



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 4, 2026 – 07:50 PM UTC

PDB ID : 2FAT / pdb_00002fat
Title : An anti-urokinase plasminogen activator receptor (UPAR) antibody: Crystal structure and binding epitope
Authors : Li, Y.; Parry, G.; Shi, X.; Chen, L.; Callahan, J.A.; Mazar, A.P.; Huang, M.
Deposited on : 2005-12-07
Resolution : 1.77 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 : 4-5-2 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

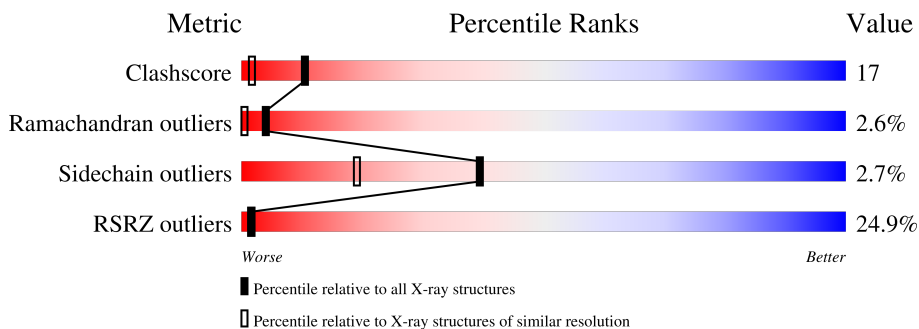
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 1.77 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))
Clashscore	190562	1395 (1.78-1.78)
Ramachandran outliers	187476	1382 (1.78-1.78)
Sidechain outliers	187428	1382 (1.78-1.78)
RSRZ outliers	180081	1365 (1.78-1.78)

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	L	212	 24% 74% 24% ..
2	H	214	 26% 64% 29% 6% .

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 3439 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 FAB ATN-615, light chain.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	L	212	1635	1023	269	335	8	0	0	0

- Molecule 2 is a protein called FAB ATN-615, heavy chain.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	H	214	1626	1039	264	317	6	0	0	0

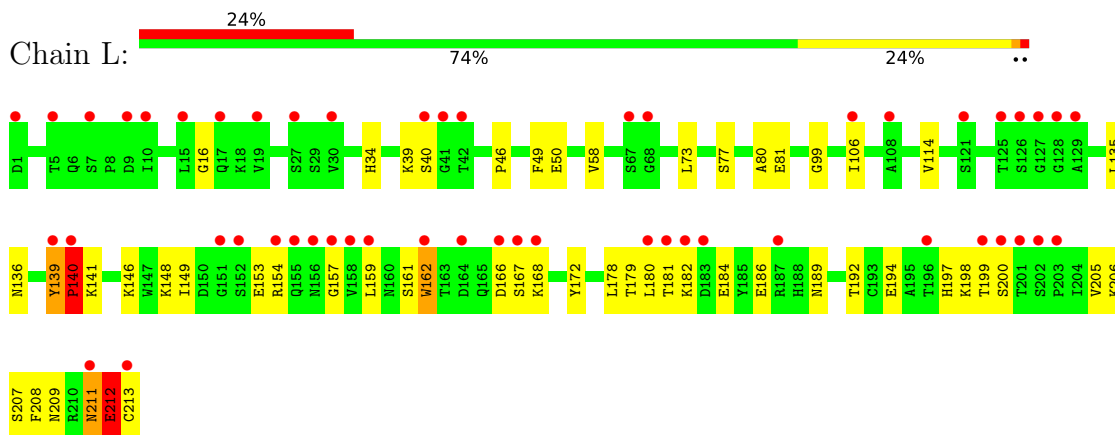
- Molecule 3 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	L	81	Total	O	0	0
			81	81		
3	H	97	Total	O	0	0
			97	97		

