



Full wwPDB X-ray Structure Validation Report i

Feb 28, 2014 – 08:31 PM GMT

PDB ID : 2AN1
Title : Structural Genomics, The crystal structure of a putative kinase from Salmonella typhimurim LT2
Authors : Zhang, R.; Zhou, M.; Holzle, D.; Collart, F.; Joachimiak, A.; Midwest Center for Structural Genomics (MCSG)
Deposited on : 2005-08-10
Resolution : 2.00 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

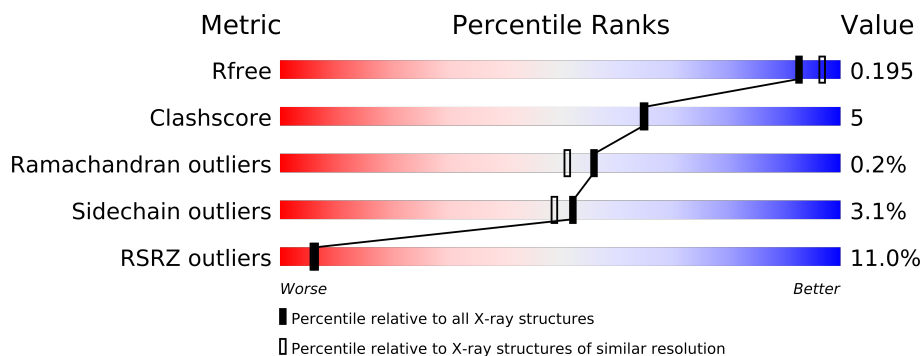
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.15 2013
Xtriage (Phenix) : dev-1323
EDS : stable22639
Percentile statistics : 21963
Refmac : 5.8.0049
CCP4 : 6.3.0 (Settle)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable22683

1 Overall quality at a glance

The reported resolution of this entry is 2.00 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}	66092	4888 (2.00-2.00)
Clashscore	79885	6188 (2.00-2.00)
Ramachandran outliers	78287	6102 (2.00-2.00)
Sidechain outliers	78261	6100 (2.00-2.00)
RSRZ outliers	66119	4890 (2.00-2.00)

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 on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	A	292	
1	B	292	
1	C	292	
1	D	292	

2 Entry composition

There are 2 unique types of molecules in this entry. The entry contains 9108 atoms, of which 0 are hydrogen and 0 are deuterium.

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 putative kinase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	275	Total	C	N	O	S	0	0	0
			2149	1364	368	408	9			
1	B	281	Total	C	N	O	S	0	0	0
			2205	1394	384	418	9			
1	C	271	Total	C	N	O	S	0	0	0
			2115	1337	363	406	9			
1	D	268	Total	C	N	O	S	0	0	0
			2097	1330	361	397	9			

- Molecule 2 is water.

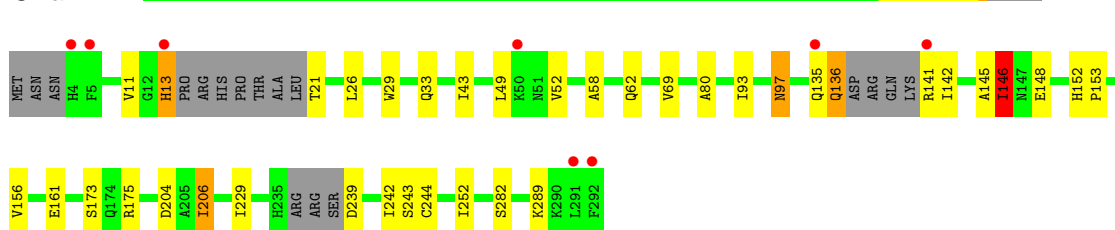
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
2	A	151	Total	O	0	0
			151	151		
2	B	170	Total	O	0	0
			170	170		
2	C	104	Total	O	0	0
			104	104		
2	D	117	Total	O	0	0
			117	117		

3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors 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.

