Full wwPDB X-ray Structure Validation Report ⓘ

May 29, 2024 – 02:09 PM JST

PDB ID	:	8KEM
Title	:	PKS domains-fused AmpC EC2
Authors	:	Son, S.Y.; Bae, D.W.; Cha, S.S.
Deposited on	:	2023-08-12
Resolution	:	2.77 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 ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ⓘ) were used in the production of this report:

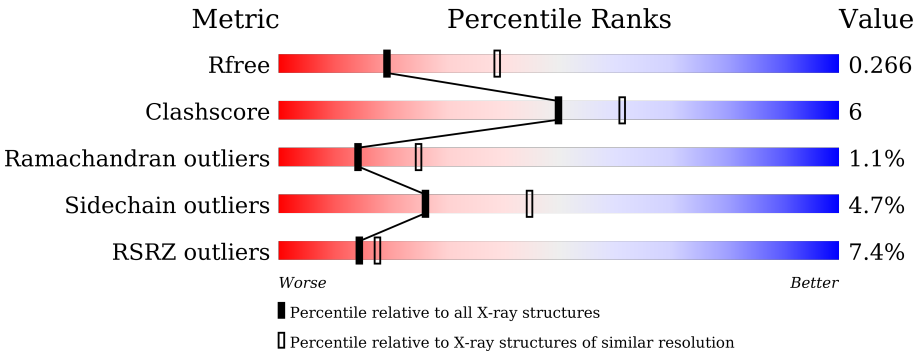
MolProbity	:	4.02b-467
Xtriage (Phenix)	:	1.13
EDS	:	2.36.2
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36.2

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 2.77 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1235 (2.78-2.74)
Clashscore	141614	1277 (2.78-2.74)
Ramachandran outliers	138981	1257 (2.78-2.74)
Sidechain outliers	138945	1257 (2.78-2.74)
RSRZ outliers	127900	1207 (2.78-2.74)

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	428	4% 82% 16%
1	B	428	7% 85% 13%
1	C	428	10% 73% 19% 7%

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 9464 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 SDR family NAD(P)-dependent oxidoreductase,Beta-lactamase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	425	Total	C	N	O	S	0	0	0
			3257	2088	558	603	8			
1	B	424	Total	C	N	O	S	0	0	0
			3203	2046	555	594	8			
1	C	399	Total	C	N	O	S	0	0	0
			3004	1923	521	552	8			

There are 24 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	33	GLY	-	linker	UNP A7Z472
A	34	GLY	-	linker	UNP A7Z472
A	35	GLY	-	linker	UNP A7Z472
A	36	SER	-	linker	UNP A7Z472
A	394	GLY	-	linker	UNP B7SNP8
A	395	GLY	-	linker	UNP B7SNP8
A	396	GLY	-	linker	UNP B7SNP8
A	397	SER	-	linker	UNP B7SNP8
B	33	GLY	-	linker	UNP A7Z472
B	34	GLY	-	linker	UNP A7Z472
B	35	GLY	-	linker	UNP A7Z472
B	36	SER	-	linker	UNP A7Z472
B	394	GLY	-	linker	UNP B7SNP8
B	395	GLY	-	linker	UNP B7SNP8
B	396	GLY	-	linker	UNP B7SNP8
B	397	SER	-	linker	UNP B7SNP8
C	33	GLY	-	linker	UNP A7Z472
C	34	GLY	-	linker	UNP A7Z472
C	35	GLY	-	linker	UNP A7Z472
C	36	SER	-	linker	UNP A7Z472
C	394	GLY	-	linker	UNP B7SNP8
C	395	GLY	-	linker	UNP B7SNP8