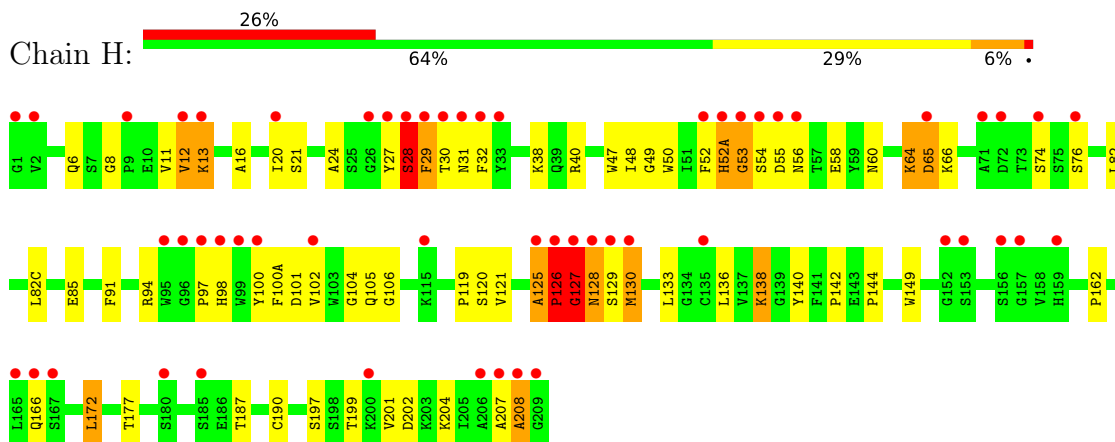
3 Residue-property plots [i](#)

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: FAB ATN-615, light chain



- Molecule 2: FAB ATN-615, heavy chain



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	37.16Å 84.47Å 134.03Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	40.29 – 1.77 40.29 – 1.77	Depositor EDS
% Data completeness (in resolution range)	93.5 (40.29-1.77) 97.7 (40.29-1.77)	Depositor EDS
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.89 (at 1.77Å)	Xtrriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.239 , 0.273 0.255 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	wwPDB-VP
Wilson B-factor (Å ²)	23.8	Xtrriage
Anisotropy	0.195	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.35 , 35.6	EDS
L-test for twinning ²	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.33$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	3439	wwPDB-VP
Average B, all atoms (Å ²)	31.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 5.39% 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 [i](#)

5.1 Standard geometry [i](#)

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	L	0.35	0/1675	1.71	9/2275 (0.4%)
2	H	0.48	0/1677	1.33	16/2295 (0.7%)
All	All	0.42	0/3352	1.53	25/4570 (0.5%)

There are no bond length outliers.

All (25) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	139	TYR	CA-C-N	47.85	179.66	119.84
1	L	139	TYR	C-N-CA	47.85	179.66	119.84
2	H	125	ALA	CA-C-N	18.84	143.39	119.84
2	H	125	ALA	C-N-CA	18.84	143.39	119.84
2	H	130	MET	N-CA-C	-18.23	79.71	109.07
2	H	56	ASN	N-CA-C	-12.95	90.29	108.54
2	H	126	PRO	N-CA-C	12.19	137.59	112.47
1	L	139	TYR	C-N-CD	-11.93	76.08	125.00
2	H	127	GLY	N-CA-C	11.59	140.64	113.18
2	H	128	ASN	N-CA-C	11.21	134.69	110.80
2	H	64	LYS	N-CA-C	-8.47	97.74	110.28
2	H	60	ASN	N-CA-C	-7.73	97.46	109.76
2	H	8	GLY	CA-C-N	6.88	126.84	119.76
2	H	8	GLY	C-N-CA	6.88	126.84	119.76
1	L	136	ASN	N-CA-C	6.87	121.22	110.17
2	H	53	GLY	N-CA-C	-6.74	97.20	113.18
2	H	120	SER	N-CA-C	-6.74	98.26	109.24
1	L	157	GLY	N-CA-C	-6.38	106.44	115.43
2	H	101	ASP	N-CA-C	6.30	120.17	112.23
2	H	138	LYS	N-CA-C	6.03	119.55	109.95
1	L	140	PRO	CA-N-CD	-5.93	103.70	112.00
2	H	129	SER	N-CA-C	5.42	120.14	112.93
1	L	99	GLY	N-CA-C	-5.12	104.61	112.85
1	L	58	VAL	CA-C-N	5.07	125.00	119.78
1	L	58	VAL	C-N-CA	5.07	125.00	119.78

