Full wwPDB X-ray Structure Validation Report ⓘ

Sep 9, 2024 – 10:02 pm BST

PDB ID	:	8CRE
Title	:	Crystal structure of the Candida albicans 80S ribosome in complex with geneticin G418
Authors	:	Kolosova, O.; Zgadzay, Y.; Yusupov, M.
Deposited on	:	2023-03-08
Resolution	:	3.00 Å(reported)

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

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

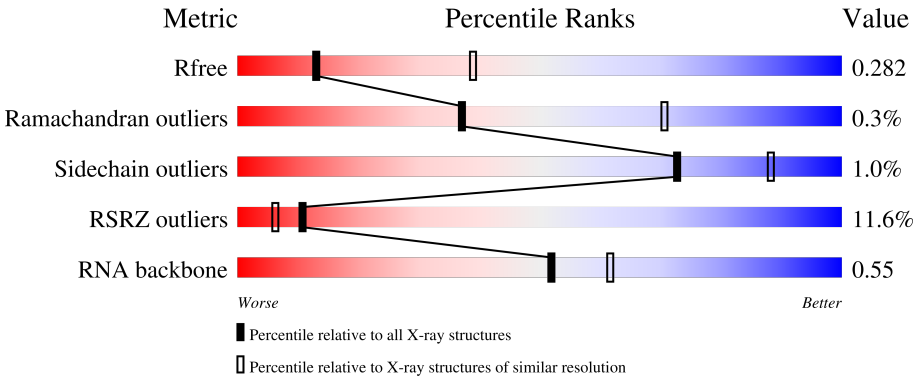
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	3.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.002 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.38.2

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 3.00 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	2511 (3.00-3.00)
Ramachandran outliers	177936	2778 (3.00-3.00)
Sidechain outliers	177891	2781 (3.00-3.00)
RSRZ outliers	164620	2523 (3.00-3.00)
RNA backbone	3690	1019 (3.20-2.80)

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

Mol	Chain	Length	Quality of chain
1	1	3359	2% 76% 18%
1	AS	3359	4% 76% 19%
2	3	121	% 93% 7%
2	AT	121	% 93% 7%
3	4	158	% 84% 15%

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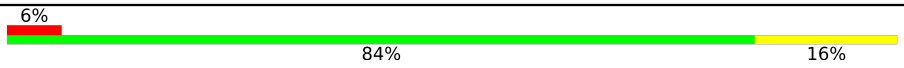
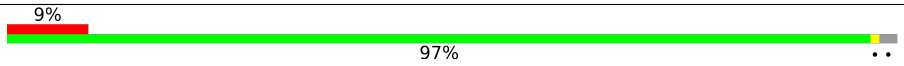
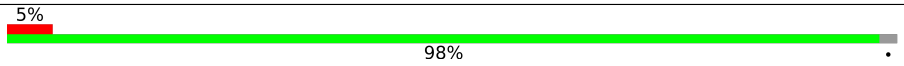
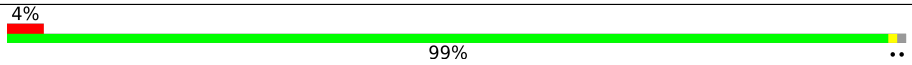
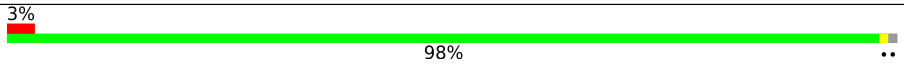
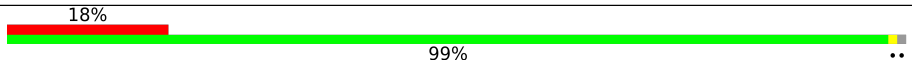
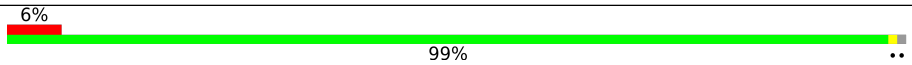
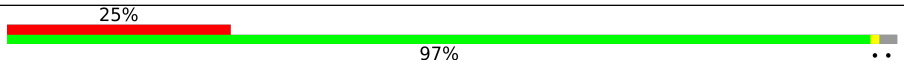
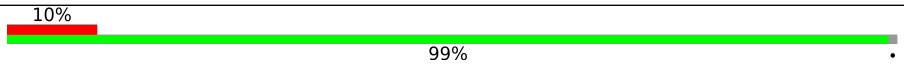
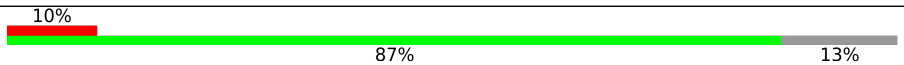
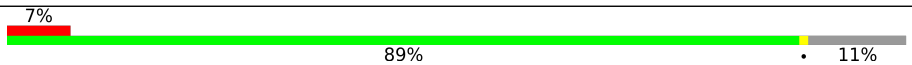
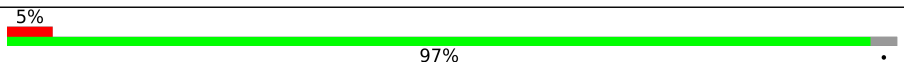
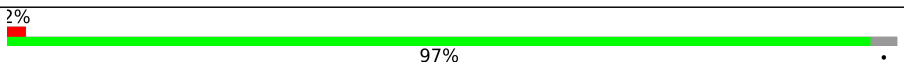
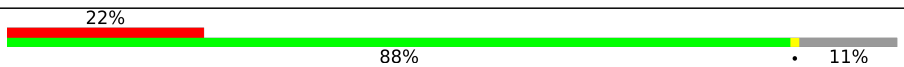
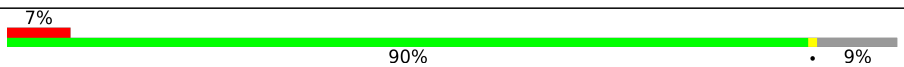
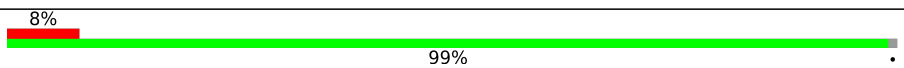
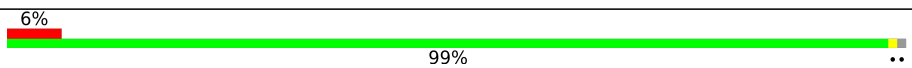
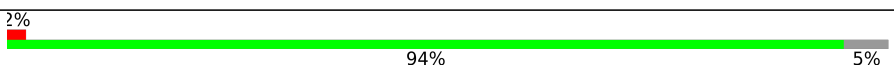
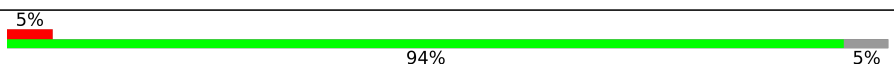
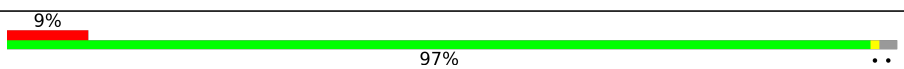
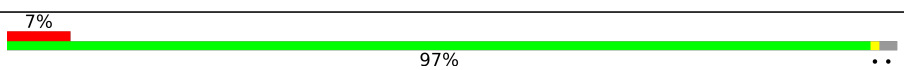
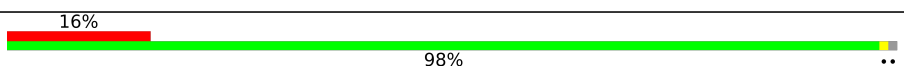
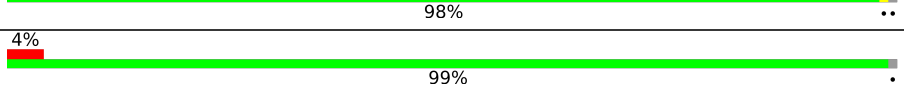
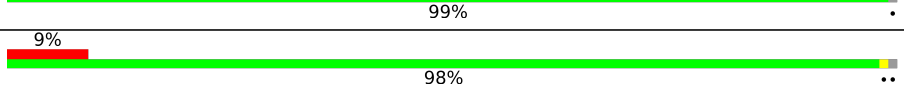
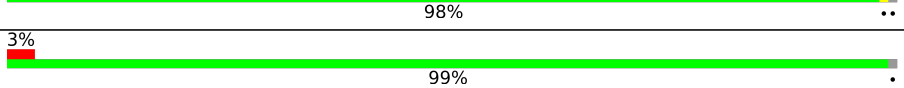
Mol	Chain	Length	Quality of chain
3	AU	158	
4	AW	254	
4	j	254	
5	AX	389	
5	k	389	
6	AY	363	
6	l	363	
7	AZ	298	
7	m	298	
8	BA	176	
8	n	176	
9	BB	241	
9	o	241	
10	BC	262	
10	p	262	
11	BD	191	
11	q	191	
12	BE	220	
12	r	220	
13	BF	174	
13	s	174	
14	BG	202	
14	t	202	
15	BH	131	
15	u	131	

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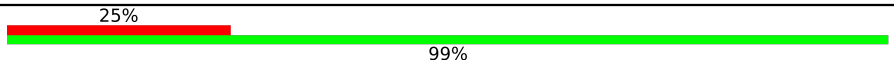
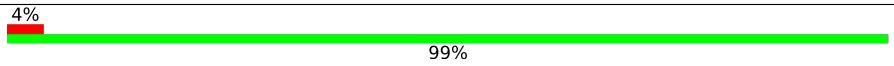
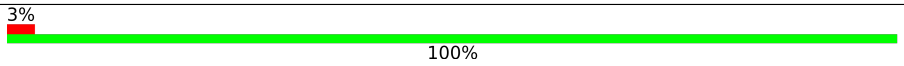
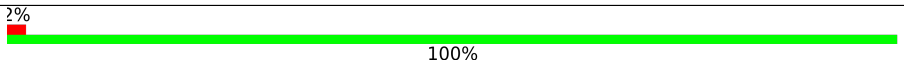
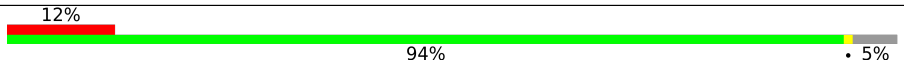
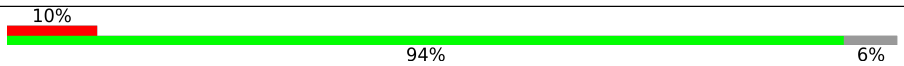
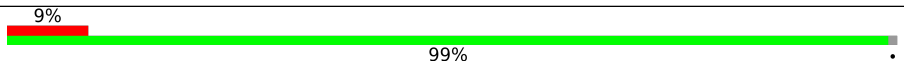
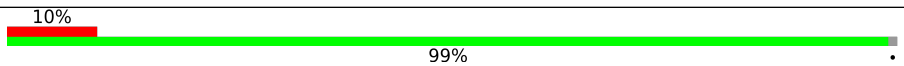
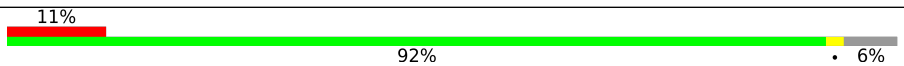
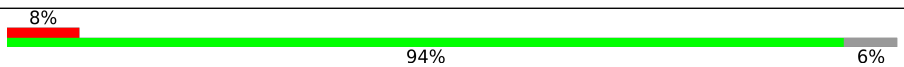
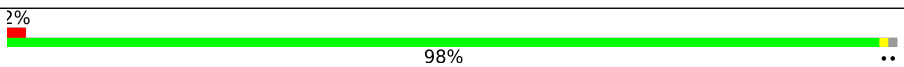
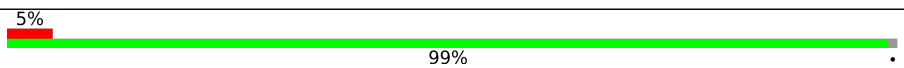
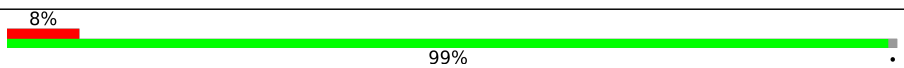
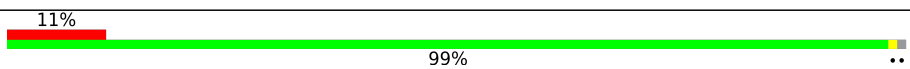
Mol	Chain	Length	Quality of chain
16	BI	204	
16	v	204	
17	BJ	200	
17	w	200	
18	BK	185	
18	x	185	
19	BL	186	
19	y	186	
20	BM	190	
20	z	190	
21	0	172	
21	BN	172	
22	2	160	
22	BO	160	
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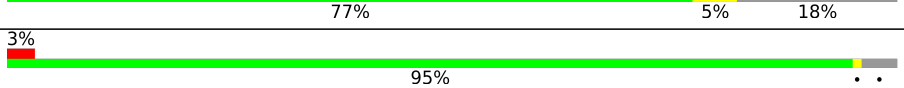
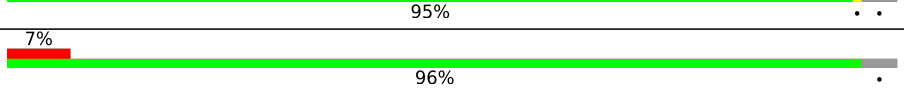
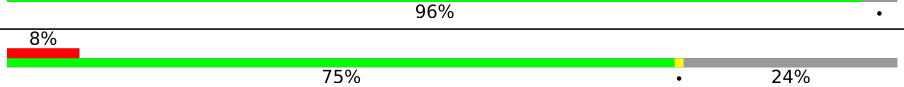
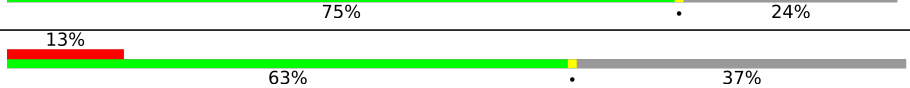
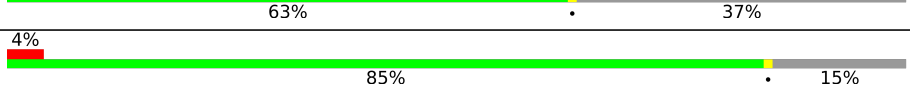
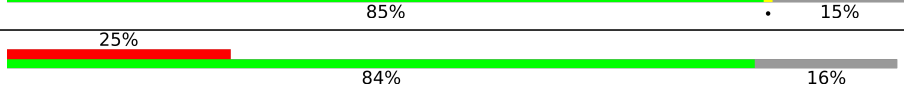
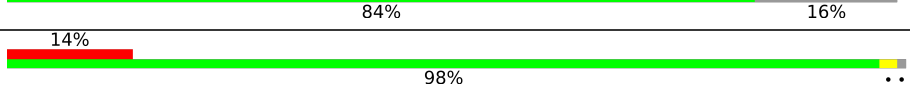
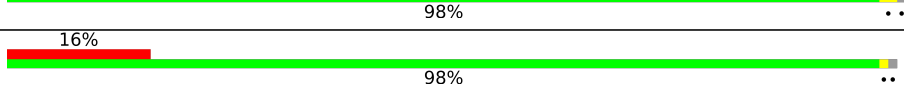
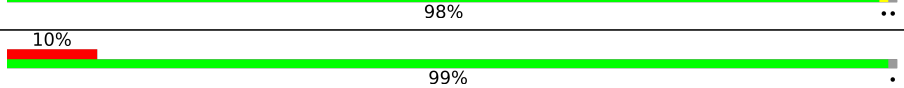
23	BP	124	
24	6	137	
24	BQ	137	
25	7	155	
25	BR	155	
26	8	142	
26	BS	142	
27	9	127	
27	BT	127	
28	AA	136	

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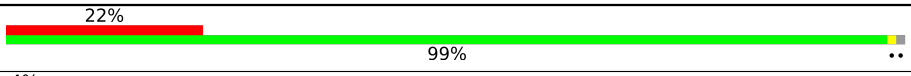
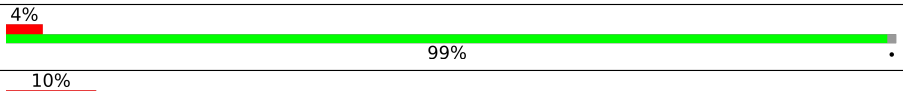
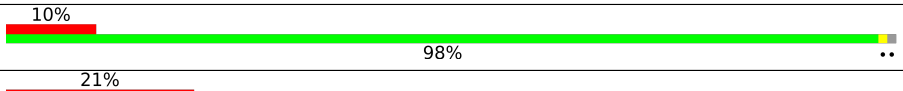
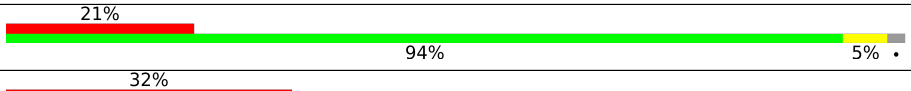
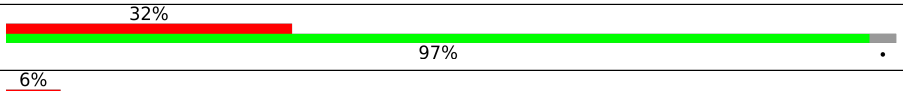
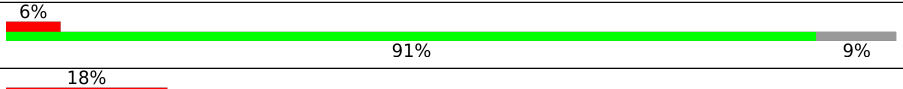
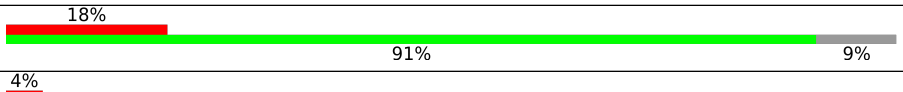
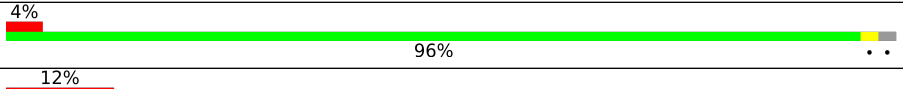
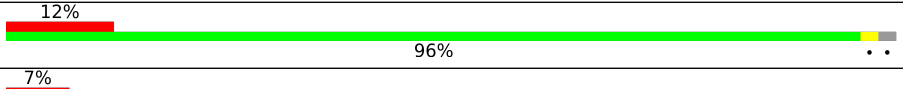
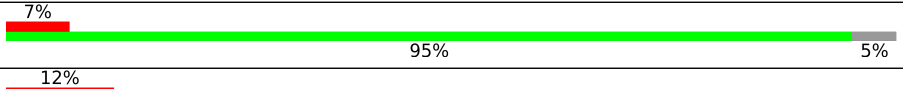
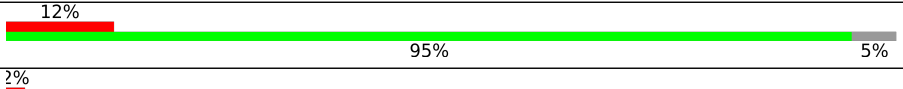
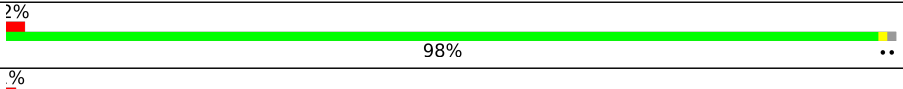
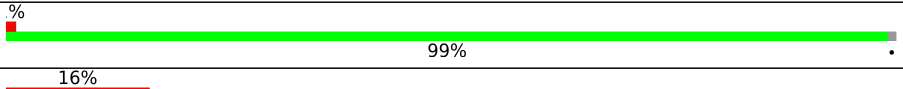
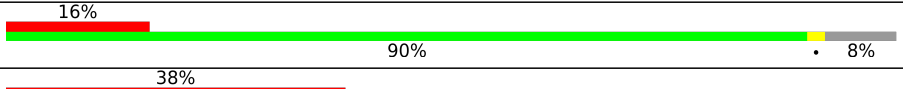
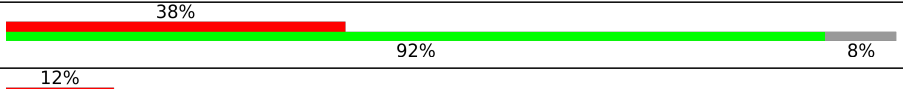
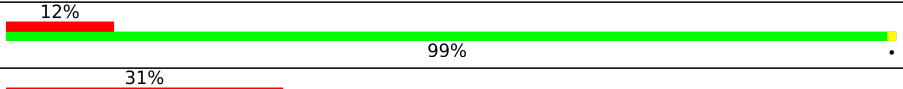
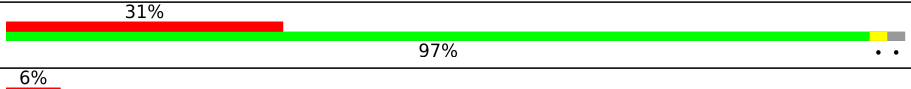
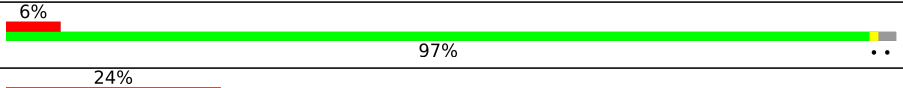
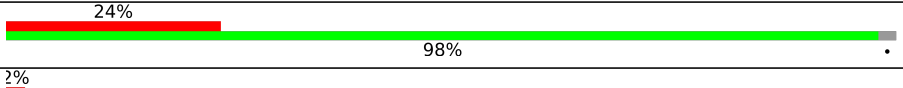
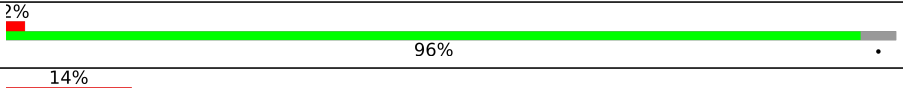
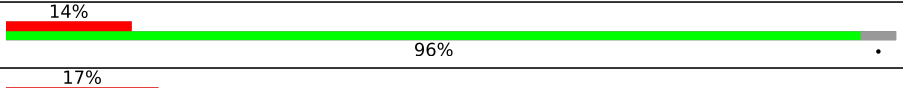
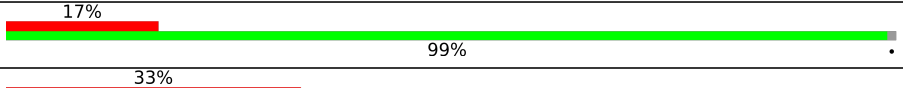
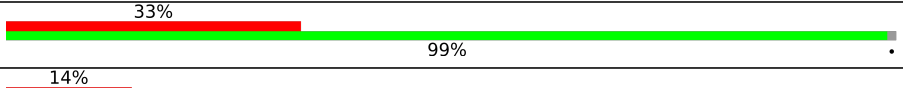
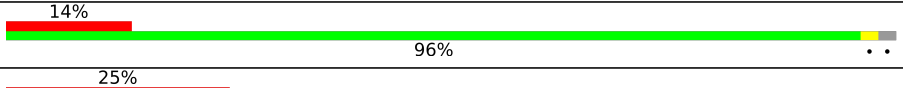
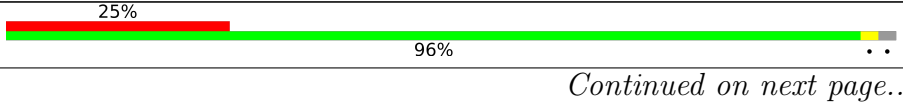
Mol	Chain	Length	Quality of chain
28	BU	136	
29	AB	149	
29	BV	149	
30	AC	63	
30	BW	63	
31	AD	106	
31	BX	106	
32	AE	112	
32	BY	112	
33	AF	131	
33	BZ	131	
34	AG	107	
34	CA	107	
35	AH	122	
35	CB	122	
36	AI	120	
36	CC	120	
37	AJ	99	
37	CD	99	
38	AK	90	
38	CE	90	
39	AL	78	
39	CF	78	
40	AM	51	
40	CG	51	

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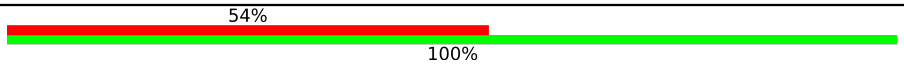
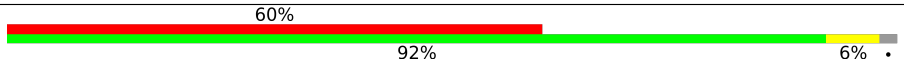
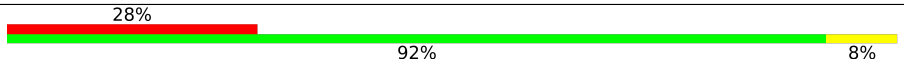
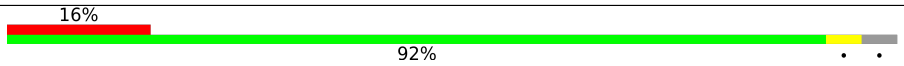
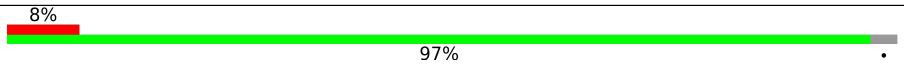
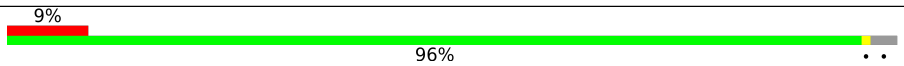
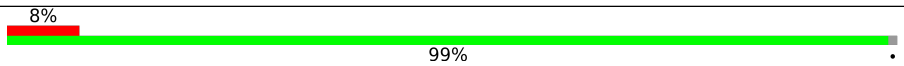
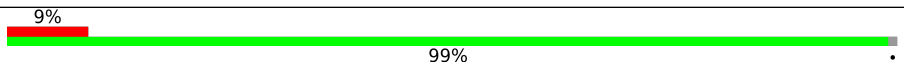
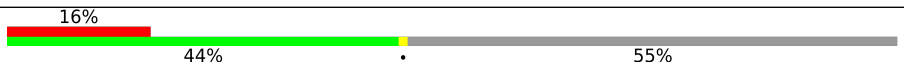
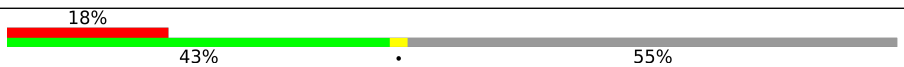
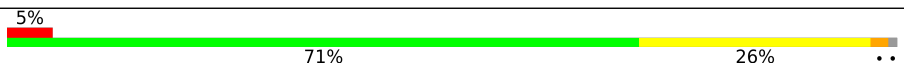
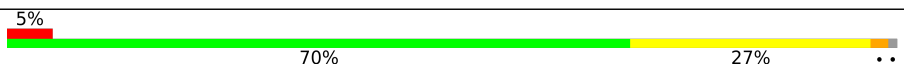
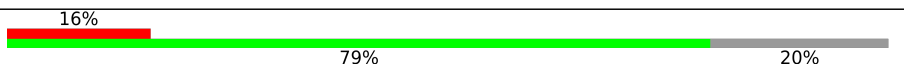
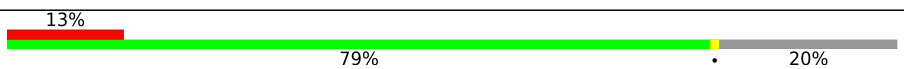
Mol	Chain	Length	Quality of chain
41	AN	52	
41	CH	52	
42	AO	25	
42	CI	25	
43	AP	106	
43	CJ	106	
44	AQ	92	
44	CK	92	
45	CL	267	
45	i	267	
46	B	1787	
46	CM	1787	
47	C	261	
47	CN	261	
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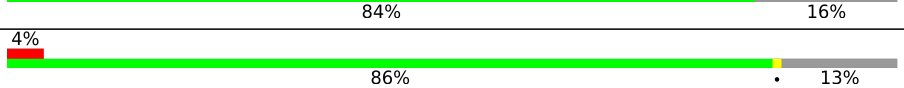
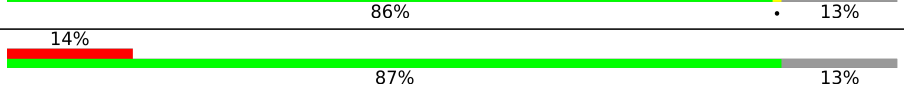
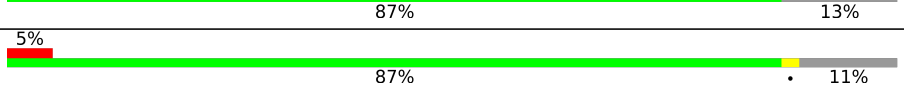
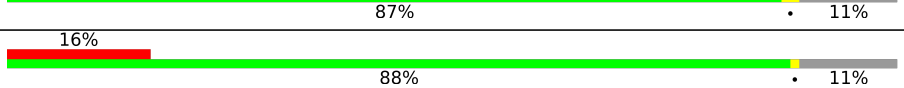
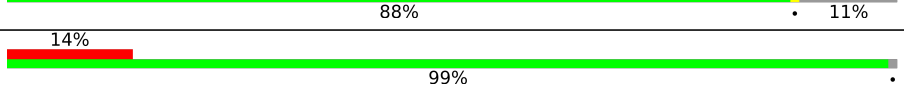
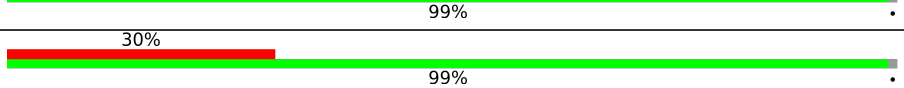
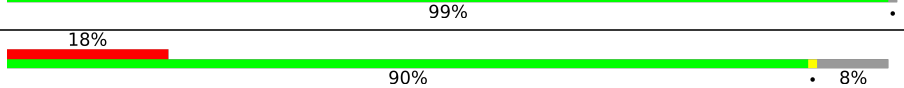
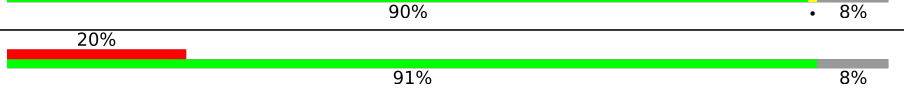
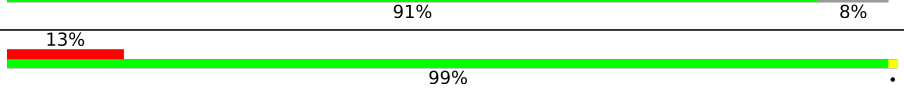
49	CP	249	
49	E	249	
50	CQ	251	
50	F	251	
51	CR	262	
51	G	262	
52	CS	225	
52	H	225	
53	CT	236	

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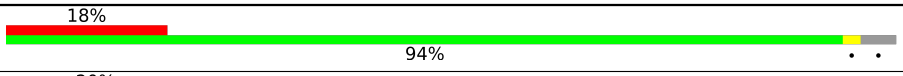
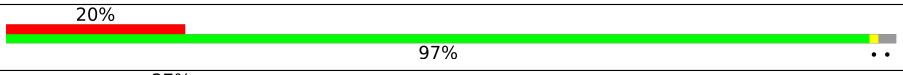
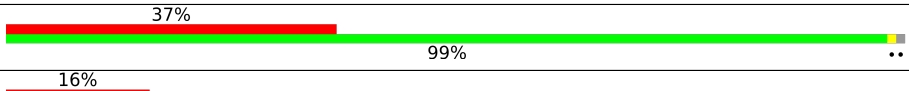
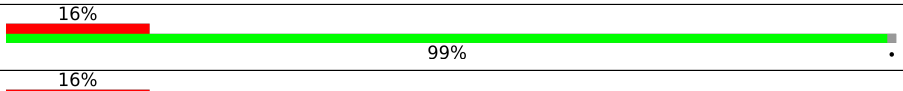
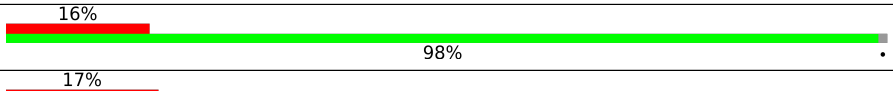
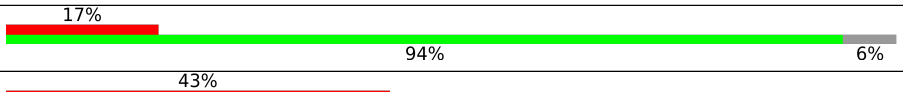
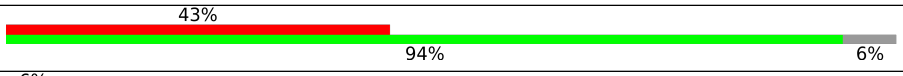
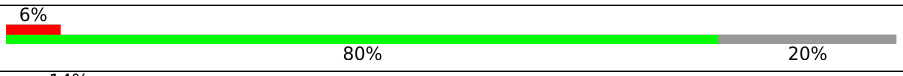
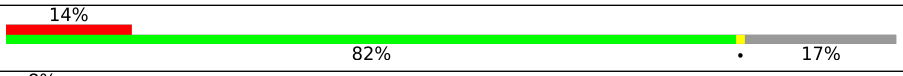
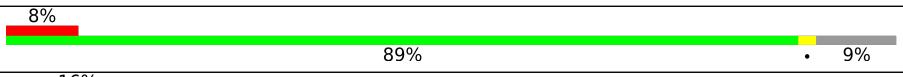
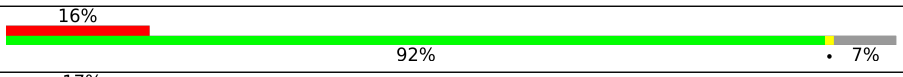
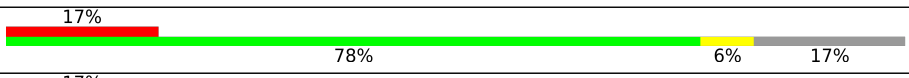
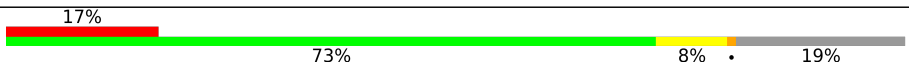
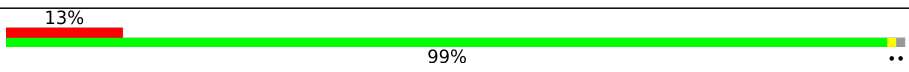
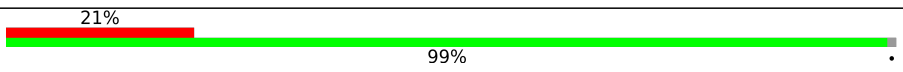
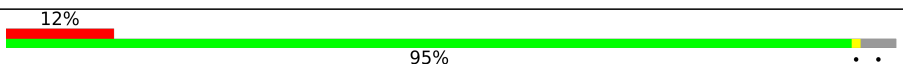
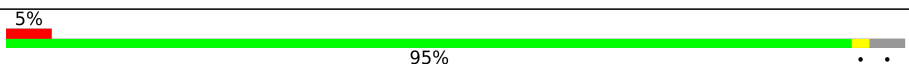
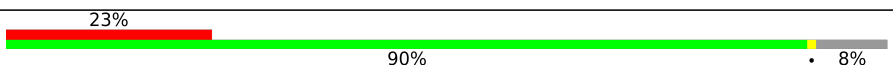
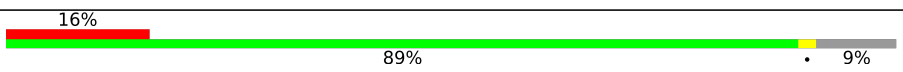
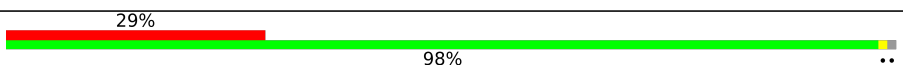
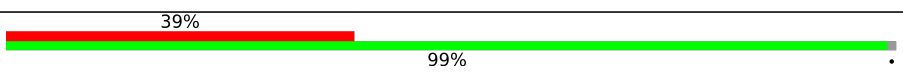
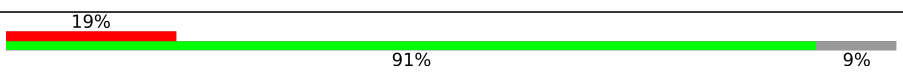
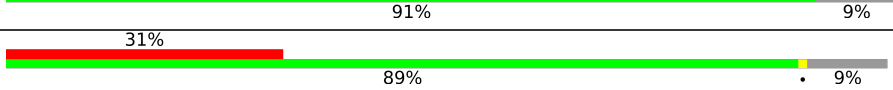
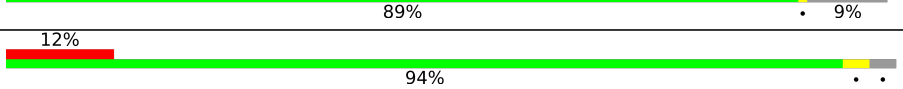
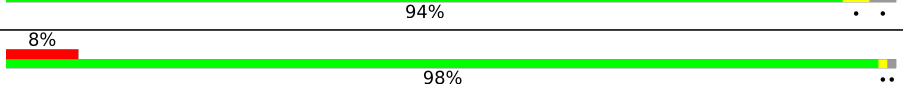
Mol	Chain	Length	Quality of chain
53	I	236	
54	CU	186	
54	J	186	
55	CV	206	
55	K	206	
56	CW	189	
56	L	189	
57	CX	118	
57	M	118	
58	CY	155	
58	N	155	
59	CZ	143	
59	O	143	
60	DA	151	
60	P	151	
61	DB	132	
61	Q	132	
62	DC	142	
62	R	142	
63	DD	142	
63	S	142	
64	DE	137	
64	T	137	
65	DF	145	
65	U	145	

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Mol	Chain	Length	Quality of chain
66	DG	145	20% 97%
66	V	145	22% 97%
67	DH	119	13% 79% 18%
67	W	119	22% 83% 14%
68	DI	87	6% 99%
68	X	87	18% 100%
69	DJ	130	5% 98%
69	Y	130	28% 99%
70	DK	145	13% 98%
70	Z	145	11% 98%
71	DL	135	10% 98%
71	a	135	24% 99%
72	DM	105	8% 68% 32%
72	b	105	3% 69% 31%
73	DN	119	12% 82% 18%
73	c	119	18% 81% 18%
74	DO	82	20% 99%
74	d	82	6% 99%
75	DP	67	6% 91% 9%
75	e	67	24% 91% 7%
76	DQ	56	14% 91% 5%
76	f	56	18% 95%
77	DR	63	37% 87% 5% 8%
77	g	63	32% 95% 5%
78	DS	193	24% 32% 64%

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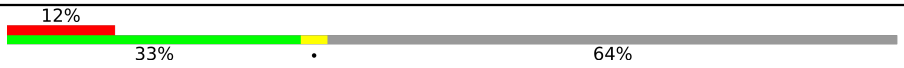
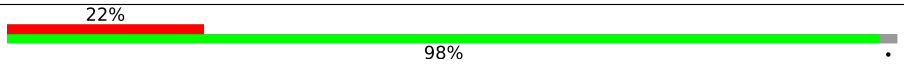
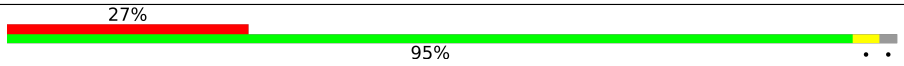
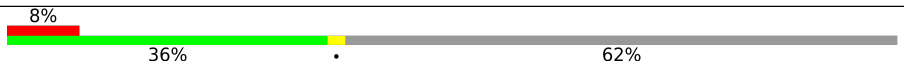
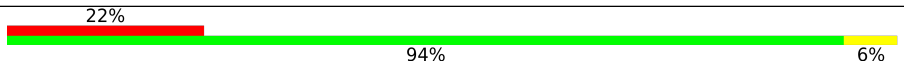
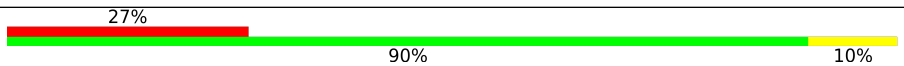
Mol	Chain	Length	Quality of chain
78	h	193	
79	AR	317	
79	DT	317	
80	P0	312	
80	p0	312	
81	12	165	
82	L1	217	
82	l1	217	

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
83	MG	1	3463	-	-	-	X
83	MG	1	3758	-	-	-	X
83	MG	1	3847	-	-	-	X
83	MG	9	202	-	-	-	X
83	MG	AS	3421	-	-	-	X
83	MG	AS	3434	-	-	-	X
83	MG	AS	3522	-	-	-	X
83	MG	B	1831	-	-	-	X
83	MG	B	1839	-	-	-	X
83	MG	B	1876	-	-	-	X
83	MG	B	1892	-	-	-	X
83	MG	B	1907	-	-	-	X
83	MG	CL	302	-	-	-	X
83	MG	I	301	-	-	-	X

2 Entry composition (i)

There are 87 unique types of molecules in this entry. The entry contains 409812 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 25S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1	3216	Total	C	N	O	P	0	0	0
			68751	30713	12360	22462	3216			
1	AS	3229	Total	C	N	O	P	0	0	0
			69025	30835	12406	22555	3229			

- Molecule 2 is a RNA chain called 5S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	3	121	Total	C	N	O	P	0	0	0
			2579	1153	463	842	121			
2	AT	121	Total	C	N	O	P	0	0	0
			2579	1153	463	842	121			

- Molecule 3 is a RNA chain called 5.8S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	4	157	Total	C	N	O	P	0	0	0
			3333	1491	583	1102	157			
3	AU	158	Total	C	N	O	P	0	0	0
			3353	1500	585	1110	158			

- Molecule 4 is a protein called 60S ribosomal protein L2-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	j	249	Total	C	N	O	S	0	0	0
			1888	1180	376	330	2			
4	AW	249	Total	C	N	O	S	0	0	0
			1888	1180	376	330	2			

- Molecule 5 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	k	386	Total	C	N	O	S	0	0	0
			3077	1950	582	538	7			
5	AX	386	Total	C	N	O	S	0	0	0
			3077	1950	582	538	7			

- Molecule 6 is a protein called 60S ribosomal protein L4-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	l	361	Total	C	N	O	S	0	0	0
			2751	1729	529	490	3			
6	AY	361	Total	C	N	O	S	0	0	0
			2751	1729	529	490	3			

- Molecule 7 is a protein called Uncharacterized protein CaJ7.0206.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	m	296	Total	C	N	O	S	0	0	0
			2426	1544	422	458	2			
7	AZ	292	Total	C	N	O	S	0	0	0
			2394	1526	416	450	2			

- Molecule 8 is a protein called 60S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	n	157	Total	C	N	O	S	0	0	0
			1242	796	226	219	1			
8	BA	153	Total	C	N	O		0	0	0
			1210	777	221	212				

- Molecule 9 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	o	234	Total	C	N	O	S	0	0	0
			1885	1208	345	331	1			
9	BB	234	Total	C	N	O	S	0	0	0
			1885	1208	345	331	1			

- Molecule 10 is a protein called 60S ribosomal protein L8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	p	238	Total	C	N	O	S	0	0	0
			1839	1175	327	334	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	BC	233	Total	C	N	O	S	0	0	0
			1805	1156	321	325	3			

- Molecule 11 is a protein called 60S ribosomal protein L9-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	q	190	Total	C	N	O	S	0	0	0
			1519	958	276	281	4			
11	BD	190	Total	C	N	O	S	0	0	0
			1519	958	276	281	4			

- Molecule 12 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	r	208	Total	C	N	O	S	0	0	0
			1689	1069	322	291	7			
12	BE	208	Total	C	N	O	S	0	0	0
			1689	1069	322	291	7			

- Molecule 13 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	s	171	Total	C	N	O	S	0	0	0
			1371	857	260	250	4			
13	BF	171	Total	C	N	O	S	0	0	0
			1371	857	260	250	4			

- Molecule 14 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	t	200	Total	C	N	O	0	0	0
			1610	1009	318	283			
14	BG	200	Total	C	N	O	0	0	0
			1610	1009	318	283			

- Molecule 15 is a protein called 60S ribosomal protein L14-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	u	130	Total	C	N	O	S	0	0	0
			1029	660	193	175	1			
15	BH	130	Total	C	N	O	S	0	0	0
			1029	660	193	175	1			

- Molecule 16 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	v	203	Total	C	N	O	S	0	0	0
			1713	1075	356	280	2			
16	BI	203	Total	C	N	O	S	0	0	0
			1713	1075	356	280	2			

- Molecule 17 is a protein called Ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	w	199	Total	C	N	O	S	0	0	0
			1590	1025	294	269	2			
17	BJ	199	Total	C	N	O	S	0	0	0
			1590	1025	294	269	2			

- Molecule 18 is a protein called Ribosomal protein L22.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	x	173	Total	C	N	O	0	0	0
			1387	856	280	251			
18	BK	176	Total	C	N	O	0	0	0
			1406	868	284	254			

- Molecule 19 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
19	y	185	Total	C	N	O	0	0	0
			1458	916	297	245			
19	BL	185	Total	C	N	O	0	0	0
			1458	916	297	245			

- Molecule 20 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	z	179	Total	C	N	O	S	0	0	0
			1457	901	310	243	3			
20	BM	179	Total	C	N	O	S	0	0	0
			1457	901	310	243	3			

- Molecule 21 is a protein called 60S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	0	170	Total	C	N	O	S	0	0	0
			1423	921	258	241	3			
21	BN	170	Total	C	N	O	S	0	0	0
			1423	921	258	241	3			

- Molecule 22 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	2	159	Total	C	N	O	S	0	0	0
			1262	798	241	221	2			
22	BO	159	Total	C	N	O	S	0	0	0
			1262	798	241	221	2			

- Molecule 23 is a protein called 60S ribosomal protein L22-B.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
23	5	103	Total	C	N	O	0	0	0
			831	539	138	154			
23	BP	102	Total	C	N	O	0	0	0
			826	536	137	153			

- Molecule 24 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	6	131	Total	C	N	O	S	0	0	0
			977	615	183	171	8			
24	BQ	131	Total	C	N	O	S	0	0	0
			977	615	183	171	8			

- Molecule 25 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	7	118	Total	C	N	O	S	0	0	0
			945	591	192	161	1			
25	BR	98	Total	C	N	O	S	0	0	0
			801	501	162	137	1			

- Molecule 26 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	8	121	Total	C	N	O	S	0	0	0
			974	622	175	176	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BS	119	Total 960	C 613	N 172	O 174	S 1	0	0	0

- Molecule 27 is a protein called Ribosomal protein L24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	9	126	Total 989	C 618	N 190	O 181	0	0	0
27	BT	126	Total 989	C 618	N 190	O 181	0	0	0

- Molecule 28 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	AA	135	Total 1087	C 705	N 197	O 183	S 2	0	0	0
28	BU	135	Total 1087	C 705	N 197	O 183	S 2	0	0	0

- Molecule 29 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	AB	148	Total 1170	C 741	N 231	O 197	S 1	0	0	0
29	BV	148	Total 1170	C 741	N 231	O 197	S 1	0	0	0

- Molecule 30 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
30	AC	62	Total 493	C 307	N 105	O 81	0	0	0
30	BW	61	Total 488	C 304	N 104	O 80	0	0	0

- Molecule 31 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	AD	96	Total 729	C 469	N 121	O 137	S 2	0	0	0
31	BX	96	Total 729	C 469	N 121	O 137	S 2	0	0	0

- Molecule 32 is a protein called 60S ribosomal protein L31-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	AE	110	Total	C	N	O	S	0	0	0
			894	565	168	159	2			
32	BY	110	Total	C	N	O	S	0	0	0
			894	565	168	159	2			

- Molecule 33 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	AF	124	Total	C	N	O	S	0	0	0
			1000	638	194	167	1			
33	BZ	124	Total	C	N	O	S	0	0	0
			1004	641	195	167	1			

- Molecule 34 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	AG	106	Total	C	N	O	S	0	0	0
			847	543	161	142	1			
34	CA	106	Total	C	N	O	S	0	0	0
			847	543	161	142	1			

- Molecule 35 is a protein called 60S ribosomal protein L34-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	AH	112	Total	C	N	O	S	0	0	0
			887	547	182	154	4			
35	CB	112	Total	C	N	O	S	0	0	0
			887	547	182	154	4			

- Molecule 36 is a protein called Ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	AI	120	Total	C	N	O	S	0	0	0
			992	629	195	167	1			
36	CC	118	Total	C	N	O		0	0	0
			979	621	193	165				

- Molecule 37 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	AJ	97	Total	C	N	O	S	0	0	0
			758	471	156	130	1			
37	CD	97	Total	C	N	O	S	0	0	0
			758	471	156	130	1			

- Molecule 38 is a protein called 60S ribosomal protein L37-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	AK	86	Total	C	N	O	S	0	0	0
			677	413	148	110	6			
38	CE	86	Total	C	N	O	S	0	0	0
			677	413	148	110	6			

- Molecule 39 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	AL	77	Total	C	N	O	0	0	0
			617	393	115	109			
39	CF	77	Total	C	N	O	0	0	0
			617	393	115	109			

- Molecule 40 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	AM	50	Total	C	N	O	0	0	0
			438	275	97	66			
40	CG	50	Total	C	N	O	0	0	0
			438	275	97	66			

- Molecule 41 is a protein called 60S ribosomal protein L40-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	AN	52	Total	C	N	O	S	0	0	0
			419	260	86	67	6			
41	CH	51	Total	C	N	O	S	0	0	0
			411	255	85	66	5			

- Molecule 42 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	AO	25	Total	C	N	O	S	0	0	0
			236	144	63	28	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	CI	24	Total	C	N	O	S	0	0	0
			227	138	61	27	1			

- Molecule 43 is a protein called 60S ribosomal protein L42-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	AP	103	Total	C	N	O	S	0	0	0
			828	521	165	137	5			
43	CJ	103	Total	C	N	O	S	0	0	0
			828	521	165	137	5			

- Molecule 44 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	AQ	91	Total	C	N	O	S	0	0	0
			698	430	140	124	4			
44	CK	91	Total	C	N	O	S	0	0	0
			698	430	140	124	4			

- Molecule 45 is a protein called 60S ribosomal protein CAALFM_C304810CA.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	i	121	Total	C	N	O	0	0	0
			931	563	166	202			
45	CL	121	Total	C	N	O	0	0	0
			931	563	166	202			

- Molecule 46 is a RNA chain called 18S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	B	1761	Total	C	N	O	P	0	0	0
			37537	16780	6656	12340	1761			
46	CM	1765	Total	C	N	O	P	0	0	0
			37621	16818	6670	12368	1765			

- Molecule 47 is a protein called 40S ribosomal protein S0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	C	208	Total	C	N	O	S	0	0	0
			1627	1041	284	297	5			
47	CN	208	Total	C	N	O	S	0	0	0
			1627	1041	284	297	5			

- Molecule 48 is a protein called 40S ribosomal protein S1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	D	214	Total	C	N	O	S	0	0	0
			1724	1094	313	313	4			
48	CO	214	Total	C	N	O	S	0	0	0
			1724	1094	313	313	4			

- Molecule 49 is a protein called Ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	E	217	Total	C	N	O	S	0	0	0
			1629	1039	289	296	5			
49	CP	217	Total	C	N	O	S	0	0	0
			1629	1039	289	296	5			

- Molecule 50 is a protein called Ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	F	223	Total	C	N	O	S	0	0	0
			1707	1087	311	305	4			
50	CQ	223	Total	C	N	O	S	0	0	0
			1707	1087	311	305	4			

- Molecule 51 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	G	259	Total	C	N	O	S	0	0	0
			2051	1304	385	357	5			
51	CR	260	Total	C	N	O	S	0	0	0
			2055	1306	386	358	5			

- Molecule 52 is a protein called Ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	H	206	Total	C	N	O	S	0	0	0
			1614	1008	301	301	4			
52	CS	206	Total	C	N	O	S	0	0	0
			1614	1008	301	301	4			

- Molecule 53 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	I	226	Total	C	N	O	S	0	0	0
			1820	1133	351	330	6			
53	CT	236	Total	C	N	O	S	0	0	0
			1904	1184	369	345	6			

- Molecule 54 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
54	J	185	Total	C	N	O	0	0	0
			1491	953	269	269			
54	CU	183	Total	C	N	O	0	0	0
			1475	944	265	266			

- Molecule 55 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	K	203	Total	C	N	O	S	0	0	0
			1579	973	322	283	1			
55	CV	203	Total	C	N	O	S	0	0	0
			1579	973	322	283	1			

- Molecule 56 is a protein called Ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	L	178	Total	C	N	O	S	0	0	0
			1453	918	286	248	1			
56	CW	178	Total	C	N	O	S	0	0	0
			1453	918	286	248	1			

- Molecule 57 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	M	98	Total	C	N	O	S	0	0	0
			817	531	135	150	1			
57	CX	94	Total	C	N	O	S	0	0	0
			791	515	131	144	1			

- Molecule 58 is a protein called 40S ribosomal protein S11A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	N	144	Total	C	N	O	S	0	0	0
			1150	734	215	198	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	CY	141	Total	C	N	O	S	0	0	0
			1129	722	212	192	3			

- Molecule 59 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	O	116	Total	C	N	O	S	0	0	0
			885	550	158	172	5			
59	CZ	119	Total	C	N	O	S	0	0	0
			913	566	163	179	5			

- Molecule 60 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	P	150	Total	C	N	O	S	0	0	0
			1187	757	219	210	1			
60	DA	150	Total	C	N	O	S	0	0	0
			1187	757	219	210	1			

- Molecule 61 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	Q	127	Total	C	N	O	S	0	0	0
			942	579	186	174	3			
61	DB	127	Total	C	N	O	S	0	0	0
			942	579	186	174	3			

- Molecule 62 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	R	129	Total	C	N	O	S	0	0	0
			1018	649	185	177	7			
62	DC	130	Total	C	N	O	S	0	0	0
			1029	655	189	178	7			

- Molecule 63 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	S	140	Total	C	N	O	S	0	0	0
			1091	700	198	192	1			
63	DD	140	Total	C	N	O	S	0	0	0
			1091	700	198	192	1			

- Molecule 64 is a protein called 40S ribosomal protein S17-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	T	124	Total	C	N	O	S	0	0	0
			997	628	183	185	1			
64	DE	124	Total	C	N	O	S	0	0	0
			997	628	183	185	1			

- Molecule 65 is a protein called 40S ribosomal protein S18-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	U	144	Total	C	N	O	S	0	0	0
			1187	744	233	207	3			
65	DF	141	Total	C	N	O	S	0	0	0
			1161	727	227	204	3			

- Molecule 66 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	V	141	Total	C	N	O	S	0	0	0
			1100	689	210	200	1			
66	DG	141	Total	C	N	O	S	0	0	0
			1100	689	210	200	1			

- Molecule 67 is a protein called Ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	W	102	Total	C	N	O	S	0	0	0
			808	509	150	147	2			
67	DH	97	Total	C	N	O	S	0	0	0
			763	481	140	140	2			

- Molecule 68 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	X	87	Total	C	N	O	S	0	0	0
			676	415	126	133	2			
68	DI	87	Total	C	N	O	S	0	0	0
			676	415	126	133	2			

- Molecule 69 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	Y	129	Total	C	N	O	S	0	0	0
			1032	655	191	183	3			
69	DJ	129	Total	C	N	O	S	0	0	0
			1032	655	191	183	3			

- Molecule 70 is a protein called Ribosomal protein S23 (S12).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	Z	143	Total	C	N	O	S	0	0	0
			1110	701	219	188	2			
70	DK	143	Total	C	N	O	S	0	0	0
			1110	701	219	188	2			

- Molecule 71 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
71	a	134	Total	C	N	O	0	0	0
			1086	677	218	191			
71	DL	132	Total	C	N	O	0	0	0
			1072	670	216	186			

- Molecule 72 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
72	b	72	Total	C	N	O	0	0	0
			578	369	103	106			
72	DM	71	Total	C	N	O	0	0	0
			570	365	102	103			

- Molecule 73 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	c	98	Total	C	N	O	S	0	0	0
			779	482	163	128	6			
73	DN	98	Total	C	N	O	S	0	0	0
			779	482	163	128	6			

- Molecule 74 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	d	81	Total	C	N	O	S	0	0	0
			614	383	110	114	7			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	DO	81	Total	C	N	O	S	0	0	0
			614	383	110	114	7			

- Molecule 75 is a protein called 40S ribosomal protein S28-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	e	62	Total	C	N	O	S	0	0	0
			487	299	98	88	2			
75	DP	61	Total	C	N	O	S	0	0	0
			476	293	94	87	2			

- Molecule 76 is a protein called 40S ribosomal protein S29A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	f	55	Total	C	N	O	S	0	0	0
			454	281	94	75	4			
76	DQ	54	Total	C	N	O	S	0	0	0
			449	278	93	74	4			

- Molecule 77 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	g	60	Total	C	N	O	S	0	0	0
			474	297	96	79	2			
77	DR	58	Total	C	N	O	S	0	0	0
			461	289	93	77	2			

- Molecule 78 is a protein called Ubiquitin-40S ribosomal protein S31 fusion protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	h	70	Total	C	N	O	S	0	0	0
			574	362	113	93	6			
78	DS	69	Total	C	N	O	S	0	0	0
			563	356	109	92	6			

- Molecule 79 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	AR	311	Total	C	N	O	S	0	0	0
			2398	1519	412	462	5			
79	DT	311	Total	C	N	O	S	0	0	0
			2398	1519	412	462	5			

- Molecule 80 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
80	P0	107	Total	C	N	O	S	0	0	0
			845	542	150	150	3			
80	p0	107	Total	C	N	O	S	0	0	0
			845	542	150	150	3			

- Molecule 81 is a protein called 60S ribosomal protein L12-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
81	12	63	Total	C	N	O	S	0	0	0
			480	297	85	96	2			

- Molecule 82 is a protein called Ribosomal protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
82	L1	217	Total	C	N	O	S	0	0	0
			1711	1096	294	312	9			
82	l1	217	Total	C	N	O	S	0	0	0
			1711	1096	294	312	9			

- Molecule 83 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
83	1	531	Total	Mg	0	0
			531	531		
83	3	13	Total	Mg	0	0
			13	13		
83	4	11	Total	Mg	0	0
			11	11		
83	j	4	Total	Mg	0	0
			4	4		
83	k	4	Total	Mg	0	0
			4	4		
83	m	1	Total	Mg	0	0
			1	1		
83	o	3	Total	Mg	0	0
			3	3		
83	r	3	Total	Mg	0	0
			3	3		
83	s	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	u	1	Total Mg 1 1	0	0
83	v	4	Total Mg 4 4	0	0
83	w	3	Total Mg 3 3	0	0
83	x	3	Total Mg 3 3	0	0
83	z	1	Total Mg 1 1	0	0
83	0	5	Total Mg 5 5	0	0
83	2	2	Total Mg 2 2	0	0
83	6	2	Total Mg 2 2	0	0
83	7	1	Total Mg 1 1	0	0
83	8	2	Total Mg 2 2	0	0
83	9	3	Total Mg 3 3	0	0
83	AB	1	Total Mg 1 1	0	0
83	AC	1	Total Mg 1 1	0	0
83	AD	1	Total Mg 1 1	0	0
83	AE	2	Total Mg 2 2	0	0
83	AF	1	Total Mg 1 1	0	0
83	AG	2	Total Mg 2 2	0	0
83	AH	2	Total Mg 2 2	0	0
83	AM	2	Total Mg 2 2	0	0
83	AP	2	Total Mg 2 2	0	0
83	i	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	B	152	Total Mg 152 152	0	0
83	D	1	Total Mg 1 1	0	0
83	G	1	Total Mg 1 1	0	0
83	I	1	Total Mg 1 1	0	0
83	J	1	Total Mg 1 1	0	0
83	K	1	Total Mg 1 1	0	0
83	L	1	Total Mg 1 1	0	0
83	Q	3	Total Mg 3 3	0	0
83	R	1	Total Mg 1 1	0	0
83	Y	3	Total Mg 3 3	0	0
83	Z	3	Total Mg 3 3	0	0
83	a	1	Total Mg 1 1	0	0
83	f	1	Total Mg 1 1	0	0
83	AR	2	Total Mg 2 2	0	0
83	AS	274	Total Mg 274 274	0	0
83	AT	10	Total Mg 10 10	0	0
83	AU	2	Total Mg 2 2	0	0
83	AW	4	Total Mg 4 4	0	0
83	BB	4	Total Mg 4 4	0	0
83	BE	3	Total Mg 3 3	0	0
83	BF	1	Total Mg 1 1	0	0

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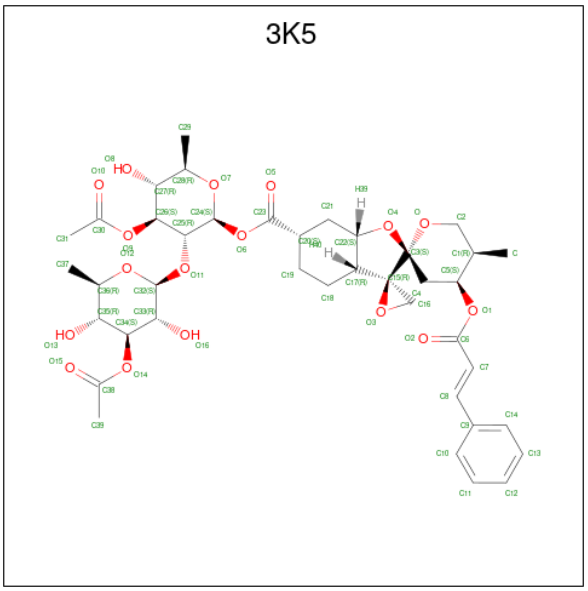
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	BH	1	Total Mg 1 1	0	0
83	BJ	2	Total Mg 2 2	0	0
83	BK	1	Total Mg 1 1	0	0
83	BN	1	Total Mg 1 1	0	0
83	BV	1	Total Mg 1 1	0	0
83	BZ	3	Total Mg 3 3	0	0
83	CA	1	Total Mg 1 1	0	0
83	CJ	1	Total Mg 1 1	0	0
83	CK	2	Total Mg 2 2	0	0
83	CL	3	Total Mg 3 3	0	0
83	CM	103	Total Mg 103 103	0	0
83	CN	1	Total Mg 1 1	0	0
83	CP	1	Total Mg 1 1	0	0
83	CQ	1	Total Mg 1 1	0	0
83	DA	1	Total Mg 1 1	0	0
83	DB	3	Total Mg 3 3	0	0
83	DQ	1	Total Mg 1 1	0	0

- Molecule 84 is 3-O-acetyl-2-O-(3-O-acetyl-6-deoxy-beta-D-glucopyranosyl)-6-deoxy-1-O-{[(2R,2'S,3a'R,4''S,5''R,6'S,7a'S)-5''-methyl-4''-{[(2E)-3-phenylprop-2-enoyl]oxy}decahydrodispiro[oxirane-2,3'-[1]benzofuran-2',2''-pyran]-6'-yl]carbonyl}-beta-D-glucopyranose (three-letter code: 3K5) (formula: $C_{40}H_{52}O_{17}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
84	1	1	Total C O 57 40 17	0	0
84	AS	1	Total C O 57 40 17	0	0

- Molecule 85 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
85	AH	1	Total Zn 1 1	0	0
85	AK	1	Total Zn 1 1	0	0
85	AN	1	Total Zn 1 1	0	0
85	AP	1	Total Zn 1 1	0	0
85	AQ	1	Total Zn 1 1	0	0
85	c	1	Total Zn 1 1	0	0
85	d	1	Total Zn 1 1	0	0
85	f	1	Total Zn 1 1	0	0
85	h	1	Total Zn 1 1	0	0
85	CB	1	Total Zn 1 1	0	0

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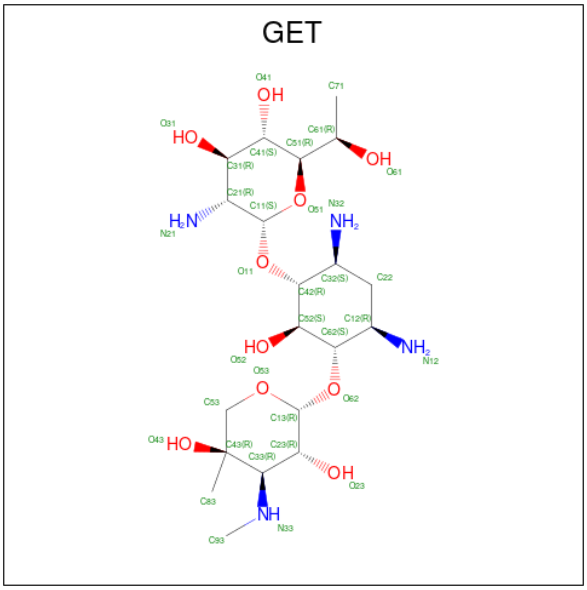
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
85	CE	1	Total Zn 1 1	0	0
85	CH	1	Total Zn 1 1	0	0
85	CJ	1	Total Zn 1 1	0	0
85	CK	1	Total Zn 1 1	0	0
85	DN	1	Total Zn 1 1	0	0
85	DO	1	Total Zn 1 1	0	0
85	DQ	1	Total Zn 1 1	0	0
85	DS	1	Total Zn 1 1	0	0

- Molecule 86 is GENETICIN (three-letter code: GET) (formula: $C_{20}H_{40}N_4O_{10}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
86	B	1	Total C N O 34 20 4 10	0	0
86	CM	1	Total C N O 34 20 4 10	0	0

- Molecule 87 is water.

