



Full wwPDB X-ray Structure Validation Report ⓘ

Sep 9, 2024 – 09:46 pm BST

PDB ID : 8CQW
Title : Crystal structure of the Candida albicans 80S ribosome in complex with Hygromycin B
Authors : Kolosova, O.; Zgadzay, Y.; Yusupov, M.
Deposited on : 2023-03-07
Resolution : 3.05 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

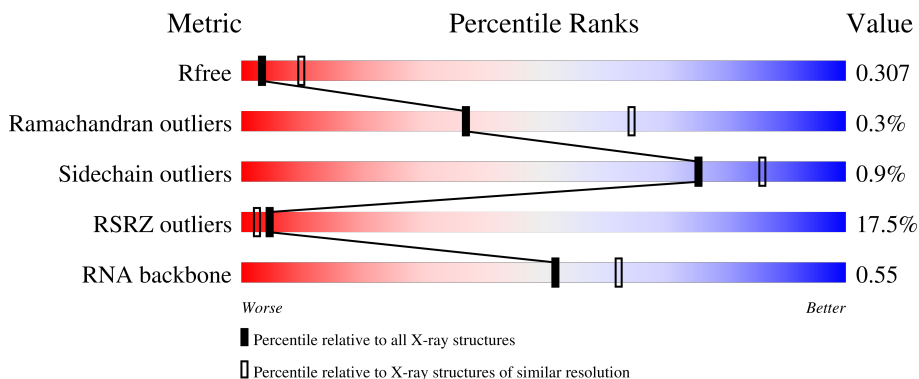
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.05 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	2258 (3.10-3.02)
Ramachandran outliers	177936	2269 (3.10-3.02)
Sidechain outliers	177891	2268 (3.10-3.02)
RSRZ outliers	164620	2258 (3.10-3.02)
RNA backbone	3690	1166 (3.32-2.80)

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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1	3359	 3% 77% 17% . .
1	AS	3359	 5% 77% 19% . .
2	3	121	 % 93% 7%
2	AT	121	 3% 93% 7%
3	4	158	 % 84% 16% .

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Mol	Chain	Length	Quality of chain
3	AU	158	4% 83% 16%
4	AW	254	9% 97%
4	j	254	7% 98%
5	AX	389	4% 99%
5	k	389	5% 99%
6	AY	363	17% 98%
6	l	363	18% 99%
7	AZ	298	28% 97%
7	m	298	23% 99%
8	BA	176	8% 87% 13%
8	n	176	10% 89% 11%
9	BB	241	5% 97%
9	o	241	8% 96%
10	BC	262	27% 86% 13%
10	p	262	18% 88% 11%
11	BD	191	9% 99%
11	q	191	21% 98%
12	BE	220	4% 94% 5%
12	r	220	13% 94% 5%
13	BF	174	15% 97%
13	s	174	24% 97%
14	BG	202	19% 98%
14	t	202	10% 99%
15	BH	131	9% 98%
15	u	131	8% 99%

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Mol	Chain	Length	Quality of chain
16	BI	204	25% 99%
16	v	204	11% 99%
17	BJ	200	4% 100%
17	w	200	8% 100%
18	BK	185	12% 94% 5%
18	x	185	11% 94% 6%
19	BL	186	8% 99% .
19	y	186	27% 99% .
20	BM	190	13% 92% 6%
20	z	190	7% 94% 6%
21	0	172	12% 98% ..
21	BN	172	5% 99% .
22	2	160	15% 99% ..
22	BO	160	15% 99% ..
23	5	124	12% 81% 18%
23	BP	124	19% 78% 18%
24	6	137	6% 96% .
24	BQ	137	8% 96% .
25	7	155	14% 75% 24%
25	BR	155	12% 63% 37%
26	8	142	8% 83% 15%
26	BS	142	22% 84% 16%
27	9	127	28% 98% ..
27	BT	127	17% 98% ..
28	AA	136	21% 99% .

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Mol	Chain	Length	Quality of chain
28	BU	136	21% 99%
29	AB	149	11% 99%
29	BV	149	17% 99%
30	AC	63	43% 94% 5%
30	BW	63	27% 97%
31	AD	106	7% 91% 9%
31	BX	106	18% 91% 9%
32	AE	112	4% 96%
32	BY	112	12% 98%
33	AF	131	15% 95% 5%
33	BZ	131	7% 95% 5%
34	AG	107	14% 98%
34	CA	107	4% 99%
35	AH	122	20% 91% 8%
35	CB	122	30% 92% 8%
36	AI	120	17% 98%
36	CC	120	32% 97%
37	AJ	99	17% 97%
37	CD	99	29% 98%
38	AK	90	13% 96%
38	CE	90	14% 96%
39	AL	78	19% 99%
39	CF	78	36% 99%
40	AM	51	10% 96%
40	CG	51	20% 98%

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Mol	Chain	Length	Quality of chain
41	AN	52	58% 100%
41	CH	52	63% 92% 6%
42	AO	25	40% 92% 8%
42	CI	25	28% 96%
43	AP	106	14% 97%
43	CJ	106	14% 97%
44	AQ	92	4% 99%
44	CK	92	9% 99%
45	CL	267	15% 43% 55%
45	i	267	19% 44% 55%
46	B	1787	10% 71% 25%
46	CM	1787	7% 71% 27%
47	C	261	18% 79% 20%
47	CN	261	12% 79% 20%
48	CO	256	23% 83% 16%
48	D	256	13% 83% 16%
49	CP	249	11% 86% 13%
49	E	249	24% 87% 13%
50	CQ	251	18% 86% 11%
50	F	251	39% 88% 11%
51	CR	262	33% 99%
51	G	262	38% 99%
52	CS	225	34% 91% 8%
52	H	225	40% 90% 8%
53	CT	236	24% 99%

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Mol	Chain	Length	Quality of chain
53	I	236	27% 95%
54	CU	186	33% 97%
54	J	186	47% 98%
55	CV	206	23% 99%
55	K	206	20% 98%
56	CW	189	32% 94% 6%
56	L	189	56% 94% 6%
57	CX	118	9% 80% 20%
57	M	118	36% 81% 17%
58	CY	155	17% 89% 9%
58	N	155	18% 92% 7%
59	CZ	143	29% 77% 6% 17%
59	O	143	39% 76% 5% 19%
60	DA	151	34% 99%
60	P	151	34% 99%
61	DB	132	17% 96%
61	Q	132	17% 95%
62	DC	142	25% 90% 8%
62	R	142	42% 89% 9%
63	DD	142	58% 97%
63	S	142	61% 96%
64	DE	137	43% 91% 9%
64	T	137	43% 89% 9%
65	DF	145	25% 95%
65	U	145	30% 99%


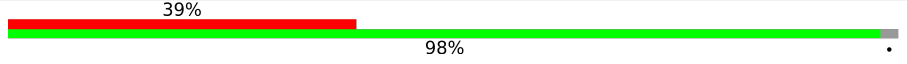
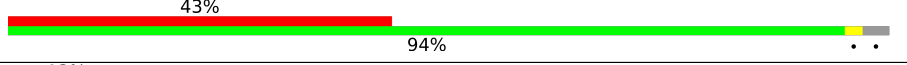

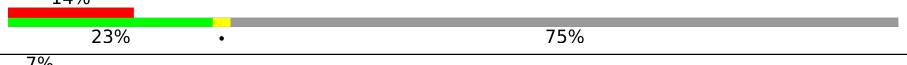

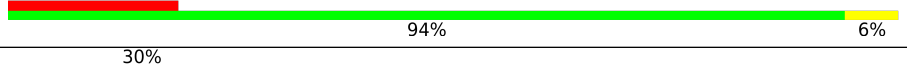
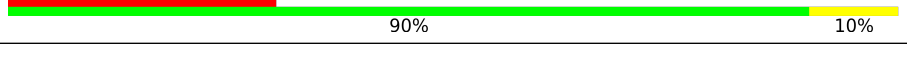
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Mol	Chain	Length	Quality of chain
66	DG	145	30% 97%
66	V	145	44% 97%
67	DH	119	29% 79% 18%
67	W	119	37% 83% 14%
68	DI	87	11% 100%
68	X	87	22% 100%
69	DJ	130	24% 98%
69	Y	130	38% 99%
70	DK	145	22% 98%
70	Z	145	24% 98%
71	DL	135	19% 98%
71	a	135	33% 99%
72	DM	105	16% 68% 32%
72	b	105	15% 69% 31%
73	DN	119	20% 82% 18%
73	c	119	26% 81% 18%
74	DO	82	27% 99%
74	d	82	23% 99%
75	DP	67	18% 91% 9%
75	e	67	28% 93% 7%
76	DQ	56	27% 95%
76	f	56	48% 93% 5%
77	DR	63	33% 90% 8%
77	g	63	37% 94% 5%
78	DS	193	24% 34% 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	11	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	3630	-	-	-	X
83	MG	1	3651	-	-	-	X
83	MG	1	3688	-	-	-	X
83	MG	1	3715	-	-	-	X
83	MG	1	3776	-	-	-	X
83	MG	8	202	-	-	-	X
83	MG	9	201	-	-	-	X
83	MG	CL	302	-	-	-	X

2 Entry composition [i](#)

There are 87 unique types of molecules in this entry. The entry contains 408804 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
			Total	C	N	O	P			
1	1	3208	Total	C	N	O	P	0	0	0
			68581	30637	12330	22406	3208			
1	AS	3227	Total	C	N	O	P	0	0	0
			68985	30817	12402	22539	3227			

- Molecule 2 is a RNA chain called 5S.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
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	233	Total	C	N	O	S	0	0	0
			1876	1203	344	328	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	233	Total	C	N	O	S	0	0	0
			1805	1156	321	325	3			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	BC	229	Total 1778	C 1140	N 316	O 319	S 3	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	q	189	Total 1510	C 953	N 275	O 278	S 4	0	0	0
11	BD	190	Total 1519	C 958	N 276	O 281	S 4	0	0	0

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
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
			Total	C	N	O	S			
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
			Total	C	N	O			
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
			Total	C	N	O			
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
			Total	C	N	O	S			
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	102	Total	C	N	O	0	0	0
			826	536	137	153			
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	120	Total	C	N	O	S	0	0	0
			965	616	173	175	1			

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

- Molecule 27 is a protein called Ribosomal protein L24.

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	AD	96	729	469	121	137	2	0	0	0
31	BX	96	729	469	121	137	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	120	Total	C	N	O	0	0	0
			922	558	165	199			
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	1741	Total	C	N	O	P	0	0	0
			37113	16590	6583	12199	1741			
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
			Total	C	N	O	S			
48	D	214	Total 1724	C 1094	N 313	O 313	S 4	0	0	0
48	CO	214	Total 1724	C 1094	N 313	O 313	S 4	0	0	0

- Molecule 49 is a protein called Ribosomal protein S5.

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

- Molecule 50 is a protein called Ribosomal protein S3.

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

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

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

- Molecule 52 is a protein called Ribosomal protein S7.

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

- 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	184	Total	C	N	O	S	0	0	0
			1485	950	268	267				
54	CU	183	Total	C	N	O	S	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
			Total	C	N	O	S			
64	T	124	Total 997	C 628	N 183	O 185	S 1	0	0	0
64	DE	124	Total 997	C 628	N 183	O 185	S 1	0	0	0

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

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

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

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

- Molecule 67 is a protein called Ribosomal protein S10.

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

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

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

- 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	97	Total	C	N	O	S	0	0	0
			770	477	161	126	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
			Total	C	N	O	S			
74	DO	81	614	383	110	114	7	0	0	0

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
79	AR	311	2398	1519	412	462	5	0	0	0
79	DT	306	2357	1494	402	456	5	0	0	0

- 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	79	Total	C	N	O	S	0	0	0
			635	404	114	115	2			

- 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	11	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	530	Total	Mg	0	0
			530	530		
83	3	14	Total	Mg	0	0
			14	14		
83	4	12	Total	Mg	0	0
			12	12		
83	j	3	Total	Mg	0	0
			3	3		
83	k	4	Total	Mg	0	0
			4	4		
83	o	3	Total	Mg	0	0
			3	3		
83	r	2	Total	Mg	0	0
			2	2		
83	s	1	Total	Mg	0	0
			1	1		
83	u	2	Total	Mg	0	0
			2	2		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
83	v	3	Total 3	Mg 3	0	0
83	w	3	Total 3	Mg 3	0	0
83	x	3	Total 3	Mg 3	0	0
83	y	1	Total 1	Mg 1	0	0
83	0	5	Total 5	Mg 5	0	0
83	2	3	Total 3	Mg 3	0	0
83	5	1	Total 1	Mg 1	0	0
83	6	3	Total 3	Mg 3	0	0
83	8	2	Total 2	Mg 2	0	0
83	9	2	Total 2	Mg 2	0	0
83	AB	2	Total 2	Mg 2	0	0
83	AC	1	Total 1	Mg 1	0	0
83	AD	1	Total 1	Mg 1	0	0
83	AE	2	Total 2	Mg 2	0	0
83	AF	1	Total 1	Mg 1	0	0
83	AG	2	Total 2	Mg 2	0	0
83	AH	2	Total 2	Mg 2	0	0
83	AJ	1	Total 1	Mg 1	0	0
83	AK	1	Total 1	Mg 1	0	0
83	AM	1	Total 1	Mg 1	0	0
83	AP	2	Total 2	Mg 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
83	B	152	Total 152	Mg 152	0	0
83	D	1	Total 1	Mg 1	0	0
83	G	2	Total 2	Mg 2	0	0
83	I	2	Total 2	Mg 2	0	0
83	J	1	Total 1	Mg 1	0	0
83	K	1	Total 1	Mg 1	0	0
83	L	1	Total 1	Mg 1	0	0
83	Q	1	Total 1	Mg 1	0	0
83	R	1	Total 1	Mg 1	0	0
83	V	1	Total 1	Mg 1	0	0
83	Y	3	Total 3	Mg 3	0	0
83	Z	2	Total 2	Mg 2	0	0
83	a	1	Total 1	Mg 1	0	0
83	f	1	Total 1	Mg 1	0	0
83	AR	1	Total 1	Mg 1	0	0
83	AS	278	Total 278	Mg 278	0	0
83	AT	9	Total 9	Mg 9	0	0
83	AU	2	Total 2	Mg 2	0	0
83	AW	4	Total 4	Mg 4	0	0
83	BB	2	Total 2	Mg 2	0	0
83	BE	2	Total 2	Mg 2	0	0

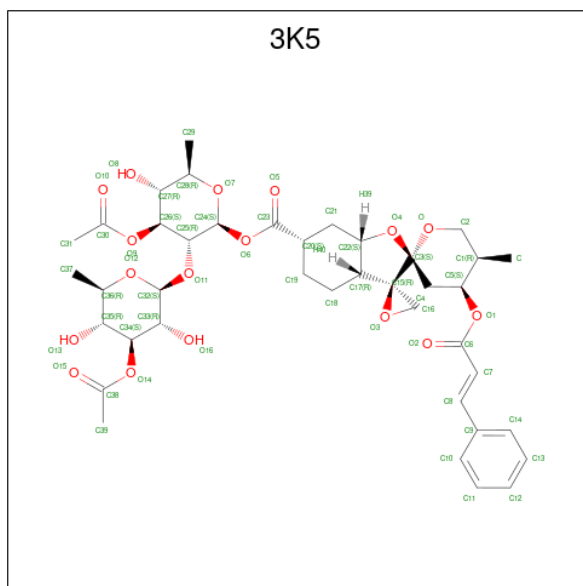
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
83	BF	1	Total Mg 1 1	0	0
83	BH	1	Total Mg 1 1	0	0
83	BJ	3	Total Mg 3 3	0	0
83	BK	1	Total Mg 1 1	0	0
83	BN	1	Total Mg 1 1	0	0
83	BQ	1	Total Mg 1 1	0	0
83	BV	1	Total Mg 1 1	0	0
83	BZ	2	Total Mg 2 2	0	0
83	CA	1	Total Mg 1 1	0	0
83	CJ	1	Total Mg 1 1	0	0
83	CK	1	Total Mg 1 1	0	0
83	CL	3	Total Mg 3 3	0	0
83	CM	102	Total Mg 102 102	0	0
83	CO	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	DG	2	Total Mg 2 2	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}decahy
 drodispiro[oxirane-2,3'-[1]benzofuran-2',2''-pyran]-6'-yl]carbonyl]-beta-D-glucopyranose

(three-letter code: 3K5) (formula: C₄₀H₅₂O₁₇).



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).

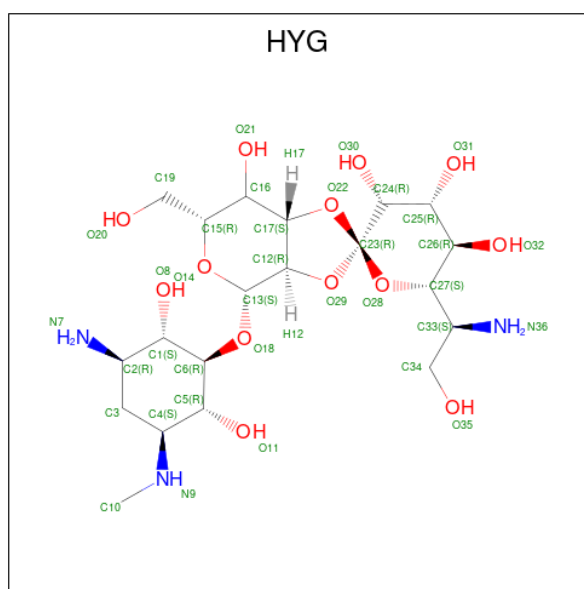
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
85	AH	1	Total Zn 1 1	0	0
85	AK	1	Total Zn 1 1	0	0
85	AN	1	Total Zn 1 1	0	0
85	AP	1	Total Zn 1 1	0	0
85	AQ	1	Total Zn 1 1	0	0
85	c	1	Total Zn 1 1	0	0
85	d	1	Total Zn 1 1	0	0
85	f	1	Total Zn 1 1	0	0
85	h	1	Total Zn 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
85	CB	1	Total Zn 1 1	0	0
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	DQ	1	Total Zn 1 1	0	0
85	DS	1	Total Zn 1 1	0	0

- Molecule 86 is HYGROMYCIN B (three-letter code: HYG) (formula: $C_{20}H_{37}N_3O_{13}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
86	B	1	Total C N O 36 20 3 13	0	0
86	CM	1	Total C N O 36 20 3 13	0	0

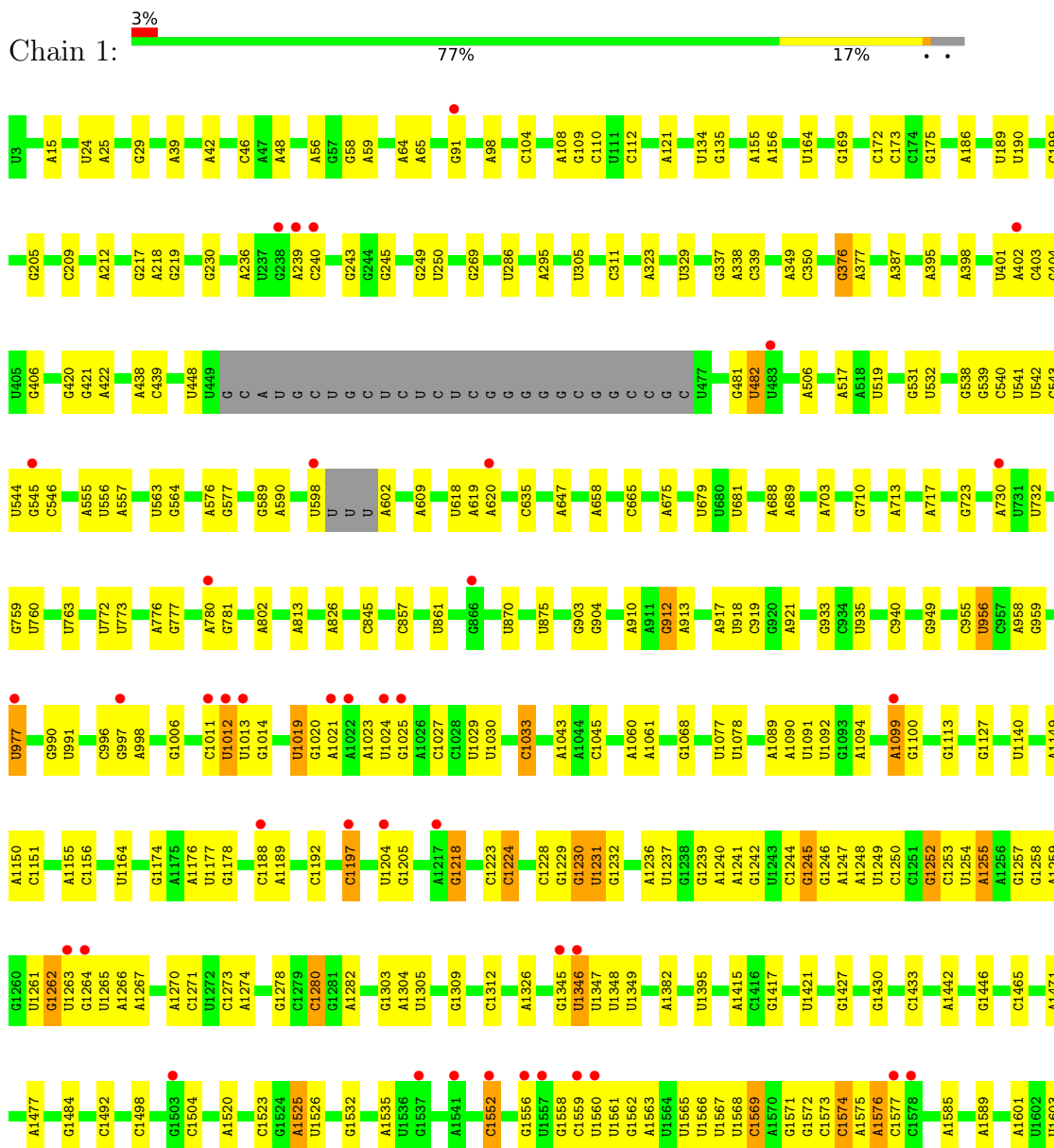
- Molecule 87 is water.

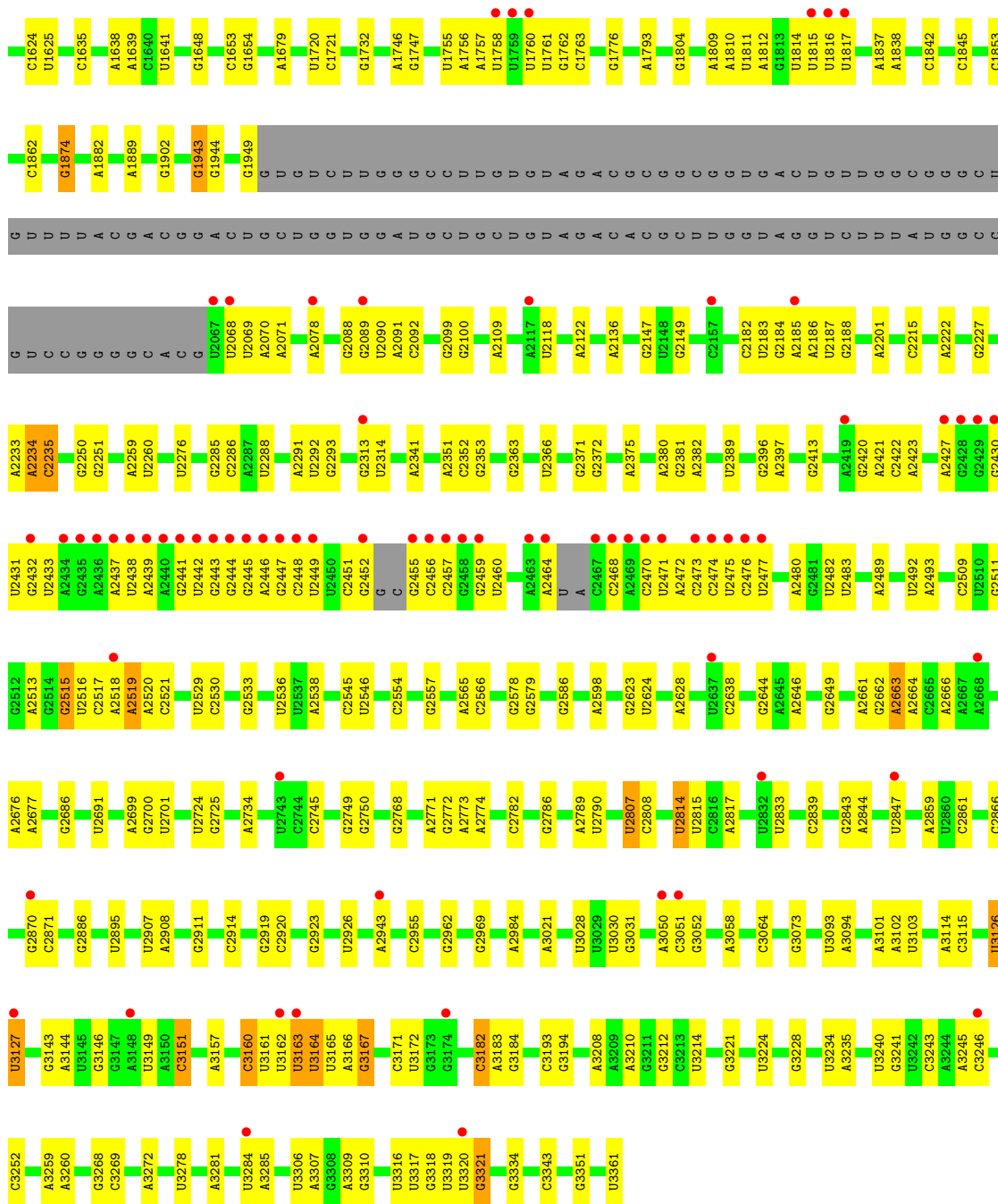
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
87	1	9	Total O 9 9	0	0
87	4	3	Total O 3 3	0	0
87	B	6	Total O 6 6	0	0
87	AS	12	Total O 12 12	0	0

3 Residue-property plots [i](#)

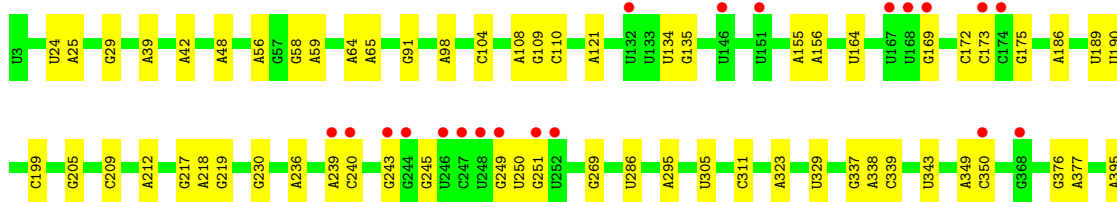
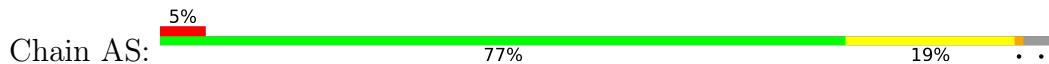
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

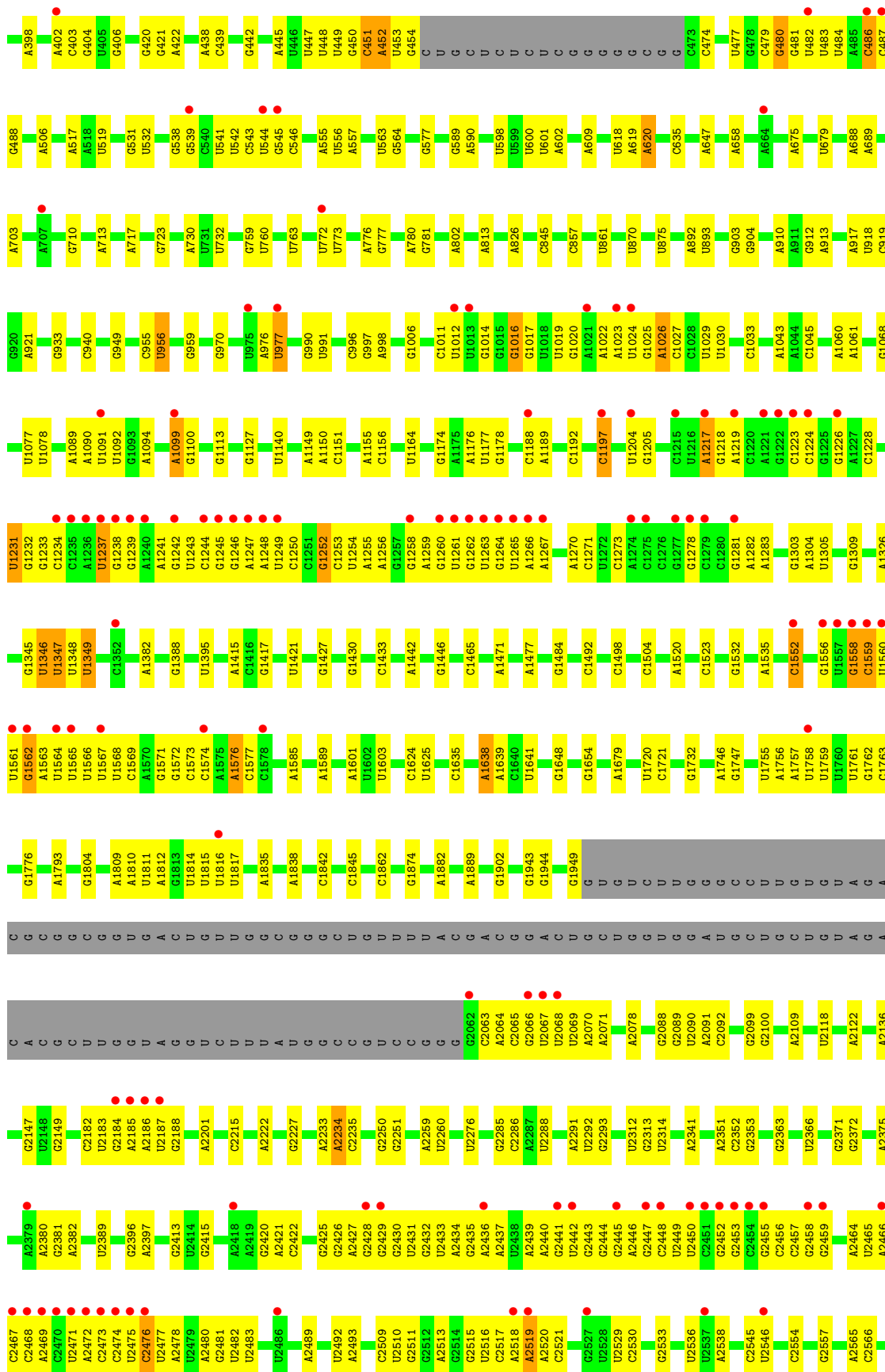
- Molecule 1: 25S

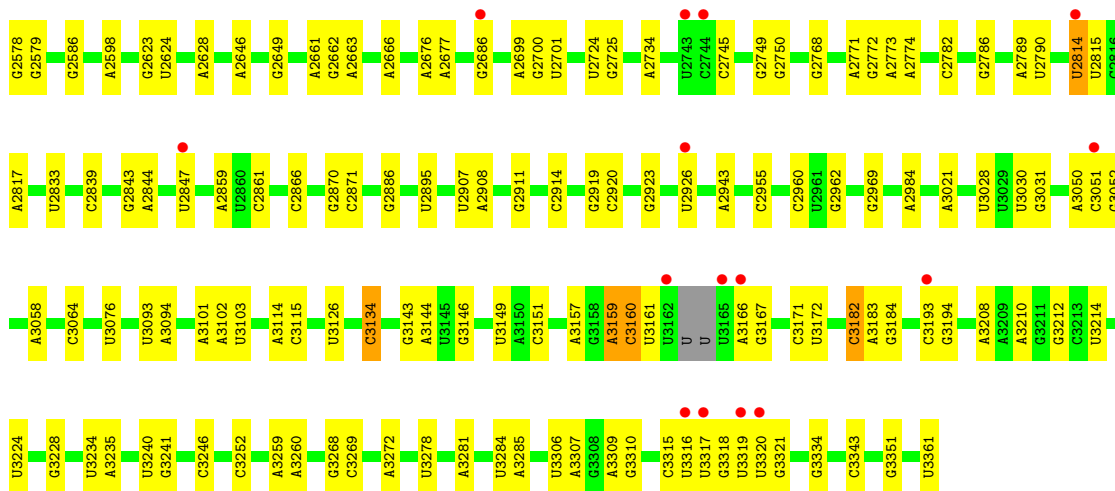




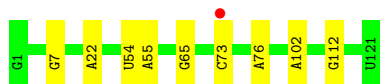
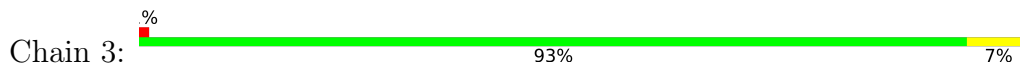
• Molecule 1: 25S



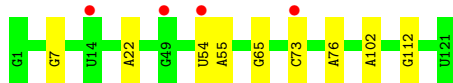




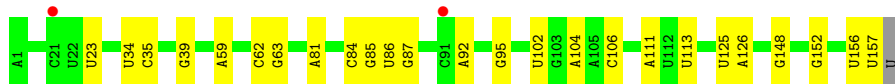
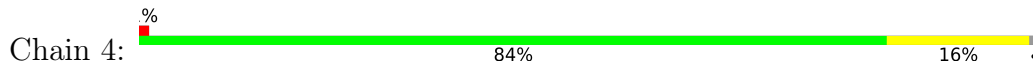
• Molecule 2: 5S



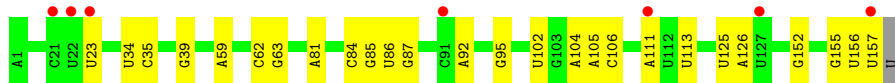
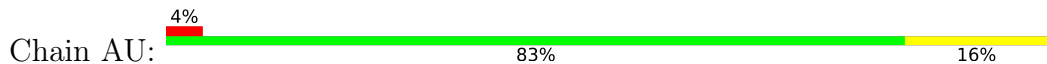
• Molecule 2: 5S



• Molecule 3: 5.8S



• Molecule 3: 5.8S



• Molecule 4: 60S ribosomal protein L2-B

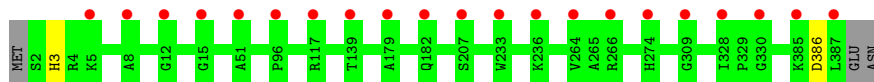




- Molecule 4: 60S ribosomal protein L2-B



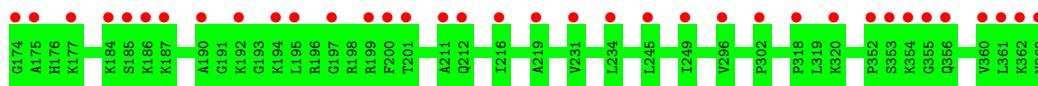
- Molecule 5: 60S ribosomal protein L3



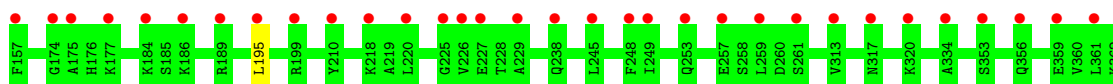
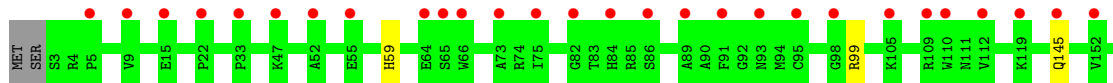
- Molecule 5: 60S ribosomal protein L3



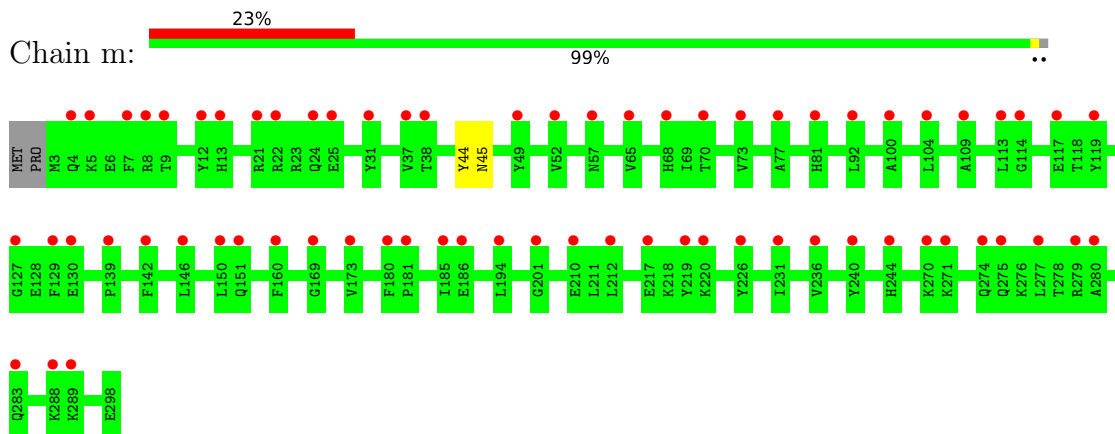
- Molecule 6: 60S ribosomal protein L4-B



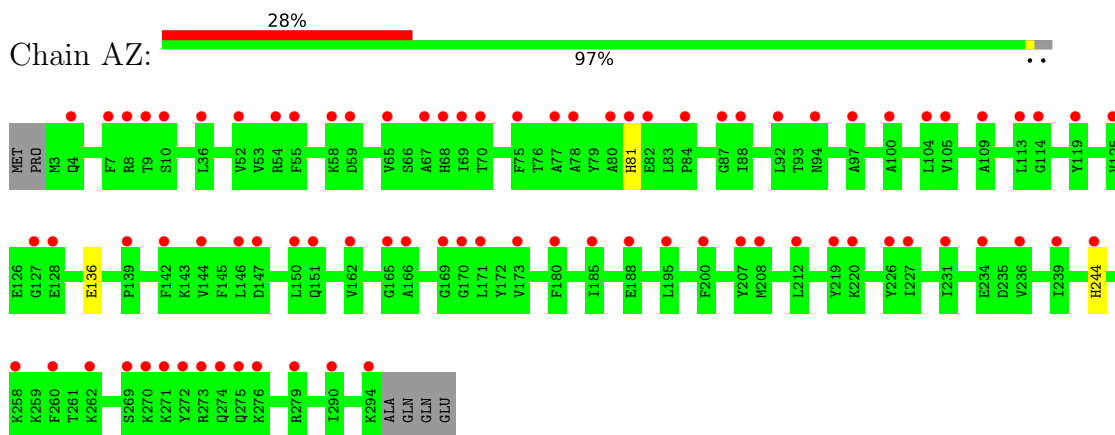
- Molecule 6: 60S ribosomal protein L4-B



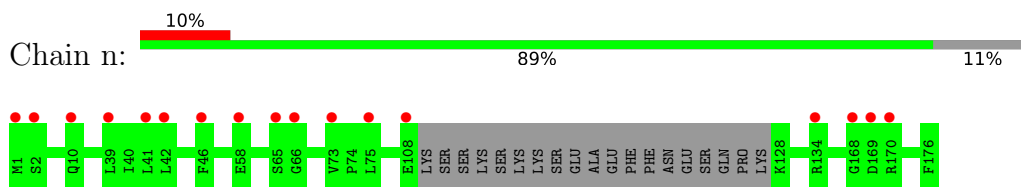
• Molecule 7: Uncharacterized protein CaJ7.0206



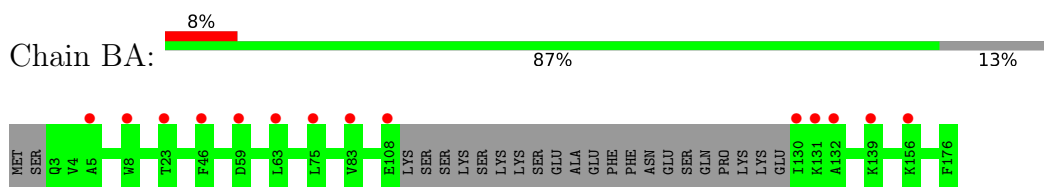
• Molecule 7: Uncharacterized protein CaJ7.0206



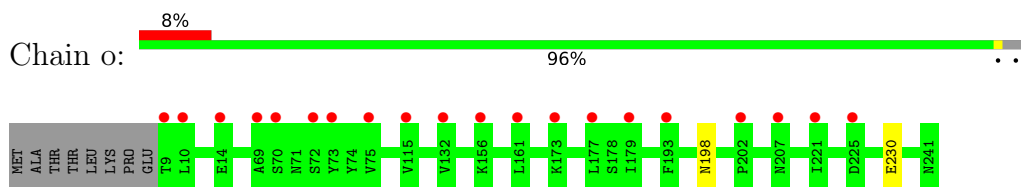
• Molecule 8: 60S ribosomal protein L6



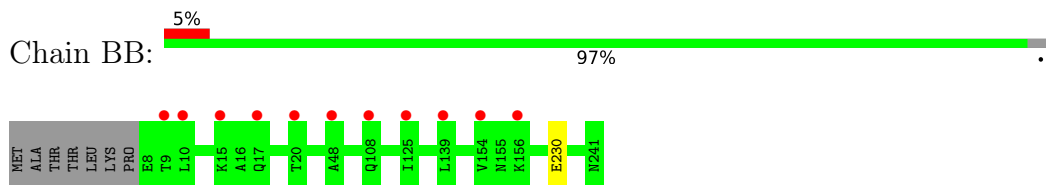
• Molecule 8: 60S ribosomal protein L6



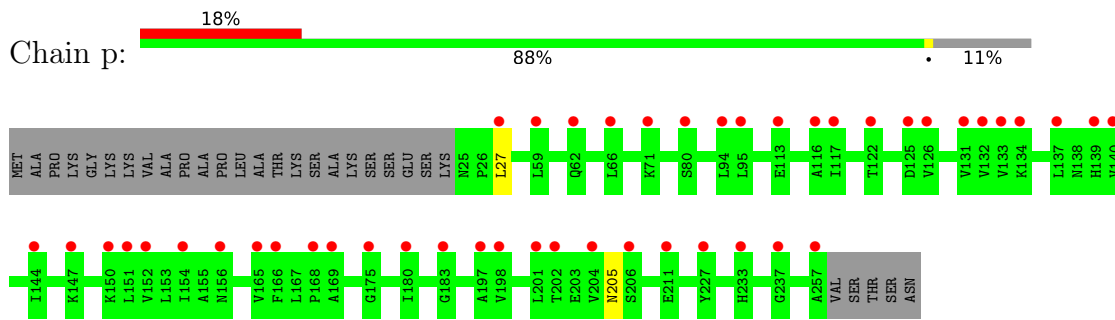
• Molecule 9: 60S ribosomal protein L7-A



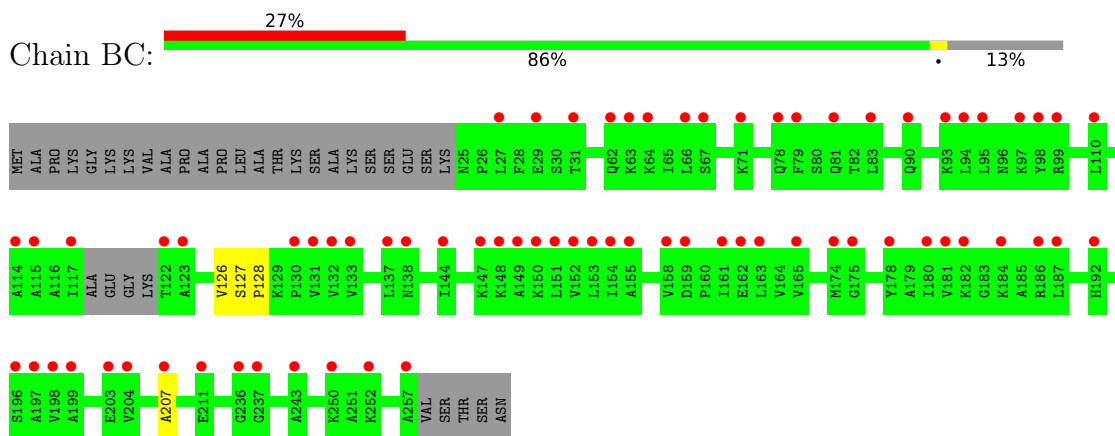
- Molecule 9: 60S ribosomal protein L7-A



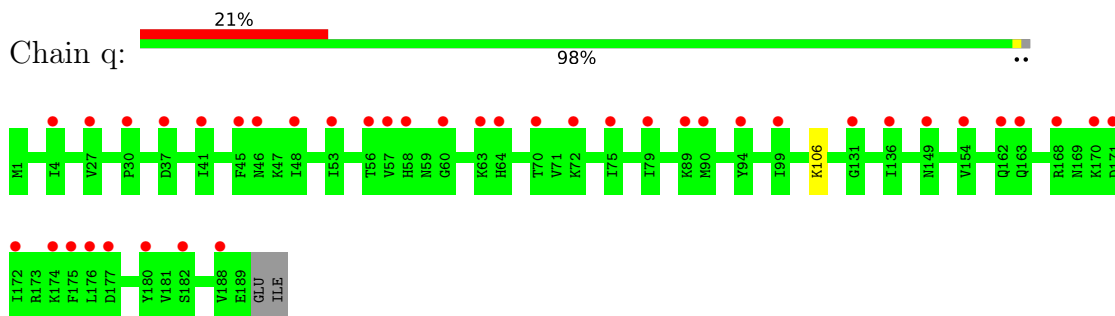
- Molecule 10: 60S ribosomal protein L8



- Molecule 10: 60S ribosomal protein L8

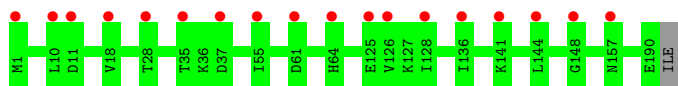


- Molecule 11: 60S ribosomal protein L9-B

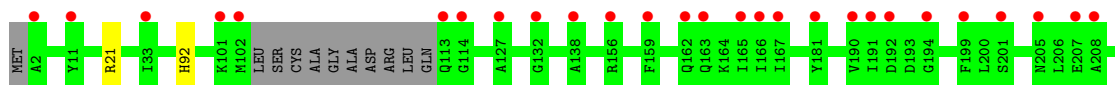
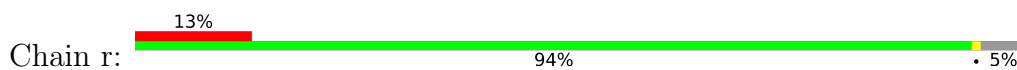


- Molecule 11: 60S ribosomal protein L9-B

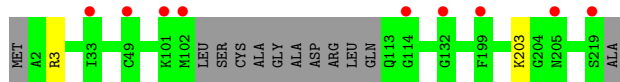




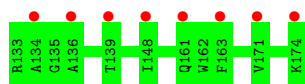
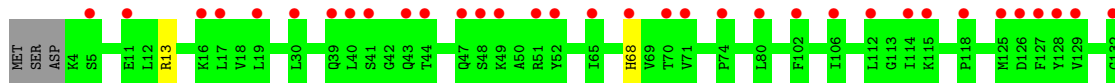
- Molecule 12: 60S ribosomal protein L10



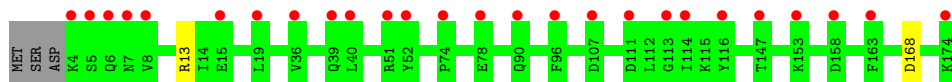
- Molecule 12: 60S ribosomal protein L10



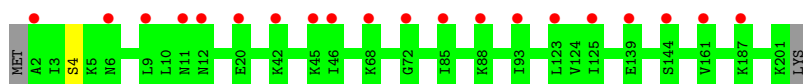
- Molecule 13: 60S ribosomal protein L11-B



- Molecule 13: 60S ribosomal protein L11-B

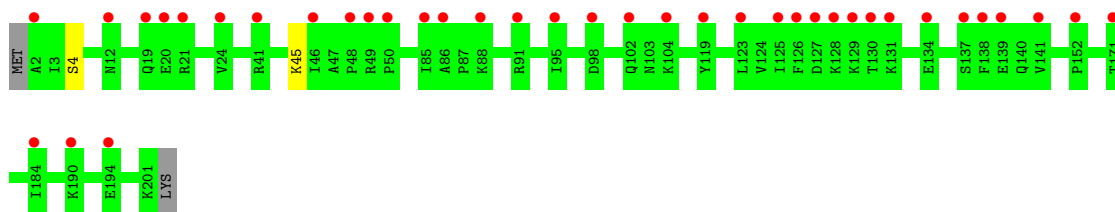


- Molecule 14: 60S ribosomal protein L13



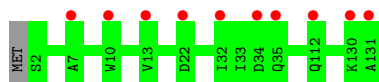
- Molecule 14: 60S ribosomal protein L13

Chain BG: 



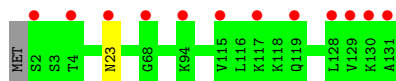
- Molecule 15: 60S ribosomal protein L14-B

Chain u: 



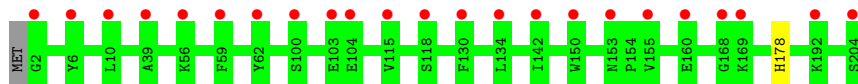
- Molecule 15: 60S ribosomal protein L14-B

Chain BH: 



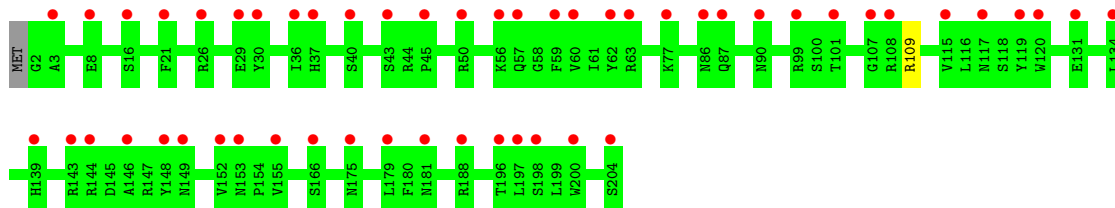
- Molecule 16: 60S ribosomal protein L15-A

Chain v: 



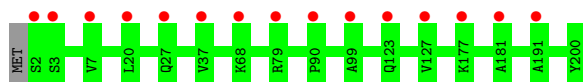
- Molecule 16: 60S ribosomal protein L15-A

Chain BI: 

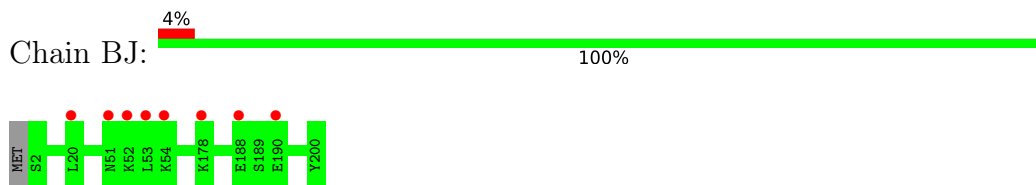


- Molecule 17: Ribosomal protein L13

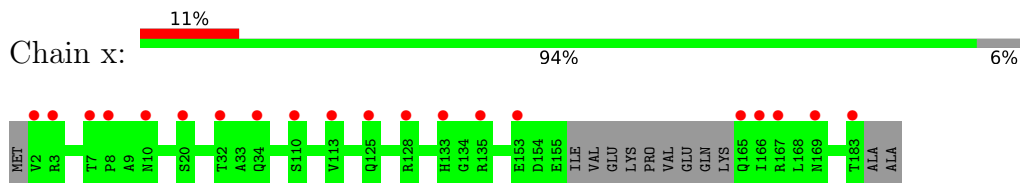
Chain w: 



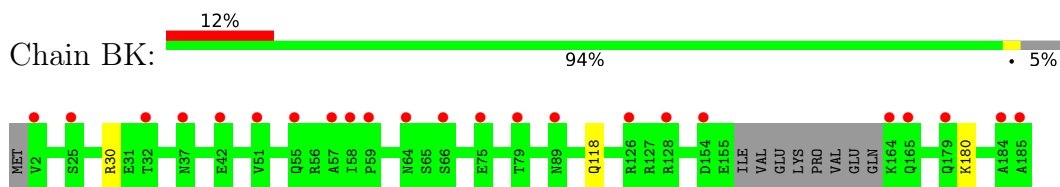
- Molecule 17: Ribosomal protein L13



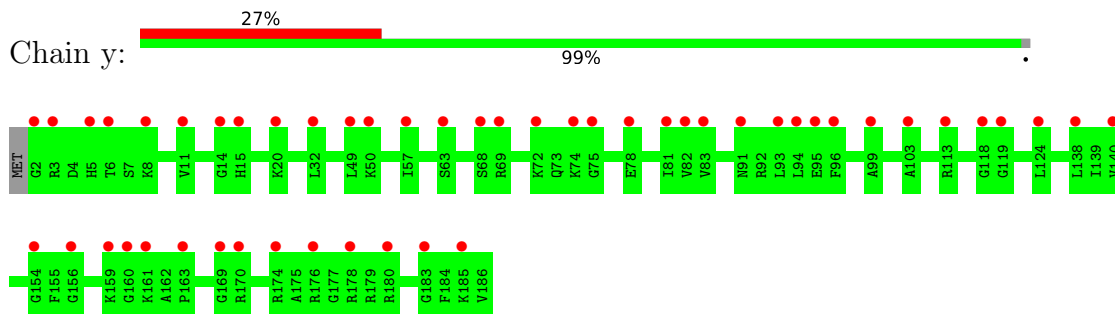
- Molecule 18: Ribosomal protein L22



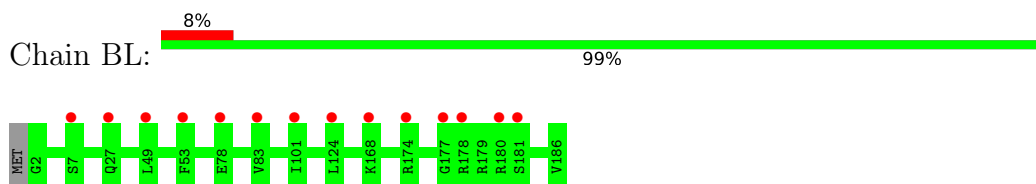
- Molecule 18: Ribosomal protein L22



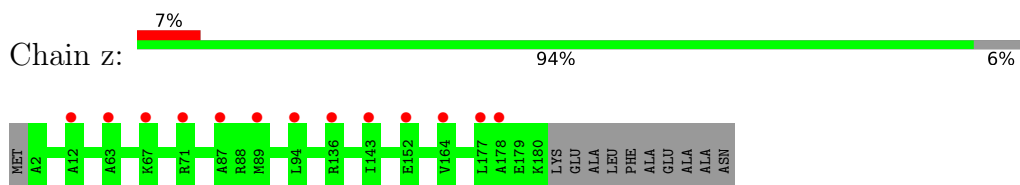
- Molecule 19: 60S ribosomal protein L18-A



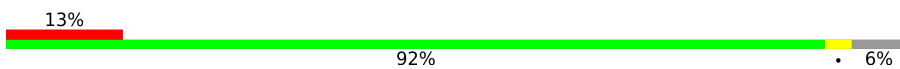
- Molecule 19: 60S ribosomal protein L18-A

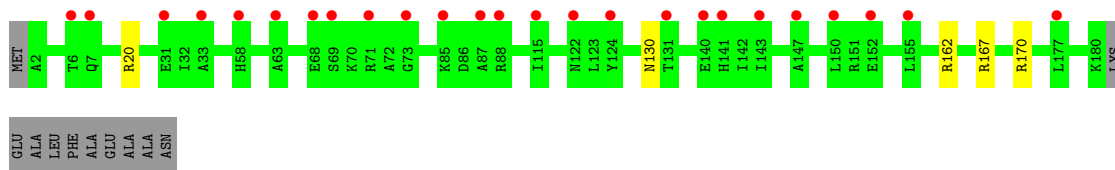


- Molecule 20: 60S ribosomal protein L19-A



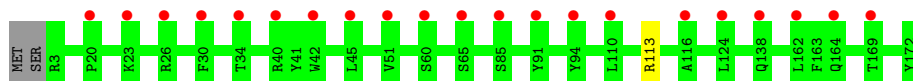
- Molecule 20: 60S ribosomal protein L19-A

Chain BM: 



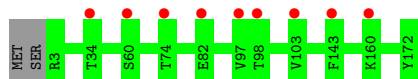
- Molecule 21: 60S ribosomal protein L20

Chain 0: 



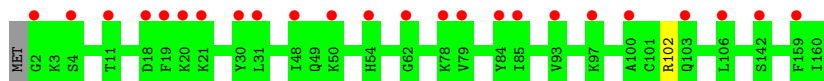
- Molecule 21: 60S ribosomal protein L20

Chain BN: 



- Molecule 22: 60S ribosomal protein L21-A

Chain 2: 




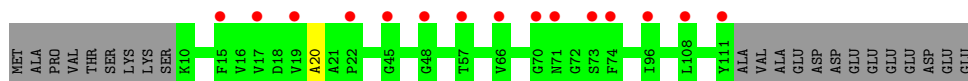
- Molecule 22: 60S ribosomal protein L21-A

Chain BO: 




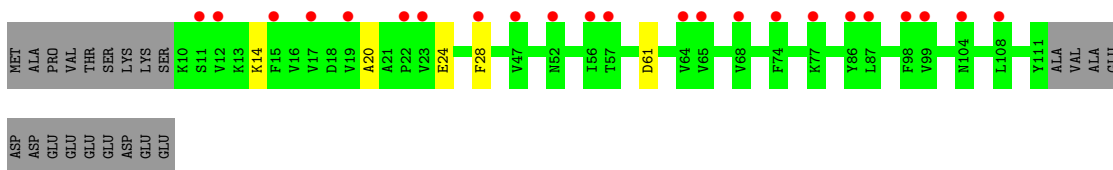
- Molecule 23: 60S ribosomal protein L22-B

Chain 5: 

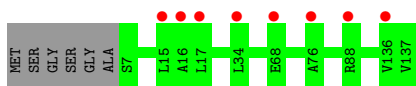


- Molecule 23: 60S ribosomal protein L22-B

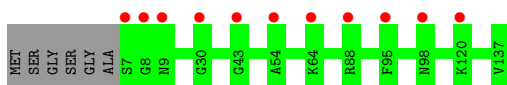
Chain BP: 



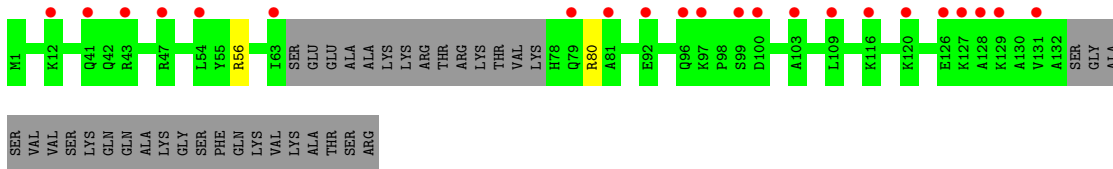
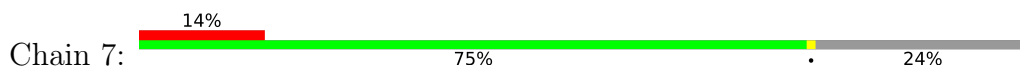
• Molecule 24: 60S ribosomal protein L23-A



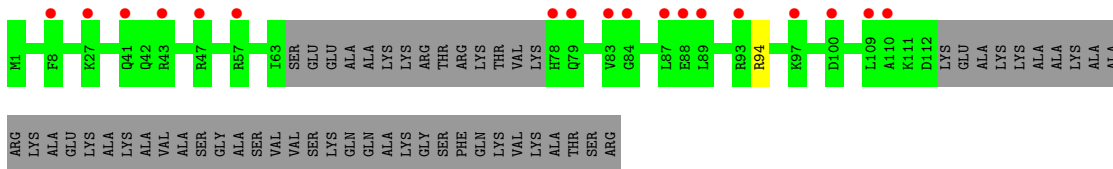
• Molecule 24: 60S ribosomal protein L23-A



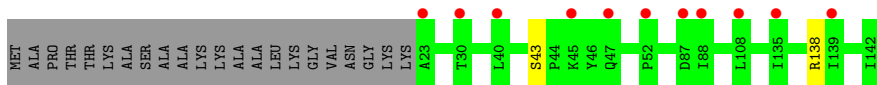
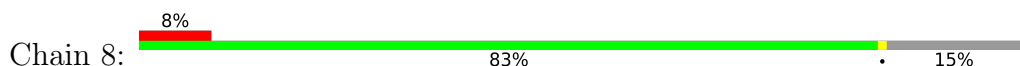
• Molecule 25: 60S ribosomal protein L24-A



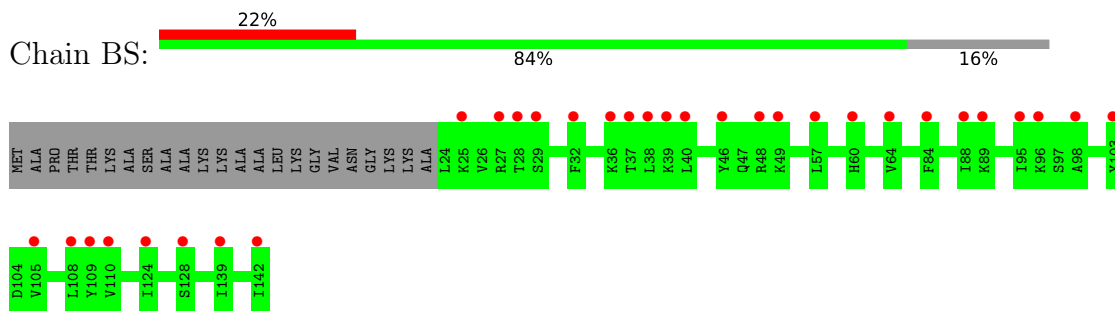
• Molecule 25: 60S ribosomal protein L24-A



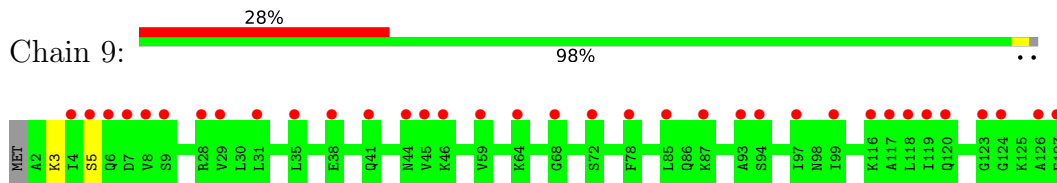
• Molecule 26: 60S ribosomal protein L25



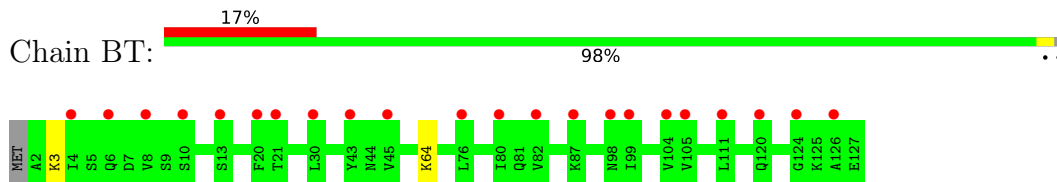
• Molecule 26: 60S ribosomal protein L25



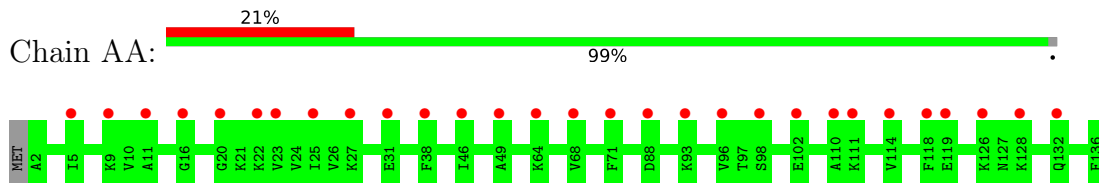
- Molecule 27: Ribosomal protein L24



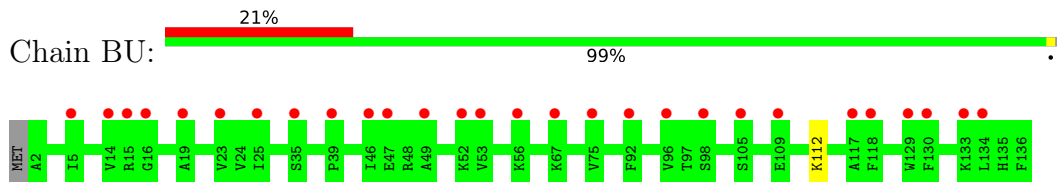
- Molecule 27: Ribosomal protein L24



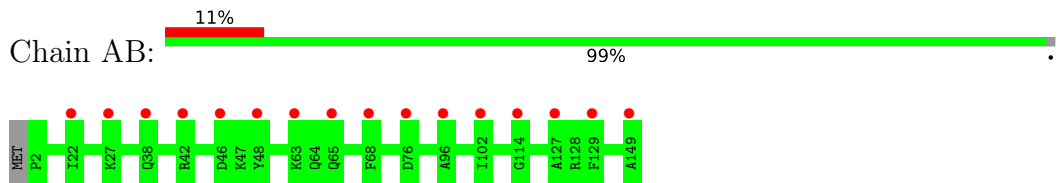
- Molecule 28: 60S ribosomal protein L27



- Molecule 28: 60S ribosomal protein L27

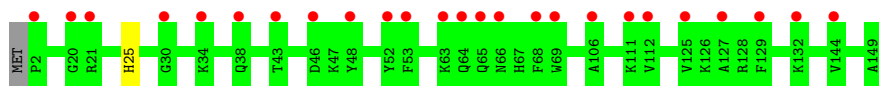


- Molecule 29: 60S ribosomal protein L28

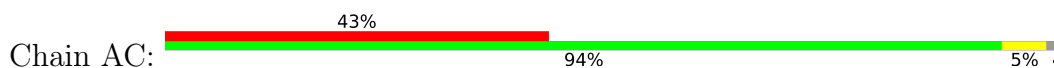


- Molecule 29: 60S ribosomal protein L28

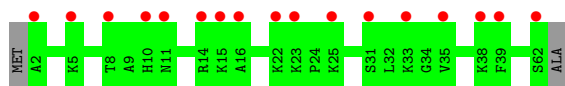




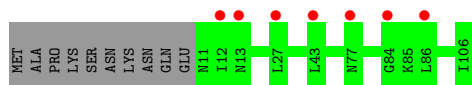
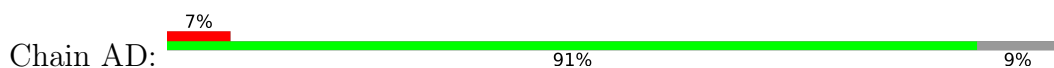
- Molecule 30: 60S ribosomal protein L29



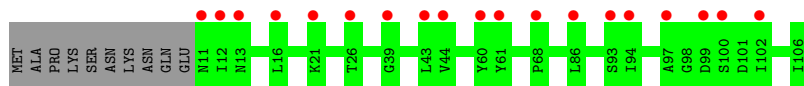
- Molecule 30: 60S ribosomal protein L29



