Full wwPDB X-ray Structure Validation Report ⓘ

Nov 12, 2024 – 12:59 AM EST

PDB ID	:	2P2N
Title	:	Crystal Structure and Allosteric Regulation of the Cytoplasmic Escherichia coli L-Asparaginase I
Authors	:	Yun, M.-K.; Nourse, A.; White, S.W.; Rock, C.O.; Heath, R.J.
Deposited on	:	2007-03-07
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:

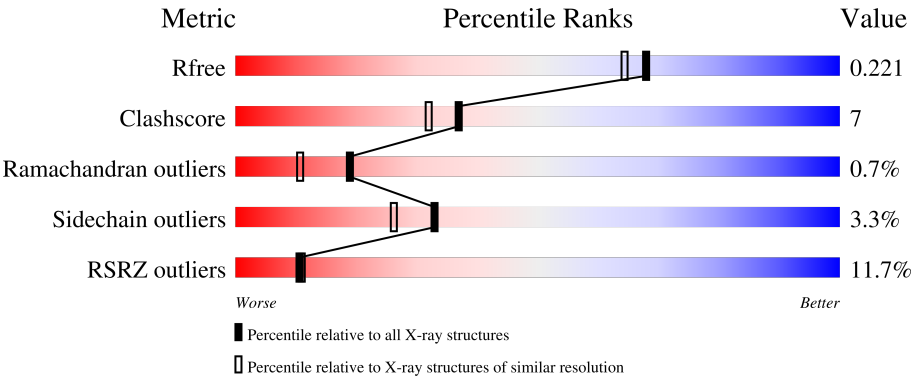
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.20.1
EDS	:	3.0
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4	:	9.0.003 (Gargrove)
Density-Fitness	:	1.0.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

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 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	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	7293 (1.90-1.90)
Clashscore	180529	8090 (1.90-1.90)
Ramachandran outliers	177936	8022 (1.90-1.90)
Sidechain outliers	177891	8022 (1.90-1.90)
RSRZ outliers	164620	7292 (1.90-1.90)

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	358	10% 72% 12% • 15%
1	B	358	11% 76% 12% • 10%
1	C	358	10% 74% 11% • 14%
1	D	358	10% 76% 11% • 11%

2 Entry composition (i)

There are 6 unique types of molecules in this entry. The entry contains 10323 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 L-ASPARAGINASE I.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	304	Total	C	N	O	S	0	0	0
			2326	1476	396	444	10			
1	B	321	Total	C	N	O	S	0	0	0
			2464	1562	424	467	11			
1	C	307	Total	C	N	O	S	0	0	0
			2359	1500	401	447	11			
1	D	319	Total	C	N	O	S	0	0	0
			2440	1549	417	464	10			

There are 80 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-19	MET	-	cloning artifact	UNP P0A962
A	-18	GLY	-	cloning artifact	UNP P0A962
A	-17	SER	-	cloning artifact	UNP P0A962
A	-16	SER	-	cloning artifact	UNP P0A962
A	-15	HIS	-	cloning artifact	UNP P0A962
A	-14	HIS	-	cloning artifact	UNP P0A962
A	-13	HIS	-	cloning artifact	UNP P0A962
A	-12	HIS	-	cloning artifact	UNP P0A962
A	-11	HIS	-	cloning artifact	UNP P0A962
A	-10	HIS	-	cloning artifact	UNP P0A962
A	-9	SER	-	cloning artifact	UNP P0A962
A	-8	SER	-	cloning artifact	UNP P0A962
A	-7	GLY	-	cloning artifact	UNP P0A962
A	-6	LEU	-	cloning artifact	UNP P0A962
A	-5	VAL	-	cloning artifact	UNP P0A962
A	-4	PRO	-	cloning artifact	UNP P0A962
A	-3	ARG	-	cloning artifact	UNP P0A962
A	-2	GLY	-	cloning artifact	UNP P0A962
A	-1	SER	-	cloning artifact	UNP P0A962
A	0	HIS	-	cloning artifact	UNP P0A962
B	-19	MET	-	cloning artifact	UNP P0A962

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Chain	Residue	Modelled	Actual	Comment	Reference
B	-18	GLY	-	cloning artifact	UNP P0A962
B	-17	SER	-	cloning artifact	UNP P0A962
B	-16	SER	-	cloning artifact	UNP P0A962
B	-15	HIS	-	cloning artifact	UNP P0A962
B	-14	HIS	-	cloning artifact	UNP P0A962
B	-13	HIS	-	cloning artifact	UNP P0A962
B	-12	HIS	-	cloning artifact	UNP P0A962
B	-11	HIS	-	cloning artifact	UNP P0A962
B	-10	HIS	-	cloning artifact	UNP P0A962
B	-9	SER	-	cloning artifact	UNP P0A962
B	-8	SER	-	cloning artifact	UNP P0A962
B	-7	GLY	-	cloning artifact	UNP P0A962
B	-6	LEU	-	cloning artifact	UNP P0A962
B	-5	VAL	-	cloning artifact	UNP P0A962
B	-4	PRO	-	cloning artifact	UNP P0A962
B	-3	ARG	-	cloning artifact	UNP P0A962
B	-2	GLY	-	cloning artifact	UNP P0A962
B	-1	SER	-	cloning artifact	UNP P0A962
B	0	HIS	-	cloning artifact	UNP P0A962
C	-19	MET	-	cloning artifact	UNP P0A962
C	-18	GLY	-	cloning artifact	UNP P0A962
C	-17	SER	-	cloning artifact	UNP P0A962
C	-16	SER	-	cloning artifact	UNP P0A962
C	-15	HIS	-	cloning artifact	UNP P0A962
C	-14	HIS	-	cloning artifact	UNP P0A962
C	-13	HIS	-	cloning artifact	UNP P0A962
C	-12	HIS	-	cloning artifact	UNP P0A962
C	-11	HIS	-	cloning artifact	UNP P0A962
C	-10	HIS	-	cloning artifact	UNP P0A962
C	-9	SER	-	cloning artifact	UNP P0A962
C	-8	SER	-	cloning artifact	UNP P0A962
C	-7	GLY	-	cloning artifact	UNP P0A962
C	-6	LEU	-	cloning artifact	UNP P0A962
C	-5	VAL	-	cloning artifact	UNP P0A962
C	-4	PRO	-	cloning artifact	UNP P0A962
C	-3	ARG	-	cloning artifact	UNP P0A962
C	-2	GLY	-	cloning artifact	UNP P0A962
C	-1	SER	-	cloning artifact	UNP P0A962
C	0	HIS	-	cloning artifact	UNP P0A962
D	-19	MET	-	cloning artifact	UNP P0A962
D	-18	GLY	-	cloning artifact	UNP P0A962
D	-17	SER	-	cloning artifact	UNP P0A962