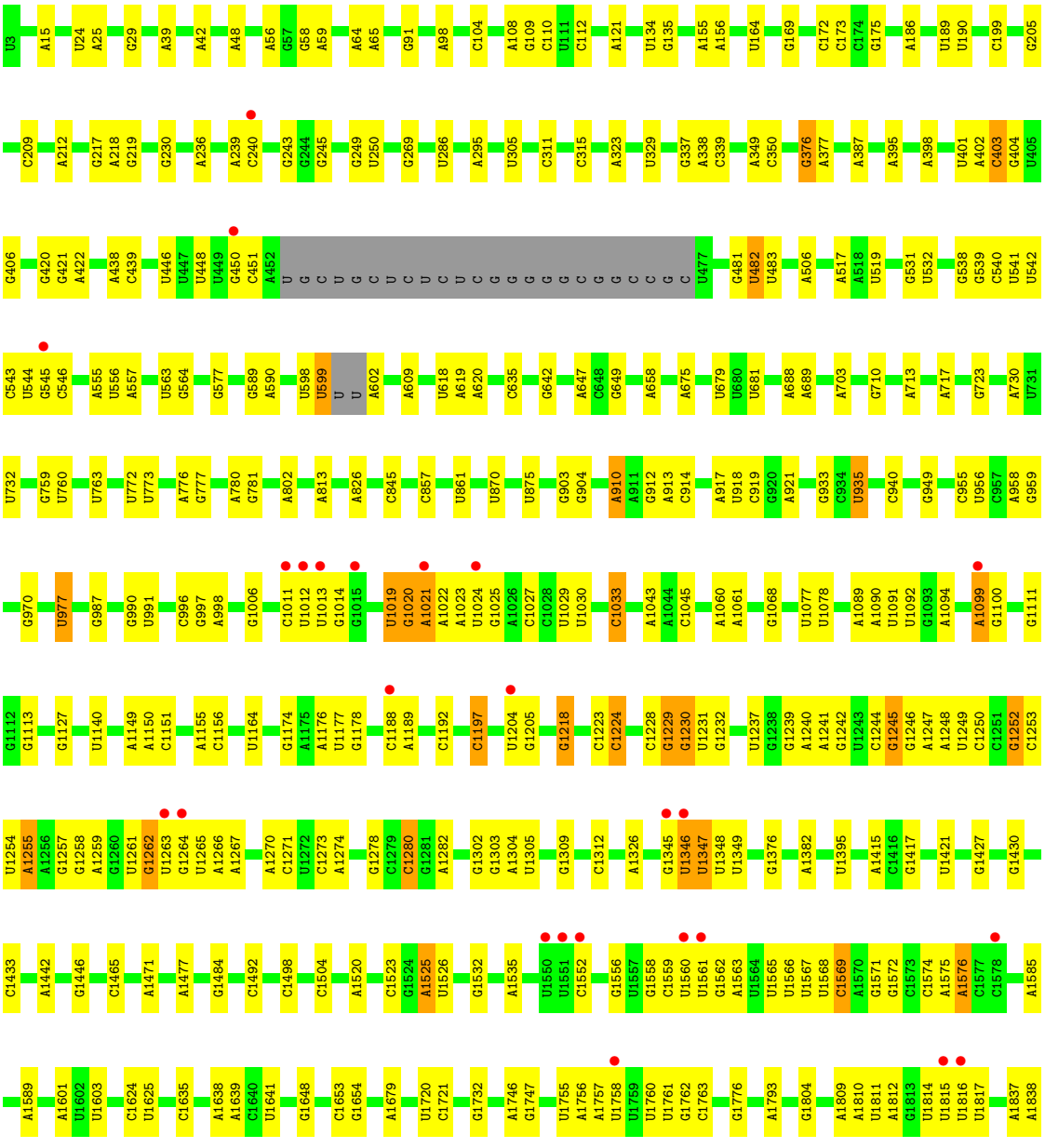
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
87	1	9	Total O 9 9	0	0
87	4	3	Total O 3 3	0	0
87	B	5	Total O 5 5	0	0
87	G	1	Total O 1 1	0	0
87	AS	12	Total O 12 12	0	0

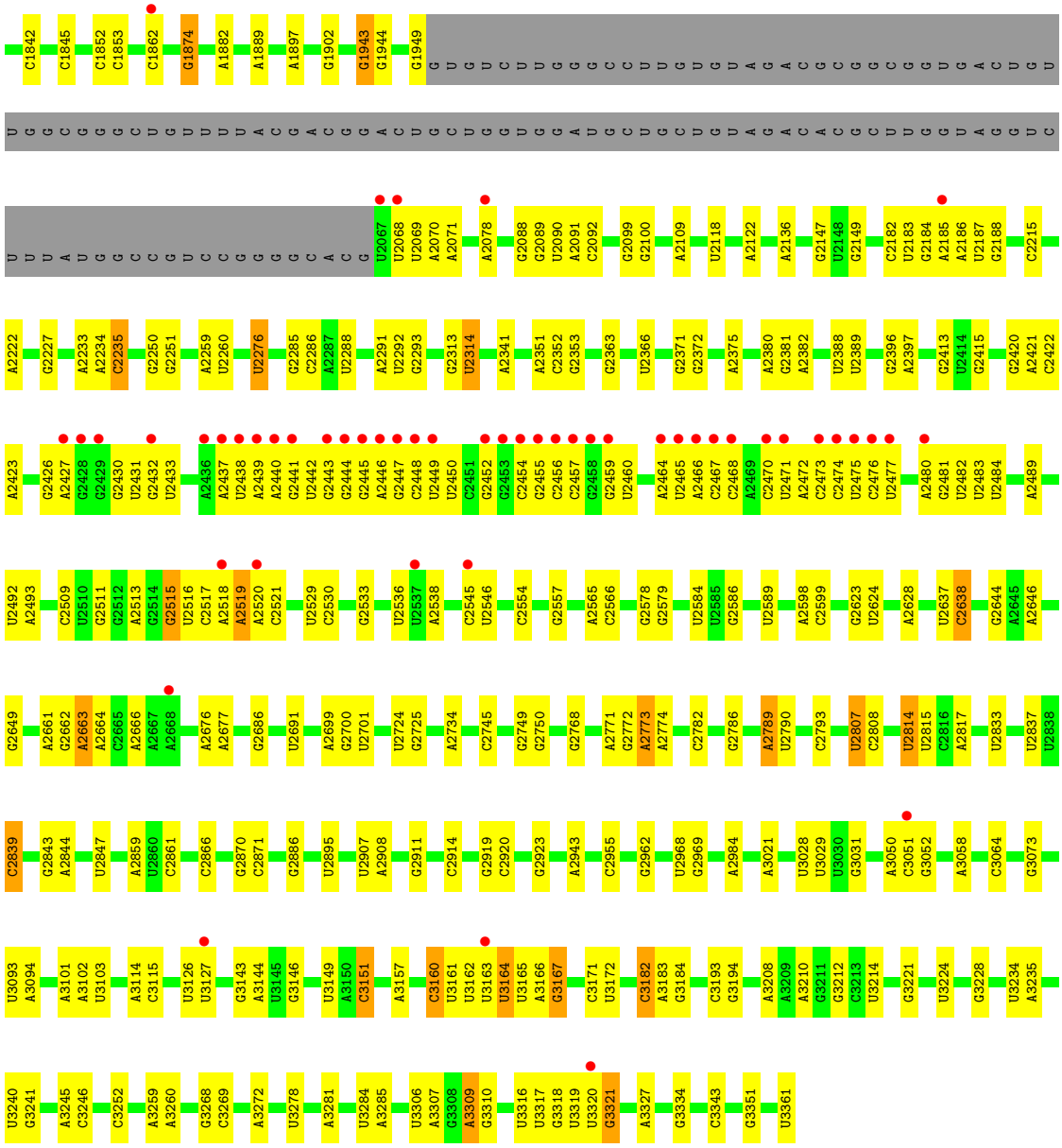
3 Residue-property plots (i)

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

- Molecule 1: 25S

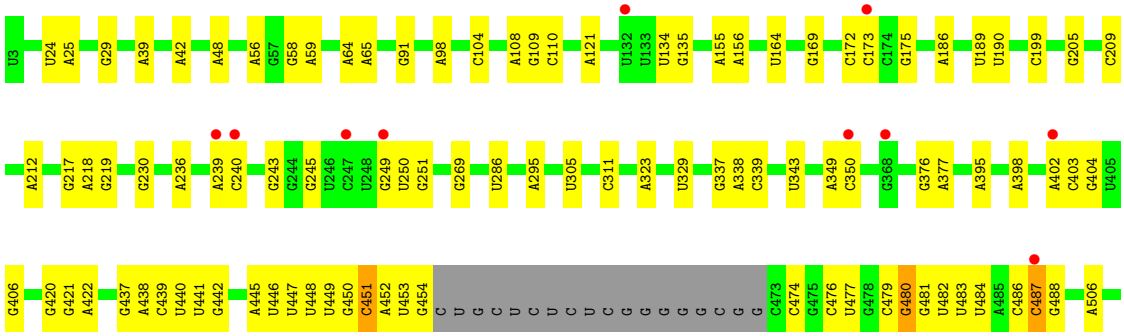
Chain 1:

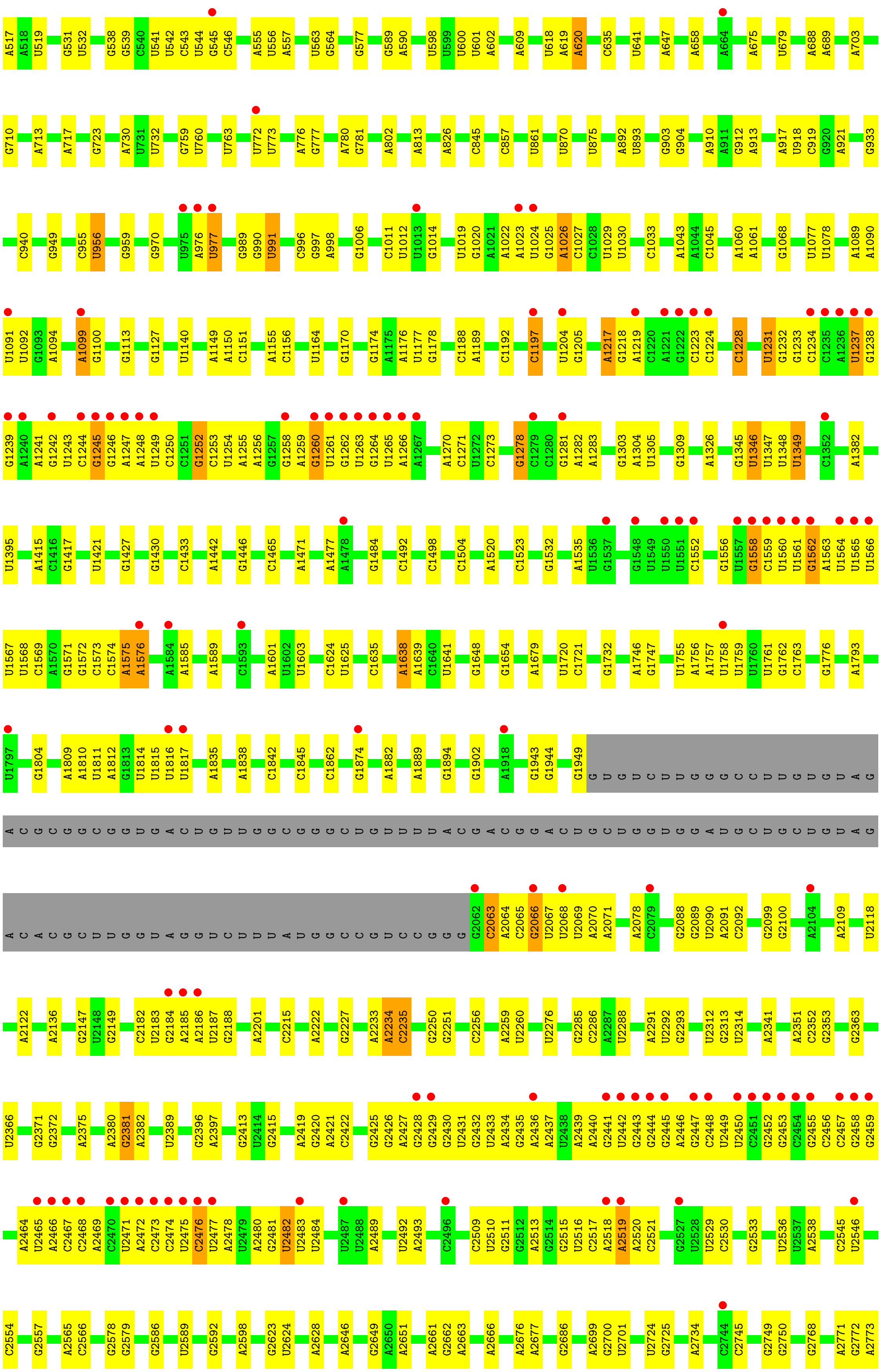




• Molecule 1: 25S

Chain AS:




A517 A518 U519 G531 U532 G538 G539 C540 U541 U542 C543 U544 G545 C546 A555 U556 A557 U563 G564 G577 G589 A590 U598 U599 U600 U601 A602 A609 U618 A619 A620 C635 U641 A647 A658 A664 A675 U679 A688 A689 A703
G710 A713 A717 G723 A730 U731 U732 G759 U760 U763 U772 U773 A776 G777 A780 G781 A802 A813 A826 C845 C857 U861 U870 U875 A892 U893 G903 G904 A910 A911 G912 A913 A917 U918 C919 G920 A921 G933
C940 G949 C955 U956 G959 G970 U975 A976 U977 G989 G990 U991 C996 G997 A998 G1006 C1011 U1012 U1013 G1014 U1019 G1020 A1021 A1022 A1023 U1024 G1025 A1026 C1027 C1028 U1029 U1030 C1033 A1043 A1044 C1045 A1060 A1061 G1068 U1077 U1078 A1089 A1090
U1091 U1092 G1093 A1094 A1099 G1100 G1113 G1127 U1140 A1149 A1150 C1151 A1155 C1156 U1164 G1170 G1174 A1175 A1176 U1177 G1178 C1188 A1189 C1192 C1197 U1204 G1205 A1217 G1218 A1219 C1220 A1221 G1222 C1223 C1224 C1228 U1231 G1232 G1233 C1234 C1235 A1236 U1237 G1238
G1239 A1240 A1241 G1242 U1243 C1244 G1245 G1246 A1247 A1248 U1249 C1250 C1251 G1252 C1253 U1254 A1255 A1256 G1257 G1258 A1259 G1260 U1261 G1262 U1263 G1264 U1265 A1266 A1267 A1270 C1271 U1272 C1273 G1278 C1279 C1280 G1281 A1282 A1283 G1303 A1304 U1305 G1309 A1326 G1345 U1346 U1347 U1348 U1349 C1352 A1382
U1395 A1415 C1416 G1417 U1421 G1427 G1430 C1433 A1442 G1446 C1465 A1471 A1477 A1478 G1484 C1492 C1498 C1504 A1520 C1523 G1532 A1535 U1536 G1537 G1548 U1549 U1550 U1551 C1552 G1556 U1557 G1558 C1559 U1560 U1561 G1562 A1563 U1564 U1565 U1566
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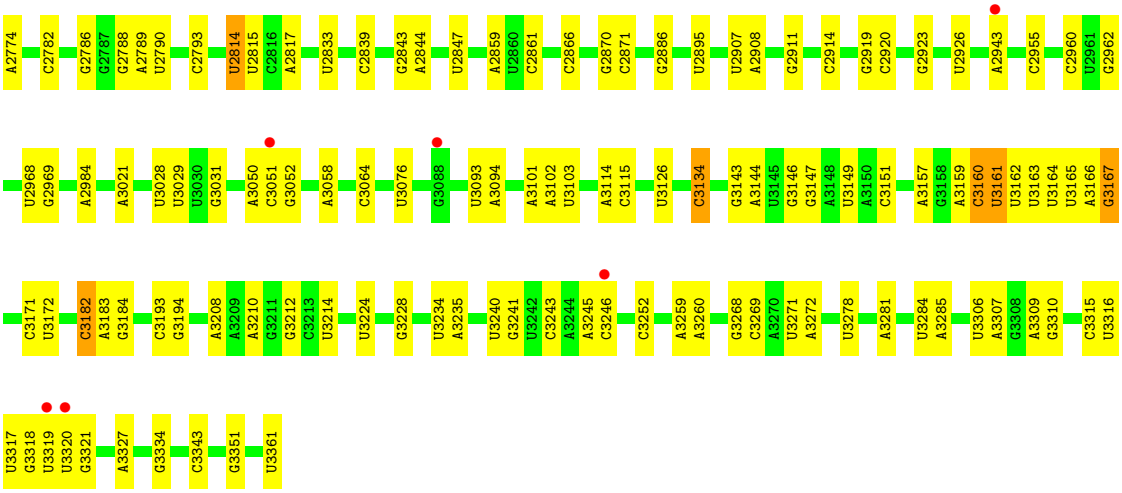
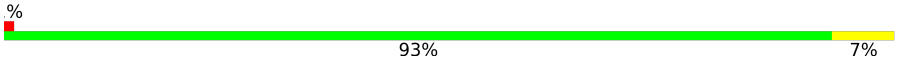
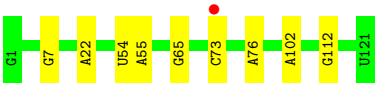


• Molecule 2: 5S

Chain 3:





• Molecule 2: 5S

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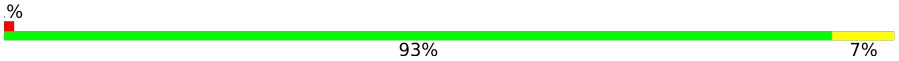
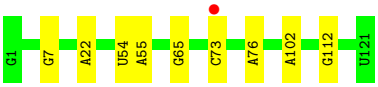
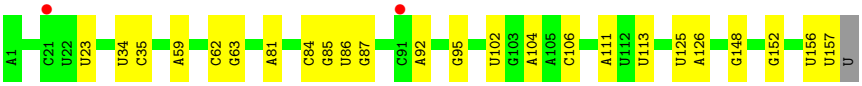




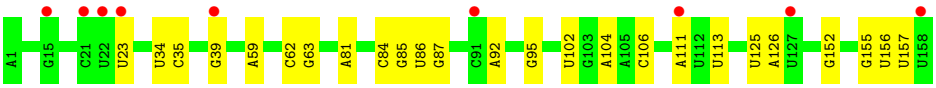
• Molecule 3: 5.8S

Chain 4:



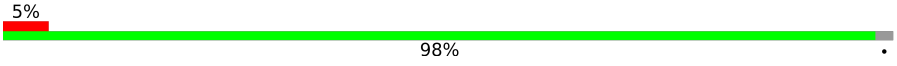
• Molecule 3: 5.8S

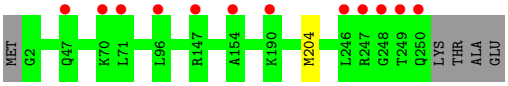
Chain AU:



• Molecule 4: 60S ribosomal protein L2-B

Chain j:





• Molecule 4: 60S ribosomal protein L2-B

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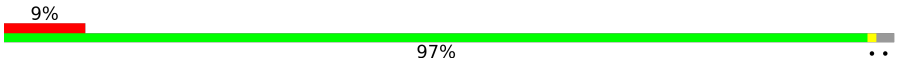
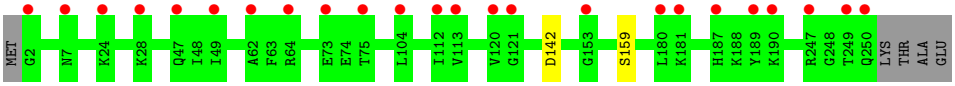
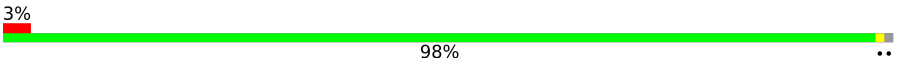
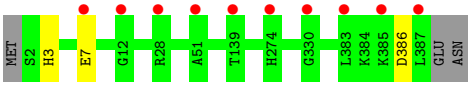




• Molecule 5: 60S ribosomal protein L3

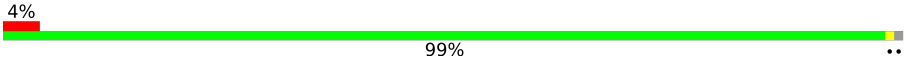
Chain k:

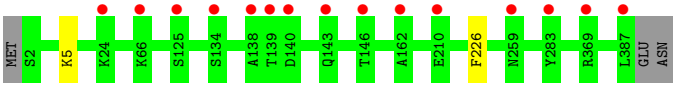




• Molecule 5: 60S ribosomal protein L3

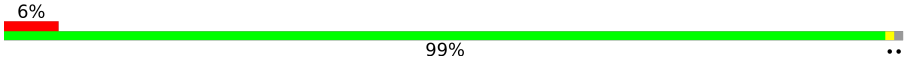
Chain AX:

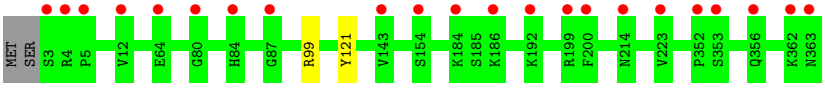




• Molecule 6: 60S ribosomal protein L4-B

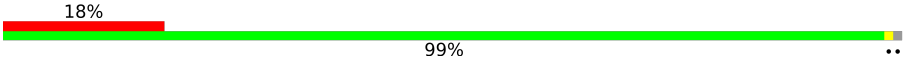
Chain l:

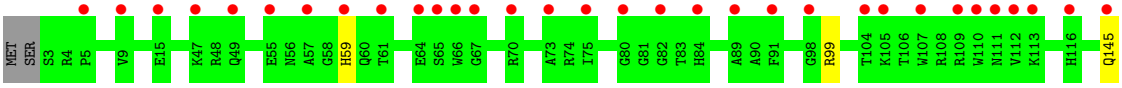


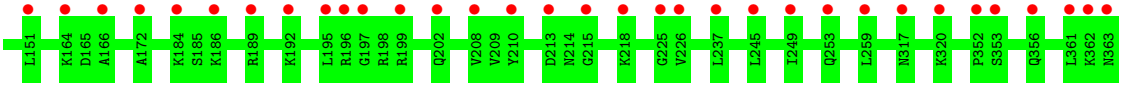


• Molecule 6: 60S ribosomal protein L4-B

Chain AY:

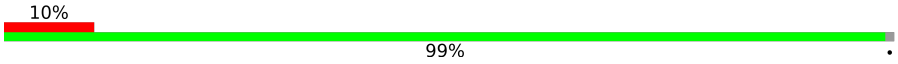


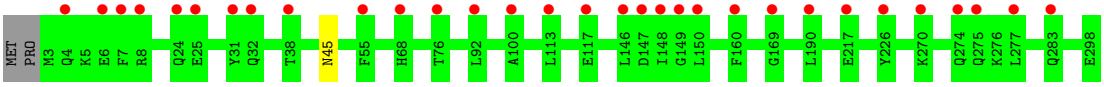




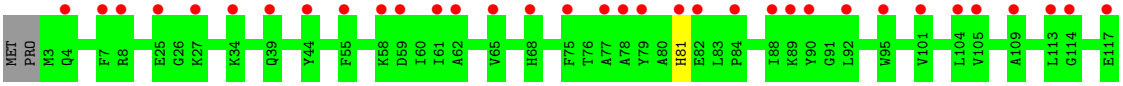
• Molecule 7: Uncharacterized protein CaJ7.0206

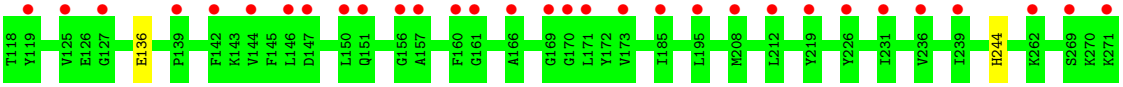
Chain m:

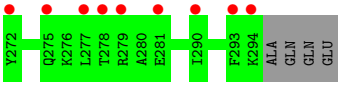




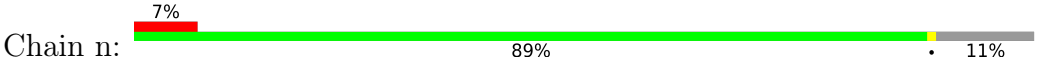
• Molecule 7: Uncharacterized protein CaJ7.0206



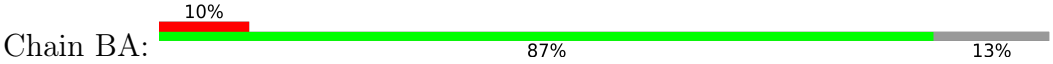




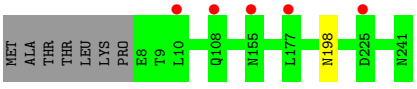
• Molecule 8: 60S ribosomal protein L6



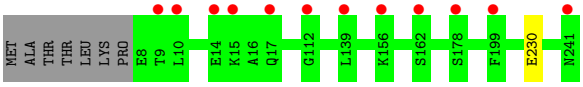
• Molecule 8: 60S ribosomal protein L6



• Molecule 9: 60S ribosomal protein L7-A

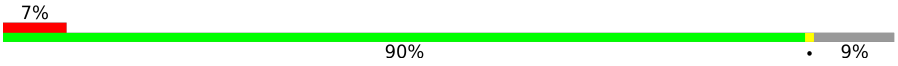


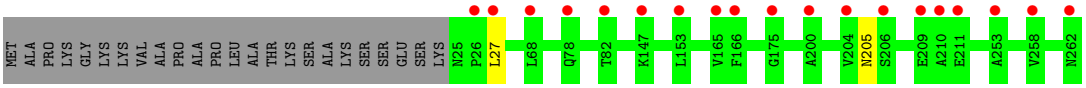
• Molecule 9: 60S ribosomal protein L7-A



• Molecule 10: 60S ribosomal protein L8

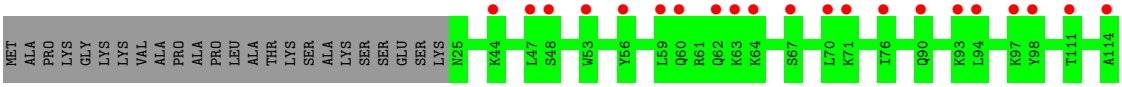
Chain p:

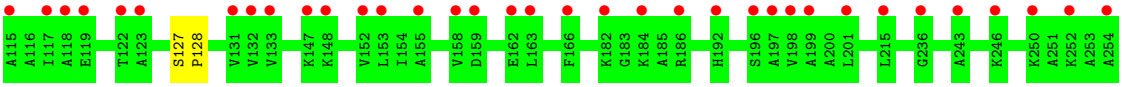


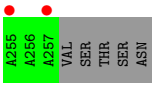


• Molecule 10: 60S ribosomal protein L8

Chain BC:

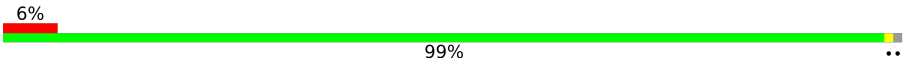






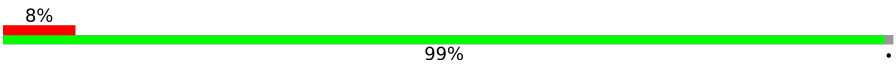
• Molecule 11: 60S ribosomal protein L9-B

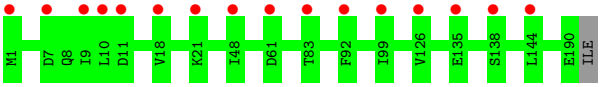
Chain q:



• Molecule 11: 60S ribosomal protein L9-B

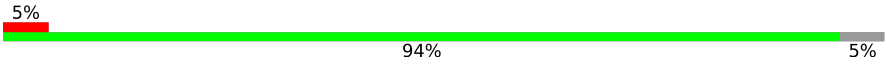
Chain BD:

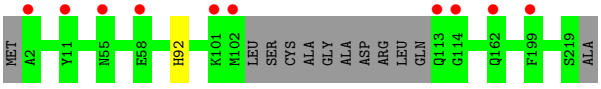




• Molecule 12: 60S ribosomal protein L10

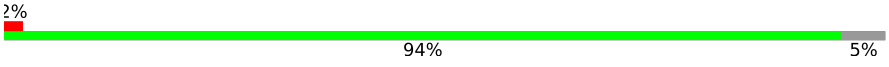
Chain r:

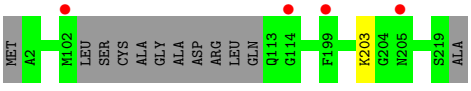




• Molecule 12: 60S ribosomal protein L10

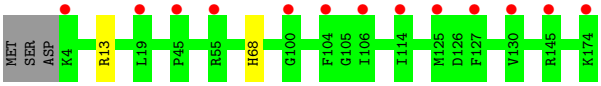
Chain BE:





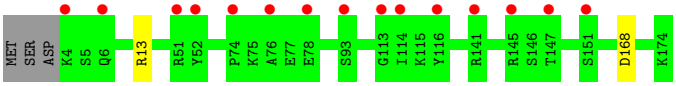
• Molecule 13: 60S ribosomal protein L11-B

Chain s:



• Molecule 13: 60S ribosomal protein L11-B

Chain BF:

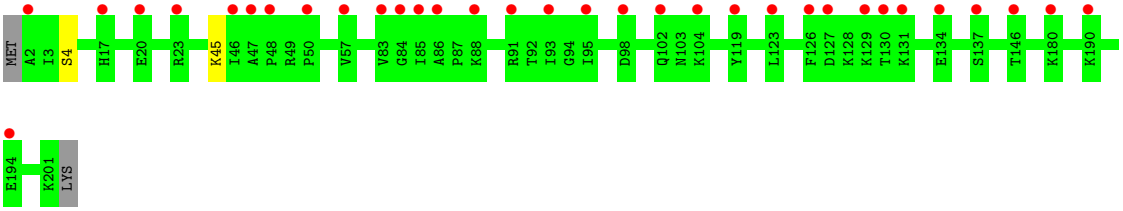


• Molecule 14: 60S ribosomal protein L13

Chain t:

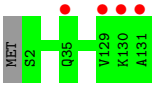
• Molecule 14: 60S ribosomal protein L13

Chain BG:



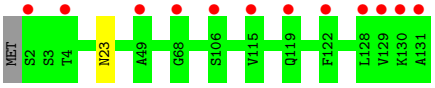
• Molecule 15: 60S ribosomal protein L14-B

Chain u:



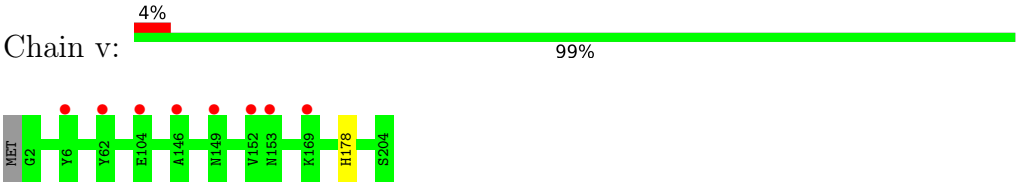
• Molecule 15: 60S ribosomal protein L14-B

Chain BH:



• Molecule 16: 60S ribosomal protein L15-A

Chain v:



• Molecule 16: 60S ribosomal protein L15-A

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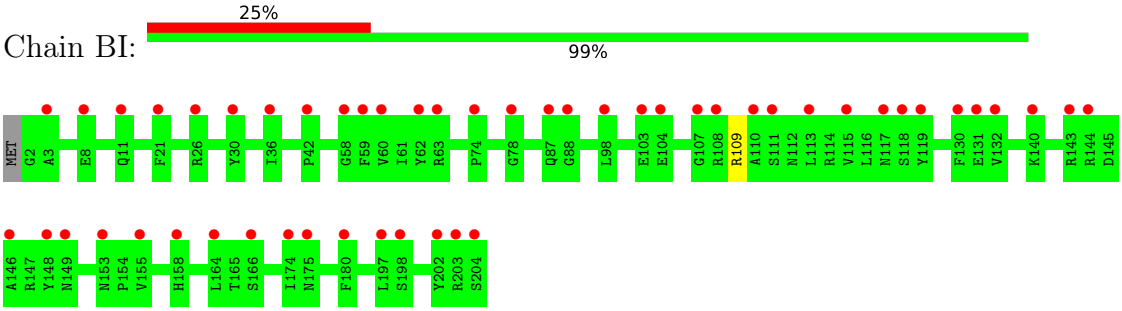
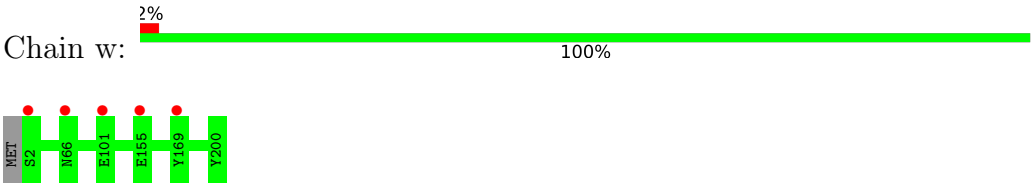


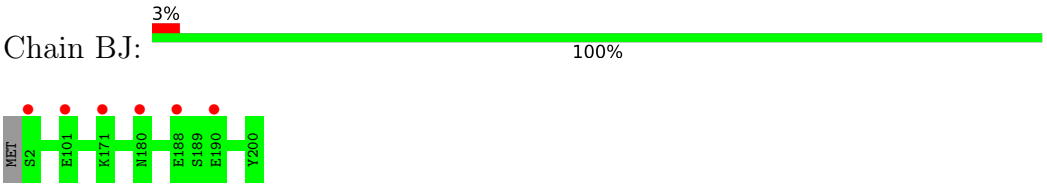
• Molecule 17: Ribosomal protein L13

Chain w:



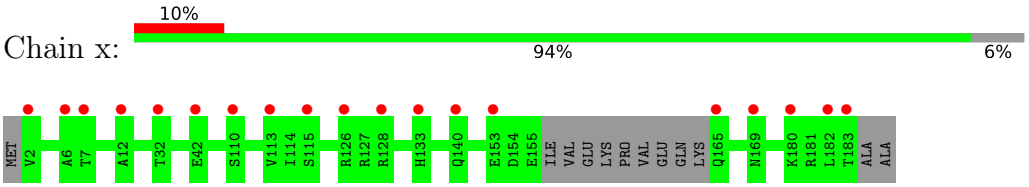
• Molecule 17: Ribosomal protein L13

Chain BJ:



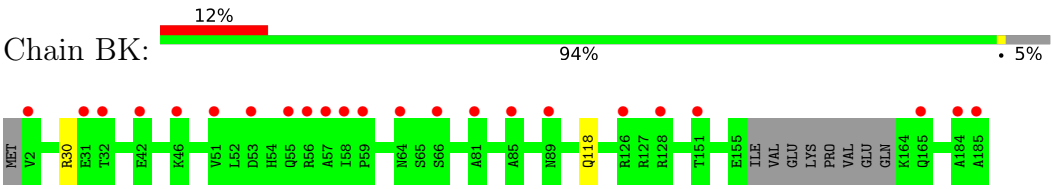
• Molecule 18: Ribosomal protein L22

Chain x:



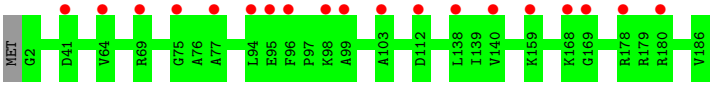
• Molecule 18: Ribosomal protein L22

Chain BK:

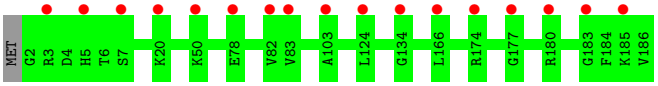


• Molecule 19: 60S ribosomal protein L18-A

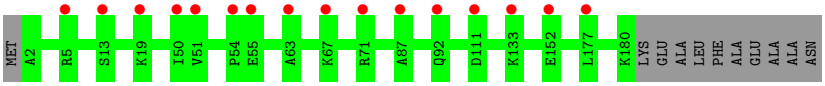
Chain y:



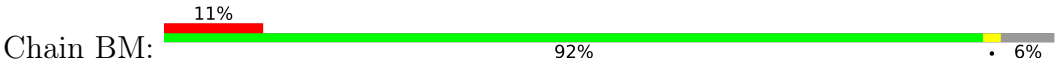
• Molecule 19: 60S ribosomal protein L18-A

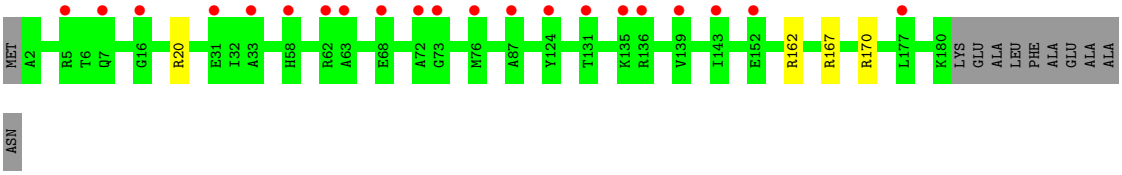


• Molecule 20: 60S ribosomal protein L19-A



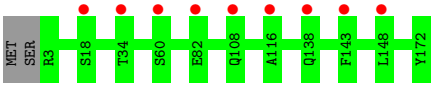
• Molecule 20: 60S ribosomal protein L19-A



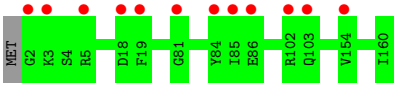


• Molecule 21: 60S ribosomal protein L20

• Molecule 21: 60S ribosomal protein L20

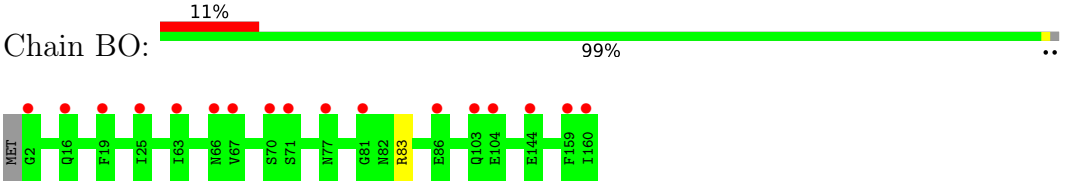


• Molecule 22: 60S ribosomal protein L21-A



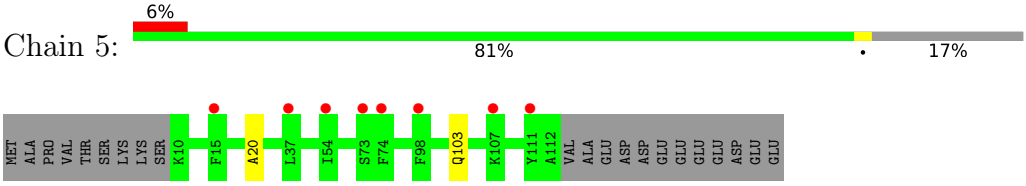
• Molecule 22: 60S ribosomal protein L21-A

Chain BO:



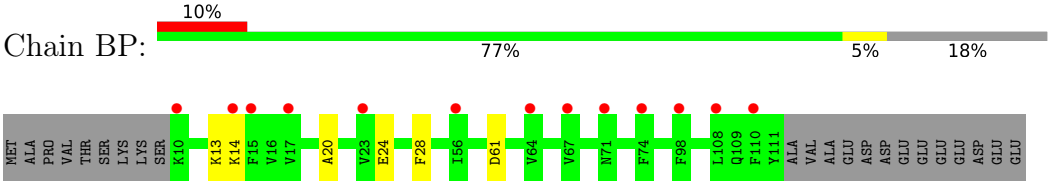
• Molecule 23: 60S ribosomal protein L22-B

Chain 5:



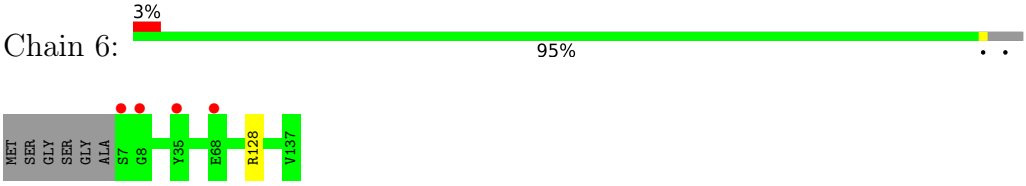
• Molecule 23: 60S ribosomal protein L22-B

Chain BP:



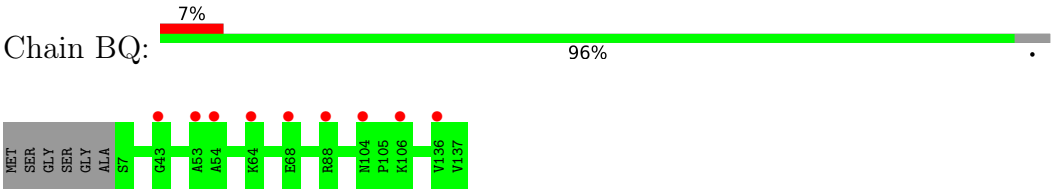
• Molecule 24: 60S ribosomal protein L23-A

Chain 6:



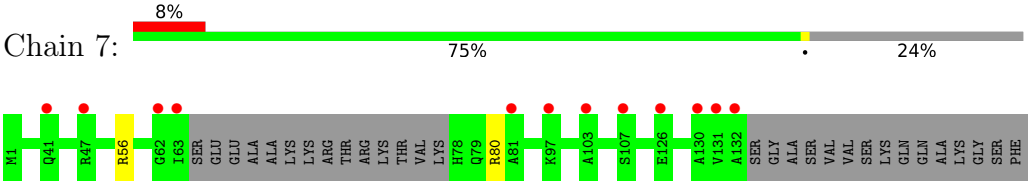
• Molecule 24: 60S ribosomal protein L23-A

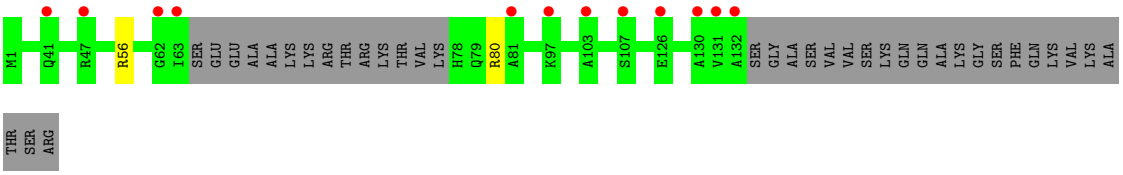
Chain BQ:



• Molecule 25: 60S ribosomal protein L24-A

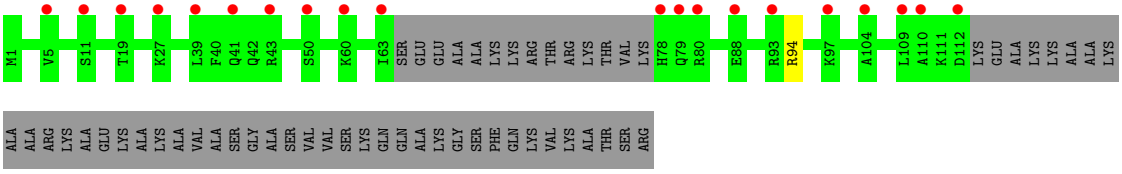
Chain 7:



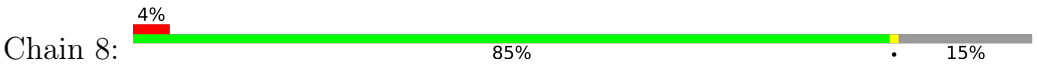


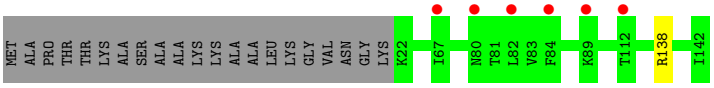
• Molecule 25: 60S ribosomal protein L24-A

Chain BR:

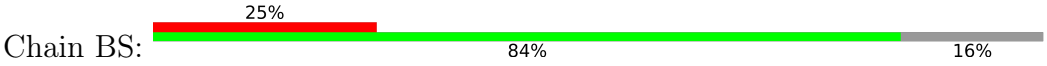


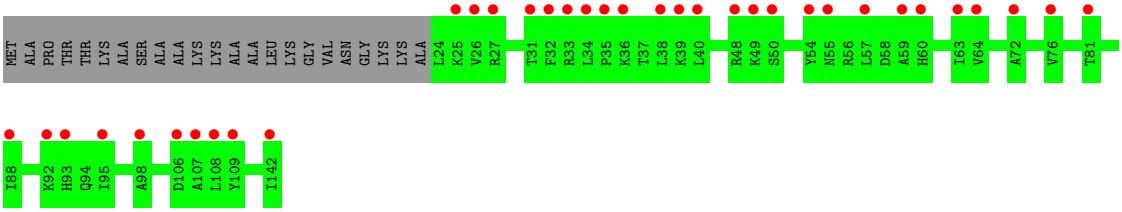
• Molecule 26: 60S ribosomal protein L25



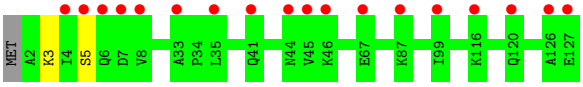


• Molecule 26: 60S ribosomal protein L25

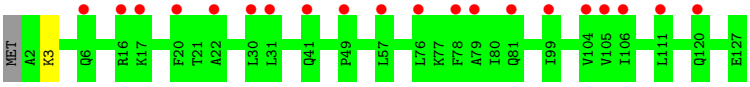




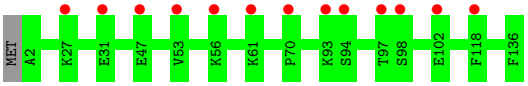
• Molecule 27: Ribosomal protein L24



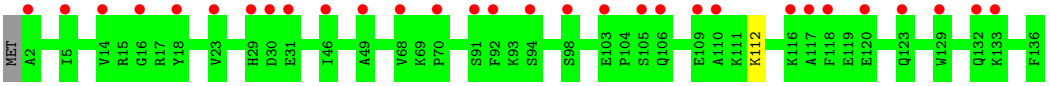
• Molecule 27: Ribosomal protein L24



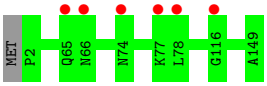
• Molecule 28: 60S ribosomal protein L27



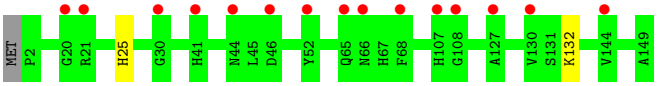
• Molecule 28: 60S ribosomal protein L27



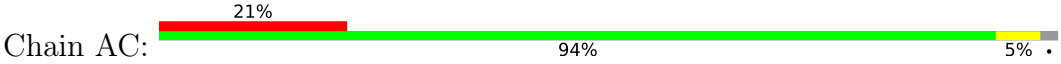
• Molecule 29: 60S ribosomal protein L28

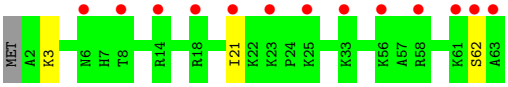


• Molecule 29: 60S ribosomal protein L28

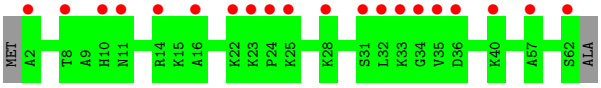


• Molecule 30: 60S ribosomal protein L29

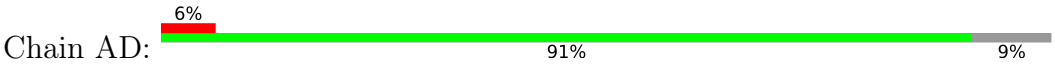


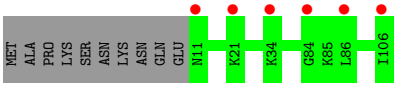


• Molecule 30: 60S ribosomal protein L29



• Molecule 31: 60S ribosomal protein L30

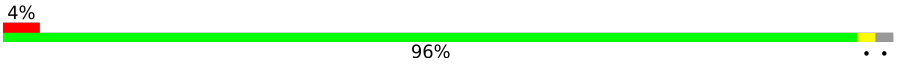


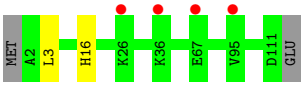


• Molecule 31: 60S ribosomal protein L30

• Molecule 32: 60S ribosomal protein L31-B

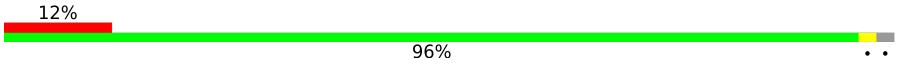
Chain AE:

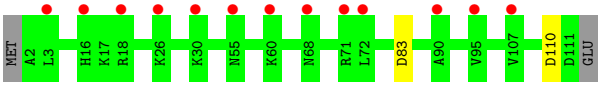




• Molecule 32: 60S ribosomal protein L31-B

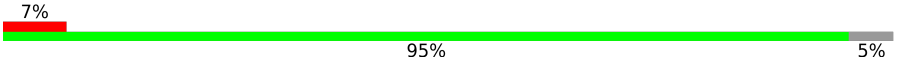
Chain BY:

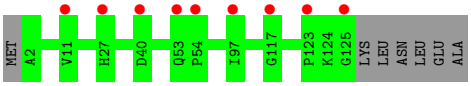




• Molecule 33: 60S ribosomal protein L32

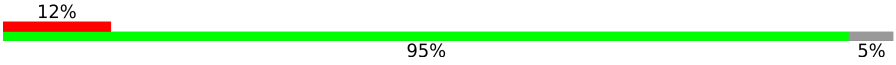
Chain AF:

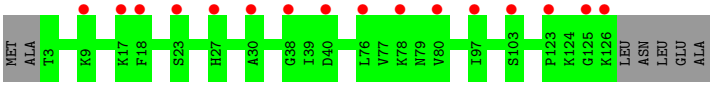




• Molecule 33: 60S ribosomal protein L32

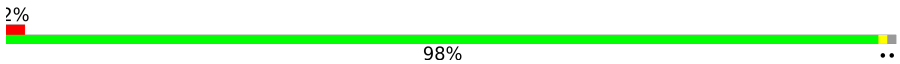
Chain BZ:

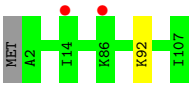




• Molecule 34: 60S ribosomal protein L33-A

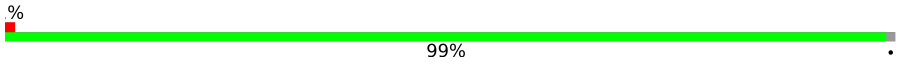
Chain AG:

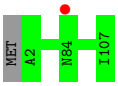




• Molecule 34: 60S ribosomal protein L33-A

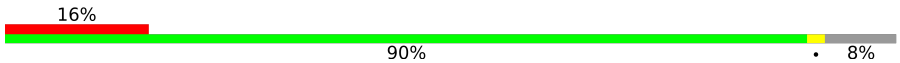
Chain CA:

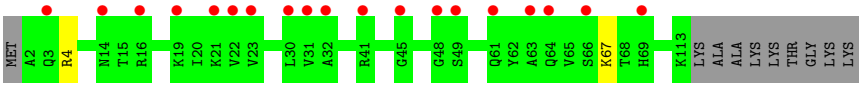




• Molecule 35: 60S ribosomal protein L34-B

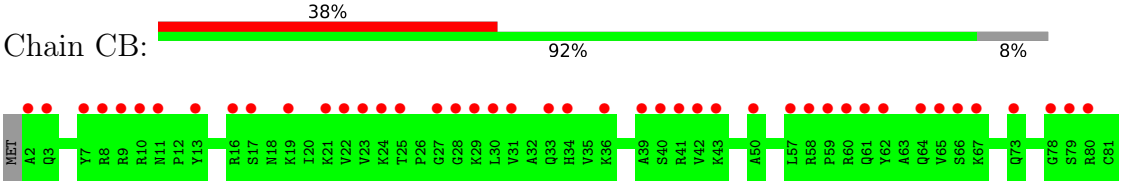
Chain AH:





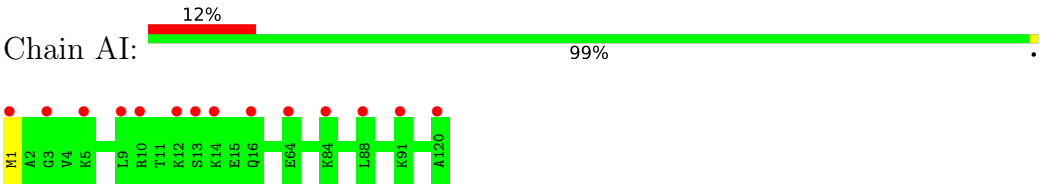
• Molecule 35: 60S ribosomal protein L34-B

Chain CB:



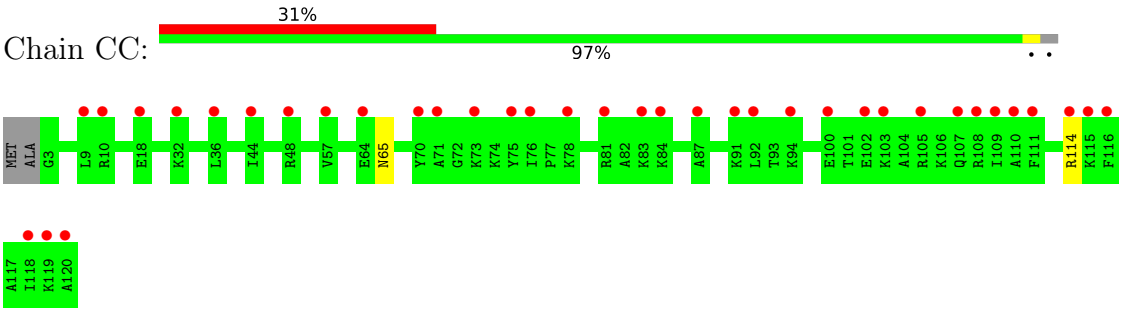
• Molecule 36: Ribosomal protein L29

Chain AI:



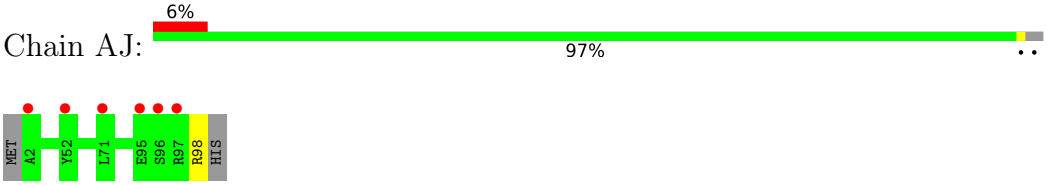
• Molecule 36: Ribosomal protein L29

Chain CC:



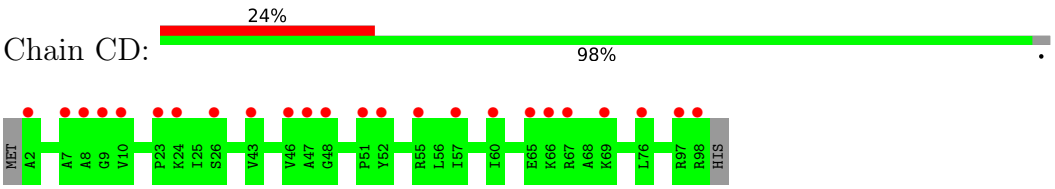
• Molecule 37: 60S ribosomal protein L36

Chain AJ:



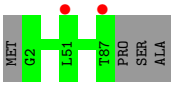
• Molecule 37: 60S ribosomal protein L36

Chain CD:



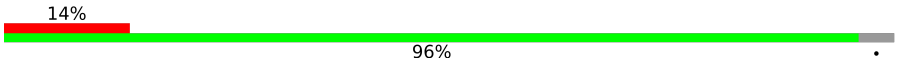
• Molecule 38: 60S ribosomal protein L37-B

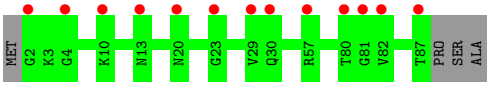
Chain AK:



• Molecule 38: 60S ribosomal protein L37-B

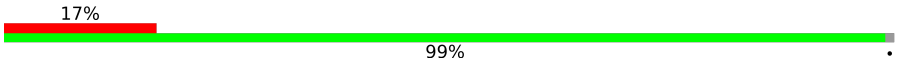
Chain CE:

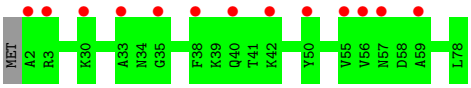




• Molecule 39: 60S ribosomal protein L38

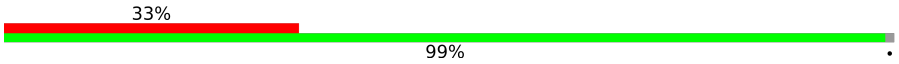
Chain AL:

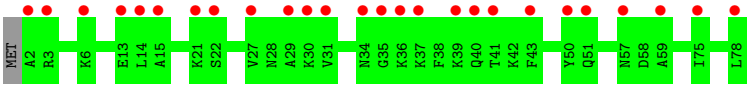




• Molecule 39: 60S ribosomal protein L38

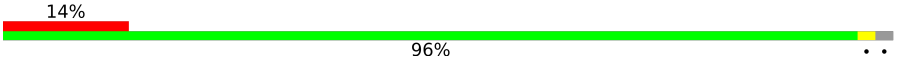
Chain CF:

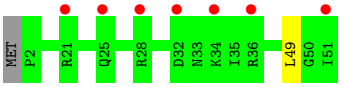




• Molecule 40: 60S ribosomal protein L39

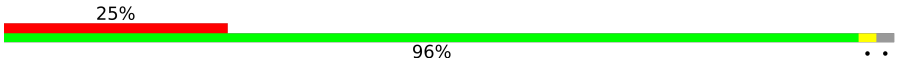
Chain AM:

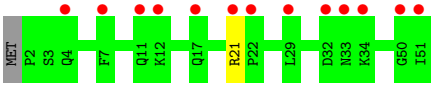




• Molecule 40: 60S ribosomal protein L39

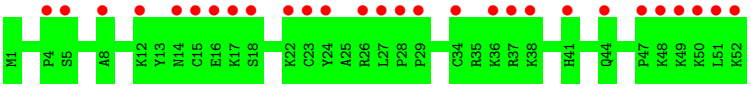
Chain CG:





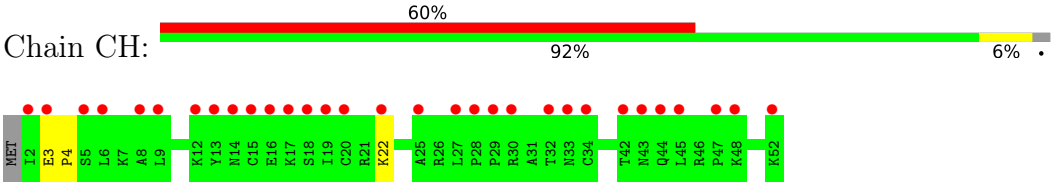
• Molecule 41: 60S ribosomal protein L40-B

Chain AN:



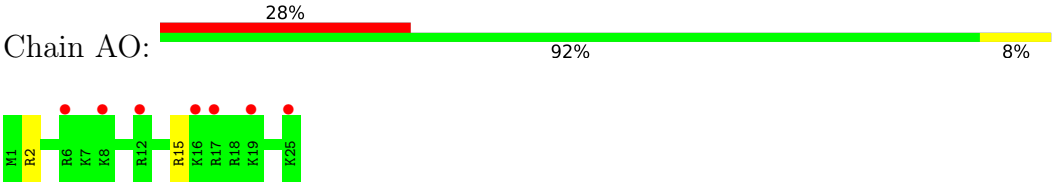
• Molecule 41: 60S ribosomal protein L40-B

Chain CH:



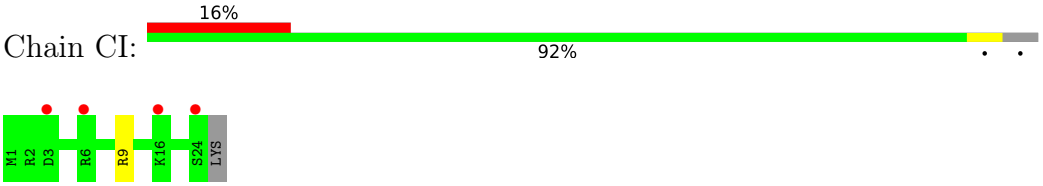
• Molecule 42: 60S ribosomal protein L41

Chain AO:



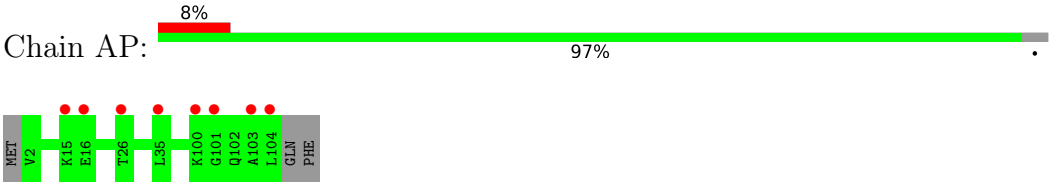
• Molecule 42: 60S ribosomal protein L41

Chain CI:



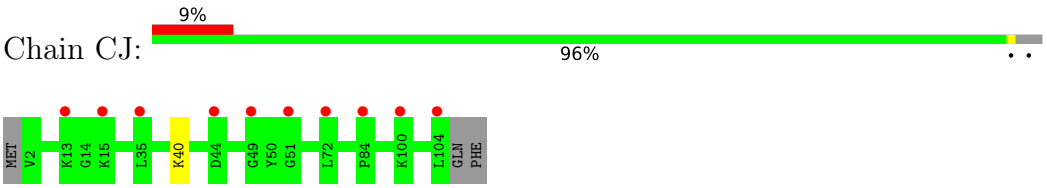
• Molecule 43: 60S ribosomal protein L42-B

Chain AP:



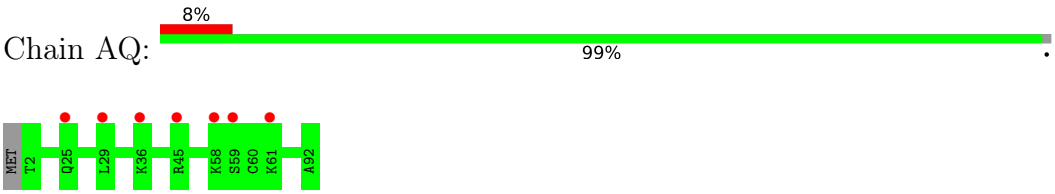
• Molecule 43: 60S ribosomal protein L42-B

Chain CJ:



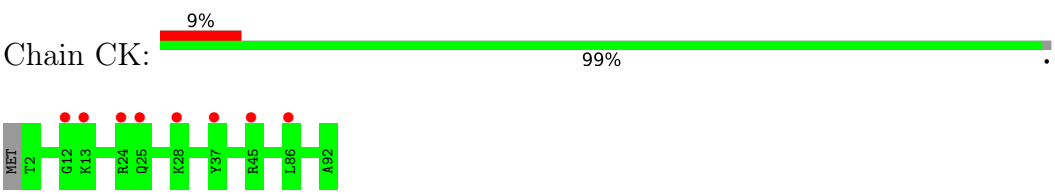
• Molecule 44: 60S ribosomal protein L43-A

Chain AQ:



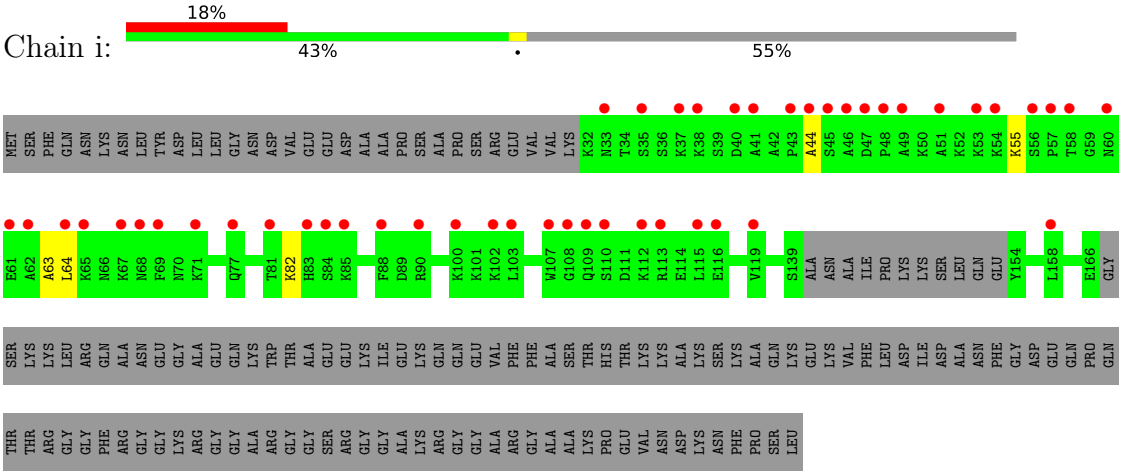
• Molecule 44: 60S ribosomal protein L43-A

Chain CK:



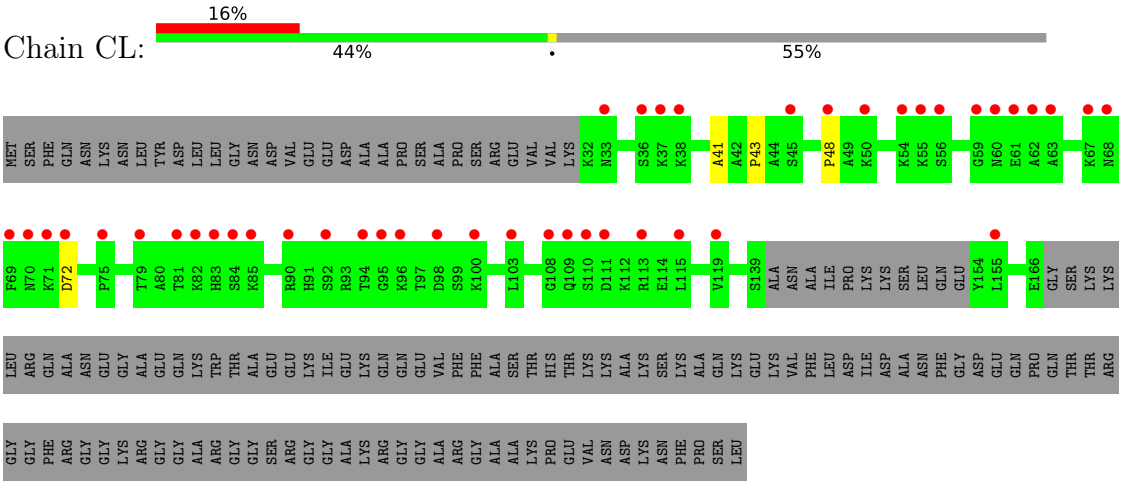
• Molecule 45: 60S ribosomal protein CAALFM_C304810CA

Chain i:



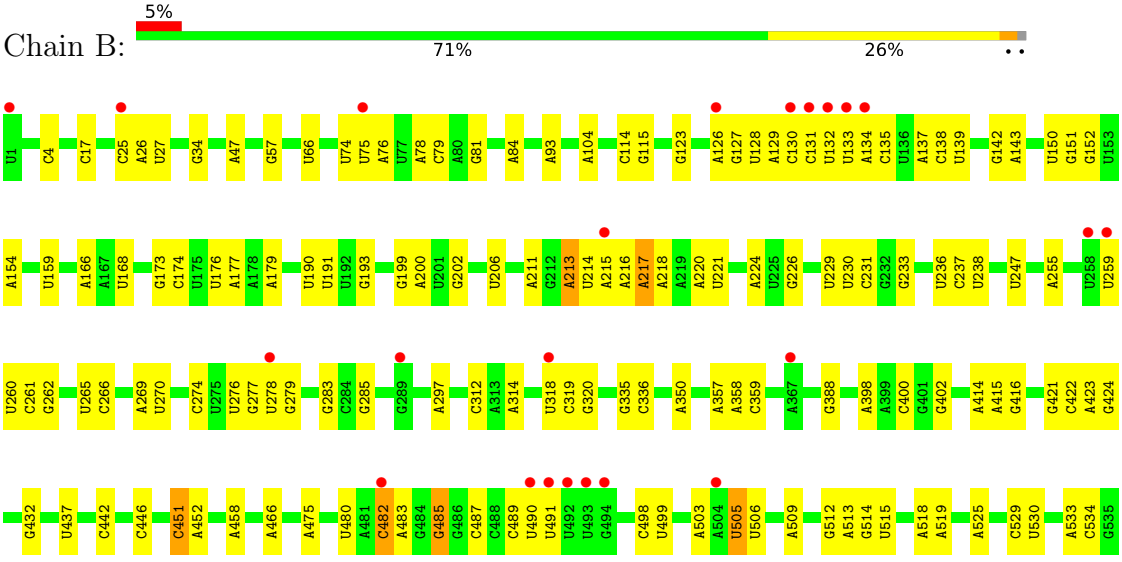
• Molecule 45: 60S ribosomal protein CAALFM_C304810CA

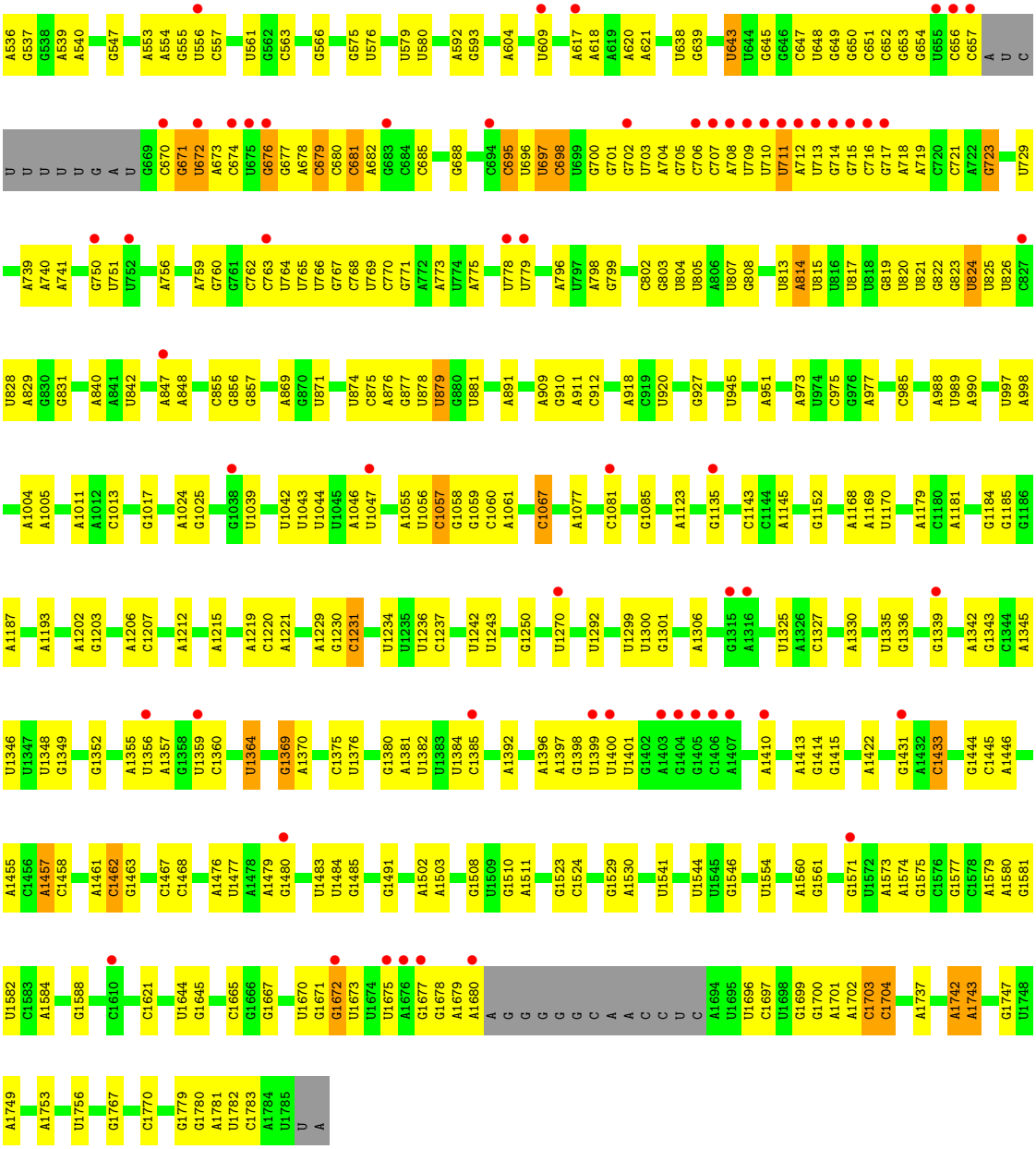
Chain CL:



• Molecule 46: 18S

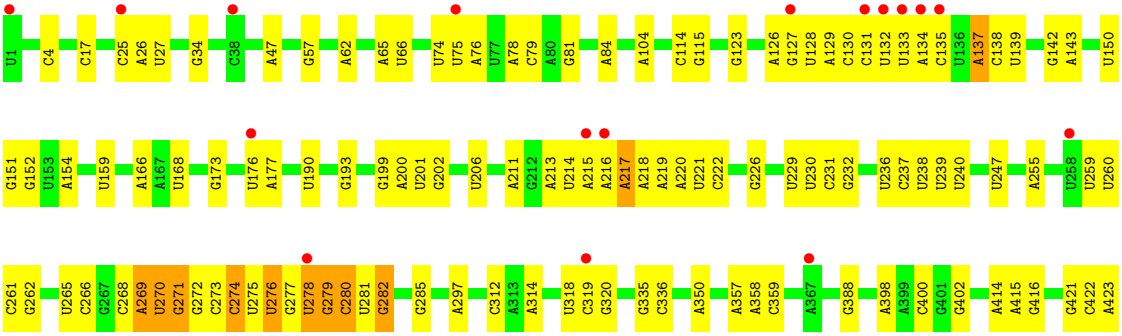
Chain B:

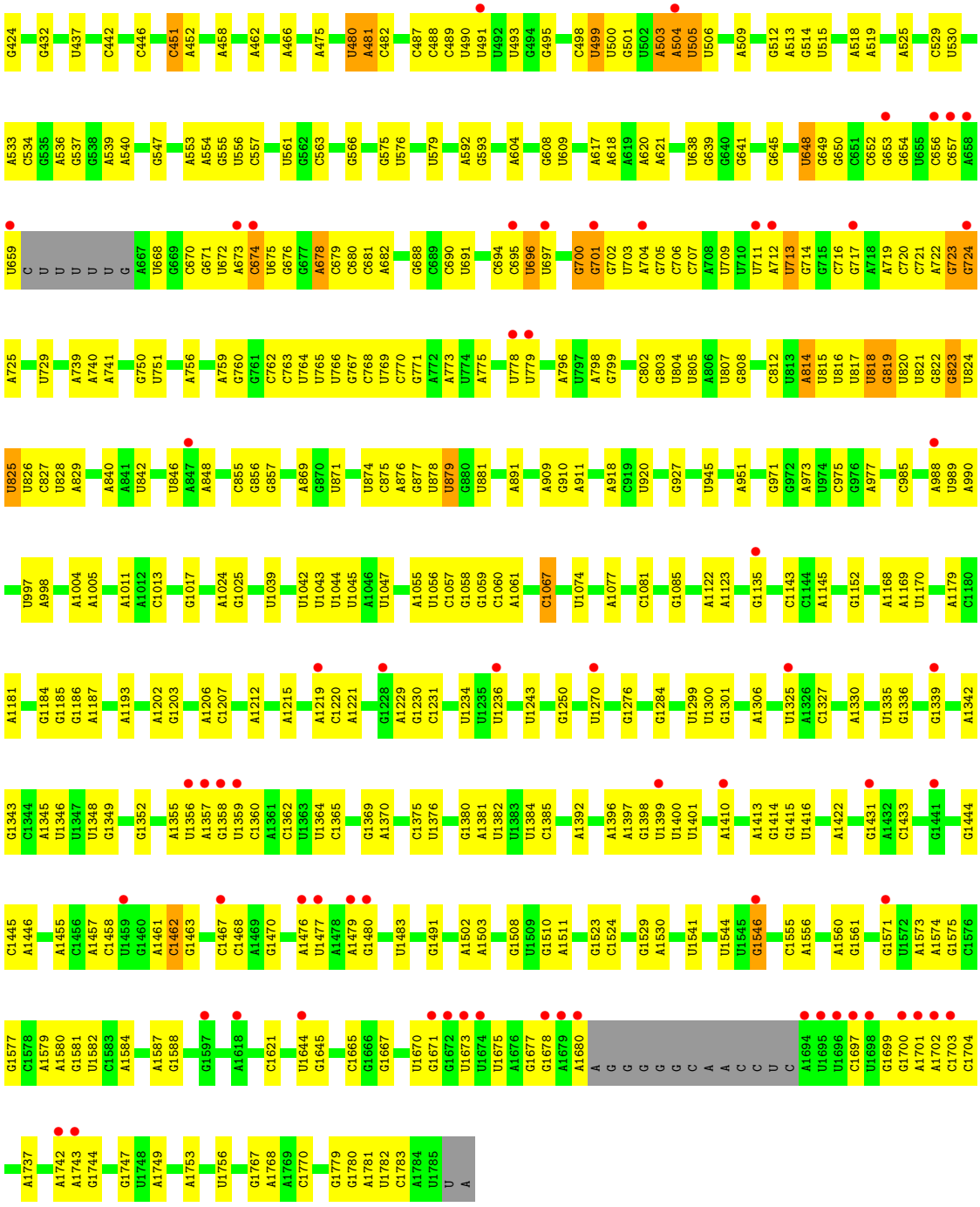




- Molecule 46: 18S

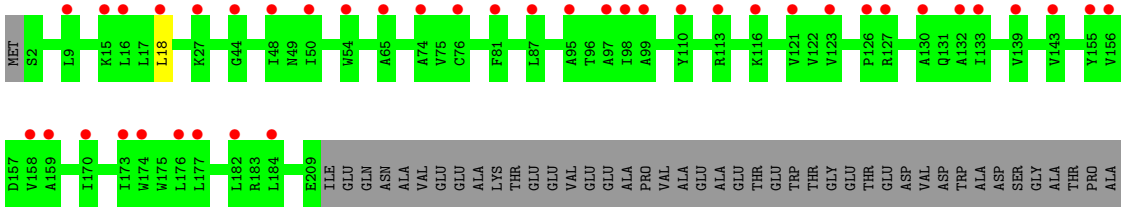
Chain CM:





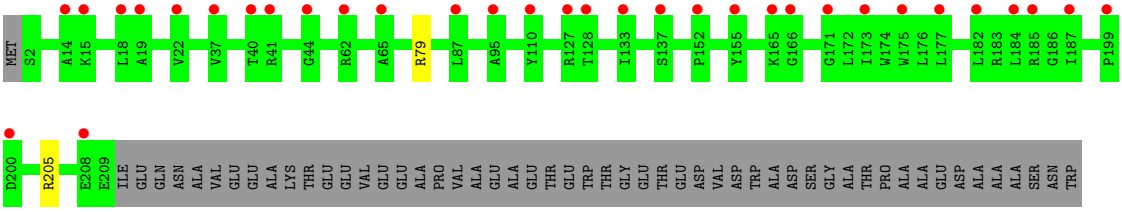
• Molecule 47: 40S ribosomal protein S0

Chain C:



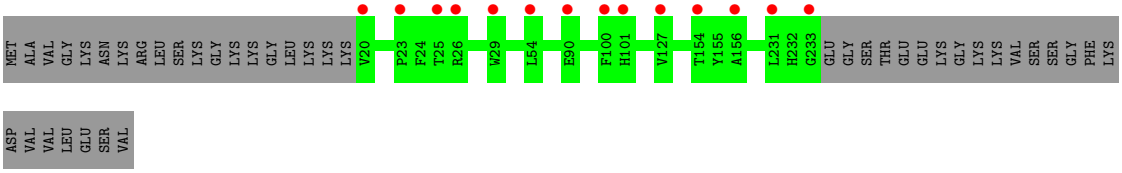
• Molecule 47: 40S ribosomal protein S0

Chain CN:



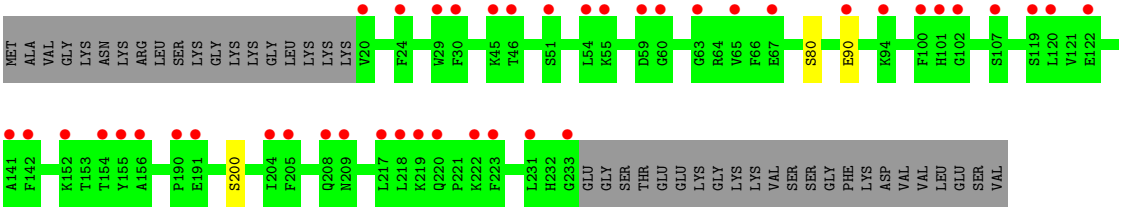
• Molecule 48: 40S ribosomal protein S1

Chain D:



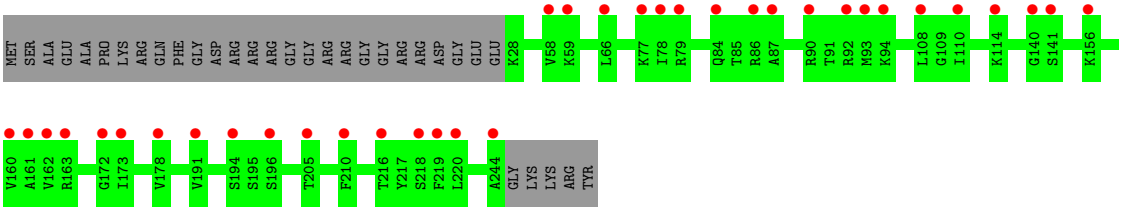
• Molecule 48: 40S ribosomal protein S1

Chain CO:



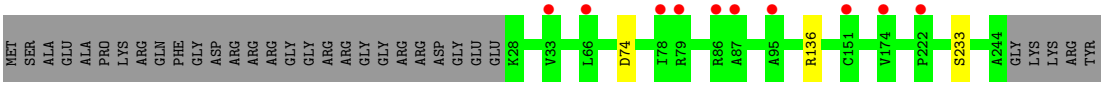
• Molecule 49: Ribosomal protein S5

Chain E:

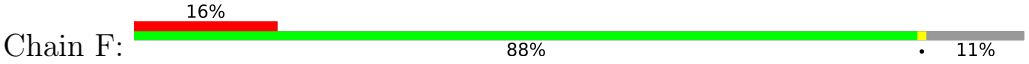


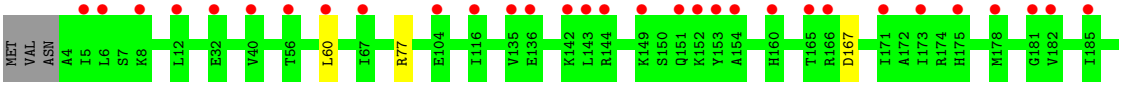
• Molecule 49: Ribosomal protein S5

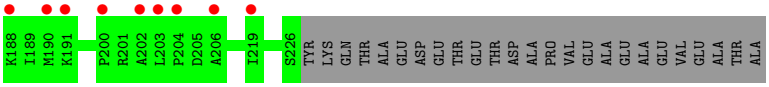
Chain CP:



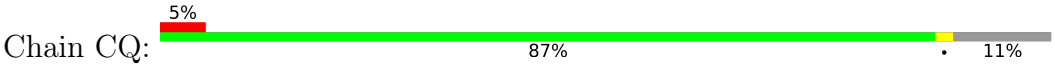
• Molecule 50: Ribosomal protein S3

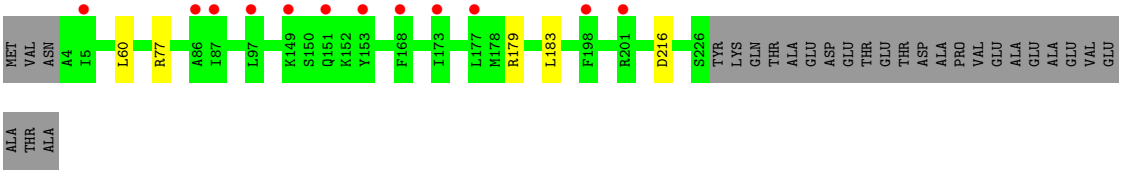




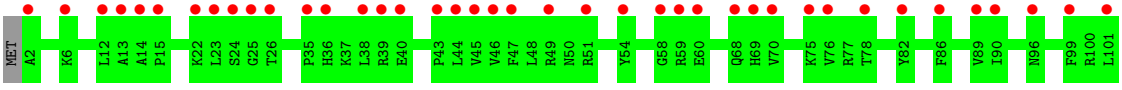


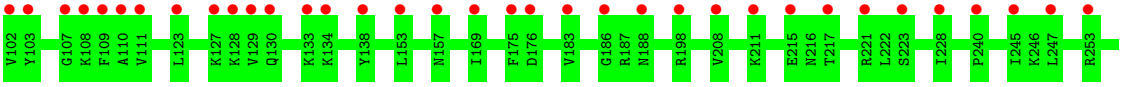
• Molecule 50: Ribosomal protein S3

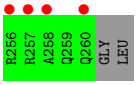




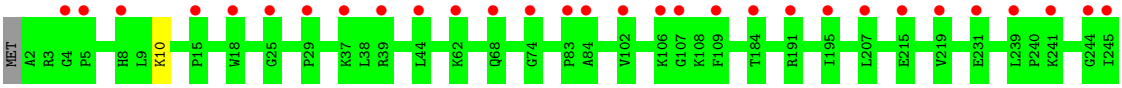
• Molecule 51: 40S ribosomal protein S4

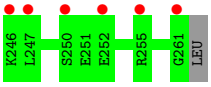






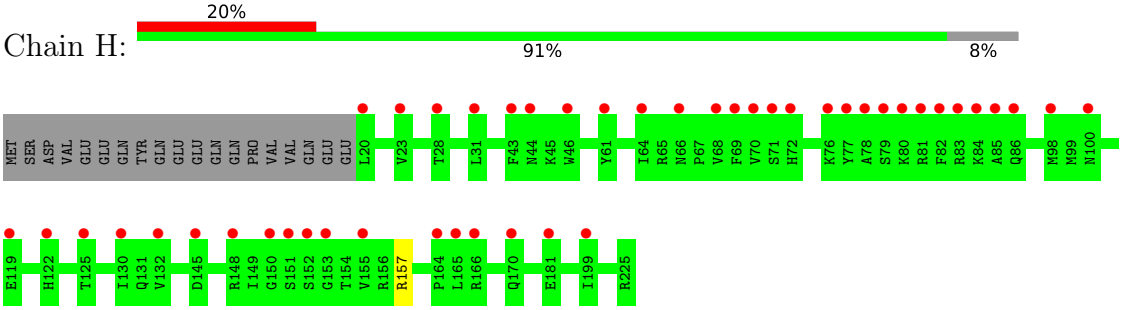
• Molecule 51: 40S ribosomal protein S4





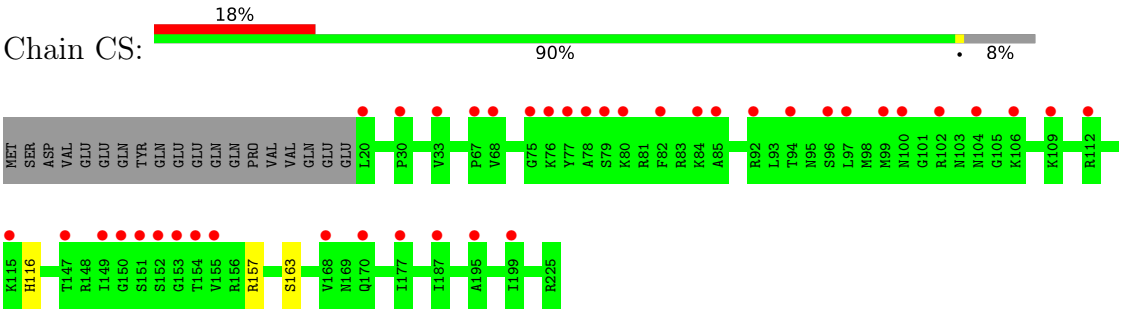
• Molecule 52: Ribosomal protein S7

Chain H:



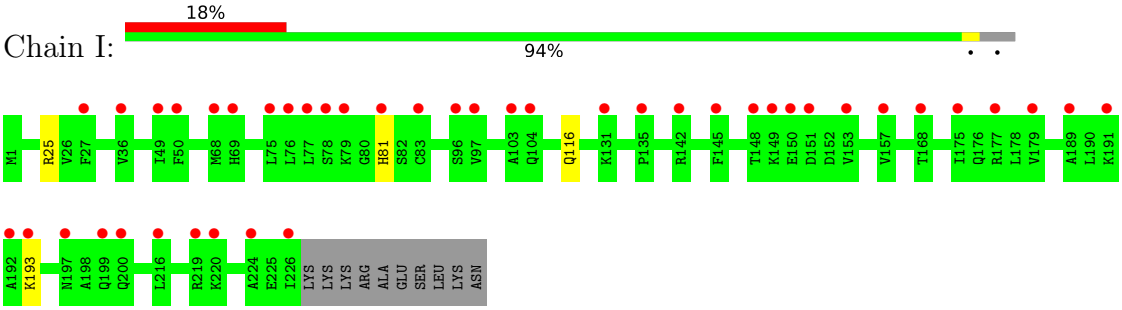
• Molecule 52: Ribosomal protein S7

Chain CS:



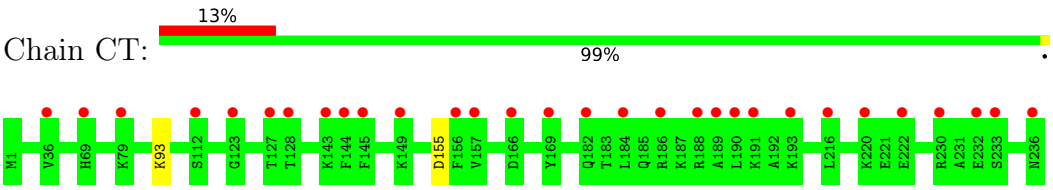
• Molecule 53: 40S ribosomal protein S6

Chain I:



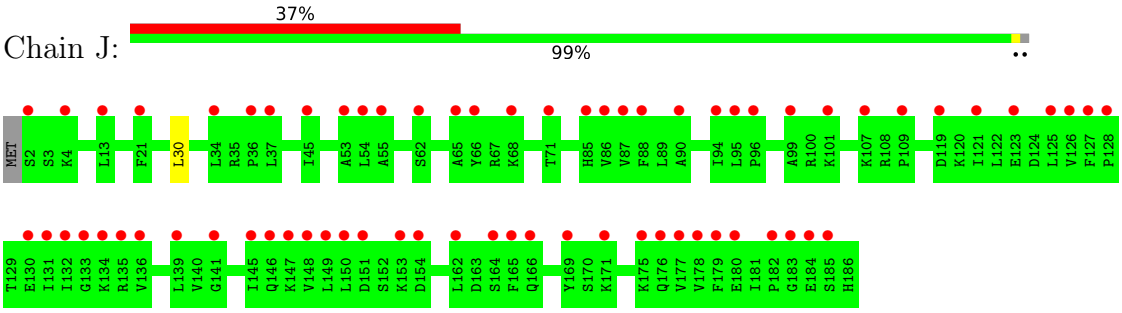
• Molecule 53: 40S ribosomal protein S6

Chain CT:



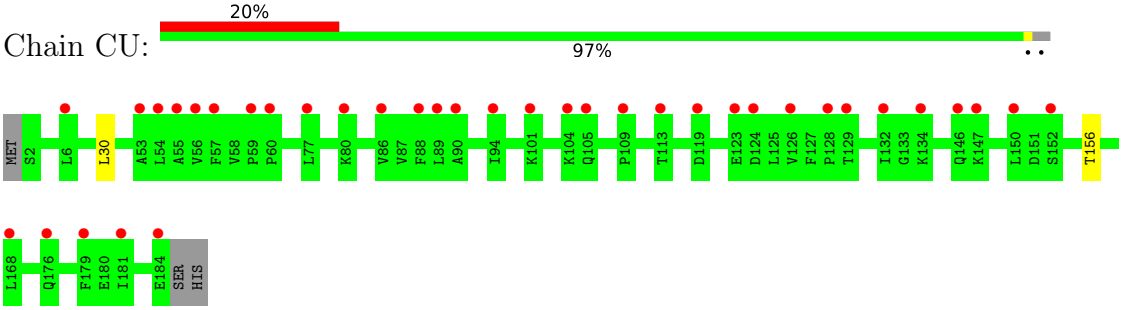
• Molecule 54: 40S ribosomal protein S7

Chain J:



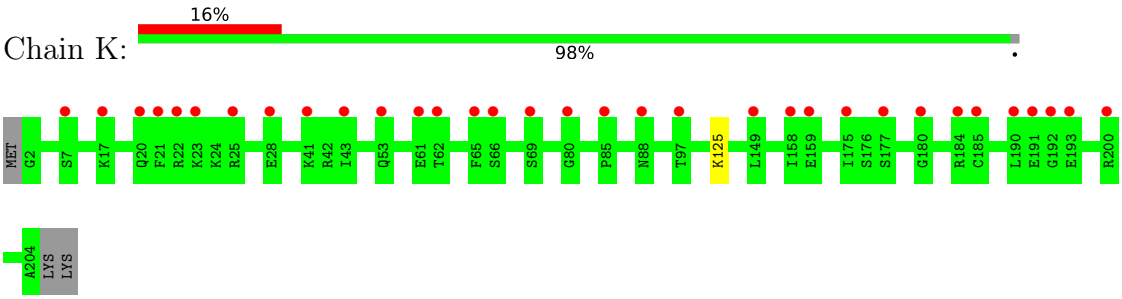
• Molecule 54: 40S ribosomal protein S7

Chain CU:



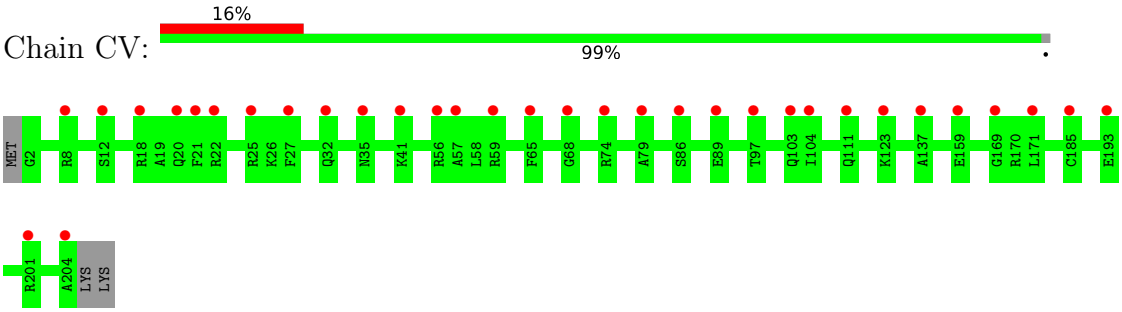
• Molecule 55: 40S ribosomal protein S8

Chain K:



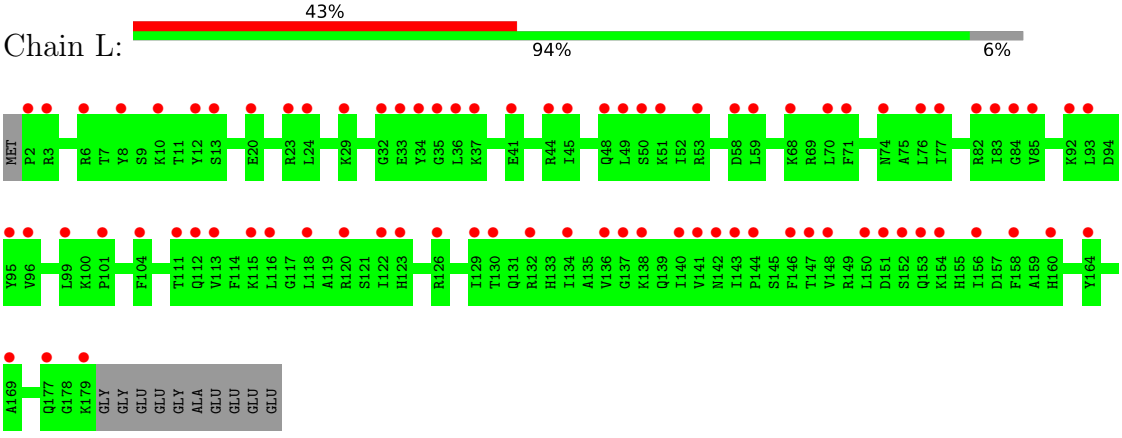
• Molecule 55: 40S ribosomal protein S8

Chain CV:



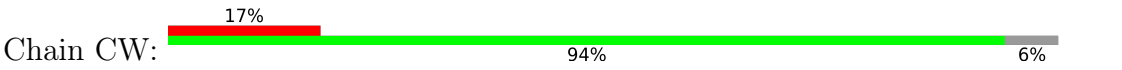
• Molecule 56: Ribosomal protein S4

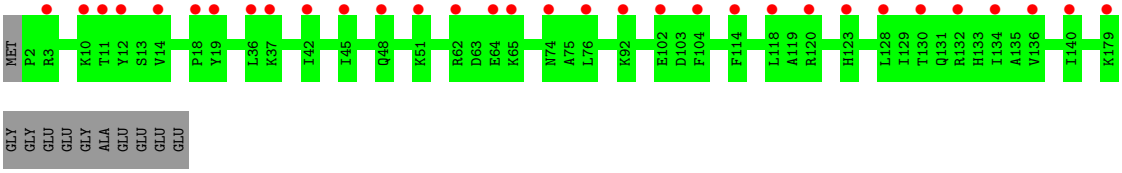
Chain L:



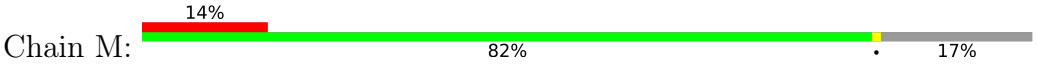
• Molecule 56: Ribosomal protein S4

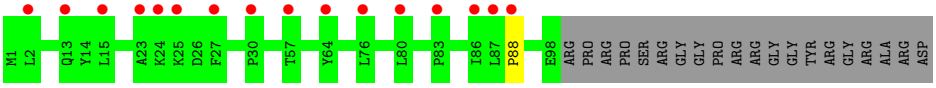
Chain CW:



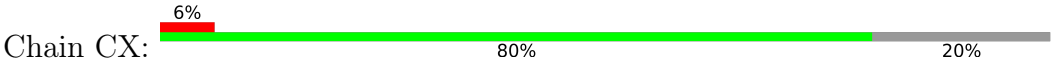


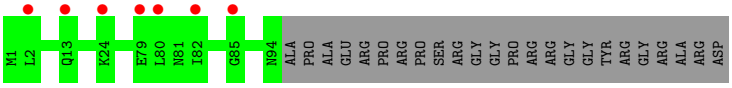
• Molecule 57: 40S ribosomal protein S10-A



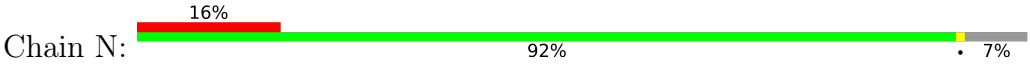


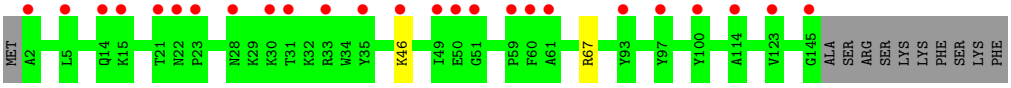
• Molecule 57: 40S ribosomal protein S10-A



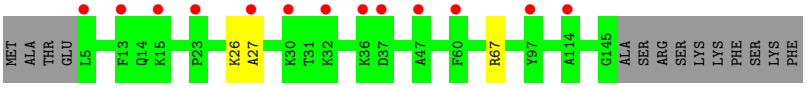


• Molecule 58: 40S ribosomal protein S11A

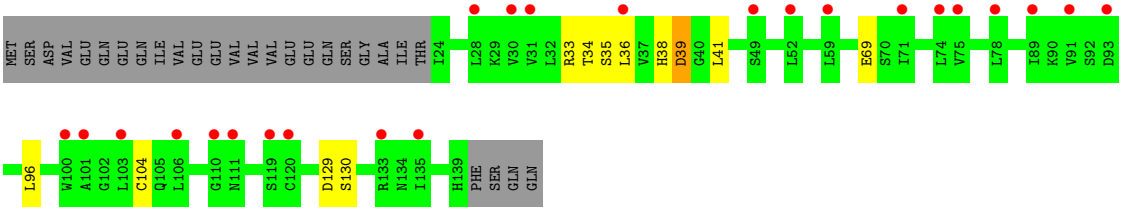




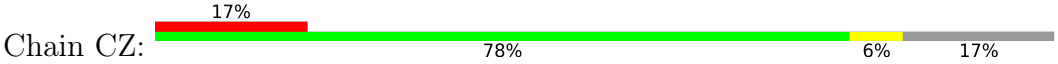
• Molecule 58: 40S ribosomal protein S11A

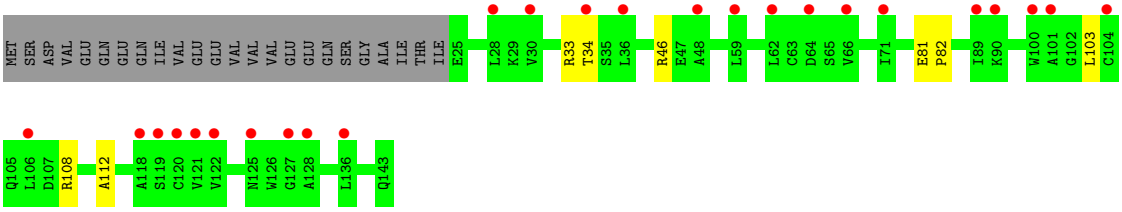


• Molecule 59: 40S ribosomal protein S12

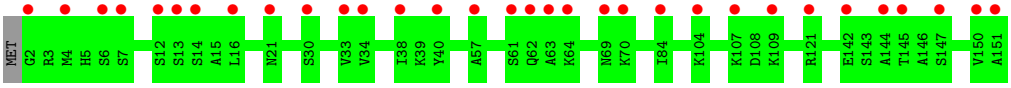


• Molecule 59: 40S ribosomal protein S12

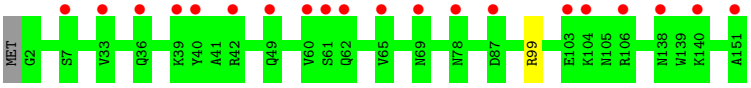




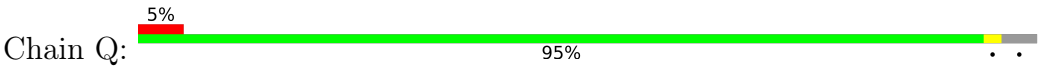
• Molecule 60: 40S ribosomal protein S13

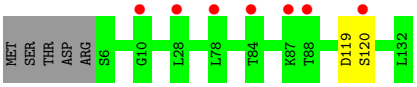


• Molecule 60: 40S ribosomal protein S13

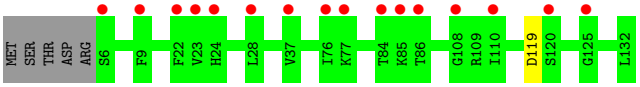


• Molecule 61: 40S ribosomal protein S14-A

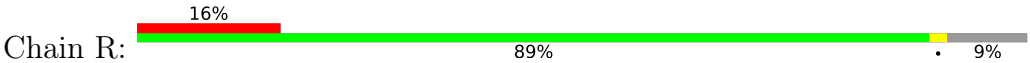


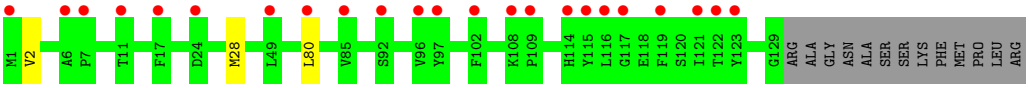


• Molecule 61: 40S ribosomal protein S14-A

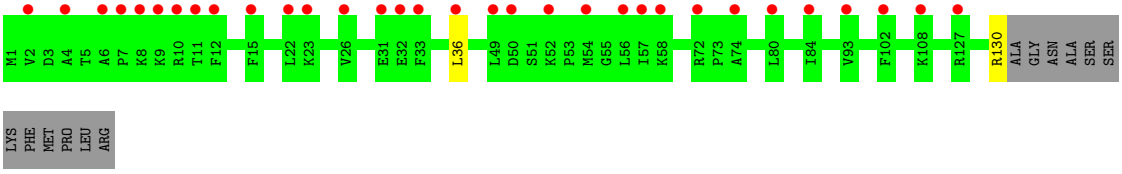


• Molecule 62: 40S ribosomal protein S15



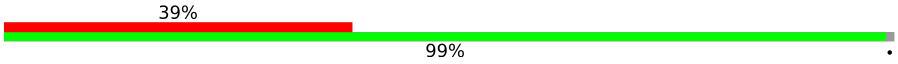


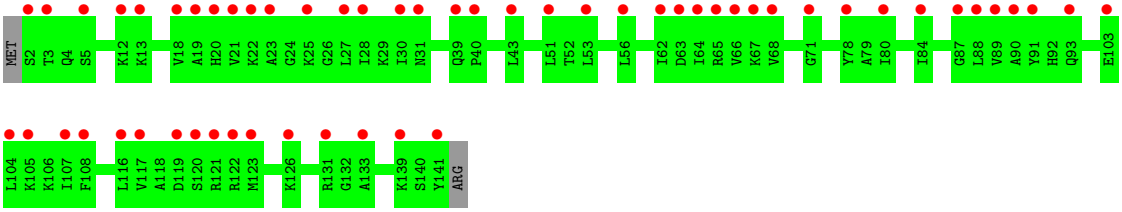
• Molecule 62: 40S ribosomal protein S15



• Molecule 63: 40S ribosomal protein S16

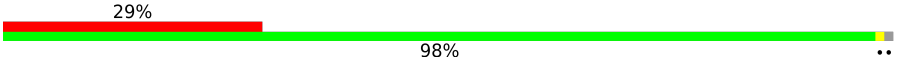
Chain S:

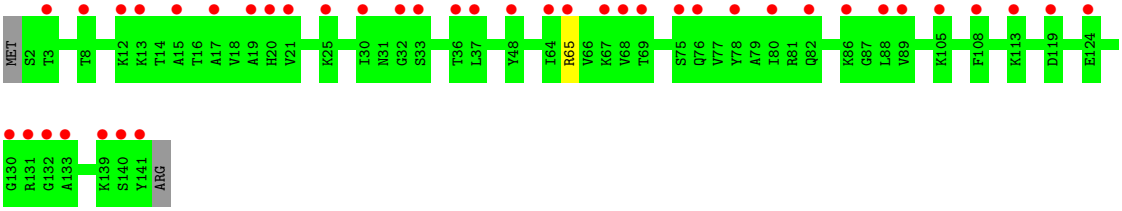




• Molecule 63: 40S ribosomal protein S16

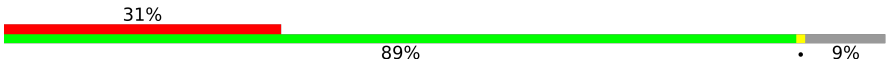
Chain DD:

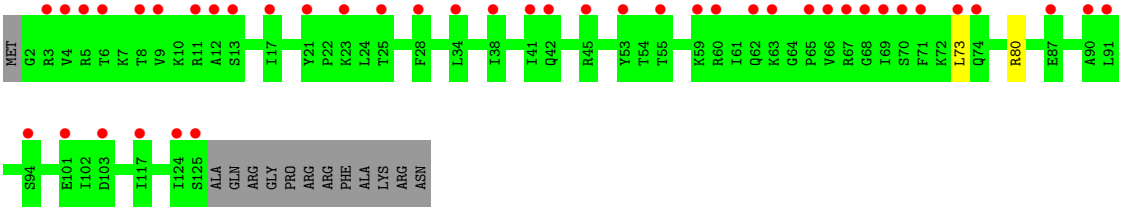




• Molecule 64: 40S ribosomal protein S17-B

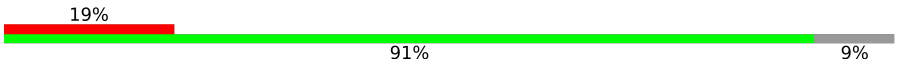
Chain T:

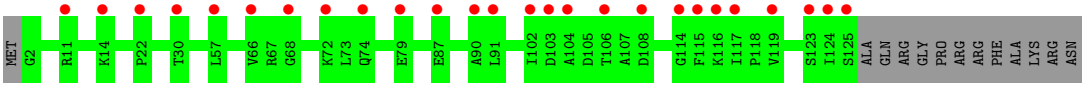




• Molecule 64: 40S ribosomal protein S17-B

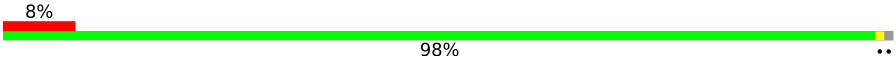
Chain DE:

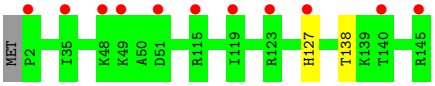




• Molecule 65: 40S ribosomal protein S18-B

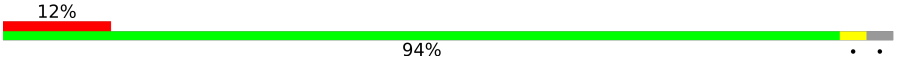
Chain U:

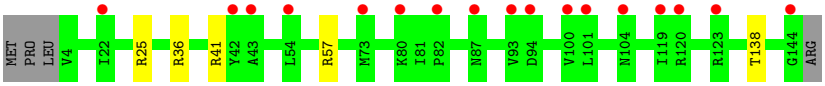




• Molecule 65: 40S ribosomal protein S18-B

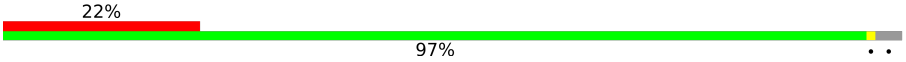
Chain DF:

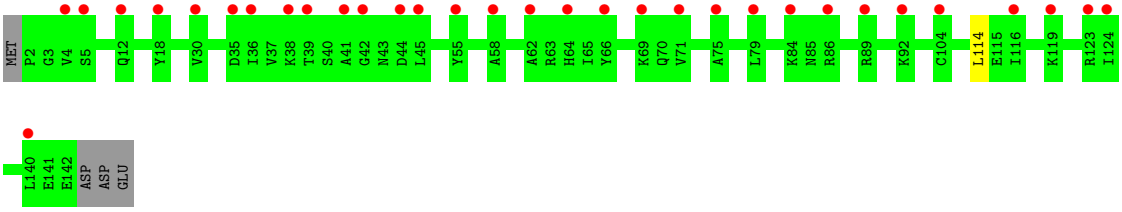




• Molecule 66: 40S ribosomal protein S19-A

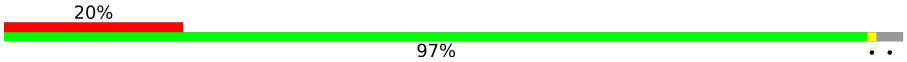
Chain V:

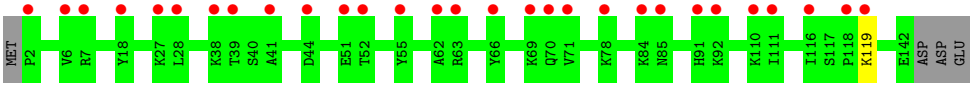




• Molecule 66: 40S ribosomal protein S19-A

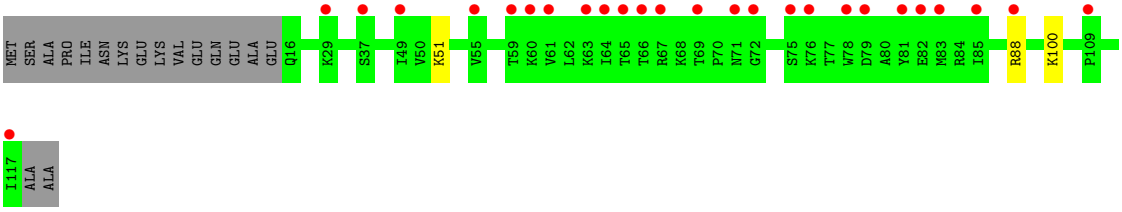
Chain DG:





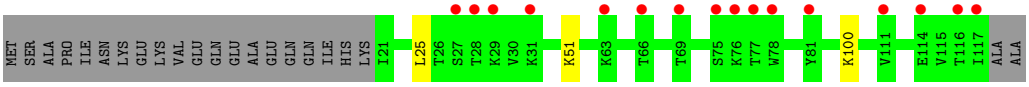
• Molecule 67: Ribosomal protein S10

Chain W:



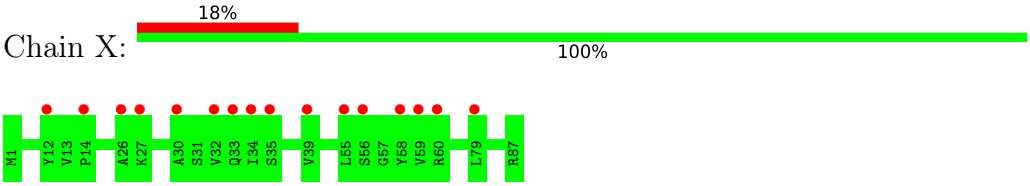
• Molecule 67: Ribosomal protein S10

Chain DH:



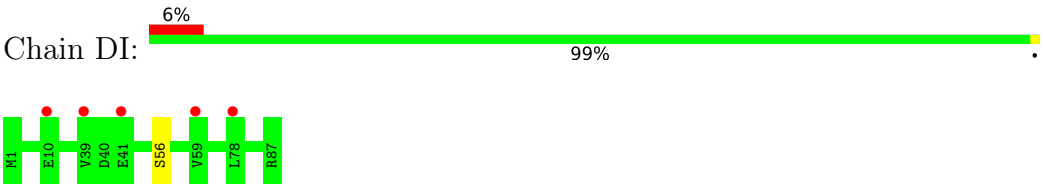
• Molecule 68: 40S ribosomal protein S21

Chain X:



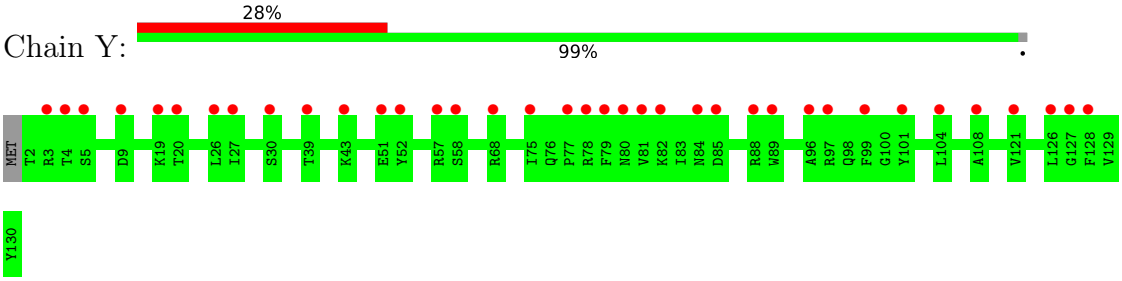
• Molecule 68: 40S ribosomal protein S21

Chain DI:



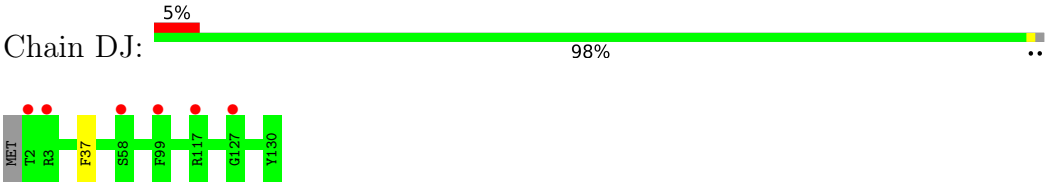
• Molecule 69: 40S ribosomal protein S22-A

Chain Y:



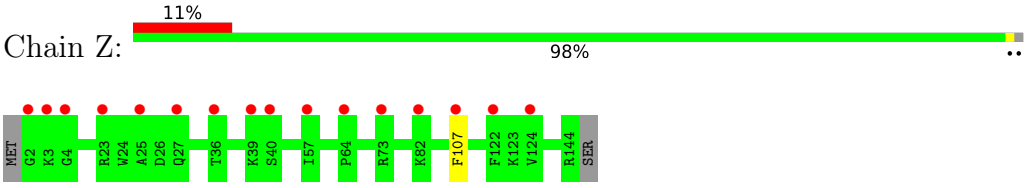
• Molecule 69: 40S ribosomal protein S22-A

Chain DJ:



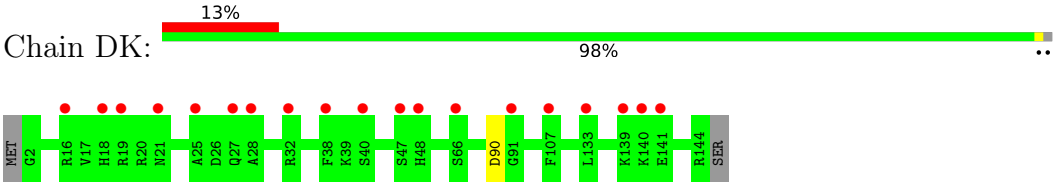
• Molecule 70: Ribosomal protein S23 (S12)

Chain Z:



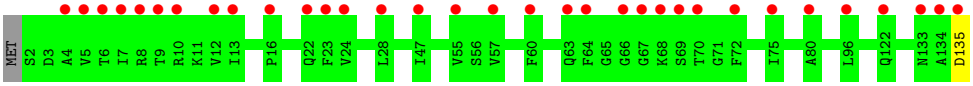
• Molecule 70: Ribosomal protein S23 (S12)

Chain DK:



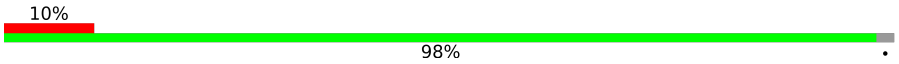
• Molecule 71: 40S ribosomal protein S24

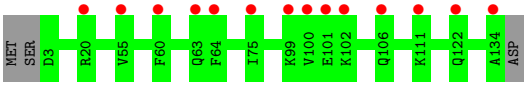
Chain a:



• Molecule 71: 40S ribosomal protein S24

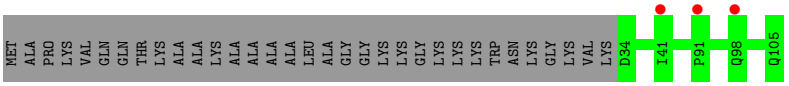
Chain DL:





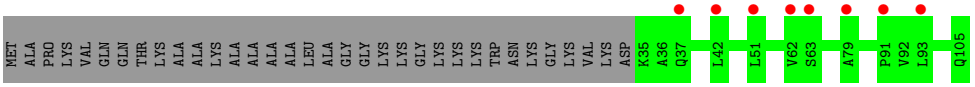
• Molecule 72: 40S ribosomal protein S25

Chain b:



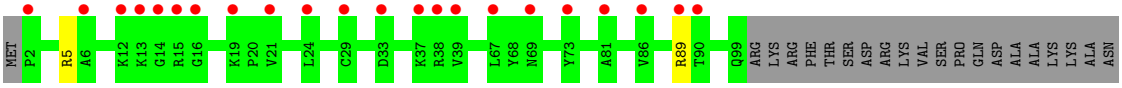
• Molecule 72: 40S ribosomal protein S25

Chain DM:



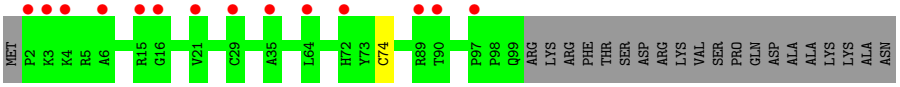
• Molecule 73: 40S ribosomal protein S26

Chain c:



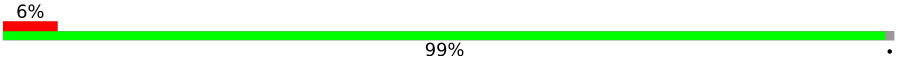
• Molecule 73: 40S ribosomal protein S26

Chain DN:



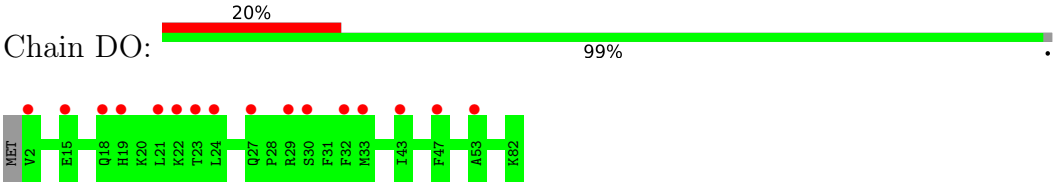
• Molecule 74: 40S ribosomal protein S27

Chain d:



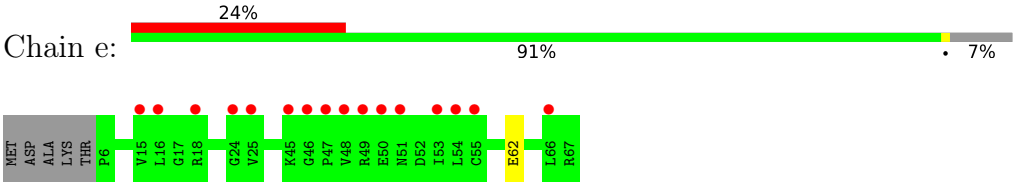
• Molecule 74: 40S ribosomal protein S27

Chain DO:



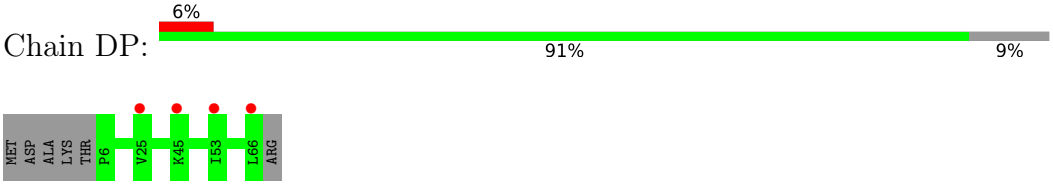
• Molecule 75: 40S ribosomal protein S28-B

Chain e:



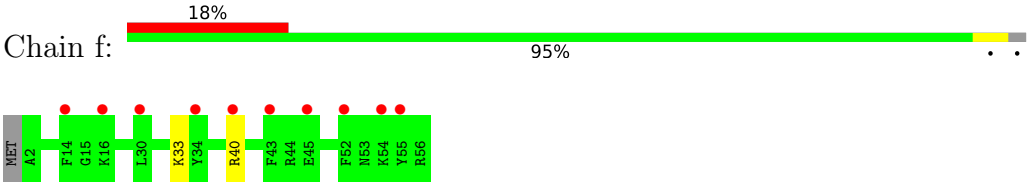
• Molecule 75: 40S ribosomal protein S28-B

Chain DP:



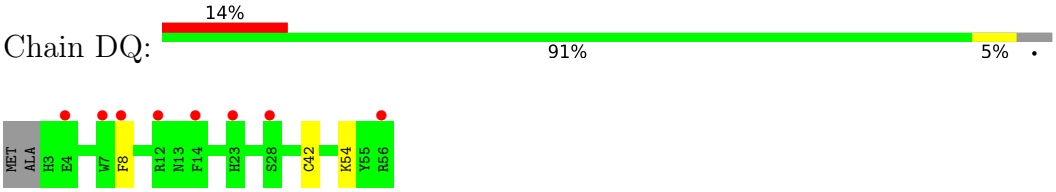
• Molecule 76: 40S ribosomal protein S29A

Chain f:



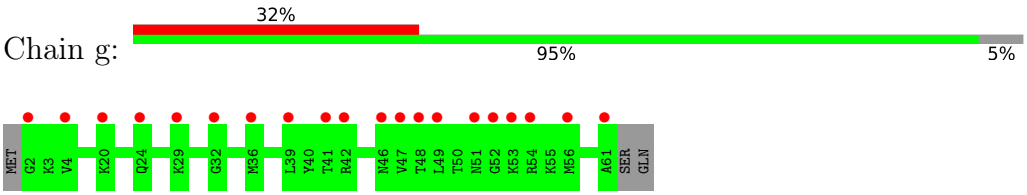
• Molecule 76: 40S ribosomal protein S29A

Chain DQ:



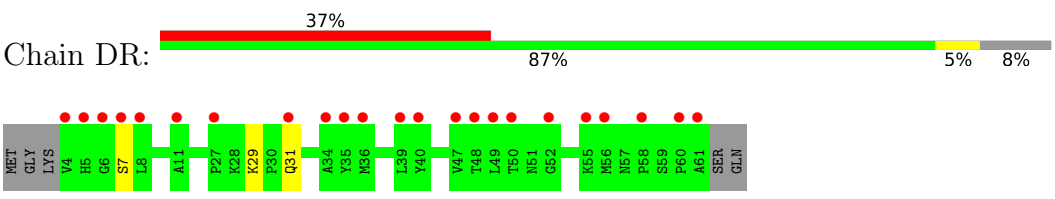
• Molecule 77: 40S ribosomal protein S30

Chain g:



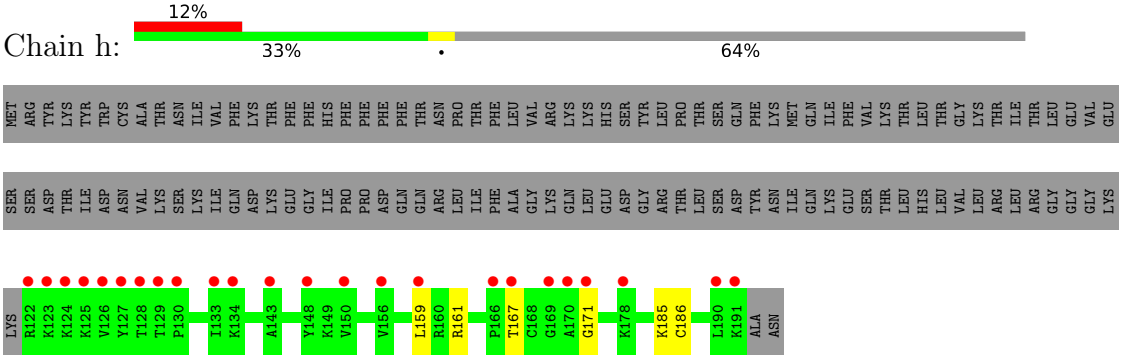
• Molecule 77: 40S ribosomal protein S30

Chain DR:



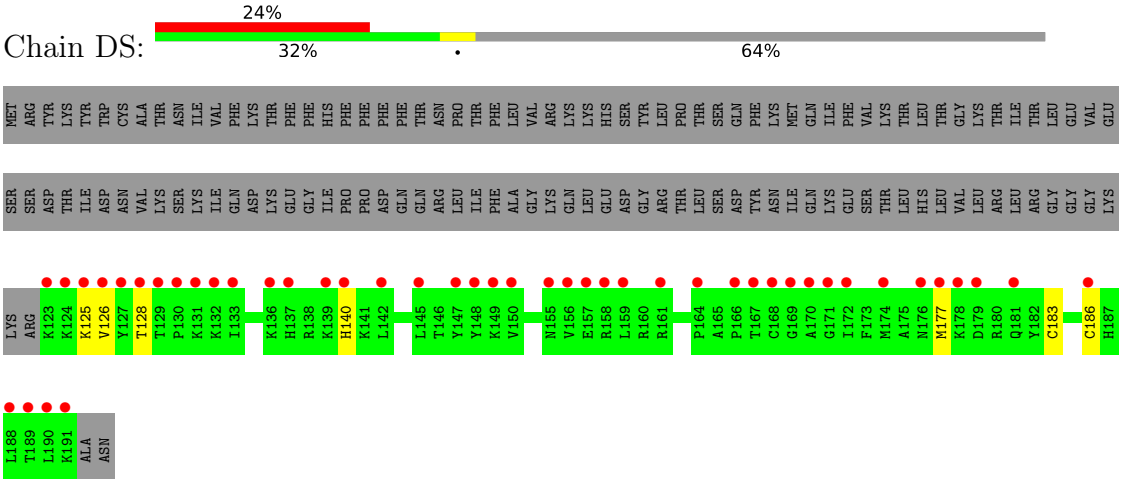
• Molecule 78: Ubiquitin-40S ribosomal protein S31 fusion protein

Chain h:



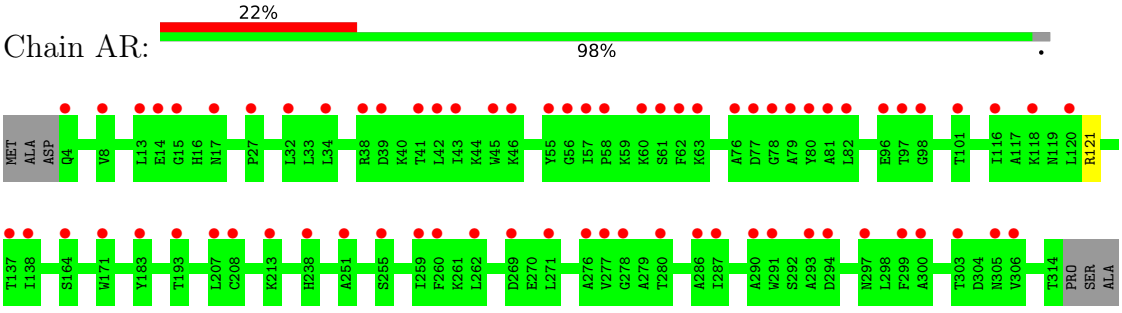
• Molecule 78: Ubiquitin-40S ribosomal protein S31 fusion protein

Chain DS:



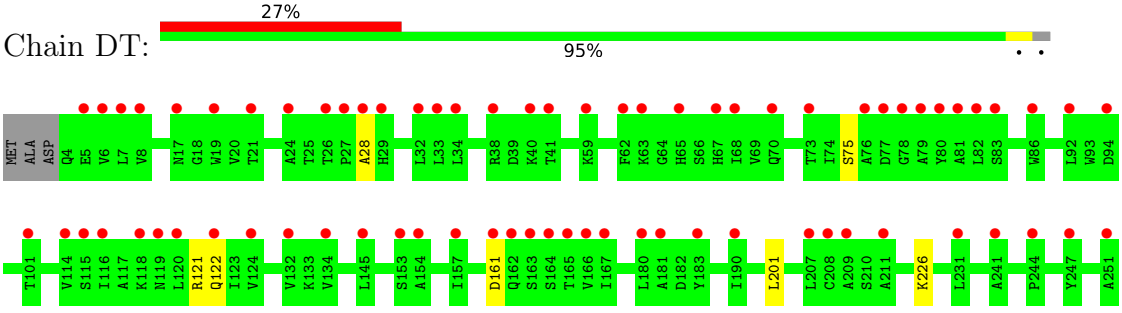
• Molecule 79: Guanine nucleotide-binding protein subunit beta-like protein

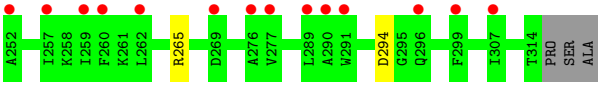
Chain AR:



• Molecule 79: Guanine nucleotide-binding protein subunit beta-like protein

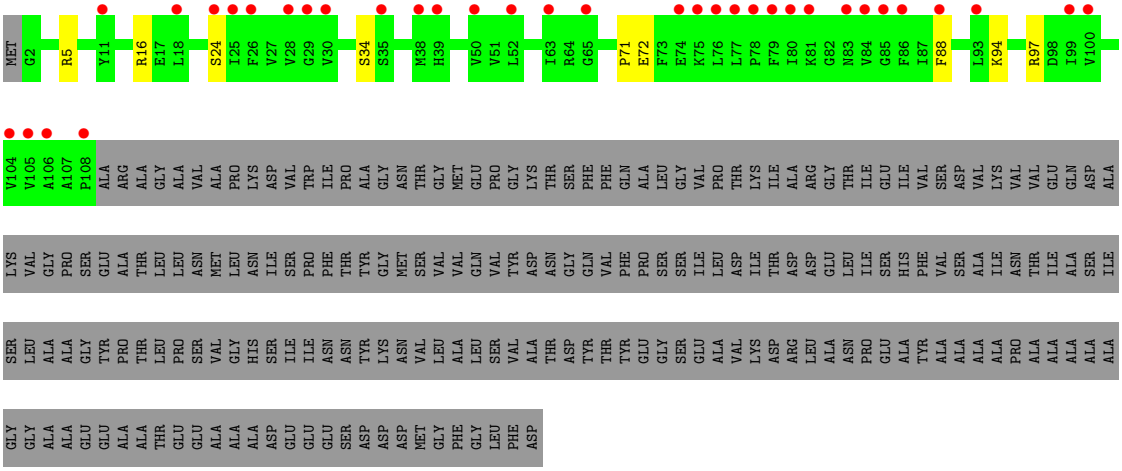
Chain DT:





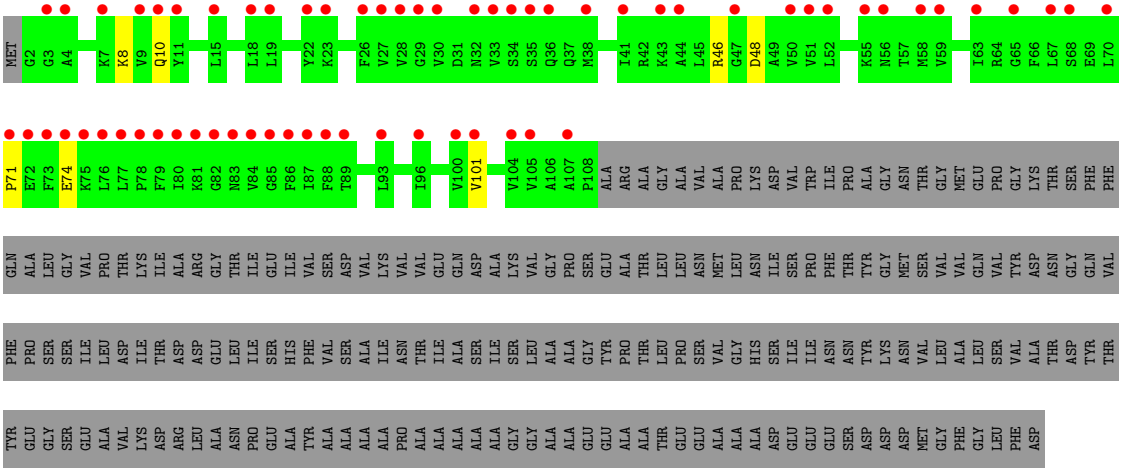
• Molecule 80: 60S acidic ribosomal protein P0

Chain P0:



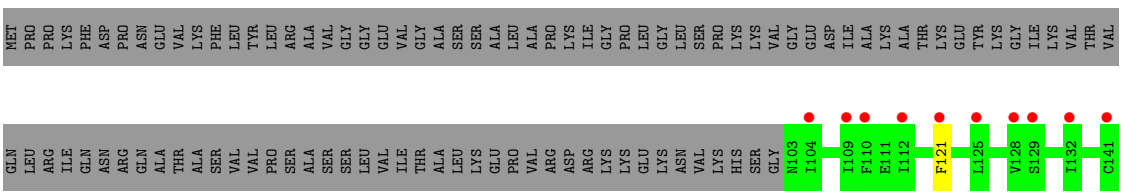
• Molecule 80: 60S acidic ribosomal protein P0

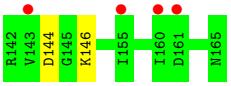
Chain p0:



• Molecule 81: 60S ribosomal protein L12-A

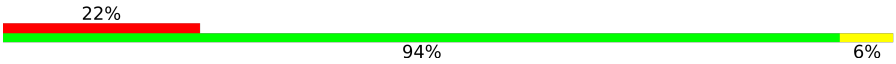
Chain 12:

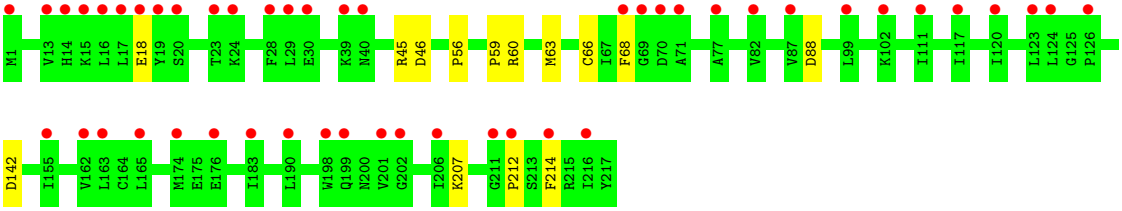




• Molecule 82: Ribosomal protein

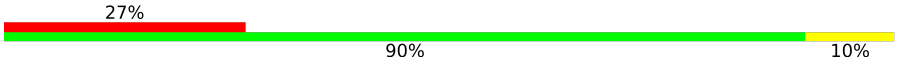
Chain L1:

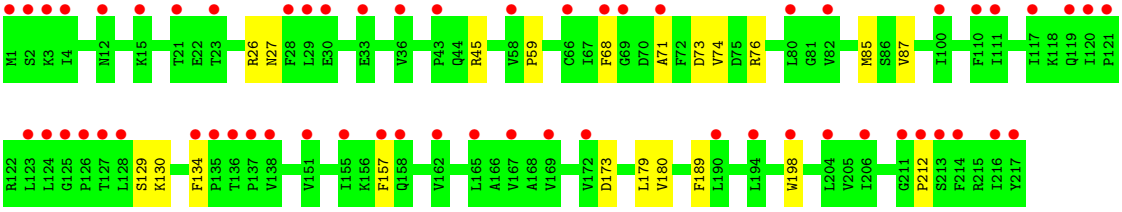




• Molecule 82: Ribosomal protein

Chain l1:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	299.18Å 294.18Å 450.09Å 90.00° 100.05° 90.00°	Depositor
Resolution (Å)	162.01 – 3.00 162.01 – 3.00	Depositor EDS
% Data completeness (in resolution range)	99.3 (162.01-3.00) 88.2 (162.01-3.00)	Depositor EDS
R_{merge}	0.64	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.88 (at 3.01Å)	Xtriage
Refinement program	PHENIX 1.19rc4_4035	Depositor
R, R_{free}	0.264 , 0.281 0.266 , 0.282	Depositor DCC
R_{free} test set	2000 reflections (0.13%)	wwPDB-VP
Wilson B-factor (Å^2)	54.0	Xtriage
Anisotropy	0.116	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.24 , 42.9	EDS
L-test for twinning[2]	$< \|L\| > = 0.43$, $< L^2 > = 0.26$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.88	EDS
Total number of atoms	409812	wwPDB-VP
Average B, all atoms (Å^2)	92.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.46% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: MG, 3K5, GET, ZN

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|>5$	RMSZ	#$\|Z\|>5$
1	1	0.48	0/76948	1.01	128/119959 (0.1%)
1	AS	0.46	0/77254	1.01	132/120438 (0.1%)
2	3	0.40	0/2884	0.88	0/4492
2	AT	0.43	0/2884	0.88	0/4492
3	4	0.40	0/3724	0.88	0/5798
3	AU	0.35	0/3746	0.86	2/5832 (0.0%)
4	AW	0.32	0/1922	0.60	0/2581
4	j	0.35	0/1922	0.64	1/2581 (0.0%)
5	AX	0.35	0/3145	0.62	0/4231
5	k	0.34	0/3145	0.61	1/4231 (0.0%)
6	AY	0.30	0/2799	0.57	0/3777
6	l	0.32	0/2799	0.59	0/3777
7	AZ	0.30	0/2447	0.54	0/3294
7	m	0.30	0/2479	0.56	0/3337
8	BA	0.32	0/1231	0.59	0/1662
8	n	0.32	0/1263	0.58	0/1703
9	BB	0.33	0/1918	0.55	0/2575
9	o	0.33	0/1918	0.55	0/2575
10	BC	0.28	0/1835	0.51	0/2472
10	p	0.32	0/1869	0.54	0/2519
11	BD	0.30	0/1537	0.57	0/2067
11	q	0.32	0/1537	0.60	0/2067
12	BE	0.35	0/1724	0.60	0/2314
12	r	0.33	0/1724	0.60	0/2314
13	BF	0.31	0/1390	0.60	0/1861
13	s	0.30	0/1390	0.60	0/1861
14	BG	0.28	0/1637	0.56	0/2195
14	t	0.31	0/1637	0.59	0/2195
15	BH	0.31	0/1044	0.58	0/1407
15	u	0.31	0/1044	0.58	0/1407
16	BI	0.31	0/1753	0.63	0/2347
16	v	0.34	0/1753	0.64	0/2347

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	BJ	0.34	0/1620	0.58	0/2167
17	w	0.33	0/1620	0.57	0/2167
18	BK	0.30	0/1429	0.61	0/1920
18	x	0.32	0/1410	0.61	0/1895
19	BL	0.31	0/1482	0.61	0/1985
19	y	0.33	0/1482	0.62	0/1985
20	BM	0.29	0/1475	0.62	0/1961
20	z	0.29	0/1475	0.63	0/1961
21	0	0.33	0/1457	0.61	0/1962
21	BN	0.34	0/1457	0.58	0/1962
22	2	0.33	0/1285	0.58	0/1723
22	BO	0.34	0/1285	0.58	0/1723
23	5	0.27	0/846	0.48	0/1140
23	BP	0.30	0/841	0.53	0/1133
24	6	0.33	0/993	0.61	0/1339
24	BQ	0.34	0/993	0.63	0/1339
25	7	0.31	0/958	0.55	0/1267
25	BR	0.31	0/814	0.57	0/1079
26	8	0.30	0/990	0.56	0/1337
26	BS	0.28	0/976	0.53	0/1319
27	9	0.30	0/999	0.57	0/1334
27	BT	0.29	0/999	0.55	0/1334
28	AA	0.29	0/1112	0.50	0/1488
28	BU	0.28	0/1112	0.51	0/1488
29	AB	0.31	0/1199	0.58	0/1607
29	BV	0.30	0/1199	0.57	0/1607
30	AC	0.29	0/503	0.60	0/668
30	BW	0.29	0/498	0.56	0/661
31	AD	0.31	0/738	0.52	0/994
31	BX	0.28	0/738	0.51	0/994
32	AE	0.30	0/907	0.59	1/1219 (0.1%)
32	BY	0.29	0/907	0.60	0/1219
33	AF	0.32	0/1021	0.57	0/1368
33	BZ	0.31	0/1025	0.61	0/1372
34	AG	0.34	0/866	0.57	0/1165
34	CA	0.34	0/866	0.58	0/1165
35	AH	0.31	0/896	0.60	0/1195
35	CB	0.28	0/896	0.60	0/1195
36	AI	0.28	0/1003	0.58	0/1336
36	CC	0.27	0/990	0.57	0/1319
37	AJ	0.31	0/763	0.60	0/1012
37	CD	0.29	0/763	0.60	0/1012
38	AK	0.34	0/690	0.65	0/916

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	CE	0.30	0/690	0.61	0/916
39	AL	0.28	0/623	0.52	0/831
39	CF	0.29	0/623	0.59	0/831
40	AM	0.32	0/447	0.60	0/594
40	CG	0.31	0/447	0.65	0/594
41	AN	0.31	0/425	0.59	0/563
41	CH	0.33	0/417	0.62	0/553
42	AO	0.35	0/237	0.74	0/304
42	CI	0.37	0/228	0.75	0/293
43	AP	0.33	0/840	0.60	0/1110
43	CJ	0.32	0/840	0.58	0/1110
44	AQ	0.35	0/705	0.65	0/940
44	CK	0.30	0/705	0.62	0/940
45	CL	0.34	0/942	0.65	0/1258
45	i	0.32	0/942	0.68	0/1258
46	B	0.42	0/41987	1.02	91/65427 (0.1%)
46	CM	0.47	0/42081	1.05	118/65573 (0.2%)
47	C	0.27	0/1666	0.51	0/2273
47	CN	0.29	0/1666	0.53	0/2273
48	CO	0.28	0/1750	0.60	0/2354
48	D	0.28	0/1750	0.55	0/2354
49	CP	0.34	0/1657	0.57	0/2248
49	E	0.28	0/1657	0.54	0/2248
50	CQ	0.32	0/1731	0.66	3/2324 (0.1%)
50	F	0.29	0/1731	0.62	1/2324 (0.0%)
51	CR	0.30	0/2096	0.58	0/2822
51	G	0.29	0/2092	0.57	0/2817
52	CS	0.28	0/1631	0.56	0/2199
52	H	0.28	0/1631	0.57	0/2199
53	CT	0.31	0/1929	0.60	0/2571
53	I	0.28	0/1845	0.58	0/2464
54	CU	0.28	0/1499	0.57	0/2016
54	J	0.27	0/1516	0.56	0/2039
55	CV	0.33	0/1606	0.63	0/2150
55	K	0.31	0/1606	0.62	0/2150
56	CW	0.29	0/1478	0.59	0/1978
56	L	0.29	0/1478	0.58	0/1978
57	CX	0.32	0/809	0.61	0/1092
57	M	0.33	0/836	0.65	0/1130
58	CY	0.36	0/1154	0.61	0/1553
58	N	0.31	0/1175	0.59	0/1582
59	CZ	0.32	0/921	0.84	1/1240 (0.1%)
59	O	0.33	0/892	0.76	1/1203 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
60	DA	0.28	0/1210	0.56	0/1631
60	P	0.28	0/1210	0.53	0/1631
61	DB	0.30	0/953	0.65	0/1279
61	Q	0.35	0/953	0.66	0/1279
62	DC	0.34	0/1049	0.63	0/1409
62	R	0.35	0/1038	0.63	1/1395 (0.1%)
63	DD	0.28	0/1109	0.56	0/1486
63	S	0.29	0/1109	0.56	0/1486
64	DE	0.31	0/1009	0.64	0/1354
64	T	0.27	0/1009	0.64	1/1354 (0.1%)
65	DF	0.29	0/1178	0.60	0/1579
65	U	0.30	0/1205	0.60	0/1615
66	DG	0.30	0/1120	0.58	0/1508
66	V	0.29	0/1120	0.60	1/1508 (0.1%)
67	DH	0.30	0/772	0.62	1/1045 (0.1%)
67	W	0.27	0/818	0.58	0/1106
68	DI	0.32	0/683	0.62	0/918
68	X	0.28	0/683	0.60	0/918
69	DJ	0.33	0/1049	0.61	0/1412
69	Y	0.29	0/1049	0.56	0/1412
70	DK	0.36	0/1128	0.64	0/1505
70	Z	0.31	0/1128	0.64	0/1505
71	DL	0.29	0/1086	0.59	0/1447
71	a	0.28	0/1100	0.58	0/1466
72	DM	0.29	0/577	0.58	0/778
72	b	0.28	0/585	0.55	0/789
73	DN	0.30	0/791	0.62	0/1060
73	c	0.33	0/791	0.64	0/1060
74	DO	0.29	0/624	0.58	0/843
74	d	0.28	0/624	0.54	0/843
75	DP	0.30	0/478	0.73	0/640
75	e	0.27	0/489	0.70	0/654
76	DQ	0.37	0/461	0.67	0/613
76	f	0.33	0/466	0.60	0/620
77	DR	0.35	0/469	0.72	0/626
77	g	0.29	0/482	0.63	0/642
78	DS	0.35	0/574	0.76	1/764 (0.1%)
78	h	0.36	0/585	0.69	1/778 (0.1%)
79	AR	0.26	0/2451	0.55	0/3337
79	DT	0.28	0/2451	0.64	2/3337 (0.1%)
80	P0	0.29	0/857	0.57	0/1148
80	p0	0.33	0/857	0.65	0/1148
81	12	0.30	0/486	0.56	0/653

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
82	L1	0.29	0/1737	0.53	0/2335
82	l1	0.30	0/1737	0.56	0/2335
All	All	0.40	0/438201	0.87	488/642667 (0.1%)

There are no bond length outliers.

