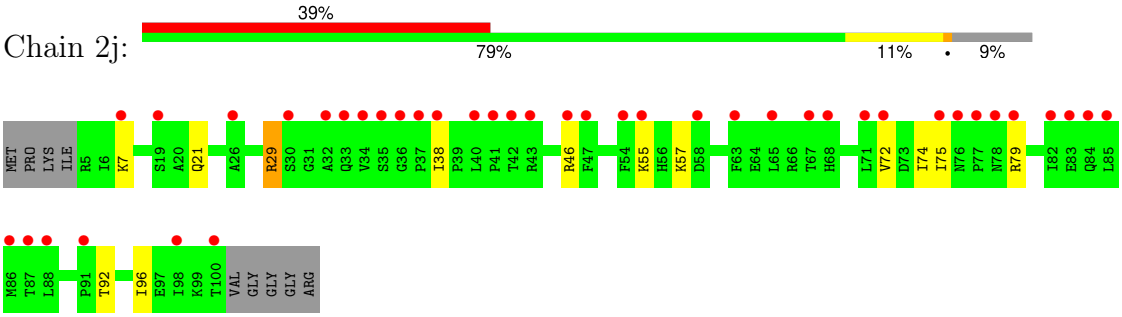
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



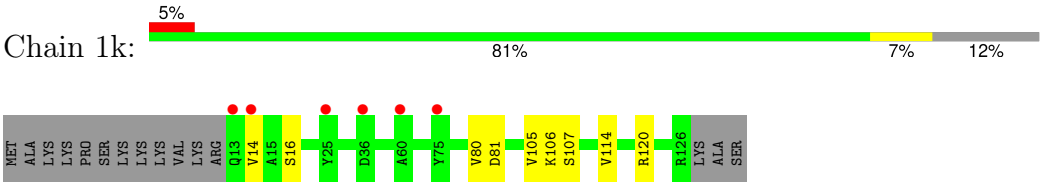
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



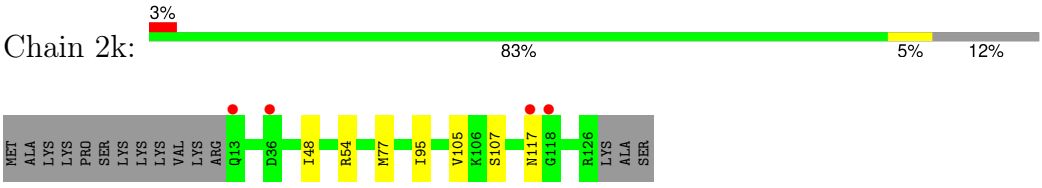
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



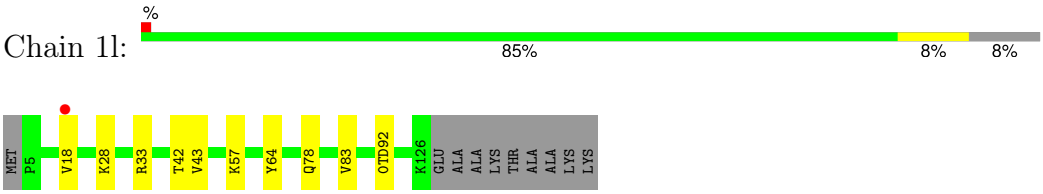
• Molecule 42: 30S ribosomal protein S11

Chain 2k:



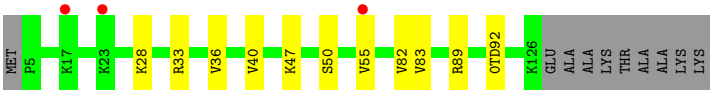
• Molecule 43: 30S ribosomal protein S12

Chain 1l:



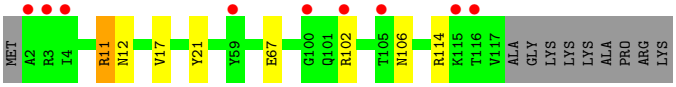
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



• Molecule 44: 30S ribosomal protein S13

Chain 1m:

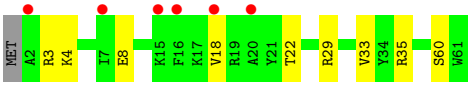


• Molecule 44: 30S ribosomal protein S13

Chain 2m:

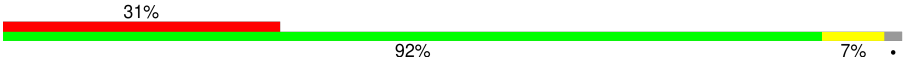
• Molecule 45: 30S ribosomal protein S14 type Z

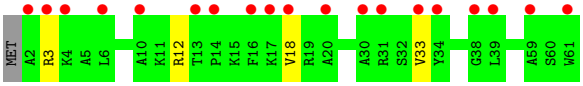
Chain 1n:



• Molecule 45: 30S ribosomal protein S14 type Z

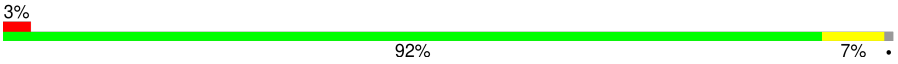
Chain 2n:

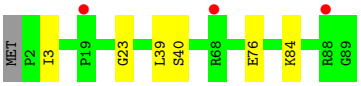




• Molecule 46: 30S ribosomal protein S15

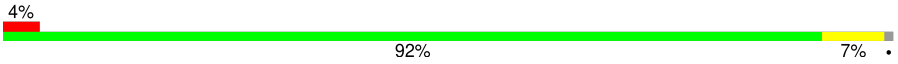
Chain 1o:

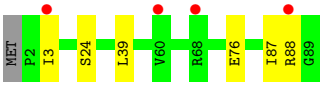




• Molecule 46: 30S ribosomal protein S15

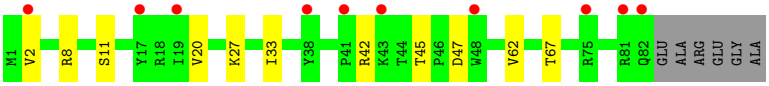
Chain 2o:





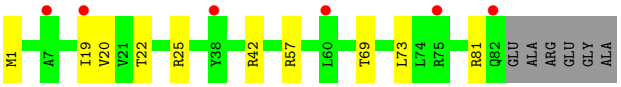
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



• Molecule 47: 30S ribosomal protein S16

Chain 2p:



• Molecule 48: 30S ribosomal protein S17

Chain 1q:

• Molecule 48: 30S ribosomal protein S17

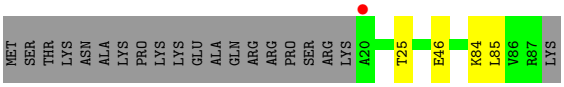
Chain 2q:

• Molecule 49: 30S ribosomal protein S18

Chain 1r:

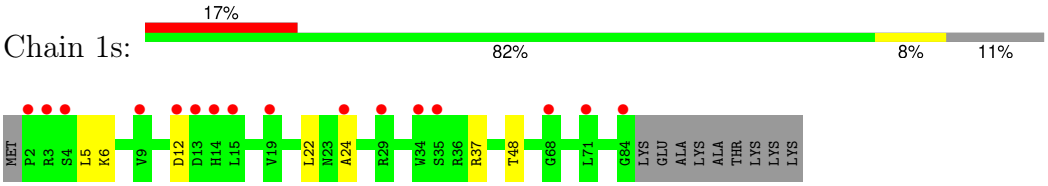
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



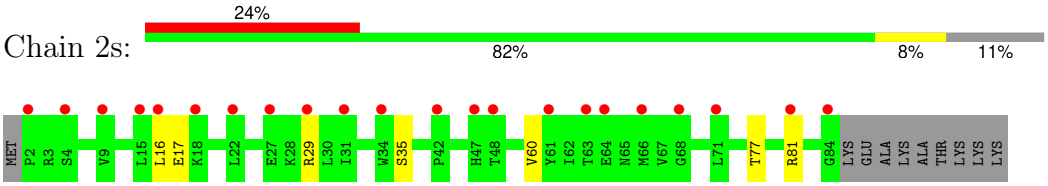
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



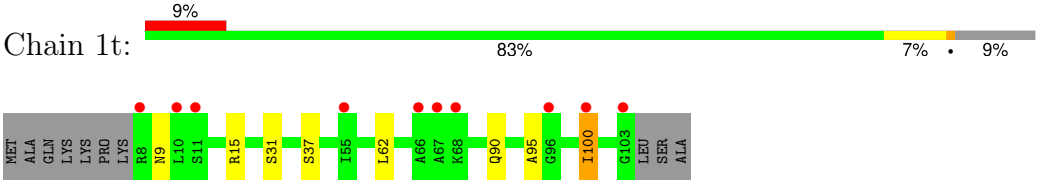
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



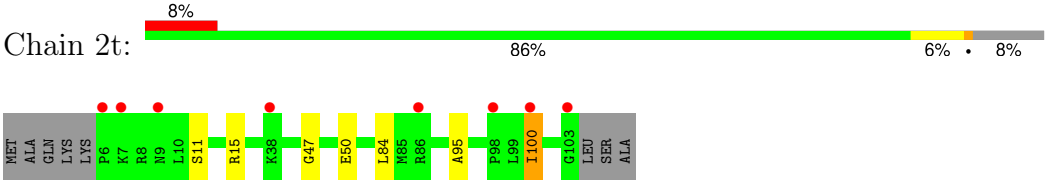
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



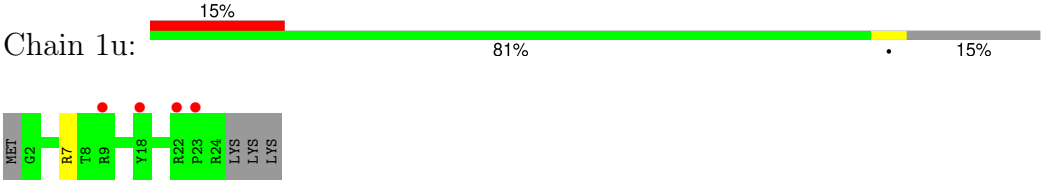
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



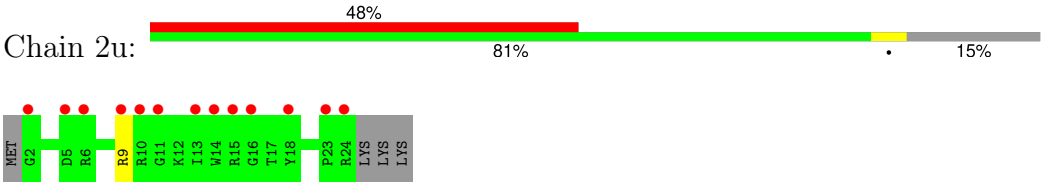
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



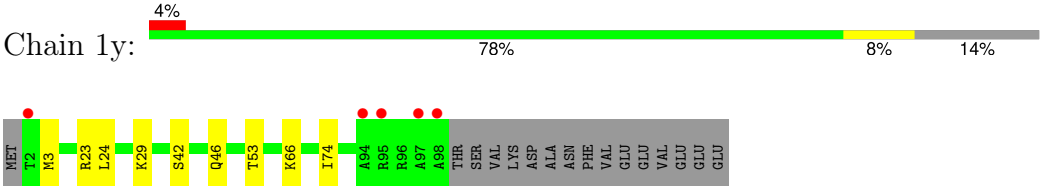
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



• Molecule 53: Ribosome-associated inhibitor A

Chain 1y:

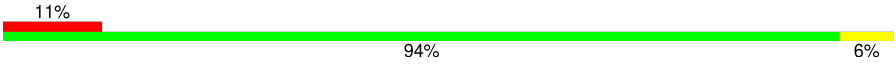


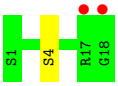
• Molecule 53: Ribosome-associated inhibitor A

Chain 2y:

• Molecule 54: Lasso peptide lariocidin

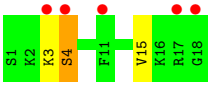
Chain 1z:





• Molecule 54: Lasso peptide lariocidin

Chain 2z:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	207.14Å 444.01Å 615.20Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	55.97 – 2.60 55.97 – 2.60	Depositor EDS
% Data completeness (in resolution range)	99.9 (55.97-2.60) 100.0 (55.97-2.60)	Depositor EDS
R_{merge}	0.26	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.24 (at 2.62Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.202 , 0.252 0.200 , 0.249	Depositor DCC
R_{free} test set	86084 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	44.1	Xtriage
Anisotropy	0.067	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.32 , 53.3	EDS
L-test for twinning[2]	$< \|L\| > = 0.46$, $< L^2 > = 0.29$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	298738	wwPDB-VP
Average B, all atoms (Å^2)	53.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.49% 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: SF4, MG, 4OC, OMG, ZN, 5MU, MA6, MPD, PSU, 2MA, 0TD, 2MG, 5MC, UR3, G7M, M2G, OMC, OMU

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	1.17	57/69031 (0.1%)	1.59	1224/107754 (1.1%)
1	2A	0.95	23/68903 (0.0%)	1.41	643/107552 (0.6%)
2	1B	0.92	1/2876 (0.0%)	1.43	22/4486 (0.5%)
2	2B	0.72	0/2878	1.27	13/4490 (0.3%)
3	1D	0.65	0/2181	0.82	2/2940 (0.1%)
3	2D	0.56	0/2186	0.72	1/2944 (0.0%)
4	1E	0.62	0/1592	0.75	0/2149
4	2E	0.52	0/1592	0.67	0/2149
5	1F	0.60	0/1619	0.79	3/2193 (0.1%)
5	2F	0.50	0/1615	0.69	0/2188
6	1G	0.49	0/1451	0.64	0/1961
6	2G	0.43	0/1449	0.58	0/1957
7	1H	0.53	0/1356	0.72	0/1834
7	2H	0.46	0/1350	0.59	0/1826
8	1I	0.48	0/1109	0.68	0/1512
8	2I	0.43	0/1091	0.59	0/1490
9	1N	0.67	0/1148	0.85	2/1547 (0.1%)
9	2N	0.46	0/1144	0.64	0/1543
10	1O	0.65	0/943	0.77	2/1269 (0.2%)
10	2O	0.56	0/943	0.71	1/1269 (0.1%)
11	1P	0.61	0/1152	0.73	0/1533
11	2P	0.53	0/1152	0.69	0/1533
12	1Q	0.62	0/1143	0.74	0/1527
12	2Q	0.51	0/1143	0.64	0/1527
13	1R	0.64	0/982	0.78	0/1312
13	2R	0.50	0/982	0.75	0/1312
14	1S	0.54	0/887	0.69	0/1180
14	2S	0.46	0/880	0.62	0/1172
15	1T	0.56	0/1105	0.75	1/1477 (0.1%)
15	2T	0.51	0/1097	0.66	0/1468
16	1U	0.68	1/977 (0.1%)	0.78	1/1301 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.50	0/977	0.68	0/1301
17	1V	0.66	0/786	0.77	0/1053
17	2V	0.48	0/782	0.65	0/1049
18	1W	0.64	0/897	0.73	0/1205
18	2W	0.58	0/897	0.69	0/1205
19	1X	0.64	0/764	0.70	0/1025
19	2X	0.52	0/764	0.67	0/1025
20	1Y	0.65	0/823	0.74	1/1099 (0.1%)
20	2Y	0.56	0/823	0.69	0/1100
21	1Z	0.50	0/1620	0.65	0/2200
21	2Z	0.45	0/1590	0.62	0/2162
22	10	0.63	0/616	0.77	0/821
22	20	0.48	0/616	0.64	0/821
23	11	0.60	0/761	0.71	1/1013 (0.1%)
23	21	0.60	0/766	0.73	0/1018
24	12	0.60	0/590	0.71	0/781
24	22	0.49	0/594	0.59	0/785
25	13	0.62	0/474	0.77	0/635
25	23	0.45	0/469	0.65	0/630
26	14	0.50	0/559	0.66	0/754
26	24	0.60	0/549	0.64	0/741
27	15	0.63	0/473	0.74	0/639
27	25	0.56	0/469	0.77	1/635 (0.2%)
28	16	0.68	0/460	0.82	0/613
28	26	0.55	0/456	0.67	0/608
29	17	0.70	0/426	0.83	0/561
29	27	0.56	0/426	0.72	0/561
30	18	0.65	0/525	0.80	1/691 (0.1%)
30	28	0.51	0/525	0.62	0/691
31	19	0.72	0/310	0.76	0/407
31	29	0.53	0/310	0.67	0/407
32	1a	0.82	2/35795 (0.0%)	1.33	238/55864 (0.4%)
32	2a	0.79	5/35890 (0.0%)	1.30	189/56012 (0.3%)
33	1b	0.48	0/1876	0.63	0/2533
33	2b	0.51	0/1860	0.64	0/2518
34	1c	0.46	0/1582	0.59	0/2137
34	2c	0.45	0/1566	0.59	0/2119
35	1d	0.46	0/1695	0.63	0/2274
35	2d	0.43	0/1698	0.63	0/2277
36	1e	0.47	0/1149	0.64	0/1548
36	2e	0.43	0/1149	0.66	0/1548
37	1f	0.48	0/827	0.64	1/1120 (0.1%)
37	2f	0.49	0/829	0.64	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.47	0/1254	0.57	0/1683
38	2g	0.48	0/1248	0.58	0/1676
39	1h	0.43	0/1118	0.63	0/1506
39	2h	0.44	0/1108	0.60	0/1494
40	1i	0.46	0/1005	0.63	0/1351
40	2i	0.48	0/985	0.57	0/1329
41	1j	0.46	0/732	0.58	0/993
41	2j	0.44	0/723	0.57	0/984
42	1k	0.49	0/849	0.65	0/1150
42	2k	0.44	0/848	0.66	0/1149
43	1l	0.47	0/937	0.70	1/1260 (0.1%)
43	2l	0.45	0/937	0.66	0/1260
44	1m	0.44	0/924	0.61	0/1242
44	2m	0.43	0/905	0.61	0/1217
45	1n	0.48	0/501	0.56	0/664
45	2n	0.48	0/501	0.61	0/664
46	1o	0.46	0/739	0.63	0/985
46	2o	0.45	0/739	0.60	0/985
47	1p	0.46	0/697	0.70	0/939
47	2p	0.48	0/693	0.65	0/935
48	1q	0.45	0/836	0.66	0/1117
48	2q	0.48	0/836	0.66	1/1117 (0.1%)
49	1r	0.44	0/560	0.65	0/746
49	2r	0.48	0/560	0.70	0/746
50	1s	0.43	0/663	0.63	0/895
50	2s	0.47	0/660	0.55	0/893
51	1t	0.45	0/734	0.59	0/969
51	2t	0.41	0/736	0.57	0/976
52	1u	0.38	0/203	0.67	0/266
52	2u	0.42	0/203	0.59	0/266
53	1y	0.44	0/776	0.60	0/1048
53	2y	0.43	0/761	0.57	0/1030
54	1z	0.50	0/133	0.73	0/168
54	2z	0.53	0/133	0.65	0/168
All	All	0.86	89/310207 (0.0%)	1.28	2349/463575 (0.5%)

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
11	1P	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
11	2P	0	1
14	1S	0	1
17	1V	0	1
19	1X	0	1
26	14	0	1
29	17	0	1
29	27	0	1
30	18	0	1
33	1b	0	1
33	2b	0	1
35	1d	0	1
43	2l	0	1
47	2p	0	1
All	All	0	14

All (89) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	330	A	N9-C4	-9.11	1.32	1.37
1	1A	1649	G	N7-C5	-7.11	1.34	1.39
1	1A	2062	A	N9-C4	6.87	1.42	1.37
2	1B	100	A	N3-C4	-6.83	1.30	1.34
1	1A	1791	A	N9-C4	-6.81	1.33	1.37
1	1A	570	G	C6-O6	-6.60	1.18	1.24
1	2A	1046	A	N9-C4	6.59	1.41	1.37
1	1A	1067	A	N9-C4	6.54	1.41	1.37
1	1A	2790	A	N9-C4	6.54	1.41	1.37
1	1A	2764	A	N9-C4	-6.39	1.34	1.37
1	2A	1378	A	N9-C4	-6.33	1.34	1.37
1	1A	1310	G	C5-C4	-6.18	1.34	1.38
1	1A	2685	G	C6-O6	-6.16	1.18	1.24
32	2a	1003	G	N9-C4	6.15	1.42	1.38
1	2A	2805	G	N9-C4	6.11	1.42	1.38
1	1A	1073	A	N9-C4	5.99	1.41	1.37
1	1A	1775	U	C2-N3	-5.99	1.33	1.37
1	1A	1791	A	C5-C4	-5.96	1.34	1.38
32	2a	1030(D)	A	N9-C4	5.96	1.41	1.37
1	2A	1076	C	N1-C2	5.96	1.46	1.40
1	1A	2028	U	C4-O4	-5.89	1.19	1.23
1	1A	2593	U	C4-O4	-5.81	1.19	1.23
1	1A	1648	C	N3-C4	-5.77	1.29	1.33
1	2A	126	A	N9-C4	-5.77	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	2057	A	N9-C4	-5.74	1.34	1.37
32	2a	1499	A	N9-C4	-5.73	1.34	1.37
1	1A	2506	U	N1-C2	5.71	1.43	1.38
1	2A	2506	U	N1-C2	5.69	1.43	1.38
1	1A	2587	A	N3-C4	-5.67	1.31	1.34
1	1A	2593	U	C2-N3	-5.65	1.33	1.37
1	1A	2011	U	C2-O2	-5.61	1.17	1.22
1	1A	2062	A	N3-C4	5.61	1.38	1.34
1	2A	1082	U	N1-C2	5.61	1.43	1.38
1	1A	1326	U	C4-O4	-5.58	1.19	1.23
1	1A	113	G	N9-C4	-5.55	1.33	1.38
1	1A	944	G	C8-N7	-5.55	1.27	1.30
1	1A	2249	U	C2-N3	-5.54	1.33	1.37
1	1A	299	A	N3-C4	-5.54	1.31	1.34
32	1a	1483	A	N9-C4	-5.50	1.34	1.37
1	1A	2765	A	N7-C5	-5.45	1.35	1.39
1	1A	1775	U	C2-O2	-5.45	1.17	1.22
1	1A	1393	A	N3-C4	-5.44	1.31	1.34
1	1A	2021	C	N1-C6	-5.43	1.33	1.37
1	2A	2821	A	N9-C4	-5.42	1.34	1.37
1	1A	1063	G	N3-C4	5.42	1.39	1.35
1	1A	1610	A	N9-C4	-5.41	1.34	1.37
1	1A	2450	A	N9-C4	-5.40	1.34	1.37
1	1A	442	G	N7-C5	-5.40	1.36	1.39
1	1A	1131	G	C6-N1	-5.38	1.35	1.39
1	2A	2602	A	N3-C4	5.36	1.38	1.34
1	1A	2078	C	N1-C6	-5.35	1.33	1.37
1	1A	229	A	N9-C4	5.35	1.41	1.37
1	2A	2104	G	N1-C2	-5.34	1.33	1.37
1	2A	1091	G	N9-C4	5.32	1.42	1.38
1	2A	2593	U	C4-O4	-5.32	1.19	1.23
1	1A	1045	A	N3-C4	5.31	1.38	1.34
1	2A	910	A	C6-N1	-5.31	1.31	1.35
1	2A	741	G	N3-C4	-5.30	1.31	1.35
1	1A	2685	G	C6-N1	-5.29	1.35	1.39
1	2A	1773	A	N7-C5	-5.29	1.36	1.39
1	1A	675	A	C6-N1	-5.28	1.31	1.35
1	1A	2319	G	N9-C4	-5.25	1.33	1.38
1	2A	1935	G	C5-C4	-5.25	1.34	1.38
16	1U	69	CYS	CB-SG	-5.23	1.73	1.81
1	2A	1620	G	N7-C5	-5.22	1.36	1.39
32	2a	1279	A	N9-C4	5.22	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	2393	A	N9-C4	-5.20	1.34	1.37
1	2A	633	A	N9-C4	-5.19	1.34	1.37
1	1A	1067	A	N3-C4	5.18	1.38	1.34
1	1A	2638	G	N7-C5	-5.16	1.36	1.39
1	2A	2819	G	N3-C4	-5.14	1.31	1.35
1	1A	1250	G	C5-C4	-5.12	1.34	1.38
32	2a	965	A	N9-C4	-5.11	1.34	1.37
1	1A	1190	G	N7-C5	-5.11	1.36	1.39
1	2A	1077	A	N9-C4	5.10	1.41	1.37
1	1A	2090	G	C5-C4	-5.08	1.34	1.38
1	1A	751	A	N3-C4	-5.08	1.31	1.34
1	1A	953	A	N9-C4	-5.05	1.34	1.37
1	1A	655	A	N9-C4	-5.04	1.34	1.37
1	1A	983	A	N9-C4	-5.04	1.34	1.37
32	1a	1493	A	N9-C4	5.03	1.40	1.37
1	2A	2014	A	N9-C4	-5.03	1.34	1.37
1	1A	205	G	C5-C6	-5.03	1.37	1.42
1	1A	1981	A	C6-N1	-5.03	1.32	1.35
1	1A	2445	G	C6-N1	-5.03	1.36	1.39
1	1A	2642	G	C5-C4	-5.03	1.34	1.38
1	1A	2319	G	N3-C4	-5.02	1.31	1.35
1	2A	444	C	N1-C2	-5.01	1.35	1.40
1	1A	34	C	N1-C6	5.01	1.40	1.37

