



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 6, 2026 – 05:32 AM UTC

PDB ID : 3CJW / pdb_00003cjlw
Title : Crystal structure of the human COUP-TFII ligand binding domain
Authors : Kruse, S.W.; Reynolds, R.; Vornrhein, C.; Xu, H.E.
Deposited on : 2008-03-14
Resolution : 1.48 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 : 4-5-2 with Phenix2.0
Xtriage (Phenix) : 2.0
EDS : 3.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4 : 9.0.010 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

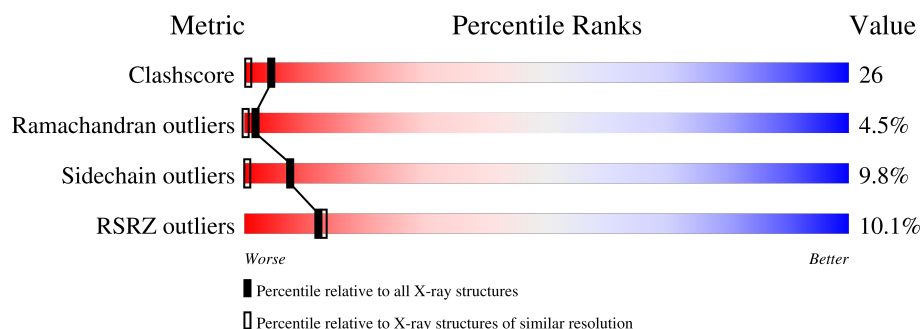
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 1.48 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))
Clashscore	190562	7025 (1.50-1.46)
Ramachandran outliers	187476	6917 (1.50-1.46)
Sidechain outliers	187428	6914 (1.50-1.46)
RSRZ outliers	180081	6781 (1.50-1.46)

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 $\leq 5\%$. 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	244	

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 1636 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 COUP transcription factor 2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	207	Total	C	N	O	S	0	1	0
			1636	1050	274	301	11			

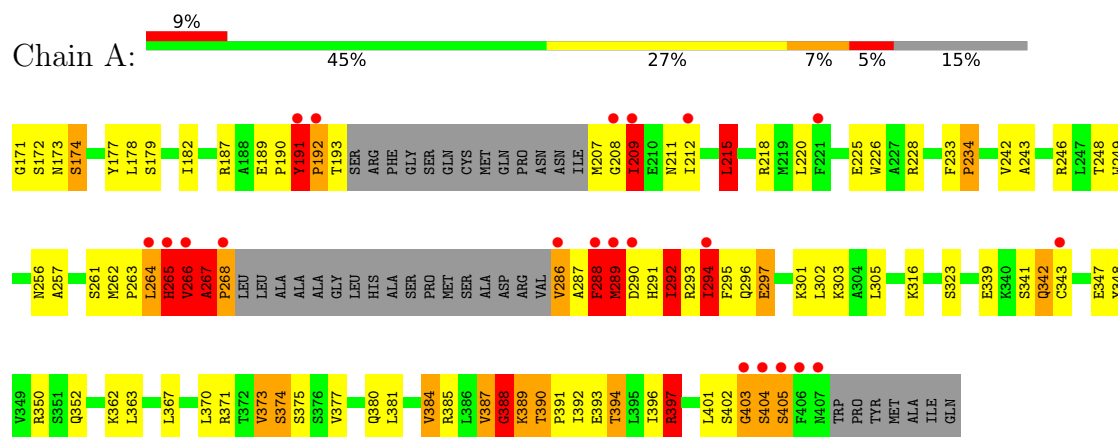
There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	171	GLY	-	expression tag	UNP P24468
A	172	SER	-	expression tag	UNP P24468
A	173	ASN	-	expression tag	UNP P24468
A	174	SER	-	expression tag	UNP P24468

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: COUP transcription factor 2



