



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 17, 2026 – 03:30 AM UTC

PDB ID : 4V5J / pdb_00004v5j
Title : Structure of the 70S ribosome bound to Release factor 2 and a substrate analog provides insights into catalysis of peptide release
Authors : Jin, H.; Kelley, A.C.; Loakes, D.; Ramakrishnan, V.
Deposited on : 2010-03-24
Resolution : 3.10 Å(reported)

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

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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	:	FAILED
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.48.1

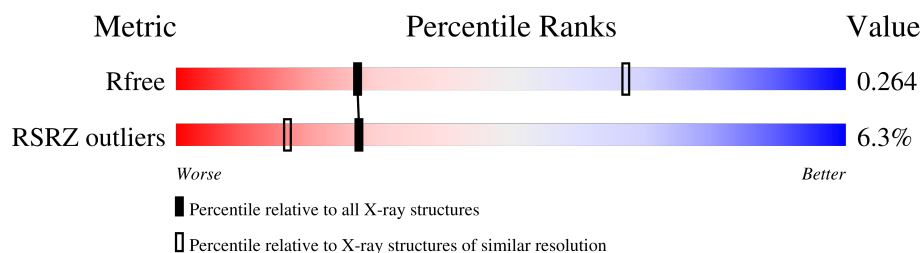
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.10 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	1351 (3.10-3.10)
RSRZ outliers	164620	1351 (3.10-3.10)

MolProbity failed to run properly - the sequence quality summary graphics cannot be shown.

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
22	PHA	AW	77	-	-	-	X
59	MG	AA	1666	-	-	-	X
59	MG	BA	3121	-	-	-	X
59	MG	BA	3208	-	-	-	X
59	MG	BA	3239	-	-	-	X
59	MG	CA	1696	-	-	-	X
59	MG	DA	3095	-	-	-	X
59	MG	DA	3197	-	-	-	X
59	MG	DA	3214	-	-	-	X

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 305067 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1504	Total	C	N	O	P	0	0	0
			32329	14390	5992	10444	1503			
1	CA	1504	Total	C	N	O	P	0	0	0
			32329	14390	5992	10444	1503			

- Molecule 2 is a protein called 30S RIBOSOMAL PROTEIN S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	235	Total	C	N	O	S	0	0	1
			1901	1213	342	341	5			
2	CB	235	Total	C	N	O	S	0	0	1
			1901	1213	342	341	5			

- Molecule 3 is a protein called 30S RIBOSOMAL PROTEIN S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	207	Total	C	N	O	S	0	0	1
			1613	1016	315	281	1			
3	CC	207	Total	C	N	O	S	0	0	1
			1613	1016	315	281	1			

- Molecule 4 is a protein called 30S RIBOSOMAL PROTEIN S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			
4	CD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
6	CF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

- Molecule 7 is a protein called 30S RIBOSOMAL PROTEIN S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			

- Molecule 8 is a protein called 30S RIBOSOMAL PROTEIN S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			
8	CH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Molecule 22 is a RNA chain called E-SITE TRNA PHE OR P-SITE TRNA PHE (UNMODIFIED BASES).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	77	Total	C	N	O	P	0	0	0
			1630	732	292	531	75			
22	AW	77	Total	C	N	O	P	0	0	0
			1630	732	292	531	75			
22	CV	77	Total	C	N	O	P	0	0	0
			1630	732	292	531	75			
22	CW	77	Total	C	N	O	P	0	0	0
			1630	732	292	531	75			

- Molecule 23 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AX	8	Total	C	N	O	P	0	0	0
			165	76	29	53	7			
23	CX	8	Total	C	N	O	P	0	0	0
			165	76	29	53	7			

- Molecule 24 is a protein called PEPTIDE CHAIN RELEASE FACTOR 2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AY	351	Total	C	N	O	S	0	0	0
			2801	1752	506	535	8			
24	CY	351	Total	C	N	O	S	0	0	0
			2801	1752	506	535	8			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	B0	83	Total	C	N	O	S	0	0	0
			657	407	139	110	1			
25	D0	83	Total	C	N	O	S	0	0	0
			657	407	139	110	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	B1	94	Total	C	N	O	S	0	0	1
			732	460	146	125	1			
26	D1	94	Total	C	N	O	S	0	0	1
			732	460	146	125	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	B2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			
27	D2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	B4	31	Total	C	N	O	S	0	0	1
			226	142	37	43	4			
29	D4	31	Total	C	N	O	S	0	0	1
			226	142	37	43	4			

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

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

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

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

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

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

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

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

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

- Molecule 34 is a protein called 50S RIBOSOMAL PROTEIN L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	B9	36	Total	C	N	O	S	0	0	0
			299	183	67	46	3			
34	D9	36	Total	C	N	O	S	0	0	0
			299	183	67	46	3			

- Molecule 35 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BA	2901	Total	C	N	O	P	0	0	0
			62474	27806	11681	20087	2900			
35	DA	2901	Total	C	N	O	P	0	0	0
			62474	27806	11681	20087	2900			

- Molecule 36 is a RNA chain called 5S RIBOSOMAL RNA.

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

- Molecule 37 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BC	120	Total	C	N	O	S	0	0	0
			937	590	174	172	1			
37	DC	120	Total	C	N	O	S	0	0	0
			937	590	174	172	1			

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L2.

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

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L3.

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

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L4.

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

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L5.

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

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L6.

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

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L9.

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

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BJ	130	Total	C	N	O		0	0	0
			651	390	130	131				
44	DJ	130	Total	C	N	O		0	0	0
			651	390	130	131				

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BK	141	Total	C	N	O	S	0	0	1
			1038	661	184	187	6			
45	DK	141	Total	C	N	O	S	0	0	1
			1038	661	184	187	6			

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L13.

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

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L14.

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

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

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L15.

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

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L16.

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

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

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

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L18.

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

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L19.

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

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L20.

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

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L21.

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

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L22.

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

- Molecule 56 is a protein called 50S RIBOSOMAL PROTEIN L23.

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

- Molecule 57 is a protein called 50S RIBOSOMAL PROTEIN L24.

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

- Molecule 58 is a protein called 50S RIBOSOMAL PROTEIN L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	BZ	185	Total	C	N	O	S	0	0	1
			1468	936	262	268	2			
58	DZ	185	Total	C	N	O	S	0	0	1
			1468	936	262	268	2			

- Molecule 59 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	AA	161	Total	Mg	0	0
			161	161		
59	AL	1	Total	Mg	0	0
			1	1		
59	AS	1	Total	Mg	0	0
			1	1		
59	AV	7	Total	Mg	0	0
			7	7		
59	AW	4	Total	Mg	0	0
			4	4		
59	AX	1	Total	Mg	0	0
			1	1		
59	AY	1	Total	Mg	0	0
			1	1		
59	B1	1	Total	Mg	0	0
			1	1		
59	B5	2	Total	Mg	0	0
			2	2		
59	BA	357	Total	Mg	0	0
			357	357		
59	BB	4	Total	Mg	0	0
			4	4		
59	BD	2	Total	Mg	0	0
			2	2		
59	BF	2	Total	Mg	0	0
			2	2		
59	BG	1	Total	Mg	0	0
			1	1		
59	BT	1	Total	Mg	0	0
			1	1		
59	BX	1	Total	Mg	0	0
			1	1		
59	BY	1	Total	Mg	0	0
			1	1		
59	CA	155	Total	Mg	0	0
			155	155		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	CD	1	Total 1	Mg 1	0	0
59	CL	2	Total 2	Mg 2	0	0
59	CN	1	Total 1	Mg 1	0	0
59	CS	1	Total 1	Mg 1	0	0
59	CV	7	Total 7	Mg 7	0	0
59	CW	4	Total 4	Mg 4	0	0
59	CX	1	Total 1	Mg 1	0	0
59	D1	1	Total 1	Mg 1	0	0
59	D5	2	Total 2	Mg 2	0	0
59	DA	359	Total 359	Mg 359	0	0
59	DB	4	Total 4	Mg 4	0	0
59	DD	1	Total 1	Mg 1	0	0
59	DE	1	Total 1	Mg 1	0	0
59	DF	1	Total 1	Mg 1	0	0
59	DG	1	Total 1	Mg 1	0	0
59	DH	1	Total 1	Mg 1	0	0
59	DP	1	Total 1	Mg 1	0	0
59	DS	1	Total 1	Mg 1	0	0
59	DX	1	Total 1	Mg 1	0	0

- Molecule 60 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	AD	1	Total 1	Zn 1	0	0
60	AN	1	Total 1	Zn 1	0	0
60	B9	1	Total 1	Zn 1	0	0
60	CD	1	Total 1	Zn 1	0	0
60	CN	1	Total 1	Zn 1	0	0
60	D9	1	Total 1	Zn 1	0	0

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	AV	1	Total 1	O 1	0	0
61	AY	1	Total 1	O 1	0	0
61	BA	1	Total 1	O 1	0	0

MolProbity failed to run properly - this section is therefore empty.

3 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	211.42Å 452.50Å 625.44Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	47.86 – 3.10 47.86 – 3.10	Depositor EDS
% Data completeness (in resolution range)	100.0 (47.86-3.10) 99.9 (47.86-3.10)	Depositor EDS
R_{merge}	0.16	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.59 (at 3.01Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, R_{free}	0.223 , 0.264 0.222 , 0.264	Depositor DCC
R_{free} test set	52374 reflections (4.44%)	wwPDB-VP
Wilson B-factor (Å ²)	55.0	Xtriage
Anisotropy	0.035	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.28 , 78.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.40$, $\langle L^2 \rangle = 0.22$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	305067	wwPDB-VP
Average B, all atoms (Å ²)	89.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.49% 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.

4 Model quality [i](#)

4.1 Standard geometry [i](#)

MolProbity failed to run properly - this section is therefore empty.

4.2 Too-close contacts [i](#)

MolProbity failed to run properly - this section is therefore empty.

4.3 Torsion angles [i](#)

4.3.1 Protein backbone [i](#)

MolProbity failed to run properly - this section is therefore empty.

4.3.2 Protein sidechains [i](#)

MolProbity failed to run properly - this section is therefore empty.

4.3.3 RNA [i](#)

MolProbity failed to run properly - this section is therefore empty.

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
22	PHA	CW	77	22	10,11,11	1.11	0	8,13,13	0.25	0
22	PHA	AV	77	22	10,11,11	1.13	0	8,13,13	0.39	0
22	8AN	AV	76	22,59,35	17,24,25	0.90	1 (5%)	13,35,38	1.04	1 (7%)
22	PHA	CV	77	22	10,11,11	1.00	0	8,13,13	0.47	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
22	8AN	AW	76	22,35	17,24,25	0.95	1 (5%)	13,35,38	0.99	1 (7%)
22	8AN	CV	76	22,59,35	17,24,25	0.82	1 (5%)	13,35,38	0.98	1 (7%)
22	8AN	CW	76	22,35	17,24,25	0.81	0	13,35,38	0.98	1 (7%)
22	PHA	AW	77	22	10,11,11	1.27	1 (10%)	8,13,13	0.36	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	PHA	CW	77	22	-	3/5/6/6	0/1/1/1
22	PHA	AV	77	22	-	3/5/6/6	0/1/1/1
22	8AN	AV	76	22,59,35	-	1/3/25/26	0/3/3/3
22	PHA	CV	77	22	-	4/5/6/6	0/1/1/1
22	8AN	AW	76	22,35	-	1/3/25/26	0/3/3/3
22	8AN	CV	76	22,59,35	-	1/3/25/26	0/3/3/3
22	8AN	CW	76	22,35	-	0/3/25/26	0/3/3/3
22	PHA	AW	77	22	-	2/5/6/6	0/1/1/1

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AW	77	PHA	CE1-CD1	2.36	1.43	1.38
22	AV	76	8AN	C3'-N3'	-2.28	1.43	1.47
22	AW	76	8AN	C3'-N3'	-2.16	1.44	1.47
22	CV	76	8AN	C3'-N3'	-2.13	1.44	1.47

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	AW	76	8AN	C5-C6-N6	2.21	123.67	120.31
22	AV	76	8AN	O4'-C4'-C3'	2.16	107.36	104.22
22	CW	76	8AN	C5-C6-N6	2.07	123.46	120.31
22	CV	76	8AN	O4'-C4'-C3'	2.00	107.13	104.22

There are no chirality outliers.

All (15) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
22	AV	76	8AN	C4'-C5'-O5'-P
22	AV	77	PHA	C-CA-CB-CG
22	AW	77	PHA	C-CA-CB-CG
22	CV	76	8AN	C4'-C5'-O5'-P
22	CV	77	PHA	C-CA-CB-CG
22	CW	77	PHA	O-C-CA-CB
22	CW	77	PHA	N-CA-CB-CG
22	CW	77	PHA	C-CA-CB-CG
22	CV	77	PHA	CA-CB-CG-CD2
22	AV	77	PHA	CA-CB-CG-CD2
22	AV	77	PHA	CA-CB-CG-CD1
22	CV	77	PHA	CA-CB-CG-CD1
22	CV	77	PHA	N-CA-CB-CG
22	AW	77	PHA	N-CA-CB-CG
22	AW	76	8AN	C4'-C5'-O5'-P

There are no ring outliers.

No monomer is involved in short contacts.

4.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

4.6 Ligand geometry [i](#)

Of 1100 ligands modelled in this entry, 1100 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

4.7 Other polymers [i](#)

There are no such residues in this entry.

4.8 Polymer linkage issues ⓘ

The following chains have linkage breaks:

Mol	Chain	Number of breaks
13	AM	5
13	CM	5
9	AI	2
9	CI	2
31	B6	1
41	BG	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B6	46:HIS	C	47:THR	N	7.42
1	AI	104:ARG	C	105:ASP	N	4.76
1	CI	104:ARG	C	105:ASP	N	4.74
1	AM	112:GLY	C	113:PRO	N	4.66
1	CM	112:GLY	C	113:PRO	N	4.66
1	BG	112:PRO	C	113:ARG	N	4.32
1	AM	69:GLU	C	70:LEU	N	4.17
1	CM	69:GLU	C	70:LEU	N	4.16
1	AM	65:LYS	C	66:LEU	N	3.15
1	CM	65:LYS	C	66:LEU	N	3.11
1	CM	118:ALA	C	119:GLY	N	2.99
1	AM	118:ALA	C	119:GLY	N	2.98
1	AM	97:PRO	C	98:VAL	N	2.81
1	CM	97:PRO	C	98:VAL	N	2.81
1	AI	53:VAL	C	54:ASP	N	2.79
1	CI	53:VAL	C	54:ASP	N	2.79

5 Fit of model and data ⓘ

5.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	AA	1504/1522 (98%)	0.48	62 (4%) 42 24	44, 101, 185, 201	0
1	CA	1504/1522 (98%)	0.40	56 (3%) 45 27	34, 96, 178, 201	0
2	AB	235/256 (91%)	0.70	18 (7%) 21 11	81, 138, 188, 201	0
2	CB	235/256 (91%)	0.60	21 (8%) 17 10	34, 118, 174, 201	0
3	AC	207/239 (86%)	0.69	17 (8%) 19 11	73, 133, 173, 201	0
3	CC	207/239 (86%)	0.48	8 (3%) 44 26	62, 113, 157, 198	0
4	AD	208/209 (99%)	0.44	10 (4%) 36 21	50, 93, 140, 190	0
4	CD	208/209 (99%)	0.86	21 (10%) 14 8	63, 108, 157, 201	0
5	AE	151/162 (93%)	0.45	6 (3%) 43 25	51, 97, 147, 177	0
5	CE	151/162 (93%)	0.20	3 (1%) 64 45	52, 84, 132, 163	0
6	AF	101/101 (100%)	0.49	4 (3%) 43 25	63, 105, 149, 201	0
6	CF	101/101 (100%)	0.29	4 (3%) 43 25	51, 88, 141, 168	0
7	AG	155/156 (99%)	0.77	16 (10%) 13 8	65, 130, 177, 191	0
7	CG	155/156 (99%)	0.51	11 (7%) 23 14	60, 106, 163, 201	0
8	AH	138/138 (100%)	0.55	8 (5%) 30 18	53, 105, 151, 172	0
8	CH	138/138 (100%)	0.37	4 (2%) 54 34	48, 83, 125, 156	0
9	AI	127/128 (99%)	1.31	29 (22%) 2 1	82, 148, 193, 201	0
9	CI	127/128 (99%)	0.93	16 (12%) 9 5	57, 123, 184, 200	0
10	AJ	99/105 (94%)	1.17	17 (17%) 5 3	62, 148, 189, 201	0
10	CJ	99/105 (94%)	0.94	14 (14%) 7 4	66, 133, 186, 201	0
11	AK	119/129 (92%)	0.50	5 (4%) 41 24	50, 109, 158, 185	0
11	CK	119/129 (92%)	0.30	6 (5%) 35 21	38, 81, 138, 181	0
12	AL	125/132 (94%)	0.55	10 (8%) 20 11	46, 86, 126, 188	0
12	CL	125/132 (94%)	0.79	10 (8%) 20 11	40, 90, 142, 200	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AM	125/126 (99%)	1.24	24 (19%) 4 2	83, 152, 196, 201	0
13	CM	125/126 (99%)	0.88	18 (14%) 7 4	40, 112, 176, 201	0
14	AN	60/61 (98%)	1.38	15 (25%) 2 1	72, 143, 178, 201	0
14	CN	60/61 (98%)	0.82	5 (8%) 19 10	63, 102, 144, 167	0
15	AO	88/89 (98%)	0.60	4 (4%) 39 23	59, 101, 135, 182	0
15	CO	88/89 (98%)	0.21	2 (2%) 61 42	45, 82, 126, 162	0
16	AP	84/88 (95%)	0.41	5 (5%) 29 17	45, 83, 143, 196	0
16	CP	84/88 (95%)	0.88	11 (13%) 8 5	63, 105, 145, 168	0
17	AQ	100/105 (95%)	0.38	4 (4%) 43 25	43, 89, 133, 153	0
17	CQ	100/105 (95%)	0.52	2 (2%) 64 45	49, 86, 121, 161	0
18	AR	70/88 (79%)	0.62	3 (4%) 40 24	74, 104, 159, 191	0
18	CR	70/88 (79%)	0.20	1 (1%) 73 56	61, 85, 129, 150	0
19	AS	79/93 (84%)	1.09	16 (20%) 3 2	102, 156, 194, 200	0
19	CS	79/93 (84%)	0.85	7 (8%) 17 10	69, 126, 187, 201	0
20	AT	99/106 (93%)	0.74	10 (10%) 14 8	54, 96, 158, 201	0
20	CT	99/106 (93%)	0.76	9 (9%) 16 9	49, 101, 152, 192	0
21	AU	25/27 (92%)	1.82	10 (40%) 1 0	92, 133, 184, 200	0
21	CU	25/27 (92%)	1.94	10 (40%) 1 0	77, 106, 145, 200	0
22	AV	75/77 (97%)	0.59	2 (2%) 56 36	82, 133, 176, 185	0
22	AW	75/77 (97%)	0.92	5 (6%) 25 15	91, 175, 200, 201	0
22	CV	75/77 (97%)	0.35	2 (2%) 56 36	61, 107, 152, 192	0
22	CW	75/77 (97%)	0.83	5 (6%) 25 15	64, 165, 200, 201	0
23	AX	8/8 (100%)	1.07	3 (37%) 1 0	77, 106, 136, 153	0
23	CX	8/8 (100%)	1.25	2 (25%) 2 1	46, 77, 146, 167	0
24	AY	351/351 (100%)	0.67	30 (8%) 18 10	68, 137, 194, 201	0
24	CY	351/351 (100%)	0.88	41 (11%) 10 7	66, 142, 191, 201	0
25	B0	83/85 (97%)	0.85	11 (13%) 8 5	55, 90, 160, 185	0
25	D0	83/85 (97%)	-0.05	5 (6%) 29 17	17, 43, 119, 176	0
26	B1	94/98 (95%)	0.14	4 (4%) 40 24	32, 69, 121, 148	0
26	D1	94/98 (95%)	-0.22	2 (2%) 63 44	18, 50, 99, 171	0
27	B2	71/72 (98%)	0.33	3 (4%) 41 24	53, 93, 147, 185	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
27	D2	71/72 (98%)	-0.36	2 (2%) 55 35	23, 48, 119, 154	0
28	B3	60/60 (100%)	0.41	3 (5%) 35 21	53, 82, 125, 183	0
28	D3	60/60 (100%)	-0.35	1 (1%) 69 50	13, 40, 82, 179	0
29	B4	31/71 (43%)	0.70	2 (6%) 26 16	86, 154, 187, 200	0
29	D4	31/71 (43%)	0.75	4 (12%) 9 5	77, 111, 160, 187	0
30	B5	59/60 (98%)	0.63	9 (15%) 6 3	30, 69, 181, 201	0
30	D5	59/60 (98%)	0.27	8 (13%) 8 5	10, 35, 157, 163	0
31	B6	45/54 (83%)	1.38	11 (24%) 2 1	71, 128, 178, 200	0
31	D6	45/54 (83%)	1.76	14 (31%) 1 1	40, 83, 144, 186	0
32	B7	49/49 (100%)	0.10	5 (10%) 13 8	25, 52, 117, 184	0
32	D7	49/49 (100%)	-0.28	1 (2%) 64 45	12, 26, 103, 200	0
33	B8	64/65 (98%)	1.08	14 (21%) 3 1	38, 78, 141, 201	0
33	D8	64/65 (98%)	0.19	6 (9%) 15 9	14, 45, 102, 180	0
34	B9	36/37 (97%)	1.12	6 (16%) 5 3	61, 94, 137, 149	0
34	D9	36/37 (97%)	0.11	1 (2%) 55 35	29, 48, 106, 125	0
35	BA	2901/2915 (99%)	0.09	78 (2%) 56 36	31, 70, 183, 201	0
35	DA	2901/2915 (99%)	-0.42	81 (2%) 55 35	10, 41, 178, 201	0
36	BB	119/122 (97%)	1.06	12 (10%) 14 8	76, 144, 190, 200	0
36	DB	119/122 (97%)	-0.20	4 (3%) 48 28	29, 59, 101, 171	0
37	BC	120/229 (52%)	1.04	18 (15%) 6 3	106, 177, 201, 201	0
37	DC	120/229 (52%)	1.24	18 (15%) 6 3	91, 170, 200, 201	0
38	BD	272/276 (98%)	0.15	8 (2%) 54 34	24, 63, 111, 158	0
38	DD	272/276 (98%)	-0.26	8 (2%) 54 34	15, 40, 84, 154	0
39	BE	205/206 (99%)	0.31	10 (4%) 36 21	29, 67, 136, 201	0
39	DE	205/206 (99%)	-0.08	17 (8%) 19 10	10, 41, 138, 200	0
40	BF	208/210 (99%)	0.38	12 (5%) 30 18	33, 77, 161, 201	0
40	DF	208/210 (99%)	-0.18	5 (2%) 59 41	9, 44, 158, 196	0
41	BG	181/182 (99%)	0.84	20 (11%) 12 7	66, 137, 182, 201	0
41	DG	181/182 (99%)	0.11	7 (3%) 44 26	34, 79, 147, 181	0
42	BH	160/180 (88%)	1.08	24 (15%) 6 3	70, 132, 180, 201	0
42	DH	160/180 (88%)	0.32	14 (8%) 17 10	29, 69, 139, 201	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
43	BI	146/148 (98%)	0.43	6 (4%) 42 24	53, 112, 152, 186	0
43	DI	146/148 (98%)	0.15	1 (0%) 84 70	36, 94, 142, 187	0
44	BJ	0/130	-	-	-	-
44	DJ	0/130	-	-	-	-
45	BK	141/147 (95%)	1.07	22 (15%) 6 3	122, 170, 201, 201	0
45	DK	141/147 (95%)	1.35	33 (23%) 2 1	117, 178, 201, 201	0
46	BN	139/140 (99%)	0.59	12 (8%) 18 10	43, 85, 141, 201	0
46	DN	139/140 (99%)	-0.01	9 (6%) 26 16	18, 42, 104, 201	0
47	BO	122/122 (100%)	-0.13	0 100 100	36, 62, 91, 112	0
47	DO	122/122 (100%)	-0.45	0 100 100	20, 43, 81, 130	0
48	BP	146/150 (97%)	1.03	29 (19%) 3 2	37, 100, 161, 198	0
48	DP	146/150 (97%)	0.58	18 (12%) 9 6	16, 58, 135, 188	0
49	BQ	141/141 (100%)	0.76	15 (10%) 13 8	46, 91, 142, 179	0
49	DQ	141/141 (100%)	-0.25	2 (1%) 73 56	21, 46, 101, 181	0
50	BR	117/118 (99%)	0.40	7 (5%) 29 17	36, 66, 109, 152	0
50	DR	117/118 (99%)	-0.26	7 (5%) 29 17	14, 39, 82, 142	0
51	BS	99/112 (88%)	1.42	32 (32%) 1 0	64, 131, 182, 191	0
51	DS	99/112 (88%)	0.55	10 (10%) 14 8	31, 67, 128, 181	0
52	BT	138/146 (94%)	0.58	15 (10%) 12 7	40, 81, 169, 201	0
52	DT	138/146 (94%)	0.41	12 (8%) 17 10	22, 61, 150, 201	0
53	BU	117/118 (99%)	0.44	9 (7%) 21 11	33, 73, 134, 191	0
53	DU	117/118 (99%)	-0.35	2 (1%) 69 50	11, 32, 85, 147	0
54	BV	101/101 (100%)	0.65	8 (7%) 20 11	33, 96, 143, 201	0
54	DV	101/101 (100%)	-0.14	7 (6%) 24 14	7, 45, 101, 201	0
55	BW	113/113 (100%)	0.04	2 (1%) 67 49	31, 62, 117, 193	0
55	DW	113/113 (100%)	-0.49	1 (0%) 81 66	9, 32, 68, 201	0
56	BX	93/96 (96%)	0.27	2 (2%) 62 42	45, 79, 118, 158	0
56	DX	93/96 (96%)	-0.26	1 (1%) 77 61	12, 43, 80, 121	0
57	BY	101/110 (91%)	1.36	27 (26%) 2 1	52, 102, 172, 201	0
57	DY	101/110 (91%)	1.06	22 (21%) 3 1	18, 73, 156, 191	0
58	BZ	185/206 (89%)	0.62	12 (6%) 26 16	64, 120, 168, 201	0
58	DZ	185/206 (89%)	0.25	10 (5%) 32 19	36, 75, 154, 201	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
All	All	22130/23284 (95%)	0.32	1403 (6%) 27 16	7, 85, 180, 201	0

