



# Full wwPDB X-ray Structure Validation Report ⓘ

Jan 20, 2025 – 08:09 PM JST

PDB ID : 9J32  
Title : Crystal structure of aminotransferase-like protein from *Variovorax paradoxus* mutant N174K  
Authors : Ilyasov, I.O.; Minyaev, M.E.; Rakitina, T.V.; Bakunova, A.K.; Matyuta, I.O.; Popov, V.O.; Bezsudnova, E.Y.; Boyko, K.M.  
Deposited on : 2024-08-07  
Resolution : 2.20 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](mailto: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>.

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The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtriage (Phenix) : 1.21  
EDS : 3.0  
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)  
CCP4 : 9.0.004 (Gargrove)  
Density-Fitness : 1.0.11  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.40

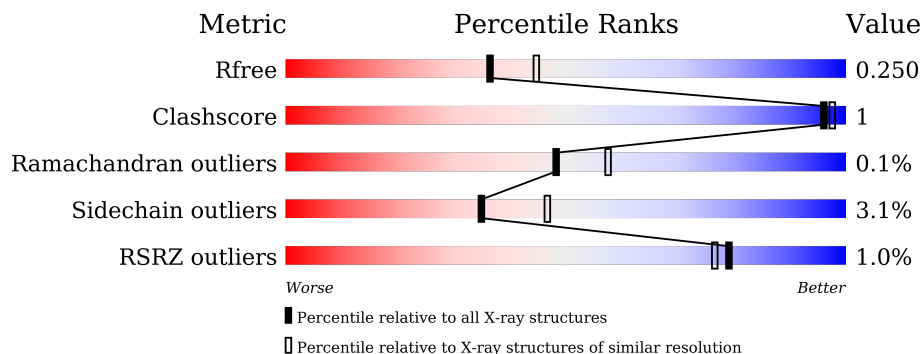
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.20 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	5791 (2.20-2.20)
Clashscore	180529	6634 (2.20-2.20)
Ramachandran outliers	177936	6560 (2.20-2.20)
Sidechain outliers	177891	6561 (2.20-2.20)
RSRZ outliers	164620	5791 (2.20-2.20)

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  $\geq 3$ , 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	317	
1	B	317	
1	C	317	

## 2 Entry composition [i](#)

There are 3 unique types of molecules in this entry. The entry contains 6973 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.

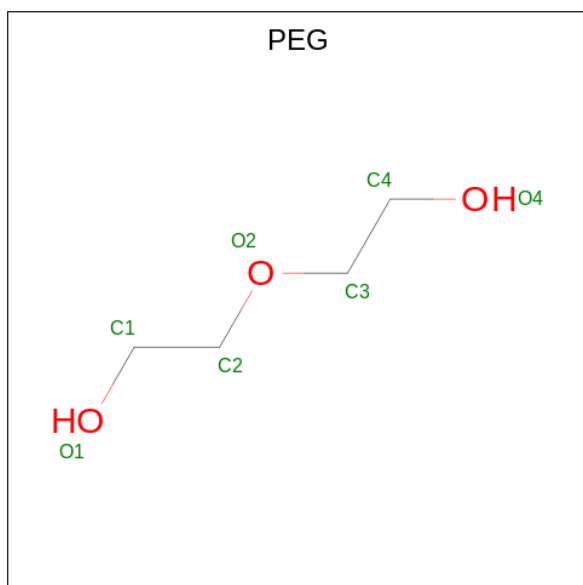
- Molecule 1 is a protein called Aminotransferase, class 4.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
			Total	C	N	O	P	S			
1	A	300	Total 2246	C 1409	N 406	O 420	P 1	S 10	0	0	0
1	B	300	Total 2263	C 1417	N 413	O 422	P 1	S 10	0	2	0
1	C	302	Total 2254	C 1413	N 408	O 422	P 1	S 10	0	0	0

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	174	LLP	ASN	engineered mutation	UNP T1XIY1
B	174	LLP	ASN	engineered mutation	UNP T1XIY1
C	174	LLP	ASN	engineered mutation	UNP T1XIY1