4 Data and refinement statistics

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α , β , γ	97.85Å 47.76Å 43.13Å 90.00° 100.87° 90.00°	Depositor
Resolution (Å)	6.00 – 1.48 6.00 – 1.48	Depositor EDS
% Data completeness (in resolution range)	7.7 (6.00-1.48) 97.8 (6.00-1.48)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.98 (at 1.48Å)	Xtriage
Refinement program	REFMAC	Depositor
R, R_{free}	0.168 , 0.238 0.252 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	wwPDB-VP
Wilson B-factor (Å ²)	24.3	Xtriage
Anisotropy	0.156	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	1.20 , 110.4	EDS
L-test for twinning ²	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.32$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	1636	wwPDB-VP
Average B, all atoms (Å ²)	34.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 9.92% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ 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	1.99	35/1674 (2.1%)	1.75	32/2269 (1.4%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	8

All (35) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	294	ILE	CB-CG2	12.97	1.95	1.52
1	A	343	CYS	CA-CB	12.04	1.72	1.53
1	A	397	ARG	CD-NE	-10.68	1.31	1.46
1	A	295	PHE	CA-C	10.33	1.66	1.52
1	A	396	ILE	CA-CB	10.16	1.67	1.54
1	A	367	LEU	N-CA	-7.54	1.40	1.46
1	A	343	CYS	CA-C	6.82	1.61	1.52
1	A	264	LEU	N-CA	6.62	1.54	1.45
1	A	179	SER	N-CA	-6.59	1.38	1.46
1	A	257	ALA	C-O	6.38	1.31	1.24
1	A	288	PHE	CA-C	6.27	1.61	1.52
1	A	339	GLU	CG-CD	-6.25	1.36	1.52
1	A	190	PRO	C-O	6.16	1.31	1.24
1	A	243	ALA	C-O	6.07	1.31	1.24
1	A	401	LEU	C-O	5.96	1.32	1.24
1	A	288	PHE	N-CA	5.86	1.53	1.46
1	A	342	GLN	CB-CG	-5.84	1.34	1.52
1	A	363	LEU	C-O	-5.83	1.17	1.24
1	A	394	THR	CA-CB	5.80	1.63	1.53
1	A	294	ILE	CG1-CD1	5.78	1.74	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	295	PHE	C-O	5.72	1.30	1.24
1	A	341	SER	C-O	-5.65	1.17	1.24
1	A	288	PHE	CD1-CE1	5.64	1.55	1.38
1	A	343	CYS	CB-SG	-5.64	1.62	1.81
1	A	289	MET	CA-C	-5.56	1.45	1.52
1	A	226	TRP	C-O	5.55	1.30	1.24
1	A	178	LEU	N-CA	5.40	1.52	1.46
1	A	380	GLN	CA-C	5.38	1.59	1.52
1	A	266	VAL	CA-C	5.36	1.57	1.53
1	A	295	PHE	CE2-CZ	-5.35	1.22	1.38
1	A	212	ILE	CA-CB	5.29	1.61	1.54
1	A	234	PRO	CA-CB	5.29	1.61	1.53
1	A	371	ARG	N-CA	-5.26	1.39	1.46
1	A	295	PHE	CB-CG	-5.18	1.38	1.50
1	A	288	PHE	C-O	5.01	1.30	1.24

