



# Full wwPDB X-ray Structure Validation Report ⓘ

Jul 18, 2023 – 12:17 AM EDT

PDB ID : 8FC6  
Title : Crystal structure of the A2058-N6-dimethylated *Thermus thermophilus* 70S ribosome in complex with protein Y, hygromycin A, and telithromycin at 2.35Å resolution  
Authors : Chen, C.-W.; Syroegin, E.A.; Svetlov, M.S.; Polikanov, Y.S.  
Deposited on : 2022-12-01  
Resolution : 2.35 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](mailto: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 ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtriage (Phenix) : 1.13  
EDS : 2.34  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.34

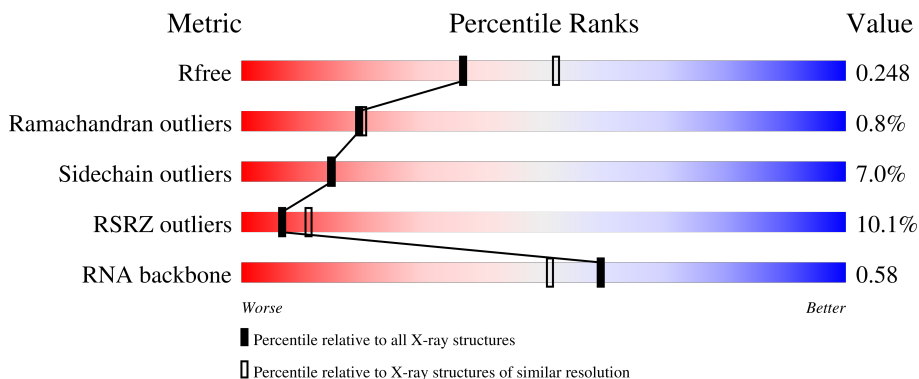
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

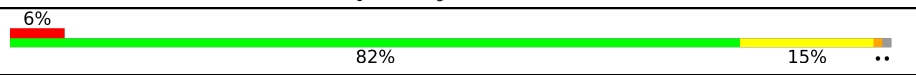
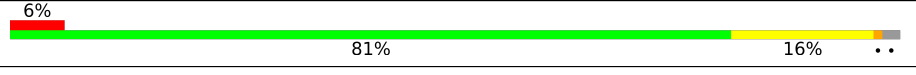
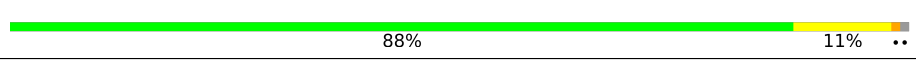
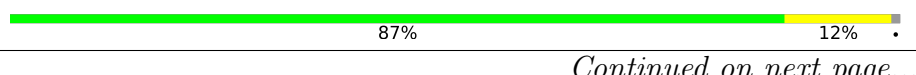
The reported resolution of this entry is 2.35 Å.

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))
$R_{free}$	130704	1164 (2.36-2.36)
Ramachandran outliers	138981	1211 (2.36-2.36)
Sidechain outliers	138945	1212 (2.36-2.36)
RSRZ outliers	127900	1150 (2.36-2.36)
RNA backbone	3102	1006 (2.74-1.98)

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  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1A	2915	 6% 82% 15% ..
1	2A	2915	 6% 81% 16% ..
2	1B	121	 88% 11% ..
2	2B	121	 87% 12% .

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Mol	Chain	Length	Quality of chain
3	1D	276	2% 94% 5%
3	2D	276	4% 94% 6%
4	1E	206	3% 95% ..
4	2E	206	3% 95% ..
5	1F	210	2% 92% 5% .
5	2F	210	2% 90% 7% .
6	1G	182	4% 90% 9% .
6	2G	182	41% 90% 10% .
7	1H	180	2% 93% ..
7	2H	180	35% 87% 9% .
8	1I	148	3% 89% 10% .
8	2I	148	14% 91% 8% .
9	1N	140	8% 96% .
9	2N	140	% 95% 5%
10	1O	122	% 99% .
10	2O	122	2% 97% .
11	1P	150	94% 5% .
11	2P	150	9% 93% 6% .
12	1Q	141	% 96% .
12	2Q	141	7% 95% 5%
13	1R	118	2% 97% .
13	2R	118	2% 94% 6%
14	1S	112	2% 90% 8% .
14	2S	112	22% 90% 8% .
15	1T	146	2% 84% 5% 10%

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Mol	Chain	Length	Quality of chain
15	2T	146	3% 84% 6% 10%
16	1U	118	3% 95% ..
16	2U	118	4% 92% 6% .
17	1V	101	% 96% .
17	2V	101	6% 93% 6% .
18	1W	113	9% 95% ..
18	2W	113	6% 96% ..
19	1X	96	3% 95% ..
19	2X	96	9% 96% ..
20	1Y	110	2% 92% 5% .
20	2Y	110	15% 93% 5% .
21	1Z	206	2% 91% 8% .
21	2Z	206	8% 91% 6% .
22	10	85	% 91% 9%
22	20	85	16% 91% 9%
23	11	98	3% 92% 7% .
23	21	98	7% 92% 7% .
24	12	72	% 90% 7% .
24	22	72	6% 92% 6% .
25	13	60	5% 95% ..
25	23	60	8% 90% 8% .
26	14	71	24% 86% 10% ..
26	24	71	52% 83% 13% ..
27	15	60	5% 92% 5% ..
27	25	60	2% 97% ..

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Mol	Chain	Length	Quality of chain
28	16	54	2% 93% 6%
28	26	54	2% 89% 9%
29	17	49	10% 94% ..
29	27	49	10% 90% 8%
30	18	65	2% 92% 6%
30	28	65	6% 94% 5%
31	19	37	97% .
31	29	37	30% 95% 5%
32	1a	1521	6% 83% 15%
32	2a	1521	6% 81% 17%
33	1b	256	11% 78% 12% 10%
33	2b	256	16% 79% 11% 10%
34	1c	239	13% 82% . 14%
34	2c	239	24% 77% 10% 14%
35	1d	209	18% 93% 6%
35	2d	209	13% 92% 8%
36	1e	162	4% 86% 5% 9%
36	2e	162	6% 87% . 9%
37	1f	101	2% 96% ..
37	2f	101	% 91% 8%
38	1g	156	4% 93% 6%
38	2g	156	17% 92% 8%
39	1h	138	12% 95% ..
39	2h	138	8% 92% 7%
40	1i	128	40% 93% 6%

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Mol	Chain	Length	Quality of chain
40	2i	128	74% 89% 9% ..
41	1j	105	26% 84% 9% 8%
41	2j	105	44% 82% 10% 9%
42	1k	129	2% 84% 12%
42	2k	129	11% 86% 12%
43	1l	132	13% 91% 8%
43	2l	132	5% 87% 5% 8%
44	1m	126	17% 85% 7% 8%
44	2m	126	45% 82% 9% 10%
45	1n	61	51% 92% 7% .
45	2n	61	80% 90% 8% .
46	1o	89	7% 97% ..
46	2o	89	8% 89% 10% .
47	1p	88	48% 83% 10% 7%
47	2p	88	18% 84% 9% 7%
48	1q	105	20% 90% 6%
48	2q	105	12% 90% 6%
49	1r	88	% 75% 23%
49	2r	88	% 74% 23%
50	1s	93	19% 85% 11%
50	2s	93	51% 81% 9% 11%
51	1t	106	38% 85% 5% . 9%
51	2t	106	8% 85% 8% 8%
52	1u	27	56% 81% 15%
52	2u	27	67% 74% 11% 15%

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Mol	Chain	Length	Quality of chain
53	1y	113	
53	2y	113	

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
54	MG	1A	3309	-	-	-	X
54	MG	1A	3575	-	-	-	X
54	MG	1A	3588	-	-	-	X
54	MG	1A	3608	-	-	-	X
54	MG	1A	3629	-	-	-	X
54	MG	1A	3636	-	-	-	X
54	MG	1A	3691	-	-	-	X
54	MG	1A	4012	-	-	-	X
54	MG	1A	4018	-	-	-	X
54	MG	1a	3003	-	-	-	X
54	MG	1a	3244	-	-	-	X
54	MG	2A	3166	-	-	-	X
54	MG	2A	3230	-	-	-	X
54	MG	2A	3522	-	-	-	X
54	MG	2A	3528	-	-	-	X
54	MG	2A	3671	-	-	-	X
54	MG	2A	3715	-	-	-	X

## 2 Entry composition [i](#)

There are 61 unique types of molecules in this entry. The entry contains 298008 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
			Total	C	N	O	P			
1	1A	2872	Total	C	N	O	P	0	0	0
			61871	27542	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61760	27493	11552	19850	2865			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	1G	181	Total 1426	C 916	N 253	O 253	S 4	0	0	0
6	2G	181	Total 1424	C 912	N 259	O 249	S 4	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	1H	174	Total 1330	C 845	N 248	O 236	S 1	0	0	0
7	2H	173	Total 1324	C 842	N 247	O 234	S 1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	1I	147	Total 1094	C 699	N 191	O 203	S 1	0	0	0
8	2I	146	Total 1076	C 687	N 186	O 202	S 1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
9	1N	140	Total 1121	C 722	N 208	O 187	S 4	0	0	0
9	2N	140	Total 1117	C 719	N 207	O 187	S 4	0	0	0

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total	C	N	O	0	0	0
			877	553	175	149			
14	2S	110	Total	C	N	O	0	0	0
			870	549	173	148			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
17	1V	101	Total 775	C 498	N 141	O 135	S 1	0	0	0
17	2V	101	Total 771	C 495	N 140	O 135	S 1	0	0	0

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
20	1Y	107	Total 810	C 520	N 153	O 131	S 6	0	0	0
20	2Y	107	Total 810	C 519	N 153	O 132	S 6	0	0	0

- 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	C	N	O	S	0	0	0
			764	478	144	139	3			
53	2y	96	Total	C	N	O	S	0	0	0
			749	468	141	137	3			

- Molecule 54 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	1A	1019	Total	Mg	0	0
			1019	1019		
54	1B	30	Total	Mg	0	0
			30	30		
54	1D	15	Total	Mg	0	0
			15	15		
54	1E	9	Total	Mg	0	0
			9	9		
54	1F	19	Total	Mg	0	0
			19	19		
54	1G	4	Total	Mg	0	0
			4	4		
54	1H	2	Total	Mg	0	0
			2	2		
54	1N	4	Total	Mg	0	0
			4	4		
54	1O	1	Total	Mg	0	0
			1	1		
54	1P	7	Total	Mg	0	0
			7	7		
54	1Q	5	Total	Mg	0	0
			5	5		
54	1R	4	Total	Mg	0	0
			4	4		
54	1T	5	Total	Mg	0	0
			5	5		
54	1U	8	Total	Mg	0	0
			8	8		
54	1V	7	Total	Mg	0	0
			7	7		
54	1W	3	Total	Mg	0	0
			3	3		
54	1X	1	Total	Mg	0	0
			1	1		
54	1Z	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	10	7	Total Mg 7 7	0	0
54	11	4	Total Mg 4 4	0	0
54	13	4	Total Mg 4 4	0	0
54	14	1	Total Mg 1 1	0	0
54	15	9	Total Mg 9 9	0	0
54	17	7	Total Mg 7 7	0	0
54	18	4	Total Mg 4 4	0	0
54	19	2	Total Mg 2 2	0	0
54	1a	278	Total Mg 278 278	0	0
54	1b	1	Total Mg 1 1	0	0
54	1d	4	Total Mg 4 4	0	0
54	1e	3	Total Mg 3 3	0	0
54	1f	1	Total Mg 1 1	0	0
54	1g	2	Total Mg 2 2	0	0
54	1h	2	Total Mg 2 2	0	0
54	1i	1	Total Mg 1 1	0	0
54	1k	1	Total Mg 1 1	0	0
54	1l	2	Total Mg 2 2	0	0
54	1m	1	Total Mg 1 1	0	0
54	1n	2	Total Mg 2 2	0	0
54	1o	2	Total Mg 2 2	0	0

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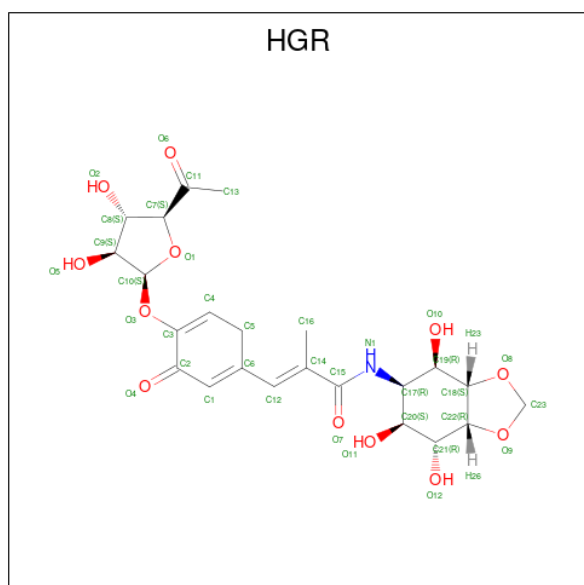
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1r	1	Total Mg 1 1	0	0
54	1t	1	Total Mg 1 1	0	0
54	1y	3	Total Mg 3 3	0	0
54	2A	742	Total Mg 742 742	0	0
54	2B	17	Total Mg 17 17	0	0
54	2D	10	Total Mg 10 10	0	0
54	2E	6	Total Mg 6 6	0	0
54	2F	4	Total Mg 4 4	0	0
54	2G	2	Total Mg 2 2	0	0
54	2I	1	Total Mg 1 1	0	0
54	2N	1	Total Mg 1 1	0	0
54	2O	1	Total Mg 1 1	0	0
54	2P	4	Total Mg 4 4	0	0
54	2Q	2	Total Mg 2 2	0	0
54	2R	2	Total Mg 2 2	0	0
54	2T	4	Total Mg 4 4	0	0
54	2V	3	Total Mg 3 3	0	0
54	2W	4	Total Mg 4 4	0	0
54	20	1	Total Mg 1 1	0	0
54	21	1	Total Mg 1 1	0	0
54	23	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	25	2	Total Mg 2 2	0	0
54	27	1	Total Mg 1 1	0	0
54	28	2	Total Mg 2 2	0	0
54	2a	192	Total Mg 192 192	0	0
54	2e	1	Total Mg 1 1	0	0
54	2f	1	Total Mg 1 1	0	0
54	2j	1	Total Mg 1 1	0	0
54	2k	1	Total Mg 1 1	0	0
54	2p	1	Total Mg 1 1	0	0
54	2t	1	Total Mg 1 1	0	0

- Molecule 55 is Hygromycin A (three-letter code: HGR) (formula: C<sub>23</sub>H<sub>29</sub>NO<sub>12</sub>) (labeled as "Ligand of Interest" by depositor).



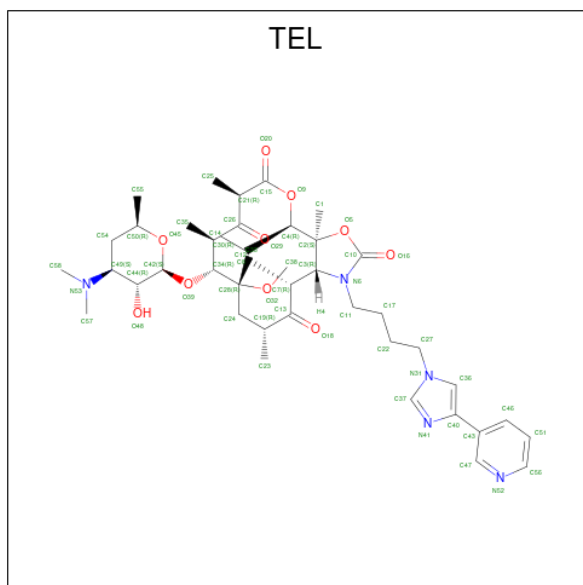
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	1A	1	Total C N O 36 23 1 12	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	
			Total	C	N			O
55	2A	1	36	23	1	12	0	0

- Molecule 56 is TELITHROMYCIN (three-letter code: TEL) (formula:  $C_{43}H_{65}N_5O_{10}$ ) (labeled as "Ligand of Interest" by depositor).



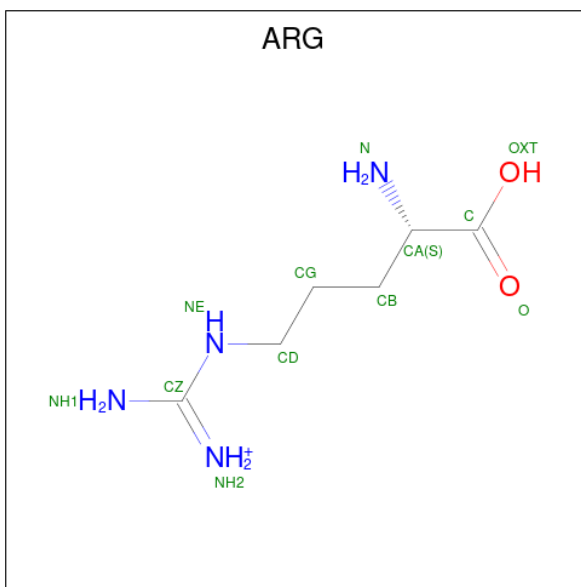
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	
			Total	C	N			O
56	1A	1	58	43	5	10	0	0
56	2A	1	58	43	5	10	0	0

- 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	1A	1	Total C O 8 6 2	0	0
57	1T	1	Total C O 8 6 2	0	0
57	18	1	Total C O 8 6 2	0	0
57	1a	1	Total C O 8 6 2	0	0
57	2A	1	Total C O 8 6 2	0	0
57	2A	1	Total C O 8 6 2	0	0
57	2A	1	Total C O 8 6 2	0	0

- Molecule 58 is ARGinine (three-letter code: ARG) (formula: C<sub>6</sub>H<sub>15</sub>N<sub>4</sub>O<sub>2</sub>).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
58	1B	1	Total	C	N	O	0	0
			12	6	4	2		
58	1F	1	Total	C	N	O	0	0
			12	6	4	2		

- Molecule 59 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	1Y	1	Total	Zn	0	0
			1	1		
59	14	1	Total	Zn	0	0
			1	1		
59	15	1	Total	Zn	0	0
			1	1		
59	16	1	Total	Zn	0	0
			1	1		
59	19	1	Total	Zn	0	0
			1	1		
59	1n	1	Total	Zn	0	0
			1	1		
59	2Y	1	Total	Zn	0	0
			1	1		
59	24	1	Total	Zn	0	0
			1	1		
59	25	1	Total	Zn	0	0
			1	1		
59	26	1	Total	Zn	0	0
			1	1		

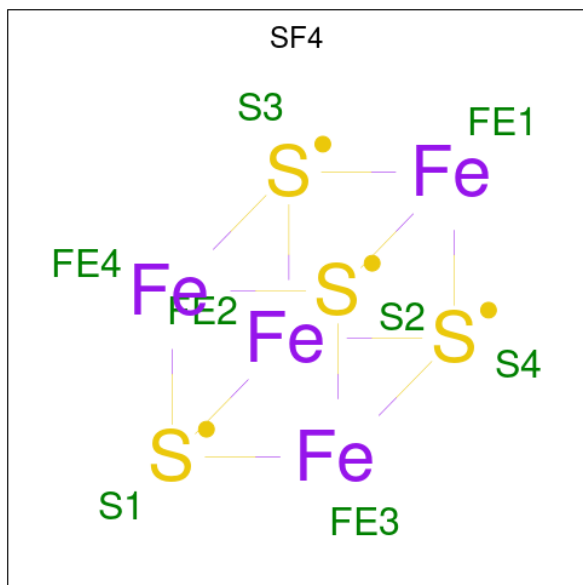
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	29	1	Total Zn 1 1	0	0
59	2n	1	Total Zn 1 1	0	0

- Molecule 60 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe<sub>4</sub>S<sub>4</sub>).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1d	1	Total Fe S 8 4 4	0	0
60	2d	1	Total Fe S 8 4 4	0	0

- Molecule 61 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1A	4030	Total O 4030 4030	0	0
61	1B	101	Total O 101 101	0	0
61	1D	118	Total O 118 118	0	0
61	1E	76	Total O 76 76	0	0
61	1F	67	Total O 67 67	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1G	17	Total O 17 17	0	0
61	1H	16	Total O 16 16	0	0
61	1I	7	Total O 7 7	0	0
61	1N	56	Total O 56 56	0	0
61	1O	22	Total O 22 22	0	0
61	1P	59	Total O 59 59	0	0
61	1Q	39	Total O 39 39	0	0
61	1R	36	Total O 36 36	0	0
61	1S	13	Total O 13 13	0	0
61	1T	36	Total O 36 36	0	0
61	1U	50	Total O 50 50	0	0
61	1V	34	Total O 34 34	0	0
61	1W	26	Total O 26 26	0	0
61	1X	26	Total O 26 26	0	0
61	1Y	15	Total O 15 15	0	0
61	1Z	13	Total O 13 13	0	0
61	10	23	Total O 23 23	0	0
61	11	24	Total O 24 24	0	0
61	12	13	Total O 13 13	0	0
61	13	27	Total O 27 27	0	0
61	14	2	Total O 2 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	15	23	Total 23	O 23	0	0
61	16	15	Total 15	O 15	0	0
61	17	16	Total 16	O 16	0	0
61	18	27	Total 27	O 27	0	0
61	19	7	Total 7	O 7	0	0
61	1a	483	Total 483	O 483	0	0
61	1b	1	Total 1	O 1	0	0
61	1d	9	Total 9	O 9	0	0
61	1e	6	Total 6	O 6	0	0
61	1f	2	Total 2	O 2	0	0
61	1h	1	Total 1	O 1	0	0
61	1j	1	Total 1	O 1	0	0
61	1l	3	Total 3	O 3	0	0
61	1m	1	Total 1	O 1	0	0
61	1o	2	Total 2	O 2	0	0
61	1p	1	Total 1	O 1	0	0
61	1u	1	Total 1	O 1	0	0
61	1y	3	Total 3	O 3	0	0
61	2A	2427	Total 2427	O 2427	0	0
61	2B	56	Total 56	O 56	0	0
61	2D	60	Total 60	O 60	0	0

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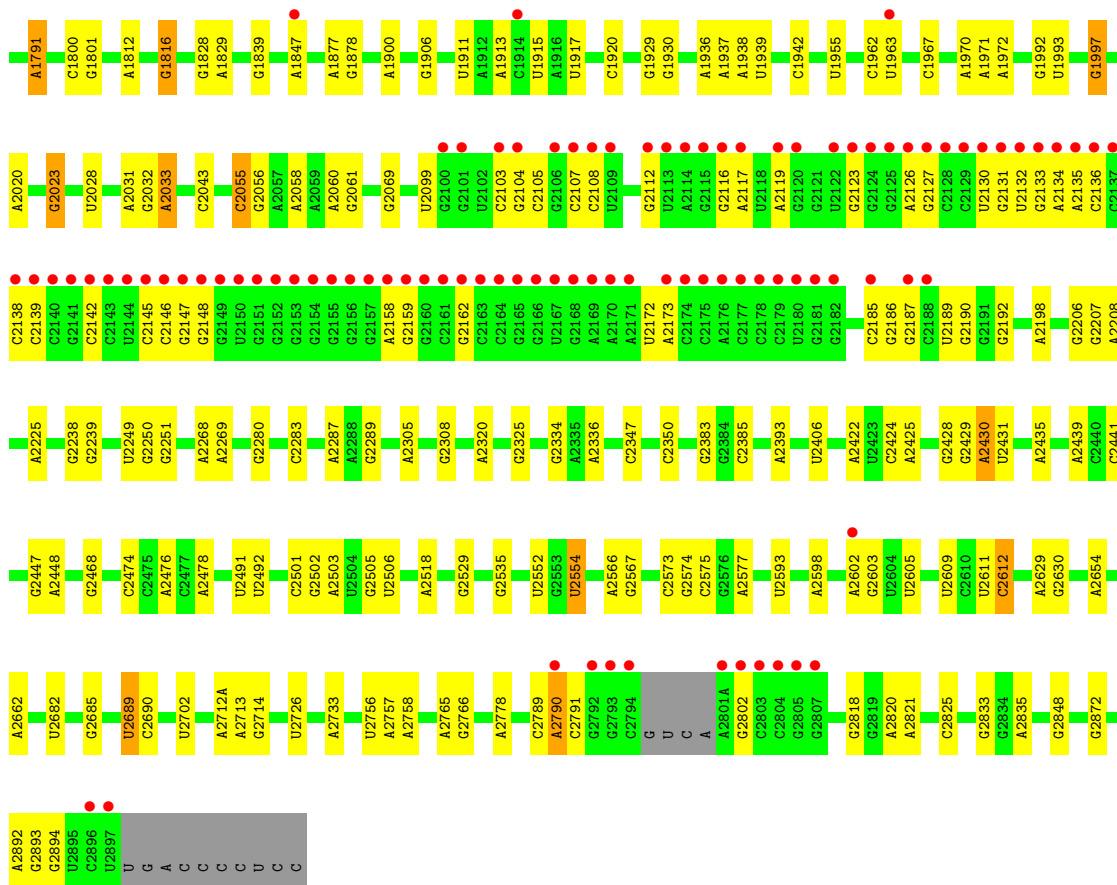
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
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61	2F	26	Total 26	O 26	0	0
61	2G	3	Total 3	O 3	0	0
61	2H	2	Total 2	O 2	0	0
61	2I	4	Total 4	O 4	0	0
61	2N	5	Total 5	O 5	0	0
61	2O	24	Total 24	O 24	0	0
61	2P	30	Total 30	O 30	0	0
61	2Q	18	Total 18	O 18	0	0
61	2R	18	Total 18	O 18	0	0
61	2S	4	Total 4	O 4	0	0
61	2T	9	Total 9	O 9	0	0
61	2U	14	Total 14	O 14	0	0
61	2V	4	Total 4	O 4	0	0
61	2W	18	Total 18	O 18	0	0
61	2X	5	Total 5	O 5	0	0
61	2Y	3	Total 3	O 3	0	0
61	2Z	9	Total 9	O 9	0	0
61	20	13	Total 13	O 13	0	0
61	21	21	Total 21	O 21	0	0
61	22	2	Total 2	O 2	0	0

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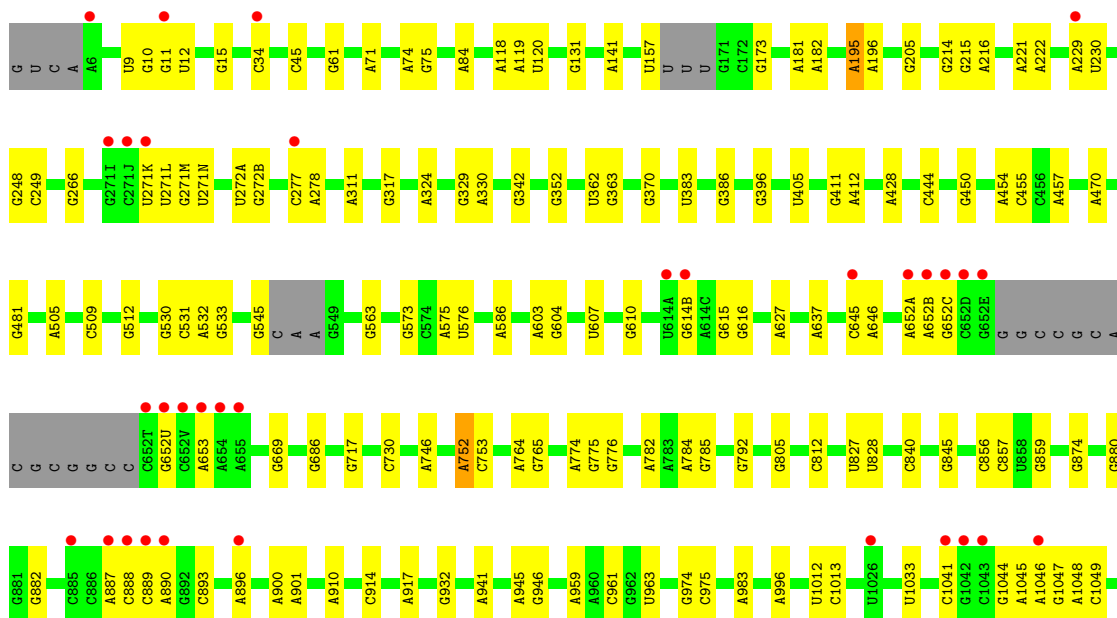
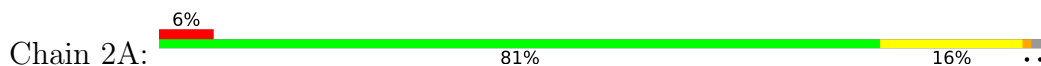
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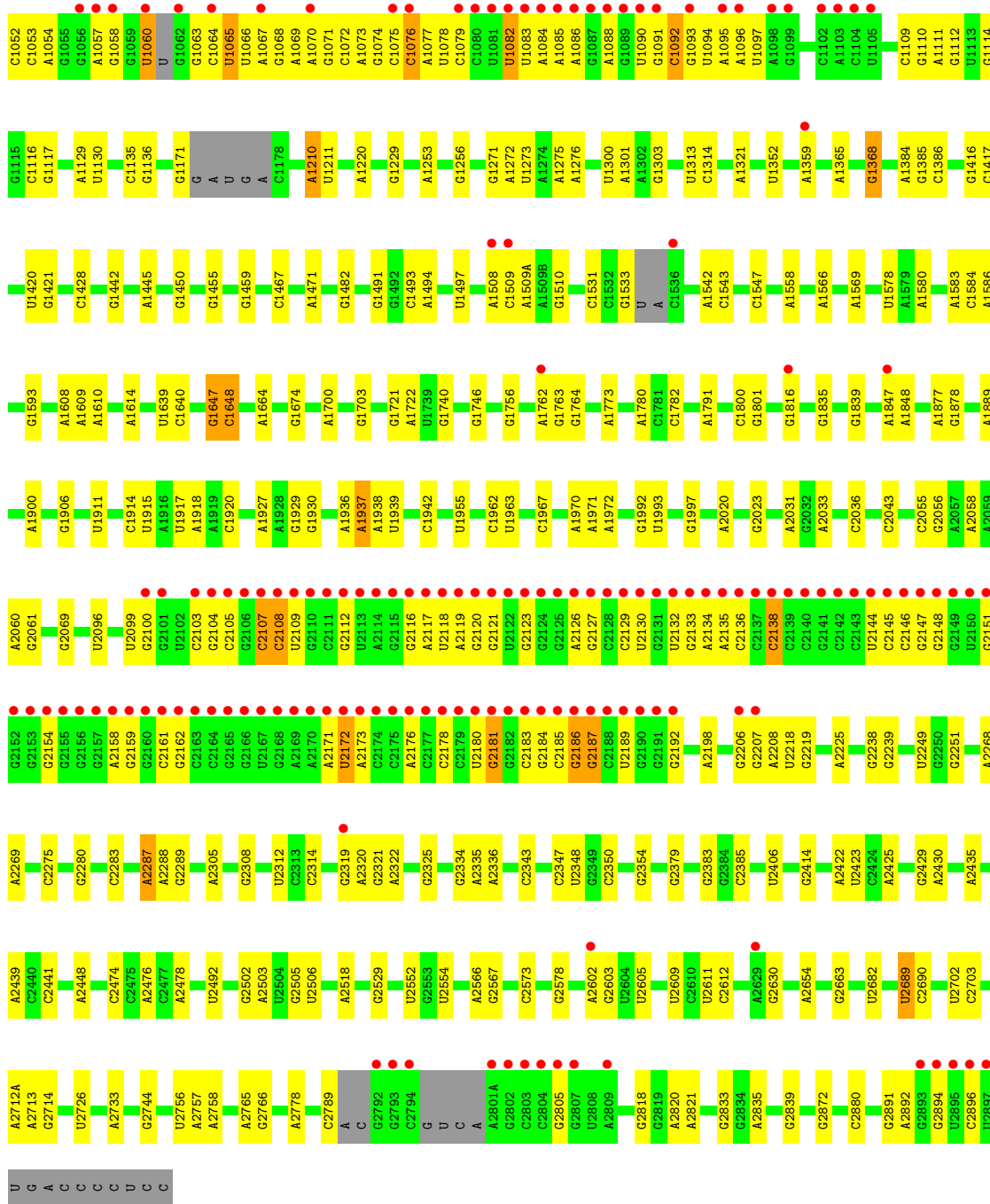
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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61	25	9	Total O 9 9	0	0
61	26	6	Total O 6 6	0	0
61	27	9	Total O 9 9	0	0
61	28	13	Total O 13 13	0	0
61	29	1	Total O 1 1	0	0
61	2a	428	Total O 428 428	0	0
61	2d	6	Total O 6 6	0	0
61	2e	1	Total O 1 1	0	0
61	2f	2	Total O 2 2	0	0
61	2j	2	Total O 2 2	0	0
61	2l	3	Total O 3 3	0	0
61	2m	1	Total O 1 1	0	0
61	2n	1	Total O 1 1	0	0
61	2o	2	Total O 2 2	0	0
61	2p	2	Total O 2 2	0	0
61	2q	1	Total O 1 1	0	0
61	2r	4	Total O 4 4	0	0
61	2t	2	Total O 2 2	0	0
61	2y	3	Total O 3 3	0	0



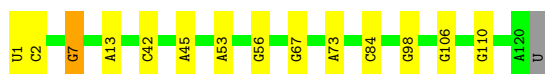
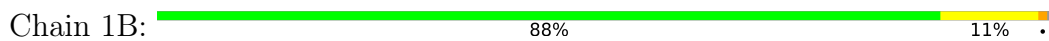


• Molecule 1: 23S Ribosomal RNA

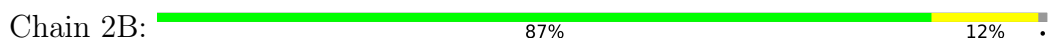




• Molecule 2: 5S Ribosomal RNA



• Molecule 2: 5S Ribosomal RNA







- Molecule 3: 50S ribosomal protein L2



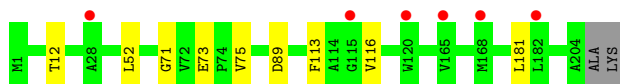
- Molecule 3: 50S ribosomal protein L2



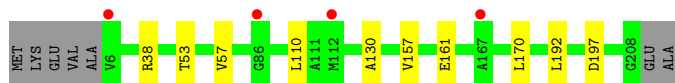
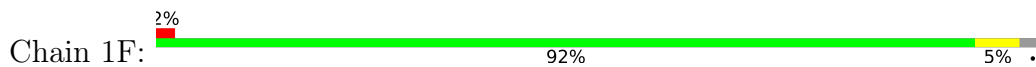
- Molecule 4: 50S ribosomal protein L3



- Molecule 4: 50S ribosomal protein L3



- Molecule 5: 50S ribosomal protein L4

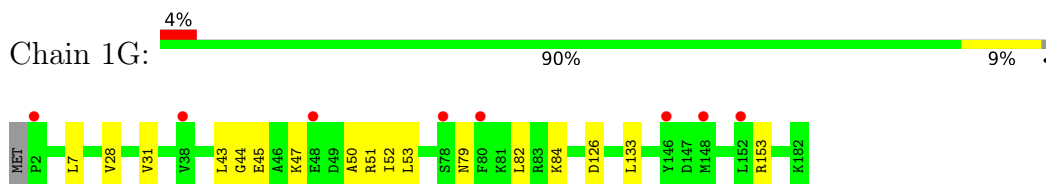


- Molecule 5: 50S ribosomal protein L4

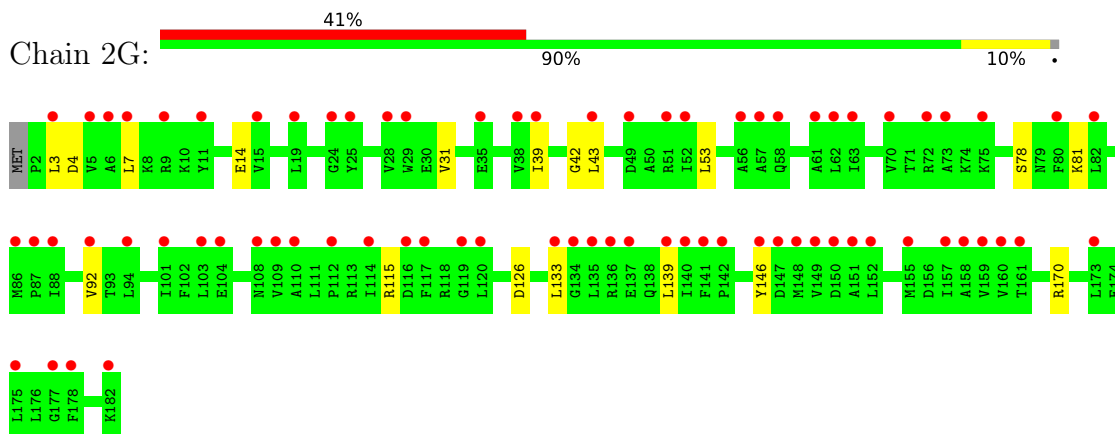


- Molecule 6: 50S ribosomal protein L5

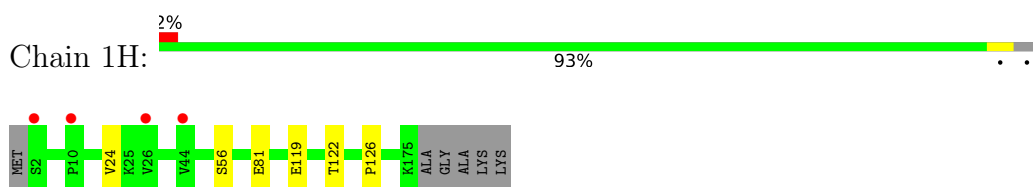




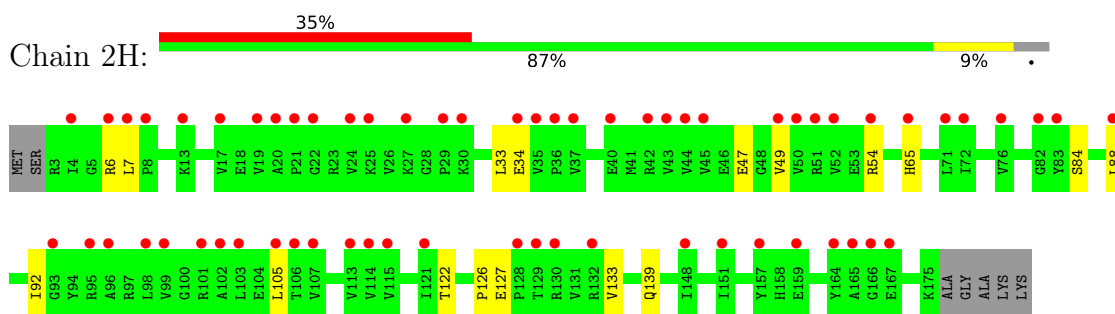
- Molecule 6: 50S ribosomal protein L5



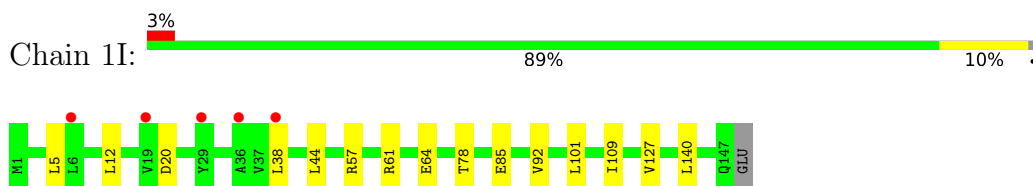
- Molecule 7: 50S ribosomal protein L6



- Molecule 7: 50S ribosomal protein L6

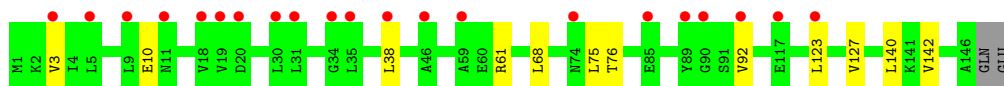


- Molecule 8: 50S ribosomal protein L9



- Molecule 8: 50S ribosomal protein L9

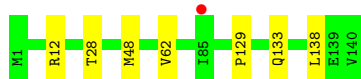




- Molecule 9: 50S ribosomal protein L13



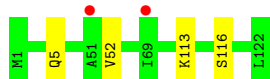
- Molecule 9: 50S ribosomal protein L13



- Molecule 10: 50S ribosomal protein L14



- Molecule 10: 50S ribosomal protein L14



- Molecule 11: 50S ribosomal protein L15



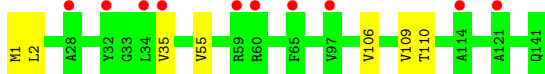
- Molecule 11: 50S ribosomal protein L15



- Molecule 12: 50S ribosomal protein L16



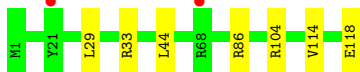
- Molecule 12: 50S ribosomal protein L16



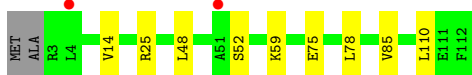
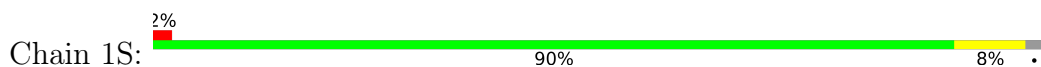
- Molecule 13: 50S ribosomal protein L17



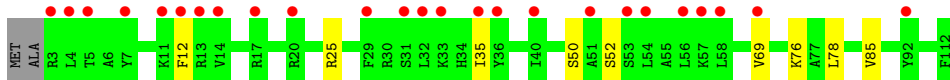
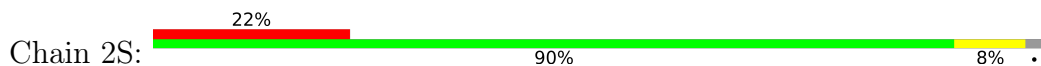
- Molecule 13: 50S ribosomal protein L17



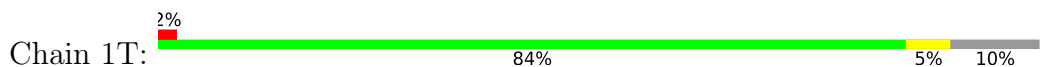
- Molecule 14: 50S ribosomal protein L18



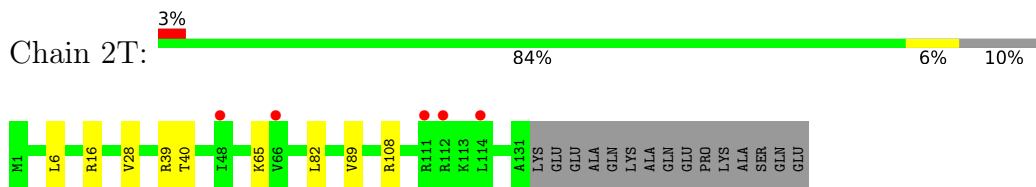
- Molecule 14: 50S ribosomal protein L18



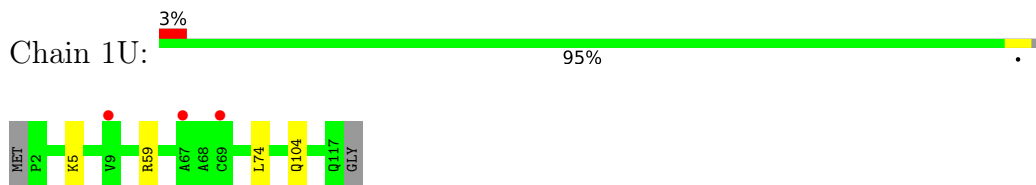
- Molecule 15: 50S ribosomal protein L19



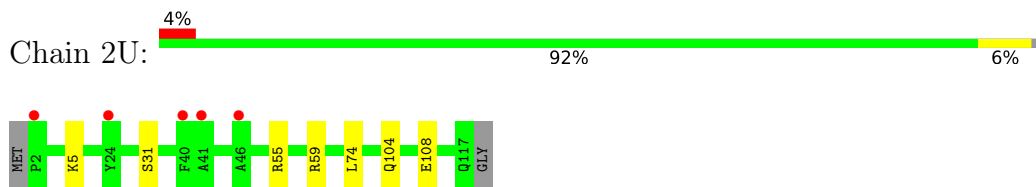
- Molecule 15: 50S ribosomal protein L19



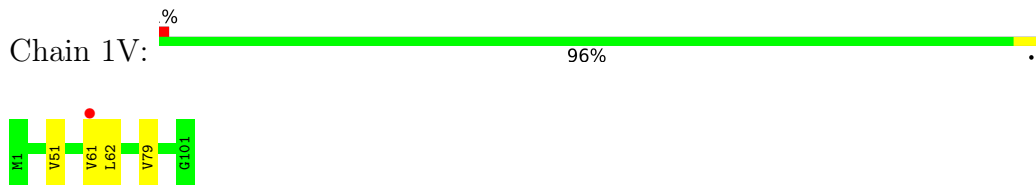
- Molecule 16: 50S ribosomal protein L20



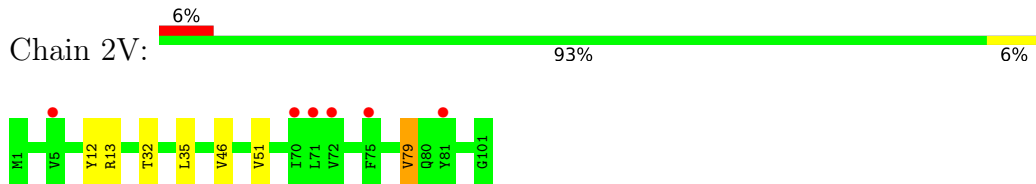
- Molecule 16: 50S ribosomal protein L20



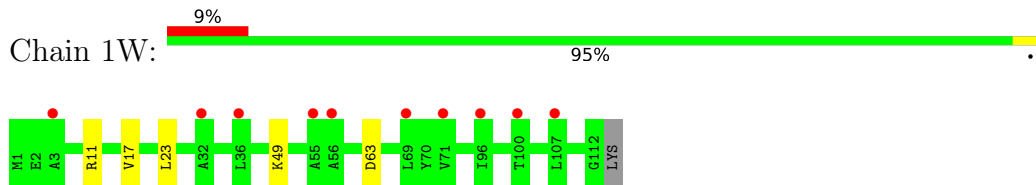
- Molecule 17: 50S ribosomal protein L21



- Molecule 17: 50S ribosomal protein L21

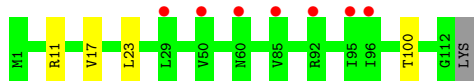


- Molecule 18: 50S ribosomal protein L22

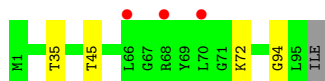


- Molecule 18: 50S ribosomal protein L22

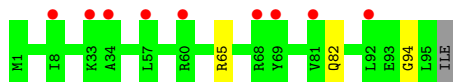




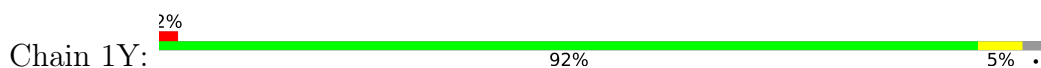
- Molecule 19: 50S ribosomal protein L23



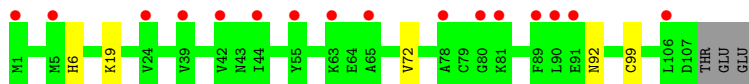
- Molecule 19: 50S ribosomal protein L23



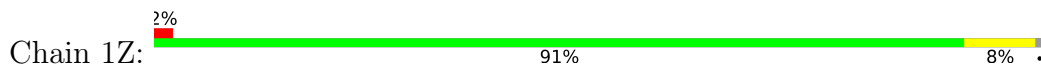
- Molecule 20: 50S ribosomal protein L24



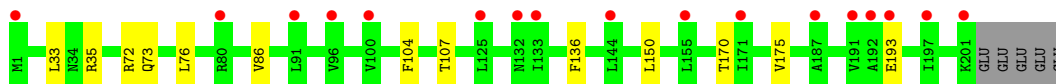
- Molecule 20: 50S ribosomal protein L24



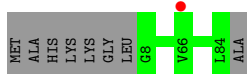
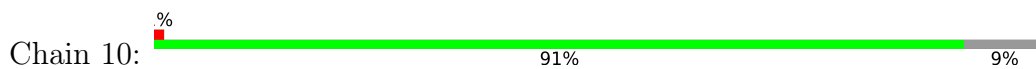
- Molecule 21: 50S ribosomal protein L25



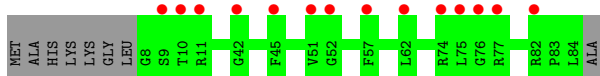
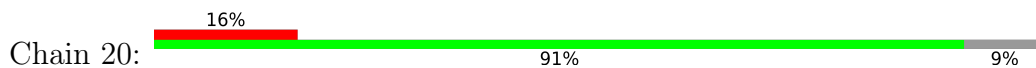
- Molecule 21: 50S ribosomal protein L25



- Molecule 22: 50S ribosomal protein L27



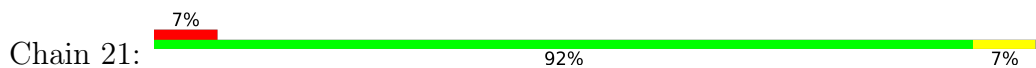
- Molecule 22: 50S ribosomal protein L27



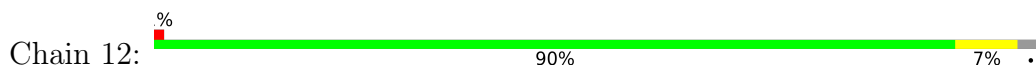
- Molecule 23: 50S ribosomal protein L28



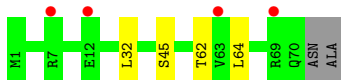
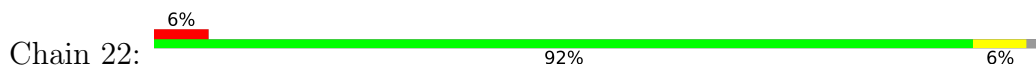
- Molecule 23: 50S ribosomal protein L28



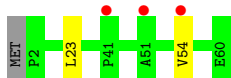
- Molecule 24: 50S ribosomal protein L29



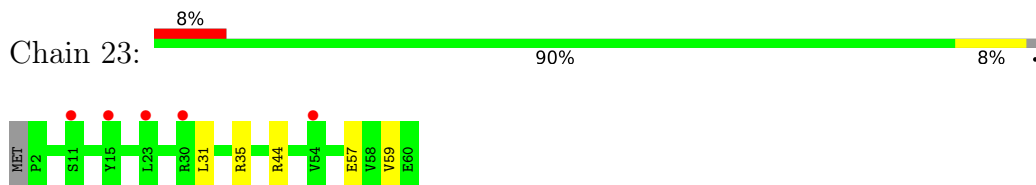
- Molecule 24: 50S ribosomal protein L29



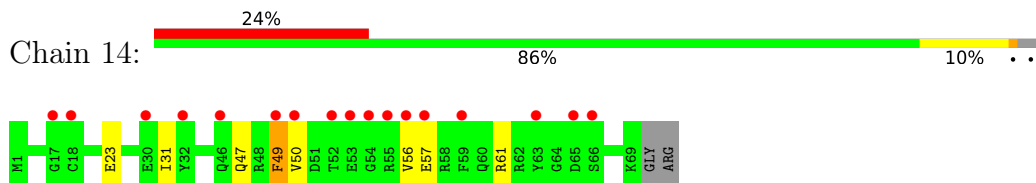
- Molecule 25: 50S ribosomal protein L30



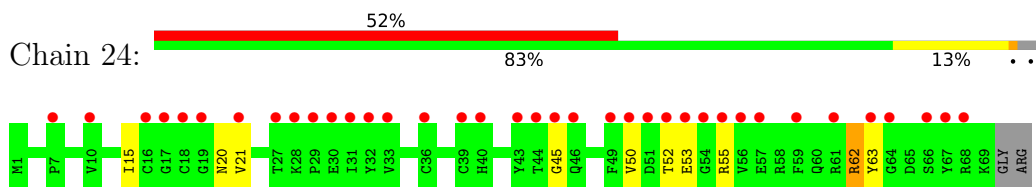
- Molecule 25: 50S ribosomal protein L30



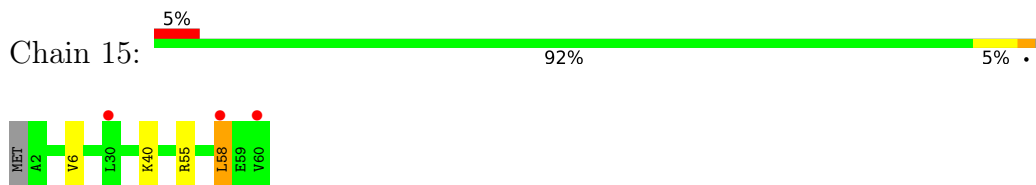
- Molecule 26: 50S ribosomal protein L31



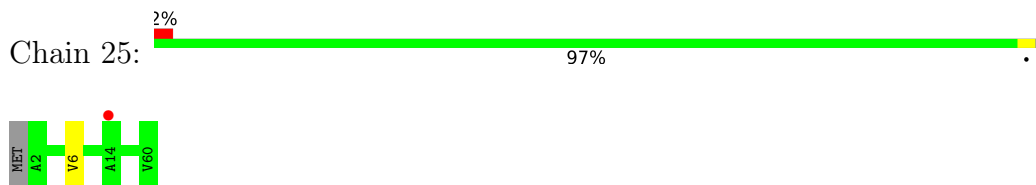
- Molecule 26: 50S ribosomal protein L31



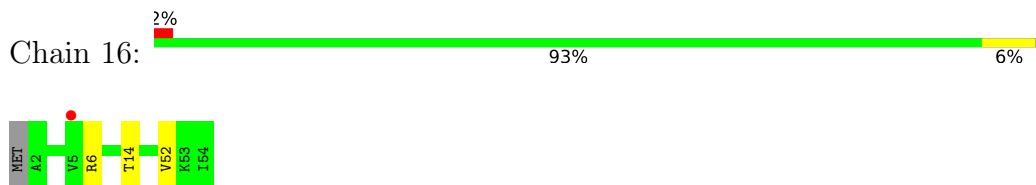
- Molecule 27: 50S ribosomal protein L32



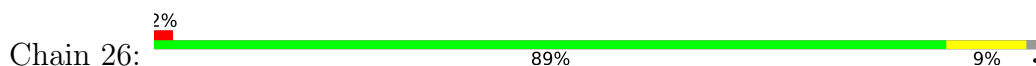
- Molecule 27: 50S ribosomal protein L32



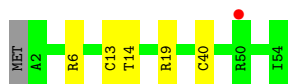
- Molecule 28: 50S ribosomal protein L33



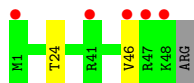
- Molecule 28: 50S ribosomal protein L33



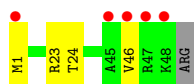
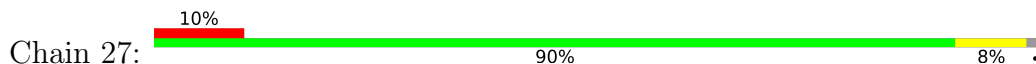




- Molecule 29: 50S ribosomal protein L34



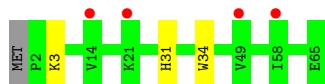
- Molecule 29: 50S ribosomal protein L34



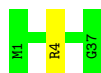
- Molecule 30: 50S ribosomal protein L35



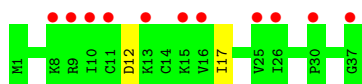
- Molecule 30: 50S ribosomal protein L35



- Molecule 31: 50S ribosomal protein L36



- Molecule 31: 50S ribosomal protein L36



- Molecule 32: 16S Ribosomal RNA





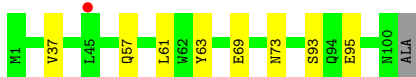




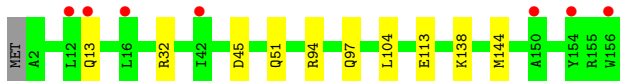
- Molecule 37: 30S ribosomal protein S6



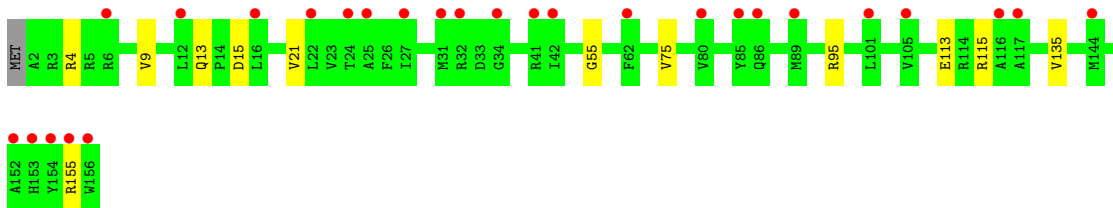
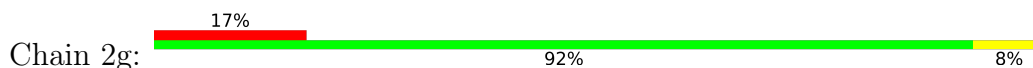
- Molecule 37: 30S ribosomal protein S6



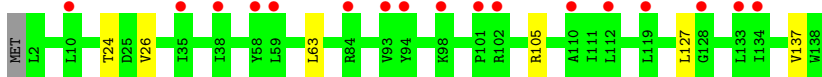
- Molecule 38: 30S ribosomal protein S7



- Molecule 38: 30S ribosomal protein S7



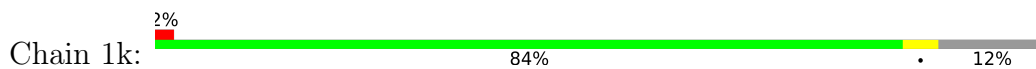
- Molecule 39: 30S ribosomal protein S8



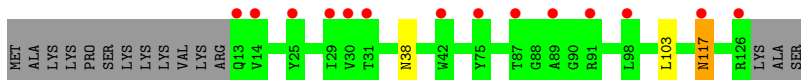
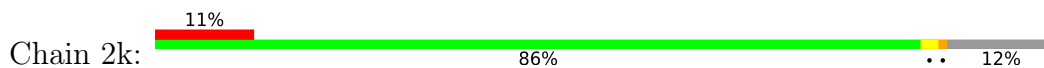
- Molecule 39: 30S ribosomal protein S8



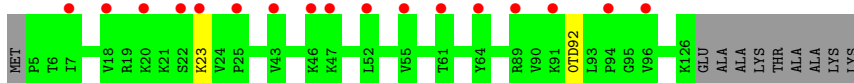
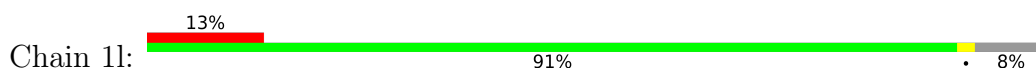




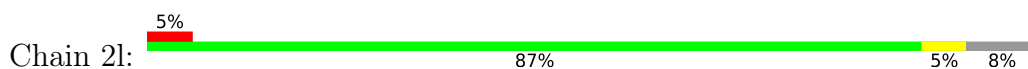
- Molecule 42: 30S ribosomal protein S11



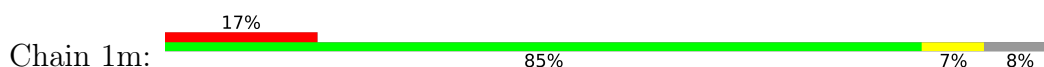
- Molecule 43: 30S ribosomal protein S12



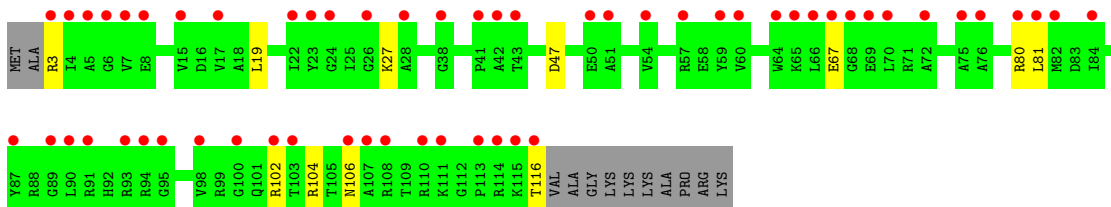
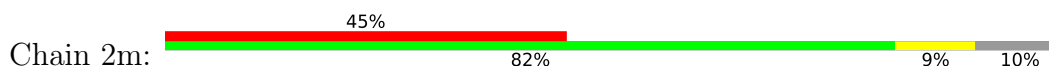
- Molecule 43: 30S ribosomal protein S12



