



# wwPDB X-ray Structure Validation Summary Report ⓘ

Jun 25, 2024 – 12:29 AM EDT

PDB ID : 4V8I  
Title : Crystal structure of YfiA bound to the 70S ribosome.  
Authors : Polikanov, Y.S.; Blaha, G.M.; Steitz, T.A.  
Deposited on : 2011-12-12  
Resolution : 2.70 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4.02b-467  
Xtriage (Phenix) : 1.13  
EDS : 2.37.1  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.37.1

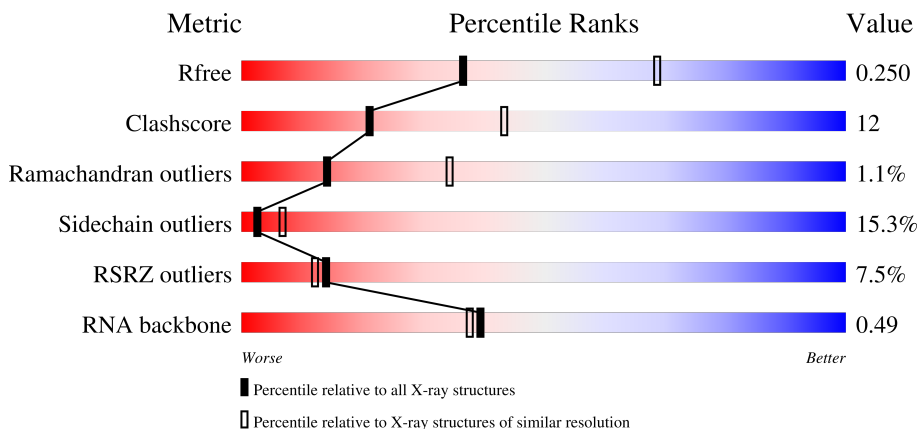
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.70 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)
Clashscore	141614	3122 (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  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	1522	
1	CA	1522	
2	AB	256	
2	CB	256	

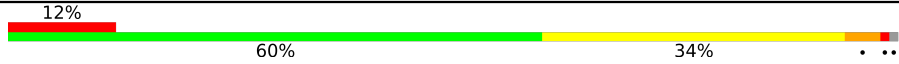

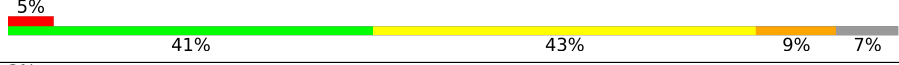
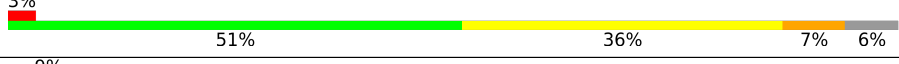
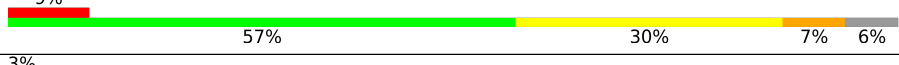
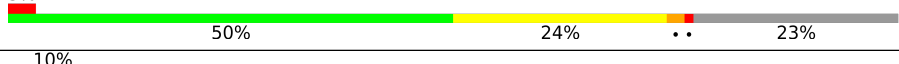
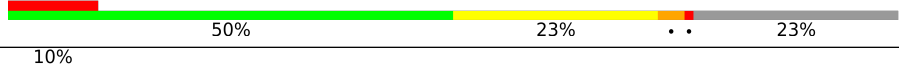




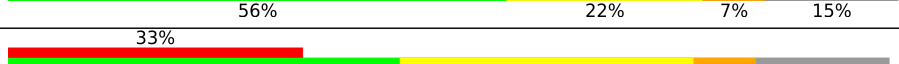
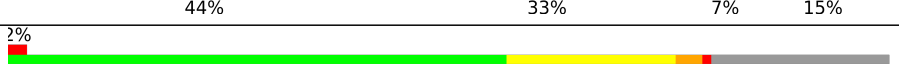
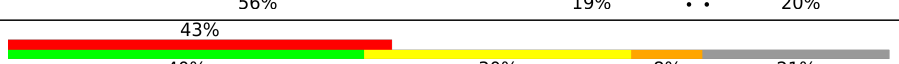
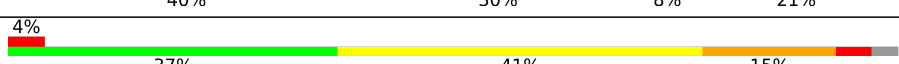
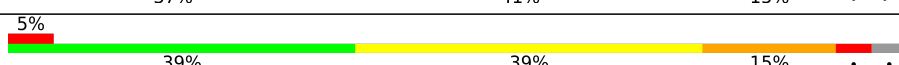

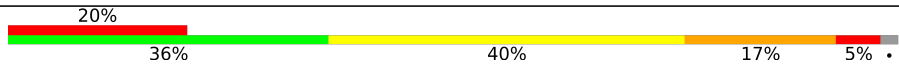
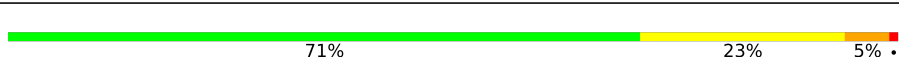


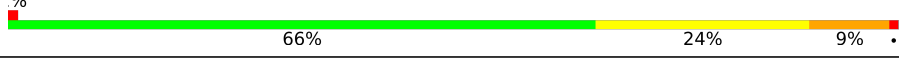
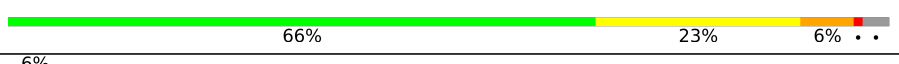


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Mol	Chain	Length	Quality of chain
3	AC	239	5% 63% 19% 14%
3	CC	239	21% 41% 36% 8% 14%
4	AD	209	15% 70% 23% 7%
4	CD	209	14% 61% 31% 8%
5	AE	162	56% 31% 9%
5	CE	162	8% 54% 32% 6% 9%
6	AF	101	3% 70% 23% 6% .
6	CF	101	3% 70% 21% 7% .
7	AG	156	4% 71% 24% .
7	CG	156	26% 56% 37% 6% .
8	AH	138	4% 64% 30% 6%
8	CH	138	10% 64% 29% 7%
9	AI	128	11% 52% 40% 5% ..
9	CI	128	35% 48% 41% 9% .
10	AJ	105	19% 42% 40% 9% . 9%
10	CJ	105	39% 54% 27% 10% . 9%
11	AK	129	7% 67% 19% . 12%
11	CK	129	11% 62% 23% . 12%
12	AL	132	4% 65% 23% . 8%
12	CL	132	14% 64% 25% . . 8%
13	AM	126	6% 50% 26% 13% . 10%
13	CM	126	31% 47% 32% 10% . 11%
14	AN	61	7% 52% 39% 7% .
14	CN	61	31% 41% 38% 16% . .
15	AO	89	3% 63% 30% . .

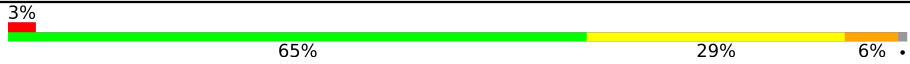
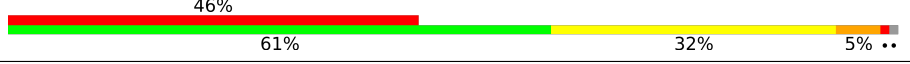
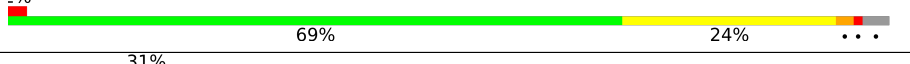



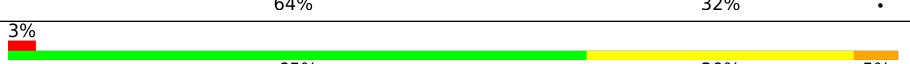
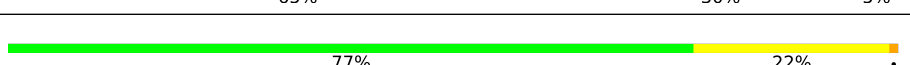
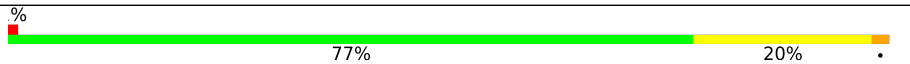


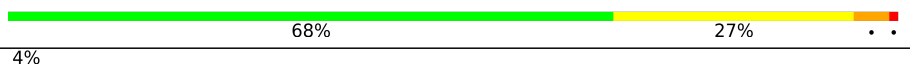
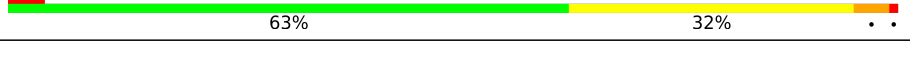

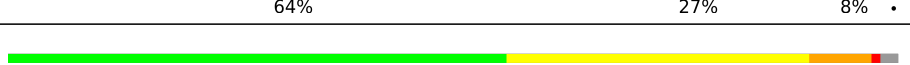










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Mol	Chain	Length	Quality of chain
15	CO	89	
16	AP	88	
16	CP	88	
17	AQ	105	
17	CQ	105	
18	AR	88	
18	CR	88	
19	AS	93	
19	CS	93	
20	AT	106	
20	CT	106	
21	AU	27	
21	CU	27	
22	AY	119	
22	CY	119	
23	BA	2915	
23	DA	2915	
24	BB	122	
24	DB	122	
25	BD	276	
25	DD	276	
26	BE	206	
26	DE	206	
27	BF	210	
27	DF	210	
















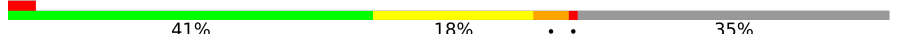
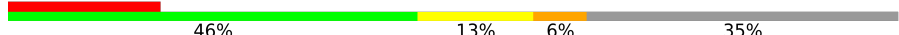








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Mol	Chain	Length	Quality of chain
28	BG	182	
28	DG	182	
29	BH	180	
29	DH	180	
30	BI	148	
30	DI	148	
31	BN	140	
31	DN	140	
32	BO	122	
32	DO	122	
33	BP	150	
33	DP	150	
34	BQ	141	
34	DQ	141	
35	BR	118	
35	DR	118	
36	BS	112	
36	DS	112	
37	BT	146	
37	DT	146	
38	BU	118	
38	DU	118	
39	BV	101	
39	DV	101	
40	BW	113	

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Mol	Chain	Length	Quality of chain
40	DW	113	
41	BX	96	
41	DX	96	
42	BY	110	
42	DY	110	
43	BZ	206	
43	DZ	206	
44	B0	85	
44	D0	85	
45	B1	98	
45	D1	98	
46	B2	72	
46	D2	72	
47	B3	60	
47	D3	60	
48	B4	71	
48	D4	71	
49	B5	60	
49	D5	60	
50	B6	54	
50	D6	54	
51	B7	49	
51	D7	49	
52	B8	65	
52	D8	65	

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Mol	Chain	Length	Quality of chain
53	B9	37	
53	D9	37	

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	BA	3111	-	-	-	X
54	MG	BA	3605	-	-	-	X
54	MG	CA	1604	-	-	-	X
54	MG	CA	1607	-	-	-	X
54	MG	CA	1612	-	-	-	X
54	MG	CA	1630	-	-	-	X
54	MG	DA	3014	-	-	-	X
54	MG	DA	3130	-	-	-	X
54	MG	DA	3547	-	-	-	X
54	MG	DA	3614	-	-	-	X
54	MG	DB	206	-	-	-	X

## 2 Entry composition [i](#)

There are 56 unique types of molecules in this entry. The entry contains 287173 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 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	AA	1493	Total 32102	C 14287	N 5955	O 10367	P 1493	0	0	0
1	CA	1491	Total 32056	C 14267	N 5945	O 10353	P 1491	0	0	0

- Molecule 2 is a protein called 30S Ribosomal Protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	AB	229	Total 1777	C 1134	N 318	O 320	S 5	0	0	0
2	CB	235	Total 1817	C 1160	N 325	O 327	S 5	0	0	1

- Molecule 3 is a protein called 30S Ribosomal Protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	AC	206	Total 1450	C 906	N 279	O 264	S 1	0	0	0
3	CC	206	Total 1453	C 908	N 280	O 264	S 1	0	0	0

- Molecule 4 is a protein called 30S Ribosomal Protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	AD	208	Total 1520	C 960	N 283	O 272	S 5	0	0	0
4	CD	208	Total 1537	C 968	N 287	O 276	S 6	0	0	0

- Molecule 5 is a protein called 30S Ribosomal Protein S5.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	148	Total	C	N	O	S	0	0	0
			1105	699	204	198	4			
5	CE	148	Total	C	N	O	S	0	0	0
			1106	700	204	198	4			

- Molecule 6 is a protein called 30S Ribosomal Protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	100	Total	C	N	O	S	0	0	0
			781	495	137	146	3			
6	CF	99	Total	C	N	O	S	0	0	0
			776	492	135	146	3			

- Molecule 7 is a protein called 30S Ribosomal Protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0	0
			1167	727	224	210	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1164	726	224	208	6			

- Molecule 8 is a protein called 30S Ribosomal Protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0	0
			1045	665	188	190	2			
8	CH	138	Total	C	N	O	S	0	0	0
			1049	667	188	192	2			

- Molecule 9 is a protein called 30S Ribosomal Protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	125	Total	C	N	O	0	0	0
			852	533	163	156			
9	CI	125	Total	C	N	O	0	0	0
			849	531	161	157			

- Molecule 10 is a protein called 30S Ribosomal Protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	AJ	96	Total	C	N	O	0	0	0
			659	408	131	120			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	CJ	96	Total	C	N	O	0	0	0
			657	407	129	121			

- Molecule 11 is a protein called 30S Ribosomal Protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	114	Total	C	N	O	S	0	0	0
			828	516	155	154	3			
11	CK	114	Total	C	N	O	S	0	0	0
			828	516	155	154	3			

- Molecule 12 is a protein called 30S Ribosomal Protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	122	Total	C	N	O	S	0	0	0
			909	570	179	159	1			
12	CL	122	Total	C	N	O	S	0	0	0
			905	567	178	159	1			

- Molecule 13 is a protein called 30S Ribosomal Protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	114	Total	C	N	O	S	0	0	0
			801	494	164	142	1			
13	CM	112	Total	C	N	O	S	0	0	0
			784	486	159	138	1			

- Molecule 14 is a protein called 30S Ribosomal Protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	60	Total	C	N	O	S	0	0	0
			478	303	99	72	4			
14	CN	60	Total	C	N	O	S	0	0	0
			474	300	98	72	4			

- Molecule 15 is a protein called 30S Ribosomal Protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			724	453	143	126	2			
15	CO	88	Total	C	N	O	S	0	0	0
			724	453	143	126	2			

- Molecule 16 is a protein called 30S Ribosomal Protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	AP	82	Total 651	C 416	N 123	O 111	S 1	0	0	0
16	CP	82	Total 661	C 421	N 126	O 113	S 1	0	0	0

- Molecule 17 is a protein called 30S Ribosomal Protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
17	AQ	99	Total 823	C 528	N 151	O 142	S 2	0	0	0
17	CQ	99	Total 819	C 525	N 150	O 142	S 2	0	0	0

- Molecule 18 is a protein called 30S Ribosomal Protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
18	AR	68	Total 514	C 329	N 98	O 87	0	0	0
18	CR	68	Total 514	C 329	N 98	O 87	0	0	0

- Molecule 19 is a protein called 30S Ribosomal Protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
19	AS	81	Total 560	C 351	N 108	O 99	S 2	0	0	0
19	CS	78	Total 549	C 345	N 106	O 96	S 2	0	0	0

- Molecule 20 is a protein called 30S Ribosomal Protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
20	AT	96	Total 699	C 430	N 150	O 117	S 2	0	0	0
20	CT	104	Total 773	C 476	N 162	O 133	S 2	0	0	0

- Molecule 21 is a protein called 30S Ribosomal Protein THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
21	AU	23	199	122	48	29	0	0	0
21	CU	23	180	112	41	27	0	0	0

- Molecule 22 is a protein called Ribosome-associated inhibitor A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
22	AY	95	754	472	142	137	3	0	0	0
22	CY	94	739	461	138	137	3	0	0	0

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AY	114	HIS	-	EXPRESSION TAG	UNP P0AD49
AY	115	HIS	-	EXPRESSION TAG	UNP P0AD49
AY	116	HIS	-	EXPRESSION TAG	UNP P0AD49
AY	117	HIS	-	EXPRESSION TAG	UNP P0AD49
AY	118	HIS	-	EXPRESSION TAG	UNP P0AD49
AY	119	HIS	-	EXPRESSION TAG	UNP P0AD49
CY	114	HIS	-	EXPRESSION TAG	UNP P0AD49
CY	115	HIS	-	EXPRESSION TAG	UNP P0AD49
CY	116	HIS	-	EXPRESSION TAG	UNP P0AD49
CY	117	HIS	-	EXPRESSION TAG	UNP P0AD49
CY	118	HIS	-	EXPRESSION TAG	UNP P0AD49
CY	119	HIS	-	EXPRESSION TAG	UNP P0AD49

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
23	BA	2827	60898	27101	11400	19571	2826	0	0	0
23	DA	2798	60264	26820	11274	19374	2796	0	0	0

- Molecule 24 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
24	BB	120	2573	1146	476	832	119	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
24	DB	120	2573	1146	476	832	119	0	0	0

- Molecule 25 is a protein called 50S Ribosomal Protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
25	BD	275	2136	1349	423	361	3	0	0	0
25	DD	275	2136	1349	423	361	3	0	0	0

- Molecule 26 is a protein called 50S Ribosomal Protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
26	BE	204	1555	982	297	270	6	0	0	0
26	DE	204	1555	982	297	270	6	0	0	0

- Molecule 27 is a protein called 50S Ribosomal Protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
27	BF	203	1577	1004	298	273	2	0	0	1
27	DF	203	1572	1003	298	269	2	0	0	1

- Molecule 28 is a protein called 50S Ribosomal Protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
28	BG	181	1368	879	242	244	3	0	0	0
28	DG	181	1368	879	242	244	3	0	0	0

- Molecule 29 is a protein called 50S Ribosomal Protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
29	BH	174	1317	837	243	236	1	0	0	0
29	DH	174	1317	837	243	236	1	0	0	0

- Molecule 30 is a protein called 50S Ribosomal Protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BI	146	Total	C	N	O	S	0	0	0
			1043	672	180	190	1			
30	DI	146	Total	C	N	O	S	0	0	0
			1043	672	180	190	1			

- Molecule 31 is a protein called 50S Ribosomal Protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BN	140	Total	C	N	O	S	0	0	0
			1112	717	207	184	4			
31	DN	140	Total	C	N	O	S	0	0	0
			1112	717	207	184	4			

- Molecule 32 is a protein called 50S Ribosomal Protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BO	122	Total	C	N	O	S	0	0	0
			923	583	168	168	4			
32	DO	122	Total	C	N	O	S	0	0	0
			923	583	168	168	4			

- Molecule 33 is a protein called 50S Ribosomal Protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BP	149	Total	C	N	O	S	0	0	0
			1131	703	229	196	3			
33	DP	149	Total	C	N	O	S	0	0	0
			1131	703	229	196	3			

- Molecule 34 is a protein called 50S Ribosomal Protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BQ	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			
34	DQ	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			

- Molecule 35 is a protein called 50S Ribosomal Protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BR	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			
35	DR	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			

- Molecule 36 is a protein called 50S Ribosomal Protein L18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BS	110	Total	C	N	O	S	0	0	0
			865	544	172	149				
36	DS	110	Total	C	N	O	S	0	0	0
			873	550	174	149				

- Molecule 37 is a protein called 50S Ribosomal Protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BT	131	Total	C	N	O	S	0	0	0
			1063	666	213	183	1			
37	DT	130	Total	C	N	O	S	0	0	0
			1058	663	212	182	1			

- Molecule 38 is a protein called 50S Ribosomal Protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BU	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
38	DU	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 39 is a protein called 50S Ribosomal Protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BV	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			
39	DV	101	Total	C	N	O	S	0	0	0
			775	498	141	135	1			

- Molecule 40 is a protein called 50S Ribosomal Protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BW	112	Total	C	N	O	S	0	0	0
			881	554	172	153	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
40	DW	111	877	552	171	152	2	0	0	0

- Molecule 41 is a protein called 50S Ribosomal Protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
41	BX	95	742	483	134	124	1	0	0	0
41	DX	95	732	477	130	124	1	0	0	0

- Molecule 42 is a protein called 50S Ribosomal Protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	BY	107	785	503	145	131	6	0	0	0
42	DY	107	781	502	145	128	6	0	0	0

- Molecule 43 is a protein called 50S Ribosomal Protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
43	BZ	198	1522	972	269	279	2	0	0	0
43	DZ	203	1528	973	268	284	3	0	0	0

- Molecule 44 is a protein called 50S Ribosomal Protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
44	B0	76	594	368	125	100	1	0	0	0
44	D0	77	607	376	126	104	1	0	0	0

- Molecule 45 is a protein called 50S Ribosomal Protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
45	B1	97	745	469	144	131	1	0	0	0
45	D1	97	745	469	144	131	1	0	0	0



- Molecule 46 is a protein called 50S Ribosomal Protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	B2	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
46	D2	71	Total	C	N	O	S	0	0	0
			584	361	118	103	2			

- Molecule 47 is a protein called 50S Ribosomal Protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
47	B3	59	Total	C	N	O	0	0	0
			458	293	87	78			
47	D3	59	Total	C	N	O	0	0	0
			463	295	87	81			

- Molecule 48 is a protein called 50S Ribosomal Protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B4	46	Total	C	N	O	S	0	0	0
			349	223	57	64	5			
48	D4	46	Total	C	N	O	S	0	0	0
			349	223	57	64	5			

- Molecule 49 is a protein called 50S Ribosomal Protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	B5	59	Total	C	N	O	S	0	0	0
			455	286	90	74	5			
49	D5	59	Total	C	N	O	S	0	0	0
			451	283	89	74	5			

- Molecule 50 is a protein called 50S Ribosomal Protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B6	53	Total	C	N	O	S	0	0	0
			449	278	90	77	4			
50	D6	53	Total	C	N	O	S	0	0	0
			437	272	84	77	4			

- Molecule 51 is a protein called 50S Ribosomal Protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B7	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
51	D7	48	Total	C	N	O	S	0	0	0
			402	248	97	55	2			

- Molecule 52 is a protein called 50S Ribosomal Protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B8	64	Total	C	N	O	S	0	0	0
			509	326	99	82	2			
52	D8	64	Total	C	N	O	S	0	0	0
			509	326	99	82	2			

- Molecule 53 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	B9	36	Total	C	N	O	S	0	0	0
			297	182	66	46	3			
53	D9	36	Total	C	N	O	S	0	0	0
			297	182	66	46	3			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	AA	217	Total	Mg	0	0
			217	217		
54	AD	2	Total	Mg	0	0
			2	2		
54	AE	1	Total	Mg	0	0
			1	1		
54	AF	1	Total	Mg	0	0
			1	1		
54	AI	1	Total	Mg	0	0
			1	1		
54	AL	1	Total	Mg	0	0
			1	1		
54	AM	2	Total	Mg	0	0
			2	2		
54	AP	1	Total	Mg	0	0
			1	1		
54	BA	729	Total	Mg	0	0
			729	729		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	BB	19	Total 19	Mg 19	0	0
54	BD	7	Total 7	Mg 7	0	0
54	BE	6	Total 6	Mg 6	0	0
54	BF	6	Total 6	Mg 6	0	0
54	BG	1	Total 1	Mg 1	0	0
54	BH	1	Total 1	Mg 1	0	0
54	BN	2	Total 2	Mg 2	0	0
54	BO	1	Total 1	Mg 1	0	0
54	BP	2	Total 2	Mg 2	0	0
54	BQ	5	Total 5	Mg 5	0	0
54	BR	5	Total 5	Mg 5	0	0
54	BS	1	Total 1	Mg 1	0	0
54	BT	3	Total 3	Mg 3	0	0
54	BU	3	Total 3	Mg 3	0	0
54	BV	4	Total 4	Mg 4	0	0
54	BW	1	Total 1	Mg 1	0	0
54	BY	1	Total 1	Mg 1	0	0
54	BZ	2	Total 2	Mg 2	0	0
54	B0	4	Total 4	Mg 4	0	0
54	B1	1	Total 1	Mg 1	0	0
54	B2	2	Total 2	Mg 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	B3	3	Total Mg 3 3	0	0
54	B5	1	Total Mg 1 1	0	0
54	B6	1	Total Mg 1 1	0	0
54	B7	1	Total Mg 1 1	0	0
54	B8	1	Total Mg 1 1	0	0
54	B9	3	Total Mg 3 3	0	0
54	CA	203	Total Mg 203 203	0	0
54	CE	1	Total Mg 1 1	0	0
54	CQ	1	Total Mg 1 1	0	0
54	DA	637	Total Mg 637 637	0	0
54	DB	10	Total Mg 10 10	0	0
54	DD	5	Total Mg 5 5	0	0
54	DE	3	Total Mg 3 3	0	0
54	DF	5	Total Mg 5 5	0	0
54	DO	3	Total Mg 3 3	0	0
54	DP	3	Total Mg 3 3	0	0
54	DQ	4	Total Mg 4 4	0	0
54	DR	2	Total Mg 2 2	0	0
54	DT	2	Total Mg 2 2	0	0
54	DW	1	Total Mg 1 1	0	0
54	D0	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	D1	1	Total Mg 1 1	0	0
54	D5	2	Total Mg 2 2	0	0
54	D7	2	Total Mg 2 2	0	0
54	D8	2	Total Mg 2 2	0	0
54	D9	1	Total Mg 1 1	0	0

- Molecule 55 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	AD	1	Total Zn 1 1	0	0
55	AN	1	Total Zn 1 1	0	0
55	BY	1	Total Zn 1 1	0	0
55	B4	1	Total Zn 1 1	0	0
55	B5	1	Total Zn 1 1	0	0
55	B6	1	Total Zn 1 1	0	0
55	B9	1	Total Zn 1 1	0	0
55	CD	1	Total Zn 1 1	0	0
55	CN	1	Total Zn 1 1	0	0
55	DY	1	Total Zn 1 1	0	0
55	D4	1	Total Zn 1 1	0	0
55	D5	1	Total Zn 1 1	0	0
55	D6	1	Total Zn 1 1	0	0
55	D9	1	Total Zn 1 1	0	0

- Molecule 56 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	AA	443	Total O 443 443	0	0
56	AD	3	Total O 3 3	0	0
56	AE	2	Total O 2 2	0	0
56	AF	2	Total O 2 2	0	0
56	AG	2	Total O 2 2	0	0
56	AJ	1	Total O 1 1	0	0
56	AK	1	Total O 1 1	0	0
56	AL	3	Total O 3 3	0	0
56	AM	1	Total O 1 1	0	0
56	AO	1	Total O 1 1	0	0
56	AP	1	Total O 1 1	0	0
56	AQ	3	Total O 3 3	0	0
56	AY	1	Total O 1 1	0	0
56	BA	1988	Total O 1988 1988	0	0
56	BB	43	Total O 43 43	0	0
56	BD	21	Total O 21 21	0	0
56	BE	18	Total O 18 18	0	0
56	BF	18	Total O 18 18	0	0
56	BG	2	Total O 2 2	0	0
56	BH	2	Total O 2 2	0	0
56	BN	7	Total O 7 7	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	BO	3	Total 3	O 3	0	0
56	BP	20	Total 20	O 20	0	0
56	BQ	9	Total 9	O 9	0	0
56	BR	8	Total 8	O 8	0	0
56	BS	2	Total 2	O 2	0	0
56	BT	5	Total 5	O 5	0	0
56	BU	9	Total 9	O 9	0	0
56	BV	13	Total 13	O 13	0	0
56	BW	6	Total 6	O 6	0	0
56	BX	2	Total 2	O 2	0	0
56	BY	2	Total 2	O 2	0	0
56	BZ	2	Total 2	O 2	0	0
56	B0	4	Total 4	O 4	0	0
56	B1	5	Total 5	O 5	0	0
56	B3	4	Total 4	O 4	0	0
56	B5	5	Total 5	O 5	0	0
56	B6	2	Total 2	O 2	0	0
56	B7	5	Total 5	O 5	0	0
56	B8	11	Total 11	O 11	0	0
56	B9	1	Total 1	O 1	0	0
56	CA	400	Total 400	O 400	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	CD	2	Total O 2 2	0	0
56	CE	4	Total O 4 4	0	0
56	CF	1	Total O 1 1	0	0
56	CK	1	Total O 1 1	0	0
56	CL	2	Total O 2 2	0	0
56	CP	3	Total O 3 3	0	0
56	CQ	3	Total O 3 3	0	0
56	CR	1	Total O 1 1	0	0
56	CT	2	Total O 2 2	0	0
56	CU	1	Total O 1 1	0	0
56	DA	1496	Total O 1496 1496	0	0
56	DB	33	Total O 33 33	0	0
56	DD	17	Total O 17 17	0	0
56	DE	12	Total O 12 12	0	0
56	DF	10	Total O 10 10	0	0
56	DN	2	Total O 2 2	0	0
56	DO	7	Total O 7 7	0	0
56	DP	11	Total O 11 11	0	0
56	DQ	2	Total O 2 2	0	0
56	DR	5	Total O 5 5	0	0
56	DT	3	Total O 3 3	0	0

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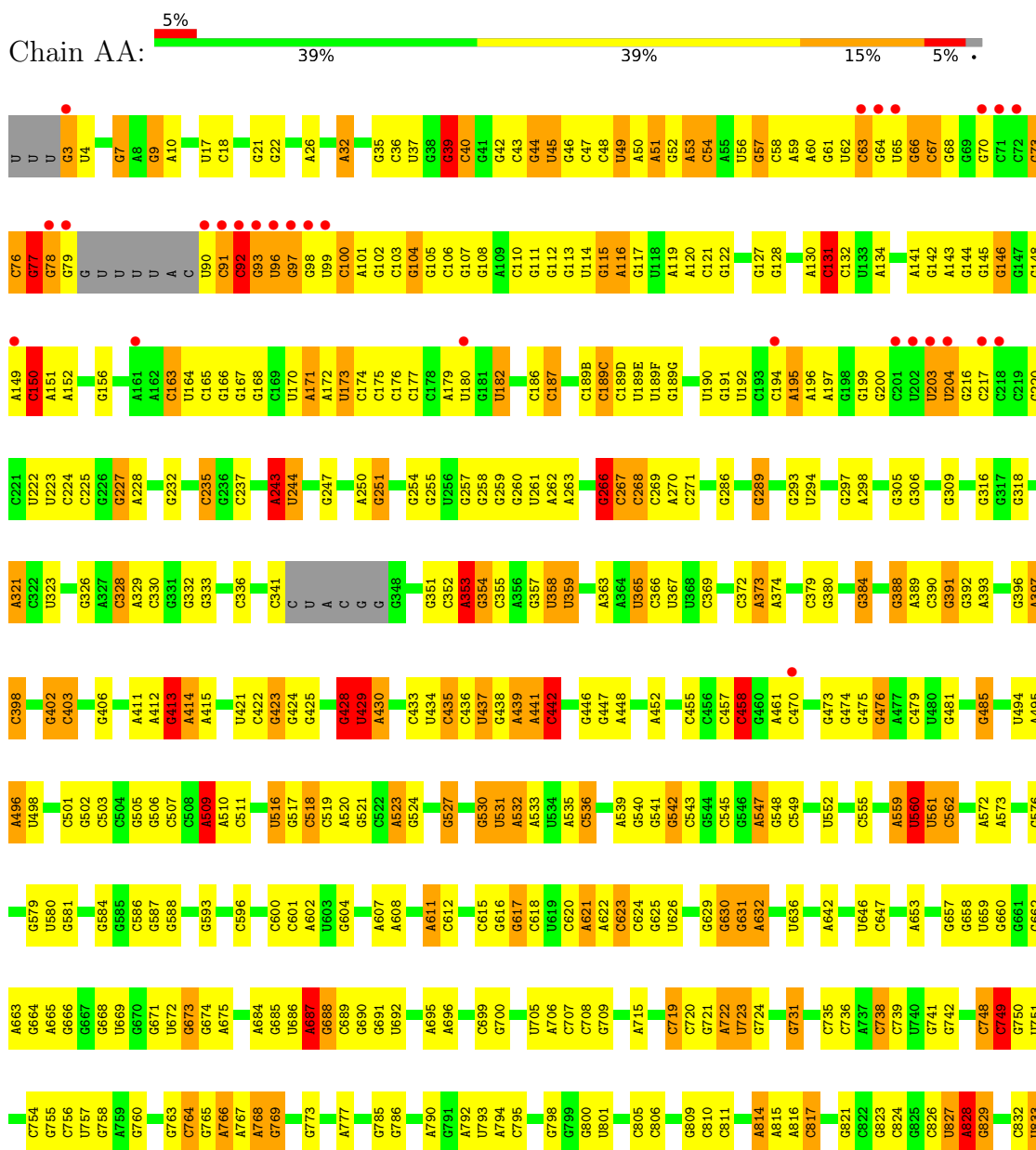
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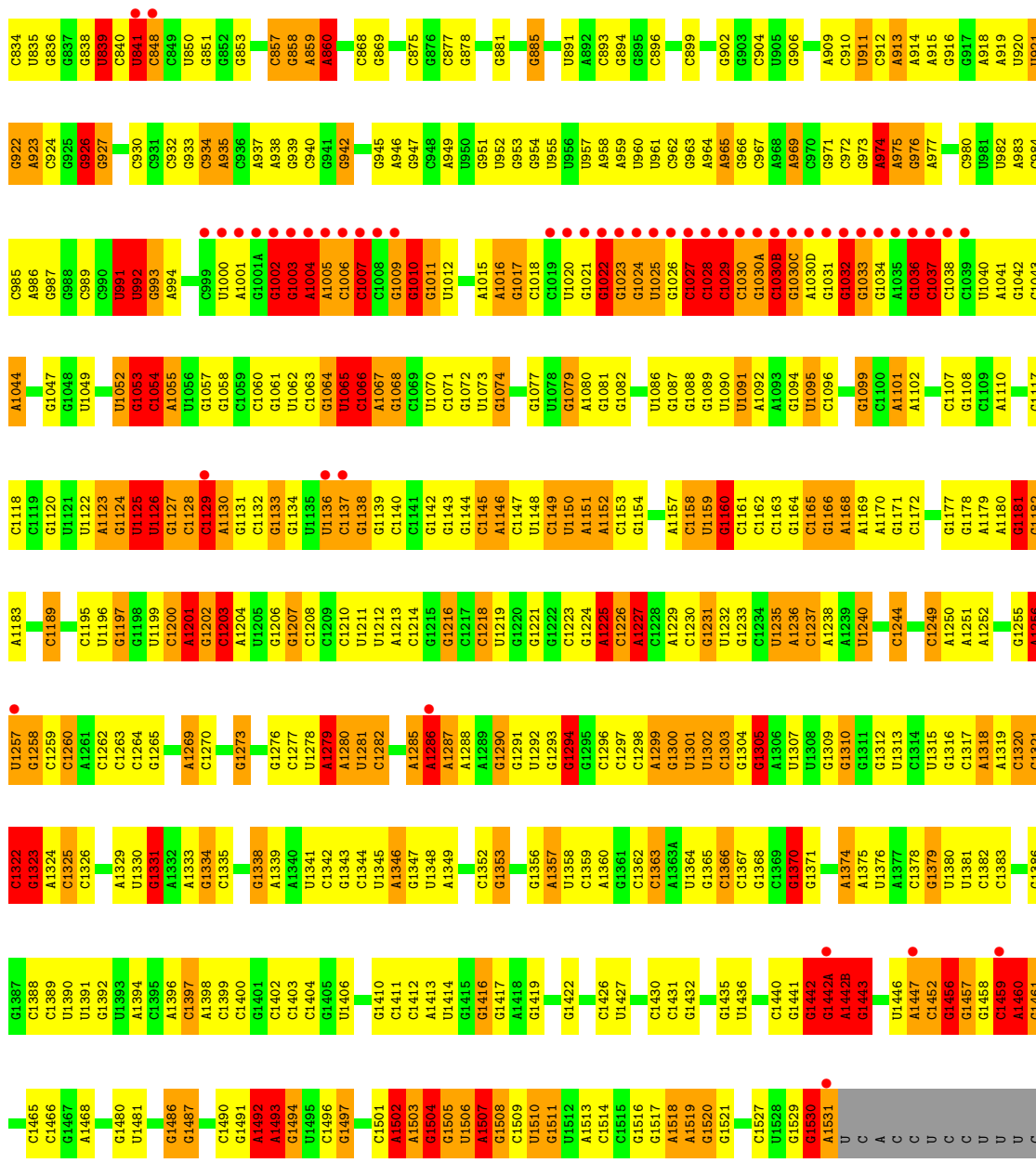
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56	DV	1	Total 1	O 1	0	0
56	DW	4	Total 4	O 4	0	0
56	DX	2	Total 2	O 2	0	0
56	DY	2	Total 2	O 2	0	0
56	D0	2	Total 2	O 2	0	0
56	D1	3	Total 3	O 3	0	0
56	D2	1	Total 1	O 1	0	0
56	D3	1	Total 1	O 1	0	0
56	D5	3	Total 3	O 3	0	0
56	D6	3	Total 3	O 3	0	0
56	D7	3	Total 3	O 3	0	0
56	D8	6	Total 6	O 6	0	0
56	D9	1	Total 1	O 1	0	0

### 3 Residue-property plots

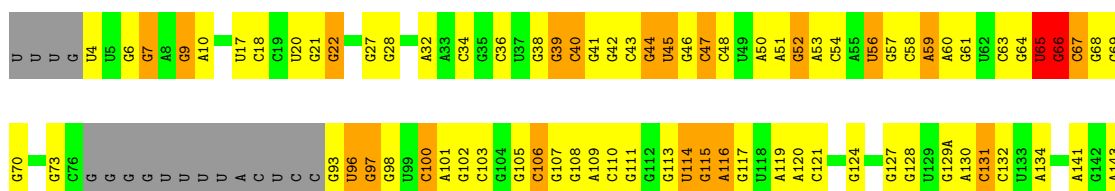
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

