Full wwPDB X-ray Structure Validation Report ⓘ

Aug 23, 2023 – 03:17 AM EDT

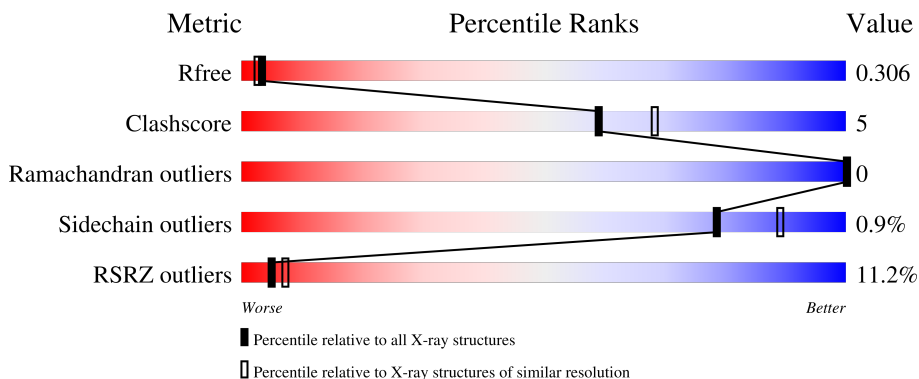|		
PDB ID	:	3EAP
Title	:	Crystal structure of the RhoGAP domain of ARHGAP11A
Authors	:	Shen, Y.; Shen, L.; Tong, Y.; Tempel, W.; MacKenzie, F.; Arrowsmith, C.H.; Edwards, A.M.; Bountra, C.; Weigelt, J.; Bochkarev, A.; Park, H.; Structural Genomics Consortium; Structural Genomics Consortium (SGC)
Deposited on	:	2008-08-26
Resolution	:	2.30 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 2.30 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		0.306
Clashscore		5
Ramachandran outliers		0
Sidechain outliers		0.9%
RSRZ outliers		11.2%

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$_{free}$	130704	5042 (2.30-2.30)
Clashscore	141614	5643 (2.30-2.30)
Ramachandran outliers	138981	5575 (2.30-2.30)
Sidechain outliers	138945	5575 (2.30-2.30)
RSRZ outliers	127900	4938 (2.30-2.30)

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	271	10% 75% 8% 17%
1	B	271	8% 71% 7% 21%
1	C	271	9% 70% 10% 20%
1	D	271	8% 66% 12% 22%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard

residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
2	UNX	A	254	-	-	-	X
2	UNX	B	254	-	-	-	X
2	UNX	B	255	-	-	-	X
2	UNX	B	256	-	-	-	X
2	UNX	B	257	-	-	-	X
2	UNX	C	254	-	-	-	X

2 Entry composition ⓘ

There are 3 unique types of molecules in this entry. The entry contains 6525 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 Rho GTPase-activating protein 11A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	225	Total 1665	C 1079	N 281	O 299	S 6	0	0	0
1	B	213	Total 1606	C 1041	N 275	O 286	S 4	0	0	0
1	C	216	Total 1613	C 1049	N 273	O 285	S 6	0	0	0
1	D	212	Total 1577	C 1026	N 266	O 280	S 5	0	0	0

There are 72 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-17	MET	-	expression tag	UNP Q6P4F7
A	-16	HIS	-	expression tag	UNP Q6P4F7
A	-15	HIS	-	expression tag	UNP Q6P4F7
A	-14	HIS	-	expression tag	UNP Q6P4F7
A	-13	HIS	-	expression tag	UNP Q6P4F7
A	-12	HIS	-	expression tag	UNP Q6P4F7
A	-11	HIS	-	expression tag	UNP Q6P4F7
A	-10	SER	-	expression tag	UNP Q6P4F7
A	-9	SER	-	expression tag	UNP Q6P4F7
A	-8	GLY	-	expression tag	UNP Q6P4F7
A	-7	ARG	-	expression tag	UNP Q6P4F7
A	-6	GLU	-	expression tag	UNP Q6P4F7
A	-5	ASN	-	expression tag	UNP Q6P4F7
A	-4	LEU	-	expression tag	UNP Q6P4F7
A	-3	TYR	-	expression tag	UNP Q6P4F7
A	-2	PHE	-	expression tag	UNP Q6P4F7
A	-1	GLN	-	expression tag	UNP Q6P4F7
A	0	GLY	-	expression tag	UNP Q6P4F7
B	-17	MET	-	expression tag	UNP Q6P4F7
B	-16	HIS	-	expression tag	UNP Q6P4F7
B	-15	HIS	-	expression tag	UNP Q6P4F7

