WORLDWIDE PDB
PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report (i)

Sep 11, 2023 – 09:06 AM EDT

PDB ID	:	4LLO
Title	:	Structure of the eag domain-CNBHD complex of the mouse EAG1 channel
Authors	:	Haitin, Y.; Carlson, A.E.; Zagotta, W.N.
Deposited on	:	2013-07-09
Resolution	:	2.00 Å(reported)

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

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

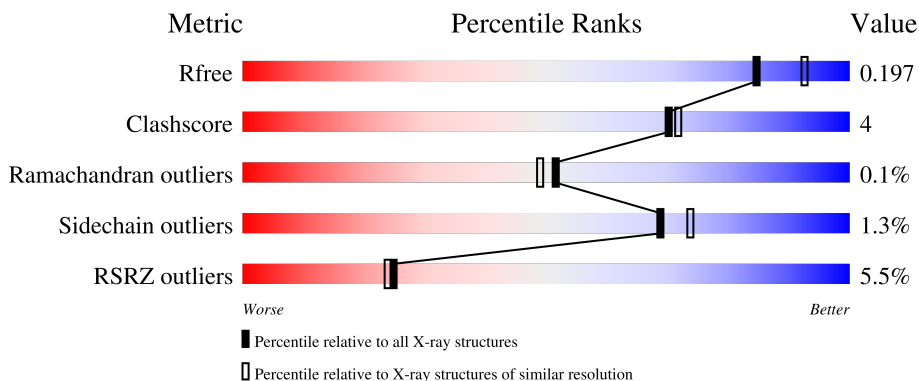|		
MolProbity	:	4.02b-467
Xtriage (Phenix)	:	1.13
EDS	:	2.35.1
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35.1

1 Overall quality at a glance ⓘ

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

The reported resolution of this entry is 2.00 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.
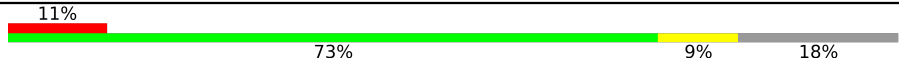

Metric	Percentile Ranks	Value
Rfree		0.197
Clashscore		4
Ramachandran outliers		0.1%
Sidechain outliers		1.3%
RSRZ outliers		5.5%

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	8085 (2.00-2.00)
Clashscore	141614	9178 (2.00-2.00)
Ramachandran outliers	138981	9054 (2.00-2.00)
Sidechain outliers	138945	9053 (2.00-2.00)
RSRZ outliers	127900	7900 (2.00-2.00)

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	177	3% / 91% 7% ·
1	C	177	4% / 86% 8% · 5%
1	E	177	% / 85% 11% · ·
1	G	177	5% / 91% 5% 5%
2	B	134	5% / 84% 7% 10%

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Mol	Chain	Length	Quality of chain
2	D	134	11% / 73% / 9% / 18%
2	F	134	4% / 80% / 10% / 10%
2	H	134	10% / 80% / 18%

2 Entry composition ⓘ

There are 3 unique types of molecules in this entry. The entry contains 9889 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 Potassium voltage-gated channel subfamily H member 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	173	Total	C	N	O	S	0	0	0
			1328	845	233	240	10			
1	C	168	Total	C	N	O	S	0	0	0
			1291	825	226	230	10			
1	E	171	Total	C	N	O	S	0	0	0
			1328	844	235	239	10			
1	G	169	Total	C	N	O	S	0	0	0
			1304	831	227	236	10			

There are 16 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	548	GLY	-	expression tag	UNP Q60603
A	549	ALA	-	expression tag	UNP Q60603
A	550	MET	-	expression tag	UNP Q60603
A	551	GLY	-	expression tag	UNP Q60603
C	548	GLY	-	expression tag	UNP Q60603
C	549	ALA	-	expression tag	UNP Q60603
C	550	MET	-	expression tag	UNP Q60603
C	551	GLY	-	expression tag	UNP Q60603
E	548	GLY	-	expression tag	UNP Q60603
E	549	ALA	-	expression tag	UNP Q60603
E	550	MET	-	expression tag	UNP Q60603
E	551	GLY	-	expression tag	UNP Q60603
G	548	GLY	-	expression tag	UNP Q60603
G	549	ALA	-	expression tag	UNP Q60603
G	550	MET	-	expression tag	UNP Q60603
G	551	GLY	-	expression tag	UNP Q60603