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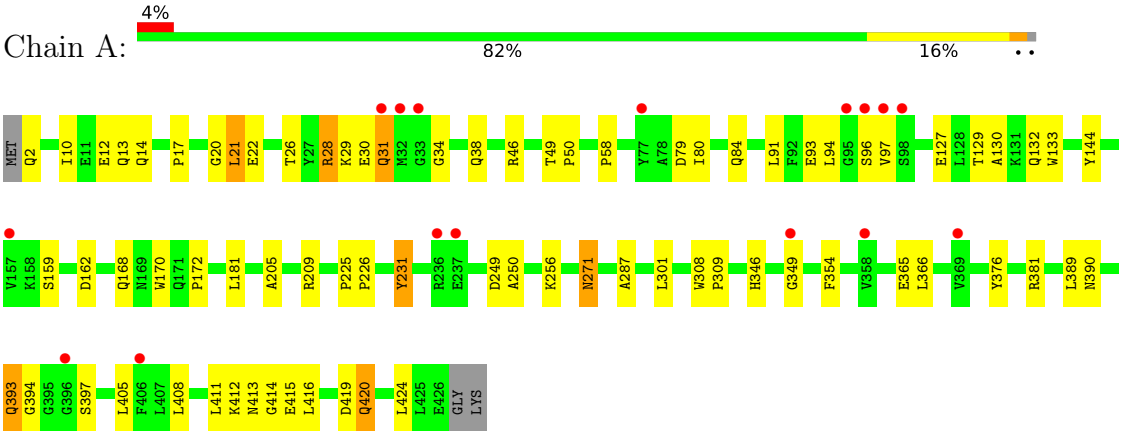
Chain	Residue	Modelled	Actual	Comment	Reference
C	396	GLY	-	linker	UNP B7SNP8
C	397	SER	-	linker	UNP B7SNP8

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.

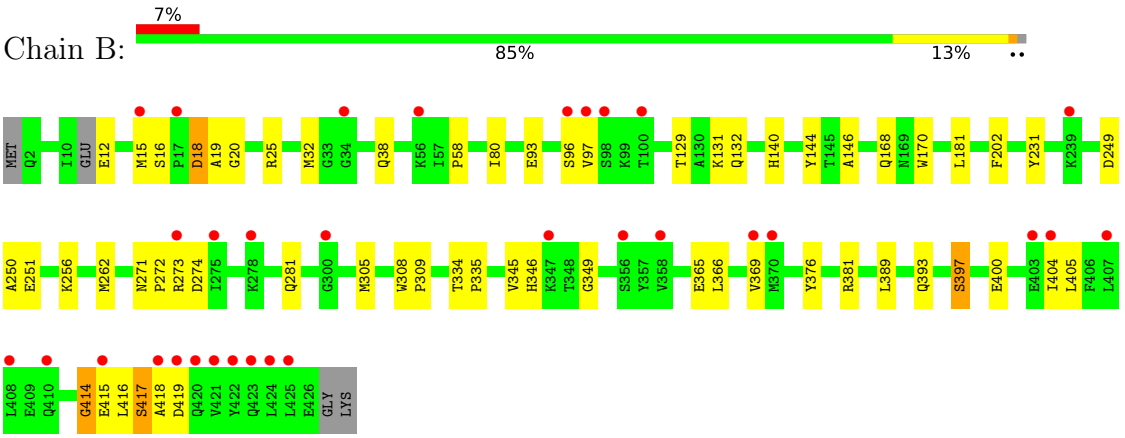
• Molecule 1: SDR family NAD(P)-dependent oxidoreductase,Beta-lactamase

Chain A:



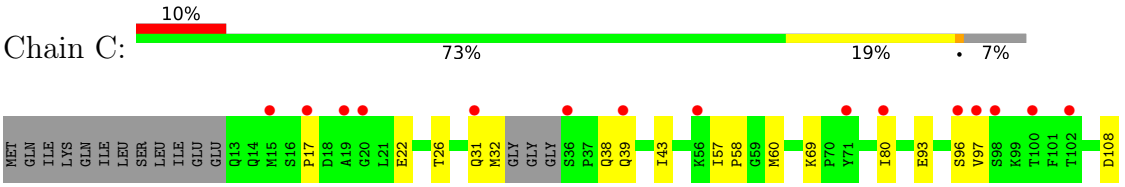
• Molecule 1: SDR family NAD(P)-dependent oxidoreductase,Beta-lactamase

