

wwPDB X-ray Structure Validation Summary Report (i)

Dec 17, 2023 – 09:04 PM EST

PDB ID	:	4WQU
Title	:	Crystal structure of the Thermus thermophilus 70S ribosome in complex with
		elongation factor G trapped by the antibiotic dityromycin
Authors	:	Lin, J.; Gagnon, M.G.; Steitz, T.A.
Deposited on	:	2014-10-22
Resolution	:	2.80 Å(reported)

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

We welcome your comments at validation@mail.wwpdb.org A user guide is available at https://www.wwpdb.org/validation/2017/XrayValidationReportHelp with specific help available everywhere you see the (i) 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 (1)) were used in the production of this report:

MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7(2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure: $X\text{-}RAY \, DIFFRACTION$

The reported resolution of this entry is 2.80 Å.

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



Metric	$egin{array}{c} { m Whole \ archive} \ (\#{ m Entries}) \end{array}$	${f Similar\ resolution}\ (\#{ m Entries,\ resolution\ range}({ m \AA}))$
R _{free}	130704	3140 (2.80-2.80)
Clashscore	141614	3569(2.80-2.80)
Ramachandran outliers	138981	3498 (2.80-2.80)
Sidechain outliers	138945	3500 (2.80-2.80)
RSRZ outliers	127900	3078 (2.80-2.80)
RNA backbone	3102	1227 (3.10-2.50)

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

Mol	Chain	Length		Quality of chain	
1	AA	2915	24%	47%	23% ••
1	CA	2915	32%	44%	19% • •
2	AB	121	28%	55%	14% ••
2	CB	121	.% 3 6%	47%	17% •



Mol Chain Length Quality of chain 3 AC 228 22% 28% 10% 40% 3 CC 228 21% 28% 10% 40% 4 AD 276 50% 30% 8% 40% 4 CD 276 50% 30% 8% 40% 5 AE 206 55% 33% 10% 6% 5 AE 206 52% 36% 10% 6% 6 AF 210 53% 33% 9% 6% 6% 10% 6% 10% 6% 10% 6% 10% 10% 6% 10% 6% 10%	Conti	nued fron	n previous	page								
3 AC 228 $\frac{54\%}{22\%}$ $\frac{10\%}{10\%}$ 40% 3 CC 228 $\frac{22\%}{22\%}$ 28% 10% 40% 4 AD 276 $\frac{50\%}{56\%}$ 30% 8% 4 CD 276 $\frac{56\%}{56\%}$ 33% 10% 5 AE 206 59% 32% 8% 5 CE 206 52% 36% 10% 6 AF 210 54% 33% 9% 6 CF 210 46% 43% 8% 7 AG 182 55% 45% 10% 7 AG 182 45% 45% 10% 8 AH 180 44% 44% 23% 5% 9 AK 173 49% 23% 5% 23% 9 CK 147 20% 23% 5% 30%	Mol	Chain	Length	Quality	Quality of chain							
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9 AK 173 49% 21% 5% 25% 9 CK 173 55% 16% 25% 10 AL 147 20% 22% 55% 10 CL 147 20% 22% 55% 10 CL 147 20% 22% 55% 11 AN 140 63% 27% 9% 11 CN 140 63% 27% 9% 12 AO 122 62% 30% 7% 13 AP 150 58% 33% 7% 14 AQ 141 65% 28% 8% 14 CQ 141 53% 37% 9% 15 AR 118 58% 31% 11%	8	СН	180	44%	44%	8% •						
J III IIII IIIII IIIIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Q	ΔK	173	400/	210/ 50/	25.0/						
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10CL 147 $20%$ $18%$ $7%$ $55%$ 11AN140 $63%$ $27%$ $9%$ 11CN140 $51%$ $36%$ $14%$ 12AO122 $62%$ $30%$ $7%$ 12CO122 $64%$ $31%$ $5%$ 13AP150 $58%$ $33%$ $7%$ 14AQ141 $65%$ $28%$ $8%$ 14CQ141 $53%$ $37%$ $9%$ 15AR118 $58%$ $31%$ $11%$	10	CI	1.47	39%								
11AN14063%27%9%11CN140 51% 36%14%12AO12262%30%7%12CO12264%31%5%13AP15058%33%7%14AQ14165%28%8%14CQ14153%37%9%15AR11858%31%11%	10	CL	147	20% 18% 7%	55%							
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13AP15058%33%7%13CP1505%33%7% 50 14AQ14165%28%8%14CQ14153%37%9% 50 15AR11858%31%11%	12		122	0470	5176	5%						
13 CP 150 5% 33% 7% · · 14 AQ 141 65% 28% 8% 14 CQ 141 53% 37% 9% · 15 AR 118 58% 31% 11%	13	AP	150	58%	33%	7% ••						
13 CP 150 58% 33% 7% 14 AQ 141 65% 28% 8% 14 CQ 141 53% 37% 9% 15 AR 118 58% 31% 11%				5%								
14 AQ 141 65% 28% 8% 14 CQ 141 53% 37% 9% . 15 AR 118 58% 31% 11%	13	CP	150	58%	33%	7% ••						
14 AQ 141 65% 28% 8% 14 CQ 141 53% 37% 9% 9% 115 AR 118 58% 31% 11%	14		1 / 1									
14 CQ 141 53% 37% 9% 15 AR 118 58% 31% 11%	14	AQ	141	65%	28%	8%						
15 AR 118 58% 31% 11%	14	CO	141	53%	37%	9%						
15 AR 118 58% 31% 11%		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~										
	15	AR	118	58%	31%	11%						



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Mol	Chain	Length	Quality	of chain	
15	CR	118	58%	31%	9% •
16	AS	112	53%	38%	8% •
16	\mathbf{CS}	112	27%	60%	12% •
17	AT	146	% 	34% 10	0% • 10%
17	CT	146	% 49%	36%	5% 10%
18	AU	118	62%	31%	• ••
18	CU	118	58%	31%	9% •
19	AV	101	72%	24	% •
19	CV	101	61%	31%	8%
20	AW	113	61%	31%	5% ••
20	CW	113	60%	32%	7% •
21	AX	96	68%	27%	••
21	CX	96	51%	43%	• ••
22	AY	110	51%	35%	12% •
22	CY	110	39%	47%	10% ••
23	AZ	206	46%	32% 9%	• 10%
23	CZ	206	38%	38% 13%	10%
24	A0	85	65%	19%	6% • 9%
24	C0	85	48%	33% 9	9%
25	A1	98	55%	37%	7% •
25	C1	98	57%	34%	8% •
26	A2	72	64%	26%	7% •
26	C2	72	39%	47%	11% •
27	A3	60	60%	30%	8% •
27	C3	60	45%	40%	13% •



Continued from previous page... Quality of chain Chain Length Mol 17% 28A47152% 35% 10% • 30% • 28C47139% 42% 15% 29A560 . . 67% 28% 2% C52960 57% 38% . . 30 A6• 5444% 44% 9% 30 C65450% 35% 13% . 2% A749 31 61% 29% 6% •• C731 49• 63% 24% 10% A83265 48% 43% 6% •• 32C86551% 45% • • 33 A937 57% 38% 5% C93733 46% 49% 5% 3% 34BA 1521 • • 31% 48% 17% 6% 34DA 152134% ••• 48% 16% 9% BΒ 3525646% 34% 8% 10% 21% 35DB 25639% 39% 12% 10% 9% BC 23936 48% 33% 5% 14% 28% DC 36 23944% 39% • 14% 5% BD 37 209 52% 38% 8% • .% DD 3720947% 42% 10% 38ΒE 16246% 35% 10% • 9% 4% 38DE 16238% 38% 15% • 9% BF39101 52% 37% 10% • 2% 39 \mathbf{DF} 101 54% 38% 7% • 12% BG 40 1568% •• 54% 37%



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Mol	Chain	Length	Qua	ality of chain	
			26%		
40	DG	156	53%	39%	7% •
41	BH	138	45%	45%	8% ••
41	DH	138	41%	43%	15% ••
42	BI	128	53%	38%	8% •
42	DI	128	54%	36%	9% •
43	BJ	105	30%	40%	•• 8%
43	DJ	105	48%	34%	6% 9%
44	BK	129	50%	33%	5% • 12%
44	DK	129	49%	34%	5% 12%
45	BL	132	59%	27%	6% 8%
45	DL	132	.% 5 1%	51% <u>33%</u>	
46	ВМ	126	7% 55% 29%		9% 7%
46	DM	126	46%	36%	10% 8%
47	BN	61	38%	51%	10% •
47	DN	61	33%	57%	8% •
48	BO	89	49%	45%	
48	DO	89	53%	42%	• •
49	BP	88	33%	42%	17% • 7%
49	DP	88	40%	40%	13% • 7%
50	BQ	105	57%	29%	9% 6%
50	DQ	105	45%	43%	7% 6%
51	BR	88	36%	35% 6%	23%
51	DR	88	38%	34% 6%	23%
52	BS	93	44%	34%	12% 10%
52	DS	93	48%	32%	9% 11%



Mol	Chain	Length	Qı	uality of chain	
53	BT	106	38%	45%	6% • 9%
53	DT	106	53%	28%	9% 9%
54	BU	27	52%	33%	15%
54	DU	27	37%	41%	7% 15%
55	BV	18	22% 11% 6%	61%	
55	DV	18	17% 22% 11%	67%	
56	BW	76	36%	37%	20% 8%
56	BY	76	38%	34% 38%	21% •
56	DW	76	38%	39%	18% •
56	DY	76	34%	87% 46%	13% • •
57	ΒZ	758	45%	38%	12% • •
57	DZ	758	32%	36%	10% • •
58	BX	10	30%	60%	10%
58	DX	10	10% 10%	80%	

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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	\mathbf{Res}	Chirality	Geometry	Clashes	Electron density
56	PSU	BY	32	-	-	-	Х
56	MIA	BY	37	-	-	-	Х
56	PSU	BY	39	-	-	-	Х
56	5MU	BY	54	-	-	-	Х
56	PSU	BY	55	-	-	-	Х
56	PSU	DY	32	-	-	-	Х
56	MIA	DY	37	-	-	-	Х
56	PSU	DY	39	-	-	-	Х
56	7MG	DY	46	-	-	-	Х
56	5 MU	DY	54	-	-	-	Х
56	PSU	DY	55	-	-	-	Х
56	4SU	DY	8	-	-	-	Х
58	2QY	DX	10	-	-	Х	-



Mol		Chain	ls page.	 Chirality	Geometry	Clashes	Electron density
50	MG		3016		Geometry		X X
50	MG		3067		_	_	X
59	MG		3108			_	X
50	MG		3100		_	_	X
50	MG		31/0		_	_	X
50	MC		3212	_	_	_	X
50	MG		3212	_	_	-	X
50	MC		3266	_	_	-	
50	MC		$\frac{5200}{3273}$		_	-	X V
50	MG		3273 3977	_	_	-	
50	MG		2500	-	-	-	
50	MG		2712	-	-	-	
59	MG		3712	-	-	-	
59	MG	AA	3/1/	-	-	-	A V
59	MG	AA	3773	-	-	-	Λ V
59	MG	AA	3814	-	-	-	A V
59	MG	AA	3816	-	-	-	X
59	MG	AA	3820	-	-	-	X
59	MG	AD	305	-	-	-	X
59	MG	AE	301	-	-	-	X
59	MG	AF	305	-	-	-	X
59	MG	BA	1665	-	-	-	Х
59	MG	BA	1691	-	-	-	X
59	MG	BA	1697	-	-	-	Х
59	MG	BA	1698	-	-	-	Х
59	MG	BA	1767	-	_	-	Х
59	MG	CA	3030	-	_	-	Х
59	MG	CA	3037	_	_	-	Х
59	MG	CA	3040	-	_	-	Х
59	MG	CA	3041	-	-	-	Х
59	MG	CA	3075	-	-	-	Х
59	MG	CA	3082	-	-	-	Х
59	MG	CA	3084	-	_	-	Х
59	MG	CA	3089	-	-	-	Х
59	MG	CA	3092	-	-	-	X
59	MG	CA	3093	-	-	-	Х
59	MG	CA	3101	-	-	-	Х
59	MG	CA	3127	-	-	-	Х
59	MG	CA	3139	-	-	-	Х
59	MG	CA	3146	-	-	-	Х
59	MG	CA	3186	-	-	-	Х
59	MG	CA	3205	-	-	-	Х
59	MG	CA	3208	-	-	-	Х

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
59	MG	CA	3216	-	-	-	Х
59	MG	CA	3236	-	-	-	Х
59	MG	CA	3237	-	-	-	Х
59	MG	CA	3240	-	-	-	Х
59	MG	CA	3460	-	-	-	Х
59	MG	CA	3499	-	-	-	Х
59	MG	CA	3501	-	-	-	Х
59	MG	CA	3502	-	-	-	Х
59	MG	CA	3514	-	-	-	Х
59	MG	CA	3542	-	-	-	Х
59	MG	CA	3600	-	-	-	Х
59	MG	CA	3620	-	-	-	Х
59	MG	CV	201	-	-	-	Х
59	MG	DA	1639	-	-	-	Х
59	MG	DA	1724	-	-	-	Х
59	MG	DA	1738	-	-	-	Х
59	MG	DA	1754	-	-	-	Х
59	MG	DA	1756	-	-	-	Х
59	MG	DA	1757	-	-	-	Х
59	MG	DA	1769	-	-	-	Х
59	MG	DT	3001	-	-	-	Х
61	SF4	DD	501	-	_	Х	_

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4WQU

2 Entry composition (i)

There are 63 unique types of molecules in this entry. The entry contains 310038 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 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace		
1		2872	Total	С	Ν	Ο	Р	0	0	0	0
1	AA	A 2872	61861	27532	11574	19884	2871	0	0	0	
1	CA	2868	Total	С	Ν	Ο	Р	0	0	0	
1	CA 2868	2000	61771	27492	11554	19858	2867	0	0	0	

• Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues		A	toms			ZeroOcc	AltConf	Trace
2	AB	120	Total 2573	C 1146	N 476	0 832	Р 119	0	0	0
2	СВ	120	Total 2573	C 1146	N 476	0 832	Р 119	0	0	0

• Molecule 3 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
2		127	Total	С	Ν	0	\mathbf{S}	0	0	0
0	AU	137	1063	669	201	192	1	0	0	0
2	CC	127	Total	С	Ν	0	S	0	0	0
0		101	1063	669	201	192	1			U

• Molecule 4 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues		Ate	oms			ZeroOcc	AltConf	Trace
4		275	Total	С	Ν	0	S	0	0	0
4	AD	215	2136	1349	423	361	3	0	0	0
4	CD	275	Total	С	Ν	0	S	0	0	0
4	CD	215	2142	1352	426	361	3	0	0	0

• Molecule 5 is a protein called 50S ribosomal protein L3.



Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
5	٨F	204	Total	С	Ν	0	S	0	0	0
0	AL	204	1559	985	298	270	6	0	0	0
5	CF	204	Total	С	Ν	0	S	0	0	0
0	OE	204	1559	985	298	270	6	0	0	0

• Molecule 6 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
6		202	Total	С	Ν	0	S	0	0	1
0	Аг	203	1584	1009	298	275	2	0	0	1
6	CE	202	Total	С	Ν	0	S	0	0	1
0		203	1580	1007	297	274	2	0	U	

• Molecule 7 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
7	AG	181	Total 1425	C 914	N 256	0 251	$\frac{S}{4}$	0	0	0
7	CG	181	Total 1424	C 911	N 258	0 251	$\frac{S}{4}$	0	0	0

• Molecule 8 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
8	ΛН	174	Total	С	Ν	0	S	0	0	0
0	АП	174	1330	845	248	236	1	0	0	0
0	СН	174	Total	С	Ν	0	S	0	0	0
0	UII	174	1330	845	248	236	1	0	0	0

• Molecule 9 is a protein called 50S ribosomal protein L10.

Mol	Chain	Residues		Ato	ms		ZeroOcc	AltConf	Trace
9	AK	130	Total 641	C 381	N 130	O 130	0	0	0
9	CK	130	Total 641	C 381	N 130	O 130	0	0	0

• Molecule 10 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues		Atc	\mathbf{pms}			ZeroOcc	AltConf	Trace
10	AL	66	Total 498	C 310	N 93	O 92	${ m S} { m 3}$	0	0	0



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Mol	Chain	Residues		Ato	\mathbf{ms}			ZeroOcc	AltConf	Trace
10	CL	66	Total 498	C 310	N 93	O 92	${ m S} { m 3}$	0	0	0

• Molecule 11 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
11	AN	140	Total	С	Ν	0	S	0	0	0
**	1111	110	1117	719	207	187	4	Ŭ	0	Ŭ
11	CN	140	Total	С	Ν	Ο	\mathbf{S}	0	0	0
		140	1117	719	207	187	4		0	U

• Molecule 12 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
19	10	199	Total	С	Ν	0	S	0	0	0
12	AU	122	933	588	171	170	4	0	0	0
10	CO	199	Total	С	Ν	0	S	0	0	0
		122	933	588	171	170	4			U

• Molecule 13 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
12	ΛD	140	Total	С	Ν	0	S	0	0	0
10	ЛІ	149	1139	709	231	196	3	0	0	0
19	CD	140	Total	С	Ν	0	S	0	0	0
10	UP	149	1135	706	230	196	3			U

• Molecule 14 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
14	AQ	141	Total 1122	C 715	N 212	0 188	${f S}{7}$	0	0	0
14	CQ	141	Total 1122	C 715	N 212	0 188	S 7	0	0	0

• Molecule 15 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
15		110	Total	С	Ν	0	\mathbf{S}	0	0	0
1.0	An	110	968	604	203	160	1	0	0	0
15	CP	110	Total	С	Ν	0	S	0	0	0
1.0	On	110	968	604	203	160	1	0	0	0



• Molecule 16 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues		Ato	ms		ZeroOcc	AltConf	Trace
16	٨S	110	Total	С	Ν	Ο	0	0	0
10	Ab	110	877	553	175	149	0	0	0
16	CS	110	Total	С	Ν	Ο	0	0	0
10	Co	110	870	549	173	148	0	0	0

• Molecule 17 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
17	۸T	121	Total	С	Ν	0	S	0	0	0
11	AI	101	1091	680	225	185	1	0	0	0
17	СТ	121	Total	С	Ν	0	S	0	0	0
11	01	101	1083	675	224	183	1	0	0	0

• Molecule 18 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
18	AU	116	Total	С	Ν	0	S	0	0	0
			959	608	201	149	1	Ŭ	, , , , , , , , , , , , , , , , , , ,	Ŭ
18	CU	116	Total	С	Ν	0	\mathbf{S}	0	0	0
10		110	959	608	201	149	1	0	U	U

• Molecule 19 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
10	AV	101	Total	С	Ν	0	\mathbf{S}	0	0	0
19	ΛV	101	771	495	140	135	1	0	0	0
10	CV	101	Total	С	Ν	0	S	0	0	0
19	UV	101	771	495	140	135	1	0	0	0

• Molecule 20 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
20	ΔΜ	119	Total	С	Ν	0	S	0	0	0
20	Δνν	112	886	557	174	153	2	0	0	0
20	CW	119	Total	С	Ν	0	S	0	0	0
20	CW	112	886	557	174	153	2	0	0	0

• Molecule 21 is a protein called 50S ribosomal protein L23.



Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
21	ΛV	05	Total	С	Ν	0	S	0	0	0
21	АЛ	90	750	488	135	126	1	0	0	0
21	CY	05	Total	С	Ν	0	S	0	0	0
21	UA	90	750	488	135	126	1	0	0	0

• Molecule 22 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
	AV	107	Total	С	Ν	0	S	0	0	0
	AI	107	806	517	152	131	6	0	0	0
	CV	107	Total	С	Ν	0	S	0	0	0
	UI	107	806	517	152	131	6			U

• Molecule 23 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
23	AZ	185	Total 1451	C 927	N 258	O 264	$\begin{array}{c} \mathrm{S} \\ \mathrm{2} \end{array}$	0	0	0
23	CZ	185	Total 1451	C 927	N 258	0 264	$\begin{array}{c} \mathrm{S} \\ \mathrm{2} \end{array}$	0	0	0

• Molecule 24 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
94	4.0	77	Total	С	Ν	0	S	0	0	0
24	AU	11	608	375	129	103	1	0	0	0
94	CO	77	Total	С	Ν	0	S	0	0	0
24	00	11	608	375	129	103	1			U

• Molecule 25 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
25	Δ.1	07	Total	С	Ν	0	S	0	0	0
2.0	AI	91	755	475	148	131	1	0	0	0
25	C1	07	Total	С	Ν	0	S	0	0	0
		91	755	475	148	131	1			U

• Molecule 26 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues		At	oms		ZeroOcc	AltConf	Trace	
26	A2	70	Total 588	$\begin{array}{c} \mathrm{C} \\ 365 \end{array}$	N 118	O 103	${ m S} { m 2}$	0	0	0



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Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
26	C2	70	Total 588	$\begin{array}{c} \mathrm{C} \\ \mathrm{365} \end{array}$	N 118	O 103	${ m S} { m 2}$	0	0	0

• Molecule 27 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues		Aton	ns		ZeroOcc	AltConf	Trace
97	Λ3	50	Total	С	Ν	0	0	0	0
21	AJ		469	298	90	81	0	0	0
97	C3	50	Total	С	Ν	0	0	0	0
	U9	- 59	464	296	90	78		U	U

• Molecule 28 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues		Ato	oms			ZeroOcc	AltConf	Trace
28	A4	69	Total 558	C 352	N 102	0 99	${ m S}{ m 5}$	0	0	0
28	C4	69	Total 532	C 339	N 97	0 91	S 5	0	0	0

• Molecule 29 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues		Atc	\mathbf{ms}			ZeroOcc	AltConf	Trace
20	15	50	Total	С	Ν	0	S	0	0	0
29	AJ		455	285	89	76	5	0	0	0
20	CF.	50	Total	С	Ν	Ο	S	0	0	0
29	\mathbb{C}^{2}		455	285	89	76	5	0	0	0

• Molecule 30 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues		Ato	\mathbf{ms}			ZeroOcc	AltConf	Trace
20	16	52	Total	С	Ν	0	S	0	0	0
- 50	A0		453	281	91	77	4	0	0	0
20	CG	52	Total	С	Ν	0	S	0	0	0
- 50	0		449	279	91	75	4	0	0	0

• Molecule 31 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
21	Δ7	18	Total	С	Ν	0	S	0	0	0
51	AI	40	418	257	104	55	2	0	0	0
21	07	18	Total	С	Ν	0	S	0	0	0
51	01	40	418	257	104	55	2	0	0	0



• Molecule 32 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues		At	\mathbf{oms}			ZeroOcc	AltConf	Trace
30	18	64	Total	С	Ν	Ο	\mathbf{S}	0	0	0
52	Ао	04	517	331	102	82	2	0	0	0
20	C e	64	Total	С	Ν	0	S	0	0	0
32	0	04	517	331	102	82	2	0	0	0

• Molecule 33 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues		Ato	\mathbf{ms}			ZeroOcc	AltConf	Trace
22	ΔΩ	37	Total	С	Ν	Ο	S	0	0	0
- 55	A9	57	307	188	68	47	4	0	0	0
22	CO	27	Total	С	Ν	Ο	S	0	0	0
55	09	57	307	188	68	47	4	0	U	U

• Molecule 34 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues		I	Atoms			ZeroOcc	AltConf	Trace
34	BA	1495	Total 32141	C 14304	N 5958	O 10384	Р 1495	0	0	0
34	DA	1501	Total 32268	C 14361	N 5980	O 10426	Р 1501	0	0	0

• Molecule 35 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues		At	oms		ZeroOcc	AltConf	Trace	
25	BB	021	Total	С	Ν	0	S	0	0	0
- 55		201	1846	1179	331	331	5	0	0	0
25	пр	0.91	Total	С	Ν	0	S	0	0	0
- 55		201	1825	1167	326	327	5	0	0	0

• Molecule 36 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
36	BC	206	Total	С	Ν	0	S	0	0	0
50	DU	200	1552	976	302	273	1	0	0	0
26	DC	206	Total	С	Ν	0	S	0	0	0
- 30	DC	200	1544	970	300	273	1	0	0	0

• Molecule 37 is a protein called 30S ribosomal protein S4.



Mol	Chain	Residues		Ate	oms		ZeroOcc	AltConf	Trace	
27	ВD	208	Total	С	Ν	0	\mathbf{S}	0	0	0
51		200	1659	1040	326	286	7	0	0	0
27	מת	208	Total	С	Ν	0	S	0	0	0
31		208	1678	1052	333	286	7	0	0	0

• Molecule 38 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
20	PE	1/19	Total	С	Ν	0	S	0	0	0
- 30	DE	140	1129	714	213	198	4	0	0	0
20	DF	1 / 9	Total	С	Ν	0	S	0	0	0
- 30	DE	140	1133	716	214	199	4	0	0	0

• Molecule 39 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
39	BF	100	Total 812	C 514	N 146	0 149	${ m S} { m 3}$	0	0	0
39	DF	100	Total 820	C 518	N 147	O 152	${ m S} { m 3}$	0	0	0

• Molecule 40 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
40	BC	155	Total	С	Ν	0	S	0	0	0
40	DG	100	1231	766	243	216	6	0	0	0
40	DC	155	Total	С	Ν	0	S	0	0	0
40	DG	100	1235	769	244	216	6			U

• Molecule 41 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
41	рЦ	127	Total	С	Ν	0	S	0	0	0
41	DII	137	1088	689	206	191	2	0	0	0
41	חח	197	Total	С	Ν	0	S	0	0	0
41		101	1088	689	206	191	2	0	U	U

• Molecule 42 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues		Ato	ms		ZeroOcc	AltConf	Trace
42	BI	127	Total 986	C 626	N 193	O 167	0	0	0



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Mol	Chain	Residues		Ato	ms		ZeroOcc	AltConf	Trace
42	DI	127	Total 978	C 619	N 190	O 169	0	0	0

• Molecule 43 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues		Ato	ms		ZeroOcc	AltConf	Trace
43	BJ	97	Total 709	C 440	N 138	O 131	0	0	0
43	DJ	96	Total 714	C 445	N 138	0 131	0	0	0

• Molecule 44 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
4.4	PK	114	Total	С	Ν	0	S	0	0	0
44	DK	114	833	519	156	155	3	0	0	0
4.4	DK	114	Total	С	Ν	0	S	0	0	0
44	DK	114	833	519	156	155	3	0		U

• Molecule 45 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
45	BI	199	Total	С	Ν	0	S	0	0	0
40		122	930	585	185	159	1	0	0	0
45	DI	199	Total	С	Ν	0	S	0	0	0
40		122	930	585	185	159	1	0		U

• Molecule 46 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
46	BM	117	Total 923	C 570	N 191	0 160	$\begin{array}{c} \mathrm{S} \\ \mathrm{2} \end{array}$	0	0	0
46	DM	116	Total 907	C 558	N 188	O 159	$\frac{S}{2}$	0	0	0

• Molecule 47 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
47	BN	60	Total	С	Ν	0	S	0	0	0
41	DN	00	492	312	104	72	4	0	0	0
47	DN	60	Total	С	Ν	Ο	\mathbf{S}	0	0	0
41	DN	00	492	312	104	72	4	0	0	



• Molecule 48 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
18	BO	88	Total	С	Ν	0	S	0	0	0
40	DO	88	728	456	144	126	2	0	0	0
19	DO	<u> </u>	Total	С	Ν	0	S	0	0	0
40	DO	00	728	456	144	126	2	0	0	0

• Molecule 49 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
40	ВD	80	Total	С	Ν	0	S	0	0	0
49	DI	02	681	433	134	113	1	0	0	0
40	סת	80	Total	С	Ν	0	S	0	0	0
49	DI	02	677	430	133	113	1	0	0	0

• Molecule 50 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
50	BQ	99	Total 823	C 528	N 151	O 142	S 2	0	0	0
50	DQ	99	Total 823	C 528	N 151	0 142	S 2	0	0	0

• Molecule 51 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues		Ator	\mathbf{ns}		ZeroOcc	AltConf	Trace
51	BB	68	Total	С	Ν	0	0	0	0
51	DR	08	555	355	108	92	0	0	0
51	סת	68	Total	С	Ν	0	0	0	0
10	DR	00	555	355	108	92	0		U

• Molecule 52 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
50	PC	84	Total	С	Ν	0	S	0	0	0
52	DS	04	661	423	122	114	2	0	0	0
50	DS	02	Total	С	Ν	0	S	0	0	0
52	Do	00	646	412	119	113	2	0	0	0

• Molecule 53 is a protein called 30S ribosomal protein S20.



Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
53	BT	06	Total	С	Ν	0	S	0	0	0
55	DI	90	728	446	156	124	2	0	0	0
52	лт	06	Total	С	Ν	0	S	0	0	0
55		90	731	449	156	124	2	0	0	0

• Molecule 54 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues		Aton	ıs		ZeroOcc	AltConf	Trace
54	BII	<u> </u>	Total	С	Ν	0	0	0	0
04	DU	23	199	122	48	29	0	0	0
54	DU	02	Total	С	Ν	0	0	0	0
04	DU	20	199	122	48	29	0	0	0

• Molecule 55 is a RNA chain called mRNA.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
55	BV	7	Total	С	Ν	Ο	Р	0	0	0
00	DV	1	148	67	27	47	7	0	0	0
55	DV	6	Total	С	Ν	Ο	Р	0	0	0
- 55	DV	0	123	57	22	39	5	0	0	0

• Molecule 56 is a RNA chain called P-site tRNA.

Mol	Chain	Residues			Atom	IS			ZeroOcc	AltConf	Trace
56	BW	76	Total	С	Ν	0	Р	S	0	0	0
50	DW	10	1631	731	290	532	76	2	0	0	0
56	BV	74	Total	С	Ν	0	Р	\mathbf{S}	0	0	0
50	DI	14	1581	707	285	515	73	1	0	0	0
56	DW	76	Total	С	Ν	0	Р	\mathbf{S}	0	0	0
50	DW	10	1631	731	290	532	76	2	0	0	0
56	DV	73	Total	С	Ν	0	Р	S	0	0	0
50		10	1561	698	283	507	72	1			U

• Molecule 57 is a protein called 50S ribosomal protein L9, Elongation factor G.

Mol	Chain	Residues		A	toms			ZeroOcc	AltConf	Trace
57	BZ	728	Total 5663	C 3599	N 973	O 1072	S 19	0	0	0
57	DZ	730	Total 5682	C 3611	N 978	O 1074	S 19	0	0	0

• Molecule 58 is a protein called Dityromycin.



Mol	Chain	Residues		Ator	ns		ZeroOcc	AltConf	Trace
58	BX	10	Total	С	N	0	0	0	0
			93	67	10	16			
58	DY	10	Total	С	Ν	0	0	0	0
- 50		10	93	67	10	16	0	U	U

• Molecule 59 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	AA	832	Total Mg 832 832	0	0
59	AB	23	TotalMg2323	0	0
59	AD	10	Total Mg 10 10	0	0
59	AE	5	Total Mg 5 5	0	0
59	AF	6	Total Mg 6 6	0	0
59	AG	2	Total Mg 2 2	0	0
59	AH	1	Total Mg 1 1	0	0
59	AN	3	Total Mg 3 3	0	0
59	AO	1	Total Mg 1 1	0	0
59	AP	3	Total Mg 3 3	0	0
59	AQ	4	Total Mg 4 4	0	0
59	AR	1	Total Mg 1 1	0	0
59	AU	5	Total Mg 5 5	0	0
59	AV	2	Total Mg 2 2	0	0
59	AW	3	Total Mg 3 3	0	0
59	AX	1	TotalMg11	0	0
59	AY	1	Total Mg 1 1	0	0
59	AZ	1	Total Mg 1 1	0	0



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	A0	5	Total Mg 5 5	0	0
59	A2	1	Total Mg 1 1	0	0
59	A5	1	Total Mg 1 1	0	0
59	A6	2	Total Mg 2 2	0	0
59	A7	1	Total Mg 1 1	0	0
59	A8	1	Total Mg 1 1	0	0
59	A9	1	Total Mg 1 1	0	0
59	BA	215	Total Mg 215 215	0	0
59	BB	1	Total Mg 1 1	0	0
59	BD	1	Total Mg 1 1	0	0
59	BE	1	Total Mg 1 1	0	0
59	BF	1	Total Mg 1 1	0	0
59	BK	1	Total Mg 1 1	0	0
59	BL	2	Total Mg 2 2	0	0
59	BM	1	Total Mg 1 1	0	0
59	BN	2	Total Mg 2 2	0	0
59	BS	1	Total Mg 1 1	0	0
59	BT	1	$\begin{array}{ccc} \text{Total} & \text{Mg} \\ 1 & 1 \end{array}$	0	0
59	BW	3	Total Mg 3 3	0	0
59	BZ	1	Total Mg 1 1	0	0
59	CA	664	Total Mg 664 664	0	0



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	СВ	13	Total Mg 13 13	0	0
59	CD	4	Total Mg 4 4	0	0
59	CE	5	Total Mg 5 5	0	0
59	CF	4	Total Mg 4 4	0	0
59	CG	1	Total Mg 1 1	0	0
59	CN	1	Total Mg 1 1	0	0
59	СО	1	Total Mg 1 1	0	0
59	СР	1	Total Mg 1 1	0	0
59	CQ	4	Total Mg 4 4	0	0
59	CR	1	Total Mg 1 1	0	0
59	CU	1	Total Mg 1 1	0	0
59	CV	2	Total Mg 2 2	0	0
59	CW	1	Total Mg 1 1	0	0
59	CX	1	Total Mg 1 1	0	0
59	С0	1	Total Mg 1 1	0	0
59	C1	1	Total Mg 1 1	0	0
59	C3	1	Total Mg 1 1	0	0
59	C5	1	Total Mg 1 1	0	0
59	C7	1	Total Mg 1 1	0	0
59	C8	1	Total Mg 1 1	0	0
59	DA	171	Total Mg 171 171	0	0



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	DD	1	Total Mg 1 1	0	0
59	DE	2	Total Mg 2 2	0	0
59	DF	1	Total Mg 1 1	0	0
59	DJ	1	Total Mg 1 1	0	0
59	DK	1	Total Mg 1 1	0	0
59	DT	1	Total Mg 1 1	0	0
59	DW	3	Total Mg 3 3	0	0
59	DZ	2	Total Mg 2 2	0	0

• Molecule 60 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	AY	1	Total Zn 1 1	0	0
60	A4	1	Total Zn 1 1	0	0
60	A5	1	Total Zn 1 1	0	0
60	A6	1	Total Zn 1 1	0	0
60	A9	1	Total Zn 1 1	0	0
60	BN	1	Total Zn 1 1	0	0
60	CY	1	Total Zn 1 1	0	0
60	C4	1	Total Zn 1 1	0	0
60	C5	1	Total Zn 1 1	0	0
60	C6	1	Total Zn 1 1	0	0
60	С9	1	Total Zn 1 1	0	0



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	DN	1	Total Zn 1 1	0	0

• Molecule 61 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	BD	1	Total Fe S 8 4 4	0	0
61	DD	1	TotalFeS844	0	0

• Molecule 62 is GUANOSINE-5'-DIPHOSPHATE (three-letter code: GDP) (formula: $C_{10}H_{15}N_5O_{11}P_2$).