All (488) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	CM	481	A	O5'-P-OP2	-19.45	87.36	110.70
46	CM	481	A	C8-N9-C4	-14.39	100.04	105.80
1	1	1576	A	P-O3'-C3'	-12.61	104.57	119.70
46	CM	481	A	N9-C4-C5	11.86	110.54	105.80
46	CM	481	A	O5'-P-OP1	11.77	124.83	110.70
1	1	1575	A	P-O3'-C3'	-11.59	105.79	119.70
46	CM	272	G	P-O3'-C3'	-11.18	106.29	119.70
46	CM	273	C	P-O3'-C3'	-10.88	106.64	119.70
46	CM	275	U	P-O3'-C3'	-10.82	106.71	119.70
46	CM	823	G	N9-C1'-C2'	-10.40	100.47	114.00
1	AS	2419	A	C8-N9-C4	-10.35	101.66	105.80
1	AS	442	G	O4'-C1'-N9	-10.23	100.01	108.20
1	1	1230	G	O4'-C1'-N9	10.18	116.35	108.20
46	CM	823	G	C8-N9-C1'	-10.01	113.99	127.00
46	CM	271	G	P-O3'-C3'	-9.86	107.87	119.70
46	CM	279	G	P-O3'-C3'	-9.83	107.90	119.70
46	B	1743	A	O4'-C1'-N9	-9.80	100.36	108.20
59	CZ	81	GLU	C-N-CD	-9.59	99.50	120.60
46	CM	281	U	P-O3'-C3'	-9.36	108.47	119.70
46	CM	280	C	P-O3'-C3'	-9.17	108.69	119.70
46	B	676	G	O4'-C1'-N9	9.10	115.48	108.20
1	1	1229	G	O5'-P-OP2	-9.05	97.55	105.70
1	AS	1252	G	C8-N9-C1'	-9.03	115.26	127.00
1	AS	1228	C	C2-N1-C1'	8.99	128.69	118.80
46	CM	276	U	P-O3'-C3'	-8.97	108.94	119.70
46	B	824	U	O4'-C1'-N1	-8.92	101.07	108.20
1	AS	477	U	C5-C6-N1	8.87	127.14	122.70
1	AS	1252	G	C4-N9-C1'	8.86	138.02	126.50
1	AS	1575	A	P-O3'-C3'	-8.85	109.08	119.70
46	CM	282	G	P-O3'-C3'	-8.82	109.11	119.70
1	AS	442	G	C8-N9-C1'	-8.81	115.55	127.00
46	CM	268	C	P-O3'-C3'	-8.77	109.18	119.70
46	CM	656	C	N1-C2-O2	8.69	124.11	118.90
50	F	60	LEU	CA-CB-CG	8.54	134.95	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	B	698	C	C6-N1-C2	-8.51	116.90	120.30
46	CM	482	C	N3-C4-N4	8.49	123.94	118.00
1	AS	442	G	C4-N9-C1'	8.41	137.43	126.50
46	CM	823	G	OP1-P-O3'	-8.32	86.89	105.20
1	1	2388	U	N3-C2-O2	-8.31	116.38	122.20
1	1	401	U	O4'-C1'-N1	8.24	114.79	108.20
1	AS	1576	A	P-O3'-C3'	-8.23	109.82	119.70
46	B	451	C	N1-C2-O2	8.23	123.84	118.90
1	AS	1228	C	N1-C2-O2	8.21	123.82	118.90
1	AS	1252	G	C6-C5-N7	-8.12	125.53	130.40
1	1	1229	G	N3-C4-C5	-8.04	124.58	128.60
46	B	451	C	C2-N1-C1'	8.01	127.61	118.80
46	CM	482	C	C5-C4-N4	-8.01	114.59	120.20
46	CM	451	C	N1-C2-O2	7.95	123.67	118.90
46	B	656	C	C6-N1-C2	-7.95	117.12	120.30
46	B	1742	A	O4'-C1'-N9	7.92	114.54	108.20
46	CM	270	U	P-O3'-C3'	-7.90	110.22	119.70
46	CM	274	C	P-O3'-C3'	-7.87	110.26	119.70
1	1	1218	G	O4'-C1'-N9	7.85	114.48	108.20
46	B	485	G	C4-N9-C1'	7.84	136.70	126.50
46	B	1375	C	C2-N1-C1'	7.65	127.21	118.80
1	AS	442	G	C5'-C4'-O4'	-7.61	99.97	109.10
46	CM	451	C	C2-N1-C1'	7.58	127.14	118.80
1	AS	2419	A	N9-C4-C5	7.56	108.82	105.80
46	B	1375	C	N1-C2-O2	7.55	123.43	118.90
1	1	2814	U	C2-N1-C1'	7.53	126.74	117.70
46	CM	481	A	N7-C8-N9	7.51	117.55	113.80
46	CM	482	C	C2-N3-C4	-7.50	116.15	119.90
1	AS	1228	C	C6-N1-C1'	-7.50	111.81	120.80
46	CM	823	G	C4-N9-C1'	7.44	136.18	126.50
1	1	1021	A	C8-N9-C4	-7.42	102.83	105.80
1	AS	2256	C	N1-C2-O2	7.39	123.33	118.90
46	B	698	C	O4'-C1'-N1	7.36	114.08	108.20
46	CM	823	G	O5'-P-OP1	-7.35	99.09	105.70
46	B	1046	A	C8-N9-C4	-7.34	102.87	105.80
46	CM	481	A	N3-C4-N9	-7.32	121.55	127.40
1	AS	480	G	C8-N9-C4	-7.31	103.48	106.40
1	AS	1231	U	N3-C4-O4	7.29	124.50	119.40
1	1	642	G	C5-C6-O6	7.25	132.95	128.60
46	CM	1375	C	C2-N1-C1'	7.17	126.68	118.80
79	DT	201	LEU	CB-CG-CD1	-7.16	98.82	111.00
46	B	672	U	C6-N1-C2	-7.16	116.70	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	CM	701	G	N3-C4-N9	-7.16	121.70	126.00
46	CM	656	C	C6-N1-C2	-7.13	117.45	120.30
46	CM	269	A	P-O3'-C3'	-7.12	111.16	119.70
1	1	3309	A	C8-N9-C4	-7.11	102.95	105.80
1	AS	442	G	C4-C5-N7	7.10	113.64	110.80
1	1	1019	U	N1-C1'-C2'	-7.09	104.20	112.00
46	CM	696	U	C5-C6-N1	7.02	126.21	122.70
1	1	1020	G	O4'-C1'-N9	7.00	113.80	108.20
46	B	1743	A	C4-N9-C1'	6.99	138.88	126.30
1	1	406	G	O4'-C1'-N9	6.97	113.78	108.20
46	B	656	C	C2-N1-C1'	6.97	126.46	118.80
1	AS	977	U	C2-N1-C1'	6.95	126.03	117.70
1	1	482	U	O4'-C1'-N1	6.94	113.75	108.20
46	B	1375	C	N3-C2-O2	-6.91	117.06	121.90
46	CM	482	C	C4-C5-C6	6.89	120.85	117.40
1	AS	1252	G	C4-C5-N7	6.89	113.56	110.80
46	CM	656	C	N3-C2-O2	-6.88	117.09	121.90
3	AU	39	G	O4'-C1'-N9	6.87	113.70	108.20
1	1	3160	C	C2-N1-C1'	6.86	126.35	118.80
1	AS	480	G	N9-C1'-C2'	-6.86	104.45	112.00
46	CM	822	G	O4'-C1'-N9	6.86	113.69	108.20
46	B	485	G	N7-C8-N9	6.86	116.53	113.10
1	AS	3162	U	C5-C4-O4	-6.85	121.79	125.90
46	B	656	C	C5-C6-N1	6.84	124.42	121.00
1	1	1280	C	C6-N1-C2	-6.83	117.57	120.30
1	AS	2814	U	N1-C2-O2	6.83	127.58	122.80
1	AS	480	G	C2-N3-C4	6.82	115.31	111.90
1	AS	480	G	N3-C4-C5	-6.82	125.19	128.60
1	1	3309	A	N7-C8-N9	6.80	117.20	113.80
1	1	1248	A	O4'-C1'-N9	6.78	113.62	108.20
46	CM	217	A	C8-N9-C4	-6.78	103.09	105.80
46	B	217	A	O4'-C1'-N9	6.77	113.61	108.20
46	CM	696	U	O5'-P-OP1	-6.75	99.63	105.70
46	CM	656	C	C2-N1-C1'	6.70	126.17	118.80
1	AS	1349	U	C2-N1-C1'	6.69	125.73	117.70
1	1	1019	U	O4'-C1'-N1	6.68	113.55	108.20
46	CM	482	C	N1-C2-O2	-6.68	114.89	118.90
46	B	485	G	C6-C5-N7	-6.67	126.40	130.40
1	1	1020	G	N9-C1'-C2'	6.67	122.67	114.00
46	CM	505	U	P-O3'-C3'	6.66	127.69	119.70
1	AS	3160	C	C2-N1-C1'	6.65	126.12	118.80
1	1	1229	G	N3-C4-N9	6.64	129.98	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	B	1457	A	C8-N9-C4	-6.63	103.15	105.80
1	1	1492	C	C2-N1-C1'	6.63	126.09	118.80
46	CM	451	C	N3-C2-O2	-6.63	117.26	121.90
1	AS	2814	U	C2-N1-C1'	6.62	125.64	117.70
46	CM	504	A	O4'-C1'-N9	-6.61	102.91	108.20
1	AS	2235	C	C6-N1-C2	-6.59	117.66	120.30
1	AS	1228	C	C5-C6-N1	6.57	124.29	121.00
46	B	723	G	O4'-C1'-N9	6.57	113.46	108.20
1	1	977	U	C2-N1-C1'	6.57	125.58	117.70
46	B	698	C	C5-C6-N1	6.55	124.28	121.00
46	CM	823	G	OP2-P-O3'	6.52	119.54	105.20
1	AS	918	U	C2-N1-C1'	6.50	125.50	117.70
1	AS	2066	G	O4'-C1'-N9	6.50	113.40	108.20
1	AS	1252	G	N3-C4-N9	6.50	129.90	126.00
46	CM	725	A	C5'-C4'-C3'	-6.50	105.61	116.00
46	B	723	G	C8-N9-C1'	6.49	135.43	127.00
1	AS	2788	G	C5-C6-N1	-6.48	108.26	111.50
1	1	1228	C	C6-N1-C1'	-6.47	113.03	120.80
46	B	671	G	O4'-C1'-N9	6.47	113.38	108.20
1	1	481	G	O4'-C1'-N9	6.47	113.37	108.20
1	1	599	U	O4'-C1'-N1	6.47	113.37	108.20
46	CM	1045	U	C2-N1-C1'	6.46	125.46	117.70
46	B	482	C	O4'-C1'-N1	6.46	113.37	108.20
1	AS	1231	U	C5-C4-O4	-6.45	122.03	125.90
1	1	1229	G	C4-N9-C1'	6.44	134.88	126.50
1	1	315	C	C6-N1-C2	-6.44	117.72	120.30
1	1	3245	A	O4'-C1'-N9	6.43	113.34	108.20
46	B	485	G	C8-N9-C1'	-6.40	118.68	127.00
1	AS	2793	C	N1-C2-O2	6.39	122.73	118.90
46	B	1743	A	C8-N9-C1'	-6.38	116.21	127.70
46	B	1743	A	N7-C8-N9	6.38	116.99	113.80
1	AS	3167	G	N3-C4-N9	6.38	129.83	126.00
1	AS	3126	U	C2-N1-C1'	6.37	125.35	117.70
46	B	451	C	N3-C2-O2	-6.37	117.44	121.90
46	B	721	C	O4'-C1'-N1	6.36	113.29	108.20
1	1	3327	A	O4'-C1'-N9	6.35	113.28	108.20
1	1	1237	U	C5'-C4'-O4'	6.34	116.71	109.10
1	1	1021	A	C4-N9-C1'	6.34	137.71	126.30
46	B	1554	U	C6-N1-C2	-6.33	117.20	121.00
1	AS	2419	A	O4'-C1'-N9	6.33	113.26	108.20
1	1	1230	G	C8-N9-C1'	6.32	135.21	127.00
46	B	1242	U	C2-N1-C1'	6.30	125.26	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	CM	1462	C	C2-N1-C1'	6.29	125.72	118.80
1	1	3126	U	C2-N1-C1'	6.28	125.24	117.70
46	CM	1327	C	N1-C2-O2	6.28	122.67	118.90
1	AS	1234	C	C2-N1-C1'	6.23	125.65	118.80
46	CM	561	U	N3-C2-O2	-6.23	117.84	122.20
1	AS	2589	U	C5-C4-O4	6.22	129.63	125.90
46	CM	814	A	P-O3'-C3'	6.22	127.16	119.70
46	B	723	G	C4-N9-C1'	-6.21	118.43	126.50
1	AS	1492	C	C2-N1-C1'	6.20	125.62	118.80
46	B	681	C	C6-N1-C2	-6.16	117.83	120.30
46	CM	503	A	N9-C1'-C2'	-6.16	105.22	112.00
1	1	2215	C	N3-C2-O2	-6.14	117.60	121.90
1	AS	1562	G	C4-N9-C1'	6.14	134.48	126.50
1	1	1224	C	C2-N1-C1'	6.13	125.55	118.80
1	AS	2814	U	N3-C2-O2	-6.13	117.91	122.20
46	CM	1768	A	C8-N9-C4	-6.13	103.35	105.80
1	1	1230	G	C4-N9-C1'	-6.12	118.54	126.50
1	AS	3160	C	C6-N1-C1'	-6.12	113.46	120.80
46	CM	1234	U	C2-N1-C1'	6.12	125.04	117.70
1	AS	1558	G	N3-C4-N9	6.12	129.67	126.00
1	1	1229	G	C8-N9-C4	-6.11	103.96	106.40
1	AS	1223	C	N1-C2-O2	6.11	122.56	118.90
46	B	879	U	N3-C2-O2	-6.10	117.93	122.20
1	1	2589	U	C5-C4-O4	6.09	129.56	125.90
46	B	1672	G	O4'-C1'-N9	6.08	113.07	108.20
1	AS	2788	G	N1-C6-O6	6.08	123.55	119.90
1	AS	1252	G	N9-C4-C5	-6.08	102.97	105.40
1	1	1237	U	O4'-C1'-N1	6.07	113.06	108.20
1	AS	2589	U	N3-C2-O2	-6.07	117.95	122.20
1	1	2663	A	P-O3'-C3'	6.06	126.98	119.70
1	AS	1262	G	C8-N9-C1'	-6.05	119.13	127.00
1	AS	2215	C	N3-C2-O2	-6.04	117.67	121.90
1	1	1228	C	C2-N1-C1'	6.03	125.44	118.80
1	AS	3182	C	C2-N1-C1'	6.03	125.44	118.80
1	AS	620	A	N1-C6-N6	6.02	122.21	118.60
1	AS	3161	U	C6-N1-C2	-6.02	117.39	121.00
66	V	114	LEU	CA-CB-CG	6.01	129.13	115.30
46	B	1703	C	OP1-P-O3'	5.99	118.39	105.20
46	B	814	A	P-O3'-C3'	5.98	126.88	119.70
1	1	2235	C	N1-C2-O2	5.98	122.49	118.90
46	B	1242	U	N3-C2-O2	-5.98	118.01	122.20
46	B	1433	C	O4'-C1'-N1	5.98	112.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	CM	1587	A	N1-C6-N6	-5.97	115.02	118.60
46	B	1067	C	C2-N1-C1'	5.96	125.36	118.80
1	1	2807	U	P-O3'-C3'	5.96	126.85	119.70
3	AU	155	G	O4'-C1'-N9	5.95	112.96	108.20
1	AS	442	G	N9-C4-C5	-5.93	103.03	105.40
46	B	485	G	N3-C4-N9	5.93	129.56	126.00
1	AS	1262	G	C4-N9-C1'	5.92	134.19	126.50
46	CM	825	U	OP1-P-O3'	5.91	118.20	105.20
46	CM	641	G	N3-C4-N9	-5.91	122.45	126.00
1	1	1347	U	N1-C2-O2	5.89	126.92	122.80
1	AS	1638	A	O4'-C1'-N9	-5.89	103.49	108.20
1	1	1197	C	C6-N1-C2	-5.89	117.94	120.30
1	AS	1237	U	O4'-C1'-N1	5.88	112.91	108.20
46	B	1234	U	C2-N1-C1'	5.88	124.75	117.70
1	1	2773	A	N1-C2-N3	5.87	132.24	129.30
1	1	2235	C	N3-C2-O2	-5.87	117.79	121.90
46	CM	1362	C	N3-C2-O2	-5.87	117.79	121.90
1	AS	446	U	C5-C6-N1	5.86	125.63	122.70
1	AS	3162	U	N1-C2-N3	-5.86	111.39	114.90
1	1	1197	C	C2-N1-C1'	5.84	125.22	118.80
46	B	985	C	C6-N1-C2	-5.82	117.97	120.30
1	1	1033	C	C2-N1-C1'	5.82	125.20	118.80
46	B	1703	C	P-O3'-C3'	5.81	126.68	119.70
46	B	1046	A	O4'-C1'-N9	5.81	112.85	108.20
1	1	2474	C	N1-C2-O2	5.80	122.38	118.90
46	B	723	G	N3-C4-N9	-5.80	122.52	126.00
46	CM	1416	U	N3-C2-O2	-5.79	118.15	122.20
1	AS	2381	G	N1-C6-O6	5.79	123.37	119.90
1	AS	2235	C	C2-N1-C1'	5.78	125.16	118.80
46	B	672	U	C5-C6-N1	5.78	125.59	122.70
1	1	1943	G	OP1-P-O3'	5.78	117.91	105.20
46	CM	505	U	O5'-P-OP1	5.78	117.63	110.70
46	CM	648	U	C5-C6-N1	5.78	125.59	122.70
1	1	2388	U	C2-N3-C4	-5.78	123.53	127.00
46	B	643	U	O4'-C1'-N1	5.78	112.82	108.20
1	1	1253	C	C2-N1-C1'	5.77	125.15	118.80
46	CM	818	U	N3-C2-O2	-5.76	118.17	122.20
46	B	561	U	N3-C2-O2	-5.76	118.17	122.20
1	1	2793	C	N1-C2-O2	5.75	122.35	118.90
1	AS	1346	U	P-O3'-C3'	5.75	126.60	119.70
46	B	1444	G	N3-C4-N9	5.74	129.44	126.00
1	1	642	G	C4-C5-N7	-5.74	108.50	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	1562	G	N7-C8-N9	5.73	115.97	113.10
46	B	985	C	C2-N1-C1'	5.73	125.10	118.80
1	1	3151	C	O4'-C1'-N1	5.72	112.78	108.20
46	B	1675	U	O4'-C1'-N1	-5.71	103.63	108.20
1	1	2314	U	C5-C6-N1	-5.71	119.85	122.70
1	1	918	U	C2-N1-C1'	5.71	124.55	117.70
46	CM	1444	G	C4-N9-C1'	5.70	133.91	126.50
50	CQ	216	ASP	CB-CG-OD1	5.70	123.43	118.30
46	CM	724	G	O4'-C1'-N9	5.70	112.76	108.20
46	CM	608	G	C8-N9-C1'	-5.69	119.60	127.00
46	CM	879	U	N3-C2-O2	-5.69	118.22	122.20
46	B	1237	C	C2-N1-C1'	5.69	125.06	118.80
46	CM	608	G	C4-N9-C1'	5.69	133.89	126.50
46	CM	721	C	N1-C2-O2	5.69	122.31	118.90
1	AS	1562	G	O4'-C1'-N9	-5.67	103.66	108.20
46	B	1375	C	C6-N1-C2	-5.67	118.03	120.30
1	1	376	G	O4'-C1'-N9	5.66	112.73	108.20
1	AS	2793	C	N3-C2-O2	-5.65	117.94	121.90
46	B	451	C	C6-N1-C2	-5.65	118.04	120.30
46	B	656	C	N1-C2-O2	5.65	122.29	118.90
46	B	579	U	C2-N1-C1'	5.65	124.48	117.70
1	AS	1026	A	C4-N9-C1'	5.64	136.45	126.30
1	AS	1026	A	C8-N9-C1'	-5.63	117.56	127.70
46	CM	846	U	C2-N1-C1'	5.62	124.44	117.70
1	1	2276	U	O4'-C1'-N1	5.62	112.69	108.20
1	1	2637	U	O3'-P-O5'	-5.62	93.32	104.00
46	CM	700	G	O4'-C1'-N9	5.61	112.69	108.20
1	AS	3162	U	C6-N1-C1'	-5.61	113.35	121.20
46	CM	499	U	P-O3'-C3'	-5.61	112.97	119.70
46	CM	579	U	C2-N1-C1'	5.61	124.43	117.70
46	CM	656	C	C5-C6-N1	5.61	123.80	121.00
1	1	1346	U	P-O3'-C3'	5.58	126.40	119.70
1	1	3029	U	N3-C2-O2	-5.58	118.29	122.20
1	AS	406	G	O4'-C1'-N9	5.58	112.66	108.20
1	1	3182	C	C2-N1-C1'	5.58	124.94	118.80
1	AS	977	U	N1-C2-O2	5.58	126.70	122.80
46	CM	1375	C	C6-N1-C1'	-5.57	114.11	120.80
1	AS	2592	G	N1-C6-O6	5.56	123.23	119.90
46	CM	1122	A	C8-N9-C4	5.55	108.02	105.80
46	B	1057	C	C2-N1-C1'	5.54	124.90	118.80
1	1	1021	A	C8-N9-C1'	-5.53	117.75	127.70
1	AS	956	U	C2-N1-C1'	5.52	124.33	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	3164	U	OP1-P-O3'	5.52	117.34	105.20
1	1	3160	C	C6-N1-C1'	-5.51	114.19	120.80
46	CM	500	U	C2-N1-C1'	-5.51	111.09	117.70
1	1	3160	C	N1-C2-O2	5.50	122.20	118.90
1	AS	1231	U	C2-N1-C1'	5.50	124.30	117.70
1	AS	1197	C	C2-N1-C1'	5.49	124.84	118.80
1	AS	3029	U	N3-C2-O2	-5.49	118.36	122.20
1	1	1302	G	C5-C6-O6	-5.49	125.31	128.60
1	AS	1247	A	O3'-P-O5'	5.49	114.42	104.00
46	CM	1470	G	C8-N9-C4	-5.48	104.21	106.40
1	AS	2234	A	C5'-C4'-O4'	-5.48	102.53	109.10
1	1	987	G	N1-C6-O6	5.47	123.19	119.90
1	1	3321	G	O5'-P-OP1	-5.47	100.77	105.70
1	AS	2509	C	N1-C2-O2	5.47	122.18	118.90
46	CM	678	A	O5'-P-OP1	5.47	117.27	110.70
46	CM	1067	C	N1-C2-O2	5.47	122.19	118.90
46	CM	818	U	C2-N1-C1'	5.47	124.26	117.70
46	CM	481	A	C8-N9-C1'	5.46	137.53	127.70
46	B	505	U	P-O3'-C3'	5.46	126.25	119.70
46	CM	488	C	C6-N1-C2	-5.46	118.11	120.30
1	1	910	A	N1-C6-N6	5.46	121.88	118.60
1	AS	3271	U	O4'-C1'-N1	5.45	112.56	108.20
46	CM	481	A	C4-C5-N7	-5.44	107.98	110.70
46	B	451	C	C6-N1-C1'	-5.44	114.27	120.80
78	h	159	LEU	CA-CB-CG	5.44	127.81	115.30
1	1	1943	G	P-O3'-C3'	5.44	126.22	119.70
79	DT	121	ARG	CG-CD-NE	5.43	123.21	111.80
1	AS	487	C	C5-C6-N1	5.43	123.72	121.00
1	1	2814	U	C6-N1-C1'	-5.43	113.60	121.20
46	CM	278	U	P-O3'-C3'	-5.42	113.19	119.70
1	AS	1562	G	C6-C5-N7	-5.42	127.15	130.40
1	1	977	U	O4'-C1'-N1	5.42	112.54	108.20
1	1	2837	U	C6-N1-C2	-5.42	117.75	121.00
46	CM	1067	C	C2-N1-C1'	5.42	124.76	118.80
46	B	505	U	O4'-C1'-N1	5.41	112.52	108.20
46	CM	62	A	O4'-C1'-N9	5.40	112.52	108.20
1	AS	1170	G	C8-N9-C4	-5.39	104.24	106.40
46	B	1364	U	C2-N1-C1'	5.39	124.17	117.70
46	B	1462	C	C2-N1-C1'	5.39	124.73	118.80
1	1	401	U	C2-N1-C1'	5.39	124.17	117.70
1	AS	2519	A	P-O3'-C3'	5.39	126.17	119.70
46	CM	723	G	O4'-C1'-N9	5.39	112.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AS	1349	U	N1-C2-O2	5.38	126.57	122.80
1	1	1569	C	C2-N1-C1'	5.38	124.72	118.80
64	T	73	LEU	CA-CB-CG	5.37	127.66	115.30
1	AS	1260	G	C4-N9-C1'	5.37	133.48	126.50
1	1	2599	C	C6-N1-C2	5.37	122.45	120.30
1	AS	1252	G	N7-C8-N9	5.36	115.78	113.10
1	1	2814	U	N1-C2-O2	5.36	126.55	122.80
1	AS	1253	C	N1-C2-O2	5.35	122.11	118.90
46	CM	500	U	O4'-C1'-N1	5.35	112.48	108.20
1	AS	451	C	C2-N1-C1'	5.34	124.68	118.80
1	AS	641	U	N3-C2-O2	-5.34	118.46	122.20
67	DH	25	LEU	CA-CB-CG	5.34	127.58	115.30
1	1	977	U	N1-C2-O2	5.34	126.54	122.80
1	1	2509	C	N1-C2-O2	5.33	122.10	118.90
1	1	2839	C	C6-N1-C2	-5.33	118.17	120.30
46	CM	725	A	O5'-C5'-C4'	-5.33	101.58	111.70
62	R	80	LEU	CA-CB-CG	5.32	127.54	115.30
1	AS	2235	C	N3-C2-O2	-5.32	118.17	121.90
46	B	1067	C	N1-C2-O2	5.32	122.09	118.90
1	AS	1231	U	O4'-C1'-N1	-5.31	103.95	108.20
1	AS	989	G	O4'-C1'-N9	5.31	112.45	108.20
46	CM	700	G	N1-C6-O6	-5.31	116.71	119.90
1	1	1302	G	N1-C6-O6	5.31	123.08	119.90
1	1	1853	C	C2-N1-C1'	5.31	124.64	118.80
1	1	2519	A	P-O3'-C3'	5.30	126.06	119.70
1	1	1229	G	N7-C8-N9	5.29	115.75	113.10
1	1	2584	U	N3-C4-O4	5.29	123.11	119.40
1	1	1525	A	C8-N9-C1'	-5.29	118.18	127.70
1	1	403	C	O4'-C1'-N1	5.29	112.43	108.20
46	CM	500	U	P-O3'-C3'	-5.28	113.36	119.70
1	1	1255	A	O4'-C1'-N9	5.28	112.43	108.20
46	B	4	C	C2-N1-C1'	5.28	124.61	118.80
1	AS	918	U	N3-C2-O2	-5.28	118.50	122.20
1	1	2474	C	N3-C2-O2	-5.28	118.21	121.90
1	AS	437	G	N3-C4-N9	-5.26	122.84	126.00
46	B	1057	C	C6-N1-C2	-5.26	118.20	120.30
1	AS	2476	C	OP1-P-O3'	5.26	116.77	105.20
1	1	977	U	C6-N1-C1'	-5.25	113.84	121.20
46	CM	451	C	C6-N1-C1'	-5.25	114.50	120.80
1	1	935	U	O4'-C1'-N1	-5.24	104.01	108.20
32	AE	3	LEU	CA-CB-CG	5.24	127.36	115.30
50	CQ	183	LEU	CA-CB-CG	5.24	127.36	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	1021	A	N7-C8-N9	5.24	116.42	113.80
1	AS	2476	C	P-O3'-C3'	5.24	125.99	119.70
1	1	3167	G	N3-C4-N9	5.24	129.14	126.00
1	1	1897	A	C8-N9-C4	-5.24	103.70	105.80
46	B	1327	C	C2-N1-C1'	5.24	124.56	118.80
1	AS	1247	A	P-O3'-C3'	5.24	125.98	119.70
46	B	824	U	P-O5'-C5'	-5.24	112.52	120.90
1	AS	1349	U	C6-N1-C1'	-5.24	113.87	121.20
46	CM	823	G	P-O5'-C5'	-5.23	112.53	120.90
46	B	4	C	N1-C2-O2	5.23	122.04	118.90
46	B	679	C	O4'-C1'-N1	5.23	112.38	108.20
1	AS	3245	A	O4'-C1'-N9	5.22	112.38	108.20
46	CM	137	A	P-O3'-C3'	5.22	125.97	119.70
1	1	3151	C	C2-N1-C1'	5.22	124.54	118.80
46	CM	721	C	C6-N1-C2	-5.22	118.21	120.30
46	B	1242	U	C6-N1-C2	-5.21	117.87	121.00
1	AS	1894	G	N9-C4-C5	5.21	107.49	105.40
1	1	2515	G	P-O3'-C3'	5.21	125.95	119.70
1	AS	3162	U	O5'-P-OP2	-5.20	101.02	105.70
1	1	1252	G	O4'-C1'-N9	5.20	112.36	108.20
46	B	1369	G	P-O3'-C3'	5.20	125.94	119.70
1	1	1874	G	C4-N9-C1'	5.20	133.26	126.50
46	CM	1375	C	N1-C2-O2	5.20	122.02	118.90
46	CM	1444	G	C8-N9-C1'	-5.20	120.24	127.00
1	1	1099	A	OP2-P-O3'	5.20	116.63	105.20
46	CM	4	C	C2-N1-C1'	5.20	124.52	118.80
1	AS	3243	C	C6-N1-C2	-5.19	118.22	120.30
5	k	7	GLU	CA-CB-CG	-5.19	101.98	113.40
1	AS	1253	C	C2-N1-C1'	5.19	124.51	118.80
1	AS	1245	G	P-O3'-C3'	5.19	125.93	119.70
46	B	1444	G	C4-N9-C1'	5.19	133.24	126.50
1	AS	1217	A	OP2-P-O3'	5.18	116.60	105.20
1	AS	3147	G	C8-N9-C4	5.18	108.47	106.40
46	CM	818	U	N1-C2-O2	5.18	126.43	122.80
1	AS	3167	G	N9-C4-C5	-5.18	103.33	105.40
46	B	1231	C	N1-C2-O2	5.17	122.00	118.90
1	1	1376	G	C8-N9-C4	5.17	108.47	106.40
46	B	1743	A	C5-N7-C8	-5.17	101.31	103.90
1	1	1853	C	C6-N1-C2	-5.17	118.23	120.30
46	B	912	C	N1-C2-N3	5.17	122.82	119.20
46	CM	701	G	C8-N9-C1'	5.16	133.71	127.00
1	AS	2968	U	C2-N1-C1'	5.16	123.89	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	O	96	LEU	CA-CB-CG	5.15	127.16	115.30
1	AS	1278	G	N9-C4-C5	-5.15	103.34	105.40
1	1	481	G	C8-N9-C1'	5.15	133.70	127.00
46	CM	501	G	N3-C4-C5	-5.15	126.02	128.60
1	1	112	C	C2-N1-C1'	5.15	124.46	118.80
46	B	1046	A	C4-N9-C1'	5.15	135.56	126.30
1	1	1262	G	C4-N9-C1'	5.14	133.19	126.50
46	B	711	U	P-O3'-C3'	5.14	125.87	119.70
1	AS	1099	A	P-O3'-C3'	5.14	125.87	119.70
4	j	204	MET	CB-CA-C	5.14	120.68	110.40
46	CM	721	C	N3-C2-O2	-5.14	118.30	121.90
1	1	2968	U	C2-N1-C1'	5.14	123.87	117.70
1	AS	1573	C	C2-N1-C1'	5.14	124.45	118.80
1	AS	3327	A	O4'-C1'-N9	5.14	112.31	108.20
1	1	1245	G	O4'-C1'-N9	5.13	112.31	108.20
1	AS	956	U	N1-C2-O2	5.13	126.39	122.80
1	AS	991	U	N3-C2-O2	-5.13	118.61	122.20
46	CM	480	U	N3-C2-O2	-5.13	118.61	122.20
46	CM	1444	G	C6-C5-N7	-5.13	127.32	130.40
1	AS	3243	C	N1-C2-O2	5.12	121.97	118.90
46	B	1703	C	N3-C2-O2	-5.12	118.31	121.90
46	CM	819	G	C4-N9-C1'	5.12	133.16	126.50
46	CM	451	C	C6-N1-C2	-5.12	118.25	120.30
1	AS	1223	C	N3-C2-O2	-5.11	118.32	121.90
46	CM	825	U	P-O3'-C3'	5.11	125.84	119.70
46	CM	985	C	C6-N1-C2	-5.11	118.26	120.30
46	CM	674	C	C5-C6-N1	5.11	123.56	121.00
46	CM	713	U	C2-N1-C1'	5.11	123.83	117.70
46	B	1292	U	C2-N1-C1'	5.11	123.83	117.70
1	1	1852	C	C6-N1-C2	-5.11	118.26	120.30
1	AS	2651	A	O4'-C1'-N9	5.10	112.28	108.20
1	AS	1492	C	C6-N1-C1'	-5.10	114.68	120.80
46	CM	1546	G	O4'-C1'-N9	5.10	112.28	108.20
46	B	682	A	N7-C8-N9	5.09	116.34	113.80
1	AS	477	U	C2-N3-C4	5.09	130.05	127.00
46	B	697	U	O5'-P-OP1	5.08	116.80	110.70
1	AS	1099	A	OP2-P-O3'	5.08	116.38	105.20
1	AS	1252	G	N1-C6-O6	5.08	122.95	119.90
1	1	1197	C	N1-C2-O2	5.08	121.95	118.90
46	B	653	G	O4'-C1'-N9	5.08	112.26	108.20
46	B	1704	C	O4'-C1'-N1	5.07	112.26	108.20
1	AS	3134	C	C2-N1-C1'	5.07	124.38	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	CM	1703	C	C5'-C4'-O4'	5.07	115.18	109.10
1	1	1099	A	P-O3'-C3'	5.06	125.78	119.70
46	CM	487	C	C6-N1-C2	-5.06	118.27	120.30
1	1	649	G	N3-C4-C5	-5.06	126.07	128.60
50	CQ	60	LEU	CA-CB-CG	5.06	126.94	115.30
1	1	446	U	O3'-P-O5'	-5.06	94.39	104.00
1	1	1569	C	C6-N1-C1'	-5.06	114.73	120.80
1	1	2638	C	C6-N1-C2	-5.06	118.28	120.30
1	1	2789	A	OP2-P-O3'	5.05	116.32	105.20
46	B	1375	C	C6-N1-C1'	-5.05	114.73	120.80
46	B	1242	U	N1-C2-O2	5.05	126.33	122.80
46	CM	971	G	P-O5'-C5'	5.05	128.97	120.90
1	AS	442	G	C6-C5-N7	-5.04	127.37	130.40
46	CM	657	C	C5-C6-N1	5.04	123.52	121.00
1	1	406	G	N1-C6-O6	-5.04	116.88	119.90
46	CM	481	A	O3'-P-O5'	-5.04	94.42	104.00
78	DS	177	MET	CA-CB-CG	5.04	121.87	113.30
46	B	213	A	C8-N9-C4	-5.04	103.78	105.80
46	CM	1276	G	N3-C4-N9	-5.03	122.98	126.00
1	1	2215	C	N1-C2-O2	5.03	121.92	118.90
1	1	2773	A	N9-C4-C5	5.03	107.81	105.80
1	1	1111	G	C4-N9-C1'	5.02	133.03	126.50
1	1	602	A	N9-C4-C5	-5.02	103.79	105.80
1	AS	2066	G	C5'-C4'-O4'	5.01	115.12	109.10
1	AS	2215	C	N1-C2-O2	5.01	121.91	118.90
1	AS	2482	U	C2-N1-C1'	5.01	123.72	117.70
46	CM	656	C	C2-N3-C4	5.01	122.41	119.90
1	1	1492	C	C5-C6-N1	5.01	123.51	121.00
46	B	695	C	P-O3'-C3'	5.01	125.71	119.70
1	AS	2063	C	C6-N1-C2	-5.01	118.30	120.30
1	AS	1562	G	C8-N9-C1'	-5.01	120.49	127.00
1	1	483	U	O4'-C1'-N1	5.00	112.20	108.20
1	1	1347	U	N3-C2-O2	-5.00	118.70	122.20
1	AS	1562	G	O5'-P-OP1	5.00	116.70	110.70

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	AW	247/254 (97%)	239 (97%)	8 (3%)	0	100	100
4	j	247/254 (97%)	239 (97%)	8 (3%)	0	100	100
5	AX	384/389 (99%)	372 (97%)	12 (3%)	0	100	100
5	k	384/389 (99%)	372 (97%)	12 (3%)	0	100	100
6	AY	359/363 (99%)	349 (97%)	10 (3%)	0	100	100
6	l	359/363 (99%)	348 (97%)	11 (3%)	0	100	100
7	AZ	290/298 (97%)	278 (96%)	12 (4%)	0	100	100
7	m	294/298 (99%)	282 (96%)	12 (4%)	0	100	100
8	BA	149/176 (85%)	147 (99%)	2 (1%)	0	100	100
8	n	153/176 (87%)	150 (98%)	3 (2%)	0	100	100
9	BB	232/241 (96%)	226 (97%)	5 (2%)	1 (0%)	30	66
9	o	232/241 (96%)	225 (97%)	7 (3%)	0	100	100
10	BC	231/262 (88%)	220 (95%)	9 (4%)	2 (1%)	14	49
10	p	236/262 (90%)	227 (96%)	8 (3%)	1 (0%)	30	66
11	BD	188/191 (98%)	183 (97%)	5 (3%)	0	100	100
11	q	188/191 (98%)	184 (98%)	4 (2%)	0	100	100
12	BE	204/220 (93%)	199 (98%)	5 (2%)	0	100	100
12	r	204/220 (93%)	201 (98%)	3 (2%)	0	100	100
13	BF	169/174 (97%)	163 (96%)	6 (4%)	0	100	100
13	s	169/174 (97%)	161 (95%)	8 (5%)	0	100	100
14	BG	198/202 (98%)	194 (98%)	4 (2%)	0	100	100
14	t	198/202 (98%)	196 (99%)	2 (1%)	0	100	100
15	BH	128/131 (98%)	124 (97%)	4 (3%)	0	100	100
15	u	128/131 (98%)	125 (98%)	3 (2%)	0	100	100
16	BI	201/204 (98%)	197 (98%)	4 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
16	v	201/204 (98%)	196 (98%)	5 (2%)	0	100	100
17	BJ	197/200 (98%)	195 (99%)	2 (1%)	0	100	100
17	w	197/200 (98%)	195 (99%)	2 (1%)	0	100	100
18	BK	172/185 (93%)	167 (97%)	5 (3%)	0	100	100
18	x	169/185 (91%)	166 (98%)	3 (2%)	0	100	100
19	BL	183/186 (98%)	179 (98%)	4 (2%)	0	100	100
19	y	183/186 (98%)	179 (98%)	4 (2%)	0	100	100
20	BM	177/190 (93%)	173 (98%)	4 (2%)	0	100	100
20	z	177/190 (93%)	174 (98%)	3 (2%)	0	100	100
21	0	168/172 (98%)	166 (99%)	2 (1%)	0	100	100
21	BN	168/172 (98%)	166 (99%)	2 (1%)	0	100	100
22	2	157/160 (98%)	154 (98%)	3 (2%)	0	100	100
22	BO	157/160 (98%)	154 (98%)	3 (2%)	0	100	100
23	5	101/124 (82%)	95 (94%)	5 (5%)	1 (1%)	13	46
23	BP	100/124 (81%)	87 (87%)	10 (10%)	3 (3%)	3	20
24	6	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
24	BQ	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
25	7	114/155 (74%)	102 (90%)	12 (10%)	0	100	100
25	BR	94/155 (61%)	90 (96%)	4 (4%)	0	100	100
26	8	119/142 (84%)	118 (99%)	1 (1%)	0	100	100
26	BS	117/142 (82%)	115 (98%)	2 (2%)	0	100	100
27	9	124/127 (98%)	123 (99%)	1 (1%)	0	100	100
27	BT	124/127 (98%)	123 (99%)	1 (1%)	0	100	100
28	AA	133/136 (98%)	132 (99%)	1 (1%)	0	100	100
28	BU	133/136 (98%)	131 (98%)	2 (2%)	0	100	100
29	AB	146/149 (98%)	138 (94%)	8 (6%)	0	100	100
29	BV	146/149 (98%)	139 (95%)	7 (5%)	0	100	100
30	AC	60/63 (95%)	57 (95%)	1 (2%)	2 (3%)	3	18
30	BW	59/63 (94%)	58 (98%)	1 (2%)	0	100	100
31	AD	94/106 (89%)	93 (99%)	1 (1%)	0	100	100
31	BX	94/106 (89%)	92 (98%)	2 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
32	AE	108/112 (96%)	105 (97%)	3 (3%)	0	100 100
32	BY	108/112 (96%)	103 (95%)	3 (3%)	2 (2%)	6 31
33	AF	122/131 (93%)	122 (100%)	0	0	100 100
33	BZ	122/131 (93%)	122 (100%)	0	0	100 100
34	AG	104/107 (97%)	101 (97%)	3 (3%)	0	100 100
34	CA	104/107 (97%)	102 (98%)	2 (2%)	0	100 100
35	AH	110/122 (90%)	108 (98%)	2 (2%)	0	100 100
35	CB	110/122 (90%)	107 (97%)	3 (3%)	0	100 100
36	AI	118/120 (98%)	114 (97%)	4 (3%)	0	100 100
36	CC	116/120 (97%)	113 (97%)	3 (3%)	0	100 100
37	AJ	95/99 (96%)	94 (99%)	1 (1%)	0	100 100
37	CD	95/99 (96%)	94 (99%)	1 (1%)	0	100 100
38	AK	84/90 (93%)	81 (96%)	3 (4%)	0	100 100
38	CE	84/90 (93%)	81 (96%)	3 (4%)	0	100 100
39	AL	75/78 (96%)	70 (93%)	5 (7%)	0	100 100
39	CF	75/78 (96%)	68 (91%)	7 (9%)	0	100 100
40	AM	48/51 (94%)	46 (96%)	1 (2%)	1 (2%)	5 28
40	CG	48/51 (94%)	47 (98%)	1 (2%)	0	100 100
41	AN	50/52 (96%)	49 (98%)	1 (2%)	0	100 100
41	CH	49/52 (94%)	46 (94%)	1 (2%)	2 (4%)	2 13
42	AO	23/25 (92%)	22 (96%)	1 (4%)	0	100 100
42	CI	22/25 (88%)	22 (100%)	0	0	100 100
43	AP	101/106 (95%)	100 (99%)	1 (1%)	0	100 100
43	CJ	101/106 (95%)	100 (99%)	1 (1%)	0	100 100
44	AQ	89/92 (97%)	85 (96%)	4 (4%)	0	100 100
44	CK	89/92 (97%)	85 (96%)	4 (4%)	0	100 100
45	CL	117/267 (44%)	92 (79%)	21 (18%)	4 (3%)	3 17
45	i	117/267 (44%)	94 (80%)	19 (16%)	4 (3%)	3 17
47	C	206/261 (79%)	201 (98%)	5 (2%)	0	100 100
47	CN	206/261 (79%)	199 (97%)	7 (3%)	0	100 100
48	CO	212/256 (83%)	204 (96%)	8 (4%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
48	D	212/256 (83%)	207 (98%)	5 (2%)	0	100	100
49	CP	215/249 (86%)	209 (97%)	6 (3%)	0	100	100
49	E	215/249 (86%)	210 (98%)	5 (2%)	0	100	100
50	CQ	221/251 (88%)	211 (96%)	10 (4%)	0	100	100
50	F	221/251 (88%)	213 (96%)	8 (4%)	0	100	100
51	CR	258/262 (98%)	254 (98%)	4 (2%)	0	100	100
51	G	257/262 (98%)	253 (98%)	4 (2%)	0	100	100
52	CS	204/225 (91%)	196 (96%)	8 (4%)	0	100	100
52	H	204/225 (91%)	193 (95%)	11 (5%)	0	100	100
53	CT	234/236 (99%)	231 (99%)	3 (1%)	0	100	100
53	I	224/236 (95%)	220 (98%)	4 (2%)	0	100	100
54	CU	181/186 (97%)	171 (94%)	9 (5%)	1 (1%)	22	57
54	J	183/186 (98%)	172 (94%)	11 (6%)	0	100	100
55	CV	201/206 (98%)	199 (99%)	2 (1%)	0	100	100
55	K	201/206 (98%)	200 (100%)	1 (0%)	0	100	100
56	CW	176/189 (93%)	175 (99%)	1 (1%)	0	100	100
56	L	176/189 (93%)	175 (99%)	1 (1%)	0	100	100
57	CX	92/118 (78%)	86 (94%)	6 (6%)	0	100	100
57	M	96/118 (81%)	81 (84%)	14 (15%)	1 (1%)	13	46
58	CY	139/155 (90%)	128 (92%)	9 (6%)	2 (1%)	9	37
58	N	142/155 (92%)	137 (96%)	5 (4%)	0	100	100
59	CZ	117/143 (82%)	89 (76%)	23 (20%)	5 (4%)	2	13
59	O	114/143 (80%)	88 (77%)	22 (19%)	4 (4%)	3	16
60	DA	148/151 (98%)	146 (99%)	2 (1%)	0	100	100
60	P	148/151 (98%)	146 (99%)	2 (1%)	0	100	100
61	DB	125/132 (95%)	120 (96%)	4 (3%)	1 (1%)	16	51
61	Q	125/132 (95%)	119 (95%)	4 (3%)	2 (2%)	8	34
62	DC	128/142 (90%)	109 (85%)	19 (15%)	0	100	100
62	R	127/142 (89%)	115 (91%)	11 (9%)	1 (1%)	16	51
63	DD	138/142 (97%)	134 (97%)	4 (3%)	0	100	100
63	S	138/142 (97%)	133 (96%)	5 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
64	DE	122/137 (89%)	119 (98%)	3 (2%)	0	100	100
64	T	122/137 (89%)	118 (97%)	4 (3%)	0	100	100
65	DF	139/145 (96%)	133 (96%)	5 (4%)	1 (1%)	19	54
65	U	142/145 (98%)	137 (96%)	5 (4%)	0	100	100
66	DG	139/145 (96%)	133 (96%)	5 (4%)	1 (1%)	19	54
66	V	139/145 (96%)	136 (98%)	3 (2%)	0	100	100
67	DH	95/119 (80%)	93 (98%)	2 (2%)	0	100	100
67	W	100/119 (84%)	97 (97%)	3 (3%)	0	100	100
68	DI	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
68	X	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
69	DJ	127/130 (98%)	125 (98%)	2 (2%)	0	100	100
69	Y	127/130 (98%)	125 (98%)	2 (2%)	0	100	100
70	DK	141/145 (97%)	139 (99%)	2 (1%)	0	100	100
70	Z	141/145 (97%)	137 (97%)	4 (3%)	0	100	100
71	DL	130/135 (96%)	130 (100%)	0	0	100	100
71	a	132/135 (98%)	130 (98%)	2 (2%)	0	100	100
72	DM	69/105 (66%)	65 (94%)	4 (6%)	0	100	100
72	b	70/105 (67%)	69 (99%)	1 (1%)	0	100	100
73	DN	96/119 (81%)	94 (98%)	2 (2%)	0	100	100
73	c	96/119 (81%)	94 (98%)	2 (2%)	0	100	100
74	DO	79/82 (96%)	72 (91%)	7 (9%)	0	100	100
74	d	79/82 (96%)	75 (95%)	4 (5%)	0	100	100
75	DP	59/67 (88%)	52 (88%)	7 (12%)	0	100	100
75	e	60/67 (90%)	57 (95%)	3 (5%)	0	100	100
76	DQ	52/56 (93%)	49 (94%)	3 (6%)	0	100	100
76	f	53/56 (95%)	51 (96%)	2 (4%)	0	100	100
77	DR	56/63 (89%)	50 (89%)	5 (9%)	1 (2%)	7	32
77	g	58/63 (92%)	54 (93%)	4 (7%)	0	100	100
78	DS	67/193 (35%)	55 (82%)	9 (13%)	3 (4%)	2	12
78	h	68/193 (35%)	52 (76%)	15 (22%)	1 (2%)	8	36
79	AR	309/317 (98%)	292 (94%)	17 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
79	DT	309/317 (98%)	284 (92%)	22 (7%)	3 (1%)	13 46
80	P0	105/312 (34%)	82 (78%)	20 (19%)	3 (3%)	3 20
80	p0	105/312 (34%)	74 (70%)	28 (27%)	3 (3%)	3 20
81	12	61/165 (37%)	38 (62%)	23 (38%)	0	100 100
82	L1	215/217 (99%)	162 (75%)	49 (23%)	4 (2%)	6 31
82	l1	215/217 (99%)	128 (60%)	77 (36%)	10 (5%)	2 11
All	All	22809/25499 (90%)	21774 (96%)	965 (4%)	70 (0%)	37 70

All (70) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
30	AC	21	ILE
40	AM	49	LEU
45	i	55	LYS
45	i	64	LEU
59	O	41	LEU
59	O	130	SER
61	Q	119	ASP
61	Q	120	SER
41	CH	3	GLU
45	CL	41	ALA
45	CL	43	PRO
45	CL	72	ASP
59	CZ	82	PRO
59	CZ	112	ALA
65	DF	57	ARG
66	DG	119	LYS
79	DT	75	SER
79	DT	122	GLN
80	P0	24	SER
80	P0	71	PRO
80	P0	72	GLU
82	L1	45	ARG
82	l1	71	ALA
82	l1	74	VAL
82	l1	129	SER
82	l1	157	PHE
82	l1	179	LEU
82	l1	212	PRO
80	p0	46	ARG

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Mol	Chain	Res	Type
80	p0	71	PRO
80	p0	101	VAL
10	p	205	ASN
45	i	63	ALA
57	M	88	PRO
62	R	2	VAL
41	CH	4	PRO
58	CY	26	LYS
59	CZ	34	THR
82	L1	212	PRO
82	l1	27	ASN
82	l1	59	PRO
82	l1	87	VAL
82	l1	180	VAL
23	5	20	ALA
32	BY	83	ASP
32	BY	110	ASP
82	L1	56	PRO
82	L1	59	PRO
9	BB	230	GLU
23	BP	20	ALA
23	BP	24	GLU
78	DS	125	LYS
78	DS	128	THR
45	i	44	ALA
59	O	39	ASP
59	O	104	CYS
78	h	171	GLY
10	BC	128	PRO
45	CL	48	PRO
54	CU	156	THR
59	CZ	103	LEU
59	CZ	108	ARG
79	DT	28	ALA
30	AC	3	LYS
23	BP	13	LYS
58	CY	27	ALA
61	DB	119	ASP
77	DR	7	SER
78	DS	126	VAL
10	BC	127	SER

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
4	AW	190/194 (98%)	188 (99%)	2 (1%)	70 87
4	j	190/194 (98%)	190 (100%)	0	100 100
5	AX	325/328 (99%)	323 (99%)	2 (1%)	84 93
5	k	325/328 (99%)	323 (99%)	2 (1%)	84 93
6	AY	290/292 (99%)	287 (99%)	3 (1%)	73 88
6	l	290/292 (99%)	288 (99%)	2 (1%)	81 91
7	AZ	247/252 (98%)	244 (99%)	3 (1%)	67 86
7	m	250/252 (99%)	249 (100%)	1 (0%)	89 95
8	BA	132/154 (86%)	132 (100%)	0	100 100
8	n	136/154 (88%)	135 (99%)	1 (1%)	81 91
9	BB	198/204 (97%)	198 (100%)	0	100 100
9	o	198/204 (97%)	197 (100%)	1 (0%)	86 94
10	BC	193/216 (89%)	193 (100%)	0	100 100
10	p	198/216 (92%)	197 (100%)	1 (0%)	86 94
11	BD	169/170 (99%)	169 (100%)	0	100 100
11	q	169/170 (99%)	168 (99%)	1 (1%)	84 93
12	BE	178/186 (96%)	177 (99%)	1 (1%)	84 93
12	r	178/186 (96%)	177 (99%)	1 (1%)	84 93
13	BF	146/149 (98%)	144 (99%)	2 (1%)	62 83
13	s	146/149 (98%)	144 (99%)	2 (1%)	62 83
14	BG	166/168 (99%)	164 (99%)	2 (1%)	67 86
14	t	166/168 (99%)	165 (99%)	1 (1%)	84 93
15	BH	108/109 (99%)	107 (99%)	1 (1%)	75 89
15	u	108/109 (99%)	108 (100%)	0	100 100
16	BI	177/178 (99%)	176 (99%)	1 (1%)	84 93
16	v	177/178 (99%)	176 (99%)	1 (1%)	84 93

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
17	BJ	166/167 (99%)	166 (100%)	0	100	100
17	w	166/167 (99%)	166 (100%)	0	100	100
18	BK	145/154 (94%)	143 (99%)	2 (1%)	62	83
18	x	144/154 (94%)	144 (100%)	0	100	100
19	BL	153/154 (99%)	153 (100%)	0	100	100
19	y	153/154 (99%)	153 (100%)	0	100	100
20	BM	146/153 (95%)	142 (97%)	4 (3%)	40	71
20	z	146/153 (95%)	146 (100%)	0	100	100
21	0	155/157 (99%)	154 (99%)	1 (1%)	84	93
21	BN	155/157 (99%)	155 (100%)	0	100	100
22	2	133/134 (99%)	133 (100%)	0	100	100
22	BO	133/134 (99%)	132 (99%)	1 (1%)	79	90
23	5	93/112 (83%)	92 (99%)	1 (1%)	70	87
23	BP	93/112 (83%)	90 (97%)	3 (3%)	34	67
24	6	101/104 (97%)	100 (99%)	1 (1%)	73	88
24	BQ	101/104 (97%)	101 (100%)	0	100	100
25	7	97/127 (76%)	95 (98%)	2 (2%)	48	77
25	BR	86/127 (68%)	85 (99%)	1 (1%)	67	86
26	8	108/121 (89%)	107 (99%)	1 (1%)	75	89
26	BS	107/121 (88%)	107 (100%)	0	100	100
27	9	111/112 (99%)	109 (98%)	2 (2%)	54	80
27	BT	111/112 (99%)	110 (99%)	1 (1%)	75	89
28	AA	117/118 (99%)	117 (100%)	0	100	100
28	BU	117/118 (99%)	116 (99%)	1 (1%)	75	89
29	AB	120/121 (99%)	120 (100%)	0	100	100
29	BV	120/121 (99%)	118 (98%)	2 (2%)	56	81
30	AC	48/49 (98%)	47 (98%)	1 (2%)	48	77
30	BW	48/49 (98%)	48 (100%)	0	100	100
31	AD	81/90 (90%)	81 (100%)	0	100	100
31	BX	81/90 (90%)	81 (100%)	0	100	100
32	AE	98/100 (98%)	97 (99%)	1 (1%)	73	88

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
32	BY	98/100 (98%)	98 (100%)	0	100 100
33	AF	109/115 (95%)	109 (100%)	0	100 100
33	BZ	110/115 (96%)	110 (100%)	0	100 100
34	AG	91/92 (99%)	90 (99%)	1 (1%)	70 87
34	CA	91/92 (99%)	91 (100%)	0	100 100
35	AH	95/102 (93%)	93 (98%)	2 (2%)	48 77
35	CB	95/102 (93%)	95 (100%)	0	100 100
36	AI	106/106 (100%)	105 (99%)	1 (1%)	75 89
36	CC	105/106 (99%)	103 (98%)	2 (2%)	52 79
37	AJ	77/79 (98%)	76 (99%)	1 (1%)	65 85
37	CD	77/79 (98%)	77 (100%)	0	100 100
38	AK	70/73 (96%)	70 (100%)	0	100 100
38	CE	70/73 (96%)	70 (100%)	0	100 100
39	AL	68/69 (99%)	68 (100%)	0	100 100
39	CF	68/69 (99%)	68 (100%)	0	100 100
40	AM	46/47 (98%)	46 (100%)	0	100 100
40	CG	46/47 (98%)	45 (98%)	1 (2%)	47 76
41	AN	47/47 (100%)	47 (100%)	0	100 100
41	CH	46/47 (98%)	45 (98%)	1 (2%)	47 76
42	AO	24/24 (100%)	22 (92%)	2 (8%)	9 34
42	CI	23/24 (96%)	22 (96%)	1 (4%)	25 58
43	AP	88/91 (97%)	88 (100%)	0	100 100
43	CJ	88/91 (97%)	87 (99%)	1 (1%)	70 87
44	AQ	72/73 (99%)	72 (100%)	0	100 100
44	CK	72/73 (99%)	72 (100%)	0	100 100
45	CL	100/212 (47%)	100 (100%)	0	100 100
45	i	100/212 (47%)	99 (99%)	1 (1%)	73 88
47	C	176/215 (82%)	175 (99%)	1 (1%)	84 93
47	CN	176/215 (82%)	174 (99%)	2 (1%)	70 87
48	CO	194/229 (85%)	191 (98%)	3 (2%)	60 83
48	D	194/229 (85%)	194 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
49	CP	175/198 (88%)	172 (98%)	3 (2%)	56 81
49	E	175/198 (88%)	175 (100%)	0	100 100
50	CQ	174/196 (89%)	172 (99%)	2 (1%)	70 87
50	F	174/196 (89%)	172 (99%)	2 (1%)	70 87
51	CR	218/220 (99%)	217 (100%)	1 (0%)	86 94
51	G	218/220 (99%)	218 (100%)	0	100 100
52	CS	178/197 (90%)	175 (98%)	3 (2%)	56 81
52	H	178/197 (90%)	177 (99%)	1 (1%)	84 93
53	CT	204/204 (100%)	202 (99%)	2 (1%)	73 88
53	I	195/204 (96%)	191 (98%)	4 (2%)	48 77
54	CU	164/167 (98%)	163 (99%)	1 (1%)	84 93
54	J	166/167 (99%)	165 (99%)	1 (1%)	84 93
55	CV	157/160 (98%)	157 (100%)	0	100 100
55	K	157/160 (98%)	156 (99%)	1 (1%)	84 93
56	CW	153/160 (96%)	153 (100%)	0	100 100
56	L	153/160 (96%)	153 (100%)	0	100 100
57	CX	88/104 (85%)	88 (100%)	0	100 100
57	M	90/104 (86%)	90 (100%)	0	100 100
58	CY	122/134 (91%)	121 (99%)	1 (1%)	79 90
58	N	124/134 (92%)	122 (98%)	2 (2%)	58 82
59	CZ	101/123 (82%)	99 (98%)	2 (2%)	50 78
59	O	98/123 (80%)	90 (92%)	8 (8%)	9 34
60	DA	129/130 (99%)	128 (99%)	1 (1%)	79 90
60	P	129/130 (99%)	129 (100%)	0	100 100
61	DB	97/102 (95%)	97 (100%)	0	100 100
61	Q	97/102 (95%)	97 (100%)	0	100 100
62	DC	112/121 (93%)	110 (98%)	2 (2%)	54 80
62	R	111/121 (92%)	110 (99%)	1 (1%)	75 89
63	DD	114/116 (98%)	113 (99%)	1 (1%)	75 89
63	S	114/116 (98%)	114 (100%)	0	100 100
64	DE	112/122 (92%)	112 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
64	T	112/122 (92%)	111 (99%)	1 (1%)	75 89
65	DF	125/129 (97%)	121 (97%)	4 (3%)	34 67
65	U	128/129 (99%)	126 (98%)	2 (2%)	58 82
66	DG	113/117 (97%)	113 (100%)	0	100 100
66	V	113/117 (97%)	113 (100%)	0	100 100
67	DH	87/105 (83%)	85 (98%)	2 (2%)	45 75
67	W	92/105 (88%)	89 (97%)	3 (3%)	33 67
68	DI	71/71 (100%)	70 (99%)	1 (1%)	62 83
68	X	71/71 (100%)	71 (100%)	0	100 100
69	DJ	112/113 (99%)	111 (99%)	1 (1%)	75 89
69	Y	112/113 (99%)	112 (100%)	0	100 100
70	DK	116/118 (98%)	115 (99%)	1 (1%)	75 89
70	Z	116/118 (98%)	115 (99%)	1 (1%)	75 89
71	DL	109/112 (97%)	109 (100%)	0	100 100
71	a	111/112 (99%)	110 (99%)	1 (1%)	75 89
72	DM	63/85 (74%)	63 (100%)	0	100 100
72	b	64/85 (75%)	64 (100%)	0	100 100
73	DN	84/102 (82%)	83 (99%)	1 (1%)	67 86
73	c	84/102 (82%)	82 (98%)	2 (2%)	44 74
74	DO	72/73 (99%)	72 (100%)	0	100 100
74	d	72/73 (99%)	72 (100%)	0	100 100
75	DP	53/58 (91%)	53 (100%)	0	100 100
75	e	54/58 (93%)	53 (98%)	1 (2%)	52 79
76	DQ	47/48 (98%)	44 (94%)	3 (6%)	14 44
76	f	47/48 (98%)	45 (96%)	2 (4%)	25 58
77	DR	50/54 (93%)	48 (96%)	2 (4%)	27 61
77	g	51/54 (94%)	51 (100%)	0	100 100
78	DS	61/175 (35%)	58 (95%)	3 (5%)	21 54
78	h	62/175 (35%)	58 (94%)	4 (6%)	14 43
79	AR	259/263 (98%)	258 (100%)	1 (0%)	89 95
79	DT	259/263 (98%)	255 (98%)	4 (2%)	60 83

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
80	P0	92/247 (37%)	86 (94%)	6 (6%)	14 43
80	p0	92/247 (37%)	88 (96%)	4 (4%)	25 58
81	12	53/137 (39%)	50 (94%)	3 (6%)	17 49
82	L1	196/196 (100%)	186 (95%)	10 (5%)	20 53
82	l1	196/196 (100%)	185 (94%)	11 (6%)	17 49
All	All	19581/21471 (91%)	19392 (99%)	189 (1%)	73 88

All (189) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
5	k	3	HIS
5	k	386	ASP
6	l	99	ARG
6	l	121	TYR
7	m	45	ASN
8	n	166	LYS
9	o	198	ASN
10	p	27	LEU
11	q	106	LYS
12	r	92	HIS
13	s	13	ARG
13	s	68	HIS
14	t	4	SER
16	v	178	HIS
21	0	113	ARG
23	5	103	GLN
24	6	128	ARG
25	7	56	ARG
25	7	80	ARG
26	8	138	ARG
27	9	3	LYS
27	9	5	SER
30	AC	62	SER
32	AE	16	HIS
34	AG	92	LYS
35	AH	4	ARG
35	AH	67	LYS
36	AI	1	MET
37	AJ	98	ARG
42	AO	2	ARG

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Mol	Chain	Res	Type
42	AO	15	ARG
45	i	82	LYS
47	C	18	LEU
50	F	77	ARG
50	F	167	ASP
52	H	157	ARG
53	I	25	ARG
53	I	81	HIS
53	I	116	GLN
53	I	193	LYS
54	J	30	LEU
55	K	125	LYS
58	N	46	LYS
58	N	67	ARG
59	O	33	ARG
59	O	34	THR
59	O	35	SER
59	O	36	LEU
59	O	38	HIS
59	O	39	ASP
59	O	69	GLU
59	O	129	ASP
62	R	28	MET
64	T	80	ARG
65	U	127	HIS
65	U	138	THR
67	W	51	LYS
67	W	88	ARG
67	W	100	LYS
70	Z	107	PHE
71	a	135	ASP
73	c	5	ARG
73	c	89	ARG
75	e	62	GLU
76	f	33	LYS
76	f	40	ARG
78	h	161	ARG
78	h	167	THR
78	h	185	LYS
78	h	186	CYS
79	AR	121	ARG
4	AW	142	ASP

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Mol	Chain	Res	Type
4	AW	159	SER
5	AX	5	LYS
5	AX	226	PHE
6	AY	59	HIS
6	AY	99	ARG
6	AY	145	GLN
7	AZ	81	HIS
7	AZ	136	GLU
7	AZ	244	HIS
12	BE	203	LYS
13	BF	13	ARG
13	BF	168	ASP
14	BG	4	SER
14	BG	45	LYS
15	BH	23	ASN
16	BI	109	ARG
18	BK	30	ARG
18	BK	118	GLN
20	BM	20	ARG
20	BM	162	ARG
20	BM	167	ARG
20	BM	170	ARG
22	BO	83	ARG
23	BP	14	LYS
23	BP	28	PHE
23	BP	61	ASP
25	BR	94	ARG
27	BT	3	LYS
28	BU	112	LYS
29	BV	25	HIS
29	BV	132	LYS
36	CC	65	ASN
36	CC	114	ARG
40	CG	21	ARG
41	CH	22	LYS
42	CI	9	ARG
43	CJ	40	LYS
47	CN	79	ARG
47	CN	205	ARG
48	CO	80	SER
48	CO	90	GLU
48	CO	200	SER

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Mol	Chain	Res	Type
49	CP	74	ASP
49	CP	136	ARG
49	CP	233	SER
50	CQ	77	ARG
50	CQ	179	ARG
51	CR	10	LYS
52	CS	116	HIS
52	CS	157	ARG
52	CS	163	SER
53	CT	93	LYS
53	CT	155	ASP
54	CU	30	LEU
58	CY	67	ARG
59	CZ	33	ARG
59	CZ	46	ARG
60	DA	99	ARG
62	DC	36	LEU
62	DC	130	ARG
63	DD	65	ARG
65	DF	25	ARG
65	DF	36	ARG
65	DF	41	ARG
65	DF	138	THR
67	DH	51	LYS
67	DH	100	LYS
68	DI	56	SER
69	DJ	37	PHE
70	DK	90	ASP
73	DN	74	CYS
76	DQ	8	PHE
76	DQ	42	CYS
76	DQ	54	LYS
77	DR	29	LYS
77	DR	31	GLN
78	DS	140	HIS
78	DS	183	CYS
78	DS	186	CYS
79	DT	161	ASP
79	DT	226	LYS
79	DT	265	ARG
79	DT	294	ASP
80	P0	5	ARG

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Mol	Chain	Res	Type
80	P0	16	ARG
80	P0	34	SER
80	P0	88	PHE
80	P0	94	LYS
80	P0	97	ARG
81	12	121	PHE
81	12	144	ASP
81	12	146	LYS
82	L1	18	GLU
82	L1	46	ASP
82	L1	60	ARG
82	L1	63	MET
82	L1	66	CYS
82	L1	68	PHE
82	L1	88	ASP
82	L1	142	ASP
82	L1	207	LYS
82	L1	214	PHE
82	l1	26	ARG
82	l1	45	ARG
82	l1	68	PHE
82	l1	73	ASP
82	l1	76	ARG
82	l1	85	MET
82	l1	130	LYS
82	l1	134	PHE
82	l1	173	ASP
82	l1	189	PHE
82	l1	198	TRP
80	p0	8	LYS
80	p0	10	GLN
80	p0	48	ASP
80	p0	74	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (24) such sidechains are listed below:

Mol	Chain	Res	Type
9	o	17	GLN
23	5	30	GLN
32	AE	68	ASN
36	AI	45	HIS
45	i	66	ASN

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Mol	Chain	Res	Type
79	AR	53	ASN
7	AZ	94	ASN
9	BB	17	GLN
22	BO	22	HIS
22	BO	66	ASN
22	BO	95	HIS
36	CC	62	GLN
45	CL	33	ASN
48	CO	232	HIS
49	CP	54	HIS
52	CS	63	GLN
55	CV	32	GLN
63	DD	138	GLN
77	DR	31	GLN
79	DT	53	ASN
82	l1	12	ASN
80	p0	39	HIS
80	p0	56	ASN
80	p0	83	ASN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1	3212/3359 (95%)	605 (18%)	44 (1%)
1	AS	3226/3359 (96%)	629 (19%)	50 (1%)
2	3	120/121 (99%)	9 (7%)	0
2	AT	120/121 (99%)	9 (7%)	0
3	4	156/158 (98%)	23 (14%)	3 (1%)
3	AU	157/158 (99%)	22 (14%)	3 (1%)
46	B	1758/1787 (98%)	450 (25%)	46 (2%)
46	CM	1762/1787 (98%)	456 (25%)	55 (3%)
All	All	10511/10850 (96%)	2203 (20%)	201 (1%)

All (2203) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1	15	A
1	1	24	U
1	1	25	A
1	1	29	G
1	1	39	A

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Mol	Chain	Res	Type
1	1	42	A
1	1	48	A
1	1	56	A
1	1	58	G
1	1	59	A
1	1	64	A
1	1	65	A
1	1	91	G
1	1	98	A
1	1	104	C
1	1	108	A
1	1	109	G
1	1	110	C
1	1	121	A
1	1	134	U
1	1	135	G
1	1	155	A
1	1	156	A
1	1	164	U
1	1	169	G
1	1	172	C
1	1	173	C
1	1	175	G
1	1	186	A
1	1	189	U
1	1	190	U
1	1	199	C
1	1	205	G
1	1	209	C
1	1	212	A
1	1	217	G
1	1	218	A
1	1	219	G
1	1	230	G
1	1	236	A
1	1	239	A
1	1	240	C
1	1	243	G
1	1	245	G
1	1	249	G
1	1	250	U
1	1	269	G

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Mol	Chain	Res	Type
1	1	286	U
1	1	295	A
1	1	305	U
1	1	311	C
1	1	323	A
1	1	329	U
1	1	337	G
1	1	338	A
1	1	339	C
1	1	349	A
1	1	350	C
1	1	376	G
1	1	377	A
1	1	387	A
1	1	395	A
1	1	398	A
1	1	402	A
1	1	403	C
1	1	404	G
1	1	420	G
1	1	421	G
1	1	422	A
1	1	438	A
1	1	439	C
1	1	448	U
1	1	450	G
1	1	451	C
1	1	482	U
1	1	506	A
1	1	517	A
1	1	519	U
1	1	531	G
1	1	532	U
1	1	538	G
1	1	539	G
1	1	540	C
1	1	541	U
1	1	542	U
1	1	543	C
1	1	544	U
1	1	545	G
1	1	546	C

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Mol	Chain	Res	Type
1	1	555	A
1	1	556	U
1	1	557	A
1	1	564	G
1	1	577	G
1	1	589	G
1	1	590	A
1	1	598	U
1	1	599	U
1	1	609	A
1	1	618	U
1	1	619	A
1	1	620	A
1	1	635	C
1	1	647	A
1	1	658	A
1	1	675	A
1	1	679	U
1	1	681	U
1	1	688	A
1	1	689	A
1	1	703	A
1	1	710	G
1	1	713	A
1	1	717	A
1	1	723	G
1	1	730	A
1	1	732	U
1	1	760	U
1	1	763	U
1	1	772	U
1	1	773	U
1	1	776	A
1	1	777	G
1	1	780	A
1	1	781	G
1	1	802	A
1	1	813	A
1	1	826	A
1	1	845	C
1	1	857	C
1	1	861	U

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Mol	Chain	Res	Type
1	1	870	U
1	1	875	U
1	1	903	G
1	1	904	G
1	1	910	A
1	1	912	G
1	1	913	A
1	1	914	C
1	1	917	A
1	1	919	C
1	1	921	A
1	1	933	G
1	1	935	U
1	1	940	C
1	1	949	G
1	1	955	C
1	1	956	U
1	1	958	A
1	1	959	G
1	1	970	G
1	1	977	U
1	1	990	G
1	1	991	U
1	1	996	C
1	1	997	G
1	1	998	A
1	1	1006	G
1	1	1011	C
1	1	1012	U
1	1	1013	U
1	1	1014	G
1	1	1019	U
1	1	1020	G
1	1	1021	A
1	1	1022	A
1	1	1023	A
1	1	1024	U
1	1	1025	G
1	1	1027	C
1	1	1030	U
1	1	1033	C
1	1	1043	A

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Mol	Chain	Res	Type
1	1	1045	C
1	1	1060	A
1	1	1061	A
1	1	1068	G
1	1	1077	U
1	1	1078	U
1	1	1089	A
1	1	1090	A
1	1	1091	U
1	1	1092	U
1	1	1094	A
1	1	1099	A
1	1	1100	G
1	1	1113	G
1	1	1127	G
1	1	1140	U
1	1	1149	A
1	1	1150	A
1	1	1151	C
1	1	1155	A
1	1	1156	C
1	1	1164	U
1	1	1174	G
1	1	1176	A
1	1	1177	U
1	1	1178	G
1	1	1188	C
1	1	1189	A
1	1	1192	C
1	1	1197	C
1	1	1204	U
1	1	1205	G
1	1	1218	G
1	1	1223	C
1	1	1224	C
1	1	1229	G
1	1	1230	G
1	1	1231	U
1	1	1232	G
1	1	1239	G
1	1	1240	A
1	1	1241	A

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Mol	Chain	Res	Type
1	1	1242	G
1	1	1244	C
1	1	1245	G
1	1	1246	G
1	1	1247	A
1	1	1249	U
1	1	1250	C
1	1	1252	G
1	1	1254	U
1	1	1255	A
1	1	1257	G
1	1	1258	G
1	1	1259	A
1	1	1261	U
1	1	1262	G
1	1	1263	U
1	1	1264	G
1	1	1265	U
1	1	1266	A
1	1	1267	A
1	1	1270	A
1	1	1271	C
1	1	1273	C
1	1	1274	A
1	1	1278	G
1	1	1280	C
1	1	1282	A
1	1	1303	G
1	1	1304	A
1	1	1305	U
1	1	1309	G
1	1	1312	C
1	1	1326	A
1	1	1345	G
1	1	1346	U
1	1	1347	U
1	1	1348	U
1	1	1349	U
1	1	1382	A
1	1	1395	U
1	1	1415	A
1	1	1417	G

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Mol	Chain	Res	Type
1	1	1421	U
1	1	1427	G
1	1	1430	G
1	1	1433	C
1	1	1442	A
1	1	1446	G
1	1	1465	C
1	1	1471	A
1	1	1477	A
1	1	1484	G
1	1	1498	C
1	1	1504	C
1	1	1520	A
1	1	1523	C
1	1	1525	A
1	1	1526	U
1	1	1532	G
1	1	1535	A
1	1	1552	C
1	1	1556	G
1	1	1558	G
1	1	1559	C
1	1	1560	U
1	1	1561	U
1	1	1562	G
1	1	1563	A
1	1	1565	U
1	1	1566	U
1	1	1567	U
1	1	1568	U
1	1	1569	C
1	1	1571	G
1	1	1572	G
1	1	1574	C
1	1	1576	A
1	1	1585	A
1	1	1589	A
1	1	1601	A
1	1	1603	U
1	1	1624	C
1	1	1625	U
1	1	1635	C

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Mol	Chain	Res	Type
1	1	1638	A
1	1	1639	A
1	1	1641	U
1	1	1648	G
1	1	1653	C
1	1	1654	G
1	1	1679	A
1	1	1720	U
1	1	1721	C
1	1	1732	G
1	1	1746	A
1	1	1747	G
1	1	1755	U
1	1	1756	A
1	1	1757	A
1	1	1758	U
1	1	1760	U
1	1	1761	U
1	1	1762	G
1	1	1763	C
1	1	1776	G
1	1	1793	A
1	1	1804	G
1	1	1809	A
1	1	1810	A
1	1	1811	U
1	1	1812	A
1	1	1814	U
1	1	1815	U
1	1	1816	U
1	1	1817	U
1	1	1837	A
1	1	1838	A
1	1	1842	C
1	1	1845	C
1	1	1862	C
1	1	1874	G
1	1	1882	A
1	1	1889	A
1	1	1902	G
1	1	1944	G
1	1	1949	G

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Mol	Chain	Res	Type
1	1	2068	U
1	1	2069	U
1	1	2070	A
1	1	2071	A
1	1	2078	A
1	1	2088	G
1	1	2089	G
1	1	2091	A
1	1	2092	C
1	1	2099	G
1	1	2100	G
1	1	2109	A
1	1	2118	U
1	1	2122	A
1	1	2136	A
1	1	2147	G
1	1	2149	G
1	1	2183	U
1	1	2184	G
1	1	2185	A
1	1	2186	A
1	1	2187	U
1	1	2188	G
1	1	2222	A
1	1	2227	G
1	1	2233	A
1	1	2234	A
1	1	2235	C
1	1	2250	G
1	1	2251	G
1	1	2259	A
1	1	2260	U
1	1	2276	U
1	1	2285	G
1	1	2286	C
1	1	2288	U
1	1	2291	A
1	1	2292	U
1	1	2293	G
1	1	2313	G
1	1	2314	U
1	1	2341	A

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Mol	Chain	Res	Type
1	1	2351	A
1	1	2352	C
1	1	2353	G
1	1	2363	G
1	1	2366	U
1	1	2371	G
1	1	2372	G
1	1	2375	A
1	1	2380	A
1	1	2381	G
1	1	2382	A
1	1	2389	U
1	1	2396	G
1	1	2397	A
1	1	2413	G
1	1	2415	G
1	1	2420	G
1	1	2421	A
1	1	2422	C
1	1	2423	A
1	1	2426	G
1	1	2427	A
1	1	2430	G
1	1	2431	U
1	1	2432	G
1	1	2433	U
1	1	2437	A
1	1	2438	U
1	1	2439	A
1	1	2440	A
1	1	2441	G
1	1	2442	U
1	1	2443	G
1	1	2444	G
1	1	2445	G
1	1	2446	A
1	1	2448	C
1	1	2449	U
1	1	2450	U
1	1	2452	G
1	1	2454	C
1	1	2455	G

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Mol	Chain	Res	Type
1	1	2456	C
1	1	2457	C
1	1	2459	G
1	1	2460	U
1	1	2464	A
1	1	2465	U
1	1	2466	A
1	1	2467	C
1	1	2468	C
1	1	2470	C
1	1	2471	U
1	1	2472	A
1	1	2473	C
1	1	2475	U
1	1	2476	C
1	1	2477	U
1	1	2480	A
1	1	2481	G
1	1	2482	U
1	1	2483	U
1	1	2484	U
1	1	2489	A
1	1	2492	U
1	1	2493	A
1	1	2511	G
1	1	2513	A
1	1	2515	G
1	1	2516	U
1	1	2517	C
1	1	2518	A
1	1	2519	A
1	1	2520	A
1	1	2521	C
1	1	2529	U
1	1	2530	C
1	1	2533	G
1	1	2536	U
1	1	2538	A
1	1	2545	C
1	1	2546	U
1	1	2554	C
1	1	2557	G

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Mol	Chain	Res	Type
1	1	2565	A
1	1	2566	C
1	1	2578	G
1	1	2579	G
1	1	2586	G
1	1	2598	A
1	1	2623	G
1	1	2624	U
1	1	2628	A
1	1	2638	C
1	1	2644	G
1	1	2646	A
1	1	2649	G
1	1	2661	A
1	1	2662	G
1	1	2663	A
1	1	2664	A
1	1	2666	A
1	1	2676	A
1	1	2677	A
1	1	2686	G
1	1	2691	U
1	1	2699	A
1	1	2700	G
1	1	2701	U
1	1	2724	U
1	1	2725	G
1	1	2734	A
1	1	2745	C
1	1	2749	G
1	1	2750	G
1	1	2768	G
1	1	2771	A
1	1	2772	G
1	1	2773	A
1	1	2774	A
1	1	2782	C
1	1	2786	G
1	1	2789	A
1	1	2790	U
1	1	2808	C
1	1	2814	U

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Mol	Chain	Res	Type
1	1	2815	U
1	1	2817	A
1	1	2833	U
1	1	2839	C
1	1	2843	G
1	1	2844	A
1	1	2847	U
1	1	2859	A
1	1	2861	C
1	1	2866	C
1	1	2870	G
1	1	2871	C
1	1	2886	G
1	1	2895	U
1	1	2907	U
1	1	2908	A
1	1	2911	G
1	1	2914	C
1	1	2919	G
1	1	2920	C
1	1	2923	G
1	1	2943	A
1	1	2955	C
1	1	2962	G
1	1	2969	G
1	1	2984	A
1	1	3021	A
1	1	3028	U
1	1	3031	G
1	1	3050	A
1	1	3051	C
1	1	3052	G
1	1	3058	A
1	1	3064	C
1	1	3073	G
1	1	3094	A
1	1	3101	A
1	1	3102	A
1	1	3103	U
1	1	3114	A
1	1	3115	C
1	1	3127	U

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Mol	Chain	Res	Type
1	1	3143	G
1	1	3144	A
1	1	3146	G
1	1	3149	U
1	1	3151	C
1	1	3157	A
1	1	3160	C
1	1	3161	U
1	1	3162	U
1	1	3163	U
1	1	3164	U
1	1	3165	U
1	1	3166	A
1	1	3167	G
1	1	3171	C
1	1	3172	U
1	1	3182	C
1	1	3183	A
1	1	3184	G
1	1	3194	G
1	1	3208	A
1	1	3210	A
1	1	3212	G
1	1	3214	U
1	1	3221	G
1	1	3224	U
1	1	3228	G
1	1	3235	A
1	1	3241	G
1	1	3246	C
1	1	3252	C
1	1	3259	A
1	1	3260	A
1	1	3268	G
1	1	3269	C
1	1	3272	A
1	1	3278	U
1	1	3281	A
1	1	3284	U
1	1	3285	A
1	1	3306	U
1	1	3307	A

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Mol	Chain	Res	Type
1	1	3309	A
1	1	3310	G
1	1	3316	U
1	1	3317	U
1	1	3318	G
1	1	3319	U
1	1	3320	U
1	1	3321	G
1	1	3334	G
1	1	3343	C
1	1	3351	G
1	1	3361	U
2	3	7	G
2	3	22	A
2	3	54	U
2	3	55	A
2	3	65	G
2	3	73	C
2	3	76	A
2	3	102	A
2	3	112	G
3	4	23	U
3	4	34	U
3	4	35	C
3	4	59	A
3	4	62	C
3	4	63	G
3	4	81	A
3	4	84	C
3	4	85	G
3	4	86	U
3	4	87	G
3	4	92	A
3	4	95	G
3	4	102	U
3	4	104	A
3	4	106	C
3	4	111	A
3	4	113	U
3	4	125	U
3	4	126	A
3	4	148	G

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Mol	Chain	Res	Type
3	4	152	G
3	4	157	U
46	B	17	C
46	B	25	C
46	B	26	A
46	B	27	U
46	B	34	G
46	B	47	A
46	B	57	G
46	B	66	U
46	B	74	U
46	B	75	U
46	B	76	A
46	B	78	A
46	B	79	C
46	B	81	G
46	B	84	A
46	B	93	A
46	B	104	A
46	B	114	C
46	B	115	G
46	B	123	G
46	B	126	A
46	B	127	G
46	B	128	U
46	B	129	A
46	B	130	C
46	B	131	C
46	B	132	U
46	B	133	U
46	B	134	A
46	B	135	C
46	B	138	C
46	B	139	U
46	B	142	G
46	B	143	A
46	B	150	U
46	B	151	G
46	B	152	G
46	B	154	A
46	B	159	U
46	B	166	A

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Mol	Chain	Res	Type
46	B	168	U
46	B	173	G
46	B	174	C
46	B	176	U
46	B	177	A
46	B	179	A
46	B	190	U
46	B	191	U
46	B	193	G
46	B	199	G
46	B	200	A
46	B	202	G
46	B	206	U
46	B	211	A
46	B	213	A
46	B	214	U
46	B	215	A
46	B	216	A
46	B	217	A
46	B	218	A
46	B	220	A
46	B	221	U
46	B	224	A
46	B	226	G
46	B	229	U
46	B	230	U
46	B	231	C
46	B	233	G
46	B	236	U
46	B	237	C
46	B	238	U
46	B	247	U
46	B	255	A
46	B	259	U
46	B	260	U
46	B	261	C
46	B	262	G
46	B	266	C
46	B	269	A
46	B	270	U
46	B	274	C
46	B	276	U

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Mol	Chain	Res	Type
46	B	277	G
46	B	278	U
46	B	279	G
46	B	283	G
46	B	285	G
46	B	297	A
46	B	312	C
46	B	314	A
46	B	318	U
46	B	319	C
46	B	320	G
46	B	335	G
46	B	336	C
46	B	350	A
46	B	357	A
46	B	358	A
46	B	359	C
46	B	388	G
46	B	398	A
46	B	400	C
46	B	402	G
46	B	414	A
46	B	416	G
46	B	421	G
46	B	422	C
46	B	423	A
46	B	424	G
46	B	432	G
46	B	437	U
46	B	442	C
46	B	446	C
46	B	452	A
46	B	458	A
46	B	466	A
46	B	475	A
46	B	480	U
46	B	482	C
46	B	483	A
46	B	485	G
46	B	487	C
46	B	489	C
46	B	490	U

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Mol	Chain	Res	Type
46	B	491	U
46	B	498	C
46	B	499	U
46	B	503	A
46	B	505	U
46	B	506	U
46	B	509	A
46	B	512	G
46	B	513	A
46	B	515	U
46	B	518	A
46	B	519	A
46	B	525	A
46	B	530	U
46	B	534	C
46	B	536	A
46	B	537	G
46	B	539	A
46	B	540	A
46	B	547	G
46	B	553	A
46	B	554	A
46	B	555	G
46	B	556	U
46	B	557	C
46	B	563	C
46	B	566	G
46	B	575	G
46	B	576	U
46	B	580	U
46	B	592	A
46	B	593	G
46	B	604	A
46	B	609	U
46	B	617	A
46	B	618	A
46	B	620	A
46	B	621	A
46	B	639	G
46	B	643	U
46	B	645	G
46	B	647	C

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Mol	Chain	Res	Type
46	B	648	U
46	B	649	G
46	B	650	G
46	B	651	C
46	B	652	C
46	B	654	G
46	B	657	C
46	B	670	C
46	B	671	G
46	B	672	U
46	B	673	A
46	B	674	C
46	B	676	G
46	B	677	G
46	B	678	A
46	B	679	C
46	B	680	C
46	B	681	C
46	B	685	C
46	B	688	G
46	B	695	C
46	B	696	U
46	B	697	U
46	B	698	C
46	B	700	G
46	B	701	G
46	B	702	G
46	B	703	U
46	B	704	A
46	B	705	G
46	B	706	C
46	B	707	C
46	B	708	A
46	B	709	U
46	B	710	U
46	B	711	U
46	B	712	A
46	B	713	U
46	B	714	G
46	B	715	G
46	B	716	C
46	B	717	G

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Mol	Chain	Res	Type
46	B	718	A
46	B	719	A
46	B	723	G
46	B	729	U
46	B	739	A
46	B	740	A
46	B	741	A
46	B	750	G
46	B	751	U
46	B	756	A
46	B	759	A
46	B	760	G
46	B	762	C
46	B	764	U
46	B	765	U
46	B	766	U
46	B	767	G
46	B	768	C
46	B	770	C
46	B	771	G
46	B	773	A
46	B	775	A
46	B	778	U
46	B	779	U
46	B	796	A
46	B	798	A
46	B	799	G
46	B	802	C
46	B	803	G
46	B	804	U
46	B	805	U
46	B	807	U
46	B	808	G
46	B	813	U
46	B	815	U
46	B	817	U
46	B	819	G
46	B	820	U
46	B	821	U
46	B	822	G
46	B	823	G
46	B	824	U

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Mol	Chain	Res	Type
46	B	825	U
46	B	826	U
46	B	828	U
46	B	829	A
46	B	831	G
46	B	840	A
46	B	842	U
46	B	847	A
46	B	848	A
46	B	856	G
46	B	857	G
46	B	869	A
46	B	871	U
46	B	875	C
46	B	877	G
46	B	878	U
46	B	879	U
46	B	881	U
46	B	891	A
46	B	909	A
46	B	910	G
46	B	911	A
46	B	918	A
46	B	920	U
46	B	927	G
46	B	945	U
46	B	951	A
46	B	973	A
46	B	975	C
46	B	977	A
46	B	988	A
46	B	989	U
46	B	990	A
46	B	997	U
46	B	998	A
46	B	1004	A
46	B	1005	A
46	B	1011	A
46	B	1013	C
46	B	1017	G
46	B	1024	A
46	B	1025	G

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Mol	Chain	Res	Type
46	B	1039	U
46	B	1042	U
46	B	1043	U
46	B	1044	U
46	B	1047	U
46	B	1055	A
46	B	1056	U
46	B	1057	C
46	B	1058	G
46	B	1059	G
46	B	1060	C
46	B	1061	A
46	B	1067	C
46	B	1077	A
46	B	1081	C
46	B	1085	G
46	B	1123	A
46	B	1135	G
46	B	1143	C
46	B	1145	A
46	B	1152	G
46	B	1168	A
46	B	1169	A
46	B	1170	U
46	B	1179	A
46	B	1181	A
46	B	1184	G
46	B	1185	G
46	B	1187	A
46	B	1193	A
46	B	1202	A
46	B	1203	G
46	B	1206	A
46	B	1207	C
46	B	1212	A
46	B	1215	A
46	B	1219	A
46	B	1220	C
46	B	1221	A
46	B	1229	A
46	B	1230	G
46	B	1231	C

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Mol	Chain	Res	Type
46	B	1236	U
46	B	1243	U
46	B	1250	G
46	B	1270	U
46	B	1299	U
46	B	1300	U
46	B	1301	G
46	B	1306	A
46	B	1325	U
46	B	1330	A
46	B	1336	G
46	B	1339	G
46	B	1342	A
46	B	1343	G
46	B	1345	A
46	B	1346	U
46	B	1348	U
46	B	1349	G
46	B	1352	G
46	B	1355	A
46	B	1356	U
46	B	1357	A
46	B	1359	U
46	B	1360	C
46	B	1364	U
46	B	1369	G
46	B	1370	A
46	B	1376	U
46	B	1380	G
46	B	1381	A
46	B	1382	U
46	B	1384	U
46	B	1385	C
46	B	1392	A
46	B	1397	A
46	B	1398	G
46	B	1399	U
46	B	1400	U
46	B	1401	U
46	B	1410	A
46	B	1413	A
46	B	1414	G

