WORLDWIDE wwPDB PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report ⓘ

Nov 24, 2025 – 12:10 pm GMT

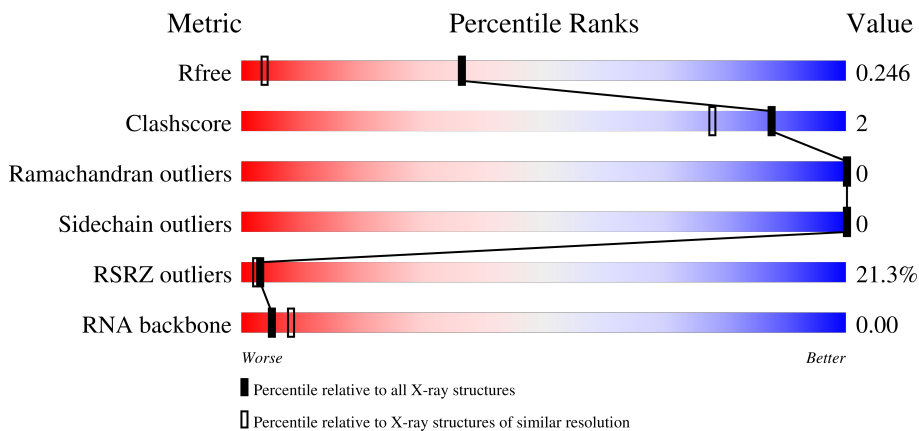|		
PDB ID	:	9QS9 / pdb_00009qs9
Title	:	Structure and mechanism of the broad spectrum CRISPR-associated ring nuclease Crn4
Authors	:	McMahon, S.A.; Chi, H.; Hoikkala, V.; Gloster, T.M.; White, M.F.
Deposited on	:	2025-04-04
Resolution	:	1.44 Å(reported)

1 Overall quality at a glance ⓘ

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

The reported resolution of this entry is 1.44 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	Percentile Ranks	Value
Rfree		0.246
Clashscore		2
Ramachandran outliers		0
Sidechain outliers		0
RSRZ outliers		21.3%
RNA backbone		0.00

Worse   *Better*

■ Percentile relative to all X-ray structures

▯ Percentile relative to X-ray structures of similar resolution

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	2809 (1.46-1.42)
Clashscore	180529	3008 (1.46-1.42)
Ramachandran outliers	177936	2971 (1.46-1.42)
Sidechain outliers	177891	2971 (1.46-1.42)
RSRZ outliers	164620	2809 (1.46-1.42)
RNA backbone	3690	1006 (2.16-0.86)

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	A	149	13% / 80% · 17%
1	B	149	9% / 81% · 17%
1	C	149	25% / 81% · 16%
1	D	149	17% / 81% · 16%

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Mol	Chain	Length	Quality of chain
1	E	149	13% 82% 16%
1	F	149	33% 80% 16%
2	G	6	33% 50% 17%
2	J	6	83% 17%
2	K	6	33% 50% 17%

2 Entry composition (i)

There are 4 unique types of molecules in this entry. The entry contains 6855 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 protein called Crn4 H15A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	124	Total 977	C 621	N 176	O 179	S 1	0	5	0
1	B	124	Total 948	C 604	N 170	O 173	S 1	0	1	0
1	F	125	Total 962	C 612	N 174	O 175	S 1	0	3	0
1	E	125	Total 946	C 602	N 165	O 178	S 1	0	1	0
1	C	125	Total 958	C 609	N 173	O 175	S 1	0	3	0
1	D	125	Total 959	C 610	N 169	O 179	S 1	0	2	0

- Molecule 2 is a RNA chain called Cyclic polyA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	G	6	Total 132	C 60	N 30	O 36	P 6	0	0	0
2	J	6	Total 132	C 60	N 30	O 36	P 6	0	0	0
2	K	6	Total 132	C 60	N 30	O 36	P 6	0	0	0

- Molecule 3 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	1	Total 1	Mg 1	0	0
3	F	1	Total 1	Mg 1	0	0
3	E	2	Total 2	Mg 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	G	1	Total 2	Mg 2	0	1
3	J	1	Total 2	Mg 2	0	1
3	K	1	Total 2	Mg 2	0	1

- Molecule 4 is water.