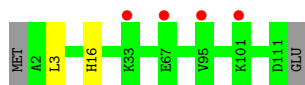
- Molecule 31: 60S ribosomal protein L30



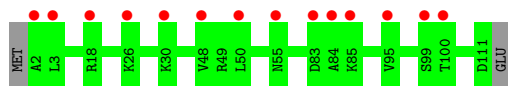
- Molecule 31: 60S ribosomal protein L30



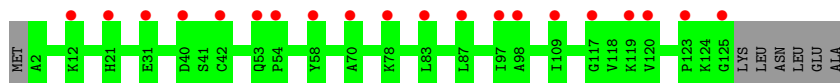
- Molecule 32: 60S ribosomal protein L31-B



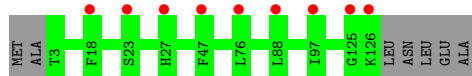
- Molecule 32: 60S ribosomal protein L31-B



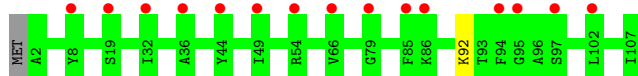
- Molecule 33: 60S ribosomal protein L32



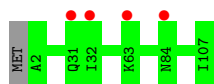
- Molecule 33: 60S ribosomal protein L32



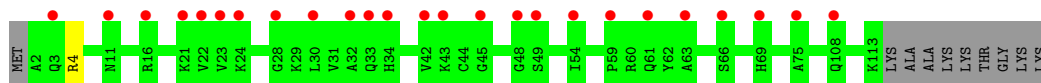
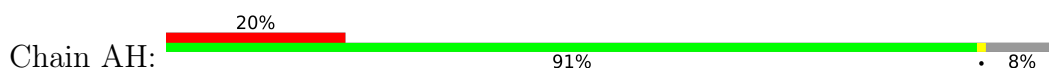
- Molecule 34: 60S ribosomal protein L33-A



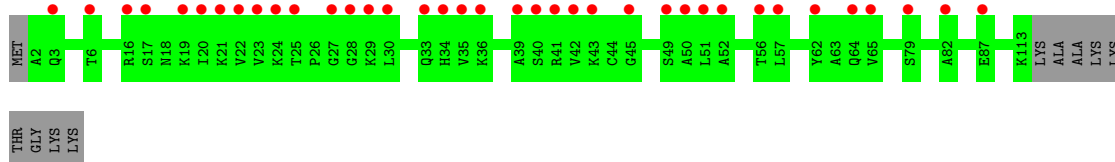
- Molecule 34: 60S ribosomal protein L33-A



- Molecule 35: 60S ribosomal protein L34-B

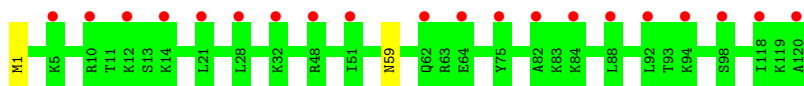


- Molecule 35: 60S ribosomal protein L34-B

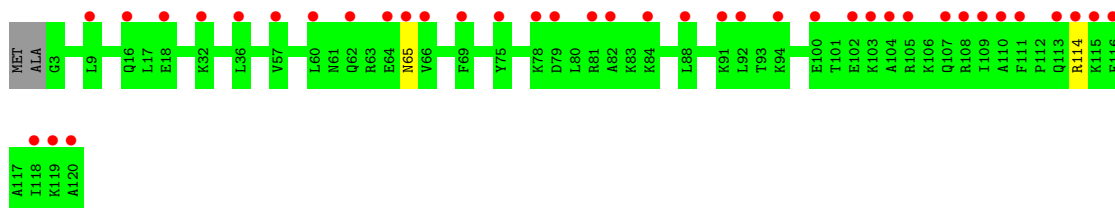


- Molecule 36: Ribosomal protein L29

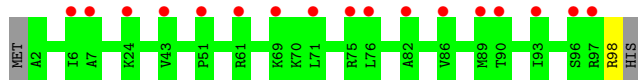




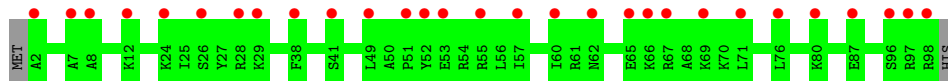
- Molecule 36: Ribosomal protein L29



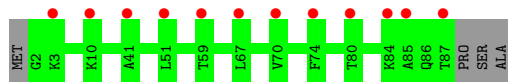
- Molecule 37: 60S ribosomal protein L36



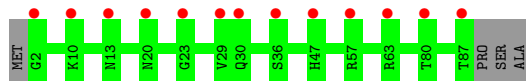
- Molecule 37: 60S ribosomal protein L36



- Molecule 38: 60S ribosomal protein L37-B

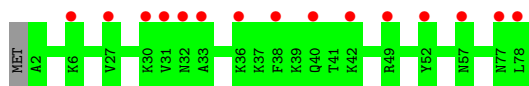


- Molecule 38: 60S ribosomal protein L37-B

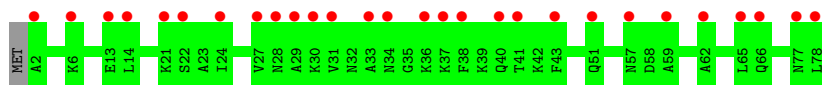


- Molecule 39: 60S ribosomal protein L38

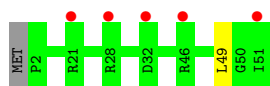




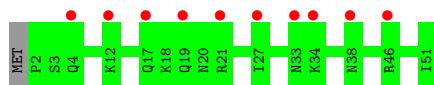
- Molecule 39: 60S ribosomal protein L38



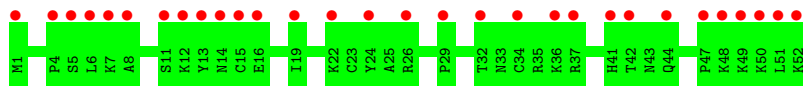
- Molecule 40: 60S ribosomal protein L39



- Molecule 40: 60S ribosomal protein L39



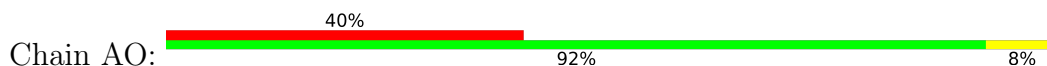
- Molecule 41: 60S ribosomal protein L40-B



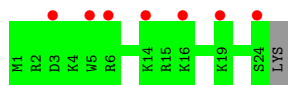
- Molecule 41: 60S ribosomal protein L40-B



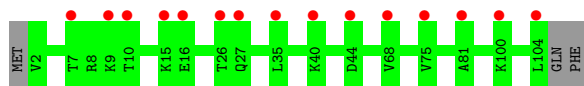
- Molecule 42: 60S ribosomal protein L41



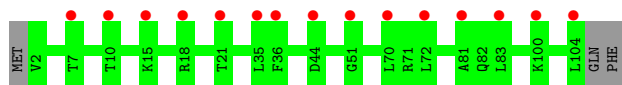
- Molecule 42: 60S ribosomal protein L41



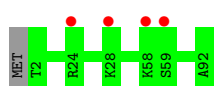
- Molecule 43: 60S ribosomal protein L42-B



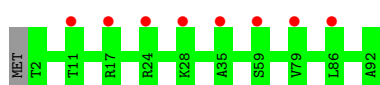
- Molecule 43: 60S ribosomal protein L42-B



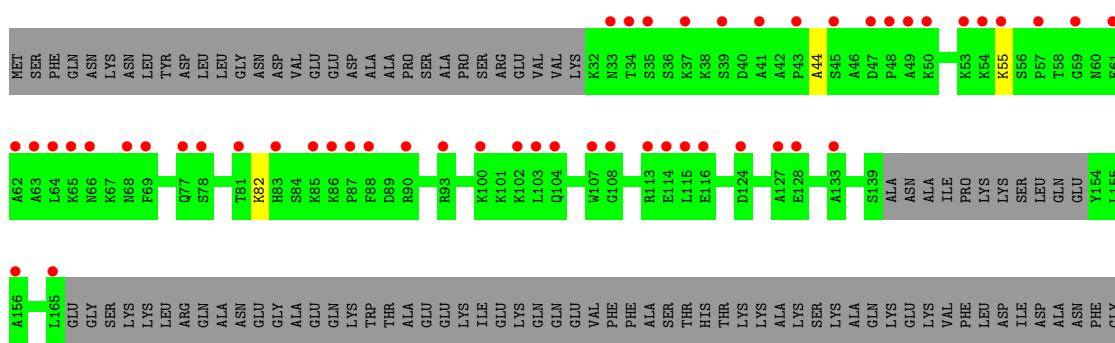
- Molecule 44: 60S ribosomal protein L43-A



- Molecule 44: 60S ribosomal protein L43-A

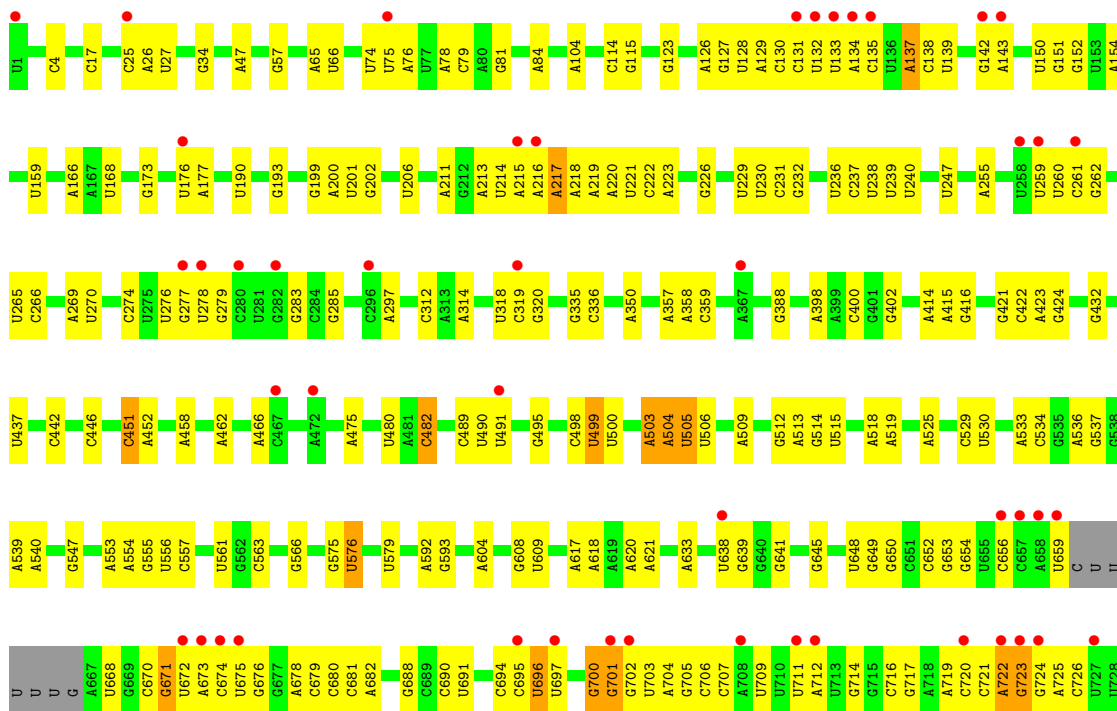
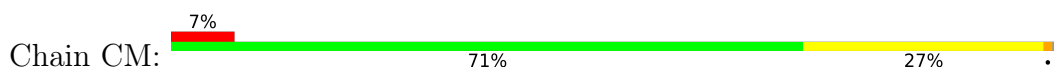


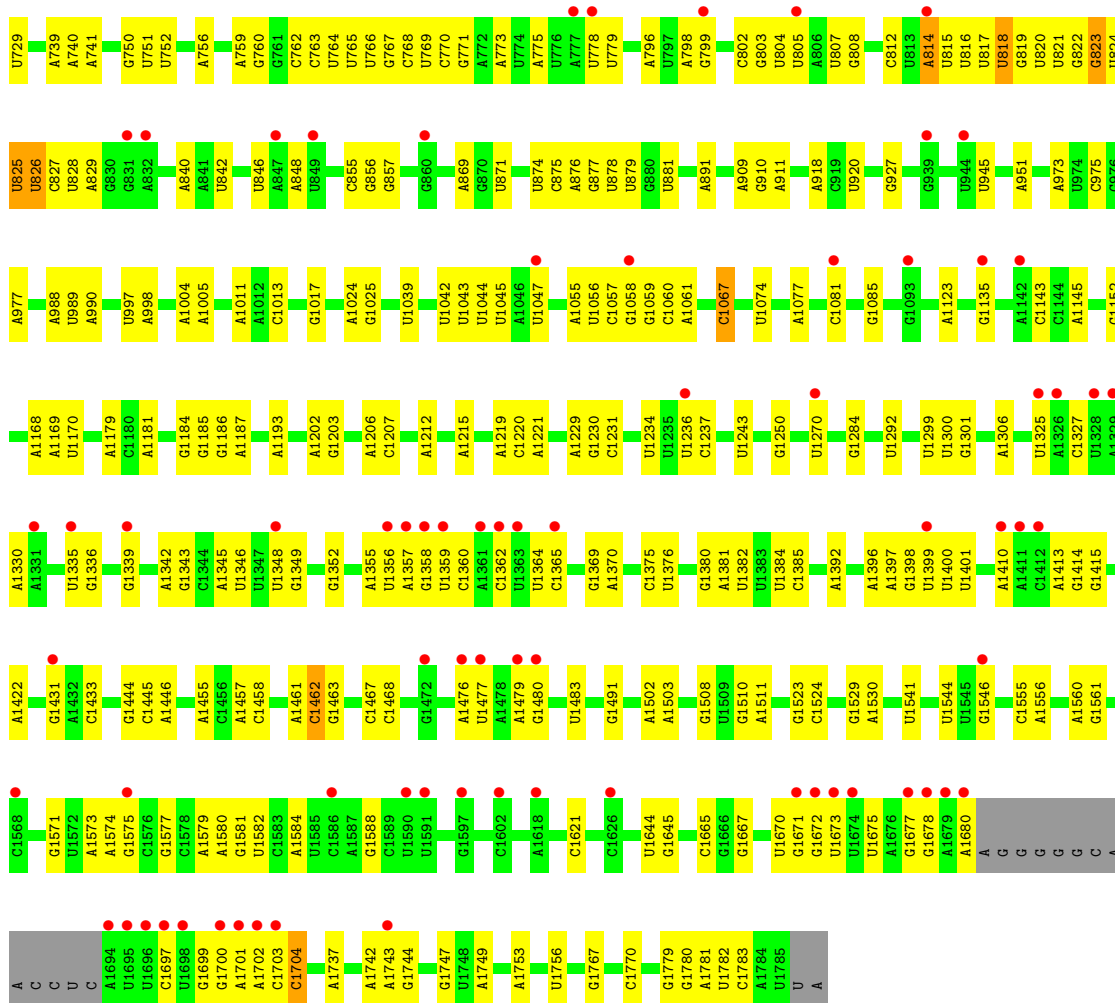
- Molecule 45: 60S ribosomal protein CAALFM_C304810CA



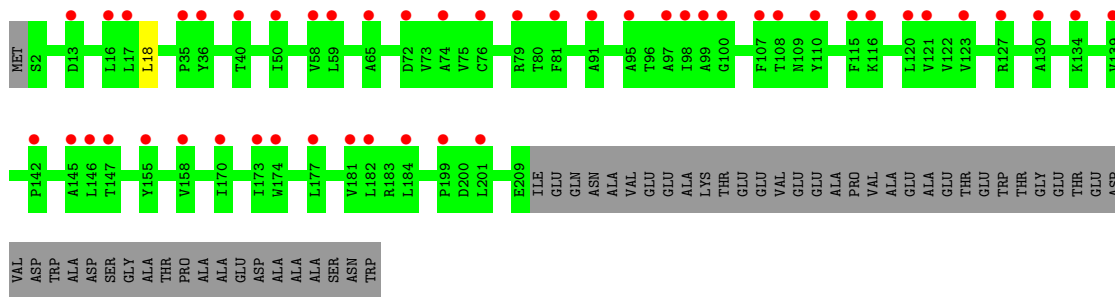
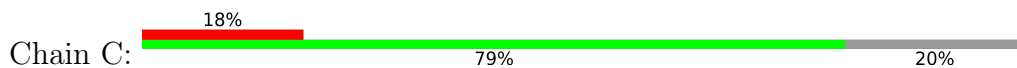


• Molecule 46: 18S

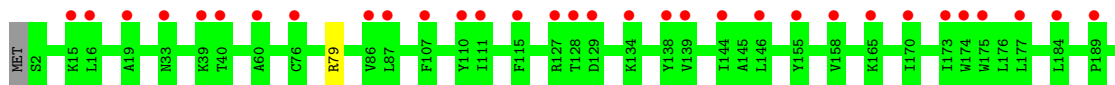
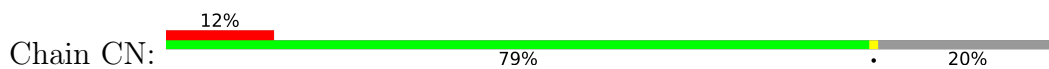




• Molecule 47: 40S ribosomal protein S0

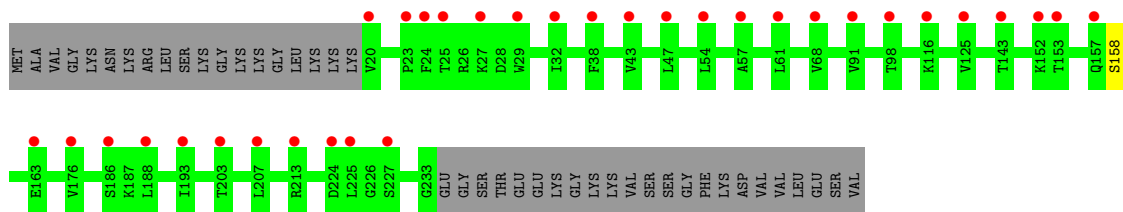
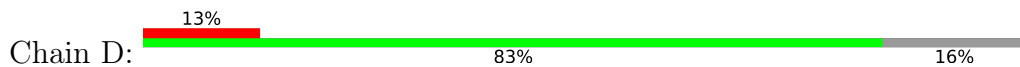


• Molecule 47: 40S ribosomal protein S0

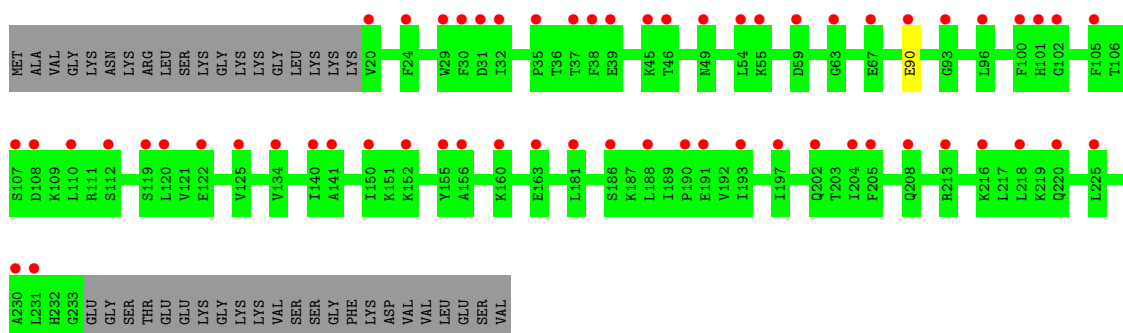
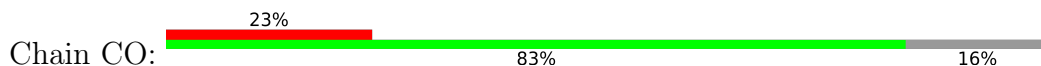


R206	E209	ILE	GLY	GLN	ASN	ALA	VAL	GLU	GLU	ALA	LYS	THR	GLU	VAL	GLU	GLU	ALA	PRO	VAL	VAL	ALA	GLU	GLU	ALA	ALA	GLU	THR	THR	GLY	GLU	THR	GLU	ASP	VAL	ASP	ASP	ALA	GLY	ALA	THR	PRO	ALA	ALA	ALA	ALA	ASN	ASN	TRP
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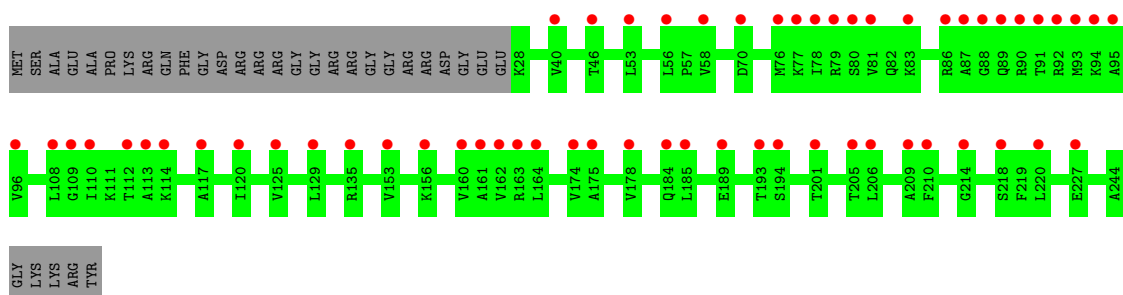
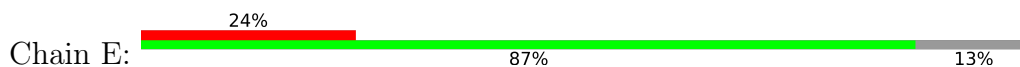
● Molecule 48: 40S ribosomal protein S1



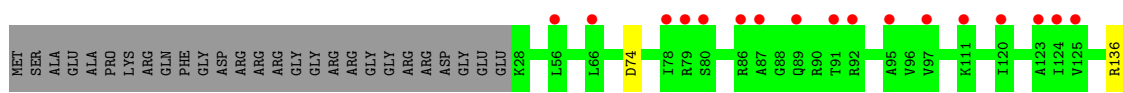
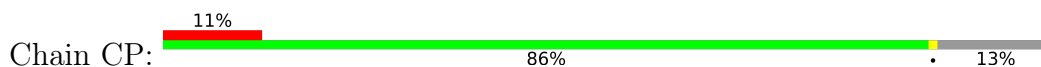
● Molecule 48: 40S ribosomal protein S1

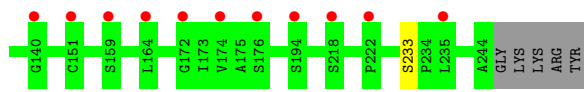


● Molecule 49: Ribosomal protein S5

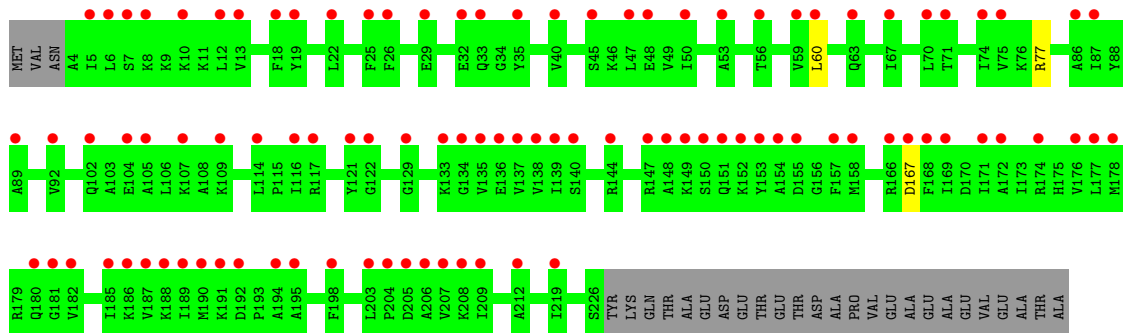
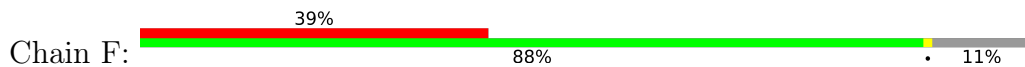


● Molecule 49: Ribosomal protein S5

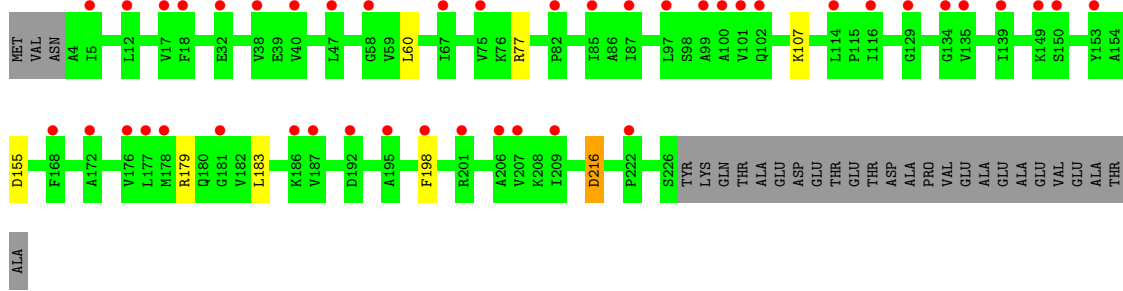
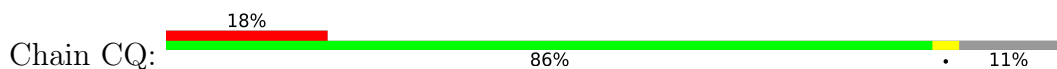




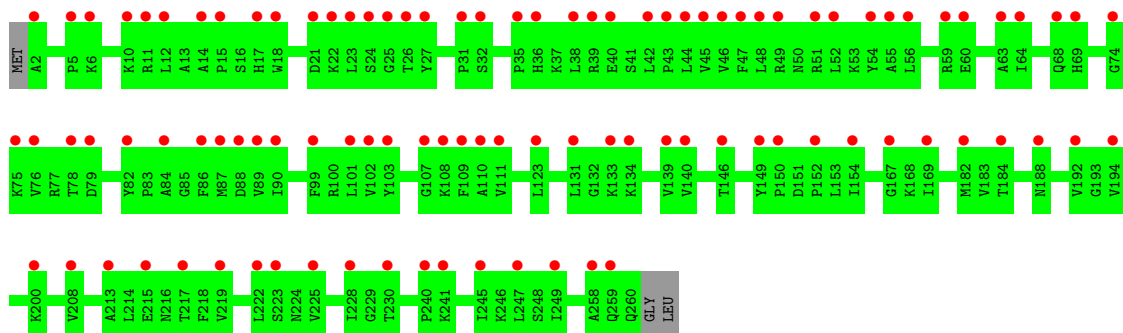
• Molecule 50: Ribosomal protein S3



• Molecule 50: Ribosomal protein S3

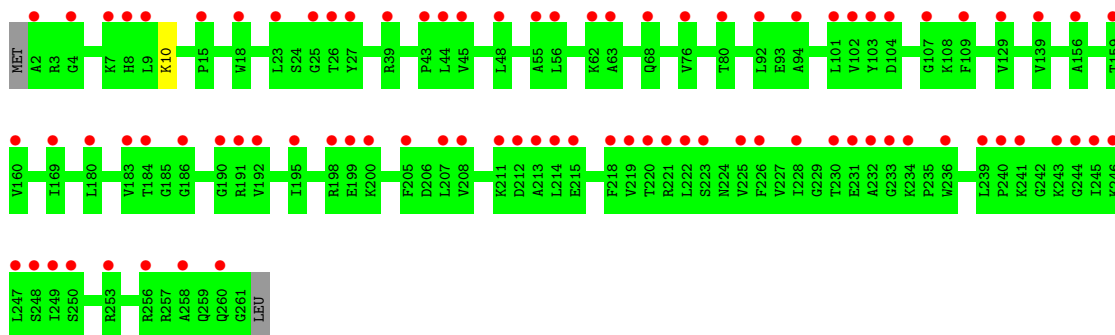


• Molecule 51: 40S ribosomal protein S4



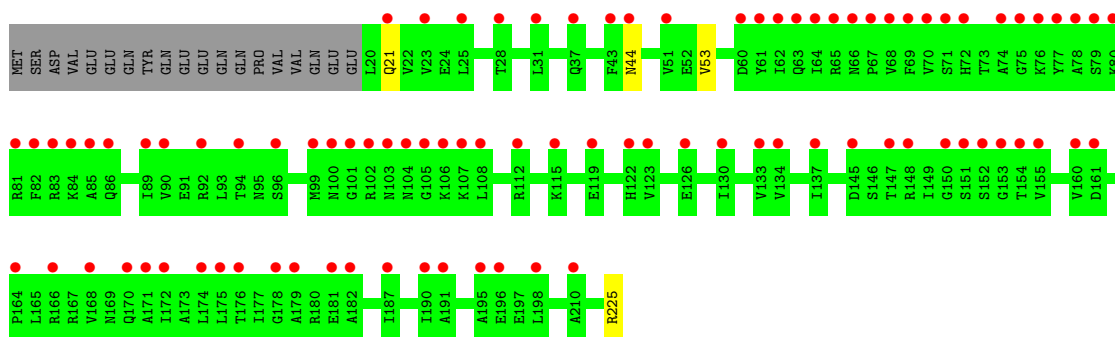
• Molecule 51: 40S ribosomal protein S4





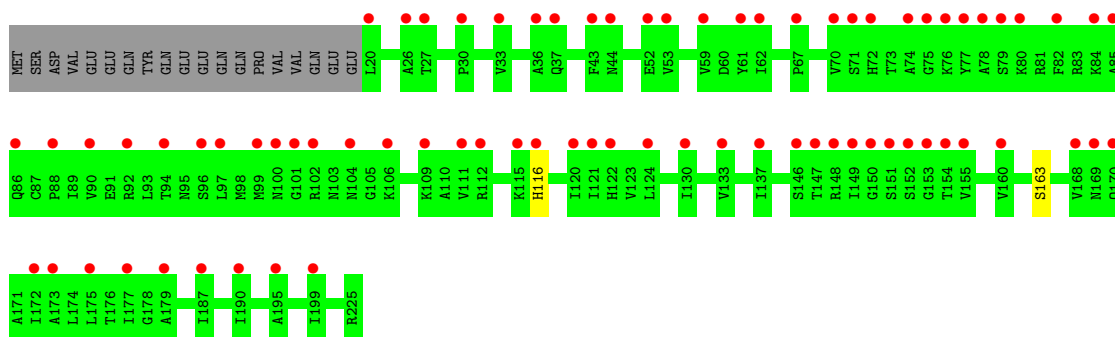
- Molecule 52: Ribosomal protein S7

Chain H: 40% 90% 8%



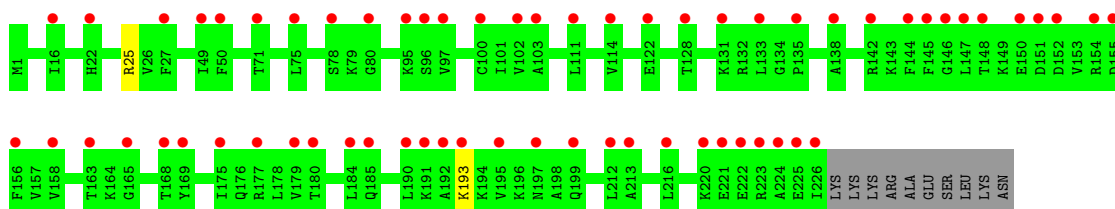
- Molecule 52: Ribosomal protein S7

Chain CS: 34% 91% 8%

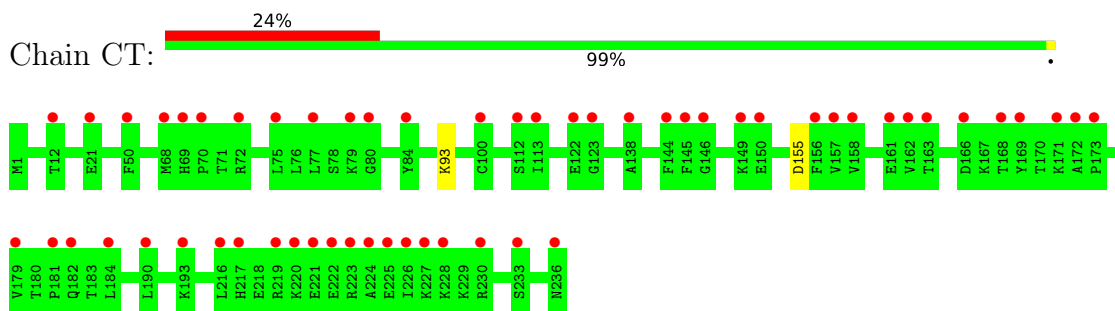


- Molecule 53: 40S ribosomal protein S6

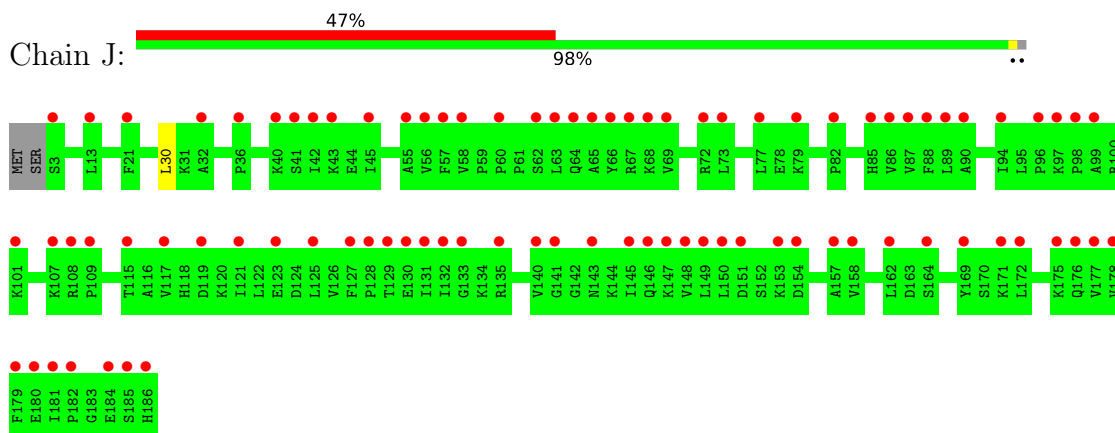
Chain I: 27% 95%



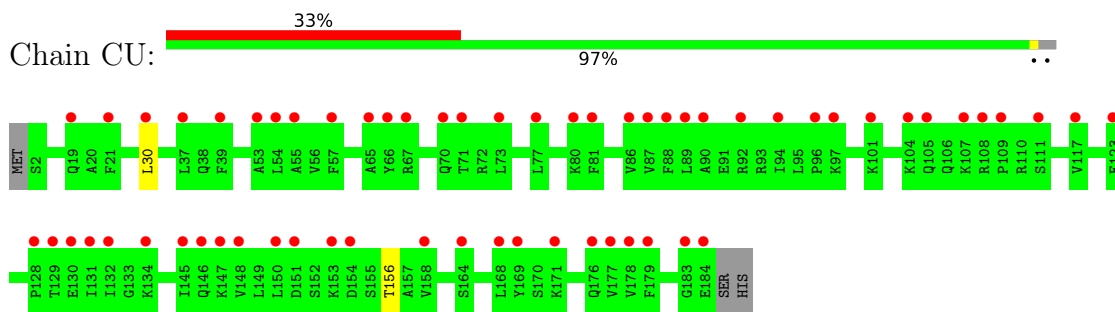
- Molecule 53: 40S ribosomal protein S6



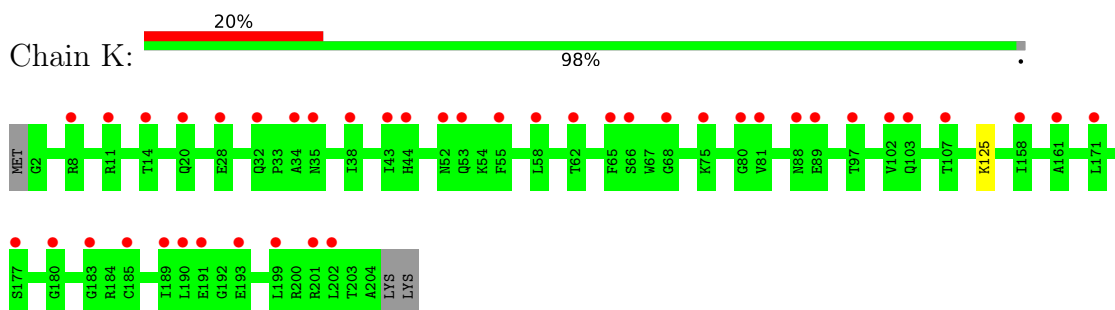
- Molecule 54: 40S ribosomal protein S7



- Molecule 54: 40S ribosomal protein S7

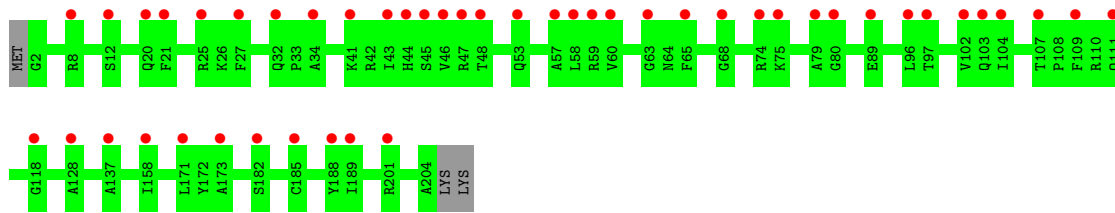


- Molecule 55: 40S ribosomal protein S8

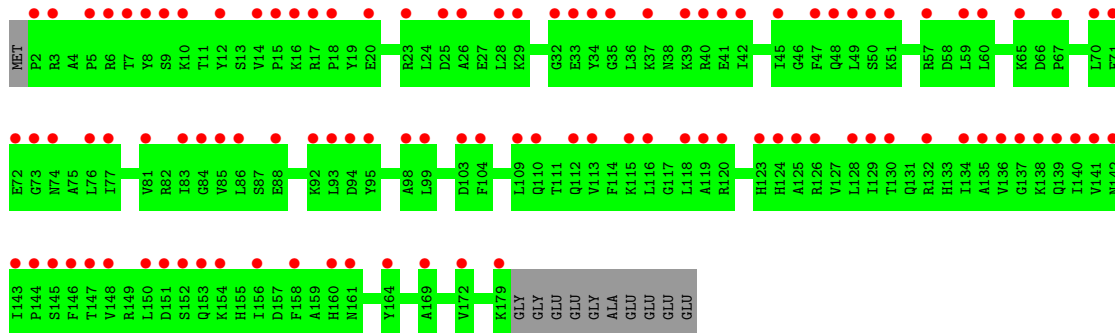


- Molecule 55: 40S ribosomal protein S8

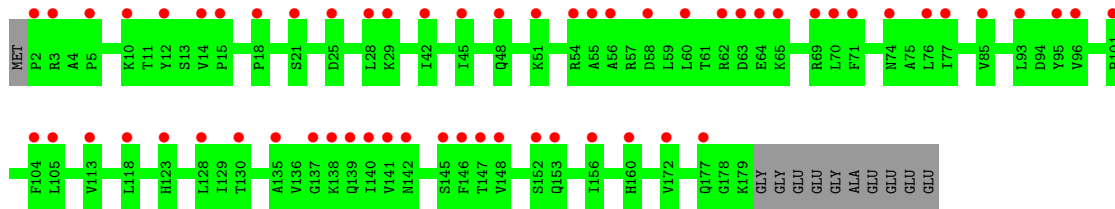




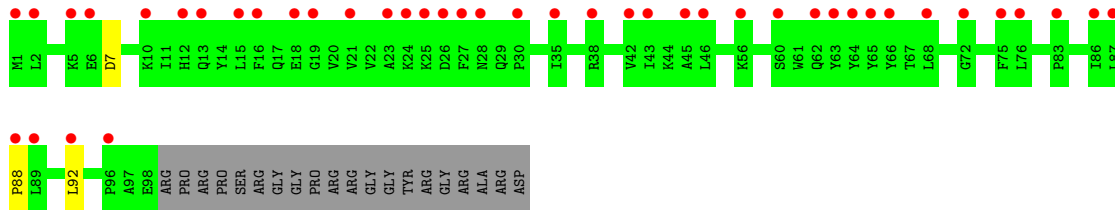
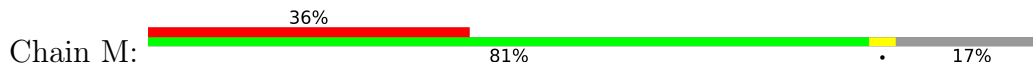
• Molecule 56: Ribosomal protein S4



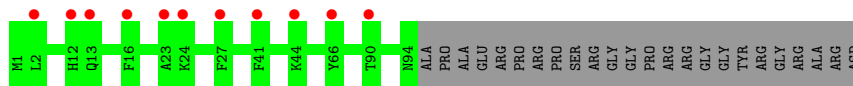
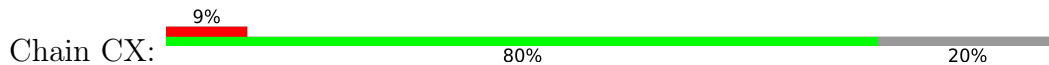
• Molecule 56: Ribosomal protein S4



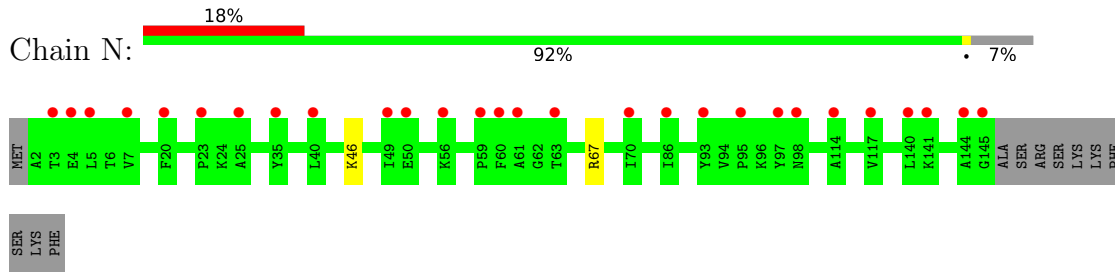
• Molecule 57: 40S ribosomal protein S10-A



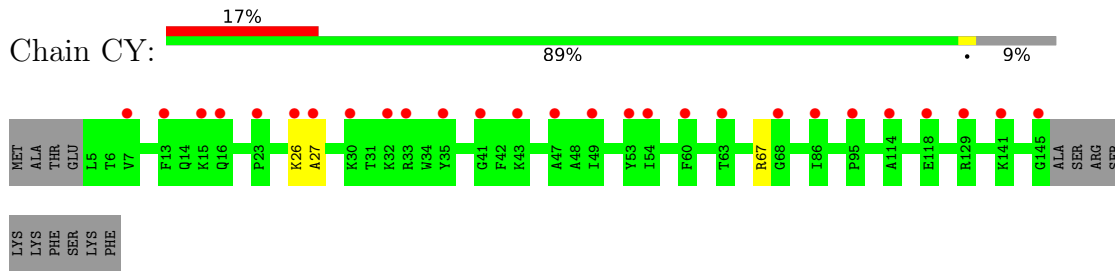
• Molecule 57: 40S ribosomal protein S10-A



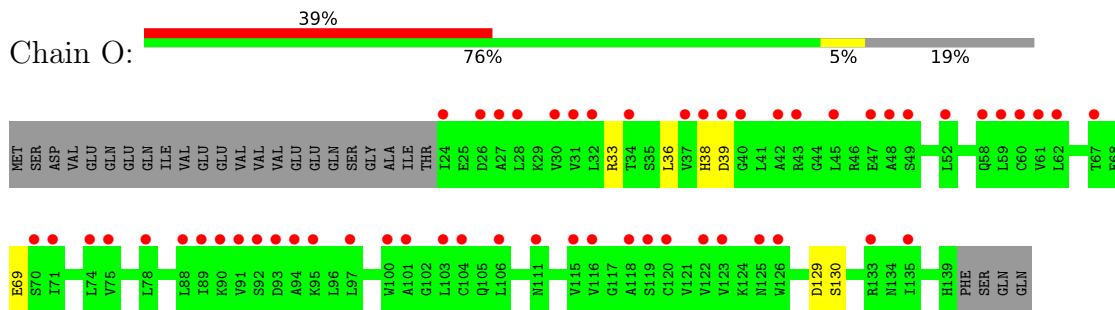
- Molecule 58: 40S ribosomal protein S11A



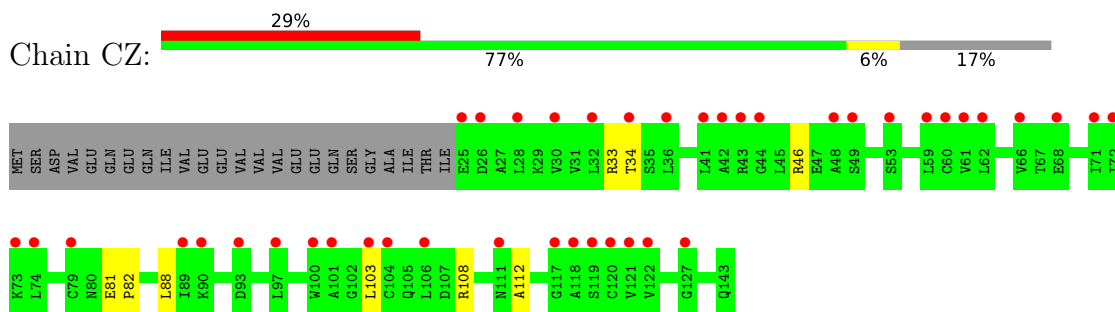
- Molecule 58: 40S ribosomal protein S11A



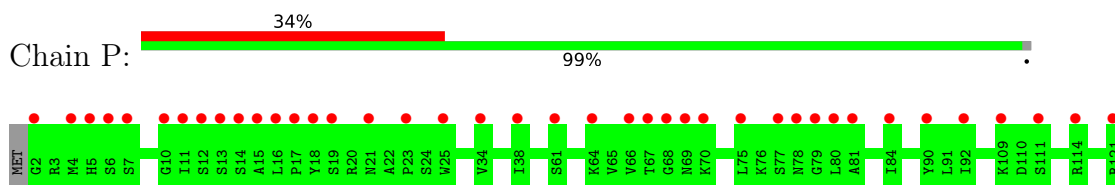
- Molecule 59: 40S ribosomal protein S12

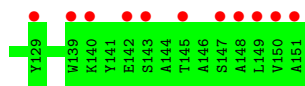


- Molecule 59: 40S ribosomal protein S12

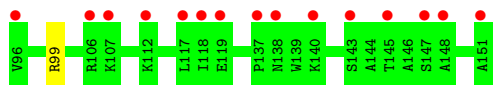
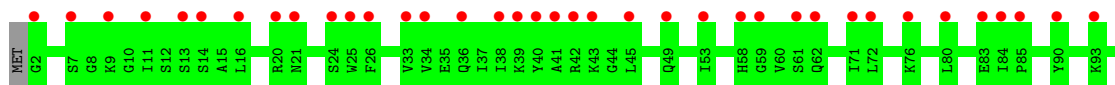


- Molecule 60: 40S ribosomal protein S13





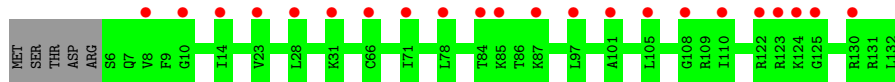
- Molecule 60: 40S ribosomal protein S13



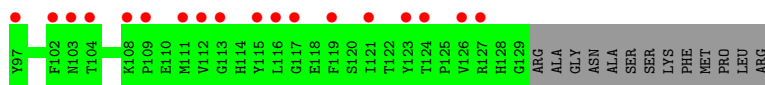
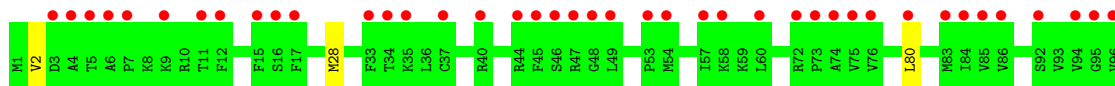
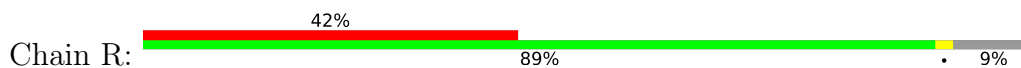
- Molecule 61: 40S ribosomal protein S14-A



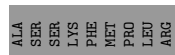
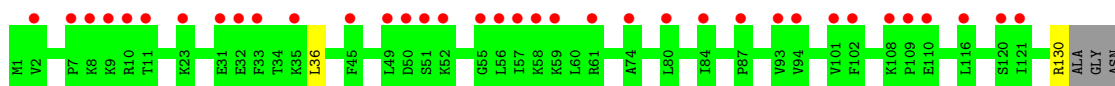
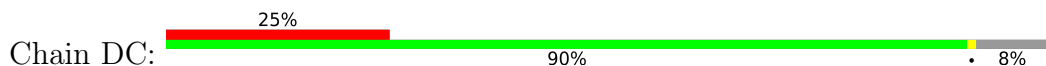
- Molecule 61: 40S ribosomal protein S14-A



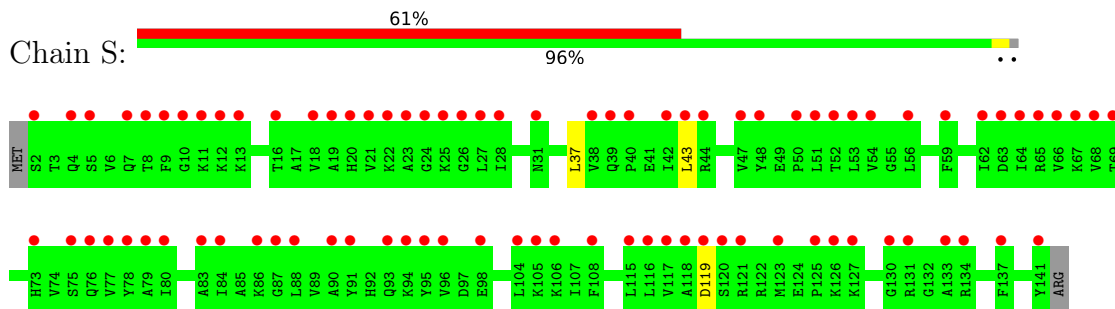
- Molecule 62: 40S ribosomal protein S15



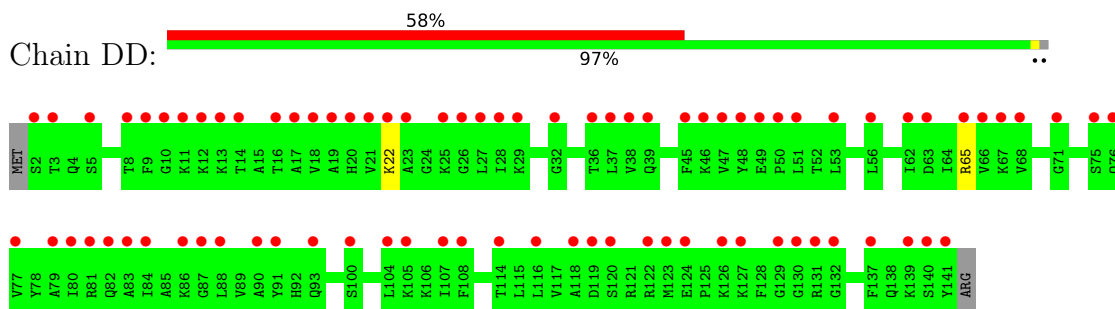
- Molecule 62: 40S ribosomal protein S15



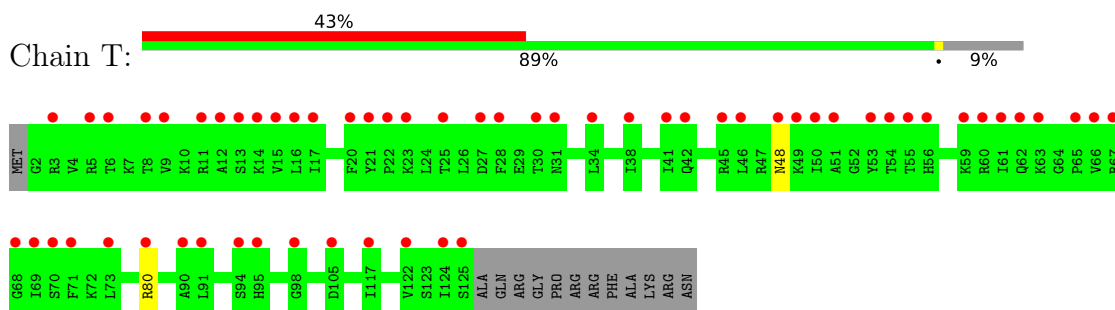
● Molecule 63: 40S ribosomal protein S16



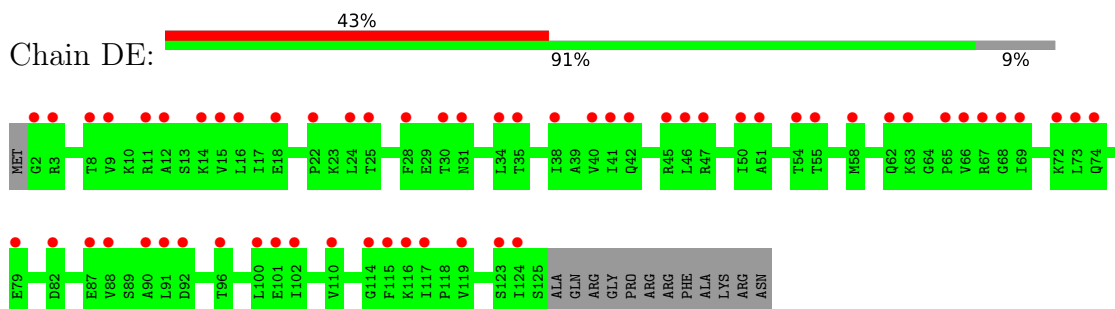
● Molecule 63: 40S ribosomal protein S16



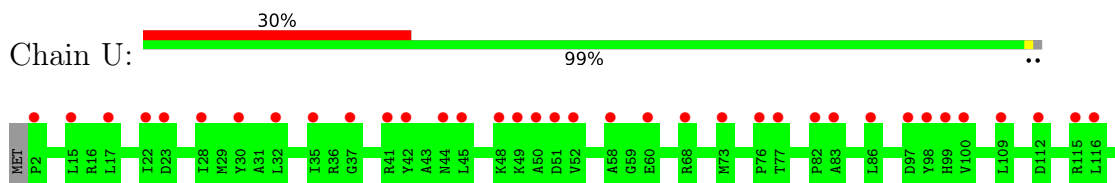
● Molecule 64: 40S ribosomal protein S17-B



● Molecule 64: 40S ribosomal protein S17-B



● Molecule 65: 40S ribosomal protein S18-B

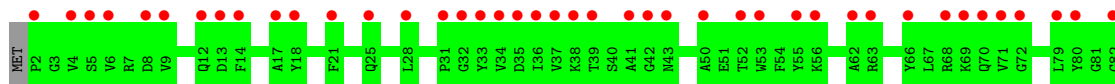
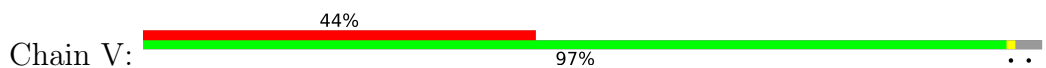




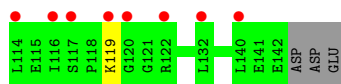
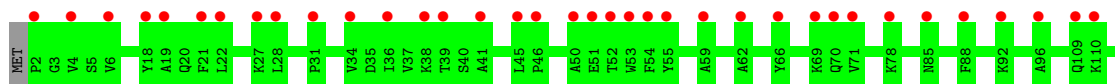
- Molecule 65: 40S ribosomal protein S18-B



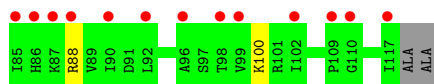
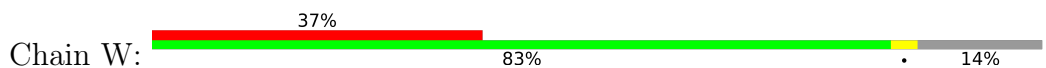
- Molecule 66: 40S ribosomal protein S19-A



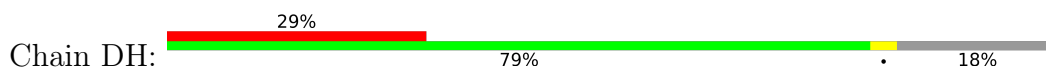
- Molecule 66: 40S ribosomal protein S19-A

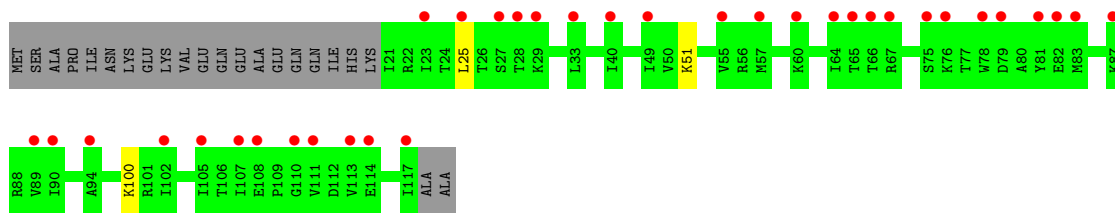


- Molecule 67: Ribosomal protein S10

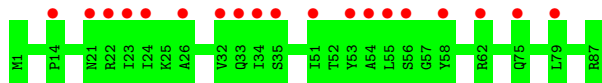


- Molecule 67: Ribosomal protein S10

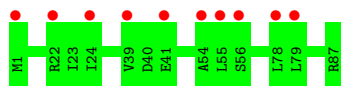




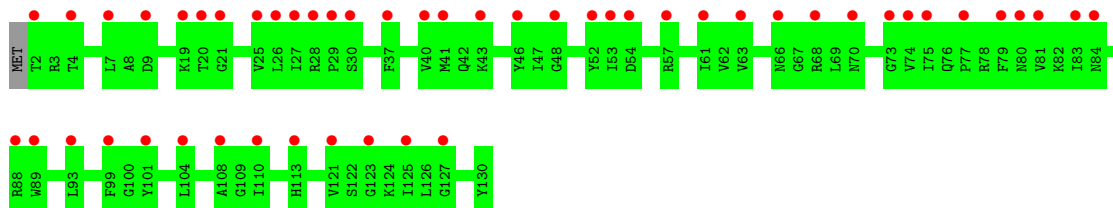
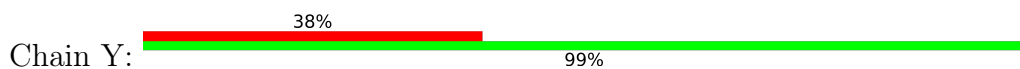
- Molecule 68: 40S ribosomal protein S21



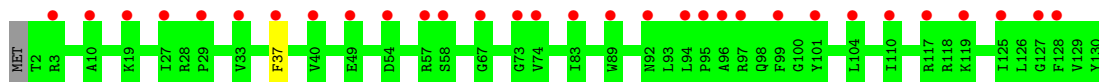
- Molecule 68: 40S ribosomal protein S21



- Molecule 69: 40S ribosomal protein S22-A



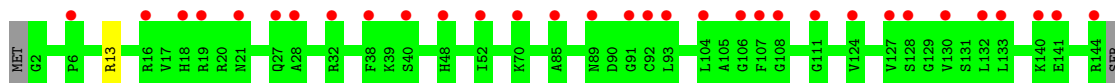
- Molecule 69: 40S ribosomal protein S22-A



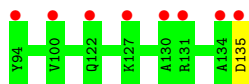
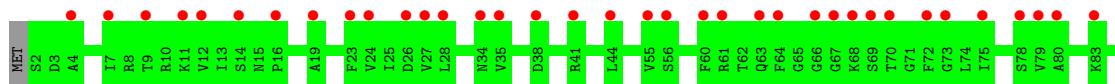
- Molecule 70: Ribosomal protein S23 (S12)



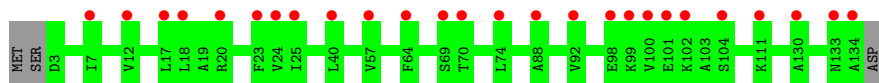
- Molecule 70: Ribosomal protein S23 (S12)



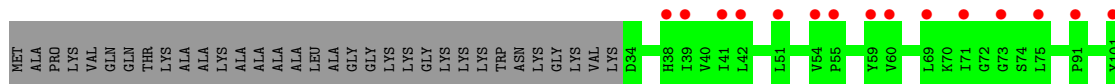
• Molecule 71: 40S ribosomal protein S24



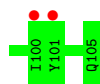
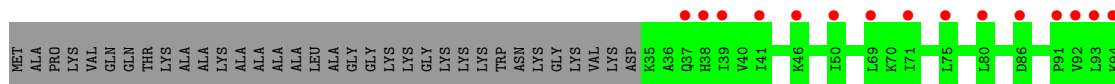
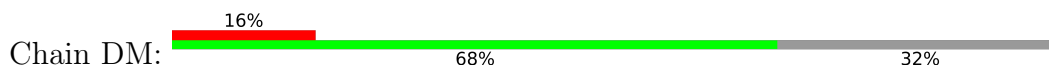
• Molecule 71: 40S ribosomal protein S24



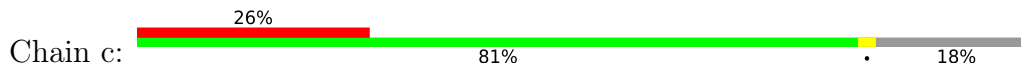
• Molecule 72: 40S ribosomal protein S25

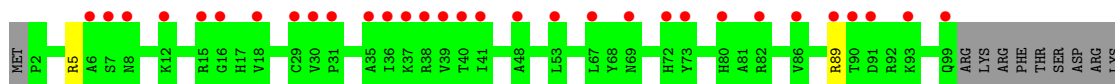


• Molecule 72: 40S ribosomal protein S25



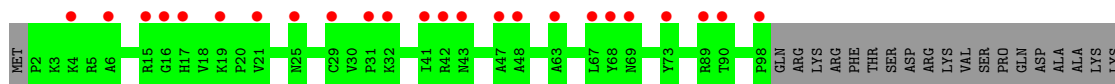
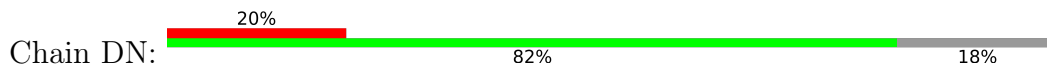
• Molecule 73: 40S ribosomal protein S26





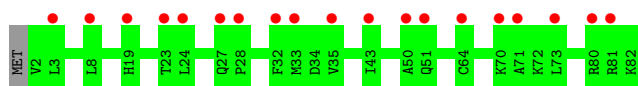
VAL
SER
PRO
GLN
ASP
ALA
ALA
LYS
LYS
ALA
ASN

- Molecule 73: 40S ribosomal protein S26

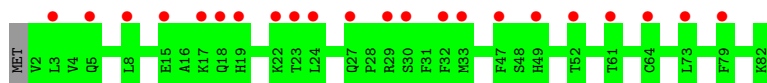


ALA
ASN

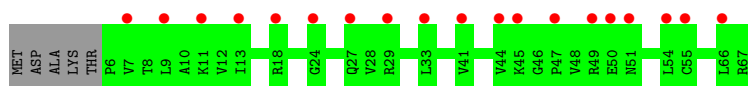
- Molecule 74: 40S ribosomal protein S27



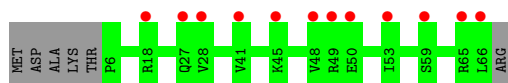
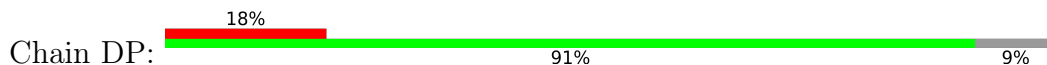
- Molecule 74: 40S ribosomal protein S27



- Molecule 75: 40S ribosomal protein S28-B

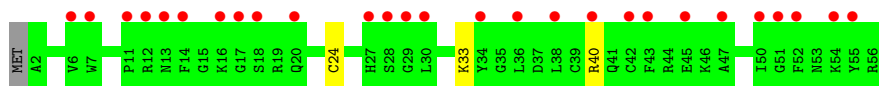


- Molecule 75: 40S ribosomal protein S28-B



- Molecule 76: 40S ribosomal protein S29A

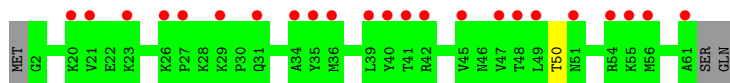




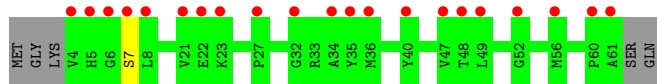
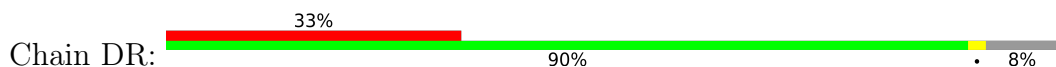
• Molecule 76: 40S ribosomal protein S29A



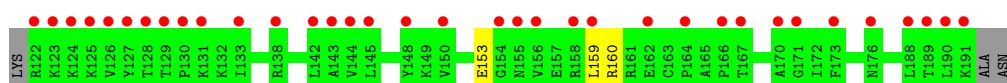
• Molecule 77: 40S ribosomal protein S30



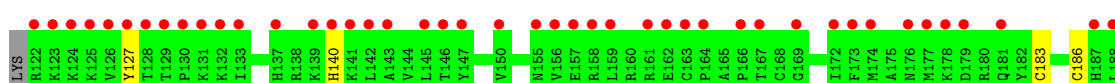
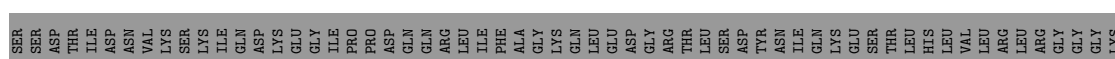
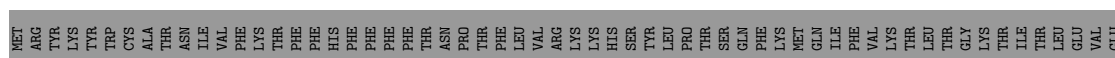
• Molecule 77: 40S ribosomal protein S30

