



wwPDB X-ray Structure Validation Summary Report ⓘ

Jan 4, 2024 – 11:06 pm GMT

PDB ID : 4V51
Title : Structure of the *Thermus thermophilus* 70S ribosome complexed with mRNA, tRNA and paromomycin
Authors : Selmer, M.; Dunham, C.M.; Murphy, F.V.; Weixlbaumer, A.; Petry, S.; Weir, J.R.; Kelley, A.C.; Ramakrishnan, V.
Deposited on : 2006-07-31
Resolution : 2.80 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

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>.

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

MolProbity : 4.02b-467
Mogul : 1.8.4, CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.36
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36

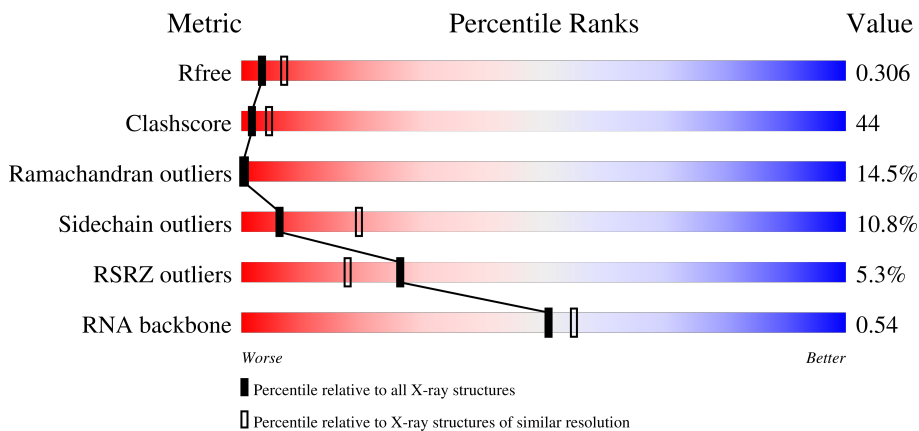
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.80 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	3140 (2.80-2.80)
Clashscore	141614	3569 (2.80-2.80)
Ramachandran outliers	138981	3498 (2.80-2.80)
Sidechain outliers	138945	3500 (2.80-2.80)
RSRZ outliers	127900	3078 (2.80-2.80)
RNA backbone	3102	1227 (3.10-2.50)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. 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	 2% 24% 62% 11% ..
1	CA	1522	 2% 23% 64% 11% ..
2	AB	256	 11% 21% 54% 15% 8%


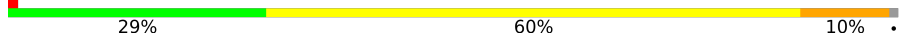

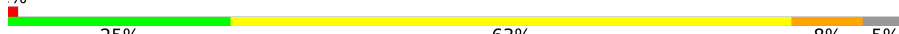
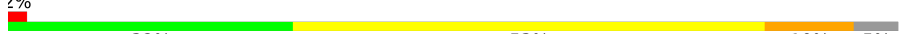

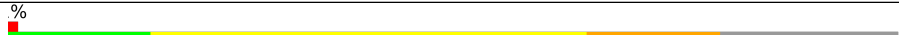
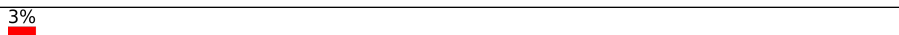
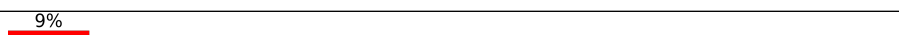
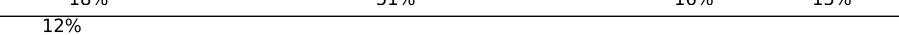
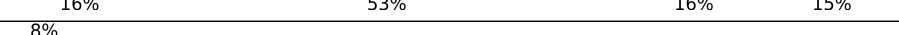
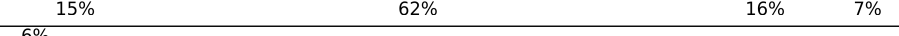
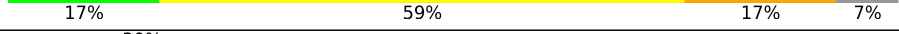


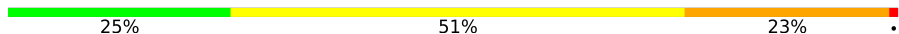

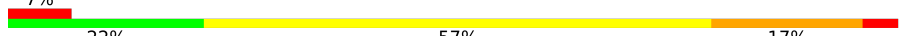







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Mol	Chain	Length	Quality of chain
2	CB	256	11% 21% 54% 15% 8%
3	AC	239	3% 28% 49% 8% 13%
3	CC	239	5% 29% 48% 8% 13%
4	AD	209	27% 56% 16%
4	CD	209	2% 27% 56% 16%
5	AE	162	20% 60% 13% 7%
5	CE	162	25% 56% 12% 7%
6	AF	101	3% 33% 58% 8%
6	CF	101	2% 34% 58% 7%
7	AG	156	8% 32% 60% 8%
7	CG	156	15% 33% 59% 7%
8	AH	138	2% 38% 57% 5%
8	CH	138	3% 38% 57%
9	AI	128	12% 20% 66% 13% ..
9	CI	128	16% 22% 62% 14% ..
10	AJ	105	16% 26% 56% 12% 6%
10	CJ	105	21% 28% 54% 12% 6%
11	AK	129	2% 31% 56% 5% 8%
11	CK	129	5% 33% 55% .. 8%
12	AL	135	3% 31% 47% 14% 7%
12	CL	135	3% 30% 50% 13% 7%
13	AM	126	12% 19% 63% 17%
13	CM	126	12% 19% 63% 17%
14	AN	61	10% 26% 61% 11%
14	CN	61	7% 28% 61% 10%

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Mol	Chain	Length	Quality of chain
15	AO	89	
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	AV	77	
22	CV	77	
23	AW	76	
23	AY	76	
23	CW	76	
23	CY	76	
24	AX	24	
24	CX	24	
25	B0	85	
25	D0	85	
26	B1	98	

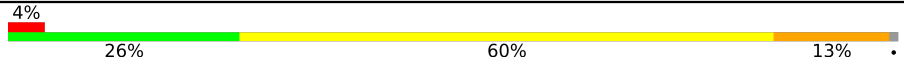

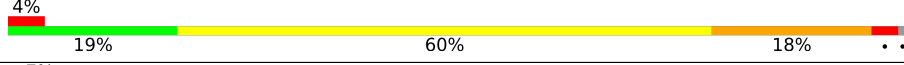
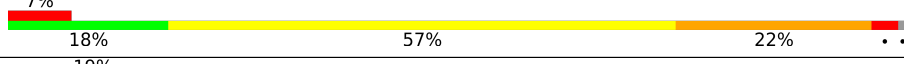
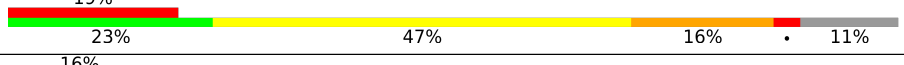
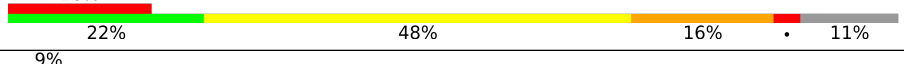
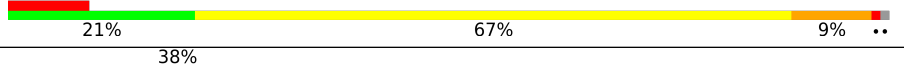
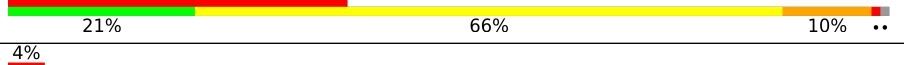
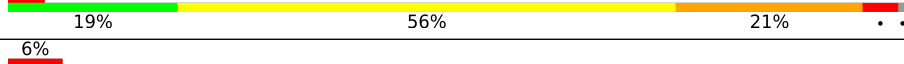
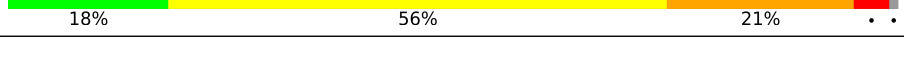

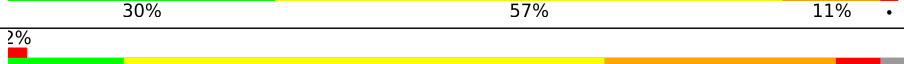
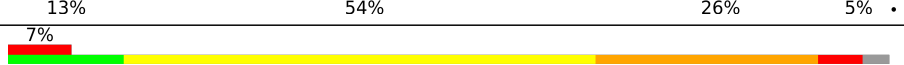
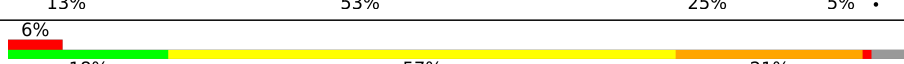
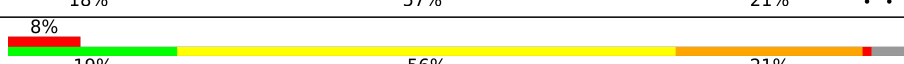
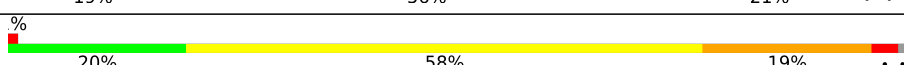
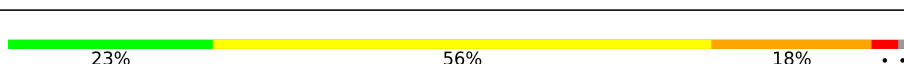
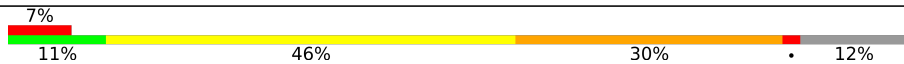
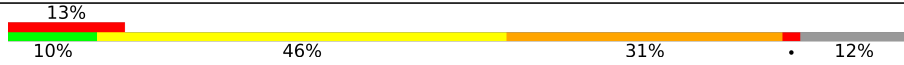


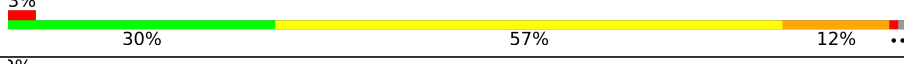

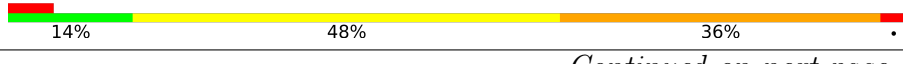

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Mol	Chain	Length	Quality of chain
26	D1	98	
27	B2	72	
27	D2	72	
28	B3	60	
28	D3	60	
29	B4	71	
29	D4	71	
30	B5	60	
30	D5	60	
31	B6	54	
31	D6	54	
32	B7	49	
32	D7	49	
33	B8	65	
33	D8	65	
34	BA	2787	
34	DA	2787	
35	BB	122	
35	DB	122	
36	BC	229	
36	DC	229	
37	BD	276	
37	DD	276	
38	BE	206	
38	DE	206	

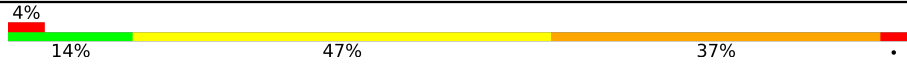

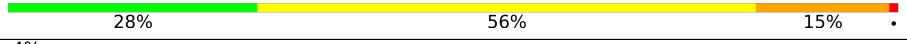
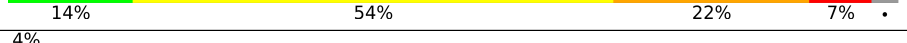
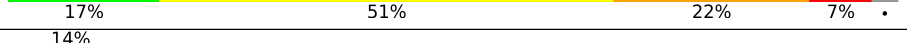
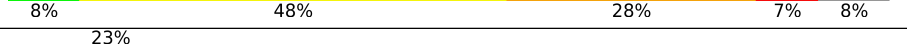
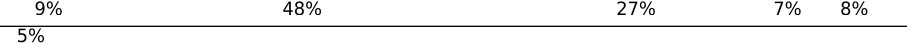
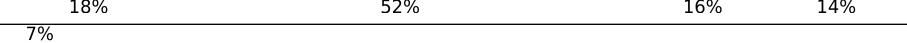
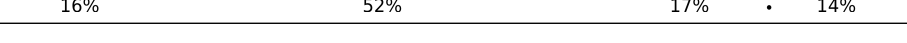
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Mol	Chain	Length	Quality of chain
39	BF	210	
39	DF	210	
40	BG	182	
40	DG	182	
41	BH	180	
41	DH	180	
42	BI	148	
42	DI	148	
43	BN	140	
43	DN	140	
44	BO	122	
44	DO	122	
45	BP	150	
45	DP	150	
46	BQ	141	
46	DQ	141	
47	BR	118	
47	DR	118	
48	BS	112	
48	DS	112	
49	BT	146	
49	DT	146	
50	BU	118	
50	DU	118	
51	BV	101	

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Mol	Chain	Length	Quality of chain
51	DV	101	
52	BW	113	
52	DW	113	
53	BX	96	
53	DX	96	
54	BY	110	
54	DY	110	
55	BZ	206	
55	DZ	206	

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
56	MG	AA	1618	-	-	-	X
56	MG	AA	1633	-	-	-	X
56	MG	AA	1697	-	-	-	X
56	MG	BA	3004	-	-	-	X
56	MG	BA	3403	-	-	-	X
56	MG	BA	3413	-	-	-	X
56	MG	BB	201	-	-	-	X
56	MG	BB	213	-	-	-	X
56	MG	CA	1622	-	-	-	X
56	MG	CA	1637	-	-	-	X
56	MG	CA	1646	-	-	-	X
56	MG	CA	1685	-	-	-	X
56	MG	CA	1719	-	-	-	X
56	MG	CA	1729	-	-	-	X
56	MG	CA	1752	-	-	-	X
56	MG	DA	3004	-	-	-	X
56	MG	DA	3187	-	-	-	X
56	MG	DA	3219	-	-	-	X
56	MG	DA	3255	-	-	-	X
56	MG	DA	3261	-	-	-	X
56	MG	DA	3273	-	-	-	X

2 Entry composition

There are 58 unique types of molecules in this entry. The entry contains 291075 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	1504	Total 32329	C 14390	N 5992	O 10444	P 1503	0	0	0
1	CA	1504	Total 32329	C 14390	N 5992	O 10444	P 1503	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	235	Total 1901	C 1213	N 342	O 341	S 5	0	0	1
2	CB	235	Total 1901	C 1213	N 342	O 341	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	207	Total 1613	C 1016	N 315	O 281	S 1	0	0	1
3	CC	207	Total 1613	C 1016	N 315	O 281	S 1	0	0	1

- 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 1703	C 1066	N 339	O 291	S 7	0	0	0
4	CD	208	Total 1703	C 1066	N 339	O 291	S 7	0	0	0

- Molecule 5 is a protein called 30S RIBOSOMAL PROTEIN S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			
5	CE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			

- Molecule 6 is a protein called 30S RIBOSOMAL PROTEIN S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
6	CF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	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
			1257	781	252	218	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	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
			1116	705	215	193	3			
8	CH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

- Molecule 9 is a protein called 30S RIBOSOMAL PROTEIN S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	0	0	0
			1011	639	198	174			
9	CI	127	Total	C	N	O	0	0	0
			1011	639	198	174			

- Molecule 10 is a protein called 30S RIBOSOMAL PROTEIN S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	CJ	99	795	499	157	138	1	0	0	1

- Molecule 11 is a protein called 30S RIBOSOMAL PROTEIN S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	AK	119	885	549	168	165	3	0	0	0
11	CK	119	885	549	168	165	3	0	0	0

- Molecule 12 is a protein called 30S RIBOSOMAL PROTEIN S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	AL	125	971	611	196	163	1	0	0	1
12	CL	125	971	611	196	163	1	0	0	1

- Molecule 13 is a protein called 30S RIBOSOMAL PROTEIN S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	AM	125	988	611	206	169	2	0	0	1
13	CM	125	988	611	206	169	2	0	0	1

- Molecule 14 is a protein called 30S RIBOSOMAL PROTEIN S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	AN	60	492	312	104	72	4	0	0	0
14	CN	60	492	312	104	72	4	0	0	0

- Molecule 15 is a protein called 30S RIBOSOMAL PROTEIN S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
15	AO	88	734	459	147	126	2	0	0	0
15	CO	88	734	459	147	126	2	0	0	0

- Molecule 16 is a protein called 30S RIBOSOMAL PROTEIN S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			
16	CP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			

- Molecule 17 is a protein called 30S RIBOSOMAL PROTEIN S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			
17	CQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			

- Molecule 18 is a protein called 30S RIBOSOMAL PROTEIN S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	70	Total	C	N	O	0	0	0
			574	367	112	95			
18	CR	70	Total	C	N	O	0	0	0
			574	367	112	95			

- Molecule 19 is a protein called 30S RIBOSOMAL PROTEIN S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			
19	CS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			

- Molecule 20 is a protein called 30S RIBOSOMAL PROTEIN S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			
20	CT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			

- Molecule 21 is a protein called 30S RIBOSOMAL PROTEIN THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AU	25	Total	C	N	O	0	0	1
			209	128	51	30			
21	CU	25	Total	C	N	O	0	0	1
			209	128	51	30			

- Molecule 22 is a RNA chain called P-SITE TRNA FMET (UNMODIFIED BASES EXCEPT FOR THYMINE 54).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	77	Total	C	N	O	P	0	0	0
			1645	733	297	538	77			
22	CV	77	Total	C	N	O	P	0	0	0
			1645	733	297	538	77			

- Molecule 23 is a RNA chain called E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AW	76	Total	C	N	O	P	0	0	0
			1623	723	290	534	76			
23	AY	19	Total	C	N	O	P	0	0	0
			407	183	78	128	18			
23	CW	76	Total	C	N	O	P	0	0	0
			1623	723	290	534	76			
23	CY	19	Total	C	N	O	P	0	0	0
			407	183	78	128	18			

- Molecule 24 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AX	11	Total	C	N	O	P	0	0	0
			235	106	44	74	11			
24	CX	11	Total	C	N	O	P	0	0	0
			235	106	44	74	11			

- Molecule 25 is a protein called 50S RIBOSOMAL PROTEIN L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	B0	85	Total	C	N	O	S	0	0	0
			650	401	137	111	1			
25	D0	85	Total	C	N	O	S	0	0	0
			650	401	137	111	1			

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
26	B1	89	Total	C	N	O	0	0	1
			693	435	140	118			
26	D1	89	Total	C	N	O	0	0	1
			693	435	140	118			

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	B2	51	Total	C	N	O	S	0	0	1
			421	263	85	72	1			
27	D2	51	Total	C	N	O	S	0	0	1
			421	263	85	72	1			

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	B3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			
28	D3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L31.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
29	B4	50	Total	C	N	O	0	0	1
			242	143	50	49			
29	D4	50	Total	C	N	O	0	0	1
			242	143	50	49			

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	B5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
30	D5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	B6	45	Total	C	N	O	S	0	0	1
			381	235	78	64	4			
31	D6	45	Total	C	N	O	S	0	0	1
			381	235	78	64	4			

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	B7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			
32	D7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	B8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			
33	D8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			

- Molecule 34 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BA	2772	Total	C	N	O	P	0	0	0
			59708	26573	11171	19193	2771			
34	DA	2772	Total	C	N	O	P	0	0	0
			59708	26573	11171	19193	2771			

- Molecule 35 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BB	119	Total	C	N	O	P	0	0	0
			2551	1136	471	826	118			
35	DB	119	Total	C	N	O	P	0	0	0
			2551	1136	471	826	118			

- Molecule 36 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
36	BC	191	Total	C	N	O	0	0	1
			1142	691	221	230			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
36	DC	191	1142	691	221	230	0	0	1

- Molecule 37 is a protein called 50S RIBOSOMAL PROTEIN L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
37	BD	272	2105	1329	417	356	3	0	0	1
37	DD	272	2105	1329	417	356	3	0	0	1

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
38	BE	205	1564	988	300	270	6	0	0	1
38	DE	205	1564	988	300	270	6	0	0	1

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
39	BF	208	1624	1035	304	282	3	0	0	1
39	DF	208	1624	1035	304	282	3	0	0	1

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
40	BG	181	1474	942	268	260	4	0	0	0
40	DG	181	1474	942	268	260	4	0	0	0

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
41	BH	160	1223	773	229	220	1	0	0	1
41	DH	160	1223	773	229	220	1	0	0	1

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	BI	146	Total 1132	C 723	N 201	O 207	S 1	0	0	1
42	DI	146	Total 1132	C 723	N 201	O 207	S 1	0	0	1

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
43	BN	139	Total 1105	C 712	N 207	O 182	S 4	0	0	1
43	DN	139	Total 1105	C 712	N 207	O 182	S 4	0	0	1

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
44	BO	122	Total 933	C 588	N 171	O 170	S 4	0	0	0
44	DO	122	Total 933	C 588	N 171	O 170	S 4	0	0	0

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
45	BP	146	Total 1114	C 692	N 227	O 193	S 2	0	0	0
45	DP	146	Total 1114	C 692	N 227	O 193	S 2	0	0	0

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
46	BQ	136	Total 1080	C 688	N 204	O 183	S 5	0	0	0
46	DQ	136	Total 1080	C 688	N 204	O 183	S 5	0	0	0

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L17.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
47	BR	117	Total	C	N	O	0	0	0
			960	599	202	159			
47	DR	117	Total	C	N	O	0	0	0
			960	599	202	159			

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
48	BS	99	Total	C	N	O	0	0	1
			771	486	155	130			
48	DS	99	Total	C	N	O	0	0	1
			771	486	155	130			

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	BT	138	Total	C	N	O	S	0	0	1
			1142	710	235	196	1			
49	DT	138	Total	C	N	O	S	0	0	1
			1142	710	235	196	1			

- Molecule 50 is a protein called 50S RIBOSOMAL PROTEIN L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	BU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			
50	DU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	BV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			
51	DV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	BW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	DW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
53	BX	93	Total	C	N	O	0	0	1
			726	471	132	123			
53	DX	93	Total	C	N	O	0	0	1
			726	471	132	123			

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	BY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			
54	DY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	BZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			
55	DZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			

- Molecule 56 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	AA	215	Total	Mg	0	0
			215	215		
56	AE	1	Total	Mg	0	0
			1	1		
56	AV	7	Total	Mg	0	0
			7	7		
56	AW	22	Total	Mg	0	0
			22	22		
56	AX	4	Total	Mg	0	0
			4	4		
56	AY	1	Total	Mg	0	0
			1	1		

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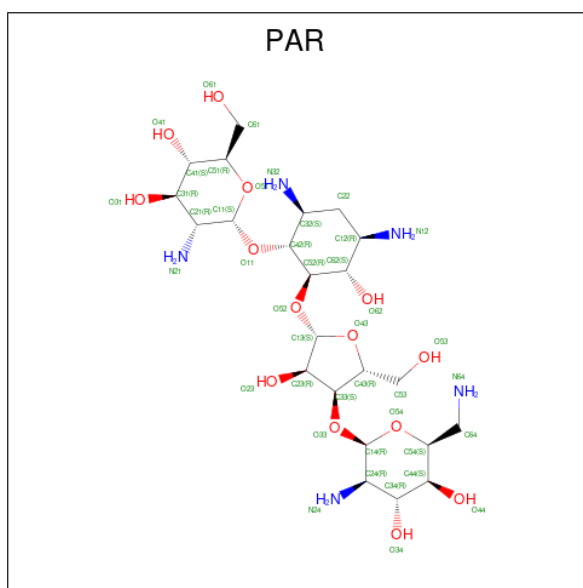
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	B1	1	Total 1	Mg 1	0	0
56	B2	5	Total 5	Mg 5	0	0
56	B3	1	Total 1	Mg 1	0	0
56	B5	2	Total 2	Mg 2	0	0
56	B7	2	Total 2	Mg 2	0	0
56	BA	454	Total 454	Mg 454	0	0
56	BB	19	Total 19	Mg 19	0	0
56	BE	1	Total 1	Mg 1	0	0
56	BF	2	Total 2	Mg 2	0	0
56	BN	1	Total 1	Mg 1	0	0
56	BO	1	Total 1	Mg 1	0	0
56	BV	1	Total 1	Mg 1	0	0
56	BX	1	Total 1	Mg 1	0	0
56	CA	189	Total 189	Mg 189	0	0
56	CF	1	Total 1	Mg 1	0	0
56	CJ	1	Total 1	Mg 1	0	0
56	CM	1	Total 1	Mg 1	0	0
56	CU	1	Total 1	Mg 1	0	0
56	CV	4	Total 4	Mg 4	0	0
56	CW	13	Total 13	Mg 13	0	0
56	CX	6	Total 6	Mg 6	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	D5	2	Total Mg 2 2	0	0
56	DA	398	Total Mg 398 398	0	0
56	DB	12	Total Mg 12 12	0	0
56	DD	2	Total Mg 2 2	0	0
56	DE	1	Total Mg 1 1	0	0
56	DF	1	Total Mg 1 1	0	0
56	DH	1	Total Mg 1 1	0	0
56	DN	1	Total Mg 1 1	0	0
56	DO	1	Total Mg 1 1	0	0
56	DS	1	Total Mg 1 1	0	0
56	DU	1	Total Mg 1 1	0	0
56	DZ	1	Total Mg 1 1	0	0

- Molecule 57 is PAROMOMYCIN (three-letter code: PAR) (formula: $C_{23}H_{45}N_5O_{14}$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
57	AA	1	Total	C	N	O	0	0
			42	23	5	14		
57	CA	1	Total	C	N	O	0	0
			42	23	5	14		

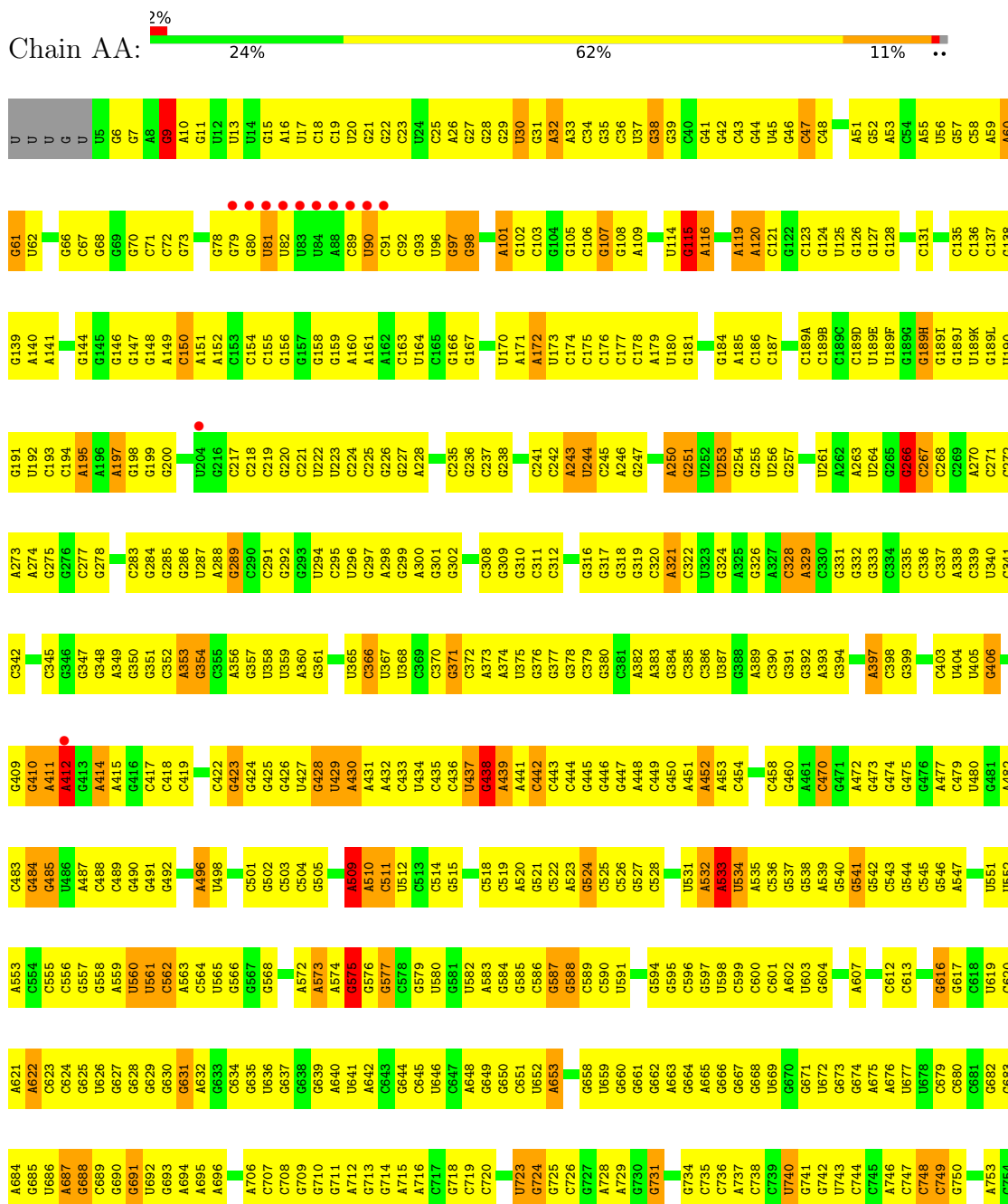
- Molecule 58 is ZINC ION (three-letter code: ZN) (formula: Zn).

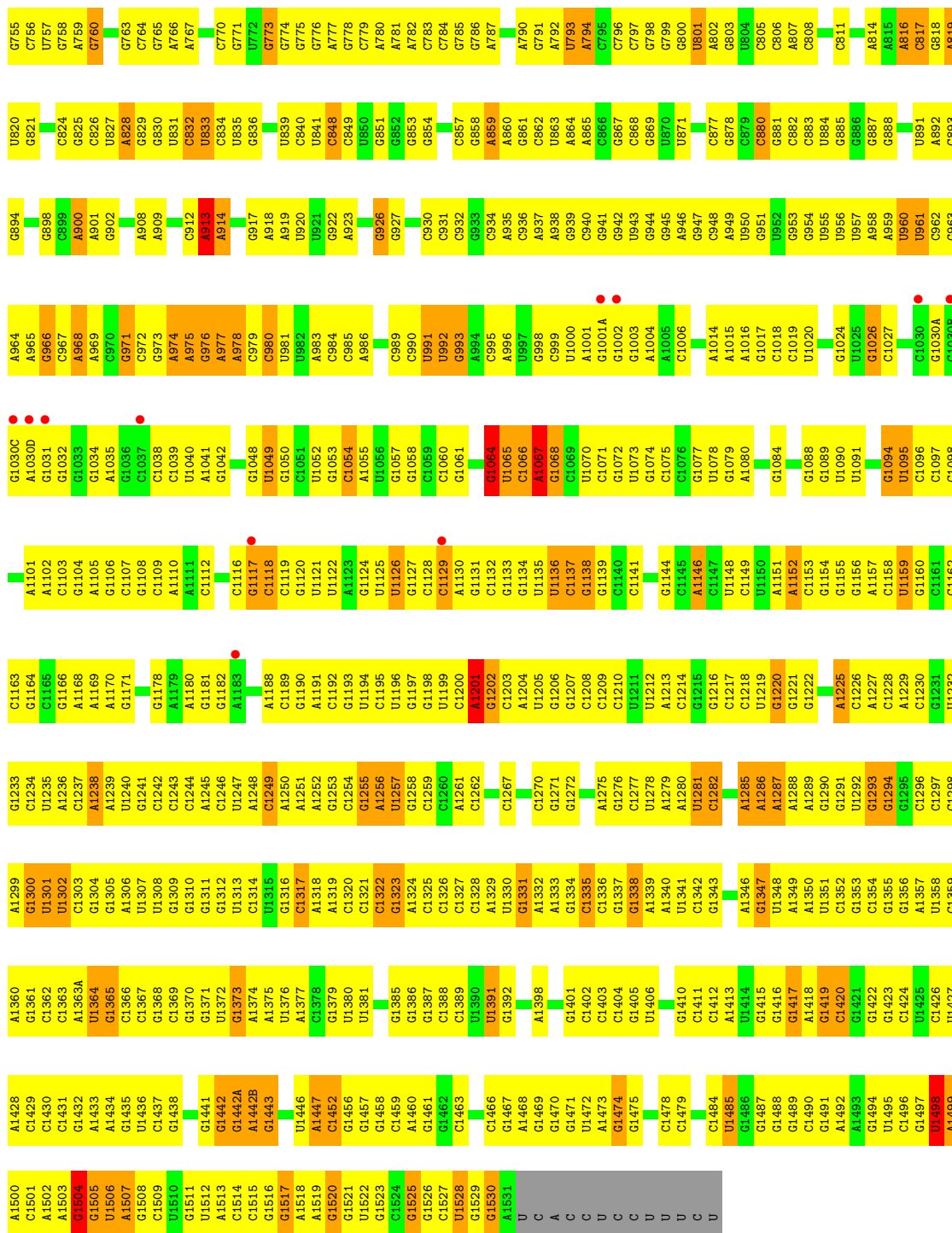
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	AD	1	Total	Zn	0	0
			1	1		
58	AN	1	Total	Zn	0	0
			1	1		
58	CD	1	Total	Zn	0	0
			1	1		
58	CN	1	Total	Zn	0	0
			1	1		

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.