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	L	1635	0	1559	43	0
2	H	1626	0	1565	68	0
3	H	97	0	0	1	0
3	L	81	0	0	0	0
All	All	3439	0	3124	108	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 17.

All (108) 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:L:80:ALA:HA	1:L:106:ILE:HG21	1.53	0.90
1:L:159:LEU:HD11	2:H:166:GLN:HG3	1.57	0.84
1:L:194:GLU:HG2	1:L:205:VAL:HG22	1.60	0.84
2:H:12:VAL:HG21	2:H:82(C):LEU:HD12	1.62	0.80
1:L:154:ARG:NH1	1:L:180:LEU:HD21	1.98	0.77
2:H:24:ALA:HB1	2:H:27:TYR:CE2	2.21	0.76
2:H:126:PRO:HG3	2:H:133:LEU:HD23	1.68	0.75
1:L:139:TYR:CD2	1:L:140:PRO:HD3	2.22	0.74
1:L:141:LYS:NZ	1:L:162:TRP:HB3	2.03	0.74
2:H:105:GLN:H	2:H:105:GLN:CD	1.95	0.74
2:H:30:THR:HA	2:H:52(A):HIS:CG	2.24	0.73
2:H:98:HIS:HB2	2:H:100:TYR:CE1	2.25	0.72
1:L:141:LYS:HZ1	1:L:162:TRP:HB3	1.56	0.71
2:H:12:VAL:HG23	2:H:16:ALA:HB3	1.71	0.71
2:H:28:SER:O	2:H:30:THR:N	2.24	0.70
2:H:6:GLN:H	2:H:105:GLN:NE2	1.90	0.69
2:H:94:ARG:HB3	2:H:102:VAL:HG12	1.75	0.69
2:H:29:PHE:CD2	2:H:76:SER:HA	2.30	0.66
2:H:136:LEU:HD21	2:H:138:LYS:NZ	2.12	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:40:ARG:NH1	2:H:85:GLU:HG3	2.12	0.65
1:L:146:LYS:HE2	1:L:153:GLU:CD	2.22	0.64
2:H:47:TRP:CZ2	2:H:49:GLY:HA2	2.32	0.64
1:L:154:ARG:HH12	1:L:180:LEU:CD2	2.10	0.64
2:H:28:SER:HB2	2:H:31:ASN:OD1	1.98	0.63
1:L:154:ARG:HH12	1:L:180:LEU:HD21	1.61	0.63
2:H:27:TYR:CE1	2:H:29:PHE:HA	2.34	0.63
2:H:32:PHE:O	2:H:52(A):HIS:CE1	2.52	0.63
1:L:179:THR:O	1:L:180:LEU:HD23	1.99	0.63
1:L:16:GLY:HA2	1:L:77:SER:OG	1.98	0.62
2:H:97:PRO:HG2	2:H:98:HIS:ND1	2.14	0.62
1:L:166:ASP:OD1	1:L:168:LYS:HB2	2.00	0.62
1:L:34:HIS:HD2	1:L:50:GLU:H	1.48	0.61
1:L:46:PRO:HG3	2:H:100(A):PHE:O	1.99	0.61
2:H:98:HIS:HB2	2:H:100:TYR:HE1	1.65	0.61
1:L:149:ILE:HD11	1:L:178:LEU:HD21	1.83	0.61
2:H:30:THR:HA	2:H:52(A):HIS:CD2	2.38	0.58
2:H:38:LYS:HB2	2:H:48:ILE:HD11	1.85	0.58
2:H:32:PHE:O	2:H:52(A):HIS:HE1	1.84	0.57
2:H:105:GLN:H	2:H:105:GLN:NE2	2.02	0.57
2:H:24:ALA:HB1	2:H:27:TYR:CZ	2.39	0.57
1:L:182:LYS:O	1:L:186:GLU:HG3	2.04	0.57
1:L:34:HIS:CD2	1:L:50:GLU:H	2.25	0.55
1:L:189:ASN:OD1	1:L:211:ASN:ND2	2.41	0.53
1:L:135:LEU:N	1:L:135:LEU:HD12	2.24	0.53
1:L:154:ARG:CZ	1:L:180:LEU:HD21	2.40	0.52
2:H:64:LYS:O	2:H:65:ASP:OD1	2.28	0.51
2:H:136:LEU:HD21	2:H:138:LYS:HZ3	1.75	0.51
1:L:49:PHE:HD1	1:L:50:GLU:HG3	1.75	0.51
2:H:100(A):PHE:N	2:H:100(A):PHE:CD1	2.78	0.51
2:H:197:SER:O	2:H:199:THR:HG23	2.11	0.51
2:H:172:LEU:C	2:H:172:LEU:HD23	2.35	0.51
1:L:146:LYS:HE2	1:L:153:GLU:OE1	2.11	0.51
2:H:207:ALA:O	2:H:208:ALA:CB	2.59	0.51