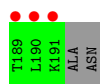


• Molecule 78: Ubiquitin-40S ribosomal protein S31 fusion protein

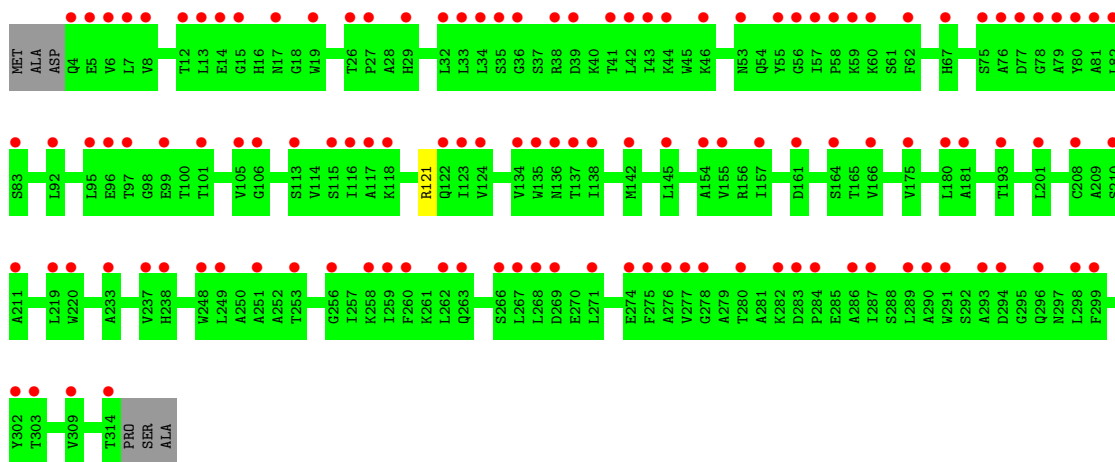
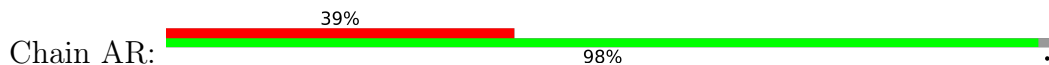


• Molecule 78: Ubiquitin-40S ribosomal protein S31 fusion protein

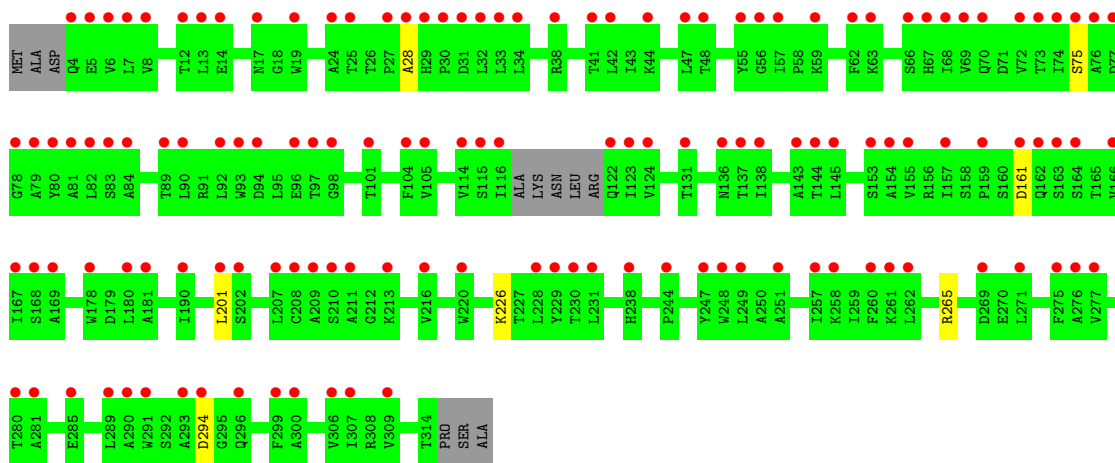
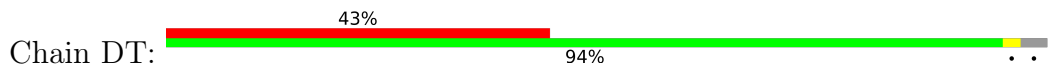




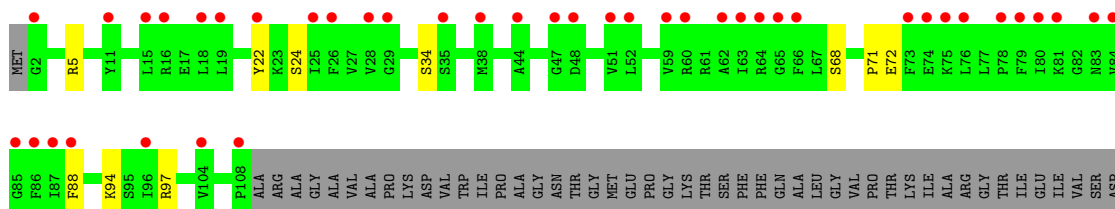
• Molecule 79: Guanine nucleotide-binding protein subunit beta-like protein

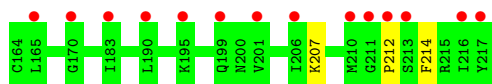


• Molecule 79: Guanine nucleotide-binding protein subunit beta-like protein

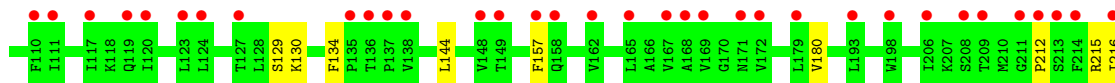
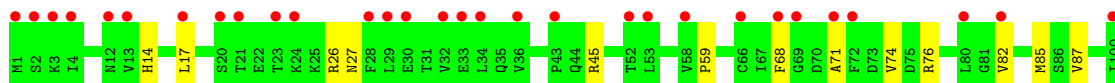
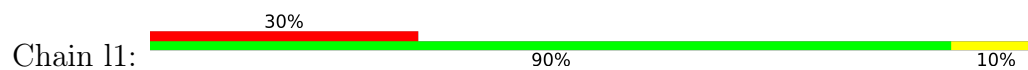


• Molecule 80: 60S acidic ribosomal protein P0





- Molecule 82: Ribosomal protein



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	298.81Å 292.84Å 450.18Å 90.00° 100.11° 90.00°	Depositor
Resolution (Å)	163.72 – 3.05 163.72 – 3.05	Depositor EDS
% Data completeness (in resolution range)	99.1 (163.72-3.05) 89.6 (163.72-3.05)	Depositor EDS
R_{merge}	0.84	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.00 (at 3.07Å)	Xtrriage
Refinement program	PHENIX (1.19rc4_4035: ???)	Depositor
R, R_{free}	0.283 , 0.307 0.283 , 0.307	Depositor DCC
R_{free} test set	2000 reflections (0.14%)	wwPDB-VP
Wilson B-factor (Å ²)	50.5	Xtrriage
Anisotropy	0.070	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.24 , 46.3	EDS
L-test for twinning ²	$\langle L \rangle = 0.40$, $\langle L^2 \rangle = 0.23$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.84	EDS
Total number of atoms	408804	wwPDB-VP
Average B, all atoms (Å ²)	87.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.31% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality i

5.1 Standard geometry i

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	1	0.30	0/76756	0.90	107/119655 (0.1%)
1	AS	0.29	0/77209	0.89	86/120366 (0.1%)
2	3	0.25	0/2884	0.78	0/4492
2	AT	0.25	0/2884	0.78	0/4492
3	4	0.25	0/3724	0.80	1/5798 (0.0%)
3	AU	0.24	0/3724	0.81	2/5798 (0.0%)
4	AW	0.27	0/1922	0.56	0/2581
4	j	0.27	0/1922	0.59	0/2581
5	AX	0.27	0/3145	0.57	0/4231
5	k	0.27	0/3145	0.57	0/4231
6	AY	0.26	0/2799	0.53	0/3777
6	l	0.28	0/2799	0.55	0/3777
7	AZ	0.26	0/2447	0.51	0/3294
7	m	0.27	0/2479	0.53	0/3337
8	BA	0.27	0/1231	0.55	0/1662
8	n	0.28	0/1263	0.54	0/1703
9	BB	0.27	0/1918	0.50	0/2575
9	o	0.28	0/1909	0.52	0/2563
10	BC	0.30	0/1807	0.50	0/2434
10	p	0.28	0/1835	0.50	0/2472
11	BD	0.26	0/1537	0.54	0/2067
11	q	0.28	0/1528	0.58	0/2055
12	BE	0.27	0/1724	0.57	0/2314
12	r	0.29	0/1724	0.57	0/2314
13	BF	0.26	0/1390	0.58	0/1861
13	s	0.27	0/1390	0.57	0/1861
14	BG	0.27	0/1637	0.55	0/2195
14	t	0.27	0/1637	0.56	0/2195
15	BH	0.26	0/1044	0.54	0/1407
15	u	0.27	0/1044	0.56	0/1407
16	BI	0.26	0/1753	0.60	0/2347
16	v	0.27	0/1753	0.60	0/2347

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	BJ	0.28	0/1620	0.53	0/2167
17	w	0.27	0/1620	0.52	0/2167
18	BK	0.26	0/1429	0.57	0/1920
18	x	0.26	0/1410	0.57	0/1895
19	BL	0.27	0/1482	0.57	0/1985
19	y	0.27	0/1482	0.58	0/1985
20	BM	0.26	0/1475	0.59	0/1961
20	z	0.27	0/1475	0.60	0/1961
21	0	0.26	0/1457	0.57	0/1962
21	BN	0.27	0/1457	0.54	0/1962
22	2	0.28	0/1285	0.54	0/1723
22	BO	0.26	0/1285	0.54	0/1723
23	5	0.32	0/841	0.49	0/1133
23	BP	0.28	0/841	0.51	0/1133
24	6	0.27	0/993	0.57	0/1339
24	BQ	0.27	0/993	0.57	0/1339
25	7	0.27	0/958	0.53	0/1267
25	BR	0.26	0/814	0.55	0/1079
26	8	0.26	0/981	0.53	0/1326
26	BS	0.24	0/976	0.51	0/1319
27	9	0.25	0/999	0.52	0/1334
27	BT	0.25	0/999	0.53	0/1334
28	AA	0.27	0/1112	0.49	0/1488
28	BU	0.26	0/1112	0.49	0/1488
29	AB	0.26	0/1199	0.53	0/1607
29	BV	0.27	0/1199	0.54	0/1607
30	AC	0.26	0/503	0.58	0/668
30	BW	0.24	0/498	0.52	0/661
31	AD	0.27	0/738	0.48	0/994
31	BX	0.27	0/738	0.49	0/994
32	AE	0.25	0/907	0.56	1/1219 (0.1%)
32	BY	0.25	0/907	0.56	0/1219
33	AF	0.27	0/1021	0.54	0/1368
33	BZ	0.26	0/1025	0.55	0/1372
34	AG	0.27	0/866	0.54	0/1165
34	CA	0.29	0/866	0.53	0/1165
35	AH	0.26	0/896	0.58	0/1195
35	CB	0.26	0/896	0.58	0/1195
36	AI	0.26	0/1003	0.56	0/1336
36	CC	0.25	0/990	0.55	0/1319
37	AJ	0.35	0/763	0.60	0/1012
37	CD	0.26	0/763	0.56	0/1012
38	AK	0.27	0/690	0.61	0/916

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	CE	0.28	0/690	0.61	0/916
39	AL	0.26	0/623	0.50	0/831
39	CF	0.28	0/623	0.56	0/831
40	AM	0.26	0/447	0.58	0/594
40	CG	0.27	0/447	0.62	0/594
41	AN	0.31	0/425	0.61	0/563
41	CH	0.32	0/417	0.62	0/553
42	AO	0.31	0/237	0.72	0/304
42	CI	0.27	0/228	0.69	0/293
43	AP	0.27	0/840	0.55	0/1110
43	CJ	0.28	0/840	0.54	0/1110
44	AQ	0.28	0/705	0.60	0/940
44	CK	0.26	0/705	0.59	0/940
45	CL	0.36	0/942	0.64	0/1258
45	i	0.35	0/933	0.68	0/1246
46	B	0.31	0/41511	0.95	83/64681 (0.1%)
46	CM	0.31	0/42081	0.94	72/65573 (0.1%)
47	C	0.25	0/1666	0.49	0/2273
47	CN	0.26	0/1666	0.51	0/2273
48	CO	0.26	0/1750	0.58	0/2354
48	D	0.25	0/1750	0.53	0/2354
49	CP	0.27	0/1657	0.53	0/2248
49	E	0.25	0/1657	0.50	0/2248
50	CQ	0.28	0/1731	0.65	3/2324 (0.1%)
50	F	0.27	0/1731	0.60	1/2324 (0.0%)
51	CR	0.26	0/2096	0.55	0/2822
51	G	0.26	0/2092	0.55	0/2817
52	CS	0.27	0/1631	0.54	0/2199
52	H	0.31	0/1631	0.58	0/2199
53	CT	0.27	0/1929	0.57	0/2571
53	I	0.26	0/1845	0.55	0/2464
54	CU	0.32	0/1499	0.57	0/2016
54	J	0.26	0/1510	0.55	0/2031
55	CV	0.27	0/1606	0.61	0/2150
55	K	0.28	0/1606	0.59	0/2150
56	CW	0.26	0/1478	0.56	0/1978
56	L	0.26	0/1478	0.56	0/1978
57	CX	0.29	0/809	0.58	0/1092
57	M	0.28	0/836	0.62	0/1130
58	CY	0.28	0/1154	0.57	0/1553
58	N	0.27	0/1175	0.57	0/1582
59	CZ	0.31	0/921	0.84	1/1240 (0.1%)
59	O	0.36	0/892	0.81	0/1203

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
60	DA	0.25	0/1210	0.53	0/1631
60	P	0.25	0/1210	0.50	0/1631
61	DB	0.27	0/953	0.62	0/1279
61	Q	0.32	0/953	0.62	0/1279
62	DC	0.29	0/1049	0.60	0/1409
62	R	0.31	0/1038	0.62	1/1395 (0.1%)
63	DD	0.25	0/1109	0.54	0/1486
63	S	0.33	0/1109	0.68	2/1486 (0.1%)
64	DE	0.27	0/1009	0.62	0/1354
64	T	0.27	0/1009	0.63	0/1354
65	DF	0.28	0/1178	0.59	0/1579
65	U	0.27	0/1205	0.57	0/1615
66	DG	0.26	0/1120	0.55	0/1508
66	V	0.27	0/1120	0.59	1/1508 (0.1%)
67	DH	0.27	0/772	0.59	1/1045 (0.1%)
67	W	0.26	0/818	0.55	0/1106
68	DI	0.30	0/683	0.59	0/918
68	X	0.26	0/683	0.57	0/918
69	DJ	0.27	0/1049	0.56	0/1412
69	Y	0.25	0/1049	0.54	0/1412
70	DK	0.27	0/1128	0.59	0/1505
70	Z	0.26	0/1128	0.61	0/1505
71	DL	0.27	0/1086	0.58	0/1447
71	a	0.26	0/1100	0.56	0/1466
72	DM	0.26	0/577	0.56	0/778
72	b	0.25	0/585	0.52	0/789
73	DN	0.25	0/782	0.60	0/1048
73	c	0.27	0/791	0.60	0/1060
74	DO	0.28	0/624	0.56	0/843
74	d	0.25	0/624	0.53	0/843
75	DP	0.27	0/478	0.69	0/640
75	e	0.27	0/489	0.67	0/654
76	DQ	0.30	0/461	0.58	0/613
76	f	0.28	0/466	0.58	0/620
77	DR	0.34	0/469	0.77	0/626
77	g	0.30	0/482	0.66	1/642 (0.2%)
78	DS	0.39	0/585	0.84	0/778
78	h	0.34	0/585	0.69	0/778
79	AR	0.25	0/2451	0.54	0/3337
79	DT	0.27	0/2409	0.60	1/3280 (0.0%)
80	P0	0.26	0/857	0.57	0/1148
80	p0	0.37	0/638	0.72	0/845
81	12	0.26	0/486	0.51	0/653

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
82	L1	0.30	0/1737	0.54	0/2335
82	l1	0.33	0/1737	0.59	1/2335 (0.0%)
All	All	0.29	0/437098	0.79	365/641006 (0.1%)

There are no bond length outliers.

All (365) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
46	B	653	G	O5'-P-OP2	-22.09	84.20	110.70
46	B	1742	A	O4'-C1'-N9	13.61	119.08	108.20
1	AS	1576	A	O4'-C1'-N9	12.61	118.28	108.20
1	1	1576	A	O4'-C1'-N9	12.17	117.94	108.20
46	B	653	G	O5'-P-OP1	11.61	124.63	110.70
1	1	3163	U	OP1-P-O3'	-10.81	81.41	105.20
59	CZ	81	GLU	C-N-CD	-10.33	97.88	120.60
1	1	3163	U	OP2-P-O3'	-9.93	83.34	105.20
1	1	1230	G	O4'-C1'-N9	9.89	116.11	108.20
46	CM	482	C	O4'-C1'-N1	9.23	115.58	108.20
46	B	1742	A	C4-N9-C1'	-9.09	109.94	126.30
1	AS	477	U	C5-C6-N1	9.06	127.23	122.70
46	B	824	U	O4'-C1'-N1	-9.03	100.98	108.20
46	B	1742	A	C8-N9-C1'	9.02	143.94	127.70
46	B	700	G	O5'-P-OP2	-8.64	97.93	105.70
46	B	698	C	C6-N1-C2	-8.52	116.89	120.30
1	1	1230	G	C6-C5-N7	8.50	135.50	130.40
50	F	60	LEU	CA-CB-CG	8.47	134.78	115.30
46	B	451	C	N1-C2-O2	8.45	123.97	118.90
46	B	676	G	O4'-C1'-N9	8.34	114.87	108.20
1	1	1229	G	N3-C4-C5	-8.15	124.52	128.60
46	CM	451	C	N1-C2-O2	8.10	123.76	118.90
1	1	1576	A	C5-N7-C8	-8.05	99.88	103.90
46	CM	656	C	N1-C2-O2	8.04	123.72	118.90
46	B	698	C	C5-C6-N1	8.02	125.01	121.00
1	1	1218	G	O4'-C1'-N9	7.99	114.59	108.20
46	B	480	U	C5-C6-N1	7.89	126.64	122.70
50	CQ	60	LEU	CA-CB-CG	7.89	133.44	115.30
46	CM	1375	C	C2-N1-C1'	7.65	127.21	118.80
1	1	3160	C	C2-N1-C1'	7.62	127.18	118.80
46	B	451	C	C2-N1-C1'	7.55	127.11	118.80
1	AS	977	U	C2-N1-C1'	7.45	126.64	117.70
1	AS	2814	U	C2-N1-C1'	7.38	126.55	117.70
46	B	485	G	C4-N9-C1'	7.32	136.02	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
46	CM	451	C	C2-N1-C1'	7.32	126.85	118.80
3	AU	39	G	O4'-C1'-N9	7.29	114.03	108.20
1	1	2814	U	C2-N1-C1'	7.28	126.43	117.70
1	AS	1576	A	C5-N7-C8	-7.26	100.27	103.90
46	B	1375	C	C2-N1-C1'	7.17	126.69	118.80
1	AS	1231	U	N3-C4-O4	7.12	124.38	119.40
46	B	1046	A	C8-N9-C4	-7.08	102.97	105.80
1	1	1576	A	C4-C5-N7	7.08	114.24	110.70
63	S	37	LEU	CA-CB-CG	7.06	131.53	115.30
1	1	401	U	O4'-C1'-N1	7.05	113.84	108.20
1	1	1576	A	N7-C8-N9	7.04	117.32	113.80
46	B	482	C	O4'-C1'-N1	7.04	113.83	108.20
46	B	480	U	C6-N1-C2	-7.01	116.80	121.00
46	CM	825	U	P-O3'-C3'	7.00	128.09	119.70
1	1	481	G	O4'-C1'-N9	6.95	113.76	108.20
1	1	977	U	C2-N1-C1'	6.95	126.04	117.70
46	CM	451	C	N3-C2-O2	-6.90	117.07	121.90
46	CM	823	G	P-O5'-C5'	-6.90	109.86	120.90
1	AS	480	G	C8-N9-C4	-6.89	103.64	106.40
1	AS	1349	U	C2-N1-C1'	6.89	125.97	117.70
46	B	1375	C	N1-C2-O2	6.87	123.02	118.90
46	CM	814	A	P-O3'-C3'	6.86	127.94	119.70
1	AS	3182	C	C2-N1-C1'	6.80	126.29	118.80
46	B	1742	A	N9-C4-C5	6.79	108.52	105.80
46	CM	505	U	P-O3'-C3'	6.79	127.84	119.70
1	1	3164	U	OP1-P-OP2	6.77	129.75	119.60
46	CM	696	U	C5-C6-N1	6.76	126.08	122.70
46	B	671	G	O4'-C1'-N9	6.74	113.59	108.20
1	AS	2814	U	N1-C2-O2	6.74	127.52	122.80
1	AS	3126	U	C2-N1-C1'	6.70	125.74	117.70
1	1	3126	U	C2-N1-C1'	6.70	125.73	117.70
46	B	1742	A	C6-C5-N7	6.69	136.98	132.30
1	1	3127	U	O4'-C1'-N1	6.59	113.47	108.20
46	CM	701	G	N3-C4-N9	-6.59	122.05	126.00
1	AS	1223	C	N1-C2-O2	6.58	122.85	118.90
46	B	700	G	P-O5'-C5'	6.57	131.41	120.90
46	CM	1703	C	C5'-C4'-O4'	6.57	116.98	109.10
46	B	485	G	C6-C5-N7	-6.56	126.46	130.40
46	CM	814	A	OP2-P-O3'	6.54	119.58	105.20
1	1	3182	C	C2-N1-C1'	6.50	125.95	118.80
46	B	451	C	N3-C2-O2	-6.50	117.35	121.90
46	CM	217	A	C8-N9-C4	-6.50	103.20	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
46	CM	823	G	O4'-C1'-N9	-6.49	103.01	108.20
46	CM	823	G	N3-C4-N9	-6.49	122.11	126.00
1	AS	1576	A	C4-C5-N7	6.49	113.94	110.70
1	AS	1231	U	C5-C4-O4	-6.48	122.01	125.90
46	CM	503	A	N9-C1'-C2'	-6.47	104.88	112.00
46	B	723	G	O4'-C1'-N9	6.46	113.37	108.20
1	1	1248	A	O4'-C1'-N9	6.43	113.34	108.20
46	CM	846	U	C2-N1-C1'	6.40	125.38	117.70
46	B	723	G	C8-N9-C1'	6.39	135.31	127.00
1	1	1228	C	C6-N1-C2	-6.34	117.76	120.30
3	4	39	G	O4'-C1'-N9	6.34	113.27	108.20
46	B	1242	U	C2-N1-C1'	6.32	125.29	117.70
1	AS	2215	C	N3-C2-O2	-6.31	117.48	121.90
1	1	1230	G	C4-N9-C1'	-6.31	118.29	126.50
1	1	1230	G	N3-C4-N9	-6.30	122.22	126.00
1	AS	3160	C	C2-N1-C1'	6.30	125.73	118.80
46	B	646	G	C4-N9-C1'	6.29	134.68	126.50
46	CM	656	C	N3-C2-O2	-6.29	117.49	121.90
1	1	918	U	C2-N1-C1'	6.28	125.24	117.70
1	1	2215	C	N3-C2-O2	-6.28	117.51	121.90
46	CM	1045	U	C2-N1-C1'	6.28	125.23	117.70
46	CM	696	U	O5'-P-OP1	-6.26	100.07	105.70
1	1	1237	U	C5'-C4'-O4'	6.25	116.60	109.10
1	1	3160	C	N1-C2-O2	6.25	122.65	118.90
46	B	652	C	OP1-P-O3'	6.23	118.91	105.20
1	AS	480	G	N3-C4-C5	-6.23	125.48	128.60
46	B	723	G	C4-N9-C1'	-6.23	118.41	126.50
46	CM	826	U	C6-N1-C2	-6.22	117.27	121.00
46	B	485	G	C8-N9-C1'	-6.21	118.92	127.00
1	AS	3160	C	C6-N1-C1'	-6.20	113.36	120.80
46	B	1375	C	N3-C2-O2	-6.19	117.57	121.90
1	AS	480	G	N9-C1'-C2'	-6.17	105.21	112.00
46	CM	1234	U	C2-N1-C1'	6.17	125.11	117.70
46	B	647	C	C2-N1-C1'	6.16	125.58	118.80
1	1	1237	U	O4'-C1'-N1	6.15	113.12	108.20
46	CM	1462	C	C2-N1-C1'	6.14	125.56	118.80
1	AS	2234	A	O4'-C1'-N9	-6.14	103.29	108.20
1	AS	918	U	C2-N1-C1'	6.14	125.06	117.70
1	1	1230	G	C8-N9-C1'	6.13	134.97	127.00
1	1	1280	C	C6-N1-C2	-6.13	117.85	120.30
1	1	482	U	O4'-C1'-N1	6.12	113.09	108.20
1	AS	1558	G	N3-C4-N9	6.11	129.66	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	1492	C	C2-N1-C1'	6.09	125.50	118.80
46	B	646	G	C8-N9-C4	-6.08	103.97	106.40
1	1	3160	C	C6-N1-C1'	-6.06	113.53	120.80
46	CM	504	A	O4'-C1'-N9	-6.03	103.38	108.20
1	AS	1223	C	N3-C2-O2	-6.03	117.68	121.90
1	AS	1562	G	C4-N9-C1'	6.02	134.33	126.50
46	CM	656	C	C2-N1-C1'	6.01	125.41	118.80
1	AS	1638	A	O4'-C1'-N9	-6.01	103.39	108.20
46	B	814	A	P-O3'-C3'	6.00	126.90	119.70
1	1	3160	C	C5-C6-N1	5.99	123.99	121.00
1	1	1231	U	O4'-C1'-N1	5.98	112.98	108.20
46	CM	826	U	C5-C6-N1	5.98	125.69	122.70
1	AS	1262	G	C8-N9-C1'	-5.96	119.25	127.00
1	AS	2814	U	N3-C2-O2	-5.96	118.03	122.20
1	1	2474	C	N1-C2-O2	5.94	122.47	118.90
46	B	1242	U	N3-C2-O2	-5.93	118.05	122.20
46	CM	500	U	O4'-C1'-N1	5.93	112.95	108.20
1	1	3164	U	OP1-P-O3'	5.93	118.25	105.20
46	B	505	U	P-O3'-C3'	5.93	126.81	119.70
1	AS	1252	G	C8-N9-C1'	-5.89	119.34	127.00
1	AS	1234	C	C2-N1-C1'	5.89	125.28	118.80
46	B	579	U	N3-C2-O2	-5.89	118.08	122.20
46	B	217	A	O4'-C1'-N9	5.87	112.89	108.20
46	B	1234	U	C2-N1-C1'	5.86	124.73	117.70
46	CM	1375	C	C6-N1-C1'	-5.85	113.78	120.80
46	CM	656	C	C6-N1-C2	-5.85	117.96	120.30
46	B	218	A	C8-N9-C4	-5.84	103.47	105.80
1	AS	977	U	N1-C2-O2	5.82	126.88	122.80
1	1	3182	C	N1-C2-O2	5.82	122.39	118.90
1	1	1229	G	C8-N9-C4	-5.81	104.08	106.40
1	1	2814	U	N1-C2-O2	5.81	126.87	122.80
1	1	2663	A	P-O3'-C3'	5.80	126.66	119.70
3	AU	155	G	O4'-C1'-N9	5.80	112.84	108.20
1	1	376	G	O4'-C1'-N9	5.79	112.84	108.20
1	1	2235	C	C2-N1-C1'	5.78	125.16	118.80
1	1	1943	G	OP1-P-O3'	5.78	117.91	105.20
1	1	1229	G	C2-N3-C4	5.78	114.79	111.90
46	CM	579	U	C2-N1-C1'	5.77	124.63	117.70
1	1	2215	C	N1-C2-O2	5.76	122.36	118.90
46	B	579	U	C2-N1-C1'	5.75	124.60	117.70
1	1	1576	A	N1-C6-N6	5.75	122.05	118.60
50	CQ	216	ASP	CB-CG-OD1	5.75	123.47	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
46	B	579	U	N1-C2-O2	5.74	126.82	122.80
46	CM	1067	C	C2-N1-C1'	5.74	125.11	118.80
1	1	401	U	C2-N1-C1'	5.73	124.58	117.70
1	1	1575	A	C8-N9-C4	5.73	108.09	105.80
46	B	723	G	N3-C4-N9	-5.72	122.57	126.00
46	CM	1327	C	N1-C2-O2	5.72	122.33	118.90
1	1	1228	C	C2-N1-C1'	5.71	125.08	118.80
1	AS	1576	A	N7-C8-N9	5.70	116.65	113.80
1	AS	1262	G	C4-N9-C1'	5.70	133.90	126.50
46	B	700	G	O4'-C1'-N9	5.68	112.75	108.20
46	B	1672	G	O4'-C1'-N9	5.67	112.74	108.20
1	AS	480	G	C2-N3-C4	5.67	114.74	111.90
1	1	1230	G	N9-C4-C5	5.67	107.67	105.40
46	B	1462	C	C2-N1-C1'	5.67	125.04	118.80
1	1	1874	G	C4-N9-C1'	5.67	133.87	126.50
46	B	485	G	N7-C8-N9	5.65	115.92	113.10
1	AS	620	A	N1-C6-N6	5.65	121.99	118.60
46	CM	576	U	N1-C2-O2	5.65	126.75	122.80
1	1	1525	A	C8-N9-C1'	-5.64	117.55	127.70
1	1	3126	U	N3-C2-O2	-5.64	118.25	122.20
46	B	1067	C	C2-N1-C1'	5.64	125.00	118.80
46	B	721	C	O4'-C1'-N1	5.63	112.70	108.20
62	R	80	LEU	CA-CB-CG	5.62	128.23	115.30
1	AS	2235	C	C2-N1-C1'	5.62	124.98	118.80
1	AS	956	U	C2-N1-C1'	5.61	124.43	117.70
1	AS	1253	C	N1-C2-O2	5.61	122.27	118.90
1	AS	1492	C	C2-N1-C1'	5.60	124.96	118.80
1	AS	1346	U	P-O3'-C3'	5.60	126.42	119.70
1	1	1224	C	C2-N1-C1'	5.59	124.95	118.80
1	1	1197	C	C2-N1-C1'	5.59	124.95	118.80
46	B	480	U	N1-C2-O2	-5.58	118.89	122.80
1	AS	1253	C	C2-N1-C1'	5.57	124.92	118.80
1	1	3167	G	N3-C4-N9	5.56	129.34	126.00
46	B	485	G	N3-C4-N9	5.56	129.34	126.00
46	CM	721	C	C6-N1-C2	-5.55	118.08	120.30
1	AS	1231	U	C2-N1-C1'	5.55	124.36	117.70
1	AS	2509	C	N1-C2-O2	5.55	122.23	118.90
1	1	1573	C	C2-N1-C1'	5.54	124.89	118.80
46	CM	822	G	O4'-C1'-N9	5.54	112.63	108.20
1	AS	2215	C	N1-C2-O2	5.54	122.22	118.90
46	CM	722	A	C8-N9-C4	-5.53	103.59	105.80
46	B	1675	U	O4'-C1'-N1	-5.53	103.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	1943	G	P-O3'-C3'	5.52	126.33	119.70
46	B	1457	A	C8-N9-C4	-5.52	103.59	105.80
1	1	1230	G	N1-C6-O6	-5.52	116.59	119.90
1	AS	2519	A	P-O3'-C3'	5.51	126.31	119.70
1	1	1033	C	C2-N1-C1'	5.51	124.86	118.80
46	B	1742	A	N3-C4-N9	-5.51	123.00	127.40
46	CM	846	U	C6-N1-C1'	-5.50	113.49	121.20
46	CM	823	G	N9-C1'-C2'	-5.50	105.95	112.00
1	AS	1026	A	C4-N9-C1'	5.50	136.19	126.30
1	1	3126	U	N1-C2-O2	5.49	126.64	122.80
1	1	602	A	O4'-C1'-N9	-5.48	103.81	108.20
1	AS	1026	A	C8-N9-C1'	-5.48	117.84	127.70
46	B	1067	C	N1-C2-O2	5.47	122.18	118.90
1	1	2234	A	C8-N9-C4	-5.47	103.61	105.80
46	CM	1704	C	O4'-C1'-N1	5.46	112.57	108.20
82	11	144	LEU	CB-CG-CD1	-5.46	101.72	111.00
1	1	3151	C	C2-N1-C1'	5.45	124.80	118.80
46	CM	608	G	C4-N9-C1'	5.45	133.59	126.50
1	AS	1231	U	O4'-C1'-N1	-5.45	103.84	108.20
46	CM	4	C	C2-N1-C1'	5.45	124.79	118.80
46	CM	818	U	C2-N1-C1'	5.44	124.22	117.70
1	1	3030	U	C2-N1-C1'	5.44	124.22	117.70
1	AS	1237	U	O4'-C1'-N1	5.43	112.54	108.20
1	1	3245	A	O4'-C1'-N9	5.42	112.54	108.20
1	1	1569	C	C2-N1-C1'	5.42	124.76	118.80
46	CM	641	G	N3-C4-N9	-5.42	122.75	126.00
46	B	1290	U	N3-C2-O2	-5.42	118.41	122.20
1	1	1228	C	C6-N1-C1'	-5.41	114.30	120.80
79	DT	201	LEU	CB-CG-CD1	-5.41	101.80	111.00
46	B	1046	A	O4'-C1'-N9	5.41	112.53	108.20
1	1	2519	A	P-O3'-C3'	5.40	126.18	119.70
46	B	4	C	N1-C2-O2	5.40	122.14	118.90
1	1	406	G	O4'-C1'-N9	5.40	112.52	108.20
46	B	672	U	C6-N1-C2	-5.40	117.76	121.00
46	CM	500	U	C2-N1-C1'	-5.40	111.22	117.70
1	AS	1347	U	N3-C2-O2	-5.40	118.42	122.20
46	CM	700	G	O4'-C1'-N9	5.39	112.52	108.20
1	1	112	C	C2-N1-C1'	5.39	124.73	118.80
46	CM	725	A	C5'-C4'-C3'	-5.38	107.39	116.00
46	CM	1362	C	N3-C2-O2	-5.38	118.13	121.90
1	1	1236	A	C8-N9-C4	-5.38	103.65	105.80
1	AS	918	U	N1-C2-O2	5.37	126.56	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AS	1573	C	C2-N1-C1'	5.37	124.71	118.80
1	1	1230	G	C4-C5-N7	-5.37	108.65	110.80
46	B	1237	C	C2-N1-C1'	5.37	124.71	118.80
46	B	1444	G	N3-C4-N9	5.37	129.22	126.00
46	B	1369	G	P-O3'-C3'	5.37	126.14	119.70
1	AS	3126	U	N1-C2-O2	5.37	126.56	122.80
1	1	1346	U	P-O3'-C3'	5.37	126.14	119.70
1	1	1231	U	OP1-P-OP2	-5.36	111.56	119.60
1	AS	1562	G	N7-C8-N9	5.36	115.78	113.10
1	1	2474	C	N3-C2-O2	-5.35	118.15	121.90
46	B	451	C	C6-N1-C1'	-5.35	114.38	120.80
46	CM	1375	C	N1-C2-O2	5.35	122.11	118.90
67	DH	25	LEU	CA-CB-CG	5.35	127.60	115.30
1	1	1253	C	C2-N1-C1'	5.34	124.68	118.80
46	CM	1067	C	N1-C2-O2	5.33	122.10	118.90
1	AS	1562	G	O4'-C1'-N9	-5.33	103.94	108.20
77	g	50	THR	CA-CB-CG2	-5.32	104.95	112.40
1	1	2807	U	P-O3'-C3'	5.30	126.06	119.70
1	AS	451	C	C2-N1-C1'	5.30	124.63	118.80
1	1	1255	A	O4'-C1'-N9	5.30	112.44	108.20
46	CM	451	C	C6-N1-C2	-5.29	118.18	120.30
46	CM	499	U	P-O3'-C3'	-5.29	113.36	119.70
46	B	1327	C	N1-C2-O2	5.29	122.07	118.90
1	AS	1016	G	C8-N9-C4	-5.29	104.29	106.40
1	AS	2476	C	OP1-P-O3'	5.28	116.83	105.20
46	CM	1672	G	O3'-P-O5'	5.28	114.03	104.00
1	1	1230	G	C5'-C4'-O4'	5.27	115.43	109.10
46	CM	561	U	N3-C2-O2	-5.27	118.51	122.20
1	1	1252	G	O4'-C1'-N9	5.27	112.42	108.20
1	AS	3030	U	C2-N1-C1'	5.27	124.02	117.70
1	AS	1217	A	OP2-P-O3'	5.27	116.79	105.20
1	1	3151	C	O4'-C1'-N1	5.26	112.41	108.20
50	CQ	183	LEU	CA-CB-CG	5.26	127.41	115.30
46	B	4	C	C2-N1-C1'	5.26	124.59	118.80
46	CM	723	G	N9-C4-C5	5.26	107.50	105.40
1	1	1576	A	C6-C5-N7	-5.25	128.62	132.30
46	CM	1444	G	C4-N9-C1'	5.25	133.32	126.50
1	AS	1197	C	C2-N1-C1'	5.24	124.56	118.80
1	AS	1388	G	O4'-C1'-N9	5.24	112.39	108.20
1	1	46	C	O4'-C1'-N1	5.23	112.39	108.20
46	CM	818	U	N3-C2-O2	-5.23	118.54	122.20
1	AS	918	U	N3-C2-O2	-5.22	118.55	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AS	1559	C	C2-N1-C1'	5.21	124.53	118.80
1	AS	1576	A	N1-C6-N6	5.21	121.72	118.60
46	B	671	G	N3-C4-N9	5.21	129.12	126.00
1	AS	1247	A	O3'-P-O5'	5.20	113.89	104.00
1	AS	2476	C	P-O3'-C3'	5.20	125.94	119.70
1	1	481	G	C8-N9-C1'	5.20	133.76	127.00
46	CM	726	C	C6-N1-C2	-5.20	118.22	120.30
1	1	1012	U	OP2-P-O3'	5.20	116.63	105.20
32	AE	3	LEU	CA-CB-CG	5.20	127.25	115.30
46	B	561	U	N3-C2-O2	-5.20	118.56	122.20
1	AS	1562	G	O5'-P-OP1	5.19	116.93	110.70
1	1	1231	U	N3-C2-O2	-5.19	118.57	122.20
1	AS	1099	A	OP2-P-O3'	5.19	116.61	105.20
1	1	1099	A	OP2-P-O3'	5.18	116.59	105.20
1	1	3321	G	O5'-P-OP1	-5.17	101.04	105.70
46	B	1231	C	C2-N1-C1'	5.17	124.48	118.80
1	AS	1226	G	O4'-C1'-N9	5.17	112.33	108.20
1	AS	2235	C	N1-C2-O2	5.16	122.00	118.90
63	S	43	LEU	CA-CB-CG	5.16	127.17	115.30
1	AS	1562	G	C6-C5-N7	-5.16	127.30	130.40
46	CM	137	A	P-O3'-C3'	5.16	125.89	119.70
46	B	480	U	OP1-P-O3'	5.16	116.55	105.20
46	B	1364	U	C2-N1-C1'	5.16	123.89	117.70
46	B	1057	C	C2-N1-C1'	5.14	124.46	118.80
1	AS	486	C	C2-N1-C1'	5.14	124.46	118.80
1	AS	3182	C	N1-C2-O2	5.14	121.98	118.90
1	1	918	U	N3-C2-O2	-5.14	118.60	122.20
46	CM	579	U	N1-C2-O2	5.13	126.39	122.80
1	AS	486	C	C6-N1-C1'	-5.13	114.64	120.80
46	B	1242	U	N1-C2-O2	5.13	126.39	122.80
46	CM	671	G	C4-N9-C1'	5.13	133.16	126.50
46	B	505	U	O4'-C1'-N1	5.12	112.30	108.20
1	1	1853	C	C6-N1-C2	-5.12	118.25	120.30
46	B	681	C	C6-N1-C2	-5.12	118.25	120.30
1	1	2509	C	N1-C2-O2	5.11	121.97	118.90
46	B	1231	C	N1-C2-O2	5.11	121.97	118.90
1	AS	3182	C	C6-N1-C1'	-5.11	114.67	120.80
46	CM	1672	G	C5'-C4'-C3'	-5.11	107.83	116.00
1	AS	3134	C	C2-N1-C1'	5.11	124.42	118.80
1	1	1853	C	C2-N1-C1'	5.10	124.41	118.80
66	V	114	LEU	CA-CB-CG	5.10	127.03	115.30
1	1	1019	U	C5-C4-O4	-5.10	122.84	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AS	406	G	O4'-C1'-N9	5.10	112.28	108.20
46	CM	1237	C	C2-N1-C1'	5.10	124.41	118.80
1	1	1552	C	C2-N1-C1'	5.09	124.40	118.80
46	B	216	A	OP1-P-O3'	5.09	116.40	105.20
1	AS	1576	A	OP2-P-O3'	5.09	116.40	105.20
46	B	1444	G	C4-N9-C1'	5.09	133.12	126.50
1	1	1245	G	O4'-C1'-N9	5.08	112.27	108.20
1	1	956	U	C2-N1-C1'	5.08	123.80	117.70
1	AS	1552	C	C2-N1-C1'	5.08	124.39	118.80
46	CM	1292	U	C2-N1-C1'	5.08	123.79	117.70
1	AS	1247	A	P-O3'-C3'	5.07	125.79	119.70
1	1	1525	A	C4-N9-C1'	5.06	135.41	126.30
46	CM	608	G	C8-N9-C1'	-5.06	120.42	127.00
1	1	912	G	P-O3'-C3'	5.06	125.77	119.70
46	B	480	U	OP1-P-OP2	5.06	127.19	119.60
1	AS	2814	U	C6-N1-C1'	-5.06	114.12	121.20
1	AS	1252	G	C4-N9-C1'	5.05	133.07	126.50
46	B	643	U	O4'-C1'-N1	5.05	112.24	108.20
46	CM	823	G	N9-C4-C5	5.05	107.42	105.40
1	1	1576	A	OP2-P-O3'	5.05	116.31	105.20
1	1	918	U	N1-C2-O2	5.04	126.33	122.80
1	1	1574	C	C2-N1-C1'	5.04	124.34	118.80
46	CM	696	U	C6-N1-C2	-5.04	117.98	121.00
1	AS	977	U	C6-N1-C1'	-5.04	114.15	121.20
1	1	3243	C	N1-C2-O2	5.03	121.92	118.90
46	CM	725	A	O5'-C5'-C4'	-5.03	102.15	111.70
46	CM	752	U	N3-C2-O2	-5.03	118.68	122.20
1	AS	3159	A	P-O3'-C3'	5.03	125.73	119.70
1	AS	1349	U	C6-N1-C1'	-5.03	114.17	121.20
46	B	912	C	N1-C2-O2	-5.02	115.89	118.90
1	AS	452	A	P-O3'-C3'	5.02	125.73	119.70
1	1	1262	G	C4-N9-C1'	5.02	133.02	126.50
46	CM	451	C	C6-N1-C1'	-5.02	114.78	120.80
46	CM	823	G	C4'-C3'-O3'	5.02	123.04	113.00
1	1	2515	G	P-O3'-C3'	5.01	125.71	119.70
1	1	1230	G	C4-C5-C6	-5.01	115.80	118.80
46	B	1242	U	C6-N1-C2	-5.01	118.00	121.00

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%)	281 (96%)	12 (4%)	1 (0%)	37	64
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	58
9	o	231/241 (96%)	223 (96%)	7 (3%)	1 (0%)	30	58
10	BC	225/262 (86%)	210 (93%)	11 (5%)	4 (2%)	7	25
10	p	231/262 (88%)	223 (96%)	7 (3%)	1 (0%)	30	58
11	BD	188/191 (98%)	184 (98%)	4 (2%)	0	100	100
11	q	187/191 (98%)	182 (97%)	5 (3%)	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%)	193 (98%)	5 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
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
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	100/124 (81%)	89 (89%)	10 (10%)	1 (1%)	13	38
23	BP	100/124 (81%)	87 (87%)	11 (11%)	2 (2%)	6	22
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%)	103 (90%)	11 (10%)	0	100	100
25	BR	94/155 (61%)	90 (96%)	4 (4%)	0	100	100
26	8	118/142 (83%)	116 (98%)	2 (2%)	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%)	139 (95%)	7 (5%)	0	100	100
29	BV	146/149 (98%)	139 (95%)	7 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
30	AC	60/63 (95%)	57 (95%)	1 (2%)	2 (3%)	3	14
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
32	AE	108/112 (96%)	106 (98%)	2 (2%)	0	100	100
32	BY	108/112 (96%)	103 (95%)	5 (5%)	0	100	100
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%)	102 (98%)	2 (2%)	0	100	100
34	CA	104/107 (97%)	101 (97%)	3 (3%)	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%)	114 (98%)	2 (2%)	0	100	100
37	AJ	95/99 (96%)	93 (98%)	2 (2%)	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%)	72 (96%)	3 (4%)	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	21
40	CG	48/51 (94%)	48 (100%)	0	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	11
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%)	91 (78%)	22 (19%)	4 (3%)	3	13

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	i	116/267 (43%)	91 (78%)	23 (20%)	2 (2%)	7	26
47	C	206/261 (79%)	201 (98%)	5 (2%)	0	100	100
47	CN	206/261 (79%)	198 (96%)	8 (4%)	0	100	100
48	CO	212/256 (83%)	204 (96%)	8 (4%)	0	100	100
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%)	185 (91%)	17 (8%)	2 (1%)	13	38
53	CT	234/236 (99%)	231 (99%)	3 (1%)	0	100	100
53	I	224/236 (95%)	221 (99%)	3 (1%)	0	100	100
54	CU	181/186 (97%)	171 (94%)	9 (5%)	1 (1%)	22	49
54	J	182/186 (98%)	172 (94%)	10 (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%)	13 (14%)	2 (2%)	5	21
58	CY	139/155 (90%)	133 (96%)	4 (3%)	2 (1%)	9	30
58	N	142/155 (92%)	137 (96%)	5 (4%)	0	100	100
59	CZ	117/143 (82%)	90 (77%)	22 (19%)	5 (4%)	2	10
59	O	114/143 (80%)	89 (78%)	23 (20%)	2 (2%)	7	25
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%)	5 (4%)	0	100	100
61	Q	125/132 (95%)	119 (95%)	5 (4%)	1 (1%)	16	43

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
62	DC	128/142 (90%)	111 (87%)	17 (13%)	0	100	100
62	R	127/142 (89%)	115 (91%)	11 (9%)	1 (1%)	16	43
63	DD	138/142 (97%)	134 (97%)	4 (3%)	0	100	100
63	S	138/142 (97%)	132 (96%)	6 (4%)	0	100	100
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	46
65	U	142/145 (98%)	137 (96%)	5 (4%)	0	100	100
66	DG	139/145 (96%)	133 (96%)	5 (4%)	1 (1%)	19	46
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%)	126 (99%)	1 (1%)	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%)	138 (98%)	3 (2%)	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	95/119 (80%)	93 (98%)	2 (2%)	0	100	100
73	c	96/119 (81%)	93 (97%)	3 (3%)	0	100	100
74	DO	79/82 (96%)	73 (92%)	6 (8%)	0	100	100
74	d	79/82 (96%)	75 (95%)	4 (5%)	0	100	100
75	DP	59/67 (88%)	53 (90%)	6 (10%)	0	100	100
75	e	60/67 (90%)	57 (95%)	3 (5%)	0	100	100
76	DQ	52/56 (93%)	50 (96%)	2 (4%)	0	100	100
76	f	53/56 (95%)	51 (96%)	2 (4%)	0	100	100
77	DR	56/63 (89%)	52 (93%)	3 (5%)	1 (2%)	7	25

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
77	g	58/63 (92%)	55 (95%)	3 (5%)	0	100	100
78	DS	68/193 (35%)	57 (84%)	10 (15%)	1 (2%)	8	29
78	h	68/193 (35%)	55 (81%)	13 (19%)	0	100	100
79	AR	309/317 (98%)	292 (94%)	17 (6%)	0	100	100
79	DT	302/317 (95%)	281 (93%)	19 (6%)	2 (1%)	19	46
80	P0	105/312 (34%)	81 (77%)	21 (20%)	3 (3%)	3	16
80	p0	69/312 (22%)	46 (67%)	20 (29%)	3 (4%)	2	10
81	12	61/165 (37%)	36 (59%)	25 (41%)	0	100	100
82	L1	215/217 (99%)	166 (77%)	46 (21%)	3 (1%)	9	30
82	l1	215/217 (99%)	131 (61%)	72 (34%)	12 (6%)	1	7
All	All	22749/25499 (89%)	21733 (96%)	951 (4%)	65 (0%)	37	64

All (65) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
30	AC	21	ILE
40	AM	49	LEU
45	i	55	LYS
59	O	130	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
78	DS	127	TYR
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	87	VAL
82	l1	129	SER
82	l1	157	PHE
82	l1	212	PRO
80	p0	46	ARG
80	p0	71	PRO

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Mol	Chain	Res	Type
80	p0	101	VAL
10	p	205	ASN
52	H	44	ASN
57	M	88	PRO
10	BC	207	ALA
41	CH	4	PRO
58	CY	26	LYS
59	CZ	34	THR
59	CZ	108	ARG
65	DF	57	ARG
79	DT	75	SER
82	L1	212	PRO
82	l1	27	ASN
82	l1	59	PRO
9	o	230	GLU
62	R	2	VAL
9	BB	230	GLU
45	CL	49	ALA
66	DG	119	LYS
82	l1	14	HIS
23	5	20	ALA
57	M	92	LEU
59	O	38	HIS
10	BC	127	SER
10	BC	128	PRO
23	BP	20	ALA
23	BP	24	GLU
79	DT	28	ALA
7	m	44	TYR
54	CU	156	THR
59	CZ	103	LEU
77	DR	7	SER
30	AC	3	LYS
45	i	44	ALA
61	Q	119	ASP
10	BC	126	VAL
58	CY	27	ALA
52	H	53	VAL
82	L1	59	PRO
82	l1	216	ILE
82	l1	82	VAL
82	l1	180	VAL

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	AW	190/194 (98%)	188 (99%)	2 (1%)	70	83
4	j	190/194 (98%)	190 (100%)	0	100	100
5	AX	325/328 (99%)	323 (99%)	2 (1%)	84	90
5	k	325/328 (99%)	323 (99%)	2 (1%)	84	90
6	AY	290/292 (99%)	286 (99%)	4 (1%)	62	79
6	l	290/292 (99%)	288 (99%)	2 (1%)	81	89
7	AZ	247/252 (98%)	244 (99%)	3 (1%)	67	82
7	m	250/252 (99%)	249 (100%)	1 (0%)	89	93
8	BA	132/154 (86%)	132 (100%)	0	100	100
8	n	136/154 (88%)	136 (100%)	0	100	100
9	BB	198/204 (97%)	198 (100%)	0	100	100
9	o	197/204 (97%)	196 (100%)	1 (0%)	86	91
10	BC	191/216 (88%)	191 (100%)	0	100	100
10	p	193/216 (89%)	192 (100%)	1 (0%)	86	91
11	BD	169/170 (99%)	169 (100%)	0	100	100
11	q	168/170 (99%)	167 (99%)	1 (1%)	84	90
12	BE	178/186 (96%)	176 (99%)	2 (1%)	70	83
12	r	178/186 (96%)	176 (99%)	2 (1%)	70	83
13	BF	146/149 (98%)	144 (99%)	2 (1%)	62	79
13	s	146/149 (98%)	144 (99%)	2 (1%)	62	79
14	BG	166/168 (99%)	164 (99%)	2 (1%)	67	82
14	t	166/168 (99%)	165 (99%)	1 (1%)	84	90
15	BH	108/109 (99%)	107 (99%)	1 (1%)	75	86
15	u	108/109 (99%)	108 (100%)	0	100	100
16	BI	177/178 (99%)	176 (99%)	1 (1%)	84	90
16	v	177/178 (99%)	176 (99%)	1 (1%)	84	90

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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%)	142 (98%)	3 (2%)	48	69
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%)	141 (97%)	5 (3%)	32	59
20	z	146/153 (95%)	146 (100%)	0	100	100
21	0	155/157 (99%)	154 (99%)	1 (1%)	84	90
21	BN	155/157 (99%)	155 (100%)	0	100	100
22	2	133/134 (99%)	132 (99%)	1 (1%)	79	88
22	BO	133/134 (99%)	132 (99%)	1 (1%)	79	88
23	5	93/112 (83%)	93 (100%)	0	100	100
23	BP	93/112 (83%)	90 (97%)	3 (3%)	34	60
24	6	101/104 (97%)	101 (100%)	0	100	100
24	BQ	101/104 (97%)	101 (100%)	0	100	100
25	7	97/127 (76%)	95 (98%)	2 (2%)	48	69
25	BR	86/127 (68%)	85 (99%)	1 (1%)	67	82
26	8	107/121 (88%)	105 (98%)	2 (2%)	52	72
26	BS	107/121 (88%)	107 (100%)	0	100	100
27	9	111/112 (99%)	109 (98%)	2 (2%)	54	74
27	BT	111/112 (99%)	109 (98%)	2 (2%)	54	74
28	AA	117/118 (99%)	117 (100%)	0	100	100
28	BU	117/118 (99%)	116 (99%)	1 (1%)	75	86
29	AB	120/121 (99%)	120 (100%)	0	100	100
29	BV	120/121 (99%)	119 (99%)	1 (1%)	79	88
30	AC	48/49 (98%)	47 (98%)	1 (2%)	48	69
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	85

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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	83
34	CA	91/92 (99%)	91 (100%)	0	100	100
35	AH	95/102 (93%)	94 (99%)	1 (1%)	70	83
35	CB	95/102 (93%)	95 (100%)	0	100	100
36	AI	106/106 (100%)	104 (98%)	2 (2%)	52	72
36	CC	105/106 (99%)	103 (98%)	2 (2%)	52	72
37	AJ	77/79 (98%)	76 (99%)	1 (1%)	65	80
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%)	46 (100%)	0	100	100
41	AN	47/47 (100%)	47 (100%)	0	100	100
41	CH	46/47 (98%)	45 (98%)	1 (2%)	47	68
42	AO	24/24 (100%)	22 (92%)	2 (8%)	9	29
42	CI	23/24 (96%)	23 (100%)	0	100	100
43	AP	88/91 (97%)	88 (100%)	0	100	100
43	CJ	88/91 (97%)	88 (100%)	0	100	100
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%)	97 (97%)	3 (3%)	36	61
45	i	99/212 (47%)	98 (99%)	1 (1%)	73	85
47	C	176/215 (82%)	175 (99%)	1 (1%)	84	90
47	CN	176/215 (82%)	174 (99%)	2 (1%)	70	83
48	CO	194/229 (85%)	193 (100%)	1 (0%)	86	91
48	D	194/229 (85%)	193 (100%)	1 (0%)	86	91

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
49	CP	175/198 (88%)	172 (98%)	3 (2%)	56	75
49	E	175/198 (88%)	175 (100%)	0	100	100
50	CQ	174/196 (89%)	168 (97%)	6 (3%)	32	59
50	F	174/196 (89%)	172 (99%)	2 (1%)	70	83
51	CR	218/220 (99%)	217 (100%)	1 (0%)	86	91
51	G	218/220 (99%)	218 (100%)	0	100	100
52	CS	178/197 (90%)	176 (99%)	2 (1%)	70	83
52	H	178/197 (90%)	176 (99%)	2 (1%)	70	83
53	CT	204/204 (100%)	202 (99%)	2 (1%)	73	85
53	I	195/204 (96%)	193 (99%)	2 (1%)	73	85
54	CU	164/167 (98%)	163 (99%)	1 (1%)	84	90
54	J	165/167 (99%)	164 (99%)	1 (1%)	84	90
55	CV	157/160 (98%)	157 (100%)	0	100	100
55	K	157/160 (98%)	156 (99%)	1 (1%)	84	90
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%)	89 (99%)	1 (1%)	70	83
58	CY	122/134 (91%)	121 (99%)	1 (1%)	79	88
58	N	124/134 (92%)	122 (98%)	2 (2%)	58	76
59	CZ	101/123 (82%)	98 (97%)	3 (3%)	36	61
59	O	98/123 (80%)	93 (95%)	5 (5%)	20	46
60	DA	129/130 (99%)	128 (99%)	1 (1%)	79	88
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	74
62	R	111/121 (92%)	110 (99%)	1 (1%)	75	86
63	DD	114/116 (98%)	112 (98%)	2 (2%)	54	74
63	S	114/116 (98%)	113 (99%)	1 (1%)	75	86
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%)	110 (98%)	2 (2%)	54	74
65	DF	125/129 (97%)	123 (98%)	2 (2%)	58	76
65	U	128/129 (99%)	127 (99%)	1 (1%)	79	88
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	67
67	W	92/105 (88%)	89 (97%)	3 (3%)	33	59
68	DI	71/71 (100%)	71 (100%)	0	100	100
68	X	71/71 (100%)	71 (100%)	0	100	100
69	DJ	112/113 (99%)	111 (99%)	1 (1%)	75	86
69	Y	112/113 (99%)	112 (100%)	0	100	100
70	DK	116/118 (98%)	115 (99%)	1 (1%)	75	86
70	Z	116/118 (98%)	115 (99%)	1 (1%)	75	86
71	DL	109/112 (97%)	109 (100%)	0	100	100
71	a	111/112 (99%)	110 (99%)	1 (1%)	75	86
72	DM	63/85 (74%)	63 (100%)	0	100	100
72	b	64/85 (75%)	64 (100%)	0	100	100
73	DN	83/102 (81%)	83 (100%)	0	100	100
73	c	84/102 (82%)	82 (98%)	2 (2%)	44	67
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%)	54 (100%)	0	100	100
76	DQ	47/48 (98%)	46 (98%)	1 (2%)	48	69
76	f	47/48 (98%)	44 (94%)	3 (6%)	14	38
77	DR	50/54 (93%)	50 (100%)	0	100	100
77	g	51/54 (94%)	51 (100%)	0	100	100
78	DS	62/175 (35%)	59 (95%)	3 (5%)	21	48
78	h	62/175 (35%)	59 (95%)	3 (5%)	21	48
79	AR	259/263 (98%)	258 (100%)	1 (0%)	89	93
79	DT	255/263 (97%)	251 (98%)	4 (2%)	58	76

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
80	P0	92/247 (37%)	85 (92%)	7 (8%)	11	32
80	p0	71/247 (29%)	66 (93%)	5 (7%)	12	35
81	12	53/137 (39%)	51 (96%)	2 (4%)	28	55
82	L1	196/196 (100%)	186 (95%)	10 (5%)	20	46
82	l1	196/196 (100%)	187 (95%)	9 (5%)	23	49
All	All	19544/21471 (91%)	19359 (99%)	185 (1%)	75	86

All (185) 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
9	o	198	ASN
10	p	27	LEU
11	q	106	LYS
12	r	21	ARG
12	r	92	HIS
13	s	13	ARG
13	s	68	HIS
14	t	4	SER
16	v	178	HIS
21	0	113	ARG
22	2	102	ARG
25	7	56	ARG
25	7	80	ARG
26	8	43	SER
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
36	AI	1	MET
36	AI	59	ASN
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
48	D	158	SER
50	F	77	ARG
50	F	167	ASP
52	H	21	GLN
52	H	225	ARG
53	I	25	ARG
53	I	193	LYS
54	J	30	LEU
55	K	125	LYS
57	M	7	ASP
58	N	46	LYS
58	N	67	ARG
59	O	33	ARG
59	O	36	LEU
59	O	39	ASP
59	O	69	GLU
59	O	129	ASP
62	R	28	MET
63	S	119	ASP
64	T	48	ASN
64	T	80	ARG
65	U	127	HIS
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
76	f	24	CYS
76	f	33	LYS
76	f	40	ARG
78	h	153	GLU
78	h	159	LEU
78	h	160	ARG
79	AR	121	ARG
4	AW	142	ASP
4	AW	159	SER
5	AX	5	LYS

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Mol	Chain	Res	Type
5	AX	226	PHE
6	AY	59	HIS
6	AY	99	ARG
6	AY	145	GLN
6	AY	195	LEU
7	AZ	81	HIS
7	AZ	136	GLU
7	AZ	244	HIS
12	BE	3	ARG
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
18	BK	180	LYS
20	BM	20	ARG
20	BM	130	ASN
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
27	BT	64	LYS
28	BU	112	LYS
29	BV	25	HIS
36	CC	65	ASN
36	CC	114	ARG
41	CH	22	LYS
45	CL	67	LYS
45	CL	82	LYS
45	CL	83	HIS
47	CN	79	ARG
47	CN	205	ARG
48	CO	90	GLU

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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	107	LYS
50	CQ	155	ASP
50	CQ	179	ARG
50	CQ	198	PHE
50	CQ	216	ASP
51	CR	10	LYS
52	CS	116	HIS
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
59	CZ	88	LEU
60	DA	99	ARG
62	DC	36	LEU
62	DC	130	ARG
63	DD	22	LYS
63	DD	65	ARG
65	DF	36	ARG
65	DF	41	ARG
67	DH	51	LYS
67	DH	100	LYS
69	DJ	37	PHE
70	DK	13	ARG
76	DQ	54	LYS
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
80	P0	22	TYR
80	P0	34	SER
80	P0	68	SER

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Mol	Chain	Res	Type
80	P0	88	PHE
80	P0	94	LYS
80	P0	97	ARG
81	12	121	PHE
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	17	LEU
82	l1	26	ARG
82	l1	45	ARG
82	l1	68	PHE
82	l1	76	ARG
82	l1	85	MET
82	l1	130	LYS
82	l1	134	PHE
82	l1	215	ARG
80	p0	5	ARG
80	p0	12	PHE
80	p0	46	ARG
80	p0	48	ASP
80	p0	74	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (30) such sidechains are listed below:

Mol	Chain	Res	Type
5	k	25	GLN
5	k	182	GLN
8	n	3	GLN
9	o	17	GLN
18	x	121	HIS
23	5	30	GLN
26	8	111	ASN
36	AI	45	HIS
52	H	34	GLN

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Mol	Chain	Res	Type
52	H	37	GLN
59	O	38	HIS
64	T	48	ASN
79	AR	53	ASN
7	AZ	94	ASN
9	BB	17	GLN
10	BC	205	ASN
12	BE	59	GLN
12	BE	95	HIS
17	BJ	51	ASN
20	BM	130	ASN
20	BM	134	HIS
45	CL	33	ASN
45	CL	83	HIS
47	CN	33	ASN
48	CO	232	HIS
52	CS	63	GLN
57	CX	58	GLN
63	DD	138	GLN
79	DT	53	ASN
82	II	12	ASN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1	3203/3359 (95%)	594 (18%)	44 (1%)
1	AS	3223/3359 (95%)	625 (19%)	52 (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	156/158 (98%)	23 (14%)	3 (1%)
46	B	1736/1787 (97%)	433 (24%)	42 (2%)
46	CM	1762/1787 (98%)	454 (25%)	55 (3%)
All	All	10476/10850 (96%)	2170 (20%)	199 (1%)

All (2170) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1	15	A
1	1	24	U
1	1	25	A

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Mol	Chain	Res	Type
1	1	29	G
1	1	39	A
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

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Mol	Chain	Res	Type
1	1	250	U
1	1	269	G
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	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	576	A
1	1	577	G
1	1	589	G
1	1	590	A
1	1	598	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	665	C
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

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Mol	Chain	Res	Type
1	1	861	U
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	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	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	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
1	1	1045	C
1	1	1060	A

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Mol	Chain	Res	Type
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	1230	G
1	1	1231	U
1	1	1232	G
1	1	1239	G
1	1	1240	A
1	1	1241	A
1	1	1242	G
1	1	1244	C
1	1	1245	G

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Mol	Chain	Res	Type
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
1	1	1421	U
1	1	1427	G
1	1	1430	G

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Mol	Chain	Res	Type
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	1577	C
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
1	1	1638	A
1	1	1639	A

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Mol	Chain	Res	Type
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
1	1	2068	U
1	1	2069	U

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Mol	Chain	Res	Type
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	2201	A
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
1	1	2351	A

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Mol	Chain	Res	Type
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	2420	G
1	1	2421	A
1	1	2422	C
1	1	2423	A
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	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	2451	C
1	1	2452	G
1	1	2456	C
1	1	2457	C
1	1	2459	G
1	1	2460	U
1	1	2464	A
1	1	2468	C

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Mol	Chain	Res	Type
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	2482	U
1	1	2483	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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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	2926	U
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	3126	U
1	1	3127	U
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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	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
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

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Mol	Chain	Res	Type
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	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
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

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Mol	Chain	Res	Type
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
46	B	491	U
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

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Mol	Chain	Res	Type
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	633	A
46	B	639	G
46	B	645	G
46	B	647	C
46	B	648	U
46	B	649	G
46	B	650	G
46	B	651	C
46	B	652	C
46	B	653	G
46	B	654	G
46	B	670	C
46	B	671	G
46	B	672	U
46	B	673	A
46	B	674	C
46	B	675	U
46	B	676	G
46	B	677	G

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Mol	Chain	Res	Type
46	B	678	A
46	B	679	C
46	B	680	C
46	B	681	C
46	B	688	G
46	B	695	C
46	B	696	U
46	B	697	U
46	B	698	C
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	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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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	1696	U
46	B	1697	C
46	B	1699	G
46	B	1700	G
46	B	1701	A
46	B	1702	A
46	B	1703	C
46	B	1704	C
46	B	1737	A
46	B	1742	A
46	B	1743	A
46	B	1744	G
46	B	1747	G
46	B	1749	A
46	B	1753	A
46	B	1756	U
46	B	1767	G
46	B	1769	A

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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	442	G
1	AS	445	A
1	AS	447	U
1	AS	448	U
1	AS	449	U
1	AS	450	G
1	AS	451	C

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Mol	Chain	Res	Type
1	AS	453	U
1	AS	454	G
1	AS	474	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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
1	AS	1016	G
1	AS	1017	G
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
1	AS	1261	U
1	AS	1263	U
1	AS	1264	G
1	AS	1265	U
1	AS	1266	A
1	AS	1267	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
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

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Mol	Chain	Res	Type
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
1	AS	1574	C
1	AS	1576	A
1	AS	1577	C
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
1	AS	2483	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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
1	AS	3160	C
1	AS	3161	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
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

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Mol	Chain	Res	Type
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
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	105	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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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	223	A
46	CM	226	G
46	CM	229	U
46	CM	230	U
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	274	C
46	CM	276	U
46	CM	277	G
46	CM	278	U
46	CM	279	G
46	CM	283	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

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Mol	Chain	Res	Type
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
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	482	C
46	CM	489	C
46	CM	490	U
46	CM	491	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

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Mol	Chain	Res	Type
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
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	633	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

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Mol	Chain	Res	Type
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
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	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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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

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Mol	Chain	Res	Type
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
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 (199) 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

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Mol	Chain	Res	Type
1	1	1347	U
1	1	1559	C
1	1	1561	U
1	1	1576	A
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	2441	G
1	1	2442	U
1	1	2447	G
1	1	2455	G
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	2790	U
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	137	A
46	B	151	G
46	B	176	U
46	B	215	A
46	B	216	A
46	B	259	U

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Mol	Chain	Res	Type
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
46	B	556	U
46	B	638	U
46	B	695	C
46	B	740	A
46	B	763	C
46	B	769	U
46	B	814	A
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	1703	C
1	AS	172	C
1	AS	403	C
1	AS	447	U
1	AS	452	A
1	AS	453	U
1	AS	481	G
1	AS	487	C
1	AS	538	G

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Mol	Chain	Res	Type
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
1	AS	1245	G
1	AS	1346	U
1	AS	1347	U
1	AS	1559	C
1	AS	1576	A
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

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Mol	Chain	Res	Type
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
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	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

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Mol	Chain	Res	Type
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
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
46	CM	1743	A

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 1231 ligands modelled in this entry, 1227 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	HYG	B	1953	83	35,39,39	0.40	0	43,60,60	1.09	4 (9%)
86	HYG	CM	1902	83	35,39,39	0.47	0	43,60,60	1.22	5 (11%)
84	3K5	AS	3401	-	62,63,63	0.24	0	82,95,95	0.99	4 (4%)
84	3K5	1	3402	-	62,63,63	0.30	0	82,95,95	0.90	5 (6%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	HYG	B	1953	83	-	5/12/87/87	0/4/4/4
86	HYG	CM	1902	83	-	6/12/87/87	0/4/4/4
84	3K5	AS	3401	-	-	3/29/121/121	0/7/7/7
84	3K5	1	3402	-	-	6/29/121/121	0/7/7/7

There are no bond length outliers.

