



# Full wwPDB X-ray Structure Validation Report ⓘ

Jun 12, 2024 – 08:01 AM EDT

PDB ID : 2X1G  
Title : Crystal structure of Importin13 - Mago-Y14 complex  
Authors : Bono, F.; Cook, A.G.; Gruenwald, M.; Ebert, J.; Conti, E.  
Deposited on : 2009-12-23  
Resolution : 3.35 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  
Xtriage (Phenix) : 1.20.1  
EDS : 2.36.2  
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) : 2.36.2

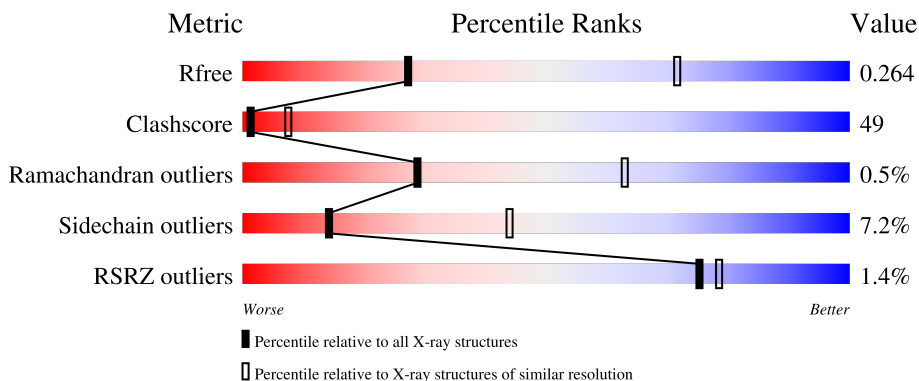
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.35 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.



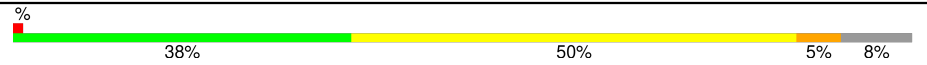
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	1558 (3.42-3.30)
Clashscore	141614	1627 (3.42-3.30)
Ramachandran outliers	138981	1599 (3.42-3.30)
Sidechain outliers	138945	1598 (3.42-3.30)
RSRZ outliers	127900	1507 (3.42-3.30)

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	165	
1	C	165	
2	B	147	
2	D	147	
3	F	971	

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Mol	Chain	Length	Quality of chain
3	G	971	 <p>A horizontal bar chart showing the quality of chain. The bar is divided into four segments: a small red segment at the start, a green segment labeled '38%', a yellow segment labeled '50%', and a small orange segment labeled '5%'. The total length of the bar is marked as '8%' at the end.</p>

## 2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 16076 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 RNA-BINDING PROTEIN 8A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	90	Total 650	C 415	N 110	O 122	S 3	0	0	0
1	C	90	Total 650	C 415	N 110	O 122	S 3	0	0	0

- Molecule 2 is a protein called PROTEIN MAGO NASHI.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	140	Total 1081	C 702	N 185	O 189	S 5	0	0	0
2	D	140	Total 1081	C 702	N 185	O 189	S 5	0	0	0

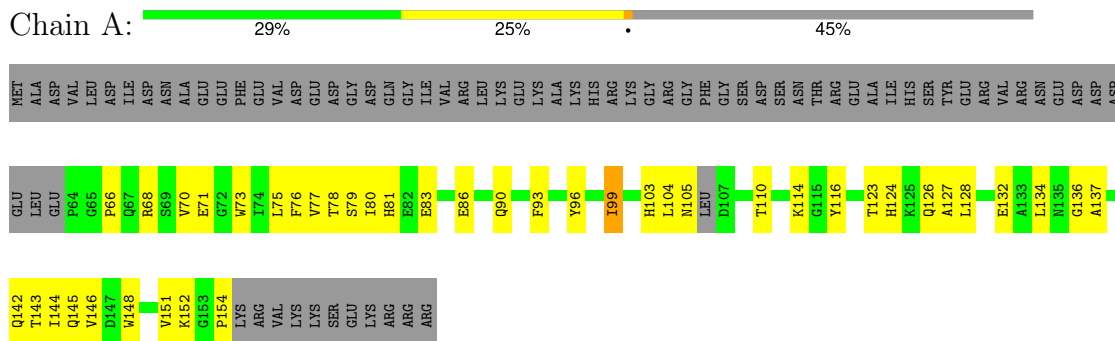
- Molecule 3 is a protein called CADMUS.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	F	896	Total 6307	C 4043	N 1078	O 1137	S 49	0	0	0
3	G	896	Total 6307	C 4043	N 1078	O 1137	S 49	0	0	0

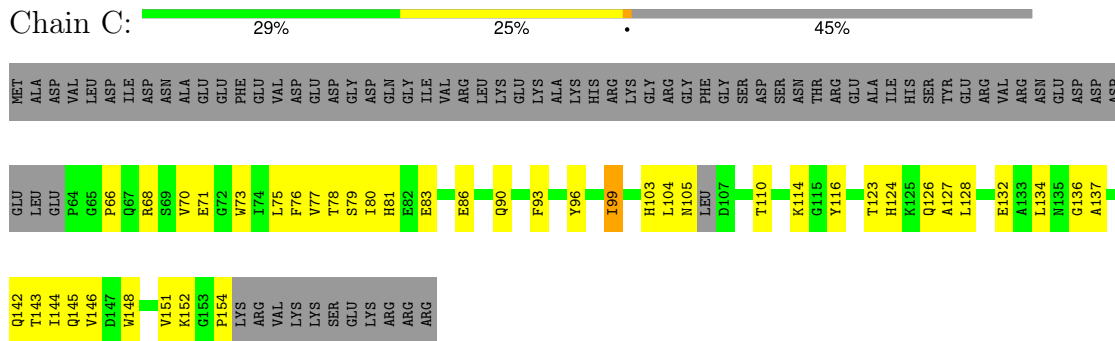
### 3 Residue-property plots

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.

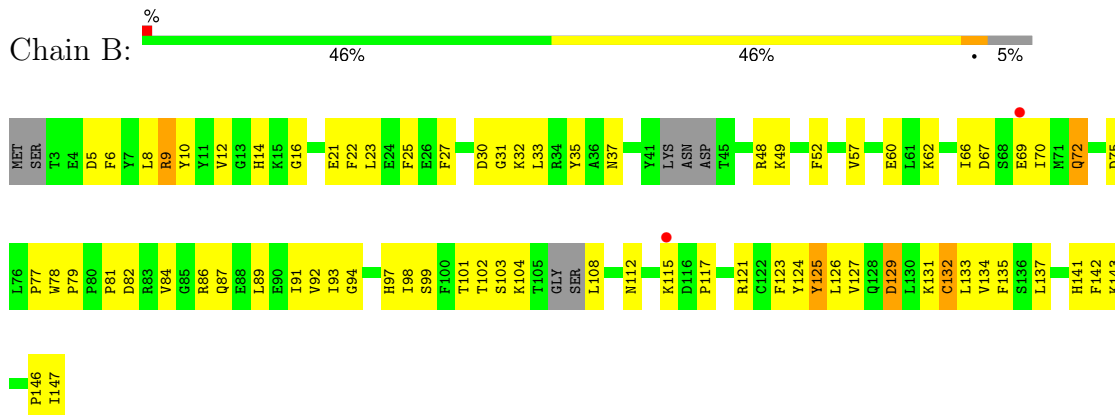
#### • Molecule 1: RNA-BINDING PROTEIN 8A