Mol	Chain	Residues		Ate	oms			ZeroOcc	AltConf
62	P7	1	Total	С	Ν	Ο	Р	0	0
02	BZ	L	28	10	5	11	2	0	0
69	DZ	1	Total	С	Ν	Ο	Р	0	0
02	DZ	L	28	10	5	11	2	0	0

• Molecule 63 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
63	AA	1413	Total O 1413 1413	0	0
63	AB	38	Total O 38 38	0	0
63	AD	10	Total O 10 10	0	0
63	AE	17	Total O 17 17	0	0
63	AF	11	Total O 11 11	0	0
63	AG	3	Total O 3 3	0	0
63	AH	1	Total O 1 1	0	0
63	AN	1	Total O 1 1	0	0
63	AO	3	Total O 3 3	0	0
63	AP	16	Total O 16 16	0	0



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
63	AQ	4	Total O 4 4	0	0
63	AR	2	Total O 2 2	0	0
63	AS	1	Total O 1 1	0	0
63	AT	1	Total O 1 1	0	0
63	AU	4	Total O 4 4	0	0
63	AV	1	Total O 1 1	0	0
63	AW	1	Total O 1 1	0	0
63	AX	3	Total O 3 3	0	0
63	AZ	1	Total O 1 1	0	0
63	A0	6	Total O 6 6	0	0
63	A1	2	Total O 2 2	0	0
63	A3	2	Total O 2 2	0	0
63	A5	3	Total O 3 3	0	0
63	A6	1	Total O 1 1	0	0
63	A7	2	Total O 2 2	0	0
63	A8	10	Total O 10 10	0	0
63	A9	1	Total O 1 1	0	0
63	BA	213	Total O 213 213	0	0
63	BD	1	Total O 1 1	0	0
63	BM	1	Total O 1 1	0	0
63	BO	1	Total O 1 1	0	0



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
63	BP	1	Total O 1 1	0	0
63	BV	1	Total O 1 1	0	0
63	BW	1	Total O 1 1	0	0
63	ΒZ	2	Total O 2 2	0	0
63	CA	983	Total O 983 983	0	0
63	CB	9	Total O 9 9	0	0
63	CD	15	Total O 15 15	0	0
63	CE	9	Total O 9 9	0	0
63	CF	6	Total O 6 6	0	0
63	CN	1	Total O 1 1	0	0
63	СО	1	Total O 1 1	0	0
63	СР	11	Total O 11 11	0	0
63	CQ	2	Total O 2 2	0	0
63	CT	3	Total O 3 3	0	0
63	CU	2	Total O 2 2	0	0
63	CV	1	Total O 1 1	0	0
63	CW	1	Total O 1 1	0	0
63	CX	1	Total O 1 1	0	0
63	CY	2	Total O 2 2	0	0
63	C0	4	Total O 4 4	0	0
63	C3	2	Total O 2 2	0	0



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
63	C5	1	Total O 1 1	0	0
63	C7	2	Total O 2 2	0	0
63	C8	4	Total O 4 4	0	0
63	DA	157	Total O 157 157	0	0
63	DD	1	Total O 1 1	0	0
63	DE	2	Total O 2 2	0	0
63	DH	1	Total O 1 1	0	0
63	DJ	1	Total O 1 1	0	0
63	DK	2	Total O 2 2	0	0
63	DL	1	Total O 1 1	0	0
63	DT	1	Total O 1 1	0	0



3 Residue-property plots (i)

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



• Molecule 1: 23S Ribosomal RNA





G1690	C1691 G1692	C1693	G1694	06010	G1698	61700	A1701	A1702	C1704 C1704	C1705	U1706	G1708	C1709	C1710	A1712	G1713	G1714 A1715	A1716	C1717	U1718	C1719 11720	G1721	C1722	A1723	G1725	U1726	01727 G1728	G1729	C1730 C1731	C1732	90714	A1737	C1738	U1740	C1741	G1742 G1743	G1744	A1745	A1747	A1748	G1750	G1751 G1752
U1753	G1754 C1755		G1764	G1766	A1767	01/08 G1769		C1773	G1776	G1777	G1778	A1780	G1781	C1782	G1784	C1785	A1786 61787	U1788	G1789	A1790	A1791 C1792	A1793	G1794	G1795	01190 01797	C1798	61801	C1802	G1803 A1804	C1805	U1806	U1808	U1809		C1812	C1813 A1814	A1815	A1816 A1017	A1818	C1819	C1821	A1822 G1823
C1824	U1825 C1826	U1827	C1828	G1830	C1831	41832 A1833	A1834	C1835	01636 C1837	G1838	A1 0/1	G1842	A1843	G1844	A1846	G1847	G1848 11 84 0	A1850	U1851	A1852	G1853 C1854	G1855	A1856	G1857	G1859	A1860	C1861 G1862	C1863	U1864	G1870	1010 1010		A1878	G1880	G1881	01882	G1886	G1887	G1889	A1890	G1892	<mark>G1893</mark> G1894
U1895	G1896	G1900	C100E	COGTO	C1908	A1911	A1912	G1913	C1917	G1918	G1919	G1921	A1922	A1923	G1925	G1926	C1927	G1929	C1930		A1934 A1935	C1936	U1937	A1040	A1941	C1942	G1943 G1944	U1945	C1946 C1947	U1948	A1949 A1050	G1951	G1952	01933 A1954	G1955	C1956 G1957	A1958	A1959	U1961	U1962	C1964	U1965 U1966
G1967	G1971	G1972	U1973	FICTW	U1977	C1979	C1 980	G1981	C1984	U1985	G1986 C1007	A1988	C1 989	G1990	A1992	A1 993	A1994	C1996	-	A1999	A2000	G2002	A2003	C2004	G2006	G2007	A2008 G2009	C2010	170013	G2014	U2015	U2017	C2018	G2020	C2021	62022 A2023	G2024	G2025 C2026	42027 A2027	C2028	C2030	G2031 G2032
U2033	G2034 A2035	A2036	A2037	U2039	G2040	A2041 A2042	C2043	U2044	G2046	C2047	C2048	U2050	G2051	A2052	G2054	A2055	U2056 C2057	C2058	G2059		C2062 112063	A2064	C2065	C2066	G2068		C2072 A2073	G2074	G2075 A2076	C2077	G2078	A2080	A2081	A2002 G2083	A2084	C2085 C2086	C2087	C2088	U2090	G2091	A2093	G2094 C2095
U2096	U2097 112098	A2099	C2100 112101	G2102	C2103	G2105	C2106	C2107	00170	G2112	U2113 112114	G2115	G2116	0110	U2120	U2121	G2122	U2124	C2125	G2126	C2127 G2128	C2129	C2130	U2131	C2133	G2134	U2135 A2136	G2137	G2138	U2140	A2141	G2143	U2144	G2146 G2146	G2147	62149	C2150	C2151	G2153		A2156	A2157 • C2158 •
2159	2160	2162	2163	2165	12166	2168	2169	2170	21/1	2173	2174	2176	2177	2178	2180	2181	2182	2184	2185	2186	218/	2189	2190	2191	2193	12194	2195	2197	2198	2200	2201 •	2203	2204	2206	2207	2209	2210	2211	2213	12214	2216	:2217 :2218
2219	2220	2222	2223	2225	2226 0007	2228	2229	2230		2234 G	2235 0	2237	2238	2239 0	2241 A	2242 G	2243 0344	2245	2246	2247 C	2248	2250 U	2251 0	2252 A	2254 A	2255 U	2256 A	2258	2259 A	2261	2262 C	2264	2265 00066	2267	2268	2270	2271	2272 U	2274	2275 G		2280
2281 U	2282 2283	2284	2285 0006	2287 U	2288 0000	2290 G	2291 A	2292 U	2294	(2295 G	12296 112296	2298 A	2299	2300 A	2302 0	12303 12303	2304 0305	2306 U	2307 G	2308 G	2309	2311	2312 G	0316 0316	2317 G	2318 U	2319 U 2320 U	2321 G	2322 A	2324 U	2325 G	2331 G	2332	2334	2335 2335	2337 2337	2338	2339 C	2341 U	2342 0	2344	2345 A
2347 A	2348 2349	2350 U	2351 A	2354 C	2355 2355	2357 A	2358 G	2359	2361	2362 C		2366 A	2367 A	2368	2370 2370	2371 U	2372 C	2374 C	2375 C	2376 U	2377 2378	2379	2380 G	0 0383	2384 A	2385	2386 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2388 A	2389 A	2391 U	2392 C	2394 G	2395 A	2397 A	2398 22398	2399 C	2401 C	2402 A	5 00 FZ	2406 G	2408 U	2409 A
2411 A	2415 6	2416 G	2417 G:	2419 C	2420 2420	2422 G.	2423 A	2424 C	2426 G	Ü	2429	2431 G	2432 C	2433 C	2435 G	2436 C:	2437 A	2439 G	2440 C	2441 C	2442	2444 G	2445 C	2446	2448 G	2449 G	2450 C.	2452 A.	2453 A	2455 G.	2456 C	2458	2459 G.	2461 C:	2462 C	2463 2464	0	2467 U.	2469	2470 C:	2472 G	2473 G
:475 G2	1476 1477	.478 C	(479 G	1481 GS	1482 US	484	A	1488 A.	490	1491	(492 C	494 U	:495 C	:496	500 U	501 C	502 AC	504 C	1505 G	1506 G	100 AC	509 AC	510 A2	511 A	513 G	514 US	516 U	:517 C		520 C	521 G	523 G	524 G	1020 1526 U	527 AS	529 C.	530	531 G	1533 U	1534 G	100 000 000 000 000 000 000 000 000 000	1538 U
C2539 C2	12540 C2	A2542 C2	A2543 C2	42545 42	A2546 G2	G2548 G2	U2549	C2550 A2	C2552	A2553 G2	A2554 C2	G2556 G2	G2557 C2	U2558 G2	G2560 A2	G2561 G2	G2562 G2 77563 G2	U2564 U2	G2565 U2	U2566 G2	02567 02568	G2569 A2	C2570 C2	C2571 C2 77577 T17	A2573 C2	U2574 G2	U2576 U2 42576 U2	A2577 G2	A2578 U2 12579 C2	C2580 G2	G2581 G2	C2583 U2	A2584 C2	G2586 U2	C2587 C2	G2589 G2 A2589 C2	G2590 A2	C2591 U2	G2593 C2	G2594 U2	U2596 G2	U2597 G2 C2598 G2
A2599	G2600 42601	A2602	C2603	12605	C2606	12608	G2609	A2610	42612 42612	C2613	A2614	12616		G2619	J2621	C2622	U2623	12625	A2626	U2627	C2628	32630	C2631	C2632	32635	<mark>G2636</mark>	G2637 C2638	G2639	C2640 12641	32642	G2643	G2645	G2646	12648	U2649	G2650 42651	G2652	G2653	1007D	G2657	U2659	C2660 U2661
																							W		RI				E													







-	G623 C624		A627	L63A	C635	G636	4638 G638	U639	C640 C641	G642	A643	A644	4646	G647	G648 Ceao	G650	G651	C652	A652A	G652C	C652D	G652E	9 C	9 U	C	5 5	Å	G	ల ల	0 0	5 5	00	C652T	C652V		A655 G656	U657	C658	6660 G660	C661	G662 C663	C664	<mark>C665</mark> G666
U667	G668	A670	C671	C672 C673	G674		C679	G680	G681 G682	4000	A685	G686	U688	A689	G690 C601	C692	C693	U694	G695 C606	C697	<mark>C698</mark>	A699	6100	G704	A7 05	A7.06 G7.07		G7 15	G723	U724	G725 G726	A727	G728	C730	C731	C732 G733		C736	6738	G7 39	U740 C741	G742	G7 43 G7 44
G745	A746 11747	G748	C749	A750 A751	A752	C753	C755	C756	U757 C758	G759	G760	A761 11763	7010	G765	<u>, 760</u>	6770	G771	C772	0773 1777	G775	G776	A777	6778 11779	G780	A781	A782 A783	A784	G785	C786 U787	A788	A789 C790	C791	6792 4703	G794	C795	C796 C797	G798	G799	Aduu	U803	A804 CR05	CB06	<mark>U807</mark> G808
C 809	U810 11811	C812	U813	C814 C815	C816	C817	4818 A819		U827 11828	A829	G830	G831	U833	C834	A835	4030 C837	C838	U839	C840	G842	<mark>G843</mark>	C844	G845 C846	U847	G848	A849 C850	U851	G852	G853 G854	G855	C856	U858	G859 11060	0000 A861	G862	A863 G864	C865	A866	U868	G 869	A870 11871	A872	<mark>G873</mark> G874
G875	C876	A878	G879	G880	G882	G883	C885	C886	A887	C889	A890	G892	C093 C894	<mark>U895</mark>	A896	C097	A899	• 006A	A901	C903	C904	U905	11905	C908	A909	A910 A911	C912	U913	C914 C915	<mark>G916</mark>	A917	6919	G920	U922	C923	C924 C925	A926	G927	1930 1930	G931	6932 A 033	6934	G 938
G 339	G940 A941	G942	U943	G944 AG4 E	G946	G947	G950	C951	6952 A953	G954	C955	G956 Age 7	U958	A959	A960	C301	U963	C964	C965	C967	G968	0960 0020	C970		G974	C975 C975A		G978	6979 A980	A981	C982 4983		C986	4307 A988	G 389	A990 C991	C992	(993	C995	A996	C997	666N	A1000 A1001
G1002	G1003	C1005	C1006	C1007 C1008	A1009	A1010	01012 01012	C1013	01014 G1015	G1016		U1019	A1020 A1021	G1022	U1023	G1025	U1026	A1027	A1028	G1031	A1032	U1033	G1036	G1037	C1 038	G1039 C1040	C1041	G1042	C1043 G1044	A1045	A1046	A1048	C1 049	G1051	C1052	C1053 A1054	G1055	G1056	A1 05 / G1 058	G1059	U1060	G1062	G1 063 C1 064
J65 ●)66 67	968	069	070 77	072)73 7	075	76	77	079	80)81 • • • • •	007 083	84)85 06		88	89	90 100	005 002	93)94 01		067 097	• 86	66 60	01	02	03	05	.06	08	00	11	12	.13 14		18	20	21	, vo	25	.26 .27
010		G10	A10	A10	CIC	A1C	C10	C10		C10	C1 C		010	A1C	A1C	G10	A1C	G10		E E	G10	010		010	A10	CI CI		C1 J	C11 C11	011	G11 C12	E E E E	11 S		G11	011 G13		5.5	G11	C11	5	G11	A11 A11
A1128	A1129 111130	G1131	A1132	U1133 C1135	G1136	G1137	G1138 G1139	C1140	U1141 11142	A1142A	A1143	G1144 C114E	07170	G1149	C1150 C1151	C1152	C1153	G1154	A1155 A1156	G1157		G1160	G1 164	0110 1 01165	C1166	U1167 G1168		G1171	D A	n	5 a	ст С1178	C1179 C1180	C1 180 C1 181	A1182	G1183 G1184	C1185	G1186	01188	A1189	G1190	G1193	U1199
C1200	C1201	G1203	A1204	U1205	C1207	C1208	61209 A1210	U1211	G1212	A1214	G1215	G1216		A1220	C1221	C1222		A1226	G1227	G1229	C1230	G1231	G1232 C1233	U1234	G1235	G1236 A1237	DOTE:	U1240	A1241 A1242		A1246	G1248	U1249 01260	G1250 C1251	G1252	A1253 A1254	U1255	G1256	CIZD	G1260	C1261	U1263	G1264 A1265
G1266	01267 A1268	A1269	C1270	G1271 A1272	01273	A1274	A12/5 A1276	G1277	A1278 C1279	G1280		G1283	41 20 1 G1 285	A1286	A1287	01 200 C1 289	C1290	C1291	01292	U1294	C1295	G1296	C1297 C1298	C1230 G1299	U1300	A1301 A1302	G1303	C1304	C1305 C1306	A1307	A1308 G1309	G1310	111 21 2	C1314 C1314	C1315	U1316 A1317	C1318	G1319 21200	C1 320 A1 321	A1322	01323 21324	G1325	<mark>U1326</mark> C1327
G1328	01329	A1331	G1332	<u>61337</u>	G1338	G1339	01340 01341	A1342	G1343 G1344	C1345		G1348 A1340	A1343 C1350	C1351	U1352	A1354	G1355	G1356	A 12 EO	A1360	G1361	C1362	C1363 C1364	A1365	-	G1368 G1369	C1370	G1371	U1372 A1373	G1374	C1375		A1379 61360	G1381	<mark>G1382</mark>	C1383 A1384	G1385	C1386	C138/ G1388	G1389	U1390	A1392	<mark>A1393</mark> U1394
A1395	01396	G1401	C1402	C1403	U1405	U1406	C1407 C1408	<mark>C1409</mark>	G1410 C1411	A1412	<mark>G1413</mark>	1116	G1417	G1418	A1419	01420 G1421	G1422	G1423	G1424	G1426	A1427	C1428	G1429 C1430	U1431		A1434	C1437	U1438	A1439 G1440		G1444	C1445A	C1446	G1448	A1449	G1450 C1450A	C1451	A1452	01455 G1455	G1456	014E0	00115	C1462 C1463
C1464	C1 A67		A1471	A1472 C1473	C1474	G1475	C14/6 A1477	G1478	G1479 C1480	U1481	G1482	C1 107	G1488	U1489	A1490	G1491 G1492	C1493	A1494	A1495 A1406	01497	C1498	C1499	G1500 C1501	C1502	U1503	C1504 C1505	C1506	A1507	A1508 C1509	A1509A	A1509B C1510	C1511	U1512	U1514	G1515	C1516 G1517	U1518	G1519 21 500	01520 01523		A1528A 71520	670TB	C1532 G1533



n	A C1536		G1539 111540	G1541	A1542 C1543		C1547	C1549 C1549	C1550	41553		C1556	C1557	A 1550 G 1559	G1560	G1561	C1564	C1565	A1566 A1567	G1568	A1569	A1570 A1571	A1572	G1573	U1578	A1579	A1580 G1581	C1582	A1583	A1586	A1587	C1588	G1 <mark>5</mark> 93		AI596	C1600	G1601	01602 A1603	C1604	C1605 G1606	C1607	A1608 A1609
A1610	C1612	G1613	A1614 C1615	A1616	C1617 A1618	G1619	G1620	01021 G1622	<mark>G1623</mark>	G1624	G1627		A1632	61033 A1634		A1637	01639 U1639	C1640	A1641 C1642	G1643	C1644	G1645 C1646	G1647	C1648	G1651	A1652	G1653 A1654		C1657	U1659	C1660	G1661 C1662	C1663	A1664	A1665 G1666	G1667	A1668		U1671	C1672 U1673	G1674	C1675 A1676
A1677	01679 U1679	U1680	G1681 G1682	C1683	111 688	A1689	A1690	01692 U1692	U1693	C1694 C1695	G1696	G1697	A1698	A1700	A1701	G1702	G1704 G1704		G1707 C1708	U1709	C1710	C1/11	<mark>01720</mark>	G1721	A1/22 U1739	G1740	A1741	C1744	V 1 7 7 1 V	A141A	G1753	C1 / 54 A1 755	G1756	U1757	G1759 A1759	A1760	C1761	A1 / 02 G1763	G1764	c1767	U1768	G1769 G1770
C1771 C1770	A1773	C1774	01775 01776	01777	U1778 111779	A1780	C1781	01/02 A1783	A1784	A1785 A1786	A1787	C1788	A1789	A1791	G1792	C1793	01/94 C1795	U1796	C1797 111798	G1799	C1800	61801 41802	A1803	C1804	01805 C1806	G1807	U1808 A1809	A1810	G1811	A1812 G1813	G1814	A1815 G1816	G1817	U1818	A1819 U1820	A1821	G1822	G1824	A1825	G1826 C1827	G1828	A1829 C1830
G1831	01632 U1833	U1834	G1835 C1836	C1837	C1838 G1838	G1840	U1841	G1042 C1843	C1844	A 1847	A1848	G1849	G1850	G1857	G1858	A1859	G1861		01864 G1865	C1866	A1876	A18// C1878		G1883	C1886		A1889	C1892	C1893	C1895		01898 G1899	A1900		61903	G1906	G1907	C1909 C1909		A1913 C1914		U1917 A1918
A1919	G1921	G1922	U1923	U1 <mark>926</mark>	A1927	G1929	G1930	01931 A1932	G1933	C1934 C1935	A1936	A1937	A1938	AC AT O	U1 <mark>943</mark>	U1944	01946 U1946		G1949 G1950	U1951	A1952	A1953 C1954	01955	U1956	C1958	G1959	C1962	U1963	41066	A1960 C1967	G1968	A1969 A1970	A1971	A1972	G19/3 C1974	G1975	01010	G1980	A1981	G1984	G1985	C1988
114 00 1	G1992	U1993	C1994 111995	C1996	G1997 G1998	C1999	G2000	G2002	G2003	G2004 A2005	C2006	C2007			A2013	A2014	A2015 U2016		A2020 C2021	U2022	G2023	G2024 C2025	C2026	G2027	02029 G2029	<u>A2030</u>	A2031 G2032	A2033	U2034	G2036	G2037	G2039 C2039	C2040	U2041	A2042 C2043	C2044	C2045	02045 U2047	-	C2050 A2051	G2052	G2053 A2054
C2055	A2057		A2060 G2061	A2062	C2063 C2064	C2065	C2066	G2069	G2070	A2071	C2073	U2074	U2075	c2078	U2079	G2080	42082		U2086 G2087	10075	C2095	112102	C2103	G2104	G2106	c2107	C2108	G2110	C2111	U2113	A2114	G2116	A2117	U2118	G2120	G2121	U2122	G2123	G2125	A2126 G2127	C2128	C2129 U2130
G2131	G2133	A2134	A2135	C2137	C2138	C2140	G2141	C2142 C2143	U2144	C2145	G2147	G2148	G2149	02150 G2151	G2152	G2153	G2155	G2156	G2157	G2159	G2160	C2161	C2163	C2164	G2166	U2167	G2168	A2170	A2171	021/2 A2173	C2174		C2177	C2178		G2181	G2182	C2183 G2184	C2185	G2186 G2187	C2188	U2189 G2190
G2191	G2193	G2194	C2195 C2196	U2197	A2198 A2199	C2200	C2201	U2203	C2205	G2206 G2207	A2208	U2218		7775	A2225	C2226	62228	<mark>C2229</mark>	112233	G2234	G2235	C2236 C2236	G2238	G2239	U2243	U2244	A2247	C2248	U2249	G2251	G2252	G2253 C2254	G2255	G2256	02256 C2258	G2259	C2260	U2262	C2263	C2264 1122,65		A2268 A2269
02001	42273	A2274	C2275 C2276	G2277	A2278 C2279	G2280	C2281 C2281	C2283	C2284	C2285	A2287	A2288	G2289	U2291	C2292	C2293	C2295	U2296	C2297	G2299		62302 62303	G2304	A2305	G2307		02312 C2313	C2314	G2315 C0316	C2316 C2317	G2318	G2319 A2320	G2321	A2322	G2324 C2324	G2325	C2326	A2321 A2328	G2329	G2330 G2331	U2332	A2333 G2334
A2335	0000 4	G2340	C2343	U2344	G2345	C2347	U2348	G2350	G2351	C7354	C2355	C2356	U2357	62359 C2359	A2360	A2361	62363 C2363	C2364	G2365 A2366	G2367	C2368	A2369 62370	G2371	G2372	G2374	G2375	A2376 A2377	A2378	G2379	C2381	<mark>G2382</mark>	G2384 G2384	C2385	C2386	0238/ A2388	G2389	U2390	62391 A2392	A2393	C2394 C2395	G2396	<mark>G2399</mark>
G2400	10520	C2404	G2405 112406	G2407	U2408 G2409	G2410	C0417	G2415	C2416	C2417	011274	A2422	U2423	0.24.24 A2425	A2426	C2427	G2429	A2430	U2431	A2434	A2435	112436 112437	U2438	A2439	C2441 C2441	C2442	C2443 G2444	G2445	G2446	62447 A2448		A2451 C2452	A2453	G2454	G2456	U2457	G2458	N2459 U2460		C2465 C2466	C2467	G2468 A2469
G2470	C2474	C2475	A2476 C2477	A2478	G2479	G2485	G2486	42401 A2488	G2489	G2490 112491	U2492	<mark>U2493</mark>	G2494	62430	C2498	C2499	02501 C2501	G2502	A2503	G2505		G2508 G2509	C2510	U2511	G2513	U2514	C2515	A2518		U2522	G2523	G2525	G2526	C2527	02529 G2529	A2530	A2531	42533 A2533		G2536 U2537	C2538	C2539 C2540










 \bullet Molecule 5: 50S ribosomal protein L3



• Molecule 5: 50S ribosomal protein L3



 \bullet Molecule 6: 50S ribosomal protein L4













 \bullet Molecule 8: 50S ribosomal protein L6









K109 G110 F111 M112 K113 1114 V115 V115 P119 P119 P119

 \bullet Molecule 12: 50S ribosomal protein L14





- \bullet Molecule 15: 50S ribosomal protein L17
- Chain AR: 58% 31% 11%

 \bullet Molecule 15: 50S ribosomal protein L17



 \bullet Molecule 16: 50S ribosomal protein L18



• Molecule 17: 50S ribosomal protein L19









• Molecule 20: 50S ribosomal protein L22





• Molecule 20: 50S ribosomal protein L22



A89 B94 H102 T104 T104 L107 C112 L107 L12

• Molecule 21: 50S ribosomal protein L23



• Molecule 21: 50S ribosomal protein L23



• Molecule 22: 50S ribosomal protein L24





 \bullet Molecule 22: 50S ribosomal protein L24





 \bullet Molecule 23: 50S ribosomal protein L25



 \bullet Molecule 24: 50S ribosomal protein L27

Chain A0: 65% 19% 6% 9%







<mark>q70</mark> ASN ALA



MET A2 H4 P5 V6 K8 K8	R15 R16 R19 R19 R20 R20 R32 C33 K37 K37 K37 K37 K37 K37 K37 K37 K37 K	L 15 L 15 E 15 R 15 R 15 R 15 R 15 R 15 R 15 R 15 R	
• Molecule 3	0: 50S ribosomal protein L33		
Chain A6:	44%	44%	9% •
MET 83 E4 V5 R6 K8 K8	E12 E12 T14 T14 T14 T15 T20 T13 T20 T21 T20 T23 T23 T23 T23 T23 T23 T23 T23 T23 T23	147 147 147 147 155 155 154 154 154	
• Molecule 3	0: 50S ribosomal protein L33		
Chain C6:	50%	35%	13% •
MET A2 S3 B4 B4 B4 B4 B4 B4 B4 B4 B4 B4 B4 B4 B4	C13 714 714 717 714 717 714 728 728 728 728 728 728 728 728 728 729 731 731 734 731 734 734 734 734 734 734 734 734 734 734		
• Molecule 3	1: 50S ribosomal protein L34		
Chain A7:	61%	29%	6% ••
M1 R3 86 87 87 87 87 87 87 87 87 87 87 87 87 87	R1 9 124 124 124 828 833 1335 143 143 143 143 143 143 143 143 143 143		
• Molecule 3	1: 50S ribosomal protein L34		
Chain C7:	63%	24%	10% •
M1 T4 V5 P7 R9 R9 R10	K11 15 15 15 15 15 15 15 15 15 15 15 15 1		
• Molecule 3	2: 50S ribosomal protein L35		
Chain A8:	48%	43%	6% • •
MET P2 K3 K5 K5 A10 A10 K11	R12 R13 V14 V14 V23 V23 V25 R36 R36 R36 R36 R36 R36 R36 R36 R36 R36	852 158 158 158 160 161 165 766 766 766	
• Molecule 3	2: 50S ribosomal protein L35		
Chain C8:	51%	45%	
MET P2 K3 M4 K5 K6 K8 K8 K8 K8 K8 K8 K8 K8 K8 K8 K8 K8 K8	A10 A11 V14 V14 V14 V14 V14 V14 V14 V14 V14 V	E56 R57 158 161 162 162 163 763 763 865	
• Molecule 3	3: 50S ribosomal protein L36		
Chain A9:	57%	38%	5%















• Molecule 37: 30S ribosomal protein S4







 \bullet Molecule 37: 30S ribosomal protein S4





 \bullet Molecule 38: 30S ribosomal protein S5



 \bullet Molecule 39: 30S ribosomal protein S6

























MET ALA GLN LYS LYS PRO G96 A97 P98 LEU SER ALA L92 E92 • Molecule 53: 30S ribosomal protein S20 Chain DT: 53% 28% 9% 9% MET ALA GLN CYS LYS LYS PRO PRO • Molecule 54: 30S ribosomal protein Thx Chain BU: 52% 33% 15% LYS LYS LYS • Molecule 54: 30S ribosomal protein Thx 63% Chain DU: 37% 41% 7% 15% MET G2 K3 K3 G4 D5 D5 D5 R7 R7 R7 R7 R7 R7 R1 G1 K1 • Molecule 55: mRNA 11% Chain BV: 61% 11% 6% 22% • Molecule 55: mRNA 17% Chain DV: 67% 22% 11%00044004000 • Molecule 56: P-site tRNA Chain BW: 36% 37% 20% 8%













• Molecule 58: Dityromycin





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants	209.84Å 450.58Å 623.43Å	Deperitor
a, b, c, α , β , γ	90.00° 90.00° 90.00°	Depositor
$\mathbf{P}_{\text{assolution}}(\hat{\mathbf{A}})$	49.81 - 2.80	Depositor
Resolution (A)	49.80 - 2.80	EDS
% Data completeness	94.5 (49.81-2.80)	Depositor
(in resolution range)	94.5 (49.80-2.80)	EDS
R_{merge}	0.13	Depositor
R _{sym}	(Not available)	Depositor
$< I/\sigma(I) > 1$	$1.61 (at 2.81 \text{\AA})$	Xtriage
Refinement program	PHENIX (PHENIX.REFINE: 1.8.2_1309)	Depositor
B B.	0.209 , 0.264	Depositor
$\mathbf{n}, \mathbf{n}_{free}$	0.210 , 0.265	DCC
R_{free} test set	67916 reflections $(5.02%)$	wwPDB-VP
Wilson B-factor $(Å^2)$	56.0	Xtriage
Anisotropy	0.111	Xtriage
Bulk solvent $k_{sol}(e/Å^3), B_{sol}(Å^2)$	0.27 , 73.5	EDS
L-test for $twinning^2$	$< L > = 0.47, < L^2 > = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.93	EDS
Total number of atoms	310038	wwPDB-VP
Average B, all atoms $(Å^2)$	79.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 1.56% of the height of the origin peak. No significant pseudotranslation is detected.

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.



¹Intensities estimated from amplitudes.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: 2QZ, 2QY, 5MU, ZN, MVA, 4SU, MG, GDP, 2R3, SF4, 2R1, MIA, 004, PSU, 7MG

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

Mal	Chain	Bond lengths		Bond angles		
		RMSZ	# Z > 5	RMSZ	# Z > 5	
1	AA	1.41	444/69281~(0.6%)	2.07	3848/108144~(3.6%)	
1	CA	1.00	75/69179~(0.1%)	1.66	1653/107984~(1.5%)	
2	AB	1.17	7/2878~(0.2%)	1.92	120/4490~(2.7%)	
2	CB	0.66	0/2878	1.33	24/4490~(0.5%)	
3	AC	0.34	0/1083	0.65	0/1460	
3	CC	0.34	0/1083	0.65	0/1460	
4	AD	0.94	2/2186~(0.1%)	1.04	5/2944~(0.2%)	
4	CD	0.74	0/2192	0.95	6/2951~(0.2%)	
5	AE	0.93	0/1592	1.08	2/2149~(0.1%)	
5	CE	0.72	0/1592	0.91	1/2149~(0.0%)	
6	AF	0.91	2/1619~(0.1%)	1.01	4/2193~(0.2%)	
6	CF	0.63	0/1615	0.83	1/2188~(0.0%)	
7	AG	0.60	0/1450	0.83	2/1959~(0.1%)	
7	CG	0.36	0/1449	0.62	0/1958	
8	AH	0.84	0/1356	0.96	1/1834~(0.1%)	
8	CH	0.49	0/1356	0.67	0/1834	
9	AK	0.34	0/640	0.67	0/889	
9	CK	0.28	0/640	0.61	0/889	
10	AL	0.31	0/503	0.54	0/673	
10	CL	0.34	0/503	0.60	0/673	
11	AN	0.95	0/1144	1.01	3/1543~(0.2%)	
11	CN	0.61	0/1144	0.81	0/1543	
12	AO	0.91	1/943~(0.1%)	1.02	3/1269~(0.2%)	
12	CO	0.77	0/943	0.87	0/1269	
13	AP	0.85	0/1156	1.03	4/1537~(0.3%)	
13	CP	0.57	0/1152	0.87	2/1533~(0.1%)	
14	AQ	0.91	0/1143	0.97	2/1527~(0.1%)	
14	CQ	0.64	0/1143	0.82	1/1527~(0.1%)	
15	AR	0.90	0/982	1.07	$4\overline{/1312}\ (0.3\%)$	
15	CR	0.65	0/982	0.88	1/1312~(0.1%)	
16	AS	0.76	0/887	0.95	1/1180~(0.1%)	
16	CS	0.49	0/880	0.74	0/1172	



Mal Chain		Bond lengths		Bond angles		
NIOI	Chain	RMSZ	# Z > 5	RMSZ	# Z > 5	
17	AT	0.89	0/1105	1.02	3/1477~(0.2%)	
17	CT	0.65	0/1097	0.89	1/1468 (0.1%)	
18	AU	1.11	3/977~(0.3%)	1.05	1/1301 (0.1%)	
18	CU	0.69	1/977~(0.1%)	0.79	0/1301	
19	AV	0.98	0/782	1.08	2/1049~(0.2%)	
19	CV	0.58	0/782	0.79	0/1049	
20	AW	1.10	2/897~(0.2%)	1.09	7/1205~(0.6%)	
20	CW	0.80	0/897	0.92	0/1205	
21	AX	0.96	0/764	0.99	0/1025	
21	CX	0.67	0/764	0.83	1/1025~(0.1%)	
22	AY	0.88	0/819	0.97	0/1095	
22	CY	0.56	0/819	0.72	0/1095	
23	AZ	0.72	1/1483~(0.1%)	0.93	4/2017~(0.2%)	
23	CZ	0.45	0/1483	0.73	0/2017	
24	A0	0.87	0/616	1.05	1/821~(0.1%)	
24	C0	0.60	0/616	0.76	0/821	
25	A1	0.87	0/762	0.92	0/1014	
25	C1	0.67	0/762	0.89	1/1014~(0.1%)	
26	A2	0.79	0/590	0.93	1/781~(0.1%)	
26	C2	0.59	0/590	0.73	0/781	
27	A3	1.01	0/474	1.06	0/635	
27	C3	0.57	0/469	0.81	0/630	
28	A4	0.50	0/571	0.72	0/768	
28	C4	0.35	0/545	0.59	0/737	
29	A5	0.99	0/469	1.05	0/635	
29	C5	0.76	1/469~(0.2%)	0.86	0/635	
30	A6	0.95	0/460	1.03	1/613~(0.2%)	
30	C6	0.71	0/456	0.81	1/608~(0.2%)	
31	A7	0.99	0/426	1.11	3/561~(0.5%)	
31	C7	0.77	0/426	0.99	1/561~(0.2%)	
32	A8	0.95	0/525	0.94	0/691	
32	C8	0.63	0/525	0.82	0/691	
33	A9	0.98	0/310	1.05	0/407	
33	C9	0.64	0/310	0.80	0/407	
34	BA	0.77	3/35976~(0.0%)	1.42	439/56145~(0.8%)	
34	DA	0.68	1/36119 (0.0%)	1.30	$238/56370 \ (0.4\%)$	
35	BB	0.45	0/1881	0.69	1/2542 (0.0%)	
35	DB	0.38	0/1860	0.66	0/2518	
36	BC	0.40	0/1576	0.61	0/2130	
36	DC	0.35	0/1568	0.55	0/2122	
37	BD	0.49	0/1689	0.71	0/2267	
37	DD	0.51	0/1708	0.73	1/2289~(0.0%)	
38	BE	0.60	0/1145	0.79	0/1543	



		Bond lengths		Bond angles		
Mol	Chain	RMSZ	# Z > 5	RMSZ	# Z > 5	
38	DE	0.51	0/1149	0.77	0/1548	
39	BF	0.50	0/825	0.77	0/1118	
39	DF	0.51	0/833	0.72	0/1128	
40	BG	0.43	0/1250	0.60	0/1679	
40	DG	0.35	0/1254	0.58	0/1683	
41	BH	0.55	0/1108	0.76	0/1494	
41	DH	0.45	0/1108	0.75	1/1494~(0.1%)	
42	BI	0.44	0/1005	0.64	0/1350	
42	DI	0.34	0/997	0.56	0/1343	
43	BJ	0.39	0/722	0.71	2/982~(0.2%)	
43	DJ	0.34	0/727	0.59	0/988	
44	BK	0.56	0/848	0.72	0/1149	
44	DK	0.48	0/848	0.63	0/1149	
45	BL	0.65	0/946	0.79	0/1274	
45	DL	0.64	0/946	0.84	1/1274~(0.1%)	
46	BM	0.42	0/933	0.67	0/1253	
46	DM	0.30	0/917	0.52	0/1234	
47	BN	0.45	0/501	0.67	0/664	
47	DN	0.33	0/501	0.60	0/664	
48	BO	0.57	0/739	0.74	0/985	
48	DO	0.50	0/739	0.70	0/985	
49	BP	0.55	0/697	0.81	1/939~(0.1%)	
49	DP	0.49	0/693	0.72	0/935	
50	BQ	0.58	0/836	0.78	0/1117	
50	DQ	0.51	0/836	0.72	0/1117	
51	BR	0.55	0/560	0.83	0/746	
51	DR	0.48	0/560	0.70	0/746	
52	BS	0.34	0/676	0.59	0/911	
52	DS	0.31	0/661	0.66	0/893	
53	BT	0.50	0/730	0.81	0/965	
53	DT	0.46	0/733	0.72	0/969	
54	BU	0.42	0/203	0.69	0/266	
54	DU	0.38	0/203	0.59	0/266	
55	BV	0.64	0/165	1.06	0/254	
55	DV	0.54	0/137	1.11	0/211	
56	BW	0.86	0/1650	1.64	45/2569~(1.8%)	
56	BY	0.42	0/1602	0.95	1/2493~(0.0%)	
56	DW	0.65	0/1650	1.29	7/2569~(0.3%)	
56	DY	0.35	0/1579	0.86	0/2455	
57	BZ	0.49	0/5763	0.72	1/7804 (0.0%)	
57	DZ	0.45	0/5784	0.69	1/7835~(0.0%)	
58	BX	0.67	0/20	0.66	0/23	
58	DX	0.70	0/20	1.43	0/23	



Mol	Chain	B	Bond lengths	Bond angles		
		RMSZ	# Z > 5	RMSZ	# Z > 5	
All	All	0.95	543/329767~(0.2%)	1.50	6455/491645~(1.3%)	

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

Mol	Chain	#Chirality outliers	#Planarity outliers
5	AE	0	1
6	AF	0	1
19	AV	0	1
35	BB	0	1
57	DZ	0	1
58	BX	0	1
All	All	0	6

The worst 5 of 543 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1067	A	N9-C4	-15.28	1.28	1.37
1	AA	354	А	N9-C4	-13.92	1.29	1.37
1	AA	2299	A	N9-C4	-13.50	1.29	1.37
1	AA	1188	А	N9-C4	-13.32	1.29	1.37
1	AA	990	A	N9-C4	-11.81	1.30	1.37

The worst 5 of 6455 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	$Observed(^{o})$	$Ideal(^{o})$
1	AA	553	A	N1-C6-N6	26.84	134.71	118.60
1	AA	990	A	N1-C2-N3	21.55	140.07	129.30
1	AA	990	А	C6-C5-N7	-21.18	117.48	132.30
1	AA	354	A	C2-N3-C4	-21.03	100.09	110.60
1	AA	553	А	C6-C5-N7	-20.90	117.67	132.30

There are no chirality outliers.

