



Full wwPDB X-ray Structure Validation Report ⓘ

May 7, 2026 – 11:23 AM EDT

PDB ID : 5KO2 / pdb_00005ko2
Title : Mouse pgp 34 linker deleted mutant Hg derivative
Authors : Xia, D.; Esser, L.; Zhou, F.
Deposited on : 2016-06-29
Resolution : 3.30 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 ⓘ 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	:	4-5-2 with Phenix2.0
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

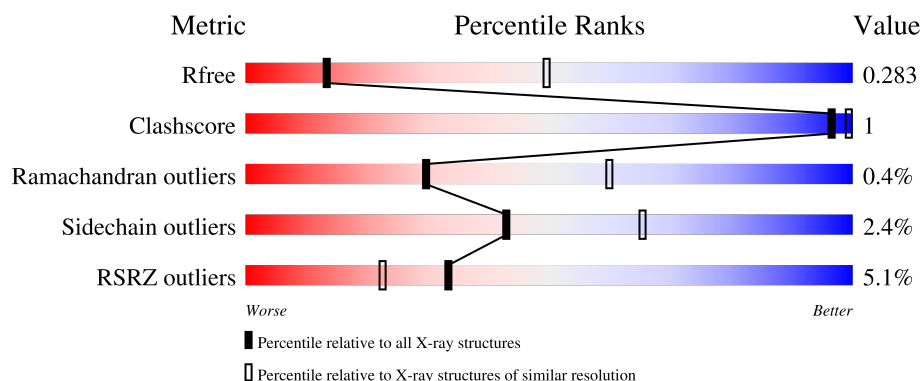
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.30 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}	180053	1169 (3.32-3.28)
Clashscore	190562	1209 (3.32-3.28)
Ramachandran outliers	187476	1188 (3.32-3.28)
Sidechain outliers	187428	1187 (3.32-3.28)
RSRZ outliers	180081	1169 (3.32-3.28)

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 $\leq 5\%$. 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	1248	5% 90% 5% 5%
1	B	1248	4% 90% 5% 5%

2 Entry composition [i](#)

There are 2 unique types of molecules in this entry. The entry contains 37085 atoms, of which 18697 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 Multidrug resistance protein 1A.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
1	A	1185	Total	C	H	N	O	S	0	0	0
			18539	5907	9350	1559	1685	38			
1	B	1184	Total	C	H	N	O	S	0	0	0
			18532	5905	9347	1558	1684	38			

There are 84 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	552	GLN	GLU	engineered mutation	UNP P21447
A	?	-	MET	deletion	UNP P21447
A	?	-	SER	deletion	UNP P21447
A	?	-	SER	deletion	UNP P21447
A	?	-	LYS	deletion	UNP P21447
A	?	-	ASP	deletion	UNP P21447
A	?	-	SER	deletion	UNP P21447
A	?	-	GLY	deletion	UNP P21447
A	?	-	SER	deletion	UNP P21447
A	?	-	SER	deletion	UNP P21447
A	?	-	LEU	deletion	UNP P21447
A	?	-	ILE	deletion	UNP P21447
A	?	-	ARG	deletion	UNP P21447
A	?	-	ARG	deletion	UNP P21447
A	?	-	ARG	deletion	UNP P21447
A	?	-	SER	deletion	UNP P21447
A	?	-	THR	deletion	UNP P21447
A	?	-	ARG	deletion	UNP P21447
A	?	-	LYS	deletion	UNP P21447
A	?	-	SER	deletion	UNP P21447
A	?	-	ILE	deletion	UNP P21447
A	?	-	CYS	deletion	UNP P21447
A	?	-	GLY	deletion	UNP P21447
A	?	-	PRO	deletion	UNP P21447
A	?	-	HIS	deletion	UNP P21447