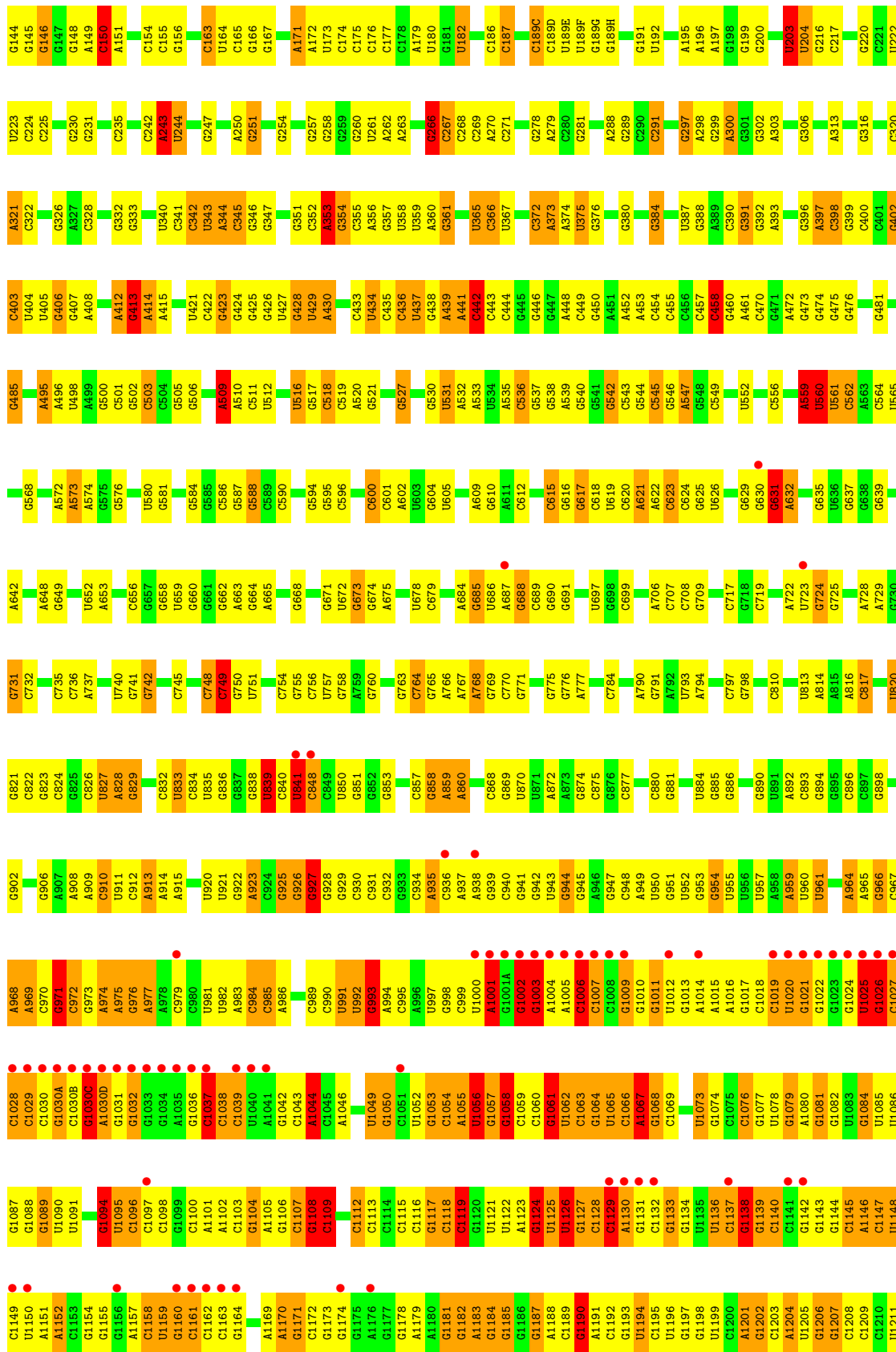
- Molecule 1: 16S Ribosomal RNA

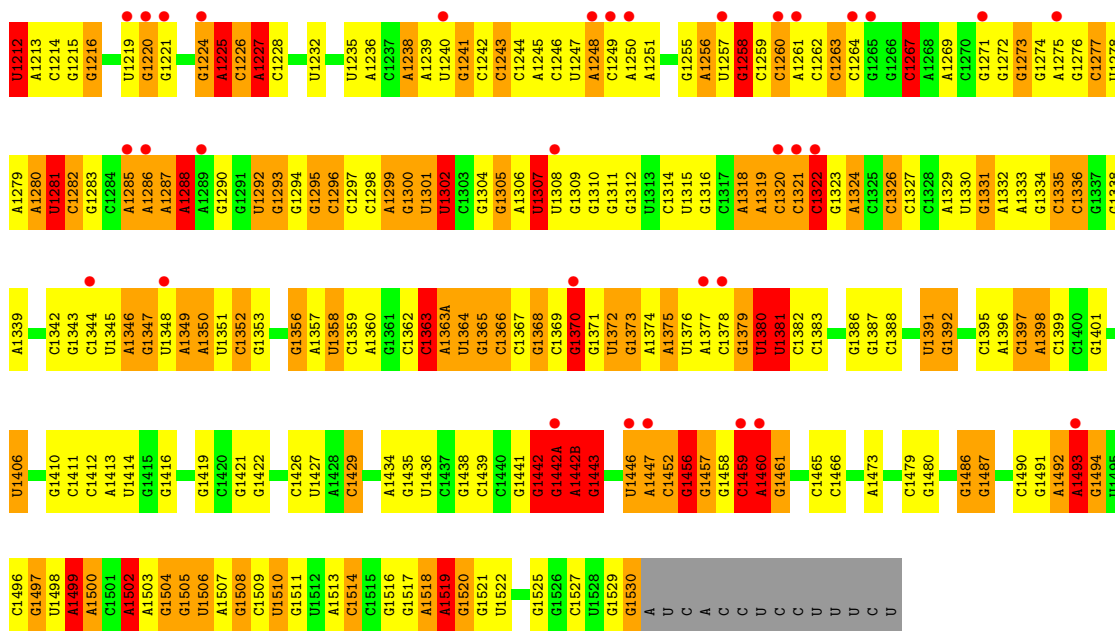




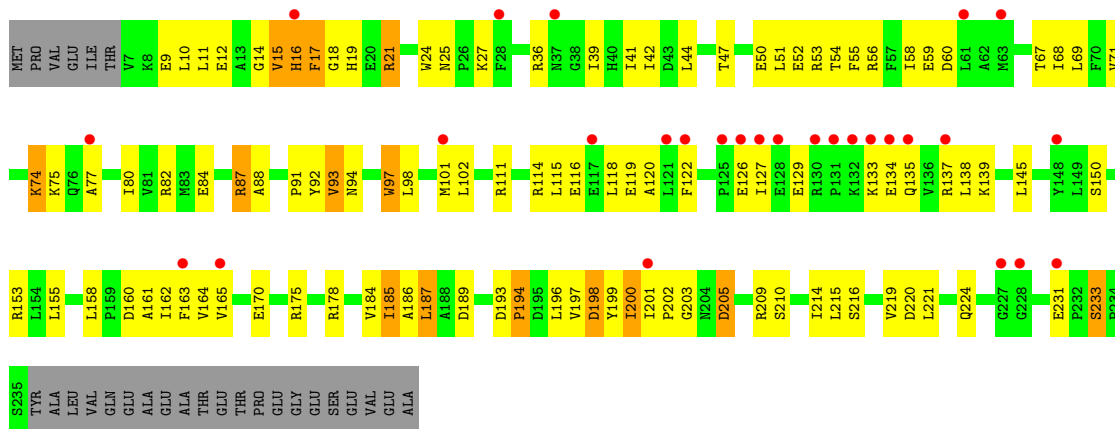
● Molecule 1: 16S Ribosomal RNA



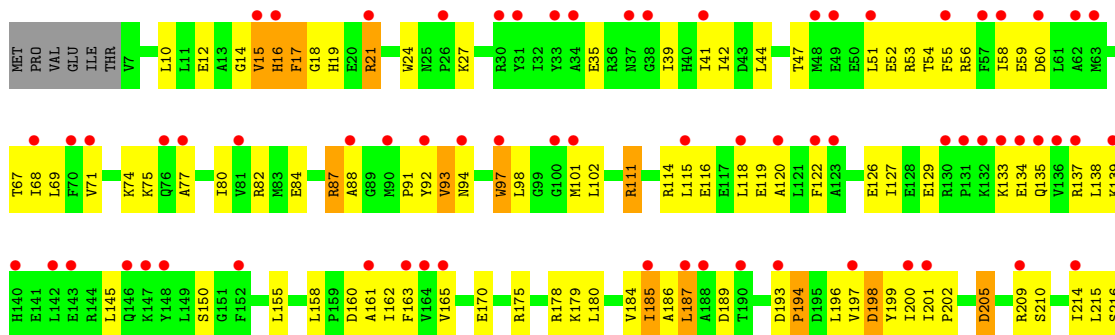


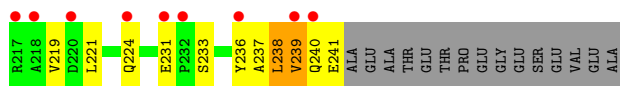


• Molecule 2: 30S Ribosomal Protein S2



• Molecule 2: 30S Ribosomal Protein S2

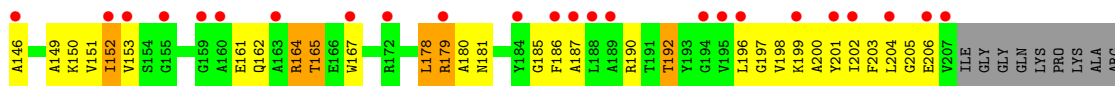
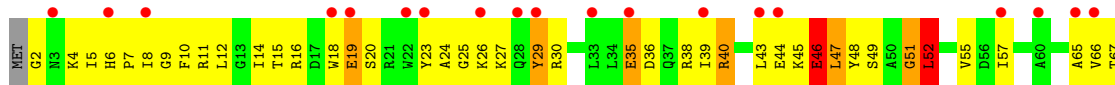




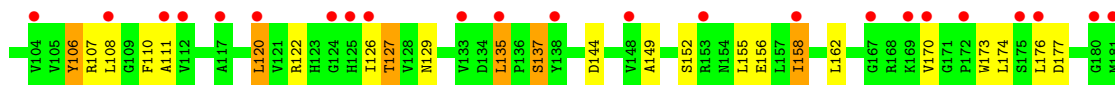
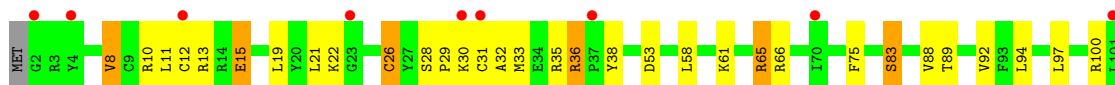
- Molecule 3: 30S Ribosomal Protein S3



- Molecule 3: 30S Ribosomal Protein S3

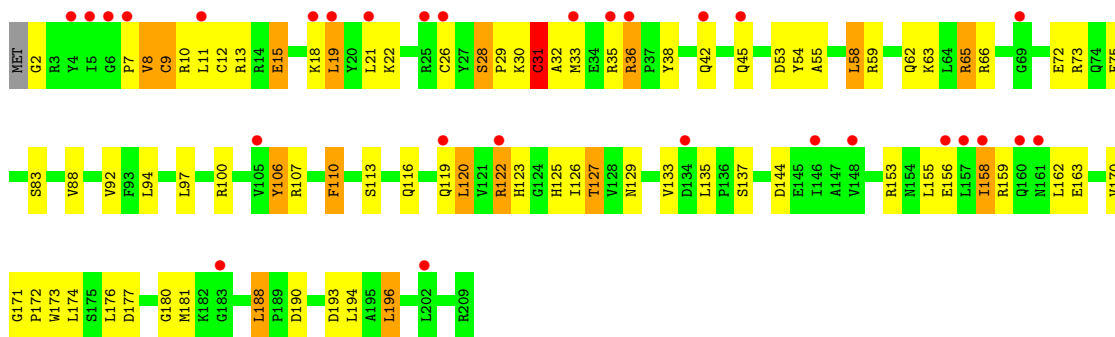


- Molecule 4: 30S Ribosomal Protein S4



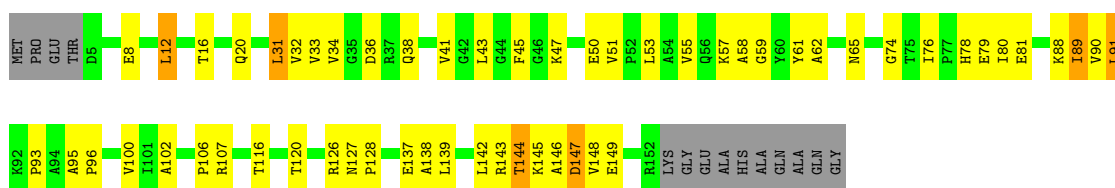
- Molecule 4: 30S Ribosomal Protein S4





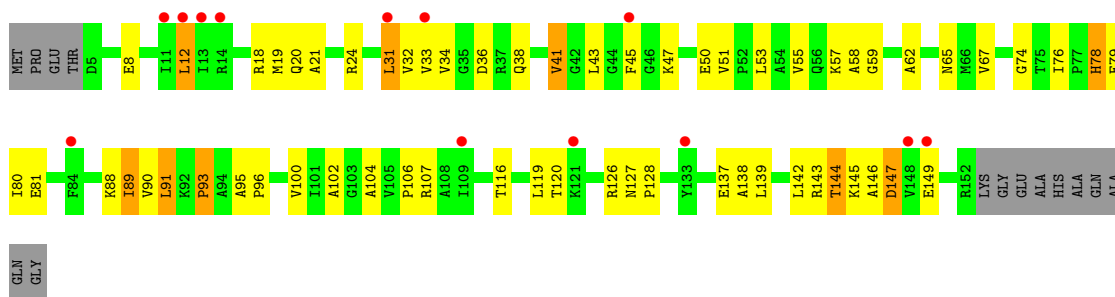
- Molecule 5: 30S Ribosomal Protein S5

Chain AE: 56% 31% 9%



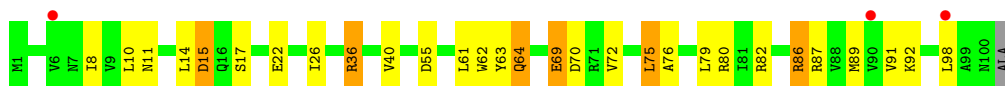
- Molecule 5: 30S Ribosomal Protein S5

Chain CE: 8% 54% 32% 6% 9%



- Molecule 6: 30S Ribosomal Protein S6

Chain AF: 3% 70% 23% 6%




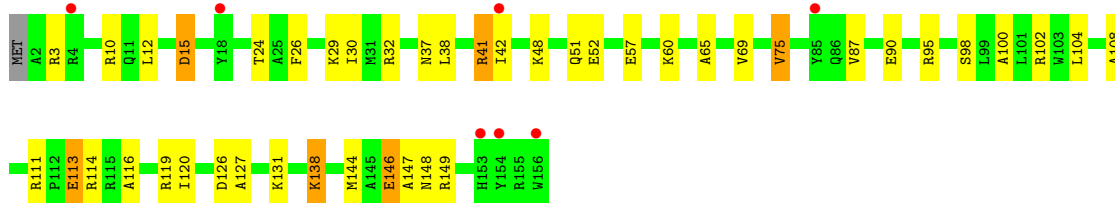
- Molecule 6: 30S Ribosomal Protein S6

Chain CF: 3% 70% 21% 7%



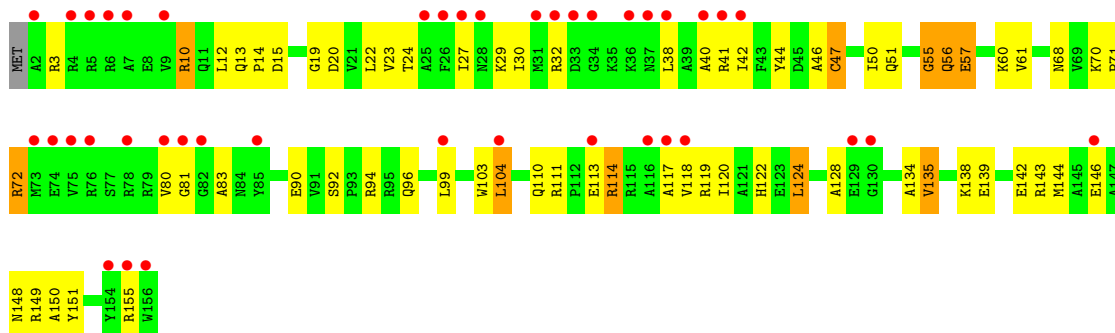
- Molecule 7: 30S Ribosomal Protein S7

Chain AG: 



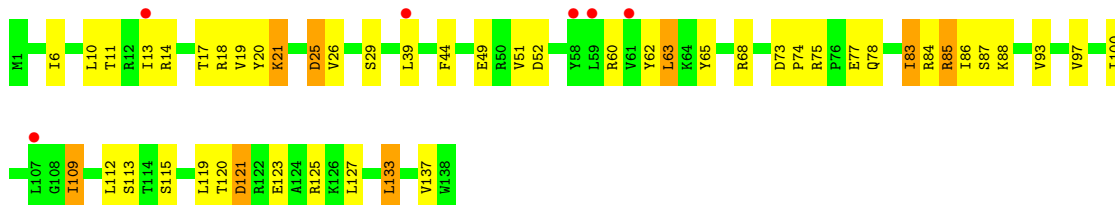
- Molecule 7: 30S Ribosomal Protein S7

Chain CG: 



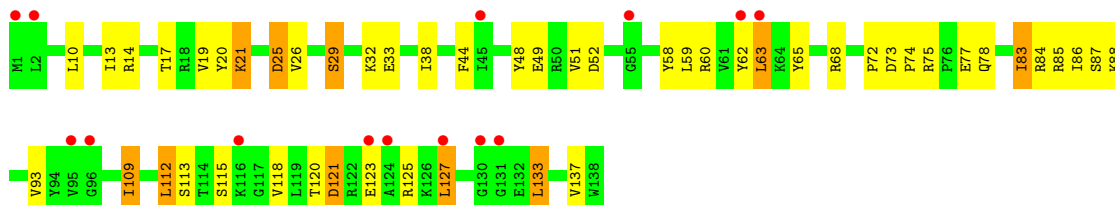
- Molecule 8: 30S Ribosomal Protein S8

Chain AH: 



- Molecule 8: 30S Ribosomal Protein S8

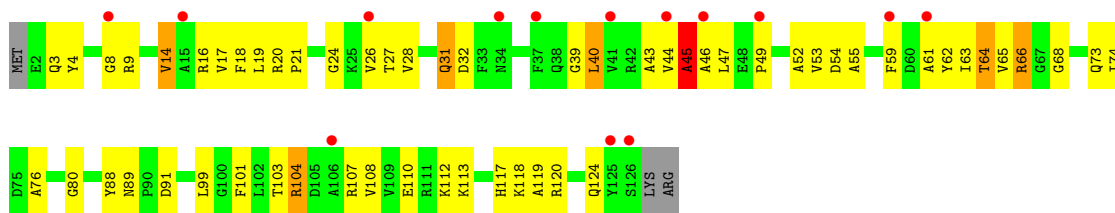
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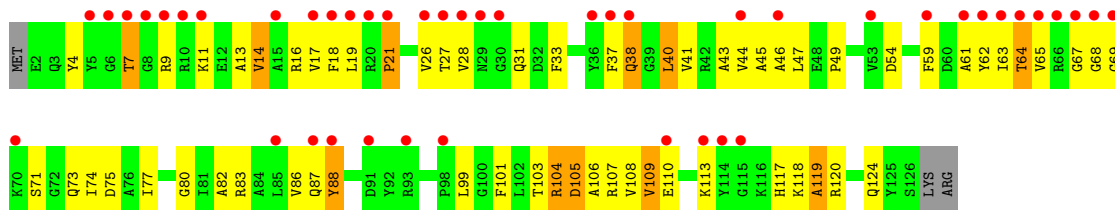
- Molecule 9: 30S Ribosomal Protein S9

Chain AI: 

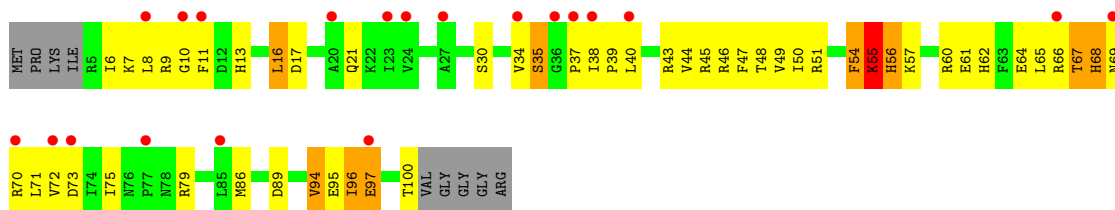
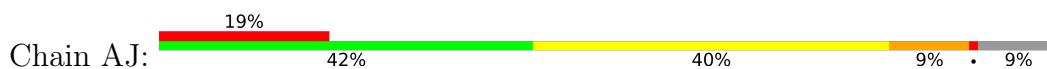




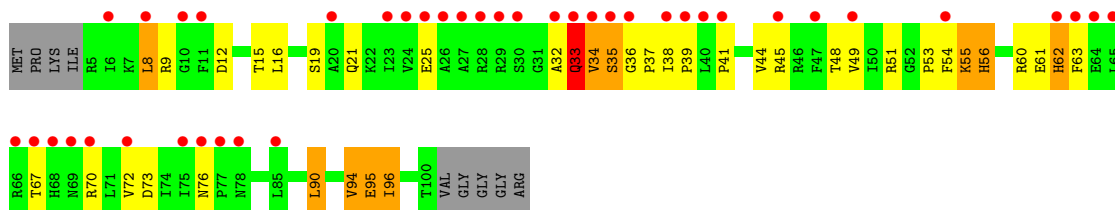
• Molecule 9: 30S Ribosomal Protein S9



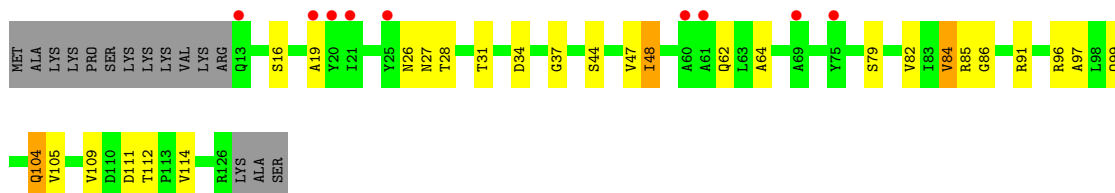
• Molecule 10: 30S Ribosomal Protein S10



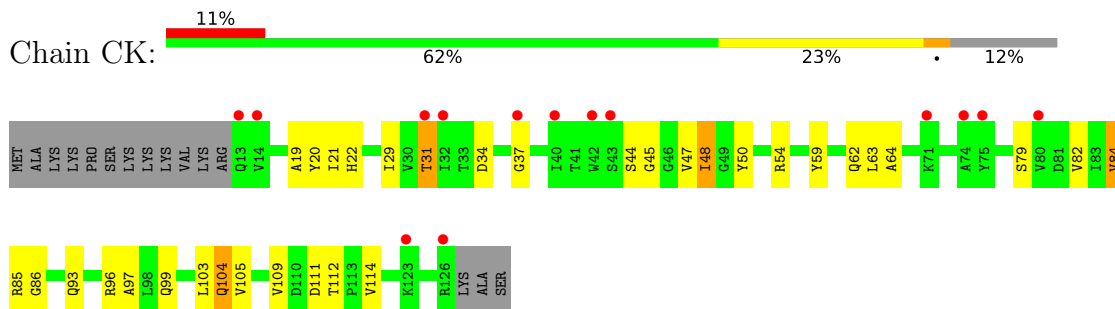
• Molecule 10: 30S Ribosomal Protein S10



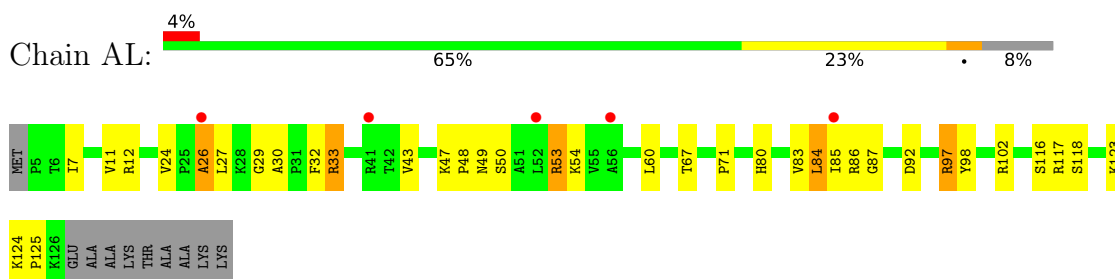
• Molecule 11: 30S Ribosomal Protein S11



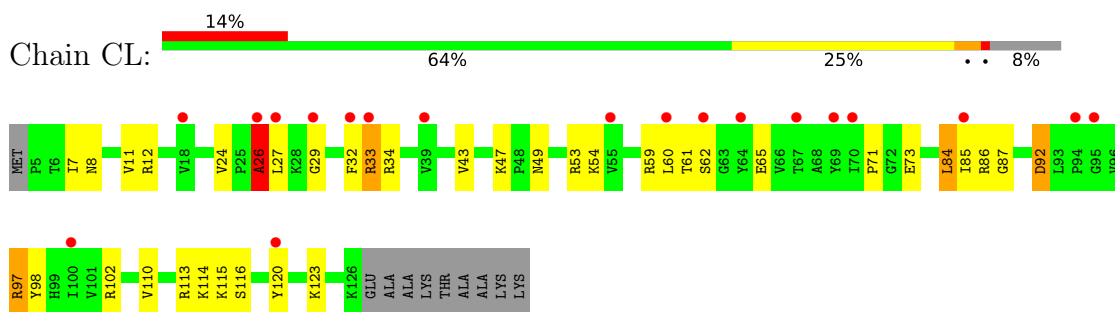
- Molecule 11: 30S Ribosomal Protein S11



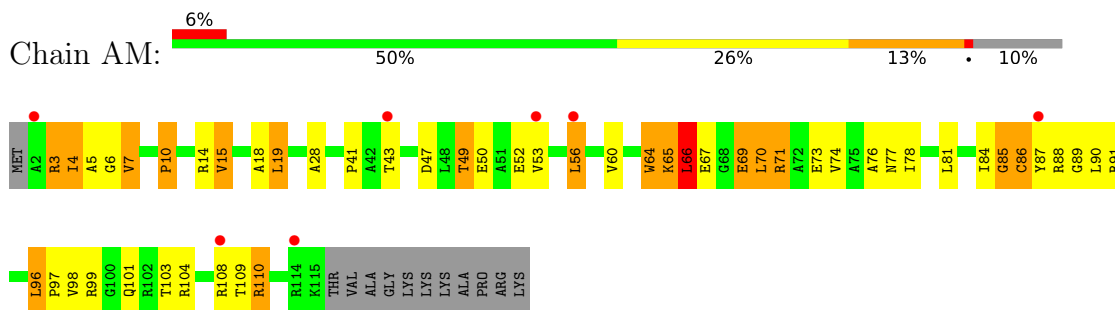
- Molecule 12: 30S Ribosomal Protein S12



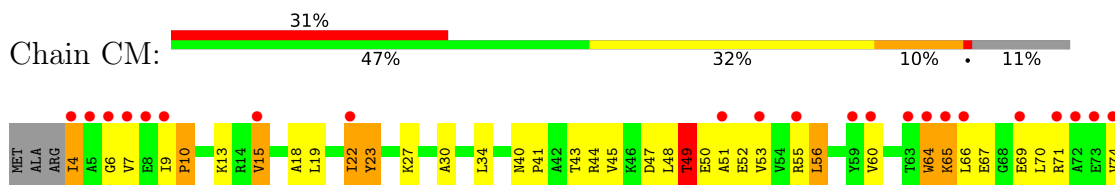
- Molecule 12: 30S Ribosomal Protein S12

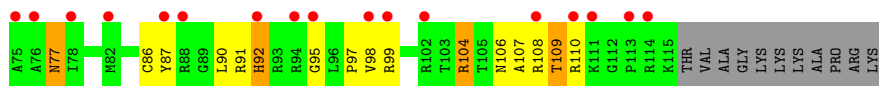


- Molecule 13: 30S Ribosomal Protein S13



- Molecule 13: 30S Ribosomal Protein S13

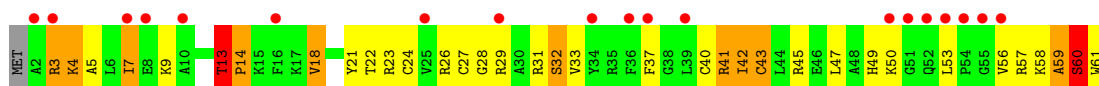




• Molecule 14: 30S Ribosomal Protein S14



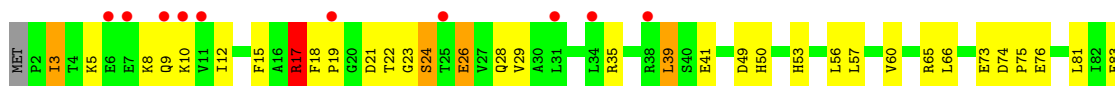
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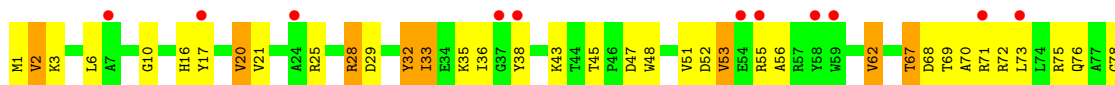
• Molecule 15: 30S Ribosomal Protein S15



• Molecule 15: 30S Ribosomal Protein S15

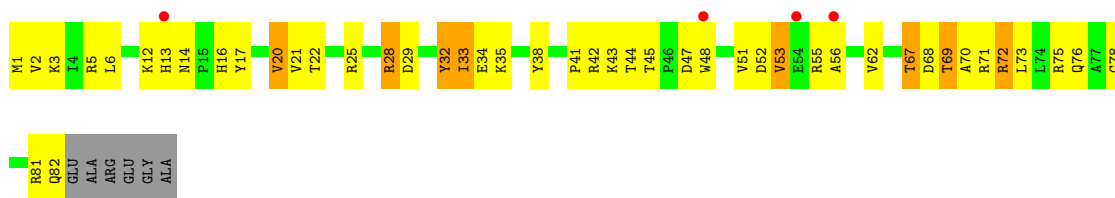


• Molecule 16: 30S Ribosomal Protein S16

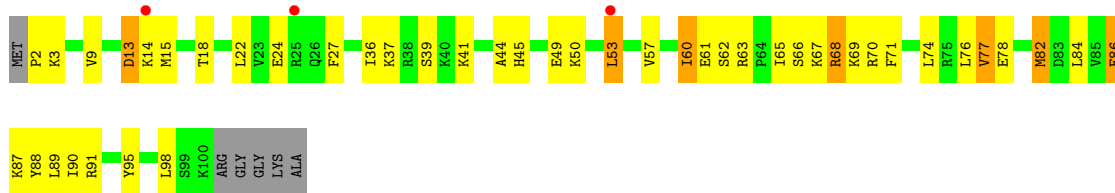


• Molecule 16: 30S Ribosomal Protein S16

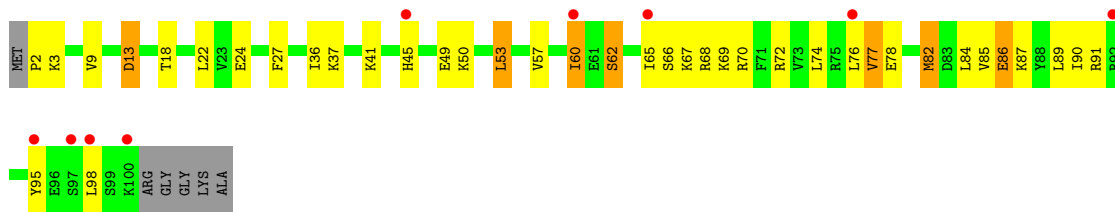




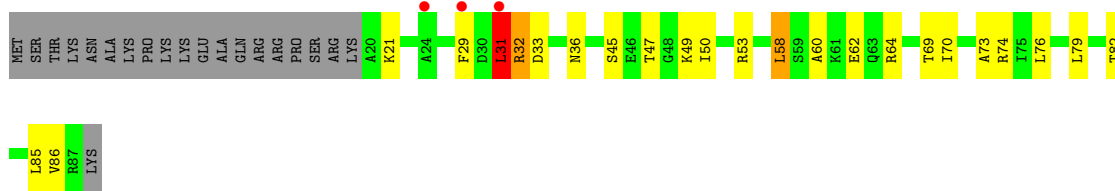
• Molecule 17: 30S Ribosomal Protein S17



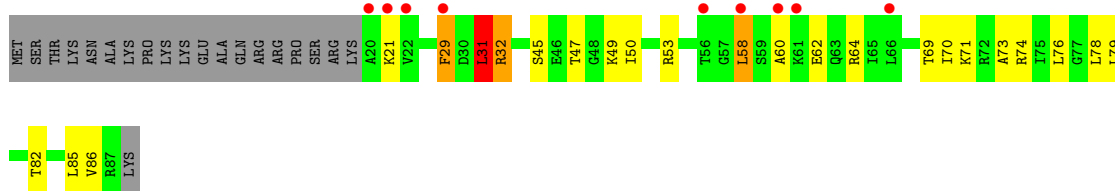
• Molecule 17: 30S Ribosomal Protein S17



• Molecule 18: 30S Ribosomal Protein S18



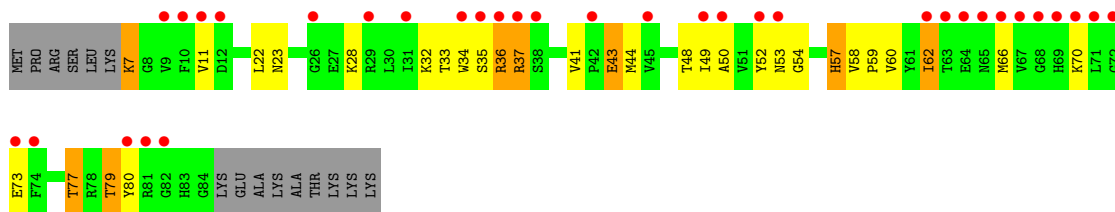
• Molecule 18: 30S Ribosomal Protein S18



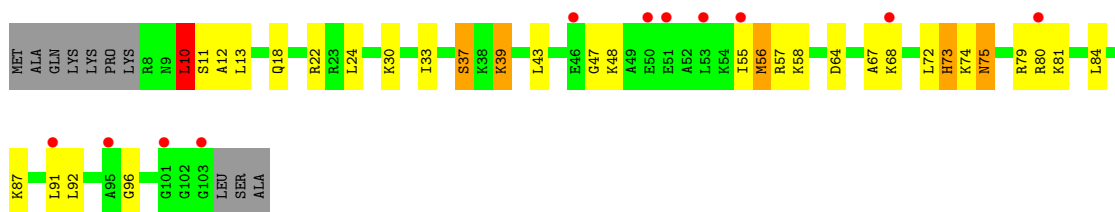
• Molecule 19: 30S Ribosomal Protein S19



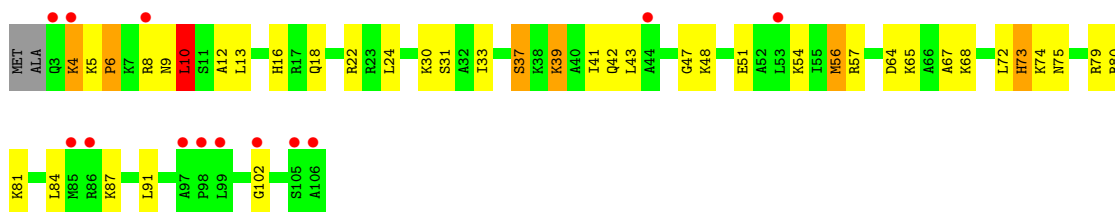
- Molecule 19: 30S Ribosomal Protein S19



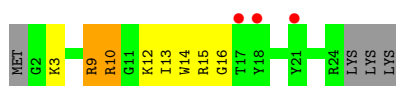
- Molecule 20: 30S Ribosomal Protein S20



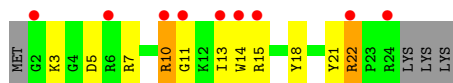
- Molecule 20: 30S Ribosomal Protein S20



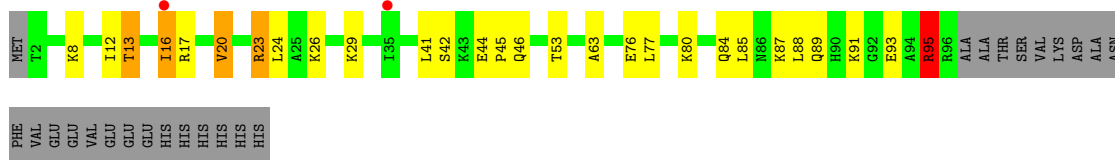
- Molecule 21: 30S Ribosomal Protein THX



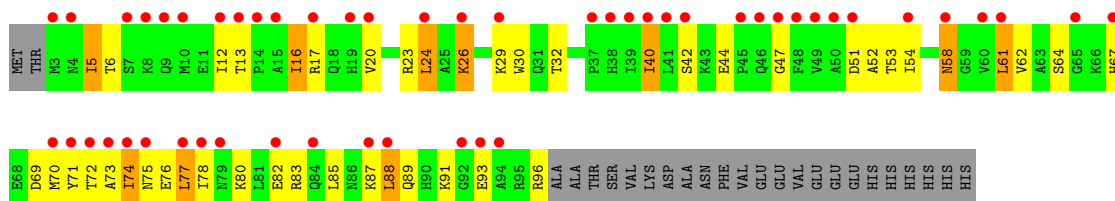
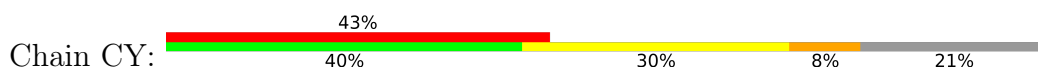
- Molecule 21: 30S Ribosomal Protein THX



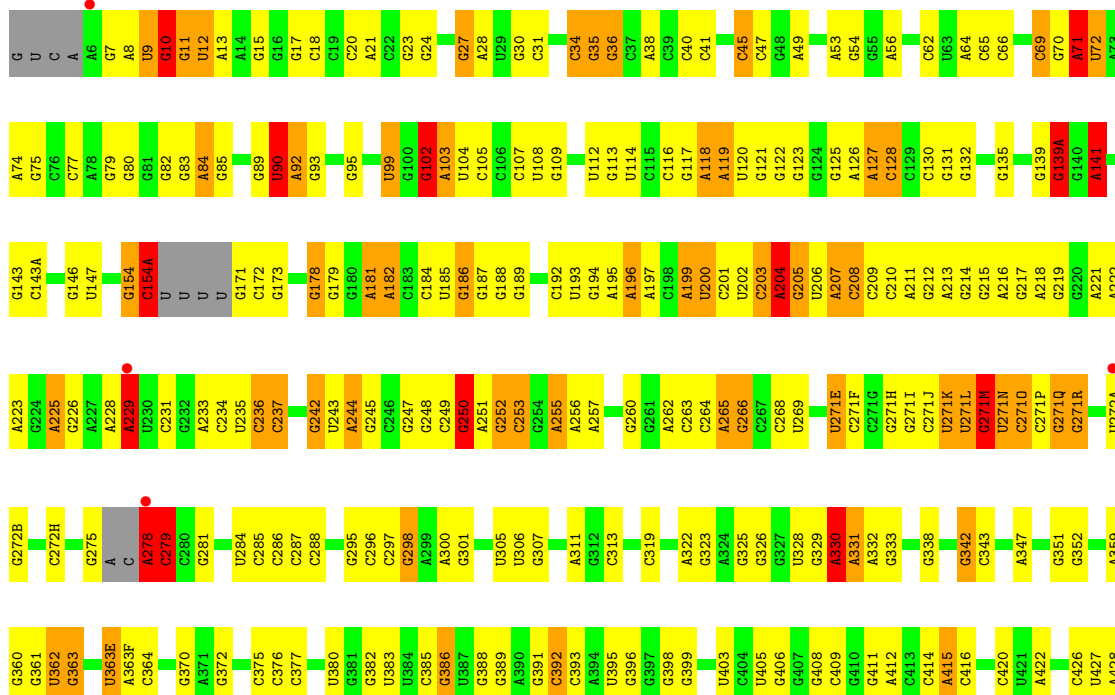
- Molecule 22: Ribosome-associated inhibitor A