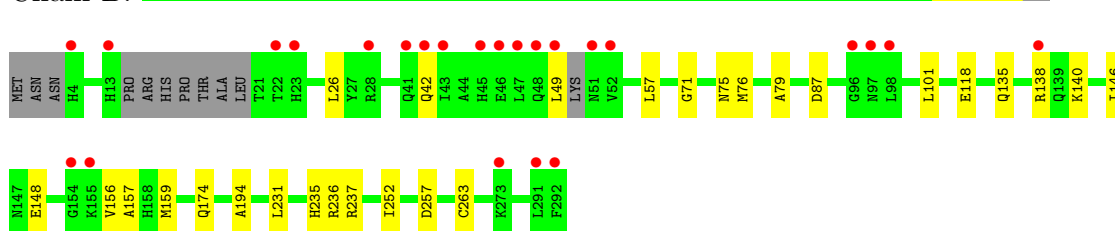
- Molecule 1: putative kinase

Chain A:



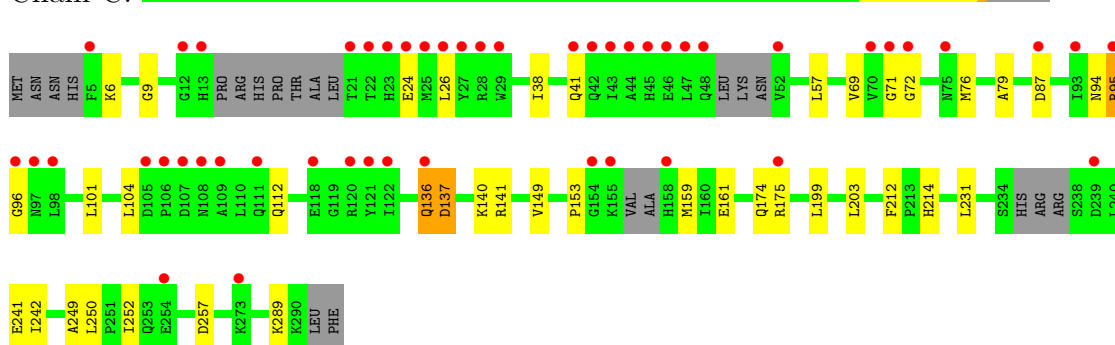
- Molecule 1: putative kinase

Chain B:



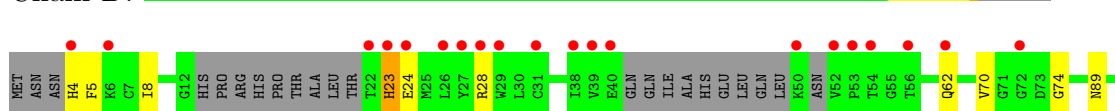
- Molecule 1: putative kinase

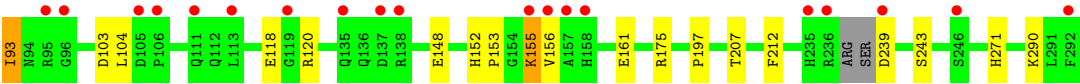
Chain C:



- Molecule 1: putative kinase

Chain D:





4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	98.53Å 99.32Å 144.84Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 2.00 40.96 – 1.99	Depositor EDS
% Data completeness (in resolution range)	97.2 (50.00-2.00) 97.3 (40.96-1.99)	Depositor EDS
R_{merge}	0.09	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.87 (at 2.00Å)	Xtriage
Refinement program	REFMAC 5.2.0005	Depositor
R, R_{free}	0.200 , 0.233 0.202 , 0.195	Depositor DCC
R_{free} test set	4763 reflections (5.30%)	DCC
Wilson B-factor (Å ²)	30.9	Xtriage
Anisotropy	0.448	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.37 , 51.8	EDS
Estimated twinning fraction	0.014 for k,h,-l	Xtriage
L-test for twinning	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.32$	Xtriage
Outliers	0 of 94563 reflections	Xtriage
F_o, F_c correlation	0.95	EDS
Total number of atoms	9108	wwPDB-VP
Average B, all atoms (Å ²)	36.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.94% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality

5.1 Standard geometry

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	0.50	0/2189	0.63	1/2968 (0.0%)
1	B	0.52	1/2246 (0.0%)	0.65	0/3044
1	C	0.44	0/2151	0.58	0/2914
1	D	0.48	0/2134	0.59	0/2888
All	All	0.49	1/8720 (0.0%)	0.61	1/11814 (0.0%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	263	CYS	CB-SG	-6.82	1.70	1.82

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	146	ILE	CB-CA-C	-5.30	101.00	111.60

There are no chirality outliers.