- Molecule 44: 30S ribosomal protein S13

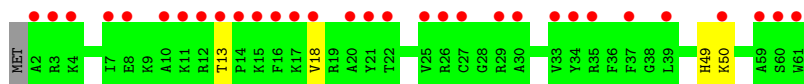


- Molecule 44: 30S ribosomal protein S13

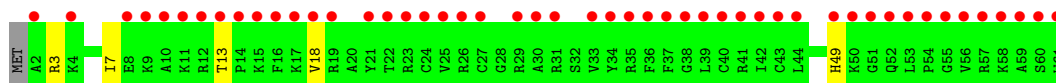
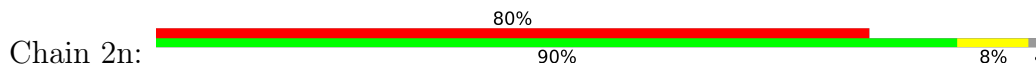


- Molecule 45: 30S ribosomal protein S14 type Z





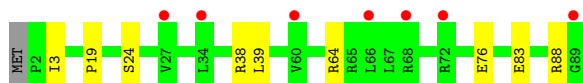
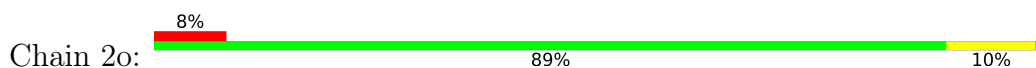
- Molecule 45: 30S ribosomal protein S14 type Z



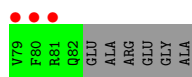
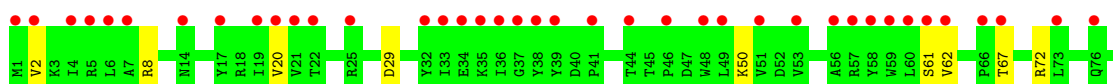
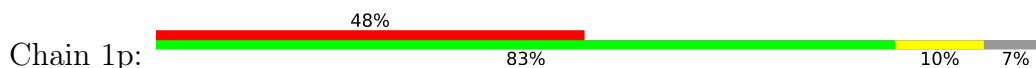
- Molecule 46: 30S ribosomal protein S15



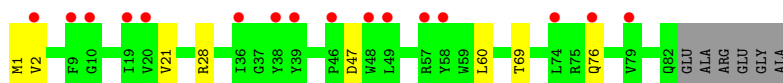
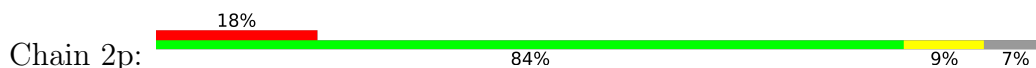
- Molecule 46: 30S ribosomal protein S15



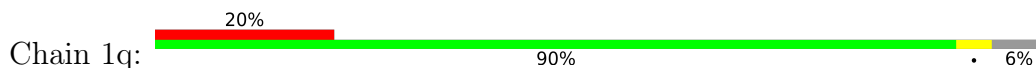
- Molecule 47: 30S ribosomal protein S16



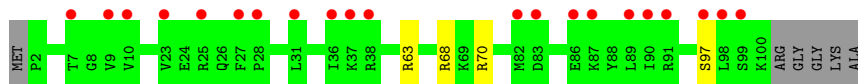
- Molecule 47: 30S ribosomal protein S16



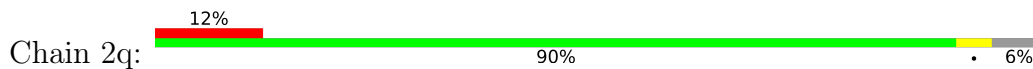
- Molecule 48: 30S ribosomal protein S17



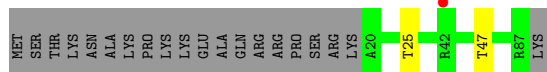
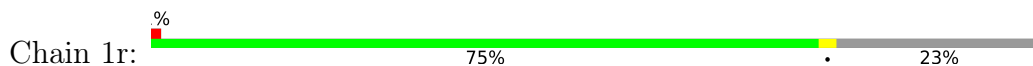




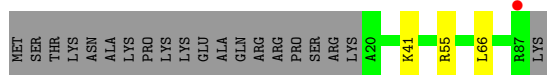
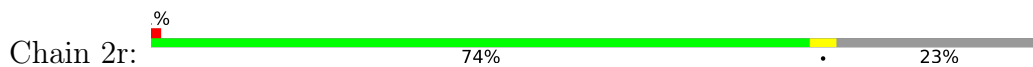
• Molecule 48: 30S ribosomal protein S17



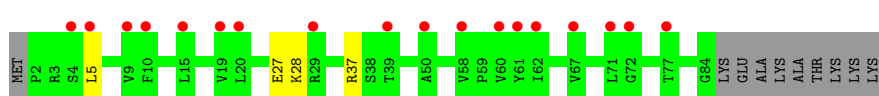
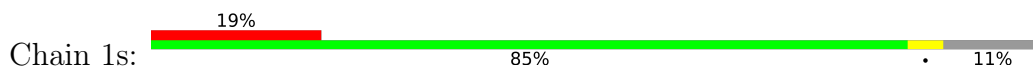
• Molecule 49: 30S ribosomal protein S18



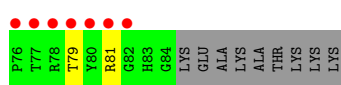
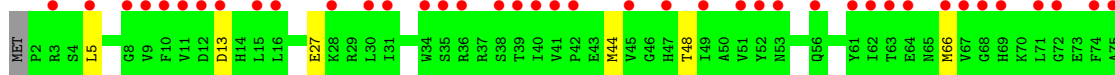
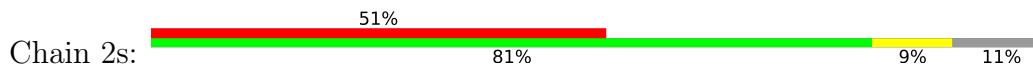
• Molecule 49: 30S ribosomal protein S18



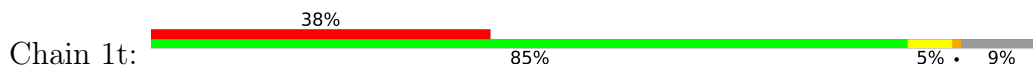
• Molecule 50: 30S ribosomal protein S19

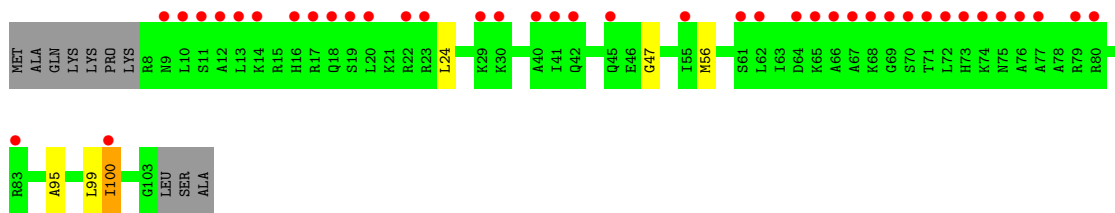


• Molecule 50: 30S ribosomal protein S19

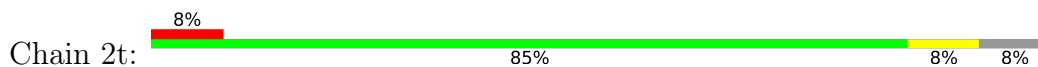


• Molecule 51: 30S ribosomal protein S20

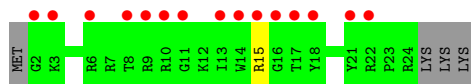
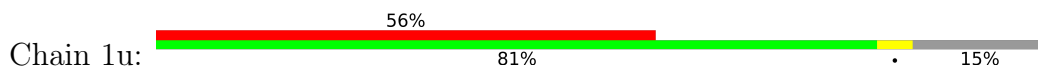




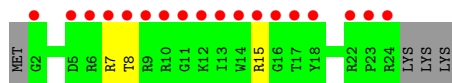
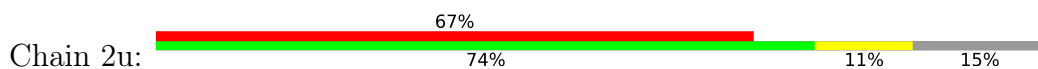
• Molecule 51: 30S ribosomal protein S20



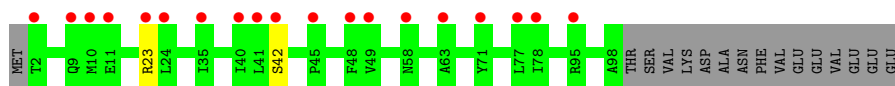
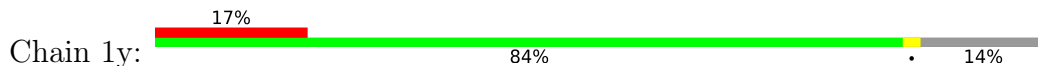
• Molecule 52: 30S ribosomal protein Thx



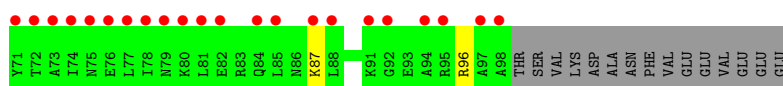
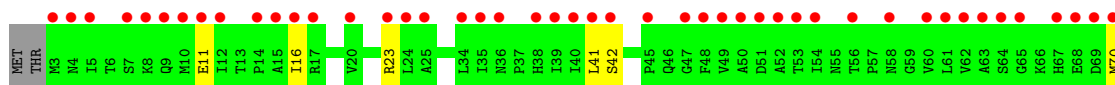
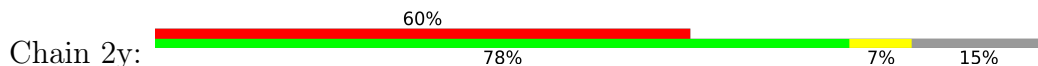
• Molecule 52: 30S ribosomal protein Thx



• Molecule 53: Ribosome-associated inhibitor A



• Molecule 53: Ribosome-associated inhibitor A



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	209.60Å 449.65Å 619.88Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	181.99 – 2.35 211.35 – 2.35	Depositor EDS
% Data completeness (in resolution range)	99.8 (181.99-2.35) 99.8 (211.35-2.35)	Depositor EDS
$R_{merge}$	0.21	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.16 (at 2.34Å)	Xtrriage
Refinement program	PHENIX 1.8.2	Depositor
R, $R_{free}$	0.211 , 0.248 0.211 , 0.248	Depositor DCC
$R_{free}$ test set	119489 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	50.5	Xtrriage
Anisotropy	0.216	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.29 , 48.5	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.46$ , $\langle L^2 \rangle = 0.29$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.93	EDS
Total number of atoms	298008	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	58.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.62% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  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: G7M, UR3, OMC, TEL, OMG, 0TD, MG, ZN, 4OC, OMU, MA6, 5MC, PSU, HGR, 2MA, MPD, M2G, SF4, 2MG, 5MU

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
1	1A	0.54	3/69005 (0.0%)	1.01	125/107711 (0.1%)
1	2A	0.42	1/68877 (0.0%)	0.89	70/107509 (0.1%)
2	1B	0.44	0/2876	0.95	6/4486 (0.1%)
2	2B	0.36	0/2878	0.80	0/4490
3	1D	0.36	0/2181	0.64	0/2940
3	2D	0.32	0/2186	0.55	0/2944
4	1E	0.35	0/1592	0.56	0/2149
4	2E	0.31	0/1592	0.51	0/2149
5	1F	0.35	0/1619	0.57	0/2193
5	2F	0.30	0/1615	0.52	0/2188
6	1G	0.30	0/1451	0.48	0/1961
6	2G	0.30	0/1449	0.47	0/1957
7	1H	0.32	0/1356	0.50	0/1834
7	2H	0.29	0/1350	0.48	0/1826
8	1I	0.27	0/1109	0.49	0/1512
8	2I	0.27	0/1091	0.47	0/1490
9	1N	0.34	0/1148	0.54	0/1547
9	2N	0.27	0/1144	0.45	0/1543
10	1O	0.32	0/943	0.55	0/1269
10	2O	0.32	0/943	0.53	0/1269
11	1P	0.35	0/1152	0.58	0/1533
11	2P	0.31	0/1152	0.53	0/1533
12	1Q	0.34	0/1143	0.53	0/1527
12	2Q	0.30	0/1143	0.49	0/1527
13	1R	0.34	0/982	0.57	0/1312
13	2R	0.28	0/982	0.51	0/1312
14	1S	0.31	0/887	0.52	0/1180
14	2S	0.30	0/880	0.50	0/1172
15	1T	0.33	0/1105	0.55	0/1477
15	2T	0.30	0/1097	0.50	0/1468
16	1U	0.34	0/977	0.53	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
16	2U	0.29	0/977	0.47	0/1301
17	1V	0.36	0/786	0.53	0/1053
17	2V	0.30	0/782	0.52	0/1049
18	1W	0.38	0/897	0.53	0/1205
18	2W	0.31	0/897	0.48	0/1205
19	1X	0.35	0/764	0.56	0/1025
19	2X	0.30	0/764	0.50	0/1025
20	1Y	0.34	0/823	0.54	0/1099
20	2Y	0.30	0/823	0.52	0/1100
21	1Z	0.31	0/1620	0.50	0/2200
21	2Z	0.28	0/1590	0.48	0/2162
22	10	0.35	0/616	0.56	0/821
22	20	0.28	0/616	0.47	0/821
23	11	0.31	0/761	0.52	0/1013
23	21	0.32	0/766	0.51	0/1018
24	12	0.31	0/590	0.49	0/781
24	22	0.29	0/594	0.43	0/785
25	13	0.34	0/474	0.54	0/635
25	23	0.26	0/469	0.48	0/630
26	14	0.32	0/559	0.56	0/754
26	24	0.34	0/549	0.53	0/741
27	15	0.36	0/473	0.63	1/639 (0.2%)
27	25	0.31	0/469	0.55	0/635
28	16	0.32	0/460	0.54	0/613
28	26	0.28	0/456	0.46	0/608
29	17	0.37	0/426	0.61	0/561
29	27	0.29	0/426	0.51	0/561
30	18	0.37	0/525	0.53	0/691
30	28	0.31	0/525	0.48	0/691
31	19	0.33	0/310	0.54	0/407
31	29	0.30	0/310	0.49	0/407
32	1a	0.37	0/35795	0.86	13/55864 (0.0%)
32	2a	0.36	0/35890	0.85	27/56012 (0.0%)
33	1b	0.30	0/1876	0.47	0/2533
33	2b	0.31	0/1860	0.48	0/2518
34	1c	0.28	0/1582	0.45	0/2137
34	2c	0.29	0/1566	0.47	0/2119
35	1d	0.29	0/1695	0.50	0/2274
35	2d	0.28	0/1698	0.46	0/2277
36	1e	0.29	0/1149	0.52	0/1548
36	2e	0.29	0/1149	0.50	0/1548
37	1f	0.30	0/827	0.47	0/1120
37	2f	0.30	0/829	0.49	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
38	1g	0.28	0/1254	0.41	0/1683
38	2g	0.29	0/1248	0.44	0/1676
39	1h	0.27	0/1118	0.47	0/1506
39	2h	0.28	0/1108	0.46	0/1494
40	1i	0.30	0/1005	0.49	0/1351
40	2i	0.30	0/985	0.45	0/1329
41	1j	0.28	0/732	0.46	0/993
41	2j	0.29	0/723	0.46	0/984
42	1k	0.29	0/849	0.50	0/1150
42	2k	0.29	0/848	0.52	0/1149
43	1l	0.30	0/937	0.52	0/1260
43	2l	0.29	0/937	0.50	0/1260
44	1m	0.28	0/924	0.46	0/1242
44	2m	0.29	0/905	0.47	0/1217
45	1n	0.30	0/501	0.48	0/664
45	2n	0.30	0/501	0.48	0/664
46	1o	0.28	0/739	0.46	0/985
46	2o	0.28	0/739	0.42	0/985
47	1p	0.28	0/697	0.52	0/939
47	2p	0.28	0/693	0.49	0/935
48	1q	0.29	0/836	0.46	0/1117
48	2q	0.30	0/836	0.46	0/1117
49	1r	0.29	0/560	0.45	0/746
49	2r	0.29	0/560	0.46	0/746
50	1s	0.27	0/663	0.49	0/895
50	2s	0.29	0/660	0.49	0/893
51	1t	0.28	0/734	0.44	0/969
51	2t	0.26	0/736	0.42	0/976
52	1u	0.26	0/203	0.48	0/266
52	2u	0.25	0/203	0.51	0/266
53	1y	0.28	0/776	0.46	0/1048
53	2y	0.27	0/761	0.45	0/1030
All	All	0.41	4/309889 (0.0%)	0.83	242/463153 (0.1%)

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
11	2P	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
33	1b	0	1
42	2k	0	1
All	All	0	4

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	330	A	N9-C4	-7.41	1.33	1.37
1	2A	2104	G	N1-C2	-5.58	1.33	1.37
1	1A	2790	A	N9-C4	5.37	1.41	1.37
1	1A	570	G	C6-O6	-5.18	1.19	1.24

All (242) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1139	G	O5'-P-OP2	-14.95	92.24	105.70
1	2A	2104	G	C5-C6-O6	13.81	136.89	128.60
1	1A	2023	G	O5'-P-OP1	-12.09	94.82	105.70
1	1A	2554	U	O5'-P-OP1	-11.40	95.44	105.70
1	1A	1042	G	OP1-P-O3'	-11.23	80.50	105.20
1	2A	2104	G	N3-C2-N2	11.20	127.74	119.90
1	1A	570	G	C5-C6-O6	-10.83	122.10	128.60
1	1A	330	A	C2-N3-C4	-10.77	105.22	110.60
1	2A	2185	C	N1-C2-O2	10.54	125.22	118.90
1	1A	512	G	O4'-C1'-N9	10.51	116.61	108.20
1	2A	2104	G	N1-C2-N2	-10.23	107.00	116.20
1	1A	1352	U	O5'-P-OP1	-9.73	96.94	105.70
1	2A	1092	C	N1-C2-O2	9.71	124.73	118.90
1	1A	1075	C	N1-C2-O2	9.41	124.55	118.90
1	2A	2185	C	C2-N3-C4	9.28	124.54	119.90
1	2A	1648	C	O5'-P-OP1	-9.26	97.36	105.70
1	1A	575	A	O5'-P-OP1	-9.17	97.45	105.70
1	1A	1653	G	C8-N9-C4	-9.08	102.77	106.40
1	1A	1372	U	C5-C4-O4	-9.02	120.49	125.90
2	1B	7	G	N3-C4-N9	-8.95	120.63	126.00
1	1A	2685	G	N1-C6-O6	-8.91	114.55	119.90
1	1A	1372	U	N3-C4-O4	8.84	125.59	119.40
2	1B	7	G	N3-C2-N2	-8.80	113.74	119.90
1	1A	801	G	O5'-P-OP2	-8.63	97.94	105.70
1	1A	330	A	N1-C2-N3	8.60	133.60	129.30
1	2A	1092	C	C2-N1-C1'	8.58	128.24	118.80
32	2a	1003	G	N3-C4-C5	-8.54	124.33	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	1395	A	O5'-P-OP1	-8.52	98.03	105.70
1	2A	2682	U	O5'-P-OP2	-8.34	98.20	105.70
1	2A	512	G	O4'-C1'-N9	8.31	114.85	108.20
1	1A	1648	C	O5'-P-OP1	-8.21	98.31	105.70
1	2A	2185	C	C5-C4-N4	8.10	125.87	120.20
1	1A	1042	G	OP2-P-O3'	-8.03	87.53	105.20
1	1A	2249	U	N3-C4-O4	-8.01	113.79	119.40
1	2A	1092	C	N3-C2-O2	-8.01	116.29	121.90
1	2A	1614	A	O5'-P-OP1	-7.86	98.63	105.70
1	1A	2430	A	O5'-P-OP2	-7.83	98.66	105.70
1	1A	570	G	C5-C6-N1	7.79	115.40	111.50
1	2A	2185	C	N3-C4-N4	-7.76	112.57	118.00
1	2A	2104	G	N1-C6-O6	-7.72	115.27	119.90
1	1A	751	A	O5'-P-OP1	-7.67	98.80	105.70
1	1A	948	G	O5'-P-OP1	-7.66	98.80	105.70
1	1A	845	G	O4'-C1'-N9	7.65	114.32	108.20
1	2A	2104	G	C6-N1-C2	7.58	129.65	125.10
1	1A	1791	A	O5'-P-OP1	-7.57	98.89	105.70
32	2a	79	G	C5-C6-O6	7.54	133.12	128.60
1	1A	1075	C	C2-N3-C4	7.50	123.65	119.90
1	2A	195	A	C5-N7-C8	7.37	107.58	103.90
1	1A	527	C	N1-C2-O2	-7.36	114.48	118.90
1	1A	2682	U	O5'-P-OP2	-7.32	99.11	105.70
1	2A	2104	G	C5-C6-N1	-7.32	107.84	111.50
1	1A	570	G	N9-C4-C5	-7.30	102.48	105.40
1	1A	1602	U	N3-C4-O4	-7.25	114.33	119.40
1	1A	576	U	O5'-P-OP1	-7.25	99.18	105.70
1	2A	2249	U	N3-C4-O4	-7.23	114.34	119.40
1	1A	2492	U	O5'-P-OP1	-7.19	99.23	105.70
1	1A	1653	G	N3-C4-C5	-7.19	125.01	128.60
1	1A	1043	C	OP1-P-OP2	7.15	130.32	119.60
1	2A	2161	C	C5-C4-N4	7.10	125.17	120.20
2	1B	7	G	N3-C4-C5	7.10	132.15	128.60
32	2a	266	G	P-O3'-C3'	7.09	128.21	119.70
1	2A	1075	C	N1-C2-O2	7.08	123.15	118.90
32	2a	1004	A	O4'-C1'-N9	7.07	113.86	108.20
1	2A	1092	C	C6-N1-C2	-7.07	117.47	120.30
1	1A	568	U	N3-C4-C5	7.01	118.81	114.60
1	1A	996	A	O5'-P-OP1	-7.00	99.40	105.70
1	2A	576	U	O5'-P-OP1	-6.94	99.45	105.70
1	1A	1936	A	O4'-C1'-N9	6.94	113.75	108.20
1	1A	226	G	O4'-C1'-N9	6.93	113.74	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1136	U	C2-N1-C1'	6.92	126.00	117.70
1	1A	2023	G	O5'-P-OP2	6.86	118.94	110.70
1	2A	1368	G	O5'-P-OP2	-6.86	99.53	105.70
1	1A	330	A	N3-C4-N9	-6.82	121.95	127.40
2	1B	98	G	O5'-P-OP2	-6.74	99.64	105.70
32	2a	1158	C	C2-N1-C1'	6.72	126.19	118.80
32	1a	1136	U	N1-C2-O2	6.71	127.50	122.80
1	1A	2848	G	O4'-C1'-N9	6.70	113.56	108.20
1	1A	570	G	C4-C5-N7	6.55	113.42	110.80
1	2A	1639	U	O5'-P-OP2	-6.54	99.81	105.70
2	1B	7	G	N1-C2-N2	6.52	122.07	116.20
1	2A	1065	U	P-O3'-C3'	6.51	127.51	119.70
1	1A	1339	G	C5-C6-O6	-6.51	124.69	128.60
1	2A	1075	C	N3-C2-O2	-6.46	117.38	121.90
1	1A	746	A	O4'-C1'-N9	6.41	113.32	108.20
1	1A	1086	A	N1-C6-N6	-6.40	114.76	118.60
1	2A	2036	C	O5'-P-OP1	-6.39	99.95	105.70
1	1A	975	C	O5'-P-OP1	-6.34	100.00	105.70
1	2A	1075	C	C2-N1-C1'	6.32	125.76	118.80
32	2a	754	C	C2-N1-C1'	6.32	125.75	118.80
32	2a	1003	G	C4-N9-C1'	6.30	134.69	126.50
1	1A	1416	G	O4'-C1'-N9	6.23	113.19	108.20
32	1a	1136	U	N3-C2-O2	-6.22	117.85	122.20
1	1A	2825	C	C6-N1-C1'	6.20	128.24	120.80
1	1A	2032	G	C5-N7-C8	6.20	107.40	104.30
1	1A	1210	A	P-O3'-C3'	6.18	127.12	119.70
27	15	58	LEU	CA-CB-CG	6.16	129.46	115.30
1	1A	785	G	O5'-P-OP2	-6.09	100.22	105.70
1	1A	2033	A	OP1-P-OP2	-6.08	110.47	119.60
1	2A	2181	G	C5-C6-O6	6.08	132.25	128.60
1	2A	2108	C	C2-N3-C4	6.08	122.94	119.90
1	2A	2120	G	N3-C4-N9	6.08	129.65	126.00
1	2A	2689	U	N3-C2-O2	-6.07	117.95	122.20
1	1A	528	A	C8-N9-C4	-6.06	103.38	105.80
1	1A	645	C	C2-N1-C1'	6.06	125.46	118.80
1	1A	1075	C	N3-C2-O2	-6.04	117.67	121.90
1	1A	787	U	O5'-P-OP1	-6.02	100.28	105.70
1	2A	1082	U	C2-N1-C1'	6.01	124.91	117.70
32	2a	53	A	O5'-P-OP2	-6.01	100.29	105.70
32	2a	1003	G	N3-C4-N9	6.00	129.60	126.00
32	2a	115	G	P-O3'-C3'	5.99	126.88	119.70
1	1A	383	U	O4'-C1'-N1	5.97	112.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	450	G	N1-C6-O6	-5.97	116.32	119.90
1	1A	1176	G	OP1-P-O3'	5.96	118.32	105.20
1	1A	330	A	N3-C4-C5	5.96	130.97	126.80
1	1A	1997	G	O5'-P-OP2	-5.95	100.35	105.70
32	2a	1003	G	C8-N9-C4	-5.94	104.02	106.40
1	2A	2187	G	N3-C4-N9	5.91	129.54	126.00
1	1A	999	U	O5'-P-OP2	-5.87	100.42	105.70
1	2A	1936	A	O4'-C1'-N9	5.84	112.87	108.20
1	1A	271(Y)	U	O4'-C1'-N1	5.83	112.86	108.20
1	2A	1075	C	C6-N1-C2	-5.82	117.97	120.30
1	2A	1076	C	OP1-P-O3'	5.80	117.97	105.20
32	2a	754	C	N1-C2-O2	5.78	122.37	118.90
32	2a	1123	A	C5-C6-N6	5.74	128.29	123.70
1	1A	614	U	N3-C2-O2	-5.73	118.19	122.20
1	2A	2161	C	N3-C4-N4	-5.73	113.99	118.00
1	2A	1097	U	C2-N1-C1'	5.73	124.57	117.70
32	1a	816	A	O5'-P-OP1	5.72	117.56	110.70
32	2a	1183	A	P-O3'-C3'	5.72	126.56	119.70
1	1A	570	G	N3-C4-N9	5.71	129.42	126.00
1	1A	2598	A	O5'-P-OP1	-5.71	100.56	105.70
1	1A	2575	C	O5'-P-OP2	-5.70	100.57	105.70
1	1A	372	G	O4'-C1'-N9	5.69	112.75	108.20
1	2A	1937	A	O4'-C1'-N9	5.69	112.75	108.20
32	1a	115	G	P-O3'-C3'	5.68	126.51	119.70
1	1A	1816	G	O5'-P-OP1	-5.67	100.60	105.70
32	2a	687	A	P-O3'-C3'	5.63	126.46	119.70
1	1A	570	G	C8-N9-C4	5.62	108.65	106.40
1	2A	195	A	P-O3'-C3'	5.62	126.45	119.70
1	1A	797	C	C6-N1-C2	-5.62	118.05	120.30
32	1a	1058	G	C5-C6-O6	-5.61	125.23	128.60
1	1A	1602	U	N3-C4-C5	5.60	117.96	114.60
1	1A	1780	A	O5'-P-OP2	-5.60	100.66	105.70
2	1B	1	U	C2-N1-C1'	5.59	124.41	117.70
1	1A	588	U	O5'-P-OP2	-5.59	100.67	105.70
1	1A	774	A	C8-N9-C4	-5.57	103.57	105.80
32	2a	1123	A	N1-C6-N6	-5.56	115.26	118.60
1	1A	2689	U	P-O3'-C3'	5.55	126.37	119.70
1	1A	2577	A	O5'-P-OP1	-5.54	100.71	105.70
1	1A	943	U	O5'-P-OP2	-5.53	100.72	105.70
1	2A	2172	U	OP1-P-O3'	5.52	117.34	105.20
1	1A	2789	C	N1-C2-O2	-5.51	115.59	118.90
1	2A	214	G	O4'-C1'-N9	5.51	112.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	607	U	O5'-P-OP1	-5.50	100.75	105.70
32	2a	1225	A	C5-C6-N6	5.50	128.10	123.70
1	1A	1828	G	O5'-P-OP2	-5.49	100.76	105.70
1	1A	784	A	OP1-P-O3'	5.49	117.28	105.20
1	2A	1313	U	C2-N1-C1'	5.49	124.28	117.70
1	1A	1647	G	O4'-C1'-N9	-5.49	103.81	108.20
1	1A	2593	U	N3-C4-O4	-5.48	115.56	119.40
1	2A	1647	G	O4'-C1'-N9	-5.48	103.81	108.20
1	1A	1175	U	P-O3'-C3'	5.47	126.26	119.70
1	1A	448	U	O5'-P-OP2	-5.46	100.78	105.70
1	1A	2685	G	C5-C6-O6	5.46	131.88	128.60
1	1A	740	U	O5'-P-OP2	-5.46	100.79	105.70
1	2A	2120	G	C4-N9-C1'	5.46	133.60	126.50
32	2a	1003	G	C2-N3-C4	5.46	114.63	111.90
32	2a	1158	C	N1-C2-O2	5.45	122.17	118.90
1	2A	1092	C	C6-N1-C1'	-5.44	114.28	120.80
32	2a	1065	U	P-O3'-C3'	5.43	126.22	119.70
32	2a	1158	C	C6-N1-C2	-5.43	118.13	120.30
1	2A	383	U	O4'-C1'-N1	5.43	112.54	108.20
1	2A	2104	G	C4-N9-C1'	5.41	133.53	126.50
1	2A	2107	C	N1-C2-O2	5.40	122.14	118.90
1	1A	800	A	O5'-P-OP1	-5.39	100.85	105.70
1	2A	2108	C	N1-C2-O2	5.38	122.13	118.90
1	2A	2805	G	O4'-C1'-N9	5.38	112.50	108.20
1	1A	2825	C	N3-C4-N4	-5.36	114.25	118.00
1	1A	996	A	O5'-P-OP2	5.36	117.13	110.70
1	1A	2825	C	C5-C4-N4	5.36	123.95	120.20
1	1A	793	A	O5'-P-OP2	-5.34	100.89	105.70
1	2A	2287	A	O4'-C1'-N9	5.34	112.47	108.20
1	1A	1187	G	N1-C6-O6	-5.33	116.70	119.90
1	2A	2187	G	N3-C4-C5	-5.32	125.94	128.60
1	2A	2154	G	C6-N1-C2	5.32	128.29	125.10
1	1A	1648	C	O5'-P-OP2	5.32	117.08	110.70
1	2A	1092	C	C5-C6-N1	5.31	123.65	121.00
1	1A	2249	U	N3-C4-C5	5.29	117.78	114.60
1	1A	555	U	O4'-C1'-N1	5.29	112.43	108.20
1	2A	752	A	P-O3'-C3'	5.28	126.04	119.70
1	1A	2790	A	C2-N3-C4	5.27	113.24	110.60
1	2A	2172	U	P-O3'-C3'	5.27	126.03	119.70
1	1A	568	U	C5-C4-O4	-5.26	122.74	125.90
1	1A	783	A	C2-N3-C4	5.26	113.23	110.60
32	2a	79	G	C6-N1-C2	5.25	128.25	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1111	A	O4'-C1'-N9	5.25	112.40	108.20
1	2A	2120	G	C8-N9-C1'	-5.24	120.19	127.00
1	1A	2825	C	C2-N1-C1'	-5.23	113.04	118.80
1	1A	1617	C	N1-C2-O2	-5.23	115.76	118.90
1	1A	1430	C	C6-N1-C2	-5.23	118.21	120.30
32	1a	754	C	N1-C2-O2	5.23	122.04	118.90
32	2a	90	U	N1-C2-O2	-5.23	119.14	122.80
32	2a	266	G	OP2-P-O3'	5.23	116.70	105.20
1	1A	1139	G	O5'-P-OP1	5.22	116.97	110.70
1	1A	847	U	C2-N1-C1'	5.21	123.96	117.70
1	1A	1064	C	N1-C2-O2	5.21	122.03	118.90
1	2A	195	A	N7-C8-N9	-5.21	111.19	113.80
1	1A	1177	A	O5'-P-OP1	-5.21	101.01	105.70
1	1A	1653	G	N9-C4-C5	5.20	107.48	105.40
1	1A	1773	A	N9-C1'-C2'	-5.19	106.29	112.00
1	1A	2501	C	C2-N1-C1'	-5.19	113.09	118.80
1	2A	845	G	O4'-C1'-N9	5.19	112.35	108.20
32	1a	1201	A	P-O3'-C3'	5.17	125.91	119.70
32	2a	955	U	C5-C4-O4	5.17	129.00	125.90
32	1a	99	U	N1-C2-O2	-5.16	119.19	122.80
1	1A	1782	C	O5'-P-OP1	-5.15	101.06	105.70
32	1a	687	A	P-O3'-C3'	5.14	125.87	119.70
1	1A	1063	G	C6-N1-C2	5.13	128.18	125.10
1	1A	1272	A	O5'-P-OP2	-5.12	101.09	105.70
1	1A	1791	A	C5'-C4'-C3'	-5.12	107.81	116.00
1	2A	752	A	C8-N9-C4	-5.11	103.76	105.80
1	1A	2028	U	N3-C4-C5	5.10	117.66	114.60
1	1A	645	C	N1-C2-O2	5.10	121.96	118.90
1	1A	1131	G	O4'-C1'-N9	5.10	112.28	108.20
1	2A	2186	G	C5-C6-O6	5.10	131.66	128.60
32	1a	754	C	C2-N1-C1'	5.09	124.40	118.80
1	2A	1210	A	P-O3'-C3'	5.09	125.81	119.70
1	1A	1153	C	O5'-P-OP2	-5.07	101.14	105.70
1	1A	2055	C	OP1-P-O3'	5.07	116.36	105.20
1	1A	383	U	C2-N1-C1'	-5.07	111.62	117.70
1	2A	1060	U	C2-N1-C1'	5.07	123.78	117.70
1	1A	1063	G	C5-C6-O6	5.07	131.64	128.60
1	1A	2612	C	O5'-P-OP2	-5.06	101.15	105.70
1	1A	1253	A	C5-N7-C8	5.05	106.42	103.90
1	2A	2689	U	P-O3'-C3'	5.04	125.75	119.70
32	1a	839	U	P-O3'-C3'	5.03	125.74	119.70
1	2A	2108	C	C5-C4-N4	5.02	123.71	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	963	U	O5'-P-OP2	-5.01	101.19	105.70
1	1A	195	A	P-O3'-C3'	5.01	125.71	119.70
32	2a	1150	U	C5-C4-O4	5.01	128.90	125.90
32	1a	1065	U	P-O3'-C3'	5.00	125.70	119.70
32	2a	60	A	P-O3'-C3'	5.00	125.70	119.70

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
11	1P	35	HIS	Peptide
33	1b	231	GLU	Peptide
11	2P	35	HIS	Peptide
42	2k	117	ASN	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%)	262 (96%)	11 (4%)	0	100	100
3	2D	273/276 (99%)	259 (95%)	14 (5%)	0	100	100
4	1E	202/206 (98%)	191 (95%)	9 (4%)	2 (1%)	15	15
4	2E	202/206 (98%)	192 (95%)	8 (4%)	2 (1%)	15	15
5	1F	201/210 (96%)	195 (97%)	5 (2%)	1 (0%)	29	32
5	2F	201/210 (96%)	196 (98%)	4 (2%)	1 (0%)	29	32
6	1G	179/182 (98%)	163 (91%)	12 (7%)	4 (2%)	6	4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	2G	179/182 (98%)	158 (88%)	18 (10%)	3 (2%)	9	7
7	1H	172/180 (96%)	163 (95%)	8 (5%)	1 (1%)	25	27
7	2H	171/180 (95%)	154 (90%)	15 (9%)	2 (1%)	13	11
8	1I	145/148 (98%)	133 (92%)	12 (8%)	0	100	100
8	2I	144/148 (97%)	129 (90%)	14 (10%)	1 (1%)	22	23
9	1N	138/140 (99%)	135 (98%)	3 (2%)	0	100	100
9	2N	138/140 (99%)	131 (95%)	6 (4%)	1 (1%)	22	23
10	1O	120/122 (98%)	115 (96%)	4 (3%)	1 (1%)	19	20
10	2O	120/122 (98%)	113 (94%)	6 (5%)	1 (1%)	19	20
11	1P	147/150 (98%)	139 (95%)	8 (5%)	0	100	100
11	2P	147/150 (98%)	139 (95%)	6 (4%)	2 (1%)	11	9
12	1Q	139/141 (99%)	134 (96%)	4 (3%)	1 (1%)	22	23
12	2Q	139/141 (99%)	133 (96%)	6 (4%)	0	100	100
13	1R	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
13	2R	116/118 (98%)	112 (97%)	4 (3%)	0	100	100
14	1S	108/112 (96%)	101 (94%)	7 (6%)	0	100	100
14	2S	108/112 (96%)	100 (93%)	8 (7%)	0	100	100
15	1T	129/146 (88%)	124 (96%)	4 (3%)	1 (1%)	19	20
15	2T	129/146 (88%)	122 (95%)	7 (5%)	0	100	100
16	1U	114/118 (97%)	114 (100%)	0	0	100	100
16	2U	114/118 (97%)	114 (100%)	0	0	100	100
17	1V	99/101 (98%)	96 (97%)	3 (3%)	0	100	100
17	2V	99/101 (98%)	92 (93%)	6 (6%)	1 (1%)	15	15
18	1W	110/113 (97%)	110 (100%)	0	0	100	100
18	2W	110/113 (97%)	109 (99%)	1 (1%)	0	100	100
19	1X	93/96 (97%)	92 (99%)	0	1 (1%)	14	13
19	2X	93/96 (97%)	90 (97%)	2 (2%)	1 (1%)	14	13
20	1Y	105/110 (96%)	99 (94%)	6 (6%)	0	100	100
20	2Y	105/110 (96%)	97 (92%)	8 (8%)	0	100	100
21	1Z	201/206 (98%)	189 (94%)	11 (6%)	1 (0%)	29	32
21	2Z	199/206 (97%)	181 (91%)	17 (8%)	1 (0%)	29	32

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
22	10	75/85 (88%)	72 (96%)	3 (4%)	0	100	100
22	20	75/85 (88%)	73 (97%)	2 (3%)	0	100	100
23	11	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	14	13
23	21	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	14	13
24	12	68/72 (94%)	67 (98%)	1 (2%)	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%)	55 (96%)	2 (4%)	0	100	100
26	14	67/71 (94%)	50 (75%)	14 (21%)	3 (4%)	2	1
26	24	67/71 (94%)	44 (66%)	19 (28%)	4 (6%)	1	0
27	15	57/60 (95%)	57 (100%)	0	0	100	100
27	25	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
28	26	51/54 (94%)	48 (94%)	3 (6%)	0	100	100
29	17	46/49 (94%)	46 (100%)	0	0	100	100
29	27	46/49 (94%)	46 (100%)	0	0	100	100
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	62 (100%)	0	0	100	100
31	19	35/37 (95%)	35 (100%)	0	0	100	100
31	29	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
33	1b	229/256 (90%)	192 (84%)	27 (12%)	10 (4%)	2	1
33	2b	229/256 (90%)	199 (87%)	21 (9%)	9 (4%)	3	1
34	1c	204/239 (85%)	186 (91%)	17 (8%)	1 (0%)	29	32
34	2c	204/239 (85%)	173 (85%)	28 (14%)	3 (2%)	10	8
35	1d	206/209 (99%)	192 (93%)	14 (7%)	0	100	100
35	2d	206/209 (99%)	191 (93%)	14 (7%)	1 (0%)	29	32
36	1e	146/162 (90%)	138 (94%)	8 (6%)	0	100	100
36	2e	146/162 (90%)	142 (97%)	4 (3%)	0	100	100
37	1f	98/101 (97%)	95 (97%)	3 (3%)	0	100	100
37	2f	98/101 (97%)	95 (97%)	3 (3%)	0	100	100
38	1g	153/156 (98%)	149 (97%)	4 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
38	2g	153/156 (98%)	144 (94%)	7 (5%)	2 (1%)	12	10
39	1h	135/138 (98%)	127 (94%)	8 (6%)	0	100	100
39	2h	135/138 (98%)	127 (94%)	8 (6%)	0	100	100
40	1i	125/128 (98%)	110 (88%)	14 (11%)	1 (1%)	19	20
40	2i	124/128 (97%)	105 (85%)	15 (12%)	4 (3%)	4	2
41	1j	95/105 (90%)	82 (86%)	9 (10%)	4 (4%)	3	1
41	2j	94/105 (90%)	79 (84%)	11 (12%)	4 (4%)	2	1
42	1k	112/129 (87%)	106 (95%)	5 (4%)	1 (1%)	17	17
42	2k	112/129 (87%)	104 (93%)	8 (7%)	0	100	100
43	1l	119/132 (90%)	115 (97%)	4 (3%)	0	100	100
43	2l	119/132 (90%)	114 (96%)	5 (4%)	0	100	100
44	1m	114/126 (90%)	103 (90%)	8 (7%)	3 (3%)	5	3
44	2m	112/126 (89%)	97 (87%)	13 (12%)	2 (2%)	8	6
45	1n	58/61 (95%)	55 (95%)	3 (5%)	0	100	100
45	2n	58/61 (95%)	56 (97%)	2 (3%)	0	100	100
46	1o	86/89 (97%)	83 (96%)	2 (2%)	1 (1%)	13	11
46	2o	86/89 (97%)	82 (95%)	2 (2%)	2 (2%)	6	4
47	1p	80/88 (91%)	71 (89%)	9 (11%)	0	100	100
47	2p	80/88 (91%)	69 (86%)	11 (14%)	0	100	100
48	1q	97/105 (92%)	89 (92%)	7 (7%)	1 (1%)	15	15
48	2q	97/105 (92%)	90 (93%)	6 (6%)	1 (1%)	15	15
49	1r	66/88 (75%)	64 (97%)	2 (3%)	0	100	100
49	2r	66/88 (75%)	65 (98%)	1 (2%)	0	100	100
50	1s	81/93 (87%)	74 (91%)	6 (7%)	1 (1%)	13	11
50	2s	81/93 (87%)	70 (86%)	11 (14%)	0	100	100
51	1t	94/106 (89%)	87 (93%)	3 (3%)	4 (4%)	2	1
51	2t	96/106 (91%)	91 (95%)	1 (1%)	4 (4%)	3	1
52	1u	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
52	2u	21/27 (78%)	18 (86%)	2 (10%)	1 (5%)	2	0
53	1y	95/113 (84%)	94 (99%)	1 (1%)	0	100	100
53	2y	94/113 (83%)	91 (97%)	3 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
All	All	11629/12354 (94%)	10880 (94%)	651 (6%)	98 (1%)	19	20

All (98) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	1F	130	ALA
6	1G	47	LYS
6	1G	50	ALA
26	14	57	GLU
33	1b	21	ARG
33	1b	124	SER
33	1b	127	ILE
33	1b	231	GLU
41	1j	55	LYS
44	1m	67	GLU
4	2E	71	GLY
6	2G	81	LYS
7	2H	126	PRO
8	2I	10	GLU
19	2X	94	GLY
26	24	63	TYR
40	2i	43	ALA
40	2i	55	ALA
46	2o	88	ARG
4	1E	71	GLY
6	1G	51	ARG
33	1b	8	LYS
33	1b	17	PHE
34	1c	107	GLN
40	1i	11	LYS
41	1j	82	ILE
44	1m	3	ARG
46	1o	19	PRO
48	1q	68	ARG
51	1t	47	GLY
51	1t	99	LEU
51	1t	100	ILE
23	21	3	LYS
26	24	45	GLY
26	24	62	ARG
40	2i	54	ASP
48	2q	68	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
51	2t	47	GLY
51	2t	100	ILE
10	1O	5	GLN
12	1Q	59	ARG
19	1X	94	GLY
21	1Z	52	SER
23	11	3	LYS
26	14	49	PHE
33	1b	126	GLU
41	1j	77	PRO
50	1s	27	GLU
5	2F	130	ALA
7	2H	65	HIS
10	2O	5	GLN
17	2V	79	VAL
33	2b	17	PHE
33	2b	22	LYS
33	2b	190	THR
38	2g	4	ARG
38	2g	55	GLY
41	2j	78	ASN
41	2j	79	ARG
46	2o	19	PRO
4	1E	52	LEU
15	1T	55	ASN
33	1b	20	GLU
33	1b	36	ARG
33	1b	228	GLY
41	1j	78	ASN
51	1t	95	ALA
4	2E	52	LEU
6	2G	78	SER
11	2P	29	LYS
26	24	55	ARG
33	2b	95	GLN
34	2c	4	LYS
34	2c	18	TRP
41	2j	55	LYS
41	2j	75	ILE
26	14	61	ARG
42	1k	100	ALA
11	2P	122	PRO

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Mol	Chain	Res	Type
21	2Z	104	PHE
33	2b	20	GLU
33	2b	165	VAL
40	2i	96	LEU
44	2m	67	GLU
51	2t	95	ALA
7	1H	126	PRO
44	1m	12	ASN
33	2b	16	HIS
33	2b	126	GLU
44	2m	80	ARG
52	2u	7	ARG
51	2t	102	GLY
35	2d	167	GLY
6	1G	44	GLY
6	2G	42	GLY
9	2N	129	PRO
33	2b	125	PRO
34	2c	81	GLY

### 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%)	199 (93%)	15 (7%)	15	15
3	2D	215/218 (99%)	199 (93%)	16 (7%)	13	14
4	1E	164/166 (99%)	157 (96%)	7 (4%)	29	35
4	2E	164/166 (99%)	157 (96%)	7 (4%)	29	35
5	1F	160/166 (96%)	151 (94%)	9 (6%)	21	23
5	2F	159/166 (96%)	145 (91%)	14 (9%)	10	8
6	1G	144/156 (92%)	131 (91%)	13 (9%)	9	8
6	2G	142/156 (91%)	127 (89%)	15 (11%)	6	6
7	1H	144/148 (97%)	139 (96%)	5 (4%)	36	44

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	2H	143/148 (97%)	128 (90%)	15 (10%)	7	6
8	1I	111/124 (90%)	96 (86%)	15 (14%)	4	3
8	2I	108/124 (87%)	97 (90%)	11 (10%)	7	6
9	1N	119/119 (100%)	114 (96%)	5 (4%)	30	36
9	2N	118/119 (99%)	112 (95%)	6 (5%)	24	27
10	1O	100/100 (100%)	100 (100%)	0	100	100
10	2O	100/100 (100%)	97 (97%)	3 (3%)	41	50
11	1P	115/116 (99%)	108 (94%)	7 (6%)	18	20
11	2P	115/116 (99%)	109 (95%)	6 (5%)	23	27
12	1Q	111/111 (100%)	106 (96%)	5 (4%)	27	33
12	2Q	111/111 (100%)	104 (94%)	7 (6%)	18	19
13	1R	101/101 (100%)	97 (96%)	4 (4%)	31	39
13	2R	101/101 (100%)	94 (93%)	7 (7%)	15	15
14	1S	87/88 (99%)	78 (90%)	9 (10%)	7	6
14	2S	85/88 (97%)	76 (89%)	9 (11%)	6	6
15	1T	115/127 (91%)	108 (94%)	7 (6%)	18	20
15	2T	113/127 (89%)	104 (92%)	9 (8%)	12	12
16	1U	93/94 (99%)	89 (96%)	4 (4%)	29	35
16	2U	93/94 (99%)	86 (92%)	7 (8%)	13	13
17	1V	81/82 (99%)	77 (95%)	4 (5%)	25	29
17	2V	80/82 (98%)	73 (91%)	7 (9%)	10	8
18	1W	90/92 (98%)	85 (94%)	5 (6%)	21	23
18	2W	90/92 (98%)	86 (96%)	4 (4%)	28	34
19	1X	77/78 (99%)	74 (96%)	3 (4%)	32	40
19	2X	77/78 (99%)	75 (97%)	2 (3%)	46	56
20	1Y	86/91 (94%)	80 (93%)	6 (7%)	15	15
20	2Y	86/91 (94%)	81 (94%)	5 (6%)	20	22
21	1Z	169/179 (94%)	154 (91%)	15 (9%)	9	8
21	2Z	165/179 (92%)	153 (93%)	12 (7%)	14	14
22	10	61/67 (91%)	61 (100%)	0	100	100
22	20	61/67 (91%)	61 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
23	11	79/83 (95%)	73 (92%)	6 (8%)	13	13
23	21	81/83 (98%)	75 (93%)	6 (7%)	13	14
24	12	65/67 (97%)	60 (92%)	5 (8%)	13	12
24	22	66/67 (98%)	62 (94%)	4 (6%)	18	20
25	13	51/52 (98%)	49 (96%)	2 (4%)	32	40
25	23	50/52 (96%)	45 (90%)	5 (10%)	7	6
26	14	58/63 (92%)	52 (90%)	6 (10%)	7	6
26	24	54/63 (86%)	47 (87%)	7 (13%)	4	4
27	15	51/52 (98%)	47 (92%)	4 (8%)	12	12
27	25	50/52 (96%)	49 (98%)	1 (2%)	55	66
28	16	51/52 (98%)	48 (94%)	3 (6%)	19	22
28	26	50/52 (96%)	45 (90%)	5 (10%)	7	6
29	17	41/42 (98%)	39 (95%)	2 (5%)	25	29
29	27	41/42 (98%)	37 (90%)	4 (10%)	8	7
30	18	54/55 (98%)	50 (93%)	4 (7%)	13	14
30	28	54/55 (98%)	51 (94%)	3 (6%)	21	23
31	19	34/34 (100%)	33 (97%)	1 (3%)	42	52
31	29	34/34 (100%)	32 (94%)	2 (6%)	19	22
33	1b	191/220 (87%)	168 (88%)	23 (12%)	5	4
33	2b	187/220 (85%)	167 (89%)	20 (11%)	6	6
34	1c	144/188 (77%)	136 (94%)	8 (6%)	21	23
34	2c	140/188 (74%)	120 (86%)	20 (14%)	3	3
35	1d	171/181 (94%)	158 (92%)	13 (8%)	13	13
35	2d	172/181 (95%)	157 (91%)	15 (9%)	10	9
36	1e	114/123 (93%)	106 (93%)	8 (7%)	15	15
36	2e	114/123 (93%)	107 (94%)	7 (6%)	18	20
37	1f	85/90 (94%)	82 (96%)	3 (4%)	36	44
37	2f	85/90 (94%)	77 (91%)	8 (9%)	8	8
38	1g	120/127 (94%)	110 (92%)	10 (8%)	11	11
38	2g	119/127 (94%)	109 (92%)	10 (8%)	11	10
39	1h	116/119 (98%)	110 (95%)	6 (5%)	23	27

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
39	2h	114/119 (96%)	104 (91%)	10 (9%)	10	8
40	1i	91/99 (92%)	84 (92%)	7 (8%)	13	12
40	2i	88/99 (89%)	79 (90%)	9 (10%)	7	6
41	1j	68/92 (74%)	63 (93%)	5 (7%)	13	14
41	2j	68/92 (74%)	62 (91%)	6 (9%)	10	8
42	1k	83/99 (84%)	79 (95%)	4 (5%)	25	30
42	2k	83/99 (84%)	80 (96%)	3 (4%)	35	43
43	1l	96/108 (89%)	95 (99%)	1 (1%)	76	85
43	2l	96/108 (89%)	90 (94%)	6 (6%)	18	19
44	1m	90/101 (89%)	84 (93%)	6 (7%)	16	17
44	2m	87/101 (86%)	78 (90%)	9 (10%)	7	6
45	1n	49/50 (98%)	45 (92%)	4 (8%)	11	11
45	2n	49/50 (98%)	44 (90%)	5 (10%)	7	6
46	1o	78/80 (98%)	77 (99%)	1 (1%)	69	80
46	2o	78/80 (98%)	71 (91%)	7 (9%)	9	8
47	1p	69/74 (93%)	60 (87%)	9 (13%)	4	4
47	2p	68/74 (92%)	60 (88%)	8 (12%)	5	5
48	1q	94/97 (97%)	91 (97%)	3 (3%)	39	47
48	2q	94/97 (97%)	91 (97%)	3 (3%)	39	47
49	1r	59/77 (77%)	57 (97%)	2 (3%)	37	46
49	2r	59/77 (77%)	56 (95%)	3 (5%)	24	27
50	1s	68/80 (85%)	65 (96%)	3 (4%)	28	34
50	2s	67/80 (84%)	59 (88%)	8 (12%)	5	4
51	1t	71/82 (87%)	68 (96%)	3 (4%)	30	36
51	2t	70/82 (85%)	66 (94%)	4 (6%)	20	22
52	1u	18/22 (82%)	17 (94%)	1 (6%)	21	23
52	2u	18/22 (82%)	16 (89%)	2 (11%)	6	5
53	1y	82/98 (84%)	80 (98%)	2 (2%)	49	59
53	2y	79/98 (81%)	71 (90%)	8 (10%)	7	6
All	All	9524/10260 (93%)	8861 (93%)	663 (7%)	15	15

All (663) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	37	LEU
3	1D	39	LYS
3	1D	43	ARG
3	1D	61	LEU
3	1D	71	ASP
3	1D	99	ASP
3	1D	111	LEU
3	1D	126	GLN
3	1D	142	VAL
3	1D	155	LEU
3	1D	183	ARG
3	1D	211	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
4	1E	12	THR
4	1E	41	LYS
4	1E	73	GLU
4	1E	75	VAL
4	1E	116	VAL
4	1E	181	LEU
4	1E	184	VAL
5	1F	38	ARG
5	1F	53	THR
5	1F	57	VAL
5	1F	110	LEU
5	1F	157	VAL
5	1F	161	GLU
5	1F	170	LEU
5	1F	192	LEU
5	1F	197	ASP
6	1G	7	LEU
6	1G	28	VAL
6	1G	31	VAL
6	1G	43	LEU
6	1G	45	GLU
6	1G	52	ILE
6	1G	53	LEU
6	1G	79	ASN
6	1G	82	LEU
6	1G	84	LYS
6	1G	126	ASP
6	1G	133	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
6	1G	153	ARG
7	1H	24	VAL
7	1H	56	SER
7	1H	81	GLU
7	1H	119	GLU
7	1H	122	THR
8	1I	5	LEU
8	1I	12	LEU
8	1I	20	ASP
8	1I	38	LEU
8	1I	44	LEU
8	1I	57	ARG
8	1I	61	ARG
8	1I	64	GLU
8	1I	78	THR
8	1I	85	GLU
8	1I	92	VAL
8	1I	101	LEU
8	1I	109	ILE
8	1I	127	VAL
8	1I	140	LEU
9	1N	33	LEU
9	1N	48	MET
9	1N	73	THR
9	1N	85	ILE
9	1N	87	LEU
11	1P	2	LYS
11	1P	3	LEU
11	1P	71	VAL
11	1P	90	ARG
11	1P	95	VAL
11	1P	99	LEU
11	1P	148	LEU
12	1Q	6	ARG
12	1Q	7	MET
12	1Q	16	ARG
12	1Q	75	THR
12	1Q	109	VAL
13	1R	29	LEU
13	1R	33	ARG
13	1R	44	LEU
13	1R	114	VAL

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
14	1S	14	VAL
14	1S	25	ARG
14	1S	48	LEU
14	1S	52	SER
14	1S	59	LYS
14	1S	75	GLU
14	1S	78	LEU
14	1S	85	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	34	VAL
15	1T	39	ARG
15	1T	53	ARG
15	1T	59	THR
15	1T	96	ARG
15	1T	118	ARG
16	1U	5	LYS
16	1U	59	ARG
16	1U	74	LEU
16	1U	104	GLN
17	1V	51	VAL
17	1V	61	VAL
17	1V	62	LEU
17	1V	79	VAL
18	1W	11	ARG
18	1W	17	VAL
18	1W	23	LEU
18	1W	49	LYS
18	1W	63	ASP
19	1X	35	THR
19	1X	45	THR
19	1X	72	LYS
20	1Y	23	ARG
20	1Y	43	ASN
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	85	VAL
20	1Y	99	CYS
21	1Z	31	ARG
21	1Z	66	SER
21	1Z	86	VAL
21	1Z	93	ASP

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
21	1Z	145	GLU
21	1Z	150	LEU
21	1Z	155	LEU
21	1Z	156	LYS
21	1Z	161	VAL
21	1Z	163	LEU
21	1Z	170	THR
21	1Z	185	GLU
21	1Z	191	VAL
21	1Z	202	GLU
21	1Z	203	GLU
23	11	21	ARG
23	11	30	VAL
23	11	40	ARG
23	11	51	VAL
23	11	69	LYS
23	11	80	LEU
24	12	1	MET
24	12	27	GLU
24	12	30	ARG
24	12	53	LEU
24	12	70	GLN
25	13	23	LEU
25	13	54	VAL
26	14	23	GLU
26	14	31	ILE
26	14	47	GLN
26	14	49	PHE
26	14	50	VAL
26	14	56	VAL
27	15	6	VAL
27	15	40	LYS
27	15	55	ARG
27	15	58	LEU
28	16	6	ARG
28	16	14	THR
28	16	52	VAL
29	17	24	THR
29	17	46	VAL
30	18	29	LYS
30	18	30	ARG
30	18	31	HIS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
30	18	34	TRP
31	19	4	ARG
33	1b	9	GLU
33	1b	15	VAL
33	1b	19	HIS
33	1b	24	TRP
33	1b	32	ILE
33	1b	51	LEU
33	1b	80	ILE
33	1b	96	ARG
33	1b	107	THR
33	1b	111	ARG
33	1b	112	VAL
33	1b	122	PHE
33	1b	124	SER
33	1b	134	GLU
33	1b	158	LEU
33	1b	160	ASP
33	1b	163	PHE
33	1b	185	ILE
33	1b	189	ASP
33	1b	208	ILE
33	1b	224	GLN
33	1b	229	VAL
33	1b	230	VAL
34	1c	26	LYS
34	1c	36	ASP
34	1c	63	ASN
34	1c	70	VAL
34	1c	98	ASN
34	1c	105	GLU
34	1c	132	ARG
34	1c	178	LEU
35	1d	8	VAL
35	1d	25	ARG
35	1d	31	CYS
35	1d	47	ARG
35	1d	83	SER
35	1d	135	LEU
35	1d	166	LYS
35	1d	168	ARG
35	1d	177	ASP

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
35	1d	178	VAL
35	1d	190	ASP
35	1d	194	LEU
35	1d	196	LEU
36	1e	10	MET
36	1e	31	LEU
36	1e	64	ARG
36	1e	69	VAL
36	1e	75	THR
36	1e	79	GLU
36	1e	101	ILE
36	1e	147	ASP
37	1f	69	GLU
37	1f	72	VAL
37	1f	86	ARG
38	1g	13	GLN
38	1g	32	ARG
38	1g	45	ASP
38	1g	51	GLN
38	1g	94	ARG
38	1g	97	GLN
38	1g	104	LEU
38	1g	113	GLU
38	1g	138	LYS
38	1g	144	MET
39	1h	24	THR
39	1h	26	VAL
39	1h	63	LEU
39	1h	105	ARG
39	1h	127	LEU
39	1h	137	VAL
40	1i	2	GLU
40	1i	47	LEU
40	1i	64	THR
40	1i	65	VAL
40	1i	75	ASP
40	1i	81	ILE
40	1i	125	TYR
41	1j	34	VAL
41	1j	38	ILE
41	1j	46	ARG
41	1j	92	THR

