

Full wwPDB X-ray Structure Validation Report (i)

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PDB ID	:	7DAN
Title	:	Structure of the Ca2+-bound wild-type peptidylarginine deiminase type III
		(PAD3)
Authors	:	Sawata, M.; Unno, M.
Deposited on	:	2020-10-16
Resolution	:	3.10 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 (i) 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 (1)) 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	:	2.36
buster-report	:	1.1.7(2018)
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)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure: $X\text{-}RAY \, DIFFRACTION$

The reported resolution of this entry is 3.10 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	$egin{array}{c} { m Whole \ archive} \ (\#{ m Entries}) \end{array}$	${f Similar\ resolution}\ (\#{ m Entries,\ resolution\ range}({ m \AA}))$	
R_{free}	130704	1094 (3.10-3.10)	
Clashscore	141614	1184 (3.10-3.10)	
Ramachandran outliers	138981	1141 (3.10-3.10)	
Sidechain outliers	138945	1141 (3.10-3.10)	
RSRZ outliers	127900	1067 (3.10-3.10)	

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	А	664	6%	19%	•••
1	В	664	4% 71%	24%	•••
1	С	664	4% 72%	23%	•••

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	А	907	-	-	-	Х
3	CL	В	907	-	-	-	Х
5	GOL	В	912	-	-	-	Х
5	GOL	С	910	-	-	-	Х



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2 Entry composition (i)

There are 6 unique types of molecules in this entry. The entry contains 14885 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.

Mol	Chain	Residues		At	oms			ZeroOcc	AltConf	Trace
1	C	636	Total	С	Ν	0	\mathbf{S}	0	0	0
		050	4923	3145	830	912	36	0		
1	1 B	635	Total	С	Ν	0	S	0	0	0
			4913	3137	835	906	35			
1	Δ	635	Total	С	Ν	0	S	0	0	0
1 A	055	4904	3134	827	907	36	0		0	

• Molecule 1 is a protein called Protein-arginine deiminase type-3.

• Molecule 2 is CALCIUM ION (three-letter code: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	С	5	Total Ca 5 5	0	0
2	В	5	Total Ca 5 5	0	0
2	А	5	Total Ca 5 5	0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	С	2	Total Cl 2 2	0	0
3	В	4	Total Cl 4 4	0	0
3	А	5	Total Cl 5 5	0	0

• Molecule 4 is 1,2-ETHANEDIOL (three-letter code: EDO) (formula: $C_2H_6O_2$).





Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	С	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
4	С	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
4	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
4	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
4	А	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
4	А	1	$\begin{array}{c cc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0

• Molecule 5 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).





Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	С	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 6 & 3 & 3 \end{array}$	0	0
5	С	1	Total C O 6 3 3	0	0
5	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 6 & 3 & 3 \end{array}$	0	0
5	В	1	$\begin{array}{ccc} \text{Total} \text{C} \text{O} \\ 6 3 3 \end{array}$	0	0
5	А	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 6 & 3 & 3 \end{array}$	0	0
5	А	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 6 & 3 & 3 \end{array}$	0	0

• Molecule 6 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	С	20	TotalO2020	0	0
6	В	19	Total O 19 19	0	0
6	А	20	TotalO2020	0	0



Chain B:

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.



24%

71%

• Molecule 1: Protein-arginine deiminase type-3

R389 R389 R389 R397 R389 R397 R397 R397 R397 R397 R397 R397 R401 L404 R401 L404 R401 L404 R427 L428 R441 L428 R441 L428 R441 L428 R441 L428 R442 L434 R445 L443 R445 L443 R445 L443 R445 L443 R446 L445 R446 L445 R445 L445 R446 L445 R446 L445 R446 L445 R48 L445 R48 L445 R487 L448 R487 L448 R487 L448 R487 L448 R487 L448 L448

• Molecule 1: Protein-arginine deiminase type-3





4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants	200.65Å 115.84Å 128.58Å	Deperitor
a, b, c, α , β , γ	90.00° 121.34° 90.00°	Depositor
$\mathbf{B}_{\mathrm{ascolution}}\left(\overset{\mathrm{A}}{\mathbf{\lambda}}\right)$	29.53 - 3.10	Depositor
Resolution (A)	47.99 - 3.10	EDS
% Data completeness	99.0 (29.53-3.10)	Depositor
(in resolution range)	99.4(47.99-3.10)	EDS
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) > 1$	$2.52 (at 3.12 \text{\AA})$	Xtriage
Refinement program	PHENIX 1.14_3260	Depositor
D D	0.237 , 0.308	Depositor
$\mathbf{n}, \mathbf{n}_{free}$	0.239 , 0.309	DCC
R_{free} test set	2294 reflections $(5.04%)$	wwPDB-VP
Wilson B-factor $(Å^2)$	102.2	Xtriage
Anisotropy	0.587	Xtriage
Bulk solvent $k_{sol}(e/A^3), B_{sol}(A^2)$	0.33 , 87.7	EDS
L-test for twinning ²	$< L >=0.51, < L^2>=0.34$	Xtriage
	0.468 for 1/2*h-3/2*k,-1/2*h-1/2*k,-1/2*h	
Estimated twinning fraction	$+1/2^{*}k$ -l	Xtriage
	$0.468 \text{ for } 1/2^{h+3/2^{k},1/2^{h-1/2^{k},-1/2^{h-1}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}$	11011080
	1/2*k-1	EDC
$\mathbf{F}_{o}, \mathbf{F}_{c}$ correlation	0.94	EDS
Total number of atoms	14885	wwPDB-VP
Average B, all atoms $(Å^2)$	131.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 3.67% of the height of the origin peak. No significant pseudotranslation is detected.

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.



¹Intensities estimated from amplitudes.