2:H:6:GLN:HE21	2:H:104:GLY:HA3	1.76	0.51
1:L:154:ARG:HD3	1:L:178:LEU:HD11	1.92	0.50
1:L:197:HIS:HD2	1:L:199:THR:OG1	1.94	0.50
2:H:121:VAL:HG21	2:H:201:VAL:HG11	1.94	0.49
2:H:64:LYS:O	2:H:65:ASP:CB	2.60	0.49
2:H:100(A):PHE:N	2:H:100(A):PHE:HD1	2.10	0.48
2:H:6:GLN:NE2	2:H:106:GLY:H	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:128:ASN:C	2:H:128:ASN:ND2	2.72	0.48
2:H:6:GLN:HE22	2:H:91:PHE:HA	1.78	0.47
1:L:141:LYS:HD3	1:L:172:TYR:CD1	2.48	0.47
2:H:13:LYS:H	2:H:13:LYS:HD2	1.79	0.47
1:L:148:LYS:HD2	1:L:194:GLU:OE2	2.15	0.47
1:L:180:LEU:HB3	1:L:184:GLU:HB2	1.97	0.47
1:L:198:LYS:HG3	1:L:199:THR:N	2.30	0.47
2:H:126:PRO:CG	2:H:133:LEU:HD23	2.42	0.46
1:L:146:LYS:HE2	1:L:153:GLU:OE2	2.15	0.46
1:L:198:LYS:C	1:L:200:SER:H	2.24	0.46
2:H:29:PHE:CD2	2:H:52(A):HIS:CD2	3.04	0.46
2:H:130:MET:HE3	2:H:177:THR:HG22	1.97	0.46
2:H:40:ARG:NH1	2:H:85:GLU:HA	2.31	0.45
2:H:119:PRO:HB3	2:H:140:TYR:HB3	1.97	0.45
2:H:121:VAL:HG21	2:H:201:VAL:CG1	2.45	0.45
2:H:105:GLN:CD	2:H:105:GLN:N	2.70	0.45
2:H:12:VAL:CG2	2:H:82(C):LEU:HD12	2.41	0.45
1:L:39:LYS:O	1:L:40:SER:C	2.61	0.44
1:L:114:VAL:HG12	1:L:206:LYS:HG3	1.99	0.44
1:L:141:LYS:HZ3	1:L:162:TRP:HB3	1.81	0.44
2:H:53:GLY:O	2:H:55:ASP:N	2.51	0.44
1:L:73:LEU:C	1:L:73:LEU:HD23	2.43	0.44
2:H:52(A):HIS:ND1	2:H:52(A):HIS:N	2.66	0.44
2:H:98:HIS:HB2	2:H:100:TYR:CD1	2.53	0.44
2:H:97:PRO:HG2	2:H:98:HIS:CE1	2.53	0.43
1:L:181:THR:H	1:L:184:GLU:CD	2.26	0.43
1:L:211:ASN:HB2	1:L:212:GLU:H	1.59	0.43
2:H:20:ILE:HG22	2:H:21:SER:N	2.33	0.43
1:L:192:THR:CG2	1:L:205:VAL:HG13	2.48	0.43
2:H:149:TRP:CZ3	2:H:190:CYS:HB3	2.53	0.43
2:H:66:LYS:O	2:H:82:LEU:HA	2.18	0.42
2:H:187:THR:HG23	2:H:204:LYS:HE3	2.02	0.42
2:H:50:TRP:CE2	2:H:58:GLU:HB3	2.54	0.42
2:H:94:ARG:HB3	2:H:102:VAL:CG1	2.48	0.42
2:H:11:VAL:HG21	2:H:142:PRO:HG3	2.03	0.41
2:H:53:GLY:C	2:H:55:ASP:N	2.78	0.41
2:H:136:LEU:HD21	2:H:138:LYS:HZ1	1.84	0.41
2:H:74:SER:HB2	3:H:290:HOH:O	2.21	0.41
1:L:161:SER:OG	2:H:162:PRO:HD2	2.21	0.41
2:H:47:TRP:CH2	2:H:49:GLY:HA2	2.56	0.41
2:H:52:PHE:O	2:H:52(A):HIS:C	2.63	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:208:PHE:HB2	1:L:213:CYS:CB	2.50	0.41
2:H:126:PRO:HB2	2:H:127:GLY:H	1.31	0.41
1:L:140:PRO:O	1:L:141:LYS:C	2.64	0.40
1:L:192:THR:HG23	1:L:207:SER:OG	2.21	0.40
1:L:209:ASN:H	1:L:213:CYS:HB2	1.86	0.40
2:H:201:VAL:HG22	2:H:202:ASP:N	2.36	0.40
2:H:125:ALA:HA	2:H:126:PRO:HD3	1.37	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	L	210/212 (99%)	199 (95%)	7 (3%)	4 (2%)	6	1
2	H	212/214 (99%)	194 (92%)	11 (5%)	7 (3%)	3	0
All	All	422/426 (99%)	393 (93%)	18 (4%)	11 (3%)	4	0