- Molecule 2 is DI(HYDROXYETHYL)ETHER (three-letter code: PEG) (formula: C<sub>4</sub>H<sub>10</sub>O<sub>3</sub>).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
2	C	1	Total	C	O	0	0
			7	4	3		


- Molecule 3 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	83	Total	O	0	0
			83	83		
3	B	64	Total	O	0	0
			64	64		
3	C	56	Total	O	0	0
			56	56		

### 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.

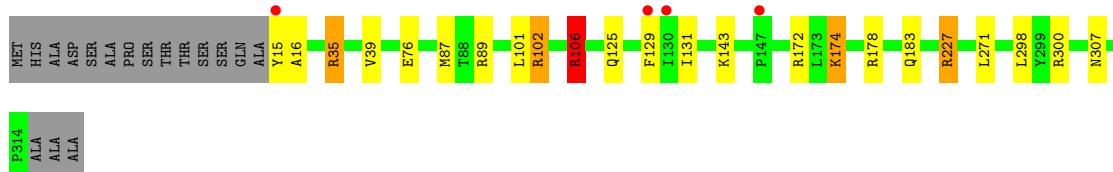
- Molecule 1: Aminotransferase, class 4

Chain A: 




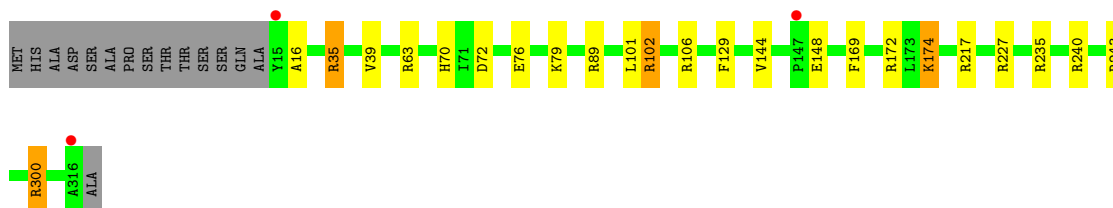
- Molecule 1: Aminotransferase, class 4

Chain B: 



- Molecule 1: Aminotransferase, class 4

Chain C: 



## 4 Data and refinement statistics

Property	Value	Source
Space group	I 1 2 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	94.25Å 87.34Å 104.66Å 90.00° 99.45° 90.00°	Depositor
Resolution (Å)	21.81 – 2.20 21.81 – 2.20	Depositor EDS
% Data completeness (in resolution range)	98.3 (21.81-2.20) 82.1 (21.81-2.20)	Depositor EDS
$R_{merge}$	0.22	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.96 (at 2.19Å)	Xtrriage
Refinement program	REFMAC 5.8.0430	Depositor
R, $R_{free}$	0.214 , 0.269 0.200 , 0.250	Depositor DCC
$R_{free}$ test set	2062 reflections (4.87%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	26.5	Xtrriage
Anisotropy	0.471	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.31 , 34.9	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.50$ , $\langle L^2 \rangle = 0.33$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.94	EDS
Total number of atoms	6973	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	41.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 8.49% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical 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](#)

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

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	0.63	0/2261	1.12	9/3077 (0.3%)
1	B	0.58	0/2289	1.12	10/3112 (0.3%)
1	C	0.59	0/2269	1.08	7/3089 (0.2%)
All	All	0.60	0/6819	1.11	26/9278 (0.3%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	10
1	B	0	5
1	C	0	9
All	All	0	24

There are no bond length outliers.