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Chain	Residue	Modelled	Actual	Comment	Reference
A	?	-	ASP	deletion	UNP P21447
A	?	-	GLN	deletion	UNP P21447
A	?	-	ASP	deletion	UNP P21447
A	?	-	ARG	deletion	UNP P21447
A	?	-	LYS	deletion	UNP P21447
A	?	-	LEU	deletion	UNP P21447
A	?	-	SER	deletion	UNP P21447
A	?	-	THR	deletion	UNP P21447
A	?	-	LYS	deletion	UNP P21447
A	?	-	GLU	deletion	UNP P21447
A	1197	GLN	GLU	engineered mutation	UNP P21447
A	1277	HIS	-	expression tag	UNP P21447
A	1278	HIS	-	expression tag	UNP P21447
A	1279	HIS	-	expression tag	UNP P21447
A	1280	HIS	-	expression tag	UNP P21447
A	1281	HIS	-	expression tag	UNP P21447
A	1282	HIS	-	expression tag	UNP P21447
B	552	GLN	GLU	engineered mutation	UNP P21447
B	?	-	MET	deletion	UNP P21447
B	?	-	SER	deletion	UNP P21447
B	?	-	SER	deletion	UNP P21447
B	?	-	LYS	deletion	UNP P21447
B	?	-	ASP	deletion	UNP P21447
B	?	-	SER	deletion	UNP P21447
B	?	-	GLY	deletion	UNP P21447
B	?	-	SER	deletion	UNP P21447
B	?	-	SER	deletion	UNP P21447
B	?	-	LEU	deletion	UNP P21447
B	?	-	ILE	deletion	UNP P21447
B	?	-	ARG	deletion	UNP P21447
B	?	-	ARG	deletion	UNP P21447
B	?	-	ARG	deletion	UNP P21447
B	?	-	SER	deletion	UNP P21447
B	?	-	THR	deletion	UNP P21447
B	?	-	ARG	deletion	UNP P21447
B	?	-	LYS	deletion	UNP P21447
B	?	-	SER	deletion	UNP P21447
B	?	-	ILE	deletion	UNP P21447
B	?	-	CYS	deletion	UNP P21447
B	?	-	GLY	deletion	UNP P21447
B	?	-	PRO	deletion	UNP P21447
B	?	-	HIS	deletion	UNP P21447

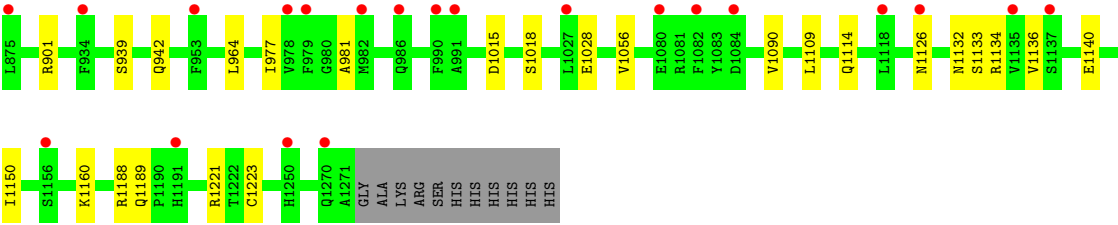
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Chain	Residue	Modelled	Actual	Comment	Reference
B	?	-	ASP	deletion	UNP P21447
B	?	-	GLN	deletion	UNP P21447
B	?	-	ASP	deletion	UNP P21447
B	?	-	ARG	deletion	UNP P21447
B	?	-	LYS	deletion	UNP P21447
B	?	-	LEU	deletion	UNP P21447
B	?	-	SER	deletion	UNP P21447
B	?	-	THR	deletion	UNP P21447
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B	1279	HIS	-	expression tag	UNP P21447
B	1280	HIS	-	expression tag	UNP P21447
B	1281	HIS	-	expression tag	UNP P21447
B	1282	HIS	-	expression tag	UNP P21447

- Molecule 2 is MERCURY (II) ION (CCD ID: HG) (formula: Hg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	7	Total Hg 7 7	0	0
2	B	7	Total Hg 7 7	0	0



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	98.19Å 114.74Å 375.43Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	33.54 – 3.30 33.54 – 3.30	Depositor EDS
% Data completeness (in resolution range)	92.2 (33.54-3.30) 90.9 (33.54-3.30)	Depositor EDS
R_{merge}	0.15	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.92 (at 3.33Å)	Xtriage
Refinement program	PHENIX dev_2443	Depositor
R, R_{free}	0.243 , 0.285 0.253 , 0.283	Depositor DCC
R_{free} test set	2000 reflections (3.28%)	wwPDB-VP
Wilson B-factor (Å ²)	108.7	Xtriage
Anisotropy	0.179	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.30 , 52.9	EDS
L-test for twinning ²	$\langle L \rangle = 0.43$, $\langle L^2 \rangle = 0.26$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	37085	wwPDB-VP
Average B, all atoms (Å ²)	145.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.45% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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.