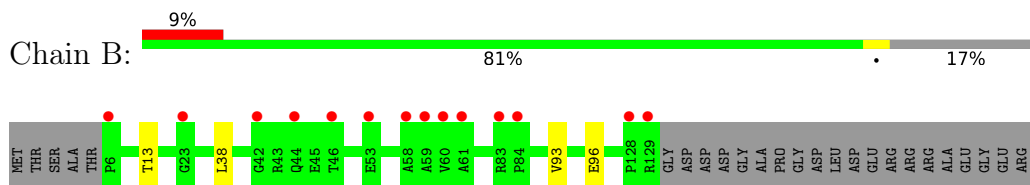| Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	110	Total 111	O 111	0	1
4	B	114	Total 115	O 115	0	1
4	F	76	Total 76	O 76	0	0
4	E	111	Total 113	O 113	0	3
4	C	105	Total 105	O 105	0	0
4	D	98	Total 99	O 99	0	1
4	G	26	Total 26	O 26	0	0
4	J	27	Total 27	O 27	0	0
4	K	26	Total 27	O 27	0	1

3 Residue-property plots ⓘ

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density (RSRZ > 2). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.
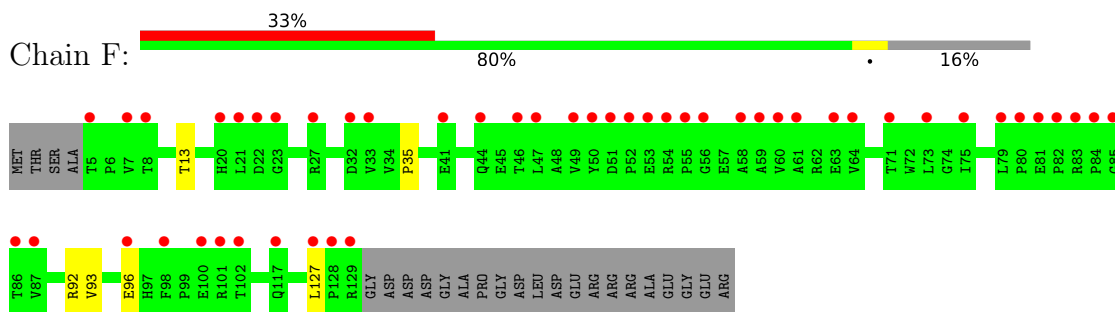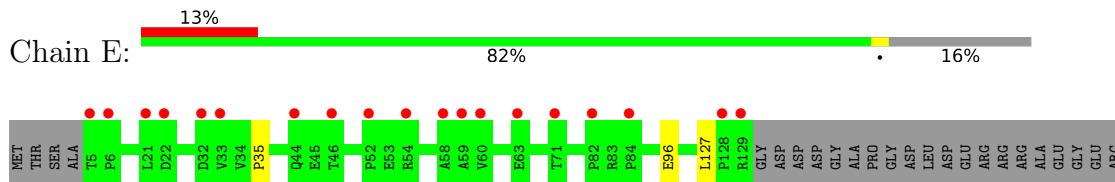
- Molecule 1: Crn4 H15A

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MET THR SER A4 T5 P6 G23 D32 V33 V34 P35 E41 G42 R43 Q44 E45 T46 L47 A48 V49 Y50 D51 P52 E53 R54 P55 G56 E57 A58 A59 V60 A61 V64 P65 I66 A67 V68 G69 A70 T71 W72 L73 G74 I75 R83 P84 G85 V93 E96 L127 P128 ARG