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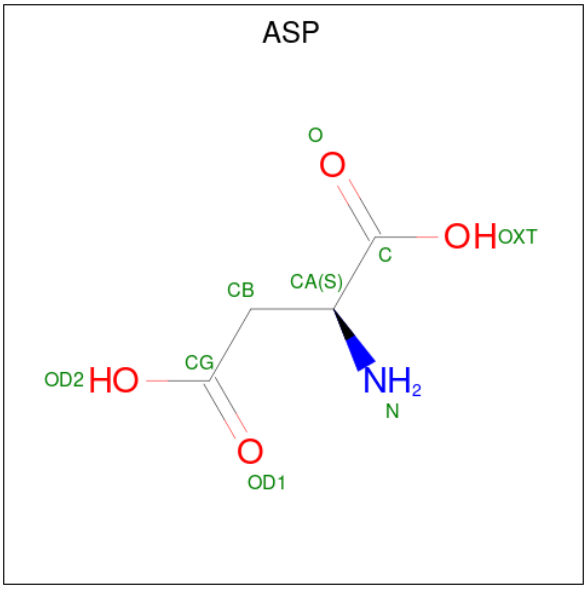
Chain	Residue	Modelled	Actual	Comment	Reference
D	-16	SER	-	cloning artifact	UNP P0A962
D	-15	HIS	-	cloning artifact	UNP P0A962
D	-14	HIS	-	cloning artifact	UNP P0A962
D	-13	HIS	-	cloning artifact	UNP P0A962
D	-12	HIS	-	cloning artifact	UNP P0A962
D	-11	HIS	-	cloning artifact	UNP P0A962
D	-10	HIS	-	cloning artifact	UNP P0A962
D	-9	SER	-	cloning artifact	UNP P0A962
D	-8	SER	-	cloning artifact	UNP P0A962
D	-7	GLY	-	cloning artifact	UNP P0A962
D	-6	LEU	-	cloning artifact	UNP P0A962
D	-5	VAL	-	cloning artifact	UNP P0A962
D	-4	PRO	-	cloning artifact	UNP P0A962
D	-3	ARG	-	cloning artifact	UNP P0A962
D	-2	GLY	-	cloning artifact	UNP P0A962
D	-1	SER	-	cloning artifact	UNP P0A962
D	0	HIS	-	cloning artifact	UNP P0A962

- Molecule 2 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

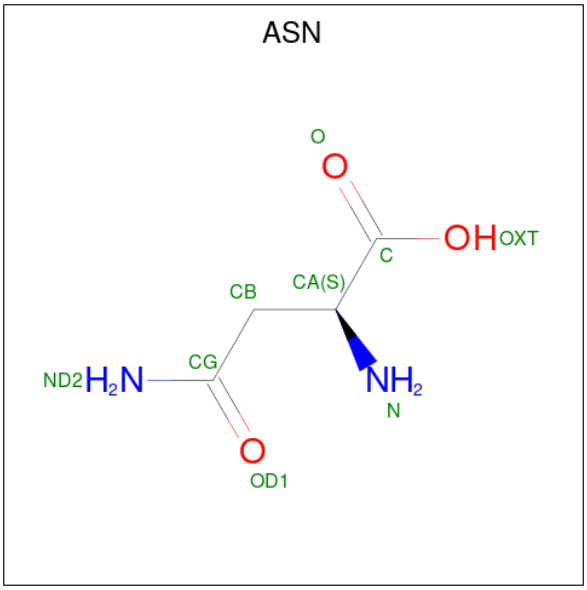
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	2	Total Cl 2 2	0	0
2	B	2	Total Cl 2 2	0	0

- Molecule 3 is ASPARTIC ACID (three-letter code: ASP) (formula: $C_4H_7NO_4$).



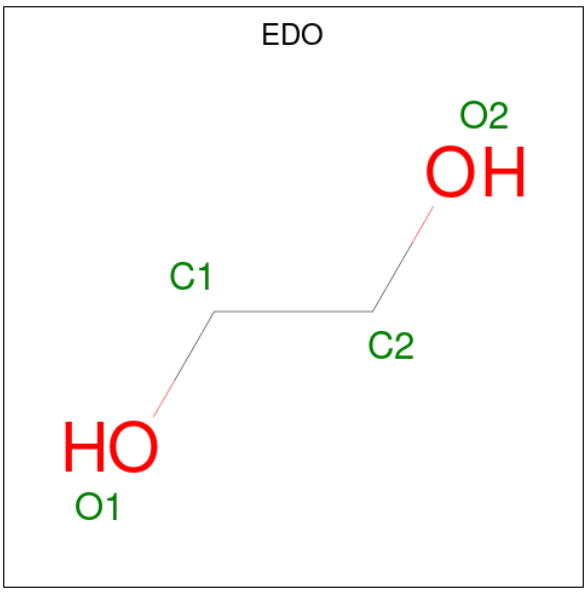
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total C N O 8 4 1 3	0	1
3	B	1	Total C N O 9 4 1 4	0	1
3	C	1	Total C N O 9 4 1 4	0	1
3	D	1	Total C N O 9 4 1 4	0	1

- Molecule 4 is ASPARAGINE (three-letter code: ASN) (formula: $C_4H_8N_2O_3$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C N O 9 4 2 3	0	1
4	A	1	Total C N O 9 4 2 3	0	0
4	B	1	Total C N O 9 4 2 3	0	1
4	B	1	Total C N O 9 4 2 3	0	0
4	C	1	Total C N O 9 4 2 3	0	1
4	C	1	Total C N O 9 4 2 3	0	0
4	D	1	Total C N O 9 4 2 3	0	1
4	D	1	Total C N O 9 4 2 3	0	0

- Molecule 5 is 1,2-ETHANEDIOL (three-letter code: EDO) (formula: $C_2H_6O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	A	1	Total C O 4 2 2	0	0
5	A	1	Total C O 4 2 2	0	0
5	B	1	Total C O 4 2 2	0	0
5	B	1	Total C O 4 2 2	0	0
5	B	1	Total C O 4 2 2	0	0
5	C	1	Total C O 4 2 2	0	0
5	C	1	Total C O 4 2 2	0	0
5	D	1	Total C O 4 2 2	0	0
5	D	1	Total C O 4 2 2	0	0
5	D	1	Total C O 4 2 2	0	0
5	D	1	Total C O 4 2 2	0	0
5	D	1	Total C O 4 2 2	0	0

- Molecule 6 is water.