There are no planarity outliers.

5.2 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 hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2149	0	2138	33	0
1	B	2205	0	2195	14	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	C	2115	0	2102	22	0
1	D	2097	0	2093	25	0
2	A	151	0	0	7	0
2	B	170	0	0	4	0
2	C	104	0	0	4	0
2	D	117	0	0	8	0
All	All	9108	0	8528	90	0

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 5.

All (90) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:13:HIS:HB3	1:A:43:ILE:HG22	1.51	0.92
1:A:161:GLU:HG2	1:A:175:ARG:HG2	1.52	0.91
1:D:155:LYS:HE3	1:D:155:LYS:H	1.45	0.81
1:D:8:ILE:HG12	2:D:548:HOH:O	1.81	0.81
1:C:289:LYS:HD3	2:C:622:HOH:O	1.80	0.80
1:C:136:GLN:O	1:C:137:ASP:HB2	1.79	0.79
1:A:97:ASN:HD22	1:A:97:ASN:H	1.29	0.77
1:B:146:ILE:HB	2:B:673:HOH:O	1.86	0.75
1:D:103:ASP:OD2	1:D:271:HIS:ND1	2.20	0.71
1:A:58:ALA:O	1:A:62:GLN:HG2	1.92	0.68
1:D:239:ASP:N	2:D:561:HOH:O	2.27	0.68
1:D:118:GLU:OE1	1:D:120:ARG:NH2	2.23	0.68
1:A:156:VAL:HG11	1:C:153:PRO:O	1.95	0.67
1:C:159:MET:HE2	1:C:214:HIS:HB2	1.77	0.67
1:A:242:ILE:HG12	1:A:252:ILE:HD11	1.77	0.66
1:A:97:ASN:HD22	1:A:97:ASN:N	1.90	0.66
1:A:135:GLN:O	1:A:136:GLN:HB3	1.96	0.66
1:C:212:PHE:CD2	2:C:610:HOH:O	2.48	0.65
1:A:206:ILE:HD11	1:A:229:ILE:HD11	1.79	0.65
1:D:74:GLY:HA3	2:D:549:HOH:O	1.94	0.65
1:B:49:LEU:H	1:B:49:LEU:HD12	1.64	0.62
1:B:57:LEU:HD21	1:B:79:ALA:HA	1.79	0.62
1:C:161:GLU:HG2	1:C:175:ARG:HG2	1.82	0.62
1:C:174:GLN:NE2	2:C:604:HOH:O	2.32	0.62
1:B:236:ARG:NH1	2:B:604:HOH:O	2.33	0.61
1:D:24:GLU:HB3	1:D:28:ARG:HH21	1.66	0.61
1:A:173:SER:OG	1:D:290:LYS:O	2.15	0.60
1:A:97:ASN:ND2	1:A:97:ASN:H	1.99	0.59
1:D:8:ILE:CG1	2:D:548:HOH:O	2.46	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:235:HIS:HD2	2:B:669:HOH:O	1.85	0.59
1:B:87:ASP:OD1	1:B:87:ASP:C	2.40	0.58
1:A:239:ASP:N	2:A:637:HOH:O	2.35	0.58
1:D:5:PHE:HE1	1:D:89:ASN:HD22	1.52	0.57
1:A:49:LEU:CB	1:A:52:VAL:HG11	2.34	0.57
1:A:206:ILE:HD11	1:A:229:ILE:CD1	2.35	0.57
1:B:138:ARG:HH12	1:B:140:LYS:HZ3	1.52	0.57
1:C:231:LEU:O	1:C:257:ASP:HB2	2.05	0.56
1:A:49:LEU:HB3	1:A:52:VAL:HG11	1.88	0.56
1:A:161:GLU:CG	1:A:175:ARG:HG2	2.30	0.56
1:A:152:HIS:HD2	1:A:153:PRO:O	1.89	0.56
1:C:242:ILE:HG12	1:C:252:ILE:HD11	1.87	0.55
1:D:161:GLU:HG2	1:D:175:ARG:HG2	1.88	0.54