GLY ASP ASP ASP GLY ALA PRO GLY ASP LEU ASP GLU ARG ARG ALA ALA GLU GLU GLU ARG

• **Molecule 1: Crn4 H15A**

Chain D:

17%

81%　　　　　·　　　　16%

MET THR SER ALA T5 T13 L28 D32 P35 R36 Q44 E45 T46 L47 A48 V49 Y50 D51 P52 E53 R54 P55 G56 E57 A58 A59 V60 A61 R62 E63 L73 E81 P82 R83 P84 V93 E96 E100 V119 P128 R129 GLY ASP ASP ASP GLY ALA PRO

GLY ASP LEU ASP GLU ARG ARG ALA GLU GLY GLU ARG

• **Molecule 2: Cyclic polyA**

Chain G:

33%　　　　　　　50%　　　　　　17%

A1 A2 A3 A4 A5 A6

• **Molecule 2: Cyclic polyA**

Chain J:

83%　　　　　　17%

A1 A2 A3 A4 A5 A6

• **Molecule 2: Cyclic polyA**

Chain K:

33%　　　　　　　50%　　　　　　17%

A1 A2 A3 A4 A5 A6

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	66.27Å 102.90Å 72.44Å 90.00° 103.88° 90.00°	Depositor
Resolution (Å)	70.42 – 1.44 70.33 – 1.44	Depositor EDS
% Data completeness (in resolution range)	97.9 (70.42-1.44) 97.9 (70.33-1.44)	Depositor EDS
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.00 (at 1.44Å)	Xtriage
Refinement program	REFMAC 5.8.0430	Depositor
R, R_{free}	0.222 , 0.239 0.230 , 0.246	Depositor DCC
R_{free} test set	1992 reflections (1.17%)	wwPDB-VP
Wilson B-factor (Å^2)	24.1	Xtriage
Anisotropy	0.152	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.37 , 31.8	EDS
L-test for twinning[2]	$< \|L\| > = 0.51, < L^2 > = 0.34$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.96	EDS
Total number of atoms	6855	wwPDB-VP
Average B, all atoms (Å^2)	31.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 14.23% of the height of the origin peak. No significant pseudotranslation is detected.*

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

5   Model quality ⓘ

5.1   Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: MG

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$|Z|$>5	RMSZ	#$|Z|$>5
1	A	0.48	0/1004	0.79	0/1382
1	B	0.51	0/972	0.82	0/1338
1	C	0.50	0/982	0.80	0/1354
1	D	0.49	0/986	0.80	0/1358
1	E	0.49	0/970	0.81	0/1339
1	F	0.49	0/992	0.80	0/1366
2	G	0.48	0/149	0.84	0/230
2	J	0.47	0/149	0.79	0/230
2	K	0.47	0/149	0.87	0/230
All	All	0.49	0/6353	0.81	0/8827

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2   Too-close contacts ⓘ

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	A	977	0	988	5	0
1	B	948	0	963	4	0
1	C	958	0	961	5	0
1	D	959	0	965	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	E	946	0	947	3	0
1	F	962	0	975	5	0
2	G	132	0	66	3	0
2	J	132	0	66	3	0
2	K	132	0	66	4	0
3	A	1	0	0	0	0
3	E	2	0	0	0	0
3	F	1	0	0	0	0
3	G	2	0	0	0	0
3	J	2	0	0	0	0
3	K	2	0	0	0	0
4	A	111	0	0	0	0
4	B	115	0	0	0	0
4	C	105	0	0	0	0
4	D	99	0	0	0	0
4	E	113	0	0	0	0
4	F	76	0	0	0	0
4	G	26	0	0	0	0
4	J	27	0	0	0	0
4	K	27	0	0	0	0
All	All	6855	0	5997	23	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 2.