All (1403) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
57	BY	102	CYS	9.7
57	DY	102	CYS	9.0
1	AA	82	U	7.8
21	AU	6	ARG	6.8
42	BH	171	LEU	6.8
19	CS	81	ARG	6.7
13	AM	123	ALA	6.7
51	DS	54	LEU	6.5
9	AI	127	LYS	6.4
46	DN	139	GLU	6.4
31	D6	46	HIS	6.4
1	AA	83	U	6.3
49	DQ	141	GLN	6.3
13	AM	102	ARG	6.2
30	D5	59	GLU	6.2
10	AJ	59	SER	6.2
19	CS	82	GLY	6.0
9	AI	115	GLY	6.0
58	BZ	114	GLY	6.0
48	BP	104	GLY	5.8
35	BA	654(F)	C	5.8
49	BQ	22	LYS	5.8
13	CM	122	LYS	5.7
31	D6	49	HIS	5.7
31	B6	42	TRP	5.6
50	BR	8	ARG	5.6
13	AM	120	LYS	5.6
24	CY	198	SER	5.6
25	D0	3	HIS	5.5
7	AG	82	GLY	5.4
25	D0	4	LYS	5.3
50	BR	2	ARG	5.3
35	BA	2802	G	5.3
50	BR	3	HIS	5.2
37	DC	177	GLY	5.2
35	DA	1541	G	5.2
39	DE	76	ARG	5.2

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Mol	Chain	Res	Type	RSRZ
13	CM	124	PRO	5.2
57	BY	28	LYS	5.1
33	B8	65	GLU	5.1
57	BY	61	ILE	5.1
57	DY	28	LYS	5.1
13	CM	102	ARG	5.0
25	D0	5	LYS	5.0
35	BA	654(G)	C	5.0
20	AT	14	LYS	5.0
57	BY	55	TYR	5.0
42	DH	169	VAL	4.9
31	D6	47	THR	4.9
33	B8	48	PHE	4.9
52	DT	92	GLY	4.9
21	CU	23	PRO	4.9
13	CM	100	GLY	4.9
35	BA	654(E)	G	4.9
10	CJ	59	SER	4.9
45	DK	111	LYS	4.8
30	B5	54	GLY	4.8
19	AS	13	ASP	4.8
30	B5	53	ALA	4.7
13	CM	123	ALA	4.7
25	B0	4	LYS	4.7
52	DT	25	GLY	4.7
48	BP	57	THR	4.7
2	CB	155	LEU	4.7
21	CU	25	LYS	4.6
35	DA	2119	A	4.6
13	CM	117	VAL	4.6
19	AS	68	GLY	4.6
58	BZ	113	ALA	4.6
13	AM	104	ARG	4.6
42	DH	44	VAL	4.6
38	BD	36	PRO	4.6
39	DE	130	GLY	4.6
35	DA	654(V)	A	4.6
58	DZ	114	GLY	4.5
32	B7	49	ARG	4.5
35	DA	1534	U	4.5
34	B9	37	GLY	4.5
37	DC	2	PRO	4.5

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Mol	Chain	Res	Type	RSRZ
42	BH	169	VAL	4.5
1	AA	81	U	4.5
1	CA	1503	A	4.5
1	AA	1117	G	4.5
33	B8	64	TYR	4.5
8	AH	1	MET	4.4
30	B5	59	GLU	4.4
35	BA	654(V)	A	4.4
30	D5	60	VAL	4.4
13	CM	126	LYS	4.4
31	D6	42	TRP	4.4
51	BS	94	TYR	4.4
31	D6	48	VAL	4.4
49	BQ	141	GLN	4.3
45	BK	21	PRO	4.3
48	DP	9	ASN	4.3
42	BH	170	ARG	4.3
35	BA	508	G	4.3
35	BA	654(H)	G	4.3
35	BA	2477	C	4.3
45	DK	9	LYS	4.3
31	D6	45	LYS	4.3
21	CU	10	ARG	4.2
57	BY	57	GLN	4.2
42	DH	171	LEU	4.2
13	AM	122	LYS	4.2
25	B0	7	LEU	4.2
1	CA	1286	A	4.2
9	AI	106	ALA	4.2
33	D8	35	GLN	4.2
7	AG	16	LEU	4.2
11	CK	129	SER	4.1
42	BH	71	LEU	4.1
2	AB	152	PHE	4.1
52	BT	92	GLY	4.1
37	DC	44	VAL	4.1
46	DN	3	THR	4.1
52	DT	105	LEU	4.1
22	CW	34	G	4.0
35	BA	2120	G	4.0
4	CD	95	GLY	4.0
7	CG	4	ARG	4.0

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Mol	Chain	Res	Type	RSRZ
9	AI	81	ILE	4.0
20	CT	106	ALA	4.0
52	DT	32	TYR	4.0
48	BP	105	LEU	4.0
35	BA	1087	G	4.0
1	CA	89	C	4.0
24	AY	79	LEU	4.0
24	CY	65	LEU	4.0
25	B0	5	LYS	4.0
24	AY	199	GLY	4.0
46	BN	36	GLY	4.0
45	DK	115	LEU	4.0
31	D6	39	TYR	3.9
39	BE	76	ARG	3.9
35	BA	2795	G	3.9
19	AS	82	GLY	3.9
35	DA	1059	G	3.9
38	BD	244	ARG	3.9
14	AN	25	VAL	3.9
41	BG	12	TYR	3.9
10	AJ	38	ILE	3.9
16	AP	68	ASP	3.9
13	AM	124	PRO	3.9
13	CM	7	VAL	3.9
48	DP	110	TYR	3.9
13	CM	8	GLU	3.8
24	CY	161	GLU	3.8
38	DD	36	PRO	3.8
30	D5	54	GLY	3.8
5	AE	30	ALA	3.8
24	CY	162	ALA	3.8
41	DG	2	PRO	3.8
45	DK	120	LEU	3.8
1	AA	89	C	3.8
9	AI	128	ARG	3.8
51	DS	12	PHE	3.8
14	AN	39	LEU	3.8
24	CY	124	ALA	3.8
57	BY	59	GLY	3.8
2	AB	163	PHE	3.8
57	BY	89	PHE	3.8
37	BC	30	VAL	3.8

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Mol	Chain	Res	Type	RSRZ
14	CN	2	ALA	3.8
24	CY	236	GLY	3.8
35	DA	1058	G	3.7
45	DK	22	PRO	3.7
51	BS	93	LYS	3.7
24	CY	247	SER	3.7
42	BH	155	SER	3.7
46	DN	9	VAL	3.7
38	DD	29	PRO	3.7
48	BP	107	LYS	3.7
51	BS	45	GLY	3.7
19	AS	15	LEU	3.7
24	CY	42	PRO	3.7
12	CL	73	GLU	3.7
48	DP	57	THR	3.7
17	CQ	100	LYS	3.7
13	AM	125	ARG	3.7
13	CM	94	ARG	3.7
42	BH	128	PRO	3.7
21	AU	13	ILE	3.7
58	BZ	178	GLU	3.7
31	D6	52	VAL	3.7
37	BC	197	LEU	3.7
16	CP	42	ARG	3.7
54	DV	36	PRO	3.7
35	DA	508	G	3.7
33	B8	45	GLY	3.6
22	CW	17	C	3.6
45	BK	8	VAL	3.6
48	BP	7	ARG	3.6
57	BY	44	ILE	3.6
33	B8	28	GLY	3.6
51	BS	12	PHE	3.6
35	DA	654(E)	G	3.6
53	BU	90	VAL	3.6
45	DK	21	PRO	3.6
2	AB	85	ALA	3.6
39	BE	73	GLU	3.6
34	D9	20	HIS	3.6
52	DT	106	SER	3.6
57	BY	49	VAL	3.6
23	CX	15	A	3.6

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Mol	Chain	Res	Type	RSRZ
1	AA	952	U	3.6
31	B6	38	LYS	3.6
45	DK	105	LEU	3.6
24	CY	195	PHE	3.6
35	BA	2112	G	3.6
50	DR	3	HIS	3.6
37	BC	174	ALA	3.5
46	DN	18	ALA	3.5
12	CL	32	PHE	3.5
31	B6	20	ASN	3.5
57	DY	62	GLU	3.5
42	BH	85	LYS	3.5
1	AA	1030(A)	G	3.5
1	CA	630	G	3.5
52	BT	91	ARG	3.5
21	AU	14	TRP	3.5
10	AJ	34	VAL	3.5
1	AA	1364	U	3.5
3	AC	182	ILE	3.5
11	AK	129	SER	3.5
9	AI	70	LYS	3.5
13	AM	121	LYS	3.5
54	DV	19	LYS	3.5
1	CA	220	G	3.5
58	DZ	123	ASP	3.5
39	BE	77	ILE	3.5
23	AX	14	A	3.5
35	DA	1494	A	3.5
57	BY	79	CYS	3.5
4	CD	152	SER	3.5
35	DA	2112	G	3.5
35	DA	2120	G	3.5
23	CX	14	A	3.5
12	AL	72	GLY	3.5
13	AM	7	VAL	3.5
48	DP	41	ARG	3.5
53	BU	58	ARG	3.5
57	DY	2	ARG	3.5
35	BA	2402	C	3.4
35	DA	654(G)	C	3.4
7	AG	85	TYR	3.4
14	AN	14	PRO	3.4

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Mol	Chain	Res	Type	RSRZ
13	CM	24	GLY	3.4
1	CA	81	U	3.4
11	AK	123	LYS	3.4
1	CA	80	G	3.4
13	CM	84	ILE	3.4
25	B0	71	ASP	3.4
2	CB	165	VAL	3.4
1	AA	84	U	3.4
7	CG	38	LEU	3.4
35	BA	2893	G	3.4
36	DB	86	G	3.4
12	AL	17	LYS	3.4
31	D6	43	CYS	3.4
43	DI	138	ILE	3.4
35	BA	2179	C	3.4
12	CL	27	LEU	3.4
24	AY	38	LEU	3.4
1	CA	84	U	3.4
11	AK	51	LYS	3.4
24	AY	162	ALA	3.4
30	D5	51	TYR	3.4
39	BE	151	TYR	3.4
40	BF	208	GLY	3.4
48	BP	24	GLY	3.4
37	DC	172	ILE	3.4
31	D6	20	ASN	3.4
57	BY	92	ASN	3.4
35	DA	34	C	3.4
45	BK	22	PRO	3.4
21	CU	5	ASP	3.4
9	CI	81	ILE	3.4
35	DA	2790	A	3.4
9	AI	116	LYS	3.3
33	D8	63	PRO	3.3
45	BK	31	GLY	3.3
52	BT	106	SER	3.3
4	AD	84	LYS	3.3
20	AT	9	ASN	3.3
24	CY	192	PRO	3.3
48	DP	149	GLU	3.3
16	CP	39	TYR	3.3
24	CY	79	LEU	3.3

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Mol	Chain	Res	Type	RSRZ
31	D6	34	LEU	3.3
57	BY	47	LYS	3.3
57	DY	5	MET	3.3
24	AY	160	PRO	3.3
35	DA	2117	A	3.3
45	BK	57	ILE	3.3
53	DU	91	ASP	3.3
1	AA	951	G	3.3
1	CA	66	G	3.3
4	CD	3	ARG	3.3
13	AM	88	ARG	3.3
10	AJ	47	PHE	3.3
10	AJ	54	PHE	3.3
35	DA	2179	C	3.3
48	DP	27	HIS	3.3
22	CW	36	A	3.3
31	B6	12	GLU	3.3
18	AR	23	LYS	3.3
56	BX	72	LYS	3.3
6	AF	55	ASP	3.3
15	AO	54	ARG	3.3
45	DK	1	MET	3.3
7	CG	7	ALA	3.3
13	AM	98	VAL	3.3
2	AB	140	HIS	3.3
2	CB	133	LYS	3.2
35	DA	2402	C	3.2
1	CA	1447	A	3.2
53	DU	58	ARG	3.2
30	B5	2	ALA	3.2
57	BY	56	PRO	3.2
51	BS	95	HIS	3.2
35	BA	1534	U	3.2
32	D7	49	ARG	3.2
37	BC	26	ALA	3.2
40	BF	128	ALA	3.2
35	BA	1535	A	3.2
39	DE	53	PRO	3.2
48	BP	71	VAL	3.2
20	AT	72	LEU	3.2
1	AA	1224	G	3.2
35	DA	2802	G	3.2

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Mol	Chain	Res	Type	RSRZ
57	DY	91	GLU	3.2
2	CB	229	VAL	3.2
5	AE	86	ALA	3.2
12	AL	13	LYS	3.2
35	BA	654(M)	C	3.2
35	BA	654(J)	A	3.2
41	BG	35	GLU	3.2
1	AA	631	G	3.2
36	DB	87	G	3.2
37	BC	27	ALA	3.2
13	AM	84	ILE	3.2
45	BK	89	HIS	3.1
19	AS	9	VAL	3.1
26	D1	27	GLU	3.1
51	BS	100	ALA	3.1
5	AE	80	ILE	3.1
45	BK	115	LEU	3.1
1	CA	1183	A	3.1
12	AL	94	PRO	3.1
11	CK	127	LYS	3.1
2	CB	152	PHE	3.1
24	CY	306	GLU	3.1
35	BA	2801(A)	A	3.1
57	BY	33	LYS	3.1
39	DE	75	VAL	3.1
35	BA	1047	G	3.1
35	BA	2894	G	3.1
35	DA	11	G	3.1
5	CE	104	ALA	3.1
14	AN	6	LEU	3.1
19	CS	15	LEU	3.1
24	AY	197	ALA	3.1
24	AY	198	SER	3.1
37	DC	174	ALA	3.1
24	CY	244	THR	3.1
17	AQ	100	LYS	3.1
24	CY	55	LEU	3.1
21	CU	16	GLY	3.1
57	DY	47	LYS	3.1
57	DY	63	LYS	3.1
45	DK	104	VAL	3.1
2	CB	28	PHE	3.1

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Mol	Chain	Res	Type	RSRZ
40	DF	24	LEU	3.1
9	AI	10	ARG	3.1
36	BB	88	C	3.1
7	AG	88	PRO	3.0
6	CF	21	LEU	3.0
24	AY	156	LEU	3.0
5	AE	27	ARG	3.0
35	BA	11	G	3.0
35	DA	1087	G	3.0
24	AY	234	ALA	3.0
57	BY	81	LYS	3.0
12	CL	116	SER	3.0
22	AW	17	C	3.0
36	DB	88	C	3.0
40	BF	207	GLY	3.0
45	DK	96	VAL	3.0
24	CY	118	LEU	3.0
30	D5	58	LEU	3.0
49	BQ	104	PHE	3.0
51	BS	30	ARG	3.0
57	DY	75	ILE	3.0
45	DK	30	HIS	3.0
42	DH	85	LYS	3.0
42	DH	116	GLU	3.0
35	BA	654(L)	G	3.0
35	DA	654(H)	G	3.0
3	AC	205	GLY	3.0
12	CL	72	GLY	3.0
19	CS	4	SER	3.0
5	CE	69	VAL	3.0
9	CI	64	THR	3.0
45	DK	136	VAL	3.0
51	DS	16	ASN	3.0
24	CY	316	LEU	3.0
35	BA	2310	A	3.0
9	CI	4	TYR	3.0
24	AY	161	GLU	3.0
58	DZ	169	GLU	3.0
24	AY	15	GLY	3.0
16	CP	2	VAL	3.0
49	BQ	10	ARG	3.0
5	AE	20	GLN	3.0