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Mol	Chain	Res	Type
46	B	1415	G
46	B	1422	A
46	B	1431	G
46	B	1433	C
46	B	1445	C
46	B	1446	A
46	B	1455	A
46	B	1457	A
46	B	1458	C
46	B	1461	A
46	B	1462	C
46	B	1463	G
46	B	1468	C
46	B	1476	A
46	B	1477	U
46	B	1480	G
46	B	1483	U
46	B	1485	G
46	B	1491	G
46	B	1502	A
46	B	1503	A
46	B	1508	G
46	B	1510	G
46	B	1511	A
46	B	1523	G
46	B	1524	C
46	B	1529	G
46	B	1530	A
46	B	1541	U
46	B	1544	U
46	B	1546	G
46	B	1560	A
46	B	1561	G
46	B	1571	G
46	B	1574	A
46	B	1575	G
46	B	1577	G
46	B	1580	A
46	B	1582	U
46	B	1584	A
46	B	1588	G
46	B	1621	C

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Mol	Chain	Res	Type
46	B	1644	U
46	B	1645	G
46	B	1665	C
46	B	1667	G
46	B	1670	U
46	B	1671	G
46	B	1672	G
46	B	1673	U
46	B	1678	G
46	B	1679	A
46	B	1680	A
46	B	1696	U
46	B	1697	C
46	B	1699	G
46	B	1700	G
46	B	1701	A
46	B	1702	A
46	B	1704	C
46	B	1737	A
46	B	1742	A
46	B	1743	A
46	B	1747	G
46	B	1749	A
46	B	1753	A
46	B	1756	U
46	B	1767	G
46	B	1770	C
46	B	1779	G
46	B	1780	G
46	B	1781	A
46	B	1782	U
46	B	1783	C
1	AS	24	U
1	AS	25	A
1	AS	29	G
1	AS	39	A
1	AS	42	A
1	AS	48	A
1	AS	56	A
1	AS	58	G
1	AS	59	A
1	AS	64	A

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Mol	Chain	Res	Type
1	AS	65	A
1	AS	91	G
1	AS	98	A
1	AS	104	C
1	AS	108	A
1	AS	109	G
1	AS	110	C
1	AS	121	A
1	AS	134	U
1	AS	135	G
1	AS	155	A
1	AS	156	A
1	AS	164	U
1	AS	169	G
1	AS	172	C
1	AS	173	C
1	AS	175	G
1	AS	186	A
1	AS	189	U
1	AS	190	U
1	AS	199	C
1	AS	205	G
1	AS	209	C
1	AS	212	A
1	AS	217	G
1	AS	218	A
1	AS	219	G
1	AS	230	G
1	AS	236	A
1	AS	239	A
1	AS	240	C
1	AS	243	G
1	AS	245	G
1	AS	249	G
1	AS	250	U
1	AS	251	G
1	AS	269	G
1	AS	286	U
1	AS	295	A
1	AS	305	U
1	AS	311	C
1	AS	323	A

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Mol	Chain	Res	Type
1	AS	329	U
1	AS	337	G
1	AS	338	A
1	AS	339	C
1	AS	343	U
1	AS	349	A
1	AS	350	C
1	AS	376	G
1	AS	377	A
1	AS	395	A
1	AS	398	A
1	AS	402	A
1	AS	403	C
1	AS	404	G
1	AS	420	G
1	AS	421	G
1	AS	422	A
1	AS	438	A
1	AS	439	C
1	AS	440	U
1	AS	441	U
1	AS	445	A
1	AS	447	U
1	AS	448	U
1	AS	449	U
1	AS	450	G
1	AS	451	C
1	AS	453	U
1	AS	454	G
1	AS	474	C
1	AS	476	C
1	AS	479	C
1	AS	480	G
1	AS	481	G
1	AS	482	U
1	AS	483	U
1	AS	484	U
1	AS	486	C
1	AS	487	C
1	AS	488	G
1	AS	506	A
1	AS	517	A

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Mol	Chain	Res	Type
1	AS	519	U
1	AS	531	G
1	AS	532	U
1	AS	538	G
1	AS	539	G
1	AS	541	U
1	AS	542	U
1	AS	543	C
1	AS	544	U
1	AS	545	G
1	AS	546	C
1	AS	555	A
1	AS	556	U
1	AS	557	A
1	AS	564	G
1	AS	577	G
1	AS	589	G
1	AS	590	A
1	AS	598	U
1	AS	600	U
1	AS	601	U
1	AS	602	A
1	AS	609	A
1	AS	618	U
1	AS	619	A
1	AS	620	A
1	AS	635	C
1	AS	647	A
1	AS	658	A
1	AS	675	A
1	AS	679	U
1	AS	688	A
1	AS	689	A
1	AS	703	A
1	AS	710	G
1	AS	713	A
1	AS	717	A
1	AS	723	G
1	AS	730	A
1	AS	732	U
1	AS	760	U
1	AS	763	U

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Mol	Chain	Res	Type
1	AS	772	U
1	AS	773	U
1	AS	776	A
1	AS	777	G
1	AS	780	A
1	AS	781	G
1	AS	802	A
1	AS	813	A
1	AS	826	A
1	AS	845	C
1	AS	857	C
1	AS	861	U
1	AS	870	U
1	AS	875	U
1	AS	892	A
1	AS	893	U
1	AS	903	G
1	AS	904	G
1	AS	910	A
1	AS	912	G
1	AS	913	A
1	AS	917	A
1	AS	919	C
1	AS	921	A
1	AS	933	G
1	AS	940	C
1	AS	949	G
1	AS	955	C
1	AS	956	U
1	AS	959	G
1	AS	970	G
1	AS	976	A
1	AS	977	U
1	AS	990	G
1	AS	991	U
1	AS	996	C
1	AS	997	G
1	AS	998	A
1	AS	1006	G
1	AS	1011	C
1	AS	1012	U
1	AS	1014	G

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Mol	Chain	Res	Type
1	AS	1019	U
1	AS	1020	G
1	AS	1022	A
1	AS	1023	A
1	AS	1024	U
1	AS	1025	G
1	AS	1026	A
1	AS	1027	C
1	AS	1030	U
1	AS	1033	C
1	AS	1043	A
1	AS	1045	C
1	AS	1060	A
1	AS	1061	A
1	AS	1068	G
1	AS	1077	U
1	AS	1078	U
1	AS	1089	A
1	AS	1090	A
1	AS	1091	U
1	AS	1092	U
1	AS	1094	A
1	AS	1099	A
1	AS	1100	G
1	AS	1113	G
1	AS	1127	G
1	AS	1140	U
1	AS	1149	A
1	AS	1150	A
1	AS	1151	C
1	AS	1155	A
1	AS	1156	C
1	AS	1164	U
1	AS	1174	G
1	AS	1176	A
1	AS	1177	U
1	AS	1178	G
1	AS	1188	C
1	AS	1189	A
1	AS	1192	C
1	AS	1197	C
1	AS	1204	U

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Mol	Chain	Res	Type
1	AS	1205	G
1	AS	1218	G
1	AS	1219	A
1	AS	1224	C
1	AS	1228	C
1	AS	1231	U
1	AS	1232	G
1	AS	1233	G
1	AS	1237	U
1	AS	1238	G
1	AS	1239	G
1	AS	1241	A
1	AS	1242	G
1	AS	1243	U
1	AS	1244	C
1	AS	1246	G
1	AS	1248	A
1	AS	1249	U
1	AS	1250	C
1	AS	1252	G
1	AS	1254	U
1	AS	1255	A
1	AS	1256	A
1	AS	1258	G
1	AS	1259	A
1	AS	1260	G
1	AS	1261	U
1	AS	1263	U
1	AS	1264	G
1	AS	1265	U
1	AS	1266	A
1	AS	1270	A
1	AS	1271	C
1	AS	1273	C
1	AS	1278	G
1	AS	1281	G
1	AS	1282	A
1	AS	1283	A
1	AS	1303	G
1	AS	1304	A
1	AS	1305	U
1	AS	1309	G

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Mol	Chain	Res	Type
1	AS	1326	A
1	AS	1345	G
1	AS	1346	U
1	AS	1347	U
1	AS	1348	U
1	AS	1349	U
1	AS	1382	A
1	AS	1395	U
1	AS	1415	A
1	AS	1417	G
1	AS	1421	U
1	AS	1427	G
1	AS	1430	G
1	AS	1433	C
1	AS	1442	A
1	AS	1446	G
1	AS	1465	C
1	AS	1471	A
1	AS	1477	A
1	AS	1484	G
1	AS	1498	C
1	AS	1504	C
1	AS	1520	A
1	AS	1523	C
1	AS	1532	G
1	AS	1535	A
1	AS	1552	C
1	AS	1556	G
1	AS	1558	G
1	AS	1559	C
1	AS	1560	U
1	AS	1561	U
1	AS	1562	G
1	AS	1563	A
1	AS	1564	U
1	AS	1565	U
1	AS	1566	U
1	AS	1567	U
1	AS	1568	U
1	AS	1569	C
1	AS	1571	G
1	AS	1572	G

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Mol	Chain	Res	Type
1	AS	1574	C
1	AS	1575	A
1	AS	1576	A
1	AS	1585	A
1	AS	1589	A
1	AS	1601	A
1	AS	1603	U
1	AS	1624	C
1	AS	1625	U
1	AS	1635	C
1	AS	1638	A
1	AS	1639	A
1	AS	1641	U
1	AS	1648	G
1	AS	1654	G
1	AS	1679	A
1	AS	1720	U
1	AS	1721	C
1	AS	1732	G
1	AS	1746	A
1	AS	1747	G
1	AS	1755	U
1	AS	1756	A
1	AS	1757	A
1	AS	1758	U
1	AS	1759	U
1	AS	1761	U
1	AS	1762	G
1	AS	1763	C
1	AS	1776	G
1	AS	1793	A
1	AS	1804	G
1	AS	1809	A
1	AS	1810	A
1	AS	1811	U
1	AS	1812	A
1	AS	1814	U
1	AS	1815	U
1	AS	1816	U
1	AS	1817	U
1	AS	1835	A
1	AS	1838	A

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Mol	Chain	Res	Type
1	AS	1842	C
1	AS	1845	C
1	AS	1862	C
1	AS	1874	G
1	AS	1882	A
1	AS	1889	A
1	AS	1902	G
1	AS	1944	G
1	AS	1949	G
1	AS	2063	C
1	AS	2064	A
1	AS	2065	C
1	AS	2066	G
1	AS	2067	U
1	AS	2068	U
1	AS	2069	U
1	AS	2070	A
1	AS	2071	A
1	AS	2078	A
1	AS	2088	G
1	AS	2089	G
1	AS	2091	A
1	AS	2092	C
1	AS	2099	G
1	AS	2100	G
1	AS	2109	A
1	AS	2118	U
1	AS	2122	A
1	AS	2136	A
1	AS	2147	G
1	AS	2149	G
1	AS	2183	U
1	AS	2184	G
1	AS	2185	A
1	AS	2186	A
1	AS	2187	U
1	AS	2188	G
1	AS	2201	A
1	AS	2222	A
1	AS	2227	G
1	AS	2233	A
1	AS	2234	A

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Mol	Chain	Res	Type
1	AS	2235	C
1	AS	2250	G
1	AS	2251	G
1	AS	2259	A
1	AS	2260	U
1	AS	2276	U
1	AS	2285	G
1	AS	2286	C
1	AS	2288	U
1	AS	2291	A
1	AS	2292	U
1	AS	2293	G
1	AS	2312	U
1	AS	2313	G
1	AS	2314	U
1	AS	2341	A
1	AS	2351	A
1	AS	2352	C
1	AS	2353	G
1	AS	2363	G
1	AS	2366	U
1	AS	2371	G
1	AS	2372	G
1	AS	2375	A
1	AS	2380	A
1	AS	2381	G
1	AS	2382	A
1	AS	2389	U
1	AS	2396	G
1	AS	2397	A
1	AS	2413	G
1	AS	2415	G
1	AS	2420	G
1	AS	2421	A
1	AS	2422	C
1	AS	2425	G
1	AS	2426	G
1	AS	2427	A
1	AS	2428	G
1	AS	2429	G
1	AS	2430	G
1	AS	2431	U

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Mol	Chain	Res	Type
1	AS	2432	G
1	AS	2433	U
1	AS	2434	A
1	AS	2435	G
1	AS	2436	A
1	AS	2437	A
1	AS	2439	A
1	AS	2440	A
1	AS	2441	G
1	AS	2442	U
1	AS	2443	G
1	AS	2444	G
1	AS	2445	G
1	AS	2446	A
1	AS	2447	G
1	AS	2448	C
1	AS	2449	U
1	AS	2450	U
1	AS	2452	G
1	AS	2453	G
1	AS	2455	G
1	AS	2456	C
1	AS	2457	C
1	AS	2458	G
1	AS	2459	G
1	AS	2464	A
1	AS	2465	U
1	AS	2466	A
1	AS	2467	C
1	AS	2468	C
1	AS	2469	A
1	AS	2471	U
1	AS	2472	A
1	AS	2473	C
1	AS	2474	C
1	AS	2475	U
1	AS	2476	C
1	AS	2477	U
1	AS	2478	A
1	AS	2480	A
1	AS	2481	G
1	AS	2482	U

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Mol	Chain	Res	Type
1	AS	2483	U
1	AS	2484	U
1	AS	2489	A
1	AS	2492	U
1	AS	2493	A
1	AS	2510	U
1	AS	2511	G
1	AS	2513	A
1	AS	2515	G
1	AS	2516	U
1	AS	2517	C
1	AS	2518	A
1	AS	2519	A
1	AS	2520	A
1	AS	2521	C
1	AS	2529	U
1	AS	2530	C
1	AS	2533	G
1	AS	2536	U
1	AS	2538	A
1	AS	2545	C
1	AS	2546	U
1	AS	2554	C
1	AS	2557	G
1	AS	2565	A
1	AS	2566	C
1	AS	2578	G
1	AS	2579	G
1	AS	2586	G
1	AS	2598	A
1	AS	2623	G
1	AS	2624	U
1	AS	2628	A
1	AS	2646	A
1	AS	2649	G
1	AS	2661	A
1	AS	2662	G
1	AS	2663	A
1	AS	2666	A
1	AS	2676	A
1	AS	2677	A
1	AS	2686	G

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Mol	Chain	Res	Type
1	AS	2699	A
1	AS	2700	G
1	AS	2701	U
1	AS	2724	U
1	AS	2725	G
1	AS	2734	A
1	AS	2745	C
1	AS	2749	G
1	AS	2750	G
1	AS	2768	G
1	AS	2771	A
1	AS	2772	G
1	AS	2773	A
1	AS	2774	A
1	AS	2782	C
1	AS	2786	G
1	AS	2789	A
1	AS	2790	U
1	AS	2814	U
1	AS	2815	U
1	AS	2817	A
1	AS	2833	U
1	AS	2839	C
1	AS	2843	G
1	AS	2844	A
1	AS	2847	U
1	AS	2859	A
1	AS	2861	C
1	AS	2866	C
1	AS	2870	G
1	AS	2871	C
1	AS	2886	G
1	AS	2895	U
1	AS	2907	U
1	AS	2908	A
1	AS	2911	G
1	AS	2914	C
1	AS	2919	G
1	AS	2920	C
1	AS	2923	G
1	AS	2926	U
1	AS	2943	A

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Mol	Chain	Res	Type
1	AS	2955	C
1	AS	2960	C
1	AS	2962	G
1	AS	2969	G
1	AS	2984	A
1	AS	3021	A
1	AS	3028	U
1	AS	3031	G
1	AS	3050	A
1	AS	3051	C
1	AS	3052	G
1	AS	3058	A
1	AS	3064	C
1	AS	3076	U
1	AS	3094	A
1	AS	3101	A
1	AS	3102	A
1	AS	3103	U
1	AS	3114	A
1	AS	3115	C
1	AS	3134	C
1	AS	3143	G
1	AS	3144	A
1	AS	3146	G
1	AS	3149	U
1	AS	3151	C
1	AS	3157	A
1	AS	3160	C
1	AS	3161	U
1	AS	3163	U
1	AS	3164	U
1	AS	3165	U
1	AS	3166	A
1	AS	3167	G
1	AS	3171	C
1	AS	3172	U
1	AS	3182	C
1	AS	3183	A
1	AS	3184	G
1	AS	3194	G
1	AS	3208	A
1	AS	3210	A

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Mol	Chain	Res	Type
1	AS	3212	G
1	AS	3214	U
1	AS	3224	U
1	AS	3228	G
1	AS	3235	A
1	AS	3241	G
1	AS	3246	C
1	AS	3252	C
1	AS	3259	A
1	AS	3260	A
1	AS	3268	G
1	AS	3269	C
1	AS	3272	A
1	AS	3278	U
1	AS	3281	A
1	AS	3284	U
1	AS	3285	A
1	AS	3306	U
1	AS	3307	A
1	AS	3309	A
1	AS	3310	G
1	AS	3316	U
1	AS	3317	U
1	AS	3318	G
1	AS	3319	U
1	AS	3320	U
1	AS	3321	G
1	AS	3334	G
1	AS	3343	C
1	AS	3351	G
1	AS	3361	U
2	AT	7	G
2	AT	22	A
2	AT	54	U
2	AT	55	A
2	AT	65	G
2	AT	73	C
2	AT	76	A
2	AT	102	A
2	AT	112	G
3	AU	23	U
3	AU	34	U

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Mol	Chain	Res	Type
3	AU	35	C
3	AU	59	A
3	AU	62	C
3	AU	63	G
3	AU	81	A
3	AU	84	C
3	AU	85	G
3	AU	86	U
3	AU	87	G
3	AU	92	A
3	AU	95	G
3	AU	102	U
3	AU	104	A
3	AU	106	C
3	AU	111	A
3	AU	113	U
3	AU	125	U
3	AU	126	A
3	AU	152	G
3	AU	157	U
46	CM	17	C
46	CM	25	C
46	CM	26	A
46	CM	27	U
46	CM	34	G
46	CM	47	A
46	CM	57	G
46	CM	66	U
46	CM	74	U
46	CM	75	U
46	CM	76	A
46	CM	78	A
46	CM	79	C
46	CM	81	G
46	CM	84	A
46	CM	104	A
46	CM	114	C
46	CM	115	G
46	CM	123	G
46	CM	126	A
46	CM	127	G
46	CM	128	U

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Mol	Chain	Res	Type
46	CM	129	A
46	CM	130	C
46	CM	131	C
46	CM	132	U
46	CM	133	U
46	CM	134	A
46	CM	135	C
46	CM	138	C
46	CM	139	U
46	CM	142	G
46	CM	143	A
46	CM	150	U
46	CM	151	G
46	CM	152	G
46	CM	154	A
46	CM	159	U
46	CM	166	A
46	CM	168	U
46	CM	173	G
46	CM	176	U
46	CM	177	A
46	CM	190	U
46	CM	193	G
46	CM	199	G
46	CM	200	A
46	CM	201	U
46	CM	202	G
46	CM	206	U
46	CM	211	A
46	CM	213	A
46	CM	214	U
46	CM	215	A
46	CM	216	A
46	CM	217	A
46	CM	218	A
46	CM	219	A
46	CM	220	A
46	CM	221	U
46	CM	222	C
46	CM	226	G
46	CM	229	U
46	CM	230	U

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Mol	Chain	Res	Type
46	CM	231	C
46	CM	232	G
46	CM	236	U
46	CM	237	C
46	CM	238	U
46	CM	239	U
46	CM	240	U
46	CM	247	U
46	CM	255	A
46	CM	259	U
46	CM	260	U
46	CM	261	C
46	CM	262	G
46	CM	266	C
46	CM	269	A
46	CM	270	U
46	CM	271	G
46	CM	274	C
46	CM	276	U
46	CM	277	G
46	CM	278	U
46	CM	279	G
46	CM	280	C
46	CM	282	G
46	CM	285	G
46	CM	297	A
46	CM	312	C
46	CM	314	A
46	CM	318	U
46	CM	319	C
46	CM	320	G
46	CM	335	G
46	CM	336	C
46	CM	350	A
46	CM	357	A
46	CM	358	A
46	CM	359	C
46	CM	388	G
46	CM	398	A
46	CM	400	C
46	CM	402	G
46	CM	414	A

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Mol	Chain	Res	Type
46	CM	416	G
46	CM	421	G
46	CM	422	C
46	CM	423	A
46	CM	424	G
46	CM	432	G
46	CM	437	U
46	CM	442	C
46	CM	446	C
46	CM	452	A
46	CM	458	A
46	CM	462	A
46	CM	466	A
46	CM	475	A
46	CM	480	U
46	CM	481	A
46	CM	489	C
46	CM	490	U
46	CM	491	U
46	CM	493	U
46	CM	495	G
46	CM	498	C
46	CM	499	U
46	CM	503	A
46	CM	504	A
46	CM	505	U
46	CM	506	U
46	CM	509	A
46	CM	512	G
46	CM	513	A
46	CM	515	U
46	CM	518	A
46	CM	519	A
46	CM	525	A
46	CM	530	U
46	CM	534	C
46	CM	536	A
46	CM	537	G
46	CM	539	A
46	CM	540	A
46	CM	547	G
46	CM	553	A

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Mol	Chain	Res	Type
46	CM	554	A
46	CM	555	G
46	CM	556	U
46	CM	557	C
46	CM	563	C
46	CM	566	G
46	CM	575	G
46	CM	576	U
46	CM	592	A
46	CM	593	G
46	CM	604	A
46	CM	609	U
46	CM	617	A
46	CM	618	A
46	CM	620	A
46	CM	621	A
46	CM	639	G
46	CM	645	G
46	CM	648	U
46	CM	649	G
46	CM	650	G
46	CM	652	C
46	CM	653	G
46	CM	654	G
46	CM	659	U
46	CM	668	U
46	CM	670	C
46	CM	671	G
46	CM	672	U
46	CM	673	A
46	CM	674	C
46	CM	675	U
46	CM	676	G
46	CM	678	A
46	CM	679	C
46	CM	680	C
46	CM	681	C
46	CM	682	A
46	CM	688	G
46	CM	691	U
46	CM	694	C
46	CM	695	C

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Mol	Chain	Res	Type
46	CM	696	U
46	CM	697	U
46	CM	700	G
46	CM	701	G
46	CM	702	G
46	CM	703	U
46	CM	704	A
46	CM	705	G
46	CM	706	C
46	CM	707	C
46	CM	709	U
46	CM	711	U
46	CM	712	A
46	CM	713	U
46	CM	714	G
46	CM	716	C
46	CM	717	G
46	CM	719	A
46	CM	720	C
46	CM	722	A
46	CM	723	G
46	CM	724	G
46	CM	729	U
46	CM	739	A
46	CM	740	A
46	CM	741	A
46	CM	750	G
46	CM	751	U
46	CM	756	A
46	CM	759	A
46	CM	760	G
46	CM	762	C
46	CM	764	U
46	CM	765	U
46	CM	766	U
46	CM	767	G
46	CM	768	C
46	CM	770	C
46	CM	771	G
46	CM	773	A
46	CM	775	A
46	CM	778	U

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Mol	Chain	Res	Type
46	CM	779	U
46	CM	796	A
46	CM	798	A
46	CM	799	G
46	CM	802	C
46	CM	803	G
46	CM	804	U
46	CM	805	U
46	CM	807	U
46	CM	808	G
46	CM	812	C
46	CM	814	A
46	CM	815	U
46	CM	816	U
46	CM	818	U
46	CM	819	G
46	CM	820	U
46	CM	821	U
46	CM	823	G
46	CM	824	U
46	CM	825	U
46	CM	826	U
46	CM	827	C
46	CM	828	U
46	CM	829	A
46	CM	840	A
46	CM	842	U
46	CM	848	A
46	CM	856	G
46	CM	857	G
46	CM	869	A
46	CM	871	U
46	CM	875	C
46	CM	877	G
46	CM	878	U
46	CM	879	U
46	CM	881	U
46	CM	891	A
46	CM	909	A
46	CM	910	G
46	CM	911	A
46	CM	918	A

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Mol	Chain	Res	Type
46	CM	920	U
46	CM	927	G
46	CM	945	U
46	CM	951	A
46	CM	973	A
46	CM	975	C
46	CM	977	A
46	CM	988	A
46	CM	989	U
46	CM	990	A
46	CM	997	U
46	CM	998	A
46	CM	1004	A
46	CM	1005	A
46	CM	1011	A
46	CM	1013	C
46	CM	1017	G
46	CM	1024	A
46	CM	1025	G
46	CM	1039	U
46	CM	1042	U
46	CM	1043	U
46	CM	1044	U
46	CM	1047	U
46	CM	1055	A
46	CM	1056	U
46	CM	1057	C
46	CM	1058	G
46	CM	1059	G
46	CM	1060	C
46	CM	1061	A
46	CM	1067	C
46	CM	1074	U
46	CM	1077	A
46	CM	1081	C
46	CM	1085	G
46	CM	1123	A
46	CM	1135	G
46	CM	1143	C
46	CM	1145	A
46	CM	1152	G
46	CM	1168	A

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Mol	Chain	Res	Type
46	CM	1169	A
46	CM	1170	U
46	CM	1179	A
46	CM	1181	A
46	CM	1184	G
46	CM	1185	G
46	CM	1186	G
46	CM	1187	A
46	CM	1193	A
46	CM	1202	A
46	CM	1203	G
46	CM	1206	A
46	CM	1207	C
46	CM	1212	A
46	CM	1215	A
46	CM	1219	A
46	CM	1220	C
46	CM	1221	A
46	CM	1229	A
46	CM	1230	G
46	CM	1231	C
46	CM	1236	U
46	CM	1243	U
46	CM	1250	G
46	CM	1270	U
46	CM	1284	G
46	CM	1299	U
46	CM	1300	U
46	CM	1301	G
46	CM	1306	A
46	CM	1325	U
46	CM	1330	A
46	CM	1336	G
46	CM	1339	G
46	CM	1342	A
46	CM	1343	G
46	CM	1345	A
46	CM	1346	U
46	CM	1348	U
46	CM	1349	G
46	CM	1352	G
46	CM	1355	A

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Mol	Chain	Res	Type
46	CM	1356	U
46	CM	1357	A
46	CM	1358	G
46	CM	1359	U
46	CM	1360	C
46	CM	1364	U
46	CM	1365	C
46	CM	1369	G
46	CM	1370	A
46	CM	1376	U
46	CM	1380	G
46	CM	1381	A
46	CM	1382	U
46	CM	1384	U
46	CM	1385	C
46	CM	1392	A
46	CM	1397	A
46	CM	1398	G
46	CM	1399	U
46	CM	1400	U
46	CM	1401	U
46	CM	1410	A
46	CM	1413	A
46	CM	1414	G
46	CM	1415	G
46	CM	1422	A
46	CM	1431	G
46	CM	1433	C
46	CM	1445	C
46	CM	1446	A
46	CM	1455	A
46	CM	1457	A
46	CM	1458	C
46	CM	1461	A
46	CM	1462	C
46	CM	1463	G
46	CM	1468	C
46	CM	1476	A
46	CM	1477	U
46	CM	1480	G
46	CM	1483	U
46	CM	1491	G

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Mol	Chain	Res	Type
46	CM	1502	A
46	CM	1503	A
46	CM	1508	G
46	CM	1510	G
46	CM	1511	A
46	CM	1523	G
46	CM	1524	C
46	CM	1529	G
46	CM	1530	A
46	CM	1541	U
46	CM	1544	U
46	CM	1546	G
46	CM	1556	A
46	CM	1560	A
46	CM	1561	G
46	CM	1571	G
46	CM	1574	A
46	CM	1575	G
46	CM	1577	G
46	CM	1580	A
46	CM	1582	U
46	CM	1584	A
46	CM	1588	G
46	CM	1621	C
46	CM	1644	U
46	CM	1645	G
46	CM	1665	C
46	CM	1667	G
46	CM	1670	U
46	CM	1671	G
46	CM	1673	U
46	CM	1675	U
46	CM	1677	G
46	CM	1678	G
46	CM	1680	A
46	CM	1697	C
46	CM	1699	G
46	CM	1700	G
46	CM	1701	A
46	CM	1702	A
46	CM	1704	C
46	CM	1737	A

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Mol	Chain	Res	Type
46	CM	1742	A
46	CM	1743	A
46	CM	1744	G
46	CM	1747	G
46	CM	1749	A
46	CM	1753	A
46	CM	1756	U
46	CM	1767	G
46	CM	1770	C
46	CM	1779	G
46	CM	1780	G
46	CM	1781	A
46	CM	1782	U
46	CM	1783	C

All (201) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1	172	C
1	1	403	C
1	1	538	G
1	1	563	U
1	1	759	G
1	1	912	G
1	1	1011	C
1	1	1012	U
1	1	1023	A
1	1	1029	U
1	1	1060	A
1	1	1099	A
1	1	1346	U
1	1	1347	U
1	1	1559	C
1	1	1561	U
1	1	1762	G
1	1	1815	U
1	1	1943	G
1	1	2090	U
1	1	2182	C
1	1	2183	U
1	1	2234	A
1	1	2441	G

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Mol	Chain	Res	Type
1	1	2442	U
1	1	2447	G
1	1	2455	G
1	1	2465	U
1	1	2476	C
1	1	2515	G
1	1	2519	A
1	1	2545	C
1	1	2663	A
1	1	2789	A
1	1	2807	U
1	1	3093	U
1	1	3164	U
1	1	3165	U
1	1	3193	C
1	1	3234	U
1	1	3240	U
1	1	3284	U
1	1	3309	A
1	1	3317	U
3	4	85	G
3	4	125	U
3	4	156	U
46	B	25	C
46	B	78	A
46	B	133	U
46	B	137	A
46	B	151	G
46	B	176	U
46	B	215	A
46	B	216	A
46	B	259	U
46	B	265	U
46	B	278	U
46	B	415	A
46	B	451	C
46	B	505	U
46	B	514	G
46	B	518	A
46	B	529	C
46	B	533	A
46	B	553	A

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Mol	Chain	Res	Type
46	B	556	U
46	B	638	U
46	B	695	C
46	B	711	U
46	B	740	A
46	B	763	C
46	B	769	U
46	B	814	A
46	B	820	U
46	B	855	C
46	B	874	U
46	B	876	A
46	B	1168	A
46	B	1335	U
46	B	1369	G
46	B	1396	A
46	B	1398	G
46	B	1457	A
46	B	1467	C
46	B	1479	A
46	B	1484	U
46	B	1523	G
46	B	1573	A
46	B	1579	A
46	B	1581	G
46	B	1677	G
46	B	1703	C
1	AS	172	C
1	AS	403	C
1	AS	452	A
1	AS	453	U
1	AS	481	G
1	AS	487	C
1	AS	538	G
1	AS	563	U
1	AS	601	U
1	AS	759	G
1	AS	912	G
1	AS	1029	U
1	AS	1060	A
1	AS	1099	A
1	AS	1217	A

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Mol	Chain	Res	Type
1	AS	1245	G
1	AS	1346	U
1	AS	1347	U
1	AS	1559	C
1	AS	1762	G
1	AS	1815	U
1	AS	1943	G
1	AS	2090	U
1	AS	2182	C
1	AS	2183	U
1	AS	2430	G
1	AS	2431	U
1	AS	2434	A
1	AS	2447	G
1	AS	2448	C
1	AS	2449	U
1	AS	2452	G
1	AS	2455	G
1	AS	2458	G
1	AS	2465	U
1	AS	2476	C
1	AS	2515	G
1	AS	2519	A
1	AS	2545	C
1	AS	2789	A
1	AS	2790	U
1	AS	3093	U
1	AS	3159	A
1	AS	3193	C
1	AS	3234	U
1	AS	3240	U
1	AS	3284	U
1	AS	3309	A
1	AS	3315	C
1	AS	3317	U
3	AU	85	G
3	AU	125	U
3	AU	156	U
46	CM	25	C
46	CM	65	A
46	CM	78	A
46	CM	133	U

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Mol	Chain	Res	Type
46	CM	137	A
46	CM	151	G
46	CM	176	U
46	CM	214	U
46	CM	216	A
46	CM	237	C
46	CM	238	U
46	CM	259	U
46	CM	265	U
46	CM	270	U
46	CM	278	U
46	CM	415	A
46	CM	451	C
46	CM	505	U
46	CM	514	G
46	CM	518	A
46	CM	529	C
46	CM	533	A
46	CM	553	A
46	CM	556	U
46	CM	638	U
46	CM	680	C
46	CM	681	C
46	CM	690	C
46	CM	695	C
46	CM	700	G
46	CM	702	G
46	CM	711	U
46	CM	740	A
46	CM	763	C
46	CM	769	U
46	CM	814	A
46	CM	817	U
46	CM	823	G
46	CM	855	C
46	CM	874	U
46	CM	876	A
46	CM	1168	A
46	CM	1335	U
46	CM	1359	U
46	CM	1369	G
46	CM	1396	A

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Mol	Chain	Res	Type
46	CM	1398	G
46	CM	1457	A
46	CM	1467	C
46	CM	1479	A
46	CM	1523	G
46	CM	1555	C
46	CM	1573	A
46	CM	1579	A
46	CM	1581	G

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 1232 ligands modelled in this entry, 1228 are monoatomic - leaving 4 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	$\#\|Z\| > 2$
86	GET	B	1801	-	33,36,36	0.60	0	43,55,55	1.54	6 (13%)
84	3K5	AS	3401	-	62,63,63	2.79	26 (41%)	82,95,95	1.67	13 (15%)
86	GET	CM	1904	-	33,36,36	0.51	0	43,55,55	1.44	6 (13%)
84	3K5	1	3402	-	62,63,63	2.85	28 (45%)	82,95,95	1.70	20 (24%)

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
86	GET	B	1801	-	-	4/13/74/74	0/3/3/3
84	3K5	AS	3401	-	-	11/29/121/121	0/7/7/7
86	GET	CM	1904	-	-	2/13/74/74	0/3/3/3
84	3K5	1	3402	-	-	10/29/121/121	0/7/7/7

All (54) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	1	3402	3K5	C17-C22	-9.23	1.36	1.53
84	AS	3401	3K5	C17-C22	-7.76	1.39	1.53
84	1	3402	3K5	O4-C22	7.42	1.60	1.43
84	AS	3401	3K5	O4-C22	6.96	1.59	1.43
84	1	3402	3K5	C21-C22	5.86	1.63	1.52
84	AS	3401	3K5	C21-C22	5.41	1.62	1.52
84	AS	3401	3K5	O6-C23	5.03	1.46	1.34
84	1	3402	3K5	O6-C23	4.94	1.45	1.34
84	AS	3401	3K5	O12-C36	4.66	1.55	1.44
84	1	3402	3K5	C37-C36	-4.63	1.40	1.51
84	1	3402	3K5	O1-C6	4.53	1.43	1.34
84	AS	3401	3K5	O1-C6	4.48	1.43	1.34
84	AS	3401	3K5	C37-C36	-4.34	1.41	1.51
84	1	3402	3K5	C20-C23	4.33	1.62	1.51
84	AS	3401	3K5	C20-C23	4.30	1.62	1.51
84	AS	3401	3K5	O4-C3	-4.14	1.32	1.42
84	AS	3401	3K5	O-C2	4.11	1.49	1.43
84	AS	3401	3K5	C18-C17	4.10	1.60	1.53
84	1	3402	3K5	O4-C3	-4.05	1.33	1.42
84	1	3402	3K5	C29-C28	-4.05	1.41	1.51
84	1	3402	3K5	O12-C36	4.04	1.54	1.44
84	AS	3401	3K5	C29-C28	-3.99	1.42	1.51
84	AS	3401	3K5	O9-C30	3.95	1.44	1.35
84	1	3402	3K5	O7-C28	3.81	1.53	1.44
84	AS	3401	3K5	O7-C28	3.75	1.53	1.44
84	1	3402	3K5	O-C2	3.71	1.49	1.43
84	AS	3401	3K5	O9-C26	3.67	1.50	1.44
84	1	3402	3K5	O9-C26	3.50	1.50	1.44
84	1	3402	3K5	O14-C38	3.46	1.43	1.35
84	1	3402	3K5	C7-C6	3.42	1.56	1.48
84	AS	3401	3K5	C7-C6	3.37	1.56	1.48
84	AS	3401	3K5	C21-C20	-3.35	1.46	1.53
84	1	3402	3K5	C21-C20	-3.33	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
84	1	3402	3K5	O9-C30	3.30	1.42	1.35
84	1	3402	3K5	C18-C17	3.20	1.59	1.53
84	AS	3401	3K5	O14-C38	3.12	1.42	1.35
84	AS	3401	3K5	C26-C25	-2.92	1.46	1.52
84	1	3402	3K5	C26-C25	-2.91	1.46	1.52
84	1	3402	3K5	O14-C34	2.83	1.49	1.44
84	1	3402	3K5	C9-C8	2.72	1.55	1.47
84	AS	3401	3K5	C1-C5	-2.72	1.46	1.52
84	AS	3401	3K5	C9-C8	2.68	1.55	1.47
84	AS	3401	3K5	O14-C34	2.62	1.48	1.44
84	AS	3401	3K5	C4-C3	2.50	1.57	1.52
84	1	3402	3K5	C2-C1	2.39	1.55	1.51
84	AS	3401	3K5	O11-C25	2.38	1.50	1.43
84	1	3402	3K5	C4-C3	2.30	1.56	1.52
84	AS	3401	3K5	C2-C1	2.19	1.55	1.51
84	1	3402	3K5	O16-C33	2.18	1.48	1.43
84	1	3402	3K5	C-C1	2.13	1.58	1.53
84	1	3402	3K5	O11-C25	2.11	1.49	1.43
84	1	3402	3K5	O12-C32	2.09	1.47	1.41
84	AS	3401	3K5	O12-C32	2.07	1.47	1.41
84	1	3402	3K5	C27-C28	2.01	1.57	1.52

All (45) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
84	AS	3401	3K5	C2-O-C3	-6.54	109.05	113.66
86	B	1801	GET	C53-O53-C13	6.47	121.94	111.53
84	1	3402	3K5	O14-C38-C39	4.76	119.84	111.09
84	AS	3401	3K5	O9-C30-C31	4.45	119.28	111.09
84	AS	3401	3K5	O14-C38-C39	4.40	119.19	111.09
84	1	3402	3K5	O9-C30-C31	4.29	118.98	111.09
84	1	3402	3K5	C9-C8-C7	-3.85	118.11	126.91
84	AS	3401	3K5	C8-C7-C6	-3.77	110.77	122.26
86	CM	1904	GET	O43-C43-C83	3.76	116.37	108.13
86	CM	1904	GET	C13-O62-C62	3.73	127.19	117.96
84	AS	3401	3K5	C-C1-C5	-3.67	107.80	112.65
84	1	3402	3K5	O1-C6-C7	3.57	119.49	111.38
84	1	3402	3K5	O6-C23-C20	3.42	119.41	111.83
86	CM	1904	GET	C62-C52-C42	-3.39	101.94	108.96
84	AS	3401	3K5	C32-O11-C25	-3.20	110.05	117.96
86	B	1801	GET	O43-C43-C83	3.16	115.06	108.13
86	B	1801	GET	C13-O62-C62	3.13	125.71	117.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
86	CM	1904	GET	C13-C23-C33	3.10	114.47	109.34
84	1	3402	3K5	O4-C22-C21	3.03	119.09	111.36
86	B	1801	GET	C62-C52-C42	-3.00	102.73	108.96
84	1	3402	3K5	C18-C19-C20	2.93	116.10	111.18
84	1	3402	3K5	C32-O11-C25	-2.87	110.85	117.96
84	1	3402	3K5	O-C3-C4	2.82	113.68	110.76
86	B	1801	GET	O11-C42-C52	2.80	114.73	107.28
84	AS	3401	3K5	C18-C17-C22	2.78	113.48	107.56
84	1	3402	3K5	C26-O9-C30	-2.74	113.47	117.72
84	1	3402	3K5	C24-O6-C23	-2.67	112.97	116.94
84	1	3402	3K5	O4-C22-C17	-2.62	101.11	105.05
86	CM	1904	GET	C32-C22-C12	-2.60	105.84	111.18
84	AS	3401	3K5	C29-C28-C27	-2.50	108.45	113.07
86	B	1801	GET	O11-C42-C32	2.49	115.12	109.18
84	AS	3401	3K5	C37-C36-C35	-2.46	108.53	113.07
84	AS	3401	3K5	O4-C22-C21	2.39	117.46	111.36
84	1	3402	3K5	C24-O7-C28	-2.33	109.66	113.67
84	AS	3401	3K5	C21-C20-C23	-2.28	106.04	111.36
84	1	3402	3K5	C3-C4-C5	2.23	116.33	112.27
84	1	3402	3K5	C21-C20-C19	2.20	112.83	109.86
84	AS	3401	3K5	C4-C3-C15	-2.16	110.66	114.34
84	1	3402	3K5	O1-C5-C1	2.15	110.27	107.23
86	CM	1904	GET	O52-C52-C42	-2.14	104.26	109.94
84	1	3402	3K5	O6-C23-O5	-2.12	119.98	123.94
84	1	3402	3K5	C34-O14-C38	-2.11	114.45	117.72
84	AS	3401	3K5	C26-C27-C28	2.11	114.70	110.12
84	1	3402	3K5	C26-C27-C28	2.06	114.60	110.12
84	1	3402	3K5	C18-C17-C22	-2.00	103.30	107.56

There are no chirality outliers.

All (27) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
84	1	3402	3K5	C4-C5-O1-C6
84	1	3402	3K5	C7-C6-O1-C5
84	1	3402	3K5	C31-C30-O9-C26
84	AS	3401	3K5	C39-C38-O14-C34
84	AS	3401	3K5	C35-C34-O14-C38
84	AS	3401	3K5	C31-C30-O9-C26
86	B	1801	GET	C23-C33-N33-C93
86	CM	1904	GET	C23-C33-N33-C93
84	1	3402	3K5	C39-C38-O14-C34

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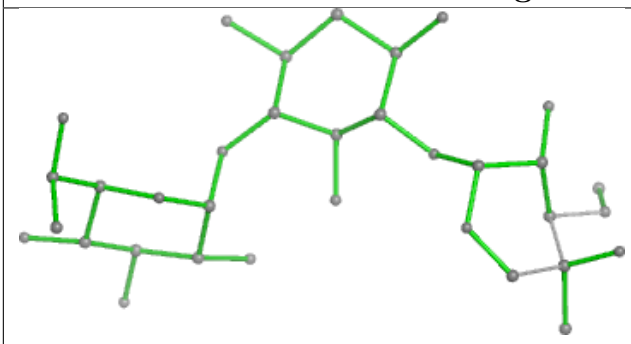
Mol	Chain	Res	Type	Atoms
84	AS	3401	3K5	O15-C38-O14-C34
84	1	3402	3K5	O15-C38-O14-C34
84	1	3402	3K5	O10-C30-O9-C26
84	AS	3401	3K5	O10-C30-O9-C26
84	1	3402	3K5	O2-C6-O1-C5
84	1	3402	3K5	O7-C24-O6-C23
84	AS	3401	3K5	C7-C8-C9-C10
84	AS	3401	3K5	C7-C8-C9-C14
84	1	3402	3K5	O1-C6-C7-C8
84	AS	3401	3K5	O2-C6-O1-C5
86	B	1801	GET	C32-C42-O11-C11
86	B	1801	GET	C52-C62-O62-C13
84	1	3402	3K5	O2-C6-C7-C8
86	B	1801	GET	C52-C42-O11-C11
84	AS	3401	3K5	O1-C6-C7-C8
84	AS	3401	3K5	C7-C6-O1-C5
86	CM	1904	GET	O51-C51-C61-C71
84	AS	3401	3K5	O2-C6-C7-C8

There are no ring outliers.

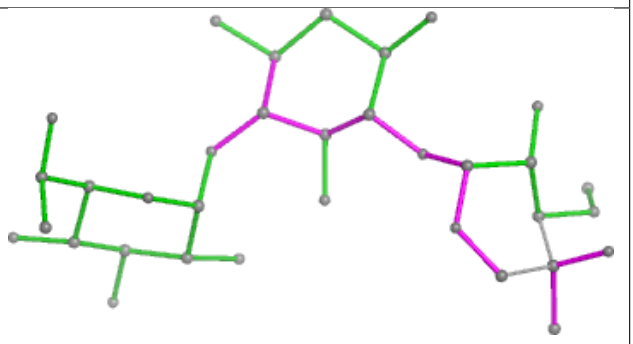
No monomer is involved in short contacts.

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

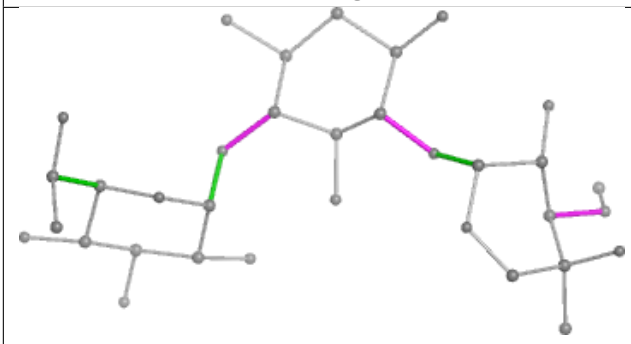
Ligand GET B 1801



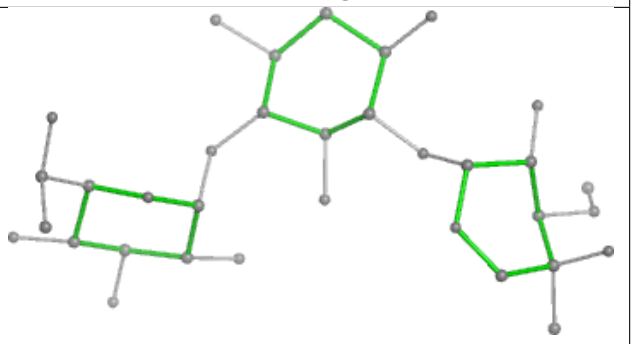
Bond lengths



Bond angles

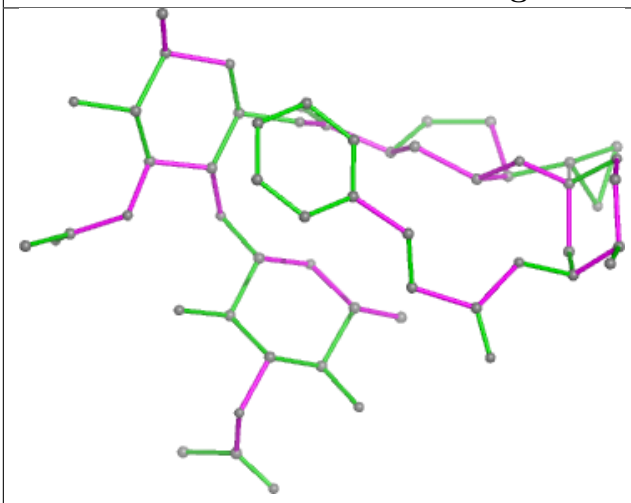


Torsions

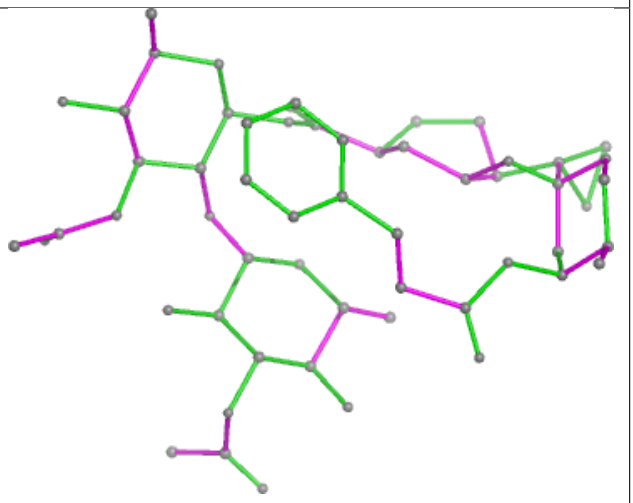


Rings

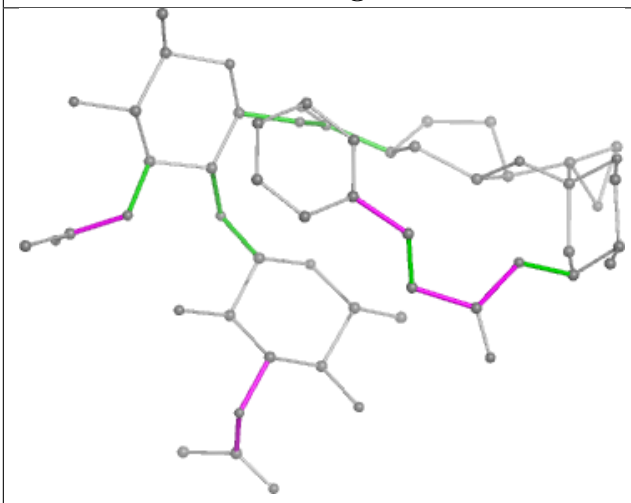
Ligand 3K5 AS 3401



Bond lengths



Bond angles



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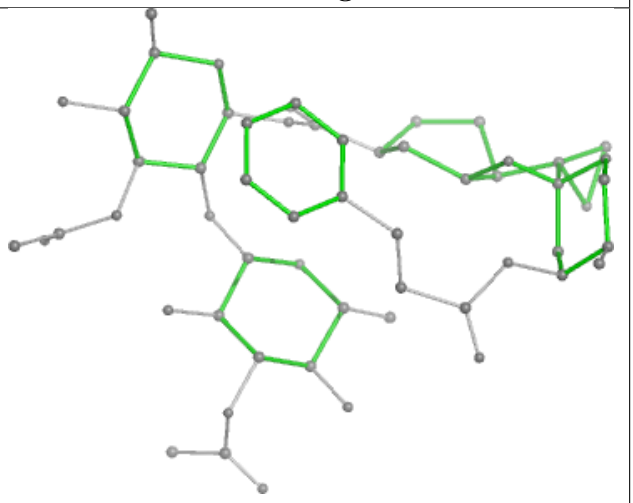
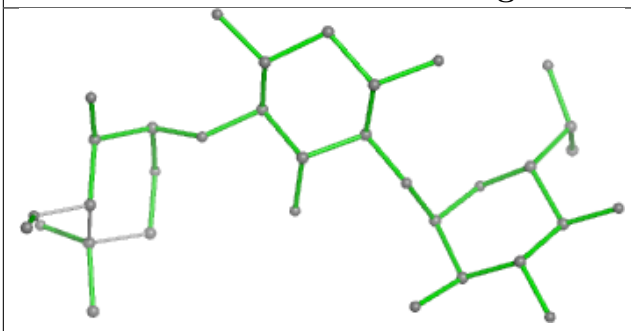
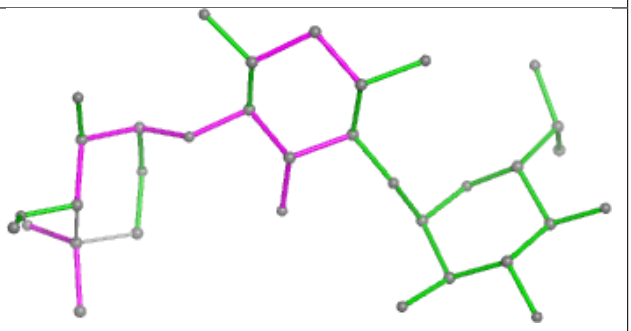


Rings

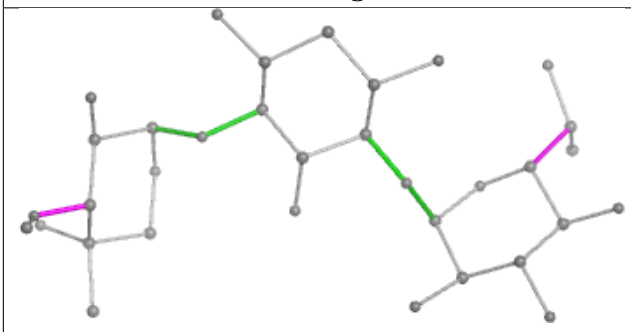
Ligand GET CM 1904



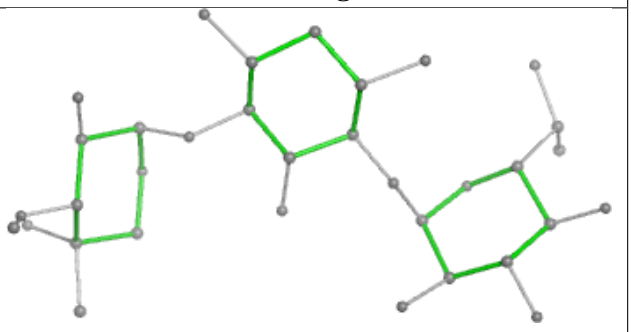
Bond lengths



Bond angles

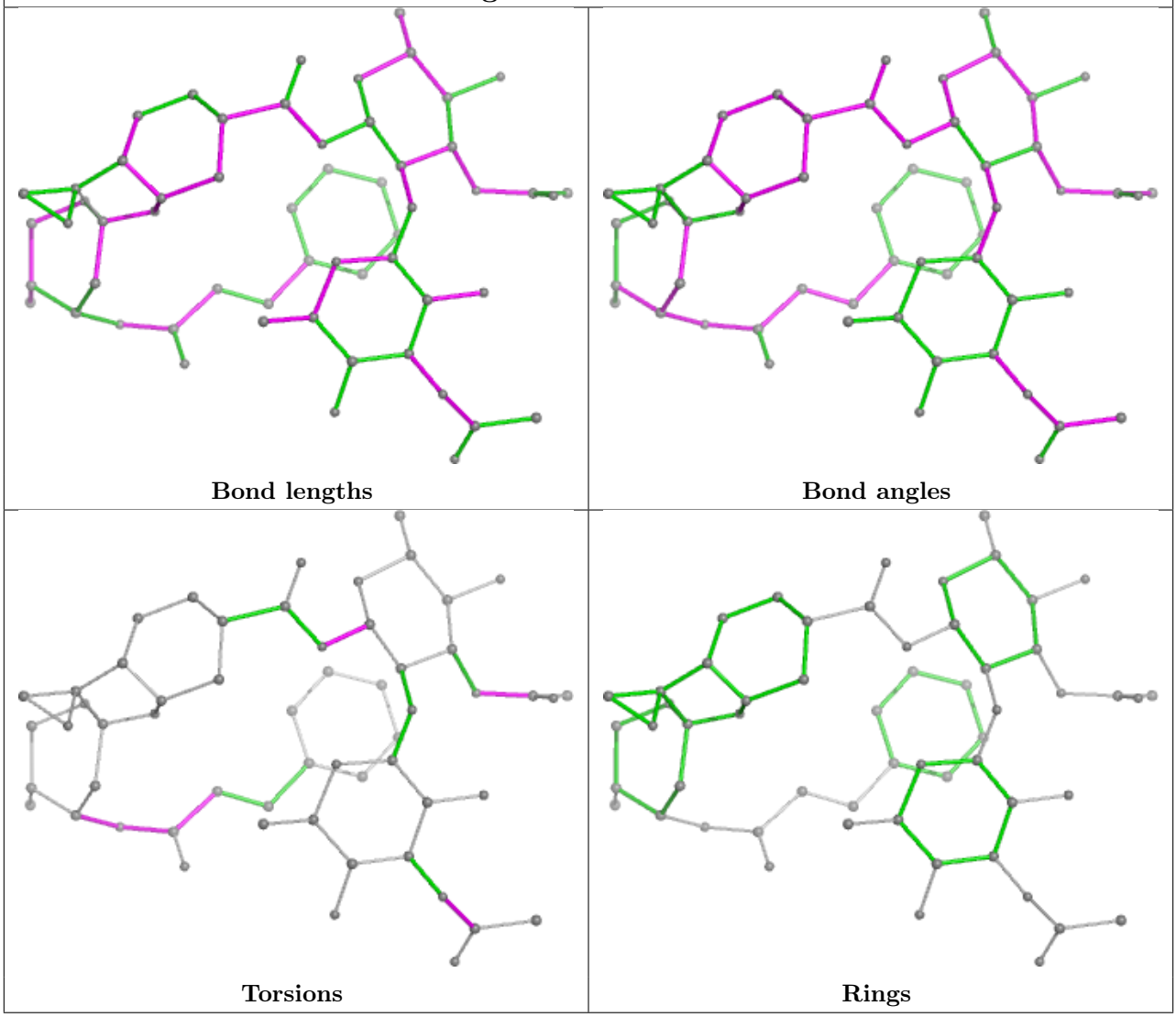


Torsions



Rings

Ligand 3K5 1 3402



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1	3216/3359 (95%)	0.17	77 (2%) 59 37	34, 65, 184, 386	0
1	AS	3229/3359 (96%)	0.41	131 (4%) 42 24	39, 76, 213, 334	0
2	3	121/121 (100%)	-0.05	1 (0%) 82 66	45, 80, 101, 132	0
2	AT	121/121 (100%)	0.11	1 (0%) 82 66	40, 75, 101, 149	0
3	4	157/158 (99%)	0.08	2 (1%) 74 54	49, 69, 121, 183	0
3	AU	158/158 (100%)	0.57	9 (5%) 30 17	61, 99, 147, 227	0
4	AW	249/254 (98%)	0.92	24 (9%) 15 8	44, 81, 108, 126	0
4	j	249/254 (98%)	0.65	12 (4%) 36 21	30, 56, 80, 157	0
5	AX	386/389 (99%)	0.54	15 (3%) 44 26	41, 64, 98, 158	0
5	k	386/389 (99%)	0.51	10 (2%) 57 35	39, 61, 84, 132	0
6	AY	361/363 (99%)	1.23	65 (18%) 4 3	54, 81, 112, 138	0
6	l	361/363 (99%)	0.75	22 (6%) 28 16	38, 72, 109, 144	0
7	AZ	292/298 (97%)	1.50	74 (25%) 2 2	49, 100, 135, 157	0
7	m	296/298 (99%)	0.99	31 (10%) 13 7	53, 91, 124, 149	0
8	BA	153/176 (86%)	1.06	18 (11%) 10 6	58, 79, 111, 146	0
8	n	157/176 (89%)	0.79	12 (7%) 21 12	60, 81, 115, 150	0
9	BB	234/241 (97%)	0.63	12 (5%) 34 19	44, 62, 119, 178	0
9	o	234/241 (97%)	0.46	5 (2%) 63 41	43, 63, 124, 170	0
10	BC	233/262 (88%)	1.41	58 (24%) 2 2	99, 131, 170, 188	0
10	p	238/262 (90%)	0.87	19 (7%) 20 11	62, 83, 139, 178	0
11	BD	190/191 (99%)	0.94	16 (8%) 18 10	63, 82, 113, 157	0
11	q	190/191 (99%)	0.90	11 (5%) 30 17	62, 81, 107, 138	0
12	BE	208/220 (94%)	0.29	4 (1%) 66 44	37, 56, 109, 150	0
12	r	208/220 (94%)	0.60	10 (4%) 36 21	42, 62, 102, 121	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	BF	171/174 (98%)	0.89	15 (8%) 17 9	62, 91, 124, 140	0
13	s	171/174 (98%)	0.98	13 (7%) 21 12	62, 92, 119, 131	0
14	BG	200/202 (99%)	1.22	33 (16%) 5 4	54, 102, 139, 158	0
14	t	200/202 (99%)	0.64	9 (4%) 39 22	47, 77, 121, 145	0
15	BH	130/131 (99%)	0.86	12 (9%) 16 9	55, 74, 102, 126	0
15	u	130/131 (99%)	0.42	4 (3%) 51 30	58, 72, 97, 120	0
16	BI	203/204 (99%)	1.62	51 (25%) 2 2	61, 94, 114, 123	0
16	v	203/204 (99%)	0.74	8 (3%) 44 26	38, 58, 75, 87	0
17	BJ	199/200 (99%)	0.57	6 (3%) 52 31	38, 56, 97, 133	0
17	w	199/200 (99%)	0.56	5 (2%) 58 36	42, 58, 91, 117	0
18	BK	176/185 (95%)	1.15	23 (13%) 8 5	53, 70, 102, 139	0
18	x	173/185 (93%)	0.95	19 (10%) 12 7	44, 61, 99, 127	0
19	BL	185/186 (99%)	0.94	17 (9%) 16 9	56, 76, 94, 108	0
19	y	185/186 (99%)	0.93	19 (10%) 13 8	47, 67, 86, 99	0
20	BM	179/190 (94%)	1.15	21 (11%) 10 6	65, 90, 149, 183	0
20	z	179/190 (94%)	0.95	16 (8%) 17 9	56, 74, 136, 153	0
21	0	170/172 (98%)	0.46	4 (2%) 59 37	50, 64, 85, 145	0
21	BN	170/172 (98%)	0.73	9 (5%) 33 19	44, 64, 88, 118	0
22	2	159/160 (99%)	0.68	12 (7%) 22 12	46, 61, 124, 152	0
22	BO	159/160 (99%)	1.05	17 (10%) 12 7	43, 64, 122, 154	0
23	5	103/124 (83%)	1.02	8 (7%) 20 11	88, 121, 152, 169	0
23	BP	102/124 (82%)	1.20	13 (12%) 9 5	102, 137, 160, 173	0
24	6	131/137 (95%)	0.50	4 (3%) 51 30	43, 56, 79, 100	0
24	BQ	131/137 (95%)	0.76	9 (6%) 24 14	40, 56, 87, 106	0
25	7	118/155 (76%)	0.85	12 (10%) 13 8	41, 82, 134, 147	0
25	BR	98/155 (63%)	1.31	20 (20%) 3 2	52, 74, 132, 146	0
26	8	121/142 (85%)	0.83	6 (4%) 35 20	60, 77, 97, 131	0
26	BS	119/142 (83%)	1.54	35 (29%) 1 1	74, 105, 126, 134	0
27	9	126/127 (99%)	1.28	18 (14%) 7 4	54, 82, 105, 137	0
27	BT	126/127 (99%)	1.19	20 (15%) 6 4	70, 102, 136, 156	0
28	AA	135/136 (99%)	1.01	13 (9%) 15 8	69, 96, 115, 151	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	BU	135/136 (99%)	1.39	30 (22%) 3 2	100, 128, 152, 180	0
29	AB	148/149 (99%)	0.74	6 (4%) 42 24	37, 64, 93, 131	0
29	BV	148/149 (99%)	1.21	15 (10%) 14 8	51, 83, 106, 123	0
30	AC	62/63 (98%)	1.35	13 (20%) 3 2	44, 77, 136, 150	0
30	BW	61/63 (96%)	1.73	20 (32%) 1 1	48, 83, 131, 149	0
31	AD	96/106 (90%)	0.63	6 (6%) 27 15	63, 84, 106, 118	0
31	BX	96/106 (90%)	1.34	19 (19%) 3 3	87, 123, 144, 157	0
32	AE	110/112 (98%)	0.76	4 (3%) 46 27	52, 70, 119, 151	0
32	BY	110/112 (98%)	1.09	13 (11%) 10 6	56, 83, 128, 158	0
33	AF	124/131 (94%)	0.77	9 (7%) 22 12	42, 67, 84, 100	0
33	BZ	124/131 (94%)	1.00	16 (12%) 9 5	45, 71, 100, 117	0
34	AG	106/107 (99%)	0.60	2 (1%) 66 44	49, 62, 78, 98	0
34	CA	106/107 (99%)	0.51	1 (0%) 81 63	42, 57, 77, 92	0
35	AH	112/122 (91%)	1.16	19 (16%) 5 3	52, 76, 124, 146	0
35	CB	112/122 (91%)	1.91	46 (41%) 1 1	74, 106, 148, 166	0
36	AI	120/120 (100%)	1.12	14 (11%) 10 6	68, 86, 118, 138	0
36	CC	118/120 (98%)	1.69	37 (31%) 1 1	88, 114, 138, 150	0
37	AJ	97/99 (97%)	0.78	6 (6%) 28 15	58, 75, 109, 177	0
37	CD	97/99 (97%)	1.50	24 (24%) 2 2	86, 107, 137, 156	0
38	AK	86/90 (95%)	0.85	2 (2%) 61 39	42, 56, 96, 121	0
38	CE	86/90 (95%)	1.19	13 (15%) 6 4	53, 76, 122, 141	0
39	AL	77/78 (98%)	1.30	13 (16%) 5 3	81, 106, 140, 165	0
39	CF	77/78 (98%)	1.71	26 (33%) 1 1	100, 130, 164, 170	0
40	AM	50/51 (98%)	0.89	7 (14%) 7 4	48, 63, 87, 91	0
40	CG	50/51 (98%)	1.62	13 (26%) 2 2	63, 84, 98, 108	0
41	AN	52/52 (100%)	2.24	28 (53%) 0 0	95, 121, 135, 144	0
41	CH	51/52 (98%)	2.34	31 (60%) 0 0	92, 125, 142, 145	0
42	AO	25/25 (100%)	1.40	7 (28%) 2 2	62, 69, 80, 89	0
42	CI	24/25 (96%)	1.38	4 (16%) 5 3	54, 63, 74, 84	0
43	AP	103/106 (97%)	0.62	8 (7%) 20 11	35, 62, 111, 126	0
43	CJ	103/106 (97%)	0.89	10 (9%) 15 8	48, 75, 123, 136	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	AQ	91/92 (98%)	0.71	7 (7%) 21 12	45, 64, 95, 126	0
44	CK	91/92 (98%)	0.92	8 (8%) 17 9	54, 84, 121, 131	0
45	CL	121/267 (45%)	1.69	44 (36%) 1 1	63, 100, 135, 150	0
45	i	121/267 (45%)	1.91	48 (39%) 1 1	75, 111, 143, 150	0
46	B	1761/1787 (98%)	0.57	84 (4%) 36 21	48, 93, 186, 464	0
46	CM	1765/1787 (98%)	0.50	82 (4%) 38 22	40, 82, 188, 472	0
47	C	208/261 (79%)	1.34	41 (19%) 3 3	91, 123, 148, 166	0
47	CN	208/261 (79%)	1.17	33 (15%) 6 4	67, 105, 139, 177	0
48	CO	214/256 (83%)	1.38	43 (20%) 3 2	79, 126, 149, 177	0
48	D	214/256 (83%)	0.86	14 (6%) 26 15	74, 98, 120, 131	0
49	CP	217/249 (87%)	0.58	10 (4%) 38 22	48, 74, 104, 128	0
49	E	217/249 (87%)	1.26	36 (16%) 5 3	76, 102, 125, 145	0
50	CQ	223/251 (88%)	0.83	12 (5%) 32 18	58, 80, 146, 173	0
50	F	223/251 (88%)	1.26	40 (17%) 4 3	81, 111, 159, 181	0
51	CR	260/262 (99%)	1.14	36 (13%) 8 4	62, 88, 115, 155	0
51	G	259/262 (98%)	1.64	79 (30%) 1 1	74, 104, 128, 156	0
52	CS	206/225 (91%)	1.23	40 (19%) 4 2	80, 109, 152, 202	0
52	H	206/225 (91%)	1.34	46 (22%) 3 2	81, 109, 142, 175	0
53	CT	236/236 (100%)	1.07	30 (12%) 9 5	60, 103, 147, 168	0
53	I	226/236 (95%)	1.20	43 (19%) 4 3	65, 105, 146, 185	0
54	CU	183/186 (98%)	1.26	37 (20%) 3 2	71, 136, 176, 185	0
54	J	185/186 (99%)	1.78	69 (37%) 1 1	84, 136, 165, 176	0
55	CV	203/206 (98%)	1.12	33 (16%) 5 4	46, 75, 131, 165	0
55	K	203/206 (98%)	1.13	33 (16%) 5 4	53, 87, 130, 156	0
56	CW	178/189 (94%)	1.35	32 (17%) 4 3	64, 95, 126, 144	0
56	L	178/189 (94%)	2.06	81 (45%) 1 1	77, 114, 131, 147	0
57	CX	94/118 (79%)	0.87	7 (7%) 22 12	61, 94, 136, 150	0
57	M	98/118 (83%)	1.31	16 (16%) 5 4	87, 120, 149, 161	0
58	CY	141/155 (90%)	0.86	13 (9%) 16 9	47, 67, 98, 158	0
58	N	144/155 (92%)	1.21	25 (17%) 5 3	56, 83, 120, 152	0
59	CZ	119/143 (83%)	1.47	25 (21%) 3 2	147, 171, 185, 192	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
59	O	116/143 (81%)	1.44	24 (20%) 3 2	156, 188, 199, 207	0
60	DA	150/151 (99%)	1.23	20 (13%) 8 5	59, 97, 127, 146	0
60	P	150/151 (99%)	1.33	32 (21%) 3 2	64, 98, 119, 132	0
61	DB	127/132 (96%)	1.15	16 (12%) 9 5	60, 105, 132, 140	0
61	Q	127/132 (96%)	0.73	7 (5%) 32 18	56, 84, 105, 113	0
62	DC	130/142 (91%)	1.55	32 (24%) 2 2	64, 101, 133, 157	0
62	R	129/142 (90%)	1.26	23 (17%) 4 3	79, 102, 136, 157	0
63	DD	140/142 (98%)	1.59	41 (29%) 1 1	67, 104, 140, 152	0
63	S	140/142 (98%)	1.85	56 (40%) 1 1	82, 115, 148, 163	0
64	DE	124/137 (90%)	1.51	26 (20%) 3 2	69, 122, 170, 177	0
64	T	124/137 (90%)	1.78	43 (34%) 1 1	97, 129, 174, 180	0
65	DF	141/145 (97%)	1.29	17 (12%) 10 6	63, 102, 137, 165	0
65	U	144/145 (99%)	0.89	11 (7%) 21 12	73, 91, 124, 154	0
66	DG	141/145 (97%)	1.41	29 (20%) 3 2	69, 100, 129, 154	0
66	V	141/145 (97%)	1.31	32 (22%) 3 2	85, 108, 141, 157	0
67	DH	97/119 (81%)	1.28	16 (16%) 5 4	53, 104, 128, 146	0
67	W	102/119 (85%)	1.50	26 (25%) 2 2	78, 129, 154, 164	0
68	DI	87/87 (100%)	0.85	5 (5%) 30 17	68, 90, 126, 152	0
68	X	87/87 (100%)	1.25	16 (18%) 4 3	83, 110, 136, 141	0
69	DJ	129/130 (99%)	0.77	6 (4%) 37 21	52, 69, 87, 99	0
69	Y	129/130 (99%)	1.51	37 (28%) 1 2	77, 91, 110, 119	0
70	DK	143/145 (98%)	0.99	19 (13%) 8 5	46, 66, 88, 120	0
70	Z	143/145 (98%)	0.91	16 (11%) 11 7	63, 78, 95, 118	0
71	DL	132/135 (97%)	1.03	14 (10%) 13 7	84, 111, 140, 184	0
71	a	134/135 (99%)	1.42	33 (24%) 2 2	80, 119, 138, 158	0
72	DM	71/105 (67%)	1.15	8 (11%) 11 6	106, 132, 150, 159	0
72	b	72/105 (68%)	0.75	3 (4%) 41 24	95, 114, 138, 154	0
73	DN	98/119 (82%)	1.25	14 (14%) 7 4	64, 83, 139, 147	0
73	c	98/119 (82%)	1.37	22 (22%) 3 2	68, 88, 130, 148	0
74	DO	81/82 (98%)	1.27	16 (19%) 3 3	77, 107, 173, 189	0
74	d	81/82 (98%)	1.06	5 (6%) 28 15	87, 107, 163, 179	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
75	DP	61/67 (91%)	0.85	4 (6%) 26 14	88, 112, 140, 161	0
75	e	62/67 (92%)	1.40	16 (25%) 2 2	96, 117, 142, 152	0
76	DQ	54/56 (96%)	1.07	8 (14%) 7 4	55, 70, 100, 118	0
76	f	55/56 (98%)	1.41	10 (18%) 4 3	82, 93, 120, 138	0
77	DR	58/63 (92%)	1.76	23 (39%) 1 1	69, 103, 170, 187	0
77	g	60/63 (95%)	1.50	20 (33%) 1 1	82, 113, 159, 176	0
78	DS	69/193 (35%)	2.93	46 (66%) 0 0	127, 179, 197, 217	0
78	h	70/193 (36%)	1.63	24 (34%) 1 1	132, 176, 195, 200	0
79	AR	311/317 (98%)	1.51	71 (22%) 2 2	130, 163, 185, 198	0
79	DT	311/317 (98%)	1.57	86 (27%) 2 2	114, 157, 182, 197	0
80	P0	107/312 (34%)	1.73	35 (32%) 1 1	115, 131, 144, 164	0
80	p0	107/312 (34%)	2.52	64 (59%) 0 0	123, 138, 154, 166	0
81	12	63/165 (38%)	1.27	14 (22%) 3 2	111, 134, 150, 158	0
82	L1	217/217 (100%)	1.31	48 (22%) 3 2	107, 133, 170, 237	0
82	l1	217/217 (100%)	1.56	59 (27%) 2 2	115, 140, 163, 206	0
All	All	33667/36349 (92%)	0.88	3912 (11%) 11 6	30, 86, 164, 472	0

All (3912) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
78	DS	127	TYR	12.2
6	AY	363	ASN	8.7
4	j	250	GLN	8.4
7	AZ	82	GLU	7.9
1	AS	1262	G	7.8
1	AS	1263	U	7.7
80	p0	74	GLU	7.5
78	DS	191	LYS	7.4
16	BI	204	SER	7.1
45	i	64	LEU	7.1
78	h	126	VAL	6.9
60	P	151	ALA	6.9
35	CB	28	GLY	6.9
48	CO	54	LEU	6.8
78	DS	164	PRO	6.8
46	CM	1680	A	6.8
14	BG	2	ALA	6.7

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Mol	Chain	Res	Type	RSRZ
52	CS	152	SER	6.7
54	J	179	PHE	6.7
41	AN	16	GLU	6.6
52	CS	151	SER	6.5
80	p0	71	PRO	6.5
1	AS	1264	G	6.5
80	p0	88	PHE	6.5
51	G	39	ARG	6.4
80	p0	27	VAL	6.4
4	AW	73	GLU	6.4
79	AR	80	TYR	6.2
1	1	2436	A	6.2
46	CM	1679	A	6.1
1	AS	1265	U	6.0
45	i	108	GLY	5.9
51	G	110	ALA	5.9
46	B	132	U	5.9
61	Q	88	THR	5.8
67	W	81	TYR	5.7
45	CL	84	SER	5.7
56	L	138	LYS	5.7
14	t	2	ALA	5.7
79	AR	17	ASN	5.7
30	BW	10	HIS	5.7
78	DS	123	LYS	5.7
16	BI	198	SER	5.6
27	9	127	GLU	5.6
52	H	152	SER	5.6
64	T	68	GLY	5.6
1	AS	1245	G	5.6
35	CB	30	LEU	5.6
49	CP	86	ARG	5.6
65	DF	94	ASP	5.6
1	AS	3319	U	5.6
56	L	116	LEU	5.5
35	CB	33	GLN	5.5
52	H	80	LYS	5.5
78	DS	169	GLY	5.5
1	AS	1244	C	5.5
35	CB	29	LYS	5.5
71	DL	99	LYS	5.5
71	a	135	ASP	5.4

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Mol	Chain	Res	Type	RSRZ
36	AI	84	LYS	5.4
33	BZ	27	HIS	5.4
1	AS	2450	U	5.4
1	1	2454	C	5.4
3	AU	21	C	5.4
52	H	72	HIS	5.4
49	E	86	ARG	5.3
59	O	89	ILE	5.3
1	AS	1261	U	5.3
36	CC	120	ALA	5.3
45	i	69	PHE	5.3
30	BW	23	LYS	5.3
45	CL	98	ASP	5.3
26	BS	25	LYS	5.3
41	CH	16	GLU	5.2
27	9	120	GLN	5.2
66	DG	119	LYS	5.2
46	CM	1480	G	5.2
7	m	24	GLN	5.2
80	p0	28	VAL	5.2
29	BV	20	GLY	5.1
18	BK	2	VAL	5.1
7	AZ	7	PHE	5.1
1	AS	1235	C	5.1
51	G	107	GLY	5.1
56	L	48	GLN	5.1
78	DS	172	ILE	5.1
54	J	176	GLN	5.1
78	DS	190	LEU	5.1
52	H	70	VAL	5.1
40	CG	34	LYS	5.0
27	9	45	VAL	5.0
17	w	101	GLU	5.0
80	p0	76	LEU	5.0
46	CM	1697	C	5.0
45	i	61	GLU	5.0
78	DS	181	GLN	5.0
45	i	43	PRO	4.9
75	e	45	LYS	4.9
80	P0	26	PHE	4.9
15	BH	131	ALA	4.9
48	CO	55	LYS	4.9

