



# Full wwPDB X-ray Structure Validation Report ⓘ

Jun 24, 2024 – 10:43 am BST

PDB ID : 8PK5  
Title : INTS13-INTS14 complex with ZNF609  
Authors : Sabath, K.; Jonas, S.  
Deposited on : 2023-06-25  
Resolution : 2.50 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>.

---

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

MolProbity : 4.02b-467  
Xtriage (Phenix) : 1.13  
EDS : 2.37.1  
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) : 2.37.1

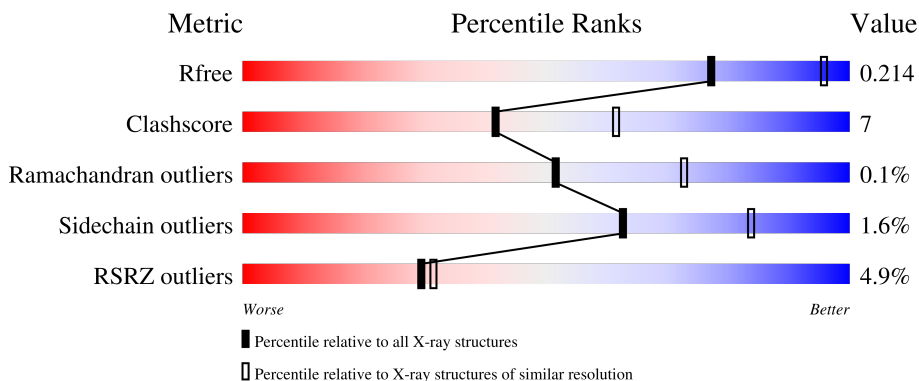
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.50 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))
$R_{free}$	130704	4661 (2.50-2.50)
Clashscore	141614	5346 (2.50-2.50)
Ramachandran outliers	138981	5231 (2.50-2.50)
Sidechain outliers	138945	5233 (2.50-2.50)
RSRZ outliers	127900	4559 (2.50-2.50)

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	718	
2	B	538	

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	MG	B	600	-	-	-	X

## 2 Entry composition [i](#)

There are 4 unique types of molecules in this entry. The entry contains 8017 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 Integrator complex subunit 13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	535	4177	2614	736	795	32	0	0	0

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-11	GLY	-	expression tag	UNP Q9NVM9
A	-10	PRO	-	expression tag	UNP Q9NVM9
A	-9	SER	-	expression tag	UNP Q9NVM9
A	-8	ASP	-	expression tag	UNP Q9NVM9
A	-7	PRO	-	expression tag	UNP Q9NVM9
A	-6	GLY	-	expression tag	UNP Q9NVM9
A	-5	PRO	-	expression tag	UNP Q9NVM9
A	-4	LYS	-	expression tag	UNP Q9NVM9
A	-3	ARG	-	expression tag	UNP Q9NVM9
A	-2	ALA	-	expression tag	UNP Q9NVM9
A	-1	GLU	-	expression tag	UNP Q9NVM9
A	0	PHE	-	expression tag	UNP Q9NVM9

- Molecule 2 is a protein called Integrator complex subunit 14,Zinc finger protein 609.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	495	3790	2427	623	715	25	0	0	0

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	519	SER	-	linker	UNP Q96SY0
B	520	GLY	-	linker	UNP Q96SY0
B	521	SER	-	linker	UNP Q96SY0

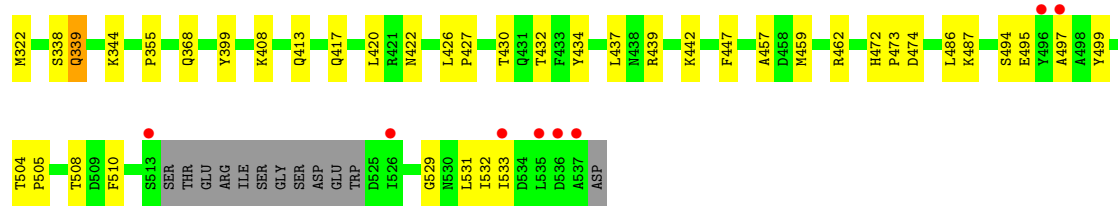
- Molecule 3 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	B	1	Total	Mg	0	0
			1	1		

- Molecule 4 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	20	Total	O	0	0
			20	20		
4	B	29	Total	O	0	0
			29	29		





## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 2	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	189.06Å 115.63Å 147.70Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	47.94 – 2.50 47.94 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.9 (47.94-2.50) 100.0 (47.94-2.50)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.06 (at 2.51Å)	Xtrriage
Refinement program	PHENIX 1.15.2_3472	Depositor
R, $R_{free}$	0.190 , 0.214 0.190 , 0.214	Depositor DCC
$R_{free}$ test set	5581 reflections (4.96%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	70.6	Xtrriage
Anisotropy	0.306	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.33 , 69.1	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.49$ , $\langle L^2 \rangle = 0.32$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.96	EDS
Total number of atoms	8017	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	96.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.36% 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: MG

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	0.41	1/4259 (0.0%)	0.58	0/5780
2	B	0.45	0/3873	0.61	0/5271
All	All	0.43	1/8132 (0.0%)	0.59	0/11051

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	331	CYS	CB-SG	-5.39	1.73	1.81

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	A	4177	0	4082	61	0
2	B	3790	0	3737	56	0
3	B	1	0	0	0	0
4	A	20	0	0	0	0
4	B	29	0	0	1	0
All	All	8017	0	7819	110	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 (110) 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:147:LEU:HB3	1:A:151:ALA:HB3	1.57	0.85
1:A:267:MET:HE1	1:A:346:PRO:HA	1.62	0.79
1:A:136:ILE:HD13	1:A:141:HIS:HB2	1.63	0.78
2:B:339:GLN:HE21	2:B:344:LYS:HB2	1.48	0.78
1:A:530:ARG:HD2	1:A:564:PRO:HG3	1.67	0.77
1:A:464:SER:HB3	1:A:516:VAL:HB	1.66	0.76
2:B:439:ARG:NH2	4:B:701:HOH:O	2.21	0.74
1:A:537:GLU:OE1	1:A:541:ARG:NH1	2.23	0.71
1:A:3:ILE:HD12	1:A:73:LYS:HE3	1.74	0.69
2:B:339:GLN:HE22	2:B:344:LYS:HD2	1.60	0.67
2:B:93:VAL:HG23	2:B:143:PRO:HG3	1.77	0.66
2:B:339:GLN:NE2	2:B:344:LYS:HB2	2.16	0.60
1:A:419:GLY:HA2	1:A:422:MET:HE2	1.83	0.59
2:B:422:ASN:ND2	2:B:432:THR:OG1	2.33	0.59
2:B:474:ASP:OD1	2:B:508:THR:OG1	2.14	0.58
1:A:166:ALA:HB3	1:A:218:VAL:HG21	1.85	0.57
1:A:130:VAL:HG11	1:A:182:THR:HG22	1.87	0.57
1:A:267:MET:HE2	2:B:531:LEU:HD13	1.87	0.56
2:B:61:GLU:HB2	2:B:85:LYS:HA	1.85	0.56
1:A:61:GLU:OE2	1:A:64:ARG:NH2	2.38	0.56
1:A:353:PHE:CZ	1:A:358:ARG:HG2	2.41	0.56
1:A:354:LEU:HD21	1:A:360:VAL:HG12	1.88	0.55
2:B:473:PRO:HB2	2:B:510:PHE:CZ	2.42	0.55
1:A:318:TRP:HE1	1:A:320:THR:HG22	1.73	0.55
2:B:339:GLN:NE2	2:B:344:LYS:HD2	2.22	0.55
1:A:261:THR:HG22	1:A:282:GLU:HB2	1.89	0.54
1:A:227:SER:HB3	1:A:230:LEU:H	1.72	0.54
2:B:57:SER:OG	2:B:58:SER:N	2.38	0.54
2:B:413:GLN:O	2:B:417:GLN:HG2	2.08	0.54
1:A:79:ILE:HG12	1:A:87:VAL:HG12	1.89	0.54
1:A:180:GLN:HE21	1:A:227:SER:HB2	1.73	0.53
2:B:427:PRO:HD3	2:B:472:HIS:HB3	1.90	0.53
1:A:165:ASN:ND2	1:A:209:THR:O	2.41	0.53
1:A:15:ASP:O	1:A:20:MET:HG3	2.10	0.52
2:B:427:PRO:O	2:B:430:THR:HG23	2.10	0.52
1:A:64:ARG:NH1	1:A:339:PRO:O	2.43	0.51
2:B:533:ILE:HD12	2:B:533:ILE:N	2.25	0.51
2:B:437:LEU:HD11	2:B:486:LEU:HD22	1.93	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:442:LYS:HE3	2:B:499:TYR:O	2.11	0.50
2:B:426:LEU:HD22	2:B:430:THR:HG22	1.94	0.49
1:A:13:VAL:HG23	1:A:162:CYS:HA	1.93	0.49
1:A:467:THR:OG1	1:A:513:ILE:HG22	2.13	0.48
2:B:532:ILE:HG12	2:B:533:ILE:H	1.79	0.48
1:A:70:PHE:HB3	1:A:74:LYS:HG3	1.95	0.48
1:A:112:ASN:ND2	1:A:115:ALA:HB2	2.28	0.48
1:A:73:LYS:HG3	1:A:139:TYR:CE1	2.49	0.48
2:B:322:MET:HB3	2:B:322:MET:HE2	1.58	0.48
2:B:268:LEU:HD11	2:B:355:PRO:HD3	1.96	0.48
2:B:62:LEU:HD13	2:B:98:ILE:HD13	1.95	0.47
1:A:144:ARG:HG3	1:A:154:VAL:HG21	1.97	0.47
2:B:61:GLU:HG2	2:B:83:TYR:HE2	1.80	0.47
1:A:524:LYS:HD3	1:A:525:ARG:N	2.30	0.47
1:A:281:VAL:HG13	1:A:347:SER:HB2	1.98	0.46
1:A:563:LYS:HB2	1:A:563:LYS:HE2	1.60	0.46
2:B:61:GLU:HG2	2:B:83:TYR:CE2	2.50	0.46
1:A:318:TRP:HE1	1:A:320:THR:CG2	2.29	0.46
2:B:228:PHE:CD1	2:B:229:PRO:HA	2.51	0.46
2:B:457:ALA:CB	2:B:487:LYS:HG3	2.47	0.45
1:A:68:ASP:HB2	1:A:338:SER:HB2	1.99	0.45
1:A:21:ALA:HB2	1:A:111:PRO:HG2	1.99	0.45
2:B:25:TYR:HB3	2:B:29:HIS:HB2	1.98	0.45
1:A:210:TYR:CE1	1:A:216:SER:HB3	2.51	0.45
2:B:262:ILE:HG23	2:B:265:PRO:HD3	1.99	0.45
1:A:208:HIS:CD2	1:A:218:VAL:HB	2.52	0.45
1:A:351:THR:HG21	2:B:399:TYR:HB2	1.99	0.44
2:B:420:LEU:HD11	2:B:459:MET:CE	2.48	0.44
2:B:434:TYR:CE2	2:B:505:PRO:HB3	2.53	0.44
2:B:533:ILE:HD12	2:B:533:ILE:H	1.82	0.44
1:A:414:ARG:HD3	1:A:460:PRO:O	2.17	0.44
2:B:66:PHE:CD2	2:B:102:GLU:HG3	2.52	0.44
2:B:473:PRO:HB2	2:B:510:PHE:CE1	2.53	0.44
1:A:97:ASN:ND2	1:A:100:GLU:H	2.15	0.43
1:A:241:ARG:NH2	2:B:408:LYS:HG2	2.34	0.43
1:A:431:LEU:HD23	1:A:431:LEU:HA	1.80	0.43
1:A:53:THR:HG23	2:B:447:PHE:HB3	2.00	0.43
1:A:80:VAL:HG23	1:A:86:HIS:HD2	1.83	0.43
1:A:22:GLU:HG2	1:A:23:SER:H	1.83	0.43
2:B:81:ASP:OD1	2:B:81:ASP:N	2.52	0.43
1:A:10:THR:O	1:A:76:VAL:HA	2.19	0.43

