



Full wwPDB X-ray Structure Validation Report ⓘ

Apr 24, 2026 – 09:15 PM EDT

PDB ID : 1AMY / pdb_00001amy
Title : CRYSTAL AND MOLECULAR STRUCTURE OF BARLEY ALPHA-AMYLASE
Authors : Kadziola, A.; Haser, R.
Deposited on : 1994-03-10
Resolution : 2.80 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

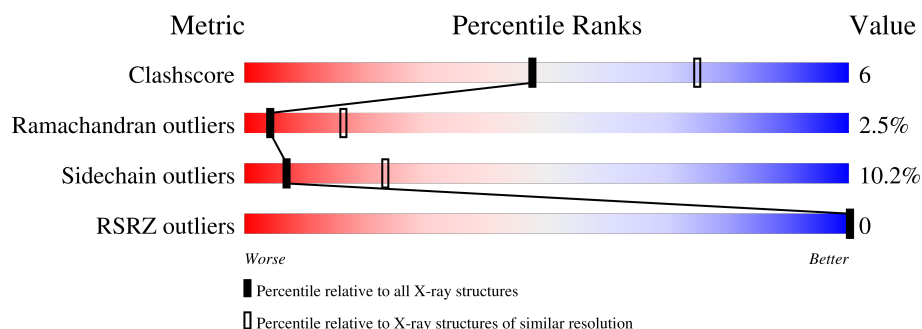
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.80 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	4276 (2.80-2.80)
Ramachandran outliers	187476	4196 (2.80-2.80)
Sidechain outliers	187428	4198 (2.80-2.80)
RSRZ outliers	180081	3869 (2.80-2.80)

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	403	 63% 31% 5%

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 3339 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 1,4-ALPHA-D-GLUCAN GLUCANOHYDROLASE.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	403	Total	C	N	O	S	0	0	0
			3184	2040	552	583	9			

- Molecule 2 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
2	A	3	Total	Ca	0	0
			3	3		

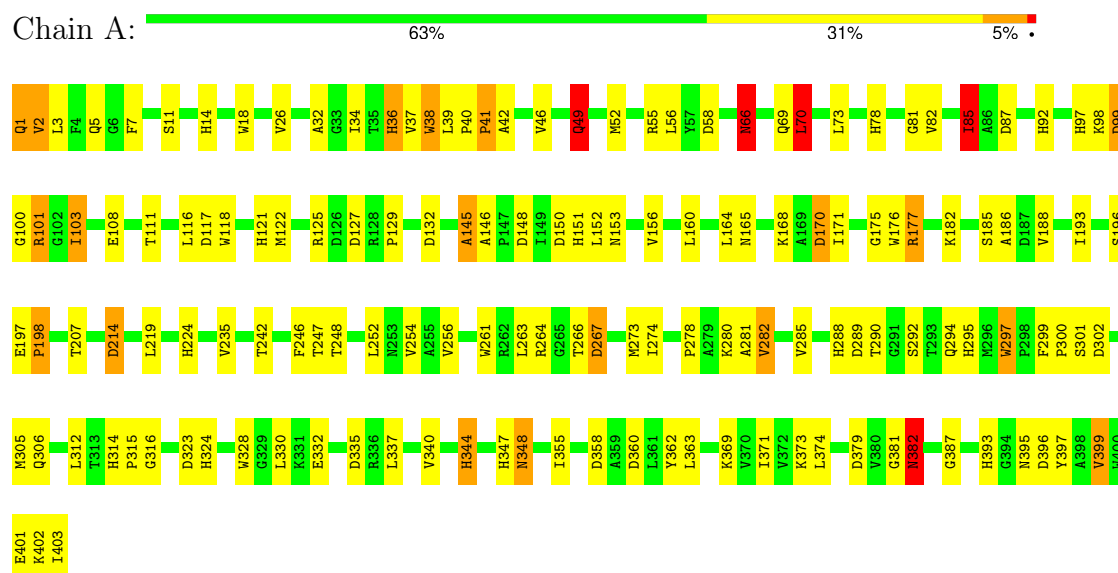
- Molecule 3 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	152	Total	O	0	0
			152	152		