- Molecule 2 is a protein called Potassium voltage-gated channel subfamily H member 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	121	Total 947	C 613	N 154	O 173	S 7	0	0	0
2	D	110	Total 856	C 555	N 138	O 156	S 7	0	0	0
2	F	121	Total 959	C 618	N 156	O 178	S 7	0	0	0
2	H	110	Total 858	C 556	N 137	O 158	S 7	0	0	0

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	3	GLY	-	expression tag	UNP Q60603
B	4	ALA	-	expression tag	UNP Q60603
B	5	MET	-	expression tag	UNP Q60603
D	3	GLY	-	expression tag	UNP Q60603
D	4	ALA	-	expression tag	UNP Q60603
D	5	MET	-	expression tag	UNP Q60603
F	3	GLY	-	expression tag	UNP Q60603
F	4	ALA	-	expression tag	UNP Q60603
F	5	MET	-	expression tag	UNP Q60603
H	3	GLY	-	expression tag	UNP Q60603
H	4	ALA	-	expression tag	UNP Q60603
H	5	MET	-	expression tag	UNP Q60603

- Molecule 3 is water.

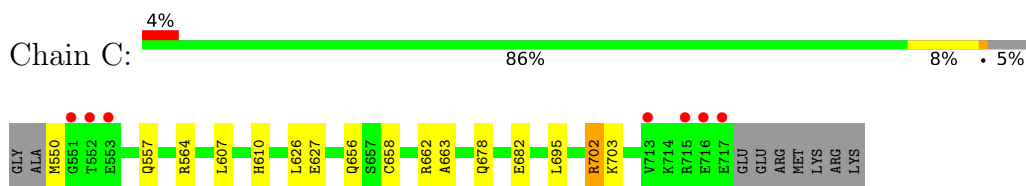| Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	185	Total 185	O 185	0	0
3	B	107	Total 107	O 107	0	0
3	C	156	Total 156	O 156	0	0
3	D	57	Total 57	O 57	0	0
3	E	178	Total 178	O 178	0	0
3	F	153	Total 153	O 153	0	0
3	G	132	Total 132	O 132	0	0
3	H	50	Total 50	O 50	0	0

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.
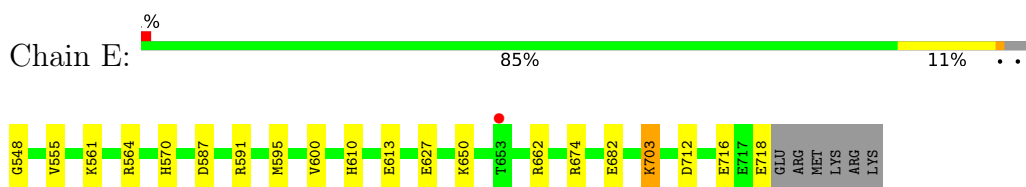
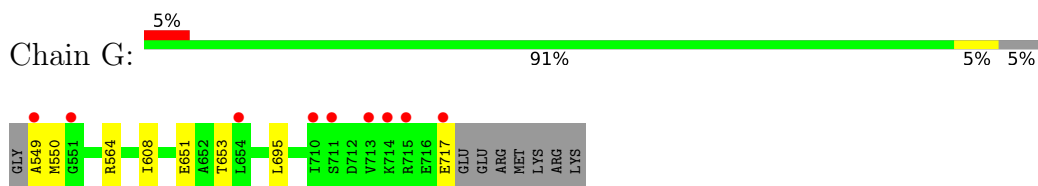• Molecule 1: Potassium voltage-gated channel subfamily H member 1
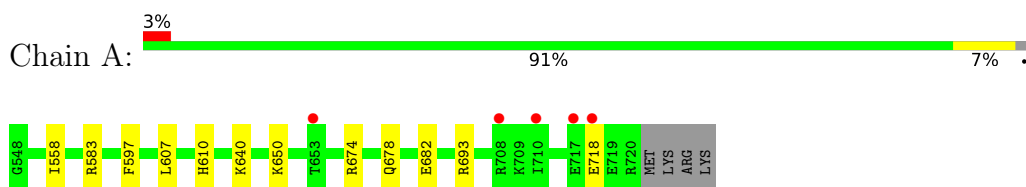
Chain A:

• Molecule 1: Potassium voltage-gated channel subfamily H member 1

Chain C:

• Molecule 1: Potassium voltage-gated channel subfamily H member 1

Chain E:

• Molecule 1: Potassium voltage-gated channel subfamily H member 1

Chain G:

• Molecule 2: Potassium voltage-gated channel subfamily H member 1

Chain B:

• Molecule 2: Potassium voltage-gated channel subfamily H member 1

Chain D:

11%

73% 9% 18%

GLY ALA MET GLY ARG ARG GLY LEU VAL ALA PRO GLN ASN THR PHE LEU GLU ASN ILE VAL ARG ARG S25 T28 G33 V38 D39 W40 S65 G72 V83 F87 Y90 E91 M92 N93 S94 Y100 K101 V107 F110 I116 E119 Q120 D121 K122 V123
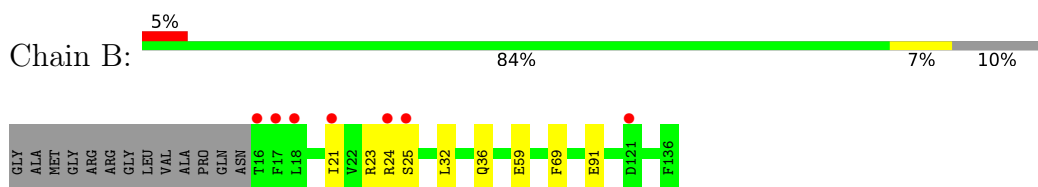
V124 L125 I133 T134 ALA PHE

• Molecule 2: Potassium voltage-gated channel subfamily H member 1

Chain F:

4%

80% 10% • 10%

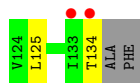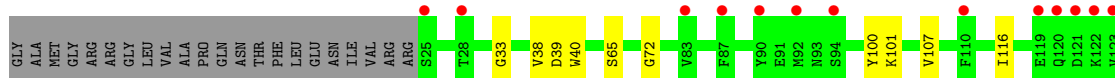GLY ALA MET GLY ARG ARG GLY LEU VAL ALA PRO GLN ASN T16 F17 L18 E19 V22 N26 G72 T86 N93 Y100 K101 V107 I116 Q120 D121 L125 F136
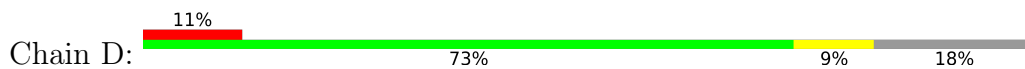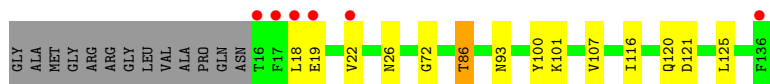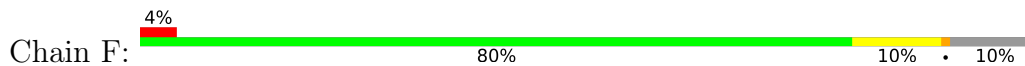
• Molecule 2: Potassium voltage-gated channel subfamily H member 1

Chain H:

10%

80% • 18%

GLY ALA MET GLY ARG ARG GLY LEU VAL ALA PRO GLN ASN THR PHE LEU GLU ASN ILE VAL ARG ARG SER N26 D27 R57 M61 Q85 T86 F87 N93 F110 N118 E119 Q120 D121 K122 V123 I133 T134 A135 PHE
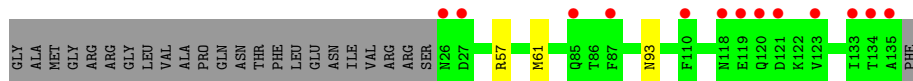
4 Data and refinement statistics ⓘ