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Chain	Residue	Modelled	Actual	Comment	Reference
B	-14	HIS	-	expression tag	UNP Q6P4F7
B	-13	HIS	-	expression tag	UNP Q6P4F7
B	-12	HIS	-	expression tag	UNP Q6P4F7
B	-11	HIS	-	expression tag	UNP Q6P4F7
B	-10	SER	-	expression tag	UNP Q6P4F7
B	-9	SER	-	expression tag	UNP Q6P4F7
B	-8	GLY	-	expression tag	UNP Q6P4F7
B	-7	ARG	-	expression tag	UNP Q6P4F7
B	-6	GLU	-	expression tag	UNP Q6P4F7
B	-5	ASN	-	expression tag	UNP Q6P4F7
B	-4	LEU	-	expression tag	UNP Q6P4F7
B	-3	TYR	-	expression tag	UNP Q6P4F7
B	-2	PHE	-	expression tag	UNP Q6P4F7
B	-1	GLN	-	expression tag	UNP Q6P4F7
B	0	GLY	-	expression tag	UNP Q6P4F7
C	-17	MET	-	expression tag	UNP Q6P4F7
C	-16	HIS	-	expression tag	UNP Q6P4F7
C	-15	HIS	-	expression tag	UNP Q6P4F7
C	-14	HIS	-	expression tag	UNP Q6P4F7
C	-13	HIS	-	expression tag	UNP Q6P4F7
C	-12	HIS	-	expression tag	UNP Q6P4F7
C	-11	HIS	-	expression tag	UNP Q6P4F7
C	-10	SER	-	expression tag	UNP Q6P4F7
C	-9	SER	-	expression tag	UNP Q6P4F7
C	-8	GLY	-	expression tag	UNP Q6P4F7
C	-7	ARG	-	expression tag	UNP Q6P4F7
C	-6	GLU	-	expression tag	UNP Q6P4F7
C	-5	ASN	-	expression tag	UNP Q6P4F7
C	-4	LEU	-	expression tag	UNP Q6P4F7
C	-3	TYR	-	expression tag	UNP Q6P4F7
C	-2	PHE	-	expression tag	UNP Q6P4F7
C	-1	GLN	-	expression tag	UNP Q6P4F7
C	0	GLY	-	expression tag	UNP Q6P4F7
D	-17	MET	-	expression tag	UNP Q6P4F7
D	-16	HIS	-	expression tag	UNP Q6P4F7
D	-15	HIS	-	expression tag	UNP Q6P4F7
D	-14	HIS	-	expression tag	UNP Q6P4F7
D	-13	HIS	-	expression tag	UNP Q6P4F7
D	-12	HIS	-	expression tag	UNP Q6P4F7
D	-11	HIS	-	expression tag	UNP Q6P4F7
D	-10	SER	-	expression tag	UNP Q6P4F7
D	-9	SER	-	expression tag	UNP Q6P4F7

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Chain	Residue	Modelled	Actual	Comment	Reference
D	-8	GLY	-	expression tag	UNP Q6P4F7
D	-7	ARG	-	expression tag	UNP Q6P4F7
D	-6	GLU	-	expression tag	UNP Q6P4F7
D	-5	ASN	-	expression tag	UNP Q6P4F7
D	-4	LEU	-	expression tag	UNP Q6P4F7
D	-3	TYR	-	expression tag	UNP Q6P4F7
D	-2	PHE	-	expression tag	UNP Q6P4F7
D	-1	GLN	-	expression tag	UNP Q6P4F7
D	0	GLY	-	expression tag	UNP Q6P4F7

- Molecule 2 is UNKNOWN ATOM OR ION (three-letter code: UNX) (formula: X).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
2	A	1	Total 1	X 1	0	0
2	B	4	Total 4	X 4	0	0
2	C	1	Total 1	X 1	0	0

- Molecule 3 is water.

| Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	10	Total 10	O 10	0	0
3	B	19	Total 19	O 19	0	0
3	C	15	Total 15	O 15	0	0
3	D	14	Total 14	O 14	0	0