- Molecule 22: Ribosome-associated inhibitor A



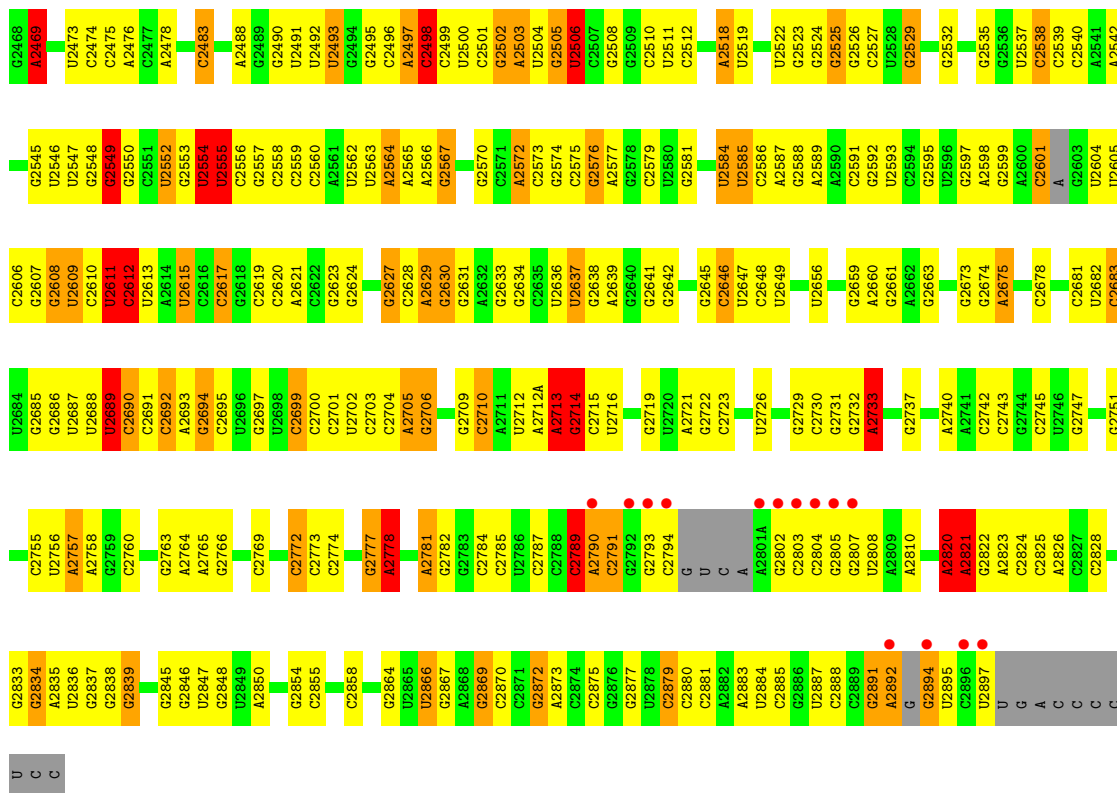
- Molecule 23: 23S Ribosomal RNA



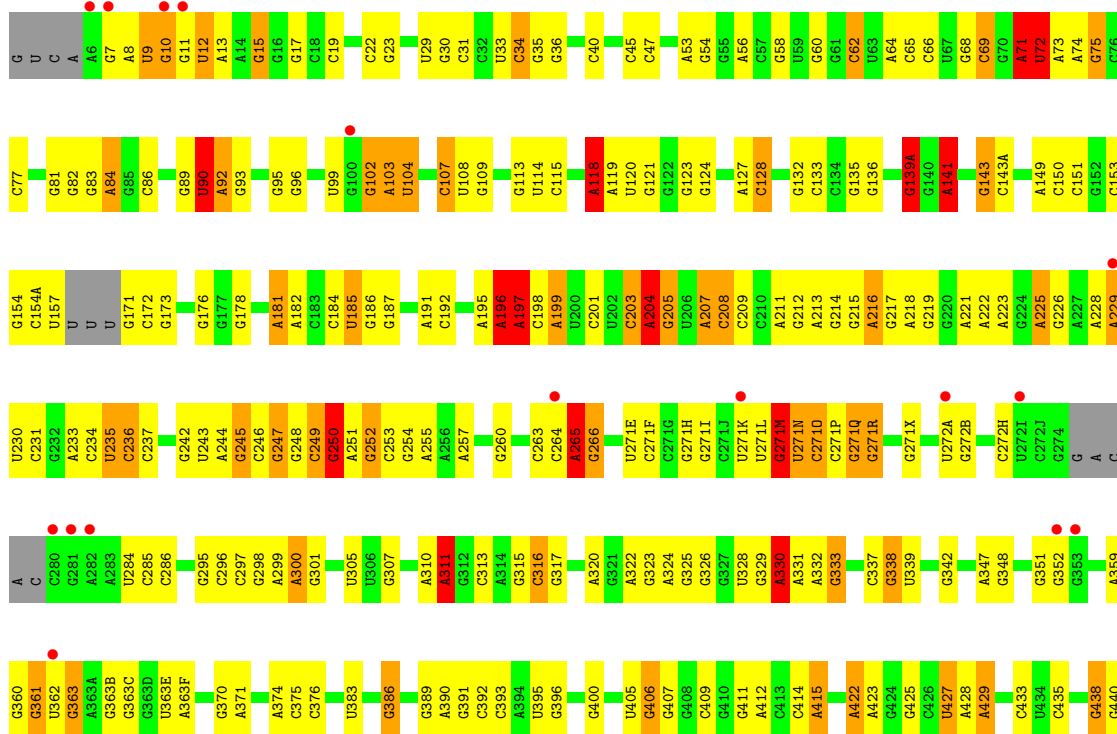
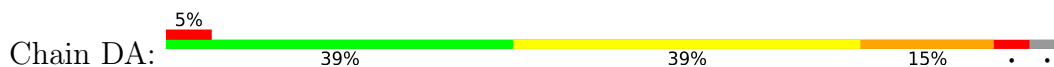
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A1331	A1262	G1194	C1123	G	C995	G922	C534	C773	G652C	G582	A507	U431
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	C1208	U1133	U1133	C	G1008	U937	A849	A782	C	C517	C517	U448
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	A1210	G1137	G1137	G	C1013	U941	C856	A785	C652P	C598	U524	G450
	U1211	G1139	G1139	C	G1017	G942	U858	C786	G652Q	G599	U525	C451
	G1212	G1140	G1140	C	G1019	U943	G859	U787	C652R	G600	A526	A454
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	A1220	A1142A	A1142A	C	A1020	G946	G862	C790	C652V	A603	A529	C456
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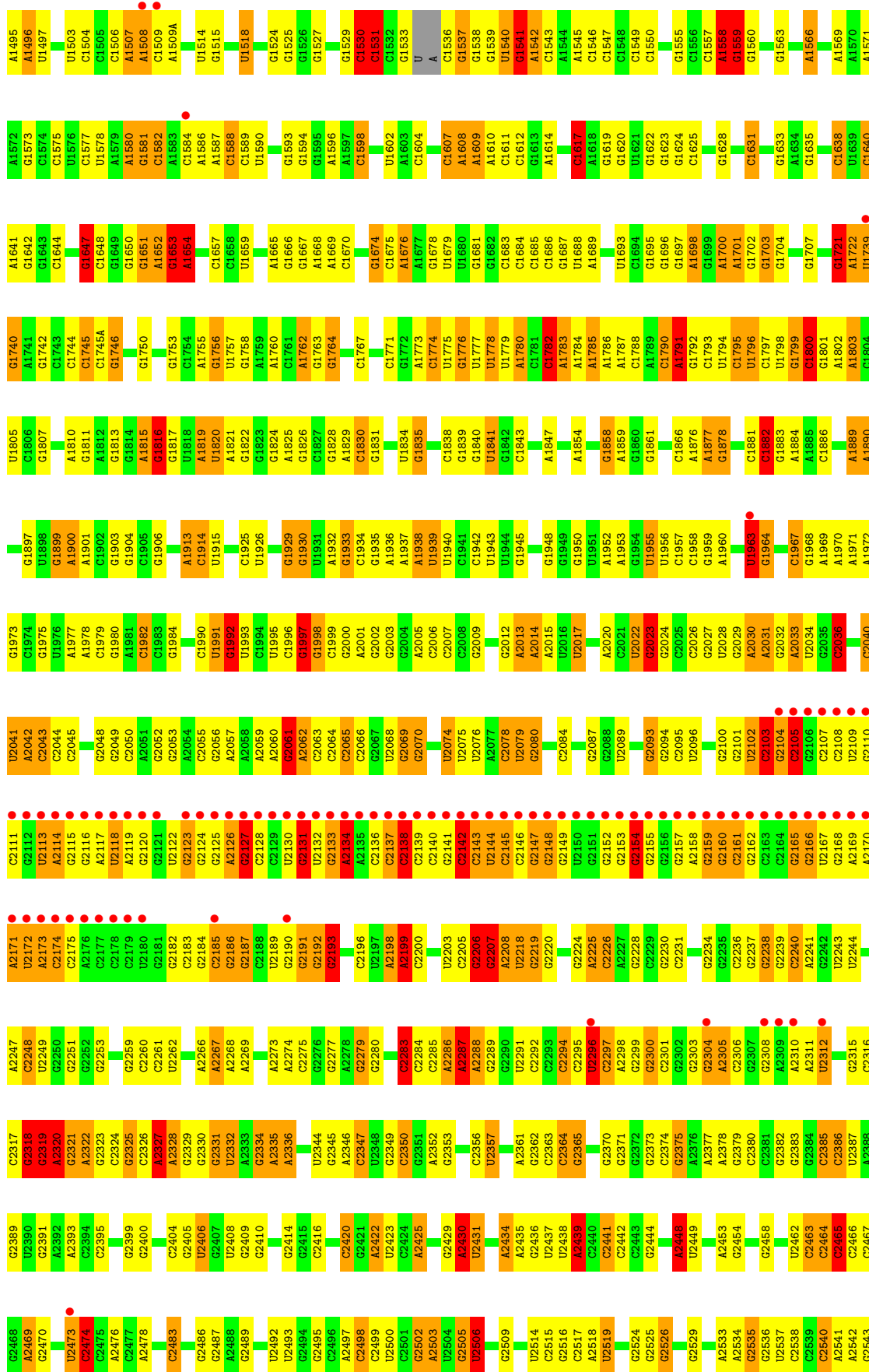


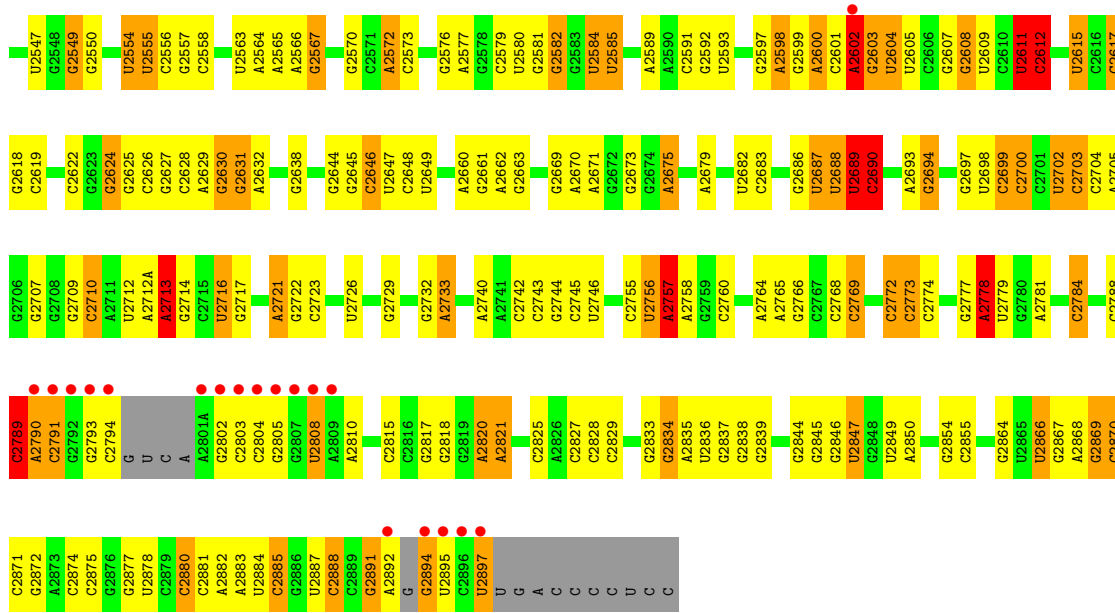


• Molecule 23: 23S Ribosomal RNA

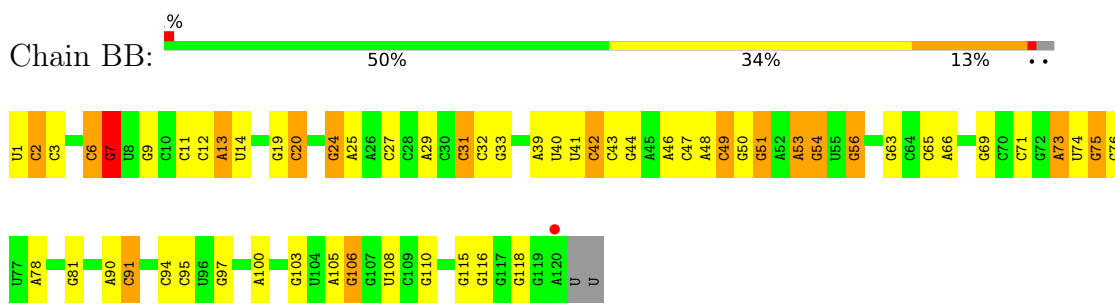


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C1417	U1133	U1188	U1113	C	U839	C915	U839	U773	G700	C652D	G583	C509	G446
G1418	A1269	A1268	A1189	A	A990	G916	C940	A774	G701	G652E	C584	G512	A447
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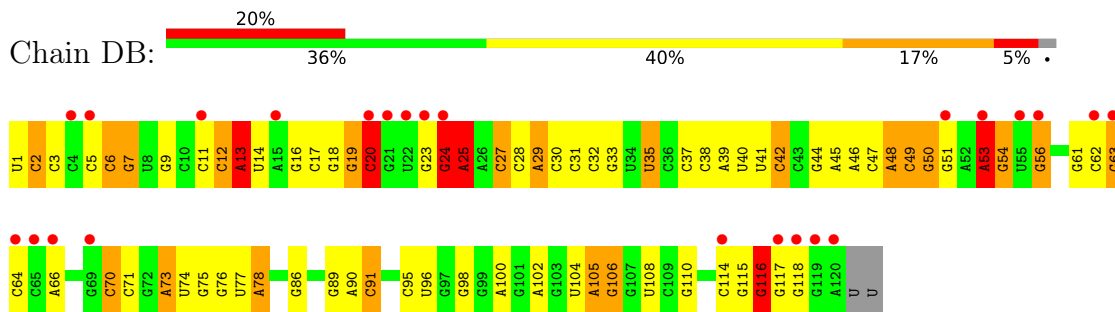




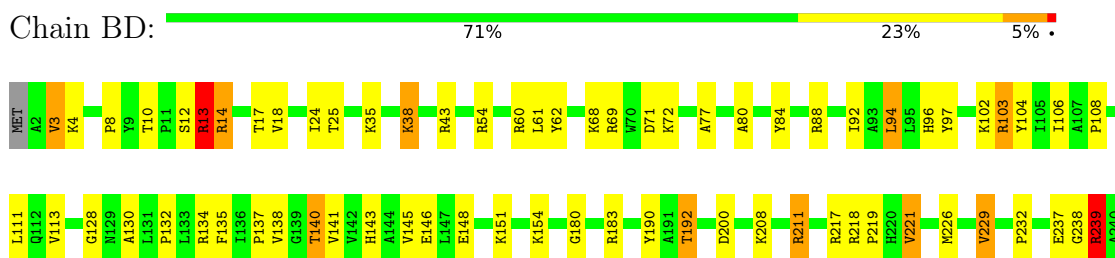
• Molecule 24: 5S Ribosomal RNA

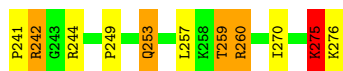


• Molecule 24: 5S Ribosomal RNA



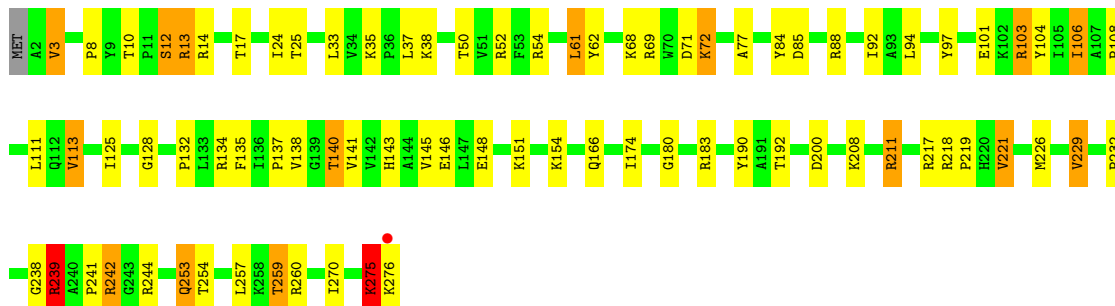
• Molecule 25: 50S Ribosomal Protein L2





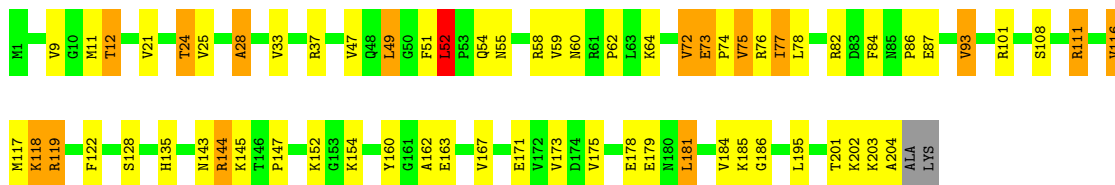
- Molecule 25: 50S Ribosomal Protein L2

Chain DD: 71% 23% 5%



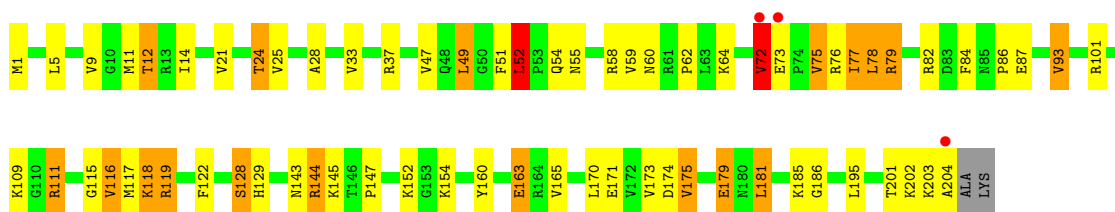
- Molecule 26: 50S Ribosomal Protein L3

Chain BE: 67% 24% 7%



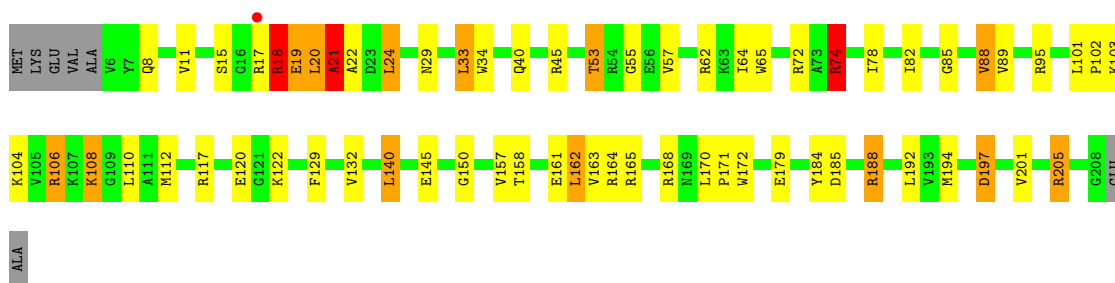
- Molecule 26: 50S Ribosomal Protein L3

Chain DE: 66% 24% 9%

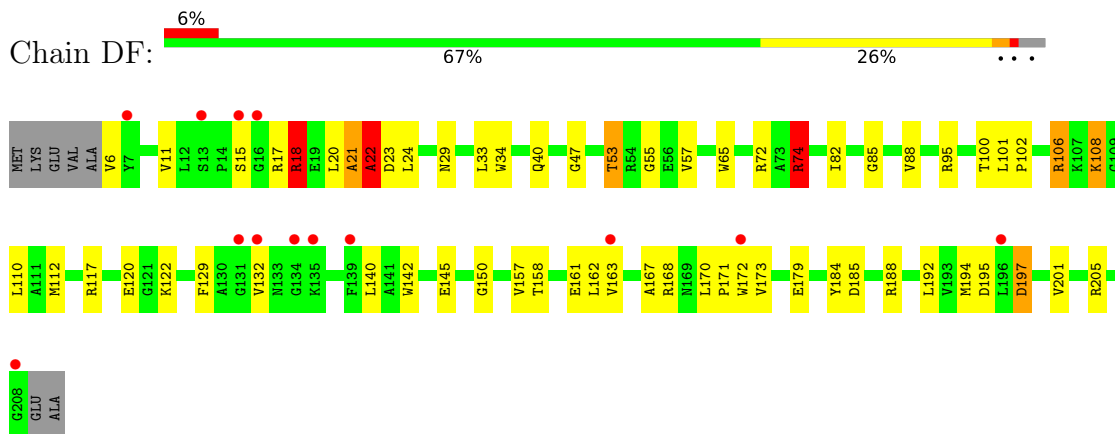


- Molecule 27: 50S Ribosomal Protein L4

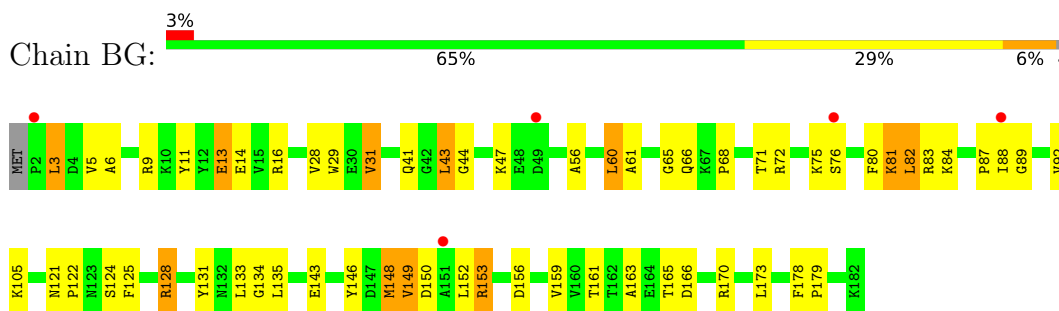
Chain BF: 66% 23% 6%



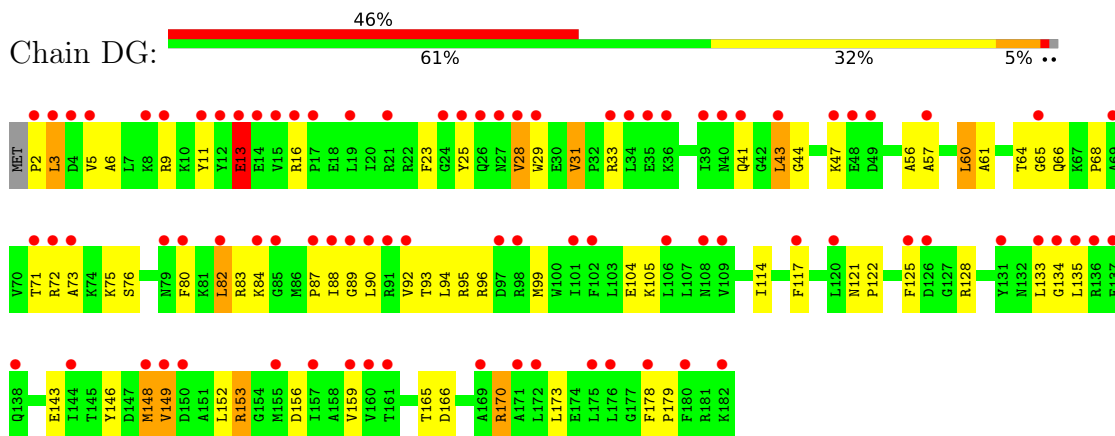
- Molecule 27: 50S Ribosomal Protein L4



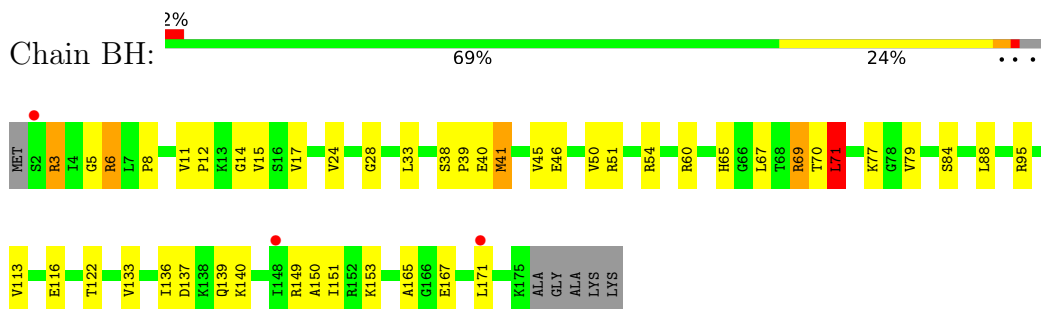
- Molecule 28: 50S Ribosomal Protein L5



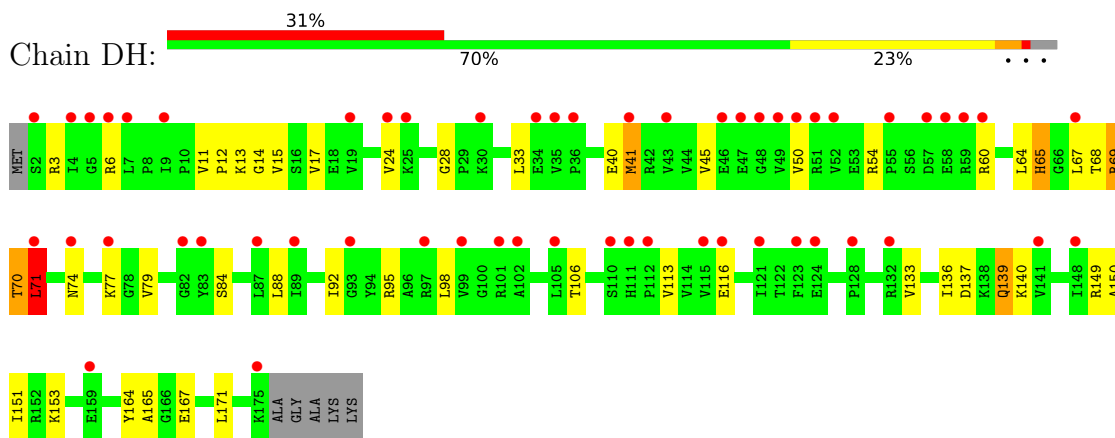
- Molecule 28: 50S Ribosomal Protein L5



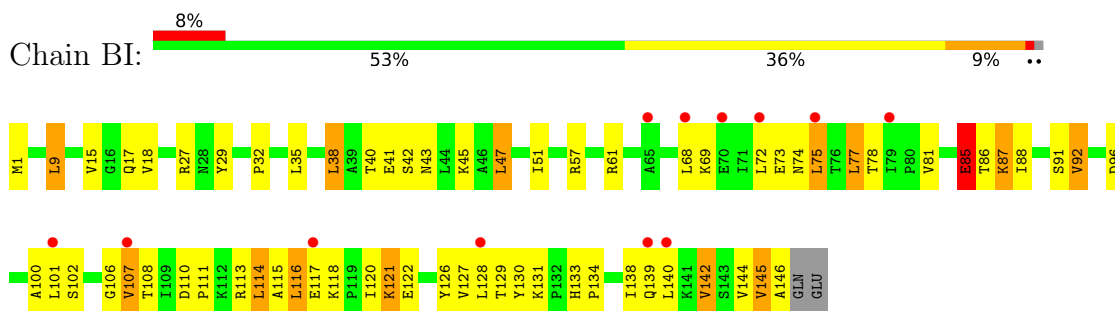
- Molecule 29: 50S Ribosomal Protein L6



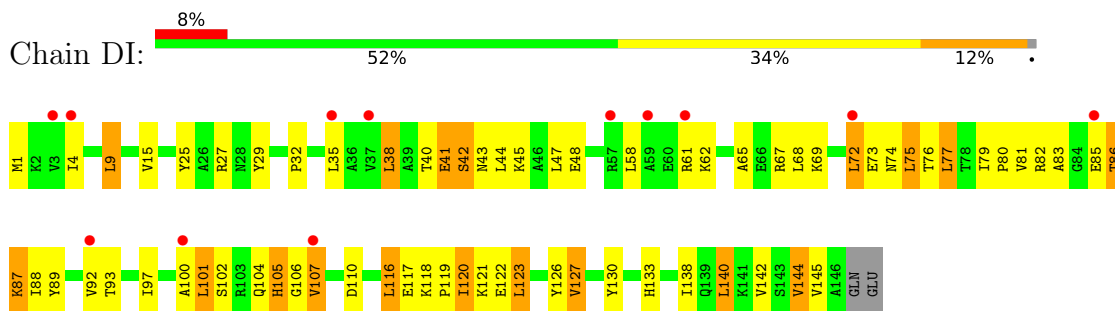
- Molecule 29: 50S Ribosomal Protein L6



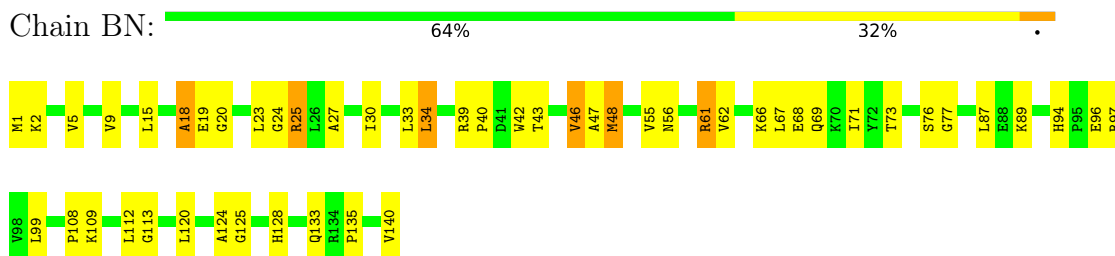
- Molecule 30: 50S Ribosomal Protein L9



- Molecule 30: 50S Ribosomal Protein L9

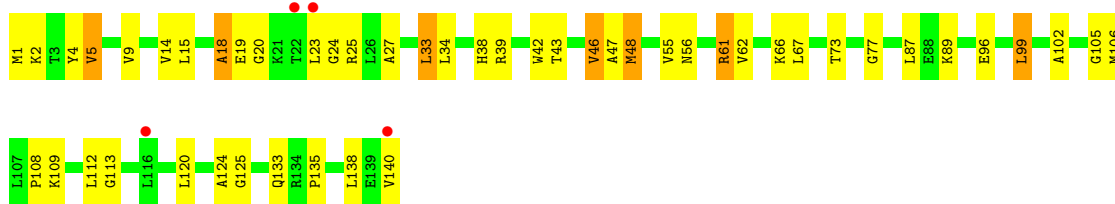


- Molecule 31: 50S Ribosomal Protein L13

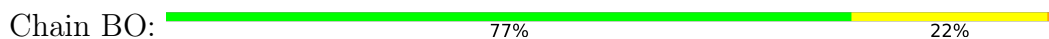


- Molecule 31: 50S Ribosomal Protein L13

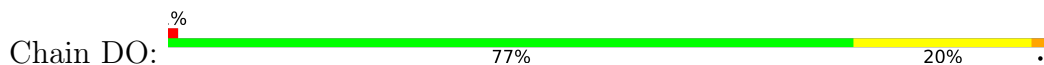




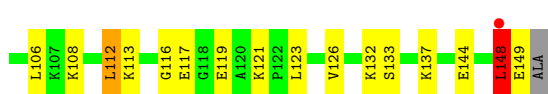
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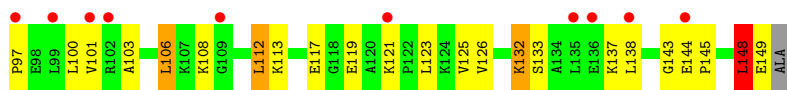
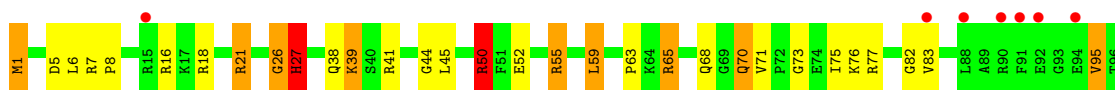
• Molecule 32: 50S Ribosomal Protein L14



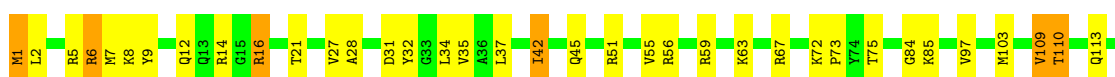
• Molecule 33: 50S Ribosomal Protein L15



• Molecule 33: 50S Ribosomal Protein L15



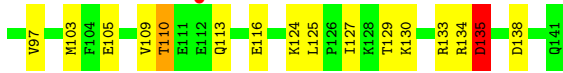
• Molecule 34: 50S Ribosomal Protein L16



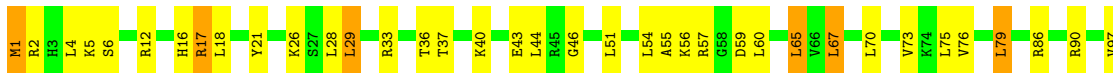




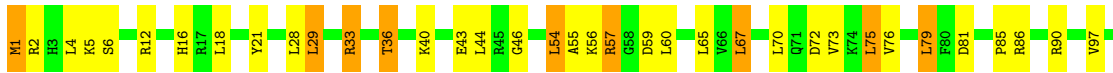
- Molecule 34: 50S Ribosomal Protein L16



- Molecule 35: 50S Ribosomal Protein L17



- Molecule 35: 50S Ribosomal Protein L17

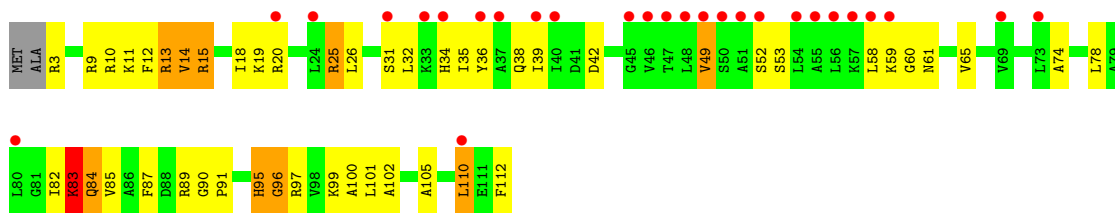


- Molecule 36: 50S Ribosomal Protein L18

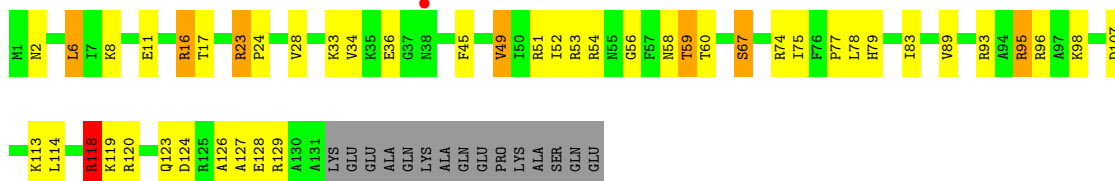


- Molecule 36: 50S Ribosomal Protein L18

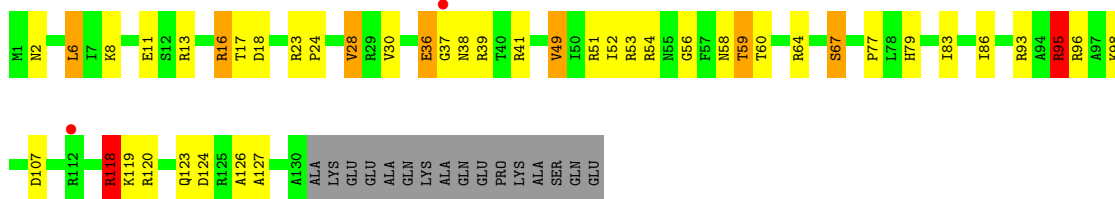




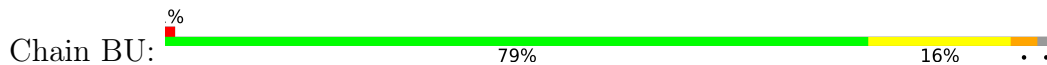
- Molecule 37: 50S Ribosomal Protein L19



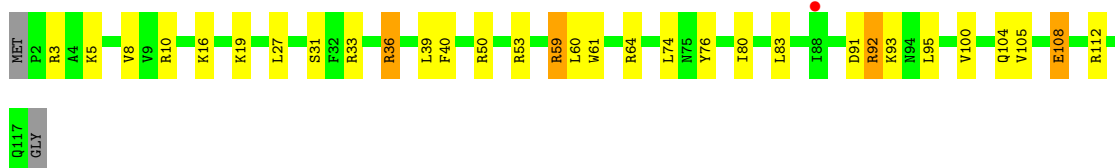
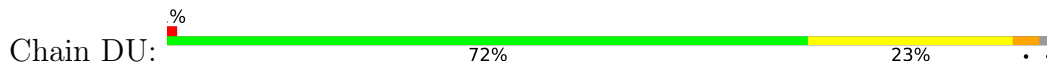
- Molecule 37: 50S Ribosomal Protein L19



- Molecule 38: 50S Ribosomal Protein L20



- Molecule 38: 50S Ribosomal Protein L20

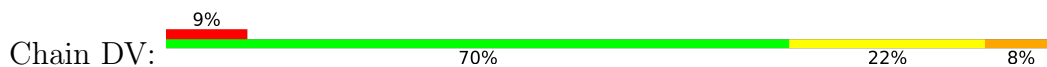


- Molecule 39: 50S Ribosomal Protein L21





- Molecule 39: 50S Ribosomal Protein L21



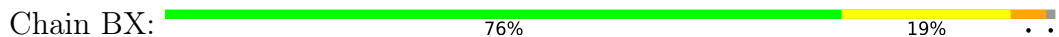
- Molecule 40: 50S Ribosomal Protein L22



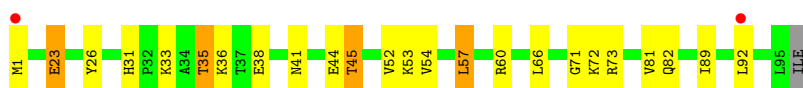
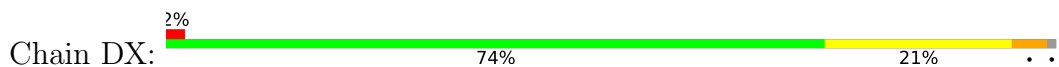
- Molecule 40: 50S Ribosomal Protein L22



- Molecule 41: 50S Ribosomal Protein L23

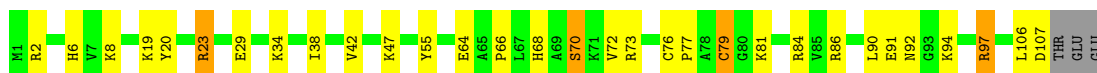


- Molecule 41: 50S Ribosomal Protein L23



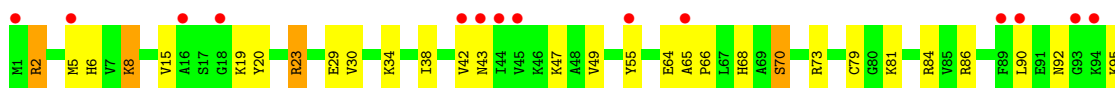
- Molecule 42: 50S Ribosomal Protein L24

Chain BY: 69% 25% . .



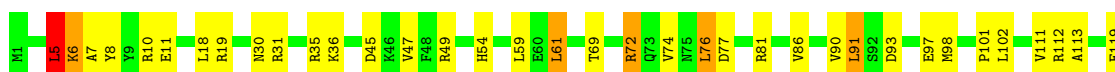
• Molecule 42: 50S Ribosomal Protein L24

Chain DY: 13% 65% 27% 5% .



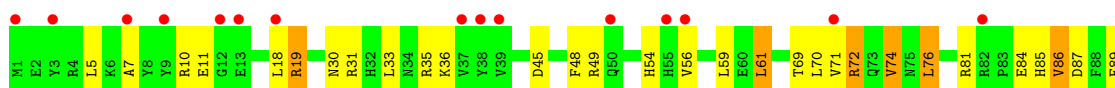
• Molecule 43: 50S Ribosomal Protein L25

Chain BZ: 64% 25% 7% . .



• Molecule 43: 50S Ribosomal Protein L25

Chain DZ: 18% 60% 31% 7% .



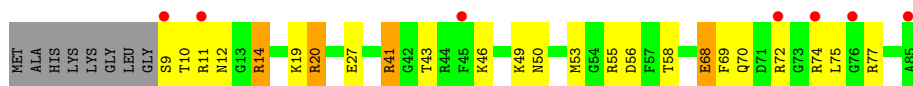
• Molecule 44: 50S Ribosomal Protein L27

Chain B0: 67% 20% 11% .