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Mol	Chain	Res	Type	RSRZ
14	AN	2	ALA	3.0
24	CY	234	ALA	3.0
35	BA	275	G	3.0
35	BA	654(S)	G	3.0
12	CL	28	LYS	3.0
35	BA	654(I)	C	3.0
1	CA	88	A	3.0
4	CD	4	TYR	3.0
21	AU	11	GLY	3.0
30	D5	47	PRO	3.0
37	DC	40	GLU	3.0
52	DT	21	GLU	3.0
24	AY	218	VAL	3.0
42	BH	24	VAL	3.0
9	AI	103	THR	3.0
37	BC	193	PHE	3.0
57	DY	89	PHE	3.0
29	D4	40	HIS	2.9
1	CA	1117	G	2.9
36	BB	89	G	2.9
24	CY	307	TRP	2.9
31	B6	31	PRO	2.9
48	BP	41	ARG	2.9
54	BV	36	PRO	2.9
9	AI	44	VAL	2.9
24	CY	69	LEU	2.9
1	CA	173	U	2.9
4	CD	32	ALA	2.9
24	CY	245	THR	2.9
37	BC	171	ALA	2.9
39	DE	70	ALA	2.9
48	BP	64	LYS	2.9
8	AH	15	ASN	2.9
7	CG	5	ARG	2.9
4	CD	21	LEU	2.9
48	BP	126	VAL	2.9
8	AH	99	GLU	2.9
10	CJ	64	GLU	2.9
40	BF	161	GLU	2.9
2	AB	70	PHE	2.9
18	CR	68	LYS	2.9
22	AW	34	G	2.9

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Mol	Chain	Res	Type	RSRZ
35	DA	654(I)	C	2.9
36	BB	49	C	2.9
49	DQ	140	ALA	2.9
1	AA	969	A	2.9
35	DA	156	U	2.9
53	BU	91	ASP	2.9
39	DE	54	GLN	2.9
57	DY	57	GLN	2.9
10	CJ	46	ARG	2.9
51	DS	89	ARG	2.9
14	CN	28	GLY	2.9
37	DC	42	VAL	2.9
40	DF	7	TYR	2.9
51	BS	104	GLY	2.9
33	B8	29	LYS	2.9
42	DH	53	GLU	2.9
57	DY	96	ILE	2.9
1	AA	950	U	2.9
8	CH	1	MET	2.9
34	B9	20	HIS	2.9
46	BN	1	MET	2.9
37	BC	215	VAL	2.9
17	AQ	58	GLU	2.9
57	BY	100	ALA	2.9
58	BZ	107	THR	2.9
50	DR	8	ARG	2.9
41	BG	82	LEU	2.9
48	BP	27	HIS	2.9
48	DP	147	LEU	2.9
17	AQ	94	ASN	2.9
33	B8	63	PRO	2.9
38	BD	5	LYS	2.9
54	DV	42	GLY	2.9
54	DV	48	GLY	2.9
1	AA	88	A	2.9
35	BA	2803	C	2.9
35	DA	654(F)	C	2.9
48	BP	110	TYR	2.9
9	AI	59	PHE	2.9
24	AY	51	GLU	2.8
9	AI	46	ALA	2.8
35	DA	100	G	2.8

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Mol	Chain	Res	Type	RSRZ
10	AJ	43	ARG	2.8
21	AU	9	ARG	2.8
26	B1	26	ARG	2.8
29	D4	39	CYS	2.8
27	D2	70	GLN	2.8
37	DC	219	MET	2.8
24	CY	193	SER	2.8
38	BD	38	LYS	2.8
45	DK	23	VAL	2.8
48	DP	64	LYS	2.8
24	CY	199	GLY	2.8
33	B8	33	ASN	2.8
10	CJ	54	PHE	2.8
37	BC	190	ILE	2.8
42	DH	157	TYR	2.8
35	BA	362	U	2.8
46	BN	139	GLU	2.8
48	BP	65	ARG	2.8
58	DZ	80	ARG	2.8
35	DA	654(T)	C	2.8
24	AY	259	THR	2.8
31	B6	23	THR	2.8
1	CA	631	G	2.8
18	AR	22	VAL	2.8
35	DA	2795	G	2.8
39	DE	69	LYS	2.8
33	B8	35	GLN	2.8
41	BG	160	VAL	2.8
45	BK	59	ILE	2.8
51	BS	18	ILE	2.8
49	BQ	16	ARG	2.8
9	AI	110	GLU	2.8
22	AW	39	U	2.8
3	CC	188	LEU	2.8
4	CD	96	LEU	2.8
12	AL	28	LYS	2.8
45	BK	3	LYS	2.8
1	AA	1027	C	2.8
13	AM	117	VAL	2.8
19	AS	11	VAL	2.8
22	CW	35	A	2.8
52	BT	115	ARG	2.8

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Mol	Chain	Res	Type	RSRZ
45	DK	3	LYS	2.8
46	DN	1	MET	2.8
24	CY	231	VAL	2.8
37	BC	4	HIS	2.8
37	DC	181	PHE	2.8
43	BI	8	PRO	2.8
1	AA	1116	C	2.8
9	CI	9	ARG	2.8
35	DA	1542	A	2.8
9	AI	4	TYR	2.8
13	CM	59	TYR	2.8
33	D8	64	TYR	2.8
16	CP	27	LYS	2.8
46	DN	68	GLU	2.8
1	AA	1084	G	2.8
1	CA	1033	G	2.8
11	CK	56	GLY	2.8
2	AB	214	ILE	2.8
35	BA	2779	U	2.7
42	DH	155	SER	2.7
24	AY	33	LEU	2.7
1	AA	1249	C	2.7
22	CV	17	C	2.7
35	BA	654(T)	C	2.7
35	DA	2791	C	2.7
35	DA	2794	C	2.7
36	BB	62	C	2.7
8	CH	95	VAL	2.7
42	BH	35	VAL	2.7
10	AJ	63	PHE	2.7
14	AN	31	ARG	2.7
29	D4	17	GLY	2.7
46	DN	36	GLY	2.7
50	DR	2	ARG	2.7
3	AC	162	GLN	2.7
24	AY	133	ALA	2.7
35	BA	2793	G	2.7
35	DA	1089	G	2.7
19	AS	80	TYR	2.7
46	BN	9	VAL	2.7
51	DS	14	VAL	2.7
35	BA	1084	A	2.7

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Mol	Chain	Res	Type	RSRZ
35	DA	2801(A)	A	2.7
1	AA	970	C	2.7
32	B7	23	ARG	2.7
2	CB	228	GLY	2.7
35	DA	1530	C	2.7
5	AE	116	THR	2.7
46	BN	3	THR	2.7
39	DE	68	ALA	2.7
45	DK	123	ALA	2.7
2	AB	155	LEU	2.7
54	BV	20	LEU	2.7
2	AB	193	ASP	2.7
4	CD	134	ASP	2.7
4	CD	208	SER	2.7
6	AF	17	SER	2.7
10	AJ	58	ASP	2.7
19	AS	67	VAL	2.7
1	AA	1190	G	2.7
1	CA	1002	G	2.7
2	CB	170	GLU	2.7
35	BA	1559	G	2.7
50	BR	105	ARG	2.7
50	DR	105	ARG	2.7
39	DE	88	GLY	2.7
51	DS	108	GLY	2.7
1	AA	1286	A	2.7
6	AF	56	PRO	2.7
12	CL	47	LYS	2.7
35	BA	654	A	2.7
41	BG	87	PRO	2.7
35	BA	2791	C	2.7
35	DA	2174	C	2.7
41	BG	34	LEU	2.7
3	AC	198	VAL	2.7
27	D2	69	ARG	2.7
7	AG	74	GLU	2.7
35	DA	1033	U	2.7
48	DP	51	PHE	2.7
49	BQ	33	GLY	2.7
54	DV	54	GLY	2.7
12	AL	46	LYS	2.7
39	BE	69	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
48	BP	39	LYS	2.7
52	BT	85	LYS	2.7
46	BN	108	PRO	2.7
51	BS	21	THR	2.7
1	AA	80	G	2.7
3	AC	117	ALA	2.7
9	AI	61	ALA	2.7
12	AL	27	LEU	2.7
22	CV	1	G	2.7
35	DA	2125	G	2.7
51	BS	24	LEU	2.7
58	BZ	18	LEU	2.7
9	AI	14	VAL	2.7
1	CA	381	C	2.7
35	DA	277	C	2.7
13	AM	69	GLU	2.6
12	CL	91	LYS	2.6
45	DK	114	ASP	2.6
39	DE	121	ASN	2.6
50	DR	11	ASN	2.6
57	BY	43	ASN	2.6
42	BH	36	PRO	2.6
52	BT	116	ALA	2.6
25	D0	74	ARG	2.6
34	B9	22	ARG	2.6
40	BF	84	VAL	2.6
45	BK	4	VAL	2.6
35	BA	1541	G	2.6
10	AJ	55	LYS	2.6
14	AN	4	LYS	2.6
23	AX	21	A	2.6
24	CY	169	ILE	2.6
35	BA	2790	A	2.6
58	BZ	110	GLY	2.6
1	CA	63	C	2.6
41	BG	97	ASP	2.6
52	DT	31	SER	2.6
17	AQ	43	LEU	2.6
52	BT	105	LEU	2.6
20	CT	98	PRO	2.6
2	AB	67	THR	2.6
24	CY	264	THR	2.6

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Mol	Chain	Res	Type	RSRZ
10	AJ	5	ARG	2.6
19	AS	81	ARG	2.6
57	DY	3	VAL	2.6
4	AD	30	LYS	2.6
7	CG	154	TYR	2.6
24	AY	47	LYS	2.6
51	BS	87	PHE	2.6
3	AC	161	GLU	2.6
52	BT	25	GLY	2.6
30	B5	58	LEU	2.6
24	AY	196	ASP	2.6
28	B3	2	PRO	2.6
20	AT	75	ASN	2.6
2	CB	90	MET	2.6
9	CI	10	ARG	2.6
17	CQ	101	ARG	2.6
45	BK	1	MET	2.6
45	BK	30	HIS	2.6
48	BP	16	ARG	2.6
48	BP	77	ARG	2.6
58	DZ	112	ARG	2.6
24	CY	218	VAL	2.6
29	B4	10	VAL	2.6
41	BG	28	VAL	2.6
24	AY	268	GLN	2.6
3	CC	167	TRP	2.6
31	B6	53	LYS	2.6
9	AI	125	TYR	2.6
1	CA	65	U	2.6
35	BA	156	U	2.6
35	DA	405	U	2.6
37	DC	209	PHE	2.6
20	AT	103	GLY	2.6
29	D4	19	GLY	2.6
54	DV	101	GLY	2.6
31	B6	34	LEU	2.6
20	AT	12	ALA	2.6
9	AI	104	ARG	2.6
26	D1	26	ARG	2.6
58	DZ	179	ASP	2.6
9	AI	108	VAL	2.6
10	CJ	55	LYS	2.6

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Mol	Chain	Res	Type	RSRZ
14	AN	58	LYS	2.6
35	DA	2310	A	2.6
1	AA	384	G	2.6
22	CW	18	G	2.6
35	BA	654(R)	C	2.6
37	BC	8	TYR	2.6
42	BH	83	TYR	2.6
33	B8	32	LEU	2.6
25	B0	68	GLU	2.6
27	B2	18	PRO	2.6
58	BZ	108	PRO	2.6
38	DD	26	LYS	2.6
42	BH	52	VAL	2.6
9	AI	105	ASP	2.6
19	AS	65	ASN	2.6
16	AP	19	ILE	2.5
1	AA	1236	A	2.5
1	AA	1503	A	2.5
1	CA	1188	A	2.5
35	BA	2173	A	2.5
25	B0	74	ARG	2.5
55	DW	92	ARG	2.5
42	BH	12	PRO	2.5
32	B7	46	VAL	2.5
35	DA	1061	U	2.5
57	DY	81	LYS	2.5
3	AC	5	ILE	2.5
57	DY	92	ASN	2.5
33	D8	48	PHE	2.5
30	B5	51	TYR	2.5
13	AM	75	ALA	2.5
1	AA	532	A	2.5
46	DN	137	LYS	2.5
51	BS	43	GLU	2.5
19	AS	41	VAL	2.5
1	AA	223	U	2.5
24	AY	105	THR	2.5
35	DA	155	U	2.5
1	AA	963	G	2.5
1	CA	1224	G	2.5
35	BA	2110	G	2.5
35	BA	2127	G	2.5

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Mol	Chain	Res	Type	RSRZ
35	DA	2115	G	2.5
35	DA	2894	G	2.5
6	CF	16	GLN	2.5
37	BC	181	PHE	2.5
32	B7	47	ARG	2.5
34	B9	19	ARG	2.5
37	BC	168	LYS	2.5
7	AG	89	MET	2.5
7	CG	146	GLU	2.5
9	CI	12	GLU	2.5
9	CI	65	VAL	2.5
37	DC	176	VAL	2.5
41	BG	2	PRO	2.5
42	BH	50	VAL	2.5
57	DY	85	VAL	2.5
35	BA	1048	A	2.5
45	DK	18	THR	2.5
58	BZ	5	LEU	2.5
1	AA	1217	C	2.5
1	AA	1397	C	2.5
1	CA	67	C	2.5
3	CC	162	GLN	2.5
30	B5	55	ARG	2.5
48	DP	21	ARG	2.5
3	AC	184	TYR	2.5
33	D8	45	GLY	2.5
42	BH	157	TYR	2.5
11	CK	89	ALA	2.5
1	CA	1001(A)	G	2.5
22	AV	1	G	2.5
35	BA	352	G	2.5
35	DA	275	G	2.5
45	DK	112	MET	2.5
58	BZ	97	GLU	2.5
45	DK	84	LEU	2.5
9	AI	83	ARG	2.5
14	AN	35	ARG	2.5
38	DD	244	ARG	2.5
35	DA	1057	A	2.5
35	DA	2801	A	2.5
9	CI	126	SER	2.5
14	AN	38	GLY	2.5

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Mol	Chain	Res	Type	RSRZ
20	AT	64	ASP	2.5
20	CT	14	LYS	2.5
24	AY	165	ASP	2.5
25	B0	8	GLY	2.5
41	DG	44	GLY	2.5
42	BH	164	TYR	2.5
1	AA	984	C	2.5
22	AW	16	U	2.5
3	AC	120	VAL	2.5
42	BH	43	VAL	2.5
2	AB	141	GLU	2.5
41	DG	35	GLU	2.5
9	AI	99	LEU	2.4
48	DP	6	LEU	2.4
40	DF	207	GLY	2.4
48	BP	28	GLY	2.4
7	AG	83	ALA	2.4
46	BN	18	ALA	2.4
31	B6	13	CYS	2.4
45	DK	8	VAL	2.4
45	DK	116	ASN	2.4
10	AJ	39	PRO	2.4
1	CA	90	U	2.4
35	DA	654(K)	C	2.4
35	DA	2111	C	2.4
36	BB	60	C	2.4
45	BK	94	GLU	2.4
57	BY	75	ILE	2.4
16	CP	72	ARG	2.4
24	AY	106	LEU	2.4
52	DT	6	LEU	2.4
39	DE	67	PHE	2.4
41	BG	36	LYS	2.4
45	BK	111	LYS	2.4
57	BY	88	LYS	2.4
13	AM	112	GLY	2.4
45	DK	124	ALA	2.4
49	BQ	20	ALA	2.4
58	DZ	113	ALA	2.4
10	CJ	24	VAL	2.4
25	B0	16	SER	2.4
26	B1	65	SER	2.4

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Mol	Chain	Res	Type	RSRZ
35	DA	2190	G	2.4
35	DA	2661	G	2.4
56	BX	69	TYR	2.4
31	D6	32	ASN	2.4
30	B5	46	CYS	2.4
4	AD	155	LEU	2.4
53	BU	60	LEU	2.4
1	AA	90	U	2.4
26	B1	25	LYS	2.4
43	BI	118	LYS	2.4
48	BP	51	PHE	2.4
36	BB	40	U	2.4
42	BH	158	HIS	2.4
35	BA	654(K)	C	2.4
36	BB	4	C	2.4
48	BP	34	GLY	2.4
37	DC	171	ALA	2.4
45	BK	104	VAL	2.4
45	DK	5	VAL	2.4
52	BT	32	TYR	2.4
54	BV	12	TYR	2.4
48	BP	10	PRO	2.4
6	AF	19	LEU	2.4
7	AG	38	LEU	2.4
9	CI	79	LEU	2.4
15	AO	3	ILE	2.4
40	BF	28	ILE	2.4
45	DK	78	ILE	2.4
46	DN	12	ARG	2.4
51	BS	58	LEU	2.4
1	CA	384	G	2.4
35	BA	82	G	2.4
35	DA	1537	G	2.4
42	BH	159	GLU	2.4
1	AA	994	A	2.4
35	DA	1535	A	2.4
1	CA	82	U	2.4
1	CA	367	U	2.4
3	AC	168	ALA	2.4
16	CP	1	MET	2.4
21	CU	14	TRP	2.4
45	DK	68	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
1	CA	1335	C	2.4
2	AB	148	TYR	2.4
35	BA	34	C	2.4
10	CJ	43	ARG	2.4
10	CJ	74	ILE	2.4
24	AY	42	PRO	2.4
55	BW	92	ARG	2.4
24	CY	26	LEU	2.4
24	CY	73	LEU	2.4
37	DC	210	LEU	2.4
57	DY	53	PRO	2.4
48	BP	25	SER	2.4
51	BS	11	LYS	2.4
5	CE	122	GLU	2.4
14	AN	8	GLU	2.4
16	AP	54	GLU	2.4
54	BV	23	GLU	2.4
9	AI	117	HIS	2.4
51	BS	34	HIS	2.4
2	AB	101	MET	2.4
54	BV	8	GLY	2.4
1	CA	1190	G	2.4
24	AY	261	THR	2.4
35	DA	2207	G	2.4
9	AI	42	ARG	2.4
35	BA	12	U	2.4
35	DA	1046	A	2.4
35	DA	1048	A	2.4
36	BB	1	U	2.4
38	BD	262	ARG	2.4
42	DH	170	ARG	2.4
53	BU	59	ARG	2.4
18	AR	68	LYS	2.3
20	AT	74	LYS	2.3
1	AA	995	C	2.3
35	BA	1536	C	2.3
3	AC	160	ALA	2.3
10	AJ	36	GLY	2.3
12	CL	63	GLY	2.3
58	BZ	98	MET	2.3
30	D5	53	ALA	2.3
49	BQ	140	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
51	BS	14	VAL	2.3
9	CI	58	ARG	2.3
57	BY	2	ARG	2.3
21	CU	20	LYS	2.3
24	CY	10	LEU	2.3
38	DD	38	LYS	2.3
51	BS	33	LYS	2.3
31	B6	39	TYR	2.3
35	BA	1046	A	2.3
35	DA	655	A	2.3
1	CA	380	G	2.3
35	DA	1816	G	2.3
51	DS	53	SER	2.3
53	BU	56	ASP	2.3
33	B8	40	GLU	2.3
42	BH	58	GLU	2.3
1	CA	221	C	2.3
10	AJ	52	GLY	2.3
24	CY	297	ALA	2.3
34	B9	3	VAL	2.3
35	BA	867	C	2.3
42	BH	17	VAL	2.3
42	DH	91	GLY	2.3
13	CM	125	ARG	2.3
46	BN	46	VAL	2.3
56	DX	12	VAL	2.3
2	CB	196	LEU	2.3
3	AC	167	TRP	2.3
8	AH	98	LYS	2.3
21	AU	8	THR	2.3
24	AY	107	LEU	2.3
40	BF	199	TRP	2.3
57	BY	46	LYS	2.3
9	CI	21	PRO	2.3
19	AS	76	PRO	2.3
52	BT	81	PRO	2.3
51	BS	27	SER	2.3
1	AA	1289	A	2.3
7	AG	73	MET	2.3
33	B8	54	GLU	2.3
35	BA	2892	A	2.3
51	BS	16	ASN	2.3