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Mol	Chain	Res	Type	RSRZ
56	CW	51	LYS	4.9
51	CR	246	LYS	4.9
82	l1	124	LEU	4.9
82	l1	167	VAL	4.9
52	H	71	SER	4.9
5	AX	140	ASP	4.9
28	BU	105	SER	4.9
56	L	130	THR	4.8
47	C	97	ALA	4.8
1	1	2453	G	4.8
56	L	154	LYS	4.8
67	DH	81	TYR	4.8
48	CO	218	LEU	4.8
82	L1	16	LEU	4.8
45	CL	81	THR	4.8
46	B	1339	G	4.8
78	DS	170	ALA	4.8
71	a	63	GLN	4.8
80	P0	108	PRO	4.8
1	1	1551	U	4.8
82	l1	28	PHE	4.8
37	CD	65	GLU	4.8
40	CG	33	ASN	4.8
80	P0	25	ILE	4.7
47	CN	19	ALA	4.7
62	DC	58	LYS	4.7
63	S	67	LYS	4.7
59	O	101	ALA	4.7
20	z	152	GLU	4.7
35	CB	64	GLN	4.7
66	DG	70	GLN	4.7
55	K	180	GLY	4.7
77	g	47	VAL	4.7
46	B	131	C	4.7
66	V	18	TYR	4.7
80	p0	59	VAL	4.6
5	k	385	LYS	4.6
6	l	363	ASN	4.6
6	AY	55	GLU	4.6
78	DS	159	LEU	4.6
7	AZ	58	LYS	4.6
39	CF	30	LYS	4.6

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Mol	Chain	Res	Type	RSRZ
16	BI	108	ARG	4.6
79	DT	80	TYR	4.6
35	CB	36	LYS	4.6
45	CL	54	LYS	4.6
47	CN	15	LYS	4.6
55	K	53	GLN	4.6
77	DR	4	VAL	4.6
41	CH	29	PRO	4.6
1	AS	1091	U	4.6
51	G	40	GLU	4.6
63	DD	36	THR	4.6
1	AS	2472	A	4.6
71	a	134	ALA	4.6
46	B	715	G	4.6
82	l1	1	MET	4.5
46	CM	1696	U	4.5
46	B	656	C	4.5
64	T	69	ILE	4.5
66	V	55	TYR	4.5
66	V	119	LYS	4.5
10	BC	67	SER	4.5
41	AN	26	ARG	4.5
48	CO	152	LYS	4.5
79	AR	260	PHE	4.5
54	J	148	VAL	4.5
64	T	66	VAL	4.5
78	DS	133	ILE	4.5
35	CB	8	ARG	4.5
56	L	92	LYS	4.5
78	h	127	TYR	4.5
80	p0	84	VAL	4.4
22	BO	86	GLU	4.4
79	DT	161	ASP	4.4
73	c	2	PRO	4.4
5	k	330	GLY	4.4
11	BD	11	ASP	4.4
49	E	161	ALA	4.4
64	DE	117	ILE	4.4
7	m	169	GLY	4.4
46	CM	712	A	4.4
1	1	2467	C	4.4
45	CL	59	GLY	4.4

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Mol	Chain	Res	Type	RSRZ
80	p0	29	GLY	4.4
53	I	50	PHE	4.4
80	p0	73	PHE	4.4
62	R	116	LEU	4.4
1	AS	545	G	4.4
41	AN	52	LYS	4.4
1	1	2466	A	4.4
67	W	78	TRP	4.3
79	AR	32	LEU	4.3
79	DT	34	LEU	4.3
37	CD	2	ALA	4.3
7	AZ	226	TYR	4.3
35	CB	24	LYS	4.3
45	i	84	SER	4.3
59	CZ	104	CYS	4.3
6	AY	105	LYS	4.3
48	CO	30	PHE	4.3
46	CM	132	U	4.3
15	u	131	ALA	4.3
49	E	90	ARG	4.3
53	I	79	LYS	4.3
64	T	21	TYR	4.3
10	BC	119	GLU	4.3
49	E	77	LYS	4.3
57	M	25	LYS	4.3
46	B	1038	G	4.3
6	l	353	SER	4.3
60	P	150	VAL	4.3
60	DA	151	ALA	4.3
56	L	137	GLY	4.3
46	B	708	A	4.2
41	CH	15	CYS	4.2
55	K	185	CYS	4.2
50	F	153	TYR	4.2
79	AR	62	PHE	4.2
61	DB	125	GLY	4.2
7	AZ	59	ASP	4.2
36	CC	75	TYR	4.2
73	c	89	ARG	4.2
80	p0	85	GLY	4.2
48	CO	59	ASP	4.2
67	W	69	THR	4.2

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Mol	Chain	Res	Type	RSRZ
45	i	41	ALA	4.2
1	1	545	G	4.2
46	B	714	G	4.2
6	AY	195	LEU	4.2
27	9	35	LEU	4.2
56	L	6	ARG	4.2
52	H	86	GLN	4.2
63	S	39	GLN	4.2
64	T	53	TYR	4.2
29	BV	144	VAL	4.2
1	AS	1236	A	4.2
16	BI	146	ALA	4.2
30	BW	2	ALA	4.2
76	DQ	8	PHE	4.2
46	B	1480	G	4.1
74	DO	18	GLN	4.1
7	AZ	109	ALA	4.1
41	CH	8	ALA	4.1
65	DF	120	ARG	4.1
46	B	133	U	4.1
45	i	45	SER	4.1
74	DO	30	SER	4.1
78	DS	179	ASP	4.1
52	H	23	VAL	4.1
82	l1	36	VAL	4.1
1	1	1550	U	4.1
37	CD	47	ALA	4.1
27	9	4	ILE	4.1
52	CS	100	ASN	4.1
79	AR	39	ASP	4.1
80	p0	30	VAL	4.1
80	p0	87	ILE	4.1
1	AS	1551	U	4.1
46	CM	1703	C	4.1
18	x	7	THR	4.1
29	BV	108	GLY	4.1
64	T	8	THR	4.1
78	DS	129	THR	4.1
35	CB	41	ARG	4.1
45	i	49	ALA	4.1
78	DS	130	PRO	4.1
36	CC	84	LYS	4.0

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Mol	Chain	Res	Type	RSRZ
6	l	352	PRO	4.0
36	CC	107	GLN	4.0
80	P0	28	VAL	4.0
1	AS	1266	A	4.0
1	AS	1249	U	4.0
4	j	70	LYS	4.0
82	l1	3	LYS	4.0
20	BM	7	GLN	4.0
8	n	1	MET	4.0
80	p0	68	SER	4.0
6	AY	64	GLU	4.0
48	CO	63	GLY	4.0
48	CO	90	GLU	4.0
52	CS	154	THR	4.0
7	m	150	LEU	4.0
1	AS	1246	G	4.0
14	t	42	LYS	4.0
35	AH	16	ARG	4.0
51	CR	39	ARG	4.0
52	H	79	SER	4.0
67	W	60	LYS	4.0
25	7	63	ILE	4.0
52	CS	97	LEU	4.0
30	BW	24	PRO	4.0
33	AF	123	PRO	4.0
62	R	123	TYR	4.0
60	DA	62	GLN	4.0
46	CM	1476	A	4.0
15	u	130	LYS	4.0
49	E	160	VAL	4.0
60	P	7	SER	4.0
1	AS	1552	C	4.0
43	AP	104	LEU	4.0
66	V	116	ILE	4.0
18	x	183	THR	4.0
81	12	121	PHE	3.9
30	AC	18	ARG	3.9
82	l1	2	SER	3.9
46	B	657	C	3.9
79	AR	299	PHE	3.9
11	q	69	ARG	3.9
40	CG	32	ASP	3.9

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Mol	Chain	Res	Type	RSRZ
35	CB	57	LEU	3.9
20	BM	87	ALA	3.9
64	DE	125	SER	3.9
41	CH	14	ASN	3.9
45	i	68	ASN	3.9
52	CS	153	GLY	3.9
1	1	2465	U	3.9
78	h	125	LYS	3.9
80	p0	55	LYS	3.9
56	L	142	ASN	3.9
7	AZ	125	VAL	3.9
7	AZ	114	GLY	3.9
45	CL	96	LYS	3.9
56	CW	10	LYS	3.9
49	E	210	PHE	3.9
51	G	47	PHE	3.9
57	M	30	PRO	3.9
79	DT	115	SER	3.9
38	CE	13	ASN	3.9
30	BW	34	GLY	3.9
79	AR	56	GLY	3.9
1	AS	402	A	3.9
18	BK	85	ALA	3.9
36	CC	71	ALA	3.9
37	CD	7	ALA	3.9
45	i	85	LYS	3.9
52	H	84	LYS	3.9
52	CS	76	LYS	3.9
6	AY	352	PRO	3.8
3	4	21	C	3.8
80	p0	58	MET	3.8
54	J	149	LEU	3.8
80	p0	41	ILE	3.8
30	BW	33	LYS	3.8
61	DB	85	LYS	3.8
79	DT	181	ALA	3.8
29	BV	21	ARG	3.8
1	AS	2185	A	3.8
55	K	193	GLU	3.8
73	c	39	VAL	3.8
31	BX	93	SER	3.8
35	CB	40	SER	3.8

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Mol	Chain	Res	Type	RSRZ
16	BI	30	TYR	3.8
7	m	149	GLY	3.8
77	g	29	LYS	3.8
36	CC	108	ARG	3.8
1	AS	1204	U	3.8
51	G	109	PHE	3.8
54	CU	88	PHE	3.8
36	CC	57	VAL	3.8
48	CO	67	GLU	3.8
57	CX	2	LEU	3.8
78	h	128	THR	3.8
80	P0	80	ILE	3.8
39	CF	37	LYS	3.8
71	a	68	LYS	3.8
78	DS	178	LYS	3.8
67	W	72	GLY	3.8
40	CG	4	GLN	3.8
80	p0	79	PHE	3.8
53	I	97	VAL	3.8
54	CU	109	PRO	3.8
82	l1	165	LEU	3.8
1	AS	1239	G	3.8
54	J	131	ILE	3.8
56	L	111	THR	3.8
71	a	64	PHE	3.8
12	r	102	MET	3.8
35	AH	23	VAL	3.8
1	AS	2448	C	3.8
65	U	140	THR	3.8
7	AZ	68	HIS	3.8
51	G	24	SER	3.7
35	CB	3	GLN	3.7
1	1	2445	G	3.7
16	v	153	ASN	3.7
54	CU	146	GLN	3.7
54	J	21	PHE	3.7
6	AY	66	TRP	3.7
35	CB	31	VAL	3.7
48	CO	20	VAL	3.7
80	p0	100	VAL	3.7
51	G	43	PRO	3.7
81	12	109	ILE	3.7

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Mol	Chain	Res	Type	RSRZ
7	AZ	77	ALA	3.7
1	AS	3320	U	3.7
46	B	713	U	3.7
54	CU	89	LEU	3.7
41	AN	50	LYS	3.7
51	G	134	LYS	3.7
1	AS	1248	A	3.7
36	CC	118	ILE	3.7
58	N	49	ILE	3.7
60	DA	106	ARG	3.7
54	J	180	GLU	3.7
60	P	142	GLU	3.7
10	p	175	GLY	3.7
79	AR	77	ASP	3.7
79	AR	269	ASP	3.7
82	l1	217	TYR	3.7
7	m	7	PHE	3.7
27	BT	20	PHE	3.7
79	DT	299	PHE	3.7
82	l1	214	PHE	3.7
46	B	1	U	3.7
56	L	29	LYS	3.7
56	CW	128	LEU	3.7
64	DE	91	LEU	3.7
69	Y	84	ASN	3.7
78	h	123	LYS	3.7
79	DT	157	ILE	3.7
58	N	114	ALA	3.7
5	AX	139	THR	3.7
16	BI	62	TYR	3.7
52	H	77	TYR	3.7
79	AR	101	THR	3.7
45	i	102	LYS	3.7
54	CU	101	LYS	3.7
77	g	49	LEU	3.7
7	AZ	151	GLN	3.7
22	BO	103	GLN	3.7
63	S	122	ARG	3.7
22	BO	81	GLY	3.7
54	J	130	GLU	3.7
79	AR	15	GLY	3.7
62	R	102	PHE	3.7

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Mol	Chain	Res	Type	RSRZ
32	BY	26	LYS	3.7
50	CQ	149	LYS	3.7
15	u	129	VAL	3.7
52	CS	155	VAL	3.7
5	AX	143	GLN	3.7
25	BR	79	GLN	3.7
52	H	44	ASN	3.7
60	DA	138	ASN	3.7
79	DT	76	ALA	3.6
36	CC	64	GLU	3.6
79	AR	96	GLU	3.6
1	AS	1197	C	3.6
45	i	88	PHE	3.6
15	BH	4	THR	3.6
77	DR	35	TYR	3.6
79	DT	116	ILE	3.6
1	1	1021	A	3.6
1	AS	1247	A	3.6
35	CB	17	SER	3.6
79	DT	28	ALA	3.6
56	L	35	GLY	3.6
56	L	20	GLU	3.6
79	AR	14	GLU	3.6
48	CO	24	PHE	3.6
51	CR	109	PHE	3.6
62	DC	56	LEU	3.6
76	f	43	PHE	3.6
77	g	36	MET	3.6
1	AS	1222	G	3.6
54	J	182	PRO	3.6
63	S	120	SER	3.6
23	BP	15	PHE	3.6
48	CO	120	LEU	3.6
52	H	181	GLU	3.6
80	p0	18	LEU	3.6
46	B	709	U	3.6
46	CM	1698	U	3.6
82	L1	23	THR	3.6
58	N	23	PRO	3.6
45	i	67	LYS	3.6
66	V	38	LYS	3.6
35	CB	39	ALA	3.6

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Mol	Chain	Res	Type	RSRZ
63	DD	19	ALA	3.6
6	AY	361	LEU	3.6
74	DO	29	ARG	3.6
78	DS	126	VAL	3.6
63	S	78	TYR	3.6
6	AY	75	ILE	3.6
66	V	92	LYS	3.6
74	DO	27	GLN	3.6
4	AW	62	ALA	3.6
4	AW	121	GLY	3.6
37	CD	67	ARG	3.6
62	DC	49	LEU	3.6
80	P0	77	LEU	3.6
1	1	2441	G	3.6
46	B	707	C	3.6
63	DD	68	VAL	3.6
18	BK	89	ASN	3.6
39	CF	57	ASN	3.6
51	G	157	ASN	3.6
50	F	116	ILE	3.6
39	CF	41	THR	3.6
50	F	149	LYS	3.6
60	P	64	LYS	3.6
62	R	7	PRO	3.6
46	B	1403	A	3.5
55	CV	20	GLN	3.5
67	W	67	ARG	3.5
79	DT	241	ALA	3.5
4	j	71	LEU	3.5
30	BW	35	VAL	3.5
35	CB	22	VAL	3.5
59	O	49	SER	3.5
79	AR	164	SER	3.5
6	AY	113	LYS	3.5
56	L	164	TYR	3.5
58	CY	15	LYS	3.5
62	R	115	TYR	3.5
7	m	38	THR	3.5
49	E	92	ARG	3.5
64	T	11	ARG	3.5
10	BC	70	LEU	3.5
45	CL	69	PHE	3.5

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Mol	Chain	Res	Type	RSRZ
64	T	103	ASP	3.5
36	CC	109	ILE	3.5
53	I	226	ILE	3.5
66	DG	116	ILE	3.5
14	BG	88	LYS	3.5
52	CS	77	TYR	3.5
56	CW	12	TYR	3.5
1	1	1552	C	3.5
7	AZ	78	ALA	3.5
10	BC	115	ALA	3.5
73	DN	6	ALA	3.5
41	CH	44	GLN	3.5
72	DM	37	GLN	3.5
54	CU	179	PHE	3.5
10	BC	152	VAL	3.5
1	AS	2453	G	3.5
63	S	119	ASP	3.5
25	BR	27	LYS	3.5
45	i	65	LYS	3.5
55	CV	41	LYS	3.5
18	BK	42	GLU	3.5
7	AZ	119	TYR	3.5
18	BK	64	ASN	3.5
27	9	44	ASN	3.5
63	S	141	TYR	3.5
64	DE	11	ARG	3.5
5	k	139	THR	3.5
56	L	147	THR	3.5
56	CW	18	PRO	3.5
45	i	103	LEU	3.5
50	F	60	LEU	3.5
77	g	39	LEU	3.5
79	DT	180	LEU	3.5
19	y	96	PHE	3.5
33	AF	53	GLN	3.5
41	AN	44	GLN	3.5
1	AS	2467	C	3.5
1	AS	3051	C	3.5
78	h	133	ILE	3.5
80	p0	75	LYS	3.5
16	BI	131	GLU	3.5
63	DD	124	GLU	3.5

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Mol	Chain	Res	Type	RSRZ
35	AH	49	SER	3.5
69	DJ	58	SER	3.5
30	BW	11	ASN	3.5
39	CF	14	LEU	3.5
41	CH	27	LEU	3.5
63	DD	141	TYR	3.5
45	i	33	ASN	3.5
46	B	711	U	3.5
46	CM	75	U	3.5
47	CN	44	GLY	3.5
80	p0	51	VAL	3.5
82	L1	13	VAL	3.5
27	9	6	GLN	3.5
37	CD	69	LYS	3.5
49	E	59	LYS	3.5
37	CD	60	ILE	3.5
68	X	34	ILE	3.5
32	BY	18	ARG	3.5
1	AS	2470	C	3.4
54	J	127	PHE	3.4
39	CF	36	LYS	3.4
45	i	37	LYS	3.4
45	CL	50	LYS	3.4
46	B	258	U	3.4
78	DS	132	LYS	3.4
56	L	153	GLN	3.4
6	AY	109	ARG	3.4
65	U	115	ARG	3.4
16	BI	164	LEU	3.4
49	E	108	LEU	3.4
54	J	34	LEU	3.4
54	J	119	ASP	3.4
80	p0	15	LEU	3.4
41	CH	3	GLU	3.4
39	CF	43	PHE	3.4
52	CS	82	PHE	3.4
64	T	9	VAL	3.4
1	1	2476	C	3.4
36	CC	103	LYS	3.4
45	i	100	LYS	3.4
78	DS	125	LYS	3.4
4	AW	250	GLN	3.4

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Mol	Chain	Res	Type	RSRZ
7	m	4	GLN	3.4
25	BR	41	GLN	3.4
39	CF	75	ILE	3.4
47	CN	127	ARG	3.4
80	p0	96	ILE	3.4
1	AS	2459	G	3.4
52	H	78	ALA	3.4
56	L	144	PRO	3.4
33	BZ	126	LYS	3.4
69	DJ	99	PHE	3.4
82	l1	110	PHE	3.4
35	AH	48	GLY	3.4
51	CR	107	GLY	3.4
63	S	2	SER	3.4
63	DD	32	GLY	3.4
64	T	13	SER	3.4
67	W	66	THR	3.4
82	l1	136	THR	3.4
59	CZ	120	CYS	3.4
82	l1	155	ILE	3.4
7	m	283	GLN	3.4
18	BK	165	GLN	3.4
1	1	1816	U	3.4
6	AY	73	ALA	3.4
13	BF	4	LYS	3.4
26	BS	49	LYS	3.4
30	AC	63	ALA	3.4
50	F	188	LYS	3.4
73	DN	4	LYS	3.4
78	DS	157	GLU	3.4
1	1	2444	G	3.4
35	CB	79	SER	3.4
37	AJ	96	SER	3.4
41	CH	2	ILE	3.4
46	CM	1678	G	3.4
41	AN	14	ASN	3.4
55	CV	185	CYS	3.4
54	CU	105	GLN	3.4
55	K	20	GLN	3.4
53	CT	190	LEU	3.4
80	p0	70	LEU	3.4
82	l1	29	LEU	3.4

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Mol	Chain	Res	Type	RSRZ
1	AS	2473	C	3.4
26	BS	36	LYS	3.4
62	DC	54	MET	3.4
79	AR	60	LYS	3.4
41	CH	47	PRO	3.4
47	CN	95	ALA	3.4
18	x	42	GLU	3.4
47	C	123	VAL	3.4
54	J	86	VAL	3.4
56	L	141	VAL	3.4
67	W	61	VAL	3.4
79	AR	277	VAL	3.4
46	B	492	U	3.4
40	CG	21	ARG	3.4
71	a	67	GLY	3.4
46	CM	1694	A	3.4
1	1	2443	G	3.3
73	c	37	LYS	3.3
35	CB	2	ALA	3.3
45	i	51	ALA	3.3
72	DM	62	VAL	3.3
17	w	155	GLU	3.3
17	BJ	188	GLU	3.3
53	I	81	HIS	3.3
69	Y	57	ARG	3.3
62	DC	50	ASP	3.3
38	CE	87	THR	3.3
45	i	115	LEU	3.3
80	P0	93	LEU	3.3
80	p0	77	LEU	3.3
54	J	185	SER	3.3
46	B	1676	A	3.3
59	O	111	ASN	3.3
70	DK	27	GLN	3.3
73	c	69	ASN	3.3
78	DS	168	CYS	3.3
80	p0	7	LYS	3.3
18	BK	57	ALA	3.3
47	C	158	VAL	3.3
49	E	178	VAL	3.3
59	CZ	101	ALA	3.3
54	J	96	PRO	3.3

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Mol	Chain	Res	Type	RSRZ
63	DD	20	HIS	3.3
5	k	12	GLY	3.3
11	q	190	GLU	3.3
12	r	114	GLY	3.3
59	O	71	ILE	3.3
1	AS	2062	G	3.3
5	AX	387	LEU	3.3
71	a	70	THR	3.3
82	L1	70	ASP	3.3
53	CT	191	LYS	3.3
73	DN	3	LYS	3.3
12	r	113	GLN	3.3
14	t	37	GLN	3.3
28	AA	98	SER	3.3
31	BX	13	ASN	3.3
19	y	140	VAL	3.3
26	BS	64	VAL	3.3
27	9	8	VAL	3.3
27	9	33	ALA	3.3
30	AC	14	ARG	3.3
35	AH	63	ALA	3.3
35	CB	23	VAL	3.3
66	V	62	ALA	3.3
78	DS	166	PRO	3.3
6	AY	82	GLY	3.3
13	BF	78	GLU	3.3
17	BJ	190	GLU	3.3
57	M	64	TYR	3.3
56	L	76	LEU	3.3
4	j	190	LYS	3.3
10	BC	71	LYS	3.3
53	CT	79	LYS	3.3
56	L	58	ASP	3.3
42	CI	24	SER	3.3
53	CT	233	SER	3.3
20	BM	63	ALA	3.3
59	O	75	VAL	3.3
68	DI	39	VAL	3.3
64	T	71	PHE	3.3
63	S	80	ILE	3.3
57	M	87	LEU	3.3
80	p0	93	LEU	3.3

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Mol	Chain	Res	Type	RSRZ
30	BW	25	LYS	3.3
42	AO	25	LYS	3.3
51	G	133	LYS	3.3
53	CT	193	LYS	3.3
73	c	12	LYS	3.3
56	CW	130	THR	3.3
44	CK	25	GLN	3.3
63	S	133	ALA	3.3
65	DF	93	VAL	3.3
74	d	27	GLN	3.3
75	e	15	VAL	3.3
75	e	48	VAL	3.3
61	Q	120	SER	3.3
68	X	56	SER	3.3
18	BK	59	PRO	3.3
40	CG	51	ILE	3.3
46	B	493	U	3.3
73	c	29	CYS	3.3
1	AS	1281	G	3.3
6	AY	245	LEU	3.3
32	AE	26	LYS	3.2
41	AN	12	LYS	3.2
46	CM	131	C	3.2
7	AZ	8	ARG	3.2
7	AZ	95	TRP	3.2
38	CE	57	ARG	3.2
31	BX	33	VAL	3.2
36	CC	116	PHE	3.2
54	J	88	PHE	3.2
82	L1	28	PHE	3.2
7	AZ	113	LEU	3.2
16	BI	58	GLY	3.2
30	AC	25	LYS	3.2
36	CC	83	LYS	3.2
41	AN	17	LYS	3.2
56	L	51	LYS	3.2
49	E	79	ARG	3.2
3	AU	91	C	3.2
46	CM	657	C	3.2
53	I	153	VAL	3.2
78	DS	128	THR	3.2
48	CO	156	ALA	3.2

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Mol	Chain	Res	Type	RSRZ
12	r	162	GLN	3.2
66	V	69	LYS	3.2
78	h	166	PRO	3.2
44	AQ	59	SER	3.2
78	h	159	LEU	3.2
7	AZ	219	TYR	3.2
25	BR	43	ARG	3.2
49	CP	151	CYS	3.2
51	G	103	TYR	3.2
73	c	73	TYR	3.2
76	f	45	GLU	3.2
46	CM	1	U	3.2
48	D	20	VAL	3.2
71	DL	55	VAL	3.2
80	p0	9	VAL	3.2
47	C	99	ALA	3.2
51	G	2	ALA	3.2
61	DB	84	THR	3.2
79	AR	251	ALA	3.2
80	P0	79	PHE	3.2
1	AS	1234	C	3.2
14	BG	190	LYS	3.2
35	CB	21	LYS	3.2
53	I	49	ILE	3.2
60	P	84	ILE	3.2
6	AY	259	LEU	3.2
79	DT	207	LEU	3.2
82	L1	212	PRO	3.2
20	BM	73	GLY	3.2
48	CO	233	GLY	3.2
51	CR	4	GLY	3.2
78	DS	171	GLY	3.2
28	BU	91	SER	3.2
24	BQ	88	ARG	3.2
46	CM	504	A	3.2
46	CM	1479	A	3.2
52	H	151	SER	3.2
68	X	35	SER	3.2
66	DG	85	ASN	3.2
77	DR	5	HIS	3.2
45	CL	61	GLU	3.2
54	J	184	GLU	3.2

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Mol	Chain	Res	Type	RSRZ
74	DO	15	GLU	3.2
49	E	58	VAL	3.2
15	BH	122	PHE	3.2
69	Y	99	PHE	3.2
41	CH	32	THR	3.2
64	T	25	THR	3.2
66	DG	69	LYS	3.2
46	B	1359	U	3.2
57	M	2	LEU	3.2
75	DP	66	LEU	3.2
51	CR	68	GLN	3.2
70	Z	27	GLN	3.2
59	O	93	ASP	3.2
2	AT	73	C	3.2
45	CL	56	SER	3.2
49	E	194	SER	3.2
60	P	147	SER	3.2
64	T	125	SER	3.2
14	t	11	ASN	3.2
47	C	155	TYR	3.2
1	AS	1099	A	3.2
82	L1	18	GLU	3.2
30	AC	23	LYS	3.2
35	CB	50	ALA	3.2
37	CD	66	LYS	3.2
39	CF	29	ALA	3.2
39	CF	59	ALA	3.2
50	F	202	ALA	3.2
79	AR	79	ALA	3.2
6	AY	61	THR	3.2
8	BA	130	ILE	3.2
11	q	75	ILE	3.2
13	BF	114	ILE	3.2
47	C	98	ILE	3.2
73	c	90	THR	3.2
74	DO	24	LEU	3.2
77	DR	8	LEU	3.2
79	AR	137	THR	3.2
80	p0	78	PRO	3.1
80	P0	85	GLY	3.1
1	AS	1565	U	3.1
1	AS	2471	U	3.1

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Mol	Chain	Res	Type	RSRZ
79	DT	269	ASP	3.1
36	AI	13	SER	3.1
48	CO	119	SER	3.1
66	V	5	SER	3.1
70	Z	40	SER	3.1
32	BY	95	VAL	3.1
54	J	178	VAL	3.1
27	9	116	LYS	3.1
56	L	37	LYS	3.1
62	DC	33	PHE	3.1
68	X	26	ALA	3.1
41	AN	15	CYS	3.1
52	CS	199	ILE	3.1
55	K	43	ILE	3.1
50	F	56	THR	3.1
14	BG	50	PRO	3.1
63	DD	131	ARG	3.1
73	DN	2	PRO	3.1
79	DT	38	ARG	3.1
24	6	8	GLY	3.1
33	BZ	125	GLY	3.1
35	AH	3	GLN	3.1
51	CR	25	GLY	3.1
56	L	84	GLY	3.1
73	DN	16	GLY	3.1
6	AY	112	VAL	3.1
52	CS	115	LYS	3.1
71	a	55	VAL	3.1
80	p0	33	VAL	3.1
82	l1	58	VAL	3.1
18	BK	66	SER	3.1
20	z	13	SER	3.1
59	O	119	SER	3.1
16	BI	149	ASN	3.1
26	BS	59	ALA	3.1
31	BX	11	ASN	3.1
45	i	44	ALA	3.1
45	CL	68	ASN	3.1
50	F	136	GLU	3.1
62	DC	6	ALA	3.1
64	DE	87	GLU	3.1
77	DR	34	ALA	3.1

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Mol	Chain	Res	Type	RSRZ
48	D	54	LEU	3.1
51	G	247	LEU	3.1
77	DR	49	LEU	3.1
56	L	134	ILE	3.1
16	BI	63	ARG	3.1
66	V	89	ARG	3.1
78	DS	161	ARG	3.1
47	CN	40	THR	3.1
55	K	62	THR	3.1
64	DE	30	THR	3.1
67	DH	66	THR	3.1
79	DT	73	THR	3.1
58	N	145	GLY	3.1
69	Y	127	GLY	3.1
6	AY	202	GLN	3.1
1	1	1099	A	3.1
1	AS	1240	A	3.1
1	AS	2436	A	3.1
13	s	125	MET	3.1
39	CF	39	LYS	3.1
77	g	56	MET	3.1
61	DB	23	VAL	3.1
79	DT	277	VAL	3.1
1	AS	1238	G	3.1
7	AZ	160	PHE	3.1
46	CM	1672	G	3.1
69	Y	79	PHE	3.1
80	P0	86	PHE	3.1
16	v	6	TYR	3.1
45	i	62	ALA	3.1
50	F	154	ALA	3.1
60	DA	103	GLU	3.1
79	DT	120	LEU	3.1
81	12	112	ILE	3.1
82	l1	100	ILE	3.1
14	BG	23	ARG	3.1
29	BV	66	ASN	3.1
35	CB	16	ARG	3.1
73	c	15	ARG	3.1
41	AN	34	CYS	3.1
52	H	170	GLN	3.1
1	AS	240	C	3.1

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Mol	Chain	Res	Type	RSRZ
1	AS	2454	C	3.1
46	CM	656	C	3.1
53	CT	157	VAL	3.1
56	L	85	VAL	3.1
62	R	85	VAL	3.1
66	DG	71	VAL	3.1
78	DS	150	VAL	3.1
78	DS	156	VAL	3.1
82	l1	169	VAL	3.1
21	0	162	LEU	3.1
36	AI	88	LEU	3.1
46	CM	1702	A	3.1
69	Y	26	LEU	3.1
71	a	72	PHE	3.1
22	BO	63	ILE	3.1
30	AC	21	ILE	3.1
40	AM	21	ARG	3.1
44	CK	45	ARG	3.1
49	E	110	ILE	3.1
54	J	132	ILE	3.1
79	AR	38	ARG	3.1
79	AR	116	ILE	3.1
48	D	90	GLU	3.1
63	DD	75	SER	3.1
53	I	197	ASN	3.1
79	AR	305	ASN	3.1
1	1	3163	U	3.1
1	AS	975	U	3.1
1	1	2458	G	3.1
33	AF	125	GLY	3.1
6	l	192	LYS	3.1
43	AP	100	LYS	3.1
45	CL	55	LYS	3.1
51	CR	106	LYS	3.1
58	N	15	LYS	3.1
22	BO	19	PHE	3.1
56	L	146	PHE	3.1
58	CY	5	LEU	3.1
80	p0	26	PHE	3.1
50	F	206	ALA	3.1
56	L	140	ILE	3.1
81	12	132	ILE	3.1

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Mol	Chain	Res	Type	RSRZ
1	1	2457	C	3.1
46	CM	25	C	3.1
54	J	66	TYR	3.1
80	p0	22	TYR	3.1
54	J	2	SER	3.0
76	DQ	28	SER	3.0
8	BA	131	LYS	3.0
65	DF	144	GLY	3.0
6	l	143	VAL	3.0
60	P	62	GLN	3.0
64	T	4	VAL	3.0
79	DT	70	GLN	3.0
30	BW	32	LEU	3.0
1	1	2459	G	3.0
6	l	199	ARG	3.0
10	p	166	PHE	3.0
56	L	118	LEU	3.0
64	DE	115	PHE	3.0
65	DF	54	LEU	3.0
75	e	16	LEU	3.0
78	DS	145	LEU	3.0
78	DS	188	LEU	3.0
36	CC	114	ARG	3.0
47	CN	14	ALA	3.0
52	H	64	ILE	3.0
59	CZ	48	ALA	3.0
5	k	7	GLU	3.0
22	2	18	ASP	3.0
54	J	123	GLU	3.0
79	DT	77	ASP	3.0
79	DT	291	TRP	3.0
63	DD	13	LYS	3.0
64	T	59	LYS	3.0
78	DS	124	LYS	3.0
37	CD	26	SER	3.0
52	H	150	GLY	3.0
64	T	70	SER	3.0
45	CL	60	ASN	3.0
56	L	74	ASN	3.0
77	g	41	THR	3.0
15	BH	115	VAL	3.0
18	x	2	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
80	P0	105	VAL	3.0
36	CC	92	LEU	3.0
38	AK	51	LEU	3.0
45	CL	115	LEU	3.0
51	G	44	LEU	3.0
71	a	122	GLN	3.0
71	DL	122	GLN	3.0
77	g	54	ARG	3.0
79	DT	231	LEU	3.0
82	L1	199	GLN	3.0
1	AS	1560	U	3.0
1	AS	1561	U	3.0
14	BG	86	ALA	3.0
46	B	752	U	3.0
46	B	778	U	3.0
49	CP	78	ILE	3.0
54	J	145	ILE	3.0
58	CY	114	ALA	3.0
16	BI	158	HIS	3.0
45	i	38	LYS	3.0
54	J	153	LYS	3.0
54	J	175	LYS	3.0
59	CZ	90	LYS	3.0
70	Z	82	LYS	3.0
6	AY	110	TRP	3.0
8	BA	108	GLU	3.0
28	AA	102	GLU	3.0
11	BD	7	ASP	3.0
59	CZ	127	GLY	3.0
72	DM	91	PRO	3.0
79	DT	94	ASP	3.0
8	BA	65	SER	3.0
14	t	4	SER	3.0
56	L	152	SER	3.0
25	BR	5	VAL	3.0
63	S	31	ASN	3.0
77	DR	48	THR	3.0
16	BI	26	ARG	3.0
18	x	165	GLN	3.0
28	BU	118	PHE	3.0
31	BX	12	ILE	3.0
54	J	65	ALA	3.0

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Mol	Chain	Res	Type	RSRZ
81	12	155	ILE	3.0
82	L1	14	HIS	3.0
3	AU	23	U	3.0
20	z	19	LYS	3.0
46	B	491	U	3.0
48	CO	45	LYS	3.0
51	G	22	LYS	3.0
35	CB	62	TYR	3.0
6	l	64	GLU	3.0
51	CR	18	TRP	3.0
47	C	44	GLY	3.0
56	L	2	PRO	3.0
62	R	117	GLY	3.0
78	h	130	PRO	3.0
4	AW	247	ARG	3.0
6	AY	353	SER	3.0
24	6	7	SER	3.0
56	L	150	LEU	3.0
60	DA	61	SER	3.0
73	DN	89	ARG	3.0
55	CV	35	ASN	3.0
56	L	104	PHE	3.0
78	DS	155	ASN	3.0
7	AZ	4	GLN	3.0
28	BU	123	GLN	3.0
35	AH	64	GLN	3.0
46	CM	1135	G	3.0
46	CM	1431	G	3.0
47	C	159	ALA	3.0
79	DT	190	ILE	3.0
6	AY	320	LYS	3.0
28	BU	116	LYS	3.0
41	CH	12	LYS	3.0
48	CO	101	HIS	3.0
67	DH	29	LYS	3.0
1	1	2448	C	3.0
1	1	2185	A	3.0
46	CM	216	A	3.0
1	1	1263	U	3.0
16	BI	42	PRO	3.0
16	BI	74	PRO	3.0
39	CF	35	GLY	3.0

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Mol	Chain	Res	Type	RSRZ
46	CM	133	U	3.0
62	DC	7	PRO	3.0
82	l1	126	PRO	3.0
47	C	121	VAL	3.0
54	J	135	ARG	3.0
56	L	82	ARG	3.0
65	U	145	ARG	3.0
4	AW	75	THR	3.0
55	K	177	SER	3.0
59	CZ	119	SER	3.0
62	DC	11	THR	3.0
10	BC	257	ALA	3.0
19	y	103	ALA	3.0
35	AH	32	ALA	3.0
54	CU	132	ILE	3.0
14	BG	131	LYS	2.9
45	CL	37	LYS	2.9
51	G	260	GLN	2.9
54	CU	134	LYS	2.9
66	V	84	LYS	2.9
45	i	83	HIS	2.9
1	AS	1558	G	2.9
58	N	93	TYR	2.9
45	i	107	TRP	2.9
50	F	204	PRO	2.9
75	e	46	GLY	2.9
79	AR	27	PRO	2.9
82	l1	43	PRO	2.9
1	1	1011	C	2.9
31	BX	95	LEU	2.9
35	CB	42	VAL	2.9
46	CM	674	C	2.9
54	J	13	LEU	2.9
68	X	39	VAL	2.9
46	CM	658	A	2.9
1	AS	1013	U	2.9
55	K	65	PHE	2.9
70	DK	107	PHE	2.9
81	12	110	PHE	2.9
53	I	193	LYS	2.9
54	J	107	LYS	2.9
55	CV	79	ALA	2.9

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Mol	Chain	Res	Type	RSRZ
56	L	169	ALA	2.9
62	DC	52	LYS	2.9
64	DE	116	LYS	2.9
6	AY	317	ASN	2.9
22	2	103	GLN	2.9
51	G	130	GLN	2.9
63	DD	76	GLN	2.9
35	CB	60	ARG	2.9
78	DS	158	ARG	2.9
55	K	80	GLY	2.9
6	AY	5	PRO	2.9
10	p	204	VAL	2.9
19	BL	83	VAL	2.9
47	C	184	LEU	2.9
51	G	12	LEU	2.9
52	CS	168	VAL	2.9
59	O	30	VAL	2.9
66	DG	28	LEU	2.9
71	a	12	VAL	2.9
71	a	16	PRO	2.9
79	DT	27	PRO	2.9
16	BI	103	GLU	2.9
13	s	106	ILE	2.9
25	BR	63	ILE	2.9
26	BS	39	LYS	2.9
43	CJ	15	LYS	2.9
82	l1	134	PHE	2.9
79	AR	57	ILE	2.9
1	AS	2429	G	2.9
1	AS	2451	C	2.9
7	AZ	62	ALA	2.9
46	CM	1700	G	2.9
50	F	165	THR	2.9
69	Y	108	ALA	2.9
5	AX	125	SER	2.9
8	n	2	SER	2.9
80	p0	35	SER	2.9
35	AH	14	ASN	2.9
45	i	109	GLN	2.9
50	F	151	GLN	2.9
78	DS	176	ASN	2.9
82	l1	158	GLN	2.9

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Mol	Chain	Res	Type	RSRZ
18	x	128	ARG	2.9
50	F	144	ARG	2.9
52	H	148	ARG	2.9
79	DT	29	HIS	2.9
15	BH	128	LEU	2.9
26	BS	57	LEU	2.9
27	BT	76	LEU	2.9
47	C	18	LEU	2.9
7	m	31	TYR	2.9
7	AZ	105	VAL	2.9
7	AZ	127	GLY	2.9
19	y	75	GLY	2.9
63	S	51	LEU	2.9
63	S	88	LEU	2.9
64	DE	68	GLY	2.9
68	X	55	LEU	2.9
68	X	79	LEU	2.9
8	BA	139	LYS	2.9
10	BC	252	LYS	2.9
16	BI	8	GLU	2.9
28	AA	31	GLU	2.9
30	AC	61	LYS	2.9
33	BZ	18	PHE	2.9
36	AI	5	LYS	2.9
45	CL	85	LYS	2.9
73	DN	29	CYS	2.9
10	BC	114	ALA	2.9
45	CL	63	ALA	2.9
66	V	39	THR	2.9
33	AF	40	ASP	2.9
30	BW	14	ARG	2.9
55	K	200	ARG	2.9
66	V	86	ARG	2.9
80	p0	34	SER	2.9
1	1	2437	A	2.9
1	AS	1224	C	2.9
1	AS	1267	A	2.9
1	AS	2474	C	2.9
46	B	130	C	2.9
46	B	1400	U	2.9
46	CM	491	U	2.9
46	CM	1673	U	2.9

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Mol	Chain	Res	Type	RSRZ
46	CM	1743	A	2.9
61	DB	24	HIS	2.9
41	CH	6	LEU	2.9
82	l1	80	LEU	2.9
35	AH	22	VAL	2.9
77	g	2	GLY	2.9
13	BF	74	PRO	2.9
24	6	35	TYR	2.9
66	DG	2	PRO	2.9
27	BT	99	ILE	2.9
36	AI	64	GLU	2.9
47	C	173	ILE	2.9
53	CT	144	PHE	2.9
54	J	165	PHE	2.9
62	R	119	PHE	2.9
39	AL	33	ALA	2.9
79	DT	211	ALA	2.9
30	AC	8	THR	2.9
57	M	57	THR	2.9
82	l1	23	THR	2.9
47	CN	41	ARG	2.9
55	CV	201	ARG	2.9
14	BG	127	ASP	2.9
39	AL	40	GLN	2.9
6	AY	84	HIS	2.9
11	BD	10	LEU	2.9
16	BI	118	SER	2.9
54	CU	176	GLN	2.9
59	O	28	LEU	2.9
59	CZ	106	LEU	2.9
63	S	53	LEU	2.9
82	L1	20	SER	2.9
82	L1	124	LEU	2.9
56	CW	14	VAL	2.9
79	DT	114	VAL	2.9
79	AR	63	LYS	2.9
79	AR	78	GLY	2.9
37	CD	51	PRO	2.9
65	DF	82	PRO	2.9
77	DR	60	PRO	2.9
1	1	2446	A	2.9
29	BV	52	TYR	2.9

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Mol	Chain	Res	Type	RSRZ
62	R	97	TYR	2.9
63	DD	48	TYR	2.9
11	q	136	ILE	2.9
56	CW	114	PHE	2.9
7	m	217	GLU	2.8
18	x	153	GLU	2.8
20	BM	31	GLU	2.8
51	CR	252	GLU	2.8
68	DI	10	GLU	2.8
58	CY	47	ALA	2.8
79	AR	276	ALA	2.8
53	CT	186	ARG	2.8
53	CT	188	ARG	2.8
53	CT	127	THR	2.8
58	N	21	THR	2.8
67	W	59	THR	2.8
53	I	68	MET	2.8
63	S	27	LEU	2.8
79	DT	7	LEU	2.8
79	DT	82	LEU	2.8
79	DT	289	LEU	2.8
60	DA	49	GLN	2.8
8	n	128	LYS	2.8
19	BL	185	LYS	2.8
26	BS	60	HIS	2.8
36	CC	91	LYS	2.8
54	J	134	LYS	2.8
54	CU	56	VAL	2.8
56	L	160	HIS	2.8
55	CV	68	GLY	2.8
56	L	13	SER	2.8
60	P	13	SER	2.8
62	DC	26	VAL	2.8
73	c	33	ASP	2.8
75	e	25	VAL	2.8
13	BF	113	GLY	2.8
49	E	172	GLY	2.8
29	AB	66	ASN	2.8
51	CR	29	PRO	2.8
64	T	65	PRO	2.8
51	CR	245	ILE	2.8
61	DB	9	PHE	2.8

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Mol	Chain	Res	Type	RSRZ
1	1	1012	U	2.8
1	1	2067	U	2.8
1	AS	1237	U	2.8
1	AS	1550	U	2.8
7	m	6	GLU	2.8
26	BS	98	ALA	2.8
46	B	710	U	2.8
55	K	28	GLU	2.8
64	T	90	ALA	2.8
18	BK	126	ARG	2.8
41	CH	30	ARG	2.8
1	1	2456	C	2.8
1	1	2468	C	2.8
1	AS	1352	C	2.8
26	BS	40	LEU	2.8
27	BT	31	LEU	2.8
45	CL	94	THR	2.8
48	CO	154	THR	2.8
60	P	145	THR	2.8
61	Q	84	THR	2.8
66	V	104	CYS	2.8
69	Y	126	LEU	2.8
71	a	9	THR	2.8
82	L1	165	LEU	2.8
1	AS	2428	G	2.8
4	AW	181	LYS	2.8
52	H	76	LYS	2.8
63	DD	12	LYS	2.8
71	a	22	GLN	2.8
7	AZ	147	ASP	2.8
59	O	110	GLY	2.8
64	DE	108	ASP	2.8
67	DH	27	SER	2.8
79	DT	153	SER	2.8
79	DT	163	SER	2.8
82	l1	137	PRO	2.8
14	BG	126	PHE	2.8
52	H	130	ILE	2.8
53	CT	236	ASN	2.8
22	2	84	TYR	2.8
31	BX	60	TYR	2.8
52	H	61	TYR	2.8

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Mol	Chain	Res	Type	RSRZ
25	BR	93	ARG	2.8
26	BS	27	ARG	2.8
37	CD	97	ARG	2.8
63	DD	17	ALA	2.8
64	T	3	ARG	2.8
79	DT	81	ALA	2.8
75	e	66	LEU	2.8
79	AR	82	LEU	2.8
42	AO	8	LYS	2.8
63	S	123	MET	2.8
63	DD	139	LYS	2.8
65	DF	80	LYS	2.8
66	DG	38	LYS	2.8
1	1	2545	C	2.8
1	AS	1223	C	2.8
1	AS	2466	A	2.8
16	BI	155	VAL	2.8
19	BL	82	VAL	2.8
49	E	162	VAL	2.8
82	l1	151	VAL	2.8
18	BK	55	GLN	2.8
75	e	24	GLY	2.8
54	CU	57	PHE	2.8
63	DD	119	ASP	2.8
66	V	124	ILE	2.8
82	l1	68	PHE	2.8
10	BC	48	SER	2.8
79	AR	255	SER	2.8
4	AW	64	ARG	2.8
1	AS	1537	G	2.8
10	p	262	ASN	2.8
13	BF	116	TYR	2.8
51	G	188	ASN	2.8
56	CW	132	ARG	2.8
64	T	45	ARG	2.8
69	Y	80	ASN	2.8
73	DN	15	ARG	2.8
39	CF	2	ALA	2.8
60	P	144	ALA	2.8
79	AR	81	ALA	2.8
79	DT	19	TRP	2.8
6	AY	15	GLU	2.8

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Mol	Chain	Res	Type	RSRZ
20	z	55	GLU	2.8
7	AZ	146	LEU	2.8
22	2	3	LYS	2.8
36	AI	91	LYS	2.8
42	CI	16	LYS	2.8
51	G	6	LYS	2.8
53	I	220	LYS	2.8
54	J	68	LYS	2.8
54	CU	104	LYS	2.8
56	CW	36	LEU	2.8
56	CW	37	LYS	2.8
58	CY	36	LYS	2.8
62	R	80	LEU	2.8
71	DL	111	LYS	2.8
78	DS	142	LEU	2.8
31	BX	44	VAL	2.8
51	G	45	VAL	2.8
79	AR	306	VAL	2.8
1	1	2068	U	2.8
1	AS	2475	U	2.8
22	BO	2	GLY	2.8
80	p0	65	GLY	2.8
7	m	68	HIS	2.8
53	I	199	GLN	2.8
53	CT	182	GLN	2.8
28	AA	70	PRO	2.8
62	R	17	PHE	2.8
64	T	38	ILE	2.8
71	a	75	ILE	2.8
46	B	134	A	2.8
1	AS	2468	C	2.8
6	AY	70	ARG	2.8
19	y	180	ARG	2.8
20	BM	5	ARG	2.8
62	DC	127	ARG	2.8
6	l	3	SER	2.8
8	n	169	ASP	2.8
10	BC	159	ASP	2.8
23	5	111	TYR	2.8
41	CH	25	ALA	2.8
45	CL	62	ALA	2.8
53	I	103	ALA	2.8

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Mol	Chain	Res	Type	RSRZ
53	CT	166	ASP	2.8
6	AY	111	ASN	2.8
41	CH	43	ASN	2.8
45	i	60	ASN	2.8
51	G	96	ASN	2.8
7	AZ	212	LEU	2.8
14	BG	129	LYS	2.8
20	z	133	LYS	2.8
45	i	116	GLU	2.8
49	E	66	LEU	2.8
56	CW	92	LYS	2.8
60	P	16	LEU	2.8
64	T	23	LYS	2.8
78	h	124	LYS	2.8
79	DT	145	LEU	2.8
80	p0	52	LEU	2.8
52	CS	99	MET	2.8
67	W	83	MET	2.8
7	AZ	236	VAL	2.8
18	BK	51	VAL	2.8
47	C	156	VAL	2.8
51	G	102	VAL	2.8
71	DL	100	VAL	2.8
82	l1	138	VAL	2.8
46	B	1135	G	2.8
46	CM	1671	G	2.8
51	G	78	THR	2.8
52	CS	147	THR	2.8
54	CU	129	THR	2.8
64	T	55	THR	2.8
67	W	65	THR	2.8
44	CK	12	GLY	2.8
63	S	87	GLY	2.8
36	CC	111	PHE	2.8
47	C	50	ILE	2.8
48	CO	100	PHE	2.8
56	CW	123	HIS	2.7
63	S	65	ARG	2.7
71	a	23	PHE	2.8
65	U	2	PRO	2.7
76	DQ	23	HIS	2.7
41	CH	34	CYS	2.7

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Mol	Chain	Res	Type	RSRZ
59	O	120	CYS	2.7
31	BX	17	ALA	2.7
17	BJ	2	SER	2.7
30	BW	22	LYS	2.7
49	E	196	SER	2.7
56	L	151	ASP	2.7
64	T	94	SER	2.7
64	DE	14	LYS	2.7
67	W	79	ASP	2.7
46	B	215	A	2.7
47	C	182	LEU	2.7
47	CN	182	LEU	2.7
63	S	104	LEU	2.7
79	DT	33	LEU	2.7
1	AS	2079	C	2.7
46	B	706	C	2.7
28	BU	103	GLU	2.7
36	CC	102	GLU	2.7
63	S	18	VAL	2.7
80	p0	104	VAL	2.7
82	L1	201	VAL	2.7
20	z	71	ARG	2.7
49	E	173	ILE	2.7
56	L	132	ARG	2.7
63	S	3	THR	2.7
71	DL	20	ARG	2.7
78	DS	189	THR	2.7
79	DT	78	GLY	2.7
82	l1	127	THR	2.7
79	DT	260	PHE	2.7
45	CL	83	HIS	2.7
56	L	112	GLN	2.7
75	e	47	PRO	2.7
39	CF	15	ALA	2.7
79	AR	76	ALA	2.7
79	DT	24	ALA	2.7
79	DT	290	ALA	2.7
6	AY	186	LYS	2.7
19	y	159	LYS	2.7
45	CL	67	LYS	2.7
57	CX	24	LYS	2.7
69	Y	19	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
71	DL	102	LYS	2.7
1	AS	1758	U	2.7
41	AN	27	LEU	2.7
46	CM	778	U	2.7
47	CN	184	LEU	2.7
54	J	169	TYR	2.7
20	z	111	ASP	2.7
45	i	47	ASP	2.7
51	G	223	SER	2.7
64	DE	103	ASP	2.7
72	DM	63	SER	2.7
11	BD	18	VAL	2.7
35	CB	87	GLU	2.7
51	CR	231	GLU	2.7
53	I	36	VAL	2.7
63	S	89	VAL	2.7
46	CM	215	A	2.7
46	CM	847	A	2.7
1	AS	2476	C	2.7
1	AS	2496	C	2.7
16	BI	144	ARG	2.7
6	AY	80	GLY	2.7
31	AD	106	ILE	2.7
46	B	25	C	2.7
46	B	1081	C	2.7
48	CO	60	GLY	2.7
5	AX	146	THR	2.7
12	BE	199	PHE	2.7
14	BG	85	ILE	2.7
52	H	43	PHE	2.7
66	V	36	ILE	2.7
45	CL	79	THR	2.7
48	D	25	THR	2.7
53	CT	128	THR	2.7
6	l	84	HIS	2.7
33	BZ	123	PRO	2.7
6	AY	145	GLN	2.7
21	BN	138	GLN	2.7
22	BO	16	GLN	2.7
26	BS	92	LYS	2.7
35	CB	61	GLN	2.7
41	AN	22	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
45	i	77	GLN	2.7
49	E	114	LYS	2.7
62	DC	8	LYS	2.7
79	DT	209	ALA	2.7
80	p0	4	ALA	2.7
50	CQ	97	LEU	2.7
62	DC	22	LEU	2.7
80	P0	76	LEU	2.7
51	G	82	TYR	2.7
51	G	138	TYR	2.7
74	DO	33	MET	2.7
77	DR	36	MET	2.7
10	p	165	VAL	2.7
1	1	1013	U	2.7
29	BV	46	ASP	2.7
54	J	87	VAL	2.7
1	1	2428	G	2.7
25	BR	88	GLU	2.7
28	BU	109	GLU	2.7
56	CW	3	ARG	2.7
56	CW	74	ASN	2.7
4	AW	2	GLY	2.7
29	BV	30	GLY	2.7
50	CQ	168	PHE	2.7
58	CY	60	PHE	2.7
79	AR	278	GLY	2.7
13	BF	147	THR	2.7
1	AS	664	A	2.7
5	AX	24	LYS	2.7
32	BY	30	LYS	2.7
41	AN	49	LYS	2.7
73	c	19	LYS	2.7
79	DT	101	THR	2.7
46	B	504	A	2.7
20	z	87	ALA	2.7
1	AS	247	C	2.7
6	AY	151	LEU	2.7
7	m	274	GLN	2.7
51	G	14	ALA	2.7
16	BI	197	LEU	2.7
50	F	12	LEU	2.7
59	O	74	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
5	AX	283	TYR	2.7
80	p0	38	MET	2.7
8	BA	4	VAL	2.7
15	BH	129	VAL	2.7
16	BI	60	VAL	2.7
56	L	148	VAL	2.7
71	a	5	VAL	2.7
11	q	168	ARG	2.7
36	CC	105	ARG	2.7
56	CW	62	ARG	2.7
63	S	121	ARG	2.7
75	e	49	ARG	2.7
6	AY	65	SER	2.7
19	y	95	GLU	2.7
21	BN	82	GLU	2.7
45	CL	45	SER	2.7
53	I	151	ASP	2.7
69	Y	58	SER	2.7
64	DE	124	ILE	2.7
46	CM	1356	U	2.7
62	DC	12	PHE	2.7
41	AN	36	LYS	2.7
56	L	10	LYS	2.7
70	Z	3	LYS	2.7
70	Z	39	LYS	2.7
78	h	134	LYS	2.7
82	L1	15	LYS	2.7
10	BC	122	THR	2.7
11	q	83	THR	2.7
41	AN	28	PRO	2.7
52	CS	67	PRO	2.7
78	DS	167	THR	2.7
79	AR	193	THR	2.7
1	1	2455	G	2.7
7	AZ	277	LEU	2.7
19	BL	5	HIS	2.7
37	AJ	2	ALA	2.7
46	B	1404	G	2.7
46	CM	1358	G	2.7
57	M	15	LEU	2.7
59	O	103	LEU	2.7
66	DG	62	ALA	2.7

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Mol	Chain	Res	Type	RSRZ
76	f	30	LEU	2.7
80	p0	67	LEU	2.7
7	AZ	275	GLN	2.7
53	I	104	GLN	2.7
64	DE	74	GLN	2.7
1	AS	239	A	2.7
1	AS	1576	A	2.7
1	AS	2518	A	2.7
65	DF	73	MET	2.7
16	BI	132	VAL	2.7
41	AN	24	TYR	2.7
54	J	177	VAL	2.7
63	S	68	VAL	2.7
78	h	150	VAL	2.7
82	L1	19	TYR	2.7
1	1	3051	C	2.7
25	7	47	ARG	2.7
35	CB	10	ARG	2.7
69	DJ	3	ARG	2.7
10	BC	162	GLU	2.6
16	v	104	GLU	2.6
16	BI	36	ILE	2.6
61	DB	76	ILE	2.6
4	AW	24	LYS	2.6
12	BE	114	GLY	2.6
28	BU	133	LYS	2.6
45	i	112	LYS	2.6
48	CO	94	LYS	2.6
48	CO	223	PHE	2.6
63	S	105	LYS	2.6
80	P0	35	SER	2.6
82	l1	213	SER	2.6
4	AW	7	ASN	2.6
26	8	80	ASN	2.6
59	CZ	125	ASN	2.6
7	AZ	92	LEU	2.6
8	n	39	LEU	2.6
37	CD	76	LEU	2.6
41	AN	29	PRO	2.6
1	AS	977	U	2.6
1	AS	2442	U	2.6
41	CH	42	THR	2.6

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Mol	Chain	Res	Type	RSRZ
52	H	20	LEU	2.6
64	T	73	LEU	2.6
68	DI	78	LEU	2.6
70	DK	133	LEU	2.6
79	AR	286	ALA	2.6
79	AR	290	ALA	2.6
30	AC	58	ARG	2.6
38	CE	29	VAL	2.6
52	H	155	VAL	2.6
56	L	44	ARG	2.6
59	O	133	ARG	2.6
63	S	21	VAL	2.6
26	BS	109	TYR	2.6
47	CN	155	TYR	2.6
46	B	717	G	2.6
7	AZ	34	LYS	2.6
10	BC	250	LYS	2.6
26	8	89	LYS	2.6
36	AI	12	LYS	2.6
41	AN	38	LYS	2.6
45	CL	82	LYS	2.6
51	G	127	LYS	2.6
56	CW	42	ILE	2.6
58	N	46	LYS	2.6
63	S	12	LYS	2.6
63	DD	105	LYS	2.6
66	DG	92	LYS	2.6
73	c	13	LYS	2.6
75	e	53	ILE	2.6
75	DP	45	LYS	2.6
7	AZ	75	PHE	2.6
43	AP	16	GLU	2.6
58	N	51	GLY	2.6
63	S	108	PHE	2.6
80	p0	47	GLY	2.6
19	BL	7	SER	2.6
77	DR	7	SER	2.6
36	CC	9	LEU	2.6
6	l	5	PRO	2.6
20	BM	72	ALA	2.6
22	BO	77	ASN	2.6
49	E	220	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
51	CR	247	LEU	2.6
78	h	190	LEU	2.6
41	AN	8	ALA	2.6
48	CO	190	PRO	2.6
52	H	85	ALA	2.6
54	CU	53	ALA	2.6
65	DF	43	ALA	2.6
78	h	170	ALA	2.6
53	I	168	THR	2.6
58	N	31	THR	2.6
53	I	69	HIS	2.6
73	DN	72	HIS	2.6
6	l	356	GLN	2.6
18	BK	128	ARG	2.6
55	CV	59	ARG	2.6
64	T	60	ARG	2.6
1	1	2471	U	2.6
1	AS	1557	U	2.6
4	AW	120	VAL	2.6
39	CF	31	VAL	2.6
46	B	1356	U	2.6
46	CM	659	U	2.6
51	G	111	VAL	2.6
80	p0	50	VAL	2.6
82	L1	162	VAL	2.6
16	BI	148	TYR	2.6
45	i	54	LYS	2.6
55	K	41	LYS	2.6
65	U	49	LYS	2.6
66	DG	18	TYR	2.6
66	DG	66	TYR	2.6
77	DR	55	LYS	2.6
67	W	85	ILE	2.6
69	Y	75	ILE	2.6
79	AR	138	ILE	2.6
82	L1	111	ILE	2.6
6	AY	67	GLY	2.6
17	BJ	101	GLU	2.6
4	j	246	LEU	2.6
9	BB	10	LEU	2.6
36	CC	36	LEU	2.6
64	T	91	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
78	DS	186	CYS	2.6
7	AZ	269	SER	2.6
17	w	2	SER	2.6
26	BS	50	SER	2.6
45	i	56	SER	2.6
46	CM	1410	A	2.6
50	F	200	PRO	2.6
60	P	61	SER	2.6
12	r	55	ASN	2.6
23	BP	71	ASN	2.6
67	W	71	ASN	2.6
1	1	2470	C	2.6
1	1	2474	C	2.6
7	AZ	81	HIS	2.6
36	CC	81	ARG	2.6
56	L	120	ARG	2.6
62	R	114	HIS	2.6
63	DD	69	THR	2.6
73	DN	90	THR	2.6
77	g	48	THR	2.6
78	h	129	THR	2.6
78	DS	174	MET	2.6
79	AR	238	HIS	2.6
79	DT	67	HIS	2.6
39	CF	27	VAL	2.6
53	I	157	VAL	2.6
59	CZ	121	VAL	2.6
64	DE	119	VAL	2.6
66	V	30	VAL	2.6
69	Y	121	VAL	2.6
66	V	12	GLN	2.6
6	l	186	LYS	2.6
45	CL	71	LYS	2.6
48	D	29	TRP	2.6
50	F	152	LYS	2.6
53	I	149	LYS	2.6
63	DD	67	LYS	2.6
80	P0	81	LYS	2.6
6	AY	210	TYR	2.6
31	BX	61	TYR	2.6
50	F	185	ILE	2.6
57	M	86	ILE	2.6

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Mol	Chain	Res	Type	RSRZ
64	DE	102	ILE	2.6
80	P0	99	ILE	2.6
80	p0	11	TYR	2.6
82	l1	216	ILE	2.6
19	y	169	GLY	2.6
77	DR	6	GLY	2.6
51	G	38	LEU	2.6
53	CT	184	LEU	2.6
72	DM	93	LEU	2.6
50	F	32	GLU	2.6
5	AX	138	ALA	2.6
18	BK	185	ALA	2.6
27	BT	22	ALA	2.6
53	CT	189	ALA	2.6
54	CU	128	PRO	2.6
59	CZ	118	ALA	2.6
7	m	147	ASP	2.6
9	o	225	ASP	2.6
14	BG	91	ARG	2.6
16	BI	111	SER	2.6
26	BS	48	ARG	2.6
37	CD	98	ARG	2.6
45	CL	90	ARG	2.6
49	E	218	SER	2.6
55	K	25	ARG	2.6
70	DK	40	SER	2.6
78	DS	177	MET	2.6
16	BI	117	ASN	2.6
29	AB	74	ASN	2.6
32	BY	55	ASN	2.6
33	BZ	80	VAL	2.6
51	G	89	VAL	2.6
60	P	33	VAL	2.6
4	AW	28	LYS	2.6
6	AY	218	LYS	2.6
10	BC	182	LYS	2.6
27	9	46	LYS	2.6
38	CE	10	LYS	2.6
46	CM	988	A	2.6
51	CR	62	LYS	2.6
58	N	30	LYS	2.6
60	P	107	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
68	X	33	GLN	2.6
47	C	174	TRP	2.6
7	AZ	185	ILE	2.6
10	BC	117	ILE	2.6
59	CZ	89	ILE	2.6
16	BI	119	TYR	2.6
39	CF	50	TYR	2.6
56	L	158	PHE	2.6
76	f	52	PHE	2.6
10	BC	236	GLY	2.6
35	AH	30	LEU	2.6
80	P0	52	LEU	2.6
80	P0	65	GLY	2.6
80	p0	19	LEU	2.6
46	B	1047	U	2.6
7	m	117	GLU	2.6
7	AZ	166	ALA	2.6
36	AI	120	ALA	2.6
36	CC	110	ALA	2.6
49	CP	87	ALA	2.6
51	G	198	ARG	2.6
53	I	189	ALA	2.6
55	K	184	ARG	2.6
58	CY	27	ALA	2.6
77	DR	56	MET	2.6
6	AY	226	VAL	2.6
25	7	97	LYS	2.6
33	BZ	78	LYS	2.6
44	CK	28	LYS	2.6
45	CL	92	SER	2.6
51	CR	241	LYS	2.6
60	P	12	SER	2.6
62	DC	2	VAL	2.6
64	DE	123	SER	2.6
79	DT	63	LYS	2.6
79	DT	166	VAL	2.6
81	12	143	VAL	2.6
14	BG	130	THR	2.6
16	v	149	ASN	2.6
18	x	169	ASN	2.6
51	G	26	THR	2.6
10	BC	62	GLN	2.5

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Mol	Chain	Res	Type	RSRZ
22	BO	25	ILE	2.5
28	BU	5	ILE	2.5
36	AI	16	GLN	2.5
50	CQ	87	ILE	2.5
54	J	94	ILE	2.5
56	L	156	ILE	2.5
79	DT	167	ILE	2.5
81	12	160	ILE	2.5
7	AZ	79	TYR	2.5
22	BO	159	PHE	2.5
69	Y	128	PHE	2.5
7	AZ	104	LEU	2.5
26	8	82	LEU	2.5
44	AQ	29	LEU	2.5
51	G	153	LEU	2.5
61	Q	78	LEU	2.5
75	e	54	LEU	2.5
82	L1	29	LEU	2.5
6	l	80	GLY	2.5
7	AZ	161	GLY	2.5
16	BI	107	GLY	2.5
57	CX	85	GLY	2.5
64	DE	114	GLY	2.5
82	L1	211	GLY	2.5
1	AS	3246	C	2.5
10	BC	123	ALA	2.5
13	BF	76	ALA	2.5
24	BQ	54	ALA	2.5
42	CI	6	ARG	2.5
44	AQ	45	ARG	2.5
54	CU	55	ALA	2.5
69	Y	96	ALA	2.5
82	L1	71	ALA	2.5
7	AZ	281	GLU	2.5
8	n	58	GLU	2.5
20	BM	152	GLU	2.5
46	B	494	G	2.5
51	G	240	PRO	2.5
51	CR	5	PRO	2.5
54	CU	184	GLU	2.5
55	CV	159	GLU	2.5
70	Z	64	PRO	2.5

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Mol	Chain	Res	Type	RSRZ
1	1	1346	U	2.5
1	AS	132	U	2.5
1	AS	1024	U	2.5
6	AY	208	VAL	2.5
10	BC	133	VAL	2.5
19	BL	50	LYS	2.5
28	AA	56	LYS	2.5
44	AQ	58	LYS	2.5
46	B	259	U	2.5
54	CU	86	VAL	2.5
75	DP	25	VAL	2.5
5	AX	134	SER	2.5
18	x	110	SER	2.5
32	BY	16	HIS	2.5
51	G	217	THR	2.5
53	CT	69	HIS	2.5
69	Y	20	THR	2.5
69	Y	85	ASP	2.5
80	P0	24	SER	2.5
20	BM	143	ILE	2.5
37	CD	57	ILE	2.5
40	AM	51	ILE	2.5
48	CO	209	ASN	2.5
54	CU	94	ILE	2.5
55	K	175	ILE	2.5
56	CW	45	ILE	2.5
67	DH	117	ILE	2.5
7	m	32	GLN	2.5
27	BT	120	GLN	2.5
45	CL	109	GLN	2.5
50	CQ	151	GLN	2.5
52	CS	170	GLN	2.5
9	BB	199	PHE	2.5
20	z	177	LEU	2.5
47	C	16	LEU	2.5
47	C	81	PHE	2.5
51	G	23	LEU	2.5
51	G	99	PHE	2.5
54	J	150	LEU	2.5
55	CV	65	PHE	2.5
70	Z	107	PHE	2.5
71	DL	60	PHE	2.5

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Mol	Chain	Res	Type	RSRZ
76	DQ	7	TRP	2.5
22	2	2	GLY	2.5
13	s	55	ARG	2.5
19	BL	3	ARG	2.5
37	AJ	97	ARG	2.5
47	C	113	ARG	2.5
55	CV	18	ARG	2.5
4	j	154	ALA	2.5
6	AY	172	ALA	2.5
7	AZ	157	ALA	2.5
10	BC	118	ALA	2.5
37	CD	8	ALA	2.5
77	DR	11	ALA	2.5
46	CM	1219	A	2.5
42	AO	16	LYS	2.5
54	J	147	LYS	2.5
56	L	33	GLU	2.5
56	CW	64	GLU	2.5
23	BP	67	VAL	2.5
2	3	73	C	2.5
1	1	1758	U	2.5
16	BI	174	ILE	2.5
46	B	672	U	2.5
46	B	1399	U	2.5
46	CM	1477	U	2.5
49	E	78	ILE	2.5
49	E	216	THR	2.5
50	CQ	5	ILE	2.5
62	DC	84	ILE	2.5
64	T	6	THR	2.5
66	V	64	HIS	2.5
70	Z	57	ILE	2.5
79	AR	303	THR	2.5
79	DT	165	THR	2.5
1	1	1345	G	2.5
1	AS	2184	G	2.5
3	AU	39	G	2.5
54	J	154	ASP	2.5
6	AY	107	TRP	2.5
7	m	113	LEU	2.5
10	BC	60	GLN	2.5
10	BC	153	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
19	y	138	LEU	2.5
25	7	41	GLN	2.5
39	AL	57	ASN	2.5
45	i	158	LEU	2.5
47	C	9	LEU	2.5
55	CV	171	LEU	2.5
79	DT	162	GLN	2.5
81	12	125	LEU	2.5
6	AY	197	GLY	2.5
13	BF	52	TYR	2.5
26	BS	33	ARG	2.5
38	CE	2	GLY	2.5
43	CJ	51	GLY	2.5
55	CV	169	GLY	2.5
56	L	126	ARG	2.5
79	AR	98	GLY	2.5
14	t	131	LYS	2.5
35	CB	43	LYS	2.5
49	E	156	LYS	2.5
54	J	90	ALA	2.5
60	DA	39	LYS	2.5
61	DB	77	LYS	2.5
79	DT	251	ALA	2.5
82	L1	77	ALA	2.5
14	BG	134	GLU	2.5
14	BG	194	GLU	2.5
51	G	183	VAL	2.5
53	I	179	VAL	2.5
55	K	191	GLU	2.5
56	L	113	VAL	2.5
1	AS	1478	A	2.5
1	AS	2186	A	2.5
26	BS	95	ILE	2.5
41	AN	41	HIS	2.5
8	n	75	LEU	2.5
26	BS	31	THR	2.5
31	AD	86	LEU	2.5
6	AY	189	ARG	2.5
6	AY	199	ARG	2.5
10	BC	196	SER	2.5
13	s	127	PHE	2.5
51	CR	184	THR	2.5

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Mol	Chain	Res	Type	RSRZ
55	K	21	PHE	2.5
56	L	99	LEU	2.5
58	N	60	PHE	2.5
59	O	36	LEU	2.5
59	O	106	LEU	2.5
67	DH	116	THR	2.5
79	DT	32	LEU	2.5
39	CF	22	SER	2.5
6	AY	213	ASP	2.5
27	9	7	ASP	2.5
27	9	41	GLN	2.5
41	AN	23	CYS	2.5
45	CL	72	ASP	2.5
57	CX	13	GLN	2.5
58	N	33	ARG	2.5
62	DC	72	ARG	2.5
64	T	42	GLN	2.5
71	a	8	ARG	2.5
75	e	55	CYS	2.5
78	h	122	ARG	2.5
41	CH	33	ASN	2.5
46	CM	711	U	2.5
52	CS	104	ASN	2.5
60	P	69	ASN	2.5
4	AW	190	LYS	2.5
7	AZ	90	TYR	2.5
50	F	181	GLY	2.5
70	Z	4	GLY	2.5
82	l1	125	GLY	2.5
7	AZ	294	LYS	2.5
23	BP	10	LYS	2.5
41	CH	22	LYS	2.5
68	X	30	ALA	2.5
70	DK	140	LYS	2.5
20	BM	139	VAL	2.5
33	AF	11	VAL	2.5
50	F	182	VAL	2.5
52	H	68	VAL	2.5
53	CT	36	VAL	2.5
62	R	109	PRO	2.5
80	P0	104	VAL	2.5
82	l1	212	PRO	2.5

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Mol	Chain	Res	Type	RSRZ
10	p	211	GLU	2.5
22	BO	144	GLU	2.5
53	CT	222	GLU	2.5
47	CN	187	ILE	2.5
50	F	67	ILE	2.5
63	S	30	ILE	2.5
80	p0	80	ILE	2.5
7	AZ	195	LEU	2.5
8	BA	75	LEU	2.5
50	F	143	LEU	2.5
63	DD	88	LEU	2.5
71	a	28	LEU	2.5
72	DM	51	LEU	2.5
7	AZ	55	PHE	2.5
78	DS	140	HIS	2.5
20	z	5	ARG	2.5
35	CB	25	THR	2.5
47	CN	185	ARG	2.5
51	G	51	ARG	2.5
1	1	2520	A	2.5
46	B	712	A	2.5
46	CM	1701	A	2.5
10	BC	184	LYS	2.5
18	x	140	GLN	2.5
31	BX	14	SER	2.5
38	CE	81	GLY	2.5
39	AL	30	LYS	2.5
56	L	115	LYS	2.5
60	P	70	LYS	2.5
79	AR	61	SER	2.5
16	BI	153	ASN	2.5
19	y	41	ASP	2.5
52	H	66	ASN	2.5
60	DA	87	ASP	2.5
82	L1	69	GLY	2.5
79	DT	119	ASN	2.5
6	AY	89	ALA	2.5
51	G	258	ALA	2.5
55	CV	137	ALA	2.5
62	R	6	ALA	2.5
64	DE	90	ALA	2.5
71	a	80	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
1	AS	2465	U	2.5
7	AZ	208	MET	2.5
46	CM	319	C	2.5
7	AZ	65	VAL	2.5
8	n	64	VAL	2.5
19	y	64	VAL	2.5
26	BS	26	VAL	2.5
28	BU	70	PRO	2.5
71	DL	101	GLU	2.5
82	l1	30	GLU	2.5
22	BO	160	ILE	2.4
28	BU	46	ILE	2.4
63	S	84	ILE	2.4
64	T	117	ILE	2.4
64	T	124	ILE	2.4
31	BX	64	LEU	2.4
51	CR	44	LEU	2.4
79	AR	13	LEU	2.4
79	AR	34	LEU	2.4
79	AR	42	LEU	2.4
82	l1	123	LEU	2.4
82	l1	128	LEU	2.4
82	l1	204	LEU	2.4
1	AS	2445	G	2.4
1	AS	2447	G	2.4
23	BP	74	PHE	2.4
41	AN	37	ARG	2.4
46	CM	1546	G	2.4
49	CP	79	ARG	2.4
52	CS	112	ARG	2.4
53	I	177	ARG	2.4
55	CV	27	PHE	2.4
70	DK	32	ARG	2.4
29	BV	107	HIS	2.4
79	DT	62	PHE	2.4
82	L1	214	PHE	2.4
6	AY	362	LYS	2.4
9	BB	15	LYS	2.4
18	BK	32	THR	2.4
30	BW	28	LYS	2.4
38	AK	87	THR	2.4
47	C	116	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
51	CR	37	LYS	2.4
53	CT	220	LYS	2.4
60	P	109	LYS	2.4
63	DD	3	THR	2.4
65	U	48	LYS	2.4
79	AR	97	THR	2.4
33	BZ	38	GLY	2.4
45	CL	95	GLY	2.4
51	G	58	GLY	2.4
59	O	100	TRP	2.4
63	DD	130	GLY	2.4
64	T	74	GLN	2.4
79	AR	4	GLN	2.4
4	AW	189	TYR	2.4
5	k	51	ALA	2.4
11	BD	1	MET	2.4
27	BT	79	ALA	2.4
35	CB	82	ALA	2.4
51	CR	84	ALA	2.4
54	CU	90	ALA	2.4
63	DD	140	SER	2.4
68	X	12	TYR	2.4
78	h	143	ALA	2.4
47	CN	200	ASP	2.4
1	1	2464	A	2.4
28	BU	68	VAL	2.4
41	CH	20	CYS	2.4
51	G	46	VAL	2.4
66	DG	6	VAL	2.4
70	DK	21	ASN	2.4
71	a	57	VAL	2.4
79	DT	208	CYS	2.4
41	AN	47	PRO	2.4
53	I	135	PRO	2.4
7	m	146	LEU	2.4
13	BF	145	ARG	2.4
19	BL	78	GLU	2.4
25	7	126	GLU	2.4
64	T	101	GLU	2.4
69	Y	51	GLU	2.4
79	AR	259	ILE	2.4
27	BT	30	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
33	BZ	76	LEU	2.4
35	CB	9	ARG	2.4
50	F	166	ARG	2.4
51	G	59	ARG	2.4
52	H	31	LEU	2.4
54	J	139	LEU	2.4
55	CV	8	ARG	2.4
59	CZ	28	LEU	2.4
63	S	131	ARG	2.4
80	p0	72	GLU	2.4
82	L1	17	LEU	2.4
82	L1	30	GLU	2.4
51	G	175	PHE	2.4
62	DC	15	PHE	2.4
6	AY	47	LYS	2.4
6	AY	59	HIS	2.4
16	BI	140	LYS	2.4
36	CC	119	LYS	2.4
56	L	123	HIS	2.4
63	S	13	LYS	2.4
63	DD	25	LYS	2.4
78	h	178	LYS	2.4
78	DS	136	LYS	2.4
6	AY	104	THR	2.4
43	AP	26	THR	2.4
33	AF	117	GLY	2.4
35	CB	78	GLY	2.4
51	G	25	GLY	2.4
54	J	133	GLY	2.4
61	Q	10	GLY	2.4
63	S	71	GLY	2.4
9	BB	17	GLN	2.4
10	BC	199	ALA	2.4
27	BT	6	GLN	2.4
36	AI	1	MET	2.4
36	CC	87	ALA	2.4
39	AL	2	ALA	2.4
49	E	244	ALA	2.4
54	J	146	GLN	2.4
56	L	177	GLN	2.4
56	CW	48	GLN	2.4
77	g	61	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
1	AS	1562	G	2.4
1	AS	1874	G	2.4
1	AS	2443	G	2.4
8	n	4	VAL	2.4
8	n	65	SER	2.4
10	BC	98	TYR	2.4
10	BC	132	VAL	2.4
16	BI	115	VAL	2.4
18	x	113	VAL	2.4
28	BU	98	SER	2.4
37	CD	52	TYR	2.4
39	AL	50	TYR	2.4
41	CH	18	SER	2.4
46	B	750	G	2.4
46	B	1571	G	2.4
46	CM	127	G	2.4
46	CM	717	G	2.4
56	CW	19	TYR	2.4
58	N	100	TYR	2.4
60	P	40	TYR	2.4
65	DF	42	TYR	2.4
82	L1	87	VAL	2.4
18	BK	53	ASP	2.4
47	C	76	CYS	2.4
79	AR	58	PRO	2.4
4	AW	180	LEU	2.4
9	o	10	LEU	2.4
11	BD	9	ILE	2.4
14	BG	123	LEU	2.4
16	BI	98	LEU	2.4
19	BL	174	ARG	2.4
41	AN	51	LEU	2.4
43	AP	35	LEU	2.4
43	CJ	35	LEU	2.4
50	CQ	177	LEU	2.4
50	CQ	201	ARG	2.4
51	G	49	ARG	2.4
51	CR	191	ARG	2.4
54	CU	77	LEU	2.4
56	CW	134	ILE	2.4
62	R	121	ILE	2.4
64	T	67	ARG	2.4