5 of 6 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
5	AE	74	PRO	Peptide
6	AF	194	MET	Peptide
19	AV	54	GLY	Peptide

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Mol	Chain	Res	Type	Group
35	BB	93	VAL	Peptide
58	BX	3	004	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	61861	0	31172	850	0
1	CA	61771	0	31146	1166	0
2	AB	2573	0	1306	27	0
2	CB	2573	0	1306	57	0
3	AC	1063	0	1091	153	4
3	CC	1063	0	1090	186	17
4	AD	2136	0	2218	84	0
4	CD	2142	0	2229	85	0
5	AE	1559	0	1618	58	0
5	CE	1559	0	1618	76	0
6	AF	1584	0	1625	62	0
6	CF	1580	0	1619	75	0
7	AG	1425	0	1443	64	0
7	CG	1424	0	1434	82	0
8	AH	1330	0	1407	53	0
8	CH	1330	0	1407	54	0
9	AK	641	0	309	15	0
9	CK	641	0	309	9	0
10	AL	498	0	521	20	0
10	CL	498	0	521	29	0
11	AN	1117	0	1184	31	0
11	CN	1117	0	1184	38	0
12	AO	933	0	996	30	0
12	CO	933	0	996	26	0
13	AP	1139	0	1223	44	0
13	CP	1135	0	1212	57	0
14	AQ	1122	0	1179	37	0
14	CQ	1122	0	1179	54	0
15	AR	968	0	1033	32	0
15	CR	968	0	1033	37	0
16	AS	877	0	938	42	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes	
16	CS	870	0	923	67	0	
17	AT	1091	0	1151	48	0	
17	CT	1083	0	1136	42	0	
18	AU	959	0	1019	29	0	
18	CU	959	0	1018	40	0	
19	AV	771	0	830	11	0	
19	CV	771	0	830	24	0	
20	AW	886	0	940	23	0	
20	CW	886	0	940	40	0	
21	AX	750	0	814	24	0	
21	CX	750	0	814	28	0	
22	AY	806	0	881	37	0	
22	CY	806	0	882	45	0	
23	AZ	1451	0	1457	61	0	
23	CZ	1451	0	1457	72	0	
24	A0	608	0	622	20	0	
24	C0	608	0	622	27	0	
25	A1	755	0	826	29	0	
25	C1	755	0	826	23	0	
26	A2	588	0	643	16	0	
26	C2	588	0	643	28	0	
27	A3	469	0	518	12	0	
27	C3	464	0	514	25	0	
28	A4	558	0	545	31	0	
28	C4	532	0	507	28	0	
29	A5	455	0	465	15	0	
29	C5	455	0	465	16	0	
30	A6	453	0	473	17	0	
30	C6	449	0	469	20	0	
31	A7	418	0	467	16	0	
31	C7	418	0	467	12	0	
32	A8	517	0	582	25	0	
32	C8	517	0	582	24	0	
33	A9	307	0	335	11	0	
33	C9	307	0	335	13	0	
34	BA	32141	0	16224	681	0	
34	DA	32268	0	16287	742	0	
35	BB	1846	0	1867	78	0	
35	DB	1825	0	1828	101	0	
36	BC	1552	0	1546	65	0	
36	DC	1544	0	1524	63	0	
37	BD	1659	0	1679	68	0	
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	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
37		1678		1710	86	
38	BE	1129	0	1115	51	0
38	DE	1120	0	1100	69	0
39	BF	812	0	804	29	0
39	DF	820	0	814	37	0
40	BG	1231	0	1238	45	0
40	DG	1235	0	1249	52	0
41	BH	1088	0	1126	53	0
41	DH	1088	0	1126	74	0
42	BI	986	0	995	52	0
42	DI	978	0	966	56	0
43	BJ	709	0	650	32	0
43	DJ	714	0	672	32	0
44	BK	833	0	836	34	0
44	DK	833	0	836	26	0
45	BL	930	0	980	39	0
45	DL	930	0	980	45	0
46	BM	923	0	970	37	0
46	DM	907	0	934	39	0
47	BN	492	0	529	30	0
47	DN	492	0	531	46	0
48	BO	728	0	760	29	0
48	DO	728	0	760	29	0
49	BP	681	0	697	50	0
49	DP	677	0	686	36	0
50	BQ	823	0	891	32	0
50	DQ	823	0	891	35	0
51	BR	555	0	618	24	0
51	DR	555	0	618	30	0
52	BS	661	0	675	36	0
52	DS	646	0	644	34	0
53	BT	728	0	798	36	0
53	DT	731	0	807	27	0
54	BU	199	0	208	7	0
54	DU	199	0	208	9	0
55	BV	148	0	(6	<u>ර</u> 1	0
55		123	0	66	1	0
50	ВW DV	1031	0	839	25	0
00 EC		1081	0	608	24	0
00 56		1031	0	839 706	55 94	0
50		1001	0	190 5747	04 265	U 17
) C	ВΔ	5003	U	3/4/	205	11



	Choin	Non H	puye	H(addad)	Clashog	Symm Clachog
NIOI		INOII-II		n(audeu)	Clashes	Symm-Clasnes
57		02	0	0700	230	4
50	DA DV	95	0	00	14	0
50		95 5	0	80	10	0
59	AU	0 1	0	0	0	0
59	AZ AE	1	0	0	0	0
59	AO	1	0	0	0	0
59	A0 A7	2 1	0	0	0	0
59		1	0	0	0	0
59	Að	1	0	0	0	0
59	A9 A A	1	0	0	0	0
59	AA	832	0	0	0	0
59	AD AD	20	0	0	0	0
59	AD	10	0	0	0	0
59	AE	C C	0	0	0	0
59	AF	0	0	0	0	0
59	AG	2	0	0	0	0
59	AH	1	0	0	0	0
59	AN	3	0	0	0	0
59	AO	1	0	0	0	0
59	AP	3	0	0	0	0
59	AQ	4	0	0	0	0
59	AR	l	0	0	0	0
59	AU	5	0	0	0	0
59	AV	2	0	0	0	0
59	AW	3	0	0	0	0
59	AX	1	0	0	0	0
59	AY	1	0	0	0	0
59	AZ	1	0	0	0	0
59	BA	215	0	0	0	0
59	BB	1	0	0	0	0
59	BD	1	0	0	0	0
59	BE	1	0	0	0	0
59	BF	1	0	0	0	0
59	BK	1	0	0	0	0
59	BL	2	0	0	0	0
59	BM	1	0	0	0	0
59	BN	2	0	0	0	0
59	BS	1	0	0	0	0
59	BT	1	0	0	0	0
59	BW	3	0	0	0	0
59	BZ	1	0	0	0	0
59	C0	1	0	0	0	0



Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
59	C1	1	0	0	0	0
59	C3	1	0	0	0	0
59	C5	1	0	0	0	0
59	C7	1	0	0	0	0
59	C8	1	0	0	0	0
59	CA	664	0	0	0	0
59	CB	13	0	0	0	0
59	CD	4	0	0	0	0
59	CE	5	0	0	0	0
59	CF	4	0	0	0	0
59	CG	1	0	0	0	0
59	CN	1	0	0	0	0
59	CO	1	0	0	0	0
59	CP	1	0	0	0	0
59	CQ	4	0	0	0	0
59	CR	1	0	0	0	0
59	CU	1	0	0	0	0
59	CV	2	0	0	0	0
59	CW	1	0	0	0	0
59	CX	1	0	0	0	0
59	DA	171	0	0	0	0
59	DD	1	0	0	0	0
59	DE	2	0	0	0	0
59	DF	1	0	0	0	0
59	DJ	1	0	0	0	0
59	DK	1	0	0	0	0
59	DT	1	0	0	0	0
59	DW	3	0	0	0	0
59	DZ	2	0	0	0	0
60	A4	1	0	0	0	0
60	A5	1	0	0	0	0
60	A6	1	0	0	0	0
60	A9	1	0	0	0	0
60	AY	1	0	0	0	0
60	BN	1	0	0	0	0
60	C4		0	0	0	0
60	C5		0	0	0	0
60			0			0
60	$\frac{0.9}{0.00}$	1	0	0		0
60		1	0	0		0
61		1	0	0	1	0
61	RD RD	8	0	0		0



Mol	Chain	Non-H	$\mathbf{H}(\mathbf{model})$	H(added)	Clashes	Symm-Clashes
61	DD	8	0	0	2	0
62	BZ	28	0	12	5	0
62	DZ	28	0	12	7	0
63	A0	6	0	0	0	0
63	A1	2	0	0	0	0
63	A3	2	0	0	0	0
63	A5	3	0	0	0	0
63	A6	1	0	0	0	0
63	A7	2	0	0	1	0
63	A8	10	0	0	1	0
63	A9	1	0	0	0	0
63	AA	1413	0	0	66	0
63	AB	38	0	0	3	0
63	AD	10	0	0	2	0
63	AE	17	0	0	4	0
63	AF	11	0	0	1	0
63	AG	3	0	0	1	0
63	AH	1	0	0	0	0
63	AN	1	0	0	0	0
63	AO	3	0	0	0	0
63	AP	16	0	0	1	0
63	AQ	4	0	0	1	0
63	AR	2	0	0	0	0
63	AS	1	0	0	1	0
63	AT	1	0	0	0	0
63	AU	4	0	0	0	0
63	AV	1	0	0	0	0
63	AW	1	0	0	0	0
63	AX	3	0	0	0	0
63	AZ	1	0	0	0	0
63	BA	213	0	0	19	0
63	BD	1	0	0	0	0
63	BM	1	0	0	0	0
63	BO	1	0	0	0	0
63	BP	1	0	0	0	0
63	BV	1	0	0	0	0
63	BW	1	0	0	0	0
63	BZ	2	0	0	0	0
63	CO	4	0	0		0
63	C3	2	0	0		0
63	C5	1	0	0		0
63	C7	2	0	0		
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WORLDWIDE PROTEIN DATA BANK

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
63	C8	4	0	0	0	0
63	CA	983	0	0	79	0
63	CB	9	0	0	1	0
63	CD	15	0	0	1	0
63	CE	9	0	0	1	0
63	CF	6	0	0	0	0
63	CN	1	0	0	0	0
63	CO	1	0	0	0	0
63	CP	11	0	0	2	0
63	CQ	2	0	0	1	0
63	CT	3	0	0	0	0
63	CU	2	0	0	0	0
63	CV	1	0	0	1	0
63	CW	1	0	0	0	0
63	CX	1	0	0	0	0
63	CY	2	0	0	1	0
63	DA	157	0	0	13	0
63	DD	1	0	0	0	0
63	DE	2	0	0	2	0
63	DH	1	0	0	0	0
63	DJ	1	0	0	0	0
63	DK	2	0	0	0	0
63	DL	1	0	0	0	0
63	DT	1	0	0	0	0
All	All	310038	0	209219	7358	21

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 15.

The worst 5 of 7358 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1891:G:H5"	3:AC:206:LYS:CG	1.32	1.59
1:AA:1891:G:C5'	3:AC:206:LYS:HD2	1.36	1.52
1:CA:2128:C:H5"	3:CC:219:MET:CE	1.36	1.51
1:CA:2132:U:C4	3:CC:6:LYS:HE3	1.51	1.41
1:AA:1891:G:C5'	3:AC:206:LYS:CD	2.01	1.37

The worst 5 of 21 symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.



Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BZ:502:GLY:CA	3:CC:9:ARG:CD[2_655]	1.16	1.04
3:AC:9:ARG:NH2	57:DZ:504:ARG:NH1[3_654]	1.36	0.84
57:BZ:502:GLY:N	3:CC:9:ARG:CB[2_655]	1.54	0.66
57:BZ:502:GLY:N	3:CC:9:ARG:CD[2_655]	1.69	0.51
57:BZ:573:HIS:CE1	3:CC:13:GLU:OE1[2_655]	1.71	0.49

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
3	AC	133/228~(58%)	90 (68%)	25~(19%)	18 (14%)	0
3	CC	133/228~(58%)	90 (68%)	25 (19%)	18 (14%)	0 0
4	AD	273/276~(99%)	249 (91%)	19 (7%)	5 (2%)	8 28
4	CD	273/276~(99%)	234 (86%)	26 (10%)	13 (5%)	2 7
5	AE	202/206~(98%)	186 (92%)	14 (7%)	2 (1%)	15 44
5	CE	202/206~(98%)	179 (89%)	20 (10%)	3 (2%)	10 33
6	AF	201/210~(96%)	182 (90%)	18 (9%)	1 (0%)	29 61
6	CF	201/210~(96%)	177 (88%)	17 (8%)	7 (4%)	3 12
7	AG	179/182~(98%)	154 (86%)	19 (11%)	6 (3%)	3 13
7	CG	179/182~(98%)	141 (79%)	31 (17%)	7 (4%)	3 10
8	AH	172/180~(96%)	154 (90%)	15 (9%)	3 (2%)	9 29
8	СН	172/180~(96%)	144 (84%)	17 (10%)	11 (6%)	1 3
9	AK	128/173~(74%)	66 (52%)	36 (28%)	26 (20%)	0 0
9	CK	128/173~(74%)	76 (59%)	27 (21%)	25 (20%)	0 0
10	AL	64/147~(44%)	43 (67%)	17 (27%)	4 (6%)	1 3
10	CL	$\overline{64/147} \ (44\%)$	42 (66%)	19 (30%)	3 (5%)	2 7
11	AN	138/140 (99%)	129 (94%)	8 (6%)	1 (1%)	22 53
11	CN	138/140~(99%)	120 (87%)	15 (11%)	3 (2%)	6 22



Conti	nued from	n previous page					
Mol	Chain	Analysed	Favoured	Allowed	Outliers	Perce	entiles
12	AO	120/122~(98%)	113~(94%)	7~(6%)	0	100	100
12	CO	120/122~(98%)	107 (89%)	10 (8%)	3 (2%)	5	19
13	AP	147/150~(98%)	130 (88%)	15 (10%)	2 (1%)	11	34
13	CP	147/150~(98%)	119 (81%)	25~(17%)	3 (2%)	7	24
14	AQ	139/141~(99%)	126 (91%)	12 (9%)	1 (1%)	22	53
14	CQ	139/141~(99%)	123 (88%)	14 (10%)	2 (1%)	11	34
15	AR	116/118~(98%)	106 (91%)	10 (9%)	0	100	100
15	CR	116/118~(98%)	102 (88%)	11 (10%)	3 (3%)	5	18
16	AS	108/112~(96%)	88 (82%)	16 (15%)	4 (4%)	3	11
16	\mathbf{CS}	108/112~(96%)	83 (77%)	20 (18%)	5 (5%)	2	7
17	AT	129/146~(88%)	114 (88%)	13 (10%)	2 (2%)	9	31
17	CT	129/146~(88%)	116 (90%)	11 (8%)	2 (2%)	9	31
18	AU	114/118~(97%)	111 (97%)	3 (3%)	0	100	100
18	CU	114/118~(97%)	100 (88%)	11 (10%)	3 (3%)	5	18
19	AV	99/101~(98%)	95~(96%)	3 (3%)	1 (1%)	15	44
19	CV	99/101~(98%)	86 (87%)	10 (10%)	3 (3%)	4	15
20	AW	110/113~(97%)	104 (94%)	6 (6%)	0	100	100
20	CW	110/113~(97%)	105 (96%)	5 (4%)	0	100	100
21	AX	93/96~(97%)	85 (91%)	6 (6%)	2 (2%)	6	22
21	CX	93/96~(97%)	77 (83%)	11 (12%)	5 (5%)	2	5
22	AY	105/110~(96%)	93~(89%)	9 (9%)	3 (3%)	4	15
22	CY	105/110~(96%)	86 (82%)	14 (13%)	5 (5%)	2	7
23	AZ	183/206~(89%)	147 (80%)	24 (13%)	12 (7%)	1	3
23	CZ	183/206~(89%)	134 (73%)	33 (18%)	16 (9%)	1	1
24	A0	75/85~(88%)	70 (93%)	5 (7%)	0	100	100
24	C0	75/85~(88%)	67 (89%)	7 (9%)	1 (1%)	12	36
25	A1	95/98~(97%)	90 (95%)	5 (5%)	0	100	100
25	C1	95/98~(97%)	85 (90%)	7 (7%)	3 (3%)	4	13
26	A2	68/72~(94%)	62 (91%)	6 (9%)	0	100	100
26	C2	68/72~(94%)	60 (88%)	7 (10%)	1 (2%)	10	33

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6 (10%)

51 (90%)

57/60 (95%)

A3

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Perce	\mathbf{ntiles}
27	C3	57/60~(95%)	50 (88%)	5 (9%)	2 (4%)	3	12
28	A4	67/71~(94%)	46 (69%)	12~(18%)	9~(13%)	0	0
28	C4	67/71~(94%)	43 (64%)	15~(22%)	9 (13%)	0	0
29	A5	57/60~(95%)	51 (90%)	6 (10%)	0	100	100
29	C5	57/60~(95%)	53 (93%)	3(5%)	1 (2%)	8	28
30	A6	51/54~(94%)	49 (96%)	2(4%)	0	100	100
30	C6	51/54~(94%)	42 (82%)	8 (16%)	1 (2%)	7	24
31	A7	46/49~(94%)	45 (98%)	1 (2%)	0	100	100
31	C7	46/49~(94%)	41 (89%)	4 (9%)	1 (2%)	6	22
32	A8	62/65~(95%)	60 (97%)	1 (2%)	1 (2%)	9	31
32	C8	62/65~(95%)	54 (87%)	7 (11%)	1 (2%)	9	31
33	A9	35/37~(95%)	35 (100%)	0	0	100	100
33	C9	35/37~(95%)	33 (94%)	2~(6%)	0	100	100
35	BB	229/256~(90%)	182 (80%)	33~(14%)	14 (6%)	1	4
35	DB	229/256~(90%)	170 (74%)	41 (18%)	18 (8%)	1	2
36	BC	204/239~(85%)	155 (76%)	38 (19%)	11 (5%)	2	5
36	DC	204/239~(85%)	169~(83%)	29~(14%)	6 (3%)	4	15
37	BD	206/209~(99%)	166 (81%)	28 (14%)	12 (6%)	1	4
37	DD	206/209~(99%)	171 (83%)	27~(13%)	8 (4%)	3	10
38	BE	146/162~(90%)	114 (78%)	24 (16%)	8 (6%)	2	5
38	DE	146/162~(90%)	117 (80%)	22~(15%)	7 (5%)	2	7
39	BF	98/101~(97%)	84 (86%)	11 (11%)	3 (3%)	4	14
39	DF	98/101~(97%)	90 (92%)	5 (5%)	3 (3%)	4	14
40	BG	153/156~(98%)	128 (84%)	13 (8%)	12 (8%)	1	2
40	DG	153/156~(98%)	126 (82%)	22 (14%)	5 (3%)	4	13
41	BH	135/138~(98%)	110 (82%)	22 (16%)	3 (2%)	6	22
41	DH	135/138 (98%)	114 (84%)	14 (10%)	7 (5%)	2	6
42	BI	$\overline{125/128}$ (98%)	103 (82%)	15 (12%)	7 (6%)	2	5
42	DI	125/128~(98%)	100 (80%)	21 (17%)	4 (3%)	4	13
43	BJ	95/105~(90%)	76 (80%)	12 (13%)	7 (7%)	1	2
43	DJ	94/105~(90%)	75 (80%)	16 (17%)	3 (3%)	4	13



Mol	Chain	Analysed	Favoured	Allowed	Outliers	Perce	entiles
44	BK	112/129~(87%)	96~(86%)	14~(12%)	2(2%)	8	28
44	DK	112/129~(87%)	92~(82%)	16 (14%)	4 (4%)	3	11
45	BL	120/132~(91%)	108 (90%)	11 (9%)	1 (1%)	19	49
45	DL	120/132~(91%)	100 (83%)	16 (13%)	4 (3%)	4	13
46	BM	115/126 (91%)	93 (81%)	18 (16%)	4 (4%)	3	12
46	DM	114/126~(90%)	88 (77%)	17 (15%)	9 (8%)	1	2
47	BN	58/61~(95%)	46 (79%)	9 (16%)	3 (5%)	2	6
47	DN	58/61~(95%)	49 (84%)	7 (12%)	2 (3%)	3	13
48	BO	86/89~(97%)	67 (78%)	16 (19%)	3 (4%)	3	12
48	DO	86/89~(97%)	72 (84%)	10 (12%)	4 (5%)	2	7
49	BP	80/88~(91%)	54 (68%)	17 (21%)	9 (11%)	0	1
49	DP	80/88~(91%)	58 (72%)	18 (22%)	4 (5%)	2	6
50	BQ	97/105~(92%)	87~(90%)	7 (7%)	3 (3%)	4	14
50	DQ	97/105~(92%)	87 (90%)	10 (10%)	0	100	100
51	BR	66/88~(75%)	57 (86%)	7 (11%)	2 (3%)	4	15
51	DR	66/88~(75%)	60 (91%)	6 (9%)	0	100	100
52	BS	82/93~(88%)	64 (78%)	14 (17%)	4 (5%)	2	7
52	DS	81/93~(87%)	63~(78%)	15 (18%)	3 (4%)	3	11
53	BT	94/106~(89%)	78~(83%)	12 (13%)	4 (4%)	2	8
53	DT	94/106~(89%)	75~(80%)	13 (14%)	6 (6%)	1	3
54	BU	21/27~(78%)	20~(95%)	1 (5%)	0	100	100
54	DU	21/27~(78%)	17 (81%)	2 (10%)	2 (10%)	0	1
57	BZ	722/758~(95%)	563~(78%)	107 (15%)	52 (7%)	1	2
57	DZ	726/758~(96%)	537 (74%)	132 (18%)	57 (8%)	1	2
58	BX	3/10~(30%)	1 (33%)	0	2 (67%)	0	0
58	DX	3/10~(30%)	0	2(67%)	1 (33%)	0	0
All	All	13227/14464 (91%)	10975 (83%)	1666 (13%)	586 (4%)	2	8

5 of 586 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	AC	42	VAL
3	AC	47	LYS



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Mol	Chain	Res	Type
3	AC	68	GLY
3	AC	180	SER
3	AC	181	PHE

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percent	tiles
3	AC	111/180~(62%)	103 (93%)	8~(7%)	14 3	38
3	CC	111/180~(62%)	103 (93%)	8 (7%)	14	38
4	AD	215/218~(99%)	173 (80%)	42 (20%)	1	4
4	CD	216/218~(99%)	178 (82%)	38~(18%)	2	5
5	AE	164/166~(99%)	138 (84%)	26~(16%)	2	7
5	CE	164/166~(99%)	137 (84%)	27~(16%)	2	7
6	AF	160/166~(96%)	132 (82%)	28~(18%)	2 6	6
6	CF	159/166~(96%)	126 (79%)	33 (21%)	1 :	3
7	AG	143/156~(92%)	115 (80%)	28 (20%)	1	4
7	CG	142/156~(91%)	114 (80%)	28 (20%)	1	4
8	AH	144/148~(97%)	120 (83%)	24 (17%)	2 (6
8	CH	144/148~(97%)	118 (82%)	26~(18%)	1 5	5
10	AL	50/111~(45%)	39~(78%)	11 (22%)	1 2	2
10	CL	50/111~(45%)	35~(70%)	15~(30%)	0	1
11	AN	118/119~(99%)	93~(79%)	25~(21%)	1 3	3
11	CN	118/119~(99%)	85 (72%)	33~(28%)	0	1
12	AO	100/100~(100%)	87 (87%)	13~(13%)	4 1	.3
12	CO	100/100~(100%)	86 (86%)	14 (14%)	3 1	1
13	AP	116/116 (100%)	97 (84%)	19 (16%)	2	7
13	CP	115/116~(99%)	95~(83%)	20 (17%)	2 (6
14	AQ	111/111 (100%)	94 (85%)	17 (15%)	2 8	8



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Mol	Chain	Analysed	Rotameric	Outliers	Perce	ntiles
14	CQ	$111/111 \ (100\%)$	83 (75%)	28~(25%)	0	1
15	AR	101/101~(100%)	80 (79%)	21 (21%)	1	3
15	CR	101/101~(100%)	87 (86%)	14 (14%)	3	11
16	AS	87/88~(99%)	71 (82%)	16 (18%)	1	5
16	\mathbf{CS}	85/88~(97%)	68 (80%)	17~(20%)	1	4
17	AT	115/127~(91%)	96 (84%)	19 (16%)	2	7
17	CT	113/127~(89%)	98 (87%)	15 (13%)	4	12
18	AU	93/94~(99%)	77 (83%)	16 (17%)	2	6
18	CU	93/94~(99%)	81 (87%)	12 (13%)	4	13
19	AV	80/82~(98%)	67 (84%)	13~(16%)	2	7
19	CV	80/82~(98%)	65 (81%)	15~(19%)	1	5
20	AW	90/92~(98%)	76 (84%)	14 (16%)	2	8
20	CW	90/92~(98%)	75 (83%)	15 (17%)	2	6
21	AX	77/78~(99%)	67 (87%)	10 (13%)	4	13
21	CX	77/78~(99%)	66 (86%)	11 (14%)	3	10
22	AY	85/91~(93%)	66 (78%)	19~(22%)	1	2
22	CY	85/91~(93%)	66 (78%)	19~(22%)	1	2
23	AZ	156/179~(87%)	120 (77%)	36~(23%)	1	2
23	CZ	156/179~(87%)	125 (80%)	31~(20%)	1	4
24	A0	61/67~(91%)	55 (90%)	6 (10%)	8	24
24	C0	61/67~(91%)	50 (82%)	11 (18%)	1	5
25	A1	80/83~(96%)	66 (82%)	14 (18%)	2	6
25	C1	80/83~(96%)	66 (82%)	14~(18%)	2	6
26	A2	65/67~(97%)	56 (86%)	9 (14%)	3	11
26	C2	65/67~(97%)	51 (78%)	14(22%)	1	3
27	A3	51/52~(98%)	41 (80%)	10 (20%)	1	4
27	C3	50/52~(96%)	38 (76%)	12 (24%)	0	2
28	A4	60/63~(95%)	52 (87%)	8 (13%)	4	12
28	C4	$53/\overline{63}\;(84\%)$	39 (74%)	14 (26%)	0	1
29	A5	50/52~(96%)	43 (86%)	7(14%)	3	11
29	C5	50/52~(96%)	42 (84%)	8 (16%)	2	7



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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
30	A6	51/52~(98%)	37 (72%)	14(28%)	0 1
30	C6	50/52~(96%)	43 (86%)	7 (14%)	3 11
31	A7	41/42~(98%)	35 (85%)	6~(15%)	3 9
31	C7	41/42~(98%)	35 (85%)	6 (15%)	3 9
32	A8	54/55~(98%)	43 (80%)	11 (20%)	1 4
32	C8	54/55~(98%)	48 (89%)	6 (11%)	6 19
33	A9	34/34~(100%)	30 (88%)	4 (12%)	5 16
33	C9	34/34~(100%)	30 (88%)	4 (12%)	5 16
35	BB	192/220~(87%)	157 (82%)	35~(18%)	1 5
35	DB	187/220~(85%)	148 (79%)	39~(21%)	1 3
36	BC	143/188~(76%)	127 (89%)	16 (11%)	6 18
36	DC	141/188~(75%)	113 (80%)	28 (20%)	1 4
37	BD	170/181~(94%)	136 (80%)	34 (20%)	1 4
37	DD	174/181~(96%)	143 (82%)	31~(18%)	2 5
38	BE	113/123~(92%)	86 (76%)	27~(24%)	0 2
38	DE	114/123~(93%)	82 (72%)	32~(28%)	0 1
39	BF	84/90~(93%)	70~(83%)	14 (17%)	2 6
39	DF	86/90~(96%)	74 (86%)	12~(14%)	3 11
40	BG	119/127~(94%)	99~(83%)	20~(17%)	2 6
40	DG	120/127~(94%)	104 (87%)	16~(13%)	4 12
41	BH	114/119~(96%)	90 (79%)	24~(21%)	1 3
41	DH	114/119~(96%)	86 (75%)	28~(25%)	0 2
42	BI	91/99~(92%)	78~(86%)	13~(14%)	3 10
42	DI	89/99~(90%)	73~(82%)	16~(18%)	1 5
43	BJ	66/92~(72%)	58 (88%)	8 (12%)	5 15
43	DJ	69/92~(75%)	58 (84%)	11~(16%)	2 7
44	BK	83/99~(84%)	65 (78%)	18 (22%)	1 3
44	DK	83/99~(84%)	64 (77%)	19~(23%)	1 2
45	BL	97/109~(89%)	83 (86%)	14 (14%)	3 10
45	DL	97/109~(89%)	74 (76%)	23 (24%)	1 2
46	BM	91/101~(90%)	80 (88%)	11 (12%)	5 15



Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
46	DM	88/101~(87%)	75~(85%)	13~(15%)	3 9
47	BN	49/50~(98%)	38~(78%)	11 (22%)	1 2
47	DN	49/50~(98%)	42 (86%)	7~(14%)	3 10
48	BO	78/80~(98%)	70~(90%)	8 (10%)	7 21
48	DO	78/80~(98%)	66~(85%)	12~(15%)	2 8
49	BP	69/74~(93%)	54 (78%)	15~(22%)	1 3
49	DP	68/74~(92%)	51~(75%)	17~(25%)	0 2
50	BQ	94/97~(97%)	82~(87%)	12 (13%)	4 13
50	DQ	94/97~(97%)	80~(85%)	14 (15%)	3 9
51	BR	59/77~(77%)	49 (83%)	10 (17%)	2 6
51	DR	59/77~(77%)	52~(88%)	7~(12%)	5 16
52	BS	70/80~(88%)	59~(84%)	11~(16%)	2 8
52	DS	67/80~(84%)	55~(82%)	12 (18%)	2 5
53	BT	70/82~(85%)	53~(76%)	17 (24%)	0 2
53	DT	71/82~(87%)	59~(83%)	12~(17%)	2 6
54	BU	18/22~(82%)	17~(94%)	1 (6%)	21 51
54	DU	18/22~(82%)	16~(89%)	2(11%)	6 19
57	BZ	604/636~(95%)	477 (79%)	127 (21%)	1 3
57	DZ	$607/63\overline{6}~(95\%)$	509 (84%)	98 (16%)	2 7
58	BX	$\overline{3/3(100\%)}$	3~(100%)	0	100 100
58	DX	3/3~(100%)	3 (100%)	0	100 100
All	All	$10664/11\overline{678}\ (91\%)$	$8760 \ (82\%)$	1904 (18%)	2 5

5 of 1904 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
57	ΒZ	623	ASP
51	DR	21	LYS
11	CN	138	LEU
49	DP	60	LEU
57	DZ	624	LEU

Sometimes side chains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 172 such side chains are listed below:



Mol	Chain	Res	Type
24	C0	70	GLN
42	DI	89	ASN
35	DB	40	HIS
37	DD	160	GLN
44	DK	93	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	2865/2915~(98%)	526 (18%)	51 (1%)
1	CA	2860/2915~(98%)	611 (21%)	39 (1%)
2	AB	$119/121 \ (98\%)$	15 (12%)	0
2	CB	119/121~(98%)	27~(22%)	0
34	BA	$1491/1521 \ (98\%)$	331~(22%)	20 (1%)
34	DA	$1498/1521 \ (98\%)$	350~(23%)	22~(1%)
55	BV	6/18~(33%)	2~(33%)	0
55	DV	5/18~(27%)	1 (20%)	0
56	BW	74/76~(97%)	16 (21%)	1 (1%)
56	BY	71/76~(93%)	23~(32%)	2(2%)
56	DW	74/76~(97%)	23 (31%)	2(2%)
56	DY	$\overline{69/76} (90\%)$	21 (30%)	1 (1%)
All	All	$925\overline{1/9454}\ (97\%)$	1946 (21%)	138 (1%)

5 of 1946 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	12	U
1	AA	13	А
1	AA	15	G
1	AA	34	С
1	AA	45	С

5 of 138 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
34	DA	115	G
34	DA	428	G
34	DA	1065	U
1	AA	2769	U
1	AA	2739	U



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

42 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).

Mal	Type	Chain	Dog	Link	Bo	ond leng	ths	Bond angles		
WIOI	Type	Ullalli	nes		Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z >2
58	2QZ	BX	1	58	$7,\!8,\!9$	0.76	0	8,10,12	4.49	5 (62%)
56	4SU	DW	8	56	18,21,22	1.73	5 (27%)	26,30,33	2.24	4 (15%)
56	MIA	BY	37	56	18,24,32	1.19	2 (11%)	18,35,47	1.37	3 (16%)
56	7MG	BY	46	56	22,26,27	1.30	3 (13%)	29,39,42	2.59	7 (24%)
56	PSU	BY	32	56	18,21,22	1.37	2 (11%)	22,30,33	1.80	3 (13%)
58	004	DX	3	58	9,10,11	1.30	1 (11%)	9,12,14	1.10	0
56	4SU	BW	8	56	18,21,22	1.41	2 (11%)	26,30,33	2.09	5 (19%)
58	2R3	BX	8	58	12,14,15	0.67	0	16,18,20	2.12	7 (43%)
58	MVA	DX	9	58	6,7,8	1.13	1 (16%)	7,8,10	1.45	1 (14%)
56	PSU	BW	39	56	18,21,22	1.34	2 (11%)	22,30,33	1.89	4 (18%)
58	004	BX	3	58	9,10,11	1.28	1 (11%)	9,12,14	2.45	2 (22%)
56	MIA	DY	37	56	18,24,32	1.10	2 (11%)	18,35,47	1.31	2 (11%)
56	7MG	DY	46	56	22,26,27	1.24	3 (13%)	29,39,42	2.65	8 (27%)
56	PSU	DW	39	56	18,21,22	1.35	2 (11%)	22,30,33	1.94	4 (18%)
56	5MU	BY	54	56	19,22,23	1.53	5 (26%)	28,32,35	2.18	8 (28%)
56	PSU	DY	32	56	18,21,22	1.33	2 (11%)	22,30,33	1.82	4 (18%)
56	5MU	DY	54	56	19,22,23	1.44	6 (31%)	28,32,35	2.05	5 (17%)
58	2QZ	DX	1	58	7,8,9	0.51	0	8,10,12	4.28	3 (37%)
58	MVA	BX	9	58	6,7,8	0.76	0	7,8,10	1.41	0
56	MIA	BW	37	56	24,31,32	2.37	5 (20%)	26,44,47	2.38	9 (34%)
56	5MU	DW	54	56	19,22,23	1.49	4 (21%)	28,32,35	2.05	7 (25%)
58	2QY	BX	10	58	12,13,14	1.87	1 (8%)	13,16,18	3.61	5 (38%)
58	2R3	DX	8	58	12,14,15	0.58	0	16,18,20	1.76	5 (31%)
56	4SU	DY	8	56	18,21,22	1.75	4 (22%)	26,30,33	2.27	5 (19%)
58	2R1	DX	6	58	10,10,11	1.62	2 (20%)	6,13,15	2.53	3 (50%)
56	PSU	BY	55	56	18,21,22	1.36	2 (11%)	22,30,33	1.84	3 (13%)



Mal	Type	Chain	Dog	Link	Bo	ond leng	ths	Bond angles		
	туре	Chain	nes		Counts	RMSZ	# Z >2	Counts	RMSZ	# Z > 2
56	7MG	DW	46	56	22,26,27	1.31	3 (13%)	29,39,42	2.60	8 (27%)
56	PSU	DW	32	56	18,21,22	1.40	3 (16%)	22,30,33	2.00	4 (18%)
58	MVA	BX	5	58	6,7,8	0.51	0	7,8,10	1.35	1 (14%)
56	PSU	DY	39	56	18,21,22	1.41	2 (11%)	22,30,33	1.82	3 (13%)
58	MVA	DX	5	58	6,7,8	1.04	0	7,8,10	1.44	1 (14%)
58	2R1	BX	6	58	10,10,11	1.99	3 (30%)	6,13,15	4.42	2 (33%)
58	2QY	DX	10	58	12,13,14	1.86	1 (8%)	13,16,18	3.06	5 (38%)
56	7MG	BW	46	56	22,26,27	1.31	4 (18%)	29,39,42	2.64	7 (24%)
56	5MU	BW	54	56	19,22,23	1.44	4 (21%)	28,32,35	1.94	8 (28%)
56	PSU	BW	32	56	18,21,22	1.32	3 (16%)	22,30,33	1.70	5 (22%)
56	PSU	DY	55	56	18,21,22	1.39	2 (11%)	22,30,33	1.87	3 (13%)
56	MIA	DW	37	56	24,31,32	2.19	4 (16%)	26,44,47	2.29	9 (34%)
56	4SU	BY	8	56	18,21,22	1.67	5 (27%)	26,30,33	2.07	6 (23%)
56	PSU	BY	39	56	18,21,22	1.36	2 (11%)	22,30,33	1.80	3 (13%)
56	PSU	BW	55	56	18,21,22	1.34	1 (5%)	22,30,33	1.80	3 (13%)
56	PSU	DW	55	56	18,21,22	1.37	2 (11%)	22,30,33	1.86	4 (18%)

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
58	2QZ	BX	1	58	-	2/6/10/12	-
56	4SU	DW	8	56	-	0/7/25/26	0/2/2/2
56	MIA	BY	37	56	-	2/3/25/34	0/3/3/3
56	$7 \mathrm{MG}$	BY	46	56	-	4/7/37/38	0/3/3/3
56	PSU	BY	32	56	-	0/7/25/26	0/2/2/2
58	004	DX	3	58	-	0/4/6/8	0/1/1/1
56	$4\mathrm{SU}$	BW	8	56	-	0/7/25/26	0/2/2/2
58	2R3	BX	8	58	-	6/11/12/14	0/1/1/1
58	MVA	DX	9	58	-	4/6/8/10	-
56	PSU	BW	39	56	-	0/7/25/26	0/2/2/2
58	004	BX	3	58	-	0/4/6/8	0/1/1/1
56	MIA	DY	37	56	-	3/3/25/34	0/3/3/3
56	7MG	DY	46	56	-	2/7/37/38	0/3/3/3
56	PSU	DW	39	56	-	1/7/25/26	0/2/2/2



1	TX7	n	TT
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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	5MU	BY	54	56	-	3/7/25/26	0/2/2/2
56	PSU	DY	32	56	-	0/7/25/26	0/2/2/2
56	5MU	DY	54	56	-	2/7/25/26	0/2/2/2
58	2QZ	DX	1	58	-	2/6/10/12	-
58	MVA	BX	9	58	-	2/6/8/10	-
56	MIA	BW	37	56	-	5/11/33/34	0/3/3/3
56	5MU	DW	54	56	-	0/7/25/26	0/2/2/2
58	2QY	BX	10	58	-	3/4/8/10	0/1/1/1
58	2R3	DX	8	58	-	6/11/12/14	0/1/1/1
56	4SU	DY	8	56	-	1/7/25/26	0/2/2/2
58	2R1	DX	6	58	-	2/2/14/16	0/1/1/1
56	PSU	BY	55	56	-	2/7/25/26	0/2/2/2
56	7MG	DW	46	56	-	4/7/37/38	0/3/3/3
56	PSU	DW	32	56	-	2/7/25/26	0/2/2/2
58	MVA	BX	5	58	-	4/6/8/10	-
56	PSU	DY	39	56	-	2/7/25/26	0/2/2/2
58	MVA	DX	5	58	-	4/6/8/10	-
58	2R1	BX	6	58	-	1/2/14/16	0/1/1/1
58	2QY	DX	10	58	-	3/4/8/10	0/1/1/1
56	7MG	BW	46	56	-	1/7/37/38	0/3/3/3
56	5MU	BW	54	56	-	0/7/25/26	0/2/2/2
56	PSU	BW	32	56	-	3/7/25/26	0/2/2/2
56	PSU	DY	55	56	-	2/7/25/26	0/2/2/2
56	MIA	DW	37	56	-	7/11/33/34	0/3/3/3
56	4SU	BY	8	56	-	1/7/25/26	0/2/2/2
56	PSU	BY	39	56	-	0/7/25/26	0/2/2/2
56	PSU	BW	55	56	-	2/7/25/26	0/2/2/2
56	PSU	DW	55	56	-	2/7/25/26	0/2/2/2

The worst 5 of 96 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms		Observed(Å)	Ideal(Å)
56	BW	37	MIA	C13-C14	7.83	1.54	1.32
56	DW	37	MIA	C13-C14	7.42	1.53	1.32
56	BW	37	MIA	C2-S10	-6.89	1.69	1.75
58	DX	10	2QY	C-CA	6.02	1.52	1.43
58	BX	10	2QY	C-CA	5.64	1.51	1.43



Mol	Chain	Res	Type	Atoms	Z	$Observed(^{o})$	$Ideal(^{o})$
58	BX	1	2QZ	OG1-CB-CG2	11.55	143.95	109.74
58	DX	1	2QZ	OG1-CB-CG2	11.24	143.03	109.74
58	BX	10	2QY	CN-N-CA	-10.66	107.25	123.45
58	BX	6	2R1	OD2-CG2-CB	-9.89	94.26	112.24
56	BW	46	7MG	N9-C4-N3	9.46	139.62	125.47

The worst 5 of 184 bond angle outliers are listed below:

There are no chirality outliers.