• Molecule 44: 50S Ribosomal Protein L27

Chain D0: 8% 62% 24% 5% 9%



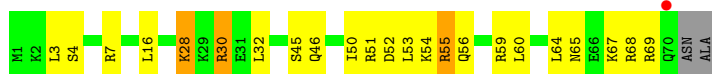
• Molecule 45: 50S Ribosomal Protein L28



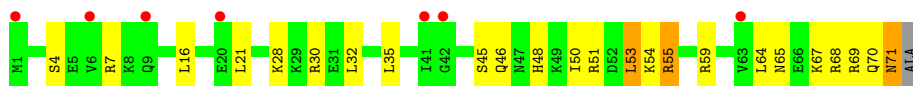
• Molecule 45: 50S Ribosomal Protein L28



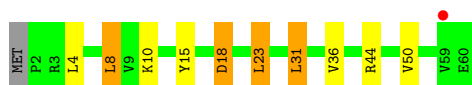
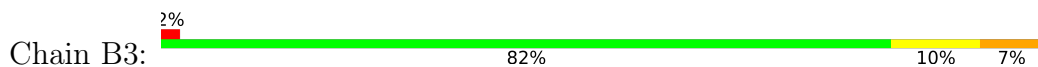
• Molecule 46: 50S Ribosomal Protein L29



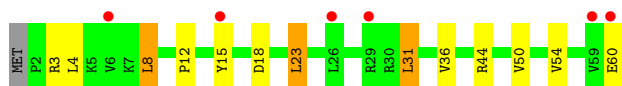
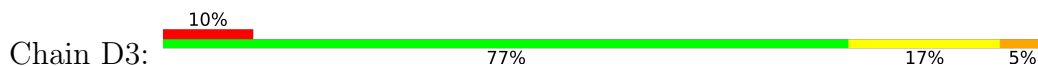
• Molecule 46: 50S Ribosomal Protein L29



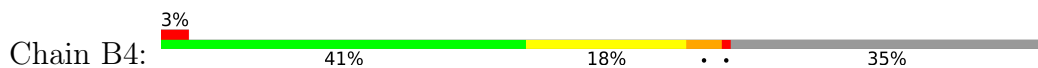
• Molecule 47: 50S Ribosomal Protein L30



• Molecule 47: 50S Ribosomal Protein L30

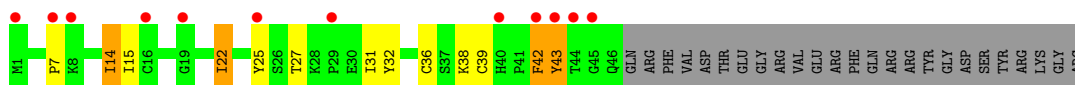


• Molecule 48: 50S Ribosomal Protein L31

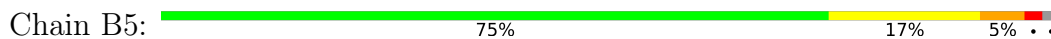




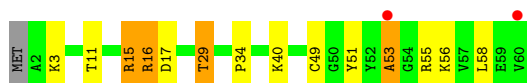
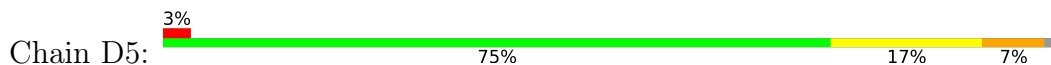
• Molecule 48: 50S Ribosomal Protein L31



• Molecule 49: 50S Ribosomal Protein L32



• Molecule 49: 50S Ribosomal Protein L32



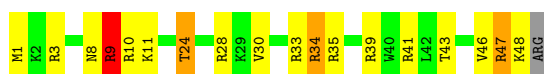
• Molecule 50: 50S Ribosomal Protein L33



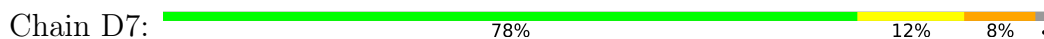
• Molecule 50: 50S Ribosomal Protein L33

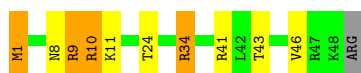


• Molecule 51: 50S Ribosomal Protein L34

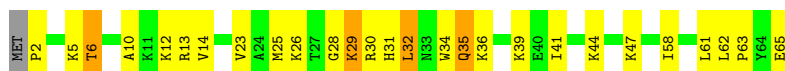


• Molecule 51: 50S Ribosomal Protein L34

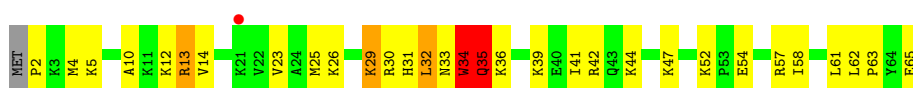




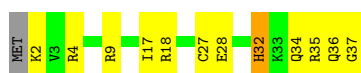
- Molecule 52: 50S Ribosomal Protein L35



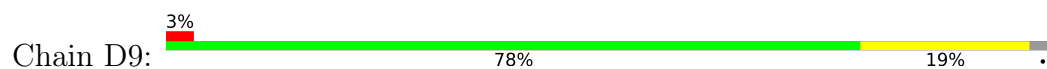
- Molecule 52: 50S Ribosomal Protein L35



- Molecule 53: 50S ribosomal protein L36



- Molecule 53: 50S ribosomal protein L36



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	209.63Å 449.30Å 620.90Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	49.71 – 2.70 49.71 – 2.70	Depositor EDS
% Data completeness (in resolution range)	98.4 (49.71-2.70) 98.4 (49.71-2.70)	Depositor EDS
$R_{merge}$	0.17	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.20 (at 2.69Å)	Xtrriage
Refinement program	PHENIX 1.7.2_869	Depositor
R, $R_{free}$	0.217 , 0.254 0.213 , 0.250	Depositor DCC
$R_{free}$ test set	78243 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	55.6	Xtrriage
Anisotropy	0.155	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.28 , 46.3	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.45$ , $\langle L^2 \rangle = 0.27$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.93	EDS
Total number of atoms	287173	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	64.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.42% of the height of the origin peak. No significant pseudotranslation is detected.*

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

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.



## 5 Model quality i

### 5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: MG, ZN

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	AA	1.00	41/35935 (0.1%)	1.48	589/56084 (1.1%)
1	CA	0.97	39/35884 (0.1%)	1.44	557/56006 (1.0%)
2	AB	0.57	0/1811	0.74	0/2452
2	CB	0.62	0/1852	0.75	0/2510
3	AC	0.63	1/1474 (0.1%)	0.84	1/2003 (0.0%)
3	CC	0.67	0/1477	0.90	4/2006 (0.2%)
4	AD	0.73	2/1550 (0.1%)	0.87	1/2106 (0.0%)
4	CD	0.68	3/1567 (0.2%)	0.85	1/2125 (0.0%)
5	AE	0.60	0/1121	0.78	0/1517
5	CE	0.64	0/1122	0.81	0/1518
6	AF	0.61	0/794	0.79	0/1082
6	CF	0.58	0/789	0.78	0/1074
7	AG	0.59	0/1186	0.74	0/1603
7	CG	0.63	0/1183	0.74	0/1599
8	AH	0.52	0/1065	0.71	0/1445
8	CH	0.53	0/1069	0.69	0/1450
9	AI	0.60	0/867	0.85	0/1180
9	CI	0.70	0/864	0.84	0/1177
10	AJ	0.65	0/672	0.83	0/919
10	CJ	0.73	0/670	0.86	0/917
11	AK	0.59	0/843	0.74	0/1144
11	CK	0.60	0/843	0.75	0/1144
12	AL	0.67	0/925	0.83	0/1251
12	CL	0.65	0/921	0.87	2/1247 (0.2%)
13	AM	0.66	0/811	0.91	0/1103
13	CM	0.72	0/794	0.92	0/1081
14	AN	0.62	0/487	0.83	0/649
14	CN	0.68	0/483	0.91	1/645 (0.2%)
15	AO	0.59	0/735	0.84	2/981 (0.2%)
15	CO	0.57	0/735	0.79	1/981 (0.1%)
16	AP	0.60	0/667	0.83	0/905
16	CP	0.57	0/677	0.83	0/917

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	AQ	0.59	0/836	0.76	0/1117
17	CQ	0.62	0/832	0.77	0/1113
18	AR	0.51	0/519	0.82	1/699 (0.1%)
18	CR	0.52	0/519	0.81	0/699
19	AS	0.58	0/574	0.85	1/781 (0.1%)
19	CS	0.64	0/563	0.82	0/766
20	AT	0.59	0/701	0.86	2/930 (0.2%)
20	CT	0.60	0/776	0.83	2/1026 (0.2%)
21	AU	0.57	0/203	0.73	0/266
21	CU	0.71	0/184	0.85	0/244
22	AY	0.67	0/766	0.87	0/1034
22	CY	0.67	0/751	0.76	0/1017
23	BA	1.46	435/68200 (0.6%)	1.72	2119/106454 (2.0%)
23	DA	1.17	125/67486 (0.2%)	1.62	1697/105338 (1.6%)
24	BB	1.09	2/2878 (0.1%)	1.48	44/4490 (1.0%)
24	DB	1.27	9/2878 (0.3%)	1.51	51/4490 (1.1%)
25	BD	0.90	1/2186 (0.0%)	1.02	8/2944 (0.3%)
25	DD	0.79	0/2186	0.96	2/2944 (0.1%)
26	BE	0.89	0/1588	0.98	2/2145 (0.1%)
26	DE	0.79	1/1588 (0.1%)	0.96	1/2145 (0.0%)
27	BF	0.84	1/1612 (0.1%)	0.94	5/2184 (0.2%)
27	DF	0.71	0/1607	0.91	4/2178 (0.2%)
28	BG	0.55	0/1393	0.78	0/1892
28	DG	0.69	0/1393	0.80	0/1892
29	BH	0.68	0/1343	0.80	0/1820
29	DH	0.63	0/1343	0.75	0/1820
30	BI	0.63	0/1058	0.84	0/1449
30	DI	0.64	0/1058	0.90	1/1449 (0.1%)
31	BN	0.84	0/1139	0.96	4/1538 (0.3%)
31	DN	0.71	0/1139	0.89	1/1538 (0.1%)
32	BO	0.86	0/933	0.92	2/1257 (0.2%)
32	DO	0.77	0/933	0.91	1/1257 (0.1%)
33	BP	0.85	0/1148	1.02	7/1529 (0.5%)
33	DP	0.72	0/1148	0.97	5/1529 (0.3%)
34	BQ	0.85	0/1143	0.89	2/1527 (0.1%)
34	DQ	0.76	0/1143	0.90	2/1527 (0.1%)
35	BR	0.85	0/982	0.98	2/1312 (0.2%)
35	DR	0.71	0/982	0.92	1/1312 (0.1%)
36	BS	0.71	0/875	0.91	1/1168 (0.1%)
36	DS	0.78	0/883	0.89	1/1176 (0.1%)
37	BT	0.79	0/1077	0.98	2/1444 (0.1%)
37	DT	0.73	0/1072	0.97	4/1437 (0.3%)
38	BU	0.89	0/977	0.95	4/1301 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
38	DU	0.78	0/977	0.83	0/1301
39	BV	0.85	0/782	0.92	0/1049
39	DV	0.77	0/786	0.89	0/1053
40	BW	0.97	2/891 (0.2%)	0.97	3/1197 (0.3%)
40	DW	0.85	0/887	0.91	1/1192 (0.1%)
41	BX	0.88	0/756	0.90	1/1016 (0.1%)
41	DX	0.78	0/746	0.88	1/1005 (0.1%)
42	BY	0.76	1/798 (0.1%)	1.04	4/1073 (0.4%)
42	DY	0.73	0/794	1.03	3/1067 (0.3%)
43	BZ	0.67	0/1555	0.85	4/2118 (0.2%)
43	DZ	0.71	0/1561	0.84	3/2131 (0.1%)
44	B0	0.78	0/602	0.94	3/804 (0.4%)
44	D0	0.76	0/615	0.90	0/820
45	B1	0.85	0/752	0.91	2/1003 (0.2%)
45	D1	0.76	0/752	0.92	2/1003 (0.2%)
46	B2	0.77	0/590	0.80	0/781
46	D2	0.73	0/586	0.78	0/779
47	B3	0.76	0/463	0.77	0/623
47	D3	0.74	0/468	0.75	0/628
48	B4	0.65	1/358 (0.3%)	0.82	1/487 (0.2%)
48	D4	0.73	0/358	0.80	0/487
49	B5	0.93	0/469	1.07	2/634 (0.3%)
49	D5	0.85	1/465 (0.2%)	0.99	1/630 (0.2%)
50	B6	0.89	1/456 (0.2%)	0.90	0/609
50	D6	0.81	0/444	0.86	0/595
51	B7	1.02	0/426	1.17	5/561 (0.9%)
51	D7	0.81	0/410	0.99	1/543 (0.2%)
52	B8	0.92	0/516	0.98	1/679 (0.1%)
52	D8	0.82	0/516	1.06	5/679 (0.7%)
53	B9	0.98	0/300	1.11	3/395 (0.8%)
53	D9	0.77	0/300	1.02	0/395
All	All	1.09	666/304847 (0.2%)	1.44	5184/456336 (1.1%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	AB	0	1
2	CB	0	2
3	AC	0	2

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Mol	Chain	#Chirality outliers	#Planarity outliers
3	CC	0	3
4	AD	0	1
4	CD	0	1
9	AI	0	3
9	CI	0	1
10	AJ	0	3
10	CJ	0	2
12	CL	0	2
13	AM	0	2
13	CM	0	1
14	CN	0	2
18	AR	0	1
18	CR	0	1
23	BA	0	4
23	DA	0	1
25	BD	0	1
25	DD	0	1
26	BE	0	1
26	DE	0	1
27	BF	0	3
27	DF	0	2
28	BG	0	1
28	DG	0	1
29	BH	0	1
29	DH	0	1
30	BI	0	1
31	BN	0	1
31	DN	0	1
33	BP	0	2
33	DP	0	2
36	BS	0	1
36	DS	0	1
37	BT	0	1
37	DT	0	1
41	BX	0	1
41	DX	0	1
43	BZ	0	1
43	DZ	0	1
45	B1	0	1
45	D1	0	1
48	B4	0	1
48	D4	0	1

*Continued on next page...*

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Mol	Chain	#Chirality outliers	#Planarity outliers
49	B5	0	1
49	D5	0	1
52	D8	0	1
All	All	0	68

The worst 5 of 666 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1459	C	N1-C2	18.78	1.58	1.40
1	CA	1459	C	N1-C2	17.97	1.58	1.40
1	CA	1442(A)	G	N9-C4	15.13	1.50	1.38
23	BA	1021	A	N9-C4	-14.91	1.28	1.37
23	BA	2287	A	N9-C4	-14.79	1.28	1.37

The worst 5 of 5184 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1459	C	C6-N1-C2	-31.41	107.74	120.30
1	CA	1459	C	C6-N1-C2	-31.40	107.74	120.30
1	CA	1459	C	N3-C2-O2	-28.90	101.67	121.90
1	AA	1459	C	N3-C2-O2	-28.10	102.23	121.90
1	CA	1442(A)	G	N3-C4-C5	-25.05	116.07	128.60

There are no chirality outliers.

5 of 68 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	AB	14	GLY	Peptide
3	AC	180	ALA	Peptide
3	AC	50	ALA	Peptide
4	AD	29	PRO	Peptide
9	AI	39	GLY	Peptide

## 5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32102	0	16201	703	0
1	CA	32056	0	16179	905	0
2	AB	1777	0	1747	75	0
2	CB	1817	0	1785	78	0
3	AC	1450	0	1314	42	0
3	CC	1453	0	1320	78	0
4	AD	1520	0	1406	44	0
4	CD	1537	0	1430	89	0
5	AE	1105	0	1130	37	0
5	CE	1106	0	1132	39	0
6	AF	781	0	741	17	0
6	CF	776	0	733	20	0
7	AG	1167	0	1108	34	0
7	CG	1164	0	1106	47	0
8	AH	1045	0	1033	31	0
8	CH	1049	0	1037	33	0
9	AI	852	0	742	47	0
9	CI	849	0	735	56	0
10	AJ	659	0	552	40	0
10	CJ	657	0	547	38	0
11	AK	828	0	822	15	0
11	CK	828	0	822	23	0
12	AL	909	0	927	29	0
12	CL	905	0	916	29	0
13	AM	801	0	743	42	0
13	CM	784	0	730	40	0
14	AN	478	0	496	25	0
14	CN	474	0	485	35	0
15	AO	724	0	749	23	0
15	CO	724	0	749	28	0
16	AP	651	0	638	34	0
16	CP	661	0	653	47	0
17	AQ	823	0	891	29	0
17	CQ	819	0	880	27	0
18	AR	514	0	530	13	0
18	CR	514	0	530	18	0
19	AS	560	0	466	31	0
19	CS	549	0	468	25	0
20	AT	699	0	746	24	0
20	CT	773	0	836	32	0
21	AU	199	0	208	6	0
21	CU	180	0	173	9	0
22	AY	754	0	776	24	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	CY	739	0	740	38	0
23	BA	60898	0	30697	759	0
23	DA	60264	0	30391	909	0
24	BB	2573	0	1306	27	0
24	DB	2573	0	1306	51	0
25	BD	2136	0	2218	55	0
25	DD	2136	0	2218	62	0
26	BE	1555	0	1607	41	0
26	DE	1555	0	1607	46	0
27	BF	1577	0	1612	44	0
27	DF	1572	0	1613	43	0
28	BG	1368	0	1324	37	0
28	DG	1368	0	1324	49	0
29	BH	1317	0	1376	23	0
29	DH	1317	0	1376	24	0
30	BI	1043	0	1054	39	0
30	DI	1043	0	1054	51	0
31	BN	1112	0	1180	25	0
31	DN	1112	0	1180	28	0
32	BO	923	0	981	12	0
32	DO	923	0	981	16	0
33	BP	1131	0	1201	39	0
33	DP	1131	0	1201	45	0
34	BQ	1122	0	1179	26	0
34	DQ	1122	0	1179	30	0
35	BR	968	0	1033	24	0
35	DR	968	0	1033	30	0
36	BS	865	0	905	38	0
36	DS	873	0	927	49	0
37	BT	1063	0	1103	29	0
37	DT	1058	0	1098	31	0
38	BU	959	0	1019	12	0
38	DU	959	0	1019	23	0
39	BV	771	0	830	14	1
39	DV	775	0	841	16	0
40	BW	881	0	935	22	0
40	DW	877	0	932	18	0
41	BX	742	0	799	14	0
41	DX	732	0	777	16	0
42	BY	785	0	828	16	0
42	DY	781	0	829	22	0
43	BZ	1522	0	1511	54	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	DZ	1528	0	1476	59	0
44	B0	594	0	604	7	0
44	D0	607	0	622	18	0
45	B1	745	0	804	20	0
45	D1	745	0	804	22	0
46	B2	588	0	643	13	0
46	D2	584	0	623	16	0
47	B3	458	0	503	6	0
47	D3	463	0	507	8	0
48	B4	349	0	336	11	0
48	D4	349	0	336	12	0
49	B5	455	0	472	10	0
49	D5	451	0	461	11	0
50	B6	449	0	462	15	0
50	D6	437	0	440	16	0
51	B7	418	0	467	10	0
51	D7	402	0	434	5	0
52	B8	509	0	565	19	0
52	D8	509	0	565	26	0
53	B9	297	0	316	6	0
53	D9	297	0	316	6	0
54	AA	217	0	0	0	0
54	AD	2	0	0	0	0
54	AE	1	0	0	0	0
54	AF	1	0	0	0	0
54	AI	1	0	0	0	0
54	AL	1	0	0	0	0
54	AM	2	0	0	0	0
54	AP	1	0	0	0	0
54	B0	4	0	0	0	0
54	B1	1	0	0	0	0
54	B2	2	0	0	0	0
54	B3	3	0	0	0	0
54	B5	1	0	0	0	0
54	B6	1	0	0	0	0
54	B7	1	0	0	0	0
54	B8	1	0	0	0	0
54	B9	3	0	0	0	0
54	BA	729	0	0	0	0
54	BB	19	0	0	0	0
54	BD	7	0	0	0	0
54	BE	6	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	BF	6	0	0	0	0
54	BG	1	0	0	0	0
54	BH	1	0	0	0	0
54	BN	2	0	0	0	0
54	BO	1	0	0	0	0
54	BP	2	0	0	0	0
54	BQ	5	0	0	0	0
54	BR	5	0	0	0	0
54	BS	1	0	0	0	0
54	BT	3	0	0	0	0
54	BU	3	0	0	0	0
54	BV	4	0	0	0	0
54	BW	1	0	0	0	0
54	BY	1	0	0	0	0
54	BZ	2	0	0	0	0
54	CA	203	0	0	0	0
54	CE	1	0	0	0	0
54	CQ	1	0	0	0	0
54	D0	1	0	0	0	0
54	D1	1	0	0	0	0
54	D5	2	0	0	0	0
54	D7	2	0	0	0	0
54	D8	2	0	0	0	0
54	D9	1	0	0	0	0
54	DA	637	0	0	0	0
54	DB	10	0	0	0	0
54	DD	5	0	0	0	0
54	DE	3	0	0	0	0
54	DF	5	0	0	0	0
54	DO	3	0	0	0	0
54	DP	3	0	0	0	0
54	DQ	4	0	0	0	0
54	DR	2	0	0	0	0
54	DT	2	0	0	0	0
54	DW	1	0	0	0	0
55	AD	1	0	0	0	0
55	AN	1	0	0	0	0
55	B4	1	0	0	0	0
55	B5	1	0	0	0	0
55	B6	1	0	0	0	0
55	B9	1	0	0	0	0
55	BY	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
55	CD	1	0	0	0	0
55	CN	1	0	0	0	0
55	D4	1	0	0	0	0
55	D5	1	0	0	0	0
55	D6	1	0	0	0	0
55	D9	1	0	0	0	0
55	DY	1	0	0	0	0
56	AA	443	0	0	25	0
56	AD	3	0	0	2	0
56	AE	2	0	0	0	0
56	AF	2	0	0	0	0
56	AG	2	0	0	0	0
56	AJ	1	0	0	0	0
56	AK	1	0	0	0	0
56	AL	3	0	0	0	0
56	AM	1	0	0	0	0
56	AO	1	0	0	0	0
56	AP	1	0	0	0	0
56	AQ	3	0	0	0	0
56	AY	1	0	0	0	0
56	B0	4	0	0	0	0
56	B1	5	0	0	0	0
56	B3	4	0	0	0	0
56	B5	5	0	0	0	0
56	B6	2	0	0	0	0
56	B7	5	0	0	2	0
56	B8	11	0	0	0	0
56	B9	1	0	0	0	0
56	BA	1988	0	0	66	1
56	BB	43	0	0	1	0
56	BD	21	0	0	2	0
56	BE	18	0	0	1	0
56	BF	18	0	0	0	0
56	BG	2	0	0	0	0
56	BH	2	0	0	0	0
56	BN	7	0	0	0	0
56	BO	3	0	0	0	0
56	BP	20	0	0	0	0
56	BQ	9	0	0	0	0
56	BR	8	0	0	0	1
56	BS	2	0	0	0	0
56	BT	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	BU	9	0	0	0	0
56	BV	13	0	0	1	1
56	BW	6	0	0	0	0
56	BX	2	0	0	0	0
56	BY	2	0	0	0	0
56	BZ	2	0	0	0	0
56	CA	400	0	0	32	0
56	CD	2	0	0	1	0
56	CE	4	0	0	0	0
56	CF	1	0	0	0	0
56	CK	1	0	0	0	0
56	CL	2	0	0	0	0
56	CP	3	0	0	0	0
56	CQ	3	0	0	0	0
56	CR	1	0	0	1	0
56	CT	2	0	0	0	0
56	CU	1	0	0	1	0
56	D0	2	0	0	0	0
56	D1	3	0	0	0	0
56	D2	1	0	0	0	0
56	D3	1	0	0	1	0
56	D5	3	0	0	0	0
56	D6	3	0	0	0	0
56	D7	3	0	0	0	0
56	D8	6	0	0	0	0
56	D9	1	0	0	0	0
56	DA	1496	0	0	107	0
56	DB	33	0	0	6	0
56	DD	17	0	0	2	0
56	DE	12	0	0	0	0
56	DF	10	0	0	0	0
56	DN	2	0	0	0	0
56	DO	7	0	0	0	0
56	DP	11	0	0	0	0
56	DQ	2	0	0	1	0
56	DR	5	0	0	0	0
56	DT	3	0	0	0	0
56	DU	1	0	0	0	0
56	DV	1	0	0	0	0
56	DW	4	0	0	0	0
56	DX	2	0	0	0	0
56	DY	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	287173	0	187292	5583	2

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 12.

The worst 5 of 5583 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2296:U:O4	23:BA:2335:A:N6	1.59	1.34
23:DA:2296:U:O4	23:DA:2335:A:N6	1.59	1.33
1:CA:1164:G:H1	1:CA:1172:C:N4	1.45	1.15
23:BA:885:C:N4	23:BA:890:A:N6	1.97	1.13
1:AA:40:C:N4	1:AA:402:G:H1	1.47	1.12

All (2) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:BR:308:HOH:O	56:BV:310:HOH:O[4_445]	2.03	0.17
39:BV:101:GLY:O	56:BA:5729:HOH:O[4_545]	2.17	0.03

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	227/256 (89%)	185 (82%)	40 (18%)	2 (1%)	17	40
2	CB	233/256 (91%)	187 (80%)	43 (18%)	3 (1%)	12	30
3	AC	204/239 (85%)	176 (86%)	28 (14%)	0	100	100
3	CC	204/239 (85%)	169 (83%)	31 (15%)	4 (2%)	7	19
4	AD	206/209 (99%)	186 (90%)	20 (10%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	CD	206/209 (99%)	182 (88%)	23 (11%)	1 (0%)	29	54
5	AE	146/162 (90%)	128 (88%)	17 (12%)	1 (1%)	22	46
5	CE	146/162 (90%)	130 (89%)	15 (10%)	1 (1%)	22	46
6	AF	98/101 (97%)	96 (98%)	2 (2%)	0	100	100
6	CF	97/101 (96%)	95 (98%)	2 (2%)	0	100	100
7	AG	153/156 (98%)	132 (86%)	20 (13%)	1 (1%)	22	46
7	CG	153/156 (98%)	130 (85%)	22 (14%)	1 (1%)	22	46
8	AH	136/138 (99%)	129 (95%)	7 (5%)	0	100	100
8	CH	136/138 (99%)	128 (94%)	8 (6%)	0	100	100
9	AI	123/128 (96%)	108 (88%)	13 (11%)	2 (2%)	9	24
9	CI	123/128 (96%)	104 (85%)	14 (11%)	5 (4%)	3	6
10	AJ	94/105 (90%)	72 (77%)	15 (16%)	7 (7%)	1	1
10	CJ	94/105 (90%)	72 (77%)	18 (19%)	4 (4%)	2	5
11	AK	112/129 (87%)	103 (92%)	9 (8%)	0	100	100
11	CK	112/129 (87%)	104 (93%)	8 (7%)	0	100	100
12	AL	120/132 (91%)	109 (91%)	10 (8%)	1 (1%)	19	43
12	CL	120/132 (91%)	109 (91%)	10 (8%)	1 (1%)	19	43
13	AM	112/126 (89%)	86 (77%)	22 (20%)	4 (4%)	3	7
13	CM	110/126 (87%)	86 (78%)	18 (16%)	6 (6%)	2	3
14	AN	58/61 (95%)	50 (86%)	7 (12%)	1 (2%)	9	23
14	CN	58/61 (95%)	49 (84%)	5 (9%)	4 (7%)	1	1
15	AO	86/89 (97%)	81 (94%)	5 (6%)	0	100	100
15	CO	86/89 (97%)	79 (92%)	7 (8%)	0	100	100
16	AP	80/88 (91%)	74 (92%)	5 (6%)	1 (1%)	12	30
16	CP	80/88 (91%)	74 (92%)	5 (6%)	1 (1%)	12	30
17	AQ	97/105 (92%)	88 (91%)	8 (8%)	1 (1%)	15	37
17	CQ	97/105 (92%)	89 (92%)	8 (8%)	0	100	100
18	AR	66/88 (75%)	55 (83%)	11 (17%)	0	100	100
18	CR	66/88 (75%)	56 (85%)	10 (15%)	0	100	100
19	AS	79/93 (85%)	67 (85%)	11 (14%)	1 (1%)	12	30
19	CS	76/93 (82%)	57 (75%)	18 (24%)	1 (1%)	12	30

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
20	AT	94/106 (89%)	77 (82%)	17 (18%)	0	100	100
20	CT	102/106 (96%)	79 (78%)	20 (20%)	3 (3%)	4	10
21	AU	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
21	CU	21/27 (78%)	16 (76%)	5 (24%)	0	100	100
22	AY	93/119 (78%)	85 (91%)	7 (8%)	1 (1%)	14	34
22	CY	92/119 (77%)	87 (95%)	5 (5%)	0	100	100
25	BD	273/276 (99%)	262 (96%)	8 (3%)	3 (1%)	14	34
25	DD	273/276 (99%)	262 (96%)	8 (3%)	3 (1%)	14	34
26	BE	202/206 (98%)	191 (95%)	8 (4%)	3 (2%)	10	26
26	DE	202/206 (98%)	187 (93%)	12 (6%)	3 (2%)	10	26
27	BF	201/210 (96%)	189 (94%)	10 (5%)	2 (1%)	15	37
27	DF	201/210 (96%)	191 (95%)	8 (4%)	2 (1%)	15	37
28	BG	179/182 (98%)	149 (83%)	26 (14%)	4 (2%)	6	17
28	DG	179/182 (98%)	148 (83%)	29 (16%)	2 (1%)	14	34
29	BH	172/180 (96%)	161 (94%)	10 (6%)	1 (1%)	25	50
29	DH	172/180 (96%)	160 (93%)	9 (5%)	3 (2%)	9	23
30	BI	144/148 (97%)	116 (81%)	24 (17%)	4 (3%)	5	11
30	DI	144/148 (97%)	119 (83%)	22 (15%)	3 (2%)	7	18
31	BN	138/140 (99%)	125 (91%)	11 (8%)	2 (1%)	11	28
31	DN	138/140 (99%)	125 (91%)	11 (8%)	2 (1%)	11	28
32	BO	120/122 (98%)	118 (98%)	2 (2%)	0	100	100
32	DO	120/122 (98%)	118 (98%)	2 (2%)	0	100	100
33	BP	147/150 (98%)	132 (90%)	13 (9%)	2 (1%)	11	28
33	DP	147/150 (98%)	130 (88%)	15 (10%)	2 (1%)	11	28
34	BQ	139/141 (99%)	132 (95%)	6 (4%)	1 (1%)	22	46
34	DQ	139/141 (99%)	131 (94%)	6 (4%)	2 (1%)	11	28
35	BR	116/118 (98%)	114 (98%)	2 (2%)	0	100	100
35	DR	116/118 (98%)	115 (99%)	1 (1%)	0	100	100
36	BS	108/112 (96%)	99 (92%)	8 (7%)	1 (1%)	17	40
36	DS	108/112 (96%)	98 (91%)	9 (8%)	1 (1%)	17	40
37	BT	129/146 (88%)	125 (97%)	4 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
37	DT	128/146 (88%)	124 (97%)	3 (2%)	1 (1%)	19	43
38	BU	114/118 (97%)	114 (100%)	0	0	100	100
38	DU	114/118 (97%)	114 (100%)	0	0	100	100
39	BV	99/101 (98%)	93 (94%)	6 (6%)	0	100	100
39	DV	99/101 (98%)	93 (94%)	6 (6%)	0	100	100
40	BW	110/113 (97%)	109 (99%)	1 (1%)	0	100	100
40	DW	109/113 (96%)	108 (99%)	1 (1%)	0	100	100
41	BX	93/96 (97%)	85 (91%)	8 (9%)	0	100	100
41	DX	93/96 (97%)	88 (95%)	4 (4%)	1 (1%)	14	34
42	BY	105/110 (96%)	93 (89%)	12 (11%)	0	100	100
42	DY	105/110 (96%)	97 (92%)	8 (8%)	0	100	100
43	BZ	196/206 (95%)	178 (91%)	14 (7%)	4 (2%)	7	19
43	DZ	201/206 (98%)	181 (90%)	15 (8%)	5 (2%)	5	14
44	B0	74/85 (87%)	72 (97%)	2 (3%)	0	100	100
44	D0	75/85 (88%)	71 (95%)	4 (5%)	0	100	100
45	B1	95/98 (97%)	92 (97%)	1 (1%)	2 (2%)	7	18
45	D1	95/98 (97%)	92 (97%)	1 (1%)	2 (2%)	7	18
46	B2	68/72 (94%)	64 (94%)	4 (6%)	0	100	100
46	D2	69/72 (96%)	65 (94%)	4 (6%)	0	100	100
47	B3	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
47	D3	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
48	B4	44/71 (62%)	35 (80%)	8 (18%)	1 (2%)	6	16
48	D4	44/71 (62%)	34 (77%)	10 (23%)	0	100	100
49	B5	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
49	D5	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
50	B6	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
50	D6	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
51	B7	46/49 (94%)	44 (96%)	1 (2%)	1 (2%)	6	17
51	D7	46/49 (94%)	44 (96%)	1 (2%)	1 (2%)	6	17
52	B8	62/65 (95%)	60 (97%)	1 (2%)	1 (2%)	9	24
52	D8	62/65 (95%)	59 (95%)	1 (2%)	2 (3%)	4	9

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
53	B9	34/37 (92%)	34 (100%)	0	0	100	100
53	D9	34/37 (92%)	34 (100%)	0	0	100	100
All	All	11568/12366 (94%)	10478 (91%)	965 (8%)	125 (1%)	14	34

5 of 125 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
10	AJ	56	HIS
13	AM	84	ILE
27	BF	21	ALA
28	BG	82	LEU
30	BI	107	VAL

### 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	
2	AB	177/220 (80%)	148 (84%)	29 (16%)	2	6
2	CB	181/220 (82%)	151 (83%)	30 (17%)	2	5
3	AC	114/188 (61%)	97 (85%)	17 (15%)	3	7
3	CC	114/188 (61%)	86 (75%)	28 (25%)	0	2
4	AD	139/181 (77%)	119 (86%)	20 (14%)	3	8
4	CD	142/181 (78%)	120 (84%)	22 (16%)	2	7
5	AE	108/123 (88%)	95 (88%)	13 (12%)	5	11
5	CE	108/123 (88%)	94 (87%)	14 (13%)	4	10
6	AF	77/90 (86%)	66 (86%)	11 (14%)	3	8
6	CF	75/90 (83%)	65 (87%)	10 (13%)	4	9
7	AG	104/127 (82%)	91 (88%)	13 (12%)	4	10
7	CG	103/127 (81%)	83 (81%)	20 (19%)	1	3
8	AH	103/119 (87%)	87 (84%)	16 (16%)	2	7
8	CH	104/119 (87%)	88 (85%)	16 (15%)	2	7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	AI	62/99 (63%)	53 (86%)	9 (14%)	3	8
9	CI	62/99 (63%)	53 (86%)	9 (14%)	3	8
10	AJ	52/92 (56%)	41 (79%)	11 (21%)	1	3
10	CJ	52/92 (56%)	40 (77%)	12 (23%)	1	2
11	AK	81/99 (82%)	73 (90%)	8 (10%)	8	18
11	CK	81/99 (82%)	73 (90%)	8 (10%)	8	18
12	AL	92/109 (84%)	83 (90%)	9 (10%)	8	18
12	CL	91/109 (84%)	85 (93%)	6 (7%)	16	38
13	AM	63/101 (62%)	46 (73%)	17 (27%)	0	1
13	CM	62/101 (61%)	45 (73%)	17 (27%)	0	1
14	AN	46/50 (92%)	38 (83%)	8 (17%)	2	5
14	CN	45/50 (90%)	33 (73%)	12 (27%)	0	1
15	AO	77/80 (96%)	64 (83%)	13 (17%)	2	5
15	CO	77/80 (96%)	64 (83%)	13 (17%)	2	5
16	AP	63/74 (85%)	50 (79%)	13 (21%)	1	3
16	CP	65/74 (88%)	51 (78%)	14 (22%)	1	3
17	AQ	94/97 (97%)	82 (87%)	12 (13%)	4	10
17	CQ	93/97 (96%)	81 (87%)	12 (13%)	4	10
18	AR	49/77 (64%)	40 (82%)	9 (18%)	1	4
18	CR	49/77 (64%)	40 (82%)	9 (18%)	1	4
19	AS	43/80 (54%)	37 (86%)	6 (14%)	3	8
19	CS	44/80 (55%)	32 (73%)	12 (27%)	0	1
20	AT	62/82 (76%)	53 (86%)	9 (14%)	3	8
20	CT	72/82 (88%)	61 (85%)	11 (15%)	2	7
21	AU	18/22 (82%)	15 (83%)	3 (17%)	2	5
21	CU	14/22 (64%)	11 (79%)	3 (21%)	1	3
22	AY	82/104 (79%)	70 (85%)	12 (15%)	3	7
22	CY	79/104 (76%)	63 (80%)	16 (20%)	1	3
25	BD	215/218 (99%)	191 (89%)	24 (11%)	6	13
25	DD	215/218 (99%)	190 (88%)	25 (12%)	5	12
26	BE	163/166 (98%)	140 (86%)	23 (14%)	3	8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
26	DE	163/166 (98%)	139 (85%)	24 (15%)	3	7
27	BF	158/166 (95%)	134 (85%)	24 (15%)	3	7
27	DF	157/166 (95%)	135 (86%)	22 (14%)	3	8
28	BG	128/156 (82%)	107 (84%)	21 (16%)	2	6
28	DG	128/156 (82%)	107 (84%)	21 (16%)	2	6
29	BH	141/148 (95%)	125 (89%)	16 (11%)	6	13
29	DH	141/148 (95%)	128 (91%)	13 (9%)	9	21
30	BI	100/124 (81%)	73 (73%)	27 (27%)	0	1
30	DI	100/124 (81%)	75 (75%)	25 (25%)	0	1
31	BN	117/119 (98%)	99 (85%)	18 (15%)	2	7
31	DN	117/119 (98%)	99 (85%)	18 (15%)	2	7
32	BO	98/100 (98%)	89 (91%)	9 (9%)	9	21
32	DO	98/100 (98%)	91 (93%)	7 (7%)	14	34
33	BP	114/116 (98%)	94 (82%)	20 (18%)	2	4
33	DP	114/116 (98%)	95 (83%)	19 (17%)	2	5
34	BQ	111/111 (100%)	94 (85%)	17 (15%)	2	7
34	DQ	111/111 (100%)	95 (86%)	16 (14%)	3	8
35	BR	101/101 (100%)	81 (80%)	20 (20%)	1	3
35	DR	101/101 (100%)	81 (80%)	20 (20%)	1	3
36	BS	84/88 (96%)	70 (83%)	14 (17%)	2	5
36	DS	86/88 (98%)	70 (81%)	16 (19%)	1	4
37	BT	110/127 (87%)	90 (82%)	20 (18%)	1	4
37	DT	110/127 (87%)	93 (84%)	17 (16%)	2	7
38	BU	93/94 (99%)	80 (86%)	13 (14%)	3	8
38	DU	93/94 (99%)	81 (87%)	12 (13%)	4	10
39	BV	80/82 (98%)	65 (81%)	15 (19%)	1	4
39	DV	81/82 (99%)	65 (80%)	16 (20%)	1	3
40	BW	89/92 (97%)	77 (86%)	12 (14%)	4	9
40	DW	89/92 (97%)	78 (88%)	11 (12%)	4	11
41	BX	75/78 (96%)	66 (88%)	9 (12%)	5	11
41	DX	73/78 (94%)	66 (90%)	7 (10%)	8	19

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
42	BY	80/91 (88%)	66 (82%)	14 (18%)	2	4
42	DY	79/91 (87%)	64 (81%)	15 (19%)	1	4
43	BZ	159/179 (89%)	137 (86%)	22 (14%)	3	8
43	DZ	155/179 (87%)	136 (88%)	19 (12%)	4	11
44	B0	59/67 (88%)	52 (88%)	7 (12%)	5	12
44	D0	61/67 (91%)	51 (84%)	10 (16%)	2	6
45	B1	78/83 (94%)	65 (83%)	13 (17%)	2	5
45	D1	78/83 (94%)	66 (85%)	12 (15%)	2	7
46	B2	65/67 (97%)	57 (88%)	8 (12%)	4	11
46	D2	63/67 (94%)	55 (87%)	8 (13%)	4	10
47	B3	49/52 (94%)	44 (90%)	5 (10%)	7	17
47	D3	50/52 (96%)	44 (88%)	6 (12%)	5	11
48	B4	39/63 (62%)	34 (87%)	5 (13%)	4	10
48	D4	39/63 (62%)	35 (90%)	4 (10%)	7	16
49	B5	50/52 (96%)	43 (86%)	7 (14%)	3	8
49	D5	49/52 (94%)	44 (90%)	5 (10%)	7	17
50	B6	50/52 (96%)	40 (80%)	10 (20%)	1	3
50	D6	48/52 (92%)	37 (77%)	11 (23%)	1	2
51	B7	41/42 (98%)	35 (85%)	6 (15%)	3	7
51	D7	38/42 (90%)	32 (84%)	6 (16%)	2	6
52	B8	52/55 (94%)	45 (86%)	7 (14%)	4	9
52	D8	52/55 (94%)	45 (86%)	7 (14%)	4	9
53	B9	32/34 (94%)	30 (94%)	2 (6%)	18	40
53	D9	32/34 (94%)	31 (97%)	1 (3%)	40	69
All	All	8871/10274 (86%)	7518 (85%)	1353 (15%)	2	7

5 of 1353 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
19	CS	62	ILE
34	DQ	63	LYS
22	CY	64	SER
19	CS	57	HIS
28	DG	71	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 69 such sidechains are listed below:

Mol	Chain	Res	Type
27	DF	75	HIS
28	DG	40	ASN
41	DX	31	HIS
41	BX	82	GLN
41	BX	31	HIS

### 5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1490/1522 (97%)	306 (20%)	32 (2%)
1	CA	1490/1522 (97%)	328 (22%)	34 (2%)
23	BA	2819/2915 (96%)	514 (18%)	72 (2%)
23	DA	2788/2915 (95%)	485 (17%)	64 (2%)
24	BB	119/122 (97%)	19 (15%)	0
24	DB	119/122 (97%)	21 (17%)	0
All	All	8825/9118 (96%)	1673 (18%)	202 (2%)

5 of 1673 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	4	U
1	AA	7	G
1	AA	9	G
1	AA	32	A
1	AA	39	G

5 of 202 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	CA	495	A
23	DA	215	G
23	DA	2778	A
1	CA	687	A
1	CA	1136	U

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

There are no non-standard protein/DNA/RNA residues in this entry.