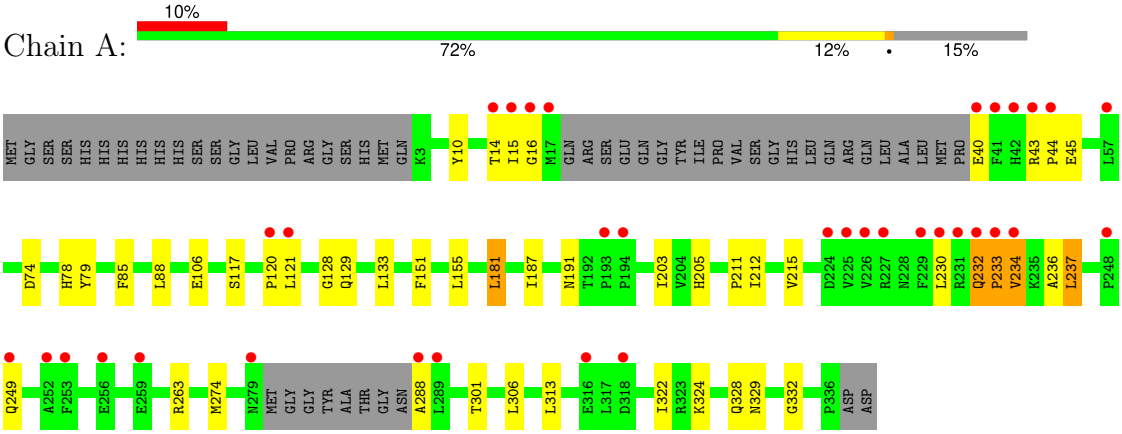
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	140	Total O 140 140	0	0
6	B	148	Total O 148 148	0	0
6	C	125	Total O 125 125	0	0
6	D	162	Total O 162 162	0	0

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.

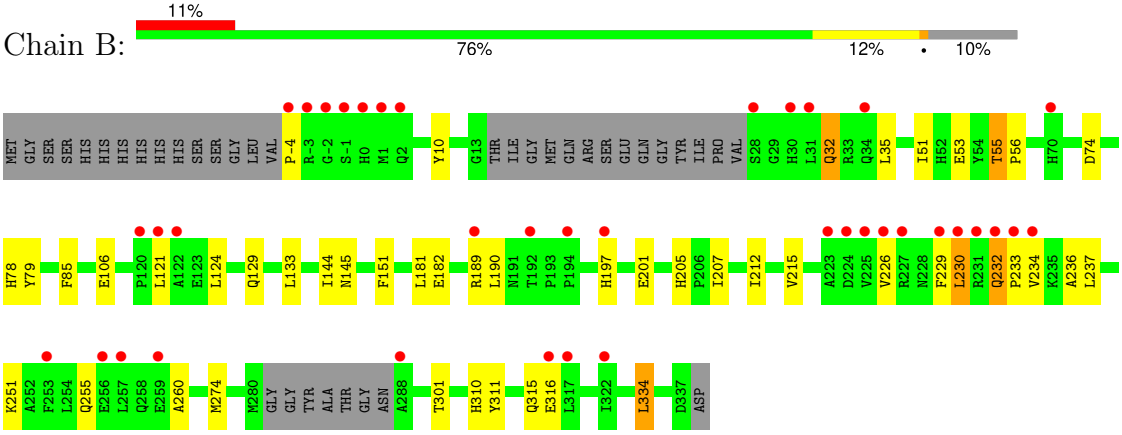
• Molecule 1: L-ASPARAGINASE I

Chain A:



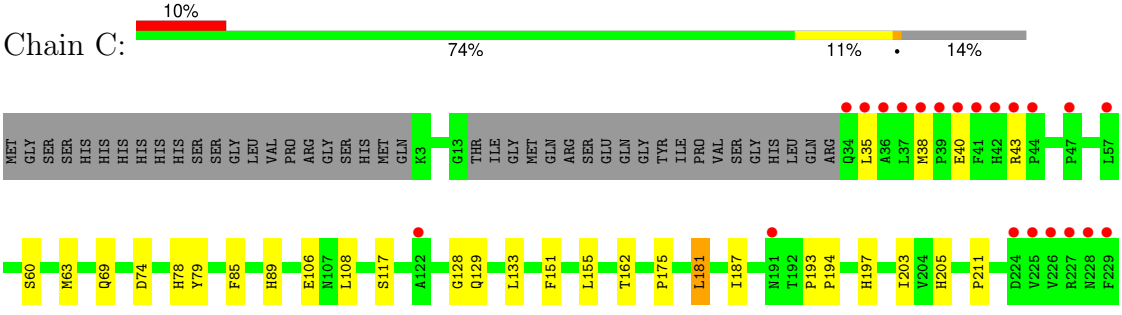
• Molecule 1: L-ASPARAGINASE I

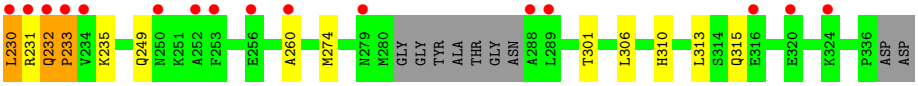
Chain B:



• Molecule 1: L-ASPARAGINASE I

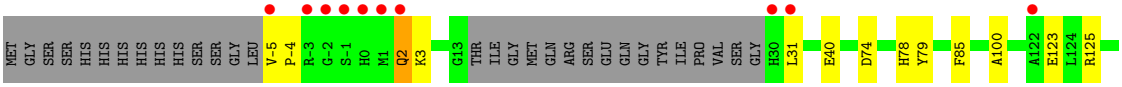
Chain C:

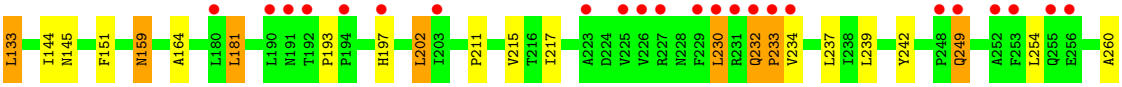


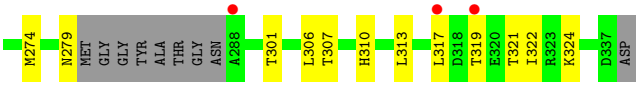


• Molecule 1: L-ASPARAGINASE I

Chain D:







4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	90.31Å 89.76Å 93.08Å 90.00° 117.03° 90.00°	Depositor
Resolution (Å)	50.00 – 1.90 50.00 – 1.90	Depositor EDS
% Data completeness (in resolution range)	90.7 (50.00-1.90) 90.7 (50.00-1.90)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.08	Depositor
$< I/\sigma(I) >$ [1]	4.27 (at 1.89Å)	Xtriage
Refinement program	REFMAC 5.2	Depositor
R, R_{free}	0.223 , 0.264 0.224 , 0.221	Depositor DCC
R_{free} test set	4749 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	19.4	Xtriage
Anisotropy	0.366	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.38 , 45.3	EDS
L-test for twinning[2]	$< \|L\| > = 0.49$, $< L^2 > = 0.32$	Xtriage
Estimated twinning fraction	0.147 for l,-k,h	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	10323	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 4.47% 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

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

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	0.59	0/2377	0.66	2/3239 (0.1%)
1	B	0.59	0/2519	0.66	2/3429 (0.1%)
1	C	0.59	0/2411	0.64	1/3284 (0.0%)
1	D	0.60	0/2494	0.70	4/3399 (0.1%)
All	All	0.59	0/9801	0.67	9/13351 (0.1%)

There are no bond length outliers.

All (9) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	181	LEU	CA-CB-CG	7.12	131.68	115.30
1	A	181	LEU	CA-CB-CG	6.08	129.28	115.30
1	C	181	LEU	CA-CB-CG	5.92	128.92	115.30
1	B	334	LEU	CA-CB-CG	5.69	128.39	115.30
1	A	133	LEU	CA-CB-CG	5.55	128.07	115.30
1	D	133	LEU	CA-CB-CG	5.42	127.77	115.30
1	D	306	LEU	CA-CB-CG	5.34	127.57	115.30
1	B	181	LEU	CA-CB-CG	5.22	127.31	115.30
1	D	202	LEU	CA-CB-CG	5.20	127.26	115.30

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	2326	0	2276	35	0
1	B	2464	0	2424	30	0
1	C	2359	0	2327	34	0
1	D	2440	0	2393	41	0
2	A	2	0	0	0	0
2	B	2	0	0	0	0
3	A	8	0	3	0	0
3	B	9	0	3	0	0
3	C	9	0	3	0	0
3	D	9	0	3	0	0
4	A	18	0	10	1	0
4	B	18	0	10	0	0
4	C	18	0	10	3	0
4	D	18	0	10	0	0
5	A	8	0	12	2	0
5	B	12	0	18	1	0
5	C	8	0	12	1	0
5	D	20	0	30	1	0
6	A	140	0	0	1	0
6	B	148	0	0	1	0
6	C	125	0	0	2	0
6	D	162	0	0	2	0
All	All	10323	0	9544	135	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 7.