All (2349) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1648	C	O5'-P-OP1	-18.86	88.07	110.70
1	2A	2104	G	C5-C6-O6	16.06	138.24	128.60
1	1A	330	A	C2-N3-C4	-15.63	102.79	110.60
1	1A	1086	A	N1-C6-N6	-15.55	109.27	118.60
1	1A	999	U	O5'-P-OP2	-14.20	92.92	105.70
1	1A	2023	G	O5'-P-OP1	-13.96	93.13	105.70
1	1A	570	G	C5-C6-O6	-13.90	120.26	128.60
1	1A	330	A	N1-C2-N3	13.54	136.07	129.30
1	1A	1075	C	N1-C2-O2	13.25	126.85	118.90
1	1A	512	G	O4'-C1'-N9	12.66	118.33	108.20
1	1A	2593	U	N3-C4-O4	-12.65	110.54	119.40
1	2A	2185	C	N1-C2-O2	12.54	126.42	118.90
2	1B	57	A	N9-C4-C5	-12.53	100.79	105.80
1	2A	2104	G	N1-C6-O6	-12.37	112.48	119.90
9	1N	25	ARG	NE-CZ-NH1	-12.35	114.12	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2685	G	N1-C6-O6	-12.35	112.49	119.90
2	1B	98	G	O5'-P-OP2	-12.34	94.60	105.70
1	2A	1352	U	O5'-P-OP1	-11.98	94.92	105.70
1	1A	1352	U	O5'-P-OP1	-11.89	95.00	105.70
1	1A	2406	U	O5'-P-OP1	-11.44	95.41	105.70
1	2A	1092	C	N1-C2-O2	11.29	125.67	118.90
32	1a	1505	G	O5'-P-OP2	-11.23	95.59	105.70
32	1a	558	G	O5'-P-OP1	-11.17	95.65	105.70
1	2A	1298	C	O5'-P-OP2	-11.10	95.71	105.70
1	2A	2104	G	N3-C2-N2	11.06	127.64	119.90
1	1A	330	A	C5-N7-C8	-10.97	98.42	103.90
32	2a	254	G	O5'-P-OP1	-10.78	96.00	105.70
1	1A	205	G	N9-C4-C5	-10.69	101.12	105.40
1	2A	1076	C	C6-N1-C2	-10.65	116.04	120.30
1	1A	1372	U	N3-C4-O4	10.52	126.76	119.40
1	1A	1647	G	O5'-P-OP1	-10.48	96.27	105.70
1	2A	1368	G	O5'-P-OP2	-10.46	96.28	105.70
1	1A	2036	C	O5'-P-OP1	-10.41	96.33	105.70
1	1A	2496	C	O5'-P-OP2	-10.31	96.42	105.70
1	1A	1075	C	C2-N1-C1'	10.12	129.93	118.80
1	1A	2319	G	N3-C4-N9	-10.07	119.96	126.00
1	1A	2319	G	N3-C4-C5	10.01	133.61	128.60
1	1A	588	U	O5'-P-OP2	-9.91	96.78	105.70
1	1A	787	U	O5'-P-OP1	-9.91	96.78	105.70
1	2A	1272	A	O5'-P-OP2	-9.91	96.78	105.70
1	1A	948	G	O5'-P-OP1	-9.90	96.79	105.70
1	2A	1071	G	N7-C8-N9	9.88	118.04	113.10
1	2A	1639	U	O5'-P-OP2	-9.84	96.84	105.70
1	1A	2430	A	O5'-P-OP2	-9.84	96.84	105.70
1	1A	2490	G	C8-N9-C4	9.82	110.33	106.40
1	2A	1673	U	O5'-P-OP1	-9.79	96.89	105.70
1	1A	226	G	O4'-C1'-N9	9.76	116.01	108.20
1	2A	1071	G	C8-N9-C4	-9.71	102.52	106.40
1	1A	615	G	N1-C6-O6	-9.70	114.08	119.90
1	2A	1074	G	O5'-P-OP2	-9.63	97.03	105.70
1	1A	614	U	C5-C4-O4	9.63	131.68	125.90
1	1A	2371	G	C5-C6-O6	-9.60	122.84	128.60
1	1A	51	G	C5-C6-O6	-9.59	122.84	128.60
1	1A	1004	C	N1-C2-O2	-9.56	113.16	118.90
1	1A	1609	A	C8-N9-C4	9.52	109.61	105.80
1	2A	2427	C	C6-N1-C2	9.47	124.09	120.30
1	1A	846	C	C6-N1-C2	9.42	124.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	205	G	C4-C5-N7	9.40	114.56	110.80
1	1A	1086	A	C5-C6-N6	9.39	131.22	123.70
1	1A	1776	G	O5'-P-OP2	-9.38	97.25	105.70
1	2A	249	C	C6-N1-C2	9.36	124.05	120.30
1	1A	1372	U	C5-C4-O4	-9.30	120.32	125.90
1	1A	530	G	C5-C6-O6	-9.17	123.10	128.60
2	1B	91	C	C6-N1-C2	9.16	123.97	120.30
1	1A	2137	C	C6-N1-C2	-9.12	116.65	120.30
1	1A	115	C	C6-N1-C2	9.11	123.94	120.30
1	1A	1189	A	O5'-P-OP2	-9.09	97.52	105.70
1	1A	1336	A	O5'-P-OP2	-9.09	97.52	105.70
32	1a	254	G	O5'-P-OP1	-9.07	97.54	105.70
32	1a	921	U	C2-N3-C4	9.06	132.44	127.00
1	1A	386	G	C5-C6-O6	-9.02	123.19	128.60
1	1A	205	G	N3-C2-N2	9.01	126.21	119.90
1	1A	2289	G	N1-C6-O6	8.99	125.29	119.90
1	2A	2061	G	O5'-P-OP2	-8.98	97.62	105.70
32	2a	1520	G	O5'-P-OP2	-8.98	97.62	105.70
1	2A	793	A	O5'-P-OP2	-8.97	97.63	105.70
1	2A	467	G	O5'-P-OP2	-8.96	97.64	105.70
2	2B	115	G	C8-N9-C4	8.95	109.98	106.40
1	1A	575	A	O5'-P-OP1	-8.93	97.67	105.70
1	2A	1092	C	N3-C2-O2	-8.90	115.67	121.90
1	1A	686	G	N9-C4-C5	-8.90	101.84	105.40
1	1A	205	G	C8-N9-C4	8.89	109.95	106.40
32	2a	21	G	O5'-P-OP1	-8.86	97.73	105.70
1	2A	512	G	O4'-C1'-N9	8.82	115.25	108.20
5	1F	74	ARG	NE-CZ-NH1	8.78	124.69	120.30
1	1A	2179	C	C2-N1-C1'	8.78	128.46	118.80
1	1A	2371	G	C5-C6-N1	8.78	115.89	111.50
1	1A	1330	C	C6-N1-C2	8.78	123.81	120.30
1	1A	1559	G	C4-N9-C1'	-8.77	115.10	126.50
1	1A	1574	C	O5'-P-OP2	-8.76	97.81	105.70
1	1A	1958	C	N1-C2-O2	-8.75	113.65	118.90
1	1A	2611	U	O5'-P-OP1	-8.75	97.83	105.70
1	2A	1771	C	C6-N1-C2	8.73	123.79	120.30
32	1a	299	G	C5-C6-O6	-8.70	123.38	128.60
1	1A	2023	G	O5'-P-OP2	8.70	121.14	110.70
32	1a	1150	U	C2-N3-C4	8.70	132.22	127.00
1	1A	1772	G	C8-N9-C4	8.68	109.87	106.40
1	1A	1006	C	C5-C6-N1	-8.65	116.67	121.00
32	1a	781	A	C8-N9-C4	8.62	109.25	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1075	C	C6-N1-C1'	-8.60	110.48	120.80
1	1A	34	C	O4'-C1'-N1	8.60	115.08	108.20
1	1A	846	C	C5-C6-N1	-8.59	116.70	121.00
1	1A	1349	A	O5'-P-OP1	-8.58	97.98	105.70
1	2A	2104	G	N1-C2-N2	-8.57	108.49	116.20
1	1A	1697	G	C5-C6-O6	-8.56	123.46	128.60
1	1A	2319	G	C2-N3-C4	-8.56	107.62	111.90
1	1A	1828	G	O5'-P-OP2	-8.55	98.00	105.70
1	1A	330	A	N7-C8-N9	8.53	118.06	113.80
1	1A	2021	C	C6-N1-C2	8.50	123.70	120.30
1	1A	805	G	C8-N9-C4	8.49	109.80	106.40
32	1a	1158	C	C4-C5-C6	8.48	121.64	117.40
1	1A	2789	C	N1-C2-O2	-8.46	113.82	118.90
1	1A	2691	C	C5-C6-N1	-8.45	116.77	121.00
32	1a	1150	U	C5-C4-O4	8.45	130.97	125.90
1	1A	1697	G	N1-C6-O6	8.43	124.96	119.90
32	1a	299	G	N1-C6-O6	8.42	124.95	119.90
1	1A	2848	G	O4'-C1'-N9	8.41	114.93	108.20
1	1A	2137	C	N3-C2-O2	-8.41	116.02	121.90
1	1A	946	G	O5'-P-OP1	-8.40	98.14	105.70
1	1A	494	G	C5-C6-O6	-8.39	123.57	128.60
1	2A	1075	C	N1-C2-O2	8.38	123.92	118.90
1	1A	762	U	C5-C4-O4	-8.37	120.88	125.90
1	1A	539	G	C8-N9-C4	8.37	109.75	106.40
1	1A	448	U	O5'-P-OP2	-8.36	98.17	105.70
1	1A	1696	G	O5'-P-OP2	-8.36	98.18	105.70
1	2A	1094	U	O4'-C1'-N1	8.36	114.88	108.20
1	1A	1192	G	C8-N9-C4	8.34	109.74	106.40
1	1A	2137	C	N3-C4-C5	-8.34	118.57	121.90
1	1A	530	G	N3-C2-N2	-8.33	114.07	119.90
32	2a	909	A	C8-N9-C4	8.32	109.13	105.80
2	2B	6	C	C6-N1-C2	8.31	123.62	120.30
1	1A	1395	A	C8-N9-C4	8.29	109.11	105.80
1	2A	2157	G	C8-N9-C4	-8.29	103.08	106.40
1	1A	185	U	C5-C6-N1	-8.28	118.56	122.70
32	1a	376	G	C8-N9-C4	8.24	109.70	106.40
1	1A	2249	U	N3-C4-O4	-8.24	113.64	119.40
32	2a	438	G	O5'-P-OP2	-8.22	98.30	105.70
1	1A	2496	C	C6-N1-C2	8.22	123.59	120.30
1	1A	1660	C	O5'-P-OP2	-8.20	98.32	105.70
1	1A	615	G	C5-C6-O6	8.20	133.52	128.60
32	2a	819	A	N1-C6-N6	8.19	123.52	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1993	U	O5'-P-OP1	-8.19	98.33	105.70
1	1A	1385	G	O4'-C1'-N9	8.17	114.73	108.20
1	2A	2318	G	O4'-C1'-N9	8.17	114.73	108.20
1	1A	671	C	N3-C4-N4	-8.16	112.28	118.00
1	1A	1786	A	C8-N9-C4	8.16	109.07	105.80
1	1A	2406	U	O5'-P-OP2	8.16	120.49	110.70
1	2A	1696	G	O5'-P-OP2	-8.16	98.36	105.70
1	2A	2185	C	C2-N3-C4	8.15	123.97	119.90
1	1A	801	G	O5'-P-OP2	-8.14	98.37	105.70
32	1a	1530	G	N1-C6-O6	8.14	124.79	119.90
1	1A	2028	U	N3-C4-C5	8.14	119.48	114.60
1	2A	845	G	O4'-C1'-N9	8.14	114.71	108.20
1	2A	2357	U	O5'-P-OP2	-8.14	98.38	105.70
1	2A	1076	C	N1-C2-O2	8.14	123.78	118.90
32	2a	266	G	P-O3'-C3'	8.14	129.46	119.70
1	1A	2246	G	C8-N9-C4	8.12	109.65	106.40
1	2A	1071	G	C5-N7-C8	-8.12	100.24	104.30
32	2a	1003	G	N3-C4-C5	-8.11	124.54	128.60
1	2A	1111	A	O4'-C1'-N9	8.11	114.69	108.20
1	1A	1432	C	C6-N1-C2	-8.11	117.06	120.30
1	1A	1258	C	N1-C2-O2	-8.09	114.05	118.90
1	2A	679	C	N1-C2-O2	-8.08	114.05	118.90
1	1A	771	G	C8-N9-C4	8.08	109.63	106.40
1	1A	2154	G	N3-C2-N2	8.08	125.55	119.90
32	1a	1396	A	C6-N1-C2	8.08	123.44	118.60
32	1a	1442	G	C2-N3-C4	8.07	115.94	111.90
1	1A	1428	C	C6-N1-C2	8.05	123.52	120.30
1	1A	2568	C	C5-C4-N4	-8.05	114.56	120.20
32	2a	770	C	C6-N1-C2	8.05	123.52	120.30
1	1A	1559	G	C6-C5-N7	8.03	135.22	130.40
1	1A	301	G	C8-N9-C4	8.01	109.60	106.40
1	2A	2186	G	C5-C6-O6	8.00	133.40	128.60
1	1A	2137	C	C2-N1-C1'	7.99	127.59	118.80
32	1a	1181	G	N3-C4-C5	7.98	132.59	128.60
1	1A	2506	U	C2-N1-C1'	7.98	127.27	117.70
1	2A	2206	G	C4-N9-C1'	-7.96	116.16	126.50
1	1A	1139	G	O5'-P-OP2	-7.95	98.55	105.70
1	1A	1332	G	C5-C6-O6	-7.95	123.83	128.60
1	2A	2684	U	O5'-P-OP2	-7.94	98.55	105.70
32	2a	266	G	N3-C4-C5	-7.93	124.64	128.60
1	1A	805	G	N9-C4-C5	-7.92	102.23	105.40
1	1A	615	G	O5'-P-OP2	-7.91	98.58	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1373	A	O5'-P-OP1	7.89	120.17	110.70
1	1A	2060	A	C8-N9-C4	7.89	108.95	105.80
1	1A	1637	A	C8-N9-C4	7.88	108.95	105.80
1	2A	2611	U	O5'-P-OP1	-7.88	98.61	105.70
1	1A	733	G	N1-C6-O6	7.87	124.62	119.90
1	2A	1075	C	N3-C2-O2	-7.86	116.40	121.90
1	1A	2495	G	N1-C6-O6	7.84	124.60	119.90
1	2A	588	U	O5'-P-OP2	-7.84	98.65	105.70
32	1a	1204	A	C6-N1-C2	7.82	123.29	118.60
32	2a	70	G	C5-C6-N1	-7.81	107.59	111.50
32	1a	1137	C	C5-C6-N1	7.80	124.90	121.00
1	1A	2154	G	C6-N1-C2	7.79	129.78	125.10
1	1A	1648	C	N3-C4-N4	-7.76	112.57	118.00
1	2A	2032	G	N7-C8-N9	-7.76	109.22	113.10
1	1A	570	G	C5-C6-N1	7.75	115.37	111.50
1	1A	704	G	O4'-C1'-N9	7.74	114.39	108.20
1	1A	2593	U	C5-C4-O4	7.74	130.54	125.90
1	1A	1180	C	C6-N1-C2	7.72	123.39	120.30
1	2A	1082	U	N3-C2-O2	-7.72	116.80	122.20
1	1A	386	G	N1-C6-O6	7.72	124.53	119.90
1	2A	961	C	N3-C2-O2	7.70	127.29	121.90
1	1A	690	G	C8-N9-C4	7.70	109.48	106.40
1	1A	570	G	C4-C5-N7	7.69	113.88	110.80
32	2a	483	C	C6-N1-C2	7.68	123.37	120.30
1	2A	2206	G	C8-N9-C4	7.68	109.47	106.40
1	1A	51	G	N1-C6-O6	7.68	124.51	119.90
1	1A	2463	C	N3-C4-C5	7.67	124.97	121.90
1	1A	530	G	N1-C6-O6	7.65	124.49	119.90
1	2A	24	G	C8-N9-C4	7.64	109.46	106.40
1	1A	2592	G	O5'-P-OP1	-7.64	98.83	105.70
1	2A	2566	A	O5'-P-OP2	-7.62	98.84	105.70
32	1a	1137	C	C6-N1-C2	-7.62	117.25	120.30
1	2A	2032	G	C8-N9-C4	7.62	109.45	106.40
1	2A	1253	A	C5-N7-C8	7.61	107.70	103.90
32	1a	1123	A	C6-N1-C2	7.59	123.16	118.60
1	1A	1416	G	O4'-C1'-N9	7.58	114.27	108.20
1	1A	1177	A	O5'-P-OP1	-7.58	98.88	105.70
1	1A	2070	G	C2-N3-C4	-7.58	108.11	111.90
1	2A	941	A	O5'-P-OP1	-7.58	98.88	105.70
1	1A	1300	U	P-O3'-C3'	7.56	128.78	119.70
1	1A	1599	C	N3-C4-N4	-7.56	112.71	118.00
1	2A	2382	G	C8-N9-C4	7.56	109.42	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	808	G	O5'-P-OP2	-7.54	98.91	105.70
1	2A	961	C	C6-N1-C2	7.54	123.32	120.30
1	1A	2691	C	C6-N1-C2	7.54	123.32	120.30
1	1A	2269	A	O5'-P-OP1	-7.54	98.92	105.70
1	1A	845	G	O4'-C1'-N9	7.53	114.22	108.20
1	2A	800	A	O5'-P-OP1	-7.53	98.93	105.70
32	1a	1522	U	OP1-P-OP2	7.52	130.89	119.60
1	1A	1187	G	N1-C6-O6	-7.52	115.39	119.90
32	2a	1003	G	C2-N3-C4	7.52	115.66	111.90
1	1A	194	G	O5'-P-OP2	-7.52	98.93	105.70
1	1A	2187	G	C5-C6-O6	-7.52	124.09	128.60
32	2a	99	U	N1-C2-O2	-7.51	117.54	122.80
32	1a	1056	U	C5-C4-O4	7.51	130.40	125.90
1	1A	2678	C	N3-C4-C5	-7.50	118.90	121.90
32	1a	784	C	C6-N1-C2	7.49	123.30	120.30
1	1A	1559	G	C8-N9-C1'	7.49	136.73	127.00
1	2A	2774	C	N1-C2-O2	7.48	123.39	118.90
1	1A	1795	C	N3-C4-C5	7.48	124.89	121.90
32	1a	143	A	C8-N9-C4	7.48	108.79	105.80
1	2A	1937	A	O4'-C1'-N9	7.48	114.18	108.20
1	1A	1086	A	C6-C5-N7	7.47	137.53	132.30
1	1A	2319	G	C5-N7-C8	-7.47	100.57	104.30
1	2A	1579	A	N1-C6-N6	7.47	123.08	118.60
1	1A	512	G	N7-C8-N9	-7.46	109.37	113.10
1	2A	1688	U	C5-C6-N1	-7.46	118.97	122.70
1	1A	2319	G	O4'-C1'-N9	7.46	114.16	108.20
1	1A	35	G	C8-N9-C4	7.45	109.38	106.40
1	2A	214	G	O4'-C1'-N9	7.45	114.16	108.20
1	2A	1076	C	N3-C2-O2	-7.45	116.68	121.90
1	2A	1082	U	N1-C2-O2	7.45	128.01	122.80
1	1A	1075	C	N3-C2-O2	-7.45	116.69	121.90
32	1a	1056	U	C2-N3-C4	7.44	131.47	127.00
1	1A	1284	A	O5'-P-OP2	-7.44	99.00	105.70
32	1a	1030(B)	C	C6-N1-C2	-7.43	117.33	120.30
1	2A	1380	G	O5'-P-OP2	-7.43	99.02	105.70
1	1A	2079	U	N1-C2-N3	7.42	119.35	114.90
32	2a	1042	G	C8-N9-C4	7.42	109.37	106.40
1	1A	963	U	O5'-P-OP2	-7.41	99.03	105.70
1	1A	2242	G	O5'-P-OP1	-7.41	99.03	105.70
1	1A	2791	C	C6-N1-C2	-7.41	117.34	120.30
1	2A	1073	A	P-O3'-C3'	7.41	128.59	119.70
1	1A	1379	A	C8-N9-C4	7.40	108.76	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1058	G	C5-C6-O6	-7.40	124.16	128.60
1	1A	1064	C	C5-C6-N1	7.39	124.70	121.00
1	1A	83	G	C4-C5-N7	7.39	113.75	110.80
1	1A	702	G	C5-C6-O6	-7.39	124.17	128.60
1	2A	2319	G	N3-C4-N9	-7.37	121.58	126.00
1	1A	614	U	N3-C2-O2	-7.37	117.04	122.20
1	1A	1703	G	O5'-P-OP2	-7.37	99.07	105.70
1	1A	330	A	C4-C5-N7	7.37	114.39	110.70
1	1A	1573	G	N1-C6-O6	7.37	124.32	119.90
1	1A	846	C	C2-N3-C4	-7.37	116.22	119.90
1	1A	2457	U	N1-C2-O2	-7.36	117.65	122.80
1	1A	2153	G	N3-C4-N9	-7.34	121.60	126.00
32	1a	190	U	C5-C6-N1	7.33	126.37	122.70
1	1A	886	C	N1-C2-O2	7.33	123.30	118.90
1	1A	2427	C	C6-N1-C2	7.33	123.23	120.30
1	2A	2602	A	P-O3'-C3'	7.33	128.49	119.70
1	2A	2022	U	C5-C4-O4	-7.33	121.50	125.90
1	1A	1667	G	C8-N9-C4	7.32	109.33	106.40
1	1A	570	G	N1-C6-O6	7.32	124.29	119.90
1	1A	2435	A	O5'-P-OP1	-7.32	99.11	105.70
32	1a	763	G	C5-C6-O6	7.31	132.99	128.60
1	1A	1829	A	O5'-P-OP2	-7.31	99.12	105.70
1	1A	2539	C	C6-N1-C2	7.30	123.22	120.30
32	1a	781	A	N9-C4-C5	-7.30	102.88	105.80
1	1A	780	G	O5'-P-OP2	-7.29	99.14	105.70
1	1A	1424	G	C8-N9-C4	7.28	109.31	106.40
1	1A	521	G	C8-N9-C4	7.27	109.31	106.40
30	18	50	LEU	CB-CG-CD1	-7.27	98.65	111.00
1	2A	2689	U	P-O3'-C3'	7.26	128.41	119.70
1	2A	2104	G	C6-N1-C2	7.26	129.46	125.10
1	2A	383	U	O4'-C1'-N1	7.25	114.00	108.20
1	1A	1823	G	C8-N9-C4	7.25	109.30	106.40
1	1A	2598	A	C8-N9-C4	7.25	108.70	105.80
1	1A	1061	U	N1-C2-O2	7.24	127.87	122.80
1	2A	662	G	C8-N9-C4	7.24	109.30	106.40
2	1B	97	G	OP2-P-O3'	7.23	121.11	105.20
1	1A	2028	U	N3-C4-O4	-7.22	114.34	119.40
1	2A	2509	G	N1-C6-O6	7.22	124.23	119.90
1	1A	1559	G	N3-C4-N9	-7.20	121.68	126.00
1	1A	2593	U	N3-C4-C5	7.19	118.91	114.60
1	2A	2282	G	N1-C6-O6	7.19	124.21	119.90
1	1A	1257	C	N3-C4-C5	-7.19	119.03	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2430	A	C2-N3-C4	7.19	114.19	110.60
1	2A	2070	G	O5'-P-OP2	-7.18	99.23	105.70
1	1A	1236	G	C8-N9-C4	7.18	109.27	106.40
1	1A	805	G	N3-C2-N2	7.17	124.92	119.90
1	2A	2478	A	C8-N9-C4	7.16	108.67	105.80
1	2A	1972	A	O5'-P-OP1	-7.16	99.25	105.70
1	1A	827	U	OP2-P-O3'	7.16	120.95	105.20
32	1a	40	C	O5'-P-OP2	-7.16	99.26	105.70
1	1A	45	C	O5'-P-OP1	-7.15	99.27	105.70
32	1a	1181	G	C6-N1-C2	7.14	129.39	125.10
1	1A	1648	C	C5-C4-N4	7.14	125.20	120.20
1	2A	784	A	C8-N9-C4	7.13	108.65	105.80
1	1A	400	G	N1-C6-O6	7.13	124.18	119.90
1	1A	1573	G	C5-C6-O6	-7.12	124.33	128.60
32	1a	997	U	C5-C4-O4	7.12	130.17	125.90
32	1a	1528	U	O5'-P-OP2	-7.12	99.29	105.70
1	1A	671	C	C5-C4-N4	7.11	125.17	120.20
1	1A	2490	G	N9-C4-C5	-7.10	102.56	105.40
1	1A	2461	C	C2-N3-C4	-7.10	116.35	119.90
1	2A	830	G	O5'-P-OP1	-7.10	99.31	105.70
1	1A	2873	A	OP1-P-OP2	7.09	130.24	119.60
1	1A	1791	A	O5'-P-OP1	-7.08	99.33	105.70
1	1A	2662	A	C8-N9-C4	-7.08	102.97	105.80
1	1A	793	A	O5'-P-OP2	-7.08	99.33	105.70
1	1A	729	G	O5'-P-OP2	-7.08	99.33	105.70
1	1A	645	C	C5-C6-N1	7.07	124.54	121.00
1	2A	1913	A	C5-C6-N1	-7.07	114.16	117.70
1	1A	1943	U	C5-C6-N1	-7.07	119.17	122.70
1	1A	2007	C	N3-C4-C5	7.07	124.73	121.90
1	1A	912	C	N3-C2-O2	-7.07	116.95	121.90
1	1A	512	G	C8-N9-C4	7.07	109.23	106.40
1	2A	205	G	C8-N9-C4	7.06	109.23	106.40
1	2A	1372	U	C5-C4-O4	-7.06	121.66	125.90
1	1A	668	G	OP2-P-O3'	7.06	120.74	105.20
1	1A	1783	A	O4'-C1'-N9	-7.06	102.55	108.20
1	1A	1276	A	C8-N9-C4	7.06	108.62	105.80
1	2A	570	G	C5-C6-O6	-7.06	124.37	128.60
32	1a	971	G	N3-C4-C5	7.05	132.13	128.60
1	2A	332	A	C8-N9-C4	7.05	108.62	105.80
1	1A	2685	G	C5-C6-N1	7.05	115.03	111.50
32	2a	878	G	C8-N9-C4	7.05	109.22	106.40
1	1A	1784	A	O5'-P-OP2	-7.05	99.36	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1187	G	N1-C6-O6	-7.05	115.67	119.90
32	1a	1123	A	C5-C6-N6	7.04	129.34	123.70
1	2A	2821	A	C2-N3-C4	-7.04	107.08	110.60
1	1A	2018	G	N1-C6-O6	7.04	124.12	119.90
1	1A	1609	A	N1-C2-N3	-7.04	125.78	129.30
1	2A	2319	G	N3-C4-C5	7.04	132.12	128.60
1	1A	117	G	N1-C6-O6	7.04	124.12	119.90
1	2A	659	C	C6-N1-C2	7.03	123.11	120.30
32	1a	1530	G	N3-C4-C5	7.03	132.12	128.60
1	1A	1348	G	N3-C2-N2	-7.03	114.98	119.90
1	2A	2140	C	C2-N3-C4	7.03	123.42	119.90
1	1A	568	U	N3-C4-C5	7.03	118.81	114.60
1	1A	2203	U	C5-C6-N1	-7.02	119.19	122.70
1	1A	2206	G	C4-C5-N7	7.02	113.61	110.80
32	1a	795	C	N1-C2-O2	-7.02	114.69	118.90
1	2A	2805	G	N3-C4-C5	-7.01	125.09	128.60
1	1A	36	G	O5'-P-OP2	-7.01	99.39	105.70
1	2A	624	C	O5'-P-OP1	-7.01	99.39	105.70
1	1A	1253	A	N7-C8-N9	-7.01	110.30	113.80
1	2A	2042	A	C8-N9-C4	7.01	108.60	105.80
1	1A	1973	G	N1-C6-O6	-7.00	115.70	119.90
1	2A	2427	C	N3-C2-O2	7.00	126.80	121.90
1	2A	733	G	N9-C4-C5	-6.99	102.60	105.40
1	1A	31	C	O5'-P-OP1	-6.99	99.41	105.70
1	1A	1493	C	C2-N1-C1'	6.98	126.48	118.80
1	2A	1788	C	O5'-P-OP1	-6.98	99.42	105.70
1	1A	1609	A	N7-C8-N9	-6.98	110.31	113.80
1	1A	1667	G	N1-C6-O6	-6.97	115.72	119.90
1	1A	297	C	N1-C2-O2	-6.96	114.72	118.90
1	1A	1782	C	O5'-P-OP1	-6.95	99.45	105.70
32	1a	792	A	C8-N9-C4	6.95	108.58	105.80
1	2A	669	G	C8-N9-C4	6.95	109.18	106.40
1	2A	2728	U	OP2-P-O3'	6.95	120.48	105.20
1	1A	1963	U	C2-N1-C1'	6.95	126.03	117.70
32	1a	1058	G	N1-C6-O6	6.94	124.07	119.90
1	2A	2185	C	N3-C4-N4	-6.94	113.14	118.00
32	1a	1442	G	N3-C4-C5	-6.94	125.13	128.60
1	2A	1076	C	C2-N1-C1'	6.93	126.43	118.80
32	1a	914	A	O5'-P-OP1	-6.93	99.47	105.70
1	2A	2517	C	O4'-C1'-N1	6.93	113.74	108.20
1	1A	1352	U	O5'-P-OP2	6.92	119.01	110.70
1	1A	1400	G	N1-C6-O6	-6.92	115.75	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	31	C	O5'-P-OP1	-6.91	99.48	105.70
1	2A	1839	G	O5'-P-OP2	-6.91	99.48	105.70
1	2A	1073	A	OP2-P-O3'	6.91	120.40	105.20
1	1A	139(A)	G	C5-C6-O6	-6.91	124.46	128.60
32	1a	572	A	C8-N9-C4	6.91	108.56	105.80
1	1A	2495	G	N3-C2-N2	-6.90	115.07	119.90
32	1a	955	U	C2-N3-C4	6.90	131.14	127.00
1	2A	1662	C	C2-N3-C4	-6.88	116.46	119.90
1	2A	1647	G	O5'-P-OP1	-6.88	99.51	105.70
1	2A	1441	G	N3-C4-C5	6.87	132.04	128.60
1	1A	1086	A	C2-N3-C4	6.87	114.03	110.60
1	1A	846	C	N3-C4-C5	6.87	124.65	121.90
1	1A	1958	C	N3-C2-O2	6.86	126.70	121.90
1	2A	1614	A	O5'-P-OP1	-6.86	99.53	105.70
1	2A	2805	G	O4'-C1'-N9	6.85	113.68	108.20
32	2a	841	U	C5-C6-N1	6.85	126.12	122.70
32	1a	227	G	C8-N9-C4	6.85	109.14	106.40
1	2A	2000	G	C5-C6-O6	-6.84	124.49	128.60
1	1A	1820	U	C5-C6-N1	-6.84	119.28	122.70
1	1A	1200	C	N1-C2-O2	-6.84	114.80	118.90
1	1A	2067	G	C5-C6-O6	-6.83	124.50	128.60
1	1A	527	C	N1-C2-O2	-6.83	114.80	118.90
1	2A	806	C	N1-C2-O2	-6.83	114.80	118.90
1	1A	1252	G	N3-C4-N9	-6.83	121.91	126.00
1	2A	936	C	C6-N1-C2	6.81	123.03	120.30
1	1A	69	C	O5'-P-OP2	-6.81	99.57	105.70
32	2a	1499	A	C8-N9-C4	6.81	108.52	105.80
1	1A	693	C	N1-C2-O2	6.80	122.98	118.90
1	1A	1282	U	C5-C6-N1	-6.80	119.30	122.70
1	1A	2457	U	N3-C2-O2	6.80	126.96	122.20
32	2a	999	C	N1-C2-O2	6.78	122.97	118.90
1	1A	676	A	C8-N9-C4	6.78	108.51	105.80
32	2a	1199	U	C5-C4-O4	6.78	129.97	125.90
1	1A	1815	A	N9-C4-C5	6.78	108.51	105.80
1	1A	954	G	N1-C6-O6	-6.78	115.83	119.90
1	1A	2468	G	O4'-C1'-N9	6.78	113.62	108.20
32	2a	687	A	P-O3'-C3'	6.77	127.83	119.70
1	1A	2006	C	O5'-P-OP1	-6.77	99.61	105.70
32	1a	77	G	N3-C4-N9	-6.77	121.94	126.00
1	1A	539	G	N7-C8-N9	-6.76	109.72	113.10
1	1A	752	A	C8-N9-C4	6.75	108.50	105.80
1	2A	1092	C	C6-N1-C2	-6.75	117.60	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1006	C	C6-N1-C2	6.75	123.00	120.30
32	2a	877	C	C6-N1-C2	6.75	123.00	120.30
1	1A	1067	A	C2-N3-C4	6.74	113.97	110.60
1	1A	2501	C	C6-N1-C2	6.74	123.00	120.30
1	2A	247	G	C8-N9-C4	6.73	109.09	106.40
1	2A	482	A	N1-C6-N6	6.73	122.64	118.60
1	2A	2608	G	C5-C6-O6	-6.73	124.56	128.60
1	1A	2782	G	C5-C6-O6	-6.73	124.56	128.60
1	2A	2163	C	C5-C6-N1	6.73	124.36	121.00
32	1a	1530	G	C5-C6-O6	-6.72	124.57	128.60
1	1A	1164	G	N1-C6-O6	-6.72	115.87	119.90
1	1A	2258	C	N1-C2-O2	-6.71	114.87	118.90
1	1A	961	C	O5'-P-OP2	-6.71	99.66	105.70
1	1A	1359	A	N1-C2-N3	-6.71	125.94	129.30
1	1A	2432	A	C8-N9-C4	6.71	108.48	105.80
1	1A	1351	C	C2-N3-C4	-6.71	116.55	119.90
1	2A	1052	C	C6-N1-C2	-6.71	117.62	120.30
32	2a	1028	C	C6-N1-C2	-6.71	117.62	120.30
1	1A	2241	A	N1-C6-N6	-6.71	114.58	118.60
32	1a	1484	C	C6-N1-C2	6.70	122.98	120.30
1	2A	446	G	C8-N9-C4	6.70	109.08	106.40
1	2A	1350	C	C6-N1-C2	6.70	122.98	120.30
1	1A	596	G	C8-N9-C4	6.69	109.08	106.40
1	1A	2289	G	C5-C6-O6	-6.69	124.59	128.60
1	2A	2256	G	O5'-P-OP2	-6.69	99.68	105.70
1	1A	1064	C	C2-N3-C4	6.69	123.25	119.90
1	1A	2596	U	N1-C2-O2	-6.69	118.12	122.80
1	1A	2137	C	N1-C2-O2	6.68	122.91	118.90
1	1A	823	G	O5'-P-OP2	-6.68	99.69	105.70
1	1A	1006	C	C2-N3-C4	-6.68	116.56	119.90
1	2A	1664	A	O5'-P-OP2	-6.67	99.69	105.70
1	1A	1845	G	N1-C6-O6	-6.67	115.90	119.90
1	2A	2724	C	N1-C2-O2	-6.67	114.90	118.90
1	1A	1394	U	O5'-P-OP1	-6.67	99.70	105.70
1	1A	1428	C	C5-C6-N1	-6.67	117.67	121.00
2	2B	52	A	N1-C6-N6	6.66	122.60	118.60
32	2a	65	U	P-O3'-C3'	6.66	127.70	119.70
1	1A	2223	G	C8-N9-C4	6.66	109.06	106.40
1	1A	325	G	C5-C6-O6	-6.65	124.61	128.60
1	2A	2260	C	C6-N1-C2	-6.65	117.64	120.30
32	2a	136	C	O5'-P-OP2	-6.64	99.72	105.70
1	1A	1187	G	O5'-P-OP2	-6.64	99.72	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1617	C	N1-C2-O2	-6.64	114.92	118.90
1	1A	2246	G	C5-C6-O6	-6.64	124.61	128.60
1	1A	2246	G	N7-C8-N9	-6.64	109.78	113.10
1	1A	1530	C	O4'-C1'-N1	6.64	113.51	108.20
1	1A	194	G	C5-C6-O6	-6.63	124.62	128.60
1	1A	494	G	N1-C6-O6	6.63	123.88	119.90
1	2A	2105	C	C2-N3-C4	6.63	123.22	119.90
1	1A	816	C	N1-C2-O2	-6.63	114.92	118.90
1	2A	1071	G	C4-C5-N7	6.63	113.45	110.80
32	1a	776	G	O5'-P-OP2	-6.62	99.75	105.70
1	1A	946	G	N9-C4-C5	-6.62	102.75	105.40
1	1A	1131	G	N1-C6-O6	-6.62	115.93	119.90
1	2A	482	A	N9-C4-C5	-6.62	103.15	105.80
1	1A	139(A)	G	N1-C6-O6	6.61	123.86	119.90
32	1a	1499	A	C8-N9-C4	6.61	108.44	105.80
1	1A	2002	G	C5-N7-C8	6.60	107.60	104.30
1	1A	2772	C	C5-C6-N1	-6.59	117.70	121.00
1	1A	32	C	O5'-P-OP2	-6.59	99.77	105.70
1	2A	1314	C	C2-N1-C1'	6.59	126.05	118.80
32	2a	931	C	O5'-P-OP2	-6.59	99.77	105.70
1	1A	372	G	O4'-C1'-N9	6.59	113.47	108.20
1	1A	1583	A	C8-N9-C4	6.59	108.44	105.80
1	1A	130	C	C6-N1-C2	6.59	122.93	120.30
1	1A	302	C	C6-N1-C2	-6.59	117.67	120.30
1	1A	2081	C	C5-C6-N1	-6.58	117.71	121.00
1	1A	2436	G	C5-C6-N1	6.58	114.79	111.50
1	1A	1034	G	C8-N9-C4	6.58	109.03	106.40
1	2A	1320	C	C6-N1-C2	6.58	122.93	120.30
1	2A	622	G	C8-N9-C4	6.57	109.03	106.40
1	1A	2639	A	N9-C4-C5	-6.56	103.17	105.80
32	2a	366	C	C5-C6-N1	-6.56	117.72	121.00
1	2A	1008	C	N3-C2-O2	-6.56	117.31	121.90
1	1A	521	G	N1-C6-O6	-6.55	115.97	119.90
1	1A	1930	G	O5'-P-OP2	-6.55	99.80	105.70
1	2A	214	G	O5'-P-OP2	-6.55	99.80	105.70
1	1A	864	G	N9-C4-C5	-6.54	102.78	105.40
1	2A	746	A	O4'-C1'-N9	6.54	113.44	108.20
32	2a	266	G	N3-C4-N9	6.54	129.93	126.00
1	1A	567	A	N1-C2-N3	-6.54	126.03	129.30
1	2A	2577	A	N1-C6-N6	6.54	122.52	118.60
32	1a	900	A	C8-N9-C4	6.53	108.41	105.80
1	1A	2249	U	C5-C4-O4	6.53	129.82	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	205	G	O5'-P-OP2	-6.53	99.82	105.70
1	2A	1670	C	O5'-P-OP2	-6.53	99.83	105.70
1	1A	1357	U	N1-C2-O2	6.52	127.37	122.80
1	2A	1359	A	N1-C2-N3	-6.52	126.04	129.30
1	1A	746	A	O4'-C1'-N9	6.51	113.41	108.20
1	1A	2534	A	N1-C6-N6	6.51	122.51	118.60
1	2A	833	U	C2-N3-C4	6.51	130.91	127.00
1	1A	2568	C	N3-C4-N4	6.51	122.56	118.00
1	1A	1602	U	C5-C6-N1	-6.51	119.45	122.70
1	1A	2179	C	C5-C6-N1	6.51	124.25	121.00
1	1A	409	C	C6-N1-C2	6.50	122.90	120.30
1	1A	1192	G	N7-C8-N9	-6.50	109.85	113.10
1	1A	826	U	N3-C4-O4	-6.50	114.85	119.40
1	1A	2593	U	N1-C2-O2	6.50	127.35	122.80
1	1A	2424	C	N1-C2-O2	-6.50	115.00	118.90
1	2A	1109	C	N1-C2-O2	6.49	122.80	118.90
1	2A	1647	G	O4'-C1'-N9	-6.49	103.01	108.20
1	1A	2306	C	N1-C2-O2	6.49	122.79	118.90
1	1A	864	G	C4-C5-N7	6.49	113.39	110.80
1	1A	1700	A	C8-N9-C4	6.49	108.39	105.80
1	1A	2639	A	C8-N9-C4	6.48	108.39	105.80
32	1a	1150	U	N3-C4-C5	-6.48	110.71	114.60
1	1A	2894	G	N3-C4-N9	-6.48	122.11	126.00
1	1A	246	C	N1-C2-O2	-6.48	115.01	118.90
1	1A	824	A	C8-N9-C4	6.48	108.39	105.80
1	1A	1015	G	C5-C6-O6	-6.48	124.71	128.60
1	1A	732	C	C5-C4-N4	6.47	124.73	120.20
1	1A	2685	G	C5-C6-O6	6.47	132.48	128.60
32	1a	175	C	C6-N1-C2	-6.47	117.71	120.30
1	1A	1190	G	C5-N7-C8	6.46	107.53	104.30
1	1A	1220	A	O5'-P-OP2	-6.46	99.88	105.70
1	2A	856	C	C6-N1-C2	-6.46	117.72	120.30
32	2a	1530	G	C8-N9-C4	6.46	108.98	106.40
1	1A	1164	G	C4-C5-N7	-6.46	108.22	110.80
1	2A	521	G	C5-C6-O6	6.46	132.47	128.60
1	2A	1350	C	N3-C2-O2	6.46	126.42	121.90
1	1A	87	C	N3-C4-C5	6.46	124.48	121.90
1	2A	1031	G	N1-C6-O6	6.45	123.77	119.90
1	2A	1908	C	O5'-P-OP2	-6.45	99.89	105.70
1	1A	2424	C	C2-N1-C1'	-6.45	111.71	118.80
1	2A	961	C	N1-C2-O2	-6.45	115.03	118.90
1	1A	564	C	N3-C2-O2	6.44	126.41	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2028	U	N3-C4-O4	-6.44	114.89	119.40
1	2A	1272	A	O5'-P-OP1	6.43	118.42	110.70
1	2A	2306	C	N1-C2-O2	6.43	122.76	118.90
1	2A	2626	C	C6-N1-C2	6.43	122.87	120.30
1	1A	731	C	C6-N1-C2	-6.43	117.73	120.30
1	1A	2153	G	C8-N9-C1'	6.43	135.36	127.00
1	2A	826	U	C5-C6-N1	-6.43	119.49	122.70
1	1A	2179	C	N1-C2-O2	6.43	122.76	118.90
32	1a	226	G	O5'-P-OP2	-6.42	99.92	105.70
1	1A	2070	G	N1-C2-N2	-6.42	110.42	116.20
1	1A	1969	A	OP1-P-O3'	6.41	119.31	105.20
1	1A	2371	G	C4-C5-N7	6.41	113.36	110.80
1	1A	213	A	C4-C5-C6	-6.41	113.80	117.00
32	1a	1431	C	N3-C2-O2	6.41	126.39	121.90
32	2a	726	C	O5'-P-OP1	-6.41	99.93	105.70
1	1A	570	G	N9-C4-C5	-6.41	102.84	105.40
1	2A	574	C	C6-N1-C2	6.41	122.86	120.30
1	1A	688	U	C2-N3-C4	-6.40	123.16	127.00
1	1A	2421	G	C8-N9-C4	6.40	108.96	106.40
1	1A	2893	G	N9-C4-C5	-6.40	102.84	105.40
1	2A	2157	G	N7-C8-N9	6.40	116.30	113.10
1	1A	2380	C	N1-C2-O2	-6.39	115.06	118.90
32	1a	398	C	N1-C2-O2	-6.39	115.06	118.90
32	2a	1099	G	C5-C6-O6	6.39	132.43	128.60
1	1A	1105	U	C5-C6-N1	6.39	125.89	122.70
32	1a	1067	A	P-O3'-C3'	6.38	127.36	119.70
32	2a	266	G	C4-N9-C1'	6.38	134.80	126.50
1	1A	185	U	C2-N3-C4	-6.38	123.17	127.00
32	1a	893	C	C6-N1-C2	6.38	122.85	120.30
1	1A	1198	U	N1-C2-O2	-6.38	118.33	122.80
1	2A	1076	C	OP1-P-O3'	6.38	119.23	105.20
1	2A	1284	A	O5'-P-OP2	-6.38	99.96	105.70
1	1A	1177	A	C8-N9-C4	-6.38	103.25	105.80
1	1A	2894	G	C8-N9-C1'	6.38	135.29	127.00
1	2A	2279	G	N3-C4-C5	6.37	131.79	128.60
32	1a	266	G	C4-N9-C1'	6.37	134.78	126.50
1	1A	2894	G	C4-N9-C1'	-6.37	118.22	126.50
1	2A	1123	C	C6-N1-C2	6.37	122.85	120.30
1	2A	2318	G	C8-N9-C4	-6.37	103.85	106.40
32	2a	921	U	C2-N3-C4	6.37	130.82	127.00
1	2A	1780	A	C5-C6-N1	-6.36	114.52	117.70
1	1A	1359	A	C6-N1-C2	6.36	122.42	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1680	U	C5-C4-O4	6.36	129.72	125.90
1	2A	1204	A	C8-N9-C4	6.36	108.34	105.80
1	1A	1825	A	N7-C8-N9	-6.36	110.62	113.80
32	1a	968	A	C8-N9-C4	6.36	108.34	105.80
32	1a	1225	A	C6-N1-C2	6.36	122.42	118.60
1	1A	635	C	C6-N1-C2	-6.36	117.76	120.30
1	1A	1395	A	N7-C8-N9	-6.36	110.62	113.80
1	2A	469	G	C5-C6-O6	-6.36	124.79	128.60
32	2a	1380	U	C5-C4-O4	6.36	129.71	125.90
1	2A	2427	C	N1-C2-O2	-6.35	115.09	118.90
1	2A	454	A	C8-N9-C4	6.35	108.34	105.80
1	1A	910	A	O5'-P-OP2	-6.34	99.99	105.70
1	2A	1163	G	C8-N9-C4	6.34	108.94	106.40
1	2A	442	G	N1-C6-O6	6.34	123.71	119.90
32	1a	1363	C	C2-N1-C1'	-6.34	111.83	118.80
1	2A	1949	G	O5'-P-OP2	-6.34	100.00	105.70
1	2A	2022	U	N1-C2-O2	-6.34	118.36	122.80
1	1A	2790	A	C2-N3-C4	6.34	113.77	110.60
1	1A	2246	G	C5-C6-N1	6.33	114.66	111.50
32	1a	971	G	N3-C4-N9	-6.33	122.20	126.00
1	1A	2574	G	N1-C6-O6	-6.33	116.10	119.90
1	1A	1301	A	O5'-P-OP2	-6.33	100.01	105.70
1	1A	2507	C	C6-N1-C2	-6.33	117.77	120.30
1	2A	1097	U	C5-C6-N1	6.32	125.86	122.70
5	1F	74	ARG	NE-CZ-NH2	-6.32	117.14	120.30
1	1A	90	U	C5-C4-O4	6.32	129.69	125.90
32	1a	595	G	N3-C4-N9	6.32	129.79	126.00
1	1A	635	C	C5-C4-N4	6.31	124.62	120.20
1	1A	2424	C	N3-C2-O2	6.31	126.32	121.90
1	1A	252	G	N3-C2-N2	-6.31	115.48	119.90
1	1A	2188	C	C2-N1-C1'	-6.31	111.86	118.80
1	1A	2682	U	O5'-P-OP2	-6.31	100.02	105.70
1	1A	205	G	N1-C2-N2	-6.30	110.53	116.20
1	1A	22	C	C6-N1-C2	6.30	122.82	120.30
9	1N	25	ARG	NE-CZ-NH2	6.30	123.45	120.30
1	2A	2577	A	C2-N3-C4	-6.30	107.45	110.60
1	2A	226	G	O4'-C1'-N9	6.30	113.24	108.20
1	2A	386	G	C8-N9-C4	6.29	108.92	106.40
1	2A	1573	G	N7-C8-N9	-6.29	109.95	113.10
1	1A	1282	U	C2-N3-C4	-6.29	123.23	127.00
1	2A	1647	G	C8-N9-C4	6.29	108.92	106.40
1	1A	2002	G	N7-C8-N9	-6.28	109.96	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1617	C	N1-C2-O2	-6.28	115.13	118.90
1	1A	1647	G	O4'-C1'-N9	-6.28	103.18	108.20
1	1A	2759	G	N3-C2-N2	-6.28	115.50	119.90
1	1A	271(J)	C	C6-N1-C2	6.28	122.81	120.30
1	1A	1015	G	N1-C6-O6	6.27	123.66	119.90
1	1A	656	G	N9-C4-C5	6.27	107.91	105.40
32	1a	1185	G	N3-C4-C5	6.26	131.73	128.60
1	1A	1253	A	C8-N9-C4	6.26	108.31	105.80
1	1A	2070	G	C4-C5-N7	6.26	113.31	110.80
1	2A	1648	C	O5'-P-OP2	6.26	118.22	110.70
1	2A	94(A)	G	N1-C6-O6	6.26	123.66	119.90
1	2A	1071	G	N1-C6-O6	6.26	123.66	119.90
1	1A	127	A	C8-N9-C4	6.26	108.30	105.80
32	2a	909	A	N9-C4-C5	-6.26	103.30	105.80
1	1A	249	C	OP1-P-O3'	6.25	118.96	105.20
1	1A	1327	C	N1-C2-O2	-6.25	115.15	118.90
1	1A	2580	U	C5-C6-N1	-6.25	119.57	122.70
1	1A	1249	U	O5'-P-OP1	-6.25	100.07	105.70
1	1A	2776	A	N9-C4-C5	-6.25	103.30	105.80
1	1A	391	G	C8-N9-C4	6.25	108.90	106.40
1	1A	1801	G	C5-C6-O6	-6.24	124.85	128.60
1	1A	1015	G	C4-C5-N7	6.24	113.30	110.80
1	1A	2380	C	N3-C2-O2	6.24	126.27	121.90
2	1B	69	G	OP2-P-O3'	6.24	118.93	105.20
1	1A	615	G	N1-C2-N2	-6.24	110.59	116.20
1	1A	1327	C	N3-C2-O2	6.23	126.26	121.90
32	2a	1173	G	N3-C4-N9	-6.23	122.26	126.00
1	1A	2081	C	C6-N1-C2	6.23	122.79	120.30
32	2a	237	C	C6-N1-C2	6.23	122.79	120.30
1	1A	449	A	C8-N9-C4	6.23	108.29	105.80
1	1A	1602	U	N3-C4-C5	6.22	118.33	114.60
1	1A	1256	G	C8-N9-C4	6.22	108.89	106.40
1	1A	2018	G	C5-C6-O6	-6.22	124.87	128.60
1	1A	2539	C	N3-C4-C5	6.22	124.39	121.90
1	1A	2245	U	C2-N3-C4	-6.22	123.27	127.00
1	1A	1131	G	C5-C6-O6	6.22	132.33	128.60
32	2a	1134	G	C8-N9-C4	-6.21	103.92	106.40
1	1A	627	A	C8-N9-C4	6.21	108.28	105.80
1	2A	1200	C	C6-N1-C2	6.21	122.78	120.30
1	1A	1351	C	N3-C4-C5	6.20	124.38	121.90
1	2A	2697	G	O5'-P-OP2	-6.20	100.12	105.70
1	1A	2573	C	O5'-P-OP1	-6.20	100.12	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1800	C	C6-N1-C2	-6.20	117.82	120.30
1	2A	442	G	C5-C6-O6	-6.20	124.88	128.60
1	2A	2586	C	N3-C4-N4	6.20	122.34	118.00
2	2B	94	C	C6-N1-C2	6.19	122.78	120.30
32	1a	763	G	N1-C6-O6	-6.19	116.19	119.90
1	1A	2721	A	C8-N9-C4	6.19	108.28	105.80
1	2A	12	U	N1-C2-O2	6.19	127.13	122.80
1	2A	1123	C	N3-C2-O2	6.19	126.23	121.90
1	1A	975(A)	G	O5'-P-OP2	-6.19	100.13	105.70
1	1A	1082	U	N3-C4-O4	-6.19	115.07	119.40
1	1A	1210	A	N9-C4-C5	6.19	108.27	105.80
1	1A	2015	A	OP2-P-O3'	6.19	118.81	105.20
32	2a	1525	G	C5-C6-O6	6.19	132.31	128.60
1	2A	1076	C	C5-C6-N1	6.18	124.09	121.00
1	2A	1899	G	C5-C6-O6	-6.18	124.89	128.60
1	1A	1033	U	C6-N1-C2	6.18	124.71	121.00
1	1A	370	G	N3-C2-N2	6.18	124.22	119.90
1	1A	2355	C	N3-C4-C5	6.18	124.37	121.90
32	2a	1058	G	C8-N9-C4	6.18	108.87	106.40
1	1A	782	A	C8-N9-C4	6.18	108.27	105.80
1	2A	1826	G	N1-C6-O6	-6.18	116.19	119.90
32	1a	975	A	O4'-C1'-N9	-6.17	103.26	108.20
1	2A	2207	G	N7-C8-N9	6.17	116.19	113.10
1	2A	2668	G	O5'-P-OP2	-6.17	100.15	105.70
32	1a	1329	A	C6-N1-C2	6.17	122.30	118.60
1	1A	97	C	N3-C2-O2	-6.16	117.59	121.90
1	2A	1791	A	C5'-C4'-C3'	-6.16	106.14	116.00
1	1A	1845	G	C5-C6-O6	6.16	132.29	128.60
32	2a	1442	G	C5-C6-O6	-6.16	124.91	128.60
32	2a	249	U	O5'-P-OP2	-6.15	100.16	105.70
1	1A	698	C	C6-N1-C2	6.15	122.76	120.30
1	1A	2079	U	N1-C2-O2	-6.15	118.49	122.80
1	1A	1086	A	C4-C5-C6	-6.15	113.92	117.00
1	1A	2352	A	C8-N9-C4	6.15	108.26	105.80
32	1a	752	G	N1-C6-O6	6.15	123.59	119.90
1	2A	37	C	C6-N1-C2	6.15	122.76	120.30
1	1A	2534	A	C5-C6-N6	-6.15	118.78	123.70
1	2A	467	G	C8-N9-C4	6.15	108.86	106.40
1	2A	779	U	C2-N3-C4	-6.15	123.31	127.00
1	2A	1120	G	N3-C4-C5	6.15	131.67	128.60
1	2A	1695	G	C8-N9-C4	6.15	108.86	106.40
1	1A	788	A	O5'-P-OP2	-6.15	100.17	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	686	G	C4-C5-N7	6.14	113.26	110.80
32	2a	611	A	C8-N9-C4	6.14	108.26	105.80
1	1A	1975	G	O5'-P-OP2	-6.14	100.17	105.70
1	1A	1198	U	N1-C2-N3	6.14	118.58	114.90
1	1A	1661	G	N7-C8-N9	-6.14	110.03	113.10
1	2A	2464	C	C6-N1-C2	6.14	122.75	120.30
1	1A	1253	A	C5-N7-C8	6.14	106.97	103.90
1	1A	1696	G	N7-C8-N9	-6.13	110.03	113.10
1	2A	756	C	N1-C2-O2	-6.13	115.22	118.90
1	2A	1819	A	C5-C6-N1	-6.13	114.64	117.70
32	2a	70	G	C6-N1-C2	6.13	128.78	125.10
32	2a	1225	A	C5-C6-N6	6.13	128.60	123.70
1	1A	2691	C	C2-N3-C4	-6.13	116.83	119.90
32	1a	267	C	O5'-P-OP1	-6.13	100.19	105.70
32	2a	819	A	C5-C6-N6	-6.13	118.80	123.70
1	1A	209	C	C6-N1-C2	6.12	122.75	120.30
1	1A	1131	G	N1-C2-N2	-6.12	110.69	116.20
1	2A	602	G	O5'-P-OP2	-6.12	100.19	105.70
1	2A	2249	U	N3-C4-O4	-6.12	115.12	119.40
32	2a	1286	A	C8-N9-C4	-6.12	103.35	105.80
1	2A	752	A	C8-N9-C4	-6.11	103.36	105.80
1	2A	2595	G	N9-C4-C5	-6.11	102.95	105.40
1	1A	1376	C	C5-C6-N1	-6.11	117.94	121.00
1	2A	2044	C	O5'-P-OP2	-6.11	100.20	105.70
1	1A	912	C	C6-N1-C2	-6.11	117.86	120.30
1	1A	2513	G	O5'-P-OP2	-6.11	100.20	105.70
32	1a	668	G	O5'-P-OP2	6.11	118.03	110.70
32	1a	872	A	O4'-C1'-N9	6.11	113.09	108.20
1	1A	615	G	N3-C2-N2	6.11	124.17	119.90
32	1a	803	G	C5-C6-O6	6.10	132.26	128.60
32	1a	1442	G	N3-C4-N9	6.10	129.66	126.00
1	1A	690	G	N7-C8-N9	-6.10	110.05	113.10
1	2A	1382	G	C5-C6-O6	-6.10	124.94	128.60
1	2A	1398	C	N3-C2-O2	6.10	126.17	121.90
1	1A	976	C	C6-N1-C2	-6.09	117.86	120.30
1	1A	2202	C	N1-C2-O2	-6.09	115.24	118.90
1	1A	788	A	C8-N9-C4	6.09	108.24	105.80
32	1a	115	G	P-O3'-C3'	6.09	127.01	119.70
1	1A	510	C	O5'-P-OP1	-6.09	100.22	105.70
1	1A	797	C	N1-C2-O2	-6.09	115.25	118.90
1	1A	2512	C	C2-N3-C4	-6.09	116.86	119.90
1	1A	2153	G	C4-N9-C1'	-6.09	118.58	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2329	G	C4-C5-N7	6.08	113.23	110.80
32	2a	400	C	N3-C2-O2	6.08	126.16	121.90
1	1A	1491	G	O5'-P-OP2	-6.08	100.23	105.70
1	1A	1187	G	N3-C2-N2	6.08	124.16	119.90
1	2A	143	G	C4-C5-N7	-6.08	108.37	110.80
1	2A	1416	G	C8-N9-C4	6.08	108.83	106.40
1	1A	1164	G	C5-N7-C8	6.08	107.34	104.30
32	2a	1123	A	N1-C6-N6	-6.07	114.96	118.60
1	1A	973	A	OP1-P-OP2	-6.07	110.49	119.60
1	1A	2506	U	N1-C2-O2	6.07	127.05	122.80
1	1A	1782	C	OP1-P-OP2	6.07	128.70	119.60
1	2A	1784	A	C8-N9-C4	6.07	108.23	105.80
1	2A	2572	A	C8-N9-C4	6.07	108.23	105.80
1	2A	2595	G	C8-N9-C4	6.07	108.83	106.40
32	2a	1473	A	N7-C8-N9	-6.07	110.77	113.80
1	1A	669	G	C8-N9-C4	6.06	108.83	106.40
1	1A	564	C	N1-C2-O2	-6.06	115.26	118.90
1	1A	1445	A	O4'-C1'-N9	6.06	113.05	108.20
1	1A	771	G	N9-C4-C5	-6.06	102.98	105.40
1	1A	2035	G	O5'-P-OP1	-6.06	100.25	105.70
32	1a	376	G	N7-C8-N9	-6.06	110.07	113.10
1	2A	594	U	C5-C6-N1	-6.06	119.67	122.70
1	1A	330	A	N3-C4-C5	6.05	131.04	126.80
1	1A	1136	G	C8-N9-C4	6.05	108.82	106.40
1	1A	2424	C	C6-N1-C2	6.05	122.72	120.30
1	2A	652(T)	C	C5-C6-N1	6.05	124.03	121.00
32	2a	955	U	C2-N3-C4	6.05	130.63	127.00
1	1A	702	G	N1-C6-O6	6.05	123.53	119.90
1	2A	2039	C	N1-C2-O2	-6.05	115.27	118.90
1	2A	205	G	OP1-P-OP2	6.04	128.67	119.60
1	1A	531	C	C2-N1-C1'	-6.04	112.16	118.80
1	1A	870	A	C8-N9-C4	6.04	108.22	105.80
1	1A	1257	C	C6-N1-C2	-6.04	117.88	120.30
1	1A	1559	G	N3-C4-C5	6.04	131.62	128.60
1	2A	2775	A	O5'-P-OP1	-6.04	100.27	105.70
1	2A	2848	G	O4'-C1'-N9	6.04	113.03	108.20
1	2A	2103	C	C2-N3-C4	6.04	122.92	119.90
1	1A	887	A	N1-C2-N3	6.03	132.32	129.30
1	2A	1077	A	C2-N3-C4	6.03	113.62	110.60
1	2A	1791	A	O5'-P-OP1	-6.03	100.27	105.70
1	2A	102	G	N1-C6-O6	-6.03	116.28	119.90
1	1A	83	G	N9-C4-C5	-6.03	102.99	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	677	A	O5'-P-OP2	-6.03	100.28	105.70
1	1A	1700	A	O5'-P-OP1	-6.02	100.28	105.70
32	1a	819	A	O5'-P-OP1	-6.02	100.28	105.70
1	2A	961	C	O5'-P-OP2	-6.02	100.28	105.70
1	2A	1880	C	C6-N1-C2	6.02	122.71	120.30
1	1A	1997	G	OP1-P-OP2	-6.02	110.57	119.60
1	2A	866	A	N9-C4-C5	-6.02	103.39	105.80
1	2A	205	G	N7-C8-N9	-6.02	110.09	113.10
1	2A	787	U	O5'-P-OP1	-6.02	100.28	105.70
32	2a	244	U	N3-C4-C5	6.02	118.21	114.60
32	2a	1099	G	C4-C5-N7	-6.02	108.39	110.80
32	2a	1074	G	N1-C6-O6	6.02	123.51	119.90
1	1A	2596	U	C5-C6-N1	-6.01	119.69	122.70
32	1a	1493	A	C2-N3-C4	6.01	113.61	110.60
32	1a	539	A	O5'-P-OP2	-6.01	100.29	105.70
1	1A	266	G	N9-C4-C5	-6.01	103.00	105.40
1	1A	2373	G	O5'-P-OP1	-6.01	100.29	105.70
1	1A	756	C	C6-N1-C1'	6.01	128.01	120.80
1	1A	1075	C	C5-C6-N1	6.01	124.00	121.00
1	1A	1284	A	OP1-P-OP2	6.01	128.61	119.60
1	1A	2517	C	O4'-C1'-N1	6.01	113.01	108.20
1	1A	1363	C	O5'-P-OP2	-6.01	100.29	105.70
1	1A	2637	U	C5-C6-N1	-6.01	119.70	122.70
32	1a	226	G	C8-N9-C4	6.01	108.80	106.40
32	1a	901	A	O5'-P-OP1	-6.01	100.29	105.70
1	2A	1983	C	N1-C2-O2	-6.01	115.30	118.90
1	1A	1425	G	N1-C6-O6	6.01	123.50	119.90
1	1A	2023	G	C5-C6-O6	-6.00	125.00	128.60
1	1A	2228	G	N1-C6-O6	-6.00	116.30	119.90
1	1A	2788	C	C6-N1-C2	6.00	122.70	120.30
1	2A	1967	C	N3-C4-C5	6.00	124.30	121.90
1	1A	852	G	O5'-P-OP2	-6.00	100.30	105.70
1	1A	2179	C	C6-N1-C1'	-6.00	113.60	120.80
1	2A	1936	A	N9-C4-C5	-6.00	103.40	105.80
1	1A	2893	G	C4-C5-N7	6.00	113.20	110.80
1	2A	1071	G	C6-C5-N7	-6.00	126.80	130.40
1	2A	1817	G	C4-C5-N7	6.00	113.20	110.80
1	1A	2639	A	N1-C6-N6	6.00	122.20	118.60
1	2A	470	A	C5-N7-C8	-6.00	100.90	103.90
1	2A	1070	A	N1-C6-N6	-6.00	115.00	118.60
1	1A	1190	G	N7-C8-N9	-6.00	110.10	113.10
1	1A	2371	G	N3-C4-N9	6.00	129.60	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	376	G	C4-N9-C1'	-5.99	118.71	126.50
1	2A	942	G	C8-N9-C4	5.99	108.80	106.40
1	2A	2185	C	C5-C4-N4	5.99	124.39	120.20
1	2A	744	G	O5'-P-OP2	-5.99	100.31	105.70
1	1A	2612	C	O5'-P-OP2	-5.99	100.31	105.70
1	1A	518	G	N1-C6-O6	-5.99	116.31	119.90
1	1A	568	U	C2-N3-C4	-5.99	123.41	127.00
1	1A	1936	A	O4'-C1'-N9	5.99	112.99	108.20
1	1A	2022	U	N1-C2-O2	-5.99	118.61	122.80
32	1a	1502	A	O5'-P-OP2	-5.99	100.31	105.70
1	2A	591	C	N1-C2-O2	-5.99	115.31	118.90
1	1A	1609	A	N9-C4-C5	-5.98	103.41	105.80
2	2B	1	U	C2-N1-C1'	5.98	124.88	117.70
1	1A	1383	C	C2-N1-C1'	-5.98	112.22	118.80
1	1A	1649	G	C5-C6-O6	-5.98	125.01	128.60
1	2A	1372	U	C5-C6-N1	5.98	125.69	122.70
1	2A	1813	G	N1-C6-O6	-5.98	116.31	119.90
1	2A	1416	G	O4'-C1'-N9	5.97	112.98	108.20
1	2A	1783	A	O5'-P-OP1	-5.97	100.32	105.70
32	2a	1487	G	O5'-P-OP2	-5.97	100.33	105.70
1	1A	1028	A	N1-C6-N6	5.97	122.18	118.60
32	2a	1517	G	O5'-P-OP2	-5.97	100.33	105.70
1	1A	129	C	C2-N1-C1'	-5.97	112.24	118.80
1	1A	819	A	C5-C6-N6	5.97	128.47	123.70
1	1A	1173	G	O4'-C1'-N9	5.96	112.97	108.20
32	1a	1442(A)	G	C5-C6-O6	-5.96	125.02	128.60
1	2A	928	G	C8-N9-C4	-5.96	104.01	106.40
1	2A	1200	C	C5-C6-N1	-5.96	118.02	121.00
1	2A	1359	A	C2-N3-C4	5.96	113.58	110.60
1	2A	2681	C	C2-N3-C4	-5.96	116.92	119.90
1	1A	2596	U	N3-C2-O2	5.96	126.37	122.20
32	2a	572	A	C8-N9-C4	5.96	108.18	105.80
1	2A	2019	A	C8-N9-C4	5.96	108.18	105.80
1	2A	205	G	C4-N9-C1'	-5.95	118.76	126.50
1	2A	756	C	N3-C2-O2	5.95	126.07	121.90
1	2A	1441	G	C8-N9-C4	5.95	108.78	106.40
1	1A	2187	G	N9-C4-C5	-5.95	103.02	105.40
32	1a	750	G	O5'-P-OP1	-5.95	100.35	105.70
1	2A	748	G	N1-C6-O6	-5.95	116.33	119.90
1	1A	2391	G	O4'-C1'-N9	5.94	112.96	108.20
1	2A	2521	C	C6-N1-C2	5.94	122.68	120.30
1	2A	1926	U	N1-C2-N3	5.94	118.47	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1297	C	N1-C2-O2	-5.94	115.34	118.90
1	1A	1345	C	C5-C6-N1	-5.94	118.03	121.00
1	1A	2413	G	O5'-P-OP2	-5.94	100.36	105.70
1	2A	948	G	O5'-P-OP1	-5.94	100.36	105.70
1	2A	1078	U	O4'-C1'-N1	5.94	112.95	108.20
1	2A	2430	A	O4'-C1'-N9	5.94	112.95	108.20
32	2a	929	G	N3-C4-N9	-5.94	122.44	126.00
32	1a	913	A	P-O3'-C3'	5.94	126.82	119.70
1	2A	1662	C	N1-C2-O2	-5.94	115.34	118.90
1	1A	1758	G	C8-N9-C4	5.93	108.77	106.40
1	1A	1838	C	C2-N1-C1'	-5.93	112.27	118.80
2	1B	56	G	O5'-P-OP2	-5.93	100.36	105.70
32	1a	1199	U	C5-C4-O4	5.93	129.46	125.90
1	2A	1610	A	N9-C4-C5	-5.93	103.43	105.80
32	2a	295	C	C6-N1-C2	5.93	122.67	120.30
1	1A	213	A	N1-C2-N3	-5.93	126.34	129.30
1	1A	392	C	C6-N1-C2	5.92	122.67	120.30
1	1A	1661	G	C8-N9-C4	5.92	108.77	106.40
1	1A	1667	G	N7-C8-N9	-5.92	110.14	113.10
1	1A	1815	A	N1-C6-N6	-5.92	115.05	118.60
1	2A	1091	G	C2-N3-C4	5.92	114.86	111.90
3	2D	242	ARG	NE-CZ-NH1	-5.92	117.34	120.30
1	1A	1632	A	C5-N7-C8	5.92	106.86	103.90
1	2A	2805	G	N1-C6-O6	-5.92	116.35	119.90
32	2a	1042	G	C5-C6-O6	-5.92	125.05	128.60
1	1A	145	G	O5'-P-OP2	-5.92	100.38	105.70
1	2A	1914	C	C5-C6-N1	5.92	123.96	121.00
1	1A	1033	U	C5-C6-N1	-5.91	119.74	122.70
1	1A	1999	C	OP2-P-O3'	5.91	118.21	105.20
1	1A	2080	G	C2-N3-C4	5.91	114.86	111.90
1	2A	488	G	O5'-P-OP2	-5.91	100.38	105.70
1	1A	1396	U	O5'-P-OP1	-5.91	100.38	105.70
32	1a	1442(A)	G	N1-C6-O6	5.91	123.45	119.90
1	2A	1341	U	N1-C2-O2	-5.91	118.66	122.80
1	1A	2179	C	C6-N1-C2	-5.91	117.94	120.30
32	2a	826	C	C6-N1-C2	5.91	122.66	120.30
1	1A	1815	A	C8-N9-C4	-5.91	103.44	105.80
1	1A	2349	G	C8-N9-C4	5.91	108.76	106.40
1	1A	252	G	C2-N3-C4	5.91	114.85	111.90
1	1A	834	C	C6-N1-C2	5.91	122.66	120.30
1	2A	530	G	OP1-P-O3'	5.91	118.19	105.20
1	1A	1063	G	N1-C2-N3	-5.90	120.36	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1839	G	C8-N9-C4	5.90	108.76	106.40
32	2a	890	G	O4'-C1'-N9	5.90	112.92	108.20
1	1A	2374	C	C5-C4-N4	-5.90	116.07	120.20
1	1A	2506	U	C6-N1-C1'	-5.90	112.94	121.20
32	1a	1514	C	C6-N1-C2	-5.90	117.94	120.30
1	1A	12	U	N3-C2-O2	-5.90	118.07	122.20
1	2A	2279	G	C8-N9-C4	5.89	108.76	106.40
1	1A	1425	G	C5-C6-O6	-5.89	125.07	128.60
2	1B	1	U	C5-C6-N1	5.89	125.64	122.70
1	1A	2070	G	C6-C5-N7	-5.89	126.87	130.40
1	2A	788	A	N9-C4-C5	-5.89	103.44	105.80
1	1A	1696	G	C4-C5-N7	-5.89	108.44	110.80
1	1A	449	A	N7-C8-N9	-5.89	110.86	113.80
1	2A	1210	A	P-O3'-C3'	5.89	126.76	119.70
1	1A	1677	A	N1-C2-N3	5.88	132.24	129.30
1	2A	469	G	N1-C6-O6	5.88	123.43	119.90
1	2A	2000	G	N1-C6-O6	5.88	123.43	119.90
1	1A	90	U	N3-C2-O2	-5.88	118.08	122.20
1	2A	1351	C	OP1-P-O3'	5.88	118.14	105.20
1	1A	1259	G	N7-C8-N9	-5.88	110.16	113.10
32	2a	1058	G	N9-C4-C5	-5.88	103.05	105.40
32	1a	900	A	N9-C4-C5	-5.88	103.45	105.80
32	1a	1123	A	C5-C6-N1	-5.88	114.76	117.70
1	1A	506	G	OP1-P-O3'	5.88	118.13	105.20
1	1A	1661	G	C5-N7-C8	5.88	107.24	104.30
1	2A	12	U	N3-C2-O2	-5.88	118.09	122.20
1	1A	1565	C	N3-C4-C5	5.88	124.25	121.90
1	1A	574	C	N1-C2-O2	-5.87	115.38	118.90
1	1A	1774	C	N3-C4-C5	5.87	124.25	121.90
1	1A	1984	G	OP2-P-O3'	5.87	118.12	105.20
32	1a	904	C	C5-C6-N1	-5.87	118.07	121.00
1	2A	2340	G	C2-N3-C4	-5.87	108.97	111.90
1	2A	22	C	C6-N1-C2	5.86	122.64	120.30
32	2a	572	A	N7-C8-N9	-5.86	110.87	113.80
32	2a	1030(B)	C	C6-N1-C2	-5.86	117.95	120.30
1	1A	1653	G	C8-N9-C4	-5.86	104.06	106.40
1	1A	1696	G	C8-N9-C4	5.86	108.75	106.40
1	1A	271(Y)	U	O4'-C1'-N1	5.86	112.89	108.20
1	1A	706	A	C2-N3-C4	-5.86	107.67	110.60
1	1A	1400	G	C6-C5-N7	5.86	133.91	130.40
32	2a	1474	G	N3-C4-C5	5.86	131.53	128.60
1	1A	2518	A	O5'-P-OP2	5.86	117.73	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	984	C	C6-N1-C2	5.86	122.64	120.30
1	2A	2230	G	O5'-P-OP2	-5.86	100.43	105.70
32	2a	1003	G	N3-C4-N9	5.86	129.51	126.00
1	1A	655	A	C5-N7-C8	-5.85	100.97	103.90
1	1A	952	G	N1-C6-O6	5.85	123.41	119.90
32	1a	217	C	C6-N1-C2	5.85	122.64	120.30
32	1a	1513	A	OP2-P-O3'	5.85	118.07	105.20
32	1a	92	C	N1-C2-O2	-5.85	115.39	118.90
1	1A	524	U	O5'-P-OP2	-5.84	100.44	105.70
37	1f	19	LEU	CA-CB-CG	5.84	128.74	115.30
1	2A	2287	A	O4'-C1'-N9	5.84	112.88	108.20
1	2A	2138	C	C2-N3-C4	5.84	122.82	119.90
32	2a	7	G	N3-C4-C5	5.84	131.52	128.60
1	2A	1253	A	N7-C8-N9	-5.84	110.88	113.80
32	2a	1225	A	C6-N1-C2	5.84	122.10	118.60
1	1A	139(A)	G	C5-N7-C8	5.84	107.22	104.30
1	1A	2596	U	C2-N3-C4	-5.84	123.50	127.00
1	2A	2804	C	C6-N1-C2	-5.84	117.97	120.30
1	2A	614	U	N3-C2-O2	-5.83	118.12	122.20
1	1A	2250	G	OP1-P-OP2	5.83	128.35	119.60
1	1A	2596	U	C6-N1-C2	5.83	124.50	121.00
1	1A	313	C	N3-C4-N4	-5.83	113.92	118.00
1	1A	2646	C	C6-N1-C2	5.83	122.63	120.30
32	1a	1077	G	O5'-P-OP2	-5.83	100.45	105.70
1	2A	1269	A	OP1-P-OP2	-5.83	110.85	119.60
32	1a	1379	G	N9-C4-C5	5.83	107.73	105.40
1	1A	1487	G	C8-N9-C4	-5.83	104.07	106.40
1	2A	482	A	C5-C6-N6	-5.83	119.04	123.70
1	2A	2130	U	C5-C6-N1	5.83	125.61	122.70
1	1A	780	G	C8-N9-C4	5.83	108.73	106.40
1	2A	2363	C	C6-N1-C2	5.83	122.63	120.30
1	1A	672	C	OP2-P-O3'	5.83	118.02	105.20
1	1A	1256	G	N9-C4-C5	-5.83	103.07	105.40
1	1A	1296	G	N3-C2-N2	-5.83	115.82	119.90
2	1B	87	G	C4-N9-C1'	-5.83	118.93	126.50
1	1A	395	U	O4'-C1'-N1	5.82	112.86	108.20
1	1A	557	U	C2-N3-C4	-5.82	123.51	127.00
1	1A	1141	U	N3-C4-O4	-5.82	115.32	119.40
1	1A	1170	G	N7-C8-N9	5.82	116.01	113.10
1	1A	2822	G	C8-N9-C4	5.82	108.73	106.40
2	1B	41	U	C5-C6-N1	-5.82	119.79	122.70
1	1A	1332	G	N9-C4-C5	-5.82	103.07	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1637	A	N9-C4-C5	-5.82	103.47	105.80
1	1A	1959	G	C8-N9-C4	5.82	108.73	106.40
1	1A	323	G	N3-C2-N2	5.82	123.97	119.90
1	2A	750	A	O5'-P-OP1	-5.82	100.46	105.70
32	2a	1173	G	N3-C2-N2	-5.82	115.83	119.90
32	1a	266	G	P-O3'-C3'	5.82	126.68	119.70
1	2A	456	C	C6-N1-C2	5.82	122.63	120.30
1	1A	2257	U	N1-C2-N3	5.82	118.39	114.90
1	1A	1653	G	O5'-P-OP1	-5.81	100.47	105.70
1	1A	784	A	N1-C2-N3	-5.81	126.39	129.30
1	1A	2396	G	O5'-P-OP2	-5.81	100.47	105.70
1	2A	2321	G	P-O3'-C3'	5.81	126.67	119.70
32	2a	1327	C	C6-N1-C2	5.81	122.62	120.30
32	1a	1185	G	N3-C4-N9	-5.81	122.52	126.00
1	2A	204	A	N7-C8-N9	-5.81	110.90	113.80
1	1A	250	G	C8-N9-C4	-5.81	104.08	106.40
1	2A	2087	G	N1-C6-O6	5.81	123.38	119.90
1	1A	391	G	N7-C8-N9	-5.80	110.20	113.10
1	1A	1680	U	N3-C4-O4	-5.80	115.34	119.40
2	1B	104	U	C6-N1-C2	5.80	124.48	121.00
32	1a	897	C	O5'-P-OP2	-5.80	100.48	105.70
1	2A	2168	G	O4'-C1'-N9	5.80	112.84	108.20
1	1A	711	G	N1-C6-O6	5.80	123.38	119.90
32	1a	549	C	N1-C2-O2	-5.80	115.42	118.90
1	1A	2289	G	N3-C4-C5	5.80	131.50	128.60
32	2a	881	G	C8-N9-C4	5.80	108.72	106.40
1	2A	2893	G	O4'-C1'-N9	-5.80	103.56	108.20
1	1A	1772	G	N9-C1'-C2'	-5.80	105.62	112.00
1	1A	959	A	OP1-P-OP2	5.79	128.29	119.60
1	2A	806	C	N3-C4-C5	-5.79	119.58	121.90
1	1A	2512	C	C4-C5-C6	5.79	120.30	117.40
1	1A	1164	G	C6-C5-N7	5.79	133.87	130.40
1	1A	1326	U	N3-C4-O4	-5.79	115.35	119.40
1	1A	1086	A	N9-C4-C5	5.79	108.11	105.80
1	2A	2687	U	C5-C4-O4	-5.79	122.43	125.90
1	1A	1562	A	O5'-P-OP1	-5.79	100.49	105.70
1	1A	1902	C	OP2-P-O3'	5.79	117.93	105.20
1	1A	1954	G	C5-C6-O6	-5.79	125.13	128.60
1	1A	2349	G	O5'-P-OP1	-5.79	100.49	105.70
1	1A	1155	A	N1-C2-N3	-5.78	126.41	129.30
1	2A	2073	C	N1-C2-O2	-5.78	115.43	118.90
32	2a	913	A	P-O3'-C3'	5.78	126.64	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2023	G	N1-C6-O6	5.78	123.37	119.90
1	2A	444	C	C2-N1-C1'	-5.78	112.44	118.80
1	2A	254	G	N1-C6-O6	5.78	123.37	119.90
1	2A	698	C	C4-C5-C6	5.78	120.29	117.40
32	2a	293	G	C8-N9-C4	-5.78	104.09	106.40
1	1A	260	G	N3-C2-N2	-5.78	115.86	119.90
1	2A	679	C	N3-C2-O2	5.78	125.94	121.90
1	1A	425	G	C8-N9-C4	-5.77	104.09	106.40
1	1A	530	G	N1-C2-N2	5.77	121.40	116.20
1	1A	637	A	C8-N9-C4	5.77	108.11	105.80
1	1A	27	G	C8-N9-C4	5.77	108.71	106.40
1	2A	1899	G	C6-C5-N7	-5.77	126.94	130.40
1	1A	686	G	N3-C2-N2	5.77	123.94	119.90
2	1B	1	U	C2-N1-C1'	5.77	124.62	117.70
1	1A	932	G	C8-N9-C4	5.77	108.71	106.40
1	1A	1631	C	O5'-P-OP1	-5.77	100.51	105.70
1	1A	329	G	O4'-C1'-N9	-5.77	103.59	108.20
1	1A	676	A	OP1-P-OP2	5.76	128.25	119.60
1	1A	1633	G	C5-C6-O6	-5.76	125.14	128.60
32	1a	951	G	N3-C2-N2	-5.76	115.86	119.90
1	2A	750	A	N9-C4-C5	-5.76	103.49	105.80
32	2a	1442	G	N3-C4-N9	5.76	129.46	126.00
1	1A	2512	C	C5-C6-N1	-5.76	118.12	121.00
1	2A	958	U	N3-C2-O2	-5.76	118.17	122.20
1	1A	2490	G	N7-C8-N9	-5.76	110.22	113.10
1	1A	2021	C	N3-C2-O2	5.76	125.93	121.90
27	25	19	ARG	NE-CZ-NH2	-5.76	117.42	120.30
32	2a	871	U	O5'-P-OP1	-5.76	100.52	105.70
1	2A	2024	G	C5-C6-N1	-5.76	108.62	111.50
32	1a	611	A	C8-N9-C4	5.76	108.10	105.80
1	1A	1798	U	N3-C4-O4	-5.75	115.37	119.40
1	2A	1416	G	N3-C4-C5	5.75	131.48	128.60
1	2A	1977	A	N1-C6-N6	-5.75	115.15	118.60
1	1A	2070	G	N9-C4-C5	-5.75	103.10	105.40
1	1A	2692	C	C2-N3-C4	-5.75	117.02	119.90
1	2A	1471	A	C8-N9-C4	-5.75	103.50	105.80
32	2a	1123	A	C5-C6-N6	5.75	128.30	123.70
32	1a	984	C	C2-N1-C1'	-5.75	112.47	118.80
1	2A	690	G	O5'-P-OP2	-5.75	100.52	105.70
1	2A	2687	U	N3-C2-O2	5.75	126.23	122.20
1	2A	257	A	O5'-P-OP2	-5.75	100.53	105.70
1	1A	2689	U	P-O3'-C3'	5.75	126.60	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2712	U	O4'-C1'-N1	5.75	112.80	108.20
1	1A	1109	C	C5-C6-N1	5.75	123.87	121.00
1	1A	1654	A	C5-N7-C8	5.75	106.77	103.90
1	2A	37	C	C5-C6-N1	-5.75	118.13	121.00
1	2A	659	C	C5-C6-N1	-5.75	118.13	121.00
1	2A	2255	G	OP2-P-O3'	5.74	117.83	105.20
1	1A	1127	A	C8-N9-C4	5.74	108.10	105.80
1	2A	1092	C	C2-N1-C1'	5.74	125.11	118.80
1	1A	64	A	C2-N3-C4	-5.74	107.73	110.60
1	1A	395	U	N1-C2-O2	5.74	126.82	122.80
1	2A	2340	G	N1-C6-O6	5.74	123.34	119.90
1	1A	1824	G	O5'-P-OP2	-5.74	100.54	105.70
1	1A	2237	G	N9-C4-C5	-5.74	103.11	105.40
1	2A	12	U	C2-N1-C1'	5.74	124.58	117.70
32	2a	266	G	C6-C5-N7	-5.73	126.96	130.40
1	1A	325	G	N1-C6-O6	5.73	123.34	119.90
1	1A	730	C	N3-C4-C5	5.73	124.19	121.90
1	2A	1579	A	C5-C6-N6	-5.73	119.11	123.70
1	1A	1308	A	N1-C6-N6	-5.73	115.16	118.60
1	2A	1699	G	O5'-P-OP1	-5.73	100.54	105.70
1	2A	2375	G	C4-N9-C1'	-5.73	119.05	126.50
32	2a	199	G	N3-C4-C5	5.73	131.47	128.60
1	2A	1573	G	C4-C5-N7	-5.73	108.51	110.80
1	2A	2206	G	N3-C4-C5	5.73	131.46	128.60
32	2a	1003	G	C8-N9-C4	-5.73	104.11	106.40
1	1A	1235	G	N3-C2-N2	-5.73	115.89	119.90
32	1a	240	C	N1-C2-O2	-5.73	115.46	118.90
32	1a	595	G	C8-N9-C1'	-5.72	119.56	127.00
32	1a	903	G	O5'-P-OP2	-5.72	100.55	105.70
1	2A	1251	C	N1-C2-O2	-5.72	115.47	118.90
1	1A	834	C	C5-C6-N1	-5.72	118.14	121.00
32	1a	1058	G	C5-C6-O6	-5.72	125.17	128.60
1	2A	1008	C	C6-N1-C2	-5.72	118.01	120.30
1	1A	1786	A	N7-C8-N9	-5.72	110.94	113.80
1	1A	2381	C	C2-N3-C4	-5.72	117.04	119.90
1	1A	22	C	N3-C2-O2	5.71	125.90	121.90
1	1A	1186	G	C8-N9-C4	5.71	108.69	106.40
1	1A	1186	G	N3-C4-C5	5.71	131.46	128.60
1	2A	113	G	N3-C4-N9	-5.71	122.57	126.00
1	2A	1030	G	N1-C6-O6	5.71	123.33	119.90
1	2A	1153	C	N1-C2-O2	-5.71	115.47	118.90
10	2O	8	LEU	CA-CB-CG	5.71	128.44	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	69	C	N1-C2-O2	-5.71	115.47	118.90
1	1A	748	G	C8-N9-C4	5.71	108.69	106.40
1	2A	184	C	C6-N1-C2	5.71	122.58	120.30
32	2a	800	G	OP2-P-O3'	5.71	117.76	105.20
1	1A	387	U	N3-C2-O2	5.71	126.20	122.20
1	1A	20	C	C2-N3-C4	-5.71	117.05	119.90
1	1A	587	C	N3-C4-C5	-5.71	119.62	121.90
1	1A	2636	U	N3-C4-O4	-5.71	115.40	119.40
1	2A	1379	A	N9-C4-C5	-5.71	103.52	105.80
1	2A	1999	C	N3-C4-C5	5.71	124.18	121.90
2	2B	104	U	O5'-P-OP2	-5.71	100.56	105.70
1	2A	1799	G	O5'-P-OP2	-5.71	100.56	105.70
1	2A	1831	G	C2-N3-C4	-5.71	109.05	111.90
1	1A	1139	G	C4-C5-N7	-5.71	108.52	110.80
1	1A	23	G	C4-C5-N7	-5.70	108.52	110.80
1	1A	2419	U	N3-C4-C5	5.70	118.02	114.60
1	2A	639	U	C5-C4-O4	5.70	129.32	125.90
1	2A	1784	A	O5'-P-OP2	-5.70	100.57	105.70
1	1A	132	G	C8-N9-C4	5.70	108.68	106.40
1	1A	971	C	N1-C2-O2	-5.70	115.48	118.90
1	2A	662	G	N7-C8-N9	-5.70	110.25	113.10
1	2A	2122	U	C5-C4-O4	5.70	129.32	125.90
1	1A	512	G	N9-C4-C5	-5.70	103.12	105.40
1	1A	2321	G	O5'-P-OP1	5.70	117.54	110.70
1	1A	2359	C	C6-N1-C2	-5.70	118.02	120.30