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 1945 ligands modelled in this entry, 1945 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 6 Fit of model and data i

### 6.1 Protein, DNA and RNA chains i

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	AA	1493/1522 (98%)	0.01	76 (5%) 28 26	37, 73, 129, 165	0
1	CA	1491/1522 (97%)	0.16	99 (6%) 18 16	40, 84, 135, 175	0
2	AB	229/256 (89%)	0.66	28 (12%) 4 3	76, 103, 123, 135	0
2	CB	235/256 (91%)	1.48	77 (32%) 0 0	80, 108, 127, 135	0
3	AC	206/239 (86%)	0.23	11 (5%) 26 25	62, 81, 98, 105	0
3	CC	206/239 (86%)	1.19	51 (24%) 0 0	85, 109, 122, 130	0
4	AD	208/209 (99%)	0.91	32 (15%) 2 1	64, 85, 105, 113	0
4	CD	208/209 (99%)	0.71	29 (13%) 2 2	68, 85, 103, 111	0
5	AE	148/162 (91%)	0.03	0 100 100	59, 73, 86, 101	0
5	CE	148/162 (91%)	0.52	13 (8%) 10 8	62, 77, 91, 105	0
6	AF	100/101 (99%)	0.01	3 (3%) 50 51	61, 72, 85, 100	0
6	CF	99/101 (98%)	0.16	3 (3%) 50 51	62, 74, 86, 95	0
7	AG	155/156 (99%)	-0.05	7 (4%) 33 31	64, 76, 91, 100	0
7	CG	155/156 (99%)	1.17	41 (26%) 0 0	86, 102, 111, 118	0
8	AH	138/138 (100%)	0.44	6 (4%) 35 33	61, 75, 83, 94	0
8	CH	138/138 (100%)	0.57	14 (10%) 7 5	64, 79, 87, 95	0
9	AI	125/128 (97%)	0.57	14 (11%) 5 4	64, 93, 106, 114	0
9	CI	125/128 (97%)	1.97	45 (36%) 0 0	89, 118, 126, 133	0
10	AJ	96/105 (91%)	1.22	20 (20%) 1 0	63, 96, 120, 124	0
10	CJ	96/105 (91%)	2.18	41 (42%) 0 0	95, 118, 135, 144	0
11	AK	114/129 (88%)	0.43	9 (7%) 12 10	50, 72, 91, 107	0
11	CK	114/129 (88%)	0.75	14 (12%) 4 3	54, 77, 95, 109	0
12	AL	122/132 (92%)	0.56	5 (4%) 37 36	54, 68, 82, 95	0
12	CL	122/132 (92%)	0.89	19 (15%) 2 1	55, 72, 85, 99	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	AM	114/126 (90%)	0.11	7 (6%) 21 20	68, 82, 97, 102	0
13	CM	112/126 (88%)	1.59	39 (34%) 0 0	94, 117, 126, 134	0
14	AN	60/61 (98%)	0.46	4 (6%) 17 16	68, 79, 92, 102	0
14	CN	60/61 (98%)	1.54	19 (31%) 0 0	99, 110, 121, 128	0
15	AO	88/89 (98%)	0.34	3 (3%) 45 45	52, 73, 90, 94	0
15	CO	88/89 (98%)	0.63	11 (12%) 3 3	58, 77, 91, 96	0
16	AP	82/88 (93%)	1.04	13 (15%) 1 1	68, 82, 100, 110	0
16	CP	82/88 (93%)	0.46	4 (4%) 29 28	66, 79, 94, 103	0
17	AQ	99/105 (94%)	0.38	3 (3%) 50 51	57, 74, 87, 92	0
17	CQ	99/105 (94%)	0.62	9 (9%) 9 7	60, 75, 85, 94	0
18	AR	68/88 (77%)	0.08	3 (4%) 34 33	62, 73, 92, 96	0
18	CR	68/88 (77%)	0.58	9 (13%) 3 2	65, 76, 92, 96	0
19	AS	81/93 (87%)	0.63	9 (11%) 5 4	74, 89, 105, 128	0
19	CS	78/93 (83%)	2.18	34 (43%) 0 0	100, 118, 130, 133	0
20	AT	96/106 (90%)	0.85	11 (11%) 4 4	66, 82, 100, 106	0
20	CT	104/106 (98%)	0.81	13 (12%) 3 3	64, 83, 103, 119	0
21	AU	23/27 (85%)	0.71	3 (13%) 3 2	71, 80, 83, 90	0
21	CU	23/27 (85%)	1.82	9 (39%) 0 0	97, 106, 115, 119	0
22	AY	95/119 (79%)	0.05	2 (2%) 63 65	51, 64, 81, 92	0
22	CY	94/119 (78%)	2.31	51 (54%) 0 0	76, 95, 113, 120	0
23	BA	2827/2915 (96%)	-0.05	108 (3%) 40 39	24, 40, 120, 169	0
23	DA	2798/2915 (95%)	-0.28	147 (5%) 26 25	27, 46, 118, 170	0
24	BB	120/122 (98%)	-0.23	1 (0%) 86 87	39, 65, 76, 119	0
24	DB	120/122 (98%)	0.80	24 (20%) 1 0	50, 81, 97, 130	0
25	BD	275/276 (99%)	-0.13	0 100 100	24, 39, 51, 79	0
25	DD	275/276 (99%)	-0.26	1 (0%) 92 93	26, 43, 55, 84	0
26	BE	204/206 (99%)	-0.15	0 100 100	24, 44, 64, 81	0
26	DE	204/206 (99%)	-0.12	3 (1%) 73 76	27, 48, 69, 84	0
27	BF	203/210 (96%)	0.08	1 (0%) 91 92	25, 49, 82, 113	0
27	DF	203/210 (96%)	0.19	13 (6%) 19 18	28, 58, 84, 115	0
28	BG	181/182 (99%)	0.18	5 (2%) 53 54	64, 83, 108, 138	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
28	DG	181/182 (99%)	2.11	84 (46%) 0 0	78, 96, 116, 140	0
29	BH	174/180 (96%)	0.17	3 (1%) 70 72	49, 64, 80, 92	0
29	DH	174/180 (96%)	1.61	55 (31%) 0 0	61, 78, 92, 101	0
30	BI	146/148 (98%)	0.41	12 (8%) 11 9	46, 75, 91, 98	0
30	DI	146/148 (98%)	0.56	12 (8%) 11 9	49, 81, 99, 107	0
31	BN	140/140 (100%)	0.04	0 100 100	30, 44, 66, 83	0
31	DN	140/140 (100%)	-0.05	4 (2%) 51 52	35, 52, 73, 86	0
32	BO	122/122 (100%)	-0.17	0 100 100	34, 43, 62, 65	0
32	DO	122/122 (100%)	-0.35	1 (0%) 86 87	37, 47, 65, 68	0
33	BP	149/150 (99%)	0.16	1 (0%) 87 89	25, 51, 77, 96	0
33	DP	149/150 (99%)	0.46	17 (11%) 5 4	30, 60, 87, 99	0
34	BQ	141/141 (100%)	0.08	0 100 100	31, 47, 59, 74	0
34	DQ	141/141 (100%)	0.12	6 (4%) 35 33	39, 55, 69, 79	0
35	BR	118/118 (100%)	-0.01	0 100 100	30, 38, 51, 62	0
35	DR	118/118 (100%)	-0.27	0 100 100	33, 42, 55, 67	0
36	BS	110/112 (98%)	0.14	0 100 100	48, 62, 77, 85	0
36	DS	110/112 (98%)	1.46	27 (24%) 0 0	59, 74, 87, 93	0
37	BT	131/146 (89%)	-0.19	1 (0%) 86 87	38, 46, 76, 103	0
37	DT	130/146 (89%)	-0.25	2 (1%) 73 76	41, 50, 73, 105	0
38	BU	116/118 (98%)	0.08	1 (0%) 84 85	28, 38, 53, 70	0
38	DU	116/118 (98%)	-0.16	1 (0%) 84 85	33, 45, 61, 70	0
39	BV	101/101 (100%)	0.01	1 (0%) 82 83	27, 48, 67, 83	0
39	DV	101/101 (100%)	0.59	9 (8%) 9 7	32, 59, 76, 85	0
40	BW	112/113 (99%)	-0.19	0 100 100	28, 35, 52, 92	0
40	DW	111/113 (98%)	-0.37	0 100 100	32, 40, 58, 85	0
41	BX	95/96 (98%)	-0.05	0 100 100	33, 43, 65, 84	0
41	DX	95/96 (98%)	-0.04	2 (2%) 63 65	39, 50, 68, 89	0
42	BY	107/110 (97%)	-0.08	0 100 100	44, 55, 77, 88	0
42	DY	107/110 (97%)	0.70	14 (13%) 3 2	53, 63, 82, 91	0
43	BZ	198/206 (96%)	-0.07	0 100 100	48, 68, 91, 103	0
43	DZ	203/206 (98%)	0.96	37 (18%) 1 1	57, 78, 100, 126	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
44	B0	76/85 (89%)	-0.01	0 <b>100</b> <b>100</b>	37, 44, 57, 75	0
44	D0	77/85 (90%)	0.41	7 (9%) <b>9</b> <b>7</b>	44, 52, 67, 101	0
45	B1	97/98 (98%)	0.10	2 (2%) <b>63</b> <b>65</b>	31, 44, 74, 82	0
45	D1	97/98 (98%)	-0.11	3 (3%) <b>49</b> <b>49</b>	33, 48, 78, 85	0
46	B2	70/72 (97%)	0.16	1 (1%) <b>75</b> <b>77</b>	42, 56, 67, 93	0
46	D2	71/72 (98%)	0.48	7 (9%) <b>7</b> <b>5</b>	51, 65, 76, 94	0
47	B3	59/60 (98%)	0.07	1 (1%) <b>70</b> <b>72</b>	33, 42, 66, 84	0
47	D3	59/60 (98%)	0.63	6 (10%) <b>6</b> <b>5</b>	39, 50, 76, 96	0
48	B4	46/71 (64%)	0.14	2 (4%) <b>35</b> <b>33</b>	73, 96, 111, 116	0
48	D4	46/71 (64%)	1.28	12 (26%) <b>0</b> <b>0</b>	89, 107, 118, 124	0
49	B5	59/60 (98%)	-0.12	0 <b>100</b> <b>100</b>	23, 38, 56, 68	0
49	D5	59/60 (98%)	-0.14	2 (3%) <b>45</b> <b>45</b>	27, 43, 61, 73	0
50	B6	53/54 (98%)	-0.23	0 <b>100</b> <b>100</b>	40, 46, 59, 66	0
50	D6	53/54 (98%)	-0.06	0 <b>100</b> <b>100</b>	47, 52, 60, 70	0
51	B7	48/49 (97%)	-0.03	0 <b>100</b> <b>100</b>	26, 30, 50, 71	0
51	D7	48/49 (97%)	-0.20	0 <b>100</b> <b>100</b>	28, 33, 54, 82	0
52	B8	64/65 (98%)	0.07	0 <b>100</b> <b>100</b>	34, 38, 45, 57	0
52	D8	64/65 (98%)	0.06	1 (1%) <b>72</b> <b>74</b>	38, 44, 50, 60	0
53	B9	36/37 (97%)	0.12	0 <b>100</b> <b>100</b>	38, 46, 57, 69	0
53	D9	36/37 (97%)	0.09	1 (2%) <b>53</b> <b>54</b>	45, 55, 66, 76	0
All	All	20617/21484 (95%)	0.22	1551 (7%) <b>14</b> <b>12</b>	23, 63, 117, 175	0

The worst 5 of 1551 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	CA	1036	G	16.0
1	CA	1030(B)	C	12.9
23	DA	2139	C	12.4
9	CI	30	GLY	11.6
23	DA	2154	G	11.2

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

There are no non-standard protein/DNA/RNA residues in this entry.

