Full wwPDB X-ray Structure Validation Report ⓘ

Jun 25, 2024 – 11:10 PM EDT

PDB ID	:	6YWO
Title	:	CutA in complex with A3 RNA
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Deposited on	:	2020-04-29
Resolution	:	1.90 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:

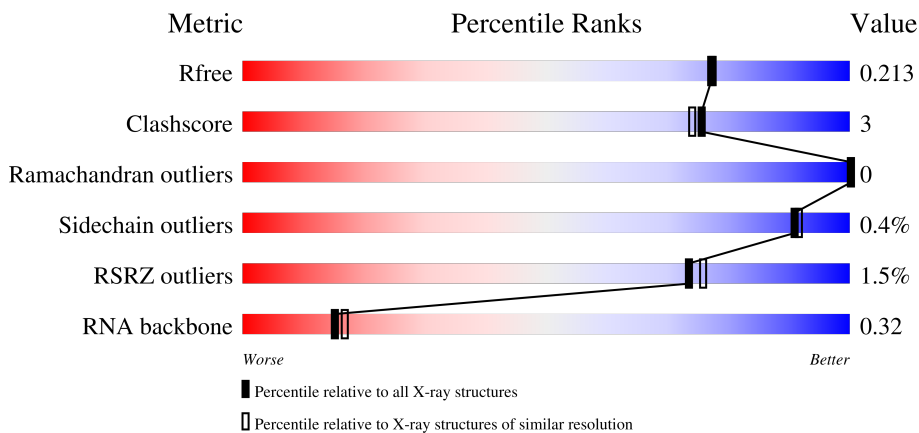|		
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.37.1
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.37.1

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 1.90 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		0.213
Clashscore		3
Ramachandran outliers		0
Sidechain outliers		0.4%
RSRZ outliers		1.5%
RNA backbone		0.32

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	6207 (1.90-1.90)
Clashscore	141614	6847 (1.90-1.90)
Ramachandran outliers	138981	6760 (1.90-1.90)
Sidechain outliers	138945	6760 (1.90-1.90)
RSRZ outliers	127900	6082 (1.90-1.90)
RNA backbone	3102	1013 (2.42-1.38)

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	363	91% 6% •
1	B	363	90% 7% •
1	C	363	88% 8% •
1	D	363	90% 7% •

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W O R L D W I D E
wwPDB
PROTEIN DATA BANK

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Mol	Chain	Length	Quality of chain
2	E	3	67% 33%
2	F	3	67% 33%
2	I	3	33% / 33% 67%
2	K	3	33% / 67% 33%

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
3	CL	A	701	-	-	X	-
3	CL	B	701	-	-	X	-

2 Entry composition (i)

There are 5 unique types of molecules in this entry. The entry contains 12529 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 CutA.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
1	A	354	Total	C	N	O	S	Se	0	10	0
			2862	1827	487	529	9	10			
1	B	353	Total	C	N	O	S	Se	0	4	0
			2826	1798	487	522	9	10			
1	C	347	Total	C	N	O	S	Se	0	4	0
			2775	1761	478	517	9	10			
1	D	350	Total	C	N	O	S	Se	0	6	0
			2801	1776	481	525	9	10			

- Molecule 2 is a RNA chain called RNA (5'-R(*AP*AP*A)-3').

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	E	3	Total	C	N	O	P	0	0	0
			63	30	15	16	2			
2	I	3	Total	C	N	O	P	0	0	0
			63	30	15	16	2			
2	F	3	Total	C	N	O	P	0	0	0
			63	30	15	16	2			
2	K	3	Total	C	N	O	P	0	0	0
			63	30	15	16	2			

- Molecule 3 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	1	Total	Cl	0	0
			1	1		
3	B	1	Total	Cl	0	0
			1	1		

- Molecule 4 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	2	Total 2	Mg 2	0	0
4	B	4	Total 4	Mg 4	0	0
4	C	2	Total 2	Mg 2	0	0
4	D	4	Total 4	Mg 4	0	0

• Molecule 5 is water.

| Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
5	A	284	Total 284	O 284	0	0
5	B	271	Total 271	O 271	0	0
5	C	207	Total 207	O 207	0	0
5	D	217	Total 217	O 217	0	0
5	E	6	Total 6	O 6	0	0
5	I	4	Total 4	O 4	0	0
5	F	5	Total 5	O 5	0	0
5	K	5	Total 5	O 5	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.