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.
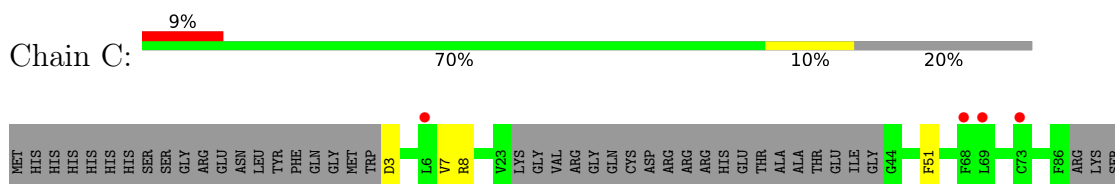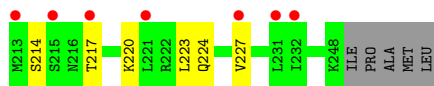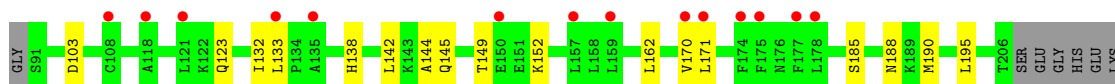
- Molecule 1: Rho GTPase-activating protein 11A
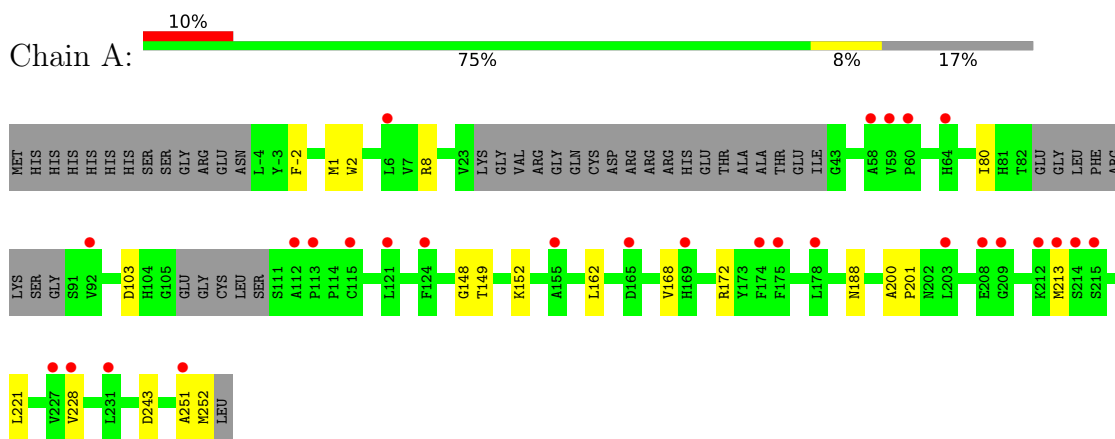
Chain A:

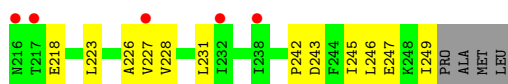- Molecule 1: Rho GTPase-activating protein 11A
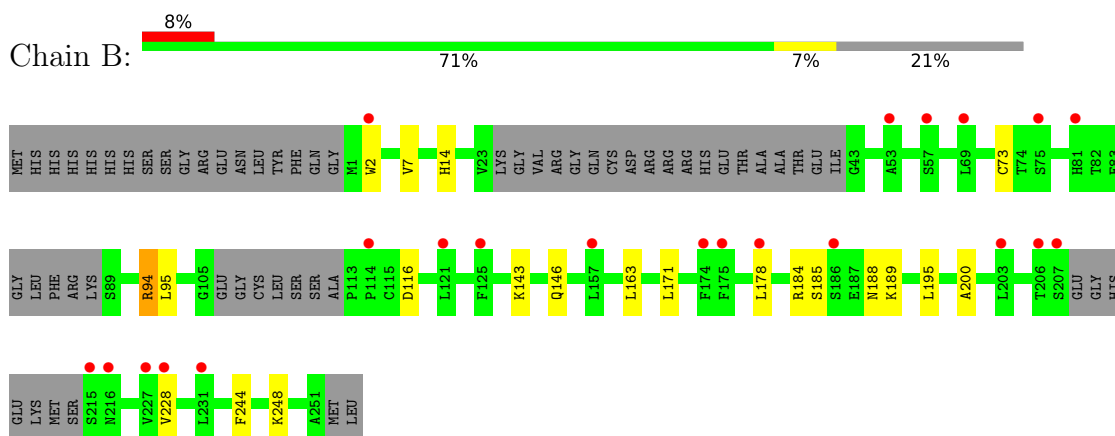
Chain B:
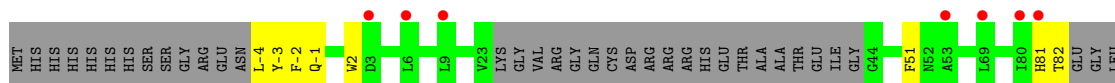