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
41	1j	100	THR
42	1k	16	SER
42	1k	91	ARG
42	1k	109	VAL
42	1k	114	VAL
43	1l	23	LYS
44	1m	4	ILE
44	1m	11	ARG
44	1m	19	LEU
44	1m	60	VAL
44	1m	70	LEU
44	1m	94	ARG
45	1n	13	THR
45	1n	18	VAL
45	1n	49	HIS
45	1n	50	LYS
46	1o	39	LEU
47	1p	2	VAL
47	1p	8	ARG
47	1p	20	VAL
47	1p	29	ASP
47	1p	50	LYS
47	1p	61	SER
47	1p	62	VAL
47	1p	67	THR
47	1p	72	ARG
48	1q	63	ARG
48	1q	70	ARG
48	1q	97	SER
49	1r	25	THR
49	1r	47	THR
50	1s	5	LEU
50	1s	28	LYS
50	1s	37	ARG
51	1t	24	LEU
51	1t	56	MET
51	1t	100	ILE
52	1u	15	ARG
53	1y	23	ARG
53	1y	42	SER
3	2D	3	VAL
3	2D	61	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
3	2D	99	ASP
3	2D	103	ARG
3	2D	111	LEU
3	2D	113	VAL
3	2D	134	ARG
3	2D	140	THR
3	2D	142	VAL
3	2D	183	ARG
3	2D	211	ARG
3	2D	221	VAL
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	274	ARG
4	2E	12	THR
4	2E	73	GLU
4	2E	75	VAL
4	2E	89	ASP
4	2E	113	PHE
4	2E	116	VAL
4	2E	181	LEU
5	2F	20	LEU
5	2F	33	LEU
5	2F	57	VAL
5	2F	60	SER
5	2F	74	ARG
5	2F	88	VAL
5	2F	120	GLU
5	2F	126	VAL
5	2F	135	LYS
5	2F	140	LEU
5	2F	162	LEU
5	2F	175	THR
5	2F	197	ASP
5	2F	201	VAL
6	2G	3	LEU
6	2G	4	ASP
6	2G	7	LEU
6	2G	14	GLU
6	2G	31	VAL
6	2G	39	ILE
6	2G	43	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
6	2G	53	LEU
6	2G	92	VAL
6	2G	115	ARG
6	2G	126	ASP
6	2G	133	LEU
6	2G	139	LEU
6	2G	146	TYR
6	2G	170	ARG
7	2H	6	ARG
7	2H	7	LEU
7	2H	33	LEU
7	2H	34	GLU
7	2H	47	GLU
7	2H	49	VAL
7	2H	54	ARG
7	2H	84	SER
7	2H	88	LEU
7	2H	92	ILE
7	2H	105	LEU
7	2H	122	THR
7	2H	127	GLU
7	2H	133	VAL
7	2H	139	GLN
8	2I	3	VAL
8	2I	38	LEU
8	2I	61	ARG
8	2I	68	LEU
8	2I	75	LEU
8	2I	76	THR
8	2I	92	VAL
8	2I	123	LEU
8	2I	127	VAL
8	2I	140	LEU
8	2I	142	VAL
9	2N	12	ARG
9	2N	28	THR
9	2N	48	MET
9	2N	62	VAL
9	2N	133	GLN
9	2N	138	LEU
10	2O	52	VAL
10	2O	113	LYS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
10	2O	116	SER
11	2P	90	ARG
11	2P	95	VAL
11	2P	96	THR
11	2P	99	LEU
11	2P	148	LEU
11	2P	149	GLU
12	2Q	1	MET
12	2Q	2	LEU
12	2Q	35	VAL
12	2Q	55	VAL
12	2Q	106	VAL
12	2Q	109	VAL
12	2Q	110	THR
13	2R	29	LEU
13	2R	33	ARG
13	2R	44	LEU
13	2R	86	ARG
13	2R	104	ARG
13	2R	114	VAL
13	2R	118	GLU
14	2S	12	PHE
14	2S	25	ARG
14	2S	35	ILE
14	2S	50	SER
14	2S	52	SER
14	2S	69	VAL
14	2S	76	LYS
14	2S	78	LEU
14	2S	85	VAL
15	2T	6	LEU
15	2T	16	ARG
15	2T	28	VAL
15	2T	39	ARG
15	2T	40	THR
15	2T	65	LYS
15	2T	82	LEU
15	2T	89	VAL
15	2T	108	ARG
16	2U	5	LYS
16	2U	31	SER
16	2U	55	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
16	2U	59	ARG
16	2U	74	LEU
16	2U	104	GLN
16	2U	108	GLU
17	2V	12	TYR
17	2V	13	ARG
17	2V	32	THR
17	2V	35	LEU
17	2V	46	VAL
17	2V	51	VAL
17	2V	79	VAL
18	2W	11	ARG
18	2W	17	VAL
18	2W	23	LEU
18	2W	100	THR
19	2X	65	ARG
19	2X	82	GLN
20	2Y	6	HIS
20	2Y	19	LYS
20	2Y	72	VAL
20	2Y	92	ASN
20	2Y	99	CYS
21	2Z	33	LEU
21	2Z	35	ARG
21	2Z	72	ARG
21	2Z	73	GLN
21	2Z	76	LEU
21	2Z	86	VAL
21	2Z	107	THR
21	2Z	136	PHE
21	2Z	150	LEU
21	2Z	170	THR
21	2Z	175	VAL
21	2Z	193	GLU
23	21	4	VAL
23	21	21	ARG
23	21	26	ARG
23	21	40	ARG
23	21	46	LEU
23	21	85	LEU
24	22	32	LEU
24	22	45	SER

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
24	22	62	THR
24	22	64	LEU
25	23	31	LEU
25	23	35	ARG
25	23	44	ARG
25	23	57	GLU
25	23	59	VAL
26	24	15	ILE
26	24	20	ASN
26	24	21	VAL
26	24	50	VAL
26	24	52	THR
26	24	53	GLU
26	24	62	ARG
27	25	6	VAL
28	26	6	ARG
28	26	13	CYS
28	26	14	THR
28	26	19	ARG
28	26	40	CYS
29	27	1	MET
29	27	23	ARG
29	27	24	THR
29	27	46	VAL
30	28	3	LYS
30	28	31	HIS
30	28	34	TRP
31	29	12	ASP
31	29	17	ILE
33	2b	8	LYS
33	2b	15	VAL
33	2b	24	TRP
33	2b	28	PHE
33	2b	42	ILE
33	2b	45	GLN
33	2b	64	ARG
33	2b	67	THR
33	2b	80	ILE
33	2b	82	ARG
33	2b	83	MET
33	2b	118	LEU
33	2b	124	SER

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
33	2b	126	GLU
33	2b	128	GLU
33	2b	140	HIS
33	2b	189	ASP
33	2b	200	ILE
33	2b	217	ARG
33	2b	224	GLN
34	2c	3	ASN
34	2c	33	LEU
34	2c	44	GLU
34	2c	46	GLU
34	2c	47	LEU
34	2c	49	SER
34	2c	52	LEU
34	2c	102	ASN
34	2c	105	GLU
34	2c	115	LEU
34	2c	128	PHE
34	2c	131	ARG
34	2c	143	GLU
34	2c	152	ILE
34	2c	166	GLU
34	2c	181	ASN
34	2c	182	ILE
34	2c	192	THR
34	2c	195	VAL
34	2c	207	VAL
35	2d	17	VAL
35	2d	28	SER
35	2d	31	CYS
35	2d	106	TYR
35	2d	108	LEU
35	2d	122	ARG
35	2d	132	ARG
35	2d	135	LEU
35	2d	141	ARG
35	2d	150	GLU
35	2d	155	LEU
35	2d	157	LEU
35	2d	160	GLN
35	2d	166	LYS
35	2d	209	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	2e	31	LEU
36	2e	69	VAL
36	2e	71	LEU
36	2e	79	GLU
36	2e	145	LYS
36	2e	150	ARG
36	2e	152	ARG
37	2f	37	VAL
37	2f	57	GLN
37	2f	61	LEU
37	2f	63	TYR
37	2f	69	GLU
37	2f	73	ASN
37	2f	93	SER
37	2f	95	GLU
38	2g	9	VAL
38	2g	13	GLN
38	2g	15	ASP
38	2g	21	VAL
38	2g	75	VAL
38	2g	95	ARG
38	2g	113	GLU
38	2g	115	ARG
38	2g	135	VAL
38	2g	155	ARG
39	2h	54	ASP
39	2h	63	LEU
39	2h	84	ARG
39	2h	85	ARG
39	2h	112	LEU
39	2h	114	THR
39	2h	121	ASP
39	2h	122	ARG
39	2h	133	LEU
39	2h	137	VAL
40	2i	7	THR
40	2i	31	GLN
40	2i	34	ASN
40	2i	54	ASP
40	2i	56	LEU
40	2i	60	ASP
40	2i	105	ASP

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
40	2i	108	VAL
40	2i	125	TYR
41	2j	9	ARG
41	2j	30	SER
41	2j	34	VAL
41	2j	47	PHE
41	2j	84	GLN
41	2j	89	ASP
42	2k	38	ASN
42	2k	103	LEU
42	2k	117	ASN
43	2l	41	ARG
43	2l	59	ARG
43	2l	73	GLU
43	2l	81	SER
43	2l	83	VAL
43	2l	112	ASP
44	2m	3	ARG
44	2m	19	LEU
44	2m	27	LYS
44	2m	47	ASP
44	2m	81	LEU
44	2m	102	ARG
44	2m	104	ARG
44	2m	106	ASN
44	2m	116	THR
45	2n	3	ARG
45	2n	7	ILE
45	2n	13	THR
45	2n	18	VAL
45	2n	49	HIS
46	2o	3	ILE
46	2o	24	SER
46	2o	38	ARG
46	2o	39	LEU
46	2o	64	ARG
46	2o	76	GLU
46	2o	83	GLU
47	2p	1	MET
47	2p	2	VAL
47	2p	21	VAL
47	2p	28	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
47	2p	47	ASP
47	2p	60	LEU
47	2p	69	THR
47	2p	76	GLN
48	2q	63	ARG
48	2q	70	ARG
48	2q	96	GLU
49	2r	41	LYS
49	2r	55	ARG
49	2r	66	LEU
50	2s	5	LEU
50	2s	13	ASP
50	2s	27	GLU
50	2s	44	MET
50	2s	48	THR
50	2s	66	MET
50	2s	79	THR
50	2s	81	ARG
51	2t	10	LEU
51	2t	38	LYS
51	2t	62	LEU
51	2t	84	LEU
52	2u	8	THR
52	2u	15	ARG
53	2y	11	GLU
53	2y	16	ILE
53	2y	23	ARG
53	2y	41	LEU
53	2y	42	SER
53	2y	70	MET
53	2y	87	LYS
53	2y	96	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (113) such sidechains are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
3	1D	116	GLN
3	1D	253	GLN
4	1E	48	GLN
5	1F	8	GLN
5	1F	69	HIS
5	1F	203	GLN

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
6	1G	26	GLN
8	1I	54	GLN
13	1R	24	GLN
15	1T	58	ASN
15	1T	123	GLN
18	1W	60	ASN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	6	HIS
20	1Y	92	ASN
21	1Z	73	GLN
25	13	32	GLN
26	14	20	ASN
31	19	34	GLN
34	1c	6	HIS
34	1c	63	ASN
34	1c	104	GLN
35	1d	45	GLN
35	1d	77	ASN
35	1d	119	GLN
35	1d	123	HIS
35	1d	129	ASN
37	1f	32	ASN
37	1f	73	ASN
37	1f	100	ASN
38	1g	28	ASN
38	1g	64	GLN
38	1g	86	GLN
38	1g	148	ASN
40	1i	3	GLN
40	1i	73	GLN
40	1i	87	GLN
41	1j	56	HIS
41	1j	69	ASN
42	1k	117	ASN
43	1l	99	HIS
45	1n	49	HIS
46	1o	13	GLN
46	1o	28	GLN
47	1p	13	HIS
47	1p	16	HIS
48	1q	16	GLN

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
50	1s	23	ASN
50	1s	83	HIS
51	1t	9	ASN
51	1t	18	GLN
53	1y	38	HIS
3	2D	253	GLN
4	2E	48	GLN
5	2F	69	HIS
5	2F	133	ASN
6	2G	108	ASN
6	2G	138	GLN
7	2H	74	ASN
8	2I	43	ASN
8	2I	104	GLN
8	2I	105	HIS
9	2N	133	GLN
10	2O	3	GLN
13	2R	13	HIS
13	2R	24	GLN
14	2S	68	GLN
15	2T	58	ASN
15	2T	123	GLN
17	2V	64	HIS
19	2X	31	HIS
19	2X	82	GLN
20	2Y	92	ASN
21	2Z	73	GLN
21	2Z	132	ASN
21	2Z	151	HIS
25	23	32	GLN
26	24	20	ASN
30	28	35	GLN
31	29	34	GLN
33	2b	40	HIS
33	2b	78	GLN
34	2c	6	HIS
34	2c	28	GLN
34	2c	37	GLN
34	2c	170	GLN
34	2c	176	HIS
34	2c	181	ASN
35	2d	77	ASN

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Mol	Chain	Res	Type
35	2d	116	GLN
35	2d	125	HIS
35	2d	160	GLN
35	2d	161	ASN
36	2e	20	GLN
37	2f	73	ASN
38	2g	13	GLN
38	2g	28	ASN
40	2i	3	GLN
40	2i	29	ASN
40	2i	31	GLN
41	2j	68	HIS
41	2j	84	GLN
43	2l	99	HIS
44	2m	12	ASN
45	2n	49	HIS
46	2o	9	GLN
46	2o	13	GLN
46	2o	28	GLN
47	2p	16	HIS
48	2q	16	GLN
50	2s	83	HIS
53	2y	38	HIS

### 5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2863/2915 (98%)	401 (14%)	33 (1%)
1	2A	2856/2915 (97%)	443 (15%)	39 (1%)
2	1B	119/121 (98%)	12 (10%)	0
2	2B	119/121 (98%)	15 (12%)	0
32	1a	1494/1521 (98%)	217 (14%)	0
32	2a	1498/1521 (98%)	247 (16%)	0
All	All	8949/9114 (98%)	1335 (14%)	72 (0%)

All (1335) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	34	C
1	1A	45	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	181	A
1	1A	182	A
1	1A	196	A
1	1A	205	G
1	1A	215	G
1	1A	216	A
1	1A	221	A
1	1A	222	A
1	1A	229	A
1	1A	248	G
1	1A	265	A
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(O)	C
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	283	A
1	1A	311	A
1	1A	330	A
1	1A	352	G
1	1A	363	G
1	1A	363(C)	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G
1	1A	412	A
1	1A	421	U
1	1A	422	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	428	A
1	1A	429	A
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	481	G
1	1A	505	A
1	1A	509	C
1	1A	518	G
1	1A	528	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	574	C
1	1A	575	A
1	1A	586	A
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(T)	C
1	1A	652(U)	G
1	1A	668	G
1	1A	669	G
1	1A	686	G
1	1A	730	C
1	1A	746	A
1	1A	747	U
1	1A	764	A
1	1A	765	G
1	1A	775	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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	812	C
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	878	A
1	1A	879	G
1	1A	882	G
1	1A	885	C
1	1A	886	C
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	896	A
1	1A	897	C
1	1A	900	A
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	953	A
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1026	U
1	1A	1033	U
1	1A	1039	G
1	1A	1041	C
1	1A	1042	G
1	1A	1043	C
1	1A	1046	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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	1067	A
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1074	G
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1083	U
1	1A	1087	G
1	1A	1088	A
1	1A	1089	G
1	1A	1090	U
1	1A	1096	A
1	1A	1097	U
1	1A	1109	C
1	1A	1110	G
1	1A	1112	G
1	1A	1116	C
1	1A	1128	A
1	1A	1129	A
1	1A	1130	U
1	1A	1135	C
1	1A	1136	G
1	1A	1170	G
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	1178	C
1	1A	1180	C
1	1A	1210	A
1	1A	1211	U
1	1A	1220	A
1	1A	1229	G
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1273	U
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1365	A
1	1A	1370	C
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	1445	A
1	1A	1450	G
1	1A	1459	G
1	1A	1467	C
1	1A	1471	A
1	1A	1482	G
1	1A	1493	C
1	1A	1494	A
1	1A	1509(A)	A
1	1A	1525	G
1	1A	1542	A
1	1A	1543	C
1	1A	1554	A
1	1A	1558	A
1	1A	1566	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	1569	A
1	1A	1578	U
1	1A	1579	A
1	1A	1581	G
1	1A	1582	C
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1616	A
1	1A	1648	C
1	1A	1654	A
1	1A	1674	G
1	1A	1696	G
1	1A	1700	A
1	1A	1701	A
1	1A	1722	A
1	1A	1739	U
1	1A	1746	G
1	1A	1747	G
1	1A	1756	G
1	1A	1762	A
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
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	1929	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	1930	G
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1992	G
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2099	U
1	1A	2103	C
1	1A	2104	G
1	1A	2105	C
1	1A	2107	C
1	1A	2108	C
1	1A	2112	G
1	1A	2116	G
1	1A	2117	A
1	1A	2119	A
1	1A	2123	G
1	1A	2126	A
1	1A	2127	G
1	1A	2130	U
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2136	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	2138	C
1	1A	2139	C
1	1A	2142	C
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	2162	G
1	1A	2173	A
1	1A	2185	C
1	1A	2186	G
1	1A	2187	G
1	1A	2189	U
1	1A	2190	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2269	A
1	1A	2280	G
1	1A	2283	C
1	1A	2287	A
1	1A	2289	G
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2325	G
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2383	G
1	1A	2385	C
1	1A	2393	A
1	1A	2406	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	2422	A
1	1A	2424	C
1	1A	2425	A
1	1A	2428	G
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2447	G
1	1A	2448	A
1	1A	2468	G
1	1A	2474	C
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2554	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2574	G
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	2662	A
1	1A	2689	U
1	1A	2690	C
1	1A	2702	U
1	1A	2712(A)	A
1	1A	2713	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	2714	G
1	1A	2726	U
1	1A	2733	A
1	1A	2757	A
1	1A	2758	A
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2818	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2872	G
1	1A	2892	A
1	1A	2893	G
1	1A	2894	G
2	1B	2	C
2	1B	7	G
2	1B	13	A
2	1B	42	C
2	1B	45	A
2	1B	53	A
2	1B	56	G
2	1B	67	G
2	1B	73	A
2	1B	84	C
2	1B	106	G
2	1B	110	G
32	1a	7	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	48	C
32	1a	51	A
32	1a	61	G
32	1a	69	G
32	1a	78	G
32	1a	79	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	1a	101	A
32	1a	115	G
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	144	G
32	1a	163	C
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	189(D)	C
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	247	G
32	1a	251	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	348	G
32	1a	351	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	356	A
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	397	A
32	1a	406	G
32	1a	409	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	1a	429	U
32	1a	430	A
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	458	C
32	1a	461	A
32	1a	470	C
32	1a	484	G
32	1a	485	G
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	521	G
32	1a	532	A
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	564	C
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	596	C
32	1a	607	A
32	1a	619	U
32	1a	630	G
32	1a	631	G
32	1a	632	A
32	1a	653	A
32	1a	665	A
32	1a	666	G
32	1a	671	G
32	1a	687	A
32	1a	688	G
32	1a	723	U
32	1a	755	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	1a	777	A
32	1a	793	U
32	1a	794	A
32	1a	817	C
32	1a	821	G
32	1a	828	A
32	1a	829	G
32	1a	836	G
32	1a	839	U
32	1a	840	C
32	1a	841	U
32	1a	851	G
32	1a	902	G
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	960	U
32	1a	961	U
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	992	U
32	1a	993	G
32	1a	994	A
32	1a	998	G
32	1a	1001	A
32	1a	1001(A)	G
32	1a	1004	A
32	1a	1005	A
32	1a	1006	C
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G
32	1a	1025	U
32	1a	1026	G
32	1a	1028	C
32	1a	1029	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(B)	C
32	1a	1030(D)	A
32	1a	1032	G
32	1a	1033	G
32	1a	1034	G
32	1a	1037	C
32	1a	1044	A
32	1a	1046	A
32	1a	1053	G
32	1a	1065	U
32	1a	1066	C
32	1a	1067	A
32	1a	1070	U
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1104	G
32	1a	1124	G
32	1a	1130	A
32	1a	1132	C
32	1a	1133	G
32	1a	1134	G
32	1a	1136	U
32	1a	1139	G
32	1a	1140	C
32	1a	1147	C
32	1a	1152	A
32	1a	1154	G
32	1a	1159	U
32	1a	1166	G
32	1a	1168	A
32	1a	1183	A
32	1a	1184	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1208	C
32	1a	1212	U
32	1a	1213	A
32	1a	1224	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	1a	1227	A
32	1a	1238	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1260	C
32	1a	1270	C
32	1a	1278	U
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1320	C
32	1a	1338	G
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1370	G
32	1a	1397	C
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1492	A
32	1a	1493	A
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1517	G
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
1	2A	10	G
1	2A	11	G
1	2A	12	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	15	G
1	2A	34	C
1	2A	45	C
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	131	G
1	2A	141	A
1	2A	157	U
1	2A	173	G
1	2A	181	A
1	2A	182	A
1	2A	196	A
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	272(A)	U
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	311	A
1	2A	317	G
1	2A	324	A
1	2A	329	G
1	2A	330	A
1	2A	342	G
1	2A	352	G
1	2A	362	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	363	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	454	A
1	2A	455	C
1	2A	457	A
1	2A	470	A
1	2A	481	G
1	2A	505	A
1	2A	509	C
1	2A	530	G
1	2A	531	C
1	2A	532	A
1	2A	533	G
1	2A	545	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	610	G
1	2A	614(B)	G
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(A)	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	653	A
1	2A	669	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	686	G
1	2A	717	G
1	2A	730	C
1	2A	752	A
1	2A	753	C
1	2A	764	A
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	857	C
1	2A	859	G
1	2A	874	G
1	2A	880	G
1	2A	882	G
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	914	C
1	2A	917	A
1	2A	932	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	959	A
1	2A	961	C
1	2A	963	U
1	2A	974	G
1	2A	975	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	983	A
1	2A	996	A
1	2A	1012	U
1	2A	1013	C
1	2A	1033	U
1	2A	1041	C
1	2A	1044	G
1	2A	1045	A
1	2A	1046	A
1	2A	1047	G
1	2A	1048	A
1	2A	1049	C
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	1069	A
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	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A
1	2A	1088	A
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	1093	G
1	2A	1094	U
1	2A	1095	A
1	2A	1096	A
1	2A	1109	C
1	2A	1110	G
1	2A	1112	G
1	2A	1114	G
1	2A	1116	C
1	2A	1117	G
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1171	G
1	2A	1211	U
1	2A	1220	A
1	2A	1229	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1276	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1321	A
1	2A	1352	U
1	2A	1359	A
1	2A	1365	A
1	2A	1368	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1428	C
1	2A	1445	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	1450	G
1	2A	1455	G
1	2A	1459	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1493	C
1	2A	1494	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1510	G
1	2A	1531	C
1	2A	1533	G
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1586	A
1	2A	1593	G
1	2A	1608	A
1	2A	1609	A
1	2A	1610	A
1	2A	1640	C
1	2A	1647	G
1	2A	1648	C
1	2A	1664	A
1	2A	1674	G
1	2A	1700	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A
1	2A	1740	G
1	2A	1746	G
1	2A	1756	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1816	G
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
1	2A	1900	A
1	2A	1906	G
1	2A	1914	C
1	2A	1918	A
1	2A	1927	A
1	2A	1929	G
1	2A	1930	G
1	2A	1937	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
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
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2096	U
1	2A	2099	U
1	2A	2100	G
1	2A	2103	C
1	2A	2105	C
1	2A	2107	C
1	2A	2108	C
1	2A	2109	U
1	2A	2112	G
1	2A	2116	G
1	2A	2117	A
1	2A	2118	U
1	2A	2119	A
1	2A	2121	G
1	2A	2123	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2130	U
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2135	A
1	2A	2136	C
1	2A	2138	C
1	2A	2144	U
1	2A	2145	C
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G
1	2A	2151	G
1	2A	2158	A
1	2A	2159	G
1	2A	2162	G
1	2A	2172	U
1	2A	2173	A
1	2A	2176	A
1	2A	2178	C
1	2A	2180	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	2181	G
1	2A	2183	C
1	2A	2184	G
1	2A	2186	G
1	2A	2187	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	2238	G
1	2A	2239	G
1	2A	2268	A
1	2A	2269	A
1	2A	2275	C
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2289	G
1	2A	2305	A
1	2A	2308	G
1	2A	2312	U
1	2A	2314	C
1	2A	2319	G
1	2A	2320	A
1	2A	2321	G
1	2A	2322	A
1	2A	2325	G
1	2A	2334	G
1	2A	2335	A
1	2A	2336	A
1	2A	2343	C
1	2A	2347	C
1	2A	2348	U
1	2A	2350	C
1	2A	2354	G
1	2A	2379	G
1	2A	2383	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	2385	C
1	2A	2406	U
1	2A	2414	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	2441	C
1	2A	2448	A
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2492	U
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2529	G
1	2A	2554	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2578	G
1	2A	2602	A
1	2A	2603	G
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2630	G
1	2A	2654	A
1	2A	2663	G
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	2A	2733	A
1	2A	2744	G
1	2A	2757	A
1	2A	2758	A
1	2A	2765	A
1	2A	2766	G
1	2A	2778	A
1	2A	2789	C
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	2880	C
1	2A	2891	G
1	2A	2892	A
1	2A	2894	G
1	2A	2896	C
2	2B	2	C
2	2B	7	G
2	2B	8	U
2	2B	9	G
2	2B	12	C
2	2B	13	A
2	2B	30	C
2	2B	32	C
2	2B	42	C
2	2B	51	G
2	2B	56	G
2	2B	73	A
2	2B	84	C
2	2B	90	A
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	2a	50	A
32	2a	51	A
32	2a	52	G
32	2a	61	G
32	2a	66	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	127	G
32	2a	131	C
32	2a	156	G
32	2a	163	C
32	2a	174	C
32	2a	182	U
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	217	C
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	281	G
32	2a	289	G
32	2a	298	A
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	2a	384	G
32	2a	397	A
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	461	A
32	2a	470	C
32	2a	476	G
32	2a	482	A
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	518	C
32	2a	531	U
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
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	596	C
32	2a	630	G
32	2a	631	G
32	2a	633	G
32	2a	653	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	2a	660	G
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	753	A
32	2a	755	G
32	2a	766	A
32	2a	777	A
32	2a	785	G
32	2a	793	U
32	2a	794	A
32	2a	817	C
32	2a	821	G
32	2a	828	A
32	2a	829	G
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	854	G
32	2a	859	A
32	2a	868	C
32	2a	874	G
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	934	C
32	2a	935	A
32	2a	960	U
32	2a	961	U
32	2a	966	M2G
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	984	C
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	994	A
32	2a	996	A
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1017	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	1029	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1041	A
32	2a	1043	C
32	2a	1044	A
32	2a	1047	G
32	2a	1053	G
32	2a	1054	C
32	2a	1055	A
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1070	U
32	2a	1081	G
32	2a	1094	G
32	2a	1095	U
32	2a	1101	A
32	2a	1113	C
32	2a	1117	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1130	A
32	2a	1134	G
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1159	U
32	2a	1160	G
32	2a	1161	C
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1211	U
32	2a	1212	U
32	2a	1213	A
32	2a	1214	C
32	2a	1224	G
32	2a	1227	A
32	2a	1228	C
32	2a	1236	A
32	2a	1238	A
32	2a	1248	A
32	2a	1250	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1270	C
32	2a	1278	U
32	2a	1279	A
32	2a	1286	A
32	2a	1287	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1305	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
32	2a	1317	C
32	2a	1320	C
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1358	U
32	2a	1359	C
32	2a	1363	C
32	2a	1364	U
32	2a	1370	G
32	2a	1397	C
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1452	C
32	2a	1456	G
32	2a	1492	A
32	2a	1497	G
32	2a	1499	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

All (72) RNA pucker outliers are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
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

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	1A	839	U
1	1A	888	C
1	1A	895	U
1	1A	974	G
1	1A	1047	G
1	1A	1065	U
1	1A	1142(A)	A
1	1A	1175	U
1	1A	1176	G
1	1A	1210	A
1	1A	1442	G
1	1A	1608	A
1	1A	1653	G
1	1A	1997	G
1	1A	2126	A
1	1A	2172	U
1	1A	2250	G
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2439	A
1	1A	2602	A
1	1A	2611	U
1	1A	2689	U
1	1A	2756	U
1	2A	9	U
1	2A	195	A
1	2A	196	A
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
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	1047	G

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Mol	Chain	Res	Type
1	2A	1053	C
1	2A	1057	A
1	2A	1065	U
1	2A	1067	A
1	2A	1073	A
1	2A	1076	C
1	2A	1210	A
1	2A	1275	A
1	2A	1420	U
1	2A	1442	G
1	2A	1491	G
1	2A	1992	G
1	2A	2126	A
1	2A	2171	A
1	2A	2172	U
1	2A	2288	A
1	2A	2321	G
1	2A	2406	U
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](#)

50 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
32	UR3	1a	1498	32	19,22,23	0.99	1 (5%)	26,32,35	1.60	3 (11%)
1	PSU	2A	1911	1	18,21,22	1.36	2 (11%)	22,30,33	1.93	4 (18%)
32	5MC	2a	1404	32	18,22,23	0.97	2 (11%)	26,32,35	1.17	3 (11%)
1	OMC	2A	1920	1	19,22,23	0.80	0	26,31,34	0.97	1 (3%)
32	4OC	1a	1402	32	20,23,24	0.72	1 (5%)	26,32,35	1.04	1 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
1	OMG	2A	2251	54,1	18,26,27	0.92	1 (5%)	19,38,41	1.09	2 (10%)
1	OMU	1A	2552	54,1	19,22,23	1.28	3 (15%)	26,31,34	1.84	6 (23%)
1	MA6	1A	2058	54,1	19,26,27	0.78	0	18,38,41	1.49	2 (11%)
32	5MC	1a	1404	32	18,22,23	0.95	2 (11%)	26,32,35	1.10	2 (7%)
1	OMU	2A	2552	54,1	19,22,23	1.24	3 (15%)	26,31,34	1.71	6 (23%)
32	PSU	2a	516	54,32	18,21,22	1.30	2 (11%)	22,30,33	1.86	4 (18%)
32	M2G	2a	966	54,32	20,27,28	1.37	3 (15%)	22,40,43	0.97	2 (9%)
32	MA6	2a	1518	32	19,26,27	0.80	0	18,38,41	1.41	2 (11%)
1	5MC	2A	1942	54,1	18,22,23	0.96	2 (11%)	26,32,35	1.20	2 (7%)
32	5MC	2a	1407	32	18,22,23	0.98	1 (5%)	26,32,35	1.11	3 (11%)
32	5MC	1a	1400	32	18,22,23	1.03	2 (11%)	26,32,35	1.18	2 (7%)
32	PSU	1a	516	54,32	18,21,22	1.35	2 (11%)	22,30,33	1.75	3 (13%)
1	PSU	1A	2605	54,1	18,21,22	1.35	2 (11%)	22,30,33	1.87	4 (18%)
32	MA6	2a	1519	32	19,26,27	0.84	0	18,38,41	1.52	2 (11%)
32	MA6	1a	1518	32	19,26,27	0.81	0	18,38,41	1.37	2 (11%)
32	M2G	1a	966	32	20,27,28	1.49	3 (15%)	22,40,43	0.93	2 (9%)
1	5MC	2A	1962	54,1	18,22,23	0.94	2 (11%)	26,32,35	1.17	2 (7%)
1	PSU	1A	1911	1	18,21,22	1.32	2 (11%)	22,30,33	1.89	3 (13%)
1	5MU	2A	1915	1	19,22,23	1.47	4 (21%)	28,32,35	2.15	9 (32%)
32	5MC	1a	1407	32	18,22,23	0.94	2 (11%)	26,32,35	1.11	4 (15%)
1	OMC	1A	1920	54,1	19,22,23	0.81	0	26,31,34	0.90	1 (3%)
32	G7M	2a	527	54,32	20,26,27	2.67	4 (20%)	17,39,42	0.95	1 (5%)
43	0TD	1l	92	43	7,9,10	4.98	1 (14%)	6,11,13	1.79	2 (33%)
1	5MU	1A	1915	1	19,22,23	1.44	5 (26%)	28,32,35	2.31	10 (35%)
32	5MC	2a	967	32	18,22,23	1.00	2 (11%)	26,32,35	1.11	2 (7%)
1	5MC	1A	1962	1	18,22,23	0.99	2 (11%)	26,32,35	1.18	4 (15%)
1	OMG	1A	2251	54,1	18,26,27	0.97	1 (5%)	19,38,41	1.11	2 (10%)
32	MA6	1a	1519	32	19,26,27	0.79	0	18,38,41	1.48	2 (11%)
43	0TD	2l	92	43	7,9,10	4.86	1 (14%)	6,11,13	2.78	2 (33%)
1	5MU	1A	1939	54,1	19,22,23	1.39	4 (21%)	28,32,35	2.13	6 (21%)
1	2MA	2A	2503	54,1	17,25,26	1.05	2 (11%)	17,37,40	0.97	2 (11%)
32	UR3	2a	1498	32	19,22,23	1.02	2 (10%)	26,32,35	1.41	2 (7%)
1	5MU	2A	1939	54,1	19,22,23	1.40	5 (26%)	28,32,35	2.30	6 (21%)
1	2MA	1A	2503	54,1	17,25,26	0.98	1 (5%)	17,37,40	1.02	2 (11%)
32	G7M	1a	527	54,32	20,26,27	2.61	4 (20%)	17,39,42	0.92	1 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
32	4OC	2a	1402	32	20,23,24	0.75	1 (5%)	26,32,35	0.94	1 (3%)
1	5MC	1A	1942	54,1	18,22,23	1.00	2 (11%)	26,32,35	1.11	1 (3%)
32	2MG	2a	1207	32	18,26,27	0.87	1 (5%)	16,38,41	1.11	2 (12%)
32	5MC	1a	967	32	18,22,23	0.97	2 (11%)	26,32,35	1.10	2 (7%)
1	PSU	2A	2605	1	18,21,22	1.27	2 (11%)	22,30,33	2.10	3 (13%)
1	PSU	1A	1917	1	18,21,22	1.34	2 (11%)	22,30,33	1.73	3 (13%)
32	5MC	2a	1400	32	18,22,23	0.98	2 (11%)	26,32,35	1.20	2 (7%)
32	2MG	1a	1207	32	18,26,27	0.96	1 (5%)	16,38,41	1.51	4 (25%)
1	MA6	2A	2058	1	19,26,27	0.73	0	18,38,41	1.49	2 (11%)
1	PSU	2A	1917	1	18,21,22	1.30	2 (11%)	22,30,33	1.91	3 (13%)

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
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
1	OMC	2A	1920	1	-	1/9/27/28	0/2/2/2
32	4OC	1a	1402	32	-	0/9/29/30	0/2/2/2
1	OMG	2A	2251	54,1	-	0/5/27/28	0/3/3/3
1	OMU	1A	2552	54,1	-	0/9/27/28	0/2/2/2
1	MA6	1A	2058	54,1	-	0/7/29/30	0/3/3/3
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
1	OMU	2A	2552	54,1	-	0/9/27/28	0/2/2/2
32	PSU	2a	516	54,32	-	0/7/25/26	0/2/2/2
32	M2G	2a	966	54,32	-	0/7/29/30	0/3/3/3
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
1	5MC	2A	1942	54,1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
32	PSU	1a	516	54,32	-	0/7/25/26	0/2/2/2
1	PSU	1A	2605	54,1	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	2/7/29/30	0/3/3/3
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
1	5MC	2A	1962	54,1	-	0/7/25/26	0/2/2/2
1	PSU	1A	1911	1	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
1	OMC	1A	1920	54,1	-	1/9/27/28	0/2/2/2
32	G7M	2a	527	54,32	-	0/3/25/26	0/3/3/3
43	0TD	1l	92	43	-	1/7/12/14	-
1	5MU	1A	1915	1	-	2/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1	-	1/7/25/26	0/2/2/2
1	OMG	1A	2251	54,1	-	1/5/27/28	0/3/3/3
32	MA6	1a	1519	32	-	2/7/29/30	0/3/3/3
43	0TD	2l	92	43	-	3/7/12/14	-
1	5MU	1A	1939	54,1	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	54,1	-	2/3/25/26	0/3/3/3
32	UR3	2a	1498	32	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	54,1	-	0/7/25/26	0/2/2/2
1	2MA	1A	2503	54,1	-	2/3/25/26	0/3/3/3
32	G7M	1a	527	54,32	-	2/3/25/26	0/3/3/3
32	4OC	2a	1402	32	-	1/9/29/30	0/2/2/2
1	5MC	1A	1942	54,1	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	PSU	1A	1917	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	0/5/27/28	0/3/3/3
1	MA6	2A	2058	1	-	0/7/29/30	0/3/3/3
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2

All (91) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.77	1.69	1.82
43	2l	92	0TD	CB-SB	-12.52	1.69	1.82
32	2a	527	G7M	C8-N9	7.63	1.47	1.33
32	1a	527	G7M	C8-N9	7.59	1.47	1.33
32	2a	527	G7M	C8-N7	7.34	1.46	1.33
32	1a	527	G7M	C8-N7	7.00	1.45	1.33
32	1a	966	M2G	C2-N3	4.62	1.36	1.30
32	2a	966	M2G	C2-N3	4.41	1.36	1.30
32	2a	527	G7M	C5-C4	4.18	1.47	1.39
32	1a	527	G7M	C5-C4	4.13	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	1a	516	PSU	C6-C5	3.51	1.39	1.35
1	2A	1911	PSU	C6-C5	3.42	1.39	1.35
1	1A	1917	PSU	C6-C5	3.28	1.39	1.35
1	1A	2605	PSU	C4-N3	-3.20	1.32	1.38
1	1A	1911	PSU	C6-C5	3.20	1.39	1.35
32	2a	516	PSU	C6-C5	3.16	1.39	1.35
1	2A	1915	5MU	C2-N1	3.12	1.43	1.38
32	2a	1407	5MC	C6-C5	3.09	1.39	1.34
1	2A	1915	5MU	C6-C5	3.01	1.39	1.34
1	2A	1917	PSU	C6-C5	3.00	1.38	1.35
32	1a	1400	5MC	C6-C5	2.98	1.39	1.34
32	1a	966	M2G	C2-N2	2.98	1.40	1.35
32	2a	967	5MC	C6-C5	2.94	1.39	1.34
1	1A	1942	5MC	C6-C5	2.94	1.39	1.34
1	1A	1915	5MU	C2-N1	2.93	1.43	1.38
32	1a	1404	5MC	C6-C5	2.90	1.39	1.34
1	2A	1939	5MU	C6-C5	2.83	1.39	1.34
32	2a	1404	5MC	C6-C5	2.82	1.39	1.34
1	1A	2605	PSU	C6-C5	2.79	1.38	1.35
1	1A	1939	5MU	C6-C5	2.77	1.39	1.34
32	1a	1407	5MC	C6-C5	2.74	1.39	1.34
1	1A	1962	5MC	C6-N1	-2.74	1.33	1.38
32	2a	1400	5MC	C6-C5	2.73	1.39	1.34
1	1A	2251	OMG	C6-N1	-2.70	1.33	1.37
1	2A	1942	5MC	C6-C5	2.69	1.39	1.34
32	1a	967	5MC	C6-C5	2.68	1.39	1.34
1	2A	2605	PSU	C6-C5	2.67	1.38	1.35
1	2A	1939	5MU	C4-N3	-2.65	1.33	1.38
32	2a	966	M2G	C2-N2	2.62	1.40	1.35
32	1a	966	M2G	C6-N1	-2.60	1.34	1.37
1	1A	1917	PSU	C4-N3	-2.60	1.34	1.38
1	2A	2552	OMU	C4-N3	-2.60	1.33	1.38
1	1A	1939	5MU	C4-N3	-2.58	1.34	1.38
1	2A	1962	5MC	C6-C5	2.57	1.38	1.34
1	2A	1911	PSU	C4-N3	-2.54	1.34	1.38
1	1A	1911	PSU	C4-N3	-2.53	1.34	1.38
1	2A	1939	5MU	C4-C5	2.52	1.49	1.44
1	1A	1915	5MU	C4-C5	2.51	1.49	1.44
1	1A	1915	5MU	C6-C5	2.50	1.38	1.34
32	1a	1207	2MG	C6-N1	-2.49	1.34	1.37
1	1A	2552	OMU	C4-N3	-2.48	1.34	1.38
1	1A	1915	5MU	C4-N3	-2.47	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	1942	5MC	C6-N1	-2.44	1.33	1.38
32	1a	516	PSU	C4-N3	-2.43	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.42	1.34	1.38
1	1A	2552	OMU	C5-C4	2.42	1.49	1.43
1	1A	1939	5MU	C2-N3	-2.40	1.33	1.38
1	2A	1915	5MU	C4-C5	2.39	1.48	1.44
32	2a	1400	5MC	C6-N1	-2.39	1.34	1.38
32	2a	516	PSU	C4-N3	-2.39	1.34	1.38
1	1A	1962	5MC	C6-C5	2.39	1.38	1.34
32	1a	1400	5MC	C6-N1	-2.36	1.34	1.38
1	2A	1917	PSU	C4-N3	-2.36	1.34	1.38
1	2A	2251	OMG	C6-N1	-2.36	1.34	1.37
1	2A	1942	5MC	C6-N1	-2.32	1.34	1.38
1	2A	2605	PSU	C4-N3	-2.30	1.34	1.38
32	2a	527	G7M	C6-N1	-2.30	1.34	1.37
1	2A	2503	2MA	C6-N1	-2.28	1.32	1.38
1	2A	1962	5MC	C6-N1	-2.28	1.34	1.38
32	1a	527	G7M	C6-N1	-2.27	1.34	1.37
1	1A	2503	2MA	C2-N3	2.22	1.35	1.31
32	2a	966	M2G	C6-N1	-2.21	1.34	1.37
32	1a	967	5MC	C6-N1	-2.20	1.34	1.38
32	2a	1404	5MC	C6-N1	-2.19	1.34	1.38
1	2A	2503	2MA	C2-N3	2.18	1.35	1.31
1	1A	1939	5MU	C6-N1	-2.17	1.34	1.38
32	2a	1498	UR3	C6-C5	2.17	1.40	1.35
32	2a	1498	UR3	C2-N1	2.15	1.41	1.38
1	2A	2552	OMU	C2-N3	-2.14	1.34	1.38
1	2A	2552	OMU	C5-C4	2.13	1.48	1.43
1	2A	1939	5MU	C6-N1	-2.12	1.34	1.38
32	1a	1404	5MC	C6-N1	-2.11	1.34	1.38
32	1a	1407	5MC	C6-N1	-2.10	1.34	1.38
32	2a	967	5MC	C6-N1	-2.09	1.34	1.38
1	2A	1939	5MU	C2-N1	2.06	1.41	1.38
32	2a	1402	4OC	C6-C5	2.05	1.39	1.35
1	1A	1915	5MU	C6-N1	-2.04	1.34	1.38
32	1a	1402	4OC	C6-C5	2.03	1.39	1.35
32	1a	1498	UR3	C6-C5	2.02	1.39	1.35
32	2a	1207	2MG	C6-N1	-2.02	1.34	1.37
1	1A	2552	OMU	C2-N3	-2.00	1.34	1.38

All (144) bond angle outliers are listed below:



Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	1498	UR3	C4-N3-C2	-6.49	118.45	124.56
1	2A	2605	PSU	N1-C2-N3	6.37	122.35	115.13
1	2A	1911	PSU	N1-C2-N3	6.19	122.15	115.13
32	2a	1498	UR3	C4-N3-C2	-5.91	119.00	124.56
1	2A	1939	5MU	C4-N3-C2	-5.91	119.70	127.35
1	1A	1911	PSU	N1-C2-N3	5.90	121.82	115.13
43	2l	92	0TD	CSB-SB-CB	-5.86	91.85	102.44
1	2A	1917	PSU	N1-C2-N3	5.85	121.76	115.13
32	2a	516	PSU	N1-C2-N3	5.74	121.63	115.13
1	1A	2605	PSU	N1-C2-N3	5.47	121.32	115.13
1	2A	1939	5MU	N3-C2-N1	5.46	122.14	114.89
1	1A	1917	PSU	N1-C2-N3	5.34	121.18	115.13
32	1a	516	PSU	N1-C2-N3	5.25	121.07	115.13
1	1A	1939	5MU	C4-N3-C2	-5.24	120.57	127.35
1	1A	2552	OMU	N3-C2-N1	5.22	121.82	114.89
1	1A	1939	5MU	N3-C2-N1	5.21	121.80	114.89
1	1A	2058	MA6	N3-C2-N1	-5.20	120.56	128.68
1	2A	1939	5MU	C5-C4-N3	5.05	119.62	115.31
1	2A	1915	5MU	N3-C2-N1	4.96	121.47	114.89
1	2A	2058	MA6	N3-C2-N1	-4.91	121.00	128.68
1	1A	1939	5MU	C5-C4-N3	4.81	119.42	115.31
32	1a	1519	MA6	N3-C2-N1	-4.75	121.26	128.68
1	1A	1915	5MU	C4-N3-C2	-4.72	121.24	127.35
1	1A	1915	5MU	C1'-N1-C2	4.69	126.06	117.57
1	2A	2605	PSU	C4-N3-C2	-4.69	119.58	126.34
32	1a	1518	MA6	N3-C2-N1	-4.65	121.41	128.68
1	2A	1915	5MU	C4-N3-C2	-4.61	121.38	127.35
1	2A	2552	OMU	N3-C2-N1	4.59	120.98	114.89
1	1A	1915	5MU	N3-C2-N1	4.56	120.95	114.89
32	2a	1519	MA6	N3-C2-N1	-4.56	121.55	128.68
1	1A	1939	5MU	O4-C4-C5	-4.54	119.64	124.90
1	1A	2552	OMU	C4-N3-C2	-4.53	120.60	126.58
32	2a	1518	MA6	N3-C2-N1	-4.42	121.76	128.68
1	1A	1915	5MU	C5-C4-N3	4.41	119.08	115.31
1	1A	2605	PSU	C4-N3-C2	-4.40	120.00	126.34
1	2A	1939	5MU	O4-C4-C5	-4.31	119.91	124.90
1	2A	1939	5MU	C5-C6-N1	-4.23	118.99	123.34
1	1A	1915	5MU	C1'-N1-C6	-4.20	114.13	121.12
1	2A	2605	PSU	O2-C2-N1	-4.19	118.18	122.79
32	2a	1400	5MC	C5-C6-N1	-4.11	119.11	123.34
32	1a	1400	5MC	C5-C6-N1	-4.09	119.13	123.34
1	2A	2552	OMU	C4-N3-C2	-4.09	121.19	126.58
1	2A	1917	PSU	O2-C2-N1	-4.07	118.31	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2A	1911	PSU	C4-N3-C2	-4.05	120.51	126.34
1	2A	1942	5MC	C5-C6-N1	-4.02	119.20	123.34
1	2A	1915	5MU	C1'-N1-C2	3.99	124.79	117.57
1	1A	1911	PSU	C4-N3-C2	-3.89	120.73	126.34
1	2A	1917	PSU	C4-N3-C2	-3.88	120.74	126.34
32	2a	516	PSU	C4-N3-C2	-3.87	120.76	126.34
1	2A	1915	5MU	C5-C4-N3	3.81	118.56	115.31
1	1A	1942	5MC	C5-C6-N1	-3.80	119.43	123.34
1	1A	1915	5MU	O4-C4-C5	-3.79	120.51	124.90
1	2A	1915	5MU	O4-C4-C5	-3.73	120.57	124.90
32	1a	516	PSU	C4-N3-C2	-3.73	120.97	126.34
1	1A	1917	PSU	C4-N3-C2	-3.71	120.99	126.34
1	1A	1911	PSU	O2-C2-N1	-3.71	118.71	122.79
32	2a	967	5MC	C5-C6-N1	-3.66	119.58	123.34
32	1a	1404	5MC	C5-C6-N1	-3.63	119.60	123.34
32	1a	967	5MC	C5-C6-N1	-3.54	119.69	123.34
32	2a	1519	MA6	C4-C5-N7	-3.51	105.74	109.40
32	2a	1407	5MC	C5-C6-N1	-3.47	119.77	123.34
43	1l	92	0TD	OD2-CG-CB	3.30	120.28	113.15
32	2a	516	PSU	O2-C2-N1	-3.27	119.19	122.79
32	1a	1407	5MC	C5-C6-N1	-3.27	119.98	123.34
1	2A	1911	PSU	O2-C2-N1	-3.18	119.28	122.79
1	1A	1962	5MC	C5-C6-N1	-3.17	120.08	123.34
32	2a	1518	MA6	C4-C5-N7	-3.16	106.11	109.40
1	1A	1939	5MU	C5-C6-N1	-3.14	120.11	123.34
1	2A	1939	5MU	O2-C2-N1	-3.13	118.63	122.79
1	2A	1915	5MU	C1'-N1-C6	-3.10	115.97	121.12
1	2A	1962	5MC	C5-C6-N1	-3.08	120.17	123.34
1	2A	2552	OMU	O2-C2-N1	-3.07	118.70	122.79
32	2a	1404	5MC	C5-C4-N3	-3.07	118.36	121.67
1	1A	1915	5MU	C5M-C5-C4	3.03	122.10	118.77
1	1A	2552	OMU	O2-C2-N1	-2.99	118.81	122.79
32	2a	1404	5MC	C5-C6-N1	-2.91	120.35	123.34
32	1a	1519	MA6	C4-C5-N7	-2.90	106.38	109.40
1	2A	2552	OMU	C5-C4-N3	2.88	119.14	114.84
32	1a	1402	4OC	C6-C5-C4	2.83	120.42	116.96
1	1A	2605	PSU	C5-C6-N1	-2.81	117.89	122.11
32	1a	516	PSU	O2-C2-N1	-2.77	119.74	122.79
32	2a	527	G7M	CN7-N7-C8	-2.75	112.18	125.43
32	1a	1498	UR3	C3U-N3-C2	2.68	122.01	117.31
1	1A	2251	OMG	C8-N7-C5	2.66	108.06	102.99
1	2A	2552	OMU	C2'-C1'-N1	-2.65	109.08	114.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	1a	527	G7M	CN7-N7-C8	-2.63	112.77	125.43
1	2A	2552	OMU	O4-C4-C5	-2.60	120.58	125.16
1	2A	1920	OMC	O2-C2-N3	-2.60	118.10	122.33
32	1a	1518	MA6	C4-C5-N7	-2.60	106.69	109.40
43	2l	92	0TD	OD2-CG-CB	2.59	118.75	113.15
32	1a	1407	5MC	C5-C4-N3	-2.58	118.89	121.67
1	2A	1915	5MU	C5-C6-N1	-2.58	120.68	123.34
1	1A	2552	OMU	C5-C4-N3	2.57	118.69	114.84
1	1A	1962	5MC	C1'-N1-C6	-2.57	116.85	121.12
1	1A	2552	OMU	O4-C4-C5	-2.55	120.67	125.16
1	1A	1917	PSU	O2-C2-N1	-2.50	120.03	122.79
1	1A	2552	OMU	C2'-C1'-N1	-2.50	109.38	114.22
1	2A	2058	MA6	C4-C5-N7	-2.49	106.81	109.40
32	1a	1207	2MG	C5-C6-N1	2.48	118.34	113.95
32	1a	1207	2MG	C8-N7-C5	2.48	107.71	102.99
32	2a	1207	2MG	C8-N7-C5	2.48	107.71	102.99
32	1a	1400	5MC	C5-C4-N3	-2.47	119.01	121.67
1	2A	2503	2MA	C8-N7-C5	2.45	107.66	102.99
32	2a	1402	4OC	C6-C5-C4	2.45	119.95	116.96
1	2A	2503	2MA	C5-C6-N1	2.44	118.23	114.02
1	2A	1942	5MC	C5-C4-N3	-2.43	119.05	121.67
32	1a	1207	2MG	CM2-N2-C2	-2.42	118.52	123.86
1	1A	1920	OMC	O2-C2-N3	-2.41	118.41	122.33
32	1a	1404	5MC	C5-C4-N3	-2.41	119.08	121.67
32	2a	1407	5MC	C5-C4-N3	-2.39	119.10	121.67
1	1A	2503	2MA	C5-C6-N1	2.38	118.12	114.02
1	2A	1915	5MU	O2-C2-N3	-2.38	117.08	121.50
32	2a	967	5MC	C5-C4-N3	-2.37	119.11	121.67
1	2A	1962	5MC	C5-C4-N3	-2.34	119.15	121.67
1	1A	1939	5MU	O2-C2-N1	-2.34	119.67	122.79
1	2A	2251	OMG	C5-C6-N1	2.34	118.08	113.95
1	1A	1915	5MU	C5-C6-N1	-2.33	120.94	123.34
1	1A	2251	OMG	C5-C6-N1	2.33	118.06	113.95
32	2a	516	PSU	O4'-C1'-C2'	2.31	108.40	105.14
32	2a	1404	5MC	O2-C2-N3	-2.30	118.59	122.33
32	1a	966	M2G	C5-C6-N1	2.29	118.00	113.95
32	2a	1400	5MC	C5-C4-N3	-2.29	119.21	121.67
32	1a	1207	2MG	O3'-C3'-C2'	2.29	119.21	111.82
32	2a	1207	2MG	CM2-N2-C2	-2.27	118.85	123.86
32	2a	966	M2G	C8-N7-C5	2.25	107.28	102.99
1	1A	1962	5MC	CM5-C5-C6	-2.23	119.87	122.85
1	1A	1915	5MU	C5M-C5-C6	-2.22	119.89	122.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1A	2605	PSU	O2-C2-N1	-2.21	120.36	122.79
32	1a	967	5MC	C5-C4-N3	-2.20	119.30	121.67
1	2A	2251	OMG	C8-N7-C5	2.20	107.17	102.99
1	1A	2503	2MA	C8-N7-C5	2.19	107.16	102.99
43	1l	92	0TD	OD1-CG-CB	-2.18	117.86	122.44
1	1A	1962	5MC	C5-C4-N3	-2.18	119.32	121.67
32	2a	966	M2G	C5-C6-N1	2.17	117.78	113.95
32	1a	966	M2G	C8-N7-C5	2.16	107.10	102.99
32	2a	1407	5MC	O2-C2-N3	-2.14	118.86	122.33
1	1A	1915	5MU	O2-C2-N3	-2.14	117.52	121.50
32	1a	1498	UR3	C6-N1-C2	-2.07	119.93	121.79
1	2A	1915	5MU	C6-N1-C2	-2.06	119.21	121.30
32	2a	1498	UR3	C3U-N3-C4	2.05	120.82	117.89
1	2A	1911	PSU	O4'-C1'-C2'	2.05	108.04	105.14
1	1A	2058	MA6	C4-C5-N7	-2.03	107.28	109.40
32	1a	1407	5MC	O2-C2-N3	-2.03	119.04	122.33
32	1a	1407	5MC	CM5-C5-C6	-2.02	120.15	122.85

There are no chirality outliers.

All (24) 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
1	1A	2251	OMG	C1'-C2'-O2'-CM2
1	2A	1915	5MU	O4'-C1'-N1-C2
1	2A	1915	5MU	O4'-C1'-N1-C6
43	2l	92	0TD	CG-CB-SB-CSB
32	1a	1519	MA6	O4'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
43	1l	92	0TD	CG-CB-SB-CSB
32	1a	1519	MA6	C3'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
32	2a	1519	MA6	C3'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
43	2l	92	0TD	CA-CB-SB-CSB
32	2a	1402	4OC	O4'-C4'-C5'-O5'
1	1A	2503	2MA	O4'-C4'-C5'-O5'
43	2l	92	0TD	SB-CB-CG-OD1
1	1A	1920	OMC	C2'-C1'-N1-C2
1	2A	1920	OMC	C2'-C1'-N1-C2
1	2A	2503	2MA	C4'-C5'-O5'-P

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Mol	Chain	Res	Type	Atoms
32	1a	1400	5MC	O4'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
1	1A	1962	5MC	C2'-C1'-N1-C6
32	1a	527	G7M	C4'-C5'-O5'-P

There are no ring outliers.

No monomer is involved in short contacts.