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: 1,4-ALPHA-D-GLUCAN GLUCANOHYDROLASE



4 Data and refinement statistics

Property	Value	Source
Space group	P 31 2 1	Depositor
Cell constants a, b, c, α , β , γ	135.20Å 135.20Å 79.60Å 90.00° 90.00° 120.00°	Depositor
Resolution (Å)	10.00 – 2.80 10.00 – 2.80	Depositor EDS
% Data completeness (in resolution range)	(Not available) (10.00-2.80) 87.2 (10.00-2.80)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.74 (at 2.80Å)	Xtriage
Refinement program	X-PLOR	Depositor
R, R_{free}	0.153 , (Not available) 0.147 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	wwPDB-VP
Wilson B-factor (Å ²)	31.4	Xtriage
Anisotropy	0.110	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.23 , 67.9	EDS
L-test for twinning ²	$\langle L \rangle = 0.43$, $\langle L^2 \rangle = 0.25$	Xtriage
Estimated twinning fraction	0.063 for -h,-k,l	Xtriage
F_o, F_c correlation	0.95	EDS
Total number of atoms	3339	wwPDB-VP
Average B, all atoms (Å ²)	19.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.02% 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

Bond lengths and bond angles in the following residue types are not validated in this section: CA

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	1.26	22/3281 (0.7%)	1.95	99/4459 (2.2%)

All (22) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	36	HIS	CD2-NE2	-7.38	1.29	1.37
1	A	92	HIS	CD2-NE2	-7.24	1.29	1.37
1	A	314	HIS	CD2-NE2	-7.23	1.29	1.37
1	A	344	HIS	CD2-NE2	-7.03	1.30	1.37
1	A	97	HIS	CD2-NE2	-6.95	1.30	1.37
1	A	282	VAL	CA-CB	6.85	1.62	1.54
1	A	347	HIS	CD2-NE2	-6.80	1.30	1.37
1	A	224	HIS	CD2-NE2	-6.62	1.30	1.37
1	A	324	HIS	CD2-NE2	-6.57	1.30	1.37
1	A	288	HIS	CD2-NE2	-6.53	1.30	1.37
1	A	14	HIS	CD2-NE2	-6.46	1.30	1.37
1	A	151	HIS	CD2-NE2	-6.16	1.31	1.37
1	A	2	VAL	CA-CB	6.15	1.61	1.54
1	A	393	HIS	CD2-NE2	-6.09	1.31	1.37
1	A	78	HIS	CD2-NE2	-5.66	1.31	1.37
1	A	121	HIS	CD2-NE2	-5.64	1.31	1.37
1	A	92	HIS	CG-ND1	-5.62	1.32	1.38
1	A	324	HIS	CG-ND1	-5.55	1.32	1.38
1	A	295	HIS	CD2-NE2	-5.51	1.31	1.37
1	A	36	HIS	CG-ND1	-5.27	1.32	1.38
1	A	97	HIS	CG-ND1	-5.11	1.32	1.38
1	A	254	VAL	CA-CB	-5.08	1.49	1.54