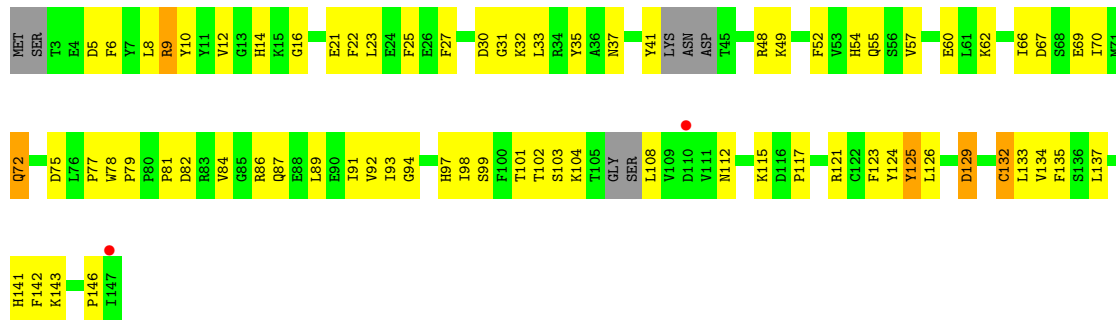
#### • Molecule 1: RNA-BINDING PROTEIN 8A



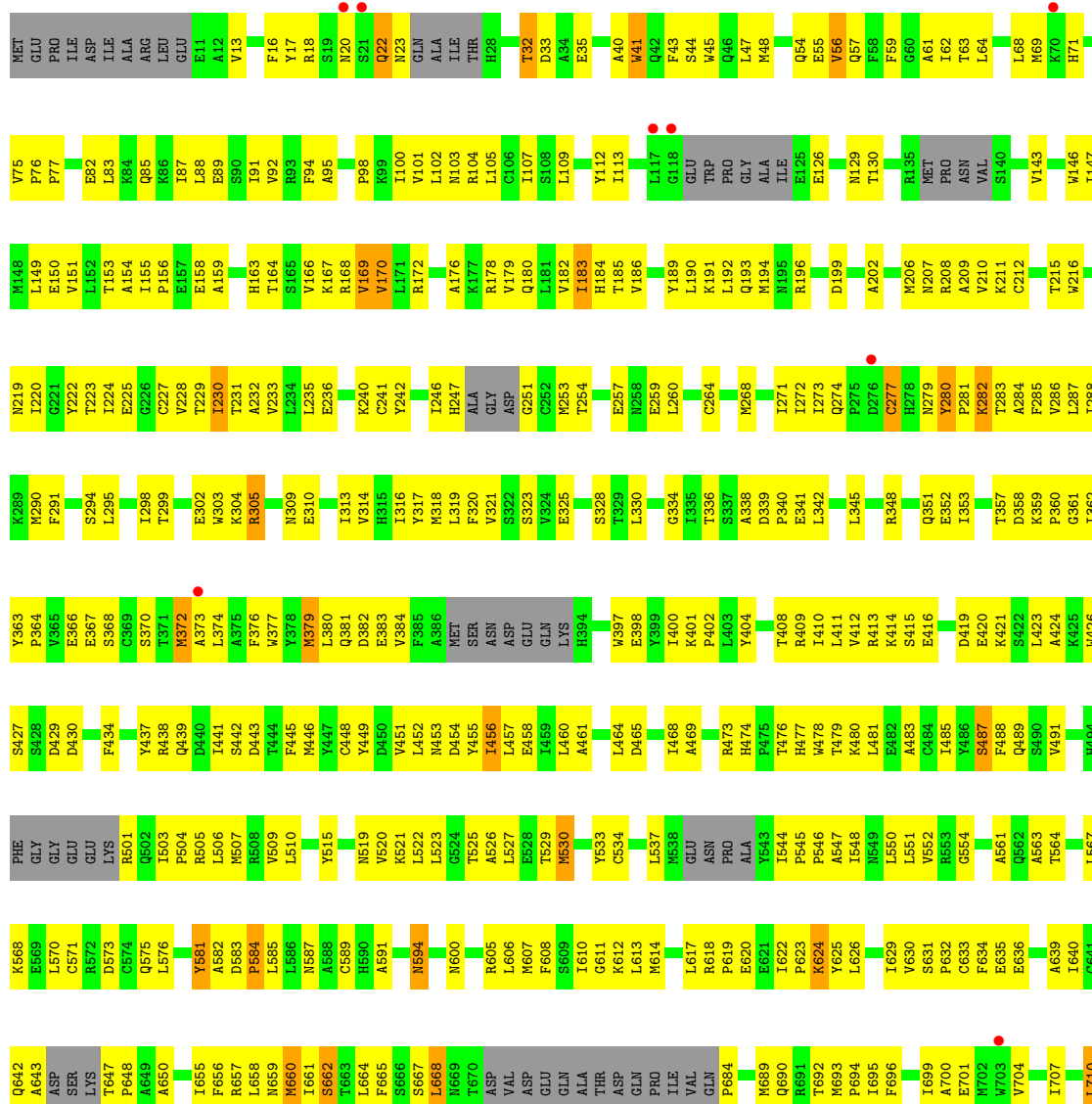
#### • Molecule 2: PROTEIN MAGO NASHI

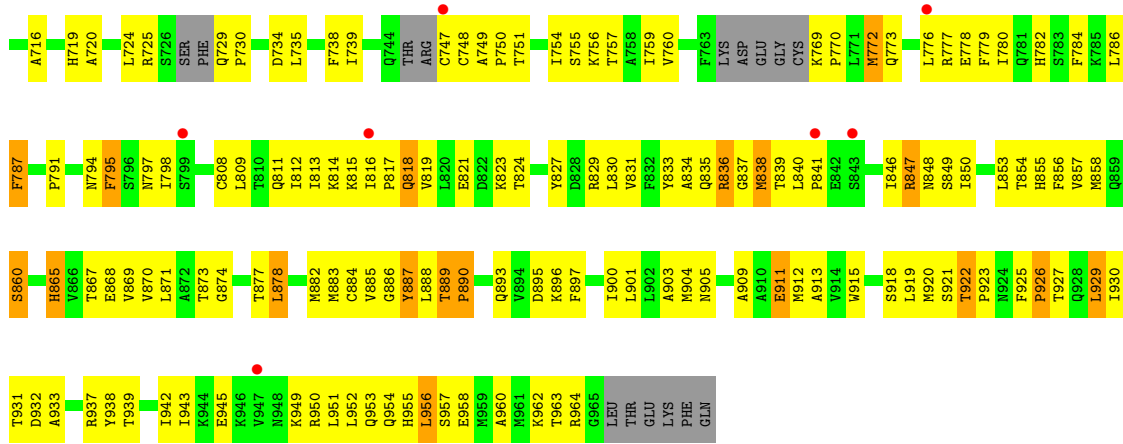


● Molecule 2: PROTEIN MAGO NASHI

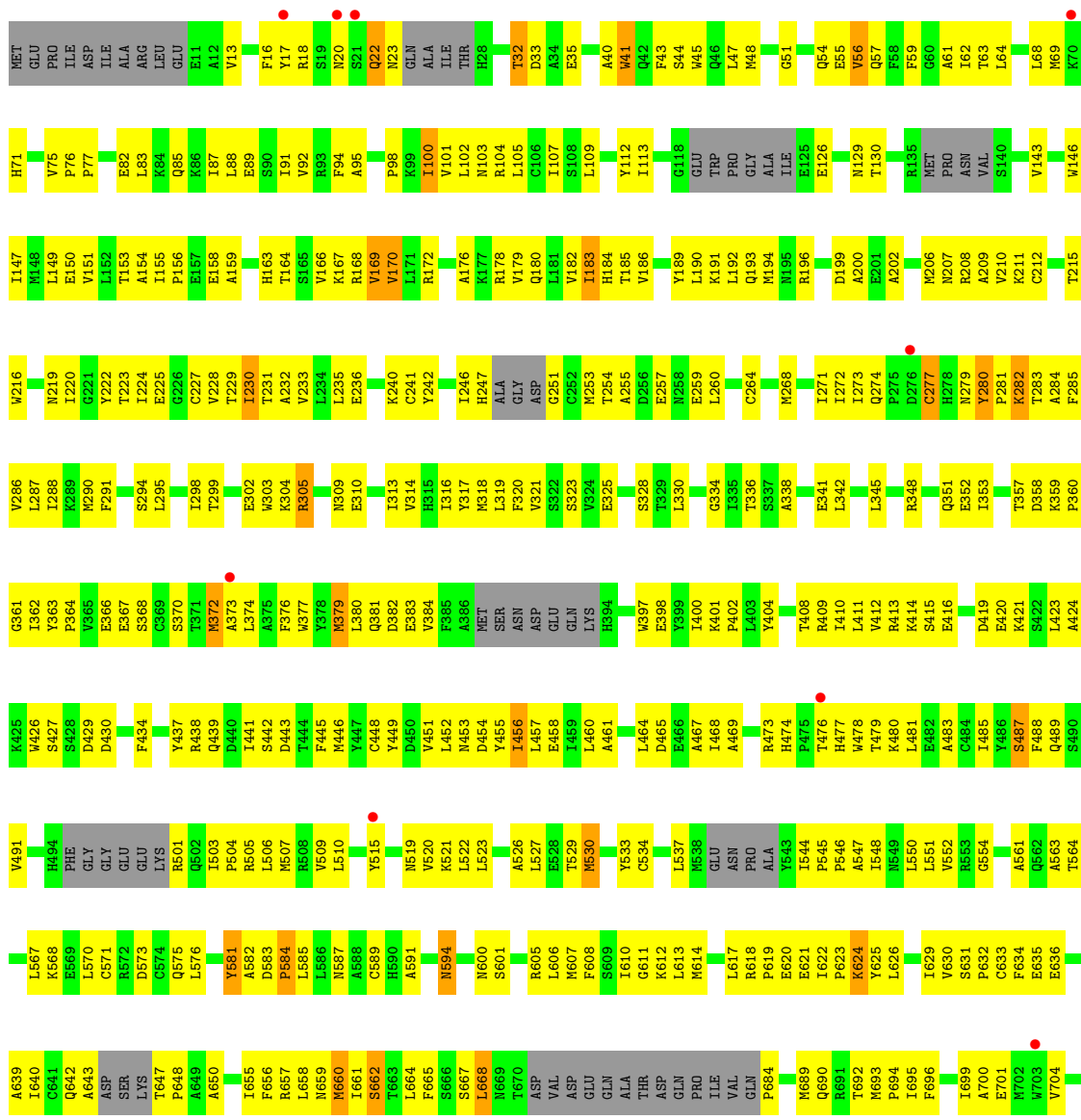


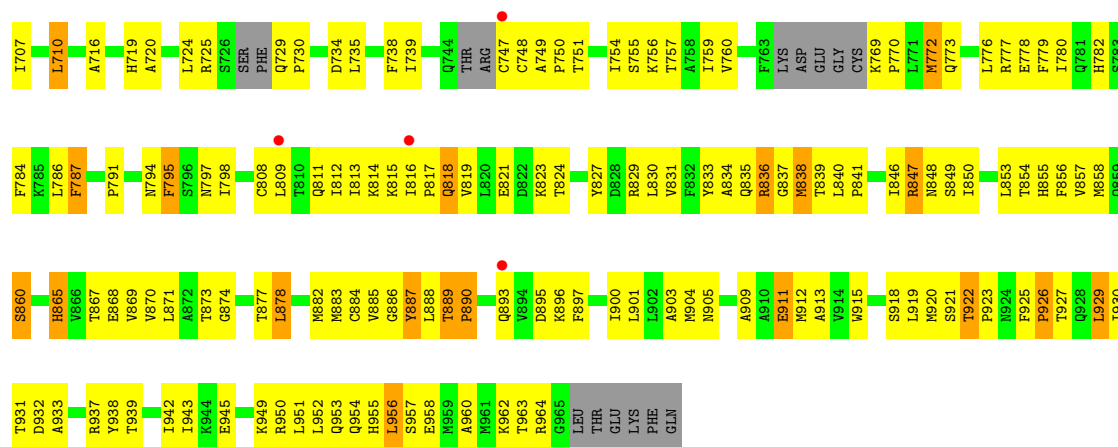
● Molecule 3: CADMUS





• Molecule 3: CADMUS







## 4 Data and refinement statistics i

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	82.57Å 100.79Å 93.92Å 89.83° 110.18° 90.63°	Depositor
Resolution (Å)	50.00 – 3.35 58.71 – 3.16	Depositor EDS
% Data completeness (in resolution range)	96.3 (50.00-3.35) 93.4 (58.71-3.16)	Depositor EDS
$R_{merge}$	0.10	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.44 (at 3.19Å)	Xtrriage
Refinement program	CNS 1.2	Depositor
R, $R_{free}$	0.267 , 0.289 0.260 , 0.264	Depositor DCC
$R_{free}$ test set	2376 reflections (5.07%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	89.4	Xtrriage
Anisotropy	0.189	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.33 , 109.7	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.45$ , $\langle L^2 \rangle = 0.28$	Xtrriage
Estimated twinning fraction	0.388 for -h,k,-l	Xtrriage
$F_o, F_c$ correlation	0.90	EDS
Total number of atoms	16076	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	97.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.48% 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](#)

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	0.39	0/665	0.57	0/907
1	C	0.39	0/665	0.57	0/907
2	B	0.35	0/1108	0.59	0/1499
2	D	0.35	0/1108	0.59	0/1499
3	F	0.43	8/6416 (0.1%)	0.62	4/8773 (0.0%)
3	G	0.43	8/6416 (0.1%)	0.62	4/8773 (0.0%)
All	All	0.42	16/16378 (0.1%)	0.61	8/22358 (0.0%)