All (11) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	L	140	PRO
1	L	212	GLU
2	H	29	PHE
2	H	208	ALA
1	L	211	ASN
2	H	54	SER
2	H	126	PRO
2	H	127	GLY
1	L	167	SER
2	H	52(A)	HIS
2	H	28	SER

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	L	186/186 (100%)	183 (98%)	3 (2%)	55	38
2	H	182/182 (100%)	175 (96%)	7 (4%)	29	9
All	All	368/368 (100%)	358 (97%)	10 (3%)	39	19

All (10) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	L	81	GLU
1	L	162	TRP
1	L	212	GLU
2	H	12	VAL
2	H	13	LYS
2	H	28	SER
2	H	65	ASP
2	H	126	PRO
2	H	144	PRO
2	H	172	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (9) such sidechains are listed below:

Mol	Chain	Res	Type
1	L	34	HIS
1	L	136	ASN
1	L	137	ASN
1	L	144	ASN
1	L	211	ASN
2	H	6	GLN
2	H	56	ASN
2	H	105	GLN
2	H	128	ASN

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 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	L	212/212 (100%)	1.32	51 (24%) 2 2	16, 29, 56, 89	0
2	H	214/214 (100%)	1.38	55 (25%) 1 1	13, 26, 72, 110	0
All	All	426/426 (100%)	1.35	106 (24%) 2 1	13, 28, 59, 110	0