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Mol	Chain	Res	Type	RSRZ
52	BT	1	MET	2.3
52	BT	2	ASN	2.3
52	DT	2	ASN	2.3
6	CF	88	VAL	2.3
9	AI	100	GLY	2.3
9	CI	41	VAL	2.3
12	AL	26	ALA	2.3
24	CY	71	GLY	2.3
39	BE	68	ALA	2.3
45	BK	124	ALA	2.3
1	CA	1120	G	2.3
4	CD	120	LEU	2.3
35	BA	2121	G	2.3
52	BT	86	ILE	2.3
24	AY	244	THR	2.3
24	CY	259	THR	2.3
35	DA	1092	C	2.3
3	AC	170	GLN	2.3
13	AM	97	PRO	2.3
15	CO	62	GLN	2.3
16	CP	66	PRO	2.3
24	AY	195	PHE	2.3
20	AT	25	ARG	2.3
21	AU	10	ARG	2.3
45	BK	126	MET	2.3
4	CD	178	VAL	2.3
24	CY	59	VAL	2.3
37	DC	30	VAL	2.3
40	DF	84	VAL	2.3
42	BH	19	VAL	2.3
12	CL	46	LYS	2.3
51	BS	90	GLY	2.3
20	CT	9	ASN	2.3
1	AA	1150	U	2.3
4	CD	186	LEU	2.3
30	B5	17	ASP	2.3
52	BT	104	ASN	2.3
35	DA	1540	U	2.3
1	AA	1531	A	2.3
2	CB	107	THR	2.3
4	CD	37	PRO	2.3
16	CP	41	PRO	2.3

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Mol	Chain	Res	Type	RSRZ
39	BE	54	GLN	2.3
46	BN	133	GLN	2.3
1	AA	1001(A)	G	2.3
35	BA	654(N)	G	2.3
35	BA	1537	G	2.3
35	DA	2893	G	2.3
35	BA	2794	C	2.3
7	AG	94	ARG	2.3
21	CU	22	ARG	2.3
50	BR	96	ARG	2.3
51	BS	97	ARG	2.3
11	AK	114	VAL	2.3
13	CM	98	VAL	2.3
39	DE	131	ALA	2.3
57	BY	39	VAL	2.3
10	CJ	10	GLY	2.3
13	AM	24	GLY	2.3
19	AS	5	LEU	2.3
33	B8	50	LEU	2.3
48	BP	62	LEU	2.3
2	CB	201	ILE	2.2
3	CC	3	ASN	2.2
8	AH	86	ILE	2.2
16	CP	23	ASP	2.2
38	BD	44	ASN	2.2
51	BS	82	ILE	2.2
53	BU	88	ILE	2.2
58	BZ	124	ILE	2.2
10	CJ	47	PHE	2.2
37	BC	2	PRO	2.2
41	BG	161	THR	2.2
23	AX	15	A	2.2
35	DA	1070	A	2.2
41	BG	41	GLN	2.2
45	DK	76	TYR	2.2
12	AL	115	LYS	2.2
38	DD	35	LYS	2.2
43	BI	141	LYS	2.2
42	DH	45	VAL	2.2
3	CC	52	LEU	2.2
10	CJ	88	LEU	2.2
24	CY	295	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
26	B1	22	GLY	2.2
40	BF	49	ALA	2.2
51	BS	55	ALA	2.2
1	AA	1082	G	2.2
1	CA	388	G	2.2
1	CA	620	C	2.2
35	BA	2154	G	2.2
35	BA	2178	C	2.2
35	DA	2477	C	2.2
35	DA	2805	G	2.2
38	DD	30	GLU	2.2
45	DK	137	GLU	2.2
52	BT	11	GLU	2.2
31	B6	46	HIS	2.2
43	BI	109	ILE	2.2
57	DY	44	ILE	2.2
40	BF	133	ASN	2.2
4	CD	79	PHE	2.2
14	AN	12	ARG	2.2
48	DP	15	ARG	2.2
57	BY	86	ARG	2.2
12	AL	47	LYS	2.2
14	AN	34	TYR	2.2
42	DH	164	TYR	2.2
46	BN	118	LYS	2.2
51	BS	99	LYS	2.2
58	DZ	156	LYS	2.2
2	CB	164	VAL	2.2
1	AA	938	A	2.2
9	AI	76	ALA	2.2
10	CJ	40	LEU	2.2
30	D5	2	ALA	2.2
35	BA	1445	A	2.2
37	BC	12	LEU	2.2
49	BQ	79	LEU	2.2
51	BS	48	LEU	2.2
13	AM	119	GLY	2.2
14	AN	55	GLY	2.2
43	BI	79	ILE	2.2
48	DP	52	GLU	2.2
10	AJ	35	SER	2.2
1	CA	1066	C	2.2

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Mol	Chain	Res	Type	RSRZ
24	CY	196	ASP	2.2
39	DE	62	PRO	2.2
57	DY	82	PRO	2.2
9	AI	66	ARG	2.2
13	AM	80	ARG	2.2
13	CM	108	ARG	2.2
45	DK	93	ARG	2.2
1	AA	1124	G	2.2
1	AA	1353	G	2.2
1	CA	346	G	2.2
1	CA	1124	G	2.2
15	AO	25	THR	2.2
35	DA	2116	G	2.2
38	BD	35	LYS	2.2
7	CG	85	TYR	2.2
7	CG	23	VAL	2.2
13	AM	53	VAL	2.2
4	CD	157	LEU	2.2
37	DC	33	LEU	2.2
35	DA	362	U	2.2
43	BI	146	ALA	2.2
4	CD	167	GLY	2.2
38	DD	42	GLY	2.2
39	BE	130	GLY	2.2
3	CC	5	ILE	2.2
22	AW	7	A	2.2
35	BA	1111	A	2.2
35	BA	2170	A	2.2
2	AB	137	ARG	2.2
3	AC	10	PHE	2.2
7	AG	79	ARG	2.2
41	BG	128	ARG	2.2
41	BG	178	PHE	2.2
48	DP	7	ARG	2.2
50	BR	33	ARG	2.2
50	DR	6	SER	2.2
57	BY	82	PRO	2.2
4	AD	134	ASP	2.2
10	AJ	12	ASP	2.2
48	BP	87	ASP	2.2
1	AA	508	C	2.2
1	AA	1039	C	2.2

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Mol	Chain	Res	Type	RSRZ
1	CA	345	C	2.2
4	AD	160	GLN	2.2
37	BC	223	VAL	2.2
45	DK	4	VAL	2.2
50	DR	10	LEU	2.2
51	DS	58	LEU	2.2
39	DE	186	GLY	2.2
42	DH	66	GLY	2.2
49	BQ	15	GLY	2.2
1	AA	664	G	2.2
1	CA	1003	G	2.2
1	CA	1026	G	2.2
3	AC	152	ILE	2.2
19	AS	40	ILE	2.2
45	DK	127	ILE	2.2
51	BS	39	ILE	2.2
1	CA	1135	U	2.2
4	AD	49	ARG	2.2
4	AD	122	ARG	2.2
19	CS	78	ARG	2.2
20	AT	73	HIS	2.2
20	CT	80	ARG	2.2
34	B9	15	LYS	2.2
57	DY	33	LYS	2.2
48	BP	48	PRO	2.2
20	CT	70	SER	2.2
35	BA	2119	A	2.2
36	BB	45	A	2.2
50	BR	6	SER	2.2
4	CD	154	ASN	2.2
3	CC	43	LEU	2.2
4	CD	188	LEU	2.2
20	CT	10	LEU	2.2
37	BC	33	LEU	2.2
57	BY	98	VAL	2.2
58	DZ	93	ASP	2.2
4	CD	138	TYR	2.2
16	AP	65	GLN	2.2
40	BF	166	ALA	2.1
41	BG	50	ALA	2.1
45	DK	87	GLY	2.1
48	DP	104	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
41	BG	20	ILE	2.1
1	AA	1325	C	2.1
7	CG	32	ARG	2.1
10	AJ	46	ARG	2.1
8	CH	98	LYS	2.1
14	CN	15	LYS	2.1
51	BS	57	LYS	2.1
25	B0	3	HIS	2.1
42	BH	18	GLU	2.1
1	AA	1085	U	2.1
1	AA	1202	G	2.1
7	AG	112	PRO	2.1
13	CM	10	PRO	2.1
35	BA	272(A)	U	2.1
35	DA	1056	G	2.1
35	DA	2807	G	2.1
14	CN	32	SER	2.1
14	CN	33	VAL	2.1
48	BP	147	LEU	2.1
3	CC	192	THR	2.1
37	BC	166	ASN	2.1
40	BF	175	THR	2.1
48	DP	30	THR	2.1
8	AH	8	ASP	2.1
13	AM	87	TYR	2.1
24	AY	246	ASP	2.1
40	BF	141	ALA	2.1
45	BK	141	ALA	2.1
45	DK	50	ASP	2.1
51	BS	74	ALA	2.1
1	AA	1492	A	2.1
35	DA	1045	A	2.1
4	CD	124	GLY	2.1
7	CG	82	GLY	2.1
9	CI	72	GLY	2.1
24	CY	239	GLY	2.1
49	BQ	23	GLY	2.1
27	B2	51	ARG	2.1
41	DG	113	ARG	2.1
48	BP	33	ARG	2.1
52	DT	3	ARG	2.1
13	CM	120	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
27	B2	5	GLU	2.1
1	AA	526	C	2.1
1	CA	1129	C	2.1
2	CB	221	LEU	2.1
51	BS	46	VAL	2.1
57	DY	27	VAL	2.1
35	DA	1060	U	2.1
19	AS	4	SER	2.1
3	AC	189	ALA	2.1
10	CJ	42	THR	2.1
11	AK	128	ALA	2.1
15	CO	22	THR	2.1
29	B4	27	THR	2.1
39	BE	131	ALA	2.1
45	BK	128	ALA	2.1
46	BN	63	THR	2.1
54	DV	49	THR	2.1
2	CB	31	TYR	2.1
1	AA	973	G	2.1
1	CA	64	G	2.1
10	AJ	73	ASP	2.1
13	AM	100	GLY	2.1
24	CY	269	ILE	2.1
39	DE	77	ILE	2.1
41	DG	26	GLN	2.1
41	DG	88	ILE	2.1
4	CD	115	ARG	2.1
7	AG	32	ARG	2.1
16	AP	25	ARG	2.1
35	BA	81	G	2.1
36	BB	63	G	2.1
21	AU	25	LYS	2.1
41	BG	47	LYS	2.1
48	BP	61	ARG	2.1
51	DS	13	ARG	2.1
35	DA	1098	A	2.1
35	DA	1495	A	2.1
53	BU	32	PHE	2.1
2	AB	40	HIS	2.1
4	AD	156	GLU	2.1
28	B3	34	GLU	2.1
39	DE	73	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
48	BP	52	GLU	2.1
49	BQ	105	GLU	2.1
9	CI	50	LEU	2.1
52	DT	1	MET	2.1
54	BV	5	VAL	2.1
1	AA	1030(B)	C	2.1
1	AA	1354	C	2.1
1	AA	1366	C	2.1
1	CA	1397	C	2.1
4	AD	32	ALA	2.1
35	BA	2174	C	2.1
36	BB	27	C	2.1
9	AI	126	SER	2.1
11	CK	41	THR	2.1
58	DZ	142	SER	2.1
1	CA	30	U	2.1
1	CA	1196	U	2.1
4	AD	73	ARG	2.1
8	AH	21	LYS	2.1
19	CS	80	TYR	2.1
21	AU	24	ARG	2.1
22	AV	47	U	2.1
35	DA	2897	U	2.1
41	DG	128	ARG	2.1
8	AH	25	ASP	2.1
53	BU	97	ASP	2.1
24	CY	6	LEU	2.1
24	CY	33	LEU	2.1
24	CY	329	MET	2.1
31	D6	31	PRO	2.1
35	BA	2125	G	2.1
36	DB	89	G	2.1
33	B8	56	GLU	2.1
39	BE	132	HIS	2.1
1	AA	1151	A	2.1
1	AA	1363(A)	A	2.1
7	AG	75	VAL	2.1
11	CK	114	VAL	2.1
48	BP	149	GLU	2.1
37	DC	27	ALA	2.1
51	BS	102	ALA	2.1
10	CJ	7	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
45	BK	90	LYS	2.1
54	BV	85	LYS	2.1
57	BY	50	ARG	2.1
15	AO	23	GLY	2.1
16	CP	22	THR	2.1
37	DC	35	THR	2.1
6	CF	57	GLN	2.1
1	CA	1030	C	2.1
35	DA	2799	C	2.1
35	BA	1083	U	2.1
2	CB	10	LEU	2.1
2	CB	63	MET	2.1
19	CS	5	LEU	2.1
25	B0	75	LEU	2.1
48	DP	105	LEU	2.1
2	AB	234	PRO	2.1
2	CB	7	VAL	2.1
28	D3	2	PRO	2.1
2	CB	96	ARG	2.0
9	CI	15	ALA	2.0
21	CU	6	ARG	2.0
39	DE	61	ARG	2.0
41	BG	67	LYS	2.0
41	BG	72	ARG	2.0
49	BQ	28	ALA	2.0
52	DT	29	ARG	2.0
1	AA	1102	A	2.0
1	CA	432	A	2.0
1	CA	1285	A	2.0
35	BA	2062	A	2.0
1	CA	112	G	2.0
35	BA	1044	G	2.0
35	BA	1058	G	2.0
35	DA	654(L)	G	2.0
35	DA	1740	G	2.0
35	DA	2655	G	2.0
2	AB	33	TYR	2.0
20	CT	90	GLN	2.0
41	BG	23	PHE	2.0
49	BQ	65	PHE	2.0
24	AY	298	LEU	2.0
40	DF	23	ASP	2.0

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Mol	Chain	Res	Type	RSRZ
2	AB	7	VAL	2.0
1	AA	1066	C	2.0
1	AA	1103	C	2.0
1	CA	401	C	2.0
24	AY	80	PRO	2.0
35	BA	155	U	2.0
35	BA	1026	U	2.0
35	BA	2118	U	2.0
42	BH	44	VAL	2.0
35	DA	654(Q)	C	2.0
35	DA	2113	U	2.0
45	BK	7	VAL	2.0
58	BZ	105	VAL	2.0
2	CB	40	HIS	2.0
7	AG	95	ARG	2.0
16	CP	59	TRP	2.0
32	B7	48	LYS	2.0
37	DC	168	LYS	2.0
45	DK	16	LYS	2.0
51	DS	107	GLU	2.0
9	AI	77	ILE	2.0
49	BQ	50	ALA	2.0
57	BY	48	ALA	2.0
7	CG	81	GLY	2.0
20	CT	101	GLY	2.0
25	B0	6	GLY	2.0
25	D0	6	GLY	2.0
38	BD	42	GLY	2.0
46	BN	64	GLY	2.0
54	BV	42	GLY	2.0
21	AU	18	TYR	2.0
7	AG	86	GLN	2.0
24	CY	62	PHE	2.0
1	AA	965	A	2.0
1	CA	1289	A	2.0
35	BA	2117	A	2.0
3	AC	33	LEU	2.0
19	AS	71	LEU	2.0
33	D8	50	LEU	2.0
45	BK	120	LEU	2.0
1	CA	402	G	2.0
1	CA	664	G	2.0

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Mol	Chain	Res	Type	RSRZ
28	B3	59	VAL	2.0
35	DA	274	G	2.0
35	DA	1047	G	2.0
36	BB	18	G	2.0
42	DH	43	VAL	2.0
55	BW	63	ASP	2.0
48	DP	8	PRO	2.0
9	CI	128	ARG	2.0
13	AM	27	LYS	2.0
14	AN	19	ARG	2.0
21	CU	9	ARG	2.0
51	BS	13	ARG	2.0
57	DY	19	LYS	2.0
2	AB	170	GLU	2.0
31	D6	24	GLU	2.0
1	AA	47	C	2.0
1	CA	135	C	2.0
2	CB	18	GLY	2.0
8	CH	130	GLY	2.0
35	BA	271(Z)	C	2.0
35	BA	2111	C	2.0
35	DA	1043	C	2.0

5.2 Non-standard residues in protein, DNA, RNA chains ⓘ

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
22	PHA	AW	77	11/11	0.79	0.47	77,77,79,80	0
22	PHA	AV	77	11/11	0.89	0.25	70,70,72,73	0
22	PHA	CV	77	11/11	0.90	0.23	70,70,72,73	0
22	PHA	CW	77	11/11	0.90	0.29	77,77,79,80	0
22	8AN	AW	76	22/23	0.91	0.11	71,74,82,82	0
22	8AN	AV	76	22/23	0.92	0.13	59,59,59,104	0
22	8AN	CV	76	22/23	0.93	0.16	59,59,59,104	0
22	8AN	CW	76	22/23	0.94	0.14	71,74,82,82	0