All (16) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	82	GLU	CB-CG	-5.37	1.42	1.52
3	F	458	GLU	CB-CG	-5.36	1.42	1.52
3	G	458	GLU	CB-CG	-5.36	1.42	1.52
3	G	82	GLU	CB-CG	-5.35	1.42	1.52
3	G	795	PHE	CB-CG	-5.34	1.42	1.51
3	F	795	PHE	CB-CG	-5.33	1.42	1.51
3	G	787	PHE	CB-CG	-5.29	1.42	1.51
3	F	787	PHE	CB-CG	-5.29	1.42	1.51
3	F	911	GLU	CB-CG	-5.27	1.42	1.52
3	G	911	GLU	CB-CG	-5.27	1.42	1.52
3	F	55	GLU	CB-CG	-5.25	1.42	1.52
3	G	55	GLU	CB-CG	-5.21	1.42	1.52
3	G	341	GLU	CB-CG	-5.06	1.42	1.52
3	F	341	GLU	CB-CG	-5.04	1.42	1.52
3	F	887	TYR	CB-CG	-5.03	1.44	1.51
3	G	887	TYR	CB-CG	-5.03	1.44	1.51

All (8) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	G	684	PRO	N-CA-CB	5.48	109.88	103.30
3	F	684	PRO	N-CA-CB	5.48	109.87	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	730	PRO	N-CA-CB	5.46	109.85	103.30
3	F	926	PRO	N-CA-C	-5.46	97.92	112.10
3	G	926	PRO	N-CA-C	-5.44	97.95	112.10
3	G	730	PRO	N-CA-CB	5.44	109.82	103.30
3	G	841	PRO	N-CA-CB	5.19	109.53	103.30
3	F	841	PRO	N-CA-CB	5.17	109.50	103.30

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	650	0	561	48	0
1	C	650	0	561	51	0
2	B	1081	0	987	94	0
2	D	1081	0	987	91	1
3	F	6307	0	5647	634	1
3	G	6307	0	5647	634	0
All	All	16076	0	14390	1497	1

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 49.