All (106) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	H	127	GLY	10.9
2	H	126	PRO	9.3
1	L	213	CYS	8.4
2	H	52(A)	HIS	7.8
2	H	129	SER	7.8
2	H	209	GLY	7.6
2	H	27	TYR	6.6
1	L	162	TRP	5.8
2	H	54	SER	5.7
1	L	201	THR	5.4
1	L	211	ASN	5.1
2	H	208	ALA	5.0
1	L	168	LYS	5.0
2	H	128	ASN	5.0
2	H	53	GLY	4.9
2	H	207	ALA	4.8
2	H	55	ASP	4.8
1	L	140	PRO	4.7
2	H	1	GLY	4.7
2	H	56	ASN	4.6
2	H	99	TRP	4.3
1	L	125	THR	4.2
2	H	32	PHE	4.0
2	H	29	PHE	3.9

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Mol	Chain	Res	Type	RSRZ
1	L	180	LEU	3.9
2	H	30	THR	3.9
1	L	156	ASN	3.8
2	H	28	SER	3.7
2	H	166	GLN	3.6
2	H	97	PRO	3.5
1	L	200	SER	3.5
2	H	167	SER	3.4
2	H	20	ILE	3.4
2	H	125	ALA	3.3
2	H	98	HIS	3.3
2	H	52	PHE	3.3
2	H	165	LEU	3.3
1	L	30	VAL	3.2
2	H	102	VAL	3.2
2	H	115	LYS	3.2
1	L	155	GLN	3.2
2	H	157	GLY	3.2
2	H	185	SER	3.2
1	L	15	LEU	3.2
2	H	96	GLY	3.2
1	L	199	THR	3.2
2	H	2	VAL	3.1
1	L	121	SER	3.1
2	H	12	VAL	3.0
1	L	154	ARG	3.0
1	L	202	SER	3.0
1	L	158	VAL	3.0
1	L	167	SER	2.9
1	L	181	THR	2.9
2	H	31	ASN	2.9
1	L	127	GLY	2.9
1	L	164	ASP	2.9
2	H	130	MET	2.9
1	L	151	GLY	2.9
1	L	126	SER	2.9
1	L	157	GLY	2.8
1	L	17	GLN	2.8
1	L	10	ILE	2.8
1	L	27	SER	2.8
1	L	40	SER	2.7
2	H	74	SER	2.6

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Mol	Chain	Res	Type	RSRZ
1	L	41	GLY	2.6
2	H	65	ASP	2.6
1	L	159	LEU	2.6
1	L	108	ALA	2.6
1	L	187	ARG	2.6
1	L	5	THR	2.5
2	H	71	ALA	2.5
1	L	1	ASP	2.5
1	L	183	ASP	2.4
1	L	182	LYS	2.4
2	H	206	ALA	2.4
2	H	152	GLY	2.4
2	H	153	SER	2.3
2	H	100	TYR	2.3
2	H	95	TRP	2.3
1	L	128	GLY	2.3
2	H	76	SER	2.3
1	L	7	SER	2.2
2	H	9	PRO	2.2
2	H	26	GLY	2.2
2	H	13	LYS	2.2
2	H	159	HIS	2.2
2	H	33	TYR	2.2
1	L	67	SER	2.2
2	H	135	CYS	2.1
1	L	42	THR	2.1
1	L	196	THR	2.1
2	H	72	ASP	2.1
1	L	106	ILE	2.1
2	H	156	SER	2.1
1	L	129	ALA	2.1
1	L	9	ASP	2.1
1	L	166	ASP	2.1
1	L	203	PRO	2.1
1	L	152	SER	2.0
2	H	180	SER	2.0
1	L	68	GLY	2.0
1	L	139	TYR	2.0
1	L	19	VAL	2.0
2	H	200	LYS	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.