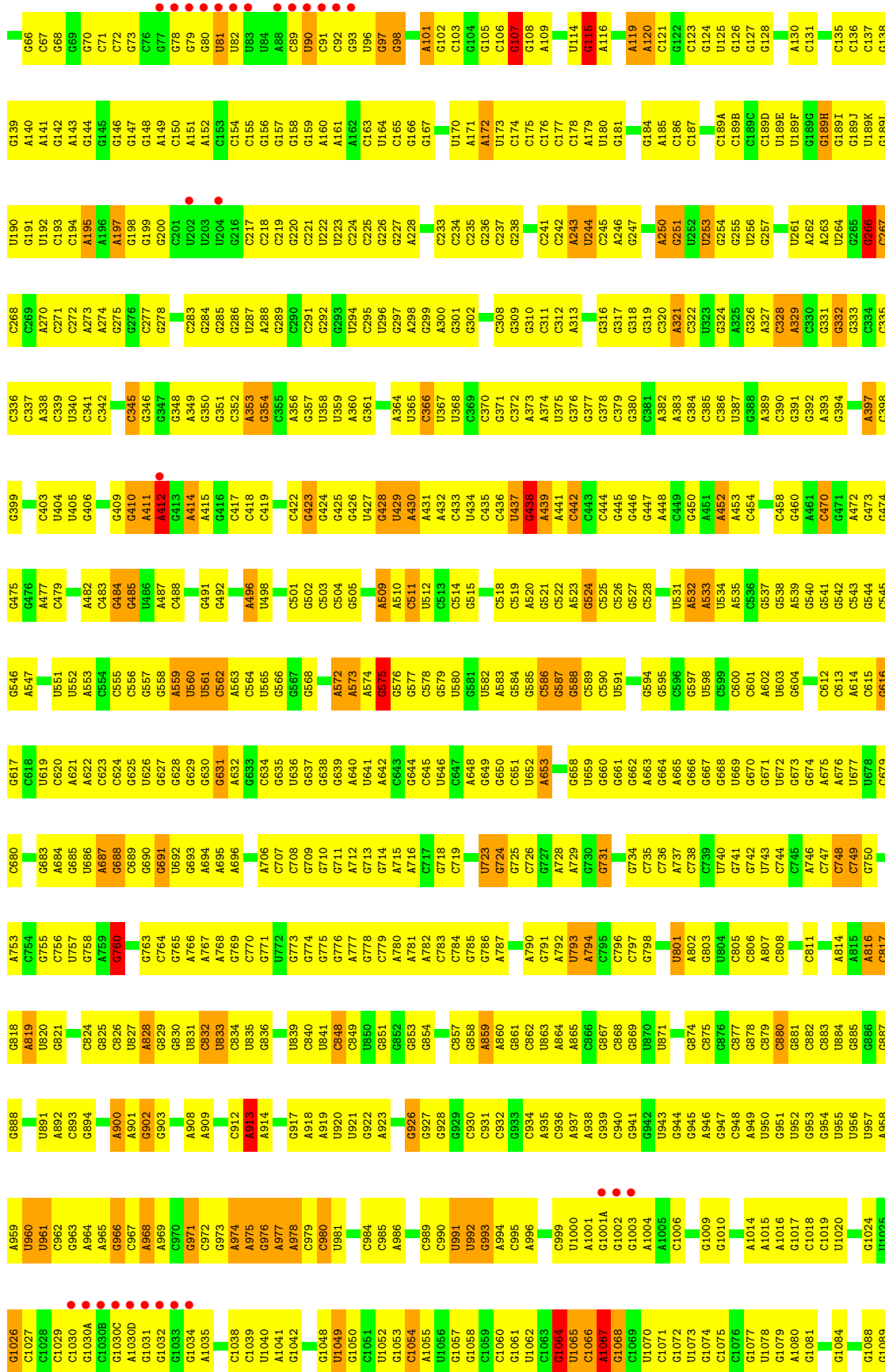
● Molecule 1: 16S ribosomal RNA

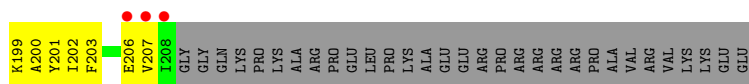




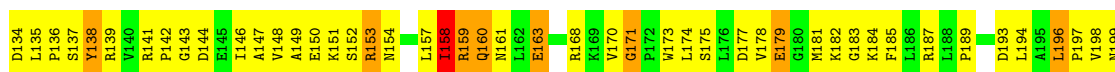
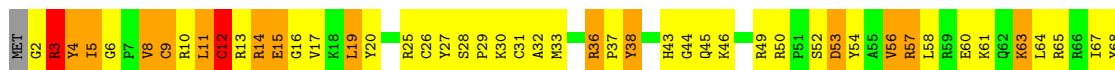
● Molecule 1: 16S ribosomal RNA



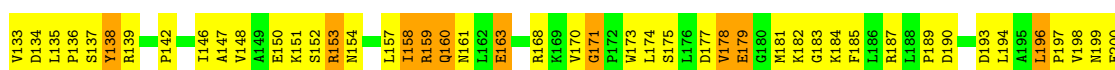
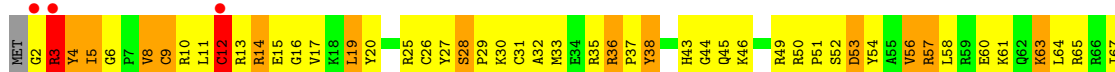




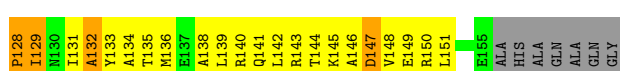
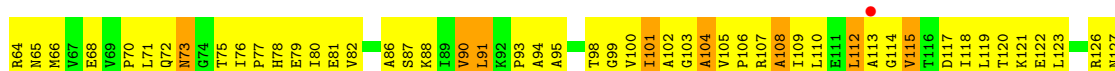
• Molecule 4: 30S RIBOSOMAL PROTEIN S4



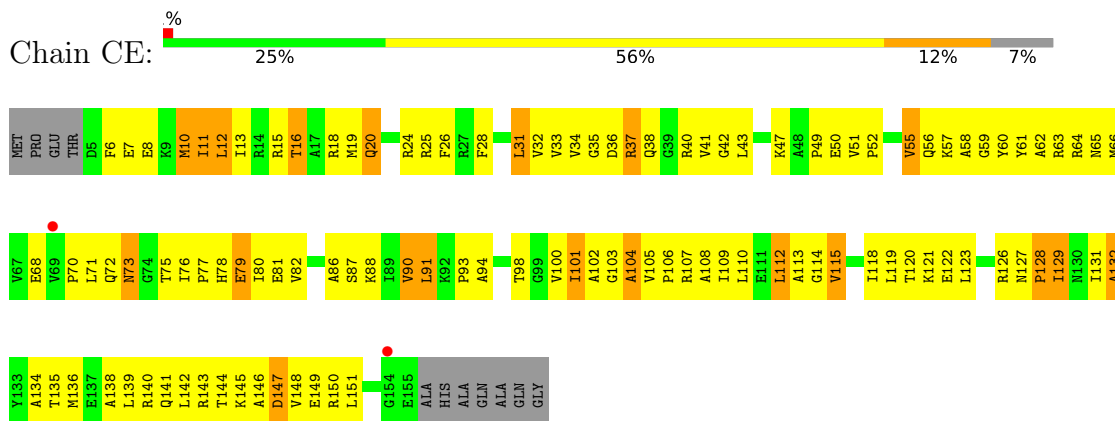
• Molecule 4: 30S RIBOSOMAL PROTEIN S4



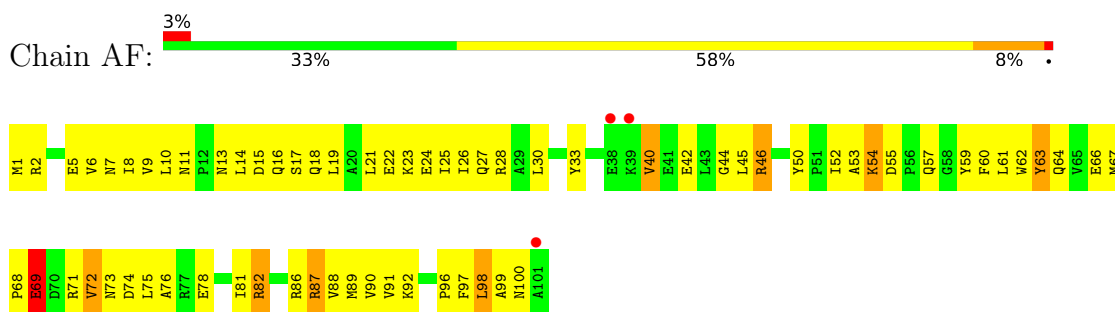
• Molecule 5: 30S RIBOSOMAL PROTEIN S5



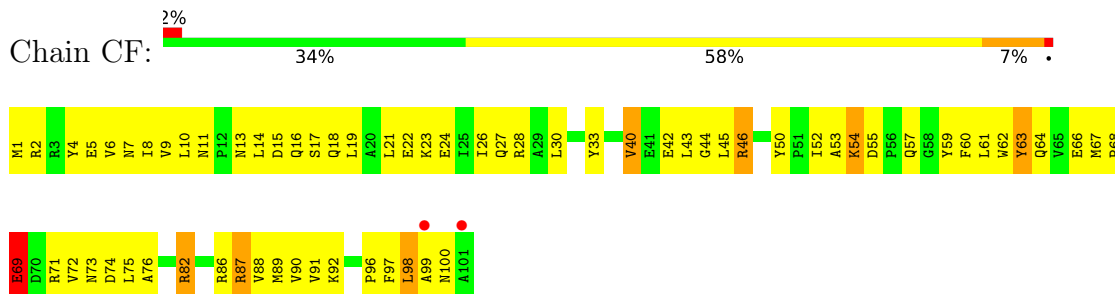
- Molecule 5: 30S RIBOSOMAL PROTEIN S5



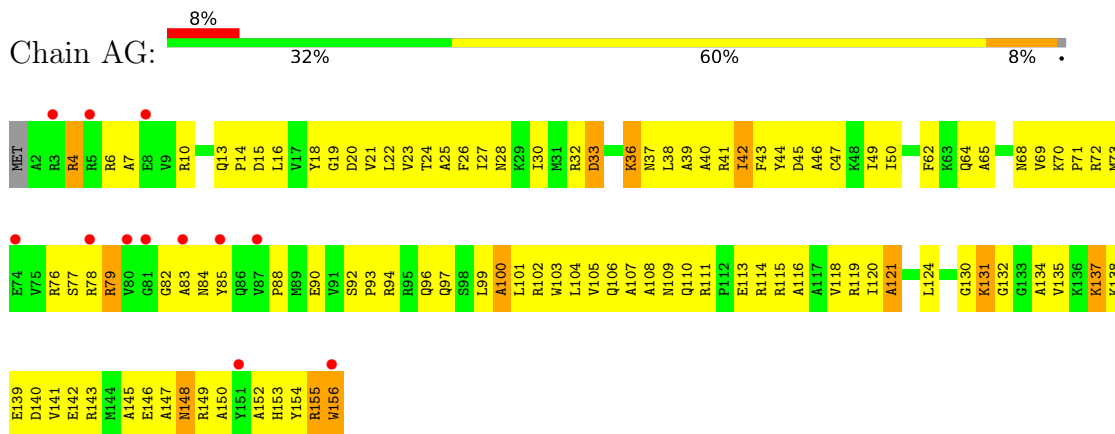
- Molecule 6: 30S RIBOSOMAL PROTEIN S6



- Molecule 6: 30S RIBOSOMAL PROTEIN S6



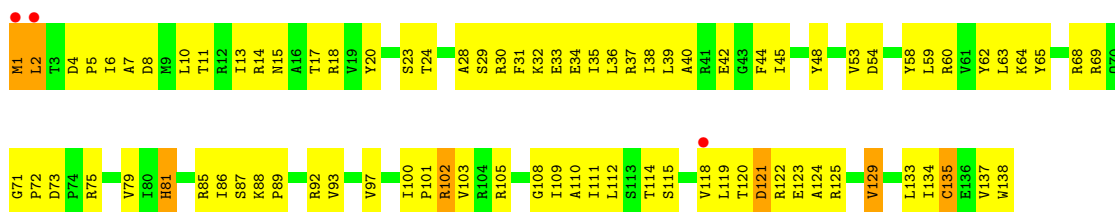
- Molecule 7: 30S RIBOSOMAL PROTEIN S7



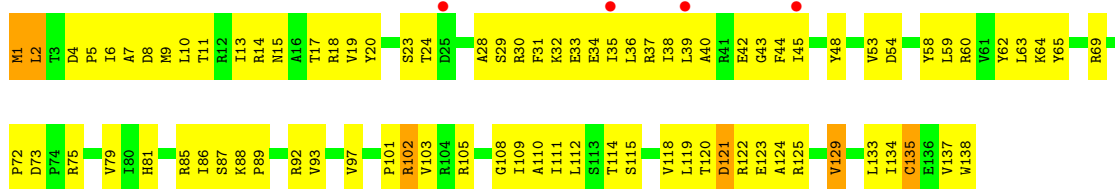
- Molecule 7: 30S RIBOSOMAL PROTEIN S7



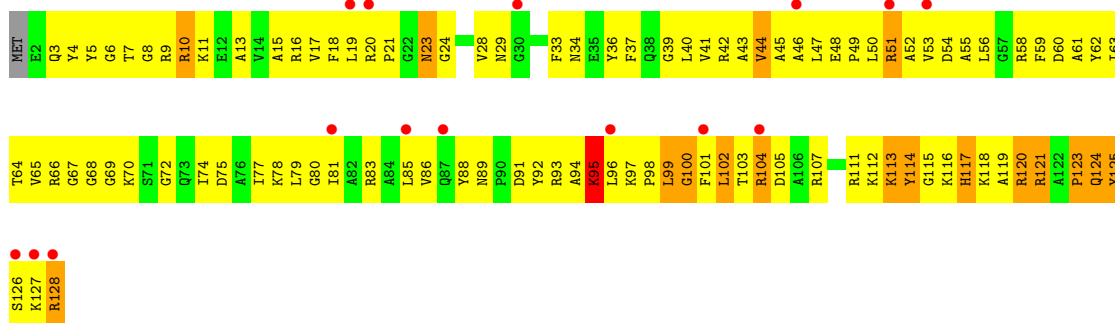
• Molecule 8: 30S RIBOSOMAL PROTEIN S8



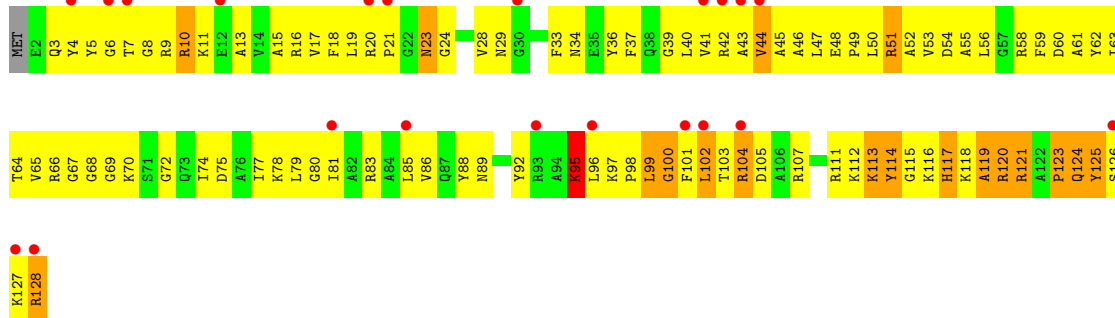
• Molecule 8: 30S RIBOSOMAL PROTEIN S8



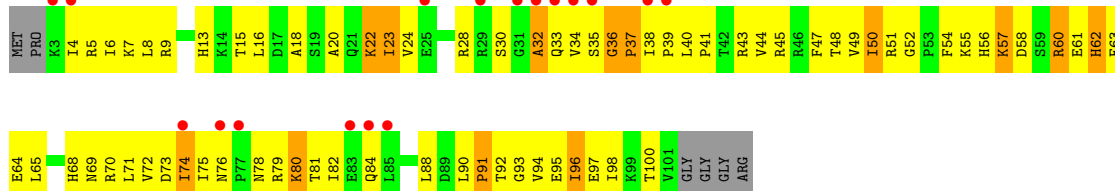
• Molecule 9: 30S RIBOSOMAL PROTEIN S9



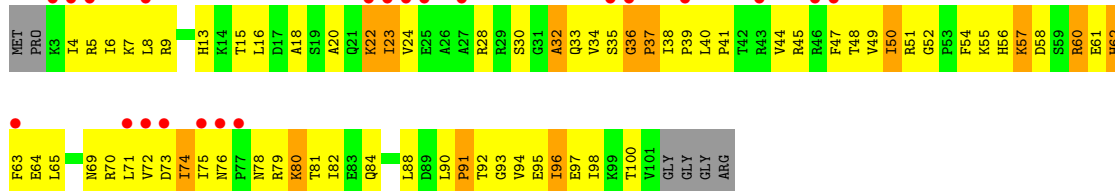
• Molecule 9: 30S RIBOSOMAL PROTEIN S9



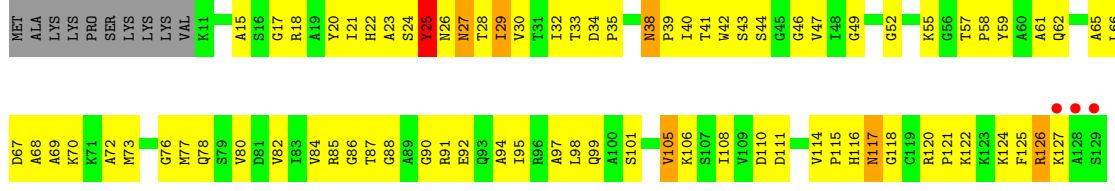
• Molecule 10: 30S RIBOSOMAL PROTEIN S10



• Molecule 10: 30S RIBOSOMAL PROTEIN S10

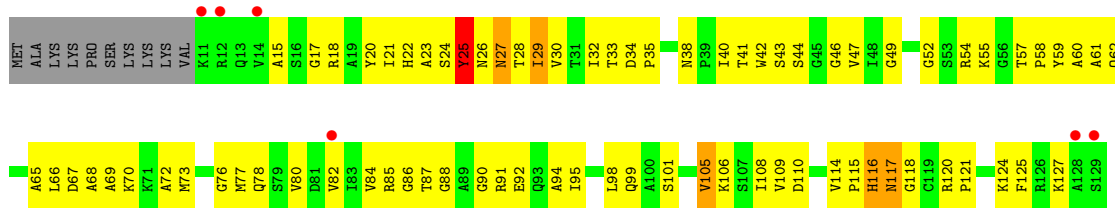


• Molecule 11: 30S RIBOSOMAL PROTEIN S11

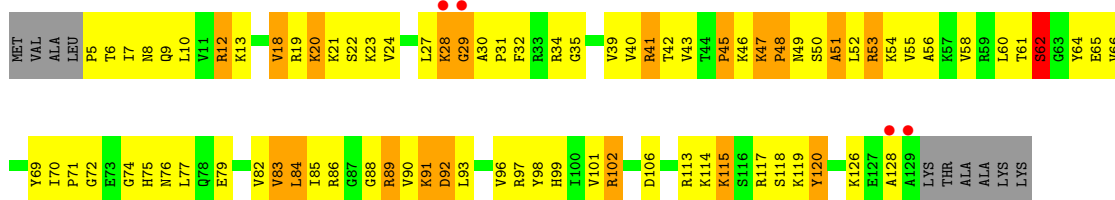


• Molecule 11: 30S RIBOSOMAL PROTEIN S11

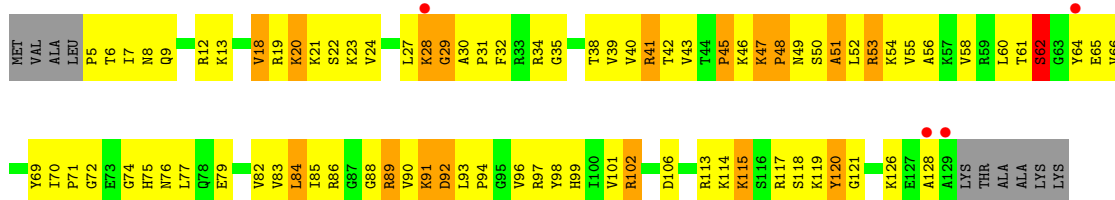




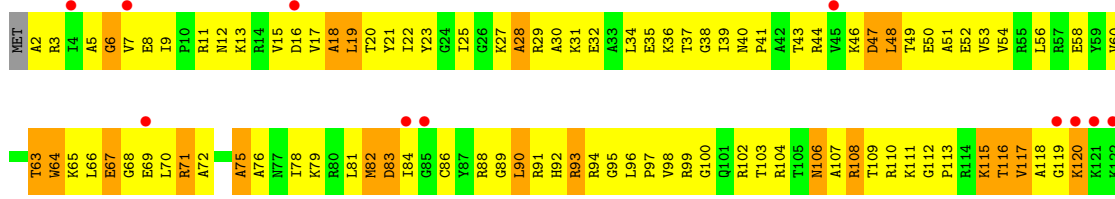
• Molecule 12: 30S RIBOSOMAL PROTEIN S12



• Molecule 12: 30S RIBOSOMAL PROTEIN S12

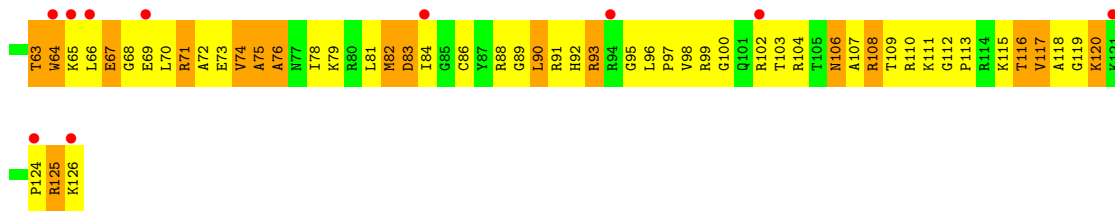


• Molecule 13: 30S RIBOSOMAL PROTEIN S13



• Molecule 13: 30S RIBOSOMAL PROTEIN S13

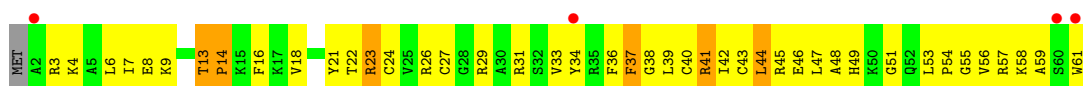




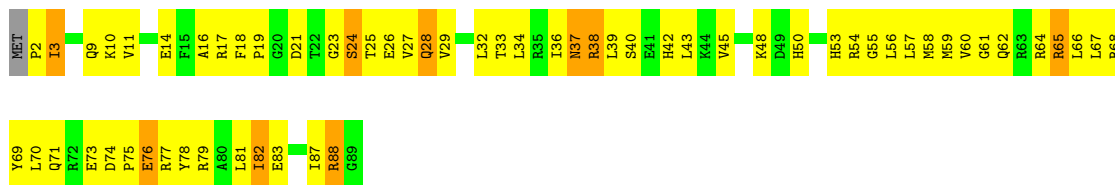
• Molecule 14: 30S RIBOSOMAL PROTEIN S14



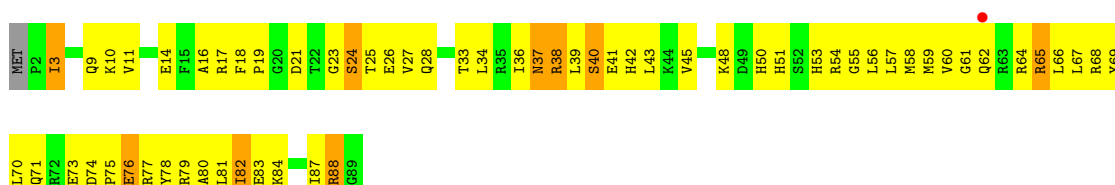
• Molecule 14: 30S RIBOSOMAL PROTEIN S14



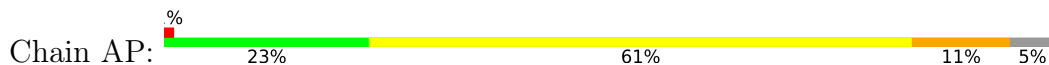
• Molecule 15: 30S RIBOSOMAL PROTEIN S15

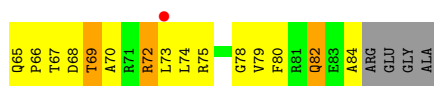


• Molecule 15: 30S RIBOSOMAL PROTEIN S15

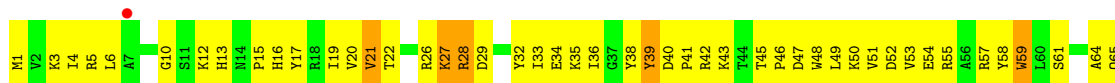


• Molecule 16: 30S RIBOSOMAL PROTEIN S16

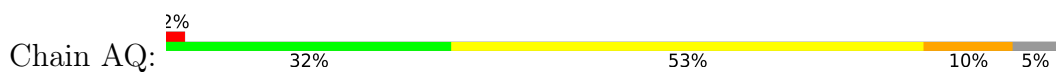




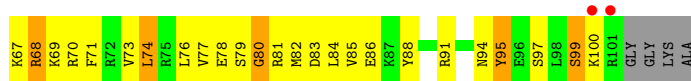
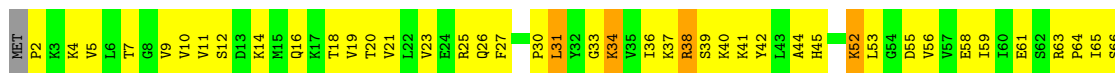
- Molecule 16: 30S RIBOSOMAL PROTEIN S16



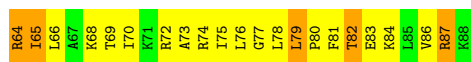
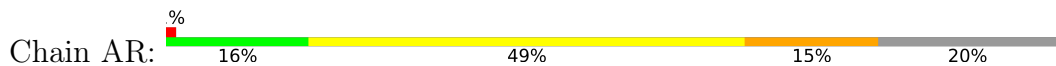
- Molecule 17: 30S RIBOSOMAL PROTEIN S17



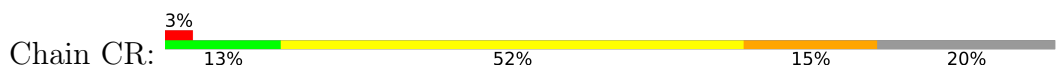
- Molecule 17: 30S RIBOSOMAL PROTEIN S17

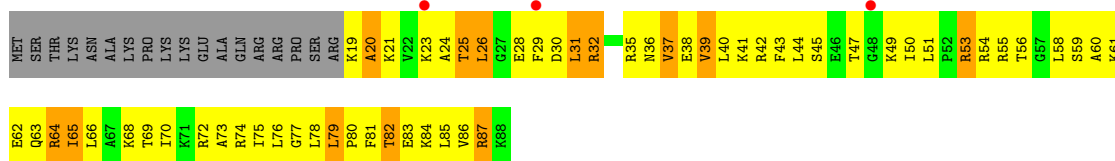


- Molecule 18: 30S RIBOSOMAL PROTEIN S18

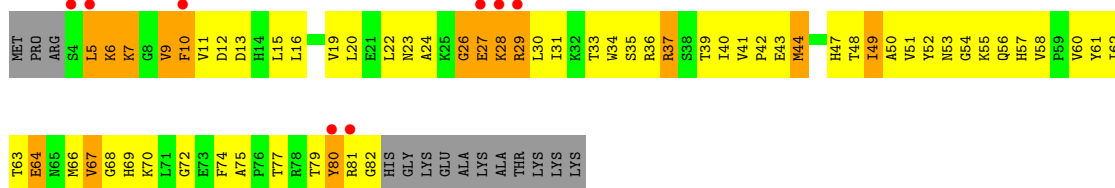
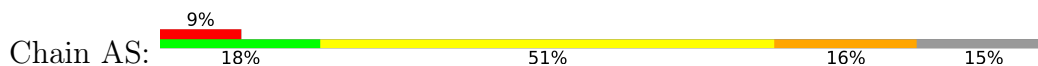


- Molecule 18: 30S RIBOSOMAL PROTEIN S18

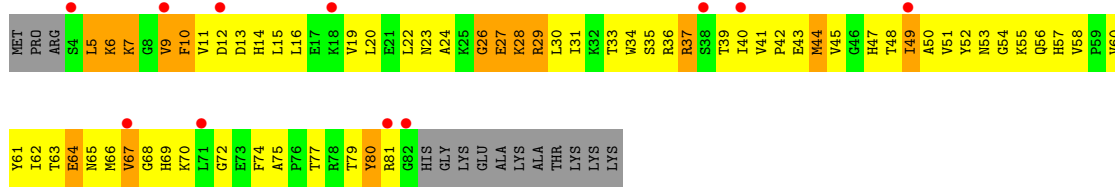
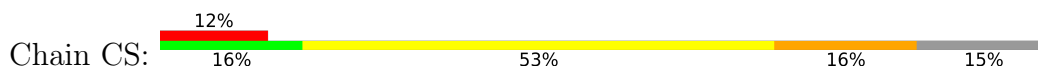




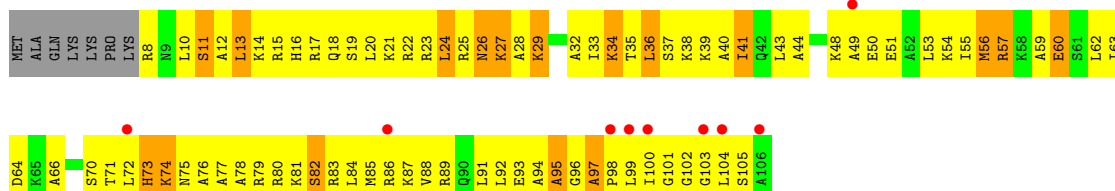
• Molecule 19: 30S RIBOSOMAL PROTEIN S19



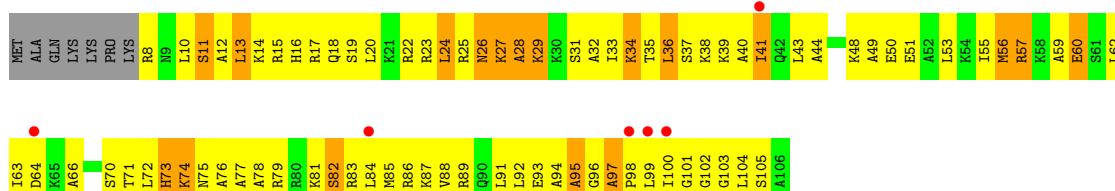
• Molecule 19: 30S RIBOSOMAL PROTEIN S19



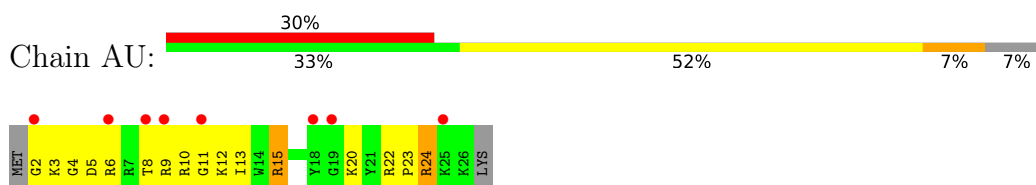
• Molecule 20: 30S RIBOSOMAL PROTEIN S20



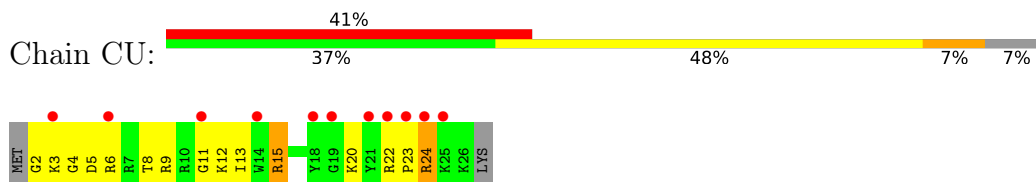
• Molecule 20: 30S RIBOSOMAL PROTEIN S20



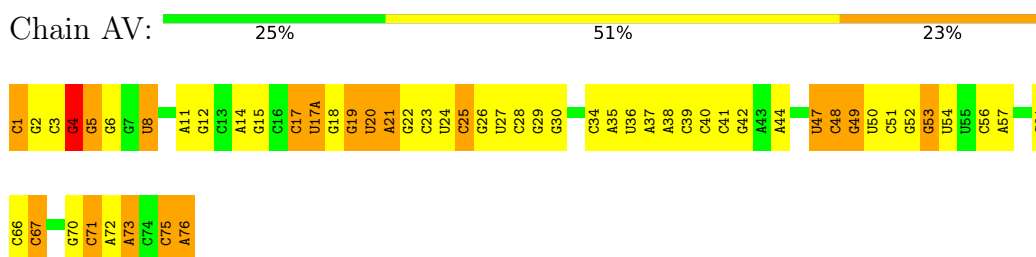
• Molecule 21: 30S RIBOSOMAL PROTEIN THX



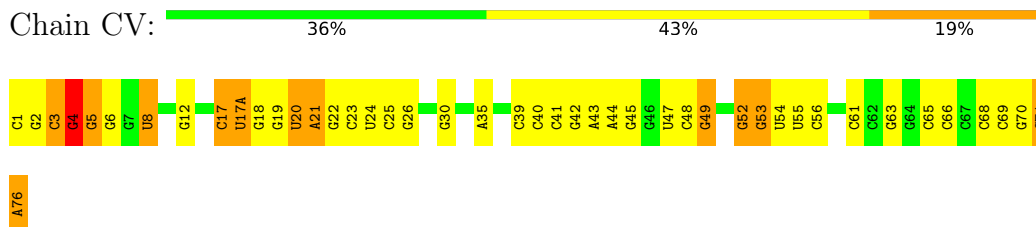
- Molecule 21: 30S RIBOSOMAL PROTEIN THX



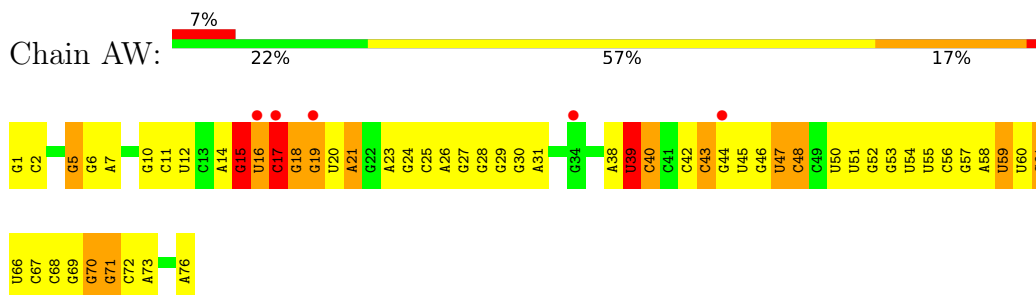
- Molecule 22: P-SITE TRNA FMET (UNMODIFIED BASES EXCEPT FOR THYMINE 54)



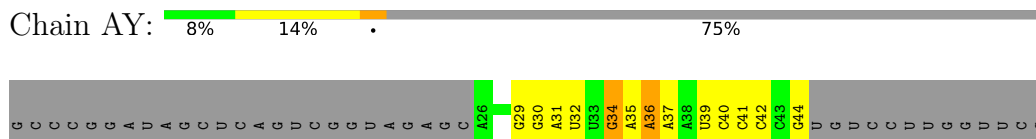
- Molecule 22: P-SITE TRNA FMET (UNMODIFIED BASES EXCEPT FOR THYMINE 54)



- Molecule 23: E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES)

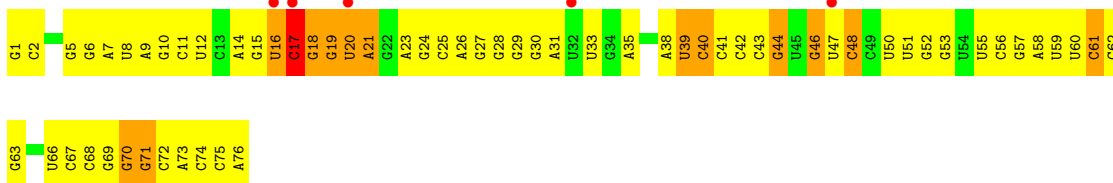


- Molecule 23: E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES)

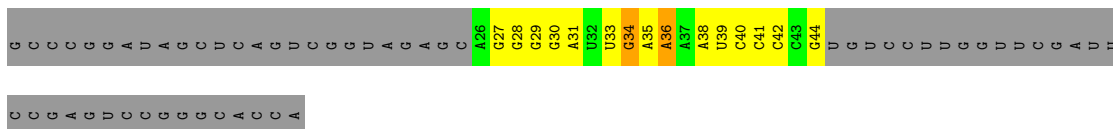


C G A G U D C C G G C C C A

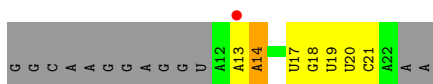
• Molecule 23: E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES)



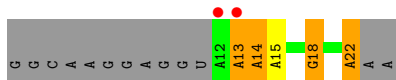
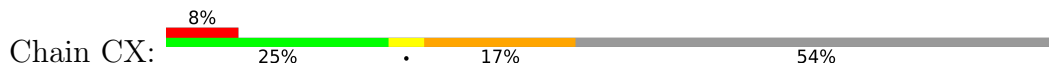
• Molecule 23: E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES)



• Molecule 24: MRNA



• Molecule 24: MRNA

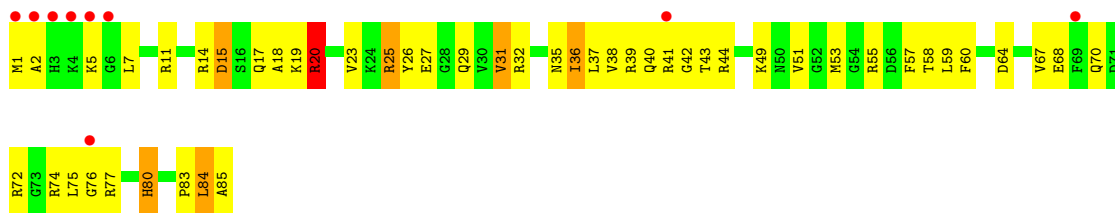


• Molecule 25: 50S RIBOSOMAL PROTEIN L27

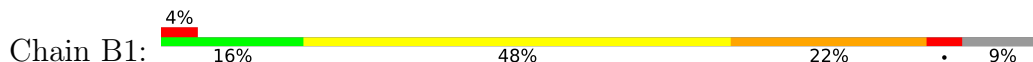


• Molecule 25: 50S RIBOSOMAL PROTEIN L27

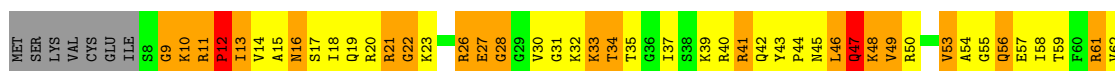
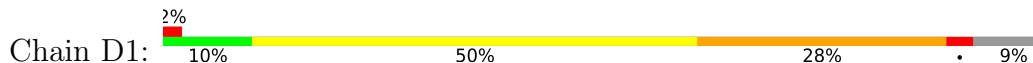




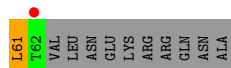
● Molecule 26: 50S RIBOSOMAL PROTEIN L28



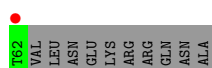
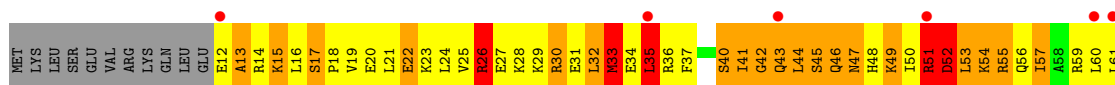
● Molecule 26: 50S RIBOSOMAL PROTEIN L28



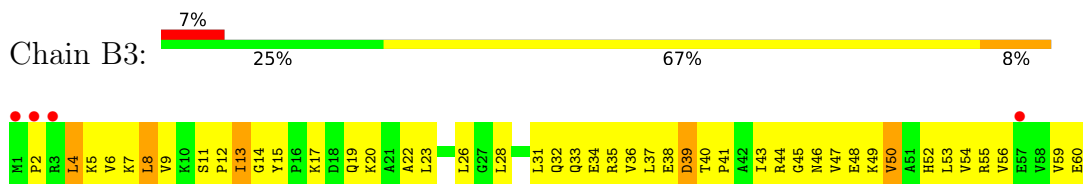
● Molecule 27: 50S RIBOSOMAL PROTEIN L29



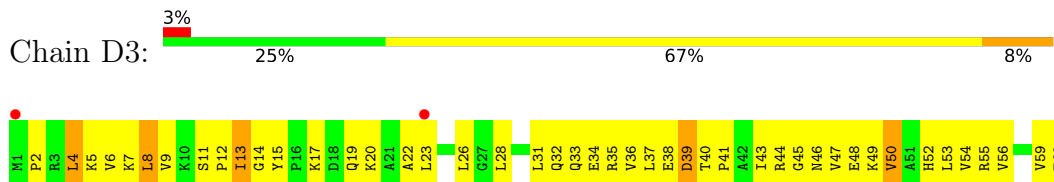
● Molecule 27: 50S RIBOSOMAL PROTEIN L29



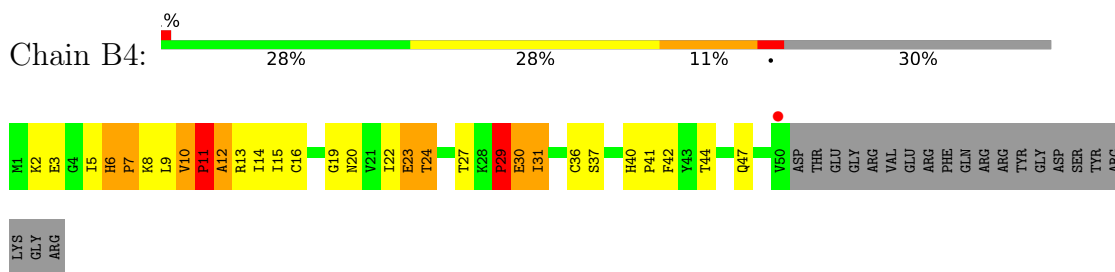
● Molecule 28: 50S RIBOSOMAL PROTEIN L30



