Full wwPDB X-ray Structure Validation Report (i)

Nov 6, 2023 – 01:18 PM EST

PDB ID	:	6CFK
Title	:	Crystal structure of the Thermus thermophilus 70S ribosome in complex with D-histidyl-CAM and bound to protein Y (YfiA) at 2.7A resolution
Authors	:	Tereshchenkov, A.G.; Dobosz-Bartoszek, M.; Osterman, I.A.; Marks, J.; Sergeeva, V.A.; Kasatsky, P.; Komarova, E.S.; Stavrianidi, A.N.; Rodin, I.A.; Konevega, A.L.; Sergiev, P.V.; Sumbatyan, N.V.; Mankin, A.S.; Bogdanov, A.A.; Polikanov, Y.S.
Deposited on	:	2018-02-15
Resolution	:	2.70 Å(reported)

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

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

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

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

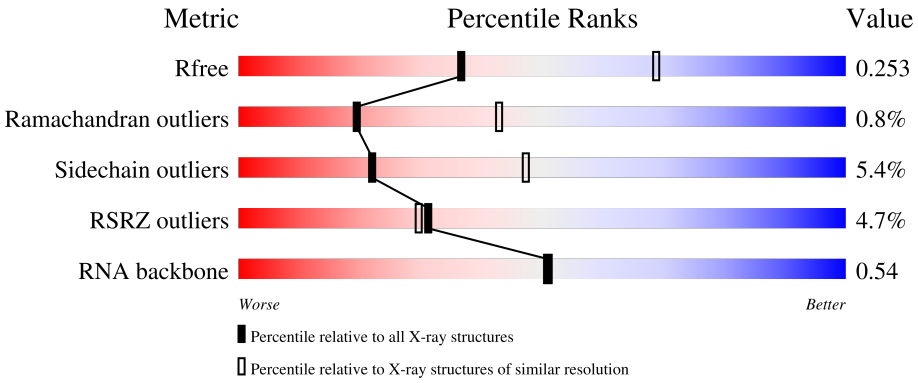
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 2.70 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	2808 (2.70-2.70)
Ramachandran outliers	138981	3069 (2.70-2.70)
Sidechain outliers	138945	3069 (2.70-2.70)
RSRZ outliers	127900	2737 (2.70-2.70)
RNA backbone	3102	1159 (3.00-2.40)

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

Mol	Chain	Length	Quality of chain
1	1A	2915	2% 82% 15%
1	2A	2915	2% 80% 18%
2	1B	121	89% 10%

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Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36

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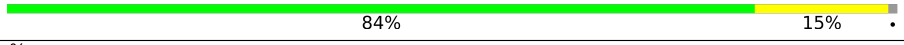
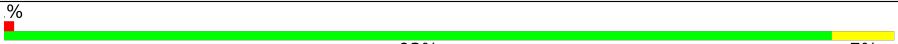
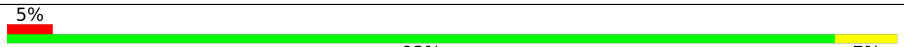
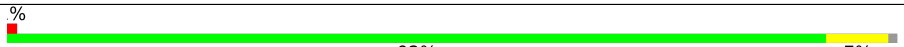
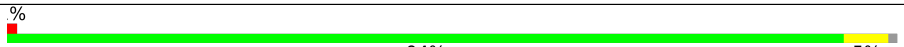
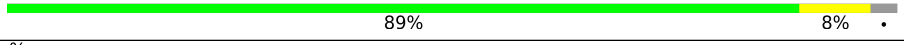
Mol	Chain	Length	Quality of chain
2	2B	121	
3	1D	276	
3	2D	276	
4	1E	206	
4	2E	206	
5	1F	210	
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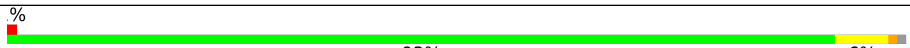
6	1G	182	
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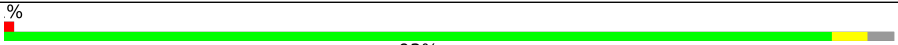
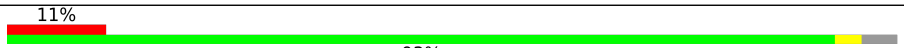
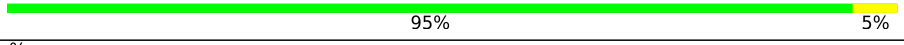
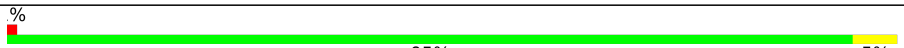
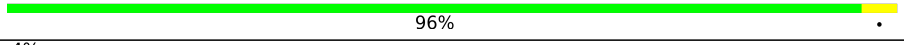
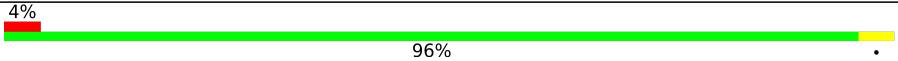
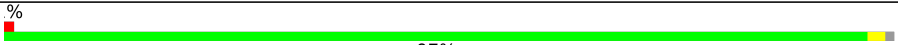
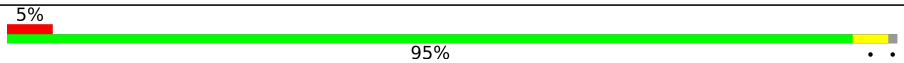
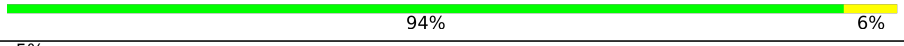
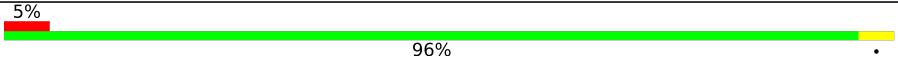
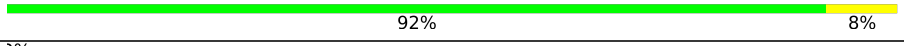
7	1H	180	
7	2H	180	
8	1I	148	
8	2I	148	
9	1N	140	
9	2N	140	
10	1O	122	
10	2O	122	
11	1P	150	
11	2P	150	
12	1Q	141	
12	2Q	141	
13	1R	118	
13	2R	118	
14	1S	112	
14	2S	112	

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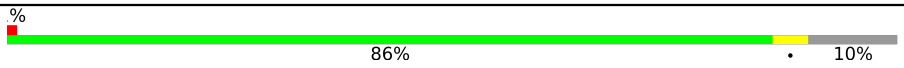
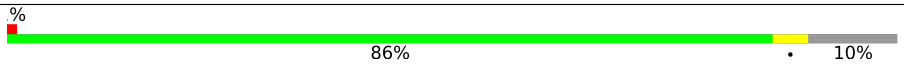
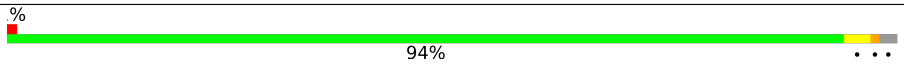
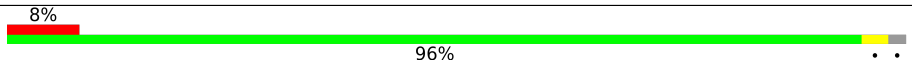
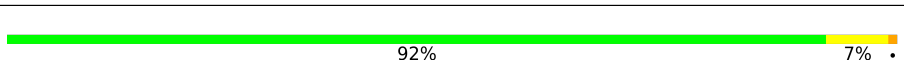
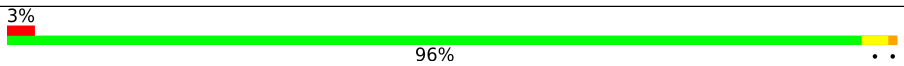
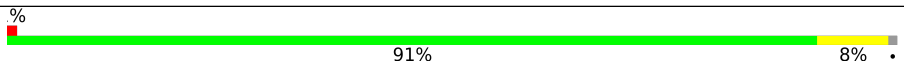
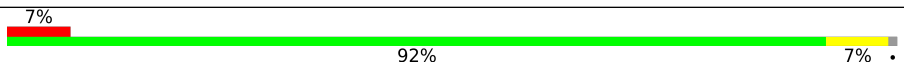
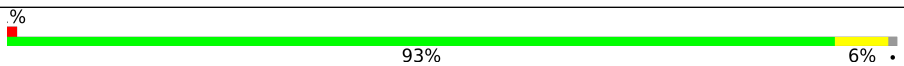
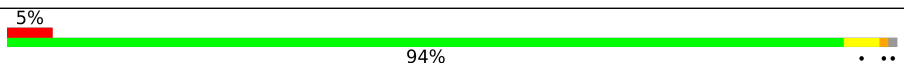
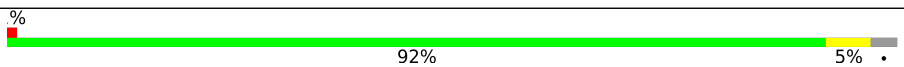
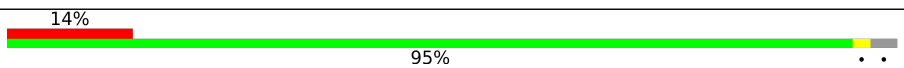
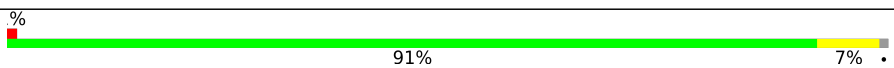
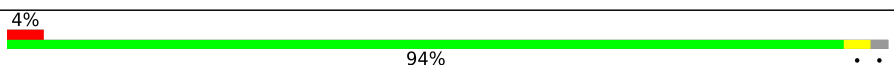
Mol	Chain	Length	Quality of chain
15	1T	146	
15	2T	146	
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
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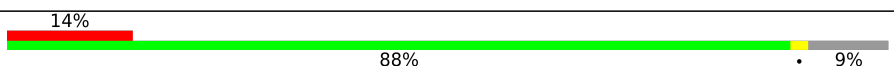
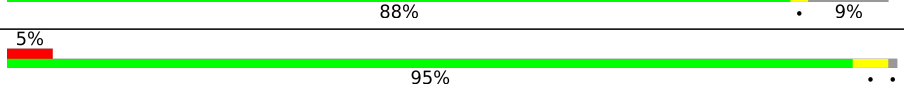
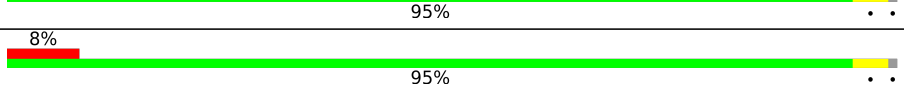
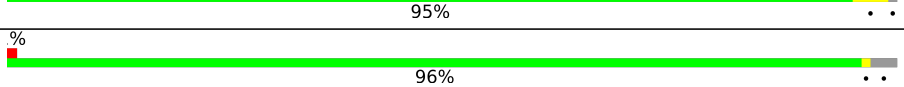
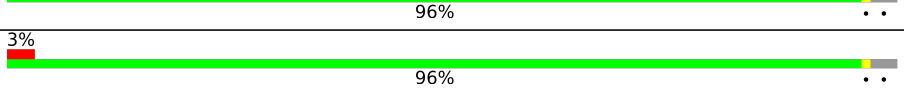
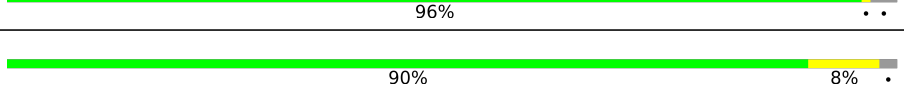
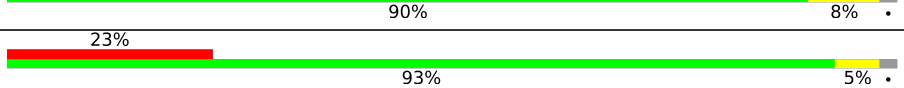
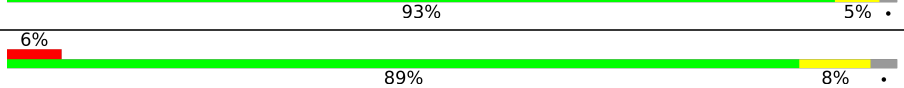
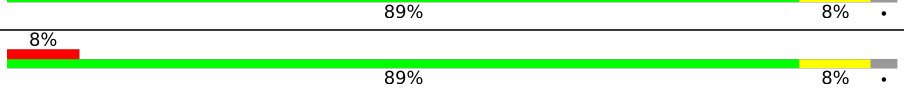
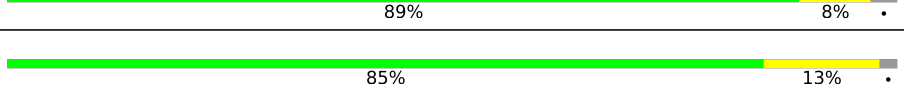
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	

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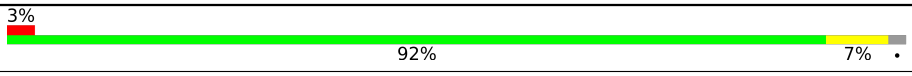
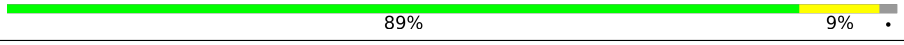
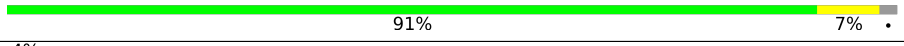
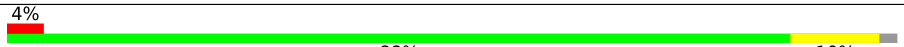
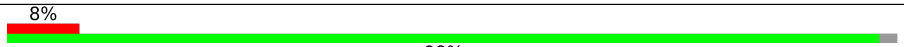
Mol	Chain	Length	Quality of chain
27	25	60	
28	16	54	
28	26	54	
29	17	49	
29	27	49	
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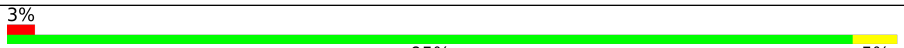
31	19	37	
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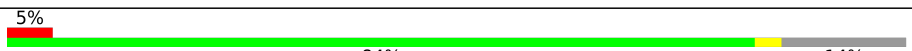
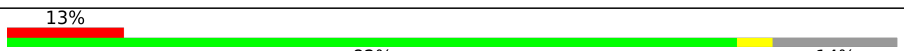
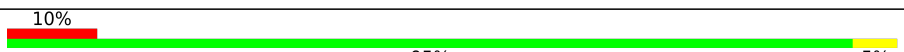
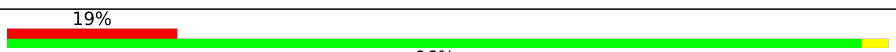
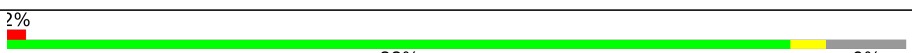
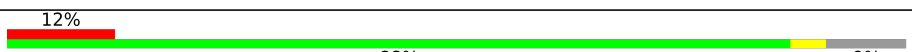
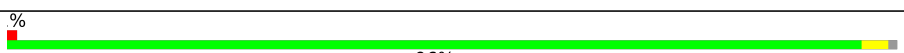
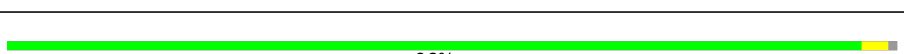
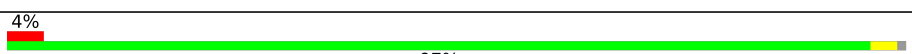
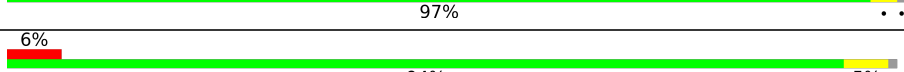
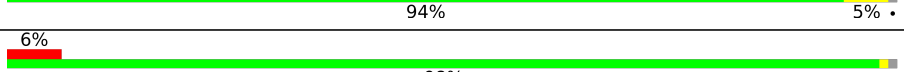
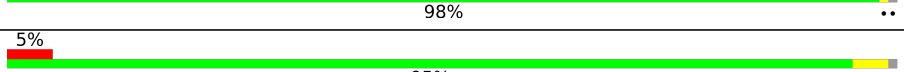
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	

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Mol	Chain	Length	Quality of chain
40	1i	128	13% 98%
40	2i	128	38% 94% 5%
41	1j	105	12% 88% 5% 8%
41	2j	105	45% 89% 9%
42	1k	129	85% 12%
42	2k	129	5% 84% 12%
43	1l	132	3% 89% 8%
43	2l	132	12% 90% 8%
44	1m	126	3% 87% 5% 8%
44	2m	126	10% 87% 10%
45	1n	61	16% 97%
45	2n	61	59% 98%
46	1o	89	91% 8%
46	2o	89	2% 97%
47	1p	88	14% 88% 6% 7%
47	2p	88	9% 85% 8% 7%
48	1q	105	6% 90% 5% 6%
48	2q	105	7% 90% 5% 6%
49	1r	88	% 76% 23%
49	2r	88	2% 70% 7% 23%
50	1s	93	% 86% 11%
50	2s	93	16% 87% 11%
51	1t	106	14% 85% 6% 9%
51	2t	106	7% 85% 7% 8%
52	1u	27	33% 81% 15%

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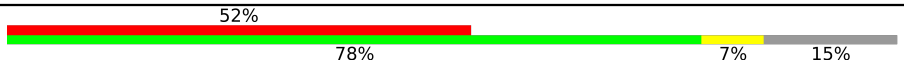
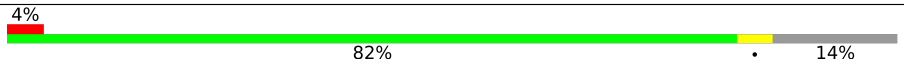
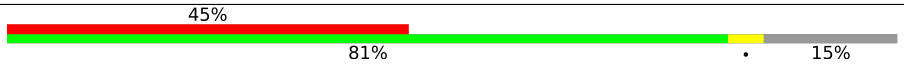
Mol	Chain	Length	Quality of chain
52	2u	27	
53	1y	113	
53	2y	113	

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	3189	-	-	-	X
54	MG	1A	3921	-	-	-	X
54	MG	1F	311	-	-	-	X
54	MG	1a	1767	-	-	-	X
54	MG	1a	1851	-	-	-	X
54	MG	2A	3146	-	-	-	X
54	MG	2A	3206	-	-	-	X

2 Entry composition (i)

There are 61 unique types of molecules in this entry. The entry contains 295438 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1A	2872	Total	C	N	O	P	0	0	0
			61869	27540	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61758	27491	11552	19850	2865			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1B	120	Total	C	N	O	P	0	0	0
			2572	1145	476	832	119			
2	2B	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	1D	275	Total	C	N	O	S	0	0	0
			2131	1346	422	360	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total	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
16	1U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
16	2U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			
22	20	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			754	475	148	130	1			
23	21	97	Total	C	N	O	S	0	0	0
			759	478	149	131	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			592	368	119	103	2			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			546	346	96	99	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			536	342	98	91	5			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1504	Total	C	N	O	P	0	0	0
			32331	14396	5990	10441	1504			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1842	1175	330	332	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1558	979	305	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1665	1043	329	286	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1668	1047	330	284	7			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			814	516	144	151	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1229	766	241	216	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1098	694	210	192	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			986	625	193	168			
40	2i	126	Total	C	N	O	0	0	0
			966	613	186	167			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			719	446	142	131			
41	2j	96	Total	C	N	O	0	0	0
			710	442	137	131			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			834	520	156	155	3			

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	116	Total	C	N	O	S	0	0	0
			914	564	189	159	2			
44	2m	114	Total	C	N	O	S	0	0	0
			895	550	186	157	2			

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			648	415	120	111	2			
50	2s	83	Total	C	N	O	S	0	0	0
			645	410	118	115	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			732	449	157	124	2			
51	2t	98	Total	C	N	O	S	0	0	0
			733	451	154	126	2			

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

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

- Molecule 53 is a protein called Ribosome-associated inhibitor A.

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

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	1A	1024	Total 1024	Mg 1024	0	0
54	1B	29	Total 29	Mg 29	0	0
54	1D	13	Total 13	Mg 13	0	0
54	1E	7	Total 7	Mg 7	0	0
54	1F	13	Total 13	Mg 13	0	0
54	1G	4	Total 4	Mg 4	0	0
54	1H	2	Total 2	Mg 2	0	0
54	1N	3	Total 3	Mg 3	0	0
54	1O	2	Total 2	Mg 2	0	0
54	1P	3	Total 3	Mg 3	0	0
54	1Q	4	Total 4	Mg 4	0	0
54	1R	3	Total 3	Mg 3	0	0
54	1S	1	Total 1	Mg 1	0	0
54	1T	3	Total 3	Mg 3	0	0
54	1U	2	Total 2	Mg 2	0	0
54	1V	3	Total 3	Mg 3	0	0
54	1W	2	Total 2	Mg 2	0	0
54	1X	2	Total 2	Mg 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1Z	1	Total Mg 1 1	0	0
54	10	6	Total Mg 6 6	0	0
54	11	3	Total Mg 3 3	0	0
54	13	2	Total Mg 2 2	0	0
54	14	1	Total Mg 1 1	0	0
54	15	3	Total Mg 3 3	0	0
54	17	2	Total Mg 2 2	0	0
54	18	1	Total Mg 1 1	0	0
54	19	2	Total Mg 2 2	0	0
54	1a	255	Total Mg 255 255	0	0
54	1b	1	Total Mg 1 1	0	0
54	1d	6	Total Mg 6 6	0	0
54	1e	2	Total Mg 2 2	0	0
54	1f	2	Total Mg 2 2	0	0
54	1g	3	Total Mg 3 3	0	0
54	1h	2	Total Mg 2 2	0	0
54	1i	1	Total Mg 1 1	0	0
54	1l	2	Total Mg 2 2	0	0
54	1n	1	Total Mg 1 1	0	0
54	1o	1	Total Mg 1 1	0	0
54	1t	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1y	4	Total Mg 4 4	0	0
54	2A	721	Total Mg 721 721	0	0
54	2B	19	Total Mg 19 19	0	0
54	2D	8	Total Mg 8 8	0	0
54	2E	6	Total Mg 6 6	0	0
54	2F	3	Total Mg 3 3	0	0
54	2G	3	Total Mg 3 3	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	2	Total Mg 2 2	0	0
54	2Q	2	Total Mg 2 2	0	0
54	2R	1	Total Mg 1 1	0	0
54	2T	4	Total Mg 4 4	0	0
54	2V	1	Total Mg 1 1	0	0
54	2W	2	Total Mg 2 2	0	0
54	2X	1	Total Mg 1 1	0	0
54	20	1	Total Mg 1 1	0	0
54	21	1	Total Mg 1 1	0	0
54	25	1	Total Mg 1 1	0	0
54	28	3	Total Mg 3 3	0	0

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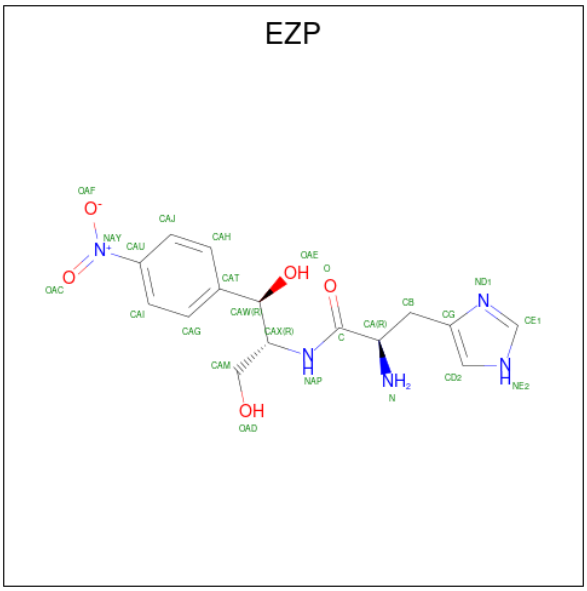
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	2a	151	Total Mg 151 151	0	0
54	2e	1	Total Mg 1 1	0	0
54	2f	1	Total Mg 1 1	0	0
54	2j	1	Total Mg 1 1	0	0
54	2p	1	Total Mg 1 1	0	0
54	2q	1	Total Mg 1 1	0	0
54	2r	1	Total Mg 1 1	0	0
54	2t	1	Total Mg 1 1	0	0

- Molecule 55 is POTASSIUM ION (three-letter code: K) (formula: K).

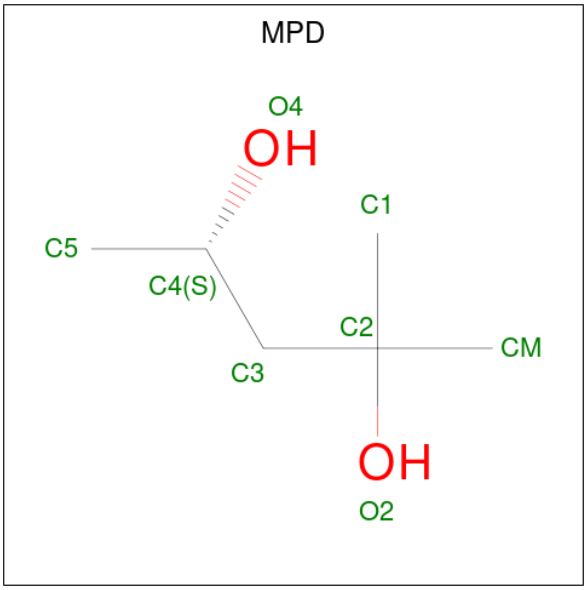
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	1A	1	Total K 1 1	0	0
55	2A	1	Total K 1 1	0	0

- Molecule 56 is N-[(1R,2R)-1,3-dihydroxy-1-(4-nitrophenyl)propan-2-yl]-D-histidinamide (three-letter code: EZP) (formula: $C_{15}H_{19}N_5O_5$).



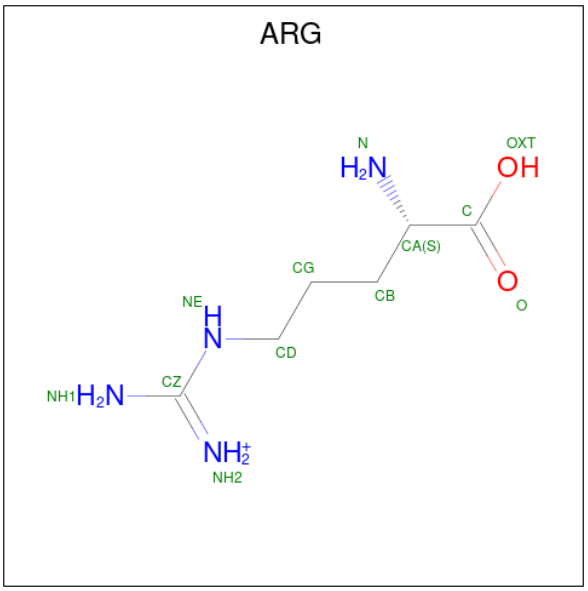
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1A	1	Total C N O 25 15 5 5	0	0
56	2A	1	Total C N O 25 15 5 5	0	0

- 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	2B	1	Total C O 8 6 2	0	0

- Molecule 58 is ARGININE (three-letter code: ARG) (formula: $C_6H_{15}N_4O_2$).



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

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

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

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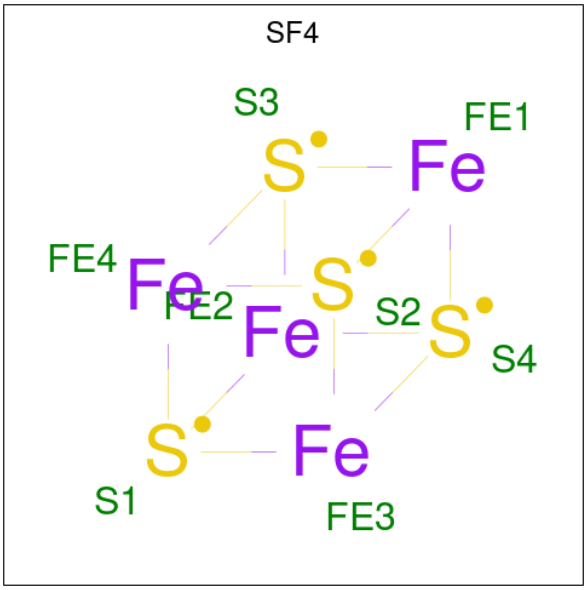
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	29	1	Total Zn 1 1	0	0
59	2n	1	Total Zn 1 1	0	0

- Molecule 60 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



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	2980	Total O 2980 2980	0	0
61	1B	105	Total O 105 105	0	0
61	1D	116	Total O 116 116	0	0
61	1E	76	Total O 76 76	0	0
61	1F	63	Total O 63 63	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1G	22	Total O 22 22	0	0
61	1H	16	Total O 16 16	0	0
61	1I	7	Total O 7 7	0	0
61	1N	50	Total O 50 50	0	0
61	1O	22	Total O 22 22	0	0
61	1P	58	Total O 58 58	0	0
61	1Q	42	Total O 42 42	0	0
61	1R	37	Total O 37 37	0	0
61	1S	13	Total O 13 13	0	0
61	1T	42	Total O 42 42	0	0
61	1U	45	Total O 45 45	0	0
61	1V	37	Total O 37 37	0	0
61	1W	24	Total O 24 24	0	0
61	1X	24	Total O 24 24	0	0
61	1Y	15	Total O 15 15	0	0
61	1Z	14	Total O 14 14	0	0
61	10	22	Total O 22 22	0	0
61	11	28	Total O 28 28	0	0
61	12	14	Total O 14 14	0	0
61	13	22	Total O 22 22	0	0
61	14	2	Total O 2 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	15	26	Total O 26 26	0	0
61	16	17	Total O 17 17	0	0
61	17	14	Total O 14 14	0	0
61	18	30	Total O 30 30	0	0
61	19	8	Total O 8 8	0	0
61	1a	261	Total O 261 261	0	0
61	1b	1	Total O 1 1	0	0
61	1d	9	Total O 9 9	0	0
61	1e	6	Total O 6 6	0	0
61	1f	3	Total O 3 3	0	0
61	1h	1	Total O 1 1	0	0
61	1i	1	Total O 1 1	0	0
61	1j	1	Total O 1 1	0	0
61	1k	1	Total O 1 1	0	0
61	1l	4	Total O 4 4	0	0
61	1n	1	Total O 1 1	0	0
61	1o	5	Total O 5 5	0	0
61	1p	3	Total O 3 3	0	0
61	1y	5	Total O 5 5	0	0
61	2A	1686	Total O 1686 1686	0	0
61	2B	65	Total O 65 65	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2D	52	Total O 52 52	0	0
61	2E	25	Total O 25 25	0	0
61	2F	21	Total O 21 21	0	0
61	2G	7	Total O 7 7	0	0
61	2H	4	Total O 4 4	0	0
61	2I	4	Total O 4 4	0	0
61	2N	6	Total O 6 6	0	0
61	2O	22	Total O 22 22	0	0
61	2P	23	Total O 23 23	0	0
61	2Q	30	Total O 30 30	0	0
61	2R	21	Total O 21 21	0	0
61	2S	8	Total O 8 8	0	0
61	2T	10	Total O 10 10	0	0
61	2U	14	Total O 14 14	0	0
61	2V	9	Total O 9 9	0	0
61	2W	21	Total O 21 21	0	0
61	2X	9	Total O 9 9	0	0
61	2Y	3	Total O 3 3	0	0
61	2Z	15	Total O 15 15	0	0
61	20	13	Total O 13 13	0	0
61	21	24	Total O 24 24	0	0

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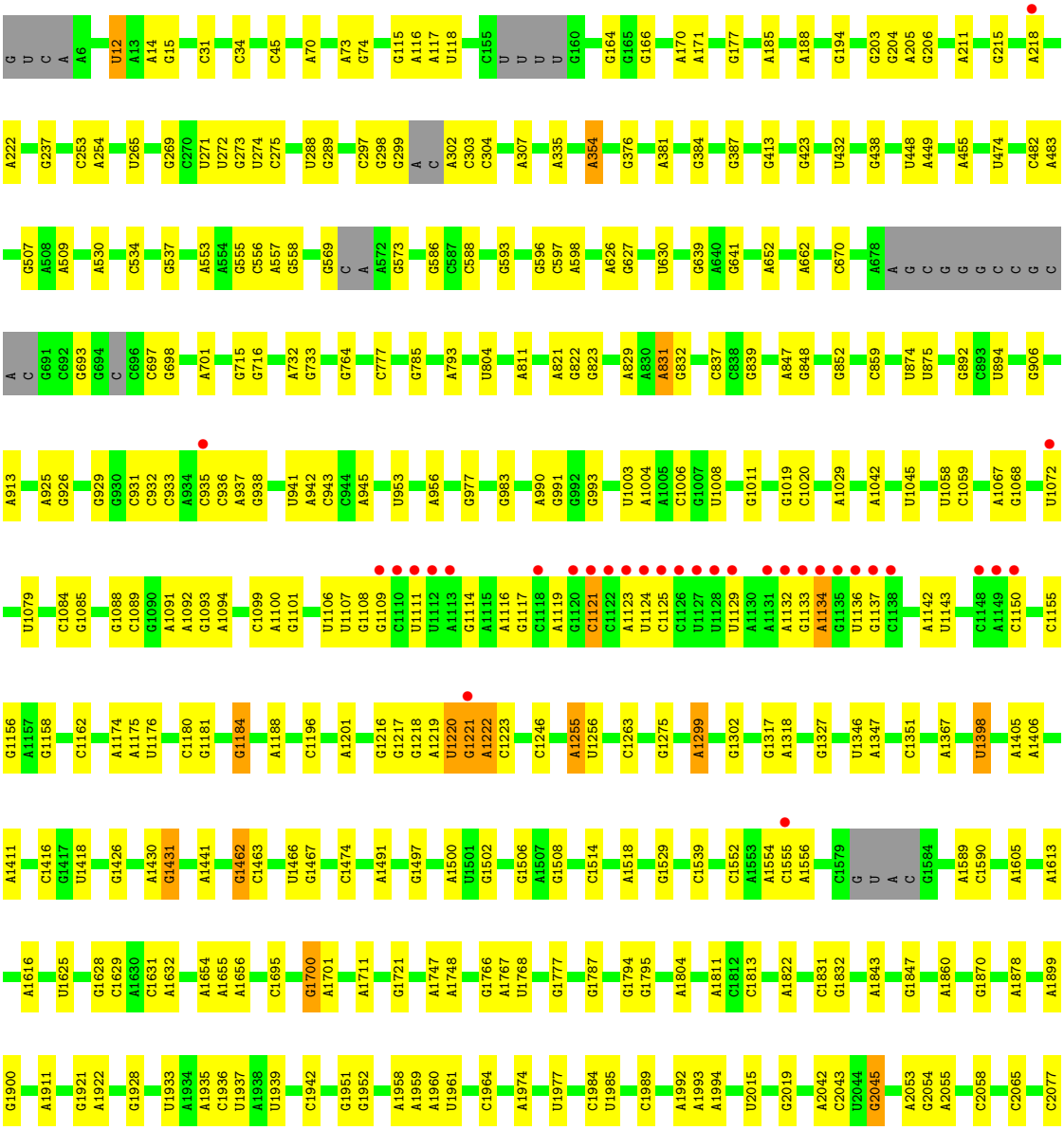
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	22	5	Total O 5 5	0	0
61	23	3	Total O 3 3	0	0
61	24	2	Total O 2 2	0	0
61	25	9	Total O 9 9	0	0
61	26	6	Total O 6 6	0	0
61	27	7	Total O 7 7	0	0
61	28	15	Total O 15 15	0	0
61	29	2	Total O 2 2	0	0
61	2a	100	Total O 100 100	0	0
61	2d	6	Total O 6 6	0	0
61	2e	1	Total O 1 1	0	0
61	2f	1	Total O 1 1	0	0
61	2j	2	Total O 2 2	0	0
61	2l	1	Total O 1 1	0	0
61	2m	1	Total O 1 1	0	0
61	2o	2	Total O 2 2	0	0
61	2p	1	Total O 1 1	0	0
61	2q	1	Total O 1 1	0	0
61	2r	4	Total O 4 4	0	0
61	2y	1	Total O 1 1	0	0

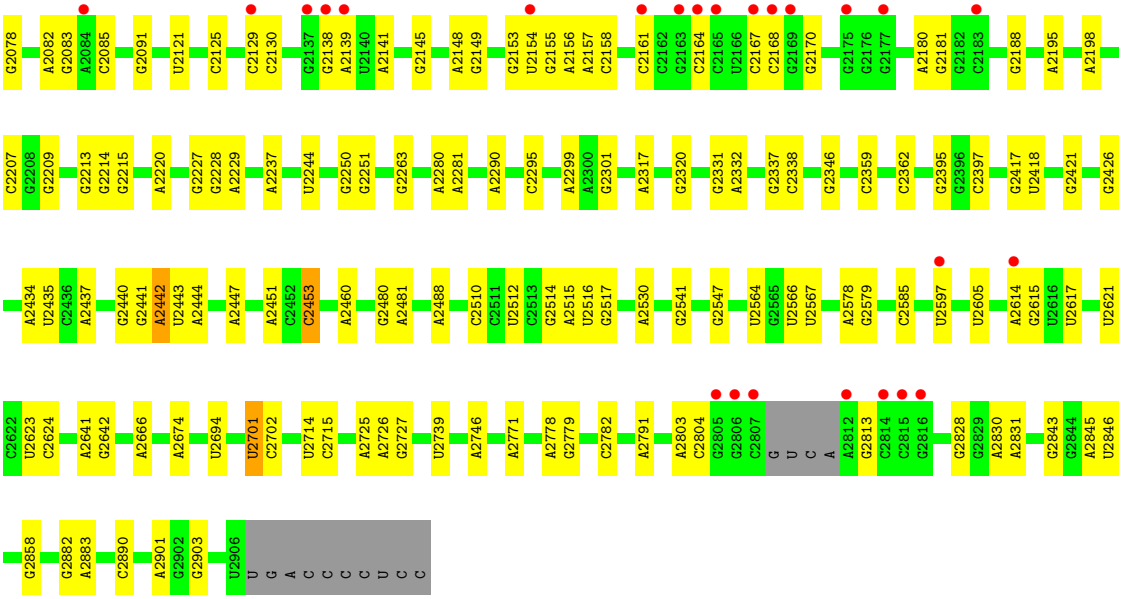
3 Residue-property plots (i)

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

- Molecule 1: 23S Ribosomal RNA

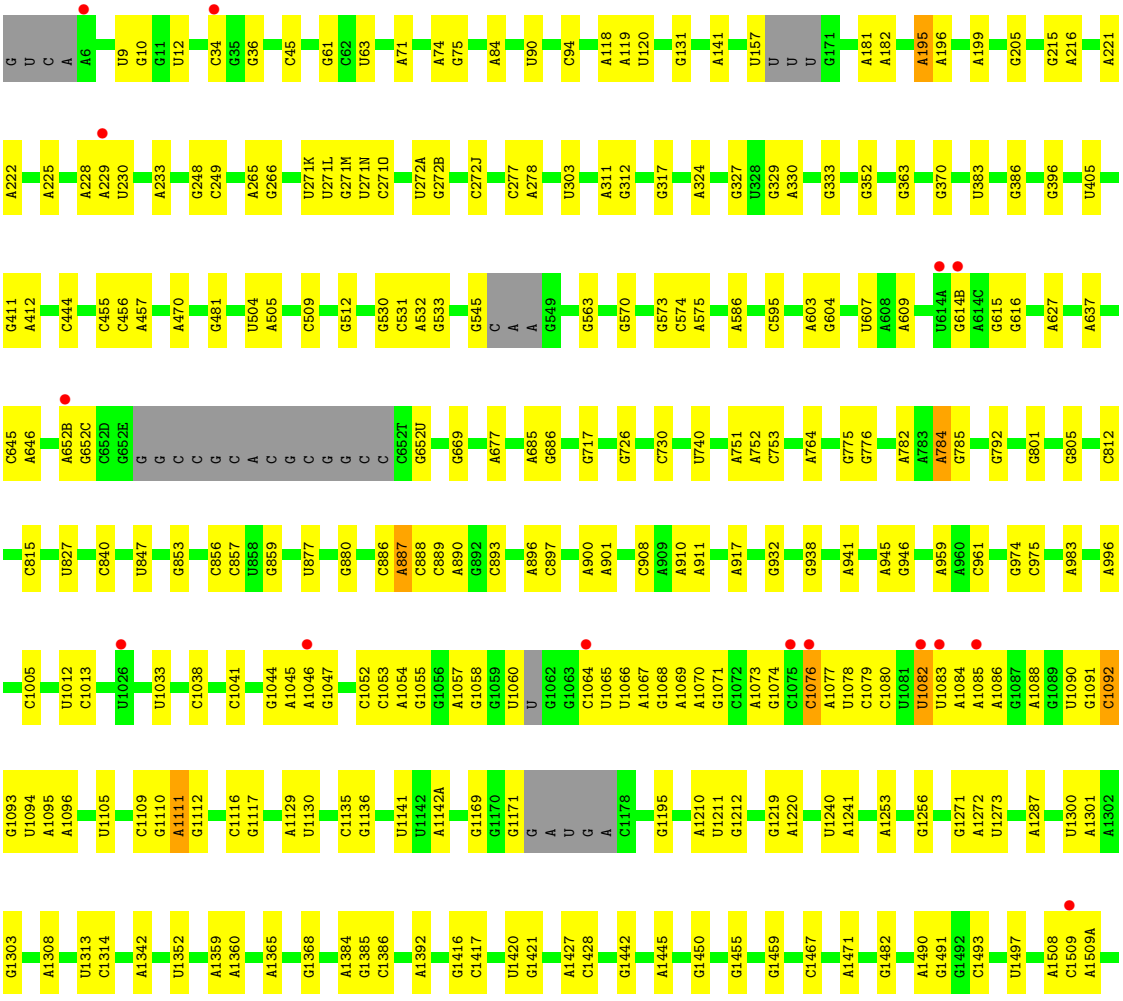
Chain 1A:

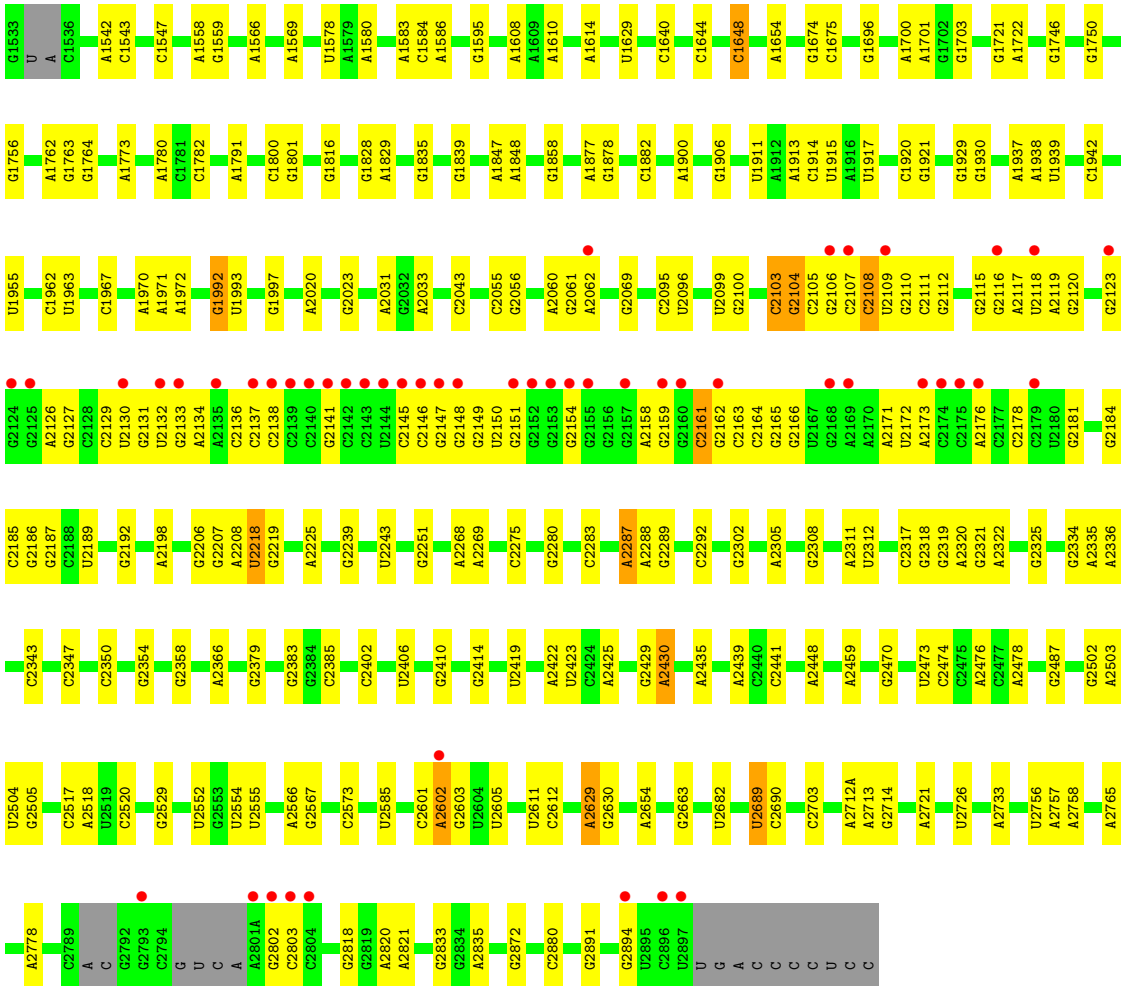




• Molecule 1: 23S Ribosomal RNA

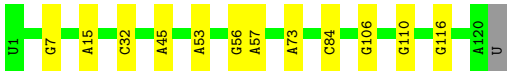
Chain 2A:





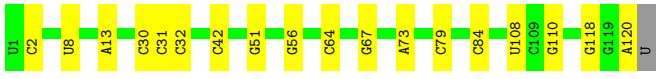
• Molecule 2: 5S Ribosomal RNA

Chain 1B:



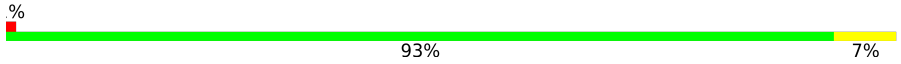
• Molecule 2: 5S Ribosomal RNA

Chain 2B:



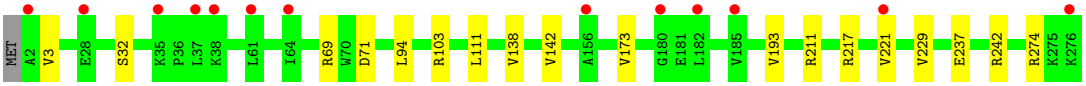
• Molecule 3: 50S ribosomal protein L2

Chain 1D:



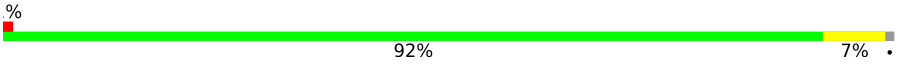
• Molecule 3: 50S ribosomal protein L2

Chain 2D:



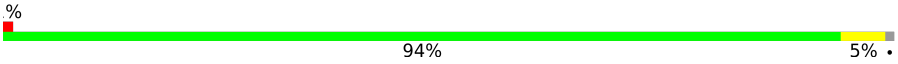
• Molecule 4: 50S ribosomal protein L3

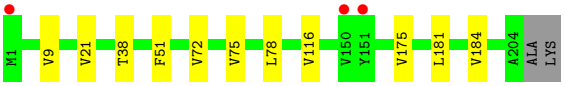
Chain 1E:



• Molecule 4: 50S ribosomal protein L3

Chain 2E:



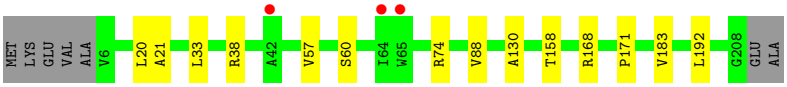


• Molecule 5: 50S ribosomal protein L4

Chain 1F:

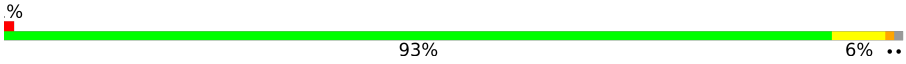
• Molecule 5: 50S ribosomal protein L4

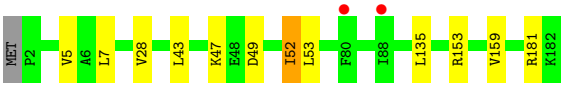
Chain 2F:



• Molecule 6: 50S ribosomal protein L5

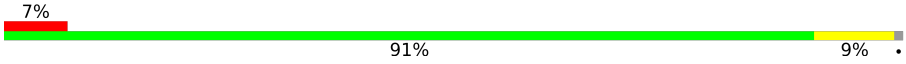
Chain 1G:

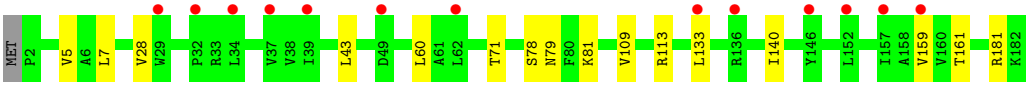




• Molecule 6: 50S ribosomal protein L5

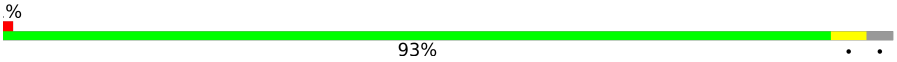
Chain 2G:





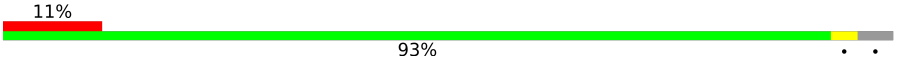
• Molecule 7: 50S ribosomal protein L6

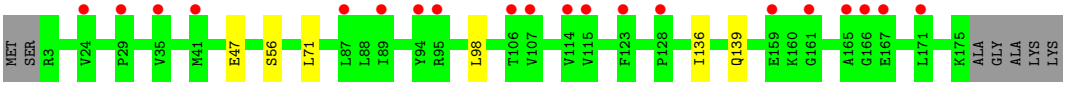
Chain 1H:



• Molecule 7: 50S ribosomal protein L6

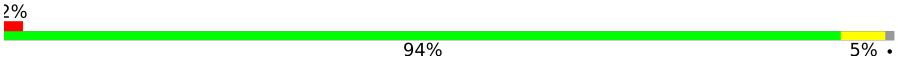
Chain 2H:

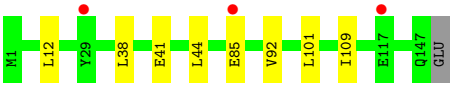




• Molecule 8: 50S ribosomal protein L9

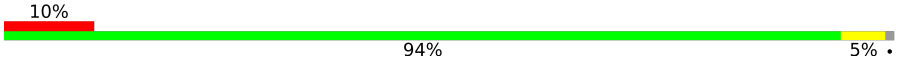
Chain 1I:

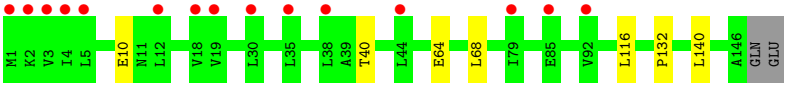




• Molecule 8: 50S ribosomal protein L9

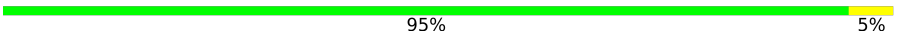
Chain 2I:

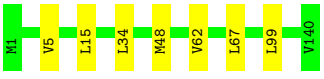




• Molecule 9: 50S ribosomal protein L13

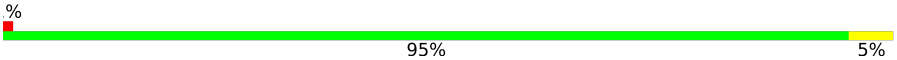
Chain 1N:

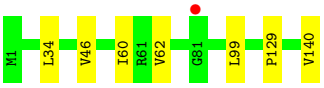




• Molecule 9: 50S ribosomal protein L13

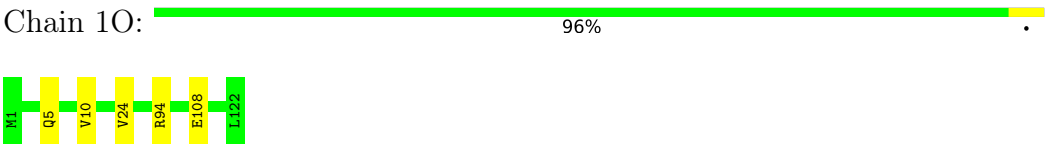
Chain 2N:





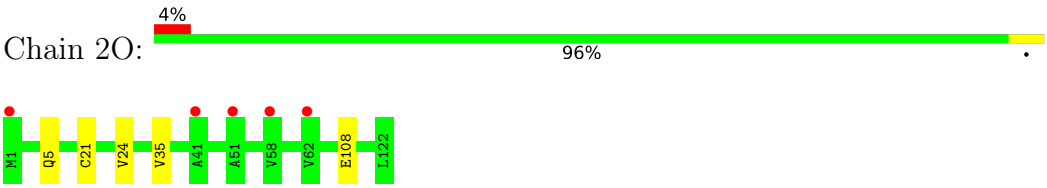
• Molecule 10: 50S ribosomal protein L14

Chain 1O:



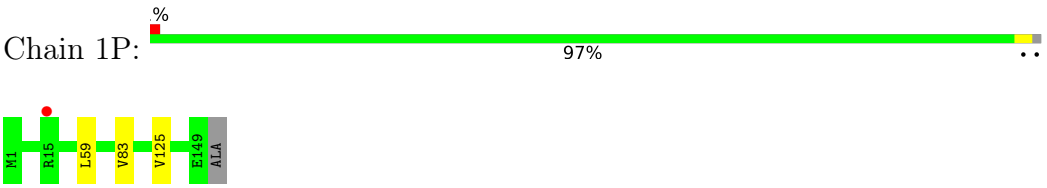
• Molecule 10: 50S ribosomal protein L14

Chain 2O:



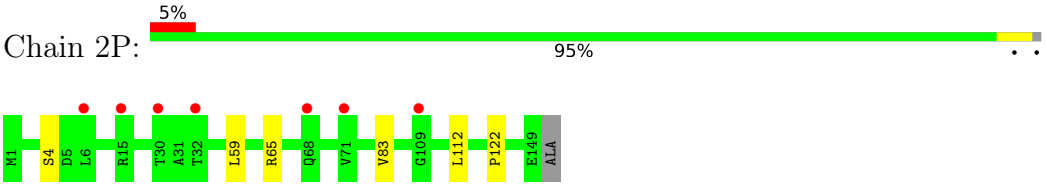
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



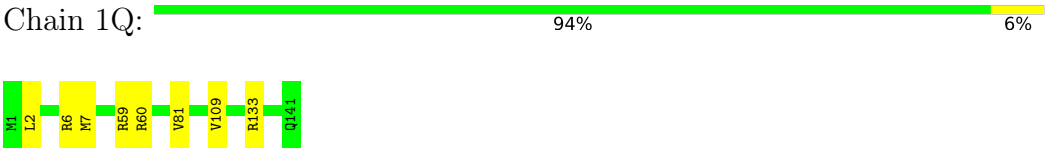
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



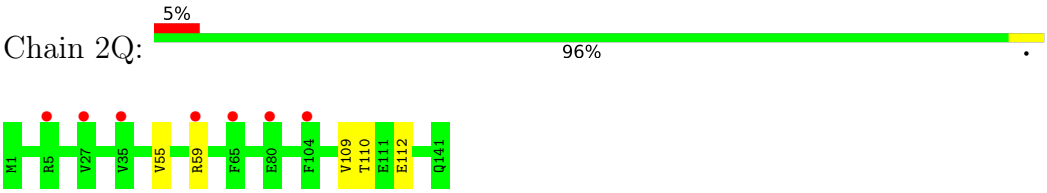
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



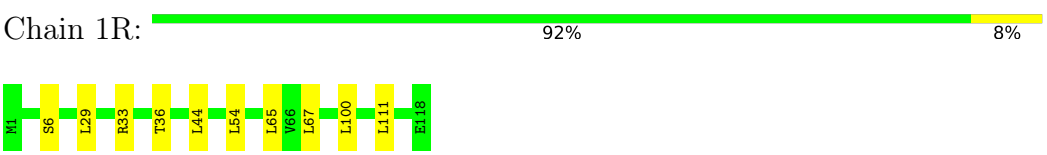
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



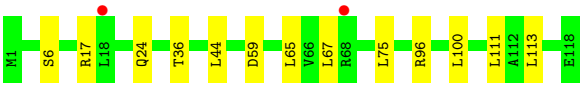
• Molecule 13: 50S ribosomal protein L17

Chain 1R:



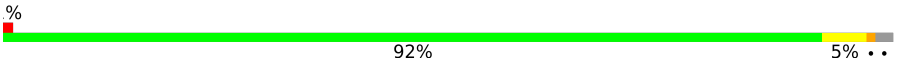
• Molecule 13: 50S ribosomal protein L17

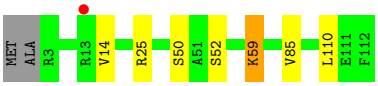
Chain 2R:



• Molecule 14: 50S ribosomal protein L18

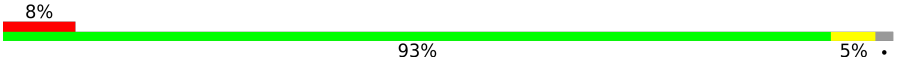
Chain 1S:

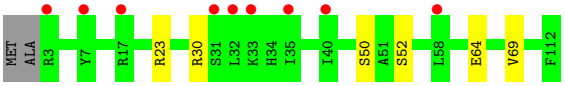




• Molecule 14: 50S ribosomal protein L18

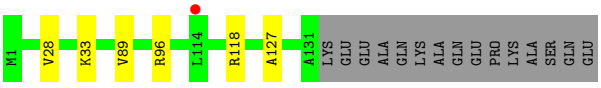
Chain 2S:





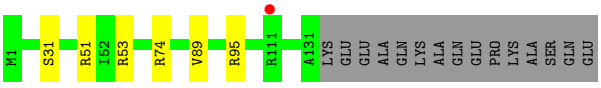
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



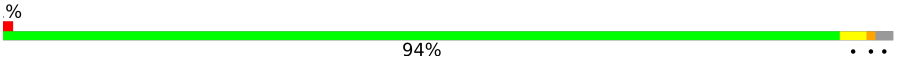
• Molecule 15: 50S ribosomal protein L19

Chain 2T:



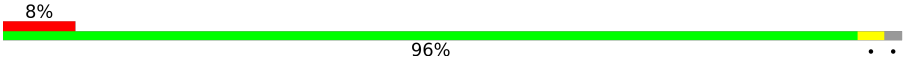
• Molecule 16: 50S ribosomal protein L20

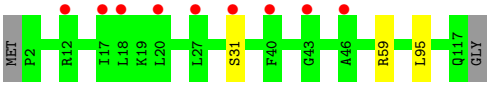
Chain 1U:



• Molecule 16: 50S ribosomal protein L20

Chain 2U:



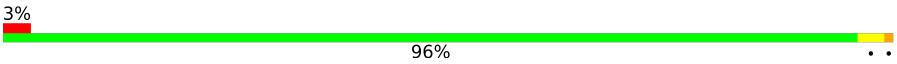


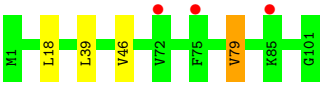
• Molecule 17: 50S ribosomal protein L21

Chain 1V:

• Molecule 17: 50S ribosomal protein L21

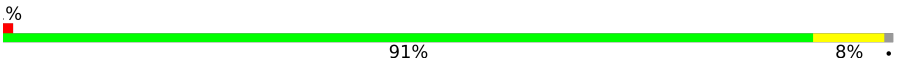
Chain 2V:

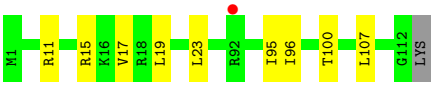




• Molecule 18: 50S ribosomal protein L22

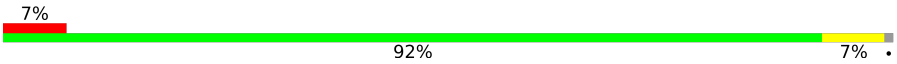
Chain 1W:

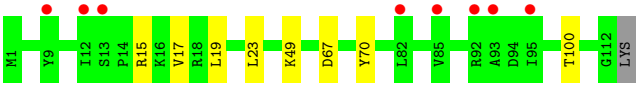




• Molecule 18: 50S ribosomal protein L22

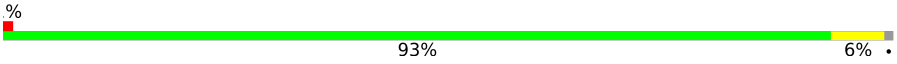
Chain 2W:

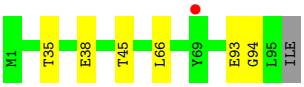




• Molecule 19: 50S ribosomal protein L23

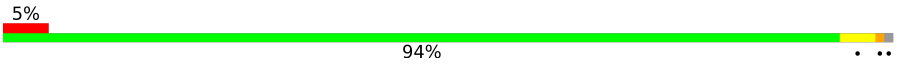
Chain 1X:

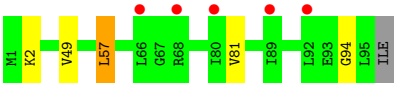




• Molecule 19: 50S ribosomal protein L23

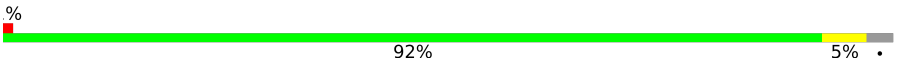
Chain 2X:

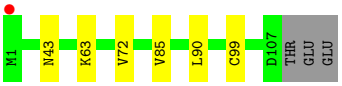




• Molecule 20: 50S ribosomal protein L24

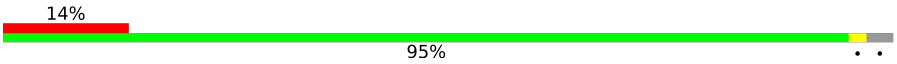
Chain 1Y:

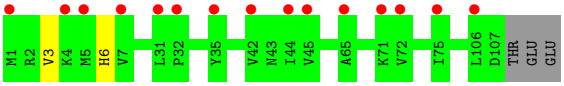




• Molecule 20: 50S ribosomal protein L24

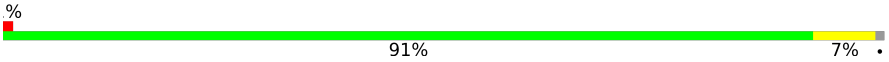
Chain 2Y:





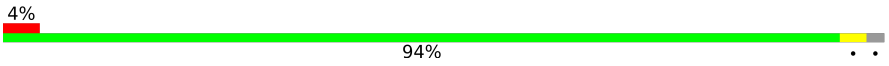
• Molecule 21: 50S ribosomal protein L25

Chain 1Z:



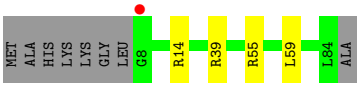
• Molecule 21: 50S ribosomal protein L25

Chain 2Z:



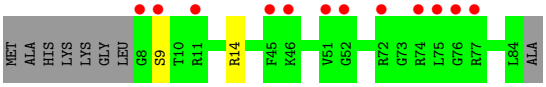
• Molecule 22: 50S ribosomal protein L27

Chain 10:



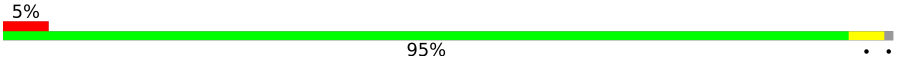
• Molecule 22: 50S ribosomal protein L27

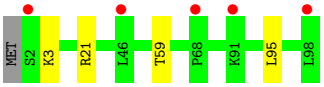
Chain 20:



• Molecule 23: 50S ribosomal protein L28

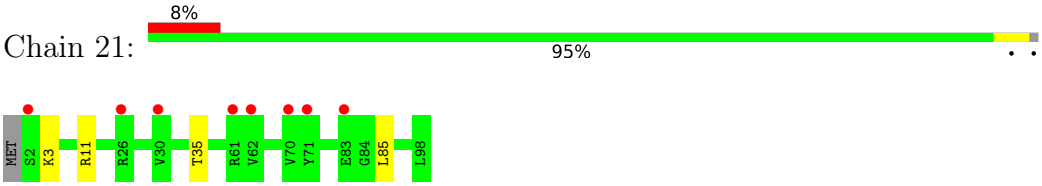
Chain 11:





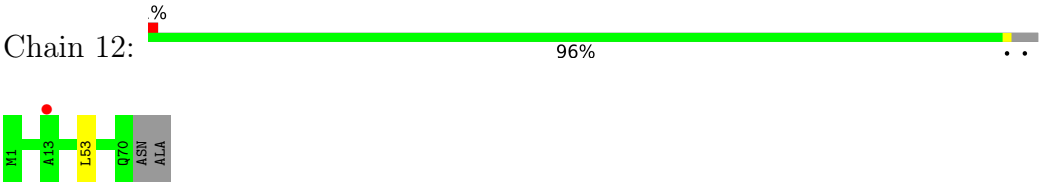
• Molecule 23: 50S ribosomal protein L28

Chain 21:



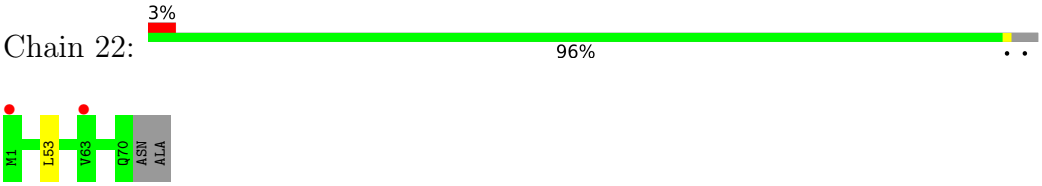
• Molecule 24: 50S ribosomal protein L29

Chain 12:



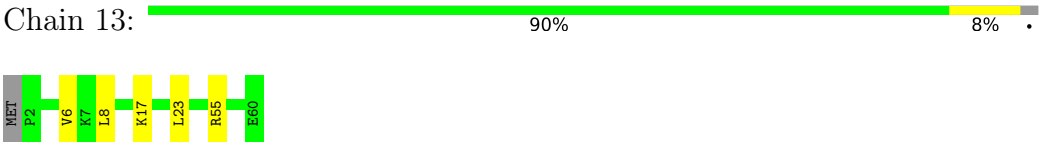
• Molecule 24: 50S ribosomal protein L29

Chain 22:



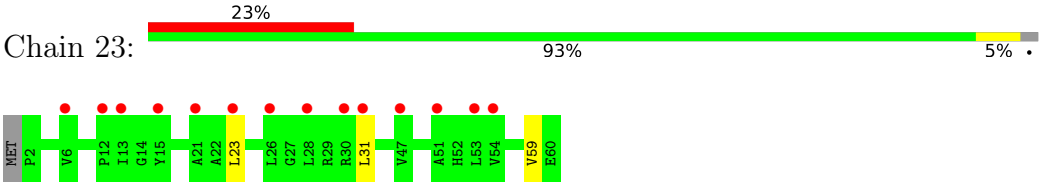
• Molecule 25: 50S ribosomal protein L30

Chain 13:



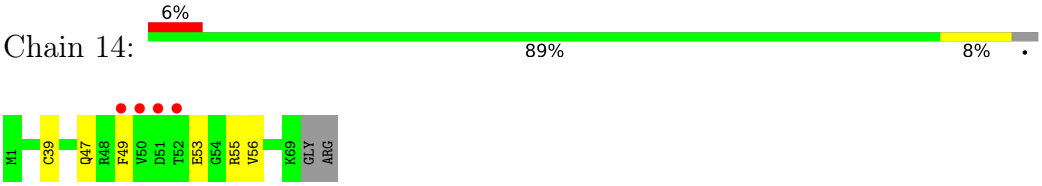
• Molecule 25: 50S ribosomal protein L30

Chain 23:



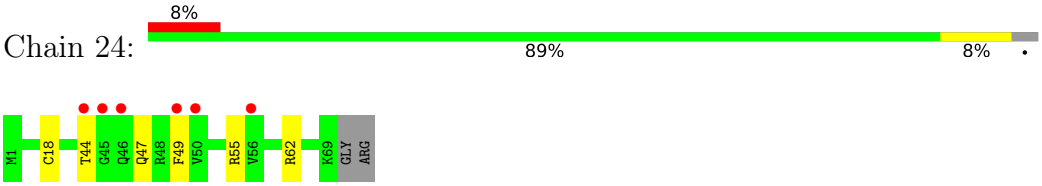
• Molecule 26: 50S ribosomal protein L31

Chain 14:



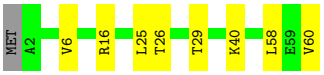
• Molecule 26: 50S ribosomal protein L31

Chain 24:



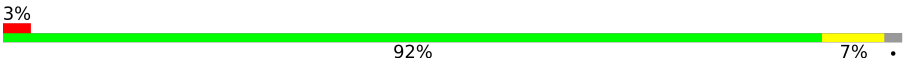
• Molecule 27: 50S ribosomal protein L32

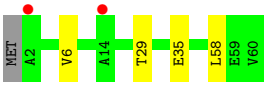
Chain 15:



• Molecule 27: 50S ribosomal protein L32

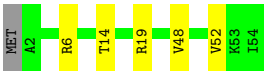
Chain 25:





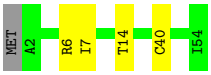
• Molecule 28: 50S ribosomal protein L33

Chain 16:



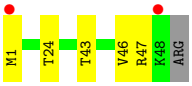
• Molecule 28: 50S ribosomal protein L33

Chain 26:



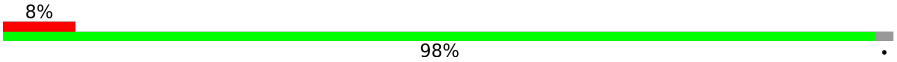
• Molecule 29: 50S ribosomal protein L34

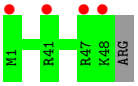
Chain 17:



• Molecule 29: 50S ribosomal protein L34

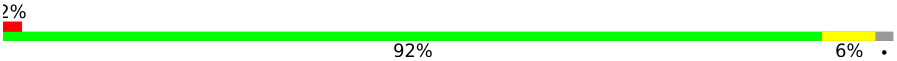
Chain 27:

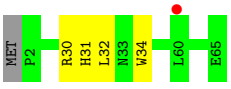




• Molecule 30: 50S ribosomal protein L35

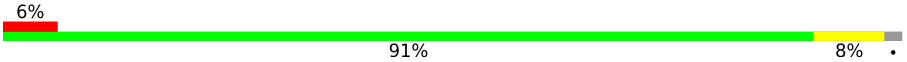
Chain 18:

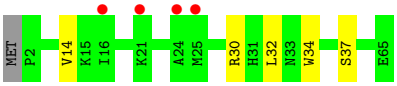




• Molecule 30: 50S ribosomal protein L35

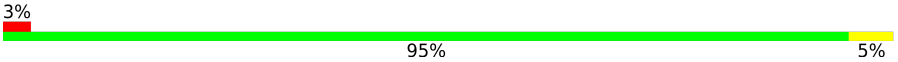
Chain 28:

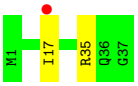




• Molecule 31: 50S ribosomal protein L36

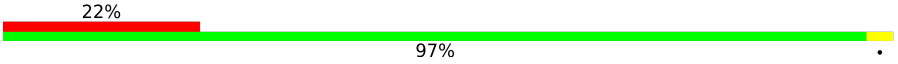
Chain 19:

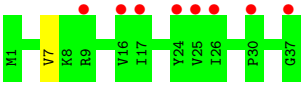




• Molecule 31: 50S ribosomal protein L36

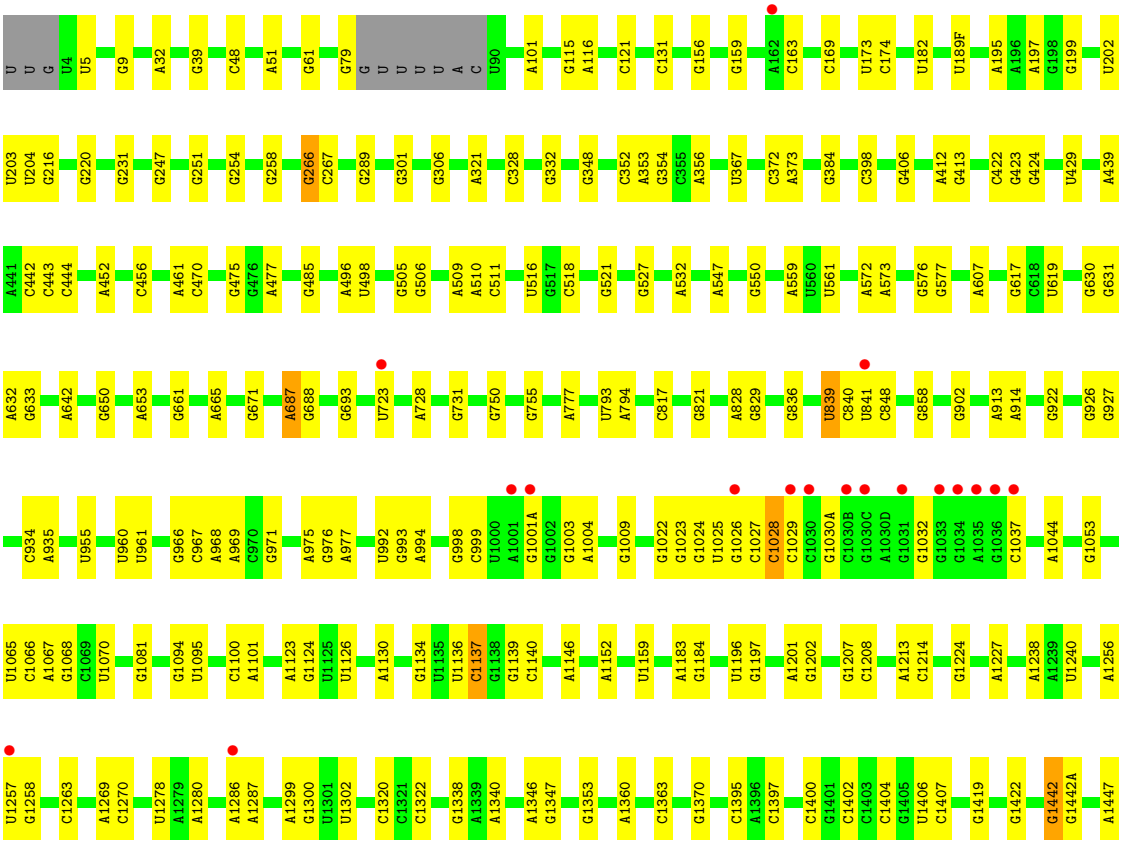
Chain 29:

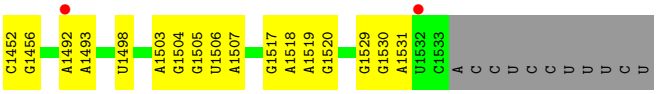




• Molecule 32: 16S Ribosomal RNA

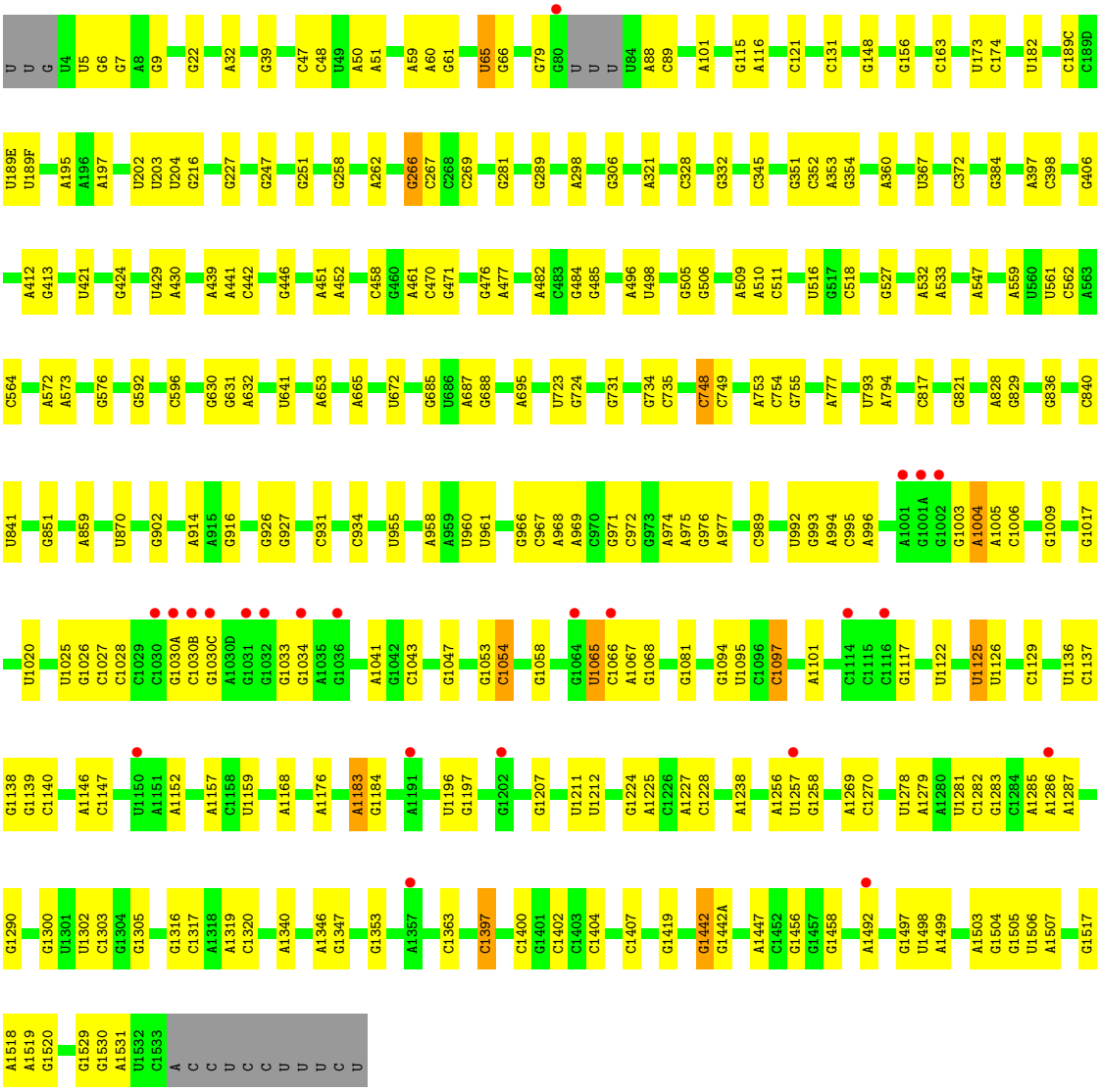
Chain 1a:





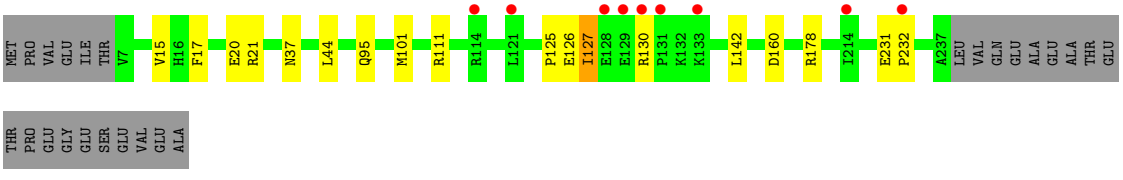
• Molecule 32: 16S Ribosomal RNA

Chain 2a:



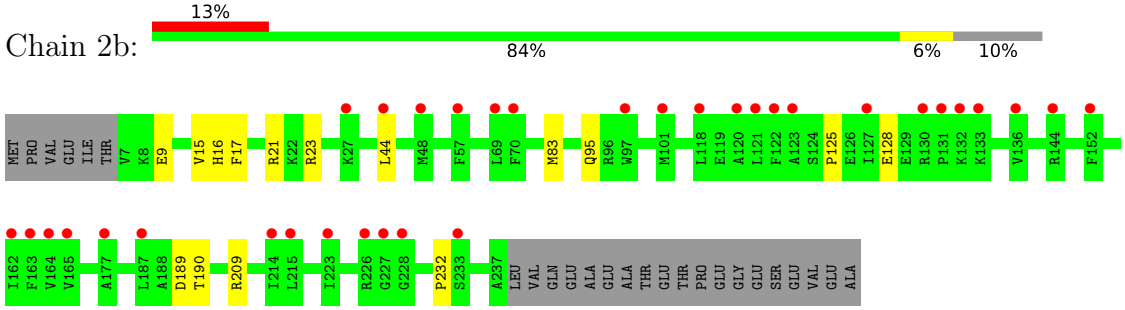
• Molecule 33: 30S ribosomal protein S2

Chain 1b:



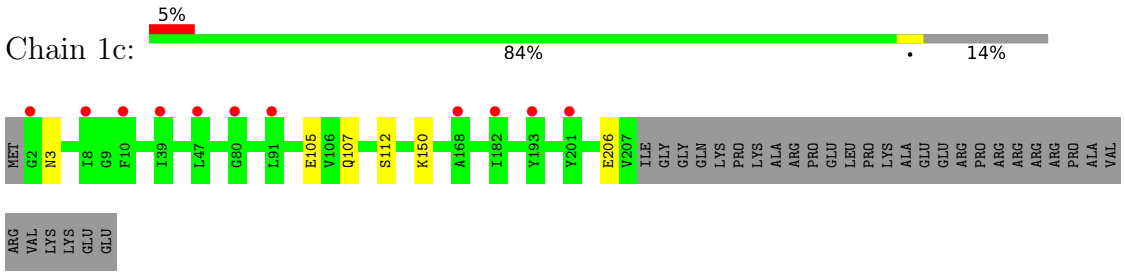
• Molecule 33: 30S ribosomal protein S2

Chain 2b:



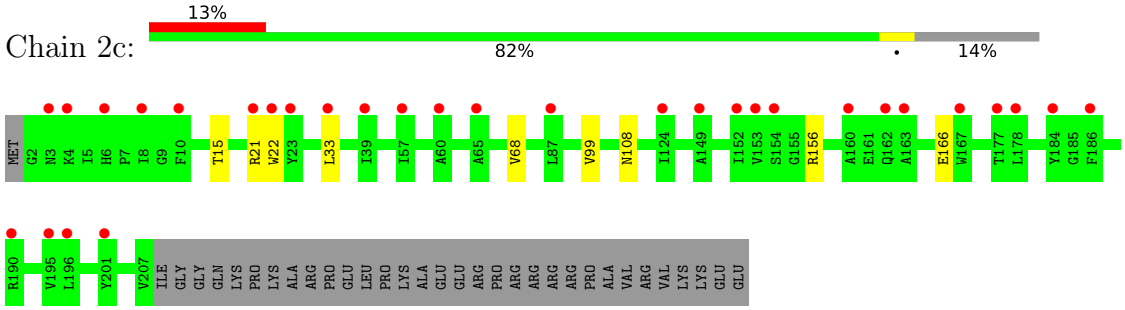
• Molecule 34: 30S ribosomal protein S3

Chain 1c:



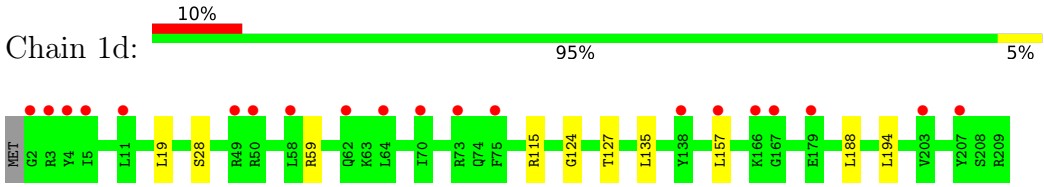
• Molecule 34: 30S ribosomal protein S3

Chain 2c:



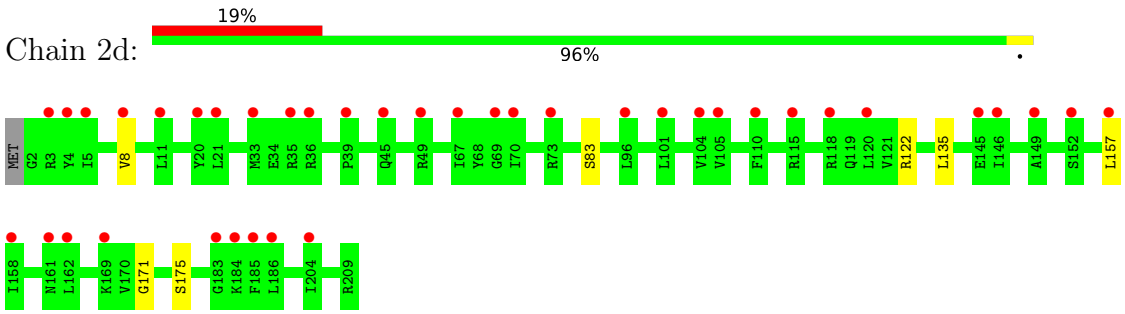
• Molecule 35: 30S ribosomal protein S4

Chain 1d:



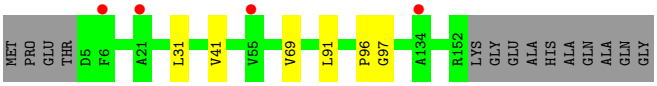
• Molecule 35: 30S ribosomal protein S4

Chain 2d:



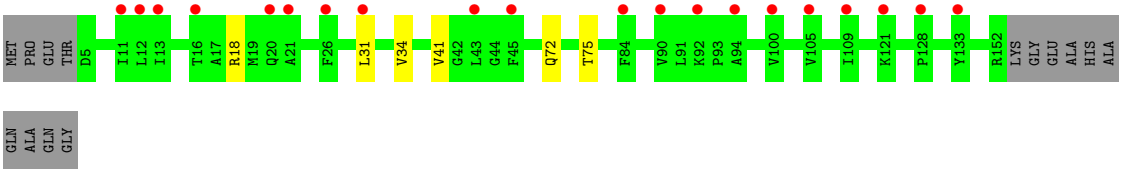
• Molecule 36: 30S ribosomal protein S5

Chain 1e:



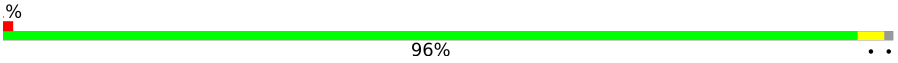
• Molecule 36: 30S ribosomal protein S5

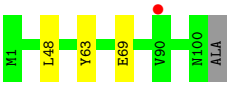
Chain 2e:



• Molecule 37: 30S ribosomal protein S6

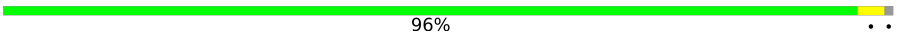
Chain 1f:

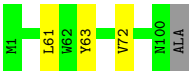




• Molecule 37: 30S ribosomal protein S6

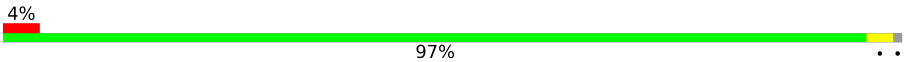
Chain 2f:

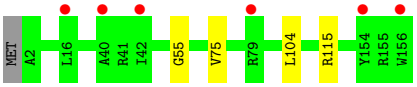




• Molecule 38: 30S ribosomal protein S7

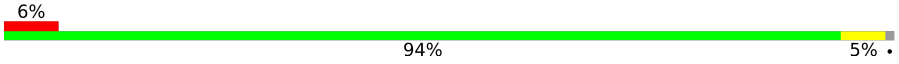
Chain 1g:

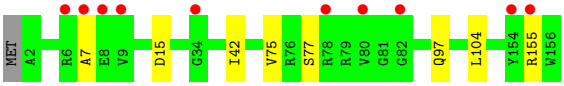




• Molecule 38: 30S ribosomal protein S7

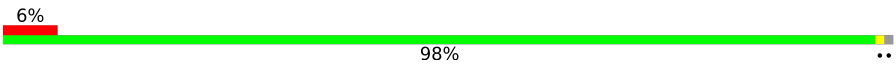
Chain 2g:

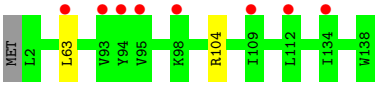




• Molecule 39: 30S ribosomal protein S8

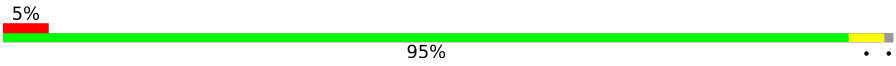
Chain 1h:

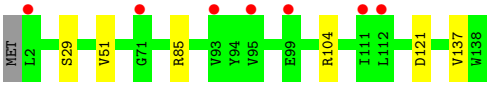




• Molecule 39: 30S ribosomal protein S8

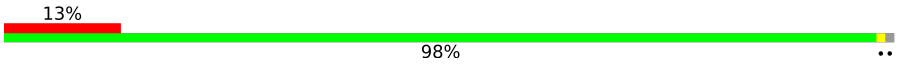
Chain 2h:

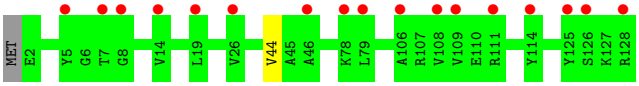




• Molecule 40: 30S ribosomal protein S9

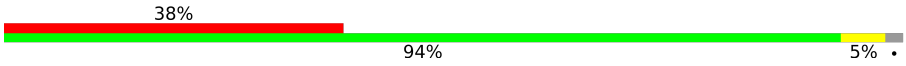
Chain 1i:

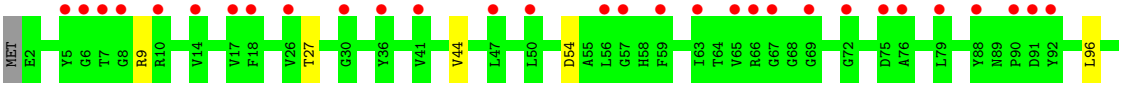


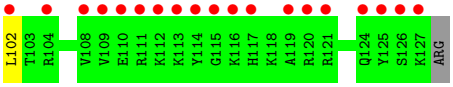


• Molecule 40: 30S ribosomal protein S9

Chain 2i:

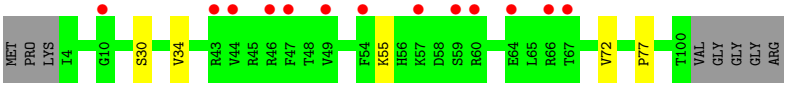






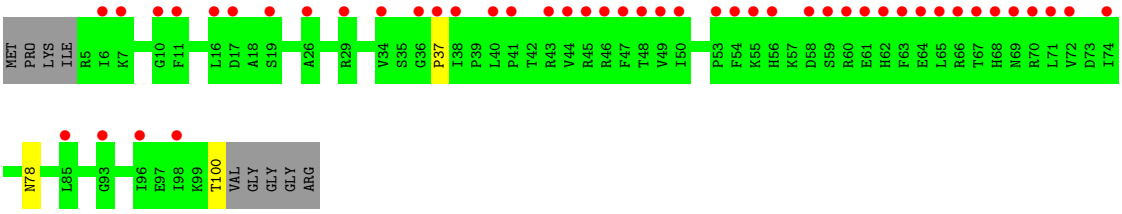
• Molecule 41: 30S ribosomal protein S10

Chain 1j:



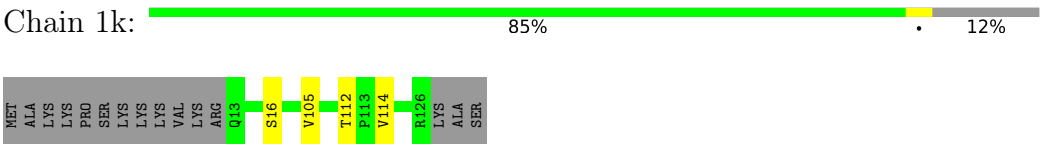
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



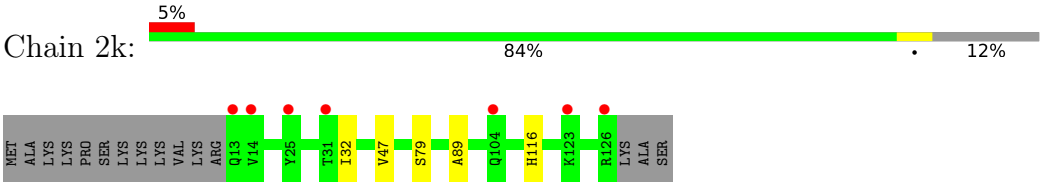
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



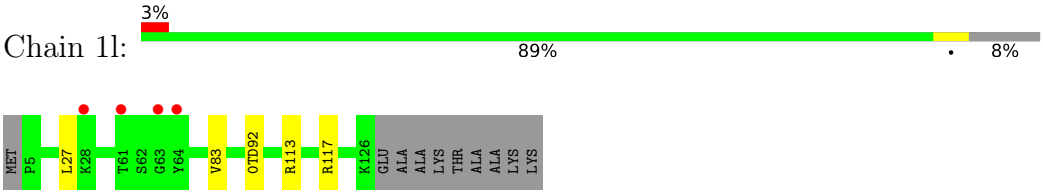
• Molecule 42: 30S ribosomal protein S11

Chain 2k:



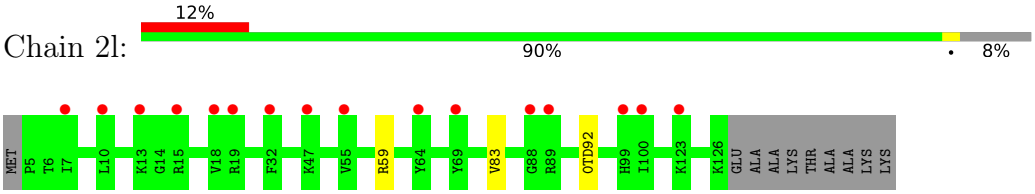
• Molecule 43: 30S ribosomal protein S12

Chain 1l:



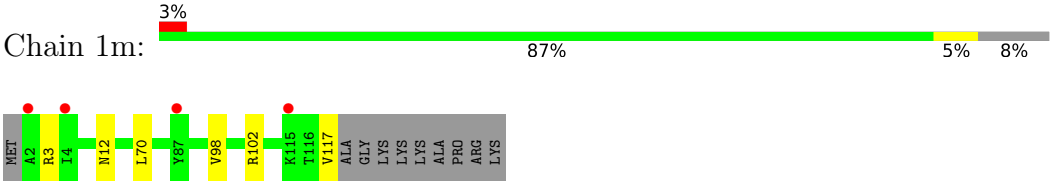
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



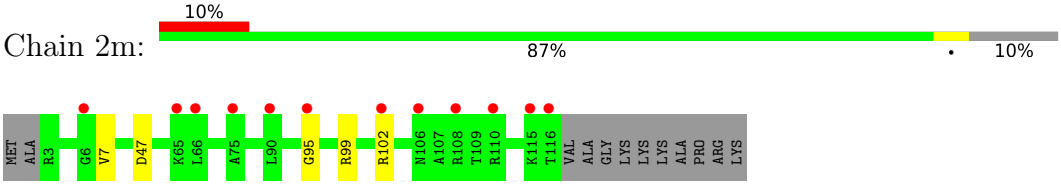
• Molecule 44: 30S ribosomal protein S13

Chain 1m:



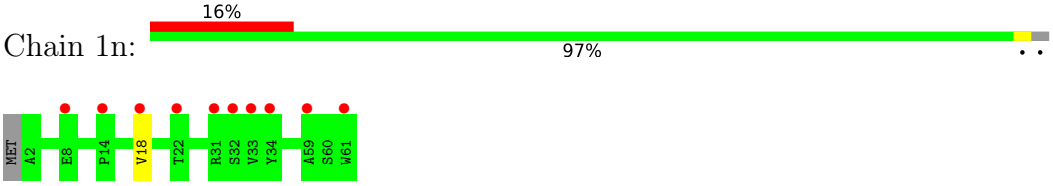
• Molecule 44: 30S ribosomal protein S13

Chain 2m:



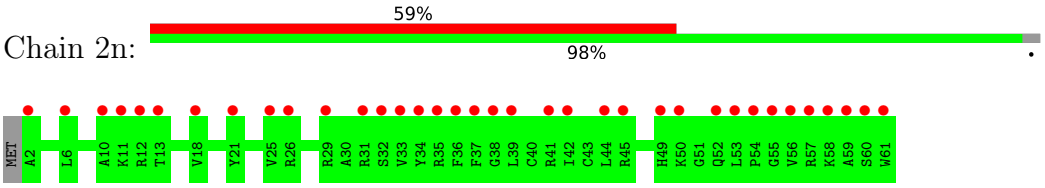
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 1n:



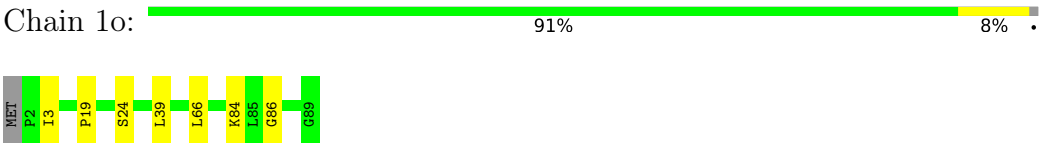
• Molecule 45: 30S ribosomal protein S14 type Z

Chain 2n:



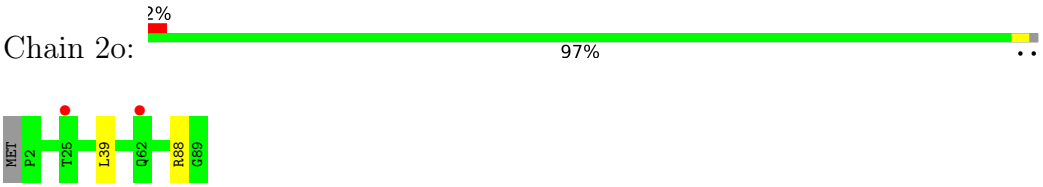
• Molecule 46: 30S ribosomal protein S15

Chain 1o:



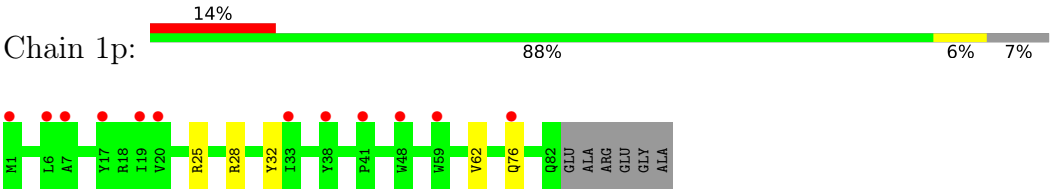
• Molecule 46: 30S ribosomal protein S15

Chain 2o:



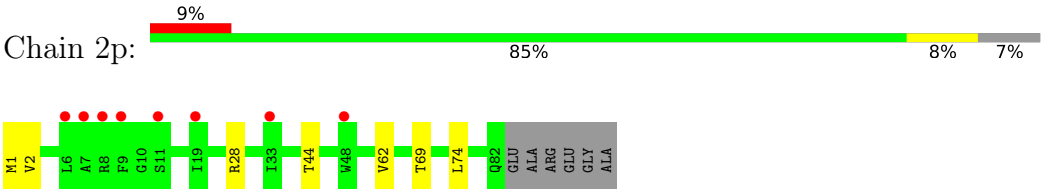
• Molecule 47: 30S ribosomal protein S16

Chain 1p:



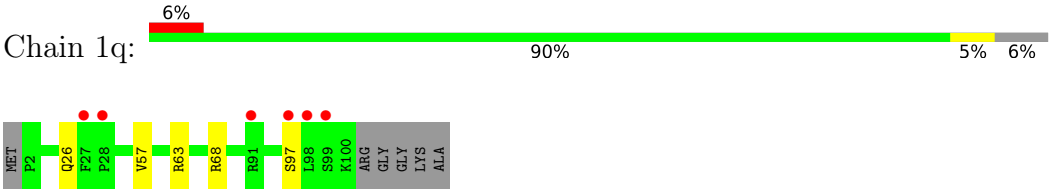
• Molecule 47: 30S ribosomal protein S16

Chain 2p:



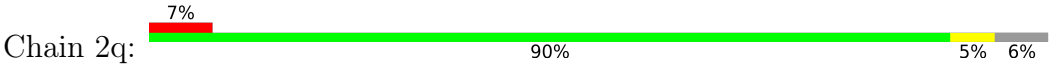
• Molecule 48: 30S ribosomal protein S17

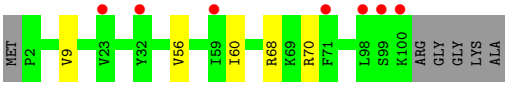
Chain 1q:



• Molecule 48: 30S ribosomal protein S17

Chain 2q:



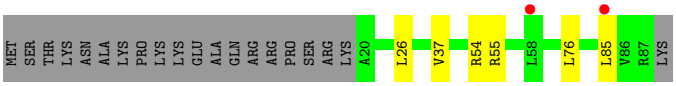


• Molecule 49: 30S ribosomal protein S18

Chain 1r:

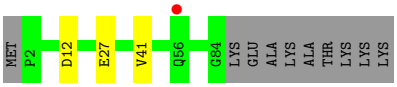
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



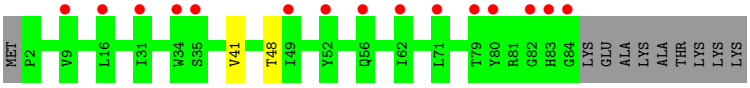
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



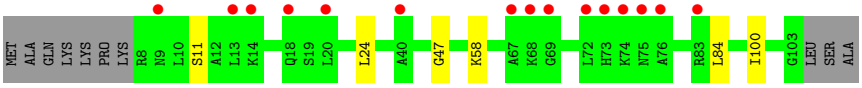
• Molecule 50: 30S ribosomal protein S19

Chain 2s:



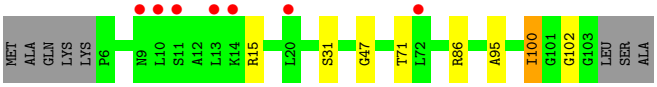
• Molecule 51: 30S ribosomal protein S20

Chain 1t:



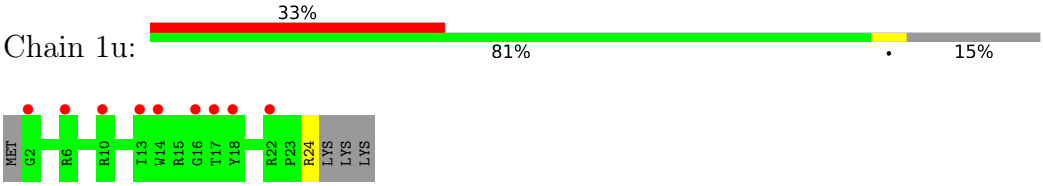
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



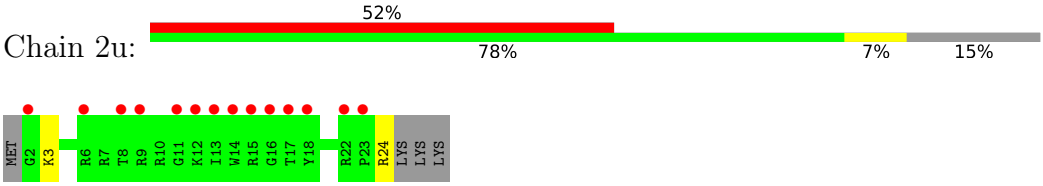
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



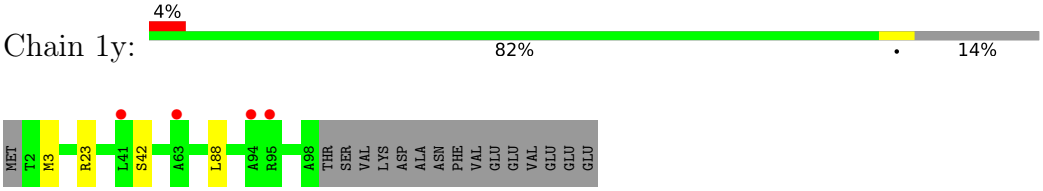
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



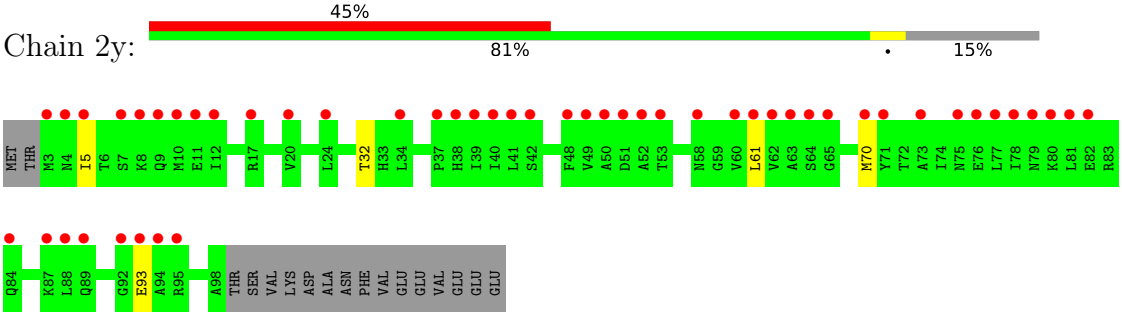
• Molecule 53: Ribosome-associated inhibitor A

Chain 1y:



• Molecule 53: Ribosome-associated inhibitor A

Chain 2y:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	210.09Å 449.12Å 621.91Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	121.92 – 2.70 364.10 – 2.70	Depositor EDS
% Data completeness (in resolution range)	99.2 (121.92-2.70) 99.2 (364.10-2.70)	Depositor EDS
R_{merge}	0.15	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.24 (at 2.69Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.206 , 0.253 0.207 , 0.253	Depositor DCC
R_{free} test set	79057 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	52.6	Xtriage
Anisotropy	0.142	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 53.3	EDS
L-test for twinning[2]	$< \|L\| > = 0.43$, $< L^2 > = 0.25$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.91	EDS
Total number of atoms	295438	wwPDB-VP
Average B, all atoms (Å^2)	54.0	wwPDB-VP

Xtriage'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.*

[1] Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: MA6, MPD, K, 2MA, OMG, 2MU, EZP, M2G, 5MC, MG, 5MU, 7MG, SF4, PSU, 4OC, ZN, 2MG, 0TD, UR3

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	0.51	0/69029	0.96	51/107746 (0.0%)
1	2A	0.41	0/68901	0.90	41/107544 (0.0%)
2	1B	0.43	0/2876	0.90	1/4486 (0.0%)
2	2B	0.37	0/2878	0.87	0/4490
3	1D	0.37	0/2181	0.59	0/2940
3	2D	0.33	0/2186	0.55	0/2944
4	1E	0.37	0/1592	0.55	0/2149
4	2E	0.31	0/1592	0.53	0/2149
5	1F	0.34	0/1619	0.53	0/2193
5	2F	0.31	0/1615	0.52	0/2188
6	1G	0.30	0/1451	0.50	0/1961
6	2G	0.30	0/1449	0.47	0/1957
7	1H	0.33	0/1356	0.51	0/1834
7	2H	0.29	0/1350	0.47	0/1826
8	1I	0.30	0/1109	0.52	0/1512
8	2I	0.28	0/1091	0.49	0/1490
9	1N	0.36	0/1148	0.55	0/1547
9	2N	0.29	0/1144	0.48	0/1543
10	1O	0.36	0/943	0.56	0/1269
10	2O	0.33	0/943	0.54	0/1269
11	1P	0.34	0/1152	0.57	0/1533
11	2P	0.32	0/1152	0.54	0/1533
12	1Q	0.35	0/1143	0.52	0/1527
12	2Q	0.30	0/1143	0.49	0/1527
13	1R	0.34	0/982	0.58	0/1312
13	2R	0.31	0/982	0.55	1/1312 (0.1%)
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	0.54	0/1477
15	2T	0.30	0/1097	0.51	0/1468
16	1U	0.36	0/977	0.53	1/1301 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.30	0/977	0.45	0/1301
17	1V	0.34	0/786	0.54	0/1053
17	2V	0.32	0/782	0.52	0/1049
18	1W	0.33	0/897	0.51	0/1205
18	2W	0.32	0/897	0.50	0/1205
19	1X	0.38	0/764	0.56	0/1025
19	2X	0.31	0/764	0.55	1/1025 (0.1%)
20	1Y	0.37	0/823	0.54	0/1099
20	2Y	0.33	0/823	0.51	0/1100
21	1Z	0.30	0/1620	0.52	0/2200
21	2Z	0.30	0/1590	0.49	0/2162
22	10	0.35	0/616	0.56	0/821
22	20	0.33	0/616	0.50	0/821
23	11	0.33	0/761	0.51	0/1013
23	21	0.32	0/766	0.50	0/1018
24	12	0.30	0/590	0.51	0/781
24	22	0.30	0/594	0.44	0/785
25	13	0.33	0/474	0.52	0/635
25	23	0.30	0/469	0.49	0/630
26	14	0.32	0/559	0.54	0/754
26	24	0.35	0/549	0.54	0/741
27	15	0.40	0/473	0.65	2/639 (0.3%)
27	25	0.33	0/469	0.53	0/635
28	16	0.33	0/460	0.56	0/613
28	26	0.32	0/456	0.49	0/608
29	17	0.38	0/426	0.58	0/561
29	27	0.31	0/426	0.50	0/561
30	18	0.36	0/525	0.56	0/691
30	28	0.31	0/525	0.52	0/691
31	19	0.37	0/310	0.53	0/407
31	29	0.31	0/310	0.52	0/407
32	1a	0.37	0/35795	0.88	18/55864 (0.0%)
32	2a	0.37	0/35890	0.89	32/56012 (0.1%)
33	1b	0.30	0/1876	0.50	0/2533
33	2b	0.33	0/1860	0.52	1/2518 (0.0%)
34	1c	0.29	0/1582	0.47	0/2137
34	2c	0.30	0/1566	0.48	0/2119
35	1d	0.30	0/1695	0.49	0/2274
35	2d	0.29	0/1698	0.46	0/2277
36	1e	0.31	0/1149	0.52	0/1548
36	2e	0.30	0/1149	0.51	0/1548
37	1f	0.32	0/827	0.51	0/1120
37	2f	0.29	0/829	0.50	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.29	0/1254	0.44	0/1683
38	2g	0.29	0/1248	0.43	0/1676
39	1h	0.28	0/1118	0.48	0/1506
39	2h	0.28	0/1108	0.47	0/1494
40	1i	0.28	0/1005	0.50	0/1351
40	2i	0.30	0/985	0.47	0/1329
41	1j	0.30	0/732	0.49	0/993
41	2j	0.28	0/723	0.48	0/984
42	1k	0.30	0/849	0.48	0/1150
42	2k	0.30	0/848	0.54	0/1149
43	1l	0.30	0/937	0.51	0/1260
43	2l	0.29	0/937	0.53	0/1260
44	1m	0.28	0/924	0.46	0/1242
44	2m	0.30	0/905	0.49	0/1217
45	1n	0.31	0/501	0.46	0/664
45	2n	0.31	0/501	0.47	0/664
46	1o	0.28	0/739	0.48	0/985
46	2o	0.28	0/739	0.46	0/985
47	1p	0.30	0/697	0.53	0/939
47	2p	0.29	0/693	0.49	0/935
48	1q	0.30	0/836	0.51	0/1117
48	2q	0.29	0/836	0.49	0/1117
49	1r	0.28	0/560	0.48	0/746
49	2r	0.28	0/560	0.47	0/746
50	1s	0.27	0/663	0.50	0/895
50	2s	0.28	0/660	0.49	0/893
51	1t	0.27	0/734	0.45	0/969
51	2t	0.27	0/736	0.41	0/976
52	1u	0.25	0/203	0.48	0/266
52	2u	0.32	0/203	0.51	0/266
53	1y	0.29	0/776	0.47	0/1048
53	2y	0.27	0/761	0.45	0/1030
All	All	0.40	0/309937	0.82	149/463223 (0.0%)

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
19	1X	0	1
26	24	0	1

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

There are no bond length outliers.