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
84	AS	3401	3K5	O14-C34-C33	4.71	118.45	107.70
84	AS	3401	3K5	C34-O14-C38	3.80	123.60	117.72
86	CM	1902	HYG	C16-C17-C12	-3.68	104.56	113.50
86	B	1953	HYG	C16-C17-C12	-3.36	105.34	113.50
86	B	1953	HYG	O22-C17-C16	3.23	119.08	111.22
86	CM	1902	HYG	O29-C12-C13	3.22	119.32	110.86
84	1	3402	3K5	O14-C34-C35	-3.10	100.63	107.70
86	CM	1902	HYG	O22-C17-C16	2.80	118.03	111.22
84	1	3402	3K5	O14-C34-C33	2.60	113.63	107.70
84	1	3402	3K5	C34-O14-C38	2.60	121.74	117.72
84	1	3402	3K5	C18-C17-C22	-2.47	102.30	107.56
84	AS	3401	3K5	O14-C34-C35	2.39	113.15	107.70
86	CM	1902	HYG	C26-C25-C24	-2.34	108.08	111.30
86	B	1953	HYG	O11-C5-C4	-2.29	104.73	109.47
84	AS	3401	3K5	O1-C5-C1	2.22	110.37	107.23
86	B	1953	HYG	O29-C12-C13	2.11	116.41	110.86
84	1	3402	3K5	C9-C8-C7	-2.10	122.11	126.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
86	CM	1902	HYG	O14-C13-C12	-2.09	105.37	109.51

There are no chirality outliers.

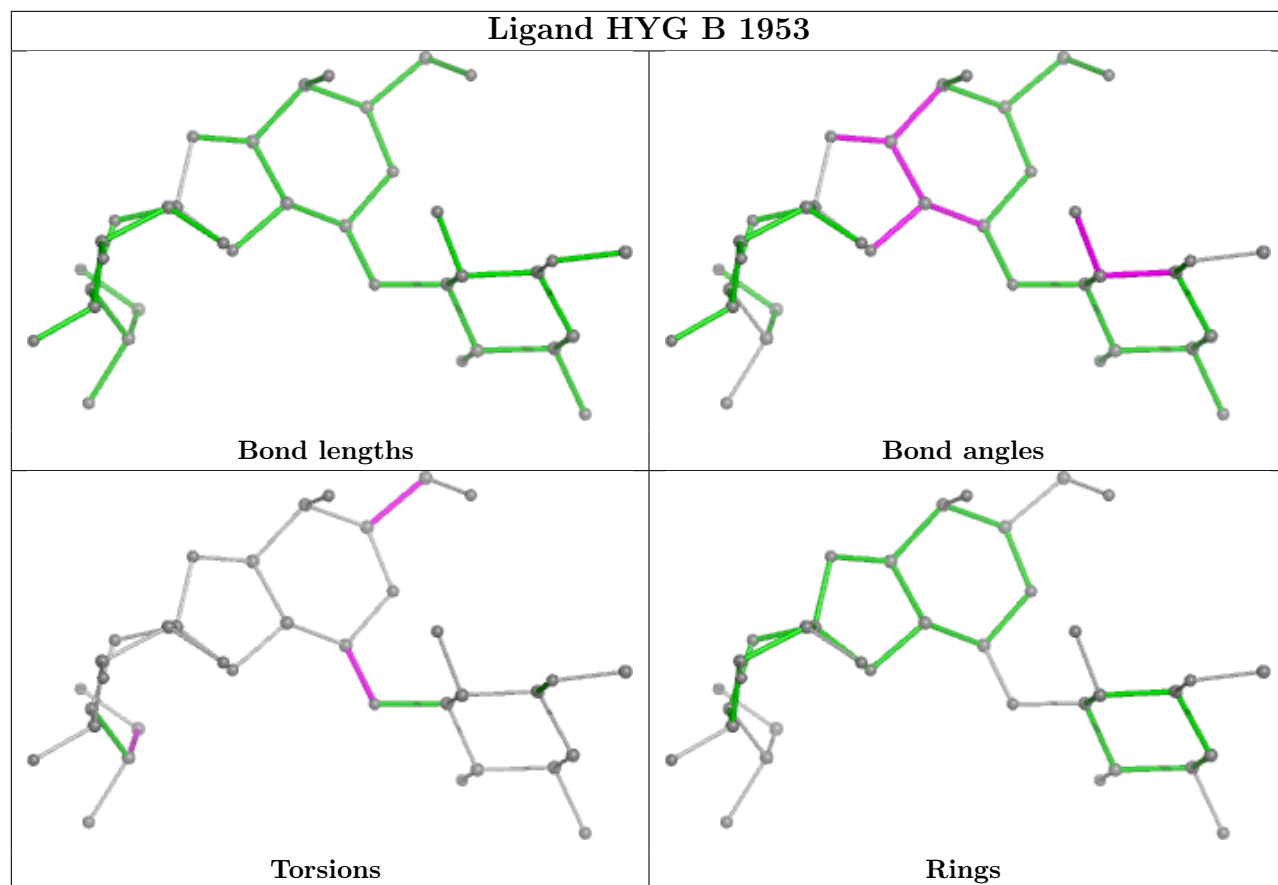
All (20) torsion outliers are listed below:

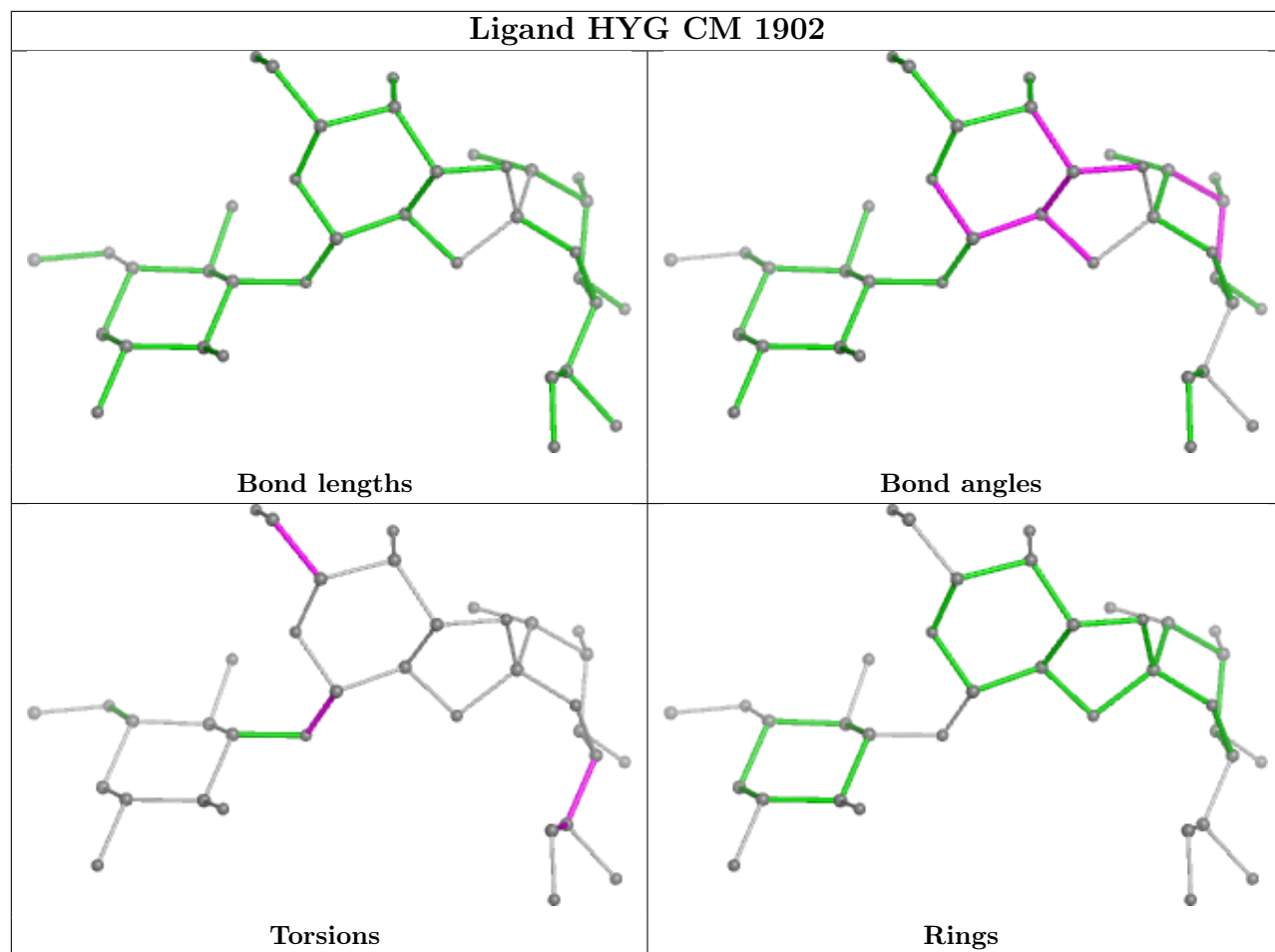
Mol	Chain	Res	Type	Atoms
84	1	3402	3K5	O15-C38-O14-C34
84	AS	3401	3K5	O15-C38-O14-C34
86	B	1953	HYG	N36-C33-C34-O35
86	CM	1902	HYG	O28-C27-C33-C34
86	CM	1902	HYG	N36-C33-C34-O35
84	1	3402	3K5	C39-C38-O14-C34
84	AS	3401	3K5	C39-C38-O14-C34
86	B	1953	HYG	O14-C13-O18-C6
86	CM	1902	HYG	O14-C13-O18-C6
84	AS	3401	3K5	C35-C34-O14-C38
86	B	1953	HYG	O14-C15-C19-O20
86	B	1953	HYG	C16-C15-C19-O20
86	B	1953	HYG	C27-C33-C34-O35
84	1	3402	3K5	C25-C24-O6-C23
84	1	3402	3K5	O7-C24-O6-C23
84	1	3402	3K5	C1-C5-O1-C6
86	CM	1902	HYG	C16-C15-C19-O20
86	CM	1902	HYG	O14-C15-C19-O20
86	CM	1902	HYG	C27-C33-C34-O35
84	1	3402	3K5	C21-C20-C23-O6

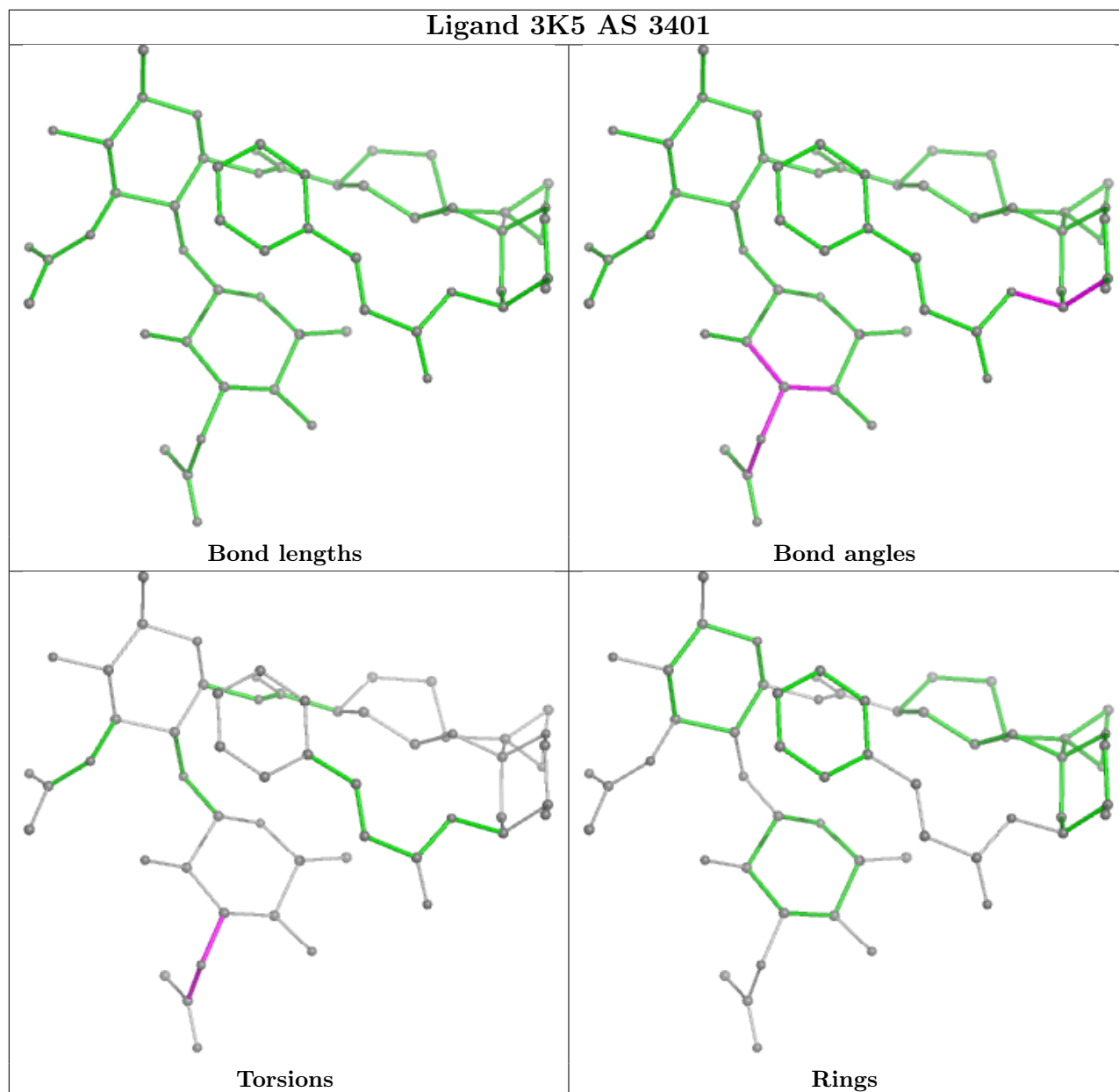
There are no ring outliers.

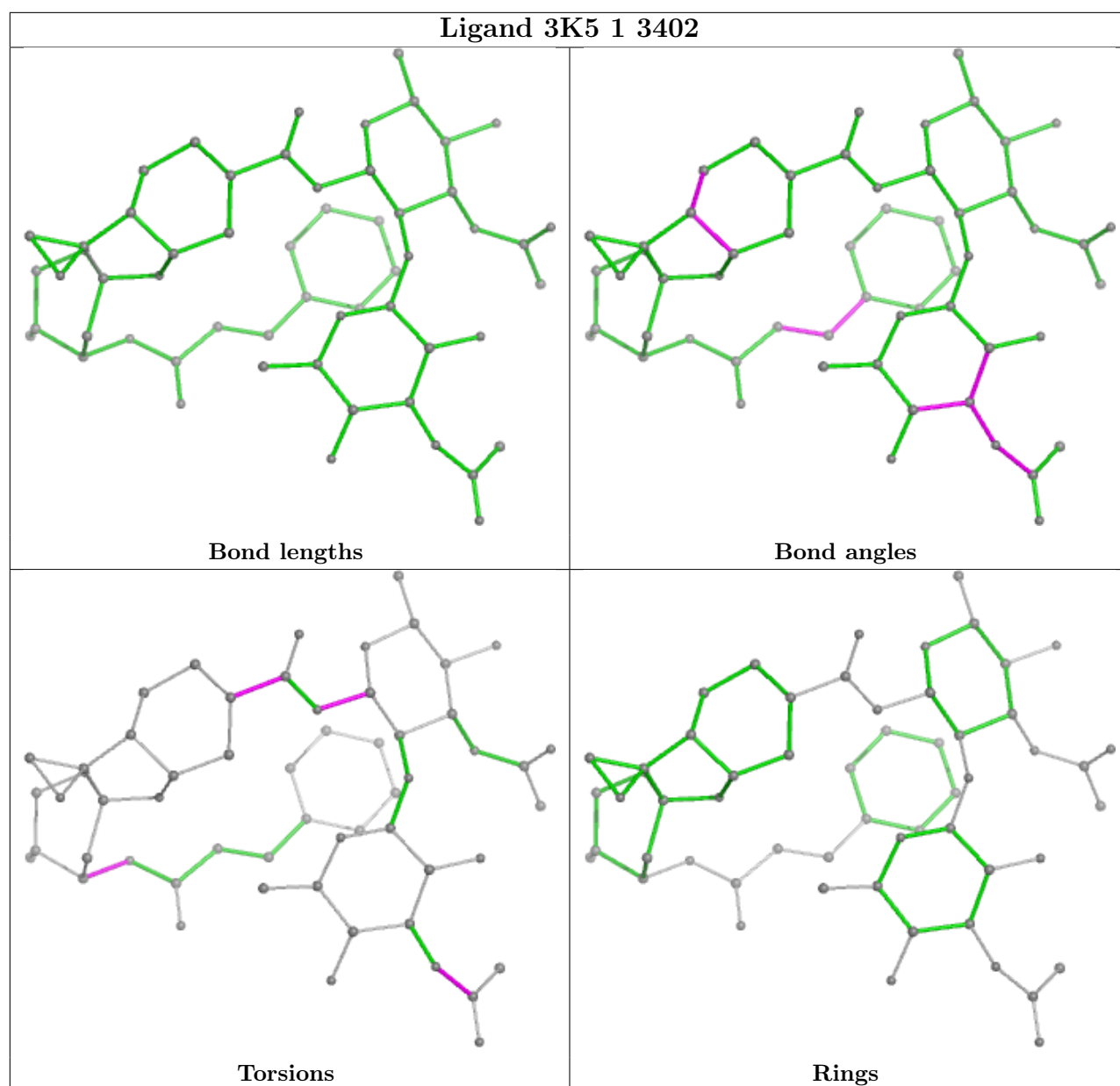
No monomer is involved in short contacts.

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









5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data i

6.1 Protein, DNA and RNA chains i

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1	3208/3359 (95%)	0.47	112 (3%) 47 28	32, 64, 173, 334	0
1	AS	3227/3359 (96%)	0.47	153 (4%) 37 21	34, 69, 204, 323	0
2	3	121/121 (100%)	0.46	1 (0%) 82 66	50, 78, 100, 136	0
2	AT	121/121 (100%)	0.35	4 (3%) 49 30	39, 70, 93, 145	0
3	4	157/158 (99%)	0.27	2 (1%) 74 56	46, 67, 117, 169	0
3	AU	157/158 (99%)	0.63	7 (4%) 39 22	55, 89, 136, 219	0
4	AW	249/254 (98%)	0.90	22 (8%) 17 9	37, 72, 95, 108	0
4	j	249/254 (98%)	0.85	17 (6%) 25 14	28, 52, 74, 143	0
5	AX	386/389 (99%)	0.57	16 (4%) 42 24	34, 56, 85, 150	0
5	k	386/389 (99%)	0.70	21 (5%) 32 19	29, 58, 78, 116	0
6	AY	361/363 (99%)	1.24	61 (16%) 5 3	44, 73, 101, 132	0
6	l	361/363 (99%)	1.16	66 (18%) 4 2	35, 70, 105, 135	0
7	AZ	292/298 (97%)	1.62	83 (28%) 1 1	44, 93, 124, 140	0
7	m	296/298 (99%)	1.42	68 (22%) 2 1	50, 87, 119, 141	0
8	BA	153/176 (86%)	0.93	14 (9%) 16 9	48, 68, 103, 132	0
8	n	157/176 (89%)	0.99	17 (10%) 12 7	53, 75, 101, 138	0
9	BB	234/241 (97%)	0.62	11 (4%) 37 21	35, 55, 113, 167	0
9	o	233/241 (96%)	1.01	20 (8%) 18 10	38, 63, 123, 164	0
10	BC	229/262 (87%)	1.65	72 (31%) 1 1	76, 117, 159, 188	0
10	p	233/262 (88%)	1.21	46 (19%) 3 2	51, 76, 125, 148	0
11	BD	190/191 (99%)	1.12	18 (9%) 15 8	48, 74, 106, 155	0
11	q	189/191 (98%)	1.35	40 (21%) 3 2	52, 77, 97, 127	0
12	BE	208/220 (94%)	0.63	9 (4%) 40 23	33, 51, 99, 134	0
12	r	208/220 (94%)	0.99	28 (13%) 8 4	40, 65, 101, 119	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	BF	171/174 (98%)	1.17	26 (15%) 6 3	53, 81, 114, 127	0
13	s	171/174 (98%)	1.53	42 (24%) 2 1	58, 92, 116, 131	0
14	BG	200/202 (99%)	1.30	38 (19%) 4 2	48, 92, 133, 154	0
14	t	200/202 (99%)	0.92	20 (10%) 14 8	43, 75, 110, 143	0
15	BH	130/131 (99%)	0.80	12 (9%) 16 9	43, 65, 96, 128	0
15	u	130/131 (99%)	0.94	10 (7%) 21 11	52, 70, 89, 103	0
16	BI	203/204 (99%)	1.63	52 (25%) 2 1	54, 84, 106, 118	0
16	v	203/204 (99%)	1.17	23 (11%) 11 7	36, 57, 71, 85	0
17	BJ	199/200 (99%)	0.53	8 (4%) 43 25	34, 51, 86, 120	0
17	w	199/200 (99%)	0.83	15 (7%) 22 12	33, 55, 82, 103	0
18	BK	176/185 (95%)	1.11	23 (13%) 8 5	44, 63, 91, 123	0
18	x	173/185 (93%)	0.99	20 (11%) 11 6	33, 59, 92, 120	0
19	BL	185/186 (99%)	0.92	14 (7%) 21 11	45, 69, 85, 104	0
19	y	185/186 (99%)	1.49	50 (27%) 2 1	41, 66, 85, 100	0
20	BM	179/190 (94%)	1.07	25 (13%) 7 4	48, 77, 137, 169	0
20	z	179/190 (94%)	0.97	13 (7%) 22 12	45, 68, 126, 145	0
21	0	170/172 (98%)	1.03	21 (12%) 9 5	46, 64, 87, 137	0
21	BN	170/172 (98%)	0.69	9 (5%) 33 19	39, 58, 77, 105	0
22	2	159/160 (99%)	1.15	24 (15%) 6 3	44, 63, 111, 147	0
22	BO	159/160 (99%)	1.08	24 (15%) 6 3	37, 60, 113, 147	0
23	5	102/124 (82%)	1.17	15 (14%) 7 3	73, 109, 140, 160	0
23	BP	102/124 (82%)	1.37	23 (22%) 3 1	89, 125, 151, 162	0
24	6	131/137 (95%)	0.78	8 (6%) 28 16	37, 55, 76, 86	0
24	BQ	131/137 (95%)	0.83	11 (8%) 18 10	32, 53, 77, 116	0
25	7	118/155 (76%)	1.09	22 (18%) 4 2	38, 76, 126, 143	0
25	BR	98/155 (63%)	1.17	18 (18%) 4 2	39, 70, 128, 138	0
26	8	120/142 (84%)	0.99	11 (9%) 16 9	53, 71, 91, 98	0
26	BS	119/142 (83%)	1.45	31 (26%) 2 1	62, 93, 113, 128	0
27	9	126/127 (99%)	1.58	35 (27%) 2 1	55, 80, 98, 113	0
27	BT	126/127 (99%)	1.24	22 (17%) 5 2	59, 91, 123, 140	0
28	AA	135/136 (99%)	1.36	29 (21%) 3 1	56, 84, 111, 143	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	BU	135/136 (99%)	1.45	28 (20%) 3 2	78, 113, 137, 159	0
29	AB	148/149 (99%)	1.16	16 (10%) 12 7	34, 63, 95, 123	0
29	BV	148/149 (99%)	1.27	25 (16%) 5 3	44, 73, 96, 118	0
30	AC	62/63 (98%)	1.83	27 (43%) 1 0	39, 77, 122, 143	0
30	BW	61/63 (96%)	1.57	17 (27%) 2 1	38, 76, 112, 135	0
31	AD	96/106 (90%)	0.83	7 (7%) 22 12	53, 73, 95, 108	0
31	BX	96/106 (90%)	1.30	19 (19%) 3 2	78, 103, 128, 152	0
32	AE	110/112 (98%)	0.76	4 (3%) 46 28	46, 64, 109, 134	0
32	BY	110/112 (98%)	1.04	14 (12%) 9 5	42, 72, 120, 146	0
33	AF	124/131 (94%)	1.19	20 (16%) 5 3	33, 65, 83, 94	0
33	BZ	124/131 (94%)	0.90	9 (7%) 22 12	37, 63, 87, 107	0
34	AG	106/107 (99%)	1.15	15 (14%) 7 4	45, 61, 78, 99	0
34	CA	106/107 (99%)	0.63	4 (3%) 44 26	36, 51, 73, 91	0
35	AH	112/122 (91%)	1.42	25 (22%) 3 1	46, 70, 113, 139	0
35	CB	112/122 (91%)	1.63	37 (33%) 1 0	50, 95, 128, 158	0
36	AI	120/120 (100%)	1.28	20 (16%) 5 3	60, 83, 106, 128	0
36	CC	118/120 (98%)	1.65	39 (33%) 1 0	74, 100, 125, 135	0
37	AJ	97/99 (97%)	1.18	17 (17%) 5 2	50, 70, 102, 166	0
37	CD	97/99 (97%)	1.57	29 (29%) 1 1	77, 98, 125, 155	0
38	AK	86/90 (95%)	0.93	12 (13%) 7 4	28, 54, 95, 109	0
38	CE	86/90 (95%)	1.22	13 (15%) 6 3	48, 71, 100, 135	0
39	AL	77/78 (98%)	1.37	15 (19%) 4 2	72, 94, 125, 153	0
39	CF	77/78 (98%)	1.73	28 (36%) 1 0	83, 115, 157, 165	0
40	AM	50/51 (98%)	1.15	5 (10%) 14 8	42, 61, 84, 95	0
40	CG	50/51 (98%)	1.60	10 (20%) 3 2	55, 76, 97, 105	0
41	AN	52/52 (100%)	2.36	30 (57%) 0 0	65, 96, 120, 128	0
41	CH	51/52 (98%)	2.59	33 (64%) 0 0	60, 95, 115, 127	0
42	AO	25/25 (100%)	1.89	10 (40%) 1 0	55, 66, 82, 88	0
42	CI	24/25 (96%)	1.58	7 (29%) 1 1	43, 58, 68, 74	0
43	AP	103/106 (97%)	0.98	15 (14%) 7 4	36, 62, 100, 118	0
43	CJ	103/106 (97%)	1.12	15 (14%) 7 4	44, 72, 107, 121	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	AQ	91/92 (98%)	0.87	4 (4%) 39 23	39, 57, 97, 108	0
44	CK	91/92 (98%)	0.96	8 (8%) 17 9	48, 72, 104, 123	0
45	CL	121/267 (45%)	1.65	40 (33%) 1 0	59, 88, 120, 144	0
45	i	120/267 (44%)	2.03	51 (42%) 1 0	59, 103, 135, 152	0
46	B	1741/1787 (97%)	0.97	174 (9%) 14 8	48, 89, 173, 457	0
46	CM	1765/1787 (98%)	0.82	121 (6%) 24 13	41, 79, 180, 457	0
47	C	208/261 (79%)	1.43	48 (23%) 2 1	80, 109, 137, 148	0
47	CN	208/261 (79%)	1.34	32 (15%) 6 3	53, 97, 127, 165	0
48	CO	214/256 (83%)	1.62	60 (28%) 2 1	65, 113, 138, 164	0
48	D	214/256 (83%)	1.20	33 (15%) 6 3	58, 92, 111, 131	0
49	CP	217/249 (87%)	1.04	28 (12%) 9 5	42, 73, 102, 120	0
49	E	217/249 (87%)	1.62	59 (27%) 2 1	69, 97, 121, 146	0
50	CQ	223/251 (88%)	1.30	44 (19%) 3 2	49, 76, 133, 174	0
50	F	223/251 (88%)	1.94	99 (44%) 1 0	70, 107, 152, 178	0
51	CR	260/262 (99%)	1.74	86 (33%) 1 0	58, 88, 110, 151	0
51	G	259/262 (98%)	1.87	100 (38%) 1 0	63, 96, 116, 156	0
52	CS	206/225 (91%)	1.89	76 (36%) 1 0	65, 99, 137, 191	0
52	H	206/225 (91%)	2.04	91 (44%) 1 0	67, 103, 143, 168	0
53	CT	236/236 (100%)	1.44	56 (23%) 2 1	54, 94, 139, 159	0
53	I	226/236 (95%)	1.40	63 (27%) 2 1	59, 96, 142, 175	0
54	CU	183/186 (98%)	1.66	61 (33%) 1 0	67, 124, 165, 174	0
54	J	184/186 (98%)	2.14	87 (47%) 0 0	76, 126, 156, 173	0
55	CV	203/206 (98%)	1.43	47 (23%) 2 1	38, 70, 120, 148	0
55	K	203/206 (98%)	1.29	42 (20%) 3 2	43, 79, 123, 140	0
56	CW	178/189 (94%)	1.85	60 (33%) 1 0	59, 93, 121, 136	0
56	L	178/189 (94%)	2.33	106 (59%) 0 0	74, 108, 129, 143	0
57	CX	94/118 (79%)	1.16	11 (11%) 10 6	62, 85, 123, 142	0
57	M	98/118 (83%)	1.96	43 (43%) 1 0	84, 117, 142, 158	0
58	CY	141/155 (90%)	1.36	27 (19%) 4 2	39, 67, 95, 149	0
58	N	144/155 (92%)	1.35	28 (19%) 4 2	48, 77, 113, 139	0
59	CZ	119/143 (83%)	1.72	42 (35%) 1 0	124, 157, 177, 180	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
59	O	116/143 (81%)	2.02	56 (48%)	0	0	136, 175, 196, 203	0
60	DA	150/151 (99%)	1.70	52 (34%)	1	0	54, 89, 117, 134	0
60	P	150/151 (99%)	1.70	51 (34%)	1	0	46, 88, 116, 122	0
61	DB	127/132 (96%)	1.30	22 (17%)	5	2	57, 97, 123, 132	0
61	Q	127/132 (96%)	1.14	22 (17%)	5	2	44, 79, 96, 107	0
62	DC	130/142 (91%)	1.57	36 (27%)	2	1	50, 89, 130, 144	0
62	R	129/142 (90%)	1.99	59 (45%)	1	0	63, 100, 137, 151	0
63	DD	140/142 (98%)	2.37	82 (58%)	0	0	58, 98, 130, 143	0
63	S	140/142 (98%)	2.60	86 (61%)	0	0	67, 112, 148, 152	0
64	DE	124/137 (90%)	2.10	59 (47%)	0	0	67, 108, 158, 166	0
64	T	124/137 (90%)	2.34	59 (47%)	0	0	80, 121, 166, 176	0
65	DF	141/145 (97%)	1.53	36 (25%)	2	1	54, 92, 124, 156	0
65	U	144/145 (99%)	1.71	44 (30%)	1	1	62, 90, 114, 157	0
66	DG	141/145 (97%)	1.73	44 (31%)	1	1	60, 90, 119, 148	0
66	V	141/145 (97%)	2.11	64 (45%)	1	0	79, 107, 140, 162	0
67	DH	97/119 (81%)	1.82	35 (36%)	1	0	49, 94, 122, 150	0
67	W	102/119 (85%)	2.04	44 (43%)	1	0	71, 121, 149, 158	0
68	DI	87/87 (100%)	1.07	10 (11%)	11	6	61, 83, 114, 149	0
68	X	87/87 (100%)	1.33	19 (21%)	3	1	76, 102, 126, 133	0
69	DJ	129/130 (99%)	1.45	31 (24%)	2	1	50, 69, 87, 96	0
69	Y	129/130 (99%)	1.93	50 (38%)	1	0	59, 84, 105, 113	0
70	DK	143/145 (98%)	1.34	32 (22%)	3	1	43, 64, 88, 116	0
70	Z	143/145 (98%)	1.48	35 (24%)	2	1	56, 78, 97, 115	0
71	DL	132/135 (97%)	1.39	26 (19%)	3	2	71, 110, 133, 174	0
71	a	134/135 (99%)	1.73	44 (32%)	1	1	68, 112, 130, 144	0
72	DM	71/105 (67%)	1.39	17 (23%)	2	1	89, 120, 143, 148	0
72	b	72/105 (68%)	1.50	16 (22%)	3	1	85, 111, 134, 154	0
73	DN	97/119 (81%)	1.54	24 (24%)	2	1	52, 75, 129, 137	0
73	c	98/119 (82%)	1.64	31 (31%)	1	1	53, 83, 123, 135	0
74	DO	81/82 (98%)	1.66	22 (27%)	2	1	73, 99, 160, 173	0
74	d	81/82 (98%)	1.58	19 (23%)	2	1	73, 99, 156, 170	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å ²)	Q<0.9	
75	DP	61/67 (91%)	1.26	12 (19%)	3	2	78, 101, 129, 148	0
75	e	62/67 (92%)	1.70	19 (30%)	1	1	91, 111, 131, 138	0
76	DQ	54/56 (96%)	1.51	15 (27%)	2	1	51, 65, 93, 103	0
76	f	55/56 (98%)	2.03	27 (49%)	0	0	75, 92, 118, 141	0
77	DR	58/63 (92%)	1.79	21 (36%)	1	0	63, 101, 161, 173	0
77	g	60/63 (95%)	1.90	23 (38%)	1	0	75, 105, 154, 169	0
78	DS	70/193 (36%)	2.81	47 (67%)	0	0	95, 163, 181, 196	0
78	h	70/193 (36%)	2.28	35 (50%)	0	0	113, 160, 185, 191	0
79	AR	311/317 (98%)	1.92	124 (39%)	1	0	114, 155, 178, 192	0
79	DT	306/317 (96%)	2.01	135 (44%)	1	0	100, 145, 174, 196	0
80	P0	107/312 (34%)	1.79	42 (39%)	1	0	104, 127, 144, 157	0
80	p0	79/312 (25%)	2.57	44 (55%)	0	0	119, 138, 155, 161	0
81	12	63/165 (38%)	1.17	11 (17%)	5	2	98, 132, 151, 157	0
82	L1	217/217 (100%)	1.19	42 (19%)	4	2	91, 127, 164, 224	0
82	11	217/217 (100%)	1.62	65 (29%)	1	1	109, 137, 164, 197	0
All	All	33588/36349 (92%)	1.14	5883 (17%)	5	2	28, 80, 154, 457	0

All (5883) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
51	G	110	ALA	9.8
67	W	81	TYR	9.8
50	F	206	ALA	9.6
78	DS	127	TYR	9.4
1	AS	1263	U	9.4
41	AN	16	GLU	8.5
52	CS	152	SER	8.5
64	T	68	GLY	8.4
45	i	64	LEU	8.4
1	AS	1262	G	8.2
52	CS	151	SER	8.1
66	V	18	TYR	8.1
56	L	138	LYS	8.0
1	AS	3319	U	7.8
62	R	109	PRO	7.7
59	O	89	ILE	7.4
63	S	67	LYS	7.3

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Mol	Chain	Res	Type	RSRZ
52	H	70	VAL	7.3
41	CH	16	GLU	7.1
80	p0	74	GLU	7.0
79	AR	80	TYR	7.0
49	E	86	ARG	6.9
63	S	120	SER	6.9
6	AY	363	ASN	6.8
54	CU	87	VAL	6.8
77	g	47	VAL	6.8
63	S	50	PRO	6.8
29	BV	20	GLY	6.8
79	DT	34	LEU	6.7
27	9	4	ILE	6.7
67	W	79	ASP	6.6
78	DS	125	LYS	6.6
49	E	92	ARG	6.5
65	DF	94	ASP	6.5
67	DH	81	TYR	6.4
51	CR	245	ILE	6.4
79	DT	293	ALA	6.4
46	CM	1679	A	6.4
36	CC	107	GLN	6.4
56	L	116	LEU	6.4
80	P0	85	GLY	6.4
80	p0	71	PRO	6.4
79	DT	80	TYR	6.3
80	p0	59	VAL	6.3
1	AS	1261	U	6.2
79	DT	290	ALA	6.2
37	AJ	96	SER	6.2
52	CS	82	PHE	6.2
79	AR	260	PHE	6.2
63	DD	67	LYS	6.2
49	E	77	LYS	6.2
79	AR	17	ASN	6.1
49	E	161	ALA	6.1
1	AS	1264	G	6.1
52	H	152	SER	6.1
56	L	6	ARG	6.1
4	j	250	GLN	6.1
80	p0	73	PHE	6.1
46	B	1339	G	6.0

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Mol	Chain	Res	Type	RSRZ
48	CO	155	TYR	6.0
52	H	170	GLN	6.0
66	V	84	LYS	6.0
6	AY	361	LEU	5.9
74	DO	24	LEU	5.9
27	9	44	ASN	5.9
40	CG	21	ARG	5.9
56	L	35	GLY	5.9
46	CM	1680	A	5.9
5	k	12	GLY	5.9
79	AR	79	ALA	5.9
79	DT	73	THR	5.9
64	DE	91	LEU	5.9
77	g	49	LEU	5.8
80	p0	67	LEU	5.8
1	AS	1265	U	5.8
56	CW	62	ARG	5.8
10	BC	115	ALA	5.8
80	p0	79	PHE	5.8
75	e	50	GLU	5.8
8	n	168	GLY	5.8
59	O	118	ALA	5.8
1	AS	545	G	5.8
45	CL	59	GLY	5.8
79	DT	116	ILE	5.7
52	H	76	LYS	5.7
60	P	150	VAL	5.7
7	AZ	7	PHE	5.7
73	c	29	CYS	5.7
50	F	151	GLN	5.6
73	c	16	GLY	5.6
48	CO	107	SER	5.6
50	F	154	ALA	5.6
52	CS	154	THR	5.6
54	J	179	PHE	5.6
66	V	86	ARG	5.6
25	BR	79	GLN	5.6
79	DT	208	CYS	5.6
50	CQ	206	ALA	5.6
45	CL	95	GLY	5.6
51	G	39	ARG	5.6
71	DL	88	ALA	5.5

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Mol	Chain	Res	Type	RSRZ
50	F	168	PHE	5.5
78	DS	179	ASP	5.5
54	J	77	LEU	5.5
69	Y	127	GLY	5.5
71	a	63	GLN	5.5
1	AS	1244	C	5.5
64	T	12	ALA	5.4
64	T	51	ALA	5.4
46	CM	657	C	5.4
66	DG	119	LYS	5.4
76	f	34	TYR	5.4
46	B	1410	A	5.4
60	P	7	SER	5.4
63	S	66	VAL	5.4
45	i	108	GLY	5.4
1	1	2436	A	5.4
14	BG	2	ALA	5.4
41	AN	12	LYS	5.4
68	X	56	SER	5.4
61	Q	88	THR	5.4
7	AZ	82	GLU	5.3
10	BC	114	ALA	5.3
52	CS	26	ALA	5.3
50	F	136	GLU	5.3
79	AR	96	GLU	5.3
53	CT	169	TYR	5.3
14	t	2	ALA	5.3
63	S	119	ASP	5.3
66	V	116	ILE	5.3
82	ll	167	VAL	5.3
51	CR	246	LYS	5.3
15	u	131	ALA	5.3
47	C	127	ARG	5.2
65	U	115	ARG	5.2
1	AS	1245	G	5.2
18	BK	66	SER	5.2
66	DG	55	TYR	5.2
63	S	54	VAL	5.2
50	F	153	TYR	5.2
51	G	109	PHE	5.2
54	CU	179	PHE	5.2
67	W	80	ALA	5.2

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Mol	Chain	Res	Type	RSRZ
79	DT	260	PHE	5.2
16	BI	43	SER	5.2
64	T	8	THR	5.2
45	i	102	LYS	5.1
67	W	66	THR	5.1
77	DR	4	VAL	5.1
79	DT	299	PHE	5.1
30	AC	21	ILE	5.1
6	l	184	LYS	5.1
15	BH	4	THR	5.1
46	CM	1696	U	5.1
71	a	23	PHE	5.1
80	p0	70	LEU	5.1
1	1	1552	C	5.1
1	1	2467	C	5.1
12	BE	114	GLY	5.1
52	CS	79	SER	5.1
71	a	69	SER	5.1
52	H	86	GLN	5.1
79	AR	32	LEU	5.1
58	CY	114	ALA	5.1
55	K	80	GLY	5.1
46	B	1	U	5.1
80	p0	76	LEU	5.1
78	DS	172	ILE	5.0
52	CS	76	LYS	5.0
56	L	142	ASN	5.0
56	L	146	PHE	5.0
66	V	119	LYS	5.0
52	H	72	HIS	5.0
46	CM	1697	C	5.0
80	P0	26	PHE	5.0
16	BI	108	ARG	5.0
54	J	176	GLN	5.0
13	s	125	MET	5.0
54	J	86	VAL	5.0
79	DT	75	SER	5.0
53	I	135	PRO	5.0
6	AY	73	ALA	5.0
49	CP	95	ALA	5.0
82	l1	23	THR	5.0
1	AS	2472	A	4.9

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Mol	Chain	Res	Type	RSRZ
59	O	97	LEU	4.9
52	CS	99	MET	4.9
6	l	363	ASN	4.9
56	CW	74	ASN	4.9
63	DD	131	ARG	4.9
63	S	68	VAL	4.9
79	AR	62	PHE	4.9
80	p0	75	LYS	4.9
66	V	124	ILE	4.9
79	AR	76	ALA	4.9
37	CD	65	GLU	4.9
30	BW	10	HIS	4.9
79	AR	81	ALA	4.9
51	G	24	SER	4.9
64	T	66	VAL	4.8
13	BF	158	ASP	4.8
36	CC	114	ARG	4.8
78	h	122	ARG	4.8
1	AS	2470	C	4.8
64	T	62	GLN	4.8
7	m	150	LEU	4.8
35	CB	39	ALA	4.8
51	CR	44	LEU	4.8
56	L	130	THR	4.8
59	CZ	118	ALA	4.8
79	DT	262	LEU	4.8
61	Q	119	ASP	4.8
71	a	68	LYS	4.8
78	DS	123	LYS	4.8
46	B	131	C	4.8
52	H	44	ASN	4.8
64	DE	24	LEU	4.8
63	S	79	ALA	4.8
56	CW	18	PRO	4.8
63	DD	68	VAL	4.8
56	CW	118	LEU	4.8
64	T	125	SER	4.8
5	k	330	GLY	4.8
49	E	160	VAL	4.8
73	c	39	VAL	4.8
68	X	54	ALA	4.8
73	c	90	THR	4.8

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Mol	Chain	Res	Type	RSRZ
52	H	130	ILE	4.7
48	D	54	LEU	4.7
57	M	46	LEU	4.7
69	Y	79	PHE	4.7
46	CM	1480	G	4.7
63	S	19	ALA	4.7
63	S	20	HIS	4.7
63	S	87	GLY	4.7
82	ll	1	MET	4.7
18	x	128	ARG	4.7
19	y	95	GLU	4.7
46	CM	1678	G	4.7
34	AG	95	GLY	4.7
54	J	87	VAL	4.7
78	h	144	VAL	4.7
7	m	9	THR	4.7
63	DD	16	THR	4.7
43	CJ	72	LEU	4.7
79	AR	77	ASP	4.7
66	DG	50	ALA	4.7
60	DA	106	ARG	4.7
63	S	5	SER	4.7
53	I	50	PHE	4.7
62	R	17	PHE	4.7
64	T	90	ALA	4.7
61	DB	23	VAL	4.6
55	CV	185	CYS	4.6
74	DO	15	GLU	4.6
62	R	97	TYR	4.6
78	DS	164	PRO	4.6
63	S	116	LEU	4.6
74	DO	19	HIS	4.6
50	F	56	THR	4.6
64	T	25	THR	4.6
1	1	1099	A	4.6
56	L	141	VAL	4.6
64	T	9	VAL	4.6
64	DE	9	VAL	4.6
72	b	54	VAL	4.6
78	DS	166	PRO	4.6
80	p0	15	LEU	4.6
65	DF	22	ILE	4.6

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Mol	Chain	Res	Type	RSRZ
78	DS	133	ILE	4.6
1	AS	1266	A	4.6
54	J	57	PHE	4.6
46	B	1359	U	4.6
63	DD	118	ALA	4.6
22	BO	103	GLN	4.6
54	J	146	GLN	4.6
74	DO	18	GLN	4.6
22	2	18	ASP	4.6
1	1	2476	C	4.6
49	CP	87	ALA	4.6
54	CU	55	ALA	4.6
35	CB	21	LYS	4.5
50	F	149	LYS	4.5
56	CW	93	LEU	4.5
63	S	2	SER	4.5
64	T	70	SER	4.5
6	l	352	PRO	4.5
13	s	118	PRO	4.5
70	Z	107	PHE	4.5
7	m	217	GLU	4.5
60	P	151	ALA	4.5
77	DR	34	ALA	4.5
54	J	148	VAL	4.5
47	CN	16	LEU	4.5
41	CH	5	SER	4.5
52	H	67	PRO	4.5
45	i	83	HIS	4.5
25	BR	88	GLU	4.5
62	R	34	THR	4.5
66	V	38	LYS	4.5
23	BP	17	VAL	4.5
62	DC	49	LEU	4.5
36	CC	116	PHE	4.5
3	AU	21	C	4.5
24	BQ	88	ARG	4.5
6	AY	55	GLU	4.5
48	CO	156	ALA	4.5
71	DL	111	LYS	4.5
51	G	78	THR	4.5
64	T	42	GLN	4.5
77	DR	60	PRO	4.5

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Mol	Chain	Res	Type	RSRZ
80	p0	78	PRO	4.5
29	BV	21	ARG	4.5
40	AM	28	ARG	4.5
47	C	155	TYR	4.5
77	DR	35	TYR	4.5
14	BG	88	LYS	4.5
7	AZ	125	VAL	4.5
1	1	1345	G	4.5
15	u	130	LYS	4.5
43	AP	15	LYS	4.5
52	H	104	ASN	4.4
77	g	34	ALA	4.4
63	DD	14	THR	4.4
78	DS	146	THR	4.4
74	DO	29	ARG	4.4
50	CQ	40	VAL	4.4
52	CS	155	VAL	4.4
63	S	53	LEU	4.4
78	DS	188	LEU	4.4
64	DE	124	ILE	4.4
65	U	123	ARG	4.4
7	m	7	PHE	4.4
45	i	88	PHE	4.4
51	G	134	LYS	4.4
12	r	162	GLN	4.4
66	DG	70	GLN	4.4
59	O	59	LEU	4.4
62	R	116	LEU	4.4
77	DR	61	ALA	4.4
6	l	353	SER	4.4
47	C	173	ILE	4.4
52	H	147	THR	4.4
53	CT	163	THR	4.4
46	B	1480	G	4.4
46	B	1571	G	4.4
78	h	123	LYS	4.4
80	P0	79	PHE	4.4
1	AS	1560	U	4.4
7	AZ	78	ALA	4.4
7	AZ	219	TYR	4.4
54	CU	89	LEU	4.4
63	S	90	ALA	4.4

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Mol	Chain	Res	Type	RSRZ
72	b	51	LEU	4.4
79	AR	55	TYR	4.4
30	BW	14	ARG	4.4
33	AF	125	GLY	4.4
7	AZ	151	GLN	4.4
47	C	99	ALA	4.4
79	DT	154	ALA	4.4
16	v	6	TYR	4.4
51	CR	76	VAL	4.4
79	DT	38	ARG	4.4
54	J	145	ILE	4.4
64	DE	14	LYS	4.4
16	BI	117	ASN	4.4
62	R	119	PHE	4.4
61	DB	84	THR	4.4
64	T	55	THR	4.4
79	DT	32	LEU	4.3
10	BC	149	ALA	4.3
79	DT	94	ASP	4.3
65	U	145	ARG	4.3
45	i	65	LYS	4.3
76	f	43	PHE	4.3
39	CF	41	THR	4.3
4	j	71	LEU	4.3
13	s	129	VAL	4.3
63	DD	18	VAL	4.3
41	AN	26	ARG	4.3
52	H	63	GLN	4.3
64	T	53	TYR	4.3
64	T	41	ILE	4.3
71	a	64	PHE	4.3
48	CO	163	GLU	4.3
76	f	45	GLU	4.3
45	CL	81	THR	4.3
75	e	51	ASN	4.3
79	AR	13	LEU	4.3
41	CH	30	ARG	4.3
60	DA	16	LEU	4.3
64	DE	12	ALA	4.3
73	DN	48	ALA	4.3
63	DD	65	ARG	4.3
27	BT	21	THR	4.3

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Mol	Chain	Res	Type	RSRZ
45	i	78	SER	4.3
50	F	137	VAL	4.3
79	DT	114	VAL	4.3
7	AZ	119	TYR	4.3
27	9	6	GLN	4.3
27	9	120	GLN	4.3
63	S	39	GLN	4.3
64	T	21	TYR	4.3
50	F	18	PHE	4.3
52	H	43	PHE	4.3
71	DL	23	PHE	4.3
56	L	160	HIS	4.3
69	Y	48	GLY	4.3
68	X	55	LEU	4.3
63	S	65	ARG	4.2
51	CR	219	VAL	4.2
75	e	45	LYS	4.2
79	DT	155	VAL	4.2
52	H	179	ALA	4.2
69	Y	2	THR	4.2
16	v	153	ASN	4.2
6	AY	84	HIS	4.2
7	AZ	171	LEU	4.2
35	CB	30	LEU	4.2
43	AP	104	LEU	4.2
64	T	73	LEU	4.2
71	a	67	GLY	4.2
78	DS	190	LEU	4.2
54	J	119	ASP	4.2
54	J	96	PRO	4.2
73	c	69	ASN	4.2
1	AS	1552	C	4.2
75	DP	66	LEU	4.2
65	DF	46	VAL	4.2
51	G	63	ALA	4.2
61	Q	12	ALA	4.2
70	Z	85	ALA	4.2
13	s	106	ILE	4.2
54	CU	94	ILE	4.2
56	CW	140	ILE	4.2
69	Y	75	ILE	4.2
80	P0	80	ILE	4.2

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Mol	Chain	Res	Type	RSRZ
11	q	176	LEU	4.2
72	b	69	LEU	4.2
11	q	170	LYS	4.2
43	CJ	51	GLY	4.2
55	K	180	GLY	4.2
57	M	30	PRO	4.2
64	DE	102	ILE	4.2
6	l	199	ARG	4.2
47	C	16	LEU	4.2
56	L	137	GLY	4.2
60	P	68	GLY	4.2
50	CQ	172	ALA	4.2
64	T	124	ILE	4.2
46	CM	131	C	4.2
46	B	491	U	4.2
48	CO	218	LEU	4.2
10	p	237	GLY	4.1
56	L	48	GLN	4.1
57	CX	12	HIS	4.1
48	D	57	ALA	4.1
78	h	164	PRO	4.1
10	BC	154	ILE	4.1
64	T	50	ILE	4.1
82	ll	30	GLU	4.1
6	AY	195	LEU	4.1
13	BF	4	LYS	4.1
79	AR	101	THR	4.1
1	AS	2448	C	4.1
1	AS	2450	U	4.1
82	L1	69	GLY	4.1
6	l	12	VAL	4.1
10	BC	152	VAL	4.1
45	CL	84	SER	4.1
52	H	155	VAL	4.1
45	i	33	ASN	4.1
49	E	209	ALA	4.1
7	AZ	8	ARG	4.1
30	AC	22	LYS	4.1
51	CR	184	THR	4.1
50	CQ	207	VAL	4.1
71	a	12	VAL	4.1
57	M	13	GLN	4.1

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Mol	Chain	Res	Type	RSRZ
76	f	20	GLN	4.1
1	AS	1249	U	4.1
9	o	69	ALA	4.1
20	BM	87	ALA	4.1
56	CW	123	HIS	4.1
69	Y	27	ILE	4.1
7	m	8	ARG	4.1
38	CE	57	ARG	4.1
66	V	69	LYS	4.1
19	y	94	LEU	4.1
80	p0	52	LEU	4.1
43	AP	26	THR	4.1
7	m	65	VAL	4.1
12	r	114	GLY	4.1
7	AZ	226	TYR	4.1
70	DK	27	GLN	4.1
30	BW	38	LYS	4.1
55	K	66	SER	4.1
74	d	24	LEU	4.1
79	DT	285	GLU	4.1
5	AX	139	THR	4.1
48	CO	59	ASP	4.1
50	F	40	VAL	4.1
53	I	168	THR	4.1
67	W	69	THR	4.1
56	CW	12	TYR	4.1
52	CS	170	GLN	4.1
65	U	48	LYS	4.1
75	DP	45	LYS	4.1
7	AZ	212	LEU	4.1
39	CF	57	ASN	4.1
46	B	504	A	4.1
1	AS	1235	C	4.0
49	E	79	ARG	4.0
52	H	92	ARG	4.0
75	e	49	ARG	4.0
51	G	54	TYR	4.0
64	T	38	ILE	4.0
7	AZ	68	HIS	4.0
7	AZ	150	LEU	4.0
10	BC	62	GLN	4.0
56	CW	146	PHE	4.0

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Mol	Chain	Res	Type	RSRZ
82	l1	2	SER	4.0
18	BK	89	ASN	4.0
50	F	178	MET	4.0
6	AY	66	TRP	4.0
10	p	165	VAL	4.0
62	R	96	VAL	4.0
1	AS	1248	A	4.0
78	DS	178	LYS	4.0
52	CS	187	ILE	4.0
60	DA	151	ALA	4.0
47	CN	184	LEU	4.0
51	G	44	LEU	4.0
52	CS	67	PRO	4.0
10	p	62	GLN	4.0
53	CT	179	VAL	4.0
82	l1	148	VAL	4.0
13	BF	78	GLU	4.0
19	BL	174	ARG	4.0
7	AZ	109	ALA	4.0
10	p	202	THR	4.0
62	R	57	ILE	4.0
63	DD	90	ALA	4.0
49	E	220	LEU	4.0
62	R	49	LEU	4.0
46	CM	1698	U	4.0
69	Y	52	TYR	4.0
4	AW	47	GLN	4.0
45	CL	54	LYS	4.0
45	CL	102	LYS	4.0
52	H	23	VAL	4.0
64	T	3	ARG	4.0
65	DF	120	ARG	4.0
74	DO	30	SER	4.0
19	y	169	GLY	4.0
35	AH	45	GLY	4.0
66	DG	53	TRP	4.0
79	AR	116	ILE	4.0
22	2	31	LEU	4.0
48	CO	120	LEU	4.0
62	DC	56	LEU	4.0
79	DT	207	LEU	4.0
64	T	22	PRO	4.0

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Mol	Chain	Res	Type	RSRZ
33	BZ	27	HIS	4.0
46	B	1270	U	4.0
46	CM	132	U	4.0
49	CP	89	GLN	4.0
70	Z	48	HIS	4.0
52	CS	102	ARG	4.0
69	Y	74	VAL	4.0
78	h	126	VAL	4.0
82	L1	13	VAL	4.0
53	I	96	SER	4.0
41	CH	8	ALA	4.0
46	CM	1703	C	4.0
54	J	125	LEU	4.0
59	CZ	101	ALA	4.0
63	DD	80	ILE	4.0
79	AR	82	LEU	4.0
80	p0	11	TYR	3.9
42	CI	16	LYS	3.9
64	T	63	LYS	3.9
66	DG	71	VAL	3.9
80	p0	51	VAL	3.9
26	BS	40	LEU	3.9
48	CO	54	LEU	3.9
52	H	79	SER	3.9
54	J	42	ILE	3.9
56	L	152	SER	3.9
1	AS	1239	G	3.9
36	CC	84	LYS	3.9
43	CJ	15	LYS	3.9
63	DD	13	LYS	3.9
52	H	99	MET	3.9
29	BV	46	ASP	3.9
7	AZ	92	LEU	3.9
57	CX	2	LEU	3.9
22	2	100	ALA	3.9
35	CB	50	ALA	3.9
44	AQ	59	SER	3.9
79	AR	35	SER	3.9
14	t	11	ASN	3.9
41	AN	14	ASN	3.9
46	CM	658	A	3.9
10	BC	122	THR	3.9

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Mol	Chain	Res	Type	RSRZ
23	5	15	PHE	3.9
51	CR	80	THR	3.9
80	P0	108	PRO	3.9
26	BS	25	LYS	3.9
49	E	114	LYS	3.9
52	H	148	ARG	3.9
78	h	125	LYS	3.9
78	DS	191	LYS	3.9
63	S	141	TYR	3.9
66	V	66	TYR	3.9
63	S	21	VAL	3.9
3	AU	91	C	3.9
36	AI	88	LEU	3.9
45	i	115	LEU	3.9
51	CR	233	GLY	3.9
57	M	26	ASP	3.9
47	CN	111	ILE	3.9
54	J	94	ILE	3.9
56	CW	42	ILE	3.9
59	CZ	62	LEU	3.9
79	DT	28	ALA	3.9
48	D	29	TRP	3.9
14	BG	131	LYS	3.9
52	H	96	SER	3.9
63	DD	120	SER	3.9
24	6	88	ARG	3.9
54	CU	109	PRO	3.9
49	E	205	THR	3.9
60	P	21	ASN	3.9
1	AS	1247	A	3.9
79	DT	29	HIS	3.9
7	m	212	LEU	3.9
9	BB	139	LEU	3.9
20	BM	73	GLY	3.9
59	CZ	44	GLY	3.9
49	E	87	ALA	3.9
52	H	85	ALA	3.9
1	1	2452	G	3.9
57	M	5	LYS	3.9
64	T	5	ARG	3.9
73	c	82	ARG	3.9
49	E	210	PHE	3.9

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Mol	Chain	Res	Type	RSRZ
57	M	27	PHE	3.9
63	S	75	SER	3.9
63	DD	140	SER	3.9
72	b	55	PRO	3.9
38	AK	87	THR	3.9
50	F	187	VAL	3.9
13	s	17	LEU	3.9
49	E	129	LEU	3.9
73	DN	16	GLY	3.9
79	AR	15	GLY	3.9
49	E	95	ALA	3.9
51	G	14	ALA	3.9
53	I	138	ALA	3.9
59	CZ	48	ALA	3.9
56	CW	10	LYS	3.9
62	DC	58	LYS	3.9
79	AR	44	LYS	3.9
52	H	119	GLU	3.8
55	CV	109	PHE	3.8
16	BI	155	VAL	3.8
24	BQ	7	SER	3.8
67	W	61	VAL	3.8
1	AS	1246	G	3.8
59	CZ	97	LEU	3.8
58	CY	32	LYS	3.8
80	p0	64	ARG	3.8
49	CP	151	CYS	3.8
48	CO	190	PRO	3.8
57	M	83	PRO	3.8
10	BC	165	VAL	3.8
66	V	113	VAL	3.8
69	DJ	33	VAL	3.8
52	H	77	TYR	3.8
56	CW	142	ASN	3.8
66	V	55	TYR	3.8
69	Y	84	ASN	3.8
1	AS	3051	C	3.8
7	AZ	170	GLY	3.8
38	CE	2	GLY	3.8
41	AN	52	LYS	3.8
41	CH	44	GLN	3.8
48	CO	141	ALA	3.8

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Mol	Chain	Res	Type	RSRZ
50	F	63	GLN	3.8
70	Z	28	ALA	3.8
27	9	7	ASP	3.8
56	L	151	ASP	3.8
16	BI	8	GLU	3.8
18	BK	42	GLU	3.8
38	CE	29	VAL	3.8
72	DM	91	PRO	3.8
56	L	20	GLU	3.8
56	L	145	SER	3.8
63	S	64	ILE	3.8
71	a	70	THR	3.8
77	g	41	THR	3.8
10	p	80	SER	3.8
10	BC	182	LYS	3.8
48	CO	102	GLY	3.8
52	CS	74	ALA	3.8
76	f	12	ARG	3.8
1	1	2456	C	3.8
55	CV	21	PHE	3.8
41	AN	47	PRO	3.8
46	CM	278	U	3.8
50	F	138	VAL	3.8
62	DC	101	VAL	3.8
79	AR	58	PRO	3.8
37	CD	71	LEU	3.8
47	C	76	CYS	3.8
54	CU	77	LEU	3.8
58	CY	118	GLU	3.8
63	S	43	LEU	3.8
65	U	15	LEU	3.8
48	CO	152	LYS	3.8
71	DL	99	LYS	3.8
79	DT	97	THR	3.8
63	S	118	ALA	3.8
63	DD	87	GLY	3.8
7	m	283	GLN	3.8
29	AB	65	GLN	3.8
49	E	89	GLN	3.8
55	CV	111	GLN	3.8
45	i	69	PHE	3.8
63	S	108	PHE	3.8

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Mol	Chain	Res	Type	RSRZ
33	AF	123	PRO	3.8
54	J	109	PRO	3.8
63	DD	50	PRO	3.8
79	AR	34	LEU	3.8
50	F	191	LYS	3.8
53	I	226	ILE	3.8
53	CT	100	CYS	3.8
61	DB	85	LYS	3.8
63	S	80	ILE	3.8
52	CS	153	GLY	3.8
79	AR	276	ALA	3.8
59	O	49	SER	3.7
79	AR	210	SER	3.7
71	a	122	GLN	3.7
28	BU	130	PHE	3.7
19	y	140	VAL	3.7
49	E	178	VAL	3.7
51	CR	192	VAL	3.7
63	DD	66	VAL	3.7
64	DE	15	VAL	3.7
7	m	92	LEU	3.7
39	CF	14	LEU	3.7
78	h	190	LEU	3.7
35	CB	29	LYS	3.7
36	AI	84	LYS	3.7
50	F	208	LYS	3.7
52	CS	199	ILE	3.7
67	DH	117	ILE	3.7
79	DT	167	ILE	3.7
16	BI	146	ALA	3.7
18	x	183	THR	3.7
35	AH	32	ALA	3.7
56	CW	55	ALA	3.7
63	DD	19	ALA	3.7
66	V	39	THR	3.7
6	l	356	GLN	3.7
6	AY	353	SER	3.7
30	AC	62	SER	3.7
52	H	151	SER	3.7
58	CY	60	PHE	3.7
64	DE	28	PHE	3.7
52	CS	100	ASN	3.7

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Mol	Chain	Res	Type	RSRZ
52	CS	104	ASN	3.7
28	AA	68	VAL	3.7
31	BX	44	VAL	3.7
66	V	114	LEU	3.7
45	i	43	PRO	3.7
45	i	85	LYS	3.7
78	h	124	LYS	3.7
79	DT	63	LYS	3.7
62	R	84	ILE	3.7
1	AS	2453	G	3.7
46	CM	1339	G	3.7
6	AY	89	ALA	3.7
51	CR	107	GLY	3.7
54	J	133	GLY	3.7
60	P	15	ALA	3.7
63	DD	32	GLY	3.7
66	DG	120	GLY	3.7
68	DI	54	ALA	3.7
69	Y	101	TYR	3.7
78	h	148	TYR	3.7
11	q	175	PHE	3.7
8	n	1	MET	3.7
1	1	1557	U	3.7
6	AY	145	GLN	3.7
30	BW	23	LYS	3.7
41	CH	9	LEU	3.7
55	K	177	SER	3.7
45	CL	50	LYS	3.7
65	U	17	LEU	3.7
78	DS	145	LEU	3.7
59	O	111	ASN	3.7
70	DK	89	ASN	3.7
79	DT	59	LYS	3.7
51	CR	15	PRO	3.7
66	V	31	PRO	3.7
78	DS	130	PRO	3.7
67	W	85	ILE	3.7
72	DM	50	ILE	3.7
46	CM	1694	A	3.7
49	E	91	THR	3.7
45	CL	69	PHE	3.7
59	O	120	CYS	3.7

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Mol	Chain	Res	Type	RSRZ
78	DS	174	MET	3.7
45	i	86	LYS	3.7
51	G	247	LEU	3.7
54	J	107	LYS	3.7
59	O	30	VAL	3.7
60	P	16	LEU	3.7
75	e	54	LEU	3.7
60	DA	36	GLN	3.7
41	CH	2	ILE	3.7
46	CM	75	U	3.7
63	S	28	ILE	3.7
6	l	174	GLY	3.7
28	BU	117	ALA	3.7
63	DD	23	ALA	3.7
79	DT	24	ALA	3.7
6	l	186	LYS	3.7
64	DE	8	THR	3.7
69	Y	104	LEU	3.7
72	DM	93	LEU	3.7
78	h	131	LYS	3.7
7	m	37	VAL	3.7
54	J	56	VAL	3.7
19	y	3	ARG	3.7
29	BV	65	GLN	3.7
21	0	60	SER	3.7
39	CF	22	SER	3.7
41	AN	5	SER	3.7
52	H	137	ILE	3.7
63	S	24	GLY	3.6
78	h	170	ALA	3.6
4	AW	73	GLU	3.6
73	c	12	LYS	3.6
54	J	66	TYR	3.6
63	DD	27	LEU	3.6
78	DS	189	THR	3.6
63	DD	76	GLN	3.6
9	o	202	PRO	3.6
50	F	204	PRO	3.6
68	X	34	ILE	3.6
47	C	174	TRP	3.6
40	CG	33	ASN	3.6
69	Y	66	ASN	3.6

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Mol	Chain	Res	Type	RSRZ
19	y	154	GLY	3.6
45	i	37	LYS	3.6
48	CO	55	LYS	3.6
56	CW	51	LYS	3.6
66	DG	51	GLU	3.6
46	CM	133	U	3.6
50	CQ	168	PHE	3.6
79	DT	289	LEU	3.6
1	1	545	G	3.6
1	AS	1238	G	3.6
6	AY	9	VAL	3.6
49	E	162	VAL	3.6
71	a	35	VAL	3.6
18	x	7	THR	3.6
38	CE	87	THR	3.6
48	CO	46	THR	3.6
78	DS	129	THR	3.6
11	q	172	ILE	3.6
51	CR	228	ILE	3.6
4	AW	250	GLN	3.6
65	U	2	PRO	3.6
82	ll	43	PRO	3.6
54	J	3	SER	3.6
79	AR	75	SER	3.6
30	BW	2	ALA	3.6
30	BW	33	LYS	3.6
35	CB	43	LYS	3.6
36	CC	91	LYS	3.6
43	CJ	81	ALA	3.6
45	i	54	LYS	3.6
52	H	80	LYS	3.6
67	DH	29	LYS	3.6
78	DS	124	LYS	3.6
16	BI	63	ARG	3.6
36	CC	108	ARG	3.6
53	CT	156	PHE	3.6
64	DE	11	ARG	3.6
75	e	33	LEU	3.6
78	DS	142	LEU	3.6
82	L1	16	LEU	3.6
48	CO	20	VAL	3.6
67	DH	55	VAL	3.6

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Mol	Chain	Res	Type	RSRZ
1	1	2743	U	3.6
31	BX	26	THR	3.6
58	N	93	TYR	3.6
46	CM	1	U	3.6
46	CM	1356	U	3.6
79	AR	314	THR	3.6
6	l	216	ILE	3.6
14	BG	95	ILE	3.6
1	AS	1222	G	3.6
7	AZ	59	ASP	3.6
46	B	1349	G	3.6
41	CH	12	LYS	3.6
50	CQ	149	LYS	3.6
52	CS	84	LYS	3.6
73	DN	4	LYS	3.6
79	AR	46	LYS	3.6
66	V	62	ALA	3.6
16	BI	198	SER	3.6
10	p	201	LEU	3.6
35	CB	57	LEU	3.6
47	CN	127	ARG	3.6
52	CS	112	ARG	3.6
64	T	67	ARG	3.6
23	BP	74	PHE	3.6
51	G	208	VAL	3.6
56	CW	64	GLU	3.6
52	H	122	HIS	3.6
63	DD	20	HIS	3.6
41	CH	32	THR	3.6
60	P	67	THR	3.6
6	l	5	PRO	3.6
66	V	90	PRO	3.6
78	h	130	PRO	3.6
46	CM	1270	U	3.6
6	AY	52	ALA	3.6
60	P	79	GLY	3.6
82	ll	124	LEU	3.6
29	BV	68	PHE	3.6
64	T	28	PHE	3.6
1	1	2455	G	3.6
78	DS	126	VAL	3.6
36	AI	64	GLU	3.6