2	1B	91	C	N3-C4-C5	5.70	124.18	121.90
32	2a	266	G	O4'-C1'-N9	-5.70	103.64	108.20
1	1A	691	C	C5-C6-N1	5.69	123.85	121.00
1	2A	1010	A	OP2-P-O3'	5.69	117.72	105.20
1	2A	2022	U	N3-C4-O4	5.69	123.39	119.40
1	2A	2185	C	N1-C2-N3	-5.69	115.22	119.20
1	1A	1116	C	C5-C6-N1	5.69	123.84	121.00
1	1A	1214	A	C8-N9-C4	5.69	108.08	105.80
1	1A	2430	A	OP1-P-OP2	5.69	128.13	119.60
1	1A	2893	G	N1-C2-N3	-5.69	120.49	123.90
1	1A	480	A	C8-N9-C4	5.69	108.08	105.80
1	1A	1591	G	N1-C6-O6	-5.69	116.49	119.90
1	1A	1934	C	C6-N1-C2	5.69	122.58	120.30
32	1a	132	C	C6-N1-C2	5.69	122.58	120.30
1	2A	1847	A	O4'-C1'-N9	5.69	112.75	108.20
1	1A	59	U	OP2-P-O3'	5.68	117.71	105.20
1	1A	473	G	N7-C8-N9	-5.68	110.26	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2084	C	C6-N1-C2	5.68	122.57	120.30
1	1A	781	A	C2-N3-C4	5.68	113.44	110.60
1	2A	1340	U	N3-C2-O2	5.68	126.18	122.20
1	1A	188	G	C4-C5-N7	-5.68	108.53	110.80
1	1A	1701	A	N1-C6-N6	5.68	122.01	118.60
1	1A	672	C	N3-C4-C5	5.68	124.17	121.90
1	2A	573	G	OP1-P-O3'	5.67	117.68	105.20
1	1A	2058	A	N1-C6-N6	-5.67	115.20	118.60
1	1A	2434	A	N9-C4-C5	5.67	108.07	105.80
1	2A	61	G	N1-C6-O6	5.67	123.30	119.90
1	2A	2249	U	N3-C4-C5	5.67	118.00	114.60
1	1A	120	U	N1-C2-O2	-5.66	118.84	122.80
1	1A	1661	G	C4-C5-N7	-5.66	108.53	110.80
1	2A	1306	C	C5-C6-N1	5.66	123.83	121.00
1	1A	2820	A	N9-C4-C5	-5.66	103.54	105.80
1	1A	1248	G	C8-N9-C4	5.66	108.66	106.40
1	1A	1288	U	C5-C6-N1	-5.66	119.87	122.70
1	2A	693	C	C6-N1-C2	5.66	122.56	120.30
1	1A	2226	C	C6-N1-C2	5.66	122.56	120.30
1	2A	1755	A	N1-C6-N6	-5.65	115.21	118.60
1	1A	482	A	O5'-P-OP2	-5.65	100.61	105.70
1	2A	2741	A	C8-N9-C4	5.65	108.06	105.80
1	1A	522	G	OP1-P-OP2	-5.65	111.13	119.60
1	1A	686	G	N1-C2-N2	-5.65	111.12	116.20
32	1a	378	G	N3-C4-C5	5.65	131.42	128.60
32	1a	490	G	C8-N9-C4	5.65	108.66	106.40
32	2a	328	C	C6-N1-C2	5.65	122.56	120.30
1	1A	95	G	C2-N3-C4	-5.65	109.08	111.90
1	1A	2058	A	C6-N1-C2	-5.65	115.21	118.60
32	1a	204	U	N1-C2-O2	5.64	126.75	122.80
1	2A	24	G	N1-C6-O6	5.64	123.29	119.90
1	2A	2000	G	C4-C5-N7	5.64	113.06	110.80
32	1a	925	G	N1-C6-O6	5.64	123.28	119.90
1	2A	1992	G	P-O3'-C3'	5.64	126.47	119.70
1	2A	2632	A	C8-N9-C4	5.64	108.06	105.80
32	2a	1065	U	P-O3'-C3'	5.64	126.47	119.70
1	1A	607	U	C6-N1-C2	5.64	124.38	121.00
1	1A	911	A	OP1-P-OP2	5.64	128.06	119.60
1	1A	1626	G	C5-C6-O6	5.64	131.98	128.60
32	1a	1331	G	O5'-P-OP2	-5.64	100.63	105.70
32	1a	1286	A	C8-N9-C4	-5.63	103.55	105.80
1	1A	487	C	N1-C2-O2	-5.63	115.52	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1431	C	N1-C2-O2	-5.63	115.52	118.90
1	2A	2186	G	N1-C6-O6	-5.63	116.52	119.90
1	2A	2469	A	C8-N9-C4	5.63	108.05	105.80
32	2a	402	G	N1-C6-O6	-5.63	116.52	119.90
1	1A	688	U	N1-C2-N3	5.63	118.28	114.90
1	1A	2059	A	O4'-C1'-N9	5.63	112.70	108.20
1	1A	2343	C	N1-C2-O2	-5.63	115.52	118.90
1	1A	2280	G	OP2-P-O3'	5.63	117.58	105.20
1	2A	1252	G	O4'-C1'-N9	-5.63	103.70	108.20
1	2A	1979	C	C5-C4-N4	-5.62	116.26	120.20
32	2a	1473	A	C8-N9-C4	5.62	108.05	105.80
1	1A	584	C	O5'-P-OP2	-5.62	100.64	105.70
1	1A	636	G	O5'-P-OP1	-5.62	100.64	105.70
1	1A	801	G	C5-C6-O6	-5.62	125.23	128.60
32	1a	841	U	C6-N1-C2	-5.62	117.63	121.00
1	1A	1250	G	C8-N9-C4	5.62	108.65	106.40
1	1A	2474	C	N1-C2-O2	5.62	122.27	118.90
32	1a	853	G	O5'-P-OP2	-5.62	100.64	105.70
1	2A	2619	C	C5-C6-N1	-5.62	118.19	121.00
1	1A	94	C	C6-N1-C2	-5.62	118.05	120.30
1	1A	1372	U	C5-C6-N1	5.62	125.51	122.70
32	1a	687	A	P-O3'-C3'	5.62	126.44	119.70
1	1A	1100	C	O4'-C1'-N1	5.62	112.69	108.20
1	1A	1633	G	C5-C6-N1	5.61	114.31	111.50
1	2A	1776	G	N3-C4-N9	5.61	129.37	126.00
1	2A	2486	G	C5-C6-O6	-5.61	125.23	128.60
1	2A	1779	U	O4'-C1'-N1	5.61	112.69	108.20
32	2a	662	G	N1-C6-O6	5.61	123.27	119.90
1	2A	684	G	N1-C6-O6	5.61	123.27	119.90
32	2a	244	U	C6-N1-C2	5.61	124.37	121.00
1	1A	1344	G	N3-C4-C5	5.61	131.40	128.60
1	1A	1807	G	N9-C1'-C2'	-5.61	105.83	112.00
1	1A	2685	G	C6-C5-N7	5.61	133.76	130.40
1	1A	946	G	C4-C5-N7	5.61	113.04	110.80
1	1A	1377	G	C5-C6-O6	5.61	131.96	128.60
1	1A	1899	G	C4-C5-N7	5.61	113.04	110.80
1	1A	2265	U	N1-C2-O2	-5.61	118.88	122.80
1	2A	1899	G	C4-C5-N7	5.61	113.04	110.80
1	1A	406	G	N3-C4-N9	-5.60	122.64	126.00
1	1A	1493	C	C6-N1-C1'	-5.60	114.08	120.80
32	1a	997	U	C2-N3-C4	5.60	130.36	127.00
1	1A	2044	C	N1-C2-O2	-5.60	115.54	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2885	C	OP2-P-O3'	5.60	117.53	105.20
1	2A	754	C	N3-C4-C5	-5.60	119.66	121.90
32	1a	1377	A	N1-C6-N6	5.60	121.96	118.60
1	2A	2593	U	N3-C4-O4	-5.60	115.48	119.40
1	2A	1997	G	N3-C4-N9	5.60	129.36	126.00
1	2A	2065	C	N1-C2-O2	5.60	122.26	118.90
32	2a	1281	U	N3-C2-O2	-5.60	118.28	122.20
1	1A	627	A	N7-C8-N9	-5.59	111.00	113.80
1	1A	756	C	C2-N1-C1'	-5.59	112.65	118.80
1	1A	2504	U	N3-C4-O4	-5.59	115.48	119.40
1	1A	29	U	C5-C4-O4	5.59	129.25	125.90
1	1A	1754	C	N1-C2-O2	-5.59	115.55	118.90
32	1a	1181	G	N3-C4-N9	-5.59	122.64	126.00
1	2A	2774	C	N3-C4-N4	-5.59	114.09	118.00
1	1A	2626	C	C6-N1-C2	5.59	122.54	120.30
32	1a	595	G	N3-C4-C5	-5.59	125.81	128.60
1	2A	27	G	O4'-C1'-N9	5.59	112.67	108.20
1	2A	733	G	C8-N9-C4	5.59	108.64	106.40
1	1A	1937	A	O4'-C1'-N9	5.59	112.67	108.20
32	1a	1396	A	C5-C6-N1	-5.59	114.91	117.70
1	2A	213	A	C4-C5-C6	-5.59	114.21	117.00
1	1A	1401	G	C8-N9-C4	5.58	108.63	106.40
1	1A	2419	U	N3-C4-O4	-5.58	115.49	119.40
1	2A	143	G	N9-C4-C5	5.58	107.63	105.40
1	2A	1370	C	N3-C4-N4	-5.58	114.09	118.00
1	1A	573	G	C5-C6-O6	-5.58	125.25	128.60
1	1A	1176	G	OP1-P-O3'	5.58	117.48	105.20
1	2A	914	C	N1-C2-O2	5.58	122.25	118.90
1	1A	1770	G	C8-N9-C4	5.58	108.63	106.40
32	2a	1523	G	O5'-P-OP2	-5.58	100.68	105.70
1	1A	1953	A	C8-N9-C4	5.58	108.03	105.80
1	1A	2567	G	N7-C8-N9	-5.58	110.31	113.10
32	1a	894	G	C4-N9-C1'	-5.58	119.25	126.50
1	2A	562	U	N3-C2-O2	-5.58	118.30	122.20
32	2a	366	C	C2-N1-C1'	-5.58	112.66	118.80
32	2a	423	G	C4-C5-N7	5.58	113.03	110.80
1	1A	952	G	C5-C6-O6	-5.58	125.25	128.60
32	1a	784	C	C5-C6-N1	-5.58	118.21	121.00
32	1a	1142	G	C6-C5-N7	5.58	133.75	130.40
32	1a	904	C	C6-N1-C2	5.57	122.53	120.30
1	2A	537	C	N1-C2-O2	-5.57	115.56	118.90
1	2A	1825	A	C4-C5-C6	5.57	119.78	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2762	G	C8-N9-C4	5.57	108.63	106.40
1	2A	693	C	C5-C6-N1	-5.57	118.22	121.00
1	2A	918	A	O5'-P-OP1	-5.57	100.69	105.70
1	1A	2732	G	C5-C6-O6	5.57	131.94	128.60
1	1A	35	G	N9-C4-C5	-5.56	103.17	105.40
32	1a	1446	U	O4'-C1'-N1	5.56	112.65	108.20
1	1A	775	G	OP1-P-OP2	5.56	127.94	119.60
1	1A	1332	G	N1-C6-O6	5.56	123.24	119.90
32	2a	534	U	N1-C2-O2	5.56	126.69	122.80
32	1a	1074	G	N1-C6-O6	5.56	123.24	119.90
32	2a	954	G	O5'-P-OP2	-5.56	100.69	105.70
1	1A	1898	U	C5-C6-N1	-5.56	119.92	122.70
1	2A	521	G	C5-C6-N1	-5.56	108.72	111.50
1	2A	673	C	C6-N1-C2	5.56	122.52	120.30
1	2A	2032	G	C5-N7-C8	5.56	107.08	104.30
32	2a	246	A	O5'-P-OP2	-5.56	100.70	105.70
32	2a	1420	C	C6-N1-C2	-5.56	118.08	120.30
1	1A	1075	C	C5-C4-N4	-5.56	116.31	120.20
1	1A	1772	G	N3-C4-C5	5.56	131.38	128.60
1	1A	2436	G	C6-N1-C2	-5.56	121.77	125.10
1	1A	2509	G	C2-N3-C4	5.56	114.68	111.90
1	2A	2467	C	N1-C2-O2	5.56	122.23	118.90
32	2a	1474	G	N3-C4-N9	-5.56	122.67	126.00
1	1A	2008	C	N1-C2-O2	-5.55	115.57	118.90
1	1A	689	A	N1-C6-N6	-5.55	115.27	118.60
23	11	3	LYS	CD-CE-NZ	-5.55	98.93	111.70
1	1A	787	U	N3-C2-O2	-5.55	118.31	122.20
16	1U	10	ARG	NE-CZ-NH2	-5.55	117.53	120.30
1	1A	867	C	N1-C2-O2	-5.55	115.57	118.90
32	2a	7	G	C8-N9-C4	5.55	108.62	106.40
1	1A	385	C	N1-C2-O2	-5.55	115.57	118.90
1	2A	1692	U	C5-C6-N1	-5.55	119.93	122.70
1	1A	2782	G	N1-C6-O6	5.54	123.23	119.90
32	1a	925	G	C5-C6-O6	-5.54	125.27	128.60
1	2A	670	A	O4'-C1'-N9	-5.54	103.76	108.20
1	1A	271(W)	G	C5-C6-N1	-5.54	108.73	111.50
1	2A	2019	A	N7-C8-N9	-5.54	111.03	113.80
1	1A	518	G	C5-C6-O6	5.54	131.92	128.60
1	1A	1570	A	C8-N9-C4	5.54	108.02	105.80
1	1A	2390	U	O5'-P-OP1	-5.54	100.71	105.70
32	1a	549	C	C6-N1-C2	5.54	122.52	120.30
1	1A	817	C	N3-C2-O2	-5.54	118.02	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1258	C	N3-C2-O2	5.54	125.78	121.90
1	1A	1351	C	C5-C4-N4	-5.54	116.32	120.20
32	2a	900	A	O5'-P-OP2	5.54	117.35	110.70
1	2A	1961	C	N1-C2-O2	-5.54	115.58	118.90
1	2A	2707	G	C2-N3-C4	-5.54	109.13	111.90
32	2a	246	A	C8-N9-C4	5.54	108.01	105.80
1	1A	64	A	C8-N9-C4	5.53	108.01	105.80
1	2A	1187	G	C5-C6-O6	5.53	131.92	128.60
1	1A	20	C	C5-C6-N1	-5.53	118.23	121.00
32	1a	266	G	N3-C4-C5	-5.53	125.83	128.60
1	2A	372	G	O4'-C1'-N9	5.53	112.63	108.20
1	1A	931	G	O5'-P-OP2	-5.53	100.72	105.70
32	1a	839	U	P-O3'-C3'	5.53	126.34	119.70
1	1A	561	G	OP2-P-O3'	5.53	117.36	105.20
1	1A	234	C	N3-C4-C5	5.53	124.11	121.90
1	1A	816	C	C2-N3-C4	-5.53	117.14	119.90
1	1A	452	G	C5-C6-N1	5.53	114.26	111.50
1	1A	2027	G	C2-N3-C4	5.53	114.66	111.90
1	1A	2526	G	N1-C6-O6	5.53	123.22	119.90
1	1A	2378	A	N1-C6-N6	5.52	121.91	118.60
1	1A	48	G	N3-C2-N2	-5.52	116.03	119.90
1	1A	2060	A	C2-N3-C4	-5.52	107.84	110.60
1	2A	1688	U	C2-N1-C1'	-5.52	111.07	117.70
1	1A	2239	G	N1-C6-O6	-5.52	116.59	119.90
1	1A	1783	A	OP1-P-OP2	5.52	127.88	119.60
1	1A	2702	U	C6-N1-C2	5.52	124.31	121.00
32	1a	965	A	C5-N7-C8	-5.52	101.14	103.90
32	2a	400	C	C6-N1-C2	5.52	122.51	120.30
1	2A	1092	C	C5-C6-N1	5.52	123.76	121.00
1	1A	125	G	O4'-C1'-N9	-5.51	103.79	108.20
32	1a	1204	A	C5-C6-N1	-5.51	114.94	117.70
32	1a	1530	G	C4-C5-N7	5.51	113.01	110.80
1	2A	752	A	N7-C8-N9	5.51	116.56	113.80
1	2A	1573	G	C5-N7-C8	5.51	107.06	104.30
1	2A	2617	C	C6-N1-C2	5.51	122.51	120.30
32	2a	897	C	C6-N1-C2	5.51	122.51	120.30
32	2a	1152	A	C8-N9-C4	-5.51	103.59	105.80
48	2q	72	ARG	NE-CZ-NH1	5.51	123.06	120.30
1	1A	1129	A	OP1-P-OP2	5.51	127.87	119.60
1	1A	1630	G	C8-N9-C4	5.51	108.61	106.40
1	1A	2002	G	C4-C5-N7	-5.51	108.59	110.80
1	1A	2238	G	O5'-P-OP2	5.51	117.31	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1008	C	N1-C2-O2	5.51	122.21	118.90
1	2A	2105	C	N3-C4-C5	-5.51	119.70	121.90
1	1A	392	C	O5'-P-OP1	-5.51	100.74	105.70
32	1a	1296	C	N1-C2-O2	-5.51	115.60	118.90
1	2A	1695	G	N9-C4-C5	-5.51	103.20	105.40
32	2a	73	G	C5-C6-O6	5.51	131.90	128.60
32	2a	719	C	O5'-P-OP2	-5.51	100.74	105.70
1	1A	1663	C	N1-C2-O2	-5.50	115.60	118.90
1	2A	1987	G	OP1-P-OP2	-5.50	111.34	119.60
32	2a	785	G	O5'-P-OP2	-5.50	100.75	105.70
32	1a	116	A	N1-C6-N6	5.50	121.90	118.60
1	2A	1444	G	N1-C6-O6	-5.50	116.60	119.90
1	1A	2273	A	C8-N9-C4	5.50	108.00	105.80
32	1a	897	C	N1-C2-O2	-5.50	115.60	118.90
1	2A	2126	A	P-O3'-C3'	5.50	126.30	119.70
32	2a	277	C	C6-N1-C2	5.50	122.50	120.30
32	2a	99	U	C2-N1-C1'	-5.50	111.10	117.70
1	1A	2570	G	N3-C4-N9	-5.50	122.70	126.00
1	1A	1392	A	N1-C6-N6	5.50	121.90	118.60
1	1A	2452	C	N3-C4-C5	5.50	124.10	121.90
1	1A	120	U	OP1-P-OP2	-5.50	111.36	119.60
1	2A	1097	U	C2-N1-C1'	5.50	124.29	117.70
1	1A	1025	G	N3-C2-N2	-5.49	116.06	119.90
1	1A	1282	U	N1-C2-N3	5.49	118.20	114.90
1	1A	2629	A	N1-C2-N3	5.49	132.05	129.30
32	1a	1181	G	C4-N9-C1'	-5.49	119.36	126.50
1	1A	1400	G	C4-C5-N7	-5.49	108.60	110.80
1	1A	2623	G	C8-N9-C4	-5.49	104.20	106.40
1	2A	1997	G	N3-C4-C5	-5.49	125.86	128.60
32	2a	840	C	C2-N1-C1'	5.49	124.84	118.80
32	2a	1023	G	N3-C4-N9	-5.49	122.71	126.00
32	1a	1054	C	N3-C2-O2	-5.49	118.06	121.90
1	1A	2894	G	N3-C4-C5	5.49	131.34	128.60
2	1B	94	C	N1-C2-O2	-5.49	115.61	118.90
3	1D	211	ARG	NE-CZ-NH1	5.49	123.04	120.30
1	2A	2430	A	N1-C2-N3	-5.49	126.56	129.30
1	2A	203	C	C6-N1-C2	5.48	122.49	120.30
1	2A	1264	G	N3-C2-N2	-5.48	116.06	119.90
1	1A	529	A	O4'-C1'-N9	5.48	112.58	108.20
32	1a	354	G	O5'-P-OP2	-5.48	100.77	105.70
1	2A	1133	U	C2-N3-C4	-5.48	123.71	127.00
1	2A	2384	G	O5'-P-OP2	-5.48	100.77	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	621	A	C5-N7-C8	-5.48	101.16	103.90
32	1a	903	G	O5'-P-OP1	5.48	117.28	110.70
1	2A	482	A	C8-N9-C4	5.48	107.99	105.80
32	2a	1395	C	N3-C4-C5	-5.48	119.71	121.90
1	1A	627	A	O5'-P-OP2	-5.48	100.77	105.70
2	1B	7	G	C5-C6-O6	-5.48	125.31	128.60
1	2A	2406	U	O4'-C1'-N1	-5.48	103.82	108.20
1	1A	2371	G	N9-C4-C5	-5.48	103.21	105.40
1	1A	2624	G	C5-C6-O6	-5.48	125.31	128.60
32	2a	64	G	N3-C4-C5	5.48	131.34	128.60
1	1A	325	G	N3-C4-C5	5.47	131.34	128.60
1	1A	1236	G	N7-C8-N9	-5.47	110.36	113.10
1	1A	2374	C	N3-C4-N4	5.47	121.83	118.00
1	2A	460	A	N1-C2-N3	-5.47	126.56	129.30
1	2A	1250	G	N3-C4-N9	-5.47	122.72	126.00
32	2a	1397	C	N1-C2-O2	5.47	122.19	118.90
32	1a	1142	G	C4-N9-C1'	-5.47	119.39	126.50
1	1A	1005	C	C6-N1-C2	5.47	122.49	120.30
1	1A	1799	G	C8-N9-C4	5.47	108.59	106.40
1	1A	1997	G	OP2-P-O3'	5.47	117.23	105.20
32	1a	921	U	C5-C6-N1	5.47	125.43	122.70
1	2A	2111	C	C5-C6-N1	5.47	123.73	121.00
1	1A	252	G	N1-C2-N2	5.47	121.12	116.20
1	1A	2222	G	C8-N9-C4	5.47	108.59	106.40
1	2A	1899	G	N3-C4-N9	5.47	129.28	126.00
1	1A	986	C	C4-C5-C6	-5.47	114.67	117.40
1	1A	2677	G	N3-C4-C5	5.47	131.33	128.60
32	1a	1039	C	N1-C2-O2	5.47	122.18	118.90
32	1a	1525	G	N3-C4-C5	5.47	131.33	128.60
1	1A	761	A	O5'-P-OP1	5.46	117.26	110.70
1	1A	826	U	C5-C6-N1	-5.46	119.97	122.70
1	2A	460	A	C5-C6-N6	-5.46	119.33	123.70
1	1A	194	G	C4-C5-N7	5.46	112.98	110.80
1	1A	911	A	C2-N3-C4	-5.46	107.87	110.60
1	1A	2598	A	N7-C8-N9	-5.46	111.07	113.80
32	2a	354	G	C6-C5-N7	-5.46	127.12	130.40
1	1A	2073	C	C2-N3-C4	-5.46	117.17	119.90
32	2a	792	A	O4'-C1'-N9	5.46	112.57	108.20
1	1A	2137	C	C4-C5-C6	5.46	120.13	117.40
1	2A	1862	G	O5'-P-OP2	-5.46	100.79	105.70
1	2A	1994	C	O5'-P-OP2	-5.46	100.79	105.70
1	2A	2111	C	C6-N1-C2	-5.46	118.12	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	370	G	O4'-C1'-N9	-5.46	103.83	108.20
32	1a	129	U	C5-C4-O4	5.46	129.17	125.90
1	2A	242	G	C8-N9-C4	5.46	108.58	106.40
1	1A	1122	G	C5-C6-N1	5.46	114.23	111.50
1	1A	684	G	C5-C6-O6	-5.45	125.33	128.60
1	1A	996	A	C8-N9-C4	5.45	107.98	105.80
1	1A	1108	U	N1-C2-O2	-5.45	118.98	122.80
1	2A	2206	G	C8-N9-C1'	5.45	134.09	127.00
1	1A	1071	G	C8-N9-C4	-5.45	104.22	106.40
1	1A	1131	G	N3-C2-N2	5.45	123.71	119.90
1	1A	1249	U	C5-C6-N1	-5.45	119.98	122.70
1	1A	1308	A	N9-C4-C5	5.45	107.98	105.80
1	2A	226	G	N3-C4-N9	-5.45	122.73	126.00
1	2A	2238	G	C5-C6-O6	-5.45	125.33	128.60
1	1A	251	A	C8-N9-C4	5.45	107.98	105.80
1	1A	2776	A	C8-N9-C4	5.45	107.98	105.80
1	2A	1582	C	C6-N1-C2	5.45	122.48	120.30
32	1a	1158	C	C5-C6-N1	-5.44	118.28	121.00
1	1A	1640	C	O4'-C1'-N1	5.44	112.55	108.20
1	1A	2289	G	C4-C5-N7	5.44	112.98	110.80
1	1A	2518	A	OP1-P-OP2	-5.44	111.44	119.60
1	2A	2501	C	C6-N1-C2	5.44	122.48	120.30
32	2a	1390	U	N1-C2-O2	-5.44	118.99	122.80
1	1A	1772	G	N7-C8-N9	-5.44	110.38	113.10
32	1a	1442	G	C5-C6-N1	5.44	114.22	111.50
1	1A	587	C	C6-N1-C2	-5.43	118.13	120.30
1	1A	691	C	C6-N1-C2	-5.43	118.13	120.30
1	1A	2689	U	N3-C4-O4	5.43	123.20	119.40
1	2A	966	G	N3-C4-N9	-5.43	122.74	126.00
1	2A	1379	A	N1-C6-N6	5.43	121.86	118.60
1	2A	1826	G	N3-C4-C5	-5.43	125.88	128.60
1	2A	2497	A	O5'-P-OP2	-5.43	100.81	105.70
1	1A	1383	C	C6-N1-C2	5.43	122.47	120.30
1	1A	2271	G	N9-C4-C5	-5.43	103.23	105.40
1	2A	1999	C	C6-N1-C2	5.43	122.47	120.30
2	2B	115	G	N9-C4-C5	-5.43	103.23	105.40
32	2a	115	G	P-O3'-C3'	5.43	126.22	119.70
1	1A	249	C	C6-N1-C2	5.43	122.47	120.30
1	1A	1380	G	O5'-P-OP2	-5.43	100.81	105.70
1	2A	1115	G	C8-N9-C4	5.43	108.57	106.40
1	2A	1633	G	C8-N9-C4	-5.43	104.23	106.40
10	1O	8	LEU	CA-CB-CG	5.43	127.78	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1765	C	OP2-P-O3'	5.43	117.14	105.20
1	1A	2018	G	N9-C4-C5	-5.43	103.23	105.40
2	1B	33	G	N3-C4-C5	5.43	131.31	128.60
1	2A	2045	C	C6-N1-C2	5.43	122.47	120.30
1	1A	1524	G	N1-C6-O6	-5.42	116.65	119.90
1	2A	1995	U	C5-C4-O4	5.42	129.16	125.90
1	1A	2555	U	C2-N1-C1'	-5.42	111.19	117.70
1	1A	1141	U	O4'-C1'-N1	5.42	112.54	108.20
1	2A	614	U	C5-C4-O4	5.42	129.15	125.90
1	2A	1632	A	N1-C6-N6	5.42	121.85	118.60
1	1A	2332	U	C4-C5-C6	-5.42	116.45	119.70
1	2A	1783	A	O4'-C1'-N9	-5.42	103.86	108.20
1	2A	2238	G	C5-N7-C8	-5.42	101.59	104.30
1	2A	61	G	C5-N7-C8	-5.42	101.59	104.30
1	2A	946	G	OP1-P-OP2	5.42	127.72	119.60
32	2a	722	A	N1-C6-N6	5.42	121.85	118.60
32	1a	803	G	C5-C6-N1	-5.42	108.79	111.50
1	2A	2424	C	C2-N1-C1'	-5.42	112.84	118.80
1	2A	467	G	N9-C1'-C2'	-5.41	106.04	112.00
1	1A	455	C	N1-C2-O2	-5.41	115.65	118.90
1	1A	1769	G	C5-C6-O6	-5.41	125.35	128.60
1	1A	2233	U	N1-C2-N3	5.41	118.15	114.90
1	2A	61	G	C4-C5-N7	5.41	112.96	110.80
1	1A	1288	U	C6-N1-C2	5.41	124.25	121.00
20	1Y	10	GLY	N-CA-C	-5.41	99.58	113.10
1	2A	1992	G	N3-C4-C5	-5.41	125.90	128.60
1	2A	2549	G	N3-C2-N2	-5.41	116.11	119.90
32	2a	328	C	C5-C6-N1	-5.41	118.30	121.00
1	2A	2740	A	C8-N9-C4	5.41	107.96	105.80
1	1A	656	G	N3-C4-N9	-5.41	122.76	126.00
1	1A	2182	G	N9-C4-C5	5.41	107.56	105.40
1	1A	2644	G	C2-N3-C4	-5.41	109.20	111.90
2	1B	70	C	O5'-P-OP2	-5.41	100.83	105.70
1	2A	972	G	O5'-P-OP2	-5.41	100.84	105.70
32	2a	70	G	C5-C6-O6	5.41	131.84	128.60
1	2A	1306	C	C2-N3-C4	5.40	122.60	119.90
1	1A	1740	G	C6-C5-N7	5.40	133.64	130.40
1	1A	2032	G	N7-C8-N9	-5.40	110.40	113.10
32	1a	1088	G	N3-C2-N2	-5.40	116.12	119.90
1	1A	489	G	N1-C6-O6	5.40	123.14	119.90
1	2A	676	A	C2-N3-C4	-5.40	107.90	110.60
1	2A	794	G	O5'-P-OP2	-5.40	100.84	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	419	C	C6-N1-C2	5.40	122.46	120.30
1	1A	1325	G	OP1-P-OP2	-5.40	111.50	119.60
1	1A	2788	C	C5-C6-N1	-5.40	118.30	121.00
32	2a	572	A	C4-N9-C1'	-5.40	116.58	126.30
1	1A	735	A	OP1-P-OP2	5.40	127.70	119.60
1	1A	1613	G	C8-N9-C4	5.40	108.56	106.40
1	2A	1131	G	O4'-C1'-N9	5.40	112.52	108.20
1	1A	309	G	N1-C6-O6	-5.40	116.66	119.90
1	1A	377	C	C6-N1-C2	5.40	122.46	120.30
1	1A	587	C	C5-C4-N4	5.40	123.98	120.20
1	1A	1089	G	N3-C4-C5	-5.39	125.90	128.60
1	1A	1894	C	C6-N1-C2	-5.39	118.14	120.30
1	1A	2807	G	C8-N9-C4	-5.39	104.24	106.40
1	1A	557	U	N1-C2-N3	5.39	118.14	114.90
1	1A	1015	G	N9-C4-C5	-5.39	103.24	105.40
1	1A	1250	G	N1-C6-O6	-5.39	116.66	119.90
1	1A	2469	A	O5'-P-OP1	-5.39	100.85	105.70
1	2A	1967	C	C6-N1-C2	5.39	122.46	120.30
32	1a	780	A	C8-N9-C4	5.39	107.96	105.80
1	1A	867	C	N3-C2-O2	5.39	125.67	121.90
1	1A	1650	G	C2-N3-C4	-5.39	109.21	111.90
1	2A	2194	G	N3-C2-N2	-5.39	116.13	119.90
1	1A	2052	G	C5-N7-C8	5.38	106.99	104.30
1	1A	2434	A	C8-N9-C4	-5.38	103.65	105.80
1	1A	2759	G	N1-C2-N2	5.38	121.05	116.20
1	2A	2010	G	N3-C2-N2	-5.38	116.13	119.90
1	2A	2065	C	N3-C2-O2	-5.38	118.13	121.90
1	1A	645	C	N1-C2-O2	5.38	122.13	118.90
1	1A	2003	G	C5-C6-N1	5.38	114.19	111.50
32	1a	534	U	C2-N1-C1'	-5.38	111.24	117.70
32	2a	929	G	N3-C2-N2	-5.38	116.13	119.90
1	1A	29	U	N3-C4-O4	-5.38	115.63	119.40
32	2a	1504	G	C4-N9-C1'	-5.38	119.51	126.50
1	1A	115	C	N3-C2-O2	5.38	125.67	121.90
1	1A	1693	U	O4'-C1'-N1	-5.38	103.90	108.20
2	1B	9	G	OP2-P-O3'	5.38	117.03	105.20
1	2A	1239	G	C5-C6-O6	-5.38	125.37	128.60
2	2B	62	C	C6-N1-C2	5.38	122.45	120.30
1	1A	491	G	C6-C5-N7	5.38	133.63	130.40
1	1A	1475	G	N3-C2-N2	-5.38	116.14	119.90
1	1A	1889	A	C8-N9-C4	5.38	107.95	105.80
1	2A	204	A	C8-N9-C4	5.38	107.95	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1408	C	N1-C2-O2	-5.38	115.67	118.90
1	1A	726	G	O5'-P-OP1	-5.38	100.86	105.70
1	1A	2645	G	N7-C8-N9	5.38	115.79	113.10
1	1A	2427	C	C5-C6-N1	-5.37	118.31	121.00
1	2A	419	C	OP1-P-OP2	5.37	127.66	119.60
1	2A	414	C	C5-C6-N1	-5.37	118.31	121.00
1	1A	2677	G	N3-C4-N9	-5.37	122.78	126.00
32	1a	266	G	C8-N9-C1'	-5.37	120.02	127.00
1	1A	802	A	O5'-P-OP1	-5.37	100.87	105.70
1	1A	2242	G	N3-C2-N2	-5.37	116.14	119.90
1	1A	1210	A	C4-C5-C6	5.37	119.68	117.00
32	1a	381	C	N3-C4-C5	-5.37	119.75	121.90
32	1a	1351	U	N1-C2-O2	-5.37	119.04	122.80
1	2A	974	G	O5'-P-OP2	-5.37	100.87	105.70
1	2A	1362	C	C5-C6-N1	-5.37	118.32	121.00
1	1A	1210	A	OP1-P-O3'	5.36	117.00	105.20
1	1A	2258	C	C2-N3-C4	-5.36	117.22	119.90
1	2A	936	C	C5-C6-N1	-5.36	118.32	121.00
2	2B	22	U	C6-N1-C2	-5.36	117.78	121.00
1	1A	271(R)	G	O5'-P-OP1	-5.36	100.88	105.70
2	2B	30	C	N3-C4-C5	-5.36	119.75	121.90
1	1A	2167	U	C4-C5-C6	5.36	122.92	119.70
1	2A	1771	C	N3-C4-C5	5.36	124.04	121.90
1	2A	2184	G	N3-C4-C5	5.36	131.28	128.60
1	1A	2148	G	C8-N9-C4	5.36	108.54	106.40
1	1A	2501	C	C2-N1-C1'	-5.36	112.91	118.80
32	1a	1030(B)	C	C5-C6-N1	5.36	123.68	121.00
1	2A	944	G	N9-C4-C5	-5.36	103.26	105.40
1	1A	821	A	N1-C2-N3	-5.36	126.62	129.30
1	1A	2070	G	N3-C2-N2	5.36	123.65	119.90
1	1A	2134	A	N1-C6-N6	-5.36	115.39	118.60
1	1A	2538	C	N3-C4-C5	5.35	124.04	121.90
3	1D	229	VAL	CG1-CB-CG2	5.35	119.47	110.90
1	2A	598	G	C8-N9-C4	5.35	108.54	106.40
1	1A	751	A	C8-N9-C4	-5.35	103.66	105.80
1	1A	1133	U	C2-N1-C1'	-5.35	111.28	117.70
1	1A	1965	C	C6-N1-C2	5.35	122.44	120.30
1	1A	2319	G	C4-C5-N7	5.35	112.94	110.80
1	2A	445	C	O5'-P-OP1	-5.35	100.88	105.70
1	1A	379	G	N7-C8-N9	-5.35	110.42	113.10
1	2A	395	U	O4'-C1'-N1	5.35	112.48	108.20
1	1A	424	G	C5-C6-O6	-5.35	125.39	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	491	G	N1-C6-O6	-5.35	116.69	119.90
1	1A	1034	G	N7-C8-N9	-5.35	110.42	113.10
1	1A	2593	U	N3-C2-O2	-5.35	118.45	122.20
2	1B	75	G	C8-N9-C4	5.35	108.54	106.40
1	2A	739	G	OP1-P-O3'	5.35	116.97	105.20
1	2A	2223	G	O5'-P-OP2	-5.35	100.89	105.70
1	1A	732	C	C6-N1-C2	-5.35	118.16	120.30
1	1A	2587	A	O5'-P-OP2	-5.35	100.89	105.70
43	1l	43	VAL	C-N-CA	-5.35	108.33	121.70
32	2a	1072	G	N3-C4-N9	-5.35	122.79	126.00
1	1A	1308	A	C8-N9-C4	-5.35	103.66	105.80
1	2A	669	G	OP1-P-OP2	-5.35	111.58	119.60
1	1A	406	G	N1-C2-N2	5.34	121.01	116.20
32	2a	60	A	P-O3'-C3'	5.34	126.11	119.70
1	1A	1602	U	C2-N3-C4	-5.34	123.79	127.00
1	2A	460	A	N1-C6-N6	5.34	121.81	118.60
1	1A	570	G	N3-C4-N9	5.34	129.20	126.00
1	1A	2554	U	O5'-P-OP1	-5.34	100.89	105.70
1	1A	2826	A	N7-C8-N9	-5.34	111.13	113.80
32	1a	483	C	C6-N1-C2	5.34	122.44	120.30
1	2A	1082	U	C2-N1-C1'	5.34	124.11	117.70
1	2A	1762	A	C8-N9-C4	5.34	107.94	105.80
1	1A	2230	G	C8-N9-C4	5.34	108.54	106.40
1	2A	1192	G	C8-N9-C4	5.34	108.54	106.40
1	1A	630	G	N9-C1'-C2'	-5.34	106.13	112.00
1	2A	2589	A	C8-N9-C4	5.34	107.94	105.80
1	1A	1325	G	C8-N9-C4	-5.33	104.27	106.40
1	1A	1823	G	N9-C4-C5	-5.33	103.27	105.40
32	2a	1286	A	N7-C8-N9	5.33	116.47	113.80
1	1A	2363	C	C6-N1-C2	5.33	122.43	120.30
32	1a	782	A	OP1-P-OP2	5.33	127.60	119.60
1	1A	2153	G	N3-C4-C5	5.33	131.26	128.60
1	1A	2154	G	N1-C2-N3	-5.33	120.70	123.90
32	2a	834	C	O5'-P-OP2	-5.33	100.90	105.70
1	1A	129	C	C6-N1-C1'	5.33	127.19	120.80
1	1A	1630	G	N7-C8-N9	-5.33	110.44	113.10
1	1A	2634	G	N9-C4-C5	-5.33	103.27	105.40
1	1A	1250	G	N7-C8-N9	-5.33	110.44	113.10
32	1a	1525	G	C4-N9-C1'	-5.33	119.58	126.50
32	2a	303	A	C2-N3-C4	-5.33	107.94	110.60
32	2a	1442	G	N1-C6-O6	5.33	123.10	119.90
1	1A	139(A)	G	N7-C8-N9	-5.33	110.44	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1170	G	C8-N9-C4	-5.33	104.27	106.40
32	2a	285	G	N3-C4-C5	5.33	131.26	128.60
1	1A	453	C	C6-N1-C2	-5.32	118.17	120.30
1	1A	706	A	C8-N9-C4	5.32	107.93	105.80
1	1A	2463	C	C6-N1-C2	5.32	122.43	120.30
32	1a	371	G	N1-C6-O6	5.32	123.09	119.90
32	1a	894	G	C8-N9-C1'	5.32	133.92	127.00
1	1A	1351	C	N1-C2-O2	-5.32	115.71	118.90
1	2A	271(Y)	U	O4'-C1'-N1	5.32	112.46	108.20
32	2a	878	G	N7-C8-N9	-5.32	110.44	113.10
32	1a	1225	A	C5-C6-N6	5.32	127.96	123.70
32	2a	295	C	C2-N3-C4	-5.32	117.24	119.90
1	2A	570	G	N1-C6-O6	5.32	123.09	119.90
1	2A	2373	G	N1-C6-O6	5.32	123.09	119.90
1	1A	1763	G	N1-C6-O6	-5.32	116.71	119.90
32	1a	885	G	N3-C2-N2	-5.32	116.18	119.90
1	1A	850	C	C6-N1-C2	5.32	122.43	120.30
1	1A	2735	G	N3-C4-N9	-5.32	122.81	126.00
1	2A	1450(A)	C	O5'-P-OP2	-5.32	100.92	105.70
1	1A	523	C	OP2-P-O3'	5.31	116.89	105.20
1	2A	192	C	OP1-P-OP2	5.31	127.57	119.60
1	2A	277	C	N3-C2-O2	-5.31	118.18	121.90
1	2A	2037	G	N3-C4-C5	5.31	131.26	128.60
1	1A	245	G	C5-C6-O6	-5.31	125.41	128.60
1	1A	266	G	C8-N9-C4	5.31	108.52	106.40
1	1A	2153	G	C6-C5-N7	5.31	133.59	130.40
32	1a	431	A	C8-N9-C4	5.31	107.92	105.80
32	2a	1259	C	C6-N1-C2	-5.31	118.18	120.30
1	1A	185	U	N3-C4-C5	5.31	117.78	114.60
1	1A	2501	C	N3-C4-N4	-5.31	114.28	118.00
1	2A	1615	C	N3-C4-C5	-5.31	119.78	121.90
1	1A	2372	G	C5-C6-O6	-5.31	125.42	128.60
1	2A	1603	A	N1-C2-N3	-5.31	126.65	129.30
1	2A	1997	G	N3-C2-N2	5.31	123.61	119.90
1	2A	1780	A	C6-N1-C2	5.30	121.78	118.60
1	1A	424	G	C8-N9-C4	5.30	108.52	106.40
1	1A	2058	A	C4-C5-N7	-5.30	108.05	110.70
32	1a	1329	A	N3-C4-C5	5.30	130.51	126.80
1	2A	1692	U	C2-N3-C4	-5.30	123.82	127.00
1	2A	2184	G	N3-C4-N9	-5.30	122.82	126.00
1	2A	2427	C	N3-C4-C5	5.30	124.02	121.90
32	2a	526	C	C4-C5-C6	-5.30	114.75	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1632	A	N7-C8-N9	-5.30	111.15	113.80
1	1A	1799	G	N7-C8-N9	-5.30	110.45	113.10
1	1A	62	C	O5'-P-OP2	-5.30	100.93	105.70
1	1A	199	A	C8-N9-C4	5.30	107.92	105.80
1	1A	842	G	N3-C4-N9	-5.30	122.82	126.00
1	1A	1344	G	C8-N9-C4	5.30	108.52	106.40
1	1A	1477	A	C8-N9-C4	5.30	107.92	105.80
1	1A	2090	G	C5-C6-N1	5.30	114.15	111.50
1	1A	2627	G	N7-C8-N9	-5.30	110.45	113.10
32	1a	615	C	C6-N1-C2	-5.30	118.18	120.30
32	1a	1065	U	P-O3'-C3'	5.30	126.06	119.70
1	1A	704	G	C2-N3-C4	5.29	114.55	111.90
1	1A	1748	G	C8-N9-C4	5.29	108.52	106.40
1	2A	2585	U	OP1-P-O3'	5.29	116.85	105.20
1	1A	473	G	C5-N7-C8	5.29	106.95	104.30
1	1A	672	C	C2-N3-C4	-5.29	117.25	119.90
1	1A	1133	U	C5-C6-N1	-5.29	120.05	122.70
1	1A	1626	G	N1-C6-O6	-5.29	116.72	119.90
1	2A	2610	C	C6-N1-C2	-5.29	118.18	120.30
32	2a	38	G	C8-N9-C4	5.29	108.52	106.40
1	1A	2241	A	C5-C6-N6	5.29	127.93	123.70
1	2A	939	G	C5-C6-O6	-5.29	125.42	128.60
1	2A	1314	C	C5-C6-N1	5.29	123.65	121.00
1	2A	2821	A	C8-N9-C4	5.29	107.92	105.80
32	2a	1530	G	N3-C4-C5	5.29	131.25	128.60
1	1A	788	A	N9-C4-C5	-5.29	103.69	105.80
1	1A	2036	C	N1-C2-O2	-5.29	115.73	118.90
1	1A	2265	U	OP1-P-OP2	-5.29	111.67	119.60
1	1A	2496	C	C5-C6-N1	-5.29	118.36	121.00
1	1A	2736	G	N7-C8-N9	-5.29	110.46	113.10
1	1A	181	A	N1-C6-N6	-5.29	115.43	118.60
1	1A	949	C	N3-C4-N4	-5.28	114.30	118.00
1	1A	2187	G	C4-C5-N7	5.28	112.91	110.80
2	2B	115	G	N7-C8-N9	-5.28	110.46	113.10
32	2a	550	G	O5'-P-OP1	-5.28	100.94	105.70
1	1A	34	C	C6-N1-C2	-5.28	118.19	120.30
1	1A	2081	C	C2-N3-C4	-5.28	117.26	119.90
1	2A	747	U	O5'-P-OP2	-5.28	100.95	105.70
1	2A	2172	U	OP1-P-O3'	5.28	116.81	105.20
1	1A	954	G	C5-C6-O6	5.28	131.77	128.60
32	1a	226	G	OP1-P-OP2	5.28	127.52	119.60
1	2A	2186	G	C6-N1-C2	5.28	128.27	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	372	C	N1-C2-O2	5.28	122.07	118.90
1	1A	207	A	C8-N9-C4	5.28	107.91	105.80
1	1A	1164	G	C5-C6-O6	5.28	131.77	128.60
1	1A	2331	G	C8-N9-C4	5.28	108.51	106.40
1	2A	2259	G	C5-C6-O6	5.28	131.77	128.60
1	1A	204	A	C4-C5-C6	-5.28	114.36	117.00
1	1A	1283	G	C5-C6-O6	5.28	131.77	128.60
1	1A	1992	G	O4'-C1'-N9	-5.28	103.98	108.20
1	1A	2507	C	N3-C4-C5	-5.28	119.79	121.90
1	2A	2506	U	C2-N1-C1'	5.28	124.03	117.70
32	2a	49	U	C5-C6-N1	-5.28	120.06	122.70
1	1A	466	A	C5-C6-N6	-5.27	119.48	123.70
1	2A	307	G	O5'-P-OP2	-5.27	100.95	105.70
1	2A	2080	G	C5-C6-N1	5.27	114.14	111.50
1	1A	481	G	O4'-C1'-N9	5.27	112.42	108.20
32	1a	781	A	OP1-P-O3'	-5.27	93.60	105.20
32	1a	905	U	N1-C2-O2	-5.27	119.11	122.80
1	2A	99	U	O5'-P-OP1	5.27	117.03	110.70
1	1A	1903	G	OP2-P-O3'	5.27	116.80	105.20
1	2A	1332	G	O5'-P-OP2	-5.27	100.96	105.70
1	1A	191	A	N7-C8-N9	-5.27	111.17	113.80
1	1A	2629	A	C2-N3-C4	-5.27	107.97	110.60
1	1A	442	G	C4-N9-C1'	5.26	133.34	126.50
1	1A	488	G	C4-C5-N7	-5.26	108.69	110.80
1	1A	2673	G	N3-C2-N2	-5.26	116.22	119.90
32	2a	269	C	C6-N1-C2	5.26	122.41	120.30
1	1A	2088	G	N3-C4-C5	5.26	131.23	128.60
1	1A	2289	G	N9-C4-C5	-5.26	103.30	105.40
1	1A	2474	C	C6-N1-C1'	-5.26	114.48	120.80
1	1A	2735	G	C5-C6-O6	5.26	131.76	128.60
1	2A	1032	A	O5'-P-OP2	-5.26	100.97	105.70
1	2A	2440	C	N3-C4-C5	-5.26	119.80	121.90
1	1A	185	U	C6-N1-C2	5.26	124.16	121.00
1	1A	2334	G	OP2-P-O3'	5.26	116.77	105.20
1	2A	2085	C	N3-C4-C5	5.26	124.00	121.90
1	1A	2715	C	C6-N1-C2	5.26	122.40	120.30
1	1A	952	G	C4-C5-N7	5.26	112.90	110.80
1	1A	1667	G	OP1-P-OP2	5.26	127.48	119.60
1	1A	1805	U	OP2-P-O3'	5.26	116.77	105.20
1	1A	1814	G	O5'-P-OP2	-5.26	100.97	105.70
1	1A	2515	C	C2-N3-C4	-5.26	117.27	119.90
32	1a	1028	C	C2-N3-C4	5.26	122.53	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2035	G	C8-N9-C4	5.26	108.50	106.40
1	2A	2172	U	P-O3'-C3'	5.26	126.01	119.70
1	1A	766	C	C6-N1-C2	5.25	122.40	120.30
1	1A	2566	A	N1-C6-N6	5.25	121.75	118.60
32	2a	665	A	C2-N3-C4	-5.25	107.97	110.60
1	1A	570	G	C6-N1-C2	-5.25	121.95	125.10
1	1A	1958	C	C2-N1-C1'	-5.25	113.02	118.80
1	2A	271(M)	G	P-O3'-C3'	5.25	126.00	119.70
1	2A	796	C	C2-N3-C4	-5.25	117.27	119.90
1	2A	1947	C	C6-N1-C2	5.25	122.40	120.30
1	2A	2689	U	N3-C2-O2	-5.25	118.52	122.20
32	2a	99	U	N3-C2-O2	5.25	125.88	122.20
32	2a	1003	G	C4-N9-C1'	5.25	133.33	126.50
1	1A	859	G	N1-C6-O6	5.25	123.05	119.90
1	1A	1805	U	C2-N3-C4	-5.25	123.85	127.00
32	1a	541	G	O5'-P-OP1	-5.25	100.97	105.70
32	1a	1396	A	N1-C2-N3	-5.25	126.67	129.30
1	2A	1192	G	N7-C8-N9	-5.25	110.47	113.10
1	2A	1252	G	C8-N9-C4	5.25	108.50	106.40
1	2A	1791	A	C2-N3-C4	5.25	113.22	110.60
1	2A	2509	G	N3-C2-N2	-5.25	116.22	119.90
1	2A	2587	A	C8-N9-C4	5.25	107.90	105.80
1	1A	552	G	N3-C2-N2	5.25	123.57	119.90
1	1A	1899	G	C5-N7-C8	-5.25	101.68	104.30
1	1A	2789	C	C2-N1-C1'	-5.25	113.03	118.80
32	1a	1325	C	C6-N1-C2	5.25	122.40	120.30
1	2A	1094	U	C4-C5-C6	5.25	122.85	119.70
1	1A	2431	U	N3-C2-O2	-5.25	118.53	122.20
32	1a	149	A	N1-C6-N6	5.25	121.75	118.60
1	2A	1204	A	N9-C4-C5	-5.25	103.70	105.80
1	2A	1825	A	C8-N9-C4	-5.25	103.70	105.80
1	2A	2103	C	C5-C4-N4	5.25	123.87	120.20
1	2A	2139	C	C2-N3-C4	5.25	122.52	119.90
1	1A	186	G	C8-N9-C4	5.24	108.50	106.40
1	1A	446	G	N1-C6-O6	5.24	123.05	119.90
32	1a	785	G	OP2-P-O3'	5.24	116.74	105.20
1	2A	188	G	C6-C5-N7	-5.24	127.25	130.40
32	2a	96	U	N1-C2-O2	-5.24	119.13	122.80
32	2a	483	C	C2-N1-C1'	-5.24	113.03	118.80
32	1a	695	A	N1-C6-N6	5.24	121.75	118.60
32	1a	863	U	C2-N1-C1'	-5.24	111.41	117.70
1	1A	1559	G	C4-C5-C6	-5.24	115.66	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2423	U	C6-N1-C2	5.24	124.14	121.00
32	2a	266	G	C8-N9-C1'	-5.24	120.19	127.00
1	1A	301	G	C2-N3-C4	-5.24	109.28	111.90
1	1A	349	G	OP2-P-O3'	5.24	116.72	105.20
1	1A	686	G	C8-N9-C4	5.24	108.50	106.40
1	1A	2501	C	N3-C4-C5	5.24	124.00	121.90
1	2A	2375	G	C8-N9-C1'	5.24	133.81	127.00
1	1A	122	G	C8-N9-C4	5.24	108.50	106.40
1	1A	512	G	C5-N7-C8	5.24	106.92	104.30
1	1A	702	G	OP1-P-OP2	5.24	127.45	119.60
1	1A	2538	C	C6-N1-C2	5.24	122.39	120.30
1	2A	652(T)	C	C6-N1-C2	-5.24	118.21	120.30
1	1A	1276	A	N7-C8-N9	-5.23	111.18	113.80
32	1a	772	U	C5-C4-O4	-5.23	122.76	125.90
32	1a	1419	G	C5-C6-N1	-5.23	108.88	111.50
1	1A	1377	G	N1-C6-O6	-5.23	116.76	119.90
1	1A	1626	G	N9-C4-C5	5.23	107.49	105.40
1	1A	2080	G	N1-C6-O6	-5.23	116.76	119.90
1	2A	2139	C	C5-C6-N1	5.23	123.62	121.00
1	1A	2261	C	OP2-P-O3'	5.23	116.71	105.20
1	1A	2555	U	C5-C6-N1	-5.23	120.08	122.70
1	2A	2166	G	N7-C8-N9	5.23	115.72	113.10
1	1A	732	C	C6-N1-C1'	5.23	127.08	120.80
1	2A	36	G	O5'-P-OP2	-5.23	100.99	105.70
1	1A	1395	A	OP2-P-O3'	5.23	116.70	105.20
1	1A	2452	C	C2-N3-C4	-5.23	117.29	119.90
15	1T	9	LEU	CA-CB-CG	-5.23	103.28	115.30
1	1A	2241	A	OP2-P-O3'	5.23	116.70	105.20
1	1A	2813	A	N1-C6-N6	-5.23	115.46	118.60
32	1a	880	C	C2-N1-C1'	-5.23	113.05	118.80
2	2B	97	G	C4-N9-C1'	-5.23	119.71	126.50
1	1A	2319	G	N7-C8-N9	5.22	115.71	113.10
1	2A	2084	C	N1-C2-O2	-5.22	115.77	118.90
1	2A	2873	A	O4'-C1'-N9	5.22	112.38	108.20
1	2A	2027	G	C5-C6-O6	5.22	131.73	128.60
32	2a	1056	U	C2-N3-C4	5.22	130.13	127.00
1	1A	1937	A	O5'-P-OP2	-5.22	101.00	105.70
1	1A	2058	A	N1-C2-N3	5.22	131.91	129.30
1	1A	2382	G	N1-C6-O6	-5.22	116.77	119.90
1	2A	2519	U	N1-C2-O2	-5.22	119.14	122.80
1	1A	2056	G	C4-C5-N7	5.22	112.89	110.80
1	2A	2438	U	OP2-P-O3'	5.22	116.68	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2519	U	C5-C4-O4	-5.22	122.77	125.90
1	1A	836	G	OP2-P-O3'	5.22	116.68	105.20
1	1A	1653	G	P-O3'-C3'	5.22	125.96	119.70
1	2A	1825	A	N3-C4-C5	-5.22	123.15	126.80
1	1A	2655	G	O4'-C1'-N9	5.22	112.37	108.20
2	1B	31	C	OP2-P-O3'	5.22	116.68	105.20
32	2a	112	G	N1-C2-N2	5.22	120.89	116.20
1	1A	379	G	C5-N7-C8	5.21	106.91	104.30
1	1A	596	G	N7-C8-N9	-5.21	110.49	113.10
32	2a	297	G	O5'-P-OP2	-5.21	101.01	105.70
1	1A	452	G	C6-N1-C2	-5.21	121.97	125.10
32	1a	700	G	C5-C6-O6	-5.21	125.47	128.60
1	2A	363(B)	G	O5'-P-OP2	-5.21	101.01	105.70
1	2A	1979	C	N3-C4-N4	5.21	121.65	118.00
1	1A	330	A	C6-C5-N7	-5.21	128.66	132.30
1	1A	1468	C	N1-C2-O2	-5.21	115.78	118.90
32	1a	7	G	O4'-C1'-N9	5.21	112.36	108.20
32	1a	947	G	C8-N9-C4	5.21	108.48	106.40
1	2A	1378	A	C8-N9-C4	5.21	107.88	105.80
1	2A	2186	G	C6-C5-N7	5.21	133.52	130.40
32	2a	1133	G	N3-C2-N2	-5.21	116.25	119.90
1	1A	996	A	N7-C8-N9	-5.21	111.20	113.80
1	2A	332	A	N7-C8-N9	-5.21	111.20	113.80
1	2A	1647	G	N7-C8-N9	-5.21	110.50	113.10
1	2A	1670	C	OP1-P-OP2	5.21	127.41	119.60
1	2A	2282	G	N3-C4-C5	5.21	131.20	128.60
1	1A	1428	C	C2-N1-C1'	-5.20	113.08	118.80
1	1A	1775	U	N1-C2-N3	5.20	118.02	114.90
1	1A	1786	A	N9-C4-C5	-5.20	103.72	105.80
1	2A	2687	U	N1-C2-N3	-5.20	111.78	114.90
1	1A	113	G	N3-C4-N9	-5.20	122.88	126.00
1	1A	817	C	N1-C2-O2	5.20	122.02	118.90
1	1A	205	G	N3-C4-N9	5.20	129.12	126.00
32	1a	9	G	N9-C4-C5	-5.20	103.32	105.40
1	1A	27	G	N1-C6-O6	5.20	123.02	119.90
1	1A	537	C	C6-N1-C2	5.20	122.38	120.30
1	1A	846	C	C2-N1-C1'	-5.20	113.08	118.80
1	1A	1945	G	O5'-P-OP1	-5.20	101.02	105.70
32	1a	1054	C	N1-C2-O2	5.20	122.02	118.90
32	1a	1363	C	C6-N1-C1'	5.20	127.04	120.80
1	2A	2452	C	N1-C2-O2	-5.20	115.78	118.90
1	1A	246	C	C4-C5-C6	5.20	120.00	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2629	A	O4'-C1'-N9	5.20	112.36	108.20
1	1A	729	G	OP1-P-OP2	5.20	127.39	119.60
32	1a	1033	G	N3-C2-N2	5.20	123.54	119.90
1	2A	2238	G	C4-C5-N7	5.20	112.88	110.80
32	2a	1346	A	C8-N9-C4	5.20	107.88	105.80
1	1A	1680	U	N3-C2-O2	-5.19	118.56	122.20
1	1A	2254	C	C4-C5-C6	5.19	120.00	117.40
1	2A	936	C	N3-C4-C5	5.19	123.98	121.90
1	2A	2854	G	N3-C4-C5	5.19	131.20	128.60
1	1A	199	A	N7-C8-N9	-5.19	111.20	113.80
1	1A	2355	C	C6-N1-C2	5.19	122.38	120.30
1	2A	633	A	N1-C6-N6	5.19	121.71	118.60
1	2A	2487	G	N9-C4-C5	-5.19	103.32	105.40
1	1A	1204	A	C2-N3-C4	-5.19	108.00	110.60
32	1a	538	G	N3-C4-C5	5.19	131.19	128.60
1	2A	2105	C	C5-C6-N1	5.19	123.59	121.00
1	1A	2300	G	N1-C6-O6	5.19	123.01	119.90
32	1a	902	G	O5'-P-OP2	-5.19	101.03	105.70
1	1A	491	G	N9-C4-C5	5.19	107.47	105.40
32	1a	738	C	C6-N1-C2	-5.18	118.23	120.30
32	1a	1204	A	C5-C6-N6	5.18	127.85	123.70
1	1A	1130	U	N1-C2-O2	-5.18	119.17	122.80
1	1A	1574	C	OP2-P-O3'	5.18	116.60	105.20
32	1a	1201	A	P-O3'-C3'	5.18	125.92	119.70
1	2A	1382	G	N1-C6-O6	5.18	123.01	119.90
1	2A	2699	C	C6-N1-C2	5.18	122.37	120.30
32	2a	912	C	N1-C2-O2	-5.18	115.79	118.90
1	1A	2803	C	C6-N1-C2	-5.18	118.23	120.30
1	2A	1583	A	O5'-P-OP2	-5.18	101.04	105.70
1	1A	812	C	C2-N3-C4	-5.18	117.31	119.90
1	1A	1779	U	OP2-P-O3'	5.18	116.59	105.20
1	1A	1785	A	O5'-P-OP2	-5.18	101.04	105.70
1	1A	2248	C	N3-C4-C5	5.18	123.97	121.90
1	1A	2319	G	C8-N9-C4	-5.18	104.33	106.40
1	1A	1429	G	C6-C5-N7	5.18	133.51	130.40
1	1A	2548	G	C8-N9-C4	5.18	108.47	106.40
32	2a	266	G	C8-N9-C4	-5.18	104.33	106.40
32	2a	295	C	N3-C4-C5	5.18	123.97	121.90
1	1A	1257	C	C4-C5-C6	5.17	119.99	117.40
32	2a	1158	C	C2-N1-C1'	5.17	124.49	118.80
1	1A	2520	C	C6-N1-C2	5.17	122.37	120.30
32	1a	1232	U	C2-N3-C4	5.17	130.10	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1674	G	O4'-C1'-N9	-5.17	104.06	108.20
32	2a	50	A	O5'-P-OP2	-5.17	101.05	105.70
1	2A	1299	G	C4-C5-N7	-5.17	108.73	110.80
1	1A	748	G	C5-C6-O6	-5.17	125.50	128.60
1	1A	1219	G	N3-C4-C5	5.17	131.18	128.60
1	1A	2662	A	N7-C8-N9	5.17	116.38	113.80
1	1A	1410	G	N1-C6-O6	5.17	123.00	119.90
32	1a	927	G	C8-N9-C4	5.17	108.47	106.40
1	1A	1187	G	O5'-P-OP1	5.17	116.90	110.70
32	1a	254	G	N3-C4-C5	5.17	131.18	128.60
32	1a	341	C	C5-C6-N1	-5.17	118.42	121.00
1	2A	1992	G	C2'-C3'-O3'	5.17	121.97	113.70
1	2A	481	G	O5'-P-OP2	-5.16	101.05	105.70
1	2A	936	C	N3-C4-N4	-5.16	114.39	118.00
1	2A	1787	A	N9-C4-C5	-5.16	103.73	105.80
1	1A	217	G	O5'-P-OP2	-5.16	101.05	105.70
1	1A	2154	G	C5-C6-O6	5.16	131.70	128.60
1	1A	2272	U	OP2-P-O3'	5.16	116.55	105.20
1	2A	1343	G	O5'-P-OP1	-5.16	101.06	105.70
32	2a	1500	A	O4'-C1'-N9	-5.16	104.07	108.20
1	1A	234	C	N3-C4-N4	-5.16	114.39	118.00
1	1A	2043	C	N3-C4-C5	-5.16	119.84	121.90
32	1a	690	G	OP1-P-OP2	5.16	127.34	119.60
1	2A	2281	C	N3-C2-O2	-5.16	118.29	121.90
1	1A	2578	G	N1-C6-O6	-5.16	116.81	119.90
32	1a	949	A	C6-N1-C2	5.16	121.69	118.60
1	2A	2191	G	N1-C6-O6	5.16	122.99	119.90
1	1A	301	G	N3-C4-C5	5.16	131.18	128.60
1	1A	2580	U	N3-C2-O2	-5.16	118.59	122.20
2	1B	57	A	C4-C5-C6	-5.16	114.42	117.00
32	1a	902	G	OP2-P-O3'	5.16	116.54	105.20
1	2A	460	A	N9-C4-C5	-5.16	103.74	105.80
32	2a	1387	G	C4-C5-N7	-5.16	108.74	110.80
1	2A	2828	C	C6-N1-C2	5.15	122.36	120.30
32	1a	509	A	C8-N9-C4	-5.15	103.74	105.80
32	1a	1161	C	C6-N1-C2	5.15	122.36	120.30
1	2A	2804	C	N3-C4-C5	-5.15	119.84	121.90
32	2a	787	A	C8-N9-C4	5.15	107.86	105.80
1	1A	768	G	N3-C4-N9	-5.15	122.91	126.00
1	1A	1016	G	C5-C6-O6	-5.15	125.51	128.60
1	1A	1286	A	O5'-P-OP2	-5.15	101.06	105.70
1	1A	2058	A	C5-N7-C8	5.15	106.47	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2090	G	N7-C8-N9	-5.15	110.52	113.10
32	1a	554	C	N1-C2-O2	-5.15	115.81	118.90
1	2A	574	C	N3-C2-O2	5.15	125.51	121.90
1	2A	1817	G	N9-C4-C5	-5.15	103.34	105.40
32	2a	317	G	OP1-P-O3'	5.15	116.53	105.20
2	1B	87	G	C8-N9-C1'	5.15	133.69	127.00
32	1a	894	G	N3-C4-N9	-5.15	122.91	126.00
1	2A	1230	C	C6-N1-C2	5.15	122.36	120.30
1	1A	252	G	C8-N9-C4	-5.15	104.34	106.40
1	2A	698	C	C5-C6-N1	-5.15	118.43	121.00
1	2A	701	G	C5-C6-O6	5.15	131.69	128.60
1	2A	749	C	O5'-P-OP2	-5.15	101.07	105.70
1	1A	596	G	C4-N9-C1'	-5.14	119.81	126.50
1	1A	1206	G	N1-C2-N2	5.14	120.83	116.20
1	1A	529	A	C5-N7-C8	-5.14	101.33	103.90
1	1A	655	A	N3-C4-N9	-5.14	123.29	127.40
32	1a	803	G	N3-C4-N9	-5.14	122.92	126.00
1	2A	1194	A	OP2-P-O3'	5.14	116.51	105.20
1	1A	428	A	C5'-C4'-C3'	-5.14	107.78	116.00
1	1A	1400	G	C5-C6-O6	5.14	131.68	128.60
1	1A	1928	A	O5'-P-OP1	-5.14	101.07	105.70
1	1A	2461	C	C4-C5-C6	5.14	119.97	117.40
32	2a	1054	C	O5'-P-OP2	-5.14	101.07	105.70
32	2a	1523	G	C8-N9-C4	-5.14	104.34	106.40
1	1A	1524	G	C6-C5-N7	5.14	133.48	130.40
32	2a	791	G	N3-C4-C5	5.14	131.17	128.60
1	1A	696	G	N3-C4-C5	5.14	131.17	128.60
32	1a	1395	C	C2-N3-C4	5.14	122.47	119.90
1	1A	205	G	C5-C6-O6	-5.13	125.52	128.60
1	1A	213	A	C6-C5-N7	5.13	135.89	132.30
1	1A	618	C	N3-C2-O2	-5.13	118.31	121.90
1	1A	782	A	N9-C4-C5	-5.13	103.75	105.80
1	1A	2079	U	C2-N3-C4	-5.13	123.92	127.00
1	1A	2701	C	OP2-P-O3'	5.13	116.50	105.20
32	1a	266	G	O4'-C1'-N9	-5.13	104.09	108.20
32	1a	557	G	O5'-P-OP2	-5.13	101.08	105.70
1	2A	1120	G	N3-C4-N9	-5.13	122.92	126.00
1	1A	32	C	C2-N1-C1'	-5.13	113.16	118.80
1	2A	1708	C	N1-C2-O2	-5.13	115.82	118.90
1	1A	1698	A	C8-N9-C4	5.13	107.85	105.80
1	1A	1980	G	C8-N9-C4	-5.13	104.35	106.40
1	1A	83	G	C5-C6-O6	-5.13	125.52	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	222	A	C8-N9-C4	5.13	107.85	105.80
32	2a	70	G	C2-N3-C4	-5.13	109.34	111.90
32	2a	819	A	C4-C5-N7	5.13	113.26	110.70
32	2a	1058	G	N1-C6-O6	5.13	122.98	119.90
1	1A	731	C	N1-C2-N3	5.13	122.79	119.20
1	1A	967	C	C6-N1-C2	-5.13	118.25	120.30
1	2A	271(K)	U	C6-N1-C2	-5.13	117.92	121.00
1	2A	848	G	C8-N9-C4	-5.12	104.35	106.40
1	1A	242	G	C8-N9-C4	5.12	108.45	106.40
1	1A	1475	G	N1-C2-N2	5.12	120.81	116.20
1	1A	2813	A	C5-N7-C8	5.12	106.46	103.90
32	1a	276	G	C2-N3-C4	-5.12	109.34	111.90
1	2A	797	C	C6-N1-C2	-5.12	118.25	120.30
1	1A	1272	A	N1-C6-N6	-5.12	115.53	118.60
1	1A	2789	C	C2-N3-C4	-5.12	117.34	119.90
32	1a	1442	G	P-O3'-C3'	5.12	125.84	119.70
1	2A	2602	A	O4'-C1'-N9	5.12	112.30	108.20
1	1A	1816	G	O5'-P-OP1	-5.12	101.09	105.70
1	1A	2245	U	N3-C4-O4	-5.12	115.82	119.40
1	1A	2645	G	C5-N7-C8	-5.12	101.74	104.30
1	2A	1108	U	C5-C6-N1	5.12	125.26	122.70
1	1A	1792	G	C8-N9-C4	5.12	108.45	106.40
1	1A	2698	U	O5'-P-OP2	-5.12	101.09	105.70
32	1a	997	U	N1-C2-O2	5.12	126.38	122.80
1	2A	304	G	C8-N9-C4	5.12	108.45	106.40
32	2a	819	A	C6-C5-N7	-5.12	128.72	132.30
1	1A	2415	G	C8-N9-C4	-5.12	104.35	106.40
2	1B	101	G	C8-N9-C4	5.12	108.45	106.40
1	1A	119	A	OP1-P-O3'	5.11	116.45	105.20
1	1A	1223	G	N1-C6-O6	-5.11	116.83	119.90
1	1A	1791	A	C4-C5-C6	-5.11	114.44	117.00
1	2A	115	C	C6-N1-C2	5.11	122.35	120.30
1	2A	1497	U	C5-C4-O4	5.11	128.97	125.90
1	2A	2281	C	C6-N1-C2	-5.11	118.25	120.30
1	2A	1986	A	O5'-P-OP2	-5.11	101.10	105.70
1	1A	2329	G	C5-C6-O6	-5.11	125.53	128.60
1	1A	2429	G	O5'-P-OP1	5.11	116.83	110.70
1	1A	1304	C	N3-C4-C5	5.11	123.94	121.90
1	1A	1825	A	C8-N9-C4	5.11	107.84	105.80
1	1A	2232	U	O5'-P-OP2	-5.11	101.10	105.70
1	1A	1333	C	N3-C4-C5	-5.11	119.86	121.90
1	2A	798	G	N9-C4-C5	5.11	107.44	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1399	C	OP2-P-O3'	5.10	116.43	105.20
1	1A	9	U	N1-C2-O2	5.10	126.37	122.80
1	1A	1160	G	C5-C6-O6	-5.10	125.54	128.60
1	1A	1383	C	N1-C2-O2	-5.10	115.84	118.90
32	1a	813	U	OP1-P-OP2	-5.10	111.95	119.60
1	2A	408	G	C8-N9-C4	5.10	108.44	106.40
1	2A	461	C	N1-C2-O2	-5.10	115.84	118.90
1	2A	1341	U	C2-N1-C1'	-5.10	111.58	117.70
32	2a	593	G	N3-C4-C5	5.10	131.15	128.60
1	1A	953	A	C8-N9-C4	5.10	107.84	105.80
32	2a	1034	G	N3-C2-N2	-5.10	116.33	119.90
1	1A	1587	A	N1-C6-N6	-5.10	115.54	118.60
1	1A	388	G	C5-C6-O6	5.10	131.66	128.60
1	1A	516	C	C6-N1-C2	5.10	122.34	120.30
1	1A	935	C	C2-N3-C4	-5.10	117.35	119.90
1	1A	2188	C	C6-N1-C1'	5.10	126.92	120.80
32	2a	525	C	N3-C4-C5	-5.10	119.86	121.90
1	1A	1340	U	C5-C6-N1	-5.09	120.15	122.70
1	1A	568	U	C5-C4-O4	-5.09	122.84	125.90
1	1A	1740	G	N1-C6-O6	-5.09	116.84	119.90
1	1A	442	G	C6-C5-N7	-5.09	127.34	130.40
1	1A	1897	G	N3-C4-C5	5.09	131.15	128.60
1	1A	2461	C	N1-C2-N3	5.09	122.76	119.20
32	1a	915	A	C8-N9-C4	5.09	107.84	105.80
1	2A	966	G	N3-C4-C5	5.09	131.15	128.60
1	2A	1324	G	O4'-C1'-N9	5.09	112.27	108.20
32	2a	1150	U	C5-C4-O4	5.09	128.96	125.90
32	1a	872	A	N1-C6-N6	5.09	121.65	118.60
1	1A	933	A	C8-N9-C4	5.09	107.83	105.80
1	1A	1141	U	C5-C4-O4	5.09	128.95	125.90
1	1A	1514	U	O5'-P-OP2	-5.09	101.12	105.70
1	1A	40	C	C4-C5-C6	5.09	119.94	117.40
1	1A	1061	U	N3-C2-O2	-5.09	118.64	122.20
1	1A	1163	G	C5-C6-O6	-5.09	125.55	128.60
1	1A	2197	U	C5-C6-N1	-5.09	120.16	122.70
1	2A	1227	G	C5-C6-O6	-5.09	125.55	128.60
1	1A	494	G	C4-C5-N7	5.08	112.83	110.80
1	2A	308	G	C5-C6-O6	-5.08	125.55	128.60
1	1A	1335	U	N3-C4-C5	5.08	117.65	114.60
32	1a	266	G	N3-C4-N9	5.08	129.05	126.00
1	2A	1109	C	C2-N1-C1'	5.08	124.39	118.80
1	2A	2186	G	C4-C5-N7	-5.08	108.77	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	970	C	C5-C4-N4	-5.08	116.64	120.20
1	2A	120	U	OP1-P-OP2	-5.08	111.98	119.60
32	2a	115	G	N3-C4-C5	-5.08	126.06	128.60
32	2a	907	A	C8-N9-C4	-5.08	103.77	105.80
1	1A	592	G	O5'-P-OP2	-5.08	101.13	105.70
1	1A	1128	A	N7-C8-N9	-5.08	111.26	113.80
1	1A	2233	U	C2-N3-C4	-5.08	123.95	127.00
1	1A	2416	C	N1-C2-O2	-5.08	115.85	118.90
1	2A	2506	U	N1-C2-O2	5.08	126.35	122.80
1	1A	2358	G	C8-N9-C4	5.08	108.43	106.40
5	1F	188	ARG	NE-CZ-NH2	-5.08	117.76	120.30
1	1A	191	A	C8-N9-C4	5.08	107.83	105.80
1	1A	489	G	N3-C4-C5	5.08	131.14	128.60
1	1A	744	G	C5-C6-N1	-5.08	108.96	111.50
1	1A	1163	G	N1-C6-O6	5.08	122.94	119.90
1	1A	1554	A	C8-N9-C4	5.08	107.83	105.80
32	1a	724	G	OP1-P-O3'	5.08	116.37	105.20
1	2A	1471	A	N7-C8-N9	5.08	116.34	113.80
1	2A	1997	G	C5'-C4'-O4'	5.08	115.19	109.10
1	2A	2612	C	C6-N1-C2	5.08	122.33	120.30
32	1a	442	C	C6-N1-C2	-5.07	118.27	120.30
1	2A	2238	G	OP1-P-OP2	5.07	127.21	119.60
1	2A	2549	G	OP2-P-O3'	5.07	116.36	105.20
1	2A	2895	U	C5-C6-N1	5.07	125.24	122.70
32	2a	1256	A	P-O3'-C3'	5.07	125.79	119.70
1	1A	1268	A	C5-C6-N1	-5.07	115.16	117.70
1	1A	1602	U	N3-C2-O2	-5.07	118.65	122.20
1	1A	1703	G	OP2-P-O3'	5.07	116.36	105.20
32	1a	407	G	O5'-P-OP1	-5.07	101.14	105.70
32	2a	991	U	P-O3'-C3'	5.07	125.79	119.70
1	1A	2182	G	C8-N9-C1'	5.07	133.59	127.00
1	2A	1994	C	C6-N1-C2	5.07	122.33	120.30
1	1A	1100	C	N1-C1'-C2'	-5.07	106.42	112.00
1	1A	2374	C	C2-N3-C4	-5.07	117.37	119.90
32	1a	702	A	N9-C4-C5	-5.07	103.77	105.80
1	1A	1997	G	C5'-C4'-O4'	5.07	115.18	109.10
1	1A	2035	G	OP1-P-O3'	5.07	116.35	105.20
1	1A	2383	G	C2-N3-C4	-5.07	109.37	111.90
1	2A	1097	U	C6-N1-C2	-5.07	117.96	121.00
1	2A	2445	G	OP2-P-O3'	5.07	116.35	105.20
1	2A	2619	C	C6-N1-C2	5.07	122.33	120.30
32	2a	64	G	C8-N9-C4	5.07	108.43	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1281	U	O4'-C1'-N1	5.07	112.25	108.20
1	1A	529	A	C2-N3-C4	-5.07	108.07	110.60
1	1A	866	A	N9-C4-C5	-5.07	103.77	105.80
1	1A	1406	U	N1-C2-N3	5.07	117.94	114.90
1	2A	2593	U	N3-C4-C5	5.07	117.64	114.60
2	2B	52	A	C5-C6-N6	-5.07	119.65	123.70
1	1A	1475	G	N1-C6-O6	5.06	122.94	119.90
1	2A	726	G	O5'-P-OP1	-5.06	101.14	105.70
1	1A	434	U	N1-C2-O2	-5.06	119.26	122.80
1	1A	569	U	N1-C2-O2	-5.06	119.26	122.80
1	1A	859	G	O4'-C1'-N9	-5.06	104.15	108.20
1	1A	949	C	C5-C6-N1	-5.06	118.47	121.00
1	1A	2570	G	N3-C4-C5	5.06	131.13	128.60
1	2A	570	G	C4-C5-N7	5.06	112.83	110.80
1	2A	2185	C	N3-C2-O2	-5.06	118.36	121.90
32	2a	96	U	C2-N1-C1'	-5.06	111.62	117.70
1	1A	305	U	N1-C2-O2	-5.06	119.26	122.80
1	1A	1002	G	N1-C6-O6	5.06	122.94	119.90
1	1A	1014	U	N3-C2-O2	-5.06	118.66	122.20
1	1A	213	A	OP2-P-O3'	5.06	116.33	105.20
1	1A	1614	A	C2-N3-C4	-5.06	108.07	110.60
32	1a	1028	C	C5-C6-N1	5.06	123.53	121.00
1	2A	1794	U	C5-C4-O4	-5.06	122.86	125.90
1	1A	1049	C	C6-N1-C2	-5.06	118.28	120.30
1	1A	1709	U	N1-C2-O2	-5.06	119.26	122.80
1	2A	277	C	C6-N1-C2	-5.06	118.28	120.30
32	2a	1173	G	N1-C2-N2	5.06	120.75	116.20
1	1A	154(A)	C	N3-C4-C5	5.06	123.92	121.90
1	1A	1394	U	O5'-P-OP2	5.06	116.77	110.70
1	1A	1707	G	N1-C6-O6	5.06	122.93	119.90
32	1a	626	U	C6-N1-C2	5.06	124.03	121.00
32	1a	1054	C	N3-C4-N4	-5.05	114.46	118.00
1	2A	1001	A	N1-C6-N6	5.05	121.63	118.60
1	2A	2042	A	N3-C4-C5	5.05	130.34	126.80
1	1A	209	C	OP1-P-OP2	5.05	127.18	119.60
32	2a	1399	C	N1-C2-O2	-5.05	115.87	118.90
1	1A	738	G	C2-N3-C4	-5.05	109.38	111.90
32	1a	1385	G	N3-C4-N9	-5.05	122.97	126.00
1	1A	659	C	N3-C4-N4	-5.05	114.47	118.00
1	1A	2244	U	N3-C4-O4	-5.05	115.87	119.40
1	1A	2265	U	O5'-P-OP2	5.05	116.76	110.70
1	1A	2733	A	N1-C6-N6	5.05	121.63	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2893	G	C8-N9-C4	5.05	108.42	106.40
32	1a	872	A	N9-C4-C5	-5.05	103.78	105.80
1	2A	446	G	N9-C4-C5	-5.05	103.38	105.40
32	2a	656	C	C6-N1-C2	-5.05	118.28	120.30
32	2a	1190	G	N3-C4-N9	-5.05	122.97	126.00
1	2A	1801	G	N1-C2-N2	-5.05	111.66	116.20
1	2A	1992	G	C8-N9-C4	-5.05	104.38	106.40
1	1A	2206	G	C5-C6-O6	-5.05	125.57	128.60
1	1A	2062	A	O4'-C1'-N9	-5.04	104.16	108.20
1	1A	2513	G	C8-N9-C4	5.04	108.42	106.40
1	2A	2022	U	C2-N3-C4	-5.04	123.97	127.00
32	2a	770	C	C5-C6-N1	-5.04	118.48	121.00
1	1A	539	G	O5'-P-OP1	-5.04	101.16	105.70
1	1A	864	G	C6-C5-N7	-5.04	127.37	130.40
32	1a	1338	G	C5-C6-O6	5.04	131.63	128.60
1	1A	2018	G	C8-N9-C4	5.04	108.42	106.40
1	1A	2273	A	N9-C4-C5	-5.04	103.78	105.80
1	1A	2278	A	OP2-P-O3'	5.04	116.29	105.20
1	2A	113	G	N3-C4-C5	5.04	131.12	128.60
1	2A	2567	G	C5-C6-O6	-5.04	125.58	128.60
1	1A	1248	G	N9-C4-C5	-5.04	103.39	105.40
1	1A	1803	A	N1-C2-N3	-5.04	126.78	129.30
1	1A	2181	G	N1-C6-O6	-5.04	116.88	119.90
1	1A	2187	G	N1-C6-O6	5.04	122.92	119.90
1	2A	1758	G	C5-C6-O6	-5.04	125.58	128.60
1	1A	1063	G	C6-N1-C2	5.04	128.12	125.10
1	1A	1791	A	N3-C4-C5	5.04	130.33	126.80
1	1A	2566	A	O5'-P-OP2	-5.04	101.17	105.70
1	2A	2356	C	N1-C2-O2	-5.04	115.88	118.90
1	1A	23	G	OP2-P-O3'	5.04	116.28	105.20
1	1A	123	G	O5'-P-OP2	-5.04	101.17	105.70
1	1A	1604	C	C2-N3-C4	5.04	122.42	119.90
32	1a	904	C	C2-N1-C1'	-5.04	113.26	118.80
32	2a	991	U	C5-C6-N1	5.04	125.22	122.70
1	1A	653	A	N1-C6-N6	5.03	121.62	118.60
1	1A	992	C	C6-N1-C2	5.03	122.31	120.30
1	1A	1332	G	C8-N9-C4	5.03	108.41	106.40
1	2A	1204	A	N1-C6-N6	5.03	121.62	118.60
32	2a	897	C	C5-C6-N1	-5.03	118.48	121.00
1	1A	406	G	N3-C2-N2	-5.03	116.38	119.90
1	1A	1497	U	O5'-P-OP1	-5.03	101.17	105.70
1	1A	1657	C	O5'-P-OP2	-5.03	101.17	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	2609	U	OP1-P-O3'	5.03	116.27	105.20
1	1A	2807	G	N7-C8-N9	5.03	115.61	113.10
32	1a	809	G	OP1-P-OP2	5.03	127.15	119.60
1	1A	2373	G	OP1-P-OP2	5.03	127.14	119.60
1	1A	2435	A	C2-N3-C4	-5.03	108.09	110.60
32	1a	927	G	C5-C6-O6	-5.03	125.58	128.60
1	1A	271(X)	G	C5-C6-N1	-5.03	108.99	111.50
1	1A	960	A	C8-N9-C4	5.03	107.81	105.80
10	1O	91	LEU	C-N-CA	-5.03	109.13	121.70
1	2A	34	C	C6-N1-C2	-5.03	118.29	120.30
1	2A	61	G	C5-C6-O6	-5.03	125.58	128.60
32	2a	1042	G	N9-C4-C5	-5.03	103.39	105.40
32	1a	266	G	C6-C5-N7	-5.03	127.39	130.40
32	1a	1181	G	C8-N9-C4	5.03	108.41	106.40
1	2A	2051	A	N1-C6-N6	5.03	121.62	118.60
1	2A	2185	C	C4-C5-C6	-5.03	114.89	117.40
1	1A	2560	C	C4-C5-C6	5.02	119.91	117.40
1	2A	2164	C	C6-N1-C2	-5.02	118.29	120.30
1	1A	377	C	N3-C2-O2	5.02	125.42	121.90
1	1A	2775	A	C8-N9-C4	5.02	107.81	105.80
1	2A	892	G	N3-C4-N9	-5.02	122.99	126.00
1	2A	1203	G	C8-N9-C4	5.02	108.41	106.40
1	2A	1313	U	C2-N1-C1'	5.02	123.72	117.70
1	2A	2016	U	N3-C2-O2	5.02	125.72	122.20
1	1A	2073	C	N1-C2-O2	-5.02	115.89	118.90
1	2A	1465	G	O5'-P-OP2	-5.02	101.18	105.70
1	1A	1584	C	O4'-C1'-N1	5.02	112.21	108.20
1	2A	487	C	N3-C4-N4	5.02	121.51	118.00
1	2A	1577	C	O5'-P-OP2	-5.02	101.19	105.70
1	1A	2482	G	C8-N9-C4	5.02	108.41	106.40
1	2A	1090	U	C5-C6-N1	5.01	125.21	122.70
1	2A	2432	A	N1-C6-N6	5.01	121.61	118.60
1	1A	2495	G	O5'-P-OP2	-5.01	101.19	105.70
32	2a	408	A	O5'-P-OP2	-5.01	101.19	105.70
1	1A	396	G	C5-C6-O6	-5.01	125.59	128.60
1	1A	463	G	C4-N9-C1'	-5.01	119.98	126.50
1	1A	780	G	N9-C4-C5	-5.01	103.39	105.40
1	1A	801	G	N1-C6-O6	5.01	122.91	119.90
32	1a	595	G	C4-N9-C1'	5.01	133.01	126.50
32	1a	809	G	C2-N3-C4	-5.01	109.39	111.90
1	1A	195	A	P-O3'-C3'	5.01	125.71	119.70
1	1A	1437	C	C6-N1-C2	-5.01	118.30	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1845	G	N9-C4-C5	5.01	107.40	105.40
1	1A	2832	U	C5-C6-N1	-5.01	120.19	122.70
32	1a	1493	A	N1-C6-N6	-5.01	115.59	118.60
1	1A	1815	A	C6-N1-C2	-5.01	115.59	118.60
32	1a	955	U	C5-C4-O4	5.01	128.91	125.90
1	1A	1602	U	N3-C4-O4	-5.01	115.90	119.40
1	1A	2480	C	N1-C2-O2	-5.01	115.90	118.90
32	1a	353	A	OP2-P-O3'	5.01	116.21	105.20
32	1a	1505	G	N9-C4-C5	5.01	107.40	105.40
1	2A	1296	G	N3-C2-N2	5.01	123.40	119.90
1	2A	1582	C	C5-C6-N1	-5.01	118.50	121.00
1	1A	623	G	C5-C6-N1	5.00	114.00	111.50
1	1A	976	C	OP2-P-O3'	5.00	116.21	105.20
1	1A	1139	G	N9-C4-C5	5.00	107.40	105.40
1	2A	1228	G	N3-C4-C5	5.00	131.10	128.60
1	2A	24	G	N9-C4-C5	-5.00	103.40	105.40
1	2A	1301	A	O4'-C1'-N9	5.00	112.20	108.20
1	1A	552	G	N1-C2-N2	-5.00	111.70	116.20
1	1A	673	C	O5'-P-OP2	-5.00	101.20	105.70
1	1A	914	C	C2-N3-C4	-5.00	117.40	119.90
1	1A	1617	C	C2-N3-C4	-5.00	117.40	119.90
1	1A	2403	C	C6-N1-C2	-5.00	118.30	120.30
1	2A	1265	A	O5'-P-OP2	-5.00	101.20	105.70
1	2A	1378	A	C2-N3-C4	-5.00	108.10	110.60