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Mol	Chain	Res	Type	RSRZ
79	AR	271	LEU	2.4
1	1	2078	A	2.4
7	m	25	GLU	2.4
24	6	68	GLU	2.4
46	B	1316	A	2.4
46	CM	1357	A	2.4
7	AZ	27	LYS	2.4
14	BG	104	LYS	2.4
22	2	19	PHE	2.4
23	BP	110	PHE	2.4
31	BX	21	LYS	2.4
35	AH	21	LYS	2.4
35	CB	19	LYS	2.4
39	CF	6	LYS	2.4
40	AM	34	LYS	2.4
48	CO	142	PHE	2.4
49	E	94	LYS	2.4
56	L	71	PHE	2.4
46	B	75	U	2.4
46	CM	779	U	2.4
67	W	63	LYS	2.4
78	DS	131	LYS	2.4
80	P0	75	LYS	2.4
80	p0	23	LYS	2.4
25	BR	78	HIS	2.4
65	U	127	HIS	2.4
1	1	240	C	2.4
46	CM	695	C	2.4
38	CE	4	GLY	2.4
38	CE	80	THR	2.4
39	AL	35	GLY	2.4
55	K	192	GLY	2.4
77	DR	52	GLY	2.4
80	P0	29	GLY	2.4
82	l1	69	GLY	2.4
12	BE	102	MET	2.4
16	BI	110	ALA	2.4
49	E	87	ALA	2.4
58	N	2	ALA	2.4
63	S	19	ALA	2.4
66	V	58	ALA	2.4
77	DR	61	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
79	AR	300	ALA	2.4
79	DT	79	ALA	2.4
15	BH	119	GLN	2.4
27	BT	105	VAL	2.4
47	CN	22	VAL	2.4
54	J	166	GLN	2.4
60	DA	36	GLN	2.4
66	V	71	VAL	2.4
68	X	59	VAL	2.4
77	DR	31	GLN	2.4
80	p0	36	GLN	2.4
10	BC	56	TYR	2.4
53	CT	169	TYR	2.4
63	S	91	TYR	2.4
9	BB	178	SER	2.4
15	BH	2	SER	2.4
23	5	73	SER	2.4
58	CY	23	PRO	2.4
10	BC	186	ARG	2.4
14	BG	95	ILE	2.4
16	BI	203	ARG	2.4
26	BS	63	ILE	2.4
31	BX	94	ILE	2.4
41	CH	9	LEU	2.4
47	C	176	LEU	2.4
51	G	176	ASP	2.4
54	CU	168	LEU	2.4
56	L	49	LEU	2.4
59	CZ	62	LEU	2.4
67	W	117	ILE	2.4
69	Y	27	ILE	2.4
73	c	38	ARG	2.4
79	AR	120	LEU	2.4
79	AR	294	ASP	2.4
79	DT	307	ILE	2.4
82	L1	206	ILE	2.4
82	l1	206	ILE	2.4
7	AZ	89	LYS	2.4
10	BC	246	LYS	2.4
23	BP	14	LYS	2.4
51	G	128	LYS	2.4
56	L	68	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
77	g	20	LYS	2.4
79	AR	46	LYS	2.4
1	AS	1548	G	2.4
1	AS	3088	G	2.4
7	m	160	PHE	2.4
46	B	1315	G	2.4
46	B	1405	G	2.4
46	CM	653	G	2.4
48	CO	191	GLU	2.4
50	F	104	GLU	2.4
68	DI	41	GLU	2.4
80	P0	88	PHE	2.4
82	L1	68	PHE	2.4
1	1	2427	A	2.4
46	B	1680	A	2.4
70	DK	18	HIS	2.4
3	AU	158	U	2.4
36	AI	3	GLY	2.4
6	AY	166	ALA	2.4
12	r	2	ALA	2.4
18	BK	81	ALA	2.4
25	7	132	ALA	2.4
28	BU	2	ALA	2.4
46	B	490	U	2.4
47	CN	128	THR	2.4
48	D	154	THR	2.4
49	E	93	MET	2.4
50	CQ	86	ALA	2.4
60	P	57	ALA	2.4
62	DC	74	ALA	2.4
64	DE	106	THR	2.4
72	DM	79	ALA	2.4
73	DN	35	ALA	2.4
29	BV	130	VAL	2.4
64	DE	66	VAL	2.4
6	AY	49	GLN	2.4
6	AY	356	GLN	2.4
1	AS	2744	C	2.4
7	AZ	44	TYR	2.4
46	B	482	C	2.4
46	B	716	C	2.4
46	B	1385	C	2.4

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Mol	Chain	Res	Type	RSRZ
7	AZ	279	ARG	2.4
40	AM	28	ARG	2.4
56	L	95	TYR	2.4
60	DA	42	ARG	2.4
69	Y	52	TYR	2.4
69	Y	88	ARG	2.4
78	DS	148	TYR	2.4
79	AR	55	TYR	2.4
41	AN	4	PRO	2.4
45	CL	48	PRO	2.4
15	BH	106	SER	2.4
23	5	37	LEU	2.4
30	AC	62	SER	2.4
48	CO	217	LEU	2.4
54	J	125	LEU	2.4
56	L	50	SER	2.4
61	Q	28	LEU	2.4
64	T	41	ILE	2.4
66	V	45	LEU	2.4
70	DK	47	SER	2.4
82	L1	99	LEU	2.4
82	l1	111	ILE	2.4
10	BC	97	LYS	2.4
11	BD	61	ASP	2.4
35	AH	19	LYS	2.4
36	CC	32	LYS	2.4
40	CG	12	LYS	2.4
47	CN	165	LYS	2.4
64	T	63	LYS	2.4
78	DS	149	LYS	2.4
55	K	88	ASN	2.4
53	I	83	CYS	2.4
53	CT	145	PHE	2.4
66	DG	51	GLU	2.4
5	k	274	HIS	2.4
78	DS	137	HIS	2.4
80	P0	39	HIS	2.4
6	AY	98	GLY	2.4
19	BL	134	GLY	2.4
56	L	32	GLY	2.4
82	L1	202	GLY	2.4
6	AY	57	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
10	p	200	ALA	2.4
25	7	103	ALA	2.4
27	9	126	ALA	2.4
29	BV	127	ALA	2.4
58	N	61	ALA	2.4
63	S	90	ALA	2.4
73	c	81	ALA	2.4
9	BB	9	THR	2.4
10	BC	158	VAL	2.4
60	DA	60	VAL	2.4
65	DF	100	VAL	2.4
1	1	2438	U	2.4
1	1	2480	A	2.4
1	AS	976	A	2.4
1	AS	1221	A	2.4
7	m	275	GLN	2.4
11	q	122	ARG	2.4
46	CM	176	U	2.4
46	CM	1695	U	2.4
55	K	22	ARG	2.4
70	DK	19	ARG	2.4
7	m	190	LEU	2.3
8	n	41	LEU	2.3
20	BM	177	LEU	2.3
6	AY	192	LYS	2.3
27	BT	106	ILE	2.3
30	AC	33	LYS	2.3
33	BZ	97	ILE	2.3
36	CC	76	ILE	2.3
43	CJ	84	PRO	2.3
48	CO	231	LEU	2.3
57	CX	82	ILE	2.3
59	O	59	LEU	2.3
59	CZ	59	LEU	2.3
39	AL	42	LYS	2.3
51	G	75	LYS	2.3
51	G	108	LYS	2.3
52	CS	106	LYS	2.3
53	I	191	LYS	2.3
54	CU	80	LYS	2.3
63	S	40	PRO	2.3
76	f	55	TYR	2.3

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Mol	Chain	Res	Type	RSRZ
41	AN	18	SER	2.3
45	CL	36	SER	2.3
51	G	86	PHE	2.3
55	CV	21	PHE	2.3
58	CY	13	PHE	2.3
69	Y	30	SER	2.3
42	CI	3	ASP	2.3
46	B	763	C	2.3
76	DQ	14	PHE	2.3
54	CU	119	ASP	2.3
66	V	35	ASP	2.3
14	t	20	GLU	2.3
39	CF	13	GLU	2.3
79	DT	5	GLU	2.3
82	l1	66	CYS	2.3
10	BC	197	ALA	2.3
22	2	81	GLY	2.3
28	BU	110	ALA	2.3
49	E	140	GLY	2.3
51	CR	102	VAL	2.3
53	I	224	ALA	2.3
59	O	31	VAL	2.3
60	P	63	ALA	2.3
70	Z	25	ALA	2.3
74	DO	19	HIS	2.3
79	DT	276	ALA	2.3
82	l1	211	GLY	2.3
62	DC	93	VAL	2.3
77	DR	47	VAL	2.3
80	P0	100	VAL	2.3
82	l1	82	VAL	2.3
7	AZ	278	THR	2.3
14	t	41	ARG	2.3
16	BI	143	ARG	2.3
39	CF	3	ARG	2.3
45	i	58	THR	2.3
45	i	81	THR	2.3
48	D	26	ARG	2.3
49	E	205	THR	2.3
52	H	28	THR	2.3
53	I	148	THR	2.3
59	CZ	100	TRP	2.3

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Mol	Chain	Res	Type	RSRZ
67	DH	78	TRP	2.3
79	AR	41	THR	2.3
4	AW	104	LEU	2.3
9	BB	139	LEU	2.3
10	BC	94	LEU	2.3
4	AW	112	ILE	2.3
6	AY	249	ILE	2.3
10	BC	76	ILE	2.3
10	BC	93	LYS	2.3
11	BD	21	LYS	2.3
16	BI	11	GLN	2.3
29	AB	77	LYS	2.3
45	CL	103	LEU	2.3
47	CN	87	LEU	2.3
51	G	101	LEU	2.3
54	CU	150	LEU	2.3
61	DB	28	LEU	2.3
65	DF	101	LEU	2.3
29	BV	65	GLN	2.3
33	AF	97	ILE	2.3
44	AQ	25	GLN	2.3
61	DB	110	ILE	2.3
62	DC	57	ILE	2.3
66	DG	78	LYS	2.3
70	DK	139	LYS	2.3
76	f	16	LYS	2.3
78	h	191	LYS	2.3
78	DS	139	LYS	2.3
28	BU	18	TYR	2.3
47	CN	199	PRO	2.3
82	L1	126	PRO	2.3
82	l1	117	ILE	2.3
56	L	12	TYR	2.3
78	h	148	TYR	2.3
1	1	2439	A	2.3
1	AS	1584	A	2.3
8	BA	176	PHE	2.3
16	BI	130	PHE	2.3
28	AA	118	PHE	2.3
46	B	779	U	2.3
46	CM	1674	U	2.3
1	1	2432	G	2.3

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Mol	Chain	Res	Type	RSRZ
1	AS	1260	G	2.3
46	B	676	G	2.3
14	BG	137	SER	2.3
52	CS	79	SER	2.3
55	CV	12	SER	2.3
60	DA	7	SER	2.3
30	BW	36	ASP	2.3
32	BY	68	ASN	2.3
34	CA	84	ASN	2.3
52	H	100	ASN	2.3
65	U	51	ASP	2.3
69	Y	9	ASP	2.3
31	BX	78	GLU	2.3
54	CU	123	GLU	2.3
52	H	98	MET	2.3
80	P0	38	MET	2.3
4	j	247	ARG	2.3
28	BU	14	VAL	2.3
37	CD	43	VAL	2.3
49	CP	33	VAL	2.3
49	CP	95	ALA	2.3
54	J	55	ALA	2.3
54	J	141	GLY	2.3
53	CT	230	ARG	2.3
56	L	23	ARG	2.3
56	L	53	ARG	2.3
59	CZ	122	VAL	2.3
63	S	66	VAL	2.3
66	V	4	VAL	2.3
69	Y	97	ARG	2.3
79	AR	8	VAL	2.3
5	k	387	LEU	2.3
10	p	27	LEU	2.3
10	BC	44	LYS	2.3
11	q	174	LYS	2.3
13	s	19	LEU	2.3
24	BQ	106	LYS	2.3
34	AG	86	LYS	2.3
37	AJ	71	LEU	2.3
41	CH	45	LEU	2.3
50	F	191	LYS	2.3
52	CS	80	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
52	CS	109	LYS	2.3
54	CU	6	LEU	2.3
56	L	59	LEU	2.3
61	Q	87	LYS	2.3
62	R	49	LEU	2.3
63	S	56	LEU	2.3
64	T	34	LEU	2.3
66	DG	39	THR	2.3
74	DO	21	LEU	2.3
79	DT	86	TRP	2.3
63	DD	8	THR	2.3
79	AR	280	THR	2.3
41	CH	19	ILE	2.3
47	CN	133	ILE	2.3
63	S	64	ILE	2.3
79	DT	68	ILE	2.3
4	j	47	GLN	2.3
10	BC	90	GLN	2.3
26	BS	35	PRO	2.3
38	CE	30	GLN	2.3
47	C	126	PRO	2.3
57	M	83	PRO	2.3
41	CH	13	TYR	2.3
28	BU	92	PHE	2.3
53	CT	156	PHE	2.3
1	AS	2477	U	2.3
13	BF	151	SER	2.3
33	BZ	23	SER	2.3
46	CM	1359	U	2.3
67	DH	75	SER	2.3
71	a	69	SER	2.3
5	AX	259	ASN	2.3
22	BO	104	GLU	2.3
33	BZ	40	ASP	2.3
35	CB	11	ASN	2.3
46	B	367	A	2.3
46	B	847	A	2.3
50	F	40	VAL	2.3
51	G	257	ARG	2.3
53	I	150	GLU	2.3
58	CY	37	ASP	2.3
60	P	21	ASN	2.3

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Mol	Chain	Res	Type	RSRZ
62	DC	32	GLU	2.3
64	T	87	GLU	2.3
66	V	44	ASP	2.3
8	BA	51	VAL	2.3
43	AP	103	ALA	2.3
47	C	143	VAL	2.3
47	CN	37	VAL	2.3
52	H	153	GLY	2.3
59	CZ	30	VAL	2.3
60	P	34	VAL	2.3
70	Z	2	GLY	2.3
73	c	14	GLY	2.3
76	f	40	ARG	2.3
79	DT	154	ALA	2.3
1	1	2452	G	2.3
1	AS	1242	G	2.3
1	AS	2458	G	2.3
10	p	147	LYS	2.3
28	AA	27	LYS	2.3
28	AA	93	LYS	2.3
37	CD	24	LYS	2.3
43	CJ	13	LYS	2.3
43	CJ	100	LYS	2.3
53	I	131	LYS	2.3
53	CT	143	LYS	2.3
54	J	85	HIS	2.3
62	DC	23	LYS	2.3
63	DD	113	LYS	2.3
7	m	92	LEU	2.3
8	BA	146	LEU	2.3
26	BS	38	LEU	2.3
26	BS	108	LEU	2.3
48	D	231	LEU	2.3
53	I	76	LEU	2.3
59	CZ	36	LEU	2.3
77	DR	39	LEU	2.3
79	DT	262	LEU	2.3
47	C	54	TRP	2.3
47	CN	175	TRP	2.3
51	CR	195	ILE	2.3
67	W	49	ILE	2.3
80	p0	63	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
82	L1	198	TRP	2.3
1	AS	1279	C	2.3
26	BS	81	THR	2.3
28	AA	97	THR	2.3
79	DT	26	THR	2.3
28	BU	132	GLN	2.3
54	CU	60	PRO	2.3
16	BI	21	PHE	2.3
16	BI	180	PHE	2.3
26	BS	32	PHE	2.3
47	CN	110	TYR	2.3
58	N	14	GLN	2.3
60	DA	40	TYR	2.3
64	T	62	GLN	2.3
13	BF	141	ARG	2.3
36	CC	48	ARG	2.3
55	CV	22	ARG	2.3
65	DF	123	ARG	2.3
69	Y	68	ARG	2.3
75	e	18	ARG	2.3
11	q	71	VAL	2.3
33	BZ	103	SER	2.3
6	l	362	LYS	2.3
16	BI	78	GLY	2.3
18	BK	46	LYS	2.3
19	y	77	ALA	2.3
52	CS	68	VAL	2.3
52	CS	85	ALA	2.3
53	CT	112	SER	2.3
54	CU	126	VAL	2.3
55	K	7	SER	2.3
55	K	69	SER	2.3
59	CZ	66	VAL	2.3
60	P	6	SER	2.3
24	BQ	68	GLU	2.3
25	7	62	GLY	2.3
28	AA	47	GLU	2.3
12	BE	205	ASN	2.3
43	AP	15	LYS	2.3
48	CO	122	GLU	2.3
58	CY	32	LYS	2.3
62	DC	4	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
80	P0	50	VAL	2.3
80	p0	101	VAL	2.3
82	l1	172	VAL	2.3
29	BV	44	ASN	2.3
45	CL	33	ASN	2.3
63	S	22	LYS	2.3
67	DH	76	LYS	2.3
74	DO	22	LYS	2.3
79	DT	17	ASN	2.3
1	1	3320	U	2.3
1	AS	1564	U	2.3
1	AS	1797	U	2.3
1	AS	2487	U	2.3
3	AU	127	U	2.3
8	BA	63	LEU	2.3
44	CK	86	LEU	2.3
46	B	655	U	2.3
46	B	675	U	2.3
46	B	1675	U	2.3
46	CM	697	U	2.3
46	CM	1325	U	2.3
50	F	203	LEU	2.3
71	a	96	LEU	2.3
81	12	161	ASP	2.3
52	H	122	HIS	2.3
82	l1	190	LEU	2.3
1	AS	2943	A	2.3
7	AZ	231	ILE	2.3
11	BD	99	ILE	2.3
26	BS	142	ILE	2.3
46	CM	673	A	2.3
46	CM	1618	A	2.3
63	S	28	ILE	2.3
79	AR	43	ILE	2.3
82	L1	120	ILE	2.3
82	l1	4	ILE	2.3
30	BW	8	THR	2.3
31	BX	26	THR	2.3
49	CP	222	PRO	2.3
54	J	109	PRO	2.3
58	N	59	PRO	2.3
69	Y	77	PRO	2.3

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Mol	Chain	Res	Type	RSRZ
82	l1	21	THR	2.3
10	p	78	GLN	2.3
10	BC	166	PHE	2.3
23	5	74	PHE	2.3
31	BX	72	PHE	2.3
39	CF	40	GLN	2.3
66	DG	55	TYR	2.3
71	DL	63	GLN	2.3
79	DT	122	GLN	2.3
1	1	450	G	2.3
1	AS	2452	G	2.3
3	AU	15	G	2.3
46	B	289	G	2.3
46	CM	1441	G	2.3
79	DT	183	TYR	2.3
1	AS	487	C	2.3
1	AS	2457	C	2.3
46	B	694	C	2.3
46	B	1406	C	2.3
5	AX	369	ARG	2.3
22	2	5	ARG	2.3
44	CK	24	ARG	2.3
45	i	113	ARG	2.3
63	DD	65	ARG	2.3
82	L1	1	MET	2.3
7	AZ	271	LYS	2.3
13	s	4	LYS	2.3
31	AD	21	LYS	2.3
49	E	191	VAL	2.3
50	F	135	VAL	2.3
50	F	142	LYS	2.3
52	CS	33	VAL	2.3
53	CT	149	LYS	2.3
57	M	24	LYS	2.3
62	DC	108	LYS	2.3
63	S	25	LYS	2.3
6	AY	225	GLY	2.3
10	BC	243	ALA	2.3
15	BH	68	GLY	2.3
16	BI	3	ALA	2.3
25	7	81	ALA	2.3
25	7	130	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
64	T	12	ALA	2.3
66	DG	41	ALA	2.3
79	DT	6	VAL	2.3
29	AB	116	GLY	2.3
35	CB	27	GLY	2.3
51	CR	261	GLY	2.3
74	d	69	GLY	2.3
77	g	52	GLY	2.3
6	l	154	SER	2.3
11	BD	135	GLU	2.3
28	BU	120	GLU	2.3
29	AB	78	LEU	2.3
31	BX	43	LEU	2.3
35	AH	66	SER	2.3
45	i	110	SER	2.3
47	C	177	LEU	2.3
49	CP	66	LEU	2.3
58	N	50	GLU	2.3
61	DB	120	SER	2.3
62	DC	36	LEU	2.3
79	DT	83	SER	2.3
7	m	148	ILE	2.2
7	AZ	88	ILE	2.2
18	x	133	HIS	2.2
19	y	112	ASP	2.2
22	BO	66	ASN	2.2
51	G	69	HIS	2.2
56	L	45	ILE	2.2
58	N	22	ASN	2.2
70	DK	48	HIS	2.2
80	P0	83	ASN	2.2
82	L1	155	ILE	2.2
69	Y	89	TRP	2.2
82	l1	198	TRP	2.2
1	1	1561	U	2.2
1	AS	772	U	2.2
20	z	54	PRO	2.2
26	8	84	PHE	2.2
39	AL	38	PHE	2.2
40	CG	22	PRO	2.2
41	CH	28	PRO	2.2
45	i	57	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
55	K	97	THR	2.2
70	Z	36	THR	2.2
76	f	14	PHE	2.2
1	AS	2104	A	2.2
16	v	62	TYR	2.2
35	AH	61	GLN	2.2
35	CB	7	TYR	2.2
44	CK	37	TYR	2.2
46	B	617	A	2.2
46	CM	367	A	2.2
57	M	13	GLN	2.2
58	N	97	TYR	2.2
69	Y	101	TYR	2.2
79	DT	296	GLN	2.2
80	p0	10	GLN	2.2
27	BT	16	ARG	2.2
52	H	83	ARG	2.2
53	I	219	ARG	2.2
71	a	10	ARG	2.2
74	d	80	ARG	2.2
6	l	184	LYS	2.2
6	AY	164	LYS	2.2
10	BC	148	LYS	2.2
27	9	87	LYS	2.2
44	CK	13	LYS	2.2
51	G	211	LYS	2.2
56	CW	179	LYS	2.2
79	DT	59	LYS	2.2
80	p0	43	LYS	2.2
4	AW	113	VAL	2.2
7	AZ	101	VAL	2.2
10	BC	198	VAL	2.2
51	G	208	VAL	2.2
52	H	132	VAL	2.2
67	DH	111	VAL	2.2
73	c	86	VAL	2.2
82	l1	162	VAL	2.2
18	BK	184	ALA	2.2
20	z	63	ALA	2.2
20	BM	16	GLY	2.2
21	0	116	ALA	2.2
26	BS	34	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
35	AH	45	GLY	2.2
43	CJ	72	LEU	2.2
45	CL	108	GLY	2.2
48	D	233	GLY	2.2
48	CO	102	GLY	2.2
51	CR	74	GLY	2.2
53	I	75	LEU	2.2
54	J	37	LEU	2.2
54	J	99	ALA	2.2
56	L	70	LEU	2.2
62	DC	80	LEU	2.2
63	DD	15	ALA	2.2
73	c	67	LEU	2.2
78	h	171	GLY	2.2
80	p0	3	GLY	2.2
1	AS	2527	G	2.2
3	4	91	C	2.2
5	AX	210	GLU	2.2
46	B	702	G	2.2
46	B	827	C	2.2
46	B	1677	G	2.2
46	CM	701	G	2.2
46	CM	1339	G	2.2
76	DQ	4	GLU	2.2
80	P0	74	GLU	2.2
4	AW	49	ILE	2.2
14	BG	17	HIS	2.2
22	BO	70	SER	2.2
23	5	54	ILE	2.2
53	I	175	ILE	2.2
54	CU	152	SER	2.2
55	K	158	ILE	2.2
56	L	129	ILE	2.2
61	DB	6	SER	2.2
75	DP	53	ILE	2.2
81	12	104	ILE	2.2
6	l	214	ASN	2.2
39	CF	34	ASN	2.2
8	BA	8	TRP	2.2
33	AF	54	PRO	2.2
47	CN	152	PRO	2.2
51	G	15	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
80	p0	86	PHE	2.2
48	CO	46	THR	2.2
62	R	11	THR	2.2
69	Y	39	THR	2.2
3	AU	22	U	2.2
14	BG	102	GLN	2.2
19	y	178	ARG	2.2
19	BL	180	ARG	2.2
20	BM	136	ARG	2.2
22	2	102	ARG	2.2
51	G	253	ARG	2.2
52	CS	92	ARG	2.2
64	T	5	ARG	2.2
79	AR	208	CYS	2.2
27	BT	41	GLN	2.2
27	BT	81	GLN	2.2
29	AB	65	GLN	2.2
46	B	556	U	2.2
46	CM	258	U	2.2
46	CM	1270	U	2.2
50	F	190	MET	2.2
54	J	101	LYS	2.2
56	L	34	TYR	2.2
72	b	98	GLN	2.2
76	f	54	LYS	2.2
77	DR	40	TYR	2.2
79	AR	183	TYR	2.2
82	l1	119	GLN	2.2
30	BW	40	LYS	2.2
36	CC	115	LYS	2.2
41	AN	48	LYS	2.2
62	R	108	LYS	2.2
80	p0	81	LYS	2.2
10	p	258	VAL	2.2
20	z	51	VAL	2.2
51	G	76	VAL	2.2
79	DT	124	VAL	2.2
1	AS	1918	A	2.2
10	BC	254	ALA	2.2
25	BR	39	LEU	2.2
46	B	1410	A	2.2
46	CM	134	A	2.2

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Mol	Chain	Res	Type	RSRZ
47	C	87	LEU	2.2
48	D	156	ALA	2.2
55	K	149	LEU	2.2
55	K	190	LEU	2.2
59	O	78	LEU	2.2
63	S	116	LEU	2.2
74	DO	53	ALA	2.2
79	AR	207	LEU	2.2
31	AD	84	GLY	2.2
7	AZ	290	ILE	2.2
14	BG	46	ILE	2.2
18	BK	58	ILE	2.2
56	L	83	ILE	2.2
59	CZ	71	ILE	2.2
63	DD	80	ILE	2.2
67	W	64	ILE	2.2
72	b	41	ILE	2.2
9	BB	14	GLU	2.2
32	AE	67	GLU	2.2
51	CR	215	GLU	2.2
20	BM	58	HIS	2.2
28	AA	94	SER	2.2
54	J	62	SER	2.2
54	J	164	SER	2.2
60	P	14	SER	2.2
63	DD	33	SER	2.2
67	W	37	SER	2.2
67	W	75	SER	2.2
79	DT	164	SER	2.2
1	1	1578	C	2.2
1	AS	173	C	2.2
7	AZ	84	PRO	2.2
7	AZ	293	PHE	2.2
30	AC	6	ASN	2.2
31	AD	11	ASN	2.2
40	AM	32	ASP	2.2
46	CM	1467	C	2.2
51	CR	83	PRO	2.2
52	H	164	PRO	2.2
53	I	145	PHE	2.2
54	CU	59	PRO	2.2
70	DK	38	PHE	2.2

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Mol	Chain	Res	Type	RSRZ
77	g	46	ASN	2.2
13	BF	51	ARG	2.2
19	y	69	ARG	2.2
20	BM	62	ARG	2.2
36	AI	10	ARG	2.2
56	L	3	ARG	2.2
76	DQ	56	ARG	2.2
1	AS	368	G	2.2
1	AS	1258	G	2.2
4	AW	249	THR	2.2
10	BC	111	THR	2.2
15	BH	130	LYS	2.2
18	x	180	LYS	2.2
39	CF	21	LYS	2.2
41	CH	48	LYS	2.2
46	CM	1571	G	2.2
55	K	17	LYS	2.2
56	CW	65	LYS	2.2
58	CY	30	LYS	2.2
63	S	139	LYS	2.2
74	DO	23	THR	2.2
79	AR	213	LYS	2.2
79	DT	118	LYS	2.2
17	w	169	TYR	2.2
36	CC	70	TYR	2.2
49	E	84	GLN	2.2
51	G	68	GLN	2.2
55	CV	103	GLN	2.2
8	BA	97	VAL	2.2
23	BP	64	VAL	2.2
39	AL	56	VAL	2.2
56	L	136	VAL	2.2
56	CW	136	VAL	2.2
60	DA	33	VAL	2.2
62	R	96	VAL	2.2
68	X	32	VAL	2.2
74	DO	2	VAL	2.2
77	g	4	VAL	2.2
80	P0	30	VAL	2.2
80	P0	84	VAL	2.2
7	m	277	LEU	2.2
9	o	177	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
47	CN	18	LEU	2.2
51	G	123	LEU	2.2
53	I	216	LEU	2.2
58	N	5	LEU	2.2
59	CZ	136	LEU	2.2
66	V	79	LEU	2.2
69	Y	104	LEU	2.2
1	1	2449	U	2.2
1	AS	2483	U	2.2
39	AL	59	ALA	2.2
46	CM	1399	U	2.2
51	G	13	ALA	2.2
52	CS	78	ALA	2.2
54	J	53	ALA	2.2
63	DD	133	ALA	2.2
64	DE	104	ALA	2.2
6	AY	215	GLY	2.2
7	AZ	169	GLY	2.2
51	G	186	GLY	2.2
23	BP	56	ILE	2.2
50	F	173	ILE	2.2
50	F	219	ILE	2.2
51	G	90	ILE	2.2
54	CU	181	ILE	2.2
79	DT	259	ILE	2.2
1	AS	2519	A	2.2
16	BI	104	GLU	2.2
57	CX	79	GLU	2.2
70	DK	141	GLU	2.2
35	AH	69	HIS	2.2
48	D	101	HIS	2.2
16	BI	166	SER	2.2
41	AN	5	SER	2.2
41	CH	5	SER	2.2
51	G	256	ARG	2.2
53	I	27	PHE	2.2
68	X	60	ARG	2.2
81	12	129	SER	2.2
7	AZ	262	LYS	2.2
16	BI	175	ASN	2.2
20	z	67	LYS	2.2
24	BQ	104	ASN	2.2

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Mol	Chain	Res	Type	RSRZ
27	BT	17	LYS	2.2
38	CE	20	ASN	2.2
41	CH	17	LYS	2.2
45	i	71	LYS	2.2
55	CV	123	LYS	2.2
60	P	104	LYS	2.2
73	DN	97	PRO	2.2
75	e	51	ASN	2.2
80	p0	32	ASN	2.2
80	p0	89	THR	2.2
5	k	383	LEU	2.2
6	AY	253	GLN	2.2
7	AZ	39	GLN	2.2
7	AZ	173	VAL	2.2
7	AZ	272	TYR	2.2
8	n	73	VAL	2.2
10	BC	47	LEU	2.2
13	s	130	VAL	2.2
16	BI	113	LEU	2.2
32	AE	95	VAL	2.2
35	CB	73	GLN	2.2
37	AJ	52	TYR	2.2
37	CD	10	VAL	2.2
37	CD	46	VAL	2.2
39	CF	78	LEU	2.2
46	B	670	C	2.2
47	C	110	TYR	2.2
51	G	70	VAL	2.2
51	CR	219	VAL	2.2
58	CY	97	TYR	2.2
66	V	140	LEU	2.2
79	DT	8	VAL	2.2
79	DT	134	VAL	2.2
79	DT	247	TYR	2.2
82	L1	123	LEU	2.2
18	x	6	ALA	2.2
18	x	12	ALA	2.2
19	y	99	ALA	2.2
30	BW	57	ALA	2.2
45	i	46	ALA	2.2
47	C	74	ALA	2.2
47	C	130	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
80	P0	106	ALA	2.2
7	AZ	156	GLY	2.2
38	CE	23	GLY	2.2
43	AP	101	GLY	2.2
47	CN	171	GLY	2.2
53	CT	123	GLY	2.2
78	h	169	GLY	2.2
80	p0	82	GLY	2.2
11	BD	48	ILE	2.2
20	z	50	ILE	2.2
46	CM	724	G	2.2
65	DF	22	ILE	2.2
1	1	1024	U	2.2
1	1	2477	U	2.2
1	1	2537	U	2.2
46	B	278	U	2.2
6	l	4	ARG	2.2
18	BK	31	GLU	2.2
20	BM	68	GLU	2.2
36	CC	18	GLU	2.2
6	l	200	PHE	2.2
6	AY	196	ARG	2.2
7	m	55	PHE	2.2
37	CD	55	ARG	2.2
49	E	163	ARG	2.2
53	I	142	ARG	2.2
55	K	61	GLU	2.2
55	K	159	GLU	2.2
56	L	41	GLU	2.2
62	DC	31	GLU	2.2
64	DE	79	GLU	2.2
9	BB	156	LYS	2.2
12	r	199	PHE	2.2
24	BQ	64	LYS	2.2
28	AA	61	LYS	2.2
40	CG	7	PHE	2.2
47	C	27	LYS	2.2
48	CO	205	PHE	2.2
69	Y	78	ARG	2.2
70	DK	16	ARG	2.2
48	CO	219	LYS	2.2
54	J	171	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
67	DH	63	LYS	2.2
45	i	48	PRO	2.2
48	CO	29	TRP	2.2
54	J	128	PRO	2.2
21	BN	60	SER	2.2
30	BW	62	SER	2.2
53	I	78	SER	2.2
55	CV	86	SER	2.2
62	R	92	SER	2.2
63	S	5	SER	2.2
58	N	28	ASN	2.2
65	DF	87	ASN	2.2
80	p0	56	ASN	2.2
7	m	76	THR	2.2
10	BC	59	LEU	2.2
14	BG	57	VAL	2.2
19	y	94	LEU	2.2
27	BT	57	LEU	2.2
28	BU	23	VAL	2.2
43	CJ	44	ASP	2.2
45	i	40	ASP	2.2
45	i	119	VAL	2.2
45	CL	155	LEU	2.2
54	CU	54	LEU	2.2
54	CU	113	THR	2.2
57	M	80	LEU	2.2
67	DH	28	THR	2.2
69	Y	81	VAL	2.2
72	DM	42	LEU	2.2
20	z	92	GLN	2.2
39	CF	51	GLN	2.2
40	CG	11	GLN	2.2
53	I	192	ALA	2.1
55	CV	111	GLN	2.2
55	CV	204	ALA	2.1
63	S	93	GLN	2.2
68	X	58	TYR	2.2
71	a	4	ALA	2.1
71	DL	134	ALA	2.1
73	c	6	ALA	2.1
9	BB	112	GLY	2.1
19	BL	177	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
52	CS	150	GLY	2.1
77	g	32	GLY	2.1
22	2	85	ILE	2.1
36	CC	44	ILE	2.1
47	CN	173	ILE	2.1
50	F	171	ILE	2.1
71	a	47	ILE	2.1
79	DT	257	ILE	2.1
46	B	674	C	2.1
13	s	145	ARG	2.1
60	P	121	ARG	2.1
70	Z	23	ARG	2.1
76	DQ	12	ARG	2.1
16	v	169	LYS	2.1
30	AC	56	LYS	2.1
31	AD	34	LYS	2.1
33	BZ	17	LYS	2.1
36	CC	78	LYS	2.1
42	AO	19	LYS	2.1
7	AZ	117	GLU	2.1
10	p	209	GLU	2.1
16	BI	59	PHE	2.1
48	D	100	PHE	2.1
55	K	23	LYS	2.1
56	CW	104	PHE	2.1
63	S	126	LYS	2.1
63	S	103	GLU	2.1
63	DD	108	PHE	2.1
66	DG	27	LYS	2.1
66	DG	84	LYS	2.1
71	a	60	PHE	2.1
79	AR	118	LYS	2.1
79	DT	65	HIS	2.1
1	AS	2068	U	2.1
1	AS	2455	G	2.1
10	BC	53	TRP	2.1
45	CL	75	PRO	2.1
46	CM	278	U	2.1
46	CM	1236	U	2.1
72	b	91	PRO	2.1
79	AR	291	TRP	2.1
50	F	178	MET	2.1

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Mol	Chain	Res	Type	RSRZ
7	AZ	144	VAL	2.1
10	BC	163	LEU	2.1
10	BC	215	LEU	2.1
14	BG	83	VAL	2.1
21	BN	18	SER	2.1
22	2	154	VAL	2.1
22	BO	67	VAL	2.1
24	BQ	136	VAL	2.1
25	BR	11	SER	2.1
25	BR	109	LEU	2.1
26	BS	76	VAL	2.1
27	BT	104	VAL	2.1
47	CN	137	SER	2.1
49	E	141	SER	2.1
49	CP	174	VAL	2.1
51	CR	250	SER	2.1
73	c	21	VAL	2.1
74	d	8	LEU	2.1
79	DT	92	LEU	2.1
10	p	82	THR	2.1
20	BM	131	THR	2.1
26	BS	55	ASN	2.1
52	CS	94	THR	2.1
54	J	71	THR	2.1
60	DA	78	ASN	2.1
62	R	122	THR	2.1
71	a	6	THR	2.1
77	DR	50	THR	2.1
78	h	167	THR	2.1
79	DT	21	THR	2.1
79	DT	41	THR	2.1
82	L1	40	ASN	2.1
5	AX	162	ALA	2.1
10	p	210	ALA	2.1
16	BI	202	TYR	2.1
20	BM	33	ALA	2.1
25	BR	112	ASP	2.1
26	BS	107	ALA	2.1
28	BU	30	ASP	2.1
32	BY	90	ALA	2.1
33	BZ	30	ALA	2.1
51	G	54	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
53	I	200	GLN	2.1
56	L	8	TYR	2.1
66	DG	44	ASP	2.1
1	AS	1219	A	2.1
46	B	1407	A	2.1
16	BI	88	GLY	2.1
19	BL	183	GLY	2.1
37	CD	48	GLY	2.1
47	C	48	ILE	2.1
47	C	133	ILE	2.1
50	CQ	173	ILE	2.1
52	CS	149	ILE	2.1
65	U	119	ILE	2.1
66	V	42	GLY	2.1
71	a	13	ILE	2.1
73	c	16	GLY	2.1
74	DO	43	ILE	2.1
82	L1	183	ILE	2.1
45	i	90	ARG	2.1
77	g	42	ARG	2.1
5	AX	66	LYS	2.1
6	AY	184	LYS	2.1
20	BM	135	LYS	2.1
35	CB	67	LYS	2.1
54	CU	147	LYS	2.1
68	X	27	LYS	2.1
49	E	219	PHE	2.1
50	CQ	198	PHE	2.1
52	H	82	PHE	2.1
74	DO	32	PHE	2.1
28	BU	31	GLU	2.1
33	AF	27	HIS	2.1
50	F	175	HIS	2.1
52	H	119	GLU	2.1
48	D	23	PRO	2.1
54	J	36	PRO	2.1
67	W	109	PRO	2.1
68	X	14	PRO	2.1
7	AZ	150	LEU	2.1
43	CJ	104	LEU	2.1
56	CW	118	LEU	2.1
79	AR	262	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
82	L1	163	LEU	2.1
82	L1	174	MET	2.1
23	BP	23	VAL	2.1
45	CL	119	VAL	2.1
54	J	126	VAL	2.1
61	DB	37	VAL	2.1
67	W	55	VAL	2.1
1	AS	1816	U	2.1
1	AS	1817	U	2.1
46	B	318	U	2.1
46	B	609	U	2.1
9	BB	162	SER	2.1
25	7	107	SER	2.1
30	BW	31	SER	2.1
55	K	66	SER	2.1
70	DK	66	SER	2.1
16	v	146	ALA	2.1
19	BL	103	ALA	2.1
24	BQ	53	ALA	2.1
28	BU	117	ALA	2.1
48	CO	141	ALA	2.1
80	p0	44	ALA	2.1
17	BJ	180	ASN	2.1
35	CB	13	TYR	2.1
8	BA	19	GLN	2.1
1	1	1015	G	2.1
1	1	2447	G	2.1
13	s	100	GLY	2.1
14	BG	93	ILE	2.1
20	BM	124	TYR	2.1
66	V	66	TYR	2.1
77	g	51	ASN	2.1
80	P0	11	TYR	2.1
80	p0	83	ASN	2.1
37	CD	9	GLY	2.1
40	AM	25	GLN	2.1
47	C	170	ILE	2.1
60	P	2	GLY	2.1
63	S	63	ASP	2.1
71	a	7	ILE	2.1
80	P0	63	ILE	2.1
82	L1	117	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
12	r	101	LYS	2.1
13	s	174	LYS	2.1
25	BR	80	ARG	2.1
25	BR	97	LYS	2.1
36	CC	10	ARG	2.1
42	AO	17	ARG	2.1
46	B	1431	G	2.1
44	AQ	61	LYS	2.1
47	C	127	ARG	2.1
52	H	81	ARG	2.1
55	CV	25	ARG	2.1
55	CV	74	ARG	2.1
62	DC	10	ARG	2.1
65	U	123	ARG	2.1
66	DG	7	ARG	2.1
1	1	2440	A	2.1
1	1	2668	A	2.1
8	BA	46	PHE	2.1
13	s	104	PHE	2.1
46	CM	704	A	2.1
52	H	69	PHE	2.1
70	Z	122	PHE	2.1
35	CB	34	HIS	2.1
47	CN	208	GLU	2.1
6	AY	237	LEU	2.1
7	AZ	139	PRO	2.1
14	BG	48	PRO	2.1
51	G	36	HIS	2.1
52	H	165	LEU	2.1
52	CS	20	LEU	2.1
52	CS	30	PRO	2.1
64	DE	22	PRO	2.1
79	DT	244	PRO	2.1
82	L1	176	GLU	2.1
32	BY	3	LEU	2.1
32	BY	72	LEU	2.1
36	AI	9	LEU	2.1
40	CG	29	LEU	2.1
54	J	95	LEU	2.1
54	J	162	LEU	2.1
56	L	24	LEU	2.1
56	L	93	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
56	CW	76	LEU	2.1
74	d	24	LEU	2.1
82	L1	190	LEU	2.1
82	l1	135	PRO	2.1
8	BA	135	VAL	2.1
28	AA	53	VAL	2.1
35	AH	31	VAL	2.1
39	AL	55	VAL	2.1
54	J	136	VAL	2.1
59	O	91	VAL	2.1
63	DD	89	VAL	2.1
1	1	2473	C	2.1
1	AS	1559	C	2.1
30	BW	16	ALA	2.1
46	CM	38	C	2.1
47	C	132	ALA	2.1
79	AR	293	ALA	2.1
80	p0	107	ALA	2.1
82	l1	71	ALA	2.1
11	BD	138	SER	2.1
18	x	32	THR	2.1
22	BO	71	SER	2.1
25	BR	50	SER	2.1
26	8	112	THR	2.1
48	CO	51	SER	2.1
48	CO	107	SER	2.1
51	G	245	ILE	2.1
52	CS	187	ILE	2.1
53	I	96	SER	2.1
54	J	121	ILE	2.1
56	CW	11	THR	2.1
1	AS	2546	U	2.1
4	j	248	GLY	2.1
7	m	8	ARG	2.1
7	m	226	TYR	2.1
9	o	108	GLN	2.1
9	BB	241	ASN	2.1
10	BC	147	LYS	2.1
11	q	72	LYS	2.1
16	BI	87	GLN	2.1
36	CC	94	LYS	2.1
41	CH	52	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
42	AO	6	ARG	2.1
45	CL	38	LYS	2.1
48	CO	155	TYR	2.1
51	CR	244	GLY	2.1
54	J	4	LYS	2.1
58	N	35	TYR	2.1
65	DF	119	ILE	2.1
78	DS	147	TYR	2.1
82	l1	120	ILE	2.1
55	CV	32	GLN	2.1
56	L	179	LYS	2.1
64	DE	72	LYS	2.1
65	DF	104	ASN	2.1
69	Y	82	LYS	2.1
71	a	66	GLY	2.1
48	CO	208	GLN	2.1
71	DL	106	GLN	2.1
79	DT	40	LYS	2.1
82	L1	39	LYS	2.1
14	BG	98	ASP	2.1
52	H	145	ASP	2.1
21	BN	143	PHE	2.1
62	DC	102	PHE	2.1
1	AS	2444	G	2.1
4	j	96	LEU	2.1
10	p	68	LEU	2.1
11	BD	144	LEU	2.1
20	BM	76	MET	2.1
23	BP	108	LEU	2.1
27	BT	49	PRO	2.1
29	BV	41	HIS	2.1
46	B	1672	G	2.1
46	CM	1228	G	2.1
46	CM	1597	G	2.1
47	CN	177	LEU	2.1
55	CV	89	GLU	2.1
55	CV	193	GLU	2.1
56	CW	102	GLU	2.1
57	M	88	PRO	2.1
62	R	1	MET	2.1
64	DE	57	LEU	2.1
1	AS	1023	A	2.1

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Mol	Chain	Res	Type	RSRZ
6	l	223	VAL	2.1
11	BD	126	VAL	2.1
12	r	58	GLU	2.1
14	BG	20	GLU	2.1
16	v	152	VAL	2.1
22	2	86	GLU	2.1
23	BP	17	VAL	2.1
46	CM	1742	A	2.1
67	DH	114	GLU	2.1
70	Z	124	VAL	2.1
75	e	50	GLU	2.1
79	AR	171	TRP	2.1
79	DT	132	VAL	2.1
81	12	128	VAL	2.1
82	l1	33	GLU	2.1
10	BC	255	ALA	2.1
14	BG	47	ALA	2.1
52	CS	195	ALA	2.1
55	CV	57	ALA	2.1
5	k	28	ARG	2.1
10	BC	64	LYS	2.1
19	BL	20	LYS	2.1
23	5	107	LYS	2.1
27	9	99	ILE	2.1
31	BX	37	ARG	2.1
35	CB	80	ARG	2.1
36	AI	14	LYS	2.1
39	AL	3	ARG	2.1
44	AQ	36	LYS	2.1
47	C	15	LYS	2.1
48	CO	204	ILE	2.1
50	F	5	ILE	2.1
50	F	8	LYS	2.1
51	G	169	ILE	2.1
56	L	77	ILE	2.1
56	L	143	ILE	2.1
56	CW	140	ILE	2.1
63	DD	64	ILE	2.1
66	DG	111	ILE	2.1
69	Y	43	LYS	2.1
79	AR	287	ILE	2.1
4	j	249	THR	2.1

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Mol	Chain	Res	Type	RSRZ
4	AW	153	GLY	2.1
21	BN	34	THR	2.1
24	BQ	43	GLY	2.1
40	CG	50	GLY	2.1
43	CJ	49	GLY	2.1
59	CZ	34	THR	2.1
61	DB	108	GLY	2.1
67	DH	69	THR	2.1
69	Y	4	THR	2.1
8	BA	11	SER	2.1
10	p	206	SER	2.1
27	9	5	SER	2.1
28	BU	94	SER	2.1
45	CL	110	SER	2.1
52	CS	96	SER	2.1
60	P	30	SER	2.1
76	f	34	TYR	2.1
4	AW	47	GLN	2.1
28	BU	106	GLN	2.1
40	CG	17	GLN	2.1
63	DD	82	GLN	2.1
77	g	24	GLN	2.1
17	w	66	ASN	2.1
1	1	1188	C	2.1
1	1	2475	U	2.1
1	AS	1566	U	2.1
23	5	15	PHE	2.1
27	BT	78	PHE	2.1
46	CM	135	C	2.1
46	B	1270	U	2.1
46	CM	1459	U	2.1
54	J	151	ASP	2.1
62	R	24	ASP	2.1
71	DL	64	PHE	2.1
10	p	153	LEU	2.1
18	x	182	LEU	2.1
19	BL	124	LEU	2.1
51	CR	207	LEU	2.1
53	I	77	LEU	2.1
59	O	52	LEU	2.1
60	P	4	MET	2.1
63	S	43	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
73	c	24	LEU	2.1
73	DN	64	LEU	2.1
80	P0	18	LEU	2.1
10	BC	192	HIS	2.1
25	7	131	VAL	2.1
28	BU	29	HIS	2.1
35	CB	59	PRO	2.1
48	D	127	VAL	2.1
50	F	160	HIS	2.1
51	G	35	PRO	2.1
51	G	129	VAL	2.1
51	CR	15	PRO	2.1
55	K	85	PRO	2.1
56	L	96	VAL	2.1
56	L	101	PRO	2.1
63	S	20	HIS	2.1
66	DG	91	HIS	2.1
66	DG	118	PRO	2.1
71	a	24	VAL	2.1
77	DR	27	PRO	2.1
77	DR	58	PRO	2.1
80	p0	105	VAL	2.1
27	9	67	GLU	2.1
37	AJ	95	GLU	2.1
51	G	60	GLU	2.1
51	G	215	GLU	2.1
7	AZ	61	ILE	2.0
10	p	253	ALA	2.0
10	BC	155	ALA	2.0
13	s	114	ILE	2.0
14	t	5	LYS	2.0
17	BJ	171	LYS	2.0
18	x	126	ARG	2.0
18	BK	56	ARG	2.0
26	BS	72	ALA	2.0
35	CB	58	ARG	2.0
26	BS	88	ILE	2.0
36	CC	73	LYS	2.0
45	i	53	LYS	2.0
47	C	65	ALA	2.0
52	H	166	ARG	2.0
52	CS	84	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
55	CV	56	ARG	2.0
59	CZ	128	ALA	2.0
66	V	123	ARG	2.0
66	DG	63	ARG	2.0
65	U	35	ILE	2.0
66	V	75	ALA	2.0
67	DH	31	LYS	2.0
69	DJ	117	ARG	2.0
70	Z	73	ARG	2.0
70	DK	25	ALA	2.0
82	L1	216	ILE	2.0
1	AS	249	G	2.0
1	AS	2066	G	2.0
1	AS	2441	G	2.0
6	l	87	GLY	2.0
28	BU	16	GLY	2.0
54	J	183	GLY	2.0
11	BD	83	THR	2.0
14	BG	119	TYR	2.0
14	BG	146	THR	2.0
52	H	125	THR	2.0
55	CV	97	THR	2.0
63	DD	78	TYR	2.0
15	u	35	GLN	2.0
21	BN	108	GLN	2.0
48	CO	220	GLN	2.0
69	Y	5	SER	2.0
6	AY	91	PHE	2.0
7	AZ	142	PHE	2.0
23	5	98	PHE	2.0
23	BP	98	PHE	2.0
29	BV	68	PHE	2.0
57	M	27	PHE	2.0
61	DB	22	PHE	2.0
82	l1	157	PHE	2.0
60	DA	69	ASN	2.0
82	l1	12	ASN	2.0
7	AZ	171	LEU	2.0
19	BL	166	LEU	2.0
21	BN	148	LEU	2.0
45	CL	111	ASP	2.0
53	CT	216	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
54	J	54	LEU	2.0
54	CU	124	ASP	2.0
56	L	36	LEU	2.0
59	CZ	64	ASP	2.0
82	l1	194	LEU	2.0
1	1	1204	U	2.0
1	1	1560	U	2.0
1	1	1815	U	2.0
1	1	3127	U	2.0
6	l	12	VAL	2.0
8	BA	14	VAL	2.0
10	BC	131	VAL	2.0
35	CB	65	VAL	2.0
1	AS	350	C	2.0
1	AS	1593	C	2.0
37	CD	23	PRO	2.0
38	CE	82	VAL	2.0
47	C	139	VAL	2.0
58	N	123	VAL	2.0
60	DA	65	VAL	2.0
63	DD	21	VAL	2.0
68	DI	59	VAL	2.0
78	h	156	VAL	2.0
82	L1	82	VAL	2.0
6	AY	116	HIS	2.0
26	BS	93	HIS	2.0
46	B	1610	C	2.0
51	CR	8	HIS	2.0
7	m	270	LYS	2.0
7	AZ	25	GLU	2.0
11	q	166	ARG	2.0
14	BG	180	LYS	2.0
21	0	160	LYS	2.0
32	BY	60	LYS	2.0
32	BY	71	ARG	2.0
33	BZ	9	LYS	2.0
35	AH	41	ARG	2.0
36	CC	100	GLU	2.0
40	AM	36	ARG	2.0
42	AO	12	ARG	2.0
45	CL	100	LYS	2.0
45	CL	113	ARG	2.0

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Mol	Chain	Res	Type	RSRZ
47	CN	62	ARG	2.0
48	CO	222	LYS	2.0
51	G	221	ARG	2.0
52	CS	102	ARG	2.0
53	CT	232	GLU	2.0
60	DA	104	LYS	2.0
62	DC	9	LYS	2.0
67	W	29	LYS	2.0
67	W	82	GLU	2.0
67	W	88	ARG	2.0
77	g	53	LYS	2.0
82	L1	24	LYS	2.0
82	L1	102	LYS	2.0
15	BH	49	ALA	2.0
21	BN	116	ALA	2.0
34	AG	14	ILE	2.0
47	C	95	ALA	2.0
47	CN	65	ALA	2.0
51	G	228	ILE	2.0
52	H	199	ILE	2.0
52	CS	177	ILE	2.0
56	L	122	ILE	2.0
59	O	135	ILE	2.0
60	P	38	ILE	2.0
63	S	107	ILE	2.0
63	DD	30	ILE	2.0
66	V	41	ALA	2.0
7	AZ	170	GLY	2.0
14	BG	84	GLY	2.0
47	CN	166	GLY	2.0
52	CS	75	GLY	2.0
63	DD	132	GLY	2.0
69	DJ	127	GLY	2.0
12	r	11	TYR	2.0
18	BK	151	THR	2.0
25	BR	19	THR	2.0
26	BS	54	TYR	2.0
50	CQ	153	TYR	2.0
61	DB	86	THR	2.0
66	DG	52	THR	2.0
67	DH	77	THR	2.0
69	DJ	2	THR	2.0

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Mol	Chain	Res	Type	RSRZ
11	BD	92	PHE	2.0
13	BF	6	GLN	2.0
64	T	28	PHE	2.0
74	DO	47	PHE	2.0
1	1	2518	A	2.0
3	AU	111	A	2.0
10	BC	201	LEU	2.0
13	BF	93	SER	2.0
18	x	115	SER	2.0
27	BT	111	LEU	2.0
35	CB	66	SER	2.0
45	i	35	SER	2.0
46	B	126	A	2.0
50	F	6	LEU	2.0
51	CR	239	LEU	2.0
57	M	76	LEU	2.0
57	CX	80	LEU	2.0
63	DD	37	LEU	2.0
9	o	155	ASN	2.0
45	CL	70	ASN	2.0
71	a	133	ASN	2.0
79	AR	297	ASN	2.0
1	1	1264	G	2.0
1	1	2429	G	2.0
6	AY	9	VAL	2.0
26	BS	106	ASP	2.0
32	BY	107	VAL	2.0
46	B	683	G	2.0
48	CO	65	VAL	2.0
63	S	117	VAL	2.0
73	DN	21	VAL	2.0
10	p	26	PRO	2.0
13	s	45	PRO	2.0
80	P0	78	PRO	2.0
82	l1	121	PRO	2.0
4	j	147	ARG	2.0
4	AW	187	HIS	2.0
10	BC	63	LYS	2.0
19	y	98	LYS	2.0
19	y	168	LYS	2.0
25	BR	60	LYS	2.0
32	AE	36	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
51	CR	255	ARG	2.0
56	CW	120	ARG	2.0
60	DA	140	LYS	2.0
63	DD	86	LYS	2.0
66	DG	110	LYS	2.0
67	W	76	LYS	2.0
69	Y	3	ARG	2.0
82	l1	15	LYS	2.0
7	m	100	ALA	2.0
7	AZ	239	ILE	2.0
21	0	82	GLU	2.0
25	BR	104	ALA	2.0
25	BR	110	ALA	2.0
26	8	67	ILE	2.0
28	BU	49	ALA	2.0
28	BU	129	TRP	2.0
52	H	46	TRP	2.0
54	J	45	ILE	2.0
55	CV	104	ILE	2.0
57	M	23	ALA	2.0
63	S	23	ALA	2.0
63	S	62	ILE	2.0
64	T	17	ILE	2.0
70	DK	28	ALA	2.0
71	DL	75	ILE	2.0
79	AR	45	TRP	2.0
46	CM	1644	U	2.0
79	DT	252	ALA	2.0
1	1	1862	C	2.0
70	DK	91	GLY	2.0
81	12	141	CYS	2.0