5 of 90 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
56	BW	32	PSU	C2'-C1'-C5-C4
56	BW	32	PSU	O4'-C1'-C5-C4
56	BW	32	PSU	O4'-C1'-C5-C6
56	BW	37	MIA	N6-C12-C13-C14
56	BW	37	MIA	C12-C13-C14-C15

There are no ring outliers.

23 monomers are involved in 48 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	DW	8	4SU	1	0
58	DX	3	004	1	0
58	BX	8	2R3	2	0
58	DX	9	MVA	4	0
58	BX	3	004	4	0
56	DY	46	7MG	2	0
56	DW	39	PSU	6	0
58	DX	1	2QZ	2	0
58	BX	9	MVA	2	0
56	BW	37	MIA	2	0
56	DW	54	5MU	1	0
58	BX	10	2QY	1	0
58	DX	8	2R3	2	0
58	DX	6	2R1	2	0
58	BX	5	MVA	2	0
58	DX	5	MVA	2	0
58	BX	6	2R1	5	0
58	DX	10	2QY	9	0
56	BW	32	PSU	1	0
56	DY	55	PSU	3	0
56	DW	37	MIA	2	0



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Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	BY	8	4SU	1	0
56	DW	55	PSU	1	0

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2056 ligands modelled in this entry, 2052 are monoatomic - leaving 4 for Mogul analysis.

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

Mal	Type Chain Bes Link		Bo	Bond lengths			Bond angles			
	туре	Ullaill	nes		Counts	RMSZ	# Z >2	Counts	RMSZ	# Z > 2
62	GDP	DZ	703	59	24,30,30	1.02	1 (4%)	30,47,47	1.25	2 (6%)
61	SF4	DD	501	37	0,12,12	-	-	-		
61	SF4	BD	501	-	0,12,12	-	-	-		
62	GDP	BZ	702	59	24,30,30	0.95	0	30,47,47	1.42	4 (13%)

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
62	GDP	DZ	703	59	-	1/12/32/32	0/3/3/3
62	GDP	BZ	702	59	-	3/12/32/32	0/3/3/3
61	SF4	BD	501	-	-	-	0/6/5/5
61	SF4	DD	501	37	-	-	0/6/5/5

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
62	DZ	703	GDP	C6-N1	-2.02	1.34	1.37



Mol	Chain	Res	Type	Atoms	Z	$Observed(^{o})$	$Ideal(^{o})$
62	BZ	702	GDP	PA-O3A-PB	-4.62	116.96	132.83
62	DZ	703	GDP	PA-O3A-PB	-3.88	119.51	132.83
62	BZ	702	GDP	C8-N7-C5	2.75	108.23	102.99
62	BZ	702	GDP	O3B-PB-O2B	2.25	116.22	107.64
62	BZ	702	GDP	O3'-C3'-C2'	-2.06	105.17	111.82

The worst 5 of 6 bond angle outliers are listed below:

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
62	ΒZ	702	GDP	C5'-O5'-PA-O3A
62	ΒZ	702	GDP	C5'-O5'-PA-O1A
62	ΒZ	702	GDP	C5'-O5'-PA-O2A
62	DZ	703	GDP	C5'-O5'-PA-O1A

There are no ring outliers.

4 monomers are involved in 15 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
62	DZ	703	GDP	7	0
61	DD	501	SF4	2	0
61	BD	501	SF4	1	0
62	ΒZ	702	GDP	5	0

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







5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.



6 Fit of model and data (i)

6.1 Protein, DNA and RNA chains (i)

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

Mol	Chain	Analysed	<RSRZ $>$	#RSRZ>2	$\mathbf{OWAB}(\mathrm{\AA}^2)$	Q < 0.9
1	AA	2872/2915~(98%)	-0.06	94 (3%) 46 36	13, 31, 166, 313	0
1	CA	2868/2915~(98%)	0.06	122 (4%) 35 25	24, 54, 177, 331	0
2	AB	120/121~(99%)	-0.41	0 100 100	24, 47, 66, 112	0
2	CB	120/121~(99%)	0.01	1 (0%) 86 81	56, 104, 146, 178	0
3	AC	137/228~(60%)	5.85	122 (89%) 0 0	89, 187, 231, 259	0
3	CC	137/228~(60%)	8.38	136 (99%) 0 0	142, 205, 249, 270	0
4	AD	275/276~(99%)	-0.46	2 (0%) 87 84	8, 30, 56, 122	0
4	CD	275/276~(99%)	-0.37	2 (0%) 87 84	13, 44, 77, 134	0
5	AE	204/206~(99%)	-0.47	0 100 100	7, 31, 60, 100	0
5	CE	204/206~(99%)	-0.31	0 100 100	16, 51, 87, 143	0
6	AF	203/210~(96%)	-0.41	0 100 100	6, 32, 76, 141	0
6	CF	203/210~(96%)	-0.19	1 (0%) 91 88	20, 66, 123, 158	0
7	AG	181/182~(99%)	-0.28	2 (1%) 80 75	34, 67, 114, 180	0
7	CG	181/182~(99%)	0.82	27 (14%) 2 1	75, 125, 183, 211	0
8	AH	174/180~(96%)	-0.46	2 (1%) 80 75	21, 46, 74, 199	0
8	CH	174/180~(96%)	0.66	11 (6%) 20 12	52, 92, 139, 174	0
9	AK	130/173~(75%)	1.27	30 (23%) 0 0	65, 131, 198, 223	0
9	CK	130/173~(75%)	2.85	78~(60%) 0 0	85, 163, 212, 233	0
10	AL	66/147~(44%)	4.23	54 (81%) 0 0	112, 182, 229, 247	0
10	CL	66/147~(44%)	5.46	58 (87%) 0 0	105, 183, 232, 263	0
11	AN	140/140~(100%)	-0.58	0 100 100	11, 28, 57, 97	0
11	CN	140/140~(100%)	-0.12	3 (2%) 63 54	35, 59, 92, 143	0
12	AO	122/122 (100%)	-0.43	0 100 100	16, 35, 66, 93	0
12	CO	$12\overline{2/122}~(100\%)$	-0.32	0 100 100	30, 49, 80, 94	0



Mol	Chain	Analysed	$\langle RSRZ \rangle$	#RSRZ>2	$OWAB(Å^2)$	Q < 0.9
13	AP	149/150~(99%)	-0.35	0 100 100	8, 38, 78, 128	0
13	CP	149/150~(99%)	0.27	7 (4%) 31 22	26,75,123,155	0
14	AQ	141/141~(100%)	-0.48	0 100 100	9, 32, 54, 99	0
14	CQ	141/141~(100%)	-0.27	1 (0%) 87 84	19,63,95,146	0
15	AR	118/118~(100%)	-0.48	0 100 100	14, 27, 52, 76	0
15	CR	118/118 (100%)	-0.32	0 100 100	26, 49, 75, 106	0
16	AS	110/112~(98%)	-0.28	0 100 100	24, 47, 76, 86	0
16	CS	110/112~(98%)	0.66	8 (7%) 15 8	61, 96, 140, 166	0
17	AT	131/146~(89%)	-0.30	1 (0%) 86 81	20, 40, 95, 219	0
17	CT	131/146~(89%)	-0.22	1 (0%) 86 81	36, 56, 104, 152	0
18	AU	116/118~(98%)	-0.51	0 100 100	7, 22, 39, 87	0
18	CU	116/118~(98%)	-0.18	0 100 100	31, 55, 88, 107	0
19	AV	101/101~(100%)	-0.60	0 100 100	11, 27, 58, 77	0
19	CV	101/101~(100%)	-0.07	2 (1%) 65 56	29, 69, 102, 162	0
20	AW	112/113~(99%)	-0.47	0 100 100	10, 24, 49, 145	0
20	CW	112/113~(99%)	-0.21	0 100 100	26, 45, 76, 159	0
21	AX	95/96~(98%)	-0.48	0 100 100	12, 33, 64, 108	0
21	CX	95/96~(98%)	0.15	4 (4%) 36 26	37, 63, 100, 173	0
22	AY	107/110~(97%)	-0.40	1 (0%) 84 80	18, 43, 88, 120	0
22	CY	107/110~(97%)	0.57	10 (9%) 8 4	48, 81, 124, 171	0
23	AZ	185/206~(89%)	-0.44	0 100 100	28, 56, 94, 136	0
23	CZ	185/206~(89%)	0.39	12 (6%) 18 11	52, 98, 145, 175	0
24	A0	77/85~(90%)	-0.42	0 100 100	10, 31, 54, 82	0
24	C0	77/85~(90%)	0.28	4 (5%) 27 18	27, 69, 104, 127	0
25	A1	97/98~(98%)	-0.31	1 (1%) 82 77	15, 39, 80, 98	0
25	C1	97/98~(98%)	-0.16	1 (1%) 82 77	31, 56, 95, 144	0
26	A2	70/72~(97%)	-0.39	1 (1%) 75 70	15, 43, 65, 135	0
26	C2	70/72~(97%)	-0.03	1 (1%) 75 70	47, 79, 110, 151	0
27	A3	59/60~(98%)	-0.40	1 (1%) 70 63	11, 26, 53, 112	0
27	C3	59/60~(98%)	0.39	2 (3%) 45 35	31, 63, 103, 162	0
28	A4	69/71~(97%)	0.73	12 (17%) 1 1	47, 102, 188, 221	0



Mol	Chain	Analysed	$\langle RSRZ \rangle$	#RSRZ>2	$OWAB(Å^2)$	Q < 0.9
28	C4	69/71~(97%)	1.31	21 (30%) 0 0	88, 158, 196, 229	0
29	A5	59/60~(98%)	-0.51	0 100 100	11, 23, 50, 68	0
29	C5	59/60~(98%)	-0.26	1 (1%) 70 63	16, 47, 82, 121	0
30	A6	53/54~(98%)	-0.44	0 100 100	17, 36, 62, 77	0
30	C6	53/54~(98%)	-0.11	0 100 100	41, 63, 86, 104	0
31	A7	48/49~(97%)	-0.34	1 (2%) 63 54	11, 21, 54, 100	0
31	C7	48/49~(97%)	-0.22	0 100 100	23, 36, 96, 120	0
32	A8	64/65~(98%)	-0.43	0 100 100	14, 26, 39, 63	0
32	C8	64/65~(98%)	-0.20	0 100 100	27, 53, 71, 94	0
33	A9	37/37~(100%)	-0.29	0 100 100	20, 33, 64, 67	0
33	C9	37/37~(100%)	0.05	0 100 100	44, 62, 90, 101	0
34	BA	1495/1521~(98%)	0.14	50 (3%) 46 36	24, 82, 180, 330	0
34	DA	1501/1521~(98%)	0.33	93 (6%) 20 13	40, 94, 207, 307	0
35	BB	231/256~(90%)	0.50	22 (9%) 8 4	53, 104, 167, 195	0
35	DB	231/256~(90%)	1.21	54 (23%) 0 0	67, 135, 197, 228	0
36	BC	206/239~(86%)	0.73	21 (10%) 6 3	74, 114, 169, 187	0
36	DC	206/239~(86%)	1.71	66 (32%) 0 0	88, 151, 198, 221	0
37	BD	208/209~(99%)	0.27	11 (5%) 26 17	54, 91, 141, 182	0
37	DD	208/209~(99%)	0.13	3 (1%) 75 70	53, 88, 134, 199	0
38	BE	148/162~(91%)	-0.09	0 100 100	37, 72, 110, 150	0
38	DE	148/162~(91%)	0.35	6 (4%) 37 27	43, 90, 131, 177	0
39	BF	100/101~(99%)	-0.12	0 100 100	43, 81, 124, 145	0
39	DF	100/101~(99%)	0.02	2 (2%) 65 56	49, 90, 133, 146	0
40	BG	155/156~(99%)	0.62	19 (12%) 4 2	66, 100, 155, 194	0
40	DG	155/156~(99%)	1.52	40 (25%) 0 0	81, 131, 178, 214	0
41	BH	137/138~(99%)	0.11	1 (0%) 87 84	45, 73, 105, 121	0
41	DH	137/138~(99%)	0.35	7 (5%) 28 19	52, 92, 126, 160	0
42	BI	127/128~(99%)	1.37	31 (24%) 0 0	59, 115, 169, 192	0
42	DI	127/128~(99%)	2.47	69 (54%) 0 0	79, 154, 192, 248	0
43	BJ	97/105~(92%)	1.59	31 (31%) 0 0	75, 123, 173, 194	0
43	DJ	96/105~(91%)	2.40	50 (52%) 0 0	77, 160, 201, 221	0



Mol	Chain	Analysed	$\langle RSRZ \rangle$	# RSRZ > 2	$OWAB(Å^2)$	Q < 0.9
44	BK	114/129~(88%)	-0.28	1 (0%) 84 80	30, 73, 117, 125	0
44	DK	114/129~(88%)	0.23	2 (1%) 68 61	61, 93, 139, 170	0
45	BL	122/132~(92%)	-0.21	1 (0%) 86 81	27, 61, 88, 110	0
45	DL	122/132~(92%)	0.04	1 (0%) 86 81	41, 70, 101, 142	0
46	BM	117/126~(92%)	0.53	9 (7%) 13 7	62, 108, 154, 187	0
46	DM	116/126~(92%)	1.46	34 (29%) 0 0	64, 156, 202, 235	0
47	BN	60/61~(98%)	0.80	5 (8%) 11 6	60, 110, 153, 173	0
47	DN	60/61~(98%)	1.97	27 (45%) 0 0	95, 142, 192, 210	0
48	BO	88/89~(98%)	-0.17	0 100 100	36, 69, 107, 139	0
48	DO	88/89~(98%)	0.09	0 100 100	50, 83, 115, 140	0
49	BP	82/88~(93%)	0.20	2 (2%) 59 49	46, 81, 126, 151	0
49	DP	82/88~(93%)	0.30	2 (2%) 59 49	50, 76, 108, 121	0
50	BQ	99/105~(94%)	-0.09	0 100 100	46, 72, 103, 119	0
50	DQ	99/105~(94%)	0.22	2 (2%) 65 56	47, 80, 116, 148	0
51	BR	68/88~(77%)	0.25	3 (4%) 34 24	45, 71, 115, 136	0
51	DR	68/88~(77%)	0.52	6 (8%) 10 5	58, 90, 129, 147	0
52	BS	84/93~(90%)	2.00	36 (42%) 0 0	68, 127, 168, 222	0
52	DS	83/93~(89%)	3.09	60 (72%) 0 0	98, 164, 213, 222	0
53	BT	96/106~(90%)	0.31	2 (2%) 63 54	49, 84, 117, 160	0
53	DT	96/106~(90%)	0.16	3 (3%) 49 39	48, 81, 126, 145	0
54	BU	23/27~(85%)	1.34	6(26%) 0 0	60, 100, 114, 154	0
54	DU	23/27~(85%)	2.81	17 (73%) 0 0	78, 134, 159, 181	0
55	BV	7/18~(38%)	1.22	2(28%) 0 0	61, 69, 175, 190	0
55	DV	6/18~(33%)	1.85	3 (50%) 0 0	89, 95, 181, 204	0
56	BW	69/76~(90%)	0.28	3 (4%) 35 25	38, 69, 118, 210	0
56	BY	67/76~(88%)	4.14	64 (95%) 0 0	76, 232, 280, 304	0
56	DW	69/76~(90%)	0.56	1 (1%) 75 70	48, 108, 151, 254	0
56	DY	66/76~(86%)	6.43	66 (100%) 0 0	145, 283, 315, 338	0
57	ΒZ	728/758~(96%)	0.71	113 (15%) 2 1	38, 97, 190, 248	0
57	DZ	730/758~(96%)	1.48	242 (33%) 0 0	27, 113, 212, 264	0
58	BX	3/10~(30%)	-0.18	0 100 100	83, 83, 83, 83	0



Mol	Chain	Analysed	$\langle RSRZ \rangle$	#RSRZ>2	$OWAB(Å^2)$	Q<0.9
58	DX	3/10~(30%)	0.19	0 100 100	81, 81, 81, 81	0
All	All	22705/23918~(94%)	0.37	2127 (9%) 8 4	6, 70, 189, 338	0

The worst 5 of 2127 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	CC	166	ASN	26.6
3	CC	167	ASP	25.1
3	CC	179	ALA	24.3
3	AC	171	ALA	21.6
3	CC	175	PRO	19.2

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(Å^2)$	Q<0.9
56	PSU	DY	32	20/21	0.14	1.13	275,275,275,275	0
56	PSU	DY	39	20/21	0.18	1.02	291,291,291,291	0
56	PSU	BY	55	20/21	0.27	0.51	243,243,243,243	0
56	PSU	DY	55	20/21	0.29	0.66	252,252,252,252	0
56	5MU	DY	54	21/22	0.38	0.84	303,303,303,303	0
56	4SU	DY	8	20/21	0.40	0.42	277,277,277,277	0
56	MIA	DY	37	22/30	0.46	0.85	271,271,271,271	0
56	5MU	BY	54	21/22	0.47	0.58	246,246,246,246	0
56	PSU	BY	32	20/21	0.47	0.55	226,226,226,226	0
56	7MG	BY	46	24/25	0.49	0.34	276,276,276,276	0
56	4SU	BY	8	20/21	0.52	0.34	239,239,239,239	0
56	7MG	DY	46	24/25	0.52	0.40	266,266,266,266	0
56	PSU	BY	39	20/21	0.68	0.54	$197,\!197,\!197,\!197$	0
56	MIA	BY	37	22/30	0.72	0.42	186,186,186,186	0
56	PSU	DW	32	20/21	0.82	0.31	126,126,126,126	0
58	004	DX	3	10/11	0.83	0.19	81,81,81,81	0
58	2R1	DX	6	10/11	0.83	0.15	81,81,81,81	0
56	PSU	DW	39	20/21	0.86	0.28	112,112,112,112	1
58	MVA	BX	5	8/9	0.87	0.15	82,82,82,82	0
56	7MG	DW	46	24/25	0.87	0.23	$124, 124, 124, \overline{124}$	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
56	PSU	DW	55	20/21	0.88	0.19	92,92,92,92	0
56	5MU	DW	54	21/22	0.89	0.20	95,95,95,95	1
58	2R1	BX	6	10/11	0.89	0.16	82,82,82,82	1
56	7MG	BW	46	24/25	0.89	0.19	76,76,76,76	3
58	004	BX	3	10/11	0.90	0.12	82,82,82,82	0
58	MVA	BX	9	8/9	0.90	0.31	82,82,82,82	0
58	2QY	BX	10	13/14	0.90	0.19	82,82,82,82	0
56	4SU	DW	8	20/21	0.91	0.14	103,103,103,103	0
56	PSU	BW	55	20/21	0.91	0.17	79,79,79,79	0
56	MIA	DW	37	29/30	0.91	0.24	109,109,109,109	0
56	5MU	BW	54	21/22	0.92	0.18	80,80,80,80	0
58	2R3	BX	8	14/15	0.92	0.14	82,82,82,82	0
58	2QY	DX	10	13/14	0.92	0.17	81,81,81,81	0
58	2QZ	BX	1	9/10	0.93	0.25	82,82,82,82	0
56	MIA	BW	37	29/30	0.94	0.22	$79,\!79,\!79,\!79$	0
58	MVA	DX	9	8/9	0.94	0.24	81,81,81,81	0
56	PSU	BW	32	20/21	0.94	0.20	73,73,73,73	1
58	2QZ	DX	1	9/10	0.94	0.24	81,81,81,81	0
58	MVA	DX	5	8/9	0.95	0.36	81,81,81,81	0
56	4SU	BW	8	20/21	0.96	0.14	60,60,60,60	1
58	2R3	DX	8	14/15	0.96	0.13	81,81,81,81	0
56	PSU	BW	39	20/21	0.96	0.14	$65,\!65,\!65,\!65$	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(Å^2)$	Q<0.9
59	MG	BA	1660	1/1	0.10	0.39	82,82,82,82	0
59	MG	CA	3460	1/1	0.11	0.95	104,104,104,104	0
59	MG	DA	1757	1/1	0.26	1.14	111,111,111,111	0
59	MG	DA	1738	1/1	0.29	0.48	95,95,95,95	0
59	MG	CA	3155	1/1	0.31	0.23	112,112,112,112	0
59	MG	CA	3096	1/1	0.32	0.24	125,125,125,125	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(Å^2)$	Q<0.9
59	MG	CA	3139	1/1	0.32	0.70	126,126,126,126	0
59	MG	CA	3646	1/1	0.36	0.16	91,91,91,91	0
59	MG	BA	1755	1/1	0.38	0.14	86,86,86,86	0
59	MG	AA	3108	1/1	0.40	0.64	101,101,101,101	0
59	MG	AA	3040	1/1	0.42	0.17	113,113,113,113	0
59	MG	BA	1767	1/1	0.44	0.42	96,96,96,96	0
59	MG	AA	3212	1/1	0.45	0.82	81,81,81,81	0
59	MG	DA	1626	1/1	0.47	0.30	71,71,71,71	0
59	MG	CA	3565	1/1	0.47	0.19	$95,\!95,\!95,\!95$	0
59	MG	BA	1657	1/1	0.47	0.25	78,78,78,78	0
59	MG	AA	3747	1/1	0.48	0.33	85,85,85,85	0
59	MG	CA	3620	1/1	0.48	0.64	96,96,96,96	0
59	MG	DA	1754	1/1	0.48	0.40	120,120,120,120	0
59	MG	BA	1812	1/1	0.48	0.20	79,79,79,79	0
59	MG	AA	3266	1/1	0.49	0.78	90,90,90,90	0
59	MG	CA	3100	1/1	0.49	0.25	81,81,81,81	0
59	MG	AA	3807	1/1	0.50	0.31	77,77,77,77	0
59	MG	AA	3617	1/1	0.53	0.15	77,77,77,77	0
59	MG	AA	3122	1/1	0.53	0.70	99,99,99,99	0
59	MG	BA	1616	1/1	0.54	0.27	122,122,122,122	0
59	MG	CA	3244	1/1	0.54	0.30	89,89,89,89	0
59	MG	DA	1639	1/1	0.55	0.55	69,69,69,69	0
59	MG	AA	3269	1/1	0.55	0.33	63,63,63,63	0
59	MG	DA	1733	1/1	0.56	0.34	92,92,92,92	0
59	MG	CA	3546	1/1	0.56	0.15	88,88,88,88	0
59	MG	CA	3127	1/1	0.56	0.41	94,94,94,94	0
59	MG	CA	3485	1/1	0.56	0.30	85,85,85,85	0
59	MG	BA	1775	1/1	0.57	0.34	90,90,90,90	0
59	MG	AF	305	1/1	0.57	0.53	76,76,76,76	0
59	MG	CA	3080	1/1	0.58	0.24	75,75,75,75	0
59	MG	BA	1786	1/1	0.58	0.22	82,82,82,82	0
59	MG	AA	3754	1/1	0.58	0.25	64,64,64,64	0
59	MG	CA	3101	1/1	0.58	1.12	84,84,84,84	0
59	MG	DA	1717	1/1	0.59	0.28	$95,\!95,\!95,\!95$	0
59	MG	CA	3149	1/1	0.59	0.17	100,100,100,100	0
59	MG	BA	1691	1/1	0.59	0.45	86,86,86,86	0
59	MG	CA	3186	1/1	0.59	0.61	77,77,77,77	0
59	MG	AB	3017	1/1	0.59	0.17	59, 59, 59, 59, 59	0
59	MG	BA	1764	1/1	0.60	0.09	71,71,71,71	0
59	MG	BA	1673	1/1	0.60	0.20	80,80,80,80	0
59	MG	CA	3040	1/1	0.61	0.47	79,79,79,79	0
59	MG	BA	1790	1/1	0.61	0.15	96,96,96,96	0



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	Type MC	Chain	Res		RSCC	R5R	B-lactors (A^{-})	Q < 0.9
59	MG	CB	3013	1/1	0.62	0.17	100,100,100,100	0
59	MG	CA	3075	1/1	0.62	0.65	90,90,90,90	0
59	MG	BA	1741	1/1	0.63	0.19	88,88,88,88	0
59	MG	CA	3146	1/1	0.63	0.95	82,82,82,82	0
59	MG	BA	1776	1/1	0.64	0.21	97,97,97,97	0
59	MG	AA	3242	1/1	0.64	0.29	85,85,85,85	0
59	MG	DA	1655	1/1	0.64	0.24	83,83,83,83	0
59	MG	CQ	202	1/1	0.64	0.29	74,74,74,74	0
59	MG	DT	3001	1/1	0.64	0.42	60,60,60,60	0
59	MG	AA	3240	1/1	0.65	0.16	69,69,69,69	0
59	MG	CA	3624	1/1	0.65	0.16	118,118,118,118	0
59	MG	AA	3241	1/1	0.65	0.21	65,65,65,65	0
59	MG	AA	3195	1/1	0.65	0.37	69,69,69,69	0
59	MG	CP	201	1/1	0.65	0.16	62,62,62,62	1
59	MG	CA	3108	1/1	0.65	0.27	78,78,78,78	0
59	MG	DA	1623	1/1	0.65	0.24	72,72,72,72	0
59	MG	DK	5001	1/1	0.65	0.16	76,76,76,76	0
59	MG	AA	3016	1/1	0.65	0.45	64,64,64,64	0
59	MG	BA	1638	1/1	0.66	0.21	$66,\!66,\!66,\!66$	0
59	MG	CA	3654	1/1	0.66	0.40	90,90,90,90	0
59	MG	AA	3541	1/1	0.66	0.12	74,74,74,74	0
59	MG	DA	1746	1/1	0.66	0.10	81,81,81,81	0
59	MG	BL	201	1/1	0.67	0.37	84,84,84,84	0
59	MG	CA	3587	1/1	0.67	0.34	70,70,70,70	0
59	MG	DA	1718	1/1	0.67	0.32	101,101,101,101	0
59	MG	BA	1654	1/1	0.67	0.23	76,76,76,76	0
59	MG	DA	1642	1/1	0.67	0.20	62,62,62,62	0
59	MG	DA	1634	1/1	0.68	0.29	66,66,66,66	0
59	MG	AA	3680	1/1	0.69	0.33	79,79,79,79	0
59	MG	CA	3061	1/1	0.69	0.35	68,68,68,68	0
59	MG	DA	1659	1/1	0.69	0.29	78,78,78,78	0
59	MG	CA	3237	1/1	0.69	0.49	94,94,94,94	0
59	MG	AA	3582	1/1	0.69	0.58	76,76,76,76	0
59	MG	BA	1643	1/1	0.69	0.34	66,66,66,66	0
59	MG	BA	1802	1/1	0.70	0.24	76,76,76,76	0
59	MG	CA	3579	1/1	0.70	0.22	65,65,65,65	0
59	MG	CA	3117	1/1	0.70	0.28	67,67,67.67	0
59	MG	AA	3717	1/1	0.70	0.56	68,68.68.68	0
59	MG	CA	3242	1/1	0.70	0.39	82,82,82,82	0
59	MG	AD	305	1/1	0.70	0.63	86.86.86.86	0
59	MG	CA	3304	1/1	0.70	0.12	67.67.67.67	0
59	MG	AE	302	1/1	0.70	0.24	57,57.57.57	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9			
59	MG	AA	3238	1/1	0.70	0.44	76,76,76,76	0			
59	MG	CA	3501	1/1	0.70	0.45	74,74,74,74	0			
59	MG	CA	3538	1/1	0.70	0.15	72,72,72,72	0			
59	MG	CA	3154	1/1	0.70	0.20	64,64,64,64	0			
59	MG	CA	3548	1/1	0.70	0.10	90,90,90,90	0			
59	MG	DA	1756	1/1	0.71	0.57	86,86,86,86	0			
59	MG	DA	1654	1/1	0.71	0.35	63,63,63,63	0			
59	MG	CA	3499	1/1	0.72	0.49	$62,\!62,\!62,\!62$	0			
59	MG	BA	1602	1/1	0.72	0.18	79,79,79,79	0			
59	MG	AB	3004	1/1	0.72	0.32	69,69,69,69	0			
59	MG	CA	3152	1/1	0.72	0.35	64,64,64,64	0			
59	MG	BA	1631	1/1	0.72	0.17	71,71,71,71	0			
59	MG	BA	1697	1/1	0.72	1.08	$99,\!99,\!99,\!99$	0			
59	MG	AA	3739	1/1	0.72	0.17	38,38,38,38	0			
59	MG	AA	3296	1/1	0.72	0.25	$67,\!67,\!67,\!67$	0			
59	MG	CA	3112	1/1	0.72	0.38	$69,\!69,\!69,\!69$	0			
59	MG	BA	1758	1/1	0.72	0.36	76,76,76,76	0			
59	MG	CA	3294	1/1	0.72	0.09	72,72,72,72	0			
59	MG	AA	3140	1/1	0.72	0.58	$62,\!62,\!62,\!62$	0			
59	MG	CA	3325	1/1	0.72	0.13	38,38,38,38	0			
59	MG	CA	3378	1/1	0.72	0.24	$97,\!97,\!97,\!97$	0			
59	MG	CA	3135	1/1	0.72	0.31	59, 59, 59, 59, 59	0			
59	MG	DA	1611	1/1	0.72	0.39	89,89,89,89	0			
59	MG	AA	3277	1/1	0.72	0.69	99,99,99,99	0			
59	MG	CA	3536	1/1	0.73	0.26	84,84,84,84	0			
59	MG	CA	3205	1/1	0.73	0.53	81,81,81,81	0			
59	MG	AA	3571	1/1	0.73	0.34	94,94,94,94	0			
59	MG	CA	3486	1/1	0.73	0.24	81,81,81,81	0			
59	MG	AA	3769	1/1	0.73	0.17	63,63,63,63	0			
59	MG	CB	3008	1/1	0.73	0.20	66,66,66,66	0			
59	MG	BA	1601	1/1	0.73	0.34	95,95,95,95	0			
59	MG	CA	3505	1/1	0.74	0.09	67,67,67,67	0			
59	MG	DA	1724	1/1	0.74	0.41	70,70,70,70	0			
59	MG	AA	3363	1/1	0.74	0.20	82,82,82,82	0			
59	MG	CA	3420	1/1	0.74	0.33	69,69,69,69	0			
59	MG	BA	1716	1/1	0.74	0.24	86,86,86,86	0			
59	MG	CA	3093	1/1	0.74	0.71	75,75,75,75	0			
59	MG	CA	3553	1/1	0.74	0.19	90,90,90,90	0			
59	MG	AA	3536	1/1	0.74	0.24	66,66,66,66	0			
59	MG	BA	1612	1/1	0.74	0.25	92,92,92,92	0			
59	MG	CA	3350	1/1	0.74	0.09	82,82,82,82	0			
59	MG	CA	3041	1/1	0.75	0.41	$61,\!61,\!61,\!61$	0			



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(Å^2)$	Q<0.9
59	MG	AA	3814	1/1	0.75	0.59	72,72,72,72	0
59	MG	AA	3767	1/1	0.75	0.35	67,67,67,67	0
59	MG	AA	3625	1/1	0.75	0.21	51,51,51,51	0
59	MG	CA	3082	1/1	0.75	0.75	76,76,76,76	0
59	MG	CA	3089	1/1	0.75	0.47	87,87,87,87	0
59	MG	CA	3602	1/1	0.75	0.10	84,84,84,84	0
59	MG	BA	1707	1/1	0.75	0.11	72,72,72,72	0
59	MG	BA	1714	1/1	0.75	0.28	74,74,74,74	0
59	MG	BA	1604	1/1	0.75	0.19	63,63,63,63	0
59	MG	BA	1721	1/1	0.75	0.20	66,66,66,66	0
59	MG	CA	3216	1/1	0.75	0.47	79,79,79,79	0
59	MG	DA	1742	1/1	0.75	0.21	72,72,72,72	0
59	MG	CA	3502	1/1	0.75	0.66	90,90,90,90	0
59	MG	AA	3773	1/1	0.75	0.45	35,35,35,35	1
59	MG	AA	3067	1/1	0.75	0.42	61,61,61,61	0
59	MG	CQ	204	1/1	0.75	0.33	74,74,74,74	0
59	MG	BA	1670	1/1	0.75	0.23	69,69,69,69	0
59	MG	CA	3542	1/1	0.75	0.41	87,87,87,87	0
59	MG	AA	3712	1/1	0.76	0.69	70,70,70,70	0
59	MG	DA	1631	1/1	0.76	0.09	74,74,74,74	0
59	MG	AE	301	1/1	0.76	0.57	69,69,69,69	0
59	MG	DA	1769	1/1	0.76	0.44	74,74,74,74	0
59	MG	CA	3517	1/1	0.76	0.16	62,62,62,62	0
59	MG	CA	3390	1/1	0.76	0.23	80,80,80,80	0
59	MG	DA	1622	1/1	0.77	0.35	60,60,60,60	0
59	MG	CA	3194	1/1	0.77	0.23	52,52,52,52	0
59	MG	CA	3097	1/1	0.77	0.29	66,66,66,66	0
59	MG	CA	3084	1/1	0.77	0.41	56, 56, 56, 56	0
59	MG	CA	3348	1/1	0.77	0.28	44,44,44,44	0
59	MG	CA	3236	1/1	0.77	0.68	81,81,81,81	0
59	MG	BA	1665	1/1	0.77	0.45	73,73,73,73	0
59	MG	BA	1788	1/1	0.77	0.19	79,79,79,79	0
59	MG	AA	3323	1/1	0.77	0.21	64,64,64,64	0
59	MG	CV	201	1/1	0.77	0.81	117,117,117,117	0
59	MG	DA	1674	1/1	0.77	0.28	77,77,77,77	0
59	MG	CA	3279	1/1	0.77	0.17	26,26,26,26	0
59	MG	CA	3572	1/1	0.78	0.16	70,70,70,70	0
59	MG	AA	3066	1/1	0.78	0.14	$51, \overline{51}, \overline{51}, \overline{51}$	0
59	MG	BA	1698	1/1	0.78	0.42	63,63,63,63	0
59	MG	CA	3240	1/1	0.78	0.48	71,71,71,71	0
59	MG	CA	3494	1/1	0.78	0.24	97,97,97,97	0
59	MG	BB	3001	1/1	0.78	0.16	91,91,91,91	0



Mol	Type	Chain	\mathbf{Res}	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	CA	3630	1/1	0.78	0.10	65,65,65,65	0
59	MG	DA	1715	1/1	0.78	0.28	79,79,79,79	0
59	MG	CA	3092	1/1	0.78	0.78	79,79,79,79	0
59	MG	AA	3732	1/1	0.78	0.28	70,70,70,70	0
59	MG	CA	3007	1/1	0.78	0.40	92,92,92,92	0
59	MG	BA	1614	1/1	0.78	0.14	72,72,72,72	0
59	MG	AA	3225	1/1	0.78	0.15	73,73,73,73	0
59	MG	CA	3158	1/1	0.78	0.37	54,54,54,54	0
59	MG	CA	3541	1/1	0.78	0.28	63,63,63,63	0
59	MG	CA	3055	1/1	0.78	0.12	77,77,77,77	0
59	MG	AA	3644	1/1	0.78	0.33	56,56,56,56	0
59	MG	CA	3388	1/1	0.78	0.14	90,90,90,90	0
59	MG	CA	3550	1/1	0.78	0.09	62,62,62,62	1
59	MG	AA	3181	1/1	0.78	0.33	79,79,79,79	0
59	MG	AA	3002	1/1	0.78	0.21	57,57,57,57	0
59	MG	CA	3389	1/1	0.79	0.34	59,59,59,59	0
59	MG	AA	3827	1/1	0.79	0.37	38,38,38,38	0
59	MG	CA	3150	1/1	0.79	0.19	$57,\!57,\!57,\!57$	0
59	MG	BA	1811	1/1	0.79	0.20	77,77,77,77	0
59	MG	BA	1634	1/1	0.79	0.39	64,64,64,64	0
59	MG	AA	3780	1/1	0.79	0.40	72,72,72,72	0
59	MG	DA	1722	1/1	0.79	0.13	77,77,77,77	0
59	MG	CA	3490	1/1	0.79	0.13	50, 50, 50, 50	0
59	MG	AA	3167	1/1	0.79	0.19	45,45,45,45	0
59	MG	CA	3180	1/1	0.79	0.36	62,62,62,62	0
59	MG	BA	1644	1/1	0.79	0.19	74,74,74,74	0
59	MG	CA	3037	1/1	0.79	0.72	$57,\!57,\!57,\!57$	0
59	MG	CA	3591	1/1	0.79	0.11	60,60,60,60	0
59	MG	CA	3600	1/1	0.79	0.52	86,86,86,86	0
59	MG	AX	3001	1/1	0.79	0.31	52,52,52,52	0
59	MG	CA	3514	1/1	0.79	0.42	64,64,64,64	0
59	MG	AA	3281	1/1	0.79	0.29	75,75,75,75	0
59	MG	CA	3044	1/1	0.79	0.21	89,89,89,89	0
59	MG	AA	3768	1/1	0.80	0.19	58,58,58,58	0
59	MG	BA	1619	1/1	0.80	0.21	59,59,59,59	0
59	MG	CA	3208	1/1	0.80	0.63	74,74,74,74	0
59	MG	BA	1628	1/1	0.80	0.30	87,87,87,87	0
59	MG	AA	3273	1/1	0.80	0.77	90,90,90,90	0
59	MG	BA	1704	1/1	0.80	0.31	71,71,71,71	0
59	MG	AA	3219	1/1	0.80	0.21	61,61,61,61	0
59	MG	AA	3352	1/1	0.80	0.36	47,47,47,47	0
59	MG	AA	3012	1/1	0.80	0.35	$49,\!49,\!49,\!49$	0