- Molecule 1: Rho GTPase-activating protein 11A

Chain C:

• Molecule 1: Rho GTPase-activating protein 11A

Chain D:

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	46.07Å 106.15Å 107.33Å 90.00° 97.16° 90.00°	Depositor
Resolution (Å)	20.00 – 2.30 19.94 – 2.30	Depositor EDS
% Data completeness (in resolution range)	98.1 (20.00-2.30) 98.1 (19.94-2.30)	Depositor EDS
R_{merge}	0.06	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.24 (at 2.30Å)	Xtriage
Refinement program	REFMAC 5.4.0069, tlsmd, FFAS03/SCWRL	Depositor
R, R_{free}	0.227 , 0.277 0.265 , 0.306	Depositor DCC
R_{free} test set	2233 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å^2)	44.5	Xtriage
Anisotropy	0.028	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.31 , 75.0	EDS
L-test for twinning[2]	$< |L| > = 0.48, < L^2 > = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	6525	wwPDB-VP
Average B, all atoms (Å^2)	60.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.87% 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: UNX

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	0.70	0/1701	0.69	0/2321
1	B	0.72	1/1639 (0.1%)	0.69	0/2230
1	C	0.80	0/1645	0.69	0/2235
1	D	0.71	0/1610	0.72	1/2192 (0.0%)
All	All	0.73	1/6595 (0.0%)	0.70	1/8978 (0.0%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	73	CYS	CB-SG	-5.37	1.73	1.81

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	179	ARG	NE-CZ-NH1	-5.43	117.58	120.30

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	1665	0	1583	14	0
1	B	1606	0	1567	14	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	C	1613	0	1569	14	0
1	D	1577	0	1511	23	0
2	A	1	0	0	0	0
2	B	4	0	0	0	0
2	C	1	0	0	0	0
3	A	10	0	0	0	0
3	B	19	0	0	1	0
3	C	15	0	0	0	0
3	D	14	0	0	0	0
All	All	6525	0	6230	60	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 5.