All (135) 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:C:232:GLN:H	1:C:233:PRO:HD3	1.17	1.00
1:A:232:GLN:H	1:A:233:PRO:HD3	1.23	0.97
1:C:232:GLN:N	1:C:233:PRO:HD3	1.90	0.85
1:A:232:GLN:H	1:A:233:PRO:CD	1.90	0.84
1:A:232:GLN:N	1:A:233:PRO:HD3	2.01	0.75
1:C:106:GLU:OE1	1:C:205:HIS:HE1	1.70	0.74
1:C:175:PRO:HG3	1:C:274:MET:HE2	1.71	0.72
1:A:10:TYR:OH	1:A:16:GLY:HA3	1.91	0.70
1:A:43:ARG:HB2	1:A:44:PRO:HD2	1.75	0.69
1:A:106:GLU:OE2	1:A:205:HIS:HE1	1.75	0.69
1:D:230:LEU:HD11	1:D:260:ALA:HA	1.75	0.68
1:C:232:GLN:H	1:C:233:PRO:CD	2.00	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:310:HIS:HD2	6:C:9107:HOH:O	1.76	0.68
1:A:301:THR:HA	5:A:9002:EDO:H12	1.75	0.68
1:C:274:MET:HE1	4:C:8003:ASN:HB3	1.77	0.66
1:D:232:GLN:H	1:D:233:PRO:CD	2.08	0.65
1:B:215:VAL:CG2	1:B:237:LEU:HD21	2.27	0.65
1:B:229:PHE:HB3	1:B:234:VAL:HG21	1.78	0.64
1:C:108:LEU:O	1:C:197:HIS:HE1	1.81	0.64
1:C:301:THR:HA	5:C:9001:EDO:H12	1.81	0.62
1:C:230:LEU:HD11	1:C:260:ALA:HA	1.80	0.62
1:C:74:ASP:O	1:C:78:HIS:HD2	1.83	0.61
1:A:324:LYS:O	1:A:328:GLN:HG3	2.01	0.60
1:D:249:GLN:HG3	1:D:254:LEU:HD11	1.83	0.60
1:D:215:VAL:HG12	1:D:239:LEU:HD23	1.83	0.59
1:C:38:MET:SD	1:C:129:GLN:HG2	2.42	0.59
1:B:233:PRO:O	1:B:234:VAL:HG23	2.02	0.59
1:C:232:GLN:N	1:C:233:PRO:CD	2.60	0.59
1:A:15:ILE:HD13	1:A:88:LEU:HD22	1.85	0.58
1:A:43:ARG:HD3	1:B:124:LEU:HD13	1.85	0.58
1:C:35:LEU:HA	1:C:38:MET:HE3	1.85	0.58
1:C:106:GLU:OE1	1:C:205:HIS:CE1	2.55	0.57
1:D:215:VAL:CG1	1:D:239:LEU:CD2	2.82	0.57
1:A:74:ASP:O	1:A:78:HIS:HD2	1.87	0.57
1:B:274:MET:CE	1:D:274:MET:HB2	2.35	0.56
1:D:-5:VAL:HA	1:D:144:ILE:HG12	1.87	0.56
1:A:106:GLU:OE2	1:A:205:HIS:CE1	2.57	0.56
1:B:207:ILE:HG23	1:B:310:HIS:HB3	1.88	0.55
1:B:79:TYR:HA	1:B:85:PHE:HZ	1.72	0.55
1:C:230:LEU:HD21	1:C:260:ALA:HB2	1.87	0.55
1:B:215:VAL:HG21	1:B:237:LEU:HD21	1.89	0.55
1:A:274:MET:HE1	6:C:9124:HOH:O	2.07	0.54
1:C:162:THR:HG21	1:C:274:MET:CE	2.37	0.54
1:C:60:SER:HB2	1:C:89:HIS:CE1	2.43	0.53
6:B:9031:HOH:O	1:D:310:HIS:HE1	1.91	0.53
1:C:274:MET:CE	4:C:8003:ASN:HB3	2.38	0.53
1:D:215:VAL:CG1	1:D:239:LEU:HD22	2.39	0.53
1:C:274:MET:HE1	4:C:8003:ASN:CB	2.39	0.52
1:D:40:GLU:HG3	1:D:133:LEU:HD23	1.92	0.52
1:D:319:THR:HG22	6:D:9116:HOH:O	2.09	0.52
1:A:329:ASN:HD21	1:A:332:GLY:CA	2.22	0.51
1:D:79:TYR:HA	1:D:85:PHE:CZ	2.45	0.51
1:D:234:VAL:HG11	1:D:237:LEU:HD13	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:274:MET:HE3	1:D:274:MET:HB2	1.92	0.51
1:D:313:LEU:HD23	1:D:322:ILE:HD13	1.91	0.51
1:A:40:GLU:O	1:A:43:ARG:HG2	2.11	0.51
1:B:226:VAL:O	1:B:230:LEU:HD23	2.11	0.51
1:B:215:VAL:HG23	1:B:237:LEU:HD21	1.92	0.50
1:D:215:VAL:HG11	1:D:239:LEU:HD22	1.93	0.50
1:D:-5:VAL:CB	1:D:144:ILE:HD11	2.41	0.50
1:A:249:GLN:NE2	1:A:288:ALA:HB3	2.27	0.50
1:A:191:ASN:HD22	1:D:193:PRO:HD3	1.76	0.50
1:B:79:TYR:HA	1:B:85:PHE:CZ	2.46	0.50
1:D:217:ILE:HG22	1:D:242:TYR:CZ	2.46	0.49
1:A:79:TYR:HA	1:A:85:PHE:CZ	2.46	0.49
1:D:211:PRO:HB2	1:D:233:PRO:C	2.33	0.49
1:A:232:GLN:N	1:A:233:PRO:CD	2.65	0.49
1:D:310:HIS:HD2	6:D:9138:HOH:O	1.95	0.49
1:D:301:THR:HA	5:D:9003:EDO:H21	1.94	0.49
1:D:79:TYR:HA	1:D:85:PHE:HZ	1.77	0.49
1:B:32:GLN:H	1:B:32:GLN:HE21	1.60	0.48
1:D:215:VAL:CG1	1:D:239:LEU:HD23	2.44	0.48
1:A:15:ILE:O	1:A:121:LEU:CB	2.62	0.47
1:B:145:ASN:HB2	1:B:197:HIS:HE1	1.79	0.47
1:D:159:ASN:C	1:D:159:ASN:HD22	2.18	0.47
1:D:211:PRO:HB2	1:D:233:PRO:O	2.13	0.47
1:B:121:LEU:HD11	1:B:129:GLN:HG3	1.96	0.47
1:B:230:LEU:HD11	1:B:260:ALA:HA	1.95	0.47
1:A:121:LEU:CB	1:A:129:GLN:HE22	2.28	0.46
1:C:235:LYS:HE2	1:C:313:LEU:HD22	1.97	0.46
1:B:121:LEU:CD1	1:B:129:GLN:HG3	2.46	0.46
1:A:234:VAL:HG11	1:A:237:LEU:HD23	1.98	0.46
1:C:211:PRO:HB2	1:C:233:PRO:O	2.15	0.46
1:A:45:GLU:HB2	1:B:124:LEU:HD22	1.97	0.46
1:D:215:VAL:HG11	1:D:239:LEU:CD2	2.46	0.46
1:A:313:LEU:HD23	1:A:322:ILE:HD13	1.97	0.46
1:C:274:MET:O	1:C:274:MET:HE3	2.16	0.46
1:B:230:LEU:HD21	1:B:260:ALA:HB2	1.96	0.46
1:C:40:GLU:HA	1:C:43:ARG:HG3	1.98	0.45
1:B:212:ILE:HG12	1:B:236:ALA:HB3	1.98	0.45
1:D:74:ASP:O	1:D:78:HIS:HD2	1.99	0.45
1:D:164:ALA:HB2	1:D:274:MET:HE1	1.98	0.45
1:A:117:SER:HB3	1:A:128:GLY:HA2	1.98	0.45
1:C:106:GLU:HB3	1:C:203:ILE:HB	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:232:GLN:H	1:D:233:PRO:HD3	1.82	0.45
1:A:215:VAL:CG2	1:A:237:LEU:HD11	2.47	0.44
1:D:-4:PRO:HD2	1:D:144:ILE:HG12	1.99	0.44
1:A:230:LEU:O	1:A:263:ARG:NH1	2.51	0.44
1:C:175:PRO:HG3	1:C:274:MET:CE	2.43	0.44
1:C:79:TYR:HA	1:C:85:PHE:CZ	2.52	0.44
1:D:145:ASN:HB2	1:D:197:HIS:HE1	1.82	0.44
1:B:232:GLN:O	1:B:234:VAL:N	2.43	0.44
1:B:301:THR:HA	5:B:9004:EDO:H21	2.00	0.44
1:A:181:LEU:HD21	1:A:187:ILE:HG23	2.00	0.44
4:A:8001:ASN:N	5:A:9002:EDO:HO1	2.15	0.43
1:C:155:LEU:HB3	1:C:181:LEU:HB3	2.00	0.43
1:B:106:GLU:OE2	1:B:205:HIS:NE2	2.44	0.43
1:A:14:THR:HG23	1:A:120:PRO:HD3	2.01	0.43
6:A:9027:HOH:O	1:C:310:HIS:HE1	2.01	0.43
1:A:211:PRO:HB2	1:A:233:PRO:O	2.19	0.43
1:C:60:SER:HA	1:C:63:MET:HG3	2.01	0.43
1:B:-4:PRO:HD2	1:B:144:ILE:HG12	2.01	0.42
1:B:311:TYR:O	1:B:315:GLN:HG2	2.19	0.42
1:C:117:SER:HB3	1:C:128:GLY:HA2	2.01	0.42
1:C:187:ILE:HD11	1:D:125:ARG:CZ	2.50	0.42
1:D:317:LEU:HD22	1:D:321:THR:HG21	2.02	0.42
1:B:55:THR:HA	1:B:56:PRO:HA	1.92	0.42
1:D:145:ASN:HB2	1:D:197:HIS:CE1	2.54	0.42
1:D:-5:VAL:HA	1:D:-4:PRO:HD2	1.90	0.41
1:A:155:LEU:HB3	1:A:181:LEU:HB3	2.02	0.41
1:A:215:VAL:HG23	1:A:237:LEU:CD1	2.50	0.41
1:A:212:ILE:HG12	1:A:236:ALA:HB3	2.01	0.41
1:B:35:LEU:HD12	1:B:51:ILE:HD11	2.02	0.41
1:C:193:PRO:HA	1:C:194:PRO:HD3	1.96	0.41
1:A:106:GLU:HB3	1:A:203:ILE:HB	2.01	0.41
1:B:10:TYR:HB3	1:B:53:GLU:HA	2.02	0.41
1:D:2:GLN:HE21	1:D:2:GLN:HB2	1.62	0.41
1:D:100:ALA:HA	1:D:307:THR:HB	2.02	0.41
1:A:215:VAL:HG23	1:A:237:LEU:HD11	2.03	0.41
1:D:164:ALA:HB2	1:D:274:MET:CE	2.51	0.41
1:B:74:ASP:O	1:B:78:HIS:HD2	2.04	0.40
1:B:182:GLU:OE2	1:B:190:LEU:HD11	2.21	0.40
1:D:249:GLN:HA	1:D:249:GLN:HE21	1.86	0.40
1:C:162:THR:HG21	1:C:274:MET:HE2	2.02	0.40
1:D:233:PRO:O	1:D:234:VAL:HG23	2.22	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	298/358 (83%)	289 (97%)	7 (2%)	2 (1%)	19 11
1	B	315/358 (88%)	305 (97%)	9 (3%)	1 (0%)	37 29
1	C	301/358 (84%)	290 (96%)	8 (3%)	3 (1%)	13 5
1	D	313/358 (87%)	304 (97%)	7 (2%)	2 (1%)	22 13
All	All	1227/1432 (86%)	1188 (97%)	31 (2%)	8 (1%)	19 11