Mol	Tvpe	Chain	$\frac{15 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	B -factors($Å^2$)	Q<0.9
59	MG	BS	101	1/1	0.80	0.16	79.79.79.79	0
59	MG	DA	1633	1/1	0.80	0.27	55.55.55.55	0
59	MG	CA	3289	1/1	0.80	0.28	65,65,65,65	0
59	MG	CA	3005	1/1	0.80	0.19	48,48,48,48	0
59	MG	AA	3708	1/1	0.80	0.30	61,61,61,61	0
59	MG	CA	3307	1/1	0.80	0.31	60,60,60,60	0
59	MG	CA	3555	1/1	0.80	0.14	71,71,71,71	0
59	MG	CA	3557	1/1	0.80	0.22	76,76,76,76	0
59	MG	CA	3563	1/1	0.80	0.09	75,75,75,75	0
59	MG	CA	3030	1/1	0.80	0.51	59, 59, 59, 59, 59	0
59	MG	CA	3034	1/1	0.80	0.29	77,77,77,77	0
59	MG	AA	3816	1/1	0.80	0.70	66,66,66,66	0
59	MG	CA	3583	1/1	0.80	0.16	80,80,80,80	0
59	MG	CA	3038	1/1	0.80	0.51	97,97,97,97	0
59	MG	BA	1655	1/1	0.80	0.15	59, 59, 59, 59	0
59	MG	AA	3820	1/1	0.80	0.43	85,85,85,85	0
59	MG	AA	3761	1/1	0.80	0.38	92,92,92,92	0
59	MG	CA	3605	1/1	0.80	0.21	70,70,70,70	0
59	MG	AB	3003	1/1	0.80	0.23	60,60,60,60	0
59	MG	BA	1668	1/1	0.80	0.16	69,69,69,69	0
59	MG	CA	3072	1/1	0.80	0.38	66,66,66,66	0
59	MG	AA	3586	1/1	0.80	0.35	74,74,74,74	0
59	MG	CA	3077	1/1	0.80	0.24	42,42,42,42	0
59	MG	BA	1778	1/1	0.80	0.16	54,54,54,54	0
59	MG	BA	1693	1/1	0.81	0.47	76,76,76,76	0
59	MG	AA	3128	1/1	0.81	0.47	89,89,89,89	0
59	MG	AA	3109	1/1	0.81	0.34	56, 56, 56, 56	0
59	MG	AW	3002	1/1	0.81	0.25	$47,\!47,\!47,\!47$	0
59	MG	AA	3227	1/1	0.81	0.18	22,22,22,22	0
59	MG	BA	1713	1/1	0.81	0.58	$68,\!68,\!68,\!68$	0
59	MG	CA	3122	1/1	0.81	0.70	58, 58, 58, 58	0
59	MG	BA	1810	1/1	0.81	0.13	82,82,82,82	0
59	MG	CA	3513	1/1	0.81	0.16	$70,\!70,\!70,\!70$	0
59	MG	DA	1704	1/1	0.81	0.18	49,49,49,49	0
59	MG	CA	3068	1/1	0.81	0.43	66, 66, 66, 66	0
59	MG	AA	3627	1/1	0.81	0.15	76, 76, 76, 76	0
59	MG	CA	3631	1/1	0.81	0.11	$65,\!65,\!65,\!65$	0
59	MG	CA	3145	1/1	0.81	0.44	76,76,76,76	0
59	MG	AA	3817	1/1	0.81	0.18	75,75,75,75	0
59	MG	DA	1727	1/1	0.81	0.13	$61,\!61,\!61,\!61$	0
59	MG	AA	3629	1/1	0.81	0.17	77,77,77,77	0
59	MG	CA	3078	1/1	0.81	0.48	57,57,57,57	0



Mol	Type	Chain	\mathbf{Res}	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	AA	3643	1/1	0.81	0.24	84,84,84,84	0
59	MG	AA	3556	1/1	0.81	0.32	66,66,66,66	0
59	MG	AA	3653	1/1	0.81	0.22	60,60,60,60	0
59	MG	AA	3675	1/1	0.81	0.14	64,64,64,64	0
59	MG	CA	3013	1/1	0.81	0.23	42,42,42,42	0
59	MG	AA	3206	1/1	0.81	0.54	106,106,106,106	0
59	MG	AA	3051	1/1	0.81	0.47	48,48,48,48	0
59	MG	CA	3202	1/1	0.81	0.71	73,73,73,73	0
59	MG	BA	1689	1/1	0.82	0.51	71,71,71,71	0
59	MG	BA	1690	1/1	0.82	0.40	71,71,71,71	0
59	MG	CA	3406	1/1	0.82	0.13	77,77,77,77	0
59	MG	CA	3413	1/1	0.82	0.22	39,39,39,39	0
59	MG	DA	1632	1/1	0.82	0.29	57,57,57,57	0
59	MG	AA	3601	1/1	0.82	0.11	61,61,61,61	0
59	MG	CA	3457	1/1	0.82	0.26	43,43,43,43	0
59	MG	CA	3575	1/1	0.82	0.21	71,71,71,71	0
59	MG	AA	3660	1/1	0.82	0.22	61,61,61,61	0
59	MG	BA	1635	1/1	0.82	0.51	$65,\!65,\!65,\!65$	0
59	MG	CA	3050	1/1	0.82	0.45	75,75,75,75	0
59	MG	AA	3315	1/1	0.82	0.22	$65,\!65,\!65,\!65$	0
59	MG	DA	1669	1/1	0.82	0.20	$65,\!65,\!65,\!65$	0
59	MG	CA	3060	1/1	0.82	0.39	72,72,72,72	0
59	MG	CA	3125	1/1	0.82	0.32	78, 78, 78, 78, 78	0
59	MG	A0	101	1/1	0.82	0.20	$69,\!69,\!69,\!69$	0
59	MG	A7	101	1/1	0.82	0.16	$55,\!55,\!55,\!55$	0
59	MG	BA	1648	1/1	0.82	0.11	74, 74, 74, 74	0
59	MG	AA	3149	1/1	0.82	0.33	$51,\!51,\!51,\!51$	0
59	MG	AA	3693	1/1	0.82	0.14	$69,\!69,\!69,\!69$	0
59	MG	AA	3558	1/1	0.82	0.08	48,48,48,48	0
59	MG	CA	3528	1/1	0.82	0.10	38,38,38,38	0
59	MG	BA	1723	1/1	0.82	0.24	70,70,70,70	0
59	MG	AB	3008	1/1	0.82	0.38	52,52,52,52	0
59	MG	CA	3333	1/1	0.82	0.36	68,68,68,68	0
59	MG	AA	3258	1/1	0.82	0.44	68,68,68,68	0
59	MG	AA	3640	1/1	0.82	0.21	68,68,68,68	0
59	MG	AA	3087	1/1	0.82	0.48	55,55,55,55	0
59	MG	DA	1610	1/1	0.82	0.71	71,71,71,71	0
59	MG	AA	3018	1/1	0.82	1.43	67,67,67,67	0
59	MG	DA	1614	1/1	0.82	0.18	65,65,65,65	0
59	MG	DA	1605	1/1	0.83	0.33	105,105,105,105	0
59	MG	AA	3809	1/1	0.83	0.29	57,57,57,57	0
59	MG	CA	3193	1/1	0.83	0.44	89,89,89,89	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(A ²)	Q<0.9
59	MG	CA	3058		0.83	0.33	67,67,67,67	0
59	MG	AA	3656		0.83	0.23	80,80,80,80	0
59	MG	CA	3559		0.83	0.12	75,75,75,75	0
59	MG	AA	3622		0.83	0.22	60,60,60,60	0
59	MG	BA	1633		0.83	0.25	63,63,63,63	0
59	MG	CA	3566	1/1	0.83	0.35	30,30,30,30	1
59	MG	CA	3001	1/1	0.83	0.25	64,64,64,64	0
59	MG	CA	3225	1/1	0.83	0.34	64,64,64,64	0
59	MG	AA	3450	1/1	0.83	0.10	58,58,58,58	0
59	MG	AA	3070	1/1	0.83	0.40	81,81,81,81	0
59	MG	A0	102	1/1	0.83	0.09	56,56,56,56	0
59	MG	CA	3023	1/1	0.83	0.42	68,68,68,68	0
59	MG	DA	1656	1/1	0.83	0.13	63,63,63,63	0
59	MG	CA	3598	1/1	0.83	0.15	65,65,65,65	0
59	MG	AA	3583	1/1	0.83	0.14	63,63,63,63	0
59	MG	AA	3019	1/1	0.83	0.29	70,70,70,70	0
59	MG	AA	3596	1/1	0.83	0.31	$65,\!65,\!65,\!65$	0
59	MG	CA	3608	1/1	0.83	0.32	50, 50, 50, 50	1
59	MG	BA	1603	1/1	0.83	0.11	$61,\!61,\!61,\!61$	0
59	MG	AA	3714	1/1	0.83	0.24	70,70,70,70	0
59	MG	AA	3776	1/1	0.83	0.12	$69,\!69,\!69,\!69$	0
59	MG	CA	3323	1/1	0.83	0.40	87,87,87,87	0
59	MG	CA	3644	1/1	0.83	0.20	66,66,66,66	0
59	MG	CA	3518	1/1	0.83	0.11	$65,\!65,\!65,\!65$	0
59	MG	AA	3056	1/1	0.83	1.05	96,96,96,96	0
59	MG	CA	3159	1/1	0.83	0.59	69,69,69,69	0
59	MG	CA	3172	1/1	0.83	0.35	81,81,81,81	0
59	MG	CD	302	1/1	0.83	0.53	$56,\!56,\!56,\!56$	0
59	MG	CA	3176	1/1	0.83	0.42	60,60,60,60	0
59	MG	CA	3367	1/1	0.83	0.21	63,63,63,63	0
59	MG	CA	3377	1/1	0.83	0.10	52,52,52,52	0
59	MG	DA	1770	1/1	0.83	0.15	63,63,63,63	0
59	MG	DA	1771	1/1	0.83	0.12	60,60,60,60	0
59	MG	AA	3300	1/1	0.83	0.16	22,22,22,22	0
59	MG	C7	101	1/1	0.83	0.43	56, 56, 56, 56	0
59	MG	CA	3629	1/1	0.84	0.08	55,55,55,55	0
59	MG	BA	1756	1/1	0.84	0.07	85,85,85,85	0
59	MG	AP	203	1/1	0.84	0.18	59,59,59,59	0
59	MG	CA	3633	1/1	0.84	0.26	68,68,68,68	0
59	MG	CA	3634	1/1	0.84	0.23	82,82,82,82	0
59	MG	CA	3432	1/1	0.84	0.27	32,32,32,32	0
59	MG	CA	3456	1/1	0.84	0.09	54,54,54,54	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$\frac{\text{B-factors}(A^2)}{40.40.40}$	Q<0.9
59	MG	AA	3792	1/1	0.84	0.13	48,48,48,48	0
59	MG	AA	3061	1/1	0.84	0.57	59,59,59,59	0
59	MG	BA	1772	1/1	0.84	0.12	66,66,66,66	0
59	MG	CA	3070	1/1	0.84	0.16	60,60,60,60	0
59	MG	AA	3808	1/1	0.84	0.40	72,72,72,72	0
59	MG	AA	3626	1/1	0.84	0.18	35,35,35,35	0
59	MG	AA	3544	1/1	0.84	0.22	26,26,26,26	0
59	MG	AA	3208	1/1	0.84	0.42	54,54,54,54	0
59	MG	CA	3200	1/1	0.84	0.30	51,51,51,51	0
59	MG	DA	1603	1/1	0.84	0.10	72,72,72,72	0
59	MG	AA	3026	1/1	0.84	0.23	47,47,47,47	0
59	MG	CA	3203	1/1	0.84	0.19	73,73,73,73	0
59	MG	CA	3081	1/1	0.84	0.31	$63,\!63,\!63,\!63$	0
59	MG	AA	3818	1/1	0.84	0.31	61,61,61,61	0
59	MG	DA	1618	1/1	0.84	0.64	$91,\!91,\!91,\!91$	0
59	MG	BA	1792	1/1	0.84	0.19	80,80,80,80	0
59	MG	CA	3521	1/1	0.84	0.22	$74,\!74,\!74,\!74$	0
59	MG	DA	1624	1/1	0.84	0.12	82,82,82,82	0
59	MG	BA	1682	1/1	0.84	0.82	$70,\!70,\!70,\!70$	0
59	MG	CA	3530	1/1	0.84	0.51	$71,\!71,\!71,\!71$	0
59	MG	AA	3169	1/1	0.84	0.34	$35,\!35,\!35,\!35$	0
59	MG	AA	3409	1/1	0.84	0.08	60,60,60,60	0
59	MG	AB	3001	1/1	0.84	0.37	74,74,74,74	0
59	MG	AA	3093	1/1	0.84	1.05	92,92,92,92	0
59	MG	BA	1696	1/1	0.84	0.16	98,98,98,98	0
59	MG	DA	1644	1/1	0.84	0.35	94,94,94,94	0
59	MG	CA	3273	1/1	0.84	0.35	58, 58, 58, 58	0
59	MG	AA	3461	1/1	0.84	0.19	62,62,62,62	0
59	MG	CA	3284	1/1	0.84	0.17	75,75,75,75	0
59	MG	BA	1624	1/1	0.84	0.18	58, 58, 58, 58	0
59	MG	DA	1665	1/1	0.84	0.20	63,63,63,63	0
59	MG	AB	3006	1/1	0.84	0.19	$57,\!57,\!57,\!57$	0
59	MG	CA	3296	1/1	0.84	0.15	79,79,79,79	0
59	MG	AA	3467	1/1	0.84	0.31	49,49,49,49	0
59	MG	CA	3120	1/1	0.84	0.21	42,42,42,42	0
59	MG	AA	3479	1/1	0.84	0.23	55,55,55,55	0
59	MG	CA	3124	1/1	0.84	0.26	65,65,65,65	0
59	MG	AA	3614	1/1	0.84	0.28	50,50,50,50	1
59	MG	AD	307	1/1	0.84	0.24	56,56,56,56	0
59	MG	CA	3581	1/1	0.84	0.12	38,38,38,38	0
59	MG	DA	1732	1/1	0.84	0.15	85,85,85.85	0
59	MG	BA	1719	1/1	0.84	0.15	62,62,62,62	0


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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(A ²)	Q<0.9
59	MG	CA	3363	1/1	0.84	0.17	88,88,88,88	0
59	MG	AA	3480	1/1	0.84	0.31	88,88,88,88	0
59	MG	AA	3010	1/1	0.84	0.45	46,46,46,46	0
59	MG	CA	3599	1/1	0.84	0.08	70,70,70,70	0
59	MG	BA	1729	1/1	0.84	0.16	$53,\!53,\!53,\!53$	0
59	MG	AA	3786	1/1	0.84	0.17	53,53,53,53	0
59	MG	CA	3603	1/1	0.84	0.35	$49,\!49,\!49,\!49$	0
59	MG	BA	1750	1/1	0.84	0.20	$55,\!55,\!55,\!55$	0
59	MG	BA	1646	1/1	0.84	0.95	$66,\!66,\!66,\!66$	0
59	MG	CA	3392	1/1	0.84	0.19	43,43,43,43	0
59	MG	CA	3153	1/1	0.84	0.23	73,73,73,73	0
59	MG	CF	301	1/1	0.85	0.47	61,61,61,61	0
59	MG	BA	1610	1/1	0.85	0.08	78,78,78,78	0
59	MG	AA	3634	1/1	0.85	0.19	76,76,76,76	0
59	MG	CA	3288	1/1	0.85	0.17	49,49,49,49	0
59	MG	CA	3069	1/1	0.85	0.72	81,81,81,81	0
59	MG	AA	3344	1/1	0.85	0.23	22,22,22,22	0
59	MG	AA	3180	1/1	0.85	0.26	69,69,69,69	0
59	MG	BA	1814	1/1	0.85	0.21	69,69,69,69	0
59	MG	BA	1815	1/1	0.85	0.22	$53,\!53,\!53,\!53$	0
59	MG	AA	3740	1/1	0.85	0.29	61,61,61,61	0
59	MG	BA	1727	1/1	0.85	0.09	77,77,77,77	0
59	MG	AA	3215	1/1	0.85	0.33	59, 59, 59, 59, 59	0
59	MG	BA	1625	1/1	0.85	0.15	86,86,86,86	0
59	MG	BA	1679	1/1	0.85	0.31	59, 59, 59, 59	0
59	MG	CA	3352	1/1	0.85	0.18	79,79,79,79	0
59	MG	CA	3088	1/1	0.85	0.31	67,67,67,67	0
59	MG	AA	3649	1/1	0.85	0.33	62,62,62,62	0
59	MG	CA	3560	1/1	0.85	0.23	79,79,79,79	0
59	MG	CA	3373	1/1	0.85	0.29	58,58,58,58	0
59	MG	CA	3091	1/1	0.85	0.28	69,69,69,69	0
59	MG	CA	3184	1/1	0.85	0.33	77,77,77,77	0
59	MG	CA	3379	1/1	0.85	0.23	83,83,83,83	0
59	MG	DA	1643	1/1	0.85	0.24	79,79,79,79	0
59	MG	BA	1685	1/1	0.85	0.14	50,50,50,50	0
59	MG	CA	3577	1/1	0.85	0.16	51,51,51,51	1
59	MG	CA	3014	1/1	0.85	0.24	50,50,50,50	0
59	MG	AA	3542	1/1	0.85	0.23	58,58,58,58	0
59	MG	AA	3611	1/1	0.85	0.18	47,47,47,47	0
59	MG	AA	3083	1/1	0.85	0.38	61,61,61,61	0
59	MG	CA	3408	1/1	0.85	0.11	58,58,58,58	0
59	MG	AA	3551	1/1	0.85	0.12	39,39,39,39	0

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Mol	Tvpe	Chain	$\frac{15 \text{ paye.}}{\text{Res}}$	Atoms	RSCC	RSR	B-factors ($Å^2$)	Q<0.9
59	MG	BA	1694	1/1	0.85	0.24	83.83.83.83	0
59	MG	CA	3111	1/1	0.85	0.24	79,79,79,79	0
59	MG	CA	3454	1/1	0.85	0.16	81,81,81,81	0
59	MG	CA	3210	1/1	0.85	0.34	62,62,62,62	0
59	MG	A0	103	1/1	0.85	0.10	70,70,70,70	0
59	MG	AA	3249	1/1	0.85	0.17	59,59,59,59	0
59	MG	CA	3226	1/1	0.85	0.33	52,52,52,52	0
59	MG	DA	1729	1/1	0.85	0.17	49,49,49,49	0
59	MG	CA	3229	1/1	0.85	0.19	53,53,53,53	0
59	MG	CA	3488	1/1	0.85	0.15	88,88,88,88	0
59	MG	AA	3041	1/1	0.85	0.26	37,37,37,37	0
59	MG	AA	3057	1/1	0.85	0.18	46,46,46,46	0
59	MG	AA	3575	1/1	0.85	0.14	35,35,35,35	0
59	MG	DA	1749	1/1	0.85	0.33	77,77,77,77	0
59	MG	BA	1791	1/1	0.85	0.18	72,72,72,72	0
59	MG	AA	3095	1/1	0.85	0.32	75,75,75,75	0
59	MG	CA	3251	1/1	0.85	0.18	82,82,82,82	0
59	MG	DA	1761	1/1	0.85	0.29	72,72,72,72	0
59	MG	CA	3647	1/1	0.85	0.15	85,85,85,85	0
59	MG	CA	3507	1/1	0.85	0.27	83,83,83,83	0
59	MG	CA	3510	1/1	0.85	0.11	$95,\!95,\!95,\!95$	0
59	MG	DE	202	1/1	0.85	0.08	100,100,100,100	0
59	MG	CA	3130	1/1	0.85	0.16	$55,\!55,\!55,\!55$	0
59	MG	CA	3276	1/1	0.85	0.18	44,44,44,44	0
59	MG	AA	3035	1/1	0.86	0.15	48,48,48,48	0
59	MG	AA	3213	1/1	0.86	0.65	76,76,76,76	0
59	MG	CA	3319	1/1	0.86	0.14	$65,\!65,\!65,\!65$	0
59	MG	BA	1695	1/1	0.86	0.08	83,83,83,83	0
59	MG	AA	3695	1/1	0.86	0.08	67,67,67,67	0
59	MG	CA	3540	1/1	0.86	0.07	54,54,54,54	0
59	MG	DA	1609	1/1	0.86	0.30	89,89,89,89	0
59	MG	BA	1803	1/1	0.86	0.12	64,64,64,64	0
59	MG	CA	3340	1/1	0.86	0.17	66,66,66,66	0
59	MG	CA	3544	1/1	0.86	0.32	60,60,60,60	0
59	MG	CA	3341	1/1	0.86	0.34	73,73,73,73	0
59	MG	AE	304	1/1	0.86	0.19	52,52,52,52	0
59	MG	AA	3705	1/1	0.86	0.57	53,53,53,53	1
59	MG	CA	3165	1/1	0.86	0.25	57,57,57,57	0
59	MG	BA	1700	1/1	0.86	0.14	52,52,52,52	0
59	MG	AA	3274	1/1	0.86	0.38	75,75,75,75	0
59	MG	AA	3275	1/1	0.86	0.34	89,89,89,89	0
59	MG	CA	3376	1/1	0.86	0.09	78,78,78,78	0



Mol	Type	Chain	$\frac{13 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	CA	3087	1/1	0.86	0.81	68.68.68.68	0
59	MG	DA	1636	1/1	0.86	0.50	62,62,62,62	0
59	MG	AA	3150	1/1	0.86	0.28	45,45,45,45	0
59	MG	BD	502	1/1	0.86	0.53	64,64,64,64	0
59	MG	AA	3202	1/1	0.86	0.11	61,61,61,61	0
59	MG	AA	3177	1/1	0.86	0.28	59,59,59,59	0
59	MG	BA	1652	1/1	0.86	0.12	59,59,59,59	0
59	MG	CA	3095	1/1	0.86	0.32	58,58,58,58	0
59	MG	CA	3395	1/1	0.86	0.42	50,50,50,50	0
59	MG	AA	3736	1/1	0.86	0.30	59, 59, 59, 59, 59	0
59	MG	DA	1662	1/1	0.86	0.23	75,75,75,75	0
59	MG	AA	3253	1/1	0.86	0.35	64,64,64,64	0
59	MG	AA	3158	1/1	0.86	0.88	68,68,68,68	0
59	MG	BA	1659	1/1	0.86	0.33	67,67,67,67	0
59	MG	CA	3016	1/1	0.86	0.25	52,52,52,52	0
59	MG	AA	3481	1/1	0.86	0.13	78,78,78,78	0
59	MG	BA	1662	1/1	0.86	0.72	70,70,70,70	0
59	MG	CA	3235	1/1	0.86	0.28	78,78,78,78	0
59	MG	CA	3115	1/1	0.86	0.41	67,67,67,67	0
59	MG	CA	3481	1/1	0.86	0.21	64,64,64,64	0
59	MG	CA	3612	1/1	0.86	0.36	83,83,83,83	0
59	MG	AA	3751	1/1	0.86	0.34	61,61,61,61	0
59	MG	AA	3237	1/1	0.86	0.38	76,76,76,76	0
59	MG	BA	1669	1/1	0.86	0.37	66,66,66,66	0
59	MG	AA	3603	1/1	0.86	0.62	76,76,76,76	0
59	MG	AA	3604	1/1	0.86	0.43	81,81,81,81	0
59	MG	CA	3256	1/1	0.86	0.29	65,65,65,65	0
59	MG	BA	1613	1/1	0.86	0.12	76,76,76,76	0
59	MG	AA	3657		0.86	0.17	63,63,63,63	0
59	MG	AA	3327		0.86	0.17	31,31,31,31	0
59	MG	AB	3020		0.86	0.18	62,62,62,62	0
59	MG	CA	3140		0.80	0.38	03,03,03,03	0
59	MG		3030		0.80	0.57	03,03,03,03	0
59	MG	BA CA	2201		0.80	0.27	08,08,08,08	0
50	MG	CA	5291 2516		0.80	0.41	40,40,40,40	0
50	MC		303		0.00	0.55	50 50 50 50	0
50	MC		2321		0.00	0.10		0
50	MC	RA RA	1737	1/1	0.80	0.10	79 79 70 70 70	0
59	MG		3478	1/1	0.87	0.20	65 65 65 65	0
50	MG		3694	1/1	0.87	0.01	53 53 53 53	0
59	MG	BA	1630	1/1	0.87	0.10	61 61 61 61	0
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Mol	Tvpe	Chain	$\frac{15 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	B-factors ($Å^2$)	Q<0.9
59	MG	AA	3153	1/1	0.87	0.32	59.59.59.59	0
59	MG	BA	1683	1/1	0.87	0.21	71.71.71.71	0
59	MG	AA	3157	1/1	0.87	0.48	91,91,91,91	0
59	MG	BA	1687	1/1	0.87	0.22	52,52,52,52	0
59	MG	AA	3264	1/1	0.87	0.41	51,51,51,51	0
59	MG	CA	3317	1/1	0.87	0.14	49,49,49,49	0
59	MG	DA	1641	1/1	0.87	0.25	74,74,74,74	0
59	MG	A2	3001	1/1	0.87	0.25	53,53,53,53	0
59	MG	A6	101	1/1	0.87	0.23	60,60,60,60	0
59	MG	CA	3098	1/1	0.87	0.14	70,70,70,70	0
59	MG	AA	3592	1/1	0.87	0.15	26,26,26,26	0
59	MG	CA	3511	1/1	0.87	0.20	81,81,81,81	0
59	MG	AA	3197	1/1	0.87	0.19	45,45,45,45	0
59	MG	AA	3229	1/1	0.87	0.36	67,67,67,67	0
59	MG	DA	1660	1/1	0.87	0.15	80,80,80,80	0
59	MG	AB	3021	1/1	0.87	0.26	$65,\!65,\!65,\!65$	0
59	MG	AA	3126	1/1	0.87	0.36	79,79,79,79	0
59	MG	CA	3204	1/1	0.87	0.19	54,54,54,54	0
59	MG	BA	1605	1/1	0.87	0.13	73,73,73,73	0
59	MG	DA	1681	1/1	0.87	0.37	70,70,70,70	0
59	MG	DA	1683	1/1	0.87	0.32	58, 58, 58, 58	0
59	MG	DA	1686	1/1	0.87	0.19	56, 56, 56, 56	0
59	MG	DA	1692	1/1	0.87	0.16	$53,\!53,\!53,\!53$	0
59	MG	CA	3116	1/1	0.87	0.32	$52,\!52,\!52,\!52$	0
59	MG	DA	1708	1/1	0.87	0.25	77,77,77,77	0
59	MG	AA	3164	1/1	0.87	0.63	71,71,71,71	0
59	MG	CA	3118	1/1	0.87	0.64	$65,\!65,\!65,\!65$	0
59	MG	CA	3059	1/1	0.87	0.43	58, 58, 58, 58	0
59	MG	AA	3079	1/1	0.87	0.12	27,27,27,27	0
59	MG	BA	1658	1/1	0.87	0.61	66,66,66,66	0
59	MG	CA	3065	1/1	0.87	0.55	56,56,56,56	0
59	MG	CB	3012	1/1	0.87	0.26	62,62,62,62	0
59	MG	BA	1709	1/1	0.87	0.29	50,50,50,50	0
59	MG	CA	3545	1/1	0.87	0.46	86,86,86,86	0
59	MG	DA	1737	1/1	0.87	0.20	69,69,69,69	0
59	MG	BA	1712	1/1	0.87	0.40	57,57,57,57	0
59	MG	AA	3065	1/1	0.87	0.58	62,62,62,62	0
59	MG	AA	3444	1/1	0.87	0.24	66,66,66,66	0
59	MG	CQ	203	1/1	0.87	0.34	54,54,54,54	0
59	MG	CA	3551	1/1	0.87	0.07	63,63,63,63	0
59	MG	AA	3445	1/1	0.87	0.13	23,23,23,23	0
59	MG	CA	3246	1/1	0.87	0.50	$57,\!57,\!57,\!57$	0



Mol	Type	Chain	\mathbf{Res}	Atoms	RSCC	RSR	B -factors($Å^2$)	Q<0.9
59	MG	CA	3411	1/1	0.87	0.24	57.57.57.57	0
59	MG	BA	1663	1/1	0.87	0.23	43,43,43,43	0
59	MG	AA	3677	1/1	0.87	0.10	69,69,69,69	0
59	MG	CA	3260	1/1	0.87	0.15	35,35,35,35	0
59	MG	BA	1622	1/1	0.87	0.51	65,65,65,65	0
59	MG	AA	3068	1/1	0.87	0.56	73,73,73,73	0
59	MG	AA	3025	1/1	0.87	0.43	68,68,68,68	0
59	MG	DZ	701	1/1	0.87	0.25	72,72,72,72	0
59	MG	CA	3114	1/1	0.88	0.19	66,66,66,66	0
59	MG	CA	3224	1/1	0.88	0.53	59, 59, 59, 59, 59	0
59	MG	AA	3659	1/1	0.88	0.18	73,73,73,73	0
59	MG	AA	3031	1/1	0.88	0.48	63,63,63,63	0
59	MG	AA	3664	1/1	0.88	0.20	62,62,62,62	0
59	MG	AA	3171	1/1	0.88	0.27	54,54,54,54	0
59	MG	AA	3175	1/1	0.88	0.56	$63,\!63,\!63,\!63$	0
59	MG	CA	3057	1/1	0.88	0.29	$60,\!60,\!60,\!60$	0
59	MG	AA	3619	1/1	0.88	0.12	$47,\!47,\!47,\!47$	0
59	MG	AA	3156	1/1	0.88	0.43	$49,\!49,\!49,\!49$	0
59	MG	CA	3569	1/1	0.88	0.19	41,41,41,41	0
59	MG	AA	3414	1/1	0.88	0.17	37,37,37,37	0
59	MG	DA	1638	1/1	0.88	0.29	80,80,80,80	0
59	MG	AE	305	1/1	0.88	0.35	48,48,48,48	0
59	MG	AF	302	1/1	0.88	0.11	41,41,41,41	0
59	MG	AA	3788	1/1	0.88	0.28	61,61,61,61	0
59	MG	AN	3003	1/1	0.88	0.08	$55,\!55,\!55,\!55$	0
59	MG	CA	3474	1/1	0.88	0.22	59,59,59,59	0
59	MG	DA	1646	1/1	0.88	0.12	57,57,57,57	0
59	MG	DA	1652	1/1	0.88	0.84	80,80,80,80	0
59	MG	CA	3264	1/1	0.88	0.19	60,60,60,60	0
59	MG	AP	202	1/1	0.88	0.18	44,44,44	0
59	MG	AA	3440	1/1	0.88	0.24	63,63,63,63	0
59	MG	BA	1703	1/1	0.88	0.30	51,51,51,51	0
59	MG	AR	201	1/1	0.88	0.16	28,28,28,28	0
59	MG	AA	3796	1/1	0.88	0.50	78,78,78,78	0
59	MG	DA	1663	1/1	0.88	0.42	91,91,91,91	0
59	MG	CA	3492		0.88	0.24	59,59,59,59	0
59	MG	AA	3699		0.88	0.27		0
59	MG	CA DA	3495		0.88	0.21	70,70,70,70	0
59	MG	DA	1679		0.88	0.12	70,70,70,70	0
59	MG	CA	3496		0.88	0.13	56,56,56	0
59	MG	AA	3047		0.88	0.18	29,29,29,29	0
59	MG	AA	3285	$1/1$	0.88	0.30	$51,\!51,\!51,\!51$	0



Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	AA	3293	1/1	0.88	0.15	27,27,27,27	0
59	MG	CA	3503	1/1	0.88	0.35	52,52,52,52	0
59	MG	AA	3636	1/1	0.88	0.34	86,86,86,86	0
59	MG	AA	3142	1/1	0.88	0.25	64,64,64,64	0
59	MG	BW	503	1/1	0.88	0.20	60,60,60,60	0
59	MG	CA	3173	1/1	0.88	0.36	61,61,61,61	0
59	MG	CA	3090	1/1	0.88	0.28	77,77,77,77	0
59	MG	AA	3723	1/1	0.88	0.09	49,49,49,49	0
59	MG	CA	3328	1/1	0.88	0.20	35,35,35,35	0
59	MG	AA	3724	1/1	0.88	0.23	47,47,47,47	0
59	MG	CA	3336	1/1	0.88	0.09	64,64,64,64	0
59	MG	CB	3011	1/1	0.88	0.23	56, 56, 56, 56	0
59	MG	DA	1735	1/1	0.88	0.12	73,73,73,73	0
59	MG	AA	3642	1/1	0.88	0.34	71,71,71,71	0
59	MG	CA	3189	1/1	0.88	0.14	50,50,50,50	0
59	MG	DA	1739	1/1	0.88	0.12	73,73,73,73	0
59	MG	CA	3191	1/1	0.88	0.22	46,46,46,46	0
59	MG	CE	301	1/1	0.88	0.32	53,53,53,53	0
59	MG	CA	3534	1/1	0.88	0.11	73,73,73,73	0
59	MG	CA	3535	1/1	0.88	0.22	77,77,77,77	0
59	MG	CQ	201	1/1	0.88	0.23	72,72,72,72	0
59	MG	AA	3464	1/1	0.88	0.40	66,66,66,66	0
59	MG	AA	3194	1/1	0.88	0.26	82,82,82,82	0
59	MG	AA	3015	1/1	0.88	0.35	57,57,57,57	0
59	MG	BA	1744	1/1	0.88	0.17	57,57,57,57	0
59	MG	BA	1609	1/1	0.88	0.12	62,62,62,62	0
59	MG	AA	3196	1/1	0.88	0.19	55,55,55,55	0
59	MG	CA	3035	1/1	0.88	0.28	69,69,69,69	0
59	MG	AA	3005	1/1	0.88	0.16	64,64,64,64	0
59	MG	AA	3235	1/1	0.88	0.45	93,93,93,93	0
59	MG	AA	3499	1/1	0.89	0.13	48,48,48,48	0
59	MG	BA	1730	1/1	0.89	0.18	53,53,53,53	0
59	MG	AA	3371	1/1	0.89	0.23	53,53,53,53	0
59	MG	BA	1607	1/1	0.89	0.27	64,64,64,64	0
59	MG	CA	3371	1/1	0.89	0.18	52,52,52,52	0
59	MG	AA	3616	1/1	0.89	0.17	57,57,57,57	
59	MG	DA	1604		0.89	0.12	80,80,80,80	
59	MG	AA	3385		0.89	0.21	49,49,49,49	
59	MG	CA	3113		0.89	0.39	38,38,38,38	
59	MG	CA	3215		0.89	0.07	54,54,54,54	
59	MG	AA	3230	1/1	0.89	0.28	69,69,69,69	
59	MG	CA	3385	1/1	0.89	0.37	$61,\!61,\!61,\!61$	0