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:418:PHE:O	1:A:421:PHE:HB3	2.18	0.43
1:A:265:ILE:HG23	1:A:318:TRP:CE3	2.54	0.43
1:A:133:LEU:HD23	1:A:133:LEU:HA	1.89	0.43
1:A:261:THR:HG23	1:A:313:THR:OG1	2.18	0.43
2:B:195:LYS:HE2	2:B:195:LYS:HB3	1.77	0.43
2:B:459:MET:HE3	2:B:462:ARG:NH2	2.34	0.43
1:A:345:ARG:NH1	2:B:529:GLY:O	2.53	0.42
2:B:176:ILE:HG22	2:B:181:GLY:HA2	2.01	0.42
1:A:345:ARG:HB2	1:A:346:PRO:HD3	2.01	0.42
2:B:486:LEU:HD12	2:B:486:LEU:HA	1.78	0.42
2:B:277:ALA:O	2:B:284:GLU:HA	2.19	0.42
2:B:63:MET:CE	2:B:76:ALA:HB1	2.50	0.42
2:B:188:ILE:HD13	2:B:196:ASN:HB3	2.02	0.42
1:A:261:THR:HG22	1:A:282:GLU:CB	2.50	0.42
1:A:82:ASP:C	1:A:120:CYS:HB2	2.40	0.41
1:A:422:MET:HG2	2:B:256:PHE:CE2	2.55	0.41
2:B:66:PHE:HD2	2:B:102:GLU:HG3	1.85	0.41
1:A:61:GLU:CD	1:A:64:ARG:NH2	2.74	0.41
1:A:101:LEU:HD23	1:A:101:LEU:HA	1.87	0.41
1:A:155:GLY:HA2	1:A:200:GLN:OE1	2.20	0.41
1:A:248:ASN:O	1:A:251:VAL:HG12	2.20	0.41
2:B:339:GLN:HE21	2:B:344:LYS:CB	2.27	0.41
1:A:563:LYS:HG3	1:A:564:PRO:HD2	2.02	0.41
2:B:495:GLU:C	2:B:497:ALA:H	2.22	0.41
1:A:444:PRO:HG2	2:B:368:GLN:HA	2.03	0.41
2:B:91:ALA:O	2:B:95:VAL:HG23	2.21	0.41
2:B:214:ALA:HB1	2:B:249:THR:O	2.21	0.41
2:B:314:HIS:CD2	2:B:338:SER:HB2	2.56	0.41
2:B:459:MET:HE2	2:B:459:MET:HB3	2.01	0.40
1:A:513:ILE:CD1	1:A:528:GLN:HG2	2.51	0.40
2:B:504:THR:HG22	2:B:505:PRO:O	2.21	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	527/718 (73%)	504 (96%)	23 (4%)	0	100	100
2	B	487/538 (90%)	463 (95%)	23 (5%)	1 (0%)	47	68
All	All	1014/1256 (81%)	967 (95%)	46 (4%)	1 (0%)	51	73