There are no chirality outliers.

All (14) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	14	67	TYR	Peptide
29	17	46	VAL	Peptide
30	18	13	ARG	Peptide
11	1P	35	HIS	Peptide
14	1S	58	LEU	Peptide
17	1V	54	GLY	Peptide
19	1X	93	GLU	Peptide
33	1b	126	GLU	Peptide
35	1d	189	PRO	Peptide
29	27	46	VAL	Peptide
11	2P	35	HIS	Peptide
33	2b	19	HIS	Peptide
43	2l	82	VAL	Peptide

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Mol	Chain	Res	Type	Group
47	2p	19	ILE	Peptide

5.2 Too-close contacts (i)

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

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
3	1D	273/276 (99%)	255 (93%)	18 (7%)	0	100 100
3	2D	273/276 (99%)	257 (94%)	14 (5%)	2 (1%)	19 38
4	1E	202/206 (98%)	192 (95%)	9 (4%)	1 (0%)	25 47
4	2E	202/206 (98%)	188 (93%)	12 (6%)	2 (1%)	13 29
5	1F	201/210 (96%)	192 (96%)	7 (4%)	2 (1%)	13 29
5	2F	201/210 (96%)	194 (96%)	5 (2%)	2 (1%)	13 29
6	1G	179/182 (98%)	159 (89%)	16 (9%)	4 (2%)	5 10
6	2G	179/182 (98%)	148 (83%)	24 (13%)	7 (4%)	2 3
7	1H	172/180 (96%)	157 (91%)	12 (7%)	3 (2%)	7 16
7	2H	171/180 (95%)	145 (85%)	20 (12%)	6 (4%)	3 4
8	1I	145/148 (98%)	122 (84%)	19 (13%)	4 (3%)	4 7
8	2I	144/148 (97%)	121 (84%)	17 (12%)	6 (4%)	2 3
9	1N	138/140 (99%)	131 (95%)	7 (5%)	0	100 100
9	2N	138/140 (99%)	127 (92%)	10 (7%)	1 (1%)	19 38
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%)	14 (10%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
11	2P	147/150 (98%)	134 (91%)	9 (6%)	4 (3%)	4 7
12	1Q	139/141 (99%)	130 (94%)	9 (6%)	0	100 100
12	2Q	139/141 (99%)	133 (96%)	5 (4%)	1 (1%)	19 38
13	1R	116/118 (98%)	111 (96%)	4 (3%)	1 (1%)	14 31
13	2R	116/118 (98%)	109 (94%)	7 (6%)	0	100 100
14	1S	108/112 (96%)	98 (91%)	10 (9%)	0	100 100
14	2S	108/112 (96%)	101 (94%)	7 (6%)	0	100 100
15	1T	129/146 (88%)	123 (95%)	5 (4%)	1 (1%)	16 34
15	2T	129/146 (88%)	121 (94%)	8 (6%)	0	100 100
16	1U	114/118 (97%)	113 (99%)	1 (1%)	0	100 100
16	2U	114/118 (97%)	112 (98%)	2 (2%)	0	100 100
17	1V	99/101 (98%)	91 (92%)	6 (6%)	2 (2%)	6 12
17	2V	99/101 (98%)	93 (94%)	3 (3%)	3 (3%)	3 6
18	1W	110/113 (97%)	108 (98%)	2 (2%)	0	100 100
18	2W	110/113 (97%)	107 (97%)	3 (3%)	0	100 100
19	1X	93/96 (97%)	91 (98%)	2 (2%)	0	100 100
19	2X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	12 26
20	1Y	105/110 (96%)	95 (90%)	8 (8%)	2 (2%)	6 13
20	2Y	105/110 (96%)	95 (90%)	8 (8%)	2 (2%)	6 13
21	1Z	201/206 (98%)	187 (93%)	13 (6%)	1 (0%)	25 47
21	2Z	199/206 (97%)	178 (89%)	17 (8%)	4 (2%)	6 12
22	10	75/85 (88%)	70 (93%)	5 (7%)	0	100 100
22	20	75/85 (88%)	70 (93%)	4 (5%)	1 (1%)	10 21
23	11	95/98 (97%)	87 (92%)	7 (7%)	1 (1%)	12 26
23	21	95/98 (97%)	91 (96%)	3 (3%)	1 (1%)	12 26
24	12	68/72 (94%)	66 (97%)	2 (3%)	0	100 100
24	22	68/72 (94%)	64 (94%)	4 (6%)	0	100 100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100 100
25	23	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
26	14	67/71 (94%)	52 (78%)	8 (12%)	7 (10%)	0 0
26	24	67/71 (94%)	50 (75%)	15 (22%)	2 (3%)	3 6

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
27	15	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
27	25	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
28	16	51/54 (94%)	48 (94%)	3 (6%)	0	100	100
28	26	51/54 (94%)	50 (98%)	1 (2%)	0	100	100
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%)	60 (97%)	2 (3%)	0	100	100
31	19	35/37 (95%)	35 (100%)	0	0	100	100
31	29	35/37 (95%)	35 (100%)	0	0	100	100
33	1b	229/256 (90%)	193 (84%)	26 (11%)	10 (4%)	2	2
33	2b	229/256 (90%)	188 (82%)	33 (14%)	8 (4%)	3	4
34	1c	204/239 (85%)	173 (85%)	26 (13%)	5 (2%)	4	8
34	2c	204/239 (85%)	171 (84%)	29 (14%)	4 (2%)	6	12
35	1d	206/209 (99%)	186 (90%)	19 (9%)	1 (0%)	25	47
35	2d	206/209 (99%)	181 (88%)	18 (9%)	7 (3%)	3	5
36	1e	146/162 (90%)	132 (90%)	10 (7%)	4 (3%)	4	7
36	2e	146/162 (90%)	131 (90%)	15 (10%)	0	100	100
37	1f	98/101 (97%)	91 (93%)	7 (7%)	0	100	100
37	2f	98/101 (97%)	92 (94%)	6 (6%)	0	100	100
38	1g	153/156 (98%)	143 (94%)	8 (5%)	2 (1%)	10	21
38	2g	153/156 (98%)	136 (89%)	13 (8%)	4 (3%)	4	7
39	1h	135/138 (98%)	125 (93%)	9 (7%)	1 (1%)	19	38
39	2h	135/138 (98%)	127 (94%)	7 (5%)	1 (1%)	19	38
40	1i	125/128 (98%)	104 (83%)	15 (12%)	6 (5%)	2	2
40	2i	124/128 (97%)	106 (86%)	14 (11%)	4 (3%)	3	5
41	1j	95/105 (90%)	72 (76%)	19 (20%)	4 (4%)	2	3
41	2j	94/105 (90%)	79 (84%)	12 (13%)	3 (3%)	3	5
42	1k	112/129 (87%)	101 (90%)	8 (7%)	3 (3%)	4	7
42	2k	112/129 (87%)	105 (94%)	6 (5%)	1 (1%)	14	31
43	1l	119/132 (90%)	109 (92%)	10 (8%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
43	2l	119/132 (90%)	110 (92%)	9 (8%)	0	100 100
44	1m	114/126 (90%)	101 (89%)	8 (7%)	5 (4%)	2 2
44	2m	112/126 (89%)	98 (88%)	13 (12%)	1 (1%)	14 31
45	1n	58/61 (95%)	56 (97%)	2 (3%)	0	100 100
45	2n	58/61 (95%)	52 (90%)	6 (10%)	0	100 100
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%)	66 (82%)	14 (18%)	0	100 100
47	2p	80/88 (91%)	71 (89%)	8 (10%)	1 (1%)	10 21
48	1q	97/105 (92%)	87 (90%)	9 (9%)	1 (1%)	13 29
48	2q	97/105 (92%)	90 (93%)	6 (6%)	1 (1%)	13 29
49	1r	66/88 (75%)	63 (96%)	2 (3%)	1 (2%)	8 18
49	2r	66/88 (75%)	63 (96%)	3 (4%)	0	100 100
50	1s	81/93 (87%)	72 (89%)	8 (10%)	1 (1%)	11 24
50	2s	81/93 (87%)	71 (88%)	8 (10%)	2 (2%)	4 8
51	1t	94/106 (89%)	87 (93%)	5 (5%)	2 (2%)	5 11
51	2t	96/106 (91%)	88 (92%)	5 (5%)	3 (3%)	3 5
52	1u	21/27 (78%)	18 (86%)	3 (14%)	0	100 100
52	2u	21/27 (78%)	17 (81%)	4 (19%)	0	100 100
53	1y	95/113 (84%)	91 (96%)	4 (4%)	0	100 100
53	2y	94/113 (83%)	90 (96%)	4 (4%)	0	100 100
54	1z	16/18 (89%)	14 (88%)	1 (6%)	1 (6%)	1 1
54	2z	16/18 (89%)	12 (75%)	3 (19%)	1 (6%)	1 1
All	All	11661/12390 (94%)	10637 (91%)	859 (7%)	165 (1%)	9 19

All (165) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
6	1G	43	LEU
6	1G	47	LYS
6	1G	50	ALA
21	1Z	53	ILE
26	14	47	GLN
26	14	61	ARG

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Mol	Chain	Res	Type
33	1b	17	PHE
33	1b	21	ARG
33	1b	127	ILE
39	1h	54	ASP
40	1i	33	PHE
40	1i	54	ASP
41	1j	55	LYS
42	1k	107	SER
54	1z	4	SER
6	2G	43	LEU
6	2G	78	SER
8	2I	10	GLU
8	2I	39	ALA
8	2I	117	GLU
17	2V	79	VAL
19	2X	94	GLY
21	2Z	156	LYS
33	2b	9	GLU
33	2b	17	PHE
33	2b	125	PRO
38	2g	54	THR
38	2g	55	GLY
40	2i	54	ASP
40	2i	55	ALA
40	2i	96	LEU
41	2j	79	ARG
44	2m	67	GLU
51	2t	100	ILE
54	2z	4	SER
6	1G	51	ARG
7	1H	126	PRO
7	1H	159	GLU
8	1I	73	GLU
8	1I	105	HIS
8	1I	107	VAL
17	1V	43	GLU
17	1V	79	VAL
26	14	44	THR
26	14	45	GLY
26	14	55	ARG
33	1b	20	GLU
34	1c	47	LEU

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Mol	Chain	Res	Type
34	1c	61	ALA
34	1c	107	GLN
36	1e	146	ALA
40	1i	11	LYS
41	1j	79	ARG
42	1k	105	VAL
42	1k	106	LYS
44	1m	11	ARG
44	1m	67	GLU
48	1q	68	ARG
49	1r	36	ASN
3	2D	275	LYS
4	2E	57	LYS
5	2F	130	ALA
6	2G	42	GLY
6	2G	81	LYS
7	2H	55	PRO
7	2H	126	PRO
10	2O	5	GLN
11	2P	36	LYS
11	2P	122	PRO
12	2Q	59	ARG
17	2V	53	GLU
20	2Y	58	GLY
22	20	73	GLY
23	21	3	LYS
26	24	62	ARG
33	2b	10	LEU
33	2b	16	HIS
35	2d	3	ARG
35	2d	5	ILE
35	2d	179	GLU
35	2d	180	GLY
38	2g	4	ARG
38	2g	7	ALA
41	2j	75	ILE
47	2p	81	ARG
48	2q	68	ARG
50	2s	17	GLU
51	2t	47	GLY
7	1H	3	ARG
8	1I	117	GLU

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Mol	Chain	Res	Type
20	1Y	102	CYS
23	11	3	LYS
33	1b	8	LYS
34	1c	22	TRP
44	1m	12	ASN
44	1m	106	ASN
50	1s	24	ALA
3	2D	99	ASP
7	2H	47	GLU
8	2I	85	GLU
9	2N	119	ARG
11	2P	136	GLU
20	2Y	2	ARG
33	2b	20	GLU
35	2d	42	GLN
41	2j	55	LYS
50	2s	29	ARG
4	1E	52	LEU
5	1F	195	ASP
15	1T	127	ALA
26	14	48	ARG
33	1b	16	HIS
33	1b	78	GLN
41	1j	24	VAL
44	1m	21	TYR
46	1o	23	GLY
51	1t	95	ALA
4	2E	52	LEU
5	2F	21	ALA
6	2G	117	PHE
7	2H	80	SER
11	2P	29	LYS
21	2Z	52	SER
34	2c	30	ARG
34	2c	95	THR
46	2o	88	ARG
51	2t	95	ALA
33	1b	36	ARG
38	1g	52	GLU
41	1j	77	PRO
51	1t	100	ILE
6	2G	104	GLU

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Mol	Chain	Res	Type
7	2H	20	ALA
7	2H	174	GLY
21	2Z	31	ARG
33	2b	123	ALA
40	2i	43	ALA
5	1F	17	ARG
26	14	49	PHE
36	1e	147	ASP
40	1i	25	LYS
8	2I	133	HIS
21	2Z	188	ALA
33	2b	232	PRO
34	2c	82	GLU
34	2c	108	ASN
13	1R	83	ILE
35	1d	172	PRO
6	2G	52	ILE
26	24	45	GLY
40	1i	44	VAL
8	2I	84	GLY
35	2d	142	PRO
35	2d	204	ILE
20	1Y	51	VAL
33	1b	232	PRO
34	1c	14	ILE
36	1e	22	GLY
38	1g	55	GLY
40	1i	53	VAL
39	2h	86	ILE
33	1b	124	SER
42	2k	105	VAL
36	1e	70	PRO
17	2V	50	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	214/218 (98%)	194 (91%)	20 (9%)	7 15
3	2D	215/218 (99%)	194 (90%)	21 (10%)	6 13
4	1E	164/166 (99%)	151 (92%)	13 (8%)	10 21
4	2E	164/166 (99%)	153 (93%)	11 (7%)	13 29
5	1F	160/166 (96%)	146 (91%)	14 (9%)	8 17
5	2F	159/166 (96%)	148 (93%)	11 (7%)	13 28
6	1G	144/156 (92%)	132 (92%)	12 (8%)	9 19
6	2G	142/156 (91%)	129 (91%)	13 (9%)	7 15
7	1H	144/148 (97%)	138 (96%)	6 (4%)	25 50
7	2H	143/148 (97%)	119 (83%)	24 (17%)	1 3
8	1I	111/124 (90%)	98 (88%)	13 (12%)	4 8
8	2I	108/124 (87%)	99 (92%)	9 (8%)	9 19
9	1N	119/119 (100%)	105 (88%)	14 (12%)	4 8
9	2N	118/119 (99%)	108 (92%)	10 (8%)	8 18
10	1O	100/100 (100%)	91 (91%)	9 (9%)	8 16
10	2O	100/100 (100%)	96 (96%)	4 (4%)	27 52
11	1P	115/116 (99%)	107 (93%)	8 (7%)	12 27
11	2P	115/116 (99%)	105 (91%)	10 (9%)	8 17
12	1Q	111/111 (100%)	104 (94%)	7 (6%)	15 32
12	2Q	111/111 (100%)	100 (90%)	11 (10%)	6 13
13	1R	101/101 (100%)	96 (95%)	5 (5%)	20 43
13	2R	101/101 (100%)	93 (92%)	8 (8%)	10 21
14	1S	87/88 (99%)	80 (92%)	7 (8%)	10 21
14	2S	85/88 (97%)	76 (89%)	9 (11%)	5 11
15	1T	115/127 (91%)	110 (96%)	5 (4%)	25 49
15	2T	113/127 (89%)	105 (93%)	8 (7%)	12 26
16	1U	93/94 (99%)	86 (92%)	7 (8%)	11 24
16	2U	93/94 (99%)	88 (95%)	5 (5%)	18 39
17	1V	81/82 (99%)	77 (95%)	4 (5%)	21 43
17	2V	80/82 (98%)	72 (90%)	8 (10%)	6 13
18	1W	90/92 (98%)	82 (91%)	8 (9%)	8 17
18	2W	90/92 (98%)	84 (93%)	6 (7%)	13 29

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
19	1X	77/78 (99%)	73 (95%)	4 (5%)	19 41
19	2X	77/78 (99%)	74 (96%)	3 (4%)	27 53
20	1Y	86/91 (94%)	75 (87%)	11 (13%)	3 7
20	2Y	86/91 (94%)	76 (88%)	10 (12%)	4 9
21	1Z	169/179 (94%)	155 (92%)	14 (8%)	9 19
21	2Z	165/179 (92%)	141 (86%)	24 (14%)	2 4
22	10	61/67 (91%)	58 (95%)	3 (5%)	21 43
22	20	61/67 (91%)	57 (93%)	4 (7%)	14 30
23	11	79/83 (95%)	75 (95%)	4 (5%)	20 42
23	21	81/83 (98%)	71 (88%)	10 (12%)	4 8
24	12	65/67 (97%)	63 (97%)	2 (3%)	35 62
24	22	66/67 (98%)	59 (89%)	7 (11%)	5 11
25	13	51/52 (98%)	46 (90%)	5 (10%)	6 13
25	23	50/52 (96%)	46 (92%)	4 (8%)	10 21
26	14	58/63 (92%)	49 (84%)	9 (16%)	2 3
26	24	54/63 (86%)	47 (87%)	7 (13%)	3 6
27	15	51/52 (98%)	48 (94%)	3 (6%)	16 35
27	25	50/52 (96%)	46 (92%)	4 (8%)	10 21
28	16	51/52 (98%)	44 (86%)	7 (14%)	3 5
28	26	50/52 (96%)	45 (90%)	5 (10%)	6 13
29	17	41/42 (98%)	37 (90%)	4 (10%)	6 13
29	27	41/42 (98%)	36 (88%)	5 (12%)	4 8
30	18	54/55 (98%)	48 (89%)	6 (11%)	5 10
30	28	54/55 (98%)	50 (93%)	4 (7%)	11 24
31	19	34/34 (100%)	33 (97%)	1 (3%)	37 64
31	29	34/34 (100%)	33 (97%)	1 (3%)	37 64
33	1b	191/220 (87%)	165 (86%)	26 (14%)	3 5
33	2b	187/220 (85%)	165 (88%)	22 (12%)	4 8
34	1c	144/188 (77%)	130 (90%)	14 (10%)	6 14
34	2c	140/188 (74%)	125 (89%)	15 (11%)	5 11
35	1d	171/181 (94%)	151 (88%)	20 (12%)	4 8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
35	2d	172/181 (95%)	151 (88%)	21 (12%)	4 8
36	1e	114/123 (93%)	101 (89%)	13 (11%)	4 9
36	2e	114/123 (93%)	99 (87%)	15 (13%)	3 6
37	1f	85/90 (94%)	75 (88%)	10 (12%)	4 8
37	2f	85/90 (94%)	77 (91%)	8 (9%)	7 15
38	1g	120/127 (94%)	111 (92%)	9 (8%)	11 24
38	2g	119/127 (94%)	108 (91%)	11 (9%)	7 15
39	1h	116/119 (98%)	104 (90%)	12 (10%)	6 12
39	2h	114/119 (96%)	104 (91%)	10 (9%)	8 17
40	1i	91/99 (92%)	76 (84%)	15 (16%)	2 3
40	2i	88/99 (89%)	77 (88%)	11 (12%)	3 7
41	1j	68/92 (74%)	62 (91%)	6 (9%)	8 17
41	2j	68/92 (74%)	58 (85%)	10 (15%)	2 4
42	1k	83/99 (84%)	77 (93%)	6 (7%)	12 26
42	2k	83/99 (84%)	77 (93%)	6 (7%)	12 26
43	1l	96/108 (89%)	88 (92%)	8 (8%)	9 19
43	2l	96/108 (89%)	87 (91%)	9 (9%)	7 15
44	1m	90/101 (89%)	86 (96%)	4 (4%)	24 48
44	2m	87/101 (86%)	78 (90%)	9 (10%)	6 12
45	1n	49/50 (98%)	40 (82%)	9 (18%)	1 2
45	2n	49/50 (98%)	45 (92%)	4 (8%)	9 20
46	1o	78/80 (98%)	73 (94%)	5 (6%)	14 32
46	2o	78/80 (98%)	73 (94%)	5 (6%)	14 32
47	1p	69/74 (93%)	58 (84%)	11 (16%)	2 3
47	2p	68/74 (92%)	60 (88%)	8 (12%)	4 8
48	1q	94/97 (97%)	86 (92%)	8 (8%)	8 18
48	2q	94/97 (97%)	87 (93%)	7 (7%)	11 24
49	1r	59/77 (77%)	56 (95%)	3 (5%)	20 42
49	2r	59/77 (77%)	55 (93%)	4 (7%)	13 28
50	1s	68/80 (85%)	62 (91%)	6 (9%)	8 17
50	2s	67/80 (84%)	62 (92%)	5 (8%)	11 24

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
51	1t	71/82 (87%)	64 (90%)	7 (10%)	6 13
51	2t	70/82 (85%)	65 (93%)	5 (7%)	12 26
52	1u	18/22 (82%)	17 (94%)	1 (6%)	17 38
52	2u	18/22 (82%)	17 (94%)	1 (6%)	17 38
53	1y	82/98 (84%)	73 (89%)	9 (11%)	5 10
53	2y	79/98 (81%)	72 (91%)	7 (9%)	8 17
54	1z	13/13 (100%)	13 (100%)	0	100 100
54	2z	13/13 (100%)	10 (77%)	3 (23%)	0 1
All	All	9550/10286 (93%)	8671 (91%)	879 (9%)	7 15

All (879) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	13	ARG
3	1D	35	LYS
3	1D	39	LYS
3	1D	43	ARG
3	1D	69	ARG
3	1D	71	ASP
3	1D	88	ARG
3	1D	106	ILE
3	1D	115	GLN
3	1D	126	GLN
3	1D	142	VAL
3	1D	155	LEU
3	1D	164	GLN
3	1D	183	ARG
3	1D	193	VAL
3	1D	211	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
4	1E	1	MET
4	1E	7	VAL
4	1E	64	LYS
4	1E	75	VAL
4	1E	89	ASP
4	1E	113	PHE

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Mol	Chain	Res	Type
4	1E	116	VAL
4	1E	119	ARG
4	1E	144	ARG
4	1E	147	PRO
4	1E	170	LEU
4	1E	175	VAL
4	1E	181	LEU
5	1F	12	LEU
5	1F	17	ARG
5	1F	18	ARG
5	1F	24	LEU
5	1F	53	THR
5	1F	57	VAL
5	1F	60	SER
5	1F	74	ARG
5	1F	132	VAL
5	1F	140	LEU
5	1F	170	LEU
5	1F	183	VAL
5	1F	192	LEU
5	1F	205	ARG
6	1G	7	LEU
6	1G	31	VAL
6	1G	43	LEU
6	1G	45	GLU
6	1G	52	ILE
6	1G	79	ASN
6	1G	81	LYS
6	1G	86	MET
6	1G	108	ASN
6	1G	133	LEU
6	1G	145	THR
6	1G	149	VAL
7	1H	6	ARG
7	1H	15	VAL
7	1H	106	THR
7	1H	119	GLU
7	1H	122	THR
7	1H	139	GLN
8	1I	5	LEU
8	1I	20	ASP
8	1I	40	THR

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Mol	Chain	Res	Type
8	1I	61	ARG
8	1I	75	LEU
8	1I	78	THR
8	1I	79	ILE
8	1I	92	VAL
8	1I	101	LEU
8	1I	109	ILE
8	1I	133	HIS
8	1I	140	LEU
8	1I	144	VAL
9	1N	12	ARG
9	1N	15	LEU
9	1N	33	LEU
9	1N	48	MET
9	1N	60	ILE
9	1N	61	ARG
9	1N	62	VAL
9	1N	73	THR
9	1N	87	LEU
9	1N	97	ARG
9	1N	99	LEU
9	1N	115	ARG
9	1N	119	ARG
9	1N	134	ARG
10	1O	8	LEU
10	1O	17	ARG
10	1O	28	SER
10	1O	52	VAL
10	1O	69	ILE
10	1O	89	ASN
10	1O	97	ARG
10	1O	98	VAL
10	1O	108	GLU
11	1P	3	LEU
11	1P	4	SER
11	1P	36	LYS
11	1P	71	VAL
11	1P	99	LEU
11	1P	133	SER
11	1P	135	LEU
11	1P	149	GLU
12	1Q	1	MET

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Mol	Chain	Res	Type
12	1Q	2	LEU
12	1Q	7	MET
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	110	THR
12	1Q	112	GLU
13	1R	33	ARG
13	1R	36	THR
13	1R	67	LEU
13	1R	75	LEU
13	1R	86	ARG
14	1S	3	ARG
14	1S	36	TYR
14	1S	38	GLN
14	1S	46	VAL
14	1S	50	SER
14	1S	59	LYS
14	1S	85	VAL
15	1T	39	ARG
15	1T	67	SER
15	1T	84	GLN
15	1T	96	ARG
15	1T	118	ARG
16	1U	5	LYS
16	1U	30	LYS
16	1U	31	SER
16	1U	50	ARG
16	1U	74	LEU
16	1U	108	GLU
16	1U	112	ARG
17	1V	35	LEU
17	1V	72	VAL
17	1V	73	SER
17	1V	79	VAL
18	1W	11	ARG
18	1W	14	PRO
18	1W	15	ARG
18	1W	16	LYS
18	1W	17	VAL
18	1W	23	LEU
18	1W	67	ASP
18	1W	100	THR

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Mol	Chain	Res	Type
19	1X	14	SER
19	1X	15	GLU
19	1X	45	THR
19	1X	68	ARG
20	1Y	7	VAL
20	1Y	26	LYS
20	1Y	34	LYS
20	1Y	43	ASN
20	1Y	50	ARG
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	85	VAL
20	1Y	90	LEU
20	1Y	92	ASN
20	1Y	99	CYS
21	1Z	18	LEU
21	1Z	31	ARG
21	1Z	33	LEU
21	1Z	42	VAL
21	1Z	50	GLN
21	1Z	61	LEU
21	1Z	66	SER
21	1Z	72	ARG
21	1Z	93	ASP
21	1Z	149	SER
21	1Z	150	LEU
21	1Z	154	ASP
21	1Z	155	LEU
21	1Z	203	GLU
22	10	11	ARG
22	10	55	ARG
22	10	74	ARG
23	11	33	LYS
23	11	40	ARG
23	11	46	LEU
23	11	95	LEU
24	12	53	LEU
24	12	68	ARG
25	13	8	LEU
25	13	23	LEU
25	13	44	ARG
25	13	54	VAL

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Mol	Chain	Res	Type
25	13	56	VAL
26	14	23	GLU
26	14	30	GLU
26	14	47	GLN
26	14	49	PHE
26	14	50	VAL
26	14	52	THR
26	14	58	ARG
26	14	59	PHE
26	14	66	SER
27	15	6	VAL
27	15	29	THR
27	15	40	LYS
28	16	6	ARG
28	16	9	LEU
28	16	19	ARG
28	16	48	VAL
28	16	49	HIS
28	16	50	ARG
28	16	52	VAL
29	17	1	MET
29	17	24	THR
29	17	43	THR
29	17	48	LYS
30	18	14	VAL
30	18	29	LYS
30	18	30	ARG
30	18	31	HIS
30	18	34	TRP
30	18	52	LYS
31	19	17	ILE
33	1b	7	VAL
33	1b	10	LEU
33	1b	12	GLU
33	1b	15	VAL
33	1b	17	PHE
33	1b	19	HIS
33	1b	21	ARG
33	1b	24	TRP
33	1b	28	PHE
33	1b	43	ASP
33	1b	44	LEU

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Mol	Chain	Res	Type
33	1b	45	GLN
33	1b	74	LYS
33	1b	80	ILE
33	1b	83	MET
33	1b	90	MET
33	1b	113	HIS
33	1b	121	LEU
33	1b	124	SER
33	1b	144	ARG
33	1b	157	ARG
33	1b	185	ILE
33	1b	208	ILE
33	1b	212	GLN
33	1b	213	LEU
33	1b	235	SER
34	1c	3	ASN
34	1c	8	ILE
34	1c	26	LYS
34	1c	49	SER
34	1c	52	LEU
34	1c	69	HIS
34	1c	98	ASN
34	1c	178	LEU
34	1c	179	ARG
34	1c	182	ILE
34	1c	188	LEU
34	1c	190	ARG
34	1c	192	THR
34	1c	206	GLU
35	1d	8	VAL
35	1d	83	SER
35	1d	104	VAL
35	1d	107	ARG
35	1d	110	PHE
35	1d	112	VAL
35	1d	115	ARG
35	1d	127	THR
35	1d	135	LEU
35	1d	155	LEU
35	1d	158	ILE
35	1d	168	ARG
35	1d	170	VAL

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Mol	Chain	Res	Type
35	1d	173	TRP
35	1d	175	SER
35	1d	179	GLU
35	1d	184	LYS
35	1d	188	LEU
35	1d	194	LEU
35	1d	196	LEU
36	1e	10	MET
36	1e	27	ARG
36	1e	31	LEU
36	1e	41	VAL
36	1e	51	VAL
36	1e	53	LEU
36	1e	75	THR
36	1e	78	HIS
36	1e	79	GLU
36	1e	80	ILE
36	1e	120	THR
36	1e	135	THR
36	1e	152	ARG
37	1f	19	LEU
37	1f	21	LEU
37	1f	45	LEU
37	1f	48	LEU
37	1f	69	GLU
37	1f	73	ASN
37	1f	74	ASP
37	1f	93	SER
37	1f	98	LEU
37	1f	100	ASN
38	1g	10	ARG
38	1g	16	LEU
38	1g	21	VAL
38	1g	45	ASP
38	1g	50	ILE
38	1g	97	GLN
38	1g	98	SER
38	1g	104	LEU
38	1g	153	HIS
39	1h	19	VAL
39	1h	39	LEU
39	1h	52	ASP

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Mol	Chain	Res	Type
39	1h	63	LEU
39	1h	69	ARG
39	1h	82	HIS
39	1h	88	LYS
39	1h	95	VAL
39	1h	102	ARG
39	1h	104	ARG
39	1h	125	ARG
39	1h	137	VAL
40	1i	3	GLN
40	1i	27	THR
40	1i	31	GLN
40	1i	41	VAL
40	1i	42	ARG
40	1i	47	LEU
40	1i	54	ASP
40	1i	78	LYS
40	1i	81	ILE
40	1i	83	ARG
40	1i	92	TYR
40	1i	103	THR
40	1i	104	ARG
40	1i	109	VAL
40	1i	125	TYR
41	1j	38	ILE
41	1j	40	LEU
41	1j	43	ARG
41	1j	55	LYS
41	1j	72	VAL
41	1j	100	THR
42	1k	14	VAL
42	1k	16	SER
42	1k	80	VAL
42	1k	81	ASP
42	1k	114	VAL
42	1k	120	ARG
43	1l	18	VAL
43	1l	28	LYS
43	1l	33	ARG
43	1l	42	THR
43	1l	57	LYS
43	1l	64	TYR

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Mol	Chain	Res	Type
43	1l	78	GLN
43	1l	83	VAL
44	1m	11	ARG
44	1m	17	VAL
44	1m	102	ARG
44	1m	114	ARG
45	1n	3	ARG
45	1n	4	LYS
45	1n	8	GLU
45	1n	18	VAL
45	1n	22	THR
45	1n	29	ARG
45	1n	33	VAL
45	1n	35	ARG
45	1n	60	SER
46	1o	3	ILE
46	1o	39	LEU
46	1o	40	SER
46	1o	76	GLU
46	1o	84	LYS
47	1p	2	VAL
47	1p	8	ARG
47	1p	11	SER
47	1p	20	VAL
47	1p	27	LYS
47	1p	33	ILE
47	1p	42	ARG
47	1p	45	THR
47	1p	47	ASP
47	1p	62	VAL
47	1p	67	THR
48	1q	6	LEU
48	1q	34	LYS
48	1q	45	HIS
48	1q	60	ILE
48	1q	86	GLU
48	1q	89	LEU
48	1q	98	LEU
48	1q	99	SER
49	1r	25	THR
49	1r	26	LEU
49	1r	85	LEU

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Mol	Chain	Res	Type
50	1s	5	LEU
50	1s	6	LYS
50	1s	12	ASP
50	1s	22	LEU
50	1s	37	ARG
50	1s	48	THR
51	1t	9	ASN
51	1t	15	ARG
51	1t	31	SER
51	1t	37	SER
51	1t	62	LEU
51	1t	90	GLN
51	1t	100	ILE
52	1u	7	ARG
53	1y	3	MET
53	1y	23	ARG
53	1y	24	LEU
53	1y	29	LYS
53	1y	42	SER
53	1y	46	GLN
53	1y	53	THR
53	1y	66	LYS
53	1y	74	ILE
3	2D	3	VAL
3	2D	32	SER
3	2D	35	LYS
3	2D	38	LYS
3	2D	61	LEU
3	2D	71	ASP
3	2D	88	ARG
3	2D	94	LEU
3	2D	103	ARG
3	2D	106	ILE
3	2D	113	VAL
3	2D	141	VAL
3	2D	142	VAL
3	2D	176	ARG
3	2D	183	ARG
3	2D	193	VAL
3	2D	211	ARG
3	2D	229	VAL
3	2D	242	ARG

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Mol	Chain	Res	Type
3	2D	259	THR
3	2D	260	ARG
4	2E	73	GLU
4	2E	75	VAL
4	2E	89	ASP
4	2E	113	PHE
4	2E	116	VAL
4	2E	119	ARG
4	2E	144	ARG
4	2E	175	VAL
4	2E	181	LEU
4	2E	182	LEU
4	2E	184	VAL
5	2F	17	ARG
5	2F	20	LEU
5	2F	24	LEU
5	2F	43	LYS
5	2F	53	THR
5	2F	57	VAL
5	2F	60	SER
5	2F	74	ARG
5	2F	135	LYS
5	2F	149	ASP
5	2F	197	ASP
6	2G	5	VAL
6	2G	7	LEU
6	2G	21	ARG
6	2G	43	LEU
6	2G	79	ASN
6	2G	80	PHE
6	2G	91	ARG
6	2G	98	ARG
6	2G	107	LEU
6	2G	108	ASN
6	2G	126	ASP
6	2G	155	MET
6	2G	159	VAL
7	2H	3	ARG
7	2H	6	ARG
7	2H	13	LYS
7	2H	15	VAL
7	2H	16	SER

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Mol	Chain	Res	Type
7	2H	33	LEU
7	2H	47	GLU
7	2H	49	VAL
7	2H	56	SER
7	2H	59	ARG
7	2H	63	SER
7	2H	68	THR
7	2H	71	LEU
7	2H	76	VAL
7	2H	86	GLU
7	2H	88	LEU
7	2H	97	ARG
7	2H	98	LEU
7	2H	116	GLU
7	2H	134	SER
7	2H	136	ILE
7	2H	139	GLN
7	2H	163	TYR
7	2H	175	LYS
8	2I	19	VAL
8	2I	38	LEU
8	2I	66	GLU
8	2I	75	LEU
8	2I	102	SER
8	2I	117	GLU
8	2I	127	VAL
8	2I	140	LEU
8	2I	142	VAL
9	2N	28	THR
9	2N	33	LEU
9	2N	43	THR
9	2N	48	MET
9	2N	62	VAL
9	2N	63	THR
9	2N	67	LEU
9	2N	73	THR
9	2N	87	LEU
9	2N	127	ASP
10	2O	52	VAL
10	2O	70	LYS
10	2O	89	ASN
10	2O	108	GLU

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Mol	Chain	Res	Type
11	2P	1	MET
11	2P	3	LEU
11	2P	4	SER
11	2P	30	THR
11	2P	65	ARG
11	2P	71	VAL
11	2P	95	VAL
11	2P	99	LEU
11	2P	148	LEU
11	2P	149	GLU
12	2Q	1	MET
12	2Q	2	LEU
12	2Q	3	MET
12	2Q	7	MET
12	2Q	38	GLU
12	2Q	60	ARG
12	2Q	75	THR
12	2Q	77	LYS
12	2Q	98	LYS
12	2Q	110	THR
12	2Q	111	GLU
13	2R	33	ARG
13	2R	36	THR
13	2R	65	LEU
13	2R	67	LEU
13	2R	75	LEU
13	2R	96	ARG
13	2R	102	GLU
13	2R	114	VAL
14	2S	12	PHE
14	2S	21	THR
14	2S	25	ARG
14	2S	35	ILE
14	2S	36	TYR
14	2S	41	ASP
14	2S	50	SER
14	2S	85	VAL
14	2S	110	LEU
15	2T	28	VAL
15	2T	36	GLU
15	2T	65	LYS
15	2T	75	ILE

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Mol	Chain	Res	Type
15	2T	89	VAL
15	2T	96	ARG
15	2T	104	ASN
15	2T	107	ASP
16	2U	5	LYS
16	2U	30	LYS
16	2U	31	SER
16	2U	74	LEU
16	2U	101	ARG
17	2V	32	THR
17	2V	35	LEU
17	2V	51	VAL
17	2V	52	VAL
17	2V	62	LEU
17	2V	79	VAL
17	2V	82	ARG
17	2V	98	GLU
18	2W	11	ARG
18	2W	15	ARG
18	2W	17	VAL
18	2W	23	LEU
18	2W	37	ARG
18	2W	103	ILE
19	2X	15	GLU
19	2X	33	LYS
19	2X	78	LYS
20	2Y	1	MET
20	2Y	6	HIS
20	2Y	19	LYS
20	2Y	23	ARG
20	2Y	31	LEU
20	2Y	47	LYS
20	2Y	57	GLN
20	2Y	70	SER
20	2Y	72	VAL
20	2Y	107	ASP
21	2Z	5	LEU
21	2Z	8	TYR
21	2Z	14	LYS
21	2Z	18	LEU
21	2Z	19	ARG
21	2Z	28	MET

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Mol	Chain	Res	Type
21	2Z	31	ARG
21	2Z	36	LYS
21	2Z	46	LYS
21	2Z	61	LEU
21	2Z	66	SER
21	2Z	76	LEU
21	2Z	93	ASP
21	2Z	94	GLU
21	2Z	97	GLU
21	2Z	119	GLU
21	2Z	121	HIS
21	2Z	123	ASP
21	2Z	136	PHE
21	2Z	142	SER
21	2Z	150	LEU
21	2Z	170	THR
21	2Z	185	GLU
21	2Z	191	VAL
22	20	10	THR
22	20	11	ARG
22	20	55	ARG
22	20	74	ARG
23	21	4	VAL
23	21	11	ARG
23	21	21	ARG
23	21	35	THR
23	21	40	ARG
23	21	52	ARG
23	21	69	LYS
23	21	76	ARG
23	21	85	LEU
23	21	86	SER
24	22	22	GLU
24	22	30	ARG
24	22	32	LEU
24	22	41	ILE
24	22	52	ASP
24	22	53	LEU
24	22	70	GLN
25	23	17	LYS
25	23	31	LEU
25	23	54	VAL

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Mol	Chain	Res	Type
25	23	57	GLU
26	24	3	GLU
26	24	37	SER
26	24	52	THR
26	24	53	GLU
26	24	61	ARG
26	24	63	TYR
26	24	68	ARG
27	25	6	VAL
27	25	29	THR
27	25	33	CYS
27	25	48	GLU
28	26	6	ARG
28	26	19	ARG
28	26	27	LYS
28	26	48	VAL
28	26	52	VAL
29	27	1	MET
29	27	24	THR
29	27	43	THR
29	27	46	VAL
29	27	48	LYS
30	28	14	VAL
30	28	30	ARG
30	28	31	HIS
30	28	34	TRP
31	29	17	ILE
33	2b	8	LYS
33	2b	9	GLU
33	2b	10	LEU
33	2b	12	GLU
33	2b	22	LYS
33	2b	24	TRP
33	2b	28	PHE
33	2b	45	GLN
33	2b	55	PHE
33	2b	56	ARG
33	2b	68	ILE
33	2b	74	LYS
33	2b	81	VAL
33	2b	95	GLN
33	2b	111	ARG

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Mol	Chain	Res	Type
33	2b	118	LEU
33	2b	126	GLU
33	2b	127	ILE
33	2b	142	LEU
33	2b	191	ASP
33	2b	224	GLN
33	2b	230	VAL
34	2c	3	ASN
34	2c	16	ARG
34	2c	21	ARG
34	2c	26	LYS
34	2c	32	LEU
34	2c	36	ASP
34	2c	43	LEU
34	2c	44	GLU
34	2c	72	LYS
34	2c	77	ILE
34	2c	82	GLU
34	2c	104	GLN
34	2c	119	ARG
34	2c	166	GLU
34	2c	207	VAL
35	2d	5	ILE
35	2d	8	VAL
35	2d	11	LEU
35	2d	19	LEU
35	2d	34	GLU
35	2d	52	SER
35	2d	59	ARG
35	2d	73	ARG
35	2d	76	ARG
35	2d	83	SER
35	2d	96	LEU
35	2d	106	TYR
35	2d	108	LEU
35	2d	118	ARG
35	2d	123	HIS
35	2d	127	THR
35	2d	135	LEU
35	2d	155	LEU
35	2d	170	VAL
35	2d	175	SER

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Mol	Chain	Res	Type
35	2d	209	ARG
36	2e	12	LEU
36	2e	13	ILE
36	2e	24	ARG
36	2e	27	ARG
36	2e	41	VAL
36	2e	64	ARG
36	2e	73	ASN
36	2e	75	THR
36	2e	78	HIS
36	2e	91	LEU
36	2e	107	ARG
36	2e	120	THR
36	2e	135	THR
36	2e	150	ARG
36	2e	152	ARG
37	2f	13	ASN
37	2f	19	LEU
37	2f	70	ASP
37	2f	81	ILE
37	2f	87	ARG
37	2f	89	MET
37	2f	92	LYS
37	2f	95	GLU
38	2g	8	GLU
38	2g	9	VAL
38	2g	10	ARG
38	2g	22	LEU
38	2g	64	GLN
38	2g	75	VAL
38	2g	106	GLN
38	2g	113	GLU
38	2g	115	ARG
38	2g	153	HIS
38	2g	155	ARG
39	2h	22	GLU
39	2h	39	LEU
39	2h	45	ILE
39	2h	51	VAL
39	2h	85	ARG
39	2h	91	ARG
39	2h	97	VAL

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Mol	Chain	Res	Type
39	2h	104	ARG
39	2h	112	LEU
39	2h	137	VAL
40	2i	20	ARG
40	2i	27	THR
40	2i	53	VAL
40	2i	56	LEU
40	2i	64	THR
40	2i	65	VAL
40	2i	75	ASP
40	2i	105	ASP
40	2i	108	VAL
40	2i	125	TYR
40	2i	127	LYS
41	2j	7	LYS
41	2j	21	GLN
41	2j	29	ARG
41	2j	38	ILE
41	2j	46	ARG
41	2j	57	LYS
41	2j	72	VAL
41	2j	74	ILE
41	2j	92	THR
41	2j	96	ILE
42	2k	48	ILE
42	2k	54	ARG
42	2k	77	MET
42	2k	95	ILE
42	2k	107	SER
42	2k	117	ASN
43	2l	28	LYS
43	2l	33	ARG
43	2l	36	VAL
43	2l	40	VAL
43	2l	47	LYS
43	2l	50	SER
43	2l	55	VAL
43	2l	83	VAL
43	2l	89	ARG
44	2m	3	ARG
44	2m	12	ASN
44	2m	15	VAL

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Mol	Chain	Res	Type
44	2m	32	GLU
44	2m	40	ASN
44	2m	47	ASP
44	2m	70	LEU
44	2m	88	ARG
44	2m	93	ARG
45	2n	3	ARG
45	2n	12	ARG
45	2n	18	VAL
45	2n	33	VAL
46	2o	3	ILE
46	2o	24	SER
46	2o	39	LEU
46	2o	76	GLU
46	2o	87	ILE
47	2p	1	MET
47	2p	20	VAL
47	2p	22	THR
47	2p	25	ARG
47	2p	42	ARG
47	2p	57	ARG
47	2p	69	THR
47	2p	73	LEU
48	2q	6	LEU
48	2q	7	THR
48	2q	22	LEU
48	2q	60	ILE
48	2q	61	GLU
48	2q	87	LYS
48	2q	99	SER
49	2r	25	THR
49	2r	46	GLU
49	2r	84	LYS
49	2r	85	LEU
50	2s	16	LEU
50	2s	35	SER
50	2s	60	VAL
50	2s	77	THR
50	2s	81	ARG
51	2t	11	SER
51	2t	15	ARG
51	2t	50	GLU

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Mol	Chain	Res	Type
51	2t	84	LEU
51	2t	100	ILE
52	2u	9	ARG
53	2y	3	MET
53	2y	23	ARG
53	2y	24	LEU
53	2y	29	LYS
53	2y	33	HIS
53	2y	64	SER
53	2y	96	ARG
54	2z	3	LYS
54	2z	4	SER
54	2z	15	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (131) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	164	GLN
3	1D	253	GLN
4	1E	48	GLN
4	1E	143	ASN
5	1F	8	GLN
5	1F	69	HIS
7	1H	139	GLN
7	1H	158	HIS
8	1I	104	GLN
8	1I	105	HIS
10	1O	3	GLN
11	1P	70	GLN
12	1Q	89	ASN
15	1T	58	ASN
15	1T	123	GLN
16	1U	94	ASN
18	1W	60	ASN
19	1X	31	HIS
19	1X	55	ASN
19	1X	82	GLN
20	1Y	43	ASN
21	1Z	32	HIS
21	1Z	50	GLN
21	1Z	73	GLN
21	1Z	151	HIS

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Mol	Chain	Res	Type
24	12	46	GLN
25	13	32	GLN
26	14	60	GLN
30	18	35	GLN
31	19	34	GLN
33	1b	40	HIS
33	1b	95	GLN
34	1c	6	HIS
34	1c	104	GLN
34	1c	181	ASN
35	1d	77	ASN
35	1d	119	GLN
35	1d	201	GLN
37	1f	73	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	86	GLN
38	1g	110	GLN
38	1g	148	ASN
40	1i	3	GLN
40	1i	73	GLN
40	1i	87	GLN
41	1j	56	HIS
41	1j	84	GLN
42	1k	62	GLN
43	1l	80	HIS
43	1l	99	HIS
46	1o	28	GLN
47	1p	13	HIS
50	1s	47	HIS
50	1s	69	HIS
50	1s	83	HIS
51	1t	18	GLN
53	1y	38	HIS
3	2D	126	GLN
3	2D	253	GLN
4	2E	48	GLN
5	2F	69	HIS
7	2H	143	GLN
7	2H	147	ASN
8	2I	43	ASN
8	2I	104	GLN

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Mol	Chain	Res	Type
8	2I	105	HIS
8	2I	133	HIS
9	2N	8	GLN
9	2N	133	GLN
10	2O	89	ASN
13	2R	71	GLN
14	2S	68	GLN
15	2T	58	ASN
15	2T	104	ASN
15	2T	123	GLN
16	2U	104	GLN
17	2V	64	HIS
19	2X	31	HIS
20	2Y	92	ASN
21	2Z	34	ASN
21	2Z	73	GLN
21	2Z	151	HIS
22	20	50	ASN
25	23	32	GLN
30	28	35	GLN
31	29	34	GLN
33	2b	78	GLN
33	2b	135	GLN
33	2b	212	GLN
34	2c	37	GLN
34	2c	102	ASN
34	2c	108	ASN
34	2c	176	HIS
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	125	HIS
35	2d	160	GLN
36	2e	20	GLN
37	2f	94	GLN
37	2f	100	ASN
38	2g	13	GLN
38	2g	28	ASN
38	2g	86	GLN
38	2g	148	ASN
40	2i	3	GLN
40	2i	58	HIS

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Mol	Chain	Res	Type
40	2i	117	HIS
41	2j	13	HIS
42	2k	99	GLN
42	2k	117	ASN
43	2l	99	HIS
44	2m	40	ASN
44	2m	62	ASN
44	2m	77	ASN
44	2m	106	ASN
46	2o	9	GLN
46	2o	28	GLN
47	2p	76	GLN
48	2q	16	GLN
50	2s	23	ASN
50	2s	53	ASN
50	2s	65	ASN
50	2s	69	HIS
50	2s	83	HIS
51	2t	16	HIS
53	2y	33	HIS
53	2y	38	HIS
53	2y	46	GLN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2864/2915 (98%)	447 (15%)	44 (1%)
1	2A	2857/2915 (98%)	505 (17%)	47 (1%)
2	1B	119/121 (98%)	13 (10%)	0
2	2B	119/121 (98%)	22 (18%)	0
32	1a	1494/1521 (98%)	261 (17%)	0
32	2a	1498/1521 (98%)	265 (17%)	0
All	All	8951/9114 (98%)	1513 (16%)	91 (1%)

All (1513) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	23	G
1	1A	34	C
1	1A	36	G

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Mol	Chain	Res	Type
1	1A	45	C
1	1A	63	U
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	100	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	154(A)	C
1	1A	181	A
1	1A	182	A
1	1A	196	A
1	1A	197	A
1	1A	199	A
1	1A	205	G
1	1A	215	G
1	1A	216	A
1	1A	222	A
1	1A	229	A
1	1A	248	G
1	1A	261	G
1	1A	271(I)	G
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(S)	G
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	272(H)	C
1	1A	275	G
1	1A	279	C
1	1A	311	A
1	1A	330	A
1	1A	352	G
1	1A	363	G
1	1A	370	G
1	1A	380	U
1	1A	386	G
1	1A	405	U
1	1A	411	G

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Mol	Chain	Res	Type
1	1A	412	A
1	1A	421	U
1	1A	428	A
1	1A	442	G
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	455	C
1	1A	456	C
1	1A	457	A
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	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	592	G
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(E)	G
1	1A	652(T)	C
1	1A	652(U)	G
1	1A	669	G
1	1A	686	G
1	1A	715	G
1	1A	717	G
1	1A	730	C
1	1A	765	G

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Mol	Chain	Res	Type
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	790	C
1	1A	792	G
1	1A	805	G
1	1A	811	U
1	1A	812	C
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	881	G
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	894	C
1	1A	896	A
1	1A	897	C
1	1A	907	U
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	958	U
1	1A	959	A
1	1A	961	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

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Mol	Chain	Res	Type
1	1A	1027	A
1	1A	1033	U
1	1A	1039	G
1	1A	1041	C
1	1A	1042	G
1	1A	1043	C
1	1A	1044	G
1	1A	1046	A
1	1A	1047	G
1	1A	1048	A
1	1A	1054	A
1	1A	1060	U
1	1A	1061	U
1	1A	1062	G
1	1A	1063	G
1	1A	1065	U
1	1A	1068	G
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1083	U
1	1A	1088	A
1	1A	1090	U
1	1A	1095	A
1	1A	1096	A
1	1A	1097	U
1	1A	1100	C
1	1A	1104	C
1	1A	1109	C
1	1A	1110	G
1	1A	1112	G
1	1A	1116	C
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1170	G
1	1A	1171	G

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Mol	Chain	Res	Type
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1210	A
1	1A	1211	U
1	1A	1218	C
1	1A	1244	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1319	G
1	1A	1321	A
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	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1437	C
1	1A	1445	A
1	1A	1446	C
1	1A	1450	G
1	1A	1452	A
1	1A	1455	G
1	1A	1459	G
1	1A	1467	C
1	1A	1471	A
1	1A	1482	G
1	1A	1490	A

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Mol	Chain	Res	Type
1	1A	1493	C
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1514	U
1	1A	1530	C
1	1A	1531	C
1	1A	1532	C
1	1A	1542	A
1	1A	1543	C
1	1A	1554	A
1	1A	1558	A
1	1A	1569	A
1	1A	1578	U
1	1A	1579	A
1	1A	1580	A
1	1A	1581	G
1	1A	1582	C
1	1A	1583	A
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1647	G
1	1A	1648	C
1	1A	1653	G
1	1A	1654	A
1	1A	1664	A
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1720	U
1	1A	1722	A
1	1A	1739	U
1	1A	1756	G
1	1A	1758	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1769	G

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Mol	Chain	Res	Type
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1812	A
1	1A	1816	G
1	1A	1829	A
1	1A	1839	G
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1900	A
1	1A	1906	G
1	1A	1913	A
1	1A	1914	C
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	1965	C
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
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	2034	U
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G

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Mol	Chain	Res	Type
1	1A	2062	A
1	1A	2069	G
1	1A	2099	U
1	1A	2103	C
1	1A	2104	G
1	1A	2106	G
1	1A	2107	C
1	1A	2108	C
1	1A	2110	G
1	1A	2112	G
1	1A	2116	G
1	1A	2117	A
1	1A	2119	A
1	1A	2124	G
1	1A	2125	G
1	1A	2126	A
1	1A	2127	G
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	2141	G
1	1A	2142	C
1	1A	2144	U
1	1A	2145	C
1	1A	2146	C
1	1A	2147	G
1	1A	2148	G
1	1A	2158	A
1	1A	2159	G
1	1A	2165	G
1	1A	2171	A
1	1A	2173	A
1	1A	2179	C
1	1A	2184	G
1	1A	2185	C
1	1A	2186	G
1	1A	2187	G
1	1A	2188	C
1	1A	2190	G

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Mol	Chain	Res	Type
1	1A	2191	G
1	1A	2192	G
1	1A	2193	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2218	U
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2278	A
1	1A	2280	G
1	1A	2283	C
1	1A	2286	A
1	1A	2287	A
1	1A	2289	G
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2321	G
1	1A	2325	G
1	1A	2326	C
1	1A	2334	G
1	1A	2347	C
1	1A	2350	C
1	1A	2354	G
1	1A	2372	G
1	1A	2383	G
1	1A	2385	C
1	1A	2393	A
1	1A	2406	U
1	1A	2407	G
1	1A	2414	G
1	1A	2422	A
1	1A	2423	U
1	1A	2424	C
1	1A	2425	A
1	1A	2429	G
1	1A	2430	A
1	1A	2435	A

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Mol	Chain	Res	Type
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2449	U
1	1A	2468	G
1	1A	2469	A
1	1A	2471	C
1	1A	2474	C
1	1A	2476	A
1	1A	2478	A
1	1A	2482	G
1	1A	2491	U
1	1A	2502	G
1	1A	2504	U
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2532	G
1	1A	2535	G
1	1A	2549	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	2586	C
1	1A	2602	A
1	1A	2603	G
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2657	A
1	1A	2689	U
1	1A	2690	C
1	1A	2703	C
1	1A	2712(A)	A
1	1A	2713	A

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Mol	Chain	Res	Type
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2758	A
1	1A	2764	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2789	C
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2839	G
1	1A	2872	G
1	1A	2873	A
1	1A	2880	C
1	1A	2892	A
1	1A	2894	G
2	1B	2	C
2	1B	7	G
2	1B	13	A
2	1B	15	A
2	1B	25	A
2	1B	45	A
2	1B	50	G
2	1B	52	A
2	1B	53	A
2	1B	56	G
2	1B	73	A
2	1B	109	C
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	33	A
32	1a	39	G
32	1a	48	C

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Mol	Chain	Res	Type
32	1a	50	A
32	1a	51	A
32	1a	55	A
32	1a	61	G
32	1a	62	U
32	1a	79	G
32	1a	101	A
32	1a	105	G
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	151	A
32	1a	156	G
32	1a	163	C
32	1a	174	C
32	1a	181	G
32	1a	182	U
32	1a	189(F)	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	220	G
32	1a	222	U
32	1a	231	G
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	306	G
32	1a	321	A
32	1a	328	C
32	1a	329	A
32	1a	330	C
32	1a	332	G
32	1a	348	G

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Mol	Chain	Res	Type
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	378	G
32	1a	397	A
32	1a	398	C
32	1a	402	G
32	1a	406	G
32	1a	411	A
32	1a	412	A
32	1a	413	G
32	1a	414	A
32	1a	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	461	A
32	1a	470	C
32	1a	475	G
32	1a	476	G
32	1a	480	U
32	1a	485	G
32	1a	495	A
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	518	C
32	1a	527	G7M
32	1a	532	A
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	572	A
32	1a	573	A

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Mol	Chain	Res	Type
32	1a	576	G
32	1a	596	C
32	1a	618	C
32	1a	619	U
32	1a	630	G
32	1a	631	G
32	1a	632	A
32	1a	653	A
32	1a	661	G
32	1a	665	A
32	1a	672	U
32	1a	673	G
32	1a	686	U
32	1a	687	A
32	1a	688	G
32	1a	723	U
32	1a	731	G
32	1a	733	A
32	1a	735	C
32	1a	755	G
32	1a	777	A
32	1a	793	U
32	1a	794	A
32	1a	805	C
32	1a	815	A
32	1a	816	A
32	1a	817	C
32	1a	828	A
32	1a	829	G
32	1a	836	G
32	1a	838	G
32	1a	839	U
32	1a	840	C
32	1a	841	U
32	1a	848	C
32	1a	851	G
32	1a	855	G
32	1a	872	A
32	1a	913	A
32	1a	914	A
32	1a	916	G
32	1a	926	G

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Mol	Chain	Res	Type
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	960	U
32	1a	961	U
32	1a	963	G
32	1a	966	M2G
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A
32	1a	975	A
32	1a	976	G
32	1a	977	A
32	1a	978	A
32	1a	992	U
32	1a	993	G
32	1a	994	A
32	1a	998	G
32	1a	999	C
32	1a	1001(A)	G
32	1a	1004	A
32	1a	1006	C
32	1a	1021	G
32	1a	1023	G
32	1a	1024	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	1032	G
32	1a	1034	G
32	1a	1037	C
32	1a	1042	G
32	1a	1044	A
32	1a	1053	G
32	1a	1054	C
32	1a	1065	U

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Mol	Chain	Res	Type
32	1a	1066	C
32	1a	1068	G
32	1a	1070	U
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1108	G
32	1a	1120	G
32	1a	1122	U
32	1a	1124	G
32	1a	1130	A
32	1a	1132	C
32	1a	1134	G
32	1a	1136	U
32	1a	1137	C
32	1a	1139	G
32	1a	1140	C
32	1a	1150	U
32	1a	1152	A
32	1a	1154	G
32	1a	1159	U
32	1a	1166	G
32	1a	1168	A
32	1a	1176	A
32	1a	1182	G
32	1a	1183	A
32	1a	1184	G
32	1a	1185	G
32	1a	1193	G
32	1a	1196	U
32	1a	1197	G
32	1a	1201	A
32	1a	1202	G
32	1a	1208	C
32	1a	1211	U
32	1a	1212	U
32	1a	1213	A
32	1a	1214	C
32	1a	1224	G
32	1a	1227	A
32	1a	1238	A

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Mol	Chain	Res	Type
32	1a	1240	U
32	1a	1250	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1270	C
32	1a	1273	G
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	1319	A
32	1a	1320	C
32	1a	1322	C
32	1a	1331	G
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1354	C
32	1a	1363	C
32	1a	1370	G
32	1a	1379	G
32	1a	1397	C
32	1a	1409	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1442(B)	A
32	1a	1456	G
32	1a	1493	A
32	1a	1494	G
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1507	A

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Mol	Chain	Res	Type
32	1a	1517	G
32	1a	1529	G
32	1a	1530	G
1	2A	10	G
1	2A	11	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	45	C
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	94	C
1	2A	102	G
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	141	A
1	2A	154	G
1	2A	157	U
1	2A	173	G
1	2A	181	A
1	2A	196	A
1	2A	197	A
1	2A	199	A
1	2A	200	U
1	2A	205	G
1	2A	215	G
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	229	A
1	2A	230	U
1	2A	248	G
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(P)	C
1	2A	272(A)	U

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Mol	Chain	Res	Type
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	283	A
1	2A	291	C
1	2A	294	A
1	2A	308	G
1	2A	310	A
1	2A	311	A
1	2A	312	G
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	342	G
1	2A	346	A
1	2A	352	G
1	2A	362	U
1	2A	363	G
1	2A	363(C)	G
1	2A	370	G
1	2A	386	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	412	A
1	2A	428	A
1	2A	444	C
1	2A	451	C
1	2A	455	C
1	2A	457	A
1	2A	470	A
1	2A	480	A
1	2A	481	G
1	2A	499	U
1	2A	505	A
1	2A	509	C
1	2A	512	G
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	545	G

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Mol	Chain	Res	Type
1	2A	551	G
1	2A	563	G
1	2A	573	G
1	2A	575	A
1	2A	586	A
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	614(C)	A
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	631	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	669	G
1	2A	686	G
1	2A	717	G
1	2A	726	G
1	2A	730	C
1	2A	740	U
1	2A	752	A
1	2A	753	C
1	2A	765	G
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	827	U
1	2A	828	U
1	2A	846	C
1	2A	857	C

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Mol	Chain	Res	Type
1	2A	859	G
1	2A	866	A
1	2A	869	G
1	2A	874	G
1	2A	880	G
1	2A	881	G
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	894	C
1	2A	896	A
1	2A	897	C
1	2A	900	A
1	2A	901	A
1	2A	907	U
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
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	1012	U
1	2A	1013	C
1	2A	1022	G
1	2A	1026	U
1	2A	1033	U
1	2A	1038	C
1	2A	1039	G
1	2A	1041	C
1	2A	1043	C
1	2A	1045	A

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Mol	Chain	Res	Type
1	2A	1046	A
1	2A	1047	G
1	2A	1052	C
1	2A	1053	C
1	2A	1054	A
1	2A	1058	G
1	2A	1060	U
1	2A	1063	G
1	2A	1064	C
1	2A	1065	U
1	2A	1066	U
1	2A	1067	A
1	2A	1068	G
1	2A	1070	A
1	2A	1071	G
1	2A	1072	C
1	2A	1073	A
1	2A	1074	G
1	2A	1076	C
1	2A	1077	A
1	2A	1078	U
1	2A	1079	C
1	2A	1080	C
1	2A	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A
1	2A	1087	G
1	2A	1088	A
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C
1	2A	1093	G
1	2A	1094	U
1	2A	1095	A
1	2A	1097	U
1	2A	1098	A
1	2A	1107	G
1	2A	1108	U
1	2A	1109	C
1	2A	1110	G

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Mol	Chain	Res	Type
1	2A	1112	G
1	2A	1116	C
1	2A	1117	G
1	2A	1128	A
1	2A	1135	C
1	2A	1136	G
1	2A	1170	G
1	2A	1171	G
1	2A	1205	U
1	2A	1210	A
1	2A	1211	U
1	2A	1213	A
1	2A	1220	A
1	2A	1229	G
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	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1321	A
1	2A	1342	A
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1380	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1395	A
1	2A	1396	U
1	2A	1416	G
1	2A	1420	U
1	2A	1421	G
1	2A	1428	C
1	2A	1445	A

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Mol	Chain	Res	Type
1	2A	1452	A
1	2A	1459	G
1	2A	1461	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1490	A
1	2A	1493	C
1	2A	1494	A
1	2A	1496	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509(A)	A
1	2A	1525	G
1	2A	1530	C
1	2A	1531	C
1	2A	1533	G
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1554	A
1	2A	1558	A
1	2A	1559	G
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1584	C
1	2A	1586	A
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1648	C
1	2A	1664	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1721	G
1	2A	1722	A
1	2A	1739	U

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Mol	Chain	Res	Type
1	2A	1750	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	1812	A
1	2A	1816	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1847	A
1	2A	1858	G
1	2A	1861	G
1	2A	1877	A
1	2A	1878	G
1	2A	1900	A
1	2A	1906	G
1	2A	1914	C
1	2A	1918	A
1	2A	1929	G
1	2A	1930	G
1	2A	1936	A
1	2A	1938	A
1	2A	1939	5MU
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
1	2A	2023	G
1	2A	2031	A

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Mol	Chain	Res	Type
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	2062	A
1	2A	2069	G
1	2A	2074	U
1	2A	2097	C
1	2A	2099	U
1	2A	2100	G
1	2A	2103	C
1	2A	2104	G
1	2A	2105	C
1	2A	2107	C
1	2A	2108	C
1	2A	2109	U
1	2A	2112	G
1	2A	2113	U
1	2A	2116	G
1	2A	2117	A
1	2A	2119	A
1	2A	2121	G
1	2A	2123	G
1	2A	2124	G
1	2A	2127	G
1	2A	2129	C
1	2A	2130	U
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G
1	2A	2150	U
1	2A	2151	G
1	2A	2158	A
1	2A	2159	G

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Mol	Chain	Res	Type
1	2A	2161	C
1	2A	2164	C
1	2A	2165	G
1	2A	2166	G
1	2A	2167	U
1	2A	2171	A
1	2A	2172	U
1	2A	2173	A
1	2A	2178	C
1	2A	2179	C
1	2A	2180	U
1	2A	2181	G
1	2A	2183	C
1	2A	2186	G
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U
1	2A	2219	G
1	2A	2225	A
1	2A	2268	A
1	2A	2269	A
1	2A	2275	C
1	2A	2278	A
1	2A	2279	G
1	2A	2283	C
1	2A	2287	A
1	2A	2288	A
1	2A	2289	G
1	2A	2305	A
1	2A	2308	G
1	2A	2319	G
1	2A	2320	A
1	2A	2321	G
1	2A	2322	A
1	2A	2325	G
1	2A	2326	C
1	2A	2334	G
1	2A	2335	A

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Mol	Chain	Res	Type
1	2A	2336	A
1	2A	2343	C
1	2A	2347	C
1	2A	2350	C
1	2A	2354	G
1	2A	2366	A
1	2A	2379	G
1	2A	2383	G
1	2A	2385	C
1	2A	2388	A
1	2A	2396	G
1	2A	2402	C
1	2A	2406	U
1	2A	2407	G
1	2A	2422	A
1	2A	2423	U
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2440	C
1	2A	2441	C
1	2A	2448	A
1	2A	2468	G
1	2A	2470	G
1	2A	2474	C
1	2A	2476	A
1	2A	2486	G
1	2A	2487	G
1	2A	2491	U
1	2A	2492	U
1	2A	2498	C
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2529	G
1	2A	2543	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G

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Mol	Chain	Res	Type
1	2A	2572	A
1	2A	2573	C
1	2A	2585	U
1	2A	2596	U
1	2A	2602	A
1	2A	2603	G
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2629	A
1	2A	2630	G
1	2A	2654	A
1	2A	2663	G
1	2A	2669	G
1	2A	2682	U
1	2A	2689	U
1	2A	2690	C
1	2A	2702	U
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	2757	A
1	2A	2764	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2789	C
1	2A	2793	G
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2839	G
1	2A	2872	G
1	2A	2873	A
1	2A	2876	G
1	2A	2879	C
1	2A	2889	C

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Mol	Chain	Res	Type
1	2A	2892	A
1	2A	2894	G
1	2A	2896	C
1	2A	2897	U
2	2B	2	C
2	2B	7	G
2	2B	9	G
2	2B	13	A
2	2B	15	A
2	2B	19	G
2	2B	23	G
2	2B	27	C
2	2B	30	C
2	2B	34	U
2	2B	40	U
2	2B	51	G
2	2B	52	A
2	2B	54	G
2	2B	56	G
2	2B	63	G
2	2B	73	A
2	2B	84	C
2	2B	94	C
2	2B	108	U
2	2B	109	C
2	2B	110	G
32	2a	5	U
32	2a	9	G
32	2a	22	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	60	A
32	2a	61	G
32	2a	65	U
32	2a	66	G
32	2a	78	G
32	2a	88	A

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Mol	Chain	Res	Type
32	2a	89	C
32	2a	98	G
32	2a	101	A
32	2a	105	G
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	144	G
32	2a	151	A
32	2a	163	C
32	2a	173	U
32	2a	174	C
32	2a	182	U
32	2a	189(D)	C
32	2a	189(F)	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	220	G
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	342	C
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	368	U
32	2a	372	C
32	2a	396	G
32	2a	397	A

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Mol	Chain	Res	Type
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	422	C
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	452	A
32	2a	461	A
32	2a	470	C
32	2a	484	G
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	513	C
32	2a	518	C
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	560	U
32	2a	561	U
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	581	G
32	2a	592	G
32	2a	596	C
32	2a	618	C
32	2a	630	G
32	2a	631	G
32	2a	632	A
32	2a	633	G

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Mol	Chain	Res	Type
32	2a	653	A
32	2a	665	A
32	2a	666	G
32	2a	687	A
32	2a	688	G
32	2a	695	A
32	2a	723	U
32	2a	724	G
32	2a	731	G
32	2a	749	C
32	2a	755	G
32	2a	759	A
32	2a	773	G
32	2a	774	G
32	2a	776	G
32	2a	777	A
32	2a	785	G
32	2a	793	U
32	2a	794	A
32	2a	816	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	829	G
32	2a	836	G
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	858	G
32	2a	859	A
32	2a	880	C
32	2a	914	A
32	2a	920	U
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	934	C
32	2a	935	A
32	2a	960	U
32	2a	961	U
32	2a	963	G
32	2a	966	M2G

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Mol	Chain	Res	Type
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	978	A
32	2a	982	U
32	2a	988	G
32	2a	992	U
32	2a	993	G
32	2a	994	A
32	2a	995	C
32	2a	1001	A
32	2a	1004	A
32	2a	1005	A
32	2a	1009	G
32	2a	1020	U
32	2a	1022	G
32	2a	1023	G
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1030	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1033	G
32	2a	1037	C
32	2a	1038	C
32	2a	1039	C
32	2a	1040	U
32	2a	1041	A
32	2a	1043	C
32	2a	1053	G
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1072	G
32	2a	1081	G

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Mol	Chain	Res	Type
32	2a	1091	U
32	2a	1092	A
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1117	G
32	2a	1122	U
32	2a	1125	U
32	2a	1126	U
32	2a	1128	C
32	2a	1129	C
32	2a	1130	A
32	2a	1132	C
32	2a	1136	U
32	2a	1137	C
32	2a	1139	G
32	2a	1147	C
32	2a	1152	A
32	2a	1154	G
32	2a	1157	A
32	2a	1159	U
32	2a	1160	G
32	2a	1177	G
32	2a	1183	A
32	2a	1196	U
32	2a	1197	G
32	2a	1212	U
32	2a	1213	A
32	2a	1214	C
32	2a	1224	G
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1240	U
32	2a	1241	G
32	2a	1250	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1261	A
32	2a	1270	C

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Mol	Chain	Res	Type
32	2a	1272	G
32	2a	1278	U
32	2a	1279	A
32	2a	1280	A
32	2a	1281	U
32	2a	1282	C
32	2a	1287	A
32	2a	1300	G
32	2a	1305	G
32	2a	1320	C
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1358	U
32	2a	1363	C
32	2a	1368	G
32	2a	1370	G
32	2a	1381	U
32	2a	1397	C
32	2a	1398	A
32	2a	1404	5MC
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1442(B)	A
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1492	A
32	2a	1493	A
32	2a	1504	G
32	2a	1505	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A

All (91) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	199	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	573	G
1	1A	746	A
1	1A	764	A
1	1A	774	A
1	1A	776	G
1	1A	790	C
1	1A	827	U
1	1A	839	U
1	1A	859	G
1	1A	887	A
1	1A	958	U
1	1A	974	G
1	1A	1047	G
1	1A	1065	U
1	1A	1067	A
1	1A	1089	G
1	1A	1176	G
1	1A	1210	A
1	1A	1300	U
1	1A	1301	A
1	1A	1379	A
1	1A	1420	U
1	1A	1442	G
1	1A	1608	A
1	1A	1609	A
1	1A	1653	G
1	1A	1762	A
1	1A	2126	A
1	1A	2172	U
1	1A	2225	A
1	1A	2250	G
1	1A	2288	A
1	1A	2308	G
1	1A	2406	U
1	1A	2422	A
1	1A	2439	A
1	1A	2447	G
1	1A	2602	A

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Mol	Chain	Res	Type
1	1A	2689	U
1	2A	196	A
1	2A	215	G
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	310	A
1	2A	512	G
1	2A	530	G
1	2A	685	A
1	2A	746	A
1	2A	752	A
1	2A	764	A
1	2A	774	A
1	2A	827	U
1	2A	840	C
1	2A	856	C
1	2A	900	A
1	2A	974	G
1	2A	1053	C
1	2A	1057	A
1	2A	1065	U
1	2A	1067	A
1	2A	1076	C
1	2A	1142(A)	A
1	2A	1210	A
1	2A	1378	A
1	2A	1379	A
1	2A	1395	A
1	2A	1420	U
1	2A	1442	G
1	2A	1491	G
1	2A	1608	A
1	2A	1992	G
1	2A	2126	A
1	2A	2171	A
1	2A	2172	U
1	2A	2275	C
1	2A	2321	G
1	2A	2335	A
1	2A	2406	U

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Mol	Chain	Res	Type
1	2A	2422	A
1	2A	2430	A
1	2A	2439	A
1	2A	2602	A
1	2A	2689	U
1	2A	2756	U

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

48 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	PSU	2A	1917	1,55	18,21,22	1.51	3 (16%)	21,30,33	2.10	4 (19%)
1	2MA	2A	2503	1,55	17,25,26	1.11	2 (11%)	16,37,40	1.65	4 (25%)
1	5MU	2A	1915	1	19,22,23	1.53	3 (15%)	27,32,35	2.28	9 (33%)
1	5MC	2A	1962	1,55	19,22,23	1.69	3 (15%)	26,32,35	1.45	3 (11%)
32	M2G	1a	966	55,32	20,27,28	1.38	3 (15%)	19,40,43	1.03	2 (10%)
32	5MC	2a	1400	32	19,22,23	1.97	3 (15%)	26,32,35	1.35	3 (11%)
1	OMC	1A	1920	1,55	19,22,23	0.83	1 (5%)	25,31,34	1.01	0
1	5MC	1A	1962	1,55	19,22,23	1.42	3 (15%)	26,32,35	1.27	3 (11%)
32	4OC	2a	1402	32	20,23,24	0.76	1 (5%)	25,32,35	1.12	2 (8%)
1	OMU	1A	2552	1,55	19,22,23	1.29	3 (15%)	25,31,34	1.86	5 (20%)
43	0TD	2l	92	43	8,9,10	4.88	3 (37%)	6,11,13	2.65	2 (33%)
1	5MU	2A	1939	1,55	19,22,23	1.63	5 (26%)	27,32,35	2.35	6 (22%)
32	5MC	1a	967	32	19,22,23	1.48	2 (10%)	26,32,35	1.14	1 (3%)
32	G7M	1a	527	32	20,26,27	1.32	3 (15%)	16,39,42	0.86	0
1	5MU	1A	1939	1,55	19,22,23	1.64	4 (21%)	27,32,35	2.25	6 (22%)
32	5MC	1a	1400	32	19,22,23	1.55	3 (15%)	26,32,35	1.21	3 (11%)
1	OMG	1A	2251	1,55	19,26,27	0.96	1 (5%)	21,38,41	1.14	1 (4%)
32	PSU	2a	516	55,32	18,21,22	1.30	3 (16%)	21,30,33	2.13	6 (28%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
1	PSU	2A	2605	1	18,21,22	1.36	1 (5%)	21,30,33	2.53	4 (19%)
1	OMC	2A	1920	1	19,22,23	0.77	0	25,31,34	0.84	0
1	5MC	1A	1942	1	19,22,23	1.63	3 (15%)	26,32,35	1.47	2 (7%)
1	PSU	1A	2605	1,55	18,21,22	1.54	3 (16%)	21,30,33	1.94	4 (19%)
1	PSU	1A	1911	1	18,21,22	1.45	2 (11%)	21,30,33	2.03	5 (23%)
32	UR3	1a	1498	32	19,22,23	1.00	1 (5%)	26,32,35	1.67	3 (11%)
43	0TD	1l	92	43	8,9,10	3.96	2 (25%)	6,11,13	4.26	2 (33%)
32	2MG	2a	1207	32	18,26,27	0.90	1 (5%)	16,38,41	1.44	3 (18%)
1	PSU	2A	1911	1	18,21,22	1.43	3 (16%)	21,30,33	1.86	6 (28%)
32	MA6	2a	1518	32	19,26,27	1.08	2 (10%)	18,38,41	1.87	3 (16%)
32	G7M	2a	527	32	20,26,27	1.18	2 (10%)	16,39,42	0.59	0
32	5MC	2a	1404	32	19,22,23	1.55	3 (15%)	26,32,35	1.35	3 (11%)
32	4OC	1a	1402	32	20,23,24	0.78	0	25,32,35	0.86	1 (4%)
1	OMU	2A	2552	1,55	19,22,23	1.40	3 (15%)	25,31,34	1.80	5 (20%)
32	MA6	1a	1518	32	19,26,27	1.06	2 (10%)	18,38,41	2.04	4 (22%)
1	5MU	1A	1915	1,55	19,22,23	1.45	5 (26%)	27,32,35	2.46	8 (29%)
1	PSU	1A	1917	1	18,21,22	1.43	2 (11%)	21,30,33	2.08	3 (14%)
32	5MC	1a	1407	32	19,22,23	1.73	3 (15%)	26,32,35	1.05	3 (11%)
32	M2G	2a	966	55,32	20,27,28	1.39	2 (10%)	19,40,43	0.96	1 (5%)
32	MA6	2a	1519	32	19,26,27	1.01	2 (10%)	18,38,41	1.86	3 (16%)
32	UR3	2a	1498	55,32	19,22,23	0.95	1 (5%)	26,32,35	1.84	3 (11%)
32	2MG	1a	1207	55,32	18,26,27	1.07	1 (5%)	16,38,41	1.99	6 (37%)
1	5MC	2A	1942	1	19,22,23	1.56	3 (15%)	26,32,35	1.19	2 (7%)
32	5MC	2a	1407	32	19,22,23	1.52	3 (15%)	26,32,35	1.27	3 (11%)
1	OMG	2A	2251	1,55	19,26,27	0.88	0	21,38,41	1.33	3 (14%)
32	MA6	1a	1519	32	19,26,27	1.11	1 (5%)	18,38,41	1.77	3 (16%)
1	2MA	1A	2503	1,55	17,25,26	1.10	1 (5%)	16,37,40	1.47	3 (18%)
32	5MC	1a	1404	32	19,22,23	1.68	3 (15%)	26,32,35	1.19	3 (11%)
32	PSU	1a	516	55,32	18,21,22	1.33	3 (16%)	21,30,33	1.75	4 (19%)
32	5MC	2a	967	32	19,22,23	1.85	3 (15%)	26,32,35	1.26	1 (3%)

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	PSU	2A	1917	1,55	-	1/7/25/26	0/2/2/2
1	2MA	2A	2503	1,55	-	1/3/25/26	0/3/3/3
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
1	5MC	2A	1962	1,55	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	55,32	-	0/7/29/30	0/3/3/3
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	1,55	-	0/9/27/28	0/2/2/2
1	5MC	1A	1962	1,55	-	2/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	0/9/29/30	0/2/2/2
1	OMU	1A	2552	1,55	-	0/9/27/28	0/2/2/2
43	0TD	2l	92	43	-	2/7/12/14	-
1	5MU	2A	1939	1,55	-	2/7/25/26	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	32	-	3/3/25/26	0/3/3/3
1	5MU	1A	1939	1,55	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
1	OMG	1A	2251	1,55	-	1/5/27/28	0/3/3/3
32	PSU	2a	516	55,32	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
1	5MC	1A	1942	1	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	1,55	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
32	G7M	2a	527	32	-	1/3/25/26	0/3/3/3
32	5MC	2a	1404	32	-	2/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
1	OMU	2A	2552	1,55	-	0/9/27/28	0/2/2/2
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
1	5MU	1A	1915	1,55	-	2/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	55,32	-	0/7/29/30	0/3/3/3
32	MA6	2a	1519	32	-	3/7/29/30	0/3/3/3
32	UR3	2a	1498	55,32	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	55,32	-	0/5/27/28	0/3/3/3
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	1,55	-	0/5/27/28	0/3/3/3
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3
1	2MA	1A	2503	1,55	-	1/3/25/26	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	55,32	-	0/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2