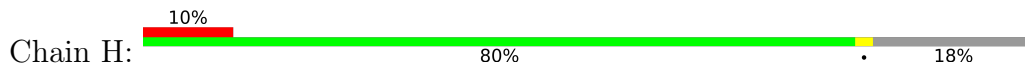| Property	Value	Source
Space group	P 65	Depositor
Cell constants a, b, c, α, β, γ	162.38Å 162.38Å 100.44Å 90.00° 90.00° 120.00°	Depositor
Resolution (Å)	42.71 – 2.00 42.71 – 2.00	Depositor EDS
% Data completeness (in resolution range)	100.0 (42.71-2.00) 100.0 (42.71-2.00)	Depositor EDS
R_{merge}	0.16	Depositor
R_{sym}	(Not available)	Depositor
$<I/\sigma(I)>$ [1]	2.30 (at 2.00Å)	Xtriage
Refinement program	PHENIX (phenix.refine: dev_1269)	Depositor
R, R_{free}	0.167 , 0.197 0.167 , 0.197	Depositor DCC
R_{free} test set	5113 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	33.7	Xtriage
Anisotropy	0.174	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.32 , 52.6	EDS
L-test for twinning[2]	$<|L|> = 0.50$, $<L^2> = 0.33$	Xtriage
Estimated twinning fraction	0.024 for h,-h-k,-l	Xtriage
F_o,F_c correlation	0.96	EDS
Total number of atoms	9889	wwPDB-VP
Average B, all atoms (Å^2)	41.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.25% 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 ⓘ

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	0.41	0/1352	0.54	0/1828
1	C	0.38	0/1315	0.52	0/1778
1	E	0.39	0/1352	0.53	0/1825
1	G	0.34	0/1328	0.49	0/1796
2	B	0.37	0/969	0.50	0/1314
2	D	0.32	0/877	0.48	0/1192
2	F	0.42	0/981	0.54	0/1328
2	H	0.31	0/879	0.47	0/1195
All	All	0.37	0/9053	0.51	0/12256

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	1328	0	1298	10	0
1	C	1291	0	1269	11	0
1	E	1328	0	1317	15	0
1	G	1304	0	1283	5	0
2	B	947	0	892	6	0
2	D	856	0	795	7	0
2	F	959	0	906	8	0
2	H	858	0	801	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	A	185	0	0	7	0
3	B	107	0	0	4	0
3	C	156	0	0	6	0
3	D	57	0	0	1	0
3	E	178	0	0	7	0
3	F	153	0	0	3	0
3	G	132	0	0	3	0
3	H	50	0	0	0	0
All	All	9889	0	8561	63	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 4.