All (149) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1003	G	N3-C4-C5	-8.97	124.12	128.60
32	2a	1003	G	C8-N9-C4	-8.85	102.86	106.40
1	1A	537	G	O4'-C1'-N9	8.36	114.89	108.20
1	1A	354	A	C2-N3-C4	-8.34	106.43	110.60
32	1a	1028	C	C2-N3-C4	7.73	123.77	119.90
1	2A	2629	A	O4'-C1'-N9	7.72	114.38	108.20
32	2a	1397	C	C2-N1-C1'	7.66	127.22	118.80
1	1A	354	A	N1-C2-N3	7.59	133.10	129.30
32	2a	1397	C	N1-C2-O2	7.47	123.38	118.90
1	1A	1121	C	N1-C2-O2	7.20	123.22	118.90
2	1B	57	A	N9-C4-C5	-7.15	102.94	105.80
32	2a	1003	G	C4-N9-C1'	7.04	135.66	126.50
1	2A	1648	C	O5'-P-OP1	-6.96	99.44	105.70
1	1A	1132	A	N1-C6-N6	-6.89	114.46	118.60
1	2A	1614	A	O5'-P-OP1	-6.77	99.61	105.70
1	2A	1992	G	P-O3'-C3'	6.73	127.78	119.70
33	2b	232	PRO	C-N-CA	6.71	138.47	121.70
32	1a	1028	C	C5-C6-N1	6.69	124.34	121.00
32	2a	266	G	P-O3'-C3'	6.64	127.67	119.70
32	2a	1225	A	C5-C6-N6	6.64	129.01	123.70
1	2A	1313	U	C2-N1-C1'	6.58	125.59	117.70
1	2A	1092	C	N1-C2-O2	6.53	122.82	118.90
1	1A	593	G	C5-C6-O6	-6.33	124.80	128.60
1	1A	2858	G	O4'-C1'-N9	6.31	113.25	108.20
1	1A	1222	A	O5'-P-OP1	-6.27	100.06	105.70
1	2A	1082	U	C2-N1-C1'	6.27	125.23	117.70
1	2A	2103	C	C2-N3-C4	6.23	123.02	119.90
1	2A	2130	U	C5-C6-N1	6.21	125.80	122.70
19	2X	57	LEU	CA-CB-CG	6.18	129.52	115.30
32	2a	1004	A	O4'-C1'-N9	6.17	113.14	108.20
1	2A	1082	U	N3-C2-O2	-6.17	117.89	122.20
1	2A	383	U	O4'-C1'-N1	6.15	113.12	108.20
32	2a	1225	A	N1-C6-N6	-6.14	114.92	118.60
1	1A	1418	U	C5-C4-O4	-6.14	122.22	125.90
32	2a	1003	G	C2-N3-C4	6.10	114.95	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1092	C	C6-N1-C2	-6.09	117.86	120.30
32	2a	1003	G	N7-C8-N9	6.07	116.13	113.10
32	1a	1442	G	N3-C4-C5	-6.05	125.58	128.60
32	1a	1137	C	C6-N1-C2	-6.04	117.88	120.30
1	1A	2058	C	O5'-P-OP1	-6.03	100.27	105.70
1	2A	1092	C	C5-C6-N1	6.03	124.02	121.00
1	1A	2605	U	N3-C4-O4	-6.01	115.19	119.40
1	1A	2331	G	O4'-C1'-N9	5.98	112.98	108.20
1	1A	1134	A	O4'-C1'-N9	5.97	112.98	108.20
1	1A	2512	U	N3-C2-O2	-5.97	118.02	122.20
32	2a	1397	C	C6-N1-C1'	-5.89	113.73	120.80
16	1U	74	LEU	CA-CB-CG	5.85	128.76	115.30
32	1a	266	G	P-O3'-C3'	5.85	126.72	119.70
32	1a	1067	A	P-O3'-C3'	5.85	126.72	119.70
1	2A	1076	C	OP1-P-O3'	5.82	118.01	105.20
1	1A	12	U	C2-N1-C1'	5.81	124.67	117.70
27	15	58	LEU	CA-CB-CG	5.80	128.65	115.30
1	1A	848	G	O5'-P-OP2	-5.80	100.48	105.70
1	1A	715	G	OP2-P-O3'	5.79	117.93	105.20
1	1A	1398	U	O5'-P-OP1	-5.76	100.51	105.70
27	15	25	LEU	C-N-CA	-5.68	107.50	121.70
1	1A	1220	U	P-O3'-C3'	5.67	126.51	119.70
32	2a	1065	U	P-O3'-C3'	5.67	126.50	119.70
1	1A	1255	A	P-O3'-C3'	5.65	126.48	119.70
1	1A	1121	C	C2-N1-C1'	5.63	124.99	118.80
1	1A	2045	G	O5'-P-OP1	-5.63	100.64	105.70
1	1A	1150	C	C5-C4-N4	5.63	124.14	120.20
1	1A	2043	C	C6-N1-C2	5.62	122.55	120.30
1	1A	2701	U	P-O3'-C3'	5.60	126.42	119.70
1	1A	1418	U	N3-C4-O4	5.60	123.32	119.40
1	2A	2108	C	C2-N3-C4	5.60	122.70	119.90
1	1A	215	G	O4'-C1'-N9	5.57	112.66	108.20
32	1a	839	U	P-O3'-C3'	5.57	126.38	119.70
1	1A	847	A	O5'-P-OP1	-5.53	100.73	105.70
1	2A	2430	A	O5'-P-OP2	-5.52	100.73	105.70
1	1A	1184	G	O5'-P-OP2	-5.52	100.73	105.70
1	1A	593	G	C4-C5-N7	5.49	113.00	110.80
1	2A	2689	U	N3-C2-O2	-5.49	118.36	122.20
1	2A	2185	C	C2-N3-C4	5.47	122.63	119.90
32	2a	1054	C	N1-C2-O2	5.47	122.18	118.90
1	2A	2287	A	O4'-C1'-N9	5.46	112.57	108.20
32	1a	115	G	P-O3'-C3'	5.45	126.24	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2602	A	P-O3'-C3'	5.44	126.22	119.70
1	2A	1313	U	N3-C2-O2	-5.43	118.40	122.20
1	1A	588	C	C6-N1-C2	-5.42	118.13	120.30
1	1A	1221	G	OP1-P-O3'	5.42	117.11	105.20
1	1A	1462	G	O4'-C1'-N9	5.41	112.53	108.20
1	2A	2161	C	C5-C4-N4	5.41	123.99	120.20
32	2a	754	C	C2-N1-C1'	5.41	124.75	118.80
32	2a	1097	C	C2-N1-C1'	5.41	124.75	118.80
1	2A	2218	U	N3-C2-O2	-5.39	118.43	122.20
32	2a	1097	C	N3-C2-O2	-5.39	118.13	121.90
32	2a	1125	U	N1-C2-O2	5.34	126.54	122.80
1	2A	2104	G	C4-N9-C1'	5.33	133.43	126.50
32	2a	1033	G	C5-C6-O6	5.33	131.80	128.60
1	1A	1101	G	C6-N1-C2	5.33	128.30	125.10
32	1a	1137	C	C5-C6-N1	5.32	123.66	121.00
32	1a	1028	C	C6-N1-C2	-5.31	118.17	120.30
1	2A	512	G	O4'-C1'-N9	5.31	112.45	108.20
32	2a	1003	G	N3-C4-N9	5.31	129.19	126.00
32	1a	955	U	C5-C4-O4	5.30	129.08	125.90
32	1a	922	G	C5-C6-O6	5.30	131.78	128.60
1	1A	2453	C	N3-C2-O2	-5.29	118.19	121.90
1	1A	1299	A	C5-N7-C8	5.29	106.55	103.90
32	1a	687	A	P-O3'-C3'	5.27	126.03	119.70
1	1A	892	G	O4'-C1'-N9	5.27	112.41	108.20
1	1A	1958	A	O4'-C1'-N9	5.27	112.41	108.20
1	2A	2218	U	N1-C2-O2	5.25	126.48	122.80
1	1A	1246	C	C6-N1-C2	5.25	122.40	120.30
32	2a	1058	G	C5-C6-O6	-5.25	125.45	128.60
32	2a	115	G	P-O3'-C3'	5.24	125.99	119.70
1	1A	2331	G	N3-C2-N2	-5.24	116.23	119.90
1	1A	1921	G	N3-C4-N9	5.22	129.13	126.00
32	2a	1067	A	P-O3'-C3'	5.22	125.97	119.70
1	1A	31	C	O5'-P-OP1	-5.22	101.00	105.70
32	2a	65	U	P-O3'-C3'	5.20	125.94	119.70
1	2A	1082	U	N1-C2-O2	5.20	126.44	122.80
1	2A	2473	U	C2-N1-C1'	5.18	123.91	117.70
1	2A	2689	U	P-O3'-C3'	5.18	125.91	119.70
32	2a	687	A	P-O3'-C3'	5.17	125.90	119.70
1	2A	195	A	P-O3'-C3'	5.16	125.89	119.70
1	2A	2103	C	C5-C4-N4	5.15	123.81	120.20
32	2a	1442	G	C4-N9-C1'	5.15	133.20	126.50
1	2A	1092	C	C2-N1-C1'	5.15	124.46	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2108	C	N1-C2-O2	5.15	121.99	118.90
32	2a	1183	A	P-O3'-C3'	5.14	125.87	119.70
1	2A	801	G	O5'-P-OP2	-5.14	101.07	105.70
32	1a	839	U	OP1-P-O3'	5.13	116.49	105.20
32	2a	266	G	OP2-P-O3'	5.13	116.48	105.20
1	2A	570	G	C5-C6-N1	5.12	114.06	111.50
32	1a	1201	A	P-O3'-C3'	5.12	125.85	119.70
1	2A	784	A	O4'-C1'-N9	5.12	112.30	108.20
1	1A	2694	U	O5'-P-OP2	-5.12	101.10	105.70
32	2a	60	A	P-O3'-C3'	5.12	125.84	119.70
32	2a	955	U	C2-N3-C4	5.10	130.06	127.00
1	2A	1644	C	N1-C2-O2	5.09	121.96	118.90
1	1A	993	G	O5'-P-OP1	-5.09	101.12	105.70
1	2A	2154	G	C5-C6-O6	5.08	131.65	128.60
1	1A	2442	A	C2-N3-C4	5.08	113.14	110.60
32	1a	1123	A	C6-N1-C2	5.08	121.65	118.60
1	1A	894	U	C2-N1-C1'	5.08	123.79	117.70
1	2A	1313	U	N1-C2-O2	5.07	126.35	122.80
13	2R	113	LEU	CA-CB-CG	5.07	126.95	115.30
1	1A	1431	G	O4'-C1'-N9	5.07	112.25	108.20
1	1A	1011	G	N1-C6-O6	-5.06	116.87	119.90
32	1a	913	A	P-O3'-C3'	5.06	125.77	119.70
1	1A	1700	G	P-O3'-C3'	5.05	125.76	119.70
1	1A	1150	C	N3-C4-N4	-5.05	114.47	118.00
1	1A	831	A	O4'-C1'-N9	5.04	112.23	108.20
1	2A	1111	A	O4'-C1'-N9	5.03	112.23	108.20
32	2a	748	C	P-O3'-C3'	5.03	125.73	119.70
1	2A	887	A	O4'-C1'-N9	5.02	112.22	108.20
32	1a	1395	C	C2-N3-C4	5.02	122.41	119.90
32	2a	1126	U	N1-C2-O2	5.00	126.30	122.80

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
19	1X	93	GLU	Peptide
33	1b	127	ILE	Peptide
33	1b	231	GLU	Peptide
26	24	18	CYS	Peptide

5.2 Too-close contacts

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

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	258 (94%)	15 (6%)	0	100	100
3	2D	273/276 (99%)	258 (94%)	15 (6%)	0	100	100
4	1E	202/206 (98%)	192 (95%)	9 (4%)	1 (0%)	29	54
4	2E	202/206 (98%)	192 (95%)	9 (4%)	1 (0%)	29	54
5	1F	201/210 (96%)	191 (95%)	9 (4%)	1 (0%)	29	54
5	2F	201/210 (96%)	191 (95%)	7 (4%)	3 (2%)	10	26
6	1G	179/182 (98%)	163 (91%)	15 (8%)	1 (1%)	25	50
6	2G	179/182 (98%)	166 (93%)	10 (6%)	3 (2%)	9	23
7	1H	172/180 (96%)	162 (94%)	9 (5%)	1 (1%)	25	50
7	2H	171/180 (95%)	152 (89%)	19 (11%)	0	100	100
8	1I	145/148 (98%)	129 (89%)	15 (10%)	1 (1%)	22	46
8	2I	144/148 (97%)	130 (90%)	12 (8%)	2 (1%)	11	28
9	1N	138/140 (99%)	135 (98%)	3 (2%)	0	100	100
9	2N	138/140 (99%)	130 (94%)	7 (5%)	1 (1%)	22	46
10	1O	120/122 (98%)	111 (92%)	8 (7%)	1 (1%)	19	43
10	2O	120/122 (98%)	111 (92%)	8 (7%)	1 (1%)	19	43
11	1P	147/150 (98%)	138 (94%)	9 (6%)	0	100	100
11	2P	147/150 (98%)	137 (93%)	9 (6%)	1 (1%)	22	46
12	1Q	139/141 (99%)	134 (96%)	4 (3%)	1 (1%)	22	46
12	2Q	139/141 (99%)	131 (94%)	7 (5%)	1 (1%)	22	46
13	1R	116/118 (98%)	113 (97%)	3 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	2R	116/118 (98%)	109 (94%)	7 (6%)	0	100	100
14	1S	108/112 (96%)	99 (92%)	8 (7%)	1 (1%)	17	40
14	2S	108/112 (96%)	96 (89%)	12 (11%)	0	100	100
15	1T	129/146 (88%)	121 (94%)	7 (5%)	1 (1%)	19	43
15	2T	129/146 (88%)	121 (94%)	8 (6%)	0	100	100
16	1U	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
16	2U	114/118 (97%)	109 (96%)	5 (4%)	0	100	100
17	1V	99/101 (98%)	97 (98%)	1 (1%)	1 (1%)	15	37
17	2V	99/101 (98%)	93 (94%)	5 (5%)	1 (1%)	15	37
18	1W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100
18	2W	110/113 (97%)	107 (97%)	3 (3%)	0	100	100
19	1X	93/96 (97%)	91 (98%)	1 (1%)	1 (1%)	14	34
19	2X	93/96 (97%)	89 (96%)	3 (3%)	1 (1%)	14	34
20	1Y	105/110 (96%)	95 (90%)	10 (10%)	0	100	100
20	2Y	105/110 (96%)	98 (93%)	7 (7%)	0	100	100
21	1Z	201/206 (98%)	189 (94%)	12 (6%)	0	100	100
21	2Z	199/206 (97%)	183 (92%)	16 (8%)	0	100	100
22	10	75/85 (88%)	73 (97%)	2 (3%)	0	100	100
22	20	75/85 (88%)	72 (96%)	3 (4%)	0	100	100
23	11	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	14	34
23	21	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	14	34
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
24	22	68/72 (94%)	66 (97%)	2 (3%)	0	100	100
25	13	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
25	23	57/60 (95%)	55 (96%)	1 (2%)	1 (2%)	8	21
26	14	67/71 (94%)	52 (78%)	12 (18%)	3 (4%)	2	5
26	24	67/71 (94%)	53 (79%)	9 (13%)	5 (8%)	1	1
27	15	57/60 (95%)	57 (100%)	0	0	100	100
27	25	57/60 (95%)	55 (96%)	1 (2%)	1 (2%)	8	21
28	16	51/54 (94%)	48 (94%)	3 (6%)	0	100	100
28	26	51/54 (94%)	47 (92%)	4 (8%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
29	17	46/49 (94%)	46 (100%)	0	0	100	100
29	27	46/49 (94%)	45 (98%)	1 (2%)	0	100	100
30	18	62/65 (95%)	62 (100%)	0	0	100	100
30	28	62/65 (95%)	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%)	200 (87%)	20 (9%)	9 (4%)	3	6
33	2b	229/256 (90%)	200 (87%)	22 (10%)	7 (3%)	4	9
34	1c	204/239 (85%)	191 (94%)	12 (6%)	1 (0%)	29	54
34	2c	204/239 (85%)	172 (84%)	29 (14%)	3 (2%)	10	26
35	1d	206/209 (99%)	192 (93%)	13 (6%)	1 (0%)	29	54
35	2d	206/209 (99%)	189 (92%)	16 (8%)	1 (0%)	29	54
36	1e	146/162 (90%)	141 (97%)	3 (2%)	2 (1%)	11	28
36	2e	146/162 (90%)	134 (92%)	12 (8%)	0	100	100
37	1f	98/101 (97%)	93 (95%)	5 (5%)	0	100	100
37	2f	98/101 (97%)	91 (93%)	7 (7%)	0	100	100
38	1g	153/156 (98%)	145 (95%)	7 (5%)	1 (1%)	22	46
38	2g	153/156 (98%)	144 (94%)	7 (5%)	2 (1%)	12	30
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100	100
39	2h	135/138 (98%)	127 (94%)	7 (5%)	1 (1%)	22	46
40	1i	125/128 (98%)	112 (90%)	12 (10%)	1 (1%)	19	43
40	2i	124/128 (97%)	111 (90%)	10 (8%)	3 (2%)	6	15
41	1j	95/105 (90%)	77 (81%)	15 (16%)	3 (3%)	4	9
41	2j	94/105 (90%)	80 (85%)	12 (13%)	2 (2%)	7	18
42	1k	112/129 (87%)	102 (91%)	9 (8%)	1 (1%)	17	40
42	2k	112/129 (87%)	100 (89%)	11 (10%)	1 (1%)	17	40
43	1l	119/132 (90%)	115 (97%)	4 (3%)	0	100	100
43	2l	119/132 (90%)	108 (91%)	11 (9%)	0	100	100
44	1m	114/126 (90%)	104 (91%)	8 (7%)	2 (2%)	8	21
44	2m	112/126 (89%)	98 (88%)	12 (11%)	2 (2%)	8	21
45	1n	58/61 (95%)	56 (97%)	2 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
45	2n	58/61 (95%)	53 (91%)	5 (9%)	0	100 100
46	1o	86/89 (97%)	82 (95%)	1 (1%)	3 (4%)	3 8
46	2o	86/89 (97%)	83 (96%)	2 (2%)	1 (1%)	13 32
47	1p	80/88 (91%)	72 (90%)	7 (9%)	1 (1%)	12 30
47	2p	80/88 (91%)	68 (85%)	11 (14%)	1 (1%)	12 30
48	1q	97/105 (92%)	92 (95%)	5 (5%)	0	100 100
48	2q	97/105 (92%)	92 (95%)	5 (5%)	0	100 100
49	1r	66/88 (75%)	65 (98%)	1 (2%)	0	100 100
49	2r	66/88 (75%)	63 (96%)	3 (4%)	0	100 100
50	1s	81/93 (87%)	71 (88%)	8 (10%)	2 (2%)	5 14
50	2s	81/93 (87%)	73 (90%)	8 (10%)	0	100 100
51	1t	94/106 (89%)	87 (93%)	5 (5%)	2 (2%)	7 18
51	2t	96/106 (91%)	89 (93%)	3 (3%)	4 (4%)	3 5
52	1u	21/27 (78%)	21 (100%)	0	0	100 100
52	2u	21/27 (78%)	16 (76%)	4 (19%)	1 (5%)	2 4
53	1y	95/113 (84%)	90 (95%)	5 (5%)	0	100 100
53	2y	94/113 (83%)	88 (94%)	6 (6%)	0	100 100
All	All	11629/12354 (94%)	10827 (93%)	706 (6%)	96 (1%)	19 43

All (96) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
26	14	47	GLN
26	14	55	ARG
33	1b	21	ARG
4	2E	51	PHE
6	2G	78	SER
6	2G	81	LYS
8	2I	10	GLU
12	2Q	59	ARG
33	2b	17	PHE
40	2i	54	ASP
6	1G	52	ILE
12	1Q	59	ARG
14	1S	59	LYS
15	1T	127	ALA

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Mol	Chain	Res	Type
17	1V	79	VAL
33	1b	17	PHE
33	1b	20	GLU
33	1b	126	GLU
34	1c	107	GLN
38	1g	55	GLY
41	1j	77	PRO
44	1m	3	ARG
5	2F	130	ALA
10	2O	5	GLN
17	2V	79	VAL
23	21	3	LYS
26	24	62	ARG
33	2b	95	GLN
40	2i	44	VAL
41	2j	78	ASN
51	2t	47	GLY
51	2t	95	ALA
4	1E	52	LEU
19	1X	94	GLY
23	11	3	LYS
26	14	39	CYS
36	1e	96	PRO
41	1j	55	LYS
46	1o	19	PRO
6	2G	43	LEU
26	24	44	THR
26	24	47	GLN
33	2b	16	HIS
52	2u	3	LYS
5	1F	130	ALA
7	1H	159	GLU
8	1I	85	GLU
10	1O	5	GLN
33	1b	37	ASN
33	1b	95	GLN
41	1j	30	SER
44	1m	12	ASN
47	1p	28	ARG
50	1s	12	ASP
50	1s	27	GLU
5	2F	21	ALA

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Mol	Chain	Res	Type
19	2X	94	GLY
33	2b	128	GLU
38	2g	7	ALA
40	2i	96	LEU
42	2k	89	ALA
47	2p	44	THR
51	2t	100	ILE
51	2t	102	GLY
35	1d	124	GLY
36	1e	97	GLY
8	2I	132	PRO
26	24	49	PHE
27	25	35	GLU
33	2b	9	GLU
34	2c	108	ASN
34	2c	156	ARG
38	2g	97	GLN
44	2m	95	GLY
46	2o	88	ARG
33	1b	127	ILE
33	1b	232	PRO
46	1o	84	LYS
26	24	55	ARG
33	2b	21	ARG
34	2c	99	VAL
39	2h	51	VAL
9	2N	129	PRO
5	2F	171	PRO
11	2P	122	PRO
41	2j	37	PRO
44	2m	7	VAL
25	23	59	VAL
35	2d	171	GLY
40	1i	44	VAL
42	1k	105	VAL
51	1t	47	GLY
51	1t	100	ILE
33	2b	125	PRO
46	1o	86	GLY
33	1b	125	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	1D	214/218 (98%)	195 (91%)	19 (9%)	9 22
3	2D	215/218 (99%)	197 (92%)	18 (8%)	11 25
4	1E	164/166 (99%)	151 (92%)	13 (8%)	12 28
4	2E	164/166 (99%)	154 (94%)	10 (6%)	18 41
5	1F	160/166 (96%)	145 (91%)	15 (9%)	8 20
5	2F	159/166 (96%)	148 (93%)	11 (7%)	15 35
6	1G	144/156 (92%)	132 (92%)	12 (8%)	11 25
6	2G	142/156 (91%)	129 (91%)	13 (9%)	9 21
7	1H	144/148 (97%)	138 (96%)	6 (4%)	30 58
7	2H	143/148 (97%)	137 (96%)	6 (4%)	30 58
8	1I	111/124 (90%)	104 (94%)	7 (6%)	18 40
8	2I	108/124 (87%)	103 (95%)	5 (5%)	27 54
9	1N	119/119 (100%)	112 (94%)	7 (6%)	19 43
9	2N	118/119 (99%)	112 (95%)	6 (5%)	24 50
10	1O	100/100 (100%)	96 (96%)	4 (4%)	31 60
10	2O	100/100 (100%)	96 (96%)	4 (4%)	31 60
11	1P	115/116 (99%)	112 (97%)	3 (3%)	46 75
11	2P	115/116 (99%)	110 (96%)	5 (4%)	29 57
12	1Q	111/111 (100%)	104 (94%)	7 (6%)	18 40
12	2Q	111/111 (100%)	107 (96%)	4 (4%)	35 64
13	1R	101/101 (100%)	91 (90%)	10 (10%)	8 18
13	2R	101/101 (100%)	89 (88%)	12 (12%)	5 12
14	1S	87/88 (99%)	80 (92%)	7 (8%)	12 27
14	2S	85/88 (97%)	79 (93%)	6 (7%)	14 34
15	1T	115/127 (91%)	110 (96%)	5 (4%)	29 57
15	2T	113/127 (89%)	107 (95%)	6 (5%)	22 48

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
16	1U	93/94 (99%)	88 (95%)	5 (5%)	22 47
16	2U	93/94 (99%)	90 (97%)	3 (3%)	39 68
17	1V	81/82 (99%)	73 (90%)	8 (10%)	8 18
17	2V	80/82 (98%)	76 (95%)	4 (5%)	24 51
18	1W	90/92 (98%)	81 (90%)	9 (10%)	7 18
18	2W	90/92 (98%)	82 (91%)	8 (9%)	9 22
19	1X	77/78 (99%)	73 (95%)	4 (5%)	23 49
19	2X	77/78 (99%)	73 (95%)	4 (5%)	23 49
20	1Y	86/91 (94%)	80 (93%)	6 (7%)	15 35
20	2Y	86/91 (94%)	84 (98%)	2 (2%)	50 78
21	1Z	169/179 (94%)	154 (91%)	15 (9%)	9 22
21	2Z	165/179 (92%)	158 (96%)	7 (4%)	30 58
22	10	61/67 (91%)	57 (93%)	4 (7%)	16 38
22	20	61/67 (91%)	59 (97%)	2 (3%)	38 67
23	11	79/83 (95%)	76 (96%)	3 (4%)	33 62
23	21	81/83 (98%)	78 (96%)	3 (4%)	34 63
24	12	65/67 (97%)	64 (98%)	1 (2%)	65 86
24	22	66/67 (98%)	65 (98%)	1 (2%)	65 86
25	13	51/52 (98%)	46 (90%)	5 (10%)	8 18
25	23	50/52 (96%)	48 (96%)	2 (4%)	31 60
26	14	58/63 (92%)	55 (95%)	3 (5%)	23 49
26	24	54/63 (86%)	54 (100%)	0	100 100
27	15	51/52 (98%)	45 (88%)	6 (12%)	5 12
27	25	50/52 (96%)	47 (94%)	3 (6%)	19 42
28	16	51/52 (98%)	46 (90%)	5 (10%)	8 18
28	26	50/52 (96%)	46 (92%)	4 (8%)	12 27
29	17	41/42 (98%)	36 (88%)	5 (12%)	5 11
29	27	41/42 (98%)	41 (100%)	0	100 100
30	18	54/55 (98%)	50 (93%)	4 (7%)	13 32
30	28	54/55 (98%)	49 (91%)	5 (9%)	9 21
31	19	34/34 (100%)	32 (94%)	2 (6%)	19 43

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	29	34/34 (100%)	33 (97%)	1 (3%)	42	71
33	1b	191/220 (87%)	183 (96%)	8 (4%)	30	58
33	2b	187/220 (85%)	180 (96%)	7 (4%)	34	63
34	1c	144/188 (77%)	139 (96%)	5 (4%)	36	65
34	2c	140/188 (74%)	134 (96%)	6 (4%)	29	57
35	1d	171/181 (94%)	162 (95%)	9 (5%)	22	48
35	2d	172/181 (95%)	166 (96%)	6 (4%)	36	65
36	1e	114/123 (93%)	110 (96%)	4 (4%)	36	65
36	2e	114/123 (93%)	108 (95%)	6 (5%)	22	48
37	1f	85/90 (94%)	82 (96%)	3 (4%)	36	65
37	2f	85/90 (94%)	82 (96%)	3 (4%)	36	65
38	1g	120/127 (94%)	117 (98%)	3 (2%)	47	76
38	2g	119/127 (94%)	113 (95%)	6 (5%)	24	51
39	1h	116/119 (98%)	114 (98%)	2 (2%)	60	84
39	2h	114/119 (96%)	109 (96%)	5 (4%)	28	56
40	1i	91/99 (92%)	91 (100%)	0	100	100
40	2i	88/99 (89%)	85 (97%)	3 (3%)	37	66
41	1j	68/92 (74%)	66 (97%)	2 (3%)	42	71
41	2j	68/92 (74%)	67 (98%)	1 (2%)	65	86
42	1k	83/99 (84%)	80 (96%)	3 (4%)	35	64
42	2k	83/99 (84%)	79 (95%)	4 (5%)	25	53
43	1l	96/108 (89%)	92 (96%)	4 (4%)	30	58
43	2l	96/108 (89%)	94 (98%)	2 (2%)	53	80
44	1m	90/101 (89%)	86 (96%)	4 (4%)	28	56
44	2m	87/101 (86%)	84 (97%)	3 (3%)	37	66
45	1n	49/50 (98%)	48 (98%)	1 (2%)	55	81
45	2n	49/50 (98%)	49 (100%)	0	100	100
46	1o	78/80 (98%)	74 (95%)	4 (5%)	24	50
46	2o	78/80 (98%)	77 (99%)	1 (1%)	69	87
47	1p	69/74 (93%)	65 (94%)	4 (6%)	20	43
47	2p	68/74 (92%)	62 (91%)	6 (9%)	10	23

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
48	1q	94/97 (97%)	89 (95%)	5 (5%)	22 48
48	2q	94/97 (97%)	89 (95%)	5 (5%)	22 48
49	1r	59/77 (77%)	58 (98%)	1 (2%)	60 84
49	2r	59/77 (77%)	53 (90%)	6 (10%)	7 17
50	1s	68/80 (85%)	67 (98%)	1 (2%)	65 86
50	2s	67/80 (84%)	65 (97%)	2 (3%)	41 70
51	1t	71/82 (87%)	67 (94%)	4 (6%)	21 45
51	2t	70/82 (85%)	65 (93%)	5 (7%)	14 34
52	1u	18/22 (82%)	17 (94%)	1 (6%)	21 45
52	2u	18/22 (82%)	17 (94%)	1 (6%)	21 45
53	1y	82/98 (84%)	78 (95%)	4 (5%)	25 52
53	2y	79/98 (81%)	74 (94%)	5 (6%)	18 40
All	All	9524/10260 (93%)	9014 (95%)	510 (5%)	22 47

All (510) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	3	VAL
3	1D	13	ARG
3	1D	39	LYS
3	1D	61	LEU
3	1D	63	ARG
3	1D	69	ARG
3	1D	88	ARG
3	1D	103	ARG
3	1D	106	ILE
3	1D	111	LEU
3	1D	138	VAL
3	1D	173	VAL
3	1D	193	VAL
3	1D	211	ARG
3	1D	221	VAL
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	260	ARG
4	1E	1	MET
4	1E	9	VAL

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Mol	Chain	Res	Type
4	1E	33	VAL
4	1E	34	VAL
4	1E	49	LEU
4	1E	75	VAL
4	1E	78	LEU
4	1E	116	VAL
4	1E	119	ARG
4	1E	144	ARG
4	1E	154	LYS
4	1E	175	VAL
4	1E	181	LEU
5	1F	38	ARG
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	88	VAL
5	1F	95	ARG
5	1F	110	LEU
5	1F	125	LEU
5	1F	132	VAL
5	1F	158	THR
5	1F	170	LEU
5	1F	191	ARG
5	1F	192	LEU
5	1F	197	ASP
5	1F	201	VAL
6	1G	5	VAL
6	1G	7	LEU
6	1G	28	VAL
6	1G	43	LEU
6	1G	47	LYS
6	1G	49	ASP
6	1G	52	ILE
6	1G	53	LEU
6	1G	135	LEU
6	1G	153	ARG
6	1G	159	VAL
6	1G	181	ARG
7	1H	15	VAL
7	1H	71	LEU
7	1H	85	LYS
7	1H	122	THR

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Mol	Chain	Res	Type
7	1H	134	SER
7	1H	149	ARG
8	1I	12	LEU
8	1I	38	LEU
8	1I	41	GLU
8	1I	44	LEU
8	1I	92	VAL
8	1I	101	LEU
8	1I	109	ILE
9	1N	5	VAL
9	1N	15	LEU
9	1N	34	LEU
9	1N	48	MET
9	1N	62	VAL
9	1N	67	LEU
9	1N	99	LEU
10	1O	10	VAL
10	1O	24	VAL
10	1O	94	ARG
10	1O	108	GLU
11	1P	59	LEU
11	1P	83	VAL
11	1P	125	VAL
12	1Q	2	LEU
12	1Q	6	ARG
12	1Q	7	MET
12	1Q	60	ARG
12	1Q	81	VAL
12	1Q	109	VAL
12	1Q	133	ARG
13	1R	6	SER
13	1R	29	LEU
13	1R	33	ARG
13	1R	36	THR
13	1R	44	LEU
13	1R	54	LEU
13	1R	65	LEU
13	1R	67	LEU
13	1R	100	LEU
13	1R	111	LEU
14	1S	14	VAL
14	1S	25	ARG

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Mol	Chain	Res	Type
14	1S	50	SER
14	1S	52	SER
14	1S	59	LYS
14	1S	85	VAL
14	1S	110	LEU
15	1T	28	VAL
15	1T	33	LYS
15	1T	89	VAL
15	1T	96	ARG
15	1T	118	ARG
16	1U	8	VAL
16	1U	30	LYS
16	1U	74	LEU
16	1U	77	SER
16	1U	95	LEU
17	1V	46	VAL
17	1V	51	VAL
17	1V	52	VAL
17	1V	61	VAL
17	1V	62	LEU
17	1V	72	VAL
17	1V	79	VAL
17	1V	82	ARG
18	1W	11	ARG
18	1W	15	ARG
18	1W	17	VAL
18	1W	19	LEU
18	1W	23	LEU
18	1W	95	ILE
18	1W	96	ILE
18	1W	100	THR
18	1W	107	LEU
19	1X	35	THR
19	1X	38	GLU
19	1X	45	THR
19	1X	66	LEU
20	1Y	43	ASN
20	1Y	63	LYS
20	1Y	72	VAL
20	1Y	85	VAL
20	1Y	90	LEU
20	1Y	99	CYS

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Mol	Chain	Res	Type
21	1Z	18	LEU
21	1Z	31	ARG
21	1Z	46	LYS
21	1Z	58	VAL
21	1Z	61	LEU
21	1Z	74	VAL
21	1Z	76	LEU
21	1Z	86	VAL
21	1Z	91	LEU
21	1Z	126	VAL
21	1Z	150	LEU
21	1Z	155	LEU
21	1Z	161	VAL
21	1Z	162	GLU
21	1Z	170	THR
22	10	14	ARG
22	10	39	ARG
22	10	55	ARG
22	10	59	LEU
23	11	21	ARG
23	11	59	THR
23	11	95	LEU
24	12	53	LEU
25	13	6	VAL
25	13	8	LEU
25	13	17	LYS
25	13	23	LEU
25	13	55	ARG
26	14	49	PHE
26	14	53	GLU
26	14	56	VAL
27	15	6	VAL
27	15	16	ARG
27	15	26	THR
27	15	29	THR
27	15	40	LYS
27	15	60	VAL
28	16	6	ARG
28	16	14	THR
28	16	19	ARG
28	16	48	VAL
28	16	52	VAL

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Mol	Chain	Res	Type
29	17	1	MET
29	17	24	THR
29	17	43	THR
29	17	46	VAL
29	17	47	ARG
30	18	30	ARG
30	18	31	HIS
30	18	32	LEU
30	18	34	TRP
31	19	17	ILE
31	19	35	ARG
33	1b	15	VAL
33	1b	44	LEU
33	1b	101	MET
33	1b	111	ARG
33	1b	130	ARG
33	1b	142	LEU
33	1b	160	ASP
33	1b	178	ARG
34	1c	3	ASN
34	1c	105	GLU
34	1c	112	SER
34	1c	150	LYS
34	1c	206	GLU
35	1d	19	LEU
35	1d	28	SER
35	1d	59	ARG
35	1d	115	ARG
35	1d	127	THR
35	1d	135	LEU
35	1d	157	LEU
35	1d	188	LEU
35	1d	194	LEU
36	1e	31	LEU
36	1e	41	VAL
36	1e	69	VAL
36	1e	91	LEU
37	1f	48	LEU
37	1f	63	TYR
37	1f	69	GLU
38	1g	75	VAL
38	1g	104	LEU

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Mol	Chain	Res	Type
38	1g	115	ARG
39	1h	63	LEU
39	1h	104	ARG
41	1j	34	VAL
41	1j	72	VAL
42	1k	16	SER
42	1k	112	THR
42	1k	114	VAL
43	1l	27	LEU
43	1l	83	VAL
43	1l	113	ARG
43	1l	117	ARG
44	1m	70	LEU
44	1m	98	VAL
44	1m	102	ARG
44	1m	117	VAL
45	1n	18	VAL
46	1o	3	ILE
46	1o	24	SER
46	1o	39	LEU
46	1o	66	LEU
47	1p	25	ARG
47	1p	32	TYR
47	1p	62	VAL
47	1p	76	GLN
48	1q	26	GLN
48	1q	57	VAL
48	1q	63	ARG
48	1q	68	ARG
48	1q	97	SER
49	1r	42	ARG
50	1s	41	VAL
51	1t	11	SER
51	1t	24	LEU
51	1t	58	LYS
51	1t	84	LEU
52	1u	24	ARG
53	1y	3	MET
53	1y	23	ARG
53	1y	42	SER
53	1y	88	LEU
3	2D	3	VAL

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Mol	Chain	Res	Type
3	2D	32	SER
3	2D	69	ARG
3	2D	71	ASP
3	2D	94	LEU
3	2D	103	ARG
3	2D	111	LEU
3	2D	138	VAL
3	2D	142	VAL
3	2D	173	VAL
3	2D	193	VAL
3	2D	211	ARG
3	2D	217	ARG
3	2D	221	VAL
3	2D	229	VAL
3	2D	237	GLU
3	2D	242	ARG
3	2D	274	ARG
4	2E	9	VAL
4	2E	21	VAL
4	2E	38	THR
4	2E	72	VAL
4	2E	75	VAL
4	2E	78	LEU
4	2E	116	VAL
4	2E	175	VAL
4	2E	181	LEU
4	2E	184	VAL
5	2F	20	LEU
5	2F	33	LEU
5	2F	38	ARG
5	2F	57	VAL
5	2F	60	SER
5	2F	74	ARG
5	2F	88	VAL
5	2F	158	THR
5	2F	168	ARG
5	2F	183	VAL
5	2F	192	LEU
6	2G	5	VAL
6	2G	7	LEU
6	2G	28	VAL
6	2G	60	LEU

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Mol	Chain	Res	Type
6	2G	71	THR
6	2G	79	ASN
6	2G	109	VAL
6	2G	113	ARG
6	2G	133	LEU
6	2G	140	ILE
6	2G	159	VAL
6	2G	161	THR
6	2G	181	ARG
7	2H	47	GLU
7	2H	56	SER
7	2H	71	LEU
7	2H	98	LEU
7	2H	136	ILE
7	2H	139	GLN
8	2I	40	THR
8	2I	64	GLU
8	2I	68	LEU
8	2I	116	LEU
8	2I	140	LEU
9	2N	34	LEU
9	2N	46	VAL
9	2N	60	ILE
9	2N	62	VAL
9	2N	99	LEU
9	2N	140	VAL
10	2O	21	CYS
10	2O	24	VAL
10	2O	35	VAL
10	2O	108	GLU
11	2P	4	SER
11	2P	59	LEU
11	2P	65	ARG
11	2P	83	VAL
11	2P	112	LEU
12	2Q	55	VAL
12	2Q	109	VAL
12	2Q	110	THR
12	2Q	112	GLU
13	2R	6	SER
13	2R	17	ARG
13	2R	24	GLN

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Mol	Chain	Res	Type
13	2R	36	THR
13	2R	44	LEU
13	2R	59	ASP
13	2R	65	LEU
13	2R	67	LEU
13	2R	75	LEU
13	2R	96	ARG
13	2R	100	LEU
13	2R	111	LEU
14	2S	23	ARG
14	2S	30	ARG
14	2S	50	SER
14	2S	52	SER
14	2S	64	GLU
14	2S	69	VAL
15	2T	31	SER
15	2T	51	ARG
15	2T	53	ARG
15	2T	74	ARG
15	2T	89	VAL
15	2T	95	ARG
16	2U	31	SER
16	2U	59	ARG
16	2U	95	LEU
17	2V	18	LEU
17	2V	39	LEU
17	2V	46	VAL
17	2V	79	VAL
18	2W	15	ARG
18	2W	17	VAL
18	2W	19	LEU
18	2W	23	LEU
18	2W	49	LYS
18	2W	67	ASP
18	2W	70	TYR
18	2W	100	THR
19	2X	2	LYS
19	2X	49	VAL
19	2X	57	LEU
19	2X	81	VAL
20	2Y	3	VAL
20	2Y	6	HIS

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Mol	Chain	Res	Type
21	2Z	33	LEU
21	2Z	72	ARG
21	2Z	86	VAL
21	2Z	107	THR
21	2Z	150	LEU
21	2Z	170	THR
21	2Z	175	VAL
22	20	9	SER
22	20	14	ARG
23	21	11	ARG
23	21	35	THR
23	21	85	LEU
24	22	53	LEU
25	23	23	LEU
25	23	31	LEU
27	25	6	VAL
27	25	29	THR
27	25	58	LEU
28	26	6	ARG
28	26	7	ILE
28	26	14	THR
28	26	40	CYS
30	28	14	VAL
30	28	30	ARG
30	28	32	LEU
30	28	34	TRP
30	28	37	SER
31	29	7	VAL
33	2b	15	VAL
33	2b	23	ARG
33	2b	44	LEU
33	2b	83	MET
33	2b	189	ASP
33	2b	190	THR
33	2b	209	ARG
34	2c	15	THR
34	2c	21	ARG
34	2c	22	TRP
34	2c	33	LEU
34	2c	68	VAL
34	2c	166	GLU
35	2d	8	VAL

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Mol	Chain	Res	Type
35	2d	83	SER
35	2d	122	ARG
35	2d	135	LEU
35	2d	157	LEU
35	2d	175	SER
36	2e	18	ARG
36	2e	31	LEU
36	2e	34	VAL
36	2e	41	VAL
36	2e	72	GLN
36	2e	75	THR
37	2f	61	LEU
37	2f	63	TYR
37	2f	72	VAL
38	2g	15	ASP
38	2g	42	ILE
38	2g	75	VAL
38	2g	77	SER
38	2g	104	LEU
38	2g	155	ARG
39	2h	29	SER
39	2h	85	ARG
39	2h	104	ARG
39	2h	121	ASP
39	2h	137	VAL
40	2i	9	ARG
40	2i	27	THR
40	2i	102	LEU
41	2j	100	THR
42	2k	32	ILE
42	2k	47	VAL
42	2k	79	SER
42	2k	116	HIS
43	2l	59	ARG
43	2l	83	VAL
44	2m	47	ASP
44	2m	99	ARG
44	2m	102	ARG
46	2o	39	LEU
47	2p	1	MET
47	2p	2	VAL
47	2p	28	ARG

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Mol	Chain	Res	Type
47	2p	62	VAL
47	2p	69	THR
47	2p	74	LEU
48	2q	9	VAL
48	2q	56	VAL
48	2q	60	ILE
48	2q	68	ARG
48	2q	70	ARG
49	2r	26	LEU
49	2r	37	VAL
49	2r	54	ARG
49	2r	55	ARG
49	2r	76	LEU
49	2r	85	LEU
50	2s	41	VAL
50	2s	48	THR
51	2t	15	ARG
51	2t	31	SER
51	2t	71	THR
51	2t	86	ARG
51	2t	100	ILE
52	2u	24	ARG
53	2y	5	ILE
53	2y	32	THR
53	2y	61	LEU
53	2y	70	MET
53	2y	93	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (102) such sidechains are listed below:

Mol	Chain	Res	Type
4	1E	143	ASN
5	1F	69	HIS
5	1F	203	GLN
6	1G	26	GLN
7	1H	158	HIS
8	1I	104	GLN
8	1I	105	HIS
9	1N	94	HIS
13	1R	71	GLN
15	1T	58	ASN
16	1U	81	HIS

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Mol	Chain	Res	Type
16	1U	117	GLN
19	1X	31	HIS
20	1Y	6	HIS
20	1Y	43	ASN
20	1Y	92	ASN
21	1Z	151	HIS
25	13	32	GLN
27	15	4	HIS
31	19	34	GLN
34	1c	6	HIS
34	1c	37	GLN
34	1c	69	HIS
34	1c	102	ASN
34	1c	162	GLN
35	1d	45	GLN
35	1d	116	GLN
35	1d	123	HIS
35	1d	125	HIS
35	1d	129	ASN
37	1f	64	GLN
37	1f	100	ASN
38	1g	28	ASN
38	1g	51	GLN
38	1g	148	ASN
40	1i	3	GLN
40	1i	73	GLN
41	1j	21	GLN
41	1j	56	HIS
41	1j	84	GLN
42	1k	93	GLN
43	1l	99	HIS
44	1m	92	HIS
46	1o	28	GLN
47	1p	13	HIS
47	1p	16	HIS
48	1q	16	GLN
50	1s	69	HIS
50	1s	83	HIS
51	1t	18	GLN
53	1y	9	GLN
53	1y	38	HIS
3	2D	126	GLN

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Mol	Chain	Res	Type
3	2D	253	GLN
4	2E	48	GLN
5	2F	40	GLN
5	2F	69	HIS
5	2F	133	ASN
6	2G	26	GLN
6	2G	79	ASN
8	2I	43	ASN
10	2O	3	GLN
11	2P	27	HIS
12	2Q	89	ASN
12	2Q	123	HIS
12	2Q	141	GLN
15	2T	58	ASN
18	2W	60	ASN
19	2X	31	HIS
21	2Z	34	ASN
21	2Z	73	GLN
25	23	32	GLN
31	29	36	GLN
33	2b	40	HIS
34	2c	3	ASN
34	2c	6	HIS
34	2c	37	GLN
34	2c	69	HIS
34	2c	104	GLN
34	2c	139	GLN
34	2c	176	HIS
35	2d	77	ASN
35	2d	116	GLN
35	2d	161	ASN
36	2e	20	GLN
36	2e	78	HIS
37	2f	100	ASN
38	2g	28	ASN
38	2g	56	GLN
40	2i	3	GLN
40	2i	38	GLN
40	2i	73	GLN
41	2j	56	HIS
41	2j	68	HIS
41	2j	69	ASN

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Mol	Chain	Res	Type
43	2l	99	HIS
45	2n	49	HIS
46	2o	28	GLN
47	2p	16	HIS
50	2s	69	HIS
50	2s	83	HIS
53	2y	38	HIS

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2862/2915 (98%)	421 (14%)	29 (1%)
1	2A	2855/2915 (97%)	492 (17%)	36 (1%)
2	1B	119/121 (98%)	11 (9%)	0
2	2B	119/121 (98%)	18 (15%)	0
32	1a	1494/1521 (98%)	233 (15%)	0
32	2a	1498/1521 (98%)	261 (17%)	0
All	All	8947/9114 (98%)	1436 (16%)	65 (0%)

All (1436) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	14	A
1	1A	15	G
1	1A	34	C
1	1A	45	C
1	1A	70	A
1	1A	73	A
1	1A	74	G
1	1A	116	A
1	1A	117	A
1	1A	118	U
1	1A	164	G
1	1A	166	G
1	1A	170	A
1	1A	171	A
1	1A	177	G
1	1A	185	A
1	1A	188	A
1	1A	194	G

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Mol	Chain	Res	Type
1	1A	203	G
1	1A	204	G
1	1A	205	A
1	1A	206	G
1	1A	211	A
1	1A	218	A
1	1A	222	A
1	1A	237	G
1	1A	253	C
1	1A	254	A
1	1A	265	U
1	1A	269	G
1	1A	271	U
1	1A	272	U
1	1A	273	G
1	1A	274	U
1	1A	275	C
1	1A	288	U
1	1A	289	G
1	1A	297	C
1	1A	298	G
1	1A	299	G
1	1A	303	C
1	1A	304	C
1	1A	307	A
1	1A	335	A
1	1A	354	A
1	1A	376	G
1	1A	381	A
1	1A	384	G
1	1A	387	G
1	1A	413	G
1	1A	423	G
1	1A	432	U
1	1A	438	G
1	1A	448	U
1	1A	449	A
1	1A	455	A
1	1A	474	U
1	1A	482	C
1	1A	483	A
1	1A	507	G

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Mol	Chain	Res	Type
1	1A	530	A
1	1A	534	C
1	1A	553	A
1	1A	555	G
1	1A	556	C
1	1A	557	A
1	1A	558	G
1	1A	569	G
1	1A	573	G
1	1A	586	G
1	1A	596	G
1	1A	597	C
1	1A	598	A
1	1A	626	A
1	1A	627	G
1	1A	630	U
1	1A	639	G
1	1A	641	G
1	1A	652	A
1	1A	662	A
1	1A	670	C
1	1A	693	G
1	1A	697	C
1	1A	698	G
1	1A	701	A
1	1A	716	G
1	1A	733	G
1	1A	764	G
1	1A	777	C
1	1A	785	G
1	1A	804	U
1	1A	822	G
1	1A	823	G
1	1A	829	A
1	1A	831	A
1	1A	832	G
1	1A	837	C
1	1A	839	G
1	1A	852	G
1	1A	859	C
1	1A	874	U
1	1A	875	U

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Mol	Chain	Res	Type
1	1A	906	G
1	1A	913	A
1	1A	925	A
1	1A	926	G
1	1A	929	G
1	1A	931	C
1	1A	932	C
1	1A	933	C
1	1A	935	C
1	1A	936	C
1	1A	937	A
1	1A	938	G
1	1A	942	A
1	1A	943	C
1	1A	945	A
1	1A	953	U
1	1A	956	A
1	1A	977	G
1	1A	983	G
1	1A	990	A
1	1A	991	G
1	1A	1003	U
1	1A	1004	A
1	1A	1006	C
1	1A	1008	U
1	1A	1019	G
1	1A	1020	C
1	1A	1029	A
1	1A	1042	A
1	1A	1045	U
1	1A	1058	U
1	1A	1059	C
1	1A	1068	G
1	1A	1072	U
1	1A	1079	U
1	1A	1084	C
1	1A	1085	G
1	1A	1088	G
1	1A	1089	C
1	1A	1091	A
1	1A	1092	A
1	1A	1093	G

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Mol	Chain	Res	Type
1	1A	1094	A
1	1A	1099	C
1	1A	1100	A
1	1A	1106	U
1	1A	1107	U
1	1A	1108	G
1	1A	1109	G
1	1A	1111	U
1	1A	1114	G
1	1A	1116	A
1	1A	1117	G
1	1A	1119	A
1	1A	1121	C
1	1A	1123	A
1	1A	1124	U
1	1A	1125	C
1	1A	1129	U
1	1A	1133	G
1	1A	1134	A
1	1A	1136	U
1	1A	1137	G
1	1A	1142	A
1	1A	1143	U
1	1A	1155	C
1	1A	1156	G
1	1A	1158	G
1	1A	1162	C
1	1A	1174	A
1	1A	1175	A
1	1A	1176	U
1	1A	1180	C
1	1A	1181	G
1	1A	1184	G
1	1A	1196	C
1	1A	1216	G
1	1A	1217	G
1	1A	1218	G
1	1A	1219	A
1	1A	1220	U
1	1A	1221	G
1	1A	1222	A
1	1A	1223	C

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Mol	Chain	Res	Type
1	1A	1255	A
1	1A	1256	U
1	1A	1263	C
1	1A	1275	G
1	1A	1299	A
1	1A	1302	G
1	1A	1317	G
1	1A	1318	A
1	1A	1327	G
1	1A	1346	U
1	1A	1347	A
1	1A	1351	C
1	1A	1367	A
1	1A	1398	U
1	1A	1405	A
1	1A	1406	A
1	1A	1411	A
1	1A	1416	C
1	1A	1426	G
1	1A	1430	A
1	1A	1431	G
1	1A	1441	A
1	1A	1462	G
1	1A	1463	C
1	1A	1466	U
1	1A	1467	G
1	1A	1474	C
1	1A	1491	A
1	1A	1497	G
1	1A	1500	A
1	1A	1502	G
1	1A	1506	G
1	1A	1508	G
1	1A	1514	C
1	1A	1518	A
1	1A	1529	G
1	1A	1539	C
1	1A	1552	C
1	1A	1554	A
1	1A	1555	C
1	1A	1556	A
1	1A	1589	A

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Mol	Chain	Res	Type
1	1A	1590	C
1	1A	1605	A
1	1A	1613	A
1	1A	1616	A
1	1A	1625	U
1	1A	1628	G
1	1A	1629	C
1	1A	1631	C
1	1A	1632	A
1	1A	1654	A
1	1A	1655	A
1	1A	1656	A
1	1A	1695	C
1	1A	1701	A
1	1A	1711	A
1	1A	1721	G
1	1A	1747	A
1	1A	1748	A
1	1A	1766	G
1	1A	1767	A
1	1A	1768	U
1	1A	1777	G
1	1A	1787	G
1	1A	1794	G
1	1A	1795	G
1	1A	1804	A
1	1A	1811	A
1	1A	1813	C
1	1A	1822	A
1	1A	1831	C
1	1A	1832	G
1	1A	1843	A
1	1A	1847	G
1	1A	1860	A
1	1A	1870	G
1	1A	1878	A
1	1A	1899	A
1	1A	1900	G
1	1A	1911	A
1	1A	1922	A
1	1A	1928	G
1	1A	1935	A

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Mol	Chain	Res	Type
1	1A	1936	C
1	1A	1951	G
1	1A	1952	G
1	1A	1959	A
1	1A	1960	A
1	1A	1974	A
1	1A	1977	U
1	1A	1985	U
1	1A	1989	C
1	1A	1992	A
1	1A	1993	A
1	1A	1994	A
1	1A	2015	U
1	1A	2019	G
1	1A	2042	A
1	1A	2045	G
1	1A	2053	A
1	1A	2054	G
1	1A	2055	A
1	1A	2065	C
1	1A	2077	C
1	1A	2078	G
1	1A	2082	A
1	1A	2083	G
1	1A	2085	C
1	1A	2091	G
1	1A	2121	U
1	1A	2125	C
1	1A	2129	C
1	1A	2130	C
1	1A	2138	G
1	1A	2139	A
1	1A	2141	A
1	1A	2145	G
1	1A	2148	A
1	1A	2149	G
1	1A	2153	G
1	1A	2154	U
1	1A	2155	G
1	1A	2156	A
1	1A	2157	A
1	1A	2158	C

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Mol	Chain	Res	Type
1	1A	2161	C
1	1A	2164	C
1	1A	2167	C
1	1A	2168	C
1	1A	2170	G
1	1A	2180	A
1	1A	2181	G
1	1A	2188	G
1	1A	2195	A
1	1A	2198	A
1	1A	2207	C
1	1A	2209	G
1	1A	2213	G
1	1A	2214	G
1	1A	2215	G
1	1A	2220	A
1	1A	2227	G
1	1A	2228	G
1	1A	2229	A
1	1A	2237	A
1	1A	2244	U
1	1A	2250	G
1	1A	2251	G
1	1A	2280	A
1	1A	2281	A
1	1A	2290	A
1	1A	2295	C
1	1A	2299	A
1	1A	2301	G
1	1A	2317	A
1	1A	2320	G
1	1A	2332	A
1	1A	2337	G
1	1A	2338	C
1	1A	2346	G
1	1A	2359	C
1	1A	2362	C
1	1A	2395	G
1	1A	2397	C
1	1A	2417	G
1	1A	2418	U
1	1A	2421	G

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Mol	Chain	Res	Type
1	1A	2426	G
1	1A	2434	A
1	1A	2435	U
1	1A	2437	A
1	1A	2440	G
1	1A	2441	G
1	1A	2442	A
1	1A	2443	U
1	1A	2444	A
1	1A	2447	A
1	1A	2451	A
1	1A	2453	C
1	1A	2460	A
1	1A	2480	G
1	1A	2481	A
1	1A	2488	A
1	1A	2510	C
1	1A	2514	G
1	1A	2516	U
1	1A	2517	G
1	1A	2530	A
1	1A	2541	G
1	1A	2547	G
1	1A	2566	U
1	1A	2567	U
1	1A	2578	A
1	1A	2579	G
1	1A	2585	C
1	1A	2597	U
1	1A	2614	A
1	1A	2615	G
1	1A	2621	U
1	1A	2623	U
1	1A	2624	C
1	1A	2641	A
1	1A	2642	G
1	1A	2666	A
1	1A	2674	A
1	1A	2701	U
1	1A	2702	C
1	1A	2714	U
1	1A	2715	C

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Mol	Chain	Res	Type
1	1A	2725	A
1	1A	2726	A
1	1A	2727	G
1	1A	2739	U
1	1A	2746	A
1	1A	2771	A
1	1A	2778	A
1	1A	2779	G
1	1A	2782	C
1	1A	2791	A
1	1A	2803	A
1	1A	2804	C
1	1A	2813	G
1	1A	2828	G
1	1A	2830	A
1	1A	2831	A
1	1A	2843	G
1	1A	2845	A
1	1A	2846	U
1	1A	2882	G
1	1A	2883	A
1	1A	2890	C
1	1A	2901	A
1	1A	2903	G
2	1B	7	G
2	1B	15	A
2	1B	32	C
2	1B	45	A
2	1B	53	A
2	1B	56	G
2	1B	73	A
2	1B	84	C
2	1B	106	G
2	1B	110	G
2	1B	116	G
32	1a	5	U
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	48	C
32	1a	51	A
32	1a	61	G

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Mol	Chain	Res	Type
32	1a	79	G
32	1a	101	A
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	156	G
32	1a	159	G
32	1a	163	C
32	1a	169	C
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	189(F)	U
32	1a	195	A
32	1a	197	A
32	1a	199	G
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	220	G
32	1a	231	G
32	1a	247	G
32	1a	251	G
32	1a	254	G
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	301	G
32	1a	306	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	348	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

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Mol	Chain	Res	Type
32	1a	384	G
32	1a	398	C
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	424	G
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	443	C
32	1a	444	C
32	1a	452	A
32	1a	456	C
32	1a	461	A
32	1a	470	C
32	1a	475	G
32	1a	477	A
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	506	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	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	607	A
32	1a	617	G
32	1a	619	U
32	1a	630	G

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Mol	Chain	Res	Type
32	1a	631	G
32	1a	632	A
32	1a	633	G
32	1a	642	A
32	1a	650	G
32	1a	653	A
32	1a	661	G
32	1a	665	A
32	1a	671	G
32	1a	687	A
32	1a	688	G
32	1a	693	G
32	1a	723	U
32	1a	728	A
32	1a	731	G
32	1a	750	G
32	1a	755	G
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	848	C
32	1a	858	G
32	1a	902	G
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	975	A

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Mol	Chain	Res	Type
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	999	C
32	1a	1001(A)	G
32	1a	1003	G
32	1a	1004	A
32	1a	1009	G
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030(A)	G
32	1a	1032	G
32	1a	1037	C
32	1a	1044	A
32	1a	1053	G
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1070	U
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1100	C
32	1a	1101	A
32	1a	1124	G
32	1a	1126	U
32	1a	1130	A
32	1a	1134	G
32	1a	1136	U
32	1a	1137	C
32	1a	1139	G
32	1a	1140	C
32	1a	1146	A

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Mol	Chain	Res	Type
32	1a	1152	A
32	1a	1159	U
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	1213	A
32	1a	1214	C
32	1a	1224	G
32	1a	1227	A
32	1a	1238	A
32	1a	1240	U
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1263	C
32	1a	1269	A
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	1322	C
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1360	A
32	1a	1363	C
32	1a	1370	G
32	1a	1397	C
32	1a	1406	U
32	1a	1419	G
32	1a	1422	G
32	1a	1442	G

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Mol	Chain	Res	Type
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	1507	A
32	1a	1517	G
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
1	2A	9	U
1	2A	10	G
1	2A	12	U
1	2A	34	C
1	2A	36	G
1	2A	45	C
1	2A	61	G
1	2A	63	U
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	90	U
1	2A	94	C
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	181	A
1	2A	182	A
1	2A	196	A
1	2A	199	A
1	2A	205	G
1	2A	215	G

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Mol	Chain	Res	Type
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	225	A
1	2A	228	A
1	2A	229	A
1	2A	230	U
1	2A	233	A
1	2A	248	G
1	2A	265	A
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(A)	U
1	2A	272(B)	G
1	2A	272(J)	C
1	2A	277	C
1	2A	278	A
1	2A	303	U
1	2A	311	A
1	2A	312	G
1	2A	317	G
1	2A	324	A
1	2A	327	G
1	2A	329	G
1	2A	330	A
1	2A	333	G
1	2A	352	G
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	444	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	470	A