1:A:152:HIS:HE1	1:A:243:SER:OG	1.91	0.54
1:D:152:HIS:HE1	1:D:243:SER:OG	1.91	0.54
1:A:26:LEU:HD11	1:A:93:ILE:HD11	1.88	0.53
1:C:136:GLN:O	1:C:137:ASP:CB	2.56	0.53
1:D:23:HIS:HD2	1:D:70:VAL:HG11	1.72	0.53
1:B:71:GLY:HA3	1:B:75:ASN:HD22	1.72	0.53
1:D:5:PHE:CB	2:D:548:HOH:O	2.58	0.52
1:D:239:ASP:HA	2:D:542:HOH:O	2.10	0.51
1:C:140:LYS:O	1:C:141:ARG:HG3	2.10	0.51
1:A:141:ARG:HD3	2:A:574:HOH:O	2.11	0.51
1:D:5:PHE:HB3	2:D:548:HOH:O	2.13	0.49
1:D:155:LYS:HE2	1:D:239:ASP:OD2	2.12	0.49
1:C:241:GLU:HB3	1:C:249:ALA:HB1	1.95	0.48
1:D:24:GLU:O	1:D:28:ARG:HG3	2.14	0.48
1:A:11:VAL:CG2	1:A:69:VAL:HG22	2.43	0.47
1:A:204:ASP:HB2	2:A:621:HOH:O	2.12	0.47
1:D:197:PRO:HD2	1:D:207:THR:HG21	1.97	0.47
1:C:71:GLY:HA2	1:C:95:ARG:HH11	1.80	0.47
1:B:236:ARG:NH2	1:B:252:ILE:O	2.49	0.46
1:A:62:GLN:NE2	2:A:536:HOH:O	2.49	0.46
1:D:24:GLU:CD	1:D:24:GLU:H	2.18	0.46
1:D:152:HIS:HD2	1:D:153:PRO:O	1.97	0.46
1:C:159:MET:CE	1:C:214:HIS:HB2	2.44	0.46
1:A:26:LEU:HD11	1:A:93:ILE:CD1	2.46	0.45
1:C:149:VAL:HG13	1:C:242:ILE:HG23	1.98	0.45
1:B:76:MET:HG2	1:B:101:LEU:HB3	2.00	0.44
1:C:72:GLY:HA2	1:C:94:ASN:HA	2.00	0.44
1:A:145:ALA:HB2	1:A:244:CYS:HB3	2.00	0.44
1:C:76:MET:HG2	1:C:101:LEU:HB3	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:21:THR:N	2:A:606:HOH:O	2.52	0.43
1:A:282:SER:OG	1:A:289:LYS:HE2	2.18	0.43
1:B:157:ALA:N	1:D:156:VAL:HG11	2.34	0.43
1:A:62:GLN:NE2	2:A:522:HOH:O	2.34	0.43
1:C:199:LEU:HG	1:C:203:LEU:HD23	2.00	0.43
1:D:5:PHE:HB2	2:D:548:HOH:O	2.20	0.42
1:A:141:ARG:N	2:A:590:HOH:O	2.52	0.42
1:B:231:LEU:O	1:B:257:ASP:HB2	2.20	0.42
1:A:152:HIS:HB2	1:A:153:PRO:HD2	2.01	0.42
1:A:80:ALA:HB3	1:A:146:ILE:HD12	2.02	0.42
1:D:93:ILE:HD12	1:D:104:LEU:O	2.19	0.42
1:A:29:TRP:O	1:A:33:GLN:HG2	2.20	0.42
1:C:57:LEU:HD21	1:C:79:ALA:HA	2.02	0.41
1:A:141:ARG:C	1:A:142:ILE:HD12	2.40	0.41
1:C:212:PHE:CE2	2:C:610:HOH:O	2.72	0.41
1:B:174:GLN:NE2	2:B:617:HOH:O	2.54	0.40
1:B:194:ALA:HA	1:D:212:PHE:CD1	2.56	0.40
1:C:104:LEU:HD22	1:C:112:GLN:HB3	2.02	0.40
1:C:9:GLY:HA2	1:C:38:ILE:O	2.22	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	267/292 (91%)	260 (97%)	7 (3%)	0	100	100
1	B	275/292 (94%)	269 (98%)	6 (2%)	0	100	100
1	C	261/292 (89%)	253 (97%)	6 (2%)	2 (1%)	27	17
1	D	259/292 (89%)	248 (96%)	11 (4%)	0	100	100
All	All	1062/1168 (91%)	1030 (97%)	30 (3%)	2 (0%)	56	51