All (110) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.99	1.69	1.82
43	1l	92	0TD	CB-SB	-10.63	1.71	1.82
32	2a	1400	5MC	C5-C4	7.55	1.49	1.44
32	2a	967	5MC	C5-C4	6.94	1.49	1.44
32	1a	1407	5MC	C5-C4	6.41	1.49	1.44
32	1a	1404	5MC	C5-C4	6.13	1.48	1.44
1	2A	1962	5MC	C5-C4	5.80	1.48	1.44
1	1A	1942	5MC	C5-C4	5.60	1.48	1.44
32	2a	1404	5MC	C5-C4	5.52	1.48	1.44
1	2A	1942	5MC	C5-C4	5.31	1.48	1.44
32	2a	1407	5MC	C5-C4	5.17	1.48	1.44
32	1a	967	5MC	C5-C4	5.06	1.47	1.44
32	1a	1400	5MC	C5-C4	4.97	1.47	1.44
1	1A	1962	5MC	C5-C4	4.67	1.47	1.44
32	1a	966	M2G	C2-N3	3.90	1.36	1.30
1	1A	1939	5MU	C4-N3	-3.88	1.31	1.38
1	2A	1917	PSU	C6-C5	3.85	1.39	1.35
1	1A	1911	PSU	C6-C5	3.75	1.39	1.35
32	2a	966	M2G	C2-N3	3.71	1.35	1.30
32	1a	527	G7M	C5-C4	3.68	1.46	1.39
32	2a	966	M2G	C2-N2	3.59	1.41	1.35
32	1a	516	PSU	C6-C5	3.58	1.39	1.35
1	2A	1915	5MU	C2-N1	3.55	1.44	1.38
32	2a	527	G7M	C5-C4	3.54	1.46	1.39
1	2A	1939	5MU	C4-N3	-3.49	1.32	1.38
1	1A	1917	PSU	C6-C5	3.46	1.39	1.35
1	1A	2605	PSU	C6-C5	3.38	1.39	1.35
1	2A	2552	OMU	C4-N3	-3.35	1.32	1.38
1	1A	1915	5MU	C2-N1	3.34	1.43	1.38
1	2A	2605	PSU	C6-C5	3.28	1.38	1.35
1	2A	1911	PSU	C6-C5	3.27	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	1939	5MU	C4-C5	3.27	1.50	1.44
1	2A	1915	5MU	C6-C5	3.17	1.39	1.34
32	1a	1400	5MC	C6-N1	-3.16	1.32	1.38
43	2l	92	0TD	CB-CA	-3.13	1.53	1.54
32	2a	967	5MC	C6-C5	3.11	1.39	1.34
1	1A	1939	5MU	C6-N1	-3.10	1.32	1.38
1	1A	1939	5MU	C6-C5	3.08	1.39	1.34
1	1A	1939	5MU	C2-N3	-3.07	1.32	1.38
1	2A	1915	5MU	C4-C5	3.06	1.49	1.44
1	2A	2552	OMU	C2-N3	-3.03	1.32	1.38
1	2A	1939	5MU	C6-C5	2.98	1.39	1.34
1	2A	1942	5MC	C6-C5	2.92	1.39	1.34
1	1A	2605	PSU	C4-N3	-2.91	1.33	1.38
32	2a	516	PSU	C6-C5	2.90	1.38	1.35
1	1A	1962	5MC	C6-N1	-2.81	1.33	1.38
1	1A	1942	5MC	C6-N1	-2.80	1.33	1.38
1	2A	1911	PSU	C4-N3	-2.79	1.33	1.38
32	2a	1400	5MC	C6-C5	2.78	1.39	1.34
1	1A	2552	OMU	C4-N3	-2.77	1.33	1.38
1	2A	1939	5MU	C2-N3	-2.74	1.33	1.38
32	2a	1407	5MC	C6-C5	2.72	1.39	1.34
32	1a	966	M2G	C2-N2	2.70	1.40	1.35
32	1a	1207	2MG	C6-N1	-2.69	1.33	1.37
1	1A	2251	OMG	C6-N1	-2.69	1.33	1.37
32	1a	1400	5MC	C6-C5	2.68	1.39	1.34
1	1A	1917	PSU	C4-N3	-2.68	1.33	1.38
1	2A	1962	5MC	C6-C5	2.67	1.39	1.34
1	1A	1942	5MC	C6-C5	2.66	1.38	1.34
1	1A	1915	5MU	C4-N3	-2.65	1.33	1.38
32	1a	1519	MA6	C6-C5	-2.64	1.40	1.44
32	1a	967	5MC	C6-C5	2.63	1.38	1.34
1	2A	2552	OMU	C5-C4	-2.59	1.38	1.43
32	1a	966	M2G	C6-N1	-2.58	1.33	1.37
1	2A	1917	PSU	C4-N3	-2.56	1.34	1.38
1	1A	1911	PSU	C4-N3	-2.56	1.34	1.38
32	1a	1407	5MC	C6-C5	2.55	1.38	1.34
32	2a	1404	5MC	C6-N1	-2.53	1.33	1.38
1	1A	1915	5MU	C6-C5	2.50	1.38	1.34
32	1a	1518	MA6	C6-C5	-2.47	1.41	1.44
1	1A	2503	2MA	C6-N1	-2.46	1.32	1.37
32	2a	1404	5MC	C6-C5	2.44	1.38	1.34
32	2a	516	PSU	C4-N3	-2.43	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2A	1911	PSU	C2-N3	-2.43	1.33	1.37
32	2a	1518	MA6	C6-C5	-2.43	1.41	1.44
32	1a	1404	5MC	C6-C5	2.40	1.38	1.34
1	1A	2552	OMU	C2-N3	-2.34	1.33	1.38
1	2A	2503	2MA	C2-N3	2.33	1.36	1.31
32	1a	516	PSU	C4-N3	-2.32	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.29	1.34	1.38
32	1a	527	G7M	C6-N1	-2.28	1.34	1.37
32	2a	1400	5MC	C6-N1	-2.27	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.27	1.34	1.38
43	2l	92	0TD	CSB-SB	-2.26	1.75	1.79
1	1A	1962	5MC	C6-C5	2.25	1.38	1.34
32	2a	1207	2MG	C6-N1	-2.25	1.34	1.37
1	2A	2503	2MA	C6-N1	-2.24	1.33	1.37
1	1A	2605	PSU	O4'-C1'	-2.23	1.40	1.43
32	1a	527	G7M	C8-N9	2.20	1.37	1.33
32	2a	1519	MA6	C6-N1	2.18	1.35	1.32
1	2A	1917	PSU	C2-N3	-2.18	1.33	1.37
32	2a	527	G7M	C6-N1	-2.17	1.34	1.37
1	2A	1939	5MU	C6-N1	-2.13	1.34	1.38
1	1A	2552	OMU	C5-C4	-2.11	1.39	1.43
32	2a	1498	UR3	C6-C5	2.10	1.40	1.35
32	2a	1519	MA6	C6-C5	-2.10	1.41	1.44
43	1l	92	0TD	CSB-SB	-2.08	1.75	1.79
1	1A	1915	5MU	C2-N3	-2.07	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.07	1.34	1.38
32	2a	1518	MA6	C6-N1	2.06	1.35	1.32
32	1a	1407	5MC	C6-N1	-2.06	1.34	1.38
32	2a	516	PSU	O4'-C1'	-2.05	1.41	1.43
32	2a	967	5MC	C6-N1	-2.04	1.34	1.38
1	1A	1920	OMC	C5-C4	-2.04	1.38	1.42
1	1A	1915	5MU	C4-C5	2.03	1.48	1.44
32	1a	1498	UR3	C6-C5	2.02	1.39	1.35
32	2a	1407	5MC	C6-N1	-2.01	1.34	1.38
32	2a	1402	4OC	C6-C5	2.01	1.39	1.35
32	1a	1518	MA6	C6-N1	2.01	1.35	1.32
32	1a	516	PSU	C2-N3	-2.01	1.34	1.37

All (154) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	1l	92	0TD	CSB-SB-CB	-9.94	84.49	102.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1498	UR3	C4-N3-C2	-7.63	118.44	124.58
1	2A	2605	PSU	N1-C2-N3	7.24	122.81	115.17
1	2A	1917	PSU	N1-C2-N3	7.07	122.62	115.17
32	1a	1498	UR3	C4-N3-C2	-6.80	119.11	124.58
1	1A	1917	PSU	N1-C2-N3	6.38	121.90	115.17
1	1A	1911	PSU	N1-C2-N3	6.30	121.82	115.17
32	2a	516	PSU	N1-C2-N3	6.28	121.80	115.17
1	1A	2605	PSU	N1-C2-N3	5.95	121.45	115.17
1	2A	1939	5MU	N3-C2-N1	5.94	122.62	114.89
1	2A	1939	5MU	C4-N3-C2	-5.87	119.64	127.34
1	1A	1939	5MU	C5-C4-N3	5.85	120.41	115.32
1	2A	1911	PSU	N1-C2-N3	5.58	121.06	115.17
1	1A	1915	5MU	C4-N3-C2	-5.56	120.04	127.34
1	1A	1942	5MC	C5-C6-N1	-5.54	117.30	123.31
32	1a	1518	MA6	C2-N1-C6	5.52	122.25	116.84
1	1A	1915	5MU	C5-C4-N3	5.51	120.11	115.32
43	2l	92	0TD	CSB-SB-CB	-5.48	92.51	102.36
1	2A	2605	PSU	C4-N3-C2	-5.41	118.91	126.37
1	2A	1939	5MU	C5-C4-N3	5.25	119.89	115.32
1	1A	1915	5MU	N3-C2-N1	5.22	121.69	114.89
1	1A	1939	5MU	C4-N3-C2	-5.19	120.53	127.34
32	2a	1518	MA6	N3-C2-N1	-5.06	121.80	128.67
1	1A	2552	OMU	C4-N3-C2	-5.05	120.35	126.61
32	2a	1400	5MC	C5-C6-N1	-4.99	117.89	123.31
32	1a	1518	MA6	N3-C2-N1	-4.97	121.93	128.67
1	2A	1915	5MU	C4-N3-C2	-4.91	120.90	127.34
1	1A	1939	5MU	C5-C6-N1	-4.84	118.05	123.31
32	2a	1518	MA6	C2-N1-C6	4.81	121.56	116.84
1	2A	1915	5MU	N3-C2-N1	4.78	121.11	114.89
1	2A	1939	5MU	C5-C6-N1	-4.77	118.13	123.31
32	2a	516	PSU	C4-N3-C2	-4.76	119.81	126.37
32	2a	1519	MA6	N3-C2-N1	-4.74	122.24	128.67
32	1a	516	PSU	N1-C2-N3	4.71	120.14	115.17
1	1A	1915	5MU	O4-C4-C5	-4.70	119.54	124.92
32	1a	1519	MA6	C2-N1-C6	4.68	121.43	116.84
32	1a	1519	MA6	N3-C2-N1	-4.63	122.38	128.67
1	2A	1915	5MU	C5-C4-N3	4.63	119.35	115.32
1	1A	1917	PSU	O2-C2-N1	-4.62	118.03	122.79
1	2A	2605	PSU	O2-C2-N1	-4.51	118.14	122.79
32	2a	1404	5MC	C5-C6-N1	-4.50	118.42	123.31
32	2a	967	5MC	C5-C6-N1	-4.47	118.45	123.31
32	2a	1519	MA6	C2-N1-C6	4.46	121.21	116.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1939	5MU	N3-C2-N1	4.45	120.69	114.89
1	2A	2552	OMU	C4-N3-C2	-4.42	121.13	126.61
1	2A	1962	5MC	C5-C6-N1	-4.38	118.56	123.31
1	1A	1939	5MU	O4-C4-C5	-4.18	120.13	124.92
1	2A	2552	OMU	C5-C4-N3	4.11	120.56	114.80
1	2A	2503	2MA	C4-N3-C2	-4.07	120.18	123.30
1	2A	2552	OMU	N3-C2-N1	4.04	120.15	114.89
1	2A	1915	5MU	O4-C4-C5	-4.03	120.31	124.92
1	2A	1915	5MU	C1'-N1-C2	4.02	124.81	117.59
1	1A	1911	PSU	C4-N3-C2	-4.02	120.83	126.37
1	1A	2251	OMG	C8-N7-C5	3.92	109.22	102.55
32	1a	967	5MC	C5-C6-N1	-3.91	119.06	123.31
1	1A	2552	OMU	N3-C2-N1	3.91	119.98	114.89
1	1A	2552	OMU	C5-C4-N3	3.88	120.23	114.80
1	2A	1911	PSU	C4-N3-C2	-3.83	121.10	126.37
1	2A	1942	5MC	C5-C6-N1	-3.79	119.20	123.31
32	1a	1404	5MC	C5-C6-N1	-3.78	119.21	123.31
1	1A	1915	5MU	C1'-N1-C2	3.72	124.27	117.59
1	1A	1917	PSU	C4-N3-C2	-3.70	121.27	126.37
1	2A	1917	PSU	C4-N3-C2	-3.69	121.29	126.37
32	1a	516	PSU	C4-N3-C2	-3.66	121.33	126.37
32	1a	1207	2MG	N1-C2-N2	3.63	120.27	116.56
32	1a	1400	5MC	C5-C4-N3	-3.61	118.06	121.75
32	1a	1207	2MG	C8-N7-C5	3.59	108.67	102.55
1	1A	2605	PSU	C4-N3-C2	-3.54	121.50	126.37
1	2A	1915	5MU	C1'-N1-C6	-3.53	115.34	121.15
1	1A	2503	2MA	C4-N3-C2	-3.47	120.63	123.30
32	2a	1407	5MC	C5-C6-N1	-3.46	119.56	123.31
1	2A	2251	OMG	C8-N7-C5	3.43	108.39	102.55
1	2A	1917	PSU	O2-C2-N1	-3.42	119.26	122.79
1	1A	1962	5MC	C5-C6-N1	-3.41	119.61	123.31
32	2a	1402	4OC	C6-C5-C4	3.35	121.04	117.00
1	2A	1962	5MC	C5-C4-N4	-3.30	116.74	121.39
1	1A	1911	PSU	O2-C2-N1	-3.26	119.42	122.79
1	2A	1942	5MC	C5-C4-N3	-3.25	118.42	121.75
1	2A	2503	2MA	C5-C6-N1	3.22	120.12	114.12
1	1A	1915	5MU	C1'-N1-C6	-3.18	115.91	121.15
32	2a	1207	2MG	N1-C2-N2	3.15	119.78	116.56
32	1a	1518	MA6	C4-C5-N7	-3.13	106.03	109.34
32	1a	1498	UR3	C5-C4-N3	3.12	119.16	115.04
1	1A	1915	5MU	C5-C6-N1	-3.11	119.93	123.31
32	1a	1400	5MC	C5-C6-N1	-3.11	119.94	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1962	5MC	C1'-N1-C6	-3.09	116.06	121.15
1	1A	2503	2MA	C8-N7-C5	3.09	107.81	102.55
32	2a	1519	MA6	C4-C5-N7	-3.09	106.08	109.34
32	1a	1407	5MC	C5-C6-N1	-3.04	120.01	123.31
32	2a	516	PSU	O2-C2-N1	-3.02	119.67	122.79
32	2a	1498	UR3	C5-C4-N3	3.00	118.99	115.04
32	2a	1518	MA6	C4-C5-N7	-2.89	106.28	109.34
1	1A	2605	PSU	O2-C2-N1	-2.87	119.82	122.79
1	2A	1939	5MU	O2-C2-N1	-2.86	119.08	122.80
32	1a	1404	5MC	C5-C4-N3	-2.85	118.84	121.75
32	2a	1407	5MC	O2-C2-N3	-2.80	117.91	122.33
32	2a	1207	2MG	N2-C2-N3	-2.79	116.95	120.51
1	2A	2605	PSU	O4-C4-C5	-2.78	117.09	124.01
1	1A	2552	OMU	O4-C4-C5	-2.78	120.36	125.16
32	2a	966	M2G	C8-N7-C5	2.78	107.28	102.55
32	1a	1207	2MG	O3'-C3'-C2'	2.78	120.72	111.82
1	1A	1915	5MU	O2-C2-N3	-2.76	116.40	121.49
32	1a	1519	MA6	C4-C5-N7	-2.70	106.48	109.34
1	2A	1962	5MC	N4-C4-N3	2.69	123.38	118.51
32	1a	1207	2MG	N2-C2-N3	-2.68	117.10	120.51
32	2a	1207	2MG	C8-N7-C5	2.67	107.10	102.55
32	1a	1404	5MC	CM5-C5-C6	-2.62	119.31	122.85
1	2A	2552	OMU	O2-C2-N1	-2.61	119.40	122.80
1	2A	2552	OMU	CM2-O2'-C2'	-2.58	107.85	114.47
32	2a	516	PSU	C5-C6-N1	-2.54	118.62	122.14
32	2a	1498	UR3	C3U-N3-C2	2.52	121.72	117.33
32	1a	1407	5MC	C5-C4-N3	-2.51	119.19	121.75
43	2l	92	0TD	OD2-CG-CB	2.48	118.52	113.15
1	1A	2503	2MA	C5-C6-N1	2.48	118.73	114.12
32	2a	1407	5MC	C5-C4-N3	-2.46	119.23	121.75
1	2A	2503	2MA	C8-N7-C5	2.44	106.70	102.55
1	1A	2552	OMU	C5-C6-N1	-2.43	117.88	121.84
1	2A	2503	2MA	O4'-C1'-N9	-2.43	105.52	108.75
32	1a	1207	2MG	O3'-C3'-C4'	2.42	118.03	111.08
1	1A	1911	PSU	C5-C6-N1	-2.36	118.86	122.14
1	2A	1915	5MU	C5-C6-N1	-2.34	120.77	123.31
32	1a	516	PSU	C6-C5-C4	-2.34	116.59	118.17
32	2a	1400	5MC	CM5-C5-C6	-2.34	119.69	122.85
32	1a	966	M2G	C8-N7-C5	2.34	106.53	102.55
1	1A	1962	5MC	C5-C4-N3	-2.31	119.39	121.75
32	2a	1404	5MC	O2-C2-N3	-2.31	118.70	122.33
43	1l	92	0TD	OD2-CG-CB	2.30	118.13	113.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1404	5MC	N1-C2-N3	2.30	122.80	118.80
1	2A	2251	OMG	CM2-O2'-C2'	-2.30	108.58	114.47
1	2A	1915	5MU	C5M-C5-C4	2.26	121.19	118.78
32	1a	1407	5MC	CM5-C5-C6	-2.24	119.83	122.85
1	2A	1939	5MU	O4-C4-C5	-2.21	122.39	124.92
1	2A	2251	OMG	O6-C6-C5	-2.21	119.95	124.32
32	1a	1207	2MG	C5-C6-N1	2.19	118.25	114.07
32	1a	516	PSU	O4'-C1'-C2'	2.19	108.18	105.15
1	2A	1911	PSU	C6-C5-C4	-2.19	116.70	118.17
32	2a	1400	5MC	C5-C4-N3	-2.17	119.53	121.75
1	1A	1911	PSU	O4'-C1'-C2'	2.14	108.11	105.15
1	1A	1939	5MU	O2-C2-N1	-2.14	120.01	122.80
32	1a	1498	UR3	C3U-N3-C2	2.13	121.05	117.33
32	2a	516	PSU	O4'-C1'-C2'	2.13	108.09	105.15
1	2A	1911	PSU	C5-C6-N1	-2.12	119.19	122.14
32	1a	966	M2G	CM2-N2-CM1	2.12	122.64	115.87
32	2a	516	PSU	O4-C4-C5	-2.11	118.77	124.01
1	2A	1917	PSU	O2-C2-N3	-2.11	118.12	121.86
1	2A	1915	5MU	O2-C2-N3	-2.09	117.62	121.49
1	2A	1911	PSU	O2-C2-N3	-2.09	118.14	121.86
32	1a	1518	MA6	C10-N6-C6	2.09	125.17	119.40
32	2a	1402	4OC	C5-C4-N3	-2.08	119.34	122.60
32	1a	1402	4OC	C6-C5-C4	2.08	119.51	117.00
1	2A	1911	PSU	O4'-C1'-C2'	2.05	107.99	105.15
1	1A	2605	PSU	O4-C4-C5	-2.05	118.92	124.01
32	1a	1400	5MC	O2-C2-N3	-2.04	119.12	122.33
1	1A	1942	5MC	N1-C2-N3	2.03	122.33	118.80

There are no chirality outliers.

All (31) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	1915	5MU	O4'-C1'-N1-C2
1	1A	1915	5MU	O4'-C1'-N1-C6
32	1a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	O-C-CA-CB
1	2A	1915	5MU	O4'-C1'-N1-C2
1	2A	1915	5MU	O4'-C1'-N1-C6
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
32	1a	527	G7M	O4'-C4'-C5'-O5'
32	2a	1404	5MC	C3'-C4'-C5'-O5'
1	2A	1917	PSU	O4'-C4'-C5'-O5'
43	1l	92	0TD	SB-CB-CG-OD1
43	2l	92	0TD	SB-CB-CG-OD1
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
1	2A	1939	5MU	O4'-C4'-C5'-O5'
32	1a	527	G7M	C4'-C5'-O5'-P
32	2a	1519	MA6	C4'-C5'-O5'-P
32	1a	1402	4OC	C3'-C4'-C5'-O5'
1	2A	2503	2MA	C4'-C5'-O5'-P
1	1A	1962	5MC	C2'-C1'-N1-C6
43	1l	92	0TD	CG-CB-SB-CSB
43	2l	92	0TD	CG-CB-SB-CSB
1	1A	2251	OMG	C4'-C5'-O5'-P
32	1a	1519	MA6	C4'-C5'-O5'-P
32	2a	1404	5MC	O4'-C4'-C5'-O5'
1	2A	1939	5MU	C3'-C4'-C5'-O5'
1	1A	1962	5MC	O4'-C1'-N1-C6

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 2538 ligands modelled in this entry, 2532 are monoatomic - leaving 6 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	$\#\|Z\|>2$
59	SF4	2d	501	35	0,12,12	-	-	-		
57	MPD	1T	206	-	7,7,7	0.35	0	9,10,10	0.57	0
57	MPD	2A	3746	-	7,7,7	0.43	0	9,10,10	0.50	0
59	SF4	1d	306	35	0,12,12	-	-	-		
57	MPD	18	102	-	7,7,7	0.40	0	9,10,10	0.62	0
56	ARG	1B	232	55	10,11,11	0.94	1 (10%)	9,13,13	1.13	1 (11%)

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
59	SF4	2d	501	35	-	-	0/6/5/5
57	MPD	1T	206	-	-	3/5/5/5	-
57	MPD	2A	3746	-	-	4/5/5/5	-
59	SF4	1d	306	35	-	-	0/6/5/5
57	MPD	18	102	-	-	2/5/5/5	-
56	ARG	1B	232	55	-	3/11/11/11	-

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	1B	232	ARG	OXT-C	-2.75	1.21	1.30

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	1B	232	ARG	OXT-C-O	-3.08	117.09	124.08

There are no chirality outliers.

All (12) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
57	18	102	MPD	C2-C3-C4-O4
56	1B	232	ARG	NE-CD-CG-CB
56	1B	232	ARG	CA-CB-CG-CD
56	1B	232	ARG	OXT-C-CA-N
57	18	102	MPD	C2-C3-C4-C5
57	2A	3746	MPD	C2-C3-C4-C5

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Mol	Chain	Res	Type	Atoms
57	1T	206	MPD	O2-C2-C3-C4
57	2A	3746	MPD	O2-C2-C3-C4
57	1T	206	MPD	C2-C3-C4-O4
57	2A	3746	MPD	C2-C3-C4-O4
57	1T	206	MPD	CM-C2-C3-C4
57	2A	3746	MPD	C1-C2-C3-C4

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)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 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	2861/2915 (98%)	-0.47	199 (6%) 24 19	17, 32, 89, 101	0
1	2A	2856/2915 (97%)	-0.02	207 (7%) 23 18	26, 48, 89, 100	0
2	1B	120/121 (99%)	-0.16	2 (1%) 69 64	29, 48, 62, 79	0
2	2B	120/121 (99%)	0.50	2 (1%) 69 64	49, 68, 75, 83	0
3	1D	275/276 (99%)	-0.52	1 (0%) 89 86	17, 32, 45, 72	0
3	2D	275/276 (99%)	-0.20	3 (1%) 77 74	26, 41, 54, 75	0
4	1E	204/206 (99%)	-0.40	1 (0%) 87 84	17, 35, 58, 75	0
4	2E	204/206 (99%)	-0.05	1 (0%) 87 84	28, 48, 64, 73	0
5	1F	203/210 (96%)	-0.40	1 (0%) 87 84	16, 36, 63, 74	0
5	2F	203/210 (96%)	0.18	0 100 100	28, 57, 71, 81	0
6	1G	181/182 (99%)	0.42	8 (4%) 39 33	44, 60, 74, 83	0
6	2G	181/182 (99%)	1.22	31 (17%) 5 4	62, 74, 81, 85	0
7	1H	174/180 (96%)	-0.05	2 (1%) 77 74	32, 47, 61, 67	0
7	2H	173/180 (96%)	0.94	11 (6%) 27 21	61, 71, 80, 83	0
8	1I	147/148 (99%)	0.51	2 (1%) 73 68	38, 64, 73, 80	0
8	2I	146/148 (98%)	0.47	3 (2%) 63 58	47, 64, 75, 81	0
9	1N	140/140 (100%)	-0.41	0 100 100	24, 34, 56, 63	0
9	2N	140/140 (100%)	0.08	2 (1%) 73 68	37, 54, 67, 74	0
10	1O	122/122 (100%)	-0.47	0 100 100	26, 35, 52, 58	0
10	2O	122/122 (100%)	-0.14	0 100 100	37, 46, 60, 68	0
11	1P	149/150 (99%)	-0.32	1 (0%) 84 81	18, 40, 60, 76	0
11	2P	149/150 (99%)	0.23	3 (2%) 64 59	30, 59, 73, 82	0
12	1Q	141/141 (100%)	-0.37	0 100 100	24, 36, 48, 69	0
12	2Q	141/141 (100%)	0.23	2 (1%) 73 68	37, 54, 66, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	-0.52	0 100 100	23, 31, 42, 52	0
13	2R	118/118 (100%)	-0.09	0 100 100	33, 45, 54, 62	0
14	1S	110/112 (98%)	-0.07	0 100 100	36, 49, 60, 66	0
14	2S	110/112 (98%)	0.68	6 (5%) 32 26	55, 64, 70, 74	0
15	1T	131/146 (89%)	-0.22	4 (3%) 51 46	30, 39, 61, 75	0
15	2T	131/146 (89%)	0.16	3 (2%) 61 55	42, 50, 71, 77	0
16	1U	116/118 (98%)	-0.63	0 100 100	20, 28, 42, 61	0
16	2U	116/118 (98%)	0.07	0 100 100	32, 48, 64, 71	0
17	1V	101/101 (100%)	-0.57	0 100 100	20, 38, 52, 59	0
17	2V	101/101 (100%)	0.26	1 (0%) 79 75	34, 59, 67, 73	0
18	1W	112/113 (99%)	-0.52	1 (0%) 81 77	19, 27, 47, 80	0
18	2W	112/113 (99%)	-0.20	1 (0%) 81 77	33, 42, 57, 81	0
19	1X	95/96 (98%)	-0.30	1 (1%) 77 74	25, 34, 59, 69	0
19	2X	95/96 (98%)	0.23	2 (2%) 63 58	37, 51, 65, 73	0
20	1Y	107/110 (97%)	-0.02	1 (0%) 81 77	31, 44, 60, 72	0
20	2Y	107/110 (97%)	0.78	10 (9%) 16 13	48, 61, 72, 75	0
21	1Z	203/206 (98%)	0.36	8 (3%) 44 38	39, 54, 69, 82	0
21	2Z	201/206 (97%)	0.77	8 (3%) 43 37	56, 68, 77, 88	0
22	10	77/85 (90%)	-0.29	0 100 100	27, 35, 55, 57	0
22	20	77/85 (90%)	0.43	1 (1%) 74 70	44, 55, 65, 72	0
23	11	97/98 (98%)	-0.18	2 (2%) 63 58	23, 39, 62, 69	0
23	21	97/98 (98%)	0.13	4 (4%) 42 36	33, 49, 66, 72	0
24	12	70/72 (97%)	-0.15	1 (1%) 73 68	29, 43, 52, 79	0
24	22	70/72 (97%)	0.50	2 (2%) 54 48	52, 60, 69, 75	0
25	13	59/60 (98%)	-0.46	1 (1%) 69 64	26, 33, 56, 67	0
25	23	59/60 (98%)	0.12	2 (3%) 48 42	42, 52, 67, 72	0
26	14	69/71 (97%)	1.00	14 (20%) 3 3	53, 73, 85, 87	0
26	24	69/71 (97%)	1.83	24 (34%) 1 1	70, 80, 89, 91	0
27	15	59/60 (98%)	-0.49	0 100 100	17, 31, 53, 62	0
27	25	59/60 (98%)	-0.17	0 100 100	29, 43, 59, 68	0
28	16	53/54 (98%)	-0.51	0 100 100	30, 37, 51, 54	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.11	0 100 100	44, 52, 61, 65	0
29	17	48/49 (97%)	-0.44	4 (8%) 19 15	19, 23, 50, 61	0
29	27	48/49 (97%)	-0.15	3 (6%) 27 22	28, 34, 58, 66	0
30	18	64/65 (98%)	-0.58	0 100 100	25, 30, 38, 44	0
30	28	64/65 (98%)	0.01	0 100 100	37, 46, 52, 59	0
31	19	37/37 (100%)	-0.26	0 100 100	27, 36, 52, 56	0
31	29	37/37 (100%)	0.63	0 100 100	47, 56, 64, 70	0
32	1a	1488/1521 (97%)	0.52	107 (7%) 23 18	30, 64, 87, 100	0
32	2a	1492/1521 (98%)	0.60	111 (7%) 22 18	38, 67, 87, 101	0
33	1b	231/256 (90%)	1.06	29 (12%) 9 7	59, 72, 82, 91	0
33	2b	231/256 (90%)	1.21	39 (16%) 5 4	61, 74, 83, 86	0
34	1c	206/239 (86%)	0.81	12 (5%) 30 24	58, 70, 79, 83	0
34	2c	206/239 (86%)	1.21	22 (10%) 12 10	66, 76, 81, 85	0
35	1d	208/209 (99%)	0.85	13 (6%) 27 22	49, 65, 74, 80	0
35	2d	208/209 (99%)	0.75	9 (4%) 40 34	51, 63, 72, 77	0
36	1e	148/162 (91%)	0.37	0 100 100	37, 59, 70, 77	0
36	2e	148/162 (91%)	0.69	7 (4%) 37 32	49, 64, 74, 80	0
37	1f	100/101 (99%)	0.50	2 (2%) 64 59	49, 62, 71, 76	0
37	2f	100/101 (99%)	0.22	1 (1%) 79 75	49, 60, 69, 70	0
38	1g	155/156 (99%)	0.70	8 (5%) 34 28	59, 67, 75, 81	0
38	2g	155/156 (99%)	0.98	16 (10%) 13 11	64, 72, 78, 82	0
39	1h	137/138 (99%)	0.40	1 (0%) 84 81	50, 61, 67, 72	0
39	2h	137/138 (99%)	0.56	2 (1%) 71 67	54, 63, 69, 74	0
40	1i	127/128 (99%)	1.64	47 (37%) 1 1	58, 75, 80, 85	0
40	2i	126/128 (98%)	1.78	51 (40%) 1 1	64, 77, 81, 83	0
41	1j	97/105 (92%)	1.60	27 (27%) 2 1	62, 75, 83, 88	0
41	2j	96/105 (91%)	2.00	41 (42%) 1 1	69, 78, 84, 86	0
42	1k	114/129 (88%)	0.39	6 (5%) 33 28	37, 57, 69, 77	0
42	2k	114/129 (88%)	0.55	4 (3%) 47 41	47, 61, 73, 76	0
43	1l	121/132 (91%)	0.23	1 (0%) 82 79	42, 52, 63, 69	0
43	2l	121/132 (91%)	0.38	3 (2%) 58 53	46, 57, 66, 73	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	116/126 (92%)	0.87	9 (7%) 20 17	56, 68, 75, 81	0
44	2m	114/126 (90%)	1.15	12 (10%) 13 11	69, 75, 80, 83	0
45	1n	60/61 (98%)	1.06	6 (10%) 14 12	61, 69, 72, 74	0
45	2n	60/61 (98%)	1.72	19 (31%) 1 1	69, 75, 80, 82	0
46	1o	88/89 (98%)	0.42	3 (3%) 48 42	44, 61, 73, 76	0
46	2o	88/89 (98%)	0.46	4 (4%) 39 33	48, 61, 71, 76	0
47	1p	82/88 (93%)	1.11	10 (12%) 10 7	54, 65, 74, 80	0
47	2p	82/88 (93%)	0.77	6 (7%) 22 18	52, 62, 71, 75	0
48	1q	99/105 (94%)	0.56	2 (2%) 64 59	50, 61, 70, 77	0
48	2q	99/105 (94%)	0.39	1 (1%) 79 75	48, 61, 69, 73	0
49	1r	68/88 (77%)	0.43	3 (4%) 39 33	49, 60, 74, 77	0
49	2r	68/88 (77%)	0.35	1 (1%) 71 67	51, 59, 71, 74	0
50	1s	83/93 (89%)	1.16	16 (19%) 4 3	57, 71, 80, 84	0
50	2s	83/93 (89%)	1.51	22 (26%) 2 2	70, 77, 83, 87	0
51	1t	96/106 (90%)	0.89	10 (10%) 13 11	55, 65, 74, 77	0
51	2t	98/106 (92%)	0.74	8 (8%) 19 16	52, 61, 74, 75	0
52	1u	23/27 (85%)	1.38	4 (17%) 5 4	63, 67, 72, 74	0
52	2u	23/27 (85%)	2.10	13 (56%) 0 0	70, 75, 77, 83	0
53	1y	97/113 (85%)	0.35	5 (5%) 34 28	45, 57, 66, 75	0
53	2y	96/113 (84%)	1.08	12 (12%) 9 7	61, 68, 76, 80	0
54	1z	18/18 (100%)	0.85	2 (11%) 12 9	58, 65, 76, 77	0
54	2z	18/18 (100%)	1.23	5 (27%) 2 1	68, 74, 83, 83	0
All	All	20802/21504 (96%)	0.24	1318 (6%) 27 22	16, 56, 81, 101	0

All (1318) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	1A	1064	C	9.6
1	1A	1076	C	8.3
1	2A	2174	C	8.2
1	2A	2173	A	8.1
45	2n	2	ALA	8.1
1	2A	2124	G	7.8
1	2A	2125	G	7.5

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Mol	Chain	Res	Type	RSRZ
1	1A	2117	A	7.4
1	1A	1087	G	7.4
45	1n	2	ALA	7.3
1	1A	1074	G	7.3
1	2A	2147	G	7.3
1	1A	1075	C	7.1
1	1A	2173	A	6.8
1	2A	1067	A	6.8
1	2A	2172	U	6.6
1	2A	2793	G	6.6
1	1A	2176	A	6.6
24	12	70	GLN	6.6
1	1A	2123	G	6.4
1	2A	2176	A	6.4
1	1A	2161	C	6.4
1	2A	2896	C	6.3
32	1a	1001	A	6.3
1	1A	1086	A	6.2
1	2A	2802	G	6.2
1	1A	2172	U	6.2
1	1A	2174	C	6.2
3	1D	276	LYS	6.2
1	2A	2175	C	6.2
1	1A	2805	G	6.1
32	2a	1030(B)	C	6.1
1	2A	2118	U	6.1
1	2A	2803	C	6.1
1	1A	1091	G	6.1
1	1A	1077	A	6.0
1	1A	2125	G	6.0
1	1A	1063	G	6.0
1	2A	1085	A	5.9
1	2A	2162	G	5.9
1	2A	2148	G	5.8
1	1A	2793	G	5.8
1	2A	1095	A	5.8
1	2A	2116	G	5.8
32	1a	1493	A	5.8
1	1A	1089	G	5.8
1	1A	1081	U	5.8
1	1A	1092	C	5.7
32	2a	1030(A)	G	5.7

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Mol	Chain	Res	Type	RSRZ
1	1A	1066	U	5.7
1	1A	2804	C	5.6
1	2A	2120	G	5.6
1	2A	2804	C	5.6
53	1y	98	ALA	5.6
1	1A	1057	A	5.6
1	1A	1072	C	5.5
1	1A	1067	A	5.5
1	1A	1104	C	5.5
1	2A	1046	A	5.5
53	2y	98	ALA	5.5
1	1A	2116	G	5.5
51	2t	6	PRO	5.5
40	2i	11	LYS	5.4
1	1A	1078	U	5.4
1	1A	2147	G	5.4
32	1a	1003	G	5.4
1	2A	2602	A	5.4
1	2A	1076	C	5.4
1	2A	2138	C	5.4
1	2A	2126	A	5.4
1	2A	1064	C	5.3
1	2A	1536	C	5.3
1	2A	1091	G	5.3
1	2A	2160	G	5.3
1	2A	2110	G	5.3
1	2A	2146	C	5.2
1	2A	2161	C	5.2
1	2A	1070	A	5.2
1	1A	1093	G	5.2
1	1A	1079	C	5.2
1	1A	1102	C	5.2
1	1A	2803	C	5.2
1	1A	2108	C	5.2
1	1A	1083	U	5.2
32	1a	1001(A)	G	5.1
1	2A	2119	A	5.1
1	1A	2129	C	5.1
1	2A	2111	C	5.1
32	2a	1036	G	5.1
1	2A	6	A	5.1
1	2A	2107	C	5.0

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Mol	Chain	Res	Type	RSRZ
1	2A	2894	G	5.0
15	2T	131	ALA	5.0
1	2A	2897	U	5.0
1	2A	2171	A	5.0
1	2A	2145	C	5.0
1	2A	2179	C	5.0
32	1a	1029	C	5.0
32	1a	1030(B)	C	5.0
1	1A	1103	A	4.9
1	2A	1082	U	4.9
1	1A	2111	C	4.9
32	1a	1002	G	4.9
26	24	45	GLY	4.9
26	24	49	PHE	4.9
1	2A	1066	U	4.9
26	24	56	VAL	4.8
32	1a	1028	C	4.8
1	1A	2119	A	4.8
1	1A	2112	G	4.8
32	1a	1036	G	4.8
1	1A	1065	U	4.8
1	1A	1084	A	4.8
1	1A	2160	G	4.8
1	1A	2109	U	4.8
1	2A	2108	C	4.8
1	2A	2136	C	4.8
1	2A	2165	G	4.8
44	1m	2	ALA	4.7
1	1A	2124	G	4.7
1	2A	2109	U	4.7
1	2A	2121	G	4.7
1	2A	2123	G	4.7
1	2A	2130	U	4.7
32	1a	1030(A)	G	4.7
1	1A	1062	G	4.7
1	1A	1085	A	4.7
40	1i	128	ARG	4.7
1	1A	1082	U	4.7
15	1T	131	ALA	4.7
1	2A	2139	C	4.6
32	1a	1027	C	4.6
41	2j	36	GLY	4.6

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Mol	Chain	Res	Type	RSRZ
1	1A	2162	G	4.6
1	2A	2154	G	4.6
1	1A	1080	C	4.6
1	2A	1071	G	4.6
32	2a	1286	A	4.6
1	2A	1072	C	4.6
1	2A	1092	C	4.6
44	2m	102	ARG	4.6
1	1A	1088	A	4.5
23	11	2	SER	4.5
23	21	2	SER	4.5
1	1A	2144	U	4.5
1	2A	652(B)	A	4.5
5	1F	208	GLY	4.5
1	1A	1071	G	4.5
1	1A	1176	G	4.5
1	1A	2110	G	4.5
32	2a	1001(A)	G	4.5
1	1A	1090	U	4.5
32	1a	1000	U	4.5
32	1a	1286	A	4.5
1	1A	2175	C	4.5
26	24	65	ASP	4.5
1	1A	1073	A	4.4
1	2A	2137	C	4.4
32	2a	1027	C	4.4
20	1Y	92	ASN	4.4
1	1A	2135	A	4.4
1	1A	2128	C	4.4
1	2A	2128	C	4.4
1	2A	2122	U	4.4
1	1A	2148	G	4.4
1	2A	614(B)	G	4.4
32	2a	1026	G	4.4
32	2a	1040	U	4.4
40	2i	126	SER	4.4
51	1t	103	GLY	4.3
50	1s	13	ASP	4.3
1	2A	2170	A	4.3
1	1A	1058	G	4.3
1	1A	2794	C	4.3
1	2A	2127	G	4.3

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Mol	Chain	Res	Type	RSRZ
32	1a	1026	G	4.3
32	2a	1256	A	4.3
1	2A	2893	G	4.3
32	2a	1030(C)	G	4.3
26	14	63	TYR	4.3
32	1a	65	U	4.3
1	2A	1084	A	4.3
7	1H	2	SER	4.2
1	1A	2136	C	4.2
1	2A	1083	U	4.2
32	2a	1028	C	4.2
1	1A	2115	G	4.2
32	1a	630	G	4.2
1	1A	2126	A	4.2
6	2G	146	TYR	4.2
15	1T	130	ALA	4.2
33	2b	237	ALA	4.2
1	1A	888	C	4.2
1	1A	2107	C	4.2
1	1A	2145	C	4.2
1	1A	2118	U	4.2
1	2A	2133	G	4.2
32	2a	1002	G	4.2
1	1A	2113	U	4.1
36	2e	21	ALA	4.1
1	2A	1089	G	4.1
1	1A	2602	A	4.1
1	1A	2166	G	4.1
1	2A	2792	G	4.1
32	1a	1031	G	4.1
32	2a	1032	G	4.1
1	1A	1105	U	4.0
1	1A	2150	U	4.0
1	2A	2140	C	4.0
1	1A	2127	G	4.0
1	2A	2115	G	4.0
52	2u	9	ARG	4.0
32	1a	1257	U	4.0
32	1a	1030	C	4.0
32	1a	1041	A	4.0
1	1A	1101	U	4.0
41	2j	75	ILE	4.0

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Mol	Chain	Res	Type	RSRZ
6	2G	45	GLU	4.0
41	1j	32	ALA	4.0
1	2A	2794	C	4.0
1	1A	1099	G	4.0
1	1A	2168	G	4.0
1	2A	2106	G	4.0
1	2A	2112	G	4.0
33	1b	127	ILE	4.0
33	1b	229	VAL	3.9
1	2A	2129	C	3.9
1	1A	2169	A	3.9
33	1b	237	ALA	3.9
1	1A	1068	G	3.9
1	1A	2167	U	3.9
1	2A	2153	G	3.9
1	2A	2805	G	3.9
32	2a	1003	G	3.9
32	2a	1031	G	3.9
32	2a	1257	U	3.9
26	14	56	VAL	3.9
1	1A	1053	C	3.9
6	2G	35	GLU	3.9
1	1A	1069	A	3.9
1	1A	2134	A	3.9
1	1A	2171	A	3.9
1	1A	2894	G	3.9
1	2A	2168	G	3.9
1	1A	2138	C	3.9
1	2A	2169	A	3.9
52	2u	2	GLY	3.9
44	1m	102	ARG	3.9
41	2j	72	VAL	3.8
42	1k	25	TYR	3.8
1	2A	653	A	3.8
1	1A	2141	G	3.8
32	1a	1024	G	3.8
40	2i	102	LEU	3.8
33	1b	232	PRO	3.8
41	2j	79	ARG	3.8
40	2i	5	TYR	3.8
32	2a	1039	C	3.8
1	1A	1046	A	3.8

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Mol	Chain	Res	Type	RSRZ
1	2A	2135	A	3.8
1	2A	2180	U	3.8
32	1a	1040	U	3.8
6	1G	76	SER	3.8
1	2A	2182	G	3.8
32	2a	1037	C	3.8
1	1A	12	U	3.8
1	1A	2170	A	3.8
32	1a	1030(C)	G	3.7
1	1A	1070	A	3.7
1	2A	2892	A	3.7
41	2j	32	ALA	3.7
40	2i	10	ARG	3.7
41	2j	46	ARG	3.7
1	2A	11	G	3.7
1	2A	2181	G	3.7
32	1a	1032	G	3.7
1	1A	271(K)	U	3.7
1	1A	2146	C	3.7
1	2A	1057	A	3.7
1	1A	2159	G	3.7
32	2a	1034	G	3.7
40	2i	2	GLU	3.7
40	1i	46	ALA	3.7
32	1a	1007	C	3.7
33	1b	7	VAL	3.7
41	2j	34	VAL	3.7
40	2i	9	ARG	3.7
35	1d	179	GLU	3.6
33	2b	236	TYR	3.6
1	1A	2149	G	3.6
1	1A	2792	G	3.6
1	1A	2893	G	3.6
1	2A	2152	G	3.6
34	2c	207	VAL	3.6
1	1A	2139	C	3.6
1	2A	2177	C	3.6
32	2a	1149	C	3.6
6	2G	43	LEU	3.6
26	24	50	VAL	3.6
33	2b	136	VAL	3.6
15	1T	37	GLY	3.6

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Mol	Chain	Res	Type	RSRZ
1	2A	2149	G	3.6
3	2D	276	LYS	3.6
1	1A	2143	C	3.6
1	2A	1509	C	3.6
32	2a	1038	C	3.6
34	1c	2	GLY	3.6
1	2A	2895	U	3.6
1	1A	2155	G	3.6
40	1i	106	ALA	3.6
1	1A	2892	A	3.6
1	2A	2105	C	3.6
20	2Y	1	MET	3.6
32	1a	1492	A	3.6
32	2a	1030(D)	A	3.6
52	2u	24	ARG	3.6
26	24	67	TYR	3.6
1	1A	2132	U	3.5
1	1A	2153	G	3.5
1	2A	1075	C	3.5
1	2A	2155	G	3.5
1	2A	2163	C	3.5
1	2A	2801(A)	A	3.5
33	1b	236	TYR	3.5
32	1a	1034	G	3.5
32	2a	1029	C	3.5
32	2a	1033	G	3.5
38	2g	156	TRP	3.5
41	2j	76	ASN	3.5
18	1W	112	GLY	3.5
1	2A	1096	A	3.5
32	2a	1447	A	3.5
32	2a	1492	A	3.5
1	1A	1100	C	3.5
40	1i	102	LEU	3.5
1	1A	1056	G	3.5
32	1a	79	G	3.5
42	1k	14	VAL	3.5
1	2A	2167	U	3.5
47	1p	82	GLN	3.5
33	2b	121	LEU	3.5
1	1A	887	A	3.5
1	2A	229	A	3.5

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Mol	Chain	Res	Type	RSRZ
6	2G	2	PRO	3.5
32	2a	1493	A	3.5
1	1A	2133	G	3.5
1	2A	2807	G	3.5
26	24	66	SER	3.5
32	1a	1023	G	3.5
8	1I	147	GLN	3.5
1	1A	2130	U	3.5
1	2A	2113	U	3.5
34	1c	87	LEU	3.5
1	1A	2158	A	3.4
1	2A	2117	A	3.4
6	2G	52	ILE	3.4
1	1A	2163	C	3.4
1	1A	10	G	3.4
32	1a	1033	G	3.4
40	2i	125	TYR	3.4
40	1i	21	PRO	3.4
41	2j	37	PRO	3.4
1	1A	6	A	3.4
1	1A	2114	A	3.4
26	14	52	THR	3.4
54	1z	17	ARG	3.4
41	2j	55	LYS	3.4
1	2A	652(U)	G	3.4
1	2A	2159	G	3.4
1	2A	2186	G	3.4
1	2A	1097	U	3.4
2	1B	1	U	3.4
26	24	44	THR	3.4
51	2t	7	LYS	3.4
1	2A	652(T)	C	3.4
1	2A	2103	C	3.4
1	2A	2143	C	3.4
1	2A	2178	C	3.4
21	1Z	51	ALA	3.4
32	1a	1037	C	3.4
40	2i	65	VAL	3.4
40	1i	85	LEU	3.4
29	27	48	LYS	3.4
45	2n	17	LYS	3.4
1	2A	887	A	3.3

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Mol	Chain	Res	Type	RSRZ
32	1a	1447	A	3.3
40	1i	91	ASP	3.3
1	2A	34	C	3.3
1	1A	2151	G	3.3
33	2b	97	TRP	3.3
50	1s	12	ASP	3.3
53	1y	2	THR	3.3
1	1A	11	G	3.3
51	1t	10	LEU	3.3
51	2t	103	GLY	3.3
32	2a	1001	A	3.3
2	2B	1	U	3.3
15	2T	130	ALA	3.3
32	2a	1006	C	3.3
40	2i	127	LYS	3.3
53	2y	8	LYS	3.3
1	1A	2152	G	3.3
1	1A	2165	G	3.3
26	24	63	TYR	3.2
53	2y	97	ALA	3.2
1	1A	1097	U	3.2
1	2A	2144	U	3.2
32	1a	1025	U	3.2
36	2e	22	GLY	3.2
40	2i	7	THR	3.2
50	2s	2	PRO	3.2
1	1A	2120	G	3.2
1	2A	1087	G	3.2
1	2A	2100	G	3.2
38	1g	156	TRP	3.2
34	1c	47	LEU	3.2
32	2a	1025	U	3.2
1	2A	1080	C	3.2
32	2a	1030	C	3.2
21	2Z	58	VAL	3.2
1	2A	2101	G	3.2
26	24	55	ARG	3.2
1	1A	2790	A	3.2
44	2m	116	THR	3.2
1	1A	2177	C	3.2
40	1i	14	VAL	3.2
36	2e	20	GLN	3.2

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Mol	Chain	Res	Type	RSRZ
51	1t	8	ARG	3.2
1	2A	10	G	3.1
1	2A	2206	G	3.1
40	2i	103	THR	3.1
32	2a	1005	A	3.1
33	2b	21	ARG	3.1
42	2k	13	GLN	3.1
1	1A	34	C	3.1
1	1A	2896	C	3.1
34	1c	62	ASP	3.1
42	2k	117	ASN	3.1
6	1G	50	ALA	3.1
32	2a	630	G	3.1
32	2a	1021	G	3.1
33	2b	7	VAL	3.1
34	1c	207	VAL	3.1
50	2s	84	GLY	3.1
41	2j	86	MET	3.1
33	2b	133	LYS	3.1
1	2A	885	C	3.1
1	2A	2789	C	3.1
32	2a	999	C	3.1
41	1j	27	ALA	3.1
49	1r	20	ALA	3.1
1	2A	9	U	3.1
1	2A	2808	U	3.1
1	1A	548	A	3.1
1	1A	1095	A	3.1
1	2A	2158	A	3.1
32	1a	78	G	3.1
44	1m	116	THR	3.1
33	1b	10	LEU	3.1
1	1A	889	C	3.1
1	1A	2137	C	3.1
1	2A	1109	C	3.1
1	2A	2164	C	3.1
33	2b	99	GLY	3.1
40	1i	125	TYR	3.1
52	2u	23	PRO	3.1
1	1A	1096	A	3.0
1	1A	2629	A	3.0
1	2A	1073	A	3.0

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Mol	Chain	Res	Type	RSRZ
1	2A	2629	A	3.0
38	1g	153	HIS	3.0
32	1a	200	G	3.0
32	2a	1009	G	3.0
32	2a	1023	G	3.0
6	2G	50	ALA	3.0
32	1a	163	C	3.0
32	1a	1039	C	3.0
26	24	61	ARG	3.0
1	2A	1086	A	3.0
6	2G	151	ALA	3.0
7	2H	45	VAL	3.0
38	2g	83	ALA	3.0
40	2i	13	ALA	3.0
43	1l	18	VAL	3.0
1	1A	2131	G	3.0
1	2A	1063	G	3.0
29	17	48	LYS	3.0
6	2G	53	LEU	3.0
1	1A	1175	U	3.0
1	2A	1090	U	3.0
32	1a	202	U	3.0
32	1a	1035	A	3.0
1	1A	2156	G	3.0
1	1A	2802	G	3.0
6	1G	52	ILE	3.0
1	1A	2164	C	3.0
40	1i	17	VAL	3.0
41	2j	78	ASN	3.0
32	1a	1020	U	3.0
1	2A	2114	A	2.9
32	2a	1041	A	2.9
33	1b	97	TRP	2.9
33	2b	231	GLU	2.9
40	1i	56	LEU	2.9
40	2i	105	ASP	2.9
1	2A	1537	G	2.9
6	2G	149	VAL	2.9
32	2a	1010	G	2.9
40	2i	17	VAL	2.9
47	2p	82	GLN	2.9
26	24	19	GLY	2.9

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Mol	Chain	Res	Type	RSRZ
1	1A	1061	U	2.9
1	1A	2122	U	2.9
1	2A	2102	U	2.9
53	2y	3	MET	2.9
26	14	67	TYR	2.9
32	1a	1004	A	2.9
32	1a	1005	A	2.9
4	2E	204	ALA	2.9
40	1i	18	PHE	2.9
33	1b	125	PRO	2.9
41	1j	77	PRO	2.9
1	2A	652(C)	G	2.9
1	2A	1533	G	2.9
1	2A	2190	G	2.9
1	2A	2319	G	2.9
32	1a	1131	G	2.9
50	2s	71	LEU	2.9
40	1i	126	SER	2.9
41	2j	83	GLU	2.9
1	1A	2142	C	2.9
1	1A	9	U	2.9
6	2G	118	ARG	2.9
35	1d	3	ARG	2.9
40	2i	66	ARG	2.9
33	2b	70	PHE	2.9
33	2b	163	PHE	2.9
41	1j	31	GLY	2.9
45	2n	38	GLY	2.9
19	2X	68	ARG	2.9
1	2A	2104	G	2.9
1	2A	886	C	2.9
40	2i	64	THR	2.9
7	2H	21	PRO	2.9
1	1A	2801(A)	A	2.9
50	1s	15	LEU	2.9
33	1b	133	LYS	2.8
38	2g	115	ARG	2.8
41	1j	87	THR	2.8
42	1k	13	GLN	2.8
1	1A	275	G	2.8
1	1A	2157	G	2.8
1	2A	2166	G	2.8

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Mol	Chain	Res	Type	RSRZ
32	2a	1148	U	2.8
1	2A	652(V)	C	2.8
1	2A	888	C	2.8
1	2A	1079	C	2.8
1	2A	2142	C	2.8
32	2a	1018	C	2.8
40	2i	72	GLY	2.8
38	1g	84	ASN	2.8
50	1s	14	HIS	2.8
12	2Q	59	ARG	2.8
41	1j	34	VAL	2.8
33	2b	123	ALA	2.8
38	1g	154	TYR	2.8
38	2g	154	TYR	2.8
6	2G	147	ASP	2.8
26	14	51	ASP	2.8
1	1A	2102	U	2.8
1	2A	1081	U	2.8
32	1a	203	U	2.8
1	1A	2182	G	2.8
1	1A	2190	G	2.8
1	2A	545	G	2.8
1	2A	2151	G	2.8
20	2Y	91	GLU	2.8
1	1A	886	C	2.8
1	1A	1509	C	2.8
1	1A	2178	C	2.8
32	2a	1119	C	2.8
4	1E	204	ALA	2.8
40	2i	106	ALA	2.8
41	2j	87	THR	2.8
21	2Z	4	ARG	2.8
51	2t	86	ARG	2.8
1	1A	2206	G	2.8
32	1a	77	G	2.8
32	1a	201	C	2.8
32	1a	219	C	2.8
32	2a	1325	C	2.8
50	1s	9	VAL	2.8
33	1b	123	ALA	2.8
19	1X	95	LEU	2.8
39	2h	112	LEU	2.8

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Mol	Chain	Res	Type	RSRZ
50	2s	15	LEU	2.8
32	2a	1004	A	2.8
7	1H	6	ARG	2.8
26	24	51	ASP	2.8
38	2g	79	ARG	2.8
46	2o	68	ARG	2.8
1	2A	1060	U	2.7
6	2G	145	THR	2.7
7	2H	41	MET	2.7
1	1A	2103	C	2.7
32	1a	1019	C	2.7
34	2c	25	GLY	2.7
36	2e	133	TYR	2.7
1	1A	1042	G	2.7
1	1A	2154	G	2.7
1	1A	2207	G	2.7
1	2A	2157	G	2.7
26	24	13	ARG	2.7
29	17	47	ARG	2.7
32	2a	993	G	2.7
32	2a	1013	G	2.7
32	2a	1094	G	2.7
38	2g	4	ARG	2.7
35	2d	5	ILE	2.7
41	1j	4	ILE	2.7
42	1k	36	ASP	2.7
32	1a	162	A	2.7
1	1A	1094	U	2.7
26	14	64	GLY	2.7
40	1i	20	ARG	2.7
47	1p	75	ARG	2.7
52	2u	18	TYR	2.7
33	2b	127	ILE	2.7
40	2i	81	ILE	2.7
40	2i	12	GLU	2.7
1	1A	2179	C	2.7
1	2A	1058	G	2.7
1	1A	1098	A	2.7
1	1A	1460	A	2.7
7	2H	44	VAL	2.7
32	1a	1256	A	2.7
41	1j	72	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
24	22	70	GLN	2.7
41	2j	26	ALA	2.7
53	1y	97	ALA	2.7
26	14	59	PHE	2.7
50	1s	4	SER	2.7
1	2A	362	U	2.7
1	2A	1094	U	2.7
1	2A	2132	U	2.7
1	2A	2150	U	2.7
1	2A	2189	U	2.7
32	1a	841	U	2.7
33	1b	33	TYR	2.7
33	2b	222	ILE	2.7
40	1i	62	TYR	2.7
40	2i	62	TYR	2.7
6	2G	54	GLU	2.7
26	24	57	GLU	2.7
6	2G	28	VAL	2.7
32	2a	1019	C	2.7
6	1G	46	ALA	2.7
21	2Z	192	ALA	2.7
25	23	2	PRO	2.7
41	2j	33	GLN	2.7
1	1A	2121	G	2.7
1	2A	2131	G	2.7
32	2a	1281	U	2.6
17	2V	22	VAL	2.6
40	1i	86	VAL	2.6
33	2b	95	GLN	2.6
21	1Z	192	ALA	2.6
40	1i	61	ALA	2.6
50	2s	16	LEU	2.6
45	1n	16	PHE	2.6
1	1A	2140	C	2.6
32	1a	1043	C	2.6
40	1i	6	GLY	2.6
54	2z	18	GLY	2.6
1	2A	1088	A	2.6
1	1A	2181	G	2.6
1	2A	1056	G	2.6
23	21	83	GLU	2.6
32	1a	156	G	2.6

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Mol	Chain	Res	Type	RSRZ
32	1a	181	G	2.6
32	1a	183	G	2.6
32	1a	1022	G	2.6
34	1c	193	TYR	2.6
40	2i	91	ASP	2.6
1	1A	2897	U	2.6
32	1a	173	U	2.6
32	1a	204	U	2.6
32	2a	1219	U	2.6
41	1j	76	ASN	2.6
14	2S	46	VAL	2.6
40	2i	14	VAL	2.6
41	2j	40	LEU	2.6
41	2j	71	LEU	2.6
51	2t	98	PRO	2.6
40	1i	15	ALA	2.6
14	2S	17	ARG	2.6
26	24	17	GLY	2.6
52	2u	16	GLY	2.6
54	1z	18	GLY	2.6
1	2A	1104	C	2.6
32	1a	92	C	2.6
33	2b	22	LYS	2.6
35	1d	169	LYS	2.6
38	1g	85	TYR	2.6
40	1i	127	LYS	2.6
45	1n	15	LYS	2.6
41	2j	58	ASP	2.6
1	1A	229	A	2.6
32	1a	149	A	2.6
41	1j	78	ASN	2.6
1	2A	1171	G	2.6
47	1p	41	PRO	2.6
1	1A	1963	U	2.6
1	2A	1065	U	2.6
8	2I	146	ALA	2.6
32	2a	1020	U	2.6
32	2a	1446	U	2.6
40	2i	104	ARG	2.6
41	1j	5	ARG	2.6
41	1j	79	ARG	2.6
45	2n	10	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
53	2y	53	THR	2.6
40	2i	115	GLY	2.6
33	2b	124	SER	2.6
6	1G	48	GLU	2.6
33	2b	148	TYR	2.6
6	2G	34	LEU	2.6
33	1b	94	ASN	2.6
38	2g	84	ASN	2.6
1	2A	1049	C	2.6
32	1a	217	C	2.6
32	1a	1038	C	2.6
40	2i	21	PRO	2.6
52	1u	23	PRO	2.6
53	2y	45	PRO	2.6
11	2P	15	ARG	2.6
40	2i	59	PHE	2.6
52	1u	22	ARG	2.6
1	1A	1045	A	2.6
32	1a	1030(D)	A	2.6
32	2a	1130	A	2.6
33	2b	19	HIS	2.6
41	2j	98	ILE	2.6
1	1A	1047	G	2.6
1	1A	2191	G	2.6
1	2A	171	G	2.6
1	2A	1068	G	2.6
21	1Z	1	MET	2.5
41	1j	35	SER	2.5
41	1j	83	GLU	2.5
41	1j	8	LEU	2.5
33	2b	229	VAL	2.5
45	2n	33	VAL	2.5
40	1i	104	ARG	2.5
26	24	59	PHE	2.5
41	2j	63	PHE	2.5
50	2s	47	HIS	2.5
1	1A	1584	C	2.5
1	1A	2188	C	2.5
32	2a	470	C	2.5
1	2A	1045	A	2.5
32	2a	1092	A	2.5
32	2a	202	U	2.5

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Mol	Chain	Res	Type	RSRZ
32	2a	1000	U	2.5
1	1A	1055	G	2.5
1	1A	1106	G	2.5
1	2A	1074	G	2.5
32	2a	1042	G	2.5
32	2a	1202	G	2.5
32	2a	1255	G	2.5
26	14	32	TYR	2.5
21	2Z	191	VAL	2.5
38	2g	5	ARG	2.5
52	2u	5	ASP	2.5
14	2S	61	ASN	2.5
20	2Y	89	PHE	2.5
29	27	45	ALA	2.5
40	2i	15	ALA	2.5
41	1j	74	ILE	2.5
44	1m	4	ILE	2.5
47	1p	19	ILE	2.5
20	2Y	93	GLY	2.5
26	14	54	GLY	2.5
26	24	64	GLY	2.5
34	2c	26	LYS	2.5
53	2y	44	GLU	2.5
1	2A	645	C	2.5
32	2a	1260	C	2.5
1	2A	1913	A	2.5
32	1a	160	A	2.5
32	1a	1183	A	2.5
32	2a	1067	A	2.5
1	2A	614(A)	U	2.5
14	2S	32	LEU	2.5
32	2a	1235	U	2.5
41	2j	88	LEU	2.5
35	1d	195	ALA	2.5
49	2r	20	ALA	2.5
51	2t	9	ASN	2.5
1	1A	2100	G	2.5
1	2A	2156	G	2.5
41	1j	6	ILE	2.5
41	2j	38	ILE	2.5
34	2c	192	THR	2.5
50	2s	48	THR	2.5

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Mol	Chain	Res	Type	RSRZ
33	2b	134	GLU	2.5
7	2H	171	LEU	2.5
40	1i	19	LEU	2.5
41	1j	85	LEU	2.5
23	11	26	ARG	2.5
35	2d	115	ARG	2.5
38	2g	76	ARG	2.5
40	1i	66	ARG	2.5
40	2i	123	PRO	2.5
45	2n	3	ARG	2.5
50	1s	3	ARG	2.5
52	1u	9	ARG	2.5
33	2b	93	VAL	2.5
38	2g	80	VAL	2.5
1	1A	154(A)	C	2.5
26	14	49	PHE	2.5
32	2a	972	C	2.5
32	2a	1035	A	2.5
40	2i	18	PHE	2.5
7	2H	175	LYS	2.5
33	2b	132	LYS	2.5
49	1r	24	ALA	2.5
35	2d	158	ILE	2.5
1	2A	2141	G	2.4
1	2A	2318	G	2.4
32	1a	1011	G	2.4
14	2S	58	LEU	2.4
46	2o	60	VAL	2.4
20	2Y	55	TYR	2.4
40	2i	94	ALA	2.4
7	2H	136	ILE	2.4
34	1c	77	ILE	2.4
32	1a	182	U	2.4
1	2A	277	C	2.4
32	2a	1249	C	2.4
32	2a	1354	C	2.4
32	2a	1357	A	2.4
44	2m	100	GLY	2.4
40	1i	7	THR	2.4
41	2j	42	THR	2.4
44	1m	105	THR	2.4
41	1j	65	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
41	2j	41	PRO	2.4
41	2j	35	SER	2.4
50	2s	4	SER	2.4
20	2Y	34	LYS	2.4
32	1a	1021	G	2.4
32	2a	1024	G	2.4
38	2g	2	ALA	2.4
40	1i	94	ALA	2.4
45	2n	34	TYR	2.4
52	1u	18	TYR	2.4
21	1Z	132	ASN	2.4
8	1I	90	GLY	2.4
50	1s	68	GLY	2.4
32	1a	90	U	2.4
32	1a	1135	U	2.4
1	2A	1048	A	2.4
20	2Y	90	LEU	2.4
32	1a	171	A	2.4
1	1A	645	C	2.4
1	2A	2183	C	2.4
1	2A	2185	C	2.4
2	2B	88	C	2.4
32	1a	345	C	2.4
32	2a	980	C	2.4
40	1i	90	PRO	2.4
45	2n	18	VAL	2.4
51	1t	11	SER	2.4
40	1i	52	ALA	2.4
45	2n	30	ALA	2.4
40	2i	114	TYR	2.4
50	1s	84	GLY	2.4
32	1a	220	G	2.4
32	1a	1042	G	2.4
26	24	52	THR	2.4
41	2j	67	THR	2.4
6	2G	82	LEU	2.4
25	23	60	GLU	2.4
1	1A	1026	U	2.4
46	2o	88	ARG	2.4
40	2i	98	PRO	2.4
41	2j	91	PRO	2.4
20	2Y	57	GLN	2.4

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Mol	Chain	Res	Type	RSRZ
33	1b	15	VAL	2.4
50	2s	9	VAL	2.4
32	1a	999	C	2.4
32	1a	1140	C	2.4
32	1a	1249	C	2.4
6	1G	146	TYR	2.4
44	2m	24	GLY	2.4
50	2s	68	GLY	2.4
35	2d	156	GLU	2.3
44	2m	11	ARG	2.3
34	1c	135	LYS	2.3
36	2e	10	MET	2.3
45	2n	4	LYS	2.3
1	1A	1173	G	2.3
32	1a	1010	G	2.3
32	2a	1011	G	2.3
32	2a	1017	G	2.3
33	1b	131	PRO	2.3
50	1s	2	PRO	2.3
33	1b	140	HIS	2.3
32	2a	992	U	2.3
32	2a	1012	U	2.3
33	1b	17	PHE	2.3
36	2e	45	PHE	2.3
29	17	45	ALA	2.3
38	2g	27	ILE	2.3
32	1a	1285	A	2.3
35	1d	124	GLY	2.3
32	1a	1452	C	2.3
32	2a	1128	C	2.3
40	2i	99	LEU	2.3
45	2n	13	THR	2.3
33	1b	129	GLU	2.3
23	21	78	LYS	2.3
34	2c	135	LYS	2.3
46	1o	88	ARG	2.3
44	2m	113	PRO	2.3
6	2G	41	GLN	2.3
41	2j	54	PHE	2.3
34	2c	182	ILE	2.3
1	1A	362	U	2.3
1	2A	7	G	2.3

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Mol	Chain	Res	Type	RSRZ
1	2A	1062	G	2.3
1	2A	2207	G	2.3
1	2A	2751	G	2.3
26	14	66	SER	2.3
32	2a	1117	G	2.3
45	1n	20	ALA	2.3
32	2a	1125	U	2.3
7	2H	22	GLY	2.3
35	2d	167	GLY	2.3
40	1i	8	GLY	2.3
11	1P	99	LEU	2.3
33	1b	213	LEU	2.3
34	2c	48	TYR	2.3
34	2c	201	TYR	2.3
38	2g	16	LEU	2.3
48	1q	98	LEU	2.3
1	1A	1913	A	2.3
1	2A	1098	A	2.3
34	1c	27	LYS	2.3
41	2j	100	THR	2.3
23	21	26	ARG	2.3
44	1m	3	ARG	2.3
44	2m	88	ARG	2.3
47	2p	75	ARG	2.3
50	2s	18	LYS	2.3
50	2s	27	GLU	2.3
52	2u	15	ARG	2.3
32	1a	1006	C	2.3
32	2a	848	C	2.3
33	2b	40	HIS	2.3
45	2n	16	PHE	2.3
52	2u	13	ILE	2.3
21	2Z	164	ALA	2.3
38	1g	2	ALA	2.3
51	1t	66	ALA	2.3
35	2d	152	SER	2.3
6	2G	44	GLY	2.3
40	2i	19	LEU	2.3
41	1j	71	LEU	2.3
41	2j	65	LEU	2.3
33	1b	132	LYS	2.3
1	2A	1047	G	2.3

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Mol	Chain	Res	Type	RSRZ
1	2A	1170	G	2.3
15	1T	129	ARG	2.3
39	2h	122	ARG	2.3
40	1i	92	TYR	2.3
20	2Y	53	PRO	2.3
1	2A	2134	A	2.3
32	1a	152	A	2.3
33	2b	165	VAL	2.3
40	2i	108	VAL	2.3
47	1p	2	VAL	2.3
1	2A	884	C	2.3
32	1a	1141	C	2.3
45	1n	7	ILE	2.3
46	2o	3	ILE	2.3
50	2s	31	ILE	2.3
45	2n	20	ALA	2.3
50	2s	34	TRP	2.3
18	2W	112	GLY	2.3
26	24	54	GLY	2.3
33	1b	38	GLY	2.3
3	2D	38	LYS	2.2
33	1b	11	LEU	2.3
41	2j	30	SER	2.3
48	2q	100	LYS	2.2
50	2s	22	LEU	2.3
26	14	55	ARG	2.2
35	1d	132	ARG	2.2
35	2d	131	ARG	2.2
38	1g	4	ARG	2.2
38	2g	32	ARG	2.2
53	1y	95	ARG	2.2
26	24	32	TYR	2.2
34	2c	3	ASN	2.2
44	1m	59	TYR	2.2
44	2m	37	THR	2.2
44	2m	87	TYR	2.2
1	1A	2189	U	2.2
1	2A	271(K)	U	2.2
1	2A	2506	U	2.2
21	2Z	121	HIS	2.2
1	1A	2106	G	2.2
24	22	9	GLN	2.2

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Mol	Chain	Res	Type	RSRZ
32	1a	198	G	2.2
32	2a	998	G	2.2
33	2b	17	PHE	2.2
41	1j	33	GLN	2.2
33	2b	185	ILE	2.2
33	2b	214	ILE	2.2
34	2c	152	ILE	2.2
1	2A	1069	A	2.2
1	2A	1847	A	2.2
32	2a	1280	A	2.2
44	2m	42	ALA	2.2
33	1b	227	GLY	2.2
47	1p	43	LYS	2.2
37	1f	19	LEU	2.2
41	1j	90	LEU	2.2
32	1a	1137	C	2.2
45	2n	31	ARG	2.2
47	1p	81	ARG	2.2
1	2A	272(A)	U	2.2
9	2N	140	VAL	2.2
32	1a	1446	U	2.2
40	2i	28	VAL	2.2
45	1n	18	VAL	2.2
41	2j	7	LYS	2.2
44	1m	115	LYS	2.2
40	1i	39	GLY	2.2
45	2n	6	LEU	2.2
1	1A	2833	G	2.2
1	2A	2187	G	2.2
32	1a	1139	G	2.2
32	2a	1022	G	2.2
32	2a	1138	G	2.2
40	1i	16	ARG	2.2
40	1i	42	ARG	2.2
40	1i	83	ARG	2.2
52	2u	6	ARG	2.2
41	2j	19	SER	2.2
1	1A	1532	C	2.2
2	1B	3	C	2.2
32	1a	48	C	2.2
32	1a	67	C	2.2
32	1a	218	C	2.2