All (23) 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:B:38:LEU:HD13	1:C:73:LEU:O	2.00	0.62
1:D:13:THR:HG21	2:K:3:A:H5'	1.86	0.57
1:B:38:LEU:HD13	1:C:73:LEU:C	2.30	0.57
1:E:35:PRO:HB2	2:K:5:A:C6	2.40	0.56
1:A:35:PRO:HB2	2:G:2:A:C6	2.45	0.52
1:F:13:THR:HG21	2:J:5:A:H5'	1.90	0.52
1:D:35:PRO:HB2	2:K:2:A:C6	2.47	0.50
1:B:13:THR:HG21	2:G:6:A:H5'	1.94	0.49
1:C:35:PRO:HB2	2:J:1:A:C6	2.50	0.46
1:A:93:VAL:O	1:A:96[B]:GLU:HG2	2.16	0.46
1:E:96:GLU:HG2	1:E:127:LEU:HD21	1.98	0.45
1:F:93:VAL:O	1:F:96[A]:GLU:HG2	2.17	0.45
1:A:60:VAL:O	1:A:60:VAL:HG22	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:93:VAL:O	1:B:96:GLU:HG2	2.16	0.44
1:F:35:PRO:HB2	2:J:4:A:C6	2.54	0.42
1:C:96[A]:GLU:HG2	1:C:127:LEU:HD21	2.00	0.42
1:D:93:VAL:O	1:D:96:GLU:HG2	2.18	0.42
1:E:35:PRO:HB2	2:K:5:A:C5	2.54	0.42
1:C:93:VAL:O	1:C:96[B]:GLU:HG2	2.20	0.42
1:A:119:VAL:HG21	1:D:119:VAL:HG21	2.01	0.42
1:F:96[B]:GLU:HG2	1:F:127:LEU:HD21	2.02	0.42
1:F:92[B]:ARG:HH21	1:F:96[B]:GLU:CD	2.29	0.41
1:A:35:PRO:HB2	2:G:2:A:C5	2.55	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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	
1	A	127/149 (85%)	125 (98%)	2 (2%)	0	100	100
1	B	123/149 (83%)	121 (98%)	2 (2%)	0	100	100
1	C	126/149 (85%)	124 (98%)	2 (2%)	0	100	100
1	D	125/149 (84%)	123 (98%)	2 (2%)	0	100	100
1	E	124/149 (83%)	122 (98%)	2 (2%)	0	100	100
1	F	126/149 (85%)	124 (98%)	2 (2%)	0	100	100
All	All	751/894 (84%)	739 (98%)	12 (2%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	105/120 (88%)	105 (100%)	0	100	100
1	B	102/120 (85%)	102 (100%)	0	100	100
1	C	101/120 (84%)	101 (100%)	0	100	100
1	D	103/120 (86%)	103 (100%)	0	100	100
1	E	102/120 (85%)	102 (100%)	0	100	100
1	F	103/120 (86%)	103 (100%)	0	100	100
All	All	616/720 (86%)	616 (100%)	0	100	100

There are no protein residues with a non-rotameric sidechain to report.

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (1) such sidechains are listed below:

Mol	Chain	Res	Type
1	C	117	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	G	5/6 (83%)	3 (60%)	0
2	J	5/6 (83%)	4 (80%)	0
2	K	5/6 (83%)	2 (40%)	0
All	All	15/18 (83%)	9 (60%)	0

All (9) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
2	G	3	A
2	G	4	A
2	G	6	A
2	J	2	A
2	J	3	A

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Mol	Chain	Res	Type
2	J	5	A
2	J	6	A
2	K	3	A
2	K	4	A

There are no RNA pucker outliers to report.

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

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

5.5   Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6   Ligand geometry ⓘ

Of 10 ligands modelled in this entry, 10 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7   Other polymers ⓘ

There are no such residues in this entry.