5.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.4 Ligands ⓘ

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
59	MG	BA	3335	1/1	-0.49	0.28	173,173,173,173	0
59	MG	CA	1603	1/1	0.29	0.35	130,130,130,130	0
59	MG	CA	1720	1/1	0.49	0.18	93,93,93,93	1
59	MG	AA	1758	1/1	0.52	0.26	99,99,99,99	0
59	MG	BA	3208	1/1	0.53	0.41	100,100,100,100	0
59	MG	CA	1678	1/1	0.54	0.14	101,101,101,101	0
59	MG	CA	1719	1/1	0.55	0.13	98,98,98,98	0
59	MG	CA	1754	1/1	0.55	0.34	68,68,68,68	1
59	MG	CA	1713	1/1	0.57	0.20	94,94,94,94	0
59	MG	AA	1717	1/1	0.57	0.39	110,110,110,110	0
59	MG	AA	1740	1/1	0.58	0.35	75,75,75,75	0
59	MG	CA	1708	1/1	0.58	0.19	104,104,104,104	0
59	MG	CA	1696	1/1	0.59	0.63	17,17,17,17	1
59	MG	AV	104	1/1	0.59	0.17	109,109,109,109	0
59	MG	BA	3242	1/1	0.61	0.27	106,106,106,106	0
59	MG	DA	3339	1/1	0.61	0.10	89,89,89,89	0
59	MG	CA	1722	1/1	0.62	0.29	74,74,74,74	1
59	MG	BA	3239	1/1	0.62	0.46	4,4,4,4	1
59	MG	BA	3296	1/1	0.62	0.24	83,83,83,83	0
59	MG	AA	1721	1/1	0.63	0.24	87,87,87,87	0
59	MG	CV	106	1/1	0.63	0.13	96,96,96,96	0
59	MG	BA	3218	1/1	0.63	0.26	89,89,89,89	0
59	MG	DA	3195	1/1	0.64	0.14	102,102,102,102	0
59	MG	AA	1660	1/1	0.65	0.22	69,69,69,69	0
59	MG	AA	1699	1/1	0.65	0.26	83,83,83,83	0
59	MG	BA	3213	1/1	0.65	0.15	80,80,80,80	1
59	MG	AA	1645	1/1	0.65	0.34	88,88,88,88	0
59	MG	DA	3240	1/1	0.66	0.32	50,50,50,50	1
59	MG	CA	1739	1/1	0.67	0.29	94,94,94,94	1
59	MG	CA	1699	1/1	0.67	0.15	84,84,84,84	0
59	MG	AA	1752	1/1	0.68	0.23	57,57,57,57	1
59	MG	CA	1632	1/1	0.68	0.29	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	CA	1743	1/1	0.69	0.22	61,61,61,61	0
59	MG	BB	203	1/1	0.69	0.24	69,69,69,69	0
59	MG	AV	107	1/1	0.69	0.23	65,65,65,65	1
59	MG	DA	3197	1/1	0.70	0.58	94,94,94,94	0
59	MG	CW	102	1/1	0.70	0.27	51,51,51,51	1
59	MG	CA	1734	1/1	0.70	0.15	72,72,72,72	1
59	MG	DA	3215	1/1	0.71	0.39	129,129,129,129	0
59	MG	CA	1748	1/1	0.72	0.24	1,1,1,1	1
59	MG	AA	1691	1/1	0.72	0.26	69,69,69,69	0
59	MG	DA	3337	1/1	0.72	0.31	102,102,102,102	0
59	MG	AA	1614	1/1	0.72	0.27	68,68,68,68	0
59	MG	AA	1748	1/1	0.73	0.35	81,81,81,81	0
59	MG	DA	3153	1/1	0.73	0.35	94,94,94,94	0
59	MG	BA	3163	1/1	0.73	0.28	67,67,67,67	0
59	MG	CW	101	1/1	0.73	0.18	46,46,46,46	1
59	MG	AA	1702	1/1	0.74	0.15	51,51,51,51	0
59	MG	BA	3192	1/1	0.74	0.33	65,65,65,65	0
59	MG	AA	1703	1/1	0.74	0.18	71,71,71,71	0
59	MG	BB	201	1/1	0.74	0.30	38,38,38,38	1
59	MG	CD	301	1/1	0.74	0.12	84,84,84,84	0
59	MG	CA	1679	1/1	0.75	0.29	60,60,60,60	0
59	MG	AA	1731	1/1	0.75	0.18	68,68,68,68	0
59	MG	BA	3255	1/1	0.75	0.29	73,73,73,73	0
59	MG	BA	3293	1/1	0.75	0.39	83,83,83,83	0
59	MG	AA	1759	1/1	0.75	0.15	139,139,139,139	0
59	MG	BA	3146	1/1	0.75	0.21	58,58,58,58	0
59	MG	BA	3216	1/1	0.76	0.17	59,59,59,59	0
59	MG	BA	3139	1/1	0.76	0.23	84,84,84,84	0
59	MG	AA	1667	1/1	0.76	0.22	85,85,85,85	0
59	MG	CA	1638	1/1	0.76	0.17	77,77,77,77	0
59	MG	CA	1642	1/1	0.76	0.19	67,67,67,67	1
59	MG	AX	101	1/1	0.77	0.30	27,27,27,27	1
59	MG	BA	3091	1/1	0.77	0.14	58,58,58,58	0
59	MG	BA	3093	1/1	0.77	0.17	38,38,38,38	0
59	MG	BA	3357	1/1	0.77	0.16	68,68,68,68	1
59	MG	BA	3121	1/1	0.77	0.42	92,92,92,92	0
59	MG	AA	1716	1/1	0.77	0.13	66,66,66,66	1
59	MG	BA	3273	1/1	0.77	0.12	12,12,12,12	1
59	MG	CA	1622	1/1	0.77	0.15	53,53,53,53	0
59	MG	BA	3292	1/1	0.77	0.25	55,55,55,55	0
59	MG	BA	3312	1/1	0.78	0.17	93,93,93,93	0
59	MG	BA	3194	1/1	0.78	0.26	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3351	1/1	0.78	0.33	82,82,82,82	0
59	MG	BA	3220	1/1	0.78	0.11	79,79,79,79	0
59	MG	DA	3095	1/1	0.78	0.56	111,111,111,111	0
59	MG	BA	3082	1/1	0.78	0.17	60,60,60,60	0
59	MG	DX	101	1/1	0.78	0.20	58,58,58,58	0
59	MG	AV	103	1/1	0.79	0.12	74,74,74,74	0
59	MG	BA	3140	1/1	0.79	0.21	77,77,77,77	0
59	MG	BA	3240	1/1	0.79	0.14	73,73,73,73	0
59	MG	AA	1601	1/1	0.79	0.18	58,58,58,58	1
59	MG	CA	1626	1/1	0.79	0.12	75,75,75,75	0
59	MG	DA	3214	1/1	0.79	0.54	117,117,117,117	0
59	MG	AA	1680	1/1	0.79	0.11	91,91,91,91	0
59	MG	CA	1717	1/1	0.79	0.18	63,63,63,63	1
59	MG	CL	202	1/1	0.79	0.37	80,80,80,80	0
59	MG	AA	1666	1/1	0.79	0.42	70,70,70,70	0
59	MG	BA	3277	1/1	0.79	0.25	68,68,68,68	0
59	MG	BA	3176	1/1	0.80	0.12	59,59,59,59	0
59	MG	BA	3180	1/1	0.80	0.16	46,46,46,46	1
59	MG	BA	3241	1/1	0.80	0.29	1,1,1,1	1
59	MG	AA	1718	1/1	0.80	0.24	71,71,71,71	0
59	MG	AA	1747	1/1	0.80	0.34	81,81,81,81	0
59	MG	AA	1674	1/1	0.80	0.09	69,69,69,69	0
59	MG	CA	1612	1/1	0.80	0.15	65,65,65,65	0
59	MG	AA	1723	1/1	0.80	0.25	54,54,54,54	1
59	MG	DA	3204	1/1	0.80	0.19	59,59,59,59	0
59	MG	BA	3143	1/1	0.80	0.27	90,90,90,90	0
59	MG	AA	1654	1/1	0.80	0.13	78,78,78,78	0
59	MG	AA	1732	1/1	0.80	0.25	72,72,72,72	0
59	MG	BA	3305	1/1	0.80	0.18	54,54,54,54	0
59	MG	BA	3227	1/1	0.80	0.14	56,56,56,56	0
59	MG	BA	3331	1/1	0.80	0.16	47,47,47,47	0
59	MG	BB	204	1/1	0.81	0.12	22,22,22,22	1
59	MG	BA	3080	1/1	0.81	0.17	42,42,42,42	0
59	MG	AA	1745	1/1	0.81	0.12	62,62,62,62	0
59	MG	BA	3162	1/1	0.81	0.27	96,96,96,96	0
59	MG	AA	1623	1/1	0.81	0.09	60,60,60,60	0
59	MG	AA	1633	1/1	0.81	0.28	73,73,73,73	0
59	MG	AA	1738	1/1	0.81	0.19	85,85,85,85	0
59	MG	AA	1607	1/1	0.81	0.19	57,57,57,57	0
59	MG	CA	1675	1/1	0.81	0.21	64,64,64,64	0
59	MG	BA	3064	1/1	0.81	0.39	61,61,61,61	0
59	MG	BA	3099	1/1	0.82	0.09	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	AA	1730	1/1	0.82	0.44	78,78,78,78	0
59	MG	BA	3127	1/1	0.82	0.23	75,75,75,75	0
59	MG	BA	3313	1/1	0.82	0.24	86,86,86,86	0
59	MG	AA	1681	1/1	0.82	0.14	60,60,60,60	0
59	MG	AA	1742	1/1	0.82	0.26	72,72,72,72	0
59	MG	CA	1738	1/1	0.82	0.12	15,15,15,15	1
59	MG	DA	3338	1/1	0.82	0.20	58,58,58,58	0
59	MG	AA	1754	1/1	0.82	0.17	51,51,51,51	0
59	MG	AA	1727	1/1	0.82	0.20	20,20,20,20	1
59	MG	BA	3327	1/1	0.83	0.15	52,52,52,52	0
59	MG	AA	1678	1/1	0.83	0.18	56,56,56,56	0
59	MG	AA	1728	1/1	0.83	0.22	69,69,69,69	0
59	MG	BA	3286	1/1	0.83	0.17	71,71,71,71	0
59	MG	AA	1611	1/1	0.83	0.25	74,74,74,74	0
59	MG	CA	1659	1/1	0.83	0.26	69,69,69,69	0
59	MG	BA	3065	1/1	0.83	0.17	67,67,67,67	0
59	MG	AA	1750	1/1	0.83	0.29	54,54,54,54	0
59	MG	BA	3172	1/1	0.83	0.24	58,58,58,58	0
59	MG	AA	1603	1/1	0.83	0.14	60,60,60,60	0
59	MG	DA	3309	1/1	0.83	0.15	61,61,61,61	0
59	MG	DA	3335	1/1	0.83	0.10	88,88,88,88	0
59	MG	CA	1610	1/1	0.83	0.14	60,60,60,60	0
59	MG	CA	1704	1/1	0.83	0.37	75,75,75,75	0
59	MG	BA	3264	1/1	0.83	0.13	64,64,64,64	0
59	MG	CA	1710	1/1	0.83	0.08	120,120,120,120	0
59	MG	BA	3278	1/1	0.84	0.24	59,59,59,59	0
59	MG	BA	3280	1/1	0.84	0.12	56,56,56,56	0
59	MG	AA	1711	1/1	0.84	0.30	63,63,63,63	0
59	MG	DA	3132	1/1	0.84	0.18	62,62,62,62	0
59	MG	AW	103	1/1	0.84	0.20	84,84,84,84	0
59	MG	BA	3149	1/1	0.84	0.49	75,75,75,75	0
59	MG	AA	1602	1/1	0.84	0.58	53,53,53,53	1
59	MG	BA	3111	1/1	0.84	0.25	65,65,65,65	0
59	MG	BA	3237	1/1	0.84	0.27	64,64,64,64	0
59	MG	AV	101	1/1	0.84	0.16	72,72,72,72	0
59	MG	AA	1626	1/1	0.84	0.24	61,61,61,61	0
59	MG	DA	3256	1/1	0.84	0.18	49,49,49,49	0
59	MG	BA	3132	1/1	0.84	0.17	80,80,80,80	0
59	MG	BA	3191	1/1	0.84	0.17	84,84,84,84	0
59	MG	BA	3133	1/1	0.84	0.26	118,118,118,118	0
59	MG	AA	1679	1/1	0.84	0.13	82,82,82,82	0
59	MG	BA	3199	1/1	0.84	0.29	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	AV	105	1/1	0.84	0.34	88,88,88,88	0
59	MG	CA	1752	1/1	0.85	0.10	84,84,84,84	0
59	MG	BA	3341	1/1	0.85	0.24	61,61,61,61	0
59	MG	B5	102	1/1	0.85	0.30	78,78,78,78	0
59	MG	AA	1630	1/1	0.85	0.24	72,72,72,72	0
59	MG	CA	1689	1/1	0.85	0.17	57,57,57,57	0
59	MG	CA	1695	1/1	0.85	0.10	46,46,46,46	1
59	MG	AA	1664	1/1	0.85	0.31	65,65,65,65	0
59	MG	BA	3287	1/1	0.85	0.14	65,65,65,65	0
59	MG	AA	1695	1/1	0.85	0.17	56,56,56,56	0
59	MG	BA	3151	1/1	0.85	0.15	52,52,52,52	0
59	MG	AA	1639	1/1	0.85	0.33	73,73,73,73	0
59	MG	AA	1700	1/1	0.85	0.27	77,77,77,77	0
59	MG	CA	1714	1/1	0.85	0.32	62,62,62,62	0
59	MG	DA	3211	1/1	0.85	0.32	69,69,69,69	0
59	MG	CA	1614	1/1	0.85	0.09	44,44,44,44	0
59	MG	BA	3260	1/1	0.85	0.12	53,53,53,53	0
59	MG	DA	3219	1/1	0.85	0.12	32,32,32,32	0
59	MG	BA	3134	1/1	0.85	0.11	52,52,52,52	0
59	MG	BA	3268	1/1	0.85	0.30	66,66,66,66	0
59	MG	CA	1636	1/1	0.85	0.24	52,52,52,52	0
59	MG	DA	3311	1/1	0.85	0.17	75,75,75,75	0
59	MG	AA	1659	1/1	0.85	0.13	78,78,78,78	0
59	MG	BA	3177	1/1	0.85	0.19	77,77,77,77	0
59	MG	BA	3337	1/1	0.85	0.14	55,55,55,55	0
59	MG	CA	1670	1/1	0.85	0.25	77,77,77,77	0
59	MG	CA	1749	1/1	0.85	0.20	65,65,65,65	0
59	MG	CA	1619	1/1	0.86	0.22	41,41,41,41	0
59	MG	AA	1677	1/1	0.86	0.36	68,68,68,68	0
59	MG	BA	3324	1/1	0.86	0.17	19,19,19,19	1
59	MG	BA	3159	1/1	0.86	0.23	55,55,55,55	0
59	MG	AA	1729	1/1	0.86	0.41	88,88,88,88	0
59	MG	AA	1669	1/1	0.86	0.13	34,34,34,34	0
59	MG	CA	1641	1/1	0.86	0.13	43,43,43,43	0
59	MG	DA	3210	1/1	0.86	0.25	95,95,95,95	0
59	MG	BA	3281	1/1	0.86	0.22	51,51,51,51	1
59	MG	DA	3212	1/1	0.86	0.20	59,59,59,59	0
59	MG	BA	3282	1/1	0.86	0.14	68,68,68,68	0
59	MG	BA	3283	1/1	0.86	0.09	49,49,49,49	0
59	MG	CA	1740	1/1	0.86	0.22	56,56,56,56	0
59	MG	BA	3095	1/1	0.86	0.34	73,73,73,73	0
59	MG	DA	3252	1/1	0.86	0.18	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3247	1/1	0.86	0.10	66,66,66,66	0
59	MG	DA	3258	1/1	0.86	0.17	58,58,58,58	0
59	MG	DA	3260	1/1	0.86	0.21	43,43,43,43	0
59	MG	DA	3274	1/1	0.86	0.24	69,69,69,69	0
59	MG	AA	1642	1/1	0.86	0.22	55,55,55,55	0
59	MG	BA	3259	1/1	0.86	0.13	80,80,80,80	0
59	MG	AA	1726	1/1	0.86	0.30	2,2,2,2	1
59	MG	CA	1606	1/1	0.86	0.22	58,58,58,58	0
59	MG	BA	3303	1/1	0.86	0.24	57,57,57,57	0
59	MG	AA	1733	1/1	0.86	0.26	79,79,79,79	0
59	MG	DH	201	1/1	0.86	0.12	44,44,44,44	0
59	MG	AA	1694	1/1	0.86	0.25	54,54,54,54	0
59	MG	AA	1722	1/1	0.87	0.19	46,46,46,46	1
59	MG	AA	1686	1/1	0.87	0.22	64,64,64,64	0
59	MG	BA	3195	1/1	0.87	0.20	62,62,62,62	0
59	MG	CA	1661	1/1	0.87	0.29	83,83,83,83	0
59	MG	BA	3266	1/1	0.87	0.21	35,35,35,35	0
59	MG	BA	3198	1/1	0.87	0.16	38,38,38,38	0
59	MG	DA	3031	1/1	0.87	0.25	52,52,52,52	0
59	MG	BA	3272	1/1	0.87	0.27	44,44,44,44	0
59	MG	DA	3123	1/1	0.87	0.27	76,76,76,76	0
59	MG	BA	3338	1/1	0.87	0.26	54,54,54,54	0
59	MG	CA	1685	1/1	0.87	0.19	53,53,53,53	0
59	MG	AW	101	1/1	0.87	0.20	58,58,58,58	1
59	MG	BA	3206	1/1	0.87	0.13	85,85,85,85	0
59	MG	BA	3352	1/1	0.87	0.40	62,62,62,62	0
59	MG	AA	1606	1/1	0.87	0.19	65,65,65,65	0
59	MG	AA	1692	1/1	0.87	0.23	50,50,50,50	0
59	MG	AA	1652	1/1	0.87	0.32	50,50,50,50	0
59	MG	BA	3116	1/1	0.87	0.20	45,45,45,45	0
59	MG	BA	3161	1/1	0.87	0.12	54,54,54,54	0
59	MG	BA	3117	1/1	0.87	0.10	30,30,30,30	0
59	MG	CA	1715	1/1	0.87	0.27	50,50,50,50	1
59	MG	CA	1607	1/1	0.87	0.15	32,32,32,32	0
59	MG	BA	3039	1/1	0.87	0.38	111,111,111,111	0
59	MG	BA	3288	1/1	0.87	0.15	52,52,52,52	0
59	MG	CA	1613	1/1	0.87	0.18	58,58,58,58	0
59	MG	CA	1730	1/1	0.87	0.15	72,72,72,72	0
59	MG	AA	1629	1/1	0.87	0.16	61,61,61,61	0
59	MG	BA	3175	1/1	0.87	0.17	65,65,65,65	0
59	MG	DA	3322	1/1	0.87	0.11	38,38,38,38	0
59	MG	CA	1621	1/1	0.87	0.16	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3131	1/1	0.87	0.27	67,67,67,67	0
59	MG	AA	1657	1/1	0.87	0.12	46,46,46,46	0
59	MG	BA	3078	1/1	0.87	0.25	58,58,58,58	0
59	MG	DB	201	1/1	0.87	0.19	27,27,27,27	1
59	MG	BA	3310	1/1	0.87	0.27	68,68,68,68	0
59	MG	AA	1684	1/1	0.87	0.26	59,59,59,59	0
59	MG	CV	103	1/1	0.88	0.12	57,57,57,57	0
59	MG	CV	105	1/1	0.88	0.24	66,66,66,66	0
59	MG	AA	1644	1/1	0.88	0.10	54,54,54,54	0
59	MG	BA	3147	1/1	0.88	0.16	35,35,35,35	0
59	MG	BA	3118	1/1	0.88	0.21	38,38,38,38	0
59	MG	BA	3254	1/1	0.88	0.24	62,62,62,62	0
59	MG	DA	3044	1/1	0.88	0.38	62,62,62,62	0
59	MG	BF	301	1/1	0.88	0.12	33,33,33,33	0
59	MG	AA	1621	1/1	0.88	0.11	93,93,93,93	0
59	MG	BA	3297	1/1	0.88	0.11	75,75,75,75	1
59	MG	DA	3144	1/1	0.88	0.25	56,56,56,56	0
59	MG	CA	1701	1/1	0.88	0.29	55,55,55,55	1
59	MG	DA	3167	1/1	0.88	0.28	46,46,46,46	0
59	MG	DA	3178	1/1	0.88	0.18	51,51,51,51	0
59	MG	BA	3298	1/1	0.88	0.26	68,68,68,68	0
59	MG	CA	1706	1/1	0.88	0.13	53,53,53,53	0
59	MG	CA	1707	1/1	0.88	0.29	65,65,65,65	0
59	MG	CA	1609	1/1	0.88	0.16	58,58,58,58	0
59	MG	BA	3152	1/1	0.88	0.10	104,104,104,104	0
59	MG	CA	1712	1/1	0.88	0.19	67,67,67,67	0
59	MG	BA	3204	1/1	0.88	0.31	35,35,35,35	1
59	MG	BA	3008	1/1	0.88	0.20	58,58,58,58	0
59	MG	AA	1622	1/1	0.88	0.22	81,81,81,81	0
59	MG	BA	3210	1/1	0.88	0.24	70,70,70,70	0