All (8) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	232	GLN
1	D	232	GLN
1	A	233	PRO
1	B	232	GLN
1	C	231	ARG
1	C	232	GLN
1	C	233	PRO
1	D	233	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	248/298 (83%)	244 (98%)	4 (2%)	58	56
1	B	264/298 (89%)	253 (96%)	11 (4%)	25	18
1	C	253/298 (85%)	246 (97%)	7 (3%)	38	33
1	D	260/298 (87%)	248 (95%)	12 (5%)	23	15
All	All	1025/1192 (86%)	991 (97%)	34 (3%)	33	26

All (34) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	151	PHE
1	A	234	VAL
1	A	237	LEU
1	A	306	LEU
1	B	32	GLN
1	B	55	THR
1	B	133	LEU
1	B	151	PHE
1	B	189	ARG
1	B	201	GLU
1	B	230	LEU
1	B	251	LYS
1	B	255	GLN
1	B	316	GLU
1	B	334	LEU
1	C	69	GLN
1	C	133	LEU
1	C	151	PHE
1	C	230	LEU
1	C	249	GLN
1	C	306	LEU
1	C	315	GLN
1	D	2	GLN
1	D	3	LYS
1	D	31	LEU
1	D	123	GLU
1	D	151	PHE
1	D	159	ASN
1	D	181	LEU
1	D	202	LEU
1	D	230	LEU
1	D	249	GLN
1	D	279	ASN

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Mol	Chain	Res	Type
1	D	324	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (30) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	70	HIS
1	A	78	HIS
1	A	129	GLN
1	A	191	ASN
1	A	205	HIS
1	A	328	GLN
1	A	329	ASN
1	B	32	GLN
1	B	78	HIS
1	B	145	ASN
1	B	152	ASN
1	B	197	HIS
1	B	249	GLN
1	B	258	GLN
1	B	310	HIS
1	C	78	HIS
1	C	186	HIS
1	C	197	HIS
1	C	205	HIS
1	C	249	GLN
1	C	258	GLN
1	C	310	HIS
1	D	2	GLN
1	D	78	HIS
1	D	129	GLN
1	D	159	ASN
1	D	249	GLN
1	D	279	ASN
1	D	310	HIS
1	D	315	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)

Of 28 ligands modelled in this entry, 4 are monoatomic - leaving 24 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
4	ASN	B	8002	-	7,8,8	0.88	0	6,10,10	0.80	0
4	ASN	A	8001	-	7,8,8	0.90	1 (14%)	6,10,10	0.50	0
5	EDO	D	9006	-	3,3,3	0.57	0	2,2,2	0.07	0
4	ASN	D	7008[B]	-	7,8,8	0.79	0	6,10,10	0.90	1 (16%)
4	ASN	B	7004[B]	-	7,8,8	0.82	1 (14%)	6,10,10	1.08	1 (16%)
5	EDO	B	9009	-	3,3,3	0.50	0	2,2,2	0.87	0
5	EDO	D	9012	-	3,3,3	0.64	0	2,2,2	0.64	0
5	EDO	A	9005	-	3,3,3	0.54	0	2,2,2	0.85	0
5	EDO	C	9001	-	3,3,3	0.46	0	2,2,2	0.69	0
4	ASN	A	7002[B]	-	7,8,8	0.89	1 (14%)	6,10,10	1.08	1 (16%)
5	EDO	A	9002	-	3,3,3	0.50	0	2,2,2	0.61	0
5	EDO	D	9007	-	3,3,3	0.62	0	2,2,2	0.12	0
5	EDO	D	9003	-	3,3,3	0.40	0	2,2,2	0.43	0
4	ASN	C	8003	-	7,8,8	0.93	1 (14%)	6,10,10	0.67	0
3	ASP	A	7001[A]	1	6,7,8	0.99	1 (16%)	3,8,10	1.83	1 (33%)
3	ASP	C	7005[A]	-	7,8,8	1.07	1 (14%)	6,10,10	1.47	1 (16%)
3	ASP	B	7003[A]	-	7,8,8	1.13	1 (14%)	6,10,10	1.36	1 (16%)
5	EDO	D	9011	-	3,3,3	0.61	0	2,2,2	0.13	0
5	EDO	B	9008	-	3,3,3	0.43	0	2,2,2	0.43	0
4	ASN	D	8004	-	7,8,8	0.91	0	6,10,10	0.96	1 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
3	ASP	D	7007[A]	-	7,8,8	1.16	1 (14%)	6,10,10	1.25	1 (16%)
4	ASN	C	7006[B]	-	7,8,8	0.89	1 (14%)	6,10,10	0.99	1 (16%)
5	EDO	C	9010	-	3,3,3	0.61	0	2,2,2	0.75	0
5	EDO	B	9004	-	3,3,3	0.37	0	2,2,2	0.48	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	ASN	B	8002	-	-	3/8/8/8	-
4	ASN	A	8001	-	-	2/8/8/8	-
5	EDO	D	9006	-	-	0/1/1/1	-
4	ASN	D	7008[B]	-	-	0/8/8/8	-
4	ASN	B	7004[B]	-	-	2/8/8/8	-
5	EDO	B	9009	-	-	0/1/1/1	-
5	EDO	D	9012	-	-	0/1/1/1	-
5	EDO	A	9005	-	-	0/1/1/1	-
5	EDO	C	9001	-	-	0/1/1/1	-
4	ASN	A	7002[B]	-	-	0/8/8/8	-
5	EDO	A	9002	-	-	0/1/1/1	-
5	EDO	D	9007	-	-	0/1/1/1	-
5	EDO	D	9003	-	-	0/1/1/1	-
4	ASN	C	8003	-	-	3/8/8/8	-
3	ASP	A	7001[A]	1	-	3/7/7/8	-
3	ASP	C	7005[A]	-	-	4/8/8/8	-
3	ASP	B	7003[A]	-	-	4/8/8/8	-
5	EDO	D	9011	-	-	0/1/1/1	-
5	EDO	B	9008	-	-	0/1/1/1	-
4	ASN	D	8004	-	-	2/8/8/8	-
3	ASP	D	7007[A]	-	-	4/8/8/8	-
4	ASN	C	7006[B]	-	-	0/8/8/8	-
5	EDO	C	9010	-	-	0/1/1/1	-
5	EDO	B	9004	-	-	0/1/1/1	-