All (32) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	266	VAL	N-CA-C	11.86	123.75	106.55
1	A	290	ASP	N-CA-C	-10.37	100.06	111.36
1	A	191	TYR	CA-C-N	-10.07	107.25	119.84
1	A	191	TYR	C-N-CA	-10.07	107.25	119.84
1	A	294	ILE	CB-CG1-CD1	-9.88	93.06	113.80
1	A	343	CYS	CA-CB-SG	-9.68	92.14	114.40
1	A	343	CYS	CB-CA-C	9.40	126.83	110.85
1	A	264	LEU	N-CA-C	8.70	125.11	113.97
1	A	215	LEU	N-CA-C	-8.59	101.86	111.14
1	A	265	HIS	N-CA-C	-8.02	103.58	112.72
1	A	267	ALA	N-CA-C	-7.72	92.75	109.81
1	A	305	LEU	CA-CB-CG	7.40	142.19	116.30
1	A	384	VAL	N-CA-C	7.29	118.93	110.62
1	A	190	PRO	CA-C-N	-6.80	105.21	121.80
1	A	190	PRO	C-N-CA	-6.80	105.21	121.80
1	A	397	ARG	CG-CD-NE	-6.38	97.95	112.00
1	A	405	SER	N-CA-C	6.33	124.28	110.80
1	A	375	SER	CA-CB-OG	-6.08	98.94	111.10
1	A	182	ILE	N-CA-C	-5.97	104.53	110.62
1	A	248	THR	N-CA-C	5.84	120.56	113.38
1	A	302	LEU	N-CA-C	-5.84	104.99	111.36
1	A	343	CYS	N-CA-C	-5.76	105.08	111.36
1	A	403	GLY	N-CA-C	5.60	123.61	115.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	295	PHE	CA-C-O	5.57	126.45	120.55
1	A	292	ILE	N-CA-C	-5.43	105.21	110.42
1	A	373	VAL	CA-C-N	-5.37	114.62	122.19
1	A	373	VAL	C-N-CA	-5.37	114.62	122.19
1	A	268	PRO	CB-CA-C	5.36	120.29	110.10
1	A	362	LYS	N-CA-C	5.31	117.07	111.28
1	A	388	GLY	O-C-N	-5.28	117.74	122.86
1	A	268	PRO	CA-N-CD	-5.21	104.71	112.00
1	A	323	SER	N-CA-CB	5.10	119.40	110.42

There are no chirality outliers.

All (8) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	172	SER	Peptide
1	A	265	HIS	Peptide
1	A	267	ALA	Peptide
1	A	288	PHE	Peptide
1	A	388	GLY	Peptide
1	A	397	ARG	Sidechain
1	A	402	SER	Peptide
1	A	404	SER	Peptide

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	1636	0	1648	87	0
All	All	1636	0	1648	87	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 26.