59	MG	DA	3244	1/1	0.88	0.12	1,1,1,1	1
59	MG	BA	3316	1/1	0.88	0.15	74,74,74,74	0
59	MG	BA	3319	1/1	0.88	0.31	77,77,77,77	0
59	MG	AA	1713	1/1	0.88	0.12	49,49,49,49	1
59	MG	BA	3215	1/1	0.88	0.07	26,26,26,26	0
59	MG	AA	1640	1/1	0.88	0.25	47,47,47,47	0
59	MG	DA	3281	1/1	0.88	0.22	59,59,59,59	0
59	MG	BA	3104	1/1	0.88	0.24	57,57,57,57	0
59	MG	BA	3336	1/1	0.88	0.20	40,40,40,40	0
59	MG	DA	3312	1/1	0.88	0.10	65,65,65,65	0
59	MG	BA	3136	1/1	0.88	0.16	42,42,42,42	0
59	MG	CA	1652	1/1	0.88	0.22	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	CA	1655	1/1	0.88	0.15	37,37,37,37	0
59	MG	BA	3107	1/1	0.88	0.09	25,25,25,25	1
59	MG	CA	1660	1/1	0.88	0.25	69,69,69,69	0
59	MG	BA	3077	1/1	0.88	0.18	74,74,74,74	0
59	MG	AA	1610	1/1	0.88	0.07	80,80,80,80	1
59	MG	DS	201	1/1	0.88	0.14	30,30,30,30	0
59	MG	BA	3145	1/1	0.88	0.12	60,60,60,60	0
59	MG	BA	3189	1/1	0.89	0.15	41,41,41,41	0
59	MG	CA	1637	1/1	0.89	0.34	65,65,65,65	0
59	MG	DA	3155	1/1	0.89	0.14	50,50,50,50	0
59	MG	BA	3344	1/1	0.89	0.29	63,63,63,63	0
59	MG	BA	3348	1/1	0.89	0.14	48,48,48,48	1
59	MG	AA	1715	1/1	0.89	0.15	59,59,59,59	0
59	MG	CA	1645	1/1	0.89	0.08	45,45,45,45	1
59	MG	CA	1647	1/1	0.89	0.17	44,44,44,44	0
59	MG	BA	3012	1/1	0.89	0.20	25,25,25,25	0
59	MG	CA	1724	1/1	0.89	0.27	58,58,58,58	0
59	MG	BA	3355	1/1	0.89	0.09	9,9,9,9	1
59	MG	BA	3226	1/1	0.89	0.33	58,58,58,58	0
59	MG	BA	3029	1/1	0.89	0.36	66,66,66,66	0
59	MG	BA	3232	1/1	0.89	0.13	59,59,59,59	0
59	MG	CA	1663	1/1	0.89	0.20	57,57,57,57	0
59	MG	BA	3311	1/1	0.89	0.07	75,75,75,75	0
59	MG	AA	1685	1/1	0.89	0.17	57,57,57,57	0
59	MG	DA	3253	1/1	0.89	0.16	18,18,18,18	1
59	MG	AA	1697	1/1	0.89	0.09	60,60,60,60	0
59	MG	AA	1706	1/1	0.89	0.26	69,69,69,69	0
59	MG	CA	1680	1/1	0.89	0.28	67,67,67,67	0
59	MG	DA	3273	1/1	0.89	0.10	1,1,1,1	1
59	MG	AA	1710	1/1	0.89	0.27	61,61,61,61	0
59	MG	CA	1687	1/1	0.89	0.10	64,64,64,64	0
59	MG	DA	3287	1/1	0.89	0.11	28,28,28,28	0
59	MG	DA	3308	1/1	0.89	0.16	41,41,41,41	0
59	MG	BA	3323	1/1	0.89	0.21	49,49,49,49	1
59	MG	CV	104	1/1	0.89	0.17	2,2,2,2	1
59	MG	AA	1671	1/1	0.89	0.19	66,66,66,66	0
59	MG	DA	3313	1/1	0.89	0.26	74,74,74,74	0
59	MG	BA	3079	1/1	0.89	0.19	36,36,36,36	0
59	MG	BA	3329	1/1	0.89	0.16	58,58,58,58	0
59	MG	BA	3209	1/1	0.89	0.29	66,66,66,66	0
59	MG	AA	1690	1/1	0.89	0.12	64,64,64,64	0
59	MG	BA	3289	1/1	0.89	0.17	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3002	1/1	0.89	0.20	80,80,80,80	0
59	MG	DA	3121	1/1	0.89	0.19	14,14,14,14	1
59	MG	BA	3122	1/1	0.89	0.24	62,62,62,62	0
59	MG	BA	3339	1/1	0.89	0.13	21,21,21,21	1
59	MG	DA	3051	1/1	0.90	0.18	23,23,23,23	0
59	MG	DA	3054	1/1	0.90	0.19	22,22,22,22	0
59	MG	DA	3056	1/1	0.90	0.21	26,26,26,26	0
59	MG	CA	1611	1/1	0.90	0.21	51,51,51,51	0
59	MG	CA	1700	1/1	0.90	0.30	58,58,58,58	0
59	MG	BA	3318	1/1	0.90	0.21	42,42,42,42	0
59	MG	AA	1647	1/1	0.90	0.08	66,66,66,66	0
59	MG	DA	3141	1/1	0.90	0.20	56,56,56,56	0
59	MG	BA	3275	1/1	0.90	0.17	27,27,27,27	1
59	MG	AA	1741	1/1	0.90	0.11	44,44,44,44	0
59	MG	BA	3137	1/1	0.90	0.09	38,38,38,38	0
59	MG	DA	3161	1/1	0.90	0.20	44,44,44,44	0
59	MG	BA	3013	1/1	0.90	0.15	54,54,54,54	0
59	MG	BA	3181	1/1	0.90	0.25	60,60,60,60	0
59	MG	BA	3025	1/1	0.90	0.16	40,40,40,40	0
59	MG	BA	3142	1/1	0.90	0.32	97,97,97,97	0
59	MG	AA	1682	1/1	0.90	0.53	77,77,77,77	0
59	MG	CA	1716	1/1	0.90	0.14	50,50,50,50	0
59	MG	BA	3031	1/1	0.90	0.14	37,37,37,37	0
59	MG	BA	3034	1/1	0.90	0.11	39,39,39,39	0
59	MG	AA	1743	1/1	0.90	0.20	49,49,49,49	1
59	MG	BA	3290	1/1	0.90	0.09	11,11,11,11	1
59	MG	BA	3243	1/1	0.90	0.13	10,10,10,10	1
59	MG	DA	3221	1/1	0.90	0.12	63,63,63,63	0
59	MG	BA	3246	1/1	0.90	0.20	60,60,60,60	0
59	MG	DA	3242	1/1	0.90	0.18	11,11,11,11	1
59	MG	CA	1654	1/1	0.90	0.18	48,48,48,48	0
59	MG	BA	3045	1/1	0.90	0.30	44,44,44,44	0
59	MG	BA	3353	1/1	0.90	0.12	61,61,61,61	0
59	MG	BA	3203	1/1	0.90	0.24	43,43,43,43	0
59	MG	BA	3356	1/1	0.90	0.12	68,68,68,68	0
59	MG	AA	1649	1/1	0.90	0.23	67,67,67,67	0
59	MG	BA	3257	1/1	0.90	0.13	45,45,45,45	0
59	MG	CA	1750	1/1	0.90	0.15	76,76,76,76	0
59	MG	AA	1637	1/1	0.90	0.18	63,63,63,63	0
59	MG	CA	1677	1/1	0.90	0.10	46,46,46,46	1
59	MG	DA	3305	1/1	0.90	0.11	39,39,39,39	0
59	MG	BA	3309	1/1	0.90	0.09	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	AA	1616	1/1	0.90	0.13	36,36,36,36	1
59	MG	CA	1602	1/1	0.90	0.17	16,16,16,16	1
59	MG	AA	1646	1/1	0.90	0.14	48,48,48,48	0
59	MG	AA	1734	1/1	0.90	0.20	51,51,51,51	0
59	MG	AA	1735	1/1	0.90	0.28	74,74,74,74	0
59	MG	DA	3323	1/1	0.90	0.17	45,45,45,45	0
59	MG	CA	1692	1/1	0.90	0.35	73,73,73,73	0
59	MG	CA	1693	1/1	0.90	0.30	56,56,56,56	0
59	MG	CW	103	1/1	0.90	0.07	15,15,15,15	1
59	MG	CX	101	1/1	0.90	0.25	79,79,79,79	0
59	MG	DA	3340	1/1	0.90	0.07	25,25,25,25	0
59	MG	DA	3355	1/1	0.90	0.31	68,68,68,68	0
59	MG	DA	3356	1/1	0.90	0.30	74,74,74,74	0
59	MG	AA	1658	1/1	0.90	0.17	66,66,66,66	0
59	MG	DA	3034	1/1	0.90	0.18	32,32,32,32	0
59	MG	DA	3039	1/1	0.90	0.41	97,97,97,97	0
59	MG	BA	3317	1/1	0.90	0.12	1,1,1,1	1
59	MG	CA	1669	1/1	0.91	0.18	33,33,33,33	0
59	MG	CA	1725	1/1	0.91	0.23	72,72,72,72	0
59	MG	DA	3159	1/1	0.91	0.36	68,68,68,68	0
59	MG	CA	1727	1/1	0.91	0.17	44,44,44,44	0
59	MG	CA	1729	1/1	0.91	0.16	33,33,33,33	1
59	MG	AA	1753	1/1	0.91	0.05	16,16,16,16	1
59	MG	CA	1731	1/1	0.91	0.20	69,69,69,69	0
59	MG	CA	1672	1/1	0.91	0.11	52,52,52,52	1
59	MG	CA	1674	1/1	0.91	0.09	35,35,35,35	1
59	MG	AA	1746	1/1	0.91	0.33	54,54,54,54	0
59	MG	CA	1676	1/1	0.91	0.20	46,46,46,46	1
59	MG	BA	3010	1/1	0.91	0.29	63,63,63,63	0
59	MG	BA	3276	1/1	0.91	0.24	60,60,60,60	0
59	MG	AA	1615	1/1	0.91	0.30	50,50,50,50	0
59	MG	BA	3072	1/1	0.91	0.20	41,41,41,41	0
59	MG	BA	3349	1/1	0.91	0.26	45,45,45,45	0
59	MG	DA	3228	1/1	0.91	0.09	41,41,41,41	0
59	MG	DA	3236	1/1	0.91	0.21	43,43,43,43	0
59	MG	AA	1617	1/1	0.91	0.07	44,44,44,44	0
59	MG	CA	1688	1/1	0.91	0.08	56,56,56,56	0
59	MG	AW	102	1/1	0.91	0.11	25,25,25,25	1
59	MG	BA	3249	1/1	0.91	0.27	103,103,103,103	0
59	MG	CA	1633	1/1	0.91	0.11	69,69,69,69	0
59	MG	BA	3252	1/1	0.91	0.10	32,32,32,32	1
59	MG	BA	3160	1/1	0.91	0.08	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	AA	1651	1/1	0.91	0.25	49,49,49,49	0
59	MG	CA	1640	1/1	0.91	0.23	37,37,37,37	0
59	MG	BA	3322	1/1	0.91	0.14	52,52,52,52	0
59	MG	DA	3277	1/1	0.91	0.09	37,37,37,37	0
59	MG	AV	102	1/1	0.91	0.14	61,61,61,61	0
59	MG	CA	1643	1/1	0.91	0.17	10,10,10,10	1
59	MG	DA	3293	1/1	0.91	0.41	63,63,63,63	0
59	MG	DA	3298	1/1	0.91	0.15	78,78,78,78	0
59	MG	DA	3303	1/1	0.91	0.09	25,25,25,25	0
59	MG	BA	3258	1/1	0.91	0.20	48,48,48,48	0
59	MG	DA	3036	1/1	0.91	0.16	39,39,39,39	0
59	MG	CA	1646	1/1	0.91	0.09	37,37,37,37	0
59	MG	BA	3223	1/1	0.91	0.14	38,38,38,38	0
59	MG	CA	1648	1/1	0.91	0.21	72,72,72,72	0
59	MG	CA	1601	1/1	0.91	0.16	59,59,59,59	0
59	MG	BA	3033	1/1	0.91	0.35	35,35,35,35	0
59	MG	DA	3080	1/1	0.91	0.18	32,32,32,32	0
59	MG	DA	3328	1/1	0.91	0.09	32,32,32,32	0
59	MG	BA	3167	1/1	0.91	0.19	70,70,70,70	0
59	MG	DA	3115	1/1	0.91	0.17	44,44,44,44	0
59	MG	CA	1605	1/1	0.91	0.11	44,44,44,44	0
59	MG	BA	3333	1/1	0.91	0.20	23,23,23,23	1
59	MG	DA	3130	1/1	0.91	0.13	45,45,45,45	0
59	MG	DA	3350	1/1	0.91	0.19	37,37,37,37	0
59	MG	BA	3200	1/1	0.91	0.10	36,36,36,36	0
59	MG	DA	3135	1/1	0.91	0.08	33,33,33,33	0
59	MG	DA	3140	1/1	0.91	0.10	57,57,57,57	0
59	MG	AA	1724	1/1	0.91	0.34	1,1,1,1	1
59	MG	DP	201	1/1	0.91	0.22	1,1,1,1	1
59	MG	CA	1668	1/1	0.91	0.21	50,50,50,50	0
59	MG	DA	3152	1/1	0.91	0.14	38,38,38,38	0
59	MG	DA	3192	1/1	0.92	0.13	35,35,35,35	0
59	MG	BA	3262	1/1	0.92	0.13	49,49,49,49	0
59	MG	BA	3059	1/1	0.92	0.14	30,30,30,30	0
59	MG	BA	3212	1/1	0.92	0.12	74,74,74,74	0
59	MG	DA	3208	1/1	0.92	0.07	26,26,26,26	0
59	MG	AY	401	1/1	0.92	0.09	74,74,74,74	0
59	MG	BA	3214	1/1	0.92	0.16	55,55,55,55	0
59	MG	AA	1619	1/1	0.92	0.18	39,39,39,39	0
59	MG	BA	3129	1/1	0.92	0.36	59,59,59,59	0
59	MG	BA	3169	1/1	0.92	0.11	45,45,45,45	0
59	MG	AA	1760	1/1	0.92	0.06	27,27,27,27	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3006	1/1	0.92	0.41	73,73,73,73	0
59	MG	DA	3224	1/1	0.92	0.29	44,44,44,44	0
59	MG	BA	3330	1/1	0.92	0.19	49,49,49,49	0
59	MG	CA	1682	1/1	0.92	0.24	60,60,60,60	0
59	MG	CS	101	1/1	0.92	0.10	52,52,52,52	1
59	MG	CA	1684	1/1	0.92	0.24	50,50,50,50	0
59	MG	AA	1662	1/1	0.92	0.17	56,56,56,56	0
59	MG	CA	1617	1/1	0.92	0.20	61,61,61,61	0
59	MG	BA	3332	1/1	0.92	0.08	54,54,54,54	0
59	MG	AA	1663	1/1	0.92	0.24	50,50,50,50	0
59	MG	CA	1691	1/1	0.92	0.20	33,33,33,33	0
59	MG	BA	3179	1/1	0.92	0.27	43,43,43,43	0
59	MG	DA	3264	1/1	0.92	0.13	58,58,58,58	1
59	MG	DA	3266	1/1	0.92	0.12	27,27,27,27	0
59	MG	DA	3268	1/1	0.92	0.15	30,30,30,30	0
59	MG	DA	3270	1/1	0.92	0.14	30,30,30,30	0
59	MG	AA	1709	1/1	0.92	0.09	50,50,50,50	0
59	MG	CA	1627	1/1	0.92	0.09	51,51,51,51	0
59	MG	AA	1739	1/1	0.92	0.06	54,54,54,54	0
59	MG	AA	1751	1/1	0.92	0.09	11,11,11,11	1
59	MG	DA	3282	1/1	0.92	0.14	41,41,41,41	0
59	MG	AV	106	1/1	0.92	0.07	77,77,77,77	0
59	MG	DA	3290	1/1	0.92	0.19	1,1,1,1	1
59	MG	BA	3030	1/1	0.92	0.36	59,59,59,59	0
59	MG	AA	1719	1/1	0.92	0.17	63,63,63,63	0
59	MG	DA	3053	1/1	0.92	0.23	50,50,50,50	0
59	MG	DA	3304	1/1	0.92	0.21	18,18,18,18	1
59	MG	CA	1639	1/1	0.92	0.20	51,51,51,51	0
59	MG	BA	3103	1/1	0.92	0.18	28,28,28,28	0
59	MG	AA	1687	1/1	0.92	0.14	51,51,51,51	0
59	MG	AA	1653	1/1	0.92	0.23	44,44,44,44	0
59	MG	BA	3250	1/1	0.92	0.10	50,50,50,50	1
59	MG	BA	3038	1/1	0.92	0.13	44,44,44,44	0
59	MG	BA	3299	1/1	0.92	0.17	55,55,55,55	0
59	MG	BA	3202	1/1	0.92	0.07	42,42,42,42	0
59	MG	DA	3325	1/1	0.92	0.24	48,48,48,48	0
59	MG	BA	3113	1/1	0.92	0.20	33,33,33,33	0
59	MG	CA	1651	1/1	0.92	0.25	40,40,40,40	0
59	MG	CA	1718	1/1	0.92	0.18	44,44,44,44	1
59	MG	AA	1756	1/1	0.92	0.07	64,64,64,64	0
59	MG	BB	202	1/1	0.92	0.20	51,51,51,51	0
59	MG	DA	3149	1/1	0.92	0.19	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	DA	3342	1/1	0.92	0.37	61,61,61,61	0
59	MG	BA	3154	1/1	0.92	0.17	44,44,44,44	0
59	MG	CA	1657	1/1	0.92	0.12	52,52,52,52	0
59	MG	AA	1648	1/1	0.92	0.07	69,69,69,69	0
59	MG	BA	3049	1/1	0.92	0.20	46,46,46,46	0
59	MG	DG	201	1/1	0.92	0.07	1,1,1,1	1
59	MG	BF	302	1/1	0.92	0.17	63,63,63,63	0
59	MG	DA	3164	1/1	0.92	0.27	44,44,44,44	0
59	MG	BX	101	1/1	0.92	0.17	47,47,47,47	0
59	MG	CA	1665	1/1	0.92	0.23	46,46,46,46	0
59	MG	DA	3165	1/1	0.93	0.20	45,45,45,45	0
59	MG	CA	1658	1/1	0.93	0.13	53,53,53,53	0
59	MG	DA	3174	1/1	0.93	0.18	46,46,46,46	0
59	MG	DA	3177	1/1	0.93	0.13	53,53,53,53	0
59	MG	CA	1728	1/1	0.93	0.23	53,53,53,53	0
59	MG	DA	3187	1/1	0.93	0.27	44,44,44,44	0
59	MG	AA	1701	1/1	0.93	0.11	61,61,61,61	0
59	MG	BA	3306	1/1	0.93	0.18	29,29,29,29	0
59	MG	BA	3308	1/1	0.93	0.09	39,39,39,39	0
59	MG	DA	3199	1/1	0.93	0.22	14,14,14,14	0
59	MG	DA	3203	1/1	0.93	0.13	37,37,37,37	0
59	MG	CA	1733	1/1	0.93	0.15	50,50,50,50	0
59	MG	BA	3046	1/1	0.93	0.15	22,22,22,22	0
59	MG	DA	3209	1/1	0.93	0.11	47,47,47,47	0
59	MG	CA	1736	1/1	0.93	0.17	55,55,55,55	0
59	MG	CA	1737	1/1	0.93	0.23	59,59,59,59	0
59	MG	BG	201	1/1	0.93	0.08	1,1,1,1	1
59	MG	BT	201	1/1	0.93	0.18	49,49,49,49	0
59	MG	BA	3048	1/1	0.93	0.20	32,32,32,32	0
59	MG	BA	3106	1/1	0.93	0.14	34,34,34,34	0
59	MG	AA	1712	1/1	0.93	0.12	47,47,47,47	0
59	MG	BA	3110	1/1	0.93	0.26	51,51,51,51	0
59	MG	DA	3225	1/1	0.93	0.06	34,34,34,34	0
59	MG	BA	3314	1/1	0.93	0.23	45,45,45,45	0
59	MG	DA	3233	1/1	0.93	0.17	37,37,37,37	0
59	MG	BA	3315	1/1	0.93	0.11	45,45,45,45	0
59	MG	DA	3237	1/1	0.93	0.18	39,39,39,39	0
59	MG	BA	3205	1/1	0.93	0.17	75,75,75,75	0
59	MG	BA	3053	1/1	0.93	0.14	45,45,45,45	1
59	MG	DA	3243	1/1	0.93	0.09	54,54,54,54	1
59	MG	BA	3261	1/1	0.93	0.14	60,60,60,60	0
59	MG	AA	1661	1/1	0.93	0.14	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3156	1/1	0.93	0.18	58,58,58,58	0
59	MG	BA	3158	1/1	0.93	0.23	23,23,23,23	0
59	MG	BA	3115	1/1	0.93	0.20	43,43,43,43	0
59	MG	BA	3028	1/1	0.93	0.20	40,40,40,40	0
59	MG	AA	1676	1/1	0.93	0.09	21,21,21,21	1
59	MG	CA	1620	1/1	0.93	0.11	48,48,48,48	0
59	MG	CA	1690	1/1	0.93	0.20	54,54,54,54	0
59	MG	CW	104	1/1	0.93	0.06	37,37,37,37	1
59	MG	BA	3274	1/1	0.93	0.06	57,57,57,57	0
59	MG	DA	3002	1/1	0.93	0.10	39,39,39,39	1
59	MG	DA	3276	1/1	0.93	0.30	57,57,57,57	0
59	MG	BA	3069	1/1	0.93	0.14	32,32,32,32	0