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Mol	Chain	Res	Type	RSRZ
47	CN	33	ASN	3.6
63	DD	124	GLU	3.6
47	CN	173	ILE	3.6
69	Y	61	ILE	3.6
77	DR	5	HIS	3.6
51	G	217	THR	3.6
79	AR	41	THR	3.6
51	G	22	LYS	3.6
54	J	175	LYS	3.6
55	CV	41	LYS	3.6
67	W	68	LYS	3.6
1	1	2437	A	3.5
20	BM	63	ALA	3.5
49	CP	86	ARG	3.5
51	G	84	ALA	3.5
60	DA	42	ARG	3.5
59	O	78	LEU	3.5
59	O	106	LEU	3.5
76	DQ	38	LEU	3.5
22	2	2	GLY	3.5
52	CS	75	GLY	3.5
55	CV	68	GLY	3.5
12	BE	199	PHE	3.5
58	N	60	PHE	3.5
51	CR	208	VAL	3.5
55	CV	45	SER	3.5
57	M	60	SER	3.5
55	K	28	GLU	3.5
9	o	221	ILE	3.5
52	H	64	ILE	3.5
63	S	84	ILE	3.5
7	AZ	81	HIS	3.5
45	CL	83	HIS	3.5
1	AS	240	C	3.5
1	AS	1197	C	3.5
1	AS	2468	C	3.5
49	E	94	LYS	3.5
79	AR	12	THR	3.5
80	p0	55	LYS	3.5
53	CT	181	PRO	3.5
70	Z	16	ARG	3.5
21	0	116	ALA	3.5

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Mol	Chain	Res	Type	RSRZ
47	C	97	ALA	3.5
48	D	47	LEU	3.5
63	DD	37	LEU	3.5
66	DG	62	ALA	3.5
68	X	26	ALA	3.5
79	DT	13	LEU	3.5
79	DT	81	ALA	3.5
51	G	25	GLY	3.5
67	DH	110	GLY	3.5
76	DQ	8	PHE	3.5
1	AS	3166	A	3.5
11	q	171	ASP	3.5
46	CM	712	A	3.5
67	DH	23	ILE	3.5
71	DL	25	ILE	3.5
6	AY	184	LYS	3.5
17	w	177	LYS	3.5
50	F	188	LYS	3.5
57	M	64	TYR	3.5
73	DN	73	TYR	3.5
6	AY	109	ARG	3.5
63	S	16	THR	3.5
1	1	2448	C	3.5
6	l	166	ALA	3.5
7	AZ	104	LEU	3.5
27	BT	76	LEU	3.5
58	CY	47	ALA	3.5
71	a	134	ALA	3.5
78	h	159	LEU	3.5
7	m	151	GLN	3.5
52	H	75	GLY	3.5
56	L	32	GLY	3.5
51	G	111	VAL	3.5
57	M	42	VAL	3.5
66	V	37	VAL	3.5
71	a	135	ASP	3.5
54	J	43	LYS	3.5
54	J	147	LYS	3.5
56	L	65	LYS	3.5
56	L	154	LYS	3.5
77	g	23	LYS	3.5
80	P0	87	ILE	3.5

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Mol	Chain	Res	Type	RSRZ
1	AS	402	A	3.5
8	n	2	SER	3.5
45	i	39	SER	3.5
61	Q	120	SER	3.5
60	P	69	ASN	3.5
65	DF	79	TYR	3.5
41	CH	6	LEU	3.5
50	F	22	LEU	3.5
50	F	203	LEU	3.5
66	V	52	THR	3.5
78	h	128	THR	3.5
52	CS	173	ALA	3.5
22	2	103	GLN	3.5
47	C	58	VAL	3.5
59	O	100	TRP	3.5
60	DA	62	GLN	3.5
71	DL	92	VAL	3.5
35	CB	20	ILE	3.5
54	J	131	ILE	3.5
36	CC	100	GLU	3.5
51	G	60	GLU	3.5
1	1	2444	G	3.5
1	AS	249	G	3.5
62	R	92	SER	3.5
14	BG	12	ASN	3.5
16	BI	149	ASN	3.5
56	L	18	PRO	3.5
58	N	98	ASN	3.5
67	W	70	PRO	3.5
69	Y	80	ASN	3.5
77	g	39	LEU	3.5
78	h	145	LEU	3.5
82	ll	12	ASN	3.5
7	m	70	THR	3.5
46	B	75	U	3.5
46	B	1356	U	3.5
46	B	1399	U	3.5
59	O	48	ALA	3.5
79	DT	76	ALA	3.5
7	AZ	105	VAL	3.5
52	H	68	VAL	3.5
59	O	123	VAL	3.5

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Mol	Chain	Res	Type	RSRZ
66	V	82	GLY	3.5
82	ll	28	PHE	3.5
51	CR	243	LYS	3.5
61	DB	14	ILE	3.5
25	7	47	ARG	3.5
67	W	67	ARG	3.5
43	CJ	44	ASP	3.5
45	i	47	ASP	3.5
60	P	142	GLU	3.4
13	s	41	SER	3.4
28	AA	98	SER	3.4
41	CH	47	PRO	3.4
54	J	164	SER	3.4
59	O	119	SER	3.4
18	BK	64	ASN	3.4
39	AL	33	ALA	3.4
23	BP	57	THR	3.4
28	BU	118	PHE	3.4
51	G	76	VAL	3.4
52	H	134	VAL	3.4
56	CW	113	VAL	3.4
70	DK	38	PHE	3.4
1	1	1021	A	3.4
1	1	1760	U	3.4
3	AU	22	U	3.4
19	y	74	LYS	3.4
45	CL	96	LYS	3.4
57	M	25	LYS	3.4
60	P	70	LYS	3.4
1	1	2443	G	3.4
7	m	24	GLN	3.4
7	AZ	275	GLN	3.4
36	CC	118	ILE	3.4
79	DT	123	ILE	3.4
26	BS	48	ARG	3.4
65	U	41	ARG	3.4
65	U	120	ARG	3.4
6	AY	259	LEU	3.4
54	J	149	LEU	3.4
36	CC	102	GLU	3.4
22	2	30	TYR	3.4
65	U	82	PRO	3.4

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Mol	Chain	Res	Type	RSRZ
52	H	74	ALA	3.4
54	CU	90	ALA	3.4
57	CX	23	ALA	3.4
79	DT	66	SER	3.4
65	DF	4	VAL	3.4
48	CO	63	GLY	3.4
52	H	66	ASN	3.4
53	I	197	ASN	3.4
73	c	37	LYS	3.4
4	AW	64	ARG	3.4
10	BC	117	ILE	3.4
11	q	163	GLN	3.4
35	AH	33	GLN	3.4
52	CS	149	ILE	3.4
55	CV	53	GLN	3.4
65	U	119	ILE	3.4
69	Y	68	ARG	3.4
56	L	59	LEU	3.4
56	CW	70	LEU	3.4
5	AX	140	ASP	3.4
27	9	127	GLU	3.4
53	CT	217	HIS	3.4
56	L	33	GLU	3.4
76	f	11	PRO	3.4
78	h	162	GLU	3.4
82	L1	30	GLU	3.4
78	h	143	ALA	3.4
79	DT	84	ALA	3.4
27	BT	20	PHE	3.4
47	C	107	PHE	3.4
53	I	97	VAL	3.4
63	S	127	LYS	3.4
66	DG	18	TYR	3.4
70	DK	107	PHE	3.4
11	q	60	GLY	3.4
52	H	153	GLY	3.4
54	J	129	THR	3.4
65	U	121	SER	3.4
65	DF	121	SER	3.4
78	DS	128	THR	3.4
79	DT	210	SER	3.4
53	I	100	CYS	3.4

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Mol	Chain	Res	Type	RSRZ
49	CP	92	ARG	3.4
51	CR	18	TRP	3.4
64	DE	62	GLN	3.4
5	AX	387	LEU	3.4
1	AS	2743	U	3.4
46	B	1047	U	3.4
46	CM	659	U	3.4
10	BC	199	ALA	3.4
50	F	212	ALA	3.4
56	CW	65	LYS	3.4
63	S	123	MET	3.4
65	U	83	ALA	3.4
71	DL	102	LYS	3.4
79	AR	59	LYS	3.4
28	BU	14	VAL	3.4
28	BU	92	PHE	3.4
47	CN	139	VAL	3.4
52	H	133	VAL	3.4
53	CT	166	ASP	3.4
60	P	66	VAL	3.4
79	DT	161	ASP	3.4
7	m	169	GLY	3.4
35	AH	28	GLY	3.4
60	DA	59	GLY	3.4
63	DD	132	GLY	3.4
30	AC	18	ARG	3.4
1	1	2459	G	3.4
12	BE	33	ILE	3.4
17	w	2	SER	3.4
35	AH	49	SER	3.4
16	BI	153	ASN	3.4
33	AF	53	GLN	3.4
10	p	66	LEU	3.4
56	L	86	LEU	3.4
67	W	62	LEU	3.4
78	DS	159	LEU	3.4
79	AR	271	LEU	3.4
1	AS	1223	C	3.4
9	o	156	LYS	3.4
46	CM	674	C	3.4
80	P0	81	LYS	3.4
53	CT	224	ALA	3.4

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Mol	Chain	Res	Type	RSRZ
51	G	47	PHE	3.4
52	CS	53	VAL	3.4
56	CW	14	VAL	3.4
58	CY	95	PRO	3.4
65	DF	128	PHE	3.4
79	DT	124	VAL	3.4
1	1	1346	U	3.4
46	B	1348	U	3.4
4	AW	53	GLY	3.4
59	CZ	127	GLY	3.4
77	DR	6	GLY	3.4
7	m	38	THR	3.4
46	B	1407	A	3.4
50	F	171	ILE	3.4
67	DH	66	THR	3.4
67	DH	107	ILE	3.4
6	AY	110	TRP	3.4
45	i	35	SER	3.4
45	i	45	SER	3.4
60	P	14	SER	3.4
59	CZ	59	LEU	3.3
38	CE	10	LYS	3.3
49	CP	111	LYS	3.3
7	AZ	65	VAL	3.3
10	BC	155	ALA	3.3
12	r	190	VAL	3.3
15	BH	115	VAL	3.3
27	9	45	VAL	3.3
29	AB	127	ALA	3.3
54	J	182	PRO	3.3
56	CW	148	VAL	3.3
79	DT	79	ALA	3.3
66	V	14	PHE	3.3
80	p0	12	PHE	3.3
14	BG	194	GLU	3.3
19	y	174	ARG	3.3
73	DN	89	ARG	3.3
79	AR	38	ARG	3.3
79	AR	238	HIS	3.3
7	m	31	TYR	3.3
19	y	14	GLY	3.3
63	S	48	TYR	3.3

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Mol	Chain	Res	Type	RSRZ
46	B	1568	C	3.3
48	CO	140	ILE	3.3
1	AS	1012	U	3.3
46	CM	1695	U	3.3
52	H	145	ASP	3.3
65	U	51	ASP	3.3
65	DF	51	ASP	3.3
64	T	54	THR	3.3
64	DE	25	THR	3.3
37	CD	49	LEU	3.3
50	CQ	177	LEU	3.3
61	Q	78	LEU	3.3
79	DT	7	LEU	3.3
16	BI	166	SER	3.3
67	DH	75	SER	3.3
1	AS	2186	A	3.3
39	AL	40	GLN	3.3
46	CM	1476	A	3.3
53	I	191	LYS	3.3
56	L	153	GLN	3.3
63	S	105	LYS	3.3
63	DD	123	MET	3.3
29	BV	144	VAL	3.3
49	E	125	VAL	3.3
52	CS	33	VAL	3.3
59	O	101	ALA	3.3
79	DT	216	VAL	3.3
82	ll	36	VAL	3.3
51	G	49	ARG	3.3
70	DK	18	HIS	3.3
31	BX	12	ILE	3.3
50	CQ	134	GLY	3.3
53	I	146	GLY	3.3
63	S	91	TYR	3.3
8	n	42	LEU	3.3
5	k	233	TRP	3.3
15	u	22	ASP	3.3
51	CR	180	LEU	3.3
53	CT	190	LEU	3.3
69	Y	26	LEU	3.3
79	AR	145	LEU	3.3
80	P0	18	LEU	3.3

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Mol	Chain	Res	Type	RSRZ
16	BI	120	TRP	3.3
10	BC	150	LYS	3.3
10	BC	184	LYS	3.3
19	y	72	LYS	3.3
1	AS	3165	U	3.3
46	B	636	C	3.3
63	DD	105	LYS	3.3
37	CD	41	SER	3.3
46	CM	1359	U	3.3
6	AY	253	GLN	3.3
7	AZ	4	GLN	3.3
21	0	138	GLN	3.3
55	K	32	GLN	3.3
41	CH	14	ASN	3.3
62	R	111	MET	3.3
64	DE	31	ASN	3.3
14	BG	49	ARG	3.3
30	AC	9	ALA	3.3
33	AF	120	VAL	3.3
39	CF	33	ALA	3.3
42	AO	17	ARG	3.3
54	J	177	VAL	3.3
56	L	113	VAL	3.3
56	L	148	VAL	3.3
68	X	22	ARG	3.3
72	DM	92	VAL	3.3
79	AR	277	VAL	3.3
1	AS	1240	A	3.3
7	m	142	PHE	3.3
62	DC	109	PRO	3.3
82	ll	212	PRO	3.3
12	r	165	ILE	3.3
35	AH	48	GLY	3.3
50	F	185	ILE	3.3
64	DE	68	GLY	3.3
64	DE	117	ILE	3.3
78	h	171	GLY	3.3
7	m	226	TYR	3.3
10	BC	178	TYR	3.3
7	AZ	146	LEU	3.3
9	BB	10	LEU	3.3
20	BM	177	LEU	3.3

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Mol	Chain	Res	Type	RSRZ
26	8	108	LEU	3.3
56	L	118	LEU	3.3
59	CZ	32	LEU	3.3
63	S	51	LEU	3.3
10	p	134	LYS	3.3
63	DD	25	LYS	3.3
65	U	77	THR	3.3
77	g	48	THR	3.3
11	q	162	GLN	3.3
51	CR	191	ARG	3.3
54	J	64	GLN	3.3
55	K	53	GLN	3.3
64	DE	67	ARG	3.3
66	V	89	ARG	3.3
23	BP	47	VAL	3.3
50	F	207	VAL	3.3
54	J	65	ALA	3.3
64	DE	119	VAL	3.3
1	1	1011	C	3.3
1	1	2068	U	3.3
1	AS	247	C	3.3
1	AS	3162	U	3.3
46	CM	695	C	3.3
54	CU	88	PHE	3.3
57	M	16	PHE	3.3
41	CH	29	PRO	3.3
82	ll	137	PRO	3.3
26	BS	88	ILE	3.3
50	F	122	GLY	3.3
19	y	124	LEU	3.3
41	AN	51	LEU	3.3
51	G	82	TYR	3.3
51	CR	247	LEU	3.3
56	L	93	LEU	3.3
54	CU	134	LYS	3.3
56	L	164	TYR	3.3
79	DT	42	LEU	3.3
79	DT	228	LEU	3.3
66	DG	110	LYS	3.3
78	h	191	LYS	3.3
55	K	8	ARG	3.3
6	AY	356	GLN	3.3

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Mol	Chain	Res	Type	RSRZ
30	AC	63	ALA	3.3
47	CN	86	VAL	3.3
51	G	259	GLN	3.3
52	H	82	PHE	3.3
58	N	114	ALA	3.3
59	CZ	121	VAL	3.3
66	V	71	VAL	3.3
50	F	198	PHE	3.3
59	CZ	119	SER	3.3
64	T	13	SER	3.3
64	T	71	PHE	3.3
82	ll	68	PHE	3.3
54	J	36	PRO	3.3
79	DT	27	PRO	3.3
55	K	43	ILE	3.3
68	X	23	ILE	3.3
1	AS	1557	U	3.3
80	p0	65	GLY	3.3
1	AS	2447	G	3.3
1	1	2474	C	3.2
10	BC	147	LYS	3.2
41	CH	45	LEU	3.3
46	B	1184	G	3.3
50	F	6	LEU	3.3
59	O	74	LEU	3.3
60	DA	58	HIS	3.3
63	S	27	LEU	3.3
41	CH	3	GLU	3.2
1	AS	2185	A	3.2
51	CR	39	ARG	3.2
63	DD	36	THR	3.2
69	Y	57	ARG	3.2
25	BR	83	VAL	3.2
79	DT	6	VAL	3.2
80	p0	50	VAL	3.2
20	z	12	ALA	3.2
26	BS	32	PHE	3.2
30	AC	2	ALA	3.2
51	G	55	ALA	3.2
55	CV	32	GLN	3.2
63	S	23	ALA	3.2
67	DH	79	ASP	3.2

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Mol	Chain	Res	Type	RSRZ
69	Y	9	ASP	3.2
10	BC	67	SER	3.2
11	q	136	ILE	3.2
48	CO	204	ILE	3.2
6	l	192	LYS	3.2
42	AO	19	LYS	3.2
44	CK	28	LYS	3.2
52	CS	115	LYS	3.2
53	CT	193	LYS	3.2
54	CU	168	LEU	3.2
62	R	117	GLY	3.2
64	DE	2	GLY	3.2
64	DE	116	LYS	3.2
65	U	44	ASN	3.2
78	h	155	ASN	3.2
79	AR	33	LEU	3.2
7	m	25	GLU	3.2
46	B	1114	U	3.2
63	DD	48	TYR	3.2
16	BI	99	ARG	3.2
19	y	69	ARG	3.2
54	J	108	ARG	3.2
63	S	44	ARG	3.2
64	DE	3	ARG	3.2
1	AS	1224	C	3.2
37	AJ	89	MET	3.2
1	AS	2062	G	3.2
30	AC	8	THR	3.2
55	K	102	VAL	3.2
56	L	85	VAL	3.2
61	Q	25	VAL	3.2
63	S	47	VAL	3.2
64	DE	54	THR	3.2
79	DT	101	THR	3.2
50	F	26	PHE	3.2
51	CR	63	ALA	3.2
59	CZ	42	ALA	3.2
63	S	83	ALA	3.2
63	DD	79	ALA	3.2
4	j	47	GLN	3.2
46	CM	1479	A	3.2
54	CU	70	GLN	3.2

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Mol	Chain	Res	Type	RSRZ
63	DD	119	ASP	3.2
11	BD	144	LEU	3.2
14	BG	129	LYS	3.2
40	CG	34	LYS	3.2
41	CH	28	PRO	3.2
72	DM	100	ILE	3.2
35	CB	17	SER	3.2
47	C	177	LEU	3.2
51	G	107	GLY	3.2
53	CT	233	SER	3.2
60	P	19	SER	3.2
79	AR	249	LEU	3.2
50	CQ	58	GLY	3.2
66	V	42	GLY	3.2
10	BC	98	TYR	3.2
17	BJ	188	GLU	3.2
31	BX	61	TYR	3.2
41	CH	15	CYS	3.2
53	I	222	GLU	3.2
1	1	1758	U	3.2
1	AS	2442	U	3.2
46	B	492	U	3.2
7	AZ	80	ALA	3.2
23	5	57	THR	3.2
47	CN	107	PHE	3.2
48	CO	37	THR	3.2
53	I	27	PHE	3.2
56	L	7	THR	3.2
66	V	21	PHE	3.2
76	DQ	52	PHE	3.2
79	DT	251	ALA	3.2
7	m	275	GLN	3.2
10	BC	144	ILE	3.2
21	0	162	LEU	3.2
25	7	79	GLN	3.2
46	CM	1412	C	3.2
47	CN	165	LYS	3.2
56	L	29	LYS	3.2
58	N	49	ILE	3.2
31	AD	86	LEU	3.2
51	G	43	PRO	3.2
60	P	80	LEU	3.2

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Mol	Chain	Res	Type	RSRZ
62	R	80	LEU	3.2
67	W	25	LEU	3.2
73	DN	67	LEU	3.2
54	J	151	ASP	3.2
1	1	1264	G	3.2
1	1	2447	G	3.2
1	AS	2452	G	3.2
46	B	750	G	3.2
71	a	73	GLY	3.2
1	1	239	A	3.2
1	1	2464	A	3.2
76	DQ	25	SER	3.2
79	AR	164	SER	3.2
31	AD	77	ASN	3.2
55	K	11	ARG	3.2
57	M	12	HIS	3.2
61	DB	130	ARG	3.2
69	Y	113	HIS	3.2
79	DT	17	ASN	3.2
41	CH	13	TYR	3.2
50	F	104	GLU	3.2
78	DS	147	TYR	3.2
7	AZ	162	VAL	3.2
16	BI	115	VAL	3.2
39	CF	27	VAL	3.2
52	CS	59	VAL	3.2
59	CZ	30	VAL	3.2
62	R	94	VAL	3.2
66	DG	34	VAL	3.2
6	AY	91	PHE	3.2
10	BC	123	ALA	3.2
54	CU	57	PHE	3.2
70	Z	12	ALA	3.2
70	Z	31	ALA	3.2
82	L1	28	PHE	3.2
40	CG	12	LYS	3.2
51	G	133	LYS	3.2
1	AS	132	U	3.2
8	n	39	LEU	3.2
56	L	70	LEU	3.2
64	T	46	LEU	3.2
64	T	65	PRO	3.2

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Mol	Chain	Res	Type	RSRZ
78	DS	169	GLY	3.2
11	q	168	ARG	3.2
11	BD	11	ASP	3.2
40	CG	46	ARG	3.2
52	H	161	ASP	3.2
64	T	45	ARG	3.2
79	DT	77	ASP	3.2
19	y	63	SER	3.2
46	B	753	C	3.2
82	L1	213	SER	3.2
52	H	61	TYR	3.2
52	CS	77	TYR	3.2
67	DH	83	MET	3.2
77	g	56	MET	3.2
6	l	64	GLU	3.2
10	p	204	VAL	3.2
11	q	154	VAL	3.2
32	AE	95	VAL	3.2
55	K	193	GLU	3.2
55	CV	102	VAL	3.2
62	R	76	VAL	3.2
65	DF	93	VAL	3.2
79	DT	277	VAL	3.2
46	B	1603	G	3.2
10	p	166	PHE	3.2
51	CR	236	TRP	3.2
52	CS	109	LYS	3.2
54	CU	21	PHE	3.2
80	P0	73	PHE	3.2
10	p	144	ILE	3.2
51	CR	101	LEU	3.2
66	V	79	LEU	3.2
70	Z	104	LEU	3.2
78	h	166	PRO	3.1
20	z	136	ARG	3.1
45	i	59	GLY	3.1
55	CV	20	GLN	3.1
56	CW	54	ARG	3.1
64	T	60	ARG	3.1
69	DJ	57	ARG	3.1
74	d	27	GLN	3.1
79	DT	56	GLY	3.1

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Mol	Chain	Res	Type	RSRZ
1	AS	1758	U	3.1
46	CM	1399	U	3.1
42	AO	3	ASP	3.1
82	ll	213	SER	3.1
6	AY	317	ASN	3.1
7	m	219	TYR	3.1
7	m	236	VAL	3.1
49	E	58	VAL	3.1
52	CS	61	TYR	3.1
68	X	32	VAL	3.1
31	BX	21	LYS	3.1
53	CT	79	LYS	3.1
58	N	50	GLU	3.1
67	W	20	LYS	3.1
1	AS	2474	C	3.1
6	l	175	ALA	3.1
25	7	128	ALA	3.1
28	AA	118	PHE	3.1
29	AB	149	ALA	3.1
47	CN	19	ALA	3.1
60	DA	148	ALA	3.1
9	o	10	LEU	3.1
41	AN	6	LEU	3.1
48	CO	150	ILE	3.1
49	E	206	LEU	3.1
50	CQ	85	ILE	3.1
51	G	123	LEU	3.1
69	Y	83	ILE	3.1
82	ll	4	ILE	3.1
55	CV	97	THR	3.1
79	AR	137	THR	3.1
79	AR	253	THR	3.1
58	N	95	PRO	3.1
13	s	47	GLN	3.1
46	B	1038	G	3.1
56	L	84	GLY	3.1
49	E	93	MET	3.1
1	1	977	U	3.1
56	L	124	HIS	3.1
14	t	187	LYS	3.1
39	AL	36	LYS	3.1
45	CL	65	LYS	3.1

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Mol	Chain	Res	Type	RSRZ
52	H	160	VAL	3.1
70	Z	39	LYS	3.1
82	L1	3	LYS	3.1
82	l1	172	VAL	3.1
25	7	99	SER	3.1
50	F	7	SER	3.1
51	CR	27	TYR	3.1
54	J	88	PHE	3.1
63	S	95	TYR	3.1
76	DQ	28	SER	3.1
56	L	135	ALA	3.1
80	p0	69	GLU	3.1
79	DT	201	LEU	3.1
10	BC	180	ILE	3.1
79	DT	307	ILE	3.1
4	j	147	ARG	3.1
48	CO	213	ARG	3.1
46	B	1340	C	3.1
46	CM	1362	C	3.1
47	CN	76	CYS	3.1
63	DD	8	THR	3.1
79	DT	41	THR	3.1
56	L	5	PRO	3.1
10	BC	236	GLY	3.1
51	CR	244	GLY	3.1
74	d	51	GLN	3.1
75	DP	27	GLN	3.1
1	AS	1021	A	3.1
1	AS	1236	A	3.1
46	CM	1743	A	3.1
39	AL	6	LYS	3.1
58	CY	15	LYS	3.1
6	l	296	VAL	3.1
23	5	66	VAL	3.1
48	D	43	VAL	3.1
59	O	31	VAL	3.1
65	DF	5	VAL	3.1
80	P0	104	VAL	3.1
46	B	1135	G	3.1
46	CM	701	G	3.1
46	CM	724	G	3.1
48	CO	24	PHE	3.1

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Mol	Chain	Res	Type	RSRZ
62	R	102	PHE	3.1
69	Y	37	PHE	3.1
82	l1	110	PHE	3.1
1	AS	167	U	3.1
6	AY	261	SER	3.1
39	CF	78	LEU	3.1
47	C	74	ALA	3.1
51	G	101	LEU	3.1
52	CS	97	LEU	3.1
54	J	13	LEU	3.1
55	CV	89	GLU	3.1
57	M	89	LEU	3.1
73	c	73	TYR	3.1
82	l1	165	LEU	3.1
6	AY	249	ILE	3.1
64	T	69	ILE	3.1
64	DE	41	ILE	3.1
70	Z	57	ILE	3.1
19	BL	180	ARG	3.1
38	CE	20	ASN	3.1
51	CR	221	ARG	3.1
63	S	31	ASN	3.1
78	DS	158	ARG	3.1
21	BN	34	THR	3.1
30	BW	8	THR	3.1
45	i	34	THR	3.1
56	CW	15	PRO	3.1
64	T	6	THR	3.1
69	Y	29	PRO	3.1
77	g	27	PRO	3.1
41	CH	23	CYS	3.1
59	CZ	104	CYS	3.1
70	DK	92	CYS	3.1
1	1	240	C	3.1
7	m	52	VAL	3.1
50	CQ	135	VAL	3.1
70	DK	124	VAL	3.1
82	L1	162	VAL	3.1
18	x	133	HIS	3.1
33	BZ	76	LEU	3.1
47	CN	177	LEU	3.1
51	CR	109	PHE	3.1

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Mol	Chain	Res	Type	RSRZ
53	CT	144	PHE	3.1
64	DE	16	LEU	3.1
64	DE	90	ALA	3.1
66	DG	132	LEU	3.1
74	DO	32	PHE	3.1
20	BM	143	ILE	3.1
29	AB	46	ASP	3.1
51	G	2	ALA	3.1
55	CV	173	ALA	3.1
41	CH	37	ARG	3.1
52	H	166	ARG	3.1
53	I	223	ARG	3.1
54	CU	67	ARG	3.1
54	CU	131	ILE	3.1
55	CV	74	ARG	3.1
64	DE	47	ARG	3.1
66	DG	66	TYR	3.1
77	g	35	TYR	3.1
8	BA	108	GLU	3.1
14	t	6	ASN	3.1
24	BQ	98	ASN	3.1
76	DQ	5	ASN	3.1
6	AY	5	PRO	3.1
29	BV	43	THR	3.1
52	CS	27	THR	3.1
54	J	141	GLY	3.1
55	K	183	GLY	3.1
74	d	23	THR	3.1
80	P0	78	PRO	3.1
7	AZ	58	LYS	3.1
28	BU	133	LYS	3.1
35	AH	21	LYS	3.1
35	CB	36	LYS	3.1
51	G	6	LYS	3.1
67	W	87	LYS	3.1
72	DM	94	LYS	3.1
79	AR	60	LYS	3.1
54	CU	176	GLN	3.1
67	W	57	MET	3.1
80	p0	9	VAL	3.1
5	k	274	HIS	3.1
7	AZ	244	HIS	3.1

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Mol	Chain	Res	Type	RSRZ
33	AF	21	HIS	3.1
45	CL	115	LEU	3.1
48	CO	205	PHE	3.1
64	DE	46	LEU	3.1
71	a	72	PHE	3.1
75	e	66	LEU	3.1
82	ll	123	LEU	3.1
30	AC	58	ARG	3.1
45	i	41	ALA	3.1
52	CS	85	ALA	3.1
52	CS	92	ARG	3.1
55	CV	79	ALA	3.1
56	L	40	ARG	3.1
60	P	148	ALA	3.1
73	DN	47	ALA	3.1
79	AR	259	ILE	3.1
79	DT	74	ILE	3.1
80	p0	63	ILE	3.1
14	BG	119	TYR	3.1
56	CW	58	ASP	3.0
57	M	65	TYR	3.1
65	DF	23	ASP	3.0
78	h	127	TYR	3.1
48	CO	90	GLU	3.0
1	AS	2436	A	3.0
54	J	62	SER	3.0
67	W	78	TRP	3.0
11	q	174	LYS	3.0
50	F	129	GLY	3.0
63	DD	130	GLY	3.0
76	f	54	LYS	3.0
82	ll	211	GLY	3.0
63	S	69	THR	3.0
12	r	102	MET	3.0
46	B	1541	U	3.0
10	BC	132	VAL	3.0
22	BO	89	VAL	3.0
28	AA	132	GLN	3.0
52	CS	160	VAL	3.0
58	CY	16	GLN	3.0
79	DT	70	GLN	3.0
55	K	65	PHE	3.0

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Mol	Chain	Res	Type	RSRZ
56	L	109	LEU	3.0
60	P	149	LEU	3.0
62	R	37	CYS	3.0
1	AS	2441	G	3.0
48	CO	105	PHE	3.0
63	DD	53	LEU	3.0
66	DG	21	PHE	3.0
70	DK	104	LEU	3.0
77	DR	49	LEU	3.0
79	AR	42	LEU	3.0
82	ll	34	LEU	3.0
57	M	38	ARG	3.0
14	t	125	ILE	3.0
47	C	65	ALA	3.0
55	CV	189	ILE	3.0
59	O	71	ILE	3.0
59	CZ	89	ILE	3.0
78	h	133	ILE	3.0
12	r	218	TYR	3.0
16	BI	62	TYR	3.0
60	P	90	TYR	3.0
57	M	6	GLU	3.0
65	U	23	ASP	3.0
79	DT	294	ASP	3.0
4	j	70	LYS	3.0
41	AN	50	LYS	3.0
67	W	60	LYS	3.0
19	y	2	GLY	3.0
54	CU	164	SER	3.0
64	DE	123	SER	3.0
65	DF	76	PRO	3.0
67	W	109	PRO	3.0
6	l	163	THR	3.0
12	BE	102	MET	3.0
68	X	21	ASN	3.0
67	W	28	THR	3.0
7	AZ	236	VAL	3.0
79	DT	105	VAL	3.0
5	k	182	GLN	3.0
13	BF	19	LEU	3.0
26	BS	84	PHE	3.0
49	E	90	ARG	3.0

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Mol	Chain	Res	Type	RSRZ
52	H	108	LEU	3.0
53	CT	145	PHE	3.0
55	CV	25	ARG	3.0
63	DD	104	LEU	3.0
79	DT	122	GLN	3.0
46	B	1675	U	3.0
48	CO	230	ALA	3.0
63	DD	28	ILE	3.0
71	a	7	ILE	3.0
81	12	109	ILE	3.0
36	CC	75	TYR	3.0
37	CD	66	LYS	3.0
45	CL	82	LYS	3.0
47	CN	155	TYR	3.0
50	F	152	LYS	3.0
53	I	131	LYS	3.0
54	CU	101	LYS	3.0
56	L	51	LYS	3.0
67	DH	60	LYS	3.0
72	b	59	TYR	3.0
77	DR	40	TYR	3.0
36	CC	64	GLU	3.0
6	AY	82	GLY	3.0
13	BF	74	PRO	3.0
14	BG	98	ASP	3.0
58	CY	68	GLY	3.0
59	O	93	ASP	3.0
77	DR	27	PRO	3.0
6	l	18	SER	3.0
30	BW	31	SER	3.0
10	BC	198	VAL	3.0
30	BW	11	ASN	3.0
45	CL	94	THR	3.0
49	CP	97	VAL	3.0
59	O	75	VAL	3.0
19	y	170	ARG	3.0
23	BP	108	LEU	3.0
37	CD	98	ARG	3.0
44	CK	17	ARG	3.0
59	O	52	LEU	3.0
82	11	53	LEU	3.0
1	AS	2473	C	3.0

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Mol	Chain	Res	Type	RSRZ
13	s	102	PHE	3.0
15	u	35	GLN	3.0
33	BZ	18	PHE	3.0
56	L	139	GLN	3.0
7	AZ	77	ALA	3.0
46	CM	215	A	3.0
46	CM	1702	A	3.0
54	J	90	ALA	3.0
55	CV	104	ILE	3.0
56	L	156	ILE	3.0
64	DE	38	ILE	3.0
79	AR	251	ALA	3.0
70	DK	48	HIS	3.0
1	AS	1091	U	3.0
46	B	490	U	3.0
53	I	193	LYS	3.0
58	CY	43	LYS	3.0
63	S	86	LYS	3.0
54	CU	66	TYR	3.0
13	BF	15	GLU	3.0
52	H	181	GLU	3.0
69	DJ	29	PRO	3.0
56	CW	25	ASP	3.0
10	BC	137	LEU	3.0
13	s	19	LEU	3.0
27	9	72	SER	3.0
35	AH	30	LEU	3.0
40	AM	21	ARG	3.0
66	V	9	VAL	3.0
43	CJ	83	LEU	3.0
51	CR	26	THR	3.0
56	CW	60	LEU	3.0
62	DC	51	SER	3.0
64	DE	30	THR	3.0
66	DG	22	LEU	3.0
74	d	80	ARG	3.0
79	AR	97	THR	3.0
69	DJ	92	ASN	3.0
69	DJ	128	PHE	3.0
22	2	85	ILE	3.0
27	9	99	ILE	3.0
46	B	1185	G	3.0

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Mol	Chain	Res	Type	RSRZ
46	B	1405	G	3.0
46	B	1472	G	3.0
47	C	98	ILE	3.0
51	G	228	ILE	3.0
56	L	112	GLN	3.0
62	R	121	ILE	3.0
8	BA	131	LYS	3.0
39	CF	21	LYS	3.0
47	CN	134	LYS	3.0
1	1	1578	C	3.0
46	B	135	C	3.0
46	B	707	C	3.0
46	B	1611	C	3.0
46	CM	656	C	3.0
16	v	62	TYR	3.0
79	DT	55	TYR	3.0
1	1	1817	U	3.0
1	AS	3316	U	3.0
5	k	96	PRO	3.0
14	BG	48	PRO	3.0
38	CE	23	GLY	3.0
48	CO	67	GLU	3.0
60	DA	137	PRO	3.0
66	V	2	PRO	3.0
51	G	59	ARG	3.0
51	CR	198	ARG	3.0
52	H	168	VAL	3.0
62	DC	10	ARG	3.0
24	6	34	LEU	3.0
57	M	15	LEU	3.0
59	O	45	LEU	3.0
63	S	18	VAL	3.0
70	Z	33	LEU	3.0
73	c	30	VAL	3.0
80	p0	31	ASP	3.0
7	AZ	10	SER	3.0
51	G	184	THR	3.0
52	CS	43	PHE	3.0
55	CV	107	THR	3.0
6	l	211	ALA	3.0
7	m	231	ILE	3.0
7	AZ	100	ALA	3.0

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Mol	Chain	Res	Type	RSRZ
19	y	57	ILE	3.0
22	BO	77	ASN	3.0
27	9	119	ILE	3.0
51	CR	213	ALA	3.0
54	J	32	ALA	3.0
58	N	61	ALA	3.0
59	CZ	111	ASN	3.0
62	DC	57	ILE	3.0
65	U	28	ILE	3.0
71	a	75	ILE	3.0
79	AR	290	ALA	3.0
79	AR	293	ALA	3.0
79	DT	169	ALA	3.0
6	AY	218	LYS	2.9
17	BJ	178	LYS	2.9
41	AN	36	LYS	2.9
41	CH	50	LYS	2.9
54	CU	147	LYS	2.9
70	Z	75	GLN	2.9
26	BS	60	HIS	2.9
1	1	2428	G	2.9
1	AS	2429	G	2.9
46	B	494	G	2.9
51	G	103	TYR	2.9
57	M	66	TYR	2.9
60	DA	90	TYR	2.9
29	BV	30	GLY	2.9
37	CD	51	PRO	2.9
50	F	190	MET	2.9
1	1	1188	C	2.9
1	1	1197	C	2.9
7	m	146	LEU	2.9
16	v	160	GLU	2.9
51	G	31	PRO	2.9
22	BO	67	VAL	2.9
25	BR	87	LEU	2.9
25	BR	89	LEU	2.9
35	CB	35	VAL	2.9
50	F	12	LEU	2.9
51	CR	225	VAL	2.9
53	CT	157	VAL	2.9
61	Q	74	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
72	DM	69	LEU	2.9
46	CM	847	A	2.9
1	1	3163	U	2.9
1	AS	772	U	2.9
14	BG	126	PHE	2.9
28	AA	71	PHE	2.9
46	CM	1673	U	2.9
12	r	191	ILE	2.9
16	v	142	ILE	2.9
25	7	63	ILE	2.9
26	BS	142	ILE	2.9
50	CQ	5	ILE	2.9
51	G	26	THR	2.9
51	CR	249	ILE	2.9
52	CS	190	ILE	2.9
54	J	115	THR	2.9
54	CU	132	ILE	2.9
63	S	62	ILE	2.9
7	AZ	294	LYS	2.9
13	s	174	LYS	2.9
45	CL	99	SER	2.9
54	J	153	LYS	2.9
57	CX	24	LYS	2.9
62	DC	59	LYS	2.9
67	DH	87	LYS	2.9
45	i	68	ASN	2.9
45	CL	70	ASN	2.9
53	CT	236	ASN	2.9
55	K	20	GLN	2.9
64	DE	74	GLN	2.9
66	DG	109	GLN	2.9
73	c	8	ASN	2.9
18	x	167	ARG	2.9
65	DF	68	ARG	2.9
4	AW	81	GLY	2.9
12	r	11	TYR	2.9
49	E	214	GLY	2.9
66	V	80	TYR	2.9
79	AR	142	MET	2.9
10	BC	95	LEU	2.9
16	v	115	VAL	2.9
22	BO	93	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
28	BU	134	LEU	2.9
45	i	87	PRO	2.9
47	C	17	LEU	2.9
50	CQ	47	LEU	2.9
51	G	23	LEU	2.9
53	I	133	LEU	2.9
54	J	178	VAL	2.9
56	L	14	VAL	2.9
57	M	68	LEU	2.9
58	N	5	LEU	2.9
59	CZ	41	LEU	2.9
63	S	77	VAL	2.9
64	T	91	LEU	2.9
71	DL	74	LEU	2.9
80	P0	28	VAL	2.9
51	G	40	GLU	2.9
51	CR	215	GLU	2.9
69	DJ	49	GLU	2.9
16	BI	21	PHE	2.9
10	p	180	ILE	2.9
18	x	166	ILE	2.9
19	y	159	LYS	2.9
39	CF	43	PHE	2.9
41	AN	7	LYS	2.9
48	CO	38	PHE	2.9
51	CR	205	PHE	2.9
60	P	84	ILE	2.9
61	DB	124	LYS	2.9
69	DJ	19	LYS	2.9
82	ll	111	ILE	2.9
1	1	2445	G	2.9
27	9	126	ALA	2.9
38	CE	80	THR	2.9
46	B	130	C	2.9
1	1	1012	U	2.9
1	1	2449	U	2.9
1	1	3127	U	2.9
1	AS	248	U	2.9
11	BD	61	ASP	2.9
47	C	108	THR	2.9
55	K	62	THR	2.9
59	CZ	34	THR	2.9

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Mol	Chain	Res	Type	RSRZ
65	U	50	ALA	2.9
66	DG	41	ALA	2.9
73	DN	6	ALA	2.9
6	AY	65	SER	2.9
22	BO	70	SER	2.9
46	B	493	U	2.9
46	B	1400	U	2.9
65	U	97	ASP	2.9
67	W	37	SER	2.9
39	AL	57	ASN	2.9
40	CG	17	GLN	2.9
54	CU	105	GLN	2.9
54	J	67	ARG	2.9
62	R	72	ARG	2.9
63	S	131	ARG	2.9
73	c	15	ARG	2.9
16	BI	197	LEU	2.9
19	BL	177	GLY	2.9
47	C	184	LEU	2.9
59	O	88	LEU	2.9
55	CV	188	TYR	2.9
56	L	8	TYR	2.9
62	R	75	VAL	2.9
62	R	113	GLY	2.9
67	DH	111	VAL	2.9
76	f	6	VAL	2.9
79	AR	278	GLY	2.9
6	l	157	PHE	2.9
10	p	147	LYS	2.9
29	AB	63	LYS	2.9
45	i	116	GLU	2.9
45	CL	100	LYS	2.9
40	AM	51	ILE	2.9
52	CS	177	ILE	2.9
55	K	55	PHE	2.9
56	L	140	ILE	2.9
56	CW	45	ILE	2.9
66	DG	116	ILE	2.9
6	l	129	ALA	2.9
50	F	172	ALA	2.9
58	N	3	THR	2.9
82	ll	127	THR	2.9

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Mol	Chain	Res	Type	RSRZ
50	F	155	ASP	2.9
9	BB	17	GLN	2.9
36	AI	10	ARG	2.9
40	AM	46	ARG	2.9
41	CH	11	SER	2.9
53	I	154	ARG	2.9
53	CT	112	SER	2.9
63	DD	122	ARG	2.9
77	DR	7	SER	2.9
78	DS	181	GLN	2.9
1	1	2439	A	2.9
1	AS	977	U	2.9
1	AS	2518	A	2.9
31	BX	11	ASN	2.9
46	CM	1348	U	2.9
46	CM	1357	A	2.9
4	AW	104	LEU	2.9
6	AY	245	LEU	2.9
43	CJ	104	LEU	2.9
78	h	142	LEU	2.9
10	BC	237	GLY	2.9
19	y	183	GLY	2.9
31	AD	84	GLY	2.9
33	BZ	125	GLY	2.9
47	C	158	VAL	2.9
54	J	117	VAL	2.9
69	Y	21	GLY	2.9
75	e	24	GLY	2.9
77	g	45	VAL	2.9
19	y	8	LYS	2.9
21	0	91	TYR	2.9
28	BU	39	PRO	2.9
56	L	15	PRO	2.9
72	b	91	PRO	2.9
30	AC	23	LYS	2.9
36	CC	115	LYS	2.9
45	CL	37	LYS	2.9
79	DT	291	TRP	2.9
82	L1	15	LYS	2.9
28	AA	25	ILE	2.9
28	BU	46	ILE	2.9
49	E	78	ILE	2.9

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Mol	Chain	Res	Type	RSRZ
53	CT	50	PHE	2.9
57	CX	27	PHE	2.9
62	DC	84	ILE	2.9
80	P0	25	ILE	2.9
80	p0	26	PHE	2.9
38	AK	59	THR	2.9
71	DL	70	THR	2.9
79	AR	280	THR	2.9
52	H	83	ARG	2.9
66	V	123	ARG	2.9
77	g	42	ARG	2.9
25	BR	41	GLN	2.9
33	AF	40	ASP	2.9
23	5	108	LEU	2.9
27	9	5	SER	2.9
60	DA	14	SER	2.9
64	DE	100	LEU	2.9
70	DK	133	LEU	2.9
79	AR	201	LEU	2.9
80	p0	68	SER	2.9
48	CO	101	HIS	2.9
9	o	115	VAL	2.9
50	F	182	VAL	2.9
52	CS	111	VAL	2.9
51	G	241	LYS	2.9
51	CR	25	GLY	2.9
65	DF	144	GLY	2.9
70	Z	99	ASN	2.9
71	DL	100	VAL	2.9
26	BS	89	LYS	2.9
44	AQ	28	LYS	2.9
56	L	144	PRO	2.9
60	DA	85	PRO	2.9
62	R	73	PRO	2.9
63	S	40	PRO	2.9
66	V	118	PRO	2.9
69	Y	19	LYS	2.9
1	1	1560	U	2.9
46	B	1338	U	2.9
46	CM	1047	U	2.9
1	AS	1188	C	2.9
21	0	42	TRP	2.9

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Mol	Chain	Res	Type	RSRZ
45	i	107	TRP	2.9
46	B	577	A	2.9
46	B	617	A	2.9
46	B	1411	A	2.9
46	CM	1701	A	2.9
54	J	21	PHE	2.9
54	J	132	ILE	2.9
56	CW	104	PHE	2.9
64	T	20	PHE	2.9
71	a	60	PHE	2.9
1	AS	169	G	2.8
16	v	104	GLU	2.8
19	y	103	ALA	2.8
29	BV	127	ALA	2.8
46	B	1546	G	2.8
53	I	213	ALA	2.8
62	R	6	ALA	2.8
63	DD	83	ALA	2.8
37	CD	28	ARG	2.8
59	CZ	120	CYS	2.8
54	CU	129	THR	2.8
78	h	167	THR	2.8
55	CV	58	LEU	2.8
56	CW	28	LEU	2.8
59	O	62	LEU	2.8
63	DD	56	LEU	2.8
77	DR	8	LEU	2.8
80	p0	18	LEU	2.8
82	L1	38	LEU	2.8
50	F	102	GLN	2.8
66	V	70	GLN	2.8
82	L1	70	ASP	2.8
82	l1	119	GLN	2.8
4	AW	24	LYS	2.8
5	k	264	VAL	2.8
6	AY	177	LYS	2.8
14	t	42	LYS	2.8
14	BG	190	LYS	2.8
23	BP	64	VAL	2.8
39	AL	42	LYS	2.8
42	AO	8	LYS	2.8
27	9	68	GLY	2.8

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Mol	Chain	Res	Type	RSRZ
35	AH	66	SER	2.8
54	J	41	SER	2.8
54	CU	86	VAL	2.8
58	CY	141	LYS	2.8
59	CZ	90	LYS	2.8
60	DA	76	LYS	2.8
61	Q	116	VAL	2.8
63	DD	12	LYS	2.8
65	U	122	HIS	2.8
67	DH	27	SER	2.8
68	DI	39	VAL	2.8
79	AR	258	LYS	2.8
82	L1	201	VAL	2.8
82	l1	24	LYS	2.8
63	S	10	GLY	2.8
10	BC	130	PRO	2.8
22	BO	66	ASN	2.8
60	DA	138	ASN	2.8
30	AC	27	TYR	2.8
58	N	70	ILE	2.8
80	p0	25	ILE	2.8
1	AS	1816	U	2.8
59	O	27	ALA	2.8
63	S	133	ALA	2.8
67	DH	94	ALA	2.8
71	a	130	ALA	2.8
14	BG	41	ARG	2.8
18	BK	128	ARG	2.8
46	CM	708	A	2.8
56	CW	3	ARG	2.8
78	DS	122	ARG	2.8
10	BC	94	LEU	2.8
10	BC	151	LEU	2.8
25	7	109	LEU	2.8
48	D	25	THR	2.8
48	CO	231	LEU	2.8
51	G	87	MET	2.8
54	CU	30	LEU	2.8
57	M	76	LEU	2.8
67	W	92	LEU	2.8
74	d	8	LEU	2.8
21	BN	160	LYS	2.8

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Mol	Chain	Res	Type	RSRZ
5	AX	143	GLN	2.8
6	l	143	VAL	2.8
6	l	164	LYS	2.8
39	CF	36	LYS	2.8
41	AN	48	LYS	2.8
41	CH	52	LYS	2.8
35	AH	61	GLN	2.8
48	D	20	VAL	2.8
51	CR	7	LYS	2.8
56	CW	96	VAL	2.8
63	DD	86	LYS	2.8
76	DQ	54	LYS	2.8
78	DS	139	LYS	2.8
48	D	157	GLN	2.8
22	BO	98	HIS	2.8
51	CR	4	GLY	2.8
64	DE	114	GLY	2.8
79	DT	238	HIS	2.8
66	V	13	ASP	2.8
16	v	100	SER	2.8
37	AJ	51	PRO	2.8
48	CO	186	SER	2.8
7	m	160	PHE	2.8
45	CL	68	ASN	2.8
47	C	50	ILE	2.8
47	C	81	PHE	2.8
50	F	50	ILE	2.8
69	Y	125	ILE	2.8
73	c	36	ILE	2.8
79	AR	57	ILE	2.8
79	AR	299	PHE	2.8
26	BS	46	TYR	2.8
29	BV	52	TYR	2.8
15	BH	131	ALA	2.8
20	BM	71	ARG	2.8
20	BM	147	ALA	2.8
27	BT	126	ALA	2.8
51	G	258	ALA	2.8
56	L	120	ARG	2.8
56	L	132	ARG	2.8
64	T	11	ARG	2.8
46	B	259	U	2.8

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Mol	Chain	Res	Type	RSRZ
48	D	225	LEU	2.8
51	CR	214	LEU	2.8
55	K	199	LEU	2.8
78	h	188	LEU	2.8
79	DT	231	LEU	2.8
80	p0	77	LEU	2.8
12	BE	101	LYS	2.8
51	G	108	LYS	2.8
62	R	54	MET	2.8
65	DF	80	LYS	2.8
66	V	92	LYS	2.8
70	DK	70	LYS	2.8
74	d	33	MET	2.8
6	l	201	THR	2.8
23	5	17	VAL	2.8
35	CB	65	VAL	2.8
43	CJ	10	THR	2.8
46	B	674	C	2.8
50	F	176	VAL	2.8
54	CU	158	VAL	2.8
62	R	104	THR	2.8
65	DF	100	VAL	2.8
79	AR	208	CYS	2.8
82	ll	66	CYS	2.8
7	m	201	GLY	2.8
18	x	34	GLN	2.8
35	CB	64	GLN	2.8
52	H	101	GLY	2.8
74	DO	49	HIS	2.8
79	AR	36	GLY	2.8
80	p0	82	GLY	2.8
23	BP	15	PHE	2.8
26	8	88	ILE	2.8
50	CQ	198	PHE	2.8
51	G	88	ASP	2.8
59	O	39	ASP	2.8
60	P	11	ILE	2.8
63	DD	84	ILE	2.8
66	V	5	SER	2.8
66	V	8	ASP	2.8
67	W	102	ILE	2.8
82	L1	212	PRO	2.8

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Mol	Chain	Res	Type	RSRZ
22	2	4	SER	2.8
49	CP	159	SER	2.8
79	AR	115	SER	2.8
79	DT	153	SER	2.8
1	1	2441	G	2.8
7	m	280	ALA	2.8
30	AC	19	ASN	2.8
62	R	127	ARG	2.8
65	DF	84	TRP	2.8
75	DP	65	ARG	2.8
36	AI	120	ALA	2.8
46	CM	1672	G	2.8
52	H	195	ALA	2.8
66	V	17	ALA	2.8
80	P0	11	TYR	2.8
10	p	113	GLU	2.8
7	AZ	113	LEU	2.8
8	BA	63	LEU	2.8
15	BH	128	LEU	2.8
26	8	45	LYS	2.8
41	CH	27	LEU	2.8
52	CS	20	LEU	2.8
55	K	190	LEU	2.8
55	CV	171	LEU	2.8
56	L	92	LYS	2.8
66	DG	69	LYS	2.8
67	DH	25	LEU	2.8
67	W	83	MET	2.8
11	BD	18	VAL	2.8
63	S	38	VAL	2.8
73	DN	21	VAL	2.8
82	11	138	VAL	2.8
52	H	94	THR	2.8
69	Y	4	THR	2.8
1	1	1816	U	2.8
1	1	2067	U	2.8
1	1	2471	U	2.8
1	AS	544	U	2.8
7	AZ	87	GLY	2.8
19	y	118	GLY	2.8
50	F	181	GLY	2.8
51	G	169	ILE	2.8

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Mol	Chain	Res	Type	RSRZ
52	CS	86	GLN	2.8
12	r	199	PHE	2.8
41	AN	29	PRO	2.8
47	CN	115	PHE	2.8
53	CT	113	ILE	2.8
54	J	186	HIS	2.8
56	L	67	PRO	2.8
63	S	42	ILE	2.8
63	S	59	PHE	2.8
64	DE	22	PRO	2.8
65	U	22	ILE	2.8
65	U	35	ILE	2.8
79	DT	244	PRO	2.8
80	P0	86	PHE	2.8
82	l1	100	ILE	2.8
1	AS	2466	A	2.8
46	B	1573	A	2.8
46	CM	1142	A	2.8
1	AS	2467	C	2.8
46	B	374	C	2.8
54	J	135	ARG	2.8
55	K	201	ARG	2.8
69	DJ	3	ARG	2.8
48	CO	29	TRP	2.8
49	CP	218	SER	2.8
53	I	224	ALA	2.8
56	L	9	SER	2.8
60	DA	24	SER	2.8
62	R	123	TYR	2.8
10	BC	138	ASN	2.8
82	L1	27	ASN	2.8
9	BB	15	LYS	2.8
10	BC	187	LEU	2.8
19	BL	168	LYS	2.8
20	BM	31	GLU	2.8
20	BM	152	GLU	2.8
25	7	127	LYS	2.8
27	9	35	LEU	2.8
33	AF	119	LYS	2.8
36	CC	36	LEU	2.8
45	i	61	GLU	2.8
51	CR	231	GLU	2.8

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Mol	Chain	Res	Type	RSRZ
52	H	175	LEU	2.8
54	J	150	LEU	2.8
54	J	172	LEU	2.8
60	DA	119	GLU	2.8
62	DC	8	LYS	2.8
65	U	116	LEU	2.8
65	DF	86	LEU	2.8
7	AZ	208	MET	2.8
11	q	90	MET	2.8
17	w	7	VAL	2.8
27	9	29	VAL	2.8
46	B	1358	G	2.8
11	BD	28	THR	2.8
35	CB	56	THR	2.8
27	9	123	GLY	2.8
59	CZ	117	GLY	2.8
8	BA	130	ILE	2.8
13	s	161	GLN	2.7
13	BF	90	GLN	2.7
16	v	59	PHE	2.8
26	8	47	GLN	2.7
27	9	78	PHE	2.8
50	CQ	209	ILE	2.8
54	J	181	ILE	2.8
52	CS	37	GLN	2.7
60	DA	20	ARG	2.7
61	DB	110	ILE	2.8
56	CW	160	HIS	2.7
57	M	88	PRO	2.7
59	O	58	GLN	2.7
62	R	47	ARG	2.7
66	DG	122	ARG	2.7
67	DH	67	ARG	2.7
69	DJ	27	ILE	2.8
27	BT	6	GLN	2.7
30	AC	7	HIS	2.7
35	CB	33	GLN	2.7
69	DJ	97	ARG	2.7
79	DT	275	PHE	2.8
1	AS	2475	U	2.7
46	B	778	U	2.7
82	ll	135	PRO	2.7

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Mol	Chain	Res	Type	RSRZ
43	AP	81	ALA	2.7
79	DT	211	ALA	2.7
7	AZ	207	TYR	2.7
72	b	101	TYR	2.7
82	l1	198	TRP	2.7
14	BG	127	ASP	2.7
22	2	97	LYS	2.7
30	AC	33	LYS	2.7
31	BX	99	ASP	2.7
49	E	80	SER	2.7
50	F	205	ASP	2.7
60	P	109	LYS	2.7
60	DA	147	SER	2.7
62	R	9	LYS	2.7
62	R	35	LYS	2.7
63	DD	75	SER	2.7
71	a	56	SER	2.7
76	f	28	SER	2.7
76	DQ	18	SER	2.7
79	AR	294	ASP	2.7
1	1	1217	A	2.7
1	AS	2519	A	2.7
7	m	277	LEU	2.7
46	B	1403	A	2.7
46	CM	134	A	2.7
50	F	114	LEU	2.7
79	AR	262	LEU	2.7
79	DT	180	LEU	2.7
1	1	2468	C	2.7
29	BV	66	ASN	2.7
34	CA	84	ASN	2.7
46	B	1406	C	2.7
56	L	41	GLU	2.7
56	L	88	GLU	2.7
68	DI	41	GLU	2.7
80	P0	51	VAL	2.7
6	AY	189	ARG	2.7
11	q	70	THR	2.7
13	BF	147	THR	2.7
14	BG	184	ILE	2.7
26	BS	27	ARG	2.7
34	AG	54	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
36	CC	111	PHE	2.7
37	CD	60	ILE	2.7
45	i	90	ARG	2.7
52	CS	147	THR	2.7
53	CT	226	ILE	2.7
55	CV	48	THR	2.7
61	DB	125	GLY	2.7
67	W	84	ARG	2.7
67	W	117	ILE	2.7
72	b	41	ILE	2.7
79	DT	131	THR	2.7
50	F	157	PHE	2.7
62	R	15	PHE	2.7
6	AY	33	PRO	2.7
36	AI	62	GLN	2.7
58	N	23	PRO	2.7
70	Z	27	GLN	2.7
1	AS	1281	G	2.7
8	BA	132	ALA	2.7
51	CR	94	ALA	2.7
51	CR	258	ALA	2.7
52	H	78	ALA	2.7
52	H	171	ALA	2.7
54	CU	53	ALA	2.7
66	DG	59	ALA	2.7
69	Y	108	ALA	2.7
10	p	150	LYS	2.7
26	BS	36	LYS	2.7
29	BV	34	LYS	2.7
45	i	50	LYS	2.7
50	F	186	LYS	2.7
57	CX	44	LYS	2.7
74	DO	22	LYS	2.7
75	e	55	CYS	2.7
7	AZ	272	TYR	2.7
14	t	9	LEU	2.7
32	BY	50	LEU	2.7
56	CW	105	LEU	2.7
63	DD	91	TYR	2.7
67	DH	33	LEU	2.7
75	e	9	LEU	2.7
80	P0	76	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
82	l1	29	LEU	2.7
19	y	68	SER	2.7
33	BZ	23	SER	2.7
45	CL	110	SER	2.7
62	DC	50	ASP	2.7
50	CQ	178	MET	2.7
55	CV	12	SER	2.7
73	c	7	SER	2.7
6	AY	313	VAL	2.7
49	E	81	VAL	2.7
50	F	29	GLU	2.7
50	F	135	VAL	2.7
79	AR	53	ASN	2.7
3	AU	111	A	2.7
46	CM	1329	A	2.7
1	1	2470	C	2.7
37	CD	55	ARG	2.7
16	BI	36	ILE	2.7
19	y	75	GLY	2.7
46	B	1385	C	2.7
52	H	65	ARG	2.7
62	DC	61	ARG	2.7
74	d	81	ARG	2.7
49	E	109	GLY	2.7
52	CS	120	ILE	2.7
57	M	72	GLY	2.7
82	L1	37	GLY	2.7
22	2	11	THR	2.7
63	S	8	THR	2.7
58	CY	23	PRO	2.7
17	w	191	ALA	2.7
20	BM	33	ALA	2.7
28	AA	22	LYS	2.7
36	AI	14	LYS	2.7
39	CF	6	LYS	2.7
39	CF	30	LYS	2.7
48	D	116	LYS	2.7
50	F	8	LYS	2.7
50	CQ	102	GLN	2.7
54	CU	146	GLN	2.7
63	S	13	LYS	2.7
63	S	76	GLN	2.7

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Mol	Chain	Res	Type	RSRZ
63	DD	93	GLN	2.7
70	Z	3	LYS	2.7
79	DT	276	ALA	2.7
31	BX	43	LEU	2.7
63	DD	116	LEU	2.7
64	DE	34	LEU	2.7
66	V	28	LEU	2.7
66	V	108	LEU	2.7
79	AR	291	TRP	2.7
65	DF	42	TYR	2.7
6	I	146	VAL	2.7
10	BC	158	VAL	2.7
19	BL	83	VAL	2.7
23	BP	19	VAL	2.7
28	BU	98	SER	2.7
35	CB	49	SER	2.7
42	CI	24	SER	2.7
50	F	192	ASP	2.7
51	G	45	VAL	2.7
54	J	58	VAL	2.7
56	CW	145	SER	2.7
61	Q	23	VAL	2.7
63	DD	38	VAL	2.7
64	T	15	VAL	2.7
70	Z	74	VAL	2.7
79	AR	124	VAL	2.7
82	II	13	VAL	2.7
1	AS	2459	G	2.7
8	n	58	GLU	2.7
25	7	126	GLU	2.7
16	BI	143	ARG	2.7
46	B	1575	G	2.7
52	H	100	ASN	2.7
65	U	60	GLU	2.7
79	AR	14	GLU	2.7
52	H	112	ARG	2.7
65	U	68	ARG	2.7
80	p0	32	ASN	2.7
28	BU	25	ILE	2.7
49	CP	120	ILE	2.7
50	F	67	ILE	2.7
54	J	45	ILE	2.7

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Mol	Chain	Res	Type	RSRZ
56	L	83	ILE	2.7
60	DA	84	ILE	2.7
51	G	86	PHE	2.7
52	CS	101	GLY	2.7
66	DG	36	ILE	2.7
67	W	64	ILE	2.7
73	c	41	ILE	2.7
80	P0	63	ILE	2.7
4	AW	63	PHE	2.7
48	CO	30	PHE	2.7
1	AS	1274	A	2.7
6	AY	320	LYS	2.7
26	BS	37	THR	2.7
51	G	200	LYS	2.7
56	L	16	LYS	2.7
57	CX	90	THR	2.7
46	B	847	A	2.7
46	CM	1331	A	2.7
58	CY	30	LYS	2.7
60	P	64	LYS	2.7
79	AR	282	LYS	2.7
10	p	197	ALA	2.7
52	CS	116	HIS	2.7
1	AS	1352	C	2.7
16	BI	87	GLN	2.7
71	a	80	ALA	2.7
79	AR	154	ALA	2.7
37	CD	76	LEU	2.7
39	CF	65	LEU	2.7
51	G	38	LEU	2.7
54	J	89	LEU	2.7
55	CV	96	LEU	2.7
61	DB	28	LEU	2.7
69	DJ	104	LEU	2.7
70	Z	9	LEU	2.7
79	DT	145	LEU	2.7
66	V	53	TRP	2.7
50	F	19	TYR	2.7
51	G	27	TYR	2.7
79	DT	247	TYR	2.7
80	p0	58	MET	2.7
10	BC	181	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
59	O	91	VAL	2.7
59	O	116	VAL	2.7
63	DD	21	VAL	2.7
64	DE	40	VAL	2.7
79	AR	309	VAL	2.7
82	ll	58	VAL	2.7
38	CE	63	ARG	2.7
53	I	142	ARG	2.7
60	P	121	ARG	2.7
21	0	85	SER	2.7
22	BO	86	GLU	2.7
34	AG	97	SER	2.7
53	CT	161	GLU	2.7
56	L	72	GLU	2.7
56	CW	21	SER	2.7
76	f	18	SER	2.7
47	CN	170	ILE	2.7
61	Q	76	ILE	2.7
67	DH	90	ILE	2.7
82	ll	171	ASN	2.7
7	AZ	127	GLY	2.7
46	B	318	U	2.7
46	B	480	U	2.7
46	B	675	U	2.7
46	CM	259	U	2.7
46	CM	1363	U	2.7
55	CV	27	PHE	2.7
60	DA	2	GLY	2.7
79	AR	56	GLY	2.7
6	l	187	LYS	2.7
10	BC	97	LYS	2.7
25	BR	27	LYS	2.7
57	M	24	LYS	2.7
60	DA	9	LYS	2.7
63	S	25	LYS	2.7
64	T	23	LYS	2.7
67	W	63	LYS	2.7
18	BK	59	PRO	2.7
23	BP	22	PRO	2.7
48	CO	35	PRO	2.7
56	L	2	PRO	2.7
82	ll	21	THR	2.7

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Mol	Chain	Res	Type	RSRZ
1	1	2458	G	2.7
1	1	2870	G	2.7
7	m	100	ALA	2.7
7	AZ	97	ALA	2.7
10	BC	163	LEU	2.7
20	BM	150	LEU	2.7
35	AH	75	ALA	2.7
36	CC	120	ALA	2.7
44	CK	86	LEU	2.7
50	F	148	ALA	2.7
51	CR	239	LEU	2.7
63	S	88	LEU	2.7
64	T	16	LEU	2.7
65	DF	17	LEU	2.7
67	W	86	HIS	2.7
78	DS	140	HIS	2.7
79	AR	29	HIS	2.7
79	DT	67	HIS	2.7
79	DT	92	LEU	2.7
16	BI	57	GLN	2.7
29	AB	38	GLN	2.7
40	CG	4	GLN	2.7
52	H	37	GLN	2.7
64	DE	42	GLN	2.7
29	BV	69	TRP	2.7
46	B	215	A	2.7
46	B	1574	A	2.7
68	DI	1	MET	2.7
8	n	73	VAL	2.7
31	BX	60	TYR	2.7
50	CQ	75	VAL	2.7
53	I	169	TYR	2.7
67	W	55	VAL	2.7
78	h	156	VAL	2.7
80	p0	33	VAL	2.7
1	1	2457	C	2.7
3	4	21	C	2.7
16	BI	188	ARG	2.7
51	CR	256	ARG	2.7
59	O	133	ARG	2.7
62	R	44	ARG	2.7
6	AY	75	ILE	2.6