5 Model quality

5.1 Standard geometry

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

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	0.20	0/9358	0.37	0/12650
1	B	0.20	0/9354	0.37	0/12645
All	All	0.20	0/18712	0.37	0/25295

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

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	9189	9350	9367	17	0
1	B	9185	9347	9364	21	0
2	A	7	0	0	0	0
2	B	7	0	0	0	0
All	All	18388	18697	18731	38	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 (38) 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:1134:ARG:NH1	1:B:1140:GLU:OE2	2.26	0.68
1:B:1189:GLN:OE1	1:B:1221:ARG:NH2	2.29	0.65
1:B:440:TYR:OH	1:B:901:ARG:NH2	2.30	0.65
1:A:440:TYR:OH	1:A:901:ARG:NH2	2.31	0.63
1:A:1207:GLU:OE2	1:A:1229:ARG:NH1	2.33	0.61
1:A:852:GLN:N	1:A:852:GLN:OE1	2.34	0.61
1:A:504:ASN:O	1:A:534:ARG:NH2	2.35	0.59
1:B:852:GLN:N	1:B:852:GLN:OE1	2.36	0.57
1:B:942:GLN:N	1:B:942:GLN:OE1	2.37	0.57
1:B:1109:LEU:O	1:B:1188:ARG:NH1	2.36	0.57
1:B:562:GLU:OE1	1:B:584:ARG:NH1	2.38	0.57
1:B:180:GLU:OE2	1:B:185:LYS:NZ	2.34	0.56
1:A:1015:ASP:OD1	1:A:1018:SER:N	2.42	0.53
1:A:1221:ARG:O	1:A:1223:CYS:SG	2.67	0.52
1:A:258:ARG:NH1	1:A:801:ASP:OD1	2.45	0.50
1:B:977:ILE:O	1:B:981:ALA:N	2.38	0.48
1:B:1221:ARG:O	1:B:1223:CYS:SG	2.71	0.48
1:A:977:ILE:O	1:A:981:ALA:N	2.42	0.48
1:A:1109:LEU:O	1:A:1188:ARG:NH1	2.47	0.47
1:B:253:VAL:O	1:B:256:ALA:N	2.47	0.47
1:B:1015:ASP:OD1	1:B:1018:SER:N	2.48	0.47
1:B:1132:ASN:O	1:B:1133:SER:OG	2.28	0.46
1:B:170:ARG:NH1	1:B:360:GLU:OE1	2.48	0.45
1:A:1203:ASP:N	1:A:1203:ASP:OD1	2.47	0.45
1:A:791:SER:OG	1:A:1007:ILE:O	2.34	0.44
1:B:407:LYS:NZ	1:B:599:GLY:O	2.52	0.43
1:A:78:PHE:O	1:A:82:GLY:N	2.50	0.43
1:A:149:HIS:ND1	1:A:913:GLU:OE2	2.30	0.43
1:B:476:PHE:O	1:B:478:THR:N	2.52	0.43
1:B:816:ASN:OD1	1:B:817:ASP:N	2.52	0.43
1:A:334:VAL:O	1:A:338:ALA:N	2.49	0.42
1:B:583:HIS:O	1:B:625:GLN:NE2	2.46	0.41
1:A:755:PHE:O	1:A:759:GLY:N	2.50	0.40
1:B:126:TYR:N	1:B:939:SER:OG	2.54	0.40
1:A:592:ASP:OD1	1:A:592:ASP:N	2.54	0.40
1:A:825:THR:OG1	1:A:826:GLY:N	2.55	0.40
1:B:128:GLN:NE2	1:B:191:GLN:OE1	2.54	0.40
1:B:592:ASP:OD1	1:B:592:ASP:N	2.54	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	1181/1248 (95%)	1139 (96%)	37 (3%)	5 (0%)	30	60
1	B	1180/1248 (95%)	1140 (97%)	35 (3%)	5 (0%)	30	60
All	All	2361/2496 (95%)	2279 (96%)	72 (3%)	10 (0%)	30	60