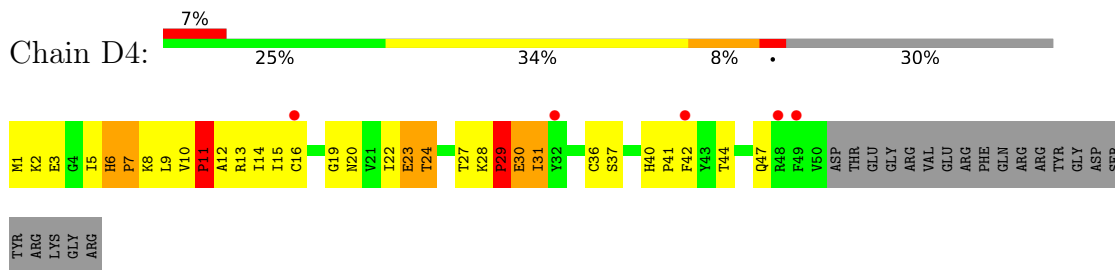
• Molecule 28: 50S RIBOSOMAL PROTEIN L30



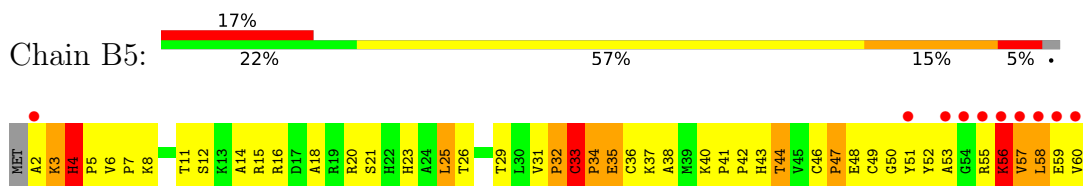
• Molecule 29: 50S RIBOSOMAL PROTEIN L31



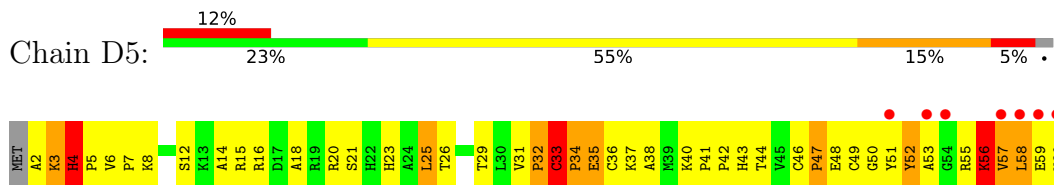
• Molecule 29: 50S RIBOSOMAL PROTEIN L31



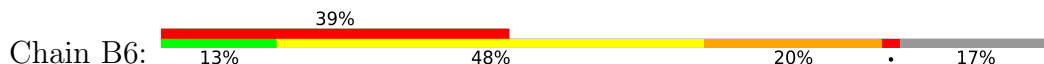
• Molecule 30: 50S RIBOSOMAL PROTEIN L32

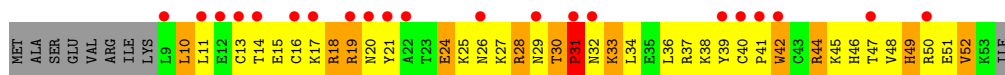


• Molecule 30: 50S RIBOSOMAL PROTEIN L32

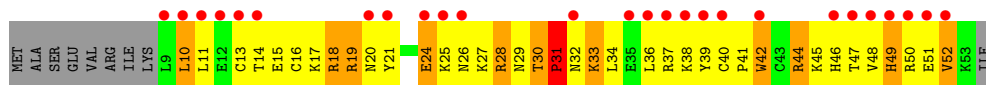
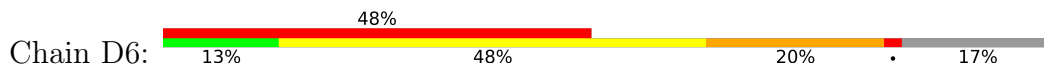


• Molecule 31: 50S RIBOSOMAL PROTEIN L33

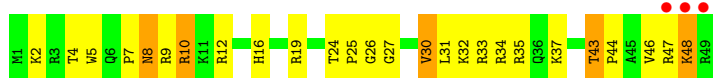




● Molecule 31: 50S RIBOSOMAL PROTEIN L33



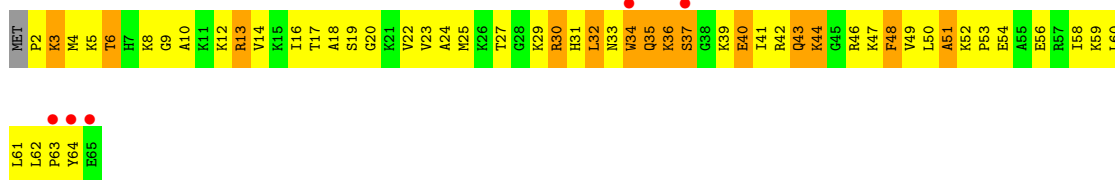
● Molecule 32: 50S RIBOSOMAL PROTEIN L34



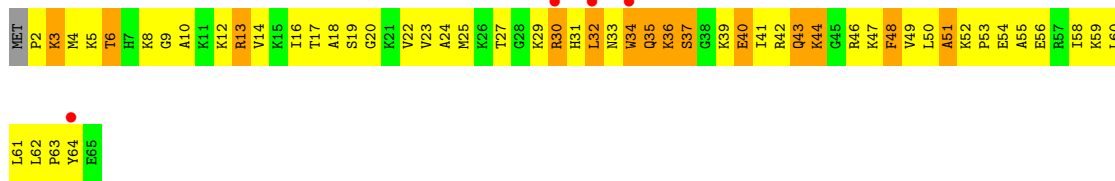
● Molecule 32: 50S RIBOSOMAL PROTEIN L34



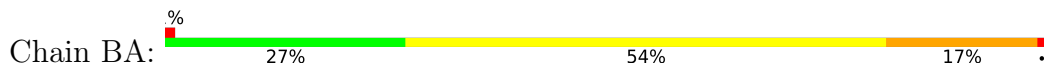
● Molecule 33: 50S RIBOSOMAL PROTEIN L35

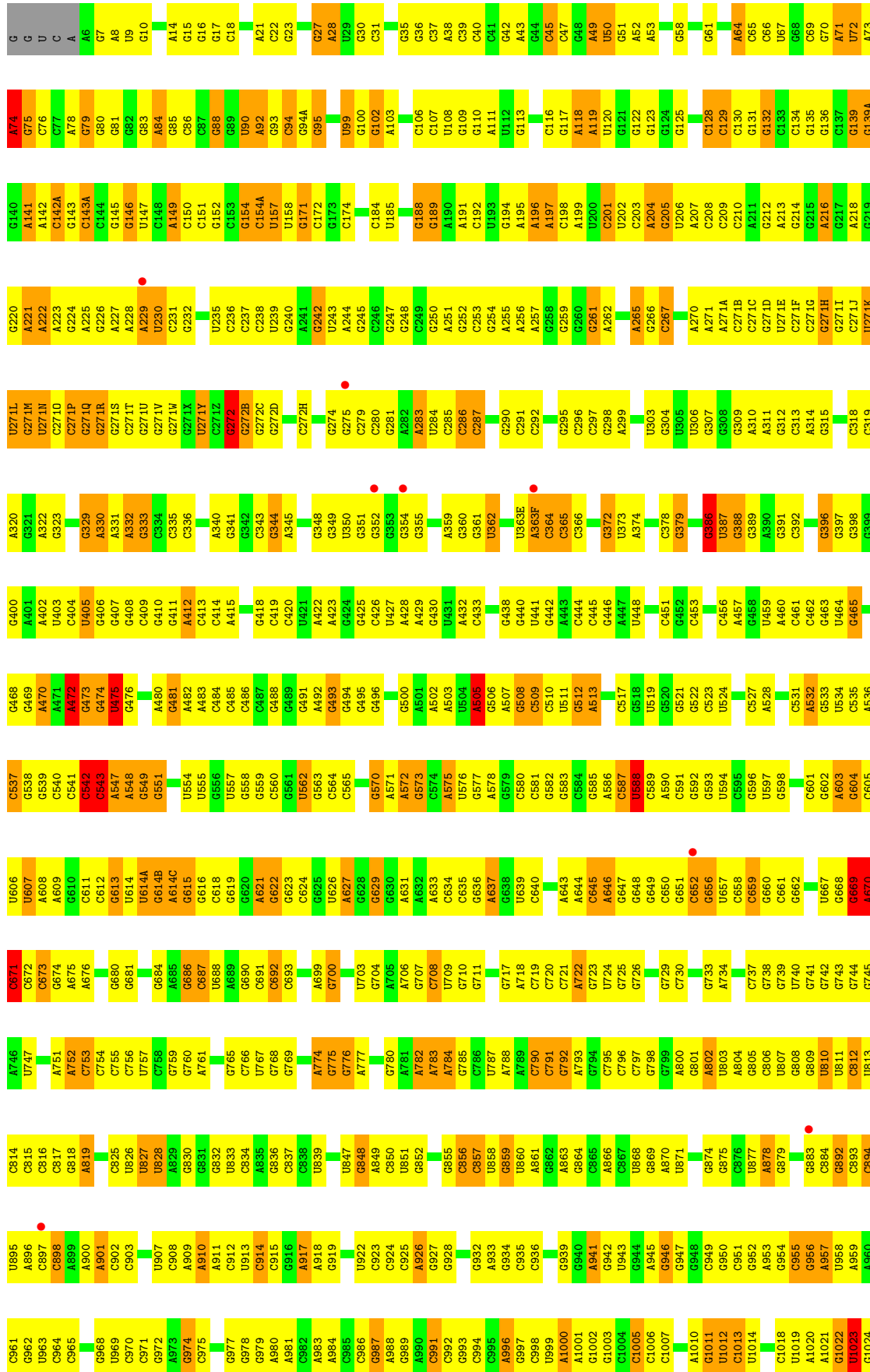


● Molecule 33: 50S RIBOSOMAL PROTEIN L35

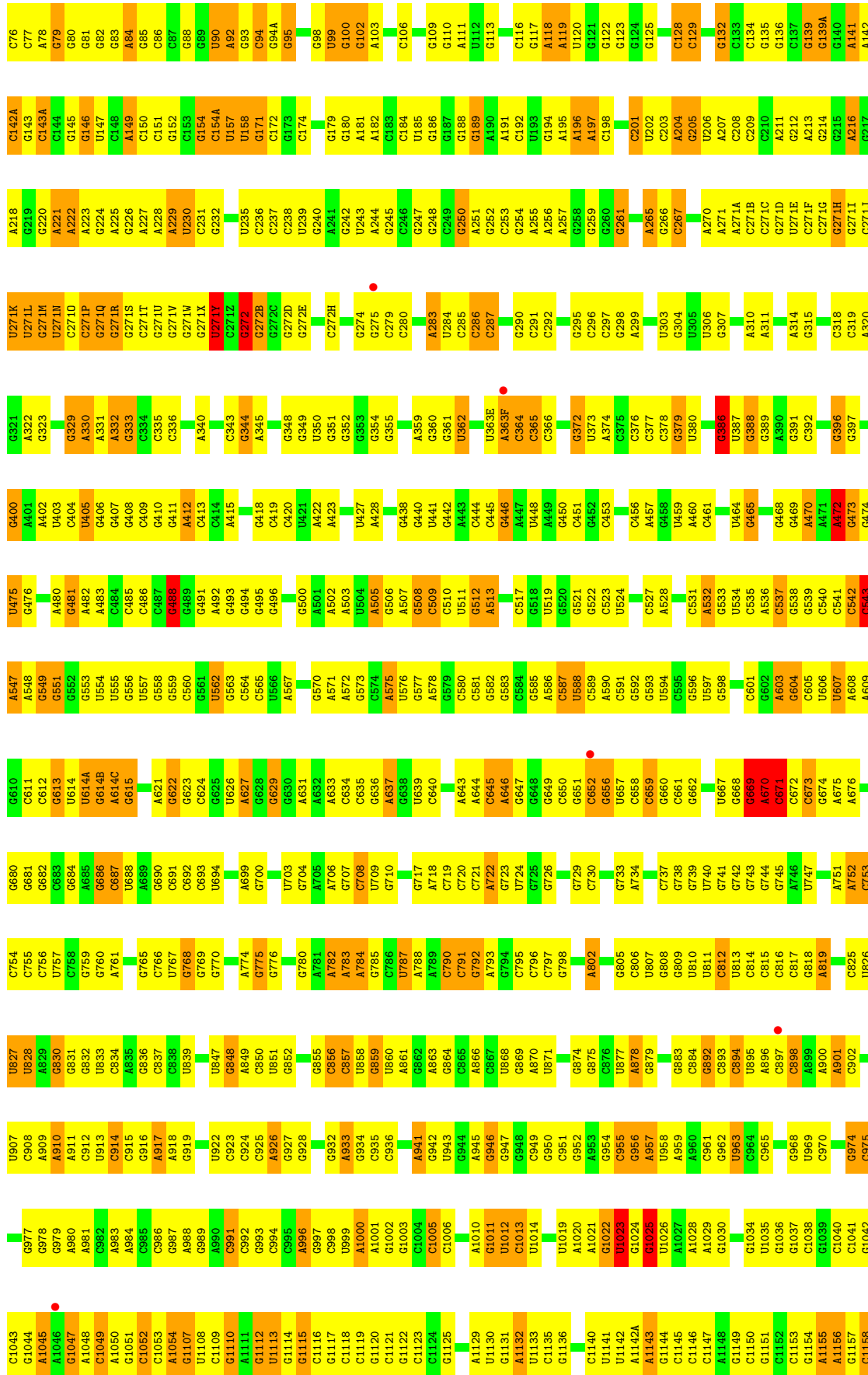


● Molecule 34: 23S RIBOSOMAL RNA

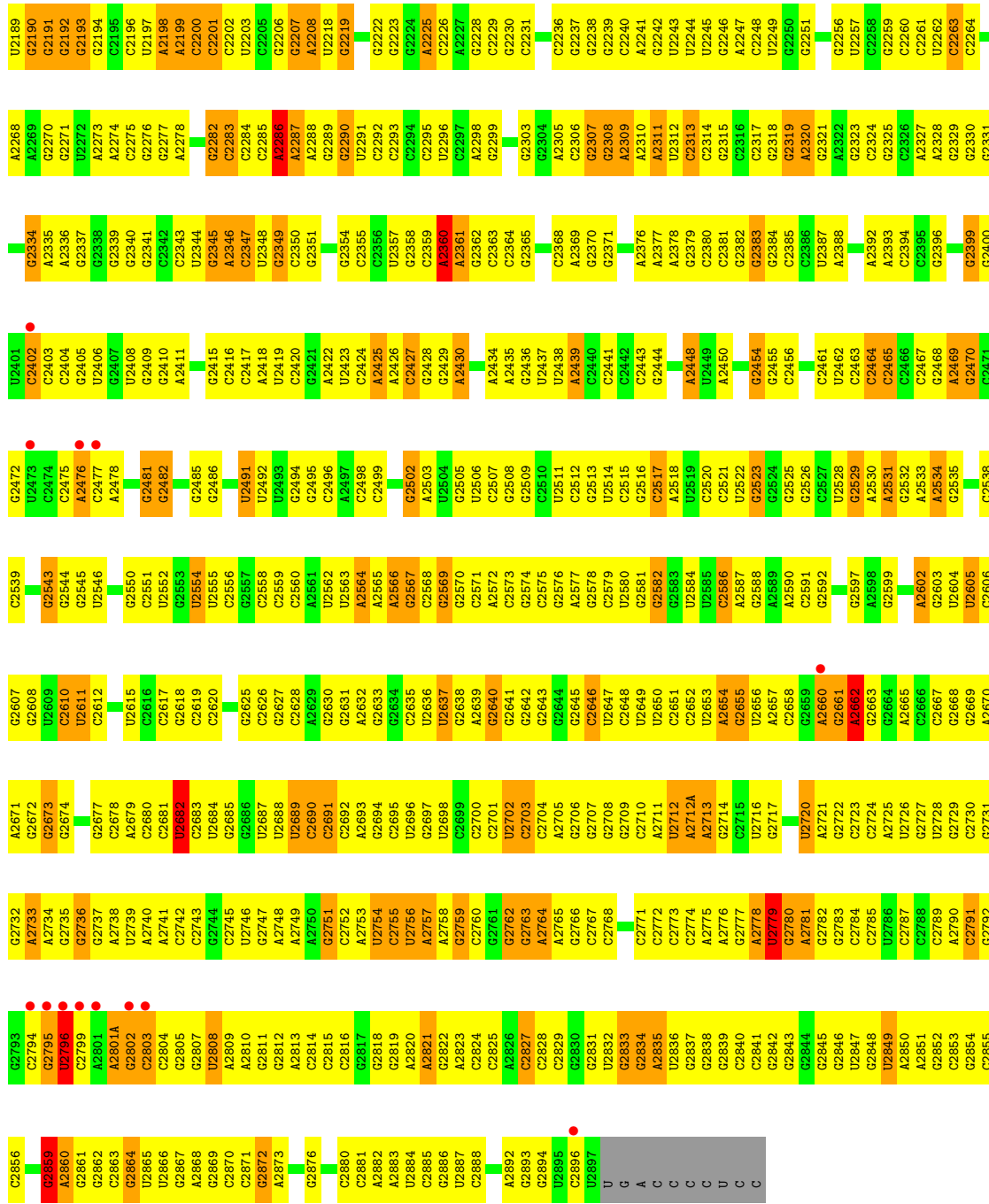




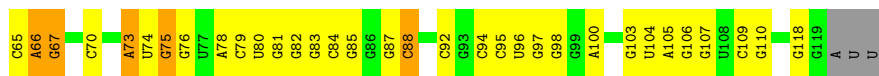
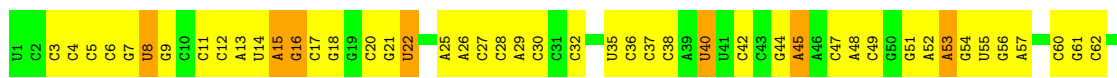
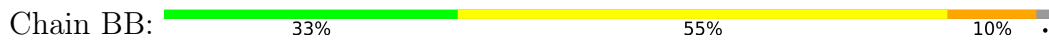
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A2015	U1777	G1845	U1778	G1697	G1623	C1407	G1339	C1270	C1207	A1143	A1027
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A2019	A1936	G1849	A1783	A1701	U1629	C1411	G1344	A1274	U1211	C1147	G1031
A2020	A1937	G1850	A1783	G1702	U1630	C1412	G1345	A1275	A1148	A1148	A1032
C2021	A1938	U1851	A1784	G1703	G1635	G1413	G1346	A1276	G1215	U1149	U1033
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G2023	U1940	A1853	A1786	G1705	C1637	G1415	G1348	A1278	C1151	U1035	U1035
G2024	U1946	A1854	A1789	G1707	U1639	G1416	A1349	U1279	A1220	G1036	G1036
C2025	C1947	G1855	G1789	U1709	C1640	G1417	C1350	G1280	C1221	G1037	G1037
G2026	G1948	G1856	A1791	U1710	A1641	G1418	C1351	G1281	C1221A	G1154	C1038
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G2028	U1949	A1860	U1796	C1711	G1643	U1420	U1353	A1284	G1223	A1156	C1040
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C2050	A1972	A1885	G1813	G1746	C1663	U1438	U1371	U1302	U1241	U1175	U1110
A2051	G1980	C1886	U1814	G1747	A1664	A1439	C1376	G1309	A1242	G1176	A1111
G2052	A1981	C1887	A1815	U1747	U1665	G1440	G1377	G1310	G1243	A1177	G1112
G2053	G1982	G1888	G1816	G1747A	G1666	A1441	A1378	G1311	G1244	G1178	U1113
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A2062	C1988	C1902	G1823	C1754	C1675	G1447	A1385	C1318	C1251	C1185	G1120
C2063	G1989	G1903	G1824	A1755	C1675	G1448	G1386	G1319	G1252	G1186	C1121
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G2067	U1993	C1908	G1828	G1759	U1681	G1452	G1390	G1324	G1256	G1190	G1125
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G2069	G1997	G1910	C1830	A1763	C1683	G1454	U1394	C1326	C1258	G1192	A1129
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A2071	G1998	A1912	G1832	G1765	C1685	G1457	U1396	C1327	G1260	G1194	G1131
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U2088	G1160	A1427	C1574	G1652	G1717	U1798	G1863	U1951	U2028	U2088	U1287	A1427	C1574	G1652	G1717	U1798	G1863	U1951	U2028	U2088
A2030	G1161	G1428	C1577	A1496	G1497	G1799	G1864	A1952	G2029	A2030	U1288	G1428	C1577	A1496	G1497	G1799	G1864	A1952	G2029	A2030
G2031	G1162	G1429	A1579	G1498	G1499	C1800	G1865	G1653	G2030	G2031	U1289	G1429	A1579	G1498	G1499	C1800	G1865	G1653	G2030	G2031
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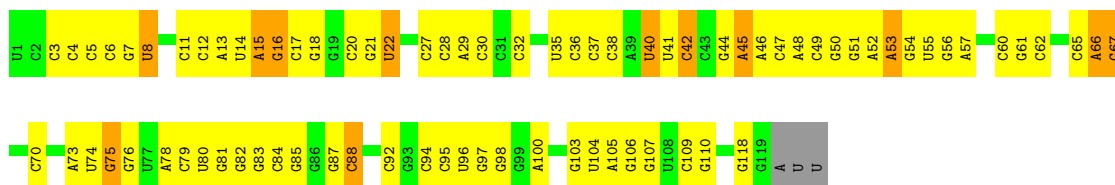