5 Model quality (i)

5.1 Standard geometry (i)

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

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).

Mal	Chain	Bond lengths		Bond angles	
	Unam	RMSZ	# Z > 5	RMSZ	# Z > 5
1	А	0.26	0/5027	0.51	0/6848
1	В	0.26	0/5035	0.51	0/6854
1	С	0.26	0/5048	0.51	0/6877
All	All	0.26	0/15110	0.51	0/20579

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 (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	А	4904	0	4712	88	0
1	В	4913	0	4734	105	0
1	С	4923	0	4727	102	0
2	А	5	0	0	0	0
2	В	5	0	0	0	0
2	С	5	0	0	0	0
3	А	5	0	0	0	0
3	В	4	0	0	0	0
3	С	2	0	0	0	0
4	A	8	0	12	0	0



Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	В	8	0	12	0	0
4	С	8	0	12	0	0
5	А	12	0	16	0	0
5	В	12	0	16	0	0
5	С	12	0	16	3	0
6	А	20	0	0	0	0
6	В	19	0	0	0	0
6	С	20	0	0	0	0
All	All	14885	0	14257	292	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 10.

All (292) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom 1	Atom 2	Interatomic	Clash
Atom-1	Atom-2	distance (Å)	overlap (Å)
1:B:577:ARG:HG2	1:B:579:LYS:H	1.26	0.99
1:B:401:VAL:HG23	1:B:443:THR:HG23	1.65	0.79
1:C:577:ARG:HG2	1:C:579:LYS:H	1.50	0.76
1:C:313:VAL:HG12	1:C:316:ASN:HB2	1.70	0.72
1:B:218:GLY:H	1:B:225:ALA:HB1	1.54	0.71
1:C:215:HIS:CE1	1:C:247:GLU:HB3	2.26	0.71
1:B:396:PRO:HG3	1:B:443:THR:HG21	1.74	0.70
1:A:152:VAL:O	1:A:166:ASN:ND2	2.24	0.70
1:A:52:ILE:HD11	1:A:74:LEU:HD13	1.75	0.68
1:A:216:ILE:HD11	1:A:219:PRO:HA	1.75	0.66
1:B:52:ILE:HD11	1:B:74:LEU:HD13	1.78	0.66
1:A:308:VAL:HG21	1:A:593:LEU:HD21	1.79	0.65
1:B:215:HIS:CE1	1:B:247:GLU:HB3	2.32	0.64
1:B:152:VAL:O	1:B:166:ASN:ND2	2.25	0.63
1:A:215:HIS:CE1	1:A:247:GLU:HB3	2.34	0.62
1:C:27:VAL:HB	1:C:76:ILE:HG13	1.81	0.62
1:B:380:PRO:O	1:B:384:ILE:HG22	1.99	0.62
1:B:512:LEU:HB3	1:B:525:THR:HG22	1.81	0.62
1:C:216:ILE:HD11	1:C:219:PRO:HA	1.81	0.61
1:C:512:LEU:HB3	1:C:525:THR:HG22	1.82	0.60
1:A:482:ASP:OD2	1:A:487:ARG:NH2	2.34	0.60
1:A:27:VAL:HB	1:A:76:ILE:HG13	1.83	0.60
1:B:591:LEU:HG	1:B:593:LEU:HD13	1.83	0.60
1:B:635:THR:OG1	1:B:636:PRO:HD3	2.03	0.59
1:A:487:ARG:HG2	1:A:567:ILE:HD13	1.85	0.59



		Interatomic	Clash
Atom-1	Atom-2	distance (Å)	overlap (Å)
1:B:492:SER:OG	1:B:545:GLN:OE1	2.20	0.59
1:C:492:SER:OG	1:C:545:GLN:OE1	2.21	0.57
1:C:35:GLU:N	1:C:35:GLU:OE1	2.36	0.57
1:C:635:THR:OG1	1:C:636:PRO:HD3	2.04	0.57
1:A:635:THR:OG1	1:A:636:PRO:HD3	2.04	0.57
1:C:52:ILE:HD11	1:C:74:LEU:HD13	1.86	0.57
1:A:347:TRP:HB2	1:A:372:ARG:NH2	2.20	0.57
1:C:151:LEU:HD21	1:C:359:ALA:HB2	1.85	0.57
1:B:283:PRO:HG3	1:A:435:PRO:HG3	1.87	0.57
1:A:512:LEU:HB3	1:A:525:THR:HG22	1.86	0.57
1:A:577:ARG:HG2	1:A:579:LYS:H	1.70	0.57
1:B:27:VAL:HB	1:B:76:ILE:HG13	1.87	0.56
1:A:116:ASP:HB3	1:A:188:GLN:HB2	1.88	0.56
1:C:407:PHE:HA	1:C:410:LEU:HB3	1.87	0.56
1:B:601:LYS:HA	1:B:630:PHE:HB3	1.88	0.56
1:B:222:VAL:HG13	1:B:225:ALA:HB2	1.87	0.56
1:C:480:ALA:HB1	1:C:624:LEU:HD22	1.86	0.56
1:B:603:PHE:HD2	1:B:634:PHE:HD2	1.52	0.56
1:C:601:LYS:HA	1:C:630:PHE:HB3	1.89	0.55
1:B:487:ARG:HG2	1:B:567:ILE:HD13	1.89	0.55
1:C:409:ASN:HA	1:C:471:VAL:H	1.71	0.55
1:A:266:SER:HB3	1:A:268:HIS:HE1	1.72	0.55
1:A:385:LEU:HA	1:A:389:PHE:HB3	1.89	0.55
1:B:163:VAL:HG12	1:B:164:GLN:H	1.71	0.55
1:A:603:PHE:HD2	1:A:634:PHE:HD2	1.55	0.54
1:A:589:ASN:OD1	1:A:643:GLU:HB2	2.07	0.54
1:B:121:CYS:SG	1:B:122:ASP:N	2.80	0.54
1:B:358:GLN:HB3	1:B:659:TRP:CD1	2.43	0.54
1:B:602:PRO:O	1:B:604:GLY:N	2.35	0.54
1:B:401:VAL:CG2	1:B:443:THR:HG23	2.34	0.54
1:C:308:VAL:HG21	1:C:593:LEU:HD21	1.89	0.54
1:C:432:GLY:HA3	1:C:441:ARG:HD2	1.89	0.54
1:A:480:ALA:HB1	1:A:624:LEU:HD22	1.89	0.53
1:B:151:LEU:HD21	1:B:359:ALA:HB2	1.90	0.53
1:B:298:MET:HB3	1:B:412:VAL:HG11	1.91	0.53
1:B:409:ASN:HA	1:B:471:VAL:H	1.74	0.53
1:C:603:PHE:HD2	1:C:634:PHE:HD2	1.56	0.53
1:A:602:PRO:O	1:A:604:GLY:N	2.35	0.53
1:B:385:LEU:HA	1:B:389:PHE:HB3	1.90	0.53
1:C:8:ARG:NH2	5:C:910:GOL:O1	2.41	0.53
1:A:577:ARG:HD2	1:A:577:ARG:N	2.24	0.53