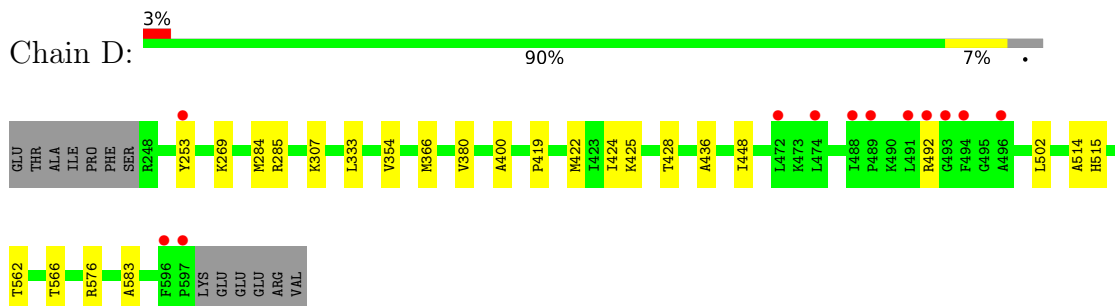- Molecule 1: CutA

Chain A:

- Molecule 1: CutA
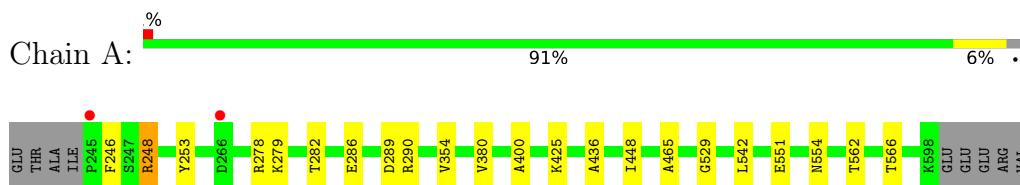
Chain B:
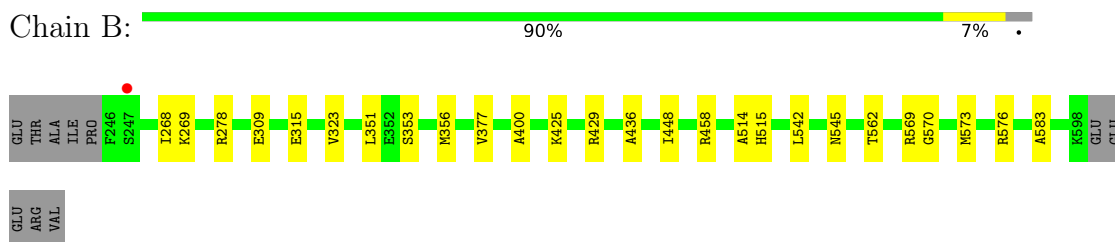
- Molecule 1: CutA
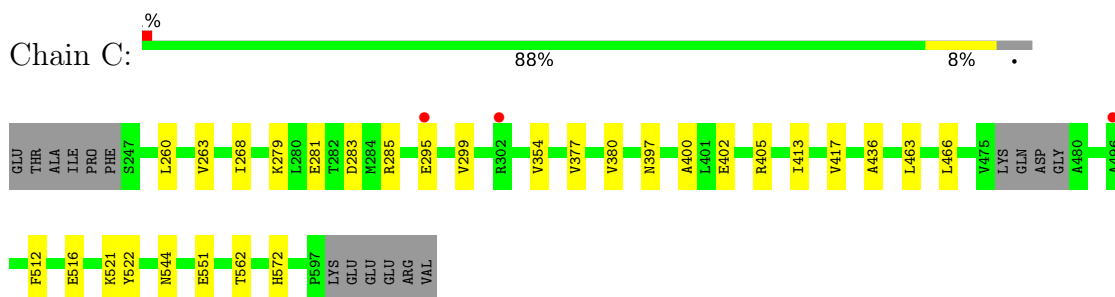
Chain C:

- Molecule 1: CutA

Chain D:

• Molecule 2: RNA (5'-R(*AP*AP*A)-3')

Chain E:

• Molecule 2: RNA (5'-R(*AP*AP*A)-3')

Chain I:

• Molecule 2: RNA (5'-R(*AP*AP*A)-3')