• Molecule 35: 5S RIBOSOMAL RNA



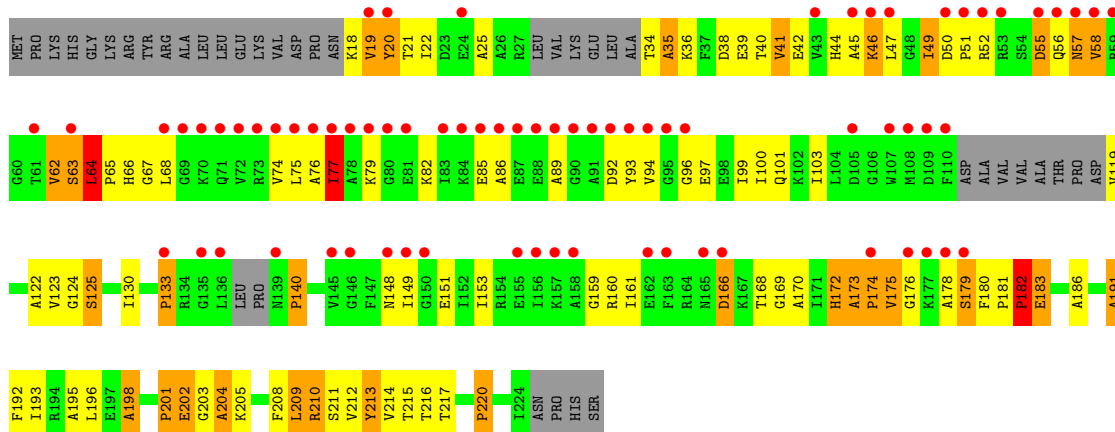
• Molecule 35: 5S RIBOSOMAL RNA

Chain DB: 33% 55% 10%



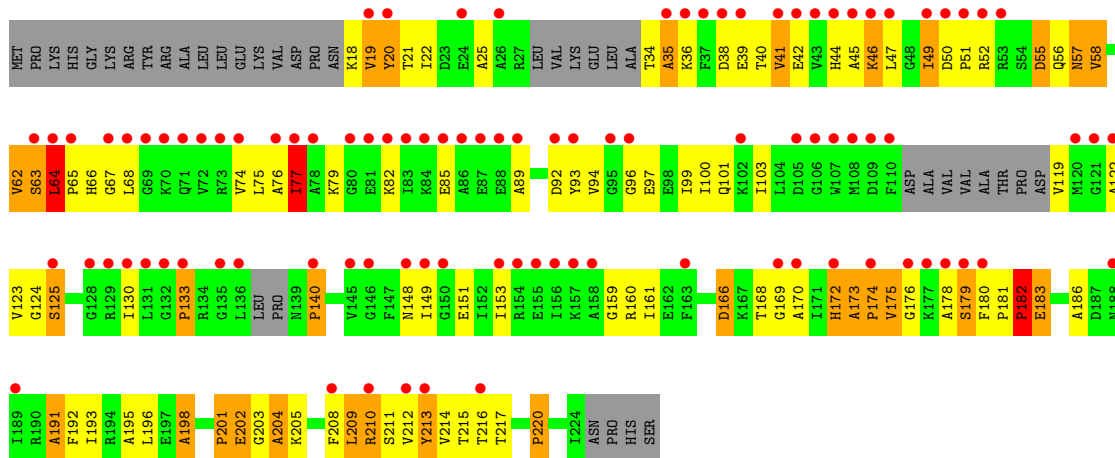
• Molecule 36: 50S RIBOSOMAL PROTEIN L1

Chain BC: 32% 38% 31% 13% 17%



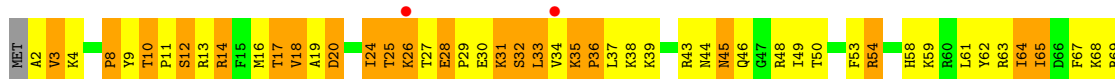
• Molecule 36: 50S RIBOSOMAL PROTEIN L1

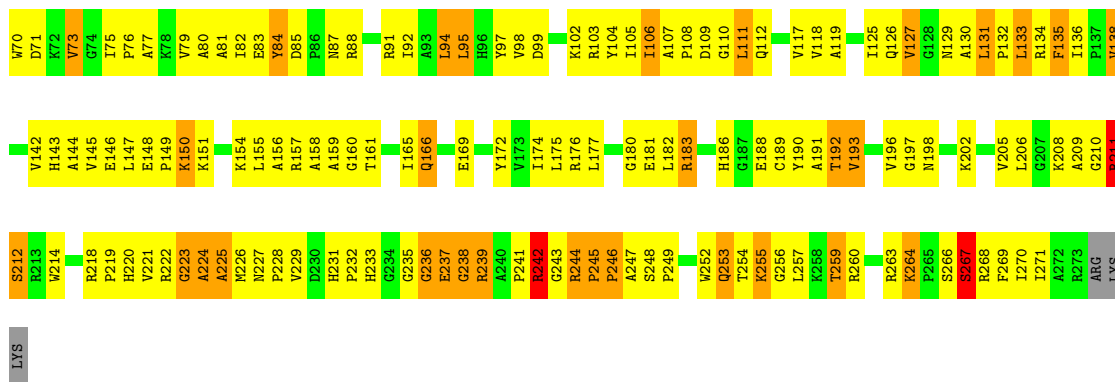
Chain DC: 42% 38% 31% 13% 17%



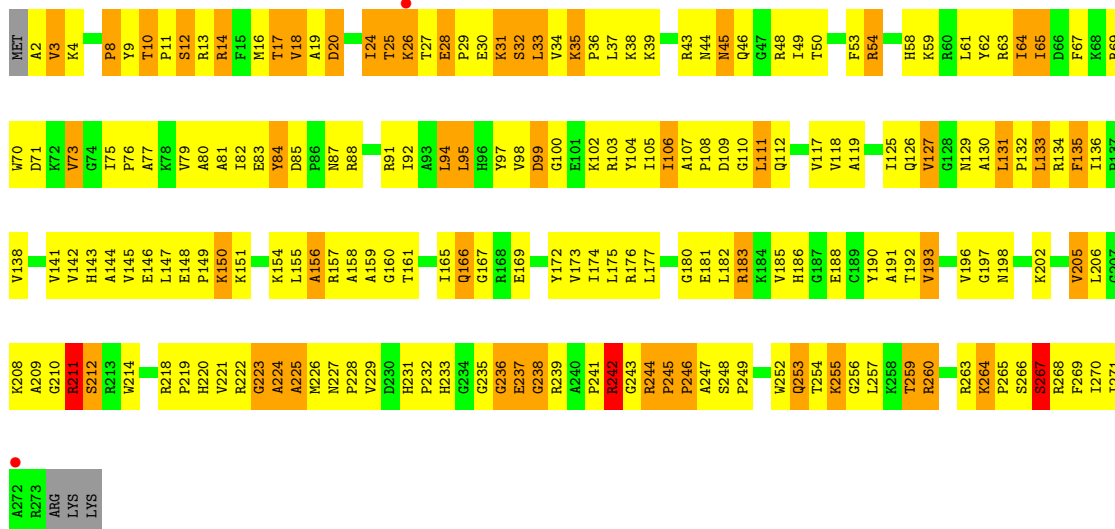
• Molecule 37: 50S RIBOSOMAL PROTEIN L2

Chain BD: 29% 50% 19%

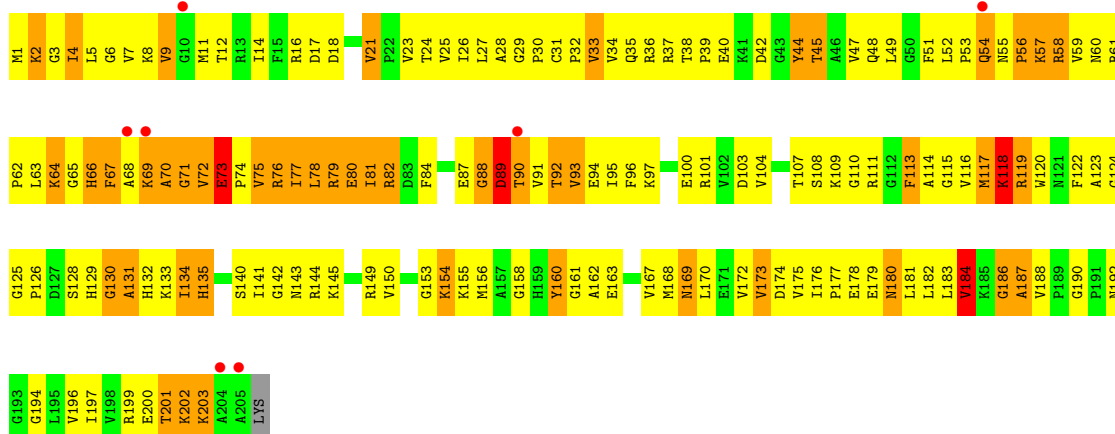




• Molecule 37: 50S RIBOSOMAL PROTEIN L2

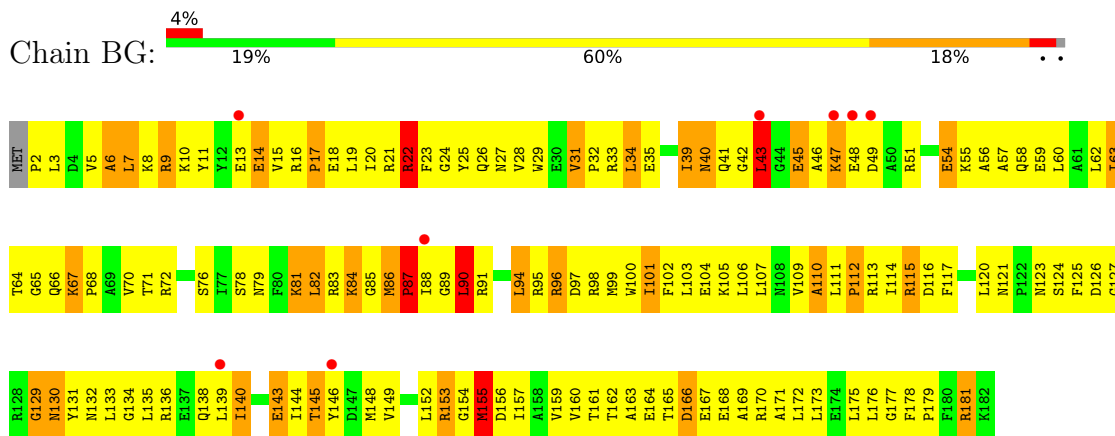


• Molecule 38: 50S RIBOSOMAL PROTEIN L3

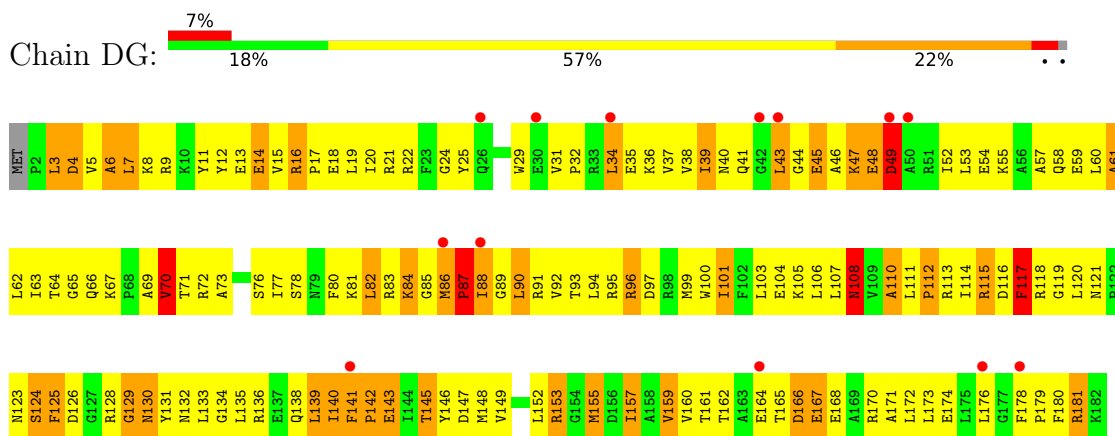


• Molecule 38: 50S RIBOSOMAL PROTEIN L3

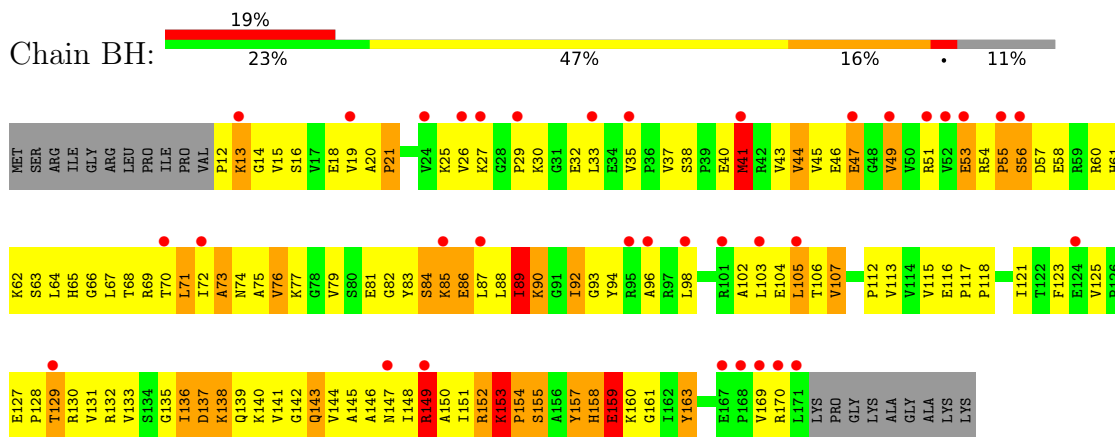
• Molecule 40: 50S RIBOSOMAL PROTEIN L5



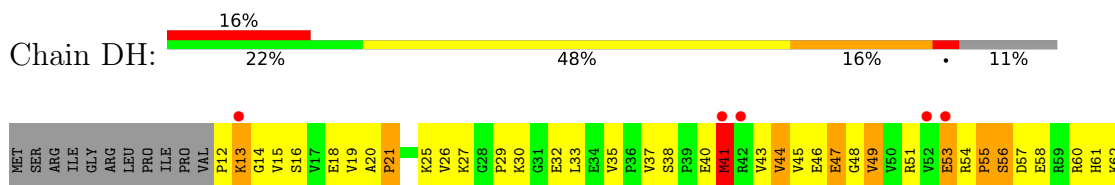
• Molecule 40: 50S RIBOSOMAL PROTEIN L5

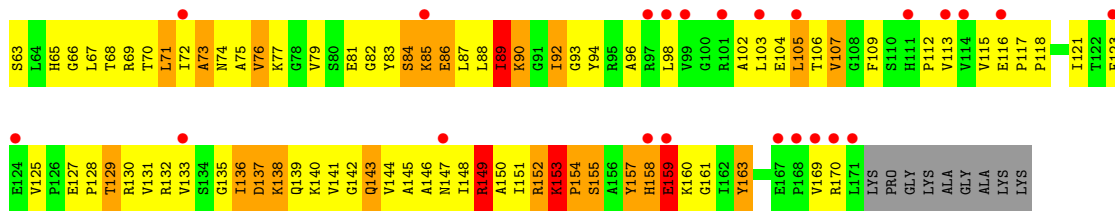


• Molecule 41: 50S RIBOSOMAL PROTEIN L6

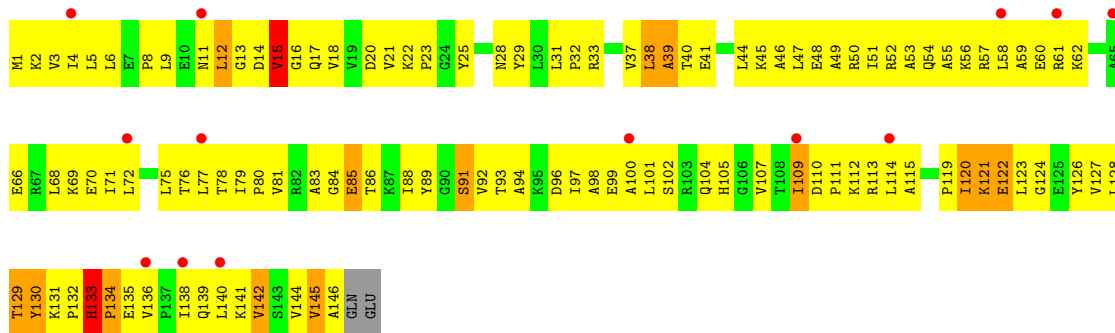


• Molecule 41: 50S RIBOSOMAL PROTEIN L6

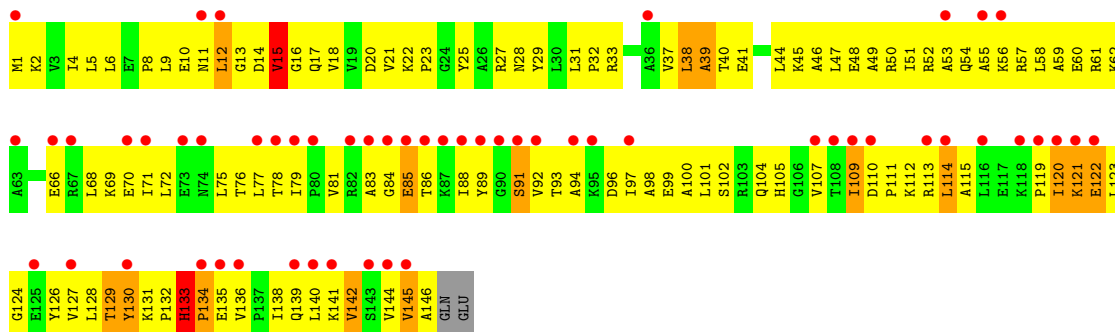




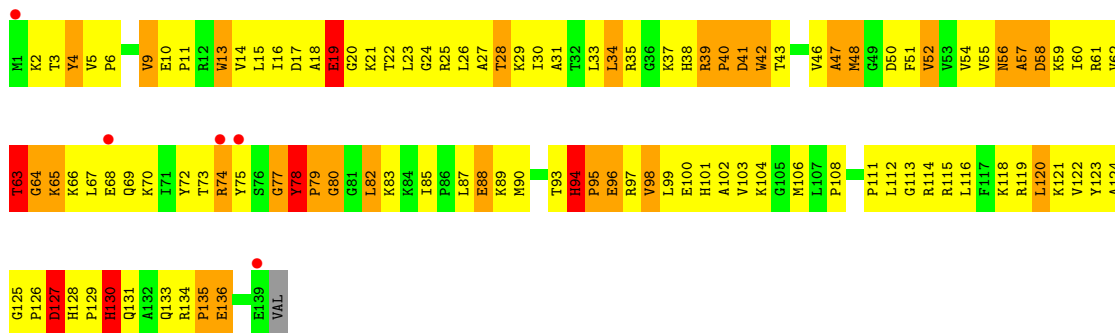
● Molecule 42: 50S RIBOSOMAL PROTEIN L9



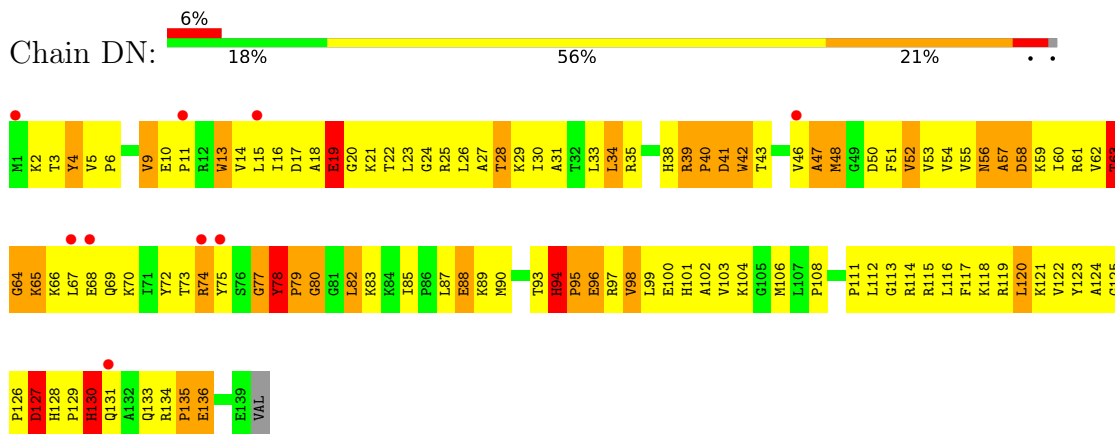
● Molecule 42: 50S RIBOSOMAL PROTEIN L9



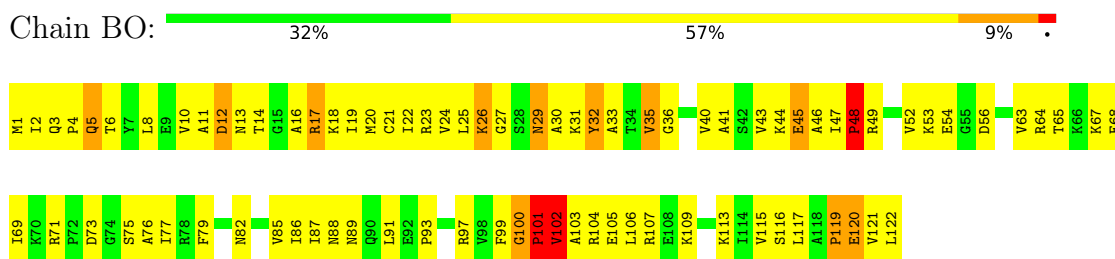
● Molecule 43: 50S RIBOSOMAL PROTEIN L13



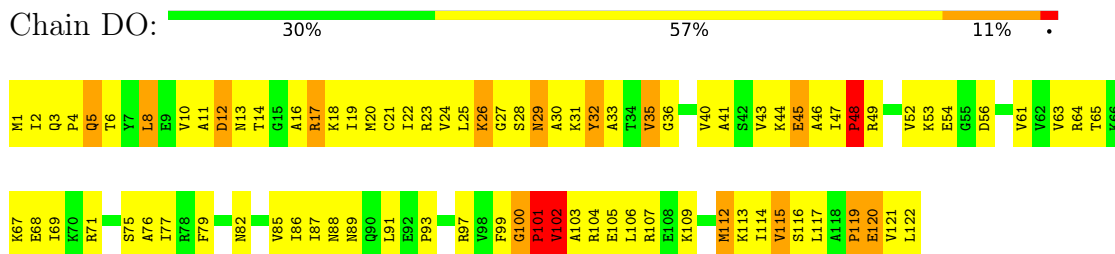
- Molecule 43: 50S RIBOSOMAL PROTEIN L13



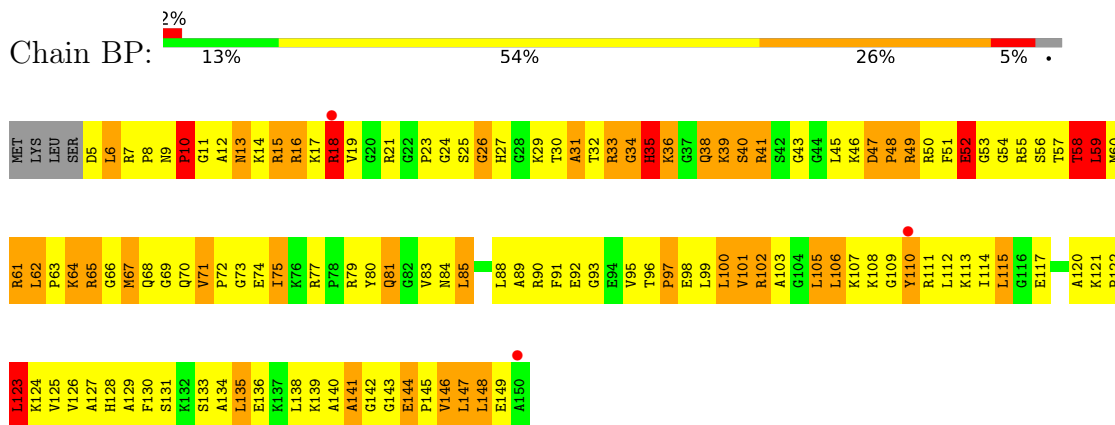
- Molecule 44: 50S RIBOSOMAL PROTEIN L14



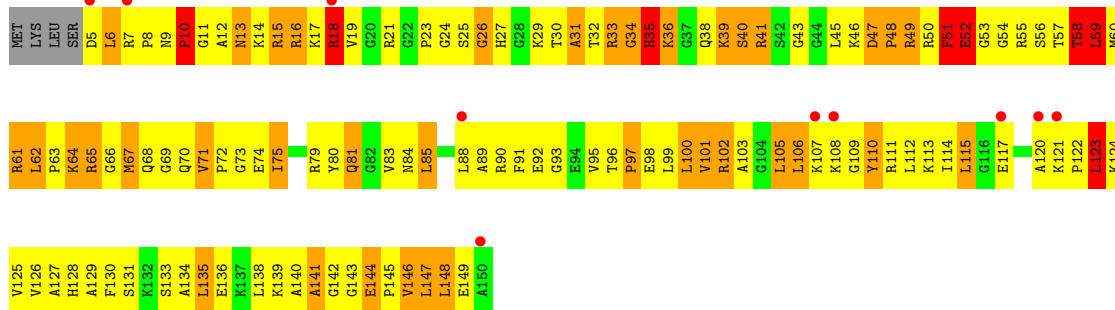
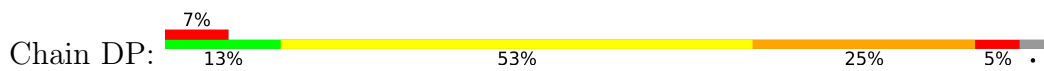
- Molecule 44: 50S RIBOSOMAL PROTEIN L14



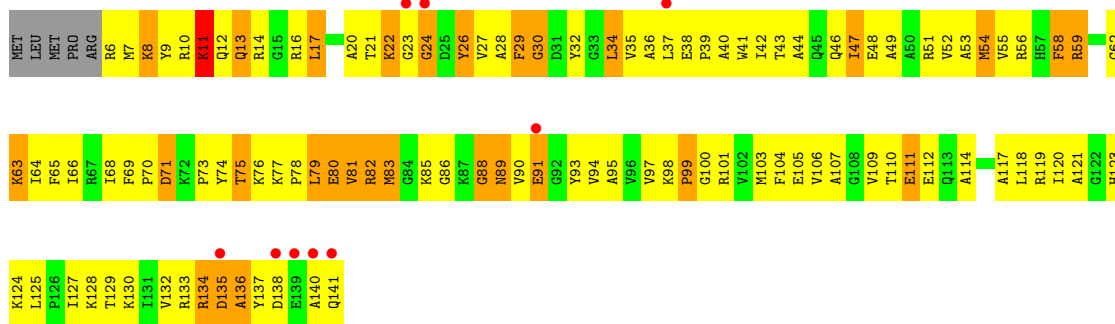
- Molecule 45: 50S RIBOSOMAL PROTEIN L15



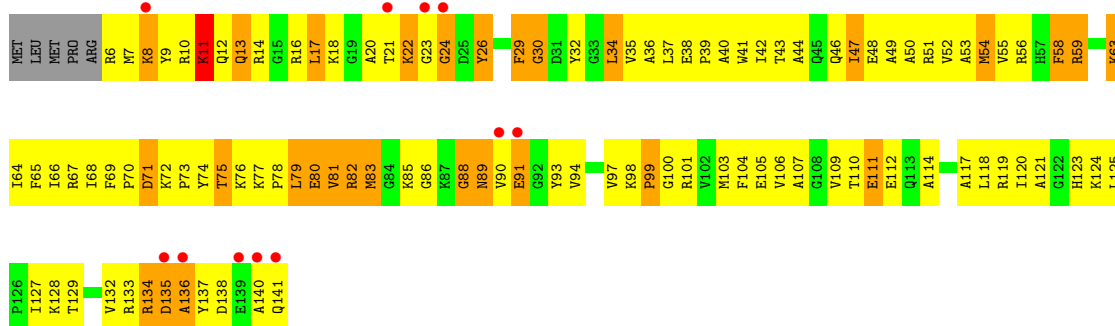
- Molecule 45: 50S RIBOSOMAL PROTEIN L15



• Molecule 46: 50S RIBOSOMAL PROTEIN L16

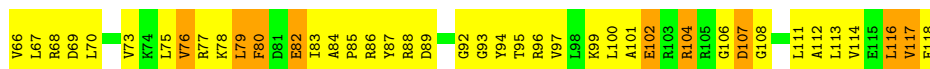


• Molecule 46: 50S RIBOSOMAL PROTEIN L16



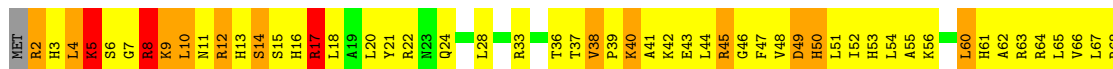
• Molecule 47: 50S RIBOSOMAL PROTEIN L17





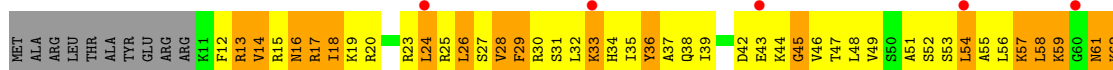
- Molecule 47: 50S RIBOSOMAL PROTEIN L17

Chain DR: 23% 56% 18%



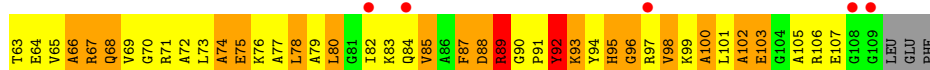
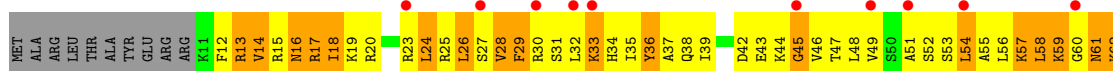
- Molecule 48: 50S RIBOSOMAL PROTEIN L18

Chain BS: 7% 11% 46% 30% 12%



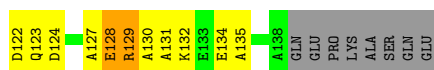
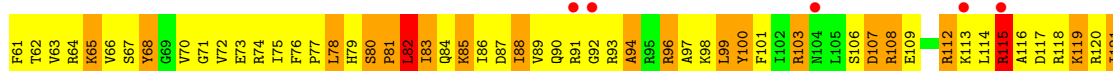
- Molecule 48: 50S RIBOSOMAL PROTEIN L18

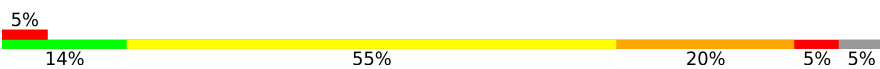
Chain DS: 13% 10% 46% 31% 12%

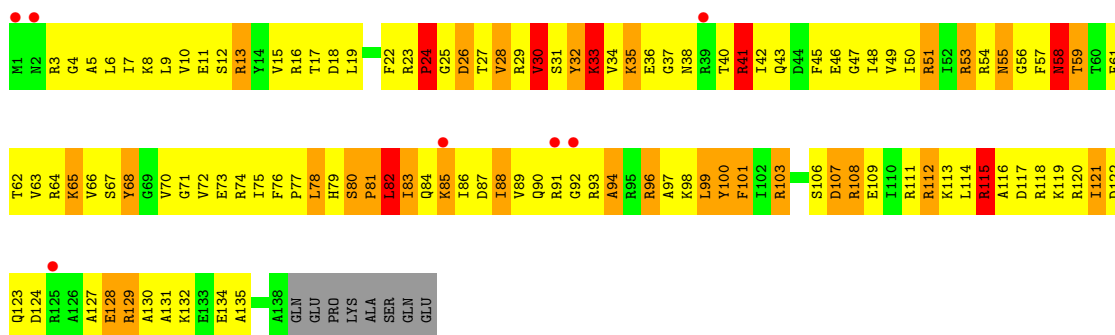


- Molecule 49: 50S RIBOSOMAL PROTEIN L19

Chain BT: 6% 15% 54% 21% 5% 5%

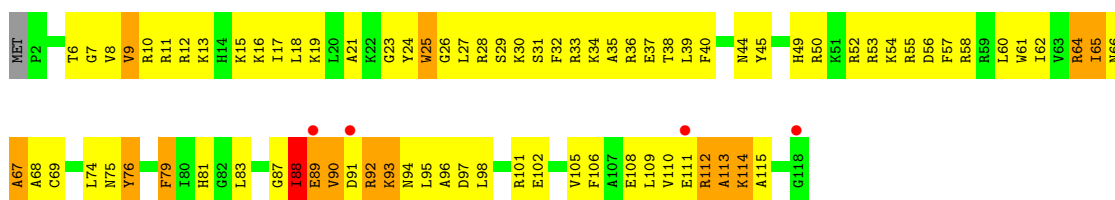


Chain DT: 



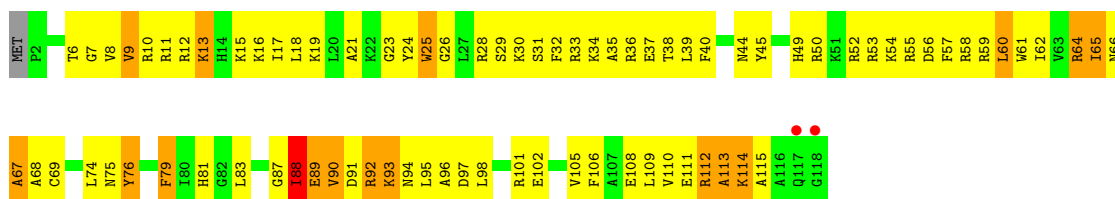
• Molecule 50: 50S RIBOSOMAL PROTEIN L20

Chain BU: 




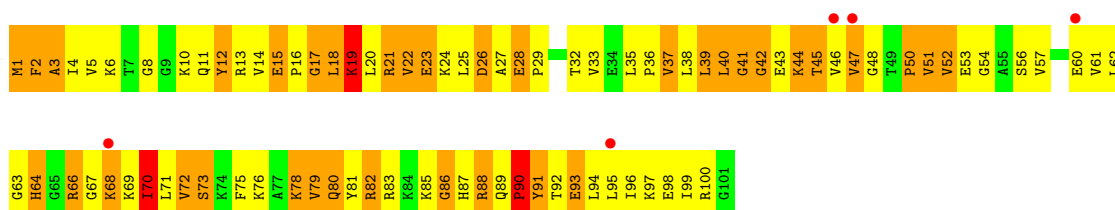
• Molecule 50: 50S RIBOSOMAL PROTEIN L20

Chain DU: 




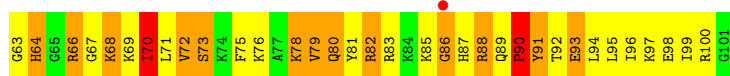
• Molecule 51: 50S RIBOSOMAL PROTEIN L21

Chain BV: 

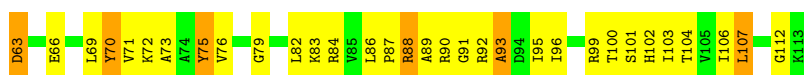
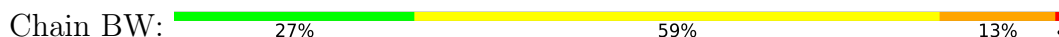


• Molecule 51: 50S RIBOSOMAL PROTEIN L21

Chain DV: 



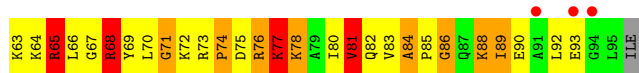
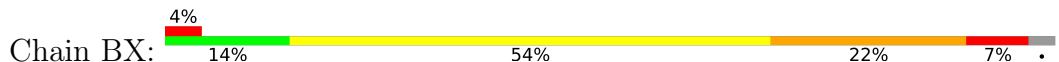
• Molecule 52: 50S RIBOSOMAL PROTEIN L22



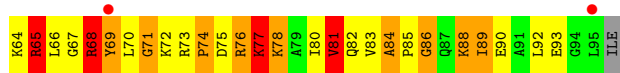
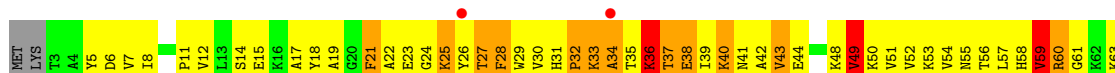
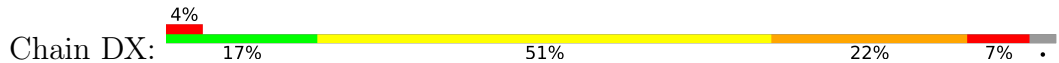
• Molecule 52: 50S RIBOSOMAL PROTEIN L22



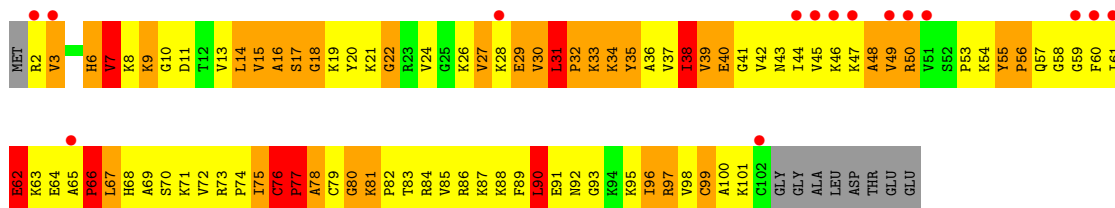
• Molecule 53: 50S RIBOSOMAL PROTEIN L23



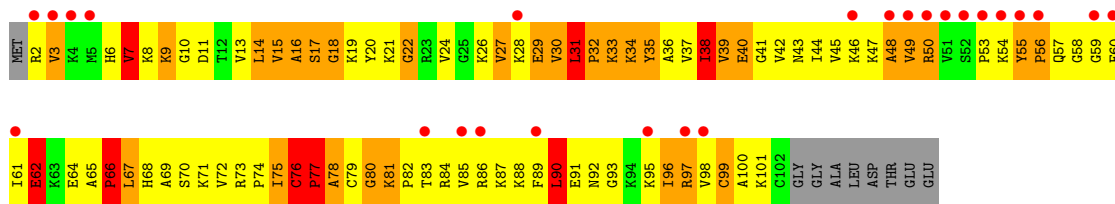
• Molecule 53: 50S RIBOSOMAL PROTEIN L23



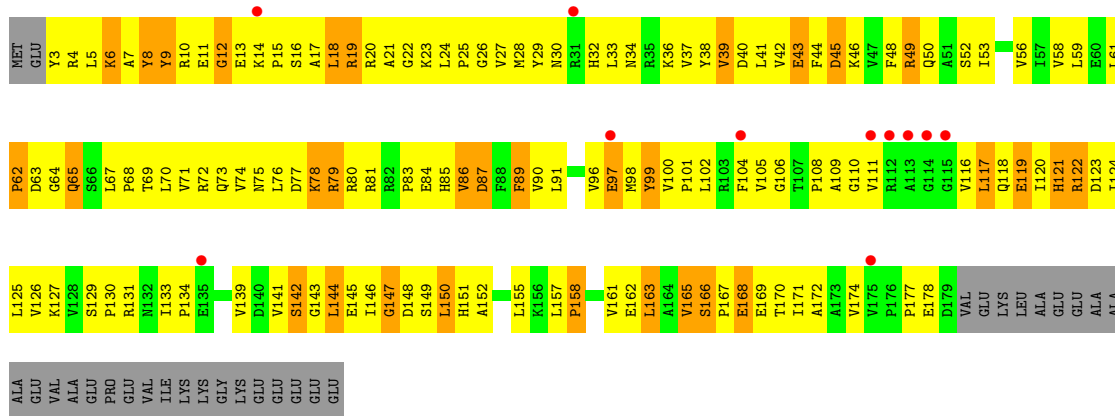
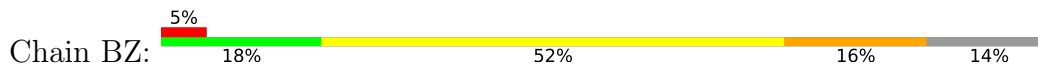
• Molecule 54: 50S RIBOSOMAL PROTEIN L24



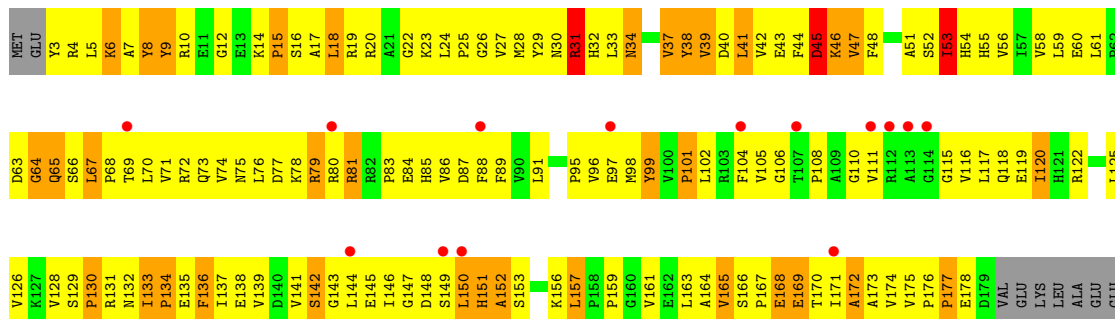
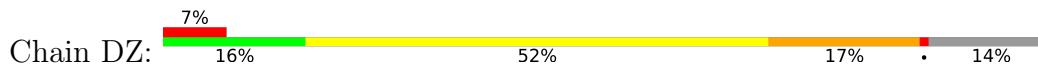
• Molecule 54: 50S RIBOSOMAL PROTEIN L24



• Molecule 55: 50S RIBOSOMAL PROTEIN L25



• Molecule 55: 50S RIBOSOMAL PROTEIN L25



ALA
ALA
ALA
GLU
VAL
VAL
ALA
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ILE
LYS
LYS
GLY
LYS
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GLU
GLU
GLU
GLU

4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	213.32Å 452.95Å 631.36Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 2.80 49.96 – 2.80	Depositor EDS
% Data completeness (in resolution range)	90.7 (50.00-2.80) 90.7 (49.96-2.80)	Depositor EDS
R_{merge}	0.28	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.84 (at 2.81Å)	Xtrriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.272 , 0.313 0.266 , 0.306	Depositor DCC
R_{free} test set	64102 reflections (4.77%)	wwPDB-VP
Wilson B-factor (Å ²)	36.9	Xtrriage
Anisotropy	0.160	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.19 , 81.8	EDS
L-test for twinning ²	$\langle L \rangle = 0.35$, $\langle L^2 \rangle = 0.17$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.86	EDS
Total number of atoms	291075	wwPDB-VP
Average B, all atoms (Å ²)	58.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.24% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 5MU, PAR, ZN, MG

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	0.50	0/36190	0.71	20/56486 (0.0%)
1	CA	0.47	0/36190	0.71	24/56486 (0.0%)
2	AB	0.33	0/1936	0.59	0/2611
2	CB	0.33	0/1936	0.59	0/2611
3	AC	0.35	0/1637	0.58	0/2207
3	CC	0.34	0/1637	0.58	0/2207
4	AD	0.42	0/1733	0.67	0/2318
4	CD	0.41	0/1733	0.66	0/2318
5	AE	0.41	0/1163	0.66	0/1566
5	CE	0.39	0/1163	0.65	0/1566
6	AF	0.37	0/856	0.64	0/1154
6	CF	0.38	0/856	0.65	0/1154
7	AG	0.34	0/1276	0.54	0/1709
7	CG	0.33	0/1276	0.54	0/1709
8	AH	0.35	0/1136	0.62	0/1527
8	CH	0.34	0/1136	0.62	0/1527
9	AI	0.32	0/1027	0.55	0/1372
9	CI	0.32	0/1027	0.55	0/1372
10	AJ	0.36	0/808	0.62	0/1087
10	CJ	0.34	0/808	0.62	0/1087
11	AK	0.38	0/900	0.64	0/1213
11	CK	0.35	0/900	0.63	0/1213
12	AL	0.42	0/987	0.71	0/1322
12	CL	0.43	0/987	0.73	0/1322
13	AM	0.34	0/994	0.62	0/1322
13	CM	0.32	0/994	0.61	0/1322
14	AN	0.39	0/501	0.66	0/664
14	CN	0.38	0/501	0.64	0/664
15	AO	0.38	0/745	0.63	0/992
15	CO	0.36	0/745	0.61	0/992
16	AP	0.43	0/717	0.69	0/965
16	CP	0.42	0/717	0.68	0/965

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AQ	0.41	0/837	0.67	0/1119
17	CQ	0.38	0/837	0.66	0/1119
18	AR	0.39	0/579	0.70	0/768
18	CR	0.38	0/579	0.70	0/768
19	AS	0.37	0/643	0.61	0/867
19	CS	0.36	0/643	0.60	0/867
20	AT	0.33	0/765	0.59	0/1007
20	CT	0.32	0/765	0.59	0/1007
21	AU	0.45	0/213	0.56	0/279
21	CU	0.44	0/213	0.55	0/279
22	AV	0.51	1/1814 (0.1%)	0.72	0/2825
22	CV	0.50	1/1814 (0.1%)	0.72	0/2825
23	AW	0.43	1/1813 (0.1%)	0.77	6/2823 (0.2%)
23	AY	0.36	0/456	0.72	0/710
23	CW	0.45	1/1813 (0.1%)	0.76	2/2823 (0.1%)
23	CY	0.35	0/456	0.68	0/710
24	AX	0.58	0/263	0.84	0/407
24	CX	0.58	0/263	0.81	1/407 (0.2%)
25	B0	0.38	0/658	0.65	0/878
25	D0	0.39	0/658	0.65	0/878
26	B1	0.61	0/700	1.04	1/931 (0.1%)
26	D1	0.52	0/700	0.99	1/931 (0.1%)
27	B2	0.45	0/423	0.99	3/560 (0.5%)
27	D2	0.45	0/423	0.89	2/560 (0.4%)
28	B3	0.37	0/473	0.61	0/636
28	D3	0.39	0/473	0.61	0/636
29	B4	0.47	0/241	0.88	4/334 (1.2%)
29	D4	0.44	0/241	0.88	4/334 (1.2%)
30	B5	0.42	0/473	0.74	0/639
30	D5	0.40	0/473	0.73	0/639
31	B6	0.39	0/387	0.62	0/517
31	D6	0.39	0/387	0.62	0/517
32	B7	0.51	0/427	0.73	0/563
32	D7	0.53	0/427	0.70	0/563
33	B8	0.50	0/516	0.81	0/681
33	D8	0.48	0/516	0.80	0/681
34	BA	0.62	4/66876 (0.0%)	0.77	56/104407 (0.1%)
34	DA	0.62	5/66876 (0.0%)	0.77	53/104407 (0.1%)
35	BB	0.39	0/2853	0.70	0/4451
35	DB	0.38	0/2853	0.70	0/4451
36	BC	0.38	0/1145	0.68	7/1556 (0.4%)
36	DC	0.40	0/1145	0.68	7/1556 (0.4%)
37	BD	0.52	0/2155	0.87	3/2907 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
37	DD	0.51	0/2155	0.86	3/2907 (0.1%)
38	BE	0.43	0/1597	0.76	0/2155
38	DE	0.45	0/1597	0.77	0/2155
39	BF	0.45	0/1659	0.70	0/2246
39	DF	0.44	0/1659	0.69	0/2246
40	BG	0.39	0/1498	0.72	1/2013 (0.0%)
40	DG	0.35	0/1498	0.73	0/2013
41	BH	0.33	0/1246	0.69	0/1684
41	DH	0.35	0/1246	0.69	0/1684
42	BI	0.35	0/1147	0.66	0/1553
42	DI	0.34	0/1147	0.66	0/1553
43	BN	0.40	0/1132	0.78	0/1527
43	DN	0.45	0/1132	0.79	0/1527
44	BO	0.48	0/943	0.74	0/1269
44	DO	0.49	0/943	0.75	0/1269
45	BP	0.42	0/1131	1.00	6/1504 (0.4%)
45	DP	0.41	0/1131	1.00	7/1504 (0.5%)
46	BQ	0.37	0/1100	0.72	1/1470 (0.1%)
46	DQ	0.37	0/1100	0.72	1/1470 (0.1%)
47	BR	0.40	0/974	0.74	1/1302 (0.1%)
47	DR	0.38	0/974	0.74	1/1302 (0.1%)
48	BS	0.40	0/779	0.73	0/1038
48	DS	0.39	0/779	0.73	0/1038
49	BT	0.42	0/1156	0.77	2/1544 (0.1%)
49	DT	0.42	0/1156	0.77	1/1544 (0.1%)
50	BU	0.37	0/975	0.68	0/1297
50	DU	0.40	0/975	0.69	0/1297
51	BV	0.38	0/789	0.73	0/1054
51	DV	0.40	0/789	0.73	0/1054
52	BW	0.43	0/907	0.72	0/1216
52	DW	0.45	0/907	0.72	0/1216
53	BX	0.53	0/740	0.89	3/995 (0.3%)
53	DX	0.50	0/740	0.89	3/995 (0.3%)
54	BY	0.41	0/789	0.78	0/1053
54	DY	0.43	0/789	0.78	0/1053
55	BZ	0.35	0/1436	0.64	0/1951
55	DZ	0.36	0/1436	0.62	0/1951
All	All	0.52	13/314628 (0.0%)	0.74	224/470502 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	2	37
1	CA	2	29
22	AV	0	2
22	CV	0	2
23	AW	3	1
23	CW	2	0
24	CX	0	1
26	B1	0	1
34	BA	30	81
34	DA	28	79
All	All	67	233

The worst 5 of 13 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	CW	1	G	OP3-P	-7.25	1.52	1.61
23	AW	1	G	OP3-P	-7.19	1.52	1.61
22	CV	1	C	OP3-P	-7.12	1.52	1.61
22	AV	1	C	OP3-P	-6.95	1.52	1.61
34	BA	783	A	C5-C6	-6.34	1.35	1.41

The worst 5 of 224 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	CW	17	C	N1-C1'-C2'	10.99	128.28	114.00
34	DA	1962	C	N1-C1'-C2'	10.90	128.18	114.00
34	BA	1962	C	N1-C1'-C2'	10.48	127.62	114.00
34	BA	669	G	N9-C1'-C2'	10.36	127.47	114.00
34	DA	669	G	N9-C1'-C2'	10.24	127.32	114.00

5 of 67 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	410	G	C3'
1	AA	412	A	C1'
23	AW	17	C	C1'
23	AW	47	U	C1'
23	AW	70	G	C3'

5 of 233 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	107	G	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	253	U	Sidechain
1	AA	371	G	Sidechain
1	AA	38	G	Sidechain
1	AA	9	G	Sidechain

5.2 Too-close contacts [i](#)

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	32329	0	16314	1350	0
1	CA	32329	0	16316	1333	0
2	AB	1901	0	1951	258	0
2	CB	1901	0	1951	256	0
3	AC	1613	0	1677	209	0
3	CC	1613	0	1677	203	0
4	AD	1703	0	1764	192	0
4	CD	1703	0	1766	191	0
5	AE	1147	0	1207	161	0
5	CE	1147	0	1206	159	0
6	AF	843	0	857	98	0
6	CF	843	0	857	101	0
7	AG	1257	0	1296	125	0
7	CG	1257	0	1296	122	0
8	AH	1116	0	1177	128	0
8	CH	1116	0	1177	130	0
9	AI	1011	0	1041	140	0
9	CI	1011	0	1041	140	0
10	AJ	795	0	840	147	0
10	CJ	795	0	840	144	0
11	AK	885	0	904	104	0
11	CK	885	0	904	96	0
12	AL	971	0	1057	122	0
12	CL	971	0	1057	120	0
13	AM	988	0	1055	156	0
13	CM	988	0	1055	151	0
14	AN	492	0	530	62	0
14	CN	492	0	529	61	0
15	AO	734	0	771	70	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	CO	734	0	771	76	0
16	AP	701	0	720	83	0
16	CP	701	0	720	75	0
17	AQ	824	0	891	91	0
17	CQ	824	0	891	90	0
18	AR	574	0	644	97	0
18	CR	574	0	644	94	0
19	AS	630	0	652	106	0
19	CS	630	0	652	106	0
20	AT	763	0	861	106	0
20	CT	763	0	861	102	0
21	AU	209	0	221	23	0
21	CU	209	0	221	22	0
22	AV	1645	0	838	61	0
22	CV	1645	0	838	51	0
23	AW	1623	0	821	83	0
23	AY	407	0	208	16	0
23	CW	1623	0	821	81	0
23	CY	407	0	208	13	0
24	AX	235	0	119	6	0
24	CX	235	0	119	5	0
25	B0	650	0	654	72	0
25	D0	650	0	654	78	0
26	B1	693	0	764	182	0
26	D1	693	0	764	197	0
27	B2	421	0	460	124	0
27	D2	421	0	461	125	0
28	B3	468	0	523	53	0
28	D3	468	0	523	52	0
29	B4	242	0	103	22	0
29	D4	242	0	103	23	0
30	B5	459	0	480	75	0
30	D5	459	0	480	70	0
31	B6	381	0	390	59	0
31	D6	381	0	390	56	0
32	B7	419	0	467	35	0
32	D7	419	0	467	35	0
33	B8	508	0	576	110	0
33	D8	508	0	576	114	0
34	BA	59708	0	30096	2501	0
34	DA	59708	0	30096	2505	0
35	BB	2551	0	1294	106	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
35	DB	2551	0	1294	100	0
36	BC	1142	0	865	109	0
36	DC	1142	0	865	106	0
37	BD	2105	0	2182	357	0
37	DD	2105	0	2182	362	0
38	BE	1564	0	1629	325	0
38	DE	1564	0	1629	323	0
39	BF	1624	0	1677	237	0
39	DF	1624	0	1677	235	0
40	BG	1474	0	1534	237	0
40	DG	1474	0	1534	242	0
41	BH	1223	0	1282	199	0
41	DH	1223	0	1282	211	0
42	BI	1132	0	1218	198	0
42	DI	1132	0	1218	200	0
43	BN	1105	0	1180	209	0
43	DN	1105	0	1180	215	0
44	BO	933	0	996	139	0
44	DO	933	0	996	139	0
45	BP	1114	0	1187	322	0
45	DP	1114	0	1187	322	0
46	BQ	1080	0	1127	224	0
46	DQ	1080	0	1127	214	0
47	BR	960	0	1021	171	0
47	DR	960	0	1021	170	0
48	BS	771	0	832	182	0
48	DS	771	0	831	186	0
49	BT	1142	0	1202	219	0
49	DT	1142	0	1202	231	0
50	BU	958	0	1015	183	0
50	DU	958	0	1014	186	0
51	BV	779	0	851	212	0
51	DV	779	0	851	216	0
52	BW	896	0	953	111	0
52	DW	896	0	953	110	0
53	BX	726	0	778	203	0
53	DX	726	0	778	200	0
54	BY	776	0	870	220	0
54	DY	776	0	870	216	0
55	BZ	1404	0	1432	219	0
55	DZ	1404	0	1432	241	0
56	AA	215	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	AE	1	0	0	0	0
56	AV	7	0	0	0	0
56	AW	22	0	0	0	0
56	AX	4	0	0	0	0
56	AY	1	0	0	0	0
56	B1	1	0	0	0	0
56	B2	5	0	0	0	0
56	B3	1	0	0	0	0
56	B5	2	0	0	0	0
56	B7	2	0	0	0	0
56	BA	454	0	0	0	0
56	BB	19	0	0	0	0
56	BE	1	0	0	0	0
56	BF	2	0	0	0	0
56	BN	1	0	0	0	0
56	BO	1	0	0	0	0
56	BV	1	0	0	0	0
56	BX	1	0	0	0	0
56	CA	189	0	0	0	0
56	CF	1	0	0	0	0
56	CJ	1	0	0	0	0
56	CM	1	0	0	0	0
56	CU	1	0	0	0	0
56	CV	4	0	0	0	0
56	CW	13	0	0	0	0
56	CX	6	0	0	0	0
56	D5	2	0	0	0	0
56	DA	398	0	0	0	0
56	DB	12	0	0	0	0
56	DD	2	0	0	0	0
56	DE	1	0	0	0	0
56	DF	1	0	0	0	0
56	DH	1	0	0	0	0
56	DN	1	0	0	0	0
56	DO	1	0	0	0	0
56	DS	1	0	0	0	0
56	DU	1	0	0	0	0
56	DZ	1	0	0	0	0
57	AA	42	0	45	3	0
57	CA	42	0	45	0	0
58	AD	1	0	0	0	0
58	AN	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	CD	1	0	0	0	0
58	CN	1	0	0	0	0
All	All	291075	0	196199	21274	0

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 44.