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Mol	Chain	Res	Type	RSRZ
26	8	139	ILE	2.6
28	AA	5	ILE	2.6
48	CO	191	GLU	2.6
49	E	189	GLU	2.6
50	F	116	ILE	2.6
51	CR	195	ILE	2.6
53	I	175	ILE	2.6
53	CT	225	GLU	2.6
59	CZ	71	ILE	2.6
6	AY	105	LYS	2.6
8	n	46	PHE	2.6
9	o	173	LYS	2.6
25	7	97	LYS	2.6
27	9	124	GLY	2.6
30	AC	4	SER	2.6
32	AE	101	LYS	2.6
39	CF	37	LYS	2.6
44	CK	59	SER	2.6
48	D	24	PHE	2.6
48	CO	31	ASP	2.6
49	E	218	SER	2.6
51	CR	226	PHE	2.6
54	J	127	PHE	2.6
59	O	40	GLY	2.6
60	P	2	GLY	2.6
63	DD	2	SER	2.6
64	T	14	LYS	2.6
64	T	49	LYS	2.6
70	Z	80	GLY	2.6
70	DK	111	GLY	2.6
80	P0	65	GLY	2.6
82	l1	69	GLY	2.6
16	BI	181	ASN	2.6
6	l	151	LEU	2.6
7	AZ	139	PRO	2.6
10	BC	110	LEU	2.6
1	1	2475	U	2.6
1	AS	2471	U	2.6
1	AS	3320	U	2.6
18	BK	32	THR	2.6
24	6	76	ALA	2.6
25	BR	109	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
31	BX	68	PRO	2.6
45	CL	80	ALA	2.6
47	CN	189	PRO	2.6
48	D	98	THR	2.6
50	F	105	ALA	2.6
50	CQ	100	ALA	2.6
52	H	191	ALA	2.6
54	J	98	PRO	2.6
54	CU	37	LEU	2.6
59	CZ	36	LEU	2.6
63	DD	88	LEU	2.6
65	U	76	PRO	2.6
64	DE	55	THR	2.6
65	U	109	LEU	2.6
72	b	75	LEU	2.6
78	h	129	THR	2.6
79	AR	219	LEU	2.6
79	DT	209	ALA	2.6
20	BM	7	GLN	2.6
27	BT	120	GLN	2.6
51	CR	260	GLN	2.6
6	AY	112	VAL	2.6
10	BC	131	VAL	2.6
13	BF	8	VAL	2.6
19	y	11	VAL	2.6
27	BT	8	VAL	2.6
38	AK	70	VAL	2.6
42	CI	5	TRP	2.6
51	CR	139	VAL	2.6
58	CY	129	ARG	2.6
47	C	110	TYR	2.6
65	U	42	TYR	2.6
1	AS	2445	G	2.6
46	B	1131	G	2.6
46	B	1213	G	2.6
6	l	10	ILE	2.6
11	q	41	ILE	2.6
13	BF	114	ILE	2.6
14	t	46	ILE	2.6
17	BJ	52	LYS	2.6
35	CB	19	LYS	2.6
43	AP	40	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
56	L	129	ILE	2.6
57	M	86	ILE	2.6
58	N	86	ILE	2.6
62	DC	108	LYS	2.6
63	S	11	LYS	2.6
63	DD	127	LYS	2.6
70	Z	82	LYS	2.6
70	DK	140	LYS	2.6
72	b	39	ILE	2.6
12	r	132	GLY	2.6
16	v	2	GLY	2.6
47	C	100	GLY	2.6
62	DC	31	GLU	2.6
74	DO	47	PHE	2.6
76	f	29	GLY	2.6
80	P0	74	GLU	2.6
1	AS	2454	C	2.6
7	AZ	147	ASP	2.6
13	BF	5	SER	2.6
34	AG	19	SER	2.6
37	CD	26	SER	2.6
46	B	1317	C	2.6
49	CP	176	SER	2.6
56	L	50	SER	2.6
79	DT	163	SER	2.6
13	BF	7	ASN	2.6
50	F	177	LEU	2.6
63	S	56	LEU	2.6
64	DE	73	LEU	2.6
65	U	86	LEU	2.6
24	BQ	54	ALA	2.6
26	8	23	ALA	2.6
37	CD	7	ALA	2.6
41	CH	31	ALA	2.6
45	i	62	ALA	2.6
45	CL	63	ALA	2.6
49	E	117	ALA	2.6
52	H	164	PRO	2.6
55	CV	128	ALA	2.6
62	R	4	ALA	2.6
51	CR	220	THR	2.6
79	DT	137	THR	2.6

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Mol	Chain	Res	Type	RSRZ
7	m	68	HIS	2.6
25	BR	78	HIS	2.6
35	AH	69	HIS	2.6
62	R	83	MET	2.6
12	r	113	GLN	2.6
14	BG	21	ARG	2.6
16	BI	50	ARG	2.6
1	AS	1561	U	2.6
15	u	13	VAL	2.6
18	BK	165	GLN	2.6
39	AL	31	VAL	2.6
43	AP	27	GLN	2.6
45	i	113	ARG	2.6
59	CZ	43	ARG	2.6
53	CT	162	VAL	2.6
55	CV	103	GLN	2.6
73	c	89	ARG	2.6
46	B	1614	U	2.6
58	CY	7	VAL	2.6
63	S	117	VAL	2.6
64	T	122	VAL	2.6
79	DT	8	VAL	2.6
51	G	18	TRP	2.6
7	AZ	262	LYS	2.6
10	BC	63	LYS	2.6
14	t	88	LYS	2.6
25	BR	97	LYS	2.6
29	BV	48	TYR	2.6
30	AC	25	LYS	2.6
37	CD	69	LYS	2.6
43	AP	100	LYS	2.6
47	CN	110	TYR	2.6
54	J	68	LYS	2.6
54	CU	169	TYR	2.6
56	L	10	LYS	2.6
63	DD	11	LYS	2.6
67	W	29	LYS	2.6
69	DJ	119	LYS	2.6
50	F	5	ILE	2.6
50	CQ	87	ILE	2.6
66	V	135	ILE	2.6
63	DD	9	PHE	2.6

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Mol	Chain	Res	Type	RSRZ
76	DQ	14	PHE	2.6
22	BO	144	GLU	2.6
49	CP	140	GLY	2.6
50	F	48	GLU	2.6
53	I	122	GLU	2.6
6	l	245	LEU	2.6
10	p	27	LEU	2.6
43	CJ	35	LEU	2.6
48	CO	225	LEU	2.6
54	CU	73	LEU	2.6
56	CW	128	LEU	2.6
59	CZ	60	CYS	2.6
64	T	34	LEU	2.6
65	U	45	LEU	2.6
72	b	42	LEU	2.6
80	p0	93	LEU	2.6
1	AS	2469	A	2.6
5	k	179	ALA	2.6
6	l	3	SER	2.6
6	l	172	ALA	2.6
39	CF	2	ALA	2.6
39	CF	59	ALA	2.6
50	CQ	150	SER	2.6
52	H	71	SER	2.6
55	CV	182	SER	2.6
60	P	13	SER	2.6
69	Y	77	PRO	2.6
70	DK	85	ALA	2.6
73	c	6	ALA	2.6
73	DN	63	ALA	2.6
75	DP	59	SER	2.6
80	p0	4	ALA	2.6
82	ll	208	SER	2.6
1	1	1556	G	2.6
46	B	650	G	2.6
46	B	705	G	2.6
46	CM	1431	G	2.6
46	CM	1546	G	2.6
46	CM	1671	G	2.6
24	BQ	9	ASN	2.6
38	CE	13	ASN	2.6
64	T	31	ASN	2.6

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Mol	Chain	Res	Type	RSRZ
67	W	71	ASN	2.6
9	BB	20	THR	2.6
11	q	56	THR	2.6
19	y	178	ARG	2.6
20	z	89	MET	2.6
21	0	34	THR	2.6
43	CJ	18	ARG	2.6
50	F	144	ARG	2.6
53	CT	230	ARG	2.6
66	DG	52	THR	2.6
73	c	80	HIS	2.6
10	p	140	VAL	2.6
50	CQ	187	VAL	2.6
52	CS	70	VAL	2.6
60	P	34	VAL	2.6
79	AR	155	VAL	2.6
18	BK	55	GLN	2.6
36	CC	113	GLN	2.6
38	CE	30	GLN	2.6
6	AY	47	LYS	2.6
19	y	185	LYS	2.6
27	9	87	LYS	2.6
30	BW	25	LYS	2.6
42	CI	19	LYS	2.6
48	CO	45	LYS	2.6
52	H	115	LYS	2.6
55	K	75	LYS	2.6
71	a	83	LYS	2.6
28	AA	46	ILE	2.6
47	CN	138	TYR	2.6
57	CX	66	TYR	2.6
1	1	3284	U	2.6
1	AS	1013	U	2.6
3	AU	23	U	2.6
46	B	278	U	2.6
46	CM	944	U	2.6
59	CZ	72	ILE	2.6
60	DA	118	ILE	2.6
67	DH	49	ILE	2.6
79	AR	138	ILE	2.6
51	CR	218	PHE	2.6
54	CU	81	PHE	2.6

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Mol	Chain	Res	Type	RSRZ
64	DE	115	PHE	2.6
66	DG	88	PHE	2.6
69	DJ	37	PHE	2.6
82	L1	211	GLY	2.6
37	CD	53	GLU	2.6
65	DF	7	GLU	2.6
10	BC	197	ALA	2.6
57	M	45	ALA	2.6
63	DD	17	ALA	2.6
74	d	28	PRO	2.6
79	DT	300	ALA	2.6
8	n	169	ASP	2.6
10	BC	186	ARG	2.6
16	BI	26	ARG	2.6
19	y	180	ARG	2.6
44	AQ	24	ARG	2.6
11	BD	1	MET	2.6
45	CL	36	SER	2.6
48	CO	108	ASP	2.6
54	J	154	ASP	2.6
67	W	75	SER	2.6
71	DL	20	ARG	2.6
75	DP	18	ARG	2.6
79	AR	269	ASP	2.6
80	p0	35	SER	2.6
20	BM	58	HIS	2.6
21	BN	97	VAL	2.6
21	BN	103	VAL	2.6
35	CB	42	VAL	2.6
43	AP	75	VAL	2.6
52	H	123	VAL	2.6
53	I	195	VAL	2.6
56	L	81	VAL	2.6
63	DD	3	THR	2.6
66	DG	4	VAL	2.6
71	a	34	ASN	2.6
78	DS	187	HIS	2.6
80	P0	83	ASN	2.6
28	AA	9	LYS	2.6
29	BV	132	LYS	2.6
32	BY	26	LYS	2.6
36	CC	103	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
42	CI	14	LYS	2.6
46	CM	216	A	2.6
50	F	133	LYS	2.6
53	CT	220	LYS	2.6
74	DO	17	LYS	2.6
14	BG	102	GLN	2.6
18	x	165	GLN	2.6
56	CW	139	GLN	2.6
82	ll	158	GLN	2.6
1	1	2429	G	2.6
1	AS	487	C	2.6
1	AS	2476	C	2.6
46	B	1081	C	2.6
46	B	1115	G	2.6
46	CM	723	G	2.6
79	AR	19	TRP	2.6
49	CP	124	ILE	2.6
67	W	90	ILE	2.6
69	Y	110	ILE	2.6
13	s	127	PHE	2.6
14	BG	138	PHE	2.6
19	y	96	PHE	2.6
34	AG	44	TYR	2.6
69	DJ	99	PHE	2.6
20	BM	155	LEU	2.6
22	BO	31	LEU	2.6
30	AC	34	GLY	2.6
48	CO	188	LEU	2.6
51	G	52	LEU	2.6
52	H	198	LEU	2.6
55	K	171	LEU	2.6
69	DJ	94	LEU	2.6
79	AR	289	LEU	2.6
1	AS	1204	U	2.6
46	B	944	U	2.6
5	AX	74	GLU	2.6
30	BW	16	ALA	2.6
47	C	145	ALA	2.6
48	CO	122	GLU	2.6
25	BR	47	ARG	2.6
50	F	194	ALA	2.6
56	L	3	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
58	CY	33	ARG	2.6
59	O	94	ALA	2.6
62	DC	74	ALA	2.6
80	P0	44	ALA	2.6
41	AN	4	PRO	2.6
79	AR	284	PRO	2.6
4	AW	190	LYS	2.6
9	BB	154	VAL	2.6
10	BC	71	LYS	2.6
28	BU	23	VAL	2.6
33	BZ	126	LYS	2.6
35	AH	23	VAL	2.6
6	I	46	ASN	2.6
11	BD	64	HIS	2.6
25	7	100	ASP	2.6
43	CJ	100	LYS	2.6
51	G	89	VAL	2.6
51	CR	241	LYS	2.6
54	J	185	SER	2.6
54	CU	104	LYS	2.6
60	DA	61	SER	2.6
62	R	108	LYS	2.6
62	R	126	VAL	2.6
63	S	22	LYS	2.6
63	DD	63	ASP	2.6
66	DG	78	LYS	2.6
68	DI	56	SER	2.6
69	Y	43	LYS	2.6
73	DN	19	LYS	2.6
81	12	162	VAL	2.6
53	I	22	HIS	2.6
62	R	11	THR	2.6
74	d	19	HIS	2.6
78	DS	176	ASN	2.6
11	BD	128	ILE	2.5
14	BG	85	ILE	2.5
22	BO	160	ILE	2.5
23	BP	56	ILE	2.5
54	CU	145	ILE	2.5
56	L	143	ILE	2.5
79	AR	122	GLN	2.5
79	DT	157	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
82	l1	117	ILE	2.5
82	l1	206	ILE	2.5
1	1	2434	A	2.5
1	1	2446	A	2.5
1	AS	1267	A	2.5
7	AZ	55	PHE	2.5
7	AZ	180	PHE	2.5
6	l	137	LEU	2.5
13	s	52	TYR	2.5
29	AB	68	PHE	2.5
17	BJ	53	LEU	2.5
41	AN	24	TYR	2.5
46	CM	673	A	2.5
69	Y	46	TYR	2.5
79	AR	275	PHE	2.5
82	l1	214	PHE	2.5
49	CP	66	LEU	2.5
79	AR	92	LEU	2.5
30	AC	20	GLY	2.5
55	CV	80	GLY	2.5
2	AT	73	C	2.5
10	p	116	ALA	2.5
31	BX	97	ALA	2.5
42	AO	6	ARG	2.5
49	E	163	ARG	2.5
51	CR	2	ALA	2.5
55	CV	137	ALA	2.5
66	DG	96	ALA	2.5
76	f	40	ARG	2.5
6	AY	15	GLU	2.5
50	F	32	GLU	2.5
54	J	128	PRO	2.5
54	J	184	GLU	2.5
64	DE	79	GLU	2.5
77	g	36	MET	2.5
14	t	68	LYS	2.5
23	BP	23	VAL	2.5
26	BS	64	VAL	2.5
26	BS	96	LYS	2.5
28	BU	56	LYS	2.5
42	AO	7	LYS	2.5
46	CM	778	U	2.5

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Mol	Chain	Res	Type	RSRZ
54	J	97	LYS	2.5
56	L	37	LYS	2.5
56	L	39	LYS	2.5
56	L	179	LYS	2.5
60	DA	33	VAL	2.5
62	DC	2	VAL	2.5
67	DH	113	VAL	2.5
78	DS	132	LYS	2.5
79	DT	258	LYS	2.5
6	l	84	HIS	2.5
12	BE	219	SER	2.5
14	BG	130	THR	2.5
21	BN	60	SER	2.5
35	CB	40	SER	2.5
47	CN	40	THR	2.5
51	CR	250	SER	2.5
56	CW	130	THR	2.5
69	Y	30	SER	2.5
70	Z	128	SER	2.5
72	b	38	HIS	2.5
79	DT	48	THR	2.5
79	DT	89	THR	2.5
79	DT	202	SER	2.5
9	BB	125	ILE	2.5
19	BL	101	ILE	2.5
29	AB	102	ILE	2.5
55	K	35	ASN	2.5
82	L1	216	ILE	2.5
28	BU	129	TRP	2.5
48	CO	220	GLN	2.5
66	V	109	GLN	2.5
72	DM	37	GLN	2.5
6	l	200	PHE	2.5
24	6	15	LEU	2.5
37	AJ	71	LEU	2.5
49	E	56	LEU	2.5
49	E	108	LEU	2.5
62	R	33	PHE	2.5
78	DS	173	PHE	2.5
82	l1	157	PHE	2.5
15	BH	68	GLY	2.5
58	N	145	GLY	2.5

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Mol	Chain	Res	Type	RSRZ
70	DK	91	GLY	2.5
14	BG	91	ARG	2.5
25	BR	57	ARG	2.5
71	a	61	ARG	2.5
73	DN	15	ARG	2.5
78	DS	143	ALA	2.5
6	l	318	PRO	2.5
11	BD	125	GLU	2.5
13	BF	174	LYS	2.5
14	BG	139	GLU	2.5
22	2	21	LYS	2.5
23	5	22	PRO	2.5
51	G	215	GLU	2.5
51	CR	62	LYS	2.5
51	CR	234	LYS	2.5
66	V	115	GLU	2.5
71	a	16	PRO	2.5
71	a	127	LYS	2.5
77	g	29	LYS	2.5
78	DS	141	LYS	2.5
9	o	75	VAL	2.5
13	s	171	VAL	2.5
28	AA	114	VAL	2.5
57	M	21	VAL	2.5
62	R	86	VAL	2.5
78	DS	150	VAL	2.5
1	1	2157	C	2.5
1	1	3051	C	2.5
7	AZ	227	ILE	2.5
21	BN	98	THR	2.5
43	CJ	7	THR	2.5
46	B	609	U	2.5
46	CM	711	U	2.5
50	CQ	116	ILE	2.5
51	G	36	HIS	2.5
51	G	69	HIS	2.5
52	CS	96	SER	2.5
57	M	43	ILE	2.5
63	DD	100	SER	2.5
67	DH	28	THR	2.5
67	DH	102	ILE	2.5
22	BO	101	CYS	2.5

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Mol	Chain	Res	Type	RSRZ
46	B	1404	G	2.5
79	DT	115	SER	2.5
79	DT	168	SER	2.5
56	CW	63	ASP	2.5
8	n	75	LEU	2.5
15	BH	119	GLN	2.5
17	BJ	51	ASN	2.5
26	BS	57	LEU	2.5
31	BX	16	LEU	2.5
32	BY	55	ASN	2.5
35	CB	51	LEU	2.5
36	AI	21	LEU	2.5
36	AI	92	LEU	2.5
51	G	12	LEU	2.5
51	CR	9	LEU	2.5
52	H	31	LEU	2.5
53	I	212	LEU	2.5
53	I	216	LEU	2.5
56	L	76	LEU	2.5
66	DG	85	ASN	2.5
77	g	51	ASN	2.5
12	r	156	ARG	2.5
13	s	132	GLY	2.5
16	BI	119	TYR	2.5
31	BX	39	GLY	2.5
57	M	19	GLY	2.5
63	DD	10	GLY	2.5
78	DS	161	ARG	2.5
6	AY	175	ALA	2.5
8	BA	156	LYS	2.5
20	z	63	ALA	2.5
29	AB	27	LYS	2.5
42	AO	16	LYS	2.5
45	CL	71	LYS	2.5
50	F	195	ALA	2.5
52	CS	80	LYS	2.5
53	I	103	ALA	2.5
63	DD	126	LYS	2.5
63	DD	139	LYS	2.5
65	U	58	ALA	2.5
7	m	181	PRO	2.5
6	AY	257	GLU	2.5

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Mol	Chain	Res	Type	RSRZ
10	BC	29	GLU	2.5
36	CC	57	VAL	2.5
51	G	225	VAL	2.5
55	K	81	VAL	2.5
58	N	117	VAL	2.5
66	DG	2	PRO	2.5
69	DJ	95	PRO	2.5
48	D	163	GLU	2.5
80	P0	59	VAL	2.5
46	B	1479	A	2.5
53	I	49	ILE	2.5
54	J	121	ILE	2.5
59	O	135	ILE	2.5
10	BC	79	PHE	2.5
10	BC	153	LEU	2.5
13	s	163	PHE	2.5
16	BI	59	PHE	2.5
18	BK	79	THR	2.5
36	CC	88	LEU	2.5
39	AL	78	LEU	2.5
43	CJ	21	THR	2.5
47	C	115	PHE	2.5
47	C	201	LEU	2.5
1	AS	486	C	2.5
6	l	154	SER	2.5
26	BS	29	SER	2.5
28	BU	35	SER	2.5
46	B	25	C	2.5
46	B	1141	C	2.5
48	D	227	SER	2.5
48	CO	100	PHE	2.5
51	G	99	PHE	2.5
58	N	20	PHE	2.5
63	DD	114	THR	2.5
66	DG	140	LEU	2.5
73	c	53	LEU	2.5
76	f	30	LEU	2.5
79	AR	7	LEU	2.5
3	AU	157	U	2.5
6	AY	95	CYS	2.5
10	BC	81	GLN	2.5
19	y	113	ARG	2.5

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Mol	Chain	Res	Type	RSRZ
51	G	11	ARG	2.5
60	P	147	SER	2.5
60	DA	13	SER	2.5
25	BR	100	ASP	2.5
12	BE	205	ASN	2.5
13	s	43	GLN	2.5
42	CI	3	ASP	2.5
71	a	41	ARG	2.5
46	B	1102	U	2.5
79	DT	248	TRP	2.5
52	CS	44	ASN	2.5
69	Y	70	ASN	2.5
13	s	128	TYR	2.5
13	BF	113	GLY	2.5
19	y	156	GLY	2.5
51	G	74	GLY	2.5
54	J	171	LYS	2.5
54	CU	80	LYS	2.5
57	M	63	TYR	2.5
70	Z	91	GLY	2.5
12	r	208	ALA	2.5
36	CC	104	ALA	2.5
37	AJ	82	ALA	2.5
41	CH	7	LYS	2.5
45	CL	67	LYS	2.5
49	E	83	LYS	2.5
82	ll	3	LYS	2.5
1	1	2313	G	2.5
46	CM	142	G	2.5
77	DR	56	MET	2.5
80	P0	38	MET	2.5
6	l	167	VAL	2.5
6	l	231	VAL	2.5
6	l	302	PRO	2.5
7	AZ	173	VAL	2.5
22	2	79	VAL	2.5
26	BS	110	VAL	2.5
27	BT	45	VAL	2.5
35	CB	23	VAL	2.5
43	AP	68	VAL	2.5
47	C	181	VAL	2.5
49	E	40	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
50	F	59	VAL	2.5
50	CQ	17	VAL	2.5
50	CQ	176	VAL	2.5
52	CS	30	PRO	2.5
52	CS	168	VAL	2.5
58	N	59	PRO	2.5
75	e	47	PRO	2.5
54	CU	184	GLU	2.5
63	DD	49	GLU	2.5
71	DL	98	GLU	2.5
6	l	249	ILE	2.5
7	AZ	69	ILE	2.5
20	BM	115	ILE	2.5
33	BZ	97	ILE	2.5
47	C	170	ILE	2.5
62	DC	121	ILE	2.5
14	t	123	LEU	2.5
7	m	129	PHE	2.5
7	AZ	200	PHE	2.5
8	BA	46	PHE	2.5
20	BM	141	HIS	2.5
48	CO	96	LEU	2.5
57	M	2	LEU	2.5
59	O	28	LEU	2.5
71	DL	18	LEU	2.5
79	DT	47	LEU	2.5
82	L1	163	LEU	2.5
25	BR	43	ARG	2.5
35	CB	25	THR	2.5
37	CD	67	ARG	2.5
45	CL	90	ARG	2.5
56	L	17	ARG	2.5
56	L	71	PHE	2.5
60	DA	26	PHE	2.5
63	S	9	PHE	2.5
56	L	147	THR	2.5
58	N	63	THR	2.5
61	Q	33	THR	2.5
74	DO	23	THR	2.5
77	g	54	ARG	2.5
79	AR	26	THR	2.5
1	1	2078	A	2.5

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Mol	Chain	Res	Type	RSRZ
12	r	194	GLY	2.5
17	w	27	GLN	2.5
28	AA	20	GLY	2.5
30	AC	61	LYS	2.5
35	CB	45	GLY	2.5
36	CC	16	GLN	2.5
50	F	140	SER	2.5
71	DL	104	SER	2.5
74	DO	5	GLN	2.5
79	DT	93	TRP	2.5
51	CR	186	GLY	2.5
57	M	56	LYS	2.5
60	DA	112	LYS	2.5
62	DC	9	LYS	2.5
63	S	106	LYS	2.5
82	L1	20	SER	2.5
16	BI	86	ASN	2.5
23	BP	52	ASN	2.5
47	C	72	ASP	2.5
10	BC	257	ALA	2.5
26	BS	98	ALA	2.5
26	BS	109	TYR	2.5
37	CD	2	ALA	2.5
41	AN	8	ALA	2.5
45	i	49	ALA	2.5
47	C	95	ALA	2.5
54	CU	65	ALA	2.5
55	K	161	ALA	2.5
60	P	18	TYR	2.5
62	R	115	TYR	2.5
67	W	96	ALA	2.5
73	DN	68	TYR	2.5
82	l1	217	TYR	2.5
1	AS	2486	U	2.5
46	B	672	U	2.5
46	B	1364	U	2.5
46	B	1365	C	2.5
27	9	8	VAL	2.5
28	AA	23	VAL	2.5
56	CW	141	VAL	2.5
75	e	44	VAL	2.5
7	AZ	84	PRO	2.5

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Mol	Chain	Res	Type	RSRZ
56	CW	5	PRO	2.5
7	m	130	GLU	2.5
28	BU	47	GLU	2.5
35	CB	87	GLU	2.5
67	DH	82	GLU	2.5
71	DL	101	GLU	2.5
26	BS	95	ILE	2.4
52	CS	137	ILE	2.4
60	DA	38	ILE	2.4
71	DL	7	ILE	2.4
79	DT	190	ILE	2.4
82	L1	155	ILE	2.4
22	2	106	LEU	2.4
49	CP	235	LEU	2.4
51	CR	56	LEU	2.4
59	CZ	74	LEU	2.4
59	CZ	103	LEU	2.4
59	CZ	106	LEU	2.4
80	P0	19	LEU	2.4
1	1	2089	G	2.4
1	AS	244	G	2.4
17	w	79	ARG	2.4
36	CC	81	ARG	2.4
46	B	1466	G	2.4
52	CS	148	ARG	2.4
53	I	144	PHE	2.4
63	S	121	ARG	2.4
66	V	63	ARG	2.4
70	DK	16	ARG	2.4
80	P0	64	ARG	2.4
35	AH	34	HIS	2.4
80	P0	88	PHE	2.4
10	p	71	LYS	2.4
15	BH	117	LYS	2.4
16	v	169	LYS	2.4
25	7	120	LYS	2.4
45	CL	55	LYS	2.4
48	D	27	LYS	2.4
49	E	193	THR	2.4
52	CS	94	THR	2.4
64	DE	72	LYS	2.4
65	U	49	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
67	W	59	THR	2.4
82	ll	136	THR	2.4
7	AZ	114	GLY	2.4
7	AZ	274	GLN	2.4
24	BQ	8	GLY	2.4
48	CO	208	GLN	2.4
51	G	68	GLN	2.4
52	H	178	GLY	2.4
56	CW	137	GLY	2.4
63	S	7	GLN	2.4
70	DK	106	GLY	2.4
7	AZ	166	ALA	2.4
29	BV	106	ALA	2.4
34	AG	36	ALA	2.4
48	CO	119	SER	2.4
57	M	23	ALA	2.4
62	R	16	SER	2.4
4	AW	7	ASN	2.4
4	AW	113	VAL	2.4
10	p	152	VAL	2.4
14	t	12	ASN	2.4
26	8	87	ASP	2.4
66	V	43	ASN	2.4
69	DJ	54	ASP	2.4
16	BI	60	VAL	2.4
53	I	179	VAL	2.4
54	CU	177	VAL	2.4
59	O	60	CYS	2.4
70	DK	127	VAL	2.4
75	e	7	VAL	2.4
82	ll	82	VAL	2.4
19	y	163	PRO	2.4
41	CH	4	PRO	2.4
51	G	152	PRO	2.4
79	AR	27	PRO	2.4
1	1	1263	U	2.4
46	CM	1335	U	2.4
7	m	279	ARG	2.4
10	BC	203	GLU	2.4
11	q	53	ILE	2.4
11	q	79	ILE	2.4
12	r	33	ILE	2.4

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Mol	Chain	Res	Type	RSRZ
36	AI	118	ILE	2.4
27	BT	111	LEU	2.4
28	AA	102	GLU	2.4
36	CC	105	ARG	2.4
43	AP	16	GLU	2.4
48	CO	193	ILE	2.4
49	CP	78	ILE	2.4
66	V	100	ILE	2.4
73	DN	41	ILE	2.4
81	12	132	ILE	2.4
16	v	10	LEU	2.4
16	BI	179	LEU	2.4
53	I	75	LEU	2.4
53	CT	184	LEU	2.4
55	CV	201	ARG	2.4
56	L	49	LEU	2.4
74	DO	8	LEU	2.4
6	AY	157	PHE	2.4
29	BV	129	PHE	2.4
50	CQ	18	PHE	2.4
57	M	75	PHE	2.4
7	AZ	276	LYS	2.4
8	BA	139	LYS	2.4
14	BG	104	LYS	2.4
19	y	5	HIS	2.4
29	BV	111	LYS	2.4
42	AO	14	LYS	2.4
43	AP	9	LYS	2.4
60	DA	43	LYS	2.4
67	W	76	LYS	2.4
80	p0	7	LYS	2.4
48	D	143	THR	2.4
49	CP	91	THR	2.4
79	DT	12	THR	2.4
82	11	209	THR	2.4
6	l	107	TRP	2.4
58	CY	145	GLY	2.4
60	P	25	TRP	2.4
70	Z	2	GLY	2.4
5	AX	138	ALA	2.4
14	BG	19	GLN	2.4
19	BL	27	GLN	2.4

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Mol	Chain	Res	Type	RSRZ
28	AA	110	ALA	2.4
49	E	76	MET	2.4
54	J	157	ALA	2.4
56	CW	153	GLN	2.4
56	CW	177	GLN	2.4
65	U	73	MET	2.4
65	DF	6	GLN	2.4
1	AS	1556	G	2.4
1	AS	2184	G	2.4
6	AY	210	TYR	2.4
16	v	204	SER	2.4
16	BI	30	TYR	2.4
16	BI	40	SER	2.4
32	BY	95	VAL	2.4
38	CE	36	SER	2.4
46	B	495	G	2.4
46	B	1099	G	2.4
46	B	1597	G	2.4
48	CO	125	VAL	2.4
51	G	139	VAL	2.4
51	CR	248	SER	2.4
56	L	12	TYR	2.4
56	L	95	TYR	2.4
60	P	12	SER	2.4
60	P	61	SER	2.4
64	DE	88	VAL	2.4
64	DE	110	VAL	2.4
66	DG	6	VAL	2.4
77	g	40	TYR	2.4
79	AR	266	SER	2.4
13	s	126	ASP	2.4
19	y	91	ASN	2.4
29	AB	76	ASP	2.4
53	I	152	ASP	2.4
53	I	155	ASP	2.4
54	CU	151	ASP	2.4
51	G	150	PRO	2.4
52	CS	88	PRO	2.4
56	L	74	ASN	2.4
64	T	105	ASP	2.4
26	8	52	PRO	2.4
79	DT	30	PRO	2.4

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Mol	Chain	Res	Type	RSRZ
4	AW	247	ARG	2.4
11	BD	136	ILE	2.4
13	BF	40	LEU	2.4
14	BG	46	ILE	2.4
16	BI	144	ARG	2.4
25	BR	93	ARG	2.4
49	CP	164	LEU	2.4
50	F	87	ILE	2.4
52	CS	175	LEU	2.4
55	K	189	ILE	2.4
56	L	42	ILE	2.4
59	CZ	28	LEU	2.4
71	a	28	LEU	2.4
74	DO	73	LEU	2.4
79	AR	43	ILE	2.4
79	DT	249	LEU	2.4
80	P0	52	LEU	2.4
81	12	112	ILE	2.4
82	L1	29	LEU	2.4
1	1	1541	A	2.4
1	AS	239	A	2.4
18	BK	75	GLU	2.4
21	BN	82	GLU	2.4
25	7	92	GLU	2.4
46	B	1694	A	2.4
1	1	1759	U	2.4
1	1	2847	U	2.4
1	AS	1024	U	2.4
4	j	190	LYS	2.4
7	m	270	LYS	2.4
21	0	23	LYS	2.4
26	BS	39	LYS	2.4
28	AA	128	LYS	2.4
57	CX	16	PHE	2.4
46	CM	697	U	2.4
46	CM	1591	U	2.4
60	DA	39	LYS	2.4
73	DN	32	LYS	2.4
13	s	68	HIS	2.4
16	BI	37	HIS	2.4
46	CM	25	C	2.4
46	CM	720	C	2.4

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Mol	Chain	Res	Type	RSRZ
4	AW	249	THR	2.4
8	n	66	GLY	2.4
8	BA	8	TRP	2.4
49	E	201	THR	2.4
52	H	28	THR	2.4
53	I	80	GLY	2.4
53	I	148	THR	2.4
69	Y	123	GLY	2.4
71	a	9	THR	2.4
81	12	140	GLY	2.4
10	p	169	ALA	2.4
17	w	99	ALA	2.4
50	CQ	99	ALA	2.4
56	L	119	ALA	2.4
60	P	4	MET	2.4
6	AY	226	VAL	2.4
19	y	82	VAL	2.4
28	BU	96	VAL	2.4
29	BV	38	GLN	2.4
47	C	121	VAL	2.4
50	F	180	GLN	2.4
51	CR	160	VAL	2.4
56	L	110	GLN	2.4
63	S	96	VAL	2.4
69	Y	121	VAL	2.4
75	DP	41	VAL	2.4
75	DP	48	VAL	2.4
79	AR	134	VAL	2.4
13	BF	52	TYR	2.4
14	BG	152	PRO	2.4
48	D	23	PRO	2.4
48	CO	112	SER	2.4
59	O	70	SER	2.4
68	X	35	SER	2.4
70	Z	40	SER	2.4
79	DT	159	PRO	2.4
82	L1	43	PRO	2.4
4	AW	184	ARG	2.4
6	AY	93	ASN	2.4
11	BD	10	LEU	2.4
19	y	49	LEU	2.4
19	y	93	LEU	2.4

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Mol	Chain	Res	Type	RSRZ
21	0	45	LEU	2.4
35	CB	16	ARG	2.4
36	CC	79	ASP	2.4
36	CC	92	LEU	2.4
37	AJ	6	ILE	2.4
38	AK	51	LEU	2.4
43	AP	44	ASP	2.4
45	i	124	ASP	2.4
49	E	53	LEU	2.4
51	G	131	LEU	2.4
56	L	126	ARG	2.4
57	M	87	LEU	2.4
59	O	26	ASP	2.4
63	S	63	ASP	2.4
63	DD	81	ARG	2.4
64	DE	45	ARG	2.4
69	DJ	110	ILE	2.4
79	DT	269	ASP	2.4
12	BE	49	CYS	2.4
7	AZ	271	LYS	2.4
10	BC	148	LYS	2.4
19	y	161	LYS	2.4
25	7	116	LYS	2.4
28	AA	111	LYS	2.4
60	DA	140	LYS	2.4
63	S	126	LYS	2.4
1	1	1025	G	2.4
1	1	1503	G	2.4
1	1	2435	G	2.4
7	AZ	234	GLU	2.4
14	BG	20	GLU	2.4
46	CM	277	G	2.4
53	CT	122	GLU	2.4
55	K	191	GLU	2.4
82	L1	68	PHE	2.4
1	1	2518	A	2.4
1	1	2668	A	2.4
1	AS	1221	A	2.4
5	AX	256	HIS	2.4
66	V	93	HIS	2.4
1	1	1013	U	2.4
1	1	1204	U	2.4

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Mol	Chain	Res	Type	RSRZ
1	AS	1565	U	2.4
19	y	160	GLY	2.4
23	5	45	GLY	2.4
35	CB	27	GLY	2.4
20	z	87	ALA	2.4
22	BO	100	ALA	2.4
46	B	556	U	2.4
53	CT	123	GLY	2.4
62	R	48	GLY	2.4
49	E	113	ALA	2.4
51	G	213	ALA	2.4
52	H	154	THR	2.4
52	CS	78	ALA	2.4
54	CU	71	THR	2.4
60	DA	41	ALA	2.4
64	T	30	THR	2.4
71	DL	130	ALA	2.4
77	g	61	ALA	2.4
79	DT	25	THR	2.4
79	DT	220	TRP	2.4
82	L1	109	ALA	2.4
82	L1	210	MET	2.4
11	q	27	VAL	2.4
25	7	131	VAL	2.4
27	BT	104	VAL	2.4
35	AH	22	VAL	2.4
52	H	51	VAL	2.4
59	O	115	VAL	2.4
65	U	100	VAL	2.4
66	V	34	VAL	2.4
71	a	100	VAL	2.4
79	AR	8	VAL	2.4
27	9	41	GLN	2.4
63	DD	82	GLN	2.4
1	AS	2451	C	2.4
16	BI	148	TYR	2.4
46	B	1610	C	2.4
7	m	194	LEU	2.4
12	r	167	ILE	2.4
13	s	74	PRO	2.4
32	BY	18	ARG	2.4
37	AJ	75	ARG	2.4

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Mol	Chain	Res	Type	RSRZ
16	BI	16	SER	2.4
18	BK	25	SER	2.4
19	y	81	ILE	2.4
19	BL	124	LEU	2.4
26	BS	108	LEU	2.4
27	BT	99	ILE	2.4
29	BV	2	PRO	2.4
34	AG	49	ILE	2.4
45	i	103	LEU	2.4
45	i	165	LEU	2.4
47	C	142	PRO	2.4
56	L	57	ARG	2.4
53	CT	75	LEU	2.4
56	CW	101	PRO	2.4
60	P	114	ARG	2.4
47	CN	87	LEU	2.4
48	D	61	LEU	2.4
50	CQ	12	LEU	2.4
60	P	38	ILE	2.4
61	Q	89	PRO	2.4
61	DB	97	LEU	2.4
62	R	60	LEU	2.4
63	S	104	LEU	2.4
79	AR	113	SER	2.4
79	AR	267	LEU	2.4
82	L1	190	LEU	2.4
7	m	220	LYS	2.4
11	q	72	LYS	2.4
26	BS	49	LYS	2.4
27	9	46	LYS	2.4
35	CB	24	LYS	2.4
41	CH	43	ASN	2.4
49	E	70	ASP	2.4
50	F	167	ASP	2.4
52	H	107	LYS	2.4
54	CU	153	LYS	2.4
60	DA	21	ASN	2.4
73	c	91	ASP	2.4
79	DT	31	ASP	2.4
80	P0	48	ASP	2.4
11	q	45	PHE	2.4
23	5	74	PHE	2.4

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Mol	Chain	Res	Type	RSRZ
56	L	158	PHE	2.4
56	CW	71	PHE	2.4
73	DN	29	CYS	2.4
14	BG	134	GLU	2.4
16	v	103	GLU	2.4
20	BM	140	GLU	2.4
52	CS	52	GLU	2.4
75	DP	50	GLU	2.4
10	p	139	HIS	2.4
53	CT	69	HIS	2.4
64	T	95	HIS	2.4
72	DM	38	HIS	2.4
73	DN	17	HIS	2.4
25	BR	84	GLY	2.4
69	DJ	73	GLY	2.4
77	DR	32	GLY	2.4
77	DR	36	MET	2.4
80	P0	29	GLY	2.4
7	m	77	ALA	2.4
14	BG	86	ALA	2.4
16	BI	3	ALA	2.4
18	BK	185	ALA	2.4
45	i	63	ALA	2.4
50	CQ	195	ALA	2.4
53	CT	172	ALA	2.4
56	L	125	ALA	2.4
56	CW	56	ALA	2.4
80	P0	62	ALA	2.4
14	BG	171	THR	2.4
16	v	155	VAL	2.4
16	BI	101	THR	2.4
16	BI	152	VAL	2.4
17	w	37	VAL	2.4
23	5	19	VAL	2.4
23	BP	99	VAL	2.4
38	AK	80	THR	2.4
47	C	139	VAL	2.4
53	I	128	THR	2.4
53	I	163	THR	2.4
54	CU	148	VAL	2.4
59	O	67	THR	2.4
62	DC	11	THR	2.4

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Mol	Chain	Res	Type	RSRZ
73	c	86	VAL	2.4
79	DT	309	VAL	2.4
46	B	262	G	2.4
46	B	921	G	2.4
46	B	1186	G	2.4
1	1	2419	A	2.4
1	AS	1023	A	2.4
1	AS	1219	A	2.4
13	s	51	ARG	2.4
36	CC	62	GLN	2.4
39	CF	40	GLN	2.4
41	AN	37	ARG	2.4
45	i	93	ARG	2.4
46	CM	258	U	2.4
46	CM	491	U	2.4
46	CM	1236	U	2.4
51	CR	253	ARG	2.4
54	J	72	ARG	2.4
68	X	33	GLN	2.4
79	AR	296	GLN	2.4
82	L1	199	GLN	2.4
6	l	354	LYS	2.3
9	o	73	TYR	2.3
10	BC	250	LYS	2.3
16	BI	56	LYS	2.3
21	0	20	PRO	2.3
43	AP	35	LEU	2.3
56	L	28	LEU	2.3
56	L	150	LEU	2.3
57	M	92	LEU	2.3
51	G	10	LYS	2.3
51	G	75	LYS	2.3
62	DC	7	PRO	2.3
63	DD	51	LEU	2.3
64	DE	69	ILE	2.3
65	U	32	LEU	2.3
66	DG	27	LYS	2.3
68	X	53	TYR	2.3
73	c	31	PRO	2.3
74	DO	3	LEU	2.3
79	AR	157	ILE	2.3
79	AR	302	TYR	2.3

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Mol	Chain	Res	Type	RSRZ
80	p0	19	LEU	2.3
82	ll	179	LEU	2.3
36	AI	12	LYS	2.3
37	CD	80	LYS	2.3
38	AK	10	LYS	2.3
45	i	53	LYS	2.3
45	CL	101	LYS	2.3
10	p	206	SER	2.3
27	BT	10	SER	2.3
1	1	1577	C	2.3
1	AS	1234	C	2.3
1	AS	3193	C	2.3
29	AB	129	PHE	2.3
60	DA	7	SER	2.3
71	a	78	SER	2.3
15	BH	23	ASN	2.3
31	AD	13	ASN	2.3
46	B	379	C	2.3
46	B	482	C	2.3
46	B	695	C	2.3
46	B	1113	C	2.3
46	CM	319	C	2.3
51	G	188	ASN	2.3
66	V	35	ASP	2.3
79	AR	161	ASP	2.3
39	CF	13	GLU	2.3
48	CO	39	GLU	2.3
64	DE	101	GLU	2.3
78	DS	157	GLU	2.3
79	DT	14	GLU	2.3
5	k	51	ALA	2.3
10	BC	192	HIS	2.3
11	q	188	VAL	2.3
12	r	2	ALA	2.3
18	x	2	VAL	2.3
18	BK	57	ALA	2.3
27	9	117	ALA	2.3
30	AC	16	ALA	2.3
38	CE	47	HIS	2.3
41	AN	41	HIS	2.3
51	G	194	VAL	2.3
52	H	182	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
54	J	55	ALA	2.3
55	K	44	HIS	2.3
63	DD	129	GLY	2.3
67	W	110	GLY	2.3
69	Y	41	MET	2.3
35	CB	22	VAL	2.3
47	C	91	ALA	2.3
71	DL	134	ALA	2.3
78	DS	137	HIS	2.3
55	CV	46	VAL	2.3
77	DR	47	VAL	2.3
79	AR	105	VAL	2.3
6	AY	199	ARG	2.3
9	BB	9	THR	2.3
13	s	139	THR	2.3
29	AB	42	ARG	2.3
37	CD	97	ARG	2.3
44	CK	24	ARG	2.3
49	CP	79	ARG	2.3
53	CT	72	ARG	2.3
67	W	98	THR	2.3
70	Z	23	ARG	2.3
78	h	158	ARG	2.3
79	DT	178	TRP	2.3
5	k	5	LYS	2.3
13	s	40	LEU	2.3
7	AZ	290	ILE	2.3
8	n	10	GLN	2.3
14	t	45	LYS	2.3
20	z	177	LEU	2.3
14	BG	125	ILE	2.3
20	BM	85	LYS	2.3
24	BQ	64	LYS	2.3
26	BS	38	LEU	2.3
27	9	85	LEU	2.3
26	BS	124	ILE	2.3
30	BW	22	LYS	2.3
51	G	222	LEU	2.3
58	N	140	LEU	2.3
60	DA	45	LEU	2.3
51	G	245	ILE	2.3
55	K	158	ILE	2.3

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Mol	Chain	Res	Type	RSRZ
61	DB	31	LYS	2.3
63	S	12	LYS	2.3
63	S	115	LEU	2.3
79	DT	33	LEU	2.3
82	l1	17	LEU	2.3
82	l1	80	LEU	2.3
82	l1	193	LEU	2.3
33	AF	97	ILE	2.3
34	AG	32	ILE	2.3
35	CB	3	GLN	2.3
48	D	193	ILE	2.3
50	CQ	153	TYR	2.3
51	G	5	PRO	2.3
63	DD	107	ILE	2.3
66	V	36	ILE	2.3
10	p	227	TYR	2.3
26	BS	103	TYR	2.3
35	CB	62	TYR	2.3
50	F	121	TYR	2.3
58	CY	35	TYR	2.3
58	CY	53	TYR	2.3
60	DA	40	TYR	2.3
65	U	98	TYR	2.3
66	DG	31	PRO	2.3
79	DT	229	TYR	2.3
81	12	163	PRO	2.3
1	1	1024	U	2.3
1	1	1815	U	2.3
1	1	2185	A	2.3
1	AS	2847	U	2.3
6	AY	248	PHE	2.3
39	AL	38	PHE	2.3
46	B	139	U	2.3
46	B	1361	A	2.3
46	CM	1411	A	2.3
53	I	145	PHE	2.3
53	I	156	PHE	2.3
74	DO	79	PHE	2.3
78	h	173	PHE	2.3
1	1	2430	G	2.3
1	AS	368	G	2.3
1	AS	1242	G	2.3

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Mol	Chain	Res	Type	RSRZ
46	B	20	G	2.3
46	CM	1135	G	2.3
46	CM	1700	G	2.3
7	AZ	269	SER	2.3
49	CP	80	SER	2.3
54	CU	111	SER	2.3
45	CL	98	ASP	2.3
54	CU	154	ASP	2.3
64	T	27	ASP	2.3
71	a	38	ASP	2.3
10	BC	162	GLU	2.3
18	x	153	GLU	2.3
19	y	78	GLU	2.3
45	CL	61	GLU	2.3
53	I	150	GLU	2.3
53	I	221	GLU	2.3
53	I	225	GLU	2.3
59	O	47	GLU	2.3
57	M	1	MET	2.3
78	DS	177	MET	2.3
82	L1	1	MET	2.3
1	1	1559	C	2.3
1	1	3246	C	2.3
1	AS	173	C	2.3
3	4	91	C	2.3
6	AY	229	ALA	2.3
7	m	114	GLY	2.3
7	AZ	52	VAL	2.3
12	BE	132	GLY	2.3
36	CC	110	ALA	2.3
46	B	1467	C	2.3
49	E	88	GLY	2.3
49	CP	172	GLY	2.3
54	J	99	ALA	2.3
56	L	26	ALA	2.3
56	L	136	VAL	2.3
56	CW	69	ARG	2.3
62	R	40	ARG	2.3
63	S	73	HIS	2.3
66	DG	19	ALA	2.3
67	DH	89	VAL	2.3
79	AR	117	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
27	9	28	ARG	2.3
37	AJ	61	ARG	2.3
4	AW	71	LEU	2.3
5	k	385	LYS	2.3
5	k	387	LEU	2.3
27	BT	30	LEU	2.3
31	AD	43	LEU	2.3
34	AG	86	LYS	2.3
36	CC	32	LYS	2.3
41	AN	22	LYS	2.3
47	C	134	LYS	2.3
47	CN	174	TRP	2.3
50	F	109	LYS	2.3
47	CN	128	THR	2.3
50	CQ	97	LEU	2.3
51	CR	92	LEU	2.3
61	DB	78	LEU	2.3
62	DC	116	LEU	2.3
74	d	70	LYS	2.3
77	DR	23	LYS	2.3
82	ll	52	THR	2.3
27	9	97	ILE	2.3
28	BU	5	ILE	2.3
37	CD	57	ILE	2.3
51	G	90	ILE	2.3
56	L	45	ILE	2.3
64	T	117	ILE	2.3
7	m	4	GLN	2.3
25	7	41	GLN	2.3
53	CT	182	GLN	2.3
54	CU	96	PRO	2.3
57	M	96	PRO	2.3
68	X	14	PRO	2.3
23	BP	28	PHE	2.3
24	BQ	95	PHE	2.3
43	CJ	36	PHE	2.3
56	L	47	PHE	2.3
63	DD	137	PHE	2.3
1	AS	1567	U	2.3
1	AS	2537	U	2.3
5	k	207	SER	2.3
32	BY	99	SER	2.3

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Mol	Chain	Res	Type	RSRZ
46	B	378	U	2.3
46	CM	675	U	2.3
46	CM	1477	U	2.3
60	DA	143	SER	2.3
70	DK	128	SER	2.3
1	1	1022	A	2.3
4	j	176	ASP	2.3
11	BD	157	ASN	2.3
37	CD	87	GLU	2.3
41	CH	33	ASN	2.3
45	i	114	GLU	2.3
46	B	682	A	2.3
46	CM	1410	A	2.3
50	CQ	192	ASP	2.3
52	H	126	GLU	2.3
55	CV	8	ARG	2.3
56	L	25	ASP	2.3
59	CZ	68	GLU	2.3
60	P	78	ASN	2.3
62	R	103	ASN	2.3
63	S	98	GLU	2.3
64	DE	58	MET	2.3
65	DF	73	MET	2.3
69	Y	88	ARG	2.3
73	DN	25	ASN	2.3
79	AR	39	ASP	2.3
79	DT	136	ASN	2.3
4	AW	120	VAL	2.3
5	k	15	GLY	2.3
5	AX	374	ALA	2.3
19	y	99	ALA	2.3
22	BO	72	VAL	2.3
28	BU	16	GLY	2.3
42	AO	20	VAL	2.3
50	F	92	VAL	2.3
60	P	10	GLY	2.3
61	DB	108	GLY	2.3
70	Z	35	GLY	2.3
70	Z	119	GLY	2.3
79	DT	78	GLY	2.3
82	L1	112	ALA	2.3
82	L1	170	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
82	l1	71	ALA	2.3
82	l1	162	VAL	2.3
1	1	2432	G	2.3
1	AS	251	G	2.3
7	m	13	HIS	2.3
11	BD	141	LYS	2.3
29	BV	63	LYS	2.3
41	CH	34	CYS	2.3
44	AQ	58	LYS	2.3
46	B	1373	G	2.3
47	C	116	LYS	2.3
50	CQ	186	LYS	2.3
54	J	79	LYS	2.3
74	d	64	CYS	2.3
80	P0	75	LYS	2.3
6	l	234	LEU	2.3
7	AZ	36	LEU	2.3
10	p	94	LEU	2.3
10	BC	27	LEU	2.3
53	CT	216	LEU	2.3
56	CW	76	LEU	2.3
61	Q	97	LEU	2.3
66	DG	114	LEU	2.3
72	DM	75	LEU	2.3
79	AR	298	LEU	2.3
80	P0	15	LEU	2.3
4	AW	49	ILE	2.3
7	AZ	88	ILE	2.3
10	p	117	ILE	2.3
15	u	32	ILE	2.3
27	BT	4	ILE	2.3
31	BX	94	ILE	2.3
49	E	110	ILE	2.3
50	F	219	ILE	2.3
51	G	64	ILE	2.3
52	CS	121	ILE	2.3
52	CS	172	ILE	2.3
60	DA	25	TRP	2.3
68	DI	24	ILE	2.3
70	DK	52	ILE	2.3
72	b	71	ILE	2.3
76	DQ	7	TRP	2.3

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Mol	Chain	Res	Type	RSRZ
79	DT	257	ILE	2.3
80	p0	96	ILE	2.3
5	AX	103	THR	2.3
10	p	122	THR	2.3
10	BC	31	THR	2.3
11	BD	35	THR	2.3
30	AC	13	THR	2.3
35	CB	6	THR	2.3
37	AJ	90	THR	2.3
46	B	38	C	2.3
46	CM	1568	C	2.3
47	C	147	THR	2.3
60	P	145	THR	2.3
79	DT	144	THR	2.3
14	BG	50	PRO	2.3
64	DE	65	PRO	2.3
7	m	240	TYR	2.3
22	2	19	PHE	2.3
37	CD	38	PHE	2.3
53	CT	84	TYR	2.3
62	DC	102	PHE	2.3
79	DT	104	PHE	2.3
6	l	4	ARG	2.3
7	m	21	ARG	2.3
25	7	43	ARG	2.3
52	H	102	ARG	2.3
69	DJ	117	ARG	2.3
80	P0	60	ARG	2.3
6	AY	98	GLY	2.3
6	AY	334	ALA	2.3
10	BC	133	VAL	2.3
11	q	182	SER	2.3
15	BH	129	VAL	2.3
4	j	215	ASN	2.3
7	m	271	LYS	2.3
7	m	289	LYS	2.3
10	BC	93	LYS	2.3
10	BC	243	ALA	2.3
26	BS	105	VAL	2.3
28	AA	49	ALA	2.3
31	BX	93	SER	2.3
11	q	89	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
12	r	207	GLU	2.3
16	v	168	GLY	2.3
17	BJ	190	GLU	2.3
28	BU	109	GLU	2.3
37	AJ	86	VAL	2.3
32	BY	30	LYS	2.3
34	AG	79	GLY	2.3
34	CA	63	LYS	2.3
37	CD	8	ALA	2.3
48	D	176	VAL	2.3
52	CS	179	ALA	2.3
53	I	165	GLY	2.3
53	CT	150	GLU	2.3
58	CY	27	ALA	2.3
59	O	61	VAL	2.3
59	CZ	122	VAL	2.3
60	P	143	SER	2.3
63	DD	26	GLY	2.3
71	a	4	ALA	2.3
73	c	48	ALA	2.3
78	h	150	VAL	2.3
79	DT	306	VAL	2.3
80	p0	100	VAL	2.3
82	ll	32	VAL	2.3
20	BM	122	ASN	2.3
36	CC	65	ASN	2.3
36	CC	78	LYS	2.3
38	AK	84	LYS	2.3
45	i	100	LYS	2.3
48	CO	216	LYS	2.3
77	g	55	LYS	2.3
82	ll	168	ALA	2.3
1	AS	246	U	2.3
7	m	244	HIS	2.3
8	n	41	LEU	2.3
10	BC	66	LEU	2.3
11	BD	37	ASP	2.3
13	s	112	LEU	2.3
13	BF	111	ASP	2.3
15	u	34	ASP	2.3
55	K	88	ASN	2.3
33	AF	87	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
38	AK	67	LEU	2.3
43	CJ	70	LEU	2.3
46	B	1454	U	2.3
49	E	164	LEU	2.3
54	J	63	LEU	2.3
55	CV	44	HIS	2.3
62	DC	80	LEU	2.3
65	DF	54	LEU	2.3
68	DI	79	LEU	2.3
69	Y	93	LEU	2.3
79	AR	268	LEU	2.3
79	AR	283	ASP	2.3
82	L1	165	LEU	2.3
1	AS	2379	A	2.3
16	v	150	TRP	2.3
18	BK	58	ILE	2.3
22	BO	63	ILE	2.3
33	AF	109	ILE	2.3
37	AJ	93	ILE	2.3
46	B	298	A	2.3
46	B	299	A	2.3
46	B	1316	A	2.3
46	CM	367	A	2.3
46	CM	1361	A	2.3
50	F	169	ILE	2.3
60	DA	11	ILE	2.3
61	Q	110	ILE	2.3
67	DH	105	ILE	2.3
76	f	50	ILE	2.3
79	DT	68	ILE	2.3
80	p0	80	ILE	2.3
43	AP	10	THR	2.3
50	F	71	THR	2.3
51	CR	240	PRO	2.3
53	CT	173	PRO	2.3
64	DE	35	THR	2.3
66	DG	46	PRO	2.3
6	l	16	GLN	2.3
45	CL	163	GLN	2.3
55	CV	65	PHE	2.3
58	CY	13	PHE	2.3
62	R	12	PHE	2.3

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Mol	Chain	Res	Type	RSRZ
69	Y	99	PHE	2.3
1	AS	1558	G	2.3
1	AS	2066	G	2.3
1	AS	2428	G	2.3
46	B	23	G	2.3
46	B	683	G	2.3
46	CM	1677	G	2.3
68	X	58	TYR	2.3
76	f	55	TYR	2.3
1	1	2473	C	2.3
1	AS	1279	C	2.3
1	AS	2744	C	2.3
21	0	26	ARG	2.3
36	AI	48	ARG	2.3
49	E	135	ARG	2.3
65	DF	57	ARG	2.3
68	DI	22	ARG	2.3
76	DQ	12	ARG	2.3
12	r	101	LYS	2.3
13	s	49	LYS	2.3
13	s	115	LYS	2.3
4	j	154	ALA	2.3
4	AW	62	ALA	2.3
7	AZ	144	VAL	2.3
18	x	113	VAL	2.3
21	0	51	VAL	2.3
28	AA	96	VAL	2.3
28	BU	53	VAL	2.3
32	BY	48	VAL	2.3
33	AF	12	LYS	2.3
39	CF	31	VAL	2.3
48	D	91	VAL	2.3
49	CP	174	VAL	2.3
7	AZ	169	GLY	2.3
50	F	53	ALA	2.3
51	CR	232	ALA	2.3
53	I	158	VAL	2.3
58	N	7	VAL	2.3
61	DB	8	VAL	2.3
71	a	27	VAL	2.3
71	DL	12	VAL	2.3
71	DL	24	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
77	g	20	LYS	2.3
78	DS	131	LYS	2.3
52	H	150	GLY	2.3
54	CU	183	GLY	2.3
55	K	34	ALA	2.3
55	CV	34	ALA	2.3
78	DS	156	VAL	2.3
55	CV	118	GLY	2.3
63	S	26	GLY	2.3
69	DJ	67	GLY	2.3
78	h	154	GLY	2.3
79	AR	106	GLY	2.3
5	AX	125	SER	2.3
5	AX	134	SER	2.3
6	l	19	SER	2.3
6	l	185	SER	2.3
6	AY	86	SER	2.3
6	AY	227	GLU	2.3
7	m	104	LEU	2.3
9	o	177	LEU	2.3
10	p	137	LEU	2.3
10	BC	196	SER	2.3
13	s	30	LEU	2.3
16	BI	134	LEU	2.3
18	x	20	SER	2.3
20	BM	69	SER	2.3
31	BX	100	SER	2.3
33	BZ	88	LEU	2.3
42	AO	13	LEU	2.3
47	C	120	LEU	2.3
51	CR	199	GLU	2.3
54	J	130	GLU	2.3
61	Q	28	LEU	2.3
64	T	94	SER	2.3
64	DE	18	GLU	2.3
76	f	36	LEU	2.3
78	DS	162	GLU	2.3
9	o	207	ASN	2.2
11	q	4	ILE	2.2
47	C	13	ASP	2.2
47	CN	144	ILE	2.2
51	G	154	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
52	H	60	ASP	2.2
59	CZ	26	ASP	2.2
64	T	56	HIS	2.2
65	U	99	HIS	2.2
69	DJ	125	ILE	2.2
78	DS	155	ASN	2.2
59	CZ	100	TRP	2.2
60	P	139	TRP	2.2
1	1	2832	U	2.2
1	1	3162	U	2.2
1	AS	252	U	2.2
1	AS	2926	U	2.2
5	k	139	THR	2.2
16	BI	45	PRO	2.2
18	x	8	PRO	2.2
29	BV	53	PHE	2.2
39	CF	38	PHE	2.2
47	C	199	PRO	2.2
49	E	46	THR	2.2
50	CQ	222	PRO	2.2
55	K	185	CYS	2.2
56	CW	147	THR	2.2
59	CZ	79	CYS	2.2
62	R	5	THR	2.2
62	DC	87	PRO	2.2
73	c	40	THR	2.2
74	DO	64	CYS	2.2
1	1	402	A	2.2
13	BF	6	GLN	2.2
13	BF	116	TYR	2.2
46	B	1202	A	2.2
46	CM	777	A	2.2
51	CR	68	GLN	2.2
54	CU	19	GLN	2.2
66	V	25	GLN	2.2
66	V	129	GLN	2.2
69	DJ	101	TYR	2.2
79	DT	4	GLN	2.2
7	AZ	273	ARG	2.2
18	x	135	ARG	2.2
48	D	213	ARG	2.2
50	F	166	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
50	F	174	ARG	2.2
56	L	23	ARG	2.2
68	X	62	ARG	2.2
73	DN	42	ARG	2.2
9	BB	156	LYS	2.2
15	BH	94	LYS	2.2
37	AJ	69	LYS	2.2
49	E	156	LYS	2.2
51	CR	200	LYS	2.2
53	I	220	LYS	2.2
54	CU	97	LYS	2.2
54	CU	107	LYS	2.2
79	DT	44	LYS	2.2
82	L1	39	LYS	2.2
11	q	57	VAL	2.2
30	BW	35	VAL	2.2
36	CC	66	VAL	2.2
48	D	125	VAL	2.2
49	E	96	VAL	2.2
51	G	46	VAL	2.2
54	CU	178	VAL	2.2
64	DE	66	VAL	2.2
71	a	55	VAL	2.2
79	AR	166	VAL	2.2
6	l	54	ALA	2.2
10	p	59	LEU	2.2
10	BC	207	ALA	2.2
11	q	131	GLY	2.2
15	u	7	ALA	2.2
16	BI	107	GLY	2.2
17	w	20	LEU	2.2
19	BL	49	LEU	2.2
24	6	16	ALA	2.2
29	AB	114	GLY	2.2
30	AC	47	LEU	2.2
31	BX	86	LEU	2.2
33	AF	70	ALA	2.2
49	E	175	ALA	2.2
50	F	86	ALA	2.2
52	H	105	GLY	2.2
54	J	73	LEU	2.2
60	DA	72	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
66	DG	28	LEU	2.2
68	X	79	LEU	2.2
69	DJ	10	ALA	2.2
74	d	71	ALA	2.2
79	DT	271	LEU	2.2
80	P0	47	GLY	2.2
1	AS	243	G	2.2
1	AS	1215	C	2.2
1	AS	1226	G	2.2
1	AS	1559	C	2.2
1	AS	2527	G	2.2
2	3	73	C	2.2
46	B	1140	G	2.2
46	B	1421	G	2.2
46	B	1697	C	2.2
46	CM	261	C	2.2
60	DA	83	GLU	2.2
62	DC	32	GLU	2.2
77	DR	22	GLU	2.2
7	m	81	HIS	2.2
9	o	72	SER	2.2
13	s	48	SER	2.2
15	BH	2	SER	2.2
18	x	110	SER	2.2
19	y	15	HIS	2.2
26	BS	139	ILE	2.2
36	AI	98	SER	2.2
39	CF	24	ILE	2.2
40	CG	27	ILE	2.2
48	D	32	ILE	2.2
49	CP	194	SER	2.2
55	CV	43	ILE	2.2
57	M	35	ILE	2.2
59	CZ	49	SER	2.2
75	DP	53	ILE	2.2
28	AA	88	ASP	2.2
39	CF	34	ASN	2.2
15	u	10	TRP	2.2
16	BI	200	TRP	2.2
47	CN	175	TRP	2.2
71	a	26	ASP	2.2
79	DT	19	TRP	2.2

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Mol	Chain	Res	Type	RSRZ
11	q	30	PRO	2.2
12	r	159	PHE	2.2
21	0	30	PHE	2.2
33	BZ	47	PHE	2.2
54	J	60	PRO	2.2
54	CU	39	PHE	2.2
63	S	137	PHE	2.2
73	DN	31	PRO	2.2
16	BI	196	THR	2.2
18	x	32	THR	2.2
20	BM	6	THR	2.2
20	BM	131	THR	2.2
47	C	40	THR	2.2
74	DO	61	THR	2.2
79	AR	193	THR	2.2
79	DT	280	THR	2.2
3	AU	127	U	2.2
9	BB	108	GLN	2.2
22	BO	16	GLN	2.2
37	AJ	97	ARG	2.2
28	BU	52	LYS	2.2
30	AC	40	LYS	2.2
30	BW	15	LYS	2.2
34	AG	8	TYR	2.2
34	CA	31	GLN	2.2
37	CD	52	TYR	2.2
39	CF	66	GLN	2.2
46	B	816	U	2.2
49	E	184	GLN	2.2
54	CU	108	ARG	2.2
56	CW	48	GLN	2.2
59	O	43	ARG	2.2
67	W	88	ARG	2.2
75	e	29	ARG	2.2
14	BG	128	LYS	2.2
24	BQ	120	LYS	2.2
45	CL	85	LYS	2.2
62	DC	23	LYS	2.2
64	T	59	LYS	2.2
70	Z	29	TYR	2.2
80	p0	81	LYS	2.2
10	BC	204	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
35	AH	42	VAL	2.2
51	CR	183	VAL	2.2
56	CW	172	VAL	2.2
77	g	21	VAL	2.2
1	1	2117	A	2.2
1	1	3050	A	2.2
1	AS	664	A	2.2
10	p	151	LEU	2.2
16	v	134	LEU	2.2
17	w	181	ALA	2.2
21	0	124	LEU	2.2
31	AD	27	LEU	2.2
46	B	39	A	2.2
46	B	678	A	2.2
46	CM	832	A	2.2
48	D	207	LEU	2.2
49	CP	123	ALA	2.2
51	G	42	LEU	2.2
52	H	25	LEU	2.2
59	O	103	LEU	2.2
64	DE	51	ALA	2.2
73	c	35	ALA	2.2
10	p	183	GLY	2.2
23	5	70	GLY	2.2
50	CQ	181	GLY	2.2
79	AR	78	GLY	2.2
11	q	48	ILE	2.2
11	q	75	ILE	2.2
26	8	135	ILE	2.2
35	AH	54	ILE	2.2
50	F	209	ILE	2.2
50	CQ	67	ILE	2.2
64	T	17	ILE	2.2
68	X	24	ILE	2.2
79	AR	123	ILE	2.2
82	L1	183	ILE	2.2
82	l1	120	ILE	2.2
7	m	117	GLU	2.2
14	t	20	GLU	2.2
28	AA	119	GLU	2.2
36	CC	18	GLU	2.2
65	DF	60	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
79	DT	5	GLU	2.2
11	q	64	HIS	2.2
51	G	17	HIS	2.2
56	L	123	HIS	2.2
9	o	70	SER	2.2
14	BG	137	SER	2.2
21	0	65	SER	2.2
51	CR	223	SER	2.2
52	CS	71	SER	2.2
63	DD	5	SER	2.2
7	m	57	ASN	2.2
7	AZ	94	ASN	2.2
11	q	46	ASN	2.2
11	q	149	ASN	2.2
22	2	159	PHE	2.2
30	AC	30	PRO	2.2
33	AF	54	PRO	2.2
46	B	292	C	2.2
46	CM	296	C	2.2
46	CM	1586	C	2.2
51	G	35	PRO	2.2
52	H	103	ASN	2.2
56	L	104	PHE	2.2
59	O	126	TRP	2.2
69	DJ	89	TRP	2.2
76	f	7	TRP	2.2
47	C	35	PRO	2.2
56	CW	2	PRO	2.2
72	DM	86	ASP	2.2
8	n	170	ARG	2.2
1	AS	539	G	2.2
7	AZ	9	THR	2.2
16	v	192	LYS	2.2
17	w	68	LYS	2.2
28	BU	67	LYS	2.2
39	AL	30	LYS	2.2
46	B	1559	G	2.2
46	CM	702	G	2.2
46	CM	799	G	2.2
49	E	112	THR	2.2
51	CR	159	THR	2.2
53	I	95	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
53	CT	227	LYS	2.2
54	CU	171	LYS	2.2
55	K	97	THR	2.2
66	V	56	LYS	2.2
66	V	139	THR	2.2
66	DG	39	THR	2.2
76	f	16	LYS	2.2
7	m	12	TYR	2.2
13	BF	39	GLN	2.2
21	0	94	TYR	2.2
29	AB	48	TYR	2.2
33	AF	58	TYR	2.2
41	AN	34	CYS	2.2
50	F	158	MET	2.2
58	N	35	TYR	2.2
58	N	97	TYR	2.2
59	O	104	CYS	2.2
60	P	129	TYR	2.2
77	g	31	GLN	2.2
79	DT	162	GLN	2.2
10	p	131	VAL	2.2
10	p	133	VAL	2.2
11	BD	126	VAL	2.2
22	2	93	VAL	2.2
47	C	123	VAL	2.2
49	E	153	VAL	2.2
50	CQ	101	VAL	2.2
62	R	112	VAL	2.2
63	DD	77	VAL	2.2
69	DJ	40	VAL	2.2
75	e	41	VAL	2.2
79	DT	166	VAL	2.2
6	l	195	LEU	2.2
26	8	40	LEU	2.2
37	AJ	76	LEU	2.2
51	G	56	LEU	2.2
73	c	67	LEU	2.2
79	AR	95	LEU	2.2
82	L1	123	LEU	2.2
1	AS	975	U	2.2
1	AS	2187	U	2.2
1	AS	2814	U	2.2