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Mol	Chain	Res	Type
1	2A	481	G
1	2A	504	U
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	574	C
1	2A	575	A
1	2A	586	A
1	2A	595	C
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	609	A
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(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	669	G
1	2A	677	A
1	2A	686	G
1	2A	717	G
1	2A	726	G
1	2A	730	C
1	2A	740	U
1	2A	751	A
1	2A	752	A
1	2A	753	C
1	2A	775	G
1	2A	776	G
1	2A	782	A

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Mol	Chain	Res	Type
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	815	C
1	2A	827	U
1	2A	847	U
1	2A	853	G
1	2A	857	C
1	2A	859	G
1	2A	877	U
1	2A	880	G
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	896	A
1	2A	897	C
1	2A	901	A
1	2A	908	C
1	2A	910	A
1	2A	911	A
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	959	A
1	2A	961	C
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	1005	C
1	2A	1012	U
1	2A	1013	C
1	2A	1033	U
1	2A	1038	C

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Mol	Chain	Res	Type
1	2A	1041	C
1	2A	1044	G
1	2A	1045	A
1	2A	1046	A
1	2A	1047	G
1	2A	1052	C
1	2A	1054	A
1	2A	1055	G
1	2A	1058	G
1	2A	1060	U
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	1073	A
1	2A	1074	G
1	2A	1076	C
1	2A	1077	A
1	2A	1078	U
1	2A	1079	C
1	2A	1080	C
1	2A	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A
1	2A	1088	A
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C
1	2A	1093	G
1	2A	1094	U
1	2A	1095	A
1	2A	1096	A
1	2A	1105	U
1	2A	1109	C
1	2A	1110	G
1	2A	1111	A

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Mol	Chain	Res	Type
1	2A	1112	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	1141	U
1	2A	1142(A)	A
1	2A	1169	G
1	2A	1171	G
1	2A	1195	G
1	2A	1211	U
1	2A	1212	G
1	2A	1219	G
1	2A	1220	A
1	2A	1241	A
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1273	U
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1308	A
1	2A	1314	C
1	2A	1342	A
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1392	A
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G

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Mol	Chain	Res	Type
1	2A	1427	A
1	2A	1428	C
1	2A	1445	A
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	1490	A
1	2A	1493	C
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C
1	2A	1509(A)	A
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1559	G
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1583	A
1	2A	1584	C
1	2A	1586	A
1	2A	1595	G
1	2A	1608	A
1	2A	1610	A
1	2A	1629	U
1	2A	1640	C
1	2A	1648	C
1	2A	1654	A
1	2A	1674	G
1	2A	1675	C
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1703	G
1	2A	1721	G
1	2A	1722	A

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Mol	Chain	Res	Type
1	2A	1746	G
1	2A	1750	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1816	G
1	2A	1828	G
1	2A	1829	A
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A
1	2A	1848	A
1	2A	1858	G
1	2A	1877	A
1	2A	1878	G
1	2A	1882	C
1	2A	1900	A
1	2A	1906	G
1	2A	1913	A
1	2A	1914	C
1	2A	1921	G
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	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G

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Mol	Chain	Res	Type
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2062	A
1	2A	2069	G
1	2A	2095	C
1	2A	2096	U
1	2A	2099	U
1	2A	2100	G
1	2A	2103	C
1	2A	2104	G
1	2A	2105	C
1	2A	2106	G
1	2A	2107	C
1	2A	2108	C
1	2A	2109	U
1	2A	2110	G
1	2A	2111	C
1	2A	2112	G
1	2A	2115	G
1	2A	2116	G
1	2A	2117	A
1	2A	2118	U
1	2A	2119	A
1	2A	2120	G
1	2A	2123	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2131	G
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2136	C
1	2A	2137	C
1	2A	2138	C
1	2A	2141	G
1	2A	2145	C

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Mol	Chain	Res	Type
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G
1	2A	2149	G
1	2A	2150	U
1	2A	2151	G
1	2A	2158	A
1	2A	2159	G
1	2A	2161	C
1	2A	2162	G
1	2A	2163	C
1	2A	2164	C
1	2A	2165	G
1	2A	2166	G
1	2A	2172	U
1	2A	2173	A
1	2A	2176	A
1	2A	2178	C
1	2A	2181	G
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	2239	G
1	2A	2243	U
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	2292	C
1	2A	2302	G

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Mol	Chain	Res	Type
1	2A	2305	A
1	2A	2308	G
1	2A	2311	A
1	2A	2312	U
1	2A	2318	G
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	2350	C
1	2A	2354	G
1	2A	2358	G
1	2A	2366	A
1	2A	2379	G
1	2A	2383	G
1	2A	2385	C
1	2A	2402	C
1	2A	2406	U
1	2A	2410	G
1	2A	2414	G
1	2A	2419	U
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	2459	A
1	2A	2470	G
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2487	G

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Mol	Chain	Res	Type
1	2A	2502	G
1	2A	2504	U
1	2A	2505	G
1	2A	2517	C
1	2A	2518	A
1	2A	2520	C
1	2A	2529	G
1	2A	2554	U
1	2A	2555	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2585	U
1	2A	2602	A
1	2A	2603	G
1	2A	2611	U
1	2A	2612	C
1	2A	2629	A
1	2A	2630	G
1	2A	2654	A
1	2A	2663	G
1	2A	2682	U
1	2A	2689	U
1	2A	2690	C
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2721	A
1	2A	2726	U
1	2A	2733	A
1	2A	2757	A
1	2A	2758	A
1	2A	2765	A
1	2A	2778	A
1	2A	2802	G
1	2A	2803	C
1	2A	2818	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A

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Mol	Chain	Res	Type
1	2A	2872	G
1	2A	2880	C
1	2A	2891	G
1	2A	2894	G
2	2B	2	C
2	2B	8	U
2	2B	13	A
2	2B	30	C
2	2B	31	C
2	2B	32	C
2	2B	42	C
2	2B	51	G
2	2B	56	G
2	2B	64	C
2	2B	67	G
2	2B	73	A
2	2B	79	C
2	2B	84	C
2	2B	108	U
2	2B	110	G
2	2B	118	G
2	2B	120	A
32	2a	5	U
32	2a	6	G
32	2a	7	G
32	2a	9	G
32	2a	22	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A
32	2a	51	A
32	2a	59	A
32	2a	61	G
32	2a	65	U
32	2a	66	G
32	2a	79	G
32	2a	88	A
32	2a	89	C
32	2a	101	A
32	2a	116	A

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Mol	Chain	Res	Type
32	2a	121	C
32	2a	131	C
32	2a	148	G
32	2a	156	G
32	2a	163	C
32	2a	173	U
32	2a	174	C
32	2a	182	U
32	2a	189(C)	C
32	2a	189(E)	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	227	G
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	262	A
32	2a	266	G
32	2a	267	C
32	2a	269	C
32	2a	281	G
32	2a	289	G
32	2a	298	A
32	2a	306	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	345	C
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	360	A
32	2a	367	U
32	2a	372	C
32	2a	384	G
32	2a	397	A

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Mol	Chain	Res	Type
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	441	A
32	2a	442	C
32	2a	446	G
32	2a	451	A
32	2a	452	A
32	2a	458	C
32	2a	461	A
32	2a	470	C
32	2a	471	G
32	2a	476	G
32	2a	477	A
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	506	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	561	U
32	2a	562	C
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	592	G

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Mol	Chain	Res	Type
32	2a	596	C
32	2a	630	G
32	2a	631	G
32	2a	632	A
32	2a	641	U
32	2a	653	A
32	2a	665	A
32	2a	672	U
32	2a	685	G
32	2a	688	G
32	2a	695	A
32	2a	723	U
32	2a	724	G
32	2a	731	G
32	2a	734	G
32	2a	735	C
32	2a	748	C
32	2a	749	C
32	2a	753	A
32	2a	755	G
32	2a	777	A
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	836	G
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	859	A
32	2a	870	U
32	2a	902	G
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	934	C
32	2a	958	A
32	2a	960	U

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Mol	Chain	Res	Type
32	2a	961	U
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	994	A
32	2a	995	C
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	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1030(C)	G
32	2a	1034	G
32	2a	1041	A
32	2a	1043	C
32	2a	1047	G
32	2a	1053	G
32	2a	1054	C
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1081	G
32	2a	1094	G
32	2a	1095	U
32	2a	1097	C
32	2a	1101	A

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Mol	Chain	Res	Type
32	2a	1117	G
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C
32	2a	1136	U
32	2a	1137	C
32	2a	1138	G
32	2a	1139	G
32	2a	1140	C
32	2a	1146	A
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1159	U
32	2a	1168	A
32	2a	1176	A
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	1224	G
32	2a	1227	A
32	2a	1228	C
32	2a	1238	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1269	A
32	2a	1270	C
32	2a	1278	U
32	2a	1279	A
32	2a	1281	U
32	2a	1282	C
32	2a	1283	G
32	2a	1285	A
32	2a	1286	A
32	2a	1287	A
32	2a	1290	G
32	2a	1300	G
32	2a	1302	U

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Mol	Chain	Res	Type
32	2a	1303	C
32	2a	1305	G
32	2a	1316	G
32	2a	1317	C
32	2a	1319	A
32	2a	1320	C
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1353	G
32	2a	1363	C
32	2a	1397	C
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1447	A
32	2a	1456	G
32	2a	1458	G
32	2a	1492	A
32	2a	1497	G
32	2a	1499	A
32	2a	1503	A
32	2a	1504	G
32	2a	1505	G
32	2a	1506	U
32	2a	1507	A
32	2a	1517	G
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G
32	2a	1531	A

All (65) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	115	G
1	1A	302	A
1	1A	509	A
1	1A	732	A
1	1A	793	A
1	1A	811	A
1	1A	821	A

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Mol	Chain	Res	Type
1	1A	874	U
1	1A	913	A
1	1A	935	C
1	1A	941	U
1	1A	1003	U
1	1A	1019	G
1	1A	1067	A
1	1A	1093	G
1	1A	1188	A
1	1A	1201	A
1	1A	1219	A
1	1A	1220	U
1	1A	1221	G
1	1A	1255	A
1	1A	1654	A
1	1A	1700	G
1	1A	2250	G
1	1A	2418	U
1	1A	2434	A
1	1A	2442	A
1	1A	2614	A
1	1A	2701	U
1	2A	9	U
1	2A	195	A
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	685	A
1	2A	752	A
1	2A	764	A
1	2A	827	U
1	2A	840	C
1	2A	856	C
1	2A	900	A
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

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Mol	Chain	Res	Type
1	2A	1240	U
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	2317	C
1	2A	2321	G
1	2A	2406	U
1	2A	2601	C
1	2A	2602	A
1	2A	2689	U
1	2A	2756	U

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
32	5MC	2a	1404	32	18,22,23	0.95	2 (11%)	26,32,35	1.24	4 (15%)
32	7MG	1a	527	32,54	22,26,27	1.43	3 (13%)	29,39,42	2.34	7 (24%)
1	PSU	2A	1911	1	18,21,22	1.37	2 (11%)	22,30,33	1.91	3 (13%)
1	5MU	1A	1961	54,1	19,22,23	1.45	5 (26%)	28,32,35	2.20	6 (21%)
1	5MC	2A	1942	1	18,22,23	0.97	2 (11%)	26,32,35	1.22	2 (7%)
1	2MA	1A	2515	54,1	17,25,26	1.01	1 (5%)	17,37,40	1.05	2 (11%)
32	MA6	1a	1519	32	19,26,27	1.02	1 (5%)	18,38,41	1.54	4 (22%)
1	PSU	2A	2605	1	18,21,22	1.40	3 (16%)	22,30,33	1.82	4 (18%)
32	7MG	2a	527	32,54	22,26,27	1.35	4 (18%)	29,39,42	2.46	5 (17%)
32	4OC	1a	1402	32	20,23,24	0.72	0	26,32,35	0.97	2 (7%)

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	0.96	1 (5%)	26,32,35	1.54	2 (7%)
1	4OC	2A	1920	1	19,22,24	0.82	0	26,31,35	0.92	1 (3%)
32	PSU	2a	516	32,54	18,21,22	1.31	2 (11%)	22,30,33	1.92	5 (22%)
32	2MG	2a	1207	32	18,26,27	0.85	0	16,38,41	1.08	1 (6%)
32	5MC	2a	967	32	18,22,23	1.01	2 (11%)	26,32,35	1.19	3 (11%)
32	M2G	1a	966	32	20,27,28	1.36	3 (15%)	22,40,43	1.06	2 (9%)
43	0TD	2l	92	43	7,9,10	4.67	1 (14%)	6,11,13	4.28	3 (50%)
1	2MA	2A	2503	54,1	17,25,26	0.96	0	17,37,40	1.09	2 (11%)
32	5MC	1a	1407	32	18,22,23	0.95	1 (5%)	26,32,35	1.20	3 (11%)
32	MA6	2a	1518	32	19,26,27	1.05	1 (5%)	18,38,41	1.67	4 (22%)
1	5MC	1A	1964	54,1	18,22,23	0.97	2 (11%)	26,32,35	1.13	2 (7%)
32	2MG	1a	1207	32	18,26,27	1.03	1 (5%)	16,38,41	1.51	5 (31%)
1	5MU	2A	1915	1	19,22,23	1.43	4 (21%)	28,32,35	2.18	8 (28%)
1	5MC	1A	1984	54,1	18,22,23	1.01	2 (11%)	26,32,35	1.20	4 (15%)
32	PSU	1a	516	32,54	18,21,22	1.38	2 (11%)	22,30,33	1.79	4 (18%)
1	5MU	1A	1937	1	19,22,23	1.44	4 (21%)	28,32,35	2.18	8 (28%)
1	5MU	2A	1939	1	19,22,23	1.45	5 (26%)	28,32,35	2.28	6 (21%)
32	4OC	2a	1402	32	20,23,24	0.77	0	26,32,35	1.11	1 (3%)
1	4OC	1A	1942	1	19,22,24	0.82	0	26,31,35	0.87	1 (3%)
1	OMG	1A	2263	54,1	18,26,27	1.05	1 (5%)	19,38,41	1.12	2 (10%)
1	2MU	2A	2552	54,1	19,22,24	1.22	3 (15%)	26,31,36	1.91	6 (23%)
1	PSU	1A	2617	54,1	18,21,22	1.38	3 (16%)	22,30,33	1.79	4 (18%)
32	MA6	2a	1519	32	19,26,27	0.97	1 (5%)	18,38,41	1.84	5 (27%)
32	M2G	2a	966	32	20,27,28	1.55	4 (20%)	22,40,43	0.81	1 (4%)
32	5MC	1a	967	32	18,22,23	1.01	2 (11%)	26,32,35	1.13	2 (7%)
1	PSU	1A	1933	1	18,21,22	1.36	2 (11%)	22,30,33	2.01	4 (18%)
1	PSU	2A	1917	1	18,21,22	1.32	2 (11%)	22,30,33	1.94	3 (13%)
32	5MC	2a	1407	32	18,22,23	0.98	2 (11%)	26,32,35	1.18	3 (11%)
1	2MU	1A	2564	54,1	19,22,24	1.32	4 (21%)	26,31,36	1.79	6 (23%)
1	5MC	2A	1962	54,1	18,22,23	0.94	2 (11%)	26,32,35	1.11	2 (7%)
1	PSU	1A	1939	1	18,21,22	1.33	2 (11%)	22,30,33	1.74	4 (18%)
32	5MC	1a	1404	32	18,22,23	0.92	2 (11%)	26,32,35	1.14	3 (11%)
32	5MC	2a	1400	32	18,22,23	0.95	2 (11%)	26,32,35	1.23	2 (7%)
32	MA6	1a	1518	32	19,26,27	0.96	1 (5%)	18,38,41	1.66	5 (27%)
1	OMG	2A	2251	54,1	18,26,27	0.87	1 (5%)	19,38,41	1.19	3 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	UR3	2a	1498	32,54	19,22,23	0.95	1 (5%)	26,32,35	1.48	2 (7%)
32	5MC	1a	1400	32	18,22,23	0.98	2 (11%)	26,32,35	1.19	3 (11%)
43	0TD	1l	92	43	7,9,10	4.80	1 (14%)	6,11,13	3.20	3 (50%)

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	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
32	7MG	1a	527	32,54	-	0/7/37/38	0/3/3/3
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	5MU	1A	1961	54,1	-	0/7/25/26	0/2/2/2
1	5MC	2A	1942	1	-	0/7/25/26	0/2/2/2
1	2MA	1A	2515	54,1	-	2/3/25/26	0/3/3/3
32	MA6	1a	1519	32	-	3/7/29/30	0/3/3/3
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
32	7MG	2a	527	32,54	-	0/7/37/38	0/3/3/3
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
1	4OC	2A	1920	1	-	0/9/27/30	0/2/2/2
32	PSU	2a	516	32,54	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	0/5/27/28	0/3/3/3
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
43	0TD	2l	92	43	-	1/7/12/14	-
1	2MA	2A	2503	54,1	-	1/3/25/26	0/3/3/3
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	MA6	2a	1518	32	-	2/7/29/30	0/3/3/3
1	5MC	1A	1964	54,1	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	2/5/27/28	0/3/3/3
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
1	5MC	1A	1984	54,1	-	2/7/25/26	0/2/2/2
32	PSU	1a	516	32,54	-	0/7/25/26	0/2/2/2
1	5MU	1A	1937	1	-	2/7/25/26	0/2/2/2
1	5MU	2A	1939	1	-	0/7/25/26	0/2/2/2
32	4OC	2a	1402	32	-	2/9/29/30	0/2/2/2
1	4OC	1A	1942	1	-	1/9/27/30	0/2/2/2
1	OMG	1A	2263	54,1	-	1/5/27/28	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	2MU	2A	2552	54,1	-	0/9/27/28	0/2/2/2
1	PSU	1A	2617	54,1	-	0/7/25/26	0/2/2/2
32	MA6	2a	1519	32	-	4/7/29/30	0/3/3/3
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
1	PSU	1A	1933	1	-	0/7/25/26	0/2/2/2
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
1	2MU	1A	2564	54,1	-	0/9/27/28	0/2/2/2
1	5MC	2A	1962	54,1	-	0/7/25/26	0/2/2/2
1	PSU	1A	1939	1	-	0/7/25/26	0/2/2/2
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	MA6	1a	1518	32	-	3/7/29/30	0/3/3/3
1	OMG	2A	2251	54,1	-	0/5/27/28	0/3/3/3
32	UR3	2a	1498	32,54	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	1/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	3/7/12/14	-

All (92) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	1l	92	0TD	CB-SB	-12.29	1.69	1.82
43	2l	92	0TD	CB-SB	-12.04	1.70	1.82
32	2a	966	M2G	C2-N3	4.91	1.36	1.30
32	1a	966	M2G	C2-N3	4.02	1.35	1.30
32	1a	527	7MG	C4-N9	-3.94	1.33	1.37
1	2A	1911	PSU	C6-C5	3.41	1.39	1.35
1	1A	1933	PSU	C6-C5	3.39	1.39	1.35
32	1a	516	PSU	C6-C5	3.33	1.39	1.35
1	1A	1939	PSU	C6-C5	3.32	1.39	1.35
1	2A	1917	PSU	C6-C5	3.18	1.39	1.35
1	1A	2263	OMG	C6-N1	-3.05	1.33	1.37
1	1A	1961	5MU	C4-N3	-3.05	1.33	1.38
1	1A	2617	PSU	C4-N3	-3.04	1.33	1.38
32	2a	966	M2G	C2-N2	2.99	1.40	1.35
1	2A	1915	5MU	C2-N1	2.96	1.43	1.38
1	1A	1937	5MU	C2-N1	2.96	1.43	1.38
32	1a	527	7MG	C5-C4	2.96	1.47	1.38
32	2a	527	7MG	C4-N9	-2.96	1.34	1.37
1	1A	2617	PSU	C6-C5	2.92	1.38	1.35
1	2A	2605	PSU	C6-C5	2.90	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1518	MA6	C5-C4	2.88	1.48	1.40
1	2A	1939	5MU	C4-C5	2.88	1.49	1.44
32	2a	516	PSU	C6-C5	2.88	1.38	1.35
1	2A	1915	5MU	C6-C5	2.86	1.39	1.34
1	2A	1939	5MU	C6-C5	2.86	1.39	1.34
32	2a	527	7MG	C5-C4	2.86	1.47	1.38
32	2a	967	5MC	C6-C5	2.81	1.39	1.34
32	1a	1407	5MC	C6-C5	2.80	1.39	1.34
1	2A	2605	PSU	C4-N3	-2.80	1.33	1.38
1	1A	2564	2MU	C4-N3	-2.78	1.33	1.38
1	2A	1962	5MC	C6-C5	2.77	1.39	1.34
32	2a	1407	5MC	C6-C5	2.74	1.39	1.34
1	1A	1937	5MU	C6-C5	2.74	1.39	1.34
32	1a	966	M2G	C2-N2	2.70	1.40	1.35
1	1A	1961	5MU	C6-C5	2.68	1.39	1.34
1	1A	1984	5MC	C6-C5	2.67	1.39	1.34
1	1A	1984	5MC	C6-N1	-2.64	1.33	1.38
32	2a	1404	5MC	C6-C5	2.64	1.38	1.34
32	1a	967	5MC	C6-C5	2.63	1.38	1.34
32	1a	1404	5MC	C6-C5	2.63	1.38	1.34
32	1a	1400	5MC	C6-N1	-2.62	1.33	1.38
32	2a	966	M2G	C6-N1	-2.62	1.34	1.37
1	1A	1964	5MC	C6-C5	2.61	1.38	1.34
32	2a	1400	5MC	C6-C5	2.61	1.38	1.34
32	2a	527	7MG	C6-N1	-2.60	1.34	1.38
1	2A	1911	PSU	C4-N3	-2.59	1.34	1.38
32	1a	1519	MA6	C5-C4	2.54	1.47	1.40
1	2A	1939	5MU	C4-N3	-2.54	1.34	1.38
32	1a	1400	5MC	C6-C5	2.53	1.38	1.34
32	1a	516	PSU	C4-N3	-2.52	1.34	1.38
1	2A	1942	5MC	C6-C5	2.52	1.38	1.34
1	1A	1939	PSU	C4-N3	-2.51	1.34	1.38
32	1a	966	M2G	C6-N1	-2.51	1.34	1.37
1	2A	1917	PSU	C4-N3	-2.51	1.34	1.38
1	2A	1915	5MU	C4-N3	-2.51	1.34	1.38
1	1A	1964	5MC	C6-N1	-2.50	1.33	1.38
1	1A	1937	5MU	C4-N3	-2.49	1.34	1.38
32	1a	1518	MA6	C5-C4	2.48	1.47	1.40
32	1a	1207	2MG	C6-N1	-2.48	1.34	1.37
1	2A	2552	2MU	C4-N3	-2.47	1.34	1.38
1	1A	1933	PSU	C4-N3	-2.46	1.34	1.38
1	1A	2564	2MU	C5-C4	2.46	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1519	MA6	C5-C4	2.44	1.47	1.40
1	2A	1942	5MC	C6-N1	-2.42	1.33	1.38
32	2a	516	PSU	C4-N3	-2.42	1.34	1.38
32	1a	527	7MG	C6-N1	-2.41	1.34	1.38
1	2A	2605	PSU	C2-N3	-2.37	1.33	1.37
1	1A	1961	5MU	C2-N3	-2.35	1.33	1.38
1	2A	2251	OMG	C6-N1	-2.34	1.34	1.37
1	1A	1961	5MU	C4-C5	2.34	1.48	1.44
32	2a	1400	5MC	C6-N1	-2.34	1.34	1.38
1	2A	1962	5MC	C6-N1	-2.32	1.34	1.38
1	2A	1915	5MU	C4-C5	2.31	1.48	1.44
1	1A	1937	5MU	C4-C5	2.27	1.48	1.44
32	2a	1404	5MC	C6-N1	-2.27	1.34	1.38
1	2A	1939	5MU	C6-N1	-2.26	1.34	1.38
32	1a	967	5MC	C6-N1	-2.25	1.34	1.38
1	1A	2515	2MA	C2-N3	2.23	1.36	1.31
32	2a	527	7MG	C8-N9	2.21	1.47	1.46
32	2a	967	5MC	C6-N1	-2.21	1.34	1.38
1	1A	2617	PSU	C2-N3	-2.17	1.33	1.37
1	1A	1961	5MU	C6-N1	-2.16	1.34	1.38
32	2a	1498	UR3	C6-C5	2.15	1.40	1.35
1	2A	1939	5MU	C2-N1	2.15	1.41	1.38
1	2A	2552	2MU	C5-C4	2.14	1.48	1.43
1	2A	2552	2MU	C2-N3	-2.13	1.34	1.38
1	1A	2564	2MU	C6-C5	2.13	1.40	1.35
32	1a	1404	5MC	C6-N1	-2.13	1.34	1.38
32	2a	1407	5MC	C6-N1	-2.12	1.34	1.38
1	1A	2564	2MU	C2-N3	-2.12	1.34	1.38
32	2a	966	M2G	C5-C4	2.05	1.48	1.43
32	1a	1498	UR3	C6-C5	2.03	1.39	1.35

All (167) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	2l	92	0TD	CSB-SB-CB	-9.79	84.73	102.44
32	2a	527	7MG	N9-C4-N3	8.32	137.92	125.47
32	1a	527	7MG	N9-C4-N3	8.04	137.50	125.47
32	1a	1498	UR3	C4-N3-C2	-6.40	118.53	124.56
1	1A	1933	PSU	N1-C2-N3	6.37	122.35	115.13
32	2a	1498	UR3	C4-N3-C2	-6.25	118.68	124.56
43	1l	92	0TD	CSB-SB-CB	-6.17	91.28	102.44
1	2A	1911	PSU	N1-C2-N3	6.07	122.00	115.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1917	PSU	N1-C2-N3	5.90	121.82	115.13
1	2A	1939	5MU	C4-N3-C2	-5.89	119.73	127.35
32	2a	516	PSU	N1-C2-N3	5.88	121.79	115.13
1	1A	2617	PSU	N1-C2-N3	5.78	121.67	115.13
32	2a	527	7MG	N9-C8-N7	-5.70	95.23	103.38
1	2A	1939	5MU	N3-C2-N1	5.68	122.43	114.89
1	2A	2605	PSU	N1-C2-N3	5.60	121.47	115.13
32	1a	516	PSU	N1-C2-N3	5.54	121.41	115.13
1	1A	1961	5MU	C4-N3-C2	-5.41	120.35	127.35
1	2A	2552	2MU	N3-C2-N1	5.36	122.00	114.89
1	1A	2564	2MU	N3-C2-N1	5.26	121.87	114.89
32	2a	527	7MG	C5-C4-N3	-5.22	118.18	128.13
1	1A	1939	PSU	N1-C2-N3	5.18	121.00	115.13
1	1A	1961	5MU	C5-C4-N3	5.14	119.70	115.31
32	1a	527	7MG	N9-C8-N7	-5.05	96.15	103.38
32	1a	527	7MG	C5-C4-N3	-4.90	118.79	128.13
1	1A	1961	5MU	N3-C2-N1	4.80	121.26	114.89
1	2A	1915	5MU	N3-C2-N1	4.75	121.20	114.89
1	2A	1939	5MU	C5-C6-N1	-4.75	118.45	123.34
1	1A	1937	5MU	N3-C2-N1	4.73	121.17	114.89
1	1A	1961	5MU	C5-C6-N1	-4.73	118.47	123.34
1	2A	1915	5MU	C4-N3-C2	-4.67	121.31	127.35
1	1A	1937	5MU	C4-N3-C2	-4.64	121.34	127.35
1	2A	2552	2MU	C4-N3-C2	-4.56	120.57	126.58
1	1A	1937	5MU	C5-C4-N3	4.43	119.09	115.31
32	2a	527	7MG	C2-N3-C4	4.29	119.94	112.30
1	2A	1917	PSU	O2-C2-N1	-4.28	118.07	122.79
32	2a	1400	5MC	C5-C6-N1	-4.25	118.96	123.34
1	2A	1915	5MU	C5-C4-N3	4.21	118.90	115.31
1	2A	1939	5MU	C5-C4-N3	4.18	118.88	115.31
1	2A	1915	5MU	C1'-N1-C2	4.11	125.01	117.57
1	1A	1937	5MU	C1'-N1-C2	4.10	125.00	117.57
1	1A	1933	PSU	O2-C2-N1	-4.08	118.30	122.79
1	1A	1933	PSU	C4-N3-C2	-4.05	120.50	126.34
32	2a	1404	5MC	C5-C6-N1	-4.05	119.17	123.34
32	2a	1519	MA6	C4-C5-N7	-4.03	105.19	109.40
1	2A	1915	5MU	O4-C4-C5	-4.02	120.24	124.90
1	1A	1937	5MU	O4-C4-C5	-4.02	120.24	124.90
32	1a	1400	5MC	C5-C6-N1	-3.95	119.28	123.34
32	2a	516	PSU	C4-N3-C2	-3.92	120.69	126.34
1	2A	1911	PSU	C4-N3-C2	-3.92	120.69	126.34
32	1a	527	7MG	C2-N3-C4	3.90	119.26	112.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2605	PSU	C4-N3-C2	-3.88	120.75	126.34
1	2A	1917	PSU	C4-N3-C2	-3.87	120.76	126.34
43	1l	92	0TD	OD2-CG-CB	3.76	121.27	113.15
1	1A	2564	2MU	C4-N3-C2	-3.75	121.63	126.58
1	1A	1961	5MU	O4-C4-C5	-3.72	120.59	124.90
1	2A	1962	5MC	C5-C6-N1	-3.72	119.52	123.34
32	1a	1518	MA6	C9-N6-C6	-3.71	108.27	119.51
1	1A	1964	5MC	C5-C6-N1	-3.69	119.55	123.34
1	2A	1939	5MU	O4-C4-C5	-3.68	120.64	124.90
32	2a	967	5MC	C5-C6-N1	-3.67	119.56	123.34
1	2A	2552	2MU	O2-C2-N1	-3.66	117.92	122.79
1	1A	2617	PSU	C4-N3-C2	-3.65	121.07	126.34
32	2a	1519	MA6	C10-N6-C6	-3.60	108.61	119.51
1	2A	1942	5MC	C5-C6-N1	-3.60	119.64	123.34
32	1a	1404	5MC	C5-C6-N1	-3.58	119.66	123.34
32	2a	516	PSU	O2-C2-N1	-3.57	118.86	122.79
32	1a	516	PSU	C4-N3-C2	-3.56	121.20	126.34
1	1A	1939	PSU	C4-N3-C2	-3.54	121.23	126.34
32	1a	1518	MA6	C4-C5-N7	-3.51	105.74	109.40
1	1A	2564	2MU	C2'-C1'-N1	-3.48	107.46	114.22
32	2a	1407	5MC	C5-C6-N1	-3.48	119.76	123.34
1	1A	1937	5MU	C1'-N1-C6	-3.40	115.47	121.12
1	2A	1915	5MU	C1'-N1-C6	-3.38	115.50	121.12
32	2a	1518	MA6	C4-C5-N7	-3.36	105.90	109.40
32	2a	1518	MA6	C9-N6-C6	-3.31	109.50	119.51
1	2A	1911	PSU	O2-C2-N1	-3.28	119.18	122.79
32	1a	967	5MC	C5-C6-N1	-3.27	119.97	123.34
32	2a	1518	MA6	N3-C2-N1	-3.18	123.71	128.68
32	1a	1407	5MC	C5-C6-N1	-3.16	120.08	123.34
32	1a	516	PSU	O2-C2-N1	-3.11	119.36	122.79
1	2A	1939	5MU	O2-C2-N1	-3.11	118.66	122.79
32	2a	1519	MA6	N3-C2-N1	-3.09	123.84	128.68
32	1a	1519	MA6	C9-N6-C6	-3.09	110.15	119.51
32	1a	1518	MA6	N3-C2-N1	-3.09	123.85	128.68
1	1A	1961	5MU	O2-C2-N1	-3.06	118.71	122.79
1	1A	1939	PSU	O2-C2-N1	-3.00	119.49	122.79
32	1a	1519	MA6	N3-C2-N1	-2.99	124.00	128.68
32	2a	1519	MA6	C10-N6-C9	-2.98	106.51	116.12
1	1A	1984	5MC	C5-C6-N1	-2.96	120.29	123.34
32	1a	1519	MA6	C4-C5-N7	-2.93	106.35	109.40
32	1a	1519	MA6	N1-C6-N6	2.92	120.13	117.06
1	1A	2515	2MA	C5-C6-N1	2.87	118.98	114.02

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2552	2MU	O4-C4-C5	-2.86	120.13	125.16
43	2l	92	0TD	OD2-CG-CB	2.82	119.25	113.15
1	2A	2552	2MU	C2'-C1'-N1	-2.81	108.77	114.22
32	2a	527	7MG	C5-C6-N1	2.74	115.81	110.99
32	2a	967	5MC	C5-C4-N3	-2.71	118.75	121.67
32	2a	1518	MA6	C10-N6-C9	-2.71	107.39	116.12
32	1a	1407	5MC	C5-C4-N3	-2.67	118.80	121.67
1	2A	2503	2MA	C8-N7-C5	2.65	108.05	102.99
32	2a	1519	MA6	C9-N6-C6	-2.64	111.53	119.51
1	2A	2503	2MA	C5-C6-N1	2.61	118.52	114.02
1	2A	2251	OMG	C5-C6-N1	2.56	118.47	113.95
32	2a	1402	4OC	C6-C5-C4	2.55	120.08	116.96
1	1A	2263	OMG	C8-N7-C5	2.55	107.84	102.99
32	1a	1400	5MC	C5-C4-N3	-2.55	118.93	121.67
32	1a	1407	5MC	O2-C2-N3	-2.54	118.21	122.33
1	1A	1937	5MU	O2-C2-N3	-2.53	116.79	121.50
1	1A	1984	5MC	CM5-C5-C6	-2.53	119.47	122.85
1	2A	2552	2MU	C5-C4-N3	2.52	118.62	114.84
32	1a	1207	2MG	C8-N7-C5	2.52	107.78	102.99
1	1A	2564	2MU	O2-C2-N1	-2.51	119.45	122.79
43	1l	92	0TD	OD1-CG-CB	-2.51	117.19	122.44
1	1A	1939	PSU	C6-C5-C4	-2.50	116.45	118.20
32	2a	1404	5MC	C5-C4-N3	-2.50	118.97	121.67
1	1A	1984	5MC	C5-C4-N3	-2.50	118.98	121.67
32	1a	1498	UR3	C3U-N3-C2	2.49	121.68	117.31
1	2A	1915	5MU	C5-C6-N1	-2.47	120.80	123.34
32	2a	1407	5MC	C5-C4-N3	-2.47	119.01	121.67
1	2A	1942	5MC	C5-C4-N3	-2.43	119.05	121.67
1	1A	1937	5MU	C5-C6-N1	-2.43	120.84	123.34
1	1A	1964	5MC	C5-C4-N3	-2.42	119.06	121.67
1	1A	2263	OMG	C5-C6-N1	2.41	118.21	113.95
32	2a	967	5MC	CM5-C5-C6	-2.39	119.65	122.85
32	1a	1402	4OC	C6-C5-C4	2.38	119.88	116.96
32	1a	966	M2G	C8-N7-C5	2.38	107.53	102.99
32	2a	516	PSU	O4'-C1'-C2'	2.34	108.45	105.14
1	1A	2617	PSU	O2-C2-N1	-2.34	120.21	122.79
32	1a	527	7MG	C5-C6-N1	2.32	115.08	110.99
1	1A	1942	4OC	O2-C2-N3	-2.32	118.55	122.33
32	2a	1407	5MC	O2-C2-N3	-2.32	118.56	122.33
32	1a	1404	5MC	C5-C4-N3	-2.30	119.19	121.67
32	1a	1207	2MG	C5-C6-N1	2.30	118.02	113.95
32	1a	1402	4OC	CM4-N4-C4	-2.30	117.96	122.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	966	M2G	C5-C6-N1	2.30	118.01	113.95
32	1a	1207	2MG	O3'-C3'-C2'	2.29	119.24	111.82
1	2A	1920	4OC	O2-C2-N3	-2.28	118.62	122.33
32	1a	967	5MC	C5-C4-N3	-2.28	119.22	121.67
1	2A	2251	OMG	C8-N7-C5	2.27	107.31	102.99
1	2A	2251	OMG	O6-C6-C5	-2.26	119.95	124.37
1	2A	2605	PSU	O2-C2-N1	-2.26	120.30	122.79
32	1a	1518	MA6	C10-N6-C9	-2.23	108.94	116.12
1	2A	1915	5MU	O2-C2-N3	-2.23	117.36	121.50
32	2a	1207	2MG	C8-N7-C5	2.20	107.19	102.99
1	1A	1984	5MC	C1'-N1-C6	-2.20	117.47	121.12
1	1A	2515	2MA	C8-N7-C5	2.17	107.13	102.99
32	1a	527	7MG	CM7-N7-C5	2.17	132.00	126.40
32	2a	1404	5MC	O2-C2-N3	-2.17	118.81	122.33
32	1a	516	PSU	O4'-C1'-C2'	2.15	108.18	105.14
1	1A	2564	2MU	C5-C4-N3	2.15	118.06	114.84
1	2A	2605	PSU	C5-C6-N1	-2.11	118.94	122.11
32	1a	1400	5MC	CM5-C5-C6	-2.11	120.03	122.85
1	1A	2617	PSU	C5-C6-N1	-2.11	118.95	122.11
1	2A	1962	5MC	C5-C4-N3	-2.09	119.42	121.67
32	2a	1400	5MC	C5-C4-N3	-2.09	119.42	121.67
32	1a	1518	MA6	C10-N6-C6	-2.09	113.19	119.51
32	2a	516	PSU	C5-C6-N1	-2.09	118.98	122.11
32	1a	1404	5MC	CM5-C5-C6	-2.08	120.07	122.85
1	1A	2564	2MU	C6'-O2'-C2'	-2.08	109.07	114.52
32	1a	1207	2MG	CM2-N2-C2	-2.08	119.28	123.86
32	2a	966	M2G	C5-C6-N1	2.07	117.60	113.95
32	1a	1207	2MG	O3'-C3'-C4'	2.06	117.01	111.05
32	1a	527	7MG	C5-C4-N9	-2.03	103.71	106.35
32	2a	1404	5MC	CM5-C5-C6	-2.03	120.14	122.85
1	1A	1933	PSU	O4'-C1'-C2'	2.01	107.98	105.14
32	2a	1498	UR3	C3U-N3-C4	2.01	120.76	117.89
43	2l	92	0TD	OD1-CG-CB	-2.01	118.24	122.44

There are no chirality outliers.

All (34) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	1937	5MU	O4'-C1'-N1-C2
1	1A	1937	5MU	O4'-C1'-N1-C6
32	1a	1207	2MG	N1-C2-N2-CM2
32	1a	1207	2MG	N3-C2-N2-CM2

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Mol	Chain	Res	Type	Atoms
32	1a	1518	MA6	C5-C6-N6-C9
32	1a	1518	MA6	C5-C6-N6-C10
32	1a	1519	MA6	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C5-C6-N6-C10
43	1l	92	0TD	O-C-CA-CB
1	2A	1915	5MU	O4'-C1'-N1-C2
1	2A	1915	5MU	O4'-C1'-N1-C6
32	2a	1518	MA6	C5-C6-N6-C10
32	2a	1519	MA6	C5-C6-N6-C9
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1402	4OC	O4'-C4'-C5'-O5'
32	2a	1402	4OC	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
32	1a	1518	MA6	N1-C6-N6-C9
32	2a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1518	MA6	C5-C6-N6-C9
32	2a	1519	MA6	C5-C6-N6-C10
43	1l	92	0TD	CG-CB-SB-CSB
43	2l	92	0TD	CG-CB-SB-CSB
1	2A	2503	2MA	O4'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
1	1A	2515	2MA	C4'-C5'-O5'-P
1	1A	2515	2MA	O4'-C4'-C5'-O5'
32	1a	1402	4OC	C3'-C2'-O2'-CM2
1	1A	1984	5MC	C2'-C1'-N1-C6
43	1l	92	0TD	SB-CB-CG-OD2
1	1A	1984	5MC	O4'-C1'-N1-C6
32	1a	1400	5MC	O4'-C4'-C5'-O5'
1	1A	1942	4OC	C2'-C1'-N1-C2
1	1A	2263	OMG	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 2389 ligands modelled in this entry, 2376 are monoatomic - leaving 13 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	$\#\|Z\| > 2$
56	EZP	1A	3987	-	21,26,26	2.81	3 (14%)	26,35,35	1.72	4 (15%)
60	SF4	1d	302	35	0,12,12	-	-	-		
60	SF4	2d	501	35	0,12,12	-	-	-		
57	MPD	1a	1854	-	7,7,7	0.38	0	9,10,10	0.38	0
56	EZP	2A	3709	-	21,26,26	3.58	3 (14%)	26,35,35	0.92	1 (3%)
57	MPD	1T	204	-	7,7,7	0.32	0	9,10,10	0.36	0
57	MPD	1A	3988	-	7,7,7	0.27	0	9,10,10	0.28	0
58	ARG	1F	314	-	10,11,11	0.70	0	11,13,13	1.03	2 (18%)
57	MPD	2A	3711	-	7,7,7	0.30	0	9,10,10	0.30	0
57	MPD	18	102	-	7,7,7	0.27	0	9,10,10	0.38	0
57	MPD	2A	3710	-	7,7,7	0.39	0	9,10,10	0.30	0
58	ARG	1B	228	54	10,11,11	0.74	1 (10%)	11,13,13	1.16	2 (18%)
57	MPD	2B	3020	-	7,7,7	0.30	0	9,10,10	0.30	0

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
56	EZP	1A	3987	-	-	7/24/26/26	0/2/2/2
60	SF4	1d	302	35	-	-	0/6/5/5
60	SF4	2d	501	35	-	-	0/6/5/5
57	MPD	1a	1854	-	-	2/5/5/5	-
56	EZP	2A	3709	-	-	7/24/26/26	0/2/2/2
57	MPD	1T	204	-	-	1/5/5/5	-
57	MPD	1A	3988	-	-	2/5/5/5	-
58	ARG	1F	314	-	-	1/11/11/11	-
57	MPD	2A	3711	-	-	3/5/5/5	-
57	MPD	18	102	-	-	1/5/5/5	-
57	MPD	2A	3710	-	-	0/5/5/5	-
58	ARG	1B	228	54	-	4/11/11/11	-
57	MPD	2B	3020	-	-	3/5/5/5	-

All (7) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	2A	3709	EZP	OAC-NAY	13.50	1.45	1.22
56	1A	3987	EZP	OAC-NAY	9.18	1.38	1.22
56	2A	3709	EZP	CAT-CAW	-8.10	1.39	1.51
56	1A	3987	EZP	CAT-CAW	-7.46	1.40	1.51
56	1A	3987	EZP	CAU-NAY	-4.60	1.34	1.45
56	2A	3709	EZP	CAU-NAY	-4.26	1.34	1.45
58	1B	228	ARG	OXT-C	-2.09	1.23	1.30

All (9) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	1A	3987	EZP	CAT-CAW-CAX	4.98	120.42	111.64
56	1A	3987	EZP	CAW-CAX-NAP	4.35	118.30	110.05
58	1B	228	ARG	OXT-C-O	-2.68	118.01	124.09
56	1A	3987	EZP	CAI-CAU-NAY	2.44	121.22	119.38
58	1F	314	ARG	OXT-C-O	-2.43	118.57	124.09
56	2A	3709	EZP	CAW-CAX-NAP	2.27	114.35	110.05
56	1A	3987	EZP	CA-C-NAP	-2.26	113.01	116.15
58	1F	314	ARG	OXT-C-CA	2.23	120.97	113.38
58	1B	228	ARG	OXT-C-CA	2.14	120.69	113.38

There are no chirality outliers.

All (31) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
56	1A	3987	EZP	NAP-C-CA-CB
56	1A	3987	EZP	O-C-CA-CB
56	1A	3987	EZP	C-CA-CB-CG
56	2A	3709	EZP	NAP-C-CA-N
56	2A	3709	EZP	NAP-C-CA-CB
56	2A	3709	EZP	O-C-CA-N
56	2A	3709	EZP	O-C-CA-CB
56	2A	3709	EZP	C-CA-CB-CG
56	2A	3709	EZP	N-CA-CB-CG
57	18	102	MPD	C2-C3-C4-C5
58	1B	228	ARG	NE-CD-CG-CB
56	1A	3987	EZP	CAM-CAX-NAP-C
58	1B	228	ARG	CA-CB-CG-CD
56	1A	3987	EZP	CA-CB-CG-CD2
57	1T	204	MPD	C2-C3-C4-C5
57	2B	3020	MPD	C2-C3-C4-C5

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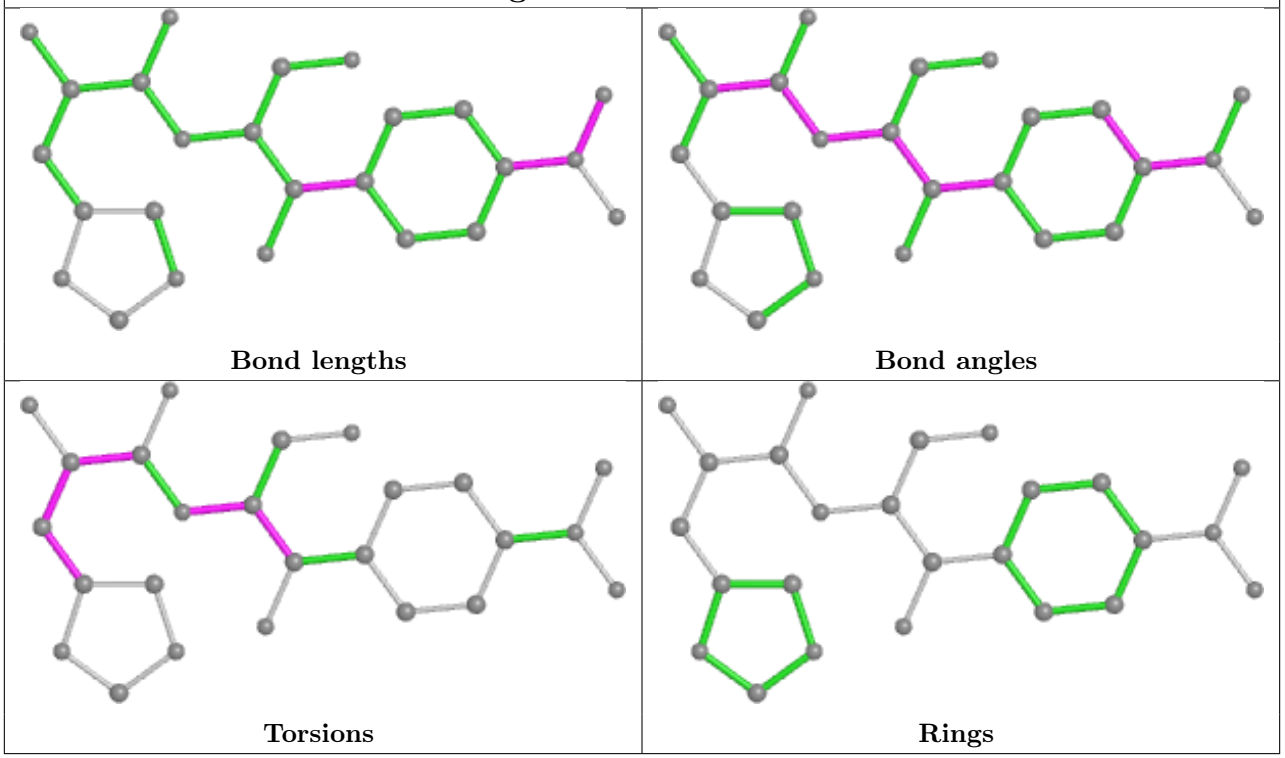
Mol	Chain	Res	Type	Atoms
56	1A	3987	EZP	N-CA-CB-CG
57	1a	1854	MPD	CM-C2-C3-C4
57	2A	3711	MPD	C1-C2-C3-C4
58	1F	314	ARG	CG-CD-NE-CZ
57	1A	3988	MPD	O2-C2-C3-C4
57	2B	3020	MPD	O2-C2-C3-C4
57	1A	3988	MPD	C2-C3-C4-C5
57	1a	1854	MPD	C2-C3-C4-C5
57	2A	3711	MPD	C2-C3-C4-C5
58	1B	228	ARG	OXT-C-CA-N
56	2A	3709	EZP	CA-CB-CG-CD2
58	1B	228	ARG	N-CA-CB-CG
56	1A	3987	EZP	OAE-CAW-CAX-CAM
57	2A	3711	MPD	C2-C3-C4-O4
57	2B	3020	MPD	C2-C3-C4-O4

There are no ring outliers.

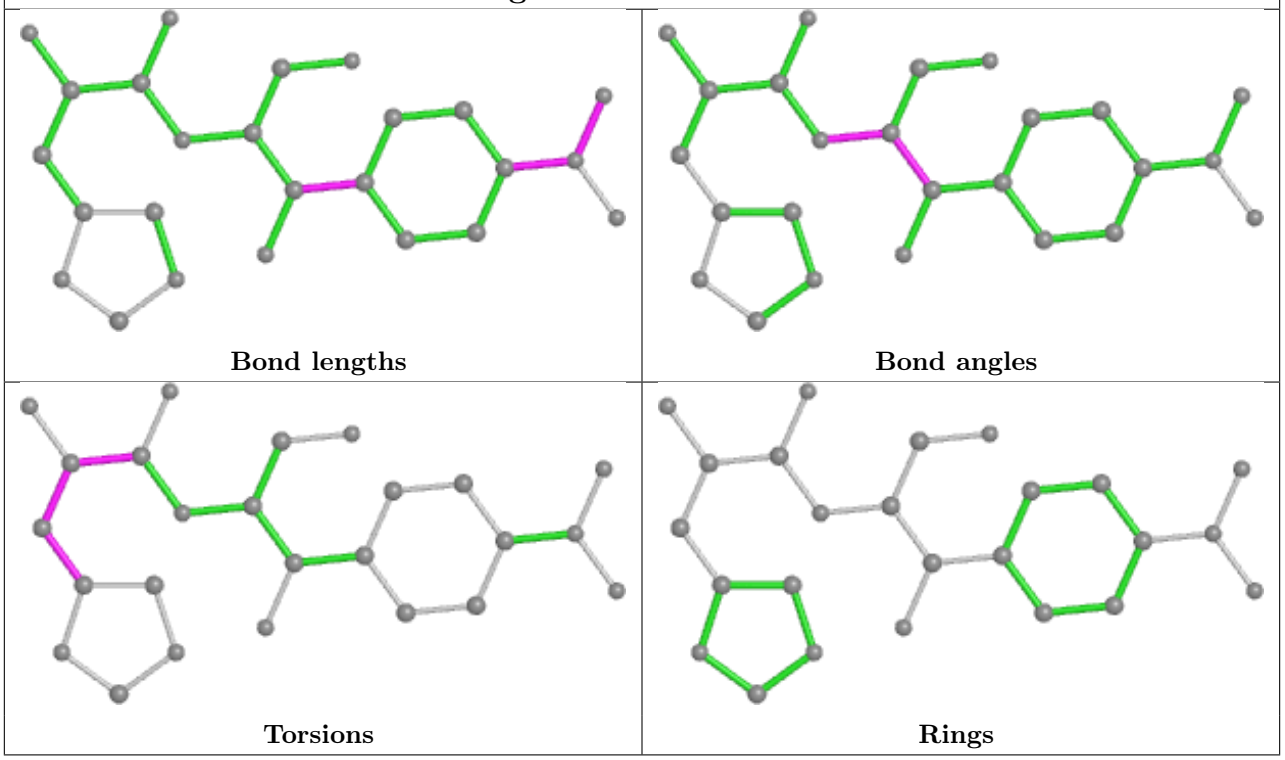
No monomer is involved in short contacts.

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 then 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.