The worst 5 of 21274 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)
51:DV:70:ILE:HB	51:DV:90:PRO:HB2	1.21	1.18
42:BI:79:ILE:HG12	42:BI:140:LEU:HD11	1.21	1.17
3:CC:20:SER:HB2	3:CC:40:ARG:HH22	1.00	1.17
37:DD:35:LYS:HD3	37:DD:63:ARG:HB3	1.24	1.17
34:DA:2491:U:H5'	34:DA:2570:G:H5''	1.26	1.16

There are no symmetry-related clashes.

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	233/256 (91%)	147 (63%)	54 (23%)	32 (14%)	0	0
2	CB	233/256 (91%)	149 (64%)	52 (22%)	32 (14%)	0	0
3	AC	205/239 (86%)	130 (63%)	55 (27%)	20 (10%)	0	1
3	CC	205/239 (86%)	130 (63%)	57 (28%)	18 (9%)	1	1
4	AD	206/209 (99%)	130 (63%)	51 (25%)	25 (12%)	0	1
4	CD	206/209 (99%)	128 (62%)	54 (26%)	24 (12%)	0	1
5	AE	149/162 (92%)	108 (72%)	28 (19%)	13 (9%)	1	1
5	CE	149/162 (92%)	107 (72%)	30 (20%)	12 (8%)	1	2

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	AF	99/101 (98%)	72 (73%)	21 (21%)	6 (6%)	1	4
6	CF	99/101 (98%)	72 (73%)	22 (22%)	5 (5%)	2	6
7	AG	153/156 (98%)	100 (65%)	41 (27%)	12 (8%)	1	2
7	CG	153/156 (98%)	100 (65%)	42 (28%)	11 (7%)	1	2
8	AH	136/138 (99%)	103 (76%)	28 (21%)	5 (4%)	3	11
8	CH	136/138 (99%)	102 (75%)	29 (21%)	5 (4%)	3	11
9	AI	121/128 (94%)	80 (66%)	30 (25%)	11 (9%)	1	1
9	CI	121/128 (94%)	81 (67%)	28 (23%)	12 (10%)	0	1
10	AJ	97/105 (92%)	70 (72%)	18 (19%)	9 (9%)	0	1
10	CJ	97/105 (92%)	70 (72%)	18 (19%)	9 (9%)	0	1
11	AK	117/129 (91%)	87 (74%)	25 (21%)	5 (4%)	2	8
11	CK	117/129 (91%)	88 (75%)	24 (20%)	5 (4%)	2	8
12	AL	123/135 (91%)	83 (68%)	22 (18%)	18 (15%)	0	0
12	CL	123/135 (91%)	84 (68%)	20 (16%)	19 (15%)	0	0
13	AM	113/126 (90%)	68 (60%)	26 (23%)	19 (17%)	0	0
13	CM	113/126 (90%)	69 (61%)	23 (20%)	21 (19%)	0	0
14	AN	58/61 (95%)	35 (60%)	17 (29%)	6 (10%)	0	1
14	CN	58/61 (95%)	35 (60%)	17 (29%)	6 (10%)	0	1
15	AO	86/89 (97%)	48 (56%)	34 (40%)	4 (5%)	2	7
15	CO	86/89 (97%)	50 (58%)	31 (36%)	5 (6%)	1	4
16	AP	82/88 (93%)	53 (65%)	24 (29%)	5 (6%)	1	4
16	CP	82/88 (93%)	53 (65%)	25 (30%)	4 (5%)	2	7
17	AQ	98/105 (93%)	74 (76%)	15 (15%)	9 (9%)	1	1
17	CQ	98/105 (93%)	75 (76%)	15 (15%)	8 (8%)	1	2
18	AR	68/88 (77%)	38 (56%)	21 (31%)	9 (13%)	0	0
18	CR	68/88 (77%)	38 (56%)	21 (31%)	9 (13%)	0	0
19	AS	77/93 (83%)	52 (68%)	14 (18%)	11 (14%)	0	0
19	CS	77/93 (83%)	51 (66%)	15 (20%)	11 (14%)	0	0
20	AT	97/106 (92%)	54 (56%)	29 (30%)	14 (14%)	0	0
20	CT	97/106 (92%)	56 (58%)	27 (28%)	14 (14%)	0	0
21	AU	23/27 (85%)	18 (78%)	4 (17%)	1 (4%)	2	8

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
21	CU	23/27 (85%)	18 (78%)	4 (17%)	1 (4%)	2	8
25	B0	83/85 (98%)	62 (75%)	16 (19%)	5 (6%)	1	4
25	D0	83/85 (98%)	63 (76%)	15 (18%)	5 (6%)	1	4
26	B1	87/98 (89%)	43 (49%)	25 (29%)	19 (22%)	0	0
26	D1	87/98 (89%)	42 (48%)	21 (24%)	24 (28%)	0	0
27	B2	49/72 (68%)	16 (33%)	16 (33%)	17 (35%)	0	0
27	D2	49/72 (68%)	15 (31%)	15 (31%)	19 (39%)	0	0
28	B3	58/60 (97%)	42 (72%)	12 (21%)	4 (7%)	1	3
28	D3	58/60 (97%)	42 (72%)	12 (21%)	4 (7%)	1	3
29	B4	48/71 (68%)	14 (29%)	11 (23%)	23 (48%)	0	0
29	D4	48/71 (68%)	14 (29%)	11 (23%)	23 (48%)	0	0
30	B5	57/60 (95%)	37 (65%)	13 (23%)	7 (12%)	0	1
30	D5	57/60 (95%)	38 (67%)	12 (21%)	7 (12%)	0	1
31	B6	41/54 (76%)	18 (44%)	16 (39%)	7 (17%)	0	0
31	D6	41/54 (76%)	18 (44%)	16 (39%)	7 (17%)	0	0
32	B7	47/49 (96%)	36 (77%)	10 (21%)	1 (2%)	7	23
32	D7	47/49 (96%)	37 (79%)	8 (17%)	2 (4%)	2	8
33	B8	62/65 (95%)	38 (61%)	13 (21%)	11 (18%)	0	0
33	D8	62/65 (95%)	37 (60%)	14 (23%)	11 (18%)	0	0
36	BC	183/229 (80%)	88 (48%)	52 (28%)	43 (24%)	0	0
36	DC	183/229 (80%)	87 (48%)	53 (29%)	43 (24%)	0	0
37	BD	270/276 (98%)	193 (72%)	51 (19%)	26 (10%)	0	1
37	DD	270/276 (98%)	194 (72%)	50 (18%)	26 (10%)	0	1
38	BE	203/206 (98%)	116 (57%)	49 (24%)	38 (19%)	0	0
38	DE	203/206 (98%)	116 (57%)	49 (24%)	38 (19%)	0	0
39	BF	206/210 (98%)	142 (69%)	40 (19%)	24 (12%)	0	1
39	DF	206/210 (98%)	142 (69%)	41 (20%)	23 (11%)	0	1
40	BG	177/182 (97%)	93 (52%)	56 (32%)	28 (16%)	0	0
40	DG	177/182 (97%)	101 (57%)	45 (25%)	31 (18%)	0	0
41	BH	158/180 (88%)	100 (63%)	31 (20%)	27 (17%)	0	0
41	DH	158/180 (88%)	100 (63%)	31 (20%)	27 (17%)	0	0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
42	BI	144/148 (97%)	98 (68%)	36 (25%)	10 (7%)	1	3
42	DI	144/148 (97%)	97 (67%)	36 (25%)	11 (8%)	1	2
43	BN	137/140 (98%)	75 (55%)	35 (26%)	27 (20%)	0	0
43	DN	137/140 (98%)	77 (56%)	33 (24%)	27 (20%)	0	0
44	BO	120/122 (98%)	92 (77%)	17 (14%)	11 (9%)	1	1
44	DO	120/122 (98%)	90 (75%)	18 (15%)	12 (10%)	0	1
45	BP	144/150 (96%)	72 (50%)	37 (26%)	35 (24%)	0	0
45	DP	144/150 (96%)	72 (50%)	38 (26%)	34 (24%)	0	0
46	BQ	134/141 (95%)	81 (60%)	34 (25%)	19 (14%)	0	0
46	DQ	134/141 (95%)	79 (59%)	35 (26%)	20 (15%)	0	0
47	BR	115/118 (98%)	74 (64%)	20 (17%)	21 (18%)	0	0
47	DR	115/118 (98%)	72 (63%)	23 (20%)	20 (17%)	0	0
48	BS	97/112 (87%)	49 (50%)	19 (20%)	29 (30%)	0	0
48	DS	97/112 (87%)	49 (50%)	18 (19%)	30 (31%)	0	0
49	BT	136/146 (93%)	77 (57%)	34 (25%)	25 (18%)	0	0
49	DT	136/146 (93%)	79 (58%)	33 (24%)	24 (18%)	0	0
50	BU	115/118 (98%)	61 (53%)	42 (36%)	12 (10%)	0	1
50	DU	115/118 (98%)	61 (53%)	40 (35%)	14 (12%)	0	1
51	BV	97/101 (96%)	47 (48%)	23 (24%)	27 (28%)	0	0
51	DV	97/101 (96%)	47 (48%)	23 (24%)	27 (28%)	0	0
52	BW	111/113 (98%)	74 (67%)	23 (21%)	14 (13%)	0	1
52	DW	111/113 (98%)	77 (69%)	19 (17%)	15 (14%)	0	0
53	BX	91/96 (95%)	45 (50%)	23 (25%)	23 (25%)	0	0
53	DX	91/96 (95%)	45 (50%)	23 (25%)	23 (25%)	0	0
54	BY	99/110 (90%)	41 (41%)	24 (24%)	34 (34%)	0	0
54	DY	99/110 (90%)	41 (41%)	24 (24%)	34 (34%)	0	0
55	BZ	175/206 (85%)	99 (57%)	48 (27%)	28 (16%)	0	0
55	DZ	175/206 (85%)	109 (62%)	33 (19%)	33 (19%)	0	0
All	All	11570/12518 (92%)	7170 (62%)	2726 (24%)	1674 (14%)	0	0

5 of 1674 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	52	GLU
2	AB	77	ALA
2	AB	84	GLU
2	AB	154	LEU

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	202/220 (92%)	182 (90%)	20 (10%)	8	23
2	CB	202/220 (92%)	182 (90%)	20 (10%)	8	23
3	AC	160/188 (85%)	151 (94%)	9 (6%)	21	51
3	CC	160/188 (85%)	150 (94%)	10 (6%)	18	46
4	AD	180/181 (99%)	159 (88%)	21 (12%)	5	16
4	CD	180/181 (99%)	161 (89%)	19 (11%)	6	20
5	AE	115/123 (94%)	102 (89%)	13 (11%)	6	18
5	CE	115/123 (94%)	103 (90%)	12 (10%)	7	21
6	AF	90/90 (100%)	84 (93%)	6 (7%)	16	43
6	CF	90/90 (100%)	84 (93%)	6 (7%)	16	43
7	AG	126/127 (99%)	122 (97%)	4 (3%)	39	73
7	CG	126/127 (99%)	122 (97%)	4 (3%)	39	73
8	AH	119/119 (100%)	114 (96%)	5 (4%)	30	63
8	CH	119/119 (100%)	114 (96%)	5 (4%)	30	63
9	AI	98/99 (99%)	88 (90%)	10 (10%)	7	22
9	CI	98/99 (99%)	88 (90%)	10 (10%)	7	22
10	AJ	88/92 (96%)	82 (93%)	6 (7%)	16	42
10	CJ	88/92 (96%)	82 (93%)	6 (7%)	16	42
11	AK	90/99 (91%)	85 (94%)	5 (6%)	21	51
11	CK	90/99 (91%)	86 (96%)	4 (4%)	28	61

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
12	AL	104/111 (94%)	95 (91%)	9 (9%)	10	30
12	CL	104/111 (94%)	96 (92%)	8 (8%)	13	35
13	AM	99/101 (98%)	93 (94%)	6 (6%)	18	48
13	CM	99/101 (98%)	93 (94%)	6 (6%)	18	48
14	AN	49/50 (98%)	47 (96%)	2 (4%)	30	64
14	CN	49/50 (98%)	47 (96%)	2 (4%)	30	64
15	AO	79/80 (99%)	74 (94%)	5 (6%)	18	46
15	CO	79/80 (99%)	74 (94%)	5 (6%)	18	46
16	AP	72/74 (97%)	65 (90%)	7 (10%)	8	24
16	CP	72/74 (97%)	65 (90%)	7 (10%)	8	24
17	AQ	94/97 (97%)	92 (98%)	2 (2%)	53	84
17	CQ	94/97 (97%)	92 (98%)	2 (2%)	53	84
18	AR	61/77 (79%)	55 (90%)	6 (10%)	8	24
18	CR	61/77 (79%)	55 (90%)	6 (10%)	8	24
19	AS	69/80 (86%)	62 (90%)	7 (10%)	7	22
19	CS	69/80 (86%)	62 (90%)	7 (10%)	7	22
20	AT	76/82 (93%)	65 (86%)	11 (14%)	3	9
20	CT	76/82 (93%)	65 (86%)	11 (14%)	3	9
21	AU	19/22 (86%)	17 (90%)	2 (10%)	7	20
21	CU	19/22 (86%)	17 (90%)	2 (10%)	7	20
25	B0	61/67 (91%)	54 (88%)	7 (12%)	5	17
25	D0	61/67 (91%)	54 (88%)	7 (12%)	5	17
26	B1	73/83 (88%)	62 (85%)	11 (15%)	3	9
26	D1	73/83 (88%)	63 (86%)	10 (14%)	3	11
27	B2	46/67 (69%)	35 (76%)	11 (24%)	0	2
27	D2	46/67 (69%)	35 (76%)	11 (24%)	0	2
28	B3	51/52 (98%)	49 (96%)	2 (4%)	32	66
28	D3	51/52 (98%)	49 (96%)	2 (4%)	32	66
30	B5	51/52 (98%)	41 (80%)	10 (20%)	1	4
30	D5	51/52 (98%)	41 (80%)	10 (20%)	1	4
31	B6	43/52 (83%)	36 (84%)	7 (16%)	2	7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	D6	43/52 (83%)	36 (84%)	7 (16%)	2	7
32	B7	41/42 (98%)	37 (90%)	4 (10%)	8	24
32	D7	41/42 (98%)	37 (90%)	4 (10%)	8	24
33	B8	53/55 (96%)	45 (85%)	8 (15%)	3	9
33	D8	53/55 (96%)	45 (85%)	8 (15%)	3	9
36	BC	61/181 (34%)	54 (88%)	7 (12%)	5	17
36	DC	61/181 (34%)	54 (88%)	7 (12%)	5	17
37	BD	213/218 (98%)	179 (84%)	34 (16%)	2	7
37	DD	213/218 (98%)	181 (85%)	32 (15%)	3	9
38	BE	165/166 (99%)	145 (88%)	20 (12%)	5	15
38	DE	165/166 (99%)	145 (88%)	20 (12%)	5	15
39	BF	165/166 (99%)	153 (93%)	12 (7%)	14	38
39	DF	165/166 (99%)	153 (93%)	12 (7%)	14	38
40	BG	155/156 (99%)	135 (87%)	20 (13%)	4	13
40	DG	155/156 (99%)	132 (85%)	23 (15%)	3	9
41	BH	132/148 (89%)	117 (89%)	15 (11%)	5	18
41	DH	132/148 (89%)	117 (89%)	15 (11%)	5	18
42	BI	122/124 (98%)	113 (93%)	9 (7%)	13	37
42	DI	122/124 (98%)	113 (93%)	9 (7%)	13	37
43	BN	117/119 (98%)	98 (84%)	19 (16%)	2	7
43	DN	117/119 (98%)	97 (83%)	20 (17%)	2	6
44	BO	100/100 (100%)	92 (92%)	8 (8%)	12	34
44	DO	100/100 (100%)	91 (91%)	9 (9%)	9	28
45	BP	112/116 (97%)	92 (82%)	20 (18%)	2	5
45	DP	112/116 (97%)	91 (81%)	21 (19%)	1	5
46	BQ	106/111 (96%)	93 (88%)	13 (12%)	4	15
46	DQ	106/111 (96%)	93 (88%)	13 (12%)	4	15
47	BR	100/101 (99%)	91 (91%)	9 (9%)	9	28
47	DR	100/101 (99%)	91 (91%)	9 (9%)	9	28
48	BS	77/88 (88%)	65 (84%)	12 (16%)	2	8
48	DS	77/88 (88%)	65 (84%)	12 (16%)	2	8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
49	BT	120/127 (94%)	99 (82%)	21 (18%)	2	6
49	DT	120/127 (94%)	99 (82%)	21 (18%)	2	6
50	BU	92/94 (98%)	85 (92%)	7 (8%)	13	36
50	DU	92/94 (98%)	85 (92%)	7 (8%)	13	36
51	BV	82/82 (100%)	64 (78%)	18 (22%)	1	2
51	DV	82/82 (100%)	64 (78%)	18 (22%)	1	2
52	BW	91/92 (99%)	85 (93%)	6 (7%)	16	44
52	DW	91/92 (99%)	84 (92%)	7 (8%)	13	35
53	BX	74/78 (95%)	59 (80%)	15 (20%)	1	4
53	DX	74/78 (95%)	60 (81%)	14 (19%)	1	5
54	BY	84/91 (92%)	67 (80%)	17 (20%)	1	4
54	DY	84/91 (92%)	67 (80%)	17 (20%)	1	4
55	BZ	155/179 (87%)	144 (93%)	11 (7%)	14	39
55	DZ	155/179 (87%)	141 (91%)	14 (9%)	9	28
All	All	9464/10238 (92%)	8444 (89%)	1020 (11%)	6	19

5 of 1020 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
52	BW	75	TYR
45	DP	144	GLU
6	CF	82	ARG
45	DP	61	ARG
50	DU	88	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 275 such sidechains are listed below:

Mol	Chain	Res	Type
42	DI	133	HIS
45	DP	13	ASN
50	DU	75	ASN
45	BP	9	ASN
43	BN	128	HIS

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1503/1522 (98%)	200 (13%)	36 (2%)
1	CA	1503/1522 (98%)	204 (13%)	36 (2%)
22	AV	76/77 (98%)	18 (23%)	0
22	CV	76/77 (98%)	20 (26%)	0
23	AW	75/76 (98%)	15 (20%)	3 (4%)
23	AY	18/76 (23%)	2 (11%)	0
23	CW	75/76 (98%)	16 (21%)	3 (4%)
23	CY	18/76 (23%)	3 (16%)	0
24	AX	10/24 (41%)	2 (20%)	0
24	CX	10/24 (41%)	2 (20%)	0
34	BA	2771/2787 (99%)	563 (20%)	76 (2%)
34	DA	2771/2787 (99%)	560 (20%)	76 (2%)
35	BB	118/122 (96%)	14 (11%)	1 (0%)
35	DB	118/122 (96%)	14 (11%)	1 (0%)
All	All	9142/9368 (97%)	1633 (17%)	232 (2%)

5 of 1633 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	G
1	AA	31	G
1	AA	32	A
1	AA	39	G
1	AA	47	C

5 of 232 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
35	BB	66	A
34	DA	2481	G
1	CA	1065	U
34	DA	2282	G
34	DA	1694	C

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

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

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the

expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
22	5MU	CV	54	22	19,22,23	0.24	0	28,32,35	0.37	0
22	5MU	AV	54	22	19,22,23	0.23	0	28,32,35	0.38	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	5MU	CV	54	22	-	0/7/25/26	0/2/2/2
22	5MU	AV	54	22	-	0/7/25/26	0/2/2/2

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.

2 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	CV	54	5MU	2	0
22	AV	54	5MU	2	0

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 1385 ligands modelled in this entry, 1383 are monoatomic - leaving 2 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the

expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
57	PAR	CA	1790	-	45,45,45	1.56	10 (22%)	64,67,67	1.30	7 (10%)
57	PAR	AA	1816	-	45,45,45	1.59	8 (17%)	64,67,67	1.20	4 (6%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	PAR	CA	1790	-	-	4/18/94/94	0/4/4/4
57	PAR	AA	1816	-	-	5/18/94/94	0/4/4/4

The worst 5 of 18 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	AA	1816	PAR	C64-C54	5.15	1.59	1.52
57	CA	1790	PAR	C64-C54	4.38	1.58	1.52
57	CA	1790	PAR	C34-C24	4.37	1.59	1.53
57	AA	1816	PAR	C52-C42	3.08	1.58	1.52
57	AA	1816	PAR	O54-C14	2.82	1.49	1.41

The worst 5 of 11 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	AA	1816	PAR	O33-C14-C24	4.79	116.47	108.22
57	CA	1790	PAR	O33-C14-C24	4.44	115.86	108.22
57	CA	1790	PAR	O54-C54-C64	3.85	113.18	106.01
57	CA	1790	PAR	C14-O54-C54	3.51	120.57	113.69
57	AA	1816	PAR	O52-C13-C23	3.34	114.89	107.96

There are no chirality outliers.

5 of 9 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
57	CA	1790	PAR	O43-C43-C53-O53
57	CA	1790	PAR	C33-C43-C53-O53
57	AA	1816	PAR	O43-C13-O52-C52
57	AA	1816	PAR	C23-C13-O52-C52

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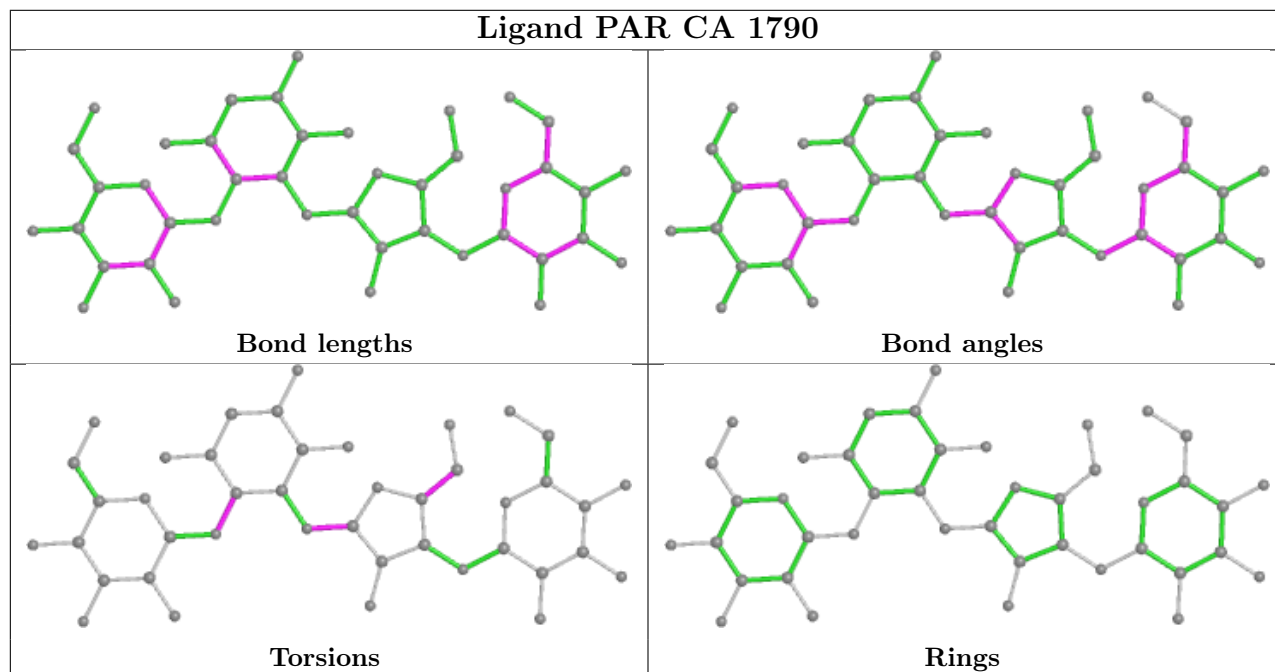
Mol	Chain	Res	Type	Atoms
57	AA	1816	PAR	O54-C54-C64-N64

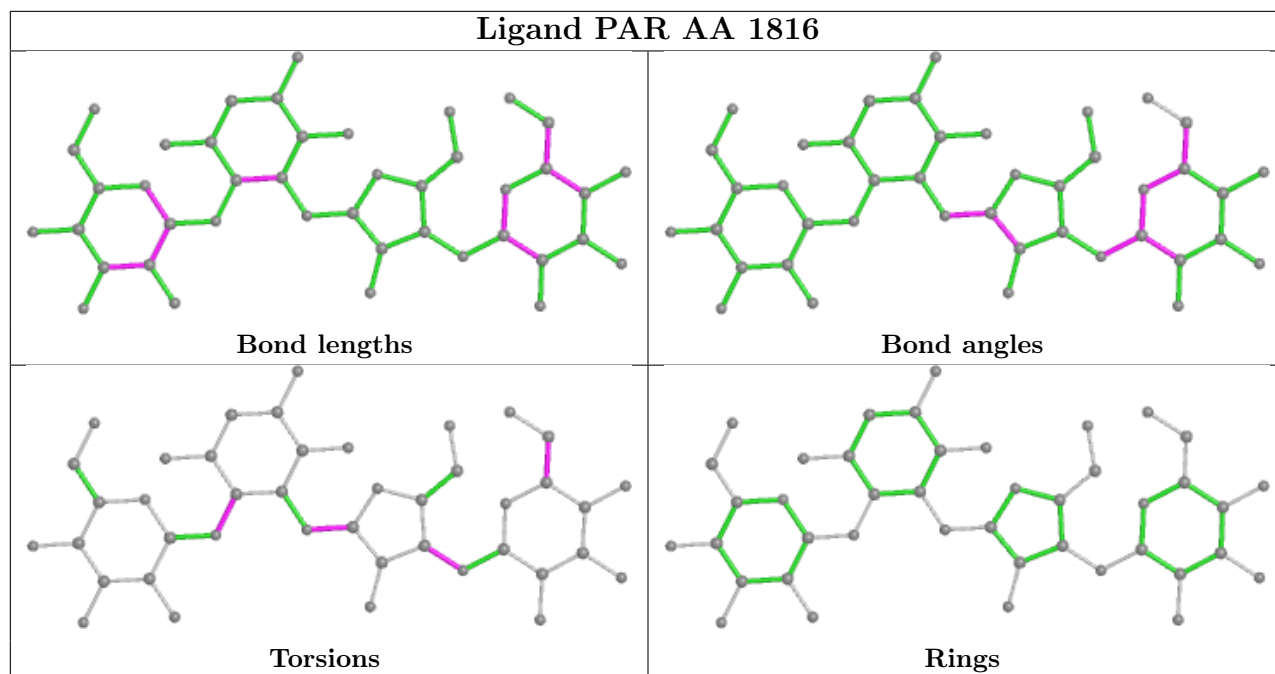
There are no ring outliers.

1 monomer is involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
57	AA	1816	PAR	3	0

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





5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
13	AM	5
13	CM	5
9	CI	2
9	AI	2
31	B6	1
31	D6	1
40	BG	1
40	DG	1
51	BV	1
51	DV	1

The worst 5 of 20 chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B6	46:HIS	C	47:THR	N	4.89
1	D6	46:HIS	C	47:THR	N	4.87
1	AM	69:GLU	C	70:LEU	N	4.66

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	CM	69:GLU	C	70:LEU	N	4.66
1	CI	53:VAL	C	54:ASP	N	4.02

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, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	AA	1504/1522 (98%)	-0.41	23 (1%) 73 68	2, 42, 165, 200	0
1	CA	1504/1522 (98%)	-0.33	32 (2%) 63 54	3, 50, 172, 200	0
2	AB	235/256 (91%)	0.26	28 (11%) 4 2	17, 94, 183, 200	0
2	CB	235/256 (91%)	0.38	28 (11%) 4 2	17, 104, 187, 200	0
3	AC	207/239 (86%)	-0.15	6 (2%) 51 41	17, 70, 156, 200	0
3	CC	207/239 (86%)	0.14	12 (5%) 23 15	19, 84, 149, 190	0
4	AD	208/209 (99%)	-0.32	1 (0%) 91 88	1, 43, 127, 198	0
4	CD	208/209 (99%)	-0.25	4 (1%) 66 59	4, 51, 133, 182	0
5	AE	151/162 (93%)	-0.32	1 (0%) 87 84	4, 51, 128, 177	0
5	CE	151/162 (93%)	-0.09	2 (1%) 77 72	3, 56, 140, 185	0
6	AF	101/101 (100%)	-0.36	3 (2%) 50 40	5, 48, 131, 156	0
6	CF	101/101 (100%)	-0.37	2 (1%) 65 56	2, 54, 130, 151	0
7	AG	155/156 (99%)	0.07	12 (7%) 13 7	8, 68, 151, 184	0
7	CG	155/156 (99%)	0.61	23 (14%) 2 1	15, 87, 155, 190	0
8	AH	138/138 (100%)	-0.24	3 (2%) 62 52	3, 52, 120, 173	0
8	CH	138/138 (100%)	-0.14	4 (2%) 51 41	16, 58, 138, 152	0
9	AI	127/128 (99%)	0.66	15 (11%) 4 2	26, 97, 171, 200	0
9	CI	127/128 (99%)	0.66	21 (16%) 1 1	28, 111, 175, 200	0
10	AJ	99/105 (94%)	0.75	17 (17%) 1 1	17, 105, 178, 200	0
10	CJ	99/105 (94%)	1.11	22 (22%) 0 0	34, 123, 176, 197	0
11	AK	119/129 (92%)	-0.29	3 (2%) 57 47	8, 46, 151, 192	0
11	CK	119/129 (92%)	0.06	6 (5%) 28 19	16, 61, 147, 200	0
12	AL	125/135 (92%)	-0.12	4 (3%) 47 37	5, 38, 133, 200	0
12	CL	125/135 (92%)	-0.08	4 (3%) 47 37	1, 38, 132, 200	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AM	125/126 (99%)	0.37	15 (12%) 4 2	13, 74, 159, 196	0
13	CM	125/126 (99%)	0.43	15 (12%) 4 2	19, 91, 160, 191	0
14	AN	60/61 (98%)	0.47	6 (10%) 7 4	14, 66, 161, 184	0
14	CN	60/61 (98%)	0.20	4 (6%) 17 10	19, 73, 143, 182	0
15	AO	88/89 (98%)	-0.54	0 100 100	2, 42, 129, 141	0
15	CO	88/89 (98%)	-0.36	1 (1%) 80 75	2, 56, 124, 167	0
16	AP	84/88 (95%)	-0.21	1 (1%) 79 73	6, 36, 104, 190	0
16	CP	84/88 (95%)	-0.06	1 (1%) 79 73	6, 49, 121, 199	0
17	AQ	100/105 (95%)	-0.33	2 (2%) 65 56	1, 45, 110, 193	0
17	CQ	100/105 (95%)	0.17	2 (2%) 65 56	18, 60, 105, 194	0
18	AR	70/88 (79%)	-0.13	1 (1%) 75 70	10, 50, 140, 172	0
18	CR	70/88 (79%)	0.19	3 (4%) 35 25	7, 56, 144, 179	0
19	AS	79/93 (84%)	0.26	8 (10%) 7 4	22, 79, 186, 200	0
19	CS	79/93 (84%)	0.68	11 (13%) 2 1	25, 83, 175, 197	0
20	AT	99/106 (93%)	0.30	9 (9%) 9 5	5, 60, 152, 180	0
20	CT	99/106 (93%)	0.21	6 (6%) 21 13	17, 77, 141, 183	0
21	AU	25/27 (92%)	1.42	8 (32%) 0 0	27, 72, 128, 141	0
21	CU	25/27 (92%)	2.31	11 (44%) 0 0	40, 74, 127, 139	0
22	AV	76/77 (98%)	-0.64	0 100 100	14, 53, 143, 194	0
22	CV	76/77 (98%)	-0.53	0 100 100	21, 55, 146, 198	0
23	AW	76/76 (100%)	-0.23	5 (6%) 18 11	30, 103, 164, 199	0
23	AY	19/76 (25%)	-0.27	0 100 100	23, 72, 190, 196	0
23	CW	76/76 (100%)	-0.03	5 (6%) 18 11	35, 116, 165, 196	0
23	CY	19/76 (25%)	-0.28	0 100 100	26, 76, 186, 196	0
24	AX	11/24 (45%)	-0.11	1 (9%) 9 5	12, 33, 170, 190	0
24	CX	11/24 (45%)	0.28	2 (18%) 1 1	14, 39, 167, 197	0
25	B0	85/85 (100%)	0.44	7 (8%) 11 6	8, 43, 138, 196	0
25	D0	85/85 (100%)	0.54	9 (10%) 6 3	18, 57, 137, 179	0
26	B1	89/98 (90%)	0.05	4 (4%) 33 23	1, 35, 143, 157	0
26	D1	89/98 (90%)	-0.06	2 (2%) 62 52	1, 44, 145, 200	0
27	B2	51/72 (70%)	0.03	5 (9%) 7 4	5, 66, 145, 200	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
27	D2	51/72 (70%)	0.53	7 (13%) 3 1	13, 79, 154, 200	0
28	B3	60/60 (100%)	0.24	4 (6%) 17 10	5, 57, 140, 190	0
28	D3	60/60 (100%)	0.28	2 (3%) 46 36	5, 58, 146, 198	0
29	B4	50/71 (70%)	-0.49	1 (2%) 65 56	38, 90, 158, 173	0
29	D4	50/71 (70%)	0.07	5 (10%) 7 4	54, 117, 160, 198	0
30	B5	59/60 (98%)	0.59	10 (16%) 1 1	5, 51, 192, 200	0
30	D5	59/60 (98%)	0.38	7 (11%) 4 2	1, 65, 179, 200	0
31	B6	45/54 (83%)	1.92	21 (46%) 0 0	54, 103, 171, 180	0
31	D6	45/54 (83%)	2.77	26 (57%) 0 0	64, 139, 171, 189	0
32	B7	49/49 (100%)	-0.15	3 (6%) 21 13	1, 19, 115, 165	0
32	D7	49/49 (100%)	-0.16	4 (8%) 11 6	1, 19, 88, 174	0
33	B8	64/65 (98%)	0.37	5 (7%) 13 7	4, 44, 140, 195	0
33	D8	64/65 (98%)	0.28	4 (6%) 20 12	5, 52, 155, 192	0
34	BA	2772/2787 (99%)	-0.52	33 (1%) 79 73	1, 29, 145, 200	0
34	DA	2772/2787 (99%)	-0.49	25 (0%) 84 80	1, 30, 152, 200	0
35	BB	119/122 (97%)	-0.54	0 100 100	22, 64, 108, 197	0
35	DB	119/122 (97%)	-0.38	0 100 100	34, 76, 127, 188	0
36	BC	191/229 (83%)	1.99	73 (38%) 0 0	51, 144, 186, 200	0
36	DC	191/229 (83%)	2.54	97 (50%) 0 0	61, 146, 186, 200	0
37	BD	272/276 (98%)	-0.52	2 (0%) 87 84	1, 19, 89, 196	0
37	DD	272/276 (98%)	-0.49	2 (0%) 87 84	1, 21, 89, 200	0
38	BE	205/206 (99%)	0.04	7 (3%) 45 35	1, 46, 141, 193	0
38	DE	205/206 (99%)	-0.15	7 (3%) 45 35	1, 43, 144, 199	0
39	BF	208/210 (99%)	-0.26	9 (4%) 35 25	1, 44, 155, 200	0
39	DF	208/210 (99%)	0.07	13 (6%) 20 12	1, 44, 160, 200	0
40	BG	181/182 (99%)	-0.09	8 (4%) 34 24	8, 65, 142, 188	0
40	DG	181/182 (99%)	0.15	13 (7%) 15 8	10, 82, 149, 195	0
41	BH	160/180 (88%)	1.07	35 (21%) 0 0	51, 124, 174, 200	0
41	DH	160/180 (88%)	0.80	28 (17%) 1 1	10, 102, 174, 194	0
42	BI	146/148 (98%)	0.25	13 (8%) 9 5	5, 78, 148, 187	0
42	DI	146/148 (98%)	2.60	56 (38%) 0 0	9, 124, 184, 200	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
43	BN	139/140 (99%)	-0.04	5 (3%) 42 32	10, 68, 144, 163	0
43	DN	139/140 (99%)	0.11	9 (6%) 18 11	15, 63, 141, 165	0
44	BO	122/122 (100%)	-0.44	0 100 100	3, 32, 103, 177	0
44	DO	122/122 (100%)	-0.49	0 100 100	1, 33, 102, 126	0
45	BP	146/150 (97%)	0.12	3 (2%) 63 54	1, 61, 159, 193	0
45	DP	146/150 (97%)	0.25	10 (6%) 17 10	2, 71, 165, 198	0
46	BQ	136/141 (96%)	0.46	9 (6%) 18 11	7, 58, 171, 200	0
46	DQ	136/141 (96%)	0.16	11 (8%) 12 6	7, 54, 164, 200	0
47	BR	117/118 (99%)	-0.20	1 (0%) 84 80	3, 32, 132, 146	0
47	DR	117/118 (99%)	-0.11	0 100 100	3, 42, 126, 166	0
48	BS	99/112 (88%)	0.33	8 (8%) 12 6	21, 76, 134, 173	0
48	DS	99/112 (88%)	0.81	15 (15%) 2 1	24, 89, 143, 170	0
49	BT	138/146 (94%)	0.02	9 (6%) 18 11	3, 67, 169, 190	0
49	DT	138/146 (94%)	-0.00	7 (5%) 28 19	7, 65, 171, 200	0
50	BU	117/118 (99%)	-0.04	4 (3%) 45 35	5, 50, 142, 200	0
50	DU	117/118 (99%)	-0.14	2 (1%) 70 63	1, 46, 145, 190	0
51	BV	101/101 (100%)	0.25	5 (4%) 28 19	14, 96, 174, 192	0
51	DV	101/101 (100%)	0.16	4 (3%) 38 28	11, 93, 172, 193	0
52	BW	113/113 (100%)	-0.46	0 100 100	1, 26, 121, 161	0
52	DW	113/113 (100%)	-0.37	0 100 100	3, 28, 126, 200	0
53	BX	93/96 (96%)	-0.22	4 (4%) 35 25	1, 46, 137, 168	0
53	DX	93/96 (96%)	-0.02	4 (4%) 35 25	8, 54, 138, 157	0
54	BY	101/110 (91%)	0.95	15 (14%) 2 1	1, 79, 170, 195	0
54	DY	101/110 (91%)	1.38	25 (24%) 0 0	1, 79, 177, 196	0
55	BZ	177/206 (85%)	0.20	11 (6%) 20 13	19, 96, 177, 200	0
55	DZ	177/206 (85%)	0.26	14 (7%) 12 7	18, 98, 178, 198	0
All	All	20972/21886 (95%)	-0.08	1115 (5%) 26 17	1, 51, 163, 200	0