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 2523 ligands modelled in this entry, 2508 are monoatomic - leaving 15 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$
57	MPD	2A	3747	-	7,7,7	0.31	0	9,10,10	0.28	0
58	ARG	1B	231	54	10,11,11	0.76	1 (10%)	11,13,13	1.26	2 (18%)
60	SF4	1d	305	35	0,12,12	-	-	-	-	-
55	HGR	1A	4020	-	39,39,39	2.40	8 (20%)	50,58,58	1.78	14 (28%)
57	MPD	2A	3745	-	7,7,7	0.28	0	9,10,10	0.17	0
57	MPD	1a	3279	-	7,7,7	0.41	0	9,10,10	0.68	0
57	MPD	2A	3746	-	7,7,7	0.30	0	9,10,10	0.16	0
57	MPD	18	105	-	7,7,7	0.23	0	9,10,10	0.33	0
58	ARG	1F	320	-	10,11,11	0.69	0	11,13,13	1.08	2 (18%)
56	TEL	2A	3744	-	59,62,62	1.23	4 (6%)	77,92,92	1.98	14 (18%)
56	TEL	1A	4021	-	59,62,62	1.23	5 (8%)	77,92,92	1.72	13 (16%)
55	HGR	2A	3743	-	39,39,39	2.43	10 (25%)	50,58,58	1.70	12 (24%)
57	MPD	1T	206	-	7,7,7	0.32	0	9,10,10	0.27	0
57	MPD	1A	4022	-	7,7,7	0.31	0	9,10,10	0.23	0
60	SF4	2d	501	35	0,12,12	-	-	-	-	-

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	MPD	2A	3747	-	-	5/5/5/5	-
58	ARG	1B	231	54	-	5/11/11/11	-
60	SF4	1d	305	35	-	-	0/6/5/5
55	HGR	1A	4020	-	-	5/20/79/79	0/4/4/4
57	MPD	2A	3745	-	-	0/5/5/5	-
57	MPD	1a	3279	-	-	2/5/5/5	-
57	MPD	2A	3746	-	-	3/5/5/5	-
57	MPD	18	105	-	-	2/5/5/5	-
58	ARG	1F	320	-	-	1/11/11/11	-
56	TEL	2A	3744	-	-	7/73/108/108	0/4/5/5
56	TEL	1A	4021	-	-	4/73/108/108	0/4/5/5
55	HGR	2A	3743	-	-	6/20/79/79	0/4/4/4
57	MPD	1T	206	-	-	2/5/5/5	-
57	MPD	1A	4022	-	-	2/5/5/5	-
60	SF4	2d	501	35	-	-	0/6/5/5

All (28) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1A	4020	HGR	C12-C14	9.18	1.55	1.33
55	2A	3743	HGR	C12-C14	9.13	1.55	1.33
56	2A	3744	TEL	O5-C10	5.47	1.44	1.35
56	1A	4021	TEL	O5-C10	5.43	1.44	1.35
55	1A	4020	HGR	C5-C6	-5.31	1.39	1.50
55	2A	3743	HGR	C5-C6	-5.28	1.39	1.50
55	2A	3743	HGR	C5-C4	-5.19	1.39	1.49
55	1A	4020	HGR	C5-C4	-5.16	1.39	1.49
56	2A	3744	TEL	O9-C15	4.94	1.45	1.34
55	2A	3743	HGR	C3-C2	-4.75	1.39	1.48
56	1A	4021	TEL	O9-C15	4.70	1.45	1.34
55	1A	4020	HGR	C3-C2	-4.55	1.39	1.48
55	2A	3743	HGR	O4-C2	4.33	1.36	1.24
55	1A	4020	HGR	O4-C2	4.25	1.35	1.24
55	1A	4020	HGR	O8-C23	2.88	1.46	1.41
55	2A	3743	HGR	O8-C23	2.85	1.46	1.41
55	2A	3743	HGR	C1-C6	2.84	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1A	4020	HGR	C1-C6	2.80	1.39	1.35
56	2A	3744	TEL	O5-C2	-2.75	1.43	1.47
56	1A	4021	TEL	O9-C4	-2.66	1.41	1.46
56	1A	4021	TEL	O5-C2	-2.50	1.43	1.47
56	1A	4021	TEL	C36-N31	-2.46	1.34	1.38
55	2A	3743	HGR	O9-C23	2.28	1.45	1.41
58	1B	231	ARG	OXT-C	-2.27	1.23	1.30
56	2A	3744	TEL	C36-N31	-2.24	1.34	1.38
55	2A	3743	HGR	O1-C10	2.21	1.45	1.41
55	2A	3743	HGR	C17-N1	2.07	1.49	1.45
55	1A	4020	HGR	C8-C7	-2.04	1.51	1.53

All (57) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	2A	3744	TEL	O9-C15-C21	8.82	119.84	110.88
56	1A	4021	TEL	O9-C15-C21	6.37	117.35	110.88
56	2A	3744	TEL	C17-C11-N6	-6.31	103.56	113.31
56	1A	4021	TEL	C17-C11-N6	-6.16	103.80	113.31
56	2A	3744	TEL	C11-N6-C10	5.91	129.71	122.25
56	1A	4021	TEL	C11-N6-C10	5.25	128.87	122.25
55	1A	4020	HGR	C4-C5-C6	4.40	121.83	112.36
55	2A	3743	HGR	C12-C6-C1	-4.30	115.35	119.31
55	2A	3743	HGR	C4-C5-C6	4.29	121.61	112.36
56	2A	3744	TEL	C8-C4-C2	-4.25	109.38	115.23
56	2A	3744	TEL	C4-O9-C15	-4.01	111.05	118.18
55	1A	4020	HGR	C12-C6-C1	-3.98	115.64	119.31
56	1A	4021	TEL	C4-O9-C15	-3.83	111.37	118.18
55	1A	4020	HGR	C23-O9-C22	-3.64	100.77	106.31
55	2A	3743	HGR	O8-C18-C22	-3.35	98.46	105.97
58	1B	231	ARG	OXT-C-O	-3.31	116.58	124.09
56	2A	3744	TEL	O20-C15-C21	-3.25	120.50	124.77
55	1A	4020	HGR	C4-C3-C2	-3.18	118.90	121.83
56	1A	4021	TEL	C38-O32-C28	3.17	124.17	117.55
56	2A	3744	TEL	C54-C49-N53	-3.11	106.89	115.67
55	2A	3743	HGR	C9-C8-C7	-3.02	98.12	101.64
55	1A	4020	HGR	C8-C7-C11	-3.00	108.40	113.67
55	1A	4020	HGR	O1-C10-C9	-3.00	101.11	104.98
55	1A	4020	HGR	O9-C22-C18	-3.00	99.26	105.97
55	2A	3743	HGR	O1-C10-C9	-2.98	101.13	104.98
56	1A	4021	TEL	O39-C34-C28	2.96	113.49	106.40
55	2A	3743	HGR	O4-C2-C3	-2.90	116.76	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	2A	3743	HGR	C10-C9-C8	-2.89	98.63	102.30
56	2A	3744	TEL	C56-N52-C47	2.79	121.67	116.85
55	1A	4020	HGR	O4-C2-C3	-2.79	116.94	121.30
55	1A	4020	HGR	C10-C9-C8	-2.71	98.86	102.30
55	1A	4020	HGR	O8-C18-C22	-2.71	99.90	105.97
55	1A	4020	HGR	C1-C2-C3	2.70	121.19	115.99
55	2A	3743	HGR	C8-C7-C11	-2.70	108.94	113.67
56	1A	4021	TEL	O5-C2-C1	2.69	111.67	106.93
55	2A	3743	HGR	C4-C3-C2	-2.65	119.39	121.83
56	1A	4021	TEL	C54-C49-N53	-2.58	108.38	115.67
56	2A	3744	TEL	O5-C2-C1	2.54	111.39	106.93
58	1F	320	ARG	OXT-C-O	-2.53	118.34	124.09
55	2A	3743	HGR	C23-O9-C22	-2.53	102.46	106.31
55	2A	3743	HGR	C1-C2-C3	2.48	120.77	115.99
56	2A	3744	TEL	C38-O32-C28	2.43	122.62	117.55
55	1A	4020	HGR	O3-C10-C9	2.40	110.83	106.78
56	1A	4021	TEL	C56-N52-C47	2.36	120.94	116.85
58	1F	320	ARG	OXT-C-CA	2.33	121.32	113.38
56	2A	3744	TEL	O39-C34-C28	2.33	111.97	106.40
55	2A	3743	HGR	O9-C22-C18	-2.33	100.76	105.97
58	1B	231	ARG	OXT-C-CA	2.32	121.28	113.38
56	2A	3744	TEL	O9-C15-O20	-2.30	119.65	123.94
55	1A	4020	HGR	O3-C3-C2	2.26	116.86	112.56
56	1A	4021	TEL	C25-C21-C15	-2.21	106.17	110.40
56	1A	4021	TEL	O45-C50-C55	2.15	111.45	106.88
56	2A	3744	TEL	O9-C4-C8	2.13	111.45	107.40
56	1A	4021	TEL	O9-C15-O20	-2.08	120.05	123.94
56	1A	4021	TEL	C44-C49-N53	2.08	116.83	110.83
55	1A	4020	HGR	C19-C17-N1	2.05	114.49	110.62
56	2A	3744	TEL	O18-C13-C19	-2.01	117.54	121.26

There are no chirality outliers.

All (44) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
55	1A	4020	HGR	C2-C3-O3-C10
55	2A	3743	HGR	C2-C3-O3-C10
56	2A	3744	TEL	C1-C2-C4-C8
56	2A	3744	TEL	O5-C2-C4-C8
56	2A	3744	TEL	C24-C28-O32-C38
56	2A	3744	TEL	C33-C28-O32-C38
56	2A	3744	TEL	C34-C28-O32-C38

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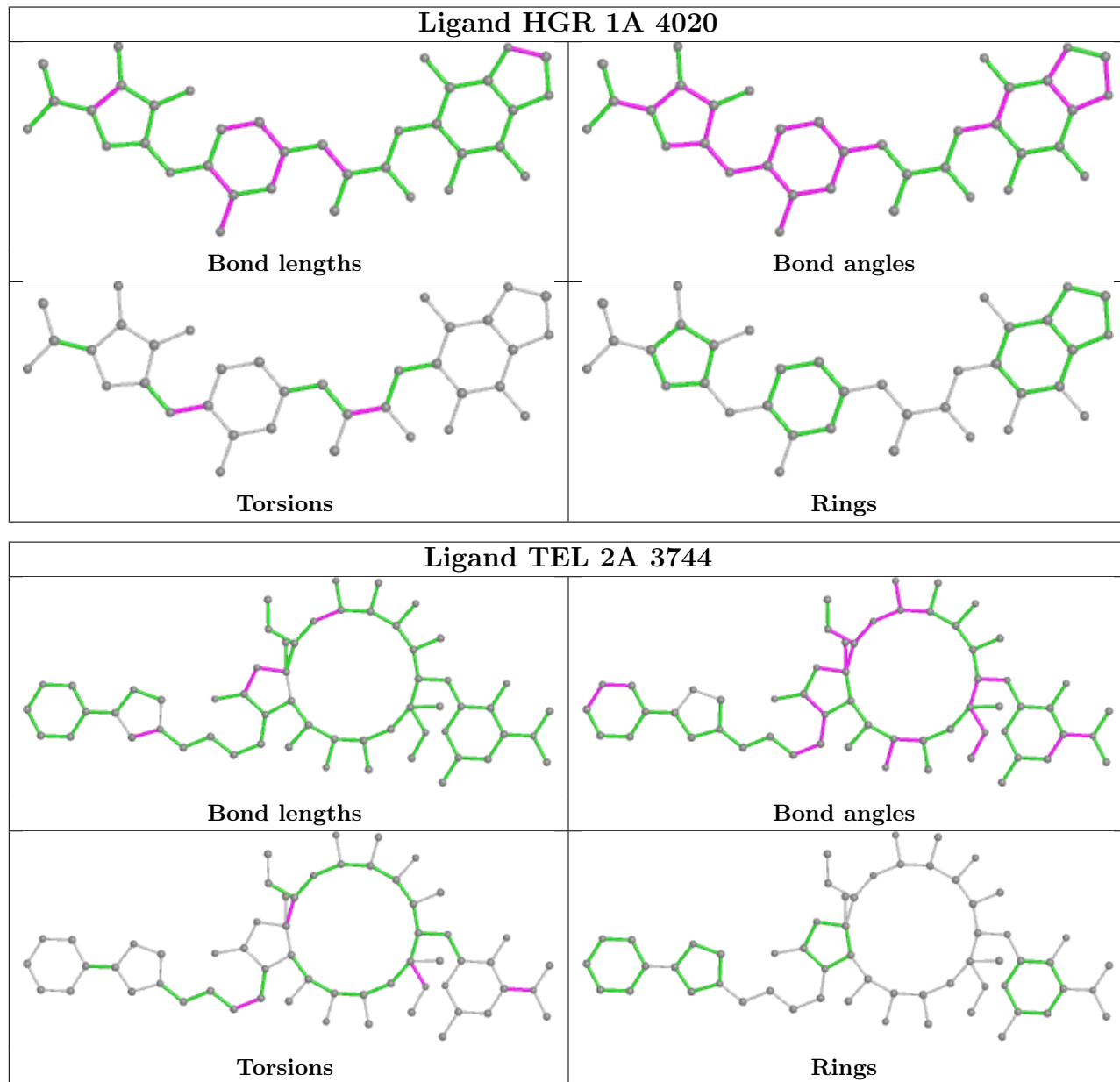
Mol	Chain	Res	Type	Atoms
57	18	105	MPD	C2-C3-C4-O4
57	1a	3279	MPD	C2-C3-C4-O4
57	1a	3279	MPD	C2-C3-C4-C5
57	2A	3747	MPD	C2-C3-C4-O4
57	2A	3747	MPD	C2-C3-C4-C5
58	1F	320	ARG	NE-CD-CG-CB
58	1B	231	ARG	NE-CD-CG-CB
58	1B	231	ARG	CA-CB-CG-CD
57	2A	3747	MPD	O2-C2-C3-C4
58	1B	231	ARG	C-CA-CB-CG
57	18	105	MPD	C2-C3-C4-C5
57	2A	3746	MPD	C2-C3-C4-C5
55	1A	4020	HGR	C12-C14-C15-O7
55	2A	3743	HGR	C12-C14-C15-O7
55	2A	3743	HGR	C12-C14-C15-N1
56	2A	3744	TEL	N6-C11-C17-C22
56	2A	3744	TEL	C44-C49-N53-C58
57	2A	3747	MPD	C1-C2-C3-C4
57	2A	3747	MPD	CM-C2-C3-C4
55	1A	4020	HGR	C16-C14-C15-O7
55	2A	3743	HGR	C16-C14-C15-O7
55	2A	3743	HGR	C16-C14-C15-N1
55	1A	4020	HGR	C12-C14-C15-N1
56	1A	4021	TEL	C24-C28-O32-C38
56	1A	4021	TEL	C33-C28-O32-C38
58	1B	231	ARG	O-C-CA-N
57	2A	3746	MPD	O2-C2-C3-C4
56	1A	4021	TEL	C34-C28-O32-C38
58	1B	231	ARG	OXT-C-CA-N
55	1A	4020	HGR	C16-C14-C15-N1
57	1A	4022	MPD	C2-C3-C4-C5
57	1T	206	MPD	C2-C3-C4-C5
55	2A	3743	HGR	O6-C11-C7-O1
57	1A	4022	MPD	C2-C3-C4-O4
57	1T	206	MPD	C2-C3-C4-O4
57	2A	3746	MPD	C2-C3-C4-O4
56	1A	4021	TEL	C17-C22-C27-N31

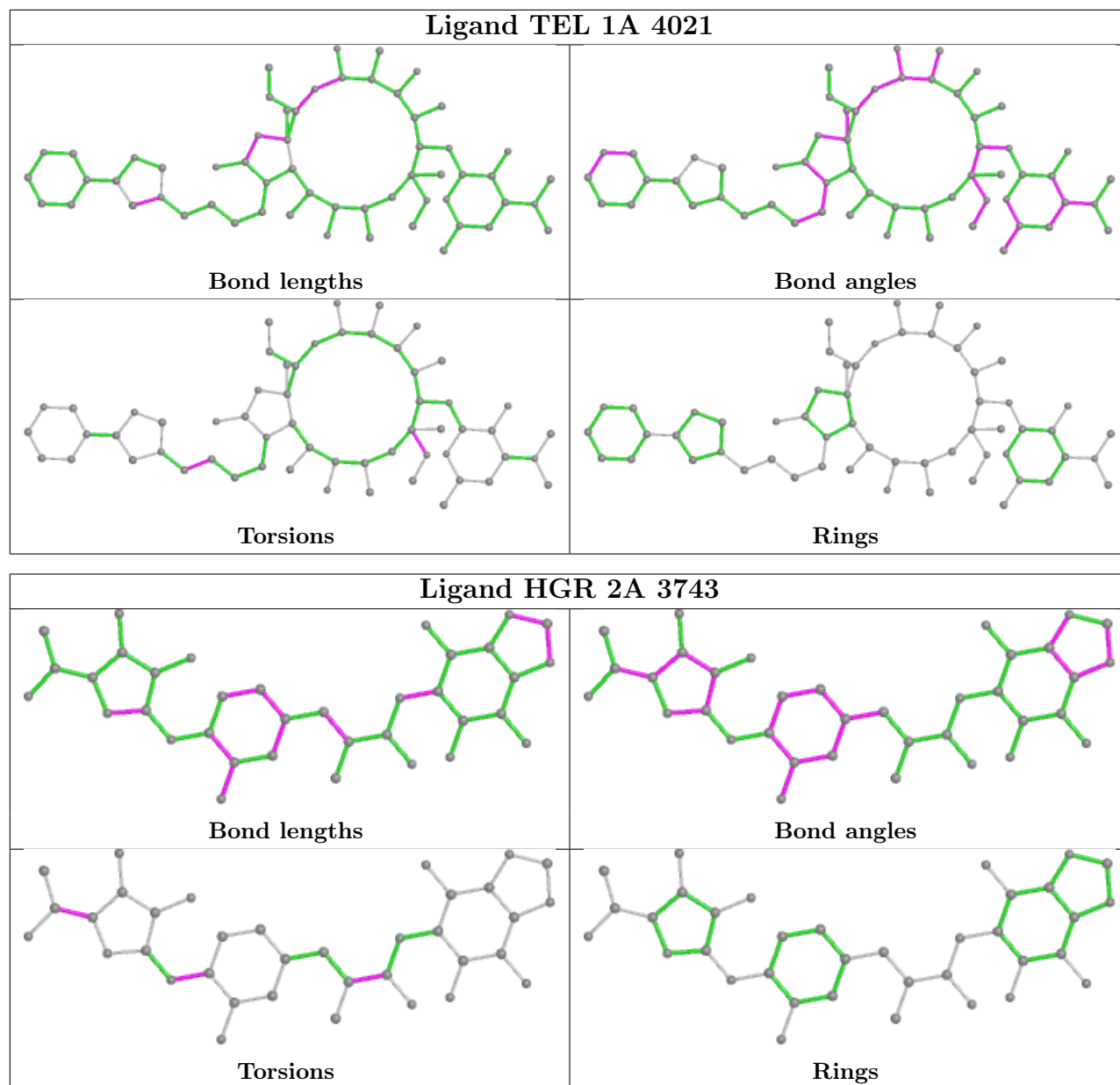
There are no ring outliers.

No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In

addition, ligands with molecular weight  $> 250$  and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.





## 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 i

### 6.1 Protein, DNA and RNA chains i

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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	1A	2860/2915 (98%)	1.12	166 (5%) 23 33	22, 38, 89, 98	0
1	2A	2855/2915 (97%)	0.89	184 (6%) 19 28	33, 55, 90, 98	0
2	1B	120/121 (99%)	0.61	0 100 100	34, 53, 64, 82	0
2	2B	120/121 (99%)	0.43	0 100 100	58, 73, 80, 85	0
3	1D	275/276 (99%)	0.79	6 (2%) 62 72	24, 36, 51, 73	0
3	2D	275/276 (99%)	0.82	12 (4%) 34 46	31, 49, 59, 73	0
4	1E	204/206 (99%)	1.03	7 (3%) 45 57	20, 41, 61, 70	0
4	2E	204/206 (99%)	0.64	6 (2%) 51 62	33, 55, 69, 77	0
5	1F	203/210 (96%)	0.97	4 (1%) 65 75	21, 45, 68, 79	0
5	2F	203/210 (96%)	0.64	5 (2%) 57 67	34, 62, 75, 80	0
6	1G	181/182 (99%)	0.53	8 (4%) 34 46	51, 65, 75, 82	0
6	2G	181/182 (99%)	1.81	75 (41%) 0 0	71, 79, 83, 86	0
7	1H	174/180 (96%)	0.78	4 (2%) 60 70	40, 53, 64, 67	0
7	2H	173/180 (96%)	1.76	63 (36%) 0 0	65, 76, 80, 86	0
8	1I	147/148 (99%)	0.44	5 (3%) 45 57	44, 68, 76, 81	0
8	2I	146/148 (98%)	0.90	21 (14%) 2 4	55, 70, 79, 82	0
9	1N	140/140 (100%)	1.18	11 (7%) 12 19	27, 39, 61, 74	0
9	2N	140/140 (100%)	0.62	1 (0%) 87 92	44, 61, 71, 74	0
10	1O	122/122 (100%)	0.71	1 (0%) 86 91	30, 40, 56, 65	0
10	2O	122/122 (100%)	0.56	2 (1%) 72 80	43, 52, 65, 71	0
11	1P	149/150 (99%)	0.78	0 100 100	23, 47, 65, 73	0
11	2P	149/150 (99%)	0.79	13 (8%) 10 15	40, 65, 76, 82	0
12	1Q	141/141 (100%)	0.78	1 (0%) 87 92	30, 41, 54, 63	0
12	2Q	141/141 (100%)	0.82	10 (7%) 16 23	46, 61, 70, 77	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	1R	118/118 (100%)	0.97	2 (1%) 70 78	25, 37, 52, 62	0
13	2R	118/118 (100%)	0.66	2 (1%) 70 78	39, 51, 59, 67	0
14	1S	110/112 (98%)	0.64	2 (1%) 68 77	43, 54, 63, 67	0
14	2S	110/112 (98%)	1.26	25 (22%) 0 1	61, 69, 75, 79	0
15	1T	131/146 (89%)	0.68	3 (2%) 60 70	36, 45, 66, 79	0
15	2T	131/146 (89%)	0.54	5 (3%) 40 53	44, 57, 72, 77	0
16	1U	116/118 (98%)	1.07	3 (2%) 56 65	24, 33, 49, 61	0
16	2U	116/118 (98%)	0.84	5 (4%) 35 47	40, 59, 70, 79	0
17	1V	101/101 (100%)	1.02	1 (0%) 82 88	25, 44, 58, 67	0
17	2V	101/101 (100%)	0.65	6 (5%) 22 33	41, 67, 73, 77	0
18	1W	112/113 (99%)	1.20	10 (8%) 9 14	26, 33, 50, 81	0
18	2W	112/113 (99%)	0.87	7 (6%) 20 29	38, 49, 63, 83	0
19	1X	95/96 (98%)	0.83	3 (3%) 47 59	31, 42, 64, 72	0
19	2X	95/96 (98%)	0.78	9 (9%) 8 13	47, 58, 70, 77	0
20	1Y	107/110 (97%)	0.96	2 (1%) 66 76	38, 50, 65, 73	0
20	2Y	107/110 (97%)	1.19	16 (14%) 2 3	55, 66, 75, 82	0
21	1Z	203/206 (98%)	0.61	5 (2%) 57 67	44, 59, 71, 76	0
21	2Z	201/206 (97%)	0.75	17 (8%) 10 16	62, 73, 78, 82	0
22	10	77/85 (90%)	1.00	1 (1%) 77 84	32, 40, 57, 58	0
22	20	77/85 (90%)	1.06	14 (18%) 1 2	47, 61, 70, 74	0
23	11	97/98 (98%)	0.90	3 (3%) 49 61	30, 46, 68, 77	0
23	21	97/98 (98%)	0.91	7 (7%) 15 23	39, 54, 70, 73	0
24	12	70/72 (97%)	0.88	1 (1%) 75 83	38, 51, 61, 79	0
24	22	70/72 (97%)	0.78	4 (5%) 23 34	57, 66, 72, 75	0
25	13	59/60 (98%)	0.99	3 (5%) 28 40	28, 38, 62, 72	0
25	23	59/60 (98%)	0.78	5 (8%) 10 16	52, 60, 71, 76	0
26	14	69/71 (97%)	1.38	17 (24%) 0 1	60, 78, 85, 89	0
26	24	69/71 (97%)	2.87	37 (53%) 0 0	74, 82, 90, 92	0
27	15	59/60 (98%)	1.12	3 (5%) 28 40	24, 37, 53, 65	0
27	25	59/60 (98%)	0.57	1 (1%) 70 78	34, 51, 64, 72	0
28	16	53/54 (98%)	0.64	1 (1%) 66 76	36, 45, 57, 61	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
28	26	53/54 (98%)	0.65	1 (1%) 66 76	52, 59, 66, 72	0
29	17	48/49 (97%)	1.20	5 (10%) 6 10	24, 29, 56, 62	0
29	27	48/49 (97%)	1.08	5 (10%) 6 10	34, 41, 62, 69	0
30	18	64/65 (98%)	0.79	1 (1%) 72 80	31, 37, 43, 56	0
30	28	64/65 (98%)	1.02	4 (6%) 20 29	43, 53, 60, 62	0
31	19	37/37 (100%)	0.96	0 100 100	33, 42, 58, 59	0
31	29	37/37 (100%)	1.70	11 (29%) 0 0	57, 64, 71, 73	0
32	1a	1488/1521 (97%)	0.78	94 (6%) 20 29	38, 67, 87, 96	0
32	2a	1492/1521 (98%)	0.73	95 (6%) 19 28	45, 72, 88, 96	0
33	1b	231/256 (90%)	0.81	29 (12%) 3 6	62, 74, 81, 84	0
33	2b	231/256 (90%)	1.03	41 (17%) 1 2	70, 78, 83, 88	0
34	1c	206/239 (86%)	1.03	30 (14%) 2 3	63, 71, 80, 84	0
34	2c	206/239 (86%)	1.44	57 (27%) 0 0	67, 78, 82, 85	0
35	1d	208/209 (99%)	1.20	38 (18%) 1 2	56, 68, 75, 81	0
35	2d	208/209 (99%)	1.03	28 (13%) 3 4	58, 68, 75, 79	0
36	1e	148/162 (91%)	0.76	7 (4%) 31 44	46, 63, 70, 81	0
36	2e	148/162 (91%)	0.69	10 (6%) 17 25	56, 68, 76, 79	0
37	1f	100/101 (99%)	0.42	2 (2%) 65 75	52, 66, 72, 74	0
37	2f	100/101 (99%)	0.35	1 (1%) 82 88	53, 64, 72, 74	0
38	1g	155/156 (99%)	0.42	7 (4%) 33 46	63, 70, 77, 79	0
38	2g	155/156 (99%)	1.09	27 (17%) 1 2	69, 75, 80, 82	0
39	1h	137/138 (99%)	0.92	17 (12%) 4 6	51, 65, 72, 76	0
39	2h	137/138 (99%)	0.72	11 (8%) 12 18	61, 69, 74, 78	0
40	1i	127/128 (99%)	1.82	51 (40%) 0 0	61, 76, 81, 82	0
40	2i	126/128 (98%)	3.17	95 (75%) 0 0	70, 80, 84, 85	0
41	1j	97/105 (92%)	1.42	27 (27%) 0 0	63, 76, 82, 86	0
41	2j	96/105 (91%)	2.39	46 (47%) 0 0	70, 80, 83, 85	0
42	1k	114/129 (88%)	0.53	3 (2%) 56 65	48, 63, 71, 74	0
42	2k	114/129 (88%)	0.92	14 (12%) 4 7	55, 68, 75, 79	0
43	1l	121/132 (91%)	0.93	17 (14%) 2 4	47, 58, 67, 70	0
43	2l	121/132 (91%)	0.59	7 (5%) 23 33	53, 65, 69, 72	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9	
44	1m	116/126 (92%)	0.99	21 (18%)	1 2	62, 73, 78, 80	0
44	2m	114/126 (90%)	2.13	57 (50%)	0 0	75, 80, 83, 87	0
45	1n	60/61 (98%)	2.35	31 (51%)	0 0	63, 70, 75, 81	0
45	2n	60/61 (98%)	3.46	49 (81%)	0 0	71, 79, 83, 86	0
46	1o	88/89 (98%)	0.82	6 (6%)	17 25	45, 63, 72, 76	0
46	2o	88/89 (98%)	0.66	7 (7%)	12 18	55, 68, 74, 79	0
47	1p	82/88 (93%)	2.34	42 (51%)	0 0	60, 69, 76, 82	0
47	2p	82/88 (93%)	1.23	16 (19%)	1 2	61, 67, 75, 77	0
48	1q	99/105 (94%)	1.30	21 (21%)	0 1	54, 66, 74, 78	0
48	2q	99/105 (94%)	1.07	13 (13%)	3 5	53, 67, 74, 77	0
49	1r	68/88 (77%)	0.45	1 (1%)	73 81	55, 63, 74, 76	0
49	2r	68/88 (77%)	0.55	1 (1%)	73 81	59, 66, 74, 77	0
50	1s	83/93 (89%)	1.25	18 (21%)	0 1	66, 74, 79, 81	0
50	2s	83/93 (89%)	2.56	47 (56%)	0 0	75, 81, 85, 87	0
51	1t	96/106 (90%)	1.79	40 (41%)	0 0	61, 69, 77, 81	0
51	2t	98/106 (92%)	0.79	9 (9%)	9 14	56, 67, 78, 80	0
52	1u	23/27 (85%)	2.64	15 (65%)	0 0	66, 71, 74, 75	0
52	2u	23/27 (85%)	3.21	18 (78%)	0 0	74, 76, 79, 81	0
53	1y	97/113 (85%)	1.28	19 (19%)	1 2	51, 62, 72, 72	0
53	2y	96/113 (84%)	3.15	68 (70%)	0 0	65, 74, 80, 81	0
All	All	20764/21468 (96%)	0.98	2105 (10%)	7 11	20, 62, 82, 98	0

All (2105) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	2A	653	A	15.4
1	2A	652(V)	C	14.5
1	2A	652(U)	G	13.4
26	24	49	PHE	13.4
1	1A	653	A	13.3
1	2A	652(C)	G	12.3
1	1A	652(C)	G	12.0
1	2A	652(T)	C	11.5
1	1A	1509	C	11.0
1	2A	1509	C	11.0

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	2A	2139	C	10.7
1	2A	2138	C	9.8
1	2A	654	A	9.8
32	2a	1030(A)	G	9.7
1	2A	2140	C	9.5
1	2A	652(D)	C	9.3
20	2Y	1	MET	9.3
1	2A	2153	G	9.3
40	2i	18	PHE	9.2
6	2G	3	LEU	9.1
32	1a	1001	A	9.0
1	2A	2142	C	9.0
1	1A	652(V)	C	9.0
32	2a	1030(B)	C	8.9
1	2A	2174	C	8.9
1	2A	2147	G	8.9
1	2A	2146	C	8.8
52	2u	16	GLY	8.6
40	2i	17	VAL	8.6
1	1A	652(S)	C	8.5
1	1A	652(U)	G	8.5
1	2A	1046	A	8.5
1	1A	1076	C	8.3
1	2A	2155	G	8.2
32	1a	1030(B)	C	8.2
1	1A	1067	A	8.2
23	11	2	SER	8.1
50	2s	10	PHE	8.1
1	2A	2141	G	8.0
1	2A	2154	G	8.0
1	2A	652(E)	G	7.9
1	2A	2124	G	7.9
45	2n	38	GLY	7.8
53	2y	40	ILE	7.8
1	2A	2152	G	7.8
41	2j	44	VAL	7.8
1	2A	2802	G	7.7
1	1A	1080	C	7.7
53	2y	88	LEU	7.7
1	2A	2793	G	7.7
1	2A	2107	C	7.7
1	2A	2168	G	7.7

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	2A	2136	C	7.7
1	2A	2125	G	7.7
45	2n	13	THR	7.6
1	2A	2169	A	7.6
1	1A	1075	C	7.6
6	2G	62	LEU	7.6
26	24	45	GLY	7.5
44	2m	5	ALA	7.5
40	2i	109	VAL	7.5
38	2g	154	TYR	7.4
50	2s	82	GLY	7.4
1	1A	1066	U	7.3
1	2A	2106	G	7.3
32	2a	1031	G	7.3
26	24	50	VAL	7.3
53	2y	9	GLN	7.2
1	2A	2151	G	7.2
32	1a	1031	G	7.2
1	1A	1088	A	7.2
1	1A	654	A	7.2
1	1A	1087	G	7.2
1	1A	1091	G	7.2
1	2A	2148	G	7.1
1	2A	2176	A	7.1
1	2A	2162	G	7.1
1	2A	2179	C	7.1
1	2A	2805	G	7.1
1	2A	2173	A	7.1
45	2n	34	TYR	7.0
1	1A	652(T)	C	7.0
40	1i	19	LEU	7.0
53	2y	41	LEU	7.0
1	2A	2126	A	7.0
1	2A	2137	C	7.0
1	2A	2801(A)	A	7.0
41	2j	67	THR	6.9
32	1a	1001(A)	G	6.9
32	2a	1001(A)	G	6.9
52	2u	14	TRP	6.9
32	1a	1030(C)	G	6.8
32	2a	1030(C)	G	6.8
1	2A	2145	C	6.8

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Mol	Chain	Res	Type	RSRZ
51	1t	9	ASN	6.8
1	2A	229	A	6.8
41	2j	68	HIS	6.7
1	1A	652(D)	C	6.7
32	2a	1001	A	6.7
40	2i	127	LYS	6.7
6	2G	39	ILE	6.7
32	1a	1492	A	6.6
1	1A	2602	A	6.6
1	2A	2127	G	6.6
26	14	18	CYS	6.6
35	1d	166	LYS	6.6
1	2A	2804	C	6.6
47	1p	19	ILE	6.6
52	1u	14	TRP	6.6
1	2A	2116	G	6.5
53	2y	73	ALA	6.5
40	1i	33	PHE	6.5
40	2i	66	ARG	6.5
44	2m	102	ARG	6.5
40	2i	14	VAL	6.4
40	2i	63	ILE	6.4
32	1a	1257	U	6.4
45	2n	12	ARG	6.4
44	2m	7	VAL	6.4
45	2n	35	ARG	6.4
32	2a	1036	G	6.4
42	2k	13	GLN	6.4
26	24	40	HIS	6.3
32	2a	1257	U	6.3
40	2i	76	ALA	6.3
1	2A	1085	A	6.3
32	2a	1027	C	6.3
1	1A	2141	G	6.3
7	2H	98	LEU	6.3
45	1n	18	VAL	6.3
40	2i	126	SER	6.3
32	1a	1030(D)	A	6.3
1	1A	652(F)	G	6.3
1	2A	2159	G	6.3
1	2A	2123	G	6.2
47	1p	73	LEU	6.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
34	2c	157	ILE	6.2
34	2c	159	GLY	6.2
40	2i	75	ASP	6.2
40	2i	88	TYR	6.2
53	2y	39	ILE	6.2
45	2n	14	PRO	6.1
40	2i	65	VAL	6.1
1	2A	888	C	6.1
32	2a	1032	G	6.1
40	2i	72	GLY	6.0
1	2A	2133	G	6.0
41	2j	34	VAL	6.0
7	2H	115	VAL	6.0
45	2n	25	VAL	6.0
40	2i	36	TYR	6.0
53	2y	63	ALA	6.0
1	1A	1089	G	6.0
26	24	63	TYR	6.0
1	1A	888	C	6.0
1	2A	2108	C	6.0
38	1g	156	TRP	6.0
1	2A	2134	A	5.9
32	2a	1033	G	5.9
41	2j	47	PHE	5.9
1	2A	2803	C	5.9
44	2m	87	TYR	5.9
40	2i	69	GLY	5.9
1	1A	2155	G	5.9
1	1A	652(E)	G	5.9
45	2n	15	LYS	5.9
26	24	51	ASP	5.9
1	1A	2132	U	5.9
26	24	52	THR	5.9
26	24	54	GLY	5.8
1	1A	2805	G	5.8
50	2s	40	ILE	5.8
50	2s	11	VAL	5.8
32	2a	1286	A	5.8
34	1c	193	TYR	5.8
7	2H	103	LEU	5.8
32	2a	1030(D)	A	5.8
32	2a	1035	A	5.8

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	1A	1068	G	5.8
1	2A	2135	A	5.7
50	2s	69	HIS	5.7
41	2j	19	SER	5.7
8	2I	19	VAL	5.7
1	2A	2110	G	5.7
34	2c	33	LEU	5.7
1	2A	2132	U	5.7
52	2u	6	ARG	5.7
50	2s	80	TYR	5.7
35	1d	2	GLY	5.7
53	2y	38	HIS	5.7
34	2c	65	ALA	5.7
51	1t	76	ALA	5.7
41	2j	72	VAL	5.7
1	1A	1078	U	5.6
29	27	47	ARG	5.6
32	1a	1036	G	5.6
1	1A	2794	C	5.6
1	1A	2169	A	5.6
1	1A	1065	U	5.6
44	2m	6	GLY	5.6
6	2G	152	LEU	5.6
34	1c	80	GLY	5.6
41	2j	40	LEU	5.6
40	2i	73	GLN	5.6
40	1i	14	VAL	5.6
26	14	55	ARG	5.6
44	1m	56	LEU	5.6
45	2n	55	GLY	5.6
32	2a	1028	C	5.6
1	1A	2147	G	5.5
53	2y	77	LEU	5.5
26	14	59	PHE	5.5
1	1A	2153	G	5.5
32	1a	1033	G	5.5
32	2a	1026	G	5.5
32	1a	1028	C	5.5
26	24	10	VAL	5.5
44	2m	23	TYR	5.5
32	1a	1029	C	5.5
40	1i	28	VAL	5.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	1A	2113	U	5.4
41	2j	96	ILE	5.4
45	2n	44	LEU	5.4
47	1p	59	TRP	5.4
41	2j	65	LEU	5.4
40	2i	108	VAL	5.4
6	2G	146	TYR	5.4
40	1i	125	TYR	5.4
1	2A	2191	G	5.4
53	2y	78	ILE	5.4
40	2i	30	GLY	5.4
53	2y	4	ASN	5.4
14	2S	92	TYR	5.4
1	2A	2156	G	5.4
1	2A	2165	G	5.4
1	1A	2154	G	5.3
44	2m	60	VAL	5.3
45	1n	34	TYR	5.3
1	2A	2175	C	5.3
40	2i	102	LEU	5.3
38	2g	34	GLY	5.3
1	2A	2161	C	5.3
45	1n	25	VAL	5.3
1	1A	1077	A	5.3
32	2a	1030	C	5.3
1	2A	2792	G	5.3
7	2H	45	VAL	5.3
32	2a	1034	G	5.3
40	2i	114	TYR	5.3
1	2A	2118	U	5.3
35	1d	157	LEU	5.3
32	2a	1029	C	5.3
1	1A	2159	G	5.2
7	2H	165	ALA	5.2
40	2i	7	THR	5.2
33	2b	37	ASN	5.2
1	1A	1090	U	5.2
23	2l	2	SER	5.2
47	1p	17	TYR	5.2
1	2A	2143	C	5.2
32	1a	1447	A	5.2
41	2j	66	ARG	5.2

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Mol	Chain	Res	Type	RSRZ
1	1A	2793	G	5.2
53	2y	48	PHE	5.2
35	2d	5	ILE	5.2
40	1i	128	ARG	5.2
1	1A	2173	A	5.2
6	2G	177	GLY	5.2
53	2y	35	ILE	5.2
51	1t	67	ALA	5.2
53	2y	74	ILE	5.2
50	2s	15	LEU	5.2
40	2i	62	TYR	5.2
44	2m	89	GLY	5.2
45	1n	33	VAL	5.2
1	2A	1076	C	5.2
53	2y	12	ILE	5.1
51	1t	18	GLN	5.1
51	1t	72	LEU	5.1
26	24	19	GLY	5.1
26	14	49	PHE	5.1
1	2A	2172	U	5.1
1	2A	2120	G	5.1
40	2i	42	ARG	5.1
1	2A	2164	C	5.1
36	2e	22	GLY	5.1
39	2h	2	LEU	5.1
1	1A	1079	C	5.1
47	1p	1	MET	5.1
52	2u	15	ARG	5.1
33	2b	122	PHE	5.1
50	2s	62	ILE	5.1
32	1a	1032	G	5.1
1	1A	2143	C	5.1
1	2A	652(B)	A	5.1
1	2A	2109	U	5.1
1	2A	2131	G	5.1
1	2A	2170	A	5.1
33	1b	131	PRO	5.0
35	1d	167	GLY	5.0
26	24	46	GLN	5.0
47	1p	49	LEU	5.0
48	1q	98	LEU	5.0
7	2H	102	ALA	5.0

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
26	14	56	VAL	5.0
1	1A	2116	G	5.0
1	1A	2161	C	5.0
1	1A	2804	C	5.0
32	1a	1030	C	5.0
38	2g	156	TRP	5.0
53	2y	11	GLU	5.0
1	2A	2157	G	5.0
38	2g	27	ILE	5.0
6	2G	87	PRO	5.0
1	1A	2107	C	5.0
40	1i	106	ALA	5.0
1	1A	2129	C	4.9
44	1m	2	ALA	4.9
1	1A	1072	C	4.9
1	2A	2128	C	4.9
1	2A	2190	G	4.9
50	2s	71	LEU	4.9
51	1t	66	ALA	4.9
1	2A	1508	A	4.9
7	2H	82	GLY	4.9
44	2m	116	THR	4.9
45	2n	24	CYS	4.9
14	2S	58	LEU	4.9
48	1q	27	PHE	4.9
48	2q	98	LEU	4.9
1	1A	2115	G	4.9
1	1A	2176	A	4.9
1	2A	2119	A	4.9
20	2Y	42	VAL	4.9
14	2S	35	ILE	4.9
35	2d	70	ILE	4.9
6	2G	117	PHE	4.9
6	2G	142	PRO	4.9
41	2j	74	ILE	4.9
40	2i	67	GLY	4.8
47	1p	6	LEU	4.8
1	2A	2160	G	4.8
1	2A	2187	G	4.8
1	2A	2894	G	4.8
1	1A	2140	C	4.8
34	2c	87	LEU	4.8

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
45	2n	16	PHE	4.8
1	2A	2117	A	4.8
45	2n	59	ALA	4.8
53	2y	5	ILE	4.8
1	2A	2150	U	4.8
44	2m	15	VAL	4.8
45	1n	13	THR	4.8
42	2k	25	TYR	4.8
26	24	66	SER	4.8
32	1a	1034	G	4.8
40	2i	21	PRO	4.8
53	2y	71	TYR	4.8
26	24	29	PRO	4.8
45	1n	2	ALA	4.8
47	2p	79	VAL	4.8
34	2c	94	LEU	4.8
40	2i	50	LEU	4.8
40	2i	74	ILE	4.8
38	2g	41	ARG	4.7
48	1q	97	SER	4.7
7	2H	35	VAL	4.7
1	1A	2166	G	4.7
38	2g	6	ARG	4.7
47	1p	80	PHE	4.7
32	2a	1002	G	4.7
40	1i	79	LEU	4.7
1	1A	2117	A	4.7
32	1a	1000	U	4.7
1	1A	2156	G	4.7
38	1g	16	LEU	4.7
1	2A	2111	C	4.7
14	2S	12	PHE	4.7
35	1d	138	TYR	4.6
51	1t	13	LEU	4.6
50	2s	49	ILE	4.6
1	1A	1093	G	4.6
36	2e	13	ILE	4.6
1	1A	2123	G	4.6
40	2i	29	ASN	4.6
34	2c	23	TYR	4.6
53	1y	95	ARG	4.6
1	1A	2145	C	4.6

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
32	1a	1286	A	4.6
53	2y	3	MET	4.6
1	2A	2144	U	4.6
45	2n	2	ALA	4.6
1	1A	2137	C	4.6
47	1p	20	VAL	4.6
53	2y	84	GLN	4.5
52	2u	13	ILE	4.5
1	1A	2174	C	4.5
1	1A	2126	A	4.5
1	1A	2152	G	4.5
39	1h	134	ILE	4.5
50	2s	34	TRP	4.5
29	27	48	LYS	4.5
51	1t	73	HIS	4.5
21	1Z	192	ALA	4.5
1	1A	1063	G	4.5
53	2y	87	LYS	4.5
40	2i	27	THR	4.5
6	2G	120	LEU	4.5
53	2y	52	ALA	4.5
6	1G	146	TYR	4.5
11	2P	110	TYR	4.5
1	2A	2181	G	4.5
1	1A	2803	C	4.5
41	2j	63	PHE	4.5
45	1n	22	THR	4.5
1	2A	1095	A	4.5
1	1A	2133	G	4.5
1	2A	1103	A	4.4
40	2i	20	ARG	4.4
1	1A	2168	G	4.4
33	2b	70	PHE	4.4
50	2s	39	THR	4.4
34	2c	8	ILE	4.4
35	1d	70	ILE	4.4
26	24	39	CYS	4.4
45	2n	61	TRP	4.4
41	1j	10	GLY	4.4
1	2A	1091	G	4.4
53	2y	50	ALA	4.4
32	1a	1035	A	4.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
33	2b	92	TYR	4.4
47	1p	48	TRP	4.4
1	2A	2149	G	4.4
50	2s	8	GLY	4.4
32	1a	999	C	4.4
42	1k	60	ALA	4.4
7	2H	6	ARG	4.4
14	2S	20	ARG	4.4
52	2u	9	ARG	4.4
32	1a	1030(A)	G	4.3
38	2g	80	VAL	4.3
32	1a	1005	A	4.3
6	2G	29	TRP	4.3
44	2m	90	LEU	4.3
53	2y	67	HIS	4.3
32	1a	1002	G	4.3
45	2n	29	ARG	4.3
11	2P	109	GLY	4.3
21	2Z	125	LEU	4.3
53	2y	24	LEU	4.3
53	2y	20	VAL	4.3
45	1n	14	PRO	4.3
52	1u	18	TYR	4.3
1	2A	2178	C	4.3
44	2m	66	LEU	4.3
45	2n	18	VAL	4.3
32	1a	1024	G	4.3
6	2G	52	ILE	4.3
50	2s	75	ALA	4.3
47	1p	60	LEU	4.3
40	2i	44	VAL	4.3
48	2q	23	VAL	4.3
52	1u	17	THR	4.3
1	2A	2807	G	4.3
40	1i	126	SER	4.3
53	2y	42	SER	4.3
40	2i	4	TYR	4.3
1	2A	2177	C	4.3
6	2G	157	ILE	4.2
45	2n	54	PRO	4.2
32	1a	1026	G	4.2
1	2A	1088	A	4.2

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Mol	Chain	Res	Type	RSRZ
7	2H	93	GLY	4.2
1	1A	1509(A)	A	4.2
32	2a	1357	A	4.2
35	1d	179	GLU	4.2
7	2H	95	ARG	4.2
53	1y	35	ILE	4.2
51	1t	12	ALA	4.2
7	2H	101	ARG	4.2
12	2Q	59	ARG	4.2
44	1m	115	LYS	4.2
44	2m	84	ILE	4.2
44	2m	110	ARG	4.2
52	2u	17	THR	4.2
45	2n	43	CYS	4.2
53	2y	10	MET	4.2
29	17	48	LYS	4.2
34	2c	177	THR	4.2
45	2n	39	LEU	4.2
1	1A	2142	C	4.2
32	1a	1037	C	4.2
32	2a	1149	C	4.2
6	2G	92	VAL	4.2
14	2S	3	ARG	4.2
47	1p	21	VAL	4.2
21	2Z	187	ALA	4.2
1	2A	2166	G	4.1
36	2e	12	LEU	4.1
50	2s	5	LEU	4.1
50	2s	16	LEU	4.1
32	1a	1019	C	4.1
1	1A	1074	G	4.1
33	2b	227	GLY	4.1
50	2s	68	GLY	4.1
50	2s	81	ARG	4.1
20	2Y	106	LEU	4.1
44	2m	64	TRP	4.1
34	1c	2	GLY	4.1
40	2i	115	GLY	4.1
1	1A	2151	G	4.1
1	2A	2105	C	4.1
15	2T	111	ARG	4.1
1	1A	2144	U	4.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
15	1T	38	ASN	4.1
7	2H	105	LEU	4.1
35	1d	174	LEU	4.1
26	14	17	GLY	4.1
53	2y	47	GLY	4.1
1	2A	1064	C	4.1
1	2A	1079	C	4.1
43	1l	64	TYR	4.1
53	2y	49	VAL	4.1
40	1i	63	ILE	4.1
32	1a	1027	C	4.1
1	2A	2121	G	4.1
32	2a	1003	G	4.1
50	2s	41	VAL	4.1
41	2j	18	ALA	4.0
1	2A	1104	C	4.0
7	2H	128	PRO	4.0
29	17	46	VAL	4.0
1	1A	2127	G	4.0
26	24	68	ARG	4.0
1	2A	887	A	4.0
40	2i	37	PHE	4.0
41	2j	64	GLU	4.0
51	1t	22	ARG	4.0
33	1b	136	VAL	4.0
26	24	67	TYR	4.0
38	2g	42	ILE	4.0
1	2A	1086	A	4.0
1	2A	2602	A	4.0
51	1t	74	LYS	4.0
40	2i	104	ARG	4.0
41	2j	46	ARG	4.0
47	1p	66	PRO	4.0
26	24	44	THR	4.0
50	2s	9	VAL	4.0
40	1i	114	TYR	4.0
41	2j	45	ARG	4.0
52	1u	10	ARG	4.0
34	2c	196	LEU	4.0
14	2S	31	SER	4.0
44	1m	4	ILE	4.0
32	2a	1492	A	4.0

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
33	2b	121	LEU	4.0
41	2j	90	LEU	4.0
3	2D	2	ALA	4.0
38	2g	22	LEU	4.0
40	1i	46	ALA	4.0
47	1p	41	PRO	4.0
41	2j	62	HIS	4.0
26	24	56	VAL	4.0
33	2b	127	ILE	3.9
34	2c	158	GLY	3.9
44	2m	93	ARG	3.9
42	1k	25	TYR	3.9
35	2d	49	ARG	3.9
1	1A	889	C	3.9
1	1A	1092	C	3.9
1	2A	2896	C	3.9
34	2c	189	ALA	3.9
40	2i	5	TYR	3.9
45	2n	10	ALA	3.9
1	2A	2158	A	3.9
1	1A	2112	G	3.9
1	2A	614(B)	G	3.9
26	24	28	LYS	3.9
6	2G	5	VAL	3.9
35	1d	180	GLY	3.9
50	2s	67	VAL	3.9
1	1A	2138	C	3.9
34	2c	160	ALA	3.9
40	2i	79	LEU	3.9
50	2s	52	TYR	3.9
35	1d	73	ARG	3.9
26	24	27	THR	3.9
50	1s	77	THR	3.9
1	1A	2149	G	3.9
45	1n	7	ILE	3.9
53	2y	70	MET	3.9
6	2G	135	LEU	3.9
8	2I	35	LEU	3.9
42	2k	87	THR	3.9
26	24	18	CYS	3.9
38	2g	155	ARG	3.9
1	2A	889	C	3.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
26	14	66	SER	3.8
53	2y	62	VAL	3.8
33	2b	123	ALA	3.8
41	2j	27	ALA	3.8
1	2A	271(K)	U	3.8
20	2Y	90	LEU	3.8
23	11	98	LEU	3.8
33	2b	95	GLN	3.8
1	1A	2119	A	3.8
1	2A	2171	A	3.8
7	2H	44	VAL	3.8
1	2A	2167	U	3.8
34	2c	85	ARG	3.8
34	2c	190	ARG	3.8
1	2A	2129	C	3.8
1	2A	2163	C	3.8
32	2a	1021	G	3.8
40	2i	85	LEU	3.8
32	2a	1358	U	3.8
40	2i	10	ARG	3.8
26	24	30	GLU	3.8
34	1c	64	VAL	3.8
40	2i	26	VAL	3.8
26	14	52	THR	3.8
50	2s	63	THR	3.8
1	2A	614(A)	U	3.8
49	1r	42	ARG	3.8
6	2G	75	LYS	3.8
32	1a	1493	A	3.8
33	1b	122	PHE	3.7
41	2j	54	PHE	3.7
34	2c	124	ILE	3.7
44	2m	82	MET	3.7
1	1A	1064	C	3.7
7	1H	2	SER	3.7
1	2A	2100	G	3.7
1	1A	271(K)	U	3.7
40	1i	37	PHE	3.7
45	1n	20	ALA	3.7
40	2i	103	THR	3.7
1	1A	2158	A	3.7
26	14	46	GLN	3.7

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Mol	Chain	Res	Type	RSRZ
53	2y	54	ILE	3.7
44	1m	48	LEU	3.7
7	2H	166	GLY	3.7
34	2c	155	GLY	3.7
11	2P	79	ARG	3.7
45	2n	57	ARG	3.7
1	1A	2170	A	3.7
40	2i	40	LEU	3.7
1	2A	645	C	3.7
33	1b	130	ARG	3.7
12	2Q	114	ALA	3.7
45	1n	16	PHE	3.7
45	2n	37	PHE	3.7
34	2c	152	ILE	3.7
1	1A	2146	C	3.7
52	1u	9	ARG	3.7
1	1A	1062	G	3.7
32	1a	1023	G	3.7
41	1j	47	PHE	3.7
45	1n	59	ALA	3.7
41	2j	48	THR	3.7
50	2s	74	PHE	3.7
8	2I	3	VAL	3.7
51	1t	55	ILE	3.7
32	1a	219	C	3.7
45	1n	15	LYS	3.7
14	2S	36	TYR	3.7
41	2j	41	PRO	3.7
1	1A	2108	C	3.6
6	2G	58	GLN	3.6
33	2b	165	VAL	3.6
1	1A	1081	U	3.6
45	2n	40	CYS	3.6
48	1q	7	THR	3.6
53	2y	92	GLY	3.6
40	2i	90	PRO	3.6
26	24	32	TYR	3.6
45	2n	21	TYR	3.6
47	1p	32	TYR	3.6
19	2X	68	ARG	3.6
32	1a	1020	U	3.6
35	2d	21	LEU	3.6

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
47	2p	49	LEU	3.6
32	1a	162	A	3.6
6	2G	134	GLY	3.6
53	2y	58	ASN	3.6
6	2G	155	MET	3.6
45	2n	50	LYS	3.6
1	2A	2130	U	3.6
3	1D	275	LYS	3.6
51	1t	41	ILE	3.6
1	1A	2125	G	3.6
6	2G	38	VAL	3.6
6	2G	139	LEU	3.6
40	2i	105	ASP	3.6
53	2y	79	ASN	3.6
41	2j	38	ILE	3.6
31	29	16	VAL	3.6
1	2A	2104	G	3.6
1	2A	2186	G	3.6
1	1A	2134	A	3.5
1	1A	2150	U	3.5
29	17	1	MET	3.5
34	1c	81	GLY	3.5
41	2j	98	ILE	3.5
6	2G	159	VAL	3.5
30	28	49	VAL	3.5
1	2A	1056	G	3.5
1	2A	2206	G	3.5
7	2H	8	PRO	3.5
50	2s	77	THR	3.5
52	2u	8	THR	3.5
1	1A	655	A	3.5
1	1A	1082	U	3.5
22	20	9	SER	3.5
11	2P	103	ALA	3.5
50	2s	12	ASP	3.5
53	2y	8	LYS	3.5
1	1A	1086	A	3.5
34	1c	89	GLU	3.5
14	2S	54	LEU	3.5
33	2b	81	VAL	3.5
34	1c	87	LEU	3.5
40	1i	56	LEU	3.5

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Mol	Chain	Res	Type	RSRZ
40	2i	15	ALA	3.5
1	1A	2136	C	3.5
32	2a	1037	C	3.5
33	2b	97	TRP	3.5
44	2m	4	ILE	3.5
7	2H	113	VAL	3.5
43	1l	43	VAL	3.5
40	2i	92	TYR	3.5
47	1p	39	TYR	3.5
1	1A	2157	G	3.5
32	2a	80	G	3.5
48	1q	37	LYS	3.5
1	1A	2801(A)	A	3.5
1	2A	1067	A	3.5
26	24	43	TYR	3.5
52	1u	15	ARG	3.5
32	2a	1150	U	3.5
47	2p	48	TRP	3.4
1	2A	652(A)	A	3.4
51	2t	6	PRO	3.4
17	2V	70	ILE	3.4
44	2m	22	ILE	3.4
50	1s	5	LEU	3.4
38	2g	25	ALA	3.4
40	1i	76	ALA	3.4
40	2i	45	ALA	3.4
41	2j	10	GLY	3.4
42	2k	14	VAL	3.4
44	2m	3	ARG	3.4
35	2d	150	GLU	3.4
1	2A	2182	G	3.4
43	2l	13	LYS	3.4
6	1G	80	PHE	3.4
32	1a	1004	A	3.4
33	2b	152	PHE	3.4
45	1n	61	TRP	3.4
41	2j	100	THR	3.4
50	2s	79	THR	3.4
52	1u	2	GLY	3.4
1	2A	2180	U	3.4
53	2y	51	ASP	3.4
45	1n	11	LYS	3.4

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Mol	Chain	Res	Type	RSRZ
1	1A	2792	G	3.4
1	2A	2115	G	3.4
35	1d	3	ARG	3.4
48	1q	86	GLU	3.4
14	2S	29	PHE	3.4
41	2j	87	THR	3.4
1	1A	2114	A	3.4
50	2s	31	ILE	3.4
47	1p	62	VAL	3.4
1	1A	2139	C	3.4
1	2A	2183	C	3.4
14	2S	17	ARG	3.4
50	2s	78	ARG	3.4
33	2b	66	GLY	3.4
1	2A	2122	U	3.4
34	1c	47	LEU	3.4
34	1c	160	ALA	3.4
41	1j	54	PHE	3.4
51	1t	68	LYS	3.4
47	2p	19	ILE	3.4
6	2G	15	VAL	3.4
7	2H	19	VAL	3.4
7	2H	43	VAL	3.4
40	2i	28	VAL	3.4
10	2O	51	ALA	3.4
21	2Z	155	LEU	3.4
41	2j	71	LEU	3.4
44	2m	28	ALA	3.4
44	2m	75	ALA	3.4
32	2a	1531	A	3.4
42	2k	30	VAL	3.4
47	1p	51	VAL	3.4
14	2S	33	LYS	3.4
1	2A	2113	U	3.4
41	1j	68	HIS	3.4
52	2u	5	ASP	3.4
40	2i	110	GLU	3.4
6	2G	43	LEU	3.4
33	2b	118	LEU	3.4
43	2l	19	ARG	3.4
14	2S	57	LYS	3.4
35	2d	166	LYS	3.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	1A	1508	A	3.3
1	1A	2167	U	3.3
11	2P	93	GLY	3.3
31	29	30	PRO	3.3
40	1i	8	GLY	3.3
1	2A	1075	C	3.3
32	1a	1043	C	3.3
32	2a	1321	C	3.3
44	2m	65	LYS	3.3
32	1a	204	U	3.3
1	1A	2124	G	3.3
1	2A	2101	G	3.3
1	2A	2112	G	3.3
11	2P	71	VAL	3.3
1	2A	6	A	3.3
53	2y	45	PRO	3.3
40	1i	10	ARG	3.3
41	2j	15	THR	3.3
53	2y	75	ASN	3.3
1	2A	34	C	3.3
40	1i	15	ALA	3.3
38	1g	12	LEU	3.3
7	2H	151	ILE	3.3
51	1t	100	ILE	3.3
35	1d	124	GLY	3.3
45	2n	51	GLY	3.3
33	2b	164	VAL	3.3
43	1l	89	ARG	3.3
1	2A	1847	A	3.3
32	2a	1363(A)	A	3.3
40	2i	71	SER	3.3
38	2g	24	THR	3.3
48	1q	82	MET	3.3
39	1h	112	LEU	3.3
38	2g	32	ARG	3.3
52	1u	13	ILE	3.3
53	1y	45	PRO	3.3
53	2y	7	SER	3.3
1	1A	2807	G	3.3
45	1n	17	LYS	3.3
51	1t	17	ARG	3.3
20	2Y	91	GLU	3.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
34	1c	39	ILE	3.3
44	2m	98	VAL	3.3
48	1q	9	VAL	3.3
1	1A	1071	G	3.3
47	1p	67	THR	3.3
33	1b	207	ALA	3.3
20	1Y	1	MET	3.3
7	2H	148	ILE	3.3
32	1a	1212	U	3.3
45	2n	36	PHE	3.3
26	14	65	ASP	3.3
7	2H	52	VAL	3.3
44	1m	117	VAL	3.3
34	2c	206	GLU	3.3
32	2a	1041	A	3.2
32	2a	1236	A	3.2
1	1A	2148	G	3.2
47	1p	37	GLY	3.2
21	2Z	192	ALA	3.2
34	1c	201	TYR	3.2
39	1h	133	LEU	3.2
35	1d	50	ARG	3.2
33	2b	38	GLY	3.2
1	1A	1084	A	3.2
1	1A	1847	A	3.2
44	2m	51	ALA	3.2
7	2H	4	ILE	3.2
1	1A	2130	U	3.2
34	2c	41	GLY	3.2
40	2i	8	GLY	3.2
7	2H	21	PRO	3.2
32	1a	1003	G	3.2
6	2G	94	LEU	3.2
45	2n	58	LYS	3.2
52	2u	12	LYS	3.2
7	2H	164	TYR	3.2
34	2c	193	TYR	3.2
26	24	59	PHE	3.2
21	2Z	96	VAL	3.2
44	1m	98	VAL	3.2
47	1p	79	VAL	3.2
53	2y	56	THR	3.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
41	2j	8	LEU	3.2
31	29	37	GLY	3.2
47	1p	58	TYR	3.2
45	2n	27	CYS	3.2
53	2y	17	ARG	3.2
34	2c	61	ALA	3.2
1	2A	1083	U	3.2
34	2c	91	LEU	3.2
50	1s	71	LEU	3.2
51	1t	10	LEU	3.2
32	1a	1007	C	3.2
53	1y	58	ASN	3.2
6	2G	11	TYR	3.2
33	1b	133	LYS	3.2
40	2i	41	VAL	3.2
6	2G	24	GLY	3.2
29	17	47	ARG	3.2
33	2b	144	ARG	3.2
40	1i	32	ASP	3.2
52	1u	6	ARG	3.2
31	29	13	LYS	3.2
1	2A	271(J)	C	3.1
1	2A	1536	C	3.1
1	1A	2106	G	3.1
40	2i	87	GLN	3.1
40	2i	64	THR	3.1
44	2m	67	GLU	3.1
44	2m	59	TYR	3.1
26	24	33	VAL	3.1
35	2d	48	ALA	3.1
40	2i	80	GLY	3.1
38	2g	101	LEU	3.1
40	2i	47	LEU	3.1
45	2n	53	LEU	3.1
1	2A	2114	A	3.1
32	2a	1287	A	3.1
33	1b	214	ILE	3.1
47	1p	4	ILE	3.1
1	2A	1089	G	3.1
20	2Y	89	PHE	3.1
32	2a	1024	G	3.1
7	2H	37	VAL	3.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
34	1c	63	ASN	3.1
26	24	36	CYS	3.1
32	1a	470	C	3.1
40	2i	81	ILE	3.1
44	2m	43	THR	3.1
50	1s	4	SER	3.1
41	1j	73	ASP	3.1
34	1c	158	GLY	3.1
52	1u	16	GLY	3.1
43	1l	47	LYS	3.1
50	2s	66	MET	3.1
6	2G	108	ASN	3.1
32	1a	1038	C	3.1
32	1a	1044	A	3.1
48	1q	36	ILE	3.1
29	27	46	VAL	3.1
32	1a	1021	G	3.1
33	1b	165	VAL	3.1
44	2m	24	GLY	3.1
44	2m	95	GLY	3.1
40	1i	5	TYR	3.1
40	2i	125	TYR	3.1
6	2G	49	ASP	3.1
19	2X	92	LEU	3.1
35	1d	152	SER	3.1
1	2A	2103	C	3.1
3	2D	38	LYS	3.1
6	2G	80	PHE	3.1
40	1i	127	LYS	3.1
40	1i	119	ALA	3.1
41	2j	20	ALA	3.1
12	2Q	32	TYR	3.1
32	2a	1042	G	3.1
45	1n	35	ARG	3.1
7	2H	71	LEU	3.1
21	2Z	1	MET	3.1
53	2y	34	LEU	3.1
7	2H	25	LYS	3.1
44	2m	41	PRO	3.1
32	2a	91	C	3.1
34	2c	57	ILE	3.1
35	2d	23	GLY	3.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
6	2G	6	ALA	3.1
6	2G	61	ALA	3.1
32	2a	1004	A	3.1
35	1d	168	ARG	3.1
45	2n	26	ARG	3.1
53	2y	95	ARG	3.1
17	2V	72	VAL	3.0
47	2p	39	TYR	3.0
1	1A	1059	G	3.0
1	2A	1087	G	3.0
53	2y	80	LYS	3.0
6	2G	173	LEU	3.0
26	14	57	GLU	3.0
34	2c	188	LEU	3.0
7	2H	54	ARG	3.0
39	1h	102	ARG	3.0
6	2G	63	ILE	3.0
32	1a	100	C	3.0
32	2a	1140	C	3.0
1	1A	1103	A	3.0
1	2A	1070	A	3.0
36	2e	45	PHE	3.0
47	2p	9	PHE	3.0
1	1A	1176	G	3.0
7	2H	36	PRO	3.0
33	2b	48	MET	3.0
34	1c	94	LEU	3.0
41	1j	39	PRO	3.0
44	2m	68	GLY	3.0
53	1y	77	LEU	3.0
34	2c	37	GLN	3.0
41	2j	23	ILE	3.0
1	2A	2188	C	3.0
14	2S	51	ALA	3.0
20	2Y	44	ILE	3.0
1	1A	1085	A	3.0
43	1l	18	VAL	3.0
19	2X	60	ARG	3.0
1	1A	2131	G	3.0
17	2V	71	LEU	3.0
19	2X	57	LEU	3.0
40	2i	70	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
53	2y	16	ILE	3.0
44	2m	108	ARG	3.0
34	2c	207	VAL	3.0
48	1q	10	VAL	3.0
50	2s	51	VAL	3.0
4	2E	115	GLY	3.0
26	24	64	GLY	3.0
23	21	83	GLU	3.0
33	2b	31	TYR	3.0
6	2G	103	LEU	3.0
29	27	1	MET	3.0
32	2a	1224	G	3.0
1	2A	2897	U	3.0
26	24	55	ARG	3.0
33	2b	124	SER	3.0
41	2j	75	ILE	3.0
1	1A	1102	C	3.0
32	2a	1006	C	3.0
50	2s	28	LYS	3.0
41	1j	97	GLU	3.0
14	2S	69	VAL	3.0
40	2i	53	VAL	3.0
47	1p	53	VAL	3.0
50	1s	19	VAL	3.0
51	1t	79	ARG	3.0
3	2D	276	LYS	3.0
40	1i	43	ALA	3.0
45	1n	60	SER	3.0
6	2G	149	VAL	3.0
32	1a	1040	U	3.0
40	2i	121	ARG	3.0
42	2k	126	ARG	3.0
53	1y	41	LEU	2.9
1	2A	1099	G	2.9
40	2i	77	ILE	2.9
40	2i	33	PHE	2.9
47	2p	20	VAL	2.9
8	2I	38	LEU	2.9
33	2b	44	LEU	2.9
47	1p	7	ALA	2.9
33	1b	227	GLY	2.9
39	1h	38	ILE	2.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
6	2G	51	ARG	2.9
6	2G	109	VAL	2.9
41	1j	49	VAL	2.9
32	2a	1005	A	2.9
51	1t	70	SER	2.9
11	2P	37	GLY	2.9
28	26	50	ARG	2.9
14	2S	40	ILE	2.9
48	1q	90	ILE	2.9
1	2A	2893	G	2.9
32	1a	102	G	2.9
32	1a	306	G	2.9
32	2a	470	C	2.9
33	2b	146	GLN	2.9
39	1h	93	VAL	2.9
35	1d	163	GLU	2.9
1	2A	2189	U	2.9
3	2D	37	LEU	2.9
7	2H	88	LEU	2.9
23	2I	26	ARG	2.9
34	2c	101	LEU	2.9
6	2G	73	ALA	2.9
34	2c	60	ALA	2.9
43	2l	64	TYR	2.9
33	2b	185	ILE	2.9
1	1A	1058	G	2.9
32	1a	218	C	2.9
32	1a	630	G	2.9
32	1a	1006	C	2.9
32	2a	1354	C	2.9
24	22	63	VAL	2.9
41	1j	44	VAL	2.9
43	2l	18	VAL	2.9
45	2n	56	VAL	2.9
52	1u	11	GLY	2.9
35	1d	120	LEU	2.9
12	2Q	121	ALA	2.9
20	2Y	5	MET	2.9
44	2m	72	ALA	2.9
47	1p	76	GLN	2.9
50	2s	76	PRO	2.9
41	2j	6	ILE	2.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
43	1l	7	ILE	2.9
45	2n	42	ILE	2.9
45	1n	12	ARG	2.9
1	2A	2185	C	2.9
6	2G	28	VAL	2.9
27	15	60	VAL	2.9
32	2a	998	G	2.9
40	1i	109	VAL	2.9
48	2q	10	VAL	2.9
24	12	70	GLN	2.9
43	1l	23	LYS	2.9
36	2e	21	ALA	2.9
26	24	7	PRO	2.9
40	2i	111	ARG	2.9
46	1o	88	ARG	2.9
53	1y	71	TYR	2.9
1	1A	272(A)	U	2.8
35	2d	67	ILE	2.8
34	2c	165	THR	2.8
45	2n	22	THR	2.8
50	2s	35	SER	2.8
22	20	52	GLY	2.8
1	1A	2178	C	2.8
33	1b	135	GLN	2.8
38	1g	13	GLN	2.8
51	1t	45	GLN	2.8
51	1t	69	GLY	2.8
7	2H	40	GLU	2.8
32	2a	1023	G	2.8
32	2a	1220	G	2.8
51	1t	64	ASP	2.8
33	2b	21	ARG	2.8
40	2i	9	ARG	2.8
35	1d	4	TYR	2.8
40	1i	11	LYS	2.8
53	2y	64	SER	2.8
51	1t	75	ASN	2.8
1	1A	2163	C	2.8
50	1s	58	VAL	2.8
45	1n	3	ARG	2.8
3	1D	37	LEU	2.8
40	2i	106	ALA	2.8