All (1497) 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)
3:G:224:ILE:HD11	3:G:277:CYS:HB3	1.19	1.17
3:F:760:VAL:HA	3:F:816:ILE:CD1	1.74	1.17
3:F:446:MET:HE1	3:F:491:VAL:HA	1.18	1.16
3:G:274:GLN:HB2	3:G:277:CYS:SG	1.85	1.16
3:G:760:VAL:HA	3:G:816:ILE:CD1	1.74	1.15
3:F:274:GLN:HB2	3:F:277:CYS:SG	1.85	1.14
3:F:362:ILE:HG22	3:F:364:PRO:HD2	1.29	1.12
3:G:446:MET:HE1	3:G:491:VAL:HA	1.22	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:224:ILE:HD11	3:F:277:CYS:HB3	1.19	1.09
3:G:362:ILE:HG22	3:G:364:PRO:HD2	1.29	1.09
2:D:70:ILE:HG21	2:D:126:LEU:HD22	1.32	1.09
2:B:70:ILE:HG21	2:B:126:LEU:HD22	1.32	1.07
3:F:230:ILE:HD12	3:F:230:ILE:H	1.19	1.07
3:G:838:MET:HA	3:G:846:ILE:HG23	1.37	1.07
3:F:760:VAL:HA	3:F:816:ILE:HD11	1.10	1.06
3:G:760:VAL:HA	3:G:816:ILE:HD11	1.10	1.05
3:G:230:ILE:H	3:G:230:ILE:HD12	1.19	1.05
2:B:87:GLN:HE21	2:B:104:LYS:HA	1.20	1.04
3:F:838:MET:HA	3:F:846:ILE:HG23	1.37	1.04
2:D:87:GLN:HE21	2:D:104:LYS:HA	1.19	1.04
3:G:839:THR:HG23	3:G:888:LEU:HD23	1.41	1.02
3:G:224:ILE:HD11	3:G:277:CYS:CB	1.93	0.99
3:F:889:THR:HG23	3:F:893:GLN:HG3	1.45	0.99
3:F:224:ILE:HD11	3:F:277:CYS:CB	1.93	0.99
3:F:224:ILE:CD1	3:F:277:CYS:HB3	1.93	0.99
3:F:839:THR:HG23	3:F:888:LEU:HD23	1.41	0.99
3:F:818:GLN:O	3:F:821:GLU:HB3	1.63	0.98
3:G:224:ILE:CD1	3:G:277:CYS:HB3	1.92	0.98
3:G:889:THR:HG23	3:G:893:GLN:HG3	1.45	0.97
3:G:760:VAL:CA	3:G:816:ILE:HD11	1.95	0.97
3:G:818:GLN:O	3:G:821:GLU:HB3	1.63	0.97
1:A:99:ILE:HD13	1:A:99:ILE:H	1.30	0.96
3:F:760:VAL:CA	3:F:816:ILE:HD11	1.95	0.95
3:F:527:LEU:HD11	3:F:554:GLY:HA3	1.49	0.95
3:G:929:LEU:HD12	3:G:929:LEU:H	1.31	0.94
3:F:929:LEU:H	3:F:929:LEU:HD12	1.31	0.94
1:C:99:ILE:HD13	1:C:99:ILE:H	1.30	0.93
3:F:701:GLU:HA	3:F:704:VAL:HG23	1.49	0.93
3:G:850:ILE:HG23	3:G:900:ILE:HG23	1.50	0.93
3:G:527:LEU:HD11	3:G:554:GLY:HA3	1.49	0.92
3:F:850:ILE:HG23	3:F:900:ILE:HG23	1.50	0.92
3:G:701:GLU:HA	3:G:704:VAL:HG23	1.49	0.92
3:F:401:LYS:HD3	3:G:18:ARG:NH1	1.87	0.90
3:G:945:GLU:HG3	3:G:951:LEU:HD23	1.52	0.90
3:F:534:CYS:SG	3:F:573:ASP:HB2	2.12	0.90
3:G:321:VAL:HG13	3:G:376:PHE:HB2	1.54	0.90
3:G:534:CYS:SG	3:G:573:ASP:HB2	2.12	0.90
1:A:78:THR:OG1	1:A:145:GLN:HB3	1.72	0.89
1:C:78:THR:OG1	1:C:145:GLN:HB3	1.72	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:149:LEU:O	3:G:153:THR:HG23	1.73	0.89
3:F:149:LEU:O	3:F:153:THR:HG23	1.72	0.89
3:F:945:GLU:HG3	3:F:951:LEU:HD23	1.52	0.89
3:F:401:LYS:CE	3:G:18:ARG:NH1	2.35	0.89
3:F:321:VAL:HG13	3:F:376:PHE:HB2	1.54	0.89
3:F:519:ASN:ND2	3:F:521:LYS:HE3	1.89	0.88
3:F:478:TRP:CD1	3:F:521:LYS:HD2	2.07	0.88
3:G:478:TRP:CD1	3:G:521:LYS:HD2	2.07	0.87
3:G:519:ASN:ND2	3:G:521:LYS:HE3	1.89	0.87
3:G:279:ASN:C	3:G:281:PRO:HD2	1.94	0.87
2:B:81:PRO:HG2	2:B:86:ARG:NH1	1.90	0.87
3:G:952:LEU:O	3:G:956:LEU:HB2	1.74	0.86
2:D:81:PRO:HG2	2:D:86:ARG:NH1	1.90	0.86
3:G:631:SER:O	3:G:635:GLU:HG2	1.75	0.86
3:F:952:LEU:O	3:F:956:LEU:HB2	1.74	0.86
3:G:693:MET:HB2	3:G:734:ASP:CG	1.96	0.86
3:F:279:ASN:C	3:F:281:PRO:HD2	1.94	0.86
3:G:882:MET:HE1	3:G:901:LEU:HD11	1.55	0.86
3:G:285:PHE:CD1	3:G:345:LEU:HD22	2.10	0.86
3:F:791:PRO:O	3:F:795:PHE:HB3	1.76	0.86
3:G:583:ASP:HB2	3:G:584:PRO:HD3	1.57	0.86
3:F:583:ASP:HB2	3:F:584:PRO:HD3	1.57	0.85
3:F:882:MET:HE1	3:F:901:LEU:HD11	1.56	0.85
3:G:446:MET:CE	3:G:491:VAL:HA	2.07	0.85
3:F:631:SER:O	3:F:635:GLU:HG2	1.75	0.85
3:F:693:MET:HB2	3:F:734:ASP:CG	1.96	0.85
3:G:831:VAL:HG11	3:G:873:THR:HG21	1.58	0.85
3:G:791:PRO:O	3:G:795:PHE:HB3	1.76	0.85
3:F:831:VAL:HG11	3:F:873:THR:HG21	1.58	0.85
3:F:285:PHE:CD1	3:F:345:LEU:HD22	2.11	0.84
3:F:927:THR:HG21	3:F:963:THR:O	1.77	0.84
3:G:886:GLY:HA3	3:G:963:THR:HG21	1.57	0.84
3:F:886:GLY:HA3	3:F:963:THR:HG21	1.57	0.84
3:F:923:PRO:HG2	3:F:926:PRO:HD3	1.60	0.84
3:G:778:GLU:O	3:G:782:HIS:CG	2.31	0.84
3:G:816:ILE:HG22	3:G:819:VAL:CG2	2.08	0.84
3:G:927:THR:HG21	3:G:963:THR:O	1.77	0.84
3:F:519:ASN:HD22	3:F:521:LYS:HE3	1.41	0.83
3:F:242:TYR:HA	3:F:253:MET:HE1	1.60	0.83
3:F:816:ILE:HG22	3:F:819:VAL:CG2	2.08	0.83
3:F:778:GLU:O	3:F:782:HIS:CG	2.31	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:12:VAL:HG22	2:B:87:GLN:HG2	1.61	0.83
3:F:401:LYS:HE2	3:G:18:ARG:HH12	1.44	0.83
3:F:379:MET:HG3	3:F:380:LEU:N	1.94	0.82
3:G:379:MET:HG3	3:G:380:LEU:N	1.94	0.82
3:G:923:PRO:HG2	3:G:926:PRO:HD3	1.59	0.82
3:G:242:TYR:HA	3:G:253:MET:HE1	1.62	0.82
3:F:279:ASN:O	3:F:281:PRO:HD2	1.80	0.81
3:G:279:ASN:O	3:G:281:PRO:HD2	1.80	0.81
