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wwPDB X-ray Structure Validation Summary Report (i)

Jun 17, 2024 – 04:02 PM EDT

PDB ID	:	3TW7
Title	:	Structure of Rhizobium etli pyruvate carboxylase T882A crystallized without acetyl coenzyme-A
Authors	:	St Maurice, M.; Kumar, S.; Lietzan, A.D.
Deposited on	:	2011-09-21
Resolution	:	3.10 Å(reported)

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

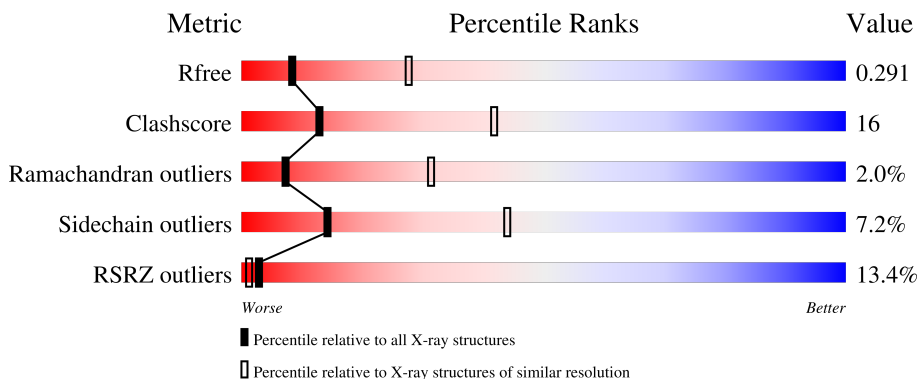|		
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.20.1
EDS	:	2.37.1
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (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 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	Percentile Ranks	Value
Rfree		0.291
Clashscore		16
Ramachandran outliers		2.0%
Sidechain outliers		7.2%
RSRZ outliers		13.4%

Worse   *Better*

▮ Percentile relative to all X-ray structures

▯ Percentile relative to X-ray structures of similar resolution

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
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	A	1165	13% 55% 28% • 14%
1	B	1165	10% 58% 25% • 14%

2 Entity composition ⓘ

There are 5 unique types of molecules in this entry. The entry contains 15185 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 Pyruvate carboxylase protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	1004	Total	C	N	O	S	0	15	0
			7544	4804	1275	1434	31			
1	B	1002	Total	C	N	O	S	0	16	0
			7623	4853	1290	1449	31			

There are 26 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-10	MET	-	EXPRESSION TAG	UNP Q2K340
A	-9	HIS	-	EXPRESSION TAG	UNP Q2K340
A	-8	HIS	-	EXPRESSION TAG	UNP Q2K340
A	-7	HIS	-	EXPRESSION TAG	UNP Q2K340
A	-6	HIS	-	EXPRESSION TAG	UNP Q2K340
A	-5	HIS	-	EXPRESSION TAG	UNP Q2K340
A	-4	HIS	-	EXPRESSION TAG	UNP Q2K340
A	-3	HIS	-	EXPRESSION TAG	UNP Q2K340
A	-2	HIS	-	EXPRESSION TAG	UNP Q2K340
A	-1	HIS	-	EXPRESSION TAG	UNP Q2K340
A	0	GLY	-	EXPRESSION TAG	UNP Q2K340
A	1	GLY	-	EXPRESSION TAG	UNP Q2K340
A	882	ALA	THR	ENGINEERED MUTATION	UNP Q2K340
B	-10	MET	-	EXPRESSION TAG	UNP Q2K340
B	-9	HIS	-	EXPRESSION TAG	UNP Q2K340
B	-8	HIS	-	EXPRESSION TAG	UNP Q2K340
B	-7	HIS	-	EXPRESSION TAG	UNP Q2K340
B	-6	HIS	-	EXPRESSION TAG	UNP Q2K340
B	-5	HIS	-	EXPRESSION TAG	UNP Q2K340
B	-4	HIS	-	EXPRESSION TAG	UNP Q2K340
B	-3	HIS	-	EXPRESSION TAG	UNP Q2K340
B	-2	HIS	-	EXPRESSION TAG	UNP Q2K340
B	-1	HIS	-	EXPRESSION TAG	UNP Q2K340
B	0	GLY	-	EXPRESSION TAG	UNP Q2K340
B	1	GLY	-	EXPRESSION TAG	UNP Q2K340