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Mol	Chain	Res	Type	RSRZ
2	AT	54	U	2.2
18	BK	184	ALA	2.2
28	AA	11	ALA	2.2
37	AJ	7	ALA	2.2
45	i	133	ALA	2.2
46	B	752	U	2.2
47	C	130	ALA	2.2
56	CW	135	ALA	2.2
66	V	50	ALA	2.2
6	AY	174	GLY	2.2
23	5	48	GLY	2.2
35	CB	28	GLY	2.2
69	DJ	127	GLY	2.2
82	L1	51	GLY	2.2
7	AZ	231	ILE	2.2
36	AI	51	ILE	2.2
50	CQ	139	ILE	2.2
53	I	16	ILE	2.2
55	CV	158	ILE	2.2
82	L1	206	ILE	2.2
1	1	2440	A	2.2
9	o	14	GLU	2.2
14	t	139	GLU	2.2
45	i	128	GLU	2.2
11	q	58	HIS	2.2
22	2	54	HIS	2.2
35	CB	34	HIS	2.2
46	B	741	A	2.2
46	B	1476	A	2.2
46	CM	814	A	2.2
54	CU	130	GLU	2.2
59	CZ	25	GLU	2.2
65	DF	65	GLU	2.2
67	DH	108	GLU	2.2
4	j	14	SER	2.2
7	AZ	142	PHE	2.2
8	n	65	SER	2.2
10	BC	99	ARG	2.2
21	BN	143	PHE	2.2
22	BO	159	PHE	2.2
41	CH	26	ARG	2.2
42	CI	6	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
45	CL	35	SER	2.2
4	AW	70	LYS	2.2
6	l	362	LYS	2.2
10	BC	252	LYS	2.2
17	w	90	PRO	2.2
50	F	147	ARG	2.2
52	CS	146	SER	2.2
54	CU	92	ARG	2.2
60	P	6	SER	2.2
60	P	111	SER	2.2
67	W	27	SER	2.2
67	DH	78	TRP	2.2
70	DK	144	ARG	2.2
79	AR	83	SER	2.2
79	DT	62	PHE	2.2
16	BI	90	ASN	2.2
18	x	169	ASN	2.2
18	BK	164	LYS	2.2
28	AA	27	LYS	2.2
37	CD	12	LYS	2.2
55	CV	75	LYS	2.2
56	L	115	LYS	2.2
61	DB	87	LYS	2.2
63	DD	29	LYS	2.2
73	DN	98	PRO	2.2
48	CO	49	ASN	2.2
79	DT	213	LYS	2.2
12	r	192	ASP	2.2
53	I	151	ASP	2.2
62	R	3	ASP	2.2
51	G	146	THR	2.2
53	CT	12	THR	2.2
63	S	52	THR	2.2
79	DT	230	THR	2.2
82	ll	149	THR	2.2
4	j	22	LEU	2.2
6	l	361	LEU	2.2
8	BA	75	LEU	2.2
13	s	39	GLN	2.2
13	s	71	VAL	2.2
14	BG	24	VAL	2.2
14	BG	123	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
22	2	84	TYR	2.2
23	BP	12	VAL	2.2
46	B	557	C	2.2
46	B	1453	C	2.2
46	CM	1602	C	2.2
47	C	182	LEU	2.2
51	G	102	VAL	2.2
51	G	140	VAL	2.2
51	G	149	TYR	2.2
51	CR	129	VAL	2.2
53	I	102	VAL	2.2
54	J	140	VAL	2.2
55	K	58	LEU	2.2
55	K	202	LEU	2.2
56	CW	95	TYR	2.2
60	DA	49	GLN	2.2
63	DD	141	TYR	2.2
65	DF	18	LEU	2.2
69	DJ	74	VAL	2.2
74	d	73	LEU	2.2
75	e	27	GLN	2.2
75	DP	28	VAL	2.2
76	DQ	55	TYR	2.2
5	k	8	ALA	2.2
6	l	190	ALA	2.2
28	BU	19	ALA	2.2
35	CB	82	ALA	2.2
45	i	156	ALA	2.2
51	CR	55	ALA	2.2
53	I	192	ALA	2.2
66	V	96	ALA	2.2
5	AX	253	GLY	2.2
51	G	167	GLY	2.2
70	Z	51	GLY	2.2
1	1	1537	G	2.2
1	AS	1562	G	2.2
1	AS	2455	G	2.2
7	m	185	ILE	2.2
23	5	96	ILE	2.2
27	BT	80	ILE	2.2
46	B	1149	G	2.2
46	B	1369	G	2.2

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Mol	Chain	Res	Type	RSRZ
46	B	1419	G	2.2
46	B	1498	G	2.2
46	B	1672	G	2.2
46	CM	1472	G	2.2
49	E	120	ILE	2.2
1	1	2637	U	2.2
46	B	637	U	2.2
46	B	779	U	2.2
46	CM	727	U	2.2
46	CM	1328	U	2.2
6	AY	64	GLU	2.2
13	BF	51	ARG	2.2
24	6	68	GLU	2.2
28	BU	15	ARG	2.2
33	AF	31	GLU	2.2
53	CT	222	GLU	2.2
57	M	18	GLU	2.2
79	AR	67	HIS	2.2
79	AR	99	GLU	2.2
5	AX	385	LYS	2.2
7	AZ	260	PHE	2.2
13	s	16	LYS	2.2
17	BJ	54	LYS	2.2
22	BO	19	PHE	2.2
35	AH	43	LYS	2.2
36	CC	94	LYS	2.2
37	CD	24	LYS	2.2
41	CH	22	LYS	2.2
48	D	38	PHE	2.2
57	CX	41	PHE	2.2
62	DC	45	PHE	2.2
75	e	11	LYS	2.2
35	AH	59	PRO	2.2
45	i	57	PRO	2.2
1	1	2469	A	2.2
46	B	479	A	2.2
59	CZ	53	SER	2.2
10	BC	174	MET	2.2
39	AL	32	ASN	2.2
45	i	66	ASN	2.2
45	CL	66	ASN	2.2
52	CS	169	ASN	2.2

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Mol	Chain	Res	Type	RSRZ
6	AY	152	VAL	2.2
10	p	95	LEU	2.2
19	y	32	LEU	2.2
26	8	30	THR	2.2
27	9	118	LEU	2.2
29	BV	112	VAL	2.2
48	D	153	THR	2.2
51	G	192	VAL	2.2
51	G	219	VAL	2.2
52	H	174	LEU	2.2
53	CT	158	VAL	2.2
59	O	34	THR	2.2
60	DA	145	THR	2.2
61	Q	8	VAL	2.2
62	R	124	THR	2.2
62	DC	94	VAL	2.2
65	U	112	ASP	2.2
69	Y	7	LEU	2.2
69	Y	54	ASP	2.2
70	DK	93	LEU	2.2
71	a	79	VAL	2.2
72	DM	80	LEU	2.2
78	DS	167	THR	2.2
81	12	139	VAL	2.2
9	BB	48	ALA	2.1
13	s	136	ALA	2.1
15	u	112	GLN	2.2
20	z	178	ALA	2.1
21	0	164	GLN	2.2
47	C	36	TYR	2.2
53	I	199	GLN	2.2
54	J	169	TYR	2.2
58	N	144	ALA	2.1
63	S	93	GLN	2.2
68	X	75	GLN	2.2
74	DO	27	GLN	2.2
7	m	127	GLY	2.1
53	CT	80	GLY	2.1
55	K	68	GLY	2.1
63	DD	71	GLY	2.1
64	T	98	GLY	2.1
76	f	51	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
10	BC	161	ILE	2.1
11	BD	55	ILE	2.1
12	r	166	ILE	2.1
22	2	48	ILE	2.1
36	CC	109	ILE	2.1
41	AN	15	CYS	2.1
41	AN	19	ILE	2.1
50	F	74	ILE	2.1
52	H	187	ILE	2.1
56	L	77	ILE	2.1
61	DB	71	ILE	2.1
63	DD	62	ILE	2.1
67	W	23	ILE	2.1
79	DT	138	ILE	2.1
82	ll	216	ILE	2.1
46	B	13	C	2.1
46	B	1412	C	2.1
46	CM	280	C	2.1
46	CM	1365	C	2.1
35	AH	16	ARG	2.1
47	C	79	ARG	2.1
50	F	117	ARG	2.1
55	CV	47	ARG	2.1
76	DQ	56	ARG	2.1
4	j	68	LYS	2.1
23	BP	98	PHE	2.1
25	BR	8	PHE	2.1
30	BW	39	PHE	2.1
36	AI	94	LYS	2.1
45	i	55	LYS	2.1
52	H	84	LYS	2.1
52	H	106	LYS	2.1
62	DC	35	LYS	2.1
66	DG	38	LYS	2.1
67	DH	76	LYS	2.1
54	CU	123	GLU	2.1
80	P0	66	PHE	2.1
46	B	258	U	2.1
1	1	3174	G	2.1
1	AS	1260	G	2.1
46	B	676	G	2.1
46	B	1214	G	2.1

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Mol	Chain	Res	Type	RSRZ
46	B	1218	G	2.1
46	CM	1093	G	2.1
46	CM	1597	G	2.1
60	P	17	PRO	2.1
79	AR	248	TRP	2.1
53	CT	68	MET	2.1
7	AZ	195	LEU	2.1
10	p	132	VAL	2.1
10	p	198	VAL	2.1
18	BK	2	VAL	2.1
19	y	138	LEU	2.1
27	9	9	SER	2.1
37	AJ	43	VAL	2.1
44	CK	79	VAL	2.1
47	CN	158	VAL	2.1
48	D	186	SER	2.1
48	CO	110	LEU	2.1
48	CO	134	VAL	2.1
49	E	174	VAL	2.1
50	F	45	SER	2.1
50	CQ	114	LEU	2.1
51	G	32	SER	2.1
52	H	90	VAL	2.1
53	I	111	LEU	2.1
54	CU	117	VAL	2.1
55	CV	60	VAL	2.1
59	O	32	LEU	2.1
60	P	75	LEU	2.1
62	DC	120	SER	2.1
69	Y	40	VAL	2.1
71	DL	57	VAL	2.1
72	b	60	VAL	2.1
79	AR	175	VAL	2.1
79	AR	237	VAL	2.1
79	DT	83	SER	2.1
9	o	9	THR	2.1
22	BO	45	ASN	2.1
35	AH	11	ASN	2.1
39	AL	77	ASN	2.1
45	CL	33	ASN	2.1
57	M	28	ASN	2.1
72	b	102	THR	2.1

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Mol	Chain	Res	Type	RSRZ
73	DN	90	THR	2.1
76	f	13	ASN	2.1
79	AR	303	THR	2.1
6	AY	238	GLN	2.1
7	AZ	67	ALA	2.1
25	BR	110	ALA	2.1
30	AC	59	ALA	2.1
35	AH	3	GLN	2.1
36	CC	82	ALA	2.1
41	AN	13	TYR	2.1
47	CN	129	ASP	2.1
25	7	96	GLN	2.1
45	i	104	GLN	2.1
55	K	103	GLN	2.1
56	L	34	TYR	2.1
60	P	81	ALA	2.1
61	Q	45	ALA	2.1
64	DE	92	ASP	2.1
63	S	4	GLN	2.1
79	AR	263	GLN	2.1
79	DT	143	ALA	2.1
46	B	112	A	2.1
46	B	216	A	2.1
46	B	452	A	2.1
46	B	1584	A	2.1
46	CM	472	A	2.1
46	CM	1326	A	2.1
7	AZ	239	ILE	2.1
10	p	175	GLY	2.1
13	s	114	ILE	2.1
19	y	119	GLY	2.1
27	BT	124	GLY	2.1
31	BX	102	ILE	2.1
48	CO	32	ILE	2.1
50	F	134	GLY	2.1
50	F	189	ILE	2.1
50	CQ	129	GLY	2.1
52	H	190	ILE	2.1
52	CS	130	ILE	2.1
69	Y	73	GLY	2.1
72	DM	39	ILE	2.1
72	DM	71	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
79	DT	57	ILE	2.1
18	x	3	ARG	2.1
53	I	177	ARG	2.1
65	DF	41	ARG	2.1
66	V	68	ARG	2.1
70	Z	32	ARG	2.1
70	DK	19	ARG	2.1
78	h	138	ARG	2.1
7	m	5	LYS	2.1
10	BC	64	LYS	2.1
27	9	64	LYS	2.1
27	BT	87	LYS	2.1
33	AF	78	LYS	2.1
48	CO	160	LYS	2.1
53	CT	149	LYS	2.1
59	O	90	LYS	2.1
60	P	140	LYS	2.1
34	AG	85	PHE	2.1
36	CC	69	PHE	2.1
61	Q	9	PHE	2.1
63	DD	108	PHE	2.1
13	s	11	GLU	2.1
16	BI	131	GLU	2.1
19	BL	78	GLU	2.1
20	z	152	GLU	2.1
28	AA	31	GLU	2.1
51	CR	8	HIS	2.1
54	J	123	GLU	2.1
60	P	5	HIS	2.1
65	U	127	HIS	2.1
70	DK	141	GLU	2.1
82	ll	33	GLU	2.1
1	AS	350	C	2.1
6	l	30	PRO	2.1
6	AY	22	PRO	2.1
46	B	706	C	2.1
46	B	763	C	2.1
46	CM	467	C	2.1
49	CP	222	PRO	2.1
51	CR	43	PRO	2.1
9	o	161	LEU	2.1
10	BC	83	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
13	s	80	LEU	2.1
30	AC	32	LEU	2.1
33	AF	83	LEU	2.1
45	CL	64	LEU	2.1
53	CT	77	LEU	2.1
54	CU	150	LEU	2.1
60	DA	80	LEU	2.1
71	DL	40	LEU	2.1
79	AR	180	LEU	2.1
79	DT	82	LEU	2.1
13	BF	36	VAL	2.1
14	t	161	VAL	2.1
14	BG	141	VAL	2.1
18	BK	51	VAL	2.1
27	BT	82	VAL	2.1
51	CR	45	VAL	2.1
52	CS	90	VAL	2.1
56	CW	85	VAL	2.1
62	DC	93	VAL	2.1
67	W	30	VAL	2.1
77	DR	21	VAL	2.1
79	DT	72	VAL	2.1
80	P0	84	VAL	2.1
82	L1	82	VAL	2.1
1	1	483	U	2.1
1	AS	146	U	2.1
1	AS	168	U	2.1
1	AS	2068	U	2.1
2	AT	14	U	2.1
46	B	1274	U	2.1
46	CM	638	U	2.1
12	r	201	SER	2.1
23	BP	11	SER	2.1
79	DT	164	SER	2.1
6	l	219	ALA	2.1
7	AZ	70	THR	2.1
10	p	257	ALA	2.1
13	s	70	THR	2.1
16	v	39	ALA	2.1
32	BY	84	ALA	2.1
32	BY	100	THR	2.1
39	CF	62	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
43	AP	7	THR	2.1
45	CL	58	THR	2.1
48	D	203	THR	2.1
51	G	230	THR	2.1
52	H	210	ALA	2.1
53	I	180	THR	2.1
56	L	98	ALA	2.1
58	CY	63	THR	2.1
65	DF	33	THR	2.1
70	DK	28	ALA	2.1
74	DO	52	THR	2.1
79	AR	286	ALA	2.1
80	p0	62	ALA	2.1
82	L1	21	THR	2.1
11	q	180	TYR	2.1
18	x	10	ASN	2.1
37	CD	62	ASN	2.1
55	K	52	ASN	2.1
6	l	212	GLN	2.1
10	BC	78	GLN	2.1
1	1	91	G	2.1
1	AS	2458	G	2.1
11	q	177	ASP	2.1
13	s	65	ILE	2.1
13	s	148	ILE	2.1
13	BF	107	ASP	2.1
18	BK	179	GLN	2.1
29	AB	22	ILE	2.1
35	AH	108	GLN	2.1
40	AM	32	ASP	2.1
48	CO	202	GLN	2.1
50	F	139	ILE	2.1
52	H	172	ILE	2.1
57	CX	13	GLN	2.1
60	P	92	ILE	2.1
61	Q	71	ILE	2.1
66	V	12	GLN	2.1
70	DK	108	GLY	2.1
76	f	17	GLY	2.1
82	L1	120	ILE	2.1
5	k	236	LYS	2.1
5	k	266	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
5	AX	325	LYS	2.1
7	AZ	270	LYS	2.1
16	BI	77	LYS	2.1
19	y	50	LYS	2.1
19	y	176	ARG	2.1
20	z	71	ARG	2.1
46	B	1183	G	2.1
46	B	1394	G	2.1
46	B	1470	G	2.1
46	CM	282	G	2.1
22	2	50	LYS	2.1
25	7	129	LYS	2.1
28	AA	93	LYS	2.1
30	BW	5	LYS	2.1
32	AE	33	LYS	2.1
38	AK	3	LYS	2.1
57	M	10	LYS	2.1
61	DB	123	ARG	2.1
64	DE	63	LYS	2.1
71	a	11	LYS	2.1
72	DM	46	LYS	2.1
73	c	38	ARG	2.1
77	g	26	LYS	2.1
1	1	780	A	2.1
1	1	2427	A	2.1
7	AZ	75	PHE	2.1
13	BF	163	PHE	2.1
46	B	1570	A	2.1
66	DG	54	PHE	2.1
76	f	52	PHE	2.1
82	ll	72	PHE	2.1
33	AF	42	CYS	2.1
76	DQ	39	CYS	2.1
6	AY	359	GLU	2.1
7	AZ	128	GLU	2.1
16	BI	29	GLU	2.1
32	BY	3	LEU	2.1
41	AN	1	MET	2.1
47	C	146	LEU	2.1
47	CN	146	LEU	2.1
49	E	185	LEU	2.1
50	CQ	82	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
59	O	38	HIS	2.1
51	G	182	MET	2.1
54	J	180	GLU	2.1
61	Q	111	GLU	2.1
53	I	147	LEU	2.1
54	CU	128	PRO	2.1
62	R	7	PRO	2.1
62	R	53	PRO	2.1
62	DC	110	GLU	2.1
56	L	99	LEU	2.1
58	N	40	LEU	2.1
71	DL	17	LEU	2.1
7	m	173	VAL	2.1
23	BP	68	VAL	2.1
28	BU	75	VAL	2.1
29	BV	125	VAL	2.1
50	F	13	VAL	2.1
50	F	75	VAL	2.1
50	CQ	38	VAL	2.1
53	I	114	VAL	2.1
62	R	85	VAL	2.1
63	DD	47	VAL	2.1
70	DK	130	VAL	2.1
74	d	35	VAL	2.1
79	AR	220	TRP	2.1
1	AS	174	C	2.1
1	AS	1275	C	2.1
7	m	109	ALA	2.1
8	BA	5	ALA	2.1
22	BO	24	ALA	2.1
28	BU	49	ALA	2.1
33	AF	98	ALA	2.1
36	AI	82	ALA	2.1
38	AK	85	ALA	2.1
46	B	261	C	2.1
46	B	1090	C	2.1
46	B	1589	C	2.1
46	B	1621	C	2.1
46	CM	1081	C	2.1
47	CN	60	ALA	2.1
58	N	25	ALA	2.1
59	O	42	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
5	k	328	ILE	2.1
13	s	5	SER	2.1
14	t	85	ILE	2.1
19	y	6	THR	2.1
21	0	169	THR	2.1
22	2	142	SER	2.1
23	5	73	SER	2.1
26	BS	128	SER	2.1
27	BT	13	SER	2.1
28	BU	105	SER	2.1
37	CD	96	SER	2.1
44	CK	11	THR	2.1
52	H	176	THR	2.1
53	I	71	THR	2.1
53	CT	168	THR	2.1
51	CR	103	TYR	2.1
55	K	38	ILE	2.1
58	CY	49	ILE	2.1
58	CY	86	ILE	2.1
65	DF	35	ILE	2.1
68	X	51	ILE	2.1
69	DJ	83	ILE	2.1
71	a	14	SER	2.1
71	DL	69	SER	2.1
1	1	2438	U	2.1
1	1	2477	U	2.1
1	AS	3317	U	2.1
6	l	69	GLY	2.1
6	AY	119	LYS	2.1
6	AY	225	GLY	2.1
7	m	49	TYR	2.1
7	m	119	TYR	2.1
7	AZ	220	LYS	2.1
20	BM	124	TYR	2.1
23	BP	86	TYR	2.1
30	AC	14	ARG	2.1
32	BY	85	LYS	2.1
36	AI	32	LYS	2.1
36	AI	75	TYR	2.1
37	AJ	24	LYS	2.1
39	AL	52	TYR	2.1
10	p	156	ASN	2.1

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Mol	Chain	Res	Type	RSRZ
12	r	205	ASN	2.1
16	BI	175	ASN	2.1
18	BK	37	ASN	2.1
23	5	71	ASN	2.1
23	BP	104	ASN	2.1
41	AN	44	GLN	2.1
46	B	176	U	2.1
46	B	1044	U	2.1
46	B	1091	U	2.1
53	CT	171	LYS	2.1
53	CT	223	ARG	2.1
56	L	73	GLY	2.1
53	I	185	GLN	2.1
59	CZ	73	LYS	2.1
62	R	58	LYS	2.1
62	DC	52	LYS	2.1
62	DC	55	GLY	2.1
63	S	130	GLY	2.1
64	T	80	ARG	2.1
65	DF	36	ARG	2.1
66	V	33	TYR	2.1
66	DG	92	LYS	2.1
71	a	94	TYR	2.1
72	DM	101	TYR	2.1
77	DR	52	GLY	2.1
79	AR	256	GLY	2.1
71	DL	133	ASN	2.1
73	DN	43	ASN	2.1
79	AR	136	ASN	2.1
81	12	147	ASN	2.1
10	p	125	ASP	2.1
18	BK	154	ASP	2.1
32	BY	83	ASP	2.1
51	G	79	ASP	2.1
51	CR	212	ASP	2.1
56	L	103	ASP	2.1
59	CZ	93	ASP	2.1
7	m	180	PHE	2.1
16	v	130	PHE	2.1
38	AK	74	PHE	2.1
63	DD	45	PHE	2.1
1	AS	1258	G	2.1

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Mol	Chain	Res	Type	RSRZ
1	AS	1278	G	2.1
2	AT	49	G	2.1
4	j	66	PRO	2.1
6	AY	220	LEU	2.1
7	m	113	LEU	2.1
7	m	139	PRO	2.1
17	BJ	20	LEU	2.1
36	CC	9	LEU	2.1
46	B	608	G	2.1
46	CM	831	G	2.1
46	CM	860	G	2.1
46	CM	1575	G	2.1
47	C	59	LEU	2.1
51	G	15	PRO	2.1
51	CR	48	LEU	2.1
54	J	82	PRO	2.1
61	Q	132	LEU	2.1
70	DK	132	LEU	2.1
71	a	44	LEU	2.1
76	f	38	LEU	2.1
78	DS	163	CYS	2.1
79	DT	90	LEU	2.1
1	1	730	A	2.1
1	1	2943	A	2.1
1	AS	2418	A	2.1
7	m	186	GLU	2.1
8	n	108	GLU	2.1
17	w	127	VAL	2.1
20	BM	68	GLU	2.1
24	6	136	VAL	2.1
27	9	59	VAL	2.1
46	CM	1618	A	2.1
49	E	227	GLU	2.1
49	CP	125	VAL	2.1
54	J	69	VAL	2.1
54	J	158	VAL	2.1
55	K	89	GLU	2.1
59	CZ	61	VAL	2.1
60	DA	34	VAL	2.1
79	DT	69	VAL	2.1
79	DT	96	GLU	2.1
69	Y	89	TRP	2.1

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Mol	Chain	Res	Type	RSRZ
70	Z	24	TRP	2.1
79	AR	135	TRP	2.1
13	s	134	ALA	2.1
25	7	103	ALA	2.1
39	CF	29	ALA	2.1
50	F	89	ALA	2.1
52	CS	36	ALA	2.1
53	CT	138	ALA	2.1
62	R	74	ALA	2.1
66	V	41	ALA	2.1
71	a	19	ALA	2.1
79	AR	233	ALA	2.1
79	DT	181	ALA	2.1
5	k	117	ARG	2.1
7	m	288	LYS	2.1
7	AZ	185	ILE	2.1
11	q	99	ILE	2.1
20	z	67	LYS	2.1
20	z	143	ILE	2.1
23	BP	77	LYS	2.1
34	CA	32	ILE	2.1
36	CC	119	LYS	2.1
41	CH	17	LYS	2.1
51	CR	211	LYS	2.1
52	H	89	ILE	2.1
52	CS	106	LYS	2.1
56	L	134	ILE	2.1
60	DA	107	LYS	2.1
61	DB	122	ARG	2.1
64	T	61	ILE	2.1
75	e	18	ARG	2.1
79	AR	118	LYS	2.1
81	12	160	ILE	2.1
82	L1	4	ILE	2.1
82	L1	195	LYS	2.1
4	j	249	THR	2.1
7	AZ	165	GLY	2.1
10	BC	175	GLY	2.1
21	BN	74	THR	2.1
22	2	62	GLY	2.1
14	t	144	SER	2.1
23	5	111	TYR	2.1

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Mol	Chain	Res	Type	RSRZ
41	AN	32	THR	2.1
51	CR	230	THR	2.1
64	DE	96	THR	2.1
66	V	32	GLY	2.1
67	DH	65	THR	2.1
70	Z	4	GLY	2.1
77	DR	48	THR	2.1
80	P0	2	GLY	2.1
27	9	94	SER	2.1
51	G	223	SER	2.1
70	DK	40	SER	2.1
80	P0	22	TYR	2.1
10	BC	90	GLN	2.1
12	r	163	GLN	2.1
39	CF	51	GLN	2.1
50	F	33	GLN	2.1
52	H	21	GLN	2.1
63	DD	39	GLN	2.1
31	BX	13	ASN	2.1
39	CF	77	ASN	2.1
1	1	2442	U	2.1
1	1	3320	U	2.1
1	AS	151	U	2.1
1	AS	1564	U	2.1
9	o	225	ASP	2.1
13	BF	96	PHE	2.1
46	B	670	C	2.1
46	B	1144	C	2.1
46	B	1190	C	2.1
46	B	1602	C	2.1
46	CM	135	C	2.1
46	CM	1626	C	2.1
46	B	638	U	2.1
46	CM	176	U	2.1
46	CM	672	U	2.1
46	CM	805	U	2.1
46	CM	849	U	2.1
46	CM	1590	U	2.1
62	DC	33	PHE	2.1
64	DE	82	ASP	2.1
76	f	14	PHE	2.1
4	AW	180	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
20	z	94	LEU	2.1
24	6	17	LEU	2.1
27	9	31	LEU	2.1
34	AG	102	LEU	2.1
36	AI	28	LEU	2.1
49	CP	56	LEU	2.1
50	F	47	LEU	2.1
50	F	60	LEU	2.1
50	F	70	LEU	2.1
51	CR	207	LEU	2.1
52	CS	124	LEU	2.1
53	I	190	LEU	2.1
56	L	128	LEU	2.1
60	DA	117	LEU	2.1
61	Q	100	LEU	2.1
61	DB	105	LEU	2.1
66	DG	45	LEU	2.1
68	DI	55	LEU	2.1
74	DO	33	MET	2.1
6	l	7	VAL	2.1
6	l	360	VAL	2.1
9	o	132	VAL	2.1
10	p	233	HIS	2.1
16	BI	139	HIS	2.1
20	z	164	VAL	2.1
23	BP	65	VAL	2.1
34	AG	66	VAL	2.1
39	AL	27	VAL	2.1
52	CS	133	VAL	2.1
54	J	85	HIS	2.1
59	O	37	VAL	2.1
59	CZ	66	VAL	2.1
60	DA	96	VAL	2.1
67	W	99	VAL	2.1
69	Y	25	VAL	2.1
70	DK	6	PRO	2.1
71	a	24	VAL	2.1
7	m	210	GLU	2.1
7	AZ	188	GLU	2.1
10	p	211	GLU	2.1
10	BC	211	GLU	2.1
32	AE	67	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
52	H	196	GLU	2.1
53	CT	21	GLU	2.1
61	DB	66	CYS	2.1
76	f	42	CYS	2.1
79	AR	5	GLU	2.1
6	AY	186	LYS	2.0
21	0	40	ARG	2.0
25	7	12	LYS	2.0
27	9	116	LYS	2.0
29	AB	96	ALA	2.0
31	AD	12	ILE	2.0
35	AH	24	LYS	2.0
35	AH	63	ALA	2.0
35	CB	52	ALA	2.0
36	AI	5	LYS	2.0
41	AN	49	LYS	2.0
44	CK	35	ALA	2.0
47	CN	39	LYS	2.0
50	F	10	LYS	2.0
51	G	51	ARG	2.0
52	H	81	ARG	2.0
52	CS	195	ALA	2.0
56	L	169	ALA	2.0
56	CW	29	LYS	2.0
56	CW	77	ILE	2.0
56	CW	156	ILE	2.0
59	O	24	ILE	2.0
59	O	95	LYS	2.0
60	DA	93	LYS	2.0
63	S	134	ARG	2.0
63	DD	22	LYS	2.0
63	DD	46	LYS	2.0
70	Z	105	ALA	2.0
75	e	13	ILE	2.0
79	AR	211	ALA	2.0
80	P0	16	ARG	2.0
72	DM	41	ILE	2.0
79	AR	287	ILE	2.0
1	1	620	A	2.0
1	AS	1099	A	2.0
6	l	197	GLY	2.0
24	BQ	30	GLY	2.0

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Mol	Chain	Res	Type	RSRZ
46	B	126	A	2.0
46	CM	143	A	2.0
46	B	746	G	2.0
46	CM	1058	G	2.0
46	CM	1358	G	2.0
53	CT	146	GLY	2.0
65	U	37	GLY	2.0
79	DT	98	GLY	2.0
26	BS	28	THR	2.0
27	BT	43	TYR	2.0
41	AN	42	THR	2.0
45	i	81	THR	2.0
50	F	35	TYR	2.0
55	K	107	THR	2.0
63	S	78	TYR	2.0
65	U	30	TYR	2.0
78	h	189	THR	2.0
16	v	118	SER	2.0
17	w	3	SER	2.0
30	BW	62	SER	2.0
41	AN	11	SER	2.0
45	i	77	GLN	2.0
50	F	150	SER	2.0
53	I	78	SER	2.0
59	O	92	SER	2.0
60	P	77	SER	2.0
62	R	46	SER	2.0
66	DG	117	SER	2.0
79	AR	4	GLN	2.0
79	DT	296	GLN	2.0
80	p0	24	SER	2.0
9	o	193	PHE	2.0
28	AA	38	PHE	2.0
62	R	45	PHE	2.0
76	DQ	43	PHE	2.0
39	CF	28	ASN	2.0
40	CG	38	ASN	2.0
64	T	48	ASN	2.0
70	DK	21	ASN	2.0
73	DN	69	ASN	2.0
78	h	176	ASN	2.0
8	BA	59	ASP	2.0

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Mol	Chain	Res	Type	RSRZ
10	BC	159	ASP	2.0
11	q	37	ASP	2.0
23	BP	87	LEU	2.0
25	7	54	LEU	2.0
48	CO	181	LEU	2.0
51	CR	104	ASP	2.0
51	CR	222	LEU	2.0
56	L	60	LEU	2.0
74	d	3	LEU	2.0
67	DH	57	MET	2.0
1	1	598	U	2.0
1	AS	1237	U	2.0
7	m	73	VAL	2.0
10	p	126	VAL	2.0
10	p	168	PRO	2.0
19	y	83	VAL	2.0
22	BO	96	VAL	2.0
27	BT	105	VAL	2.0
45	i	48	PRO	2.0
46	B	291	U	2.0
46	B	1770	C	2.0
46	CM	1325	U	2.0
46	CM	1674	U	2.0
51	G	240	PRO	2.0
51	CR	102	VAL	2.0
66	V	4	VAL	2.0
66	V	6	VAL	2.0
69	Y	63	VAL	2.0
69	Y	81	VAL	2.0
70	Z	125	VAL	2.0
52	CS	122	HIS	2.0
5	AX	210	GLU	2.0
6	l	177	LYS	2.0
6	l	320	LYS	2.0
7	m	22	ARG	2.0
7	AZ	54	ARG	2.0
7	AZ	279	ARG	2.0
18	BK	126	ARG	2.0
22	BO	97	LYS	2.0
28	AA	64	LYS	2.0
28	AA	126	LYS	2.0
37	CD	29	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
39	AL	49	ARG	2.0
47	CN	15	LYS	2.0
48	D	152	LYS	2.0
50	CQ	32	GLU	2.0
53	CT	219	ARG	2.0
53	CT	228	LYS	2.0
55	CV	59	ARG	2.0
58	N	4	GLU	2.0
58	N	56	LYS	2.0
58	CY	26	LYS	2.0
64	DE	87	GLU	2.0
65	U	129	TRP	2.0
65	DF	114	GLU	2.0
66	V	142	GLU	2.0
70	Z	144	ARG	2.0
71	a	131	ARG	2.0
73	c	93	LYS	2.0
75	DP	49	ARG	2.0
10	p	154	ILE	2.0
12	r	127	ALA	2.0
12	r	138	ALA	2.0
32	BY	2	ALA	2.0
45	i	127	ALA	2.0
45	CL	62	ALA	2.0
48	CO	197	ILE	2.0
51	CR	156	ALA	2.0
51	CR	169	ILE	2.0
58	CY	54	ILE	2.0
60	DA	53	ILE	2.0
64	DE	50	ILE	2.0
69	DJ	96	ALA	2.0
74	d	43	ILE	2.0
76	f	47	ALA	2.0
79	AR	181	ALA	2.0
79	DT	281	ALA	2.0
80	P0	96	ILE	2.0
81	12	155	ILE	2.0
6	l	355	GLY	2.0
24	BQ	43	GLY	2.0
48	CO	93	GLY	2.0
58	CY	41	GLY	2.0
66	V	72	GLY	2.0