		Interatomic	Clash	
Atom-1	Atom-2	distance (Å)	overlap (Å)	
1:B:216:ILE:HD11	1:B:219:PRO:HA	1.91	0.52	
1:C:213:VAL:HB	1:C:230:LEU:HB2	1.92	0.52	
1:C:316:ASN:OD1	1:C:319:PHE:HB3	2.10	0.52	
1:C:455:VAL:HG13	1:C:456:GLN:HG3	1.91	0.52	
1:C:487:ARG:HG2	1:C:567:ILE:HD13	1.90	0.52	
1:C:602:PRO:O	1:C:604:GLY:N	2.37	0.52	
1:C:62:ARG:HD2	1:A:66:ARG:NH2	2.24	0.52	
1:C:589:ASN:OD1	1:C:643:GLU:HB2	2.09	0.52	
1:C:603:PHE:HD2	1:C:634:PHE:CD2	2.28	0.52	
1:B:589:ASN:OD1	1:B:643:GLU:HB2	2.10	0.52	
1:A:587:LEU:HD21	1:A:602:PRO:HB3	1.92	0.52	
1:C:346:ARG:N	1:C:375:GLU:OE2	2.42	0.51	
1:B:574:LYS:HG3	1:B:583:PHE:HA	1.91	0.51	
1:B:603:PHE:HD2	1:B:634:PHE:CD2	2.28	0.51	
1:A:312:ARG:N	1:A:337:CYS:O	2.43	0.51	
1:B:139:TRP:CD1	1:B:147:GLY:HA3	2.45	0.51	
1:B:347:TRP:CZ3	1:B:642:GLY:HA3	2.45	0.51	
1:A:298:MET:HB3	1:A:412:VAL:HG11	1.93	0.51	
1:B:271:LEU:HD23	1:B:284:ILE:HD11	1.92	0.51	
1:B:493:PRO:HB3	1:B:541:ASN:HB3	1.91	0.51	
1:A:151:LEU:HD21	1:A:359:ALA:HB2	1.92	0.51	
1:C:347:TRP:CZ3	1:C:642:GLY:HA3	2.45	0.51	
1:B:213:VAL:HB	1:B:230:LEU:HB2	1.92	0.51	
1:C:266:SER:HB3	1:C:268:HIS:HE1	1.76	0.51	
1:A:215:HIS:HE1	1:A:247:GLU:HB3	1.76	0.51	
1:A:455:VAL:HG13	1:A:456:GLN:HG3	1.91	0.50	
1:A:601:LYS:HA	1:A:630:PHE:HB3	1.93	0.50	
1:A:586:ASP:HB3	1:A:643:GLU:HG3	1.92	0.50	
1:C:434:LEU:HB3	1:C:435:PRO:HD3	1.94	0.50	
1:C:590:MET:HA	1:C:644:VAL:HG13	1.94	0.50	
1:C:590:MET:HB2	1:C:598:GLY:O	2.11	0.50	
1:A:575:THR:OG1	1:A:577:ARG:O	2.29	0.50	
1:C:591:LEU:HG	1:C:593:LEU:HD13	1.93	0.50	
1:B:222:VAL:HG13	1:B:225:ALA:CB	2.41	0.50	
1:A:347:TRP:CZ3	1:A:642:GLY:HA3	2.47	0.50	
1:C:271:LEU:HD23	1:C:284:ILE:HD11	1.95	0.49	
1:C:622:GLU:N	1:C:623:PRO:HD2	2.27	0.49	
1:B:308:VAL:HG21	1:B:593:LEU:HD21	1.94	0.49	
1:B:597:LEU:O	1:B:597:LEU:HD12	2.12	0.49	
1:B:273:ASP:O	1:B:281:ALA:HA	2.12	0.49	
1:A:409:ASN:HA	1:A:471:VAL:H	1.77	0.49	