All (99) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	267	ASP	CA-CB-CG	13.21	125.81	112.60
1	A	379	ASP	CA-CB-CG	12.32	124.92	112.60
1	A	402	LYS	O-C-N	9.36	135.40	122.77
1	A	395	ASN	N-CA-C	9.22	123.55	111.75
1	A	5	GLN	OE1-CD-NE2	-8.93	113.67	122.60
1	A	165	ASN	OD1-CG-ND2	-8.39	114.21	122.60
1	A	177	ARG	CA-CB-CG	-8.16	97.78	114.10
1	A	285	VAL	N-CA-C	-7.89	105.02	111.81
1	A	46	VAL	N-CA-CB	-7.70	101.54	110.55
1	A	150	ASP	CA-CB-CG	7.67	120.27	112.60
1	A	219	LEU	N-CA-C	-7.57	102.99	112.90
1	A	214	ASP	CA-CB-CG	7.52	120.12	112.60
1	A	99	ASP	CA-CB-CG	7.46	120.06	112.60
1	A	170	ASP	CA-CB-CG	7.46	120.06	112.60
1	A	176	TRP	CG-CD2-CE3	7.06	140.96	133.90
1	A	289	ASP	CA-CB-CG	6.91	119.51	112.60
1	A	360	ASP	CA-CB-CG	6.91	119.51	112.60
1	A	177	ARG	CB-CG-CD	6.89	127.14	111.30
1	A	52	MET	CA-C-N	6.86	126.78	119.85
1	A	52	MET	C-N-CA	6.86	126.78	119.85
1	A	70	LEU	N-CA-C	-6.79	103.81	111.14
1	A	314	HIS	CB-CG-CD2	-6.75	122.43	131.20
1	A	362	TYR	N-CA-C	-6.70	97.98	108.90
1	A	261	TRP	CG-CD2-CE3	6.63	140.53	133.90
1	A	382	ASN	OD1-CG-ND2	-6.62	115.98	122.60
1	A	58	ASP	CA-CB-CG	6.61	119.21	112.60
1	A	99	ASP	N-CA-C	-6.56	101.08	110.59
1	A	299	PHE	N-CA-C	-6.53	101.83	109.93
1	A	97	HIS	CB-CG-CD2	-6.52	122.72	131.20
1	A	1	GLN	OE1-CD-NE2	-6.47	116.13	122.60
1	A	306	GLN	OE1-CD-NE2	-6.44	116.16	122.60
1	A	177	ARG	N-CA-C	-6.42	97.94	108.41
1	A	393	HIS	CB-CG-CD2	-6.42	122.86	131.20
1	A	273	MET	N-CA-C	-6.33	104.48	111.82
1	A	26	VAL	N-CA-C	6.20	116.95	110.62
1	A	288	HIS	CB-CG-CD2	-6.12	123.25	131.20
1	A	297	TRP	CG-CD2-CE3	6.06	139.96	133.90
1	A	1	GLN	N-CA-C	-5.99	94.24	111.00
1	A	176	TRP	CE2-CD2-CG	-5.95	100.06	107.20
1	A	306	GLN	N-CA-C	-5.94	104.74	112.23
1	A	100	GLY	O-C-N	5.94	130.42	122.70
1	A	323	ASP	N-CA-C	5.94	121.11	111.37
1	A	49	GLN	OE1-CD-NE2	-5.94	116.66	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	302	ASP	CA-CB-CG	5.93	118.53	112.60
1	A	294	GLN	CA-CB-CG	-5.92	102.27	114.10
1	A	146	ALA	CA-C-N	5.92	125.94	119.90
1	A	146	ALA	C-N-CA	5.92	125.94	119.90
1	A	2	VAL	N-CA-C	-5.91	99.12	107.75
1	A	358	ASP	CA-CB-CG	5.83	118.44	112.60