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Mol	Chain	Res	Type	RSRZ
32	1a	848	C	2.2
32	2a	1452	C	2.2
26	24	35	VAL	2.2
34	2c	10	PHE	2.2
49	1r	86	VAL	2.2
51	1t	55	ILE	2.2
51	2t	100	ILE	2.2
53	2y	9	GLN	2.2
53	2y	46	GLN	2.2
6	1G	75	LYS	2.2
53	2y	87	LYS	2.2
6	2G	57	ALA	2.2
33	1b	225	ALA	2.2
40	1i	13	ALA	2.2
53	1y	94	ALA	2.2
33	2b	44	LEU	2.2
41	2j	85	LEU	2.2
6	1G	83	ARG	2.2
40	1i	67	GLY	2.2
41	1j	46	ARG	2.2
52	2u	10	ARG	2.2
9	2N	10	GLU	2.2
11	2P	149	GLU	2.2
33	1b	234	PRO	2.2
45	2n	14	PRO	2.2
50	2s	42	PRO	2.2
1	2A	8	A	2.2
32	2a	532	A	2.2
1	2A	1044	G	2.2
32	1a	1134	G	2.2
32	2a	68	G	2.2
40	1i	58	HIS	2.2
50	2s	61	TYR	2.2
6	2G	88	ILE	2.2
21	1Z	191	VAL	2.2
34	2c	5	ILE	2.2
35	1d	5	ILE	2.2
40	1i	53	VAL	2.2
40	1i	65	VAL	2.2
40	2i	73	GLN	2.2
50	1s	19	VAL	2.2
1	1A	2183	C	2.2

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Mol	Chain	Res	Type	RSRZ
32	2a	1277	C	2.2
32	2a	1359	C	2.2
33	2b	10	LEU	2.2
34	1c	101	LEU	2.2
50	1s	71	LEU	2.2
15	2T	112	ARG	2.2
33	1b	228	GLY	2.2
35	1d	180	GLY	2.2
35	2d	35	ARG	2.2
50	2s	29	ARG	2.2
1	1A	271(N)	U	2.1
1	1A	2506	U	2.1
1	2A	12	U	2.1
7	2H	36	PRO	2.1
21	1Z	203	GLU	2.1
26	24	29	PRO	2.1
38	2g	14	PRO	2.1
50	2s	64	GLU	2.1
21	2Z	78	LYS	2.1
26	14	60	GLN	2.1
33	2b	230	VAL	2.1
41	2j	82	ILE	2.1
43	2l	55	VAL	2.1
44	2m	36	LYS	2.1
51	2t	38	LYS	2.1
32	2a	975	A	2.1
32	2a	1044	A	2.1
32	2a	1093	A	2.1
32	2a	1123	A	2.1
1	1A	363	G	2.1
1	1A	2104	G	2.1
1	1A	2807	G	2.1
32	2a	1182	G	2.1
42	1k	60	ALA	2.1
45	2n	59	ALA	2.1
50	1s	29	ARG	2.1
33	2b	228	GLY	2.1
42	2k	118	GLY	2.1
32	2a	1007	C	2.1
32	2a	1141	C	2.1
6	2G	29	TRP	2.1
52	2u	14	TRP	2.1

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Mol	Chain	Res	Type	RSRZ
6	2G	48	GLU	2.1
40	1i	2	GLU	2.1
1	1A	1420	U	2.1
1	2A	405	U	2.1
32	1a	1148	U	2.1
41	2j	68	HIS	2.1
50	2s	63	THR	2.1
53	2y	64	SER	2.1
40	2i	78	LYS	2.1
43	2l	23	LYS	2.1
6	2G	150	ASP	2.1
26	14	50	VAL	2.1
33	1b	136	VAL	2.1
33	2b	39	ILE	2.1
34	2c	75	VAL	2.1
34	2c	130	VAL	2.1
34	2c	193	TYR	2.1
35	1d	4	TYR	2.1
35	1d	170	VAL	2.1
38	2g	9	VAL	2.1
47	2p	38	TYR	2.1
50	2s	66	MET	2.1
41	2j	47	PHE	2.1
33	2b	187	LEU	2.1
33	2b	196	LEU	2.1
29	27	47	ARG	2.1
34	1c	190	ARG	2.1
40	2i	42	ARG	2.1
41	1j	43	ARG	2.1
54	2z	17	ARG	2.1
1	2A	890	A	2.1
1	2A	1050	A	2.1
1	2A	1111	A	2.1
32	1a	143	A	2.1
40	1i	57	GLY	2.1
40	2i	6	GLY	2.1
52	2u	11	GLY	2.1
21	2Z	68	PRO	2.1
32	1a	66	G	2.1
32	1a	93	G	2.1
40	1i	98	PRO	2.1
1	1A	1052	C	2.1

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Mol	Chain	Res	Type	RSRZ
1	1A	2791	C	2.1
32	1a	1129	C	2.1
32	1a	1354	C	2.1
32	2a	1008	C	2.1
32	2a	1118	C	2.1
6	2G	182	LYS	2.1
33	2b	67	THR	2.1
40	1i	78	LYS	2.1
32	1a	1278	U	2.1
32	2a	5	U	2.1
32	2a	1159	U	2.1
33	2b	78	GLN	2.1
33	2b	122	PHE	2.1
34	2c	76	VAL	2.1
34	2c	107	GLN	2.1
40	2i	86	VAL	2.1
51	1t	100	ILE	2.1
54	2z	11	PHE	2.1
34	2c	62	ASP	2.1
42	1k	75	TYR	2.1
40	2i	47	LEU	2.1
3	2D	262	ARG	2.1
21	1Z	131	ARG	2.1
26	24	68	ARG	2.1
41	2j	43	ARG	2.1
6	2G	42	GLY	2.1
38	1g	55	GLY	2.1
11	2P	98	GLU	2.1
1	2A	1077	A	2.1
32	1a	344	A	2.1
32	2a	1157	A	2.1
45	2n	61	TRP	2.1
47	1p	48	TRP	2.1
50	1s	34	TRP	2.1
43	2l	17	LYS	2.1
34	2c	95	THR	2.1
40	1i	64	THR	2.1
6	2G	20	ILE	2.1
6	2G	76	SER	2.1
6	2G	77	ILE	2.1
21	1Z	52	SER	2.1
36	2e	129	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
1	1A	271(M)	G	2.1
1	1A	1537	G	2.1
32	2a	1124	G	2.1
32	2a	1139	G	2.1
32	2a	1491	G	2.1
34	1c	68	VAL	2.1
34	2c	151	VAL	2.1
35	1d	201	GLN	2.1
1	1A	652(S)	C	2.1
32	1a	193	C	2.1
32	1a	1008	C	2.1
32	2a	995	C	2.1
32	2a	1066	C	2.1
32	2a	1363	C	2.1
47	2p	60	LEU	2.1
1	1A	2099	U	2.1
1	2A	1108	U	2.1
32	2a	1136	U	2.1
40	1i	5	TYR	2.1
40	2i	4	TYR	2.1
47	1p	38	TYR	2.1
35	1d	168	ARG	2.1
40	1i	10	ARG	2.1
50	2s	81	ARG	2.1
8	2I	63	ALA	2.1
41	1j	20	ALA	2.1
51	1t	96	GLY	2.1
25	13	2	PRO	2.0
35	1d	166	LYS	2.0
40	2i	97	LYS	2.0
51	1t	68	LYS	2.0
33	1b	214	ILE	2.0
44	2m	4	ILE	2.0
47	2p	19	ILE	2.0
1	2A	1445	A	2.0
7	2H	17	VAL	2.0
12	2Q	104	PHE	2.0
14	2S	28	VAL	2.0
32	1a	439	A	2.0
41	1j	44	VAL	2.0
41	2j	84	GLN	2.0
54	2z	4	SER	2.0

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Mol	Chain	Res	Type	RSRZ
6	2G	3	LEU	2.0
45	2n	39	LEU	2.0
20	2Y	50	ARG	2.0
40	2i	29	ASN	2.0
46	1o	68	ARG	2.0
48	1q	91	ARG	2.0
40	2i	92	TYR	2.0
42	2k	36	ASP	2.0
47	1p	17	TYR	2.0
33	1b	62	ALA	2.0
51	1t	67	ALA	2.0
1	1A	272(A)	U	2.0
1	2A	883	G	2.0
1	2A	1026	U	2.0
1	2A	2833	G	2.0
32	1a	69	G	2.0
32	1a	1009	G	2.0
32	1a	1491	G	2.0
44	1m	100	GLY	2.0
32	1a	91	C	2.0
32	2a	91	C	2.0
32	2a	150	C	2.0
32	2a	990	C	2.0
32	2a	1218	C	2.0
40	1i	49	PRO	2.0
41	2j	77	PRO	2.0
46	1o	19	PRO	2.0
8	2I	60	GLU	2.0
34	2c	161	GLU	2.0
40	2i	118	LYS	2.0
54	2z	3	LYS	2.0
6	2G	157	ILE	2.0
19	2X	92	LEU	2.0
40	2i	40	LEU	2.0
53	2y	60	VAL	2.0
7	2H	3	ARG	2.0
22	20	11	ARG	2.0
29	17	23	ARG	2.0
35	2d	73	ARG	2.0
40	2i	111	ARG	2.0
41	1j	28	ARG	2.0
50	1s	35	SER	2.0