All (63) 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:A:583:ARG:O	3:A:974:HOH:O	1.83	0.94
2:B:91:GLU:OE1	3:B:302:HOH:O	1.87	0.90
2:D:134:THR:O	3:D:257:HOH:O	1.89	0.89
1:C:656:GLN:OE1	3:C:946:HOH:O	1.90	0.88
2:B:59:GLU:OE2	3:B:295:HOH:O	1.95	0.85
1:A:682:GLU:OE2	3:A:983:HOH:O	1.96	0.83
2:D:101:LYS:HE3	2:D:107:VAL:HG21	1.61	0.81
1:E:716:GLU:OE1	3:E:886:HOH:O	2.00	0.79
1:G:651:GLU:OE1	3:G:901:HOH:O	2.01	0.76
1:A:682:GLU:OE1	3:A:890:HOH:O	2.03	0.75
1:E:570:HIS:ND1	3:E:864:HOH:O	2.28	0.66
1:C:658:CYS:SG	3:C:815:HOH:O	2.52	0.66
1:C:550:MET:N	3:C:915:HOH:O	2.29	0.66
1:G:549:ALA:HB1	1:G:608:ILE:HG23	1.81	0.62
1:C:564:ARG:NH2	3:C:848:HOH:O	2.16	0.60
2:B:36:GLN:OE1	3:B:250:HOH:O	2.16	0.60
2:F:101:LYS:NZ	3:F:256:HOH:O	2.34	0.59
2:F:101:LYS:HE3	2:F:107:VAL:HG21	1.83	0.59
1:E:561:LYS:HA	1:E:595:MET:HE1	1.85	0.58
2:D:116:ILE:HB	2:D:125:LEU:HB2	1.85	0.58
1:G:717:GLU:N	3:G:891:HOH:O	2.40	0.55
1:C:627:GLU:OE2	1:C:662:ARG:NH2	2.35	0.55
1:C:702:ARG:HG3	1:C:703:LYS:HG2	1.87	0.55
1:C:626:LEU:HD23	1:C:663:ALA:HA	1.89	0.54
1:A:718:GLU:O	3:A:964:HOH:O	2.18	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:640:LYS:HE2	3:A:936:HOH:O	2.09	0.53
1:E:548:GLY:N	1:E:610:HIS:HD1	2.07	0.53
1:A:650:LYS:HZ2	1:A:678:GLN:HE22	1.56	0.52
2:D:40:TRP:O	2:D:65:SER:OG	2.23	0.52
1:G:564:ARG:HD2	3:G:911:HOH:O	2.10	0.51
1:E:682:GLU:OE1	3:E:943:HOH:O	2.19	0.51
2:B:21:ILE:HG21	2:B:32:LEU:HD21	1.92	0.51
1:E:650:LYS:NZ	3:E:930:HOH:O	2.44	0.51
1:C:557:GLN:NE2	3:C:898:HOH:O	1.96	0.50
1:C:678:GLN:O	1:C:682:GLU:HG2	2.11	0.50
1:G:651:GLU:OE2	1:G:653:THR:OG1	2.20	0.48
2:H:57:ARG:O	2:H:61:MET:HG2	2.14	0.48
2:B:23:ARG:HA	2:B:24:ARG:HA	1.58	0.46
1:E:564:ARG:NH2	3:E:973:HOH:O	2.20	0.46
2:F:125:LEU:HB3	3:F:292:HOH:O	2.16	0.46
1:A:693:ARG:HD3	3:A:962:HOH:O	2.15	0.45
1:E:627:GLU:OE2	1:E:662:ARG:NH2	2.45	0.45
2:F:18:LEU:O	2:F:22:VAL:HG23	2.16	0.45
1:C:702:ARG:HD2	3:C:859:HOH:O	2.17	0.45
1:E:712:ASP:OD2	3:E:938:HOH:O	2.21	0.43
1:A:558:ILE:HD12	1:A:597:PHE:HB3	1.99	0.43
1:E:716:GLU:O	1:E:718:GLU:HG2	2.19	0.43
2:B:69:PHE:HD1	3:B:296:HOH:O	2.02	0.43
2:D:33:GLY:HA3	2:D:65:SER:OG	2.19	0.42
1:E:627:GLU:OE2	1:E:662:ARG:NE	2.47	0.42
2:F:22:VAL:HG21	2:F:116:ILE:HG21	2.02	0.42
1:E:587:ASP:HB3	1:E:591:ARG:NH1	2.35	0.41
1:C:607:LEU:HG	1:C:610:HIS:CD2	2.56	0.41
2:D:38:VAL:O	2:D:39:ASP:HB2	2.21	0.41
2:F:72:GLY:HA3	2:F:100:TYR:CE1	2.57	0.40
2:F:19:GLU:HG3	3:F:292:HOH:O	2.21	0.40
1:A:650:LYS:NZ	3:A:960:HOH:O	2.55	0.40
1:E:555:VAL:HG22	1:E:600:VAL:HG22	2.03	0.40
1:E:613:GLU:OE1	3:E:829:HOH:O	2.22	0.40
1:E:703:LYS:HE3	1:E:703:LYS:HB2	1.95	0.40
1:A:607:LEU:HG	1:A:610:HIS:CE1	2.57	0.40
2:D:72:GLY:HA3	2:D:100:TYR:CE2	2.56	0.40
2:F:86:THR:HG1	2:F:93:ASN:HD22	1.64	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	171/177 (97%)	170 (99%)	1 (1%)	0	100	100
1	C	166/177 (94%)	161 (97%)	5 (3%)	0	100	100
1	E	169/177 (96%)	168 (99%)	1 (1%)	0	100	100
1	G	167/177 (94%)	163 (98%)	4 (2%)	0	100	100
2	B	119/134 (89%)	118 (99%)	1 (1%)	0	100	100
2	D	108/134 (81%)	105 (97%)	3 (3%)	0	100	100
2	F	119/134 (89%)	116 (98%)	2 (2%)	1 (1%)	19	13
2	H	108/134 (81%)	106 (98%)	2 (2%)	0	100	100
All	All	1127/1244 (91%)	1107 (98%)	19 (2%)	1 (0%)	51	49

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	F	26	ASN

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	138/153 (90%)	137 (99%)	1 (1%)	84	88
1	C	135/153 (88%)	133 (98%)	2 (2%)	65	69
1	E	141/153 (92%)	139 (99%)	2 (1%)	67	72
1	G	138/153 (90%)	136 (99%)	2 (1%)	67	72