All (87) 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:294:ILE:CB	1:A:294:ILE:CG2	1.95	1.44
1:A:264:LEU:HD13	1:A:296:GLN:HG2	1.28	1.13
1:A:293:ARG:CZ	1:A:294:ILE:HG22	1.84	1.06
1:A:287:ALA:CB	1:A:292:ILE:HD11	1.89	1.03
1:A:293:ARG:HA	1:A:296:GLN:OE1	1.60	1.01
1:A:266:VAL:CG2	1:A:266:VAL:O	2.10	0.99
1:A:266:VAL:O	1:A:266:VAL:HG22	1.61	0.98
1:A:387:VAL:HG13	1:A:390:THR:HG23	1.45	0.98
1:A:293:ARG:NH1	1:A:294:ILE:CG2	2.27	0.97
1:A:264:LEU:CD1	1:A:265:HIS:HD2	1.81	0.94
1:A:287:ALA:HB1	1:A:292:ILE:HD11	1.48	0.92
1:A:289:MET:HE3	1:A:292:ILE:HG21	1.48	0.92
1:A:289:MET:HE3	1:A:292:ILE:CG2	2.03	0.89
1:A:225:GLU:OE1	1:A:228:ARG:NH2	2.04	0.89
1:A:387:VAL:O	1:A:390:THR:HG22	1.70	0.89
1:A:264:LEU:CD1	1:A:265:HIS:CD2	2.57	0.86
1:A:293:ARG:CZ	1:A:294:ILE:CG2	2.52	0.86
1:A:388:GLY:HA3	1:A:389:LYS:CB	2.06	0.85
1:A:208:GLY:O	1:A:209:ILE:O	1.95	0.85
1:A:289:MET:HG3	1:A:292:ILE:HB	1.60	0.84
1:A:264:LEU:HD11	1:A:265:HIS:CD2	2.13	0.83
1:A:293:ARG:NH1	1:A:294:ILE:HG23	1.97	0.77
1:A:264:LEU:HD12	1:A:265:HIS:HD2	1.50	0.75
1:A:264:LEU:HD12	1:A:265:HIS:CD2	2.24	0.72
1:A:388:GLY:HA3	1:A:389:LYS:HB2	1.71	0.70
1:A:388:GLY:HA3	1:A:389:LYS:HB3	1.74	0.70
1:A:387:VAL:O	1:A:390:THR:CG2	2.40	0.70
1:A:191:TYR:HB3	1:A:192:PRO:HD3	1.77	0.67
1:A:374:SER:OG	1:A:377:VAL:HG23	1.96	0.66
1:A:294:ILE:CG2	1:A:294:ILE:CD1	2.73	0.66
1:A:263:PRO:O	1:A:266:VAL:HG11	1.96	0.66
1:A:264:LEU:CD1	1:A:296:GLN:HE21	2.11	0.64
1:A:289:MET:CE	1:A:292:ILE:HG21	2.26	0.63
1:A:294:ILE:CG2	1:A:294:ILE:HB	2.20	0.62
1:A:297:GLU:HG3	1:A:301:LYS:HD2	1.83	0.61
1:A:370:LEU:O	1:A:373:VAL:HG12	2.01	0.61
1:A:189:GLU:OE1	1:A:193:THR:HG22	2.03	0.59
1:A:294:ILE:CG2	1:A:294:ILE:HD13	2.34	0.58
1:A:266:VAL:O	1:A:266:VAL:HG23	1.96	0.58
1:A:264:LEU:HD12	1:A:264:LEU:C	2.27	0.58
1:A:291:HIS:CG	1:A:377:VAL:HG13	2.40	0.57
1:A:289:MET:CG	1:A:292:ILE:HB	2.34	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:191:TYR:CB	1:A:192:PRO:CD	2.84	0.56
1:A:267:ALA:HB1	1:A:286:VAL:HA	1.88	0.56
1:A:256:ASN:HD21	1:A:316:LYS:HZ3	1.54	0.55
1:A:289:MET:CG	1:A:289:MET:O	2.54	0.55
1:A:233:PHE:HB3	1:A:234:PRO:HD3	1.88	0.54
1:A:208:GLY:O	1:A:209:ILE:C	2.51	0.53
1:A:286:VAL:HG23	1:A:287:ALA:N	2.23	0.53
1:A:384:VAL:HA	1:A:388:GLY:O	2.09	0.53
1:A:191:TYR:HB3	1:A:192:PRO:CD	2.38	0.53
1:A:256:ASN:HD21	1:A:316:LYS:NZ	2.08	0.52
1:A:256:ASN:ND2	1:A:316:LYS:NZ	2.60	0.50
1:A:211:ASN:C	1:A:211:ASN:OD1	2.54	0.50
1:A:264:LEU:CD1	1:A:296:GLN:HG2	2.20	0.49
1:A:242:VAL:CG1	1:A:246:ARG:HE	2.25	0.49
1:A:388:GLY:CA	1:A:389:LYS:CB	2.82	0.49
1:A:292:ILE:O	1:A:296:GLN:HG3	2.14	0.48
1:A:347:GLU:HG2	1:A:350:ARG:HH22	1.80	0.47
1:A:391:PRO:HB2	1:A:394:THR:HG23	1.97	0.47
1:A:228:ARG:HH22	1:A:403:GLY:HA3	1.80	0.46
1:A:208:GLY:C	1:A:209:ILE:CG2	2.88	0.46
1:A:293:ARG:HH11	1:A:294:ILE:HG23	1.76	0.46
1:A:263:PRO:O	1:A:266:VAL:CG1	2.64	0.46
1:A:249:TRP:CH2	1:A:392:ILE:HD12	2.50	0.46
1:A:289:MET:HG3	1:A:289:MET:O	2.15	0.46
1:A:263:PRO:C	1:A:266:VAL:HG11	2.40	0.45
1:A:347:GLU:HG2	1:A:350:ARG:NH2	2.31	0.45
1:A:288:PHE:O	1:A:289:MET:HB2	2.17	0.45
1:A:294:ILE:CD1	1:A:294:ILE:HG21	2.44	0.45
1:A:388:GLY:CA	1:A:389:LYS:HB2	2.42	0.45
1:A:288:PHE:CD2	1:A:291:HIS:CG	3.05	0.44
1:A:297:GLU:OE1	1:A:301:LYS:NZ	2.36	0.44
1:A:393:GLU:OE2	1:A:394:THR:CG2	2.65	0.43
1:A:173:ASN:O	1:A:174:SER:C	2.61	0.43
1:A:207:MET:HB2	1:A:207:MET:HE2	1.71	0.43
1:A:171:GLY:HA3	1:A:177:TYR:HB2	2.01	0.42
1:A:264:LEU:HD12	1:A:296:GLN:HE21	1.82	0.42
1:A:293:ARG:HD3	1:A:294:ILE:HG23	2.01	0.42
1:A:393:GLU:OE2	1:A:394:THR:HG23	2.20	0.42
1:A:267:ALA:HB1	1:A:286:VAL:CA	2.50	0.41
1:A:263:PRO:C	1:A:266:VAL:CG1	2.94	0.41
1:A:215:LEU:HD11	1:A:218:ARG:HH21	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:261:SER:HA	1:A:303:LYS:NZ	2.36	0.41
1:A:220:LEU:HD22	1:A:392:ILE:HD13	2.03	0.41
1:A:262:MET:HE2	1:A:262:MET:HB3	1.94	0.40
1:A:348:TYR:CE1	1:A:352:GLN:HG3	2.56	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	202/244 (83%)	188 (93%)	5 (2%)	9 (4%)	2 0