3:G:564:THR:CG2	3:G:605:ARG:HB2	2.11	0.81
3:F:446:MET:CE	3:F:491:VAL:HA	2.07	0.81
2:D:12:VAL:HG22	2:D:87:GLN:HG2	1.61	0.81
3:F:186:VAL:O	3:F:190:LEU:HG	1.80	0.81
3:G:186:VAL:O	3:G:190:LEU:HG	1.80	0.81
3:G:519:ASN:HD22	3:G:521:LYS:HE3	1.41	0.81
3:F:210:VAL:HG11	3:F:264:CYS:HA	1.63	0.81
3:F:633:CYS:HA	3:F:657:ARG:HD2	1.63	0.81
3:F:564:THR:CG2	3:F:605:ARG:HB2	2.10	0.81
3:G:313:ILE:HD12	3:G:359:LYS:HE2	1.64	0.80
3:G:210:VAL:HG11	3:G:264:CYS:HA	1.63	0.80
3:G:780:ILE:HG23	3:G:830:LEU:HD21	1.63	0.80
3:F:537:LEU:HD12	3:F:570:LEU:HD11	1.64	0.80
3:G:701:GLU:HA	3:G:704:VAL:CG2	2.12	0.80
3:F:780:ILE:HG23	3:F:830:LEU:HD21	1.63	0.80
3:G:537:LEU:HD12	3:G:570:LEU:HD11	1.64	0.80
3:G:164:THR:O	3:G:166:VAL:HG23	1.82	0.80
3:G:359:LYS:HE3	3:G:367:GLU:CD	2.03	0.79
3:F:404:TYR:O	3:F:408:THR:HG23	1.82	0.79
3:F:949:LYS:O	3:F:953:GLN:HG3	1.83	0.79
3:G:404:TYR:O	3:G:408:THR:HG23	1.82	0.79
3:F:313:ILE:HD12	3:F:359:LYS:HE2	1.64	0.79
3:F:164:THR:O	3:F:166:VAL:HG23	1.82	0.79
3:G:724:LEU:HD21	3:G:729:GLN:HA	1.64	0.79
2:B:8:LEU:HD12	2:B:9:ARG:H	1.47	0.79
3:F:303:TRP:CZ3	3:F:359:LYS:HA	2.18	0.79
3:F:701:GLU:HA	3:F:704:VAL:CG2	2.12	0.79
3:F:724:LEU:HD21	3:F:729:GLN:HA	1.64	0.79
3:G:612:LYS:HE2	3:G:667:SER:HB2	1.65	0.78
3:G:633:CYS:HA	3:G:657:ARG:HD2	1.63	0.78
3:G:303:TRP:CZ3	3:G:359:LYS:HA	2.18	0.78
3:G:359:LYS:HG2	3:G:367:GLU:HG3	1.66	0.78
2:B:8:LEU:HD13	2:B:91:ILE:HG12	1.66	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:359:LYS:HE3	3:F:367:GLU:CD	2.03	0.78
3:F:612:LYS:HE2	3:F:667:SER:HB2	1.65	0.77
3:F:631:SER:OG	3:F:632:PRO:HD3	1.84	0.77
3:G:951:LEU:O	3:G:954:GLN:HG2	1.84	0.77
3:G:693:MET:SD	3:G:734:ASP:HB2	2.24	0.77
3:G:949:LYS:O	3:G:953:GLN:HG3	1.83	0.77
2:D:8:LEU:HD12	2:D:9:ARG:H	1.47	0.77
3:G:478:TRP:CD1	3:G:479:THR:N	2.53	0.77
3:F:951:LEU:O	3:F:954:GLN:HG2	1.84	0.77
3:G:282:LYS:H	3:G:282:LYS:HD2	1.50	0.77
3:G:816:ILE:HG22	3:G:819:VAL:HG21	1.67	0.77
3:F:693:MET:SD	3:F:734:ASP:HB2	2.24	0.77
3:G:362:ILE:HG22	3:G:364:PRO:CD	2.13	0.77
3:F:401:LYS:CD	3:G:18:ARG:NH1	2.47	0.77
3:F:272:ILE:HD11	3:F:291:PHE:CE1	2.20	0.77
3:G:631:SER:OG	3:G:632:PRO:HD3	1.84	0.77
2:D:8:LEU:HD13	2:D:91:ILE:HG12	1.66	0.76
3:F:268:MET:HB3	3:F:291:PHE:HE2	1.49	0.76
3:F:282:LYS:HD2	3:F:282:LYS:H	1.50	0.76
3:F:777:ARG:CZ	3:F:824:THR:CG2	2.63	0.76
3:G:272:ILE:HD11	3:G:291:PHE:CE1	2.20	0.76
3:F:657:ARG:O	3:F:661:ILE:HG12	1.84	0.76
3:G:657:ARG:O	3:G:661:ILE:HG12	1.84	0.76
3:F:359:LYS:HG2	3:F:367:GLU:HG3	1.66	0.76
3:F:794:ASN:HA	3:F:797:ASN:HD22	1.51	0.76
3:G:268:MET:HB3	3:G:291:PHE:HE2	1.49	0.76
3:G:794:ASN:HA	3:G:797:ASN:HD22	1.51	0.76
3:F:816:ILE:HG22	3:F:819:VAL:HG21	1.67	0.76
3:G:777:ARG:CZ	3:G:824:THR:CG2	2.63	0.76
3:F:460:LEU:HD22	3:F:487:SER:OG	1.86	0.76
3:G:701:GLU:CA	3:G:704:VAL:HG23	2.16	0.76
3:F:478:TRP:CD1	3:F:479:THR:N	2.53	0.76
3:G:361:GLY:HA3	3:G:366:GLU:CB	2.16	0.76
3:G:460:LEU:HD22	3:G:487:SER:OG	1.86	0.76
3:F:361:GLY:HA3	3:F:366:GLU:CB	2.16	0.75
3:G:231:THR:HG21	3:G:287:LEU:HD22	1.68	0.75
3:F:362:ILE:HG22	3:F:364:PRO:CD	2.13	0.75
3:F:40:ALA:HA	3:F:43:PHE:CE2	2.21	0.75
3:F:147:ILE:O	3:F:151:VAL:HG23	1.86	0.75
3:F:359:LYS:HE3	3:F:367:GLU:OE1	1.87	0.75
3:G:359:LYS:HE3	3:G:367:GLU:OE1	1.87	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:81:PRO:HG2	2:D:86:ARG:HH11	1.52	0.74
3:F:231:THR:HG21	3:F:287:LEU:HD22	1.68	0.74
3:G:816:ILE:CG2	3:G:819:VAL:HG21	2.17	0.74
2:B:102:THR:HG22	2:B:103:SER:N	2.01	0.74
3:F:701:GLU:CA	3:F:704:VAL:HG23	2.16	0.74
3:G:40:ALA:HA	3:G:43:PHE:CE2	2.21	0.74
3:F:693:MET:HG3	3:F:694:PRO:HD3	1.70	0.74
3:G:147:ILE:O	3:G:151:VAL:HG23	1.86	0.74
2:D:102:THR:HG22	2:D:103:SER:N	2.01	0.74
3:G:474:HIS:HB2	3:G:477:HIS:CD2	2.23	0.74
2:B:77:PRO:HB2	2:B:115:LYS:CB	2.18	0.74
3:G:839:THR:CG2	3:G:888:LEU:HD23	2.18	0.74
2:D:77:PRO:HB2	2:D:115:LYS:CB	2.18	0.73
3:G:634:PHE:HE2	3:G:692:THR:CG2	2.01	0.73
3:G:224:ILE:HD11	3:G:277:CYS:CA	2.18	0.73
3:G:693:MET:HG3	3:G:694:PRO:HD3	1.70	0.73
3:F:474:HIS:HB2	3:F:477:HIS:CD2	2.23	0.73
3:F:895:ASP:OD1	3:F:953:GLN:HG2	1.89	0.73
3:F:945:GLU:CG	3:F:951:LEU:HD23	2.18	0.73
3:G:945:GLU:CG	3:G:951:LEU:HD23	2.18	0.73
3:F:816:ILE:CG2	3:F:819:VAL:HG21	2.17	0.73
3:G:755:SER:O	3:G:759:ILE:HG13	1.88	0.73
2:B:81:PRO:HG2	2:B:86:ARG:HH11	1.52	0.73
3:F:634:PHE:HE2	3:F:692:THR:CG2	2.01	0.73
3:G:446:MET:CE	3:G:446:MET:HA	2.19	0.73
2:D:92:VAL:HG22	2:D:97:HIS:CD2	2.24	0.73
3:G:310:GLU:O	3:G:314:VAL:HG23	1.89	0.72