59	MG	DA	3278	1/1	0.93	0.25	40,40,40,40	0
59	MG	CA	1623	1/1	0.93	0.11	51,51,51,51	0
59	MG	AA	1704	1/1	0.93	0.16	56,56,56,56	0
59	MG	DA	3285	1/1	0.93	0.11	48,48,48,48	0
59	MG	BA	3166	1/1	0.93	0.10	42,42,42,42	0
59	MG	CA	1697	1/1	0.93	0.14	58,58,58,58	0
59	MG	CA	1698	1/1	0.93	0.20	20,20,20,20	1
59	MG	CA	1628	1/1	0.93	0.20	49,49,49,49	0
59	MG	DA	3301	1/1	0.93	0.15	21,21,21,21	0
59	MG	BA	3334	1/1	0.93	0.07	55,55,55,55	0
59	MG	BA	3219	1/1	0.93	0.16	46,46,46,46	0
59	MG	DA	3065	1/1	0.93	0.30	65,65,65,65	0
59	MG	DA	3078	1/1	0.93	0.14	33,33,33,33	0
59	MG	CA	1703	1/1	0.93	0.17	62,62,62,62	0
59	MG	DA	3082	1/1	0.93	0.17	56,56,56,56	0
59	MG	DA	3091	1/1	0.93	0.10	21,21,21,21	1
59	MG	BA	3074	1/1	0.93	0.15	37,37,37,37	0
59	MG	DA	3316	1/1	0.93	0.08	33,33,33,33	1
59	MG	DA	3107	1/1	0.93	0.12	31,31,31,31	0
59	MG	DA	3108	1/1	0.93	0.20	16,16,16,16	0
59	MG	BA	3123	1/1	0.93	0.46	72,72,72,72	0
59	MG	DA	3327	1/1	0.93	0.09	38,38,38,38	0
59	MG	AA	1609	1/1	0.93	0.06	38,38,38,38	1
59	MG	DA	3329	1/1	0.93	0.18	47,47,47,47	0
59	MG	DA	3331	1/1	0.93	0.08	30,30,30,30	0
59	MG	BA	3032	1/1	0.93	0.14	49,49,49,49	0
59	MG	BA	3130	1/1	0.93	0.07	29,29,29,29	0
59	MG	BA	3236	1/1	0.93	0.19	54,54,54,54	0
59	MG	AA	1757	1/1	0.93	0.15	49,49,49,49	0
59	MG	BA	3007	1/1	0.93	0.23	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3350	1/1	0.93	0.30	69,69,69,69	0
59	MG	DA	3345	1/1	0.93	0.17	46,46,46,46	0
59	MG	DA	3349	1/1	0.93	0.10	18,18,18,18	1
59	MG	BA	3036	1/1	0.93	0.12	44,44,44,44	0
59	MG	BA	3086	1/1	0.93	0.19	25,25,25,25	0
59	MG	BA	3088	1/1	0.93	0.40	38,38,38,38	0
59	MG	DA	3359	1/1	0.93	0.15	1,1,1,1	1
59	MG	AA	1656	1/1	0.93	0.04	30,30,30,30	0
59	MG	DE	301	1/1	0.93	0.23	41,41,41,41	0
59	MG	BA	3245	1/1	0.93	0.17	43,43,43,43	0
59	MG	DA	3157	1/1	0.93	0.23	26,26,26,26	0
59	MG	AA	1604	1/1	0.93	0.10	57,57,57,57	0
59	MG	BA	3040	1/1	0.93	0.16	36,36,36,36	0
59	MG	BA	3097	1/1	0.93	0.10	45,45,45,45	0
59	MG	BA	3016	1/1	0.94	0.15	18,18,18,18	0
59	MG	CN	101	1/1	0.94	0.06	69,69,69,69	0
59	MG	BA	3018	1/1	0.94	0.10	35,35,35,35	0
59	MG	CA	1608	1/1	0.94	0.12	35,35,35,35	0
59	MG	BA	3023	1/1	0.94	0.36	52,52,52,52	0
59	MG	CA	1683	1/1	0.94	0.10	35,35,35,35	0
59	MG	BA	3155	1/1	0.94	0.16	53,53,53,53	0
59	MG	BA	3070	1/1	0.94	0.14	37,37,37,37	0
59	MG	BA	3320	1/1	0.94	0.08	57,57,57,57	0
59	MG	DA	3226	1/1	0.94	0.21	64,64,64,64	0
59	MG	AA	1689	1/1	0.94	0.14	37,37,37,37	0
59	MG	BA	3265	1/1	0.94	0.07	32,32,32,32	0
59	MG	DA	3234	1/1	0.94	0.32	69,69,69,69	0
59	MG	CA	1616	1/1	0.94	0.35	65,65,65,65	0
59	MG	D5	102	1/1	0.94	0.14	28,28,28,28	0
59	MG	DA	3239	1/1	0.94	0.16	29,29,29,29	0
59	MG	BA	3073	1/1	0.94	0.13	46,46,46,46	0
59	MG	DA	3006	1/1	0.94	0.20	52,52,52,52	0
59	MG	BA	3325	1/1	0.94	0.14	62,62,62,62	0
59	MG	DA	3032	1/1	0.94	0.10	32,32,32,32	0
59	MG	DA	3251	1/1	0.94	0.14	18,18,18,18	1
59	MG	AA	1625	1/1	0.94	0.17	53,53,53,53	0
59	MG	BA	3270	1/1	0.94	0.21	49,49,49,49	0
59	MG	BA	3120	1/1	0.94	0.14	25,25,25,25	0
59	MG	DA	3040	1/1	0.94	0.16	27,27,27,27	0
59	MG	AA	1608	1/1	0.94	0.14	48,48,48,48	0
59	MG	DA	3261	1/1	0.94	0.13	33,33,33,33	0
59	MG	DA	3262	1/1	0.94	0.08	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	CA	1624	1/1	0.94	0.14	52,52,52,52	0
59	MG	DA	3052	1/1	0.94	0.17	25,25,25,25	0
59	MG	AA	1675	1/1	0.94	0.05	35,35,35,35	0
59	MG	AA	1655	1/1	0.94	0.07	57,57,57,57	0
59	MG	BA	3217	1/1	0.94	0.24	54,54,54,54	0
59	MG	CA	1629	1/1	0.94	0.20	55,55,55,55	0
59	MG	CA	1630	1/1	0.94	0.33	68,68,68,68	0
59	MG	BA	3124	1/1	0.94	0.14	65,65,65,65	0
59	MG	AA	1708	1/1	0.94	0.09	76,76,76,76	1
59	MG	B5	101	1/1	0.94	0.15	38,38,38,38	0
59	MG	BA	3221	1/1	0.94	0.15	53,53,53,53	0
59	MG	BA	3174	1/1	0.94	0.18	29,29,29,29	0
59	MG	BA	3340	1/1	0.94	0.14	73,73,73,73	0
59	MG	DA	3109	1/1	0.94	0.08	6,6,6,6	1
59	MG	DA	3111	1/1	0.94	0.25	33,33,33,33	0
59	MG	BA	3225	1/1	0.94	0.28	73,73,73,73	0
59	MG	BA	3285	1/1	0.94	0.09	37,37,37,37	1
59	MG	BA	3346	1/1	0.94	0.08	69,69,69,69	0
59	MG	AA	1720	1/1	0.94	0.27	55,55,55,55	0
59	MG	CA	1644	1/1	0.94	0.06	64,64,64,64	0
59	MG	BA	3001	1/1	0.94	0.12	62,62,62,62	0
59	MG	BA	3231	1/1	0.94	0.06	25,25,25,25	1
59	MG	AA	1761	1/1	0.94	0.11	88,88,88,88	0
59	MG	BA	3233	1/1	0.94	0.11	50,50,50,50	0
59	MG	DA	3147	1/1	0.94	0.18	52,52,52,52	0
59	MG	BA	3003	1/1	0.94	0.14	56,56,56,56	0
59	MG	BA	3094	1/1	0.94	0.14	36,36,36,36	0
59	MG	BA	3004	1/1	0.94	0.26	118,118,118,118	1
59	MG	DA	3154	1/1	0.94	0.15	31,31,31,31	0
59	MG	DA	3326	1/1	0.94	0.32	35,35,35,35	0
59	MG	BA	3182	1/1	0.94	0.26	70,70,70,70	0
59	MG	BA	3184	1/1	0.94	0.26	27,27,27,27	0
59	MG	BA	3096	1/1	0.94	0.18	59,59,59,59	0
59	MG	CA	1732	1/1	0.94	0.16	70,70,70,70	0
59	MG	BA	3300	1/1	0.94	0.11	17,17,17,17	0
59	MG	AA	1638	1/1	0.94	0.07	43,43,43,43	0
59	MG	AA	1668	1/1	0.94	0.15	40,40,40,40	0
59	MG	DA	3171	1/1	0.94	0.08	3,3,3,3	0
59	MG	BA	3100	1/1	0.94	0.14	29,29,29,29	0
59	MG	AA	1749	1/1	0.94	0.25	48,48,48,48	0
59	MG	DA	3343	1/1	0.94	0.26	48,48,48,48	0
59	MG	BA	3196	1/1	0.94	0.32	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3197	1/1	0.94	0.17	12,12,12,12	0
59	MG	BY	201	1/1	0.94	0.06	42,42,42,42	0
59	MG	DA	3193	1/1	0.94	0.09	61,61,61,61	0
59	MG	DA	3194	1/1	0.94	0.22	32,32,32,32	0
59	MG	CA	1745	1/1	0.94	0.21	37,37,37,37	0
59	MG	CA	1671	1/1	0.94	0.12	44,44,44,44	0
59	MG	DD	301	1/1	0.94	0.17	37,37,37,37	0
59	MG	AA	1643	1/1	0.94	0.12	93,93,93,93	0
59	MG	AA	1736	1/1	0.94	0.12	43,43,43,43	1
59	MG	AA	1688	1/1	0.94	0.09	52,52,52,52	0
59	MG	DA	3207	1/1	0.94	0.12	40,40,40,40	0
59	MG	CA	1604	1/1	0.94	0.12	51,51,51,51	0
59	MG	BA	3108	1/1	0.94	0.19	15,15,15,15	0
59	MG	AA	1650	1/1	0.95	0.16	40,40,40,40	0
59	MG	CA	1726	1/1	0.95	0.36	48,48,48,48	0
59	MG	DA	3058	1/1	0.95	0.24	23,23,23,23	0
59	MG	AA	1714	1/1	0.95	0.05	21,21,21,21	1
59	MG	DA	3229	1/1	0.95	0.16	56,56,56,56	0
59	MG	DA	3232	1/1	0.95	0.11	37,37,37,37	1
59	MG	DA	3071	1/1	0.95	0.14	18,18,18,18	0
59	MG	DA	3077	1/1	0.95	0.17	9,9,9,9	0
59	MG	CA	1618	1/1	0.95	0.06	38,38,38,38	0
59	MG	BA	3342	1/1	0.95	0.19	64,64,64,64	0
59	MG	BA	3075	1/1	0.95	0.16	32,32,32,32	0
59	MG	AA	1744	1/1	0.95	0.07	1,1,1,1	1
59	MG	DA	3241	1/1	0.95	0.06	69,69,69,69	0
59	MG	DA	3094	1/1	0.95	0.14	9,9,9,9	0
59	MG	BA	3017	1/1	0.95	0.23	45,45,45,45	0
59	MG	DA	3104	1/1	0.95	0.21	35,35,35,35	0
59	MG	BA	3041	1/1	0.95	0.15	17,17,17,17	0
59	MG	BA	3044	1/1	0.95	0.20	49,49,49,49	0
59	MG	AA	1698	1/1	0.95	0.34	25,25,25,25	1
59	MG	DA	3255	1/1	0.95	0.09	13,13,13,13	0
59	MG	BA	3186	1/1	0.95	0.15	28,28,28,28	0
59	MG	BA	3083	1/1	0.95	0.13	25,25,25,25	0
59	MG	DA	3259	1/1	0.95	0.19	31,31,31,31	0
59	MG	DA	3117	1/1	0.95	0.06	16,16,16,16	0
59	MG	BA	3354	1/1	0.95	0.28	91,91,91,91	0
59	MG	BA	3085	1/1	0.95	0.11	38,38,38,38	0
59	MG	DA	3124	1/1	0.95	0.20	20,20,20,20	1
59	MG	AA	1707	1/1	0.95	0.06	58,58,58,58	0
59	MG	BA	3119	1/1	0.95	0.26	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	CA	1747	1/1	0.95	0.07	21,21,21,21	1
59	MG	DA	3271	1/1	0.95	0.23	58,58,58,58	0
59	MG	BA	3024	1/1	0.95	0.15	36,36,36,36	0
59	MG	BA	3089	1/1	0.95	0.08	28,28,28,28	0
59	MG	DA	3275	1/1	0.95	0.12	28,28,28,28	1
59	MG	BA	3235	1/1	0.95	0.14	42,42,42,42	0
59	MG	DA	3145	1/1	0.95	0.24	43,43,43,43	0
59	MG	DA	3146	1/1	0.95	0.08	27,27,27,27	0
59	MG	DA	3279	1/1	0.95	0.13	16,16,16,16	0
59	MG	BA	3090	1/1	0.95	0.16	33,33,33,33	0
59	MG	CA	1753	1/1	0.95	0.05	67,67,67,67	0
59	MG	DA	3150	1/1	0.95	0.21	48,48,48,48	0
59	MG	DA	3151	1/1	0.95	0.19	25,25,25,25	0
59	MG	BD	302	1/1	0.95	0.11	29,29,29,29	0
59	MG	DA	3291	1/1	0.95	0.13	49,49,49,49	0
59	MG	DA	3292	1/1	0.95	0.22	40,40,40,40	0
59	MG	AA	1612	1/1	0.95	0.15	47,47,47,47	0
59	MG	BA	3092	1/1	0.95	0.19	40,40,40,40	0
59	MG	DA	3299	1/1	0.95	0.18	49,49,49,49	0
59	MG	DA	3300	1/1	0.95	0.13	10,10,10,10	0
59	MG	BA	3321	1/1	0.95	0.09	73,73,73,73	0
59	MG	AA	1635	1/1	0.95	0.05	50,50,50,50	0
59	MG	CV	101	1/1	0.95	0.09	29,29,29,29	0
59	MG	DA	3160	1/1	0.95	0.24	18,18,18,18	0
59	MG	AA	1693	1/1	0.95	0.13	41,41,41,41	0
59	MG	AA	1624	1/1	0.95	0.15	62,62,62,62	0
59	MG	BA	3284	1/1	0.95	0.10	31,31,31,31	0
59	MG	CA	1702	1/1	0.95	0.12	57,57,57,57	0
59	MG	BA	3326	1/1	0.95	0.24	42,42,42,42	0
59	MG	CA	1649	1/1	0.95	0.13	22,22,22,22	0
59	MG	DA	3317	1/1	0.95	0.19	63,63,63,63	0
59	MG	DA	3318	1/1	0.95	0.24	49,49,49,49	0
59	MG	DA	3320	1/1	0.95	0.13	56,56,56,56	0
59	MG	AW	104	1/1	0.95	0.08	67,67,67,67	1
59	MG	BA	3244	1/1	0.95	0.12	51,51,51,51	0
59	MG	DA	3179	1/1	0.95	0.09	49,49,49,49	0
59	MG	DA	3184	1/1	0.95	0.11	46,46,46,46	0
59	MG	DA	3185	1/1	0.95	0.09	39,39,39,39	0
59	MG	BA	3067	1/1	0.95	0.05	30,30,30,30	0
59	MG	DA	3189	1/1	0.95	0.27	21,21,21,21	0
59	MG	BA	3168	1/1	0.95	0.10	37,37,37,37	0
59	MG	CA	1711	1/1	0.95	0.10	40,40,40,40	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3207	1/1	0.95	0.14	68,68,68,68	0
59	MG	DA	3009	1/1	0.95	0.16	15,15,15,15	0
59	MG	DA	3016	1/1	0.95	0.20	16,16,16,16	0
59	MG	DA	3018	1/1	0.95	0.15	16,16,16,16	0
59	MG	DA	3341	1/1	0.95	0.32	36,36,36,36	1
59	MG	DA	3201	1/1	0.95	0.20	29,29,29,29	0
59	MG	DA	3202	1/1	0.95	0.26	35,35,35,35	0
59	MG	DA	3344	1/1	0.95	0.17	43,43,43,43	0
59	MG	DA	3026	1/1	0.95	0.13	21,21,21,21	0
59	MG	DA	3028	1/1	0.95	0.16	24,24,24,24	0
59	MG	DA	3206	1/1	0.95	0.16	57,57,57,57	0
59	MG	DA	3351	1/1	0.95	0.31	70,70,70,70	0
59	MG	DA	3352	1/1	0.95	0.14	46,46,46,46	0
59	MG	DA	3354	1/1	0.95	0.14	21,21,21,21	0
59	MG	BA	3009	1/1	0.95	0.19	21,21,21,21	0
59	MG	BA	3291	1/1	0.95	0.10	42,42,42,42	0
59	MG	DA	3358	1/1	0.95	0.10	50,50,50,50	0
59	MG	BA	3170	1/1	0.95	0.12	38,38,38,38	0
59	MG	AA	1641	1/1	0.95	0.05	38,38,38,38	0
59	MG	DB	202	1/1	0.95	0.14	23,23,23,23	0
59	MG	CA	1662	1/1	0.95	0.07	49,49,49,49	0
59	MG	BA	3295	1/1	0.95	0.07	81,81,81,81	1
59	MG	DA	3213	1/1	0.95	0.16	17,17,17,17	0
59	MG	BA	3173	1/1	0.95	0.18	51,51,51,51	0
59	MG	CA	1666	1/1	0.95	0.15	59,59,59,59	0
59	MG	BA	3011	1/1	0.95	0.18	43,43,43,43	0
59	MG	CA	1615	1/1	0.95	0.21	26,26,26,26	0
59	MG	CA	1664	1/1	0.96	0.07	28,28,28,28	0
59	MG	DA	3113	1/1	0.96	0.18	16,16,16,16	0
59	MG	DA	3114	1/1	0.96	0.11	15,15,15,15	0
59	MG	CA	1709	1/1	0.96	0.09	40,40,40,40	1
59	MG	BA	3234	1/1	0.96	0.23	26,26,26,26	0
59	MG	AA	1673	1/1	0.96	0.16	72,72,72,72	0
59	MG	DA	3245	1/1	0.96	0.10	38,38,38,38	0
59	MG	DA	3246	1/1	0.96	0.18	45,45,45,45	0
59	MG	DA	3248	1/1	0.96	0.19	2,2,2,2	1
59	MG	CA	1667	1/1	0.96	0.06	57,57,57,57	0
59	MG	AA	1605	1/1	0.96	0.16	58,58,58,58	0
59	MG	DA	3126	1/1	0.96	0.14	6,6,6,6	0
59	MG	BA	3042	1/1	0.96	0.28	43,43,43,43	0
59	MG	BA	3238	1/1	0.96	0.08	17,17,17,17	0
59	MG	BA	3144	1/1	0.96	0.16	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	DA	3137	1/1	0.96	0.16	11,11,11,11	0
59	MG	DA	3138	1/1	0.96	0.22	58,58,58,58	0
59	MG	DA	3139	1/1	0.96	0.13	23,23,23,23	0
59	MG	BA	3279	1/1	0.96	0.15	39,39,39,39	0
59	MG	CA	1673	1/1	0.96	0.05	15,15,15,15	0
59	MG	AL	201	1/1	0.96	0.05	15,15,15,15	1
59	MG	AS	101	1/1	0.96	0.05	115,115,115,115	0
59	MG	DA	3001	1/1	0.96	0.09	29,29,29,29	1
59	MG	BA	3014	1/1	0.96	0.20	45,45,45,45	0
59	MG	DA	3148	1/1	0.96	0.16	7,7,7,7	0
59	MG	CA	1723	1/1	0.96	0.09	45,45,45,45	1
59	MG	DA	3007	1/1	0.96	0.17	4,4,4,4	0
59	MG	BA	3047	1/1	0.96	0.12	18,18,18,18	0
59	MG	DA	3011	1/1	0.96	0.10	10,10,10,10	0
59	MG	CA	1634	1/1	0.96	0.18	35,35,35,35	0
59	MG	BA	3150	1/1	0.96	0.11	44,44,44,44	0
59	MG	DA	3280	1/1	0.96	0.20	54,54,54,54	0
59	MG	DA	3020	1/1	0.96	0.16	11,11,11,11	0
59	MG	DA	3156	1/1	0.96	0.12	31,31,31,31	0
59	MG	DA	3283	1/1	0.96	0.09	35,35,35,35	0
59	MG	DA	3021	1/1	0.96	0.08	20,20,20,20	0
59	MG	DA	3286	1/1	0.96	0.23	41,41,41,41	0
59	MG	DA	3158	1/1	0.96	0.12	37,37,37,37	0
59	MG	DA	3024	1/1	0.96	0.17	10,10,10,10	0
59	MG	DA	3025	1/1	0.96	0.18	29,29,29,29	0
59	MG	BA	3211	1/1	0.96	0.15	44,44,44,44	0
59	MG	DA	3163	1/1	0.96	0.06	27,27,27,27	0
59	MG	DA	3294	1/1	0.96	0.17	33,33,33,33	0
59	MG	DA	3297	1/1	0.96	0.10	42,42,42,42	1
59	MG	AA	1627	1/1	0.96	0.06	40,40,40,40	0
59	MG	AA	1628	1/1	0.96	0.18	50,50,50,50	0
59	MG	BA	3052	1/1	0.96	0.10	28,28,28,28	0
59	MG	BA	3183	1/1	0.96	0.08	59,59,59,59	1
59	MG	DA	3035	1/1	0.96	0.14	19,19,19,19	0
59	MG	DA	3176	1/1	0.96	0.16	7,7,7,7	0
59	MG	BA	3101	1/1	0.96	0.14	27,27,27,27	0
59	MG	DA	3306	1/1	0.96	0.17	15,15,15,15	0