All (9) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	191	TYR
1	A	209	ILE
1	A	267	ALA
1	A	288	PHE
1	A	389	LYS
1	A	405	SER
1	A	174	SER
1	A	289	MET
1	A	192	PRO

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	185/213 (87%)	167 (90%)	18 (10%)	8 0

All (18) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	187	ARG
1	A	209	ILE
1	A	215	LEU
1	A	266	VAL
1	A	268	PRO
1	A	286	VAL
1	A	289	MET
1	A	292	ILE
1	A	294	ILE
1	A	297	GLU
1	A	342	GLN
1	A	374	SER
1	A	381	LEU
1	A	385	ARG
1	A	387	VAL
1	A	390	THR
1	A	397	ARG
1	A	404	SER

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (6) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	173	ASN
1	A	229	ASN
1	A	256	ASN
1	A	265	HIS
1	A	296	GLN
1	A	342	GLN

5.3.3 RNA ⓘ

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 oligosaccharides 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 [i](#)

6.1 Protein, DNA and RNA chains [i](#)

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	207/244 (84%)	0.40	21 (10%) 12 13	18, 30, 63, 87	1 (0%)

All (21) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	406	PHE	5.6
1	A	403	GLY	5.2
1	A	288	PHE	4.9
1	A	286	VAL	4.7
1	A	268	PRO	4.1
1	A	264	LEU	4.0
1	A	404	SER	3.2
1	A	265	HIS	3.1
1	A	191	TYR	3.0
1	A	209	ILE	3.0
1	A	208	GLY	2.9
1	A	405	SER	2.8
1	A	221	PHE	2.8
1	A	294	ILE	2.7
1	A	192	PRO	2.7
1	A	212	ILE	2.4
1	A	289	MET	2.4
1	A	290	ASP	2.3
1	A	266	VAL	2.2
1	A	407	ASN	2.1
1	A	343	CYS	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 oligosaccharides 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.