All (26) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	235	ARG	NE-CZ-NH1	-7.71	116.44	120.30
1	A	300	ARG	NE-CZ-NH2	-7.26	116.67	120.30
1	B	87	MET	CG-SD-CE	7.01	111.41	100.20
1	C	106	ARG	NE-CZ-NH1	6.86	123.73	120.30
1	A	76	GLU	CB-CA-C	6.81	124.02	110.40
1	B	76	GLU	CB-CA-C	6.66	123.72	110.40
1	A	105	MET	CG-SD-CE	-6.46	89.86	100.20
1	B	106[A]	ARG	NE-CZ-NH2	6.33	123.47	120.30
1	B	106[B]	ARG	NE-CZ-NH2	6.33	123.47	120.30
1	B	106[A]	ARG	NE-CZ-NH1	-6.27	117.17	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	106[B]	ARG	NE-CZ-NH1	-6.27	117.17	120.30
1	A	155	LYS	CB-CG-CD	5.91	126.98	111.60
1	A	121	LYS	N-CA-CB	5.72	120.90	110.60
1	C	76	GLU	CB-CA-C	5.70	121.79	110.40
1	A	129	PHE	CB-CA-C	5.66	121.73	110.40
1	B	227	ARG	NE-CZ-NH2	-5.64	117.48	120.30
1	A	172	ARG	NE-CZ-NH1	5.61	123.11	120.30
1	B	129	PHE	CB-CA-C	5.60	121.60	110.40
1	C	102	ARG	NE-CZ-NH2	-5.58	117.51	120.30
1	C	106	ARG	CD-NE-CZ	5.43	131.20	123.60
1	C	300	ARG	NE-CZ-NH1	5.41	123.00	120.30
1	C	129	PHE	CB-CA-C	5.32	121.03	110.40
1	B	298	LEU	CB-CG-CD2	5.31	120.03	111.00
1	A	73	ARG	NE-CZ-NH1	5.23	122.92	120.30
1	B	102	ARG	NE-CZ-NH1	5.11	122.85	120.30
1	C	102	ARG	NE-CZ-NH1	5.06	122.83	120.30

There are no chirality outliers.

All (24) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	102	ARG	Sidechain
1	A	106	ARG	Sidechain
1	A	217	ARG	Sidechain
1	A	227	ARG	Sidechain
1	A	235	ARG	Sidechain
1	A	294	ARG	Sidechain
1	A	300	ARG	Sidechain
1	A	313	LEU	Peptide
1	A	35	ARG	Sidechain
1	A	63	ARG	Sidechain
1	B	15	TYR	Peptide
1	B	16	ALA	Peptide
1	B	227	ARG	Sidechain
1	B	300	ARG	Sidechain
1	B	35	ARG	Sidechain
1	C	16	ALA	Peptide
1	C	217	ARG	Sidechain
1	C	227	ARG	Sidechain
1	C	235	ARG	Sidechain
1	C	240	ARG	Sidechain
1	C	243	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	C	300	ARG	Sidechain
1	C	35	ARG	Sidechain
1	C	63	ARG	Sidechain

## 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	2246	0	2203	0	0
1	B	2263	0	2228	9	0
1	C	2254	0	2209	6	0
2	C	7	0	10	2	0
3	A	83	0	0	0	0
3	B	64	0	0	1	0
3	C	56	0	0	1	0
All	All	6973	0	6650	14	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 1.

All (14) 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:B:106[B]:ARG:HG2	1:B:106[B]:ARG:NH2	1.93	0.84
1:C:169:PHE:HB3	2:C:401:PEG:H32	1.73	0.71
1:B:106[B]:ARG:HH21	1:B:106[B]:ARG:CG	2.11	0.62
1:B:106[B]:ARG:NH2	1:B:106[B]:ARG:CG	2.58	0.62
1:B:106[B]:ARG:HG2	1:B:106[B]:ARG:HH21	1.69	0.57
1:C:70:HIS:NE2	3:C:501:HOH:O	2.33	0.57
1:B:143:LYS:HD2	1:B:271:LEU:HD11	1.88	0.55
1:B:183:GLN:NE2	3:B:402:HOH:O	2.41	0.52
1:C:169:PHE:CB	2:C:401:PEG:H32	2.43	0.47
1:C:89:ARG:HH11	1:C:89:ARG:HG3	1.82	0.43
1:C:174:LLP:NZ	1:C:174:LLP:O3	2.48	0.43
1:B:89:ARG:HH11	1:B:89:ARG:HG3	1.86	0.41
1:B:174:LLP:O3	1:B:178:ARG:NH2	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:39:VAL:HB	1:C:39:VAL:HB	2.04	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	297/317 (94%)	290 (98%)	7 (2%)	0	100	100
1	B	299/317 (94%)	292 (98%)	6 (2%)	1 (0%)	37	42
1	C	299/317 (94%)	291 (97%)	8 (3%)	0	100	100
All	All	895/951 (94%)	873 (98%)	21 (2%)	1 (0%)	48	57