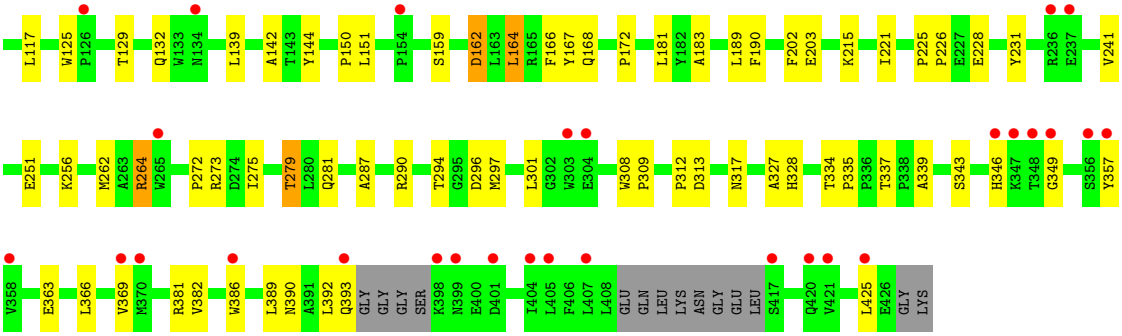
Chain B:



• Molecule 1: SDR family NAD(P)-dependent oxidoreductase,Beta-lactamase

Chain C:




L117 W125 P126 T129 Q132 W133 N134 L139 A142 T143 Y144 P150 L151 P154 S159 D162 L163 L164 R165 F166 Y167 Q168 P172 L181 Y182 A183 L189 F190 F202 E203 K215 I221 P225 P226 E227 E228 Y231 R236 E237 V241
E251 K256 M262 A263 R264 W265 P272 R273 D274 I275 T279 L280 Q281 A287 R290 T294 G296 D296 M297 L301 G302 W303 E304 W308 P309 P312 D313 N317 A327 H328 T334 P335 P336 T337 P338 A339 S343 H346 K347 T348 G349 S356 Y357
V358 E363 L366 V369 M370 R381 V382 W386 L389 N390 A391 L392 Q393 GLY GLY GLY SER K398 N399 E400 D401 I404 L405 F406 L407 L408 GLU GLN LEU LYS ASN GLY GLU LEU S417 Q420 V421 L425 E426 GLY LYS

4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α, β, γ	108.47Å 248.86Å 153.70Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	29.37 – 2.77 29.37 – 2.77	Depositor EDS
% Data completeness (in resolution range)	99.9 (29.37-2.77) 100.0 (29.37-2.77)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.68 (at 2.76Å)	Xtriage
Refinement program	phenix.refine 1.10.1_2155, PHENIX 1.10.1_2155	Depositor
R, R_{free}	0.229 , 0.266 0.230 , 0.266	Depositor DCC
R_{free} test set	2655 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	80.3	Xtriage
Anisotropy	0.091	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.33 , 53.9	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	0.94	EDS
Total number of atoms	9464	wwPDB-VP
Average B, all atoms (Å^2)	78.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.95% of the height of the origin peak. No significant pseudotranslation is detected.*

[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	0.26	0/3343	0.45	0/4563
1	B	0.26	0/3287	0.44	0/4487
1	C	0.25	0/3082	0.44	1/4211 (0.0%)
All	All	0.25	0/9712	0.44	1/13261 (0.0%)

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	17	PRO	N-CA-CB	5.23	109.58	103.30

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	3257	0	3174	37	0
1	B	3203	0	3067	25	0
1	C	3004	0	2874	46	0
All	All	9464	0	9115	107	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 6.