Ligand EZP 1A 3987



Ligand EZP 2A 3709



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2861/2915 (98%)	0.42	57 (1%) 65 67	15, 31, 89, 105	0
1	2A	2856/2915 (97%)	0.28	65 (2%) 60 62	27, 50, 92, 103	0
2	1B	120/121 (99%)	0.05	0 100 100	24, 44, 58, 80	0
2	2B	120/121 (99%)	-0.06	0 100 100	52, 74, 83, 90	0
3	1D	275/276 (99%)	0.60	3 (1%) 80 82	17, 32, 46, 65	0
3	2D	275/276 (99%)	0.69	13 (4%) 31 30	26, 44, 56, 76	0
4	1E	204/206 (99%)	0.51	2 (0%) 82 83	16, 34, 55, 70	0
4	2E	204/206 (99%)	0.59	3 (1%) 73 76	29, 50, 66, 79	0
5	1F	203/210 (96%)	0.37	0 100 100	16, 35, 60, 83	0
5	2F	203/210 (96%)	0.39	3 (1%) 73 76	29, 60, 72, 85	0
6	1G	181/182 (99%)	0.16	2 (1%) 80 82	39, 56, 72, 80	0
6	2G	181/182 (99%)	0.59	13 (7%) 15 13	68, 77, 85, 89	0
7	1H	174/180 (96%)	0.29	1 (0%) 89 91	32, 46, 59, 64	0
7	2H	173/180 (96%)	0.72	20 (11%) 4 3	62, 75, 82, 86	0
8	1I	147/148 (99%)	0.15	3 (2%) 65 67	34, 66, 76, 83	0
8	2I	146/148 (98%)	0.49	15 (10%) 6 5	51, 69, 81, 84	0
9	1N	140/140 (100%)	0.41	0 100 100	22, 32, 53, 67	0
9	2N	140/140 (100%)	0.41	1 (0%) 87 89	43, 57, 71, 76	0
10	1O	122/122 (100%)	0.47	0 100 100	23, 34, 50, 58	0
10	2O	122/122 (100%)	0.58	5 (4%) 37 36	38, 51, 61, 69	0
11	1P	149/150 (99%)	0.36	1 (0%) 87 89	15, 38, 58, 71	0
11	2P	149/150 (99%)	0.66	7 (4%) 31 30	32, 59, 77, 80	0
12	1Q	141/141 (100%)	0.44	0 100 100	21, 35, 46, 62	0
12	2Q	141/141 (100%)	0.66	7 (4%) 28 27	40, 57, 67, 76	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	0.50	0 100 100	21, 29, 44, 50	0
13	2R	118/118 (100%)	0.45	2 (1%) 70 72	31, 44, 55, 65	0
14	1S	110/112 (98%)	0.31	1 (0%) 84 85	34, 45, 56, 65	0
14	2S	110/112 (98%)	0.48	9 (8%) 11 9	59, 69, 76, 81	0
15	1T	131/146 (89%)	0.30	1 (0%) 86 87	28, 38, 62, 75	0
15	2T	131/146 (89%)	0.33	1 (0%) 86 87	41, 52, 70, 76	0
16	1U	116/118 (98%)	0.63	1 (0%) 84 85	18, 25, 39, 57	0
16	2U	116/118 (98%)	0.79	9 (7%) 13 11	33, 52, 67, 74	0
17	1V	101/101 (100%)	0.36	0 100 100	15, 35, 54, 67	0
17	2V	101/101 (100%)	0.44	3 (2%) 50 51	31, 62, 72, 77	0
18	1W	112/113 (99%)	0.46	1 (0%) 84 85	19, 27, 46, 75	0
18	2W	112/113 (99%)	0.67	8 (7%) 16 14	29, 43, 59, 84	0
19	1X	95/96 (98%)	0.44	1 (1%) 80 82	23, 32, 58, 68	0
19	2X	95/96 (98%)	0.68	5 (5%) 26 25	43, 54, 69, 74	0
20	1Y	107/110 (97%)	0.39	1 (0%) 84 85	29, 42, 62, 67	0
20	2Y	107/110 (97%)	1.10	15 (14%) 2 1	49, 63, 73, 82	0
21	1Z	203/206 (98%)	0.13	2 (0%) 82 83	35, 51, 66, 76	0
21	2Z	201/206 (97%)	0.21	8 (3%) 38 37	57, 71, 79, 88	0
22	10	77/85 (90%)	0.56	1 (1%) 77 78	24, 31, 48, 54	0
22	20	77/85 (90%)	0.99	12 (15%) 2 1	43, 57, 67, 72	0
23	11	97/98 (98%)	0.83	5 (5%) 27 25	22, 39, 61, 69	0
23	21	97/98 (98%)	0.92	8 (8%) 11 9	35, 49, 71, 73	0
24	12	70/72 (97%)	0.24	1 (1%) 75 77	29, 44, 57, 78	0
24	22	70/72 (97%)	0.40	2 (2%) 51 52	53, 64, 71, 73	0
25	13	59/60 (98%)	0.44	0 100 100	20, 30, 55, 63	0
25	23	59/60 (98%)	1.13	14 (23%) 0 0	45, 55, 69, 77	0
26	14	69/71 (97%)	0.22	4 (5%) 23 22	50, 69, 86, 90	0
26	24	69/71 (97%)	0.48	6 (8%) 10 8	70, 83, 88, 91	0
27	15	59/60 (98%)	0.53	0 100 100	17, 27, 44, 54	0
27	25	59/60 (98%)	0.38	2 (3%) 45 45	29, 44, 59, 68	0
28	16	53/54 (98%)	0.15	0 100 100	28, 36, 48, 55	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.30	0 100 100	46, 54, 63, 68	0
29	17	48/49 (97%)	0.90	2 (4%) 36 35	17, 24, 49, 58	0
29	27	48/49 (97%)	0.85	4 (8%) 11 9	28, 36, 58, 65	0
30	18	64/65 (98%)	0.64	1 (1%) 72 74	23, 28, 34, 47	0
30	28	64/65 (98%)	0.88	4 (6%) 20 19	38, 49, 56, 63	0
31	19	37/37 (100%)	0.56	1 (2%) 54 55	22, 32, 49, 53	0
31	29	37/37 (100%)	1.34	8 (21%) 0 0	50, 60, 68, 69	0
32	1a	1488/1521 (97%)	0.11	20 (1%) 77 78	32, 62, 89, 104	0
32	2a	1492/1521 (98%)	0.13	23 (1%) 73 76	42, 71, 91, 103	0
33	1b	231/256 (90%)	0.33	9 (3%) 39 38	61, 74, 83, 88	0
33	2b	231/256 (90%)	0.72	34 (14%) 2 1	66, 80, 86, 90	0
34	1c	206/239 (86%)	0.55	11 (5%) 26 25	53, 67, 77, 81	0
34	2c	206/239 (86%)	0.92	31 (15%) 2 1	70, 79, 84, 91	0
35	1d	208/209 (99%)	0.72	20 (9%) 8 6	51, 66, 75, 81	0
35	2d	208/209 (99%)	1.14	39 (18%) 1 0	55, 68, 77, 79	0
36	1e	148/162 (91%)	0.49	4 (2%) 54 55	46, 59, 69, 80	0
36	2e	148/162 (91%)	0.82	20 (13%) 3 2	57, 68, 76, 83	0
37	1f	100/101 (99%)	0.27	1 (1%) 82 83	43, 60, 70, 74	0
37	2f	100/101 (99%)	0.02	0 100 100	52, 62, 70, 76	0
38	1g	155/156 (99%)	0.31	6 (3%) 39 38	56, 65, 76, 85	0
38	2g	155/156 (99%)	0.35	10 (6%) 18 17	68, 74, 81, 87	0
39	1h	137/138 (99%)	0.63	8 (5%) 23 22	51, 62, 71, 74	0
39	2h	137/138 (99%)	0.61	7 (5%) 28 26	58, 69, 74, 82	0
40	1i	127/128 (99%)	0.71	17 (13%) 3 2	52, 73, 79, 82	0
40	2i	126/128 (98%)	1.74	49 (38%) 0 0	67, 80, 85, 87	0
41	1j	97/105 (92%)	0.50	13 (13%) 3 2	52, 72, 83, 86	0
41	2j	96/105 (91%)	2.13	47 (48%) 0 0	71, 80, 85, 87	0
42	1k	114/129 (88%)	0.22	0 100 100	39, 58, 69, 73	0
42	2k	114/129 (88%)	0.62	7 (6%) 21 20	50, 66, 75, 81	0
43	1l	121/132 (91%)	0.46	4 (3%) 46 46	42, 54, 65, 70	0
43	2l	121/132 (91%)	0.97	16 (13%) 3 2	54, 62, 69, 77	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	116/126 (92%)	0.32	4 (3%) 45 45	52, 68, 75, 79	0
44	2m	114/126 (90%)	0.82	12 (10%) 6 4	73, 80, 85, 87	0
45	1n	60/61 (98%)	1.23	10 (16%) 1 1	57, 64, 72, 79	0
45	2n	60/61 (98%)	2.71	36 (60%) 0 0	71, 79, 85, 88	0
46	1o	88/89 (98%)	0.42	0 100 100	43, 60, 71, 77	0
46	2o	88/89 (98%)	0.61	2 (2%) 60 62	54, 67, 75, 78	0
47	1p	82/88 (93%)	1.04	12 (14%) 2 1	55, 67, 77, 80	0
47	2p	82/88 (93%)	0.80	8 (9%) 7 5	55, 65, 75, 82	0
48	1q	99/105 (94%)	0.49	6 (6%) 21 20	48, 63, 72, 73	0
48	2q	99/105 (94%)	0.55	7 (7%) 16 14	53, 63, 73, 79	0
49	1r	68/88 (77%)	0.26	1 (1%) 73 76	51, 60, 73, 76	0
49	2r	68/88 (77%)	0.35	2 (2%) 51 52	59, 67, 74, 76	0
50	1s	83/93 (89%)	0.14	1 (1%) 79 80	59, 70, 76, 79	0
50	2s	83/93 (89%)	0.98	15 (18%) 1 1	70, 82, 86, 88	0
51	1t	96/106 (90%)	0.78	15 (15%) 2 1	53, 66, 76, 82	0
51	2t	98/106 (92%)	0.45	7 (7%) 16 14	53, 64, 75, 77	0
52	1u	23/27 (85%)	1.77	9 (39%) 0 0	61, 66, 69, 72	0
52	2u	23/27 (85%)	2.31	14 (60%) 0 0	73, 76, 80, 82	0
53	1y	97/113 (85%)	0.62	4 (4%) 37 36	45, 56, 67, 71	0
53	2y	96/113 (84%)	2.26	51 (53%) 0 0	60, 72, 79, 83	0
All	All	20766/21468 (96%)	0.45	976 (4%) 31 30	15, 57, 84, 105	0

All (976) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	1A	1110	C	7.7
45	2n	59	ALA	7.6
1	1A	1122	C	7.4
40	2i	127	LYS	7.3
1	1A	1133	G	7.1
20	2Y	1	MET	7.0
26	24	49	PHE	7.0
1	2A	2602	A	6.7
53	2y	8	LYS	6.5
32	2a	1030(B)	C	6.3

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Mol	Chain	Res	Type	RSRZ
45	2n	25	VAL	6.1
1	1A	1111	U	6.1
40	1i	106	ALA	6.0
1	1A	1137	G	6.0
32	2a	1030(A)	G	6.0
1	1A	1136	U	5.9
45	2n	2	ALA	5.9
42	2k	13	GLN	5.8
34	2c	8	ILE	5.8
41	2j	44	VAL	5.8
1	1A	1112	U	5.8
35	2d	146	ILE	5.8
8	2I	3	VAL	5.7
35	2d	158	ILE	5.7
41	2j	63	PHE	5.6
52	2u	6	ARG	5.6
41	2j	40	LEU	5.5
26	24	45	GLY	5.5
53	2y	40	ILE	5.5
1	1A	2614	A	5.4
41	2j	62	HIS	5.3
41	2j	48	THR	5.3
41	2j	66	ARG	5.3
53	2y	88	LEU	5.3
23	21	2	SER	5.3
41	2j	64	GLU	5.3
41	2j	96	ILE	5.2
40	2i	109	VAL	5.2
41	2j	46	ARG	5.2
44	2m	102	ARG	5.1
53	2y	92	GLY	5.1
32	2a	1001(A)	G	5.1
52	2u	14	TRP	5.1
38	2g	7	ALA	5.1
23	11	2	SER	5.1
52	2u	15	ARG	5.0
32	1a	1036	G	5.0
51	1t	9	ASN	5.0
40	2i	114	TYR	5.0
41	2j	6	ILE	5.0
40	2i	115	GLY	5.0
45	2n	41	ARG	5.0

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Mol	Chain	Res	Type	RSRZ
1	2A	2153	G	4.9
40	2i	7	THR	4.9
1	1A	1126	C	4.9
41	2j	67	THR	4.9
45	2n	55	GLY	4.9
53	2y	38	HIS	4.8
41	2j	65	LEU	4.8
41	2j	45	ARG	4.8
45	2n	34	TYR	4.8
1	1A	1135	G	4.7
1	1A	2169	G	4.7
1	2A	2146	C	4.7
1	1A	1134	A	4.7
53	2y	73	ALA	4.6
41	2j	54	PHE	4.6
45	2n	44	LEU	4.6
34	2c	65	ALA	4.6
45	2n	61	TRP	4.5
45	2n	53	LEU	4.5
1	2A	2145	C	4.5
1	2A	2174	C	4.5
41	2j	47	PHE	4.5
41	2j	72	VAL	4.5
47	1p	19	ILE	4.4
1	1A	1124	U	4.4
20	2Y	5	MET	4.4
41	2j	49	VAL	4.4
1	2A	2142	C	4.4
1	2A	2802	G	4.4
34	2c	124	ILE	4.4
53	2y	78	ILE	4.4
1	2A	2140	C	4.4
34	2c	33	LEU	4.4
41	2j	38	ILE	4.4
41	2j	55	LYS	4.4
34	1c	193	TYR	4.4
45	2n	29	ARG	4.4
45	2n	31	ARG	4.4
21	2Z	191	VAL	4.3
6	2G	39	ILE	4.3
53	2y	39	ILE	4.3
1	1A	1123	A	4.3

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Mol	Chain	Res	Type	RSRZ
48	2q	98	LEU	4.3
1	2A	2793	G	4.3
45	2n	35	ARG	4.2
14	2S	32	LEU	4.2
12	2Q	104	PHE	4.2
53	2y	63	ALA	4.2
50	2s	82	GLY	4.2
1	1A	1113	A	4.2
32	1a	1034	G	4.2
41	2j	59	SER	4.2
1	2A	1509	C	4.2
20	2Y	35	TYR	4.2
40	2i	66	ARG	4.2
32	2a	1257	U	4.2
1	2A	1085	A	4.2
53	2y	93	GLU	4.2
19	2X	68	ARG	4.2
53	2y	9	GLN	4.2
40	2i	111	ARG	4.2
7	2H	166	GLY	4.1
45	2n	49	HIS	4.1
7	2H	115	VAL	4.1
38	1g	16	LEU	4.1
1	2A	2155	G	4.1
40	2i	18	PHE	4.1
36	2e	12	LEU	4.1
47	2p	19	ILE	4.1
45	2n	56	VAL	4.1
1	2A	2147	G	4.1
45	2n	58	LYS	4.1
35	1d	3	ARG	4.1
1	2A	34	C	4.1
34	2c	87	LEU	4.1
45	2n	37	PHE	4.1
35	1d	2	GLY	4.1
38	2g	154	TYR	4.1
19	2X	92	LEU	4.0
36	2e	109	ILE	4.0
35	2d	184	LYS	4.0
1	2A	2897	U	4.0
53	2y	62	VAL	4.0
1	2A	2154	G	4.0

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Mol	Chain	Res	Type	RSRZ
25	23	26	LEU	4.0
45	2n	39	LEU	4.0
34	2c	4	LYS	4.0
1	1A	1120	G	4.0
40	2i	5	TYR	4.0
33	2b	165	VAL	4.0
53	1y	94	ALA	4.0
33	1b	130	ARG	3.9
40	2i	79	LEU	3.9
53	2y	7	SER	3.9
1	1A	1127	U	3.9
1	1A	1148	C	3.9
32	2a	1202	G	3.9
40	2i	8	GLY	3.9
20	2Y	45	VAL	3.9
53	2y	52	ALA	3.9
53	2y	87	LYS	3.9
40	2i	56	LEU	3.9
45	2n	6	LEU	3.9
1	2A	2169	A	3.9
35	2d	120	LEU	3.9
1	1A	1149	A	3.9
45	2n	36	PHE	3.9
6	2G	136	ARG	3.8
40	1i	8	GLY	3.8
1	1A	2164	C	3.8
40	2i	110	GLU	3.8
40	2i	113	LYS	3.8
1	2A	1046	A	3.8
41	2j	69	ASN	3.8
35	2d	183	GLY	3.8
33	1b	131	PRO	3.7
41	2j	60	ARG	3.7
6	2G	157	ILE	3.7
38	2g	78	ARG	3.7
53	2y	41	LEU	3.7
35	2d	20	TYR	3.7
38	1g	156	TRP	3.7
21	2Z	197	ILE	3.7
51	2t	9	ASN	3.7
44	2m	110	ARG	3.7
45	2n	60	SER	3.7

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Mol	Chain	Res	Type	RSRZ
41	2j	98	ILE	3.7
47	1p	1	MET	3.7
41	2j	68	HIS	3.7
53	2y	80	LYS	3.7
1	1A	2161	C	3.7
36	2e	13	ILE	3.7
52	2u	17	THR	3.7
1	1A	1131	A	3.7
34	2c	23	TYR	3.6
1	2A	2106	G	3.6
1	2A	652(B)	A	3.6
1	2A	1076	C	3.6
44	2m	116	THR	3.6
33	2b	70	PHE	3.6
40	2i	90	PRO	3.6
41	2j	71	LEU	3.6
53	2y	77	LEU	3.6
33	2b	233	SER	3.6
1	1A	1221	G	3.6
32	2a	1001	A	3.6
53	1y	95	ARG	3.6
33	2b	228	GLY	3.6
34	2c	6	HIS	3.6
21	2Z	192	ALA	3.5
8	2I	19	VAL	3.5
41	2j	34	VAL	3.5
52	1u	18	TYR	3.5
41	1j	44	VAL	3.5
1	1A	1132	A	3.5
1	2A	614(B)	G	3.5
12	2Q	59	ARG	3.5
1	2A	2107	C	3.5
41	2j	41	PRO	3.5
14	2S	33	LYS	3.5
40	1i	114	TYR	3.5
40	2i	125	TYR	3.5
44	1m	115	LYS	3.5
47	1p	17	TYR	3.5
53	2y	60	VAL	3.5
53	2y	12	ILE	3.5
1	2A	2138	C	3.4
35	2d	149	ALA	3.4

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Mol	Chain	Res	Type	RSRZ
43	2l	64	TYR	3.4
44	1m	2	ALA	3.4
1	2A	2144	U	3.4
32	2a	1030	C	3.4
41	2j	70	ARG	3.4
39	1h	134	ILE	3.4
1	1A	1129	U	3.4
41	2j	29	ARG	3.4
33	1b	128	GLU	3.4
53	2y	61	LEU	3.4
38	2g	155	ARG	3.4
1	1A	1072	U	3.4
3	2D	182	LEU	3.4
14	2S	40	ILE	3.4
29	27	48	LYS	3.4
52	2u	13	ILE	3.4
33	2b	122	PHE	3.4
41	2j	43	ARG	3.4
1	2A	2139	C	3.4
32	1a	1030(B)	C	3.4
1	2A	2132	U	3.4
45	2n	12	ARG	3.4
36	2e	121	LYS	3.4
1	1A	1121	C	3.4
25	23	15	TYR	3.4
33	1b	214	ILE	3.3
47	1p	59	TRP	3.3
1	1A	2815	C	3.3
50	2s	49	ILE	3.3
7	2H	165	ALA	3.3
51	1t	18	GLN	3.3
45	1n	34	TYR	3.3
7	2H	95	ARG	3.3
36	2e	133	TYR	3.3
36	2e	94	ALA	3.3
41	2j	36	GLY	3.3
51	1t	20	LEU	3.3
32	1a	1257	U	3.3
8	2I	18	VAL	3.3
43	2l	32	PHE	3.3
31	29	37	GLY	3.3
1	2A	2162	G	3.3

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Mol	Chain	Res	Type	RSRZ
30	28	24	ALA	3.3
32	2a	1036	G	3.3
1	2A	2896	C	3.3
48	1q	98	LEU	3.3
1	2A	2062	A	3.3
35	1d	70	ILE	3.3
20	2Y	106	LEU	3.3
32	2a	1030(C)	G	3.3
42	2k	104	GLN	3.3
1	2A	2803	C	3.2
39	1h	93	VAL	3.2
40	1i	5	TYR	3.2
53	2y	76	GLU	3.2
1	1A	2139	A	3.2
45	2n	26	ARG	3.2
32	1a	1030(C)	G	3.2
43	2l	18	VAL	3.2
36	2e	26	PHE	3.2
35	1d	138	TYR	3.2
53	2y	58	ASN	3.2
41	2j	10	GLY	3.2
35	2d	5	ILE	3.2
35	2d	157	LEU	3.2
39	2h	2	LEU	3.2
53	2y	42	SER	3.2
40	2i	63	ILE	3.2
33	2b	118	LEU	3.2
40	2i	120	ARG	3.2
37	1f	90	VAL	3.2
51	1t	72	LEU	3.2
32	1a	1286	A	3.1
1	1A	1109	G	3.1
1	1A	2806	G	3.1
32	2a	1031	G	3.1
4	2E	1	MET	3.1
22	20	8	GLY	3.1
40	2i	88	TYR	3.1
7	2H	128	PRO	3.1
53	2y	48	PHE	3.1
31	29	17	ILE	3.1
41	2j	16	LEU	3.1
41	2j	26	ALA	3.1

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Mol	Chain	Res	Type	RSRZ
32	1a	1001	A	3.1
53	2y	64	SER	3.1
20	2Y	4	LYS	3.1
22	20	74	ARG	3.1
32	2a	1034	G	3.1
53	2y	20	VAL	3.1
8	2I	5	LEU	3.1
34	1c	182	ILE	3.1
41	2j	74	ILE	3.1
1	1A	2163	G	3.1
1	2A	2168	G	3.1
18	2W	92	ARG	3.1
52	1u	14	TRP	3.1
1	2A	614(A)	U	3.1
1	2A	2152	G	3.1
48	1q	27	PHE	3.1
31	29	16	VAL	3.1
40	2i	117	HIS	3.0
29	27	1	MET	3.0
1	2A	2125	G	3.0
1	2A	2179	C	3.0
45	2n	38	GLY	3.0
35	2d	8	VAL	3.0
21	2Z	18	LEU	3.0
33	2b	163	PHE	3.0
34	2c	177	THR	3.0
26	14	50	VAL	3.0
44	2m	90	LEU	3.0
53	2y	50	ALA	3.0
14	2S	35	ILE	3.0
40	2i	36	TYR	3.0
1	2A	2143	C	3.0
1	1A	218	A	3.0
1	2A	229	A	3.0
45	1n	33	VAL	3.0
33	2b	214	ILE	3.0
40	2i	6	GLY	3.0
6	2G	146	TYR	3.0
45	2n	45	ARG	3.0
1	1A	2807	C	3.0
1	2A	2124	G	3.0
1	2A	2141	G	3.0

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Mol	Chain	Res	Type	RSRZ
35	2d	152	SER	3.0
34	1c	91	LEU	3.0
52	1u	2	GLY	3.0
33	2b	223	ILE	3.0
53	2y	4	ASN	3.0
50	2s	52	TYR	3.0
26	14	52	THR	3.0
33	2b	48	MET	3.0
34	2c	195	VAL	3.0
22	20	77	ARG	3.0
21	2Z	199	LYS	2.9
6	2G	152	LEU	2.9
22	20	11	ARG	2.9
1	1A	1138	C	2.9
41	1j	10	GLY	2.9
45	2n	13	THR	2.9
21	1Z	192	ALA	2.9
1	1A	1118	C	2.9
11	2P	15	ARG	2.9
51	1t	68	LYS	2.9
53	2y	94	ALA	2.9
8	2I	4	ILE	2.9
35	2d	115	ARG	2.9
34	2c	196	LEU	2.9
51	1t	13	LEU	2.9
1	1A	1125	C	2.9
20	1Y	1	MET	2.9
33	2b	101	MET	2.9
1	1A	2177	G	2.9
7	1H	2	SER	2.9
44	2m	75	ALA	2.9
40	2i	75	ASP	2.9
40	2i	126	SER	2.9
51	2t	11	SER	2.9
3	2D	276	LYS	2.9
34	2c	153	VAL	2.9
34	2c	163	ALA	2.9
38	1g	154	TYR	2.9
45	2n	10	ALA	2.9
43	2l	100	ILE	2.9
39	1h	112	LEU	2.9
29	17	1	MET	2.9

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Mol	Chain	Res	Type	RSRZ
38	1g	42	ILE	2.8
41	1j	54	PHE	2.8
35	1d	58	LEU	2.8
45	2n	57	ARG	2.8
53	2y	84	GLN	2.8
3	1D	275	LYS	2.8
33	2b	132	LYS	2.8
35	1d	179	GLU	2.8
32	1a	1037	C	2.8
33	2b	131	PRO	2.8
48	2q	99	SER	2.8
43	2l	89	ARG	2.8
1	2A	2116	G	2.8
34	1c	47	LEU	2.8
7	2H	159	GLU	2.8
38	2g	8	GLU	2.8
1	1A	2814	C	2.8
44	1m	87	TYR	2.8
51	1t	14	LYS	2.8
53	2y	34	LEU	2.8
33	2b	120	ALA	2.8
51	1t	76	ALA	2.8
1	2A	1083	U	2.8
40	2i	57	GLY	2.8
1	1A	2084	A	2.8
43	1l	64	TYR	2.8
41	2j	58	ASP	2.8
3	1D	37	LEU	2.8
45	2n	42	ILE	2.8
1	1A	1128	U	2.8
1	2A	2118	U	2.8
35	2d	33	MET	2.8
1	1A	2816	G	2.8
3	2D	37	LEU	2.8
8	2I	38	LEU	2.8
53	2y	5	ILE	2.8
1	1A	1555	C	2.8
23	21	61	ARG	2.8
35	1d	73	ARG	2.8
36	2e	21	ALA	2.7
45	2n	54	PRO	2.7
50	2s	35	SER	2.7

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Mol	Chain	Res	Type	RSRZ
45	1n	61	TRP	2.7
3	2D	28	GLU	2.7
20	2Y	42	VAL	2.7
22	20	76	GLY	2.7
38	2g	6	ARG	2.7
43	2l	19	ARG	2.7
36	2e	90	VAL	2.7
32	2a	1002	G	2.7
23	11	98	LEU	2.7
34	2c	3	ASN	2.7
35	2d	110	PHE	2.7
36	2e	43	LEU	2.7
50	2s	71	LEU	2.7
40	1i	126	SER	2.7
32	1a	1030	C	2.7
40	1i	19	LEU	2.7
52	2u	2	GLY	2.7
33	2b	121	LEU	2.7
32	1a	1492	A	2.7
33	2b	162	ILE	2.7
35	1d	5	ILE	2.7
44	1m	4	ILE	2.7
47	1p	33	ILE	2.7
47	1p	20	VAL	2.7
53	2y	10	MET	2.7
6	2G	34	LEU	2.7
1	2A	2801(A)	A	2.7
3	2D	2	ALA	2.7
23	11	91	LYS	2.7
1	2A	2151	G	2.7
35	1d	207	TYR	2.7
40	2i	92	TYR	2.7
38	2g	34	GLY	2.6
51	1t	40	ALA	2.6
35	2d	104	VAL	2.6
35	2d	101	LEU	2.6
36	2e	92	LYS	2.6
34	2c	22	TRP	2.6
35	2d	70	ILE	2.6
48	2q	32	TYR	2.6
50	2s	34	TRP	2.6
53	2y	37	PRO	2.6

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Mol	Chain	Res	Type	RSRZ
3	2D	61	LEU	2.6
35	2d	169	LYS	2.6
34	1c	10	PHE	2.6
18	2W	13	SER	2.6
34	1c	201	TYR	2.6
38	2g	9	VAL	2.6
40	2i	17	VAL	2.6
53	2y	79	ASN	2.6
7	2H	87	LEU	2.6
22	20	72	ARG	2.6
1	1A	2167	C	2.6
16	2U	46	ALA	2.6
41	2j	37	PRO	2.6
35	2d	118	ARG	2.6
50	2s	9	VAL	2.6
53	2y	3	MET	2.6
1	2A	1075	C	2.6
33	2b	123	ALA	2.6
40	2i	14	VAL	2.6
45	1n	18	VAL	2.6
35	2d	11	LEU	2.6
20	2Y	71	LYS	2.6
26	14	49	PHE	2.6
48	2q	71	PHE	2.6
10	2O	41	ALA	2.6
34	2c	160	ALA	2.6
34	2c	184	TYR	2.6
35	2d	4	TYR	2.6
22	20	46	LYS	2.6
33	2b	44	LEU	2.6
33	2b	152	PHE	2.6
34	2c	10	PHE	2.6
39	2h	99	GLU	2.6
1	1A	2138	G	2.6
43	2l	15	ARG	2.6
6	2G	32	PRO	2.6
7	2H	29	PRO	2.6
52	1u	17	THR	2.6
36	2e	20	GLN	2.6
4	2E	150	VAL	2.6
6	2G	133	LEU	2.6
53	2y	82	GLU	2.6

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Mol	Chain	Res	Type	RSRZ
25	23	30	ARG	2.6
32	2a	1492	A	2.6
33	2b	130	ARG	2.6
43	2l	7	ILE	2.5
47	1p	76	GLN	2.5
35	2d	3	ARG	2.5
53	2y	17	ARG	2.5
23	21	71	TYR	2.5
47	1p	6	LEU	2.5
51	2t	20	LEU	2.5
1	2A	2160	G	2.5
53	2y	75	ASN	2.5
34	1c	39	ILE	2.5
1	2A	1026	U	2.5
25	23	31	LEU	2.5
43	2l	55	VAL	2.5
47	2p	6	LEU	2.5
41	1j	67	THR	2.5
6	2G	29	TRP	2.5
29	17	48	LYS	2.5
8	2I	30	LEU	2.5
31	29	24	TYR	2.5
33	2b	215	LEU	2.5
35	1d	157	LEU	2.5
53	2y	11	GLU	2.5
34	1c	2	GLY	2.5
41	2j	50	ILE	2.5
43	2l	99	HIS	2.5
47	1p	7	ALA	2.5
50	2s	31	ILE	2.5
14	2S	58	LEU	2.5
41	1j	49	VAL	2.5
42	2k	14	VAL	2.5
43	2l	69	TYR	2.5
16	2U	40	PHE	2.5
34	1c	168	ALA	2.5
51	1t	69	GLY	2.5
35	2d	204	ILE	2.5
52	1u	13	ILE	2.5
7	2H	107	VAL	2.5
40	1i	109	VAL	2.5
40	2i	116	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
1	1A	2154	U	2.5
1	2A	1082	U	2.5
3	2D	38	LYS	2.5
51	2t	10	LEU	2.5
36	2e	105	VAL	2.5
39	2h	93	VAL	2.5
1	1A	935	C	2.5
1	2A	2133	G	2.5
1	1A	2597	U	2.4
43	2l	88	GLY	2.4
53	2y	89	GLN	2.4
33	2b	133	LYS	2.4
36	1e	21	ALA	2.4
43	2l	13	LYS	2.4
16	2U	17	ILE	2.4
25	23	53	LEU	2.4
53	2y	81	LEU	2.4
10	2O	58	VAL	2.4
22	20	9	SER	2.4
29	27	47	ARG	2.4
44	2m	6	GLY	2.4
47	1p	41	PRO	2.4
11	2P	32	THR	2.4
32	1a	1031	G	2.4
33	2b	164	VAL	2.4
34	2c	154	SER	2.4
40	2i	108	VAL	2.4
40	2i	121	ARG	2.4
6	1G	80	PHE	2.4
8	2I	85	GLU	2.4
33	1b	129	GLU	2.4
3	2D	35	LYS	2.4
7	2H	94	TYR	2.4
7	2H	161	GLY	2.4
41	2j	56	HIS	2.4
3	2D	64	ILE	2.4
48	1q	99	SER	2.4
1	2A	2148	G	2.4
39	2h	95	VAL	2.4
34	2c	162	GLN	2.4
32	2a	1191	A	2.4
1	2A	2175	C	2.4

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Mol	Chain	Res	Type	RSRZ
33	1b	133	LYS	2.4
50	2s	62	ILE	2.4
38	2g	80	VAL	2.4
52	2u	16	GLY	2.4
1	2A	2159	G	2.4
7	2H	41	MET	2.4
47	1p	38	TYR	2.4
23	21	26	ARG	2.4
35	2d	35	ARG	2.4
45	1n	14	PRO	2.4
40	1i	46	ALA	2.4
40	2i	119	ALA	2.4
41	1j	64	GLU	2.4
8	2I	35	LEU	2.4
1	2A	6	A	2.4
1	1A	2168	C	2.4
1	2A	2130	U	2.4
32	2a	1114	C	2.4
35	2d	69	GLY	2.4
40	2i	30	GLY	2.4
44	2m	95	GLY	2.4
52	1u	16	GLY	2.4
42	2k	126	ARG	2.4
52	2u	12	LYS	2.4
32	1a	1001(A)	G	2.4
34	2c	149	ALA	2.4
36	1e	134	ALA	2.4
39	2h	112	LEU	2.4
40	2i	124	GLN	2.4
43	2l	10	LEU	2.4
9	2N	81	GLY	2.4
24	22	63	VAL	2.4
35	1d	166	LYS	2.4
1	1A	1150	C	2.4
1	1A	2183	C	2.4
52	2u	18	TYR	2.4
25	23	12	PRO	2.4
45	2n	52	GLN	2.4
11	2P	6	LEU	2.4
27	25	14	ALA	2.4
35	1d	11	LEU	2.4
1	1A	2137	G	2.4

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Mol	Chain	Res	Type	RSRZ
8	2I	92	VAL	2.4
31	29	25	VAL	2.4
35	1d	50	ARG	2.4
40	2i	104	ARG	2.4
32	1a	841	U	2.3
32	1a	1035	A	2.3
22	20	75	LEU	2.3
36	2e	31	LEU	2.3
38	2g	82	GLY	2.3
34	1c	8	ILE	2.3
40	1i	111	ARG	2.3
4	2E	151	TYR	2.3
53	2y	71	TYR	2.3
35	2d	162	LEU	2.3
32	2a	1066	C	2.3
32	2a	1357	A	2.3
40	2i	26	VAL	2.3
53	2y	49	VAL	2.3
47	2p	48	TRP	2.3
39	1h	98	LYS	2.3
44	2m	65	LYS	2.3
51	2t	14	LYS	2.3
8	2I	1	MET	2.3
20	2Y	32	PRO	2.3
32	1a	1026	G	2.3
34	2c	178	LEU	2.3
41	2j	61	GLU	2.3
41	1j	43	ARG	2.3
52	2u	11	GLY	2.3
18	2W	12	ILE	2.3
39	2h	111	ILE	2.3
7	2H	114	VAL	2.3
35	2d	105	VAL	2.3
40	1i	14	VAL	2.3
6	2G	49	ASP	2.3
16	2U	18	LEU	2.3
30	18	60	LEU	2.3
43	1l	63	GLY	2.3
50	2s	84	GLY	2.3
52	2u	9	ARG	2.3
3	2D	156	ALA	2.3
24	12	13	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
40	1i	125	TYR	2.3
35	2d	161	ASN	2.3
51	1t	75	ASN	2.3
1	2A	2157	G	2.3
32	2a	80	G	2.3
22	20	51	VAL	2.3
32	2a	1116	C	2.3
35	2d	36	ARG	2.3
35	2d	73	ARG	2.3
25	23	23	LEU	2.3
48	1q	97	SER	2.3
25	23	51	ALA	2.3
25	23	13	ILE	2.3
32	2a	1032	G	2.3
41	1j	66	ARG	2.3
52	1u	22	ARG	2.3
22	20	52	GLY	2.3
40	2i	69	GLY	2.3
47	1p	48	TRP	2.3
53	2y	65	GLY	2.3
15	1T	114	LEU	2.3
35	2d	96	LEU	2.3
49	2r	85	LEU	2.3
51	2t	72	LEU	2.3
26	24	44	THR	2.3
35	1d	4	TYR	2.3
34	2c	39	ILE	2.3
35	2d	185	PHE	2.3
39	1h	95	VAL	2.3
44	2m	108	ARG	2.3
22	10	8	GLY	2.3
33	1b	121	LEU	2.3
52	2u	23	PRO	2.3
33	2b	177	ALA	2.3
35	1d	75	PHE	2.3
40	1i	78	LYS	2.3
45	2n	11	LYS	2.3
6	2G	159	VAL	2.3
33	2b	227	GLY	2.2
19	2X	66	LEU	2.2
33	2b	69	LEU	2.2
39	1h	63	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
41	2j	85	LEU	2.2
25	23	21	ALA	2.2
1	2A	1064	C	2.2
41	1j	46	ARG	2.2
41	1j	57	LYS	2.2
50	2s	80	TYR	2.2
51	1t	83	ARG	2.2
1	2A	2173	A	2.2
17	2V	72	VAL	2.2
34	2c	152	ILE	2.2
34	2c	186	PHE	2.2
40	1i	26	VAL	2.2
26	24	46	GLN	2.2
35	2d	39	PRO	2.2
34	2c	60	ALA	2.2
34	2c	190	ARG	2.2
35	1d	49	ARG	2.2
35	2d	49	ARG	2.2
47	2p	7	ALA	2.2
33	2b	57	PHE	2.2
20	2Y	72	VAL	2.2
14	2S	31	SER	2.2
5	2F	65	TRP	2.2
8	2I	44	LEU	2.2
53	2y	24	LEU	2.2
10	2O	1	MET	2.2
33	1b	114	ARG	2.2
40	1i	128	ARG	2.2
48	1q	91	ARG	2.2
53	2y	95	ARG	2.2
20	2Y	65	ALA	2.2
40	2i	76	ALA	2.2
46	2o	25	THR	2.2
50	2s	79	THR	2.2
34	2c	201	TYR	2.2
4	1E	163	GLU	2.2
12	2Q	65	PHE	2.2
30	28	21	LYS	2.2
1	2A	2137	C	2.2
1	1A	2805	G	2.2
51	1t	73	HIS	2.2
51	2t	13	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
30	28	25	MET	2.2
49	1r	73	ALA	2.2
40	1i	7	THR	2.2
45	1n	8	GLU	2.2
17	2V	75	PHE	2.2
41	2j	11	PHE	2.2
45	2n	50	LYS	2.2
47	2p	9	PHE	2.2
19	2X	80	ILE	2.2
20	2Y	44	ILE	2.2
23	21	70	VAL	2.2
25	23	6	VAL	2.2
31	19	17	ILE	2.2
40	2i	65	VAL	2.2
29	27	41	ARG	2.2
41	2j	19	SER	2.2
20	2Y	31	LEU	2.2
50	2s	56	GLN	2.2
32	1a	1033	G	2.2
11	2P	71	VAL	2.2
20	2Y	7	VAL	2.2
33	2b	226	ARG	2.2
35	1d	203	VAL	2.2
40	1i	79	LEU	2.2
53	1y	41	LEU	2.2
23	21	83	GLU	2.2
42	2k	31	THR	2.2
53	2y	53	THR	2.2
13	2R	68	ARG	2.2
38	1g	79	ARG	2.2
26	24	56	VAL	2.2
33	2b	127	ILE	2.2
35	2d	67	ILE	2.2
1	1A	2812	A	2.2
7	2H	171	LEU	2.2
35	2d	186	LEU	2.2
43	2l	123	LYS	2.2
44	2m	115	LYS	2.2
26	14	51	ASP	2.2
41	2j	17	ASP	2.2
5	2F	42	ALA	2.2
1	2A	2109	U	2.1

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Mol	Chain	Res	Type	RSRZ
19	1X	69	TYR	2.1
42	2k	25	TYR	2.1
48	2q	100	LYS	2.1
20	2Y	75	ILE	2.1
45	2n	33	VAL	2.1
8	2I	12	LEU	2.1
16	2U	27	LEU	2.1
36	2e	128	PRO	2.1
1	2A	2135	A	2.1
11	2P	109	GLY	2.1
40	2i	91	ASP	2.1
7	2H	106	THR	2.1
14	2S	3	ARG	2.1
47	2p	8	ARG	2.1
51	1t	67	ALA	2.1
1	2A	2804	C	2.1
12	2Q	35	VAL	2.1
31	29	26	ILE	2.1
39	1h	94	TYR	2.1
46	2o	62	GLN	2.1
48	2q	59	ILE	2.1
31	29	30	PRO	2.1
33	2b	187	LEU	2.1
45	1n	31	ARG	2.1
21	2Z	188	ALA	2.1
27	25	2	ALA	2.1
36	2e	16	THR	2.1
7	2H	167	GLU	2.1
36	2e	84	PHE	2.1
45	1n	32	SER	2.1
18	2W	95	ILE	2.1
30	28	16	ILE	2.1
36	1e	55	VAL	2.1
47	2p	33	ILE	2.1
21	2Z	200	GLY	2.1
32	2a	1150	U	2.1
40	2i	10	ARG	2.1
40	2i	67	GLY	2.1
45	1n	22	THR	2.1
52	2u	8	THR	2.1
7	2H	123	PHE	2.1
6	1G	88	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
6	2G	62	LEU	2.1
8	2I	79	ILE	2.1
14	2S	7	TYR	2.1
14	2S	17	ARG	2.1
21	2Z	125	LEU	2.1
23	21	62	VAL	2.1
25	23	28	LEU	2.1
34	1c	80	GLY	2.1
35	2d	21	LEU	2.1
42	2k	123	LYS	2.1
53	2y	51	ASP	2.1
48	1q	28	PRO	2.1
11	2P	68	GLN	2.1
43	1l	61	THR	2.1
44	2m	106	ASN	2.1
8	2I	2	LYS	2.1
40	2i	112	LYS	2.1
43	1l	28	LYS	2.1
10	2O	62	VAL	2.1
16	2U	20	LEU	2.1
40	2i	102	LEU	2.1
41	2j	93	GLY	2.1
1	2A	2894	G	2.1
8	1I	117	GLU	2.1
18	2W	9	TYR	2.1
19	2X	89	ILE	2.1
35	1d	62	GLN	2.1
32	1a	1532	U	2.1
1	1A	2165	C	2.1
3	1D	276	LYS	2.1
17	2V	85	LYS	2.1
32	1a	1029	C	2.1
41	2j	7	LYS	2.1
11	1P	15	ARG	2.1
16	2U	31	SER	2.1
34	2c	21	ARG	2.1
36	2e	45	PHE	2.1
41	1j	60	ARG	2.1
52	1u	10	ARG	2.1
39	2h	71	GLY	2.1
8	1I	85	GLU	2.1
7	2H	24	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
26	24	50	VAL	2.1
44	2m	66	LEU	2.1
45	2n	21	TYR	2.1
32	2a	1064	G	2.1
53	1y	63	ALA	2.1
1	1A	2129	C	2.1
40	2i	72	GLY	2.1
3	2D	185	VAL	2.1
40	2i	47	LEU	2.1
35	2d	45	GLN	2.1
36	2e	11	ILE	2.1
50	2s	83	HIS	2.1
8	1I	29	TYR	2.1
43	2l	47	LYS	2.1
14	1S	13	ARG	2.1
31	29	9	ARG	2.1
52	2u	22	ARG	2.1
41	1j	59	SER	2.1
47	2p	11	SER	2.1
16	2U	43	GLY	2.1
32	1a	723	U	2.0
32	2a	1286	A	2.1
35	1d	167	GLY	2.1
41	1j	47	PHE	2.1
13	2R	18	LEU	2.0
35	1d	64	LEU	2.0
48	2q	23	VAL	2.0
50	1s	56	GLN	2.0
15	2T	111	ARG	2.0
16	1U	35	ALA	2.0
16	2U	12	ARG	2.0
45	1n	59	ALA	2.0
11	2P	30	THR	2.0
24	22	1	MET	2.0
53	2y	70	MET	2.0
36	1e	6	PHE	2.0
40	2i	50	LEU	2.0
49	2r	58	LEU	2.0
50	2s	16	LEU	2.0
1	1A	2175	G	2.0
7	2H	35	VAL	2.0
12	2Q	27	VAL	2.0