3:F:446:MET:CE	3:F:446:MET:HA	2.19	0.72
3:F:839:THR:CG2	3:F:888:LEU:HD23	2.18	0.72
3:F:310:GLU:O	3:F:314:VAL:HG23	1.89	0.72
3:F:464:LEU:O	3:F:468:ILE:HG13	1.89	0.72
3:F:186:VAL:HG13	3:F:209:ALA:HB1	1.72	0.72
3:G:186:VAL:HG13	3:G:209:ALA:HB1	1.72	0.72
2:B:81:PRO:HD3	2:B:101:THR:HG22	1.72	0.72
3:F:489:GLN:HB2	3:F:529:THR:HG23	1.72	0.72
2:B:87:GLN:NE2	2:B:104:LYS:HA	2.02	0.72
2:B:92:VAL:HG22	2:B:97:HIS:CD2	2.24	0.72
3:G:693:MET:CG	3:G:694:PRO:HD3	2.20	0.72
3:F:224:ILE:HD11	3:F:277:CYS:CA	2.19	0.72
3:G:846:ILE:CD1	3:G:893:GLN:HE22	2.03	0.72
3:G:895:ASP:OD1	3:G:953:GLN:HG2	1.89	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:846:ILE:CD1	3:F:893:GLN:HE22	2.03	0.71
3:G:838:MET:CA	3:G:846:ILE:HG23	2.17	0.71
3:F:420:GLU:H	3:F:478:TRP:HZ2	1.38	0.71
3:F:755:SER:O	3:F:759:ILE:HG13	1.88	0.71
3:G:420:GLU:H	3:G:478:TRP:HZ2	1.38	0.71
3:F:401:LYS:NZ	3:G:18:ARG:HH11	1.89	0.71
3:F:794:ASN:O	3:F:798:ILE:N	2.24	0.71
3:G:284:ALA:O	3:G:288:ILE:HG13	1.91	0.71
3:F:693:MET:CG	3:F:694:PRO:HD3	2.20	0.71
3:G:464:LEU:O	3:G:468:ILE:HG13	1.89	0.71
2:D:81:PRO:HD3	2:D:101:THR:HG22	1.72	0.70
3:G:438:ARG:O	3:G:441:ILE:HG22	1.91	0.70
3:G:489:GLN:HB2	3:G:529:THR:HG23	1.72	0.70
3:G:54:GLN:HE21	3:G:98:PRO:HB2	1.56	0.70
3:G:794:ASN:O	3:G:798:ILE:N	2.24	0.70
3:G:416:GLU:HA	3:G:483:ALA:HB2	1.74	0.70
1:C:128:LEU:HD11	1:C:132:GLU:OE2	1.92	0.70
3:F:215:THR:HG22	3:F:219:ASN:ND2	2.06	0.70
3:F:284:ALA:O	3:F:288:ILE:HG13	1.91	0.70
3:F:692:THR:HG22	3:F:696:PHE:HE1	1.57	0.70
3:F:919:LEU:O	3:F:923:PRO:HG3	1.92	0.70
3:G:291:PHE:CD2	3:G:319:LEU:HD21	2.27	0.70
2:B:14:HIS:CD2	3:G:200:ALA:HB3	2.27	0.69
3:F:838:MET:CA	3:F:846:ILE:HG23	2.17	0.69
3:G:692:THR:CG2	3:G:696:PHE:HE1	2.04	0.69
1:A:128:LEU:HD11	1:A:132:GLU:OE2	1.92	0.69
3:F:416:GLU:HA	3:F:483:ALA:HB2	1.74	0.69
3:F:545:PRO:HG2	3:F:546:PRO:HD3	1.74	0.69
3:G:919:LEU:O	3:G:923:PRO:HG3	1.92	0.69
3:F:291:PHE:CD2	3:F:319:LEU:HD21	2.27	0.69
3:F:655:ILE:HG23	3:F:659:ASN:HD21	1.58	0.69
3:F:692:THR:CG2	3:F:696:PHE:HE1	2.04	0.69
3:G:816:ILE:CG2	3:G:819:VAL:CG2	2.70	0.69
3:F:438:ARG:O	3:F:441:ILE:HG22	1.91	0.69
3:G:48:MET:HA	3:G:57:GLN:HG2	1.75	0.69
3:G:215:THR:HG22	3:G:219:ASN:ND2	2.07	0.69
3:G:931:THR:HG22	3:G:933:ALA:H	1.58	0.69
3:G:835:GLN:NE2	3:G:873:THR:HG23	2.08	0.69
3:F:618:ARG:O	3:F:622:ILE:HG13	1.93	0.69
3:G:274:GLN:CB	3:G:277:CYS:SG	2.75	0.69
3:G:545:PRO:HG2	3:G:546:PRO:HD3	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:816:ILE:CG2	3:F:819:VAL:CG2	2.70	0.68
3:F:835:GLN:NE2	3:F:873:THR:HG23	2.08	0.68
3:G:839:THR:HG23	3:G:888:LEU:CD2	2.21	0.68
3:F:54:GLN:HE21	3:F:98:PRO:HB2	1.56	0.68
3:F:228:VAL:HA	3:F:287:LEU:HD21	1.74	0.68
1:A:137:ALA:HB3	1:A:144:ILE:HG12	1.75	0.68
3:F:501:ARG:CB	3:G:51:GLY:O	2.42	0.68
3:G:618:ARG:O	3:G:622:ILE:HG13	1.93	0.68
3:F:362:ILE:CG2	3:F:364:PRO:HD2	2.17	0.68
1:A:77:VAL:HB	1:A:80:ILE:HD11	1.75	0.68
3:F:48:MET:HA	3:F:57:GLN:HG2	1.75	0.68
3:G:446:MET:HA	3:G:446:MET:HE2	1.76	0.68
3:G:692:THR:HG22	3:G:696:PHE:HE1	1.57	0.68
3:F:931:THR:HG22	3:F:933:ALA:H	1.58	0.68
3:G:581:TYR:C	3:G:584:PRO:HD2	2.14	0.68
3:G:228:VAL:HA	3:G:287:LEU:HD21	1.74	0.68
3:F:146:TRP:CD1	3:F:208:ARG:HG3	2.29	0.67
2:D:37:ASN:ND2	2:D:146:PRO:HB3	2.10	0.67
3:F:929:LEU:HD12	3:F:929:LEU:N	2.08	0.67
3:G:146:TRP:CD1	3:G:208:ARG:HG3	2.29	0.67
3:G:816:ILE:HG22	3:G:816:ILE:O	1.95	0.67
3:F:581:TYR:C	3:F:584:PRO:HD2	2.14	0.67
1:C:77:VAL:HB	1:C:80:ILE:HD11	1.75	0.67
3:F:839:THR:HG23	3:F:888:LEU:CD2	2.21	0.67
3:G:636:GLU:OE2	3:G:657:ARG:NE	2.26	0.67
3:G:40:ALA:HB3	3:G:41:TRP:CE3	2.30	0.67
3:G:929:LEU:HD12	3:G:929:LEU:N	2.08	0.67
1:C:137:ALA:HB3	1:C:144:ILE:HG12	1.75	0.66
3:F:816:ILE:HG22	3:F:816:ILE:O	1.95	0.66
2:D:87:GLN:NE2	2:D:104:LYS:HA	2.02	0.66
3:F:692:THR:HG22	3:F:696:PHE:CE1	2.31	0.66
3:G:630:VAL:HG13	3:G:634:PHE:HE1	1.61	0.66
1:C:151:VAL:HG12	1:C:152:LYS:N	2.10	0.66
3:G:655:ILE:HG23	3:G:659:ASN:HD21	1.58	0.66
1:A:151:VAL:HG12	1:A:152:LYS:N	2.10	0.66
3:F:230:ILE:H	3:F:230:ILE:CD1	1.96	0.66
3:G:634:PHE:HE2	3:G:692:THR:HG21	1.61	0.66
2:B:37:ASN:ND2	2:B:146:PRO:HB3	2.10	0.66
3:F:274:GLN:CB	3:F:277:CYS:SG	2.75	0.66
3:F:630:VAL:HG13	3:F:634:PHE:HE1	1.61	0.66
3:G:544:ILE:N	3:G:545:PRO:HD2	2.11	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:230:ILE:H	3:G:230:ILE:CD1	1.96	0.66
3:F:164:THR:O	3:F:164:THR:HG22	1.96	0.65
3:F:665:PHE:CD1	3:F:720:ALA:HB2	2.31	0.65
3:G:630:VAL:CG1	3:G:634:PHE:CE1	2.79	0.65