1	A	85	ILE	CB-CG1-CD1	-5.82	101.59	113.80
1	A	292	SER	CB-CA-C	-5.81	108.22	115.89
1	A	347	HIS	CB-CG-CD2	-5.72	123.76	131.20
1	A	168	LYS	CB-CA-C	-5.72	101.87	110.90
1	A	261	TRP	CB-CG-CD1	-5.70	118.34	126.90
1	A	41	PRO	CA-C-O	5.69	127.24	121.27
1	A	344	HIS	CB-CG-CD2	-5.68	123.81	131.20
1	A	81	GLY	CA-C-N	-5.68	114.16	122.68
1	A	81	GLY	C-N-CA	-5.68	114.16	122.68
1	A	224	HIS	CB-CG-CD2	-5.65	123.86	131.20
1	A	197	GLU	CA-CB-CG	5.61	125.32	114.10
1	A	66	ASN	CB-CG-ND2	5.61	124.81	116.40
1	A	305	MET	CG-SD-CE	-5.53	88.74	100.90
1	A	132	ASP	O-C-N	-5.51	115.08	122.19
1	A	36	HIS	CB-CG-CD2	-5.50	124.05	131.20
1	A	38	TRP	CG-CD2-CE3	5.50	139.40	133.90
1	A	176	TRP	CB-CG-CD1	-5.50	118.65	126.90
1	A	153	ASN	O-C-N	-5.49	116.20	122.89
1	A	196	SER	N-CA-C	-5.47	106.65	113.38
1	A	328	TRP	CG-CD1-NE1	-5.46	103.09	110.20
1	A	49	GLN	CG-CD-NE2	5.44	124.56	116.40
1	A	14	HIS	CB-CG-CD2	-5.44	124.13	131.20
1	A	121	HIS	CB-CG-CD2	-5.43	124.14	131.20
1	A	145	ALA	N-CA-C	5.40	122.31	110.80
1	A	382	ASN	CB-CG-ND2	5.40	124.50	116.40
1	A	111	THR	CA-C-N	5.38	125.20	119.28
1	A	111	THR	C-N-CA	5.38	125.20	119.28
1	A	264	ARG	N-CA-C	-5.37	99.53	108.34
1	A	1	GLN	CA-C-N	-5.36	115.97	123.10
1	A	1	GLN	C-N-CA	-5.36	115.97	123.10
1	A	332	GLU	CA-C-O	-5.36	115.18	120.70
1	A	299	PHE	CA-C-N	5.32	126.49	119.84
1	A	299	PHE	C-N-CA	5.32	126.49	119.84
1	A	5	GLN	CG-CD-NE2	5.32	124.38	116.40
1	A	382	ASN	N-CA-C	5.31	122.11	110.80
1	A	168	LYS	N-CA-CB	5.28	117.73	110.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	176	TRP	CD1-CG-CD2	5.24	114.68	106.30
1	A	117	ASP	CA-CB-CG	5.24	117.84	112.60
1	A	176	TRP	CG-CD1-NE1	-5.23	103.40	110.20
1	A	374	LEU	N-CA-C	-5.23	101.36	109.72
1	A	42	ALA	CA-C-O	-5.13	114.07	119.97
1	A	11	SER	N-CA-C	5.09	117.57	111.71
1	A	2	VAL	CB-CA-C	5.08	117.99	110.77
1	A	328	TRP	CD1-CG-CD2	5.07	114.42	106.30
1	A	185	SER	N-CA-C	5.07	117.39	110.55
1	A	348	ASN	N-CA-C	5.06	121.58	110.80
1	A	151	HIS	CA-CB-CG	-5.05	108.75	113.80
1	A	127	ASP	CA-CB-CG	5.05	117.65	112.60
1	A	18	TRP	CG-CD1-NE1	-5.03	103.66	110.20
1	A	281	ALA	O-C-N	-5.00	117.37	123.27