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
6	2G	86	MET	2.8
35	2d	26	CYS	2.8
50	2s	30	LEU	2.8
6	2G	161	THR	2.8
20	2Y	80	GLY	2.8
44	1m	87	TYR	2.8
12	2Q	65	PHE	2.8
7	2H	99	VAL	2.8
16	2U	41	ALA	2.8
35	2d	149	ALA	2.8
36	1e	21	ALA	2.8
1	1A	2104	G	2.8
1	1A	2187	G	2.8
1	2A	2207	G	2.8
35	2d	78	LEU	2.8
41	2j	85	LEU	2.8
42	2k	98	LEU	2.8
48	2q	22	LEU	2.8
1	1A	229	A	2.8
31	29	9	ARG	2.8
32	2a	1256	A	2.8
50	2s	61	TYR	2.8
21	2Z	193	GLU	2.8
40	1i	78	LYS	2.8
44	2m	8	GLU	2.8
1	1A	886	C	2.8
1	2A	1102	C	2.8
33	2b	113	HIS	2.8
34	2c	136	GLN	2.8
40	2i	31	GLN	2.8
3	2D	272	ALA	2.8
41	1j	32	ALA	2.8
53	2y	94	ALA	2.8
41	2j	39	PRO	2.8
44	1m	96	LEU	2.8
44	2m	81	LEU	2.8
1	1A	2165	G	2.8
1	2A	2184	G	2.8
45	2n	41	ARG	2.8
50	1s	29	ARG	2.8
52	2u	10	ARG	2.8
40	1i	7	THR	2.8

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
53	2y	53	THR	2.8
32	1a	841	U	2.8
1	1A	1095	A	2.8
33	1b	19	HIS	2.8
34	2c	195	VAL	2.8
40	1i	108	VAL	2.8
3	2D	275	LYS	2.8
34	2c	32	LEU	2.8
41	2j	35	SER	2.8
45	2n	11	LYS	2.8
1	1A	2160	G	2.8
1	2A	1093	G	2.8
32	1a	220	G	2.8
26	14	63	TYR	2.8
11	2P	76	LYS	2.8
52	2u	7	ARG	2.8
8	2I	18	VAL	2.7
32	2a	1223	C	2.7
40	1i	26	VAL	2.7
53	2y	15	ALA	2.7
6	2G	182	LYS	2.7
1	2A	1084	A	2.7
6	2G	136	ARG	2.7
11	2P	15	ARG	2.7
48	1q	25	ARG	2.7
50	2s	36	ARG	2.7
16	2U	40	PHE	2.7
36	1e	6	PHE	2.7
43	1l	52	LEU	2.7
40	2i	11	LYS	2.7
44	1m	114	ARG	2.7
32	2a	1022	G	2.7
1	2A	1081	U	2.7
1	2A	1098	A	2.7
15	1T	37	GLY	2.7
39	1h	128	GLY	2.7
1	1A	2175	C	2.7
1	2A	2794	C	2.7
6	1G	48	GLU	2.7
32	2a	1452	C	2.7
47	1p	2	VAL	2.7
40	1i	118	LYS	2.7

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
40	2i	113	LYS	2.7
47	1p	35	LYS	2.7
32	2a	1349	A	2.7
15	2T	66	VAL	2.7
29	17	41	ARG	2.7
32	2a	1116	C	2.7
40	1i	17	VAL	2.7
45	2n	31	ARG	2.7
35	1d	186	LEU	2.7
50	2s	64	GLU	2.7
52	1u	3	LYS	2.7
1	2A	271(I)	G	2.7
40	2i	13	ALA	2.7
45	1n	10	ALA	2.7
50	2s	3	ARG	2.7
7	2H	157	TYR	2.7
47	1p	38	TYR	2.7
34	1c	10	PHE	2.7
1	1A	1083	U	2.7
1	2A	1043	C	2.7
37	2f	45	LEU	2.7
48	1q	89	LEU	2.7
26	24	16	CYS	2.7
7	2H	29	PRO	2.7
41	2j	91	PRO	2.7
41	1j	96	ILE	2.7
32	2a	976	G	2.7
32	2a	1202	G	2.7
44	2m	50	GLU	2.7
1	1A	1057	A	2.7
25	23	15	TYR	2.7
42	2k	75	TYR	2.7
6	2G	178	PHE	2.7
7	2H	65	HIS	2.7
22	20	10	THR	2.7
31	29	25	VAL	2.7
32	2a	1137	C	2.7
8	2I	90	GLY	2.7
52	2u	11	GLY	2.7
33	1b	175	ARG	2.6
43	1l	94	PRO	2.6
52	2u	23	PRO	2.6

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
6	2G	104	GLU	2.6
40	1i	112	LYS	2.6
1	1A	2181	G	2.6
1	2A	1816	G	2.6
1	2A	655	A	2.6
7	2H	114	VAL	2.6
8	2I	123	LEU	2.6
26	24	17	GLY	2.6
35	1d	11	LEU	2.6
50	1s	39	THR	2.6
40	1i	51	ARG	2.6
42	2k	91	ARG	2.6
52	1u	22	ARG	2.6
53	1y	23	ARG	2.6
1	2A	277	C	2.6
6	1G	148	MET	2.6
40	2i	60	ASP	2.6
1	2A	1082	U	2.6
32	1a	1446	U	2.6
50	2s	53	ASN	2.6
31	29	10	ILE	2.6
39	1h	84	ARG	2.6
8	2I	34	GLY	2.6
1	1A	2120	G	2.6
1	2A	1062	G	2.6
32	1a	78	G	2.6
33	1b	128	GLU	2.6
1	2A	896	A	2.6
1	2A	1057	A	2.6
33	2b	132	LYS	2.6
34	2c	120	VAL	2.6
40	2i	86	VAL	2.6
41	2j	49	VAL	2.6
45	2n	33	VAL	2.6
50	1s	61	TYR	2.6
35	2d	33	MET	2.6
41	1j	86	MET	2.6
32	1a	1223	C	2.6
32	2a	1040	U	2.6
8	2I	59	ALA	2.6
10	2O	69	ILE	2.6
16	1U	69	CYS	2.6

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
19	2X	34	ALA	2.6
23	21	7	ILE	2.6
36	2e	86	ALA	2.6
46	1o	89	GLY	2.6
8	2I	20	ASP	2.6
26	14	50	VAL	2.6
50	1s	60	VAL	2.6
50	2s	45	VAL	2.6
32	2a	1283	G	2.6
1	1A	1053	C	2.6
34	2c	132	ARG	2.6
41	1j	5	ARG	2.6
53	2y	68	GLU	2.6
18	1W	32	ALA	2.6
40	2i	119	ALA	2.6
8	2I	31	LEU	2.6
33	1b	213	LEU	2.6
35	1d	110	PHE	2.6
35	2d	202	LEU	2.6
40	2i	59	PHE	2.6
6	2G	25	TYR	2.6
35	1d	209	ARG	2.6
44	2m	69	GLU	2.6
45	1n	8	GLU	2.6
49	2r	87	ARG	2.6
6	2G	119	GLY	2.6
40	2i	61	ALA	2.6
35	2d	158	ILE	2.6
41	1j	4	ILE	2.6
41	1j	98	ILE	2.6
47	2p	36	ILE	2.6
47	2p	76	GLN	2.6
42	2k	117	ASN	2.6
40	2i	12	GLU	2.6
7	2H	13	LYS	2.6
23	21	23	LYS	2.6
31	29	15	LYS	2.6
53	2y	23	ARG	2.6
7	2H	24	VAL	2.6
40	2i	101	PHE	2.6
50	1s	9	VAL	2.6
32	1a	63	C	2.6

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
32	1a	163	C	2.6
32	1a	1041	A	2.6
32	2a	1039	C	2.6
32	2a	1353	G	2.6
32	2a	1373	G	2.6
40	1i	120	ARG	2.5
41	1j	59	SER	2.5
44	2m	80	ARG	2.5
48	1q	91	ARG	2.5
51	1t	23	ARG	2.5
53	1y	2	THR	2.5
8	1I	38	LEU	2.5
12	2Q	34	LEU	2.5
34	2c	43	LEU	2.5
51	1t	20	LEU	2.5
1	1A	2109	U	2.5
12	2Q	97	VAL	2.5
26	24	21	VAL	2.5
32	2a	1020	U	2.5
53	1y	9	GLN	2.5
26	14	30	GLU	2.5
32	2a	174	C	2.5
1	1A	2171	A	2.5
34	2c	4	LYS	2.5
32	2a	79	G	2.5
12	2Q	60	ARG	2.5
44	2m	94	ARG	2.5
7	2H	129	THR	2.5
53	2y	14	PRO	2.5
45	2n	8	GLU	2.5
3	2D	5	LYS	2.5
33	2b	105	PHE	2.5
43	1l	20	LYS	2.5
40	2i	57	GLY	2.5
53	2y	65	GLY	2.5
1	1A	2179	C	2.5
32	2a	979	C	2.5
34	2c	184	TYR	2.5
29	27	45	ALA	2.5
32	2a	1068	G	2.5
48	1q	99	SER	2.5
40	1i	74	ILE	2.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
44	1m	116	THR	2.5
47	1p	33	ILE	2.5
48	2q	36	ILE	2.5
51	2t	41	ILE	2.5
40	2i	49	PRO	2.5
47	2p	46	PRO	2.5
45	2n	9	LYS	2.5
8	2I	30	LEU	2.5
40	1i	20	ARG	2.5
17	1V	61	VAL	2.5
7	2H	20	ALA	2.5
44	1m	51	ALA	2.5
1	1A	2135	A	2.5
1	1A	2897	U	2.5
32	2a	532	A	2.5
32	2a	1447	A	2.5
6	2G	147	ASP	2.5
32	1a	184	G	2.5
32	1a	1017	G	2.5
41	1j	17	ASP	2.5
33	1b	232	PRO	2.5
39	2h	38	ILE	2.5
53	1y	40	ILE	2.5
22	20	77	ARG	2.5
24	22	7	ARG	2.5
41	2j	69	ASN	2.5
39	1h	10	LEU	2.5
8	2I	117	GLU	2.5
12	2Q	35	VAL	2.5
14	2S	14	VAL	2.5
34	2c	44	GLU	2.5
43	1l	55	VAL	2.5
33	2b	133	LYS	2.5
48	1q	87	LYS	2.5
51	1t	14	LYS	2.5
51	1t	19	SER	2.5
7	2H	130	ARG	2.5
32	1a	1285	A	2.5
30	28	58	ILE	2.5
53	1y	78	ILE	2.5
40	1i	117	HIS	2.5
35	2d	69	GLY	2.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
3	2D	182	LEU	2.5
22	20	75	LEU	2.5
39	2h	112	LEU	2.5
41	1j	90	LEU	2.5
41	2j	16	LEU	2.5
43	1l	91	LYS	2.5
1	1A	1094	U	2.5
53	1y	48	PHE	2.5
6	2G	56	ALA	2.5
6	2G	110	ALA	2.5
1	1A	1104	C	2.5
1	1A	2128	C	2.5
1	1A	2177	C	2.5
45	2n	19	ARG	2.5
52	2u	22	ARG	2.5
18	1W	100	THR	2.5
7	2H	30	LYS	2.5
20	2Y	81	LYS	2.5
34	2c	194	GLY	2.5
51	1t	16	HIS	2.5
41	1j	38	ILE	2.5
1	2A	1060	U	2.5
32	1a	1136	U	2.5
6	2G	82	LEU	2.5
35	2d	58	LEU	2.5
44	2m	70	LEU	2.5
51	2t	10	LEU	2.5
13	2R	68	ARG	2.4
34	1c	38	ARG	2.4
47	1p	5	ARG	2.4
4	2E	28	ALA	2.4
18	2W	50	VAL	2.4
53	2y	60	VAL	2.4
26	24	53	GLU	2.4
20	2Y	55	TYR	2.4
35	2d	20	TYR	2.4
38	2g	85	TYR	2.4
46	2o	89	GLY	2.4
32	2a	1157	A	2.4
33	2b	162	ILE	2.4
34	1c	8	ILE	2.4
34	1c	14	ILE	2.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
7	2H	42	ARG	2.4
14	2S	13	ARG	2.4
45	1n	29	ARG	2.4
7	2H	7	LEU	2.4
35	1d	101	LEU	2.4
35	2d	96	LEU	2.4
39	1h	119	LEU	2.4
51	1t	62	LEU	2.4
23	2l	78	LYS	2.4
44	2m	115	LYS	2.4
53	2y	91	LYS	2.4
6	2G	141	PHE	2.4
21	1Z	188	ALA	2.4
22	10	66	VAL	2.4
33	2b	93	VAL	2.4
33	2b	181	PHE	2.4
39	2h	47	GLY	2.4
19	2X	69	TYR	2.4
51	1t	80	ARG	2.4
1	1A	529	A	2.4
32	1a	389	A	2.4
45	2n	60	SER	2.4
1	2A	1058	G	2.4
8	1I	6	LEU	2.4
35	1d	21	LEU	2.4
40	2i	19	LEU	2.4
21	1Z	51	ALA	2.4
6	2G	70	VAL	2.4
16	2U	2	PRO	2.4
50	1s	67	VAL	2.4
34	2c	89	GLU	2.4
44	1m	93	ARG	2.4
17	2V	81	TYR	2.4
18	2W	95	ILE	2.4
6	1G	78	SER	2.4
32	2a	1248	A	2.4
14	2S	32	LEU	2.4
34	2c	104	GLN	2.4
40	1i	31	GLN	2.4
40	2i	56	LEU	2.4
47	2p	74	LEU	2.4
1	1A	2122	U	2.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
6	2G	158	ALA	2.4
32	1a	1224	G	2.4
33	2b	101	MET	2.4
38	2g	152	ALA	2.4
42	2k	89	ALA	2.4
14	2S	5	THR	2.4
19	2X	81	VAL	2.4
20	2Y	39	VAL	2.4
22	20	45	PHE	2.4
22	20	57	PHE	2.4
44	2m	54	VAL	2.4
50	2s	13	ASP	2.4
50	2s	42	PRO	2.4
34	1c	179	ARG	2.4
36	2e	84	PHE	2.4
45	2n	17	LYS	2.4
32	2a	1320	C	2.4
8	1I	29	TYR	2.4
31	29	26	ILE	2.4
45	1n	21	TYR	2.4
8	2I	9	LEU	2.4
9	1N	33	LEU	2.4
22	20	62	LEU	2.4
25	23	23	LEU	2.4
32	2a	1250	A	2.4
6	2G	9	ARG	2.4
14	2S	11	LYS	2.4
8	2I	46	ALA	2.4
34	2c	54	ARG	2.4
34	2c	164	ARG	2.4
35	1d	195	ALA	2.4
36	1e	22	GLY	2.4
40	2i	120	ARG	2.4
45	2n	4	LYS	2.4
44	2m	76	ALA	2.4
44	2m	100	GLY	2.4
1	1A	2101	G	2.4
31	29	11	CYS	2.4
35	1d	105	VAL	2.4
42	2k	31	THR	2.4
16	2U	24	TYR	2.4
36	1e	133	TYR	2.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
39	1h	94	TYR	2.4
51	1t	29	LYS	2.4
24	22	69	ARG	2.4
34	1c	172	ARG	2.4
33	1b	228	GLY	2.4
34	1c	41	GLY	2.4
6	2G	19	LEU	2.4
38	2g	12	LEU	2.4
46	1o	34	LEU	2.4
43	1l	25	PRO	2.4
38	2g	144	MET	2.4
44	1m	42	ALA	2.4
53	2y	98	ALA	2.4
26	24	57	GLU	2.4
28	16	5	VAL	2.4
33	2b	136	VAL	2.4
35	2d	198	VAL	2.4
39	2h	19	VAL	2.4
40	2i	124	GLN	2.4
45	1n	37	PHE	2.4
53	2y	82	GLU	2.4
1	2A	1026	U	2.3
40	2i	23	ASN	2.4
1	1A	34	C	2.3
1	1A	2164	C	2.3
32	1a	217	C	2.3
35	1d	49	ARG	2.3
6	2G	88	ILE	2.3
14	2S	7	TYR	2.3
50	2s	72	GLY	2.3
14	2S	56	LEU	2.3
39	1h	101	PRO	2.3
40	1i	110	GLU	2.3
44	1m	97	PRO	2.3
53	2y	97	ALA	2.3
38	2g	89	MET	2.3
5	2F	57	VAL	2.3
7	2H	17	VAL	2.3
53	1y	42	SER	2.3
1	1A	2162	G	2.3
32	1a	1361	G	2.3
22	20	76	GLY	2.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
32	1a	174	C	2.3
32	2a	1195	C	2.3
32	2a	1397	C	2.3
44	2m	26	GLY	2.3
5	2F	64	ILE	2.3
7	2H	159	GLU	2.3
38	2g	153	HIS	2.3
40	1i	77	ILE	2.3
47	1p	36	ILE	2.3
14	1S	51	ALA	2.3
1	2A	2895	U	2.3
34	1c	83	ARG	2.3
44	2m	114	ARG	2.3
39	2h	4	ASP	2.3
40	1i	105	ASP	2.3
17	2V	75	PHE	2.3
46	2o	60	VAL	2.3
48	2q	9	VAL	2.3
1	1A	2100	G	2.3
1	2A	2319	G	2.3
40	2i	6	GLY	2.3
32	2a	1008	C	2.3
32	2a	1363	C	2.3
1	1A	1963	U	2.3
32	2a	723	U	2.3
18	1W	69	LEU	2.3
34	2c	149	ALA	2.3
35	1d	132	ARG	2.3
35	2d	73	ARG	2.3
44	1m	102	ARG	2.3
47	1p	81	ARG	2.3
48	2q	51	TYR	2.3
50	1s	15	LEU	2.3
4	2E	168	MET	2.3
51	1t	71	THR	2.3
52	1u	8	THR	2.3
21	1Z	203	GLU	2.3
25	23	11	SER	2.3
43	1l	22	SER	2.3
35	2d	75	PHE	2.3
48	2q	11	VAL	2.3
36	2e	20	GLN	2.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
38	2g	86	GLN	2.3
3	2D	273	ARG	2.3
32	2a	1249	C	2.3
44	2m	91	ARG	2.3
47	1p	57	ARG	2.3
8	2I	74	ASN	2.3
53	2y	36	ASN	2.3
6	2G	151	ALA	2.3
11	2P	31	ALA	2.3
41	2j	89	ASP	2.3
51	1t	77	ALA	2.3
8	2I	89	TYR	2.3
35	2d	186	LEU	2.3
53	2y	85	LEU	2.3
33	1b	146	GLN	2.3
1	1A	887	A	2.3
35	1d	87	GLY	2.3
6	1G	38	VAL	2.3
34	1c	195	VAL	2.3
42	1k	125	PHE	2.3
32	2a	1148	U	2.3
6	2G	35	GLU	2.3
41	1j	41	PRO	2.3
47	1p	14	ASN	2.3
18	2W	96	ILE	2.3
32	1a	177	C	2.3
32	1a	221	C	2.3
35	2d	22	LYS	2.3
42	2k	29	ILE	2.3
50	1s	62	ILE	2.3
33	1b	123	ALA	2.3
45	2n	30	ALA	2.3
7	2H	106	THR	2.3
14	2S	4	LEU	2.3
18	1W	107	LEU	2.3
46	2o	34	LEU	2.3
47	1p	61	SER	2.3
51	1t	40	ALA	2.3
53	2y	72	THR	2.3
45	1n	27	CYS	2.3
52	2u	18	TYR	2.3
35	2d	6	GLY	2.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
4	1E	163	GLU	2.3
22	20	74	ARG	2.3
32	1a	202	U	2.3
32	2a	1219	U	2.3
3	1D	3	VAL	2.3
32	1a	134	A	2.3
32	2a	1279	A	2.3
6	2G	112	PRO	2.3
40	2i	25	LYS	2.3
47	1p	46	PRO	2.3
18	1W	96	ILE	2.3
21	2Z	197	ILE	2.3
26	24	31	ILE	2.3
32	1a	840	C	2.3
32	1a	1137	C	2.3
34	1c	168	ALA	2.3
36	1e	58	ALA	2.3
48	2q	60	ILE	2.3
50	1s	20	LEU	2.2
51	2t	62	LEU	2.2
22	20	42	GLY	2.2
50	2s	47	HIS	2.2
3	1D	38	LYS	2.2
44	2m	111	LYS	2.2
1	1A	1046	A	2.2
6	2G	160	VAL	2.2
7	2H	50	VAL	2.2
7	2H	107	VAL	2.2
32	1a	161	A	2.2
33	1b	229	VAL	2.2
35	2d	56	VAL	2.2
53	1y	49	VAL	2.2
4	2E	120	TRP	2.2
40	1i	49	PRO	2.2
1	1A	1914	C	2.2
4	1E	68	ALA	2.2
33	1b	185	ILE	2.2
40	1i	104	ARG	2.2
44	2m	107	ALA	2.2
47	1p	56	ALA	2.2
43	1l	61	THR	2.2
44	2m	103	THR	2.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	2A	2192	G	2.2
4	1E	195	LEU	2.2
32	1a	1009	G	2.2
39	1h	59	LEU	2.2
47	2p	10	GLY	2.2
48	1q	31	LEU	2.2
53	1y	24	LEU	2.2
6	1G	2	PRO	2.2
8	2I	85	GLU	2.2
34	1c	90	GLU	2.2
44	1m	53	VAL	2.2
9	1N	42	TRP	2.2
25	23	30	ARG	2.2
33	1b	97	TRP	2.2
35	1d	122	ARG	2.2
46	2o	68	ARG	2.2
1	1A	2103	C	2.2
1	1A	2185	C	2.2
9	2N	85	ILE	2.2
19	2X	8	ILE	2.2
37	1f	25	ILE	2.2
40	2i	24	GLY	2.2
6	2G	7	LEU	2.2
8	2I	5	LEU	2.2
15	2T	114	LEU	2.2
39	2h	119	LEU	2.2
48	1q	83	ASP	2.2
1	1A	2182	G	2.2
26	14	32	TYR	2.2
46	1o	78	TYR	2.2
52	1u	21	TYR	2.2
9	1N	126	PRO	2.2
46	1o	68	ARG	2.2
32	2a	1532	U	2.2
34	2c	86	VAL	2.2
41	1j	24	VAL	2.2
38	2g	62	PHE	2.2
1	1A	1069	A	2.2
32	1a	1046	A	2.2
39	2h	131	GLY	2.2
5	2F	39	TRP	2.2
6	2G	116	ASP	2.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
27	25	14	ALA	2.2
34	2c	22	TRP	2.2
7	2H	121	ILE	2.2
10	1O	108	GLU	2.2
32	1a	1322	C	2.2
33	1b	129	GLU	2.2
34	2c	58	GLU	2.2
27	15	30	LEU	2.2
38	2g	16	LEU	2.2
45	1n	39	LEU	2.2
46	2o	66	LEU	2.2
6	2G	148	MET	2.2
33	1b	36	ARG	2.2
40	2i	78	LYS	2.2
32	2a	1446	U	2.2
40	1i	36	TYR	2.2
20	2Y	24	VAL	2.2
34	2c	154	SER	2.2
37	1f	88	VAL	2.2
34	2c	185	GLY	2.2
40	2i	54	ASP	2.2
53	1y	11	GLU	2.2
36	1e	94	ALA	2.2
40	1i	82	ALA	2.2
44	2m	42	ALA	2.2
45	1n	30	ALA	2.2
47	1p	44	THR	2.2
21	2Z	133	ILE	2.2
34	2c	167	TRP	2.2
32	1a	1039	C	2.2
35	1d	97	LEU	2.2
40	2i	83	ARG	2.2
48	1q	38	ARG	2.2
1	1A	2180	U	2.2
1	2A	11	G	2.2
47	2p	58	TYR	2.2
5	1F	6	VAL	2.2
9	1N	122	VAL	2.2
35	2d	183	GLY	2.2
44	2m	17	VAL	2.2
50	1s	72	GLY	2.2
18	1W	55	ALA	2.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
31	29	8	LYS	2.2
39	1h	98	LYS	2.2
45	1n	4	LYS	2.2
1	1A	2790	A	2.2
1	2A	1096	A	2.2
1	2A	2629	A	2.2
32	2a	978	A	2.2
41	2j	70	ARG	2.2
52	2u	24	ARG	2.2
1	1A	1175	U	2.2
34	2c	134	ILE	2.2
51	2t	100	ILE	2.2
1	1A	2896	C	2.2
14	1S	4	LEU	2.2
19	1X	70	LEU	2.2
21	2Z	91	LEU	2.2
32	1a	92	C	2.2
41	1j	16	LEU	2.2
33	2b	232	PRO	2.2
38	2g	31	MET	2.2
5	1F	86	GLY	2.2
7	2H	27	LYS	2.1
18	2W	60	ASN	2.1
35	1d	86	LYS	2.1
40	1i	80	GLY	2.2
51	2t	42	GLN	2.2
7	2H	83	TYR	2.1
33	2b	33	TYR	2.1
7	2H	49	VAL	2.1
21	1Z	39	VAL	2.1
40	1i	83	ARG	2.1
46	2o	27	VAL	2.1
50	1s	10	PHE	2.1
5	1F	167	ALA	2.1
16	1U	67	ALA	2.1
41	1j	20	ALA	2.1
1	1A	6	A	2.1
9	1N	68	GLU	2.1
32	2a	994	A	2.1
41	2j	50	ILE	2.1
1	1A	2188	C	2.1
1	2A	885	C	2.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
3	2D	155	LEU	2.1
6	2G	133	LEU	2.1
18	2W	29	LEU	2.1
51	1t	61	SER	2.1
51	1t	65	LYS	2.1
44	2m	106	ASN	2.1
53	1y	10	MET	2.1
7	2H	51	ARG	2.1
22	20	11	ARG	2.1
41	1j	60	ARG	2.1
6	2G	137	GLU	2.1
7	1H	26	VAL	2.1
7	1H	44	VAL	2.1
8	2I	92	VAL	2.1
38	2g	105	VAL	2.1
39	2h	95	VAL	2.1
43	1l	96	VAL	2.1
3	2D	15	PHE	2.1
18	1W	56	ALA	2.1
33	2b	139	LYS	2.1
45	1n	50	LYS	2.1
21	2Z	171	ILE	2.1
32	1a	101	A	2.1
50	2s	56	GLN	2.1
21	2Z	144	LEU	2.1
27	15	58	LEU	2.1
33	1b	61	LEU	2.1
1	2A	1080	C	2.1
35	1d	71	SER	2.1
40	1i	47	LEU	2.1
43	2l	93	LEU	2.1
44	2m	113	PRO	2.1
48	1q	28	PRO	2.1
48	2q	6	LEU	2.1
23	2l	29	GLY	2.1
33	2b	228	GLY	2.1
44	2m	38	GLY	2.1
5	1F	112	MET	2.1
7	2H	167	GLU	2.1
40	2i	58	HIS	2.1
4	2E	165	VAL	2.1
9	1N	54	VAL	2.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
33	2b	230	VAL	2.1
34	2c	141	VAL	2.1
35	2d	8	VAL	2.1
1	2A	1042	G	2.1
20	2Y	78	ALA	2.1
34	2c	186	PHE	2.1
38	2g	116	ALA	2.1
39	1h	58	TYR	2.1
48	1q	23	VAL	2.1
48	2q	56	VAL	2.1
53	1y	63	ALA	2.1
8	2I	11	ASN	2.1
30	18	46	ARG	2.1
33	1b	96	ARG	2.1
33	1b	144	ARG	2.1
38	1g	42	ILE	2.1
40	1i	93	ARG	2.1
44	2m	57	ARG	2.1
48	2q	91	ARG	2.1
51	1t	83	ARG	2.1
1	1A	652(A)	A	2.1
4	1E	3	GLY	2.1
7	2H	34	GLU	2.1
26	14	53	GLU	2.1
32	2a	1374	A	2.1
40	2i	68	GLY	2.1
40	2i	123	PRO	2.1
44	1m	8	GLU	2.1
47	1p	34	GLU	2.1
1	2A	1090	U	2.1
1	2A	1105	U	2.1
32	1a	1025	U	2.1
43	1l	46	LYS	2.1
3	1D	112	GLN	2.1
17	2V	5	VAL	2.1
21	2Z	100	VAL	2.1
21	2Z	191	VAL	2.1
34	1c	200	ALA	2.1
34	2c	163	ALA	2.1
38	1g	150	ALA	2.1
18	2W	92	ARG	2.1
34	1c	127	ARG	2.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	1A	271(I)	G	2.1
21	2Z	132	ASN	2.1
32	1a	460	G	2.1
41	1j	69	ASN	2.1
9	1N	113	GLY	2.1
6	2G	101	ILE	2.1
36	1e	131	ILE	2.1
39	1h	35	ILE	2.1
44	1m	25	ILE	2.1
3	1D	276	LYS	2.1
21	2Z	201	LYS	2.1
33	1b	132	LYS	2.1
35	1d	85	LYS	2.1
51	2t	84	LEU	2.1
32	1a	1357	A	2.1
1	1A	172	C	2.1
40	2i	117	HIS	2.1
51	1t	42	GLN	2.1
53	2y	69	ASP	2.1
12	1Q	59	ARG	2.1
43	2l	16	GLU	2.1
20	2Y	65	ALA	2.1
41	2j	76	ASN	2.1
9	1N	52	VAL	2.1
20	1Y	15	VAL	2.1
25	13	54	VAL	2.1
25	23	54	VAL	2.1
47	2p	2	VAL	2.1
34	1c	184	TYR	2.1
35	1d	69	GLY	2.1
36	2e	133	TYR	2.1
43	2l	121	GLY	2.1
47	2p	38	TYR	2.1
9	1N	135	PRO	2.1
32	1a	108	G	2.1
32	2a	1142	G	2.1
32	2a	1356	G	2.1
33	2b	145	LEU	2.1
35	1d	67	ILE	2.1
35	1d	78	LEU	2.1
53	2y	81	LEU	2.1
1	2A	890	A	2.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
24	22	12	GLU	2.1
32	1a	977	A	2.1
39	2h	99	GLU	2.1
6	2G	72	ARG	2.1
32	1a	1008	C	2.1
32	2a	1260	C	2.1
32	2a	1288	A	2.1
15	2T	112	ARG	2.1
46	2o	72	ARG	2.1
47	1p	22	THR	2.1
8	1I	36	ALA	2.1
12	2Q	28	ALA	2.1
16	2U	46	ALA	2.1
18	1W	3	ALA	2.1
30	28	21	LYS	2.1
33	1b	218	ALA	2.1
38	2g	117	ALA	2.1
7	2H	22	GLY	2.1
8	1I	19	VAL	2.1
11	2P	125	VAL	2.1
14	2S	53	SER	2.1
22	20	51	VAL	2.1
30	28	14	VAL	2.1
34	1c	159	GLY	2.1
42	2k	42	TRP	2.1
48	2q	73	VAL	2.1
51	1t	11	SER	2.1
4	1E	84	PHE	2.1
1	1A	1746	G	2.0
6	2G	150	ASP	2.0
7	2H	72	ILE	2.0
7	2H	132	ARG	2.0
15	2T	48	ILE	2.0
19	1X	66	LEU	2.0
19	1X	68	ARG	2.0
26	24	61	ARG	2.0
32	1a	1220	G	2.0
32	2a	1355	G	2.0
34	1c	5	ILE	2.0
40	1i	121	ARG	2.0
41	1j	8	LEU	2.0
44	1m	110	ARG	2.0

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
45	1n	26	ARG	2.0
46	1o	65	ARG	2.0
51	2t	55	ILE	2.0
1	2A	1041	C	2.0
19	2X	33	LYS	2.0
1	2A	1762	A	2.0
32	1a	307	C	2.0
7	2H	96	ALA	2.0
9	1N	132	ALA	2.0
35	1d	111	ALA	2.0
50	1s	50	ALA	2.0
50	2s	38	SER	2.0
7	2H	76	VAL	2.0
16	1U	9	VAL	2.0
18	1W	71	VAL	2.0
25	13	41	PRO	2.0
45	2n	52	GLN	2.0
11	2P	102	ARG	2.0
22	20	82	ARG	2.0
23	11	60	PHE	2.0
45	2n	23	ARG	2.0
45	2n	49	HIS	2.0
47	2p	57	ARG	2.0
4	2E	182	LEU	2.0
6	2G	114	ILE	2.0
6	2G	140	ILE	2.0
6	2G	175	LEU	2.0
13	1R	113	LEU	2.0
18	1W	36	LEU	2.0
51	2t	72	LEU	2.0
32	1a	77	G	2.0
32	1a	105	G	2.0
34	2c	63	ASN	2.0
32	2a	848	C	2.0
1	1A	1096	A	2.0
32	2a	975	A	2.0
32	2a	1130	A	2.0
53	2y	76	GLU	2.0
36	2e	16	THR	2.0
52	2u	2	GLY	2.0
5	2F	42	ALA	2.0
6	2G	57	ALA	2.0

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Mol	Chain	Res	Type	RSRZ
25	13	51	ALA	2.0
40	1i	45	ALA	2.0
40	2i	122	ALA	2.0
7	1H	10	PRO	2.0
21	2Z	80	ARG	2.0
41	1j	70	ARG	2.0
18	2W	85	VAL	2.0
34	2c	153	VAL	2.0
13	2R	21	TYR	2.0
38	1g	154	TYR	2.0
3	2D	169	GLU	2.0
4	1E	27	LEU	2.0
4	1E	197	ILE	2.0
5	2F	161	GLU	2.0
6	1G	152	LEU	2.0
9	1N	112	LEU	2.0
15	1T	114	LEU	2.0
33	2b	102	LEU	2.0
39	2h	133	LEU	2.0
53	2y	61	LEU	2.0
1	1A	2802	G	2.0
11	2P	38	GLN	2.0
32	1a	1491	G	2.0
26	14	54	GLY	2.0
32	1a	856	C	2.0
32	1a	1397	C	2.0
1	2A	1359	A	2.0
1	2A	2809	A	2.0
13	1R	41	ALA	2.0
20	2Y	63	LYS	2.0
32	1a	1157	A	2.0
33	1b	137	ARG	2.0
47	1p	25	ARG	2.0
39	1h	110	ALA	2.0
44	1m	107	ALA	2.0
51	1t	30	LYS	2.0
53	2y	25	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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
43	0TD	2l	92	10/11	0.83	0.16	61,66,69,77	0
1	5MU	2A	1915	21/22	0.84	0.12	76,83,86,97	0
32	2MG	2a	1207	24/25	0.88	0.23	78,84,89,90	0
1	5MU	1A	1915	21/22	0.90	0.16	70,77,82,89	0
1	PSU	2A	1917	20/21	0.91	0.13	69,75,86,89	0
32	5MC	2a	967	21/22	0.91	0.19	66,71,76,77	0
32	M2G	2a	966	25/26	0.92	0.16	57,69,80,91	0
1	PSU	1A	1917	20/21	0.92	0.15	63,69,75,76	0
1	PSU	2A	1911	20/21	0.92	0.13	67,71,80,84	0
32	5MC	2a	1404	21/22	0.92	0.20	56,62,66,68	0
32	PSU	2a	516	20/21	0.92	0.13	72,76,82,82	0
43	0TD	1l	92	10/11	0.94	0.16	54,58,62,71	0
32	PSU	1a	516	20/21	0.94	0.13	51,63,66,68	0
32	M2G	1a	966	25/26	0.94	0.16	58,63,68,72	0
32	5MC	1a	967	21/22	0.94	0.20	62,67,74,76	0
32	5MC	2a	1407	21/22	0.94	0.14	57,62,66,69	0
32	MA6	2a	1518	24/25	0.94	0.20	52,63,67,69	0
32	2MG	1a	1207	24/25	0.94	0.16	65,73,77,78	0
32	G7M	2a	527	24/25	0.95	0.16	59,66,71,73	0
1	PSU	1A	1911	20/21	0.95	0.13	61,67,69,70	0
32	4OC	2a	1402	22/23	0.96	0.17	57,64,69,71	0
32	MA6	1a	1519	24/25	0.96	0.21	41,50,53,55	0
32	5MC	1a	1400	21/22	0.96	0.18	48,55,60,62	0
1	OMC	2A	1920	21/22	0.96	0.14	63,65,69,71	0
32	MA6	2a	1519	24/25	0.96	0.22	53,63,66,68	0
32	UR3	1a	1498	21/22	0.96	0.18	44,50,53,55	0
1	OMC	1A	1920	21/22	0.97	0.19	50,56,62,62	0
32	MA6	1a	1518	24/25	0.97	0.19	44,49,53,55	0
32	G7M	1a	527	24/25	0.97	0.20	48,55,58,61	0
32	5MC	2a	1400	21/22	0.97	0.25	63,69,71,72	0
1	OMG	2A	2251	24/25	0.97	0.18	37,42,47,49	0
1	2MA	2A	2503	23/24	0.97	0.19	30,35,39,41	0
1	OMU	2A	2552	21/22	0.97	0.19	35,40,43,49	0
32	UR3	2a	1498	21/22	0.97	0.16	56,61,67,70	0
1	PSU	2A	2605	20/21	0.97	0.19	34,40,49,51	0
32	5MC	1a	1404	21/22	0.97	0.19	40,47,51,53	0
32	5MC	1a	1407	21/22	0.97	0.17	43,52,58,62	0
1	5MC	1A	1962	21/22	0.98	0.18	32,37,41,46	0
1	5MU	2A	1939	21/22	0.98	0.18	33,38,42,48	0
1	5MC	2A	1942	21/22	0.98	0.16	47,51,55,60	0
1	5MC	2A	1962	21/22	0.98	0.18	40,46,51,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
1	MA6	2A	2058	24/25	0.98	0.21	34,39,45,48	0
1	MA6	1A	2058	24/25	0.98	0.23	17,27,34,42	0
1	2MA	1A	2503	23/24	0.98	0.22	20,25,29,30	0
1	OMU	1A	2552	21/22	0.98	0.21	27,32,35,40	0
32	4OC	1a	1402	22/23	0.98	0.18	46,53,54,59	0
1	5MU	1A	1939	21/22	0.98	0.19	26,30,36,38	0
1	5MC	1A	1942	21/22	0.98	0.18	32,37,41,44	0
1	OMG	1A	2251	24/25	0.99	0.21	21,27,30,31	0
1	PSU	1A	2605	20/21	0.99	0.19	26,29,34,37	0