		Interatomic	Clash
Atom-1	Atom-2	distance (Å)	overlap (Å)
1:C:71:ASP:HB3	1:C:74:LEU:HG	1.94	0.49
1:C:587:LEU:HD21	1:C:602:PRO:HB3	1.95	0.49
1:C:597:LEU:HD12	1:C:597:LEU:O	2.13	0.49
1:A:590:MET:HB2	1:A:598:GLY:O	2.12	0.49
1:C:349:GLN:HA	1:C:649:ASN:ND2	2.27	0.49
1:B:597:LEU:HD21	1:B:621:LEU:HD23	1.93	0.49
1:C:121:CYS:SG	1:C:122:ASP:N	2.85	0.49
1:C:298:MET:HB3	1:C:412:VAL:HG11	1.93	0.49
1:C:370:SER:OG	1:C:406:SER:HB3	2.13	0.49
1:B:429:LEU:HD13	1:B:475:LEU:HD21	1.95	0.49
1:A:380:PRO:O	1:A:384:ILE:HG22	2.12	0.49
1:A:427:ARG:HH21	1:A:457:PRO:HB2	1.77	0.49
1:A:603:PHE:HD2	1:A:634:PHE:CD2	2.30	0.49
1:B:482:ASP:OD2	1:B:487:ARG:NH2	2.45	0.49
1:B:622:GLU:N	1:B:623:PRO:HD2	2.27	0.48
1:B:207:ASP:HB3	1:B:265:ILE:HG23	1.96	0.48
1:B:58:ARG:HD3	1:B:58:ARG:HA	1.46	0.48
1:B:310:VAL:O	1:B:336:ILE:HA	2.14	0.48
1:C:423:TYR:HE2	1:C:457:PRO:HG2	1.78	0.48
1:A:622:GLU:N	1:A:623:PRO:HD2	2.28	0.48
1:B:158:ASP:OD1	1:B:158:ASP:N	2.45	0.48
1:A:334:LEU:HG	1:A:336:ILE:HD11	1.96	0.48
1:C:239:VAL:CG1	1:C:247:GLU:HG3	2.44	0.48
1:A:493:PRO:HB3	1:A:541:ASN:HB3	1.96	0.48
1:C:597:LEU:HD13	1:C:599:ILE:HD11	1.95	0.48
1:A:213:VAL:HB	1:A:230:LEU:HB2	1.96	0.48
1:C:385:LEU:HA	1:C:389:PHE:HB3	1.95	0.47
1:B:311:CYS:SG	1:B:376:LEU:HD21	2.54	0.47
1:B:427:ARG:HH21	1:B:457:PRO:HB2	1.79	0.47
1:B:590:MET:HA	1:B:644:VAL:HG13	1.96	0.47
1:C:380:PRO:O	1:C:384:ILE:HG22	2.13	0.47
1:C:215:HIS:HE1	1:C:247:GLU:HB3	1.76	0.47
1:C:429:LEU:HD13	1:C:475:LEU:HD21	1.97	0.47
1:A:115:VAL:HG22	1:A:117:ILE:HG13	1.96	0.47
1:A:591:LEU:HG	1:A:593:LEU:HD13	1.95	0.47
1:A:597:LEU:HD13	1:A:599:ILE:HD11	1.96	0.47
1:C:586:ASP:HB3	1:C:643:GLU:HG3	1.97	0.47
1:B:239:VAL:CG1	1:B:247:GLU:HG3	2.45	0.47
1:B:322:ALA:O	1:B:326:LEU:HB2	2.15	0.47
1:B:587:LEU:HD21	1:B:602:PRO:HB3	1.97	0.47
1:B:58:ARG:NH2	1:B:75:GLU:OE1	2.46	0.47



	louo pugom	Interatomic	Clash
Atom-1	Atom-2	distance (Å)	overlap (Å)
1:B:597:LEU:HD13	1:B:599:ILE:HD11	1.96	0.47
1:A:349:GLN:HA	1:A:649:ASN:ND2	2.29	0.47
1:C:58:ARG:HA	1:C:58:ARG:HD3	1.44	0.47
1:B:659:TRP:O	1:B:662:MET:HB2	2.15	0.47
1:A:417:VAL:HG22	1:A:422:GLU:HG3	1.96	0.47
1:C:115:VAL:HG22	1:C:117:ILE:HG13	1.96	0.46
1:B:215:HIS:HE1	1:B:247:GLU:HB3	1.79	0.46
1:C:574:LYS:HG3	1:C:583:PHE:HA	1.97	0.46
1:B:434:LEU:HG	1:B:462:PHE:CD1	2.50	0.46
1:A:199:LEU:HD23	1:A:239:VAL:HB	1.97	0.46
1:C:537:LEU:O	1:C:541:ASN:ND2	2.43	0.46
1:B:115:VAL:HG22	1:B:117:ILE:HG13	1.95	0.46
1:A:423:TYR:HE2	1:A:457:PRO:HG2	1.80	0.46
1:C:588:VAL:O	1:C:590:MET:N	2.44	0.46
1:A:358:GLN:HB3	1:A:659:TRP:CD1	2.51	0.46
1:B:586:ASP:HB3	1:B:643:GLU:HG3	1.97	0.46
1:C:185:LEU:O	1:C:246:GLU:HA	2.16	0.46
1:B:423:TYR:HE2	1:B:457:PRO:HG2	1.80	0.46
1:A:6:ILE:HG12	1:A:26:LEU:HB2	1.98	0.46
1:C:493:PRO:HB3	1:C:541:ASN:HB3	1.97	0.46
1:B:455:VAL:HG13	1:B:456:GLN:HG3	1.96	0.46
1:A:358:GLN:HA	1:A:363:THR:HB	1.98	0.46
1:A:369:ASP:OD1	1:A:380:PRO:HG2	2.16	0.45
1:A:590:MET:HA	1:A:644:VAL:HG13	1.97	0.45
1:C:187:THR:HG21	1:C:199:LEU:HD21	1.99	0.45
1:C:394:ARG:NH2	5:C:911:GOL:H32	2.31	0.45
1:C:461:LEU:HB3	1:C:551:ASN:OD1	2.17	0.45
1:C:301:SER:HB2	1:C:592:VAL:HB	1.97	0.45
1:C:597:LEU:HD21	1:C:621:LEU:HD23	1.98	0.45
1:B:116:ASP:HB3	1:B:188:GLN:HB2	1.98	0.45
1:C:427:ARG:HH21	1:C:457:PRO:HB2	1.82	0.45
1:B:118:SER:HB3	1:B:186:ARG:HG2	1.99	0.45
1:C:58:ARG:NH2	1:C:75:GLU:OE1	2.45	0.45
1:C:624:LEU:HB2	1:C:626:LEU:HD12	1.98	0.45
1:A:140:VAL:HG23	1:A:145:GLY:HA2	1.98	0.45
1:A:310:VAL:O	1:A:336:ILE:HA	2.17	0.45
1:A:604:GLY:HA3	1:A:613:LEU:HD12	1.98	0.45
1:C:7:VAL:HG11	1:C:17:ALA:HB2	1.98	0.45
1:C:575:THR:OG1	1:C:577:ARG:O	2.35	0.45
1:A:273:ASP:O	1:A:281:ALA:HA	2.17	0.45
1:B:171:VAL:O	1:B:223:CYS:HB3	2.17	0.44