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	C	8003	ASN	OXT-C	-2.32	1.23	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	A	8001	ASN	OXT-C	-2.20	1.23	1.30
4	C	7006[B]	ASN	OXT-C	-2.18	1.23	1.30
3	D	7007[A]	ASP	OXT-C	-2.12	1.23	1.30
3	A	7001[A]	ASP	OXT-C	-2.11	1.23	1.30
4	A	7002[B]	ASN	OXT-C	-2.08	1.24	1.30
3	B	7003[A]	ASP	OXT-C	-2.07	1.24	1.30
4	B	7004[B]	ASN	OXT-C	-2.02	1.24	1.30
3	C	7005[A]	ASP	OXT-C	-2.02	1.24	1.30

All (9) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	7005[A]	ASP	OXT-C-O	-2.79	117.74	124.08
3	B	7003[A]	ASP	OXT-C-O	-2.71	117.94	124.08
3	A	7001[A]	ASP	OXT-C-O	-2.58	118.22	124.08
4	B	7004[B]	ASN	OXT-C-O	-2.54	118.32	124.08
4	A	7002[B]	ASN	OXT-C-O	-2.52	118.37	124.08
3	D	7007[A]	ASP	OXT-C-O	-2.49	118.43	124.08
4	C	7006[B]	ASN	OXT-C-O	-2.32	118.81	124.08
4	D	8004	ASN	OXT-C-O	-2.30	118.87	124.08
4	D	7008[B]	ASN	OXT-C-O	-2.11	119.30	124.08

There are no chirality outliers.

All (27) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	B	7003[A]	ASP	O-C-CA-N
3	C	7005[A]	ASP	O-C-CA-N
3	D	7007[A]	ASP	O-C-CA-N
3	A	7001[A]	ASP	OXT-C-CA-N
3	C	7005[A]	ASP	OXT-C-CA-N
3	D	7007[A]	ASP	OXT-C-CA-N
3	B	7003[A]	ASP	OXT-C-CA-N
3	B	7003[A]	ASP	CA-CB-CG-OD2
3	C	7005[A]	ASP	CA-CB-CG-OD2
3	D	7007[A]	ASP	CA-CB-CG-OD1
3	B	7003[A]	ASP	CA-CB-CG-OD1
3	C	7005[A]	ASP	CA-CB-CG-OD1
3	D	7007[A]	ASP	CA-CB-CG-OD2
4	B	8002	ASN	OXT-C-CA-CB
4	A	8001	ASN	OXT-C-CA-CB
4	C	8003	ASN	OXT-C-CA-CB

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Mol	Chain	Res	Type	Atoms
3	A	7001[A]	ASP	CA-CB-CG-OD1
4	C	8003	ASN	O-C-CA-CB
4	D	8004	ASN	O-C-CA-CB
4	D	8004	ASN	OXT-C-CA-CB
4	A	8001	ASN	O-C-CA-CB
4	B	7004[B]	ASN	O-C-CA-CB
4	B	8002	ASN	O-C-CA-CB
4	B	7004[B]	ASN	OXT-C-CA-CB
4	B	8002	ASN	OXT-C-CA-N
4	C	8003	ASN	OXT-C-CA-N
3	A	7001[A]	ASP	O-C-CA-N

There are no ring outliers.

6 monomers are involved in 8 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	A	8001	ASN	1	0
5	C	9001	EDO	1	0
5	A	9002	EDO	2	0
5	D	9003	EDO	1	0
4	C	8003	ASN	3	0
5	B	9004	EDO	1	0

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	304/358 (84%)	0.64	35 (11%)	11	11	8, 17, 38, 48	0
1	B	321/358 (89%)	0.62	38 (11%)	10	11	8, 16, 37, 44	0
1	C	307/358 (85%)	0.73	37 (12%)	10	10	8, 17, 44, 59	0
1	D	319/358 (89%)	0.60	36 (11%)	11	12	7, 16, 35, 45	0
All	All	1251/1432 (87%)	0.65	146 (11%)	10	11	7, 16, 38, 59	0

All (146) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	D	233	PRO	10.0
1	B	233	PRO	9.5
1	C	39	PRO	6.8
1	A	233	PRO	6.7
1	C	37	LEU	6.3
1	B	231	ARG	5.5
1	B	232	GLN	5.5
1	C	233	PRO	5.4
1	C	36	ALA	5.3
1	C	288	ALA	5.0
1	A	14	THR	5.0
1	A	229	PHE	5.0
1	D	122	ALA	4.7
1	C	35	LEU	4.6
1	C	230	LEU	4.6
1	A	230	LEU	4.5
1	B	225	VAL	4.4
1	C	229	PHE	4.4
1	D	234	VAL	4.3
1	D	232	GLN	4.2
1	A	316	GLU	4.0