### 6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

### 6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
54	MG	1A	3941	1/1	0.07	0.19	75,75,75,75	0
54	MG	1A	3830	1/1	0.12	0.13	54,54,54,54	0
54	MG	1A	3828	1/1	0.19	0.22	72,72,72,72	0
54	MG	1a	3218	1/1	0.21	0.17	83,83,83,83	0
54	MG	2a	3151	1/1	0.24	0.09	80,80,80,80	0
54	MG	1a	3270	1/1	0.27	0.14	87,87,87,87	0
54	MG	2A	3635	1/1	0.29	0.12	69,69,69,69	0
54	MG	1B	229	1/1	0.32	0.36	72,72,72,72	0
54	MG	2a	3185	1/1	0.34	0.18	75,75,75,75	0
54	MG	2a	3096	1/1	0.35	0.26	74,74,74,74	0
54	MG	1A	3738	1/1	0.35	0.12	70,70,70,70	0
54	MG	2A	3652	1/1	0.35	0.13	62,62,62,62	0
54	MG	2A	3705	1/1	0.36	0.12	68,68,68,68	0
54	MG	2A	3035	1/1	0.36	0.19	78,78,78,78	0
54	MG	1a	3261	1/1	0.38	0.17	77,77,77,77	0
54	MG	1A	3976	1/1	0.39	0.19	43,43,43,43	0
54	MG	2A	3169	1/1	0.39	0.14	65,65,65,65	0
54	MG	1a	3198	1/1	0.40	0.18	67,67,67,67	0
54	MG	1A	3557	1/1	0.41	0.16	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3499	1/1	0.42	0.10	70,70,70,70	0
54	MG	1A	3970	1/1	0.43	0.26	65,65,65,65	0
54	MG	10	107	1/1	0.45	0.21	74,74,74,74	0
54	MG	2A	3538	1/1	0.46	0.07	64,64,64,64	0
54	MG	2Q	202	1/1	0.48	0.13	71,71,71,71	0
54	MG	1A	3428	1/1	0.48	0.22	55,55,55,55	0
54	MG	1a	3211	1/1	0.49	0.15	77,77,77,77	0
54	MG	2A	3564	1/1	0.50	0.11	66,66,66,66	0
54	MG	2A	3633	1/1	0.50	0.18	82,82,82,82	0
54	MG	1A	3977	1/1	0.50	0.17	49,49,49,49	0
54	MG	2A	3557	1/1	0.50	0.09	74,74,74,74	0
54	MG	2A	3689	1/1	0.50	0.09	71,71,71,71	0
54	MG	20	101	1/1	0.51	0.18	75,75,75,75	0
54	MG	2a	3163	1/1	0.51	0.10	63,63,63,63	0
54	MG	2a	3180	1/1	0.51	0.15	73,73,73,73	0
54	MG	1A	3577	1/1	0.51	0.22	63,63,63,63	0
54	MG	2A	3242	1/1	0.52	0.16	73,73,73,73	0
54	MG	1A	3880	1/1	0.52	0.12	57,57,57,57	0
54	MG	2A	3606	1/1	0.52	0.19	52,52,52,52	0
54	MG	1A	3947	1/1	0.52	0.20	57,57,57,57	0
54	MG	2A	3541	1/1	0.52	0.08	77,77,77,77	0
54	MG	2A	3277	1/1	0.53	0.27	70,70,70,70	0
54	MG	2A	3465	1/1	0.53	0.08	64,64,64,64	0
54	MG	1A	3431	1/1	0.54	0.11	72,72,72,72	0
54	MG	2A	3162	1/1	0.54	0.20	64,64,64,64	0
54	MG	1G	203	1/1	0.54	0.14	66,66,66,66	0
54	MG	1A	3711	1/1	0.55	0.14	47,47,47,47	0
54	MG	1A	3749	1/1	0.55	0.23	75,75,75,75	0
54	MG	2A	3196	1/1	0.56	0.23	71,71,71,71	0
54	MG	1a	3109	1/1	0.56	0.11	76,76,76,76	0
54	MG	1A	3777	1/1	0.56	0.20	66,66,66,66	0
54	MG	2A	3547	1/1	0.56	0.13	83,83,83,83	0
54	MG	2A	3657	1/1	0.56	0.26	78,78,78,78	0
54	MG	2A	3402	1/1	0.56	0.09	65,65,65,65	0
54	MG	1A	3881	1/1	0.56	0.22	49,49,49,49	0
54	MG	2I	201	1/1	0.57	0.14	70,70,70,70	0
54	MG	2A	3217	1/1	0.57	0.26	75,75,75,75	0
54	MG	1A	3286	1/1	0.57	0.13	64,64,64,64	0
54	MG	1A	3708	1/1	0.57	0.12	63,63,63,63	0
54	MG	2A	3487	1/1	0.58	0.20	74,74,74,74	0
54	MG	2A	3640	1/1	0.58	0.21	85,85,85,85	0
54	MG	1A	3794	1/1	0.58	0.17	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3524	1/1	0.58	0.16	66,66,66,66	0
54	MG	2A	3582	1/1	0.58	0.22	88,88,88,88	0
54	MG	2A	3063	1/1	0.58	0.26	76,76,76,76	0
54	MG	2A	3194	1/1	0.58	0.16	77,77,77,77	0
59	ZN	24	501	1/1	0.58	0.27	136,136,136,136	0
54	MG	2A	3226	1/1	0.59	0.26	69,69,69,69	0
54	MG	2A	3241	1/1	0.59	0.11	78,78,78,78	0
54	MG	1o	101	1/1	0.59	0.16	68,68,68,68	0
54	MG	1l	202	1/1	0.59	0.16	73,73,73,73	0
54	MG	2G	201	1/1	0.60	0.17	80,80,80,80	0
54	MG	2A	3430	1/1	0.60	0.29	58,58,58,58	0
54	MG	1a	3053	1/1	0.60	0.15	67,67,67,67	0
54	MG	1a	3250	1/1	0.60	0.12	69,69,69,69	0
54	MG	2A	3286	1/1	0.60	0.23	90,90,90,90	0
54	MG	2A	3378	1/1	0.60	0.14	75,75,75,75	0
54	MG	2A	3676	1/1	0.60	0.12	61,61,61,61	0
54	MG	2A	3603	1/1	0.60	0.09	62,62,62,62	0
54	MG	1A	3641	1/1	0.60	0.12	63,63,63,63	0
54	MG	2A	3706	1/1	0.60	0.13	65,65,65,65	0
54	MG	2a	3062	1/1	0.61	0.16	79,79,79,79	0
54	MG	2a	3087	1/1	0.61	0.23	82,82,82,82	0
54	MG	1A	3663	1/1	0.61	0.15	48,48,48,48	0
54	MG	2A	3574	1/1	0.61	0.20	50,50,50,50	0
54	MG	1A	3350	1/1	0.61	0.11	40,40,40,40	0
54	MG	2a	3179	1/1	0.61	0.20	74,74,74,74	0
54	MG	2A	3696	1/1	0.61	0.11	73,73,73,73	0
54	MG	2A	3653	1/1	0.61	0.25	90,90,90,90	0
54	MG	2a	3004	1/1	0.61	0.18	69,69,69,69	0
54	MG	1B	225	1/1	0.62	0.19	80,80,80,80	0
54	MG	2A	3682	1/1	0.62	0.08	60,60,60,60	0
54	MG	2a	3045	1/1	0.62	0.26	79,79,79,79	0
54	MG	2A	3685	1/1	0.62	0.08	74,74,74,74	0
54	MG	1A	3916	1/1	0.62	0.12	61,61,61,61	0
54	MG	1A	3323	1/1	0.62	0.11	55,55,55,55	0
54	MG	2A	3570	1/1	0.62	0.18	65,65,65,65	0
54	MG	2A	3650	1/1	0.62	0.09	85,85,85,85	0
54	MG	2A	3716	1/1	0.62	0.07	76,76,76,76	0
54	MG	1A	3681	1/1	0.62	0.13	79,79,79,79	0
54	MG	1A	3989	1/1	0.62	0.10	87,87,87,87	0
54	MG	1a	3073	1/1	0.62	0.18	76,76,76,76	0
54	MG	1a	3128	1/1	0.63	0.21	66,66,66,66	0
54	MG	1A	3950	1/1	0.63	0.15	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3438	1/1	0.63	0.11	50,50,50,50	0
54	MG	1A	3271	1/1	0.63	0.16	61,61,61,61	0
54	MG	2A	3551	1/1	0.63	0.07	74,74,74,74	0
54	MG	2A	3082	1/1	0.63	0.19	55,55,55,55	0
54	MG	1A	3375	1/1	0.63	0.21	59,59,59,59	0
54	MG	2A	3309	1/1	0.64	0.13	59,59,59,59	0
54	MG	2A	3602	1/1	0.64	0.10	64,64,64,64	0
54	MG	2a	3036	1/1	0.64	0.09	72,72,72,72	0
54	MG	1A	3966	1/1	0.64	0.39	64,64,64,64	0
54	MG	1a	3160	1/1	0.64	0.11	71,71,71,71	0
54	MG	2A	3690	1/1	0.64	0.12	82,82,82,82	0
54	MG	2A	3166	1/1	0.64	0.78	59,59,59,59	0
54	MG	2A	3005	1/1	0.64	0.18	59,59,59,59	0
54	MG	1A	3215	1/1	0.64	0.21	72,72,72,72	0
54	MG	2A	3473	1/1	0.64	0.26	60,60,60,60	0
54	MG	2A	3565	1/1	0.64	0.16	48,48,48,48	0
54	MG	2A	3285	1/1	0.64	0.12	56,56,56,56	0
54	MG	1A	3725	1/1	0.64	0.14	66,66,66,66	0
54	MG	1A	3673	1/1	0.65	0.06	74,74,74,74	0
54	MG	1A	4012	1/1	0.65	1.74	73,73,73,73	0
54	MG	1B	205	1/1	0.65	0.21	69,69,69,69	0
54	MG	2A	3632	1/1	0.65	0.38	74,74,74,74	0
54	MG	1A	3308	1/1	0.65	0.21	53,53,53,53	0
54	MG	1A	3378	1/1	0.65	0.21	61,61,61,61	0
54	MG	2A	3458	1/1	0.65	0.10	59,59,59,59	0
54	MG	2A	3580	1/1	0.65	0.09	59,59,59,59	0
54	MG	2A	3218	1/1	0.65	0.28	69,69,69,69	0
54	MG	1A	3994	1/1	0.66	0.15	84,84,84,84	0
54	MG	1A	3894	1/1	0.66	0.11	62,62,62,62	0
54	MG	2A	3459	1/1	0.66	0.13	60,60,60,60	0
54	MG	2A	3108	1/1	0.66	0.10	73,73,73,73	0
54	MG	2A	3619	1/1	0.66	0.25	44,44,44,44	0
54	MG	2A	3623	1/1	0.66	0.09	63,63,63,63	0
54	MG	2a	3177	1/1	0.66	0.05	68,68,68,68	0
54	MG	1A	3426	1/1	0.66	0.26	33,33,33,33	0
54	MG	2A	3578	1/1	0.66	0.28	53,53,53,53	0
54	MG	1a	3275	1/1	0.66	0.10	76,76,76,76	0
54	MG	2A	3637	1/1	0.66	0.08	79,79,79,79	0
54	MG	2a	3038	1/1	0.67	0.09	72,72,72,72	0
54	MG	1A	3587	1/1	0.67	0.18	54,54,54,54	0
54	MG	1F	311	1/1	0.67	0.20	58,58,58,58	0
54	MG	2A	3522	1/1	0.67	0.41	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	1a	3273	1/1	0.67	0.13	77,77,77,77	0
54	MG	2A	3249	1/1	0.67	0.22	71,71,71,71	0
54	MG	1a	3099	1/1	0.67	0.18	90,90,90,90	0
54	MG	2A	3211	1/1	0.67	0.15	79,79,79,79	0
54	MG	1A	3282	1/1	0.67	0.09	72,72,72,72	0
54	MG	2a	3008	1/1	0.67	0.10	76,76,76,76	0
54	MG	2a	3017	1/1	0.67	0.17	64,64,64,64	0
54	MG	1A	3326	1/1	0.67	0.29	50,50,50,50	0
54	MG	1A	3320	1/1	0.68	0.14	50,50,50,50	0
54	MG	1r	101	1/1	0.68	0.17	73,73,73,73	0
54	MG	2A	3702	1/1	0.68	0.34	66,66,66,66	0
54	MG	1a	3258	1/1	0.68	0.16	73,73,73,73	0
54	MG	2A	3531	1/1	0.68	0.07	61,61,61,61	0
54	MG	15	109	1/1	0.68	0.11	72,72,72,72	0
54	MG	2A	3587	1/1	0.68	0.13	52,52,52,52	0
54	MG	1A	3635	1/1	0.68	0.19	63,63,63,63	0
54	MG	2a	3164	1/1	0.68	0.11	74,74,74,74	0
54	MG	1A	3551	1/1	0.68	0.17	43,43,43,43	0
54	MG	1B	209	1/1	0.68	0.26	74,74,74,74	0
54	MG	2A	3483	1/1	0.68	0.17	66,66,66,66	0
54	MG	1a	3107	1/1	0.68	0.11	76,76,76,76	0
54	MG	2a	3191	1/1	0.68	0.15	73,73,73,73	0
54	MG	2A	3495	1/1	0.68	0.14	65,65,65,65	0
54	MG	1A	3492	1/1	0.69	0.08	63,63,63,63	0
54	MG	1A	3594	1/1	0.69	0.13	46,46,46,46	0
54	MG	2A	3238	1/1	0.69	0.16	47,47,47,47	0
54	MG	2a	3071	1/1	0.69	0.17	80,80,80,80	0
54	MG	1A	3853	1/1	0.69	0.17	52,52,52,52	0
54	MG	1A	3952	1/1	0.69	0.12	50,50,50,50	0
54	MG	2A	3188	1/1	0.69	0.24	74,74,74,74	0
54	MG	1A	3855	1/1	0.69	0.05	53,53,53,53	0
54	MG	2A	3055	1/1	0.69	0.14	68,68,68,68	0
54	MG	2A	3610	1/1	0.69	0.15	51,51,51,51	0
54	MG	2A	3616	1/1	0.69	0.09	78,78,78,78	0
54	MG	2a	3006	1/1	0.69	0.16	62,62,62,62	0
54	MG	2A	3198	1/1	0.69	0.21	66,66,66,66	0
54	MG	2a	3188	1/1	0.69	0.22	90,90,90,90	0
54	MG	1A	3918	1/1	0.69	0.18	73,73,73,73	0
54	MG	1A	3931	1/1	0.69	0.12	56,56,56,56	0
54	MG	2A	3128	1/1	0.70	0.16	63,63,63,63	0
54	MG	2B	217	1/1	0.70	0.10	70,70,70,70	0
54	MG	1a	3244	1/1	0.70	0.55	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	1A	3862	1/1	0.70	0.13	70,70,70,70	0
54	MG	2a	3105	1/1	0.70	0.07	65,65,65,65	0
54	MG	1A	3870	1/1	0.70	0.16	50,50,50,50	0
54	MG	2A	3528	1/1	0.70	0.54	86,86,86,86	0
54	MG	1A	3148	1/1	0.70	0.22	78,78,78,78	0
54	MG	1A	3430	1/1	0.70	0.18	54,54,54,54	0
54	MG	2A	3691	1/1	0.70	0.16	55,55,55,55	0
54	MG	1a	3055	1/1	0.70	0.17	63,63,63,63	0
54	MG	1A	3747	1/1	0.70	0.17	45,45,45,45	0
54	MG	2A	3107	1/1	0.70	0.16	61,61,61,61	0
54	MG	2a	3190	1/1	0.70	0.10	73,73,73,73	0
54	MG	1A	3813	1/1	0.70	0.28	42,42,42,42	0
54	MG	2a	3057	1/1	0.70	0.20	79,79,79,79	0
54	MG	2A	3677	1/1	0.71	0.11	68,68,68,68	0
54	MG	1A	3312	1/1	0.71	0.17	61,61,61,61	0
54	MG	2A	3684	1/1	0.71	0.06	73,73,73,73	0
54	MG	1A	3652	1/1	0.71	0.23	22,22,22,22	0
54	MG	1g	3101	1/1	0.71	0.10	78,78,78,78	0
54	MG	1A	3355	1/1	0.71	0.31	62,62,62,62	0
54	MG	2A	3560	1/1	0.71	0.18	74,74,74,74	0
54	MG	2A	3562	1/1	0.71	0.21	40,40,40,40	0
54	MG	1a	3254	1/1	0.71	0.10	61,61,61,61	0
54	MG	2a	3097	1/1	0.71	0.10	72,72,72,72	0
54	MG	1R	204	1/1	0.71	0.33	53,53,53,53	0
54	MG	2A	3310	1/1	0.71	0.15	68,68,68,68	0
54	MG	2A	3636	1/1	0.71	0.11	73,73,73,73	0
54	MG	2A	3572	1/1	0.71	0.26	81,81,81,81	0
54	MG	2A	3355	1/1	0.71	0.16	55,55,55,55	0
54	MG	2A	3362	1/1	0.71	0.09	71,71,71,71	0
54	MG	1a	3079	1/1	0.71	0.14	52,52,52,52	0
54	MG	1A	3189	1/1	0.71	0.23	60,60,60,60	0
54	MG	2A	3047	1/1	0.71	0.12	67,67,67,67	0
54	MG	2A	3673	1/1	0.71	0.14	74,74,74,74	0
54	MG	2A	3185	1/1	0.71	0.23	68,68,68,68	0
54	MG	2p	101	1/1	0.71	0.14	64,64,64,64	0
54	MG	2a	3011	1/1	0.71	0.25	67,67,67,67	0
54	MG	1A	3531	1/1	0.72	0.15	78,78,78,78	0
54	MG	2A	3523	1/1	0.72	0.23	62,62,62,62	0
54	MG	1A	3996	1/1	0.72	0.13	64,64,64,64	0
54	MG	1A	3216	1/1	0.72	0.16	57,57,57,57	0
54	MG	1A	3716	1/1	0.72	0.05	76,76,76,76	0
54	MG	2a	3089	1/1	0.72	0.09	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3715	1/1	0.72	0.62	54,54,54,54	0
54	MG	2A	3581	1/1	0.72	0.20	63,63,63,63	0
54	MG	2B	211	1/1	0.72	0.16	84,84,84,84	0
54	MG	2a	3145	1/1	0.72	0.11	73,73,73,73	0
54	MG	2A	3451	1/1	0.72	0.33	68,68,68,68	0
54	MG	2a	3156	1/1	0.72	0.11	63,63,63,63	0
54	MG	1A	3760	1/1	0.72	0.22	54,54,54,54	0
54	MG	2A	3597	1/1	0.72	0.22	73,73,73,73	0
54	MG	2A	3669	1/1	0.72	0.12	76,76,76,76	0
54	MG	1A	3831	1/1	0.72	0.28	52,52,52,52	0
54	MG	2A	3549	1/1	0.72	0.13	63,63,63,63	0
54	MG	2A	3290	1/1	0.72	0.09	51,51,51,51	0
54	MG	2A	3142	1/1	0.72	0.21	73,73,73,73	0
54	MG	2A	3026	1/1	0.72	0.14	52,52,52,52	0
54	MG	2A	3354	1/1	0.72	0.22	45,45,45,45	0
54	MG	1A	3691	1/1	0.72	0.46	54,54,54,54	0
54	MG	1E	308	1/1	0.72	0.16	58,58,58,58	0
54	MG	2A	3383	1/1	0.73	0.19	40,40,40,40	0
54	MG	2A	3387	1/1	0.73	0.14	52,52,52,52	0
54	MG	2A	3658	1/1	0.73	0.15	60,60,60,60	0
54	MG	1A	3143	1/1	0.73	0.24	62,62,62,62	0
54	MG	2A	3672	1/1	0.73	0.12	69,69,69,69	0
54	MG	2A	3105	1/1	0.73	0.15	59,59,59,59	0
54	MG	2a	3106	1/1	0.73	0.21	64,64,64,64	0
54	MG	1A	3854	1/1	0.73	0.11	49,49,49,49	0
54	MG	1a	3137	1/1	0.73	0.16	71,71,71,71	0
54	MG	2A	3681	1/1	0.73	0.18	78,78,78,78	0
54	MG	1A	3409	1/1	0.73	0.18	50,50,50,50	0
54	MG	1a	3195	1/1	0.73	0.12	63,63,63,63	0
54	MG	1a	3003	1/1	0.73	0.49	71,71,71,71	0
54	MG	1a	3023	1/1	0.73	0.13	64,64,64,64	0
54	MG	1a	3039	1/1	0.73	0.09	80,80,80,80	0
54	MG	2a	3024	1/1	0.73	0.24	67,67,67,67	0
54	MG	2A	3592	1/1	0.73	0.10	72,72,72,72	0
54	MG	2A	3694	1/1	0.73	0.10	68,68,68,68	0
54	MG	2A	3641	1/1	0.73	0.17	68,68,68,68	0
54	MG	2A	3180	1/1	0.73	0.18	74,74,74,74	0
54	MG	1a	3225	1/1	0.73	0.09	73,73,73,73	0
54	MG	2A	3479	1/1	0.74	0.18	64,64,64,64	0
54	MG	1A	3036	1/1	0.74	0.12	40,40,40,40	0
54	MG	2A	3485	1/1	0.74	0.17	70,70,70,70	0
54	MG	2a	3069	1/1	0.74	0.13	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3186	1/1	0.74	0.19	72,72,72,72	0
54	MG	1A	3525	1/1	0.74	0.15	47,47,47,47	0
54	MG	1A	3737	1/1	0.74	0.27	71,71,71,71	0
54	MG	1A	3583	1/1	0.74	0.17	54,54,54,54	0
54	MG	1a	3271	1/1	0.74	0.16	78,78,78,78	0
54	MG	2A	3732	1/1	0.74	0.13	67,67,67,67	0
54	MG	2A	3655	1/1	0.74	0.13	56,56,56,56	0
54	MG	2B	216	1/1	0.74	0.15	74,74,74,74	0
54	MG	1A	3528	1/1	0.74	0.22	53,53,53,53	0
54	MG	1A	3588	1/1	0.74	0.42	74,74,74,74	0
54	MG	1A	3283	1/1	0.74	0.10	82,82,82,82	0
54	MG	2A	3222	1/1	0.74	0.13	63,63,63,63	0
54	MG	1A	3608	1/1	0.74	0.65	68,68,68,68	0
54	MG	1a	3093	1/1	0.74	0.15	75,75,75,75	0
54	MG	1a	3233	1/1	0.74	0.18	76,76,76,76	0
54	MG	1y	202	1/1	0.74	0.10	69,69,69,69	0
54	MG	10	106	1/1	0.74	0.14	59,59,59,59	0
54	MG	2A	3275	1/1	0.74	0.26	67,67,67,67	0
54	MG	2A	3626	1/1	0.74	0.05	80,80,80,80	0
54	MG	1A	3347	1/1	0.74	0.15	60,60,60,60	0
54	MG	2A	3183	1/1	0.74	0.26	58,58,58,58	0
54	MG	1a	3178	1/1	0.75	0.18	76,76,76,76	0
54	MG	1a	3090	1/1	0.75	0.14	51,51,51,51	0
54	MG	1a	3025	1/1	0.75	0.09	64,64,64,64	0
54	MG	2A	3281	1/1	0.75	0.10	64,64,64,64	0
54	MG	2A	3034	1/1	0.75	0.19	62,62,62,62	0
54	MG	2a	3002	1/1	0.75	0.09	74,74,74,74	0
54	MG	2a	3139	1/1	0.75	0.11	58,58,58,58	0
54	MG	2A	3509	1/1	0.75	0.07	59,59,59,59	0
54	MG	2a	3150	1/1	0.75	0.07	72,72,72,72	0
54	MG	2A	3608	1/1	0.75	0.17	42,42,42,42	0
54	MG	2A	3693	1/1	0.75	0.27	65,65,65,65	0
54	MG	1A	4005	1/1	0.75	0.08	70,70,70,70	0
54	MG	2A	3656	1/1	0.75	0.10	71,71,71,71	0
54	MG	2a	3020	1/1	0.75	0.13	79,79,79,79	0
54	MG	1a	3052	1/1	0.75	0.19	73,73,73,73	0
54	MG	1A	3981	1/1	0.75	0.10	55,55,55,55	0
54	MG	1A	3610	1/1	0.75	0.10	64,64,64,64	0
54	MG	2A	3671	1/1	0.75	0.43	81,81,81,81	0
54	MG	1a	3130	1/1	0.75	0.06	84,84,84,84	0
54	MG	1A	3515	1/1	0.75	0.21	43,43,43,43	0
54	MG	1A	3462	1/1	0.75	0.13	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3481	1/1	0.75	0.10	66,66,66,66	0
54	MG	2A	3364	1/1	0.76	0.14	76,76,76,76	0
54	MG	2A	3051	1/1	0.76	0.13	71,71,71,71	0
54	MG	1A	3447	1/1	0.76	0.22	64,64,64,64	0
54	MG	2a	3053	1/1	0.76	0.15	68,68,68,68	0
54	MG	1A	3680	1/1	0.76	0.13	75,75,75,75	0
54	MG	2A	3630	1/1	0.76	0.27	75,75,75,75	0
54	MG	1A	3788	1/1	0.76	0.15	63,63,63,63	0
54	MG	2A	3098	1/1	0.76	0.10	69,69,69,69	0
54	MG	1A	3991	1/1	0.76	0.20	69,69,69,69	0
54	MG	1A	3460	1/1	0.76	0.20	67,67,67,67	0
54	MG	18	101	1/1	0.76	0.20	71,71,71,71	0
54	MG	2A	3119	1/1	0.76	0.13	57,57,57,57	0
54	MG	2A	3460	1/1	0.76	0.12	63,63,63,63	0
54	MG	19	101	1/1	0.76	0.20	67,67,67,67	0
54	MG	1A	3167	1/1	0.76	0.19	58,58,58,58	0
54	MG	1a	3011	1/1	0.76	0.07	72,72,72,72	0
54	MG	1A	3552	1/1	0.76	0.12	64,64,64,64	0
54	MG	1A	3309	1/1	0.76	0.47	62,62,62,62	0
54	MG	1A	3627	1/1	0.76	0.24	63,63,63,63	0
54	MG	2a	3159	1/1	0.76	0.09	76,76,76,76	0
54	MG	1A	3574	1/1	0.76	0.28	61,61,61,61	0
54	MG	1A	3636	1/1	0.76	0.54	40,40,40,40	0
54	MG	2A	3591	1/1	0.76	0.06	71,71,71,71	0
54	MG	1A	3059	1/1	0.76	0.30	47,47,47,47	0
54	MG	2A	3503	1/1	0.76	0.14	80,80,80,80	0
54	MG	2A	3326	1/1	0.76	0.16	56,56,56,56	0
54	MG	2a	3010	1/1	0.76	0.14	65,65,65,65	0
54	MG	2A	3342	1/1	0.76	0.18	37,37,37,37	0
54	MG	1A	3581	1/1	0.76	0.21	38,38,38,38	0
54	MG	1a	3236	1/1	0.76	0.18	75,75,75,75	0
54	MG	1A	3418	1/1	0.76	0.21	54,54,54,54	0
54	MG	2A	3699	1/1	0.77	0.12	54,54,54,54	0
54	MG	1a	3243	1/1	0.77	0.18	65,65,65,65	0
54	MG	1a	3148	1/1	0.77	0.12	58,58,58,58	0
54	MG	1A	3564	1/1	0.77	0.16	77,77,77,77	0
54	MG	2A	3225	1/1	0.77	0.19	58,58,58,58	0
54	MG	1B	216	1/1	0.77	0.12	62,62,62,62	0
54	MG	2A	3723	1/1	0.77	0.14	65,65,65,65	0
54	MG	2A	3725	1/1	0.77	0.17	71,71,71,71	0
54	MG	2A	3230	1/1	0.77	0.52	58,58,58,58	0
54	MG	1a	3190	1/1	0.77	0.13	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	1A	3593	1/1	0.77	0.24	48,48,48,48	0
54	MG	2A	3400	1/1	0.77	0.15	67,67,67,67	0
54	MG	2A	3044	1/1	0.77	0.36	77,77,77,77	0
54	MG	2A	3421	1/1	0.77	0.17	63,63,63,63	0
54	MG	2A	3425	1/1	0.77	0.09	59,59,59,59	0
54	MG	1a	3030	1/1	0.77	0.15	49,49,49,49	0
54	MG	1a	3199	1/1	0.77	0.12	73,73,73,73	0
54	MG	2A	3542	1/1	0.77	0.12	56,56,56,56	0
54	MG	1l	103	1/1	0.77	0.23	63,63,63,63	0
54	MG	1A	3750	1/1	0.77	0.18	47,47,47,47	0
54	MG	1g	3100	1/1	0.77	0.21	74,74,74,74	0
54	MG	2A	3086	1/1	0.77	0.25	68,68,68,68	0
54	MG	2A	3463	1/1	0.77	0.25	66,66,66,66	0
54	MG	2a	3186	1/1	0.77	0.14	71,71,71,71	0
54	MG	1A	3227	1/1	0.77	0.16	62,62,62,62	0
54	MG	2A	3563	1/1	0.77	0.19	45,45,45,45	0
54	MG	1A	4018	1/1	0.77	0.40	70,70,70,70	0
54	MG	1A	3819	1/1	0.77	0.37	38,38,38,38	0
58	ARG	1F	320	12/12	0.77	0.24	50,66,75,75	0
54	MG	2A	3215	1/1	0.77	0.28	50,50,50,50	0
54	MG	2a	3086	1/1	0.78	0.17	70,70,70,70	0
54	MG	2A	3258	1/1	0.78	0.17	63,63,63,63	0
54	MG	1A	3649	1/1	0.78	0.12	41,41,41,41	0
54	MG	2a	3095	1/1	0.78	0.09	71,71,71,71	0
54	MG	2A	3094	1/1	0.78	0.19	49,49,49,49	0
54	MG	1A	3793	1/1	0.78	0.10	52,52,52,52	0
54	MG	2a	3101	1/1	0.78	0.13	69,69,69,69	0
54	MG	1a	3183	1/1	0.78	0.09	77,77,77,77	0
54	MG	1y	203	1/1	0.78	0.36	83,83,83,83	0
54	MG	2a	3131	1/1	0.78	0.10	64,64,64,64	0
54	MG	2A	3434	1/1	0.78	0.12	49,49,49,49	0
54	MG	1A	3368	1/1	0.78	0.15	54,54,54,54	0
54	MG	1A	3383	1/1	0.78	0.23	38,38,38,38	0
54	MG	1A	3010	1/1	0.78	0.12	51,51,51,51	0
54	MG	1A	3820	1/1	0.78	0.20	35,35,35,35	0
54	MG	1a	3113	1/1	0.78	0.17	74,74,74,74	0
54	MG	2A	3351	1/1	0.78	0.10	70,70,70,70	0
54	MG	2A	3544	1/1	0.78	0.14	66,66,66,66	0
54	MG	2a	3171	1/1	0.78	0.08	78,78,78,78	0
54	MG	2a	3021	1/1	0.78	0.18	53,53,53,53	0
54	MG	1A	3876	1/1	0.78	0.19	29,29,29,29	0
54	MG	2A	3049	1/1	0.78	0.09	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	1A	3595	1/1	0.78	0.11	38,38,38,38	0
54	MG	2A	3662	1/1	0.78	0.26	83,83,83,83	0
54	MG	2A	3719	1/1	0.78	0.16	71,71,71,71	0
54	MG	2A	3555	1/1	0.78	0.15	64,64,64,64	0
54	MG	1a	3229	1/1	0.78	0.12	77,77,77,77	0
54	MG	2e	201	1/1	0.78	0.30	75,75,75,75	0
54	MG	2a	3063	1/1	0.78	0.11	75,75,75,75	0
57	MPD	2A	3745	8/8	0.78	0.28	46,53,59,59	0
57	MPD	2A	3746	8/8	0.78	0.25	64,72,74,78	0
54	MG	1A	3575	1/1	0.78	0.41	44,44,44,44	0
59	ZN	14	102	1/1	0.78	0.15	123,123,123,123	0
54	MG	1a	3077	1/1	0.78	0.11	68,68,68,68	0
54	MG	1A	3689	1/1	0.79	0.23	57,57,57,57	0
54	MG	2A	3703	1/1	0.79	0.10	57,57,57,57	0
54	MG	2A	3456	1/1	0.79	0.11	75,75,75,75	0
54	MG	1a	3260	1/1	0.79	0.26	79,79,79,79	0
54	MG	1A	3759	1/1	0.79	0.16	63,63,63,63	0
54	MG	1a	3060	1/1	0.79	0.14	78,78,78,78	0
54	MG	1A	3266	1/1	0.79	0.16	61,61,61,61	0
54	MG	2A	3070	1/1	0.79	0.17	53,53,53,53	0
54	MG	1A	3592	1/1	0.79	0.20	44,44,44,44	0
54	MG	2a	3104	1/1	0.79	0.11	54,54,54,54	0
54	MG	2A	3478	1/1	0.79	0.19	42,42,42,42	0
54	MG	2A	3207	1/1	0.79	0.13	58,58,58,58	0
54	MG	1A	3432	1/1	0.79	0.17	75,75,75,75	0
54	MG	2A	3212	1/1	0.79	0.15	61,61,61,61	0
54	MG	1A	3417	1/1	0.79	0.27	39,39,39,39	0
54	MG	1A	3953	1/1	0.79	0.16	66,66,66,66	0
54	MG	1A	3451	1/1	0.79	0.10	52,52,52,52	0
54	MG	1a	3224	1/1	0.79	0.09	83,83,83,83	0
54	MG	1a	3006	1/1	0.79	0.06	66,66,66,66	0
54	MG	2A	3508	1/1	0.79	0.23	37,37,37,37	0
54	MG	1A	3561	1/1	0.79	0.23	67,67,67,67	0
54	MG	2A	3229	1/1	0.79	0.30	59,59,59,59	0
54	MG	1A	3814	1/1	0.79	0.17	42,42,42,42	0
54	MG	2A	3138	1/1	0.79	0.11	67,67,67,67	0
54	MG	2A	3526	1/1	0.79	0.12	66,66,66,66	0
54	MG	1A	3584	1/1	0.79	0.22	62,62,62,62	0
54	MG	2A	3529	1/1	0.79	0.40	69,69,69,69	0
54	MG	2a	3022	1/1	0.79	0.17	71,71,71,71	0
54	MG	2A	3686	1/1	0.79	0.09	53,53,53,53	0
54	MG	1A	3617	1/1	0.79	0.21	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3532	1/1	0.79	0.19	58,58,58,58	0
54	MG	2a	3041	1/1	0.79	0.27	72,72,72,72	0
54	MG	1A	3986	1/1	0.79	0.20	54,54,54,54	0
54	MG	2A	3620	1/1	0.79	0.26	47,47,47,47	0
54	MG	1a	3142	1/1	0.79	0.15	86,86,86,86	0
54	MG	2A	3436	1/1	0.79	0.13	64,64,64,64	0
54	MG	1A	3011	1/1	0.79	0.18	58,58,58,58	0
54	MG	2A	3191	1/1	0.80	0.24	71,71,71,71	0
54	MG	2a	3026	1/1	0.80	0.17	69,69,69,69	0
54	MG	2a	3029	1/1	0.80	0.12	63,63,63,63	0
54	MG	1A	4002	1/1	0.80	0.08	63,63,63,63	0
54	MG	1a	3167	1/1	0.80	0.11	63,63,63,63	0
54	MG	1A	3061	1/1	0.80	0.17	48,48,48,48	0
54	MG	1A	3629	1/1	0.80	0.46	37,37,37,37	0
54	MG	2a	3046	1/1	0.80	0.19	77,77,77,77	0
54	MG	2a	3047	1/1	0.80	0.17	76,76,76,76	0
54	MG	1a	3187	1/1	0.80	0.05	75,75,75,75	0
54	MG	1a	3017	1/1	0.80	0.11	63,63,63,63	0
54	MG	2A	3569	1/1	0.80	0.11	62,62,62,62	0
54	MG	1A	4014	1/1	0.80	0.10	74,74,74,74	0
54	MG	1A	3499	1/1	0.80	0.13	49,49,49,49	0
54	MG	1A	3372	1/1	0.80	0.15	65,65,65,65	0
54	MG	1a	3032	1/1	0.80	0.13	66,66,66,66	0
54	MG	1a	3036	1/1	0.80	0.21	62,62,62,62	0
54	MG	2A	3057	1/1	0.80	0.19	73,73,73,73	0
54	MG	2a	3092	1/1	0.80	0.09	65,65,65,65	0
54	MG	1A	3190	1/1	0.80	0.30	59,59,59,59	0
54	MG	1a	3042	1/1	0.80	0.12	59,59,59,59	0
54	MG	1A	3841	1/1	0.80	0.22	59,59,59,59	0
54	MG	1B	224	1/1	0.80	0.16	48,48,48,48	0
54	MG	2A	3092	1/1	0.80	0.15	71,71,71,71	0
54	MG	1A	3851	1/1	0.80	0.07	45,45,45,45	0
54	MG	2A	3252	1/1	0.80	0.18	57,57,57,57	0
54	MG	2A	3256	1/1	0.80	0.11	61,61,61,61	0
54	MG	2a	3133	1/1	0.80	0.11	71,71,71,71	0
54	MG	2a	3136	1/1	0.80	0.09	61,61,61,61	0
54	MG	1A	3033	1/1	0.80	0.19	46,46,46,46	0
54	MG	2A	3273	1/1	0.80	0.23	49,49,49,49	0
54	MG	2a	3147	1/1	0.80	0.17	53,53,53,53	0
54	MG	1D	314	1/1	0.80	0.37	59,59,59,59	0
54	MG	1A	3002	1/1	0.80	0.22	45,45,45,45	0
54	MG	1A	3971	1/1	0.80	0.17	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3504	1/1	0.80	0.11	71,71,71,71	0
54	MG	2B	210	1/1	0.80	0.17	74,74,74,74	0
54	MG	1F	318	1/1	0.80	0.18	61,61,61,61	0
54	MG	2a	3168	1/1	0.80	0.09	75,75,75,75	0
54	MG	1A	3589	1/1	0.80	0.15	47,47,47,47	0
54	MG	2A	3288	1/1	0.80	0.10	67,67,67,67	0
54	MG	2A	3135	1/1	0.80	0.12	57,57,57,57	0
54	MG	2A	3308	1/1	0.80	0.11	64,64,64,64	0
54	MG	1A	3443	1/1	0.80	0.16	44,44,44,44	0
54	MG	1T	204	1/1	0.80	0.13	80,80,80,80	0
54	MG	1V	204	1/1	0.80	0.30	64,64,64,64	0
54	MG	1A	3403	1/1	0.80	0.14	28,28,28,28	0
54	MG	1A	3290	1/1	0.80	0.17	47,47,47,47	0
54	MG	1A	3152	1/1	0.80	0.09	49,49,49,49	0
54	MG	1a	3132	1/1	0.80	0.22	80,80,80,80	0
57	MPD	1T	206	8/8	0.80	0.20	59,65,71,80	0
57	MPD	1a	3279	8/8	0.80	0.15	52,63,67,73	0
54	MG	1A	3014	1/1	0.80	0.23	63,63,63,63	0
54	MG	1A	3481	1/1	0.80	0.16	59,59,59,59	0
54	MG	2A	3187	1/1	0.80	0.10	68,68,68,68	0
54	MG	1A	3484	1/1	0.80	0.11	45,45,45,45	0
54	MG	2A	3386	1/1	0.80	0.16	52,52,52,52	0
54	MG	2A	3639	1/1	0.81	0.07	70,70,70,70	0
54	MG	1A	3032	1/1	0.81	0.20	63,63,63,63	0
54	MG	1A	3642	1/1	0.81	0.17	29,29,29,29	0
54	MG	1A	3311	1/1	0.81	0.19	59,59,59,59	0
54	MG	1a	3064	1/1	0.81	0.23	73,73,73,73	0
54	MG	1A	3833	1/1	0.81	0.22	49,49,49,49	0
54	MG	1F	315	1/1	0.81	0.41	50,50,50,50	0
54	MG	1A	3556	1/1	0.81	0.18	60,60,60,60	0
54	MG	2A	3149	1/1	0.81	0.16	59,59,59,59	0
54	MG	1A	3656	1/1	0.81	0.15	54,54,54,54	0
54	MG	2A	3350	1/1	0.81	0.14	41,41,41,41	0
54	MG	1a	3091	1/1	0.81	0.28	74,74,74,74	0
54	MG	2a	3054	1/1	0.81	0.20	64,64,64,64	0
54	MG	2A	3539	1/1	0.81	0.12	77,77,77,77	0
54	MG	1a	3092	1/1	0.81	0.10	52,52,52,52	0
54	MG	1A	3756	1/1	0.81	0.14	70,70,70,70	0
54	MG	2a	3068	1/1	0.81	0.24	69,69,69,69	0
54	MG	2A	3358	1/1	0.81	0.20	51,51,51,51	0
54	MG	2A	3545	1/1	0.81	0.20	77,77,77,77	0
54	MG	2a	3085	1/1	0.81	0.10	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3359	1/1	0.81	0.12	72,72,72,72	0
54	MG	1T	201	1/1	0.81	0.16	66,66,66,66	0
54	MG	1A	3972	1/1	0.81	0.08	63,63,63,63	0
54	MG	1A	3424	1/1	0.81	0.26	43,43,43,43	0
54	MG	10	105	1/1	0.81	0.24	67,67,67,67	0
54	MG	1A	3478	1/1	0.81	0.21	32,32,32,32	0
54	MG	1A	3371	1/1	0.81	0.12	71,71,71,71	0
54	MG	1A	3781	1/1	0.81	0.14	26,26,26,26	0
54	MG	1y	201	1/1	0.81	0.36	72,72,72,72	0
54	MG	1A	3055	1/1	0.81	0.14	54,54,54,54	0
54	MG	1A	3198	1/1	0.81	0.25	58,58,58,58	0
54	MG	2a	3112	1/1	0.81	0.15	65,65,65,65	0
54	MG	2a	3122	1/1	0.81	0.12	68,68,68,68	0
54	MG	1a	3146	1/1	0.81	0.18	75,75,75,75	0
54	MG	2A	3025	1/1	0.81	0.15	54,54,54,54	0
54	MG	2a	3135	1/1	0.81	0.10	76,76,76,76	0
54	MG	1A	3210	1/1	0.81	0.24	68,68,68,68	0
54	MG	1a	3002	1/1	0.81	0.19	66,66,66,66	0
54	MG	2a	3140	1/1	0.81	0.09	77,77,77,77	0
54	MG	2A	3441	1/1	0.81	0.09	61,61,61,61	0
54	MG	2A	3709	1/1	0.81	0.08	57,57,57,57	0
54	MG	2A	3710	1/1	0.81	0.17	65,65,65,65	0
54	MG	1a	3166	1/1	0.81	0.12	64,64,64,64	0
54	MG	2A	3040	1/1	0.81	0.38	68,68,68,68	0
54	MG	1A	3808	1/1	0.81	0.17	47,47,47,47	0
54	MG	1A	3913	1/1	0.81	0.10	53,53,53,53	0
54	MG	1A	3915	1/1	0.81	0.08	45,45,45,45	0
54	MG	2A	3727	1/1	0.81	0.07	76,76,76,76	0
54	MG	2A	3462	1/1	0.81	0.13	66,66,66,66	0
54	MG	1A	4007	1/1	0.81	0.14	61,61,61,61	0
54	MG	2A	3237	1/1	0.81	0.17	67,67,67,67	0
54	MG	2A	3467	1/1	0.81	0.12	67,67,67,67	0
54	MG	1A	3081	1/1	0.81	0.42	43,43,43,43	0
54	MG	1A	3095	1/1	0.81	0.13	38,38,38,38	0
54	MG	1A	3919	1/1	0.81	0.10	58,58,58,58	0
54	MG	1A	3921	1/1	0.81	0.11	54,54,54,54	0
54	MG	2A	3482	1/1	0.81	0.14	68,68,68,68	0
54	MG	2I	3801	1/1	0.81	0.15	74,74,74,74	0
54	MG	1a	3208	1/1	0.81	0.18	64,64,64,64	0
54	MG	1A	3924	1/1	0.81	0.10	55,55,55,55	0
54	MG	1A	3188	1/1	0.81	0.17	64,64,64,64	0
54	MG	1a	3041	1/1	0.81	0.08	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3096	1/1	0.81	0.08	68,68,68,68	0
54	MG	1A	3934	1/1	0.81	0.12	58,58,58,58	0
54	MG	1A	3450	1/1	0.81	0.28	55,55,55,55	0
54	MG	2A	3506	1/1	0.81	0.61	61,61,61,61	0
54	MG	1a	3081	1/1	0.82	0.13	78,78,78,78	0
54	MG	2A	3320	1/1	0.82	0.11	66,66,66,66	0
54	MG	2A	3002	1/1	0.82	0.14	52,52,52,52	0
54	MG	2A	3214	1/1	0.82	0.28	71,71,71,71	0
54	MG	1A	3590	1/1	0.82	0.08	41,41,41,41	0
54	MG	2A	3016	1/1	0.82	0.14	71,71,71,71	0
54	MG	1A	3480	1/1	0.82	0.17	29,29,29,29	0
54	MG	1A	3700	1/1	0.82	0.31	71,71,71,71	0
54	MG	2a	3129	1/1	0.82	0.13	60,60,60,60	0
54	MG	2A	3033	1/1	0.82	0.71	62,62,62,62	0
54	MG	2A	3136	1/1	0.82	0.24	58,58,58,58	0
54	MG	1B	222	1/1	0.82	0.11	55,55,55,55	0
54	MG	1A	3362	1/1	0.82	0.17	50,50,50,50	0
54	MG	2A	3236	1/1	0.82	0.12	63,63,63,63	0
54	MG	2A	3584	1/1	0.82	0.05	60,60,60,60	0
54	MG	2A	3145	1/1	0.82	0.11	44,44,44,44	0
54	MG	1A	3366	1/1	0.82	0.20	72,72,72,72	0
54	MG	1a	3197	1/1	0.82	0.22	70,70,70,70	0
54	MG	2A	3390	1/1	0.82	0.26	60,60,60,60	0
54	MG	2a	3153	1/1	0.82	0.14	74,74,74,74	0
54	MG	2A	3517	1/1	0.82	0.12	83,83,83,83	0
54	MG	2A	3521	1/1	0.82	0.62	69,69,69,69	0
54	MG	2A	3394	1/1	0.82	0.15	71,71,71,71	0
54	MG	2A	3163	1/1	0.82	0.09	62,62,62,62	0
54	MG	1A	3847	1/1	0.82	0.11	58,58,58,58	0
54	MG	2A	3417	1/1	0.82	0.28	64,64,64,64	0
54	MG	14	101	1/1	0.82	0.10	78,78,78,78	0
54	MG	2A	3171	1/1	0.82	0.38	57,57,57,57	0
54	MG	1A	3850	1/1	0.82	0.16	63,63,63,63	0
54	MG	2A	3265	1/1	0.82	0.26	57,57,57,57	0
54	MG	2A	3054	1/1	0.82	0.08	66,66,66,66	0
54	MG	2a	3187	1/1	0.82	0.09	82,82,82,82	0
54	MG	1d	304	1/1	0.82	0.16	77,77,77,77	0
54	MG	2a	3189	1/1	0.82	0.10	64,64,64,64	0
54	MG	2A	3711	1/1	0.82	0.17	72,72,72,72	0
54	MG	1A	3958	1/1	0.82	0.26	79,79,79,79	0
54	MG	2A	3445	1/1	0.82	0.12	65,65,65,65	0
54	MG	1A	3811	1/1	0.82	0.18	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2a	3073	1/1	0.82	0.21	57,57,57,57	0
54	MG	1A	3128	1/1	0.82	0.20	40,40,40,40	0
54	MG	1A	3048	1/1	0.82	0.47	53,53,53,53	0
54	MG	1A	3766	1/1	0.82	0.13	47,47,47,47	0
54	MG	1t	201	1/1	0.82	0.18	59,59,59,59	0
54	MG	1P	207	1/1	0.82	0.13	71,71,71,71	0
54	MG	1A	3144	1/1	0.82	0.24	34,34,34,34	0
54	MG	2A	3453	1/1	0.83	0.17	70,70,70,70	0
54	MG	1A	3925	1/1	0.83	0.23	67,67,67,67	0
54	MG	1a	3045	1/1	0.83	0.15	67,67,67,67	0
54	MG	2A	3156	1/1	0.83	0.12	60,60,60,60	0
54	MG	2a	3048	1/1	0.83	0.16	80,80,80,80	0
54	MG	2a	3052	1/1	0.83	0.09	70,70,70,70	0
54	MG	1A	3930	1/1	0.83	0.12	52,52,52,52	0
54	MG	1T	203	1/1	0.83	0.14	66,66,66,66	0
54	MG	1A	3730	1/1	0.83	0.07	48,48,48,48	0
54	MG	2a	3058	1/1	0.83	0.30	74,74,74,74	0
54	MG	2A	3168	1/1	0.83	0.34	65,65,65,65	0
54	MG	1A	3261	1/1	0.83	0.12	56,56,56,56	0
54	MG	2A	3468	1/1	0.83	0.08	62,62,62,62	0
54	MG	1W	202	1/1	0.83	0.23	50,50,50,50	0
54	MG	10	104	1/1	0.83	0.09	51,51,51,51	0
54	MG	1a	3201	1/1	0.83	0.27	71,71,71,71	0
54	MG	2a	3081	1/1	0.83	0.36	66,66,66,66	0
54	MG	1A	3408	1/1	0.83	0.20	40,40,40,40	0
54	MG	1A	3865	1/1	0.83	0.13	58,58,58,58	0
54	MG	2A	3585	1/1	0.83	0.16	51,51,51,51	0
54	MG	1a	3080	1/1	0.83	0.11	67,67,67,67	0
54	MG	1A	3949	1/1	0.83	0.11	60,60,60,60	0
54	MG	1a	3082	1/1	0.83	0.10	83,83,83,83	0
54	MG	2A	3192	1/1	0.83	0.51	58,58,58,58	0
54	MG	1A	3622	1/1	0.83	0.27	41,41,41,41	0
54	MG	2A	3502	1/1	0.83	0.08	61,61,61,61	0
54	MG	2A	3604	1/1	0.83	0.15	48,48,48,48	0
54	MG	1A	3951	1/1	0.83	0.09	71,71,71,71	0
54	MG	1A	3315	1/1	0.83	0.18	61,61,61,61	0
54	MG	2A	3718	1/1	0.83	0.15	74,74,74,74	0
54	MG	1A	3104	1/1	0.83	0.19	50,50,50,50	0
54	MG	2a	3124	1/1	0.83	0.20	70,70,70,70	0
54	MG	2A	3612	1/1	0.83	0.33	56,56,56,56	0
54	MG	2A	3724	1/1	0.83	0.17	43,43,43,43	0
54	MG	1B	217	1/1	0.83	0.15	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1a	3105	1/1	0.83	0.25	67,67,67,67	0
54	MG	2A	3512	1/1	0.83	0.36	61,61,61,61	0
54	MG	2B	205	1/1	0.83	0.35	73,73,73,73	0
54	MG	1B	219	1/1	0.83	0.12	47,47,47,47	0
54	MG	2A	3624	1/1	0.83	0.10	64,64,64,64	0
54	MG	2A	3625	1/1	0.83	0.11	68,68,68,68	0
54	MG	1A	3686	1/1	0.83	0.13	79,79,79,79	0
54	MG	1A	3892	1/1	0.83	0.22	33,33,33,33	0
54	MG	1A	3449	1/1	0.83	0.13	50,50,50,50	0
54	MG	2N	201	1/1	0.83	0.08	75,75,75,75	0
54	MG	2P	201	1/1	0.83	0.18	64,64,64,64	0
54	MG	2P	202	1/1	0.83	0.09	69,69,69,69	0
54	MG	1A	3895	1/1	0.83	0.17	59,59,59,59	0
54	MG	2T	204	1/1	0.83	0.25	61,61,61,61	0
54	MG	2A	3634	1/1	0.83	0.06	64,64,64,64	0
54	MG	2a	3175	1/1	0.83	0.30	74,74,74,74	0
54	MG	2A	3525	1/1	0.83	0.11	75,75,75,75	0
54	MG	1A	3295	1/1	0.83	0.44	42,42,42,42	0
54	MG	1A	3297	1/1	0.83	0.15	73,73,73,73	0
54	MG	1a	3029	1/1	0.83	0.20	65,65,65,65	0
54	MG	1A	3701	1/1	0.83	0.10	54,54,54,54	0
54	MG	1A	3204	1/1	0.83	0.09	56,56,56,56	0
54	MG	2A	3114	1/1	0.83	0.12	61,61,61,61	0
54	MG	2a	3015	1/1	0.83	0.15	55,55,55,55	0
54	MG	2A	3427	1/1	0.83	0.13	70,70,70,70	0
54	MG	1a	3152	1/1	0.83	0.07	61,61,61,61	0
54	MG	2A	3124	1/1	0.83	0.22	73,73,73,73	0
54	MG	1A	3643	1/1	0.83	0.13	57,57,57,57	0
54	MG	1n	101	1/1	0.83	0.13	61,61,61,61	0
54	MG	1A	3160	1/1	0.83	0.30	63,63,63,63	0
54	MG	2A	3443	1/1	0.83	0.12	64,64,64,64	0
54	MG	2a	3033	1/1	0.83	0.08	73,73,73,73	0
54	MG	1A	3251	1/1	0.83	0.14	70,70,70,70	0
54	MG	2a	3037	1/1	0.83	0.11	87,87,87,87	0
54	MG	1a	3173	1/1	0.83	0.56	69,69,69,69	0
54	MG	1A	3697	1/1	0.84	0.40	60,60,60,60	0
54	MG	1A	3166	1/1	0.84	0.22	51,51,51,51	0
54	MG	1A	3391	1/1	0.84	0.19	45,45,45,45	0
54	MG	2A	3101	1/1	0.84	0.20	51,51,51,51	0
54	MG	1A	3707	1/1	0.84	0.22	46,46,46,46	0
54	MG	1A	3397	1/1	0.84	0.21	32,32,32,32	0
54	MG	1A	3195	1/1	0.84	0.27	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3511	1/1	0.84	0.11	52,52,52,52	0
54	MG	1A	3407	1/1	0.84	0.17	61,61,61,61	0
54	MG	1a	3277	1/1	0.84	0.10	75,75,75,75	0
54	MG	1B	202	1/1	0.84	0.14	70,70,70,70	0
54	MG	1f	201	1/1	0.84	0.21	54,54,54,54	0
54	MG	1a	3136	1/1	0.84	0.07	68,68,68,68	0
54	MG	1A	3926	1/1	0.84	0.10	45,45,45,45	0
54	MG	1A	3135	1/1	0.84	0.14	54,54,54,54	0
54	MG	2A	3469	1/1	0.84	0.14	75,75,75,75	0
54	MG	1B	210	1/1	0.84	0.08	61,61,61,61	0
54	MG	1A	3318	1/1	0.84	0.20	40,40,40,40	0
54	MG	1A	3932	1/1	0.84	0.11	43,43,43,43	0
54	MG	2A	3157	1/1	0.84	0.32	64,64,64,64	0
54	MG	1A	3530	1/1	0.84	0.13	64,64,64,64	0
54	MG	2A	3722	1/1	0.84	0.15	50,50,50,50	0
54	MG	2A	3304	1/1	0.84	0.15	41,41,41,41	0
54	MG	1A	3746	1/1	0.84	0.20	46,46,46,46	0
54	MG	1a	3031	1/1	0.84	0.21	68,68,68,68	0
54	MG	2a	3114	1/1	0.84	0.08	75,75,75,75	0
54	MG	1A	3848	1/1	0.84	0.19	42,42,42,42	0
54	MG	1A	3298	1/1	0.84	0.11	88,88,88,88	0
54	MG	1A	3300	1/1	0.84	0.27	52,52,52,52	0
54	MG	2A	3176	1/1	0.84	0.17	62,62,62,62	0
54	MG	2A	3012	1/1	0.84	0.18	64,64,64,64	0
54	MG	2A	3505	1/1	0.84	0.05	59,59,59,59	0
54	MG	1A	3125	1/1	0.84	0.08	72,72,72,72	0
54	MG	2D	310	1/1	0.84	0.12	31,31,31,31	0
54	MG	1D	315	1/1	0.84	0.17	44,44,44,44	0
54	MG	1A	3666	1/1	0.84	0.17	66,66,66,66	0
54	MG	2A	3627	1/1	0.84	0.38	59,59,59,59	0
54	MG	2a	3148	1/1	0.84	0.13	71,71,71,71	0
54	MG	2A	3510	1/1	0.84	0.39	68,68,68,68	0
54	MG	1A	3668	1/1	0.84	0.19	53,53,53,53	0
54	MG	2A	3514	1/1	0.84	0.40	59,59,59,59	0
54	MG	2a	3154	1/1	0.84	0.31	69,69,69,69	0
54	MG	1A	3468	1/1	0.84	0.22	63,63,63,63	0
54	MG	1A	3963	1/1	0.84	0.14	47,47,47,47	0
54	MG	1G	202	1/1	0.84	0.13	55,55,55,55	0
54	MG	1A	3472	1/1	0.84	0.17	37,37,37,37	0
54	MG	2a	3167	1/1	0.84	0.05	66,66,66,66	0
54	MG	2A	3380	1/1	0.84	0.04	71,71,71,71	0
54	MG	1A	3770	1/1	0.84	0.23	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1a	3076	1/1	0.84	0.14	69,69,69,69	0
54	MG	2A	3200	1/1	0.84	0.26	64,64,64,64	0
54	MG	2A	3388	1/1	0.84	0.20	53,53,53,53	0
54	MG	1A	3341	1/1	0.84	0.16	55,55,55,55	0
54	MG	1A	3684	1/1	0.84	0.10	53,53,53,53	0
54	MG	1A	3097	1/1	0.84	0.20	49,49,49,49	0
54	MG	1A	3890	1/1	0.84	0.15	57,57,57,57	0
54	MG	2A	3410	1/1	0.84	0.20	56,56,56,56	0
54	MG	2A	3659	1/1	0.84	0.11	58,58,58,58	0
54	MG	2A	3661	1/1	0.84	0.12	62,62,62,62	0
54	MG	1a	3234	1/1	0.84	0.12	68,68,68,68	0
54	MG	2A	3665	1/1	0.84	0.14	41,41,41,41	0
54	MG	2A	3069	1/1	0.84	0.28	50,50,50,50	0
54	MG	1A	3791	1/1	0.84	0.24	38,38,38,38	0
54	MG	2A	3220	1/1	0.84	0.32	69,69,69,69	0
54	MG	1A	3571	1/1	0.84	0.27	54,54,54,54	0
54	MG	2A	3550	1/1	0.84	0.14	59,59,59,59	0
57	MPD	2A	3747	8/8	0.84	0.27	60,63,68,69	0
54	MG	1A	3620	1/1	0.84	0.21	58,58,58,58	0
54	MG	1A	3912	1/1	0.84	0.07	48,48,48,48	0
54	MG	2A	3437	1/1	0.84	0.11	61,61,61,61	0
54	MG	1A	3922	1/1	0.85	0.35	57,57,57,57	0
54	MG	1A	3337	1/1	0.85	0.20	33,33,33,33	0
54	MG	2A	3199	1/1	0.85	0.20	74,74,74,74	0
54	MG	1A	3485	1/1	0.85	0.10	82,82,82,82	0
54	MG	2A	3712	1/1	0.85	0.26	54,54,54,54	0
54	MG	2A	3080	1/1	0.85	0.09	53,53,53,53	0
54	MG	2A	3370	1/1	0.85	0.18	57,57,57,57	0
54	MG	1A	3860	1/1	0.85	0.11	37,37,37,37	0
54	MG	1a	3263	1/1	0.85	0.20	63,63,63,63	0
54	MG	2A	3721	1/1	0.85	0.09	59,59,59,59	0
54	MG	1A	3633	1/1	0.85	0.26	39,39,39,39	0
54	MG	1A	3376	1/1	0.85	0.21	51,51,51,51	0
54	MG	1a	3272	1/1	0.85	0.16	69,69,69,69	0
54	MG	1N	203	1/1	0.85	0.12	59,59,59,59	0
54	MG	1A	3272	1/1	0.85	0.21	53,53,53,53	0
54	MG	1A	4004	1/1	0.85	0.17	56,56,56,56	0
54	MG	2B	203	1/1	0.85	0.08	81,81,81,81	0
54	MG	2A	3396	1/1	0.85	0.17	37,37,37,37	0
54	MG	2A	3106	1/1	0.85	0.28	61,61,61,61	0
54	MG	1a	3159	1/1	0.85	0.09	71,71,71,71	0
54	MG	2a	3121	1/1	0.85	0.24	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2B	213	1/1	0.85	0.10	71,71,71,71	0
54	MG	2B	214	1/1	0.85	0.21	65,65,65,65	0
54	MG	2A	3404	1/1	0.85	0.15	67,67,67,67	0
54	MG	2a	3130	1/1	0.85	0.52	84,84,84,84	0
54	MG	1A	3822	1/1	0.85	0.13	54,54,54,54	0
54	MG	1A	3878	1/1	0.85	0.09	33,33,33,33	0
54	MG	1A	3823	1/1	0.85	0.14	54,54,54,54	0
54	MG	2G	202	1/1	0.85	0.10	77,77,77,77	0
54	MG	2A	3638	1/1	0.85	0.13	57,57,57,57	0
54	MG	1i	201	1/1	0.85	0.19	77,77,77,77	0
54	MG	2a	3142	1/1	0.85	0.09	70,70,70,70	0
54	MG	1U	201	1/1	0.85	0.19	40,40,40,40	0
54	MG	2a	3146	1/1	0.85	0.12	47,47,47,47	0
54	MG	2A	3133	1/1	0.85	0.19	50,50,50,50	0
54	MG	1A	3826	1/1	0.85	0.17	53,53,53,53	0
54	MG	1A	3827	1/1	0.85	0.18	52,52,52,52	0
54	MG	2A	3251	1/1	0.85	0.16	63,63,63,63	0
54	MG	1a	3068	1/1	0.85	0.19	76,76,76,76	0
54	MG	2A	3253	1/1	0.85	0.39	56,56,56,56	0
54	MG	1A	3637	1/1	0.85	0.23	61,61,61,61	0
54	MG	1B	204	1/1	0.85	0.23	57,57,57,57	0
54	MG	2A	3260	1/1	0.85	0.14	75,75,75,75	0
54	MG	1A	3774	1/1	0.85	0.14	49,49,49,49	0
54	MG	1B	206	1/1	0.85	0.40	65,65,65,65	0
54	MG	1A	3605	1/1	0.85	0.12	46,46,46,46	0
54	MG	1A	3089	1/1	0.85	0.23	39,39,39,39	0
54	MG	2A	3670	1/1	0.85	0.06	56,56,56,56	0
54	MG	1A	3960	1/1	0.85	0.17	56,56,56,56	0
54	MG	1a	3083	1/1	0.85	0.34	61,61,61,61	0
54	MG	2A	3566	1/1	0.85	0.21	46,46,46,46	0
54	MG	1a	3212	1/1	0.85	0.06	76,76,76,76	0
54	MG	17	107	1/1	0.85	0.18	56,56,56,56	0
54	MG	1A	3782	1/1	0.85	0.22	70,70,70,70	0
54	MG	1A	3914	1/1	0.85	0.21	30,30,30,30	0
54	MG	2A	3576	1/1	0.85	0.22	64,64,64,64	0
54	MG	1A	3968	1/1	0.85	0.19	31,31,31,31	0
54	MG	1A	3294	1/1	0.85	0.12	57,57,57,57	0
54	MG	2a	3192	1/1	0.85	0.20	67,67,67,67	0
54	MG	1a	3103	1/1	0.85	0.12	71,71,71,71	0
54	MG	2A	3315	1/1	0.85	0.20	68,68,68,68	0
54	MG	1A	3743	1/1	0.85	0.11	44,44,44,44	0
54	MG	1a	3239	1/1	0.85	0.17	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3338	1/1	0.85	0.16	37,37,37,37	0
54	MG	1A	3395	1/1	0.85	0.23	35,35,35,35	0
54	MG	1A	3206	1/1	0.85	0.75	50,50,50,50	0
54	MG	2A	3594	1/1	0.85	0.06	65,65,65,65	0
54	MG	1A	3400	1/1	0.85	0.26	53,53,53,53	0
54	MG	1a	3251	1/1	0.85	0.15	79,79,79,79	0
54	MG	2A	3353	1/1	0.86	0.14	70,70,70,70	0
54	MG	1a	3161	1/1	0.86	0.09	62,62,62,62	0
54	MG	1a	3070	1/1	0.86	0.37	61,61,61,61	0
54	MG	2a	3072	1/1	0.86	0.33	71,71,71,71	0
54	MG	2A	3083	1/1	0.86	0.06	81,81,81,81	0
54	MG	2A	3209	1/1	0.86	0.12	63,63,63,63	0
54	MG	1A	3937	1/1	0.86	0.13	40,40,40,40	0
54	MG	1A	3114	1/1	0.86	0.16	44,44,44,44	0
54	MG	18	104	1/1	0.86	0.10	61,61,61,61	0
54	MG	2A	3621	1/1	0.86	0.13	71,71,71,71	0
54	MG	1A	3659	1/1	0.86	0.14	53,53,53,53	0
54	MG	2A	3097	1/1	0.86	0.14	76,76,76,76	0
54	MG	1a	3001	1/1	0.86	0.09	74,74,74,74	0
54	MG	1F	313	1/1	0.86	0.14	33,33,33,33	0
54	MG	1a	3193	1/1	0.86	0.09	86,86,86,86	0
54	MG	1A	3252	1/1	0.86	0.23	54,54,54,54	0