	lo uo pugom	Interatomic	Clash
Atom-1	Atom-2	distance (Å)	overlap (Å)
1:A:372:ARG:HD3	1:A:406:SER:HB3	1.98	0.44
1:A:624:LEU:HB2	1:A:626:LEU:HD12	1.99	0.44
1:A:266:SER:HB3	1:A:268:HIS:CE1	2.50	0.44
1:A:597:LEU:HD21	1:A:621:LEU:HD23	1.98	0.44
1:C:255:SER:HA	5:C:911:GOL:H31	1.99	0.44
1:A:574:LYS:HG3	1:A:583:PHE:HA	1.99	0.44
1:B:590:MET:HB2	1:B:598:GLY:O	2.18	0.44
1:A:58:ARG:HA	1:A:58:ARG:HD3	1.33	0.44
1:A:301:SER:HA	1:A:652:ARG:CZ	2.47	0.44
1:A:588:VAL:O	1:A:590:MET:N	2.44	0.44
1:B:87:LEU:HD12	1:B:190:PRO:HB2	2.00	0.44
1:C:100:HIS:HB3	1:C:101:GLU:OE1	2.18	0.44
1:C:210:ARG:HD2	1:C:255:SER:OG	2.18	0.44
1:B:588:VAL:O	1:B:590:MET:N	2.45	0.44
1:A:301:SER:HA	1:A:652:ARG:NE	2.33	0.44
1:B:494:GLY:HA3	1:B:545:GLN:HE22	1.82	0.44
1:A:406:SER:O	1:A:409:ASN:N	2.45	0.44
1:B:313:VAL:HG22	1:B:314:ARG:H	1.83	0.44
1:A:156:ARG:HH11	1:A:162:ASP:HA	1.82	0.44
1:C:313:VAL:HG13	1:C:315:ASN:H	1.82	0.44
1:A:187:THR:HG21	1:A:199:LEU:HD21	1.99	0.43
1:A:577:ARG:HD2	1:A:577:ARG:H	1.83	0.43
1:B:590:MET:SD	1:B:597:LEU:HD22	2.59	0.43
1:C:26:LEU:HD23	1:C:77:ILE:HG13	2.00	0.43
1:C:139:TRP:CD1	1:C:147:GLY:HA3	2.54	0.43
1:C:373:ASN:HB3	1:C:377:GLN:HB3	2.00	0.43
1:B:7:VAL:HG11	1:B:17:ALA:HB2	2.00	0.43
1:A:7:VAL:HG11	1:A:17:ALA:HB2	2.01	0.43
1:C:298:MET:HE3	1:C:298:MET:HB2	1.90	0.43
1:C:600:PRO:HG3	1:C:644:VAL:HG12	2.01	0.43
1:A:206:TYR:OH	1:A:260:GLY:O	2.33	0.43
1:C:24:GLU:HA	1:C:79:VAL:HG22	2.00	0.42
1:B:268:HIS:ND1	1:B:288:THR:HG22	2.34	0.42
1:A:385:LEU:HD23	1:A:385:LEU:H	1.84	0.42
1:A:600:PRO:CG	1:A:643:GLU:HB3	2.50	0.42
1:C:313:VAL:HG22	1:C:314:ARG:H	1.83	0.42
1:B:465:TRP:CZ3	1:B:544:VAL:HG13	2.54	0.42
1:C:62:ARG:HD2	1:A:66:ARG:HH21	1.84	0.42
1:C:203:THR:HB	1:C:267:PHE:HD1	1.84	0.42
1:C:358:GLN:HB3	1:C:659:TRP:CD1	2.54	0.42
1:A:212:GLN:O	1:A:251:VAL:HA	2.20	0.42