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Mol	Chain	Res	Type	RSRZ
37	1f	100	ASN	2.0
1	1A	278	A	2.0
32	2a	1250	A	2.0
34	2c	100	ALA	2.0
37	2f	4	TYR	2.0
39	1h	94	TYR	2.0
40	1i	4	TYR	2.0
47	2p	7	ALA	2.0
50	1s	24	ALA	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
1	5MU	2A	1915	21/22	0.85	0.11	68,75,79,92	0
1	5MU	1A	1915	21/22	0.86	0.12	65,76,82,86	0
32	2MG	2a	1207	24/25	0.89	0.12	71,75,81,84	0
1	PSU	1A	1917	20/21	0.90	0.12	56,65,71,77	0
32	5MC	2a	967	21/22	0.91	0.14	58,65,76,82	0
32	M2G	2a	966	25/26	0.91	0.14	55,64,75,76	0
1	PSU	1A	1911	20/21	0.92	0.10	55,61,66,67	0
32	G7M	2a	527	24/25	0.93	0.11	53,59,63,65	0
32	2MG	1a	1207	24/25	0.93	0.10	60,68,72,75	0
1	PSU	2A	1911	20/21	0.93	0.08	56,60,74,78	0
32	5MC	1a	967	21/22	0.93	0.11	56,62,71,77	0
32	4OC	2a	1402	22/23	0.93	0.10	47,51,57,62	0
1	PSU	2A	1917	20/21	0.94	0.07	57,66,72,77	0
32	M2G	1a	966	25/26	0.94	0.10	54,58,63,68	0
43	0TD	2l	92	10/11	0.94	0.10	52,57,60,65	0
32	PSU	1a	516	20/21	0.95	0.10	50,59,64,68	0
32	G7M	1a	527	24/25	0.95	0.10	43,52,54,57	0
32	PSU	2a	516	20/21	0.95	0.08	63,67,73,74	0
43	0TD	1l	92	10/11	0.96	0.09	49,51,56,58	0
1	OMC	1A	1920	21/22	0.96	0.09	47,52,56,60	0
32	5MC	1a	1400	21/22	0.96	0.09	47,53,57,61	0
32	5MC	1a	1407	21/22	0.96	0.10	39,46,51,53	0
32	5MC	2a	1400	21/22	0.96	0.10	49,60,64,68	0
1	5MC	2A	1962	21/22	0.96	0.08	31,39,45,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	5MC	2a	1404	21/22	0.96	0.08	41,48,51,54	0
32	UR3	2a	1498	21/22	0.96	0.09	47,51,54,60	0
32	MA6	2a	1518	24/25	0.96	0.09	41,52,55,57	0
32	UR3	1a	1498	21/22	0.96	0.10	40,46,48,60	0
32	5MC	1a	1404	21/22	0.97	0.07	39,43,46,48	0
1	5MC	1A	1942	21/22	0.97	0.07	25,32,35,40	0
1	5MC	1A	1962	21/22	0.97	0.07	25,32,37,44	0
1	OMC	2A	1920	21/22	0.97	0.08	52,57,60,61	0
1	5MC	2A	1942	21/22	0.97	0.07	39,44,50,51	0
32	MA6	1a	1518	24/25	0.97	0.08	36,41,46,46	0
32	5MC	2a	1407	21/22	0.97	0.07	43,50,55,58	0
1	PSU	2A	2605	20/21	0.97	0.07	28,32,36,40	0
32	MA6	1a	1519	24/25	0.97	0.09	37,42,46,50	0
32	MA6	2a	1519	24/25	0.97	0.09	47,50,55,59	0
32	4OC	1a	1402	22/23	0.97	0.09	47,50,55,58	0
1	OMU	1A	2552	21/22	0.98	0.08	23,26,28,33	0
1	OMG	2A	2251	24/25	0.98	0.09	28,34,37,40	0
1	2MA	2A	2503	23/24	0.98	0.06	20,27,30,32	0
1	OMU	2A	2552	21/22	0.98	0.07	27,34,38,39	0
1	PSU	1A	2605	20/21	0.98	0.07	21,23,29,31	0
1	5MU	1A	1939	21/22	0.98	0.08	20,24,26,28	0
1	OMG	1A	2251	24/25	0.98	0.06	20,23,27,28	0
1	5MU	2A	1939	21/22	0.98	0.07	27,31,34,35	0
1	2MA	1A	2503	23/24	0.98	0.06	15,19,22,24	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, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1B	230	1/1	0.30	0.27	86,86,86,86	0
55	MG	1A	3751	1/1	0.37	0.26	64,64,64,64	0
55	MG	2A	3347	1/1	0.42	0.25	80,80,80,80	0
55	MG	2a	3173	1/1	0.42	0.27	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3645	1/1	0.53	0.29	60,60,60,60	0
55	MG	1a	3115	1/1	0.54	0.26	86,86,86,86	0
55	MG	1a	3199	1/1	0.54	0.31	81,81,81,81	0
55	MG	2a	3123	1/1	0.55	0.32	74,74,74,74	0
55	MG	2A	3083	1/1	0.55	0.20	75,75,75,75	0
55	MG	2A	3242	1/1	0.57	0.31	79,79,79,79	0
55	MG	1a	3207	1/1	0.57	0.34	81,81,81,81	0
55	MG	1A	3292	1/1	0.58	0.17	80,80,80,80	0
55	MG	1A	3756	1/1	0.58	0.40	60,60,60,60	0
55	MG	1A	3893	1/1	0.58	0.27	48,48,48,48	0
55	MG	1a	3201	1/1	0.59	0.30	79,79,79,79	0
55	MG	2a	3176	1/1	0.59	0.29	75,75,75,75	0
55	MG	2a	3039	1/1	0.61	0.18	83,83,83,83	0
55	MG	2A	3693	1/1	0.62	0.20	77,77,77,77	0
55	MG	1a	3170	1/1	0.63	0.32	68,68,68,68	0
55	MG	1a	3041	1/1	0.63	0.29	69,69,69,69	0
55	MG	2A	3129	1/1	0.64	0.29	64,64,64,64	0
55	MG	2A	3428	1/1	0.64	0.23	52,52,52,52	0
55	MG	2a	3128	1/1	0.64	0.28	65,65,65,65	0
55	MG	1a	3150	1/1	0.64	0.25	60,60,60,60	0
55	MG	2A	3702	1/1	0.64	0.17	57,57,57,57	0
55	MG	2A	3116	1/1	0.65	0.18	73,73,73,73	0
55	MG	1A	3997	1/1	0.65	0.34	35,35,35,35	0
55	MG	2a	3066	1/1	0.65	0.18	82,82,82,82	0
55	MG	2a	3072	1/1	0.65	0.19	70,70,70,70	0
55	MG	1A	3693	1/1	0.66	0.17	76,76,76,76	0
55	MG	1A	3519	1/1	0.66	0.22	59,59,59,59	0
55	MG	2A	3631	1/1	0.67	0.20	68,68,68,68	0
55	MG	2A	3585	1/1	0.67	0.21	68,68,68,68	0
55	MG	2a	3048	1/1	0.67	0.28	73,73,73,73	0
55	MG	2A	3223	1/1	0.68	0.27	71,71,71,71	0
55	MG	1a	3216	1/1	0.68	0.20	66,66,66,66	0
55	MG	1A	4023	1/1	0.68	0.21	46,46,46,46	0
55	MG	2a	3033	1/1	0.68	0.36	69,69,69,69	0
55	MG	1A	3971	1/1	0.68	0.29	88,88,88,88	0
55	MG	1A	3909	1/1	0.68	0.18	49,49,49,49	0
55	MG	1a	3160	1/1	0.69	0.40	73,73,73,73	0
55	MG	2a	3107	1/1	0.69	0.22	86,86,86,86	0
55	MG	2A	3538	1/1	0.69	0.21	69,69,69,69	0
55	MG	1A	3994	1/1	0.69	0.27	81,81,81,81	0
55	MG	1a	3059	1/1	0.69	0.25	75,75,75,75	0
55	MG	1a	3154	1/1	0.69	0.17	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1a	3238	1/1	0.70	0.46	81,81,81,81	0
55	MG	1A	3275	1/1	0.70	0.46	63,63,63,63	0
55	MG	2A	3639	1/1	0.70	0.45	58,58,58,58	0
55	MG	2a	3150	1/1	0.70	0.28	87,87,87,87	0
55	MG	2A	3477	1/1	0.70	0.34	80,80,80,80	0
55	MG	1A	3798	1/1	0.70	0.31	61,61,61,61	0
55	MG	2A	3532	1/1	0.71	0.26	78,78,78,78	0
55	MG	1a	3246	1/1	0.71	0.19	73,73,73,73	0
55	MG	1A	3974	1/1	0.72	0.21	63,63,63,63	0
55	MG	1a	3237	1/1	0.72	0.19	58,58,58,58	0
55	MG	1A	3835	1/1	0.72	0.23	56,56,56,56	0
55	MG	1A	3652	1/1	0.72	0.27	70,70,70,70	0
55	MG	2a	3063	1/1	0.72	0.37	83,83,83,83	0
55	MG	2a	3065	1/1	0.72	0.32	61,61,61,61	0
55	MG	2A	3224	1/1	0.72	0.20	63,63,63,63	0
55	MG	1a	3226	1/1	0.73	0.21	89,89,89,89	0
55	MG	2A	3368	1/1	0.73	0.26	65,65,65,65	0
55	MG	2a	3080	1/1	0.73	0.33	70,70,70,70	0
55	MG	1A	3762	1/1	0.73	0.22	54,54,54,54	0
55	MG	2A	3144	1/1	0.73	0.21	73,73,73,73	0
55	MG	2A	3183	1/1	0.73	0.16	68,68,68,68	0
55	MG	1a	3079	1/1	0.73	0.22	63,63,63,63	0
55	MG	1a	3081	1/1	0.73	0.19	81,81,81,81	0
55	MG	1A	3894	1/1	0.73	0.19	58,58,58,58	0
55	MG	2j	201	1/1	0.73	0.14	77,77,77,77	0
55	MG	2A	3262	1/1	0.74	0.29	66,66,66,66	0
55	MG	1A	3639	1/1	0.74	0.34	33,33,33,33	0
55	MG	1A	3813	1/1	0.74	0.26	80,80,80,80	0
55	MG	1A	3686	1/1	0.74	0.18	69,69,69,69	0
55	MG	2G	203	1/1	0.74	0.19	74,74,74,74	0
55	MG	1a	3159	1/1	0.74	0.29	77,77,77,77	0
55	MG	1a	3253	1/1	0.74	0.18	69,69,69,69	0
55	MG	2A	3063	1/1	0.74	0.28	67,67,67,67	0
55	MG	2A	3579	1/1	0.74	0.21	54,54,54,54	0
55	MG	1A	3359	1/1	0.74	0.20	54,54,54,54	0
55	MG	2A	3745	1/1	0.75	0.17	71,71,71,71	0
55	MG	2G	202	1/1	0.75	0.23	81,81,81,81	0
55	MG	1A	3699	1/1	0.75	0.17	56,56,56,56	0
55	MG	1A	3725	1/1	0.75	0.17	54,54,54,54	0
55	MG	1A	3311	1/1	0.75	0.21	81,81,81,81	0
55	MG	1A	4007	1/1	0.75	0.17	53,53,53,53	0
55	MG	2A	3665	1/1	0.75	0.15	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3152	1/1	0.75	0.23	74,74,74,74	0
55	MG	2A	3280	1/1	0.75	0.25	76,76,76,76	0
55	MG	2p	101	1/1	0.75	0.37	62,62,62,62	0
55	MG	1D	317	1/1	0.76	0.20	42,42,42,42	0
55	MG	2A	3049	1/1	0.76	0.26	70,70,70,70	0
55	MG	1a	3003	1/1	0.76	0.50	74,74,74,74	0
55	MG	1A	3644	1/1	0.76	0.17	65,65,65,65	0
55	MG	1a	3166	1/1	0.76	0.29	64,64,64,64	0
55	MG	2a	3071	1/1	0.76	0.27	67,67,67,67	0
55	MG	1a	3140	1/1	0.76	0.25	78,78,78,78	0
55	MG	2A	3359	1/1	0.76	0.25	77,77,77,77	0
55	MG	1a	3179	1/1	0.76	0.15	87,87,87,87	0
55	MG	2a	3108	1/1	0.76	0.24	61,61,61,61	0
55	MG	2A	3412	1/1	0.76	0.20	57,57,57,57	0
55	MG	2A	3174	1/1	0.76	0.17	52,52,52,52	0
55	MG	2A	3436	1/1	0.76	0.29	37,37,37,37	0
55	MG	1A	3681	1/1	0.76	0.20	66,66,66,66	0
55	MG	21	101	1/1	0.76	0.17	80,80,80,80	0
55	MG	2a	3025	1/1	0.76	0.18	68,68,68,68	0
55	MG	2A	3527	1/1	0.76	0.26	75,75,75,75	0
55	MG	1b	301	1/1	0.77	0.22	73,73,73,73	0
55	MG	1A	3851	1/1	0.77	0.20	73,73,73,73	0
55	MG	2A	3264	1/1	0.77	0.21	63,63,63,63	0
55	MG	1A	3667	1/1	0.77	0.26	58,58,58,58	0
55	MG	1H	201	1/1	0.77	0.20	64,64,64,64	0
55	MG	2A	3105	1/1	0.77	0.43	64,64,64,64	0
55	MG	1N	203	1/1	0.77	0.14	55,55,55,55	0
55	MG	11	104	1/1	0.77	0.17	53,53,53,53	0
55	MG	1A	3823	1/1	0.77	0.27	76,76,76,76	0
55	MG	1A	3337	1/1	0.77	0.22	64,64,64,64	0
55	MG	2A	3441	1/1	0.77	0.18	66,66,66,66	0
55	MG	1a	3162	1/1	0.77	0.17	58,58,58,58	0
55	MG	2a	3005	1/1	0.77	0.28	61,61,61,61	0
55	MG	2A	3479	1/1	0.77	0.24	65,65,65,65	0
55	MG	1A	3839	1/1	0.77	0.19	49,49,49,49	0
55	MG	1B	216	1/1	0.77	0.15	56,56,56,56	0
57	MPD	1T	206	8/8	0.77	0.24	60,70,72,74	0
55	MG	2A	3490	1/1	0.78	0.15	63,63,63,63	0
55	MG	1A	3792	1/1	0.78	0.30	65,65,65,65	0
55	MG	1a	3108	1/1	0.78	0.15	79,79,79,79	0
55	MG	1a	3222	1/1	0.78	0.15	69,69,69,69	0
55	MG	1a	3273	1/1	0.78	0.18	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3121	1/1	0.78	0.21	71,71,71,71	0
55	MG	2A	3587	1/1	0.78	0.17	49,49,49,49	0
55	MG	2a	3135	1/1	0.78	0.21	71,71,71,71	0
55	MG	1a	3151	1/1	0.78	0.19	65,65,65,65	0
55	MG	2A	3464	1/1	0.78	0.15	74,74,74,74	0
55	MG	2A	3470	1/1	0.78	0.15	50,50,50,50	0
55	MG	1o	101	1/1	0.78	0.29	68,68,68,68	0
55	MG	1A	3692	1/1	0.78	0.19	76,76,76,76	0
55	MG	2a	3068	1/1	0.78	0.21	83,83,83,83	0
55	MG	1B	222	1/1	0.79	0.15	40,40,40,40	0
55	MG	1a	3066	1/1	0.79	0.24	73,73,73,73	0
55	MG	2A	3721	1/1	0.79	0.28	85,85,85,85	0
55	MG	2A	3510	1/1	0.79	0.18	59,59,59,59	0
55	MG	2D	308	1/1	0.79	0.21	63,63,63,63	0
55	MG	1a	3161	1/1	0.79	0.26	69,69,69,69	0
55	MG	1A	3509	1/1	0.79	0.23	47,47,47,47	0
55	MG	2I	201	1/1	0.79	0.14	67,67,67,67	0
55	MG	2A	3227	1/1	0.79	0.27	58,58,58,58	0
55	MG	1A	3243	1/1	0.79	0.23	72,72,72,72	0
55	MG	2A	3247	1/1	0.79	0.14	62,62,62,62	0
55	MG	1A	3162	1/1	0.79	0.29	41,41,41,41	0
55	MG	1a	3172	1/1	0.79	0.22	63,63,63,63	0
55	MG	2A	3637	1/1	0.79	0.22	61,61,61,61	0
55	MG	2A	3476	1/1	0.79	0.14	65,65,65,65	0
55	MG	1r	101	1/1	0.79	0.19	62,62,62,62	0
55	MG	2A	3369	1/1	0.80	0.14	71,71,71,71	0
55	MG	1a	3270	1/1	0.80	0.14	65,65,65,65	0
55	MG	2a	3064	1/1	0.80	0.21	55,55,55,55	0
55	MG	2A	3423	1/1	0.80	0.12	70,70,70,70	0
55	MG	1a	3148	1/1	0.80	0.21	73,73,73,73	0
55	MG	1a	3040	1/1	0.80	0.19	73,73,73,73	0
55	MG	2A	3212	1/1	0.80	0.34	73,73,73,73	0
55	MG	2A	3458	1/1	0.80	0.24	64,64,64,64	0
55	MG	1A	3853	1/1	0.80	0.17	50,50,50,50	0
55	MG	1D	315	1/1	0.80	0.11	61,61,61,61	0
55	MG	2A	3044	1/1	0.80	0.30	64,64,64,64	0
55	MG	1A	4008	1/1	0.80	0.11	98,98,98,98	0
55	MG	1E	307	1/1	0.80	0.17	52,52,52,52	0
55	MG	1A	3643	1/1	0.80	0.43	35,35,35,35	0
55	MG	2A	3097	1/1	0.80	0.32	67,67,67,67	0
55	MG	1a	3084	1/1	0.80	0.39	67,67,67,67	0
55	MG	1A	3568	1/1	0.80	0.21	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1B	218	1/1	0.80	0.21	68,68,68,68	0
55	MG	2A	3552	1/1	0.80	0.12	45,45,45,45	0
55	MG	1A	3559	1/1	0.80	0.18	54,54,54,54	0
55	MG	1a	3231	1/1	0.81	0.25	67,67,67,67	0
55	MG	1A	3587	1/1	0.81	0.21	65,65,65,65	0
55	MG	2A	3162	1/1	0.81	0.23	69,69,69,69	0
55	MG	1a	3155	1/1	0.81	0.12	57,57,57,57	0
55	MG	1A	3096	1/1	0.81	0.19	57,57,57,57	0
55	MG	1a	3065	1/1	0.81	0.37	68,68,68,68	0
55	MG	1a	3256	1/1	0.81	0.15	57,57,57,57	0
55	MG	1A	3926	1/1	0.81	0.15	27,27,27,27	0
55	MG	1A	3147	1/1	0.81	0.27	60,60,60,60	0
55	MG	2a	3046	1/1	0.81	0.31	72,72,72,72	0
55	MG	2A	3230	1/1	0.81	0.14	51,51,51,51	0
55	MG	2A	3512	1/1	0.81	0.20	66,66,66,66	0
55	MG	1A	3189	1/1	0.81	0.30	73,73,73,73	0
55	MG	1A	3421	1/1	0.81	0.15	63,63,63,63	0
55	MG	1a	3090	1/1	0.81	0.24	49,49,49,49	0
55	MG	2A	3024	1/1	0.81	0.17	69,69,69,69	0
55	MG	1A	3576	1/1	0.81	0.29	70,70,70,70	0
55	MG	2A	3337	1/1	0.81	0.20	57,57,57,57	0
55	MG	2A	3344	1/1	0.81	0.19	63,63,63,63	0
55	MG	2a	3089	1/1	0.81	0.33	66,66,66,66	0
55	MG	2A	3627	1/1	0.81	0.18	87,87,87,87	0
55	MG	1A	3579	1/1	0.81	0.19	40,40,40,40	0
55	MG	2A	3355	1/1	0.81	0.23	69,69,69,69	0
55	MG	1a	3138	1/1	0.81	0.20	52,52,52,52	0
55	MG	1A	3584	1/1	0.81	0.26	52,52,52,52	0
55	MG	1A	3862	1/1	0.81	0.20	66,66,66,66	0
55	MG	2a	3171	1/1	0.81	0.14	62,62,62,62	0
55	MG	1a	3029	1/1	0.81	0.26	58,58,58,58	0
55	MG	2A	3706	1/1	0.81	0.19	61,61,61,61	0
55	MG	2a	3189	1/1	0.81	0.20	74,74,74,74	0
55	MG	1A	3772	1/1	0.81	0.19	58,58,58,58	0
55	MG	1a	3230	1/1	0.81	0.19	48,48,48,48	0
55	MG	2B	210	1/1	0.81	0.26	51,51,51,51	0
55	MG	1A	3585	1/1	0.82	0.24	64,64,64,64	0
55	MG	2A	3261	1/1	0.82	0.29	59,59,59,59	0
55	MG	2A	3496	1/1	0.82	0.23	65,65,65,65	0
55	MG	2a	3022	1/1	0.82	0.29	62,62,62,62	0
55	MG	2A	3504	1/1	0.82	0.17	66,66,66,66	0
55	MG	1A	3242	1/1	0.82	0.12	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3600	1/1	0.82	0.18	56,56,56,56	0
55	MG	2A	3090	1/1	0.82	0.11	79,79,79,79	0
55	MG	2A	3320	1/1	0.82	0.13	47,47,47,47	0
55	MG	2a	3060	1/1	0.82	0.23	70,70,70,70	0
55	MG	2A	3537	1/1	0.82	0.19	61,61,61,61	0
55	MG	1A	3886	1/1	0.82	0.23	56,56,56,56	0
55	MG	1A	3737	1/1	0.82	0.19	54,54,54,54	0
55	MG	2A	3555	1/1	0.82	0.21	69,69,69,69	0
55	MG	2A	3107	1/1	0.82	0.25	58,58,58,58	0
55	MG	2a	3070	1/1	0.82	0.15	65,65,65,65	0
55	MG	1A	3300	1/1	0.82	0.12	48,48,48,48	0
55	MG	1a	3112	1/1	0.82	0.15	71,71,71,71	0
55	MG	1A	4021	1/1	0.82	0.32	37,37,37,37	0
55	MG	1a	3011	1/1	0.82	0.25	64,64,64,64	0
55	MG	1A	3309	1/1	0.82	0.19	70,70,70,70	0
55	MG	2A	3418	1/1	0.82	0.16	46,46,46,46	0
55	MG	1A	3383	1/1	0.82	0.20	55,55,55,55	0
55	MG	2A	3691	1/1	0.82	0.11	56,56,56,56	0
55	MG	1A	3952	1/1	0.82	0.23	52,52,52,52	0
55	MG	2A	3205	1/1	0.82	0.44	65,65,65,65	0
55	MG	2a	3155	1/1	0.82	0.14	79,79,79,79	0
55	MG	1A	3964	1/1	0.82	0.17	68,68,68,68	0
55	MG	1y	203	1/1	0.82	0.18	70,70,70,70	0
55	MG	2A	3461	1/1	0.82	0.14	68,68,68,68	0
55	MG	1A	3965	1/1	0.82	0.18	53,53,53,53	0
55	MG	2A	3025	1/1	0.82	0.20	54,54,54,54	0
55	MG	1a	3223	1/1	0.82	0.27	70,70,70,70	0
55	MG	2A	3047	1/1	0.82	0.25	67,67,67,67	0
55	MG	2B	216	1/1	0.83	0.14	73,73,73,73	0
55	MG	1e	203	1/1	0.83	0.33	60,60,60,60	0
55	MG	1e	204	1/1	0.83	0.30	58,58,58,58	0
55	MG	2A	3216	1/1	0.83	0.25	64,64,64,64	0
55	MG	10	107	1/1	0.83	0.15	54,54,54,54	0
55	MG	2W	203	1/1	0.83	0.21	70,70,70,70	0
55	MG	1a	3189	1/1	0.83	0.18	60,60,60,60	0
55	MG	2A	3489	1/1	0.83	0.14	53,53,53,53	0
55	MG	1A	3698	1/1	0.83	0.16	59,59,59,59	0
55	MG	2A	3010	1/1	0.83	0.37	58,58,58,58	0
55	MG	1a	3134	1/1	0.83	0.11	57,57,57,57	0
55	MG	1a	3135	1/1	0.83	0.21	53,53,53,53	0
55	MG	1A	3534	1/1	0.83	0.12	44,44,44,44	0
55	MG	2A	3515	1/1	0.83	0.12	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1a	3218	1/1	0.83	0.38	69,69,69,69	0
55	MG	2a	3062	1/1	0.83	0.27	68,68,68,68	0
55	MG	1A	3548	1/1	0.83	0.12	43,43,43,43	0
55	MG	2A	3533	1/1	0.83	0.15	52,52,52,52	0
55	MG	1A	3932	1/1	0.83	0.23	59,59,59,59	0
55	MG	1A	3216	1/1	0.83	0.31	64,64,64,64	0
55	MG	1A	3960	1/1	0.83	0.14	45,45,45,45	0
55	MG	2A	3093	1/1	0.83	0.27	67,67,67,67	0
55	MG	1A	3669	1/1	0.83	0.17	73,73,73,73	0
55	MG	1A	3295	1/1	0.83	0.20	62,62,62,62	0
55	MG	1A	3515	1/1	0.83	0.12	52,52,52,52	0
55	MG	1a	3068	1/1	0.83	0.18	64,64,64,64	0
55	MG	2a	3096	1/1	0.83	0.21	67,67,67,67	0
55	MG	1A	3577	1/1	0.83	0.14	57,57,57,57	0
55	MG	1A	3790	1/1	0.83	0.14	53,53,53,53	0
55	MG	2A	3415	1/1	0.83	0.24	66,66,66,66	0
55	MG	1a	3269	1/1	0.83	0.17	71,71,71,71	0
55	MG	2A	3420	1/1	0.83	0.13	76,76,76,76	0
55	MG	1F	319	1/1	0.83	0.19	57,57,57,57	0
55	MG	2A	3699	1/1	0.83	0.12	74,74,74,74	0
55	MG	2A	3173	1/1	0.83	0.20	82,82,82,82	0
55	MG	1A	3419	1/1	0.83	0.17	66,66,66,66	0
55	MG	2A	3713	1/1	0.83	0.25	63,63,63,63	0
55	MG	2a	3182	1/1	0.83	0.19	56,56,56,56	0
55	MG	2A	3181	1/1	0.83	0.11	53,53,53,53	0
55	MG	1A	4000	1/1	0.83	0.41	52,52,52,52	0
55	MG	2B	207	1/1	0.83	0.17	66,66,66,66	0
55	MG	2A	3204	1/1	0.83	0.30	68,68,68,68	0
55	MG	2A	3632	1/1	0.84	0.13	55,55,55,55	0
55	MG	1e	201	1/1	0.84	0.33	58,58,58,58	0
55	MG	2A	3189	1/1	0.84	0.25	62,62,62,62	0
55	MG	2A	3191	1/1	0.84	0.25	61,61,61,61	0
55	MG	1A	3808	1/1	0.84	0.44	48,48,48,48	0
55	MG	1a	3184	1/1	0.84	0.12	86,86,86,86	0
55	MG	2A	3211	1/1	0.84	0.21	51,51,51,51	0
55	MG	2a	3067	1/1	0.84	0.24	69,69,69,69	0
55	MG	2A	3505	1/1	0.84	0.20	58,58,58,58	0
55	MG	1D	310	1/1	0.84	0.30	40,40,40,40	0
55	MG	1T	204	1/1	0.84	0.10	77,77,77,77	0
55	MG	2A	3514	1/1	0.84	0.19	64,64,64,64	0
55	MG	1t	201	1/1	0.84	0.17	61,61,61,61	0
55	MG	2A	3522	1/1	0.84	0.23	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3108	1/1	0.84	0.12	62,62,62,62	0
55	MG	2A	3528	1/1	0.84	0.27	57,57,57,57	0
55	MG	2B	219	1/1	0.84	0.24	74,74,74,74	0
55	MG	2a	3112	1/1	0.84	0.22	66,66,66,66	0
55	MG	1a	3244	1/1	0.84	0.19	66,66,66,66	0
55	MG	2E	304	1/1	0.84	0.36	61,61,61,61	0
55	MG	1D	313	1/1	0.84	0.22	49,49,49,49	0
55	MG	1A	3604	1/1	0.84	0.30	45,45,45,45	0
55	MG	1A	3999	1/1	0.84	0.21	36,36,36,36	0
55	MG	2A	3440	1/1	0.84	0.17	45,45,45,45	0
55	MG	2A	3252	1/1	0.84	0.43	43,43,43,43	0
55	MG	2A	3574	1/1	0.84	0.14	49,49,49,49	0
55	MG	2A	3158	1/1	0.84	0.27	54,54,54,54	0
55	MG	1a	3076	1/1	0.84	0.26	60,60,60,60	0
55	MG	2e	201	1/1	0.84	0.26	56,56,56,56	0
55	MG	2h	201	1/1	0.84	0.23	63,63,63,63	0
55	MG	1A	4009	1/1	0.84	0.18	33,33,33,33	0
55	MG	1A	4018	1/1	0.84	0.34	60,60,60,60	0
55	MG	1a	3032	1/1	0.84	0.29	61,61,61,61	0
55	MG	1a	3167	1/1	0.85	0.22	75,75,75,75	0
55	MG	2A	3731	1/1	0.85	0.14	66,66,66,66	0
55	MG	2A	3736	1/1	0.85	0.13	45,45,45,45	0
55	MG	2A	3430	1/1	0.85	0.28	56,56,56,56	0
55	MG	2B	205	1/1	0.85	0.24	54,54,54,54	0
55	MG	1a	3277	1/1	0.85	0.27	66,66,66,66	0
55	MG	1D	318	1/1	0.85	0.14	54,54,54,54	0
55	MG	1d	301	1/1	0.85	0.19	71,71,71,71	0
55	MG	1A	3354	1/1	0.85	0.11	31,31,31,31	0
55	MG	2A	3187	1/1	0.85	0.15	43,43,43,43	0
55	MG	1A	3177	1/1	0.85	0.27	52,52,52,52	0
55	MG	2A	3467	1/1	0.85	0.17	58,58,58,58	0
55	MG	1A	3431	1/1	0.85	0.20	52,52,52,52	0
55	MG	2A	3192	1/1	0.85	0.15	67,67,67,67	0
55	MG	1h	201	1/1	0.85	0.16	68,68,68,68	0
55	MG	1l	202	1/1	0.85	0.13	64,64,64,64	0
55	MG	2A	3483	1/1	0.85	0.12	56,56,56,56	0
55	MG	1n	101	1/1	0.85	0.17	64,64,64,64	0
55	MG	1a	3187	1/1	0.85	0.11	53,53,53,53	0
55	MG	1a	3086	1/1	0.85	0.27	56,56,56,56	0
55	MG	1a	3193	1/1	0.85	0.16	68,68,68,68	0
55	MG	1a	3195	1/1	0.85	0.23	71,71,71,71	0
55	MG	2A	3005	1/1	0.85	0.13	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2a	3056	1/1	0.85	0.26	70,70,70,70	0
55	MG	2A	3229	1/1	0.85	0.30	55,55,55,55	0
55	MG	1A	3448	1/1	0.85	0.16	55,55,55,55	0
55	MG	1A	4012	1/1	0.85	0.15	46,46,46,46	0
55	MG	2A	3516	1/1	0.85	0.24	56,56,56,56	0
55	MG	2A	3243	1/1	0.85	0.29	58,58,58,58	0
55	MG	1a	3204	1/1	0.85	0.17	60,60,60,60	0
55	MG	10	106	1/1	0.85	0.20	59,59,59,59	0
55	MG	2A	3531	1/1	0.85	0.21	60,60,60,60	0
55	MG	1A	3589	1/1	0.85	0.14	43,43,43,43	0
55	MG	1A	3944	1/1	0.85	0.13	49,49,49,49	0
55	MG	2A	3534	1/1	0.85	0.17	74,74,74,74	0
55	MG	2A	3060	1/1	0.85	0.20	56,56,56,56	0
55	MG	2A	3274	1/1	0.85	0.26	57,57,57,57	0
55	MG	2a	3091	1/1	0.85	0.18	57,57,57,57	0
55	MG	13	102	1/1	0.85	0.14	68,68,68,68	0
55	MG	2A	3291	1/1	0.85	0.23	66,66,66,66	0
55	MG	1A	3829	1/1	0.85	0.14	58,58,58,58	0
55	MG	1B	211	1/1	0.85	0.37	64,64,64,64	0
55	MG	1A	3462	1/1	0.85	0.18	60,60,60,60	0
55	MG	2a	3124	1/1	0.85	0.25	78,78,78,78	0
55	MG	1A	3377	1/1	0.85	0.18	61,61,61,61	0
55	MG	2A	3349	1/1	0.85	0.20	69,69,69,69	0
55	MG	1a	3037	1/1	0.85	0.25	63,63,63,63	0
55	MG	1A	3840	1/1	0.85	0.11	44,44,44,44	0
55	MG	2a	3157	1/1	0.85	0.10	76,76,76,76	0
55	MG	2a	3165	1/1	0.85	0.11	61,61,61,61	0
55	MG	1A	3684	1/1	0.85	0.13	63,63,63,63	0
55	MG	1A	3766	1/1	0.85	0.15	40,40,40,40	0
55	MG	2A	3410	1/1	0.85	0.30	62,62,62,62	0
55	MG	2A	3670	1/1	0.85	0.21	89,89,89,89	0
55	MG	1a	3062	1/1	0.85	0.15	71,71,71,71	0
55	MG	1A	3617	1/1	0.85	0.13	45,45,45,45	0
55	MG	2A	3133	1/1	0.85	0.30	55,55,55,55	0
55	MG	1A	3880	1/1	0.85	0.19	33,33,33,33	0
55	MG	1A	3164	1/1	0.85	0.30	59,59,59,59	0
55	MG	2A	3427	1/1	0.85	0.16	54,54,54,54	0
55	MG	2A	3100	1/1	0.86	0.14	66,66,66,66	0
55	MG	1A	3620	1/1	0.86	0.20	62,62,62,62	0
55	MG	1A	4002	1/1	0.86	0.16	81,81,81,81	0
55	MG	2P	201	1/1	0.86	0.15	52,52,52,52	0
55	MG	1a	3164	1/1	0.86	0.15	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3314	1/1	0.86	0.15	66,66,66,66	0
55	MG	1A	3626	1/1	0.86	0.12	58,58,58,58	0
55	MG	2a	3012	1/1	0.86	0.15	63,63,63,63	0
55	MG	2A	3118	1/1	0.86	0.21	57,57,57,57	0
55	MG	1A	3165	1/1	0.86	0.19	61,61,61,61	0
55	MG	2A	3122	1/1	0.86	0.14	49,49,49,49	0
55	MG	1a	3168	1/1	0.86	0.16	72,72,72,72	0
55	MG	1A	3640	1/1	0.86	0.17	56,56,56,56	0
55	MG	2A	3137	1/1	0.86	0.27	65,65,65,65	0
55	MG	2a	3051	1/1	0.86	0.14	73,73,73,73	0
55	MG	2A	3361	1/1	0.86	0.18	73,73,73,73	0
55	MG	1a	3082	1/1	0.86	0.18	52,52,52,52	0
55	MG	1d	302	1/1	0.86	0.20	71,71,71,71	0
55	MG	1a	3173	1/1	0.86	0.24	64,64,64,64	0
55	MG	1A	3289	1/1	0.86	0.17	57,57,57,57	0
55	MG	1A	3814	1/1	0.86	0.20	25,25,25,25	0
55	MG	1e	206	1/1	0.86	0.16	65,65,65,65	0
55	MG	1A	3818	1/1	0.86	0.11	38,38,38,38	0
55	MG	1a	3104	1/1	0.86	0.20	66,66,66,66	0
55	MG	1A	3720	1/1	0.86	0.13	54,54,54,54	0
55	MG	1A	3099	1/1	0.86	0.18	43,43,43,43	0
55	MG	2A	3429	1/1	0.86	0.24	67,67,67,67	0
55	MG	2a	3078	1/1	0.86	0.29	56,56,56,56	0
55	MG	1A	3109	1/1	0.86	0.14	51,51,51,51	0
55	MG	2a	3084	1/1	0.86	0.37	63,63,63,63	0
55	MG	2A	3196	1/1	0.86	0.28	59,59,59,59	0
55	MG	2A	3690	1/1	0.86	0.11	63,63,63,63	0
55	MG	2A	3203	1/1	0.86	0.15	51,51,51,51	0
55	MG	1a	3132	1/1	0.86	0.23	73,73,73,73	0
55	MG	1A	3563	1/1	0.86	0.24	63,63,63,63	0
55	MG	1A	3753	1/1	0.86	0.11	28,28,28,28	0
55	MG	2a	3114	1/1	0.86	0.17	61,61,61,61	0
55	MG	1a	3137	1/1	0.86	0.14	65,65,65,65	0
55	MG	1A	3271	1/1	0.86	0.28	39,39,39,39	0
55	MG	2A	3717	1/1	0.86	0.13	52,52,52,52	0
55	MG	1A	3978	1/1	0.86	0.15	46,46,46,46	0
55	MG	2a	3139	1/1	0.86	0.10	59,59,59,59	0
55	MG	2A	3728	1/1	0.86	0.13	76,76,76,76	0
55	MG	2A	3037	1/1	0.86	0.14	51,51,51,51	0
55	MG	1A	3987	1/1	0.86	0.15	52,52,52,52	0
55	MG	2a	3161	1/1	0.86	0.14	78,78,78,78	0
55	MG	1a	3043	1/1	0.86	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
55	MG	2B	204	1/1	0.86	0.18	71,71,71,71	0
55	MG	1a	3228	1/1	0.86	0.20	67,67,67,67	0
55	MG	1a	3051	1/1	0.86	0.26	60,60,60,60	0
55	MG	1a	3153	1/1	0.86	0.14	59,59,59,59	0
55	MG	1A	3601	1/1	0.86	0.16	48,48,48,48	0
55	MG	1a	3061	1/1	0.86	0.30	60,60,60,60	0
55	MG	1A	3274	1/1	0.86	0.20	60,60,60,60	0
55	MG	2D	309	1/1	0.86	0.16	62,62,62,62	0
55	MG	2D	310	1/1	0.86	0.28	36,36,36,36	0
55	MG	1A	3413	1/1	0.86	0.21	57,57,57,57	0
55	MG	1A	3325	1/1	0.87	0.20	65,65,65,65	0
55	MG	1a	3045	1/1	0.87	0.29	55,55,55,55	0
55	MG	1A	3995	1/1	0.87	0.10	49,49,49,49	0
55	MG	2A	3098	1/1	0.87	0.24	58,58,58,58	0
55	MG	2A	3265	1/1	0.87	0.11	57,57,57,57	0
55	MG	1A	3193	1/1	0.87	0.20	58,58,58,58	0
55	MG	1A	3915	1/1	0.87	0.13	28,28,28,28	0
55	MG	2a	3011	1/1	0.87	0.23	65,65,65,65	0
55	MG	1a	3262	1/1	0.87	0.12	52,52,52,52	0
55	MG	2A	3293	1/1	0.87	0.15	44,44,44,44	0
55	MG	2A	3295	1/1	0.87	0.14	45,45,45,45	0
55	MG	2A	3310	1/1	0.87	0.24	67,67,67,67	0
55	MG	1A	3592	1/1	0.87	0.18	65,65,65,65	0
55	MG	1a	3064	1/1	0.87	0.12	59,59,59,59	0
55	MG	1A	3703	1/1	0.87	0.16	51,51,51,51	0
55	MG	1a	3275	1/1	0.87	0.10	76,76,76,76	0
55	MG	1A	4004	1/1	0.87	0.19	67,67,67,67	0
55	MG	2A	3548	1/1	0.87	0.09	79,79,79,79	0
55	MG	1A	3710	1/1	0.87	0.14	50,50,50,50	0
55	MG	1a	3073	1/1	0.87	0.31	60,60,60,60	0
55	MG	1A	3633	1/1	0.87	0.14	19,19,19,19	0
55	MG	2A	3575	1/1	0.87	0.12	38,38,38,38	0
55	MG	1a	3078	1/1	0.87	0.20	50,50,50,50	0
55	MG	2A	3583	1/1	0.87	0.15	44,44,44,44	0
55	MG	1S	201	1/1	0.87	0.19	58,58,58,58	0
55	MG	1A	3037	1/1	0.87	0.25	53,53,53,53	0
55	MG	2A	3387	1/1	0.87	0.10	43,43,43,43	0
55	MG	1A	3854	1/1	0.87	0.13	33,33,33,33	0
55	MG	2a	3074	1/1	0.87	0.33	62,62,62,62	0
55	MG	1A	3730	1/1	0.87	0.16	52,52,52,52	0
55	MG	2A	3635	1/1	0.87	0.10	73,73,73,73	0
55	MG	1A	3969	1/1	0.87	0.19	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3269	1/1	0.87	0.10	52,52,52,52	0
55	MG	1a	3091	1/1	0.87	0.22	61,61,61,61	0
55	MG	17	104	1/1	0.87	0.28	37,37,37,37	0
55	MG	1A	4025	1/1	0.87	0.16	63,63,63,63	0
55	MG	1a	3007	1/1	0.87	0.18	68,68,68,68	0
55	MG	1A	3882	1/1	0.87	0.12	45,45,45,45	0
55	MG	1a	3123	1/1	0.87	0.15	72,72,72,72	0
55	MG	1a	3023	1/1	0.87	0.26	63,63,63,63	0
55	MG	2A	3439	1/1	0.87	0.24	75,75,75,75	0
55	MG	2a	3127	1/1	0.87	0.14	60,60,60,60	0
55	MG	1A	3977	1/1	0.87	0.10	37,37,37,37	0
55	MG	1a	3030	1/1	0.87	0.18	50,50,50,50	0
55	MG	2A	3446	1/1	0.87	0.16	56,56,56,56	0
55	MG	2A	3725	1/1	0.87	0.34	40,40,40,40	0
55	MG	2A	3448	1/1	0.87	0.11	52,52,52,52	0
55	MG	2A	3038	1/1	0.87	0.14	62,62,62,62	0
55	MG	1A	3313	1/1	0.87	0.15	39,39,39,39	0
55	MG	1a	3035	1/1	0.87	0.26	68,68,68,68	0
55	MG	1B	219	1/1	0.87	0.17	62,62,62,62	0
55	MG	2A	3055	1/1	0.87	0.32	66,66,66,66	0
55	MG	1a	3146	1/1	0.87	0.23	75,75,75,75	0
55	MG	1A	3982	1/1	0.87	0.20	61,61,61,61	0
55	MG	2a	3188	1/1	0.87	0.17	77,77,77,77	0
55	MG	2A	3234	1/1	0.87	0.15	55,55,55,55	0
55	MG	2A	3241	1/1	0.87	0.17	61,61,61,61	0
55	MG	2A	3076	1/1	0.87	0.19	56,56,56,56	0
55	MG	2A	3082	1/1	0.87	0.17	54,54,54,54	0
55	MG	1A	3615	1/1	0.87	0.19	33,33,33,33	0
55	MG	2A	3503	1/1	0.87	0.15	58,58,58,58	0
57	MPD	2A	3746	8/8	0.87	0.20	47,56,64,69	0
55	MG	1A	3691	1/1	0.88	0.12	60,60,60,60	0
55	MG	1a	3046	1/1	0.88	0.23	66,66,66,66	0
55	MG	1a	3050	1/1	0.88	0.23	59,59,59,59	0
55	MG	1A	3801	1/1	0.88	0.14	63,63,63,63	0
55	MG	1A	3962	1/1	0.88	0.14	60,60,60,60	0
55	MG	2B	203	1/1	0.88	0.23	58,58,58,58	0
55	MG	1A	3807	1/1	0.88	0.09	32,32,32,32	0
55	MG	1A	3606	1/1	0.88	0.11	40,40,40,40	0
55	MG	1A	3609	1/1	0.88	0.13	60,60,60,60	0
55	MG	1A	3278	1/1	0.88	0.12	48,48,48,48	0
55	MG	1A	3973	1/1	0.88	0.14	46,46,46,46	0
55	MG	1A	3817	1/1	0.88	0.18	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2D	305	1/1	0.88	0.44	37,37,37,37	0
55	MG	2A	3452	1/1	0.88	0.12	54,54,54,54	0
55	MG	1a	3069	1/1	0.88	0.22	62,62,62,62	0
55	MG	2A	3460	1/1	0.88	0.11	61,61,61,61	0
55	MG	1a	3177	1/1	0.88	0.15	67,67,67,67	0
55	MG	1A	3280	1/1	0.88	0.12	52,52,52,52	0
55	MG	1A	3014	1/1	0.88	0.29	56,56,56,56	0
55	MG	1G	201	1/1	0.88	0.12	73,73,73,73	0
55	MG	2O	201	1/1	0.88	0.14	51,51,51,51	0
55	MG	2A	3471	1/1	0.88	0.17	71,71,71,71	0
55	MG	2A	3215	1/1	0.88	0.23	58,58,58,58	0
55	MG	1A	3708	1/1	0.88	0.20	48,48,48,48	0
55	MG	25	102	1/1	0.88	0.14	34,34,34,34	0
55	MG	1A	3986	1/1	0.88	0.14	66,66,66,66	0
55	MG	1A	3573	1/1	0.88	0.22	40,40,40,40	0
55	MG	2A	3225	1/1	0.88	0.27	61,61,61,61	0
55	MG	1T	202	1/1	0.88	0.16	63,63,63,63	0
55	MG	1A	3717	1/1	0.88	0.35	26,26,26,26	0
55	MG	1W	201	1/1	0.88	0.20	40,40,40,40	0
55	MG	2A	3231	1/1	0.88	0.14	53,53,53,53	0
55	MG	1a	3205	1/1	0.88	0.15	50,50,50,50	0
55	MG	2A	3507	1/1	0.88	0.12	60,60,60,60	0
55	MG	2A	3238	1/1	0.88	0.23	56,56,56,56	0
55	MG	1A	3441	1/1	0.88	0.16	43,43,43,43	0
55	MG	2a	3057	1/1	0.88	0.24	58,58,58,58	0
55	MG	2a	3059	1/1	0.88	0.19	69,69,69,69	0
55	MG	2A	3050	1/1	0.88	0.11	50,50,50,50	0
55	MG	2A	3054	1/1	0.88	0.21	53,53,53,53	0
55	MG	1a	3215	1/1	0.88	0.22	66,66,66,66	0
55	MG	1a	3099	1/1	0.88	0.26	52,52,52,52	0
55	MG	2A	3253	1/1	0.88	0.34	60,60,60,60	0
55	MG	2A	3256	1/1	0.88	0.21	57,57,57,57	0
55	MG	2A	3062	1/1	0.88	0.16	56,56,56,56	0
55	MG	1A	3721	1/1	0.88	0.17	29,29,29,29	0
55	MG	2A	3071	1/1	0.88	0.34	54,54,54,54	0
55	MG	2A	3075	1/1	0.88	0.15	42,42,42,42	0
55	MG	2A	3536	1/1	0.88	0.15	48,48,48,48	0
55	MG	1A	3998	1/1	0.88	0.11	34,34,34,34	0
55	MG	1A	3447	1/1	0.88	0.20	57,57,57,57	0
55	MG	2A	3547	1/1	0.88	0.12	57,57,57,57	0
55	MG	1A	3258	1/1	0.88	0.17	59,59,59,59	0
55	MG	1a	3119	1/1	0.88	0.19	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3294	1/1	0.88	0.14	60,60,60,60	0
55	MG	1A	3731	1/1	0.88	0.15	43,43,43,43	0
55	MG	1A	3201	1/1	0.88	0.16	50,50,50,50	0
55	MG	1a	3010	1/1	0.88	0.36	66,66,66,66	0
55	MG	2a	3111	1/1	0.88	0.19	63,63,63,63	0
55	MG	2A	3317	1/1	0.88	0.12	44,44,44,44	0
55	MG	2a	3113	1/1	0.88	0.17	66,66,66,66	0
55	MG	1A	3376	1/1	0.88	0.12	65,65,65,65	0
55	MG	1a	3241	1/1	0.88	0.31	64,64,64,64	0
55	MG	2A	3617	1/1	0.88	0.14	33,33,33,33	0
55	MG	2A	3341	1/1	0.88	0.24	60,60,60,60	0
55	MG	1A	3130	1/1	0.88	0.12	43,43,43,43	0
55	MG	1A	3221	1/1	0.88	0.14	59,59,59,59	0
55	MG	2A	3115	1/1	0.88	0.11	51,51,51,51	0
55	MG	2A	3350	1/1	0.88	0.11	43,43,43,43	0
55	MG	2a	3151	1/1	0.88	0.10	73,73,73,73	0
55	MG	1A	3520	1/1	0.88	0.09	19,19,19,19	0
55	MG	1a	3255	1/1	0.88	0.20	69,69,69,69	0
55	MG	1A	3906	1/1	0.88	0.12	58,58,58,58	0
55	MG	1A	3599	1/1	0.88	0.15	49,49,49,49	0
55	MG	2A	3128	1/1	0.88	0.15	50,50,50,50	0
55	MG	2A	3381	1/1	0.88	0.10	28,28,28,28	0
55	MG	1A	3408	1/1	0.88	0.19	72,72,72,72	0
55	MG	1A	3787	1/1	0.88	0.16	27,27,27,27	0
55	MG	2A	3703	1/1	0.88	0.11	64,64,64,64	0
55	MG	2A	3704	1/1	0.88	0.23	61,61,61,61	0
55	MG	2A	3705	1/1	0.88	0.12	58,58,58,58	0
55	MG	1A	3539	1/1	0.88	0.30	25,25,25,25	0
55	MG	2A	3140	1/1	0.88	0.11	64,64,64,64	0
55	MG	1A	3107	1/1	0.88	0.16	43,43,43,43	0
55	MG	2A	3719	1/1	0.88	0.11	57,57,57,57	0
55	MG	2A	3155	1/1	0.88	0.27	54,54,54,54	0
55	MG	1A	3434	1/1	0.89	0.15	43,43,43,43	0
55	MG	1A	3989	1/1	0.89	0.12	48,48,48,48	0
55	MG	2A	3385	1/1	0.89	0.14	43,43,43,43	0
55	MG	2A	3386	1/1	0.89	0.20	41,41,41,41	0
55	MG	2A	3715	1/1	0.89	0.15	60,60,60,60	0
55	MG	2A	3124	1/1	0.89	0.12	70,70,70,70	0
55	MG	2A	3390	1/1	0.89	0.12	42,42,42,42	0
55	MG	2A	3126	1/1	0.89	0.35	37,37,37,37	0
55	MG	1A	3990	1/1	0.89	0.12	22,22,22,22	0
55	MG	1A	3848	1/1	0.89	0.13	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1a	3128	1/1	0.89	0.10	64,64,64,64	0
55	MG	1a	3131	1/1	0.89	0.14	63,63,63,63	0
55	MG	2A	3744	1/1	0.89	0.10	54,54,54,54	0
55	MG	1A	3634	1/1	0.89	0.17	60,60,60,60	0
55	MG	1A	3637	1/1	0.89	0.13	45,45,45,45	0
55	MG	2A	3152	1/1	0.89	0.21	50,50,50,50	0
55	MG	1A	3572	1/1	0.89	0.16	51,51,51,51	0
55	MG	1a	3265	1/1	0.89	0.15	59,59,59,59	0
55	MG	2A	3433	1/1	0.89	0.18	57,57,57,57	0
55	MG	1A	3857	1/1	0.89	0.19	54,54,54,54	0
55	MG	1A	3438	1/1	0.89	0.25	54,54,54,54	0
55	MG	1A	3257	1/1	0.89	0.21	72,72,72,72	0
55	MG	1a	3274	1/1	0.89	0.14	75,75,75,75	0
55	MG	1a	3141	1/1	0.89	0.20	69,69,69,69	0
55	MG	1A	3445	1/1	0.89	0.14	35,35,35,35	0
55	MG	1a	3015	1/1	0.89	0.19	72,72,72,72	0
55	MG	2A	3457	1/1	0.89	0.14	64,64,64,64	0
55	MG	1A	3045	1/1	0.89	0.26	44,44,44,44	0
55	MG	1A	3888	1/1	0.89	0.07	23,23,23,23	0
55	MG	2A	3195	1/1	0.89	0.26	61,61,61,61	0
55	MG	1A	3367	1/1	0.89	0.08	41,41,41,41	0
55	MG	2Q	204	1/1	0.89	0.10	66,66,66,66	0
55	MG	2T	201	1/1	0.89	0.17	51,51,51,51	0
55	MG	2T	203	1/1	0.89	0.11	60,60,60,60	0
55	MG	2A	3199	1/1	0.89	0.19	66,66,66,66	0
55	MG	2A	3468	1/1	0.89	0.16	62,62,62,62	0
55	MG	2A	3469	1/1	0.89	0.15	57,57,57,57	0
55	MG	1A	3758	1/1	0.89	0.20	46,46,46,46	0
55	MG	2a	3006	1/1	0.89	0.25	61,61,61,61	0
55	MG	1A	3662	1/1	0.89	0.13	58,58,58,58	0
55	MG	1a	3157	1/1	0.89	0.18	63,63,63,63	0
55	MG	2A	3206	1/1	0.89	0.21	55,55,55,55	0
55	MG	2A	3207	1/1	0.89	0.21	51,51,51,51	0
55	MG	2A	3210	1/1	0.89	0.16	60,60,60,60	0
55	MG	2a	3038	1/1	0.89	0.13	60,60,60,60	0
55	MG	2A	3484	1/1	0.89	0.10	56,56,56,56	0
55	MG	2a	3041	1/1	0.89	0.28	58,58,58,58	0
55	MG	1A	3375	1/1	0.89	0.13	42,42,42,42	0
55	MG	1A	3495	1/1	0.89	0.11	47,47,47,47	0
55	MG	1A	4024	1/1	0.89	0.17	55,55,55,55	0
55	MG	2a	3053	1/1	0.89	0.34	57,57,57,57	0
55	MG	2A	3501	1/1	0.89	0.23	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3677	1/1	0.89	0.12	56,56,56,56	0
55	MG	2A	3222	1/1	0.89	0.18	58,58,58,58	0
55	MG	1B	202	1/1	0.89	0.27	64,64,64,64	0
55	MG	2a	3061	1/1	0.89	0.17	52,52,52,52	0
55	MG	1B	206	1/1	0.89	0.21	56,56,56,56	0
55	MG	1y	202	1/1	0.89	0.10	61,61,61,61	0
55	MG	1A	3498	1/1	0.89	0.08	60,60,60,60	0
55	MG	1A	3942	1/1	0.89	0.15	42,42,42,42	0
55	MG	1a	3052	1/1	0.89	0.26	60,60,60,60	0
55	MG	2A	3016	1/1	0.89	0.25	64,64,64,64	0
55	MG	1A	3683	1/1	0.89	0.09	57,57,57,57	0
55	MG	2A	3236	1/1	0.89	0.24	61,61,61,61	0
55	MG	1A	3294	1/1	0.89	0.14	70,70,70,70	0
55	MG	1A	3957	1/1	0.89	0.19	19,19,19,19	0
55	MG	1a	3178	1/1	0.89	0.14	70,70,70,70	0
55	MG	2A	3040	1/1	0.89	0.17	55,55,55,55	0
55	MG	1A	3800	1/1	0.89	0.20	66,66,66,66	0
55	MG	1a	3180	1/1	0.89	0.12	73,73,73,73	0
55	MG	2a	3086	1/1	0.89	0.10	70,70,70,70	0
55	MG	2a	3088	1/1	0.89	0.14	60,60,60,60	0
55	MG	1A	3263	1/1	0.89	0.12	70,70,70,70	0
55	MG	1A	3204	1/1	0.89	0.20	62,62,62,62	0
55	MG	1A	3086	1/1	0.89	0.17	57,57,57,57	0
55	MG	1A	3968	1/1	0.89	0.18	52,52,52,52	0
55	MG	2A	3056	1/1	0.89	0.39	67,67,67,67	0
55	MG	1A	3522	1/1	0.89	0.10	51,51,51,51	0
55	MG	2A	3567	1/1	0.89	0.11	65,65,65,65	0
55	MG	1a	3074	1/1	0.89	0.13	61,61,61,61	0
55	MG	1A	3528	1/1	0.89	0.16	52,52,52,52	0
55	MG	1F	311	1/1	0.89	0.22	49,49,49,49	0
55	MG	1F	315	1/1	0.89	0.25	34,34,34,34	0
55	MG	2a	3125	1/1	0.89	0.22	68,68,68,68	0
55	MG	1F	316	1/1	0.89	0.10	38,38,38,38	0
55	MG	1a	3211	1/1	0.89	0.13	71,71,71,71	0
55	MG	2A	3608	1/1	0.89	0.10	29,29,29,29	0
55	MG	2A	3612	1/1	0.89	0.11	52,52,52,52	0
55	MG	2a	3141	1/1	0.89	0.10	70,70,70,70	0
55	MG	2A	3303	1/1	0.89	0.12	55,55,55,55	0
55	MG	1A	3169	1/1	0.89	0.10	48,48,48,48	0
55	MG	1A	3415	1/1	0.89	0.10	46,46,46,46	0
55	MG	1A	3231	1/1	0.89	0.18	32,32,32,32	0
55	MG	2A	3096	1/1	0.89	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
55	MG	1a	3219	1/1	0.89	0.20	63,63,63,63	0
55	MG	2A	3638	1/1	0.89	0.14	56,56,56,56	0
55	MG	1H	202	1/1	0.89	0.11	49,49,49,49	0
55	MG	2A	3640	1/1	0.89	0.10	70,70,70,70	0
55	MG	2a	3180	1/1	0.89	0.11	63,63,63,63	0
55	MG	2A	3663	1/1	0.89	0.10	50,50,50,50	0
55	MG	2a	3184	1/1	0.89	0.11	67,67,67,67	0
55	MG	2A	3099	1/1	0.89	0.18	56,56,56,56	0
55	MG	1A	3195	1/1	0.89	0.13	48,48,48,48	0
55	MG	2a	3193	1/1	0.89	0.27	67,67,67,67	0
55	MG	1a	3097	1/1	0.89	0.20	64,64,64,64	0
55	MG	1A	3714	1/1	0.89	0.21	38,38,38,38	0
55	MG	1A	3200	1/1	0.89	0.13	39,39,39,39	0
55	MG	1T	203	1/1	0.89	0.09	53,53,53,53	0
55	MG	1a	3233	1/1	0.89	0.11	63,63,63,63	0
55	MG	1a	3235	1/1	0.89	0.10	71,71,71,71	0
55	MG	1A	3517	1/1	0.90	0.15	50,50,50,50	0
55	MG	1A	3371	1/1	0.90	0.10	47,47,47,47	0
55	MG	1A	3795	1/1	0.90	0.11	56,56,56,56	0
55	MG	1A	3443	1/1	0.90	0.13	44,44,44,44	0
55	MG	1A	3055	1/1	0.90	0.12	41,41,41,41	0
55	MG	2A	3478	1/1	0.90	0.12	41,41,41,41	0
55	MG	2D	311	1/1	0.90	0.07	21,21,21,21	0
55	MG	1A	3202	1/1	0.90	0.12	43,43,43,43	0
55	MG	2E	305	1/1	0.90	0.10	25,25,25,25	0
55	MG	2G	201	1/1	0.90	0.12	85,85,85,85	0
55	MG	1A	3533	1/1	0.90	0.11	26,26,26,26	0
55	MG	1A	3911	1/1	0.90	0.07	15,15,15,15	0
55	MG	1A	3716	1/1	0.90	0.16	28,28,28,28	0
55	MG	1A	3925	1/1	0.90	0.14	55,55,55,55	0
55	MG	2A	3260	1/1	0.90	0.12	43,43,43,43	0
55	MG	2A	3498	1/1	0.90	0.12	63,63,63,63	0
55	MG	2R	3302	1/1	0.90	0.20	51,51,51,51	0
55	MG	1A	3222	1/1	0.90	0.12	49,49,49,49	0
55	MG	1A	3538	1/1	0.90	0.17	59,59,59,59	0
55	MG	2A	3112	1/1	0.90	0.37	44,44,44,44	0
55	MG	1a	3271	1/1	0.90	0.18	58,58,58,58	0
55	MG	1A	3934	1/1	0.90	0.25	54,54,54,54	0
55	MG	2a	3004	1/1	0.90	0.11	56,56,56,56	0
55	MG	2A	3277	1/1	0.90	0.20	55,55,55,55	0
55	MG	1A	3654	1/1	0.90	0.14	44,44,44,44	0
55	MG	2a	3010	1/1	0.90	0.43	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3282	1/1	0.90	0.23	52,52,52,52	0
55	MG	1A	3449	1/1	0.90	0.11	36,36,36,36	0
55	MG	1a	3165	1/1	0.90	0.15	71,71,71,71	0
55	MG	2A	3518	1/1	0.90	0.10	29,29,29,29	0
55	MG	2a	3026	1/1	0.90	0.21	51,51,51,51	0
55	MG	2a	3030	1/1	0.90	0.19	52,52,52,52	0
55	MG	1A	3424	1/1	0.90	0.12	29,29,29,29	0
55	MG	1A	3955	1/1	0.90	0.11	25,25,25,25	0
55	MG	2A	3302	1/1	0.90	0.15	58,58,58,58	0
55	MG	2a	3040	1/1	0.90	0.23	61,61,61,61	0
55	MG	10	105	1/1	0.90	0.13	51,51,51,51	0
55	MG	2a	3043	1/1	0.90	0.30	61,61,61,61	0
55	MG	2A	3305	1/1	0.90	0.15	43,43,43,43	0
55	MG	1d	303	1/1	0.90	0.09	69,69,69,69	0
55	MG	2a	3049	1/1	0.90	0.41	66,66,66,66	0
55	MG	2a	3050	1/1	0.90	0.33	73,73,73,73	0
55	MG	2A	3312	1/1	0.90	0.21	53,53,53,53	0
55	MG	1A	3552	1/1	0.90	0.24	34,34,34,34	0
55	MG	1A	3831	1/1	0.90	0.18	32,32,32,32	0
55	MG	11	101	1/1	0.90	0.48	46,46,46,46	0
55	MG	1A	3464	1/1	0.90	0.12	44,44,44,44	0
55	MG	1g	3102	1/1	0.90	0.16	56,56,56,56	0
55	MG	11	105	1/1	0.90	0.10	39,39,39,39	0
55	MG	1A	3561	1/1	0.90	0.15	56,56,56,56	0
55	MG	2A	3559	1/1	0.90	0.14	60,60,60,60	0
55	MG	13	103	1/1	0.90	0.18	43,43,43,43	0
55	MG	2A	3171	1/1	0.90	0.18	61,61,61,61	0
55	MG	1a	3181	1/1	0.90	0.11	67,67,67,67	0
55	MG	15	106	1/1	0.90	0.16	40,40,40,40	0
55	MG	1A	3366	1/1	0.90	0.18	60,60,60,60	0
55	MG	1a	3093	1/1	0.90	0.18	51,51,51,51	0
55	MG	2A	3185	1/1	0.90	0.12	57,57,57,57	0
55	MG	2A	3372	1/1	0.90	0.13	63,63,63,63	0
55	MG	1a	3190	1/1	0.90	0.20	55,55,55,55	0
55	MG	1a	3191	1/1	0.90	0.11	59,59,59,59	0
55	MG	1a	3001	1/1	0.90	0.09	68,68,68,68	0
55	MG	2A	3629	1/1	0.90	0.13	36,36,36,36	0
55	MG	1A	3967	1/1	0.90	0.18	59,59,59,59	0
55	MG	2A	3194	1/1	0.90	0.17	59,59,59,59	0
55	MG	2A	3634	1/1	0.90	0.09	66,66,66,66	0
55	MG	2A	3393	1/1	0.90	0.26	67,67,67,67	0
55	MG	2A	3396	1/1	0.90	0.21	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1a	3102	1/1	0.90	0.14	54,54,54,54	0
55	MG	1a	3103	1/1	0.90	0.17	66,66,66,66	0
55	MG	2a	3109	1/1	0.90	0.14	58,58,58,58	0
55	MG	2A	3035	1/1	0.90	0.24	60,60,60,60	0
55	MG	2A	3201	1/1	0.90	0.13	48,48,48,48	0
55	MG	1a	3005	1/1	0.90	0.18	50,50,50,50	0
55	MG	2A	3421	1/1	0.90	0.09	37,37,37,37	0
55	MG	1B	208	1/1	0.90	0.13	52,52,52,52	0
55	MG	2A	3424	1/1	0.90	0.14	52,52,52,52	0
55	MG	1a	3111	1/1	0.90	0.18	51,51,51,51	0
55	MG	1A	3405	1/1	0.90	0.15	44,44,44,44	0
55	MG	1A	3505	1/1	0.90	0.09	41,41,41,41	0
55	MG	2a	3129	1/1	0.90	0.12	48,48,48,48	0
55	MG	1a	3117	1/1	0.90	0.16	63,63,63,63	0
55	MG	1a	3013	1/1	0.90	0.17	63,63,63,63	0
55	MG	1A	3688	1/1	0.90	0.13	32,32,32,32	0
55	MG	1A	3435	1/1	0.90	0.10	48,48,48,48	0
55	MG	1A	3769	1/1	0.90	0.09	51,51,51,51	0
55	MG	2A	3217	1/1	0.90	0.33	61,61,61,61	0
55	MG	2A	3218	1/1	0.90	0.16	60,60,60,60	0
55	MG	2A	3219	1/1	0.90	0.14	55,55,55,55	0
55	MG	2A	3058	1/1	0.90	0.39	64,64,64,64	0
55	MG	2A	3456	1/1	0.90	0.27	52,52,52,52	0
55	MG	1A	3630	1/1	0.90	0.12	48,48,48,48	0
55	MG	2A	3730	1/1	0.90	0.14	68,68,68,68	0
55	MG	1a	3133	1/1	0.90	0.24	51,51,51,51	0
55	MG	1A	3870	1/1	0.90	0.10	53,53,53,53	0
55	MG	2A	3741	1/1	0.90	0.11	57,57,57,57	0
55	MG	1A	3011	1/1	0.90	0.17	56,56,56,56	0
55	MG	2A	3462	1/1	0.90	0.12	36,36,36,36	0
55	MG	1D	314	1/1	0.90	0.15	53,53,53,53	0
55	MG	2A	3465	1/1	0.90	0.14	49,49,49,49	0
55	MG	2A	3466	1/1	0.90	0.11	60,60,60,60	0
55	MG	1a	3038	1/1	0.90	0.48	70,70,70,70	0
55	MG	2B	208	1/1	0.90	0.12	74,74,74,74	0
55	MG	2y	201	1/1	0.90	0.14	82,82,82,82	0
55	MG	2A	3080	1/1	0.90	0.11	48,48,48,48	0
55	MG	2B	213	1/1	0.90	0.20	70,70,70,70	0
55	MG	2A	3271	1/1	0.91	0.14	40,40,40,40	0
55	MG	1B	203	1/1	0.91	0.38	63,63,63,63	0
55	MG	1A	3947	1/1	0.91	0.08	27,27,27,27	0
55	MG	2E	307	1/1	0.91	0.16	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3950	1/1	0.91	0.14	51,51,51,51	0
55	MG	1a	3017	1/1	0.91	0.17	60,60,60,60	0
55	MG	2A	3290	1/1	0.91	0.17	54,54,54,54	0
55	MG	1a	3245	1/1	0.91	0.13	58,58,58,58	0
55	MG	1a	3021	1/1	0.91	0.10	52,52,52,52	0
55	MG	1a	3022	1/1	0.91	0.17	54,54,54,54	0
55	MG	2Q	202	1/1	0.91	0.15	48,48,48,48	0
55	MG	1B	210	1/1	0.91	0.16	54,54,54,54	0
55	MG	1A	3457	1/1	0.91	0.12	54,54,54,54	0
55	MG	1A	3816	1/1	0.91	0.17	30,30,30,30	0
55	MG	2A	3520	1/1	0.91	0.12	56,56,56,56	0
55	MG	1A	3389	1/1	0.91	0.14	40,40,40,40	0
55	MG	1a	3266	1/1	0.91	0.10	74,74,74,74	0
55	MG	1a	3268	1/1	0.91	0.19	70,70,70,70	0
55	MG	28	102	1/1	0.91	0.21	50,50,50,50	0
55	MG	2a	3002	1/1	0.91	0.16	45,45,45,45	0
55	MG	2A	3529	1/1	0.91	0.12	61,61,61,61	0
55	MG	1a	3034	1/1	0.91	0.07	42,42,42,42	0
55	MG	1A	3729	1/1	0.91	0.14	34,34,34,34	0
55	MG	2a	3007	1/1	0.91	0.13	63,63,63,63	0
55	MG	2a	3009	1/1	0.91	0.17	57,57,57,57	0
55	MG	1a	3147	1/1	0.91	0.21	70,70,70,70	0
55	MG	2A	3330	1/1	0.91	0.13	56,56,56,56	0
55	MG	1A	3616	1/1	0.91	0.11	40,40,40,40	0
55	MG	2a	3014	1/1	0.91	0.30	62,62,62,62	0
55	MG	2a	3017	1/1	0.91	0.25	63,63,63,63	0
55	MG	1A	3197	1/1	0.91	0.26	49,49,49,49	0
55	MG	1A	3735	1/1	0.91	0.07	30,30,30,30	0
55	MG	2A	3542	1/1	0.91	0.11	36,36,36,36	0
55	MG	2a	3028	1/1	0.91	0.22	51,51,51,51	0
55	MG	1A	3486	1/1	0.91	0.09	19,19,19,19	0
55	MG	2a	3031	1/1	0.91	0.23	56,56,56,56	0
55	MG	1A	3837	1/1	0.91	0.13	50,50,50,50	0
55	MG	2a	3035	1/1	0.91	0.26	60,60,60,60	0
55	MG	2a	3037	1/1	0.91	0.13	59,59,59,59	0
55	MG	1A	3746	1/1	0.91	0.21	54,54,54,54	0
55	MG	1A	3750	1/1	0.91	0.13	54,54,54,54	0
55	MG	1A	3622	1/1	0.91	0.11	17,17,17,17	0
55	MG	2A	3560	1/1	0.91	0.12	69,69,69,69	0
55	MG	1A	3535	1/1	0.91	0.15	47,47,47,47	0
55	MG	2a	3045	1/1	0.91	0.14	69,69,69,69	0
55	MG	2A	3366	1/1	0.91	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
55	MG	1e	202	1/1	0.91	0.25	62,62,62,62	0
55	MG	2A	3172	1/1	0.91	0.26	63,63,63,63	0
55	MG	1A	3755	1/1	0.91	0.09	23,23,23,23	0
55	MG	1A	3188	1/1	0.91	0.12	53,53,53,53	0
55	MG	2A	3384	1/1	0.91	0.11	48,48,48,48	0
55	MG	2a	3054	1/1	0.91	0.17	53,53,53,53	0
55	MG	1a	3060	1/1	0.91	0.27	65,65,65,65	0
55	MG	1g	3101	1/1	0.91	0.27	57,57,57,57	0
55	MG	1A	3440	1/1	0.91	0.14	48,48,48,48	0
55	MG	2A	3622	1/1	0.91	0.10	65,65,65,65	0
55	MG	2A	3388	1/1	0.91	0.13	35,35,35,35	0
55	MG	2A	3628	1/1	0.91	0.12	30,30,30,30	0
55	MG	1A	3984	1/1	0.91	0.12	54,54,54,54	0
55	MG	2A	3630	1/1	0.91	0.11	52,52,52,52	0
55	MG	1l	201	1/1	0.91	0.13	54,54,54,54	0
55	MG	1A	3540	1/1	0.91	0.19	41,41,41,41	0
55	MG	1A	3056	1/1	0.91	0.16	49,49,49,49	0
55	MG	1A	3988	1/1	0.91	0.12	51,51,51,51	0
55	MG	1A	3877	1/1	0.91	0.11	65,65,65,65	0
55	MG	1N	204	1/1	0.91	0.11	62,62,62,62	0
55	MG	1a	3070	1/1	0.91	0.20	48,48,48,48	0
55	MG	1a	3072	1/1	0.91	0.27	59,59,59,59	0
55	MG	2a	3077	1/1	0.91	0.13	53,53,53,53	0
55	MG	2A	3661	1/1	0.91	0.10	89,89,89,89	0
55	MG	1z	101	1/1	0.91	0.22	72,72,72,72	0
55	MG	2A	3002	1/1	0.91	0.12	43,43,43,43	0
55	MG	1P	205	1/1	0.91	0.08	59,59,59,59	0
55	MG	1A	3768	1/1	0.91	0.09	25,25,25,25	0
55	MG	1A	3551	1/1	0.91	0.28	59,59,59,59	0
55	MG	2A	3017	1/1	0.91	0.23	45,45,45,45	0
55	MG	1A	3596	1/1	0.91	0.17	51,51,51,51	0
55	MG	2a	3097	1/1	0.91	0.11	35,35,35,35	0
55	MG	2a	3106	1/1	0.91	0.15	65,65,65,65	0
55	MG	1A	3779	1/1	0.91	0.08	29,29,29,29	0
55	MG	2A	3032	1/1	0.91	0.24	57,57,57,57	0
55	MG	1A	3891	1/1	0.91	0.10	42,42,42,42	0
55	MG	10	104	1/1	0.91	0.10	47,47,47,47	0
55	MG	1A	3781	1/1	0.91	0.11	44,44,44,44	0
55	MG	2A	3711	1/1	0.91	0.21	58,58,58,58	0
55	MG	2A	3712	1/1	0.91	0.09	43,43,43,43	0
55	MG	2a	3118	1/1	0.91	0.14	59,59,59,59	0
55	MG	2a	3121	1/1	0.91	0.15	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2a	3122	1/1	0.91	0.10	56,56,56,56	0
55	MG	1A	3641	1/1	0.91	0.10	18,18,18,18	0
55	MG	2A	3043	1/1	0.91	0.14	30,30,30,30	0
55	MG	1a	3087	1/1	0.91	0.21	60,60,60,60	0
55	MG	2A	3718	1/1	0.91	0.12	51,51,51,51	0
55	MG	1a	3088	1/1	0.91	0.12	45,45,45,45	0
55	MG	1A	3896	1/1	0.91	0.19	36,36,36,36	0
55	MG	2a	3133	1/1	0.91	0.11	66,66,66,66	0
55	MG	1A	3707	1/1	0.91	0.07	32,32,32,32	0
55	MG	2A	3727	1/1	0.91	0.11	59,59,59,59	0
55	MG	1A	3224	1/1	0.91	0.09	47,47,47,47	0
55	MG	1a	3094	1/1	0.91	0.10	58,58,58,58	0
55	MG	1a	3095	1/1	0.91	0.12	48,48,48,48	0
55	MG	2a	3153	1/1	0.91	0.12	48,48,48,48	0
55	MG	1A	3175	1/1	0.91	0.18	45,45,45,45	0
55	MG	1A	3712	1/1	0.91	0.16	59,59,59,59	0
55	MG	2A	3743	1/1	0.91	0.28	58,58,58,58	0
55	MG	2a	3163	1/1	0.91	0.13	61,61,61,61	0
55	MG	1A	3713	1/1	0.91	0.16	42,42,42,42	0
55	MG	2a	3167	1/1	0.91	0.18	49,49,49,49	0
55	MG	1A	3034	1/1	0.91	0.12	37,37,37,37	0
55	MG	2B	202	1/1	0.91	0.20	58,58,58,58	0
55	MG	2A	3070	1/1	0.91	0.26	50,50,50,50	0
55	MG	1A	3802	1/1	0.91	0.07	78,78,78,78	0
55	MG	17	106	1/1	0.91	0.13	50,50,50,50	0
55	MG	1a	3225	1/1	0.91	0.18	58,58,58,58	0
55	MG	2a	3187	1/1	0.91	0.15	69,69,69,69	0
55	MG	1A	3380	1/1	0.91	0.11	37,37,37,37	0
55	MG	1A	3211	1/1	0.91	0.27	36,36,36,36	0
55	MG	2A	3259	1/1	0.91	0.10	54,54,54,54	0
55	MG	2B	214	1/1	0.91	0.08	81,81,81,81	0
55	MG	1A	3608	1/1	0.91	0.27	29,29,29,29	0
55	MG	2A	3086	1/1	0.91	0.13	47,47,47,47	0
55	MG	2n	101	1/1	0.91	0.21	67,67,67,67	0
55	MG	1B	201	1/1	0.91	0.16	50,50,50,50	0
55	MG	1A	3945	1/1	0.91	0.08	55,55,55,55	0
55	MG	2A	3493	1/1	0.91	0.13	57,57,57,57	0
55	MG	1a	3121	1/1	0.91	0.17	60,60,60,60	0
55	MG	1A	3791	1/1	0.92	0.09	26,26,26,26	0
55	MG	1A	3355	1/1	0.92	0.07	17,17,17,17	0
55	MG	1A	3793	1/1	0.92	0.15	53,53,53,53	0
55	MG	1f	201	1/1	0.92	0.15	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3200	1/1	0.92	0.22	46,46,46,46	0
55	MG	1A	4026	1/1	0.92	0.11	50,50,50,50	0
55	MG	1A	3436	1/1	0.92	0.11	51,51,51,51	0
55	MG	1a	3027	1/1	0.92	0.27	56,56,56,56	0
55	MG	1A	3213	1/1	0.92	0.11	35,35,35,35	0
55	MG	2A	3463	1/1	0.92	0.22	66,66,66,66	0
55	MG	2D	304	1/1	0.92	0.25	44,44,44,44	0
55	MG	1A	3937	1/1	0.92	0.12	58,58,58,58	0
55	MG	1m	202	1/1	0.92	0.23	59,59,59,59	0
55	MG	1a	3156	1/1	0.92	0.13	55,55,55,55	0
55	MG	1A	3363	1/1	0.92	0.07	40,40,40,40	0
55	MG	1A	3943	1/1	0.92	0.08	53,53,53,53	0
55	MG	2D	312	1/1	0.92	0.16	62,62,62,62	0
55	MG	1A	3702	1/1	0.92	0.14	53,53,53,53	0
55	MG	1A	3033	1/1	0.92	0.09	48,48,48,48	0
55	MG	1A	3805	1/1	0.92	0.18	52,52,52,52	0
55	MG	2F	302	1/1	0.92	0.11	42,42,42,42	0
55	MG	1B	217	1/1	0.92	0.16	47,47,47,47	0
55	MG	1A	3141	1/1	0.92	0.18	48,48,48,48	0
55	MG	2A	3221	1/1	0.92	0.23	51,51,51,51	0
55	MG	1A	3618	1/1	0.92	0.23	42,42,42,42	0
55	MG	2A	3481	1/1	0.92	0.09	42,42,42,42	0
55	MG	1a	3044	1/1	0.92	0.20	53,53,53,53	0
55	MG	1A	3167	1/1	0.92	0.13	42,42,42,42	0
55	MG	1a	3169	1/1	0.92	0.12	68,68,68,68	0
55	MG	1A	3373	1/1	0.92	0.15	42,42,42,42	0
55	MG	1a	3171	1/1	0.92	0.16	62,62,62,62	0
55	MG	1A	3959	1/1	0.92	0.10	49,49,49,49	0
55	MG	2V	201	1/1	0.92	0.17	51,51,51,51	0
55	MG	1D	311	1/1	0.92	0.24	35,35,35,35	0
55	MG	1D	312	1/1	0.92	0.36	34,34,34,34	0
55	MG	2A	3235	1/1	0.92	0.13	55,55,55,55	0
55	MG	1a	3055	1/1	0.92	0.29	52,52,52,52	0
55	MG	2A	3039	1/1	0.92	0.19	48,48,48,48	0
55	MG	1a	3056	1/1	0.92	0.26	61,61,61,61	0
55	MG	2A	3508	1/1	0.92	0.07	62,62,62,62	0
55	MG	2A	3042	1/1	0.92	0.11	40,40,40,40	0
55	MG	1A	3556	1/1	0.92	0.15	47,47,47,47	0
55	MG	1A	3629	1/1	0.92	0.13	51,51,51,51	0
55	MG	2A	3248	1/1	0.92	0.11	58,58,58,58	0
55	MG	1A	3557	1/1	0.92	0.12	44,44,44,44	0
55	MG	1A	3168	1/1	0.92	0.09	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3519	1/1	0.92	0.12	49,49,49,49	0
55	MG	1A	3826	1/1	0.92	0.20	35,35,35,35	0
55	MG	1A	3048	1/1	0.92	0.24	37,37,37,37	0
55	MG	2a	3023	1/1	0.92	0.11	45,45,45,45	0
55	MG	2a	3024	1/1	0.92	0.36	61,61,61,61	0
55	MG	2A	3524	1/1	0.92	0.21	51,51,51,51	0
55	MG	2A	3525	1/1	0.92	0.09	39,39,39,39	0
55	MG	1A	3455	1/1	0.92	0.10	47,47,47,47	0
55	MG	2a	3029	1/1	0.92	0.12	52,52,52,52	0
55	MG	1A	3638	1/1	0.92	0.16	39,39,39,39	0
55	MG	2A	3057	1/1	0.92	0.23	57,57,57,57	0
55	MG	2A	3530	1/1	0.92	0.07	43,43,43,43	0
55	MG	1A	3235	1/1	0.92	0.39	36,36,36,36	0
55	MG	1a	3196	1/1	0.92	0.12	63,63,63,63	0
55	MG	1A	3569	1/1	0.92	0.15	40,40,40,40	0
55	MG	1F	320	1/1	0.92	0.09	47,47,47,47	0
55	MG	2A	3067	1/1	0.92	0.10	40,40,40,40	0
55	MG	1A	3378	1/1	0.92	0.08	27,27,27,27	0
55	MG	1G	203	1/1	0.92	0.12	63,63,63,63	0
55	MG	1A	3293	1/1	0.92	0.12	46,46,46,46	0
55	MG	1a	3077	1/1	0.92	0.22	53,53,53,53	0
55	MG	2a	3047	1/1	0.92	0.22	51,51,51,51	0
55	MG	1a	3212	1/1	0.92	0.09	60,60,60,60	0
55	MG	2A	3549	1/1	0.92	0.10	64,64,64,64	0
55	MG	1A	3171	1/1	0.92	0.16	37,37,37,37	0
55	MG	2A	3553	1/1	0.92	0.08	59,59,59,59	0
55	MG	2A	3554	1/1	0.92	0.09	62,62,62,62	0
55	MG	1A	3983	1/1	0.92	0.13	51,51,51,51	0
55	MG	2A	3557	1/1	0.92	0.28	42,42,42,42	0
55	MG	1a	3080	1/1	0.92	0.42	66,66,66,66	0
55	MG	1A	3492	1/1	0.92	0.08	30,30,30,30	0
55	MG	2A	3566	1/1	0.92	0.09	63,63,63,63	0
55	MG	2A	3092	1/1	0.92	0.12	63,63,63,63	0
55	MG	2A	3568	1/1	0.92	0.13	64,64,64,64	0
55	MG	2A	3569	1/1	0.92	0.10	61,61,61,61	0
55	MG	2A	3572	1/1	0.92	0.16	49,49,49,49	0
55	MG	1A	3038	1/1	0.92	0.10	48,48,48,48	0
55	MG	1R	202	1/1	0.92	0.29	30,30,30,30	0
55	MG	1R	203	1/1	0.92	0.12	48,48,48,48	0
55	MG	2A	3581	1/1	0.92	0.12	68,68,68,68	0
55	MG	2A	3315	1/1	0.92	0.13	48,48,48,48	0
55	MG	2A	3316	1/1	0.92	0.12	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3855	1/1	0.92	0.11	37,37,37,37	0
55	MG	2a	3073	1/1	0.92	0.11	69,69,69,69	0
55	MG	2A	3594	1/1	0.92	0.13	51,51,51,51	0
55	MG	1T	201	1/1	0.92	0.18	45,45,45,45	0
55	MG	2A	3610	1/1	0.92	0.10	63,63,63,63	0
55	MG	1a	3089	1/1	0.92	0.19	56,56,56,56	0
55	MG	2A	3615	1/1	0.92	0.14	40,40,40,40	0
55	MG	2A	3335	1/1	0.92	0.10	26,26,26,26	0
55	MG	2A	3621	1/1	0.92	0.11	35,35,35,35	0
55	MG	1A	3397	1/1	0.92	0.08	40,40,40,40	0
55	MG	2a	3090	1/1	0.92	0.39	55,55,55,55	0
55	MG	1A	3655	1/1	0.92	0.16	56,56,56,56	0
55	MG	2a	3092	1/1	0.92	0.17	52,52,52,52	0
55	MG	1A	3865	1/1	0.92	0.08	55,55,55,55	0
55	MG	1A	3255	1/1	0.92	0.15	37,37,37,37	0
55	MG	2a	3104	1/1	0.92	0.14	47,47,47,47	0
55	MG	1Z	301	1/1	0.92	0.10	51,51,51,51	0
55	MG	1A	3873	1/1	0.92	0.10	41,41,41,41	0
55	MG	2A	3354	1/1	0.92	0.11	44,44,44,44	0
55	MG	1A	3996	1/1	0.92	0.09	19,19,19,19	0
55	MG	1A	3127	1/1	0.92	0.10	53,53,53,53	0
55	MG	1A	3183	1/1	0.92	0.48	37,37,37,37	0
55	MG	1A	3671	1/1	0.92	0.08	48,48,48,48	0
55	MG	11	102	1/1	0.92	0.12	46,46,46,46	0
55	MG	1A	3673	1/1	0.92	0.12	47,47,47,47	0
55	MG	2A	3642	1/1	0.92	0.12	62,62,62,62	0
55	MG	2A	3648	1/1	0.92	0.10	73,73,73,73	0
55	MG	2A	3652	1/1	0.92	0.09	75,75,75,75	0
55	MG	2A	3659	1/1	0.92	0.15	51,51,51,51	0
55	MG	1a	3257	1/1	0.92	0.10	47,47,47,47	0
55	MG	2A	3373	1/1	0.92	0.12	45,45,45,45	0
55	MG	2A	3132	1/1	0.92	0.15	56,56,56,56	0
55	MG	1a	3259	1/1	0.92	0.09	51,51,51,51	0
55	MG	2a	3131	1/1	0.92	0.10	59,59,59,59	0
55	MG	2A	3672	1/1	0.92	0.10	29,29,29,29	0
55	MG	1a	3261	1/1	0.92	0.08	36,36,36,36	0
55	MG	1A	4001	1/1	0.92	0.23	37,37,37,37	0
55	MG	1A	3767	1/1	0.92	0.12	42,42,42,42	0
55	MG	1A	4003	1/1	0.92	0.12	59,59,59,59	0
55	MG	1A	3259	1/1	0.92	0.09	43,43,43,43	0
55	MG	1A	4006	1/1	0.92	0.17	55,55,55,55	0
55	MG	17	105	1/1	0.92	0.17	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3163	1/1	0.92	0.14	50,50,50,50	0
55	MG	2A	3165	1/1	0.92	0.20	46,46,46,46	0
55	MG	2A	3413	1/1	0.92	0.11	61,61,61,61	0
55	MG	1A	3315	1/1	0.92	0.11	38,38,38,38	0
55	MG	2A	3416	1/1	0.92	0.14	56,56,56,56	0
55	MG	2a	3169	1/1	0.92	0.11	67,67,67,67	0
55	MG	1a	3129	1/1	0.92	0.24	51,51,51,51	0
55	MG	1A	3323	1/1	0.92	0.12	32,32,32,32	0
55	MG	2a	3174	1/1	0.92	0.11	55,55,55,55	0
55	MG	1A	3261	1/1	0.92	0.10	31,31,31,31	0
55	MG	2A	3422	1/1	0.92	0.14	53,53,53,53	0
55	MG	2A	3175	1/1	0.92	0.16	60,60,60,60	0
55	MG	2A	3180	1/1	0.92	0.10	44,44,44,44	0
55	MG	2A	3425	1/1	0.92	0.08	24,24,24,24	0
55	MG	1a	3004	1/1	0.92	0.13	57,57,57,57	0
55	MG	2A	3182	1/1	0.92	0.19	54,54,54,54	0
55	MG	2a	3192	1/1	0.92	0.39	60,60,60,60	0
55	MG	1A	4011	1/1	0.92	0.19	40,40,40,40	0
55	MG	1a	3006	1/1	0.92	0.10	59,59,59,59	0
55	MG	2A	3737	1/1	0.92	0.10	58,58,58,58	0
55	MG	2A	3739	1/1	0.92	0.15	63,63,63,63	0
55	MG	1A	3207	1/1	0.92	0.25	46,46,46,46	0
55	MG	2A	3188	1/1	0.92	0.13	64,64,64,64	0
55	MG	1A	4015	1/1	0.92	0.08	41,41,41,41	0
55	MG	1A	3603	1/1	0.92	0.08	30,30,30,30	0
55	MG	1A	3187	1/1	0.92	0.10	49,49,49,49	0
55	MG	2A	3382	1/1	0.93	0.12	49,49,49,49	0
55	MG	2A	3383	1/1	0.93	0.16	63,63,63,63	0
55	MG	1A	3897	1/1	0.93	0.37	26,26,26,26	0
55	MG	1B	212	1/1	0.93	0.11	58,58,58,58	0
55	MG	1A	3757	1/1	0.93	0.11	49,49,49,49	0
55	MG	2A	3720	1/1	0.93	0.13	60,60,60,60	0
55	MG	2A	3101	1/1	0.93	0.09	49,49,49,49	0
55	MG	1a	3206	1/1	0.93	0.19	68,68,68,68	0
55	MG	2A	3389	1/1	0.93	0.12	41,41,41,41	0
55	MG	1A	3446	1/1	0.93	0.10	42,42,42,42	0
55	MG	1a	3208	1/1	0.93	0.12	49,49,49,49	0
55	MG	1a	3209	1/1	0.93	0.08	77,77,77,77	0
55	MG	2A	3732	1/1	0.93	0.11	48,48,48,48	0
55	MG	2A	3400	1/1	0.93	0.07	46,46,46,46	0
55	MG	2A	3402	1/1	0.93	0.07	54,54,54,54	0
55	MG	2A	3114	1/1	0.93	0.22	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3910	1/1	0.93	0.20	32,32,32,32	0
55	MG	1A	3116	1/1	0.93	0.29	34,34,34,34	0
55	MG	1B	220	1/1	0.93	0.07	51,51,51,51	0
55	MG	1A	3647	1/1	0.93	0.11	25,25,25,25	0
55	MG	1B	228	1/1	0.93	0.10	65,65,65,65	0
55	MG	1B	229	1/1	0.93	0.08	62,62,62,62	0
55	MG	1A	3648	1/1	0.93	0.09	46,46,46,46	0
55	MG	1A	3566	1/1	0.93	0.14	53,53,53,53	0
55	MG	2B	206	1/1	0.93	0.23	62,62,62,62	0
55	MG	1A	3567	1/1	0.93	0.10	43,43,43,43	0
55	MG	1a	3071	1/1	0.93	0.42	60,60,60,60	0
55	MG	1A	3770	1/1	0.93	0.11	42,42,42,42	0
55	MG	2A	3135	1/1	0.93	0.20	49,49,49,49	0
55	MG	2A	3136	1/1	0.93	0.14	54,54,54,54	0
55	MG	1A	3936	1/1	0.93	0.10	52,52,52,52	0
55	MG	2A	3138	1/1	0.93	0.29	53,53,53,53	0
55	MG	1A	3279	1/1	0.93	0.21	62,62,62,62	0
55	MG	1A	3777	1/1	0.93	0.07	31,31,31,31	0
55	MG	2A	3147	1/1	0.93	0.11	45,45,45,45	0
55	MG	1A	3660	1/1	0.93	0.06	33,33,33,33	0
55	MG	1A	3124	1/1	0.93	0.22	50,50,50,50	0
55	MG	1A	3786	1/1	0.93	0.09	44,44,44,44	0
55	MG	1A	3454	1/1	0.93	0.09	44,44,44,44	0
55	MG	2A	3450	1/1	0.93	0.23	49,49,49,49	0
55	MG	1a	3242	1/1	0.93	0.11	54,54,54,54	0
55	MG	2A	3455	1/1	0.93	0.11	49,49,49,49	0
55	MG	1A	3949	1/1	0.93	0.12	41,41,41,41	0
55	MG	1A	3281	1/1	0.93	0.08	37,37,37,37	0
55	MG	1A	3288	1/1	0.93	0.32	42,42,42,42	0
55	MG	1a	3251	1/1	0.93	0.07	52,52,52,52	0
55	MG	1a	3252	1/1	0.93	0.09	53,53,53,53	0
55	MG	1a	3085	1/1	0.93	0.10	62,62,62,62	0
55	MG	2A	3178	1/1	0.93	0.14	49,49,49,49	0
55	MG	1A	3065	1/1	0.93	0.09	46,46,46,46	0
55	MG	1A	3194	1/1	0.93	0.08	40,40,40,40	0
55	MG	1A	3958	1/1	0.93	0.08	10,10,10,10	0
55	MG	1A	3678	1/1	0.93	0.16	55,55,55,55	0
55	MG	1a	3260	1/1	0.93	0.13	49,49,49,49	0
55	MG	1A	3680	1/1	0.93	0.12	61,61,61,61	0
55	MG	2V	202	1/1	0.93	0.22	45,45,45,45	0
55	MG	1N	202	1/1	0.93	0.17	42,42,42,42	0
55	MG	20	101	1/1	0.93	0.12	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1a	3264	1/1	0.93	0.09	68,68,68,68	0
55	MG	25	101	1/1	0.93	0.25	45,45,45,45	0
55	MG	2A	3475	1/1	0.93	0.17	51,51,51,51	0
55	MG	2A	3190	1/1	0.93	0.14	55,55,55,55	0
55	MG	1A	3473	1/1	0.93	0.08	37,37,37,37	0
55	MG	2a	3003	1/1	0.93	0.18	56,56,56,56	0
55	MG	1A	3474	1/1	0.93	0.13	43,43,43,43	0
55	MG	1O	201	1/1	0.93	0.08	51,51,51,51	0
55	MG	1A	3483	1/1	0.93	0.08	32,32,32,32	0
55	MG	1a	3098	1/1	0.93	0.17	61,61,61,61	0
55	MG	2A	3197	1/1	0.93	0.10	54,54,54,54	0
55	MG	2A	3487	1/1	0.93	0.13	60,60,60,60	0
55	MG	2A	3198	1/1	0.93	0.17	41,41,41,41	0
55	MG	1Q	201	1/1	0.93	0.25	41,41,41,41	0
55	MG	1A	3232	1/1	0.93	0.13	54,54,54,54	0
55	MG	2a	3015	1/1	0.93	0.24	51,51,51,51	0
55	MG	2a	3016	1/1	0.93	0.17	47,47,47,47	0
55	MG	2A	3494	1/1	0.93	0.11	52,52,52,52	0
55	MG	2a	3019	1/1	0.93	0.24	46,46,46,46	0
55	MG	2A	3495	1/1	0.93	0.08	67,67,67,67	0
55	MG	1A	3806	1/1	0.93	0.12	48,48,48,48	0
55	MG	2A	3202	1/1	0.93	0.14	46,46,46,46	0
55	MG	1A	3489	1/1	0.93	0.07	26,26,26,26	0
55	MG	1A	3595	1/1	0.93	0.11	42,42,42,42	0
55	MG	2a	3027	1/1	0.93	0.32	59,59,59,59	0
55	MG	1A	3810	1/1	0.93	0.10	48,48,48,48	0
55	MG	1A	3128	1/1	0.93	0.09	67,67,67,67	0
55	MG	1A	3975	1/1	0.93	0.12	35,35,35,35	0
55	MG	1U	208	1/1	0.93	0.29	42,42,42,42	0
55	MG	1d	305	1/1	0.93	0.07	79,79,79,79	0
55	MG	2A	3511	1/1	0.93	0.11	63,63,63,63	0
55	MG	1A	3239	1/1	0.93	0.23	30,30,30,30	0
55	MG	1A	3695	1/1	0.93	0.14	60,60,60,60	0
55	MG	10	102	1/1	0.93	0.21	43,43,43,43	0
55	MG	1a	3124	1/1	0.93	0.14	54,54,54,54	0
55	MG	1e	205	1/1	0.93	0.17	62,62,62,62	0
55	MG	1a	3126	1/1	0.93	0.09	52,52,52,52	0
55	MG	2a	3044	1/1	0.93	0.23	74,74,74,74	0
55	MG	2A	3220	1/1	0.93	0.13	57,57,57,57	0
55	MG	1a	3127	1/1	0.93	0.06	54,54,54,54	0
55	MG	1A	3196	1/1	0.93	0.14	52,52,52,52	0
55	MG	1A	3502	1/1	0.93	0.17	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3526	1/1	0.93	0.11	54,54,54,54	0
55	MG	1A	3820	1/1	0.93	0.10	52,52,52,52	0
55	MG	1i	201	1/1	0.93	0.20	66,66,66,66	0
55	MG	1A	3822	1/1	0.93	0.11	43,43,43,43	0
55	MG	1A	3602	1/1	0.93	0.07	35,35,35,35	0
55	MG	1A	3301	1/1	0.93	0.13	43,43,43,43	0
55	MG	1A	3105	1/1	0.93	0.19	38,38,38,38	0
55	MG	2a	3058	1/1	0.93	0.14	53,53,53,53	0
55	MG	1A	3513	1/1	0.93	0.08	16,16,16,16	0
55	MG	1A	3993	1/1	0.93	0.16	46,46,46,46	0
55	MG	2A	3535	1/1	0.93	0.10	53,53,53,53	0
55	MG	1A	3607	1/1	0.93	0.11	27,27,27,27	0
55	MG	1A	3139	1/1	0.93	0.10	48,48,48,48	0
55	MG	1a	3143	1/1	0.93	0.18	54,54,54,54	0
55	MG	1A	3411	1/1	0.93	0.19	39,39,39,39	0
55	MG	1A	3312	1/1	0.93	0.15	40,40,40,40	0
55	MG	1A	3842	1/1	0.93	0.07	42,42,42,42	0
55	MG	2A	3006	1/1	0.93	0.12	57,57,57,57	0
55	MG	2A	3550	1/1	0.93	0.09	68,68,68,68	0
55	MG	19	102	1/1	0.93	0.14	52,52,52,52	0
55	MG	1A	3002	1/1	0.93	0.09	43,43,43,43	0
55	MG	1A	3314	1/1	0.93	0.25	29,29,29,29	0
55	MG	2A	3023	1/1	0.93	0.17	54,54,54,54	0
55	MG	1A	3172	1/1	0.93	0.26	50,50,50,50	0
55	MG	1A	3058	1/1	0.93	0.17	50,50,50,50	0
55	MG	1A	3115	1/1	0.93	0.19	42,42,42,42	0
55	MG	2a	3081	1/1	0.93	0.10	49,49,49,49	0
55	MG	2A	3561	1/1	0.93	0.14	45,45,45,45	0
55	MG	2a	3085	1/1	0.93	0.33	50,50,50,50	0
55	MG	2A	3263	1/1	0.93	0.26	58,58,58,58	0
55	MG	1A	3327	1/1	0.93	0.09	53,53,53,53	0
55	MG	1a	3158	1/1	0.93	0.14	52,52,52,52	0
55	MG	2A	3267	1/1	0.93	0.14	45,45,45,45	0
55	MG	2A	3268	1/1	0.93	0.12	54,54,54,54	0
55	MG	1A	4005	1/1	0.93	0.14	60,60,60,60	0
55	MG	1A	3858	1/1	0.93	0.12	46,46,46,46	0
55	MG	2A	3276	1/1	0.93	0.14	52,52,52,52	0
55	MG	2a	3098	1/1	0.93	0.12	74,74,74,74	0
55	MG	1A	3859	1/1	0.93	0.10	49,49,49,49	0
55	MG	1A	3860	1/1	0.93	0.24	36,36,36,36	0
55	MG	2A	3281	1/1	0.93	0.14	25,25,25,25	0
55	MG	1A	3209	1/1	0.93	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
55	MG	2A	3588	1/1	0.93	0.11	36,36,36,36	0
55	MG	2A	3590	1/1	0.93	0.11	50,50,50,50	0
55	MG	2A	3287	1/1	0.93	0.12	34,34,34,34	0
55	MG	2A	3603	1/1	0.93	0.07	54,54,54,54	0
55	MG	2A	3606	1/1	0.93	0.12	55,55,55,55	0
55	MG	2a	3117	1/1	0.93	0.14	55,55,55,55	0
55	MG	1a	3019	1/1	0.93	0.11	55,55,55,55	0
55	MG	2A	3046	1/1	0.93	0.23	58,58,58,58	0
55	MG	1A	3345	1/1	0.93	0.12	44,44,44,44	0
55	MG	2A	3048	1/1	0.93	0.15	53,53,53,53	0
55	MG	1A	3869	1/1	0.93	0.16	28,28,28,28	0
55	MG	1A	4014	1/1	0.93	0.16	45,45,45,45	0
55	MG	2a	3126	1/1	0.93	0.20	55,55,55,55	0
55	MG	1a	3024	1/1	0.93	0.13	46,46,46,46	0
55	MG	2A	3626	1/1	0.93	0.10	51,51,51,51	0
55	MG	1A	3732	1/1	0.93	0.14	57,57,57,57	0
55	MG	2a	3130	1/1	0.93	0.12	69,69,69,69	0
55	MG	2A	3308	1/1	0.93	0.16	60,60,60,60	0