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Chain	Residue	Modelled	Actual	Comment	Reference
B	882	ALA	THR	ENGINEERED MUTATION	UNP Q2K340

- Molecule 2 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total Mg 1 1	0	0
2	B	1	Total Mg 1 1	0	0

- Molecule 3 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total Zn 1 1	0	0
3	B	1	Total Zn 1 1	0	0

- Molecule 4 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total Cl 1 1	0	0
4	B	1	Total Cl 1 1	0	0

- Molecule 5 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	A	7	Total O 7 7	0	0
5	B	5	Total O 5 5	0	0

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: Pyruvate carboxylase protein

A852 R853 S854 L855 G856 T859 R860 W861 H862 A867 A871 G876 V881 A882 P883 S884 S885 K886 V887 D890 M891 M894 M895 V896 S897 L900 T901 V902 A903 D904 V905 V906 S907 E911 V912 S913 S917 V918 V919 S920 L922 L926 P929 P930 S931 G932

Q938 K939 K940 A941 G944 L955 E958 E969 L972 E973 R974 E975 Y987 V990 S998 Y1001 G1002 P1003 V1006 L1007 P1008 T1009 E1021 L1022 E1027 K1028 G1029 K1030 V1033 I1034 N1036 Q1037 A1038 V1039 S1040 A1041 T1042 D1043 S1044 Q1045 G1046 M1047 V1048 T1049 V1050 F1051

R1059 V1063 P1064 D1065 R1066 ALA HIS GLY ALA THR GLY ALA ALA VAL ARG ARG LYS ALA GLU PRO GLY ASN ALA ALA HIS VAL GLY ALA PRO MET PRO GLY VAL ILE SER ARG VAL PHE VAL SER SER GLY GLN ALA VAL ASN ALA GLY ASP VAL LEU SER ILE GLU ALA MET LYS

MET GLU THR ALA ILE HIS ALA GLU LYS ASP GLY THR ILE ALA GLU VAL LEU VAL LYS ALA GLY ASP GLN ILE ASP ALA LYS ASP LEU LEU ALA VAL TYR GLY GLY

• Molecule 1: Pyruvate carboxylase protein

Chain B:

10%
58%   25%   •   14%

MET HIS HIS HIS HIS HIS HIS HIS GLY GLY P2 I3 S4 K5 I6 L7 V8 A9 N10 R11 S12 E13 I14 A15 I16 R17 V18 F19 R20 A21 L25 G26 I27 K28 T29 V30 A31 I32 W33 D37 A40 L41 H42 R43 F44 E48 S49 V52 G53 R54 H57 L58

ALA R60 D61 L62 G63 E66 S67 Y68 L69 S70 I71 D72 E73 V74 I75 R76 V77 A78 K79 A83 D84 A85 I86 Y90 G91 L92 L93 S94 E95 S96 P97 E98 F99 V100 N104 I109 F110 I111 G112 P113 K114 A115 D116 T117 M118 R119 Q120 L121 G122 N123 A127 R128 N129 L130

A131 I132 S133 V134 G135 V136 P137 V138 V139 P140 A141 T142 E143 P144 I145 P146 ASP ASP MET ALA GLU VAL ALA LYS MET ALA ALA ILE GLY TYR P162 V163 M164 L165 K166 A167 S168 TRP GLY GLY GLY GLY ARG GLY M176 R177 V178 I179 R180 SER GLU ALA ASP LEU ALA LYS GLU VAL THR

GLU ALA LYS ARG GLU ALA MET ALA ALA PHE GLY LYS ASP GLU V205 Y206 L207 E208 K209 E212 R213 A214 R215 E218 S219 Q220 I221 G222 G223 D224 T225 H226 V229 V230 H231 L232 F233 E234 R235 D236 V239 Q240 R241 R242 N243 Q244 K245 E248 R249 A250 P251 A252 P253 Y254 L255