		Interatomic	Clash
Atom-1	Atom-2	distance (Å)	overlap (Å)
1:B:301:SER:HA	1:B:652:ARG:NE	2.34	0.42
1:B:461:LEU:HB3	1:B:551:ASN:OD1	2.20	0.42
1:C:119:LEU:HD11	1:C:183:MET:HG2	2.02	0.42
1:C:369:ASP:OD1	1:C:380:PRO:HG2	2.20	0.42
1:B:512:LEU:HB3	1:B:525:THR:CG2	2.49	0.42
1:A:232:GLN:OE1	1:A:232:GLN:N	2.45	0.42
1:C:185:LEU:HD21	1:C:199:LEU:HD21	2.01	0.42
1:C:228:HIS:CE1	1:C:234:LYS:HD2	2.55	0.42
1:C:611:CYS:SG	1:C:613:LEU:HB2	2.60	0.42
1:A:585:PRO:HA	1:A:638:HIS:CD2	2.55	0.42
1:B:210:ARG:HD2	1:B:255:SER:OG	2.20	0.41
1:B:358:GLN:HB3	1:B:659:TRP:HD1	1.83	0.41
1:B:87:LEU:CD1	1:B:192:ALA:HB3	2.50	0.41
1:B:384:ILE:HD12	1:B:384:ILE:HA	1.88	0.41
1:B:570:PRO:O	1:B:587:LEU:HD12	2.20	0.41
1:B:604:GLY:HA3	1:B:613:LEU:HD12	2.01	0.41
1:B:611:CYS:SG	1:B:613:LEU:HB2	2.60	0.41
1:C:337:CYS:HB2	1:C:379:PHE:CE1	2.56	0.41
1:C:514:PHE:C	1:C:525:THR:HG23	2.41	0.41
1:B:509:GLY:HA2	1:B:528:ILE:HB	2.02	0.41
1:C:21:ALA:HA	1:C:80:MET:O	2.20	0.41
1:B:100:HIS:HB3	1:B:101:GLU:OE1	2.19	0.41
1:B:185:LEU:HD21	1:B:199:LEU:HD21	2.02	0.41
1:C:116:ASP:HB3	1:C:188:GLN:HB2	2.01	0.41
1:C:196:ASP:OD1	1:C:275:SER:OG	2.32	0.41
1:C:239:VAL:HG12	1:C:247:GLU:HG3	2.02	0.41
1:B:537:LEU:O	1:B:541:ASN:ND2	2.46	0.41
1:B:574:LYS:N	1:B:581:THR:O	2.53	0.41
1:A:215:HIS:HB2	1:A:229:VAL:HG11	2.02	0.41
1:B:26:LEU:HD23	1:B:77:ILE:HG13	2.01	0.41
1:A:218:GLY:HA2	1:A:219:PRO:HD3	1.78	0.41
1:A:185:LEU:HD21	1:A:199:LEU:HD21	2.03	0.41
1:C:385:LEU:HD23	1:C:385:LEU:H	1.86	0.41
1:C:480:ALA:HB2	1:C:624:LEU:HD13	2.02	0.41
1:B:6:ILE:HG12	1:B:26:LEU:HB2	2.02	0.41
1:A:373:ASN:HB3	1:A:377:GLN:HB3	2.02	0.41
1:C:384:ILE:HD12	1:C:384:ILE:HA	1.90	0.41
1:C:637:TYR:C	1:C:639:MET:H	2.24	0.41
1:B:349:GLN:HA	1:B:649:ASN:ND2	2.35	0.41
1:B:385:LEU:HD23	1:B:385:LEU:H	1.84	0.41
1:A:139:TRP:CD1	1:A:147:GLY:HA3	2.56	0.41



A + am 1	A + ama - D	Interatomic	Clash
Atom-1	Atom-2	distance (\AA)	overlap (Å)
1:C:570:PRO:O	1:C:587:LEU:HD12	2.21	0.41
1:B:203:THR:HB	1:B:267:PHE:HD1	1.85	0.41
1:B:607:ILE:HD12	1:B:608:ASN:N	2.36	0.41
1:C:6:ILE:HG12	1:C:26:LEU:HB2	2.03	0.40
1:B:218:GLY:HA2	1:B:219:PRO:HD3	1.80	0.40
1:B:78:VAL:HG11	1:B:112:LEU:HD11	2.03	0.40
1:B:123:LEU:O	1:B:124:ASN:C	2.60	0.40
1:B:480:ALA:HB1	1:B:624:LEU:HD22	2.02	0.40
1:A:118:SER:HB3	1:A:186:ARG:HG2	2.03	0.40
1:A:600:PRO:HG3	1:A:644:VAL:HG12	2.02	0.40
1:C:154:CYS:HB3	1:C:391:TYR:O	2.21	0.40
1:C:268:HIS:ND1	1:C:288:THR:HG22	2.37	0.40
1:B:346:ARG:N	1:B:375:GLU:OE2	2.54	0.40
1:B:457:PRO:HA	1:B:458:PRO:HD3	1.93	0.40
1:A:26:LEU:HD23	1:A:77:ILE:HG13	2.03	0.40
1:C:218:GLY:HA2	1:C:219:PRO:HD3	1.81	0.40
1:B:423:TYR:HD2	1:B:457:PRO:HD2	1.86	0.40
1:B:538:ILE:HG22	1:B:542:LYS:HE3	2.03	0.40
1:B:597:LEU:HD13	1:B:599:ILE:CG1	2.51	0.40
1:A:119:LEU:HD11	1:A:183:MET:HG2	2.03	0.40
1:A:210:ARG:HD2	1:A:255:SER:OG	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	Perce	entiles
1	А	619/664~(93%)	578~(93%)	41 (7%)	0	100	100
1	В	619/664~(93%)	579 (94%)	40 (6%)	0	100	100
1	С	622/664~(94%)	578~(93%)	44 (7%)	0	100	100
All	All	1860/1992~(93%)	1735 (93%)	125 (7%)	0	100	100

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There are no Ramachandran outliers to report.