All (2) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	C	137	ASP
1	C	96	GLY

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	238/254 (94%)	232 (98%)	6 (2%)	60	59
1	B	244/254 (96%)	236 (97%)	8 (3%)	50	46
1	C	235/254 (92%)	226 (96%)	9 (4%)	44	39
1	D	232/254 (91%)	226 (97%)	6 (3%)	59	58
All	All	949/1016 (93%)	920 (97%)	29 (3%)	52	49

All (29) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	13	HIS
1	A	97	ASN
1	A	136	GLN
1	A	146	ILE
1	A	148	GLU
1	A	206	ILE
1	B	26	LEU
1	B	42	GLN
1	B	118	GLU
1	B	135	GLN
1	B	148	GLU
1	B	156	VAL
1	B	159	MET
1	B	237	ARG
1	C	6	LYS
1	C	24	GLU
1	C	26	LEU
1	C	41	GLN
1	C	69	VAL
1	C	87	ASP
1	C	95	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	136	GLN
1	C	250	LEU
1	D	4	HIS
1	D	23	HIS
1	D	62	GLN
1	D	93	ILE
1	D	148	GLU
1	D	155	LYS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (31) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	4	HIS
1	A	13	HIS
1	A	62	GLN
1	A	89	ASN
1	A	97	ASN
1	A	152	HIS
1	A	158	HIS
1	A	268	ASN
1	B	13	HIS
1	B	45	HIS
1	B	75	ASN
1	B	132	GLN
1	B	147	ASN
1	B	158	HIS
1	B	174	GLN
1	B	279	ASN
1	C	41	GLN
1	C	89	ASN
1	C	136	GLN
1	C	147	ASN
1	C	158	HIS
1	C	214	HIS
1	C	247	GLN
1	C	253	GLN
1	C	266	HIS
1	C	268	ASN
1	D	89	ASN
1	D	108	ASN
1	D	147	ASN
1	D	152	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	158	HIS

5.3.3 RNA ⓘ

There are no RNA chains in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

There are no ligands in this entry.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

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, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	275/292 (94%)	0.33	8 (2%) 49 49	21, 29, 46, 53	0
1	B	281/292 (96%)	0.48	24 (8%) 11 10	21, 30, 50, 80	0
1	C	271/292 (92%)	0.99	49 (18%) 2 2	24, 38, 62, 80	0
1	D	268/292 (91%)	0.83	39 (14%) 3 3	23, 35, 53, 90	0
All	All	1095/1168 (93%)	0.65	120 (10%) 6 6	21, 32, 56, 90	0