Chain F:

• Molecule 2: RNA (5'-R(*AP*AP*A)-3')

Chain K:

4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α, β, γ	56.92Å　　56.95Å　　149.89Å 79.86°　　87.12°　　75.83°	Depositor
Resolution (Å)	33.26　–　1.90 49.18　–　1.90	Depositor EDS
% Data completeness (in resolution range)	96.1 (33.26-1.90) 89.7 (49.18-1.90)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.34 (at 1.90Å)	Xtriage
Refinement program	PHENIX 1.18.2_3874, PHENIX 1.18.2_3874	Depositor
R, R_{free}	0.176　,　0.213 0.176　,　0.213	Depositor DCC
R_{free} test set	6822 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å^2)	29.2	Xtriage
Anisotropy	0.142	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.36 , 51.2	EDS
L-test for twinning[2]	$< |L| > = 0.50, < L^2 > = 0.33$	Xtriage
Estimated twinning fraction	0.001 for -h,-k,-k+l	Xtriage
F_o,F_c correlation	0.96	EDS
Total number of atoms	12529	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 7.80% 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, CL

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	0.47	0/2941	0.61	0/3972
1	B	0.48	0/2885	0.60	0/3894
1	C	0.42	0/2832	0.56	0/3824
1	D	0.41	0/2865	0.56	0/3870
2	E	0.31	0/71	0.84	0/109
2	F	0.53	0/71	1.01	0/109
2	I	0.52	0/71	1.04	0/109
2	K	0.57	0/71	0.92	0/109
All	All	0.45	0/11807	0.60	0/15996

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	2862	0	2816	17	0
1	B	2826	0	2779	19	0
1	C	2775	0	2707	19	0
1	D	2801	0	2734	16	0
2	E	63	0	35	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	F	63	0	35	2	0
2	I	63	0	35	4	0
2	K	63	0	35	1	0
3	A	1	0	0	2	0
3	B	1	0	0	2	0
4	A	2	0	0	0	0
4	B	4	0	0	0	0
4	C	2	0	0	0	0
4	D	4	0	0	0	0
5	A	284	0	0	2	0
5	B	271	0	0	4	0
5	C	207	0	0	3	0
5	D	217	0	0	1	0
5	E	6	0	0	0	0
5	F	5	0	0	0	0
5	I	4	0	0	0	0
5	K	5	0	0	0	0
All	All	12529	0	11176	71	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 3.