54	MG	1A	3102	1/1	0.86	0.20	38,38,38,38	0
54	MG	1a	3085	1/1	0.86	0.08	64,64,64,64	0
54	MG	1A	3103	1/1	0.86	0.21	32,32,32,32	0
54	MG	1A	3786	1/1	0.86	0.08	68,68,68,68	0
54	MG	2a	3115	1/1	0.86	0.17	59,59,59,59	0
54	MG	2a	3120	1/1	0.86	0.05	75,75,75,75	0
54	MG	1a	3207	1/1	0.86	0.07	68,68,68,68	0
54	MG	1A	3670	1/1	0.86	0.14	73,73,73,73	0
54	MG	2A	3406	1/1	0.86	0.14	77,77,77,77	0
54	MG	1A	3955	1/1	0.86	0.14	52,52,52,52	0
54	MG	2F	302	1/1	0.86	0.14	44,44,44,44	0
54	MG	1A	3789	1/1	0.86	0.08	71,71,71,71	0
54	MG	2A	3001	1/1	0.86	0.10	73,73,73,73	0
54	MG	1A	3267	1/1	0.86	0.21	70,70,70,70	0
54	MG	1A	3340	1/1	0.86	0.17	51,51,51,51	0
54	MG	2O	201	1/1	0.86	0.19	62,62,62,62	0
54	MG	1A	3547	1/1	0.86	0.19	43,43,43,43	0
54	MG	1A	3597	1/1	0.86	0.09	52,52,52,52	0
54	MG	2A	3152	1/1	0.86	0.15	53,53,53,53	0
54	MG	1A	3549	1/1	0.86	0.18	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3184	1/1	0.86	0.15	71,71,71,71	0
54	MG	1a	3235	1/1	0.86	0.22	66,66,66,66	0
54	MG	1A	3402	1/1	0.86	0.25	69,69,69,69	0
54	MG	2A	3559	1/1	0.86	0.15	63,63,63,63	0
54	MG	2A	3664	1/1	0.86	0.20	40,40,40,40	0
54	MG	1a	3044	1/1	0.86	0.14	62,62,62,62	0
54	MG	1A	3696	1/1	0.86	0.42	53,53,53,53	0
54	MG	1A	3867	1/1	0.86	0.12	51,51,51,51	0
54	MG	2A	3045	1/1	0.86	0.14	51,51,51,51	0
54	MG	2A	3173	1/1	0.86	0.19	55,55,55,55	0
54	MG	1A	3611	1/1	0.86	0.12	40,40,40,40	0
54	MG	2A	3296	1/1	0.86	0.10	51,51,51,51	0
54	MG	2A	3048	1/1	0.86	0.09	63,63,63,63	0
54	MG	2a	3023	1/1	0.86	0.10	75,75,75,75	0
54	MG	1A	3094	1/1	0.86	0.16	58,58,58,58	0
54	MG	2a	3178	1/1	0.86	0.08	67,67,67,67	0
54	MG	1A	3763	1/1	0.86	0.14	44,44,44,44	0
54	MG	2a	3028	1/1	0.86	0.10	66,66,66,66	0
54	MG	1a	3062	1/1	0.86	0.30	59,59,59,59	0
54	MG	1a	3154	1/1	0.86	0.12	51,51,51,51	0
54	MG	2A	3317	1/1	0.86	0.24	52,52,52,52	0
54	MG	2A	3318	1/1	0.86	0.10	72,72,72,72	0
54	MG	2A	3056	1/1	0.86	0.10	72,72,72,72	0
54	MG	2A	3323	1/1	0.86	0.18	68,68,68,68	0
54	MG	2a	3043	1/1	0.86	0.08	79,79,79,79	0
54	MG	1a	3157	1/1	0.86	0.08	63,63,63,63	0
54	MG	2A	3337	1/1	0.86	0.17	46,46,46,46	0
54	MG	2A	3695	1/1	0.86	0.37	63,63,63,63	0
54	MG	15	108	1/1	0.86	0.08	59,59,59,59	0
54	MG	2A	3698	1/1	0.86	0.12	55,55,55,55	0
54	MG	2A	3340	1/1	0.86	0.25	61,61,61,61	0
54	MG	1a	3268	1/1	0.86	0.08	61,61,61,61	0
54	MG	2A	3493	1/1	0.86	0.16	71,71,71,71	0
54	MG	2A	3599	1/1	0.86	0.22	47,47,47,47	0
54	MG	1A	3654	1/1	0.86	0.23	30,30,30,30	0
54	MG	2A	3079	1/1	0.86	0.17	62,62,62,62	0
54	MG	1A	3600	1/1	0.87	0.10	68,68,68,68	0
54	MG	1a	3101	1/1	0.87	0.15	66,66,66,66	0
54	MG	2a	3044	1/1	0.87	0.20	72,72,72,72	0
54	MG	1A	3719	1/1	0.87	0.10	70,70,70,70	0
54	MG	1A	3569	1/1	0.87	0.09	70,70,70,70	0
54	MG	1A	3801	1/1	0.87	0.10	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1a	3255	1/1	0.87	0.06	64,64,64,64	0
54	MG	2a	3051	1/1	0.87	0.19	58,58,58,58	0
54	MG	2A	3558	1/1	0.87	0.14	62,62,62,62	0
54	MG	1a	3008	1/1	0.87	0.20	63,63,63,63	0
54	MG	1a	3010	1/1	0.87	0.17	67,67,67,67	0
54	MG	1a	3127	1/1	0.87	0.15	74,74,74,74	0
54	MG	1A	3802	1/1	0.87	0.14	27,27,27,27	0
54	MG	1a	3016	1/1	0.87	0.15	63,63,63,63	0
54	MG	1A	3729	1/1	0.87	0.23	36,36,36,36	0
54	MG	2a	3066	1/1	0.87	0.15	69,69,69,69	0
54	MG	1A	3196	1/1	0.87	0.11	63,63,63,63	0
54	MG	1A	3506	1/1	0.87	0.16	35,35,35,35	0
54	MG	1A	3454	1/1	0.87	0.27	26,26,26,26	0
54	MG	2A	3701	1/1	0.87	0.31	46,46,46,46	0
54	MG	1a	3144	1/1	0.87	0.10	60,60,60,60	0
54	MG	1A	3817	1/1	0.87	0.15	74,74,74,74	0
54	MG	1A	3616	1/1	0.87	0.14	58,58,58,58	0
54	MG	1A	3455	1/1	0.87	0.08	47,47,47,47	0
54	MG	2A	3707	1/1	0.87	0.08	60,60,60,60	0
54	MG	1a	3033	1/1	0.87	0.12	43,43,43,43	0
54	MG	2A	3257	1/1	0.87	0.14	66,66,66,66	0
54	MG	1A	3898	1/1	0.87	0.32	39,39,39,39	0
54	MG	1A	3903	1/1	0.87	0.18	37,37,37,37	0
54	MG	1A	3975	1/1	0.87	0.16	59,59,59,59	0
54	MG	2a	3098	1/1	0.87	0.14	74,74,74,74	0
54	MG	2a	3100	1/1	0.87	0.10	83,83,83,83	0
54	MG	1m	201	1/1	0.87	0.10	73,73,73,73	0
54	MG	1A	3118	1/1	0.87	0.21	39,39,39,39	0
54	MG	2A	3276	1/1	0.87	0.19	67,67,67,67	0
54	MG	1A	3222	1/1	0.87	0.20	36,36,36,36	0
54	MG	2a	3107	1/1	0.87	0.16	63,63,63,63	0
54	MG	2a	3110	1/1	0.87	0.06	74,74,74,74	0
54	MG	2A	3279	1/1	0.87	0.08	79,79,79,79	0
54	MG	2A	3466	1/1	0.87	0.15	34,34,34,34	0
54	MG	1A	3626	1/1	0.87	0.11	57,57,57,57	0
54	MG	2a	3116	1/1	0.87	0.14	63,63,63,63	0
54	MG	2A	3282	1/1	0.87	0.11	72,72,72,72	0
54	MG	1a	3171	1/1	0.87	0.24	76,76,76,76	0
54	MG	2A	3728	1/1	0.87	0.14	57,57,57,57	0
54	MG	2A	3150	1/1	0.87	0.43	65,65,65,65	0
54	MG	2A	3733	1/1	0.87	0.08	61,61,61,61	0
54	MG	2A	3736	1/1	0.87	0.10	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3474	1/1	0.87	0.16	42,42,42,42	0
54	MG	1a	3051	1/1	0.87	0.19	61,61,61,61	0
54	MG	2A	3153	1/1	0.87	0.25	62,62,62,62	0
54	MG	1A	3984	1/1	0.87	0.14	36,36,36,36	0
54	MG	2A	3300	1/1	0.87	0.10	64,64,64,64	0
54	MG	1R	203	1/1	0.87	0.17	51,51,51,51	0
54	MG	1A	3416	1/1	0.87	0.32	33,33,33,33	0
54	MG	2a	3143	1/1	0.87	0.08	81,81,81,81	0
54	MG	1A	3682	1/1	0.87	0.18	61,61,61,61	0
54	MG	1a	3192	1/1	0.87	0.10	69,69,69,69	0
54	MG	2E	303	1/1	0.87	0.18	62,62,62,62	0
54	MG	2A	3494	1/1	0.87	0.13	50,50,50,50	0
54	MG	2a	3149	1/1	0.87	0.24	77,77,77,77	0
54	MG	1A	3435	1/1	0.87	0.09	41,41,41,41	0
54	MG	1A	3993	1/1	0.87	0.15	51,51,51,51	0
54	MG	2A	3501	1/1	0.87	0.08	72,72,72,72	0
54	MG	1A	3262	1/1	0.87	0.15	75,75,75,75	0
54	MG	1A	3920	1/1	0.87	0.09	61,61,61,61	0
54	MG	1A	3998	1/1	0.87	0.09	46,46,46,46	0
54	MG	2A	3179	1/1	0.87	0.15	67,67,67,67	0
54	MG	2A	3330	1/1	0.87	0.12	49,49,49,49	0
54	MG	2R	202	1/1	0.87	0.30	57,57,57,57	0
54	MG	2A	3333	1/1	0.87	0.19	39,39,39,39	0
54	MG	1A	3634	1/1	0.87	0.20	56,56,56,56	0
54	MG	2a	3172	1/1	0.87	0.16	84,84,84,84	0
54	MG	1A	3839	1/1	0.87	0.14	53,53,53,53	0
54	MG	2a	3001	1/1	0.87	0.17	49,49,49,49	0
54	MG	2A	3036	1/1	0.87	0.14	69,69,69,69	0
54	MG	2A	3037	1/1	0.87	0.20	58,58,58,58	0
54	MG	1a	3078	1/1	0.87	0.23	60,60,60,60	0
54	MG	1A	3444	1/1	0.87	0.09	52,52,52,52	0
54	MG	1A	3842	1/1	0.87	0.13	35,35,35,35	0
54	MG	1A	3445	1/1	0.87	0.24	32,32,32,32	0
54	MG	1A	3775	1/1	0.87	0.09	45,45,45,45	0
54	MG	1A	3201	1/1	0.87	0.33	64,64,64,64	0
54	MG	2a	3018	1/1	0.87	0.06	75,75,75,75	0
54	MG	2A	3050	1/1	0.87	0.08	58,58,58,58	0
54	MG	1A	3289	1/1	0.87	0.30	62,62,62,62	0
54	MG	2A	3660	1/1	0.87	0.07	55,55,55,55	0
54	MG	1a	3089	1/1	0.87	0.10	54,54,54,54	0
54	MG	2A	3201	1/1	0.87	0.06	71,71,71,71	0
54	MG	2A	3205	1/1	0.87	0.35	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3489	1/1	0.87	0.10	57,57,57,57	0
54	MG	1A	3490	1/1	0.87	0.11	60,60,60,60	0
54	MG	2A	3384	1/1	0.87	0.15	50,50,50,50	0
54	MG	1A	3646	1/1	0.87	0.12	58,58,58,58	0
54	MG	1A	3238	1/1	0.87	0.27	72,72,72,72	0
54	MG	2A	3213	1/1	0.87	0.12	61,61,61,61	0
54	MG	1A	3047	1/1	0.88	0.27	44,44,44,44	0
54	MG	2A	3714	1/1	0.88	0.33	61,61,61,61	0
54	MG	1A	3548	1/1	0.88	0.14	63,63,63,63	0
54	MG	1A	3129	1/1	0.88	0.55	43,43,43,43	0
54	MG	1A	3754	1/1	0.88	0.26	52,52,52,52	0
54	MG	2a	3078	1/1	0.88	0.07	72,72,72,72	0
54	MG	2a	3079	1/1	0.88	0.18	53,53,53,53	0
54	MG	1A	3015	1/1	0.88	0.14	32,32,32,32	0
54	MG	1A	3241	1/1	0.88	0.22	53,53,53,53	0
54	MG	2A	3607	1/1	0.88	0.07	64,64,64,64	0
54	MG	1A	3554	1/1	0.88	0.11	54,54,54,54	0
54	MG	1A	3471	1/1	0.88	0.23	28,28,28,28	0
54	MG	1A	3192	1/1	0.88	0.37	70,70,70,70	0
54	MG	2A	3492	1/1	0.88	0.16	59,59,59,59	0
54	MG	1A	3477	1/1	0.88	0.20	37,37,37,37	0
54	MG	2A	3328	1/1	0.88	0.21	42,42,42,42	0
54	MG	1A	3049	1/1	0.88	0.28	44,44,44,44	0
54	MG	2a	3099	1/1	0.88	0.16	49,49,49,49	0
54	MG	18	102	1/1	0.88	0.20	38,38,38,38	0
54	MG	2A	3742	1/1	0.88	0.10	52,52,52,52	0
54	MG	1A	3624	1/1	0.88	0.10	67,67,67,67	0
54	MG	1B	203	1/1	0.88	0.13	54,54,54,54	0
54	MG	2B	209	1/1	0.88	0.15	65,65,65,65	0
54	MG	1A	3690	1/1	0.88	0.36	51,51,51,51	0
54	MG	1A	3779	1/1	0.88	0.20	53,53,53,53	0
54	MG	1A	3051	1/1	0.88	0.32	32,32,32,32	0
54	MG	2a	3113	1/1	0.88	0.13	71,71,71,71	0
54	MG	2A	3202	1/1	0.88	0.16	53,53,53,53	0
54	MG	1A	3302	1/1	0.88	0.16	52,52,52,52	0
54	MG	2A	3206	1/1	0.88	0.29	52,52,52,52	0
54	MG	1A	3305	1/1	0.88	0.21	51,51,51,51	0
54	MG	2A	3208	1/1	0.88	0.23	48,48,48,48	0
54	MG	2E	304	1/1	0.88	0.17	37,37,37,37	0
54	MG	2a	3123	1/1	0.88	0.38	68,68,68,68	0
54	MG	1a	3257	1/1	0.88	0.08	63,63,63,63	0
54	MG	1A	3008	1/1	0.88	0.18	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3081	1/1	0.88	0.24	64,64,64,64	0
54	MG	1A	3057	1/1	0.88	0.13	50,50,50,50	0
54	MG	1B	218	1/1	0.88	0.18	44,44,44,44	0
54	MG	2A	3644	1/1	0.88	0.08	69,69,69,69	0
54	MG	2A	3648	1/1	0.88	0.07	66,66,66,66	0
54	MG	1A	3790	1/1	0.88	0.11	48,48,48,48	0
54	MG	2A	3216	1/1	0.88	0.16	65,65,65,65	0
54	MG	2A	3088	1/1	0.88	0.64	50,50,50,50	0
54	MG	2A	3385	1/1	0.88	0.18	69,69,69,69	0
54	MG	2a	3144	1/1	0.88	0.11	65,65,65,65	0
54	MG	1A	3578	1/1	0.88	0.08	44,44,44,44	0
54	MG	2A	3219	1/1	0.88	0.06	67,67,67,67	0
54	MG	1A	3872	1/1	0.88	0.20	38,38,38,38	0
54	MG	2A	3533	1/1	0.88	0.16	33,33,33,33	0
54	MG	1a	3028	1/1	0.88	0.09	73,73,73,73	0
54	MG	2A	3392	1/1	0.88	0.13	58,58,58,58	0
54	MG	1A	3310	1/1	0.88	0.20	58,58,58,58	0
54	MG	1A	3961	1/1	0.88	0.21	66,66,66,66	0
54	MG	1D	301	1/1	0.88	0.18	51,51,51,51	0
54	MG	2A	3667	1/1	0.88	0.13	42,42,42,42	0
54	MG	1a	3150	1/1	0.88	0.18	80,80,80,80	0
54	MG	1A	3203	1/1	0.88	0.35	43,43,43,43	0
54	MG	1A	3796	1/1	0.88	0.14	54,54,54,54	0
54	MG	1A	3967	1/1	0.88	0.31	55,55,55,55	0
54	MG	1F	308	1/1	0.88	0.24	39,39,39,39	0
54	MG	2a	3169	1/1	0.88	0.17	69,69,69,69	0
54	MG	2A	3418	1/1	0.88	0.08	83,83,83,83	0
54	MG	2A	3117	1/1	0.88	0.15	69,69,69,69	0
54	MG	1h	202	1/1	0.88	0.25	72,72,72,72	0
54	MG	1A	3380	1/1	0.88	0.20	32,32,32,32	0
54	MG	2A	3126	1/1	0.88	0.18	37,37,37,37	0
54	MG	1A	3500	1/1	0.88	0.25	27,27,27,27	0
54	MG	1A	3804	1/1	0.88	0.14	36,36,36,36	0
54	MG	1A	3037	1/1	0.88	0.29	55,55,55,55	0
54	MG	1A	3727	1/1	0.88	0.11	59,59,59,59	0
54	MG	1A	3038	1/1	0.88	0.17	37,37,37,37	0
54	MG	1A	3281	1/1	0.88	0.31	50,50,50,50	0
54	MG	2A	3272	1/1	0.88	0.15	62,62,62,62	0
54	MG	1A	3978	1/1	0.88	0.10	69,69,69,69	0
54	MG	1Q	203	1/1	0.88	0.23	56,56,56,56	0
54	MG	1a	3188	1/1	0.88	0.20	68,68,68,68	0
54	MG	1a	3061	1/1	0.88	0.22	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3063	1/1	0.88	0.09	59,59,59,59	0
54	MG	1A	3172	1/1	0.88	0.17	62,62,62,62	0
54	MG	1A	3285	1/1	0.88	0.08	77,77,77,77	0
54	MG	1A	3744	1/1	0.88	0.21	54,54,54,54	0
54	MG	1A	3990	1/1	0.88	0.10	76,76,76,76	0
54	MG	1A	3039	1/1	0.88	0.21	60,60,60,60	0
54	MG	2A	3029	1/1	0.88	0.10	58,58,58,58	0
54	MG	2A	3032	1/1	0.88	0.28	73,73,73,73	0
54	MG	1A	3992	1/1	0.88	0.46	63,63,63,63	0
54	MG	2A	3573	1/1	0.89	0.07	56,56,56,56	0
54	MG	1Z	301	1/1	0.89	0.29	62,62,62,62	0
54	MG	2A	3177	1/1	0.89	0.29	54,54,54,54	0
54	MG	2A	3287	1/1	0.89	0.22	42,42,42,42	0
54	MG	10	102	1/1	0.89	0.49	44,44,44,44	0
54	MG	1a	3256	1/1	0.89	0.12	70,70,70,70	0
54	MG	2a	3070	1/1	0.89	0.12	71,71,71,71	0
54	MG	1A	3502	1/1	0.89	0.13	53,53,53,53	0
54	MG	2A	3583	1/1	0.89	0.07	65,65,65,65	0
54	MG	1A	3965	1/1	0.89	0.17	57,57,57,57	0
54	MG	1a	3259	1/1	0.89	0.14	55,55,55,55	0
54	MG	2A	3464	1/1	0.89	0.12	58,58,58,58	0
54	MG	2A	3590	1/1	0.89	0.11	59,59,59,59	0
54	MG	1a	3057	1/1	0.89	0.32	71,71,71,71	0
54	MG	2A	3062	1/1	0.89	0.12	62,62,62,62	0
54	MG	2A	3190	1/1	0.89	0.14	69,69,69,69	0
54	MG	2A	3311	1/1	0.89	0.26	62,62,62,62	0
54	MG	1A	3836	1/1	0.89	0.20	59,59,59,59	0
54	MG	2a	3094	1/1	0.89	0.07	73,73,73,73	0
54	MG	2A	3471	1/1	0.89	0.07	71,71,71,71	0
54	MG	2A	3065	1/1	0.89	0.71	52,52,52,52	0
54	MG	1A	3677	1/1	0.89	0.17	41,41,41,41	0
54	MG	2A	3726	1/1	0.89	0.09	47,47,47,47	0
54	MG	1a	3265	1/1	0.89	0.12	65,65,65,65	0
54	MG	1A	3679	1/1	0.89	0.12	64,64,64,64	0
54	MG	1A	3969	1/1	0.89	0.22	33,33,33,33	0
54	MG	2a	3103	1/1	0.89	0.22	71,71,71,71	0
54	MG	1A	3733	1/1	0.89	0.15	49,49,49,49	0
54	MG	2A	3329	1/1	0.89	0.17	59,59,59,59	0
54	MG	1A	3917	1/1	0.89	0.06	62,62,62,62	0
54	MG	2A	3618	1/1	0.89	0.39	86,86,86,86	0
54	MG	1a	3162	1/1	0.89	0.11	62,62,62,62	0
54	MG	2a	3111	1/1	0.89	0.07	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3736	1/1	0.89	0.13	61,61,61,61	0
54	MG	1A	3390	1/1	0.89	0.17	36,36,36,36	0
54	MG	2A	3090	1/1	0.89	0.10	80,80,80,80	0
54	MG	2B	212	1/1	0.89	0.15	68,68,68,68	0
54	MG	1A	3507	1/1	0.89	0.24	27,27,27,27	0
54	MG	2a	3118	1/1	0.89	0.17	61,61,61,61	0
54	MG	2A	3344	1/1	0.89	0.11	56,56,56,56	0
54	MG	1A	3085	1/1	0.89	0.28	51,51,51,51	0
54	MG	1A	3292	1/1	0.89	0.17	48,48,48,48	0
54	MG	2A	3629	1/1	0.89	0.16	72,72,72,72	0
54	MG	1a	3181	1/1	0.89	0.10	79,79,79,79	0
54	MG	2a	3126	1/1	0.89	0.18	78,78,78,78	0
54	MG	1A	3516	1/1	0.89	0.11	55,55,55,55	0
54	MG	1A	3012	1/1	0.89	0.20	39,39,39,39	0
54	MG	2A	3356	1/1	0.89	0.13	42,42,42,42	0
54	MG	2a	3132	1/1	0.89	0.09	60,60,60,60	0
54	MG	2A	3103	1/1	0.89	0.10	44,44,44,44	0
54	MG	1A	3748	1/1	0.89	0.14	50,50,50,50	0
54	MG	1E	305	1/1	0.89	0.21	30,30,30,30	0
54	MG	1A	3096	1/1	0.89	0.18	46,46,46,46	0
54	MG	1A	3401	1/1	0.89	0.16	31,31,31,31	0
54	MG	2A	3515	1/1	0.89	0.10	61,61,61,61	0
54	MG	2P	204	1/1	0.89	0.07	61,61,61,61	0
54	MG	2Q	201	1/1	0.89	0.13	56,56,56,56	0
54	MG	2A	3373	1/1	0.89	0.12	41,41,41,41	0
54	MG	2A	3520	1/1	0.89	0.05	59,59,59,59	0
54	MG	2A	3112	1/1	0.89	0.24	53,53,53,53	0
54	MG	1A	3753	1/1	0.89	0.34	45,45,45,45	0
54	MG	1A	3655	1/1	0.89	0.10	46,46,46,46	0
54	MG	1A	3164	1/1	0.89	0.19	46,46,46,46	0
54	MG	1A	3657	1/1	0.89	0.33	33,33,33,33	0
54	MG	1a	3095	1/1	0.89	0.17	71,71,71,71	0
54	MG	2a	3005	1/1	0.89	0.20	74,74,74,74	0
54	MG	2A	3235	1/1	0.89	0.19	65,65,65,65	0
54	MG	1a	3097	1/1	0.89	0.15	70,70,70,70	0
54	MG	1A	3237	1/1	0.89	0.26	69,69,69,69	0
54	MG	2A	3391	1/1	0.89	0.19	60,60,60,60	0
54	MG	2A	3134	1/1	0.89	0.19	69,69,69,69	0
54	MG	1A	3660	1/1	0.89	0.12	59,59,59,59	0
54	MG	1a	3102	1/1	0.89	0.11	72,72,72,72	0
54	MG	2a	3019	1/1	0.89	0.09	47,47,47,47	0
54	MG	1A	3765	1/1	0.89	0.17	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1a	3221	1/1	0.89	0.16	65,65,65,65	0
54	MG	1A	3632	1/1	0.89	0.10	45,45,45,45	0
54	MG	1A	3474	1/1	0.89	0.18	27,27,27,27	0
54	MG	2A	3546	1/1	0.89	0.13	67,67,67,67	0
54	MG	1A	3667	1/1	0.89	0.08	53,53,53,53	0
54	MG	2A	3413	1/1	0.89	0.04	58,58,58,58	0
54	MG	2A	3416	1/1	0.89	0.15	60,60,60,60	0
54	MG	1A	3278	1/1	0.89	0.37	32,32,32,32	0
54	MG	1a	3118	1/1	0.89	0.12	58,58,58,58	0
54	MG	2A	3155	1/1	0.89	0.24	71,71,71,71	0
54	MG	1A	3956	1/1	0.89	0.11	59,59,59,59	0
54	MG	1A	3724	1/1	0.89	0.14	55,55,55,55	0
54	MG	1A	4019	1/1	0.89	0.11	51,51,51,51	0
54	MG	2A	3688	1/1	0.89	0.15	69,69,69,69	0
54	MG	2j	201	1/1	0.89	0.15	82,82,82,82	0
54	MG	2A	3038	1/1	0.89	0.07	70,70,70,70	0
57	MPD	1A	4022	8/8	0.89	0.16	50,57,61,65	0
54	MG	1B	201	1/1	0.89	0.26	56,56,56,56	0
54	MG	1A	3900	1/1	0.89	0.20	25,25,25,25	0
54	MG	2A	3278	1/1	0.89	0.21	69,69,69,69	0
54	MG	1A	3579	1/1	0.89	0.08	71,71,71,71	0
54	MG	1a	3141	1/1	0.89	0.12	63,63,63,63	0
54	MG	1a	3253	1/1	0.89	0.14	54,54,54,54	0
54	MG	2A	3571	1/1	0.89	0.10	51,51,51,51	0
54	MG	2A	3448	1/1	0.89	0.14	50,50,50,50	0
59	ZN	2n	501	1/1	0.89	0.07	92,92,92,92	0
54	MG	1A	3346	1/1	0.90	0.19	51,51,51,51	0
54	MG	2A	3496	1/1	0.90	0.12	63,63,63,63	0
54	MG	1a	3018	1/1	0.90	0.16	50,50,50,50	0
54	MG	2a	3039	1/1	0.90	0.21	73,73,73,73	0
54	MG	1A	3088	1/1	0.90	0.12	49,49,49,49	0
54	MG	1a	3024	1/1	0.90	0.12	54,54,54,54	0
54	MG	1A	3411	1/1	0.90	0.23	26,26,26,26	0
54	MG	1A	3558	1/1	0.90	0.13	55,55,55,55	0
54	MG	1A	3412	1/1	0.90	0.25	33,33,33,33	0
54	MG	1B	227	1/1	0.90	0.15	69,69,69,69	0
54	MG	2A	3161	1/1	0.90	0.43	57,57,57,57	0
54	MG	2a	3049	1/1	0.90	0.16	76,76,76,76	0
54	MG	2A	3666	1/1	0.90	0.11	47,47,47,47	0
54	MG	1A	3225	1/1	0.90	0.20	37,37,37,37	0
54	MG	1A	3386	1/1	0.90	0.23	36,36,36,36	0
54	MG	1D	311	1/1	0.90	0.26	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1D	312	1/1	0.90	0.44	72,72,72,72	0
54	MG	1A	3389	1/1	0.90	0.24	34,34,34,34	0
54	MG	1a	3040	1/1	0.90	0.07	75,75,75,75	0
54	MG	2A	3172	1/1	0.90	0.13	66,66,66,66	0
54	MG	2a	3065	1/1	0.90	0.09	78,78,78,78	0
54	MG	2A	3003	1/1	0.90	0.12	57,57,57,57	0
54	MG	1a	3168	1/1	0.90	0.11	72,72,72,72	0
54	MG	2A	3008	1/1	0.90	0.14	38,38,38,38	0
54	MG	1A	3501	1/1	0.90	0.16	78,78,78,78	0
54	MG	2A	3347	1/1	0.90	0.16	48,48,48,48	0
54	MG	1A	3803	1/1	0.90	0.16	50,50,50,50	0
54	MG	2A	3182	1/1	0.90	0.22	56,56,56,56	0
54	MG	2A	3352	1/1	0.90	0.15	42,42,42,42	0
54	MG	2A	3023	1/1	0.90	0.30	68,68,68,68	0
54	MG	1a	3043	1/1	0.90	0.56	67,67,67,67	0
54	MG	2a	3082	1/1	0.90	0.30	65,65,65,65	0
54	MG	2a	3083	1/1	0.90	0.36	72,72,72,72	0
54	MG	2a	3084	1/1	0.90	0.09	79,79,79,79	0
54	MG	2A	3692	1/1	0.90	0.10	38,38,38,38	0
54	MG	1A	3671	1/1	0.90	0.18	75,75,75,75	0
54	MG	1A	3805	1/1	0.90	0.12	55,55,55,55	0
54	MG	1A	3974	1/1	0.90	0.12	64,64,64,64	0
54	MG	1A	3896	1/1	0.90	0.09	54,54,54,54	0
54	MG	1A	3739	1/1	0.90	0.29	55,55,55,55	0
54	MG	2A	3363	1/1	0.90	0.14	59,59,59,59	0
54	MG	1A	3456	1/1	0.90	0.13	70,70,70,70	0
54	MG	2A	3367	1/1	0.90	0.15	61,61,61,61	0
54	MG	2A	3193	1/1	0.90	0.08	67,67,67,67	0
54	MG	1A	3676	1/1	0.90	0.07	48,48,48,48	0
54	MG	2A	3376	1/1	0.90	0.13	48,48,48,48	0
54	MG	2A	3377	1/1	0.90	0.10	70,70,70,70	0
54	MG	1A	3458	1/1	0.90	0.25	51,51,51,51	0
54	MG	2A	3197	1/1	0.90	0.13	53,53,53,53	0
54	MG	1A	3815	1/1	0.90	0.26	39,39,39,39	0
54	MG	2A	3039	1/1	0.90	0.19	52,52,52,52	0
54	MG	1A	3146	1/1	0.90	0.14	57,57,57,57	0
54	MG	1A	3630	1/1	0.90	0.20	64,64,64,64	0
54	MG	1a	3067	1/1	0.90	0.10	79,79,79,79	0
54	MG	1a	3203	1/1	0.90	0.14	77,77,77,77	0
54	MG	1a	3204	1/1	0.90	0.05	71,71,71,71	0
54	MG	1A	3509	1/1	0.90	0.17	60,60,60,60	0
54	MG	1A	3425	1/1	0.90	0.21	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	1a	3209	1/1	0.90	0.18	73,73,73,73	0
54	MG	1A	3466	1/1	0.90	0.17	59,59,59,59	0
54	MG	1a	3074	1/1	0.90	0.10	64,64,64,64	0
54	MG	2A	3401	1/1	0.90	0.20	41,41,41,41	0
54	MG	1A	3467	1/1	0.90	0.24	49,49,49,49	0
54	MG	1A	3687	1/1	0.90	0.12	49,49,49,49	0
54	MG	2A	3059	1/1	0.90	0.16	50,50,50,50	0
54	MG	2A	3579	1/1	0.90	0.30	42,42,42,42	0
54	MG	1A	3758	1/1	0.90	0.09	33,33,33,33	0
54	MG	1A	3522	1/1	0.90	0.15	57,57,57,57	0
54	MG	1a	3226	1/1	0.90	0.10	70,70,70,70	0
54	MG	1V	205	1/1	0.90	0.23	60,60,60,60	0
54	MG	1A	4000	1/1	0.90	0.25	55,55,55,55	0
54	MG	2A	3076	1/1	0.90	0.14	70,70,70,70	0
54	MG	1W	203	1/1	0.90	0.25	65,65,65,65	0
54	MG	2a	3138	1/1	0.90	0.28	79,79,79,79	0
54	MG	1A	4001	1/1	0.90	0.10	39,39,39,39	0
54	MG	1A	3356	1/1	0.90	0.24	39,39,39,39	0
54	MG	1a	3237	1/1	0.90	0.15	79,79,79,79	0
54	MG	2A	3435	1/1	0.90	0.12	69,69,69,69	0
54	MG	1A	4003	1/1	0.90	0.24	51,51,51,51	0
54	MG	2D	308	1/1	0.90	0.40	86,86,86,86	0
54	MG	1A	3469	1/1	0.90	0.24	25,25,25,25	0
54	MG	1A	3165	1/1	0.90	0.20	39,39,39,39	0
54	MG	1A	3197	1/1	0.90	0.11	50,50,50,50	0
54	MG	2A	3442	1/1	0.90	0.13	71,71,71,71	0
54	MG	2A	3605	1/1	0.90	0.12	42,42,42,42	0
54	MG	1A	4010	1/1	0.90	0.18	54,54,54,54	0
54	MG	1A	3767	1/1	0.90	0.28	26,26,26,26	0
54	MG	1A	3698	1/1	0.90	0.20	56,56,56,56	0
54	MG	2A	3449	1/1	0.90	0.30	67,67,67,67	0
54	MG	2a	3157	1/1	0.90	0.11	52,52,52,52	0
54	MG	1A	4017	1/1	0.90	0.11	70,70,70,70	0
54	MG	2a	3162	1/1	0.90	0.18	67,67,67,67	0
54	MG	2A	3615	1/1	0.90	0.10	61,61,61,61	0
54	MG	1A	3844	1/1	0.90	0.09	53,53,53,53	0
54	MG	1A	3845	1/1	0.90	0.10	44,44,44,44	0
54	MG	1A	3773	1/1	0.90	0.14	39,39,39,39	0
54	MG	1A	3644	1/1	0.90	0.50	56,56,56,56	0
54	MG	2T	202	1/1	0.90	0.11	71,71,71,71	0
54	MG	1A	3948	1/1	0.90	0.08	41,41,41,41	0
54	MG	2a	3173	1/1	0.90	0.11	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3259	1/1	0.90	0.13	60,60,60,60	0
54	MG	19	102	1/1	0.90	0.13	64,64,64,64	0
54	MG	2A	3263	1/1	0.90	0.56	44,44,44,44	0
54	MG	1a	3110	1/1	0.90	0.16	59,59,59,59	0
54	MG	2a	3003	1/1	0.90	0.22	66,66,66,66	0
54	MG	2A	3109	1/1	0.90	0.15	43,43,43,43	0
54	MG	1A	3106	1/1	0.90	0.35	69,69,69,69	0
54	MG	2A	3274	1/1	0.90	0.15	60,60,60,60	0
54	MG	1a	3115	1/1	0.90	0.09	61,61,61,61	0
54	MG	2a	3009	1/1	0.90	0.22	75,75,75,75	0
54	MG	2A	3116	1/1	0.90	0.15	71,71,71,71	0
54	MG	1a	3269	1/1	0.90	0.07	67,67,67,67	0
54	MG	1A	3704	1/1	0.90	0.12	31,31,31,31	0
54	MG	2A	3476	1/1	0.90	0.16	77,77,77,77	0
54	MG	2f	201	1/1	0.90	0.13	55,55,55,55	0
54	MG	1A	3275	1/1	0.90	0.37	55,55,55,55	0
54	MG	1a	3004	1/1	0.90	0.13	62,62,62,62	0
54	MG	1A	3780	1/1	0.90	0.12	56,56,56,56	0
54	MG	1A	3093	1/1	0.90	0.19	57,57,57,57	0
54	MG	1a	3134	1/1	0.90	0.12	73,73,73,73	0
54	MG	1B	211	1/1	0.90	0.22	56,56,56,56	0
54	MG	1e	203	1/1	0.90	0.23	64,64,64,64	0
54	MG	1A	3218	1/1	0.90	0.09	46,46,46,46	0
54	MG	2A	3651	1/1	0.90	0.12	49,49,49,49	0
54	MG	1A	3342	1/1	0.90	0.24	31,31,31,31	0
54	MG	2a	3032	1/1	0.90	0.22	72,72,72,72	0
54	MG	2A	3144	1/1	0.90	0.20	63,63,63,63	0
54	MG	1T	202	1/1	0.91	0.15	57,57,57,57	0
54	MG	2A	3093	1/1	0.91	0.25	71,71,71,71	0
54	MG	1a	3149	1/1	0.91	0.11	66,66,66,66	0
54	MG	2A	3095	1/1	0.91	0.51	60,60,60,60	0
54	MG	1A	3752	1/1	0.91	0.11	50,50,50,50	0
54	MG	1a	3048	1/1	0.91	0.24	65,65,65,65	0
54	MG	2A	3221	1/1	0.91	0.14	51,51,51,51	0
54	MG	1a	3049	1/1	0.91	0.12	47,47,47,47	0
54	MG	1a	3274	1/1	0.91	0.06	61,61,61,61	0
54	MG	2a	3064	1/1	0.91	0.09	81,81,81,81	0
54	MG	1A	3419	1/1	0.91	0.35	46,46,46,46	0
54	MG	1a	3158	1/1	0.91	0.15	64,64,64,64	0
54	MG	2A	3700	1/1	0.91	0.12	33,33,33,33	0
54	MG	1d	301	1/1	0.91	0.13	70,70,70,70	0
54	MG	1A	4015	1/1	0.91	0.21	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3532	1/1	0.91	0.14	57,57,57,57	0
54	MG	2A	3405	1/1	0.91	0.18	41,41,41,41	0
54	MG	1A	3534	1/1	0.91	0.21	60,60,60,60	0
54	MG	2A	3408	1/1	0.91	0.12	44,44,44,44	0
54	MG	1V	207	1/1	0.91	0.20	78,78,78,78	0
54	MG	1A	3889	1/1	0.91	0.22	48,48,48,48	0
54	MG	1h	201	1/1	0.91	0.14	64,64,64,64	0
54	MG	1A	3453	1/1	0.91	0.12	39,39,39,39	0
54	MG	2A	3118	1/1	0.91	0.31	63,63,63,63	0
54	MG	1A	3270	1/1	0.91	0.13	57,57,57,57	0
54	MG	2A	3120	1/1	0.91	0.11	74,74,74,74	0
54	MG	2A	3717	1/1	0.91	0.09	73,73,73,73	0
54	MG	2A	3255	1/1	0.91	0.10	48,48,48,48	0
54	MG	1k	201	1/1	0.91	0.19	44,44,44,44	0
54	MG	2A	3720	1/1	0.91	0.09	68,68,68,68	0
54	MG	1A	3052	1/1	0.91	0.35	36,36,36,36	0
54	MG	1A	3174	1/1	0.91	0.11	68,68,68,68	0
54	MG	2A	3132	1/1	0.91	0.07	67,67,67,67	0
54	MG	1A	3175	1/1	0.91	0.29	38,38,38,38	0
54	MG	1A	3429	1/1	0.91	0.23	62,62,62,62	0
54	MG	2A	3264	1/1	0.91	0.13	60,60,60,60	0
54	MG	2A	3586	1/1	0.91	0.20	49,49,49,49	0
54	MG	1o	102	1/1	0.91	0.25	58,58,58,58	0
54	MG	2A	3267	1/1	0.91	0.28	40,40,40,40	0
54	MG	2A	3268	1/1	0.91	0.26	51,51,51,51	0
54	MG	2A	3734	1/1	0.91	0.17	32,32,32,32	0
54	MG	1A	3899	1/1	0.91	0.15	13,13,13,13	0
54	MG	1A	3555	1/1	0.91	0.19	46,46,46,46	0
54	MG	2A	3140	1/1	0.91	0.09	58,58,58,58	0
54	MG	13	102	1/1	0.91	0.24	45,45,45,45	0
54	MG	2A	3601	1/1	0.91	0.18	65,65,65,65	0
54	MG	1A	3768	1/1	0.91	0.10	49,49,49,49	0
54	MG	1B	212	1/1	0.91	0.18	47,47,47,47	0
54	MG	2A	3148	1/1	0.91	0.10	50,50,50,50	0
54	MG	1A	3084	1/1	0.91	0.24	54,54,54,54	0
54	MG	17	103	1/1	0.91	0.11	38,38,38,38	0
54	MG	1a	3196	1/1	0.91	0.07	64,64,64,64	0
54	MG	1A	3772	1/1	0.91	0.10	39,39,39,39	0
54	MG	2D	304	1/1	0.91	0.51	45,45,45,45	0
54	MG	2D	307	1/1	0.91	0.12	65,65,65,65	0
54	MG	2A	3006	1/1	0.91	0.12	51,51,51,51	0
54	MG	2D	309	1/1	0.91	0.21	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3658	1/1	0.91	0.09	63,63,63,63	0
54	MG	1A	3609	1/1	0.91	0.15	34,34,34,34	0
54	MG	1a	3200	1/1	0.91	0.09	67,67,67,67	0
54	MG	1A	3280	1/1	0.91	0.10	58,58,58,58	0
54	MG	2A	3470	1/1	0.91	0.07	66,66,66,66	0
54	MG	1a	3088	1/1	0.91	0.11	75,75,75,75	0
54	MG	2A	3303	1/1	0.91	0.10	43,43,43,43	0
54	MG	1A	3662	1/1	0.91	0.36	54,54,54,54	0
54	MG	1A	3382	1/1	0.91	0.13	32,32,32,32	0
54	MG	1B	226	1/1	0.91	0.18	64,64,64,64	0
54	MG	2A	3170	1/1	0.91	0.08	94,94,94,94	0
54	MG	2P	203	1/1	0.91	0.08	74,74,74,74	0
54	MG	1A	3560	1/1	0.91	0.10	61,61,61,61	0
54	MG	1A	3980	1/1	0.91	0.20	73,73,73,73	0
54	MG	1A	3313	1/1	0.91	0.24	45,45,45,45	0
54	MG	2A	3175	1/1	0.91	0.19	61,61,61,61	0
54	MG	2A	3486	1/1	0.91	0.17	57,57,57,57	0
54	MG	1a	3215	1/1	0.91	0.17	70,70,70,70	0
54	MG	2W	202	1/1	0.91	0.14	54,54,54,54	0
54	MG	2W	204	1/1	0.91	0.11	70,70,70,70	0
54	MG	1A	3441	1/1	0.91	0.17	69,69,69,69	0
54	MG	2A	3178	1/1	0.91	0.17	46,46,46,46	0
54	MG	23	101	1/1	0.91	0.20	53,53,53,53	0
54	MG	28	101	1/1	0.91	0.06	59,59,59,59	0
54	MG	28	102	1/1	0.91	0.17	67,67,67,67	0
54	MG	2A	3327	1/1	0.91	0.22	49,49,49,49	0
54	MG	1a	3098	1/1	0.91	0.29	62,62,62,62	0
54	MG	2a	3166	1/1	0.91	0.10	74,74,74,74	0
54	MG	1A	3026	1/1	0.91	0.20	64,64,64,64	0
54	MG	1A	3987	1/1	0.91	0.57	57,57,57,57	0
54	MG	1A	3735	1/1	0.91	0.26	54,54,54,54	0
54	MG	2A	3335	1/1	0.91	0.17	32,32,32,32	0
54	MG	1A	3132	1/1	0.91	0.13	53,53,53,53	0
54	MG	1E	307	1/1	0.91	0.22	31,31,31,31	0
54	MG	1A	3414	1/1	0.91	0.23	30,30,30,30	0
54	MG	1A	3928	1/1	0.91	0.16	63,63,63,63	0
54	MG	1A	3519	1/1	0.91	0.07	57,57,57,57	0
54	MG	1A	3064	1/1	0.91	0.12	49,49,49,49	0
54	MG	1a	3027	1/1	0.91	0.14	68,68,68,68	0
54	MG	2a	3183	1/1	0.91	0.06	77,77,77,77	0
54	MG	2A	3511	1/1	0.91	0.12	37,37,37,37	0
54	MG	1A	3448	1/1	0.91	0.11	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3513	1/1	0.91	0.22	45,45,45,45	0
54	MG	1a	3120	1/1	0.91	0.27	54,54,54,54	0
54	MG	1a	3246	1/1	0.91	0.14	78,78,78,78	0
54	MG	1a	3247	1/1	0.91	0.22	80,80,80,80	0
54	MG	1a	3126	1/1	0.91	0.13	70,70,70,70	0
54	MG	1A	3857	1/1	0.91	0.34	46,46,46,46	0
54	MG	1G	201	1/1	0.91	0.12	73,73,73,73	0
54	MG	1A	3526	1/1	0.91	0.13	54,54,54,54	0
54	MG	1A	3940	1/1	0.91	0.10	45,45,45,45	0
54	MG	2A	3204	1/1	0.91	0.21	61,61,61,61	0
54	MG	1a	3133	1/1	0.91	0.18	40,40,40,40	0
54	MG	1A	3527	1/1	0.91	0.21	35,35,35,35	0
54	MG	1A	3943	1/1	0.91	0.12	36,36,36,36	0
54	MG	1Q	202	1/1	0.91	0.13	34,34,34,34	0
54	MG	1A	3582	1/1	0.91	0.14	53,53,53,53	0
54	MG	1A	3301	1/1	0.91	0.34	36,36,36,36	0
54	MG	1A	3529	1/1	0.91	0.08	51,51,51,51	0
54	MG	1A	3170	1/1	0.91	0.16	50,50,50,50	0
54	MG	2A	3382	1/1	0.91	0.18	37,37,37,37	0
54	MG	1a	3147	1/1	0.91	0.11	53,53,53,53	0
54	MG	2a	3050	1/1	0.92	0.23	66,66,66,66	0
54	MG	1W	201	1/1	0.92	0.46	56,56,56,56	0
54	MG	1A	3874	1/1	0.92	0.18	64,64,64,64	0
54	MG	2A	3115	1/1	0.92	0.12	57,57,57,57	0
54	MG	1a	3163	1/1	0.92	0.11	72,72,72,72	0
54	MG	2a	3056	1/1	0.92	0.15	70,70,70,70	0
54	MG	1a	3164	1/1	0.92	0.10	65,65,65,65	0
54	MG	1A	3333	1/1	0.92	0.23	58,58,58,58	0
54	MG	1A	3124	1/1	0.92	0.28	55,55,55,55	0
54	MG	2A	3412	1/1	0.92	0.05	64,64,64,64	0
54	MG	2A	3704	1/1	0.92	0.09	67,67,67,67	0
54	MG	1A	3879	1/1	0.92	0.17	52,52,52,52	0
54	MG	2A	3415	1/1	0.92	0.25	45,45,45,45	0
54	MG	1l	201	1/1	0.92	0.24	70,70,70,70	0
54	MG	2A	3567	1/1	0.92	0.09	50,50,50,50	0
54	MG	1a	3065	1/1	0.92	0.12	77,77,77,77	0
54	MG	1A	3810	1/1	0.92	0.14	52,52,52,52	0
54	MG	1a	3175	1/1	0.92	0.17	67,67,67,67	0
54	MG	1A	3692	1/1	0.92	0.22	46,46,46,46	0
54	MG	1A	3381	1/1	0.92	0.24	29,29,29,29	0
54	MG	1A	3648	1/1	0.92	0.08	36,36,36,36	0
54	MG	2A	3575	1/1	0.92	0.13	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3338	1/1	0.92	0.20	54,54,54,54	0
54	MG	1A	3030	1/1	0.92	0.12	31,31,31,31	0
54	MG	13	103	1/1	0.92	0.17	63,63,63,63	0
54	MG	1A	3761	1/1	0.92	0.14	25,25,25,25	0
54	MG	15	107	1/1	0.92	0.15	37,37,37,37	0
54	MG	1A	3136	1/1	0.92	0.23	48,48,48,48	0
54	MG	1A	3764	1/1	0.92	0.17	27,27,27,27	0
54	MG	1A	3459	1/1	0.92	0.11	52,52,52,52	0
54	MG	2a	3093	1/1	0.92	0.15	79,79,79,79	0
54	MG	2A	3444	1/1	0.92	0.12	58,58,58,58	0
54	MG	17	106	1/1	0.92	0.39	63,63,63,63	0
54	MG	1a	3084	1/1	0.92	0.26	60,60,60,60	0
54	MG	1B	223	1/1	0.92	0.15	65,65,65,65	0
54	MG	2A	3014	1/1	0.92	0.13	53,53,53,53	0
54	MG	1a	3086	1/1	0.92	0.10	71,71,71,71	0
54	MG	2A	3017	1/1	0.92	0.10	56,56,56,56	0
54	MG	2A	3159	1/1	0.92	0.09	57,57,57,57	0
54	MG	2B	202	1/1	0.92	0.16	81,81,81,81	0
54	MG	1A	3973	1/1	0.92	0.24	65,65,65,65	0
54	MG	2A	3024	1/1	0.92	0.15	69,69,69,69	0
54	MG	2B	207	1/1	0.92	0.19	65,65,65,65	0
54	MG	1A	3825	1/1	0.92	0.11	60,60,60,60	0
54	MG	1A	3387	1/1	0.92	0.24	27,27,27,27	0
54	MG	1A	3250	1/1	0.92	0.20	62,62,62,62	0
54	MG	2A	3299	1/1	0.92	0.23	52,52,52,52	0
54	MG	1B	228	1/1	0.92	0.36	71,71,71,71	0
54	MG	1A	3710	1/1	0.92	0.12	40,40,40,40	0
54	MG	1A	3207	1/1	0.92	0.17	37,37,37,37	0
54	MG	1A	3771	1/1	0.92	0.09	47,47,47,47	0
54	MG	1A	3832	1/1	0.92	0.11	38,38,38,38	0
54	MG	2A	3613	1/1	0.92	0.12	60,60,60,60	0
54	MG	1a	3005	1/1	0.92	0.07	57,57,57,57	0
54	MG	1a	3223	1/1	0.92	0.11	70,70,70,70	0
54	MG	1A	3512	1/1	0.92	0.07	53,53,53,53	0
54	MG	2A	3316	1/1	0.92	0.23	69,69,69,69	0
54	MG	1A	3985	1/1	0.92	0.19	43,43,43,43	0
54	MG	2a	3128	1/1	0.92	0.17	65,65,65,65	0
54	MG	2A	3042	1/1	0.92	0.15	52,52,52,52	0
54	MG	2F	303	1/1	0.92	0.26	53,53,53,53	0
54	MG	1E	304	1/1	0.92	0.21	35,35,35,35	0
54	MG	1a	3104	1/1	0.92	0.14	63,63,63,63	0
54	MG	1a	3230	1/1	0.92	0.09	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	2A	3484	1/1	0.92	0.15	42,42,42,42	0
54	MG	1A	3612	1/1	0.92	0.24	22,22,22,22	0
54	MG	2a	3137	1/1	0.92	0.09	63,63,63,63	0
54	MG	2A	3628	1/1	0.92	0.14	61,61,61,61	0
54	MG	1a	3014	1/1	0.92	0.09	61,61,61,61	0
54	MG	1a	3108	1/1	0.92	0.19	69,69,69,69	0
54	MG	2A	3491	1/1	0.92	0.13	45,45,45,45	0
54	MG	1A	3838	1/1	0.92	0.12	47,47,47,47	0
54	MG	2A	3332	1/1	0.92	0.23	45,45,45,45	0
54	MG	2R	201	1/1	0.92	0.18	50,50,50,50	0
54	MG	2A	3189	1/1	0.92	0.16	48,48,48,48	0
54	MG	1A	3191	1/1	0.92	0.22	67,67,67,67	0
54	MG	2T	203	1/1	0.92	0.09	64,64,64,64	0
54	MG	2A	3336	1/1	0.92	0.11	43,43,43,43	0
54	MG	2V	201	1/1	0.92	0.12	64,64,64,64	0
54	MG	2V	203	1/1	0.92	0.36	75,75,75,75	0
54	MG	1A	3840	1/1	0.92	0.09	45,45,45,45	0
54	MG	1a	3022	1/1	0.92	0.07	64,64,64,64	0
54	MG	1A	3568	1/1	0.92	0.17	62,62,62,62	0
54	MG	1A	3618	1/1	0.92	0.22	25,25,25,25	0
54	MG	1A	3156	1/1	0.92	0.27	37,37,37,37	0
54	MG	2A	3646	1/1	0.92	0.16	41,41,41,41	0
54	MG	1A	3396	1/1	0.92	0.17	27,27,27,27	0
54	MG	1A	3138	1/1	0.92	0.13	36,36,36,36	0
54	MG	2A	3067	1/1	0.92	0.12	48,48,48,48	0
54	MG	1A	3217	1/1	0.92	0.29	33,33,33,33	0
54	MG	1A	3072	1/1	0.92	0.15	38,38,38,38	0
54	MG	2A	3071	1/1	0.92	0.36	61,61,61,61	0
54	MG	2A	3203	1/1	0.92	0.10	54,54,54,54	0
54	MG	1H	201	1/1	0.92	0.28	76,76,76,76	0
54	MG	1N	202	1/1	0.92	0.14	40,40,40,40	0
54	MG	1A	3363	1/1	0.92	0.25	34,34,34,34	0
54	MG	1A	3268	1/1	0.92	0.27	53,53,53,53	0
54	MG	2A	3519	1/1	0.92	0.06	72,72,72,72	0
54	MG	1A	3479	1/1	0.92	0.22	34,34,34,34	0
54	MG	1A	3269	1/1	0.92	0.23	42,42,42,42	0
54	MG	1A	3179	1/1	0.92	0.20	55,55,55,55	0
54	MG	2a	3184	1/1	0.92	0.05	63,63,63,63	0
54	MG	1a	3145	1/1	0.92	0.11	66,66,66,66	0
54	MG	1A	3858	1/1	0.92	0.12	59,59,59,59	0
54	MG	1a	3267	1/1	0.92	0.09	65,65,65,65	0
54	MG	1A	3944	1/1	0.92	0.16	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3745	1/1	0.92	0.47	63,63,63,63	0
54	MG	1A	3183	1/1	0.92	0.17	52,52,52,52	0
54	MG	2A	3530	1/1	0.92	0.10	56,56,56,56	0
54	MG	1A	3120	1/1	0.92	0.21	38,38,38,38	0
54	MG	1a	3151	1/1	0.92	0.11	66,66,66,66	0
54	MG	2A	3678	1/1	0.92	0.14	61,61,61,61	0
54	MG	1A	3540	1/1	0.92	0.15	53,53,53,53	0
54	MG	2A	3099	1/1	0.92	0.13	66,66,66,66	0
56	TEL	2A	3744	58/58	0.92	0.37	38,53,59,65	0
54	MG	1a	3050	1/1	0.92	0.16	52,52,52,52	0
54	MG	2A	3224	1/1	0.92	0.13	64,64,64,64	0
54	MG	1a	3155	1/1	0.92	0.10	66,66,66,66	0
54	MG	2A	3543	1/1	0.92	0.06	55,55,55,55	0
54	MG	1U	204	1/1	0.92	0.31	51,51,51,51	0
54	MG	2A	3227	1/1	0.92	0.51	49,49,49,49	0
54	MG	1b	301	1/1	0.92	0.15	79,79,79,79	0
54	MG	1A	3546	1/1	0.92	0.16	29,29,29,29	0
54	MG	1A	3871	1/1	0.92	0.16	49,49,49,49	0
54	MG	1A	3329	1/1	0.92	0.17	34,34,34,34	0
54	MG	1A	3570	1/1	0.93	0.20	25,25,25,25	0
54	MG	1A	3374	1/1	0.93	0.14	50,50,50,50	0
54	MG	1a	3231	1/1	0.93	0.10	73,73,73,73	0
54	MG	1B	214	1/1	0.93	0.34	55,55,55,55	0
54	MG	2A	3210	1/1	0.93	0.17	61,61,61,61	0
54	MG	2A	3068	1/1	0.93	0.15	50,50,50,50	0
54	MG	1a	3100	1/1	0.93	0.09	70,70,70,70	0
54	MG	1A	3244	1/1	0.93	0.40	42,42,42,42	0
54	MG	1A	3413	1/1	0.93	0.19	70,70,70,70	0
54	MG	2A	3073	1/1	0.93	0.10	46,46,46,46	0
54	MG	1A	3513	1/1	0.93	0.07	54,54,54,54	0
54	MG	2a	3059	1/1	0.93	0.16	74,74,74,74	0
54	MG	2a	3060	1/1	0.93	0.07	78,78,78,78	0
54	MG	1A	3954	1/1	0.93	0.17	69,69,69,69	0
54	MG	1a	3240	1/1	0.93	0.06	67,67,67,67	0
54	MG	1A	3864	1/1	0.93	0.14	44,44,44,44	0
54	MG	1A	3514	1/1	0.93	0.18	21,21,21,21	0
54	MG	1A	3245	1/1	0.93	0.14	36,36,36,36	0
54	MG	2A	3561	1/1	0.93	0.11	56,56,56,56	0
54	MG	2A	3708	1/1	0.93	0.13	59,59,59,59	0
54	MG	1A	3868	1/1	0.93	0.18	33,33,33,33	0
54	MG	1A	3155	1/1	0.93	0.13	34,34,34,34	0
54	MG	1A	3962	1/1	0.93	0.11	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3728	1/1	0.93	0.23	54,54,54,54	0
54	MG	2a	3074	1/1	0.93	0.11	71,71,71,71	0
54	MG	2A	3713	1/1	0.93	0.06	55,55,55,55	0
54	MG	1a	3117	1/1	0.93	0.15	64,64,64,64	0
54	MG	2a	3080	1/1	0.93	0.14	71,71,71,71	0
54	MG	1A	3964	1/1	0.93	0.10	58,58,58,58	0
54	MG	1a	3119	1/1	0.93	0.19	76,76,76,76	0
54	MG	1A	3795	1/1	0.93	0.36	41,41,41,41	0
54	MG	1a	3121	1/1	0.93	0.17	40,40,40,40	0
54	MG	1A	3022	1/1	0.93	0.09	43,43,43,43	0
54	MG	1A	3798	1/1	0.93	0.15	50,50,50,50	0
54	MG	1D	313	1/1	0.93	0.08	58,58,58,58	0
54	MG	2a	3088	1/1	0.93	0.26	65,65,65,65	0
54	MG	2A	3102	1/1	0.93	0.12	53,53,53,53	0
54	MG	1a	3019	1/1	0.93	0.17	58,58,58,58	0
54	MG	2A	3426	1/1	0.93	0.14	63,63,63,63	0
54	MG	1a	3020	1/1	0.93	0.15	62,62,62,62	0
54	MG	1a	3266	1/1	0.93	0.14	48,48,48,48	0
54	MG	1A	3877	1/1	0.93	0.17	64,64,64,64	0
54	MG	1A	3799	1/1	0.93	0.20	71,71,71,71	0
54	MG	1A	3520	1/1	0.93	0.14	31,31,31,31	0
54	MG	1A	3306	1/1	0.93	0.15	36,36,36,36	0
54	MG	1a	3138	1/1	0.93	0.14	58,58,58,58	0
54	MG	2A	3440	1/1	0.93	0.06	59,59,59,59	0
54	MG	2a	3102	1/1	0.93	0.05	71,71,71,71	0
54	MG	2A	3738	1/1	0.93	0.14	63,63,63,63	0
54	MG	2A	3741	1/1	0.93	0.28	63,63,63,63	0
54	MG	1A	3220	1/1	0.93	0.17	47,47,47,47	0
54	MG	1A	3882	1/1	0.93	0.07	54,54,54,54	0
54	MG	1A	3883	1/1	0.93	0.10	58,58,58,58	0
54	MG	1A	3421	1/1	0.93	0.22	26,26,26,26	0
54	MG	1F	312	1/1	0.93	0.21	38,38,38,38	0
54	MG	2A	3596	1/1	0.93	0.14	42,42,42,42	0
54	MG	1A	3422	1/1	0.93	0.18	29,29,29,29	0
54	MG	1A	3891	1/1	0.93	0.16	51,51,51,51	0
54	MG	1F	316	1/1	0.93	0.08	55,55,55,55	0
54	MG	1A	3343	1/1	0.93	0.06	47,47,47,47	0
54	MG	2a	3117	1/1	0.93	0.12	66,66,66,66	0
54	MG	2A	3129	1/1	0.93	0.20	69,69,69,69	0
54	MG	2B	215	1/1	0.93	0.09	77,77,77,77	0
54	MG	1A	3591	1/1	0.93	0.19	62,62,62,62	0
54	MG	1A	3258	1/1	0.93	0.21	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	1a	3153	1/1	0.93	0.18	77,77,77,77	0
54	MG	1A	3221	1/1	0.93	0.20	39,39,39,39	0
54	MG	1A	3664	1/1	0.93	0.11	68,68,68,68	0
54	MG	1a	3156	1/1	0.93	0.09	68,68,68,68	0
54	MG	1A	3473	1/1	0.93	0.23	31,31,31,31	0
54	MG	1A	3349	1/1	0.93	0.17	25,25,25,25	0
54	MG	1O	201	1/1	0.93	0.14	67,67,67,67	0
54	MG	1A	3901	1/1	0.93	0.23	31,31,31,31	0
54	MG	1A	3108	1/1	0.93	0.21	29,29,29,29	0
54	MG	1A	3904	1/1	0.93	0.16	37,37,37,37	0
54	MG	1Q	204	1/1	0.93	0.20	42,42,42,42	0
54	MG	1A	3598	1/1	0.93	0.42	37,37,37,37	0
54	MG	2A	3622	1/1	0.93	0.05	74,74,74,74	0
54	MG	1a	3054	1/1	0.93	0.13	42,42,42,42	0
54	MG	1A	3821	1/1	0.93	0.20	24,24,24,24	0
54	MG	1A	3535	1/1	0.93	0.13	24,24,24,24	0
54	MG	1A	3354	1/1	0.93	0.10	49,49,49,49	0
54	MG	1a	3172	1/1	0.93	0.11	71,71,71,71	0
54	MG	1A	3997	1/1	0.93	0.22	33,33,33,33	0
54	MG	1A	3542	1/1	0.93	0.14	48,48,48,48	0
54	MG	1a	3063	1/1	0.93	0.09	71,71,71,71	0
54	MG	2A	3165	1/1	0.93	0.26	46,46,46,46	0
54	MG	1A	3999	1/1	0.93	0.59	44,44,44,44	0
54	MG	1A	3543	1/1	0.93	0.22	46,46,46,46	0
54	MG	1a	3185	1/1	0.93	0.13	71,71,71,71	0
54	MG	1a	3186	1/1	0.93	0.10	70,70,70,70	0
54	MG	1a	3066	1/1	0.93	0.13	73,73,73,73	0
54	MG	1A	3545	1/1	0.93	0.20	54,54,54,54	0
54	MG	1a	3189	1/1	0.93	0.22	72,72,72,72	0
54	MG	1A	3392	1/1	0.93	0.23	25,25,25,25	0
54	MG	1a	3069	1/1	0.93	0.19	69,69,69,69	0
54	MG	2A	3500	1/1	0.93	0.15	58,58,58,58	0
54	MG	2A	3645	1/1	0.93	0.09	56,56,56,56	0
54	MG	1A	3394	1/1	0.93	0.19	24,24,24,24	0
54	MG	1a	3194	1/1	0.93	0.15	73,73,73,73	0
54	MG	1A	3162	1/1	0.93	0.13	44,44,44,44	0
54	MG	1A	3437	1/1	0.93	0.14	50,50,50,50	0
54	MG	2A	3181	1/1	0.93	0.17	49,49,49,49	0
54	MG	1A	3226	1/1	0.93	0.19	37,37,37,37	0
54	MG	2A	3339	1/1	0.93	0.17	34,34,34,34	0
54	MG	2a	3007	1/1	0.93	0.20	58,58,58,58	0
54	MG	1X	101	1/1	0.93	0.20	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3341	1/1	0.93	0.08	66,66,66,66	0
54	MG	1A	3099	1/1	0.93	0.14	60,60,60,60	0
54	MG	1A	3688	1/1	0.93	0.31	40,40,40,40	0
54	MG	2a	3013	1/1	0.93	0.38	69,69,69,69	0
54	MG	1A	3399	1/1	0.93	0.28	62,62,62,62	0
54	MG	2A	3349	1/1	0.93	0.14	42,42,42,42	0
54	MG	1A	3929	1/1	0.93	0.06	63,63,63,63	0
54	MG	1A	3228	1/1	0.93	0.25	31,31,31,31	0
54	MG	2A	3518	1/1	0.93	0.07	65,65,65,65	0
54	MG	1A	3495	1/1	0.93	0.15	60,60,60,60	0
54	MG	11	101	1/1	0.93	0.29	48,48,48,48	0
54	MG	1A	3058	1/1	0.93	0.18	55,55,55,55	0
54	MG	1A	3693	1/1	0.93	0.16	55,55,55,55	0
54	MG	1a	3087	1/1	0.93	0.17	73,73,73,73	0
54	MG	1A	3367	1/1	0.93	0.16	49,49,49,49	0
54	MG	1A	3296	1/1	0.93	0.15	47,47,47,47	0
54	MG	1A	3370	1/1	0.93	0.12	36,36,36,36	0
55	HGR	2A	3743	36/36	0.93	0.25	43,52,58,59	0
54	MG	2A	3527	1/1	0.93	0.12	62,62,62,62	0
54	MG	1A	3562	1/1	0.93	0.16	40,40,40,40	0
54	MG	2A	3679	1/1	0.93	0.15	49,49,49,49	0
54	MG	1A	3035	1/1	0.93	0.18	53,53,53,53	0
54	MG	1A	3046	1/1	0.93	0.16	52,52,52,52	0
54	MG	2a	3040	1/1	0.93	0.29	72,72,72,72	0
54	MG	1A	3508	1/1	0.93	0.13	41,41,41,41	0