All (107) 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:29:LYS:HB2	1:A:394:GLY:HA2	1.64	0.77
1:C:117:LEU:HB3	1:C:139:LEU:HB2	1.69	0.75
1:C:386:TRP:O	1:C:390:ASN:HB2	1.90	0.72
1:B:366:LEU:HG	1:B:389:LEU:HD22	1.73	0.70
1:A:366:LEU:HG	1:A:389:LEU:HD22	1.75	0.69
1:B:335:PRO:HD3	1:C:139:LEU:HD22	1.79	0.65
1:B:397:SER:HB3	1:B:400:GLU:HB2	1.83	0.61
1:A:132:GLN:NE2	1:A:170:TRP:O	2.34	0.60
1:B:96:SER:HB2	1:B:349:GLY:HA2	1.83	0.59
1:B:129:THR:H	1:B:168:GLN:HE22	1.48	0.59
1:A:414:GLY:O	1:A:416:LEU:N	2.36	0.59
1:A:129:THR:H	1:A:168:GLN:HE22	1.51	0.58
1:B:417:SER:O	1:B:419:ASP:N	2.37	0.58
1:C:225:PRO:HA	1:C:228:GLU:HG2	1.84	0.58
1:A:93:GLU:HG2	1:A:256:LYS:HD2	1.87	0.57
1:A:376:TYR:CE2	1:A:381:ARG:HG2	2.40	0.57
1:C:313:ASP:O	1:C:317:ASN:ND2	2.35	0.56
1:A:96:SER:HB2	1:A:349:GLY:HA2	1.88	0.56
1:B:308:TRP:CD2	1:B:309:PRO:HA	2.41	0.55
1:C:386:TRP:O	1:C:390:ASN:CB	2.53	0.55
1:B:132:GLN:NE2	1:B:170:TRP:O	2.39	0.55
1:B:58:PRO:HB3	1:B:80:ILE:HD11	1.88	0.55
1:A:130:ALA:HB3	1:A:133:TRP:HD1	1.71	0.54
1:C:290:ARG:NH2	1:C:343:SER:OG	2.41	0.54
1:B:376:TYR:CE2	1:B:381:ARG:HG2	2.43	0.54
1:C:272:PRO:HB2	1:C:281:GLN:HG3	1.89	0.54
1:C:312:PRO:HB3	1:C:386:TRP:CE2	2.43	0.53
1:C:349:GLY:O	1:C:381:ARG:NH1	2.40	0.53
1:C:159:SER:H	1:C:162:ASP:HB2	1.73	0.53
1:C:108:ASP:OD1	1:C:279:THR:OG1	2.26	0.53
1:C:97:VAL:HG23	1:C:349:GLY:HA3	1.90	0.52
1:B:18:ASP:O	1:B:20:GLY:N	2.42	0.52
1:A:420:GLN:O	1:A:424:LEU:HG	2.11	0.51
1:A:132:GLN:HB2	1:A:172:PRO:HG3	1.93	0.51
1:C:39:GLN:O	1:C:43:ILE:HG22	2.11	0.51
1:A:159:SER:H	1:A:162:ASP:HB2	1.75	0.51
1:C:308:TRP:HZ3	1:C:386:TRP:HZ3	1.59	0.51
1:B:97:VAL:HG23	1:B:349:GLY:HA3	1.92	0.51
1:C:96:SER:HB2	1:C:349:GLY:HA2	1.92	0.50
1:A:144:TYR:HB3	1:A:181:LEU:O	2.12	0.50
1:C:287:ALA:HA	1:C:301:LEU:HB2	1.93	0.50
1:A:28:ARG:HA	1:A:31:GLN:HB2	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:30:GLU:HA	1:A:34:GLY:HA2	1.94	0.50
1:C:181:LEU:HD13	1:C:327:ALA:HB2	1.94	0.50
1:C:132:GLN:HG3	1:C:172:PRO:HD3	1.93	0.49
1:C:357:TYR:CZ	1:C:382:VAL:HG22	2.47	0.49
1:A:10:ILE:HD13	1:A:408:LEU:HG	1.94	0.49
1:A:91:LEU:HB2	1:A:231:TYR:HA	1.93	0.49
1:B:262:MET:HB3	1:B:369:VAL:HG11	1.96	0.48
1:A:271:ASN:ND2	1:A:365:GLU:OE2	2.46	0.48
1:A:79:ASP:HB3	1:A:84:GLN:HB3	1.96	0.48
1:A:390:ASN:ND2	1:A:393:GLN:OE1	2.46	0.47
1:B:414:GLY:O	1:B:416:LEU:N	2.48	0.47