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Mol	Chain	Res	Type	RSRZ
25	23	47	VAL	2.0
32	1a	162	A	2.0
7	2H	89	ILE	2.0
33	1b	232	PRO	2.0
45	2n	18	VAL	2.0
12	2Q	5	ARG	2.0
33	2b	144	ARG	2.0
39	1h	109	ILE	2.0
12	2Q	80	GLU	2.0
4	1E	157	ALA	2.0
10	2O	51	ALA	2.0
18	2W	93	ALA	2.0
38	1g	40	ALA	2.0
33	2b	97	TRP	2.0
18	2W	82	LEU	2.0
3	2D	221	VAL	2.0
18	2W	85	VAL	2.0
23	11	68	PRO	2.0
25	23	54	VAL	2.0
36	2e	100	VAL	2.0
5	2F	64	ILE	2.0
21	1Z	197	ILE	2.0
34	2c	57	ILE	2.0
1	2A	2176	A	2.0
33	2b	27	LYS	2.0
1	2A	2123	G	2.0
3	2D	180	GLY	2.0
45	2n	32	SER	2.0
22	20	45	PHE	2.0
40	2i	59	PHE	2.0
34	2c	167	TRP	2.0
18	1W	92	ARG	2.0
23	11	46	LEU	2.0
35	2d	145	GLU	2.0
52	1u	6	ARG	2.0
6	2G	37	VAL	2.0
23	21	30	VAL	2.0
33	2b	136	VAL	2.0
40	1i	108	VAL	2.0
40	2i	41	VAL	2.0
41	2j	53	PRO	2.0
51	1t	74	LYS	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	5MU	2A	1915	21/22	0.89	0.15	76,82,88,101	0
32	5MC	2a	967	21/22	0.90	0.25	63,68,77,88	0
1	PSU	2A	1917	20/21	0.92	0.13	71,78,90,90	0
1	PSU	1A	1939	20/21	0.92	0.17	62,68,77,77	0
32	2MG	2a	1207	24/25	0.92	0.15	76,86,91,102	0
43	0TD	2l	92	10/11	0.92	0.28	60,65,71,95	0
1	5MU	1A	1937	21/22	0.93	0.17	67,74,83,94	0
1	PSU	2A	1911	20/21	0.93	0.13	56,70,76,78	0
32	M2G	2a	966	25/26	0.93	0.22	57,67,81,92	0
1	4OC	2A	1920	21/23	0.94	0.17	61,65,72,73	0
32	PSU	2a	516	20/21	0.94	0.16	71,76,80,84	0
43	0TD	1l	92	10/11	0.94	0.23	50,54,59,76	0
1	PSU	1A	1933	20/21	0.95	0.15	55,62,65,66	0
32	PSU	1a	516	20/21	0.95	0.17	56,60,64,65	0
32	2MG	1a	1207	24/25	0.95	0.17	56,66,69,71	0
32	4OC	2a	1402	22/23	0.95	0.20	53,63,68,71	0
32	5MC	2a	1404	21/22	0.95	0.21	51,60,63,66	0
32	7MG	2a	527	24/25	0.95	0.18	61,67,73,74	0
32	7MG	1a	527	24/25	0.96	0.22	42,51,54,59	0
32	5MC	2a	1407	21/22	0.96	0.18	50,60,64,68	0
32	MA6	2a	1518	24/25	0.96	0.25	51,61,66,67	0
32	5MC	1a	967	21/22	0.96	0.19	53,58,65,71	0
1	5MC	2A	1942	21/22	0.97	0.17	36,48,53,54	0
32	5MC	2a	1400	21/22	0.97	0.29	65,70,73,74	0
1	PSU	2A	2605	20/21	0.97	0.25	29,35,39,44	0
32	UR3	1a	1498	21/22	0.97	0.19	43,46,52,60	0
1	4OC	1A	1942	21/23	0.97	0.21	39,54,59,60	0
32	UR3	2a	1498	21/22	0.97	0.20	52,58,63,66	0
32	M2G	1a	966	25/26	0.97	0.18	51,53,58,61	0
1	5MU	2A	1939	21/22	0.97	0.19	29,36,41,43	0
1	2MU	2A	2552	21/23	0.98	0.22	30,36,39,41	0
1	5MC	1A	1984	21/22	0.98	0.21	25,33,37,45	0
32	MA6	1a	1518	24/25	0.98	0.24	34,41,46,51	0
32	MA6	1a	1519	24/25	0.98	0.23	37,43,46,49	0
1	2MA	1A	2515	23/24	0.98	0.25	16,20,24,31	0
1	PSU	1A	2617	20/21	0.98	0.20	18,22,28,28	0
1	5MC	1A	1964	21/22	0.98	0.20	26,32,38,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	5MC	1a	1400	21/22	0.98	0.21	40,45,49,51	0
32	4OC	1a	1402	22/23	0.98	0.18	42,47,55,56	0
32	5MC	1a	1404	21/22	0.98	0.20	35,44,46,49	0
32	5MC	1a	1407	21/22	0.98	0.19	36,45,49,56	0
1	5MC	2A	1962	21/22	0.98	0.19	33,43,48,58	0
1	OMG	2A	2251	24/25	0.98	0.23	32,36,38,39	0
32	MA6	2a	1519	24/25	0.98	0.26	51,60,64,67	0
1	2MA	2A	2503	23/24	0.98	0.25	24,30,35,37	0
1	2MU	1A	2564	21/23	0.99	0.21	20,26,28,29	0
1	OMG	1A	2263	24/25	0.99	0.23	15,21,23,26	0
1	5MU	1A	1961	21/22	0.99	0.20	18,24,27,32	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3219	1/1	0.40	0.21	74,74,74,74	0
54	MG	1a	1851	1/1	0.42	0.65	94,94,94,94	0
54	MG	2A	3167	1/1	0.43	0.24	74,74,74,74	0
54	MG	2B	3007	1/1	0.47	0.27	71,71,71,71	0
54	MG	1a	1840	1/1	0.48	0.20	45,45,45,45	0
54	MG	2A	3197	1/1	0.49	0.23	73,73,73,73	0
54	MG	2A	3215	1/1	0.51	0.18	73,73,73,73	0
54	MG	1a	1828	1/1	0.54	0.18	62,62,62,62	0
54	MG	2B	3015	1/1	0.56	0.19	74,74,74,74	0
54	MG	2A	3692	1/1	0.61	0.19	63,63,63,63	0
54	MG	2A	3703	1/1	0.61	0.12	81,81,81,81	0
54	MG	1A	3191	1/1	0.62	0.26	51,51,51,51	0
54	MG	2a	1684	1/1	0.62	0.13	60,60,60,60	0
54	MG	1B	219	1/1	0.63	0.13	46,46,46,46	0
54	MG	1B	211	1/1	0.63	0.18	64,64,64,64	0
54	MG	2a	1662	1/1	0.63	0.22	67,67,67,67	0
54	MG	2A	3142	1/1	0.63	0.18	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3318	1/1	0.64	0.19	78,78,78,78	0
54	MG	2A	3338	1/1	0.65	0.19	53,53,53,53	0
54	MG	1a	1830	1/1	0.66	0.21	66,66,66,66	0
54	MG	20	101	1/1	0.66	0.21	75,75,75,75	0
54	MG	2A	3160	1/1	0.67	0.17	63,63,63,63	0
54	MG	1A	3934	1/1	0.67	0.39	50,50,50,50	0
54	MG	2A	3189	1/1	0.67	0.21	66,66,66,66	0
54	MG	1a	1766	1/1	0.68	0.28	67,67,67,67	0
54	MG	1A	3278	1/1	0.68	0.22	38,38,38,38	0
54	MG	1a	1684	1/1	0.68	0.19	49,49,49,49	0
54	MG	1a	1640	1/1	0.69	0.17	59,59,59,59	0
54	MG	1A	3327	1/1	0.69	0.19	33,33,33,33	0
54	MG	2a	1611	1/1	0.69	0.13	62,62,62,62	0
54	MG	2a	1645	1/1	0.69	0.17	62,62,62,62	0
54	MG	1A	3982	1/1	0.69	0.08	49,49,49,49	0
54	MG	1a	1793	1/1	0.69	0.16	63,63,63,63	0
54	MG	1A	3346	1/1	0.70	0.18	48,48,48,48	0
54	MG	1a	1624	1/1	0.70	0.12	60,60,60,60	0
54	MG	2A	3567	1/1	0.70	0.18	40,40,40,40	0
54	MG	2A	3206	1/1	0.70	0.45	45,45,45,45	0
54	MG	1d	307	1/1	0.70	0.14	89,89,89,89	0
54	MG	2A	3173	1/1	0.70	0.20	67,67,67,67	0
54	MG	1A	3921	1/1	0.71	0.41	58,58,58,58	0
54	MG	1a	1608	1/1	0.71	0.12	63,63,63,63	0
54	MG	1A	3986	1/1	0.71	0.34	61,61,61,61	0
54	MG	1B	207	1/1	0.71	0.21	41,41,41,41	0
54	MG	2I	3001	1/1	0.71	0.17	71,71,71,71	0
54	MG	2A	3171	1/1	0.71	0.28	58,58,58,58	0
54	MG	1a	1677	1/1	0.71	0.12	64,64,64,64	0
54	MG	2A	3393	1/1	0.71	0.15	55,55,55,55	0
54	MG	1A	3804	1/1	0.71	0.12	21,21,21,21	0
54	MG	2A	3635	1/1	0.71	0.10	64,64,64,64	0
54	MG	1A	3756	1/1	0.72	0.16	57,57,57,57	0
54	MG	1A	3259	1/1	0.72	0.18	62,62,62,62	0
54	MG	1A	3398	1/1	0.72	0.15	26,26,26,26	0
54	MG	1A	3422	1/1	0.72	0.13	41,41,41,41	0
54	MG	1a	1797	1/1	0.72	0.22	66,66,66,66	0
54	MG	21	101	1/1	0.73	0.13	67,67,67,67	0
54	MG	1y	3002	1/1	0.73	0.25	62,62,62,62	0
54	MG	1A	3575	1/1	0.73	0.14	65,65,65,65	0
54	MG	1A	3597	1/1	0.73	0.23	62,62,62,62	0
54	MG	2a	1673	1/1	0.73	0.15	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3184	1/1	0.73	0.22	68,68,68,68	0
54	MG	1A	3805	1/1	0.74	0.12	54,54,54,54	0
54	MG	1a	1681	1/1	0.74	0.12	60,60,60,60	0
54	MG	1a	1652	1/1	0.74	0.14	61,61,61,61	0
54	MG	2A	3103	1/1	0.74	0.27	66,66,66,66	0
54	MG	2A	3198	1/1	0.74	0.22	60,60,60,60	0
54	MG	2Q	3002	1/1	0.75	0.10	55,55,55,55	0
54	MG	1A	3297	1/1	0.75	0.21	37,37,37,37	0
54	MG	2A	3676	1/1	0.75	0.13	66,66,66,66	0
54	MG	1F	311	1/1	0.75	0.51	45,45,45,45	0
54	MG	1A	3941	1/1	0.75	0.23	68,68,68,68	0
54	MG	1A	3950	1/1	0.75	0.14	80,80,80,80	0
54	MG	2A	3488	1/1	0.75	0.08	62,62,62,62	0
54	MG	1A	3957	1/1	0.75	0.32	79,79,79,79	0
54	MG	1A	3279	1/1	0.76	0.12	61,61,61,61	0
54	MG	1A	3894	1/1	0.76	0.38	80,80,80,80	0
54	MG	1a	1700	1/1	0.76	0.21	65,65,65,65	0
54	MG	1a	1834	1/1	0.76	0.29	58,58,58,58	0
54	MG	1a	1752	1/1	0.76	0.17	71,71,71,71	0
54	MG	1A	3662	1/1	0.76	0.18	62,62,62,62	0
54	MG	2a	1638	1/1	0.76	0.19	60,60,60,60	0
54	MG	2a	1642	1/1	0.76	0.11	58,58,58,58	0
54	MG	2A	3685	1/1	0.76	0.13	75,75,75,75	0
54	MG	1a	1680	1/1	0.76	0.14	70,70,70,70	0
54	MG	2A	3274	1/1	0.76	0.26	53,53,53,53	0
54	MG	2A	3175	1/1	0.76	0.20	55,55,55,55	0
54	MG	2a	1742	1/1	0.76	0.25	65,65,65,65	0
54	MG	1a	1606	1/1	0.77	0.14	58,58,58,58	0
54	MG	1a	1637	1/1	0.77	0.17	67,67,67,67	0
54	MG	1A	3702	1/1	0.77	0.16	27,27,27,27	0
54	MG	2A	3098	1/1	0.77	0.19	53,53,53,53	0
54	MG	1a	1835	1/1	0.77	0.25	67,67,67,67	0
54	MG	2B	3001	1/1	0.77	0.16	68,68,68,68	0
54	MG	1a	1737	1/1	0.77	0.17	62,62,62,62	0
54	MG	2A	3195	1/1	0.77	0.21	54,54,54,54	0
54	MG	1a	1843	1/1	0.77	0.09	78,78,78,78	0
54	MG	2A	3166	1/1	0.77	0.15	51,51,51,51	0
54	MG	1a	1748	1/1	0.78	0.13	57,57,57,57	0
54	MG	2A	3405	1/1	0.78	0.17	66,66,66,66	0
54	MG	1A	3783	1/1	0.78	0.13	48,48,48,48	0
54	MG	2W	8002	1/1	0.78	0.12	59,59,59,59	0
54	MG	2A	3177	1/1	0.78	0.15	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3216	1/1	0.78	0.21	54,54,54,54	0
54	MG	2a	1604	1/1	0.78	0.23	58,58,58,58	0
54	MG	2A	3673	1/1	0.78	0.17	68,68,68,68	0
54	MG	2a	1630	1/1	0.78	0.12	62,62,62,62	0
54	MG	1A	3794	1/1	0.78	0.14	53,53,53,53	0
54	MG	1A	3744	1/1	0.78	0.13	54,54,54,54	0
54	MG	2A	3095	1/1	0.78	0.13	58,58,58,58	0
54	MG	2A	3332	1/1	0.78	0.14	65,65,65,65	0
54	MG	1A	3576	1/1	0.78	0.12	43,43,43,43	0
54	MG	2A	3389	1/1	0.78	0.23	47,47,47,47	0
54	MG	2B	3014	1/1	0.78	0.17	71,71,71,71	0
54	MG	1a	1782	1/1	0.79	0.22	61,61,61,61	0
54	MG	1A	3473	1/1	0.79	0.10	63,63,63,63	0
54	MG	2A	3146	1/1	0.79	0.48	52,52,52,52	0
54	MG	2A	3226	1/1	0.79	0.23	53,53,53,53	0
54	MG	2A	3149	1/1	0.79	0.12	68,68,68,68	0
54	MG	1a	1668	1/1	0.79	0.25	74,74,74,74	0
54	MG	1a	1802	1/1	0.79	0.18	62,62,62,62	0
54	MG	1a	1674	1/1	0.79	0.13	65,65,65,65	0
54	MG	2A	3385	1/1	0.79	0.13	47,47,47,47	0
54	MG	1A	3011	1/1	0.79	0.18	47,47,47,47	0
54	MG	1A	3383	1/1	0.79	0.13	24,24,24,24	0
54	MG	1D	309	1/1	0.79	0.13	52,52,52,52	0
54	MG	1A	3938	1/1	0.79	0.17	64,64,64,64	0
54	MG	1A	3100	1/1	0.79	0.26	39,39,39,39	0
54	MG	1A	3603	1/1	0.79	0.15	60,60,60,60	0
54	MG	1A	3649	1/1	0.79	0.14	58,58,58,58	0
54	MG	1A	3189	1/1	0.79	0.42	41,41,41,41	0
54	MG	1A	3835	1/1	0.79	0.12	50,50,50,50	0
54	MG	1a	1767	1/1	0.79	0.42	58,58,58,58	0
54	MG	2a	1689	1/1	0.79	0.24	62,62,62,62	0
54	MG	2a	1737	1/1	0.79	0.18	60,60,60,60	0
54	MG	2A	3694	1/1	0.79	0.27	69,69,69,69	0
58	ARG	1F	314	12/12	0.79	0.23	47,65,78,79	0
54	MG	2A	3553	1/1	0.80	0.16	56,56,56,56	0
54	MG	1d	301	1/1	0.80	0.11	68,68,68,68	0
54	MG	2A	3589	1/1	0.80	0.16	57,57,57,57	0
54	MG	2A	3608	1/1	0.80	0.11	40,40,40,40	0
54	MG	2A	3621	1/1	0.80	0.14	28,28,28,28	0
54	MG	2A	3304	1/1	0.80	0.10	44,44,44,44	0
54	MG	1A	3870	1/1	0.80	0.11	46,46,46,46	0
54	MG	2a	1613	1/1	0.80	0.17	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1y	3001	1/1	0.80	0.38	61,61,61,61	0
54	MG	1a	1653	1/1	0.80	0.16	60,60,60,60	0
54	MG	1A	3594	1/1	0.80	0.17	54,54,54,54	0
54	MG	2A	3386	1/1	0.80	0.14	68,68,68,68	0
54	MG	2A	3697	1/1	0.80	0.11	53,53,53,53	0
54	MG	1A	3159	1/1	0.80	0.19	38,38,38,38	0
54	MG	1A	3782	1/1	0.80	0.11	41,41,41,41	0
54	MG	2A	3398	1/1	0.80	0.28	55,55,55,55	0
54	MG	1A	3577	1/1	0.80	0.20	26,26,26,26	0
54	MG	1a	1824	1/1	0.80	0.20	55,55,55,55	0
54	MG	2B	3018	1/1	0.80	0.27	76,76,76,76	0
54	MG	2X	101	1/1	0.81	0.13	59,59,59,59	0
54	MG	2A	3330	1/1	0.81	0.17	69,69,69,69	0
54	MG	1a	1754	1/1	0.81	0.23	68,68,68,68	0
54	MG	2A	3193	1/1	0.81	0.27	47,47,47,47	0
54	MG	2a	1605	1/1	0.81	0.13	57,57,57,57	0
54	MG	2A	3355	1/1	0.81	0.23	46,46,46,46	0
54	MG	1A	3187	1/1	0.81	0.39	49,49,49,49	0
54	MG	1A	3047	1/1	0.81	0.51	38,38,38,38	0
54	MG	1A	3858	1/1	0.81	0.14	28,28,28,28	0
54	MG	1a	1629	1/1	0.81	0.09	45,45,45,45	0
54	MG	1A	3602	1/1	0.81	0.20	54,54,54,54	0
54	MG	1A	3779	1/1	0.81	0.24	48,48,48,48	0
54	MG	1a	1720	1/1	0.81	0.13	60,60,60,60	0
54	MG	2a	1682	1/1	0.81	0.13	60,60,60,60	0
54	MG	1A	3913	1/1	0.81	0.32	61,61,61,61	0
54	MG	1A	3962	1/1	0.81	0.08	55,55,55,55	0
54	MG	1R	203	1/1	0.81	0.17	34,34,34,34	0
54	MG	2A	3188	1/1	0.81	0.14	51,51,51,51	0
54	MG	2a	1748	1/1	0.81	0.16	52,52,52,52	0
54	MG	2q	201	1/1	0.81	0.18	64,64,64,64	0
54	MG	2A	3326	1/1	0.81	0.17	61,61,61,61	0
54	MG	2A	3242	1/1	0.82	0.41	63,63,63,63	0
54	MG	1A	3271	1/1	0.82	0.15	49,49,49,49	0
54	MG	1A	3445	1/1	0.82	0.10	21,21,21,21	0
54	MG	2a	1602	1/1	0.82	0.12	52,52,52,52	0
54	MG	1A	3330	1/1	0.82	0.17	15,15,15,15	0
54	MG	1A	3908	1/1	0.82	0.10	52,52,52,52	0
54	MG	2A	3640	1/1	0.82	0.08	52,52,52,52	0
54	MG	1a	1701	1/1	0.82	0.20	71,71,71,71	0
54	MG	2a	1615	1/1	0.82	0.12	60,60,60,60	0
54	MG	2a	1623	1/1	0.82	0.12	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3637	1/1	0.82	0.38	47,47,47,47	0
54	MG	1A	3789	1/1	0.82	0.22	31,31,31,31	0
54	MG	1A	3151	1/1	0.82	0.47	40,40,40,40	0
54	MG	1A	3380	1/1	0.82	0.15	29,29,29,29	0
54	MG	2a	1648	1/1	0.82	0.11	60,60,60,60	0
54	MG	2A	3203	1/1	0.82	0.11	51,51,51,51	0
54	MG	2A	3165	1/1	0.82	0.28	64,64,64,64	0
54	MG	2a	1676	1/1	0.82	0.21	68,68,68,68	0
54	MG	1a	1667	1/1	0.82	0.14	50,50,50,50	0
54	MG	1A	3138	1/1	0.82	0.19	59,59,59,59	0
54	MG	1A	3144	1/1	0.82	0.11	51,51,51,51	0
54	MG	2a	1709	1/1	0.82	0.32	48,48,48,48	0
54	MG	2A	3449	1/1	0.82	0.09	58,58,58,58	0
54	MG	10	105	1/1	0.82	0.21	59,59,59,59	0
54	MG	2a	1747	1/1	0.82	0.10	61,61,61,61	0
54	MG	2A	3544	1/1	0.82	0.09	56,56,56,56	0
54	MG	2A	3229	1/1	0.82	0.66	49,49,49,49	0
54	MG	2A	3563	1/1	0.82	0.11	60,60,60,60	0
54	MG	2A	3112	1/1	0.83	0.19	44,44,44,44	0
54	MG	2A	3116	1/1	0.83	0.16	53,53,53,53	0
54	MG	1A	3635	1/1	0.83	0.12	62,62,62,62	0
54	MG	1a	1783	1/1	0.83	0.20	64,64,64,64	0
54	MG	1N	202	1/1	0.83	0.18	56,56,56,56	0
54	MG	1A	3836	1/1	0.83	0.13	51,51,51,51	0
54	MG	1a	1679	1/1	0.83	0.22	60,60,60,60	0
54	MG	2A	3341	1/1	0.83	0.15	33,33,33,33	0
54	MG	1a	1813	1/1	0.83	0.10	60,60,60,60	0
54	MG	1A	3039	1/1	0.83	0.14	56,56,56,56	0
54	MG	1a	1604	1/1	0.83	0.13	62,62,62,62	0
54	MG	1A	3479	1/1	0.83	0.18	20,20,20,20	0
54	MG	1a	1686	1/1	0.83	0.23	61,61,61,61	0
54	MG	1A	3961	1/1	0.83	0.14	38,38,38,38	0
54	MG	1A	3567	1/1	0.83	0.12	62,62,62,62	0
54	MG	1a	1707	1/1	0.83	0.09	58,58,58,58	0
54	MG	2A	3472	1/1	0.83	0.17	52,52,52,52	0
54	MG	1A	3899	1/1	0.83	0.14	51,51,51,51	0
54	MG	2A	3502	1/1	0.83	0.27	64,64,64,64	0
54	MG	2A	3520	1/1	0.83	0.18	54,54,54,54	0
54	MG	1A	3194	1/1	0.83	0.21	54,54,54,54	0
54	MG	2A	3548	1/1	0.83	0.15	54,54,54,54	0
54	MG	2A	3194	1/1	0.83	0.16	60,60,60,60	0
54	MG	1d	303	1/1	0.83	0.20	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3735	1/1	0.83	0.12	32,32,32,32	0
54	MG	2A	3569	1/1	0.83	0.19	51,51,51,51	0
54	MG	2a	1669	1/1	0.83	0.19	63,63,63,63	0
54	MG	1a	1749	1/1	0.83	0.13	46,46,46,46	0
54	MG	1A	3737	1/1	0.83	0.24	53,53,53,53	0
54	MG	2a	1678	1/1	0.83	0.10	57,57,57,57	0
54	MG	2A	3619	1/1	0.83	0.15	66,66,66,66	0
54	MG	1y	3004	1/1	0.83	0.28	76,76,76,76	0
54	MG	2A	3053	1/1	0.83	0.28	47,47,47,47	0
54	MG	2A	3056	1/1	0.83	0.32	46,46,46,46	0
54	MG	2A	3060	1/1	0.83	0.16	48,48,48,48	0
54	MG	1A	3927	1/1	0.83	0.09	42,42,42,42	0
54	MG	1a	1662	1/1	0.83	0.19	56,56,56,56	0
54	MG	2A	3691	1/1	0.83	0.12	64,64,64,64	0
54	MG	2p	3001	1/1	0.83	0.15	61,61,61,61	0
54	MG	1A	3190	1/1	0.83	0.19	45,45,45,45	0
54	MG	2A	3251	1/1	0.83	0.15	60,60,60,60	0
54	MG	2A	3401	1/1	0.84	0.07	54,54,54,54	0
54	MG	1a	1676	1/1	0.84	0.17	46,46,46,46	0
54	MG	2A	3428	1/1	0.84	0.15	53,53,53,53	0
54	MG	1A	3825	1/1	0.84	0.12	45,45,45,45	0
54	MG	1A	3499	1/1	0.84	0.40	50,50,50,50	0
54	MG	2A	3202	1/1	0.84	0.09	62,62,62,62	0
54	MG	2A	3072	1/1	0.84	0.17	49,49,49,49	0
54	MG	2A	3508	1/1	0.84	0.22	57,57,57,57	0
54	MG	1A	3748	1/1	0.84	0.12	68,68,68,68	0
54	MG	2A	3214	1/1	0.84	0.10	56,56,56,56	0
54	MG	1A	3854	1/1	0.84	0.15	19,19,19,19	0
54	MG	1a	1612	1/1	0.84	0.11	72,72,72,72	0
54	MG	2a	1614	1/1	0.84	0.21	74,74,74,74	0
54	MG	1a	1814	1/1	0.84	0.23	52,52,52,52	0
54	MG	1a	1617	1/1	0.84	0.15	58,58,58,58	0
54	MG	1a	1620	1/1	0.84	0.14	43,43,43,43	0
54	MG	2A	3587	1/1	0.84	0.48	44,44,44,44	0
54	MG	1A	4023	1/1	0.84	0.49	36,36,36,36	0
54	MG	1a	1833	1/1	0.84	0.29	60,60,60,60	0
54	MG	1a	1704	1/1	0.84	0.18	77,77,77,77	0
54	MG	2a	1656	1/1	0.84	0.08	63,63,63,63	0
54	MG	1B	202	1/1	0.84	0.23	36,36,36,36	0
54	MG	2A	3308	1/1	0.84	0.15	48,48,48,48	0
54	MG	1a	1715	1/1	0.84	0.20	58,58,58,58	0
54	MG	2A	3658	1/1	0.84	0.15	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1B	206	1/1	0.84	0.12	45,45,45,45	0
54	MG	1a	1846	1/1	0.84	0.15	74,74,74,74	0
54	MG	1A	3214	1/1	0.84	0.30	30,30,30,30	0
54	MG	2A	3335	1/1	0.84	0.19	56,56,56,56	0
54	MG	2a	1700	1/1	0.84	0.21	48,48,48,48	0
54	MG	1A	3373	1/1	0.84	0.15	25,25,25,25	0
54	MG	1A	3177	1/1	0.84	0.12	51,51,51,51	0
54	MG	1A	3949	1/1	0.84	0.28	68,68,68,68	0
54	MG	1A	3817	1/1	0.84	0.16	65,65,65,65	0
54	MG	1A	3951	1/1	0.84	0.13	50,50,50,50	0
54	MG	2j	8001	1/1	0.84	0.24	82,82,82,82	0
54	MG	2A	3191	1/1	0.84	0.23	57,57,57,57	0
54	MG	1A	3903	1/1	0.84	0.22	63,63,63,63	0
54	MG	2A	3014	1/1	0.84	0.15	51,51,51,51	0
54	MG	2B	3013	1/1	0.85	0.16	80,80,80,80	0
54	MG	2A	3096	1/1	0.85	0.12	60,60,60,60	0
54	MG	1U	202	1/1	0.85	0.20	48,48,48,48	0
54	MG	2A	3447	1/1	0.85	0.14	55,55,55,55	0
54	MG	2D	305	1/1	0.85	0.20	53,53,53,53	0
54	MG	1A	3798	1/1	0.85	0.18	35,35,35,35	0
54	MG	2A	3467	1/1	0.85	0.15	79,79,79,79	0
54	MG	1A	3430	1/1	0.85	0.17	38,38,38,38	0
54	MG	2A	3476	1/1	0.85	0.10	54,54,54,54	0
54	MG	2A	3486	1/1	0.85	0.15	56,56,56,56	0
54	MG	1A	3434	1/1	0.85	0.13	44,44,44,44	0
54	MG	2A	3218	1/1	0.85	0.23	57,57,57,57	0
54	MG	1A	3173	1/1	0.85	0.17	43,43,43,43	0
54	MG	1A	3379	1/1	0.85	0.13	73,73,73,73	0
54	MG	1a	1755	1/1	0.85	0.11	68,68,68,68	0
54	MG	1A	3303	1/1	0.85	0.12	55,55,55,55	0
54	MG	2A	3552	1/1	0.85	0.10	63,63,63,63	0
54	MG	1A	3208	1/1	0.85	0.13	53,53,53,53	0
54	MG	2A	3273	1/1	0.85	0.15	51,51,51,51	0
54	MG	1a	1777	1/1	0.85	0.21	61,61,61,61	0
54	MG	2a	1631	1/1	0.85	0.09	52,52,52,52	0
54	MG	2A	3303	1/1	0.85	0.11	40,40,40,40	0
54	MG	2A	3581	1/1	0.85	0.19	39,39,39,39	0
54	MG	1A	3527	1/1	0.85	0.09	51,51,51,51	0
54	MG	2A	3170	1/1	0.85	0.28	60,60,60,60	0
54	MG	2A	3314	1/1	0.85	0.13	30,30,30,30	0
54	MG	2A	3610	1/1	0.85	0.22	51,51,51,51	0
54	MG	2A	3618	1/1	0.85	0.11	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1t	3001	1/1	0.85	0.11	52,52,52,52	0
54	MG	1a	1628	1/1	0.85	0.18	49,49,49,49	0
54	MG	1A	3563	1/1	0.85	0.25	30,30,30,30	0
54	MG	1A	3209	1/1	0.85	0.18	52,52,52,52	0
54	MG	1A	3887	1/1	0.85	0.06	69,69,69,69	0
54	MG	2A	3667	1/1	0.85	0.14	49,49,49,49	0
54	MG	2A	3021	1/1	0.85	0.09	47,47,47,47	0
54	MG	2A	3036	1/1	0.85	0.17	57,57,57,57	0
54	MG	2a	1726	1/1	0.85	0.19	62,62,62,62	0
54	MG	2a	1729	1/1	0.85	0.12	64,64,64,64	0
54	MG	2A	3350	1/1	0.85	0.16	31,31,31,31	0
54	MG	1a	1810	1/1	0.85	0.16	63,63,63,63	0
54	MG	1a	1702	1/1	0.85	0.11	52,52,52,52	0
54	MG	1A	3056	1/1	0.85	0.12	52,52,52,52	0
54	MG	1A	3663	1/1	0.85	0.11	43,43,43,43	0
54	MG	2A	3080	1/1	0.85	0.23	57,57,57,57	0
54	MG	2A	3087	1/1	0.85	0.10	52,52,52,52	0
54	MG	1a	1659	1/1	0.85	0.12	64,64,64,64	0
54	MG	1D	310	1/1	0.86	0.22	62,62,62,62	0
54	MG	1a	1775	1/1	0.86	0.15	59,59,59,59	0
54	MG	1a	1776	1/1	0.86	0.12	69,69,69,69	0
54	MG	2A	3430	1/1	0.86	0.12	41,41,41,41	0
54	MG	1A	3131	1/1	0.86	0.20	48,48,48,48	0
54	MG	1a	1780	1/1	0.86	0.25	60,60,60,60	0
54	MG	1a	1671	1/1	0.86	0.13	60,60,60,60	0
54	MG	1G	3003	1/1	0.86	0.15	57,57,57,57	0
54	MG	1A	3339	1/1	0.86	0.13	48,48,48,48	0
54	MG	1a	1794	1/1	0.86	0.10	67,67,67,67	0
54	MG	1A	3867	1/1	0.86	0.12	47,47,47,47	0
54	MG	2A	3493	1/1	0.86	0.10	55,55,55,55	0
54	MG	1A	3720	1/1	0.86	0.10	52,52,52,52	0
54	MG	1A	3953	1/1	0.86	0.15	51,51,51,51	0
54	MG	17	102	1/1	0.86	0.14	40,40,40,40	0
54	MG	2A	3521	1/1	0.86	0.19	51,51,51,51	0
54	MG	2a	1607	1/1	0.86	0.19	64,64,64,64	0
54	MG	1A	3875	1/1	0.86	0.31	49,49,49,49	0
54	MG	1a	1817	1/1	0.86	0.15	57,57,57,57	0
54	MG	1A	3730	1/1	0.86	0.16	26,26,26,26	0
54	MG	1A	3488	1/1	0.86	0.09	56,56,56,56	0
54	MG	2a	1618	1/1	0.86	0.22	66,66,66,66	0
54	MG	2A	3262	1/1	0.86	0.13	62,62,62,62	0
54	MG	2a	1627	1/1	0.86	0.09	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3126	1/1	0.86	0.22	42,42,42,42	0
54	MG	2A	3137	1/1	0.86	0.21	52,52,52,52	0
54	MG	2A	3579	1/1	0.86	0.16	65,65,65,65	0
54	MG	1A	3969	1/1	0.86	0.34	45,45,45,45	0
54	MG	1A	3799	1/1	0.86	0.17	46,46,46,46	0
54	MG	2A	3147	1/1	0.86	0.68	44,44,44,44	0
54	MG	2A	3590	1/1	0.86	0.58	58,58,58,58	0
54	MG	1A	3901	1/1	0.86	0.14	37,37,37,37	0
54	MG	2a	1663	1/1	0.86	0.12	48,48,48,48	0
54	MG	1A	3233	1/1	0.86	0.38	48,48,48,48	0
54	MG	2A	3321	1/1	0.86	0.13	43,43,43,43	0
54	MG	1A	3082	1/1	0.86	0.14	55,55,55,55	0
54	MG	1a	1841	1/1	0.86	0.12	57,57,57,57	0
54	MG	1B	204	1/1	0.86	0.18	52,52,52,52	0
54	MG	1A	3642	1/1	0.86	0.10	51,51,51,51	0
54	MG	2a	1685	1/1	0.86	0.16	52,52,52,52	0
54	MG	1A	3752	1/1	0.86	0.12	55,55,55,55	0
54	MG	1a	1855	1/1	0.86	0.07	68,68,68,68	0
54	MG	2a	1704	1/1	0.86	0.28	63,63,63,63	0
54	MG	2A	3669	1/1	0.86	0.17	59,59,59,59	0
54	MG	2A	3672	1/1	0.86	0.19	55,55,55,55	0
54	MG	1a	1641	1/1	0.86	0.22	54,54,54,54	0
54	MG	2A	3675	1/1	0.86	0.11	73,73,73,73	0
54	MG	1A	3584	1/1	0.86	0.14	51,51,51,51	0
54	MG	2A	3183	1/1	0.86	0.32	53,53,53,53	0
54	MG	1A	3559	1/1	0.86	0.17	55,55,55,55	0
54	MG	1l	3002	1/1	0.86	0.21	72,72,72,72	0
54	MG	1B	224	1/1	0.86	0.15	43,43,43,43	0
54	MG	1A	3847	1/1	0.86	0.09	39,39,39,39	0
57	MPD	2A	3710	8/8	0.86	0.40	43,49,51,57	0
57	MPD	2B	3020	8/8	0.86	0.26	61,66,69,79	0
54	MG	2A	3399	1/1	0.86	0.15	42,42,42,42	0
54	MG	2A	3684	1/1	0.87	0.15	65,65,65,65	0
54	MG	2A	3370	1/1	0.87	0.10	70,70,70,70	0
54	MG	2A	3172	1/1	0.87	0.22	56,56,56,56	0
54	MG	1A	3757	1/1	0.87	0.11	48,48,48,48	0
54	MG	1A	3519	1/1	0.87	0.10	38,38,38,38	0
54	MG	1A	4017	1/1	0.87	0.20	34,34,34,34	0
54	MG	2A	3397	1/1	0.87	0.35	55,55,55,55	0
54	MG	1A	3280	1/1	0.87	0.17	44,44,44,44	0
54	MG	1f	3002	1/1	0.87	0.14	53,53,53,53	0
54	MG	1a	1633	1/1	0.87	0.16	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3291	1/1	0.87	0.17	45,45,45,45	0
54	MG	2A	3421	1/1	0.87	0.11	62,62,62,62	0
54	MG	1A	3158	1/1	0.87	0.23	41,41,41,41	0
54	MG	1A	3031	1/1	0.87	0.25	39,39,39,39	0
54	MG	1a	1773	1/1	0.87	0.24	61,61,61,61	0
54	MG	2P	202	1/1	0.87	0.24	59,59,59,59	0
54	MG	2A	3448	1/1	0.87	0.07	47,47,47,47	0
54	MG	2A	3010	1/1	0.87	0.26	54,54,54,54	0
54	MG	2A	3466	1/1	0.87	0.14	68,68,68,68	0
54	MG	1a	1649	1/1	0.87	0.43	41,41,41,41	0
54	MG	1a	1650	1/1	0.87	0.22	62,62,62,62	0
54	MG	28	8002	1/1	0.87	0.09	45,45,45,45	0
54	MG	28	8003	1/1	0.87	0.19	56,56,56,56	0
54	MG	1A	3906	1/1	0.87	0.19	55,55,55,55	0
54	MG	2a	1603	1/1	0.87	0.12	57,57,57,57	0
54	MG	2A	3477	1/1	0.87	0.34	59,59,59,59	0
54	MG	1A	3665	1/1	0.87	0.09	32,32,32,32	0
54	MG	1a	1658	1/1	0.87	0.15	46,46,46,46	0
54	MG	1A	3670	1/1	0.87	0.18	25,25,25,25	0
54	MG	2A	3068	1/1	0.87	0.44	59,59,59,59	0
54	MG	2A	3071	1/1	0.87	0.31	46,46,46,46	0
54	MG	2A	3510	1/1	0.87	0.21	64,64,64,64	0
54	MG	1A	3675	1/1	0.87	0.16	54,54,54,54	0
54	MG	2A	3078	1/1	0.87	0.08	63,63,63,63	0
54	MG	1D	302	1/1	0.87	0.42	42,42,42,42	0
54	MG	2A	3545	1/1	0.87	0.12	53,53,53,53	0
54	MG	2A	3547	1/1	0.87	0.13	38,38,38,38	0
54	MG	1A	3252	1/1	0.87	0.12	52,52,52,52	0
54	MG	2a	1639	1/1	0.87	0.28	54,54,54,54	0
54	MG	2A	3231	1/1	0.87	0.10	42,42,42,42	0
54	MG	1A	3095	1/1	0.87	0.19	49,49,49,49	0
54	MG	1a	1805	1/1	0.87	0.11	52,52,52,52	0
54	MG	2a	1651	1/1	0.87	0.19	58,58,58,58	0
54	MG	2A	3252	1/1	0.87	0.23	61,61,61,61	0
54	MG	1E	305	1/1	0.87	0.15	50,50,50,50	0
54	MG	1A	3937	1/1	0.87	0.15	74,74,74,74	0
54	MG	1G	3002	1/1	0.87	0.13	66,66,66,66	0
54	MG	2A	3285	1/1	0.87	0.16	65,65,65,65	0
54	MG	2a	1675	1/1	0.87	0.12	56,56,56,56	0
54	MG	1A	3043	1/1	0.87	0.25	52,52,52,52	0
54	MG	1H	8001	1/1	0.87	0.16	67,67,67,67	0
54	MG	2a	1681	1/1	0.87	0.19	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3599	1/1	0.87	0.15	45,45,45,45	0
54	MG	2a	1683	1/1	0.87	0.18	57,57,57,57	0
54	MG	2A	3305	1/1	0.87	0.16	26,26,26,26	0
54	MG	1A	3832	1/1	0.87	0.13	57,57,57,57	0
54	MG	1A	3943	1/1	0.87	0.20	52,52,52,52	0
54	MG	2a	1694	1/1	0.87	0.20	60,60,60,60	0
54	MG	1a	1832	1/1	0.87	0.10	42,42,42,42	0
54	MG	1A	3440	1/1	0.87	0.17	18,18,18,18	0
54	MG	2A	3629	1/1	0.87	0.11	51,51,51,51	0
54	MG	2a	1716	1/1	0.87	0.25	57,57,57,57	0
54	MG	2A	3148	1/1	0.87	0.74	57,57,57,57	0
54	MG	1A	3342	1/1	0.87	0.10	48,48,48,48	0
54	MG	2A	3651	1/1	0.87	0.11	58,58,58,58	0
54	MG	1A	3182	1/1	0.87	0.15	43,43,43,43	0
54	MG	2A	3659	1/1	0.87	0.41	49,49,49,49	0
54	MG	1A	3354	1/1	0.87	0.14	20,20,20,20	0
54	MG	2a	1749	1/1	0.87	0.27	64,64,64,64	0
54	MG	1A	3361	1/1	0.87	0.19	27,27,27,27	0
54	MG	1A	3866	1/1	0.87	0.10	35,35,35,35	0
54	MG	1A	3755	1/1	0.87	0.10	47,47,47,47	0
54	MG	1A	3120	1/1	0.87	0.17	44,44,44,44	0
54	MG	2A	3368	1/1	0.87	0.15	30,30,30,30	0
54	MG	2A	3683	1/1	0.87	0.09	73,73,73,73	0
54	MG	2A	3562	1/1	0.88	0.09	63,63,63,63	0
54	MG	1A	3917	1/1	0.88	0.12	51,51,51,51	0
54	MG	1a	1791	1/1	0.88	0.08	60,60,60,60	0
54	MG	1A	3619	1/1	0.88	0.42	25,25,25,25	0
54	MG	1A	3402	1/1	0.88	0.14	50,50,50,50	0
54	MG	1A	3550	1/1	0.88	0.19	53,53,53,53	0
54	MG	2A	3029	1/1	0.88	0.19	55,55,55,55	0
54	MG	1A	3935	1/1	0.88	0.09	55,55,55,55	0
54	MG	2A	3041	1/1	0.88	0.16	54,54,54,54	0
54	MG	1A	3093	1/1	0.88	0.20	38,38,38,38	0
54	MG	2A	3602	1/1	0.88	0.15	46,46,46,46	0
54	MG	2A	3192	1/1	0.88	0.19	52,52,52,52	0
54	MG	1a	1808	1/1	0.88	0.19	74,74,74,74	0
54	MG	1A	3274	1/1	0.88	0.13	40,40,40,40	0
54	MG	1A	3355	1/1	0.88	0.14	33,33,33,33	0
54	MG	1a	1627	1/1	0.88	0.14	54,54,54,54	0
54	MG	1a	1816	1/1	0.88	0.17	52,52,52,52	0
54	MG	2a	1632	1/1	0.88	0.20	59,59,59,59	0
54	MG	2A	3632	1/1	0.88	0.11	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3572	1/1	0.88	0.56	46,46,46,46	0
54	MG	2a	1641	1/1	0.88	0.25	66,66,66,66	0
54	MG	1A	3324	1/1	0.88	0.20	39,39,39,39	0
54	MG	2a	1644	1/1	0.88	0.25	55,55,55,55	0
54	MG	2A	3648	1/1	0.88	0.08	73,73,73,73	0
54	MG	2A	3408	1/1	0.88	0.14	54,54,54,54	0
54	MG	2A	3412	1/1	0.88	0.18	61,61,61,61	0
54	MG	2A	3081	1/1	0.88	0.11	55,55,55,55	0
54	MG	2A	3662	1/1	0.88	0.13	56,56,56,56	0
54	MG	2A	3423	1/1	0.88	0.13	45,45,45,45	0
54	MG	2a	1667	1/1	0.88	0.27	56,56,56,56	0
54	MG	1a	1631	1/1	0.88	0.26	64,64,64,64	0
54	MG	1D	307	1/1	0.88	0.18	40,40,40,40	0
54	MG	1a	1635	1/1	0.88	0.19	34,34,34,34	0
54	MG	1a	1729	1/1	0.88	0.25	60,60,60,60	0
54	MG	1a	1731	1/1	0.88	0.24	56,56,56,56	0
54	MG	2A	3106	1/1	0.88	0.22	46,46,46,46	0
54	MG	2A	3111	1/1	0.88	0.13	66,66,66,66	0
54	MG	1A	3242	1/1	0.88	0.16	53,53,53,53	0
54	MG	1A	3672	1/1	0.88	0.10	40,40,40,40	0
54	MG	2A	3124	1/1	0.88	0.27	54,54,54,54	0
54	MG	2A	3481	1/1	0.88	0.46	46,46,46,46	0
54	MG	2A	3695	1/1	0.88	0.15	36,36,36,36	0
54	MG	2a	1695	1/1	0.88	0.16	62,62,62,62	0
54	MG	1A	3448	1/1	0.88	0.15	24,24,24,24	0
54	MG	2A	3134	1/1	0.88	0.14	36,36,36,36	0
54	MG	2A	3721	1/1	0.88	0.09	42,42,42,42	0
54	MG	1a	1842	1/1	0.88	0.11	51,51,51,51	0
54	MG	1F	310	1/1	0.88	0.11	42,42,42,42	0
54	MG	1A	3055	1/1	0.88	0.12	45,45,45,45	0
54	MG	1A	3332	1/1	0.88	0.14	60,60,60,60	0
54	MG	1A	3258	1/1	0.88	0.24	32,32,32,32	0
54	MG	2a	1745	1/1	0.88	0.19	67,67,67,67	0
54	MG	1A	3964	1/1	0.88	0.75	36,36,36,36	0
54	MG	2A	3540	1/1	0.88	0.23	37,37,37,37	0
54	MG	2G	3003	1/1	0.88	0.17	79,79,79,79	0
54	MG	2f	3001	1/1	0.88	0.15	44,44,44,44	0
54	MG	1A	3394	1/1	0.88	0.15	18,18,18,18	0
54	MG	1P	202	1/1	0.88	0.12	66,66,66,66	0
54	MG	1A	3181	1/1	0.88	0.17	57,57,57,57	0
54	MG	1A	3618	1/1	0.88	0.13	42,42,42,42	0
54	MG	1X	101	1/1	0.88	0.19	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	4010	1/1	0.88	0.74	31,31,31,31	0
54	MG	2A	3055	1/1	0.89	0.14	38,38,38,38	0
54	MG	2A	3205	1/1	0.89	0.18	60,60,60,60	0
54	MG	2A	3468	1/1	0.89	0.16	61,61,61,61	0
54	MG	2D	301	1/1	0.89	0.10	56,56,56,56	0
54	MG	1A	3690	1/1	0.89	0.14	46,46,46,46	0
54	MG	2D	307	1/1	0.89	0.50	43,43,43,43	0
54	MG	1G	3001	1/1	0.89	0.15	52,52,52,52	0
54	MG	1A	3820	1/1	0.89	0.14	50,50,50,50	0
54	MG	1A	3205	1/1	0.89	0.11	42,42,42,42	0
54	MG	1A	3703	1/1	0.89	0.36	47,47,47,47	0
54	MG	1A	3705	1/1	0.89	0.17	48,48,48,48	0
54	MG	1A	3708	1/1	0.89	0.10	37,37,37,37	0
54	MG	1A	3718	1/1	0.89	0.13	26,26,26,26	0
54	MG	2A	3230	1/1	0.89	0.30	55,55,55,55	0
54	MG	1S	8001	1/1	0.89	0.12	62,62,62,62	0
54	MG	1U	201	1/1	0.89	0.37	38,38,38,38	0
54	MG	2a	1601	1/1	0.89	0.17	48,48,48,48	0
54	MG	2A	3245	1/1	0.89	0.20	60,60,60,60	0
54	MG	2A	3524	1/1	0.89	0.21	26,26,26,26	0
54	MG	2A	3538	1/1	0.89	0.11	35,35,35,35	0
54	MG	1A	3958	1/1	0.89	0.20	53,53,53,53	0
54	MG	1A	3484	1/1	0.89	0.12	35,35,35,35	0
54	MG	2A	3258	1/1	0.89	0.11	36,36,36,36	0
54	MG	1A	3124	1/1	0.89	0.20	40,40,40,40	0
54	MG	1A	3184	1/1	0.89	0.13	50,50,50,50	0
54	MG	19	502	1/1	0.89	0.21	50,50,50,50	0
54	MG	2A	3280	1/1	0.89	0.11	58,58,58,58	0
54	MG	1A	3500	1/1	0.89	0.17	44,44,44,44	0
54	MG	2A	3287	1/1	0.89	0.17	42,42,42,42	0
54	MG	2A	3296	1/1	0.89	0.10	36,36,36,36	0
54	MG	2A	3301	1/1	0.89	0.10	56,56,56,56	0
54	MG	1A	3611	1/1	0.89	0.12	41,41,41,41	0
54	MG	1A	3399	1/1	0.89	0.16	33,33,33,33	0
54	MG	1A	4007	1/1	0.89	0.33	23,23,23,23	0
54	MG	1A	3749	1/1	0.89	0.19	36,36,36,36	0
54	MG	1a	1619	1/1	0.89	0.13	54,54,54,54	0
54	MG	2A	3593	1/1	0.89	0.07	53,53,53,53	0
54	MG	2A	3594	1/1	0.89	0.25	60,60,60,60	0
54	MG	1A	3526	1/1	0.89	0.08	40,40,40,40	0
54	MG	2a	1649	1/1	0.89	0.16	49,49,49,49	0
54	MG	1a	1844	1/1	0.89	0.19	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1622	1/1	0.89	0.11	51,51,51,51	0
54	MG	1a	1742	1/1	0.89	0.25	62,62,62,62	0
54	MG	1a	1743	1/1	0.89	0.11	62,62,62,62	0
54	MG	2A	3156	1/1	0.89	0.12	41,41,41,41	0
54	MG	1A	3030	1/1	0.89	0.09	54,54,54,54	0
54	MG	1A	3530	1/1	0.89	0.12	44,44,44,44	0
54	MG	2A	3348	1/1	0.89	0.19	42,42,42,42	0
54	MG	2A	3633	1/1	0.89	0.10	43,43,43,43	0
54	MG	1A	3404	1/1	0.89	0.19	65,65,65,65	0
54	MG	2a	1680	1/1	0.89	0.09	58,58,58,58	0
54	MG	1A	3220	1/1	0.89	0.40	31,31,31,31	0
54	MG	1h	3002	1/1	0.89	0.15	64,64,64,64	0
54	MG	1A	3654	1/1	0.89	0.48	42,42,42,42	0
54	MG	2A	3375	1/1	0.89	0.15	64,64,64,64	0
54	MG	2A	3384	1/1	0.89	0.39	38,38,38,38	0
54	MG	1n	502	1/1	0.89	0.12	51,51,51,51	0
54	MG	2a	1693	1/1	0.89	0.14	55,55,55,55	0
54	MG	1o	3001	1/1	0.89	0.18	44,44,44,44	0
54	MG	1A	3161	1/1	0.89	0.16	34,34,34,34	0
54	MG	1A	3241	1/1	0.89	0.15	43,43,43,43	0
54	MG	1A	3010	1/1	0.89	0.12	38,38,38,38	0
54	MG	1B	229	1/1	0.89	0.11	41,41,41,41	0
54	MG	1A	3122	1/1	0.89	0.13	32,32,32,32	0
54	MG	1A	3253	1/1	0.89	0.17	59,59,59,59	0
54	MG	2A	3016	1/1	0.89	0.62	37,37,37,37	0
54	MG	2A	3019	1/1	0.89	0.17	56,56,56,56	0
54	MG	2A	3687	1/1	0.89	0.14	64,64,64,64	0
54	MG	1A	3123	1/1	0.89	0.11	32,32,32,32	0
54	MG	2a	1746	1/1	0.89	0.18	60,60,60,60	0
54	MG	1a	1781	1/1	0.89	0.19	58,58,58,58	0
54	MG	1A	3936	1/1	0.89	0.36	33,33,33,33	0
54	MG	2A	3196	1/1	0.89	0.12	50,50,50,50	0
54	MG	2e	3001	1/1	0.89	0.32	58,58,58,58	0
54	MG	1A	3679	1/1	0.89	0.29	52,52,52,52	0
54	MG	2A	3044	1/1	0.89	0.17	46,46,46,46	0
54	MG	2A	3200	1/1	0.89	0.12	45,45,45,45	0
54	MG	1A	3810	1/1	0.89	0.09	37,37,37,37	0
54	MG	2A	3450	1/1	0.89	0.11	55,55,55,55	0
54	MG	2B	3010	1/1	0.89	0.14	68,68,68,68	0
54	MG	2A	3463	1/1	0.89	0.14	62,62,62,62	0
59	ZN	2Y	501	1/1	0.89	0.12	79,79,79,79	0
54	MG	1A	3528	1/1	0.90	0.13	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3781	1/1	0.90	0.07	40,40,40,40	0
54	MG	1A	3071	1/1	0.90	0.49	29,29,29,29	0
54	MG	1A	3534	1/1	0.90	0.15	60,60,60,60	0
54	MG	1A	3784	1/1	0.90	0.11	42,42,42,42	0
54	MG	1A	3659	1/1	0.90	0.53	52,52,52,52	0
54	MG	1a	1837	1/1	0.90	0.16	44,44,44,44	0
54	MG	1N	203	1/1	0.90	0.09	53,53,53,53	0
54	MG	1A	3415	1/1	0.90	0.08	47,47,47,47	0
54	MG	1a	1697	1/1	0.90	0.13	51,51,51,51	0
54	MG	2A	3720	1/1	0.90	0.10	44,44,44,44	0
54	MG	1A	3558	1/1	0.90	0.10	34,34,34,34	0
54	MG	2A	3406	1/1	0.90	0.14	54,54,54,54	0
54	MG	2B	3004	1/1	0.90	0.12	58,58,58,58	0
54	MG	1A	3077	1/1	0.90	0.41	28,28,28,28	0
54	MG	1a	1845	1/1	0.90	0.16	78,78,78,78	0
54	MG	1A	3666	1/1	0.90	0.10	20,20,20,20	0
54	MG	1a	1703	1/1	0.90	0.16	60,60,60,60	0
54	MG	2A	3182	1/1	0.90	0.16	53,53,53,53	0
54	MG	1A	3952	1/1	0.90	0.09	46,46,46,46	0
54	MG	1A	3426	1/1	0.90	0.20	14,14,14,14	0
54	MG	2D	303	1/1	0.90	0.52	40,40,40,40	0
54	MG	1A	3955	1/1	0.90	0.10	39,39,39,39	0
54	MG	1d	304	1/1	0.90	0.12	56,56,56,56	0
54	MG	2D	308	1/1	0.90	0.14	27,27,27,27	0
54	MG	2F	301	1/1	0.90	0.16	39,39,39,39	0
54	MG	2G	3002	1/1	0.90	0.16	65,65,65,65	0
54	MG	1d	305	1/1	0.90	0.19	56,56,56,56	0
54	MG	2A	3454	1/1	0.90	0.14	70,70,70,70	0
54	MG	2A	3457	1/1	0.90	0.13	54,54,54,54	0
54	MG	2Q	3001	1/1	0.90	0.06	61,61,61,61	0
54	MG	2A	3462	1/1	0.90	0.12	53,53,53,53	0
54	MG	1a	1718	1/1	0.90	0.10	56,56,56,56	0
54	MG	11	103	1/1	0.90	0.10	42,42,42,42	0
54	MG	1a	1726	1/1	0.90	0.19	62,62,62,62	0
54	MG	15	102	1/1	0.90	0.27	42,42,42,42	0
54	MG	2A	3469	1/1	0.90	0.07	61,61,61,61	0
54	MG	1A	3347	1/1	0.90	0.12	36,36,36,36	0
54	MG	1A	3283	1/1	0.90	0.15	32,32,32,32	0
54	MG	1A	3678	1/1	0.90	0.16	40,40,40,40	0
54	MG	2A	3199	1/1	0.90	0.26	47,47,47,47	0
54	MG	2A	3482	1/1	0.90	0.16	51,51,51,51	0
54	MG	2A	3483	1/1	0.90	0.13	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3573	1/1	0.90	0.70	52,52,52,52	0
54	MG	2a	1608	1/1	0.90	0.14	62,62,62,62	0
54	MG	1a	1744	1/1	0.90	0.26	62,62,62,62	0
54	MG	1y	3003	1/1	0.90	0.17	74,74,74,74	0
54	MG	1A	3574	1/1	0.90	0.16	26,26,26,26	0
54	MG	2A	3504	1/1	0.90	0.10	60,60,60,60	0
54	MG	1A	3696	1/1	0.90	0.16	52,52,52,52	0
54	MG	2a	1621	1/1	0.90	0.14	68,68,68,68	0
54	MG	1a	1751	1/1	0.90	0.19	69,69,69,69	0
54	MG	2A	3512	1/1	0.90	0.14	51,51,51,51	0
54	MG	2A	3519	1/1	0.90	0.15	54,54,54,54	0
54	MG	1A	3286	1/1	0.90	0.33	56,56,56,56	0
54	MG	1A	3079	1/1	0.90	0.63	30,30,30,30	0
54	MG	1A	3704	1/1	0.90	0.12	50,50,50,50	0
54	MG	1A	3363	1/1	0.90	0.15	28,28,28,28	0
54	MG	2A	3220	1/1	0.90	0.14	58,58,58,58	0
54	MG	1A	3582	1/1	0.90	0.19	41,41,41,41	0
54	MG	1a	1626	1/1	0.90	0.22	59,59,59,59	0
54	MG	1A	3713	1/1	0.90	0.31	49,49,49,49	0
54	MG	1A	3449	1/1	0.90	0.17	17,17,17,17	0
54	MG	2A	3236	1/1	0.90	0.12	61,61,61,61	0
54	MG	1A	3050	1/1	0.90	0.34	27,27,27,27	0
54	MG	2A	3555	1/1	0.90	0.14	61,61,61,61	0
54	MG	2a	1661	1/1	0.90	0.41	54,54,54,54	0
54	MG	2A	3244	1/1	0.90	1.30	44,44,44,44	0
54	MG	1a	1778	1/1	0.90	0.15	60,60,60,60	0
54	MG	2A	3250	1/1	0.90	0.14	46,46,46,46	0
54	MG	2A	3058	1/1	0.90	0.21	51,51,51,51	0
54	MG	2a	1672	1/1	0.90	0.13	62,62,62,62	0
54	MG	1a	1779	1/1	0.90	0.13	58,58,58,58	0
54	MG	2A	3063	1/1	0.90	0.47	58,58,58,58	0
54	MG	2A	3065	1/1	0.90	0.41	49,49,49,49	0
54	MG	1A	3301	1/1	0.90	0.20	27,27,27,27	0
54	MG	1A	3256	1/1	0.90	0.15	51,51,51,51	0
54	MG	1A	3085	1/1	0.90	0.09	36,36,36,36	0
54	MG	1B	217	1/1	0.90	0.37	61,61,61,61	0
54	MG	2A	3597	1/1	0.90	0.32	61,61,61,61	0
54	MG	1A	3610	1/1	0.90	0.14	27,27,27,27	0
54	MG	2A	3290	1/1	0.90	0.15	30,30,30,30	0
54	MG	2A	3607	1/1	0.90	0.16	62,62,62,62	0
54	MG	1B	221	1/1	0.90	0.18	34,34,34,34	0
54	MG	1A	3391	1/1	0.90	0.23	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3613	1/1	0.90	0.18	57,57,57,57	0
54	MG	2A	3088	1/1	0.90	0.10	56,56,56,56	0
54	MG	1B	225	1/1	0.90	0.10	40,40,40,40	0
54	MG	1A	3615	1/1	0.90	0.18	50,50,50,50	0
54	MG	1B	230	1/1	0.90	0.13	68,68,68,68	0
54	MG	2a	1720	1/1	0.90	0.18	50,50,50,50	0
54	MG	1a	1806	1/1	0.90	0.20	53,53,53,53	0
54	MG	2A	3317	1/1	0.90	0.11	33,33,33,33	0
54	MG	2A	3105	1/1	0.90	0.49	46,46,46,46	0
54	MG	1A	3751	1/1	0.90	0.31	55,55,55,55	0
54	MG	2A	3644	1/1	0.90	0.15	48,48,48,48	0
54	MG	2A	3109	1/1	0.90	0.49	39,39,39,39	0
54	MG	1A	3021	1/1	0.90	0.25	38,38,38,38	0
54	MG	2A	3656	1/1	0.90	0.21	48,48,48,48	0
54	MG	1A	3004	1/1	0.90	0.23	43,43,43,43	0
54	MG	1A	3070	1/1	0.90	0.17	42,42,42,42	0
54	MG	2A	3123	1/1	0.90	0.17	49,49,49,49	0
54	MG	1A	3102	1/1	0.90	0.16	53,53,53,53	0
54	MG	1A	3928	1/1	0.90	0.12	27,27,27,27	0
54	MG	2A	3671	1/1	0.90	0.13	56,56,56,56	0
54	MG	1a	1818	1/1	0.90	0.16	62,62,62,62	0
54	MG	1a	1819	1/1	0.90	0.20	51,51,51,51	0
54	MG	1a	1673	1/1	0.90	0.35	55,55,55,55	0
54	MG	2A	3143	1/1	0.90	0.08	41,41,41,41	0
54	MG	1a	1772	1/1	0.91	0.19	57,57,57,57	0
54	MG	2A	3660	1/1	0.91	0.17	61,61,61,61	0
54	MG	2A	3661	1/1	0.91	0.07	47,47,47,47	0
54	MG	2A	3079	1/1	0.91	0.14	47,47,47,47	0
54	MG	2A	3666	1/1	0.91	0.17	51,51,51,51	0
54	MG	1A	3946	1/1	0.91	0.09	44,44,44,44	0
54	MG	2A	3328	1/1	0.91	0.15	56,56,56,56	0
54	MG	1a	1605	1/1	0.91	0.13	56,56,56,56	0
54	MG	2A	3084	1/1	0.91	0.25	52,52,52,52	0
54	MG	1A	3508	1/1	0.91	0.14	29,29,29,29	0
54	MG	1A	3513	1/1	0.91	0.14	53,53,53,53	0
54	MG	2A	3092	1/1	0.91	0.41	46,46,46,46	0
54	MG	2A	3682	1/1	0.91	0.10	51,51,51,51	0
54	MG	1A	3514	1/1	0.91	0.20	47,47,47,47	0
54	MG	1a	1613	1/1	0.91	0.15	60,60,60,60	0
54	MG	1A	3321	1/1	0.91	0.14	16,16,16,16	0
54	MG	2A	3358	1/1	0.91	0.17	38,38,38,38	0
54	MG	1a	1618	1/1	0.91	0.29	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3369	1/1	0.91	0.27	51,51,51,51	0
54	MG	1A	3786	1/1	0.91	0.16	40,40,40,40	0
54	MG	2A	3373	1/1	0.91	0.16	55,55,55,55	0
54	MG	2A	3374	1/1	0.91	0.10	26,26,26,26	0
54	MG	1A	3522	1/1	0.91	0.14	38,38,38,38	0
54	MG	2A	3717	1/1	0.91	0.27	61,61,61,61	0
54	MG	2A	3379	1/1	0.91	0.16	40,40,40,40	0
54	MG	1A	3213	1/1	0.91	0.20	33,33,33,33	0
54	MG	1A	3051	1/1	0.91	0.60	26,26,26,26	0
54	MG	2B	3002	1/1	0.91	0.20	71,71,71,71	0
54	MG	1a	1625	1/1	0.91	0.16	51,51,51,51	0
54	MG	1A	3260	1/1	0.91	0.09	38,38,38,38	0
54	MG	2B	3008	1/1	0.91	0.08	66,66,66,66	0
54	MG	1A	3411	1/1	0.91	0.12	46,46,46,46	0
54	MG	1A	3532	1/1	0.91	0.17	17,17,17,17	0
54	MG	1A	3667	1/1	0.91	0.13	40,40,40,40	0
54	MG	1A	3217	1/1	0.91	0.61	30,30,30,30	0
54	MG	1A	3543	1/1	0.91	0.24	44,44,44,44	0