All (71) 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:569:ARG:HG2	1:B:573:MSE:HE2	1.43	1.00
1:B:269:LYS:HD3	1:B:583:ALA:HB1	1.61	0.80
1:B:570:GLY:HA2	1:B:573:MSE:HE3	1.66	0.76
1:D:333:LEU:HA	1:D:422:MSE:HE3	1.76	0.67
1:B:315:GLU:OE1	5:B:801:HOH:O	2.15	0.65
1:C:436:ALA:HB1	1:C:562:THR:HG21	1.80	0.63
1:D:400:ALA:HB2	2:K:-1:A:C2	2.35	0.61
1:A:400:ALA:HB2	2:F:-1:A:C2	2.36	0.61
1:D:436:ALA:HB1	1:D:562:THR:HG21	1.83	0.61
1:A:436:ALA:HB1	1:A:562:THR:HG21	1.83	0.60
1:B:436:ALA:HB1	1:B:562:THR:HG21	1.82	0.60
1:B:429[B]:ARG:NH2	5:B:807:HOH:O	2.36	0.58
1:B:448:ILE:HD11	3:B:701:CL:CL	2.41	0.58
1:A:448:ILE:HD11	3:A:701:CL:CL	2.42	0.57
1:C:354:VAL:HB	1:C:380:VAL:HG23	1.86	0.56
1:C:413:ILE:HD11	1:C:466:LEU:HD21	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:400:ALA:HB2	2:E:-1:A:C2	2.41	0.55
1:C:402:GLU:OE2	1:C:405:ARG:NH1	2.30	0.55
1:C:400:ALA:HB2	2:I:-1:A:C2	2.42	0.55
1:C:397:ASN:ND2	2:I:-1:A:N1	2.56	0.53
1:B:309:GLU:HG3	1:B:323:VAL:HB	1.89	0.53
1:B:425:LYS:HG2	5:B:927:HOH:O	2.08	0.53
1:D:419:PRO:HB2	1:D:502:LEU:HD21	1.91	0.53
1:C:279:LYS:NZ	1:C:283:ASP:OD2	2.37	0.53
1:A:246:PHE:HE2	1:A:248[B]:ARG:HD2	1.74	0.52
1:B:377:VAL:HG21	2:E:-1:A:C6	2.44	0.52
1:C:281:GLU:O	1:C:285:ARG:HG2	2.11	0.51
1:D:424:ILE:O	1:D:428:THR:HG23	2.11	0.50
1:D:269:LYS:HD2	1:D:583:ALA:HB1	1.94	0.50
1:D:284:MSE:HE2	1:D:502:LEU:HG	1.93	0.49
1:C:260:LEU:HD22	1:C:572:HIS:CG	2.47	0.49
1:C:512:PHE:HA	1:C:516:GLU:HB2	1.94	0.49
1:D:307:LYS:HE3	1:D:366:MSE:HE1	1.94	0.49
1:A:425:LYS:HG2	5:A:900:HOH:O	2.14	0.48
1:C:551:GLU:HG3	5:C:803:HOH:O	2.14	0.47
1:B:448:ILE:CD1	3:B:701:CL:CL	2.99	0.47
1:C:263:VAL:HB	1:C:268:ILE:HD11	1.98	0.45
1:A:286[A]:GLU:HG2	1:A:290:ARG:NH1	2.31	0.45
1:D:514:ALA:HB1	1:D:576:ARG:HG2	1.98	0.45
1:B:514:ALA:HB1	1:B:576:ARG:HG2	1.99	0.45
1:D:425:LYS:HD2	1:D:448:ILE:HD11	1.99	0.45
1:C:397:ASN:ND2	2:I:-1:A:C2	2.86	0.44
1:C:521:LYS:HD2	1:C:522:TYR:CZ	2.52	0.44
1:A:354:VAL:HB	1:A:380[A]:VAL:HG22	1.99	0.44
1:C:295:GLU:O	1:C:299:VAL:HG23	2.18	0.44
1:D:354:VAL:HB	1:D:380:VAL:HG23	1.98	0.43
1:B:351:LEU:C	1:B:353:SER:H	2.22	0.43
1:C:377:VAL:HG21	2:I:-1:A:C6	2.53	0.43
1:A:448:ILE:CD1	3:A:701:CL:CL	3.03	0.43
1:D:515:HIS:HD2	5:D:934:HOH:O	2.02	0.43
1:A:278:ARG:O	1:A:282:THR:HG23	2.19	0.43
1:A:279:LYS:HB3	5:A:934:HOH:O	2.17	0.43
1:A:286[A]:GLU:HG2	1:A:290:ARG:HH12	1.84	0.42
1:C:544:ASN:HA	5:C:945:HOH:O	2.18	0.42
1:A:400:ALA:HB2	2:F:-1:A:H2	1.80	0.42
1:A:465:ALA:HB2	1:A:529:GLY:HA3	2.01	0.42
1:B:542:LEU:HB3	1:B:545:ASN:HB3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:417:VAL:HG21	1:C:463:LEU:HD21	2.01	0.42
1:D:285:ARG:HD3	1:D:285:ARG:HA	1.87	0.42
1:A:253:TYR:HA	1:A:566:THR:HG21	2.01	0.42
1:B:458:ARG:NH2	5:B:804:HOH:O	2.27	0.41
1:C:397:ASN:HB2	5:C:912:HOH:O	2.19	0.41
1:D:253:TYR:HA	1:D:566:THR:HG21	2.02	0.41
1:A:286[A]:GLU:CG	1:A:290:ARG:HH12	2.34	0.41
1:A:551:GLU:OE2	1:A:554:ASN:N	2.52	0.41
1:D:354:VAL:HB	1:D:380:VAL:CG2	2.49	0.41
1:A:246:PHE:CE2	1:A:248[B]:ARG:HD2	2.55	0.40
1:B:353:SER:HB3	1:B:356:MSE:HE2	2.03	0.40
1:B:268[A]:ILE:HD12	1:B:515:HIS:CD2	2.56	0.40
1:B:356:MSE:HE2	1:B:356:MSE:HB3	1.99	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	362/363 (100%)	354 (98%)	8 (2%)	0	100	100
1	B	355/363 (98%)	347 (98%)	8 (2%)	0	100	100
1	C	347/363 (96%)	340 (98%)	7 (2%)	0	100	100
1	D	354/363 (98%)	349 (99%)	5 (1%)	0	100	100
All	All	1418/1452 (98%)	1390 (98%)	28 (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	310/317 (98%)	306 (99%)	4 (1%)	69	68
1	B	305/317 (96%)	304 (100%)	1 (0%)	92	93
1	C	299/317 (94%)	299 (100%)	0	100	100
1	D	303/317 (96%)	302 (100%)	1 (0%)	92	93
All	All	1217/1268 (96%)	1211 (100%)	6 (0%)	91	89