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

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	3184	0	3044	35	0
2	A	3	0	0	0	0
3	A	152	0	0	1	0
All	All	3339	0	3044	35	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 (35) 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:186:ALA:HB1	1:A:235:VAL:HG23	1.79	0.64
1:A:38:TRP:CZ2	1:A:177:ARG:HD3	2.39	0.58
1:A:373:LYS:O	1:A:397:TYR:HA	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:49:GLN:NE2	1:A:49:GLN:H	2.04	0.55
1:A:66:ASN:ND2	1:A:69:GLN:H	2.03	0.55
1:A:66:ASN:HD22	1:A:69:GLN:H	1.56	0.54
1:A:118:TRP:HB3	1:A:122:MET:SD	2.48	0.54
1:A:355:ILE:HG21	1:A:363:LEU:HD23	1.91	0.51
1:A:38:TRP:HA	1:A:85:ILE:HG13	1.91	0.51
1:A:175:GLY:HA2	1:A:198:PRO:HB2	1.93	0.51
1:A:156:VAL:O	1:A:160:LEU:HB2	2.12	0.50
1:A:242:THR:HG22	1:A:280:LYS:HA	1.95	0.49
1:A:3:LEU:HD22	1:A:36:HIS:HB2	1.95	0.48
1:A:55:ARG:HA	1:A:108:GLU:O	2.14	0.48
1:A:355:ILE:CG2	1:A:363:LEU:HD23	2.44	0.48
1:A:274:ILE:HA	1:A:278:PRO:HA	1.97	0.47
1:A:344:HIS:CE1	1:A:401:GLU:HB2	2.51	0.46
1:A:387:GLY:O	1:A:403:ILE:HG12	2.15	0.46
1:A:160:LEU:HD12	1:A:160:LEU:HA	1.84	0.46
1:A:49:GLN:H	1:A:49:GLN:CD	2.24	0.45
1:A:248:THR:O	1:A:252:LEU:HB2	2.16	0.45
1:A:340:VAL:O	1:A:344:HIS:HD2	1.98	0.45
1:A:41:PRO:HG3	1:A:87:ASP:HB3	1.97	0.45
1:A:246:PHE:HD2	1:A:297:TRP:HZ3	1.65	0.45
1:A:32:ALA:HB3	1:A:34:ILE:HD12	2.00	0.44
1:A:98:LYS:HA	1:A:103:ILE:O	2.17	0.44
1:A:7:PHE:CD2	1:A:40:PRO:HB3	2.54	0.43
1:A:70:LEU:HD13	1:A:171:ILE:HG21	2.00	0.43
1:A:182:LYS:HD3	1:A:207:THR:HG22	2.00	0.42
1:A:371:ILE:O	1:A:399:VAL:HA	2.19	0.42
1:A:99:ASP:OD1	1:A:101:ARG:HB2	2.20	0.42
1:A:170:ASP:HB2	3:A:686:HOH:O	2.20	0.41
1:A:290:THR:HB	1:A:297:TRP:O	2.21	0.41
1:A:278:PRO:O	1:A:316:GLY:HA2	2.21	0.41
1:A:344:HIS:HB3	1:A:369:LYS:HD2	2.04	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	401/403 (100%)	364 (91%)	27 (7%)	10 (2%)	4 16

All (10) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	101	ARG
1	A	348	ASN
1	A	125	ARG
1	A	214	ASP
1	A	381	GLY
1	A	382	ASN
1	A	396	ASP
1	A	145	ALA
1	A	315	PRO
1	A	300	PRO

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	322/322 (100%)	289 (90%)	33 (10%)	7 23

All (33) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	1	GLN
1	A	2	VAL
1	A	37	VAL
1	A	39	LEU
1	A	49	GLN
1	A	56	LEU
1	A	66	ASN

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Mol	Chain	Res	Type
1	A	70	LEU
1	A	73	LEU
1	A	82	VAL
1	A	85	ILE
1	A	103	ILE
1	A	116	LEU
1	A	129	PRO
1	A	148	ASP
1	A	152	LEU
1	A	164	LEU
1	A	188	VAL
1	A	193	ILE
1	A	198	PRO
1	A	247	THR
1	A	256	VAL
1	A	263	LEU
1	A	266	THR
1	A	267	ASP
1	A	282	VAL
1	A	301	SER
1	A	312	LEU
1	A	330	LEU
1	A	335	ASP
1	A	337	LEU
1	A	382	ASN
1	A	399	VAL

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	49	GLN
1	A	66	ASN
1	A	69	GLN
1	A	306	GLN
1	A	344	HIS
1	A	382	ASN

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](#)

Of 3 ligands modelled in this entry, 3 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 [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	403/403 (100%)	-1.19	0 100 100	3, 15, 44, 78	0

There are no RSRZ outliers to report.

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](#)

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
2	CA	A	502	1/1	0.97	0.04	14,14,14,14	0
2	CA	A	501	1/1	0.98	0.03	5,5,5,5	0
2	CA	A	500	1/1	0.99	0.02	17,17,17,17	0

6.5 Other polymers [i](#)

There are no such residues in this entry.