59	MG	DA	3307	1/1	0.96	0.15	14,14,14,14	0
59	MG	DA	3038	1/1	0.96	0.11	20,20,20,20	0
59	MG	BA	3253	1/1	0.96	0.06	65,65,65,65	1
59	MG	DA	3310	1/1	0.96	0.28	51,51,51,51	0
59	MG	DA	3183	1/1	0.96	0.14	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3128	1/1	0.96	0.09	60,60,60,60	0
59	MG	BA	3187	1/1	0.96	0.20	18,18,18,18	0
59	MG	DA	3046	1/1	0.96	0.15	11,11,11,11	0
59	MG	DA	3047	1/1	0.96	0.13	20,20,20,20	0
59	MG	DA	3191	1/1	0.96	0.20	34,34,34,34	0
59	MG	DA	3319	1/1	0.96	0.20	71,71,71,71	0
59	MG	AA	1613	1/1	0.96	0.07	60,60,60,60	0
59	MG	DA	3321	1/1	0.96	0.13	85,85,85,85	0
59	MG	BA	3056	1/1	0.96	0.22	33,33,33,33	0
59	MG	BA	3021	1/1	0.96	0.14	32,32,32,32	0
59	MG	BA	3084	1/1	0.96	0.12	27,27,27,27	0
59	MG	CA	1741	1/1	0.96	0.22	34,34,34,34	0
59	MG	CA	1742	1/1	0.96	0.12	32,32,32,32	1
59	MG	DA	3200	1/1	0.96	0.14	18,18,18,18	0
59	MG	DA	3063	1/1	0.96	0.11	17,17,17,17	0
59	MG	DA	3330	1/1	0.96	0.10	23,23,23,23	0
59	MG	DA	3064	1/1	0.96	0.13	18,18,18,18	0
59	MG	DA	3332	1/1	0.96	0.09	26,26,26,26	1
59	MG	DA	3334	1/1	0.96	0.14	63,63,63,63	0
59	MG	BA	3061	1/1	0.96	0.17	21,21,21,21	0
59	MG	DA	3067	1/1	0.96	0.06	13,13,13,13	0
59	MG	DA	3070	1/1	0.96	0.15	11,11,11,11	0
59	MG	BA	3063	1/1	0.96	0.12	56,56,56,56	0
59	MG	DA	3074	1/1	0.96	0.14	24,24,24,24	0
59	MG	BA	3301	1/1	0.96	0.14	36,36,36,36	0
59	MG	BA	3263	1/1	0.96	0.26	54,54,54,54	0
59	MG	BA	3165	1/1	0.96	0.15	40,40,40,40	0
59	MG	DA	3081	1/1	0.96	0.15	16,16,16,16	0
59	MG	BA	3228	1/1	0.96	0.05	48,48,48,48	1
59	MG	DA	3348	1/1	0.96	0.07	18,18,18,18	0
59	MG	DA	3083	1/1	0.96	0.15	11,11,11,11	0
59	MG	CA	1751	1/1	0.96	0.07	62,62,62,62	0
59	MG	DA	3216	1/1	0.96	0.06	11,11,11,11	1
59	MG	DA	3092	1/1	0.96	0.19	18,18,18,18	0
59	MG	DA	3353	1/1	0.96	0.17	43,43,43,43	0
59	MG	BA	3229	1/1	0.96	0.08	37,37,37,37	0
59	MG	AA	1618	1/1	0.96	0.05	30,30,30,30	1
59	MG	DA	3096	1/1	0.96	0.26	50,50,50,50	0
59	MG	DA	3099	1/1	0.96	0.08	12,12,12,12	0
59	MG	DA	3227	1/1	0.96	0.17	22,22,22,22	0
59	MG	DA	3101	1/1	0.96	0.14	16,16,16,16	0
59	MG	BA	3269	1/1	0.96	0.21	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	DB	203	1/1	0.96	0.16	20,20,20,20	0
59	MG	DA	3231	1/1	0.96	0.15	27,27,27,27	0
59	MG	DA	3106	1/1	0.96	0.21	23,23,23,23	0
59	MG	CA	1755	1/1	0.96	0.12	97,97,97,97	1
59	MG	BA	3112	1/1	0.96	0.15	44,44,44,44	0
59	MG	DA	3235	1/1	0.96	0.13	18,18,18,18	0
59	MG	AA	1737	1/1	0.96	0.11	42,42,42,42	0
59	MG	DA	3110	1/1	0.96	0.23	46,46,46,46	0
59	MG	DA	3055	1/1	0.97	0.13	23,23,23,23	0
59	MG	BA	3190	1/1	0.97	0.22	47,47,47,47	0
59	MG	DA	3057	1/1	0.97	0.14	10,10,10,10	0
59	MG	CA	1625	1/1	0.97	0.06	36,36,36,36	0
59	MG	DA	3263	1/1	0.97	0.29	53,53,53,53	0
59	MG	DA	3059	1/1	0.97	0.14	13,13,13,13	0
59	MG	DA	3060	1/1	0.97	0.14	17,17,17,17	0
59	MG	DA	3061	1/1	0.97	0.11	10,10,10,10	0
59	MG	BA	3062	1/1	0.97	0.16	16,16,16,16	0
59	MG	BA	3251	1/1	0.97	0.25	55,55,55,55	0
59	MG	DA	3272	1/1	0.97	0.17	19,19,19,19	0
59	MG	DA	3162	1/1	0.97	0.07	1,1,1,1	0
59	MG	CV	102	1/1	0.97	0.15	43,43,43,43	0
59	MG	AA	1705	1/1	0.97	0.11	43,43,43,43	0
59	MG	DA	3069	1/1	0.97	0.11	19,19,19,19	0
59	MG	DA	3166	1/1	0.97	0.07	29,29,29,29	0
59	MG	BA	3193	1/1	0.97	0.27	5,5,5,5	1
59	MG	DA	3170	1/1	0.97	0.09	25,25,25,25	0
59	MG	BA	3222	1/1	0.97	0.17	29,29,29,29	0
59	MG	DA	3072	1/1	0.97	0.12	20,20,20,20	0
59	MG	DA	3175	1/1	0.97	0.31	59,59,59,59	0
59	MG	CA	1631	1/1	0.97	0.07	24,24,24,24	0
59	MG	DA	3075	1/1	0.97	0.14	26,26,26,26	0
59	MG	BA	3164	1/1	0.97	0.11	52,52,52,52	0
59	MG	BA	3081	1/1	0.97	0.16	21,21,21,21	0
59	MG	DA	3288	1/1	0.97	0.21	61,61,61,61	0
59	MG	DA	3289	1/1	0.97	0.08	17,17,17,17	0
59	MG	DA	3180	1/1	0.97	0.16	11,11,11,11	0
59	MG	DA	3182	1/1	0.97	0.18	42,42,42,42	0
59	MG	DA	3079	1/1	0.97	0.14	10,10,10,10	0
59	MG	BA	3141	1/1	0.97	0.23	42,42,42,42	0
59	MG	CA	1635	1/1	0.97	0.07	31,31,31,31	0
59	MG	AA	1755	1/1	0.97	0.05	51,51,51,51	0
59	MG	D1	101	1/1	0.97	0.05	22,22,22,22	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	DA	3084	1/1	0.97	0.12	13,13,13,13	0
59	MG	DA	3086	1/1	0.97	0.15	18,18,18,18	0
59	MG	DA	3089	1/1	0.97	0.15	5,5,5,5	0
59	MG	D5	101	1/1	0.97	0.12	25,25,25,25	0
59	MG	AA	1636	1/1	0.97	0.10	21,21,21,21	0
59	MG	DA	3196	1/1	0.97	0.11	41,41,41,41	0
59	MG	DA	3093	1/1	0.97	0.15	11,11,11,11	0
59	MG	DA	3198	1/1	0.97	0.32	52,52,52,52	0
59	MG	CA	1681	1/1	0.97	0.06	58,58,58,58	0
59	MG	BA	3328	1/1	0.97	0.10	32,32,32,32	0
59	MG	DA	3004	1/1	0.97	0.13	25,25,25,25	0
59	MG	AA	1620	1/1	0.97	0.22	54,54,54,54	0
59	MG	DA	3100	1/1	0.97	0.13	3,3,3,3	0
59	MG	BA	3294	1/1	0.97	0.16	32,32,32,32	0
59	MG	DA	3205	1/1	0.97	0.24	46,46,46,46	0
59	MG	DA	3103	1/1	0.97	0.15	12,12,12,12	0
59	MG	BA	3102	1/1	0.97	0.07	20,20,20,20	0
59	MG	BA	3068	1/1	0.97	0.16	30,30,30,30	0
59	MG	DA	3014	1/1	0.97	0.20	20,20,20,20	0
59	MG	BA	3050	1/1	0.97	0.12	36,36,36,36	0
59	MG	DA	3017	1/1	0.97	0.11	22,22,22,22	0
59	MG	BA	3148	1/1	0.97	0.07	44,44,44,44	0
59	MG	DA	3324	1/1	0.97	0.12	25,25,25,25	1
59	MG	BA	3125	1/1	0.97	0.22	19,19,19,19	0
59	MG	BA	3267	1/1	0.97	0.11	25,25,25,25	0
59	MG	BA	3087	1/1	0.97	0.12	13,13,13,13	0
59	MG	BA	3302	1/1	0.97	0.09	20,20,20,20	0
59	MG	AA	1665	1/1	0.97	0.12	61,61,61,61	0
59	MG	DA	3220	1/1	0.97	0.29	51,51,51,51	0
59	MG	DA	3119	1/1	0.97	0.25	40,40,40,40	0
59	MG	DA	3223	1/1	0.97	0.22	32,32,32,32	0
59	MG	DA	3333	1/1	0.97	0.15	55,55,55,55	0
59	MG	DA	3120	1/1	0.97	0.16	9,9,9,9	0
59	MG	BA	3178	1/1	0.97	0.15	22,22,22,22	0
59	MG	DA	3336	1/1	0.97	0.31	48,48,48,48	0
59	MG	AA	1670	1/1	0.97	0.09	34,34,34,34	0
59	MG	BA	3307	1/1	0.97	0.12	14,14,14,14	0
59	MG	DA	3033	1/1	0.97	0.21	16,16,16,16	0
59	MG	DA	3128	1/1	0.97	0.23	56,56,56,56	0
59	MG	DA	3230	1/1	0.97	0.13	42,42,42,42	0
59	MG	BA	3343	1/1	0.97	0.10	75,75,75,75	0
59	MG	DA	3131	1/1	0.97	0.11	18,18,18,18	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	BA	3153	1/1	0.97	0.14	48,48,48,48	0
59	MG	DA	3134	1/1	0.97	0.07	28,28,28,28	0
59	MG	BA	3345	1/1	0.97	0.17	63,63,63,63	0
59	MG	DA	3136	1/1	0.97	0.20	38,38,38,38	0
59	MG	DA	3037	1/1	0.97	0.13	7,7,7,7	0
59	MG	DA	3238	1/1	0.97	0.21	47,47,47,47	0
59	MG	BA	3109	1/1	0.97	0.14	37,37,37,37	1
59	MG	BA	3055	1/1	0.97	0.12	25,25,25,25	0
59	MG	BA	3019	1/1	0.97	0.13	26,26,26,26	0
59	MG	DA	3042	1/1	0.97	0.14	12,12,12,12	0
59	MG	DA	3142	1/1	0.97	0.17	17,17,17,17	0
59	MG	DA	3357	1/1	0.97	0.14	55,55,55,55	0
59	MG	DA	3143	1/1	0.97	0.15	48,48,48,48	0
59	MG	CA	1705	1/1	0.97	0.08	47,47,47,47	0
59	MG	DA	3045	1/1	0.97	0.22	34,34,34,34	0
59	MG	DA	3247	1/1	0.97	0.05	44,44,44,44	0
59	MG	BA	3058	1/1	0.97	0.18	30,30,30,30	0
59	MG	DB	204	1/1	0.97	0.10	1,1,1,1	1
59	MG	AA	1632	1/1	0.97	0.33	56,56,56,56	0
59	MG	DA	3049	1/1	0.97	0.13	15,15,15,15	0
59	MG	BA	3135	1/1	0.97	0.32	53,53,53,53	0
59	MG	DA	3254	1/1	0.97	0.04	50,50,50,50	1
59	MG	BA	3022	1/1	0.97	0.23	22,22,22,22	0
59	MG	BA	3248	1/1	0.97	0.07	62,62,62,62	0
59	MG	CL	201	1/1	0.97	0.05	8,8,8,8	1
59	MG	DA	3217	1/1	0.98	0.07	7,7,7,7	0
59	MG	DA	3218	1/1	0.98	0.17	29,29,29,29	0
59	MG	BA	3026	1/1	0.98	0.09	8,8,8,8	0
59	MG	DA	3296	1/1	0.98	0.14	34,34,34,34	0
59	MG	DA	3085	1/1	0.98	0.09	5,5,5,5	0
59	MG	CA	1686	1/1	0.98	0.04	21,21,21,21	0
59	MG	DA	3087	1/1	0.98	0.13	1,1,1,1	0
59	MG	CA	1721	1/1	0.98	0.09	74,74,74,74	0
59	MG	AA	1725	1/1	0.98	0.04	94,94,94,94	0
59	MG	BA	3071	1/1	0.98	0.03	28,28,28,28	0
59	MG	CA	1656	1/1	0.98	0.21	29,29,29,29	0
59	MG	BA	3171	1/1	0.98	0.07	30,30,30,30	0
59	MG	BA	3304	1/1	0.98	0.33	64,64,64,64	0
59	MG	BA	3054	1/1	0.98	0.16	19,19,19,19	0
59	MG	DA	3097	1/1	0.98	0.09	15,15,15,15	0
59	MG	DA	3098	1/1	0.98	0.09	6,6,6,6	0
59	MG	AA	1631	1/1	0.98	0.04	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	DA	3041	1/1	0.98	0.17	17,17,17,17	0
59	MG	B1	101	1/1	0.98	0.03	6,6,6,6	1
59	MG	DA	3043	1/1	0.98	0.12	2,2,2,2	0
59	MG	DA	3314	1/1	0.98	0.29	31,31,31,31	0
59	MG	DA	3315	1/1	0.98	0.07	15,15,15,15	0
59	MG	BA	3057	1/1	0.98	0.13	21,21,21,21	0
59	MG	DA	3169	1/1	0.98	0.07	47,47,47,47	0
59	MG	DA	3105	1/1	0.98	0.04	1,1,1,1	0
59	MG	BA	3114	1/1	0.98	0.13	37,37,37,37	0
59	MG	DA	3172	1/1	0.98	0.10	3,3,3,3	0
59	MG	DA	3173	1/1	0.98	0.09	12,12,12,12	0
59	MG	BA	3201	1/1	0.98	0.06	37,37,37,37	0
59	MG	BA	3076	1/1	0.98	0.08	28,28,28,28	0
59	MG	BA	3043	1/1	0.98	0.12	22,22,22,22	0
59	MG	DA	3050	1/1	0.98	0.08	13,13,13,13	0
59	MG	CA	1735	1/1	0.98	0.04	21,21,21,21	0
59	MG	BA	3256	1/1	0.98	0.03	25,25,25,25	0
59	MG	DA	3250	1/1	0.98	0.07	68,68,68,68	0
59	MG	BA	3230	1/1	0.98	0.12	40,40,40,40	0
59	MG	DA	3181	1/1	0.98	0.16	26,26,26,26	0
59	MG	BA	3157	1/1	0.98	0.14	36,36,36,36	1
59	MG	BA	3020	1/1	0.98	0.29	37,37,37,37	0
59	MG	DA	3118	1/1	0.98	0.17	15,15,15,15	0
59	MG	DA	3003	1/1	0.98	0.13	35,35,35,35	0
59	MG	DA	3257	1/1	0.98	0.09	35,35,35,35	0
59	MG	BA	3138	1/1	0.98	0.06	31,31,31,31	0
59	MG	DA	3188	1/1	0.98	0.14	7,7,7,7	0
59	MG	BA	3347	1/1	0.98	0.14	30,30,30,30	0
59	MG	DA	3190	1/1	0.98	0.10	16,16,16,16	0
59	MG	DA	3122	1/1	0.98	0.33	73,73,73,73	0
59	MG	BA	3005	1/1	0.98	0.26	27,27,27,27	0
59	MG	AA	1672	1/1	0.98	0.04	55,55,55,55	0
59	MG	DA	3265	1/1	0.98	0.07	27,27,27,27	0
59	MG	DA	3010	1/1	0.98	0.23	54,54,54,54	0
59	MG	DA	3267	1/1	0.98	0.08	13,13,13,13	0
59	MG	DA	3346	1/1	0.98	0.08	42,42,42,42	0
59	MG	DA	3347	1/1	0.98	0.31	24,24,24,24	1
59	MG	DA	3127	1/1	0.98	0.05	6,6,6,6	0
59	MG	CA	1744	1/1	0.98	0.23	38,38,38,38	0
59	MG	DA	3012	1/1	0.98	0.21	19,19,19,19	0
59	MG	DA	3013	1/1	0.98	0.12	16,16,16,16	0
59	MG	AA	1634	1/1	0.98	0.22	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	DA	3133	1/1	0.98	0.08	13,13,13,13	1
59	MG	DA	3068	1/1	0.98	0.12	6,6,6,6	0
59	MG	DA	3015	1/1	0.98	0.11	9,9,9,9	0
59	MG	BA	3185	1/1	0.98	0.22	46,46,46,46	0
59	MG	BA	3015	1/1	0.98	0.10	28,28,28,28	0
59	MG	BA	3037	1/1	0.98	0.10	23,23,23,23	0
59	MG	DA	3073	1/1	0.98	0.14	15,15,15,15	0
59	MG	DA	3019	1/1	0.98	0.14	17,17,17,17	0
59	MG	BA	3188	1/1	0.98	0.13	14,14,14,14	0
59	MG	DA	3076	1/1	0.98	0.12	11,11,11,11	0
59	MG	DA	3284	1/1	0.98	0.09	1,1,1,1	0
59	MG	BA	3066	1/1	0.98	0.31	25,25,25,25	0
59	MG	DA	3022	1/1	0.98	0.21	16,16,16,16	0
59	MG	AA	1696	1/1	0.98	0.03	57,57,57,57	1
59	MG	BA	3051	1/1	0.98	0.15	25,25,25,25	0
59	MG	CA	1650	1/1	0.98	0.22	46,46,46,46	0
59	MG	BA	3271	1/1	0.98	0.20	55,55,55,55	0
59	MG	DA	3029	1/1	0.98	0.23	49,49,49,49	0
60	ZN	CD	302	1/1	0.98	0.14	80,80,80,80	0
59	MG	DA	3116	1/1	0.99	0.07	7,7,7,7	0
59	MG	DA	3249	1/1	0.99	0.05	27,27,27,27	1
59	MG	BD	301	1/1	0.99	0.12	22,22,22,22	0
59	MG	DA	3222	1/1	0.99	0.07	15,15,15,15	0
59	MG	DA	3168	1/1	0.99	0.04	18,18,18,18	0
59	MG	BA	3224	1/1	0.99	0.05	37,37,37,37	0
59	MG	DA	3027	1/1	0.99	0.06	1,1,1,1	0
59	MG	AA	1683	1/1	0.99	0.03	63,63,63,63	0
59	MG	CA	1746	1/1	0.99	0.05	10,10,10,10	1
59	MG	DA	3030	1/1	0.99	0.24	34,34,34,34	0
59	MG	DA	3062	1/1	0.99	0.13	1,1,1,1	0
59	MG	CV	107	1/1	0.99	0.06	51,51,51,51	0
59	MG	DA	3125	1/1	0.99	0.22	18,18,18,18	0
59	MG	DA	3102	1/1	0.99	0.03	1,1,1,1	0
59	MG	BA	3035	1/1	0.99	0.08	21,21,21,21	0
59	MG	DA	3048	1/1	0.99	0.20	22,22,22,22	0
59	MG	DA	3129	1/1	0.99	0.06	46,46,46,46	0
59	MG	DA	3295	1/1	0.99	0.08	13,13,13,13	1
59	MG	DA	3066	1/1	0.99	0.23	14,14,14,14	0
59	MG	CA	1653	1/1	0.99	0.03	44,44,44,44	0
59	MG	CA	1694	1/1	0.99	0.07	37,37,37,37	1
59	MG	DA	3008	1/1	0.99	0.10	10,10,10,10	0
59	MG	DA	3269	1/1	0.99	0.08	7,7,7,7	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
59	MG	DA	3088	1/1	0.99	0.23	8,8,8,8	0
59	MG	DA	3186	1/1	0.99	0.24	17,17,17,17	0
59	MG	BA	3126	1/1	0.99	0.05	21,21,21,21	0
59	MG	DA	3090	1/1	0.99	0.12	20,20,20,20	0
59	MG	DA	3112	1/1	0.99	0.05	42,42,42,42	0
59	MG	BA	3060	1/1	0.99	0.11	14,14,14,14	0
59	MG	DA	3023	1/1	0.99	0.28	20,20,20,20	0
60	ZN	AD	301	1/1	0.99	0.10	67,67,67,67	0
60	ZN	AN	101	1/1	0.99	0.03	104,104,104,104	0
60	ZN	B9	101	1/1	0.99	0.02	77,77,77,77	1
59	MG	BA	3027	1/1	0.99	0.08	19,19,19,19	0
60	ZN	CN	102	1/1	0.99	0.03	101,101,101,101	0
59	MG	DA	3302	1/1	1.00	0.03	1,1,1,1	0
59	MG	DA	3005	1/1	1.00	0.24	21,21,21,21	0
59	MG	BA	3105	1/1	1.00	0.04	9,9,9,9	0
59	MG	BA	3098	1/1	1.00	0.04	15,15,15,15	0
59	MG	DF	301	1/1	1.00	0.01	9,9,9,9	0
60	ZN	D9	101	1/1	1.00	0.01	59,59,59,59	0

5.5 Other polymers [i](#)

There are no such residues in this entry.