All (10) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	1136	VAL
1	B	1160	LYS
1	A	1160	LYS
1	B	1136	VAL
1	A	690	PRO
1	A	1028	GLU
1	B	1028	GLU
1	B	1114	GLN
1	A	850	GLY
1	B	850	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	977/1031 (95%)	951 (97%)	26 (3%)	39	63
1	B	977/1031 (95%)	957 (98%)	20 (2%)	48	68
All	All	1954/2062 (95%)	1908 (98%)	46 (2%)	43	65

All (46) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	69	LEU
1	A	81	VAL
1	A	121	VAL
1	A	299	PHE
1	A	306	TYR
1	A	314	THR
1	A	422	VAL
1	A	427	CYS
1	A	443	LEU
1	A	478	THR
1	A	483	ASN
1	A	520	VAL
1	A	542	VAL
1	A	554	THR
1	A	588	VAL
1	A	610	GLU
1	A	697	LEU
1	A	756	LEU
1	A	869	VAL
1	A	962	GLN
1	A	972	LEU
1	A	1121	CYS
1	A	1126	ASN
1	A	1150	ILE
1	A	1155	ASP
1	A	1203	ASP
1	B	69	LEU
1	B	81	VAL
1	B	121	VAL
1	B	166	GLU
1	B	283	LEU
1	B	299	PHE
1	B	306	TYR
1	B	478	THR
1	B	483	ASN
1	B	520	VAL
1	B	542	VAL
1	B	549	LEU
1	B	554	THR
1	B	610	GLU
1	B	697	LEU
1	B	964	LEU

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Mol	Chain	Res	Type
1	B	1056	VAL
1	B	1090	VAL
1	B	1126	ASN
1	B	1150	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (14) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	514	HIS
1	A	533	GLN
1	A	552	GLN
1	A	1060	GLN
1	B	274	ASN
1	B	458	ASN
1	B	552	GLN
1	B	608	HIS
1	B	910	GLN
1	B	963	GLN
1	B	1050	GLN
1	B	1132	ASN
1	B	1228	HIS
1	B	1234	GLN

5.3.3 RNA ⓘ

There are no RNA molecules 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 oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 14 ligands modelled in this entry, 14 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.

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, 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	1185/1248 (94%)	0.16	67 (5%)	29	20	70, 131, 234, 358	0
1	B	1184/1248 (94%)	0.12	55 (4%)	37	25	66, 140, 237, 383	0
All	All	2369/2496 (94%)	0.14	122 (5%)	33	22	66, 135, 236, 383	0

All (122) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	986	GLN	8.6
1	B	1135	VAL	8.3
1	A	1123	ILE	7.7
1	A	1231	SER	6.7
1	A	986	GLN	5.9
1	A	1124	ALA	5.6
1	A	380	LYS	5.0
1	B	399	SER	5.0
1	A	958	TYR	4.9
1	A	1034	SER	4.9
1	A	979	PHE	4.7
1	B	875	LEU	4.5
1	B	982	MET	4.3
1	B	786	TYR	4.3
1	B	979	PHE	4.2
1	B	522	GLU	4.2
1	A	70	ILE	4.1
1	B	1084	ASP	4.1
1	B	1270	GLN	4.0
1	A	526	GLN	4.0
1	B	1082	PHE	3.9
1	A	897	ILE	3.9
1	B	42	ALA	3.9
1	B	769	GLN	3.9