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	B	494	SER

### 5.3.2 Protein sidechains [i](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	469/648 (72%)	460 (98%)	9 (2%)	57	80
2	B	415/468 (89%)	410 (99%)	5 (1%)	71	88
All	All	884/1116 (79%)	870 (98%)	14 (2%)	62	84

All (14) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	77	ASN
1	A	82	ASP
1	A	108	VAL
1	A	219	SER
1	A	231	THR
1	A	364	GLN
1	A	432	ASP
1	A	459	TRP
1	A	525	ARG
2	B	46	TYR
2	B	89	GLU
2	B	118	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	B	302	ILE
2	B	339	GLN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (10) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	77	ASN
1	A	86	HIS
1	A	97	ASN
1	A	99	GLN
1	A	324	ASN
1	A	493	ASN
2	B	301	GLN
2	B	339	GLN
2	B	368	GLN
2	B	422	ASN

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

There are no non-standard protein/DNA/RNA residues in this entry.

### 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

### 5.6 Ligand geometry [i](#)

Of 1 ligands modelled in this entry, 1 is 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

### 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<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	535/718 (74%)	0.25	30 (5%) 24 25	51, 100, 162, 205	0
2	B	495/538 (92%)	0.17	20 (4%) 38 41	49, 84, 159, 214	0
All	All	1030/1256 (82%)	0.21	50 (4%) 29 31	49, 96, 161, 214	0

All (50) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	B	297	ASN	5.5
1	A	516	VAL	5.3
2	B	240	ILE	5.2
1	A	564	PRO	4.6
2	B	282	GLY	4.2
1	A	146	LEU	3.9
2	B	283	ASP	3.8
2	B	537	ALA	3.8
2	B	88	LEU	3.7
1	A	441	LEU	3.7
1	A	279	TYR	3.6
1	A	438	ASP	3.6
2	B	285	VAL	3.5
1	A	435	TYR	3.5
2	B	296	GLU	3.4
2	B	526	ILE	3.4
2	B	142	PHE	3.3
2	B	300	ASN	3.2
1	A	324	ASN	3.2
1	A	149	GLU	3.2
2	B	281	GLU	3.2
1	A	147	LEU	3.2
1	A	437	ILE	3.2
1	A	526	ASP	3.1

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	A	515	THR	3.1
1	A	439	GLY	3.0
1	A	525	ARG	3.0
2	B	513	SER	2.9
1	A	45	ALA	2.9
2	B	535	LEU	2.8
2	B	496	TYR	2.7
1	A	195	HIS	2.5
1	A	268	LYS	2.5
1	A	217	LEU	2.5
2	B	497	ALA	2.4
1	A	166	ALA	2.4
1	A	204	LEU	2.3
1	A	514	SER	2.3
2	B	536	ASP	2.3
1	A	367	LYS	2.2
1	A	151	ALA	2.2
1	A	366	ARG	2.2
1	A	368	SER	2.2
1	A	226	LEU	2.2
2	B	279	ASN	2.2
2	B	140	ASN	2.1
1	A	267	MET	2.1
1	A	369	GLY	2.1
1	A	30	PHE	2.1
2	B	533	ILE	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<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( $\text{\AA}^2$ )	Q<0.9
3	MG	B	600	1/1	0.79	0.77	176,176,176,176	0

## 6.5 Other polymers [i](#)

There are no such residues in this entry.