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59MGDA16171/10.890.1764,64,64,64059MGCA32231/10.890.1559,59,59,59059MGDA16211/10.890.0942,42,42,42059MGBA16711/10.890.21101,101,101,101059MGAA32951/10.890.21101,101,101,101059MGAA34181/10.890.1374,74,74,74059MGAA37821/10.890.0877,77,77,77059MGCA33981/10.890.0877,77,77,77059MGCA30461/10.890.1064,64,64,64059MGBA17681/10.890.1937,37,37,37059MGAA32331/10.890.1937,37,37,37059MGAA32331/10.890.1937,37,37,37059MGCA34171/10.890.1256,56,56,56059MGCA34191/10.890.1256,56,56,56059MGCA34261/10.890.1265,65,65,65059MGCA34261/10.890.2038,38,38,38059MGCA34261/1
59MGCA 3223 $1/1$ 0.89 0.15 $59,59,59,59$ 0 59MGDA 1621 $1/1$ 0.89 0.09 $42,42,42,42$ 0 59MGBA 1671 $1/1$ 0.89 0.21 $101,101,101,101$ 0 59MGAA 3295 $1/1$ 0.89 0.14 $57,57,57,57$ 0 59MGAA 3782 $1/1$ 0.89 0.13 $74,74,74,74,74$ 0 59MGDA 1627 $1/1$ 0.89 0.08 $77,77,77,77$ 0 59MGCA 3398 $1/1$ 0.89 0.15 $67,67,67,67$ 0 59MGCA 3046 $1/1$ 0.89 0.10 $64,64,64,64$ 0 59MGBA 1768 $1/1$ 0.89 0.10 $64,64,64,64$ 0 59MGAA 3233 $1/1$ 0.89 0.19 $37,37,37,37,37$ 0 59MGCA 3417 $1/1$ 0.89 0.19 $37,37,37,37,37,37,37,37,37,37,37,37,37,3$
59MGDA1621 $1/1$ 0.89 0.09 $42,42,42,42$ 0 59MGBA1671 $1/1$ 0.89 0.21 $101,101,101,101$ 0 59MGAA 3295 $1/1$ 0.89 0.14 $57,57,57,57$ 0 59MGAA 3418 $1/1$ 0.89 0.13 $74,74,74,74$ 0 59MGAA 3782 $1/1$ 0.89 0.20 $44,44,44,44$ 0 59MGDA 1627 $1/1$ 0.89 0.08 $77,77,77,77$ 0 59MGCA 3046 $1/1$ 0.89 0.15 $67,67,67,67$ 0 59MGCA 3046 $1/1$ 0.89 0.19 $68,68,68,68$ 0 59MGBA 1768 $1/1$ 0.89 0.19 $67,67,67,67$ 0 59MGAA 3233 $1/1$ 0.89 0.19 $37,37,37,37$ 0 59MGAA 3557 $1/1$ 0.89 0.11 $56,56,56,56$ 0 59MGCA 3417 $1/1$ 0.89 0.12 $56,56,56,56$ 0 59MGCA 3426 $1/1$ 0.89 0.12 $25,55,56,56,56$ 0 59MGCA 3426 $1/1$ 0.89 0.12 $25,55,56,56,56$ 0 59MGCA 3426 $1/1$ 0.89 0.20 $38,38,38,38$ 0 <t< td=""></t<>
59MGBA1671 $1/1$ 0.89 0.21 $101,101,101,101,101$ 0 59MGAA 3295 $1/1$ 0.89 0.14 $57,57,57,57$ 0 59MGAA 3418 $1/1$ 0.89 0.13 $74,74,74,74$ 0 59MGAA 3782 $1/1$ 0.89 0.20 $44,44,44,44$ 0 59MGDA 1627 $1/1$ 0.89 0.20 $44,44,44,44$ 0 59MGCA 3398 $1/1$ 0.89 0.08 $77,77,77,77$ 0 59MGCA 3046 $1/1$ 0.89 0.15 $67,67,67,67,67$ 0 59MGCA 3046 $1/1$ 0.89 0.10 $64,64,64,64$ 0 59MGAA 3233 $1/1$ 0.89 0.18 $46,64,64,64$ 0 59MGCA 3417 $1/1$ 0.89 0.18 $46,64,64,64$ 0 59MGCA 3417 $1/1$ 0.89 0.15 $59,59,59,59$ 0 59MGCA 3421 $1/1$ 0.89 0.18 $72,72,72,72,72$ 0 59MGCA 3426 $1/1$ 0.89 0.12 $65,65,65,65$ 0 59MGCA 3426 $1/1$ 0.89 0.26 $58,58,58,58$ 0 59MGCA 3428 $1/1$ 0.89 0.30 $62,62,62,62$ 0
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59 MG AA 3168 1/1 0.89 0.31 47,47,47,47 0 59 MG CA 3593 1/1 0.89 0.60 61,61,61,61 0 59 MG CA 3593 1/1 0.89 0.60 61,61,61,61 0 59 MG CA 3467 1/1 0.89 0.62 77,77,77,77 0 59 MG CA 3257 1/1 0.89 0.16 35,35,35,35 0 59 MG AA 3803 1/1 0.89 0.33 45,45,45,45,45 0 59 MG AA 3803 1/1 0.89 0.33 45,45,45,45,45 0 50 MC DA 1666 1/1 0.89 0.10 52,52,52,52 0
59 MG CA 3593 1/1 0.89 0.60 61,61,61,61 0 59 MG CA 3467 1/1 0.89 0.62 77,77,77,77 0 59 MG CA 3257 1/1 0.89 0.16 35,35,35,35 0 59 MG CA 3803 1/1 0.89 0.16 35,35,35,35 0 59 MG AA 3803 1/1 0.89 0.33 45,45,45,45,45 0 59 MC DA 1666 1/1 0.89 0.10 52,52,53,52 0
59 MG CA 3467 1/1 0.89 0.62 77,77,77,77 0 59 MG CA 3257 1/1 0.89 0.16 35,35,35,35 0 59 MG CA 3257 1/1 0.89 0.16 35,35,35,35 0 59 MG AA 3803 1/1 0.89 0.33 45,45,45,45 0 50 MC DA 1666 1/1 0.89 0.10 52,52,52 0
59 MG CA 3257 1/1 0.89 0.16 35,35,35,35 0 59 MG AA 3803 1/1 0.89 0.33 45,45,45,45 0 59 MG AA 3803 1/1 0.89 0.33 45,45,45,45 0 50 MC DA 1666 1/1 0.89 0.10 53,53,53,53 0
59 MG AA 3803 1/1 0.89 0.33 45,45,45,45 0 50 MC DA 1666 1/1 0.89 0.10 52,52,52 0
50 MC DA 1666 1/1 0.80 0.10 52.52.52.52 0
0.00 1000 1/1 0.09 0.19 0.00,00,00,00 0 0 0 0 0 0 0
59 MG CA 3141 1/1 0.89 0.45 68,68,68,68 0
59 MG CA 3270 1/1 0.89 0.28 76,76,76,76 0
59 MG AA 3635 1/1 0.89 0.31 49,49,49,49 0
59 MG AA 3055 1/1 0.89 0.28 65,65,65,65 0
59 MG AA 3143 1/1 0.89 0.23 48,48,48,48 0
59 MG DA 1684 1/1 0.89 0.18 69.69.69.69 0
59 MG CA 3615 1/1 0.89 0.20 28,28,28,28 0
59 MG DA 1689 1/1 0.89 0.17 56.56.56.56 0
59 MG AW 3001 1/1 0.89 0.29 54.54.54.54 0
59 MG DA 1702 1/1 0.89 0.13 63.63.63 0
59 MG BA 1796 1/1 0.89 0.26 57.57.57 0
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$\frac{\text{B-factors}(A^2)}{(1,01,01,01)}$	Q<0.9
59	MG	CA	3626		0.89	0.18	61,61,61,61	0
59	MG	CA	3628		0.89	0.18	54,54,54,54	0
59	MG	AA	3034		0.89	0.31	49,49,49,49	0
59	MG	BA	1641		0.89	0.20	54,54,54,54	0
59	MG	AA	3584		0.89	0.13	17,17,17,17	0
59	MG	CA	3632	1/1	0.89	0.18	74,74,74,74	0
59	MG	CA	3500	1/1	0.89	0.23	75,75,75,75	0
59	MG	AA	3162	1/1	0.89	0.26	67,67,67,67	0
59	MG	BA	1645	1/1	0.89	0.18	74,74,74,74	0
59	MG	AA	3027	1/1	0.89	0.51	75,75,75,75	0
59	MG	DA	1736	1/1	0.89	0.12	78,78,78,78	0
59	MG	CA	3310	1/1	0.89	0.17	47,47,47,47	0
59	MG	CA	3649	1/1	0.89	0.26	51,51,51,51	0
59	MG	AA	3357	1/1	0.89	0.15	55,55,55,55	0
59	MG	CA	3509	1/1	0.89	0.11	83,83,83,83	0
59	MG	CA	3663	1/1	0.89	0.11	64,64,64,64	0
59	MG	CB	3001	1/1	0.89	0.28	72,72,72,72	0
59	MG	CB	3007	1/1	0.89	0.22	$52,\!52,\!52,\!52$	0
59	MG	BA	1711	1/1	0.89	0.14	$61,\!61,\!61,\!61$	0
59	MG	A0	104	1/1	0.89	0.35	$51,\!51,\!51,\!51$	0
59	MG	AA	3825	1/1	0.89	0.40	$63,\!63,\!63,\!63$	0
59	MG	DA	1767	1/1	0.89	0.13	74,74,74,74	0
59	MG	AA	3655	1/1	0.89	0.33	$55,\!55,\!55,\!55$	0
59	MG	AA	3744	1/1	0.89	0.15	34,34,34,34	0
59	MG	AA	3088	1/1	0.89	0.42	39,39,39,39	0
59	MG	CE	304	1/1	0.89	0.36	75,75,75,75	0
59	MG	AA	3485	1/1	0.89	0.11	48,48,48,48	0
59	MG	AA	3492	1/1	0.89	0.18	26,26,26,26	0
59	MG	BA	1661	1/1	0.89	0.32	63,63,63,63	0
59	MG	AA	3267	1/1	0.90	0.35	$53,\!53,\!53,\!53$	0
59	MG	CR	201	1/1	0.90	0.26	34,34,34,34	0
59	MG	AA	3607	1/1	0.90	0.14	60,60,60,60	1
59	MG	CX	5001	1/1	0.90	0.14	$65,\!65,\!65,\!65$	0
59	MG	BA	1728	1/1	0.90	0.19	47,47,47,47	0
59	MG	AA	3608	1/1	0.90	0.36	60,60,60,60	0
59	MG	AA	3676	1/1	0.90	0.15	26,26,26,26	0
59	MG	CA	3539	1/1	0.90	0.18	90,90,90,90	0
59	MG	DA	1608	1/1	0.90	0.17	57,57,57,57	0
59	MG	AA	3783	1/1	0.90	0.49	53,53,53,53	1
59	MG	BA	1739	1/1	0.90	0.19	62,62,62,62	0
59	MG	AA	3105	1/1	0.90	0.15	52,52,52,52	0
59	MG	BA	1656	1/1	0.90	0.32	75,75,75,75	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors(A^2)	Q<0.9
59	MG	DA	1616	1/1	0.90	0.23	51,51,51,51	0
59	MG	AA	3787	1/1	0.90	0.20	82,82,82,82	0
59	MG	CA	3171	1/1	0.90	0.37	56,56,56,56	0
59	MG	AA	3679	1/1	0.90	0.08	36,36,36,36	0
59	MG	AA	3347	1/1	0.90	0.13	88,88,88,88	0
59	MG	AA	3683	1/1	0.90	0.27	62,62,62,62	0
59	MG	AA	3123	1/1	0.90	0.34	54,54,54,54	0
59	MG	CA	3066	1/1	0.90	0.16	69,69,69,69	0
59	MG	AA	3017	1/1	0.90	0.10	61,61,61,61	0
59	MG	AA	3618	1/1	0.90	0.15	72,72,72,72	0
59	MG	A0	105	1/1	0.90	0.08	30,30,30,30	0
59	MG	CA	3192	1/1	0.90	0.11	$45,\!45,\!45,\!45$	0
59	MG	BA	1774	1/1	0.90	0.27	$50,\!50,\!50,\!50$	0
59	MG	DA	1635	1/1	0.90	0.28	$75,\!75,\!75,\!75$	0
59	MG	AA	3183	1/1	0.90	0.35	58, 58, 58, 58	0
59	MG	AA	3700	1/1	0.90	0.21	$70,\!70,\!70,\!70$	0
59	MG	AA	3810	1/1	0.90	0.27	$67,\!67,\!67,\!67$	0
59	MG	AA	3191	1/1	0.90	0.11	16, 16, 16, 16	0
59	MG	AA	3280	1/1	0.90	0.29	$53,\!53,\!53,\!53$	0
59	MG	AA	3028	1/1	0.90	0.28	39,39,39,39	0
59	MG	AA	3282	1/1	0.90	0.12	33,33,33,33	0
59	MG	CA	3086	1/1	0.90	0.26	85,85,85,85	0
59	MG	AA	3715	1/1	0.90	0.54	33,33,33,33	1
59	MG	AA	3822	1/1	0.90	0.31	47,47,47,47	0
59	MG	CA	3586	1/1	0.90	0.17	93,93,93,93	0
59	MG	BA	1608	1/1	0.90	0.52	57,57,57,57	0
59	MG	DA	1658	1/1	0.90	0.33	51,51,51,51	0
59	MG	AA	3138	1/1	0.90	0.13	38,38,38,38	0
59	MG	BA	1797	1/1	0.90	0.17	59, 59, 59, 59, 59	0
59	MG	CA	3595	1/1	0.90	0.10	70,70,70,70	0
59	MG	AA	3633	1/1	0.90	0.16	48,48,48,48	0
59	MG	DA	1664	1/1	0.90	0.12	66,66,66,66	0
59	MG	CA	3450	1/1	0.90	0.11	54,54,54,54	0
59	MG	CA	3453	1/1	0.90	0.16	35,35,35,35	0
59	MG	DA	1667	1/1	0.90	0.06	66,66,66,66	0
59	MG	AA	3155	1/1	0.90	0.21	93,93,93,93	0
59	MG	BA	1806	1/1	0.90	0.33	55,55,55,55	0
59	MG	AA	3252	1/1	0.90	0.20	44,44,44,44	0
59	MG	CA	3458	1/1	0.90	0.22	54,54,54,54	0
59	MG	AA	3226	1/1	0.90	0.22	46,46,46,46	0
59	MG	CA	3465	1/1	0.90	0.30	70,70,70,70	0
59	MG	AA	3576	1/1	0.90	0.18	52,52,52.52	0
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	CA	3472	1/1	0.90	0.47	62,62,62,62	0
59	MG	BA	1813	1/1	0.90	0.07	55,55,55,55	0
59	MG	AA	3256	1/1	0.90	0.34	49,49,49,49	0
59	MG	DA	1703	1/1	0.90	0.21	89,89,89,89	0
59	MG	AA	3308	1/1	0.90	0.22	18,18,18,18	0
59	MG	AA	3313	1/1	0.90	0.16	39,39,39,39	0
59	MG	CA	3249	1/1	0.90	0.15	61,61,61,61	0
59	MG	CA	3250	1/1	0.90	0.14	38,38,38,38	0
59	MG	AA	3466	1/1	0.90	0.20	76,76,76,76	0
59	MG	BA	1701	1/1	0.90	0.09	54,54,54,54	0
59	MG	AD	301	1/1	0.90	0.71	58,58,58,58	0
59	MG	BW	502	1/1	0.90	0.10	59,59,59,59	0
59	MG	AD	302	1/1	0.90	0.15	17,17,17,17	0
59	MG	DA	1730	1/1	0.90	0.25	71,71,71,71	0
59	MG	BA	1705	1/1	0.90	0.23	$53,\!53,\!53,\!53$	0
59	MG	AA	3591	1/1	0.90	0.26	$52,\!52,\!52,\!52$	0
59	MG	AA	3756	1/1	0.90	0.14	49,49,49,49	0
59	MG	AD	306	1/1	0.90	0.14	$65,\!65,\!65,\!65$	0
59	MG	CA	3280	1/1	0.90	0.15	48,48,48,48	0
59	MG	AA	3139	1/1	0.90	0.33	60,60,60,60	0
59	MG	CB	3002	1/1	0.90	0.10	63,63,63,63	0
59	MG	CB	3003	1/1	0.90	0.09	65,65,65,65	0
59	MG	CA	3506	1/1	0.90	0.12	63,63,63,63	0
59	MG	AA	3763	1/1	0.90	0.26	47,47,47,47	0
59	MG	DA	1753	1/1	0.90	0.29	79,79,79,79	0
59	MG	CA	3020	1/1	0.90	0.18	47,47,47,47	0
59	MG	CA	3021	1/1	0.90	0.44	69,69,69,69	0
59	MG	AA	3472	1/1	0.90	0.23	42,42,42,42	0
59	MG	CA	3512	1/1	0.90	0.15	53,53,53,53	0
59	MG	CA	3134	1/1	0.90	0.66	71,71,71,71	0
59	MG	CA	3298	1/1	0.90	0.36	57,57,57,57	0
59	MG	BA	1642	1/1	0.90	0.15	60,60,60,60	0
59	MG	CF	302	1/1	0.90	0.53	69,69,69,69	0
59	MG	CA	3031	1/1	0.90	0.48	68,68,68,68	0
59	MG	DF	3001	1/1	0.90	0.20	54,54,54,54	0
59	MG	CA	3033	1/1	0.90	0.40	55,55,55,55	0
59	MG	AA	3199		0.90	0.34	41,41,41,41	
59	MG	AA	3120		0.90	0.24	33,33,33,33	
59	MG	CA	3271		0.91	0.18	48,48,48,48	
59	MG	AA	3781		0.91	0.20		
59	MG	CA	3274		0.91	0.15	52,52,52,52	0
59	MG	AF	301	1/1	0.91	0.21	$35,\!35,\!35,\!35$	



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors (A^2)	Q < 0.9
59	MG	CA	3278	1/1	0.91	0.12	58,58,58,58	0
59	MG	AA	3339	1/1	0.91	0.17	49,49,49,49	0
59	MG	AA	3090	1/1	0.91	0.38	53,53,53,53	0
59	MG	AA	3211	1/1	0.91	0.27	56, 56, 56, 56	0
59	MG	AA	3612	1/1	0.91	0.14	$68,\!68,\!68,\!68$	0
59	MG	AA	3486	1/1	0.91	0.21	$67,\!67,\!67,\!67$	0
59	MG	CA	3126	1/1	0.91	0.31	$62,\!62,\!62,\!62$	0
59	MG	DA	1601	1/1	0.91	0.42	$74,\!74,\!74,\!74$	0
59	MG	BA	1647	1/1	0.91	0.51	$57,\!57,\!57,\!57$	0
59	MG	BA	1724	1/1	0.91	0.19	67,67,67,67	0
59	MG	CA	3524	1/1	0.91	0.24	52,52,52,52	0
59	MG	DA	1606	1/1	0.91	0.30	85,85,85,85	0
59	MG	AQ	203	1/1	0.91	0.29	32,32,32,32	0
59	MG	BA	1649	1/1	0.91	0.16	35,35,35,35	0
59	MG	AA	3078	1/1	0.91	0.32	70,70,70,70	0
59	MG	CA	3137	1/1	0.91	0.23	69,69,69,69	0
59	MG	CA	3314	1/1	0.91	0.29	57,57,57,57	0
59	MG	CA	3032	1/1	0.91	0.55	100,100,100,100	0
59	MG	AA	3166	1/1	0.91	0.41	40,40,40,40	0
59	MG	BA	1733	1/1	0.91	0.20	78,78,78,78	0
59	MG	DA	1620	1/1	0.91	0.21	57,57,57,57	0
59	MG	BA	1736	1/1	0.91	0.17	67,67,67,67	0
59	MG	CA	3036	1/1	0.91	0.28	32,32,32,32	0
59	MG	CA	3148	1/1	0.91	0.34	62,62,62,62	0
59	MG	AA	3516	1/1	0.91	0.23	$65,\!65,\!65,\!65$	0
59	MG	BA	1738	1/1	0.91	0.08	66,66,66,66	0
59	MG	AA	3358	1/1	0.91	0.12	45,45,45,45	0
59	MG	CA	3343	1/1	0.91	0.12	32,32,32,32	0
59	MG	AY	502	1/1	0.91	0.28	60,60,60,60	0
59	MG	CA	3042	1/1	0.91	0.31	$65,\!65,\!65,\!65$	0
59	MG	AA	3043	1/1	0.91	0.30	45,45,45,45	0
59	MG	BA	1746	1/1	0.91	0.12	33,33,33,33	0
59	MG	AA	3701	1/1	0.91	0.15	81,81,81,81	0
59	MG	BA	1753	1/1	0.91	0.11	48,48,48,48	0
59	MG	AA	3624	1/1	0.91	0.12	42,42,42,42	0
59	MG	CA	3374	1/1	0.91	0.30	60,60,60,60	0
59	MG	AA	3246	1/1	0.91	0.13	52,52,52,52	0
59	MG	AA	3373	1/1	0.91	0.16	48,48,48,48	0
59	MG	CA	3174	1/1	0.91	0.52	$50,\!50,\!50,\!50$	0
59	MG	AA	3284	1/1	0.91	0.58	60,60,60,60	0
59	MG	AA	3391	1/1	0.91	0.20	$19,\!19,\!19,\!19$	0
59	MG	AA	3630	1/1	0.91	0.34	72,72,72,72	0

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Mol	Type	Chain	$\frac{18 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	AA	3722	1/1	0.91	0.12	37,37,37,37	0
59	MG	CA	3580	1/1	0.91	0.23	76,76,76,76	0
59	MG	CA	3187	1/1	0.91	0.22	37,37,37,37	0
59	MG	CA	3067	1/1	0.91	0.19	63,63,63,63	0
59	MG	AA	3009	1/1	0.91	0.09	22,22,22,22	0
59	MG	AA	3288	1/1	0.91	0.27	39,39,39,39	0
59	MG	AA	3826	1/1	0.91	0.28	46,46,46,46	0
59	MG	CA	3071	1/1	0.91	0.27	45,45,45,45	0
59	MG	CA	3409	1/1	0.91	0.28	42,42,42,42	0
59	MG	CA	3594	1/1	0.91	0.11	73,73,73,73	0
59	MG	CA	3199	1/1	0.91	0.22	$55,\!55,\!55,\!55$	0
59	MG	CA	3597	1/1	0.91	0.21	58,58,58,58	0
59	MG	DA	1672	1/1	0.91	0.23	77,77,77,77	0
59	MG	AA	3224	1/1	0.91	0.24	56, 56, 56, 56	0
59	MG	DA	1677	1/1	0.91	0.42	78,78,78,78	0
59	MG	AA	3106	1/1	0.91	0.17	33,33,33,33	0
59	MG	AA	3638	1/1	0.91	0.35	71,71,71,71	0
59	MG	AA	3135	1/1	0.91	0.55	$55,\!55,\!55,\!55$	0
59	MG	CA	3079	1/1	0.91	0.10	41,41,41,41	0
59	MG	CA	3604	1/1	0.91	0.09	62,62,62,62	0
59	MG	AA	3579	1/1	0.91	0.18	$54,\!54,\!54,\!54$	0
59	MG	AA	3069	1/1	0.91	0.09	28,28,28,28	0
59	MG	DA	1694	1/1	0.91	0.35	106,106,106,106	0
59	MG	DA	1699	1/1	0.91	0.19	74,74,74,74	0
59	MG	DA	1701	1/1	0.91	0.24	$68,\!68,\!68,\!68$	0
59	MG	CA	3610	1/1	0.91	0.13	69,69,69,69	0
59	MG	CA	3442	1/1	0.91	0.59	74,74,74,74	0
59	MG	CA	3444	1/1	0.91	0.10	67,67,67,67	0
59	MG	DA	1705	1/1	0.91	0.10	68,68,68,68	0
59	MG	CA	3616	1/1	0.91	0.64	74,74,74,74	0
59	MG	CA	3448	1/1	0.91	0.21	37,37,37,37	0
59	MG	CA	3623	1/1	0.91	0.15	64,64,64,64	0
59	MG	AB	3009	1/1	0.91	0.09	50,50,50,50	0
59	MG	AA	3446	1/1	0.91	0.09	59,59,59,59	0
59	MG	CA	3221	1/1	0.91	0.58	65,65,65,65	0
59	MG	BA	1794	1/1	0.91	0.07	38,38,38,38	0
59	MG	AA	3449	1/1	0.91	0.23	50,50,50,50	0
59	MG	AA	3014	1/1	0.91	0.12	31,31,31,31	0
59	MG	BA	1620	1/1	0.91	0.17	52,52,52,52	0
59	MG	AA	3654	1/1	0.91	0.06	67,67,67,67	0
59	MG	CA	3234	1/1	0.91	0.35	50,50,50,50	0
59	MG	AA	3310	1/1	0.91	0.15	56, 56, 56, 56	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(A ²)	Q<0.9
59	MG	CA	3636	1/1	0.91	0.19	64,64,64,64	0
59	MG	CA	3638	1/1	0.91	0.34	76,76,76,76	0
59	MG	CA	3473	1/1	0.91	0.16	51,51,51,51	0
59	MG	BA	1807	1/1	0.91	0.12	61,61,61,61	0
59	MG	CA	3477	1/1	0.91	0.14	69,69,69,69	0
59	MG	AA	3205	1/1	0.91	0.15	42,42,42,42	0
59	MG	CA	3239	1/1	0.91	0.17	$69,\!69,\!69,\!69$	0
59	MG	BA	1699	1/1	0.91	0.18	72,72,72,72	0
59	MG	AA	3232	1/1	0.91	0.25	$58,\!58,\!58,\!58$	0
59	MG	AA	3179	1/1	0.91	0.50	45,45,45,45	1
59	MG	AA	3772	1/1	0.91	0.62	61,61,61,61	1
59	MG	AA	3602	1/1	0.91	0.15	51,51,51,51	0
59	MG	AA	3270	1/1	0.91	0.55	$55,\!55,\!55,\!55$	0
59	MG	BA	1706	1/1	0.91	0.20	63,63,63,63	0
59	MG	CA	3110	1/1	0.91	0.26	56, 56, 56, 56	0
59	MG	AA	3118	1/1	0.91	0.40	76,76,76,76	0
59	MG	BN	502	1/1	0.91	0.17	87,87,87,87	0
59	MG	BN	503	1/1	0.91	0.14	62,62,62,62	0
59	MG	BA	1708	1/1	0.91	0.22	64,64,64,64	0
59	MG	DW	503	1/1	0.91	0.22	85,85,85,85	0
59	MG	BA	1637	1/1	0.91	0.46	72,72,72,72	0
59	MG	BA	1718	1/1	0.92	0.09	63,63,63,63	0
59	MG	BA	1650	1/1	0.92	0.15	$55,\!55,\!55,\!55$	0
59	MG	AA	3134	1/1	0.92	0.23	62,62,62,62	0
59	MG	CA	3207	1/1	0.92	0.28	75,75,75,75	0
59	MG	AA	3203	1/1	0.92	0.07	59,59,59,59	0
59	MG	AA	3268	1/1	0.92	0.07	66,66,66,66	0
59	MG	CA	3212	1/1	0.92	0.24	84,84,84,84	0
59	MG	CA	3549	1/1	0.92	0.16	70,70,70,70	0
59	MG	CA	3387	1/1	0.92	0.33	50,50,50,50	0
59	MG	AA	3427	1/1	0.92	0.12	61,61,61,61	0
59	MG	DA	1613	1/1	0.92	0.24	48,48,48,48	0
59	MG	AA	3746	1/1	0.92	0.17	73,73,73,73	0
59	MG	A6	103	1/1	0.92	0.36	72,72,72,72	0
59	MG	CA	3391	1/1	0.92	0.07	51,51,51,51	0
59	MG	CA	3558	1/1	0.92	0.09	64,64,64,64	0
59	MG	CA	3222	1/1	0.92	0.34	57,57,57,57	0
59	MG	AA	3110	1/1	0.92	0.48	52,52,52,52	0
59	MG	CA	3396	1/1	0.92	0.23	39,39,39,39	0
59	MG	BA	1731	1/1	0.92	0.17	45,45,45,45	0
59	MG	CA	3403	1/1	0.92	0.07	70,70,70,70	0
59	MG	DA	1625	1/1	0.92	0.15	$50,\!50,\!50,\!50$	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$\frac{\text{B-factors}(A^2)}{72.72.72}$	Q<0.9
59	MG	AA	3749	1/1	0.92	0.17	73,73,73,73	0
59	MG	AA	3115	1/1	0.92	0.34	44,44,44,44	0
59	MG	AA	3319	1/1	0.92	0.19	58,58,58,58	0
59	MG	AA	3085	1/1	0.92	0.20	46,46,46,46	0
59	MG	CA	3576	1/1	0.92	0.11	71,71,71,71	0
59	MG	AA	3447	1/1	0.92	0.34	56,56,56,56	0
59	MG	CA	3026	1/1	0.92	0.22	32,32,32,32	1
59	MG	BA	1666	1/1	0.92	0.37	61,61,61,61	0
59	MG	DA	1637	1/1	0.92	0.39	68,68,68,68	0
59	MG	CA	3238	1/1	0.92	0.24	$69,\!69,\!69,\!69$	0
59	MG	BA	1667	1/1	0.92	0.25	$74,\!74,\!74,\!74$	0
59	MG	AA	3678	1/1	0.92	0.15	77,77,77,77	0
59	MG	CA	3585	1/1	0.92	0.16	36,36,36,36	1
59	MG	CA	3431	1/1	0.92	0.20	75,75,75,75	0
59	MG	BA	1748	1/1	0.92	0.14	63,63,63,63	0
59	MG	CA	3589	1/1	0.92	0.23	71,71,71,71	0
59	MG	AB	3010	1/1	0.92	0.11	62,62,62,62	0
59	MG	CA	3243	1/1	0.92	0.28	58,58,58,58	0
59	MG	AA	3161	1/1	0.92	0.23	43,43,43,43	0
59	MG	BA	1754	1/1	0.92	0.13	49,49,49,49	0
59	MG	CA	3596	1/1	0.92	0.12	51,51,51,51	0
59	MG	CA	3247	1/1	0.92	0.28	39,39,39,39	0
59	MG	AA	3102	1/1	0.92	0.23	47,47,47,47	0
59	MG	DA	1661	1/1	0.92	0.18	66,66,66,66	0
59	MG	CA	3128	1/1	0.92	0.39	50,50,50,50	0
59	MG	BA	1611	1/1	0.92	0.13	31,31,31,31	0
59	MG	BA	1675	1/1	0.92	0.07	100,100,100,100	0
59	MG	CA	3131	1/1	0.92	0.23	26,26,26,26	0
59	MG	CA	3462	1/1	0.92	0.11	63,63,63,63	0
59	MG	CA	3259	1/1	0.92	0.26	80,80,80,80	0
59	MG	BA	1760	1/1	0.92	0.17	53,53,53,53	0
59	MG	DA	1670	1/1	0.92	0.12	49,49,49,49	0
59	MG	CA	3609	1/1	0.92	0.16	52,52,52,52	0
59	MG	BA	1676	1/1	0.92	0.20	61,61,61,61	0
59	MG	DA	1675	1/1	0.92	0.41	70,70,70,70	0
59	MG	CA	3043	1/1	0.92	0.41	61,61,61,61	0
59	MG	DA	1678	1/1	0.92	0.28	66,66,66,66	0
59	MG	AA	3184	1/1	0.92	0.24	75,75,75,75	0
59	MG	AA	3771	1/1	0.92	0.24	60,60,60,60	0
59	MG	CA	3619	1/1	0.92	0.38	40,40,40,40	0
59	MG	AA	3186	1/1	0.92	0.29	48,48,48,48	0
59	MG	CA	3143	1/1	0.92	0.56	41,41,41,41	0



Mol	Type	Chain	\mathbf{Res}	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
59	MG	AA	3244	1/1	0.92	0.25	52,52,52,52	0
59	MG	DA	1691	1/1	0.92	0.18	63,63,63,63	0
59	MG	BA	1618	1/1	0.92	0.31	52,52,52,52	0
59	MG	AA	3189	1/1	0.92	0.20	62,62,62,62	0
59	MG	AA	3696	1/1	0.92	0.17	66,66,66,66	0
59	MG	AA	3698	1/1	0.92	0.16	41,41,41,41	0
59	MG	BA	1623	1/1	0.92	0.62	67,67,67,67	0
59	MG	AA	3141	1/1	0.92	0.09	68,68,68,68	0
59	MG	AA	3476	1/1	0.92	0.17	28,28,28,28	0
59	MG	AA	3033	1/1	0.92	0.27	$55,\!55,\!55,\!55$	0
59	MG	BA	1629	1/1	0.92	0.28	61,61,61,61	0
59	MG	DA	1713	1/1	0.92	0.17	49,49,49,49	0
59	MG	CA	3301	1/1	0.92	0.19	60,60,60,60	0
59	MG	AA	3287	1/1	0.92	0.39	43,43,43,43	0
59	MG	AA	3707	1/1	0.92	0.09	$59,\!59,\!59,\!59$	0
59	MG	CA	3168	1/1	0.92	0.42	58, 58, 58, 58	0
59	MG	CA	3312	1/1	0.92	0.18	38,38,38,38	0
59	MG	DA	1726	1/1	0.92	0.29	60,60,60,60	0
59	MG	AA	3045	1/1	0.92	0.32	$55,\!55,\!55,\!55$	0
59	MG	DA	1728	1/1	0.92	0.08	71,71,71,71	0
59	MG	CA	3508	1/1	0.92	0.18	52,52,52,52	0
59	MG	AA	3641	1/1	0.92	0.28	$51,\!51,\!51,\!51$	0
59	MG	BA	1800	1/1	0.92	0.46	77,77,77,77	0
59	MG	AN	3001	1/1	0.92	0.32	58, 58, 58, 58	0
59	MG	AA	3483	1/1	0.92	0.20	46,46,46,46	0
59	MG	BA	1805	1/1	0.92	0.25	71,71,71,71	0
59	MG	AA	3797	1/1	0.92	0.17	52,52,52,52	0
59	MG	CA	3515	1/1	0.92	0.20	54,54,54,54	0
59	MG	AA	3800	1/1	0.92	0.16	$35,\!35,\!35,\!35$	0
59	MG	DA	1741	1/1	0.92	0.35	$67,\!67,\!67,\!67$	0
59	MG	AA	3080	1/1	0.92	0.50	$61,\!61,\!61,\!61$	0
59	MG	CA	3083	1/1	0.92	0.41	$61,\!61,\!61,\!61$	0
59	MG	DA	1748	1/1	0.92	0.18	$70,\!70,\!70,\!70$	0
59	MG	CA	3520	1/1	0.92	0.16	$73,\!73,\!73,\!73$	0
59	MG	DA	1751	1/1	0.92	0.16	$64,\!64,\!64,\!64$	0
59	MG	CD	303	1/1	0.92	0.08	$70,\!70,\!70,\!70$	0
59	MG	AA	3716	1/1	0.92	0.24	66,66,66,66	0
59	MG	CE	303	1/1	0.92	0.40	51,51,51,51	0
59	MG	CA	3345	1/1	0.92	0.17	46,46,46,46	0
59	MG	CA	3527	1/1	0.92	0.14	76, 76, 76, 76	0
59	MG	AA	3077	1/1	0.92	0.27	43,43,43,43	0
59	MG	CA	$35\overline{29}$	1/1	0.92	0.07	$68,\!68,\!68,\!68$	0



Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	AA	3718	1/1	0.92	0.21	42,42,42,42	0
59	MG	CA	3532	1/1	0.92	0.23	49,49,49,49	0
59	MG	DE	201	1/1	0.92	0.17	84,84,84,84	0
59	MG	AA	3645	1/1	0.92	0.21	58,58,58,58	0
59	MG	AA	3487	1/1	0.92	0.03	49,49,49,49	0
59	MG	AA	3133	1/1	0.92	0.33	50,50,50,50	0
59	MG	CA	3368	1/1	0.92	0.16	44,44,44,44	0
59	MG	DW	502	1/1	0.92	0.08	58,58,58,58	0
59	MG	AA	3394	1/1	0.92	0.16	39,39,39,39	0
59	MG	C3	3001	1/1	0.92	0.39	72,72,72,72	0
60	ZN	C4	501	1/1	0.92	0.11	194,194,194,194	0
59	MG	DA	1607	1/1	0.93	0.10	86,86,86,86	0
59	MG	AQ	202	1/1	0.93	0.25	35,35,35,35	0
59	MG	BA	1710	1/1	0.93	0.25	81,81,81,81	0
59	MG	AA	3024	1/1	0.93	0.13	48,48,48,48	0
59	MG	AA	3646	1/1	0.93	0.22	53,53,53,53	0
59	MG	AA	3648	1/1	0.93	0.17	41,41,41,41	0
59	MG	AA	3304	1/1	0.93	0.15	47,47,47,47	0
59	MG	AA	3651	1/1	0.93	0.22	77,77,77,77	0
59	MG	AA	3234	1/1	0.93	0.29	36,36,36,36	0
59	MG	AZ	301	1/1	0.93	0.14	$55,\!55,\!55,\!55$	0
59	MG	BA	1720	1/1	0.93	0.21	61,61,61,61	0
59	MG	CA	3402	1/1	0.93	0.09	66,66,66,66	0
59	MG	CA	3094	1/1	0.93	0.21	59, 59, 59, 59, 59	0
59	MG	AA	3038	1/1	0.93	0.45	29,29,29,29	1
59	MG	BE	3001	1/1	0.93	0.11	78,78,78,78	0
59	MG	BK	201	1/1	0.93	0.10	44,44,44,44	0
59	MG	AA	3731	1/1	0.93	0.14	51,51,51,51	0
59	MG	CA	3412	1/1	0.93	0.18	59,59,59,59	0
59	MG	DA	1629	1/1	0.93	0.42	59, 59, 59, 59, 59	0
59	MG	AA	3058	1/1	0.93	0.14	22,22,22,22	0
59	MG	CA	3414	1/1	0.93	0.19	34,34,34,34	1
59	MG	CA	3233	1/1	0.93	0.12	59,59,59,59	0
59	MG	AA	3733	1/1	0.93	0.15	49,49,49,49	0
59	MG	AA	3609	1/1	0.93	0.11	58,58,58,58	0
59	MG	AA	3738	1/1	0.93	0.19	24,24,24,24	0
59	MG	AA	3514	1/1	0.93	0.18	42,42,42,42	0
59	MG	CA	3430	1/1	0.93	0.36	41,41,41,41	0
59	MG	AA	3823	1/1	0.93	0.48	39,39,39,39	0
59	MG	BA	1732	1/1	0.93	0.25	70,70,70,70	0
59	MG	CA	3588	1/1	0.93	0.12	32,32,32,32	0
59	MG	CA	3434	1/1	0.93	0.16	32,32,32,32	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors(A^2)	Q < 0.9
59	MG	CA	3436	1/1	0.93	0.11	64,64,64,64	0
59	MG	AA	3314	1/1	0.93	0.26	57,57,57,57	0
59	MG	DA	1650	1/1	0.93	0.28	50,50,50,50	0
59	MG	BA	1734	1/1	0.93	0.13	61,61,61,61	0
59	MG	AA	3429	1/1	0.93	0.19	31,31,31,31	0
59	MG	AA	3661	1/1	0.93	0.24	41,41,41,41	1
59	MG	AA	3832	1/1	0.93	0.42	$55,\!55,\!55,\!55$	0
59	MG	CA	3245	1/1	0.93	0.41	$62,\!62,\!62,\!62$	0
59	MG	AA	3046	1/1	0.93	0.33	$35,\!35,\!35,\!35$	0
59	MG	CA	3022	1/1	0.93	0.52	69,69,69,69	0
59	MG	AB	3002	1/1	0.93	0.17	52,52,52,52	0
59	MG	AA	3748	1/1	0.93	0.20	45,45,45,45	0
59	MG	CA	3029	1/1	0.93	0.09	56, 56, 56, 56	0
59	MG	CA	3463	1/1	0.93	0.23	56,56,56,56	0
59	MG	CA	3254	1/1	0.93	0.16	85,85,85,85	0
59	MG	AA	3667	1/1	0.93	0.29	41,41,41,41	0
59	MG	AA	3669	1/1	0.93	0.18	81,81,81,81	0
59	MG	DA	1668	1/1	0.93	0.38	65,65,65,65	0
59	MG	AA	3673	1/1	0.93	0.11	38,38,38,38	0
59	MG	CA	3614	1/1	0.93	0.24	62,62,62,62	0
59	MG	BA	1672	1/1	0.93	0.30	65,65,65,65	0
59	MG	CA	3476	1/1	0.93	0.17	38,38,38,38	0
59	MG	AA	3062	1/1	0.93	0.17	47,47,47,47	0
59	MG	AA	3096	1/1	0.93	0.20	59,59,59,59	0
59	MG	AA	3172	1/1	0.93	0.22	47,47,47,47	0
59	MG	CA	3484	1/1	0.93	0.26	78,78,78,78	0
59	MG	DA	1680	1/1	0.93	0.17	56,56,56,56	0
59	MG	BA	1757	1/1	0.93	0.22	43,43,43,43	0
59	MG	DA	1682	1/1	0.93	0.33	52,52,52,52	0
59	MG	AA	3764	1/1	0.93	0.16	73,73,73,73	0
59	MG	CA	3275	1/1	0.93	0.10	61,61,61,61	0
59	MG	BA	1759	1/1	0.93	0.32	63,63,63,63	0
59	MG	DA	1688	1/1	0.93	0.25	51,51,51,51	0
59	MG	AA	3101	1/1	0.93	0.64	68,68,68,68	0
59	MG	DA	1690	1/1	0.93	0.19	73,73,73,73	0
59	MG	BA	1763	1/1	0.93	0.17	76,76,76,76	0
59	MG	BA	1617	1/1	0.93	0.12	118,118,118,118	0
59	MG	AA	3063	1/1	0.93	0.26	54,54,54,54	0
59	MG	AA	3198	1/1	0.93	0.15	63,63.63.63	0
59	MG	DA	1700	1/1	0.93	0.16	61.61.61.61	0
59	MG	AA	3454	1/1	0.93	0.24	61.61.61.61	0
59	MG	CA	3051	1/1	0.93	0.74	57,57.57.57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$\frac{B-factors(A^2)}{52.52.52}$	Q<0.9
59	MG	CA	3642		0.93	0.52	52,52,52,52	0
59	MG	CA	3293		0.93	0.16	60,60,60,60	0
59	MG	CA	3052		0.93	0.18	44,44,44,44	0
59	MG	BA	1621		0.93	0.11	51,51,51,51	0
59	MG	CA	3056		0.93	0.09	63,63,63,63	0
59	MG	CA	3651	1/1	0.93	0.53	76,76,76,76	0
59	MG	AA	3456	1/1	0.93	0.14	56,56,56,56	0
59	MG	CA	3655	1/1	0.93	0.41	52,52,52,52	0
59	MG	CA	3156	1/1	0.93	0.38	52,52,52,52	0
59	MG	CA	3658	1/1	0.93	0.39	64,64,64,64	0
59	MG	CA	3660	1/1	0.93	0.19	60,60,60,60	0
59	MG	CA	3157	1/1	0.93	0.55	81,81,81,81	0
59	MG	AA	3178	1/1	0.93	0.36	48,48,48,48	0
59	MG	AA	3775	1/1	0.93	0.59	25,25,25,25	1
59	MG	CA	3313	1/1	0.93	0.26	38,38,38,38	0
59	MG	CB	3004	1/1	0.93	0.13	55,55,55,55	0
59	MG	CB	3005	1/1	0.93	0.38	63,63,63,63	0
59	MG	CA	3161	1/1	0.93	0.25	57,57,57,57	0
59	MG	CA	3164	1/1	0.93	0.56	64,64,64,64	0
59	MG	AD	308	1/1	0.93	0.42	46, 46, 46, 46	0
59	MG	CA	3167	1/1	0.93	0.08	$50,\!50,\!50,\!50$	0
59	MG	BA	1780	1/1	0.93	0.36	$60,\!60,\!60,\!60$	0
59	MG	BA	1782	1/1	0.93	0.19	47,47,47,47	0
59	MG	AA	3577	1/1	0.93	0.08	42,42,42,42	0
59	MG	DA	1744	1/1	0.93	0.22	66,66,66,66	0
59	MG	AA	3086	1/1	0.93	0.40	$55,\!55,\!55,\!55$	0
59	MG	BA	1787	1/1	0.93	0.27	$55,\!55,\!55,\!55$	0
59	MG	CA	3526	1/1	0.93	0.21	$58,\!58,\!58,\!58$	0
59	MG	AA	3356	1/1	0.93	0.15	80,80,80,80	0
59	MG	CA	3177	1/1	0.93	0.15	29,29,29,29	0
59	MG	CF	303	1/1	0.93	0.14	51,51,51,51	0
59	MG	DA	1755	1/1	0.93	0.51	88,88,88,88	0
59	MG	CN	5001	1/1	0.93	0.16	$65,\!65,\!65,\!65$	0
59	MG	CA	3178	1/1	0.93	0.13	54,54,54,54	0
59	MG	DA	1758	1/1	0.93	0.17	75,75,75,75	0
59	MG	DA	1759	1/1	0.93	0.17	53,53,53,53	0
59	MG	AA	3286	1/1	0.93	0.45	40,40,40,40	0
59	MG	AA	3124	1/1	0.93	0.73	62,62,62,62	0
59	MG	AA	3204	1/1	0.93	0.33	54,54,54,54	0
59	MG	CA	3073	1/1	0.93	0.26	49,49,49,49	0
59	MG	BA	1793	1/1	0.93	0.09	65,65,65,65	0
59	MG	CA	3076	1/1	0.93	0.34	64,64,64,64	0