54	MG	2A	3058	1/1	0.93	0.18	72,72,72,72	0
54	MG	1a	3227	1/1	0.93	0.12	73,73,73,73	0
59	ZN	2Y	501	1/1	0.93	0.09	88,88,88,88	0
54	MG	2A	3537	1/1	0.93	0.04	60,60,60,60	0
54	MG	2A	3060	1/1	0.93	0.17	48,48,48,48	0
54	MG	2A	3232	1/1	0.94	0.17	54,54,54,54	0
54	MG	2A	3234	1/1	0.94	0.57	51,51,51,51	0
54	MG	2A	3084	1/1	0.94	0.16	53,53,53,53	0
54	MG	2A	3085	1/1	0.94	0.11	55,55,55,55	0
54	MG	17	105	1/1	0.94	0.24	38,38,38,38	0
54	MG	1A	3935	1/1	0.94	0.14	36,36,36,36	0
54	MG	2A	3089	1/1	0.94	0.27	40,40,40,40	0
54	MG	2A	3446	1/1	0.94	0.15	66,66,66,66	0
54	MG	1A	3672	1/1	0.94	0.06	61,61,61,61	0
54	MG	2A	3243	1/1	0.94	0.44	65,65,65,65	0
54	MG	1A	3938	1/1	0.94	0.26	54,54,54,54	0
54	MG	1A	3843	1/1	0.94	0.15	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3029	1/1	0.94	0.14	39,39,39,39	0
54	MG	2A	3457	1/1	0.94	0.22	67,67,67,67	0
54	MG	1A	3762	1/1	0.94	0.12	43,43,43,43	0
54	MG	1A	3674	1/1	0.94	0.07	73,73,73,73	0
54	MG	1A	3319	1/1	0.94	0.25	48,48,48,48	0
54	MG	1a	3111	1/1	0.94	0.17	61,61,61,61	0
54	MG	1a	3112	1/1	0.94	0.16	73,73,73,73	0
54	MG	2a	3030	1/1	0.94	0.18	67,67,67,67	0
54	MG	2a	3031	1/1	0.94	0.08	80,80,80,80	0
54	MG	1A	3161	1/1	0.94	0.13	37,37,37,37	0
54	MG	1B	221	1/1	0.94	0.09	53,53,53,53	0
54	MG	2a	3035	1/1	0.94	0.17	60,60,60,60	0
54	MG	2A	3642	1/1	0.94	0.10	48,48,48,48	0
54	MG	2A	3643	1/1	0.94	0.06	66,66,66,66	0
54	MG	1A	3599	1/1	0.94	0.24	31,31,31,31	0
54	MG	1A	3377	1/1	0.94	0.13	59,59,59,59	0
54	MG	1A	3538	1/1	0.94	0.12	35,35,35,35	0
54	MG	1a	3007	1/1	0.94	0.14	65,65,65,65	0
54	MG	1A	3606	1/1	0.94	0.11	32,32,32,32	0
54	MG	1a	3124	1/1	0.94	0.10	56,56,56,56	0
54	MG	1A	3856	1/1	0.94	0.18	47,47,47,47	0
54	MG	1A	3607	1/1	0.94	0.19	42,42,42,42	0
54	MG	1A	3322	1/1	0.94	0.20	30,30,30,30	0
54	MG	2A	3477	1/1	0.94	0.20	31,31,31,31	0
54	MG	1a	3129	1/1	0.94	0.11	57,57,57,57	0
54	MG	1A	3476	1/1	0.94	0.25	43,43,43,43	0
54	MG	1a	3131	1/1	0.94	0.14	68,68,68,68	0
54	MG	1B	230	1/1	0.94	0.14	62,62,62,62	0
54	MG	1A	3232	1/1	0.94	0.58	42,42,42,42	0
54	MG	2A	3121	1/1	0.94	0.10	73,73,73,73	0
54	MG	2A	3663	1/1	0.94	0.19	42,42,42,42	0
54	MG	1A	3325	1/1	0.94	0.18	32,32,32,32	0
54	MG	2A	3125	1/1	0.94	0.15	47,47,47,47	0
54	MG	1a	3135	1/1	0.94	0.14	44,44,44,44	0
54	MG	2A	3488	1/1	0.94	0.07	70,70,70,70	0
54	MG	2a	3061	1/1	0.94	0.18	62,62,62,62	0
54	MG	2A	3127	1/1	0.94	0.12	44,44,44,44	0
54	MG	1A	3134	1/1	0.94	0.21	33,33,33,33	0
54	MG	2A	3292	1/1	0.94	0.16	56,56,56,56	0
54	MG	1A	3067	1/1	0.94	0.32	35,35,35,35	0
54	MG	1A	3385	1/1	0.94	0.18	34,34,34,34	0
54	MG	2A	3674	1/1	0.94	0.12	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1a	3276	1/1	0.94	0.14	61,61,61,61	0
54	MG	2A	3498	1/1	0.94	0.09	71,71,71,71	0
54	MG	2A	3301	1/1	0.94	0.10	50,50,50,50	0
54	MG	1A	3483	1/1	0.94	0.18	26,26,26,26	0
54	MG	1a	3278	1/1	0.94	0.12	74,74,74,74	0
54	MG	2A	3305	1/1	0.94	0.12	46,46,46,46	0
54	MG	1A	3695	1/1	0.94	0.07	41,41,41,41	0
54	MG	1A	3783	1/1	0.94	0.14	35,35,35,35	0
54	MG	1A	3110	1/1	0.94	0.41	41,41,41,41	0
54	MG	2A	3141	1/1	0.94	0.10	47,47,47,47	0
54	MG	2A	3314	1/1	0.94	0.20	67,67,67,67	0
54	MG	1A	3875	1/1	0.94	0.20	44,44,44,44	0
54	MG	1A	3243	1/1	0.94	0.12	47,47,47,47	0
54	MG	1A	3553	1/1	0.94	0.18	63,63,63,63	0
54	MG	2A	3146	1/1	0.94	0.08	57,57,57,57	0
54	MG	1A	3488	1/1	0.94	0.14	33,33,33,33	0
54	MG	2A	3321	1/1	0.94	0.12	67,67,67,67	0
54	MG	1A	3056	1/1	0.94	0.19	27,27,27,27	0
54	MG	2a	3091	1/1	0.94	0.24	54,54,54,54	0
54	MG	2A	3516	1/1	0.94	0.13	67,67,67,67	0
54	MG	1a	3034	1/1	0.94	0.15	45,45,45,45	0
54	MG	1A	3140	1/1	0.94	0.19	40,40,40,40	0
54	MG	1a	3038	1/1	0.94	0.22	66,66,66,66	0
54	MG	1A	3436	1/1	0.94	0.09	46,46,46,46	0
54	MG	1F	317	1/1	0.94	0.28	42,42,42,42	0
54	MG	2A	3331	1/1	0.94	0.13	53,53,53,53	0
54	MG	1A	3249	1/1	0.94	0.30	49,49,49,49	0
54	MG	1F	319	1/1	0.94	0.19	53,53,53,53	0
54	MG	1A	3709	1/1	0.94	0.40	40,40,40,40	0
54	MG	1A	3439	1/1	0.94	0.15	37,37,37,37	0
54	MG	1A	3168	1/1	0.94	0.12	34,34,34,34	0
54	MG	1a	3047	1/1	0.94	0.15	73,73,73,73	0
54	MG	1G	204	1/1	0.94	0.15	49,49,49,49	0
54	MG	1A	3714	1/1	0.94	0.15	32,32,32,32	0
54	MG	1A	3205	1/1	0.94	0.40	40,40,40,40	0
54	MG	1A	3983	1/1	0.94	0.58	52,52,52,52	0
54	MG	1N	204	1/1	0.94	0.12	55,55,55,55	0
54	MG	2A	3534	1/1	0.94	0.13	52,52,52,52	0
54	MG	2A	3346	1/1	0.94	0.17	42,42,42,42	0
54	MG	1A	3893	1/1	0.94	0.19	39,39,39,39	0
54	MG	2A	3348	1/1	0.94	0.12	73,73,73,73	0
54	MG	1a	3169	1/1	0.94	0.12	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1P	204	1/1	0.94	0.11	41,41,41,41	0
54	MG	1A	3718	1/1	0.94	0.08	51,51,51,51	0
54	MG	2A	3009	1/1	0.94	0.26	42,42,42,42	0
54	MG	1A	3079	1/1	0.94	0.19	49,49,49,49	0
54	MG	1a	3174	1/1	0.94	0.19	51,51,51,51	0
54	MG	1a	3058	1/1	0.94	0.06	74,74,74,74	0
54	MG	1a	3059	1/1	0.94	0.29	43,43,43,43	0
54	MG	2A	3357	1/1	0.94	0.16	33,33,33,33	0
54	MG	2A	3729	1/1	0.94	0.07	62,62,62,62	0
54	MG	1a	3179	1/1	0.94	0.08	65,65,65,65	0
54	MG	2A	3553	1/1	0.94	0.06	64,64,64,64	0
54	MG	1A	3566	1/1	0.94	0.20	52,52,52,52	0
54	MG	2A	3556	1/1	0.94	0.12	62,62,62,62	0
54	MG	1a	3182	1/1	0.94	0.06	80,80,80,80	0
54	MG	2a	3134	1/1	0.94	0.07	63,63,63,63	0
54	MG	2A	3739	1/1	0.94	0.17	67,67,67,67	0
54	MG	2A	3740	1/1	0.94	0.14	58,58,58,58	0
54	MG	1A	3640	1/1	0.94	0.22	64,64,64,64	0
54	MG	1Q	205	1/1	0.94	0.26	58,58,58,58	0
54	MG	1R	201	1/1	0.94	0.13	43,43,43,43	0
54	MG	1A	3567	1/1	0.94	0.10	47,47,47,47	0
54	MG	2a	3141	1/1	0.94	0.12	75,75,75,75	0
54	MG	2B	204	1/1	0.94	0.30	64,64,64,64	0
54	MG	2A	3371	1/1	0.94	0.27	79,79,79,79	0
54	MG	2B	206	1/1	0.94	0.07	71,71,71,71	0
54	MG	1A	3503	1/1	0.94	0.07	52,52,52,52	0
54	MG	2B	208	1/1	0.94	0.20	77,77,77,77	0
54	MG	1A	3001	1/1	0.94	0.19	38,38,38,38	0
54	MG	1A	3348	1/1	0.94	0.13	36,36,36,36	0
54	MG	1A	3173	1/1	0.94	0.18	38,38,38,38	0
54	MG	1A	3907	1/1	0.94	0.25	32,32,32,32	0
54	MG	2A	3195	1/1	0.94	0.33	58,58,58,58	0
54	MG	1A	3908	1/1	0.94	0.16	46,46,46,46	0
54	MG	1a	3072	1/1	0.94	0.09	60,60,60,60	0
54	MG	2a	3155	1/1	0.94	0.08	77,77,77,77	0
54	MG	1A	3911	1/1	0.94	0.20	42,42,42,42	0
54	MG	1A	3123	1/1	0.94	0.21	53,53,53,53	0
54	MG	2a	3158	1/1	0.94	0.16	55,55,55,55	0
54	MG	2D	302	1/1	0.94	0.25	51,51,51,51	0
54	MG	2D	303	1/1	0.94	0.37	48,48,48,48	0
54	MG	1A	3031	1/1	0.94	0.18	21,21,21,21	0
54	MG	1A	3651	1/1	0.94	0.08	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3151	1/1	0.94	0.20	42,42,42,42	0
54	MG	1A	3452	1/1	0.94	0.14	60,60,60,60	0
54	MG	1a	3202	1/1	0.94	0.06	60,60,60,60	0
54	MG	1A	3017	1/1	0.94	0.19	33,33,33,33	0
54	MG	2a	3170	1/1	0.94	0.14	51,51,51,51	0
54	MG	2A	3395	1/1	0.94	0.18	43,43,43,43	0
54	MG	1A	3406	1/1	0.94	0.17	26,26,26,26	0
54	MG	1a	3205	1/1	0.94	0.10	75,75,75,75	0
54	MG	1A	3219	1/1	0.94	0.29	39,39,39,39	0
54	MG	2a	3176	1/1	0.94	0.11	68,68,68,68	0
54	MG	1A	3153	1/1	0.94	0.28	39,39,39,39	0
54	MG	2A	3403	1/1	0.94	0.17	52,52,52,52	0
54	MG	1A	3457	1/1	0.94	0.16	56,56,56,56	0
54	MG	2A	3588	1/1	0.94	0.10	59,59,59,59	0
54	MG	2a	3181	1/1	0.94	0.13	68,68,68,68	0
54	MG	2A	3589	1/1	0.94	0.15	39,39,39,39	0
54	MG	1A	3585	1/1	0.94	0.17	60,60,60,60	0
54	MG	1A	3028	1/1	0.94	0.14	35,35,35,35	0
54	MG	1A	4016	1/1	0.94	0.15	58,58,58,58	0
54	MG	1a	3217	1/1	0.94	0.12	69,69,69,69	0
54	MG	2A	3064	1/1	0.94	0.14	43,43,43,43	0
54	MG	1A	3523	1/1	0.94	0.23	57,57,57,57	0
54	MG	2A	3598	1/1	0.94	0.17	33,33,33,33	0
54	MG	1A	3040	1/1	0.94	0.22	31,31,31,31	0
54	MG	1l	104	1/1	0.94	0.10	32,32,32,32	0
54	MG	1A	3158	1/1	0.94	0.23	41,41,41,41	0
54	MG	1A	3837	1/1	0.94	0.21	25,25,25,25	0
54	MG	2A	3419	1/1	0.94	0.28	45,45,45,45	0
54	MG	2k	201	1/1	0.94	0.17	56,56,56,56	0
54	MG	1A	3277	1/1	0.94	0.29	36,36,36,36	0
54	MG	2t	201	1/1	0.94	0.15	49,49,49,49	0
55	HGR	1A	4020	36/36	0.94	0.24	31,39,47,55	0
54	MG	2W	203	1/1	0.94	0.18	47,47,47,47	0
56	TEL	1A	4021	58/58	0.94	0.24	28,43,50,52	0
54	MG	1a	3094	1/1	0.94	0.20	49,49,49,49	0
54	MG	15	106	1/1	0.94	0.19	28,28,28,28	0
54	MG	1A	3314	1/1	0.94	0.09	63,63,63,63	0
57	MPD	18	105	8/8	0.94	0.26	30,42,48,52	0
54	MG	2A	3609	1/1	0.94	0.19	49,49,49,49	0
54	MG	25	102	1/1	0.94	0.20	64,64,64,64	0
54	MG	1A	3415	1/1	0.94	0.06	70,70,70,70	0
54	MG	2A	3431	1/1	0.94	0.11	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3432	1/1	0.94	0.16	42,42,42,42	0
54	MG	1a	3232	1/1	0.94	0.19	70,70,70,70	0
54	MG	1A	3933	1/1	0.94	0.10	69,69,69,69	0
54	MG	1A	3159	1/1	0.94	0.17	33,33,33,33	0
54	MG	2A	3231	1/1	0.94	0.24	47,47,47,47	0
54	MG	1A	3910	1/1	0.95	0.06	39,39,39,39	0
54	MG	1A	3434	1/1	0.95	0.15	62,62,62,62	0
54	MG	2a	3042	1/1	0.95	0.10	72,72,72,72	0
54	MG	1A	3835	1/1	0.95	0.12	49,49,49,49	0
54	MG	2A	3334	1/1	0.95	0.23	34,34,34,34	0
54	MG	2A	3174	1/1	0.95	0.22	44,44,44,44	0
54	MG	1a	3214	1/1	0.95	0.05	74,74,74,74	0
54	MG	1A	3524	1/1	0.95	0.13	29,29,29,29	0
54	MG	1A	3988	1/1	0.95	0.14	36,36,36,36	0
54	MG	1A	3475	1/1	0.95	0.33	35,35,35,35	0
54	MG	1a	3220	1/1	0.95	0.05	67,67,67,67	0
54	MG	1a	3116	1/1	0.95	0.24	72,72,72,72	0
54	MG	1A	3075	1/1	0.95	0.26	42,42,42,42	0
54	MG	1A	3169	1/1	0.95	0.15	33,33,33,33	0
54	MG	2A	3345	1/1	0.95	0.10	71,71,71,71	0
54	MG	1A	3638	1/1	0.95	0.17	44,44,44,44	0
54	MG	2A	3046	1/1	0.95	0.15	58,58,58,58	0
54	MG	1A	3364	1/1	0.95	0.16	29,29,29,29	0
54	MG	1A	3321	1/1	0.95	0.21	63,63,63,63	0
54	MG	1a	3228	1/1	0.95	0.20	65,65,65,65	0
54	MG	1a	3123	1/1	0.95	0.10	72,72,72,72	0
54	MG	1A	3703	1/1	0.95	0.11	39,39,39,39	0
54	MG	2A	3052	1/1	0.95	0.17	44,44,44,44	0
54	MG	1N	201	1/1	0.95	0.13	45,45,45,45	0
54	MG	2A	3697	1/1	0.95	0.08	46,46,46,46	0
54	MG	1A	3077	1/1	0.95	0.38	45,45,45,45	0
54	MG	2a	3067	1/1	0.95	0.33	70,70,70,70	0
54	MG	1A	3442	1/1	0.95	0.13	59,59,59,59	0
54	MG	1A	3923	1/1	0.95	0.14	34,34,34,34	0
54	MG	1A	3846	1/1	0.95	0.09	53,53,53,53	0
54	MG	1a	3037	1/1	0.95	0.14	49,49,49,49	0
54	MG	1P	202	1/1	0.95	0.24	46,46,46,46	0
54	MG	2A	3061	1/1	0.95	0.19	60,60,60,60	0
54	MG	1A	3263	1/1	0.95	0.44	45,45,45,45	0
54	MG	2a	3075	1/1	0.95	0.22	70,70,70,70	0
54	MG	2a	3076	1/1	0.95	0.25	65,65,65,65	0
54	MG	1P	205	1/1	0.95	0.18	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1a	3242	1/1	0.95	0.07	72,72,72,72	0
54	MG	1A	3533	1/1	0.95	0.13	28,28,28,28	0
54	MG	1A	3927	1/1	0.95	0.06	43,43,43,43	0
54	MG	2A	3375	1/1	0.95	0.20	62,62,62,62	0
54	MG	1A	3849	1/1	0.95	0.17	31,31,31,31	0
54	MG	1A	3324	1/1	0.95	0.16	29,29,29,29	0
54	MG	1a	3248	1/1	0.95	0.08	50,50,50,50	0
54	MG	1a	3249	1/1	0.95	0.07	68,68,68,68	0
54	MG	1A	3109	1/1	0.95	0.21	46,46,46,46	0
54	MG	2A	3548	1/1	0.95	0.41	57,57,57,57	0
54	MG	2A	3075	1/1	0.95	0.18	48,48,48,48	0
54	MG	1A	4008	1/1	0.95	0.22	69,69,69,69	0
54	MG	1a	3252	1/1	0.95	0.10	72,72,72,72	0
54	MG	1A	4009	1/1	0.95	0.22	20,20,20,20	0
54	MG	1A	3486	1/1	0.95	0.13	25,25,25,25	0
54	MG	1A	4011	1/1	0.95	0.22	64,64,64,64	0
54	MG	1A	3060	1/1	0.95	0.11	39,39,39,39	0
54	MG	1A	3785	1/1	0.95	0.16	58,58,58,58	0
54	MG	1A	3653	1/1	0.95	0.15	56,56,56,56	0
54	MG	2A	3393	1/1	0.95	0.18	41,41,41,41	0
54	MG	1T	205	1/1	0.95	0.20	51,51,51,51	0
54	MG	2A	3087	1/1	0.95	0.32	44,44,44,44	0
54	MG	1A	3009	1/1	0.95	0.11	30,30,30,30	0
54	MG	2A	3397	1/1	0.95	0.21	54,54,54,54	0
54	MG	1U	202	1/1	0.95	0.19	36,36,36,36	0
54	MG	2A	3223	1/1	0.95	0.20	60,60,60,60	0
54	MG	2A	3735	1/1	0.95	0.20	34,34,34,34	0
54	MG	1A	3936	1/1	0.95	0.14	28,28,28,28	0
54	MG	2A	3091	1/1	0.95	0.12	45,45,45,45	0
54	MG	1a	3264	1/1	0.95	0.14	65,65,65,65	0
54	MG	1U	205	1/1	0.95	0.27	39,39,39,39	0
54	MG	1A	3721	1/1	0.95	0.16	55,55,55,55	0
54	MG	2A	3407	1/1	0.95	0.16	48,48,48,48	0
54	MG	2B	201	1/1	0.95	0.15	72,72,72,72	0
54	MG	1A	3722	1/1	0.95	0.12	30,30,30,30	0
54	MG	2A	3409	1/1	0.95	0.10	48,48,48,48	0
54	MG	1A	3861	1/1	0.95	0.22	43,43,43,43	0
54	MG	2a	3119	1/1	0.95	0.15	67,67,67,67	0
54	MG	2A	3577	1/1	0.95	0.08	45,45,45,45	0
54	MG	2A	3411	1/1	0.95	0.12	70,70,70,70	0
54	MG	1A	3330	1/1	0.95	0.25	19,19,19,19	0
54	MG	1A	3863	1/1	0.95	0.12	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3414	1/1	0.95	0.16	67,67,67,67	0
54	MG	2a	3125	1/1	0.95	0.21	72,72,72,72	0
54	MG	1A	3792	1/1	0.95	0.24	54,54,54,54	0
54	MG	2a	3127	1/1	0.95	0.10	67,67,67,67	0
54	MG	2A	3100	1/1	0.95	0.08	67,67,67,67	0
54	MG	1A	3544	1/1	0.95	0.12	59,59,59,59	0
54	MG	1A	3491	1/1	0.95	0.16	22,22,22,22	0
54	MG	1B	208	1/1	0.95	0.15	56,56,56,56	0
54	MG	2A	3104	1/1	0.95	0.15	56,56,56,56	0
54	MG	2A	3424	1/1	0.95	0.34	61,61,61,61	0
54	MG	1A	3596	1/1	0.95	0.10	55,55,55,55	0
54	MG	2A	3244	1/1	0.95	0.43	46,46,46,46	0
54	MG	1A	3004	1/1	0.95	0.18	43,43,43,43	0
54	MG	2A	3428	1/1	0.95	0.14	38,38,38,38	0
54	MG	2D	305	1/1	0.95	0.22	40,40,40,40	0
54	MG	2A	3429	1/1	0.95	0.10	62,62,62,62	0
54	MG	1A	3797	1/1	0.95	0.10	58,58,58,58	0
54	MG	1A	3137	1/1	0.95	0.17	42,42,42,42	0
54	MG	1B	213	1/1	0.95	0.07	63,63,63,63	0
54	MG	1a	3170	1/1	0.95	0.07	73,73,73,73	0
54	MG	2A	3113	1/1	0.95	0.47	60,60,60,60	0
54	MG	2E	305	1/1	0.95	0.22	39,39,39,39	0
54	MG	1d	303	1/1	0.95	0.13	74,74,74,74	0
54	MG	1A	3182	1/1	0.95	0.24	61,61,61,61	0
54	MG	1A	3119	1/1	0.95	0.25	39,39,39,39	0
54	MG	1A	3240	1/1	0.95	0.14	33,33,33,33	0
54	MG	1A	3307	1/1	0.95	0.19	34,34,34,34	0
54	MG	13	104	1/1	0.95	0.12	44,44,44,44	0
54	MG	1a	3177	1/1	0.95	0.10	69,69,69,69	0
54	MG	2A	3266	1/1	0.95	0.20	22,22,22,22	0
54	MG	1A	3050	1/1	0.95	0.10	36,36,36,36	0
54	MG	2A	3611	1/1	0.95	0.12	24,24,24,24	0
54	MG	2A	3123	1/1	0.95	0.41	49,49,49,49	0
54	MG	1B	220	1/1	0.95	0.17	57,57,57,57	0
54	MG	1a	3180	1/1	0.95	0.11	68,68,68,68	0
54	MG	2a	3161	1/1	0.95	0.13	68,68,68,68	0
54	MG	1A	3384	1/1	0.95	0.20	43,43,43,43	0
54	MG	2A	3452	1/1	0.95	0.13	35,35,35,35	0
54	MG	1A	3741	1/1	0.95	0.23	38,38,38,38	0
54	MG	2a	3165	1/1	0.95	0.28	68,68,68,68	0
54	MG	1A	3211	1/1	0.95	0.32	40,40,40,40	0
54	MG	1a	3184	1/1	0.95	0.08	67,67,67,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1n	102	1/1	0.95	0.15	73,73,73,73	0
54	MG	1A	3212	1/1	0.95	0.20	56,56,56,56	0
54	MG	2A	3280	1/1	0.95	0.06	70,70,70,70	0
54	MG	2A	3461	1/1	0.95	0.12	67,67,67,67	0
54	MG	1A	3121	1/1	0.95	0.26	57,57,57,57	0
54	MG	1A	3510	1/1	0.95	0.21	26,26,26,26	0
54	MG	1A	3615	1/1	0.95	0.23	31,31,31,31	0
54	MG	1A	3461	1/1	0.95	0.11	48,48,48,48	0
54	MG	1A	3246	1/1	0.95	0.38	46,46,46,46	0
54	MG	2A	3631	1/1	0.95	0.67	58,58,58,58	0
54	MG	1A	3087	1/1	0.95	0.20	42,42,42,42	0
54	MG	1A	3563	1/1	0.95	0.24	24,24,24,24	0
54	MG	1D	305	1/1	0.95	0.20	44,44,44,44	0
54	MG	2A	3293	1/1	0.95	0.18	40,40,40,40	0
54	MG	1A	3621	1/1	0.95	0.20	31,31,31,31	0
54	MG	2A	3472	1/1	0.95	0.10	61,61,61,61	0
54	MG	2A	3297	1/1	0.95	0.11	62,62,62,62	0
54	MG	2A	3004	1/1	0.95	0.11	39,39,39,39	0
54	MG	2A	3147	1/1	0.95	0.20	37,37,37,37	0
54	MG	1A	3427	1/1	0.95	0.18	38,38,38,38	0
54	MG	1A	3897	1/1	0.95	0.12	55,55,55,55	0
54	MG	1A	3824	1/1	0.95	0.07	49,49,49,49	0
54	MG	2A	3480	1/1	0.95	0.12	47,47,47,47	0
54	MG	1A	3145	1/1	0.95	0.43	40,40,40,40	0
54	MG	2A	3010	1/1	0.95	0.08	65,65,65,65	0
54	MG	2A	3154	1/1	0.95	0.11	44,44,44,44	0
54	MG	1E	301	1/1	0.95	0.15	31,31,31,31	0
54	MG	1A	3625	1/1	0.95	0.08	43,43,43,43	0
54	MG	1A	3016	1/1	0.95	0.18	36,36,36,36	0
54	MG	2A	3158	1/1	0.95	0.20	39,39,39,39	0
54	MG	1A	3517	1/1	0.95	0.17	28,28,28,28	0
54	MG	2A	3490	1/1	0.95	0.07	65,65,65,65	0
54	MG	2a	3025	1/1	0.95	0.10	73,73,73,73	0
54	MG	2A	3160	1/1	0.95	0.13	63,63,63,63	0
54	MG	2A	3019	1/1	0.95	0.64	50,50,50,50	0
54	MG	2A	3022	1/1	0.95	0.49	50,50,50,50	0
54	MG	1A	3034	1/1	0.95	0.12	32,32,32,32	0
54	MG	2A	3322	1/1	0.95	0.11	60,60,60,60	0
54	MG	1a	3106	1/1	0.95	0.23	67,67,67,67	0
54	MG	2A	3497	1/1	0.95	0.19	41,41,41,41	0
58	ARG	1B	231	12/12	0.95	0.20	34,50,53,58	0
54	MG	1a	3206	1/1	0.95	0.17	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3167	1/1	0.95	0.15	39,39,39,39	0
59	ZN	1n	103	1/1	0.95	0.11	77,77,77,77	0
54	MG	1A	3358	1/1	0.95	0.24	44,44,44,44	0
54	MG	2A	3027	1/1	0.95	0.23	52,52,52,52	0
59	ZN	26	501	1/1	0.95	0.16	60,60,60,60	0
54	MG	1A	3361	1/1	0.95	0.25	72,72,72,72	0
54	MG	2A	3066	1/1	0.96	0.10	50,50,50,50	0
54	MG	2A	3617	1/1	0.96	0.15	69,69,69,69	0
54	MG	2a	3014	1/1	0.96	0.21	64,64,64,64	0
54	MG	1A	3446	1/1	0.96	0.17	25,25,25,25	0
54	MG	2a	3016	1/1	0.96	0.10	49,49,49,49	0
54	MG	2A	3228	1/1	0.96	0.67	64,64,64,64	0
54	MG	1P	201	1/1	0.96	0.28	32,32,32,32	0
54	MG	1a	3213	1/1	0.96	0.13	55,55,55,55	0
54	MG	1a	3071	1/1	0.96	0.06	72,72,72,72	0
54	MG	1A	3076	1/1	0.96	0.19	39,39,39,39	0
54	MG	2A	3233	1/1	0.96	0.46	54,54,54,54	0
54	MG	1a	3216	1/1	0.96	0.14	62,62,62,62	0
54	MG	1A	3279	1/1	0.96	0.43	39,39,39,39	0
54	MG	1A	3126	1/1	0.96	0.18	35,35,35,35	0
54	MG	1a	3075	1/1	0.96	0.08	65,65,65,65	0
54	MG	2a	3027	1/1	0.96	0.11	61,61,61,61	0
54	MG	1A	3127	1/1	0.96	0.20	45,45,45,45	0
54	MG	2A	3239	1/1	0.96	0.17	61,61,61,61	0
54	MG	2A	3439	1/1	0.96	0.15	63,63,63,63	0
54	MG	2A	3240	1/1	0.96	0.07	61,61,61,61	0
54	MG	1A	3866	1/1	0.96	0.17	22,22,22,22	0
54	MG	1A	3669	1/1	0.96	0.15	50,50,50,50	0
54	MG	2a	3034	1/1	0.96	0.20	43,43,43,43	0
54	MG	1A	3393	1/1	0.96	0.28	27,27,27,27	0
54	MG	1A	3193	1/1	0.96	0.15	34,34,34,34	0
54	MG	2A	3245	1/1	0.96	0.11	60,60,60,60	0
54	MG	2A	3248	1/1	0.96	0.10	72,72,72,72	0
54	MG	2A	3447	1/1	0.96	0.16	42,42,42,42	0
54	MG	1A	3518	1/1	0.96	0.16	57,57,57,57	0
54	MG	1R	202	1/1	0.96	0.24	40,40,40,40	0
54	MG	1A	3982	1/1	0.96	0.17	22,22,22,22	0
54	MG	1A	3042	1/1	0.96	0.13	30,30,30,30	0
54	MG	2A	3254	1/1	0.96	0.23	65,65,65,65	0
54	MG	2A	3454	1/1	0.96	0.14	57,57,57,57	0
54	MG	1A	3284	1/1	0.96	0.09	38,38,38,38	0
54	MG	1A	3675	1/1	0.96	0.15	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3339	1/1	0.96	0.12	43,43,43,43	0
54	MG	1A	3078	1/1	0.96	0.14	38,38,38,38	0
54	MG	1A	3678	1/1	0.96	0.12	44,44,44,44	0
54	MG	1A	3776	1/1	0.96	0.12	51,51,51,51	0
54	MG	2A	3654	1/1	0.96	0.18	53,53,53,53	0
54	MG	1A	3130	1/1	0.96	0.26	38,38,38,38	0
54	MG	1a	3238	1/1	0.96	0.13	50,50,50,50	0
54	MG	1U	203	1/1	0.96	0.27	37,37,37,37	0
54	MG	1A	3239	1/1	0.96	0.18	32,32,32,32	0
54	MG	1A	3131	1/1	0.96	0.18	33,33,33,33	0
54	MG	1U	206	1/1	0.96	0.12	30,30,30,30	0
54	MG	2A	3269	1/1	0.96	0.17	37,37,37,37	0
54	MG	1U	207	1/1	0.96	0.16	39,39,39,39	0
54	MG	1V	201	1/1	0.96	0.28	31,31,31,31	0
54	MG	1V	202	1/1	0.96	0.23	32,32,32,32	0
54	MG	1A	3344	1/1	0.96	0.14	54,54,54,54	0
54	MG	1A	3885	1/1	0.96	0.35	37,37,37,37	0
54	MG	1V	206	1/1	0.96	0.16	60,60,60,60	0
54	MG	2A	3668	1/1	0.96	0.11	22,22,22,22	0
54	MG	2A	3475	1/1	0.96	0.14	62,62,62,62	0
54	MG	1A	3886	1/1	0.96	0.16	58,58,58,58	0
54	MG	1A	3887	1/1	0.96	0.13	33,33,33,33	0
54	MG	1A	3683	1/1	0.96	0.20	57,57,57,57	0
54	MG	2A	3110	1/1	0.96	0.17	31,31,31,31	0
54	MG	1A	3404	1/1	0.96	0.10	40,40,40,40	0
54	MG	2A	3675	1/1	0.96	0.12	42,42,42,42	0
54	MG	2A	3283	1/1	0.96	0.16	58,58,58,58	0
54	MG	2A	3284	1/1	0.96	0.14	44,44,44,44	0
54	MG	1A	3784	1/1	0.96	0.06	44,44,44,44	0
54	MG	1A	3601	1/1	0.96	0.17	35,35,35,35	0
54	MG	2A	3680	1/1	0.96	0.13	42,42,42,42	0
54	MG	1A	3603	1/1	0.96	0.27	41,41,41,41	0
54	MG	1A	3604	1/1	0.96	0.23	34,34,34,34	0
54	MG	2A	3289	1/1	0.96	0.12	37,37,37,37	0
54	MG	1A	3199	1/1	0.96	0.33	44,44,44,44	0
54	MG	1A	3463	1/1	0.96	0.15	56,56,56,56	0
54	MG	1A	3464	1/1	0.96	0.18	33,33,33,33	0
54	MG	1A	3465	1/1	0.96	0.13	44,44,44,44	0
54	MG	1A	3293	1/1	0.96	0.14	42,42,42,42	0
54	MG	2A	3298	1/1	0.96	0.16	45,45,45,45	0
54	MG	2a	3090	1/1	0.96	0.13	61,61,61,61	0
54	MG	1A	3694	1/1	0.96	0.18	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3200	1/1	0.96	0.40	52,52,52,52	0
54	MG	1A	3902	1/1	0.96	0.11	52,52,52,52	0
54	MG	1A	3043	1/1	0.96	0.24	34,34,34,34	0
54	MG	1A	3537	1/1	0.96	0.11	35,35,35,35	0
54	MG	1a	3122	1/1	0.96	0.17	47,47,47,47	0
54	MG	2A	3307	1/1	0.96	0.13	37,37,37,37	0
54	MG	15	104	1/1	0.96	0.23	40,40,40,40	0
54	MG	2A	3130	1/1	0.96	0.27	44,44,44,44	0
54	MG	2A	3131	1/1	0.96	0.30	45,45,45,45	0
54	MG	1A	3906	1/1	0.96	0.17	52,52,52,52	0
54	MG	1A	3613	1/1	0.96	0.23	30,30,30,30	0
54	MG	2A	3507	1/1	0.96	0.14	59,59,59,59	0
54	MG	1A	3202	1/1	0.96	0.20	36,36,36,36	0
54	MG	1A	3909	1/1	0.96	0.14	15,15,15,15	0
54	MG	17	102	1/1	0.96	0.14	37,37,37,37	0
54	MG	1A	3352	1/1	0.96	0.21	33,33,33,33	0
54	MG	2a	3108	1/1	0.96	0.07	76,76,76,76	0
54	MG	17	104	1/1	0.96	0.18	36,36,36,36	0
54	MG	1A	3044	1/1	0.96	0.26	16,16,16,16	0
54	MG	1A	3247	1/1	0.96	0.28	37,37,37,37	0
54	MG	2A	3143	1/1	0.96	0.13	51,51,51,51	0
54	MG	2A	3324	1/1	0.96	0.14	48,48,48,48	0
54	MG	2A	3325	1/1	0.96	0.13	51,51,51,51	0
54	MG	1d	302	1/1	0.96	0.05	73,73,73,73	0
54	MG	1A	3706	1/1	0.96	0.20	50,50,50,50	0
54	MG	1A	3619	1/1	0.96	0.09	55,55,55,55	0
54	MG	1e	201	1/1	0.96	0.29	58,58,58,58	0
54	MG	1e	202	1/1	0.96	0.10	76,76,76,76	0
54	MG	1A	3806	1/1	0.96	0.07	32,32,32,32	0
54	MG	1B	207	1/1	0.96	0.17	50,50,50,50	0
54	MG	1A	3299	1/1	0.96	0.27	41,41,41,41	0
54	MG	1a	3139	1/1	0.96	0.05	59,59,59,59	0
54	MG	1a	3140	1/1	0.96	0.13	61,61,61,61	0
54	MG	1A	3809	1/1	0.96	0.12	50,50,50,50	0
54	MG	1A	3082	1/1	0.96	0.50	43,43,43,43	0
54	MG	1a	3143	1/1	0.96	0.10	39,39,39,39	0
54	MG	1A	3062	1/1	0.96	0.19	31,31,31,31	0
54	MG	1A	3812	1/1	0.96	0.20	27,27,27,27	0
54	MG	2A	3730	1/1	0.96	0.21	62,62,62,62	0
54	MG	1A	3054	1/1	0.96	0.33	40,40,40,40	0
54	MG	1A	3713	1/1	0.96	0.07	61,61,61,61	0
54	MG	2A	3536	1/1	0.96	0.20	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1B	215	1/1	0.96	0.27	72,72,72,72	0
54	MG	1A	3304	1/1	0.96	0.19	41,41,41,41	0
54	MG	2A	3164	1/1	0.96	0.11	68,68,68,68	0
54	MG	2A	3540	1/1	0.96	0.08	68,68,68,68	0
54	MG	1A	3715	1/1	0.96	0.08	52,52,52,52	0
54	MG	1a	3009	1/1	0.96	0.23	59,59,59,59	0
54	MG	1A	3420	1/1	0.96	0.26	22,22,22,22	0
54	MG	1A	3717	1/1	0.96	0.17	37,37,37,37	0
54	MG	1a	3012	1/1	0.96	0.20	30,30,30,30	0
54	MG	1a	3013	1/1	0.96	0.12	61,61,61,61	0
54	MG	1A	3550	1/1	0.96	0.17	49,49,49,49	0
54	MG	1A	3628	1/1	0.96	0.22	59,59,59,59	0
54	MG	1A	3720	1/1	0.96	0.20	23,23,23,23	0
54	MG	1A	3021	1/1	0.96	0.17	36,36,36,36	0
54	MG	1A	3254	1/1	0.96	0.11	50,50,50,50	0
54	MG	1A	3631	1/1	0.96	0.13	33,33,33,33	0
54	MG	1A	3482	1/1	0.96	0.16	24,24,24,24	0
54	MG	2A	3360	1/1	0.96	0.18	60,60,60,60	0
54	MG	1A	3726	1/1	0.96	0.27	39,39,39,39	0
54	MG	1A	3829	1/1	0.96	0.23	29,29,29,29	0
54	MG	1A	3257	1/1	0.96	0.15	52,52,52,52	0
54	MG	2A	3366	1/1	0.96	0.13	42,42,42,42	0
54	MG	1A	3208	1/1	0.96	0.27	43,43,43,43	0
54	MG	2A	3368	1/1	0.96	0.21	61,61,61,61	0
54	MG	2a	3160	1/1	0.96	0.10	67,67,67,67	0
54	MG	1A	3369	1/1	0.96	0.12	28,28,28,28	0
54	MG	1D	304	1/1	0.96	0.19	42,42,42,42	0
54	MG	2A	3184	1/1	0.96	0.09	66,66,66,66	0
54	MG	1A	3260	1/1	0.96	0.14	29,29,29,29	0
54	MG	2D	306	1/1	0.96	0.64	52,52,52,52	0
54	MG	2A	3020	1/1	0.96	0.21	47,47,47,47	0
54	MG	1D	307	1/1	0.96	0.17	36,36,36,36	0
54	MG	1D	309	1/1	0.96	0.18	30,30,30,30	0
54	MG	2A	3379	1/1	0.96	0.08	64,64,64,64	0
54	MG	2E	301	1/1	0.96	0.61	49,49,49,49	0
54	MG	1A	3209	1/1	0.96	0.66	39,39,39,39	0
54	MG	2A	3381	1/1	0.96	0.14	63,63,63,63	0
54	MG	1A	3112	1/1	0.96	0.21	40,40,40,40	0
54	MG	2a	3174	1/1	0.96	0.19	55,55,55,55	0
54	MG	1a	3035	1/1	0.96	0.12	65,65,65,65	0
54	MG	1A	3113	1/1	0.96	0.44	41,41,41,41	0
54	MG	2F	304	1/1	0.96	0.34	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3945	1/1	0.96	0.16	26,26,26,26	0
54	MG	1A	3946	1/1	0.96	0.12	45,45,45,45	0
54	MG	1A	3066	1/1	0.96	0.36	42,42,42,42	0
54	MG	1A	3115	1/1	0.96	0.14	28,28,28,28	0
54	MG	1A	3494	1/1	0.96	0.21	43,43,43,43	0
54	MG	1A	3565	1/1	0.96	0.16	48,48,48,48	0
54	MG	1A	3005	1/1	0.96	0.21	23,23,23,23	0
54	MG	1E	309	1/1	0.96	0.14	63,63,63,63	0
54	MG	1F	301	1/1	0.96	0.13	31,31,31,31	0
54	MG	1a	3046	1/1	0.96	0.17	65,65,65,65	0
54	MG	2A	3041	1/1	0.96	0.17	44,44,44,44	0
54	MG	1F	303	1/1	0.96	0.30	36,36,36,36	0
54	MG	1A	3497	1/1	0.96	0.10	46,46,46,46	0
54	MG	2T	201	1/1	0.96	0.11	65,65,65,65	0
54	MG	1A	3498	1/1	0.96	0.09	47,47,47,47	0
54	MG	1A	3316	1/1	0.96	0.11	50,50,50,50	0
54	MG	1A	3317	1/1	0.96	0.17	24,24,24,24	0
54	MG	1F	314	1/1	0.96	0.32	47,47,47,47	0
54	MG	2A	3595	1/1	0.96	0.05	50,50,50,50	0
54	MG	1A	3091	1/1	0.96	0.17	37,37,37,37	0
54	MG	1A	3438	1/1	0.96	0.14	30,30,30,30	0
54	MG	1A	3959	1/1	0.96	0.15	43,43,43,43	0
54	MG	1A	3069	1/1	0.96	0.16	41,41,41,41	0
54	MG	1A	3751	1/1	0.96	0.12	41,41,41,41	0
54	MG	1A	3070	1/1	0.96	0.16	31,31,31,31	0
54	MG	1A	3187	1/1	0.96	0.29	45,45,45,45	0
54	MG	27	101	1/1	0.96	0.19	44,44,44,44	0
54	MG	1A	3273	1/1	0.96	0.37	46,46,46,46	0
54	MG	1A	3755	1/1	0.96	0.19	36,36,36,36	0
54	MG	1A	3580	1/1	0.96	0.17	49,49,49,49	0
54	MG	1H	202	1/1	0.96	0.26	58,58,58,58	0
54	MG	1A	3757	1/1	0.96	0.17	42,42,42,42	0
54	MG	1A	3013	1/1	0.96	0.12	22,22,22,22	0
59	ZN	1Y	501	1/1	0.96	0.23	63,63,63,63	0
54	MG	1A	3859	1/1	0.96	0.23	33,33,33,33	0
54	MG	1A	3019	1/1	0.96	0.24	30,30,30,30	0
54	MG	2A	3420	1/1	0.96	0.11	65,65,65,65	0
54	MG	1a	3210	1/1	0.96	0.06	65,65,65,65	0
59	ZN	25	103	1/1	0.96	0.20	63,63,63,63	0
54	MG	2A	3614	1/1	0.96	0.28	46,46,46,46	0
54	MG	2A	3423	1/1	0.96	0.16	53,53,53,53	0
54	MG	1A	3470	1/1	0.97	0.18	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1a	3026	1/1	0.97	0.13	48,48,48,48	0
54	MG	2A	3077	1/1	0.97	0.52	56,56,56,56	0
54	MG	2A	3078	1/1	0.97	0.46	62,62,62,62	0
54	MG	1A	3006	1/1	0.97	0.16	25,25,25,25	0
54	MG	1A	3388	1/1	0.97	0.25	26,26,26,26	0
54	MG	2E	302	1/1	0.97	0.10	42,42,42,42	0
54	MG	1A	3661	1/1	0.97	0.23	46,46,46,46	0
54	MG	1A	3105	1/1	0.97	0.17	34,34,34,34	0
54	MG	1A	3065	1/1	0.97	0.14	36,36,36,36	0
54	MG	2E	306	1/1	0.97	0.17	66,66,66,66	0
54	MG	2F	301	1/1	0.97	0.41	48,48,48,48	0
54	MG	2A	3649	1/1	0.97	0.12	56,56,56,56	0
54	MG	1A	3778	1/1	0.97	0.12	28,28,28,28	0
54	MG	1a	3114	1/1	0.97	0.15	67,67,67,67	0
54	MG	2A	3294	1/1	0.97	0.18	38,38,38,38	0
54	MG	1A	3276	1/1	0.97	0.15	30,30,30,30	0
54	MG	1A	3521	1/1	0.97	0.28	28,28,28,28	0
54	MG	1A	3614	1/1	0.97	0.27	32,32,32,32	0
54	MG	1A	3186	1/1	0.97	0.30	35,35,35,35	0
54	MG	1U	208	1/1	0.97	0.15	39,39,39,39	0
54	MG	1A	3723	1/1	0.97	0.11	37,37,37,37	0
54	MG	2A	3302	1/1	0.97	0.14	61,61,61,61	0
54	MG	1A	3027	1/1	0.97	0.19	30,30,30,30	0
54	MG	1A	3351	1/1	0.97	0.21	27,27,27,27	0
54	MG	2A	3422	1/1	0.97	0.12	32,32,32,32	0
54	MG	1D	302	1/1	0.97	0.14	52,52,52,52	0
54	MG	1A	3142	1/1	0.97	0.09	38,38,38,38	0
54	MG	1a	3125	1/1	0.97	0.13	49,49,49,49	0
54	MG	1A	3787	1/1	0.97	0.28	57,57,57,57	0
54	MG	1A	3163	1/1	0.97	0.24	34,34,34,34	0
54	MG	1D	308	1/1	0.97	0.18	32,32,32,32	0
54	MG	2A	3312	1/1	0.97	0.21	40,40,40,40	0
54	MG	2V	202	1/1	0.97	0.38	49,49,49,49	0
54	MG	1A	3573	1/1	0.97	0.27	37,37,37,37	0
54	MG	1D	310	1/1	0.97	0.34	42,42,42,42	0
54	MG	1A	3020	1/1	0.97	0.31	42,42,42,42	0
54	MG	2A	3433	1/1	0.97	0.05	61,61,61,61	0
54	MG	2A	3552	1/1	0.97	0.09	32,32,32,32	0
54	MG	10	101	1/1	0.97	0.13	39,39,39,39	0
54	MG	2A	3554	1/1	0.97	0.17	22,22,22,22	0
54	MG	25	101	1/1	0.97	0.82	49,49,49,49	0
54	MG	1A	3398	1/1	0.97	0.20	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3319	1/1	0.97	0.16	51,51,51,51	0
54	MG	1A	3731	1/1	0.97	0.23	22,22,22,22	0
54	MG	1a	3222	1/1	0.97	0.10	68,68,68,68	0
54	MG	1A	3576	1/1	0.97	0.28	59,59,59,59	0
54	MG	2A	3007	1/1	0.97	0.14	36,36,36,36	0
54	MG	2A	3683	1/1	0.97	0.08	49,49,49,49	0
54	MG	1A	3734	1/1	0.97	0.18	42,42,42,42	0
54	MG	1A	3248	1/1	0.97	0.14	35,35,35,35	0
54	MG	2A	3111	1/1	0.97	0.13	66,66,66,66	0
54	MG	2A	3687	1/1	0.97	0.10	36,36,36,36	0
54	MG	1A	3080	1/1	0.97	0.27	33,33,33,33	0
54	MG	1a	3056	1/1	0.97	0.14	59,59,59,59	0
54	MG	2A	3013	1/1	0.97	0.15	23,23,23,23	0
54	MG	11	102	1/1	0.97	0.23	54,54,54,54	0
54	MG	2A	3568	1/1	0.97	0.17	37,37,37,37	0
54	MG	1A	3995	1/1	0.97	0.20	16,16,16,16	0
54	MG	1A	3360	1/1	0.97	0.19	17,17,17,17	0
54	MG	2A	3018	1/1	0.97	0.81	44,44,44,44	0
54	MG	1A	3111	1/1	0.97	0.12	32,32,32,32	0
54	MG	1A	3007	1/1	0.97	0.17	38,38,38,38	0
54	MG	2A	3021	1/1	0.97	0.14	39,39,39,39	0
54	MG	2a	3152	1/1	0.97	0.16	69,69,69,69	0
54	MG	2A	3455	1/1	0.97	0.16	57,57,57,57	0
54	MG	2A	3122	1/1	0.97	0.10	49,49,49,49	0
54	MG	1A	3800	1/1	0.97	0.20	44,44,44,44	0
54	MG	1A	3147	1/1	0.97	0.14	35,35,35,35	0
54	MG	15	102	1/1	0.97	0.13	38,38,38,38	0
54	MG	1F	304	1/1	0.97	0.18	39,39,39,39	0
54	MG	1F	305	1/1	0.97	0.19	37,37,37,37	0
54	MG	2A	3343	1/1	0.97	0.15	36,36,36,36	0
54	MG	1A	3253	1/1	0.97	0.33	26,26,26,26	0
54	MG	1A	3365	1/1	0.97	0.24	32,32,32,32	0
54	MG	2A	3031	1/1	0.97	0.16	30,30,30,30	0
54	MG	1A	3685	1/1	0.97	0.35	57,57,57,57	0
54	MG	1A	3003	1/1	0.97	0.16	29,29,29,29	0
54	MG	1A	3255	1/1	0.97	0.08	68,68,68,68	0
54	MG	1A	4006	1/1	0.97	0.33	40,40,40,40	0
54	MG	1A	3807	1/1	0.97	0.10	35,35,35,35	0
54	MG	1A	3541	1/1	0.97	0.17	32,32,32,32	0
54	MG	1A	3256	1/1	0.97	0.28	45,45,45,45	0
54	MG	2A	3593	1/1	0.97	0.17	62,62,62,62	0
54	MG	2A	3139	1/1	0.97	0.10	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3942	1/1	0.97	0.15	30,30,30,30	0
54	MG	1A	3149	1/1	0.97	0.12	51,51,51,51	0
54	MG	18	103	1/1	0.97	0.31	37,37,37,37	0
54	MG	1A	3023	1/1	0.97	0.19	18,18,18,18	0
54	MG	2A	3043	1/1	0.97	0.14	22,22,22,22	0
54	MG	1A	3328	1/1	0.97	0.19	26,26,26,26	0
54	MG	2A	3361	1/1	0.97	0.15	43,43,43,43	0
54	MG	2A	3247	1/1	0.97	0.32	41,41,41,41	0
54	MG	1A	3223	1/1	0.97	0.21	38,38,38,38	0
54	MG	1A	3073	1/1	0.97	0.33	46,46,46,46	0
54	MG	1A	3331	1/1	0.97	0.25	38,38,38,38	0
54	MG	1A	3816	1/1	0.97	0.28	30,30,30,30	0
54	MG	2A	3731	1/1	0.97	0.09	41,41,41,41	0
54	MG	1A	3116	1/1	0.97	0.18	35,35,35,35	0
54	MG	2A	3369	1/1	0.97	0.14	61,61,61,61	0
54	MG	2a	3055	1/1	0.97	0.09	49,49,49,49	0
54	MG	1A	3818	1/1	0.97	0.14	12,12,12,12	0
54	MG	1A	3645	1/1	0.97	0.12	58,58,58,58	0
54	MG	2A	3372	1/1	0.97	0.18	70,70,70,70	0
54	MG	2A	3737	1/1	0.97	0.14	75,75,75,75	0
54	MG	1A	3335	1/1	0.97	0.14	51,51,51,51	0
54	MG	2A	3053	1/1	0.97	0.14	42,42,42,42	0
54	MG	1a	3262	1/1	0.97	0.12	50,50,50,50	0
54	MG	1A	3888	1/1	0.97	0.11	50,50,50,50	0
54	MG	1A	3699	1/1	0.97	0.08	37,37,37,37	0
54	MG	1A	3647	1/1	0.97	0.35	47,47,47,47	0
54	MG	1A	3336	1/1	0.97	0.15	34,34,34,34	0
54	MG	1P	206	1/1	0.97	0.12	49,49,49,49	0
54	MG	1A	3086	1/1	0.97	0.24	37,37,37,37	0
54	MG	1A	3176	1/1	0.97	0.15	28,28,28,28	0
54	MG	1a	3096	1/1	0.97	0.26	60,60,60,60	0
54	MG	1a	3015	1/1	0.97	0.14	72,72,72,72	0
54	MG	2A	3270	1/1	0.97	0.21	48,48,48,48	0
54	MG	2A	3271	1/1	0.97	0.51	50,50,50,50	0
54	MG	1A	3229	1/1	0.97	0.21	31,31,31,31	0
54	MG	2A	3389	1/1	0.97	0.15	48,48,48,48	0
54	MG	1A	3602	1/1	0.97	0.21	33,33,33,33	0
54	MG	1A	3178	1/1	0.97	0.47	41,41,41,41	0
54	MG	1A	3233	1/1	0.97	0.20	37,37,37,37	0
54	MG	1A	3024	1/1	0.97	0.24	38,38,38,38	0
54	MG	1A	3769	1/1	0.97	0.16	40,40,40,40	0
54	MG	1A	3180	1/1	0.97	0.15	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3712	1/1	0.97	0.22	27,27,27,27	0
54	MG	2A	3072	1/1	0.97	0.33	38,38,38,38	0
54	MG	2A	3399	1/1	0.97	0.15	69,69,69,69	0
59	ZN	29	501	1/1	0.97	0.13	68,68,68,68	0
54	MG	1a	3191	1/1	0.97	0.12	72,72,72,72	0
54	MG	1A	3496	1/1	0.98	0.04	65,65,65,65	0
54	MG	2A	3313	1/1	0.98	0.16	25,25,25,25	0
54	MG	1A	3405	1/1	0.98	0.32	51,51,51,51	0
54	MG	1A	3291	1/1	0.98	0.19	33,33,33,33	0
54	MG	1A	3834	1/1	0.98	0.14	51,51,51,51	0
54	MG	1Q	201	1/1	0.98	0.19	43,43,43,43	0
54	MG	2a	3012	1/1	0.98	0.13	51,51,51,51	0
54	MG	1A	3107	1/1	0.98	0.18	30,30,30,30	0
54	MG	1A	3327	1/1	0.98	0.15	21,21,21,21	0
54	MG	1A	3154	1/1	0.98	0.87	45,45,45,45	0
54	MG	1A	3410	1/1	0.98	0.15	29,29,29,29	0
54	MG	1a	3176	1/1	0.98	0.16	70,70,70,70	0
54	MG	1A	3025	1/1	0.98	0.37	34,34,34,34	0
54	MG	1A	3504	1/1	0.98	0.22	19,19,19,19	0
54	MG	1A	3665	1/1	0.98	0.31	38,38,38,38	0
54	MG	1A	3905	1/1	0.98	0.23	24,24,24,24	0
54	MG	2A	3137	1/1	0.98	0.17	36,36,36,36	0
54	MG	1A	3505	1/1	0.98	0.23	23,23,23,23	0
54	MG	1A	3122	1/1	0.98	0.35	56,56,56,56	0
54	MG	1a	3021	1/1	0.98	0.17	52,52,52,52	0
54	MG	1A	3259	1/1	0.98	0.19	35,35,35,35	0
54	MG	1A	3559	1/1	0.98	0.10	60,60,60,60	0
54	MG	1A	3332	1/1	0.98	0.23	32,32,32,32	0
54	MG	1A	3373	1/1	0.98	0.20	36,36,36,36	0
54	MG	1A	3157	1/1	0.98	0.26	31,31,31,31	0
54	MG	1A	3979	1/1	0.98	0.16	43,43,43,43	0
54	MG	2A	3535	1/1	0.98	0.14	44,44,44,44	0
54	MG	1A	3018	1/1	0.98	0.20	33,33,33,33	0
54	MG	1A	3230	1/1	0.98	0.47	38,38,38,38	0
54	MG	1A	3732	1/1	0.98	0.12	52,52,52,52	0
54	MG	1A	3852	1/1	0.98	0.15	44,44,44,44	0
54	MG	2A	3151	1/1	0.98	0.19	44,44,44,44	0
54	MG	1A	3231	1/1	0.98	0.24	33,33,33,33	0
54	MG	1A	3181	1/1	0.98	0.12	35,35,35,35	0
54	MG	1A	3379	1/1	0.98	0.18	41,41,41,41	0
54	MG	2A	3246	1/1	0.98	0.57	38,38,38,38	0
54	MG	1V	203	1/1	0.98	0.12	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	2A	3647	1/1	0.98	0.17	42,42,42,42	0
54	MG	1A	3139	1/1	0.98	0.21	27,27,27,27	0
54	MG	1A	3423	1/1	0.98	0.17	15,15,15,15	0
54	MG	2A	3250	1/1	0.98	0.34	41,41,41,41	0
54	MG	1A	3623	1/1	0.98	0.12	26,26,26,26	0
54	MG	2A	3450	1/1	0.98	0.07	66,66,66,66	0
54	MG	1A	3234	1/1	0.98	0.22	36,36,36,36	0
54	MG	1A	3236	1/1	0.98	0.20	24,24,24,24	0
54	MG	1A	3572	1/1	0.98	0.27	28,28,28,28	0
54	MG	1A	3098	1/1	0.98	0.29	36,36,36,36	0
54	MG	1A	3141	1/1	0.98	0.19	31,31,31,31	0
54	MG	2D	301	1/1	0.98	0.31	44,44,44,44	0
54	MG	1A	3185	1/1	0.98	0.19	40,40,40,40	0
54	MG	2A	3074	1/1	0.98	0.12	26,26,26,26	0
54	MG	1E	302	1/1	0.98	0.34	39,39,39,39	0
54	MG	1A	3345	1/1	0.98	0.14	33,33,33,33	0
54	MG	2A	3261	1/1	0.98	0.26	43,43,43,43	0
54	MG	2A	3262	1/1	0.98	0.13	40,40,40,40	0
54	MG	10	103	1/1	0.98	0.13	58,58,58,58	0
54	MG	1A	3074	1/1	0.98	0.37	31,31,31,31	0
54	MG	1A	3274	1/1	0.98	0.14	35,35,35,35	0
54	MG	1A	3100	1/1	0.98	0.24	32,32,32,32	0
54	MG	1A	3869	1/1	0.98	0.21	31,31,31,31	0
54	MG	1A	3433	1/1	0.98	0.18	13,13,13,13	0
54	MG	1A	3242	1/1	0.98	0.26	33,33,33,33	0
54	MG	1A	3101	1/1	0.98	0.48	34,34,34,34	0
54	MG	1A	3873	1/1	0.98	0.24	23,23,23,23	0
54	MG	1F	306	1/1	0.98	0.17	33,33,33,33	0
54	MG	1a	3219	1/1	0.98	0.14	50,50,50,50	0
54	MG	1F	307	1/1	0.98	0.18	36,36,36,36	0
54	MG	1A	3090	1/1	0.98	0.41	35,35,35,35	0
54	MG	1F	309	1/1	0.98	0.25	26,26,26,26	0
54	MG	2a	3182	1/1	0.98	0.09	61,61,61,61	0
54	MG	15	101	1/1	0.98	0.26	36,36,36,36	0
54	MG	1A	3939	1/1	0.98	0.14	54,54,54,54	0
54	MG	2a	3077	1/1	0.98	0.05	71,71,71,71	0
54	MG	15	103	1/1	0.98	0.25	32,32,32,32	0
54	MG	1A	3213	1/1	0.98	0.24	30,30,30,30	0
54	MG	1A	3214	1/1	0.98	0.25	35,35,35,35	0
54	MG	1A	3586	1/1	0.98	0.22	24,24,24,24	0
54	MG	1A	3041	1/1	0.98	0.25	17,17,17,17	0
54	MG	1A	3068	1/1	0.98	0.23	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	17	101	1/1	0.98	0.30	33,33,33,33	0
54	MG	2A	3011	1/1	0.98	0.18	36,36,36,36	0
54	MG	1A	3357	1/1	0.98	0.23	20,20,20,20	0
54	MG	1A	4013	1/1	0.98	0.11	48,48,48,48	0
54	MG	1A	3536	1/1	0.98	0.14	30,30,30,30	0
54	MG	2A	3489	1/1	0.98	0.20	34,34,34,34	0
54	MG	2A	3015	1/1	0.98	0.31	36,36,36,36	0
54	MG	1A	3702	1/1	0.98	0.18	42,42,42,42	0
54	MG	1A	3487	1/1	0.98	0.16	23,23,23,23	0
54	MG	1A	3884	1/1	0.98	0.16	38,38,38,38	0
54	MG	1A	3117	1/1	0.98	0.24	21,21,21,21	0
54	MG	2W	201	1/1	0.98	0.40	44,44,44,44	0
54	MG	1A	3705	1/1	0.98	0.15	29,29,29,29	0
54	MG	1A	3359	1/1	0.98	0.26	26,26,26,26	0
54	MG	2A	3398	1/1	0.98	0.11	41,41,41,41	0
54	MG	1a	3241	1/1	0.98	0.07	72,72,72,72	0
54	MG	1A	3053	1/1	0.98	0.11	41,41,41,41	0
54	MG	2A	3600	1/1	0.98	0.11	40,40,40,40	0
54	MG	1A	3194	1/1	0.98	0.14	39,39,39,39	0
54	MG	1A	3150	1/1	0.98	0.35	33,33,33,33	0
54	MG	1a	3245	1/1	0.98	0.13	72,72,72,72	0
54	MG	1A	3493	1/1	0.98	0.15	46,46,46,46	0
59	ZN	15	110	1/1	0.98	0.20	44,44,44,44	0
54	MG	2A	3028	1/1	0.98	0.13	30,30,30,30	0
54	MG	1A	3957	1/1	0.98	0.12	49,49,49,49	0
54	MG	2A	3030	1/1	0.98	0.18	37,37,37,37	0
54	MG	2a	3109	1/1	0.98	0.18	71,71,71,71	0
54	MG	1A	3133	1/1	0.98	0.26	31,31,31,31	0
54	MG	1A	3045	1/1	0.98	0.18	23,23,23,23	0
54	MG	1P	203	1/1	0.98	0.12	32,32,32,32	0
60	SF4	1d	305	8/8	0.98	0.14	60,63,70,73	0
60	SF4	2d	501	8/8	0.98	0.13	66,79,83,84	0
54	MG	1a	3165	1/1	0.99	0.26	71,71,71,71	0
54	MG	1A	3092	1/1	0.99	0.15	14,14,14,14	0
54	MG	1F	310	1/1	0.99	0.21	35,35,35,35	0
54	MG	1A	3171	1/1	0.99	0.27	29,29,29,29	0
54	MG	1A	3650	1/1	0.99	0.18	24,24,24,24	0
54	MG	1A	3353	1/1	0.99	0.13	24,24,24,24	0
54	MG	1A	3071	1/1	0.99	0.13	33,33,33,33	0
54	MG	1A	3287	1/1	0.99	0.21	23,23,23,23	0
54	MG	15	105	1/1	0.99	0.12	26,26,26,26	0
54	MG	1A	3288	1/1	0.99	0.20	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	1A	3740	1/1	0.99	0.12	22,22,22,22	0
54	MG	2A	3291	1/1	0.99	0.23	23,23,23,23	0
54	MG	1A	3177	1/1	0.99	0.14	33,33,33,33	0
54	MG	1E	303	1/1	0.99	0.17	30,30,30,30	0
54	MG	1A	3742	1/1	0.99	0.20	28,28,28,28	0
54	MG	2A	3295	1/1	0.99	0.11	47,47,47,47	0
54	MG	1A	3639	1/1	0.99	0.18	33,33,33,33	0
54	MG	1E	306	1/1	0.99	0.14	34,34,34,34	0
54	MG	1A	3264	1/1	0.99	0.21	33,33,33,33	0
54	MG	1A	3334	1/1	0.99	0.21	22,22,22,22	0
54	MG	1A	3265	1/1	0.99	0.23	28,28,28,28	0
54	MG	1A	3083	1/1	0.99	0.27	39,39,39,39	0
54	MG	1F	302	1/1	0.99	0.29	35,35,35,35	0
54	MG	2A	3365	1/1	0.99	0.20	36,36,36,36	0
59	ZN	16	501	1/1	0.99	0.24	42,42,42,42	0
59	ZN	19	103	1/1	0.99	0.22	42,42,42,42	0
54	MG	1D	303	1/1	0.99	0.26	38,38,38,38	0
54	MG	1A	3440	1/1	0.99	0.17	53,53,53,53	0
54	MG	1A	3539	1/1	0.99	0.17	31,31,31,31	0
54	MG	2A	3306	1/1	0.99	0.15	31,31,31,31	0
54	MG	1D	306	1/1	0.99	0.20	15,15,15,15	0
54	MG	1A	3303	1/1	0.99	0.20	17,17,17,17	0
54	MG	13	101	1/1	0.99	0.18	35,35,35,35	0
54	MG	1A	3235	1/1	0.99	0.38	28,28,28,28	0
54	MG	2A	3374	1/1	0.99	0.12	62,62,62,62	0
54	MG	1A	3224	1/1	1.00	0.20	36,36,36,36	0

## 6.5 Other polymers [\(i\)](#)

There are no such residues in this entry.