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	B	99/120 (82%)	98 (99%)	1 (1%)	76	81
2	D	89/120 (74%)	89 (100%)	0	100	100
2	F	102/120 (85%)	99 (97%)	3 (3%)	42	43
2	H	90/120 (75%)	89 (99%)	1 (1%)	73	78
All	All	932/1092 (85%)	920 (99%)	12 (1%)	69	74

All (12) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	674	ARG
2	B	25	SER
1	C	695	LEU
1	C	702	ARG
1	E	674	ARG
1	E	703	LYS
2	F	86	THR
2	F	120	GLN
2	F	121	ASP
1	G	550	MET
1	G	695	LEU
2	H	93	ASN

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

Mol	Chain	Res	Type
1	A	678	GLN

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 ⓘ

There are no ligands in this entry.

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(Å²)	Q<0.9
1	A	173/177 (97%)	0.04	5 (2%)	51	50	18, 29, 57, 93	0
1	C	168/177 (94%)	-0.06	7 (4%)	36	35	19, 33, 75, 110	0
1	E	171/177 (96%)	-0.13	1 (0%)	89	88	21, 32, 53, 94	0
1	G	169/177 (95%)	0.03	9 (5%)	26	25	24, 39, 83, 115	0
2	B	121/134 (90%)	0.31	7 (5%)	23	22	24, 36, 77, 116	0
2	D	110/134 (82%)	0.43	15 (13%)	3	2	29, 52, 85, 104	0
2	F	121/134 (90%)	-0.00	6 (4%)	28	28	20, 30, 72, 86	0
2	H	110/134 (82%)	0.34	13 (11%)	4	4	33, 55, 94, 109	0
All	All	1143/1244 (91%)	0.09	63 (5%)	25	24	18, 36, 80, 116	0

All (63) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	B	18	LEU	7.8
1	C	717	GLU	7.4
2	F	16	THR	6.5
1	G	551	GLY	5.2
1	G	715	ARG	5.1
2	B	17	PHE	5.0
2	D	123	VAL	4.7
2	H	135	ALA	4.3
1	C	716	GLU	4.3
1	A	717	GLU	4.2
2	B	16	THR	4.2
2	H	87	PHE	4.1
1	A	653	THR	4.1
2	B	24	ARG	4.0
2	D	134	THR	4.0
2	D	110	PHE	3.9

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Mol	Chain	Res	Type	RSRZ
1	C	713	VAL	3.8
2	H	121	ASP	3.8
1	G	549	ALA	3.6
2	H	118	ASN	3.5
2	F	19	GLU	3.4
1	C	551	GLY	3.4
2	F	17	PHE	3.4
1	C	552	THR	3.3
1	E	653	THR	3.3
2	H	133	ILE	3.2
2	H	123	VAL	3.2
1	G	711	SER	3.1
2	D	122	LYS	3.1
2	F	18	LEU	3.1
2	B	25	SER	3.0
2	D	87	PHE	3.0
1	G	714	LYS	2.9
2	H	120	GLN	2.9
1	G	713	VAL	2.9
1	G	654	LEU	2.8
2	B	21	ILE	2.8
2	H	134	THR	2.7
2	D	120	GLN	2.7
2	D	121	ASP	2.6
2	F	22	VAL	2.6
1	G	717	GLU	2.6
2	H	27	ASP	2.6
2	D	119	GLU	2.6
2	D	83	VAL	2.6
2	D	133	ILE	2.5
2	H	110	PHE	2.5
1	A	710	ILE	2.5
2	B	121	ASP	2.4
2	D	90	TYR	2.4
2	D	94	SER	2.2
2	H	119	GLU	2.2
2	F	136	PHE	2.2
2	D	28	THR	2.2
2	D	92	MET	2.1
1	G	710	ILE	2.1
1	A	708	ARG	2.1
1	C	715	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
1	A	718	GLU	2.1
2	D	25	SER	2.0
2	H	85	GLN	2.0
2	H	26	ASN	2.0
1	C	553	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 monosaccharides in this entry.

6.4 Ligands ⓘ

There are no ligands in this entry.

6.5 Other polymers ⓘ

There are no such residues in this entry.