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Mol	Tvpe	Chain	$\frac{15 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	B-factors ($Å^2$)	Q<0.9
59	MG	AA	3589	1/1	0.93	0.08	55.55.55.55	0
59	MG	AA	3261	1/1	0.93	0.31	25.25.25.25	0
59	MG	DJ	5001	1/1	0.93	0.32	82,82,82,82	0
59	MG	AA	3231	1/1	0.93	0.21	64,64,64,64	0
59	MG	BA	1639	1/1	0.93	0.46	61,61,61,61	0
59	MG	AA	3376	1/1	0.93	0.21	35,35,35,35	0
59	MG	CA	3201	1/1	0.93	0.23	45,45,45,45	0
59	MG	AA	3163	1/1	0.93	0.25	72,72,72,72	0
60	ZN	BN	501	1/1	0.93	0.10	132,132,132,132	0
59	MG	CA	3547	1/1	0.93	0.13	69,69,69,69	0
59	MG	AA	3276	1/1	0.94	0.24	67,67,67,67	0
59	MG	AA	3089	1/1	0.94	0.28	49,49,49,49	0
59	MG	AA	3278	1/1	0.94	0.21	60,60,60,60	0
59	MG	CA	3018	1/1	0.94	0.08	41,41,41,41	0
59	MG	AA	3828	1/1	0.94	0.38	38,38,38,38	0
59	MG	CA	3142	1/1	0.94	0.43	61,61,61,61	0
59	MG	AA	3711	1/1	0.94	0.35	43,43,43,43	1
59	MG	AA	3615	1/1	0.94	0.25	43,43,43,43	0
59	MG	C1	101	1/1	0.94	0.18	$57,\!57,\!57,\!57$	0
59	MG	BA	1726	1/1	0.94	0.20	46,46,46,46	0
59	MG	AA	3351	1/1	0.94	0.21	29,29,29,29	0
59	MG	CA	3522	1/1	0.94	0.13	54,54,54,54	0
59	MG	DA	1602	1/1	0.94	0.10	45,45,45,45	0
59	MG	AA	3474	1/1	0.94	0.15	18,18,18,18	1
59	MG	AA	3279	1/1	0.94	0.23	34,34,34,34	0
59	MG	CA	3151	1/1	0.94	0.16	38,38,38,38	0
59	MG	AA	3245	1/1	0.94	0.17	11,11,11,11	0
59	MG	CA	3316	1/1	0.94	0.17	43,43,43,43	0
59	MG	AA	3620	1/1	0.94	0.11	22,22,22,22	0
59	MG	CA	3531	1/1	0.94	0.09	47,47,47,47	0
59	MG	BA	1636	1/1	0.94	0.17	57,57,57,57	0
59	MG	CA	3533	1/1	0.94	0.18	45,45,45,45	0
59	MG	DA	1612	1/1	0.94	0.13	57,57,57,57	0
59	MG	AA	3719	1/1	0.94	0.10	59,59,59,59	0
59	MG	AA	3030	1/1	0.94	0.29	24,24,24,24	1
59	MG	AA	3081		0.94	0.21	56,56,56,56	
59	MG	AB	3018		0.94	0.22	69,69,69,69	0
59	MG	AA	3359		0.94	0.18	31,31,31,31	0
59	MG	AA	3361		0.94	0.16	53,53,53,53	0
59	MG	AA	3251		0.94	0.35	56,56,56,56	0
59	MG	BA	1742		0.94	0.18	48,48,48,48	
59	MG	CA	3166	$1/1$	0.94	0.31	27,27,27,27	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors (A^2)	$\mathbf{Q} < 0.9$
59	MG	AA	3628	1/1	0.94	0.23	70,70,70,70	0
59	MG	BA	1745	1/1	0.94	0.20	46,46,46,46	0
59	MG	CA	3170	1/1	0.94	0.15	32,32,32,32	0
59	MG	CA	3357	1/1	0.94	0.12	66,66,66,66	0
59	MG	CA	3359	1/1	0.94	0.08	33,33,33,33	0
59	MG	AA	3365	1/1	0.94	0.39	77,77,77,77	0
59	MG	CA	3048	1/1	0.94	0.10	$47,\!47,\!47,\!47$	0
59	MG	AA	3490	1/1	0.94	0.16	$27,\!27,\!27,\!27$	0
59	MG	CA	3370	1/1	0.94	0.14	41,41,41,41	0
59	MG	AA	3367	1/1	0.94	0.17	$60,\!60,\!60,\!60$	0
59	MG	AA	3495	1/1	0.94	0.15	$35,\!35,\!35,\!35$	0
59	MG	AA	3743	1/1	0.94	0.16	67,67,67,67	0
59	MG	BA	1651	1/1	0.94	0.33	$55,\!55,\!55,\!55$	0
59	MG	CA	3561	1/1	0.94	0.14	41,41,41,41	1
59	MG	DA	1640	1/1	0.94	0.31	77,77,77,77	0
59	MG	AD	309	1/1	0.94	0.25	37,37,37,37	0
59	MG	CA	3182	1/1	0.94	0.31	38,38,38,38	0
59	MG	CA	3183	1/1	0.94	0.21	49,49,49,49	0
59	MG	CA	3568	1/1	0.94	0.10	39,39,39,39	0
59	MG	AD	310	1/1	0.94	0.39	78,78,78,78	0
59	MG	DA	1647	1/1	0.94	0.15	51,51,51,51	0
59	MG	AA	3370	1/1	0.94	0.15	47,47,47,47	0
59	MG	AA	3170	1/1	0.94	0.19	54,54,54,54	0
59	MG	CA	3188	1/1	0.94	0.80	94,94,94,94	0
59	MG	AA	3004	1/1	0.94	0.15	21,21,21,21	0
59	MG	CA	3190	1/1	0.94	0.23	66,66,66,66	0
59	MG	CA	3578	1/1	0.94	0.09	38,38,38,38	0
59	MG	CA	3063	1/1	0.94	0.10	34,34,34,34	0
59	MG	CA	3393	1/1	0.94	0.07	68,68,68,68	0
59	MG	AA	3518	1/1	0.94	0.17	14,14,14,14	0
59	MG	AA	3374	1/1	0.94	0.31	49,49,49,49	0
59	MG	AA	3254	1/1	0.94	0.25	52,52,52,52	0
59	MG	CA	3399	1/1	0.94	0.07	57,57,57,57	0
59	MG	CA	3196	1/1	0.94	0.66	68,68,68,68	0
59	MG	AA	3378	1/1	0.94	0.17	56, 56, 56, 56	0
59	MG	AA	3255	1/1	0.94	0.22	38,38,38,38	0
59	MG	AA	3759	1/1	0.94	0.10	57,57,57,57	0
59	MG	CA	3590	1/1	0.94	0.10	59,59,59,59	0
59	MG	BA	1664	1/1	0.94	0.14	56,56,56,56	0
59	MG	CA	3410	1/1	0.94	0.22	25,25,25,25	0
59	MG	AA	3549	1/1	0.94	0.05	66,66,66,66	0
59	MG	AA	3387	1/1	0.94	0.08	29,29,29,29	0

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Mol	Type	Chain	$\frac{13 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	AA	3555	1/1	0.94	0.15	45.45.45.45	0
59	MG	AA	3766	1/1	0.94	0.17	54.54.54.54	0
59	MG	BA	1781	1/1	0.94	0.14	63,63,63,63	0
59	MG	AQ	204	1/1	0.94	0.23	86,86,86,86	0
59	MG	AA	3289	1/1	0.94	0.43	53,53,53,53	0
59	MG	CA	3421	1/1	0.94	0.20	57,57,57,57	0
59	MG	AA	3071	1/1	0.94	0.60	40,40,40,40	0
59	MG	AA	3408	1/1	0.94	0.34	41,41,41,41	0
59	MG	CA	3429	1/1	0.94	0.26	59,59,59,59	0
59	MG	CA	3606	1/1	0.94	0.48	73,73,73,73	0
59	MG	CA	3607	1/1	0.94	0.09	64,64,64,64	0
59	MG	AA	3257	1/1	0.94	0.32	54,54,54,54	0
59	MG	BA	1789	1/1	0.94	0.15	72,72,72,72	0
59	MG	AA	3572	1/1	0.94	0.20	17,17,17,17	0
59	MG	AA	3573	1/1	0.94	0.16	12,12,12,12	0
59	MG	DA	1695	1/1	0.94	0.17	63,63,63,63	0
59	MG	DA	1698	1/1	0.94	0.33	97,97,97,97	0
59	MG	AA	3413	1/1	0.94	0.19	$25,\!25,\!25,\!25$	0
59	MG	CA	3441	1/1	0.94	0.23	56, 56, 56, 56	0
59	MG	AA	3207	1/1	0.94	0.20	60,60,60,60	0
59	MG	AA	3190	1/1	0.94	0.13	24,24,24,24	0
59	MG	BA	1795	1/1	0.94	0.10	$59,\!59,\!59,\!59$	0
59	MG	CA	3621	1/1	0.94	0.21	61,61,61,61	0
59	MG	CA	3622	1/1	0.94	0.17	$50,\!50,\!50,\!50$	0
59	MG	DA	1706	1/1	0.94	0.33	66, 66, 66, 66	0
59	MG	AA	3173	1/1	0.94	0.29	46,46,46,46	0
59	MG	DA	1709	1/1	0.94	0.16	$70,\!70,\!70,\!70$	0
59	MG	DA	1710	1/1	0.94	0.25	104,104,104,104	0
59	MG	CA	3452	1/1	0.94	0.20	36, 36, 36, 36	0
59	MG	AA	3662	1/1	0.94	0.07	60,60,60,60	0
59	MG	AA	3580	1/1	0.94	0.22	54,54,54,54	0
59	MG	BA	1801	1/1	0.94	0.09	$65,\!65,\!65,\!65$	0
59	MG	A5	502	1/1	0.94	0.16	51,51,51,51	0
59	MG	DA	1723	1/1	0.94	0.13	53,53,53,53	0
59	MG	AA	3784	1/1	0.94	0.21	59,59,59,59	0
59	MG	AA	3265	1/1	0.94	0.17	43,43,43,43	0
59	MG	AA	3174	1/1	0.94	0.44	59, 59, 59, 59, 59	0
59	MG	A8	5001	1/1	0.94	0.27	30,30,30,30	0
59	MG	AA	3672	1/1	0.94	0.15	48,48,48,48	0
59	MG	CA	3635	1/1	0.94	0.23	48,48,48,48	0
59	MG	CA	3104	1/1	0.94	0.15	80,80,80,80	0
59	MG	CA	3470	1/1	0.94	0.19	$74,\!74,\!74,\!74$	0



Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	AA	3443	1/1	0.94	0.19	33,33,33,33	0
59	MG	CA	3643	1/1	0.94	0.17	79,79,79,79	0
59	MG	AA	3148	1/1	0.94	0.45	29,29,29,29	1
59	MG	AA	3236	1/1	0.94	0.14	57,57,57,57	0
59	MG	CA	3248	1/1	0.94	0.42	53,53,53,53	0
59	MG	AA	3050	1/1	0.94	0.27	28,28,28,28	0
59	MG	AA	3001	1/1	0.94	0.14	25,25,25,25	0
59	MG	DA	1743	1/1	0.94	0.13	59,59,59,59	0
59	MG	AA	3594	1/1	0.94	0.24	56,56,56,56	0
59	MG	CA	3483	1/1	0.94	0.32	64,64,64,64	0
59	MG	CA	3253	1/1	0.94	0.17	70,70,70,70	0
59	MG	AA	3448	1/1	0.94	0.12	62,62,62,62	0
59	MG	AA	3217	1/1	0.94	0.44	29,29,29,29	1
59	MG	CA	3661	1/1	0.94	0.23	27,27,27,27	0
59	MG	AA	3324	1/1	0.94	0.14	$15,\!15,\!15,\!15$	0
59	MG	CA	3664	1/1	0.94	0.13	48,48,48,48	0
59	MG	CA	3489	1/1	0.94	0.10	39,39,39,39	0
59	MG	AA	3451	1/1	0.94	0.07	57,57,57,57	0
59	MG	AA	3218	1/1	0.94	0.09	67,67,67,67	0
59	MG	CA	3493	1/1	0.94	0.52	$65,\!65,\!65,\!65$	0
59	MG	AA	3606	1/1	0.94	0.24	34,34,34,34	0
59	MG	DA	1762	1/1	0.94	0.20	61,61,61,61	0
59	MG	CA	3269	1/1	0.94	0.14	81,81,81,81	0
59	MG	DA	1768	1/1	0.94	0.07	59,59,59,59	0
59	MG	AA	3455	1/1	0.94	0.20	32,32,32,32	1
59	MG	BW	501	1/1	0.94	0.22	47,47,47,47	0
59	MG	AA	3039	1/1	0.94	0.52	34,34,34,34	1
59	MG	AA	3819	1/1	0.94	0.51	57,57,57,57	0
59	MG	AA	3337	1/1	0.94	0.16	75,75,75,75	0
59	MG	CA	3003	1/1	0.94	0.30	62,62,62,62	0
59	MG	CD	304	1/1	0.94	0.29	28,28,28,28	0
59	MG	CA	3504	1/1	0.94	0.13	$79,\!79,\!79,\!79$	0
59	MG	AA	3610	1/1	0.94	0.22	59, 59, 59, 59, 59	0
59	MG	AA	3704	1/1	0.94	0.19	49,49,49,49	0
59	MG	CA	3132	1/1	0.94	0.16	48,48,48,48	0
59	MG	CA	3283	1/1	0.94	0.12	31,31,31,31	0
60	ZN	A4	501	1/1	0.94	0.07	117,117,117,117	0
59	MG	CA	3008	1/1	0.94	0.38	46,46,46,46	0
59	MG	CA	3285	1/1	0.94	0.19	$63,\!63,\!63,\!63$	0
59	MG	CA	3147	1/1	0.95	0.29	$55,\!55,\!55,\!55$	0
59	MG	AA	3022	1/1	0.95	$0.1\overline{2}$	5, 5, 5, 5	0
59	MG	C5	101	1/1	0.95	$0.\overline{49}$	66,66,66,66	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors(A^2)	Q<0.9
59	MG	AA	3099	1/1	0.95	0.10	53,53,53,53	0
59	MG	CA	3009	1/1	0.95	0.10	27,27,27,27	0
59	MG	CA	3318	1/1	0.95	0.21	24,24,24,24	0
59	MG	CA	3012	1/1	0.95	0.15	65,65,65,65	0
59	MG	CA	3321	1/1	0.95	0.13	28,28,28,28	0
59	MG	AA	3187	1/1	0.95	0.29	56,56,56,56	0
59	MG	AA	3671	1/1	0.95	0.23	19,19,19,19	0
59	MG	AA	3588	1/1	0.95	0.15	47,47,47,47	0
59	MG	AA	3785	1/1	0.95	0.15	$61,\!61,\!61,\!61$	0
59	MG	AA	3271	1/1	0.95	0.33	34,34,34,34	0
59	MG	CA	3337	1/1	0.95	0.14	20,20,20,20	0
59	MG	A9	502	1/1	0.95	0.24	41,41,41,41	0
59	MG	AA	3674	1/1	0.95	0.14	30,30,30,30	0
59	MG	AA	3590	1/1	0.95	0.17	60,60,60,60	0
59	MG	CA	3024	1/1	0.95	0.29	100,100,100,100	0
59	MG	DA	1615	1/1	0.95	0.25	58,58,58,58	0
59	MG	CA	3346	1/1	0.95	0.19	30,30,30,30	0
59	MG	CA	3543	1/1	0.95	0.19	71,71,71,71	0
59	MG	AA	3790	1/1	0.95	0.46	57,57,57,57	0
59	MG	DA	1619	1/1	0.95	0.59	59,59,59,59	0
59	MG	CA	3349	1/1	0.95	0.20	23,23,23,23	0
59	MG	AA	3188	1/1	0.95	0.18	31,31,31,31	0
59	MG	BA	1717	1/1	0.95	0.18	78,78,78,78	0
59	MG	CA	3354	1/1	0.95	0.25	49,49,49,49	0
59	MG	CA	3356	1/1	0.95	0.19	44,44,44,44	0
59	MG	AA	3794	1/1	0.95	0.42	60,60,60,60	0
59	MG	AA	3384	1/1	0.95	0.21	22,22,22,22	0
59	MG	CA	3552	1/1	0.95	0.18	30,30,30,30	0
59	MG	AA	3478	1/1	0.95	0.24	33,33,33,33	0
59	MG	AA	3006	1/1	0.95	0.34	52,52,52,52	0
59	MG	AA	3048	1/1	0.95	0.16	28,28,28,28	0
59	MG	AA	3104	1/1	0.95	0.32	54,54,54,54	0
59	MG	AA	3804	1/1	0.95	0.18	50,50,50,50	0
59	MG	AA	3806	1/1	0.95	0.18	42,42,42,42	0
59	MG	AA	3684	1/1	0.95	0.25	51,51,51,51	0
59	MG	CA	3562	1/1	0.95	0.14	29,29,29,29	0
59	MG	CA	3375	1/1	0.95	0.34	68,68,68,68	0
59	MG	AA	3685	1/1	0.95	0.19	72,72,72,72	0
59	MG	AA	3686	1/1	0.95	0.20	61,61,61,61	0
59	MG	AA	3687	1/1	0.95	0.29	52,52,52,52	0
59	MG	AA	3812	1/1	0.95	0.17	41,41,41,41	0
59	MG	AA	3689	1/1	0.95	0.09	$35,\!35,\!35,\!35$	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors(A^2)	Q<0.9
59	MG	CA	3185	1/1	0.95	0.29	48,48,48,48	0
59	MG	AA	3392	1/1	0.95	0.24	17,17,17,17	0
59	MG	AA	3393	1/1	0.95	0.20	23,23,23,23	0
59	MG	AA	3193	1/1	0.95	0.20	40,40,40,40	0
59	MG	AA	3400	1/1	0.95	0.17	13,13,13,13	0
59	MG	AA	3697	1/1	0.95	0.23	40,40,40,40	0
59	MG	BA	1626	1/1	0.95	0.12	41,41,41,41	0
59	MG	BA	1627	1/1	0.95	0.23	$51,\!51,\!51,\!51$	0
59	MG	AA	3325	1/1	0.95	0.16	70,70,70,70	0
59	MG	CA	3397	1/1	0.95	0.15	$57,\!57,\!57,\!57$	0
59	MG	AA	3013	1/1	0.95	0.18	$28,\!28,\!28,\!28$	0
59	MG	AA	3824	1/1	0.95	0.58	$72,\!72,\!72,\!72$	0
59	MG	CA	3198	1/1	0.95	0.23	34,34,34,34	0
59	MG	AA	3493	1/1	0.95	0.10	77,77,77,77	0
59	MG	BA	1749	1/1	0.95	0.32	61,61,61,61	0
59	MG	AA	3494	1/1	0.95	0.09	34,34,34,34	0
59	MG	AA	3330	1/1	0.95	0.06	66,66,66,66	0
59	MG	AA	3221	1/1	0.95	0.15	30,30,30,30	0
59	MG	AA	3829	1/1	0.95	0.24	47,47,47,47	0
59	MG	AA	3706	1/1	0.95	0.54	41,41,41,41	1
59	MG	AA	3501	1/1	0.95	0.06	49,49,49,49	0
59	MG	AA	3502	1/1	0.95	0.13	29,29,29,29	1
59	MG	CA	3416	1/1	0.95	0.14	44,44,44,44	0
59	MG	AA	3503	1/1	0.95	0.06	54,54,54,54	0
59	MG	AA	3504	1/1	0.95	0.09	29,29,29,29	0
59	MG	CA	3601	1/1	0.95	0.13	57,57,57,57	0
59	MG	CA	3213	1/1	0.95	0.27	51,51,51,51	0
59	MG	AA	3508	1/1	0.95	0.18	43,43,43,43	0
59	MG	AA	3509	1/1	0.95	0.16	40,40,40,40	0
59	MG	AA	3510	1/1	0.95	0.24	17,17,17,17	0
59	MG	AA	3513	1/1	0.95	0.10	41,41,41,41	0
59	MG	BA	1771	1/1	0.95	0.21	65,65,65,65	0
59	MG	DA	1685	1/1	0.95	0.10	46,46,46,46	0
59	MG	AB	3013	1/1	0.95	0.15	53,53,53,53	0
59	MG	DA	1687	1/1	0.95	0.42	56,56,56,56	0
59	MG	AA	3417	1/1	0.95	0.18	25,25,25,25	0
59	MG	AA	3333	1/1	0.95	0.20	11,11,11,11	0
59	MG	AA	3420	1/1	0.95	0.15	25,25,25,25	1
59	MG	CA	3440	1/1	0.95	0.31	49,49,49,49	0
59	MG	AA	3520	1/1	0.95	0.14	17.17.17.17	0
59	MG	AB	3022	1/1	0.95	0.12	61.61.61.61	0
59	MG	AA	3521	1/1	0.95	0.18	19,19,19.19	0

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Mol	Type	Chain	$\frac{13 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	CA	3445	1/1	0.95	0.20	22,22,22,22	0
59	MG	AA	3522	1/1	0.95	0.16	30,30,30,30	0
59	MG	AA	3632	1/1	0.95	0.20	54,54,54,54	0
59	MG	CA	3451	1/1	0.95	0.21	62,62,62,62	0
59	MG	BA	1783	1/1	0.95	0.18	57,57,57,57	0
59	MG	AD	304	1/1	0.95	0.35	41,41,41,41	0
59	MG	AA	3530	1/1	0.95	0.19	20,20,20,20	1
59	MG	CA	3455	1/1	0.95	0.28	49,49,49,49	0
59	MG	AA	3533	1/1	0.95	0.17	22,22,22,22	0
59	MG	DA	1707	1/1	0.95	0.07	61,61,61,61	0
59	MG	AA	3737	1/1	0.95	0.16	54,54,54,54	0
59	MG	AA	3425	1/1	0.95	0.05	77,77,77,77	0
59	MG	AA	3036	1/1	0.95	0.24	25,25,25,25	0
59	MG	AA	3637	1/1	0.95	0.33	$17,\!17,\!17,\!17$	1
59	MG	AA	3132	1/1	0.95	0.21	41,41,41,41	0
59	MG	AA	3431	1/1	0.95	0.15	$25,\!25,\!25,\!25$	0
59	MG	AA	3548	1/1	0.95	0.11	7, 7, 7, 7	0
59	MG	DA	1719	1/1	0.95	0.38	61,61,61,61	0
59	MG	CA	3469	1/1	0.95	0.22	61,61,61,61	0
59	MG	CA	3639	1/1	0.95	0.59	61,61,61,61	0
59	MG	AA	3064	1/1	0.95	0.13	32,32,32,32	0
59	MG	DA	1725	1/1	0.95	0.17	58,58,58,58	0
59	MG	CA	3107	1/1	0.95	0.26	77,77,77,77	0
59	MG	AA	3441	1/1	0.95	0.29	58,58,58,58	0
59	MG	CA	3645	1/1	0.95	0.11	69,69,69,69	0
59	MG	CA	3252	1/1	0.95	0.19	62,62,62,62	0
59	MG	AA	3052	1/1	0.95	0.16	11,11,11,11	0
59	MG	BA	1799	1/1	0.95	0.13	64,64,64,64	0
59	MG	AA	3348	1/1	0.95	0.06	53,53,53,53	0
59	MG	DA	1734	1/1	0.95	0.14	65,65,65,65	0
59	MG	CA	3480	1/1	0.95	0.21	50,50,50,50	0
59	MG	AF	306	1/1	0.95	0.24	57,57,57,57	0
59	MG	AG	202	1/1	0.95	0.06	54,54,54,54	0
59	MG	AH	201		0.95	0.85	64,64,64,64	0
59	MG	CA	3263		0.95	0.14	64,64,64,64	0
59	MG	BA	1674		0.95	0.57	48,48,48,48	
59	MG	CA	3265		0.95	0.29	01,01,01,01	
59	MG		3268		0.95	0.17	52,52,52,52	
59	MG	AA	31/0		0.95	0.32	10,10,10,70	
59	MG	AA DA	3200		0.95	0.22	30,30,30,30	
59	MG	DA DA	1747		0.95	0.14	48,48,48,48	
- 59	MG	BA	1809		0.95	0.23	61,61,61,61	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$\frac{\text{B-factors}(A^2)}{40,40,40}$	Q<0.9
59	MG	CA	3121	1/1	0.95	0.13	49,49,49,49	0
59	MG	DA	1750		0.95	0.08	67,67,67,67	0
59	MG	AO	5001	1/1	0.95	0.09	34,34,34,34	0
59	MG	DA	1752	1/1	0.95	0.16	52,52,52,52	0
59	MG	BA	1680	1/1	0.95	0.19	40,40,40,40	0
59	MG	AA	3757	1/1	0.95	0.07	14,14,14,14	0
59	MG	AA	3560	1/1	0.95	0.13	29,29,29,29	0
59	MG	AA	3044	1/1	0.95	0.37	52,52,52,52	0
59	MG	AA	3762	1/1	0.95	0.14	23,23,23,23	0
59	MG	CA	3281	1/1	0.95	0.23	21,21,21,21	0
59	MG	AA	3652	1/1	0.95	0.14	53,53,53,53	0
59	MG	DA	1760	1/1	0.95	0.14	61,61,61,61	0
59	MG	AA	3260	1/1	0.95	0.17	21,21,21,21	0
59	MG	AU	205	1/1	0.95	0.26	45,45,45,45	0
59	MG	DA	1763	1/1	0.95	0.30	76,76,76,76	0
59	MG	DA	1766	1/1	0.95	0.12	74,74,74,74	0
59	MG	BA	1692	1/1	0.95	0.28	$55,\!55,\!55,\!55$	0
59	MG	AA	3160	1/1	0.95	0.15	30,30,30,30	0
59	MG	CE	305	1/1	0.95	0.04	$58,\!58,\!58,\!58$	0
59	MG	AA	3574	1/1	0.95	0.17	12,12,12,12	0
59	MG	AW	3003	1/1	0.95	0.25	28,28,28,28	0
59	MG	AA	3290	1/1	0.95	0.13	64,64,64,64	0
59	MG	AA	3137	1/1	0.95	0.63	53,53,53,53	0
59	MG	AA	3658	1/1	0.95	0.21	42,42,42,42	0
59	MG	AA	3112	1/1	0.95	0.14	61,61,61,61	0
59	MG	CA	3303	1/1	0.95	0.35	43,43,43,43	0
59	MG	AA	3021	1/1	0.95	0.13	33,33,33,33	0
59	MG	CA	3305	1/1	0.95	0.27	48,48,48,48	0
59	MG	CA	3144	1/1	0.95	0.23	40,40,40,40	0
59	MG	CU	201	1/1	0.95	0.48	74,74,74,74	0
59	MG	AA	3299	1/1	0.95	0.26	47,47,47,47	0
59	MG	CW	201	1/1	0.95	0.36	46,46,46,46	0
59	MG	AA	3117	1/1	0.95	0.24	25,25,25,25	1
59	MG	CA	3471	1/1	0.96	0.19	33,33,33,33	0
59	MG	AA	3116	1/1	0.96	0.63	35,35,35,35	0
59	MG	AA	3259	1/1	0.96	0.34	41,41,41,41	1
59	MG	AA	3353	1/1	0.96	0.22	39,39,39,39	0
59	MG	AA	3008	1/1	0.96	0.21	26,26,26,26	0
59	MG	AA	3185	1/1	0.96	0.16	76,76,76,76	0
59	MG	AA	3291	1/1	0.96	0.28	45,45.45.45	0
59	MG	AA	3813	1/1	0.96	0.19	29,29.29.29	1
59	MG	AA	3262	1/1	0.96	0.14	15,15,15.15	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors(A^2)	Q<0.9
59	MG	CG	3001	1/1	0.96	0.10	65,65,65,65	0
59	MG	AA	3581	1/1	0.96	0.17	52,52,52,52	0
59	MG	CO	5001	1/1	0.96	0.17	50,50,50,50	0
59	MG	AA	3462	1/1	0.96	0.09	54,54,54,54	0
59	MG	CA	3255	1/1	0.96	0.24	28,28,28,28	0
59	MG	BA	1766	1/1	0.96	0.14	62,62,62,62	0
59	MG	BA	1632	1/1	0.96	0.08	48,48,48,48	0
59	MG	AA	3263	1/1	0.96	0.42	24,24,24,24	1
59	MG	BA	1770	1/1	0.96	0.12	$54,\!54,\!54,\!54$	0
59	MG	CA	3491	1/1	0.96	0.06	44,44,44,44	0
59	MG	CA	3262	1/1	0.96	0.12	11,11,11,11	0
59	MG	AA	3007	1/1	0.96	0.14	12,12,12,12	0
59	MG	AA	3688	1/1	0.96	0.15	$25,\!25,\!25,\!25$	0
59	MG	CO	101	1/1	0.96	0.17	59,59,59,59	0
59	MG	AA	3119	1/1	0.96	0.31	47,47,47,47	0
59	MG	AA	3690	1/1	0.96	0.20	50,50,50,50	0
59	MG	AA	3692	1/1	0.96	0.15	36,36,36,36	1
59	MG	AA	3468	1/1	0.96	0.06	55,55,55,55	0
59	MG	AA	3469	1/1	0.96	0.12	32,32,32,32	0
59	MG	CA	3099	1/1	0.96	0.25	58,58,58,58	0
59	MG	AA	3471	1/1	0.96	0.08	56, 56, 56, 56	0
59	MG	AA	3092	1/1	0.96	0.17	39,39,39,39	0
59	MG	CA	3102	1/1	0.96	0.50	62,62,62,62	0
59	MG	CA	3277	1/1	0.96	0.18	$55,\!55,\!55,\!55$	0
59	MG	AA	3301	1/1	0.96	0.30	39,39,39,39	0
59	MG	CA	3106	1/1	0.96	0.13	66,66,66,66	0
59	MG	AA	3593	1/1	0.96	0.22	$15,\!15,\!15,\!15$	1
59	MG	AA	3210	1/1	0.96	0.31	$59,\!59,\!59,\!59$	1
59	MG	AA	3305	1/1	0.96	0.16	25,25,25,25	0
59	MG	AA	3599	1/1	0.96	0.16	59,59,59,59	0
59	MG	AA	3703	1/1	0.96	0.23	56, 56, 56, 56	0
59	MG	CA	3286	1/1	0.96	0.20	58,58,58,58	0
59	MG	AA	3306	1/1	0.96	0.25	52,52,52,52	0
59	MG	AB	3007	1/1	0.96	0.07	39,39,39,39	0
59	MG	CA	3290	1/1	0.96	0.33	34,34,34,34	0
59	MG	AA	3375	1/1	0.96	0.29	48,48,48,48	0
59	MG	CA	3519	1/1	0.96	0.22	48,48,48,48	0
59	MG	BA	1653	1/1	0.96	0.10	56, 56, 56, 56	0
59	MG	AA	3307	1/1	0.96	0.34	61,61,61,61	0
59	MG	CA	3295	1/1	0.96	0.26	66,66,66,66	0
59	MG	AA	3121	1/1	0.96	0.16	$53,\!53,\!53,\!53$	0
59	MG	AA	3605	1/1	0.96	0.32	45,45,45,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	CA	3299	1/1	0.96	0.14	64,64,64,64	0
59	MG	CA	3300	1/1	0.96	0.12	47,47,47,47	0
59	MG	AA	3710	1/1	0.96	0.51	29,29,29,29	1
59	MG	DA	1628	1/1	0.96	0.09	39,39,39,39	0
59	MG	AA	3382	1/1	0.96	0.12	37,37,37,37	0
59	MG	DA	1630	1/1	0.96	0.71	62,62,62,62	0
59	MG	CA	3123	1/1	0.96	0.09	29,29,29,29	0
59	MG	BA	1798	1/1	0.96	0.41	73,73,73,73	0
59	MG	AA	3383	1/1	0.96	0.16	20,20,20,20	0
59	MG	AA	3239	1/1	0.96	0.27	25,25,25,25	1
59	MG	AA	3312	1/1	0.96	0.10	23,23,23,23	0
59	MG	AB	3023	1/1	0.96	0.35	54,54,54,54	0
59	MG	AA	3491	1/1	0.96	0.09	46,46,46,46	0
59	MG	AA	3386	1/1	0.96	0.12	45,45,45,45	0
59	MG	AA	3084	1/1	0.96	0.10	23,23,23,23	0
59	MG	AA	3388	1/1	0.96	0.08	28,28,28,28	0
59	MG	BA	1808	1/1	0.96	0.16	54,54,54,54	0
59	MG	CA	3320	1/1	0.96	0.16	36,36,36,36	0
59	MG	AA	3720	1/1	0.96	0.16	$55,\!55,\!55,\!55$	0
59	MG	AA	3389	1/1	0.96	0.15	$25,\!25,\!25,\!25$	0
59	MG	DA	1645	1/1	0.96	0.10	58, 58, 58, 58	0
59	MG	CA	3324	1/1	0.96	0.17	26,26,26,26	0
59	MG	AA	3107	1/1	0.96	0.12	49,49,49,49	0
59	MG	DA	1649	1/1	0.96	0.33	69,69,69,69	0
59	MG	CA	3326	1/1	0.96	0.24	28,28,28,28	0
59	MG	CA	3327	1/1	0.96	0.16	38,38,38,38	0
59	MG	AA	3500	1/1	0.96	0.12	59,59,59,59	0
59	MG	CA	3330	1/1	0.96	0.21	36,36,36,36	0
59	MG	AA	3725	1/1	0.96	0.15	13,13,13,13	0
59	MG	CA	3335	1/1	0.96	0.20	66,66,66,66	0
59	MG	AA	3728	1/1	0.96	0.26	29,29,29,29	0
59	MG	AA	3272	1/1	0.96	0.16	55,55,55,55	0
59	MG	CA	3338	1/1	0.96	0.14	64,64,64,64	0
59	MG	AA	3318	1/1	0.96	0.16	23,23,23,23	0
59	MG	AA	3094	1/1	0.96	0.24	80,80,80,80	0
59	MG	AA	3621	1/1	0.96	0.07	17,17,17,17	0
59	MG	CA	3344	1/1	0.96	0.07	68,68,68,68	0
59	MG	BF	3001	1/1	0.96	0.17	49,49,49,49	0
59	MG	BA	1678	1/1	0.96	0.21	54,54,54,54	0
59	MG	CA	3347	1/1	0.96	0.15	45,45,45,45	0
59	MG	AA	3396	1/1	0.96	0.17	16,16,16,16	0
59	MG	BL	202	1/1	0.96	0.17	54, 54, 54, 54	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(A ²)	Q<0.9
59	MG	DA	1671	1/1	0.96	0.36	56,56,56,56	0
59	MG	BM	201	1/1	0.96	0.04	62,62,62,62	0
59	MG	AA	3506	1/1	0.96	0.10	48,48,48,48	0
59	MG	CA	3574	1/1	0.96	0.15	37,37,37,37	0
59	MG	BA	1681	1/1	0.96	0.09	53,53,53,53	0
59	MG	CA	3355	1/1	0.96	0.14	35,35,35,35	0
59	MG	AF	304	1/1	0.96	0.29	36,36,36,36	0
59	MG	BT	3001	1/1	0.96	0.12	$46,\!46,\!46,\!46$	0
59	MG	AA	3507	1/1	0.96	0.15	$50,\!50,\!50,\!50$	0
59	MG	CA	3360	1/1	0.96	0.17	38,38,38,38	0
59	MG	CA	3362	1/1	0.96	0.12	43,43,43,43	0
59	MG	BA	1684	1/1	0.96	0.27	61,61,61,61	0
59	MG	CA	3366	1/1	0.96	0.16	49,49,49,49	0
59	MG	CA	3584	1/1	0.96	0.15	32,32,32,32	0
59	MG	AA	3399	1/1	0.96	0.15	16,16,16,16	0
59	MG	BZ	701	1/1	0.96	0.19	49,49,49,49	0
59	MG	CA	3160	1/1	0.96	0.39	57,57,57,57	0
59	MG	AA	3742	1/1	0.96	0.12	68,68,68,68	0
59	MG	CA	3162	1/1	0.96	0.39	31,31,31,31	0
59	MG	AA	3322	1/1	0.96	0.20	61,61,61,61	0
59	MG	DA	1693	1/1	0.96	0.14	67,67,67,67	0
59	MG	CA	3004	1/1	0.96	0.14	49,49,49,49	0
59	MG	AA	3403	1/1	0.96	0.34	42,42,42,42	0
59	MG	DA	1696	1/1	0.96	0.17	53,53,53,53	0
59	MG	AN	3002	1/1	0.96	0.45	69,69,69,69	0
59	MG	AA	3511	1/1	0.96	0.20	14,14,14,14	0
59	MG	AA	3404	1/1	0.96	0.20	27,27,27,27	0
59	MG	CA	3381	1/1	0.96	0.14	50,50,50,50	0
59	MG	CA	3010	1/1	0.96	0.19	43,43,43,43	0
59	MG	AP	201	1/1	0.96	0.32	21,21,21,21	1
59	MG	AA	3059	1/1	0.96	0.36	40,40,40,40	0
59	MG	AA	3032	1/1	0.96	0.33	$59,\!59,\!59,\!59$	0
59	MG	AA	3750	1/1	0.96	0.33	51,51,51,51	0
59	MG	AA	3129	1/1	0.96	0.18	34,34,34,34	1
59	MG	AA	3247	1/1	0.96	0.16	55,55,55,55	0
59	MG	AA	3329	1/1	0.96	0.08	40,40,40,40	1
59	MG	CA	3394	1/1	0.96	0.12	69,69,69,69	0
59	MG	DA	1711	1/1	0.96	0.12	60,60,60,60	0
59	MG	AU	202	1/1	0.96	0.45	82,82,82,82	0
59	MG	DA	1714	1/1	0.96	0.15	68,68,68,68	0
59	MG	AA	3131	1/1	0.96	0.26	63,63,63,63	0
59	MG	DA	1716	1/1	0.96	0.10	57,57,57,57	0