1:C:296:ASP:OD1	1:C:296:ASP:N	2.41	0.46
1:C:366:LEU:HG	1:C:389:LEU:HD22	1.98	0.46
1:B:249:ASP:OD1	1:B:250:ALA:N	2.48	0.46
1:B:305:MET:HG3	1:B:345:VAL:HG22	1.98	0.46
1:A:58:PRO:HB3	1:A:80:ILE:HD11	1.97	0.45
1:A:97:VAL:HG23	1:A:349:GLY:HA3	1.98	0.45
1:C:290:ARG:HB2	1:C:337:THR:HB	1.97	0.45
1:C:308:TRP:CD2	1:C:309:PRO:HA	2.52	0.45
1:A:93:GLU:HB2	1:A:354:PHE:CG	2.52	0.44
1:B:271:ASN:HD21	1:B:365:GLU:CD	2.17	0.44
1:C:129:THR:N	1:C:168:GLN:OE1	2.38	0.44
1:A:12:GLU:O	1:A:14:GLN:N	2.51	0.44
1:A:94:LEU:HB3	1:A:97:VAL:HB	1.98	0.44
1:B:144:TYR:HB3	1:B:181:LEU:O	2.18	0.44
1:B:93:GLU:HG2	1:B:256:LYS:HD2	1.99	0.44
1:A:393:GLN:O	1:A:393:GLN:HG2	2.17	0.44
1:A:205:ALA:O	1:A:209:ARG:HB2	2.17	0.44
1:C:273:ARG:HD2	1:C:281:GLN:NE2	2.33	0.44
1:C:151:LEU:HA	1:C:183:ALA:HA	2.00	0.44
1:C:202:PHE:CE1	1:C:251:GLU:HG3	2.53	0.43
1:C:225:PRO:N	1:C:226:PRO:HD2	2.34	0.43
1:A:127:GLU:OE1	1:A:127:GLU:N	2.39	0.43
1:C:58:PRO:HB3	1:C:80:ILE:HD11	2.00	0.43
1:A:21:LEU:HD12	1:A:405:LEU:HG	2.01	0.43
1:A:287:ALA:HA	1:A:301:LEU:HB2	2.01	0.43
1:C:215:LYS:HB2	1:C:264:ARG:NH1	2.33	0.43
1:C:251:GLU:OE1	1:C:251:GLU:N	2.50	0.43
1:A:10:ILE:HD11	1:A:20:GLY:HA3	2.01	0.43
1:A:308:TRP:CD2	1:A:309:PRO:HA	2.54	0.43
1:C:203:GLU:HA	1:C:221:ILE:HD12	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:272:PRO:HB2	1:B:281:GLN:HG3	2.00	0.42
1:C:142:ALA:HB2	1:C:190:PHE:CD1	2.54	0.42
1:C:334:THR:HA	1:C:335:PRO:HA	1.86	0.42
1:A:93:GLU:HB2	1:A:354:PHE:CD1	2.55	0.42
1:C:22:GLU:O	1:C:26:THR:HG23	2.19	0.42
1:A:249:ASP:OD1	1:A:250:ALA:N	2.53	0.41
1:C:144:TYR:HB3	1:C:181:LEU:O	2.20	0.41
1:C:39:GLN:H	1:C:39:GLN:HG3	1.66	0.41
1:C:272:PRO:HA	1:C:275:ILE:HD13	2.01	0.41
1:A:17:PRO:HB3	1:A:408:LEU:HB3	2.02	0.41
1:B:25:ARG:NH1	1:B:393:GLN:HE22	2.18	0.41
1:A:49:THR:HB	1:A:50:PRO:HD3	2.03	0.41
1:B:140:HIS:HB3	1:B:146:ALA:HA	2.03	0.41
1:C:167:TYR:CE2	1:C:189:LEU:HD22	2.55	0.41
1:C:262:MET:HB3	1:C:369:VAL:HG11	2.02	0.41
1:C:150:PRO:HG3	1:C:166:PHE:HZ	1.86	0.41
1:C:57:ILE:HG21	1:C:60:MET:HE2	2.01	0.41
1:C:202:PHE:CZ	1:C:251:GLU:HG3	2.56	0.41
1:B:400:GLU:O	1:B:404:ILE:HB	2.20	0.41
1:C:93:GLU:HG2	1:C:256:LYS:HD2	2.03	0.40
1:C:125:TRP:CZ2	1:C:164:LEU:HG	2.56	0.40
1:B:12:GLU:N	1:B:12:GLU:OE1	2.54	0.40
1:A:225:PRO:N	1:A:226:PRO:HD2	2.36	0.40
1:B:202:PHE:CE1	1:B:251:GLU:HG3	2.57	0.40