5.8   Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	A	124/149 (83%)	1.00	19 (15%)	6	5	12, 26, 58, 65	5 (4%)
1	B	124/149 (83%)	0.97	14 (11%)	11	10	12, 27, 42, 55	1 (0%)
1	C	125/149 (83%)	1.46	37 (29%)	1	1	12, 28, 63, 75	3 (2%)
1	D	125/149 (83%)	1.25	25 (20%)	3	3	12, 30, 50, 59	2 (1%)
1	E	125/149 (83%)	1.06	19 (15%)	6	5	12, 28, 45, 53	1 (0%)
1	F	125/149 (83%)	1.78	49 (39%)	1	1	11, 35, 54, 74	3 (2%)
2	G	6/6 (100%)	-0.78	0	100	100	18, 19, 20, 21	0
2	J	6/6 (100%)	-0.38	0	100	100	20, 22, 23, 26	0
2	K	6/6 (100%)	-0.78	0	100	100	19, 20, 21, 21	0
All	All	766/912 (83%)	1.21	163 (21%)	3	2	11, 29, 54, 75	15 (1%)

All (163) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	C	4	ALA	6.4
1	B	23	GLY	5.6
1	C	73	LEU	5.3
1	C	60	VAL	5.1
1	F	60	VAL	5.0
1	C	58	ALA	4.9
1	D	59	ALA	4.9
1	A	60	VAL	4.9
1	D	56	GLY	4.9
1	E	5	THR	4.7
1	F	5	THR	4.4
1	F	21	LEU	4.4
1	F	84	PRO	4.4
1	C	55	PRO	4.3
1	F	129	ARG	4.3

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Mol	Chain	Res	Type	RSRZ
1	E	60	VAL	4.2
1	C	53	GLU	4.2
1	C	44	GLN	4.2
1	C	46	THR	4.1
1	C	61	ALA	4.1
1	F	55	PRO	4.0
1	D	60	VAL	4.0
1	F	73	LEU	4.0
1	A	49[A]	VAL	4.0
1	F	58	ALA	4.0
1	C	49	VAL	3.9
1	E	129	ARG	3.9
1	B	84	PRO	3.8
1	D	58	ALA	3.8
1	F	59	ALA	3.8
1	F	56	GLY	3.8
1	C	72	TRP	3.7
1	F	83	ARG	3.7
1	A	58	ALA	3.7
1	F	50	TYR	3.6
1	F	61	ALA	3.6
1	A	59	ALA	3.5
1	C	5	THR	3.5
1	F	127	LEU	3.5
1	C	85	GLY	3.4
1	A	61	ALA	3.4
1	A	128	PRO	3.4
1	F	49	VAL	3.4
1	C	52	PRO	3.4
1	C	83	ARG	3.4
1	B	59	ALA	3.3
1	F	20	HIS	3.3
1	A	5	THR	3.3
1	A	53	GLU	3.2
1	A	55	PRO	3.2
1	B	60	VAL	3.2
1	C	64	VAL	3.1
1	F	22	ASP	3.1
1	D	55	PRO	3.1
1	C	47	LEU	3.1
1	F	23	GLY	3.1
1	D	5	THR	3.1