### 6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

### 6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	BA	3605	1/1	-0.01	0.57	89,89,89,89	0
54	MG	CA	1664	1/1	0.12	0.15	62,62,62,62	0
54	MG	DB	206	1/1	0.23	1.97	115,115,115,115	0
54	MG	CA	1741	1/1	0.28	0.12	117,117,117,117	0
54	MG	AA	1675	1/1	0.42	0.16	106,106,106,106	0
54	MG	CA	1729	1/1	0.49	0.23	84,84,84,84	0
54	MG	BA	3264	1/1	0.50	0.10	86,86,86,86	0
54	MG	CA	1758	1/1	0.53	0.24	64,64,64,64	0
54	MG	DA	3547	1/1	0.53	0.44	89,89,89,89	0
54	MG	CA	1630	1/1	0.53	0.44	78,78,78,78	0
54	MG	DA	3014	1/1	0.54	0.49	73,73,73,73	0
54	MG	CA	1657	1/1	0.55	0.15	85,85,85,85	0
54	MG	CA	1607	1/1	0.55	0.98	96,96,96,96	0
54	MG	AA	1767	1/1	0.56	0.18	70,70,70,70	0
54	MG	DB	208	1/1	0.56	0.19	96,96,96,96	0
54	MG	BR	204	1/1	0.57	0.20	49,49,49,49	0
54	MG	BA	3517	1/1	0.57	0.17	91,91,91,91	0
54	MG	AA	1794	1/1	0.57	0.20	111,111,111,111	0
54	MG	AA	1674	1/1	0.58	0.12	75,75,75,75	0
54	MG	AA	1686	1/1	0.60	0.32	68,68,68,68	0
54	MG	DA	3554	1/1	0.60	0.21	70,70,70,70	0
54	MG	DA	3141	1/1	0.61	0.37	70,70,70,70	0
54	MG	BA	3477	1/1	0.61	0.18	101,101,101,101	0
54	MG	BA	3655	1/1	0.61	0.35	68,68,68,68	0
54	MG	BA	3726	1/1	0.61	0.16	73,73,73,73	0
54	MG	AA	1605	1/1	0.61	0.24	62,62,62,62	0
54	MG	DA	3614	1/1	0.62	0.86	92,92,92,92	0
54	MG	AA	1714	1/1	0.62	0.17	58,58,58,58	0
54	MG	DA	3159	1/1	0.62	0.15	66,66,66,66	0
54	MG	DA	3618	1/1	0.64	0.37	93,93,93,93	0
54	MG	DA	3558	1/1	0.64	0.25	70,70,70,70	0
54	MG	AA	1635	1/1	0.64	0.10	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	CA	1746	1/1	0.65	0.23	113,113,113,113	0
54	MG	DA	3096	1/1	0.66	0.21	61,61,61,61	0
54	MG	CA	1643	1/1	0.67	0.12	76,76,76,76	0
54	MG	DA	3632	1/1	0.67	0.14	72,72,72,72	0
54	MG	BA	3590	1/1	0.67	0.35	77,77,77,77	0
54	MG	CA	1604	1/1	0.67	0.49	70,70,70,70	0
54	MG	CA	1681	1/1	0.68	0.21	83,83,83,83	0
54	MG	BA	3564	1/1	0.68	0.12	67,67,67,67	0
54	MG	CA	1671	1/1	0.68	0.07	78,78,78,78	0
54	MG	DA	3337	1/1	0.68	0.24	65,65,65,65	0
54	MG	D0	101	1/1	0.68	0.16	78,78,78,78	0
54	MG	BQ	201	1/1	0.69	0.37	61,61,61,61	0
54	MG	DA	3341	1/1	0.69	0.14	60,60,60,60	0
54	MG	DA	3347	1/1	0.69	0.23	87,87,87,87	0
54	MG	DA	3410	1/1	0.69	0.20	80,80,80,80	0
54	MG	DA	3478	1/1	0.69	0.28	64,64,64,64	0
54	MG	DA	3124	1/1	0.69	0.21	69,69,69,69	0
54	MG	DB	210	1/1	0.69	0.18	82,82,82,82	0
54	MG	DA	3292	1/1	0.69	0.18	59,59,59,59	0
54	MG	BA	3579	1/1	0.70	0.26	57,57,57,57	0
54	MG	DA	3606	1/1	0.70	0.32	82,82,82,82	0
54	MG	CA	1660	1/1	0.70	0.23	65,65,65,65	0
54	MG	CA	1761	1/1	0.71	0.13	92,92,92,92	0
54	MG	CA	1791	1/1	0.71	0.15	72,72,72,72	0
54	MG	CA	1616	1/1	0.71	0.15	71,71,71,71	0
54	MG	BA	3600	1/1	0.71	0.24	58,58,58,58	0
54	MG	BA	3545	1/1	0.72	0.10	63,63,63,63	0
54	MG	DA	3094	1/1	0.72	0.33	54,54,54,54	0
54	MG	DA	3435	1/1	0.72	0.09	77,77,77,77	0
54	MG	BA	3334	1/1	0.72	0.17	39,39,39,39	0
54	MG	DA	3318	1/1	0.72	0.25	75,75,75,75	0
54	MG	DA	3122	1/1	0.72	0.25	58,58,58,58	0
54	MG	BA	3577	1/1	0.72	0.11	59,59,59,59	0
54	MG	DO	201	1/1	0.72	0.13	67,67,67,67	0
54	MG	DA	3592	1/1	0.72	0.12	72,72,72,72	0
54	MG	D5	103	1/1	0.72	0.17	61,61,61,61	0
54	MG	DA	3476	1/1	0.73	0.09	95,95,95,95	0
54	MG	AA	1813	1/1	0.73	0.17	86,86,86,86	0
54	MG	DA	3108	1/1	0.73	0.38	70,70,70,70	0
54	MG	BA	3059	1/1	0.73	0.20	54,54,54,54	0
54	MG	BA	3165	1/1	0.73	0.33	41,41,41,41	0
54	MG	BA	3723	1/1	0.73	0.12	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	CA	1750	1/1	0.73	0.13	88,88,88,88	0
54	MG	DA	3164	1/1	0.73	0.16	64,64,64,64	0
55	ZN	D4	101	1/1	0.73	0.09	173,173,173,173	0
54	MG	DA	3466	1/1	0.74	0.17	65,65,65,65	0
54	MG	CA	1646	1/1	0.74	0.11	71,71,71,71	0
54	MG	BA	3679	1/1	0.74	0.09	80,80,80,80	0
54	MG	AA	1788	1/1	0.74	0.11	76,76,76,76	0
54	MG	CA	1793	1/1	0.74	0.20	89,89,89,89	0
54	MG	CA	1688	1/1	0.74	0.23	110,110,110,110	0
54	MG	CA	1677	1/1	0.75	0.20	86,86,86,86	0
54	MG	AA	1658	1/1	0.75	0.25	73,73,73,73	0
54	MG	BA	3512	1/1	0.75	0.21	71,71,71,71	0
54	MG	AA	1633	1/1	0.75	0.21	69,69,69,69	0
54	MG	DB	205	1/1	0.75	0.23	92,92,92,92	0
54	MG	DA	3247	1/1	0.75	0.26	73,73,73,73	0
54	MG	DA	3477	1/1	0.75	0.09	63,63,63,63	0
54	MG	BA	3322	1/1	0.75	0.28	54,54,54,54	0
54	MG	DA	3316	1/1	0.75	0.12	87,87,87,87	0
54	MG	BA	3074	1/1	0.75	0.32	32,32,32,32	0
54	MG	BA	3672	1/1	0.75	0.31	69,69,69,69	0
54	MG	BA	3453	1/1	0.75	0.14	65,65,65,65	0
54	MG	CA	1785	1/1	0.76	0.17	84,84,84,84	0
54	MG	DA	3130	1/1	0.76	0.65	49,49,49,49	0
54	MG	DA	3393	1/1	0.76	0.19	52,52,52,52	0
54	MG	BA	3669	1/1	0.76	0.14	44,44,44,44	0
54	MG	AA	1764	1/1	0.76	0.27	70,70,70,70	0
54	MG	BB	201	1/1	0.76	0.21	67,67,67,67	0
54	MG	DA	3240	1/1	0.76	0.11	56,56,56,56	0
54	MG	DA	3092	1/1	0.76	0.17	54,54,54,54	0
54	MG	BA	3511	1/1	0.76	0.09	72,72,72,72	0
54	MG	DA	3494	1/1	0.76	0.26	64,64,64,64	0
54	MG	CA	1624	1/1	0.76	0.18	65,65,65,65	0
54	MG	CA	1713	1/1	0.76	0.32	95,95,95,95	0
55	ZN	CD	301	1/1	0.76	0.30	93,93,93,93	0
54	MG	CA	1778	1/1	0.76	0.10	83,83,83,83	0
54	MG	CA	1645	1/1	0.77	0.38	69,69,69,69	0
54	MG	BA	3072	1/1	0.77	0.21	48,48,48,48	0
54	MG	AA	1646	1/1	0.77	0.26	87,87,87,87	0
54	MG	DA	3586	1/1	0.77	0.21	142,142,142,142	0
54	MG	CA	1606	1/1	0.77	0.36	83,83,83,83	0
54	MG	BA	3111	1/1	0.77	0.72	67,67,67,67	0
54	MG	CA	1612	1/1	0.77	0.75	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3395	1/1	0.77	0.32	75,75,75,75	0
54	MG	DA	3402	1/1	0.77	0.17	53,53,53,53	0
54	MG	BA	3560	1/1	0.77	0.28	93,93,93,93	0
54	MG	AA	1608	1/1	0.77	0.21	66,66,66,66	0
54	MG	BB	211	1/1	0.77	0.10	61,61,61,61	0
54	MG	AA	1623	1/1	0.77	0.18	85,85,85,85	0
54	MG	CA	1715	1/1	0.77	0.20	85,85,85,85	0
54	MG	DA	3040	1/1	0.77	0.14	58,58,58,58	0
54	MG	DA	3479	1/1	0.77	0.16	66,66,66,66	0
54	MG	DA	3486	1/1	0.77	0.28	44,44,44,44	0
54	MG	DA	3086	1/1	0.77	0.29	54,54,54,54	0
54	MG	AA	1603	1/1	0.78	0.11	62,62,62,62	0
54	MG	DA	3577	1/1	0.78	0.34	57,57,57,57	0
54	MG	BA	3537	1/1	0.78	0.25	66,66,66,66	0
54	MG	B3	101	1/1	0.78	0.19	54,54,54,54	0
54	MG	B6	102	1/1	0.78	0.17	69,69,69,69	0
54	MG	BA	3436	1/1	0.78	0.17	41,41,41,41	0
54	MG	DA	3175	1/1	0.78	0.35	31,31,31,31	0
54	MG	DA	3622	1/1	0.78	0.10	80,80,80,80	0
54	MG	DA	3084	1/1	0.78	0.24	45,45,45,45	0
54	MG	CA	1719	1/1	0.79	0.11	90,90,90,90	0
54	MG	DA	3145	1/1	0.79	0.13	60,60,60,60	0
54	MG	BA	3501	1/1	0.79	0.15	51,51,51,51	0
54	MG	AA	1787	1/1	0.79	0.20	54,54,54,54	0
54	MG	BA	3128	1/1	0.79	0.23	63,63,63,63	0
54	MG	DA	3182	1/1	0.79	0.16	45,45,45,45	0
54	MG	DA	3205	1/1	0.79	0.12	44,44,44,44	0
54	MG	CA	1629	1/1	0.79	0.32	81,81,81,81	0
54	MG	AA	1611	1/1	0.79	0.15	75,75,75,75	0
54	MG	BA	3447	1/1	0.79	0.09	53,53,53,53	0
54	MG	CA	1763	1/1	0.79	0.08	66,66,66,66	0
54	MG	BA	3020	1/1	0.79	0.09	69,69,69,69	0
54	MG	CA	1781	1/1	0.79	0.15	100,100,100,100	0
54	MG	BA	3285	1/1	0.79	0.29	96,96,96,96	0
54	MG	DA	3346	1/1	0.79	0.12	57,57,57,57	0
54	MG	CA	1647	1/1	0.79	0.10	103,103,103,103	0
54	MG	DA	3497	1/1	0.80	0.21	40,40,40,40	0
54	MG	DA	3503	1/1	0.80	0.12	59,59,59,59	0
54	MG	DA	3543	1/1	0.80	0.13	54,54,54,54	0
54	MG	BA	3617	1/1	0.80	0.24	44,44,44,44	0
54	MG	DA	3551	1/1	0.80	0.16	69,69,69,69	0
54	MG	BA	3557	1/1	0.80	0.14	25,25,25,25	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3375	1/1	0.80	0.14	61,61,61,61	0
54	MG	BA	3117	1/1	0.80	0.21	67,67,67,67	0
54	MG	DA	3579	1/1	0.80	0.18	52,52,52,52	0
54	MG	BA	3172	1/1	0.80	0.13	65,65,65,65	0
54	MG	BA	3716	1/1	0.80	0.17	54,54,54,54	0
54	MG	AA	1756	1/1	0.80	0.10	107,107,107,107	0
54	MG	CA	1796	1/1	0.80	0.14	85,85,85,85	0
54	MG	CA	1797	1/1	0.80	0.21	68,68,68,68	0
54	MG	DA	3013	1/1	0.80	0.26	60,60,60,60	0
54	MG	DA	3414	1/1	0.80	0.10	66,66,66,66	0
54	MG	DA	3432	1/1	0.80	0.12	67,67,67,67	0
54	MG	BA	3535	1/1	0.80	0.10	58,58,58,58	0
54	MG	DA	3038	1/1	0.80	0.21	85,85,85,85	0
54	MG	BA	3360	1/1	0.80	0.22	41,41,41,41	0
54	MG	BA	3491	1/1	0.80	0.11	72,72,72,72	0
54	MG	CA	1674	1/1	0.80	0.12	80,80,80,80	0
54	MG	DA	3255	1/1	0.80	0.08	51,51,51,51	0
54	MG	CA	1759	1/1	0.80	0.09	95,95,95,95	0
54	MG	DA	3295	1/1	0.80	0.19	58,58,58,58	0
54	MG	CA	1777	1/1	0.81	0.12	130,130,130,130	0
54	MG	BA	3328	1/1	0.81	0.13	49,49,49,49	0
54	MG	CA	1705	1/1	0.81	0.16	72,72,72,72	0
54	MG	DA	3268	1/1	0.81	0.09	54,54,54,54	0
54	MG	BA	3583	1/1	0.81	0.10	63,63,63,63	0
54	MG	AA	1779	1/1	0.81	0.17	68,68,68,68	0
54	MG	BA	3345	1/1	0.81	0.29	54,54,54,54	0
54	MG	DA	3619	1/1	0.81	0.15	57,57,57,57	0
54	MG	CA	1650	1/1	0.81	0.32	65,65,65,65	0
54	MG	DA	3136	1/1	0.81	0.70	62,62,62,62	0
54	MG	BA	3487	1/1	0.81	0.18	49,49,49,49	0
54	MG	CA	1613	1/1	0.81	0.26	68,68,68,68	0
54	MG	DB	207	1/1	0.81	0.08	82,82,82,82	0
54	MG	AA	1793	1/1	0.81	0.22	78,78,78,78	0
54	MG	DA	3348	1/1	0.81	0.14	87,87,87,87	0
54	MG	DD	303	1/1	0.81	0.14	53,53,53,53	0
54	MG	BA	3152	1/1	0.81	0.17	48,48,48,48	0
54	MG	DP	201	1/1	0.81	0.20	78,78,78,78	0
54	MG	BA	3377	1/1	0.81	0.19	44,44,44,44	0
54	MG	AA	1772	1/1	0.81	0.13	71,71,71,71	0
54	MG	CA	1639	1/1	0.81	0.84	57,57,57,57	0
54	MG	DA	3571	1/1	0.81	0.16	53,53,53,53	0
54	MG	DA	3411	1/1	0.82	0.14	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	CA	1776	1/1	0.82	0.23	76,76,76,76	0
54	MG	DA	3416	1/1	0.82	0.17	64,64,64,64	0
54	MG	BA	3205	1/1	0.82	0.12	67,67,67,67	0
54	MG	BA	3509	1/1	0.82	0.15	77,77,77,77	0
54	MG	DA	3272	1/1	0.82	0.10	69,69,69,69	0
54	MG	CA	1779	1/1	0.82	0.18	116,116,116,116	0
54	MG	B3	102	1/1	0.82	0.21	52,52,52,52	0
54	MG	BA	3685	1/1	0.82	0.30	69,69,69,69	0
54	MG	BA	3688	1/1	0.82	0.12	72,72,72,72	0
54	MG	DA	3335	1/1	0.82	0.13	68,68,68,68	0
54	MG	BA	3690	1/1	0.82	0.09	42,42,42,42	0
54	MG	AA	1757	1/1	0.82	0.22	91,91,91,91	0
54	MG	CA	1654	1/1	0.82	0.22	63,63,63,63	0
54	MG	BA	3638	1/1	0.82	0.15	82,82,82,82	0
54	MG	BA	3640	1/1	0.82	0.17	55,55,55,55	0
54	MG	BA	3653	1/1	0.82	0.12	58,58,58,58	0
54	MG	CA	1618	1/1	0.82	0.14	61,61,61,61	0
54	MG	AA	1769	1/1	0.82	0.12	69,69,69,69	0
54	MG	DA	3559	1/1	0.82	0.42	76,76,76,76	0
54	MG	BA	3130	1/1	0.82	0.13	79,79,79,79	0
54	MG	DA	3573	1/1	0.82	0.54	68,68,68,68	0
54	MG	CA	1631	1/1	0.83	0.10	87,87,87,87	0
54	MG	CA	1697	1/1	0.83	0.06	95,95,95,95	0
54	MG	CA	1635	1/1	0.83	0.43	63,63,63,63	0
54	MG	DA	3140	1/1	0.83	0.41	60,60,60,60	0
54	MG	BA	3569	1/1	0.83	0.12	67,67,67,67	0
54	MG	BA	3260	1/1	0.83	0.33	31,31,31,31	0
54	MG	DA	3149	1/1	0.83	0.42	46,46,46,46	0
54	MG	AA	1777	1/1	0.83	0.13	100,100,100,100	0
54	MG	AA	1816	1/1	0.83	0.18	75,75,75,75	0
54	MG	CA	1730	1/1	0.83	0.17	65,65,65,65	0
54	MG	BA	3382	1/1	0.83	0.22	39,39,39,39	0
54	MG	DA	3617	1/1	0.83	0.08	74,74,74,74	0
54	MG	BA	3309	1/1	0.83	0.15	69,69,69,69	0
54	MG	DA	3226	1/1	0.83	0.16	41,41,41,41	0
54	MG	BA	3704	1/1	0.83	0.18	70,70,70,70	0
54	MG	DA	3467	1/1	0.83	0.10	85,85,85,85	0
54	MG	DA	3635	1/1	0.83	0.20	54,54,54,54	0
54	MG	DA	3050	1/1	0.83	0.16	52,52,52,52	0
54	MG	DA	3065	1/1	0.83	0.25	74,74,74,74	0
54	MG	BA	3169	1/1	0.83	0.16	60,60,60,60	0
54	MG	AA	1765	1/1	0.83	0.21	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3284	1/1	0.83	0.19	70,70,70,70	0
54	MG	BA	3462	1/1	0.83	0.45	36,36,36,36	0
54	MG	BA	3076	1/1	0.83	0.39	58,58,58,58	0
54	MG	DA	3502	1/1	0.83	0.08	78,78,78,78	0
54	MG	BA	3343	1/1	0.83	0.17	48,48,48,48	0
54	MG	BD	307	1/1	0.83	0.22	65,65,65,65	0
54	MG	DA	3118	1/1	0.83	0.14	75,75,75,75	0
54	MG	BA	3248	1/1	0.83	0.26	30,30,30,30	0
54	MG	DA	3338	1/1	0.84	0.23	67,67,67,67	0
54	MG	DA	3340	1/1	0.84	0.16	72,72,72,72	0
54	MG	CA	1742	1/1	0.84	0.12	99,99,99,99	0
54	MG	DA	3179	1/1	0.84	0.24	43,43,43,43	0
54	MG	CA	1620	1/1	0.84	0.39	74,74,74,74	0
54	MG	DA	3185	1/1	0.84	0.21	47,47,47,47	0
54	MG	DA	3352	1/1	0.84	0.15	82,82,82,82	0
54	MG	AA	1652	1/1	0.84	0.19	63,63,63,63	0
54	MG	AA	1695	1/1	0.84	0.14	57,57,57,57	0
54	MG	DA	3236	1/1	0.84	0.09	40,40,40,40	0
54	MG	DA	3405	1/1	0.84	0.13	56,56,56,56	0
54	MG	BA	3120	1/1	0.84	0.09	54,54,54,54	0
54	MG	DA	3004	1/1	0.84	0.24	64,64,64,64	0
54	MG	CA	1718	1/1	0.84	0.14	76,76,76,76	0
54	MG	AA	1801	1/1	0.84	0.08	87,87,87,87	0
54	MG	DA	3032	1/1	0.84	0.33	59,59,59,59	0
54	MG	DA	3275	1/1	0.84	0.13	69,69,69,69	0
54	MG	DA	3283	1/1	0.84	0.14	51,51,51,51	0
54	MG	DA	3636	1/1	0.84	0.19	66,66,66,66	0
54	MG	CA	1764	1/1	0.84	0.13	90,90,90,90	0
54	MG	BA	3656	1/1	0.84	0.21	50,50,50,50	0
54	MG	BA	3031	1/1	0.84	0.14	66,66,66,66	0
54	MG	DA	3312	1/1	0.84	0.12	52,52,52,52	0
54	MG	DA	3315	1/1	0.84	0.07	49,49,49,49	0
54	MG	CA	1736	1/1	0.84	0.19	94,94,94,94	0
54	MG	CA	1739	1/1	0.84	0.27	76,76,76,76	0
54	MG	DA	3321	1/1	0.84	0.20	74,74,74,74	0
54	MG	DA	3326	1/1	0.84	0.17	69,69,69,69	0
54	MG	D1	101	1/1	0.84	0.09	59,59,59,59	0
54	MG	DA	3328	1/1	0.84	0.13	52,52,52,52	0
54	MG	DA	3163	1/1	0.84	0.14	39,39,39,39	0
54	MG	CA	1690	1/1	0.84	0.14	75,75,75,75	0
54	MG	DA	3451	1/1	0.85	0.10	60,60,60,60	0
54	MG	DA	3462	1/1	0.85	0.15	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	B0	103	1/1	0.85	0.15	71,71,71,71	0
54	MG	BA	3594	1/1	0.85	0.16	56,56,56,56	0
54	MG	CA	1803	1/1	0.85	0.17	55,55,55,55	0
54	MG	BA	3457	1/1	0.85	0.08	53,53,53,53	0
54	MG	DA	3244	1/1	0.85	0.19	32,32,32,32	0
54	MG	BA	3286	1/1	0.85	0.18	42,42,42,42	0
54	MG	DA	3484	1/1	0.85	0.26	34,34,34,34	0
54	MG	BA	3287	1/1	0.85	0.27	44,44,44,44	0
54	MG	AA	1613	1/1	0.85	0.34	77,77,77,77	0
54	MG	DA	3036	1/1	0.85	0.24	62,62,62,62	0
54	MG	BA	3314	1/1	0.85	0.16	39,39,39,39	0
54	MG	DA	3277	1/1	0.85	0.10	60,60,60,60	0
54	MG	DA	3508	1/1	0.85	0.24	73,73,73,73	0
54	MG	BA	3151	1/1	0.85	0.20	34,34,34,34	0
54	MG	BA	3067	1/1	0.85	0.55	55,55,55,55	0
54	MG	DA	3286	1/1	0.85	0.12	69,69,69,69	0
54	MG	AA	1698	1/1	0.85	0.20	78,78,78,78	0
54	MG	BA	3659	1/1	0.85	0.07	61,61,61,61	0
54	MG	DA	3298	1/1	0.85	0.11	51,51,51,51	0
54	MG	DA	3569	1/1	0.85	0.34	60,60,60,60	0
54	MG	BA	3336	1/1	0.85	0.16	71,71,71,71	0
54	MG	BA	3670	1/1	0.85	0.16	65,65,65,65	0
54	MG	DA	3093	1/1	0.85	0.24	55,55,55,55	0
54	MG	BA	3073	1/1	0.85	0.10	74,74,74,74	0
54	MG	AA	1762	1/1	0.85	0.30	78,78,78,78	0
54	MG	DA	3101	1/1	0.85	0.14	60,60,60,60	0
54	MG	BA	3536	1/1	0.85	0.20	54,54,54,54	0
54	MG	DA	3330	1/1	0.85	0.11	56,56,56,56	0
54	MG	CA	1632	1/1	0.85	0.32	57,57,57,57	0
54	MG	AA	1630	1/1	0.85	0.29	76,76,76,76	0
54	MG	BA	3210	1/1	0.85	0.16	58,58,58,58	0
54	MG	CA	1640	1/1	0.85	0.20	63,63,63,63	0
54	MG	DA	3134	1/1	0.85	0.22	71,71,71,71	0
54	MG	AA	1786	1/1	0.85	0.13	89,89,89,89	0
54	MG	BA	3251	1/1	0.85	0.13	24,24,24,24	0
54	MG	BA	3717	1/1	0.85	0.14	45,45,45,45	0
54	MG	DA	3143	1/1	0.85	0.25	62,62,62,62	0
54	MG	DA	3375	1/1	0.85	0.05	60,60,60,60	0
54	MG	BA	3561	1/1	0.85	0.16	46,46,46,46	0
54	MG	BA	3386	1/1	0.85	0.38	32,32,32,32	0
54	MG	CA	1653	1/1	0.85	0.15	85,85,85,85	0
54	MG	BA	3395	1/1	0.85	0.11	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DO	202	1/1	0.85	0.08	60,60,60,60	0
54	MG	BA	3432	1/1	0.85	0.20	68,68,68,68	0
54	MG	AA	1730	1/1	0.85	0.18	70,70,70,70	0
54	MG	AA	1755	1/1	0.85	0.38	76,76,76,76	0
54	MG	CA	1669	1/1	0.85	0.20	71,71,71,71	0
54	MG	BA	3034	1/1	0.85	0.20	40,40,40,40	0
54	MG	DA	3196	1/1	0.85	0.31	37,37,37,37	0
54	MG	CQ	201	1/1	0.86	0.11	76,76,76,76	0
54	MG	CA	1735	1/1	0.86	0.12	85,85,85,85	0
54	MG	BA	3267	1/1	0.86	0.18	56,56,56,56	0
54	MG	BA	3449	1/1	0.86	0.14	40,40,40,40	0
54	MG	DA	3020	1/1	0.86	0.08	66,66,66,66	0
54	MG	DA	3530	1/1	0.86	0.10	66,66,66,66	0
54	MG	DA	3166	1/1	0.86	0.15	56,56,56,56	0
54	MG	BA	3276	1/1	0.86	0.11	47,47,47,47	0
54	MG	BA	3701	1/1	0.86	0.15	34,34,34,34	0
54	MG	BA	3702	1/1	0.86	0.09	66,66,66,66	0
54	MG	BA	3281	1/1	0.86	0.12	43,43,43,43	0
54	MG	BA	3619	1/1	0.86	0.35	75,75,75,75	0
54	MG	BA	3621	1/1	0.86	0.21	35,35,35,35	0
54	MG	DA	3211	1/1	0.86	0.08	38,38,38,38	0
54	MG	DA	3572	1/1	0.86	0.13	45,45,45,45	0
54	MG	AA	1644	1/1	0.86	0.16	58,58,58,58	0
54	MG	DA	3369	1/1	0.86	0.11	85,85,85,85	0
54	MG	DA	3371	1/1	0.86	0.28	76,76,76,76	0
54	MG	BA	3467	1/1	0.86	0.13	63,63,63,63	0
54	MG	DA	3384	1/1	0.86	0.34	49,49,49,49	0
54	MG	DA	3602	1/1	0.86	0.09	53,53,53,53	0
54	MG	DA	3387	1/1	0.86	0.08	72,72,72,72	0
54	MG	DA	3089	1/1	0.86	0.29	50,50,50,50	0
54	MG	AA	1667	1/1	0.86	0.17	84,84,84,84	0
54	MG	CA	1766	1/1	0.86	0.16	65,65,65,65	0
54	MG	DA	3249	1/1	0.86	0.14	47,47,47,47	0
54	MG	BA	3129	1/1	0.86	0.07	69,69,69,69	0
54	MG	BB	213	1/1	0.86	0.11	46,46,46,46	0
54	MG	BA	3003	1/1	0.86	0.39	68,68,68,68	0
54	MG	DA	3274	1/1	0.86	0.09	51,51,51,51	0
54	MG	CA	1637	1/1	0.86	0.14	98,98,98,98	0
54	MG	CA	1707	1/1	0.86	0.40	73,73,73,73	0
54	MG	BA	3499	1/1	0.86	0.19	35,35,35,35	0
54	MG	DA	3453	1/1	0.86	0.09	49,49,49,49	0
54	MG	CA	1786	1/1	0.86	0.30	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3463	1/1	0.86	0.15	67,67,67,67	0
54	MG	CA	1787	1/1	0.86	0.20	84,84,84,84	0
54	MG	DA	3289	1/1	0.86	0.13	44,44,44,44	0
54	MG	BA	3661	1/1	0.86	0.16	40,40,40,40	0
54	MG	BA	3144	1/1	0.86	0.23	51,51,51,51	0
54	MG	DA	3137	1/1	0.86	0.25	45,45,45,45	0
54	MG	BA	3102	1/1	0.86	0.24	33,33,33,33	0
55	ZN	B4	101	1/1	0.86	0.07	117,117,117,117	0
54	MG	BA	3006	1/1	0.86	0.12	67,67,67,67	0
54	MG	AA	1721	1/1	0.86	0.12	77,77,77,77	0
54	MG	BA	3118	1/1	0.87	0.16	59,59,59,59	0
54	MG	BA	3646	1/1	0.87	0.17	38,38,38,38	0
54	MG	DA	3144	1/1	0.87	0.23	54,54,54,54	0
54	MG	BB	205	1/1	0.87	0.13	48,48,48,48	0
54	MG	DA	3324	1/1	0.87	0.24	86,86,86,86	0
54	MG	BA	3007	1/1	0.87	0.15	41,41,41,41	0
54	MG	BA	3277	1/1	0.87	0.21	32,32,32,32	0
54	MG	AA	1654	1/1	0.87	0.09	77,77,77,77	0
54	MG	BF	304	1/1	0.87	0.09	47,47,47,47	0
54	MG	DA	3027	1/1	0.87	0.19	47,47,47,47	0
54	MG	DA	3509	1/1	0.87	0.16	70,70,70,70	0
54	MG	DA	3523	1/1	0.87	0.16	73,73,73,73	0
54	MG	DA	3168	1/1	0.87	0.17	41,41,41,41	0
54	MG	DA	3028	1/1	0.87	0.12	62,62,62,62	0
54	MG	AA	1669	1/1	0.87	0.12	80,80,80,80	0
54	MG	AA	1791	1/1	0.87	0.16	68,68,68,68	0
54	MG	BA	3226	1/1	0.87	0.14	49,49,49,49	0
54	MG	B2	102	1/1	0.87	0.19	60,60,60,60	0
54	MG	DA	3351	1/1	0.87	0.14	68,68,68,68	0
54	MG	DA	3565	1/1	0.87	0.19	62,62,62,62	0
54	MG	DA	3198	1/1	0.87	0.39	52,52,52,52	0
54	MG	DA	3359	1/1	0.87	0.38	69,69,69,69	0
54	MG	BA	3238	1/1	0.87	0.09	39,39,39,39	0
54	MG	DA	3370	1/1	0.87	0.19	87,87,87,87	0
54	MG	DA	3063	1/1	0.87	0.24	47,47,47,47	0
54	MG	DA	3374	1/1	0.87	0.09	73,73,73,73	0
54	MG	DA	3583	1/1	0.87	0.47	35,35,35,35	0
54	MG	BA	3587	1/1	0.87	0.07	60,60,60,60	0
54	MG	BA	3510	1/1	0.87	0.07	77,77,77,77	0
54	MG	DA	3596	1/1	0.87	0.38	60,60,60,60	0
54	MG	DA	3598	1/1	0.87	0.16	64,64,64,64	0
54	MG	CA	1659	1/1	0.87	0.13	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3605	1/1	0.87	0.17	49,49,49,49	0
54	MG	DA	3390	1/1	0.87	0.19	73,73,73,73	0
54	MG	DA	3088	1/1	0.87	0.20	39,39,39,39	0
54	MG	B7	101	1/1	0.87	0.08	45,45,45,45	0
54	MG	DA	3399	1/1	0.87	0.18	80,80,80,80	0
54	MG	BA	3423	1/1	0.87	0.09	46,46,46,46	0
54	MG	DA	3403	1/1	0.87	0.12	56,56,56,56	0
54	MG	DA	3628	1/1	0.87	0.10	59,59,59,59	0
54	MG	DA	3629	1/1	0.87	0.10	80,80,80,80	0
54	MG	DA	3404	1/1	0.87	0.29	62,62,62,62	0
54	MG	BA	3596	1/1	0.87	0.23	59,59,59,59	0
54	MG	BA	3244	1/1	0.87	0.14	49,49,49,49	0
54	MG	BA	3317	1/1	0.87	0.16	69,69,69,69	0
54	MG	DA	3100	1/1	0.87	0.26	56,56,56,56	0
54	MG	CA	1675	1/1	0.87	0.18	75,75,75,75	0
54	MG	DA	3418	1/1	0.87	0.09	48,48,48,48	0
54	MG	BA	3606	1/1	0.87	0.10	63,63,63,63	0
54	MG	BA	3134	1/1	0.87	0.08	50,50,50,50	0
54	MG	DD	304	1/1	0.87	0.23	39,39,39,39	0
54	MG	DA	3436	1/1	0.87	0.14	77,77,77,77	0
54	MG	DA	3446	1/1	0.87	0.10	68,68,68,68	0
54	MG	CA	1782	1/1	0.87	0.21	63,63,63,63	0
54	MG	BA	3714	1/1	0.87	0.14	47,47,47,47	0
54	MG	AA	1780	1/1	0.87	0.17	72,72,72,72	0
54	MG	CA	1622	1/1	0.87	0.14	65,65,65,65	0
54	MG	D7	102	1/1	0.87	0.18	65,65,65,65	0
54	MG	AA	1676	1/1	0.87	0.18	86,86,86,86	0
54	MG	BA	3071	1/1	0.87	0.22	46,46,46,46	0
54	MG	BA	3725	1/1	0.87	0.14	57,57,57,57	0
54	MG	BA	3192	1/1	0.88	0.21	62,62,62,62	0
54	MG	DA	3039	1/1	0.88	0.21	57,57,57,57	0
54	MG	DA	3207	1/1	0.88	0.16	27,27,27,27	0
54	MG	AA	1651	1/1	0.88	0.23	62,62,62,62	0
54	MG	DA	3556	1/1	0.88	0.05	87,87,87,87	0
54	MG	BP	202	1/1	0.88	0.29	54,54,54,54	0
54	MG	BA	3296	1/1	0.88	0.19	40,40,40,40	0
54	MG	DA	3237	1/1	0.88	0.10	51,51,51,51	0
54	MG	CA	1755	1/1	0.88	0.13	79,79,79,79	0
54	MG	DA	3077	1/1	0.88	0.19	42,42,42,42	0
54	MG	CA	1756	1/1	0.88	0.09	77,77,77,77	0
54	MG	BA	3559	1/1	0.88	0.27	56,56,56,56	0
54	MG	DA	3574	1/1	0.88	0.18	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	AA	1797	1/1	0.88	0.10	106,106,106,106	0
54	MG	BA	3222	1/1	0.88	0.08	34,34,34,34	0
54	MG	DA	3581	1/1	0.88	0.15	46,46,46,46	0
54	MG	BA	3042	1/1	0.88	0.18	27,27,27,27	0
54	MG	AA	1716	1/1	0.88	0.06	62,62,62,62	0
54	MG	BA	3576	1/1	0.88	0.10	55,55,55,55	0
54	MG	CA	1768	1/1	0.88	0.33	95,95,95,95	0
54	MG	CA	1773	1/1	0.88	0.14	89,89,89,89	0
54	MG	CA	1666	1/1	0.88	0.12	71,71,71,71	0
54	MG	BA	3673	1/1	0.88	0.27	69,69,69,69	0
54	MG	BA	3242	1/1	0.88	0.08	45,45,45,45	0
54	MG	AA	1807	1/1	0.88	0.11	73,73,73,73	0
54	MG	AA	1679	1/1	0.88	0.29	58,58,58,58	0
54	MG	DA	3126	1/1	0.88	0.17	56,56,56,56	0
54	MG	BA	3689	1/1	0.88	0.17	55,55,55,55	0
54	MG	AA	1615	1/1	0.88	0.15	76,76,76,76	0
54	MG	DA	3626	1/1	0.88	0.10	75,75,75,75	0
54	MG	BA	3496	1/1	0.88	0.30	56,56,56,56	0
54	MG	BA	3252	1/1	0.88	0.13	52,52,52,52	0
54	MG	CA	1694	1/1	0.88	0.09	69,69,69,69	0
54	MG	AA	1619	1/1	0.88	0.57	45,45,45,45	0
54	MG	CA	1703	1/1	0.88	0.17	46,46,46,46	0
54	MG	BA	3709	1/1	0.88	0.12	47,47,47,47	0
54	MG	CA	1800	1/1	0.88	0.05	76,76,76,76	0
54	MG	BA	3361	1/1	0.88	0.21	30,30,30,30	0
54	MG	AA	1789	1/1	0.88	0.11	78,78,78,78	0
54	MG	AA	1622	1/1	0.88	0.16	60,60,60,60	0
54	MG	AA	1706	1/1	0.88	0.15	59,59,59,59	0
54	MG	BA	3168	1/1	0.88	0.14	68,68,68,68	0
54	MG	DA	3500	1/1	0.88	0.21	56,56,56,56	0
54	MG	BA	3529	1/1	0.88	0.26	52,52,52,52	0
54	MG	DA	3024	1/1	0.88	0.23	64,64,64,64	0
54	MG	DA	3505	1/1	0.88	0.17	66,66,66,66	0
54	MG	DA	3507	1/1	0.88	0.15	90,90,90,90	0
54	MG	BA	3623	1/1	0.88	0.18	85,85,85,85	0
54	MG	D7	101	1/1	0.88	0.66	41,41,41,41	0
54	MG	BA	3626	1/1	0.88	0.15	68,68,68,68	0
54	MG	BA	3026	1/1	0.88	0.20	50,50,50,50	0
54	MG	BA	3113	1/1	0.88	0.24	48,48,48,48	0
54	MG	DA	3533	1/1	0.88	0.07	79,79,79,79	0
54	MG	DA	3117	1/1	0.89	0.17	69,69,69,69	0
54	MG	DA	3495	1/1	0.89	0.17	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3184	1/1	0.89	0.22	37,37,37,37	0
54	MG	BA	3280	1/1	0.89	0.12	57,57,57,57	0
54	MG	CA	1783	1/1	0.89	0.26	73,73,73,73	0
54	MG	CA	1689	1/1	0.89	0.05	90,90,90,90	0
54	MG	BA	3185	1/1	0.89	0.10	44,44,44,44	0
54	MG	BA	3043	1/1	0.89	0.17	30,30,30,30	0
54	MG	DA	3135	1/1	0.89	0.17	59,59,59,59	0
54	MG	BA	3711	1/1	0.89	0.13	52,52,52,52	0
54	MG	DA	3520	1/1	0.89	0.13	74,74,74,74	0
54	MG	BA	3532	1/1	0.89	0.19	31,31,31,31	0
54	MG	BA	3715	1/1	0.89	0.16	88,88,88,88	0
54	MG	BA	3533	1/1	0.89	0.19	24,24,24,24	0
54	MG	DA	3536	1/1	0.89	0.06	76,76,76,76	0
54	MG	BA	3053	1/1	0.89	0.20	33,33,33,33	0
54	MG	CA	1801	1/1	0.89	0.09	88,88,88,88	0
54	MG	AA	1606	1/1	0.89	0.13	63,63,63,63	0
54	MG	AA	1724	1/1	0.89	0.12	93,93,93,93	0
54	MG	DA	3155	1/1	0.89	0.10	53,53,53,53	0
54	MG	BA	3016	1/1	0.89	0.16	44,44,44,44	0
54	MG	BA	3018	1/1	0.89	0.28	52,52,52,52	0
54	MG	AA	1699	1/1	0.89	0.17	65,65,65,65	0
54	MG	DA	3365	1/1	0.89	0.20	51,51,51,51	0
54	MG	BB	210	1/1	0.89	0.15	62,62,62,62	0
54	MG	BA	3136	1/1	0.89	0.17	24,24,24,24	0
54	MG	BA	3458	1/1	0.89	0.11	45,45,45,45	0
54	MG	CA	1644	1/1	0.89	0.11	63,63,63,63	0
54	MG	BA	3562	1/1	0.89	0.08	34,34,34,34	0
54	MG	BE	301	1/1	0.89	0.46	43,43,43,43	0
54	MG	BA	3327	1/1	0.89	0.07	69,69,69,69	0
54	MG	BG	201	1/1	0.89	0.13	56,56,56,56	0
54	MG	BA	3664	1/1	0.89	0.08	56,56,56,56	0
54	MG	DA	3394	1/1	0.89	0.11	59,59,59,59	0
54	MG	DA	3594	1/1	0.89	0.09	62,62,62,62	0
54	MG	CA	1757	1/1	0.89	0.16	75,75,75,75	0
54	MG	DA	3059	1/1	0.89	0.15	43,43,43,43	0
54	MG	DA	3222	1/1	0.89	0.28	37,37,37,37	0
54	MG	AA	1703	1/1	0.89	0.28	64,64,64,64	0
54	MG	BA	3329	1/1	0.89	0.14	30,30,30,30	0
54	MG	DA	3072	1/1	0.89	0.30	60,60,60,60	0
54	MG	DA	3616	1/1	0.89	0.09	63,63,63,63	0
54	MG	DA	3409	1/1	0.89	0.10	53,53,53,53	0
54	MG	DA	3076	1/1	0.89	0.36	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3029	1/1	0.89	0.18	38,38,38,38	0
54	MG	DA	3079	1/1	0.89	0.26	54,54,54,54	0
54	MG	DA	3415	1/1	0.89	0.12	53,53,53,53	0
54	MG	DA	3083	1/1	0.89	0.11	50,50,50,50	0
54	MG	BA	3077	1/1	0.89	0.21	43,43,43,43	0
54	MG	AA	1691	1/1	0.89	0.22	57,57,57,57	0
54	MG	BA	3105	1/1	0.89	0.29	44,44,44,44	0
54	MG	CA	1767	1/1	0.89	0.10	86,86,86,86	0
54	MG	DA	3090	1/1	0.89	0.13	45,45,45,45	0
54	MG	DA	3450	1/1	0.89	0.12	70,70,70,70	0
54	MG	AA	1693	1/1	0.89	0.17	72,72,72,72	0
54	MG	DA	3281	1/1	0.89	0.26	85,85,85,85	0
54	MG	CA	1771	1/1	0.89	0.21	71,71,71,71	0
54	MG	BA	3272	1/1	0.89	0.08	40,40,40,40	0
54	MG	DA	3464	1/1	0.89	0.09	35,35,35,35	0
54	MG	B9	103	1/1	0.89	0.18	52,52,52,52	0
54	MG	AA	1639	1/1	0.89	0.36	64,64,64,64	0
54	MG	DA	3472	1/1	0.89	0.20	73,73,73,73	0
54	MG	DA	3474	1/1	0.89	0.18	41,41,41,41	0
54	MG	BA	3692	1/1	0.89	0.13	38,38,38,38	0
54	MG	CA	1680	1/1	0.89	0.04	92,92,92,92	0
54	MG	DA	3297	1/1	0.89	0.12	49,49,49,49	0
54	MG	DA	3110	1/1	0.89	0.19	56,56,56,56	0
54	MG	DA	3480	1/1	0.89	0.06	57,57,57,57	0
54	MG	DA	3302	1/1	0.89	0.14	51,51,51,51	0
54	MG	DA	3309	1/1	0.89	0.21	45,45,45,45	0
54	MG	BA	3201	1/1	0.90	0.16	57,57,57,57	0
54	MG	BA	3705	1/1	0.90	0.10	57,57,57,57	0
54	MG	BA	3582	1/1	0.90	0.27	66,66,66,66	0
54	MG	BA	3301	1/1	0.90	0.11	61,61,61,61	0
54	MG	BA	3465	1/1	0.90	0.15	24,24,24,24	0
54	MG	BA	3305	1/1	0.90	0.09	67,67,67,67	0
54	MG	BA	3591	1/1	0.90	0.24	104,104,104,104	0
54	MG	AD	302	1/1	0.90	0.42	73,73,73,73	0
54	MG	AM	202	1/1	0.90	0.14	59,59,59,59	0
54	MG	BA	3220	1/1	0.90	0.32	62,62,62,62	0
54	MG	AA	1749	1/1	0.90	0.15	58,58,58,58	0
54	MG	BA	3326	1/1	0.90	0.07	46,46,46,46	0
54	MG	DA	3519	1/1	0.90	0.17	61,61,61,61	0
54	MG	BA	3612	1/1	0.90	0.26	58,58,58,58	0
54	MG	AA	1754	1/1	0.90	0.09	49,49,49,49	0
54	MG	BA	3505	1/1	0.90	0.17	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	BA	3507	1/1	0.90	0.14	67,67,67,67	0
54	MG	DA	3535	1/1	0.90	0.37	67,67,67,67	0
54	MG	CA	1663	1/1	0.90	0.14	75,75,75,75	0
54	MG	DA	3541	1/1	0.90	0.13	46,46,46,46	0
54	MG	BA	3061	1/1	0.90	0.16	44,44,44,44	0
54	MG	BA	3064	1/1	0.90	0.30	54,54,54,54	0
54	MG	DA	3550	1/1	0.90	0.19	51,51,51,51	0
54	MG	BA	3637	1/1	0.90	0.15	81,81,81,81	0
54	MG	CA	1789	1/1	0.90	0.12	66,66,66,66	0
54	MG	AA	1604	1/1	0.90	0.55	66,66,66,66	0
54	MG	BH	201	1/1	0.90	0.19	60,60,60,60	0
54	MG	DA	3148	1/1	0.90	0.12	55,55,55,55	0
54	MG	BN	201	1/1	0.90	0.12	57,57,57,57	0
54	MG	DA	3566	1/1	0.90	0.19	70,70,70,70	0
54	MG	DA	3364	1/1	0.90	0.10	54,54,54,54	0
54	MG	DA	3152	1/1	0.90	0.20	52,52,52,52	0
54	MG	BA	3639	1/1	0.90	0.13	56,56,56,56	0
54	MG	DA	3157	1/1	0.90	0.17	33,33,33,33	0
54	MG	BA	3014	1/1	0.90	0.18	61,61,61,61	0
54	MG	DA	3575	1/1	0.90	0.21	98,98,98,98	0
54	MG	BQ	205	1/1	0.90	0.15	42,42,42,42	0
54	MG	BA	3642	1/1	0.90	0.14	46,46,46,46	0
54	MG	BA	3514	1/1	0.90	0.10	29,29,29,29	0
54	MG	DA	3582	1/1	0.90	0.05	83,83,83,83	0
54	MG	BA	3141	1/1	0.90	0.12	67,67,67,67	0
54	MG	BA	3526	1/1	0.90	0.22	55,55,55,55	0
54	MG	DA	3176	1/1	0.90	0.29	37,37,37,37	0
54	MG	BA	3142	1/1	0.90	0.28	36,36,36,36	0
54	MG	DA	3015	1/1	0.90	0.12	56,56,56,56	0
54	MG	CA	1702	1/1	0.90	0.12	55,55,55,55	0
54	MG	DA	3191	1/1	0.90	0.17	56,56,56,56	0
54	MG	BA	3658	1/1	0.90	0.09	61,61,61,61	0
54	MG	DA	3026	1/1	0.90	0.29	47,47,47,47	0
54	MG	BA	3253	1/1	0.90	0.12	39,39,39,39	0
54	MG	AA	1616	1/1	0.90	0.17	55,55,55,55	0
54	MG	CA	1709	1/1	0.90	0.18	76,76,76,76	0
54	MG	DA	3216	1/1	0.90	0.10	43,43,43,43	0
54	MG	DA	3220	1/1	0.90	0.10	48,48,48,48	0
54	MG	DA	3620	1/1	0.90	0.06	65,65,65,65	0
54	MG	BA	3263	1/1	0.90	0.11	63,63,63,63	0
54	MG	CA	1605	1/1	0.90	0.14	63,63,63,63	0
54	MG	AA	1690	1/1	0.90	0.10	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3265	1/1	0.90	0.05	69,69,69,69	0
54	MG	CA	1610	1/1	0.90	0.27	67,67,67,67	0
54	MG	AA	1650	1/1	0.90	0.27	74,74,74,74	0
54	MG	DA	3060	1/1	0.90	0.09	57,57,57,57	0
54	MG	CA	1731	1/1	0.90	0.22	62,62,62,62	0
54	MG	BA	3163	1/1	0.90	0.32	30,30,30,30	0
54	MG	DA	3264	1/1	0.90	0.12	91,91,91,91	0
54	MG	DA	3454	1/1	0.90	0.19	42,42,42,42	0
54	MG	DA	3456	1/1	0.90	0.12	45,45,45,45	0
54	MG	DA	3266	1/1	0.90	0.12	40,40,40,40	0
54	MG	BA	3408	1/1	0.90	0.16	24,24,24,24	0
54	MG	DF	301	1/1	0.90	0.20	51,51,51,51	0
54	MG	DF	302	1/1	0.90	0.17	63,63,63,63	0
54	MG	DA	3075	1/1	0.90	0.13	48,48,48,48	0
54	MG	DA	3465	1/1	0.90	0.07	63,63,63,63	0
54	MG	AA	1784	1/1	0.90	0.30	63,63,63,63	0
54	MG	DP	202	1/1	0.90	0.10	53,53,53,53	0
54	MG	BA	3027	1/1	0.90	0.16	32,32,32,32	0
54	MG	BA	3099	1/1	0.90	0.26	47,47,47,47	0
54	MG	AA	1785	1/1	0.90	0.16	61,61,61,61	0
54	MG	CA	1626	1/1	0.90	0.69	86,86,86,86	0
54	MG	CA	1753	1/1	0.90	0.36	74,74,74,74	0
54	MG	D8	101	1/1	0.90	0.26	52,52,52,52	0
54	MG	BA	3030	1/1	0.90	0.26	44,44,44,44	0
54	MG	AA	1632	1/1	0.90	0.11	64,64,64,64	0
54	MG	AA	1734	1/1	0.90	0.10	50,50,50,50	0