S256 R260 Q261 E262 L263 A264 A265 Y266 S267 I270 A271 G272 A273 T274 N275 V276 I277 G278 A279 G280 T281 V282 E283 Y284 A288 D289 F293 Y294 F295 I296 E297 V298 N299 P300 R301 I302 Q303 V304 E305 V308 T309 E310 V311 V312 I315 D316 I317 V318 K319 A320 Q321 I322 H323 I324

L325 D326 G327 I330 G331 T332 P333 Q334 S335 G336 V337 P338 N339 Q340 E341 D342 I343 R344 L345 N346 G347 H348 A349 L350 Q351 C352 R353 V354 T355 T356 E357 H361 N362 F363 I364 R369 R374 S375 A376 I381 R382 L383 D384 G385 G386 T387 G391 I394 Y397 Y398 D399 P400

L401 L402 V403 K404 V405 W408 A409 P412 L413 E414 A415 I416 S417 R418 M419 D420 R421 A422 L423 R424 E425 P426 R427 I428 R429 A432 T433 N434 L435 T436 F437 L438 G443 H444 P445 D449 N450 S451 Y452 I457 D458 T459 T460 PRO GLU LEU PHE GLN GLN VAL LYS ARG GLN ASP

ARG A473 L476 L477 T478 Y479 T484 V485 N486 N500 Y508 ALA ASN GLY ASN G513 K519 Q520 L521 R535 L542 M547 R548 H551 L555 A556 T557 R558 M559 R560 T561 Y562 D563 I564 A565 R566 A574 E582 C583 W584 D590 T597 E598 D599 P600

L615 N624 G627 Y628 Y631 N634 L650 C656 L657 N658 W659 V660 E661 M667 L676 C677 E678 H713 I714 M720 L724 K725 R737 F746 H747 I754 D771 M774 D775 P784 I789 D803 P804 A805 W806 I807 S811 F812 Y813 W814

4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	I 41	Depositor
Cell constants a, b, c, α, β, γ	264.16Å 264.16Å 91.79Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 3.10 45.30 – 3.10	Depositor EDS
% Data completeness (in resolution range)	99.9 (50.00-3.10) 100.0 (45.30-3.10)	Depositor EDS
R_{merge}	0.10	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	8.13 (at 3.12Å)	Xtriage
Refinement program	REFMAC 5.6.0117	Depositor
R, R_{free}	0.250 , 0.292 0.248 , 0.291	Depositor DCC
R_{free} test set	2964 reflections (5.14%)	wwPDB-VP
Wilson B-factor (Å^2)	54.7	Xtriage
Anisotropy	0.039	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 65.9	EDS
L-test for twinning[2]	$< |L| > = 0.48, < L^2 > = 0.31$	Xtriage
Estimated twinning fraction	0.023 for -k,-h,-l	Xtriage
F_o,F_c correlation	0.86	EDS
Total number of atoms	15185	wwPDB-VP
Average B, all atoms (Å^2)	73.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.61% of the height of the origin peak. No significant pseudotranslation is detected.*

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[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: KCX, ZN, MG, CL

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	0.69	8/7719 (0.1%)	0.79	7/10500 (0.1%)
1	B	0.70	2/7799 (0.0%)	0.84	6/10603 (0.1%)
All	All	0.70	10/15518 (0.1%)	0.82	13/21103 (0.1%)

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	1
1	B	0	1
All	All	0	2

The worst 5 of 10 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	98[A]	GLU	CD-OE1	7.78	1.34	1.25
1	A	98[B]	GLU	CD-OE1	7.78	1.34	1.25
1	A	269	LYS	CE-NZ	7.16	1.67	1.49
1	A	1045	GLN	CD-NE2	6.86	1.50	1.32
1	A	1045	GLN	CG-CD	6.82	1.66	1.51

The worst 5 of 13 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	145	LEU	CA-CB-CG	7.13	131.69	115.30
1	A	548	ARG	NE-CZ-NH2	6.72	123.66	120.30
1	A	542	LEU	CA-CB-CG	-6.47	100.42	115.30
1	A	798	ARG	NE-CZ-NH2	-6.16	117.22	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	542	LEU	CA-CB-CG	-6.16	101.13	115.30

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1046	GLY	Peptide
1	B	1065	ASP	Peptide

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	7544	0	7260	247	0
1	B	7623	0	7392	249	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
4	A	1	0	0	0	0
4	B	1	0	0	0	0
5	A	7	0	0	0	0
5	B	5	0	0	0	0
All	All	15185	0	14652	492	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 16.