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Mol	Chain	Res	Type	RSRZ
1	B	46	THR	3.0
1	E	54	ARG	3.0
1	D	129	ARG	3.0
1	C	59	ALA	3.0
1	B	58	ALA	3.0
1	C	54	ARG	3.0
1	F	63	GLU	2.9
1	E	46	THR	2.9
1	C	48	ALA	2.9
1	A	56	GLY	2.8
1	F	85	GLY	2.8
1	B	129	ARG	2.8
1	F	27	ARG	2.8
1	D	100	GLU	2.8
1	C	56	GLY	2.8
1	A	54	ARG	2.8
1	D	44	GLN	2.8
1	E	58	ALA	2.8
1	F	47	LEU	2.8
1	A	23	GLY	2.7
1	F	71	THR	2.7
1	D	54	ARG	2.7
1	A	52	PRO	2.7
1	F	82	PRO	2.7
1	F	33	VAL	2.7
1	C	50	TYR	2.7
1	D	32	ASP	2.7
1	F	98	PHE	2.7
1	A	50	TYR	2.7
1	F	51	ASP	2.6
1	D	128	PRO	2.6
1	B	83	ARG	2.6
1	C	57	GLU	2.6
1	A	44	GLN	2.6
1	F	44	GLN	2.6
1	F	128	PRO	2.6
1	C	6	PRO	2.6
1	E	22	ASP	2.6
1	E	71[A]	THR	2.6
1	E	128	PRO	2.6
1	F	100	GLU	2.6
1	E	21	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
1	D	63	GLU	2.5
1	F	86	THR	2.5
1	D	46	THR	2.5
1	C	75	ILE	2.5
1	F	87	VAL	2.5
1	E	32	ASP	2.5
1	F	46	THR	2.5
1	D	50	TYR	2.4
1	F	53	GLU	2.4
1	C	23	GLY	2.4
1	B	128	PRO	2.4
1	B	42	GLY	2.4
1	E	44	GLN	2.4
1	F	75	ILE	2.4
1	F	54	ARG	2.4
1	F	80	PRO	2.4
1	E	84	PRO	2.4
1	F	32	ASP	2.4
1	C	42	GLY	2.3
1	F	101	ARG	2.3
1	D	49	VAL	2.3
1	E	6	PRO	2.3
1	F	52	PRO	2.3
1	F	7	VAL	2.3
1	B	44	GLN	2.3
1	E	59	ALA	2.3
1	D	73	LEU	2.3
1	C	33	VAL	2.3
1	D	61	ALA	2.2
1	F	79	LEU	2.2
1	D	36	ARG	2.2
1	D	84	PRO	2.2
1	C	66	ILE	2.2
1	F	64	VAL	2.2
1	E	33	VAL	2.2
1	F	8	THR	2.2
1	C	71	THR	2.2
1	E	52	PRO	2.2
1	D	82	PRO	2.2
1	F	41	GLU	2.2
1	C	70	ALA	2.2
1	D	28	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
1	A	83	ARG	2.1
1	D	81	GLU	2.1
1	F	102	THR	2.1
1	B	6	PRO	2.1
1	C	128	PRO	2.1
1	E	63	GLU	2.1
1	C	32	ASP	2.1
1	E	82	PRO	2.1
1	C	68	VAL	2.1
1	F	81	GLU	2.1
1	F	117	GLN	2.1
1	A	63	GLU	2.1
1	F	96[A]	GLU	2.1
1	A	84	PRO	2.0
1	C	84	PRO	2.0
1	B	61	ALA	2.0
1	D	48	ALA	2.0
1	A	20	HIS	2.0
1	C	41	GLU	2.0
1	C	45	GLU	2.0
1	D	52	PRO	2.0
1	B	53	GLU	2.0

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

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

6.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

6.4 Ligands ⓘ

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
3	MG	J	101[A]	1/1	0.77	0.35	35,35,35,35	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
3	MG	J	101[B]	1/1	0.77	0.35	30,30,30,30	1
3	MG	G	101[A]	1/1	0.82	0.26	31,31,31,31	1
3	MG	G	101[B]	1/1	0.82	0.26	30,30,30,30	1
3	MG	K	101[A]	1/1	0.90	0.16	25,25,25,25	1
3	MG	K	101[B]	1/1	0.90	0.16	21,21,21,21	1
3	MG	F	201	1/1	0.96	0.18	38,38,38,38	0
3	MG	E	201	1/1	0.96	0.25	35,35,35,35	0
3	MG	A	201	1/1	0.97	0.17	33,33,33,33	0
3	MG	E	202	1/1	0.98	0.08	26,26,26,26	0

6.5 Other polymers ⓘ

There are no such residues in this entry.