54	MG	1A	3548	1/1	0.91	0.15	34,34,34,34	0
54	MG	1A	3831	1/1	0.91	0.13	19,19,19,19	0
54	MG	1a	1639	1/1	0.91	0.20	49,49,49,49	0
54	MG	1A	4013	1/1	0.91	0.86	29,29,29,29	0
54	MG	2A	3413	1/1	0.91	0.14	63,63,63,63	0
54	MG	1A	3677	1/1	0.91	0.28	43,43,43,43	0
54	MG	1A	3833	1/1	0.91	0.12	30,30,30,30	0
54	MG	2A	3425	1/1	0.91	0.13	68,68,68,68	0
54	MG	2A	3152	1/1	0.91	0.10	58,58,58,58	0
54	MG	2P	201	1/1	0.91	0.13	52,52,52,52	0
54	MG	1a	1820	1/1	0.91	0.11	56,56,56,56	0
54	MG	2A	3435	1/1	0.91	0.14	60,60,60,60	0
54	MG	2A	3157	1/1	0.91	0.18	42,42,42,42	0
54	MG	2R	201	1/1	0.91	0.20	35,35,35,35	0
54	MG	1A	3419	1/1	0.91	0.21	47,47,47,47	0
54	MG	1B	203	1/1	0.91	0.13	57,57,57,57	0
54	MG	1A	3552	1/1	0.91	0.12	45,45,45,45	0
54	MG	1a	1657	1/1	0.91	0.13	59,59,59,59	0
54	MG	25	502	1/1	0.91	0.24	59,59,59,59	0
54	MG	1A	3686	1/1	0.91	0.18	32,32,32,32	0
54	MG	1A	3688	1/1	0.91	0.20	34,34,34,34	0
54	MG	1B	210	1/1	0.91	0.14	50,50,50,50	0
54	MG	1A	3857	1/1	0.91	0.12	26,26,26,26	0
54	MG	1A	3167	1/1	0.91	0.47	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1669	1/1	0.91	0.16	51,51,51,51	0
54	MG	2A	3179	1/1	0.91	0.08	65,65,65,65	0
54	MG	1A	3865	1/1	0.91	0.77	35,35,35,35	0
54	MG	1A	3423	1/1	0.91	0.09	51,51,51,51	0
54	MG	1A	3223	1/1	0.91	0.45	28,28,28,28	0
54	MG	2A	3478	1/1	0.91	0.11	36,36,36,36	0
54	MG	1A	3565	1/1	0.91	0.21	36,36,36,36	0
54	MG	1A	3873	1/1	0.91	0.11	57,57,57,57	0
54	MG	2a	1617	1/1	0.91	0.19	43,43,43,43	0
54	MG	1A	3229	1/1	0.91	0.24	55,55,55,55	0
54	MG	2a	1620	1/1	0.91	0.10	56,56,56,56	0
54	MG	1a	1853	1/1	0.91	0.18	47,47,47,47	0
54	MG	1A	3878	1/1	0.91	0.32	57,57,57,57	0
54	MG	1A	3148	1/1	0.91	0.35	30,30,30,30	0
54	MG	1A	3891	1/1	0.91	0.14	30,30,30,30	0
54	MG	1A	3436	1/1	0.91	0.09	41,41,41,41	0
54	MG	2A	3507	1/1	0.91	0.17	54,54,54,54	0
54	MG	2a	1635	1/1	0.91	0.15	71,71,71,71	0
54	MG	1a	1696	1/1	0.91	0.15	70,70,70,70	0
54	MG	2A	3509	1/1	0.91	0.20	60,60,60,60	0
54	MG	1d	306	1/1	0.91	0.19	56,56,56,56	0
54	MG	1A	3133	1/1	0.91	0.09	27,27,27,27	0
54	MG	1A	3092	1/1	0.91	0.20	32,32,32,32	0
54	MG	1A	3251	1/1	0.91	0.29	23,23,23,23	0
54	MG	1F	313	1/1	0.91	0.10	31,31,31,31	0
54	MG	1A	3721	1/1	0.91	0.19	25,25,25,25	0
54	MG	2A	3528	1/1	0.91	0.20	32,32,32,32	0
54	MG	1A	3293	1/1	0.91	0.23	18,18,18,18	0
54	MG	1A	3460	1/1	0.91	0.18	30,30,30,30	0
54	MG	1a	1709	1/1	0.91	0.14	54,54,54,54	0
54	MG	1A	3296	1/1	0.91	0.14	19,19,19,19	0
54	MG	2a	1666	1/1	0.91	0.10	57,57,57,57	0
54	MG	1A	3140	1/1	0.91	0.46	29,29,29,29	0
54	MG	1A	3183	1/1	0.91	0.15	45,45,45,45	0
54	MG	2A	3551	1/1	0.91	0.12	61,61,61,61	0
54	MG	2A	3005	1/1	0.91	0.27	41,41,41,41	0
54	MG	2A	3224	1/1	0.91	0.63	35,35,35,35	0
54	MG	2A	3554	1/1	0.91	0.09	49,49,49,49	0
54	MG	2A	3225	1/1	0.91	0.21	56,56,56,56	0
54	MG	1O	8001	1/1	0.91	0.12	43,43,43,43	0
54	MG	1A	3485	1/1	0.91	0.07	47,47,47,47	0
54	MG	1P	203	1/1	0.91	0.07	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3929	1/1	0.91	0.14	38,38,38,38	0
54	MG	2A	3573	1/1	0.91	0.16	19,19,19,19	0
54	MG	1a	1741	1/1	0.91	0.08	51,51,51,51	0
54	MG	1A	3486	1/1	0.91	0.18	21,21,21,21	0
54	MG	2A	3032	1/1	0.91	0.16	54,54,54,54	0
54	MG	1T	201	1/1	0.91	0.14	54,54,54,54	0
54	MG	2A	3249	1/1	0.91	0.14	45,45,45,45	0
54	MG	1A	3302	1/1	0.91	0.16	27,27,27,27	0
54	MG	2A	3043	1/1	0.91	0.11	68,68,68,68	0
54	MG	1A	3493	1/1	0.91	0.15	56,56,56,56	0
54	MG	2A	3598	1/1	0.91	0.09	53,53,53,53	0
54	MG	2A	3051	1/1	0.91	0.18	38,38,38,38	0
54	MG	2a	1725	1/1	0.91	0.10	64,64,64,64	0
54	MG	1A	3498	1/1	0.91	0.21	32,32,32,32	0
54	MG	2A	3054	1/1	0.91	0.20	63,63,63,63	0
54	MG	1A	3160	1/1	0.91	0.10	41,41,41,41	0
54	MG	2A	3275	1/1	0.91	0.06	62,62,62,62	0
54	MG	2a	1743	1/1	0.91	0.21	63,63,63,63	0
54	MG	11	102	1/1	0.91	0.18	47,47,47,47	0
54	MG	2A	3284	1/1	0.91	0.18	55,55,55,55	0
54	MG	1a	1753	1/1	0.91	0.15	66,66,66,66	0
54	MG	2A	3059	1/1	0.91	0.28	42,42,42,42	0
54	MG	1A	3940	1/1	0.91	0.38	67,67,67,67	0
54	MG	2A	3291	1/1	0.91	0.10	47,47,47,47	0
54	MG	1A	3766	1/1	0.91	0.12	47,47,47,47	0
54	MG	1a	1759	1/1	0.91	0.13	64,64,64,64	0
54	MG	1a	1761	1/1	0.91	0.07	57,57,57,57	0
54	MG	2A	3070	1/1	0.91	0.59	42,42,42,42	0
54	MG	2r	8001	1/1	0.91	0.15	65,65,65,65	0
57	MPD	1T	204	8/8	0.91	0.19	57,64,66,66	0
57	MPD	1a	1854	8/8	0.91	0.15	46,63,67,69	0
54	MG	1A	3311	1/1	0.91	0.12	35,35,35,35	0
54	MG	1A	3944	1/1	0.91	0.10	47,47,47,47	0
54	MG	2A	3075	1/1	0.91	0.68	42,42,42,42	0
54	MG	2A	3077	1/1	0.91	0.17	32,32,32,32	0
54	MG	2A	3281	1/1	0.92	0.18	59,59,59,59	0
54	MG	2A	3283	1/1	0.92	0.07	50,50,50,50	0
54	MG	2A	3047	1/1	0.92	0.14	56,56,56,56	0
54	MG	1a	1739	1/1	0.92	0.09	61,61,61,61	0
54	MG	1A	3083	1/1	0.92	0.26	40,40,40,40	0
54	MG	1A	3315	1/1	0.92	0.12	25,25,25,25	0
54	MG	1A	3036	1/1	0.92	0.18	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3657	1/1	0.92	0.17	43,43,43,43	0
54	MG	2A	3293	1/1	0.92	0.15	35,35,35,35	0
54	MG	2A	3294	1/1	0.92	0.13	41,41,41,41	0
54	MG	1A	3900	1/1	0.92	0.19	40,40,40,40	0
54	MG	1A	3428	1/1	0.92	0.31	52,52,52,52	0
54	MG	1A	3322	1/1	0.92	0.17	21,21,21,21	0
54	MG	1R	201	1/1	0.92	0.36	31,31,31,31	0
54	MG	1A	3714	1/1	0.92	0.18	37,37,37,37	0
54	MG	1A	3038	1/1	0.92	0.13	40,40,40,40	0
54	MG	1A	3257	1/1	0.92	0.31	42,42,42,42	0
54	MG	1A	3437	1/1	0.92	0.20	41,41,41,41	0
54	MG	1a	1756	1/1	0.92	0.15	58,58,58,58	0
54	MG	2A	3674	1/1	0.92	0.14	63,63,63,63	0
54	MG	1A	3197	1/1	0.92	0.14	41,41,41,41	0
54	MG	2A	3323	1/1	0.92	0.17	34,34,34,34	0
54	MG	2A	3677	1/1	0.92	0.30	50,50,50,50	0
54	MG	2A	3680	1/1	0.92	0.12	50,50,50,50	0
54	MG	1A	3924	1/1	0.92	0.16	45,45,45,45	0
54	MG	10	103	1/1	0.92	0.11	43,43,43,43	0
54	MG	1A	3732	1/1	0.92	0.25	41,41,41,41	0
54	MG	1a	1768	1/1	0.92	0.15	69,69,69,69	0
54	MG	10	106	1/1	0.92	0.39	41,41,41,41	0
54	MG	1A	3203	1/1	0.92	0.24	55,55,55,55	0
54	MG	2A	3339	1/1	0.92	0.10	71,71,71,71	0
54	MG	1A	3446	1/1	0.92	0.22	20,20,20,20	0
54	MG	1A	3932	1/1	0.92	0.12	58,58,58,58	0
54	MG	1A	3933	1/1	0.92	0.07	41,41,41,41	0
54	MG	2A	3702	1/1	0.92	0.09	46,46,46,46	0
54	MG	1A	3739	1/1	0.92	0.20	51,51,51,51	0
54	MG	2A	3094	1/1	0.92	0.23	49,49,49,49	0
54	MG	19	503	1/1	0.92	0.16	50,50,50,50	0
54	MG	1A	3337	1/1	0.92	0.10	55,55,55,55	0
54	MG	1A	3075	1/1	0.92	0.39	32,32,32,32	0
54	MG	2A	3371	1/1	0.92	0.17	26,26,26,26	0
54	MG	1A	3341	1/1	0.92	0.13	36,36,36,36	0
54	MG	1A	3261	1/1	0.92	0.44	36,36,36,36	0
54	MG	1a	1788	1/1	0.92	0.18	54,54,54,54	0
54	MG	2A	3108	1/1	0.92	0.19	62,62,62,62	0
54	MG	2B	3011	1/1	0.92	0.08	65,65,65,65	0
54	MG	2B	3012	1/1	0.92	0.13	50,50,50,50	0
54	MG	1A	3939	1/1	0.92	0.10	55,55,55,55	0
54	MG	1A	3263	1/1	0.92	0.39	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3266	1/1	0.92	0.66	40,40,40,40	0
54	MG	2B	3017	1/1	0.92	0.13	80,80,80,80	0
54	MG	2A	3114	1/1	0.92	0.20	56,56,56,56	0
54	MG	2B	3019	1/1	0.92	0.09	65,65,65,65	0
54	MG	1A	3605	1/1	0.92	0.15	44,44,44,44	0
54	MG	2D	302	1/1	0.92	0.91	38,38,38,38	0
54	MG	1A	3608	1/1	0.92	0.18	50,50,50,50	0
54	MG	1a	1803	1/1	0.92	0.10	64,64,64,64	0
54	MG	1A	3765	1/1	0.92	0.10	39,39,39,39	0
54	MG	2A	3132	1/1	0.92	0.14	43,43,43,43	0
54	MG	2E	302	1/1	0.92	0.39	67,67,67,67	0
54	MG	2A	3402	1/1	0.92	0.09	43,43,43,43	0
54	MG	2F	303	1/1	0.92	0.70	43,43,43,43	0
54	MG	1A	3353	1/1	0.92	0.13	18,18,18,18	0
54	MG	2A	3136	1/1	0.92	0.16	51,51,51,51	0
54	MG	1A	3767	1/1	0.92	0.11	45,45,45,45	0
54	MG	2A	3139	1/1	0.92	0.10	58,58,58,58	0
54	MG	1A	3773	1/1	0.92	0.17	64,64,64,64	0
54	MG	2A	3419	1/1	0.92	0.20	59,59,59,59	0
54	MG	1a	1812	1/1	0.92	0.10	59,59,59,59	0
54	MG	1A	3125	1/1	0.92	0.46	30,30,30,30	0
54	MG	2T	3001	1/1	0.92	0.24	50,50,50,50	0
54	MG	1A	3780	1/1	0.92	0.21	45,45,45,45	0
54	MG	2A	3426	1/1	0.92	0.09	58,58,58,58	0
54	MG	1A	3613	1/1	0.92	0.26	50,50,50,50	0
54	MG	1A	3163	1/1	0.92	0.25	47,47,47,47	0
54	MG	2A	3151	1/1	0.92	0.21	66,66,66,66	0
54	MG	28	8001	1/1	0.92	0.09	46,46,46,46	0
54	MG	1A	3210	1/1	0.92	0.32	32,32,32,32	0
54	MG	2A	3153	1/1	0.92	0.47	42,42,42,42	0
54	MG	2A	3154	1/1	0.92	0.19	41,41,41,41	0
54	MG	1A	3212	1/1	0.92	0.57	37,37,37,37	0
54	MG	2A	3453	1/1	0.92	0.31	64,64,64,64	0
54	MG	1a	1634	1/1	0.92	0.15	69,69,69,69	0
54	MG	2A	3456	1/1	0.92	0.14	31,31,31,31	0
54	MG	2a	1606	1/1	0.92	0.12	45,45,45,45	0
54	MG	1a	1821	1/1	0.92	0.18	44,44,44,44	0
54	MG	2A	3460	1/1	0.92	0.16	53,53,53,53	0
54	MG	2A	3164	1/1	0.92	0.11	69,69,69,69	0
54	MG	1A	3632	1/1	0.92	0.13	63,63,63,63	0
54	MG	2A	3465	1/1	0.92	0.20	56,56,56,56	0
54	MG	1A	3008	1/1	0.92	0.10	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3966	1/1	0.92	0.43	36,36,36,36	0
54	MG	1A	3281	1/1	0.92	0.23	36,36,36,36	0
54	MG	1A	3981	1/1	0.92	0.16	51,51,51,51	0
54	MG	1A	3797	1/1	0.92	0.33	34,34,34,34	0
54	MG	1A	3641	1/1	0.92	0.19	29,29,29,29	0
54	MG	2a	1626	1/1	0.92	0.21	53,53,53,53	0
54	MG	1a	1836	1/1	0.92	0.09	62,62,62,62	0
54	MG	1A	4005	1/1	0.92	0.31	32,32,32,32	0
54	MG	1a	1839	1/1	0.92	0.08	59,59,59,59	0
54	MG	1A	3172	1/1	0.92	0.86	31,31,31,31	0
54	MG	1A	3512	1/1	0.92	0.19	40,40,40,40	0
54	MG	1A	3651	1/1	0.92	0.30	30,30,30,30	0
54	MG	2A	3186	1/1	0.92	0.19	34,34,34,34	0
54	MG	1A	3809	1/1	0.92	0.23	39,39,39,39	0
54	MG	2A	3501	1/1	0.92	0.14	43,43,43,43	0
54	MG	1A	3132	1/1	0.92	0.12	40,40,40,40	0
54	MG	2A	3503	1/1	0.92	0.11	54,54,54,54	0
54	MG	1a	1664	1/1	0.92	0.21	51,51,51,51	0
54	MG	2A	3506	1/1	0.92	0.10	63,63,63,63	0
54	MG	2a	1650	1/1	0.92	0.11	58,58,58,58	0
54	MG	1A	4027	1/1	0.92	0.48	37,37,37,37	0
54	MG	2a	1655	1/1	0.92	0.14	63,63,63,63	0
54	MG	1A	3655	1/1	0.92	0.36	30,30,30,30	0
54	MG	2a	1658	1/1	0.92	0.15	60,60,60,60	0
54	MG	1A	3818	1/1	0.92	0.17	31,31,31,31	0
54	MG	1A	3058	1/1	0.92	0.13	34,34,34,34	0
54	MG	1a	1856	1/1	0.92	0.19	67,67,67,67	0
54	MG	2a	1664	1/1	0.92	0.11	61,61,61,61	0
54	MG	1b	3001	1/1	0.92	0.18	76,76,76,76	0
54	MG	1A	3823	1/1	0.92	0.30	29,29,29,29	0
54	MG	1A	3660	1/1	0.92	0.15	51,51,51,51	0
54	MG	1B	208	1/1	0.92	0.24	51,51,51,51	0
54	MG	1A	3392	1/1	0.92	0.22	23,23,23,23	0
54	MG	1A	3521	1/1	0.92	0.17	42,42,42,42	0
54	MG	1B	215	1/1	0.92	0.28	61,61,61,61	0
54	MG	1e	3002	1/1	0.92	0.41	53,53,53,53	0
54	MG	2A	3207	1/1	0.92	0.35	55,55,55,55	0
54	MG	2A	3208	1/1	0.92	0.13	43,43,43,43	0
54	MG	2A	3211	1/1	0.92	0.48	46,46,46,46	0
54	MG	2A	3549	1/1	0.92	0.20	38,38,38,38	0
54	MG	1A	3292	1/1	0.92	0.17	56,56,56,56	0
54	MG	1h	3001	1/1	0.92	0.12	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3061	1/1	0.92	0.10	43,43,43,43	0
54	MG	1A	3116	1/1	0.92	0.23	28,28,28,28	0
54	MG	1a	1689	1/1	0.92	0.18	55,55,55,55	0
54	MG	2A	3558	1/1	0.92	0.09	58,58,58,58	0
54	MG	1a	1691	1/1	0.92	0.16	56,56,56,56	0
54	MG	1B	222	1/1	0.92	0.14	57,57,57,57	0
54	MG	2a	1707	1/1	0.92	0.15	47,47,47,47	0
54	MG	2A	3566	1/1	0.92	0.12	35,35,35,35	0
54	MG	1A	3837	1/1	0.92	0.19	56,56,56,56	0
54	MG	1A	3142	1/1	0.92	0.21	50,50,50,50	0
54	MG	1A	3848	1/1	0.92	0.14	48,48,48,48	0
54	MG	1A	3403	1/1	0.92	0.12	50,50,50,50	0
54	MG	1A	3674	1/1	0.92	0.11	35,35,35,35	0
54	MG	2A	3235	1/1	0.92	0.15	54,54,54,54	0
54	MG	1A	3118	1/1	0.92	0.17	49,49,49,49	0
54	MG	2A	3012	1/1	0.92	0.16	43,43,43,43	0
54	MG	1A	3408	1/1	0.92	0.19	50,50,50,50	0
54	MG	1A	3538	1/1	0.92	0.11	55,55,55,55	0
54	MG	1A	3539	1/1	0.92	0.14	22,22,22,22	0
54	MG	1A	3147	1/1	0.92	0.20	39,39,39,39	0
54	MG	1A	3413	1/1	0.92	0.29	57,57,57,57	0
54	MG	2A	3031	1/1	0.92	0.19	48,48,48,48	0
54	MG	1A	3549	1/1	0.92	0.14	38,38,38,38	0
54	MG	2A	3261	1/1	0.92	0.13	43,43,43,43	0
54	MG	2A	3609	1/1	0.92	0.18	45,45,45,45	0
54	MG	1A	3119	1/1	0.92	0.14	38,38,38,38	0
54	MG	2A	3265	1/1	0.92	0.11	57,57,57,57	0
54	MG	2A	3614	1/1	0.92	0.17	58,58,58,58	0
54	MG	2A	3268	1/1	0.92	0.10	29,29,29,29	0
54	MG	1a	1730	1/1	0.92	0.12	43,43,43,43	0
54	MG	1A	3882	1/1	0.92	0.04	60,60,60,60	0
54	MG	1A	3310	1/1	0.92	0.12	38,38,38,38	0
54	MG	2A	3046	1/1	0.92	0.23	59,59,59,59	0
54	MG	1E	306	1/1	0.93	0.13	31,31,31,31	0
54	MG	1F	302	1/1	0.93	0.13	32,32,32,32	0
54	MG	1F	307	1/1	0.93	0.37	31,31,31,31	0
54	MG	2A	3624	1/1	0.93	0.11	37,37,37,37	0
54	MG	1A	3883	1/1	0.93	0.56	47,47,47,47	0
54	MG	2A	3630	1/1	0.93	0.18	52,52,52,52	0
54	MG	2A	3048	1/1	0.93	0.20	61,61,61,61	0
54	MG	2A	3049	1/1	0.93	0.18	53,53,53,53	0
54	MG	2A	3050	1/1	0.93	0.16	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1738	1/1	0.93	0.30	62,62,62,62	0
54	MG	1A	3884	1/1	0.93	0.09	48,48,48,48	0
54	MG	2A	3646	1/1	0.93	0.25	60,60,60,60	0
54	MG	2A	3647	1/1	0.93	0.17	57,57,57,57	0
54	MG	1A	3728	1/1	0.93	0.22	38,38,38,38	0
54	MG	1A	3188	1/1	0.93	0.18	53,53,53,53	0
54	MG	1A	3335	1/1	0.93	0.15	22,22,22,22	0
54	MG	1A	3733	1/1	0.93	0.12	42,42,42,42	0
54	MG	1a	1747	1/1	0.93	0.20	56,56,56,56	0
54	MG	1A	3174	1/1	0.93	0.34	34,34,34,34	0
54	MG	1A	3175	1/1	0.93	0.56	35,35,35,35	0
54	MG	1A	3902	1/1	0.93	0.14	52,52,52,52	0
54	MG	1A	3503	1/1	0.93	0.13	58,58,58,58	0
54	MG	2A	3663	1/1	0.93	0.09	61,61,61,61	0
54	MG	2A	3664	1/1	0.93	0.09	57,57,57,57	0
54	MG	1A	3904	1/1	0.93	0.13	60,60,60,60	0
54	MG	1A	3127	1/1	0.93	0.18	49,49,49,49	0
54	MG	2A	3668	1/1	0.93	0.10	48,48,48,48	0
54	MG	1A	3218	1/1	0.93	0.44	30,30,30,30	0
54	MG	1A	3343	1/1	0.93	0.14	56,56,56,56	0
54	MG	2A	3076	1/1	0.93	0.33	44,44,44,44	0
54	MG	1a	1757	1/1	0.93	0.11	77,77,77,77	0
54	MG	1A	3417	1/1	0.93	0.16	20,20,20,20	0
54	MG	1A	3178	1/1	0.93	0.29	29,29,29,29	0
54	MG	1T	203	1/1	0.93	0.14	52,52,52,52	0
54	MG	1A	3753	1/1	0.93	0.14	35,35,35,35	0
54	MG	2A	3083	1/1	0.93	0.17	49,49,49,49	0
54	MG	1A	3621	1/1	0.93	0.10	52,52,52,52	0
54	MG	1a	1771	1/1	0.93	0.16	46,46,46,46	0
54	MG	2A	3343	1/1	0.93	0.22	50,50,50,50	0
54	MG	1V	203	1/1	0.93	0.20	55,55,55,55	0
54	MG	2A	3349	1/1	0.93	0.17	56,56,56,56	0
54	MG	1A	3520	1/1	0.93	0.14	38,38,38,38	0
54	MG	1Z	8001	1/1	0.93	0.19	60,60,60,60	0
54	MG	1A	3196	1/1	0.93	0.57	40,40,40,40	0
54	MG	2A	3361	1/1	0.93	0.11	33,33,33,33	0
54	MG	2A	3362	1/1	0.93	0.14	34,34,34,34	0
54	MG	2A	3363	1/1	0.93	0.16	61,61,61,61	0
54	MG	1A	3760	1/1	0.93	0.24	61,61,61,61	0
54	MG	1A	3761	1/1	0.93	0.13	32,32,32,32	0
54	MG	1A	3349	1/1	0.93	0.15	40,40,40,40	0
54	MG	1A	3425	1/1	0.93	0.13	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3724	1/1	0.93	0.42	32,32,32,32	0
54	MG	1A	3300	1/1	0.93	0.14	23,23,23,23	0
54	MG	1A	3768	1/1	0.93	0.11	54,54,54,54	0
54	MG	2B	3003	1/1	0.93	0.09	74,74,74,74	0
54	MG	1A	3646	1/1	0.93	0.08	37,37,37,37	0
54	MG	2B	3005	1/1	0.93	0.15	61,61,61,61	0
54	MG	2A	3377	1/1	0.93	0.10	43,43,43,43	0
54	MG	1a	1786	1/1	0.93	0.20	57,57,57,57	0
54	MG	2A	3381	1/1	0.93	0.13	53,53,53,53	0
54	MG	2A	3383	1/1	0.93	0.23	64,64,64,64	0
54	MG	1A	3427	1/1	0.93	0.13	37,37,37,37	0
54	MG	2A	3113	1/1	0.93	0.27	59,59,59,59	0
54	MG	1A	3180	1/1	0.93	0.42	37,37,37,37	0
54	MG	2A	3388	1/1	0.93	0.11	51,51,51,51	0
54	MG	1A	3265	1/1	0.93	0.13	46,46,46,46	0
54	MG	1A	3942	1/1	0.93	0.20	73,73,73,73	0
54	MG	1A	3156	1/1	0.93	0.11	49,49,49,49	0
54	MG	1A	3535	1/1	0.93	0.26	38,38,38,38	0
54	MG	2A	3131	1/1	0.93	0.83	44,44,44,44	0
54	MG	1A	3305	1/1	0.93	0.12	39,39,39,39	0
54	MG	1A	3367	1/1	0.93	0.18	18,18,18,18	0
54	MG	1A	3235	1/1	0.93	0.39	39,39,39,39	0
54	MG	1A	3442	1/1	0.93	0.15	15,15,15,15	0
54	MG	1A	3376	1/1	0.93	0.12	29,29,29,29	0
54	MG	1A	3272	1/1	0.93	0.16	38,38,38,38	0
54	MG	1A	3954	1/1	0.93	0.09	36,36,36,36	0
54	MG	2G	3001	1/1	0.93	0.08	71,71,71,71	0
54	MG	2A	3417	1/1	0.93	0.12	37,37,37,37	0
54	MG	2A	3144	1/1	0.93	0.10	54,54,54,54	0
54	MG	1A	3551	1/1	0.93	0.10	43,43,43,43	0
54	MG	1A	3800	1/1	0.93	0.19	44,44,44,44	0
54	MG	1A	3238	1/1	0.93	0.56	40,40,40,40	0
54	MG	1A	3960	1/1	0.93	0.09	32,32,32,32	0
54	MG	1A	3673	1/1	0.93	0.17	28,28,28,28	0
54	MG	1A	3320	1/1	0.93	0.10	24,24,24,24	0
54	MG	2A	3432	1/1	0.93	0.16	57,57,57,57	0
54	MG	2A	3434	1/1	0.93	0.13	26,26,26,26	0
54	MG	1A	3963	1/1	0.93	0.25	38,38,38,38	0
54	MG	2A	3436	1/1	0.93	0.14	56,56,56,56	0
54	MG	2A	3439	1/1	0.93	0.14	64,64,64,64	0
54	MG	2A	3444	1/1	0.93	0.24	60,60,60,60	0
54	MG	2A	3446	1/1	0.93	0.13	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1822	1/1	0.93	0.12	60,60,60,60	0
54	MG	1A	3452	1/1	0.93	0.15	21,21,21,21	0
54	MG	1a	1825	1/1	0.93	0.13	54,54,54,54	0
54	MG	2A	3159	1/1	0.93	0.12	50,50,50,50	0
54	MG	1A	3815	1/1	0.93	0.10	33,33,33,33	0
54	MG	2A	3161	1/1	0.93	0.17	46,46,46,46	0
54	MG	1A	3968	1/1	0.93	0.10	11,11,11,11	0
54	MG	1a	1831	1/1	0.93	0.10	54,54,54,54	0
54	MG	2A	3459	1/1	0.93	0.11	38,38,38,38	0
54	MG	1A	3562	1/1	0.93	0.07	32,32,32,32	0
54	MG	1A	3457	1/1	0.93	0.09	64,64,64,64	0
54	MG	1A	3387	1/1	0.93	0.08	54,54,54,54	0
54	MG	1a	1648	1/1	0.93	0.07	72,72,72,72	0
54	MG	1A	3463	1/1	0.93	0.13	19,19,19,19	0
54	MG	1A	3995	1/1	0.93	0.20	26,26,26,26	0
54	MG	2A	3174	1/1	0.93	0.23	45,45,45,45	0
54	MG	1a	1651	1/1	0.93	0.25	59,59,59,59	0
54	MG	2A	3471	1/1	0.93	0.10	61,61,61,61	0
54	MG	1A	4000	1/1	0.93	0.11	30,30,30,30	0
54	MG	2a	1624	1/1	0.93	0.15	65,65,65,65	0
54	MG	2a	1625	1/1	0.93	0.13	67,67,67,67	0
54	MG	1A	3687	1/1	0.93	0.10	44,44,44,44	0
54	MG	1a	1655	1/1	0.93	0.26	57,57,57,57	0
54	MG	1A	3826	1/1	0.93	0.19	26,26,26,26	0
54	MG	2A	3479	1/1	0.93	0.14	41,41,41,41	0
54	MG	1A	3829	1/1	0.93	0.15	54,54,54,54	0
54	MG	1A	3570	1/1	0.93	0.25	47,47,47,47	0
54	MG	2a	1637	1/1	0.93	0.19	63,63,63,63	0
54	MG	1a	1660	1/1	0.93	0.18	46,46,46,46	0
54	MG	1a	1848	1/1	0.93	0.21	53,53,53,53	0
54	MG	2a	1640	1/1	0.93	0.17	53,53,53,53	0
54	MG	2A	3190	1/1	0.93	0.12	47,47,47,47	0
54	MG	1A	4016	1/1	0.93	0.48	41,41,41,41	0
54	MG	2A	3500	1/1	0.93	0.12	51,51,51,51	0
54	MG	1A	3471	1/1	0.93	0.10	31,31,31,31	0
54	MG	1a	1665	1/1	0.93	0.13	59,59,59,59	0
54	MG	1a	1666	1/1	0.93	0.55	50,50,50,50	0
54	MG	1A	4022	1/1	0.93	0.15	30,30,30,30	0
54	MG	1A	3166	1/1	0.93	0.10	32,32,32,32	0
54	MG	2a	1653	1/1	0.93	0.10	53,53,53,53	0
54	MG	1A	3700	1/1	0.93	0.08	34,34,34,34	0
54	MG	1A	3701	1/1	0.93	0.19	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3475	1/1	0.93	0.14	42,42,42,42	0
54	MG	1A	3841	1/1	0.93	0.15	29,29,29,29	0
54	MG	2A	3201	1/1	0.93	0.33	50,50,50,50	0
54	MG	1A	3101	1/1	0.93	0.39	30,30,30,30	0
54	MG	1A	3481	1/1	0.93	0.17	48,48,48,48	0
54	MG	1A	3106	1/1	0.93	0.42	40,40,40,40	0
54	MG	1g	3001	1/1	0.93	0.29	52,52,52,52	0
54	MG	1A	3707	1/1	0.93	0.09	40,40,40,40	0
54	MG	2a	1670	1/1	0.93	0.15	59,59,59,59	0
54	MG	2A	3532	1/1	0.93	0.17	52,52,52,52	0
54	MG	2A	3533	1/1	0.93	0.13	51,51,51,51	0
54	MG	2A	3534	1/1	0.93	0.09	65,65,65,65	0
54	MG	1A	3579	1/1	0.93	0.20	24,24,24,24	0
54	MG	1A	3861	1/1	0.93	0.17	22,22,22,22	0
54	MG	2A	3212	1/1	0.93	0.38	60,60,60,60	0
54	MG	2A	3213	1/1	0.93	0.13	67,67,67,67	0
54	MG	1A	3864	1/1	0.93	0.08	36,36,36,36	0
54	MG	1B	218	1/1	0.93	0.10	50,50,50,50	0
54	MG	1A	3712	1/1	0.93	0.11	52,52,52,52	0
54	MG	2A	3217	1/1	0.93	0.16	43,43,43,43	0
54	MG	2a	1688	1/1	0.93	0.19	54,54,54,54	0
54	MG	1a	1692	1/1	0.93	0.21	46,46,46,46	0
54	MG	1A	3395	1/1	0.93	0.12	13,13,13,13	0
54	MG	1A	3583	1/1	0.93	0.22	20,20,20,20	0
54	MG	1A	3868	1/1	0.93	0.20	23,23,23,23	0
54	MG	2A	3001	1/1	0.93	0.17	46,46,46,46	0
54	MG	2A	3004	1/1	0.93	0.17	44,44,44,44	0
54	MG	1A	3717	1/1	0.93	0.41	52,52,52,52	0
54	MG	1A	3872	1/1	0.93	0.16	50,50,50,50	0
54	MG	1A	3141	1/1	0.93	0.19	38,38,38,38	0
54	MG	2A	3234	1/1	0.93	0.17	52,52,52,52	0
54	MG	2a	1721	1/1	0.93	0.18	76,76,76,76	0
54	MG	2A	3570	1/1	0.93	0.19	44,44,44,44	0
54	MG	1A	3487	1/1	0.93	0.46	51,51,51,51	0
54	MG	1a	1705	1/1	0.93	0.13	59,59,59,59	0
54	MG	2a	1735	1/1	0.93	0.17	45,45,45,45	0
54	MG	2A	3238	1/1	0.93	0.17	44,44,44,44	0
54	MG	2a	1740	1/1	0.93	0.26	59,59,59,59	0
54	MG	2A	3582	1/1	0.93	0.17	47,47,47,47	0
54	MG	2A	3586	1/1	0.93	0.12	84,84,84,84	0
54	MG	2A	3017	1/1	0.93	0.67	41,41,41,41	0
54	MG	1A	3877	1/1	0.93	0.10	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3282	1/1	0.93	0.36	24,24,24,24	0
54	MG	2A	3247	1/1	0.93	0.07	50,50,50,50	0
54	MG	2A	3022	1/1	0.93	0.10	39,39,39,39	0
54	MG	2a	1751	1/1	0.93	0.11	53,53,53,53	0
54	MG	2A	3023	1/1	0.93	0.26	55,55,55,55	0
54	MG	1a	1714	1/1	0.93	0.16	56,56,56,56	0
54	MG	1A	3881	1/1	0.93	0.21	43,43,43,43	0
54	MG	2A	3600	1/1	0.93	0.28	54,54,54,54	0
54	MG	1D	311	1/1	0.93	0.19	66,66,66,66	0
54	MG	2A	3034	1/1	0.93	0.17	42,42,42,42	0
57	MPD	1A	3988	8/8	0.93	0.21	48,52,54,59	0
54	MG	1E	301	1/1	0.93	0.16	35,35,35,35	0
54	MG	2A	3039	1/1	0.93	0.13	56,56,56,56	0
54	MG	2A	3040	1/1	0.93	0.09	58,58,58,58	0
57	MPD	2A	3711	8/8	0.93	0.12	48,60,64,64	0
54	MG	2A	3612	1/1	0.93	0.13	40,40,40,40	0
54	MG	2A	3269	1/1	0.93	0.15	32,32,32,32	0
54	MG	1A	3724	1/1	0.93	0.15	27,27,27,27	0
59	ZN	24	501	1/1	0.93	0.05	108,108,108,108	0
54	MG	1A	3664	1/1	0.94	0.20	30,30,30,30	0
54	MG	2A	3591	1/1	0.94	0.26	51,51,51,51	0
54	MG	2A	3233	1/1	0.94	0.13	58,58,58,58	0
54	MG	1g	3002	1/1	0.94	0.09	60,60,60,60	0
54	MG	2A	3595	1/1	0.94	0.21	53,53,53,53	0
54	MG	1g	3003	1/1	0.94	0.15	45,45,45,45	0
54	MG	1A	3542	1/1	0.94	0.23	31,31,31,31	0
54	MG	1A	3983	1/1	0.94	0.30	36,36,36,36	0
54	MG	2A	3239	1/1	0.94	0.14	50,50,50,50	0
54	MG	2A	3601	1/1	0.94	0.31	57,57,57,57	0
54	MG	1l	3001	1/1	0.94	0.17	47,47,47,47	0
54	MG	2A	3606	1/1	0.94	0.07	50,50,50,50	0
54	MG	1A	3198	1/1	0.94	0.49	42,42,42,42	0
54	MG	1A	3811	1/1	0.94	0.22	31,31,31,31	0
54	MG	1A	3998	1/1	0.94	0.52	32,32,32,32	0
54	MG	1A	3544	1/1	0.94	0.55	34,34,34,34	0
54	MG	2A	3611	1/1	0.94	0.15	56,56,56,56	0
54	MG	1A	4003	1/1	0.94	0.18	27,27,27,27	0
54	MG	1A	3816	1/1	0.94	0.13	35,35,35,35	0
54	MG	1A	3669	1/1	0.94	0.16	25,25,25,25	0
54	MG	1A	4008	1/1	0.94	0.29	28,28,28,28	0
54	MG	1A	4009	1/1	0.94	0.69	42,42,42,42	0
54	MG	1A	3545	1/1	0.94	0.10	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	4012	1/1	0.94	0.50	25,25,25,25	0
54	MG	2A	3626	1/1	0.94	0.06	70,70,70,70	0
54	MG	2A	3627	1/1	0.94	0.17	53,53,53,53	0
54	MG	1A	3819	1/1	0.94	0.09	39,39,39,39	0
54	MG	1a	1675	1/1	0.94	0.12	42,42,42,42	0
54	MG	2A	3631	1/1	0.94	0.12	60,60,60,60	0
54	MG	1A	3201	1/1	0.94	0.51	39,39,39,39	0
54	MG	1A	3821	1/1	0.94	0.14	26,26,26,26	0
54	MG	1a	1678	1/1	0.94	0.15	53,53,53,53	0
54	MG	2A	3636	1/1	0.94	0.24	47,47,47,47	0
54	MG	2A	3639	1/1	0.94	0.12	56,56,56,56	0
54	MG	1A	3137	1/1	0.94	0.14	29,29,29,29	0
54	MG	2A	3642	1/1	0.94	0.16	57,57,57,57	0
54	MG	1A	3453	1/1	0.94	0.07	51,51,51,51	0
54	MG	1A	3108	1/1	0.94	0.45	42,42,42,42	0
54	MG	1A	3139	1/1	0.94	0.23	29,29,29,29	0
54	MG	2A	3028	1/1	0.94	0.12	68,68,68,68	0
54	MG	2A	3649	1/1	0.94	0.23	38,38,38,38	0
54	MG	1a	1685	1/1	0.94	0.29	40,40,40,40	0
54	MG	2A	3652	1/1	0.94	0.20	44,44,44,44	0
54	MG	2A	3654	1/1	0.94	0.10	57,57,57,57	0
54	MG	1A	3461	1/1	0.94	0.10	45,45,45,45	0
54	MG	1a	1687	1/1	0.94	0.22	54,54,54,54	0
54	MG	1a	1688	1/1	0.94	0.20	53,53,53,53	0
54	MG	1A	3388	1/1	0.94	0.18	22,22,22,22	0
54	MG	1a	1690	1/1	0.94	0.17	45,45,45,45	0
54	MG	2A	3297	1/1	0.94	0.17	51,51,51,51	0
54	MG	2A	3298	1/1	0.94	0.16	27,27,27,27	0
54	MG	1A	3680	1/1	0.94	0.21	25,25,25,25	0
54	MG	1A	3681	1/1	0.94	0.17	38,38,38,38	0
54	MG	2A	3665	1/1	0.94	0.20	56,56,56,56	0
54	MG	1A	3560	1/1	0.94	0.10	40,40,40,40	0
54	MG	1B	209	1/1	0.94	0.09	36,36,36,36	0
54	MG	2A	3306	1/1	0.94	0.13	27,27,27,27	0
54	MG	1a	1698	1/1	0.94	0.12	36,36,36,36	0
54	MG	2A	3670	1/1	0.94	0.14	49,49,49,49	0
54	MG	2A	3309	1/1	0.94	0.14	25,25,25,25	0
54	MG	1A	3469	1/1	0.94	0.09	29,29,29,29	0
54	MG	2A	3315	1/1	0.94	0.17	73,73,73,73	0
54	MG	1A	3390	1/1	0.94	0.17	40,40,40,40	0
54	MG	1A	3112	1/1	0.94	0.48	34,34,34,34	0
54	MG	2A	3320	1/1	0.94	0.10	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3691	1/1	0.94	0.18	17,17,17,17	0
54	MG	2A	3679	1/1	0.94	0.15	57,57,57,57	0
54	MG	1A	3850	1/1	0.94	0.17	48,48,48,48	0
54	MG	2A	3052	1/1	0.94	0.22	40,40,40,40	0
54	MG	1A	3693	1/1	0.94	0.10	33,33,33,33	0
54	MG	2A	3329	1/1	0.94	0.20	29,29,29,29	0
54	MG	1A	3313	1/1	0.94	0.10	46,46,46,46	0
54	MG	1A	3697	1/1	0.94	0.21	50,50,50,50	0
54	MG	2A	3690	1/1	0.94	0.07	67,67,67,67	0
54	MG	1a	1711	1/1	0.94	0.21	58,58,58,58	0
54	MG	2A	3336	1/1	0.94	0.15	36,36,36,36	0
54	MG	2A	3693	1/1	0.94	0.10	50,50,50,50	0
54	MG	1A	3859	1/1	0.94	0.14	16,16,16,16	0
54	MG	1A	3476	1/1	0.94	0.17	14,14,14,14	0
54	MG	1B	226	1/1	0.94	0.13	60,60,60,60	0
54	MG	2A	3698	1/1	0.94	0.36	40,40,40,40	0
54	MG	2A	3700	1/1	0.94	0.15	21,21,21,21	0
54	MG	1a	1719	1/1	0.94	0.13	48,48,48,48	0
54	MG	1A	3862	1/1	0.94	0.18	33,33,33,33	0
54	MG	2A	3705	1/1	0.94	0.88	45,45,45,45	0
54	MG	2A	3706	1/1	0.94	0.21	48,48,48,48	0
54	MG	2A	3707	1/1	0.94	0.18	61,61,61,61	0
54	MG	2A	3712	1/1	0.94	0.39	41,41,41,41	0
54	MG	2A	3715	1/1	0.94	0.77	37,37,37,37	0
54	MG	1a	1723	1/1	0.94	0.14	50,50,50,50	0
54	MG	2A	3719	1/1	0.94	0.23	48,48,48,48	0
54	MG	1A	3026	1/1	0.94	0.41	28,28,28,28	0
54	MG	1a	1727	1/1	0.94	0.20	43,43,43,43	0
54	MG	2A	3723	1/1	0.94	0.58	37,37,37,37	0
54	MG	1A	3057	1/1	0.94	0.25	27,27,27,27	0
54	MG	2A	3073	1/1	0.94	0.12	45,45,45,45	0
54	MG	1D	303	1/1	0.94	0.20	44,44,44,44	0
54	MG	1A	3483	1/1	0.94	0.17	49,49,49,49	0
54	MG	2A	3367	1/1	0.94	0.12	47,47,47,47	0
54	MG	1a	1734	1/1	0.94	0.16	47,47,47,47	0
54	MG	1A	3397	1/1	0.94	0.14	49,49,49,49	0
54	MG	1A	3014	1/1	0.94	0.39	44,44,44,44	0
54	MG	1A	3706	1/1	0.94	0.10	32,32,32,32	0
54	MG	2A	3372	1/1	0.94	0.10	51,51,51,51	0
54	MG	1a	1740	1/1	0.94	0.09	59,59,59,59	0
54	MG	1D	313	1/1	0.94	0.28	43,43,43,43	0
54	MG	1A	3871	1/1	0.94	0.24	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3059	1/1	0.94	0.12	42,42,42,42	0
54	MG	1A	3400	1/1	0.94	0.15	35,35,35,35	0
54	MG	1a	1746	1/1	0.94	0.07	60,60,60,60	0
54	MG	2A	3382	1/1	0.94	0.10	43,43,43,43	0
54	MG	2A	3093	1/1	0.94	0.18	58,58,58,58	0
54	MG	1A	3711	1/1	0.94	0.20	30,30,30,30	0
54	MG	1F	306	1/1	0.94	0.16	31,31,31,31	0
54	MG	1A	3876	1/1	0.94	0.12	27,27,27,27	0
54	MG	1F	309	1/1	0.94	0.24	43,43,43,43	0
54	MG	2A	3101	1/1	0.94	0.21	50,50,50,50	0
54	MG	2A	3392	1/1	0.94	0.18	56,56,56,56	0
54	MG	1A	3581	1/1	0.94	0.17	53,53,53,53	0
54	MG	1A	3121	1/1	0.94	0.10	57,57,57,57	0
54	MG	1F	312	1/1	0.94	0.19	51,51,51,51	0
54	MG	1A	3091	1/1	0.94	0.12	41,41,41,41	0
54	MG	1A	3496	1/1	0.94	0.14	47,47,47,47	0
54	MG	1A	3589	1/1	0.94	0.12	54,54,54,54	0
54	MG	2N	8001	1/1	0.94	0.14	70,70,70,70	0
54	MG	1A	3590	1/1	0.94	0.10	32,32,32,32	0
54	MG	1A	3591	1/1	0.94	0.14	36,36,36,36	0
54	MG	1H	8002	1/1	0.94	0.11	37,37,37,37	0
54	MG	2A	3115	1/1	0.94	0.15	63,63,63,63	0
54	MG	1N	201	1/1	0.94	0.32	35,35,35,35	0
54	MG	2A	3414	1/1	0.94	0.14	46,46,46,46	0
54	MG	2W	8001	1/1	0.94	0.33	42,42,42,42	0
54	MG	2A	3118	1/1	0.94	0.17	54,54,54,54	0
54	MG	2A	3120	1/1	0.94	0.15	41,41,41,41	0
54	MG	2A	3122	1/1	0.94	0.20	66,66,66,66	0
54	MG	2A	3422	1/1	0.94	0.07	55,55,55,55	0
54	MG	1A	3060	1/1	0.94	0.20	28,28,28,28	0
54	MG	1A	3726	1/1	0.94	0.10	32,32,32,32	0
54	MG	1A	3898	1/1	0.94	0.08	21,21,21,21	0
54	MG	2A	3127	1/1	0.94	0.26	36,36,36,36	0
54	MG	2A	3429	1/1	0.94	0.12	59,59,59,59	0
54	MG	1A	3727	1/1	0.94	0.25	22,22,22,22	0
54	MG	2A	3431	1/1	0.94	0.07	53,53,53,53	0
54	MG	1A	3019	1/1	0.94	0.44	33,33,33,33	0
54	MG	1A	3598	1/1	0.94	0.18	51,51,51,51	0
54	MG	1R	202	1/1	0.94	0.14	46,46,46,46	0
54	MG	1A	3599	1/1	0.94	0.24	45,45,45,45	0
54	MG	2A	3138	1/1	0.94	0.13	33,33,33,33	0
54	MG	2A	3441	1/1	0.94	0.27	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	1612	1/1	0.94	0.17	50,50,50,50	0
54	MG	2A	3443	1/1	0.94	0.16	47,47,47,47	0
54	MG	1A	3226	1/1	0.94	0.35	32,32,32,32	0
54	MG	2A	3140	1/1	0.94	0.15	51,51,51,51	0
54	MG	2a	1616	1/1	0.94	0.12	60,60,60,60	0
54	MG	1A	3501	1/1	0.94	0.17	59,59,59,59	0
54	MG	1T	202	1/1	0.94	0.09	48,48,48,48	0
54	MG	1A	3905	1/1	0.94	0.08	53,53,53,53	0
54	MG	1A	3604	1/1	0.94	0.07	29,29,29,29	0
54	MG	2a	1622	1/1	0.94	0.09	56,56,56,56	0
54	MG	1a	1785	1/1	0.94	0.10	47,47,47,47	0
54	MG	1A	3067	1/1	0.94	0.10	38,38,38,38	0
54	MG	1A	3606	1/1	0.94	0.33	42,42,42,42	0
54	MG	1a	1789	1/1	0.94	0.15	69,69,69,69	0
54	MG	2A	3458	1/1	0.94	0.17	34,34,34,34	0
54	MG	1W	3001	1/1	0.94	0.22	46,46,46,46	0
54	MG	1A	3504	1/1	0.94	0.11	16,16,16,16	0
54	MG	1A	3609	1/1	0.94	0.37	41,41,41,41	0
54	MG	1a	1796	1/1	0.94	0.24	50,50,50,50	0
54	MG	10	101	1/1	0.94	0.07	47,47,47,47	0
54	MG	1a	1799	1/1	0.94	0.16	58,58,58,58	0
54	MG	1a	1800	1/1	0.94	0.23	43,43,43,43	0
54	MG	10	102	1/1	0.94	0.14	36,36,36,36	0
54	MG	2A	3163	1/1	0.94	0.28	53,53,53,53	0
54	MG	1A	3506	1/1	0.94	0.12	33,33,33,33	0
54	MG	10	104	1/1	0.94	0.16	51,51,51,51	0
54	MG	2A	3475	1/1	0.94	0.18	30,30,30,30	0
54	MG	2a	1647	1/1	0.94	0.15	52,52,52,52	0
54	MG	1A	3048	1/1	0.94	0.30	33,33,33,33	0
54	MG	1a	1807	1/1	0.94	0.23	67,67,67,67	0
54	MG	1A	3128	1/1	0.94	0.09	32,32,32,32	0
54	MG	1A	3236	1/1	0.94	0.73	38,38,38,38	0
54	MG	1A	3162	1/1	0.94	0.15	41,41,41,41	0
54	MG	2a	1654	1/1	0.94	0.21	58,58,58,58	0
54	MG	1A	3239	1/1	0.94	0.21	33,33,33,33	0
54	MG	15	104	1/1	0.94	0.15	62,62,62,62	0
54	MG	17	101	1/1	0.94	0.49	54,54,54,54	0
54	MG	2a	1659	1/1	0.94	0.24	48,48,48,48	0
54	MG	2a	1660	1/1	0.94	0.17	55,55,55,55	0
54	MG	2A	3487	1/1	0.94	0.17	46,46,46,46	0
54	MG	2A	3176	1/1	0.94	0.21	42,42,42,42	0
54	MG	2A	3489	1/1	0.94	0.14	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3758	1/1	0.94	0.06	42,42,42,42	0
54	MG	2A	3494	1/1	0.94	0.21	50,50,50,50	0
54	MG	2A	3495	1/1	0.94	0.20	45,45,45,45	0
54	MG	2A	3178	1/1	0.94	0.15	53,53,53,53	0
54	MG	1A	3288	1/1	0.94	0.16	16,16,16,16	0
54	MG	2A	3180	1/1	0.94	0.35	63,63,63,63	0
54	MG	1A	3626	1/1	0.94	0.14	51,51,51,51	0
54	MG	1a	1601	1/1	0.94	0.09	56,56,56,56	0
54	MG	2A	3505	1/1	0.94	0.13	55,55,55,55	0
54	MG	2a	1677	1/1	0.94	0.22	53,53,53,53	0
54	MG	1a	1602	1/1	0.94	0.10	71,71,71,71	0
54	MG	1A	3764	1/1	0.94	0.20	44,44,44,44	0
54	MG	1A	3628	1/1	0.94	0.14	47,47,47,47	0
54	MG	1A	3289	1/1	0.94	0.16	23,23,23,23	0
54	MG	1A	3634	1/1	0.94	0.13	59,59,59,59	0
54	MG	1A	3352	1/1	0.94	0.21	20,20,20,20	0
54	MG	1A	3524	1/1	0.94	0.10	46,46,46,46	0
54	MG	1A	3777	1/1	0.94	0.10	19,19,19,19	0
54	MG	1A	3240	1/1	0.94	0.22	37,37,37,37	0
54	MG	2a	1692	1/1	0.94	0.20	48,48,48,48	0
54	MG	1A	3035	1/1	0.94	0.13	38,38,38,38	0
54	MG	2A	3525	1/1	0.94	0.18	28,28,28,28	0
54	MG	2A	3527	1/1	0.94	0.17	38,38,38,38	0
54	MG	2a	1696	1/1	0.94	0.15	59,59,59,59	0
54	MG	2a	1697	1/1	0.94	0.20	59,59,59,59	0
54	MG	1A	3948	1/1	0.94	0.09	60,60,60,60	0
54	MG	2A	3529	1/1	0.94	0.09	49,49,49,49	0
54	MG	1a	1621	1/1	0.94	0.11	46,46,46,46	0
54	MG	1A	3643	1/1	0.94	0.30	56,56,56,56	0
54	MG	2a	1715	1/1	0.94	0.17	60,60,60,60	0
54	MG	1a	1623	1/1	0.94	0.08	47,47,47,47	0
54	MG	2a	1718	1/1	0.94	0.27	63,63,63,63	0
54	MG	2a	1719	1/1	0.94	0.16	67,67,67,67	0
54	MG	2A	3536	1/1	0.94	0.15	57,57,57,57	0
54	MG	1A	3009	1/1	0.94	0.23	34,34,34,34	0
54	MG	2a	1723	1/1	0.94	0.19	45,45,45,45	0
54	MG	1A	3647	1/1	0.94	0.12	38,38,38,38	0
54	MG	1A	3295	1/1	0.94	0.17	19,19,19,19	0
54	MG	1A	3650	1/1	0.94	0.26	38,38,38,38	0
54	MG	2a	1730	1/1	0.94	0.22	49,49,49,49	0
54	MG	2a	1731	1/1	0.94	0.14	61,61,61,61	0
54	MG	2a	1732	1/1	0.94	0.29	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3204	1/1	0.94	0.07	47,47,47,47	0
54	MG	1A	3531	1/1	0.94	0.37	40,40,40,40	0
54	MG	2a	1738	1/1	0.94	0.30	52,52,52,52	0
54	MG	1A	3790	1/1	0.94	0.17	39,39,39,39	0
54	MG	1a	1630	1/1	0.94	0.20	46,46,46,46	0
54	MG	1A	3793	1/1	0.94	0.19	41,41,41,41	0
54	MG	2A	3210	1/1	0.94	0.13	45,45,45,45	0
54	MG	1A	3362	1/1	0.94	0.11	36,36,36,36	0
54	MG	1a	1852	1/1	0.94	0.18	54,54,54,54	0
54	MG	2A	3557	1/1	0.94	0.13	22,22,22,22	0
54	MG	1A	3795	1/1	0.94	0.12	32,32,32,32	0
54	MG	1A	3533	1/1	0.94	0.14	35,35,35,35	0
54	MG	1A	3247	1/1	0.94	0.22	40,40,40,40	0
54	MG	1A	3250	1/1	0.94	0.38	27,27,27,27	0
54	MG	1A	3370	1/1	0.94	0.14	21,21,21,21	0
54	MG	2A	3568	1/1	0.94	0.15	50,50,50,50	0
54	MG	1A	3801	1/1	0.94	0.11	34,34,34,34	0
54	MG	1A	3802	1/1	0.94	0.06	47,47,47,47	0
54	MG	2t	3001	1/1	0.94	0.11	45,45,45,45	0
56	EZP	2A	3709	25/25	0.94	0.46	38,42,50,58	0
54	MG	1A	3023	1/1	0.94	0.12	19,19,19,19	0
54	MG	2A	3575	1/1	0.94	0.21	41,41,41,41	0
54	MG	2A	3223	1/1	0.94	0.89	43,43,43,43	0
54	MG	1A	3970	1/1	0.94	0.68	40,40,40,40	0
54	MG	1A	3974	1/1	0.94	0.14	45,45,45,45	0
54	MG	2A	3583	1/1	0.94	0.14	42,42,42,42	0
54	MG	1A	3976	1/1	0.94	0.07	38,38,38,38	0
54	MG	1f	3001	1/1	0.94	0.24	64,64,64,64	0
54	MG	1A	3980	1/1	0.94	0.25	48,48,48,48	0
59	ZN	2n	501	1/1	0.94	0.08	101,101,101,101	0
54	MG	2A	3411	1/1	0.95	0.07	55,55,55,55	0
54	MG	1E	303	1/1	0.95	0.08	32,32,32,32	0
54	MG	1A	3557	1/1	0.95	0.13	35,35,35,35	0
54	MG	1A	3914	1/1	0.95	0.17	38,38,38,38	0
54	MG	2A	3416	1/1	0.95	0.17	54,54,54,54	0
54	MG	1E	307	1/1	0.95	0.13	53,53,53,53	0
54	MG	2A	3681	1/1	0.95	0.12	69,69,69,69	0
54	MG	1A	3916	1/1	0.95	0.09	29,29,29,29	0
54	MG	1F	304	1/1	0.95	0.29	24,24,24,24	0
54	MG	1a	1694	1/1	0.95	0.21	32,32,32,32	0
54	MG	1a	1695	1/1	0.95	0.20	37,37,37,37	0
54	MG	1A	3466	1/1	0.95	0.13	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3688	1/1	0.95	0.11	56,56,56,56	0
54	MG	1A	3919	1/1	0.95	0.34	45,45,45,45	0
54	MG	1A	3389	1/1	0.95	0.15	27,27,27,27	0
54	MG	2A	3185	1/1	0.95	0.09	45,45,45,45	0
54	MG	1a	1699	1/1	0.95	0.09	57,57,57,57	0
54	MG	1A	3923	1/1	0.95	0.23	50,50,50,50	0
54	MG	1A	3094	1/1	0.95	0.46	29,29,29,29	0
54	MG	2A	3696	1/1	0.95	0.17	52,52,52,52	0
54	MG	1A	3926	1/1	0.95	0.07	45,45,45,45	0
54	MG	1A	3169	1/1	0.95	0.62	33,33,33,33	0
54	MG	2A	3699	1/1	0.95	0.28	61,61,61,61	0
54	MG	1A	3275	1/1	0.95	0.21	29,29,29,29	0
54	MG	2A	3438	1/1	0.95	0.11	50,50,50,50	0
54	MG	1A	3078	1/1	0.95	0.08	47,47,47,47	0
54	MG	2A	3440	1/1	0.95	0.10	49,49,49,49	0
54	MG	1A	3930	1/1	0.95	0.14	60,60,60,60	0
54	MG	1A	3791	1/1	0.95	0.17	59,59,59,59	0
54	MG	2A	3708	1/1	0.95	0.15	58,58,58,58	0
54	MG	1A	3566	1/1	0.95	0.20	35,35,35,35	0
54	MG	1a	1712	1/1	0.95	0.18	51,51,51,51	0
54	MG	1A	3237	1/1	0.95	0.24	28,28,28,28	0
54	MG	2A	3718	1/1	0.95	0.44	44,44,44,44	0
54	MG	2A	3002	1/1	0.95	0.16	53,53,53,53	0
54	MG	1A	3568	1/1	0.95	0.16	48,48,48,48	0
54	MG	1A	3098	1/1	0.95	0.38	35,35,35,35	0
54	MG	2A	3007	1/1	0.95	0.43	36,36,36,36	0
54	MG	1A	3333	1/1	0.95	0.13	25,25,25,25	0
54	MG	2A	3725	1/1	0.95	0.28	37,37,37,37	0
54	MG	1O	8002	1/1	0.95	0.14	46,46,46,46	0
54	MG	1a	1721	1/1	0.95	0.12	42,42,42,42	0
54	MG	1P	201	1/1	0.95	0.35	27,27,27,27	0
54	MG	1A	3143	1/1	0.95	0.06	26,26,26,26	0
54	MG	1A	3682	1/1	0.95	0.09	38,38,38,38	0
54	MG	2B	3006	1/1	0.95	0.13	57,57,57,57	0
54	MG	1A	3099	1/1	0.95	0.34	30,30,30,30	0
54	MG	1A	3401	1/1	0.95	0.11	45,45,45,45	0
54	MG	2B	3009	1/1	0.95	0.08	62,62,62,62	0
54	MG	1A	3025	1/1	0.95	0.55	29,29,29,29	0
54	MG	2A	3025	1/1	0.95	0.12	44,44,44,44	0
54	MG	1A	3689	1/1	0.95	0.09	22,22,22,22	0
54	MG	1a	1736	1/1	0.95	0.18	57,57,57,57	0
54	MG	1A	3807	1/1	0.95	0.17	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3470	1/1	0.95	0.41	43,43,43,43	0
54	MG	1A	3945	1/1	0.95	0.24	36,36,36,36	0
54	MG	1A	3284	1/1	0.95	0.50	32,32,32,32	0
54	MG	2A	3473	1/1	0.95	0.32	60,60,60,60	0
54	MG	1A	3947	1/1	0.95	0.20	67,67,67,67	0
54	MG	1A	3578	1/1	0.95	0.20	23,23,23,23	0
54	MG	1A	3692	1/1	0.95	0.14	34,34,34,34	0
54	MG	1A	3812	1/1	0.95	0.44	35,35,35,35	0
54	MG	2A	3042	1/1	0.95	0.14	49,49,49,49	0
54	MG	2A	3480	1/1	0.95	0.68	37,37,37,37	0
54	MG	1W	3002	1/1	0.95	0.14	39,39,39,39	0
54	MG	2E	305	1/1	0.95	0.24	52,52,52,52	0
54	MG	2E	306	1/1	0.95	0.51	44,44,44,44	0
54	MG	1A	3490	1/1	0.95	0.16	50,50,50,50	0
54	MG	2A	3045	1/1	0.95	0.10	40,40,40,40	0
54	MG	2A	3484	1/1	0.95	0.36	65,65,65,65	0
54	MG	1A	3492	1/1	0.95	0.13	17,17,17,17	0
54	MG	1A	3065	1/1	0.95	0.40	26,26,26,26	0
54	MG	1A	3179	1/1	0.95	0.45	36,36,36,36	0
54	MG	1a	1750	1/1	0.95	0.13	59,59,59,59	0
54	MG	1A	3497	1/1	0.95	0.07	46,46,46,46	0
54	MG	1A	3002	1/1	0.95	0.11	47,47,47,47	0
54	MG	1A	3211	1/1	0.95	0.21	37,37,37,37	0
54	MG	2A	3498	1/1	0.95	0.17	30,30,30,30	0
54	MG	2A	3240	1/1	0.95	0.24	49,49,49,49	0
54	MG	1A	3822	1/1	0.95	0.11	40,40,40,40	0
54	MG	1A	3152	1/1	0.95	0.23	31,31,31,31	0
54	MG	1A	3824	1/1	0.95	0.19	17,17,17,17	0
54	MG	1A	3592	1/1	0.95	0.18	44,44,44,44	0
54	MG	1A	3022	1/1	0.95	0.23	29,29,29,29	0
54	MG	1A	3502	1/1	0.95	0.13	54,54,54,54	0
54	MG	1a	1763	1/1	0.95	0.18	64,64,64,64	0
54	MG	2A	3061	1/1	0.95	0.27	51,51,51,51	0
54	MG	2A	3253	1/1	0.95	0.19	25,25,25,25	0
54	MG	1A	3830	1/1	0.95	0.14	41,41,41,41	0
54	MG	2A	3511	1/1	0.95	0.22	43,43,43,43	0
54	MG	1A	3255	1/1	0.95	0.60	31,31,31,31	0
54	MG	2A	3513	1/1	0.95	0.21	50,50,50,50	0
54	MG	1A	3709	1/1	0.95	0.08	46,46,46,46	0
54	MG	2A	3263	1/1	0.95	0.19	32,32,32,32	0
54	MG	2A	3264	1/1	0.95	0.14	48,48,48,48	0