55	MG	2A	3309	1/1	0.93	0.13	52,52,52,52	0
55	MG	1A	3872	1/1	0.93	0.10	24,24,24,24	0
55	MG	1A	4019	1/1	0.93	0.12	46,46,46,46	0
55	MG	1a	3031	1/1	0.93	0.34	57,57,57,57	0
55	MG	2A	3059	1/1	0.93	0.11	37,37,37,37	0
55	MG	1a	3176	1/1	0.93	0.10	64,64,64,64	0
55	MG	1A	3437	1/1	0.93	0.10	56,56,56,56	0
55	MG	1A	3351	1/1	0.93	0.08	57,57,57,57	0
55	MG	2a	3156	1/1	0.93	0.12	73,73,73,73	0
55	MG	2A	3065	1/1	0.93	0.28	54,54,54,54	0
55	MG	1A	3741	1/1	0.93	0.18	48,48,48,48	0
55	MG	1A	3742	1/1	0.93	0.07	25,25,25,25	0
55	MG	1A	3210	1/1	0.93	0.17	47,47,47,47	0
55	MG	2A	3343	1/1	0.93	0.11	27,27,27,27	0
55	MG	1a	3182	1/1	0.93	0.15	68,68,68,68	0
55	MG	1a	3039	1/1	0.93	0.27	61,61,61,61	0
55	MG	2A	3077	1/1	0.93	0.36	49,49,49,49	0
55	MG	1A	3179	1/1	0.93	0.12	53,53,53,53	0
55	MG	2A	3351	1/1	0.93	0.11	45,45,45,45	0
55	MG	1A	3554	1/1	0.93	0.16	69,69,69,69	0
55	MG	2A	3680	1/1	0.93	0.09	56,56,56,56	0
55	MG	1A	3892	1/1	0.93	0.06	44,44,44,44	0
55	MG	2A	3085	1/1	0.93	0.17	51,51,51,51	0
55	MG	1A	3442	1/1	0.93	0.15	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3694	1/1	0.93	0.10	59,59,59,59	0
55	MG	2a	3191	1/1	0.93	0.33	51,51,51,51	0
55	MG	2A	3697	1/1	0.93	0.12	64,64,64,64	0
55	MG	1B	207	1/1	0.93	0.17	57,57,57,57	0
55	MG	2A	3367	1/1	0.93	0.10	53,53,53,53	0
55	MG	2A	3091	1/1	0.93	0.11	36,36,36,36	0
55	MG	1A	3155	1/1	0.93	0.14	35,35,35,35	0
55	MG	2k	201	1/1	0.93	0.13	53,53,53,53	0
55	MG	2A	3370	1/1	0.93	0.17	50,50,50,50	0
55	MG	1B	209	1/1	0.93	0.08	41,41,41,41	0
55	MG	2t	201	1/1	0.93	0.18	51,51,51,51	0
55	MG	2A	3710	1/1	0.93	0.14	45,45,45,45	0
55	MG	1a	3198	1/1	0.93	0.08	60,60,60,60	0
55	MG	1A	3156	1/1	0.93	0.18	41,41,41,41	0
58	ZN	24	501	1/1	0.93	0.17	132,132,132,132	0
55	MG	1A	3357	1/1	0.94	0.10	24,24,24,24	0
55	MG	2A	3246	1/1	0.94	0.13	57,57,57,57	0
55	MG	1A	3080	1/1	0.94	0.12	36,36,36,36	0
55	MG	1R	204	1/1	0.94	0.12	55,55,55,55	0
55	MG	1A	3992	1/1	0.94	0.10	68,68,68,68	0
55	MG	1A	3360	1/1	0.94	0.13	54,54,54,54	0
55	MG	2F	301	1/1	0.94	0.18	43,43,43,43	0
55	MG	2A	3502	1/1	0.94	0.12	47,47,47,47	0
55	MG	1A	3743	1/1	0.94	0.11	46,46,46,46	0
55	MG	1A	3190	1/1	0.94	0.19	30,30,30,30	0
55	MG	1A	3158	1/1	0.94	0.31	35,35,35,35	0
55	MG	1a	3221	1/1	0.94	0.10	60,60,60,60	0
55	MG	2N	201	1/1	0.94	0.10	69,69,69,69	0
55	MG	1U	201	1/1	0.94	0.15	30,30,30,30	0
55	MG	2A	3509	1/1	0.94	0.12	44,44,44,44	0
55	MG	1A	3082	1/1	0.94	0.21	45,45,45,45	0
55	MG	1V	204	1/1	0.94	0.12	31,31,31,31	0
55	MG	1V	206	1/1	0.94	0.12	62,62,62,62	0
55	MG	2A	3513	1/1	0.94	0.13	37,37,37,37	0
55	MG	1V	207	1/1	0.94	0.07	55,55,55,55	0
55	MG	1a	3092	1/1	0.94	0.17	62,62,62,62	0
55	MG	2A	3088	1/1	0.94	0.42	49,49,49,49	0
55	MG	1A	3234	1/1	0.94	0.24	33,33,33,33	0
55	MG	1a	3232	1/1	0.94	0.26	69,69,69,69	0
55	MG	1A	3025	1/1	0.94	0.25	49,49,49,49	0
55	MG	23	101	1/1	0.94	0.09	44,44,44,44	0
55	MG	1a	3234	1/1	0.94	0.17	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3523	1/1	0.94	0.17	48,48,48,48	0
55	MG	25	103	1/1	0.94	0.12	53,53,53,53	0
55	MG	2A	3094	1/1	0.94	0.12	37,37,37,37	0
55	MG	1A	3866	1/1	0.94	0.10	38,38,38,38	0
55	MG	1A	3020	1/1	0.94	0.18	37,37,37,37	0
55	MG	2A	3289	1/1	0.94	0.07	41,41,41,41	0
55	MG	1A	3097	1/1	0.94	0.11	51,51,51,51	0
55	MG	1a	3240	1/1	0.94	0.22	67,67,67,67	0
55	MG	1A	3459	1/1	0.94	0.12	30,30,30,30	0
55	MG	1A	3129	1/1	0.94	0.07	31,31,31,31	0
55	MG	2A	3104	1/1	0.94	0.18	43,43,43,43	0
55	MG	1A	3874	1/1	0.94	0.12	64,64,64,64	0
55	MG	2A	3106	1/1	0.94	0.34	60,60,60,60	0
55	MG	2A	3304	1/1	0.94	0.19	58,58,58,58	0
55	MG	1A	3764	1/1	0.94	0.14	47,47,47,47	0
55	MG	1A	3765	1/1	0.94	0.13	49,49,49,49	0
55	MG	1A	3247	1/1	0.94	0.27	45,45,45,45	0
55	MG	2A	3540	1/1	0.94	0.07	40,40,40,40	0
55	MG	2a	3020	1/1	0.94	0.15	73,73,73,73	0
55	MG	2A	3541	1/1	0.94	0.09	55,55,55,55	0
55	MG	1A	3305	1/1	0.94	0.11	45,45,45,45	0
55	MG	1a	3113	1/1	0.94	0.13	52,52,52,52	0
55	MG	1A	3665	1/1	0.94	0.08	18,18,18,18	0
55	MG	1A	3574	1/1	0.94	0.11	41,41,41,41	0
55	MG	17	101	1/1	0.94	0.14	24,24,24,24	0
55	MG	1A	4013	1/1	0.94	0.12	54,54,54,54	0
55	MG	2A	3318	1/1	0.94	0.08	35,35,35,35	0
55	MG	2A	3123	1/1	0.94	0.19	45,45,45,45	0
55	MG	1A	3668	1/1	0.94	0.17	27,27,27,27	0
55	MG	2a	3032	1/1	0.94	0.16	67,67,67,67	0
55	MG	2A	3331	1/1	0.94	0.10	36,36,36,36	0
55	MG	1A	3253	1/1	0.94	0.28	38,38,38,38	0
55	MG	1A	3773	1/1	0.94	0.10	42,42,42,42	0
55	MG	1A	3387	1/1	0.94	0.09	21,21,21,21	0
55	MG	1a	3002	1/1	0.94	0.16	50,50,50,50	0
55	MG	1A	3310	1/1	0.94	0.09	37,37,37,37	0
55	MG	1A	3583	1/1	0.94	0.15	29,29,29,29	0
55	MG	2A	3348	1/1	0.94	0.08	35,35,35,35	0
55	MG	1A	3782	1/1	0.94	0.11	43,43,43,43	0
55	MG	1A	3391	1/1	0.94	0.09	23,23,23,23	0
55	MG	1A	3679	1/1	0.94	0.10	48,48,48,48	0
55	MG	1a	3008	1/1	0.94	0.09	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3141	1/1	0.94	0.14	63,63,63,63	0
55	MG	2A	3357	1/1	0.94	0.12	47,47,47,47	0
55	MG	2A	3142	1/1	0.94	0.10	48,48,48,48	0
55	MG	1a	3136	1/1	0.94	0.25	62,62,62,62	0
55	MG	2a	3052	1/1	0.94	0.31	65,65,65,65	0
55	MG	1a	3009	1/1	0.94	0.21	47,47,47,47	0
55	MG	2A	3149	1/1	0.94	0.10	33,33,33,33	0
55	MG	2A	3593	1/1	0.94	0.07	61,61,61,61	0
55	MG	1a	3276	1/1	0.94	0.08	67,67,67,67	0
55	MG	2A	3153	1/1	0.94	0.24	48,48,48,48	0
55	MG	1A	3040	1/1	0.94	0.12	51,51,51,51	0
55	MG	2A	3371	1/1	0.94	0.06	31,31,31,31	0
55	MG	2A	3157	1/1	0.94	0.15	68,68,68,68	0
55	MG	1A	3918	1/1	0.94	0.09	37,37,37,37	0
55	MG	2A	3375	1/1	0.94	0.11	61,61,61,61	0
55	MG	2A	3379	1/1	0.94	0.10	52,52,52,52	0
55	MG	1A	3494	1/1	0.94	0.10	28,28,28,28	0
55	MG	1a	3142	1/1	0.94	0.09	49,49,49,49	0
55	MG	1A	3588	1/1	0.94	0.09	40,40,40,40	0
55	MG	2A	3170	1/1	0.94	0.11	56,56,56,56	0
55	MG	2a	3069	1/1	0.94	0.21	55,55,55,55	0
55	MG	1A	3131	1/1	0.94	0.18	41,41,41,41	0
55	MG	1a	3018	1/1	0.94	0.09	57,57,57,57	0
55	MG	1A	3136	1/1	0.94	0.08	38,38,38,38	0
55	MG	1a	3149	1/1	0.94	0.11	47,47,47,47	0
55	MG	1a	3020	1/1	0.94	0.10	53,53,53,53	0
55	MG	2A	3633	1/1	0.94	0.07	52,52,52,52	0
55	MG	1A	3500	1/1	0.94	0.09	29,29,29,29	0
55	MG	2A	3392	1/1	0.94	0.18	62,62,62,62	0
55	MG	2A	3636	1/1	0.94	0.10	49,49,49,49	0
55	MG	2A	3179	1/1	0.94	0.16	45,45,45,45	0
55	MG	1a	3152	1/1	0.94	0.24	53,53,53,53	0
55	MG	1A	3102	1/1	0.94	0.14	44,44,44,44	0
55	MG	1A	3598	1/1	0.94	0.15	38,38,38,38	0
55	MG	2A	3403	1/1	0.94	0.11	50,50,50,50	0
55	MG	1A	3021	1/1	0.94	0.11	42,42,42,42	0
55	MG	1a	3025	1/1	0.94	0.10	57,57,57,57	0
55	MG	2A	3657	1/1	0.94	0.07	48,48,48,48	0
55	MG	2A	3658	1/1	0.94	0.10	79,79,79,79	0
55	MG	2A	3186	1/1	0.94	0.11	52,52,52,52	0
55	MG	1A	3804	1/1	0.94	0.06	24,24,24,24	0
55	MG	2a	3100	1/1	0.94	0.25	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2a	3102	1/1	0.94	0.25	44,44,44,44	0
55	MG	2a	3103	1/1	0.94	0.11	52,52,52,52	0
55	MG	1k	201	1/1	0.94	0.12	41,41,41,41	0
55	MG	1A	3507	1/1	0.94	0.12	65,65,65,65	0
55	MG	2A	3419	1/1	0.94	0.23	52,52,52,52	0
55	MG	1A	3508	1/1	0.94	0.12	51,51,51,51	0
55	MG	2A	3674	1/1	0.94	0.07	41,41,41,41	0
55	MG	1A	3318	1/1	0.94	0.13	41,41,41,41	0
55	MG	2A	3681	1/1	0.94	0.09	62,62,62,62	0
55	MG	2A	3685	1/1	0.94	0.08	56,56,56,56	0
55	MG	1A	3701	1/1	0.94	0.16	59,59,59,59	0
55	MG	2a	3115	1/1	0.94	0.15	57,57,57,57	0
55	MG	1A	3417	1/1	0.94	0.11	20,20,20,20	0
55	MG	1o	102	1/1	0.94	0.15	44,44,44,44	0
55	MG	1a	3163	1/1	0.94	0.27	58,58,58,58	0
55	MG	1B	227	1/1	0.94	0.09	42,42,42,42	0
55	MG	1A	3953	1/1	0.94	0.09	49,49,49,49	0
55	MG	1A	3811	1/1	0.94	0.11	55,55,55,55	0
55	MG	1A	3812	1/1	0.94	0.13	66,66,66,66	0
55	MG	1D	303	1/1	0.94	0.13	41,41,41,41	0
55	MG	2A	3434	1/1	0.94	0.14	42,42,42,42	0
55	MG	1A	3514	1/1	0.94	0.06	30,30,30,30	0
55	MG	2A	3437	1/1	0.94	0.09	62,62,62,62	0
55	MG	1A	3319	1/1	0.94	0.25	35,35,35,35	0
55	MG	1A	3064	1/1	0.94	0.21	58,58,58,58	0
55	MG	2a	3132	1/1	0.94	0.13	52,52,52,52	0
55	MG	1A	3709	1/1	0.94	0.09	47,47,47,47	0
55	MG	2A	3442	1/1	0.94	0.08	48,48,48,48	0
55	MG	2A	3444	1/1	0.94	0.12	51,51,51,51	0
55	MG	1A	3324	1/1	0.94	0.12	51,51,51,51	0
55	MG	2A	3447	1/1	0.94	0.07	45,45,45,45	0
55	MG	1a	3047	1/1	0.94	0.22	58,58,58,58	0
55	MG	2a	3152	1/1	0.94	0.07	68,68,68,68	0
55	MG	1A	3428	1/1	0.94	0.07	25,25,25,25	0
55	MG	1A	3966	1/1	0.94	0.08	60,60,60,60	0
55	MG	2A	3027	1/1	0.94	0.09	41,41,41,41	0
55	MG	1A	3521	1/1	0.94	0.17	33,33,33,33	0
55	MG	1A	3430	1/1	0.94	0.11	29,29,29,29	0
55	MG	2A	3036	1/1	0.94	0.22	52,52,52,52	0
55	MG	1E	309	1/1	0.94	0.12	48,48,48,48	0
55	MG	1A	3825	1/1	0.94	0.15	27,27,27,27	0
55	MG	1A	3267	1/1	0.94	0.16	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3150	1/1	0.94	0.08	41,41,41,41	0
55	MG	2a	3172	1/1	0.94	0.06	73,73,73,73	0
55	MG	1A	3330	1/1	0.94	0.18	45,45,45,45	0
55	MG	2A	3742	1/1	0.94	0.13	43,43,43,43	0
55	MG	1A	3184	1/1	0.94	0.16	42,42,42,42	0
55	MG	2a	3177	1/1	0.94	0.17	58,58,58,58	0
55	MG	1A	3537	1/1	0.94	0.12	40,40,40,40	0
55	MG	1A	3047	1/1	0.94	0.27	44,44,44,44	0
55	MG	2A	3226	1/1	0.94	0.09	52,52,52,52	0
55	MG	1A	3979	1/1	0.94	0.08	44,44,44,44	0
55	MG	1A	3217	1/1	0.94	0.32	34,34,34,34	0
55	MG	1a	3197	1/1	0.94	0.10	74,74,74,74	0
55	MG	2A	3474	1/1	0.94	0.07	29,29,29,29	0
55	MG	1A	3841	1/1	0.94	0.10	32,32,32,32	0
55	MG	2A	3232	1/1	0.94	0.17	58,58,58,58	0
55	MG	2B	209	1/1	0.94	0.09	71,71,71,71	0
55	MG	2f	201	1/1	0.94	0.14	38,38,38,38	0
55	MG	2A	3233	1/1	0.94	0.16	50,50,50,50	0
55	MG	1A	3218	1/1	0.94	0.12	54,54,54,54	0
55	MG	1A	3985	1/1	0.94	0.10	39,39,39,39	0
55	MG	2B	215	1/1	0.94	0.09	58,58,58,58	0
55	MG	1A	3846	1/1	0.94	0.13	41,41,41,41	0
55	MG	2A	3237	1/1	0.94	0.28	39,39,39,39	0
55	MG	1A	3543	1/1	0.94	0.10	36,36,36,36	0
55	MG	2A	3240	1/1	0.94	0.22	48,48,48,48	0
55	MG	1A	3110	1/1	0.94	0.12	27,27,27,27	0
55	MG	1Q	204	1/1	0.94	0.14	32,32,32,32	0
55	MG	1A	3503	1/1	0.95	0.07	40,40,40,40	0
55	MG	1A	3907	1/1	0.95	0.07	54,54,54,54	0
55	MG	1A	3073	1/1	0.95	0.17	27,27,27,27	0
55	MG	1a	3254	1/1	0.95	0.16	56,56,56,56	0
55	MG	2A	3160	1/1	0.95	0.08	30,30,30,30	0
55	MG	1D	316	1/1	0.95	0.11	52,52,52,52	0
55	MG	1A	3745	1/1	0.95	0.05	37,37,37,37	0
55	MG	2A	3164	1/1	0.95	0.10	54,54,54,54	0
55	MG	2A	3426	1/1	0.95	0.08	47,47,47,47	0
55	MG	1A	3611	1/1	0.95	0.24	35,35,35,35	0
55	MG	2A	3166	1/1	0.95	0.11	69,69,69,69	0
55	MG	1a	3258	1/1	0.95	0.29	61,61,61,61	0
55	MG	1A	3747	1/1	0.95	0.08	34,34,34,34	0
55	MG	2A	3431	1/1	0.95	0.07	25,25,25,25	0
55	MG	1A	3749	1/1	0.95	0.07	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3613	1/1	0.95	0.14	27,27,27,27	0
55	MG	2A	3435	1/1	0.95	0.15	56,56,56,56	0
55	MG	1A	3074	1/1	0.95	0.07	29,29,29,29	0
55	MG	1A	3930	1/1	0.95	0.10	54,54,54,54	0
55	MG	1A	3225	1/1	0.95	0.14	27,27,27,27	0
55	MG	1A	3226	1/1	0.95	0.11	44,44,44,44	0
55	MG	1A	3512	1/1	0.95	0.08	22,22,22,22	0
55	MG	1G	202	1/1	0.95	0.16	49,49,49,49	0
55	MG	1A	3406	1/1	0.95	0.16	41,41,41,41	0
55	MG	2B	218	1/1	0.95	0.06	67,67,67,67	0
55	MG	2A	3445	1/1	0.95	0.10	55,55,55,55	0
55	MG	2D	301	1/1	0.95	0.16	34,34,34,34	0
55	MG	2D	303	1/1	0.95	0.49	40,40,40,40	0
55	MG	1G	204	1/1	0.95	0.12	42,42,42,42	0
55	MG	1A	3940	1/1	0.95	0.07	51,51,51,51	0
55	MG	2D	307	1/1	0.95	0.16	47,47,47,47	0
55	MG	1A	3941	1/1	0.95	0.09	54,54,54,54	0
55	MG	1A	3298	1/1	0.95	0.16	41,41,41,41	0
55	MG	1A	3625	1/1	0.95	0.12	25,25,25,25	0
55	MG	1a	3100	1/1	0.95	0.25	56,56,56,56	0
55	MG	1a	3101	1/1	0.95	0.14	52,52,52,52	0
55	MG	2E	301	1/1	0.95	0.09	54,54,54,54	0
55	MG	2E	302	1/1	0.95	0.28	41,41,41,41	0
55	MG	1A	3227	1/1	0.95	0.11	33,33,33,33	0
55	MG	1A	3032	1/1	0.95	0.10	37,37,37,37	0
55	MG	2A	3193	1/1	0.95	0.10	45,45,45,45	0
55	MG	1A	3302	1/1	0.95	0.14	36,36,36,36	0
55	MG	1d	304	1/1	0.95	0.10	69,69,69,69	0
55	MG	1A	3632	1/1	0.95	0.07	27,27,27,27	0
55	MG	1A	3019	1/1	0.95	0.20	38,38,38,38	0
55	MG	1A	3951	1/1	0.95	0.07	40,40,40,40	0
55	MG	1A	3418	1/1	0.95	0.08	14,14,14,14	0
55	MG	1A	3085	1/1	0.95	0.33	34,34,34,34	0
55	MG	1A	3010	1/1	0.95	0.11	46,46,46,46	0
55	MG	1A	3531	1/1	0.95	0.12	39,39,39,39	0
55	MG	1A	3775	1/1	0.95	0.06	30,30,30,30	0
55	MG	1A	3423	1/1	0.95	0.07	25,25,25,25	0
55	MG	1A	3778	1/1	0.95	0.09	45,45,45,45	0
55	MG	1A	3961	1/1	0.95	0.12	42,42,42,42	0
55	MG	2T	202	1/1	0.95	0.09	62,62,62,62	0
55	MG	1A	3237	1/1	0.95	0.25	35,35,35,35	0
55	MG	2T	204	1/1	0.95	0.13	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3209	1/1	0.95	0.22	62,62,62,62	0
55	MG	1A	3425	1/1	0.95	0.10	35,35,35,35	0
55	MG	2V	203	1/1	0.95	0.08	46,46,46,46	0
55	MG	1A	3089	1/1	0.95	0.12	33,33,33,33	0
55	MG	1A	3783	1/1	0.95	0.12	20,20,20,20	0
55	MG	1m	201	1/1	0.95	0.09	69,69,69,69	0
55	MG	1A	3092	1/1	0.95	0.22	31,31,31,31	0
55	MG	1X	101	1/1	0.95	0.07	56,56,56,56	0
55	MG	1A	3050	1/1	0.95	0.12	31,31,31,31	0
55	MG	1A	3244	1/1	0.95	0.27	49,49,49,49	0
55	MG	27	101	1/1	0.95	0.28	37,37,37,37	0
55	MG	28	101	1/1	0.95	0.09	53,53,53,53	0
55	MG	1A	3649	1/1	0.95	0.06	30,30,30,30	0
55	MG	1A	3651	1/1	0.95	0.16	38,38,38,38	0
55	MG	1A	3051	1/1	0.95	0.15	27,27,27,27	0
55	MG	1A	3653	1/1	0.95	0.10	30,30,30,30	0
55	MG	1A	3545	1/1	0.95	0.08	29,29,29,29	0
55	MG	2A	3001	1/1	0.95	0.31	55,55,55,55	0
55	MG	1A	3248	1/1	0.95	0.11	34,34,34,34	0
55	MG	2a	3008	1/1	0.95	0.24	55,55,55,55	0
55	MG	1A	3657	1/1	0.95	0.16	49,49,49,49	0
55	MG	2A	3228	1/1	0.95	0.08	45,45,45,45	0
55	MG	1a	3144	1/1	0.95	0.15	49,49,49,49	0
55	MG	2A	3506	1/1	0.95	0.11	33,33,33,33	0
55	MG	2a	3013	1/1	0.95	0.08	47,47,47,47	0
55	MG	1A	3549	1/1	0.95	0.16	39,39,39,39	0
55	MG	2A	3012	1/1	0.95	0.09	49,49,49,49	0
55	MG	1A	3661	1/1	0.95	0.08	18,18,18,18	0
55	MG	1A	3252	1/1	0.95	0.31	28,28,28,28	0
55	MG	2A	3022	1/1	0.95	0.36	45,45,45,45	0
55	MG	15	103	1/1	0.95	0.14	32,32,32,32	0
55	MG	1A	3663	1/1	0.95	0.07	16,16,16,16	0
55	MG	15	107	1/1	0.95	0.08	52,52,52,52	0
55	MG	2A	3026	1/1	0.95	0.12	41,41,41,41	0
55	MG	2A	3239	1/1	0.95	0.26	47,47,47,47	0
55	MG	1A	3151	1/1	0.95	0.08	38,38,38,38	0
55	MG	2A	3029	1/1	0.95	0.05	40,40,40,40	0
55	MG	1A	3553	1/1	0.95	0.06	25,25,25,25	0
55	MG	1A	3809	1/1	0.95	0.08	62,62,62,62	0
55	MG	2A	3245	1/1	0.95	0.09	48,48,48,48	0
55	MG	1A	3054	1/1	0.95	0.14	30,30,30,30	0
55	MG	1A	3256	1/1	0.95	0.18	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3991	1/1	0.95	0.07	45,45,45,45	0
55	MG	2a	3034	1/1	0.95	0.27	58,58,58,58	0
55	MG	2A	3250	1/1	0.95	0.08	56,56,56,56	0
55	MG	1A	3036	1/1	0.95	0.07	41,41,41,41	0
55	MG	1A	3004	1/1	0.95	0.09	39,39,39,39	0
55	MG	2A	3254	1/1	0.95	0.21	55,55,55,55	0
55	MG	1A	3675	1/1	0.95	0.08	41,41,41,41	0
55	MG	1A	3676	1/1	0.95	0.21	33,33,33,33	0
55	MG	1A	3344	1/1	0.95	0.10	51,51,51,51	0
55	MG	2A	3045	1/1	0.95	0.12	34,34,34,34	0
55	MG	1A	3562	1/1	0.95	0.06	32,32,32,32	0
55	MG	1A	3023	1/1	0.95	0.32	37,37,37,37	0
55	MG	1A	3565	1/1	0.95	0.10	45,45,45,45	0
55	MG	1A	3349	1/1	0.95	0.07	30,30,30,30	0
55	MG	1A	3160	1/1	0.95	0.08	28,28,28,28	0
55	MG	2A	3051	1/1	0.95	0.28	56,56,56,56	0
55	MG	1A	3262	1/1	0.95	0.14	38,38,38,38	0
55	MG	2A	3272	1/1	0.95	0.11	31,31,31,31	0
55	MG	1A	3450	1/1	0.95	0.08	38,38,38,38	0
55	MG	1a	3016	1/1	0.95	0.10	63,63,63,63	0
55	MG	2a	3055	1/1	0.95	0.24	49,49,49,49	0
55	MG	1A	3203	1/1	0.95	0.24	48,48,48,48	0
55	MG	2A	3279	1/1	0.95	0.17	48,48,48,48	0
55	MG	1A	3833	1/1	0.95	0.06	20,20,20,20	0
55	MG	1A	3265	1/1	0.95	0.10	39,39,39,39	0
55	MG	1a	3175	1/1	0.95	0.08	56,56,56,56	0
55	MG	2A	3285	1/1	0.95	0.09	11,11,11,11	0
55	MG	1A	3836	1/1	0.95	0.09	43,43,43,43	0
55	MG	1A	3456	1/1	0.95	0.13	45,45,45,45	0
55	MG	2A	3064	1/1	0.95	0.11	26,26,26,26	0
55	MG	1A	3575	1/1	0.95	0.10	33,33,33,33	0
55	MG	2A	3066	1/1	0.95	0.08	42,42,42,42	0
55	MG	1A	3161	1/1	0.95	0.26	30,30,30,30	0
55	MG	1A	3108	1/1	0.95	0.24	32,32,32,32	0
55	MG	2A	3570	1/1	0.95	0.10	54,54,54,54	0
55	MG	2A	3571	1/1	0.95	0.08	31,31,31,31	0
55	MG	2A	3299	1/1	0.95	0.06	30,30,30,30	0
55	MG	1A	3460	1/1	0.95	0.06	18,18,18,18	0
55	MG	1A	3700	1/1	0.95	0.48	42,42,42,42	0
55	MG	1a	3028	1/1	0.95	0.12	64,64,64,64	0
55	MG	1a	3185	1/1	0.95	0.08	72,72,72,72	0
55	MG	2A	3306	1/1	0.95	0.07	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1a	3186	1/1	0.95	0.09	56,56,56,56	0
55	MG	2A	3081	1/1	0.95	0.10	48,48,48,48	0
55	MG	1A	3461	1/1	0.95	0.07	38,38,38,38	0
55	MG	1A	4017	1/1	0.95	0.15	44,44,44,44	0
55	MG	2A	3591	1/1	0.95	0.09	77,77,77,77	0
55	MG	2a	3087	1/1	0.95	0.14	51,51,51,51	0
55	MG	2A	3313	1/1	0.95	0.09	46,46,46,46	0
55	MG	1A	3361	1/1	0.95	0.08	34,34,34,34	0
55	MG	2A	3596	1/1	0.95	0.08	30,30,30,30	0
55	MG	2A	3600	1/1	0.95	0.11	66,66,66,66	0
55	MG	1A	3270	1/1	0.95	0.29	50,50,50,50	0
55	MG	2a	3094	1/1	0.95	0.08	62,62,62,62	0
55	MG	2A	3087	1/1	0.95	0.16	33,33,33,33	0
55	MG	1a	3033	1/1	0.95	0.13	33,33,33,33	0
55	MG	1A	3586	1/1	0.95	0.07	30,30,30,30	0
55	MG	1A	3465	1/1	0.95	0.08	38,38,38,38	0
55	MG	2A	3323	1/1	0.95	0.09	40,40,40,40	0
55	MG	2A	3324	1/1	0.95	0.11	56,56,56,56	0
55	MG	1A	3856	1/1	0.95	0.11	40,40,40,40	0
55	MG	2a	3105	1/1	0.95	0.16	43,43,43,43	0
55	MG	1A	3466	1/1	0.95	0.07	49,49,49,49	0
55	MG	2A	3623	1/1	0.95	0.09	28,28,28,28	0
55	MG	2A	3624	1/1	0.95	0.08	47,47,47,47	0
55	MG	2A	3625	1/1	0.95	0.10	71,71,71,71	0
55	MG	2a	3110	1/1	0.95	0.18	48,48,48,48	0
55	MG	1A	3468	1/1	0.95	0.07	36,36,36,36	0
55	MG	2A	3095	1/1	0.95	0.20	46,46,46,46	0
55	MG	2A	3340	1/1	0.95	0.10	43,43,43,43	0
55	MG	1A	3591	1/1	0.95	0.11	56,56,56,56	0
55	MG	1A	3059	1/1	0.95	0.15	50,50,50,50	0
55	MG	1A	3594	1/1	0.95	0.10	22,22,22,22	0
55	MG	2A	3346	1/1	0.95	0.06	30,30,30,30	0
55	MG	1A	3060	1/1	0.95	0.14	32,32,32,32	0
55	MG	1A	3112	1/1	0.95	0.15	50,50,50,50	0
55	MG	1A	3719	1/1	0.95	0.10	31,31,31,31	0
55	MG	2A	3103	1/1	0.95	0.11	37,37,37,37	0
55	MG	1A	3277	1/1	0.95	0.14	40,40,40,40	0
55	MG	1a	3210	1/1	0.95	0.07	54,54,54,54	0
55	MG	1a	3049	1/1	0.95	0.13	49,49,49,49	0
55	MG	1A	3487	1/1	0.95	0.09	64,64,64,64	0
55	MG	1a	3213	1/1	0.95	0.08	83,83,83,83	0
55	MG	1a	3214	1/1	0.95	0.09	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3365	1/1	0.95	0.18	47,47,47,47	0
55	MG	1A	3722	1/1	0.95	0.18	31,31,31,31	0
55	MG	1A	3008	1/1	0.95	0.07	39,39,39,39	0
55	MG	1A	3727	1/1	0.95	0.07	38,38,38,38	0
55	MG	1A	3214	1/1	0.95	0.07	36,36,36,36	0
55	MG	2A	3120	1/1	0.95	0.19	55,55,55,55	0
55	MG	2a	3143	1/1	0.95	0.06	61,61,61,61	0
55	MG	2a	3144	1/1	0.95	0.07	71,71,71,71	0
55	MG	2a	3147	1/1	0.95	0.08	39,39,39,39	0
55	MG	1a	3057	1/1	0.95	0.07	66,66,66,66	0
55	MG	1a	3058	1/1	0.95	0.21	44,44,44,44	0
55	MG	1A	3043	1/1	0.95	0.16	27,27,27,27	0
55	MG	1A	3122	1/1	0.95	0.09	27,27,27,27	0
55	MG	2A	3678	1/1	0.95	0.06	55,55,55,55	0
55	MG	2A	3376	1/1	0.95	0.07	59,59,59,59	0
55	MG	1A	3123	1/1	0.95	0.13	30,30,30,30	0
55	MG	1A	3890	1/1	0.95	0.07	28,28,28,28	0
55	MG	2a	3162	1/1	0.95	0.07	62,62,62,62	0
55	MG	1a	3063	1/1	0.95	0.13	69,69,69,69	0
55	MG	1B	223	1/1	0.95	0.14	53,53,53,53	0
55	MG	2a	3166	1/1	0.95	0.06	62,62,62,62	0
55	MG	1B	226	1/1	0.95	0.10	41,41,41,41	0
55	MG	1A	3734	1/1	0.95	0.09	56,56,56,56	0
55	MG	2a	3170	1/1	0.95	0.09	51,51,51,51	0
55	MG	2A	3695	1/1	0.95	0.07	45,45,45,45	0
55	MG	1a	3067	1/1	0.95	0.30	55,55,55,55	0
55	MG	2A	3698	1/1	0.95	0.07	71,71,71,71	0
55	MG	1A	3605	1/1	0.95	0.09	48,48,48,48	0
55	MG	2A	3700	1/1	0.95	0.08	38,38,38,38	0
55	MG	1A	3068	1/1	0.95	0.25	37,37,37,37	0
55	MG	1A	3739	1/1	0.95	0.20	37,37,37,37	0
55	MG	1D	302	1/1	0.95	0.15	43,43,43,43	0
55	MG	1A	3895	1/1	0.95	0.10	46,46,46,46	0
55	MG	2A	3143	1/1	0.95	0.11	42,42,42,42	0
55	MG	2A	3707	1/1	0.95	0.08	53,53,53,53	0
55	MG	1A	3740	1/1	0.95	0.09	47,47,47,47	0
55	MG	2A	3397	1/1	0.95	0.10	50,50,50,50	0
55	MG	2A	3145	1/1	0.95	0.07	41,41,41,41	0
55	MG	2A	3146	1/1	0.95	0.14	62,62,62,62	0
55	MG	2A	3714	1/1	0.95	0.08	63,63,63,63	0
55	MG	1A	3291	1/1	0.95	0.10	65,65,65,65	0
55	MG	2A	3406	1/1	0.95	0.10	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3408	1/1	0.95	0.07	35,35,35,35	0
55	MG	2A	3148	1/1	0.95	0.09	36,36,36,36	0
55	MG	1a	3075	1/1	0.95	0.27	51,51,51,51	0
55	MG	2A	3150	1/1	0.95	0.12	49,49,49,49	0
55	MG	2A	3722	1/1	0.95	0.10	44,44,44,44	0
55	MG	2A	3151	1/1	0.95	0.16	52,52,52,52	0
55	MG	1A	3902	1/1	0.95	0.07	46,46,46,46	0
57	MPD	18	102	8/8	0.95	0.11	31,33,34,41	0
55	MG	2A	3417	1/1	0.95	0.12	41,41,41,41	0
58	ZN	14	501	1/1	0.95	0.15	115,115,115,115	0
55	MG	2A	3729	1/1	0.95	0.06	63,63,63,63	0
55	MG	1A	3928	1/1	0.96	0.06	51,51,51,51	0
55	MG	1A	3536	1/1	0.96	0.08	50,50,50,50	0
55	MG	1B	224	1/1	0.96	0.08	54,54,54,54	0
55	MG	1A	3931	1/1	0.96	0.05	53,53,53,53	0
55	MG	1A	3694	1/1	0.96	0.09	42,42,42,42	0
55	MG	1A	3794	1/1	0.96	0.07	22,22,22,22	0
55	MG	2A	3480	1/1	0.96	0.07	61,61,61,61	0
55	MG	1a	3188	1/1	0.96	0.06	57,57,57,57	0
55	MG	1A	3307	1/1	0.96	0.07	42,42,42,42	0
55	MG	1A	3697	1/1	0.96	0.13	44,44,44,44	0
55	MG	2A	3485	1/1	0.96	0.12	26,26,26,26	0
55	MG	1A	3799	1/1	0.96	0.08	72,72,72,72	0
55	MG	1a	3042	1/1	0.96	0.15	54,54,54,54	0
55	MG	1A	3308	1/1	0.96	0.04	41,41,41,41	0
55	MG	1D	306	1/1	0.96	0.10	32,32,32,32	0
55	MG	1D	309	1/1	0.96	0.24	28,28,28,28	0
55	MG	2E	303	1/1	0.96	0.08	52,52,52,52	0
55	MG	1A	3610	1/1	0.96	0.19	32,32,32,32	0
55	MG	1A	3067	1/1	0.96	0.09	34,34,34,34	0
55	MG	1a	3048	1/1	0.96	0.15	47,47,47,47	0
55	MG	2A	3500	1/1	0.96	0.08	45,45,45,45	0
55	MG	2A	3257	1/1	0.96	0.17	49,49,49,49	0
55	MG	2A	3258	1/1	0.96	0.16	41,41,41,41	0
55	MG	2A	3072	1/1	0.96	0.22	39,39,39,39	0
55	MG	2A	3073	1/1	0.96	0.11	44,44,44,44	0
55	MG	1A	3803	1/1	0.96	0.06	42,42,42,42	0
55	MG	1A	3612	1/1	0.96	0.18	34,34,34,34	0
55	MG	1A	3153	1/1	0.96	0.09	42,42,42,42	0
55	MG	2A	3078	1/1	0.96	0.11	47,47,47,47	0
55	MG	1A	3542	1/1	0.96	0.10	24,24,24,24	0
55	MG	1A	3220	1/1	0.96	0.09	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3381	1/1	0.96	0.13	41,41,41,41	0
55	MG	1A	3546	1/1	0.96	0.11	43,43,43,43	0
55	MG	2A	3084	1/1	0.96	0.09	50,50,50,50	0
55	MG	2A	3273	1/1	0.96	0.24	39,39,39,39	0
55	MG	1E	304	1/1	0.96	0.11	19,19,19,19	0
55	MG	2A	3275	1/1	0.96	0.06	61,61,61,61	0
55	MG	2A	3517	1/1	0.96	0.10	48,48,48,48	0
55	MG	1E	306	1/1	0.96	0.10	16,16,16,16	0
55	MG	1A	3547	1/1	0.96	0.07	26,26,26,26	0
55	MG	1E	308	1/1	0.96	0.05	28,28,28,28	0
55	MG	2A	3521	1/1	0.96	0.09	30,30,30,30	0
55	MG	2A	3089	1/1	0.96	0.09	37,37,37,37	0
55	MG	1A	3711	1/1	0.96	0.08	37,37,37,37	0
55	MG	1A	3057	1/1	0.96	0.12	19,19,19,19	0
55	MG	2A	3284	1/1	0.96	0.06	44,44,44,44	0
55	MG	1F	312	1/1	0.96	0.09	30,30,30,30	0
55	MG	1F	313	1/1	0.96	0.10	27,27,27,27	0
55	MG	1a	3220	1/1	0.96	0.11	48,48,48,48	0
55	MG	1A	3125	1/1	0.96	0.18	40,40,40,40	0
55	MG	1A	3388	1/1	0.96	0.05	21,21,21,21	0
55	MG	1F	317	1/1	0.96	0.18	48,48,48,48	0
55	MG	1F	318	1/1	0.96	0.18	39,39,39,39	0
55	MG	1A	3070	1/1	0.96	0.17	30,30,30,30	0
55	MG	2A	3297	1/1	0.96	0.06	34,34,34,34	0
55	MG	1a	3227	1/1	0.96	0.06	71,71,71,71	0
55	MG	1A	3159	1/1	0.96	0.06	32,32,32,32	0
55	MG	2A	3102	1/1	0.96	0.15	43,43,43,43	0
55	MG	1a	3229	1/1	0.96	0.09	53,53,53,53	0
55	MG	2A	3539	1/1	0.96	0.06	43,43,43,43	0
55	MG	1A	3718	1/1	0.96	0.11	43,43,43,43	0
55	MG	1A	3963	1/1	0.96	0.05	46,46,46,46	0
55	MG	1A	3396	1/1	0.96	0.06	34,34,34,34	0
55	MG	2A	3544	1/1	0.96	0.05	29,29,29,29	0
55	MG	1A	3821	1/1	0.96	0.09	36,36,36,36	0
55	MG	1A	3106	1/1	0.96	0.12	35,35,35,35	0
55	MG	2A	3111	1/1	0.96	0.11	65,65,65,65	0
55	MG	1A	3400	1/1	0.96	0.06	15,15,15,15	0
55	MG	2A	3551	1/1	0.96	0.07	47,47,47,47	0
55	MG	1A	3636	1/1	0.96	0.12	46,46,46,46	0
55	MG	1A	3472	1/1	0.96	0.09	49,49,49,49	0
55	MG	1A	3828	1/1	0.96	0.17	26,26,26,26	0
55	MG	1A	3972	1/1	0.96	0.18	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3119	1/1	0.96	0.07	36,36,36,36	0
55	MG	2A	3558	1/1	0.96	0.07	56,56,56,56	0
55	MG	2A	3319	1/1	0.96	0.07	25,25,25,25	0
55	MG	1P	203	1/1	0.96	0.12	27,27,27,27	0
55	MG	1A	3560	1/1	0.96	0.14	52,52,52,52	0
55	MG	1A	3830	1/1	0.96	0.07	10,10,10,10	0
55	MG	1A	3071	1/1	0.96	0.06	30,30,30,30	0
55	MG	1R	201	1/1	0.96	0.18	34,34,34,34	0
55	MG	2A	3333	1/1	0.96	0.08	40,40,40,40	0
55	MG	2A	3125	1/1	0.96	0.06	39,39,39,39	0
55	MG	2A	3336	1/1	0.96	0.16	48,48,48,48	0
55	MG	1A	3320	1/1	0.96	0.19	31,31,31,31	0
55	MG	2A	3573	1/1	0.96	0.07	60,60,60,60	0
55	MG	2a	3042	1/1	0.96	0.26	55,55,55,55	0
55	MG	1A	3229	1/1	0.96	0.29	34,34,34,34	0
55	MG	1A	3642	1/1	0.96	0.11	41,41,41,41	0
55	MG	2A	3577	1/1	0.96	0.07	28,28,28,28	0
55	MG	1A	3485	1/1	0.96	0.07	26,26,26,26	0
55	MG	1A	3838	1/1	0.96	0.06	42,42,42,42	0
55	MG	2A	3134	1/1	0.96	0.19	44,44,44,44	0
55	MG	1A	3410	1/1	0.96	0.06	34,34,34,34	0
55	MG	1A	3087	1/1	0.96	0.08	37,37,37,37	0
55	MG	1A	3276	1/1	0.96	0.12	41,41,41,41	0
55	MG	1a	3096	1/1	0.96	0.12	50,50,50,50	0
55	MG	1T	205	1/1	0.96	0.09	43,43,43,43	0
55	MG	1A	3088	1/1	0.96	0.10	35,35,35,35	0
55	MG	1U	202	1/1	0.96	0.23	31,31,31,31	0
55	MG	2A	3595	1/1	0.96	0.07	29,29,29,29	0
55	MG	2A	3356	1/1	0.96	0.21	45,45,45,45	0
55	MG	1U	205	1/1	0.96	0.36	32,32,32,32	0
55	MG	2A	3602	1/1	0.96	0.07	55,55,55,55	0
55	MG	1U	207	1/1	0.96	0.09	34,34,34,34	0
55	MG	1A	3328	1/1	0.96	0.07	26,26,26,26	0
55	MG	1V	202	1/1	0.96	0.18	24,24,24,24	0
55	MG	1A	3847	1/1	0.96	0.23	46,46,46,46	0
55	MG	1V	205	1/1	0.96	0.07	45,45,45,45	0
55	MG	1a	3110	1/1	0.96	0.07	34,34,34,34	0
55	MG	1A	3233	1/1	0.96	0.13	25,25,25,25	0
55	MG	2A	3620	1/1	0.96	0.07	21,21,21,21	0
55	MG	1A	3850	1/1	0.96	0.13	38,38,38,38	0
55	MG	1A	3496	1/1	0.96	0.10	49,49,49,49	0
55	MG	1a	3114	1/1	0.96	0.17	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1W	202	1/1	0.96	0.17	47,47,47,47	0
55	MG	2A	3374	1/1	0.96	0.07	40,40,40,40	0
55	MG	2A	3156	1/1	0.96	0.10	38,38,38,38	0
55	MG	1A	3744	1/1	0.96	0.06	17,17,17,17	0
55	MG	2a	3075	1/1	0.96	0.21	39,39,39,39	0
55	MG	2A	3377	1/1	0.96	0.14	51,51,51,51	0
55	MG	1A	3333	1/1	0.96	0.05	26,26,26,26	0
55	MG	2a	3079	1/1	0.96	0.16	57,57,57,57	0
55	MG	2A	3159	1/1	0.96	0.20	51,51,51,51	0
55	MG	1A	3334	1/1	0.96	0.07	10,10,10,10	0
55	MG	1A	3132	1/1	0.96	0.37	38,38,38,38	0
55	MG	1A	3016	1/1	0.96	0.31	33,33,33,33	0
55	MG	1A	3658	1/1	0.96	0.20	51,51,51,51	0
55	MG	1A	3659	1/1	0.96	0.07	29,29,29,29	0
55	MG	1A	3581	1/1	0.96	0.10	29,29,29,29	0
55	MG	2A	3169	1/1	0.96	0.28	44,44,44,44	0
55	MG	1A	3137	1/1	0.96	0.24	32,32,32,32	0
55	MG	1a	3130	1/1	0.96	0.07	42,42,42,42	0
55	MG	1A	3864	1/1	0.96	0.09	40,40,40,40	0
55	MG	2a	3093	1/1	0.96	0.06	60,60,60,60	0
55	MG	2A	3641	1/1	0.96	0.09	68,68,68,68	0
55	MG	1A	3347	1/1	0.96	0.05	40,40,40,40	0
55	MG	2A	3644	1/1	0.96	0.10	68,68,68,68	0
55	MG	2A	3646	1/1	0.96	0.08	54,54,54,54	0
55	MG	2a	3099	1/1	0.96	0.13	60,60,60,60	0
55	MG	1A	3348	1/1	0.96	0.09	45,45,45,45	0
55	MG	2A	3649	1/1	0.96	0.14	57,57,57,57	0
55	MG	1A	3664	1/1	0.96	0.10	42,42,42,42	0
55	MG	15	101	1/1	0.96	0.12	35,35,35,35	0
55	MG	1A	3760	1/1	0.96	0.06	33,33,33,33	0
55	MG	15	104	1/1	0.96	0.20	28,28,28,28	0
55	MG	2A	3404	1/1	0.96	0.10	51,51,51,51	0
55	MG	2A	3405	1/1	0.96	0.08	27,27,27,27	0
55	MG	2A	3664	1/1	0.96	0.10	62,62,62,62	0
55	MG	1A	3091	1/1	0.96	0.14	28,28,28,28	0
55	MG	2A	3668	1/1	0.96	0.04	42,42,42,42	0
55	MG	2A	3669	1/1	0.96	0.06	47,47,47,47	0
55	MG	1A	3432	1/1	0.96	0.09	19,19,19,19	0
55	MG	15	108	1/1	0.96	0.12	60,60,60,60	0
55	MG	2A	3673	1/1	0.96	0.09	30,30,30,30	0
55	MG	1A	3170	1/1	0.96	0.28	34,34,34,34	0
55	MG	17	102	1/1	0.96	0.08	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3875	1/1	0.96	0.05	35,35,35,35	0
55	MG	1a	3145	1/1	0.96	0.07	56,56,56,56	0
55	MG	1A	3205	1/1	0.96	0.32	36,36,36,36	0
55	MG	2A	3686	1/1	0.96	0.08	51,51,51,51	0
55	MG	1A	3206	1/1	0.96	0.14	46,46,46,46	0
55	MG	1y	201	1/1	0.96	0.07	58,58,58,58	0
55	MG	18	101	1/1	0.96	0.23	36,36,36,36	0
55	MG	1A	3031	1/1	0.96	0.17	47,47,47,47	0
55	MG	1A	3674	1/1	0.96	0.06	34,34,34,34	0
55	MG	1A	3593	1/1	0.96	0.10	54,54,54,54	0
55	MG	1A	3889	1/1	0.96	0.08	75,75,75,75	0
55	MG	2A	3003	1/1	0.96	0.07	48,48,48,48	0
55	MG	1A	3771	1/1	0.96	0.05	22,22,22,22	0
55	MG	1A	3518	1/1	0.96	0.08	42,42,42,42	0
55	MG	2A	3009	1/1	0.96	0.09	40,40,40,40	0
55	MG	2a	3140	1/1	0.96	0.08	66,66,66,66	0
55	MG	1A	4022	1/1	0.96	0.06	56,56,56,56	0
55	MG	2a	3142	1/1	0.96	0.11	58,58,58,58	0
55	MG	2A	3011	1/1	0.96	0.10	36,36,36,36	0
55	MG	1A	3358	1/1	0.96	0.09	44,44,44,44	0
55	MG	2a	3145	1/1	0.96	0.07	57,57,57,57	0
55	MG	2A	3432	1/1	0.96	0.10	54,54,54,54	0
55	MG	2A	3013	1/1	0.96	0.10	17,17,17,17	0
55	MG	1A	3142	1/1	0.96	0.06	31,31,31,31	0
55	MG	1A	3776	1/1	0.96	0.05	38,38,38,38	0
55	MG	2A	3018	1/1	0.96	0.19	41,41,41,41	0
55	MG	2A	3208	1/1	0.96	0.09	45,45,45,45	0
55	MG	2A	3438	1/1	0.96	0.06	47,47,47,47	0
55	MG	2A	3019	1/1	0.96	0.30	43,43,43,43	0
55	MG	1A	3174	1/1	0.96	0.18	35,35,35,35	0
55	MG	1A	3144	1/1	0.96	0.06	32,32,32,32	0
55	MG	1a	3012	1/1	0.96	0.08	17,17,17,17	0
55	MG	2a	3164	1/1	0.96	0.07	53,53,53,53	0
55	MG	2A	3213	1/1	0.96	0.10	51,51,51,51	0
55	MG	2A	3214	1/1	0.96	0.17	29,29,29,29	0
55	MG	1A	3525	1/1	0.96	0.06	35,35,35,35	0
55	MG	1a	3014	1/1	0.96	0.09	56,56,56,56	0
55	MG	1A	3898	1/1	0.96	0.10	43,43,43,43	0
55	MG	2A	3449	1/1	0.96	0.07	52,52,52,52	0
55	MG	1B	204	1/1	0.96	0.09	38,38,38,38	0
55	MG	2A	3451	1/1	0.96	0.08	54,54,54,54	0
55	MG	1B	205	1/1	0.96	0.21	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3733	1/1	0.96	0.07	28,28,28,28	0
55	MG	2A	3734	1/1	0.96	0.12	45,45,45,45	0
55	MG	2a	3178	1/1	0.96	0.06	64,64,64,64	0
55	MG	2A	3735	1/1	0.96	0.09	34,34,34,34	0
55	MG	2A	3453	1/1	0.96	0.12	47,47,47,47	0
55	MG	2A	3454	1/1	0.96	0.06	46,46,46,46	0
55	MG	2A	3033	1/1	0.96	0.09	48,48,48,48	0
55	MG	2A	3034	1/1	0.96	0.16	36,36,36,36	0
55	MG	1A	3212	1/1	0.96	0.26	36,36,36,36	0
55	MG	1A	3529	1/1	0.96	0.14	51,51,51,51	0
55	MG	1A	3076	1/1	0.96	0.24	25,25,25,25	0
55	MG	1A	3784	1/1	0.96	0.20	38,38,38,38	0
55	MG	2B	201	1/1	0.96	0.07	67,67,67,67	0
55	MG	1A	3117	1/1	0.96	0.10	47,47,47,47	0
55	MG	1A	3689	1/1	0.96	0.06	48,48,48,48	0
55	MG	1A	3788	1/1	0.96	0.10	34,34,34,34	0
55	MG	1a	3174	1/1	0.96	0.09	59,59,59,59	0
55	MG	1B	213	1/1	0.96	0.05	49,49,49,49	0
55	MG	1A	3789	1/1	0.96	0.10	40,40,40,40	0
55	MG	2r	101	1/1	0.96	0.09	63,63,63,63	0
55	MG	1A	3923	1/1	0.96	0.17	34,34,34,34	0
55	MG	1A	3303	1/1	0.96	0.07	41,41,41,41	0
56	ARG	1B	232	12/12	0.96	0.09	28,40,45,47	0
55	MG	1A	3079	1/1	0.96	0.18	34,34,34,34	0
55	MG	2B	211	1/1	0.96	0.18	61,61,61,61	0
55	MG	2B	212	1/1	0.96	0.07	42,42,42,42	0
55	MG	1A	3927	1/1	0.96	0.12	31,31,31,31	0
55	MG	2A	3473	1/1	0.96	0.07	57,57,57,57	0
58	ZN	2n	102	1/1	0.96	0.05	97,97,97,97	0
55	MG	1A	3433	1/1	0.97	0.05	27,27,27,27	0
55	MG	1A	3100	1/1	0.97	0.19	31,31,31,31	0
55	MG	1A	3192	1/1	0.97	0.16	35,35,35,35	0
55	MG	1A	3140	1/1	0.97	0.05	31,31,31,31	0
55	MG	1A	3827	1/1	0.97	0.22	42,42,42,42	0
55	MG	1A	3326	1/1	0.97	0.08	23,23,23,23	0
55	MG	1A	3052	1/1	0.97	0.16	24,24,24,24	0
55	MG	1A	3439	1/1	0.97	0.04	10,10,10,10	0
55	MG	19	101	1/1	0.97	0.27	40,40,40,40	0
55	MG	2A	3486	1/1	0.97	0.06	33,33,33,33	0
55	MG	2B	220	1/1	0.97	0.07	51,51,51,51	0
55	MG	2A	3053	1/1	0.97	0.05	32,32,32,32	0
55	MG	2A	3249	1/1	0.97	0.21	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3103	1/1	0.97	0.20	27,27,27,27	0
55	MG	2A	3491	1/1	0.97	0.06	48,48,48,48	0
55	MG	1A	3053	1/1	0.97	0.28	27,27,27,27	0
55	MG	1A	3834	1/1	0.97	0.07	47,47,47,47	0
55	MG	1A	3026	1/1	0.97	0.28	26,26,26,26	0
55	MG	2A	3255	1/1	0.97	0.16	40,40,40,40	0
55	MG	1A	3696	1/1	0.97	0.05	48,48,48,48	0
55	MG	2A	3499	1/1	0.97	0.06	28,28,28,28	0
55	MG	1A	3571	1/1	0.97	0.07	39,39,39,39	0
55	MG	1A	4010	1/1	0.97	0.07	13,13,13,13	0
55	MG	1A	3199	1/1	0.97	0.13	40,40,40,40	0
55	MG	1A	3336	1/1	0.97	0.05	26,26,26,26	0
55	MG	1A	3149	1/1	0.97	0.15	31,31,31,31	0
55	MG	1A	3339	1/1	0.97	0.07	31,31,31,31	0
55	MG	1A	3340	1/1	0.97	0.04	28,28,28,28	0
55	MG	1a	3183	1/1	0.97	0.08	42,42,42,42	0
55	MG	2A	3068	1/1	0.97	0.06	42,42,42,42	0
55	MG	1A	3075	1/1	0.97	0.30	36,36,36,36	0
55	MG	1A	3704	1/1	0.97	0.12	34,34,34,34	0
55	MG	2A	3269	1/1	0.97	0.05	19,19,19,19	0
55	MG	1A	3706	1/1	0.97	0.17	34,34,34,34	0
55	MG	1A	3578	1/1	0.97	0.10	19,19,19,19	0
55	MG	1A	3028	1/1	0.97	0.10	35,35,35,35	0
55	MG	1A	3580	1/1	0.97	0.12	24,24,24,24	0
55	MG	2Q	203	1/1	0.97	0.06	57,57,57,57	0
55	MG	1A	3453	1/1	0.97	0.11	56,56,56,56	0
55	MG	2R	3301	1/1	0.97	0.13	43,43,43,43	0
55	MG	1A	3077	1/1	0.97	0.15	28,28,28,28	0
55	MG	1A	3078	1/1	0.97	0.09	34,34,34,34	0
55	MG	2A	3278	1/1	0.97	0.05	33,33,33,33	0
55	MG	1a	3194	1/1	0.97	0.07	52,52,52,52	0
55	MG	1A	3268	1/1	0.97	0.21	28,28,28,28	0
55	MG	1A	3029	1/1	0.97	0.05	26,26,26,26	0
55	MG	1A	3352	1/1	0.97	0.05	27,27,27,27	0
55	MG	1A	3113	1/1	0.97	0.07	26,26,26,26	0
55	MG	2W	201	1/1	0.97	0.22	38,38,38,38	0
55	MG	2W	202	1/1	0.97	0.20	44,44,44,44	0
55	MG	1A	3861	1/1	0.97	0.13	12,12,12,12	0
55	MG	1a	3200	1/1	0.97	0.08	64,64,64,64	0
55	MG	2A	3288	1/1	0.97	0.06	31,31,31,31	0
55	MG	1A	3114	1/1	0.97	0.14	28,28,28,28	0
55	MG	1a	3203	1/1	0.97	0.07	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3590	1/1	0.97	0.07	46,46,46,46	0
55	MG	1A	3042	1/1	0.97	0.11	11,11,11,11	0
55	MG	1A	3463	1/1	0.97	0.07	44,44,44,44	0
55	MG	1A	3013	1/1	0.97	0.07	20,20,20,20	0
55	MG	1A	3723	1/1	0.97	0.06	30,30,30,30	0
55	MG	2a	3001	1/1	0.97	0.07	44,44,44,44	0
55	MG	2A	3298	1/1	0.97	0.06	28,28,28,28	0
55	MG	1A	3724	1/1	0.97	0.06	20,20,20,20	0
55	MG	2A	3300	1/1	0.97	0.08	25,25,25,25	0
55	MG	1A	3003	1/1	0.97	0.07	19,19,19,19	0
55	MG	1A	3726	1/1	0.97	0.07	23,23,23,23	0
55	MG	1A	3118	1/1	0.97	0.21	29,29,29,29	0
55	MG	1A	3119	1/1	0.97	0.19	34,34,34,34	0
55	MG	1A	3879	1/1	0.97	0.07	46,46,46,46	0
55	MG	2A	3543	1/1	0.97	0.06	31,31,31,31	0
55	MG	2A	3307	1/1	0.97	0.06	20,20,20,20	0
55	MG	1A	3597	1/1	0.97	0.06	46,46,46,46	0
55	MG	1A	3362	1/1	0.97	0.06	8,8,8,8	0
55	MG	1a	3217	1/1	0.97	0.10	58,58,58,58	0
55	MG	1A	3884	1/1	0.97	0.07	28,28,28,28	0
55	MG	1A	3885	1/1	0.97	0.08	19,19,19,19	0
55	MG	1A	3120	1/1	0.97	0.07	18,18,18,18	0
55	MG	2a	3018	1/1	0.97	0.10	36,36,36,36	0
55	MG	1A	3364	1/1	0.97	0.05	15,15,15,15	0
55	MG	1A	3477	1/1	0.97	0.07	18,18,18,18	0
55	MG	2A	3109	1/1	0.97	0.12	40,40,40,40	0
55	MG	2A	3110	1/1	0.97	0.06	17,17,17,17	0
55	MG	1A	3478	1/1	0.97	0.07	25,25,25,25	0
55	MG	1a	3224	1/1	0.97	0.06	70,70,70,70	0
55	MG	2A	3322	1/1	0.97	0.06	31,31,31,31	0
55	MG	2A	3113	1/1	0.97	0.11	46,46,46,46	0
55	MG	1A	3479	1/1	0.97	0.05	20,20,20,20	0
55	MG	2A	3325	1/1	0.97	0.07	31,31,31,31	0
55	MG	2A	3328	1/1	0.97	0.04	27,27,27,27	0
55	MG	1B	231	1/1	0.97	0.05	46,46,46,46	0
55	MG	1A	3480	1/1	0.97	0.07	18,18,18,18	0
55	MG	2A	3332	1/1	0.97	0.06	35,35,35,35	0
55	MG	2A	3117	1/1	0.97	0.24	48,48,48,48	0
55	MG	1A	3481	1/1	0.97	0.07	22,22,22,22	0
55	MG	1D	304	1/1	0.97	0.18	31,31,31,31	0
55	MG	1a	3054	1/1	0.97	0.14	46,46,46,46	0
55	MG	1D	305	1/1	0.97	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
55	MG	2A	3578	1/1	0.97	0.07	36,36,36,36	0
55	MG	1A	3365	1/1	0.97	0.06	9,9,9,9	0
55	MG	1D	308	1/1	0.97	0.06	40,40,40,40	0
55	MG	2A	3582	1/1	0.97	0.08	57,57,57,57	0
55	MG	1A	3484	1/1	0.97	0.09	21,21,21,21	0
55	MG	2A	3345	1/1	0.97	0.10	37,37,37,37	0
55	MG	2A	3586	1/1	0.97	0.04	37,37,37,37	0
55	MG	1A	3215	1/1	0.97	0.27	27,27,27,27	0
55	MG	1a	3236	1/1	0.97	0.06	53,53,53,53	0
55	MG	2A	3589	1/1	0.97	0.07	46,46,46,46	0
55	MG	2A	3127	1/1	0.97	0.06	34,34,34,34	0
55	MG	1A	3166	1/1	0.97	0.06	28,28,28,28	0
55	MG	2A	3592	1/1	0.97	0.05	60,60,60,60	0
55	MG	1A	3368	1/1	0.97	0.05	26,26,26,26	0
55	MG	2A	3131	1/1	0.97	0.26	41,41,41,41	0
55	MG	1A	3488	1/1	0.97	0.07	16,16,16,16	0
55	MG	1A	3903	1/1	0.97	0.04	48,48,48,48	0
55	MG	2A	3597	1/1	0.97	0.06	51,51,51,51	0
55	MG	2A	3599	1/1	0.97	0.07	46,46,46,46	0
55	MG	1A	3905	1/1	0.97	0.04	32,32,32,32	0
55	MG	1A	3748	1/1	0.97	0.12	39,39,39,39	0
55	MG	1A	3369	1/1	0.97	0.07	31,31,31,31	0
55	MG	1A	3491	1/1	0.97	0.05	55,55,55,55	0
55	MG	2A	3607	1/1	0.97	0.06	29,29,29,29	0
55	MG	2A	3364	1/1	0.97	0.07	52,52,52,52	0
55	MG	1a	3250	1/1	0.97	0.05	55,55,55,55	0
55	MG	2A	3611	1/1	0.97	0.06	51,51,51,51	0
55	MG	1E	301	1/1	0.97	0.10	26,26,26,26	0
55	MG	2A	3614	1/1	0.97	0.06	29,29,29,29	0
55	MG	1A	3614	1/1	0.97	0.09	31,31,31,31	0
55	MG	2A	3616	1/1	0.97	0.07	64,64,64,64	0
55	MG	1A	3752	1/1	0.97	0.07	45,45,45,45	0
55	MG	1A	3912	1/1	0.97	0.09	17,17,17,17	0
55	MG	1A	3913	1/1	0.97	0.06	31,31,31,31	0
55	MG	1A	3284	1/1	0.97	0.19	47,47,47,47	0
55	MG	1F	302	1/1	0.97	0.24	26,26,26,26	0
55	MG	1F	304	1/1	0.97	0.21	28,28,28,28	0
55	MG	1F	306	1/1	0.97	0.18	33,33,33,33	0
55	MG	1F	308	1/1	0.97	0.09	32,32,32,32	0
55	MG	1F	309	1/1	0.97	0.20	25,25,25,25	0
55	MG	1A	3372	1/1	0.97	0.08	50,50,50,50	0
55	MG	2a	3082	1/1	0.97	0.31	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2a	3083	1/1	0.97	0.33	50,50,50,50	0
55	MG	2A	3378	1/1	0.97	0.04	60,60,60,60	0
55	MG	1A	3919	1/1	0.97	0.09	20,20,20,20	0
55	MG	2A	3380	1/1	0.97	0.06	23,23,23,23	0
55	MG	1A	3921	1/1	0.97	0.04	13,13,13,13	0
55	MG	2A	3154	1/1	0.97	0.08	36,36,36,36	0
55	MG	1F	314	1/1	0.97	0.23	33,33,33,33	0
55	MG	1a	3083	1/1	0.97	0.05	46,46,46,46	0
55	MG	1A	3286	1/1	0.97	0.16	31,31,31,31	0
55	MG	1A	3374	1/1	0.97	0.07	25,25,25,25	0
55	MG	1A	3287	1/1	0.97	0.19	25,25,25,25	0
55	MG	1A	3121	1/1	0.97	0.07	32,32,32,32	0
55	MG	2A	3161	1/1	0.97	0.07	55,55,55,55	0
55	MG	1A	3501	1/1	0.97	0.09	46,46,46,46	0
55	MG	1A	3763	1/1	0.97	0.06	37,37,37,37	0
55	MG	1A	3046	1/1	0.97	0.07	22,22,22,22	0
55	MG	1A	3627	1/1	0.97	0.14	47,47,47,47	0
55	MG	2a	3101	1/1	0.97	0.05	42,42,42,42	0
55	MG	2A	3647	1/1	0.97	0.07	56,56,56,56	0
55	MG	1A	3628	1/1	0.97	0.10	16,16,16,16	0
55	MG	2A	3399	1/1	0.97	0.15	48,48,48,48	0
55	MG	1A	3219	1/1	0.97	0.17	22,22,22,22	0
55	MG	1A	3062	1/1	0.97	0.09	37,37,37,37	0
55	MG	1A	3015	1/1	0.97	0.15	34,34,34,34	0
55	MG	1A	3382	1/1	0.97	0.10	44,44,44,44	0
55	MG	2A	3660	1/1	0.97	0.04	47,47,47,47	0
55	MG	1A	3012	1/1	0.97	0.26	43,43,43,43	0
55	MG	1A	3635	1/1	0.97	0.07	41,41,41,41	0
55	MG	2A	3407	1/1	0.97	0.08	36,36,36,36	0
55	MG	1A	3384	1/1	0.97	0.06	34,34,34,34	0
55	MG	2A	3666	1/1	0.97	0.06	45,45,45,45	0
55	MG	2A	3409	1/1	0.97	0.05	35,35,35,35	0
55	MG	2a	3116	1/1	0.97	0.07	61,61,61,61	0
55	MG	2A	3176	1/1	0.97	0.12	45,45,45,45	0
55	MG	2A	3177	1/1	0.97	0.16	34,34,34,34	0
55	MG	2a	3119	1/1	0.97	0.10	63,63,63,63	0
55	MG	2a	3120	1/1	0.97	0.17	58,58,58,58	0
55	MG	1P	201	1/1	0.97	0.35	32,32,32,32	0
55	MG	1P	202	1/1	0.97	0.15	28,28,28,28	0
55	MG	1A	3774	1/1	0.97	0.06	18,18,18,18	0
55	MG	2A	3675	1/1	0.97	0.07	30,30,30,30	0
55	MG	2A	3676	1/1	0.97	0.06	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1P	204	1/1	0.97	0.06	41,41,41,41	0
55	MG	1A	3385	1/1	0.97	0.05	23,23,23,23	0
55	MG	1A	3386	1/1	0.97	0.06	24,24,24,24	0
55	MG	1Q	203	1/1	0.97	0.13	37,37,37,37	0
55	MG	1A	3223	1/1	0.97	0.10	23,23,23,23	0
55	MG	2A	3689	1/1	0.97	0.04	34,34,34,34	0
55	MG	1Q	205	1/1	0.97	0.07	35,35,35,35	0
55	MG	1A	3297	1/1	0.97	0.10	9,9,9,9	0
55	MG	2A	3692	1/1	0.97	0.05	48,48,48,48	0
55	MG	2a	3136	1/1	0.97	0.05	54,54,54,54	0
55	MG	2a	3138	1/1	0.97	0.13	54,54,54,54	0
55	MG	1A	3090	1/1	0.97	0.07	43,43,43,43	0
55	MG	1A	3780	1/1	0.97	0.10	17,17,17,17	0
55	MG	1A	3390	1/1	0.97	0.05	30,30,30,30	0
55	MG	1a	3118	1/1	0.97	0.07	32,32,32,32	0
55	MG	1R	205	1/1	0.97	0.08	28,28,28,28	0
55	MG	1A	3299	1/1	0.97	0.19	31,31,31,31	0
55	MG	1a	3122	1/1	0.97	0.10	60,60,60,60	0
55	MG	2a	3146	1/1	0.97	0.08	61,61,61,61	0
55	MG	2A	3701	1/1	0.97	0.06	33,33,33,33	0
55	MG	2a	3149	1/1	0.97	0.07	57,57,57,57	0
55	MG	1A	3393	1/1	0.97	0.06	17,17,17,17	0
55	MG	1A	3394	1/1	0.97	0.08	17,17,17,17	0
55	MG	1A	3646	1/1	0.97	0.12	49,49,49,49	0
55	MG	1A	3523	1/1	0.97	0.07	13,13,13,13	0
55	MG	2a	3154	1/1	0.97	0.06	51,51,51,51	0
55	MG	1A	3173	1/1	0.97	0.07	35,35,35,35	0
55	MG	1A	3527	1/1	0.97	0.35	31,31,31,31	0
55	MG	2A	3709	1/1	0.97	0.06	34,34,34,34	0
55	MG	1A	3650	1/1	0.97	0.14	34,34,34,34	0
55	MG	1U	204	1/1	0.97	0.08	48,48,48,48	0
55	MG	1A	3066	1/1	0.97	0.12	25,25,25,25	0
55	MG	1A	3049	1/1	0.97	0.12	32,32,32,32	0
55	MG	1A	3401	1/1	0.97	0.08	21,21,21,21	0
55	MG	2A	3008	1/1	0.97	0.17	35,35,35,35	0
55	MG	2A	3716	1/1	0.97	0.04	51,51,51,51	0
55	MG	2A	3443	1/1	0.97	0.06	36,36,36,36	0
55	MG	1A	3228	1/1	0.97	0.05	31,31,31,31	0
55	MG	1A	3094	1/1	0.97	0.12	26,26,26,26	0
55	MG	1A	3407	1/1	0.97	0.08	20,20,20,20	0
55	MG	1A	3178	1/1	0.97	0.16	30,30,30,30	0
55	MG	1A	3409	1/1	0.97	0.07	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3724	1/1	0.97	0.08	52,52,52,52	0
55	MG	2A	3014	1/1	0.97	0.11	39,39,39,39	0
55	MG	2A	3726	1/1	0.97	0.07	67,67,67,67	0
55	MG	1A	3035	1/1	0.97	0.08	28,28,28,28	0
55	MG	1A	3180	1/1	0.97	0.30	39,39,39,39	0
55	MG	1A	3182	1/1	0.97	0.14	25,25,25,25	0
55	MG	2a	3186	1/1	0.97	0.08	61,61,61,61	0
55	MG	1A	3541	1/1	0.97	0.05	17,17,17,17	0
55	MG	2A	3020	1/1	0.97	0.14	38,38,38,38	0
55	MG	2A	3021	1/1	0.97	0.06	37,37,37,37	0
55	MG	1A	3069	1/1	0.97	0.27	37,37,37,37	0
55	MG	1A	3133	1/1	0.97	0.16	25,25,25,25	0
55	MG	1A	3544	1/1	0.97	0.07	36,36,36,36	0
55	MG	1A	3238	1/1	0.97	0.21	30,30,30,30	0
55	MG	1A	3185	1/1	0.97	0.21	29,29,29,29	0
55	MG	2A	3738	1/1	0.97	0.09	50,50,50,50	0
55	MG	1A	3186	1/1	0.97	0.18	38,38,38,38	0
55	MG	1A	3316	1/1	0.97	0.14	13,13,13,13	0
55	MG	2A	3031	1/1	0.97	0.10	18,18,18,18	0
55	MG	1A	3317	1/1	0.97	0.19	38,38,38,38	0
55	MG	1A	3134	1/1	0.97	0.26	32,32,32,32	0
55	MG	1A	3427	1/1	0.97	0.11	22,22,22,22	0
55	MG	1A	3098	1/1	0.97	0.17	29,29,29,29	0
55	MG	1A	3018	1/1	0.97	0.24	23,23,23,23	0
55	MG	15	102	1/1	0.97	0.26	30,30,30,30	0
55	MG	1A	3321	1/1	0.97	0.06	21,21,21,21	0
55	MG	2A	3472	1/1	0.97	0.08	53,53,53,53	0
55	MG	1A	3322	1/1	0.97	0.07	27,27,27,27	0
58	ZN	1n	102	1/1	0.97	0.05	77,77,77,77	0
55	MG	15	105	1/1	0.97	0.19	23,23,23,23	0
55	MG	1A	3558	1/1	0.97	0.08	40,40,40,40	0
55	MG	2A	3394	1/1	0.98	0.07	33,33,33,33	0
55	MG	2A	3395	1/1	0.98	0.07	32,32,32,32	0
55	MG	1A	3623	1/1	0.98	0.05	19,19,19,19	0
55	MG	1A	3954	1/1	0.98	0.08	55,55,55,55	0
55	MG	2A	3398	1/1	0.98	0.04	27,27,27,27	0
55	MG	1A	3624	1/1	0.98	0.07	22,22,22,22	0
55	MG	1A	3093	1/1	0.98	0.10	36,36,36,36	0
55	MG	2A	3401	1/1	0.98	0.09	28,28,28,28	0
55	MG	2A	3052	1/1	0.98	0.16	37,37,37,37	0
55	MG	1A	3236	1/1	0.98	0.21	27,27,27,27	0
55	MG	1a	3202	1/1	0.98	0.10	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1a	3053	1/1	0.98	0.05	38,38,38,38	0
55	MG	1A	3824	1/1	0.98	0.08	20,20,20,20	0
55	MG	2A	3601	1/1	0.98	0.08	54,54,54,54	0
55	MG	1A	3154	1/1	0.98	0.28	33,33,33,33	0
55	MG	1A	3208	1/1	0.98	0.17	33,33,33,33	0
55	MG	1A	3027	1/1	0.98	0.12	37,37,37,37	0
55	MG	1A	3282	1/1	0.98	0.27	40,40,40,40	0
55	MG	2A	3411	1/1	0.98	0.11	40,40,40,40	0
55	MG	2A	3609	1/1	0.98	0.04	39,39,39,39	0
55	MG	2A	3061	1/1	0.98	0.06	33,33,33,33	0
55	MG	1A	3631	1/1	0.98	0.06	18,18,18,18	0
55	MG	1A	3329	1/1	0.98	0.08	17,17,17,17	0
55	MG	2A	3613	1/1	0.98	0.03	31,31,31,31	0
55	MG	1A	3728	1/1	0.98	0.04	71,71,71,71	0
55	MG	1A	3240	1/1	0.98	0.14	27,27,27,27	0
55	MG	1A	3332	1/1	0.98	0.04	18,18,18,18	0
55	MG	1A	3550	1/1	0.98	0.06	60,60,60,60	0
55	MG	2A	3619	1/1	0.98	0.05	46,46,46,46	0
55	MG	1A	3241	1/1	0.98	0.14	29,29,29,29	0
55	MG	2A	3069	1/1	0.98	0.17	44,44,44,44	0
55	MG	1A	3733	1/1	0.98	0.05	21,21,21,21	0
55	MG	1N	201	1/1	0.98	0.11	36,36,36,36	0
55	MG	1A	3181	1/1	0.98	0.16	27,27,27,27	0
55	MG	1A	3392	1/1	0.98	0.07	25,25,25,25	0
55	MG	1A	3736	1/1	0.98	0.08	30,30,30,30	0
55	MG	1A	3009	1/1	0.98	0.10	18,18,18,18	0
55	MG	1A	3555	1/1	0.98	0.08	43,43,43,43	0
55	MG	1A	3843	1/1	0.98	0.09	37,37,37,37	0
55	MG	2A	3079	1/1	0.98	0.08	50,50,50,50	0
55	MG	1A	3980	1/1	0.98	0.04	18,18,18,18	0
55	MG	1A	3845	1/1	0.98	0.06	34,34,34,34	0
55	MG	1A	3471	1/1	0.98	0.06	39,39,39,39	0
55	MG	1A	3157	1/1	0.98	0.11	34,34,34,34	0
55	MG	1A	3395	1/1	0.98	0.05	22,22,22,22	0
55	MG	1A	3338	1/1	0.98	0.09	24,24,24,24	0
55	MG	1A	3290	1/1	0.98	0.12	42,42,42,42	0
55	MG	1A	3245	1/1	0.98	0.27	33,33,33,33	0
55	MG	2a	3036	1/1	0.98	0.14	28,28,28,28	0
55	MG	1A	3341	1/1	0.98	0.07	22,22,22,22	0
55	MG	2A	3251	1/1	0.98	0.37	40,40,40,40	0
55	MG	1A	3402	1/1	0.98	0.04	16,16,16,16	0
55	MG	1A	3564	1/1	0.98	0.04	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3643	1/1	0.98	0.05	58,58,58,58	0
55	MG	1A	3403	1/1	0.98	0.06	18,18,18,18	0
55	MG	2A	3645	1/1	0.98	0.05	63,63,63,63	0
55	MG	1A	3482	1/1	0.98	0.09	39,39,39,39	0
55	MG	1A	3404	1/1	0.98	0.04	19,19,19,19	0
55	MG	1A	3342	1/1	0.98	0.10	37,37,37,37	0
55	MG	1a	3239	1/1	0.98	0.08	55,55,55,55	0
55	MG	2A	3650	1/1	0.98	0.04	41,41,41,41	0
55	MG	2A	3651	1/1	0.98	0.05	65,65,65,65	0
55	MG	1A	3343	1/1	0.98	0.07	34,34,34,34	0
55	MG	2A	3653	1/1	0.98	0.05	47,47,47,47	0
55	MG	1A	3754	1/1	0.98	0.07	30,30,30,30	0
55	MG	1A	3863	1/1	0.98	0.06	28,28,28,28	0
55	MG	1A	3570	1/1	0.98	0.09	12,12,12,12	0
55	MG	1A	3656	1/1	0.98	0.04	39,39,39,39	0
55	MG	1U	203	1/1	0.98	0.24	29,29,29,29	0
55	MG	2A	3662	1/1	0.98	0.10	47,47,47,47	0
55	MG	1A	3246	1/1	0.98	0.21	33,33,33,33	0
55	MG	2A	3266	1/1	0.98	0.11	35,35,35,35	0
55	MG	1A	3867	1/1	0.98	0.05	44,44,44,44	0
55	MG	1U	206	1/1	0.98	0.24	29,29,29,29	0
55	MG	2A	3667	1/1	0.98	0.08	47,47,47,47	0
55	MG	1A	3868	1/1	0.98	0.08	37,37,37,37	0
55	MG	2A	3459	1/1	0.98	0.07	23,23,23,23	0
55	MG	2A	3270	1/1	0.98	0.14	32,32,32,32	0
55	MG	2A	3671	1/1	0.98	0.07	32,32,32,32	0
55	MG	1A	3005	1/1	0.98	0.09	20,20,20,20	0
55	MG	1A	3759	1/1	0.98	0.09	31,31,31,31	0
55	MG	1V	203	1/1	0.98	0.17	28,28,28,28	0
55	MG	1A	3346	1/1	0.98	0.07	24,24,24,24	0
55	MG	1A	3081	1/1	0.98	0.12	36,36,36,36	0
55	MG	2A	3677	1/1	0.98	0.04	60,60,60,60	0
55	MG	1A	3250	1/1	0.98	0.05	35,35,35,35	0
55	MG	2A	3679	1/1	0.98	0.05	66,66,66,66	0
55	MG	1a	3105	1/1	0.98	0.13	52,52,52,52	0
55	MG	2a	3076	1/1	0.98	0.11	46,46,46,46	0
55	MG	1a	3107	1/1	0.98	0.10	33,33,33,33	0
55	MG	1A	3412	1/1	0.98	0.04	22,22,22,22	0
55	MG	1a	3109	1/1	0.98	0.06	39,39,39,39	0
55	MG	2A	3688	1/1	0.98	0.07	32,32,32,32	0
55	MG	1A	3876	1/1	0.98	0.04	32,32,32,32	0
55	MG	1A	3296	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
55	MG	1a	3267	1/1	0.98	0.06	64,64,64,64	0
55	MG	1A	3878	1/1	0.98	0.04	19,19,19,19	0
55	MG	1Y	201	1/1	0.98	0.09	59,59,59,59	0
55	MG	1A	3350	1/1	0.98	0.04	29,29,29,29	0
55	MG	10	101	1/1	0.98	0.08	40,40,40,40	0
55	MG	2A	3696	1/1	0.98	0.08	31,31,31,31	0
55	MG	1a	3116	1/1	0.98	0.09	59,59,59,59	0
55	MG	1A	3251	1/1	0.98	0.15	38,38,38,38	0
55	MG	10	103	1/1	0.98	0.07	37,37,37,37	0
55	MG	1A	3666	1/1	0.98	0.04	52,52,52,52	0
55	MG	1A	4016	1/1	0.98	0.05	45,45,45,45	0
55	MG	1A	3135	1/1	0.98	0.06	46,46,46,46	0
55	MG	2a	3095	1/1	0.98	0.09	70,70,70,70	0
55	MG	1A	3353	1/1	0.98	0.04	21,21,21,21	0
55	MG	2A	3130	1/1	0.98	0.15	35,35,35,35	0
55	MG	1A	3582	1/1	0.98	0.10	40,40,40,40	0
55	MG	2A	3301	1/1	0.98	0.05	36,36,36,36	0
55	MG	1A	3420	1/1	0.98	0.03	24,24,24,24	0
55	MG	2A	3708	1/1	0.98	0.04	38,38,38,38	0
55	MG	1A	3030	1/1	0.98	0.07	14,14,14,14	0
55	MG	2A	3492	1/1	0.98	0.09	31,31,31,31	0
55	MG	1A	3422	1/1	0.98	0.11	24,24,24,24	0
55	MG	13	101	1/1	0.98	0.13	31,31,31,31	0
55	MG	1A	3083	1/1	0.98	0.14	30,30,30,30	0
55	MG	1A	3506	1/1	0.98	0.07	18,18,18,18	0
55	MG	2A	3497	1/1	0.98	0.04	26,26,26,26	0
55	MG	1A	3356	1/1	0.98	0.09	25,25,25,25	0
55	MG	1A	3163	1/1	0.98	0.06	23,23,23,23	0
55	MG	1A	3426	1/1	0.98	0.11	19,19,19,19	0
55	MG	2A	3311	1/1	0.98	0.12	33,33,33,33	0
55	MG	1A	3510	1/1	0.98	0.06	18,18,18,18	0
55	MG	1A	3138	1/1	0.98	0.18	20,20,20,20	0
55	MG	1A	3682	1/1	0.98	0.10	51,51,51,51	0
55	MG	2A	3723	1/1	0.98	0.05	49,49,49,49	0
55	MG	1A	3899	1/1	0.98	0.03	22,22,22,22	0
55	MG	1A	3101	1/1	0.98	0.23	29,29,29,29	0
55	MG	1A	3429	1/1	0.98	0.07	12,12,12,12	0
55	MG	1A	3904	1/1	0.98	0.03	16,16,16,16	0
55	MG	17	103	1/1	0.98	0.10	30,30,30,30	0
55	MG	1A	3785	1/1	0.98	0.05	24,24,24,24	0
55	MG	2A	3321	1/1	0.98	0.04	42,42,42,42	0
55	MG	1A	3685	1/1	0.98	0.15	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3304	1/1	0.98	0.11	36,36,36,36	0
55	MG	1A	3908	1/1	0.98	0.09	52,52,52,52	0
55	MG	1B	214	1/1	0.98	0.06	39,39,39,39	0
55	MG	2A	3326	1/1	0.98	0.08	36,36,36,36	0
55	MG	1B	215	1/1	0.98	0.05	36,36,36,36	0
55	MG	1A	3516	1/1	0.98	0.07	22,22,22,22	0
55	MG	1A	3039	1/1	0.98	0.12	35,35,35,35	0
55	MG	1A	3690	1/1	0.98	0.04	38,38,38,38	0
55	MG	2A	3740	1/1	0.98	0.14	47,47,47,47	0
55	MG	2a	3134	1/1	0.98	0.06	49,49,49,49	0
55	MG	1A	3306	1/1	0.98	0.30	39,39,39,39	0
55	MG	2A	3334	1/1	0.98	0.11	27,27,27,27	0
55	MG	2a	3137	1/1	0.98	0.08	54,54,54,54	0
55	MG	1A	3006	1/1	0.98	0.05	22,22,22,22	0
55	MG	1A	3104	1/1	0.98	0.36	27,27,27,27	0
55	MG	1A	3916	1/1	0.98	0.05	25,25,25,25	0
55	MG	1A	3917	1/1	0.98	0.09	13,13,13,13	0
55	MG	2A	3004	1/1	0.98	0.08	33,33,33,33	0
55	MG	1A	3072	1/1	0.98	0.10	22,22,22,22	0
55	MG	1A	3264	1/1	0.98	0.13	36,36,36,36	0
55	MG	2A	3168	1/1	0.98	0.09	44,44,44,44	0
55	MG	2A	3007	1/1	0.98	0.07	31,31,31,31	0
55	MG	1A	3920	1/1	0.98	0.14	53,53,53,53	0
55	MG	1A	3796	1/1	0.98	0.05	33,33,33,33	0
55	MG	1A	3797	1/1	0.98	0.08	63,63,63,63	0
55	MG	1A	3924	1/1	0.98	0.04	37,37,37,37	0
55	MG	1D	301	1/1	0.98	0.28	35,35,35,35	0
55	MG	2A	3352	1/1	0.98	0.05	31,31,31,31	0
55	MG	2A	3353	1/1	0.98	0.11	27,27,27,27	0
55	MG	1A	3146	1/1	0.98	0.06	29,29,29,29	0
55	MG	1A	3524	1/1	0.98	0.06	44,44,44,44	0
55	MG	2A	3015	1/1	0.98	0.15	29,29,29,29	0
55	MG	2a	3158	1/1	0.98	0.06	46,46,46,46	0
55	MG	2a	3159	1/1	0.98	0.05	38,38,38,38	0
55	MG	2a	3160	1/1	0.98	0.09	39,39,39,39	0
55	MG	2B	217	1/1	0.98	0.06	52,52,52,52	0
55	MG	1A	3266	1/1	0.98	0.12	25,25,25,25	0
55	MG	1A	3526	1/1	0.98	0.08	22,22,22,22	0
55	MG	2A	3360	1/1	0.98	0.07	47,47,47,47	0
55	MG	2A	3546	1/1	0.98	0.05	48,48,48,48	0
55	MG	2D	302	1/1	0.98	0.12	41,41,41,41	0
55	MG	1A	3198	1/1	0.98	0.10	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	2A	3363	1/1	0.98	0.06	33,33,33,33	0
55	MG	1A	3370	1/1	0.98	0.05	30,30,30,30	0
55	MG	2D	306	1/1	0.98	0.08	34,34,34,34	0
55	MG	1A	3061	1/1	0.98	0.03	26,26,26,26	0
55	MG	1A	3530	1/1	0.98	0.04	22,22,22,22	0
55	MG	2A	3184	1/1	0.98	0.05	47,47,47,47	0
55	MG	1A	3935	1/1	0.98	0.09	29,29,29,29	0
55	MG	1A	3148	1/1	0.98	0.05	28,28,28,28	0
55	MG	1A	3532	1/1	0.98	0.05	55,55,55,55	0
55	MG	2a	3179	1/1	0.98	0.05	56,56,56,56	0
55	MG	1A	3938	1/1	0.98	0.07	38,38,38,38	0
55	MG	2a	3181	1/1	0.98	0.08	58,58,58,58	0
55	MG	1A	3024	1/1	0.98	0.22	27,27,27,27	0
55	MG	2a	3183	1/1	0.98	0.05	49,49,49,49	0
55	MG	1A	3063	1/1	0.98	0.08	27,27,27,27	0
55	MG	2a	3185	1/1	0.98	0.04	51,51,51,51	0
55	MG	2A	3028	1/1	0.98	0.04	33,33,33,33	0
55	MG	1A	3272	1/1	0.98	0.30	24,24,24,24	0
55	MG	2A	3565	1/1	0.98	0.06	57,57,57,57	0
55	MG	1A	3273	1/1	0.98	0.21	25,25,25,25	0
55	MG	2a	3190	1/1	0.98	0.06	64,64,64,64	0
55	MG	1A	3007	1/1	0.98	0.08	25,25,25,25	0
55	MG	2F	303	1/1	0.98	0.12	40,40,40,40	0
55	MG	2F	304	1/1	0.98	0.14	36,36,36,36	0
55	MG	1E	302	1/1	0.98	0.31	40,40,40,40	0
55	MG	1E	303	1/1	0.98	0.14	26,26,26,26	0
55	MG	1a	3036	1/1	0.98	0.07	33,33,33,33	0
55	MG	1A	3176	1/1	0.98	0.17	22,22,22,22	0
55	MG	1A	3946	1/1	0.98	0.05	49,49,49,49	0
55	MG	1A	3619	1/1	0.98	0.10	26,26,26,26	0
55	MG	1A	3948	1/1	0.98	0.04	21,21,21,21	0
55	MG	2Q	201	1/1	0.98	0.08	41,41,41,41	0
55	MG	1A	3815	1/1	0.98	0.07	42,42,42,42	0
55	MG	2A	3041	1/1	0.98	0.12	40,40,40,40	0
55	MG	1F	301	1/1	0.98	0.15	26,26,26,26	0
55	MG	1A	3379	1/1	0.98	0.09	47,47,47,47	0
55	MG	1A	3621	1/1	0.98	0.04	33,33,33,33	0
55	MG	1F	305	1/1	0.98	0.16	25,25,25,25	0
55	MG	2A	3391	1/1	0.98	0.11	37,37,37,37	0
55	MG	2A	3584	1/1	0.98	0.08	37,37,37,37	0
58	ZN	2Y	501	1/1	0.98	0.04	78,78,78,78	0
55	MG	1A	3001	1/1	0.98	0.06	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
58	ZN	29	501	1/1	0.98	0.04	54,54,54,54	0
55	MG	1F	307	1/1	0.98	0.19	33,33,33,33	0
55	MG	1A	3914	1/1	0.99	0.03	45,45,45,45	0
55	MG	1A	3504	1/1	0.99	0.09	33,33,33,33	0
55	MG	2A	3167	1/1	0.99	0.08	35,35,35,35	0
55	MG	2A	3556	1/1	0.99	0.04	74,74,74,74	0
55	MG	1A	3976	1/1	0.99	0.03	17,17,17,17	0
55	MG	1A	3687	1/1	0.99	0.07	30,30,30,30	0
55	MG	1A	3469	1/1	0.99	0.03	44,44,44,44	0
55	MG	1A	3470	1/1	0.99	0.05	22,22,22,22	0
55	MG	1A	3398	1/1	0.99	0.04	15,15,15,15	0
55	MG	2A	3562	1/1	0.99	0.03	54,54,54,54	0
55	MG	2A	3563	1/1	0.99	0.03	18,18,18,18	0
55	MG	2A	3564	1/1	0.99	0.04	46,46,46,46	0
55	MG	2A	3358	1/1	0.99	0.03	27,27,27,27	0
55	MG	1A	3981	1/1	0.99	0.06	24,24,24,24	0
55	MG	2A	3682	1/1	0.99	0.04	55,55,55,55	0
55	MG	2A	3683	1/1	0.99	0.04	50,50,50,50	0
55	MG	2A	3684	1/1	0.99	0.02	30,30,30,30	0
55	MG	1A	3399	1/1	0.99	0.06	17,17,17,17	0
55	MG	1A	3819	1/1	0.99	0.08	29,29,29,29	0
55	MG	2A	3687	1/1	0.99	0.07	59,59,59,59	0
55	MG	2A	3362	1/1	0.99	0.03	29,29,29,29	0
55	MG	1B	221	1/1	0.99	0.04	36,36,36,36	0
55	MG	1A	3922	1/1	0.99	0.05	40,40,40,40	0
55	MG	1A	3444	1/1	0.99	0.04	19,19,19,19	0
55	MG	1A	3044	1/1	0.99	0.06	5,5,5,5	0
55	MG	1B	225	1/1	0.99	0.04	39,39,39,39	0
55	MG	1A	3511	1/1	0.99	0.05	17,17,17,17	0
55	MG	23	102	1/1	0.99	0.10	44,44,44,44	0
55	MG	2A	3576	1/1	0.99	0.06	47,47,47,47	0
55	MG	1Q	202	1/1	0.99	0.04	25,25,25,25	0
55	MG	1A	3871	1/1	0.99	0.06	30,30,30,30	0
55	MG	1A	3475	1/1	0.99	0.05	12,12,12,12	0
55	MG	2A	3580	1/1	0.99	0.04	53,53,53,53	0
55	MG	1A	3260	1/1	0.99	0.24	27,27,27,27	0
55	MG	1A	3929	1/1	0.99	0.07	49,49,49,49	0
55	MG	1A	3738	1/1	0.99	0.06	35,35,35,35	0
55	MG	1A	3041	1/1	0.99	0.04	24,24,24,24	0
55	MG	1A	3017	1/1	0.99	0.11	23,23,23,23	0
55	MG	1A	3933	1/1	0.99	0.03	38,38,38,38	0
55	MG	1a	3243	1/1	0.99	0.06	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3191	1/1	0.99	0.17	39,39,39,39	0
55	MG	1A	3249	1/1	0.99	0.39	28,28,28,28	0
55	MG	1A	3451	1/1	0.99	0.06	21,21,21,21	0
55	MG	2A	3283	1/1	0.99	0.04	27,27,27,27	0
55	MG	1a	3247	1/1	0.99	0.05	59,59,59,59	0
55	MG	1a	3248	1/1	0.99	0.03	42,42,42,42	0
55	MG	2A	3286	1/1	0.99	0.04	51,51,51,51	0
55	MG	1a	3249	1/1	0.99	0.04	58,58,58,58	0
55	MG	2A	3488	1/1	0.99	0.04	42,42,42,42	0
55	MG	1D	307	1/1	0.99	0.07	9,9,9,9	0
55	MG	2A	3598	1/1	0.99	0.07	25,25,25,25	0
55	MG	1A	3452	1/1	0.99	0.06	20,20,20,20	0
55	MG	1A	3881	1/1	0.99	0.03	27,27,27,27	0
55	MG	1A	3939	1/1	0.99	0.04	39,39,39,39	0
55	MG	2a	3021	1/1	0.99	0.06	35,35,35,35	0
55	MG	2A	3292	1/1	0.99	0.07	32,32,32,32	0
55	MG	2A	3030	1/1	0.99	0.10	34,34,34,34	0
55	MG	2A	3604	1/1	0.99	0.03	36,36,36,36	0
55	MG	2A	3605	1/1	0.99	0.06	31,31,31,31	0
55	MG	2a	3148	1/1	0.99	0.09	36,36,36,36	0
55	MG	1A	3832	1/1	0.99	0.08	19,19,19,19	0
55	MG	1A	3883	1/1	0.99	0.04	30,30,30,30	0
55	MG	2A	3296	1/1	0.99	0.05	47,47,47,47	0
55	MG	1A	3331	1/1	0.99	0.06	21,21,21,21	0
55	MG	1A	3111	1/1	0.99	0.18	31,31,31,31	0
55	MG	1a	3026	1/1	0.99	0.04	35,35,35,35	0
55	MG	1A	3705	1/1	0.99	0.04	37,37,37,37	0
55	MG	1A	3887	1/1	0.99	0.03	41,41,41,41	0
55	MG	1A	3126	1/1	0.99	0.11	33,33,33,33	0
55	MG	1V	201	1/1	0.99	0.11	21,21,21,21	0
55	MG	1a	3263	1/1	0.99	0.06	47,47,47,47	0
55	MG	1A	3143	1/1	0.99	0.12	13,13,13,13	0
55	MG	2A	3618	1/1	0.99	0.05	35,35,35,35	0
55	MG	1A	3283	1/1	0.99	0.04	33,33,33,33	0
55	MG	1a	3106	1/1	0.99	0.04	30,30,30,30	0
55	MG	1A	3458	1/1	0.99	0.04	50,50,50,50	0
55	MG	1A	3670	1/1	0.99	0.03	41,41,41,41	0
55	MG	1A	3490	1/1	0.99	0.03	35,35,35,35	0
55	MG	1E	305	1/1	0.99	0.07	41,41,41,41	0
55	MG	2a	3168	1/1	0.99	0.04	52,52,52,52	0
55	MG	1A	3672	1/1	0.99	0.04	38,38,38,38	0
55	MG	1A	3022	1/1	0.99	0.06	15,15,15,15	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3844	1/1	0.99	0.06	31,31,31,31	0
55	MG	2A	3414	1/1	0.99	0.03	42,42,42,42	0
55	MG	1A	3285	1/1	0.99	0.06	20,20,20,20	0
55	MG	1a	3192	1/1	0.99	0.04	59,59,59,59	0
55	MG	2a	3175	1/1	0.99	0.10	48,48,48,48	0
55	MG	1A	3956	1/1	0.99	0.03	22,22,22,22	0
55	MG	2A	3139	1/1	0.99	0.09	27,27,27,27	0
55	MG	1A	3715	1/1	0.99	0.04	30,30,30,30	0
55	MG	1F	303	1/1	0.99	0.16	27,27,27,27	0
55	MG	1A	4020	1/1	0.99	0.08	21,21,21,21	0
55	MG	1A	3493	1/1	0.99	0.06	18,18,18,18	0
55	MG	1a	3120	1/1	0.99	0.08	33,33,33,33	0
55	MG	1A	3900	1/1	0.99	0.04	33,33,33,33	0
55	MG	1A	3901	1/1	0.99	0.05	36,36,36,36	0
55	MG	1A	3254	1/1	0.99	0.12	37,37,37,37	0
55	MG	2A	3327	1/1	0.99	0.11	28,28,28,28	0
55	MG	1A	3414	1/1	0.99	0.03	31,31,31,31	0
55	MG	2A	3329	1/1	0.99	0.09	26,26,26,26	0
55	MG	1a	3125	1/1	0.99	0.06	48,48,48,48	0
55	MG	1F	310	1/1	0.99	0.13	28,28,28,28	0
55	MG	11	103	1/1	0.99	0.05	42,42,42,42	0
55	MG	1A	3761	1/1	0.99	0.05	42,42,42,42	0
55	MG	1A	3852	1/1	0.99	0.04	35,35,35,35	0
55	MG	1A	3145	1/1	0.99	0.04	24,24,24,24	0
55	MG	1A	3497	1/1	0.99	0.07	21,21,21,21	0
55	MG	1A	3416	1/1	0.99	0.06	24,24,24,24	0
55	MG	2A	3338	1/1	0.99	0.09	30,30,30,30	0
55	MG	2A	3339	1/1	0.99	0.04	33,33,33,33	0
55	MG	2A	3654	1/1	0.99	0.04	29,29,29,29	0
55	MG	2A	3655	1/1	0.99	0.03	38,38,38,38	0
55	MG	2A	3656	1/1	0.99	0.04	54,54,54,54	0
55	MG	2A	3244	1/1	0.99	0.06	37,37,37,37	0
55	MG	1A	3499	1/1	0.99	0.03	34,34,34,34	0
55	MG	2A	3342	1/1	0.99	0.07	35,35,35,35	0
55	MG	2A	3545	1/1	0.99	0.10	23,23,23,23	0
55	MG	1A	3230	1/1	0.99	0.15	31,31,31,31	0
55	MG	1A	3970	1/1	0.99	0.10	43,43,43,43	0
55	MG	2A	3074	1/1	0.99	0.07	23,23,23,23	0
58	ZN	15	109	1/1	0.99	0.03	47,47,47,47	0
58	ZN	16	501	1/1	0.99	0.02	29,29,29,29	0
58	ZN	19	103	1/1	0.99	0.02	38,38,38,38	0
55	MG	2E	306	1/1	0.99	0.07	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1A	3084	1/1	0.99	0.19	35,35,35,35	0
55	MG	1A	3467	1/1	0.99	0.04	40,40,40,40	0
58	ZN	25	104	1/1	0.99	0.02	55,55,55,55	0
58	ZN	26	501	1/1	0.99	0.04	54,54,54,54	0
55	MG	1A	3095	1/1	0.99	0.07	10,10,10,10	0
55	MG	1a	3139	1/1	0.99	0.06	47,47,47,47	0
59	SF4	1d	306	8/8	0.99	0.06	55,64,69,72	0
59	SF4	2d	501	8/8	0.99	0.04	58,66,69,73	0
55	MG	1a	3272	1/1	1.00	0.06	45,45,45,45	0
55	MG	1A	3476	1/1	1.00	0.04	30,30,30,30	0
55	MG	2A	3482	1/1	1.00	0.05	28,28,28,28	0
55	MG	1A	3849	1/1	1.00	0.03	18,18,18,18	0
58	ZN	1Y	202	1/1	1.00	0.02	50,50,50,50	0
55	MG	1A	3335	1/1	1.00	0.04	24,24,24,24	0

6.5 Other polymers (i)

There are no such residues in this entry.