There are no symmetry-related clashes.

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
1	A	423/428 (99%)	401 (95%)	18 (4%)	4 (1%)	17 31

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	B	420/428 (98%)	397 (94%)	15 (4%)	8 (2%)	8 14
1	C	391/428 (91%)	380 (97%)	10 (3%)	1 (0%)	41 60
All	All	1234/1284 (96%)	1178 (96%)	43 (4%)	13 (1%)	14 25

All (13) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	413	ASN
1	A	415	GLU
1	B	18	ASP
1	B	19	ALA
1	B	415	GLU
1	B	418	ALA
1	B	32	MET
1	B	397	SER
1	C	339	ALA
1	A	13	GLN
1	A	397	SER
1	B	417	SER
1	B	414	GLY

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	330/350 (94%)	314 (95%)	16 (5%)	25 44
1	B	315/350 (90%)	305 (97%)	10 (3%)	39 59
1	C	295/350 (84%)	277 (94%)	18 (6%)	18 33
All	All	940/1050 (90%)	896 (95%)	44 (5%)	26 45

All (44) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	2	GLN

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Mol	Chain	Res	Type
1	A	21	LEU
1	A	22	GLU
1	A	26	THR
1	A	28	ARG
1	A	31	GLN
1	A	38	GLN
1	A	46	ARG
1	A	231	TYR
1	A	271	ASN
1	A	346	HIS
1	A	393	GLN
1	A	411	LEU
1	A	412	LYS
1	A	419	ASP
1	A	420	GLN
1	B	15	MET
1	B	16	SER
1	B	38	GLN
1	B	131	LYS
1	B	231	TYR
1	B	273	ARG
1	B	274	ASP
1	B	334	THR
1	B	346	HIS
1	B	405	LEU
1	C	31	GLN
1	C	32	MET
1	C	38	GLN
1	C	69	LYS
1	C	162	ASP
1	C	164	LEU
1	C	231	TYR
1	C	241	VAL
1	C	264	ARG
1	C	279	THR
1	C	294	THR
1	C	297	MET
1	C	328	HIS
1	C	346	HIS
1	C	363	GLU
1	C	392	LEU
1	C	393	GLN

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Mol	Chain	Res	Type
1	C	425	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (2) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	390	ASN
1	A	393	GLN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