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NIO	Type	Chain	Res	Atoms	RSCC	RSR	B -factors(A^2)	Q<0.9
59	MG	AV	202		0.96	0.23	33,33,33,33	0
59	MG	AA	3758		0.96	0.28	43,43,43,43	1
59	MG	CA	3611		0.96	0.15	59,59,59,59	0
59	MG	DA	1720	1/1	0.96	0.10	60,60,60,60	0
59	MG	DA	1721	1/1	0.96	0.09	80,80,80,80	0
59	MG	CA	3028	1/1	0.96	0.63	51,51,51,51	0
59	MG	AA	3529	1/1	0.96	0.20	30,30,30,30	0
59	MG	AA	3042	1/1	0.96	0.24	32,32,32,32	0
59	MG	AA	3531	1/1	0.96	0.13	24,24,24,24	0
59	MG	CA	3617	1/1	0.96	0.13	41,41,41,41	0
59	MG	AA	3532	1/1	0.96	0.20	20,20,20,20	0
59	MG	AA	3423	1/1	0.96	0.20	16,16,16,16	0
59	MG	AA	3113	1/1	0.96	0.32	45,45,45,45	0
59	MG	AA	3537	1/1	0.96	0.17	20,20,20,20	0
59	MG	DA	1731	1/1	0.96	0.09	49,49,49,49	0
59	MG	AA	3538	1/1	0.96	0.15	15,15,15,15	0
59	MG	AA	3647	1/1	0.96	0.11	43,43,43,43	0
59	MG	BA	1715	1/1	0.96	0.11	60,60,60,60	0
59	MG	AA	3426	1/1	0.96	0.17	20,20,20,20	0
59	MG	AA	3336	1/1	0.96	0.14	$51,\!51,\!51,\!51$	0
59	MG	CA	3418	1/1	0.96	0.29	34,34,34,34	0
59	MG	AA	3114	1/1	0.96	0.21	26,26,26,26	0
59	MG	AA	3546	1/1	0.96	0.14	60,60,60,60	0
59	MG	DA	1740	1/1	0.96	0.57	68,68,68,68	0
59	MG	AA	3547	1/1	0.96	0.26	60,60,60,60	0
59	MG	AA	3201	1/1	0.96	0.09	53,53,53,53	0
59	MG	CA	3047	1/1	0.96	0.16	84,84,84,84	0
59	MG	AA	3435	1/1	0.96	0.17	52,52,52,52	0
59	MG	AA	3550	1/1	0.96	0.20	38,38,38,38	0
59	MG	CA	3637	1/1	0.96	0.47	61,61,61,61	0
59	MG	AA	3340	1/1	0.96	0.22	3,3,3,3	0
59	MG	AA	3341	1/1	0.96	0.19	25,25,25,25	0
59	MG	CA	3054	1/1	0.96	0.25	36,36,36,36	0
59	MG	AA	3343	1/1	0.96	0.10	46,46,46,46	0
59	MG	CA	3439	1/1	0.96	0.23	32,32,32,32	0
59	MG	AA	3228	1/1	0.96	0.30	32,32,32,32	0
59	MG	CA	3218	1/1	0.96	0.36	40,40,40,40	0
59	MG	AA	3029	1/1	0.96	0.24	28,28,28,28	0
59	MG	BA	1606	1/1	0.96	0.28	126,126,126,126	0
59	MG	AA	3136	1/1	0.96	0.64	63,63,63.63	0
59	MG	AA	3564	1/1	0.96	0.20	44,44.44.44	0
59	MG	AA	3791	1/1	0.96	0.17	51,51,51,51	0



Mol	Type	Chain	$\frac{13 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	CA	3062	1/1	0.96	0.29	38.38.38.38	0
59	MG	AA	3566	1/1	0.96	0.05	56,56,56,56	0
59	MG	CA	3659	1/1	0.96	0.10	55,55,55,55	0
59	MG	CA	3232	1/1	0.96	0.17	54,54,54,54	0
59	MG	DA	1764	1/1	0.96	0.08	71,71,71,71	0
59	MG	DA	1765	1/1	0.96	0.13	64,64,64,64	0
59	MG	AA	3668	1/1	0.96	0.17	54,54,54,54	0
59	MG	CA	3662	1/1	0.96	0.32	33,33,33,33	0
59	MG	AA	3567	1/1	0.96	0.11	26,26,26,26	0
59	MG	AA	3670	1/1	0.96	0.08	54,54,54,54	0
59	MG	AA	3568	1/1	0.96	0.18	15,15,15,15	0
59	MG	BA	1615	1/1	0.96	0.28	62,62,62,62	0
59	MG	DD	502	1/1	0.96	0.48	50,50,50,50	0
59	MG	AA	3798	1/1	0.96	0.22	25,25,25,25	0
59	MG	CA	3461	1/1	0.96	0.15	34,34,34,34	0
59	MG	AA	3570	1/1	0.96	0.15	14,14,14,14	0
59	MG	CB	3006	1/1	0.96	0.06	71,71,71,71	0
59	MG	AA	3802	1/1	0.96	0.15	86,86,86,86	0
59	MG	CA	3464	1/1	0.96	0.18	36,36,36,36	0
59	MG	CB	3010	1/1	0.96	0.13	$51,\!51,\!51,\!51$	0
59	MG	AA	3349	1/1	0.96	0.17	47,47,47,47	0
59	MG	CA	3074	1/1	0.96	0.33	49,49,49,49	0
59	MG	DZ	702	1/1	0.96	0.22	$57,\!57,\!57,\!57$	0
59	MG	AA	3350	1/1	0.96	0.08	36,36,36,36	0
59	MG	CD	301	1/1	0.96	0.44	43,43,43,43	0
59	MG	AA	3805	1/1	0.96	0.21	58, 58, 58, 58	0
60	ZN	DN	501	1/1	0.96	0.08	117,117,117,117	0
62	GDP	DZ	703	28/28	0.96	0.14	66,66,66,66	1
59	MG	AA	3159	1/1	0.97	0.27	55,55,55,55	0
59	MG	CA	3053	1/1	0.97	0.45	32,32,32,32	0
59	MG	BA	1761	1/1	0.97	0.16	62,62,62,62	0
59	MG	BA	1762	1/1	0.97	0.06	74,74,74,74	0
59	MG	CA	3351	1/1	0.97	0.14	46,46,46,46	0
59	MG	CA	3537	1/1	0.97	0.30	59,59,59,59	0
59	MG	AA	3515	1/1	0.97	0.22	12,12,12,12	0
59	MG	AA	3453	1/1	0.97	0.23	39,39,39,39	0
59	MG	AA	3517	1/1	0.97	0.07	23,23,23,23	0
59	MG	AA	3100	1/1	0.97	0.24	29,29,29,29	0
59	MG	AA	3598	1/1	0.97	0.24	51,51,51,51	0
59	MG	BA	1769	1/1	0.97	0.10	58,58,58,58	0
59	MG	AA	3770	1/1	0.97	0.12	43,43,43,43	0
59	MG	AA	3519	1/1	0.97	0.23	$27,\!27,\!27,\!27$	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors(A^2)	Q < 0.9
59	MG	CA	3197	1/1	0.97	0.40	45,45,45,45	0
59	MG	CA	3364	1/1	0.97	0.10	22,22,22,22	0
59	MG	CA	3365	1/1	0.97	0.19	55,55,55,55	0
59	MG	CA	3064	1/1	0.97	0.09	48,48,48,48	0
59	MG	AA	3355	1/1	0.97	0.16	$57,\!57,\!57,\!57$	0
59	MG	BA	1773	1/1	0.97	0.13	40,40,40,40	0
59	MG	AG	201	1/1	0.97	0.07	$38,\!38,\!38,\!38$	0
59	MG	AA	3395	1/1	0.97	0.17	$54,\!54,\!54,\!54$	0
59	MG	CA	3554	1/1	0.97	0.09	$66,\!66,\!66,\!66$	0
59	MG	AA	3459	1/1	0.97	0.20	$53,\!53,\!53,\!53$	0
59	MG	CA	3556	1/1	0.97	0.18	62,62,62,62	0
59	MG	BA	1777	1/1	0.97	0.29	71,71,71,71	0
59	MG	AA	3524	1/1	0.97	0.19	41,41,41,41	0
59	MG	AA	3779	1/1	0.97	0.12	22,22,22,22	0
59	MG	AA	3681	1/1	0.97	0.13	42,42,42,42	0
59	MG	AA	3682	1/1	0.97	0.17	31,31,31,31	0
59	MG	CA	3211	1/1	0.97	0.09	29,29,29,29	0
59	MG	AA	3525	1/1	0.97	0.18	$35,\!35,\!35,\!35$	0
59	MG	CA	3564	1/1	0.97	0.13	80,80,80,80	0
59	MG	AA	3527	1/1	0.97	0.16	27,27,27,27	0
59	MG	CA	3386	1/1	0.97	0.20	50,50,50,50	0
59	MG	AA	3460	1/1	0.97	0.14	27,27,27,27	0
59	MG	BA	1785	1/1	0.97	0.17	62,62,62,62	0
59	MG	CA	3571	1/1	0.97	0.26	45,45,45,45	0
59	MG	CA	3217	1/1	0.97	0.26	62,62,62,62	0
59	MG	AQ	201	1/1	0.97	0.44	48,48,48,48	0
59	MG	CA	3219	1/1	0.97	0.25	42,42,42,42	0
59	MG	CA	3220	1/1	0.97	0.07	59, 59, 59, 59	0
59	MG	AA	3054	1/1	0.97	0.17	21,21,21,21	0
59	MG	AA	3397	1/1	0.97	0.13	13,13,13,13	0
59	MG	AA	3463	1/1	0.97	0.16	$15,\!15,\!15,\!15$	0
59	MG	AA	3398	1/1	0.97	0.22	31,31,31,31	0
59	MG	AU	201	1/1	0.97	0.19	$25,\!25,\!25,\!25$	0
59	MG	AA	3534	1/1	0.97	0.19	14,14,14,14	0
59	MG	AU	203	1/1	0.97	0.21	31,31,31,31	0
59	MG	DA	1657	1/1	0.97	0.10	23,23,23,23	0
59	MG	CA	3230	1/1	0.97	0.33	49,49,49,49	0
59	MG	CA	3231	1/1	0.97	0.72	60,60,60,60	0
59	MG	CA	3404	1/1	0.97	0.16	$65,\!65,\!65,\!65$	0
59	MG	AU	204	1/1	0.97	0.38	25,25,25,25	0
59	MG	CA	3407	1/1	0.97	0.19	36,36,36,36	0
59	MG	AA	3691	1/1	0.97	0.23	62,62,62,62	0

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Mol	Type	Chain	\mathbf{Res}	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	AA	3613	1/1	0.97	0.17	48,48,48,48	0
59	MG	AA	3535	1/1	0.97	0.13	48,48,48,48	0
59	MG	AA	3111	1/1	0.97	0.23	24,24,24,24	0
59	MG	AA	3144	1/1	0.97	0.35	50,50,50,50	0
59	MG	AA	3145	1/1	0.97	0.29	44,44,44,44	0
59	MG	AA	3539	1/1	0.97	0.14	34,34,34,34	0
59	MG	AA	3360	1/1	0.97	0.23	22,22,22,22	0
59	MG	AA	3406	1/1	0.97	0.09	20,20,20,20	0
59	MG	BA	1804	1/1	0.97	0.10	45,45,45,45	0
59	MG	AA	3543	1/1	0.97	0.22	32,32,32,32	0
59	MG	AA	3326	1/1	0.97	0.09	36,36,36,36	1
59	MG	DA	1676	1/1	0.97	0.15	74,74,74,74	0
59	MG	AA	3623	1/1	0.97	0.17	28,28,28,28	0
59	MG	CA	3422	1/1	0.97	0.24	43,43,43,43	0
59	MG	CA	3424	1/1	0.97	0.19	66, 66, 66, 66	0
59	MG	CA	3425	1/1	0.97	0.12	$50,\!50,\!50,\!50$	0
59	MG	AA	3473	1/1	0.97	0.07	$53,\!53,\!53,\!53$	0
59	MG	CA	3103	1/1	0.97	0.19	$53,\!53,\!53,\!53$	0
59	MG	AA	3147	1/1	0.97	0.52	40,40,40,40	1
59	MG	CA	3105	1/1	0.97	0.25	39, 39, 39, 39, 39	0
59	MG	AA	3298	1/1	0.97	0.15	58, 58, 58, 58	0
59	MG	AA	3366	1/1	0.97	0.23	$35,\!35,\!35,\!35$	1
59	MG	AA	3214	1/1	0.97	0.81	58, 58, 58, 58	1
59	MG	CA	3109	1/1	0.97	0.22	$35,\!35,\!35,\!35$	0
59	MG	CA	3437	1/1	0.97	0.18	64,64,64,64	0
59	MG	AA	3811	1/1	0.97	0.15	56, 56, 56, 56	0
59	MG	AA	3369	1/1	0.97	0.12	47,47,47,47	0
59	MG	AA	3552	1/1	0.97	0.18	63,63,63,63	0
59	MG	BA	1702	1/1	0.97	0.19	46,46,46,46	0
59	MG	AA	3554	1/1	0.97	0.19	40,40,40,40	0
59	MG	AA	3815	1/1	0.97	0.17	30,30,30,30	0
59	MG	CA	3447	1/1	0.97	0.25	73,73,73,73	0
59	MG	AA	3713	1/1	0.97	0.22	27,27,27,27	0
59	MG	CA	3449	1/1	0.97	0.07	55,55,55,55	0
59	MG	AA	3419	1/1	0.97	0.17	20,20,20,20	0
59	MG	AA	3049	1/1	0.97	0.18	35,35,35,35	0
59	MG	CA	3627	1/1	0.97	0.19	60,60,60,60	0
59	MG	CA	3119	1/1	0.97	0.54	55,55,55,55	0
59	MG	AA	3422	1/1	0.97	0.18	23,23,23,23	0
59	MG	AA	3216	1/1	0.97	0.60	38,38,38,38	0
59	MG	AA	3821	1/1	0.97	0.19	38,38,38,38	0
59	MG	AA	3559	1/1	0.97	0.23	$46,\!46,\!46,\!46$	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B -factors(A^2)	Q<0.9
59	MG	CA	3272	1/1	0.97	0.32	49,49,49,49	0
59	MG	AA	3424	1/1	0.97	0.18	14,14,14,14	0
59	MG	AA	3639	1/1	0.97	0.13	18,18,18,18	0
59	MG	AA	3721	1/1	0.97	0.20	40,40,40,40	0
59	MG	AA	3562	1/1	0.97	0.09	56,56,56,56	0
59	MG	AA	3563	1/1	0.97	0.21	34,34,34,34	0
59	MG	AA	3489	1/1	0.97	0.18	15,15,15,15	0
59	MG	CA	3641	1/1	0.97	0.21	46,46,46,46	0
59	MG	AA	3565	1/1	0.97	0.21	44,44,44,44	0
59	MG	CA	3002	1/1	0.97	0.23	28,28,28,28	0
59	MG	CA	3468	1/1	0.97	0.06	53,53,53,53	0
59	MG	AA	3830	1/1	0.97	0.27	47,47,47,47	0
59	MG	CA	3133	1/1	0.97	0.20	85,85,85,85	0
59	MG	AA	3334	1/1	0.97	0.14	63,63,63,63	0
59	MG	AA	3730	1/1	0.97	0.17	75,75,75,75	0
59	MG	CA	3136	1/1	0.97	0.10	$63,\!63,\!63,\!63$	0
59	MG	CA	3652	1/1	0.97	0.13	23,23,23,23	0
59	MG	CA	3653	1/1	0.97	0.20	32,32,32,32	0
59	MG	CA	3006	1/1	0.97	0.08	22,22,22,22	0
59	MG	CA	3475	1/1	0.97	0.25	$50,\!50,\!50,\!50$	0
59	MG	CA	3138	1/1	0.97	0.04	86,86,86,86	0
59	MG	CA	3657	1/1	0.97	0.39	41,41,41,41	0
59	MG	AA	3073	1/1	0.97	0.14	31,31,31,31	0
59	MG	AA	3074	1/1	0.97	0.29	14,14,14,14	0
59	MG	BA	1725	1/1	0.97	0.24	54,54,54,54	0
59	MG	AA	3428	1/1	0.97	0.19	18,18,18,18	0
59	MG	CA	3482	1/1	0.97	0.17	61,61,61,61	0
59	MG	CA	3011	1/1	0.97	0.38	63,63,63,63	0
59	MG	AB	3005	1/1	0.97	0.20	44,44,44,44	0
59	MG	CA	3297	1/1	0.97	0.34	36,36,36,36	0
59	MG	AA	3075	1/1	0.97	0.28	49,49,49,49	0
59	MG	CA	3487	1/1	0.97	0.20	60,60,60,60	0
59	MG	AA	3430	1/1	0.97	0.16	39,39,39,39	0
59	MG	AA	3650	1/1	0.97	0.11	49,49,49,49	0
59	MG	CA	3017	1/1	0.97	0.14	30,30,30,30	0
59	MG	AA	3496	1/1	0.97	0.36	31,31,31,31	0
59	MG	CA	3019	1/1	0.97	0.11	22,22,22,22	0
59	MG	CB	3009	1/1	0.97	0.18	67,67,67,67	0
59	MG	AA	3497	1/1	0.97	0.13	44,44,44,44	0
59	MG	AB	3011	1/1	0.97	0.16	29,29,29,29	0
59	MG	CA	3309	1/1	0.97	0.24	22,22,22,22	0
59	MG	AA	3125	1/1	0.97	0.16	22,22,22,22	1



Mol	Tvpe	Chain	$\frac{15 \text{ page.}}{\text{Res}}$	Atoms	RSCC	RSR	B-factors ($Å^2$)	Q<0.9
59	MG	CA	3497	1/1	0.97	0.09	45.45.45.45	0
59	MG	CA	3498	1/1	0.97	0.12	49,49,49,49	0
59	MG	BA	1735	1/1	0.97	0.20	41,41,41,41	0
59	MG	AB	3015	1/1	0.97	0.14	28,28,28,28	0
59	MG	AB	3016	1/1	0.97	0.14	34,34,34,34	0
59	MG	CE	302	1/1	0.97	0.13	64,64,64,64	0
59	MG	CA	3315	1/1	0.97	0.13	47,47,47,47	0
59	MG	CA	3027	1/1	0.97	0.06	31,31,31,31	0
59	MG	AA	3379	1/1	0.97	0.26	23,23,23,23	0
59	MG	AA	3222	1/1	0.97	0.17	4,4,4,4	0
59	MG	AB	3019	1/1	0.97	0.12	70,70,70,70	0
59	MG	AA	3578	1/1	0.97	0.13	28,28,28,28	0
59	MG	CF	304	1/1	0.97	0.13	65,65,65,65	0
59	MG	BA	1743	1/1	0.97	0.06	41,41,41,41	0
59	MG	CA	3163	1/1	0.97	0.30	30,30,30,30	0
59	MG	AA	3342	1/1	0.97	0.23	51,51,51,51	0
59	MG	AA	3442	1/1	0.97	0.14	23,23,23,23	0
59	MG	AA	3309	1/1	0.97	0.25	46,46,46,46	0
59	MG	BA	1747	1/1	0.97	0.19	$65,\!65,\!65,\!65$	0
59	MG	AA	3283	1/1	0.97	0.33	43,43,43,43	0
59	MG	AA	3223	1/1	0.97	0.11	15,15,15,15	0
59	MG	CA	3332	1/1	0.97	0.24	29,29,29,29	0
59	MG	AA	3098	1/1	0.97	0.27	51,51,51,51	0
59	MG	CA	3334	1/1	0.97	0.21	47,47,47,47	0
59	MG	BA	1751	1/1	0.97	0.12	48,48,48,48	0
59	MG	BA	1752	1/1	0.97	0.27	59,59,59,59	0
59	MG	AA	3755	1/1	0.97	0.64	78,78,78,78	0
59	MG	CA	3175	1/1	0.97	0.19	31,31,31,31	0
59	MG	CA	3339	1/1	0.97	0.14	24,24,24,24	0
59	MG	AA	3127	1/1	0.97	0.34	$57,\!57,\!57,\!57$	0
59	MG	AA	3665	1/1	0.97	0.30	40,40,40,40	0
59	MG	C8	5001	1/1	0.97	0.34	37,37,37,37	0
59	MG	AA	3666	1/1	0.97	0.14	41,41,41,41	0
60	ZN	CY	501	1/1	0.97	0.06	101,101,101,101	0
59	MG	AA	3060	1/1	0.97	0.32	20,20,20,20	0
60	ZN	C5	102	1/1	0.97	0.10	66,66,66,66	0
60	ZN	C6	501	1/1	0.97	0.10	66,66,66,66	0
59	MG	AA	3390	1/1	0.97	0.16	23,23,23,23	0
62	GDP	BZ	702	28/28	0.97	0.12	57,57,57,57	0
59	MG	AA	3317	1/1	0.97	0.16	24,24,24,24	0
59	MG	DA	1651	1/1	0.98	0.11	63,63,63,63	0
59	MG	CA	3361	1/1	0.98	0.20	43,43,43,43	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(A ²)	Q<0.9
59	MG	DA	1653	1/1	0.98	0.30	55,55,55,55	0
59	MG	AA	3316	1/1	0.98	0.23	36,36,36,36	0
59	MG	AA	3182	1/1	0.98	0.22	46,46,46,46	0
59	MG	AA	3421	1/1	0.98	0.21	28,28,28,28	0
59	MG	AA	3523	1/1	0.98	0.16	13,13,13,13	0
59	MG	AA	3381	1/1	0.98	0.16	16,16,16,16	0
59	MG	AA	3470	1/1	0.98	0.08	39,39,39,39	0
59	MG	AE	303	1/1	0.98	0.21	19,19,19,19	0
59	MG	CA	3369	1/1	0.98	0.14	48,48,48,48	0
59	MG	AA	3294	1/1	0.98	0.17	37,37,37,37	0
59	MG	AA	3789	1/1	0.98	0.21	44,44,44,44	0
59	MG	AA	3585	1/1	0.98	0.17	$35,\!35,\!35,\!35$	0
59	MG	AA	3528	1/1	0.98	0.16	$19,\!19,\!19,\!19$	0
59	MG	CA	3258	1/1	0.98	0.36	$51,\!51,\!51,\!51$	0
59	MG	BA	1722	1/1	0.98	0.29	$51,\!51,\!51,\!51$	0
59	MG	CA	3640	1/1	0.98	0.28	$43,\!43,\!43,\!43$	0
59	MG	AF	303	1/1	0.98	0.20	$19,\!19,\!19,\!19$	0
59	MG	AA	3587	1/1	0.98	0.14	$28,\!28,\!28,\!28$	0
59	MG	BA	1640	1/1	0.98	0.44	$52,\!52,\!52,\!52$	0
59	MG	AA	3793	1/1	0.98	0.22	7,7,7,7	0
59	MG	DA	1673	1/1	0.98	0.13	82,82,82,82	0
59	MG	CA	3382	1/1	0.98	0.22	38,38,38,38	0
59	MG	CA	3383	1/1	0.98	0.20	30,30,30,30	0
59	MG	CA	3384	1/1	0.98	0.11	55, 55, 55, 55	0
59	MG	CA	3648	1/1	0.98	0.34	52,52,52,52	0
59	MG	AA	3037	1/1	0.98	0.11	4,4,4,4	0
59	MG	CA	3650	1/1	0.98	0.25	14,14,14,14	0
59	MG	CA	3266	1/1	0.98	0.15	36,36,36,36	0
59	MG	CA	3267	1/1	0.98	0.13	38,38,38,38	0
59	MG	AA	3320	1/1	0.98	0.13	37,37,37,37	0
59	MG	AA	3082	1/1	0.98	0.27	60,60,60,60	0
59	MG	AA	3243	1/1	0.98	0.23	43,43,43,43	0
59	MG	AA	3020	1/1	0.98	0.18	11,11,11,11	0
59	MG	CA	3169	1/1	0.98	0.21	34,34,34,34	0
59	MG	AA	3130	1/1	0.98	0.23	34,34,34,34	0
59	MG	CA	3523	1/1	0.98	0.14	37,37,37,37	0
59	MG	AA	3097	1/1	0.98	0.20	22,22,22,22	0
59	MG	CA	3525	1/1	0.98	0.28	23,23,23,23	0
59	MG	AA	3595	1/1	0.98	0.15	42,42,42,42	0
59	MG	AA	3302	1/1	0.98	0.06	51,51,51,51	0
59	MG	AA	3597	1/1	0.98	0.11	33,33,33,33	0
59	MG	AA	3432	1/1	0.98	0.23	42,42,42,42	0
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59 MG DA 1697 1/1 0.98 0.17 48,48,48,4	8 0
59 MG CA 3401 1/1 0.98 0.22 28,28,28,2	8 0
59 MG AA 3484 1/1 0.98 0.11 53,53,53,5	$\frac{3}{2}$ 0
59 MG BA 1740 1/1 0.98 0.30 50,50,50,5	0 0
59 MG CA 3179 1/1 0.98 0.32 60,60,60,6	0 0
59 MG CA 3405 1/1 0.98 0.10 55,55,55,5	5 0
59 MG AA 3729 1/1 0.98 0.20 41,41,41,4	1 0
59 MG AA 3600 1/1 0.98 0.15 25,25,25,2	5 0
59 MG AA 3663 1/1 0.98 0.19 11,11,11,1	1 0
	5 0
59 MG AA 3433 1/1 0.98 0.14 37,37,37,3	7 0
59 MG AA 3434 1/1 0.98 0.06 17,17,17,1	7 0
59 MG AA 3734 1/1 0.98 0.24 26,26,26,2	6 0
59 MG AA 3152 1/1 0.98 0.24 10,10,10,1	0 0
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59 MG AA 3072 1/1 0.98 0.08 19,19,19,1	9 0
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59 MG AA 3332 1/1 0.98 0.18 17,17,17,1	7 0
59 MG CA 3302 1/1 0.98 0.28 37,37,37,3	7 0
59 MG CA 3427 1/1 0.98 0.19 37,37,37,3	7 0
59 MG AA 3362 1/1 0.98 0.16 46,46,46,4	6 0
59 MG AA 3165 1/1 0.98 0.16 52,52,52,5	2 0
59 MG AA 3553 1/1 0.98 0.05 43,43,43,4	3 0
59 MG CA 3306 1/1 0.98 0.08 24,24,24,2	4 0
59 MG AA 3154 1/1 0.98 0.18 57,57,57,5	7 0
59 MG CA 3308 1/1 0.98 0.10 39,39,39,3	9 0
59 MG CA 3435 1/1 0.98 0.11 55,55,55,5	5 0
59 MG AA 3498 1/1 0.98 0.24 47,47,47,4	7 0
59 MG CV 202 1/1 0.98 0.21 38,38,38,3	8 0
59 MG AA 3752 1/1 0.98 0.12 42,42,42,4	2 0
59 MG CA 3567 1/1 0.98 0.22 26.26.26.2	6 0
59 MG CA 3438 1/1 0.98 0.14 24.24.24.2	4 0
59 MG AA 3753 1/1 0.98 0.15 30,30,30,3	0 0

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	(λ^2) $(0,0)$
Mol Type Chain Res Atoms RSCC RSR B-fac	$\frac{\text{ctors}(A^2)}{Q^2}$
59 MG BA 1677 1/1 0.98 0.17 28,2	28,28,28 0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	37,37,37 0
59 MG CA 3206 1/1 0.98 0.40 44,4	14,44,44 0
59 MG CA 3443 1/1 0.98 0.18 28,2	28,28,28 0
59 MG BA 1765 1/1 0.98 0.23 54,5	54,54,54 0
59 MG AA 3335 1/1 0.98 0.24 15,1	15,15,15 0
59 MG CA 3446 1/1 0.98 0.18 33,3	33,33,33 0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	73,73,73 0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	32,62,62 0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	49,49,49 0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	59,59,59 0
	30,30,30 0
	22,22,22 0
$ \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	28,28,28 0
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	21,21,21 0
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	55,55,55 0
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	36,36,36 0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	21,21,21 0
59 MG AA 3311 1/1 0.98 0.14 2	,2,2,2 0
59 MG CA 3459 1/1 0.98 0.09 28,2	28,28,28 0
59 MG CA 3331 1/1 0.98 0.26 52,5	52,52,52 0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	34,64,64 0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	30,30,30 0
59 MG AA 3452 1/1 0.98 0.14 14,1	14,14,14 0
59 MG AA 3407 1/1 0.98 0.20 10,1	10,10,10 0
59 MG AA $3765 1/1 $ $0.98 $ $0.38 $ $60,6$	30,60,60 0
59 MG AB 3012 1/1 0.98 0.15 23,2	23,23,23 1
59 MG CA 3466 1/1 0.98 0.40 56,5	56,56,56 0
59 MG AA 3372 1/1 0.98 0.23 37,3	37,37,37 0
59 MG AB 3014 1/1 0.98 0.11 56,5	56,56,56 0
59 MG CA 3228 1/1 0.98 0.36 59,5	59,59,59 0
59 MG CA 3039 1/1 0.98 0.28 37,3	37,37,37 0
59 MG AA 3091 1/1 0.98 0.75 47,4	47,47,47 1
59 MG CA 3342 1/1 0.98 0.11 33,3	33,33,33 0
59 MG AA 3411 1/1 0.98 0.14 12,1	12,12,12 0
59 MG AA 3569 1/1 0.98 0.22 17.1	17,17,17 0
59 MG AA 3631 1/1 0.98 0.18 46.4	46.46.46 0
59 MG AA 3457 1/1 0.98 0.13 30.5	30,30,30 0
59 MG CA 3045 1/1 0.98 0.17 60.6	30,60,60 0
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59 MG DW 501 1/1 0.98 0.17 444	4.44.44 0
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
59	MG	AA	3774	1/1	0.98	0.35	$25,\!25,\!25,\!25$	1
59	MG	CA	3613	1/1	0.98	0.22	57,57,57,57	0
59	MG	CA	3049	1/1	0.98	0.36	46,46,46,46	0
59	MG	AA	3003	1/1	0.98	0.06	8,8,8,8	0
59	MG	CA	3353	1/1	0.98	0.22	45,45,45,45	0
59	MG	AA	3416	1/1	0.98	0.14	14,14,14,14	0
59	MG	AA	3777	1/1	0.98	0.12	41,41,41,41	0
59	MG	AA	3778	1/1	0.98	0.14	43,43,43,43	0
59	MG	AA	3292	1/1	0.98	0.20	24,24,24,24	0
60	ZN	C9	501	1/1	0.98	0.09	75,75,75,75	0
59	MG	CA	3358	1/1	0.98	0.29	36,36,36,36	0
61	SF4	BD	501	8/8	0.98	0.10	78,78,78,78	0
61	SF4	DD	501	8/8	0.98	0.11	82,82,82,82	1
59	MG	AA	3377	1/1	0.98	0.06	20,20,20,20	0
59	MG	AA	3465	1/1	0.98	0.20	42,42,42,42	0
59	MG	AA	3438	1/1	0.99	0.15	17,17,17,17	0
59	MG	CA	3372	1/1	0.99	0.18	35,35,35,35	0
59	MG	AA	3380	1/1	0.99	0.12	18,18,18,18	0
59	MG	CA	3423	1/1	0.99	0.23	46,46,46,46	0
59	MG	AA	3248	1/1	0.99	0.14	22,22,22,22	0
59	MG	AA	3146	1/1	0.99	0.08	29,29,29,29	0
59	MG	DA	1745	1/1	0.99	0.38	50,50,50,50	0
59	MG	AA	3328	1/1	0.99	0.16	42,42,42,42	0
59	MG	CA	3282	1/1	0.99	0.18	36,36,36,36	0
59	MG	CA	3479	1/1	0.99	0.17	50,50,50,50	0
59	MG	AA	3053	1/1	0.99	0.18	19,19,19,19	0
59	MG	AA	3401	1/1	0.99	0.14	21,21,21,21	0
59	MG	CA	3380	1/1	0.99	0.21	59, 59, 59, 59, 59	0
59	MG	AA	3726	1/1	0.99	0.16	12,12,12,12	0
59	MG	AA	3402	1/1	0.99	0.13	27,27,27,27	0
59	MG	CA	3433	1/1	0.99	0.12	82,82,82,82	0
59	MG	AA	3354	1/1	0.99	0.12	$27,\!27,\!27,\!27$	0
59	MG	AA	3799	1/1	0.99	0.33	42,42,42,42	0
59	MG	AA	3103	1/1	0.99	0.03	5, 5, 5, 5	0
59	MG	AA	3801	1/1	0.99	0.15	$27,\!27,\!27,\!27$	0
59	MG	AA	3405	1/1	0.99	0.27	44,44,44,44	0
59	MG	DA	1648	1/1	0.99	0.12	40,40,40,40	0
59	MG	AA	3076	1/1	0.99	0.13	0,0,0,0	0
59	MG	AA	3526	1/1	0.99	0.20	$19,\!19,\!19,\!19$	0
59	MG	AA	3321	1/1	0.99	0.10	$61,\!61,\!61,\!61$	0
59	MG	AA	3702	1/1	0.99	0.20	14,14,14,14	0
59	MG	AA	3735	1/1	0.99	0.13	$25,\!25,\!25,\!25$	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(A^2)$	Q<0.9
59	MG	CA	3085	1/1	0.99	0.16	$25,\!25,\!25,\!25$	0
59	MG	AA	3303	1/1	0.99	0.15	24,24,24,24	0
59	MG	AA	3475	1/1	0.99	0.25	45,45,45,45	0
59	MG	DA	1712	1/1	0.99	0.33	53,53,53,53	0
59	MG	AA	3345	1/1	0.99	0.13	6,6,6,6	0
59	MG	AA	3477	1/1	0.99	0.18	14,14,14,14	0
59	MG	AA	3410	1/1	0.99	0.14	57,57,57,57	0
59	MG	AA	3741	1/1	0.99	0.10	21,21,21,21	0
59	MG	AA	3346	1/1	0.99	0.13	59,59,59,59	0
59	MG	AA	3709	1/1	0.99	0.42	23,23,23,23	1
59	MG	CA	3261	1/1	0.99	0.16	47,47,47,47	0
59	MG	BA	1688	1/1	0.99	0.43	61,61,61,61	0
59	MG	AA	3011	1/1	0.99	0.08	16,16,16,16	0
59	MG	CA	3015	1/1	0.99	0.28	$51,\!51,\!51,\!51$	0
59	MG	AA	3745	1/1	0.99	0.18	$68,\!68,\!68,\!68$	0
59	MG	CA	3311	1/1	0.99	0.14	$50,\!50,\!50,\!50$	0
59	MG	AA	3151	1/1	0.99	0.23	62,62,62,62	0
59	MG	CA	3181	1/1	0.99	0.16	40,40,40,40	0
60	ZN	AY	501	1/1	0.99	0.09	61,61,61,61	0
59	MG	CA	3618	1/1	0.99	0.30	40,40,40,40	0
60	ZN	A5	501	1/1	0.99	0.13	30,30,30,30	0
60	ZN	A6	102	1/1	0.99	0.12	40,40,40,40	0
59	MG	AA	3482	1/1	0.99	0.11	41,41,41,41	0
59	MG	AA	3297	1/1	0.99	0.23	$27,\!27,\!27,\!27$	0
59	MG	AA	3458	1/1	0.99	0.09	40,40,40,40	0
59	MG	CA	3227	1/1	0.99	0.22	41,41,41,41	0
59	MG	AA	3415	1/1	0.99	0.23	62,62,62,62	0
59	MG	CA	3570	1/1	0.99	0.12	36,36,36,36	0
59	MG	AV	201	1/1	0.99	0.25	42,42,42,42	0
59	MG	AA	3540	1/1	0.99	0.09	36,36,36,36	0
59	MG	AA	3512	1/1	0.99	0.15	38,38,38,38	0
59	MG	CA	3322	1/1	0.99	0.26	40,40,40,40	0
59	MG	AA	3364	1/1	0.99	0.18	23,23,23,23	0
60	ZN	A9	501	1/1	1.00	0.12	42,42,42,42	0

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6.5 Other polymers (i)

There are no such residues in this entry.