54	MG	DA	3262	1/1	0.91	0.19	55,55,55,55	0
54	MG	DA	3263	1/1	0.91	0.10	54,54,54,54	0
54	MG	CA	1733	1/1	0.91	0.11	89,89,89,89	0
54	MG	BA	3307	1/1	0.91	0.14	46,46,46,46	0
54	MG	AA	1610	1/1	0.91	0.09	64,64,64,64	0
54	MG	CA	1737	1/1	0.91	0.23	75,75,75,75	0
54	MG	CA	1617	1/1	0.91	0.29	63,63,63,63	0
54	MG	AA	1729	1/1	0.91	0.10	55,55,55,55	0
54	MG	BA	3478	1/1	0.91	0.14	50,50,50,50	0
54	MG	BA	3084	1/1	0.91	0.17	43,43,43,43	0
54	MG	BA	3097	1/1	0.91	0.14	40,40,40,40	0
54	MG	CA	1751	1/1	0.91	0.10	89,89,89,89	0
54	MG	BA	3592	1/1	0.91	0.14	62,62,62,62	0
54	MG	DA	3496	1/1	0.91	0.24	38,38,38,38	0
54	MG	BA	3239	1/1	0.91	0.08	63,63,63,63	0
54	MG	BA	3710	1/1	0.91	0.08	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3294	1/1	0.91	0.10	67,67,67,67	0
54	MG	BA	3240	1/1	0.91	0.14	66,66,66,66	0
54	MG	BA	3145	1/1	0.91	0.17	33,33,33,33	0
54	MG	BA	3603	1/1	0.91	0.27	39,39,39,39	0
54	MG	DA	3300	1/1	0.91	0.19	29,29,29,29	0
54	MG	BA	3150	1/1	0.91	0.10	70,70,70,70	0
54	MG	BA	3331	1/1	0.91	0.11	47,47,47,47	0
54	MG	DA	3106	1/1	0.91	0.26	55,55,55,55	0
54	MG	DA	3314	1/1	0.91	0.16	31,31,31,31	0
54	MG	BA	3333	1/1	0.91	0.05	54,54,54,54	0
54	MG	CA	1642	1/1	0.91	0.59	64,64,64,64	0
54	MG	DA	3317	1/1	0.91	0.20	55,55,55,55	0
54	MG	AA	1624	1/1	0.91	0.15	49,49,49,49	0
54	MG	DA	3319	1/1	0.91	0.13	53,53,53,53	0
54	MG	BA	3618	1/1	0.91	0.09	67,67,67,67	0
54	MG	DA	3322	1/1	0.91	0.20	61,61,61,61	0
54	MG	DA	3121	1/1	0.91	0.19	62,62,62,62	0
54	MG	BA	3056	1/1	0.91	0.13	32,32,32,32	0
54	MG	BA	3155	1/1	0.91	0.13	37,37,37,37	0
54	MG	CA	1775	1/1	0.91	0.10	78,78,78,78	0
54	MG	BA	3513	1/1	0.91	0.12	46,46,46,46	0
54	MG	BA	3160	1/1	0.91	0.12	32,32,32,32	0
54	MG	BA	3627	1/1	0.91	0.12	40,40,40,40	0
54	MG	BA	3633	1/1	0.91	0.24	25,25,25,25	0
54	MG	AA	1680	1/1	0.91	0.33	54,54,54,54	0
54	MG	DA	3139	1/1	0.91	0.32	53,53,53,53	0
54	MG	BE	305	1/1	0.91	0.20	35,35,35,35	0
54	MG	AI	201	1/1	0.91	0.28	67,67,67,67	0
54	MG	CA	1661	1/1	0.91	0.16	55,55,55,55	0
54	MG	BA	3167	1/1	0.91	0.12	45,45,45,45	0
54	MG	AA	1740	1/1	0.91	0.26	70,70,70,70	0
54	MG	DA	3362	1/1	0.91	0.22	53,53,53,53	0
54	MG	DA	3363	1/1	0.91	0.13	51,51,51,51	0
54	MG	BA	3379	1/1	0.91	0.12	30,30,30,30	0
54	MG	CA	1668	1/1	0.91	0.26	65,65,65,65	0
54	MG	BN	202	1/1	0.91	0.12	57,57,57,57	0
54	MG	BA	3643	1/1	0.91	0.34	28,28,28,28	0
54	MG	BA	3534	1/1	0.91	0.09	69,69,69,69	0
54	MG	BA	3116	1/1	0.91	0.10	50,50,50,50	0
54	MG	AA	1798	1/1	0.91	0.11	67,67,67,67	0
54	MG	BT	202	1/1	0.91	0.27	52,52,52,52	0
54	MG	BV	202	1/1	0.91	0.33	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BV	204	1/1	0.91	0.09	67,67,67,67	0
54	MG	DA	3391	1/1	0.91	0.10	62,62,62,62	0
54	MG	DA	3010	1/1	0.91	0.21	48,48,48,48	0
54	MG	BZ	301	1/1	0.91	0.28	61,61,61,61	0
54	MG	BA	3174	1/1	0.91	0.24	73,73,73,73	0
54	MG	BA	3068	1/1	0.91	0.08	40,40,40,40	0
54	MG	AA	1685	1/1	0.91	0.37	57,57,57,57	0
54	MG	DA	3188	1/1	0.91	0.15	51,51,51,51	0
54	MG	DA	3190	1/1	0.91	0.14	43,43,43,43	0
54	MG	AA	1804	1/1	0.91	0.19	64,64,64,64	0
54	MG	B5	101	1/1	0.91	0.15	49,49,49,49	0
54	MG	BA	3013	1/1	0.91	0.28	24,24,24,24	0
54	MG	BA	3040	1/1	0.91	0.14	52,52,52,52	0
54	MG	DA	3412	1/1	0.91	0.13	75,75,75,75	0
54	MG	DB	201	1/1	0.91	0.12	67,67,67,67	0
54	MG	DA	3206	1/1	0.91	0.13	34,34,34,34	0
54	MG	DA	3031	1/1	0.91	0.35	46,46,46,46	0
54	MG	DA	3209	1/1	0.91	0.13	45,45,45,45	0
54	MG	BA	3206	1/1	0.91	0.14	67,67,67,67	0
54	MG	DA	3419	1/1	0.91	0.10	51,51,51,51	0
54	MG	DA	3424	1/1	0.91	0.19	49,49,49,49	0
54	MG	BA	3289	1/1	0.91	0.23	58,58,58,58	0
54	MG	BA	3567	1/1	0.91	0.16	66,66,66,66	0
54	MG	BA	3075	1/1	0.91	0.19	36,36,36,36	0
54	MG	DF	303	1/1	0.91	0.17	56,56,56,56	0
54	MG	DA	3443	1/1	0.91	0.07	51,51,51,51	0
54	MG	BA	3682	1/1	0.91	0.17	55,55,55,55	0
54	MG	DA	3447	1/1	0.91	0.19	58,58,58,58	0
54	MG	DA	3449	1/1	0.91	0.09	57,57,57,57	0
54	MG	DQ	204	1/1	0.91	0.14	67,67,67,67	0
54	MG	DA	3042	1/1	0.91	0.26	50,50,50,50	0
54	MG	CA	1724	1/1	0.91	0.15	60,60,60,60	0
54	MG	DA	3051	1/1	0.91	0.14	73,73,73,73	0
54	MG	DA	3053	1/1	0.91	0.28	28,28,28,28	0
54	MG	DA	3245	1/1	0.91	0.20	37,37,37,37	0
54	MG	CA	1609	1/1	0.91	0.55	77,77,77,77	0
54	MG	BA	3213	1/1	0.91	0.18	28,28,28,28	0
54	MG	DA	3253	1/1	0.91	0.13	58,58,58,58	0
54	MG	BA	3219	1/1	0.91	0.17	67,67,67,67	0
54	MG	CA	1752	1/1	0.92	0.11	91,91,91,91	0
54	MG	BA	3300	1/1	0.92	0.14	54,54,54,54	0
54	MG	BA	3052	1/1	0.92	0.18	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	AA	1681	1/1	0.92	0.08	44,44,44,44	0
54	MG	DA	3408	1/1	0.92	0.08	54,54,54,54	0
54	MG	CA	1601	1/1	0.92	0.18	55,55,55,55	0
54	MG	CA	1603	1/1	0.92	0.77	83,83,83,83	0
54	MG	BA	3641	1/1	0.92	0.15	47,47,47,47	0
54	MG	CA	1760	1/1	0.92	0.32	93,93,93,93	0
54	MG	AA	1665	1/1	0.92	0.20	66,66,66,66	0
54	MG	DA	3162	1/1	0.92	0.17	33,33,33,33	0
54	MG	AA	1636	1/1	0.92	0.10	49,49,49,49	0
54	MG	BA	3217	1/1	0.92	0.08	60,60,60,60	0
54	MG	CA	1765	1/1	0.92	0.09	87,87,87,87	0
54	MG	BA	3648	1/1	0.92	0.20	42,42,42,42	0
54	MG	DA	3428	1/1	0.92	0.19	36,36,36,36	0
54	MG	DA	3173	1/1	0.92	0.12	34,34,34,34	0
54	MG	BA	3315	1/1	0.92	0.19	63,63,63,63	0
54	MG	AA	1759	1/1	0.92	0.21	74,74,74,74	0
54	MG	DA	3178	1/1	0.92	0.15	42,42,42,42	0
54	MG	DA	3445	1/1	0.92	0.13	45,45,45,45	0
54	MG	AA	1760	1/1	0.92	0.27	74,74,74,74	0
54	MG	CA	1614	1/1	0.92	0.16	70,70,70,70	0
54	MG	DA	3184	1/1	0.92	0.14	33,33,33,33	0
54	MG	BA	3066	1/1	0.92	0.11	41,41,41,41	0
54	MG	BA	3522	1/1	0.92	0.23	53,53,53,53	0
54	MG	BA	3011	1/1	0.92	0.30	47,47,47,47	0
54	MG	BA	3662	1/1	0.92	0.14	26,26,26,26	0
54	MG	BA	3227	1/1	0.92	0.24	55,55,55,55	0
54	MG	BA	3530	1/1	0.92	0.06	95,95,95,95	0
54	MG	CA	1625	1/1	0.92	0.20	69,69,69,69	0
54	MG	BA	3234	1/1	0.92	0.09	61,61,61,61	0
54	MG	CA	1784	1/1	0.92	0.12	53,53,53,53	0
54	MG	BA	3671	1/1	0.92	0.31	50,50,50,50	0
54	MG	AA	1761	1/1	0.92	0.06	65,65,65,65	0
54	MG	DA	3471	1/1	0.92	0.14	41,41,41,41	0
54	MG	AA	1688	1/1	0.92	0.20	62,62,62,62	0
54	MG	DA	3217	1/1	0.92	0.07	54,54,54,54	0
54	MG	DA	3218	1/1	0.92	0.09	57,57,57,57	0
54	MG	DA	3219	1/1	0.92	0.22	32,32,32,32	0
54	MG	BA	3674	1/1	0.92	0.10	62,62,62,62	0
54	MG	CA	1634	1/1	0.92	0.10	40,40,40,40	0
54	MG	AA	1700	1/1	0.92	0.29	69,69,69,69	0
54	MG	DA	3482	1/1	0.92	0.13	69,69,69,69	0
54	MG	DA	3233	1/1	0.92	0.14	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	AA	1731	1/1	0.92	0.16	72,72,72,72	0
54	MG	BA	3683	1/1	0.92	0.23	95,95,95,95	0
54	MG	AA	1621	1/1	0.92	0.63	63,63,63,63	0
54	MG	CA	1641	1/1	0.92	0.20	62,62,62,62	0
54	MG	BA	3686	1/1	0.92	0.07	43,43,43,43	0
54	MG	BA	3540	1/1	0.92	0.07	64,64,64,64	0
54	MG	DA	3501	1/1	0.92	0.13	85,85,85,85	0
54	MG	DA	3003	1/1	0.92	0.28	34,34,34,34	0
54	MG	AA	1618	1/1	0.92	0.56	57,57,57,57	0
54	MG	BA	3546	1/1	0.92	0.12	46,46,46,46	0
54	MG	BA	3547	1/1	0.92	0.20	33,33,33,33	0
54	MG	BA	3554	1/1	0.92	0.13	41,41,41,41	0
54	MG	AA	1770	1/1	0.92	0.08	80,80,80,80	0
54	MG	DA	3513	1/1	0.92	0.19	52,52,52,52	0
54	MG	DA	3019	1/1	0.92	0.19	46,46,46,46	0
54	MG	DA	3267	1/1	0.92	0.07	34,34,34,34	0
54	MG	CA	1652	1/1	0.92	0.17	88,88,88,88	0
54	MG	DA	3524	1/1	0.92	0.09	61,61,61,61	0
54	MG	DA	3525	1/1	0.92	0.22	57,57,57,57	0
54	MG	AA	1742	1/1	0.92	0.12	78,78,78,78	0
54	MG	AA	1745	1/1	0.92	0.10	63,63,63,63	0
54	MG	BA	3256	1/1	0.92	0.14	38,38,38,38	0
54	MG	BA	3088	1/1	0.92	0.15	42,42,42,42	0
54	MG	DA	3278	1/1	0.92	0.06	71,71,71,71	0
54	MG	DA	3279	1/1	0.92	0.07	66,66,66,66	0
54	MG	DA	3545	1/1	0.92	0.06	53,53,53,53	0
54	MG	DA	3280	1/1	0.92	0.18	52,52,52,52	0
54	MG	DA	3549	1/1	0.92	0.22	39,39,39,39	0
54	MG	BA	3261	1/1	0.92	0.17	21,21,21,21	0
54	MG	BA	3091	1/1	0.92	0.24	34,34,34,34	0
54	MG	DA	3553	1/1	0.92	0.11	64,64,64,64	0
54	MG	BA	3568	1/1	0.92	0.19	35,35,35,35	0
54	MG	DA	3037	1/1	0.92	0.17	52,52,52,52	0
54	MG	AA	1707	1/1	0.92	0.20	79,79,79,79	0
54	MG	CA	1665	1/1	0.92	0.16	60,60,60,60	0
54	MG	DA	3562	1/1	0.92	0.17	65,65,65,65	0
54	MG	DA	3293	1/1	0.92	0.11	85,85,85,85	0
54	MG	BA	3570	1/1	0.92	0.12	50,50,50,50	0
54	MG	BA	3719	1/1	0.92	0.10	83,83,83,83	0
54	MG	DA	3570	1/1	0.92	0.14	63,63,63,63	0
54	MG	BA	3720	1/1	0.92	0.09	64,64,64,64	0
54	MG	BA	3721	1/1	0.92	0.41	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3722	1/1	0.92	0.12	71,71,71,71	0
54	MG	DA	3054	1/1	0.92	0.20	46,46,46,46	0
54	MG	DA	3307	1/1	0.92	0.49	79,79,79,79	0
54	MG	BA	3574	1/1	0.92	0.18	41,41,41,41	0
54	MG	BA	3724	1/1	0.92	0.11	97,97,97,97	0
54	MG	AA	1692	1/1	0.92	0.41	66,66,66,66	0
54	MG	BA	3037	1/1	0.92	0.17	33,33,33,33	0
54	MG	DA	3067	1/1	0.92	0.26	58,58,58,58	0
54	MG	BA	3431	1/1	0.92	0.21	28,28,28,28	0
54	MG	DA	3591	1/1	0.92	0.24	39,39,39,39	0
54	MG	BB	202	1/1	0.92	0.17	45,45,45,45	0
54	MG	DA	3593	1/1	0.92	0.15	58,58,58,58	0
54	MG	BA	3270	1/1	0.92	0.11	51,51,51,51	0
54	MG	BA	3103	1/1	0.92	0.40	33,33,33,33	0
54	MG	DA	3597	1/1	0.92	0.17	73,73,73,73	0
54	MG	CA	1695	1/1	0.92	0.33	76,76,76,76	0
54	MG	BA	3444	1/1	0.92	0.14	50,50,50,50	0
54	MG	DA	3325	1/1	0.92	0.11	72,72,72,72	0
54	MG	CA	1700	1/1	0.92	0.12	56,56,56,56	0
54	MG	DA	3608	1/1	0.92	0.10	74,74,74,74	0
54	MG	DA	3327	1/1	0.92	0.08	66,66,66,66	0
54	MG	BA	3104	1/1	0.92	0.26	27,27,27,27	0
54	MG	DA	3329	1/1	0.92	0.19	34,34,34,34	0
54	MG	DA	3087	1/1	0.92	0.35	52,52,52,52	0
54	MG	AA	1783	1/1	0.92	0.20	71,71,71,71	0
54	MG	BA	3279	1/1	0.92	0.22	38,38,38,38	0
54	MG	CA	1706	1/1	0.92	0.21	76,76,76,76	0
54	MG	DA	3623	1/1	0.92	0.16	42,42,42,42	0
54	MG	DA	3624	1/1	0.92	0.24	56,56,56,56	0
54	MG	BA	3454	1/1	0.92	0.12	55,55,55,55	0
54	MG	BF	301	1/1	0.92	0.14	40,40,40,40	0
54	MG	CA	1710	1/1	0.92	0.21	55,55,55,55	0
54	MG	CA	1711	1/1	0.92	0.21	55,55,55,55	0
54	MG	DA	3634	1/1	0.92	0.20	75,75,75,75	0
54	MG	BA	3595	1/1	0.92	0.09	78,78,78,78	0
54	MG	AD	303	1/1	0.92	0.13	84,84,84,84	0
54	MG	BA	3187	1/1	0.92	0.27	69,69,69,69	0
54	MG	DB	203	1/1	0.92	0.11	61,61,61,61	0
54	MG	DA	3353	1/1	0.92	0.06	79,79,79,79	0
54	MG	DA	3356	1/1	0.92	0.34	44,44,44,44	0
54	MG	BA	3284	1/1	0.92	0.21	37,37,37,37	0
54	MG	DA	3109	1/1	0.92	0.45	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	CA	1720	1/1	0.92	0.17	84,84,84,84	0
54	MG	DD	301	1/1	0.92	0.07	61,61,61,61	0
54	MG	DD	302	1/1	0.92	0.14	32,32,32,32	0
54	MG	AF	201	1/1	0.92	0.16	53,53,53,53	0
54	MG	BA	3196	1/1	0.92	0.19	52,52,52,52	0
54	MG	DA	3367	1/1	0.92	0.06	67,67,67,67	0
54	MG	DA	3119	1/1	0.92	0.17	38,38,38,38	0
54	MG	BA	3469	1/1	0.92	0.15	65,65,65,65	0
54	MG	BA	3615	1/1	0.92	0.38	60,60,60,60	0
54	MG	BA	3197	1/1	0.92	0.15	58,58,58,58	0
54	MG	BA	3044	1/1	0.92	0.25	53,53,53,53	0
54	MG	DA	3383	1/1	0.92	0.14	59,59,59,59	0
54	MG	BA	3485	1/1	0.92	0.26	31,31,31,31	0
54	MG	BA	3486	1/1	0.92	0.14	25,25,25,25	0
54	MG	DA	3389	1/1	0.92	0.08	82,82,82,82	0
54	MG	BA	3290	1/1	0.92	0.13	27,27,27,27	0
54	MG	BA	3625	1/1	0.92	0.21	52,52,52,52	0
54	MG	DA	3392	1/1	0.92	0.09	43,43,43,43	0
54	MG	BA	3490	1/1	0.92	0.24	74,74,74,74	0
54	MG	BA	3291	1/1	0.92	0.07	68,68,68,68	0
54	MG	BA	3202	1/1	0.92	0.13	67,67,67,67	0
54	MG	BA	3297	1/1	0.92	0.12	52,52,52,52	0
54	MG	BA	3636	1/1	0.93	0.19	25,25,25,25	0
54	MG	DA	3285	1/1	0.93	0.22	68,68,68,68	0
54	MG	AA	1684	1/1	0.93	0.10	43,43,43,43	0
54	MG	DA	3095	1/1	0.93	0.18	65,65,65,65	0
54	MG	BB	219	1/1	0.93	0.17	54,54,54,54	0
54	MG	BD	306	1/1	0.93	0.20	30,30,30,30	0
54	MG	AA	1628	1/1	0.93	0.35	81,81,81,81	0
54	MG	BA	3208	1/1	0.93	0.26	57,57,57,57	0
54	MG	BA	3390	1/1	0.93	0.24	33,33,33,33	0
54	MG	CA	1774	1/1	0.93	0.22	73,73,73,73	0
54	MG	AA	1817	1/1	0.93	0.32	78,78,78,78	0
54	MG	DA	3493	1/1	0.93	0.20	33,33,33,33	0
54	MG	BA	3137	1/1	0.93	0.18	45,45,45,45	0
54	MG	DA	3305	1/1	0.93	0.15	66,66,66,66	0
54	MG	BF	306	1/1	0.93	0.12	61,61,61,61	0
54	MG	AA	1614	1/1	0.93	0.20	42,42,42,42	0
54	MG	AA	1649	1/1	0.93	0.26	71,71,71,71	0
54	MG	BA	3143	1/1	0.93	0.17	23,23,23,23	0
54	MG	BA	3433	1/1	0.93	0.29	31,31,31,31	0
54	MG	AA	1664	1/1	0.93	0.12	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	AA	1678	1/1	0.93	0.43	75,75,75,75	0
54	MG	DA	3132	1/1	0.93	0.11	54,54,54,54	0
54	MG	BQ	204	1/1	0.93	0.12	46,46,46,46	0
54	MG	DA	3320	1/1	0.93	0.06	54,54,54,54	0
54	MG	DA	3512	1/1	0.93	0.08	43,43,43,43	0
54	MG	CA	1670	1/1	0.93	0.22	80,80,80,80	0
54	MG	BA	3657	1/1	0.93	0.20	91,91,91,91	0
54	MG	BA	3038	1/1	0.93	0.19	34,34,34,34	0
54	MG	DA	3521	1/1	0.93	0.13	43,43,43,43	0
54	MG	CA	1790	1/1	0.93	0.14	48,48,48,48	0
54	MG	AA	1634	1/1	0.93	0.28	58,58,58,58	0
54	MG	CA	1792	1/1	0.93	0.14	65,65,65,65	0
54	MG	BA	3235	1/1	0.93	0.15	45,45,45,45	0
54	MG	CA	1794	1/1	0.93	0.12	57,57,57,57	0
54	MG	CA	1795	1/1	0.93	0.06	66,66,66,66	0
54	MG	DA	3333	1/1	0.93	0.13	54,54,54,54	0
54	MG	DA	3538	1/1	0.93	0.15	60,60,60,60	0
54	MG	DA	3539	1/1	0.93	0.16	54,54,54,54	0
54	MG	DA	3540	1/1	0.93	0.10	48,48,48,48	0
54	MG	BA	3237	1/1	0.93	0.06	41,41,41,41	0
54	MG	BW	201	1/1	0.93	0.15	44,44,44,44	0
54	MG	CA	1798	1/1	0.93	0.27	67,67,67,67	0
54	MG	CA	1799	1/1	0.93	0.10	99,99,99,99	0
54	MG	CA	1682	1/1	0.93	0.20	60,60,60,60	0
54	MG	DA	3342	1/1	0.93	0.14	40,40,40,40	0
54	MG	BA	3302	1/1	0.93	0.22	47,47,47,47	0
54	MG	BA	3092	1/1	0.93	0.17	40,40,40,40	0
54	MG	BA	3002	1/1	0.93	0.10	60,60,60,60	0
54	MG	DA	3349	1/1	0.93	0.16	55,55,55,55	0
54	MG	DA	3001	1/1	0.93	0.12	38,38,38,38	0
54	MG	BA	3463	1/1	0.93	0.14	38,38,38,38	0
54	MG	DA	3167	1/1	0.93	0.11	30,30,30,30	0
54	MG	DA	3355	1/1	0.93	0.10	67,67,67,67	0
54	MG	BA	3308	1/1	0.93	0.06	51,51,51,51	0
54	MG	DA	3357	1/1	0.93	0.13	45,45,45,45	0
54	MG	DA	3172	1/1	0.93	0.15	30,30,30,30	0
54	MG	CA	1696	1/1	0.93	0.07	71,71,71,71	0
54	MG	DA	3011	1/1	0.93	0.16	45,45,45,45	0
54	MG	BA	3098	1/1	0.93	0.13	39,39,39,39	0
54	MG	AA	1715	1/1	0.93	0.16	61,61,61,61	0
54	MG	BA	3005	1/1	0.93	0.12	56,56,56,56	0
54	MG	AA	1641	1/1	0.93	0.18	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3479	1/1	0.93	0.10	77,77,77,77	0
54	MG	DA	3022	1/1	0.93	0.09	37,37,37,37	0
54	MG	CA	1602	1/1	0.93	0.23	70,70,70,70	0
54	MG	AA	1796	1/1	0.93	0.31	100,100,100,100	0
54	MG	DA	3380	1/1	0.93	0.09	47,47,47,47	0
54	MG	DA	3382	1/1	0.93	0.07	57,57,57,57	0
54	MG	BA	3324	1/1	0.93	0.13	48,48,48,48	0
54	MG	BA	3055	1/1	0.93	0.26	44,44,44,44	0
54	MG	DA	3030	1/1	0.93	0.43	63,63,63,63	0
54	MG	DA	3595	1/1	0.93	0.18	90,90,90,90	0
54	MG	DA	3388	1/1	0.93	0.35	73,73,73,73	0
54	MG	BA	3588	1/1	0.93	0.10	55,55,55,55	0
54	MG	BA	3589	1/1	0.93	0.15	41,41,41,41	0
54	MG	DA	3033	1/1	0.93	0.19	48,48,48,48	0
54	MG	DA	3604	1/1	0.93	0.07	72,72,72,72	0
54	MG	BA	3171	1/1	0.93	0.13	49,49,49,49	0
54	MG	BA	3107	1/1	0.93	0.22	47,47,47,47	0
54	MG	BA	3495	1/1	0.93	0.12	57,57,57,57	0
54	MG	AA	1776	1/1	0.93	0.24	68,68,68,68	0
54	MG	DA	3398	1/1	0.93	0.23	53,53,53,53	0
54	MG	BA	3112	1/1	0.93	0.19	52,52,52,52	0
54	MG	BA	3500	1/1	0.93	0.18	68,68,68,68	0
54	MG	DA	3049	1/1	0.93	0.10	49,49,49,49	0
54	MG	DA	3221	1/1	0.93	0.21	27,27,27,27	0
54	MG	AA	1717	1/1	0.93	0.18	79,79,79,79	0
54	MG	DA	3224	1/1	0.93	0.11	60,60,60,60	0
54	MG	BA	3504	1/1	0.93	0.16	53,53,53,53	0
54	MG	DA	3625	1/1	0.93	0.12	76,76,76,76	0
54	MG	DA	3227	1/1	0.93	0.07	39,39,39,39	0
54	MG	DA	3627	1/1	0.93	0.12	58,58,58,58	0
54	MG	AA	1718	1/1	0.93	0.11	59,59,59,59	0
54	MG	DA	3235	1/1	0.93	0.15	58,58,58,58	0
54	MG	BA	3188	1/1	0.93	0.15	47,47,47,47	0
54	MG	DA	3056	1/1	0.93	0.11	31,31,31,31	0
54	MG	BA	3608	1/1	0.93	0.13	21,21,21,21	0
54	MG	BA	3340	1/1	0.93	0.09	38,38,38,38	0
54	MG	BA	3718	1/1	0.93	0.11	49,49,49,49	0
54	MG	DA	3420	1/1	0.93	0.12	52,52,52,52	0
54	MG	CA	1627	1/1	0.93	0.19	72,72,72,72	0
54	MG	DA	3425	1/1	0.93	0.25	42,42,42,42	0
54	MG	DA	3066	1/1	0.93	0.21	51,51,51,51	0
54	MG	DA	3252	1/1	0.93	0.13	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	CA	1628	1/1	0.93	0.23	71,71,71,71	0
54	MG	BA	3266	1/1	0.93	0.18	66,66,66,66	0
54	MG	DA	3442	1/1	0.93	0.19	59,59,59,59	0
54	MG	DA	3073	1/1	0.93	0.18	41,41,41,41	0
54	MG	BA	3015	1/1	0.93	0.20	32,32,32,32	0
54	MG	DD	305	1/1	0.93	0.16	56,56,56,56	0
54	MG	BA	3352	1/1	0.93	0.09	37,37,37,37	0
54	MG	AA	1668	1/1	0.93	0.07	52,52,52,52	0
54	MG	AA	1696	1/1	0.93	0.22	66,66,66,66	0
54	MG	DA	3081	1/1	0.93	0.13	60,60,60,60	0
54	MG	BA	3372	1/1	0.93	0.24	32,32,32,32	0
54	MG	DA	3452	1/1	0.93	0.21	45,45,45,45	0
54	MG	BA	3624	1/1	0.93	0.28	36,36,36,36	0
54	MG	DQ	203	1/1	0.93	0.12	62,62,62,62	0
54	MG	DA	3085	1/1	0.93	0.08	60,60,60,60	0
54	MG	DT	201	1/1	0.93	0.07	52,52,52,52	0
54	MG	DT	202	1/1	0.93	0.06	62,62,62,62	0
54	MG	DA	3276	1/1	0.93	0.16	76,76,76,76	0
54	MG	DA	3458	1/1	0.93	0.15	58,58,58,58	0
54	MG	AA	1808	1/1	0.93	0.12	43,43,43,43	0
54	MG	BA	3376	1/1	0.93	0.18	37,37,37,37	0
54	MG	BA	3527	1/1	0.93	0.15	51,51,51,51	0
54	MG	BB	203	1/1	0.93	0.23	48,48,48,48	0
54	MG	BA	3629	1/1	0.93	0.24	34,34,34,34	0
54	MG	BA	3025	1/1	0.93	0.19	34,34,34,34	0
54	MG	DA	3469	1/1	0.93	0.16	56,56,56,56	0
54	MG	BA	3599	1/1	0.94	0.17	63,63,63,63	0
54	MG	BO	201	1/1	0.94	0.15	53,53,53,53	0
54	MG	BA	3108	1/1	0.94	0.13	51,51,51,51	0
54	MG	CA	1744	1/1	0.94	0.08	69,69,69,69	0
54	MG	DA	3147	1/1	0.94	0.11	52,52,52,52	0
54	MG	BA	3461	1/1	0.94	0.09	62,62,62,62	0
54	MG	CA	1747	1/1	0.94	0.15	63,63,63,63	0
54	MG	DA	3151	1/1	0.94	0.13	31,31,31,31	0
54	MG	AA	1687	1/1	0.94	0.21	79,79,79,79	0
54	MG	AA	1666	1/1	0.94	0.28	71,71,71,71	0
54	MG	BA	3046	1/1	0.94	0.15	35,35,35,35	0
54	MG	BR	205	1/1	0.94	0.12	45,45,45,45	0
54	MG	BA	3610	1/1	0.94	0.13	36,36,36,36	0
54	MG	BA	3466	1/1	0.94	0.07	78,78,78,78	0
54	MG	BA	3299	1/1	0.94	0.17	44,44,44,44	0
54	MG	BA	3207	1/1	0.94	0.08	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3047	1/1	0.94	0.13	30,30,30,30	0
54	MG	B0	101	1/1	0.94	0.30	40,40,40,40	0
54	MG	BA	3048	1/1	0.94	0.13	35,35,35,35	0
54	MG	BA	3001	1/1	0.94	0.13	45,45,45,45	0
54	MG	BA	3480	1/1	0.94	0.10	58,58,58,58	0
54	MG	BA	3481	1/1	0.94	0.21	22,22,22,22	0
54	MG	DA	3439	1/1	0.94	0.33	57,57,57,57	0
54	MG	BA	3483	1/1	0.94	0.22	31,31,31,31	0
54	MG	BA	3306	1/1	0.94	0.13	61,61,61,61	0
54	MG	BA	3214	1/1	0.94	0.07	39,39,39,39	0
54	MG	CA	1770	1/1	0.94	0.09	71,71,71,71	0
54	MG	B8	101	1/1	0.94	0.29	45,45,45,45	0
54	MG	AA	1719	1/1	0.94	0.16	66,66,66,66	0
54	MG	B9	104	1/1	0.94	0.10	52,52,52,52	0
54	MG	BA	3218	1/1	0.94	0.12	56,56,56,56	0
54	MG	DA	3193	1/1	0.94	0.08	66,66,66,66	0
54	MG	DA	3194	1/1	0.94	0.20	22,22,22,22	0
54	MG	AA	1689	1/1	0.94	0.17	56,56,56,56	0
54	MG	DA	3197	1/1	0.94	0.09	28,28,28,28	0
54	MG	BA	3492	1/1	0.94	0.11	57,57,57,57	0
54	MG	DA	3461	1/1	0.94	0.08	76,76,76,76	0
54	MG	AA	1758	1/1	0.94	0.13	48,48,48,48	0
54	MG	BA	3058	1/1	0.94	0.41	57,57,57,57	0
54	MG	BA	3318	1/1	0.94	0.08	64,64,64,64	0
54	MG	BA	3321	1/1	0.94	0.10	77,77,77,77	0
54	MG	CA	1608	1/1	0.94	0.12	54,54,54,54	0
54	MG	DA	3212	1/1	0.94	0.09	32,32,32,32	0
54	MG	DA	3213	1/1	0.94	0.10	33,33,33,33	0
54	MG	DA	3470	1/1	0.94	0.12	50,50,50,50	0
54	MG	AA	1701	1/1	0.94	0.06	68,68,68,68	0
54	MG	BA	3135	1/1	0.94	0.10	50,50,50,50	0
54	MG	CA	1611	1/1	0.94	0.18	56,56,56,56	0
54	MG	BA	3228	1/1	0.94	0.25	44,44,44,44	0
54	MG	CA	1788	1/1	0.94	0.11	51,51,51,51	0
54	MG	BA	3647	1/1	0.94	0.13	59,59,59,59	0
54	MG	BA	3229	1/1	0.94	0.14	61,61,61,61	0
54	MG	DA	3223	1/1	0.94	0.08	39,39,39,39	0
54	MG	DA	3481	1/1	0.94	0.16	51,51,51,51	0
54	MG	CA	1615	1/1	0.94	0.21	42,42,42,42	0
54	MG	BA	3650	1/1	0.94	0.13	53,53,53,53	0
54	MG	BA	3651	1/1	0.94	0.29	34,34,34,34	0
54	MG	DA	3489	1/1	0.94	0.16	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3490	1/1	0.94	0.09	60,60,60,60	0
54	MG	DA	3229	1/1	0.94	0.16	76,76,76,76	0
54	MG	DA	3231	1/1	0.94	0.10	51,51,51,51	0
54	MG	BA	3652	1/1	0.94	0.13	51,51,51,51	0
54	MG	AA	1725	1/1	0.94	0.13	62,62,62,62	0
54	MG	AA	1727	1/1	0.94	0.19	82,82,82,82	0
54	MG	DA	3498	1/1	0.94	0.23	39,39,39,39	0
54	MG	CA	1623	1/1	0.94	0.12	60,60,60,60	0
54	MG	BA	3140	1/1	0.94	0.17	44,44,44,44	0
54	MG	AA	1645	1/1	0.94	0.09	54,54,54,54	0
54	MG	AA	1704	1/1	0.94	0.07	75,75,75,75	0
54	MG	AA	1627	1/1	0.94	0.19	58,58,58,58	0
54	MG	BA	3070	1/1	0.94	0.33	39,39,39,39	0
54	MG	CE	201	1/1	0.94	0.09	78,78,78,78	0
54	MG	BA	3519	1/1	0.94	0.12	26,26,26,26	0
54	MG	BA	3341	1/1	0.94	0.16	44,44,44,44	0
54	MG	DA	3257	1/1	0.94	0.28	40,40,40,40	0
54	MG	DA	3514	1/1	0.94	0.29	92,92,92,92	0
54	MG	DA	3516	1/1	0.94	0.08	56,56,56,56	0
54	MG	DA	3517	1/1	0.94	0.15	52,52,52,52	0
54	MG	DA	3258	1/1	0.94	0.23	35,35,35,35	0
54	MG	BA	3666	1/1	0.94	0.14	78,78,78,78	0
54	MG	BA	3342	1/1	0.94	0.04	43,43,43,43	0
54	MG	DA	3006	1/1	0.94	0.18	42,42,42,42	0
54	MG	AA	1733	1/1	0.94	0.12	59,59,59,59	0
54	MG	BA	3344	1/1	0.94	0.15	41,41,41,41	0
54	MG	DA	3526	1/1	0.94	0.13	42,42,42,42	0
54	MG	BA	3146	1/1	0.94	0.23	34,34,34,34	0
54	MG	BA	3531	1/1	0.94	0.20	25,25,25,25	0
54	MG	DA	3534	1/1	0.94	0.25	53,53,53,53	0
54	MG	BA	3347	1/1	0.94	0.23	44,44,44,44	0
54	MG	DA	3016	1/1	0.94	0.09	64,64,64,64	0
54	MG	DA	3537	1/1	0.94	0.18	49,49,49,49	0
54	MG	BA	3675	1/1	0.94	0.09	48,48,48,48	0
54	MG	BA	3677	1/1	0.94	0.11	72,72,72,72	0
54	MG	BA	3147	1/1	0.94	0.23	33,33,33,33	0
54	MG	DA	3023	1/1	0.94	0.29	68,68,68,68	0
54	MG	DA	3542	1/1	0.94	0.22	65,65,65,65	0
54	MG	BA	3353	1/1	0.94	0.11	51,51,51,51	0
54	MG	AA	1607	1/1	0.94	0.11	57,57,57,57	0
54	MG	DA	3546	1/1	0.94	0.07	64,64,64,64	0
54	MG	AA	1739	1/1	0.94	0.11	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3362	1/1	0.94	0.13	30,30,30,30	0
54	MG	BA	3538	1/1	0.94	0.10	55,55,55,55	0
54	MG	CA	1651	1/1	0.94	0.10	55,55,55,55	0
54	MG	DA	3288	1/1	0.94	0.12	51,51,51,51	0
54	MG	BA	3539	1/1	0.94	0.05	58,58,58,58	0
54	MG	BA	3363	1/1	0.94	0.22	48,48,48,48	0
54	MG	BA	3541	1/1	0.94	0.19	21,21,21,21	0
54	MG	CA	1655	1/1	0.94	0.16	66,66,66,66	0
54	MG	BA	3694	1/1	0.94	0.19	21,21,21,21	0
54	MG	DA	3563	1/1	0.94	0.40	57,57,57,57	0
54	MG	DA	3296	1/1	0.94	0.27	61,61,61,61	0
54	MG	BA	3699	1/1	0.94	0.12	43,43,43,43	0
54	MG	DA	3567	1/1	0.94	0.14	57,57,57,57	0
54	MG	BA	3542	1/1	0.94	0.07	33,33,33,33	0
54	MG	BA	3369	1/1	0.94	0.11	27,27,27,27	0
54	MG	DA	3301	1/1	0.94	0.13	31,31,31,31	0
54	MG	DA	3044	1/1	0.94	0.39	55,55,55,55	0
54	MG	DA	3045	1/1	0.94	0.18	48,48,48,48	0
54	MG	DA	3306	1/1	0.94	0.11	68,68,68,68	0
54	MG	DA	3046	1/1	0.94	0.27	58,58,58,58	0
54	MG	BA	3023	1/1	0.94	0.11	43,43,43,43	0
54	MG	DA	3578	1/1	0.94	0.14	45,45,45,45	0
54	MG	DA	3310	1/1	0.94	0.30	47,47,47,47	0
54	MG	DA	3311	1/1	0.94	0.13	31,31,31,31	0
54	MG	BA	3024	1/1	0.94	0.25	44,44,44,44	0
54	MG	BA	3707	1/1	0.94	0.09	49,49,49,49	0
54	MG	BA	3549	1/1	0.94	0.15	22,22,22,22	0
54	MG	DA	3588	1/1	0.94	0.11	38,38,38,38	0
54	MG	BA	3550	1/1	0.94	0.12	50,50,50,50	0
54	MG	BA	3553	1/1	0.94	0.23	27,27,27,27	0
54	MG	BA	3712	1/1	0.94	0.14	49,49,49,49	0
54	MG	AA	1806	1/1	0.94	0.15	60,60,60,60	0
54	MG	DA	3061	1/1	0.94	0.08	45,45,45,45	0
54	MG	CA	1672	1/1	0.94	0.09	74,74,74,74	0
54	MG	DA	3064	1/1	0.94	0.29	36,36,36,36	0
54	MG	CA	1673	1/1	0.94	0.20	73,73,73,73	0
54	MG	AA	1709	1/1	0.94	0.14	57,57,57,57	0
54	MG	BA	3083	1/1	0.94	0.10	32,32,32,32	0
54	MG	DA	3068	1/1	0.94	0.16	38,38,38,38	0
54	MG	AA	1774	1/1	0.94	0.14	78,78,78,78	0
54	MG	AA	1809	1/1	0.94	0.36	79,79,79,79	0
54	MG	DA	3611	1/1	0.94	0.17	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	AA	1812	1/1	0.94	0.25	82,82,82,82	0
54	MG	DA	3331	1/1	0.94	0.12	48,48,48,48	0
54	MG	BA	3563	1/1	0.94	0.12	59,59,59,59	0
54	MG	DA	3334	1/1	0.94	0.10	45,45,45,45	0
54	MG	AA	1741	1/1	0.94	0.18	58,58,58,58	0
54	MG	BA	3397	1/1	0.94	0.14	36,36,36,36	0
54	MG	BA	3398	1/1	0.94	0.27	30,30,30,30	0
54	MG	CA	1692	1/1	0.94	0.10	64,64,64,64	0
54	MG	BA	3271	1/1	0.94	0.09	66,66,66,66	0
54	MG	BA	3419	1/1	0.94	0.15	29,29,29,29	0
54	MG	DA	3344	1/1	0.94	0.11	56,56,56,56	0
54	MG	BA	3032	1/1	0.94	0.19	25,25,25,25	0
54	MG	BA	3427	1/1	0.94	0.13	28,28,28,28	0
54	MG	CA	1699	1/1	0.94	0.29	73,73,73,73	0
54	MG	BA	3429	1/1	0.94	0.14	59,59,59,59	0
54	MG	DA	3350	1/1	0.94	0.08	40,40,40,40	0
54	MG	CA	1701	1/1	0.94	0.05	74,74,74,74	0
54	MG	BA	3578	1/1	0.94	0.10	49,49,49,49	0
54	MG	BB	204	1/1	0.94	0.10	47,47,47,47	0
54	MG	BA	3173	1/1	0.94	0.15	63,63,63,63	0
54	MG	BA	3580	1/1	0.94	0.17	49,49,49,49	0
54	MG	BA	3033	1/1	0.94	0.24	31,31,31,31	0
54	MG	DA	3358	1/1	0.94	0.07	59,59,59,59	0
54	MG	DA	3097	1/1	0.94	0.18	30,30,30,30	0
54	MG	BA	3183	1/1	0.94	0.12	37,37,37,37	0
54	MG	BB	216	1/1	0.94	0.31	59,59,59,59	0
54	MG	DA	3105	1/1	0.94	0.20	54,54,54,54	0
54	MG	BA	3584	1/1	0.94	0.15	48,48,48,48	0
54	MG	CA	1712	1/1	0.94	0.08	55,55,55,55	0
54	MG	BA	3585	1/1	0.94	0.08	65,65,65,65	0
54	MG	AA	1660	1/1	0.94	0.30	62,62,62,62	0
54	MG	DA	3112	1/1	0.94	0.19	48,48,48,48	0
54	MG	DA	3372	1/1	0.94	0.13	79,79,79,79	0
54	MG	DA	3113	1/1	0.94	0.18	56,56,56,56	0
54	MG	CA	1717	1/1	0.94	0.08	85,85,85,85	0
54	MG	DA	3376	1/1	0.94	0.13	73,73,73,73	0
54	MG	BA	3101	1/1	0.94	0.21	37,37,37,37	0
54	MG	DP	203	1/1	0.94	0.12	61,61,61,61	0
54	MG	BE	303	1/1	0.94	0.27	47,47,47,47	0
54	MG	BE	304	1/1	0.94	0.27	53,53,53,53	0
54	MG	BA	3035	1/1	0.94	0.21	23,23,23,23	0
54	MG	CA	1728	1/1	0.94	0.05	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3448	1/1	0.94	0.20	46,46,46,46	0
54	MG	AA	1620	1/1	0.94	0.37	61,61,61,61	0
54	MG	BF	305	1/1	0.94	0.45	29,29,29,29	0
54	MG	BA	3451	1/1	0.94	0.07	49,49,49,49	0
54	MG	CA	1734	1/1	0.94	0.15	79,79,79,79	0
54	MG	AA	1631	1/1	0.94	0.17	64,64,64,64	0
54	MG	D8	102	1/1	0.94	0.15	66,66,66,66	0
54	MG	AA	1782	1/1	0.94	0.14	59,59,59,59	0
54	MG	AA	1753	1/1	0.94	0.11	71,71,71,71	0
54	MG	CA	1738	1/1	0.94	0.17	52,52,52,52	0
54	MG	DA	3186	1/1	0.95	0.13	27,27,27,27	0
54	MG	BA	3090	1/1	0.95	0.32	30,30,30,30	0
54	MG	AA	1647	1/1	0.95	0.30	73,73,73,73	0
54	MG	DA	3422	1/1	0.95	0.07	71,71,71,71	0
54	MG	DA	3423	1/1	0.95	0.08	37,37,37,37	0
54	MG	CA	1621	1/1	0.95	0.23	87,87,87,87	0
54	MG	DA	3192	1/1	0.95	0.09	37,37,37,37	0
54	MG	BA	3370	1/1	0.95	0.21	23,23,23,23	0
54	MG	DA	3430	1/1	0.95	0.23	28,28,28,28	0
54	MG	BA	3371	1/1	0.95	0.25	26,26,26,26	0
54	MG	DA	3434	1/1	0.95	0.08	60,60,60,60	0
54	MG	AA	1815	1/1	0.95	0.09	72,72,72,72	0
54	MG	AA	1609	1/1	0.95	0.15	66,66,66,66	0
54	MG	DA	3438	1/1	0.95	0.09	54,54,54,54	0
54	MG	AA	1617	1/1	0.95	0.35	58,58,58,58	0
54	MG	DA	3201	1/1	0.95	0.16	29,29,29,29	0
54	MG	AA	1713	1/1	0.95	0.18	61,61,61,61	0
54	MG	DA	3444	1/1	0.95	0.12	73,73,73,73	0
54	MG	BA	3170	1/1	0.95	0.10	38,38,38,38	0
54	MG	BA	3680	1/1	0.95	0.12	37,37,37,37	0
54	MG	DA	3208	1/1	0.95	0.12	31,31,31,31	0
54	MG	BA	3381	1/1	0.95	0.12	41,41,41,41	0
54	MG	BA	3269	1/1	0.95	0.11	51,51,51,51	0
54	MG	BA	3684	1/1	0.95	0.16	64,64,64,64	0
54	MG	BA	3383	1/1	0.95	0.13	26,26,26,26	0
54	MG	DA	3215	1/1	0.95	0.09	30,30,30,30	0
54	MG	AA	1643	1/1	0.95	0.15	56,56,56,56	0
54	MG	DA	3455	1/1	0.95	0.21	34,34,34,34	0
54	MG	CA	1636	1/1	0.95	0.19	58,58,58,58	0
54	MG	BA	3687	1/1	0.95	0.09	53,53,53,53	0
54	MG	DA	3459	1/1	0.95	0.09	90,90,90,90	0
54	MG	DA	3460	1/1	0.95	0.16	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	AE	201	1/1	0.95	0.23	62,62,62,62	0
54	MG	AA	1738	1/1	0.95	0.04	62,62,62,62	0
54	MG	AA	1763	1/1	0.95	0.25	73,73,73,73	0
54	MG	BA	3691	1/1	0.95	0.11	57,57,57,57	0
54	MG	BA	3175	1/1	0.95	0.07	31,31,31,31	0
54	MG	BA	3693	1/1	0.95	0.09	36,36,36,36	0
54	MG	BA	3278	1/1	0.95	0.20	39,39,39,39	0
54	MG	BA	3695	1/1	0.95	0.12	52,52,52,52	0
54	MG	BA	3417	1/1	0.95	0.13	25,25,25,25	0
54	MG	BA	3418	1/1	0.95	0.23	28,28,28,28	0
54	MG	DA	3232	1/1	0.95	0.09	45,45,45,45	0
54	MG	AL	201	1/1	0.95	0.08	65,65,65,65	0
54	MG	BA	3420	1/1	0.95	0.15	23,23,23,23	0
54	MG	BA	3106	1/1	0.95	0.12	48,48,48,48	0
54	MG	BA	3706	1/1	0.95	0.10	44,44,44,44	0
54	MG	BA	3424	1/1	0.95	0.14	25,25,25,25	0
54	MG	DA	3241	1/1	0.95	0.19	47,47,47,47	0
54	MG	DA	3025	1/1	0.95	0.33	35,35,35,35	0
54	MG	BA	3425	1/1	0.95	0.16	38,38,38,38	0
54	MG	DA	3246	1/1	0.95	0.17	41,41,41,41	0
54	MG	DA	3485	1/1	0.95	0.14	33,33,33,33	0
54	MG	AM	201	1/1	0.95	0.27	78,78,78,78	0
54	MG	BA	3565	1/1	0.95	0.20	57,57,57,57	0
54	MG	DA	3251	1/1	0.95	0.20	41,41,41,41	0
54	MG	BA	3566	1/1	0.95	0.20	48,48,48,48	0
54	MG	BA	3283	1/1	0.95	0.16	36,36,36,36	0
54	MG	BA	3186	1/1	0.95	0.17	30,30,30,30	0
54	MG	AA	1629	1/1	0.95	0.50	59,59,59,59	0
54	MG	DA	3034	1/1	0.95	0.25	34,34,34,34	0
54	MG	DA	3261	1/1	0.95	0.13	37,37,37,37	0
54	MG	BA	3109	1/1	0.95	0.12	37,37,37,37	0
54	MG	BA	3572	1/1	0.95	0.08	44,44,44,44	0
54	MG	BA	3573	1/1	0.95	0.10	54,54,54,54	0
54	MG	BA	3110	1/1	0.95	0.14	60,60,60,60	0
54	MG	BA	3440	1/1	0.95	0.07	50,50,50,50	0
54	MG	AA	1683	1/1	0.95	0.21	69,69,69,69	0
54	MG	DA	3269	1/1	0.95	0.10	36,36,36,36	0
54	MG	DA	3271	1/1	0.95	0.05	42,42,42,42	0
54	MG	DA	3510	1/1	0.95	0.15	46,46,46,46	0
54	MG	BA	3445	1/1	0.95	0.06	60,60,60,60	0
54	MG	AA	1766	1/1	0.95	0.12	57,57,57,57	0
54	MG	AA	1602	1/1	0.95	0.19	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3581	1/1	0.95	0.12	42,42,42,42	0
54	MG	AA	1795	1/1	0.95	0.08	87,87,87,87	0
54	MG	AA	1768	1/1	0.95	0.32	79,79,79,79	0
54	MG	BA	3452	1/1	0.95	0.11	54,54,54,54	0