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	Percer	ntiles
1	А	537/588~(91%)	528~(98%)	9(2%)	60	83
1	В	538/588~(92%)	527~(98%)	11 (2%)	55	80
1	С	539/588~(92%)	529~(98%)	10 (2%)	57	81
All	All	1614/1764~(92%)	1584 (98%)	30 (2%)	57	81

All (30) residues with a non-rotameric sidechain are listed below:

Mol	Chain	\mathbf{Res}	Type
1	С	69	ARG
1	С	86	ASP
1	С	139	TRP
1	С	314	ARG
1	С	372	ARG
1	С	381	TYR
1	С	389	PHE
1	С	577	ARG
1	С	597	LEU
1	С	634	PHE
1	В	69	ARG
1	В	139	TRP
1	В	172	HIS
1	В	372	ARG
1	В	389	PHE
1	В	397	ARG
1	В	404	LEU
1	В	441	ARG
1	В	577	ARG
1	В	597	LEU
1	В	634	PHE
1	А	69	ARG
1	A	86	ASP



Continued from previous page...

Mol	Chain	Res	Type
1	А	139	TRP
1	А	372	ARG
1	А	389	PHE
1	А	404	LEU
1	А	577	ARG
1	А	597	LEU
1	А	634	PHE

Sometimes side chains can be flipped to improve hydrogen bonding and reduce clashes. All (1) such side chains are listed below:

Mol	Chain	Res	Type
1	А	638	HIS

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 monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 38 ligands modelled in this entry, 26 are monoatomic - leaving 12 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	Chain	Dog	Tink	B	ond leng	gths	B	ond ang	gles
	Mol Type		an nes		Counts	RMSZ	# Z >2	Counts	RMSZ	# Z > 2
4	EDO	С	909	-	3,3,3	0.45	0	2,2,2	0.34	0



Mal	Turne	Chain	Dec	Tink	B	ond leng	$_{ m gths}$	E	Bond ang	gles
IVIOI	туре	Unam	nes		Counts	RMSZ	# Z >2	Counts	RMSZ	# Z >2
5	GOL	В	913	-	$5,\!5,\!5$	0.92	0	$5,\!5,\!5$	0.98	0
4	EDO	А	912	-	3,3,3	0.46	0	2,2,2	0.36	0
4	EDO	С	908	-	3,3,3	0.46	0	2,2,2	0.30	0
5	GOL	В	912	-	$5,\!5,\!5$	0.89	0	$5,\!5,\!5$	0.99	0
4	EDO	А	911	-	3,3,3	0.45	0	2,2,2	0.34	0
5	GOL	А	914	-	$5,\!5,\!5$	0.89	0	$5,\!5,\!5$	0.93	0
5	GOL	С	911	-	$5,\!5,\!5$	0.93	0	$5,\!5,\!5$	0.99	0
4	EDO	В	911	-	3,3,3	0.45	0	2,2,2	0.37	0
5	GOL	С	910	-	$5,\!5,\!5$	0.89	0	$5,\!5,\!5$	1.02	0
5	GOL	А	913	-	5,5,5	0.91	0	$5,\!5,\!5$	1.01	0
4	EDO	В	910	-	3,3,3	0.45	0	2,2,2	0.33	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	EDO	С	909	-	-	0/1/1/1	-
5	GOL	В	913	-	-	2/4/4/4	-
4	EDO	А	912	-	-	0/1/1/1	-
4	EDO	С	908	-	-	0/1/1/1	-
5	GOL	В	912	-	-	4/4/4/4	-
4	EDO	А	911	-	-	0/1/1/1	-
5	GOL	А	914	-	-	2/4/4/4	-
5	GOL	С	911	-	-	0/4/4/4	-
4	EDO	В	911	-	-	0/1/1/1	-
5	GOL	С	910	-	-	0/4/4/4	-
5	GOL	А	913	-	-	2/4/4/4	-
4	EDO	В	910	-	-	0/1/1/1	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (10) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	В	912	GOL	O1-C1-C2-C3
5	В	912	GOL	C1-C2-C3-O3
5	В	912	GOL	O2-C2-C3-O3



		1	1 0	
Mol	Chain	Res	Type	Atoms
5	В	913	GOL	C1-C2-C3-O3
5	А	913	GOL	O1-C1-C2-C3
5	А	914	GOL	O1-C1-C2-C3
5	В	912	GOL	O1-C1-C2-O2
5	В	913	GOL	O2-C2-C3-O3
5	А	913	GOL	O1-C1-C2-O2
5	А	914	GOL	O1-C1-C2-O2

There are no ring outliers.

2 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	С	911	GOL	2	0
5	С	910	GOL	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 (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, 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	А	635/664~(95%)	0.40	40 (6%) 20 8	70, 129, 194, 233	0
1	В	635/664~(95%)	0.31	25 (3%) 39 20	73, 128, 191, 227	0
1	С	636/664~(95%)	0.35	29 (4%) 32 16	70, 128, 196, 271	0
All	All	1906/1992~(95%)	0.36	94 (4%) 29 14	70, 128, 194, 271	0

All (94) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	А	647	GLY	5.9
1	С	628	CYS	5.0
1	А	648	THR	4.9
1	С	517	VAL	4.4
1	С	650	VAL	4.3
1	В	319	PHE	4.2
1	С	334	LEU	4.1
1	С	335	THR	4.0
1	А	171	VAL	3.9
1	А	310	VAL	3.9
1	В	310	VAL	3.8
1	С	309	TYR	3.5
1	С	310	VAL	3.5
1	А	326	LEU	3.5
1	В	309	TYR	3.5
1	А	214	PHE	3.4
1	А	449	PHE	3.4
1	С	381	TYR	3.4
1	С	449	PHE	3.3
1	A	587	LEU	3.3
1	А	188	GLN	3.3
1	С	523	VAL	3.3
1	A	200	VAL	3.2