The worst 5 of 1115 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
42	DI	84	GLY	32.2
46	BQ	140	ALA	23.1

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Mol	Chain	Res	Type	RSRZ
42	DI	120	ILE	21.9
42	DI	88	ILE	21.5
17	CQ	101	ARG	20.9

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
22	5MU	AV	54	21/22	0.92	0.14	75,83,108,108	0
22	5MU	CV	54	21/22	0.93	0.12	64,75,79,79	0

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	DA	3261	1/1	0.23	0.80	94,94,94,94	0
56	MG	BB	213	1/1	0.27	0.60	71,71,71,71	0
56	MG	DA	3187	1/1	0.41	0.41	86,86,86,86	0
56	MG	CV	103	1/1	0.46	0.18	56,56,56,56	0
56	MG	CA	1637	1/1	0.51	0.46	81,81,81,81	0
56	MG	CW	111	1/1	0.54	0.22	77,77,77,77	0
56	MG	BA	3233	1/1	0.55	0.33	77,77,77,77	0
56	MG	CA	1685	1/1	0.56	0.47	82,82,82,82	0
56	MG	DA	3255	1/1	0.57	0.47	92,92,92,92	0
56	MG	CA	1719	1/1	0.58	1.11	99,99,99,99	0
56	MG	AA	1633	1/1	0.58	0.44	90,90,90,90	0
56	MG	CA	1622	1/1	0.60	0.81	123,123,123,123	0
56	MG	BA	3043	1/1	0.61	0.33	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	CA	1725	1/1	0.62	0.26	56,56,56,56	0
56	MG	BA	3403	1/1	0.62	0.48	78,78,78,78	0
56	MG	DA	3168	1/1	0.65	0.38	56,56,56,56	0
56	MG	BA	3004	1/1	0.67	0.41	77,77,77,77	0
56	MG	BA	3408	1/1	0.67	0.17	46,46,46,46	0
56	MG	CA	1646	1/1	0.68	0.42	62,62,62,62	0
56	MG	DA	3208	1/1	0.69	0.21	40,40,40,40	0
56	MG	DA	3213	1/1	0.69	0.35	84,84,84,84	0
56	MG	BB	201	1/1	0.69	0.42	54,54,54,54	1
56	MG	BA	3413	1/1	0.69	0.47	63,63,63,63	0
56	MG	BA	3433	1/1	0.70	0.17	74,74,74,74	0
56	MG	CA	1729	1/1	0.70	0.51	71,71,71,71	0
56	MG	CA	1673	1/1	0.71	0.21	80,80,80,80	1
56	MG	DA	3219	1/1	0.72	0.56	75,75,75,75	0
56	MG	DA	3231	1/1	0.72	0.40	72,72,72,72	0
56	MG	AA	1697	1/1	0.72	0.45	88,88,88,88	0
56	MG	BA	3353	1/1	0.72	0.39	42,42,42,42	1
56	MG	CA	1706	1/1	0.73	0.19	54,54,54,54	0
56	MG	DA	3217	1/1	0.73	0.14	62,62,62,62	0
56	MG	CW	107	1/1	0.73	0.27	63,63,63,63	1
56	MG	DA	3275	1/1	0.73	0.36	75,75,75,75	0
56	MG	CA	1752	1/1	0.74	0.51	83,83,83,83	0
56	MG	DA	3273	1/1	0.74	0.60	59,59,59,59	0
56	MG	BA	3278	1/1	0.74	0.37	90,90,90,90	0
56	MG	DA	3155	1/1	0.75	0.09	50,50,50,50	0
56	MG	BA	3323	1/1	0.75	0.13	79,79,79,79	0
56	MG	DA	3169	1/1	0.75	0.23	27,27,27,27	0
56	MG	DA	3238	1/1	0.75	0.26	54,54,54,54	0
56	MG	DA	3002	1/1	0.76	0.28	38,38,38,38	0
56	MG	AA	1618	1/1	0.76	0.41	66,66,66,66	0
56	MG	CA	1751	1/1	0.76	0.18	81,81,81,81	0
56	MG	DA	3320	1/1	0.76	0.17	70,70,70,70	0
56	MG	AA	1748	1/1	0.77	0.26	59,59,59,59	0
56	MG	CA	1675	1/1	0.77	0.24	57,57,57,57	0
56	MG	BA	3296	1/1	0.78	0.34	75,75,75,75	0
56	MG	DA	3004	1/1	0.78	0.41	90,90,90,90	0
56	MG	DA	3268	1/1	0.78	0.21	51,51,51,51	0
56	MG	CA	1739	1/1	0.79	0.15	66,66,66,66	0
56	MG	AA	1651	1/1	0.79	0.22	35,35,35,35	0
56	MG	CA	1722	1/1	0.79	0.31	70,70,70,70	0
56	MG	DA	3358	1/1	0.79	0.36	54,54,54,54	0
56	MG	DA	3380	1/1	0.79	0.33	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	DH	201	1/1	0.79	0.19	36,36,36,36	0
56	MG	AA	1647	1/1	0.80	0.18	71,71,71,71	0
56	MG	CA	1695	1/1	0.80	0.14	70,70,70,70	0
56	MG	AA	1698	1/1	0.80	0.15	38,38,38,38	0
56	MG	AA	1733	1/1	0.80	0.40	63,63,63,63	0
56	MG	DA	3250	1/1	0.80	0.08	57,57,57,57	0
56	MG	BA	3212	1/1	0.80	0.17	47,47,47,47	0
56	MG	DA	3138	1/1	0.80	0.27	40,40,40,40	0
56	MG	AY	101	1/1	0.81	0.18	56,56,56,56	0
56	MG	BA	3376	1/1	0.81	0.20	47,47,47,47	0
56	MG	AA	1661	1/1	0.81	0.30	60,60,60,60	0
56	MG	BA	3285	1/1	0.81	0.51	74,74,74,74	0
56	MG	DA	3310	1/1	0.81	0.30	50,50,50,50	0
56	MG	CA	1716	1/1	0.81	0.31	67,67,67,67	0
56	MG	DA	3342	1/1	0.81	0.27	49,49,49,49	0
56	MG	AA	1714	1/1	0.81	0.25	28,28,28,28	0
56	MG	AA	1782	1/1	0.81	0.28	68,68,68,68	0
56	MG	CW	109	1/1	0.81	0.11	81,81,81,81	0
56	MG	DA	3258	1/1	0.82	0.49	80,80,80,80	0
56	MG	BA	3227	1/1	0.82	0.27	49,49,49,49	0
56	MG	DA	3262	1/1	0.82	0.33	72,72,72,72	0
56	MG	AW	116	1/1	0.82	0.12	58,58,58,58	0
56	MG	CA	1691	1/1	0.82	0.23	56,56,56,56	0
56	MG	DA	3274	1/1	0.82	0.10	53,53,53,53	0
56	MG	AA	1660	1/1	0.82	0.30	61,61,61,61	0
56	MG	DA	3277	1/1	0.82	0.20	55,55,55,55	0
56	MG	CA	1745	1/1	0.82	0.42	77,77,77,77	0
56	MG	CA	1750	1/1	0.82	0.10	50,50,50,50	0
56	MG	AA	1750	1/1	0.82	0.12	57,57,57,57	0
56	MG	DA	3248	1/1	0.82	0.94	82,82,82,82	0
56	MG	AA	1677	1/1	0.82	0.12	41,41,41,41	0
56	MG	DB	204	1/1	0.82	0.16	48,48,48,48	0
56	MG	AW	110	1/1	0.82	0.26	46,46,46,46	0
56	MG	CA	1696	1/1	0.83	0.25	51,51,51,51	0
56	MG	AA	1694	1/1	0.83	0.35	58,58,58,58	0
56	MG	DA	3036	1/1	0.83	0.19	43,43,43,43	0
56	MG	DA	3067	1/1	0.83	0.13	26,26,26,26	0
56	MG	CA	1647	1/1	0.83	0.39	57,57,57,57	0
56	MG	DA	3312	1/1	0.83	0.20	44,44,44,44	0
56	MG	AW	113	1/1	0.83	0.26	46,46,46,46	1
56	MG	BA	3257	1/1	0.83	0.15	55,55,55,55	0
56	MG	AA	1794	1/1	0.83	0.28	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	BA	3279	1/1	0.83	0.21	55,55,55,55	0
56	MG	DA	3391	1/1	0.83	0.21	62,62,62,62	1
56	MG	DA	3394	1/1	0.83	0.32	66,66,66,66	0
56	MG	AX	102	1/1	0.83	0.09	32,32,32,32	0
56	MG	CW	112	1/1	0.83	0.08	53,53,53,53	0
56	MG	DA	3319	1/1	0.84	0.24	52,52,52,52	0
56	MG	AA	1693	1/1	0.84	0.42	43,43,43,43	0
56	MG	BA	3109	1/1	0.84	0.28	34,34,34,34	0
56	MG	BA	3147	1/1	0.84	0.20	20,20,20,20	0
56	MG	BA	3152	1/1	0.84	0.21	45,45,45,45	0
56	MG	DA	3381	1/1	0.84	0.23	77,77,77,77	0
56	MG	AA	1658	1/1	0.84	0.21	37,37,37,37	0
56	MG	DA	3016	1/1	0.84	0.12	52,52,52,52	0
56	MG	BA	3216	1/1	0.84	0.23	50,50,50,50	0
56	MG	CA	1645	1/1	0.84	0.14	74,74,74,74	0
56	MG	BA	3393	1/1	0.85	0.60	60,60,60,60	0
56	MG	BA	3261	1/1	0.85	0.11	24,24,24,24	0
56	MG	CA	1688	1/1	0.85	0.07	46,46,46,46	0
56	MG	D5	102	1/1	0.85	0.11	6,6,6,6	1
56	MG	BA	3275	1/1	0.85	0.17	19,19,19,19	0
56	MG	AW	103	1/1	0.85	0.18	51,51,51,51	0
56	MG	BA	3422	1/1	0.85	0.22	39,39,39,39	0
56	MG	DA	3024	1/1	0.85	0.16	20,20,20,20	0
56	MG	BA	3178	1/1	0.85	0.12	54,54,54,54	0
56	MG	BA	3451	1/1	0.85	0.09	43,43,43,43	0
56	MG	AA	1727	1/1	0.85	0.16	40,40,40,40	0
56	MG	BB	205	1/1	0.85	0.36	35,35,35,35	1
56	MG	AA	1670	1/1	0.85	0.17	52,52,52,52	0
56	MG	CA	1615	1/1	0.85	0.34	61,61,61,61	0
56	MG	DA	3330	1/1	0.85	0.49	81,81,81,81	0
56	MG	DA	3334	1/1	0.85	0.09	34,34,34,34	1
56	MG	BA	3103	1/1	0.85	0.18	55,55,55,55	0
56	MG	DA	3357	1/1	0.85	0.17	26,26,26,26	0
56	MG	BA	3346	1/1	0.85	0.22	60,60,60,60	0
56	MG	CA	1642	1/1	0.85	0.15	56,56,56,56	0
56	MG	AA	1716	1/1	0.85	0.39	73,73,73,73	0
56	MG	BA	3375	1/1	0.85	0.26	42,42,42,42	1
56	MG	CA	1767	1/1	0.85	0.27	67,67,67,67	0
56	MG	AA	1799	1/1	0.85	0.09	71,71,71,71	0
56	MG	BA	3377	1/1	0.85	0.21	43,43,43,43	0
56	MG	DA	3048	1/1	0.86	0.27	53,53,53,53	0
56	MG	BA	3329	1/1	0.86	0.12	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	BA	3332	1/1	0.86	0.20	53,53,53,53	1
56	MG	DA	3149	1/1	0.86	0.48	84,84,84,84	0
56	MG	DA	3276	1/1	0.86	0.37	45,45,45,45	0
56	MG	BA	3412	1/1	0.86	0.21	48,48,48,48	0
56	MG	CA	1753	1/1	0.86	0.23	33,33,33,33	0
56	MG	BA	3143	1/1	0.86	0.26	21,21,21,21	0
56	MG	AA	1626	1/1	0.86	0.25	50,50,50,50	0
56	MG	CA	1644	1/1	0.86	0.22	59,59,59,59	0
56	MG	BA	3425	1/1	0.86	0.22	61,61,61,61	0
56	MG	AE	201	1/1	0.86	0.09	47,47,47,47	0
56	MG	BA	3237	1/1	0.86	0.32	35,35,35,35	0
56	MG	DA	3353	1/1	0.86	0.35	42,42,42,42	0
56	MG	CX	102	1/1	0.86	0.40	75,75,75,75	0
56	MG	AA	1747	1/1	0.86	0.14	37,37,37,37	0
56	MG	CA	1730	1/1	0.86	0.18	56,56,56,56	0
56	MG	BB	203	1/1	0.86	0.15	52,52,52,52	0
56	MG	CA	1742	1/1	0.86	0.15	76,76,76,76	0
56	MG	DA	3022	1/1	0.86	0.19	37,37,37,37	0
56	MG	CA	1744	1/1	0.86	0.16	64,64,64,64	0
56	MG	AA	1730	1/1	0.86	0.36	82,82,82,82	0
56	MG	DO	201	1/1	0.86	0.13	67,67,67,67	0
56	MG	DA	3283	1/1	0.87	0.20	35,35,35,35	0
56	MG	BA	3342	1/1	0.87	0.35	52,52,52,52	1
56	MG	AW	120	1/1	0.87	0.10	52,52,52,52	0
56	MG	BA	3107	1/1	0.87	0.17	53,53,53,53	0
56	MG	CA	1763	1/1	0.87	0.18	32,32,32,32	0
56	MG	DA	3329	1/1	0.87	0.17	45,45,45,45	0
56	MG	BA	3372	1/1	0.87	0.11	43,43,43,43	1
56	MG	AA	1795	1/1	0.87	0.25	30,30,30,30	0
56	MG	CW	104	1/1	0.87	0.08	46,46,46,46	0
56	MG	AA	1657	1/1	0.87	0.16	50,50,50,50	0
56	MG	BA	3293	1/1	0.87	0.19	51,51,51,51	0
56	MG	BA	3383	1/1	0.87	0.09	37,37,37,37	0
56	MG	DA	3160	1/1	0.87	0.17	37,37,37,37	0
56	MG	B3	101	1/1	0.87	0.24	48,48,48,48	1
56	MG	BA	3247	1/1	0.87	0.14	0,0,0,0	0
56	MG	AA	1802	1/1	0.87	0.13	44,44,44,44	0
56	MG	DB	202	1/1	0.87	0.18	57,57,57,57	0
56	MG	DA	3193	1/1	0.87	0.22	35,35,35,35	0
56	MG	AA	1663	1/1	0.87	0.13	24,24,24,24	0
56	MG	DA	3212	1/1	0.87	0.24	61,61,61,61	0
56	MG	AA	1734	1/1	0.88	0.20	48,48,48,48	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	CA	1618	1/1	0.88	0.12	25,25,25,25	0
56	MG	CA	1697	1/1	0.88	0.14	49,49,49,49	0
56	MG	CV	102	1/1	0.88	0.08	56,56,56,56	0
56	MG	CA	1619	1/1	0.88	0.17	55,55,55,55	0
56	MG	CA	1714	1/1	0.88	0.16	81,81,81,81	0
56	MG	DA	3171	1/1	0.88	0.20	37,37,37,37	0
56	MG	BA	3374	1/1	0.88	0.26	48,48,48,48	0
56	MG	BA	3414	1/1	0.88	0.32	44,44,44,44	0
56	MG	BA	3419	1/1	0.88	0.24	39,39,39,39	0
56	MG	BA	3258	1/1	0.88	0.11	70,70,70,70	0
56	MG	CA	1726	1/1	0.88	0.12	29,29,29,29	0
56	MG	CX	103	1/1	0.88	0.23	40,40,40,40	0
56	MG	BA	3222	1/1	0.88	0.21	41,41,41,41	0
56	MG	BA	3265	1/1	0.88	0.23	37,37,37,37	0
56	MG	AA	1688	1/1	0.88	0.29	39,39,39,39	0
56	MG	DA	3246	1/1	0.88	0.15	38,38,38,38	0
56	MG	BA	3064	1/1	0.88	0.20	30,30,30,30	0
56	MG	DA	3249	1/1	0.88	0.47	57,57,57,57	0
56	MG	BA	3400	1/1	0.88	0.14	46,46,46,46	0
56	MG	CA	1680	1/1	0.88	0.19	51,51,51,51	0
56	MG	BA	3181	1/1	0.88	0.07	36,36,36,36	0
56	MG	BB	209	1/1	0.88	0.12	49,49,49,49	0
56	MG	DB	209	1/1	0.88	0.16	20,20,20,20	0
56	MG	BA	3070	1/1	0.88	0.21	24,24,24,24	0
56	MG	DA	3137	1/1	0.88	0.15	62,62,62,62	0
56	MG	CA	1759	1/1	0.89	0.20	68,68,68,68	0
56	MG	CA	1761	1/1	0.89	0.26	26,26,26,26	0
56	MG	DA	3111	1/1	0.89	0.24	1,1,1,1	0
56	MG	DA	3272	1/1	0.89	0.41	47,47,47,47	0
56	MG	BA	3009	1/1	0.89	0.23	20,20,20,20	0
56	MG	BA	3333	1/1	0.89	0.17	41,41,41,41	0
56	MG	CA	1786	1/1	0.89	0.23	29,29,29,29	0
56	MG	DA	3153	1/1	0.89	0.31	40,40,40,40	0
56	MG	CA	1789	1/1	0.89	0.18	33,33,33,33	0
56	MG	DA	3278	1/1	0.89	0.17	38,38,38,38	0
56	MG	DA	3159	1/1	0.89	0.23	57,57,57,57	0
56	MG	CJ	201	1/1	0.89	0.10	44,44,44,44	0
56	MG	BA	3206	1/1	0.89	0.19	25,25,25,25	0
56	MG	BA	3018	1/1	0.89	0.24	22,22,22,22	0
56	MG	CV	104	1/1	0.89	0.21	36,36,36,36	0
56	MG	DA	3173	1/1	0.89	0.13	41,41,41,41	0
56	MG	BA	3415	1/1	0.89	0.32	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	BA	3124	1/1	0.89	0.19	17,17,17,17	0
56	MG	BA	3142	1/1	0.89	0.26	66,66,66,66	0
56	MG	B2	102	1/1	0.89	0.20	44,44,44,44	0
56	MG	BA	3282	1/1	0.89	0.31	49,49,49,49	0
56	MG	CA	1663	1/1	0.89	0.16	32,32,32,32	0
56	MG	AA	1665	1/1	0.89	0.21	27,27,27,27	0
56	MG	BA	3001	1/1	0.89	0.18	38,38,38,38	0
56	MG	BA	3379	1/1	0.89	0.11	39,39,39,39	0
56	MG	BA	3166	1/1	0.89	0.06	39,39,39,39	0
56	MG	DA	3008	1/1	0.89	0.17	23,23,23,23	0
56	MG	BA	3300	1/1	0.89	0.10	6,6,6,6	0
56	MG	BA	3254	1/1	0.89	0.11	48,48,48,48	0
56	MG	BN	201	1/1	0.89	0.31	25,25,25,25	0
56	MG	DN	201	1/1	0.89	0.09	16,16,16,16	0
56	MG	AA	1643	1/1	0.89	0.17	22,22,22,22	0
56	MG	CA	1723	1/1	0.90	0.34	65,65,65,65	0
56	MG	CX	106	1/1	0.90	0.37	47,47,47,47	0
56	MG	AA	1763	1/1	0.90	0.43	58,58,58,58	1
56	MG	AA	1810	1/1	0.90	0.26	47,47,47,47	0
56	MG	BA	3286	1/1	0.90	0.19	38,38,38,38	0
56	MG	B2	103	1/1	0.90	0.29	46,46,46,46	0
56	MG	DA	3009	1/1	0.90	0.18	3,3,3,3	0
56	MG	CA	1732	1/1	0.90	0.23	43,43,43,43	0
56	MG	CA	1734	1/1	0.90	0.14	59,59,59,59	0
56	MG	BA	3230	1/1	0.90	0.16	36,36,36,36	0
56	MG	CA	1627	1/1	0.90	0.14	34,34,34,34	0
56	MG	BA	3140	1/1	0.90	0.11	10,10,10,10	0
56	MG	DA	3057	1/1	0.90	0.30	35,35,35,35	0
56	MG	AA	1768	1/1	0.90	0.15	14,14,14,14	1
56	MG	CA	1643	1/1	0.90	0.42	48,48,48,48	0
56	MG	DA	3132	1/1	0.90	0.09	13,13,13,13	0
56	MG	BA	3409	1/1	0.90	0.13	53,53,53,53	0
56	MG	BA	3241	1/1	0.90	0.19	43,43,43,43	0
56	MG	BA	3330	1/1	0.90	0.06	33,33,33,33	0
56	MG	BA	3331	1/1	0.90	0.08	45,45,45,45	0
56	MG	AA	1772	1/1	0.90	0.23	73,73,73,73	0
56	MG	AA	1776	1/1	0.90	0.10	30,30,30,30	0
56	MG	AA	1620	1/1	0.90	0.14	28,28,28,28	0
56	MG	DA	3165	1/1	0.90	0.17	38,38,38,38	0
56	MG	BA	3345	1/1	0.90	0.18	59,59,59,59	0
56	MG	BA	3429	1/1	0.90	0.16	41,41,41,41	0
56	MG	BA	3154	1/1	0.90	0.14	28,28,28,28	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	BA	3435	1/1	0.90	0.09	52,52,52,52	1
56	MG	DA	3368	1/1	0.90	0.67	71,71,71,71	0
56	MG	DA	3369	1/1	0.90	0.15	46,46,46,46	0
56	MG	DA	3371	1/1	0.90	0.12	40,40,40,40	0
56	MG	BA	3446	1/1	0.90	0.13	43,43,43,43	0
56	MG	AA	1708	1/1	0.90	0.20	41,41,41,41	0
56	MG	DA	3387	1/1	0.90	0.11	11,11,11,11	0
56	MG	BA	3367	1/1	0.90	0.26	50,50,50,50	0
56	MG	AW	118	1/1	0.90	0.16	46,46,46,46	0
56	MG	AA	1749	1/1	0.90	0.15	38,38,38,38	0
56	MG	CW	110	1/1	0.90	0.12	38,38,38,38	0
56	MG	AW	121	1/1	0.90	0.09	36,36,36,36	0
56	MG	BB	212	1/1	0.90	0.11	18,18,18,18	1
56	MG	AA	1745	1/1	0.90	0.17	56,56,56,56	0
56	MG	DA	3240	1/1	0.90	0.11	43,43,43,43	0
56	MG	CA	1711	1/1	0.91	0.29	63,63,63,63	0
56	MG	BA	3358	1/1	0.91	0.19	42,42,42,42	0
56	MG	DA	3245	1/1	0.91	0.15	38,38,38,38	0
56	MG	BB	204	1/1	0.91	0.14	42,42,42,42	0
56	MG	CX	104	1/1	0.91	0.17	31,31,31,31	1
56	MG	BA	3002	1/1	0.91	0.17	21,21,21,21	0
56	MG	BB	206	1/1	0.91	0.38	78,78,78,78	0
56	MG	AA	1780	1/1	0.91	0.13	60,60,60,60	0
56	MG	AA	1627	1/1	0.91	0.45	39,39,39,39	0
56	MG	BA	3160	1/1	0.91	0.12	17,17,17,17	0
56	MG	BB	214	1/1	0.91	0.20	46,46,46,46	0
56	MG	BB	218	1/1	0.91	0.12	36,36,36,36	1
56	MG	BA	3016	1/1	0.91	0.21	37,37,37,37	0
56	MG	BA	3167	1/1	0.91	0.14	33,33,33,33	0
56	MG	CA	1737	1/1	0.91	0.15	35,35,35,35	0
56	MG	AA	1792	1/1	0.91	0.19	74,74,74,74	0
56	MG	AA	1738	1/1	0.91	0.20	49,49,49,49	0
56	MG	BA	3051	1/1	0.91	0.12	56,56,56,56	0
56	MG	DA	3069	1/1	0.91	0.21	45,45,45,45	0
56	MG	AA	1743	1/1	0.91	0.10	44,44,44,44	0
56	MG	DA	3298	1/1	0.91	0.14	5,5,5,5	0
56	MG	CA	1633	1/1	0.91	0.27	19,19,19,19	0
56	MG	DA	3133	1/1	0.91	0.11	39,39,39,39	0
56	MG	BA	3294	1/1	0.91	0.10	6,6,6,6	0
56	MG	AA	1796	1/1	0.91	0.10	10,10,10,10	1
56	MG	BA	3219	1/1	0.91	0.06	45,45,45,45	0
56	MG	BA	3410	1/1	0.91	0.09	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	CA	1760	1/1	0.91	0.15	33,33,33,33	0
56	MG	BA	3322	1/1	0.91	0.14	35,35,35,35	0
56	MG	DA	3344	1/1	0.91	0.31	32,32,32,32	0
56	MG	AA	1767	1/1	0.91	0.22	48,48,48,48	0
56	MG	AA	1729	1/1	0.91	0.09	45,45,45,45	0
56	MG	CA	1772	1/1	0.91	0.18	37,37,37,37	0
56	MG	AA	1808	1/1	0.91	0.08	33,33,33,33	0
56	MG	BA	3231	1/1	0.91	0.42	45,45,45,45	0
56	MG	BA	3111	1/1	0.91	0.16	27,27,27,27	0
56	MG	AA	1638	1/1	0.91	0.24	24,24,24,24	0
56	MG	BA	3129	1/1	0.91	0.14	21,21,21,21	0
56	MG	DA	3197	1/1	0.91	0.16	13,13,13,13	0
56	MG	DA	3389	1/1	0.91	0.11	22,22,22,22	0
56	MG	DA	3201	1/1	0.91	0.18	7,7,7,7	0
56	MG	DA	3393	1/1	0.91	0.13	80,80,80,80	0
56	MG	BA	3343	1/1	0.91	0.30	34,34,34,34	0
56	MG	AA	1629	1/1	0.91	0.13	29,29,29,29	0
56	MG	AV	106	1/1	0.91	0.07	40,40,40,40	0
56	MG	BA	3448	1/1	0.91	0.07	35,35,35,35	0
56	MG	DF	301	1/1	0.91	0.13	29,29,29,29	0
56	MG	BA	3349	1/1	0.91	0.16	28,28,28,28	1
56	MG	AV	107	1/1	0.91	0.10	25,25,25,25	0
56	MG	DA	3233	1/1	0.91	0.12	0,0,0,0	0
56	MG	DU	201	1/1	0.91	0.13	45,45,45,45	0
56	MG	DZ	301	1/1	0.91	0.12	27,27,27,27	0
56	MG	AA	1809	1/1	0.92	0.17	40,40,40,40	1
56	MG	BA	3180	1/1	0.92	0.10	33,33,33,33	0
56	MG	BA	3071	1/1	0.92	0.24	20,20,20,20	0
56	MG	BA	3190	1/1	0.92	0.21	49,49,49,49	0
56	MG	B2	101	1/1	0.92	0.12	36,36,36,36	0
56	MG	AA	1601	1/1	0.92	0.11	35,35,35,35	0
56	MG	DA	3257	1/1	0.92	0.19	27,27,27,27	0
56	MG	BA	3388	1/1	0.92	0.22	22,22,22,22	0
56	MG	BA	3214	1/1	0.92	0.39	44,44,44,44	0
56	MG	BV	201	1/1	0.92	0.12	23,23,23,23	0
56	MG	DA	3267	1/1	0.92	0.13	13,13,13,13	0
56	MG	AA	1640	1/1	0.92	0.29	18,18,18,18	0
56	MG	DA	3270	1/1	0.92	0.09	47,47,47,47	0
56	MG	AA	1632	1/1	0.92	0.10	24,24,24,24	0
56	MG	BA	3308	1/1	0.92	0.20	25,25,25,25	0
56	MG	BA	3316	1/1	0.92	0.27	49,49,49,49	0
56	MG	DA	3040	1/1	0.92	0.04	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	BA	3318	1/1	0.92	0.18	30,30,30,30	0
56	MG	AA	1783	1/1	0.92	0.37	46,46,46,46	0
56	MG	AA	1731	1/1	0.92	0.14	56,56,56,56	0
56	MG	DA	3279	1/1	0.92	0.19	15,15,15,15	0
56	MG	CA	1639	1/1	0.92	0.23	71,71,71,71	0
56	MG	DA	3296	1/1	0.92	0.10	59,59,59,59	0
56	MG	AA	1686	1/1	0.92	0.18	52,52,52,52	0
56	MG	DA	3116	1/1	0.92	0.11	10,10,10,10	0
56	MG	AA	1755	1/1	0.92	0.26	47,47,47,47	0
56	MG	AA	1615	1/1	0.92	0.12	33,33,33,33	0
56	MG	AA	1737	1/1	0.92	0.13	60,60,60,60	0
56	MG	CA	1758	1/1	0.92	0.15	44,44,44,44	0
56	MG	BA	3150	1/1	0.92	0.12	35,35,35,35	0
56	MG	DA	3333	1/1	0.92	0.23	67,67,67,67	0
56	MG	AA	1715	1/1	0.92	0.09	24,24,24,24	0
56	MG	CA	1661	1/1	0.92	0.17	13,13,13,13	0
56	MG	BA	3431	1/1	0.92	0.09	51,51,51,51	0
56	MG	DA	3350	1/1	0.92	0.19	37,37,37,37	0
56	MG	CA	1665	1/1	0.92	0.43	71,71,71,71	0
56	MG	CA	1769	1/1	0.92	0.11	18,18,18,18	0
56	MG	BA	3250	1/1	0.92	0.19	22,22,22,22	1
56	MG	CA	1775	1/1	0.92	0.22	35,35,35,35	0
56	MG	CA	1776	1/1	0.92	0.18	44,44,44,44	0
56	MG	DA	3172	1/1	0.92	0.22	25,25,25,25	0
56	MG	DA	3379	1/1	0.92	0.22	31,31,31,31	0
56	MG	AA	1807	1/1	0.92	0.12	19,19,19,19	1
56	MG	CA	1788	1/1	0.92	0.21	42,42,42,42	1
56	MG	DA	3383	1/1	0.92	0.09	32,32,32,32	0
56	MG	DA	3188	1/1	0.92	0.32	42,42,42,42	0
56	MG	BA	3439	1/1	0.92	0.23	31,31,31,31	0
56	MG	CA	1682	1/1	0.92	0.12	32,32,32,32	0
56	MG	DA	3392	1/1	0.92	0.15	47,47,47,47	0
56	MG	CV	101	1/1	0.92	0.13	32,32,32,32	0
56	MG	BA	3157	1/1	0.92	0.28	39,39,39,39	0
56	MG	BA	3158	1/1	0.92	0.26	44,44,44,44	0
56	MG	BA	3450	1/1	0.92	0.09	55,55,55,55	0
56	MG	CA	1694	1/1	0.92	0.17	33,33,33,33	0
56	MG	BA	3052	1/1	0.92	0.24	0,0,0,0	0
56	MG	DA	3228	1/1	0.92	0.15	19,19,19,19	0
56	MG	BA	3061	1/1	0.92	0.16	0,0,0,0	0
56	MG	AA	1635	1/1	0.92	0.09	16,16,16,16	0
56	MG	CA	1700	1/1	0.92	0.14	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	BA	3277	1/1	0.92	0.19	38,38,38,38	0
56	MG	CA	1612	1/1	0.93	0.09	17,17,17,17	0
56	MG	BA	3155	1/1	0.93	0.44	66,66,66,66	0
56	MG	BA	3263	1/1	0.93	0.07	4,4,4,4	0
56	MG	AW	101	1/1	0.93	0.35	35,35,35,35	0
56	MG	BA	3268	1/1	0.93	0.14	24,24,24,24	0
56	MG	BA	3269	1/1	0.93	0.32	43,43,43,43	0
56	MG	CA	1762	1/1	0.93	0.25	39,39,39,39	0
56	MG	DA	3214	1/1	0.93	0.10	32,32,32,32	0
56	MG	DA	3216	1/1	0.93	0.12	34,34,34,34	0
56	MG	AA	1786	1/1	0.93	0.14	31,31,31,31	0
56	MG	DA	3218	1/1	0.93	0.07	27,27,27,27	0
56	MG	BA	3276	1/1	0.93	0.09	6,6,6,6	0
56	MG	BA	3390	1/1	0.93	0.11	20,20,20,20	1
56	MG	DA	3230	1/1	0.93	0.17	20,20,20,20	0
56	MG	AA	1791	1/1	0.93	0.45	22,22,22,22	1
56	MG	AW	111	1/1	0.93	0.25	32,32,32,32	1
56	MG	AA	1674	1/1	0.93	0.24	33,33,33,33	0
56	MG	BA	3407	1/1	0.93	0.11	40,40,40,40	0
56	MG	CA	1787	1/1	0.93	0.29	39,39,39,39	1
56	MG	BA	3168	1/1	0.93	0.10	22,22,22,22	0
56	MG	AA	1764	1/1	0.93	0.10	6,6,6,6	0
56	MG	AA	1765	1/1	0.93	0.05	43,43,43,43	0
56	MG	BA	3288	1/1	0.93	0.23	32,32,32,32	1
56	MG	AA	1654	1/1	0.93	0.20	50,50,50,50	0
56	MG	CA	1670	1/1	0.93	0.13	23,23,23,23	0
56	MG	CA	1671	1/1	0.93	0.26	42,42,42,42	0
56	MG	CW	102	1/1	0.93	0.07	52,52,52,52	0
56	MG	CA	1672	1/1	0.93	0.15	32,32,32,32	0
56	MG	AA	1678	1/1	0.93	0.10	43,43,43,43	0
56	MG	CA	1674	1/1	0.93	0.09	58,58,58,58	0
56	MG	AA	1769	1/1	0.93	0.20	61,61,61,61	0
56	MG	BA	3299	1/1	0.93	0.19	22,22,22,22	0
56	MG	AA	1803	1/1	0.93	0.17	48,48,48,48	0
56	MG	AA	1695	1/1	0.93	0.18	13,13,13,13	1
56	MG	BA	3428	1/1	0.93	0.49	72,72,72,72	1
56	MG	BA	3215	1/1	0.93	0.14	30,30,30,30	0
56	MG	BA	3119	1/1	0.93	0.25	16,16,16,16	0
56	MG	BA	3320	1/1	0.93	0.09	37,37,37,37	0
56	MG	AA	1735	1/1	0.93	0.18	84,84,84,84	0
56	MG	BA	3126	1/1	0.93	0.09	1,1,1,1	0
56	MG	DA	3006	1/1	0.93	0.17	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	CA	1698	1/1	0.93	0.37	42,42,42,42	0
56	MG	DA	3309	1/1	0.93	0.13	6,6,6,6	0
56	MG	BA	3442	1/1	0.93	0.09	29,29,29,29	0
56	MG	CA	1702	1/1	0.93	0.14	36,36,36,36	0
56	MG	DA	3313	1/1	0.93	0.12	35,35,35,35	1
56	MG	DA	3318	1/1	0.93	0.28	45,45,45,45	0
56	MG	AA	1681	1/1	0.93	0.13	21,21,21,21	0
56	MG	CA	1708	1/1	0.93	0.30	43,43,43,43	0
56	MG	DA	3321	1/1	0.93	0.11	45,45,45,45	1
56	MG	DA	3324	1/1	0.93	0.21	56,56,56,56	0
56	MG	DA	3325	1/1	0.93	0.11	35,35,35,35	0
56	MG	DA	3027	1/1	0.93	0.28	39,39,39,39	0
56	MG	BA	3447	1/1	0.93	0.09	37,37,37,37	0
56	MG	CA	1713	1/1	0.93	0.19	93,93,93,93	0