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

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

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3628	1/1	0.10	0.25	170,170,170,170	0
83	MG	B	1928	1/1	0.19	0.36	143,143,143,143	0
83	MG	B	1952	1/1	0.32	0.18	75,75,75,75	0
83	MG	I	301	1/1	0.34	0.42	123,123,123,123	0
83	MG	1	3922	1/1	0.35	0.24	84,84,84,84	0
83	MG	1	3594	1/1	0.36	0.36	84,84,84,84	0
83	MG	B	1943	1/1	0.36	0.18	93,93,93,93	0
83	MG	J	201	1/1	0.36	0.18	144,144,144,144	0
83	MG	1	3624	1/1	0.37	0.21	70,70,70,70	0
83	MG	1	3782	1/1	0.47	0.36	68,68,68,68	0
83	MG	1	3903	1/1	0.48	0.17	40,40,40,40	0
83	MG	B	1876	1/1	0.49	0.49	82,82,82,82	0
83	MG	3	211	1/1	0.49	0.29	86,86,86,86	0
83	MG	1	3601	1/1	0.51	0.31	73,73,73,73	0
83	MG	Y	203	1/1	0.51	0.29	89,89,89,89	0
83	MG	1	3915	1/1	0.52	0.16	75,75,75,75	0
83	MG	B	1918	1/1	0.53	0.35	68,68,68,68	0
85	ZN	DO	101	1/1	0.54	0.12	247,247,247,247	0
83	MG	1	3721	1/1	0.55	0.20	101,101,101,101	0
83	MG	AT	203	1/1	0.56	0.38	68,68,68,68	0
83	MG	AD	201	1/1	0.56	0.24	81,81,81,81	0
83	MG	B	1896	1/1	0.57	0.29	59,59,59,59	0
83	MG	1	3856	1/1	0.57	0.28	67,67,67,67	0
83	MG	B	1945	1/1	0.57	0.25	103,103,103,103	0
83	MG	AS	3622	1/1	0.58	0.36	66,66,66,66	0
83	MG	1	3804	1/1	0.59	0.28	63,63,63,63	0
83	MG	AE	202	1/1	0.59	0.16	90,90,90,90	0
83	MG	1	3864	1/1	0.59	0.29	99,99,99,99	0
83	MG	B	1939	1/1	0.60	0.20	117,117,117,117	0
83	MG	1	3809	1/1	0.60	0.26	61,61,61,61	0
83	MG	1	3607	1/1	0.61	0.18	58,58,58,58	0
83	MG	B	1804	1/1	0.61	0.33	74,74,74,74	0
83	MG	0	201	1/1	0.62	0.25	76,76,76,76	0
83	MG	1	3908	1/1	0.62	0.33	59,59,59,59	0
83	MG	1	3801	1/1	0.62	0.27	102,102,102,102	0
83	MG	9	202	1/1	0.63	0.69	65,65,65,65	0
83	MG	AS	3492	1/1	0.63	0.26	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	CL	302	1/1	0.63	0.53	78,78,78,78	0
83	MG	CM	1877	1/1	0.63	0.23	86,86,86,86	0
83	MG	AS	3601	1/1	0.63	0.23	51,51,51,51	0
83	MG	B	1837	1/1	0.64	0.10	319,319,319,319	0
83	MG	AS	3591	1/1	0.64	0.32	85,85,85,85	0
83	MG	1	3696	1/1	0.64	0.15	202,202,202,202	0
83	MG	1	3785	1/1	0.64	0.20	83,83,83,83	0
83	MG	AS	3645	1/1	0.64	0.18	54,54,54,54	0
83	MG	1	3889	1/1	0.64	0.20	58,58,58,58	0
83	MG	1	3926	1/1	0.64	0.16	50,50,50,50	0
83	MG	1	3800	1/1	0.64	0.28	73,73,73,73	0
85	ZN	d	101	1/1	0.64	0.16	257,257,257,257	0
83	MG	AS	3454	1/1	0.64	0.32	59,59,59,59	0
83	MG	B	1823	1/1	0.65	0.34	59,59,59,59	0
83	MG	AT	204	1/1	0.65	0.31	78,78,78,78	0
83	MG	AW	303	1/1	0.65	0.24	53,53,53,53	0
83	MG	1	3917	1/1	0.65	0.14	62,62,62,62	0
83	MG	1	3920	1/1	0.65	0.24	60,60,60,60	0
83	MG	AS	3636	1/1	0.65	0.25	66,66,66,66	0
83	MG	AS	3575	1/1	0.65	0.31	57,57,57,57	0
83	MG	AS	3672	1/1	0.66	0.33	57,57,57,57	0
83	MG	1	3463	1/1	0.66	0.42	57,57,57,57	0
83	MG	1	3758	1/1	0.66	0.43	77,77,77,77	0
83	MG	1	3930	1/1	0.66	0.22	88,88,88,88	0
83	MG	9	203	1/1	0.66	0.33	82,82,82,82	0
83	MG	B	1949	1/1	0.66	0.32	65,65,65,65	0
83	MG	B	1951	1/1	0.66	0.22	77,77,77,77	0
83	MG	AS	3670	1/1	0.66	0.21	62,62,62,62	0
83	MG	1	3819	1/1	0.67	0.28	54,54,54,54	0
83	MG	AS	3522	1/1	0.67	0.53	60,60,60,60	0
83	MG	AS	3535	1/1	0.67	0.27	65,65,65,65	0
83	MG	AS	3571	1/1	0.67	0.18	46,46,46,46	0
83	MG	CM	1819	1/1	0.67	0.32	65,65,65,65	0
83	MG	1	3668	1/1	0.67	0.15	50,50,50,50	0
83	MG	B	1942	1/1	0.67	0.21	79,79,79,79	0
83	MG	AS	3675	1/1	0.67	0.24	64,64,64,64	0
83	MG	1	3727	1/1	0.68	0.19	60,60,60,60	0
83	MG	1	3564	1/1	0.68	0.23	70,70,70,70	0
83	MG	1	3679	1/1	0.68	0.21	70,70,70,70	0
83	MG	AS	3667	1/1	0.68	0.14	44,44,44,44	0
83	MG	B	1817	1/1	0.68	0.33	67,67,67,67	0
83	MG	1	3736	1/1	0.69	0.26	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3846	1/1	0.69	0.13	63,63,63,63	0
83	MG	DA	201	1/1	0.69	0.32	65,65,65,65	0
83	MG	B	1846	1/1	0.69	0.16	70,70,70,70	0
83	MG	1	3731	1/1	0.69	0.36	56,56,56,56	0
83	MG	B	1864	1/1	0.70	0.21	87,87,87,87	0
83	MG	1	3821	1/1	0.70	0.25	44,44,44,44	0
83	MG	B	1936	1/1	0.70	0.23	73,73,73,73	0
83	MG	1	3871	1/1	0.70	0.23	51,51,51,51	0
83	MG	AS	3647	1/1	0.70	0.18	55,55,55,55	0
83	MG	B	1898	1/1	0.70	0.20	75,75,75,75	0
83	MG	1	3583	1/1	0.71	0.21	61,61,61,61	0
83	MG	1	3577	1/1	0.71	0.28	45,45,45,45	0
83	MG	w	302	1/1	0.71	0.25	51,51,51,51	0
83	MG	B	1897	1/1	0.71	0.23	70,70,70,70	0
83	MG	CM	1872	1/1	0.71	0.25	73,73,73,73	0
83	MG	B	1839	1/1	0.71	0.48	74,74,74,74	0
83	MG	CN	301	1/1	0.71	0.30	65,65,65,65	0
83	MG	B	1912	1/1	0.71	0.17	71,71,71,71	0
83	MG	AS	3609	1/1	0.71	0.25	56,56,56,56	0
83	MG	B	1806	1/1	0.71	0.37	67,67,67,67	0
83	MG	1	3565	1/1	0.72	0.31	66,66,66,66	0
83	MG	AS	3587	1/1	0.72	0.26	83,83,83,83	0
83	MG	1	3841	1/1	0.72	0.19	48,48,48,48	0
83	MG	B	1838	1/1	0.72	0.29	47,47,47,47	0
83	MG	4	202	1/1	0.72	0.26	62,62,62,62	0
83	MG	AS	3434	1/1	0.72	0.50	57,57,57,57	0
83	MG	1	3857	1/1	0.73	0.13	59,59,59,59	0
83	MG	1	3581	1/1	0.73	0.27	57,57,57,57	0
83	MG	CJ	202	1/1	0.73	0.24	62,62,62,62	0
83	MG	B	1835	1/1	0.73	0.24	71,71,71,71	0
83	MG	1	3595	1/1	0.73	0.15	57,57,57,57	0
83	MG	1	3754	1/1	0.73	0.28	66,66,66,66	0
83	MG	1	3842	1/1	0.73	0.26	69,69,69,69	0
83	MG	3	202	1/1	0.73	0.18	75,75,75,75	0
83	MG	1	3599	1/1	0.73	0.26	53,53,53,53	0
83	MG	AS	3597	1/1	0.73	0.23	136,136,136,136	0
83	MG	1	3580	1/1	0.73	0.27	71,71,71,71	0
83	MG	AS	3631	1/1	0.74	0.25	49,49,49,49	0
83	MG	1	3722	1/1	0.74	0.29	60,60,60,60	0
83	MG	1	3878	1/1	0.74	0.23	69,69,69,69	0
83	MG	K	301	1/1	0.74	0.16	57,57,57,57	0
83	MG	CM	1854	1/1	0.74	0.29	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3676	1/1	0.74	0.26	81,81,81,81	0
83	MG	1	3808	1/1	0.74	0.30	100,100,100,100	0
83	MG	CM	1885	1/1	0.74	0.29	68,68,68,68	0
83	MG	B	1922	1/1	0.74	0.19	67,67,67,67	0
83	MG	1	3531	1/1	0.74	0.23	43,43,43,43	0
83	MG	AH	203	1/1	0.74	0.32	77,77,77,77	0
83	MG	AS	3533	1/1	0.74	0.27	59,59,59,59	0
83	MG	AS	3611	1/1	0.75	0.25	55,55,55,55	0
83	MG	1	3450	1/1	0.75	0.37	45,45,45,45	0
83	MG	1	3614	1/1	0.75	0.33	73,73,73,73	0
83	MG	AS	3634	1/1	0.75	0.33	66,66,66,66	0
83	MG	1	3671	1/1	0.75	0.21	61,61,61,61	0
83	MG	1	3598	1/1	0.75	0.37	75,75,75,75	0
85	ZN	CB	201	1/1	0.75	0.14	235,235,235,235	0
83	MG	CM	1866	1/1	0.75	0.24	68,68,68,68	0
83	MG	AS	3623	1/1	0.76	0.21	59,59,59,59	0
83	MG	AS	3628	1/1	0.76	0.34	64,64,64,64	0
83	MG	B	1831	1/1	0.76	0.43	52,52,52,52	0
83	MG	1	3623	1/1	0.76	0.21	56,56,56,56	0
83	MG	CM	1834	1/1	0.76	0.32	49,49,49,49	0
83	MG	3	212	1/1	0.76	0.22	60,60,60,60	0
83	MG	AS	3642	1/1	0.76	0.22	58,58,58,58	0
83	MG	CM	1870	1/1	0.76	0.27	91,91,91,91	0
83	MG	AS	3583	1/1	0.76	0.21	59,59,59,59	0
83	MG	1	3684	1/1	0.76	0.22	86,86,86,86	0
83	MG	1	3923	1/1	0.76	0.36	64,64,64,64	0
83	MG	1	3432	1/1	0.76	0.27	59,59,59,59	0
83	MG	AS	3520	1/1	0.76	0.39	53,53,53,53	0
83	MG	1	3449	1/1	0.76	0.25	43,43,43,43	0
83	MG	1	3794	1/1	0.76	0.17	42,42,42,42	0
83	MG	AS	3534	1/1	0.76	0.34	64,64,64,64	0
83	MG	BH	201	1/1	0.77	0.17	52,52,52,52	0
83	MG	BN	201	1/1	0.77	0.09	71,71,71,71	0
83	MG	BZ	203	1/1	0.77	0.19	88,88,88,88	0
83	MG	1	3563	1/1	0.77	0.21	52,52,52,52	0
83	MG	B	1895	1/1	0.77	0.14	55,55,55,55	0
83	MG	3	208	1/1	0.77	0.30	74,74,74,74	0
83	MG	CM	1822	1/1	0.77	0.21	51,51,51,51	0
83	MG	1	3858	1/1	0.77	0.22	79,79,79,79	0
83	MG	1	3836	1/1	0.77	0.24	81,81,81,81	0
83	MG	B	1902	1/1	0.77	0.25	94,94,94,94	0
83	MG	B	1903	1/1	0.77	0.21	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3847	1/1	0.77	0.43	63,63,63,63	0
83	MG	B	1916	1/1	0.77	0.31	66,66,66,66	0
83	MG	4	205	1/1	0.77	0.16	39,39,39,39	0
83	MG	1	3928	1/1	0.77	0.15	52,52,52,52	0
83	MG	1	3592	1/1	0.77	0.33	64,64,64,64	0
83	MG	B	1866	1/1	0.77	0.28	73,73,73,73	0
83	MG	AS	3490	1/1	0.77	0.28	55,55,55,55	0
83	MG	B	1937	1/1	0.77	0.16	56,56,56,56	0
83	MG	j	302	1/1	0.78	0.18	69,69,69,69	0
83	MG	B	1832	1/1	0.78	0.36	63,63,63,63	0
83	MG	1	3569	1/1	0.78	0.23	48,48,48,48	0
83	MG	B	1907	1/1	0.78	0.46	56,56,56,56	0
83	MG	1	3905	1/1	0.78	0.13	39,39,39,39	0
83	MG	1	3755	1/1	0.78	0.28	63,63,63,63	0
83	MG	Q	203	1/1	0.78	0.25	64,64,64,64	0
83	MG	1	3931	1/1	0.78	0.17	71,71,71,71	0
83	MG	1	3575	1/1	0.78	0.24	65,65,65,65	0
83	MG	B	1861	1/1	0.78	0.19	83,83,83,83	0
83	MG	AS	3461	1/1	0.78	0.33	63,63,63,63	0
83	MG	B	1934	1/1	0.78	0.17	98,98,98,98	0
83	MG	1	3539	1/1	0.78	0.25	55,55,55,55	0
83	MG	AS	3509	1/1	0.78	0.24	63,63,63,63	0
83	MG	1	3883	1/1	0.78	0.24	46,46,46,46	0
83	MG	1	3921	1/1	0.78	0.29	68,68,68,68	0
83	MG	AS	3530	1/1	0.78	0.27	38,38,38,38	0
83	MG	1	3453	1/1	0.78	0.17	46,46,46,46	0
83	MG	4	203	1/1	0.78	0.32	69,69,69,69	0
83	MG	1	3900	1/1	0.78	0.29	52,52,52,52	0
83	MG	AS	3536	1/1	0.78	0.30	76,76,76,76	0
83	MG	AS	3540	1/1	0.78	0.21	42,42,42,42	0
83	MG	AS	3481	1/1	0.79	0.27	96,96,96,96	0
83	MG	AS	3643	1/1	0.79	0.21	37,37,37,37	0
83	MG	B	1844	1/1	0.79	0.12	67,67,67,67	0
83	MG	1	3894	1/1	0.79	0.20	73,73,73,73	0
83	MG	CM	1840	1/1	0.79	0.19	48,48,48,48	0
83	MG	B	1830	1/1	0.79	0.30	59,59,59,59	0
83	MG	AS	3514	1/1	0.79	0.34	63,63,63,63	0
83	MG	1	3815	1/1	0.79	0.18	73,73,73,73	0
83	MG	1	3576	1/1	0.79	0.30	69,69,69,69	0
83	MG	CM	1876	1/1	0.79	0.30	38,38,38,38	0
83	MG	1	3527	1/1	0.79	0.16	56,56,56,56	0
83	MG	AS	3419	1/1	0.79	0.30	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AS	3421	1/1	0.79	0.52	50,50,50,50	0
83	MG	1	3814	1/1	0.79	0.24	54,54,54,54	0
85	ZN	AP	201	1/1	0.79	0.20	209,209,209,209	0
83	MG	1	3925	1/1	0.79	0.20	73,73,73,73	0
83	MG	1	3892	1/1	0.79	0.15	50,50,50,50	0
85	ZN	CJ	201	1/1	0.79	0.18	222,222,222,222	0
83	MG	AS	3466	1/1	0.79	0.16	58,58,58,58	0
83	MG	BF	201	1/1	0.80	0.15	70,70,70,70	0
83	MG	AS	3592	1/1	0.80	0.25	62,62,62,62	0
83	MG	1	3681	1/1	0.80	0.20	35,35,35,35	0
83	MG	AS	3483	1/1	0.80	0.15	54,54,54,54	0
83	MG	m	301	1/1	0.80	0.16	65,65,65,65	0
83	MG	1	3518	1/1	0.80	0.23	60,60,60,60	0
83	MG	AS	3493	1/1	0.80	0.17	50,50,50,50	0
83	MG	1	3686	1/1	0.80	0.09	100,100,100,100	0
83	MG	AS	3625	1/1	0.80	0.19	85,85,85,85	0
83	MG	1	3691	1/1	0.80	0.25	87,87,87,87	0
83	MG	B	1953	1/1	0.80	0.29	60,60,60,60	0
83	MG	1	3641	1/1	0.80	0.38	56,56,56,56	0
83	MG	1	3784	1/1	0.80	0.25	51,51,51,51	0
83	MG	1	3869	1/1	0.80	0.14	66,66,66,66	0
83	MG	AG	202	1/1	0.80	0.14	56,56,56,56	0
83	MG	1	3579	1/1	0.80	0.13	38,38,38,38	0
83	MG	1	3876	1/1	0.80	0.12	45,45,45,45	0
83	MG	1	3558	1/1	0.80	0.30	68,68,68,68	0
83	MG	1	3460	1/1	0.80	0.30	41,41,41,41	0
83	MG	B	1887	1/1	0.80	0.34	74,74,74,74	0
83	MG	AS	3458	1/1	0.80	0.23	80,80,80,80	0
83	MG	B	1892	1/1	0.80	0.50	64,64,64,64	0
83	MG	AS	3589	1/1	0.80	0.27	51,51,51,51	0
83	MG	1	3417	1/1	0.80	0.22	41,41,41,41	0
83	MG	1	3574	1/1	0.81	0.25	55,55,55,55	0
83	MG	1	3818	1/1	0.81	0.17	46,46,46,46	0
83	MG	AS	3584	1/1	0.81	0.19	46,46,46,46	0
83	MG	AS	3586	1/1	0.81	0.28	52,52,52,52	0
83	MG	1	3932	1/1	0.81	0.18	71,71,71,71	0
83	MG	1	3521	1/1	0.81	0.30	52,52,52,52	0
83	MG	AS	3480	1/1	0.81	0.23	52,52,52,52	0
83	MG	1	3465	1/1	0.81	0.21	45,45,45,45	0
83	MG	1	3728	1/1	0.81	0.11	54,54,54,54	0
83	MG	AS	3599	1/1	0.81	0.29	61,61,61,61	0
83	MG	1	3609	1/1	0.81	0.16	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	CM	1806	1/1	0.81	0.18	52,52,52,52	0
83	MG	B	1911	1/1	0.81	0.30	63,63,63,63	0
83	MG	B	1860	1/1	0.81	0.15	68,68,68,68	0
83	MG	AS	3496	1/1	0.81	0.25	49,49,49,49	0
83	MG	B	1914	1/1	0.81	0.15	56,56,56,56	0
83	MG	1	3650	1/1	0.81	0.31	55,55,55,55	0
83	MG	CM	1864	1/1	0.81	0.27	67,67,67,67	0
83	MG	1	3418	1/1	0.81	0.12	47,47,47,47	0
83	MG	L	201	1/1	0.81	0.38	73,73,73,73	0
83	MG	1	3618	1/1	0.81	0.26	55,55,55,55	0
83	MG	B	1923	1/1	0.81	0.20	78,78,78,78	0
83	MG	AS	3641	1/1	0.81	0.23	63,63,63,63	0
83	MG	CM	1883	1/1	0.81	0.27	63,63,63,63	0
83	MG	CM	1884	1/1	0.81	0.14	46,46,46,46	0
83	MG	a	201	1/1	0.81	0.14	75,75,75,75	0
83	MG	1	3717	1/1	0.81	0.20	54,54,54,54	0
83	MG	AS	3644	1/1	0.81	0.25	54,54,54,54	0
85	ZN	AH	201	1/1	0.81	0.09	179,179,179,179	0
83	MG	1	3899	1/1	0.81	0.22	59,59,59,59	0
83	MG	1	3767	1/1	0.81	0.23	36,36,36,36	0
83	MG	AS	3662	1/1	0.81	0.16	103,103,103,103	0
83	MG	AS	3541	1/1	0.81	0.24	40,40,40,40	0
83	MG	AS	3450	1/1	0.81	0.25	32,32,32,32	0
83	MG	1	3797	1/1	0.82	0.40	52,52,52,52	0
83	MG	1	3737	1/1	0.82	0.19	29,29,29,29	0
83	MG	1	3703	1/1	0.82	0.13	63,63,63,63	0
83	MG	AS	3500	1/1	0.82	0.23	63,63,63,63	0
83	MG	G	301	1/1	0.82	0.20	66,66,66,66	0
83	MG	CM	1813	1/1	0.82	0.40	60,60,60,60	0
83	MG	CM	1817	1/1	0.82	0.29	38,38,38,38	0
83	MG	1	3543	1/1	0.82	0.21	52,52,52,52	0
83	MG	1	3891	1/1	0.82	0.21	75,75,75,75	0
83	MG	1	3633	1/1	0.82	0.26	45,45,45,45	0
83	MG	0	203	1/1	0.82	0.20	55,55,55,55	0
83	MG	B	1841	1/1	0.82	0.23	48,48,48,48	0
83	MG	1	3893	1/1	0.82	0.18	50,50,50,50	0
83	MG	1	3929	1/1	0.82	0.23	71,71,71,71	0
83	MG	B	1855	1/1	0.82	0.17	71,71,71,71	0
83	MG	1	3852	1/1	0.82	0.17	64,64,64,64	0
83	MG	AS	3427	1/1	0.82	0.22	66,66,66,66	0
83	MG	1	3765	1/1	0.82	0.23	38,38,38,38	0
83	MG	1	3497	1/1	0.82	0.28	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	B	1935	1/1	0.82	0.22	88,88,88,88	0
83	MG	1	3584	1/1	0.82	0.21	54,54,54,54	0
83	MG	CM	1901	1/1	0.82	0.12	45,45,45,45	0
83	MG	1	3481	1/1	0.82	0.33	41,41,41,41	0
83	MG	CP	301	1/1	0.82	0.25	41,41,41,41	0
83	MG	B	1885	1/1	0.82	0.17	92,92,92,92	0
83	MG	AS	3470	1/1	0.82	0.27	72,72,72,72	0
83	MG	1	3488	1/1	0.82	0.17	56,56,56,56	0
83	MG	AT	210	1/1	0.82	0.25	69,69,69,69	0
83	MG	B	1814	1/1	0.82	0.37	64,64,64,64	0
83	MG	1	3673	1/1	0.82	0.15	59,59,59,59	0
83	MG	1	3875	1/1	0.82	0.14	53,53,53,53	0
83	MG	AS	3521	1/1	0.83	0.32	56,56,56,56	0
83	MG	B	1882	1/1	0.83	0.20	36,36,36,36	0
83	MG	AG	201	1/1	0.83	0.21	80,80,80,80	0
83	MG	1	3790	1/1	0.83	0.28	52,52,52,52	0
83	MG	1	3620	1/1	0.83	0.17	44,44,44,44	0
83	MG	1	3795	1/1	0.83	0.19	45,45,45,45	0
83	MG	1	3652	1/1	0.83	0.23	70,70,70,70	0
83	MG	1	3896	1/1	0.83	0.21	49,49,49,49	0
83	MG	BE	303	1/1	0.83	0.11	45,45,45,45	0
83	MG	B	1816	1/1	0.83	0.33	63,63,63,63	0
83	MG	1	3622	1/1	0.83	0.26	47,47,47,47	0
83	MG	BJ	302	1/1	0.83	0.22	61,61,61,61	0
83	MG	1	3738	1/1	0.83	0.32	24,24,24,24	0
83	MG	AS	3413	1/1	0.83	0.19	51,51,51,51	0
83	MG	1	3405	1/1	0.83	0.38	40,40,40,40	0
83	MG	1	3468	1/1	0.83	0.31	50,50,50,50	0
83	MG	1	3863	1/1	0.83	0.13	62,62,62,62	0
83	MG	1	3626	1/1	0.83	0.19	60,60,60,60	0
83	MG	4	207	1/1	0.83	0.19	48,48,48,48	0
83	MG	1	3540	1/1	0.83	0.34	51,51,51,51	0
83	MG	AS	3593	1/1	0.83	0.09	41,41,41,41	0
83	MG	CM	1823	1/1	0.83	0.26	41,41,41,41	0
83	MG	AS	3455	1/1	0.83	0.42	46,46,46,46	0
83	MG	k	403	1/1	0.83	0.18	60,60,60,60	0
83	MG	AS	3459	1/1	0.83	0.20	63,63,63,63	0
83	MG	CM	1861	1/1	0.83	0.36	50,50,50,50	0
83	MG	B	1840	1/1	0.83	0.24	75,75,75,75	0
83	MG	1	3870	1/1	0.83	0.26	50,50,50,50	0
83	MG	AS	3469	1/1	0.83	0.31	54,54,54,54	0
83	MG	1	3724	1/1	0.83	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
83	MG	1	3470	1/1	0.83	0.23	37,37,37,37	0
83	MG	1	3619	1/1	0.83	0.15	44,44,44,44	0
83	MG	1	3924	1/1	0.83	0.32	67,67,67,67	0
83	MG	AS	3633	1/1	0.83	0.25	99,99,99,99	0
83	MG	1	3729	1/1	0.83	0.28	53,53,53,53	0
83	MG	CM	1893	1/1	0.83	0.29	37,37,37,37	0
83	MG	B	1941	1/1	0.83	0.11	86,86,86,86	0
83	MG	1	3788	1/1	0.83	0.21	48,48,48,48	0
83	MG	AE	201	1/1	0.83	0.13	88,88,88,88	0
83	MG	B	1872	1/1	0.83	0.28	70,70,70,70	0
83	MG	DB	203	1/1	0.83	0.23	56,56,56,56	0
83	MG	B	1946	1/1	0.83	0.27	69,69,69,69	0
83	MG	1	3839	1/1	0.83	0.16	43,43,43,43	0
83	MG	AS	3518	1/1	0.83	0.27	36,36,36,36	0
83	MG	AS	3651	1/1	0.83	0.18	59,59,59,59	0
83	MG	B	1878	1/1	0.83	0.25	60,60,60,60	0
83	MG	AS	3665	1/1	0.83	0.43	63,63,63,63	0
83	MG	2	201	1/1	0.84	0.30	102,102,102,102	0
83	MG	1	3726	1/1	0.84	0.21	53,53,53,53	0
83	MG	B	1857	1/1	0.84	0.11	55,55,55,55	0
83	MG	AU	201	1/1	0.84	0.17	66,66,66,66	0
83	MG	1	3544	1/1	0.84	0.25	46,46,46,46	0
83	MG	1	3647	1/1	0.84	0.26	50,50,50,50	0
83	MG	1	3825	1/1	0.84	0.14	29,29,29,29	0
83	MG	1	3826	1/1	0.84	0.26	47,47,47,47	0
83	MG	1	3550	1/1	0.84	0.21	57,57,57,57	0
83	MG	1	3730	1/1	0.84	0.29	48,48,48,48	0
83	MG	1	3445	1/1	0.84	0.36	53,53,53,53	0
83	MG	AS	3596	1/1	0.84	0.28	56,56,56,56	0
83	MG	B	1881	1/1	0.84	0.22	64,64,64,64	0
83	MG	AS	3598	1/1	0.84	0.16	74,74,74,74	0
83	MG	CM	1808	1/1	0.84	0.35	91,91,91,91	0
83	MG	CM	1809	1/1	0.84	0.31	95,95,95,95	0
83	MG	1	3734	1/1	0.84	0.52	59,59,59,59	0
83	MG	1	3419	1/1	0.84	0.14	56,56,56,56	0
83	MG	AS	3606	1/1	0.84	0.11	52,52,52,52	0
83	MG	B	1809	1/1	0.84	0.25	50,50,50,50	0
83	MG	1	3586	1/1	0.84	0.14	64,64,64,64	0
83	MG	1	3591	1/1	0.84	0.20	51,51,51,51	0
83	MG	1	3745	1/1	0.84	0.21	45,45,45,45	0
83	MG	CM	1848	1/1	0.84	0.24	46,46,46,46	0
83	MG	CM	1853	1/1	0.84	0.14	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AS	3504	1/1	0.84	0.30	37,37,37,37	0
83	MG	AS	3505	1/1	0.84	0.34	59,59,59,59	0
83	MG	1	3803	1/1	0.84	0.18	39,39,39,39	0
83	MG	1	3750	1/1	0.84	0.12	46,46,46,46	0
83	MG	AS	3516	1/1	0.84	0.25	43,43,43,43	0
83	MG	AS	3517	1/1	0.84	0.33	50,50,50,50	0
83	MG	B	1900	1/1	0.84	0.28	88,88,88,88	0
83	MG	1	3805	1/1	0.84	0.21	45,45,45,45	0
83	MG	CM	1879	1/1	0.84	0.22	54,54,54,54	0
83	MG	1	3718	1/1	0.84	0.14	43,43,43,43	0
83	MG	k	404	1/1	0.84	0.23	80,80,80,80	0
83	MG	1	3438	1/1	0.84	0.21	31,31,31,31	0
83	MG	o	301	1/1	0.84	0.17	42,42,42,42	0
83	MG	AS	3649	1/1	0.84	0.15	76,76,76,76	0
83	MG	r	303	1/1	0.84	0.14	53,53,53,53	0
83	MG	AS	3661	1/1	0.84	0.27	71,71,71,71	0
83	MG	1	3530	1/1	0.84	0.28	54,54,54,54	0
83	MG	DB	202	1/1	0.84	0.24	77,77,77,77	0
83	MG	1	3680	1/1	0.84	0.25	34,34,34,34	0
83	MG	1	3817	1/1	0.84	0.13	31,31,31,31	0
83	MG	AS	3669	1/1	0.84	0.15	64,64,64,64	0
83	MG	AS	3437	1/1	0.84	0.21	48,48,48,48	0
83	MG	AS	3559	1/1	0.84	0.31	46,46,46,46	0
83	MG	AS	3674	1/1	0.84	0.14	49,49,49,49	0
83	MG	AS	3567	1/1	0.84	0.23	34,34,34,34	0
83	MG	4	201	1/1	0.85	0.16	76,76,76,76	0
83	MG	1	3822	1/1	0.85	0.25	52,52,52,52	0
83	MG	1	3773	1/1	0.85	0.24	39,39,39,39	0
83	MG	CA	201	1/1	0.85	0.11	56,56,56,56	0
83	MG	AS	3621	1/1	0.85	0.26	60,60,60,60	0
83	MG	1	3687	1/1	0.85	0.23	64,64,64,64	0
83	MG	CM	1804	1/1	0.85	0.30	40,40,40,40	0
83	MG	1	3832	1/1	0.85	0.14	36,36,36,36	0
83	MG	4	211	1/1	0.85	0.10	68,68,68,68	0
83	MG	1	3526	1/1	0.85	0.23	53,53,53,53	0
83	MG	B	1825	1/1	0.85	0.30	57,57,57,57	0
83	MG	1	3918	1/1	0.85	0.10	67,67,67,67	0
83	MG	1	3694	1/1	0.85	0.28	29,29,29,29	0
83	MG	1	3840	1/1	0.85	0.22	49,49,49,49	0
83	MG	1	3786	1/1	0.85	0.13	40,40,40,40	0
83	MG	B	1906	1/1	0.85	0.12	46,46,46,46	0
83	MG	CM	1839	1/1	0.85	0.45	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	B	1836	1/1	0.85	0.21	49,49,49,49	0
83	MG	B	1909	1/1	0.85	0.10	62,62,62,62	0
83	MG	1	3881	1/1	0.85	0.16	64,64,64,64	0
83	MG	AS	3646	1/1	0.85	0.11	49,49,49,49	0
83	MG	AS	3433	1/1	0.85	0.29	31,31,31,31	0
83	MG	AS	3648	1/1	0.85	0.11	58,58,58,58	0
83	MG	1	3882	1/1	0.85	0.24	49,49,49,49	0
83	MG	AS	3545	1/1	0.85	0.14	49,49,49,49	0
83	MG	AS	3655	1/1	0.85	0.20	49,49,49,49	0
83	MG	1	3503	1/1	0.85	0.36	48,48,48,48	0
83	MG	1	3653	1/1	0.85	0.12	40,40,40,40	0
83	MG	1	3646	1/1	0.85	0.19	48,48,48,48	0
83	MG	8	202	1/1	0.85	0.19	60,60,60,60	0
83	MG	1	3850	1/1	0.85	0.15	54,54,54,54	0
83	MG	B	1850	1/1	0.85	0.18	43,43,43,43	0
83	MG	CM	1890	1/1	0.85	0.34	38,38,38,38	0
83	MG	1	3682	1/1	0.85	0.09	61,61,61,61	0
83	MG	CM	1895	1/1	0.85	0.26	47,47,47,47	0
83	MG	CM	1896	1/1	0.85	0.29	40,40,40,40	0
83	MG	AB	201	1/1	0.85	0.19	57,57,57,57	0
83	MG	1	3524	1/1	0.85	0.21	43,43,43,43	0
83	MG	1	3799	1/1	0.85	0.34	68,68,68,68	0
83	MG	1	3897	1/1	0.85	0.23	53,53,53,53	0
83	MG	AT	207	1/1	0.85	0.20	58,58,58,58	0
83	MG	AT	209	1/1	0.85	0.29	51,51,51,51	0
83	MG	B	1940	1/1	0.85	0.18	83,83,83,83	0
83	MG	1	3649	1/1	0.85	0.12	38,38,38,38	0
83	MG	1	3862	1/1	0.85	0.14	56,56,56,56	0
85	ZN	h	201	1/1	0.85	0.10	228,228,228,228	0
83	MG	1	3901	1/1	0.85	0.17	41,41,41,41	0
83	MG	i	301	1/1	0.85	0.23	54,54,54,54	0
83	MG	B	1879	1/1	0.85	0.24	43,43,43,43	0
83	MG	1	3499	1/1	0.86	0.26	33,33,33,33	0
83	MG	AS	3501	1/1	0.86	0.24	49,49,49,49	0
83	MG	B	1927	1/1	0.86	0.15	49,49,49,49	0
83	MG	AS	3411	1/1	0.86	0.33	25,25,25,25	0
83	MG	1	3630	1/1	0.86	0.23	46,46,46,46	0
83	MG	1	3443	1/1	0.86	0.24	56,56,56,56	0
83	MG	1	3637	1/1	0.86	0.10	39,39,39,39	0
83	MG	CM	1858	1/1	0.86	0.13	35,35,35,35	0
83	MG	1	3638	1/1	0.86	0.14	48,48,48,48	0
83	MG	CM	1863	1/1	0.86	0.35	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AS	3428	1/1	0.86	0.21	32,32,32,32	0
83	MG	1	3454	1/1	0.86	0.30	26,26,26,26	0
83	MG	AS	3617	1/1	0.86	0.20	55,55,55,55	0
83	MG	1	3700	1/1	0.86	0.09	49,49,49,49	0
83	MG	1	3559	1/1	0.86	0.21	64,64,64,64	0
83	MG	s	201	1/1	0.86	0.24	52,52,52,52	0
83	MG	v	304	1/1	0.86	0.23	76,76,76,76	0
83	MG	BB	303	1/1	0.86	0.17	38,38,38,38	0
83	MG	BB	304	1/1	0.86	0.35	71,71,71,71	0
83	MG	1	3427	1/1	0.86	0.29	30,30,30,30	0
83	MG	B	1944	1/1	0.86	0.09	87,87,87,87	0
83	MG	x	201	1/1	0.86	0.34	28,28,28,28	0
83	MG	1	3774	1/1	0.86	0.15	50,50,50,50	0
83	MG	1	3781	1/1	0.86	0.26	32,32,32,32	0
83	MG	BZ	202	1/1	0.86	0.37	64,64,64,64	0
83	MG	AS	3543	1/1	0.86	0.29	53,53,53,53	0
83	MG	1	3861	1/1	0.86	0.12	81,81,81,81	0
83	MG	CQ	301	1/1	0.86	0.24	57,57,57,57	0
83	MG	2	202	1/1	0.86	0.23	52,52,52,52	0
83	MG	AS	3471	1/1	0.86	0.26	48,48,48,48	0
83	MG	B	1869	1/1	0.86	0.25	55,55,55,55	0
83	MG	B	1826	1/1	0.86	0.18	51,51,51,51	0
83	MG	B	1915	1/1	0.86	0.17	59,59,59,59	0
83	MG	1	3433	1/1	0.86	0.29	33,33,33,33	0
83	MG	1	3431	1/1	0.86	0.20	42,42,42,42	0
83	MG	B	1919	1/1	0.86	0.25	72,72,72,72	0
83	MG	1	3837	1/1	0.86	0.22	61,61,61,61	0
83	MG	AS	3498	1/1	0.86	0.13	25,25,25,25	0
83	MG	R	201	1/1	0.87	0.16	92,92,92,92	0
83	MG	Y	202	1/1	0.87	0.26	85,85,85,85	0
83	MG	B	1913	1/1	0.87	0.17	62,62,62,62	0
83	MG	1	3887	1/1	0.87	0.10	32,32,32,32	0
83	MG	AR	401	1/1	0.87	0.31	73,73,73,73	0
83	MG	AF	201	1/1	0.87	0.10	46,46,46,46	0
83	MG	1	3483	1/1	0.87	0.23	54,54,54,54	0
83	MG	1	3629	1/1	0.87	0.25	37,37,37,37	0
83	MG	1	3406	1/1	0.87	0.31	33,33,33,33	0
83	MG	AS	3524	1/1	0.87	0.12	46,46,46,46	0
83	MG	CM	1829	1/1	0.87	0.30	47,47,47,47	0
83	MG	AM	102	1/1	0.87	0.11	58,58,58,58	0
83	MG	CM	1835	1/1	0.87	0.27	62,62,62,62	0
83	MG	1	3455	1/1	0.87	0.23	31,31,31,31	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3475	1/1	0.87	0.15	50,50,50,50	0
83	MG	CM	1844	1/1	0.87	0.14	18,18,18,18	0
83	MG	1	3457	1/1	0.87	0.31	21,21,21,21	0
83	MG	1	3697	1/1	0.87	0.15	55,55,55,55	0
83	MG	AS	3440	1/1	0.87	0.27	47,47,47,47	0
83	MG	AS	3441	1/1	0.87	0.33	52,52,52,52	0
83	MG	1	3640	1/1	0.87	0.14	51,51,51,51	0
83	MG	AS	3544	1/1	0.87	0.21	56,56,56,56	0
83	MG	v	301	1/1	0.87	0.22	39,39,39,39	0
83	MG	AS	3557	1/1	0.87	0.27	49,49,49,49	0
83	MG	1	3504	1/1	0.87	0.19	43,43,43,43	0
83	MG	AS	3565	1/1	0.87	0.21	46,46,46,46	0
83	MG	1	3706	1/1	0.87	0.23	42,42,42,42	0
83	MG	B	1884	1/1	0.87	0.13	81,81,81,81	0
83	MG	B	1824	1/1	0.87	0.20	36,36,36,36	0
83	MG	AS	3579	1/1	0.87	0.33	51,51,51,51	0
83	MG	AS	3462	1/1	0.87	0.31	43,43,43,43	0
83	MG	1	3873	1/1	0.87	0.16	41,41,41,41	0
83	MG	x	203	1/1	0.87	0.15	62,62,62,62	0
83	MG	z	201	1/1	0.87	0.12	69,69,69,69	0
83	MG	3	203	1/1	0.87	0.28	46,46,46,46	0
83	MG	AS	3473	1/1	0.87	0.25	45,45,45,45	0
83	MG	1	3570	1/1	0.87	0.30	47,47,47,47	0
83	MG	CM	1903	1/1	0.87	0.13	43,43,43,43	0
83	MG	AU	202	1/1	0.87	0.23	50,50,50,50	0
83	MG	0	205	1/1	0.87	0.22	59,59,59,59	0
83	MG	3	209	1/1	0.87	0.25	54,54,54,54	0
83	MG	B	1901	1/1	0.87	0.16	50,50,50,50	0
83	MG	1	3813	1/1	0.87	0.11	64,64,64,64	0
83	MG	1	3914	1/1	0.87	0.13	49,49,49,49	0
83	MG	3	213	1/1	0.87	0.22	69,69,69,69	0
83	MG	1	3556	1/1	0.87	0.12	64,64,64,64	0
83	MG	1	3787	1/1	0.87	0.24	47,47,47,47	0
83	MG	AS	3610	1/1	0.87	0.15	31,31,31,31	0
83	MG	1	3720	1/1	0.87	0.18	45,45,45,45	0
83	MG	AS	3503	1/1	0.87	0.39	58,58,58,58	0
83	MG	1	3585	1/1	0.87	0.19	47,47,47,47	0
83	MG	1	3919	1/1	0.88	0.14	58,58,58,58	0
83	MG	AS	3572	1/1	0.88	0.18	65,65,65,65	0
83	MG	1	3702	1/1	0.88	0.09	46,46,46,46	0
83	MG	1	3422	1/1	0.88	0.36	28,28,28,28	0
83	MG	AS	3580	1/1	0.88	0.30	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AS	3449	1/1	0.88	0.20	42,42,42,42	0
83	MG	1	3621	1/1	0.88	0.14	60,60,60,60	0
83	MG	1	3423	1/1	0.88	0.25	61,61,61,61	0
83	MG	1	3872	1/1	0.88	0.14	51,51,51,51	0
83	MG	BV	201	1/1	0.88	0.28	39,39,39,39	0
83	MG	1	3660	1/1	0.88	0.20	37,37,37,37	0
83	MG	B	1842	1/1	0.88	0.18	32,32,32,32	0
83	MG	B	1925	1/1	0.88	0.10	53,53,53,53	0
83	MG	1	3566	1/1	0.88	0.24	25,25,25,25	0
83	MG	1	3927	1/1	0.88	0.31	46,46,46,46	0
83	MG	1	3484	1/1	0.88	0.15	44,44,44,44	0
83	MG	1	3823	1/1	0.88	0.12	34,34,34,34	0
83	MG	B	1856	1/1	0.88	0.14	53,53,53,53	0
83	MG	AS	3600	1/1	0.88	0.34	51,51,51,51	0
83	MG	1	3467	1/1	0.88	0.29	62,62,62,62	0
83	MG	1	3627	1/1	0.88	0.15	57,57,57,57	0
83	MG	1	3573	1/1	0.88	0.15	40,40,40,40	0
83	MG	1	3835	1/1	0.88	0.16	49,49,49,49	0
83	MG	AS	3486	1/1	0.88	0.26	30,30,30,30	0
83	MG	1	3545	1/1	0.88	0.10	38,38,38,38	0
83	MG	CM	1833	1/1	0.88	0.26	54,54,54,54	0
83	MG	AS	3618	1/1	0.88	0.14	49,49,49,49	0
83	MG	AS	3620	1/1	0.88	0.16	45,45,45,45	0
83	MG	CM	1837	1/1	0.88	0.32	56,56,56,56	0
83	MG	1	3548	1/1	0.88	0.28	40,40,40,40	0
83	MG	1	3631	1/1	0.88	0.10	30,30,30,30	0
83	MG	1	3792	1/1	0.88	0.45	37,37,37,37	0
83	MG	1	3525	1/1	0.88	0.26	58,58,58,58	0
83	MG	CM	1849	1/1	0.88	0.37	48,48,48,48	0
83	MG	1	3551	1/1	0.88	0.18	50,50,50,50	0
83	MG	AS	3630	1/1	0.88	0.14	64,64,64,64	0
83	MG	B	1950	1/1	0.88	0.18	67,67,67,67	0
83	MG	1	3602	1/1	0.88	0.22	50,50,50,50	0
83	MG	1	3688	1/1	0.88	0.17	33,33,33,33	0
83	MG	1	3690	1/1	0.88	0.15	47,47,47,47	0
83	MG	AS	3637	1/1	0.88	0.20	51,51,51,51	0
83	MG	D	301	1/1	0.88	0.28	61,61,61,61	0
83	MG	AS	3511	1/1	0.88	0.20	41,41,41,41	0
83	MG	1	3494	1/1	0.88	0.19	66,66,66,66	0
83	MG	B	1886	1/1	0.88	0.18	77,77,77,77	0
83	MG	CM	1878	1/1	0.88	0.24	47,47,47,47	0
83	MG	B	1805	1/1	0.88	0.23	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	B	1891	1/1	0.88	0.18	52,52,52,52	0
83	MG	1	3439	1/1	0.88	0.24	35,35,35,35	0
83	MG	1	3747	1/1	0.88	0.19	47,47,47,47	0
83	MG	B	1813	1/1	0.88	0.23	62,62,62,62	0
83	MG	1	3459	1/1	0.88	0.12	39,39,39,39	0
83	MG	AS	3529	1/1	0.88	0.27	41,41,41,41	0
83	MG	AS	3658	1/1	0.88	0.14	59,59,59,59	0
83	MG	j	303	1/1	0.88	0.21	23,23,23,23	0
83	MG	j	304	1/1	0.88	0.18	55,55,55,55	0
83	MG	1	3909	1/1	0.88	0.17	40,40,40,40	0
83	MG	1	3912	1/1	0.88	0.06	60,60,60,60	0
83	MG	1	3860	1/1	0.88	0.25	58,58,58,58	0
83	MG	AS	3414	1/1	0.88	0.40	65,65,65,65	0
83	MG	1	3751	1/1	0.88	0.11	48,48,48,48	0
83	MG	B	1828	1/1	0.88	0.15	62,62,62,62	0
83	MG	AS	3422	1/1	0.88	0.23	51,51,51,51	0
83	MG	o	303	1/1	0.88	0.09	52,52,52,52	0
83	MG	B	1910	1/1	0.88	0.28	58,58,58,58	0
83	MG	1	3582	1/1	0.88	0.34	55,55,55,55	0
83	MG	AS	3564	1/1	0.88	0.16	46,46,46,46	0
83	MG	1	3425	1/1	0.88	0.19	39,39,39,39	0
83	MG	AS	3436	1/1	0.88	0.37	43,43,43,43	0
83	MG	1	3906	1/1	0.89	0.16	32,32,32,32	0
83	MG	AS	3608	1/1	0.89	0.20	44,44,44,44	0
83	MG	1	3710	1/1	0.89	0.17	31,31,31,31	0
83	MG	1	3648	1/1	0.89	0.07	54,54,54,54	0
83	MG	AS	3404	1/1	0.89	0.36	28,28,28,28	0
83	MG	AS	3512	1/1	0.89	0.28	35,35,35,35	0
83	MG	CL	303	1/1	0.89	0.14	66,66,66,66	0
83	MG	CM	1801	1/1	0.89	0.19	31,31,31,31	0
83	MG	AS	3513	1/1	0.89	0.29	50,50,50,50	0
83	MG	AS	3619	1/1	0.89	0.27	50,50,50,50	0
83	MG	1	3608	1/1	0.89	0.30	60,60,60,60	0
83	MG	1	3476	1/1	0.89	0.17	31,31,31,31	0
83	MG	CM	1810	1/1	0.89	0.20	32,32,32,32	0
83	MG	1	3562	1/1	0.89	0.25	58,58,58,58	0
83	MG	CM	1814	1/1	0.89	0.26	43,43,43,43	0
83	MG	1	3916	1/1	0.89	0.15	49,49,49,49	0
83	MG	1	3874	1/1	0.89	0.20	57,57,57,57	0
83	MG	CM	1820	1/1	0.89	0.32	42,42,42,42	0
83	MG	AS	3627	1/1	0.89	0.20	56,56,56,56	0
83	MG	1	3616	1/1	0.89	0.30	30,30,30,30	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	CM	1824	1/1	0.89	0.11	35,35,35,35	0
83	MG	B	1858	1/1	0.89	0.28	53,53,53,53	0
83	MG	AM	101	1/1	0.89	0.26	45,45,45,45	0
83	MG	1	3654	1/1	0.89	0.15	64,64,64,64	0
83	MG	B	1862	1/1	0.89	0.18	61,61,61,61	0
83	MG	AP	202	1/1	0.89	0.25	34,34,34,34	0
83	MG	k	402	1/1	0.89	0.17	63,63,63,63	0
83	MG	1	3763	1/1	0.89	0.12	43,43,43,43	0
83	MG	CM	1842	1/1	0.89	0.40	55,55,55,55	0
83	MG	1	3410	1/1	0.89	0.24	23,23,23,23	0
83	MG	AS	3443	1/1	0.89	0.27	33,33,33,33	0
83	MG	1	3766	1/1	0.89	0.24	54,54,54,54	0
83	MG	1	3844	1/1	0.89	0.11	33,33,33,33	0
83	MG	B	1810	1/1	0.89	0.28	59,59,59,59	0
83	MG	1	3885	1/1	0.89	0.24	45,45,45,45	0
83	MG	AS	3551	1/1	0.89	0.27	34,34,34,34	0
83	MG	AS	3456	1/1	0.89	0.25	42,42,42,42	0
83	MG	1	3845	1/1	0.89	0.16	63,63,63,63	0
83	MG	AS	3654	1/1	0.89	0.17	34,34,34,34	0
83	MG	AS	3562	1/1	0.89	0.27	39,39,39,39	0
83	MG	CM	1871	1/1	0.89	0.24	33,33,33,33	0
83	MG	1	3693	1/1	0.89	0.17	42,42,42,42	0
83	MG	CM	1875	1/1	0.89	0.21	71,71,71,71	0
83	MG	1	3446	1/1	0.89	0.35	32,32,32,32	0
83	MG	AS	3566	1/1	0.89	0.20	37,37,37,37	0
83	MG	B	1821	1/1	0.89	0.27	37,37,37,37	0
83	MG	1	3812	1/1	0.89	0.14	51,51,51,51	0
83	MG	B	1888	1/1	0.89	0.24	47,47,47,47	0
83	MG	1	3597	1/1	0.89	0.25	56,56,56,56	0
83	MG	AS	3671	1/1	0.89	0.21	58,58,58,58	0
83	MG	CM	1889	1/1	0.89	0.32	37,37,37,37	0
83	MG	1	3502	1/1	0.89	0.11	35,35,35,35	0
83	MG	1	3699	1/1	0.89	0.21	39,39,39,39	0
83	MG	AS	3582	1/1	0.89	0.17	47,47,47,47	0
83	MG	AS	3474	1/1	0.89	0.29	52,52,52,52	0
83	MG	CM	1897	1/1	0.89	0.36	35,35,35,35	0
83	MG	1	3430	1/1	0.89	0.14	33,33,33,33	0
83	MG	1	3466	1/1	0.89	0.28	36,36,36,36	0
83	MG	AT	208	1/1	0.89	0.15	53,53,53,53	0
83	MG	1	3587	1/1	0.89	0.17	52,52,52,52	0
83	MG	B	1899	1/1	0.89	0.25	60,60,60,60	0
83	MG	3	204	1/1	0.89	0.26	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	DB	201	1/1	0.89	0.14	56,56,56,56	0
83	MG	1	3590	1/1	0.89	0.19	38,38,38,38	0
83	MG	1	3741	1/1	0.89	0.17	58,58,58,58	0
84	3K5	AS	3401	57/57	0.89	0.17	52,66,85,87	0
83	MG	AS	3495	1/1	0.89	0.17	38,38,38,38	0
83	MG	1	3904	1/1	0.89	0.17	68,68,68,68	0
83	MG	9	201	1/1	0.89	0.34	58,58,58,58	0
83	MG	1	3742	1/1	0.89	0.25	27,27,27,27	0
83	MG	Y	201	1/1	0.89	0.07	39,39,39,39	0
83	MG	B	1908	1/1	0.89	0.28	49,49,49,49	0
83	MG	AS	3602	1/1	0.89	0.38	47,47,47,47	0
83	MG	1	3913	1/1	0.90	0.12	56,56,56,56	0
83	MG	1	3683	1/1	0.90	0.25	64,64,64,64	0
83	MG	AS	3653	1/1	0.90	0.29	35,35,35,35	0
83	MG	1	3655	1/1	0.90	0.14	52,52,52,52	0
83	MG	AC	101	1/1	0.90	0.14	50,50,50,50	0
83	MG	1	3659	1/1	0.90	0.17	37,37,37,37	0
83	MG	AS	3507	1/1	0.90	0.20	68,68,68,68	0
83	MG	4	208	1/1	0.90	0.22	45,45,45,45	0
83	MG	1	3555	1/1	0.90	0.14	36,36,36,36	0
83	MG	1	3662	1/1	0.90	0.14	61,61,61,61	0
83	MG	AS	3594	1/1	0.90	0.10	46,46,46,46	0
83	MG	CM	1843	1/1	0.90	0.17	44,44,44,44	0
83	MG	AS	3439	1/1	0.90	0.22	29,29,29,29	0
83	MG	1	3802	1/1	0.90	0.16	74,74,74,74	0
83	MG	1	3665	1/1	0.90	0.24	40,40,40,40	0
83	MG	1	3442	1/1	0.90	0.34	48,48,48,48	0
83	MG	1	3669	1/1	0.90	0.08	34,34,34,34	0
83	MG	CM	1855	1/1	0.90	0.29	53,53,53,53	0
83	MG	AT	202	1/1	0.90	0.22	30,30,30,30	0
83	MG	B	1849	1/1	0.90	0.18	52,52,52,52	0
83	MG	1	3670	1/1	0.90	0.22	40,40,40,40	0
83	MG	B	1854	1/1	0.90	0.10	62,62,62,62	0
83	MG	1	3496	1/1	0.90	0.37	34,34,34,34	0
83	MG	1	3672	1/1	0.90	0.09	28,28,28,28	0
83	MG	1	3698	1/1	0.90	0.10	34,34,34,34	0
83	MG	AS	3531	1/1	0.90	0.20	47,47,47,47	0
83	MG	AS	3612	1/1	0.90	0.15	52,52,52,52	0
83	MG	AS	3614	1/1	0.90	0.19	56,56,56,56	0
83	MG	1	3853	1/1	0.90	0.22	50,50,50,50	0
83	MG	1	3855	1/1	0.90	0.24	36,36,36,36	0
83	MG	BE	302	1/1	0.90	0.19	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3437	1/1	0.90	0.32	29,29,29,29	0
83	MG	1	3560	1/1	0.90	0.13	42,42,42,42	0
83	MG	1	3509	1/1	0.90	0.21	30,30,30,30	0
83	MG	1	3452	1/1	0.90	0.23	34,34,34,34	0
83	MG	1	3739	1/1	0.90	0.28	28,28,28,28	0
83	MG	CM	1891	1/1	0.90	0.13	49,49,49,49	0
83	MG	1	3552	1/1	0.90	0.22	47,47,47,47	0
83	MG	1	3709	1/1	0.90	0.25	34,34,34,34	0
83	MG	AS	3550	1/1	0.90	0.22	43,43,43,43	0
83	MG	Z	201	1/1	0.90	0.20	51,51,51,51	0
83	MG	AS	3553	1/1	0.90	0.26	37,37,37,37	0
83	MG	CK	102	1/1	0.90	0.29	57,57,57,57	0
83	MG	Z	202	1/1	0.90	0.23	48,48,48,48	0
83	MG	AS	3484	1/1	0.90	0.25	40,40,40,40	0
83	MG	AS	3485	1/1	0.90	0.27	30,30,30,30	0
83	MG	CM	1803	1/1	0.90	0.25	33,33,33,33	0
83	MG	1	3791	1/1	0.90	0.17	35,35,35,35	0
83	MG	AS	3639	1/1	0.90	0.18	46,46,46,46	0
83	MG	AS	3487	1/1	0.90	0.41	39,39,39,39	0
83	MG	AS	3489	1/1	0.90	0.34	43,43,43,43	0
83	MG	1	3615	1/1	0.90	0.14	46,46,46,46	0
83	MG	CM	1811	1/1	0.90	0.15	44,44,44,44	0
83	MG	1	3793	1/1	0.90	0.16	33,33,33,33	0
83	MG	1	3828	1/1	0.90	0.21	49,49,49,49	0
83	MG	1	3910	1/1	0.90	0.12	62,62,62,62	0
83	MG	B	1930	1/1	0.90	0.19	75,75,75,75	0
83	MG	1	3711	1/1	0.90	0.14	38,38,38,38	0
86	GET	B	1801	34/34	0.90	0.16	103,112,118,123	0
83	MG	1	3517	1/1	0.91	0.21	33,33,33,33	0
83	MG	1	3769	1/1	0.91	0.16	35,35,35,35	0
83	MG	w	303	1/1	0.91	0.11	46,46,46,46	0
83	MG	AS	3415	1/1	0.91	0.28	33,33,33,33	0
83	MG	1	3490	1/1	0.91	0.33	36,36,36,36	0
83	MG	x	202	1/1	0.91	0.09	41,41,41,41	0
83	MG	1	3519	1/1	0.91	0.24	50,50,50,50	0
83	MG	AS	3425	1/1	0.91	0.27	30,30,30,30	0
83	MG	1	3779	1/1	0.91	0.18	40,40,40,40	0
83	MG	1	3824	1/1	0.91	0.31	43,43,43,43	0
83	MG	AS	3429	1/1	0.91	0.24	28,28,28,28	0
83	MG	1	3415	1/1	0.91	0.44	29,29,29,29	0
83	MG	1	3495	1/1	0.91	0.16	44,44,44,44	0
83	MG	CM	1821	1/1	0.91	0.26	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AS	3435	1/1	0.91	0.22	33,33,33,33	0
83	MG	1	3879	1/1	0.91	0.21	48,48,48,48	0
83	MG	1	3421	1/1	0.91	0.21	10,10,10,10	0
83	MG	CM	1825	1/1	0.91	0.28	44,44,44,44	0
83	MG	AS	3638	1/1	0.91	0.14	60,60,60,60	0
83	MG	CM	1830	1/1	0.91	0.21	38,38,38,38	0
83	MG	CM	1832	1/1	0.91	0.32	32,32,32,32	0
83	MG	1	3407	1/1	0.91	0.36	32,32,32,32	0
83	MG	AS	3537	1/1	0.91	0.20	40,40,40,40	0
83	MG	1	3456	1/1	0.91	0.18	32,32,32,32	0
83	MG	CM	1836	1/1	0.91	0.23	55,55,55,55	0
83	MG	1	3529	1/1	0.91	0.20	47,47,47,47	0
83	MG	1	3501	1/1	0.91	0.23	39,39,39,39	0
83	MG	AS	3444	1/1	0.91	0.17	40,40,40,40	0
83	MG	AS	3448	1/1	0.91	0.18	45,45,45,45	0
83	MG	1	3888	1/1	0.91	0.08	65,65,65,65	0
83	MG	1	3838	1/1	0.91	0.21	34,34,34,34	0
83	MG	AS	3451	1/1	0.91	0.29	38,38,38,38	0
83	MG	1	3451	1/1	0.91	0.27	27,27,27,27	0
83	MG	3	207	1/1	0.91	0.09	42,42,42,42	0
83	MG	AS	3560	1/1	0.91	0.28	46,46,46,46	0
83	MG	AS	3561	1/1	0.91	0.24	38,38,38,38	0
83	MG	1	3656	1/1	0.91	0.23	49,49,49,49	0
83	MG	AS	3660	1/1	0.91	0.28	68,68,68,68	0
83	MG	1	3735	1/1	0.91	0.28	58,58,58,58	0
83	MG	1	3536	1/1	0.91	0.25	28,28,28,28	0
83	MG	B	1865	1/1	0.91	0.23	53,53,53,53	0
83	MG	1	3895	1/1	0.91	0.16	44,44,44,44	0
83	MG	AS	3668	1/1	0.91	0.11	46,46,46,46	0
83	MG	AS	3465	1/1	0.91	0.20	39,39,39,39	0
83	MG	B	1868	1/1	0.91	0.20	67,67,67,67	0
83	MG	1	3695	1/1	0.91	0.10	42,42,42,42	0
83	MG	AS	3578	1/1	0.91	0.28	34,34,34,34	0
83	MG	1	3404	1/1	0.91	0.19	49,49,49,49	0
83	MG	B	1873	1/1	0.91	0.20	41,41,41,41	0
83	MG	AT	201	1/1	0.91	0.26	21,21,21,21	0
83	MG	1	3661	1/1	0.91	0.08	40,40,40,40	0
83	MG	1	3469	1/1	0.91	0.22	46,46,46,46	0
83	MG	CM	1888	1/1	0.91	0.12	46,46,46,46	0
83	MG	B	1947	1/1	0.91	0.12	72,72,72,72	0
83	MG	4	204	1/1	0.91	0.21	50,50,50,50	0
83	MG	1	3571	1/1	0.91	0.29	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3851	1/1	0.91	0.10	49,49,49,49	0
83	MG	B	1883	1/1	0.91	0.09	92,92,92,92	0
83	MG	1	3489	1/1	0.91	0.18	58,58,58,58	0
83	MG	1	3510	1/1	0.91	0.18	47,47,47,47	0
83	MG	CM	1898	1/1	0.91	0.36	44,44,44,44	0
83	MG	1	3854	1/1	0.91	0.11	41,41,41,41	0
83	MG	CM	1902	1/1	0.91	0.19	40,40,40,40	0
83	MG	B	1812	1/1	0.91	0.26	39,39,39,39	0
83	MG	1	3512	1/1	0.91	0.20	23,23,23,23	0
83	MG	B	1890	1/1	0.91	0.18	60,60,60,60	0
83	MG	1	3514	1/1	0.91	0.24	50,50,50,50	0
83	MG	B	1815	1/1	0.91	0.35	51,51,51,51	0
83	MG	1	3603	1/1	0.91	0.10	51,51,51,51	0
83	MG	1	3911	1/1	0.91	0.08	83,83,83,83	0
83	MG	1	3515	1/1	0.91	0.18	38,38,38,38	0
83	MG	1	3756	1/1	0.91	0.19	42,42,42,42	0
83	MG	1	3674	1/1	0.91	0.10	42,42,42,42	0
83	MG	1	3761	1/1	0.91	0.34	27,27,27,27	0
83	MG	1	3712	1/1	0.91	0.17	31,31,31,31	0
83	MG	1	3716	1/1	0.91	0.15	31,31,31,31	0
83	MG	1	3639	1/1	0.91	0.22	24,24,24,24	0
83	MG	CK	103	1/1	0.91	0.22	45,45,45,45	0
83	MG	AS	3615	1/1	0.91	0.19	41,41,41,41	0
83	MG	AS	3616	1/1	0.91	0.28	44,44,44,44	0
83	MG	B	1905	1/1	0.92	0.19	37,37,37,37	0
83	MG	1	3685	1/1	0.92	0.14	89,89,89,89	0
83	MG	1	3704	1/1	0.92	0.24	63,63,63,63	0
83	MG	B	1852	1/1	0.92	0.22	79,79,79,79	0
83	MG	Z	203	1/1	0.92	0.24	74,74,74,74	0
83	MG	B	1853	1/1	0.92	0.20	46,46,46,46	0
83	MG	CM	1827	1/1	0.92	0.22	47,47,47,47	0
83	MG	CM	1828	1/1	0.92	0.43	41,41,41,41	0
83	MG	o	302	1/1	0.92	0.10	24,24,24,24	0
83	MG	1	3461	1/1	0.92	0.22	21,21,21,21	0
83	MG	AS	3405	1/1	0.92	0.26	30,30,30,30	0
83	MG	AS	3408	1/1	0.92	0.13	38,38,38,38	0
83	MG	B	1802	1/1	0.92	0.18	41,41,41,41	0
83	MG	1	3600	1/1	0.92	0.17	44,44,44,44	0
83	MG	1	3732	1/1	0.92	0.15	49,49,49,49	0
83	MG	1	3444	1/1	0.92	0.20	43,43,43,43	0
83	MG	B	1808	1/1	0.92	0.08	88,88,88,88	0
83	MG	1	3830	1/1	0.92	0.11	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3436	1/1	0.92	0.09	30,30,30,30	0
83	MG	AS	3595	1/1	0.92	0.40	49,49,49,49	0
83	MG	B	1811	1/1	0.92	0.23	26,26,26,26	0
83	MG	AS	3673	1/1	0.92	0.17	31,31,31,31	0
83	MG	AS	3508	1/1	0.92	0.22	55,55,55,55	0
83	MG	CM	1850	1/1	0.92	0.12	79,79,79,79	0
83	MG	1	3834	1/1	0.92	0.22	36,36,36,36	0
83	MG	B	1924	1/1	0.92	0.17	50,50,50,50	0
83	MG	B	1867	1/1	0.92	0.20	87,87,87,87	0
83	MG	1	3528	1/1	0.92	0.14	45,45,45,45	0
83	MG	CM	1859	1/1	0.92	0.13	43,43,43,43	0
83	MG	1	3606	1/1	0.92	0.09	61,61,61,61	0
83	MG	AT	206	1/1	0.92	0.26	36,36,36,36	0
83	MG	AS	3605	1/1	0.92	0.11	46,46,46,46	0
83	MG	CM	1865	1/1	0.92	0.12	71,71,71,71	0
83	MG	1	3522	1/1	0.92	0.17	35,35,35,35	0
83	MG	CM	1868	1/1	0.92	0.15	86,86,86,86	0
83	MG	AS	3607	1/1	0.92	0.21	46,46,46,46	0
83	MG	3	210	1/1	0.92	0.32	54,54,54,54	0
83	MG	B	1874	1/1	0.92	0.25	54,54,54,54	0
83	MG	CM	1874	1/1	0.92	0.23	62,62,62,62	0
83	MG	B	1875	1/1	0.92	0.14	65,65,65,65	0
83	MG	AW	301	1/1	0.92	0.17	35,35,35,35	0
83	MG	1	3677	1/1	0.92	0.14	57,57,57,57	0
83	MG	AW	304	1/1	0.92	0.14	66,66,66,66	0
83	MG	BB	301	1/1	0.92	0.32	44,44,44,44	0
83	MG	B	1818	1/1	0.92	0.32	39,39,39,39	0
83	MG	1	3777	1/1	0.92	0.15	44,44,44,44	0
83	MG	1	3596	1/1	0.92	0.21	30,30,30,30	0
83	MG	1	3807	1/1	0.92	0.31	41,41,41,41	0
83	MG	1	3780	1/1	0.92	0.17	43,43,43,43	0
83	MG	8	201	1/1	0.92	0.17	45,45,45,45	0
83	MG	1	3511	1/1	0.92	0.26	29,29,29,29	0
83	MG	1	3811	1/1	0.92	0.06	56,56,56,56	0
83	MG	1	3644	1/1	0.92	0.15	36,36,36,36	0
83	MG	4	206	1/1	0.92	0.25	32,32,32,32	0
83	MG	AS	3539	1/1	0.92	0.21	43,43,43,43	0
83	MG	B	1889	1/1	0.92	0.15	44,44,44,44	0
83	MG	B	1834	1/1	0.92	0.22	27,27,27,27	0
83	MG	1	3884	1/1	0.92	0.26	45,45,45,45	0
83	MG	1	3723	1/1	0.92	0.08	34,34,34,34	0
83	MG	CL	301	1/1	0.92	0.16	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AS	3464	1/1	0.92	0.28	30,30,30,30	0
83	MG	AS	3632	1/1	0.92	0.11	50,50,50,50	0
83	MG	1	3748	1/1	0.92	0.25	32,32,32,32	0
83	MG	1	3749	1/1	0.92	0.20	48,48,48,48	0
83	MG	AS	3635	1/1	0.92	0.11	48,48,48,48	0
83	MG	1	3612	1/1	0.92	0.18	38,38,38,38	0
83	MG	DQ	101	1/1	0.92	0.10	60,60,60,60	0
83	MG	1	3613	1/1	0.92	0.24	37,37,37,37	0
83	MG	1	3789	1/1	0.92	0.21	42,42,42,42	0
83	MG	1	3820	1/1	0.92	0.16	45,45,45,45	0
83	MG	AH	202	1/1	0.92	0.12	65,65,65,65	0
83	MG	CM	1812	1/1	0.92	0.21	47,47,47,47	0
83	MG	AS	3477	1/1	0.92	0.17	40,40,40,40	0
83	MG	AS	3479	1/1	0.92	0.12	32,32,32,32	0
83	MG	B	1845	1/1	0.92	0.27	55,55,55,55	0
85	ZN	DS	201	1/1	0.92	0.13	192,192,192,192	0
83	MG	1	3572	1/1	0.92	0.11	29,29,29,29	0
86	GET	CM	1904	34/34	0.92	0.24	98,107,112,116	0
83	MG	AS	3426	1/1	0.93	0.23	27,27,27,27	0
83	MG	1	3472	1/1	0.93	0.27	22,22,22,22	0
83	MG	1	3816	1/1	0.93	0.20	45,45,45,45	0
83	MG	AS	3624	1/1	0.93	0.10	40,40,40,40	0
83	MG	1	3474	1/1	0.93	0.29	17,17,17,17	0
83	MG	AS	3430	1/1	0.93	0.27	33,33,33,33	0
83	MG	AS	3523	1/1	0.93	0.19	39,39,39,39	0
83	MG	CM	1816	1/1	0.93	0.29	32,32,32,32	0
83	MG	1	3692	1/1	0.93	0.20	49,49,49,49	0
83	MG	4	210	1/1	0.93	0.11	42,42,42,42	0
83	MG	1	3493	1/1	0.93	0.25	26,26,26,26	0
83	MG	j	301	1/1	0.93	0.09	28,28,28,28	0
83	MG	1	3429	1/1	0.93	0.30	27,27,27,27	0
83	MG	1	3401	1/1	0.93	0.40	28,28,28,28	0
83	MG	B	1929	1/1	0.93	0.26	62,62,62,62	0
83	MG	B	1803	1/1	0.93	0.29	34,34,34,34	0
83	MG	B	1931	1/1	0.93	0.19	51,51,51,51	0
83	MG	1	3605	1/1	0.93	0.16	46,46,46,46	0
83	MG	AS	3445	1/1	0.93	0.25	30,30,30,30	0
83	MG	k	401	1/1	0.93	0.13	66,66,66,66	0
83	MG	CM	1831	1/1	0.93	0.12	45,45,45,45	0
83	MG	1	3632	1/1	0.93	0.13	40,40,40,40	0
83	MG	1	3534	1/1	0.93	0.08	34,34,34,34	0
83	MG	B	1938	1/1	0.93	0.16	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AS	3549	1/1	0.93	0.24	43,43,43,43	0
83	MG	AS	3453	1/1	0.93	0.11	40,40,40,40	0
83	MG	1	3535	1/1	0.93	0.22	26,26,26,26	0
83	MG	AS	3552	1/1	0.93	0.22	29,29,29,29	0
83	MG	B	1870	1/1	0.93	0.19	74,74,74,74	0
83	MG	AS	3652	1/1	0.93	0.10	46,46,46,46	0
83	MG	AS	3556	1/1	0.93	0.15	38,38,38,38	0
83	MG	1	3516	1/1	0.93	0.21	25,25,25,25	0
83	MG	CM	1847	1/1	0.93	0.20	37,37,37,37	0
83	MG	AS	3558	1/1	0.93	0.21	47,47,47,47	0
83	MG	AS	3657	1/1	0.93	0.16	60,60,60,60	0
83	MG	1	3477	1/1	0.93	0.20	34,34,34,34	0
83	MG	1	3478	1/1	0.93	0.23	31,31,31,31	0
83	MG	AS	3460	1/1	0.93	0.26	34,34,34,34	0
83	MG	1	3740	1/1	0.93	0.26	30,30,30,30	0
83	MG	CM	1857	1/1	0.93	0.18	49,49,49,49	0
83	MG	AS	3664	1/1	0.93	0.07	87,87,87,87	0
83	MG	1	3675	1/1	0.93	0.18	47,47,47,47	0
83	MG	CM	1860	1/1	0.93	0.18	52,52,52,52	0
83	MG	AS	3463	1/1	0.93	0.20	31,31,31,31	0
83	MG	1	3880	1/1	0.93	0.16	56,56,56,56	0
83	MG	1	3705	1/1	0.93	0.44	47,47,47,47	0
83	MG	AS	3568	1/1	0.93	0.21	26,26,26,26	0
83	MG	AS	3570	1/1	0.93	0.17	38,38,38,38	0
83	MG	B	1948	1/1	0.93	0.12	70,70,70,70	0
83	MG	CM	1869	1/1	0.93	0.19	58,58,58,58	0
83	MG	AS	3467	1/1	0.93	0.15	46,46,46,46	0
83	MG	v	302	1/1	0.93	0.18	33,33,33,33	0
83	MG	AS	3576	1/1	0.93	0.19	49,49,49,49	0
83	MG	1	3743	1/1	0.93	0.20	34,34,34,34	0
83	MG	B	1820	1/1	0.93	0.22	45,45,45,45	0
83	MG	AS	3472	1/1	0.93	0.10	35,35,35,35	0
83	MG	w	301	1/1	0.93	0.19	36,36,36,36	0
83	MG	1	3588	1/1	0.93	0.17	40,40,40,40	0
83	MG	1	3746	1/1	0.93	0.32	31,31,31,31	0
83	MG	AS	3585	1/1	0.93	0.25	36,36,36,36	0
83	MG	1	3707	1/1	0.93	0.20	43,43,43,43	0
83	MG	1	3886	1/1	0.93	0.18	54,54,54,54	0
83	MG	CM	1886	1/1	0.93	0.15	52,52,52,52	0
83	MG	B	1827	1/1	0.93	0.20	44,44,44,44	0
83	MG	1	3589	1/1	0.93	0.24	31,31,31,31	0
83	MG	B	1829	1/1	0.93	0.18	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3479	1/1	0.93	0.24	26,26,26,26	0
83	MG	CM	1892	1/1	0.93	0.19	48,48,48,48	0
83	MG	1	3520	1/1	0.93	0.13	26,26,26,26	0
83	MG	CM	1894	1/1	0.93	0.26	42,42,42,42	0
83	MG	1	3413	1/1	0.93	0.24	36,36,36,36	0
83	MG	B	1833	1/1	0.93	0.22	43,43,43,43	0
83	MG	1	3593	1/1	0.93	0.17	48,48,48,48	0
83	MG	BE	301	1/1	0.93	0.21	33,33,33,33	0
83	MG	AS	3491	1/1	0.93	0.16	34,34,34,34	0
83	MG	1	3482	1/1	0.93	0.23	39,39,39,39	0
83	MG	3	206	1/1	0.93	0.18	63,63,63,63	0
83	MG	6	202	1/1	0.93	0.19	45,45,45,45	0
83	MG	1	3549	1/1	0.93	0.17	24,24,24,24	0
83	MG	1	3848	1/1	0.93	0.20	37,37,37,37	0
83	MG	1	3414	1/1	0.93	0.39	43,43,43,43	0
83	MG	1	3760	1/1	0.93	0.22	41,41,41,41	0
83	MG	AS	3502	1/1	0.93	0.26	52,52,52,52	0
83	MG	1	3447	1/1	0.93	0.27	28,28,28,28	0
83	MG	AS	3410	1/1	0.93	0.29	31,31,31,31	0
84	3K5	1	3402	57/57	0.93	0.14	42,54,71,76	0
83	MG	B	1843	1/1	0.93	0.20	35,35,35,35	0
83	MG	1	3762	1/1	0.93	0.14	38,38,38,38	0
83	MG	1	3428	1/1	0.93	0.24	36,36,36,36	0
83	MG	1	3902	1/1	0.93	0.09	41,41,41,41	0
83	MG	AS	3417	1/1	0.93	0.22	26,26,26,26	0
83	MG	B	1847	1/1	0.93	0.34	51,51,51,51	0
83	MG	1	3625	1/1	0.93	0.24	38,38,38,38	0
83	MG	1	3689	1/1	0.93	0.10	49,49,49,49	0
83	MG	CM	1805	1/1	0.93	0.15	23,23,23,23	0
83	MG	1	3725	1/1	0.93	0.23	29,29,29,29	0
83	MG	CM	1807	1/1	0.93	0.31	50,50,50,50	0
83	MG	1	3827	1/1	0.94	0.20	33,33,33,33	0
83	MG	1	3866	1/1	0.94	0.18	46,46,46,46	0
83	MG	1	3663	1/1	0.94	0.20	48,48,48,48	0
83	MG	1	3561	1/1	0.94	0.18	30,30,30,30	0
83	MG	1	3506	1/1	0.94	0.20	26,26,26,26	0
83	MG	AT	205	1/1	0.94	0.16	50,50,50,50	0
83	MG	1	3833	1/1	0.94	0.14	34,34,34,34	0
83	MG	1	3420	1/1	0.94	0.41	39,39,39,39	0
83	MG	B	1863	1/1	0.94	0.09	89,89,89,89	0
83	MG	AS	3613	1/1	0.94	0.08	40,40,40,40	0
83	MG	CM	1852	1/1	0.94	0.14	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	AS	3468	1/1	0.94	0.27	37,37,37,37	0
83	MG	B	1819	1/1	0.94	0.30	47,47,47,47	0
83	MG	1	3541	1/1	0.94	0.12	34,34,34,34	0
83	MG	CM	1856	1/1	0.94	0.20	31,31,31,31	0
83	MG	6	201	1/1	0.94	0.15	40,40,40,40	0
83	MG	f	102	1/1	0.94	0.10	59,59,59,59	0
83	MG	AS	3547	1/1	0.94	0.22	31,31,31,31	0
83	MG	AS	3548	1/1	0.94	0.19	34,34,34,34	0
83	MG	BB	302	1/1	0.94	0.26	32,32,32,32	0
83	MG	B	1822	1/1	0.94	0.22	38,38,38,38	0
83	MG	B	1917	1/1	0.94	0.12	45,45,45,45	0
83	MG	1	3610	1/1	0.94	0.21	37,37,37,37	0
83	MG	1	3611	1/1	0.94	0.29	34,34,34,34	0
83	MG	B	1920	1/1	0.94	0.06	90,90,90,90	0
83	MG	AS	3626	1/1	0.94	0.09	52,52,52,52	0
83	MG	B	1921	1/1	0.94	0.11	41,41,41,41	0
83	MG	BJ	301	1/1	0.94	0.10	40,40,40,40	0
83	MG	1	3877	1/1	0.94	0.13	43,43,43,43	0
83	MG	B	1871	1/1	0.94	0.15	56,56,56,56	0
83	MG	1	3542	1/1	0.94	0.20	36,36,36,36	0
83	MG	1	3448	1/1	0.94	0.21	26,26,26,26	0
83	MG	B	1926	1/1	0.94	0.17	46,46,46,46	0
83	MG	1	3568	1/1	0.94	0.19	38,38,38,38	0
83	MG	1	3486	1/1	0.94	0.11	37,37,37,37	0
83	MG	CM	1880	1/1	0.94	0.17	45,45,45,45	0
83	MG	1	3645	1/1	0.94	0.15	31,31,31,31	0
83	MG	1	3487	1/1	0.94	0.30	27,27,27,27	0
83	MG	1	3810	1/1	0.94	0.14	34,34,34,34	0
83	MG	1	3775	1/1	0.94	0.12	31,31,31,31	0
83	MG	1	3617	1/1	0.94	0.21	41,41,41,41	0
83	MG	1	3546	1/1	0.94	0.26	42,42,42,42	0
83	MG	1	3513	1/1	0.94	0.17	33,33,33,33	0
83	MG	1	3498	1/1	0.94	0.29	30,30,30,30	0
83	MG	1	3403	1/1	0.94	0.23	27,27,27,27	0
83	MG	AS	3577	1/1	0.94	0.15	52,52,52,52	0
83	MG	1	3744	1/1	0.94	0.20	28,28,28,28	0
83	MG	1	3500	1/1	0.94	0.23	35,35,35,35	0
83	MG	1	3411	1/1	0.94	0.31	23,23,23,23	0
83	MG	AS	3650	1/1	0.94	0.14	39,39,39,39	0
83	MG	AP	203	1/1	0.94	0.19	67,67,67,67	0
83	MG	CM	1900	1/1	0.94	0.22	41,41,41,41	0
83	MG	1	3434	1/1	0.94	0.24	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3492	1/1	0.94	0.18	35,35,35,35	0
83	MG	B	1893	1/1	0.94	0.16	55,55,55,55	0
83	MG	CM	1815	1/1	0.94	0.17	28,28,28,28	0
83	MG	B	1894	1/1	0.94	0.17	50,50,50,50	0
83	MG	AS	3656	1/1	0.94	0.09	42,42,42,42	0
83	MG	u	201	1/1	0.94	0.06	34,34,34,34	0
83	MG	3	201	1/1	0.94	0.20	25,25,25,25	0
83	MG	AS	3659	1/1	0.94	0.23	42,42,42,42	0
83	MG	AS	3590	1/1	0.94	0.13	44,44,44,44	0
83	MG	AS	3515	1/1	0.94	0.13	35,35,35,35	0
83	MG	1	3557	1/1	0.94	0.20	47,47,47,47	0
83	MG	AS	3663	1/1	0.94	0.05	87,87,87,87	0
83	MG	B	1848	1/1	0.94	0.15	45,45,45,45	0
83	MG	1	3898	1/1	0.94	0.17	38,38,38,38	0
83	MG	AS	3519	1/1	0.94	0.17	31,31,31,31	0
83	MG	1	3441	1/1	0.94	0.17	30,30,30,30	0
83	MG	1	3537	1/1	0.94	0.15	37,37,37,37	0
83	MG	1	3752	1/1	0.94	0.16	38,38,38,38	0
83	MG	AS	3457	1/1	0.94	0.32	28,28,28,28	0
83	MG	1	3538	1/1	0.94	0.19	54,54,54,54	0
83	MG	AS	3526	1/1	0.94	0.15	53,53,53,53	0
83	MG	B	1904	1/1	0.94	0.26	57,57,57,57	0
83	MG	1	3416	1/1	0.95	0.29	37,37,37,37	0
83	MG	1	3714	1/1	0.95	0.20	27,27,27,27	0
83	MG	1	3715	1/1	0.95	0.19	45,45,45,45	0
83	MG	1	3491	1/1	0.95	0.15	49,49,49,49	0
83	MG	CM	1867	1/1	0.95	0.21	43,43,43,43	0
83	MG	B	1807	1/1	0.95	0.21	44,44,44,44	0
83	MG	1	3604	1/1	0.95	0.24	39,39,39,39	0
83	MG	0	202	1/1	0.95	0.17	39,39,39,39	0
83	MG	Q	201	1/1	0.95	0.10	40,40,40,40	0
83	MG	1	3798	1/1	0.95	0.12	34,34,34,34	0
83	MG	CM	1873	1/1	0.95	0.25	40,40,40,40	0
83	MG	AS	3446	1/1	0.95	0.28	48,48,48,48	0
83	MG	1	3657	1/1	0.95	0.24	41,41,41,41	0
83	MG	1	3719	1/1	0.95	0.26	43,43,43,43	0
83	MG	1	3859	1/1	0.95	0.08	58,58,58,58	0
83	MG	1	3658	1/1	0.95	0.20	32,32,32,32	0
83	MG	1	3772	1/1	0.95	0.08	34,34,34,34	0
83	MG	AS	3506	1/1	0.95	0.09	61,61,61,61	0
83	MG	B	1851	1/1	0.95	0.11	71,71,71,71	0
83	MG	7	201	1/1	0.95	0.10	26,26,26,26	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3831	1/1	0.95	0.14	39,39,39,39	0
83	MG	1	3471	1/1	0.95	0.23	33,33,33,33	0
83	MG	1	3485	1/1	0.95	0.22	28,28,28,28	0
83	MG	AS	3403	1/1	0.95	0.24	18,18,18,18	0
83	MG	B	1933	1/1	0.95	0.14	75,75,75,75	0
83	MG	1	3865	1/1	0.95	0.20	39,39,39,39	0
83	MG	AS	3629	1/1	0.95	0.09	43,43,43,43	0
83	MG	1	3554	1/1	0.95	0.07	55,55,55,55	0
83	MG	1	3806	1/1	0.95	0.07	32,32,32,32	0
83	MG	B	1859	1/1	0.95	0.12	78,78,78,78	0
83	MG	1	3426	1/1	0.95	0.16	27,27,27,27	0
83	MG	1	3473	1/1	0.95	0.30	24,24,24,24	0
83	MG	1	3464	1/1	0.95	0.19	27,27,27,27	0
83	MG	CM	1899	1/1	0.95	0.11	38,38,38,38	0
83	MG	AS	3416	1/1	0.95	0.10	63,63,63,63	0
83	MG	1	3666	1/1	0.95	0.11	40,40,40,40	0
83	MG	AS	3418	1/1	0.95	0.31	26,26,26,26	0
83	MG	1	3667	1/1	0.95	0.12	42,42,42,42	0
83	MG	AS	3528	1/1	0.95	0.14	66,66,66,66	0
83	MG	CM	1841	1/1	0.95	0.25	36,36,36,36	0
83	MG	r	302	1/1	0.95	0.27	32,32,32,32	0
83	MG	3	205	1/1	0.95	0.22	40,40,40,40	0
83	MG	1	3424	1/1	0.95	0.28	25,25,25,25	0
83	MG	AS	3532	1/1	0.95	0.18	31,31,31,31	0
83	MG	AS	3476	1/1	0.95	0.21	26,26,26,26	0
83	MG	1	3635	1/1	0.95	0.13	37,37,37,37	0
83	MG	1	3651	1/1	0.95	0.17	42,42,42,42	0
83	MG	CM	1851	1/1	0.95	0.20	44,44,44,44	0
83	MG	1	3636	1/1	0.95	0.15	34,34,34,34	0
83	MG	1	3733	1/1	0.95	0.18	35,35,35,35	0
83	MG	AS	3538	1/1	0.95	0.11	45,45,45,45	0
83	MG	1	3757	1/1	0.95	0.23	53,53,53,53	0
83	MG	AS	3431	1/1	0.95	0.23	35,35,35,35	0
83	MG	1	3508	1/1	0.95	0.26	41,41,41,41	0
83	MG	AS	3542	1/1	0.95	0.27	33,33,33,33	0
83	MG	1	3759	1/1	0.95	0.19	49,49,49,49	0
83	MG	AS	3603	1/1	0.95	0.12	35,35,35,35	0
83	MG	AS	3604	1/1	0.95	0.13	35,35,35,35	0
83	MG	AS	3432	1/1	0.96	0.37	30,30,30,30	0
83	MG	AS	3666	1/1	0.96	0.19	32,32,32,32	0
83	MG	AS	3563	1/1	0.96	0.14	48,48,48,48	0
83	MG	1	3708	1/1	0.96	0.21	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	1	3768	1/1	0.96	0.18	26,26,26,26	0
83	MG	1	3409	1/1	0.96	0.16	30,30,30,30	0
83	MG	AS	3475	1/1	0.96	0.25	32,32,32,32	0
83	MG	1	3770	1/1	0.96	0.15	36,36,36,36	0
83	MG	AS	3569	1/1	0.96	0.17	33,33,33,33	0
83	MG	1	3771	1/1	0.96	0.05	34,34,34,34	0
83	MG	AS	3478	1/1	0.96	0.20	37,37,37,37	0
83	MG	1	3634	1/1	0.96	0.09	27,27,27,27	0
83	MG	AS	3573	1/1	0.96	0.23	41,41,41,41	0
83	MG	AS	3574	1/1	0.96	0.30	44,44,44,44	0
83	MG	0	204	1/1	0.96	0.34	54,54,54,54	0
83	MG	CM	1882	1/1	0.96	0.19	38,38,38,38	0
83	MG	AS	3525	1/1	0.96	0.19	45,45,45,45	0
83	MG	AR	402	1/1	0.96	0.16	61,61,61,61	0
83	MG	AS	3527	1/1	0.96	0.21	33,33,33,33	0
83	MG	AS	3442	1/1	0.96	0.29	33,33,33,33	0
83	MG	CM	1887	1/1	0.96	0.20	66,66,66,66	0
83	MG	CM	1826	1/1	0.96	0.20	36,36,36,36	0
83	MG	1	3412	1/1	0.96	0.27	29,29,29,29	0
83	MG	AS	3581	1/1	0.96	0.14	44,44,44,44	0
83	MG	1	3435	1/1	0.96	0.15	21,21,21,21	0
83	MG	1	3553	1/1	0.96	0.05	46,46,46,46	0
83	MG	AS	3406	1/1	0.96	0.45	32,32,32,32	0
83	MG	AS	3488	1/1	0.96	0.14	40,40,40,40	0
83	MG	1	3458	1/1	0.96	0.19	28,28,28,28	0
83	MG	1	3778	1/1	0.96	0.18	33,33,33,33	0
83	MG	AS	3588	1/1	0.96	0.18	36,36,36,36	0
83	MG	1	3480	1/1	0.96	0.21	20,20,20,20	0
83	MG	1	3890	1/1	0.96	0.21	36,36,36,36	0
83	MG	1	3547	1/1	0.96	0.19	46,46,46,46	0
83	MG	AS	3494	1/1	0.96	0.25	43,43,43,43	0
83	MG	1	3843	1/1	0.96	0.07	45,45,45,45	0
83	MG	1	3867	1/1	0.96	0.10	45,45,45,45	0
83	MG	1	3664	1/1	0.96	0.08	51,51,51,51	0
83	MG	AS	3499	1/1	0.96	0.17	39,39,39,39	0
83	MG	1	3532	1/1	0.96	0.28	32,32,32,32	0
83	MG	BK	201	1/1	0.96	0.28	35,35,35,35	0
83	MG	1	3783	1/1	0.96	0.19	40,40,40,40	0
83	MG	AS	3546	1/1	0.96	0.25	41,41,41,41	0
83	MG	BZ	201	1/1	0.96	0.08	38,38,38,38	0
83	MG	AS	3420	1/1	0.96	0.21	26,26,26,26	0
83	MG	1	3678	1/1	0.96	0.13	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
83	MG	v	303	1/1	0.96	0.09	28,28,28,28	0
83	MG	AS	3423	1/1	0.96	0.17	37,37,37,37	0
83	MG	AS	3424	1/1	0.96	0.21	22,22,22,22	0
83	MG	1	3764	1/1	0.96	0.25	52,52,52,52	0
83	MG	1	3849	1/1	0.96	0.13	44,44,44,44	0
83	MG	1	3642	1/1	0.96	0.18	27,27,27,27	0
83	MG	AS	3510	1/1	0.96	0.18	27,27,27,27	0
83	MG	B	1932	1/1	0.96	0.10	25,25,25,25	0
83	MG	1	3507	1/1	0.96	0.26	37,37,37,37	0
83	MG	1	3829	1/1	0.96	0.15	44,44,44,44	0
83	MG	B	1877	1/1	0.96	0.22	46,46,46,46	0
83	MG	1	3796	1/1	0.97	0.17	51,51,51,51	0
83	MG	1	3505	1/1	0.97	0.12	37,37,37,37	0
83	MG	AS	3482	1/1	0.97	0.19	28,28,28,28	0
83	MG	AW	302	1/1	0.97	0.21	40,40,40,40	0
83	MG	CM	1845	1/1	0.97	0.17	39,39,39,39	0
83	MG	r	301	1/1	0.97	0.22	34,34,34,34	0
83	MG	AS	3497	1/1	0.97	0.14	34,34,34,34	0
83	MG	AS	3555	1/1	0.97	0.09	36,36,36,36	0
83	MG	AS	3447	1/1	0.97	0.15	35,35,35,35	0
83	MG	1	3776	1/1	0.97	0.15	33,33,33,33	0
83	MG	1	3643	1/1	0.97	0.32	34,34,34,34	0
83	MG	1	3533	1/1	0.97	0.19	30,30,30,30	0
83	MG	1	3701	1/1	0.97	0.14	25,25,25,25	0
83	MG	AS	3452	1/1	0.97	0.14	23,23,23,23	0
83	MG	1	3523	1/1	0.97	0.14	29,29,29,29	0
83	MG	CM	1818	1/1	0.97	0.09	27,27,27,27	0
83	MG	1	3713	1/1	0.97	0.19	36,36,36,36	0
83	MG	CM	1838	1/1	0.97	0.16	29,29,29,29	0
83	MG	CM	1802	1/1	0.97	0.43	33,33,33,33	0
83	MG	AS	3412	1/1	0.97	0.06	28,28,28,28	0
83	MG	Q	202	1/1	0.98	0.12	71,71,71,71	0
83	MG	1	3753	1/1	0.98	0.14	29,29,29,29	0
83	MG	4	209	1/1	0.98	0.10	46,46,46,46	0
83	MG	AS	3554	1/1	0.98	0.16	23,23,23,23	0
83	MG	1	3440	1/1	0.98	0.38	25,25,25,25	0
83	MG	AS	3640	1/1	0.98	0.07	40,40,40,40	0
83	MG	CM	1846	1/1	0.98	0.13	37,37,37,37	0
83	MG	AS	3438	1/1	0.98	0.09	24,24,24,24	0
83	MG	CM	1881	1/1	0.98	0.13	38,38,38,38	0
85	ZN	c	201	1/1	0.98	0.04	77,77,77,77	0
83	MG	AS	3402	1/1	0.98	0.07	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
85	ZN	f	101	1/1	0.98	0.05	82,82,82,82	0
83	MG	1	3907	1/1	0.98	0.06	30,30,30,30	0
83	MG	1	3462	1/1	0.98	0.18	20,20,20,20	0
83	MG	1	3868	1/1	0.98	0.06	48,48,48,48	0
85	ZN	CK	101	1/1	0.98	0.04	100,100,100,100	0
83	MG	1	3578	1/1	0.98	0.28	30,30,30,30	0
85	ZN	DQ	102	1/1	0.98	0.12	55,55,55,55	0
83	MG	AS	3407	1/1	0.98	0.16	23,23,23,23	0
83	MG	B	1880	1/1	0.98	0.09	70,70,70,70	0
83	MG	AS	3409	1/1	0.98	0.24	19,19,19,19	0
85	ZN	CH	101	1/1	0.99	0.12	109,109,109,109	0
85	ZN	AQ	101	1/1	0.99	0.04	69,69,69,69	0
83	MG	CM	1862	1/1	0.99	0.09	37,37,37,37	0
85	ZN	DN	201	1/1	0.99	0.02	58,58,58,58	0
83	MG	1	3408	1/1	0.99	0.05	49,49,49,49	0
85	ZN	AK	101	1/1	0.99	0.05	53,53,53,53	0
85	ZN	AN	101	1/1	0.99	0.08	103,103,103,103	0
83	MG	1	3567	1/1	0.99	0.14	22,22,22,22	0
85	ZN	CE	101	1/1	0.99	0.02	63,63,63,63	0

6.5 Other polymers (i)

There are no such residues in this entry.