Mol	Chain	Res	Type	RSRZ	
1	А	628	CYS	3.2	
1	В	650	VAL	3.2	
1	В	449	PHE	3.1	
1	А	272 LEU		3.1	
1	А	650	VAL	3.0	
1	С	403	GLY	2.9	
1	А	309	TYR	2.9	
1	А	319	PHE	2.9	
1	А	488	MET	2.9	
1	А	169	GLN	2.9	
1	С	171	VAL	2.8	
1	А	642	GLY	2.8	
1	А	334	LEU	2.8	
1	С	587	LEU	2.7	
1	А	198	LYS	2.7	
1	В	212	GLN	2.7	
1	А	271	LEU	2.7	
1	А	256	PHE	2.7	
1	С	326	LEU	2.6	
1	В	598	GLY	2.6	
1	В	359	ALA	2.6	
1	С	379	PHE	2.6	
1	А	352	MET	2.6	
1	А	348	ILE	2.6	
1	В	250	PHE	2.6	
1	С	367	VAL	2.6	
1	А	588	VAL	2.5	
1	С	430	ILE	2.5	
1	С	569	ILE	2.5	
1	А	446	VAL	2.5	
1	В	395	GLU	2.4	
1	А	430	ILE	2.4	
1	С	271	LEU	2.4	
1	В	239	VAL	2.4	
1	А	475	LEU	2.4	
1	В	311	CYS	2.4	
1	В	17	ALA	2.4	
1	А	491	ALA	2.4	
1	А	257	PRO	2.3	
1	С	489	LEU	2.3	
1	А	212	GLN	2.3	
1	В	358	GLN	2.3	



IDIN

Mol	Chain	Res Type		RSRZ	
1	С	655	PHE	2.3	
1	С	392	VAL	2.3	
1	А	450	LEU	2.3	
1	А	358	GLN	2.2	
1	А	177	LEU	2.2	
1	С	384	ILE	2.2	
1	В	229	VAL	2.2	
1	В	469	GLY	2.2	
1	С	461	LEU	2.2	
1	В	587	LEU	2.2	
1	В	591	LEU	2.2	
1	С	389	PHE	2.2	
1	С	177	LEU	2.2	
1	В	603	PHE	2.2	
1	В	201	LEU	2.1	
1	А	401	VAL	2.1	
1	С	642	GLY	2.1	
1	В	271	LEU	2.1	
1	В	621	LEU	2.1	
1	С	319	PHE	2.1	
1	В	443	THR	2.1	
1	В	632	ASP	2.1	
1	А	644	VAL	2.1	
1	С	570	PRO	2.1	
1	А	608	ASN	2.1	
1	В	100	HIS	2.0	
1	А	347	TRP	2.0	
1	А	463	VAL	2.0	
1	А	561	LEU	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	$B-factors(A^2)$	Q<0.9
3	CL	В	907	1/1	-0.04	0.57	121,121,121,121	0
3	CL	А	907	1/1	0.07	0.53	144,144,144,144	0
3	CL	С	907	1/1	0.45	0.30	122,122,122,122	0
2	CA	В	904	1/1	0.47	0.12	196,196,196,196	0
4	EDO	А	911	4/4	0.47	0.32	121,130,132,132	0
3	CL	В	906	1/1	0.57	0.29	132,132,132,132	0
3	CL	А	910	1/1	0.59	0.24	118,118,118,118	0
4	EDO	В	910	4/4	0.63	0.38	117,124,125,130	0
3	CL	А	909	1/1	0.63	0.34	129,129,129,129	0
5	GOL	C	910	6/6	0.68	0.68	130,132,138,150	0
5	GOL	В	912	6/6	0.68	0.42	100,121,127,127	0
3	CL	А	906	1/1	0.71	0.24	123,123,123,123	0
3	CL	В	909	1/1	0.75	0.21	113,113,113,113	0
4	EDO	С	909	4/4	0.76	0.24	116,123,129,137	0
5	GOL	С	911	6/6	0.77	0.28	103,127,130,146	0
3	CL	С	906	1/1	0.79	0.17	108,108,108,108	0
5	GOL	В	913	6/6	0.82	0.25	93,101,110,114	0
2	CA	А	904	1/1	0.83	0.10	202,202,202,202	0
3	CL	А	908	1/1	0.85	0.39	108,108,108,108	0
2	CA	С	904	1/1	0.86	0.13	$155,\!155,\!155,\!155$	0
5	GOL	А	914	6/6	0.86	0.36	$96,\!105,\!112,\!124$	0
4	EDO	В	911	4/4	0.88	0.27	101,105,108,121	0
2	CA	А	902	1/1	0.89	0.19	117,117,117,117	0
4	EDO	А	912	4/4	0.90	0.21	101,102,107,115	0
3	CL	В	908	1/1	0.90	0.17	111,111,111,111	0
4	EDO	С	908	4/4	0.91	0.19	$89,\!94,\!96,\!97$	0
5	GOL	A	913	6/6	0.92	0.19	97,112,130,136	0
2	CA	А	903	1/1	0.92	0.22	$133,\!133,\!133,\!133$	0
2	CA	С	905	1/1	0.93	0.20	121,121,121,121	0
2	CA	В	903	1/1	0.94	0.12	132,132,132,132	0
2	CA	С	903	1/1	0.94	0.17	137,137,137,137	0
2	CA	А	905	1/1	0.95	0.14	$125,\!125,\!125,\!125$	0
2	CA	В	905	1/1	0.95	0.21	129,129,129,129	0
2	CA	С	902	1/1	0.96	0.13	$125,\!125,\!125,\!125,\!125$	0
2	CA	В	902	1/1	0.96	0.19	$1\overline{17,117},117,117$	0
2	CA	В	901	1/1	0.97	0.21	102,102,102,102	0
2	CA	C	901	1/1	0.98	0.22	95,95,95,95	0



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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
2	CA	А	901	1/1	0.99	0.18	99,99,99,99	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.



























































6.5 Other polymers (i)

There are no such residues in this entry.