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	307	ASN

### 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	226/247 (92%)	220 (97%)	6 (3%)	40	53
1	B	230/247 (93%)	222 (96%)	8 (4%)	31	41

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	C	226/247 (92%)	218 (96%)	8 (4%)	31	41
All	All	682/741 (92%)	660 (97%)	22 (3%)	35	45

All (22) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	25	LEU
1	A	35	ARG
1	A	101	LEU
1	A	102	ARG
1	A	106	ARG
1	A	300	ARG
1	B	35	ARG
1	B	101	LEU
1	B	102	ARG
1	B	106[A]	ARG
1	B	106[B]	ARG
1	B	125	GLN
1	B	131	ILE
1	B	172	ARG
1	C	35	ARG
1	C	72	ASP
1	C	79	LYS
1	C	101	LEU
1	C	102	ARG
1	C	144	VAL
1	C	148	GLU
1	C	172	ARG

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	110	HIS
1	A	293	GLN
1	B	91	GLN
1	B	183	GLN
1	C	183	GLN
1	C	293	GLN

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

## 5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

3 non-standard protein/DNA/RNA residues are modelled in this entry.

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
1	LLP	A	174	1	23,24,25	0.66	0	25,32,34	0.84	0
1	LLP	B	174	1	23,24,25	0.96	1 (4%)	25,32,34	1.04	1 (4%)
1	LLP	C	174	1	23,24,25	0.92	1 (4%)	25,32,34	1.09	1 (4%)

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
1	LLP	A	174	1	-	1/16/17/19	0/1/1/1
1	LLP	B	174	1	-	1/16/17/19	0/1/1/1
1	LLP	C	174	1	-	1/16/17/19	0/1/1/1

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	174	LLP	C3-C2	2.50	1.43	1.40
1	C	174	LLP	P-OP1	2.21	1.57	1.50

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	174	LLP	OP3-P-OP4	-2.99	98.78	106.73
1	B	174	LLP	OP3-P-OP4	-2.53	99.99	106.73

There are no chirality outliers.

All (3) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	A	174	LLP	O-C-CA-CB
1	B	174	LLP	O-C-CA-CB
1	C	174	LLP	O-C-CA-CB

There are no ring outliers.

2 monomers are involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	B	174	LLP	1	0
1	C	174	LLP	1	0

## 5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

1 ligand is modelled in this entry.

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	$\# Z  > 2$
2	PEG	C	401	-	6,6,6	0.37	0	5,5,5	0.65	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
2	PEG	C	401	-	-	2/4/4/4	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (2) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	C	401	PEG	O2-C3-C4-O4
2	C	401	PEG	C4-C3-O2-C2

There are no ring outliers.

1 monomer is involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	C	401	PEG	2	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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	A	299/317 (94%)	-0.16	2 (0%) 84 82	19, 37, 67, 101	0
1	B	299/317 (94%)	-0.09	4 (1%) 74 71	21, 40, 68, 93	2 (0%)
1	C	301/317 (94%)	-0.02	3 (0%) 79 76	22, 43, 67, 103	0
All	All	899/951 (94%)	-0.09	9 (1%) 79 76	19, 40, 68, 103	2 (0%)

All (9) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	15	TYR	4.1
1	B	129	PHE	3.7
1	A	147	PRO	3.5
1	C	316	ALA	2.9
1	C	147	PRO	2.6
1	A	146	THR	2.5
1	C	15	TYR	2.4
1	B	147	PRO	2.2
1	B	130	ILE	2.1

### 6.2 Non-standard residues in protein, DNA, RNA chains [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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	LLP	B	174	24/25	0.96	0.06	20,30,33,34	0
1	LLP	C	174	24/25	0.96	0.07	27,30,35,37	0
1	LLP	A	174	24/25	0.97	0.06	19,24,26,27	0

### 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<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
2	PEG	C	401	7/7	0.91	0.26	43,44,48,53	0

### 6.5 Other polymers [i](#)

There are no such residues in this entry.