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Mol	Chain	Res	Type	RSRZ
5	AX	283	TYR	2.0
8	BA	23	THR	2.0
11	q	94	TYR	2.0
12	r	181	TYR	2.0
13	s	44	THR	2.0
55	K	14	THR	2.0
67	W	24	THR	2.0
69	Y	20	THR	2.0
82	L1	217	TYR	2.0
7	m	274	GLN	2.0
17	w	123	GLN	2.0
18	x	125	GLN	2.0
19	BL	53	PHE	2.0
29	BV	64	GLN	2.0
34	AG	94	PHE	2.0
40	CG	19	GLN	2.0
50	F	25	PHE	2.0
52	H	69	PHE	2.0
57	M	62	GLN	2.0
71	DL	64	PHE	2.0
73	c	99	GLN	2.0
74	d	32	PHE	2.0
80	p0	37	GLN	2.0
81	12	110	PHE	2.0
1	1	2463	A	2.0
1	1	3148	A	2.0
1	AS	707	A	2.0
1	AS	1217	A	2.0
4	AW	18	SER	2.0
16	BI	204	SER	2.0
19	BL	7	SER	2.0
19	BL	181	SER	2.0
35	CB	79	SER	2.0
46	B	1136	A	2.0
46	B	1329	A	2.0
46	B	1511	A	2.0
46	CM	722	A	2.0
21	0	110	LEU	2.0
36	CC	60	LEU	2.0
48	D	188	LEU	2.0
49	E	194	SER	2.0
51	G	48	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
51	CR	23	LEU	2.0
53	I	184	LEU	2.0
54	J	162	LEU	2.0
54	CU	54	LEU	2.0
56	CW	152	SER	2.0
65	DF	66	LEU	2.0
68	DI	78	LEU	2.0
69	DJ	58	SER	2.0
80	P0	35	SER	2.0
82	ll	20	SER	2.0
27	BT	98	ASN	2.0
54	J	143	ASN	2.0
56	L	161	ASN	2.0
59	O	125	ASN	2.0
1	1	238	G	2.0
1	1	866	G	2.0
1	1	997	G	2.0
1	AS	1277	G	2.0
1	AS	2686	G	2.0
4	j	168	VAL	2.0
6	l	43	VAL	2.0
8	BA	83	VAL	2.0
45	CL	72	ASP	2.0
45	CL	73	VAL	2.0
46	B	1282	G	2.0
46	CM	939	G	2.0
48	D	68	VAL	2.0
48	D	224	ASP	2.0
51	G	21	ASP	2.0
56	L	94	ASP	2.0
56	L	172	VAL	2.0
59	O	122	VAL	2.0
65	U	52	VAL	2.0
73	c	18	VAL	2.0
79	AR	6	VAL	2.0
82	ll	169	VAL	2.0
53	CT	70	PRO	2.0
60	P	23	PRO	2.0
63	S	125	PRO	2.0
6	l	147	LYS	2.0
6	l	194	LYS	2.0
7	AZ	258	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
8	n	134	ARG	2.0
11	q	63	LYS	2.0
13	BF	153	LYS	2.0
15	BH	130	LYS	2.0
16	v	56	LYS	2.0
19	y	20	LYS	2.0
19	BL	178	ARG	2.0
20	BM	88	ARG	2.0
22	2	20	LYS	2.0
22	2	78	LYS	2.0
22	BO	83	ARG	2.0
35	CB	41	ARG	2.0
50	F	107	LYS	2.0
50	CQ	201	ARG	2.0
52	CS	72	HIS	2.0
54	J	40	LYS	2.0
54	J	101	LYS	2.0
56	CW	138	LYS	2.0
58	N	141	LYS	2.0
63	S	94	LYS	2.0
69	Y	28	ARG	2.0
70	Z	73	ARG	2.0
70	DK	32	ARG	2.0
73	c	72	HIS	2.0
76	f	27	HIS	2.0
79	DT	261	LYS	2.0
1	AS	482	U	2.0
1	AS	2067	U	2.0
1	AS	2546	U	2.0
4	j	135	ILE	2.0
9	o	179	ILE	2.0
14	t	93	ILE	2.0
25	7	81	ALA	2.0
27	9	38	GLU	2.0
27	9	93	ALA	2.0
38	AK	41	ALA	2.0
51	G	249	ILE	2.0
52	H	62	ILE	2.0
52	CS	62	ILE	2.0
53	CT	221	GLU	2.0
55	CV	57	ALA	2.0
60	DA	71	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
61	DB	101	ALA	2.0
65	DF	72	ILE	2.0
67	DH	40	ILE	2.0
67	DH	64	ILE	2.0
67	DH	114	GLU	2.0
69	Y	53	ILE	2.0
74	d	50	ALA	2.0
79	AR	274	GLU	2.0
46	B	225	U	2.0
46	B	276	U	2.0
46	B	1048	U	2.0
1	AS	1574	C	2.0
1	AS	1578	C	2.0
4	j	81	GLY	2.0
5	k	309	GLY	2.0
11	BD	148	GLY	2.0
14	t	72	GLY	2.0
28	AA	16	GLY	2.0
33	AF	117	GLY	2.0
46	B	296	C	2.0
46	B	1703	C	2.0
51	CR	190	GLY	2.0
52	CS	150	GLY	2.0
55	CV	63	GLY	2.0
61	DB	10	GLY	2.0
62	R	95	GLY	2.0
71	a	66	GLY	2.0
72	b	73	GLY	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, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
83	MG	1	3715	1/1	0.10	0.43	76,76,76,76	0
83	MG	1	3921	1/1	0.12	0.22	67,67,67,67	0
83	MG	B	1928	1/1	0.16	0.35	108,108,108,108	0
83	MG	J	201	1/1	0.27	0.17	129,129,129,129	0
83	MG	1	3841	1/1	0.31	0.21	73,73,73,73	0
83	MG	B	1851	1/1	0.39	0.24	53,53,53,53	0
83	MG	CM	1819	1/1	0.43	0.28	74,74,74,74	0
83	MG	8	201	1/1	0.47	0.29	62,62,62,62	0
83	MG	8	202	1/1	0.49	0.66	79,79,79,79	0
83	MG	1	3651	1/1	0.53	0.42	77,77,77,77	0
83	MG	9	202	1/1	0.53	0.30	81,81,81,81	0
85	ZN	d	101	1/1	0.53	0.19	285,285,285,285	0
83	MG	1	3868	1/1	0.54	0.22	54,54,54,54	0
83	MG	1	3803	1/1	0.55	0.30	92,92,92,92	0
83	MG	AS	3676	1/1	0.55	0.18	72,72,72,72	0
83	MG	Y	201	1/1	0.59	0.15	58,58,58,58	0
83	MG	B	1898	1/1	0.59	0.33	60,60,60,60	0
83	MG	1	3669	1/1	0.59	0.37	76,76,76,76	0
83	MG	u	202	1/1	0.59	0.14	51,51,51,51	0
83	MG	1	3527	1/1	0.60	0.37	72,72,72,72	0
83	MG	AS	3601	1/1	0.61	0.17	124,124,124,124	0
83	MG	CM	1876	1/1	0.61	0.22	51,51,51,51	0
83	MG	1	3930	1/1	0.61	0.26	81,81,81,81	0
83	MG	1	3470	1/1	0.62	0.30	53,53,53,53	0
83	MG	4	207	1/1	0.63	0.32	64,64,64,64	0
83	MG	1	3722	1/1	0.63	0.23	61,61,61,61	0
83	MG	DB	203	1/1	0.63	0.16	52,52,52,52	0
83	MG	1	3699	1/1	0.63	0.23	54,54,54,54	0
83	MG	1	3630	1/1	0.64	0.41	59,59,59,59	0
83	MG	1	3867	1/1	0.64	0.22	51,51,51,51	0
83	MG	1	3688	1/1	0.64	0.43	82,82,82,82	0
83	MG	a	201	1/1	0.64	0.14	76,76,76,76	0
83	MG	B	1924	1/1	0.64	0.32	69,69,69,69	0
83	MG	1	3716	1/1	0.65	0.14	77,77,77,77	0
83	MG	G	302	1/1	0.65	0.37	63,63,63,63	0
83	MG	1	3476	1/1	0.65	0.18	58,58,58,58	0
83	MG	1	3796	1/1	0.65	0.17	84,84,84,84	0
83	MG	4	203	1/1	0.65	0.19	57,57,57,57	0
83	MG	f	102	1/1	0.65	0.16	81,81,81,81	0
83	MG	B	1941	1/1	0.66	0.15	58,58,58,58	0
83	MG	DG	201	1/1	0.66	0.32	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
83	MG	B	1875	1/1	0.66	0.33	75,75,75,75	0
83	MG	AG	201	1/1	0.67	0.29	86,86,86,86	0
83	MG	AJ	101	1/1	0.67	0.27	82,82,82,82	0
83	MG	1	3432	1/1	0.67	0.17	48,48,48,48	0
83	MG	1	3914	1/1	0.67	0.18	57,57,57,57	0
83	MG	B	1922	1/1	0.68	0.21	66,66,66,66	0
83	MG	AS	3631	1/1	0.68	0.17	66,66,66,66	0
83	MG	s	201	1/1	0.68	0.22	62,62,62,62	0
83	MG	1	3713	1/1	0.68	0.14	51,51,51,51	0
83	MG	1	3655	1/1	0.69	0.22	54,54,54,54	0
83	MG	k	404	1/1	0.69	0.19	79,79,79,79	0
83	MG	1	3797	1/1	0.69	0.21	77,77,77,77	0
83	MG	AS	3519	1/1	0.69	0.26	42,42,42,42	0
83	MG	9	201	1/1	0.70	0.83	70,70,70,70	0
83	MG	CM	1880	1/1	0.70	0.19	66,66,66,66	0
83	MG	1	3543	1/1	0.70	0.27	62,62,62,62	0
83	MG	1	3890	1/1	0.70	0.22	46,46,46,46	0
83	MG	CM	1864	1/1	0.70	0.19	73,73,73,73	0
83	MG	CL	301	1/1	0.71	0.18	40,40,40,40	0
83	MG	r	302	1/1	0.71	0.20	50,50,50,50	0
83	MG	CM	1859	1/1	0.71	0.20	60,60,60,60	0
83	MG	B	1896	1/1	0.71	0.10	61,61,61,61	0
83	MG	B	1829	1/1	0.71	0.16	64,64,64,64	0
83	MG	I	301	1/1	0.71	0.28	99,99,99,99	0
83	MG	AS	3627	1/1	0.71	0.18	57,57,57,57	0
83	MG	1	3483	1/1	0.71	0.14	38,38,38,38	0
83	MG	B	1856	1/1	0.71	0.16	47,47,47,47	0
83	MG	1	3842	1/1	0.72	0.12	63,63,63,63	0
83	MG	B	1862	1/1	0.72	0.19	68,68,68,68	0
83	MG	1	3856	1/1	0.72	0.16	66,66,66,66	0
83	MG	1	3681	1/1	0.72	0.23	52,52,52,52	0
83	MG	1	3931	1/1	0.72	0.17	61,61,61,61	0
83	MG	AS	3673	1/1	0.72	0.15	45,45,45,45	0
83	MG	1	3837	1/1	0.72	0.13	34,34,34,34	0
83	MG	1	3776	1/1	0.72	0.42	57,57,57,57	0
83	MG	AS	3597	1/1	0.73	0.11	28,28,28,28	0
83	MG	o	303	1/1	0.73	0.20	57,57,57,57	0
83	MG	CM	1882	1/1	0.73	0.24	66,66,66,66	0
83	MG	BF	201	1/1	0.74	0.14	44,44,44,44	0
83	MG	1	3783	1/1	0.74	0.20	48,48,48,48	0
83	MG	AS	3493	1/1	0.74	0.23	51,51,51,51	0
83	MG	CM	1836	1/1	0.74	0.16	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	B	1939	1/1	0.74	0.16	78,78,78,78	0
83	MG	1	3564	1/1	0.74	0.17	57,57,57,57	0
83	MG	1	3597	1/1	0.74	0.36	60,60,60,60	0
83	MG	AS	3615	1/1	0.74	0.18	50,50,50,50	0
83	MG	1	3909	1/1	0.74	0.20	79,79,79,79	0
83	MG	B	1810	1/1	0.74	0.27	45,45,45,45	0
83	MG	1	3913	1/1	0.74	0.21	55,55,55,55	0
83	MG	1	3598	1/1	0.74	0.24	56,56,56,56	0
83	MG	1	3587	1/1	0.75	0.16	58,58,58,58	0
83	MG	1	3468	1/1	0.75	0.22	38,38,38,38	0
83	MG	AS	3585	1/1	0.75	0.22	44,44,44,44	0
83	MG	CM	1822	1/1	0.75	0.20	44,44,44,44	0
83	MG	1	3876	1/1	0.75	0.14	42,42,42,42	0
83	MG	B	1890	1/1	0.75	0.17	53,53,53,53	0
83	MG	1	3438	1/1	0.75	0.20	31,31,31,31	0
83	MG	AS	3622	1/1	0.75	0.11	47,47,47,47	0
83	MG	1	3674	1/1	0.75	0.22	83,83,83,83	0
83	MG	B	1899	1/1	0.75	0.20	73,73,73,73	0
83	MG	AS	3637	1/1	0.75	0.27	97,97,97,97	0
83	MG	1	3517	1/1	0.75	0.17	58,58,58,58	0
83	MG	j	302	1/1	0.75	0.14	53,53,53,53	0
83	MG	1	3873	1/1	0.76	0.11	40,40,40,40	0
83	MG	1	3694	1/1	0.76	0.15	39,39,39,39	0
83	MG	1	3854	1/1	0.76	0.30	61,61,61,61	0
83	MG	1	3781	1/1	0.76	0.13	82,82,82,82	0
83	MG	B	1866	1/1	0.76	0.22	78,78,78,78	0
83	MG	B	1926	1/1	0.76	0.21	41,41,41,41	0
83	MG	1	3545	1/1	0.76	0.26	51,51,51,51	0
83	MG	1	3746	1/1	0.76	0.14	66,66,66,66	0
83	MG	CM	1816	1/1	0.77	0.22	27,27,27,27	0
83	MG	1	3631	1/1	0.77	0.27	64,64,64,64	0
83	MG	1	3923	1/1	0.77	0.25	64,64,64,64	0
83	MG	1	3902	1/1	0.77	0.27	51,51,51,51	0
83	MG	CM	1853	1/1	0.77	0.28	72,72,72,72	0
83	MG	V	201	1/1	0.77	0.29	48,48,48,48	0
83	MG	1	3553	1/1	0.77	0.26	54,54,54,54	0
83	MG	3	202	1/1	0.77	0.11	59,59,59,59	0
83	MG	B	1877	1/1	0.77	0.24	53,53,53,53	0
83	MG	AS	3414	1/1	0.77	0.30	47,47,47,47	0
83	MG	1	3584	1/1	0.77	0.15	41,41,41,41	0
83	MG	1	3838	1/1	0.77	0.16	61,61,61,61	0
83	MG	B	1943	1/1	0.77	0.08	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	BZ	202	1/1	0.78	0.14	66,66,66,66	0
83	MG	0	204	1/1	0.78	0.18	45,45,45,45	0
83	MG	1	3861	1/1	0.78	0.13	56,56,56,56	0
83	MG	1	3726	1/1	0.78	0.21	43,43,43,43	0
83	MG	AS	3621	1/1	0.78	0.16	53,53,53,53	0
83	MG	1	3727	1/1	0.78	0.11	38,38,38,38	0
83	MG	1	3652	1/1	0.78	0.19	43,43,43,43	0
83	MG	1	3848	1/1	0.78	0.21	78,78,78,78	0
83	MG	1	3607	1/1	0.78	0.14	51,51,51,51	0
83	MG	AS	3652	1/1	0.78	0.12	51,51,51,51	0
83	MG	AS	3666	1/1	0.78	0.13	53,53,53,53	0
83	MG	1	3893	1/1	0.78	0.19	52,52,52,52	0
83	MG	B	1944	1/1	0.78	0.13	76,76,76,76	0
83	MG	1	3552	1/1	0.78	0.19	50,50,50,50	0
83	MG	BN	201	1/1	0.78	0.12	59,59,59,59	0
83	MG	1	3754	1/1	0.79	0.24	61,61,61,61	0
83	MG	CL	302	1/1	0.79	0.40	59,59,59,59	0
83	MG	CM	1808	1/1	0.79	0.22	58,58,58,58	0
83	MG	1	3700	1/1	0.79	0.25	47,47,47,47	0
83	MG	AS	3629	1/1	0.79	0.16	38,38,38,38	0
83	MG	1	3830	1/1	0.79	0.26	43,43,43,43	0
83	MG	AH	202	1/1	0.79	0.16	55,55,55,55	0
83	MG	AS	3641	1/1	0.79	0.31	48,48,48,48	0
83	MG	1	3832	1/1	0.79	0.20	56,56,56,56	0
83	MG	CM	1860	1/1	0.79	0.21	41,41,41,41	0
83	MG	AS	3562	1/1	0.79	0.14	50,50,50,50	0
83	MG	1	3594	1/1	0.79	0.29	72,72,72,72	0
83	MG	0	201	1/1	0.79	0.24	70,70,70,70	0
83	MG	AT	207	1/1	0.79	0.22	68,68,68,68	0
83	MG	DA	201	1/1	0.79	0.28	57,57,57,57	0
83	MG	1	3524	1/1	0.79	0.27	44,44,44,44	0
83	MG	1	3648	1/1	0.79	0.14	44,44,44,44	0
83	MG	1	3871	1/1	0.79	0.20	67,67,67,67	0
83	MG	1	3729	1/1	0.80	0.41	50,50,50,50	0
83	MG	AT	202	1/1	0.80	0.27	55,55,55,55	0
83	MG	1	3800	1/1	0.80	0.21	62,62,62,62	0
83	MG	1	3732	1/1	0.80	0.13	26,26,26,26	0
83	MG	B	1806	1/1	0.80	0.15	67,67,67,67	0
83	MG	1	3554	1/1	0.80	0.12	40,40,40,40	0
83	MG	AS	3573	1/1	0.80	0.15	30,30,30,30	0
83	MG	AS	3581	1/1	0.80	0.12	46,46,46,46	0
83	MG	CM	1806	1/1	0.80	0.11	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
83	MG	B	1927	1/1	0.80	0.15	57,57,57,57	0
83	MG	B	1817	1/1	0.80	0.26	45,45,45,45	0
83	MG	CM	1818	1/1	0.80	0.20	38,38,38,38	0
83	MG	B	1934	1/1	0.80	0.16	102,102,102,102	0
83	MG	CM	1821	1/1	0.80	0.17	35,35,35,35	0
83	MG	AS	3602	1/1	0.80	0.15	59,59,59,59	0
83	MG	B	1938	1/1	0.80	0.28	70,70,70,70	0
83	MG	1	3747	1/1	0.80	0.09	45,45,45,45	0
83	MG	B	1850	1/1	0.80	0.12	24,24,24,24	0
83	MG	1	3591	1/1	0.80	0.17	58,58,58,58	0
83	MG	1	3625	1/1	0.80	0.41	95,95,95,95	0
83	MG	1	3502	1/1	0.80	0.15	41,41,41,41	0
83	MG	6	203	1/1	0.80	0.17	42,42,42,42	0
83	MG	1	3466	1/1	0.80	0.22	43,43,43,43	0
83	MG	CM	1898	1/1	0.80	0.13	44,44,44,44	0
83	MG	3	214	1/1	0.80	0.15	82,82,82,82	0
83	MG	AS	3662	1/1	0.80	0.09	57,57,57,57	0
83	MG	1	3671	1/1	0.80	0.22	52,52,52,52	0
83	MG	1	3895	1/1	0.80	0.14	44,44,44,44	0
83	MG	AS	3624	1/1	0.81	0.13	41,41,41,41	0
83	MG	1	3595	1/1	0.81	0.15	42,42,42,42	0
83	MG	3	210	1/1	0.81	0.21	59,59,59,59	0
83	MG	1	3672	1/1	0.81	0.12	57,57,57,57	0
83	MG	1	3547	1/1	0.81	0.13	42,42,42,42	0
83	MG	CM	1820	1/1	0.81	0.21	27,27,27,27	0
83	MG	1	3911	1/1	0.81	0.16	63,63,63,63	0
83	MG	AS	3646	1/1	0.81	0.13	35,35,35,35	0
83	MG	1	3677	1/1	0.81	0.22	55,55,55,55	0
83	MG	AE	202	1/1	0.81	0.09	63,63,63,63	0
83	MG	AS	3580	1/1	0.81	0.13	42,42,42,42	0
83	MG	1	3442	1/1	0.81	0.34	52,52,52,52	0
83	MG	1	3489	1/1	0.81	0.14	49,49,49,49	0
83	MG	CM	1874	1/1	0.81	0.16	66,66,66,66	0
83	MG	1	3692	1/1	0.81	0.14	176,176,176,176	0
83	MG	1	3928	1/1	0.81	0.21	59,59,59,59	0
83	MG	1	3495	1/1	0.81	0.23	68,68,68,68	0
83	MG	B	1902	1/1	0.81	0.34	60,60,60,60	0
83	MG	CO	301	1/1	0.81	0.26	34,34,34,34	0
83	MG	AS	3618	1/1	0.81	0.20	45,45,45,45	0
83	MG	B	1916	1/1	0.81	0.19	69,69,69,69	0
83	MG	1	3555	1/1	0.81	0.10	46,46,46,46	0
83	MG	CL	303	1/1	0.81	0.21	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	1	3794	1/1	0.82	0.26	68,68,68,68	0
83	MG	1	3686	1/1	0.82	0.19	60,60,60,60	0
83	MG	B	1893	1/1	0.82	0.34	43,43,43,43	0
83	MG	5	201	1/1	0.82	0.13	64,64,64,64	0
83	MG	CM	1811	1/1	0.82	0.25	59,59,59,59	0
83	MG	1	3753	1/1	0.82	0.30	55,55,55,55	0
83	MG	B	1827	1/1	0.82	0.14	37,37,37,37	0
83	MG	1	3798	1/1	0.82	0.14	41,41,41,41	0
83	MG	B	1911	1/1	0.82	0.26	60,60,60,60	0
83	MG	B	1912	1/1	0.82	0.14	81,81,81,81	0
83	MG	B	1846	1/1	0.82	0.11	57,57,57,57	0
83	MG	B	1918	1/1	0.82	0.16	59,59,59,59	0
83	MG	CM	1837	1/1	0.82	0.20	39,39,39,39	0
83	MG	AS	3427	1/1	0.82	0.12	43,43,43,43	0
83	MG	AS	3490	1/1	0.82	0.15	35,35,35,35	0
83	MG	AS	3661	1/1	0.82	0.23	64,64,64,64	0
83	MG	AS	3491	1/1	0.82	0.22	64,64,64,64	0
83	MG	1	3563	1/1	0.82	0.22	50,50,50,50	0
83	MG	1	3675	1/1	0.82	0.22	52,52,52,52	0
83	MG	1	3891	1/1	0.82	0.21	65,65,65,65	0
83	MG	B	1859	1/1	0.82	0.17	34,34,34,34	0
83	MG	AT	206	1/1	0.82	0.16	61,61,61,61	0
83	MG	1	3645	1/1	0.82	0.27	47,47,47,47	0
83	MG	B	1865	1/1	0.82	0.15	25,25,25,25	0
83	MG	1	3518	1/1	0.82	0.27	57,57,57,57	0
83	MG	1	3862	1/1	0.82	0.16	80,80,80,80	0
83	MG	B	1940	1/1	0.82	0.16	76,76,76,76	0
83	MG	AS	3632	1/1	0.83	0.17	38,38,38,38	0
83	MG	AS	3516	1/1	0.83	0.26	40,40,40,40	0
83	MG	1	3537	1/1	0.83	0.20	51,51,51,51	0
83	MG	AS	3539	1/1	0.83	0.20	59,59,59,59	0
83	MG	B	1942	1/1	0.83	0.17	67,67,67,67	0
83	MG	B	1907	1/1	0.83	0.10	44,44,44,44	0
83	MG	3	206	1/1	0.83	0.12	47,47,47,47	0
83	MG	1	3683	1/1	0.83	0.14	104,104,104,104	0
83	MG	AH	203	1/1	0.83	0.14	29,29,29,29	0
83	MG	CM	1848	1/1	0.83	0.30	52,52,52,52	0
83	MG	AS	3675	1/1	0.83	0.12	55,55,55,55	0
83	MG	CM	1858	1/1	0.83	0.15	42,42,42,42	0
83	MG	1	3858	1/1	0.83	0.17	48,48,48,48	0
83	MG	AS	3600	1/1	0.83	0.16	46,46,46,46	0
83	MG	AT	204	1/1	0.83	0.22	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	1	3877	1/1	0.83	0.12	52,52,52,52	0
83	MG	1	3419	1/1	0.83	0.17	47,47,47,47	0
83	MG	1	3618	1/1	0.83	0.15	34,34,34,34	0
83	MG	B	1886	1/1	0.83	0.16	95,95,95,95	0
83	MG	1	3866	1/1	0.83	0.09	62,62,62,62	0
83	MG	1	3668	1/1	0.83	0.14	32,32,32,32	0
83	MG	AS	3474	1/1	0.83	0.24	41,41,41,41	0
83	MG	B	1844	1/1	0.83	0.16	55,55,55,55	0
83	MG	1	3583	1/1	0.83	0.22	52,52,52,52	0
83	MG	AB	202	1/1	0.83	0.25	76,76,76,76	0
83	MG	Z	202	1/1	0.84	0.16	58,58,58,58	0
83	MG	1	3839	1/1	0.84	0.10	55,55,55,55	0
83	MG	1	3526	1/1	0.84	0.16	48,48,48,48	0
83	MG	1	3639	1/1	0.84	0.20	54,54,54,54	0
83	MG	B	1864	1/1	0.84	0.19	42,42,42,42	0
83	MG	1	3766	1/1	0.84	0.15	44,44,44,44	0
83	MG	1	3926	1/1	0.84	0.26	53,53,53,53	0
83	MG	1	3849	1/1	0.84	0.27	47,47,47,47	0
83	MG	B	1802	1/1	0.84	0.26	45,45,45,45	0
83	MG	AS	3638	1/1	0.84	0.21	59,59,59,59	0
83	MG	B	1935	1/1	0.84	0.20	56,56,56,56	0
83	MG	CM	1835	1/1	0.84	0.24	54,54,54,54	0
83	MG	AS	3518	1/1	0.84	0.20	43,43,43,43	0
83	MG	1	3464	1/1	0.84	0.28	48,48,48,48	0
83	MG	AS	3538	1/1	0.84	0.11	32,32,32,32	0
83	MG	0	202	1/1	0.84	0.11	39,39,39,39	0
83	MG	AS	3540	1/1	0.84	0.20	37,37,37,37	0
83	MG	AS	3560	1/1	0.84	0.10	52,52,52,52	0
83	MG	1	3827	1/1	0.84	0.18	50,50,50,50	0
83	MG	1	3714	1/1	0.84	0.21	43,43,43,43	0
83	MG	AS	3677	1/1	0.84	0.18	45,45,45,45	0
83	MG	1	3455	1/1	0.84	0.30	32,32,32,32	0
83	MG	CM	1877	1/1	0.84	0.14	47,47,47,47	0
83	MG	B	1836	1/1	0.84	0.21	51,51,51,51	0
83	MG	1	3836	1/1	0.84	0.18	31,31,31,31	0
83	MG	1	3908	1/1	0.84	0.10	23,23,23,23	0
83	MG	CM	1899	1/1	0.84	0.18	31,31,31,31	0
83	MG	AW	304	1/1	0.84	0.28	84,84,84,84	0
83	MG	B	1909	1/1	0.84	0.16	35,35,35,35	0
83	MG	B	1910	1/1	0.84	0.12	54,54,54,54	0
83	MG	1	3525	1/1	0.84	0.19	44,44,44,44	0
83	MG	1	3720	1/1	0.84	0.19	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	AS	3482	1/1	0.85	0.14	67,67,67,67	0
83	MG	1	3444	1/1	0.85	0.28	45,45,45,45	0
83	MG	1	3724	1/1	0.85	0.19	49,49,49,49	0
83	MG	w	302	1/1	0.85	0.36	52,52,52,52	0
83	MG	1	3929	1/1	0.85	0.11	77,77,77,77	0
83	MG	1	3568	1/1	0.85	0.23	44,44,44,44	0
83	MG	AS	3642	1/1	0.85	0.19	46,46,46,46	0
83	MG	B	1897	1/1	0.85	0.12	42,42,42,42	0
83	MG	1	3569	1/1	0.85	0.26	38,38,38,38	0
83	MG	B	1833	1/1	0.85	0.28	32,32,32,32	0
83	MG	1	3491	1/1	0.85	0.17	32,32,32,32	0
83	MG	1	3559	1/1	0.85	0.18	46,46,46,46	0
83	MG	CM	1850	1/1	0.85	0.15	58,58,58,58	0
83	MG	B	1949	1/1	0.85	0.18	47,47,47,47	0
83	MG	1	3740	1/1	0.85	0.19	53,53,53,53	0
83	MG	1	3701	1/1	0.85	0.20	59,59,59,59	0
83	MG	1	3603	1/1	0.85	0.14	50,50,50,50	0
83	MG	4	206	1/1	0.85	0.16	24,24,24,24	0
83	MG	CM	1872	1/1	0.85	0.21	45,45,45,45	0
83	MG	1	3585	1/1	0.85	0.21	44,44,44,44	0
83	MG	1	3530	1/1	0.85	0.20	52,52,52,52	0
83	MG	B	1919	1/1	0.85	0.28	50,50,50,50	0
83	MG	k	401	1/1	0.85	0.12	58,58,58,58	0
83	MG	BB	301	1/1	0.85	0.12	28,28,28,28	0
83	MG	1	3622	1/1	0.85	0.25	42,42,42,42	0
83	MG	AS	3616	1/1	0.85	0.16	45,45,45,45	0
83	MG	1	3719	1/1	0.85	0.08	27,27,27,27	0
83	MG	AS	3450	1/1	0.85	0.21	38,38,38,38	0
83	MG	AS	3467	1/1	0.85	0.14	57,57,57,57	0
83	MG	AS	3473	1/1	0.85	0.12	16,16,16,16	0
83	MG	1	3657	1/1	0.85	0.17	22,22,22,22	0
86	HYG	B	1953	36/36	0.85	0.16	49,77,94,99	0
83	MG	1	3924	1/1	0.86	0.15	69,69,69,69	0
83	MG	1	3428	1/1	0.86	0.33	47,47,47,47	0
83	MG	1	3457	1/1	0.86	0.10	20,20,20,20	0
83	MG	1	3617	1/1	0.86	0.10	37,37,37,37	0
83	MG	AS	3630	1/1	0.86	0.07	50,50,50,50	0
83	MG	1	3575	1/1	0.86	0.17	28,28,28,28	0
83	MG	1	3593	1/1	0.86	0.17	35,35,35,35	0
83	MG	1	3682	1/1	0.86	0.21	85,85,85,85	0
83	MG	1	3579	1/1	0.86	0.11	36,36,36,36	0
83	MG	AS	3512	1/1	0.86	0.17	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	CM	1827	1/1	0.86	0.22	34,34,34,34	0
83	MG	1	3721	1/1	0.86	0.18	43,43,43,43	0
83	MG	AS	3644	1/1	0.86	0.19	59,59,59,59	0
83	MG	1	3892	1/1	0.86	0.10	53,53,53,53	0
83	MG	CM	1845	1/1	0.86	0.13	29,29,29,29	0
83	MG	B	1882	1/1	0.86	0.21	49,49,49,49	0
83	MG	AS	3653	1/1	0.86	0.16	68,68,68,68	0
83	MG	1	3661	1/1	0.86	0.10	33,33,33,33	0
83	MG	1	3843	1/1	0.86	0.30	62,62,62,62	0
83	MG	1	3896	1/1	0.86	0.17	43,43,43,43	0
83	MG	AS	3544	1/1	0.86	0.13	28,28,28,28	0
83	MG	4	209	1/1	0.86	0.08	54,54,54,54	0
83	MG	B	1946	1/1	0.86	0.23	32,32,32,32	0
83	MG	1	3793	1/1	0.86	0.12	18,18,18,18	0
83	MG	1	3723	1/1	0.86	0.08	16,16,16,16	0
83	MG	AT	203	1/1	0.86	0.21	57,57,57,57	0
83	MG	B	1807	1/1	0.86	0.21	40,40,40,40	0
83	MG	1	3663	1/1	0.86	0.17	54,54,54,54	0
83	MG	1	3664	1/1	0.86	0.22	32,32,32,32	0
83	MG	1	3580	1/1	0.86	0.21	61,61,61,61	0
83	MG	1	3799	1/1	0.86	0.10	33,33,33,33	0
83	MG	1	3920	1/1	0.86	0.21	49,49,49,49	0
83	MG	1	3515	1/1	0.86	0.20	21,21,21,21	0
83	MG	AS	3412	1/1	0.86	0.16	23,23,23,23	0
83	MG	w	303	1/1	0.86	0.15	56,56,56,56	0
85	ZN	CB	201	1/1	0.86	0.15	202,202,202,202	0
83	MG	1	3529	1/1	0.86	0.10	38,38,38,38	0
83	MG	1	3872	1/1	0.87	0.14	48,48,48,48	0
83	MG	1	3807	1/1	0.87	0.11	54,54,54,54	0
83	MG	AS	3599	1/1	0.87	0.31	50,50,50,50	0
83	MG	BJ	303	1/1	0.87	0.12	30,30,30,30	0
83	MG	1	3875	1/1	0.87	0.13	42,42,42,42	0
83	MG	1	3844	1/1	0.87	0.16	48,48,48,48	0
83	MG	1	3812	1/1	0.87	0.23	46,46,46,46	0
83	MG	AS	3605	1/1	0.87	0.24	38,38,38,38	0
83	MG	1	3879	1/1	0.87	0.13	39,39,39,39	0
83	MG	B	1835	1/1	0.87	0.20	21,21,21,21	0
83	MG	AS	3413	1/1	0.87	0.19	24,24,24,24	0
83	MG	1	3884	1/1	0.87	0.14	65,65,65,65	0
83	MG	AS	3426	1/1	0.87	0.19	30,30,30,30	0
83	MG	1	3815	1/1	0.87	0.17	30,30,30,30	0
83	MG	AS	3428	1/1	0.87	0.25	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	AS	3628	1/1	0.87	0.16	33,33,33,33	0
83	MG	AS	3449	1/1	0.87	0.16	40,40,40,40	0
83	MG	B	1845	1/1	0.87	0.20	35,35,35,35	0
83	MG	CM	1823	1/1	0.87	0.17	34,34,34,34	0
83	MG	AS	3455	1/1	0.87	0.10	29,29,29,29	0
83	MG	1	3853	1/1	0.87	0.14	33,33,33,33	0
83	MG	0	205	1/1	0.87	0.39	55,55,55,55	0
83	MG	1	3653	1/1	0.87	0.07	39,39,39,39	0
83	MG	3	203	1/1	0.87	0.16	31,31,31,31	0
83	MG	1	3855	1/1	0.87	0.12	43,43,43,43	0
83	MG	AS	3643	1/1	0.87	0.16	39,39,39,39	0
83	MG	3	209	1/1	0.87	0.20	48,48,48,48	0
83	MG	1	3434	1/1	0.87	0.23	41,41,41,41	0
83	MG	AS	3648	1/1	0.87	0.17	32,32,32,32	0
83	MG	AS	3649	1/1	0.87	0.14	48,48,48,48	0
83	MG	AS	3504	1/1	0.87	0.26	50,50,50,50	0
83	MG	3	212	1/1	0.87	0.16	59,59,59,59	0
83	MG	1	3562	1/1	0.87	0.16	48,48,48,48	0
83	MG	AE	201	1/1	0.87	0.12	62,62,62,62	0
83	MG	1	3498	1/1	0.87	0.22	39,39,39,39	0
83	MG	AS	3667	1/1	0.87	0.12	92,92,92,92	0
83	MG	B	1879	1/1	0.87	0.22	46,46,46,46	0
83	MG	CM	1883	1/1	0.87	0.13	45,45,45,45	0
83	MG	CM	1884	1/1	0.87	0.21	54,54,54,54	0
83	MG	CM	1891	1/1	0.87	0.22	26,26,26,26	0
83	MG	1	3906	1/1	0.87	0.15	27,27,27,27	0
83	MG	1	3548	1/1	0.87	0.17	43,43,43,43	0
83	MG	B	1887	1/1	0.87	0.23	47,47,47,47	0
83	MG	AS	3678	1/1	0.87	0.12	42,42,42,42	0
83	MG	1	3413	1/1	0.87	0.23	31,31,31,31	0
83	MG	1	3503	1/1	0.87	0.09	32,32,32,32	0
83	MG	DG	202	1/1	0.87	0.12	63,63,63,63	0
83	MG	B	1952	1/1	0.87	0.23	48,48,48,48	0
83	MG	1	3540	1/1	0.87	0.24	42,42,42,42	0
85	ZN	DQ	102	1/1	0.87	0.28	118,118,118,118	0
83	MG	1	3494	1/1	0.87	0.19	13,13,13,13	0
83	MG	B	1892	1/1	0.88	0.15	40,40,40,40	0
83	MG	B	1815	1/1	0.88	0.26	51,51,51,51	0
83	MG	B	1947	1/1	0.88	0.18	63,63,63,63	0
83	MG	1	3889	1/1	0.88	0.13	69,69,69,69	0
83	MG	1	3679	1/1	0.88	0.15	27,27,27,27	0
83	MG	1	3647	1/1	0.88	0.14	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	B	1830	1/1	0.88	0.22	46,46,46,46	0
83	MG	AS	3547	1/1	0.88	0.12	35,35,35,35	0
83	MG	1	3835	1/1	0.88	0.09	25,25,25,25	0
83	MG	AS	3657	1/1	0.88	0.18	17,17,17,17	0
83	MG	Q	201	1/1	0.88	0.21	49,49,49,49	0
83	MG	B	1905	1/1	0.88	0.14	38,38,38,38	0
83	MG	1	3401	1/1	0.88	0.31	30,30,30,30	0
83	MG	B	1908	1/1	0.88	0.21	46,46,46,46	0
83	MG	1	3500	1/1	0.88	0.18	37,37,37,37	0
83	MG	AS	3596	1/1	0.88	0.08	37,37,37,37	0
83	MG	B	1843	1/1	0.88	0.21	21,21,21,21	0
83	MG	1	3411	1/1	0.88	0.17	10,10,10,10	0
83	MG	1	3423	1/1	0.88	0.19	42,42,42,42	0
83	MG	1	3905	1/1	0.88	0.12	27,27,27,27	0
83	MG	1	3725	1/1	0.88	0.19	40,40,40,40	0
83	MG	1	3773	1/1	0.88	0.14	32,32,32,32	0
83	MG	1	3691	1/1	0.88	0.21	22,22,22,22	0
83	MG	AS	3441	1/1	0.88	0.22	29,29,29,29	0
83	MG	1	3778	1/1	0.88	0.21	57,57,57,57	0
83	MG	1	3845	1/1	0.88	0.16	37,37,37,37	0
83	MG	BE	302	1/1	0.88	0.12	48,48,48,48	0
83	MG	1	3654	1/1	0.88	0.16	70,70,70,70	0
83	MG	1	3918	1/1	0.88	0.13	43,43,43,43	0
83	MG	AS	3626	1/1	0.88	0.20	40,40,40,40	0
83	MG	1	3817	1/1	0.88	0.12	32,32,32,32	0
83	MG	DB	201	1/1	0.88	0.14	38,38,38,38	0
83	MG	1	3824	1/1	0.88	0.12	47,47,47,47	0
83	MG	AM	101	1/1	0.88	0.17	54,54,54,54	0
83	MG	1	3881	1/1	0.88	0.20	25,25,25,25	0
83	MG	B	1805	1/1	0.88	0.20	57,57,57,57	0
83	MG	1	3718	1/1	0.88	0.13	35,35,35,35	0
83	MG	1	3885	1/1	0.88	0.10	53,53,53,53	0
83	MG	1	3887	1/1	0.88	0.08	58,58,58,58	0
83	MG	B	1825	1/1	0.89	0.16	32,32,32,32	0
83	MG	1	3599	1/1	0.89	0.17	36,36,36,36	0
83	MG	AS	3481	1/1	0.89	0.14	25,25,25,25	0
83	MG	B	1891	1/1	0.89	0.12	41,41,41,41	0
83	MG	1	3804	1/1	0.89	0.13	30,30,30,30	0
83	MG	1	3558	1/1	0.89	0.14	47,47,47,47	0
83	MG	1	3775	1/1	0.89	0.15	32,32,32,32	0
83	MG	1	3662	1/1	0.89	0.16	42,42,42,42	0
83	MG	1	3407	1/1	0.89	0.31	23,23,23,23	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	AS	3515	1/1	0.89	0.14	31,31,31,31	0
83	MG	1	3818	1/1	0.89	0.12	38,38,38,38	0
83	MG	B	1900	1/1	0.89	0.27	50,50,50,50	0
83	MG	CM	1825	1/1	0.89	0.26	31,31,31,31	0
83	MG	1	3611	1/1	0.89	0.28	24,24,24,24	0
83	MG	CM	1833	1/1	0.89	0.26	42,42,42,42	0
83	MG	AS	3537	1/1	0.89	0.21	41,41,41,41	0
83	MG	1	3735	1/1	0.89	0.25	33,33,33,33	0
83	MG	k	403	1/1	0.89	0.14	57,57,57,57	0
83	MG	CM	1839	1/1	0.89	0.19	36,36,36,36	0
83	MG	1	3829	1/1	0.89	0.12	25,25,25,25	0
83	MG	1	3433	1/1	0.89	0.32	45,45,45,45	0
83	MG	B	1855	1/1	0.89	0.19	79,79,79,79	0
83	MG	Y	202	1/1	0.89	0.19	71,71,71,71	0
83	MG	1	3643	1/1	0.89	0.13	27,27,27,27	0
83	MG	AS	3568	1/1	0.89	0.18	39,39,39,39	0
83	MG	1	3860	1/1	0.89	0.12	46,46,46,46	0
83	MG	AS	3671	1/1	0.89	0.13	32,32,32,32	0
83	MG	CM	1865	1/1	0.89	0.18	45,45,45,45	0
83	MG	CM	1866	1/1	0.89	0.10	25,25,25,25	0
83	MG	CM	1868	1/1	0.89	0.20	64,64,64,64	0
83	MG	1	3833	1/1	0.89	0.21	41,41,41,41	0
83	MG	AR	401	1/1	0.89	0.18	48,48,48,48	0
83	MG	1	3539	1/1	0.89	0.10	24,24,24,24	0
83	MG	1	3894	1/1	0.89	0.17	57,57,57,57	0
83	MG	1	3706	1/1	0.89	0.12	36,36,36,36	0
83	MG	AS	3417	1/1	0.89	0.21	23,23,23,23	0
83	MG	B	1868	1/1	0.89	0.09	59,59,59,59	0
83	MG	B	1869	1/1	0.89	0.18	41,41,41,41	0
83	MG	1	3684	1/1	0.89	0.28	54,54,54,54	0
83	MG	AS	3603	1/1	0.89	0.17	38,38,38,38	0
83	MG	AT	209	1/1	0.89	0.16	52,52,52,52	0
83	MG	B	1814	1/1	0.89	0.14	53,53,53,53	0
83	MG	AS	3606	1/1	0.89	0.07	32,32,32,32	0
83	MG	AS	3442	1/1	0.89	0.23	45,45,45,45	0
83	MG	B	1933	1/1	0.89	0.12	57,57,57,57	0
83	MG	BH	201	1/1	0.89	0.10	43,43,43,43	0
83	MG	1	3763	1/1	0.89	0.17	28,28,28,28	0
83	MG	1	3765	1/1	0.89	0.14	38,38,38,38	0
83	MG	B	1824	1/1	0.89	0.21	26,26,26,26	0
83	MG	CK	102	1/1	0.89	0.15	32,32,32,32	0
83	MG	AS	3468	1/1	0.89	0.12	37,37,37,37	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	k	402	1/1	0.90	0.13	54,54,54,54	0
83	MG	l	3614	1/1	0.90	0.20	86,86,86,86	0
83	MG	1	3774	1/1	0.90	0.11	29,29,29,29	0
83	MG	B	1823	1/1	0.90	0.16	31,31,31,31	0
83	MG	1	3523	1/1	0.90	0.23	42,42,42,42	0
83	MG	CJ	202	1/1	0.90	0.09	21,21,21,21	0
83	MG	r	301	1/1	0.90	0.20	34,34,34,34	0
83	MG	AS	3404	1/1	0.90	0.28	19,19,19,19	0
83	MG	AS	3405	1/1	0.90	0.25	16,16,16,16	0
83	MG	B	1903	1/1	0.90	0.18	87,87,87,87	0
83	MG	1	3680	1/1	0.90	0.08	30,30,30,30	0
83	MG	B	1828	1/1	0.90	0.18	39,39,39,39	0
83	MG	1	3507	1/1	0.90	0.18	9,9,9,9	0
83	MG	AS	3419	1/1	0.90	0.13	27,27,27,27	0
83	MG	AS	3420	1/1	0.90	0.12	15,15,15,15	0
83	MG	1	3619	1/1	0.90	0.14	33,33,33,33	0
83	MG	v	303	1/1	0.90	0.11	72,72,72,72	0
83	MG	1	3731	1/1	0.90	0.11	37,37,37,37	0
83	MG	1	3790	1/1	0.90	0.11	49,49,49,49	0
83	MG	B	1839	1/1	0.90	0.34	48,48,48,48	0
83	MG	CM	1824	1/1	0.90	0.09	28,28,28,28	0
83	MG	AS	3447	1/1	0.90	0.38	48,48,48,48	0
83	MG	1	3514	1/1	0.90	0.18	30,30,30,30	0
83	MG	1	3925	1/1	0.90	0.11	37,37,37,37	0
83	MG	1	3734	1/1	0.90	0.16	14,14,14,14	0
83	MG	1	3600	1/1	0.90	0.14	35,35,35,35	0
83	MG	2	203	1/1	0.90	0.09	37,37,37,37	0
83	MG	1	3736	1/1	0.90	0.17	39,39,39,39	0
83	MG	1	3484	1/1	0.90	0.14	34,34,34,34	0
83	MG	B	1931	1/1	0.90	0.18	47,47,47,47	0
83	MG	1	3717	1/1	0.90	0.19	42,42,42,42	0
83	MG	1	3497	1/1	0.90	0.18	11,11,11,11	0
83	MG	1	3673	1/1	0.90	0.16	47,47,47,47	0
83	MG	3	204	1/1	0.90	0.19	32,32,32,32	0
83	MG	AS	3496	1/1	0.90	0.22	40,40,40,40	0
83	MG	AS	3500	1/1	0.90	0.13	32,32,32,32	0
83	MG	1	3637	1/1	0.90	0.10	49,49,49,49	0
83	MG	AS	3507	1/1	0.90	0.16	20,20,20,20	0
83	MG	1	3755	1/1	0.90	0.15	34,34,34,34	0
83	MG	CM	1870	1/1	0.90	0.15	30,30,30,30	0
83	MG	AS	3658	1/1	0.90	0.10	28,28,28,28	0
83	MG	1	3810	1/1	0.90	0.13	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
83	MG	3	211	1/1	0.90	0.17	34,34,34,34	0
83	MG	B	1870	1/1	0.90	0.10	42,42,42,42	0
83	MG	AG	202	1/1	0.90	0.14	52,52,52,52	0
83	MG	AS	3536	1/1	0.90	0.12	35,35,35,35	0
83	MG	1	3759	1/1	0.90	0.10	49,49,49,49	0
83	MG	1	3762	1/1	0.90	0.14	31,31,31,31	0
83	MG	CM	1885	1/1	0.90	0.11	26,26,26,26	0
83	MG	CM	1890	1/1	0.90	0.11	24,24,24,24	0
83	MG	1	3693	1/1	0.90	0.11	37,37,37,37	0
83	MG	CM	1897	1/1	0.90	0.21	41,41,41,41	0
83	MG	1	3904	1/1	0.90	0.16	32,32,32,32	0
83	MG	1	3429	1/1	0.90	0.24	24,24,24,24	0
83	MG	1	3697	1/1	0.90	0.10	50,50,50,50	0
83	MG	CP	301	1/1	0.90	0.24	32,32,32,32	0
83	MG	AS	3550	1/1	0.90	0.20	19,19,19,19	0
83	MG	AS	3552	1/1	0.90	0.17	27,27,27,27	0
83	MG	4	212	1/1	0.90	0.10	60,60,60,60	0
83	MG	K	301	1/1	0.90	0.06	27,27,27,27	0
83	MG	AS	3565	1/1	0.90	0.23	31,31,31,31	0
84	3K5	1	3402	57/57	0.90	0.18	26,53,74,90	0
84	3K5	AS	3401	57/57	0.90	0.17	41,66,88,90	0
83	MG	AS	3567	1/1	0.90	0.12	45,45,45,45	0
85	ZN	h	201	1/1	0.90	0.10	209,209,209,209	0
83	MG	1	3907	1/1	0.90	0.19	74,74,74,74	0
83	MG	BE	301	1/1	0.90	0.17	33,33,33,33	0
83	MG	1	3771	1/1	0.90	0.14	38,38,38,38	0
86	HYG	CM	1902	36/36	0.90	0.13	34,53,79,89	0
83	MG	CM	1805	1/1	0.91	0.13	18,18,18,18	0
83	MG	1	3586	1/1	0.91	0.13	47,47,47,47	0
83	MG	CM	1807	1/1	0.91	0.22	37,37,37,37	0
83	MG	1	3880	1/1	0.91	0.26	58,58,58,58	0
83	MG	1	3698	1/1	0.91	0.22	58,58,58,58	0
83	MG	B	1951	1/1	0.91	0.12	29,29,29,29	0
83	MG	1	3780	1/1	0.91	0.19	32,32,32,32	0
83	MG	G	301	1/1	0.91	0.14	72,72,72,72	0
83	MG	AS	3497	1/1	0.91	0.13	26,26,26,26	0
83	MG	1	3851	1/1	0.91	0.07	19,19,19,19	0
83	MG	AS	3502	1/1	0.91	0.18	34,34,34,34	0
83	MG	AD	201	1/1	0.91	0.17	59,59,59,59	0
83	MG	B	1842	1/1	0.91	0.17	25,25,25,25	0
83	MG	j	303	1/1	0.91	0.10	19,19,19,19	0
83	MG	AS	3514	1/1	0.91	0.18	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	1	3490	1/1	0.91	0.16	44,44,44,44	0
83	MG	R	201	1/1	0.91	0.13	83,83,83,83	0
83	MG	B	1904	1/1	0.91	0.08	36,36,36,36	0
83	MG	1	3820	1/1	0.91	0.07	29,29,29,29	0
83	MG	AS	3523	1/1	0.91	0.19	29,29,29,29	0
83	MG	AS	3534	1/1	0.91	0.17	38,38,38,38	0
83	MG	1	3567	1/1	0.91	0.08	20,20,20,20	0
83	MG	CM	1849	1/1	0.91	0.15	50,50,50,50	0
83	MG	Z	201	1/1	0.91	0.33	54,54,54,54	0
83	MG	CM	1851	1/1	0.91	0.14	28,28,28,28	0
83	MG	B	1847	1/1	0.91	0.14	35,35,35,35	0
83	MG	1	3510	1/1	0.91	0.12	23,23,23,23	0
83	MG	1	3792	1/1	0.91	0.16	32,32,32,32	0
83	MG	1	3705	1/1	0.91	0.12	34,34,34,34	0
83	MG	1	3430	1/1	0.91	0.11	50,50,50,50	0
83	MG	B	1858	1/1	0.91	0.15	66,66,66,66	0
83	MG	AS	3408	1/1	0.91	0.09	28,28,28,28	0
83	MG	AS	3672	1/1	0.91	0.09	29,29,29,29	0
83	MG	1	3760	1/1	0.91	0.11	55,55,55,55	0
83	MG	B	1860	1/1	0.91	0.10	78,78,78,78	0
83	MG	B	1803	1/1	0.91	0.16	28,28,28,28	0
83	MG	1	3658	1/1	0.91	0.11	39,39,39,39	0
83	MG	1	3901	1/1	0.91	0.10	29,29,29,29	0
83	MG	AT	201	1/1	0.91	0.13	21,21,21,21	0
83	MG	1	3690	1/1	0.91	0.08	25,25,25,25	0
83	MG	AS	3421	1/1	0.91	0.35	19,19,19,19	0
83	MG	1	3621	1/1	0.91	0.12	54,54,54,54	0
83	MG	AS	3584	1/1	0.91	0.19	37,37,37,37	0
83	MG	CM	1888	1/1	0.91	0.09	47,47,47,47	0
83	MG	B	1930	1/1	0.91	0.15	60,60,60,60	0
83	MG	AT	208	1/1	0.91	0.13	27,27,27,27	0
83	MG	AS	3588	1/1	0.91	0.10	21,21,21,21	0
83	MG	AS	3593	1/1	0.91	0.09	16,16,16,16	0
83	MG	1	3446	1/1	0.91	0.11	71,71,71,71	0
83	MG	BB	302	1/1	0.91	0.14	53,53,53,53	0
83	MG	1	3608	1/1	0.91	0.38	67,67,67,67	0
83	MG	0	203	1/1	0.91	0.13	75,75,75,75	0
83	MG	B	1818	1/1	0.91	0.10	33,33,33,33	0
83	MG	B	1821	1/1	0.91	0.21	31,31,31,31	0
83	MG	BJ	302	1/1	0.91	0.17	58,58,58,58	0
83	MG	1	3628	1/1	0.91	0.27	48,48,48,48	0
83	MG	B	1884	1/1	0.91	0.09	97,97,97,97	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	BZ	201	1/1	0.91	0.18	41,41,41,41	0
85	ZN	AH	201	1/1	0.91	0.11	138,138,138,138	0
85	ZN	AP	201	1/1	0.91	0.09	181,181,181,181	0
83	MG	AS	3604	1/1	0.91	0.26	46,46,46,46	0
83	MG	AS	3465	1/1	0.91	0.15	19,19,19,19	0
83	MG	1	3695	1/1	0.91	0.22	32,32,32,32	0
83	MG	3	213	1/1	0.91	0.15	49,49,49,49	0
83	MG	1	3809	1/1	0.91	0.07	57,57,57,57	0
83	MG	1	3739	1/1	0.91	0.19	28,28,28,28	0
83	MG	1	3531	1/1	0.92	0.17	39,39,39,39	0
83	MG	AS	3591	1/1	0.92	0.17	52,52,52,52	0
83	MG	B	1923	1/1	0.92	0.17	57,57,57,57	0
83	MG	1	3758	1/1	0.92	0.15	33,33,33,33	0
83	MG	1	3813	1/1	0.92	0.12	27,27,27,27	0
83	MG	1	3535	1/1	0.92	0.14	34,34,34,34	0
83	MG	1	3431	1/1	0.92	0.18	20,20,20,20	0
83	MG	1	3644	1/1	0.92	0.08	20,20,20,20	0
83	MG	CM	1801	1/1	0.92	0.24	41,41,41,41	0
83	MG	1	3513	1/1	0.92	0.18	23,23,23,23	0
83	MG	AS	3459	1/1	0.92	0.14	50,50,50,50	0
83	MG	AS	3460	1/1	0.92	0.16	51,51,51,51	0
83	MG	AS	3462	1/1	0.92	0.25	31,31,31,31	0
83	MG	1	3443	1/1	0.92	0.19	44,44,44,44	0
83	MG	CM	1813	1/1	0.92	0.25	35,35,35,35	0
83	MG	1	3825	1/1	0.92	0.11	39,39,39,39	0
83	MG	1	3542	1/1	0.92	0.17	28,28,28,28	0
83	MG	AS	3469	1/1	0.92	0.27	25,25,25,25	0
83	MG	AS	3472	1/1	0.92	0.26	36,36,36,36	0
83	MG	AC	101	1/1	0.92	0.12	41,41,41,41	0
83	MG	AS	3623	1/1	0.92	0.23	32,32,32,32	0
83	MG	1	3649	1/1	0.92	0.19	38,38,38,38	0
83	MG	AS	3476	1/1	0.92	0.24	34,34,34,34	0
83	MG	1	3493	1/1	0.92	0.20	30,30,30,30	0
83	MG	1	3883	1/1	0.92	0.09	28,28,28,28	0
83	MG	CM	1828	1/1	0.92	0.25	22,22,22,22	0
83	MG	CM	1832	1/1	0.92	0.20	14,14,14,14	0
83	MG	AS	3487	1/1	0.92	0.16	20,20,20,20	0
83	MG	1	3576	1/1	0.92	0.16	31,31,31,31	0
83	MG	1	3687	1/1	0.92	0.13	39,39,39,39	0
83	MG	1	3577	1/1	0.92	0.14	12,12,12,12	0
83	MG	AS	3634	1/1	0.92	0.09	52,52,52,52	0
83	MG	CM	1841	1/1	0.92	0.33	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	CM	1843	1/1	0.92	0.10	26,26,26,26	0
83	MG	1	3427	1/1	0.92	0.24	16,16,16,16	0
83	MG	1	3469	1/1	0.92	0.17	28,28,28,28	0
83	MG	AS	3640	1/1	0.92	0.16	46,46,46,46	0
83	MG	1	3415	1/1	0.92	0.24	23,23,23,23	0
83	MG	B	1950	1/1	0.92	0.09	40,40,40,40	0
83	MG	AP	203	1/1	0.92	0.14	73,73,73,73	0
83	MG	CM	1855	1/1	0.92	0.17	29,29,29,29	0
83	MG	CM	1857	1/1	0.92	0.12	48,48,48,48	0
83	MG	4	205	1/1	0.92	0.08	33,33,33,33	0
83	MG	1	3551	1/1	0.92	0.10	36,36,36,36	0
83	MG	1	3840	1/1	0.92	0.06	14,14,14,14	0
83	MG	1	3787	1/1	0.92	0.23	23,23,23,23	0
83	MG	1	3788	1/1	0.92	0.18	23,23,23,23	0
83	MG	1	3789	1/1	0.92	0.16	21,21,21,21	0
83	MG	AS	3655	1/1	0.92	0.20	55,55,55,55	0
83	MG	1	3900	1/1	0.92	0.16	29,29,29,29	0
83	MG	CM	1871	1/1	0.92	0.17	22,22,22,22	0
83	MG	1	3730	1/1	0.92	0.25	55,55,55,55	0
83	MG	AS	3524	1/1	0.92	0.22	27,27,27,27	0
83	MG	AS	3525	1/1	0.92	0.24	32,32,32,32	0
83	MG	AS	3665	1/1	0.92	0.14	51,51,51,51	0
83	MG	AS	3528	1/1	0.92	0.14	41,41,41,41	0
83	MG	1	3620	1/1	0.92	0.14	21,21,21,21	0
83	MG	AS	3535	1/1	0.92	0.19	27,27,27,27	0
83	MG	1	3846	1/1	0.92	0.09	44,44,44,44	0
83	MG	1	3473	1/1	0.92	0.19	13,13,13,13	0
83	MG	o	301	1/1	0.92	0.07	21,21,21,21	0
83	MG	1	3451	1/1	0.92	0.11	26,26,26,26	0
83	MG	1	3623	1/1	0.92	0.10	40,40,40,40	0
83	MG	1	3624	1/1	0.92	0.20	24,24,24,24	0
83	MG	1	3425	1/1	0.92	0.12	36,36,36,36	0
83	MG	1	3426	1/1	0.92	0.14	24,24,24,24	0
83	MG	1	3702	1/1	0.92	0.15	33,33,33,33	0
83	MG	AS	3556	1/1	0.92	0.18	37,37,37,37	0
83	MG	1	3463	1/1	0.92	0.16	18,18,18,18	0
83	MG	1	3751	1/1	0.92	0.18	43,43,43,43	0
83	MG	x	201	1/1	0.92	0.18	16,16,16,16	0
83	MG	AS	3566	1/1	0.92	0.14	26,26,26,26	0
83	MG	AW	302	1/1	0.92	0.09	29,29,29,29	0
83	MG	x	202	1/1	0.92	0.06	20,20,20,20	0
83	MG	B	1913	1/1	0.92	0.11	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	B	1914	1/1	0.92	0.07	47,47,47,47	0
83	MG	AS	3574	1/1	0.92	0.07	17,17,17,17	0
83	MG	AS	3575	1/1	0.92	0.10	33,33,33,33	0
83	MG	1	3508	1/1	0.92	0.17	33,33,33,33	0
83	MG	1	3710	1/1	0.92	0.10	38,38,38,38	0
83	MG	BJ	301	1/1	0.92	0.16	22,22,22,22	0
83	MG	AS	3425	1/1	0.92	0.19	17,17,17,17	0
83	MG	1	3922	1/1	0.92	0.25	42,42,42,42	0
83	MG	1	3626	1/1	0.93	0.16	46,46,46,46	0
83	MG	1	3601	1/1	0.93	0.11	61,61,61,61	0
83	MG	1	3424	1/1	0.93	0.19	14,14,14,14	0
83	MG	CM	1804	1/1	0.93	0.22	25,25,25,25	0
83	MG	AS	3612	1/1	0.93	0.11	25,25,25,25	0
83	MG	2	202	1/1	0.93	0.10	34,34,34,34	0
83	MG	AS	3495	1/1	0.93	0.24	33,33,33,33	0
83	MG	B	1901	1/1	0.93	0.13	43,43,43,43	0
83	MG	CM	1810	1/1	0.93	0.13	46,46,46,46	0
83	MG	3	208	1/1	0.93	0.09	47,47,47,47	0
83	MG	1	3462	1/1	0.93	0.15	19,19,19,19	0
83	MG	CM	1814	1/1	0.93	0.12	19,19,19,19	0
83	MG	CM	1815	1/1	0.93	0.15	28,28,28,28	0
83	MG	1	3741	1/1	0.93	0.23	18,18,18,18	0
83	MG	AS	3503	1/1	0.93	0.15	21,21,21,21	0
83	MG	1	3857	1/1	0.93	0.10	40,40,40,40	0
83	MG	AS	3505	1/1	0.93	0.07	12,12,12,12	0
83	MG	Y	203	1/1	0.93	0.25	41,41,41,41	0
83	MG	1	3784	1/1	0.93	0.16	30,30,30,30	0
83	MG	1	3859	1/1	0.93	0.13	77,77,77,77	0
83	MG	1	3633	1/1	0.93	0.12	40,40,40,40	0
83	MG	1	3496	1/1	0.93	0.11	31,31,31,31	0
83	MG	1	3565	1/1	0.93	0.17	44,44,44,44	0
83	MG	AS	3635	1/1	0.93	0.22	44,44,44,44	0
83	MG	1	3863	1/1	0.93	0.13	29,29,29,29	0
83	MG	AS	3520	1/1	0.93	0.15	20,20,20,20	0
83	MG	AS	3522	1/1	0.93	0.11	30,30,30,30	0
83	MG	B	1848	1/1	0.93	0.15	30,30,30,30	0
83	MG	1	3831	1/1	0.93	0.18	80,80,80,80	0
83	MG	CM	1838	1/1	0.93	0.14	32,32,32,32	0
83	MG	1	3485	1/1	0.93	0.12	37,37,37,37	0
83	MG	1	3615	1/1	0.93	0.17	51,51,51,51	0
83	MG	AS	3529	1/1	0.93	0.10	55,55,55,55	0
83	MG	AS	3533	1/1	0.93	0.19	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	3910	1/1	0.93	0.09	64,64,64,64	0
83	MG	1	3590	1/1	0.93	0.12	17,17,17,17	0
83	MG	1	3646	1/1	0.93	0.21	48,48,48,48	0
83	MG	AS	3654	1/1	0.93	0.06	17,17,17,17	0
83	MG	1	3487	1/1	0.93	0.07	11,11,11,11	0
83	MG	1	3915	1/1	0.93	0.07	17,17,17,17	0
83	MG	B	1863	1/1	0.93	0.20	58,58,58,58	0
83	MG	AS	3659	1/1	0.93	0.09	18,18,18,18	0
83	MG	AS	3660	1/1	0.93	0.09	27,27,27,27	0
83	MG	1	3403	1/1	0.93	0.22	25,25,25,25	0
83	MG	CM	1861	1/1	0.93	0.09	24,24,24,24	0
83	MG	CM	1862	1/1	0.93	0.13	29,29,29,29	0
83	MG	1	3919	1/1	0.93	0.35	51,51,51,51	0
83	MG	AS	3546	1/1	0.93	0.15	15,15,15,15	0
83	MG	1	3471	1/1	0.93	0.14	21,21,21,21	0
83	MG	AS	3549	1/1	0.93	0.34	33,33,33,33	0
83	MG	CM	1869	1/1	0.93	0.13	17,17,17,17	0
83	MG	AS	3434	1/1	0.93	0.18	18,18,18,18	0
83	MG	AS	3435	1/1	0.93	0.24	30,30,30,30	0
83	MG	1	3538	1/1	0.93	0.16	48,48,48,48	0
83	MG	AS	3674	1/1	0.93	0.20	44,44,44,44	0
83	MG	1	3454	1/1	0.93	0.06	9,9,9,9	0
83	MG	AS	3444	1/1	0.93	0.15	15,15,15,15	0
83	MG	CM	1878	1/1	0.93	0.18	33,33,33,33	0
83	MG	1	3704	1/1	0.93	0.13	30,30,30,30	0
83	MG	CM	1881	1/1	0.93	0.08	11,11,11,11	0
83	MG	B	1937	1/1	0.93	0.18	47,47,47,47	0
83	MG	B	1874	1/1	0.93	0.17	37,37,37,37	0
83	MG	B	1808	1/1	0.93	0.14	29,29,29,29	0
83	MG	AS	3457	1/1	0.93	0.10	23,23,23,23	0
83	MG	u	201	1/1	0.93	0.11	28,28,28,28	0
83	MG	1	3769	1/1	0.93	0.12	21,21,21,21	0
83	MG	AS	3577	1/1	0.93	0.24	30,30,30,30	0
83	MG	CM	1895	1/1	0.93	0.20	21,21,21,21	0
83	MG	AS	3578	1/1	0.93	0.20	27,27,27,27	0
83	MG	AS	3579	1/1	0.93	0.19	38,38,38,38	0
83	MG	AU	202	1/1	0.93	0.20	31,31,31,31	0
83	MG	CM	1901	1/1	0.93	0.09	20,20,20,20	0
83	MG	1	3882	1/1	0.93	0.16	39,39,39,39	0
83	MG	1	3770	1/1	0.93	0.12	46,46,46,46	0
83	MG	1	3578	1/1	0.93	0.21	27,27,27,27	0
83	MG	B	1820	1/1	0.93	0.12	22,22,22,22	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	B	1888	1/1	0.93	0.22	52,52,52,52	0
83	MG	AS	3589	1/1	0.93	0.17	21,21,21,21	0
83	MG	AS	3590	1/1	0.93	0.17	33,33,33,33	0
83	MG	AS	3470	1/1	0.93	0.19	31,31,31,31	0
83	MG	1	3505	1/1	0.93	0.06	22,22,22,22	0
83	MG	AS	3594	1/1	0.93	0.10	34,34,34,34	0
83	MG	1	3847	1/1	0.93	0.07	36,36,36,36	0
83	MG	1	3733	1/1	0.93	0.22	11,11,11,11	0
83	MG	1	3439	1/1	0.93	0.18	20,20,20,20	0
83	MG	AS	3480	1/1	0.93	0.11	29,29,29,29	0
85	ZN	CJ	201	1/1	0.93	0.11	211,211,211,211	0
83	MG	D	301	1/1	0.93	0.16	38,38,38,38	0
83	MG	B	1826	1/1	0.93	0.14	43,43,43,43	0
83	MG	AS	3486	1/1	0.93	0.12	28,28,28,28	0
83	MG	AS	3415	1/1	0.94	0.23	22,22,22,22	0
83	MG	1	3602	1/1	0.94	0.07	28,28,28,28	0
83	MG	AS	3636	1/1	0.94	0.11	42,42,42,42	0
83	MG	AS	3532	1/1	0.94	0.27	23,23,23,23	0
83	MG	1	3886	1/1	0.94	0.09	27,27,27,27	0
83	MG	AS	3639	1/1	0.94	0.12	37,37,37,37	0
83	MG	1	3467	1/1	0.94	0.20	37,37,37,37	0
83	MG	3	205	1/1	0.94	0.16	27,27,27,27	0
83	MG	1	3604	1/1	0.94	0.15	25,25,25,25	0
83	MG	1	3660	1/1	0.94	0.08	25,25,25,25	0
83	MG	CM	1826	1/1	0.94	0.10	34,34,34,34	0
83	MG	1	3606	1/1	0.94	0.13	58,58,58,58	0
83	MG	1	3801	1/1	0.94	0.09	29,29,29,29	0
83	MG	AS	3647	1/1	0.94	0.16	45,45,45,45	0
83	MG	B	1852	1/1	0.94	0.11	26,26,26,26	0
83	MG	AS	3542	1/1	0.94	0.17	37,37,37,37	0
83	MG	AS	3651	1/1	0.94	0.07	17,17,17,17	0
83	MG	B	1853	1/1	0.94	0.20	27,27,27,27	0
83	MG	AS	3437	1/1	0.94	0.16	33,33,33,33	0
83	MG	1	3761	1/1	0.94	0.09	18,18,18,18	0
83	MG	1	3519	1/1	0.94	0.15	41,41,41,41	0
83	MG	1	3520	1/1	0.94	0.17	25,25,25,25	0
83	MG	B	1929	1/1	0.94	0.11	37,37,37,37	0
83	MG	CM	1847	1/1	0.94	0.16	27,27,27,27	0
83	MG	AS	3554	1/1	0.94	0.16	18,18,18,18	0
83	MG	1	3634	1/1	0.94	0.11	43,43,43,43	0
83	MG	1	3665	1/1	0.94	0.06	24,24,24,24	0
83	MG	B	1861	1/1	0.94	0.10	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	4	204	1/1	0.94	0.15	25,25,25,25	0
83	MG	1	3609	1/1	0.94	0.06	20,20,20,20	0
83	MG	1	3610	1/1	0.94	0.20	47,47,47,47	0
83	MG	AS	3669	1/1	0.94	0.21	56,56,56,56	0
83	MG	1	3903	1/1	0.94	0.13	56,56,56,56	0
83	MG	AS	3569	1/1	0.94	0.16	33,33,33,33	0
83	MG	AS	3571	1/1	0.94	0.17	14,14,14,14	0
83	MG	1	3814	1/1	0.94	0.07	33,33,33,33	0
83	MG	B	1867	1/1	0.94	0.09	49,49,49,49	0
83	MG	4	210	1/1	0.94	0.07	34,34,34,34	0
83	MG	1	3670	1/1	0.94	0.09	47,47,47,47	0
83	MG	j	301	1/1	0.94	0.07	15,15,15,15	0
83	MG	B	1873	1/1	0.94	0.16	48,48,48,48	0
83	MG	B	1945	1/1	0.94	0.21	56,56,56,56	0
83	MG	1	3816	1/1	0.94	0.17	28,28,28,28	0
83	MG	1	3459	1/1	0.94	0.10	20,20,20,20	0
83	MG	CM	1873	1/1	0.94	0.21	40,40,40,40	0
83	MG	1	3574	1/1	0.94	0.12	22,22,22,22	0
83	MG	CM	1875	1/1	0.94	0.08	18,18,18,18	0
83	MG	B	1878	1/1	0.94	0.17	14,14,14,14	0
83	MG	1	3592	1/1	0.94	0.22	43,43,43,43	0
83	MG	1	3821	1/1	0.94	0.22	43,43,43,43	0
83	MG	AU	201	1/1	0.94	0.09	40,40,40,40	0
83	MG	B	1883	1/1	0.94	0.17	23,23,23,23	0
83	MG	1	3864	1/1	0.94	0.14	41,41,41,41	0
83	MG	B	1813	1/1	0.94	0.13	19,19,19,19	0
83	MG	1	3460	1/1	0.94	0.17	15,15,15,15	0
83	MG	o	302	1/1	0.94	0.12	16,16,16,16	0
83	MG	CM	1886	1/1	0.94	0.23	40,40,40,40	0
83	MG	1	3777	1/1	0.94	0.19	21,21,21,21	0
83	MG	1	3703	1/1	0.94	0.23	48,48,48,48	0
83	MG	1	3916	1/1	0.94	0.09	45,45,45,45	0
83	MG	AS	3501	1/1	0.94	0.12	40,40,40,40	0
83	MG	1	3779	1/1	0.94	0.22	33,33,33,33	0
83	MG	1	3441	1/1	0.94	0.21	29,29,29,29	0
83	MG	1	3445	1/1	0.94	0.17	25,25,25,25	0
83	MG	1	3678	1/1	0.94	0.15	19,19,19,19	0
83	MG	CM	1903	1/1	0.94	0.09	38,38,38,38	0
83	MG	AS	3610	1/1	0.94	0.07	35,35,35,35	0
83	MG	1	3709	1/1	0.94	0.16	25,25,25,25	0
83	MG	AS	3614	1/1	0.94	0.09	16,16,16,16	0
83	MG	AS	3508	1/1	0.94	0.06	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	DB	202	1/1	0.94	0.15	57,57,57,57	0
83	MG	AS	3511	1/1	0.94	0.27	50,50,50,50	0
83	MG	1	3453	1/1	0.94	0.13	33,33,33,33	0
83	MG	1	3878	1/1	0.94	0.15	34,34,34,34	0
83	MG	DQ	101	1/1	0.94	0.10	42,42,42,42	0
83	MG	1	3744	1/1	0.94	0.18	23,23,23,23	0
83	MG	CM	1802	1/1	0.94	0.26	15,15,15,15	0
83	MG	y	201	1/1	0.94	0.09	12,12,12,12	0
83	MG	AS	3403	1/1	0.94	0.19	5,5,5,5	0
83	MG	1	3560	1/1	0.94	0.14	24,24,24,24	0
83	MG	B	1834	1/1	0.94	0.11	29,29,29,29	0
83	MG	1	3458	1/1	0.94	0.21	8,8,8,8	0
83	MG	1	3749	1/1	0.94	0.15	20,20,20,20	0
83	MG	1	3546	1/1	0.94	0.12	36,36,36,36	0
83	MG	1	3482	1/1	0.94	0.24	23,23,23,23	0
83	MG	AS	3526	1/1	0.94	0.08	27,27,27,27	0
83	MG	1	3782	1/1	0.95	0.12	28,28,28,28	0
83	MG	1	3549	1/1	0.95	0.18	32,32,32,32	0
83	MG	B	1857	1/1	0.95	0.16	37,37,37,37	0
83	MG	1	3737	1/1	0.95	0.16	15,15,15,15	0
83	MG	1	3738	1/1	0.95	0.11	21,21,21,21	0
83	MG	AS	3541	1/1	0.95	0.09	49,49,49,49	0
83	MG	1	3504	1/1	0.95	0.10	21,21,21,21	0
83	MG	1	3888	1/1	0.95	0.17	28,28,28,28	0
83	MG	AS	3545	1/1	0.95	0.22	15,15,15,15	0
83	MG	1	3452	1/1	0.95	0.16	19,19,19,19	0
83	MG	CM	1830	1/1	0.95	0.18	25,25,25,25	0
83	MG	1	3506	1/1	0.95	0.07	26,26,26,26	0
83	MG	AS	3650	1/1	0.95	0.08	7,7,7,7	0
83	MG	1	3743	1/1	0.95	0.11	25,25,25,25	0
83	MG	4	201	1/1	0.95	0.25	41,41,41,41	0
83	MG	1	3642	1/1	0.95	0.19	16,16,16,16	0
83	MG	AS	3553	1/1	0.95	0.11	46,46,46,46	0
83	MG	1	3406	1/1	0.95	0.24	26,26,26,26	0
83	MG	AS	3461	1/1	0.95	0.17	23,23,23,23	0
83	MG	1	3795	1/1	0.95	0.15	37,37,37,37	0
83	MG	CM	1844	1/1	0.95	0.13	26,26,26,26	0
83	MG	AS	3464	1/1	0.95	0.18	21,21,21,21	0
83	MG	1	3412	1/1	0.95	0.25	19,19,19,19	0
83	MG	B	1801	1/1	0.95	0.07	69,69,69,69	0
83	MG	B	1872	1/1	0.95	0.13	40,40,40,40	0
83	MG	1	3748	1/1	0.95	0.15	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	1	3897	1/1	0.95	0.19	52,52,52,52	0
83	MG	CM	1852	1/1	0.95	0.07	24,24,24,24	0
83	MG	AS	3471	1/1	0.95	0.24	51,51,51,51	0
83	MG	1	3898	1/1	0.95	0.07	16,16,16,16	0
83	MG	4	211	1/1	0.95	0.08	11,11,11,11	0
83	MG	1	3557	1/1	0.95	0.15	34,34,34,34	0
83	MG	1	3711	1/1	0.95	0.06	22,22,22,22	0
83	MG	AS	3479	1/1	0.95	0.13	30,30,30,30	0
83	MG	1	3850	1/1	0.95	0.07	22,22,22,22	0
83	MG	B	1811	1/1	0.95	0.17	27,27,27,27	0
83	MG	CM	1863	1/1	0.95	0.12	44,44,44,44	0
83	MG	1	3712	1/1	0.95	0.11	41,41,41,41	0
83	MG	B	1885	1/1	0.95	0.08	45,45,45,45	0
83	MG	1	3612	1/1	0.95	0.10	27,27,27,27	0
83	MG	AS	3587	1/1	0.95	0.10	14,14,14,14	0
83	MG	1	3405	1/1	0.95	0.23	21,21,21,21	0
83	MG	1	3532	1/1	0.95	0.15	15,15,15,15	0
83	MG	1	3616	1/1	0.95	0.18	22,22,22,22	0
83	MG	AS	3494	1/1	0.95	0.16	31,31,31,31	0
83	MG	1	3808	1/1	0.95	0.12	28,28,28,28	0
83	MG	1	3650	1/1	0.95	0.11	34,34,34,34	0
83	MG	1	3512	1/1	0.95	0.17	49,49,49,49	0
83	MG	1	3561	1/1	0.95	0.07	26,26,26,26	0
83	MG	AW	301	1/1	0.95	0.11	30,30,30,30	0
83	MG	1	3456	1/1	0.95	0.07	6,6,6,6	0
83	MG	AW	303	1/1	0.95	0.08	34,34,34,34	0
83	MG	1	3414	1/1	0.95	0.21	20,20,20,20	0
83	MG	1	3410	1/1	0.95	0.19	7,7,7,7	0
83	MG	1	3768	1/1	0.95	0.08	27,27,27,27	0
83	MG	1	3917	1/1	0.95	0.08	79,79,79,79	0
83	MG	1	3516	1/1	0.95	0.16	30,30,30,30	0
83	MG	1	3416	1/1	0.95	0.16	25,25,25,25	0
83	MG	CM	1887	1/1	0.95	0.19	16,16,16,16	0
83	MG	1	3819	1/1	0.95	0.19	13,13,13,13	0
83	MG	AS	3607	1/1	0.95	0.13	37,37,37,37	0
83	MG	AS	3609	1/1	0.95	0.06	8,8,8,8	0
83	MG	1	3869	1/1	0.95	0.07	37,37,37,37	0
83	MG	AS	3611	1/1	0.95	0.12	29,29,29,29	0
83	MG	AS	3513	1/1	0.95	0.14	28,28,28,28	0
83	MG	1	3870	1/1	0.95	0.14	43,43,43,43	0
83	MG	AS	3406	1/1	0.95	0.23	17,17,17,17	0
83	MG	1	3659	1/1	0.95	0.11	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	1	3436	1/1	0.95	0.16	23,23,23,23	0
83	MG	1	3823	1/1	0.95	0.11	34,34,34,34	0
83	MG	1	3448	1/1	0.95	0.16	14,14,14,14	0
83	MG	1	3571	1/1	0.95	0.14	15,15,15,15	0
83	MG	2	201	1/1	0.95	0.17	75,75,75,75	0
83	MG	1	3450	1/1	0.95	0.17	32,32,32,32	0
83	MG	1	3696	1/1	0.95	0.11	19,19,19,19	0
83	MG	1	3418	1/1	0.95	0.15	33,33,33,33	0
83	MG	AS	3527	1/1	0.95	0.09	35,35,35,35	0
83	MG	1	3486	1/1	0.95	0.17	18,18,18,18	0
83	MG	CM	1809	1/1	0.95	0.13	67,67,67,67	0
83	MG	B	1921	1/1	0.95	0.08	24,24,24,24	0
83	MG	AS	3530	1/1	0.95	0.17	34,34,34,34	0
83	MG	CM	1812	1/1	0.95	0.14	41,41,41,41	0
83	MG	AS	3633	1/1	0.95	0.05	43,43,43,43	0
83	MG	1	3666	1/1	0.95	0.09	27,27,27,27	0
83	MG	1	3667	1/1	0.95	0.05	16,16,16,16	0
83	MG	AS	3430	1/1	0.95	0.29	31,31,31,31	0
83	MG	CM	1817	1/1	0.95	0.11	19,19,19,19	0
83	MG	AS	3432	1/1	0.95	0.14	12,12,12,12	0
83	MG	AS	3509	1/1	0.96	0.10	29,29,29,29	0
83	MG	AS	3613	1/1	0.96	0.10	28,28,28,28	0
83	MG	AS	3510	1/1	0.96	0.15	28,28,28,28	0
83	MG	1	3786	1/1	0.96	0.08	24,24,24,24	0
83	MG	AS	3409	1/1	0.96	0.12	9,9,9,9	0
83	MG	AS	3617	1/1	0.96	0.07	25,25,25,25	0
83	MG	AS	3410	1/1	0.96	0.19	26,26,26,26	0
83	MG	1	3828	1/1	0.96	0.08	36,36,36,36	0
83	MG	1	3581	1/1	0.96	0.09	24,24,24,24	0
83	MG	1	3750	1/1	0.96	0.16	39,39,39,39	0
83	MG	1	3632	1/1	0.96	0.12	20,20,20,20	0
83	MG	AS	3625	1/1	0.96	0.18	42,42,42,42	0
83	MG	AF	201	1/1	0.96	0.12	23,23,23,23	0
83	MG	AS	3418	1/1	0.96	0.25	19,19,19,19	0
83	MG	1	3752	1/1	0.96	0.12	39,39,39,39	0
83	MG	B	1917	1/1	0.96	0.11	24,24,24,24	0
83	MG	1	3791	1/1	0.96	0.13	46,46,46,46	0
83	MG	AS	3424	1/1	0.96	0.19	15,15,15,15	0
83	MG	1	3834	1/1	0.96	0.19	21,21,21,21	0
83	MG	1	3521	1/1	0.96	0.14	26,26,26,26	0
83	MG	1	3541	1/1	0.96	0.08	34,34,34,34	0
83	MG	1	3522	1/1	0.96	0.07	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	CM	1829	1/1	0.96	0.13	25,25,25,25	0
83	MG	AS	3429	1/1	0.96	0.16	17,17,17,17	0
83	MG	AS	3531	1/1	0.96	0.12	45,45,45,45	0
83	MG	1	3756	1/1	0.96	0.14	31,31,31,31	0
83	MG	CM	1834	1/1	0.96	0.22	28,28,28,28	0
83	MG	AS	3431	1/1	0.96	0.19	8,8,8,8	0
83	MG	1	3638	1/1	0.96	0.15	9,9,9,9	0
83	MG	1	3422	1/1	0.96	0.22	14,14,14,14	0
83	MG	1	3544	1/1	0.96	0.28	19,19,19,19	0
83	MG	AS	3436	1/1	0.96	0.16	10,10,10,10	0
83	MG	B	1804	1/1	0.96	0.15	14,14,14,14	0
83	MG	CM	1842	1/1	0.96	0.09	45,45,45,45	0
83	MG	AS	3439	1/1	0.96	0.13	32,32,32,32	0
83	MG	AS	3440	1/1	0.96	0.17	17,17,17,17	0
83	MG	1	3589	1/1	0.96	0.13	16,16,16,16	0
83	MG	CM	1846	1/1	0.96	0.08	18,18,18,18	0
83	MG	1	3613	1/1	0.96	0.18	24,24,24,24	0
83	MG	1	3404	1/1	0.96	0.14	30,30,30,30	0
83	MG	AS	3446	1/1	0.96	0.21	22,22,22,22	0
83	MG	1	3447	1/1	0.96	0.12	10,10,10,10	0
83	MG	B	1809	1/1	0.96	0.07	79,79,79,79	0
83	MG	AS	3548	1/1	0.96	0.13	26,26,26,26	0
83	MG	B	1936	1/1	0.96	0.09	25,25,25,25	0
83	MG	CM	1854	1/1	0.96	0.20	27,27,27,27	0
83	MG	1	3927	1/1	0.96	0.07	22,22,22,22	0
83	MG	B	1871	1/1	0.96	0.12	63,63,63,63	0
83	MG	1	3511	1/1	0.96	0.19	14,14,14,14	0
83	MG	v	302	1/1	0.96	0.07	19,19,19,19	0
83	MG	AS	3555	1/1	0.96	0.15	11,11,11,11	0
83	MG	1	3805	1/1	0.96	0.07	27,27,27,27	0
83	MG	AS	3663	1/1	0.96	0.19	42,42,42,42	0
83	MG	AS	3558	1/1	0.96	0.05	25,25,25,25	0
83	MG	w	301	1/1	0.96	0.09	22,22,22,22	0
83	MG	AS	3561	1/1	0.96	0.19	18,18,18,18	0
83	MG	AS	3463	1/1	0.96	0.18	34,34,34,34	0
83	MG	AS	3563	1/1	0.96	0.14	17,17,17,17	0
83	MG	B	1876	1/1	0.96	0.12	54,54,54,54	0
83	MG	1	3461	1/1	0.96	0.14	13,13,13,13	0
83	MG	AS	3466	1/1	0.96	0.14	25,25,25,25	0
83	MG	1	3474	1/1	0.96	0.26	21,21,21,21	0
83	MG	B	1819	1/1	0.96	0.20	16,16,16,16	0
83	MG	B	1881	1/1	0.96	0.12	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	B	1948	1/1	0.96	0.18	22,22,22,22	0
83	MG	1	3437	1/1	0.96	0.19	19,19,19,19	0
83	MG	1	3596	1/1	0.96	0.11	36,36,36,36	0
83	MG	AS	3576	1/1	0.96	0.15	24,24,24,24	0
83	MG	B	1822	1/1	0.96	0.18	22,22,22,22	0
83	MG	AT	205	1/1	0.96	0.16	22,22,22,22	0
83	MG	x	203	1/1	0.96	0.15	24,24,24,24	0
83	MG	AS	3475	1/1	0.96	0.09	22,22,22,22	0
83	MG	1	3573	1/1	0.96	0.11	23,23,23,23	0
83	MG	AS	3478	1/1	0.96	0.11	16,16,16,16	0
83	MG	AS	3583	1/1	0.96	0.24	30,30,30,30	0
83	MG	1	3501	1/1	0.96	0.16	12,12,12,12	0
83	MG	1	3488	1/1	0.96	0.25	9,9,9,9	0
83	MG	AS	3586	1/1	0.96	0.17	15,15,15,15	0
83	MG	3	207	1/1	0.96	0.11	51,51,51,51	0
83	MG	CM	1893	1/1	0.96	0.10	17,17,17,17	0
83	MG	1	3477	1/1	0.96	0.10	14,14,14,14	0
83	MG	CM	1896	1/1	0.96	0.06	4,4,4,4	0
83	MG	1	3656	1/1	0.96	0.12	28,28,28,28	0
83	MG	L	201	1/1	0.96	0.19	41,41,41,41	0
83	MG	AS	3488	1/1	0.96	0.28	15,15,15,15	0
83	MG	AS	3592	1/1	0.96	0.12	20,20,20,20	0
83	MG	AS	3489	1/1	0.96	0.08	29,29,29,29	0
83	MG	1	3742	1/1	0.96	0.12	32,32,32,32	0
83	MG	AS	3595	1/1	0.96	0.18	31,31,31,31	0
83	MG	B	1894	1/1	0.96	0.12	27,27,27,27	0
83	MG	B	1895	1/1	0.96	0.10	37,37,37,37	0
83	MG	BK	201	1/1	0.96	0.16	11,11,11,11	0
83	MG	AS	3598	1/1	0.96	0.04	24,24,24,24	0
83	MG	B	1832	1/1	0.96	0.17	19,19,19,19	0
83	MG	1	3899	1/1	0.96	0.17	31,31,31,31	0
83	MG	CA	201	1/1	0.96	0.10	33,33,33,33	0
83	MG	1	3478	1/1	0.96	0.12	20,20,20,20	0
83	MG	1	3556	1/1	0.96	0.06	35,35,35,35	0
83	MG	1	3745	1/1	0.96	0.15	30,30,30,30	0
83	MG	B	1837	1/1	0.96	0.13	26,26,26,26	0
83	MG	B	1838	1/1	0.96	0.14	20,20,20,20	0
83	MG	1	3479	1/1	0.96	0.16	35,35,35,35	0
83	MG	1	3481	1/1	0.96	0.11	12,12,12,12	0
83	MG	CM	1803	1/1	0.96	0.14	13,13,13,13	0
83	MG	1	3689	1/1	0.96	0.07	33,33,33,33	0
83	MG	1	3785	1/1	0.96	0.14	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
83	MG	AB	201	1/1	0.96	0.07	9,9,9,9	0
83	MG	AS	3448	1/1	0.97	0.11	33,33,33,33	0
83	MG	B	1889	1/1	0.97	0.16	37,37,37,37	0
83	MG	AS	3572	1/1	0.97	0.14	16,16,16,16	0
83	MG	B	1816	1/1	0.97	0.22	17,17,17,17	0
83	MG	AS	3451	1/1	0.97	0.15	26,26,26,26	0
83	MG	BQ	201	1/1	0.97	0.13	14,14,14,14	0
83	MG	AS	3454	1/1	0.97	0.09	20,20,20,20	0
83	MG	1	3912	1/1	0.97	0.06	26,26,26,26	0
83	MG	1	3480	1/1	0.97	0.16	16,16,16,16	0
83	MG	AS	3402	1/1	0.97	0.06	46,46,46,46	0
83	MG	B	1932	1/1	0.97	0.08	18,18,18,18	0
83	MG	1	3627	1/1	0.97	0.14	11,11,11,11	0
83	MG	1	3533	1/1	0.97	0.15	25,25,25,25	0
83	MG	AS	3582	1/1	0.97	0.15	16,16,16,16	0
83	MG	1	3629	1/1	0.97	0.09	25,25,25,25	0
83	MG	AS	3521	1/1	0.97	0.23	28,28,28,28	0
83	MG	1	3435	1/1	0.97	0.09	0,0,0,0	0
83	MG	v	301	1/1	0.97	0.07	21,21,21,21	0
83	MG	1	3757	1/1	0.97	0.23	19,19,19,19	0
83	MG	AS	3411	1/1	0.97	0.22	13,13,13,13	0
83	MG	1	3536	1/1	0.97	0.16	15,15,15,15	0
83	MG	1	3707	1/1	0.97	0.04	3,3,3,3	0
83	MG	1	3822	1/1	0.97	0.06	23,23,23,23	0
83	MG	1	3492	1/1	0.97	0.10	31,31,31,31	0
83	MG	1	3417	1/1	0.97	0.09	13,13,13,13	0
83	MG	CM	1879	1/1	0.97	0.12	26,26,26,26	0
83	MG	1	3802	1/1	0.97	0.13	19,19,19,19	0
83	MG	B	1831	1/1	0.97	0.15	23,23,23,23	0
83	MG	B	1906	1/1	0.97	0.11	12,12,12,12	0
83	MG	AK	102	1/1	0.97	0.06	12,12,12,12	0
83	MG	AS	3477	1/1	0.97	0.13	14,14,14,14	0
83	MG	AS	3422	1/1	0.97	0.07	20,20,20,20	0
83	MG	AS	3423	1/1	0.97	0.14	25,25,25,25	0
83	MG	4	208	1/1	0.97	0.11	8,8,8,8	0
83	MG	1	3874	1/1	0.97	0.11	45,45,45,45	0
83	MG	1	3826	1/1	0.97	0.06	36,36,36,36	0
83	MG	AS	3484	1/1	0.97	0.04	22,22,22,22	0
83	MG	AS	3485	1/1	0.97	0.16	15,15,15,15	0
83	MG	AS	3543	1/1	0.97	0.09	23,23,23,23	0
83	MG	1	3421	1/1	0.97	0.22	3,3,3,3	0
83	MG	1	3728	1/1	0.97	0.18	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	1	3852	1/1	0.97	0.14	24,24,24,24	0
83	MG	1	3764	1/1	0.97	0.15	18,18,18,18	0
83	MG	CM	1900	1/1	0.97	0.13	35,35,35,35	0
83	MG	B	1915	1/1	0.97	0.10	31,31,31,31	0
83	MG	1	3806	1/1	0.97	0.07	32,32,32,32	0
83	MG	AS	3492	1/1	0.97	0.10	16,16,16,16	0
83	MG	AS	3551	1/1	0.97	0.12	23,23,23,23	0
83	MG	CQ	301	1/1	0.97	0.06	3,3,3,3	0
83	MG	I	302	1/1	0.97	0.06	31,31,31,31	0
83	MG	1	3409	1/1	0.97	0.04	12,12,12,12	0
83	MG	1	3570	1/1	0.97	0.17	28,28,28,28	0
83	MG	AS	3619	1/1	0.97	0.10	20,20,20,20	0
83	MG	AS	3620	1/1	0.97	0.16	26,26,26,26	0
83	MG	1	3509	1/1	0.97	0.18	20,20,20,20	0
83	MG	CM	1840	1/1	0.97	0.20	24,24,24,24	0
83	MG	B	1920	1/1	0.97	0.07	68,68,68,68	0
83	MG	AS	3499	1/1	0.97	0.07	6,6,6,6	0
83	MG	6	201	1/1	0.97	0.13	23,23,23,23	0
83	MG	6	202	1/1	0.97	0.14	27,27,27,27	0
85	ZN	AQ	101	1/1	0.97	0.06	65,65,65,65	0
83	MG	B	1812	1/1	0.97	0.11	17,17,17,17	0
83	MG	AS	3443	1/1	0.97	0.19	11,11,11,11	0
83	MG	AS	3564	1/1	0.97	0.05	12,12,12,12	0
85	ZN	CH	101	1/1	0.97	0.11	75,75,75,75	0
83	MG	1	3640	1/1	0.97	0.21	27,27,27,27	0
83	MG	1	3641	1/1	0.97	0.16	7,7,7,7	0
85	ZN	DS	201	1/1	0.97	0.07	134,134,134,134	0
83	MG	AS	3506	1/1	0.97	0.11	18,18,18,18	0
83	MG	1	3685	1/1	0.97	0.17	33,33,33,33	0
83	MG	1	3550	1/1	0.98	0.12	9,9,9,9	0
83	MG	CM	1831	1/1	0.98	0.08	44,44,44,44	0
83	MG	AS	3445	1/1	0.98	0.05	22,22,22,22	0
83	MG	1	3499	1/1	0.98	0.18	13,13,13,13	0
83	MG	1	3528	1/1	0.98	0.10	32,32,32,32	0
83	MG	B	1854	1/1	0.98	0.06	58,58,58,58	0
83	MG	1	3534	1/1	0.98	0.05	15,15,15,15	0
83	MG	BV	201	1/1	0.98	0.21	25,25,25,25	0
83	MG	AS	3664	1/1	0.98	0.10	29,29,29,29	0
83	MG	1	3865	1/1	0.98	0.03	25,25,25,25	0
83	MG	AS	3483	1/1	0.98	0.11	13,13,13,13	0
83	MG	AS	3517	1/1	0.98	0.09	22,22,22,22	0
83	MG	CM	1889	1/1	0.98	0.13	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	AS	3668	1/1	0.98	0.06	63,63,63,63	0
83	MG	4	202	1/1	0.98	0.18	10,10,10,10	0
83	MG	AS	3670	1/1	0.98	0.08	11,11,11,11	0
83	MG	CM	1894	1/1	0.98	0.25	16,16,16,16	0
83	MG	AS	3452	1/1	0.98	0.14	19,19,19,19	0
83	MG	AS	3453	1/1	0.98	0.14	14,14,14,14	0
83	MG	1	3420	1/1	0.98	0.13	17,17,17,17	0
83	MG	B	1880	1/1	0.98	0.12	20,20,20,20	0
83	MG	AS	3557	1/1	0.98	0.09	20,20,20,20	0
83	MG	B	1925	1/1	0.98	0.06	28,28,28,28	0
83	MG	AS	3559	1/1	0.98	0.09	8,8,8,8	0
83	MG	AS	3458	1/1	0.98	0.15	1,1,1,1	0
83	MG	AS	3679	1/1	0.98	0.06	28,28,28,28	0
83	MG	1	3635	1/1	0.98	0.07	37,37,37,37	0
83	MG	1	3636	1/1	0.98	0.05	22,22,22,22	0
83	MG	CM	1856	1/1	0.98	0.12	24,24,24,24	0
83	MG	B	1840	1/1	0.98	0.15	38,38,38,38	0
83	MG	B	1841	1/1	0.98	0.19	36,36,36,36	0
83	MG	1	3605	1/1	0.98	0.05	22,22,22,22	0
83	MG	AS	3407	1/1	0.98	0.05	0,0,0,0	0
83	MG	AS	3433	1/1	0.98	0.23	17,17,17,17	0
83	MG	AS	3498	1/1	0.98	0.10	26,26,26,26	0
83	MG	1	3465	1/1	0.98	0.10	10,10,10,10	0
83	MG	AS	3645	1/1	0.98	0.10	26,26,26,26	0
83	MG	AS	3570	1/1	0.98	0.14	16,16,16,16	0
85	ZN	AK	101	1/1	0.98	0.08	55,55,55,55	0
85	ZN	AN	101	1/1	0.98	0.06	73,73,73,73	0
83	MG	AS	3608	1/1	0.98	0.04	21,21,21,21	0
83	MG	CM	1867	1/1	0.98	0.10	34,34,34,34	0
83	MG	1	3767	1/1	0.98	0.04	26,26,26,26	0
85	ZN	f	101	1/1	0.98	0.07	71,71,71,71	0
83	MG	1	3811	1/1	0.98	0.06	6,6,6,6	0
83	MG	1	3588	1/1	0.98	0.10	26,26,26,26	0
83	MG	AS	3438	1/1	0.98	0.20	17,17,17,17	0
83	MG	1	3676	1/1	0.98	0.09	41,41,41,41	0
85	ZN	DN	201	1/1	0.98	0.03	59,59,59,59	0
83	MG	1	3449	1/1	0.98	0.15	11,11,11,11	0
83	MG	B	1849	1/1	0.98	0.13	32,32,32,32	0
83	MG	1	3572	1/1	0.98	0.10	11,11,11,11	0
83	MG	AS	3416	1/1	0.98	0.05	47,47,47,47	0
83	MG	1	3475	1/1	0.99	0.17	3,3,3,3	0
85	ZN	c	201	1/1	0.99	0.03	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
83	MG	AS	3656	1/1	0.99	0.04	45,45,45,45	0
83	MG	AS	3456	1/1	0.99	0.16	7,7,7,7	0
83	MG	1	3772	1/1	0.99	0.12	18,18,18,18	0
83	MG	1	3472	1/1	0.99	0.10	10,10,10,10	0
85	ZN	CE	101	1/1	0.99	0.04	66,66,66,66	0
83	MG	1	3440	1/1	0.99	0.18	2,2,2,2	0
83	MG	1	3566	1/1	0.99	0.10	3,3,3,3	0
85	ZN	CK	101	1/1	0.99	0.03	84,84,84,84	0
83	MG	1	3582	1/1	0.99	0.20	31,31,31,31	0
83	MG	1	3408	1/1	0.99	0.03	47,47,47,47	0
83	MG	CM	1892	1/1	0.99	0.14	9,9,9,9	0
83	MG	3	201	1/1	0.99	0.12	0,0,0,0	0
83	MG	AP	202	1/1	0.99	0.03	12,12,12,12	0
83	MG	1	3708	1/1	1.00	0.08	11,11,11,11	0

6.5 Other polymers [i](#)

There are no such residues in this entry.