54	MG	1A	3973	1/1	0.95	0.12	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3421	1/1	0.95	0.12	30,30,30,30	0
54	MG	1A	3505	1/1	0.95	0.12	27,27,27,27	0
54	MG	2A	3271	1/1	0.95	0.11	23,23,23,23	0
54	MG	1a	1774	1/1	0.95	0.17	53,53,53,53	0
54	MG	2A	3531	1/1	0.95	0.11	54,54,54,54	0
54	MG	2A	3074	1/1	0.95	0.41	39,39,39,39	0
54	MG	1A	3977	1/1	0.95	0.17	38,38,38,38	0
54	MG	2A	3277	1/1	0.95	0.15	38,38,38,38	0
54	MG	2A	3535	1/1	0.95	0.07	42,42,42,42	0
54	MG	2a	1619	1/1	0.95	0.19	47,47,47,47	0
54	MG	1A	3086	1/1	0.95	0.41	26,26,26,26	0
54	MG	1A	3110	1/1	0.95	0.24	37,37,37,37	0
54	MG	1A	3838	1/1	0.95	0.19	60,60,60,60	0
54	MG	2A	3541	1/1	0.95	0.07	47,47,47,47	0
54	MG	2A	3543	1/1	0.95	0.27	49,49,49,49	0
54	MG	1A	3840	1/1	0.95	0.12	33,33,33,33	0
54	MG	1a	1616	1/1	0.95	0.12	60,60,60,60	0
54	MG	2A	3546	1/1	0.95	0.26	41,41,41,41	0
54	MG	1A	3358	1/1	0.95	0.17	21,21,21,21	0
54	MG	2A	3288	1/1	0.95	0.12	49,49,49,49	0
54	MG	2A	3082	1/1	0.95	0.07	62,62,62,62	0
54	MG	2a	1634	1/1	0.95	0.24	55,55,55,55	0
54	MG	2A	3550	1/1	0.95	0.16	31,31,31,31	0
54	MG	2a	1636	1/1	0.95	0.11	69,69,69,69	0
54	MG	1A	3992	1/1	0.95	0.52	28,28,28,28	0
54	MG	2A	3292	1/1	0.95	0.23	47,47,47,47	0
54	MG	1A	3844	1/1	0.95	0.12	46,46,46,46	0
54	MG	1a	1784	1/1	0.95	0.18	59,59,59,59	0
54	MG	2A	3295	1/1	0.95	0.17	55,55,55,55	0
54	MG	2A	3556	1/1	0.95	0.25	35,35,35,35	0
54	MG	2a	1643	1/1	0.95	0.12	55,55,55,55	0
54	MG	1A	3299	1/1	0.95	0.17	19,19,19,19	0
54	MG	1A	3090	1/1	0.95	0.21	12,12,12,12	0
54	MG	2a	1646	1/1	0.95	0.11	63,63,63,63	0
54	MG	1A	3517	1/1	0.95	0.18	48,48,48,48	0
54	MG	1A	3851	1/1	0.95	0.10	41,41,41,41	0
54	MG	2A	3302	1/1	0.95	0.12	25,25,25,25	0
54	MG	1A	3518	1/1	0.95	0.57	51,51,51,51	0
54	MG	1a	1792	1/1	0.95	0.11	57,57,57,57	0
54	MG	2A	3097	1/1	0.95	0.10	67,67,67,67	0
54	MG	1A	3219	1/1	0.95	0.27	25,25,25,25	0
54	MG	1A	3612	1/1	0.95	0.18	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3366	1/1	0.95	0.24	16,16,16,16	0
54	MG	2a	1657	1/1	0.95	0.11	44,44,44,44	0
54	MG	2A	3576	1/1	0.95	0.10	62,62,62,62	0
54	MG	2A	3577	1/1	0.95	0.12	68,68,68,68	0
54	MG	2A	3310	1/1	0.95	0.15	29,29,29,29	0
54	MG	2A	3104	1/1	0.95	0.10	42,42,42,42	0
54	MG	1A	3135	1/1	0.95	0.15	29,29,29,29	0
54	MG	1A	3731	1/1	0.95	0.31	40,40,40,40	0
54	MG	1A	3863	1/1	0.95	0.12	12,12,12,12	0
54	MG	1A	3368	1/1	0.95	0.19	16,16,16,16	0
54	MG	2A	3588	1/1	0.95	0.12	48,48,48,48	0
54	MG	2a	1668	1/1	0.95	0.19	45,45,45,45	0
54	MG	2A	3110	1/1	0.95	0.40	40,40,40,40	0
54	MG	2A	3322	1/1	0.95	0.13	49,49,49,49	0
54	MG	1A	3523	1/1	0.95	0.19	48,48,48,48	0
54	MG	2A	3324	1/1	0.95	0.12	30,30,30,30	0
54	MG	2A	3325	1/1	0.95	0.15	40,40,40,40	0
54	MG	1A	3013	1/1	0.95	0.12	50,50,50,50	0
54	MG	2A	3596	1/1	0.95	0.26	50,50,50,50	0
54	MG	2A	3327	1/1	0.95	0.14	48,48,48,48	0
54	MG	1A	4026	1/1	0.95	0.19	35,35,35,35	0
54	MG	1a	1636	1/1	0.95	0.22	60,60,60,60	0
54	MG	1A	3439	1/1	0.95	0.17	34,34,34,34	0
54	MG	1a	1809	1/1	0.95	0.13	66,66,66,66	0
54	MG	2A	3334	1/1	0.95	0.19	35,35,35,35	0
54	MG	2A	3603	1/1	0.95	0.22	32,32,32,32	0
54	MG	2a	1687	1/1	0.95	0.21	67,67,67,67	0
54	MG	2A	3604	1/1	0.95	0.13	31,31,31,31	0
54	MG	1A	3371	1/1	0.95	0.19	49,49,49,49	0
54	MG	2a	1690	1/1	0.95	0.15	68,68,68,68	0
54	MG	1a	1811	1/1	0.95	0.16	42,42,42,42	0
54	MG	1A	3441	1/1	0.95	0.20	34,34,34,34	0
54	MG	1A	3745	1/1	0.95	0.27	60,60,60,60	0
54	MG	1a	1644	1/1	0.95	0.13	60,60,60,60	0
54	MG	2A	3342	1/1	0.95	0.23	51,51,51,51	0
54	MG	1a	1647	1/1	0.95	0.15	52,52,52,52	0
54	MG	2a	1699	1/1	0.95	0.12	71,71,71,71	0
54	MG	1A	3372	1/1	0.95	0.08	47,47,47,47	0
54	MG	2a	1703	1/1	0.95	0.15	61,61,61,61	0
54	MG	2A	3129	1/1	0.95	0.09	52,52,52,52	0
54	MG	2a	1705	1/1	0.95	0.14	55,55,55,55	0
54	MG	2a	1706	1/1	0.95	0.11	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3130	1/1	0.95	0.51	64,64,64,64	0
54	MG	2A	3354	1/1	0.95	0.17	49,49,49,49	0
54	MG	2a	1710	1/1	0.95	0.20	56,56,56,56	0
54	MG	2a	1711	1/1	0.95	0.22	45,45,45,45	0
54	MG	2a	1714	1/1	0.95	0.16	48,48,48,48	0
54	MG	1A	3443	1/1	0.95	0.14	25,25,25,25	0
54	MG	2A	3623	1/1	0.95	0.10	43,43,43,43	0
54	MG	2a	1717	1/1	0.95	0.18	60,60,60,60	0
54	MG	1A	3444	1/1	0.95	0.14	24,24,24,24	0
54	MG	2A	3360	1/1	0.95	0.13	48,48,48,48	0
54	MG	1A	3640	1/1	0.95	0.09	45,45,45,45	0
54	MG	2A	3628	1/1	0.95	0.07	60,60,60,60	0
54	MG	2a	1722	1/1	0.95	0.25	49,49,49,49	0
54	MG	1A	3262	1/1	0.95	0.15	28,28,28,28	0
54	MG	1A	3224	1/1	0.95	0.42	36,36,36,36	0
54	MG	1a	1654	1/1	0.95	0.08	56,56,56,56	0
54	MG	2a	1727	1/1	0.95	0.21	61,61,61,61	0
54	MG	1B	212	1/1	0.95	0.05	53,53,53,53	0
54	MG	1a	1656	1/1	0.95	0.20	63,63,63,63	0
54	MG	1B	214	1/1	0.95	0.13	35,35,35,35	0
54	MG	1A	3880	1/1	0.95	0.14	37,37,37,37	0
54	MG	2a	1734	1/1	0.95	0.21	55,55,55,55	0
54	MG	1B	216	1/1	0.95	0.14	33,33,33,33	0
54	MG	2a	1736	1/1	0.95	0.20	61,61,61,61	0
54	MG	1A	3040	1/1	0.95	0.15	26,26,26,26	0
54	MG	1A	3052	1/1	0.95	0.14	36,36,36,36	0
54	MG	2a	1739	1/1	0.95	0.10	51,51,51,51	0
54	MG	1A	3451	1/1	0.95	0.16	15,15,15,15	0
54	MG	2a	1741	1/1	0.95	0.15	55,55,55,55	0
54	MG	1A	3759	1/1	0.95	0.60	43,43,43,43	0
54	MG	1A	3381	1/1	0.95	0.11	40,40,40,40	0
54	MG	2a	1744	1/1	0.95	0.14	50,50,50,50	0
54	MG	2A	3380	1/1	0.95	0.26	56,56,56,56	0
54	MG	1B	223	1/1	0.95	0.07	46,46,46,46	0
54	MG	1A	3382	1/1	0.95	0.14	19,19,19,19	0
54	MG	1A	3762	1/1	0.95	0.15	19,19,19,19	0
54	MG	1A	3454	1/1	0.95	0.13	22,22,22,22	0
54	MG	2A	3655	1/1	0.95	0.16	42,42,42,42	0
54	MG	1B	227	1/1	0.95	0.08	52,52,52,52	0
54	MG	1A	3456	1/1	0.95	0.21	27,27,27,27	0
54	MG	2A	3387	1/1	0.95	0.23	45,45,45,45	0
54	MG	1A	3546	1/1	0.95	0.09	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3268	1/1	0.95	0.14	46,46,46,46	0
54	MG	2A	3391	1/1	0.95	0.16	49,49,49,49	0
54	MG	2A	3162	1/1	0.95	0.11	53,53,53,53	0
56	EZP	1A	3987	25/25	0.95	0.39	16,28,47,60	0
54	MG	1A	3459	1/1	0.95	0.17	23,23,23,23	0
54	MG	2A	3394	1/1	0.95	0.08	60,60,60,60	0
54	MG	1A	3770	1/1	0.95	0.18	27,27,27,27	0
57	MPD	18	102	8/8	0.95	0.36	22,28,35,36	0
54	MG	1A	3385	1/1	0.95	0.11	51,51,51,51	0
54	MG	1A	3316	1/1	0.95	0.10	38,38,38,38	0
54	MG	1A	3230	1/1	0.95	0.19	46,46,46,46	0
54	MG	2A	3168	1/1	0.95	0.12	54,54,54,54	0
58	ARG	1B	228	12/12	0.95	0.26	26,40,53,54	0
54	MG	1A	3556	1/1	0.95	0.14	39,39,39,39	0
54	MG	1A	3911	1/1	0.95	0.23	46,46,46,46	0
54	MG	1E	302	1/1	0.95	0.77	39,39,39,39	0
54	MG	2A	3409	1/1	0.95	0.12	51,51,51,51	0
54	MG	2A	3445	1/1	0.96	0.37	41,41,41,41	0
54	MG	1A	3080	1/1	0.96	0.45	37,37,37,37	0
54	MG	1a	1713	1/1	0.96	0.08	53,53,53,53	0
54	MG	1A	3778	1/1	0.96	0.07	35,35,35,35	0
54	MG	1G	3004	1/1	0.96	0.11	34,34,34,34	0
54	MG	2A	3704	1/1	0.96	0.17	33,33,33,33	0
54	MG	2A	3013	1/1	0.96	0.50	33,33,33,33	0
54	MG	2A	3451	1/1	0.96	0.16	49,49,49,49	0
54	MG	1a	1717	1/1	0.96	0.16	53,53,53,53	0
54	MG	1A	3656	1/1	0.96	0.19	37,37,37,37	0
54	MG	1A	3465	1/1	0.96	0.19	33,33,33,33	0
54	MG	1A	3554	1/1	0.96	0.17	40,40,40,40	0
54	MG	2A	3716	1/1	0.96	0.45	51,51,51,51	0
54	MG	1A	3555	1/1	0.96	0.18	39,39,39,39	0
54	MG	1A	3267	1/1	0.96	0.15	29,29,29,29	0
54	MG	1a	1725	1/1	0.96	0.15	46,46,46,46	0
54	MG	2A	3024	1/1	0.96	0.08	35,35,35,35	0
54	MG	1A	3467	1/1	0.96	0.07	49,49,49,49	0
54	MG	2A	3464	1/1	0.96	0.16	34,34,34,34	0
54	MG	2A	3222	1/1	0.96	0.16	46,46,46,46	0
54	MG	1A	3785	1/1	0.96	0.21	28,28,28,28	0
54	MG	1A	3468	1/1	0.96	0.16	45,45,45,45	0
54	MG	2A	3030	1/1	0.96	0.15	53,53,53,53	0
54	MG	1A	3222	1/1	0.96	0.46	32,32,32,32	0
54	MG	1A	3325	1/1	0.96	0.27	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1732	1/1	0.96	0.08	59,59,59,59	0
54	MG	1A	3668	1/1	0.96	0.17	63,63,63,63	0
54	MG	2A	3232	1/1	0.96	0.12	44,44,44,44	0
54	MG	2A	3037	1/1	0.96	0.16	56,56,56,56	0
54	MG	2A	3038	1/1	0.96	0.11	46,46,46,46	0
54	MG	1a	1735	1/1	0.96	0.12	51,51,51,51	0
54	MG	1A	3561	1/1	0.96	0.12	25,25,25,25	0
54	MG	2A	3237	1/1	0.96	0.47	34,34,34,34	0
54	MG	1A	3326	1/1	0.96	0.07	38,38,38,38	0
54	MG	1A	3105	1/1	0.96	0.16	33,33,33,33	0
54	MG	1A	3328	1/1	0.96	0.11	13,13,13,13	0
54	MG	1A	3396	1/1	0.96	0.13	21,21,21,21	0
54	MG	1A	3329	1/1	0.96	0.14	33,33,33,33	0
54	MG	1A	3012	1/1	0.96	0.20	17,17,17,17	0
54	MG	1A	3569	1/1	0.96	0.29	34,34,34,34	0
54	MG	2A	3248	1/1	0.96	0.07	55,55,55,55	0
54	MG	1V	201	1/1	0.96	0.14	50,50,50,50	0
54	MG	2D	304	1/1	0.96	0.48	42,42,42,42	0
54	MG	2A	3490	1/1	0.96	0.17	44,44,44,44	0
54	MG	2D	306	1/1	0.96	0.16	56,56,56,56	0
54	MG	1A	3062	1/1	0.96	0.16	25,25,25,25	0
54	MG	1A	3571	1/1	0.96	0.41	27,27,27,27	0
54	MG	1A	3228	1/1	0.96	0.22	18,18,18,18	0
54	MG	2A	3496	1/1	0.96	0.13	40,40,40,40	0
54	MG	2A	3497	1/1	0.96	0.14	43,43,43,43	0
54	MG	1A	3806	1/1	0.96	0.13	34,34,34,34	0
54	MG	2F	302	1/1	0.96	0.15	49,49,49,49	0
54	MG	2A	3254	1/1	0.96	0.14	51,51,51,51	0
54	MG	2A	3255	1/1	0.96	0.12	24,24,24,24	0
54	MG	1A	3334	1/1	0.96	0.14	25,25,25,25	0
54	MG	2A	3260	1/1	0.96	0.06	53,53,53,53	0
54	MG	1A	3808	1/1	0.96	0.23	41,41,41,41	0
54	MG	1A	3276	1/1	0.96	0.25	26,26,26,26	0
54	MG	1A	3001	1/1	0.96	0.14	27,27,27,27	0
54	MG	1A	3338	1/1	0.96	0.12	28,28,28,28	0
54	MG	1A	3405	1/1	0.96	0.14	17,17,17,17	0
54	MG	1A	3814	1/1	0.96	0.15	25,25,25,25	0
54	MG	1A	3192	1/1	0.96	0.41	35,35,35,35	0
54	MG	1A	3494	1/1	0.96	0.14	38,38,38,38	0
54	MG	2A	3272	1/1	0.96	0.09	38,38,38,38	0
54	MG	13	102	1/1	0.96	0.14	27,27,27,27	0
54	MG	2A	3514	1/1	0.96	0.12	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3518	1/1	0.96	0.11	41,41,41,41	0
54	MG	2A	3067	1/1	0.96	0.45	45,45,45,45	0
54	MG	1a	1762	1/1	0.96	0.17	56,56,56,56	0
54	MG	1A	3580	1/1	0.96	0.15	22,22,22,22	0
54	MG	2A	3523	1/1	0.96	0.23	49,49,49,49	0
54	MG	1a	1765	1/1	0.96	0.11	46,46,46,46	0
54	MG	15	103	1/1	0.96	0.09	41,41,41,41	0
54	MG	2A	3526	1/1	0.96	0.10	53,53,53,53	0
54	MG	2A	3282	1/1	0.96	0.17	33,33,33,33	0
54	MG	1A	3409	1/1	0.96	0.13	50,50,50,50	0
54	MG	1A	3695	1/1	0.96	0.11	49,49,49,49	0
54	MG	1a	1769	1/1	0.96	0.20	56,56,56,56	0
54	MG	2A	3286	1/1	0.96	0.14	47,47,47,47	0
54	MG	1a	1770	1/1	0.96	0.19	54,54,54,54	0
54	MG	2a	1610	1/1	0.96	0.23	45,45,45,45	0
54	MG	1A	3340	1/1	0.96	0.12	28,28,28,28	0
54	MG	2A	3289	1/1	0.96	0.12	47,47,47,47	0
54	MG	18	101	1/1	0.96	0.06	46,46,46,46	0
54	MG	1A	3232	1/1	0.96	0.48	31,31,31,31	0
54	MG	2A	3539	1/1	0.96	0.13	41,41,41,41	0
54	MG	1A	3698	1/1	0.96	0.20	58,58,58,58	0
54	MG	1A	3699	1/1	0.96	0.13	42,42,42,42	0
54	MG	2A	3542	1/1	0.96	0.19	45,45,45,45	0
54	MG	1A	3972	1/1	0.96	0.36	32,32,32,32	0
54	MG	1A	3193	1/1	0.96	0.22	44,44,44,44	0
54	MG	1A	3588	1/1	0.96	0.16	23,23,23,23	0
54	MG	2A	3085	1/1	0.96	0.16	35,35,35,35	0
54	MG	1A	3053	1/1	0.96	0.22	47,47,47,47	0
54	MG	2A	3300	1/1	0.96	0.14	28,28,28,28	0
54	MG	1A	3827	1/1	0.96	0.16	21,21,21,21	0
54	MG	2A	3089	1/1	0.96	0.10	41,41,41,41	0
54	MG	1a	1610	1/1	0.96	0.15	44,44,44,44	0
54	MG	2a	1628	1/1	0.96	0.11	31,31,31,31	0
54	MG	2a	1629	1/1	0.96	0.21	60,60,60,60	0
54	MG	1a	1611	1/1	0.96	0.18	37,37,37,37	0
54	MG	1A	3088	1/1	0.96	0.25	32,32,32,32	0
54	MG	1A	3168	1/1	0.96	0.09	46,46,46,46	0
54	MG	2a	1633	1/1	0.96	0.15	68,68,68,68	0
54	MG	1a	1614	1/1	0.96	0.08	56,56,56,56	0
54	MG	1A	3068	1/1	0.96	0.15	23,23,23,23	0
54	MG	1a	1787	1/1	0.96	0.25	40,40,40,40	0
54	MG	2A	3312	1/1	0.96	0.20	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3561	1/1	0.96	0.06	38,38,38,38	0
54	MG	2A	3099	1/1	0.96	0.08	43,43,43,43	0
54	MG	1A	3200	1/1	0.96	0.34	32,32,32,32	0
54	MG	2A	3564	1/1	0.96	0.12	57,57,57,57	0
54	MG	2A	3565	1/1	0.96	0.12	48,48,48,48	0
54	MG	1A	3424	1/1	0.96	0.15	41,41,41,41	0
54	MG	1a	1790	1/1	0.96	0.13	60,60,60,60	0
54	MG	2A	3319	1/1	0.96	0.16	39,39,39,39	0
54	MG	1A	3990	1/1	0.96	0.23	20,20,20,20	0
54	MG	1A	3991	1/1	0.96	0.58	43,43,43,43	0
54	MG	1A	3069	1/1	0.96	0.18	23,23,23,23	0
54	MG	1A	3993	1/1	0.96	0.26	26,26,26,26	0
54	MG	1a	1795	1/1	0.96	0.28	49,49,49,49	0
54	MG	1A	3032	1/1	0.96	0.10	45,45,45,45	0
54	MG	2a	1652	1/1	0.96	0.19	48,48,48,48	0
54	MG	1A	3204	1/1	0.96	0.52	27,27,27,27	0
54	MG	1A	3356	1/1	0.96	0.18	37,37,37,37	0
54	MG	1A	3839	1/1	0.96	0.25	32,32,32,32	0
54	MG	1A	3429	1/1	0.96	0.15	41,41,41,41	0
54	MG	1A	3244	1/1	0.96	0.38	27,27,27,27	0
54	MG	2A	3331	1/1	0.96	0.16	49,49,49,49	0
54	MG	1A	3716	1/1	0.96	0.15	47,47,47,47	0
54	MG	1A	3846	1/1	0.96	0.13	27,27,27,27	0
54	MG	2A	3121	1/1	0.96	0.19	53,53,53,53	0
54	MG	1A	3046	1/1	0.96	0.36	39,39,39,39	0
54	MG	2A	3337	1/1	0.96	0.07	38,38,38,38	0
54	MG	1A	3206	1/1	0.96	0.23	18,18,18,18	0
54	MG	2a	1665	1/1	0.96	0.33	55,55,55,55	0
54	MG	1A	3719	1/1	0.96	0.11	56,56,56,56	0
54	MG	1A	3207	1/1	0.96	0.43	39,39,39,39	0
54	MG	1A	3438	1/1	0.96	0.15	43,43,43,43	0
54	MG	1A	4020	1/1	0.96	0.54	27,27,27,27	0
54	MG	2A	3345	1/1	0.96	0.29	45,45,45,45	0
54	MG	2A	3347	1/1	0.96	0.20	56,56,56,56	0
54	MG	1A	4021	1/1	0.96	0.52	35,35,35,35	0
54	MG	1A	3722	1/1	0.96	0.22	39,39,39,39	0
54	MG	1A	3723	1/1	0.96	0.13	36,36,36,36	0
54	MG	2A	3352	1/1	0.96	0.11	52,52,52,52	0
54	MG	2A	3353	1/1	0.96	0.21	62,62,62,62	0
54	MG	2a	1679	1/1	0.96	0.15	53,53,53,53	0
54	MG	1A	4024	1/1	0.96	0.50	30,30,30,30	0
54	MG	1A	3072	1/1	0.96	0.49	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3356	1/1	0.96	0.17	40,40,40,40	0
54	MG	1A	3074	1/1	0.96	0.44	45,45,45,45	0
54	MG	2A	3359	1/1	0.96	0.14	52,52,52,52	0
54	MG	1B	201	1/1	0.96	0.53	34,34,34,34	0
54	MG	1A	3007	1/1	0.96	0.13	26,26,26,26	0
54	MG	1A	3369	1/1	0.96	0.17	16,16,16,16	0
54	MG	1a	1823	1/1	0.96	0.13	48,48,48,48	0
54	MG	1A	3729	1/1	0.96	0.18	31,31,31,31	0
54	MG	2A	3620	1/1	0.96	0.13	48,48,48,48	0
54	MG	1A	3617	1/1	0.96	0.15	38,38,38,38	0
54	MG	2A	3622	1/1	0.96	0.17	18,18,18,18	0
54	MG	1a	1826	1/1	0.96	0.21	58,58,58,58	0
54	MG	1A	3150	1/1	0.96	0.69	28,28,28,28	0
54	MG	1A	3028	1/1	0.96	0.13	30,30,30,30	0
54	MG	2a	1698	1/1	0.96	0.19	50,50,50,50	0
54	MG	1A	3304	1/1	0.96	0.17	26,26,26,26	0
54	MG	1A	3734	1/1	0.96	0.26	26,26,26,26	0
54	MG	1A	3622	1/1	0.96	0.14	51,51,51,51	0
54	MG	1A	3623	1/1	0.96	0.13	32,32,32,32	0
54	MG	1B	213	1/1	0.96	0.18	38,38,38,38	0
54	MG	2A	3155	1/1	0.96	0.16	48,48,48,48	0
54	MG	1a	1661	1/1	0.96	0.11	49,49,49,49	0
54	MG	1A	3738	1/1	0.96	0.14	24,24,24,24	0
54	MG	2A	3158	1/1	0.96	0.20	48,48,48,48	0
54	MG	1A	3624	1/1	0.96	0.32	45,45,45,45	0
54	MG	2a	1712	1/1	0.96	0.18	37,37,37,37	0
54	MG	1A	3741	1/1	0.96	0.15	48,48,48,48	0
54	MG	2A	3641	1/1	0.96	0.14	46,46,46,46	0
54	MG	1A	3742	1/1	0.96	0.14	32,32,32,32	0
54	MG	1A	3743	1/1	0.96	0.24	62,62,62,62	0
54	MG	2A	3645	1/1	0.96	0.07	40,40,40,40	0
54	MG	1A	3049	1/1	0.96	0.38	38,38,38,38	0
54	MG	1A	3374	1/1	0.96	0.13	50,50,50,50	0
54	MG	1A	3746	1/1	0.96	0.17	59,59,59,59	0
54	MG	1A	3629	1/1	0.96	0.08	41,41,41,41	0
54	MG	1a	1847	1/1	0.96	0.24	60,60,60,60	0
54	MG	1A	3630	1/1	0.96	0.24	54,54,54,54	0
54	MG	1a	1849	1/1	0.96	0.14	47,47,47,47	0
54	MG	1A	3885	1/1	0.96	0.20	53,53,53,53	0
54	MG	2a	1728	1/1	0.96	0.09	53,53,53,53	0
54	MG	1A	3886	1/1	0.96	0.12	52,52,52,52	0
54	MG	1A	3750	1/1	0.96	0.16	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3400	1/1	0.96	0.24	36,36,36,36	0
54	MG	1A	3889	1/1	0.96	0.19	36,36,36,36	0
54	MG	1A	3631	1/1	0.96	0.12	48,48,48,48	0
54	MG	2A	3404	1/1	0.96	0.15	56,56,56,56	0
54	MG	1A	3892	1/1	0.96	0.08	39,39,39,39	0
54	MG	1A	3307	1/1	0.96	0.17	31,31,31,31	0
54	MG	1A	3450	1/1	0.96	0.22	27,27,27,27	0
54	MG	1A	3754	1/1	0.96	0.40	37,37,37,37	0
54	MG	2A	3410	1/1	0.96	0.17	47,47,47,47	0
54	MG	1A	3377	1/1	0.96	0.20	44,44,44,44	0
54	MG	2A	3181	1/1	0.96	0.18	47,47,47,47	0
54	MG	1A	3636	1/1	0.96	0.22	17,17,17,17	0
54	MG	1D	312	1/1	0.96	0.13	54,54,54,54	0
54	MG	1A	3153	1/1	0.96	0.17	42,42,42,42	0
54	MG	1A	3639	1/1	0.96	0.21	34,34,34,34	0
54	MG	2A	3418	1/1	0.96	0.13	54,54,54,54	0
54	MG	1A	3215	1/1	0.96	0.31	35,35,35,35	0
54	MG	2A	3187	1/1	0.96	0.13	44,44,44,44	0
54	MG	2a	1750	1/1	0.96	0.08	59,59,59,59	0
54	MG	1A	3216	1/1	0.96	0.55	29,29,29,29	0
54	MG	1A	3455	1/1	0.96	0.16	10,10,10,10	0
54	MG	2A	3678	1/1	0.96	0.10	51,51,51,51	0
54	MG	1A	3907	1/1	0.96	0.14	52,52,52,52	0
54	MG	1A	3029	1/1	0.96	0.14	12,12,12,12	0
54	MG	1F	301	1/1	0.96	0.75	41,41,41,41	0
54	MG	1i	3001	1/1	0.96	0.14	53,53,53,53	0
54	MG	1A	3909	1/1	0.96	0.08	35,35,35,35	0
54	MG	1F	303	1/1	0.96	0.17	35,35,35,35	0
54	MG	1A	3644	1/1	0.96	0.08	58,58,58,58	0
54	MG	2A	3686	1/1	0.96	0.12	42,42,42,42	0
54	MG	2A	3433	1/1	0.96	0.14	57,57,57,57	0
54	MG	1A	3129	1/1	0.96	0.43	26,26,26,26	0
54	MG	2A	3689	1/1	0.96	0.06	59,59,59,59	0
54	MG	1A	3318	1/1	0.96	0.17	26,26,26,26	0
54	MG	1A	3547	1/1	0.96	0.15	29,29,29,29	0
54	MG	1A	3386	1/1	0.96	0.12	19,19,19,19	0
54	MG	1A	3186	1/1	0.96	0.47	36,36,36,36	0
54	MG	1A	3462	1/1	0.96	0.11	48,48,48,48	0
54	MG	1a	1708	1/1	0.96	0.24	32,32,32,32	0
54	MG	1A	3922	1/1	0.96	0.27	61,61,61,61	0
54	MG	1A	3775	1/1	0.96	0.26	34,34,34,34	0
54	MG	1A	3145	1/1	0.97	0.50	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1745	1/1	0.97	0.09	47,47,47,47	0
54	MG	1A	3146	1/1	0.97	0.83	34,34,34,34	0
54	MG	2A	3008	1/1	0.97	0.10	57,57,57,57	0
54	MG	1A	3027	1/1	0.97	0.26	34,34,34,34	0
54	MG	2E	301	1/1	0.97	0.12	43,43,43,43	0
54	MG	2A	3351	1/1	0.97	0.17	25,25,25,25	0
54	MG	2E	303	1/1	0.97	0.09	44,44,44,44	0
54	MG	2A	3011	1/1	0.97	0.13	21,21,21,21	0
54	MG	1A	3918	1/1	0.97	0.16	38,38,38,38	0
54	MG	1a	1615	1/1	0.97	0.17	59,59,59,59	0
54	MG	1A	3020	1/1	0.97	0.25	33,33,33,33	0
54	MG	2A	3015	1/1	0.97	0.42	43,43,43,43	0
54	MG	1A	3653	1/1	0.97	0.45	41,41,41,41	0
54	MG	1A	3245	1/1	0.97	0.11	27,27,27,27	0
54	MG	2A	3018	1/1	0.97	0.13	40,40,40,40	0
54	MG	1A	3507	1/1	0.97	0.10	29,29,29,29	0
54	MG	2A	3020	1/1	0.97	0.31	57,57,57,57	0
54	MG	2O	201	1/1	0.97	0.12	48,48,48,48	0
54	MG	1A	3246	1/1	0.97	0.14	58,58,58,58	0
54	MG	2A	3364	1/1	0.97	0.26	58,58,58,58	0
54	MG	2A	3366	1/1	0.97	0.14	31,31,31,31	0
54	MG	1A	3925	1/1	0.97	0.14	49,49,49,49	0
54	MG	1A	3658	1/1	0.97	0.10	24,24,24,24	0
54	MG	1A	3509	1/1	0.97	0.14	41,41,41,41	0
54	MG	2T	3003	1/1	0.97	0.16	61,61,61,61	0
54	MG	2T	3004	1/1	0.97	0.10	44,44,44,44	0
54	MG	1A	3447	1/1	0.97	0.15	34,34,34,34	0
54	MG	1A	3149	1/1	0.97	0.25	21,21,21,21	0
54	MG	1A	3248	1/1	0.97	0.14	31,31,31,31	0
54	MG	1A	3931	1/1	0.97	0.21	34,34,34,34	0
54	MG	1A	3515	1/1	0.97	0.29	30,30,30,30	0
54	MG	1A	3249	1/1	0.97	0.41	34,34,34,34	0
54	MG	2A	3571	1/1	0.97	0.20	42,42,42,42	0
54	MG	2A	3376	1/1	0.97	0.10	47,47,47,47	0
54	MG	2A	3574	1/1	0.97	0.15	52,52,52,52	0
54	MG	2A	3033	1/1	0.97	0.17	46,46,46,46	0
54	MG	1A	3033	1/1	0.97	0.21	34,34,34,34	0
54	MG	2A	3035	1/1	0.97	0.13	29,29,29,29	0
54	MG	2A	3578	1/1	0.97	0.16	47,47,47,47	0
54	MG	1A	3294	1/1	0.97	0.10	46,46,46,46	0
54	MG	2A	3580	1/1	0.97	0.17	36,36,36,36	0
54	MG	1a	1632	1/1	0.97	0.13	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3586	1/1	0.97	0.10	23,23,23,23	0
54	MG	1A	3587	1/1	0.97	0.15	26,26,26,26	0
54	MG	2A	3584	1/1	0.97	0.13	46,46,46,46	0
54	MG	1A	3126	1/1	0.97	0.48	33,33,33,33	0
54	MG	1A	3087	1/1	0.97	0.53	26,26,26,26	0
54	MG	1A	3041	1/1	0.97	0.12	12,12,12,12	0
54	MG	1A	3254	1/1	0.97	0.36	30,30,30,30	0
54	MG	1D	308	1/1	0.97	0.27	31,31,31,31	0
54	MG	2A	3390	1/1	0.97	0.13	31,31,31,31	0
54	MG	2A	3592	1/1	0.97	0.14	47,47,47,47	0
54	MG	1A	3348	1/1	0.97	0.13	41,41,41,41	0
54	MG	1a	1642	1/1	0.97	0.20	39,39,39,39	0
54	MG	2A	3209	1/1	0.97	0.65	43,43,43,43	0
54	MG	1a	1643	1/1	0.97	0.10	52,52,52,52	0
54	MG	2A	3395	1/1	0.97	0.12	56,56,56,56	0
54	MG	1A	3676	1/1	0.97	0.17	28,28,28,28	0
54	MG	1a	1645	1/1	0.97	0.19	41,41,41,41	0
54	MG	1a	1646	1/1	0.97	0.23	48,48,48,48	0
54	MG	1A	3458	1/1	0.97	0.19	21,21,21,21	0
54	MG	1A	3596	1/1	0.97	0.40	38,38,38,38	0
54	MG	1A	3154	1/1	0.97	0.13	41,41,41,41	0
54	MG	1A	3350	1/1	0.97	0.17	29,29,29,29	0
54	MG	1A	3849	1/1	0.97	0.11	58,58,58,58	0
54	MG	1A	3529	1/1	0.97	0.06	47,47,47,47	0
54	MG	2A	3057	1/1	0.97	0.12	39,39,39,39	0
54	MG	2A	3221	1/1	0.97	0.40	57,57,57,57	0
54	MG	1E	304	1/1	0.97	0.17	16,16,16,16	0
54	MG	1A	3600	1/1	0.97	0.21	27,27,27,27	0
54	MG	1A	3852	1/1	0.97	0.32	30,30,30,30	0
54	MG	1A	3685	1/1	0.97	0.10	42,42,42,42	0
54	MG	2A	3062	1/1	0.97	0.43	35,35,35,35	0
54	MG	2A	3615	1/1	0.97	0.14	35,35,35,35	0
54	MG	2A	3616	1/1	0.97	0.08	45,45,45,45	0
54	MG	2A	3227	1/1	0.97	0.66	38,38,38,38	0
54	MG	2A	3228	1/1	0.97	0.13	58,58,58,58	0
54	MG	1A	3855	1/1	0.97	0.18	25,25,25,25	0
54	MG	1A	3856	1/1	0.97	0.19	42,42,42,42	0
54	MG	1A	3107	1/1	0.97	0.26	27,27,27,27	0
54	MG	1A	3157	1/1	0.97	0.13	28,28,28,28	0
54	MG	2A	3069	1/1	0.97	0.11	40,40,40,40	0
54	MG	1F	305	1/1	0.97	0.49	34,34,34,34	0
54	MG	1a	1798	1/1	0.97	0.12	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3427	1/1	0.97	0.10	57,57,57,57	0
54	MG	1A	3130	1/1	0.97	0.61	25,25,25,25	0
54	MG	1a	1663	1/1	0.97	0.15	59,59,59,59	0
54	MG	1A	3959	1/1	0.97	0.48	47,47,47,47	0
54	MG	1F	308	1/1	0.97	0.39	29,29,29,29	0
54	MG	1a	1804	1/1	0.97	0.18	59,59,59,59	0
54	MG	2A	3634	1/1	0.97	0.15	42,42,42,42	0
54	MG	1A	3073	1/1	0.97	0.40	30,30,30,30	0
54	MG	1A	3406	1/1	0.97	0.15	52,52,52,52	0
54	MG	2A	3638	1/1	0.97	0.09	32,32,32,32	0
54	MG	1A	3607	1/1	0.97	0.14	50,50,50,50	0
54	MG	1A	3771	1/1	0.97	0.22	27,27,27,27	0
54	MG	2A	3437	1/1	0.97	0.08	58,58,58,58	0
54	MG	1A	3772	1/1	0.97	0.44	24,24,24,24	0
54	MG	1a	1672	1/1	0.97	0.27	51,51,51,51	0
54	MG	1A	3109	1/1	0.97	0.57	31,31,31,31	0
54	MG	1A	3357	1/1	0.97	0.13	20,20,20,20	0
54	MG	1A	3410	1/1	0.97	0.17	18,18,18,18	0
54	MG	2A	3086	1/1	0.97	0.13	48,48,48,48	0
54	MG	1A	3541	1/1	0.97	0.17	19,19,19,19	0
54	MG	2a	1671	1/1	0.97	0.25	47,47,47,47	0
54	MG	1A	3042	1/1	0.97	0.23	8,8,8,8	0
54	MG	2A	3256	1/1	0.97	0.17	51,51,51,51	0
54	MG	2a	1674	1/1	0.97	0.16	43,43,43,43	0
54	MG	1A	3472	1/1	0.97	0.14	20,20,20,20	0
54	MG	2A	3259	1/1	0.97	0.10	32,32,32,32	0
54	MG	1A	3360	1/1	0.97	0.16	18,18,18,18	0
54	MG	1A	3975	1/1	0.97	0.09	39,39,39,39	0
54	MG	1A	3414	1/1	0.97	0.14	49,49,49,49	0
54	MG	1a	1682	1/1	0.97	0.10	59,59,59,59	0
54	MG	2A	3455	1/1	0.97	0.08	48,48,48,48	0
54	MG	1a	1683	1/1	0.97	0.13	59,59,59,59	0
54	MG	1A	3308	1/1	0.97	0.20	34,34,34,34	0
54	MG	2A	3267	1/1	0.97	0.14	52,52,52,52	0
54	MG	1A	3978	1/1	0.97	0.34	26,26,26,26	0
54	MG	2a	1686	1/1	0.97	0.09	52,52,52,52	0
54	MG	1A	3979	1/1	0.97	0.28	47,47,47,47	0
54	MG	2A	3270	1/1	0.97	0.07	37,37,37,37	0
54	MG	2A	3100	1/1	0.97	0.16	48,48,48,48	0
54	MG	1A	3478	1/1	0.97	0.17	16,16,16,16	0
54	MG	2a	1691	1/1	0.97	0.17	56,56,56,56	0
54	MG	2A	3102	1/1	0.97	0.11	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1827	1/1	0.97	0.11	33,33,33,33	0
54	MG	1A	3134	1/1	0.97	0.15	22,22,22,22	0
54	MG	1a	1829	1/1	0.97	0.18	42,42,42,42	0
54	MG	2A	3279	1/1	0.97	0.12	63,63,63,63	0
54	MG	1Q	201	1/1	0.97	0.12	38,38,38,38	0
54	MG	1Q	202	1/1	0.97	0.14	29,29,29,29	0
54	MG	1Q	204	1/1	0.97	0.17	31,31,31,31	0
54	MG	1A	3227	1/1	0.97	0.35	25,25,25,25	0
54	MG	2a	1701	1/1	0.97	0.26	42,42,42,42	0
54	MG	2a	1702	1/1	0.97	0.13	73,73,73,73	0
54	MG	2A	3474	1/1	0.97	0.13	50,50,50,50	0
54	MG	1A	3482	1/1	0.97	0.18	17,17,17,17	0
54	MG	1A	3984	1/1	0.97	0.12	37,37,37,37	0
54	MG	1A	3364	1/1	0.97	0.18	13,13,13,13	0
54	MG	1A	3989	1/1	0.97	0.32	50,50,50,50	0
54	MG	2a	1708	1/1	0.97	0.27	52,52,52,52	0
54	MG	1a	1838	1/1	0.97	0.11	55,55,55,55	0
54	MG	1A	3312	1/1	0.97	0.18	17,17,17,17	0
54	MG	1A	3792	1/1	0.97	0.14	12,12,12,12	0
54	MG	1A	3111	1/1	0.97	0.45	31,31,31,31	0
54	MG	2a	1713	1/1	0.97	0.43	55,55,55,55	0
54	MG	1A	3314	1/1	0.97	0.14	46,46,46,46	0
54	MG	1A	3710	1/1	0.97	0.16	38,38,38,38	0
54	MG	1A	3997	1/1	0.97	0.25	23,23,23,23	0
54	MG	1A	3888	1/1	0.97	0.12	18,18,18,18	0
54	MG	2A	3125	1/1	0.97	0.20	38,38,38,38	0
54	MG	1A	3796	1/1	0.97	0.19	45,45,45,45	0
54	MG	1A	4001	1/1	0.97	0.20	37,37,37,37	0
54	MG	2A	3299	1/1	0.97	0.16	28,28,28,28	0
54	MG	2A	3128	1/1	0.97	0.53	45,45,45,45	0
54	MG	1X	102	1/1	0.97	0.16	31,31,31,31	0
54	MG	2a	1724	1/1	0.97	0.20	41,41,41,41	0
54	MG	1A	4002	1/1	0.97	0.63	29,29,29,29	0
54	MG	1a	1710	1/1	0.97	0.12	63,63,63,63	0
54	MG	1A	3018	1/1	0.97	0.41	24,24,24,24	0
54	MG	2A	3499	1/1	0.97	0.21	30,30,30,30	0
54	MG	2A	3701	1/1	0.97	0.17	47,47,47,47	0
54	MG	1A	3113	1/1	0.97	0.15	18,18,18,18	0
54	MG	1A	3893	1/1	0.97	0.11	50,50,50,50	0
54	MG	2A	3307	1/1	0.97	0.19	51,51,51,51	0
54	MG	2a	1733	1/1	0.97	0.32	52,52,52,52	0
54	MG	1A	3231	1/1	0.97	0.52	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3897	1/1	0.97	0.17	23,23,23,23	0
54	MG	1A	3491	1/1	0.97	0.07	36,36,36,36	0
54	MG	11	101	1/1	0.97	0.23	44,44,44,44	0
54	MG	2A	3313	1/1	0.97	0.12	33,33,33,33	0
54	MG	2A	3714	1/1	0.97	0.88	45,45,45,45	0
54	MG	2A	3141	1/1	0.97	0.37	39,39,39,39	0
54	MG	1A	4011	1/1	0.97	0.33	29,29,29,29	0
54	MG	1A	3715	1/1	0.97	0.11	19,19,19,19	0
54	MG	1A	3063	1/1	0.97	0.24	32,32,32,32	0
54	MG	1a	1722	1/1	0.97	0.15	56,56,56,56	0
54	MG	1e	3001	1/1	0.97	0.36	56,56,56,56	0
54	MG	14	502	1/1	0.97	0.06	72,72,72,72	0
54	MG	2A	3722	1/1	0.97	0.30	48,48,48,48	0
54	MG	2A	3516	1/1	0.97	0.20	19,19,19,19	0
54	MG	2A	3517	1/1	0.97	0.20	46,46,46,46	0
54	MG	1A	3044	1/1	0.97	0.15	23,23,23,23	0
54	MG	2A	3150	1/1	0.97	0.15	62,62,62,62	0
54	MG	1A	3234	1/1	0.97	0.49	24,24,24,24	0
54	MG	1A	4019	1/1	0.97	0.21	29,29,29,29	0
54	MG	2A	3522	1/1	0.97	0.15	47,47,47,47	0
54	MG	1a	1728	1/1	0.97	0.10	51,51,51,51	0
54	MG	1A	3638	1/1	0.97	0.09	38,38,38,38	0
54	MG	1A	3375	1/1	0.97	0.15	16,16,16,16	0
54	MG	1A	3564	1/1	0.97	0.11	39,39,39,39	0
54	MG	1A	3066	1/1	0.97	0.50	30,30,30,30	0
54	MG	1a	1733	1/1	0.97	0.12	55,55,55,55	0
54	MG	1A	3097	1/1	0.97	0.58	23,23,23,23	0
54	MG	1A	3045	1/1	0.97	0.22	35,35,35,35	0
54	MG	1A	3015	1/1	0.97	0.55	29,29,29,29	0
54	MG	1a	1603	1/1	0.97	0.15	45,45,45,45	0
54	MG	1A	3910	1/1	0.97	0.12	59,59,59,59	0
54	MG	2B	3016	1/1	0.97	0.14	52,52,52,52	0
54	MG	1A	3813	1/1	0.97	0.13	56,56,56,56	0
54	MG	1A	3912	1/1	0.97	0.21	43,43,43,43	0
54	MG	2A	3537	1/1	0.97	0.15	42,42,42,42	0
54	MG	1A	3176	1/1	0.97	0.17	49,49,49,49	0
54	MG	1a	1609	1/1	0.97	0.34	51,51,51,51	0
59	ZN	29	501	1/1	0.97	0.12	62,62,62,62	0
54	MG	1B	205	1/1	0.97	0.11	40,40,40,40	0
54	MG	1A	3999	1/1	0.98	0.53	32,32,32,32	0
54	MG	2A	3316	1/1	0.98	0.18	41,41,41,41	0
54	MG	1A	3433	1/1	0.98	0.12	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1801	1/1	0.98	0.15	43,43,43,43	0
54	MG	1A	3896	1/1	0.98	0.12	22,22,22,22	0
54	MG	1A	3273	1/1	0.98	0.11	30,30,30,30	0
54	MG	1A	3435	1/1	0.98	0.22	37,37,37,37	0
54	MG	1A	3633	1/1	0.98	0.19	51,51,51,51	0
54	MG	1A	4006	1/1	0.98	0.23	31,31,31,31	0
54	MG	1A	3384	1/1	0.98	0.15	14,14,14,14	0
54	MG	2A	3637	1/1	0.98	0.15	30,30,30,30	0
54	MG	1A	3803	1/1	0.98	0.48	34,34,34,34	0
54	MG	1A	3306	1/1	0.98	0.13	23,23,23,23	0
54	MG	1A	3495	1/1	0.98	0.14	18,18,18,18	0
54	MG	1A	3344	1/1	0.98	0.12	21,21,21,21	0
54	MG	1a	1693	1/1	0.98	0.08	42,42,42,42	0
54	MG	2A	3643	1/1	0.98	0.17	34,34,34,34	0
54	MG	1A	3345	1/1	0.98	0.22	50,50,50,50	0
54	MG	1A	3202	1/1	0.98	0.66	32,32,32,32	0
54	MG	2A	3485	1/1	0.98	0.10	45,45,45,45	0
54	MG	1a	1815	1/1	0.98	0.10	44,44,44,44	0
54	MG	2A	3333	1/1	0.98	0.09	28,28,28,28	0
54	MG	1A	4015	1/1	0.98	0.38	39,39,39,39	0
54	MG	1A	3225	1/1	0.98	0.30	32,32,32,32	0
54	MG	1A	3164	1/1	0.98	0.44	22,22,22,22	0
54	MG	2A	3653	1/1	0.98	0.28	48,48,48,48	0
54	MG	2A	3491	1/1	0.98	0.11	46,46,46,46	0
54	MG	2A	3492	1/1	0.98	0.25	66,66,66,66	0
54	MG	1A	4018	1/1	0.98	0.23	36,36,36,36	0
54	MG	2A	3064	1/1	0.98	0.23	21,21,21,21	0
54	MG	1A	3277	1/1	0.98	0.35	28,28,28,28	0
54	MG	2A	3340	1/1	0.98	0.19	55,55,55,55	0
54	MG	2A	3066	1/1	0.98	0.16	51,51,51,51	0
54	MG	1A	3165	1/1	0.98	0.35	28,28,28,28	0
54	MG	1A	3725	1/1	0.98	0.08	36,36,36,36	0
54	MG	2A	3344	1/1	0.98	0.17	37,37,37,37	0
54	MG	13	101	1/1	0.98	0.15	53,53,53,53	0
54	MG	1A	3393	1/1	0.98	0.17	18,18,18,18	0
54	MG	1A	3351	1/1	0.98	0.14	18,18,18,18	0
54	MG	1a	1706	1/1	0.98	0.17	28,28,28,28	0
54	MG	1A	3037	1/1	0.98	0.16	39,39,39,39	0
54	MG	1A	4025	1/1	0.98	0.37	30,30,30,30	0
54	MG	1A	3648	1/1	0.98	0.21	32,32,32,32	0
54	MG	1A	3185	1/1	0.98	0.31	42,42,42,42	0
54	MG	1A	3024	1/1	0.98	0.33	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3103	1/1	0.98	0.47	25,25,25,25	0
54	MG	1A	3920	1/1	0.98	0.15	21,21,21,21	0
54	MG	2A	3357	1/1	0.98	0.15	41,41,41,41	0
54	MG	1A	3652	1/1	0.98	0.29	44,44,44,44	0
54	MG	1A	3317	1/1	0.98	0.10	56,56,56,56	0
54	MG	2A	3515	1/1	0.98	0.17	54,54,54,54	0
54	MG	1A	3510	1/1	0.98	0.15	34,34,34,34	0
54	MG	1A	3736	1/1	0.98	0.16	41,41,41,41	0
54	MG	1A	3114	1/1	0.98	0.15	22,22,22,22	0
54	MG	1A	3319	1/1	0.98	0.14	15,15,15,15	0
54	MG	1A	3359	1/1	0.98	0.14	15,15,15,15	0
54	MG	1a	1607	1/1	0.98	0.11	51,51,51,51	0
54	MG	1A	3171	1/1	0.98	0.23	23,23,23,23	0
54	MG	1a	1724	1/1	0.98	0.18	41,41,41,41	0
54	MG	2A	3090	1/1	0.98	0.14	19,19,19,19	0
54	MG	1A	3516	1/1	0.98	0.14	31,31,31,31	0
54	MG	1A	3285	1/1	0.98	0.29	36,36,36,36	0
54	MG	1A	3115	1/1	0.98	0.17	22,22,22,22	0
54	MG	1A	3155	1/1	0.98	0.19	26,26,26,26	0
54	MG	1A	3834	1/1	0.98	0.14	31,31,31,31	0
54	MG	2A	3530	1/1	0.98	0.13	25,25,25,25	0
54	MG	1A	3585	1/1	0.98	0.11	36,36,36,36	0
54	MG	1a	1850	1/1	0.98	0.07	45,45,45,45	0
54	MG	1A	3747	1/1	0.98	0.19	44,44,44,44	0
54	MG	2A	3378	1/1	0.98	0.10	28,28,28,28	0
54	MG	1A	3407	1/1	0.98	0.12	38,38,38,38	0
54	MG	1A	3104	1/1	0.98	0.38	23,23,23,23	0
54	MG	1A	3365	1/1	0.98	0.15	13,13,13,13	0
54	MG	1A	3290	1/1	0.98	0.16	32,32,32,32	0
54	MG	1A	3064	1/1	0.98	0.40	29,29,29,29	0
54	MG	1A	3842	1/1	0.98	0.10	42,42,42,42	0
54	MG	1A	3671	1/1	0.98	0.10	15,15,15,15	0
54	MG	2A	3107	1/1	0.98	0.13	43,43,43,43	0
54	MG	1A	3845	1/1	0.98	0.17	37,37,37,37	0
54	MG	2A	3241	1/1	0.98	0.20	47,47,47,47	0
54	MG	1A	3525	1/1	0.98	0.17	37,37,37,37	0
54	MG	1A	3464	1/1	0.98	0.14	56,56,56,56	0
54	MG	2A	3713	1/1	0.98	0.82	40,40,40,40	0
54	MG	1D	301	1/1	0.98	0.30	25,25,25,25	0
54	MG	1A	3593	1/1	0.98	0.16	40,40,40,40	0
54	MG	1A	3412	1/1	0.98	0.16	45,45,45,45	0
54	MG	1D	305	1/1	0.98	0.26	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3595	1/1	0.98	0.20	16,16,16,16	0
54	MG	2A	3396	1/1	0.98	0.21	29,29,29,29	0
54	MG	1A	3096	1/1	0.98	0.33	25,25,25,25	0
54	MG	1A	3195	1/1	0.98	0.33	33,33,33,33	0
54	MG	2A	3119	1/1	0.98	0.09	64,64,64,64	0
54	MG	1A	3853	1/1	0.98	0.14	15,15,15,15	0
54	MG	1A	3089	1/1	0.98	0.29	26,26,26,26	0
54	MG	1A	3416	1/1	0.98	0.10	48,48,48,48	0
54	MG	2A	3559	1/1	0.98	0.19	32,32,32,32	0
54	MG	1A	3763	1/1	0.98	0.24	46,46,46,46	0
54	MG	1A	3470	1/1	0.98	0.12	36,36,36,36	0
54	MG	1A	3956	1/1	0.98	0.09	24,24,24,24	0
54	MG	2A	3407	1/1	0.98	0.11	50,50,50,50	0
54	MG	1A	3331	1/1	0.98	0.10	12,12,12,12	0
54	MG	1A	3684	1/1	0.98	0.12	46,46,46,46	0
54	MG	1A	3860	1/1	0.98	0.31	43,43,43,43	0
54	MG	1a	1758	1/1	0.98	0.20	52,52,52,52	0
54	MG	1A	3418	1/1	0.98	0.14	22,22,22,22	0
54	MG	2A	3266	1/1	0.98	0.14	40,40,40,40	0
54	MG	1a	1760	1/1	0.98	0.19	52,52,52,52	0
54	MG	2A	3572	1/1	0.98	0.10	21,21,21,21	0
54	MG	2A	3415	1/1	0.98	0.14	41,41,41,41	0
54	MG	1A	3264	1/1	0.98	0.64	42,42,42,42	0
54	MG	2A	3133	1/1	0.98	0.14	47,47,47,47	0
54	MG	1A	3536	1/1	0.98	0.19	26,26,26,26	0
54	MG	2A	3135	1/1	0.98	0.13	67,67,67,67	0
54	MG	1A	3537	1/1	0.98	0.18	46,46,46,46	0
54	MG	1a	1764	1/1	0.98	0.10	61,61,61,61	0
54	MG	1A	3474	1/1	0.98	0.15	44,44,44,44	0
54	MG	2A	3424	1/1	0.98	0.12	52,52,52,52	0
54	MG	2A	3006	1/1	0.98	0.54	43,43,43,43	0
54	MG	2A	3276	1/1	0.98	0.12	44,44,44,44	0
54	MG	1A	3965	1/1	0.98	0.20	10,10,10,10	0
54	MG	2A	3278	1/1	0.98	0.10	25,25,25,25	0
54	MG	1A	3006	1/1	0.98	0.17	17,17,17,17	0
54	MG	1A	3967	1/1	0.98	0.15	19,19,19,19	0
54	MG	1A	3774	1/1	0.98	0.10	12,12,12,12	0
54	MG	1A	3540	1/1	0.98	0.14	25,25,25,25	0
54	MG	2A	3145	1/1	0.98	0.63	44,44,44,44	0
54	MG	1A	3776	1/1	0.98	0.13	26,26,26,26	0
54	MG	1A	3971	1/1	0.98	0.13	16,16,16,16	0
54	MG	1A	3076	1/1	0.98	0.36	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3477	1/1	0.98	0.16	16,16,16,16	0
54	MG	1A	3694	1/1	0.98	0.09	40,40,40,40	0
54	MG	1A	3874	1/1	0.98	0.15	43,43,43,43	0
54	MG	1A	3243	1/1	0.98	0.13	35,35,35,35	0
54	MG	1A	3336	1/1	0.98	0.12	33,33,33,33	0
54	MG	1A	3614	1/1	0.98	0.16	17,17,17,17	0
54	MG	1A	3480	1/1	0.98	0.14	36,36,36,36	0
54	MG	1A	3616	1/1	0.98	0.23	16,16,16,16	0
54	MG	1A	3199	1/1	0.98	0.66	38,38,38,38	0
54	MG	1A	3378	1/1	0.98	0.09	20,20,20,20	0
54	MG	2A	3605	1/1	0.98	0.10	62,62,62,62	0
54	MG	2A	3026	1/1	0.98	0.42	41,41,41,41	0
54	MG	1A	3788	1/1	0.98	0.16	23,23,23,23	0
54	MG	2T	3002	1/1	0.98	0.11	61,61,61,61	0
54	MG	1A	3269	1/1	0.98	0.15	12,12,12,12	0
54	MG	1A	3985	1/1	0.98	0.35	36,36,36,36	0
54	MG	2V	201	1/1	0.98	0.16	60,60,60,60	0
54	MG	2A	3452	1/1	0.98	0.17	38,38,38,38	0
54	MG	1A	3270	1/1	0.98	0.12	11,11,11,11	0
54	MG	1a	1670	1/1	0.98	0.22	50,50,50,50	0
54	MG	1A	3005	1/1	0.98	0.17	15,15,15,15	0
54	MG	1A	3136	1/1	0.98	0.20	24,24,24,24	0
54	MG	1A	3431	1/1	0.98	0.13	34,34,34,34	0
54	MG	1A	3553	1/1	0.98	0.14	18,18,18,18	0
54	MG	2A	3617	1/1	0.98	0.14	46,46,46,46	0
54	MG	2A	3169	1/1	0.98	0.35	38,38,38,38	0
54	MG	1Q	203	1/1	0.98	0.24	36,36,36,36	0
54	MG	1A	3890	1/1	0.98	0.17	46,46,46,46	0
54	MG	1A	3627	1/1	0.98	0.26	30,30,30,30	0
54	MG	2A	3311	1/1	0.98	0.13	43,43,43,43	0
54	MG	1A	3996	1/1	0.98	0.40	27,27,27,27	0
59	ZN	14	501	1/1	0.98	0.14	80,80,80,80	0
59	ZN	15	101	1/1	0.98	0.20	39,39,39,39	0
54	MG	1A	3432	1/1	0.98	0.23	35,35,35,35	0
54	MG	2A	3625	1/1	0.98	0.12	16,16,16,16	0
54	MG	1A	3489	1/1	0.98	0.14	21,21,21,21	0
54	MG	2a	1609	1/1	0.98	0.17	46,46,46,46	0
60	SF4	1d	302	8/8	0.98	0.17	48,59,66,72	0
60	SF4	2d	501	8/8	0.98	0.14	61,71,81,92	0
54	MG	1A	3511	1/1	0.99	0.07	32,32,32,32	0
54	MG	1A	3843	1/1	0.99	0.23	30,30,30,30	0
54	MG	2A	3461	1/1	0.99	0.10	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1716	1/1	0.99	0.12	39,39,39,39	0
54	MG	1a	1638	1/1	0.99	0.16	44,44,44,44	0
54	MG	1A	3298	1/1	0.99	0.18	14,14,14,14	0
54	MG	1A	3657	1/1	0.99	0.29	31,31,31,31	0
54	MG	1A	3769	1/1	0.99	0.17	19,19,19,19	0
54	MG	1A	3620	1/1	0.99	0.06	44,44,44,44	0
54	MG	2A	3365	1/1	0.99	0.23	32,32,32,32	0
54	MG	1A	3323	1/1	0.99	0.14	18,18,18,18	0
54	MG	1A	3034	1/1	0.99	0.10	33,33,33,33	0
54	MG	2A	3003	1/1	0.99	0.16	37,37,37,37	0
54	MG	1A	4004	1/1	0.99	0.25	25,25,25,25	0
54	MG	2A	3420	1/1	0.99	0.17	28,28,28,28	0
54	MG	2A	3091	1/1	0.99	0.15	61,61,61,61	0
54	MG	1A	3661	1/1	0.99	0.11	32,32,32,32	0
54	MG	1A	3879	1/1	0.99	0.12	33,33,33,33	0
54	MG	1A	3683	1/1	0.99	0.14	25,25,25,25	0
54	MG	2A	3585	1/1	0.99	0.14	57,57,57,57	0
54	MG	2E	304	1/1	0.99	0.13	29,29,29,29	0
54	MG	1A	3081	1/1	0.99	0.43	34,34,34,34	0
54	MG	2A	3009	1/1	0.99	0.20	30,30,30,30	0
54	MG	1A	3117	1/1	0.99	0.17	39,39,39,39	0
54	MG	1V	202	1/1	0.99	0.15	47,47,47,47	0
54	MG	1A	3625	1/1	0.99	0.10	35,35,35,35	0
54	MG	1A	3828	1/1	0.99	0.15	13,13,13,13	0
54	MG	1A	3915	1/1	0.99	0.11	25,25,25,25	0
54	MG	1B	220	1/1	0.99	0.15	20,20,20,20	0
54	MG	1A	3016	1/1	0.99	0.49	17,17,17,17	0
54	MG	2A	3650	1/1	0.99	0.16	36,36,36,36	0
54	MG	1A	4014	1/1	0.99	0.40	28,28,28,28	0
54	MG	1A	3645	1/1	0.99	0.12	35,35,35,35	0
54	MG	1A	3221	1/1	0.99	0.51	24,24,24,24	0
54	MG	1A	3420	1/1	0.99	0.13	50,50,50,50	0
54	MG	2A	3243	1/1	0.99	0.15	18,18,18,18	0
54	MG	1A	3017	1/1	0.99	0.36	25,25,25,25	0
54	MG	1A	3084	1/1	0.99	0.21	33,33,33,33	0
55	K	1A	3287	1/1	0.99	0.06	27,27,27,27	0
55	K	2A	3246	1/1	0.99	0.11	30,30,30,30	0
54	MG	1A	3003	1/1	0.99	0.10	31,31,31,31	0
54	MG	2A	3442	1/1	0.99	0.16	27,27,27,27	0
54	MG	1A	3170	1/1	0.99	0.26	28,28,28,28	0
54	MG	1A	3054	1/1	0.99	0.12	21,21,21,21	0
54	MG	1A	3787	1/1	0.99	0.23	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3027	1/1	0.99	0.13	30,30,30,30	0
54	MG	2A	3346	1/1	0.99	0.21	52,52,52,52	0
54	MG	1A	3895	1/1	0.99	0.11	16,16,16,16	0
54	MG	1D	304	1/1	0.99	0.18	33,33,33,33	0
54	MG	2A	3117	1/1	0.99	0.26	36,36,36,36	0
54	MG	1A	3740	1/1	0.99	0.18	29,29,29,29	0
59	ZN	1Y	501	1/1	0.99	0.20	46,46,46,46	0
54	MG	1D	306	1/1	0.99	0.15	11,11,11,11	0
54	MG	2A	3257	1/1	0.99	0.18	43,43,43,43	0
59	ZN	16	501	1/1	0.99	0.27	46,46,46,46	0
59	ZN	19	501	1/1	0.99	0.23	39,39,39,39	0
59	ZN	1n	501	1/1	0.99	0.15	60,60,60,60	0
54	MG	2A	3560	1/1	0.99	0.15	43,43,43,43	0
54	MG	1A	3309	1/1	0.99	0.10	34,34,34,34	0
59	ZN	25	501	1/1	0.99	0.22	44,44,44,44	0
59	ZN	26	501	1/1	0.99	0.18	59,59,59,59	0
54	MG	2A	3403	1/1	0.99	0.29	57,57,57,57	0
54	MG	1A	3601	1/1	0.99	0.14	31,31,31,31	0
54	MG	1A	3994	1/1	0.99	0.31	26,26,26,26	0
54	MG	1A	3869	1/1	0.99	0.14	56,56,56,56	0

6.5 Other polymers (i)

There are no such residues in this entry.