All (60) 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:94:ARG:HH21	1:B:94:ARG:CG	1.64	1.10
1:B:94:ARG:HG2	1:B:94:ARG:NH2	1.46	1.01
1:A:1:MET:O	1:A:251:ALA:HB1	1.88	0.73
1:C:223:LEU:O	1:C:227:VAL:HG23	2.01	0.61
1:C:3:ASP:O	1:C:7:VAL:HG23	2.04	0.57
1:C:190:MET:HG3	1:C:195:LEU:HG	1.87	0.56
1:B:94:ARG:HH21	1:B:94:ARG:HG2	0.68	0.56
1:A:200:ALA:HB3	1:A:201:PRO:HD3	1.88	0.55
1:B:185:SER:HA	1:B:188:ASN:OD1	2.06	0.55
1:D:223:LEU:O	1:D:227:VAL:HG23	2.06	0.55
1:C:142:LEU:HD21	1:C:224:GLN:HG3	1.88	0.54
1:B:94:ARG:CG	1:B:94:ARG:NH2	2.35	0.54
1:B:244:PHE:O	1:B:248:LYS:HD3	2.09	0.52
1:A:243:ASP:OD1	1:D:-3:TYR:CD2	2.62	0.52
1:C:145:GLN:HB2	1:C:223:LEU:HD22	1.91	0.52
1:B:143:LYS:O	1:B:146:GLN:HG2	2.10	0.52
1:B:163:LEU:HD13	1:B:171:LEU:HD12	1.93	0.51
1:D:-4:LEU:O	1:D:-1:GLN:HG2	2.10	0.51
1:D:171:LEU:HD22	1:D:175:PHE:HE2	1.76	0.50
1:D:145:GLN:HG2	1:D:226:ALA:HB3	1.94	0.50
1:B:14:HIS:HE1	3:B:274:HOH:O	1.94	0.49
1:A:-2:PHE:HB2	1:D:-2:PHE:HB2	1.95	0.49
1:A:149:THR:HG21	1:D:184:ARG:NH1	2.27	0.49
1:D:133:LEU:O	1:D:138:HIS:NE2	2.41	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:213:MET:SD	1:A:221:LEU:HD12	2.54	0.48
1:D:81:HIS:O	1:D:82:THR:C	2.51	0.47
1:C:214:SER:OG	1:C:217:THR:HG23	2.14	0.47
1:A:243:ASP:OD1	1:D:-3:TYR:CE2	2.67	0.47
1:C:132:ILE:HD13	1:C:171:LEU:HD21	1.97	0.47
1:D:242:PRO:HD2	1:D:245:ILE:HD13	1.98	0.46
1:B:2:TRP:CD1	1:B:7:VAL:HG21	2.51	0.46
1:D:171:LEU:HD22	1:D:175:PHE:CE2	2.50	0.45
1:A:200:ALA:HA	1:A:228:VAL:HG21	1.98	0.45
1:C:185:SER:HA	1:C:188:ASN:OD1	2.16	0.45
1:A:251:ALA:O	1:A:252:MET:C	2.55	0.45
1:D:171:LEU:HD23	1:D:171:LEU:HA	1.91	0.44
1:A:148:GLY:O	1:A:152:LYS:HG3	2.17	0.44
1:D:145:GLN:CG	1:D:226:ALA:HB3	2.48	0.44
1:A:168:VAL:O	1:A:172:ARG:HG3	2.17	0.44
1:C:144:ALA:O	1:C:152:LYS:HB2	2.18	0.44
1:B:178:LEU:HD22	1:B:195:LEU:HD13	1.99	0.44
1:B:184:ARG:HH11	1:C:149:THR:CB	2.31	0.43
1:D:243:ASP:O	1:D:247:GLU:HG3	2.19	0.43
1:B:95:LEU:HD13	1:B:116:ASP:HA	2.01	0.43
1:B:200:ALA:HA	1:B:228:VAL:HG21	2.01	0.42
1:C:123:GLN:HE21	1:C:123:GLN:HB2	1.69	0.42
1:D:214:SER:O	1:D:218:GLU:N	2.45	0.42
1:D:145:GLN:HB3	1:D:223:LEU:HD22	2.01	0.42
1:C:133:LEU:O	1:C:138:HIS:NE2	2.40	0.41
1:D:246:LEU:HA	1:D:249:ILE:HD12	2.02	0.41
1:C:51:PHE:CE1	1:C:170:VAL:HG21	2.55	0.41
1:D:174:PHE:CE2	1:D:178:LEU:HD11	2.56	0.41
1:D:227:VAL:O	1:D:231:LEU:HG	2.21	0.41
1:A:2:TRP:CE2	1:A:251:ALA:HB2	2.55	0.41
1:A:80:ILE:O	1:A:188:ASN:HB3	2.20	0.41
1:D:200:ALA:HA	1:D:228:VAL:HG21	2.02	0.41
1:C:8:ARG:NH1	1:C:162:LEU:HD22	2.36	0.41
1:A:8:ARG:HD3	1:A:162:LEU:CD2	2.51	0.41
1:D:51:PHE:HZ	1:D:132:ILE:HD12	1.86	0.40
1:D:200:ALA:HB3	1:D:201:PRO:HD3	2.03	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	217/271 (80%)	211 (97%)	6 (3%)	0	100	100
1	B	203/271 (75%)	201 (99%)	2 (1%)	0	100	100
1	C	208/271 (77%)	204 (98%)	4 (2%)	0	100	100
1	D	202/271 (74%)	195 (96%)	7 (4%)	0	100	100
All	All	830/1084 (77%)	811 (98%)	19 (2%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains ⓘ

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	164/233 (70%)	163 (99%)	1 (1%)	86	94
1	B	163/233 (70%)	161 (99%)	2 (1%)	71	84
1	C	160/233 (69%)	158 (99%)	2 (1%)	69	82
1	D	156/233 (67%)	155 (99%)	1 (1%)	86	94
All	All	643/932 (69%)	637 (99%)	6 (1%)	78	89

All (6) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	103	ASP
1	B	94	ARG

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Mol	Chain	Res	Type
1	B	189	LYS
1	C	103	ASP
1	C	220	LYS
1	D	2	TRP

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	202	ASN

5.3.3　RNA ⓘ

There are no RNA molecules in this entry.

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 monosaccharides in this entry.