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Mol	Chain	Res	Type	RSRZ
1	B	288	ALA	4.0
1	C	226	VAL	4.0
1	C	232	GLN	3.9
1	C	225	VAL	3.9
1	B	234	VAL	3.9
1	D	230	LEU	3.9
1	D	231	ARG	3.8
1	A	226	VAL	3.8
1	C	234	VAL	3.8
1	D	-1	SER	3.8
1	B	230	LEU	3.8
1	A	225	VAL	3.8
1	D	229	PHE	3.7
1	D	288	ALA	3.7
1	A	252	ALA	3.7
1	C	231	ARG	3.6
1	D	1	MET	3.6
1	D	225	VAL	3.6
1	B	1	MET	3.5
1	B	-4	PRO	3.5
1	B	194	PRO	3.5
1	B	223	ALA	3.5
1	D	319	THR	3.4
1	C	41	PHE	3.3
1	C	43	ARG	3.3
1	B	253	PHE	3.2
1	D	-5	VAL	3.2
1	D	2	GLN	3.2
1	B	31	LEU	3.2
1	B	2	GLN	3.2
1	A	42	HIS	3.2
1	B	226	VAL	3.1
1	A	318	ASP	3.1
1	A	232	GLN	3.1
1	B	-1	SER	3.1
1	C	42	HIS	3.1
1	A	253	PHE	3.0
1	A	231	ARG	3.0
1	A	121	LEU	3.0
1	A	259	GLU	2.9
1	A	288	ALA	2.9
1	B	-2	GLY	2.9

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Mol	Chain	Res	Type	RSRZ
1	D	-3	ARG	2.9
1	B	122	ALA	2.9
1	A	43	ARG	2.9
1	A	41	PHE	2.8
1	C	44	PRO	2.8
1	B	229	PHE	2.8
1	A	248	PRO	2.8
1	D	194	PRO	2.8
1	B	-3	ARG	2.8
1	A	249	GLN	2.8
1	C	289	LEU	2.7
1	C	191	ASN	2.7
1	D	191	ASN	2.7
1	D	-2	GLY	2.7
1	A	194	PRO	2.7
1	B	121	LEU	2.6
1	D	317	LEU	2.6
1	A	289	LEU	2.6
1	C	122	ALA	2.6
1	C	38	MET	2.6
1	A	44	PRO	2.5
1	B	259	GLU	2.5
1	D	255	GLN	2.5
1	A	15	ILE	2.5
1	C	260	ALA	2.5
1	B	70	HIS	2.5
1	C	224	ASP	2.5
1	D	0	HIS	2.5
1	D	31	LEU	2.5
1	B	34	GLN	2.5
1	B	30	HIS	2.4
1	B	316	GLU	2.4
1	C	320	GLU	2.4
1	D	226	VAL	2.4
1	B	0	HIS	2.3
1	C	252	ALA	2.3
1	A	40	GLU	2.3
1	C	250	ASN	2.3
1	C	253	PHE	2.3
1	D	249	GLN	2.3
1	D	252	ALA	2.2
1	B	256	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
1	C	227	ARG	2.2
1	D	227	ARG	2.2
1	A	16	GLY	2.2
1	B	322	ILE	2.2
1	D	203	ILE	2.2
1	B	227	ARG	2.2
1	C	228	ASN	2.2
1	C	324	LYS	2.2
1	D	223	ALA	2.2
1	A	17	MET	2.2
1	D	30	HIS	2.2
1	B	224	ASP	2.2
1	A	227	ARG	2.2
1	A	57	LEU	2.2
1	B	257	LEU	2.2
1	C	316	GLU	2.2
1	A	193	PRO	2.2
1	B	189	ARG	2.2
1	B	317	LEU	2.1
1	C	47	PRO	2.1
1	D	197	HIS	2.1
1	D	190	LEU	2.1
1	A	120	PRO	2.1
1	D	256	GLU	2.1
1	A	234	VAL	2.1
1	A	224	ASP	2.1
1	B	120	PRO	2.1
1	D	248	PRO	2.1
1	A	256	GLU	2.1
1	D	192	THR	2.1
1	A	279	ASN	2.1
1	C	57	LEU	2.0
1	C	34	GLN	2.0
1	C	40	GLU	2.0
1	D	253	PHE	2.0
1	B	192	THR	2.0
1	B	197	HIS	2.0
1	C	256	GLU	2.0
1	B	28	SER	2.0
1	D	180	LEU	2.0
1	C	279	ASN	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)

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, 95^{th} 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
3	ASP	D	7007[A]	9/9	0.62	0.18	6,12,13,13	9
4	ASN	A	7002[B]	9/9	0.62	0.20	14,16,17,17	9
4	ASN	C	7006[B]	9/9	0.65	0.19	15,17,17,18	9
3	ASP	B	7003[A]	9/9	0.67	0.19	8,14,15,15	9
3	ASP	A	7001[A]	8/9	0.69	0.18	9,17,17,18	8
4	ASN	B	7004[B]	9/9	0.75	0.16	15,18,18,18	9
3	ASP	C	7005[A]	9/9	0.77	0.15	3,9,12,12	9
5	EDO	D	9011	4/4	0.77	0.15	26,28,29,30	0
5	EDO	D	9007	4/4	0.79	0.16	27,27,27,28	0
5	EDO	B	9008	4/4	0.79	0.16	29,33,33,35	0
4	ASN	D	7008[B]	9/9	0.80	0.14	10,12,12,12	9
5	EDO	D	9012	4/4	0.86	0.10	14,14,16,16	0
5	EDO	A	9005	4/4	0.88	0.10	11,15,15,18	0
5	EDO	C	9010	4/4	0.89	0.10	12,13,14,17	0
5	EDO	D	9006	4/4	0.91	0.10	15,16,17,19	0
4	ASN	A	8001	9/9	0.91	0.08	5,8,10,10	0
5	EDO	B	9009	4/4	0.92	0.07	10,11,12,16	0
5	EDO	B	9004	4/4	0.92	0.10	15,15,18,19	0
4	ASN	C	8003	9/9	0.93	0.08	8,10,12,13	0
4	ASN	D	8004	9/9	0.94	0.08	7,9,12,12	0
5	EDO	D	9003	4/4	0.94	0.11	14,15,16,17	0
5	EDO	A	9002	4/4	0.94	0.06	7,9,12,13	0
5	EDO	C	9001	4/4	0.95	0.06	7,11,12,13	0
4	ASN	B	8002	9/9	0.96	0.06	8,10,12,12	0
2	CL	A	1001	1/1	0.97	0.03	13,13,13,13	0
2	CL	B	1004	1/1	0.98	0.03	13,13,13,13	0
2	CL	B	1003	1/1	0.99	0.03	13,13,13,13	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	CL	A	1002	1/1	0.99	0.03	15,15,15,15	0

6.5 Other polymers (i)

There are no such residues in this entry.