The worst 5 of 492 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:4:SER:O	1:B:28:LYS:HG3	1.53	1.08
1:A:359:PRO:HD3	1:A:433:THR:O	1.55	1.06
1:A:90:TYR:HB2	1:A:301:ARG:HH11	1.21	1.05
1:A:1029:GLY:HA3	1:A:1030:LYS:HB2	1.39	1.04
1:B:1029:GLY:CA	1:B:1030:LYS:HB2	1.88	1.04

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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	1001/1165 (86%)	875 (87%)	107 (11%)	19 (2%)	8	33
1	B	1002/1165 (86%)	899 (90%)	82 (8%)	21 (2%)	7	30
All	All	2003/2330 (86%)	1774 (89%)	189 (9%)	40 (2%)	7	31

5 of 40 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	92	LEU
1	A	622	GLY
1	A	623	ALA
1	A	1030	LYS
1	B	92	LEU

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	749/933 (80%)	699 (93%)	50 (7%)	16	46
1	B	769/933 (82%)	709 (92%)	60 (8%)	12	40
All	All	1518/1866 (81%)	1408 (93%)	110 (7%)	14	44

5 of 110 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	B	145	LEU
1	B	324	ILE
1	B	1066	ARG
1	B	902	VAL
1	B	179	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 26 such sidechains are listed below:

Mol	Chain	Res	Type
1	B	220	GLN
1	B	346	ASN
1	B	873	GLN
1	B	299	ASN
1	B	361	HIS

5.3.3   RNA ⓘ

There are no RNA molecules in this entry.

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

2 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	KCX	A	718[A]	1,3	10,11,12	0.72	0	6,12,14	1.02	1 (16%)
1	KCX	B	718[A]	1,3	10,11,12	0.94	0	6,12,14	0.92	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
1	KCX	A	718[A]	1,3	-	1/9/10/12	-
1	KCX	B	718[A]	1,3	-	3/9/10/12	-

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	718[A]	KCX	CD-CG-CB	-2.22	105.24	113.62

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	A	718[A]	KCX	O-C-CA-CB
1	B	718[A]	KCX	O-C-CA-CB
1	B	718[A]	KCX	CG-CD-CE-NZ
1	B	718[A]	KCX	CE-CD-CG-CB

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 6 ligands modelled in this entry, 6 are 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.

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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(Å²)	Q<0.9
1	A	1003/1165 (86%)	0.52	156 (15%)	2	1	19, 72, 163, 191	8 (0%)
1	B	1001/1165 (85%)	0.30	113 (11%)	5	2	19, 56, 139, 190	7 (0%)
All	All	2004/2330 (86%)	0.41	269 (13%)	3	1	19, 65, 156, 191	15 (0%)

The worst 5 of 269 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	335	SER	11.1
1	A	142	THR	8.1
1	B	288	ALA	7.7
1	A	285	LEU	7.5
1	B	346	ASN	7.1

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

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, 95th 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(Å²)	Q<0.9
1	KCX	A	718[A]	12/13	0.98	0.13	20,21,22,22	0
1	KCX	B	718[A]	12/13	0.98	0.12	19,21,22,22	0

6.3 Carbohydrates ⓘ

There are no monosaccharides in this entry.

6.4 Ligands ⓘ

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, 95th 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
2	MG	A	1200	1/1	0.80	0.19	25,25,25,25	0
2	MG	B	1200	1/1	0.88	0.24	40,40,40,40	0
3	ZN	A	1201	1/1	0.97	0.09	56,56,56,56	0
4	CL	B	1202	1/1	0.97	0.11	30,30,30,30	0
4	CL	A	1202	1/1	0.98	0.17	24,24,24,24	0
3	ZN	B	1201	1/1	0.98	0.05	59,59,59,59	0

6.5 Other polymers ⓘ

There are no such residues in this entry.