56	MG	BA	3228	1/1	0.93	0.13	46,46,46,46	0
56	MG	DA	3339	1/1	0.93	0.07	17,17,17,17	0
56	MG	DA	3341	1/1	0.93	0.11	26,26,26,26	0
56	MG	DA	3053	1/1	0.93	0.17	24,24,24,24	0
56	MG	AA	1648	1/1	0.93	0.19	86,86,86,86	0
56	MG	DA	3348	1/1	0.93	0.14	46,46,46,46	0
56	MG	DA	3058	1/1	0.93	0.20	6,6,6,6	0
56	MG	DA	3351	1/1	0.93	0.18	16,16,16,16	0
56	MG	CA	1718	1/1	0.93	0.22	47,47,47,47	0
56	MG	AA	1811	1/1	0.93	0.12	16,16,16,16	0
56	MG	DA	3096	1/1	0.93	0.24	21,21,21,21	0
56	MG	DA	3360	1/1	0.93	0.34	39,39,39,39	0
56	MG	DA	3367	1/1	0.93	0.11	19,19,19,19	0
56	MG	DA	3106	1/1	0.93	0.15	15,15,15,15	0
56	MG	CA	1721	1/1	0.93	0.27	57,57,57,57	0
56	MG	BA	3454	1/1	0.93	0.13	44,44,44,44	0
56	MG	DA	3375	1/1	0.93	0.10	42,42,42,42	1
56	MG	DA	3120	1/1	0.93	0.13	25,25,25,25	0
56	MG	AA	1758	1/1	0.93	0.13	62,62,62,62	0
56	MG	BA	3144	1/1	0.93	0.16	8,8,8,8	0
56	MG	BA	3146	1/1	0.93	0.24	0,0,0,0	0
56	MG	BA	3003	1/1	0.93	0.20	28,28,28,28	0
56	MG	DA	3140	1/1	0.93	0.14	22,22,22,22	0
56	MG	DA	3148	1/1	0.93	0.14	5,5,5,5	0
56	MG	AV	103	1/1	0.93	0.08	28,28,28,28	0
56	MG	BA	3253	1/1	0.93	0.11	38,38,38,38	0
56	MG	BB	210	1/1	0.93	0.10	33,33,33,33	1
56	MG	AA	1784	1/1	0.93	0.29	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	CA	1738	1/1	0.93	0.11	23,23,23,23	0
56	MG	DB	205	1/1	0.93	0.20	51,51,51,51	0
56	MG	DB	207	1/1	0.93	0.21	52,52,52,52	1
56	MG	BA	3153	1/1	0.93	0.12	37,37,37,37	0
56	MG	CA	1741	1/1	0.93	0.31	40,40,40,40	0
56	MG	BA	3362	1/1	0.93	0.18	58,58,58,58	0
56	MG	AA	1785	1/1	0.93	0.15	32,32,32,32	0
56	MG	BA	3370	1/1	0.93	0.28	28,28,28,28	1
56	MG	BA	3259	1/1	0.93	0.10	32,32,32,32	0
56	MG	CA	1611	1/1	0.93	0.27	67,67,67,67	0
57	PAR	AA	1816	42/42	0.93	0.16	15,20,38,42	0
57	PAR	CA	1790	42/42	0.93	0.17	7,11,29,33	0
56	MG	BA	3174	1/1	0.94	0.11	0,0,0,0	0
56	MG	CA	1638	1/1	0.94	0.13	42,42,42,42	0
56	MG	BA	3384	1/1	0.94	0.13	36,36,36,36	0
56	MG	DA	3203	1/1	0.94	0.10	58,58,58,58	0
56	MG	DA	3204	1/1	0.94	0.12	8,8,8,8	0
56	MG	BA	3272	1/1	0.94	0.40	49,49,49,49	0
56	MG	AA	1655	1/1	0.94	0.17	32,32,32,32	0
56	MG	AA	1709	1/1	0.94	0.15	33,33,33,33	0
56	MG	CA	1768	1/1	0.94	0.14	37,37,37,37	0
56	MG	BA	3395	1/1	0.94	0.20	54,54,54,54	1
56	MG	AA	1604	1/1	0.94	0.17	52,52,52,52	0
56	MG	AA	1616	1/1	0.94	0.14	18,18,18,18	0
56	MG	CA	1649	1/1	0.94	0.12	37,37,37,37	0
56	MG	CA	1779	1/1	0.94	0.20	31,31,31,31	0
56	MG	CA	1650	1/1	0.94	0.24	68,68,68,68	0
56	MG	CA	1652	1/1	0.94	0.18	52,52,52,52	0
56	MG	DA	3232	1/1	0.94	0.12	13,13,13,13	0
56	MG	CA	1654	1/1	0.94	0.08	41,41,41,41	0
56	MG	DA	3235	1/1	0.94	0.08	39,39,39,39	0
56	MG	CA	1657	1/1	0.94	0.15	24,24,24,24	0
56	MG	CF	201	1/1	0.94	0.10	44,44,44,44	0
56	MG	BA	3199	1/1	0.94	0.14	9,9,9,9	0
56	MG	BA	3204	1/1	0.94	0.11	0,0,0,0	0
56	MG	BA	3117	1/1	0.94	0.24	3,3,3,3	0
56	MG	B2	104	1/1	0.94	0.09	34,34,34,34	0
56	MG	AA	1683	1/1	0.94	0.13	17,17,17,17	0
56	MG	B7	102	1/1	0.94	0.10	11,11,11,11	1
56	MG	AA	1717	1/1	0.94	0.08	21,21,21,21	0
56	MG	BA	3217	1/1	0.94	0.16	37,37,37,37	0
56	MG	BA	3218	1/1	0.94	0.07	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	CA	1676	1/1	0.94	0.36	46,46,46,46	0
56	MG	BA	3135	1/1	0.94	0.13	18,18,18,18	0
56	MG	BA	3301	1/1	0.94	0.20	19,19,19,19	0
56	MG	CA	1684	1/1	0.94	0.23	30,30,30,30	0
56	MG	BA	3221	1/1	0.94	0.13	49,49,49,49	0
56	MG	BA	3314	1/1	0.94	0.45	47,47,47,47	1
56	MG	AA	1790	1/1	0.94	0.08	65,65,65,65	0
56	MG	BA	3223	1/1	0.94	0.13	8,8,8,8	0
56	MG	BA	3226	1/1	0.94	0.10	20,20,20,20	0
56	MG	BA	3436	1/1	0.94	0.11	39,39,39,39	1
56	MG	BA	3141	1/1	0.94	0.10	20,20,20,20	0
56	MG	AA	1606	1/1	0.94	0.36	53,53,53,53	0
56	MG	DA	3282	1/1	0.94	0.15	41,41,41,41	0
56	MG	BA	3229	1/1	0.94	0.15	36,36,36,36	0
56	MG	DA	3010	1/1	0.94	0.14	44,44,44,44	0
56	MG	DA	3297	1/1	0.94	0.15	23,23,23,23	0
56	MG	DA	3012	1/1	0.94	0.16	27,27,27,27	0
56	MG	DA	3304	1/1	0.94	0.06	9,9,9,9	0
56	MG	DA	3307	1/1	0.94	0.11	34,34,34,34	1
56	MG	AW	102	1/1	0.94	0.26	51,51,51,51	0
56	MG	AA	1630	1/1	0.94	0.10	13,13,13,13	0
56	MG	AA	1690	1/1	0.94	0.12	48,48,48,48	0
56	MG	AA	1619	1/1	0.94	0.33	41,41,41,41	0
56	MG	BA	3452	1/1	0.94	0.11	39,39,39,39	0
56	MG	BA	3335	1/1	0.94	0.13	45,45,45,45	0
56	MG	BA	3149	1/1	0.94	0.10	10,10,10,10	0
56	MG	CA	1717	1/1	0.94	0.07	16,16,16,16	0
56	MG	DA	3056	1/1	0.94	0.16	9,9,9,9	0
56	MG	BA	3243	1/1	0.94	0.13	18,18,18,18	0
56	MG	BA	3344	1/1	0.94	0.15	17,17,17,17	0
56	MG	CA	1720	1/1	0.94	0.15	69,69,69,69	0
56	MG	DA	3331	1/1	0.94	0.26	42,42,42,42	0
56	MG	DA	3068	1/1	0.94	0.14	14,14,14,14	0
56	MG	BA	3028	1/1	0.94	0.30	36,36,36,36	0
56	MG	DA	3074	1/1	0.94	0.22	11,11,11,11	0
56	MG	DA	3086	1/1	0.94	0.21	0,0,0,0	0
56	MG	DA	3088	1/1	0.94	0.20	4,4,4,4	0
56	MG	BA	3030	1/1	0.94	0.11	0,0,0,0	0
56	MG	DA	3347	1/1	0.94	0.08	34,34,34,34	0
56	MG	AA	1609	1/1	0.94	0.15	44,44,44,44	0
56	MG	CA	1724	1/1	0.94	0.08	38,38,38,38	0
56	MG	AW	115	1/1	0.94	0.12	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	BA	3354	1/1	0.94	0.09	35,35,35,35	0
56	MG	DA	3122	1/1	0.94	0.18	43,43,43,43	0
56	MG	DA	3130	1/1	0.94	0.15	14,14,14,14	0
56	MG	BA	3255	1/1	0.94	0.14	28,28,28,28	0
56	MG	DA	3363	1/1	0.94	0.12	30,30,30,30	0
56	MG	BA	3361	1/1	0.94	0.24	53,53,53,53	0
56	MG	CA	1731	1/1	0.94	0.10	32,32,32,32	0
56	MG	BA	3256	1/1	0.94	0.09	22,22,22,22	0
56	MG	BA	3366	1/1	0.94	0.14	27,27,27,27	0
56	MG	DA	3143	1/1	0.94	0.22	36,36,36,36	0
56	MG	DA	3144	1/1	0.94	0.14	31,31,31,31	0
56	MG	CA	1736	1/1	0.94	0.14	30,30,30,30	0
56	MG	AA	1653	1/1	0.94	0.12	39,39,39,39	0
56	MG	DA	3151	1/1	0.94	0.21	46,46,46,46	0
56	MG	DA	3152	1/1	0.94	0.10	17,17,17,17	0
56	MG	CA	1601	1/1	0.94	0.17	26,26,26,26	0
56	MG	CA	1609	1/1	0.94	0.10	33,33,33,33	0
56	MG	AA	1622	1/1	0.94	0.10	8,8,8,8	0
56	MG	AA	1736	1/1	0.94	0.10	19,19,19,19	0
56	MG	DA	3161	1/1	0.94	0.13	39,39,39,39	0
56	MG	DA	3396	1/1	0.94	0.16	27,27,27,27	1
56	MG	BA	3373	1/1	0.94	0.04	39,39,39,39	0
56	MG	CA	1617	1/1	0.94	0.09	25,25,25,25	0
56	MG	AA	1676	1/1	0.94	0.07	7,7,7,7	0
56	MG	DA	3170	1/1	0.94	0.09	54,54,54,54	0
56	MG	DB	208	1/1	0.94	0.17	9,9,9,9	0
56	MG	AA	1701	1/1	0.94	0.12	18,18,18,18	0
56	MG	DB	210	1/1	0.94	0.05	15,15,15,15	0
56	MG	DD	302	1/1	0.94	0.09	7,7,7,7	0
56	MG	BA	3088	1/1	0.94	0.30	35,35,35,35	0
56	MG	BA	3266	1/1	0.94	0.28	28,28,28,28	0
56	MG	DA	3175	1/1	0.94	0.19	30,30,30,30	0
56	MG	DA	3180	1/1	0.94	0.26	0,0,0,0	0
56	MG	DA	3185	1/1	0.94	0.12	8,8,8,8	1
56	MG	CA	1757	1/1	0.94	0.12	56,56,56,56	0
56	MG	BA	3102	1/1	0.94	0.11	15,15,15,15	0
56	MG	DA	3189	1/1	0.94	0.23	34,34,34,34	0
56	MG	BA	3114	1/1	0.95	0.21	0,0,0,0	0
56	MG	AA	1684	1/1	0.95	0.13	17,17,17,17	0
56	MG	BA	3336	1/1	0.95	0.11	45,45,45,45	0
56	MG	AA	1804	1/1	0.95	0.12	31,31,31,31	0
56	MG	DA	3177	1/1	0.95	0.18	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	BA	3122	1/1	0.95	0.13	8,8,8,8	0
56	MG	BB	215	1/1	0.95	0.10	40,40,40,40	0
56	MG	DA	3186	1/1	0.95	0.24	24,24,24,24	0
56	MG	CA	1746	1/1	0.95	0.26	18,18,18,18	0
56	MG	AA	1770	1/1	0.95	0.12	16,16,16,16	0
56	MG	BB	219	1/1	0.95	0.08	24,24,24,24	0
56	MG	DA	3191	1/1	0.95	0.16	25,25,25,25	0
56	MG	BF	302	1/1	0.95	0.24	46,46,46,46	0
56	MG	AA	1685	1/1	0.95	0.07	38,38,38,38	0
56	MG	AA	1773	1/1	0.95	0.09	41,41,41,41	0
56	MG	BX	101	1/1	0.95	0.13	26,26,26,26	0
56	MG	BA	3347	1/1	0.95	0.17	22,22,22,22	1
56	MG	DA	3207	1/1	0.95	0.11	8,8,8,8	0
56	MG	CA	1602	1/1	0.95	0.12	14,14,14,14	0
56	MG	DA	3211	1/1	0.95	0.10	1,1,1,1	0
56	MG	AA	1668	1/1	0.95	0.07	23,23,23,23	0
56	MG	CA	1610	1/1	0.95	0.22	15,15,15,15	0
56	MG	BA	3351	1/1	0.95	0.28	78,78,78,78	0
56	MG	CA	1764	1/1	0.95	0.11	15,15,15,15	0
56	MG	CA	1765	1/1	0.95	0.08	38,38,38,38	0
56	MG	BA	3234	1/1	0.95	0.26	29,29,29,29	0
56	MG	BA	3139	1/1	0.95	0.11	9,9,9,9	0
56	MG	CA	1616	1/1	0.95	0.24	24,24,24,24	0
56	MG	DA	3229	1/1	0.95	0.21	1,1,1,1	0
56	MG	BA	3240	1/1	0.95	0.23	15,15,15,15	0
56	MG	AA	1777	1/1	0.95	0.11	55,55,55,55	0
56	MG	AA	1812	1/1	0.95	0.12	50,50,50,50	0
56	MG	CA	1620	1/1	0.95	0.16	32,32,32,32	0
56	MG	CA	1781	1/1	0.95	0.17	29,29,29,29	0
56	MG	DA	3236	1/1	0.95	0.13	54,54,54,54	0
56	MG	CA	1785	1/1	0.95	0.14	44,44,44,44	0
56	MG	BA	3364	1/1	0.95	0.13	35,35,35,35	0
56	MG	DA	3241	1/1	0.95	0.10	12,12,12,12	0
56	MG	CA	1625	1/1	0.95	0.20	19,19,19,19	0
56	MG	CA	1626	1/1	0.95	0.14	11,11,11,11	0
56	MG	AA	1814	1/1	0.95	0.12	25,25,25,25	0
56	MG	BA	3248	1/1	0.95	0.21	33,33,33,33	0
56	MG	CA	1636	1/1	0.95	0.13	36,36,36,36	0
56	MG	DA	3253	1/1	0.95	0.15	71,71,71,71	0
56	MG	AA	1687	1/1	0.95	0.12	10,10,10,10	0
56	MG	BA	3252	1/1	0.95	0.14	25,25,25,25	0
56	MG	AA	1781	1/1	0.95	0.23	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	BA	3005	1/1	0.95	0.11	26,26,26,26	0
56	MG	AA	1607	1/1	0.95	0.07	12,12,12,12	0
56	MG	BA	3148	1/1	0.95	0.17	37,37,37,37	0
56	MG	BA	3012	1/1	0.95	0.13	20,20,20,20	0
56	MG	AA	1673	1/1	0.95	0.10	26,26,26,26	0
56	MG	BA	3380	1/1	0.95	0.33	77,77,77,77	0
56	MG	AA	1721	1/1	0.95	0.10	28,28,28,28	0
56	MG	BA	3019	1/1	0.95	0.32	0,0,0,0	0
56	MG	BA	3026	1/1	0.95	0.22	0,0,0,0	0
56	MG	AA	1725	1/1	0.95	0.15	53,53,53,53	0
56	MG	BA	3392	1/1	0.95	0.11	8,8,8,8	0
56	MG	CA	1658	1/1	0.95	0.10	40,40,40,40	0
56	MG	AA	1726	1/1	0.95	0.11	12,12,12,12	0
56	MG	DA	3001	1/1	0.95	0.15	20,20,20,20	0
56	MG	BA	3033	1/1	0.95	0.20	30,30,30,30	0
56	MG	DA	3285	1/1	0.95	0.20	15,15,15,15	0
56	MG	BA	3399	1/1	0.95	0.19	27,27,27,27	0
56	MG	CA	1667	1/1	0.95	0.20	41,41,41,41	0
56	MG	DA	3007	1/1	0.95	0.31	39,39,39,39	0
56	MG	BA	3034	1/1	0.95	0.09	0,0,0,0	0
56	MG	BA	3401	1/1	0.95	0.22	48,48,48,48	0
56	MG	BA	3402	1/1	0.95	0.18	19,19,19,19	0
56	MG	BA	3035	1/1	0.95	0.28	10,10,10,10	0
56	MG	DA	3014	1/1	0.95	0.18	4,4,4,4	0
56	MG	BA	3405	1/1	0.95	0.09	11,11,11,11	0
56	MG	DA	3314	1/1	0.95	0.10	16,16,16,16	0
56	MG	DA	3019	1/1	0.95	0.24	0,0,0,0	0
56	MG	BA	3406	1/1	0.95	0.16	18,18,18,18	0
56	MG	AW	105	1/1	0.95	0.09	64,64,64,64	0
56	MG	AW	106	1/1	0.95	0.06	26,26,26,26	0
56	MG	AA	1789	1/1	0.95	0.13	18,18,18,18	0
56	MG	DA	3037	1/1	0.95	0.12	4,4,4,4	0
56	MG	DA	3328	1/1	0.95	0.10	27,27,27,27	0
56	MG	CA	1683	1/1	0.95	0.10	2,2,2,2	0
56	MG	AA	1650	1/1	0.95	0.11	31,31,31,31	0
56	MG	BA	3179	1/1	0.95	0.09	28,28,28,28	0
56	MG	AW	112	1/1	0.95	0.16	29,29,29,29	0
56	MG	CA	1690	1/1	0.95	0.09	19,19,19,19	0
56	MG	BA	3069	1/1	0.95	0.15	36,36,36,36	0
56	MG	DA	3061	1/1	0.95	0.25	0,0,0,0	0
56	MG	CA	1692	1/1	0.95	0.09	19,19,19,19	0
56	MG	BA	3183	1/1	0.95	0.07	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	DA	3346	1/1	0.95	0.08	29,29,29,29	0
56	MG	BA	3416	1/1	0.95	0.15	16,16,16,16	0
56	MG	BA	3287	1/1	0.95	0.21	46,46,46,46	0
56	MG	DA	3082	1/1	0.95	0.18	10,10,10,10	0
56	MG	DA	3084	1/1	0.95	0.10	29,29,29,29	0
56	MG	AA	1756	1/1	0.95	0.22	15,15,15,15	0
56	MG	DA	3354	1/1	0.95	0.06	2,2,2,2	0
56	MG	BA	3292	1/1	0.95	0.12	14,14,14,14	0
56	MG	DA	3093	1/1	0.95	0.08	16,16,16,16	0
56	MG	BA	3426	1/1	0.95	0.09	3,3,3,3	0
56	MG	DA	3361	1/1	0.95	0.27	5,5,5,5	0
56	MG	BA	3195	1/1	0.95	0.19	16,16,16,16	0
56	MG	DA	3364	1/1	0.95	0.11	57,57,57,57	0
56	MG	CA	1705	1/1	0.95	0.15	22,22,22,22	0
56	MG	DA	3115	1/1	0.95	0.11	16,16,16,16	0
56	MG	BA	3197	1/1	0.95	0.12	18,18,18,18	0
56	MG	BA	3430	1/1	0.95	0.21	30,30,30,30	0
56	MG	DA	3373	1/1	0.95	0.11	28,28,28,28	0
56	MG	DA	3374	1/1	0.95	0.17	50,50,50,50	0
56	MG	AA	1631	1/1	0.95	0.28	21,21,21,21	0
56	MG	BA	3201	1/1	0.95	0.20	21,21,21,21	0
56	MG	BA	3072	1/1	0.95	0.20	13,13,13,13	0
56	MG	BA	3205	1/1	0.95	0.11	0,0,0,0	0
56	MG	BA	3438	1/1	0.95	0.10	25,25,25,25	0
56	MG	DA	3384	1/1	0.95	0.08	25,25,25,25	0
56	MG	BA	3075	1/1	0.95	0.19	0,0,0,0	0
56	MG	BA	3441	1/1	0.95	0.10	33,33,33,33	0
56	MG	DA	3142	1/1	0.95	0.08	52,52,52,52	0
56	MG	BA	3309	1/1	0.95	0.15	14,14,14,14	0
56	MG	BA	3311	1/1	0.95	0.08	2,2,2,2	0
56	MG	DA	3145	1/1	0.95	0.11	27,27,27,27	0
56	MG	DA	3146	1/1	0.95	0.15	22,22,22,22	0
56	MG	DA	3147	1/1	0.95	0.12	19,19,19,19	0
56	MG	DB	203	1/1	0.95	0.14	33,33,33,33	0
56	MG	BA	3207	1/1	0.95	0.14	0,0,0,0	0
56	MG	AA	1602	1/1	0.95	0.12	39,39,39,39	0
56	MG	DA	3150	1/1	0.95	0.18	40,40,40,40	0
56	MG	BA	3449	1/1	0.95	0.14	27,27,27,27	0
56	MG	BA	3317	1/1	0.95	0.16	50,50,50,50	0
56	MG	BA	3091	1/1	0.95	0.15	20,20,20,20	0
56	MG	DB	211	1/1	0.95	0.07	45,45,45,45	0
56	MG	CA	1727	1/1	0.95	0.23	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	DE	301	1/1	0.95	0.23	18,18,18,18	0
56	MG	BA	3093	1/1	0.95	0.13	15,15,15,15	0
56	MG	AA	1612	1/1	0.95	0.12	31,31,31,31	0
56	MG	AA	1634	1/1	0.95	0.22	34,34,34,34	0
56	MG	DA	3162	1/1	0.95	0.21	35,35,35,35	0
56	MG	AA	1666	1/1	0.95	0.18	1,1,1,1	0
56	MG	AA	1706	1/1	0.95	0.09	10,10,10,10	0
56	MG	AX	104	1/1	0.95	0.16	44,44,44,44	0
56	MG	BA	3112	1/1	0.95	0.13	31,31,31,31	0
56	MG	BA	3017	1/1	0.96	0.09	19,19,19,19	0
56	MG	DA	3192	1/1	0.96	0.13	17,17,17,17	0
56	MG	CA	1780	1/1	0.96	0.14	38,38,38,38	0
56	MG	BA	3116	1/1	0.96	0.30	12,12,12,12	0
56	MG	DA	3199	1/1	0.96	0.09	26,26,26,26	0
56	MG	DA	3200	1/1	0.96	0.17	26,26,26,26	0
56	MG	CA	1782	1/1	0.96	0.10	29,29,29,29	0
56	MG	DA	3202	1/1	0.96	0.20	37,37,37,37	0
56	MG	AA	1779	1/1	0.96	0.16	46,46,46,46	0
56	MG	AA	1667	1/1	0.96	0.23	50,50,50,50	0
56	MG	DA	3205	1/1	0.96	0.09	19,19,19,19	0
56	MG	DA	3206	1/1	0.96	0.09	47,47,47,47	0
56	MG	BA	3120	1/1	0.96	0.08	23,23,23,23	0
56	MG	CA	1648	1/1	0.96	0.13	34,34,34,34	0
56	MG	BA	3021	1/1	0.96	0.23	17,17,17,17	0
56	MG	BA	3304	1/1	0.96	0.10	35,35,35,35	0
56	MG	BA	3411	1/1	0.96	0.18	62,62,62,62	0
56	MG	CU	101	1/1	0.96	0.11	38,38,38,38	0
56	MG	DA	3215	1/1	0.96	0.05	31,31,31,31	0
56	MG	BA	3305	1/1	0.96	0.20	30,30,30,30	0
56	MG	CA	1656	1/1	0.96	0.08	14,14,14,14	0
56	MG	BA	3022	1/1	0.96	0.14	25,25,25,25	0
56	MG	BA	3125	1/1	0.96	0.31	18,18,18,18	0
56	MG	DA	3222	1/1	0.96	0.23	24,24,24,24	0
56	MG	AA	1623	1/1	0.96	0.11	32,32,32,32	0
56	MG	BA	3128	1/1	0.96	0.16	18,18,18,18	0
56	MG	CW	106	1/1	0.96	0.06	50,50,50,50	1
56	MG	BA	3417	1/1	0.96	0.30	29,29,29,29	0
56	MG	BA	3315	1/1	0.96	0.13	43,43,43,43	0
56	MG	CA	1668	1/1	0.96	0.09	42,42,42,42	0
56	MG	DA	3234	1/1	0.96	0.10	33,33,33,33	0
56	MG	BA	3420	1/1	0.96	0.25	59,59,59,59	1
56	MG	BA	3421	1/1	0.96	0.05	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	BA	3220	1/1	0.96	0.14	29,29,29,29	0
56	MG	BA	3423	1/1	0.96	0.16	21,21,21,21	0
56	MG	AA	1760	1/1	0.96	0.08	48,48,48,48	0
56	MG	DA	3243	1/1	0.96	0.08	3,3,3,3	0
56	MG	BA	3029	1/1	0.96	0.22	30,30,30,30	0
56	MG	AA	1703	1/1	0.96	0.22	23,23,23,23	0
56	MG	DA	3247	1/1	0.96	0.21	18,18,18,18	0
56	MG	CA	1677	1/1	0.96	0.10	28,28,28,28	0
56	MG	BA	3032	1/1	0.96	0.07	17,17,17,17	0
56	MG	CA	1681	1/1	0.96	0.07	40,40,40,40	0
56	MG	DA	3251	1/1	0.96	0.16	20,20,20,20	0
56	MG	AA	1741	1/1	0.96	0.06	38,38,38,38	0
56	MG	BA	3324	1/1	0.96	0.15	18,18,18,18	1
56	MG	BA	3326	1/1	0.96	0.11	49,49,49,49	0
56	MG	BA	3327	1/1	0.96	0.09	30,30,30,30	0
56	MG	AA	1742	1/1	0.96	0.40	45,45,45,45	0
56	MG	DA	3011	1/1	0.96	0.20	11,11,11,11	0
56	MG	DA	3264	1/1	0.96	0.10	11,11,11,11	0
56	MG	AA	1669	1/1	0.96	0.40	38,38,38,38	0
56	MG	BA	3038	1/1	0.96	0.22	10,10,10,10	0
56	MG	DA	3269	1/1	0.96	0.35	33,33,33,33	0
56	MG	BA	3040	1/1	0.96	0.05	22,22,22,22	0
56	MG	DA	3271	1/1	0.96	0.32	7,7,7,7	0
56	MG	DA	3018	1/1	0.96	0.09	3,3,3,3	0
56	MG	CA	1693	1/1	0.96	0.15	18,18,18,18	1
56	MG	AA	1787	1/1	0.96	0.09	15,15,15,15	0
56	MG	BA	3049	1/1	0.96	0.28	36,36,36,36	0
56	MG	BA	3236	1/1	0.96	0.10	3,3,3,3	0
56	MG	BA	3337	1/1	0.96	0.05	57,57,57,57	0
56	MG	BA	3339	1/1	0.96	0.10	0,0,0,0	1
56	MG	AA	1815	1/1	0.96	0.13	36,36,36,36	0
56	MG	DA	3280	1/1	0.96	0.06	16,16,16,16	0
56	MG	DA	3044	1/1	0.96	0.14	15,15,15,15	0
56	MG	AA	1788	1/1	0.96	0.09	16,16,16,16	0
56	MG	DA	3052	1/1	0.96	0.16	0,0,0,0	0
56	MG	DA	3288	1/1	0.96	0.08	25,25,25,25	1
56	MG	DA	3289	1/1	0.96	0.09	18,18,18,18	0
56	MG	DA	3291	1/1	0.96	0.10	0,0,0,0	0
56	MG	DA	3293	1/1	0.96	0.10	2,2,2,2	0
56	MG	CA	1704	1/1	0.96	0.10	5,5,5,5	0
56	MG	DA	3054	1/1	0.96	0.13	5,5,5,5	0
56	MG	BA	3151	1/1	0.96	0.07	2,2,2,2	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	DA	3300	1/1	0.96	0.14	13,13,13,13	0
56	MG	BA	3453	1/1	0.96	0.15	49,49,49,49	0
56	MG	DA	3305	1/1	0.96	0.12	28,28,28,28	0
56	MG	BA	3242	1/1	0.96	0.08	4,4,4,4	0
56	MG	DA	3308	1/1	0.96	0.07	20,20,20,20	0
56	MG	BA	3055	1/1	0.96	0.12	0,0,0,0	0
56	MG	DA	3063	1/1	0.96	0.13	0,0,0,0	0
56	MG	DA	3311	1/1	0.96	0.16	53,53,53,53	0
56	MG	DA	3066	1/1	0.96	0.23	0,0,0,0	0
56	MG	BA	3057	1/1	0.96	0.27	17,17,17,17	0
56	MG	BA	3348	1/1	0.96	0.18	26,26,26,26	0
56	MG	DA	3316	1/1	0.96	0.12	7,7,7,7	0
56	MG	CA	1715	1/1	0.96	0.09	55,55,55,55	0
56	MG	DA	3071	1/1	0.96	0.10	18,18,18,18	0
56	MG	AV	101	1/1	0.96	0.06	5,5,5,5	0
56	MG	DA	3081	1/1	0.96	0.20	4,4,4,4	0
56	MG	BA	3350	1/1	0.96	0.16	32,32,32,32	0
56	MG	AA	1689	1/1	0.96	0.06	50,50,50,50	0
56	MG	BA	3156	1/1	0.96	0.06	28,28,28,28	0
56	MG	BB	211	1/1	0.96	0.10	40,40,40,40	1
56	MG	BA	3065	1/1	0.96	0.09	1,1,1,1	0
56	MG	DA	3094	1/1	0.96	0.09	10,10,10,10	0
56	MG	AA	1680	1/1	0.96	0.18	30,30,30,30	0
56	MG	DA	3098	1/1	0.96	0.09	19,19,19,19	0
56	MG	DA	3337	1/1	0.96	0.06	4,4,4,4	0
56	MG	DA	3338	1/1	0.96	0.08	53,53,53,53	0
56	MG	DA	3100	1/1	0.96	0.22	21,21,21,21	0
56	MG	DA	3340	1/1	0.96	0.10	30,30,30,30	0
56	MG	DA	3101	1/1	0.96	0.13	38,38,38,38	0
56	MG	DA	3102	1/1	0.96	0.11	0,0,0,0	0
56	MG	DA	3105	1/1	0.96	0.18	6,6,6,6	0
56	MG	AA	1611	1/1	0.96	0.15	18,18,18,18	0
56	MG	DA	3109	1/1	0.96	0.15	0,0,0,0	0
56	MG	BA	3162	1/1	0.96	0.19	12,12,12,12	0
56	MG	DA	3349	1/1	0.96	0.12	27,27,27,27	0
56	MG	DA	3112	1/1	0.96	0.07	0,0,0,0	0
56	MG	DA	3113	1/1	0.96	0.09	11,11,11,11	0
56	MG	DA	3352	1/1	0.96	0.11	9,9,9,9	0
56	MG	BA	3163	1/1	0.96	0.13	17,17,17,17	0
56	MG	BA	3165	1/1	0.96	0.17	0,0,0,0	0
56	MG	B5	102	1/1	0.96	0.29	24,24,24,24	0
56	MG	CA	1728	1/1	0.96	0.14	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	DA	3126	1/1	0.96	0.08	29,29,29,29	0
56	MG	AA	1671	1/1	0.96	0.12	19,19,19,19	0
56	MG	BO	201	1/1	0.96	0.18	13,13,13,13	0
56	MG	BA	3371	1/1	0.96	0.09	15,15,15,15	0
56	MG	DA	3365	1/1	0.96	0.09	29,29,29,29	0
56	MG	AA	1793	1/1	0.96	0.13	71,71,71,71	0
56	MG	AA	1617	1/1	0.96	0.28	24,24,24,24	0
56	MG	CA	1735	1/1	0.96	0.16	17,17,17,17	0
56	MG	DA	3370	1/1	0.96	0.10	22,22,22,22	0
56	MG	BA	3090	1/1	0.96	0.15	0,0,0,0	0
56	MG	CA	1603	1/1	0.96	0.09	25,25,25,25	0
56	MG	CA	1605	1/1	0.96	0.07	10,10,10,10	0
56	MG	CA	1607	1/1	0.96	0.19	15,15,15,15	0
56	MG	DA	3376	1/1	0.96	0.09	25,25,25,25	0
56	MG	DA	3377	1/1	0.96	0.10	6,6,6,6	1
56	MG	CA	1608	1/1	0.96	0.12	0,0,0,0	0
56	MG	BA	3267	1/1	0.96	0.11	43,43,43,43	0
56	MG	AA	1775	1/1	0.96	0.10	29,29,29,29	0
56	MG	AA	1752	1/1	0.96	0.22	25,25,25,25	0
56	MG	BA	3101	1/1	0.96	0.12	3,3,3,3	0
56	MG	CA	1747	1/1	0.96	0.09	28,28,28,28	0
56	MG	CA	1748	1/1	0.96	0.07	7,7,7,7	0
56	MG	AW	108	1/1	0.96	0.12	35,35,35,35	0
56	MG	BA	3381	1/1	0.96	0.10	21,21,21,21	0
56	MG	BA	3184	1/1	0.96	0.16	1,1,1,1	0
56	MG	BA	3186	1/1	0.96	0.16	25,25,25,25	0
56	MG	CA	1756	1/1	0.96	0.14	41,41,41,41	0
56	MG	DA	3398	1/1	0.96	0.13	7,7,7,7	0
56	MG	BA	3006	1/1	0.96	0.26	24,24,24,24	0
56	MG	BA	3389	1/1	0.96	0.09	0,0,0,0	0
56	MG	DA	3167	1/1	0.96	0.11	101,101,101,101	0
56	MG	BA	3191	1/1	0.96	0.23	23,23,23,23	0
56	MG	BA	3280	1/1	0.96	0.12	10,10,10,10	0
56	MG	BA	3193	1/1	0.96	0.22	8,8,8,8	0
56	MG	BA	3394	1/1	0.96	0.10	26,26,26,26	0
56	MG	CA	1632	1/1	0.96	0.06	11,11,11,11	0
56	MG	BA	3104	1/1	0.96	0.18	12,12,12,12	0
56	MG	DB	212	1/1	0.96	0.08	27,27,27,27	0
56	MG	CA	1635	1/1	0.96	0.21	19,19,19,19	0
56	MG	CA	1766	1/1	0.96	0.23	18,18,18,18	0
56	MG	BA	3396	1/1	0.96	0.18	15,15,15,15	0
56	MG	DA	3183	1/1	0.96	0.06	0,0,0,0	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	DA	3184	1/1	0.96	0.09	10,10,10,10	0
56	MG	AW	109	1/1	0.96	0.06	34,34,34,34	1
56	MG	AA	1628	1/1	0.96	0.14	2,2,2,2	0
56	MG	BA	3015	1/1	0.96	0.15	0,0,0,0	0
56	MG	CA	1641	1/1	0.96	0.16	13,13,13,13	0
56	MG	AA	1778	1/1	0.96	0.14	0,0,0,0	0
56	MG	CW	101	1/1	0.97	0.08	36,36,36,36	0
56	MG	AV	104	1/1	0.97	0.17	27,27,27,27	0
56	MG	CW	103	1/1	0.97	0.05	45,45,45,45	0
56	MG	BA	3194	1/1	0.97	0.13	30,30,30,30	0
56	MG	CW	105	1/1	0.97	0.08	30,30,30,30	0
56	MG	CA	1660	1/1	0.97	0.23	22,22,22,22	0
56	MG	BA	3297	1/1	0.97	0.24	7,7,7,7	0
56	MG	DA	3209	1/1	0.97	0.31	31,31,31,31	0
56	MG	DA	3210	1/1	0.97	0.11	0,0,0,0	0
56	MG	CW	108	1/1	0.97	0.04	10,10,10,10	1