54	MG	CA	1684	1/1	0.95	0.27	82,82,82,82	0
54	MG	DA	3522	1/1	0.95	0.13	59,59,59,59	0
54	MG	DA	3055	1/1	0.95	0.37	25,25,25,25	0
54	MG	DA	3282	1/1	0.95	0.07	64,64,64,64	0
54	MG	BA	3298	1/1	0.95	0.23	43,43,43,43	0
54	MG	AA	1656	1/1	0.95	0.14	69,69,69,69	0
54	MG	DA	3529	1/1	0.95	0.14	65,65,65,65	0
54	MG	BB	206	1/1	0.95	0.19	34,34,34,34	0
54	MG	DA	3531	1/1	0.95	0.04	51,51,51,51	0
54	MG	CA	1691	1/1	0.95	0.17	74,74,74,74	0
54	MG	DA	3062	1/1	0.95	0.25	43,43,43,43	0
54	MG	BA	3455	1/1	0.95	0.09	41,41,41,41	0
54	MG	DA	3291	1/1	0.95	0.18	64,64,64,64	0
54	MG	AA	1743	1/1	0.95	0.15	58,58,58,58	0
54	MG	AA	1799	1/1	0.95	0.15	44,44,44,44	0
54	MG	BA	3460	1/1	0.95	0.10	51,51,51,51	0
54	MG	AA	1800	1/1	0.95	0.18	70,70,70,70	0
54	MG	BD	301	1/1	0.95	0.17	51,51,51,51	0
54	MG	DA	3069	1/1	0.95	0.10	67,67,67,67	0
54	MG	DA	3070	1/1	0.95	0.25	51,51,51,51	0
54	MG	DA	3071	1/1	0.95	0.13	39,39,39,39	0
54	MG	BD	303	1/1	0.95	0.12	33,33,33,33	0
54	MG	BD	304	1/1	0.95	0.17	19,19,19,19	0
54	MG	DA	3304	1/1	0.95	0.10	39,39,39,39	0
54	MG	DA	3074	1/1	0.95	0.17	46,46,46,46	0
54	MG	AA	1670	1/1	0.95	0.18	56,56,56,56	0
54	MG	BA	3132	1/1	0.95	0.11	45,45,45,45	0
54	MG	DA	3308	1/1	0.95	0.17	70,70,70,70	0
54	MG	DA	3555	1/1	0.95	0.44	63,63,63,63	0
54	MG	BA	3215	1/1	0.95	0.12	41,41,41,41	0
54	MG	BA	3597	1/1	0.95	0.14	36,36,36,36	0
54	MG	BA	3216	1/1	0.95	0.12	64,64,64,64	0
54	MG	DA	3561	1/1	0.95	0.12	65,65,65,65	0
54	MG	BA	3133	1/1	0.95	0.19	30,30,30,30	0
54	MG	BA	3468	1/1	0.95	0.15	63,63,63,63	0
54	MG	AA	1802	1/1	0.95	0.37	64,64,64,64	0
54	MG	BA	3470	1/1	0.95	0.11	33,33,33,33	0
54	MG	BA	3471	1/1	0.95	0.10	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3568	1/1	0.95	0.16	62,62,62,62	0
54	MG	BA	3473	1/1	0.95	0.14	54,54,54,54	0
54	MG	BA	3474	1/1	0.95	0.17	63,63,63,63	0
54	MG	BA	3614	1/1	0.95	0.34	47,47,47,47	0
54	MG	DA	3091	1/1	0.95	0.98	38,38,38,38	0
54	MG	BA	3475	1/1	0.95	0.07	45,45,45,45	0
54	MG	DA	3323	1/1	0.95	0.13	69,69,69,69	0
54	MG	BA	3476	1/1	0.95	0.14	55,55,55,55	0
54	MG	DA	3576	1/1	0.95	0.26	36,36,36,36	0
54	MG	CA	1723	1/1	0.95	0.14	66,66,66,66	0
54	MG	AA	1803	1/1	0.95	0.08	81,81,81,81	0
54	MG	CA	1725	1/1	0.95	0.20	91,91,91,91	0
54	MG	BA	3316	1/1	0.95	0.06	43,43,43,43	0
54	MG	DA	3098	1/1	0.95	0.47	52,52,52,52	0
54	MG	DA	3099	1/1	0.95	0.26	54,54,54,54	0
54	MG	DA	3585	1/1	0.95	0.29	36,36,36,36	0
54	MG	AA	1672	1/1	0.95	0.13	50,50,50,50	0
54	MG	BA	3021	1/1	0.95	0.22	67,67,67,67	0
54	MG	DA	3589	1/1	0.95	0.07	42,42,42,42	0
54	MG	DA	3103	1/1	0.95	0.32	48,48,48,48	0
54	MG	BR	201	1/1	0.95	0.42	39,39,39,39	0
54	MG	CA	1732	1/1	0.95	0.23	63,63,63,63	0
54	MG	BR	203	1/1	0.95	0.25	33,33,33,33	0
54	MG	BA	3224	1/1	0.95	0.17	28,28,28,28	0
54	MG	BA	3022	1/1	0.95	0.24	38,38,38,38	0
54	MG	DA	3111	1/1	0.95	0.18	44,44,44,44	0
54	MG	DA	3343	1/1	0.95	0.11	54,54,54,54	0
54	MG	DA	3600	1/1	0.95	0.07	33,33,33,33	0
54	MG	AA	1805	1/1	0.95	0.11	82,82,82,82	0
54	MG	DA	3603	1/1	0.95	0.14	44,44,44,44	0
54	MG	BU	201	1/1	0.95	0.24	30,30,30,30	0
54	MG	DA	3114	1/1	0.95	0.13	36,36,36,36	0
54	MG	BU	202	1/1	0.95	0.25	34,34,34,34	0
54	MG	BU	203	1/1	0.95	0.33	31,31,31,31	0
54	MG	BV	201	1/1	0.95	0.33	30,30,30,30	0
54	MG	AA	1723	1/1	0.95	0.11	82,82,82,82	0
54	MG	AA	1626	1/1	0.95	0.23	32,32,32,32	0
54	MG	BA	3230	1/1	0.95	0.24	29,29,29,29	0
54	MG	BY	202	1/1	0.95	0.15	49,49,49,49	0
54	MG	DA	3128	1/1	0.95	0.32	47,47,47,47	0
54	MG	DA	3129	1/1	0.95	0.46	38,38,38,38	0
54	MG	CA	1749	1/1	0.95	0.16	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3634	1/1	0.95	0.05	63,63,63,63	0
54	MG	DA	3133	1/1	0.95	0.39	50,50,50,50	0
54	MG	BA	3635	1/1	0.95	0.07	72,72,72,72	0
54	MG	BA	3233	1/1	0.95	0.07	53,53,53,53	0
54	MG	B0	104	1/1	0.95	0.06	49,49,49,49	0
54	MG	B1	101	1/1	0.95	0.21	40,40,40,40	0
54	MG	B2	101	1/1	0.95	0.19	46,46,46,46	0
54	MG	BA	3330	1/1	0.95	0.20	45,45,45,45	0
54	MG	BA	3494	1/1	0.95	0.14	52,52,52,52	0
54	MG	AA	1659	1/1	0.95	0.21	75,75,75,75	0
54	MG	DA	3373	1/1	0.95	0.15	58,58,58,58	0
54	MG	BA	3332	1/1	0.95	0.13	37,37,37,37	0
54	MG	AA	1705	1/1	0.95	0.08	46,46,46,46	0
54	MG	CA	1762	1/1	0.95	0.12	86,86,86,86	0
54	MG	BA	3236	1/1	0.95	0.15	27,27,27,27	0
54	MG	DA	3381	1/1	0.95	0.09	55,55,55,55	0
54	MG	BA	3080	1/1	0.95	0.22	42,42,42,42	0
54	MG	BA	3644	1/1	0.95	0.16	35,35,35,35	0
54	MG	BA	3337	1/1	0.95	0.07	27,27,27,27	0
54	MG	AA	1810	1/1	0.95	0.15	67,67,67,67	0
54	MG	DA	3156	1/1	0.95	0.22	34,34,34,34	0
54	MG	BA	3149	1/1	0.95	0.12	24,24,24,24	0
54	MG	AA	1811	1/1	0.95	0.08	65,65,65,65	0
54	MG	DA	3160	1/1	0.95	0.04	42,42,42,42	0
54	MG	BA	3085	1/1	0.95	0.23	23,23,23,23	0
54	MG	BA	3087	1/1	0.95	0.23	36,36,36,36	0
54	MG	BA	3246	1/1	0.95	0.15	46,46,46,46	0
54	MG	BA	3654	1/1	0.95	0.28	27,27,27,27	0
54	MG	BA	3153	1/1	0.95	0.14	36,36,36,36	0
54	MG	BA	3348	1/1	0.95	0.09	44,44,44,44	0
54	MG	DA	3400	1/1	0.95	0.17	41,41,41,41	0
54	MG	DA	3401	1/1	0.95	0.15	56,56,56,56	0
54	MG	DA	3170	1/1	0.95	0.27	31,31,31,31	0
54	MG	DR	201	1/1	0.95	0.30	40,40,40,40	0
54	MG	DA	3171	1/1	0.95	0.10	28,28,28,28	0
54	MG	BA	3351	1/1	0.95	0.11	49,49,49,49	0
54	MG	DW	201	1/1	0.95	0.06	63,63,63,63	0
54	MG	BA	3154	1/1	0.95	0.12	47,47,47,47	0
54	MG	CA	1780	1/1	0.95	0.11	74,74,74,74	0
54	MG	AA	1781	1/1	0.95	0.10	71,71,71,71	0
54	MG	BA	3356	1/1	0.95	0.09	55,55,55,55	0
54	MG	BA	3156	1/1	0.95	0.15	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	DA	3181	1/1	0.95	0.09	50,50,50,50	0
54	MG	BA	3158	1/1	0.95	0.23	22,22,22,22	0
54	MG	D9	102	1/1	0.95	0.17	51,51,51,51	0
54	MG	BA	3665	1/1	0.95	0.06	72,72,72,72	0
54	MG	BA	3257	1/1	0.95	0.19	21,21,21,21	0
54	MG	DA	3417	1/1	0.95	0.10	59,59,59,59	0
54	MG	BA	3523	1/1	0.96	0.14	43,43,43,43	0
54	MG	DA	3475	1/1	0.96	0.16	60,60,60,60	0
54	MG	CA	1769	1/1	0.96	0.10	58,58,58,58	0
54	MG	BA	3525	1/1	0.96	0.13	47,47,47,47	0
54	MG	BA	3727	1/1	0.96	0.17	94,94,94,94	0
54	MG	BA	3094	1/1	0.96	0.29	33,33,33,33	0
54	MG	BA	3434	1/1	0.96	0.10	56,56,56,56	0
54	MG	BA	3435	1/1	0.96	0.05	40,40,40,40	0
54	MG	CA	1638	1/1	0.96	0.59	65,65,65,65	0
54	MG	DA	3483	1/1	0.96	0.07	63,63,63,63	0
54	MG	BA	3273	1/1	0.96	0.15	60,60,60,60	0
54	MG	DA	3299	1/1	0.96	0.08	33,33,33,33	0
54	MG	BA	3274	1/1	0.96	0.13	48,48,48,48	0
54	MG	BA	3630	1/1	0.96	0.12	57,57,57,57	0
54	MG	DA	3123	1/1	0.96	0.12	48,48,48,48	0
54	MG	DA	3491	1/1	0.96	0.16	42,42,42,42	0
54	MG	DA	3492	1/1	0.96	0.17	59,59,59,59	0
54	MG	DA	3303	1/1	0.96	0.14	46,46,46,46	0
54	MG	BB	207	1/1	0.96	0.17	49,49,49,49	0
54	MG	BB	208	1/1	0.96	0.14	33,33,33,33	0
54	MG	BA	3631	1/1	0.96	0.26	35,35,35,35	0
54	MG	BA	3443	1/1	0.96	0.17	31,31,31,31	0
54	MG	BA	3335	1/1	0.96	0.24	43,43,43,43	0
54	MG	AA	1736	1/1	0.96	0.29	67,67,67,67	0
54	MG	CA	1648	1/1	0.96	0.09	72,72,72,72	0
54	MG	CA	1649	1/1	0.96	0.20	67,67,67,67	0
54	MG	BB	218	1/1	0.96	0.09	69,69,69,69	0
54	MG	BA	3446	1/1	0.96	0.14	42,42,42,42	0
54	MG	DA	3506	1/1	0.96	0.15	57,57,57,57	0
54	MG	BA	3223	1/1	0.96	0.15	24,24,24,24	0
54	MG	DA	3138	1/1	0.96	0.36	49,49,49,49	0
54	MG	BD	302	1/1	0.96	0.26	37,37,37,37	0
54	MG	BA	3339	1/1	0.96	0.16	34,34,34,34	0
54	MG	BA	3065	1/1	0.96	0.17	36,36,36,36	0
54	MG	DA	3142	1/1	0.96	0.11	48,48,48,48	0
54	MG	AA	1708	1/1	0.96	0.13	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3515	1/1	0.96	0.12	54,54,54,54	0
54	MG	BA	3100	1/1	0.96	0.20	41,41,41,41	0
54	MG	AA	1663	1/1	0.96	0.09	62,62,62,62	0
54	MG	DA	3518	1/1	0.96	0.17	53,53,53,53	0
54	MG	BE	302	1/1	0.96	0.25	29,29,29,29	0
54	MG	CA	1662	1/1	0.96	0.09	54,54,54,54	0
54	MG	AA	1673	1/1	0.96	0.05	76,76,76,76	0
54	MG	BA	3544	1/1	0.96	0.13	60,60,60,60	0
54	MG	BA	3645	1/1	0.96	0.18	59,59,59,59	0
54	MG	BE	306	1/1	0.96	0.23	24,24,24,24	0
54	MG	BA	3177	1/1	0.96	0.13	41,41,41,41	0
54	MG	BF	303	1/1	0.96	0.11	43,43,43,43	0
54	MG	BA	3231	1/1	0.96	0.19	35,35,35,35	0
54	MG	BA	3178	1/1	0.96	0.27	23,23,23,23	0
54	MG	DA	3161	1/1	0.96	0.15	47,47,47,47	0
54	MG	DA	3532	1/1	0.96	0.14	58,58,58,58	0
54	MG	BA	3459	1/1	0.96	0.24	57,57,57,57	0
54	MG	DA	3005	1/1	0.96	0.12	53,53,53,53	0
54	MG	DA	3339	1/1	0.96	0.08	53,53,53,53	0
54	MG	BA	3182	1/1	0.96	0.10	30,30,30,30	0
54	MG	DA	3165	1/1	0.96	0.14	36,36,36,36	0
54	MG	DA	3007	1/1	0.96	0.24	59,59,59,59	0
54	MG	BA	3551	1/1	0.96	0.10	60,60,60,60	0
54	MG	AA	1637	1/1	0.96	0.34	64,64,64,64	0
54	MG	DA	3345	1/1	0.96	0.15	56,56,56,56	0
54	MG	AA	1694	1/1	0.96	0.09	76,76,76,76	0
54	MG	BA	3355	1/1	0.96	0.10	51,51,51,51	0
54	MG	DA	3544	1/1	0.96	0.15	67,67,67,67	0
54	MG	BP	201	1/1	0.96	0.16	44,44,44,44	0
54	MG	BA	3039	1/1	0.96	0.14	58,58,58,58	0
54	MG	DA	3174	1/1	0.96	0.11	24,24,24,24	0
54	MG	DA	3018	1/1	0.96	0.16	54,54,54,54	0
54	MG	CA	1683	1/1	0.96	0.06	71,71,71,71	0
54	MG	BA	3359	1/1	0.96	0.32	19,19,19,19	0
54	MG	BQ	203	1/1	0.96	0.14	38,38,38,38	0
54	MG	DA	3180	1/1	0.96	0.11	29,29,29,29	0
54	MG	BA	3292	1/1	0.96	0.09	36,36,36,36	0
54	MG	BA	3293	1/1	0.96	0.11	36,36,36,36	0
54	MG	BA	3294	1/1	0.96	0.08	32,32,32,32	0
54	MG	DA	3360	1/1	0.96	0.18	36,36,36,36	0
54	MG	BA	3295	1/1	0.96	0.20	52,52,52,52	0
54	MG	BA	3364	1/1	0.96	0.18	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	AA	1638	1/1	0.96	0.20	64,64,64,64	0
54	MG	BT	201	1/1	0.96	0.14	49,49,49,49	0
54	MG	AA	1744	1/1	0.96	0.14	74,74,74,74	0
54	MG	DA	3368	1/1	0.96	0.07	56,56,56,56	0
54	MG	CA	1698	1/1	0.96	0.10	62,62,62,62	0
54	MG	BA	3668	1/1	0.96	0.08	60,60,60,60	0
54	MG	AA	1601	1/1	0.96	0.40	52,52,52,52	0
54	MG	BA	3148	1/1	0.96	0.23	21,21,21,21	0
54	MG	BA	3195	1/1	0.96	0.10	46,46,46,46	0
54	MG	AA	1697	1/1	0.96	0.16	50,50,50,50	0
54	MG	DA	3200	1/1	0.96	0.17	34,34,34,34	0
54	MG	BV	203	1/1	0.96	0.10	56,56,56,56	0
54	MG	DA	3379	1/1	0.96	0.11	69,69,69,69	0
54	MG	DA	3202	1/1	0.96	0.05	29,29,29,29	0
54	MG	DA	3204	1/1	0.96	0.13	32,32,32,32	0
54	MG	AA	1750	1/1	0.96	0.17	55,55,55,55	0
54	MG	DA	3580	1/1	0.96	0.18	39,39,39,39	0
54	MG	DA	3041	1/1	0.96	0.14	34,34,34,34	0
54	MG	BA	3303	1/1	0.96	0.14	40,40,40,40	0
54	MG	DA	3386	1/1	0.96	0.18	64,64,64,64	0
54	MG	DA	3043	1/1	0.96	0.06	64,64,64,64	0
54	MG	BA	3380	1/1	0.96	0.11	37,37,37,37	0
54	MG	BA	3676	1/1	0.96	0.20	46,46,46,46	0
54	MG	BZ	302	1/1	0.96	0.13	45,45,45,45	0
54	MG	DA	3047	1/1	0.96	0.20	52,52,52,52	0
54	MG	DA	3214	1/1	0.96	0.16	32,32,32,32	0
54	MG	DA	3048	1/1	0.96	0.14	50,50,50,50	0
54	MG	BA	3078	1/1	0.96	0.22	45,45,45,45	0
54	MG	B0	102	1/1	0.96	0.15	50,50,50,50	0
54	MG	DA	3397	1/1	0.96	0.15	59,59,59,59	0
54	MG	CA	1714	1/1	0.96	0.19	67,67,67,67	0
54	MG	DA	3052	1/1	0.96	0.13	35,35,35,35	0
54	MG	AA	1752	1/1	0.96	0.24	102,102,102,102	0
54	MG	CA	1716	1/1	0.96	0.20	49,49,49,49	0
54	MG	BA	3203	1/1	0.96	0.23	39,39,39,39	0
54	MG	BA	3254	1/1	0.96	0.12	36,36,36,36	0
54	MG	DA	3057	1/1	0.96	0.14	53,53,53,53	0
54	MG	BA	3389	1/1	0.96	0.22	30,30,30,30	0
54	MG	DA	3406	1/1	0.96	0.14	54,54,54,54	0
54	MG	DA	3610	1/1	0.96	0.10	79,79,79,79	0
54	MG	BA	3255	1/1	0.96	0.10	25,25,25,25	0
54	MG	DA	3613	1/1	0.96	0.15	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	CA	1721	1/1	0.96	0.10	53,53,53,53	0
54	MG	BA	3310	1/1	0.96	0.13	19,19,19,19	0
54	MG	BA	3493	1/1	0.96	0.11	65,65,65,65	0
54	MG	AA	1732	1/1	0.96	0.38	68,68,68,68	0
54	MG	DA	3234	1/1	0.96	0.19	52,52,52,52	0
54	MG	CA	1726	1/1	0.96	0.10	77,77,77,77	0
54	MG	BA	3586	1/1	0.96	0.18	39,39,39,39	0
54	MG	AA	1677	1/1	0.96	0.05	50,50,50,50	0
54	MG	BA	3400	1/1	0.96	0.07	39,39,39,39	0
54	MG	B9	102	1/1	0.96	0.28	29,29,29,29	0
54	MG	BA	3404	1/1	0.96	0.20	27,27,27,27	0
54	MG	BA	3259	1/1	0.96	0.12	20,20,20,20	0
54	MG	AP	101	1/1	0.96	0.10	81,81,81,81	0
54	MG	BA	3502	1/1	0.96	0.17	34,34,34,34	0
54	MG	DA	3630	1/1	0.96	0.05	76,76,76,76	0
54	MG	BA	3593	1/1	0.96	0.30	34,34,34,34	0
54	MG	DA	3250	1/1	0.96	0.35	38,38,38,38	0
54	MG	DA	3429	1/1	0.96	0.23	26,26,26,26	0
54	MG	BA	3696	1/1	0.96	0.06	38,38,38,38	0
54	MG	BA	3503	1/1	0.96	0.23	23,23,23,23	0
54	MG	AA	1720	1/1	0.96	0.10	74,74,74,74	0
54	MG	BA	3157	1/1	0.96	0.15	36,36,36,36	0
54	MG	DA	3256	1/1	0.96	0.23	57,57,57,57	0
54	MG	BA	3703	1/1	0.96	0.06	26,26,26,26	0
54	MG	CA	1743	1/1	0.96	0.15	65,65,65,65	0
54	MG	DB	209	1/1	0.96	0.13	67,67,67,67	0
54	MG	DA	3441	1/1	0.96	0.21	63,63,63,63	0
54	MG	DA	3260	1/1	0.96	0.12	57,57,57,57	0
54	MG	BA	3506	1/1	0.96	0.07	33,33,33,33	0
54	MG	BA	3028	1/1	0.96	0.15	34,34,34,34	0
54	MG	BA	3422	1/1	0.96	0.10	33,33,33,33	0
54	MG	BA	3122	1/1	0.96	0.13	46,46,46,46	0
54	MG	DE	301	1/1	0.96	0.10	29,29,29,29	0
54	MG	DE	302	1/1	0.96	0.14	37,37,37,37	0
54	MG	BA	3708	1/1	0.96	0.17	49,49,49,49	0
54	MG	DA	3448	1/1	0.96	0.28	53,53,53,53	0
54	MG	BA	3161	1/1	0.96	0.18	20,20,20,20	0
54	MG	BA	3089	1/1	0.96	0.13	32,32,32,32	0
54	MG	BA	3607	1/1	0.96	0.07	76,76,76,76	0
54	MG	DA	3270	1/1	0.96	0.17	24,24,24,24	0
54	MG	CA	1754	1/1	0.96	0.12	77,77,77,77	0
54	MG	BA	3426	1/1	0.96	0.08	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	DQ	201	1/1	0.96	0.12	52,52,52,52	0
54	MG	DA	3273	1/1	0.96	0.05	93,93,93,93	0
54	MG	BA	3713	1/1	0.96	0.10	35,35,35,35	0
54	MG	DA	3457	1/1	0.96	0.14	59,59,59,59	0
54	MG	BA	3609	1/1	0.96	0.04	37,37,37,37	0
54	MG	BA	3268	1/1	0.96	0.07	52,52,52,52	0
54	MG	BA	3611	1/1	0.96	0.06	32,32,32,32	0
54	MG	BA	3516	1/1	0.96	0.08	54,54,54,54	0
54	MG	AA	1790	1/1	0.96	0.19	63,63,63,63	0
54	MG	AA	1771	1/1	0.96	0.06	67,67,67,67	0
54	MG	BA	3616	1/1	0.96	0.18	26,26,26,26	0
54	MG	DA	3102	1/1	0.96	0.22	48,48,48,48	0
54	MG	BA	3520	1/1	0.96	0.22	29,29,29,29	0
54	MG	DA	3104	1/1	0.96	0.45	51,51,51,51	0
54	MG	BA	3521	1/1	0.96	0.17	35,35,35,35	0
55	ZN	AD	301	1/1	0.96	0.27	76,76,76,76	0
54	MG	AA	1792	1/1	0.96	0.09	51,51,51,51	0
54	MG	DA	3287	1/1	0.96	0.15	52,52,52,52	0
55	ZN	CN	101	1/1	0.96	0.08	108,108,108,108	0
54	MG	BA	3620	1/1	0.96	0.42	40,40,40,40	0
54	MG	BA	3062	1/1	0.97	0.10	32,32,32,32	0
54	MG	DA	3336	1/1	0.97	0.13	53,53,53,53	0
54	MG	DA	3504	1/1	0.97	0.12	52,52,52,52	0
54	MG	BA	3063	1/1	0.97	0.17	31,31,31,31	0
54	MG	AA	1625	1/1	0.97	0.31	42,42,42,42	0
54	MG	BA	3095	1/1	0.97	0.18	39,39,39,39	0
54	MG	DA	3183	1/1	0.97	0.14	36,36,36,36	0
54	MG	BA	3180	1/1	0.97	0.09	42,42,42,42	0
54	MG	BA	3598	1/1	0.97	0.17	34,34,34,34	0
54	MG	BA	3181	1/1	0.97	0.07	41,41,41,41	0
54	MG	BA	3391	1/1	0.97	0.21	24,24,24,24	0
54	MG	BA	3602	1/1	0.97	0.06	43,43,43,43	0
54	MG	BA	3392	1/1	0.97	0.29	29,29,29,29	0
54	MG	BA	3393	1/1	0.97	0.20	29,29,29,29	0
54	MG	BA	3096	1/1	0.97	0.21	36,36,36,36	0
54	MG	BA	3036	1/1	0.97	0.12	41,41,41,41	0
54	MG	DA	3195	1/1	0.97	0.17	33,33,33,33	0
54	MG	AA	1702	1/1	0.97	0.05	67,67,67,67	0
54	MG	BA	3399	1/1	0.97	0.13	42,42,42,42	0
54	MG	BA	3245	1/1	0.97	0.10	29,29,29,29	0
54	MG	DA	3199	1/1	0.97	0.26	29,29,29,29	0
54	MG	BA	3401	1/1	0.97	0.27	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3403	1/1	0.97	0.19	35,35,35,35	0
54	MG	BA	3138	1/1	0.97	0.06	64,64,64,64	0
54	MG	DA	3058	1/1	0.97	0.11	38,38,38,38	0
54	MG	BA	3311	1/1	0.97	0.18	34,34,34,34	0
54	MG	DA	3361	1/1	0.97	0.24	40,40,40,40	0
54	MG	BA	3409	1/1	0.97	0.14	26,26,26,26	0
54	MG	BA	3411	1/1	0.97	0.18	24,24,24,24	0
54	MG	BA	3414	1/1	0.97	0.19	23,23,23,23	0
54	MG	BA	3415	1/1	0.97	0.23	26,26,26,26	0
54	MG	DA	3366	1/1	0.97	0.22	41,41,41,41	0
54	MG	DA	3210	1/1	0.97	0.18	47,47,47,47	0
54	MG	CA	1619	1/1	0.97	0.43	56,56,56,56	0
54	MG	BA	3416	1/1	0.97	0.16	22,22,22,22	0
54	MG	BA	3247	1/1	0.97	0.12	45,45,45,45	0
54	MG	BA	3622	1/1	0.97	0.09	31,31,31,31	0
54	MG	AA	1726	1/1	0.97	0.22	75,75,75,75	0
54	MG	CA	1748	1/1	0.97	0.18	57,57,57,57	0
54	MG	AA	1773	1/1	0.97	0.19	52,52,52,52	0
54	MG	BA	3729	1/1	0.97	0.24	42,42,42,42	0
54	MG	BA	3069	1/1	0.97	0.16	42,42,42,42	0
54	MG	DA	3377	1/1	0.97	0.07	74,74,74,74	0
54	MG	DA	3548	1/1	0.97	0.11	54,54,54,54	0
54	MG	DA	3378	1/1	0.97	0.11	65,65,65,65	0
54	MG	BA	3421	1/1	0.97	0.20	34,34,34,34	0
54	MG	BA	3524	1/1	0.97	0.08	35,35,35,35	0
54	MG	BA	3628	1/1	0.97	0.17	46,46,46,46	0
54	MG	BA	3189	1/1	0.97	0.06	71,71,71,71	0
54	MG	BA	3320	1/1	0.97	0.15	42,42,42,42	0
54	MG	BA	3191	1/1	0.97	0.28	43,43,43,43	0
54	MG	DA	3557	1/1	0.97	0.38	55,55,55,55	0
54	MG	DA	3385	1/1	0.97	0.15	59,59,59,59	0
54	MG	DA	3080	1/1	0.97	0.09	48,48,48,48	0
54	MG	CA	1633	1/1	0.97	0.18	50,50,50,50	0
54	MG	DA	3082	1/1	0.97	0.12	34,34,34,34	0
54	MG	BA	3632	1/1	0.97	0.18	29,29,29,29	0
54	MG	DA	3564	1/1	0.97	0.11	61,61,61,61	0
54	MG	BB	209	1/1	0.97	0.15	45,45,45,45	0
54	MG	AA	1653	1/1	0.97	0.19	64,64,64,64	0
54	MG	BA	3323	1/1	0.97	0.11	57,57,57,57	0
54	MG	BB	212	1/1	0.97	0.08	49,49,49,49	0
54	MG	BA	3193	1/1	0.97	0.14	46,46,46,46	0
54	MG	DA	3238	1/1	0.97	0.08	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BB	215	1/1	0.97	0.11	57,57,57,57	0
54	MG	BA	3428	1/1	0.97	0.26	23,23,23,23	0
54	MG	DA	3243	1/1	0.97	0.11	32,32,32,32	0
54	MG	BA	3325	1/1	0.97	0.23	28,28,28,28	0
54	MG	BA	3430	1/1	0.97	0.22	27,27,27,27	0
54	MG	BA	3194	1/1	0.97	0.19	52,52,52,52	0
54	MG	BA	3258	1/1	0.97	0.21	18,18,18,18	0
54	MG	DA	3248	1/1	0.97	0.10	59,59,59,59	0
54	MG	AA	1661	1/1	0.97	0.18	62,62,62,62	0
54	MG	CA	1772	1/1	0.97	0.09	61,61,61,61	0
54	MG	DA	3407	1/1	0.97	0.15	51,51,51,51	0
54	MG	AA	1662	1/1	0.97	0.08	64,64,64,64	0
54	MG	AA	1778	1/1	0.97	0.11	74,74,74,74	0
54	MG	DA	3584	1/1	0.97	0.08	37,37,37,37	0
54	MG	BA	3262	1/1	0.97	0.04	51,51,51,51	0
54	MG	DA	3254	1/1	0.97	0.24	39,39,39,39	0
54	MG	BA	3200	1/1	0.97	0.16	24,24,24,24	0
54	MG	DA	3413	1/1	0.97	0.06	78,78,78,78	0
54	MG	DA	3590	1/1	0.97	0.07	59,59,59,59	0
54	MG	BA	3441	1/1	0.97	0.14	58,58,58,58	0
54	MG	BA	3045	1/1	0.97	0.18	35,35,35,35	0
54	MG	AA	1640	1/1	0.97	0.13	70,70,70,70	0
54	MG	AA	1746	1/1	0.97	0.15	63,63,63,63	0
54	MG	BA	3204	1/1	0.97	0.20	47,47,47,47	0
54	MG	AA	1612	1/1	0.97	0.15	61,61,61,61	0
54	MG	CA	1658	1/1	0.97	0.10	64,64,64,64	0
54	MG	DA	3421	1/1	0.97	0.15	44,44,44,44	0
54	MG	DA	3599	1/1	0.97	0.07	45,45,45,45	0
54	MG	AA	1657	1/1	0.97	0.24	51,51,51,51	0
54	MG	BA	3079	1/1	0.97	0.18	45,45,45,45	0
54	MG	AA	1642	1/1	0.97	0.14	53,53,53,53	0
54	MG	BA	3209	1/1	0.97	0.24	19,19,19,19	0
54	MG	BA	3054	1/1	0.97	0.13	31,31,31,31	0
54	MG	BA	3211	1/1	0.97	0.15	49,49,49,49	0
54	MG	DA	3607	1/1	0.97	0.09	65,65,65,65	0
54	MG	DA	3115	1/1	0.97	0.28	33,33,33,33	0
54	MG	DA	3609	1/1	0.97	0.10	42,42,42,42	0
54	MG	DA	3116	1/1	0.97	0.32	26,26,26,26	0
54	MG	DA	3433	1/1	0.97	0.11	34,34,34,34	0
54	MG	BA	3275	1/1	0.97	0.15	31,31,31,31	0
54	MG	BA	3660	1/1	0.97	0.05	39,39,39,39	0
54	MG	CA	1667	1/1	0.97	0.34	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	DA	3437	1/1	0.97	0.18	54,54,54,54	0
54	MG	DA	3120	1/1	0.97	0.16	47,47,47,47	0
54	MG	BA	3456	1/1	0.97	0.12	37,37,37,37	0
54	MG	BA	3212	1/1	0.97	0.07	52,52,52,52	0
54	MG	BA	3663	1/1	0.97	0.06	53,53,53,53	0
54	MG	BA	3114	1/1	0.97	0.08	39,39,39,39	0
54	MG	DA	3125	1/1	0.97	0.23	59,59,59,59	0
54	MG	BQ	202	1/1	0.97	0.22	47,47,47,47	0
54	MG	DA	3127	1/1	0.97	0.25	24,24,24,24	0
54	MG	BA	3350	1/1	0.97	0.14	28,28,28,28	0
54	MG	BA	3009	1/1	0.97	0.22	23,23,23,23	0
54	MG	BA	3667	1/1	0.97	0.12	22,22,22,22	0
54	MG	DA	3131	1/1	0.97	0.31	25,25,25,25	0
54	MG	AA	1722	1/1	0.97	0.05	48,48,48,48	0
54	MG	CA	1802	1/1	0.97	0.08	60,60,60,60	0
54	MG	DA	3290	1/1	0.97	0.12	47,47,47,47	0
54	MG	CA	1678	1/1	0.97	0.09	55,55,55,55	0
54	MG	DA	3637	1/1	0.97	0.12	63,63,63,63	0
54	MG	BR	202	1/1	0.97	0.21	35,35,35,35	0
54	MG	BA	3086	1/1	0.97	0.23	21,21,21,21	0
54	MG	DB	204	1/1	0.97	0.17	65,65,65,65	0
54	MG	BA	3159	1/1	0.97	0.20	44,44,44,44	0
54	MG	DA	3002	1/1	0.97	0.11	45,45,45,45	0
54	MG	BA	3464	1/1	0.97	0.14	28,28,28,28	0
54	MG	BS	201	1/1	0.97	0.13	63,63,63,63	0
54	MG	CA	1686	1/1	0.97	0.27	67,67,67,67	0
54	MG	CA	1687	1/1	0.97	0.18	68,68,68,68	0
54	MG	BA	3119	1/1	0.97	0.08	57,57,57,57	0
54	MG	DA	3008	1/1	0.97	0.22	44,44,44,44	0
54	MG	BA	3571	1/1	0.97	0.15	74,74,74,74	0
54	MG	DA	3146	1/1	0.97	0.24	55,55,55,55	0
54	MG	BA	3358	1/1	0.97	0.33	22,22,22,22	0
54	MG	BA	3057	1/1	0.97	0.31	29,29,29,29	0
54	MG	BA	3162	1/1	0.97	0.24	22,22,22,22	0
54	MG	DE	303	1/1	0.97	0.30	31,31,31,31	0
54	MG	BA	3221	1/1	0.97	0.17	51,51,51,51	0
54	MG	BA	3121	1/1	0.97	0.33	26,26,26,26	0
54	MG	DA	3153	1/1	0.97	0.10	32,32,32,32	0
54	MG	DF	304	1/1	0.97	0.07	41,41,41,41	0
54	MG	DF	305	1/1	0.97	0.14	74,74,74,74	0
54	MG	DA	3154	1/1	0.97	0.15	47,47,47,47	0
54	MG	DA	3017	1/1	0.97	0.11	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DO	203	1/1	0.97	0.12	75,75,75,75	0
54	MG	BA	3288	1/1	0.97	0.16	44,44,44,44	0
54	MG	DA	3313	1/1	0.97	0.12	34,34,34,34	0
54	MG	BA	3681	1/1	0.97	0.22	31,31,31,31	0
54	MG	DA	3158	1/1	0.97	0.20	49,49,49,49	0
54	MG	BA	3164	1/1	0.97	0.17	39,39,39,39	0
54	MG	DA	3021	1/1	0.97	0.20	32,32,32,32	0
54	MG	BA	3365	1/1	0.97	0.20	33,33,33,33	0
54	MG	BA	3366	1/1	0.97	0.20	36,36,36,36	0
54	MG	BA	3367	1/1	0.97	0.22	34,34,34,34	0
54	MG	BA	3012	1/1	0.97	0.17	37,37,37,37	0
54	MG	DA	3488	1/1	0.97	0.16	46,46,46,46	0
54	MG	BA	3225	1/1	0.97	0.19	19,19,19,19	0
54	MG	D5	102	1/1	0.97	0.11	44,44,44,44	0
54	MG	CA	1704	1/1	0.97	0.13	71,71,71,71	0
54	MG	BA	3123	1/1	0.97	0.21	48,48,48,48	0
54	MG	BA	3124	1/1	0.97	0.17	24,24,24,24	0
54	MG	BA	3374	1/1	0.97	0.20	27,27,27,27	0
54	MG	BA	3125	1/1	0.97	0.16	39,39,39,39	0
54	MG	BA	3126	1/1	0.97	0.17	30,30,30,30	0
54	MG	BA	3127	1/1	0.97	0.11	30,30,30,30	0
54	MG	DA	3035	1/1	0.97	0.18	43,43,43,43	0
54	MG	AA	1737	1/1	0.97	0.12	41,41,41,41	0
54	MG	B3	103	1/1	0.97	0.27	38,38,38,38	0
55	ZN	DY	201	1/1	0.97	0.05	77,77,77,77	0
54	MG	AA	1710	1/1	0.97	0.22	52,52,52,52	0
55	ZN	D5	101	1/1	0.97	0.10	53,53,53,53	0
54	MG	BA	3412	1/1	0.98	0.18	19,19,19,19	0
54	MG	BA	3697	1/1	0.98	0.18	27,27,27,27	0
54	MG	BA	3313	1/1	0.98	0.15	23,23,23,23	0
54	MG	BA	3700	1/1	0.98	0.08	41,41,41,41	0
54	MG	CA	1745	1/1	0.98	0.27	52,52,52,52	0
54	MG	BA	3179	1/1	0.98	0.34	31,31,31,31	0
54	MG	BA	3357	1/1	0.98	0.18	40,40,40,40	0
54	MG	BA	3548	1/1	0.98	0.13	32,32,32,32	0
54	MG	BA	3243	1/1	0.98	0.24	31,31,31,31	0
54	MG	DA	3239	1/1	0.98	0.12	46,46,46,46	0
54	MG	CA	1656	1/1	0.98	0.08	66,66,66,66	0
54	MG	BT	203	1/1	0.98	0.06	51,51,51,51	0
54	MG	DA	3242	1/1	0.98	0.12	36,36,36,36	0
54	MG	AA	1655	1/1	0.98	0.07	64,64,64,64	0
54	MG	AA	1735	1/1	0.98	0.44	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3552	1/1	0.98	0.13	26,26,26,26	0
54	MG	BA	3060	1/1	0.98	0.24	49,49,49,49	0
54	MG	BA	3319	1/1	0.98	0.17	26,26,26,26	0
54	MG	BA	3555	1/1	0.98	0.13	23,23,23,23	0
54	MG	DA	3354	1/1	0.98	0.15	39,39,39,39	0
54	MG	BA	3556	1/1	0.98	0.20	52,52,52,52	0
54	MG	BA	3482	1/1	0.98	0.19	21,21,21,21	0
54	MG	DA	3587	1/1	0.98	0.19	49,49,49,49	0
54	MG	DA	3468	1/1	0.98	0.06	66,66,66,66	0
54	MG	BA	3558	1/1	0.98	0.13	60,60,60,60	0
54	MG	BA	3081	1/1	0.98	0.13	38,38,38,38	0
54	MG	BA	3484	1/1	0.98	0.08	41,41,41,41	0
54	MG	BA	3282	1/1	0.98	0.18	29,29,29,29	0
54	MG	BA	3082	1/1	0.98	0.15	26,26,26,26	0
54	MG	BA	3249	1/1	0.98	0.23	20,20,20,20	0
54	MG	BA	3488	1/1	0.98	0.11	20,20,20,20	0
54	MG	BA	3489	1/1	0.98	0.04	57,57,57,57	0
54	MG	DA	3259	1/1	0.98	0.16	39,39,39,39	0
54	MG	BA	3250	1/1	0.98	0.12	39,39,39,39	0
54	MG	AA	1775	1/1	0.98	0.11	63,63,63,63	0
54	MG	CA	1676	1/1	0.98	0.06	64,64,64,64	0
54	MG	DA	3601	1/1	0.98	0.15	32,32,32,32	0
54	MG	BA	3131	1/1	0.98	0.14	28,28,28,28	0
54	MG	BA	3008	1/1	0.98	0.24	20,20,20,20	0
54	MG	DA	3265	1/1	0.98	0.16	34,34,34,34	0
54	MG	AA	1728	1/1	0.98	0.07	68,68,68,68	0
54	MG	BA	3373	1/1	0.98	0.19	46,46,46,46	0
54	MG	DA	3487	1/1	0.98	0.27	65,65,65,65	0
54	MG	AA	1682	1/1	0.98	0.23	48,48,48,48	0
54	MG	BA	3728	1/1	0.98	0.07	47,47,47,47	0
54	MG	BA	3649	1/1	0.98	0.21	30,30,30,30	0
54	MG	CA	1685	1/1	0.98	0.26	62,62,62,62	0
54	MG	DA	3612	1/1	0.98	0.36	49,49,49,49	0
54	MG	BA	3190	1/1	0.98	0.22	36,36,36,36	0
54	MG	AA	1711	1/1	0.98	0.11	35,35,35,35	0
54	MG	BA	3575	1/1	0.98	0.17	59,59,59,59	0
54	MG	AA	1747	1/1	0.98	0.07	60,60,60,60	0
54	MG	DA	3169	1/1	0.98	0.14	32,32,32,32	0
54	MG	AA	1748	1/1	0.98	0.14	57,57,57,57	0
54	MG	BA	3437	1/1	0.98	0.16	28,28,28,28	0
54	MG	DA	3621	1/1	0.98	0.12	41,41,41,41	0
54	MG	DA	3499	1/1	0.98	0.07	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BA	3438	1/1	0.98	0.14	31,31,31,31	0
54	MG	CA	1693	1/1	0.98	0.07	73,73,73,73	0
54	MG	BA	3439	1/1	0.98	0.08	30,30,30,30	0
54	MG	DA	3078	1/1	0.98	0.31	41,41,41,41	0
54	MG	AA	1814	1/1	0.98	0.13	66,66,66,66	0
54	MG	BA	3139	1/1	0.98	0.17	55,55,55,55	0
54	MG	BA	3442	1/1	0.98	0.25	24,24,24,24	0
54	MG	BA	3166	1/1	0.98	0.09	53,53,53,53	0
54	MG	BA	3049	1/1	0.98	0.21	26,26,26,26	0
54	MG	DA	3633	1/1	0.98	0.19	49,49,49,49	0
54	MG	BB	214	1/1	0.98	0.14	38,38,38,38	0
54	MG	BA	3384	1/1	0.98	0.18	29,29,29,29	0
54	MG	DA	3511	1/1	0.98	0.07	44,44,44,44	0
54	MG	DA	3396	1/1	0.98	0.14	48,48,48,48	0
54	MG	BA	3385	1/1	0.98	0.18	31,31,31,31	0
54	MG	DB	202	1/1	0.98	0.20	67,67,67,67	0
54	MG	BB	217	1/1	0.98	0.09	66,66,66,66	0
54	MG	BA	3338	1/1	0.98	0.07	49,49,49,49	0
54	MG	DA	3187	1/1	0.98	0.14	44,44,44,44	0
54	MG	BA	3515	1/1	0.98	0.10	35,35,35,35	0
54	MG	BA	3387	1/1	0.98	0.25	27,27,27,27	0
54	MG	BA	3388	1/1	0.98	0.25	20,20,20,20	0
54	MG	BA	3518	1/1	0.98	0.28	28,28,28,28	0
54	MG	BA	3450	1/1	0.98	0.13	24,24,24,24	0
54	MG	BD	305	1/1	0.98	0.06	46,46,46,46	0
54	MG	BA	3199	1/1	0.98	0.05	46,46,46,46	0
54	MG	BA	3115	1/1	0.98	0.08	35,35,35,35	0
54	MG	BA	3050	1/1	0.98	0.26	54,54,54,54	0
54	MG	BA	3093	1/1	0.98	0.13	28,28,28,28	0
54	MG	DA	3527	1/1	0.98	0.15	38,38,38,38	0
54	MG	DA	3528	1/1	0.98	0.22	36,36,36,36	0
54	MG	BA	3051	1/1	0.98	0.12	33,33,33,33	0
54	MG	BA	3394	1/1	0.98	0.10	27,27,27,27	0
54	MG	AA	1712	1/1	0.98	0.15	43,43,43,43	0
54	MG	BA	3678	1/1	0.98	0.29	47,47,47,47	0
54	MG	DA	3203	1/1	0.98	0.06	36,36,36,36	0
54	MG	BA	3601	1/1	0.98	0.17	43,43,43,43	0
54	MG	BF	302	1/1	0.98	0.46	31,31,31,31	0
54	MG	DA	3009	1/1	0.98	0.17	27,27,27,27	0
54	MG	CA	1722	1/1	0.98	0.13	58,58,58,58	0
54	MG	DA	3107	1/1	0.98	0.23	38,38,38,38	0
54	MG	BA	3396	1/1	0.98	0.15	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	BA	3017	1/1	0.98	0.17	27,27,27,27	0
54	MG	BA	3346	1/1	0.98	0.09	43,43,43,43	0
54	MG	DQ	202	1/1	0.98	0.30	39,39,39,39	0
54	MG	AA	1648	1/1	0.98	0.19	73,73,73,73	0
54	MG	CA	1727	1/1	0.98	0.25	63,63,63,63	0
54	MG	DA	3426	1/1	0.98	0.13	55,55,55,55	0
54	MG	DR	202	1/1	0.98	0.16	45,45,45,45	0
54	MG	DA	3427	1/1	0.98	0.21	24,24,24,24	0
54	MG	BA	3019	1/1	0.98	0.13	23,23,23,23	0
54	MG	BA	3349	1/1	0.98	0.15	30,30,30,30	0
54	MG	AA	1671	1/1	0.98	0.09	64,64,64,64	0
54	MG	BA	3004	1/1	0.98	0.21	53,53,53,53	0
54	MG	BA	3405	1/1	0.98	0.16	22,22,22,22	0
54	MG	BA	3406	1/1	0.98	0.21	25,25,25,25	0
54	MG	DA	3552	1/1	0.98	0.08	56,56,56,56	0
54	MG	BA	3241	1/1	0.98	0.17	56,56,56,56	0
54	MG	BA	3312	1/1	0.98	0.12	32,32,32,32	0
54	MG	BA	3410	1/1	0.98	0.27	56,56,56,56	0
54	MG	BA	3354	1/1	0.98	0.13	24,24,24,24	0
54	MG	BA	3472	1/1	0.98	0.07	34,34,34,34	0
54	MG	DA	3440	1/1	0.98	0.12	65,65,65,65	0
54	MG	DA	3225	1/1	0.98	0.11	53,53,53,53	0
54	MG	BA	3543	1/1	0.98	0.21	29,29,29,29	0
54	MG	DA	3332	1/1	0.98	0.15	28,28,28,28	0
54	MG	CA	1740	1/1	0.98	0.34	72,72,72,72	0
54	MG	DA	3228	1/1	0.98	0.13	60,60,60,60	0
55	ZN	D6	101	1/1	0.98	0.13	66,66,66,66	0
55	ZN	D9	101	1/1	0.98	0.09	68,68,68,68	0
54	MG	BA	3413	1/1	0.99	0.14	24,24,24,24	0
54	MG	DA	3631	1/1	0.99	0.06	54,54,54,54	0
54	MG	BA	3402	1/1	0.99	0.14	31,31,31,31	0
54	MG	BA	3613	1/1	0.99	0.10	50,50,50,50	0
54	MG	CA	1679	1/1	0.99	0.15	53,53,53,53	0
54	MG	BA	3304	1/1	0.99	0.15	33,33,33,33	0
54	MG	BA	3368	1/1	0.99	0.08	27,27,27,27	0
54	MG	BA	3232	1/1	0.99	0.16	24,24,24,24	0
54	MG	DA	3431	1/1	0.99	0.15	27,27,27,27	0
54	MG	DA	3189	1/1	0.99	0.13	36,36,36,36	0
54	MG	BA	3378	1/1	0.99	0.12	24,24,24,24	0
54	MG	BA	3407	1/1	0.99	0.13	24,24,24,24	0
54	MG	BA	3041	1/1	0.99	0.13	29,29,29,29	0
54	MG	BA	3198	1/1	0.99	0.20	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DA	3029	1/1	0.99	0.14	37,37,37,37	0
54	MG	BA	3508	1/1	0.99	0.10	33,33,33,33	0
54	MG	CA	1708	1/1	0.99	0.06	73,73,73,73	0
54	MG	DA	3615	1/1	0.99	0.07	67,67,67,67	0
54	MG	BA	3604	1/1	0.99	0.19	43,43,43,43	0
54	MG	AA	1751	1/1	0.99	0.26	54,54,54,54	0
54	MG	BA	3010	1/1	0.99	0.14	27,27,27,27	0
54	MG	DA	3150	1/1	0.99	0.32	29,29,29,29	0
54	MG	DA	3012	1/1	0.99	0.18	34,34,34,34	0
54	MG	DA	3560	1/1	0.99	0.12	57,57,57,57	0
55	ZN	AN	101	1/1	0.99	0.11	118,118,118,118	0
55	ZN	BY	201	1/1	0.99	0.12	54,54,54,54	0
54	MG	DA	3473	1/1	0.99	0.22	34,34,34,34	0
55	ZN	B5	102	1/1	0.99	0.14	42,42,42,42	0
55	ZN	B6	101	1/1	0.99	0.13	42,42,42,42	0
55	ZN	B9	101	1/1	0.99	0.09	49,49,49,49	0
54	MG	BA	3176	1/1	0.99	0.10	27,27,27,27	0
54	MG	DA	3177	1/1	0.99	0.19	32,32,32,32	0
54	MG	DA	3230	1/1	0.99	0.09	31,31,31,31	0
54	MG	BA	3698	1/1	0.99	0.22	24,24,24,24	0
54	MG	BA	3497	1/1	0.99	0.16	29,29,29,29	0
54	MG	BA	3528	1/1	0.99	0.25	27,27,27,27	0
54	MG	BA	3498	1/1	0.99	0.13	45,45,45,45	0

## 6.5 Other polymers [i](#)

There are no such residues in this entry.