All (120) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	C	45	HIS	7.6
1	D	52	VAL	7.4
1	B	48	GLN	7.1
1	D	95	ARG	6.9
1	C	43	ILE	6.6
1	C	52	VAL	6.1
1	C	23	HIS	6.0
1	C	47	LEU	5.8
1	C	41	GLN	5.3
1	C	22	THR	5.3
1	C	42	GLN	5.2
1	D	4	HIS	5.1
1	B	155	LYS	4.9
1	C	44	ALA	4.8
1	C	26	LEU	4.8
1	C	72	GLY	4.8
1	D	27	TYR	4.7
1	C	46	GLU	4.7
1	C	107	ASP	4.7
1	D	157	ALA	4.6
1	B	46	GLU	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	95	ARG	4.6
1	B	45	HIS	4.6
1	C	13	HIS	4.6
1	C	136	GLN	4.6
1	D	54	THR	4.5
1	C	120	ARG	4.4
1	D	156	VAL	4.3
1	C	25	MET	4.2
1	D	50	LYS	4.2
1	C	48	GLN	4.1
1	C	28	ARG	3.9
1	D	239	ASP	3.9
1	B	96	GLY	3.8
1	D	53	PRO	3.8
1	C	24	GLU	3.8
1	D	26	LEU	3.8
1	D	236	ARG	3.8
1	C	27	TYR	3.8
1	D	137	ASP	3.7
1	B	41	GLN	3.7
1	C	21	THR	3.6
1	C	118	GLU	3.6
1	C	97	ASN	3.6
1	D	292	PHE	3.6
1	B	51	ASN	3.5
1	A	292	PHE	3.5
1	A	141	ARG	3.5
1	D	56	THR	3.5
1	C	106	PRO	3.4
1	C	105	ASP	3.4
1	D	235	HIS	3.3
1	D	105	ASP	3.3
1	D	28	ARG	3.3
1	B	47	LEU	3.3
1	C	108	ASN	3.3
1	A	4	HIS	3.2
1	D	158	HIS	3.2
1	D	62	GLN	3.1
1	A	135	GLN	3.1
1	B	138	ARG	3.1
1	C	111	GLN	3.1
1	C	12	GLY	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	5	PHE	3.0
1	C	29	TRP	3.0
1	D	155	LYS	3.0
1	C	254	GLU	2.9
1	B	4	HIS	2.9
1	D	39	VAL	2.9
1	C	93	ILE	2.9
1	D	23	HIS	2.8
1	B	23	HIS	2.8
1	A	50	LYS	2.8
1	C	154	GLY	2.8
1	C	70	VAL	2.7
1	B	292	PHE	2.7
1	C	155	LYS	2.6
1	D	96	GLY	2.6
1	C	158	HIS	2.6
1	B	49	LEU	2.6
1	B	154	GLY	2.6
1	D	31	CYS	2.6
1	C	273	LYS	2.5
1	C	71	GLY	2.5
1	C	87	ASP	2.5
1	C	109	ALA	2.4
1	D	135	GLN	2.4
1	B	291	LEU	2.4
1	B	273	LYS	2.4
1	D	106	PRO	2.4
1	B	13	HIS	2.4
1	C	121	TYR	2.4
1	D	29	TRP	2.4
1	B	22	THR	2.4
1	C	96	GLY	2.4
1	D	119	GLY	2.4
1	C	98	LEU	2.3
1	D	38	ILE	2.3
1	D	246	SER	2.3
1	B	52	VAL	2.3
1	D	40	GLU	2.3
1	D	138	ARG	2.3
1	B	28	ARG	2.3
1	C	175	ARG	2.2
1	B	43	ILE	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	B	97	ASN	2.2
1	A	5	PHE	2.2
1	D	22	THR	2.2
1	D	6	LYS	2.2
1	C	122	ILE	2.2
1	D	24	GLU	2.2
1	B	98	LEU	2.1
1	D	113	LEU	2.1
1	C	75	ASN	2.1
1	A	291	LEU	2.1
1	C	239	ASP	2.1
1	D	72	GLY	2.1
1	A	13	HIS	2.0
1	B	42	GLN	2.0
1	D	111	GLN	2.0

6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

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

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

There are no ligands in this entry.

6.5 Other polymers ⓘ

There are no such residues in this entry.