56	MG	CA	1662	1/1	0.97	0.09	18,18,18,18	0
56	MG	BA	3298	1/1	0.97	0.31	25,25,25,25	0
56	MG	BA	3105	1/1	0.97	0.19	13,13,13,13	0
56	MG	BA	3008	1/1	0.97	0.38	22,22,22,22	0
56	MG	CW	113	1/1	0.97	0.05	24,24,24,24	0
56	MG	BA	3418	1/1	0.97	0.11	64,64,64,64	0
56	MG	CA	1669	1/1	0.97	0.06	0,0,0,0	0
56	MG	BA	3108	1/1	0.97	0.11	0,0,0,0	0
56	MG	DA	3220	1/1	0.97	0.10	3,3,3,3	0
56	MG	BA	3302	1/1	0.97	0.18	14,14,14,14	0
56	MG	DA	3223	1/1	0.97	0.31	11,11,11,11	0
56	MG	DA	3225	1/1	0.97	0.25	22,22,22,22	0
56	MG	DA	3226	1/1	0.97	0.08	5,5,5,5	0
56	MG	D5	101	1/1	0.97	0.07	7,7,7,7	0
56	MG	BA	3303	1/1	0.97	0.17	15,15,15,15	0
56	MG	BA	3200	1/1	0.97	0.07	5,5,5,5	1
56	MG	AV	105	1/1	0.97	0.13	12,12,12,12	0
56	MG	BA	3424	1/1	0.97	0.15	38,38,38,38	0
56	MG	BA	3306	1/1	0.97	0.20	20,20,20,20	0
56	MG	BA	3203	1/1	0.97	0.21	14,14,14,14	0
56	MG	BA	3110	1/1	0.97	0.11	0,0,0,0	0
56	MG	BA	3010	1/1	0.97	0.06	30,30,30,30	0
56	MG	BA	3313	1/1	0.97	0.11	21,21,21,21	0
56	MG	BA	3011	1/1	0.97	0.20	0,0,0,0	0
56	MG	BA	3432	1/1	0.97	0.07	15,15,15,15	0
56	MG	AA	1614	1/1	0.97	0.07	19,19,19,19	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	DA	3244	1/1	0.97	0.29	0,0,0,0	0
56	MG	CA	1686	1/1	0.97	0.11	57,57,57,57	0
56	MG	BA	3434	1/1	0.97	0.07	28,28,28,28	0
56	MG	BA	3208	1/1	0.97	0.11	8,8,8,8	0
56	MG	DA	3020	1/1	0.97	0.30	1,1,1,1	0
56	MG	BA	3209	1/1	0.97	0.15	15,15,15,15	0
56	MG	BA	3211	1/1	0.97	0.16	42,42,42,42	0
56	MG	DA	3026	1/1	0.97	0.26	0,0,0,0	0
56	MG	BA	3319	1/1	0.97	0.06	0,0,0,0	0
56	MG	DA	3254	1/1	0.97	0.10	1,1,1,1	0
56	MG	DA	3029	1/1	0.97	0.15	36,36,36,36	0
56	MG	DA	3256	1/1	0.97	0.09	22,22,22,22	0
56	MG	DA	3031	1/1	0.97	0.08	0,0,0,0	0
56	MG	DA	3033	1/1	0.97	0.20	17,17,17,17	1
56	MG	DA	3260	1/1	0.97	0.37	44,44,44,44	0
56	MG	DA	3034	1/1	0.97	0.07	7,7,7,7	0
56	MG	BA	3440	1/1	0.97	0.19	33,33,33,33	0
56	MG	BA	3115	1/1	0.97	0.09	0,0,0,0	0
56	MG	DA	3266	1/1	0.97	0.07	11,11,11,11	0
56	MG	AA	1722	1/1	0.97	0.14	20,20,20,20	0
56	MG	DA	3041	1/1	0.97	0.19	8,8,8,8	0
56	MG	DA	3042	1/1	0.97	0.56	58,58,58,58	0
56	MG	AA	1723	1/1	0.97	0.07	9,9,9,9	0
56	MG	DA	3045	1/1	0.97	0.14	1,1,1,1	0
56	MG	DA	3046	1/1	0.97	0.26	0,0,0,0	0
56	MG	BA	3118	1/1	0.97	0.11	0,0,0,0	0
56	MG	BA	3325	1/1	0.97	0.07	28,28,28,28	0
56	MG	AA	1753	1/1	0.97	0.11	26,26,26,26	0
56	MG	AA	1754	1/1	0.97	0.12	16,16,16,16	0
56	MG	AA	1724	1/1	0.97	0.07	0,0,0,0	0
56	MG	AA	1664	1/1	0.97	0.11	0,0,0,0	0
56	MG	AA	1636	1/1	0.97	0.20	27,27,27,27	1
56	MG	DA	3060	1/1	0.97	0.31	0,0,0,0	0
56	MG	DA	3281	1/1	0.97	0.20	14,14,14,14	1
56	MG	CA	1709	1/1	0.97	0.07	9,9,9,9	0
56	MG	CA	1710	1/1	0.97	0.09	22,22,22,22	0
56	MG	DA	3284	1/1	0.97	0.13	12,12,12,12	0
56	MG	BA	3023	1/1	0.97	0.28	0,0,0,0	0
56	MG	DA	3287	1/1	0.97	0.25	17,17,17,17	0
56	MG	CA	1712	1/1	0.97	0.16	19,19,19,19	0
56	MG	BA	3024	1/1	0.97	0.13	0,0,0,0	0
56	MG	DA	3290	1/1	0.97	0.07	0,0,0,0	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	AA	1603	1/1	0.97	0.13	47,47,47,47	0
56	MG	DA	3070	1/1	0.97	0.18	0,0,0,0	0
56	MG	AA	1762	1/1	0.97	0.14	18,18,18,18	0
56	MG	BA	3136	1/1	0.97	0.21	8,8,8,8	0
56	MG	DA	3076	1/1	0.97	0.13	0,0,0,0	0
56	MG	DA	3080	1/1	0.97	0.17	0,0,0,0	0
56	MG	DA	3301	1/1	0.97	0.08	18,18,18,18	0
56	MG	DA	3302	1/1	0.97	0.09	11,11,11,11	0
56	MG	BA	3138	1/1	0.97	0.17	12,12,12,12	0
56	MG	BB	207	1/1	0.97	0.08	23,23,23,23	0
56	MG	DA	3083	1/1	0.97	0.24	13,13,13,13	0
56	MG	BB	208	1/1	0.97	0.08	27,27,27,27	0
56	MG	AA	1682	1/1	0.97	0.19	17,17,17,17	0
56	MG	AA	1700	1/1	0.97	0.16	31,31,31,31	0
56	MG	AA	1605	1/1	0.97	0.09	16,16,16,16	0
56	MG	AW	114	1/1	0.97	0.10	25,25,25,25	1
56	MG	BA	3235	1/1	0.97	0.06	7,7,7,7	0
56	MG	AA	1766	1/1	0.97	0.11	23,23,23,23	0
56	MG	DA	3099	1/1	0.97	0.12	10,10,10,10	0
56	MG	DA	3317	1/1	0.97	0.06	11,11,11,11	1
56	MG	AA	1798	1/1	0.97	0.14	36,36,36,36	0
56	MG	BB	217	1/1	0.97	0.11	34,34,34,34	0
56	MG	BA	3239	1/1	0.97	0.25	12,12,12,12	0
56	MG	DA	3103	1/1	0.97	0.13	9,9,9,9	0
56	MG	DA	3322	1/1	0.97	0.08	27,27,27,27	0
56	MG	DA	3323	1/1	0.97	0.20	31,31,31,31	0
56	MG	DA	3104	1/1	0.97	0.12	9,9,9,9	0
56	MG	AA	1702	1/1	0.97	0.21	23,23,23,23	0
56	MG	BF	301	1/1	0.97	0.16	17,17,17,17	0
56	MG	AW	119	1/1	0.97	0.06	19,19,19,19	0
56	MG	AA	1801	1/1	0.97	0.20	34,34,34,34	0
56	MG	CA	1733	1/1	0.97	0.14	31,31,31,31	0
56	MG	DA	3332	1/1	0.97	0.06	45,45,45,45	0
56	MG	AA	1641	1/1	0.97	0.06	0,0,0,0	0
56	MG	DA	3114	1/1	0.97	0.09	8,8,8,8	0
56	MG	DA	3336	1/1	0.97	0.17	3,3,3,3	1
56	MG	BA	3245	1/1	0.97	0.11	9,9,9,9	0
56	MG	BA	3246	1/1	0.97	0.14	15,15,15,15	0
56	MG	DA	3117	1/1	0.97	0.06	1,1,1,1	0
56	MG	DA	3118	1/1	0.97	0.09	6,6,6,6	0
56	MG	AW	122	1/1	0.97	0.10	37,37,37,37	0
56	MG	BA	3363	1/1	0.97	0.09	8,8,8,8	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	DA	3123	1/1	0.97	0.10	20,20,20,20	0
56	MG	DA	3345	1/1	0.97	0.21	17,17,17,17	0
56	MG	AA	1642	1/1	0.97	0.14	8,8,8,8	0
56	MG	AX	103	1/1	0.97	0.08	29,29,29,29	0
56	MG	AA	1621	1/1	0.97	0.10	14,14,14,14	0
56	MG	BA	3368	1/1	0.97	0.07	32,32,32,32	0
56	MG	DA	3136	1/1	0.97	0.21	3,3,3,3	0
56	MG	AA	1806	1/1	0.97	0.23	24,24,24,24	0
56	MG	BA	3063	1/1	0.97	0.25	0,0,0,0	0
56	MG	DA	3139	1/1	0.97	0.09	28,28,28,28	0
56	MG	B1	101	1/1	0.97	0.17	0,0,0,0	0
56	MG	DA	3355	1/1	0.97	0.07	7,7,7,7	0
56	MG	AA	1644	1/1	0.97	0.16	17,17,17,17	0
56	MG	CA	1749	1/1	0.97	0.08	7,7,7,7	0
56	MG	DA	3359	1/1	0.97	0.25	15,15,15,15	0
56	MG	BA	3068	1/1	0.97	0.18	0,0,0,0	0
56	MG	AA	1710	1/1	0.97	0.19	29,29,29,29	0
56	MG	DA	3362	1/1	0.97	0.21	10,10,10,10	1
56	MG	AA	1774	1/1	0.97	0.08	9,9,9,9	0
56	MG	BA	3260	1/1	0.97	0.07	23,23,23,23	0
56	MG	CA	1754	1/1	0.97	0.14	6,6,6,6	0
56	MG	CA	1755	1/1	0.97	0.16	26,26,26,26	1
56	MG	AA	1739	1/1	0.97	0.11	23,23,23,23	0
56	MG	BA	3164	1/1	0.97	0.06	9,9,9,9	0
56	MG	BA	3264	1/1	0.97	0.24	0,0,0,0	0
56	MG	CA	1624	1/1	0.97	0.08	16,16,16,16	0
56	MG	B2	105	1/1	0.97	0.16	0,0,0,0	0
56	MG	DA	3157	1/1	0.97	0.25	34,34,34,34	0
56	MG	BA	3073	1/1	0.97	0.08	4,4,4,4	0
56	MG	BA	3387	1/1	0.97	0.10	38,38,38,38	0
56	MG	CA	1629	1/1	0.97	0.14	10,10,10,10	0
56	MG	CA	1631	1/1	0.97	0.37	48,48,48,48	0
56	MG	DA	3164	1/1	0.97	0.07	8,8,8,8	0
56	MG	AA	1740	1/1	0.97	0.14	40,40,40,40	0
56	MG	DA	3382	1/1	0.97	0.09	6,6,6,6	0
56	MG	DA	3166	1/1	0.97	0.08	0,0,0,0	0
56	MG	BA	3080	1/1	0.97	0.12	0,0,0,0	0
56	MG	CA	1634	1/1	0.97	0.11	17,17,17,17	0
56	MG	DA	3388	1/1	0.97	0.16	15,15,15,15	0
56	MG	BA	3171	1/1	0.97	0.10	0,0,0,0	1
56	MG	BA	3271	1/1	0.97	0.11	33,33,33,33	0
56	MG	CA	1771	1/1	0.97	0.13	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	BA	3172	1/1	0.97	0.16	22,22,22,22	0
56	MG	BA	3173	1/1	0.97	0.16	14,14,14,14	0
56	MG	BA	3085	1/1	0.97	0.16	0,0,0,0	0
56	MG	DA	3397	1/1	0.97	0.20	31,31,31,31	0
56	MG	CA	1640	1/1	0.97	0.08	43,43,43,43	0
56	MG	BA	3086	1/1	0.97	0.13	2,2,2,2	0
56	MG	DA	3182	1/1	0.97	0.09	5,5,5,5	0
56	MG	BA	3087	1/1	0.97	0.20	16,16,16,16	0
56	MG	AA	1711	1/1	0.97	0.09	8,8,8,8	0
56	MG	DB	206	1/1	0.97	0.09	0,0,0,0	1
56	MG	AA	1645	1/1	0.97	0.18	25,25,25,25	0
56	MG	AA	1608	1/1	0.97	0.13	47,47,47,47	0
56	MG	BA	3283	1/1	0.97	0.05	36,36,36,36	0
56	MG	AA	1662	1/1	0.97	0.10	31,31,31,31	0
56	MG	BA	3185	1/1	0.97	0.04	9,9,9,9	0
56	MG	DA	3190	1/1	0.97	0.07	2,2,2,2	0
56	MG	AA	1691	1/1	0.97	0.07	11,11,11,11	0
56	MG	BA	3189	1/1	0.97	0.10	3,3,3,3	0
56	MG	CA	1651	1/1	0.97	0.20	31,31,31,31	0
56	MG	DA	3194	1/1	0.97	0.10	0,0,0,0	1
56	MG	DA	3195	1/1	0.97	0.14	0,0,0,0	1
56	MG	DA	3196	1/1	0.97	0.24	18,18,18,18	0
56	MG	DS	201	1/1	0.97	0.45	14,14,14,14	1
56	MG	BA	3291	1/1	0.97	0.05	12,12,12,12	0
56	MG	AV	102	1/1	0.97	0.05	28,28,28,28	0
56	MG	CA	1655	1/1	0.97	0.12	0,0,0,0	0
56	MG	AA	1720	1/1	0.97	0.19	29,29,29,29	0
58	ZN	AN	101	1/1	0.97	0.05	50,50,50,50	0
56	MG	DA	3021	1/1	0.98	0.19	0,0,0,0	0
56	MG	BA	3340	1/1	0.98	0.08	28,28,28,28	0
56	MG	CA	1699	1/1	0.98	0.12	0,0,0,0	0
56	MG	BA	3244	1/1	0.98	0.11	19,19,19,19	0
56	MG	CA	1701	1/1	0.98	0.10	16,16,16,16	0
56	MG	DA	3028	1/1	0.98	0.13	0,0,0,0	0
56	MG	BB	202	1/1	0.98	0.10	14,14,14,14	0
56	MG	DA	3030	1/1	0.98	0.10	0,0,0,0	0
56	MG	DA	3221	1/1	0.98	0.10	11,11,11,11	0
56	MG	CA	1703	1/1	0.98	0.06	19,19,19,19	0
56	MG	DA	3032	1/1	0.98	0.15	59,59,59,59	0
56	MG	DA	3224	1/1	0.98	0.29	2,2,2,2	0
56	MG	BA	3161	1/1	0.98	0.08	11,11,11,11	0
56	MG	AA	1707	1/1	0.98	0.08	2,2,2,2	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	DA	3227	1/1	0.98	0.06	8,8,8,8	0
56	MG	DA	3035	1/1	0.98	0.09	0,0,0,0	0
56	MG	AA	1649	1/1	0.98	0.20	0,0,0,0	0
56	MG	CA	1707	1/1	0.98	0.19	6,6,6,6	0
56	MG	DA	3038	1/1	0.98	0.13	17,17,17,17	0
56	MG	BA	3094	1/1	0.98	0.22	0,0,0,0	0
56	MG	BA	3249	1/1	0.98	0.08	11,11,11,11	0
56	MG	BA	3096	1/1	0.98	0.09	0,0,0,0	0
56	MG	DA	3043	1/1	0.98	0.16	2,2,2,2	0
56	MG	BA	3251	1/1	0.98	0.15	11,11,11,11	0
56	MG	DA	3237	1/1	0.98	0.06	15,15,15,15	0
56	MG	BA	3097	1/1	0.98	0.07	2,2,2,2	0
56	MG	DA	3239	1/1	0.98	0.13	39,39,39,39	0
56	MG	BA	3098	1/1	0.98	0.07	5,5,5,5	0
56	MG	BA	3100	1/1	0.98	0.21	3,3,3,3	0
56	MG	DA	3049	1/1	0.98	0.18	0,0,0,0	0
56	MG	DA	3050	1/1	0.98	0.31	0,0,0,0	0
56	MG	BA	3169	1/1	0.98	0.07	8,8,8,8	0
56	MG	BA	3355	1/1	0.98	0.12	20,20,20,20	0
56	MG	BA	3357	1/1	0.98	0.07	19,19,19,19	0
56	MG	BA	3170	1/1	0.98	0.14	0,0,0,0	0
56	MG	BA	3359	1/1	0.98	0.05	75,75,75,75	0
56	MG	BA	3360	1/1	0.98	0.07	25,25,25,25	0
56	MG	BE	301	1/1	0.98	0.15	8,8,8,8	0
56	MG	DA	3252	1/1	0.98	0.08	0,0,0,0	1
56	MG	B5	101	1/1	0.98	0.15	6,6,6,6	0
56	MG	BA	3031	1/1	0.98	0.20	11,11,11,11	0
56	MG	DA	3064	1/1	0.98	0.20	0,0,0,0	0
56	MG	DA	3065	1/1	0.98	0.25	0,0,0,0	0
56	MG	AA	1624	1/1	0.98	0.07	33,33,33,33	0
56	MG	AA	1679	1/1	0.98	0.07	5,5,5,5	1
56	MG	BA	3176	1/1	0.98	0.07	11,11,11,11	0
56	MG	BA	3262	1/1	0.98	0.06	20,20,20,20	0
56	MG	BA	3177	1/1	0.98	0.07	7,7,7,7	0
56	MG	DA	3263	1/1	0.98	0.16	30,30,30,30	0
56	MG	BA	3369	1/1	0.98	0.12	30,30,30,30	0
56	MG	DA	3265	1/1	0.98	0.08	0,0,0,0	0
56	MG	DA	3072	1/1	0.98	0.05	0,0,0,0	0
56	MG	DA	3073	1/1	0.98	0.10	0,0,0,0	0
56	MG	AA	1692	1/1	0.98	0.19	0,0,0,0	0
56	MG	DA	3075	1/1	0.98	0.22	0,0,0,0	0
56	MG	CA	1604	1/1	0.98	0.23	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	DA	3077	1/1	0.98	0.17	0,0,0,0	0
56	MG	DA	3079	1/1	0.98	0.14	13,13,13,13	0
56	MG	AA	1813	1/1	0.98	0.14	25,25,25,25	0
56	MG	CA	1606	1/1	0.98	0.18	16,16,16,16	0
56	MG	BA	3036	1/1	0.98	0.13	25,25,25,25	0
56	MG	BA	3037	1/1	0.98	0.17	0,0,0,0	0
56	MG	BA	3182	1/1	0.98	0.09	16,16,16,16	0
56	MG	AA	1713	1/1	0.98	0.13	7,7,7,7	0
56	MG	DA	3087	1/1	0.98	0.30	23,23,23,23	0
56	MG	BA	3270	1/1	0.98	0.07	0,0,0,0	0
56	MG	DA	3089	1/1	0.98	0.11	4,4,4,4	0
56	MG	DA	3090	1/1	0.98	0.11	0,0,0,0	0
56	MG	DA	3091	1/1	0.98	0.13	0,0,0,0	0
56	MG	DA	3092	1/1	0.98	0.10	4,4,4,4	0
56	MG	AA	1639	1/1	0.98	0.14	30,30,30,30	0
56	MG	DA	3286	1/1	0.98	0.10	0,0,0,0	0
56	MG	CA	1613	1/1	0.98	0.21	4,4,4,4	0
56	MG	DA	3095	1/1	0.98	0.22	0,0,0,0	0
56	MG	CA	1614	1/1	0.98	0.12	20,20,20,20	0
56	MG	DA	3097	1/1	0.98	0.12	12,12,12,12	0
56	MG	CA	1743	1/1	0.98	0.18	1,1,1,1	0
56	MG	DA	3292	1/1	0.98	0.08	5,5,5,5	0
56	MG	BA	3041	1/1	0.98	0.14	0,0,0,0	0
56	MG	BA	3273	1/1	0.98	0.14	20,20,20,20	0
56	MG	BA	3113	1/1	0.98	0.24	14,14,14,14	0
56	MG	BA	3042	1/1	0.98	0.08	13,13,13,13	0
56	MG	DA	3299	1/1	0.98	0.10	0,0,0,0	0
56	MG	AA	1757	1/1	0.98	0.06	0,0,0,0	0
56	MG	BA	3386	1/1	0.98	0.07	85,85,85,85	0
56	MG	CA	1621	1/1	0.98	0.18	0,0,0,0	0
56	MG	DA	3303	1/1	0.98	0.10	11,11,11,11	0
56	MG	BA	3044	1/1	0.98	0.18	5,5,5,5	0
56	MG	DA	3107	1/1	0.98	0.27	12,12,12,12	0
56	MG	DA	3306	1/1	0.98	0.22	6,6,6,6	0
56	MG	DA	3108	1/1	0.98	0.25	0,0,0,0	0
56	MG	CA	1623	1/1	0.98	0.09	9,9,9,9	0
56	MG	DA	3110	1/1	0.98	0.21	1,1,1,1	0
56	MG	BA	3045	1/1	0.98	0.12	0,0,0,0	0
56	MG	AW	117	1/1	0.98	0.21	24,24,24,24	0
56	MG	BA	3007	1/1	0.98	0.24	0,0,0,0	0
56	MG	BA	3391	1/1	0.98	0.05	26,26,26,26	0
56	MG	BA	3196	1/1	0.98	0.06	0,0,0,0	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
56	MG	DA	3315	1/1	0.98	0.06	4,4,4,4	0
56	MG	CA	1630	1/1	0.98	0.10	0,0,0,0	0
56	MG	AA	1675	1/1	0.98	0.23	4,4,4,4	0
56	MG	BA	3198	1/1	0.98	0.08	0,0,0,0	0
56	MG	DA	3119	1/1	0.98	0.12	7,7,7,7	0
56	MG	BA	3054	1/1	0.98	0.12	0,0,0,0	0
56	MG	DA	3121	1/1	0.98	0.10	12,12,12,12	0
56	MG	BA	3123	1/1	0.98	0.12	6,6,6,6	0
56	MG	BA	3398	1/1	0.98	0.07	9,9,9,9	1
56	MG	DA	3124	1/1	0.98	0.17	0,0,0,0	0
56	MG	DA	3125	1/1	0.98	0.13	0,0,0,0	0
56	MG	DA	3326	1/1	0.98	0.34	25,25,25,25	0
56	MG	AA	1759	1/1	0.98	0.11	5,5,5,5	1
56	MG	DA	3127	1/1	0.98	0.11	0,0,0,0	0
56	MG	DA	3128	1/1	0.98	0.09	0,0,0,0	0
56	MG	BA	3202	1/1	0.98	0.07	0,0,0,0	0
56	MG	DA	3131	1/1	0.98	0.17	0,0,0,0	0
56	MG	AA	1797	1/1	0.98	0.08	26,26,26,26	0
56	MG	BA	3059	1/1	0.98	0.10	16,16,16,16	0
56	MG	DA	3335	1/1	0.98	0.06	10,10,10,10	0
56	MG	DA	3134	1/1	0.98	0.21	4,4,4,4	0
56	MG	DA	3135	1/1	0.98	0.19	7,7,7,7	0
56	MG	BA	3295	1/1	0.98	0.17	16,16,16,16	0
56	MG	BA	3127	1/1	0.98	0.11	8,8,8,8	0
56	MG	CA	1770	1/1	0.98	0.08	14,14,14,14	0
56	MG	AA	1705	1/1	0.98	0.06	21,21,21,21	0
56	MG	AA	1761	1/1	0.98	0.15	16,16,16,16	0
56	MG	DA	3343	1/1	0.98	0.11	4,4,4,4	0
56	MG	DA	3141	1/1	0.98	0.07	0,0,0,0	0
56	MG	CA	1773	1/1	0.98	0.09	13,13,13,13	0
56	MG	CA	1774	1/1	0.98	0.16	21,21,21,21	0
56	MG	BA	3130	1/1	0.98	0.05	4,4,4,4	0
56	MG	BA	3131	1/1	0.98	0.18	0,0,0,0	0
56	MG	BA	3210	1/1	0.98	0.15	11,11,11,11	0
56	MG	BA	3132	1/1	0.98	0.13	2,2,2,2	0
56	MG	BA	3133	1/1	0.98	0.07	11,11,11,11	0
56	MG	BA	3213	1/1	0.98	0.23	19,19,19,19	0
56	MG	CA	1783	1/1	0.98	0.17	13,13,13,13	0
56	MG	CA	1784	1/1	0.98	0.10	15,15,15,15	0
56	MG	BA	3013	1/1	0.98	0.15	0,0,0,0	0
56	MG	BA	3014	1/1	0.98	0.24	7,7,7,7	0
56	MG	DA	3154	1/1	0.98	0.19	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	BA	3307	1/1	0.98	0.04	7,7,7,7	0
56	MG	DA	3156	1/1	0.98	0.15	36,36,36,36	0
56	MG	CA	1653	1/1	0.98	0.05	60,60,60,60	0
56	MG	DA	3158	1/1	0.98	0.10	5,5,5,5	0
56	MG	BA	3137	1/1	0.98	0.17	6,6,6,6	0
56	MG	BA	3067	1/1	0.98	0.11	5,5,5,5	0
56	MG	BA	3310	1/1	0.98	0.17	22,22,22,22	0
56	MG	DA	3366	1/1	0.98	0.10	3,3,3,3	0
56	MG	CM	201	1/1	0.98	0.06	21,21,21,21	0
56	MG	DA	3163	1/1	0.98	0.13	51,51,51,51	0
56	MG	AX	101	1/1	0.98	0.05	0,0,0,0	0
56	MG	BA	3312	1/1	0.98	0.19	0,0,0,0	0
56	MG	AA	1800	1/1	0.98	0.06	36,36,36,36	0
56	MG	AA	1652	1/1	0.98	0.09	7,7,7,7	0
56	MG	AA	1744	1/1	0.98	0.30	18,18,18,18	0
56	MG	AA	1718	1/1	0.98	0.15	0,0,0,0	0
56	MG	CA	1664	1/1	0.98	0.14	28,28,28,28	0
56	MG	BA	3020	1/1	0.98	0.26	1,1,1,1	0
56	MG	CA	1666	1/1	0.98	0.06	41,41,41,41	0
56	MG	BA	3427	1/1	0.98	0.06	12,12,12,12	0
56	MG	BA	3145	1/1	0.98	0.15	0,0,0,0	0
56	MG	AA	1746	1/1	0.98	0.11	11,11,11,11	0
56	MG	DA	3178	1/1	0.98	0.10	19,19,19,19	0
56	MG	DA	3179	1/1	0.98	0.05	10,10,10,10	0
56	MG	DA	3385	1/1	0.98	0.07	29,29,29,29	0
56	MG	DA	3386	1/1	0.98	0.28	0,0,0,0	0
56	MG	BA	3076	1/1	0.98	0.15	4,4,4,4	0
56	MG	DA	3181	1/1	0.98	0.10	17,17,17,17	0
56	MG	BA	3321	1/1	0.98	0.20	4,4,4,4	0
56	MG	BA	3077	1/1	0.98	0.22	6,6,6,6	0
56	MG	BA	3078	1/1	0.98	0.20	11,11,11,11	0
56	MG	BA	3079	1/1	0.98	0.17	0,0,0,0	0
56	MG	BA	3232	1/1	0.98	0.10	23,23,23,23	0
56	MG	DA	3395	1/1	0.98	0.18	45,45,45,45	0
56	MG	AW	104	1/1	0.98	0.04	28,28,28,28	0
56	MG	BA	3437	1/1	0.98	0.06	4,4,4,4	0
56	MG	CA	1678	1/1	0.98	0.15	0,0,0,0	0
56	MG	CX	105	1/1	0.98	0.08	41,41,41,41	0
56	MG	BA	3082	1/1	0.98	0.09	22,22,22,22	0
56	MG	BA	3328	1/1	0.98	0.06	30,30,30,30	0
56	MG	BA	3083	1/1	0.98	0.13	20,20,20,20	0
56	MG	AA	1732	1/1	0.98	0.07	3,3,3,3	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	AA	1719	1/1	0.98	0.11	65,65,65,65	0
56	MG	DA	3003	1/1	0.98	0.07	26,26,26,26	0
56	MG	BA	3443	1/1	0.98	0.04	20,20,20,20	0
56	MG	DA	3198	1/1	0.98	0.09	10,10,10,10	0
56	MG	DA	3005	1/1	0.98	0.07	13,13,13,13	0
56	MG	BA	3444	1/1	0.98	0.09	7,7,7,7	0
56	MG	CA	1687	1/1	0.98	0.08	0,0,0,0	0
56	MG	BA	3445	1/1	0.98	0.14	52,52,52,52	0
56	MG	CA	1689	1/1	0.98	0.07	0,0,0,0	0
56	MG	BA	3238	1/1	0.98	0.20	0,0,0,0	0
56	MG	BA	3025	1/1	0.98	0.14	0,0,0,0	0
56	MG	BA	3334	1/1	0.98	0.17	40,40,40,40	0
56	MG	AW	107	1/1	0.98	0.07	28,28,28,28	0
56	MG	BA	3089	1/1	0.98	0.17	6,6,6,6	0
56	MG	DA	3017	1/1	0.98	0.13	6,6,6,6	0
56	MG	BA	3159	1/1	0.98	0.18	12,12,12,12	0
56	MG	BA	3338	1/1	0.98	0.06	22,22,22,22	1
58	ZN	AD	301	1/1	0.98	0.18	21,21,21,21	0
56	MG	BA	3027	1/1	0.98	0.07	8,8,8,8	0
58	ZN	CD	301	1/1	0.98	0.19	24,24,24,24	0
56	MG	BA	3047	1/1	0.99	0.27	0,0,0,0	0
56	MG	DA	3176	1/1	0.99	0.20	13,13,13,13	0
56	MG	DA	3023	1/1	0.99	0.26	0,0,0,0	0
56	MG	BA	3224	1/1	0.99	0.21	2,2,2,2	0
56	MG	DA	3025	1/1	0.99	0.15	6,6,6,6	0
56	MG	DA	3259	1/1	0.99	0.17	14,14,14,14	0
56	MG	BA	3225	1/1	0.99	0.17	0,0,0,0	0
56	MG	CA	1777	1/1	0.99	0.19	0,0,0,0	0
56	MG	CA	1778	1/1	0.99	0.11	3,3,3,3	0
56	MG	BA	3365	1/1	0.99	0.13	60,60,60,60	0
56	MG	AA	1625	1/1	0.99	0.09	3,3,3,3	0
56	MG	BA	3050	1/1	0.99	0.14	0,0,0,0	0
56	MG	CA	1659	1/1	0.99	0.06	9,9,9,9	0
56	MG	AA	1699	1/1	0.99	0.14	0,0,0,0	0
56	MG	BA	3187	1/1	0.99	0.15	2,2,2,2	0
56	MG	BA	3188	1/1	0.99	0.21	13,13,13,13	0
56	MG	AA	1659	1/1	0.99	0.10	14,14,14,14	1
56	MG	BA	3274	1/1	0.99	0.06	0,0,0,0	0
56	MG	BA	3081	1/1	0.99	0.13	10,10,10,10	0
56	MG	DA	3356	1/1	0.99	0.08	12,12,12,12	0
56	MG	BA	3053	1/1	0.99	0.16	0,0,0,0	0
56	MG	BA	3192	1/1	0.99	0.11	0,0,0,0	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	AA	1712	1/1	0.99	0.06	22,22,22,22	0
56	MG	BA	3084	1/1	0.99	0.19	0,0,0,0	0
56	MG	BA	3378	1/1	0.99	0.04	54,54,54,54	1
56	MG	AA	1751	1/1	0.99	0.08	19,19,19,19	0
56	MG	BA	3281	1/1	0.99	0.13	0,0,0,0	0
56	MG	DA	3047	1/1	0.99	0.20	0,0,0,0	0
56	MG	BA	3056	1/1	0.99	0.17	0,0,0,0	0
56	MG	BA	3382	1/1	0.99	0.10	63,63,63,63	0
56	MG	BA	3121	1/1	0.99	0.12	2,2,2,2	0
56	MG	DA	3051	1/1	0.99	0.17	0,0,0,0	0
56	MG	BA	3284	1/1	0.99	0.19	14,14,14,14	0
56	MG	BA	3385	1/1	0.99	0.06	12,12,12,12	0
56	MG	DA	3129	1/1	0.99	0.17	6,6,6,6	0
56	MG	DA	3372	1/1	0.99	0.09	12,12,12,12	0
56	MG	B7	101	1/1	0.99	0.07	7,7,7,7	0
56	MG	DA	3055	1/1	0.99	0.20	0,0,0,0	0
56	MG	CA	1679	1/1	0.99	0.05	4,4,4,4	0
56	MG	CA	1740	1/1	0.99	0.07	19,19,19,19	0
56	MG	BA	3058	1/1	0.99	0.20	0,0,0,0	0
56	MG	DA	3378	1/1	0.99	0.10	8,8,8,8	0
56	MG	DA	3059	1/1	0.99	0.21	0,0,0,0	0
56	MG	DA	3294	1/1	0.99	0.19	0,0,0,0	0
56	MG	DA	3295	1/1	0.99	0.06	6,6,6,6	0
56	MG	AA	1613	1/1	0.99	0.22	2,2,2,2	0
56	MG	BA	3060	1/1	0.99	0.22	0,0,0,0	0
56	MG	DA	3062	1/1	0.99	0.27	13,13,13,13	0
56	MG	BA	3289	1/1	0.99	0.17	41,41,41,41	0
56	MG	BA	3290	1/1	0.99	0.08	2,2,2,2	0
56	MG	AA	1610	1/1	0.99	0.15	0,0,0,0	0
56	MG	BA	3092	1/1	0.99	0.19	0,0,0,0	0
56	MG	CX	101	1/1	0.99	0.15	3,3,3,3	0
56	MG	DA	3390	1/1	0.99	0.08	73,73,73,73	0
56	MG	BA	3062	1/1	0.99	0.23	0,0,0,0	0
56	MG	CA	1628	1/1	0.99	0.11	35,35,35,35	0
56	MG	BA	3341	1/1	0.99	0.17	21,21,21,21	0
56	MG	AA	1637	1/1	0.99	0.15	0,0,0,0	0
56	MG	BA	3397	1/1	0.99	0.10	32,32,32,32	0
56	MG	BA	3095	1/1	0.99	0.12	0,0,0,0	0
56	MG	AA	1728	1/1	0.99	0.08	2,2,2,2	0
56	MG	AA	1704	1/1	0.99	0.07	0,0,0,0	0
56	MG	DB	201	1/1	0.99	0.06	19,19,19,19	0
56	MG	BA	3066	1/1	0.99	0.08	0,0,0,0	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
56	MG	BA	3134	1/1	0.99	0.11	1,1,1,1	0
56	MG	DA	3078	1/1	0.99	0.20	2,2,2,2	0
56	MG	BA	3099	1/1	0.99	0.21	1,1,1,1	0
56	MG	BA	3404	1/1	0.99	0.29	17,17,17,17	0
56	MG	BA	3039	1/1	0.99	0.31	31,31,31,31	0
56	MG	AA	1771	1/1	0.99	0.07	6,6,6,6	0
56	MG	AA	1656	1/1	0.99	0.16	12,12,12,12	0
56	MG	BA	3352	1/1	0.99	0.10	30,30,30,30	1
56	MG	DA	3085	1/1	0.99	0.20	0,0,0,0	0
56	MG	BA	3175	1/1	0.99	0.07	0,0,0,0	0
56	MG	DD	301	1/1	0.99	0.14	1,1,1,1	0
56	MG	AA	1646	1/1	0.99	0.17	3,3,3,3	0
56	MG	DA	3242	1/1	0.99	0.14	9,9,9,9	0
56	MG	AA	1696	1/1	0.99	0.09	0,0,0,0	0
56	MG	DA	3013	1/1	0.99	0.12	1,1,1,1	0
56	MG	DA	3327	1/1	0.99	0.08	6,6,6,6	0
56	MG	BA	3356	1/1	0.99	0.08	37,37,37,37	0
56	MG	DA	3015	1/1	0.99	0.10	0,0,0,0	0
56	MG	AA	1805	1/1	0.99	0.23	0,0,0,0	0
56	MG	BB	216	1/1	0.99	0.27	11,11,11,11	1
56	MG	BA	3106	1/1	0.99	0.18	0,0,0,0	0
56	MG	AA	1672	1/1	0.99	0.14	0,0,0,0	0
56	MG	BA	3074	1/1	0.99	0.19	10,10,10,10	0
56	MG	BA	3046	1/1	0.99	0.25	0,0,0,0	0
56	MG	DA	3174	1/1	0.99	0.23	26,26,26,26	0
58	ZN	CN	101	1/1	0.99	0.10	53,53,53,53	0
56	MG	DA	3039	1/1	1.00	0.17	10,10,10,10	0
56	MG	BA	3048	1/1	1.00	0.19	0,0,0,0	0

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

There are no such residues in this entry.