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

Mol	Chain	Res	Type
1	A	248[A]	ARG
1	A	248[B]	ARG
1	A	289	ASP
1	A	542	LEU
1	B	278	ARG
1	D	492	ARG

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

Mol	Chain	Res	Type
1	B	561	ASN
1	C	397	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	E	2/3 (66%)	0	0
2	F	2/3 (66%)	0	0
2	I	2/3 (66%)	1 (50%)	0
2	K	2/3 (66%)	0	0
All	All	8/12 (66%)	1 (12%)	0

All (1) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
2	I	0	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 monosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 14 ligands modelled in this entry, 14 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	344/363 (94%)	-0.12	2 (0%)	89	90	21, 34, 56, 103	1 (0%)
1	B	343/363 (94%)	-0.17	1 (0%)	94	94	22, 34, 53, 84	1 (0%)
1	C	337/363 (92%)	-0.14	3 (0%)	84	85	25, 40, 69, 85	1 (0%)
1	D	340/363 (93%)	0.11	12 (3%)	44	47	25, 41, 66, 86	1 (0%)
2	E	3/3 (100%)	1.01	0	100	100	94, 94, 100, 116	1 (33%)
2	F	3/3 (100%)	0.82	0	100	100	68, 68, 72, 96	2 (66%)
2	I	3/3 (100%)	1.53	1 (33%)	0	0	86, 86, 103, 131	1 (33%)
2	K	3/3 (100%)	1.27	1 (33%)	0	0	75, 75, 77, 84	2 (66%)
All	All	1376/1464 (93%)	-0.07	20 (1%)	73	76	21, 37, 64, 131	10 (0%)

All (20) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	D	488	ILE	5.0
1	D	472	LEU	4.9
1	D	496	ALA	4.4
1	D	489	PRO	3.8
1	D	492	ARG	3.5
1	C	496	ALA	3.5
1	D	493	GLY	3.4
1	D	253	TYR	3.3
1	D	491	LEU	2.6
1	A	266	ASP	2.6
1	D	597	PRO	2.6
2	I	-2	A	2.5
2	K	-2	A	2.4
1	B	247	SER	2.4
1	D	596	PHE	2.4
1	D	494	PHE	2.3

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WORLDWIDE
wwPDB
PROTEIN DATA BANK

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Mol	Chain	Res	Type	RSRZ
1	A	245	PRO	2.3
1	C	295	GLU	2.1
1	C	302	ARG	2.1
1	D	474	LEU	2.1

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 ⓘ

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
4	MG	D	702	1/1	0.88	0.07	52,52,52,52	0
4	MG	C	701	1/1	0.89	0.08	58,58,58,58	0
4	MG	B	702	1/1	0.90	0.08	52,52,52,52	0
4	MG	D	703	1/1	0.90	0.29	61,61,61,61	0
4	MG	B	703	1/1	0.91	0.05	41,41,41,41	0
3	CL	A	701	1/1	0.91	0.09	50,50,50,50	0
4	MG	D	704	1/1	0.91	0.09	70,70,70,70	0
4	MG	B	704	1/1	0.93	0.17	58,58,58,58	0
4	MG	C	702	1/1	0.95	0.04	49,49,49,49	0
4	MG	D	701	1/1	0.96	0.13	44,44,44,44	0
3	CL	B	701	1/1	0.96	0.07	51,51,51,51	0
4	MG	A	703	1/1	0.97	0.04	38,38,38,38	0
4	MG	A	702	1/1	0.97	0.04	47,47,47,47	0
4	MG	B	705	1/1	0.99	0.07	25,25,25,25	0

6.5 Other polymers ⓘ

There are no such residues in this entry.