5.6　Ligand geometry ⓘ

Of 6 ligands modelled in this entry, 6 are unknown - 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 (i)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 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(Å²)	Q<0.9
1	A	225/271 (83%)	0.71	28 (12%)	4	5	47, 60, 70, 77	0
1	B	213/271 (78%)	0.53	22 (10%)	6	9	51, 60, 68, 71	0
1	C	216/271 (79%)	0.62	25 (11%)	4	6	52, 60, 70, 77	0
1	D	212/271 (78%)	0.62	22 (10%)	6	9	53, 60, 70, 79	0
All	All	866/1084 (79%)	0.62	97 (11%)	5	7	47, 60, 70, 79	0

All (97) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	C	121	LEU	4.9
1	C	174	PHE	4.4
1	D	104	HIS	4.4
1	A	227	VAL	4.3
1	C	69	LEU	4.0
1	D	69	LEU	3.7
1	A	92	VAL	3.6
1	A	113	PRO	3.5
1	C	178	LEU	3.5
1	D	6	LEU	3.5
1	B	53	ALA	3.5
1	A	175	PHE	3.4
1	D	174	PHE	3.3
1	A	6	LEU	3.3
1	A	59	VAL	3.3
1	A	228	VAL	3.2
1	C	170	VAL	3.2
1	C	171	LEU	3.2
1	A	174	PHE	3.2
1	A	60	PRO	3.2
1	D	178	LEU	3.1

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Mol	Chain	Res	Type	RSRZ
1	D	53	ALA	3.1
1	D	121	LEU	3.0
1	D	9	LEU	3.0
1	A	203	LEU	2.9
1	C	108	CYS	2.9
1	C	175	PHE	2.9
1	C	68	PHE	2.9
1	A	215	SER	2.8
1	B	203	LEU	2.8
1	C	231	LEU	2.8
1	D	193	SER	2.8
1	B	227	VAL	2.8
1	D	135	ALA	2.7
1	C	215	SER	2.7
1	D	80	ILE	2.7
1	D	81	HIS	2.7
1	A	251	ALA	2.6
1	C	157	LEU	2.6
1	C	150	GLU	2.6
1	A	212	LYS	2.6
1	A	112	ALA	2.6
1	D	227	VAL	2.6
1	D	217	THR	2.5
1	A	121	LEU	2.5
1	B	121	LEU	2.5
1	A	178	LEU	2.5
1	C	177	PHE	2.5
1	C	133	LEU	2.5
1	B	215	SER	2.5
1	B	206	THR	2.5
1	C	217	THR	2.5
1	D	232	ILE	2.5
1	B	114	PRO	2.4
1	A	64	HIS	2.4
1	B	75	SER	2.4
1	D	186	SER	2.4
1	C	221	LEU	2.4
1	B	186	SER	2.4
1	B	69	LEU	2.4
1	D	3	ASP	2.4
1	B	178	LEU	2.4
1	C	213	MET	2.4

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Mol	Chain	Res	Type	RSRZ
1	D	238	ILE	2.3
1	A	231	LEU	2.3
1	A	169	HIS	2.3
1	A	208	GLU	2.3
1	B	81	HIS	2.3
1	B	125	PHE	2.3
1	C	232	ILE	2.3
1	C	6	LEU	2.3
1	B	174	PHE	2.3
1	D	175	PHE	2.2
1	B	2	TRP	2.2
1	B	57	SER	2.2
1	A	165	ASP	2.2
1	D	203	LEU	2.2
1	A	115	CYS	2.2
1	A	155	ALA	2.2
1	B	207	SER	2.2
1	B	175	PHE	2.1
1	B	231	LEU	2.1
1	A	213	MET	2.1
1	D	216	ASN	2.1
1	A	209	GLY	2.1
1	C	73	CYS	2.1
1	C	135	ALA	2.1
1	B	216	ASN	2.1
1	A	214	SER	2.1
1	C	159	LEU	2.1
1	C	118	ALA	2.1
1	B	228	VAL	2.1
1	A	124	PHE	2.1
1	A	58	ALA	2.1
1	D	124	PHE	2.1
1	B	157	LEU	2.0
1	C	227	VAL	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 (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	UNX	B	254	1/1	-0.44	6.24	17,17,17,17	1
2	UNX	B	255	1/1	0.02	1.32	2,2,2,2	1
2	UNX	A	254	1/1	0.03	2.36	2,2,2,2	1
2	UNX	B	257	1/1	0.05	1.57	2,2,2,2	1
2	UNX	C	254	1/1	0.17	2.04	2,2,2,2	1
2	UNX	B	256	1/1	0.28	1.31	2,2,2,2	1

6.5 Other polymers (i)

There are no such residues in this entry.