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Mol	Chain	Res	Type	RSRZ
1	A	1033	PHE	3.8
1	B	41	TYR	3.8
1	B	1137	SER	3.8
1	A	1141	ILE	3.7
1	B	953	PHE	3.7
1	B	1191	HIS	3.7
1	A	306	TYR	3.7
1	A	1143	ARG	3.7
1	A	1032	GLN	3.7
1	B	1080	GLU	3.6
1	A	1127	ILE	3.6
1	A	1147	GLU	3.5
1	B	419	VAL	3.4
1	A	1254	GLN	3.4
1	A	724	PHE	3.4
1	A	1122	SER	3.4
1	B	1156	SER	3.3
1	A	185	LYS	3.3
1	A	691	ALA	3.3
1	A	1161	TYR	3.2
1	B	594	ILE	3.2
1	B	306	TYR	3.2
1	A	321	GLU	3.2
1	B	605	GLN	3.2
1	A	105	GLU	3.2
1	A	964	LEU	3.2
1	A	269	GLU	3.1
1	B	990	PHE	3.1
1	A	1187	VAL	3.1
1	B	277	LEU	3.1
1	A	188	MET	3.1
1	A	1045	SER	2.9
1	A	769	GLN	2.9
1	A	1089	SER	2.9
1	B	160	ASP	2.8
1	B	421	LEU	2.8
1	B	991	ALA	2.8
1	B	603	VAL	2.8
1	A	1186	LEU	2.7
1	A	180	GLU	2.7
1	A	1113	SER	2.7
1	B	934	PHE	2.7

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Mol	Chain	Res	Type	RSRZ
1	A	949	TYR	2.7
1	B	604	GLU	2.7
1	B	327	VAL	2.6
1	B	1126	ASN	2.6
1	A	737	ASN	2.6
1	B	1027	LEU	2.6
1	A	1204	THR	2.6
1	B	302	ILE	2.5
1	A	690	PRO	2.5
1	A	990	PHE	2.5
1	A	527	LEU	2.5
1	B	1250	HIS	2.5
1	A	1232	THR	2.4
1	A	1229	ARG	2.4
1	A	225	ALA	2.4
1	A	951	ALA	2.4
1	A	470	SER	2.4
1	A	518	THR	2.4
1	B	593	VAL	2.4
1	B	617	ILE	2.4
1	A	741	PRO	2.4
1	B	978	VAL	2.4
1	A	1205	GLU	2.3
1	B	299	PHE	2.3
1	A	1031	VAL	2.3
1	A	1054	LEU	2.2
1	A	1091	PHE	2.2
1	B	403	VAL	2.2
1	A	1224	ILE	2.2
1	B	420	ALA	2.2
1	B	1118	LEU	2.2
1	A	71	PHE	2.2
1	A	626	THR	2.2
1	B	413	VAL	2.2
1	A	239	GLU	2.2
1	B	398	PRO	2.2
1	B	736	THR	2.2
1	B	103	LEU	2.2
1	B	161	VAL	2.1
1	A	1257	LEU	2.1
1	A	229	ALA	2.1
1	B	511	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
1	B	611	LEU	2.1
1	A	366	ASP	2.1
1	A	69	LEU	2.1
1	A	443	LEU	2.1
1	A	459	VAL	2.1
1	B	720	LEU	2.1
1	A	1055	GLU	2.1
1	A	1230	LEU	2.0
1	B	478	THR	2.0
1	B	595	ALA	2.0
1	A	151	ILE	2.0
1	B	217	ILE	2.0
1	B	691	ALA	2.0
1	A	1172	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 oligosaccharides 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, 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($\text{\AA}^2$)	Q<0.9
2	HG	A	1301	1/1	0.75	0.13	274,274,274,274	0
2	HG	B	1306	1/1	0.79	0.07	414,414,414,414	0
2	HG	A	1306	1/1	0.83	0.12	368,368,368,368	0
2	HG	B	1307	1/1	0.84	0.08	536,536,536,536	0
2	HG	A	1307	1/1	0.87	0.07	415,415,415,415	0
2	HG	B	1304	1/1	0.91	0.15	385,385,385,385	0
2	HG	B	1302	1/1	0.92	0.05	321,321,321,321	0
2	HG	A	1305	1/1	0.95	0.04	303,303,303,303	0
2	HG	B	1305	1/1	0.95	0.04	347,347,347,347	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
2	HG	A	1302	1/1	0.96	0.08	286,286,286,286	0
2	HG	A	1304	1/1	0.96	0.06	228,228,228,228	0
2	HG	B	1301	1/1	0.97	0.14	182,182,182,182	0
2	HG	B	1303	1/1	0.98	0.03	142,142,142,142	0
2	HG	A	1303	1/1	0.99	0.05	127,127,127,127	0

6.5 Other polymers [i](#)

There are no such residues in this entry.