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

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, 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	OWAB(Å^2)	Q<0.9
1	A	425/428 (99%)	0.24	16 (3%) 40 48	51, 67, 112, 131	0
1	B	424/428 (99%)	0.39	32 (7%) 14 17	50, 69, 120, 141	0
1	C	399/428 (93%)	0.60	44 (11%) 5 6	58, 84, 139, 151	0
All	All	1248/1284 (97%)	0.41	92 (7%) 14 17	50, 73, 123, 151	0

All (92) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	408	LEU	6.2
1	B	407	LEU	5.3
1	B	420	GLN	5.1
1	C	17	PRO	5.0
1	C	97	VAL	4.6
1	C	404	ILE	4.6
1	C	20	GLY	4.4
1	C	15	MET	4.3
1	B	273	ARG	4.3
1	C	237	GLU	4.2
1	A	406	PHE	4.2
1	C	405	LEU	4.1
1	B	404	ILE	3.9
1	B	97	VAL	3.8
1	C	348	THR	3.8
1	B	403	GLU	3.7
1	C	96	SER	3.6
1	C	100	THR	3.5
1	B	415	GLU	3.4
1	B	419	ASP	3.4
1	B	410	GLN	3.3
1	C	421	VAL	3.3
1	C	347	LYS	3.3

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Mol	Chain	Res	Type	RSRZ
1	A	31	GLN	3.1
1	C	425	LEU	3.1
1	C	386	TRP	3.1
1	B	424	LEU	3.1
1	A	157	VAL	3.1
1	B	96	SER	3.1
1	C	36	SER	3.0
1	B	418	ALA	3.0
1	C	19	ALA	3.0
1	B	34	GLY	3.0
1	C	357	TYR	3.0
1	C	126	PRO	2.9
1	C	399	ASN	2.9
1	C	356	SER	2.8
1	C	349	GLY	2.8
1	A	98	SER	2.8
1	C	401	ASP	2.8
1	A	358	VAL	2.7
1	C	358	VAL	2.7
1	A	96	SER	2.7
1	C	420	GLN	2.7
1	B	17	PRO	2.7
1	B	358	VAL	2.6
1	B	15	MET	2.6
1	B	56	LYS	2.6
1	A	33	GLY	2.6
1	A	97	VAL	2.6
1	C	98	SER	2.5
1	C	154	PRO	2.5
1	B	98	SER	2.5
1	C	346	HIS	2.4
1	A	32	MET	2.4
1	C	417	SER	2.4
1	B	275	ILE	2.4
1	B	369	VAL	2.3
1	B	239	LYS	2.3
1	B	423	GLN	2.3
1	C	407	LEU	2.3
1	B	422	TYR	2.3
1	B	347	LYS	2.3
1	B	300	GLY	2.2
1	C	134	ASN	2.2

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Mol	Chain	Res	Type	RSRZ
1	C	265	TRP	2.2
1	C	236	ARG	2.2
1	B	356	SER	2.2
1	B	421	VAL	2.2
1	B	278	LYS	2.2
1	C	80	ILE	2.2
1	A	237	GLU	2.2
1	C	304	GLU	2.1
1	A	349	GLY	2.1
1	C	303	TRP	2.1
1	C	102	THR	2.1
1	C	370	MET	2.1
1	C	31	GLN	2.1
1	A	77	TYR	2.1
1	A	369	VAL	2.1
1	A	396	GLY	2.1
1	C	71	TYR	2.1
1	C	56	LYS	2.1
1	A	95	GLY	2.1
1	B	370	MET	2.1
1	C	39	GLN	2.1
1	A	236	ARG	2.1
1	C	369	VAL	2.1
1	C	393	GLN	2.1
1	B	100	THR	2.0
1	C	398	LYS	2.0
1	B	425	LEU	2.0

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

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)

There are no ligands in this entry.

6.5 Other polymers (i)

There are no such residues in this entry.