3:G:665:PHE:CD1	3:G:720:ALA:HB2	2.31	0.65
1:A:105:ASN:HD21	2:B:132:CYS:HB3	1.61	0.65
1:A:123:THR:OG1	1:A:126:GLN:HG3	1.96	0.65
3:F:630:VAL:CG1	3:F:634:PHE:CE1	2.79	0.65
1:C:123:THR:OG1	1:C:126:GLN:HG3	1.96	0.65
3:F:40:ALA:HB3	3:F:41:TRP:CE3	2.30	0.65
3:G:794:ASN:O	3:G:798:ILE:HG12	1.97	0.65
3:G:164:THR:O	3:G:164:THR:HG22	1.96	0.65
3:G:488:PHE:CD2	3:G:506:LEU:HD22	2.32	0.65
3:F:488:PHE:CD2	3:F:506:LEU:HD22	2.32	0.65
3:F:634:PHE:HE2	3:F:692:THR:HG21	1.61	0.65
3:G:362:ILE:CG2	3:G:364:PRO:HD2	2.17	0.65
2:D:14:HIS:HB2	2:D:84:VAL:O	1.97	0.65
3:G:854:THR:O	3:G:858:MET:HG2	1.97	0.65
1:C:105:ASN:HD21	2:D:132:CYS:HB3	1.61	0.65
3:F:544:ILE:N	3:F:545:PRO:HD2	2.11	0.65
3:G:527:LEU:HD13	3:G:563:ALA:HB2	1.78	0.65
3:G:692:THR:HG22	3:G:696:PHE:CE1	2.31	0.65
3:G:929:LEU:H	3:G:929:LEU:CD1	2.08	0.65
3:G:40:ALA:HB3	3:G:41:TRP:CZ3	2.32	0.65
3:G:273:ILE:HG12	3:G:273:ILE:O	1.97	0.65
2:D:12:VAL:CG2	2:D:87:GLN:HG2	2.26	0.64
2:B:8:LEU:HD12	2:B:9:ARG:N	2.12	0.64
3:F:854:THR:O	3:F:858:MET:HG2	1.97	0.64
2:D:8:LEU:HD12	2:D:9:ARG:N	2.12	0.64
3:F:40:ALA:HB3	3:F:41:TRP:CZ3	2.32	0.64
3:F:54:GLN:HE21	3:F:98:PRO:CB	2.10	0.64
3:G:527:LEU:CD1	3:G:554:GLY:HA3	2.25	0.64
2:B:102:THR:HG22	2:B:103:SER:H	1.60	0.64
3:F:633:CYS:CB	3:F:661:ILE:HD11	2.28	0.64
2:D:102:THR:HG22	2:D:103:SER:H	1.60	0.64
3:F:429:ASP:CG	3:F:430:ASP:H	2.01	0.64
3:G:850:ILE:HG23	3:G:900:ILE:CG2	2.27	0.64
3:F:927:THR:OG1	3:F:963:THR:HG23	1.98	0.64
2:B:12:VAL:CG2	2:B:87:GLN:HG2	2.26	0.64
3:F:794:ASN:O	3:F:798:ILE:HG12	1.97	0.64
3:G:64:LEU:O	3:G:68:LEU:HG	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:54:GLN:HE21	3:G:98:PRO:CB	2.10	0.64
3:F:287:LEU:HB3	3:F:291:PHE:HE1	1.63	0.63
3:F:527:LEU:HD13	3:F:563:ALA:HB2	1.78	0.63
3:G:633:CYS:CB	3:G:661:ILE:HD11	2.28	0.63
3:F:527:LEU:CD1	3:F:554:GLY:HA3	2.25	0.63
3:F:64:LEU:O	3:F:68:LEU:HG	1.98	0.63
3:G:287:LEU:HB3	3:G:291:PHE:HE1	1.63	0.63
1:A:151:VAL:HG12	1:A:152:LYS:H	1.64	0.63
2:B:14:HIS:HB2	2:B:84:VAL:O	1.97	0.63
3:F:273:ILE:HG12	3:F:273:ILE:O	1.97	0.63
3:F:285:PHE:CE1	3:F:345:LEU:HD22	2.33	0.63
3:G:285:PHE:CE1	3:G:345:LEU:HD22	2.33	0.63
3:G:429:ASP:CG	3:G:430:ASP:H	2.01	0.63
3:G:889:THR:OG1	3:G:893:GLN:NE2	2.32	0.63
3:G:927:THR:OG1	3:G:963:THR:HG23	1.98	0.63
3:G:310:GLU:HA	3:G:313:ILE:HD11	1.81	0.62
3:G:884:CYS:HB3	3:G:889:THR:HB	1.81	0.62
3:F:846:ILE:CD1	3:F:893:GLN:NE2	2.62	0.62
3:G:59:PHE:HA	3:G:62:ILE:HG22	1.82	0.62
1:C:151:VAL:HG12	1:C:152:LYS:H	1.64	0.62
2:D:70:ILE:HD13	2:D:126:LEU:CD2	2.29	0.62
3:F:446:MET:HE1	3:F:491:VAL:CA	2.13	0.62
3:F:791:PRO:HB3	3:F:836:ARG:NH1	2.14	0.62
3:F:838:MET:O	3:F:846:ILE:HD13	2.00	0.62
3:G:724:LEU:HD11	3:G:729:GLN:N	2.14	0.62
2:D:37:ASN:ND2	2:D:146:PRO:CB	2.63	0.62
2:B:14:HIS:HD2	3:G:200:ALA:HB3	1.63	0.62
2:B:49:LYS:HD2	2:B:142:PHE:CD1	2.34	0.62
2:D:49:LYS:HD2	2:D:142:PHE:CD1	2.34	0.62
3:F:310:GLU:HA	3:F:313:ILE:HD11	1.81	0.62
3:F:777:ARG:CZ	3:F:824:THR:HG21	2.30	0.62
3:G:695:ILE:O	3:G:699:ILE:HG13	2.00	0.62
3:G:838:MET:O	3:G:846:ILE:HD13	2.00	0.62
2:B:37:ASN:ND2	2:B:146:PRO:CB	2.63	0.62
3:G:777:ARG:NE	3:G:824:THR:CG2	2.63	0.62
3:G:846:ILE:CD1	3:G:893:GLN:NE2	2.62	0.62
2:B:70:ILE:HD13	2:B:126:LEU:CD2	2.29	0.62
3:F:153:THR:HG22	3:F:212:CYS:SG	2.40	0.62
3:F:401:LYS:HB2	3:F:402:PRO:HD3	1.81	0.62
3:F:465:ASP:HA	3:F:468:ILE:HD12	1.80	0.62
3:F:527:LEU:HD11	3:F:554:GLY:CA	2.28	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:153:THR:HG22	3:G:212:CYS:SG	2.40	0.62
3:G:310:GLU:OE1	3:G:367:GLU:OE1	2.18	0.62
3:F:636:GLU:OE2	3:F:657:ARG:NE	2.26	0.61
3:F:884:CYS:HB3	3:F:889:THR:HB	1.81	0.61
3:G:207:ASN:HD21	3:G:211:LYS:HE3	1.64	0.61
3:F:695:ILE:O	3:F:699:ILE:HG13	2.00	0.61
3:F:777:ARG:NE	3:F:824:THR:CG2	2.63	0.61
3:G:534:CYS:SG	3:G:570:LEU:HA	2.41	0.61
3:G:831:VAL:O	3:G:835:GLN:HG3	2.01	0.61
3:G:519:ASN:ND2	3:G:521:LYS:CE	2.63	0.61
3:G:777:ARG:CZ	3:G:824:THR:HG21	2.30	0.61
3:G:791:PRO:HB3	3:G:836:ARG:NH1	2.14	0.61
2:D:82:ASP:OD2	2:D:103:SER:HB2	2.01	0.61
3:F:95:ALA:HB1	3:F:143:VAL:HG11	1.81	0.61
3:F:724:LEU:HD11	3:F:729:GLN:N	2.14	0.61
3:F:867:THR:O	3:F:871:LEU:HG	2.01	0.61
3:G:756:LYS:HD3	3:G:757:THR:N	2.16	0.61
3:G:95:ALA:HB1	3:G:143:VAL:HG11	1.81	0.61
3:G:412:VAL:HG22	3:G:445:PHE:HZ	1.65	0.61
3:G:465:ASP:HA	3:G:468:ILE:HD12	1.80	0.61
3:G:831:VAL:HG11	3:G:873:THR:CG2	2.31	0.61
3:G:846:ILE:HD12	3:G:893:GLN:NE2	2.16	0.61
3:F:68:LEU:CD2	3:F:83:LEU:HD21	2.31	0.61
3:F:600:ASN:HB2	3:F:656:PHE:CD1	2.36	0.61
3:G:600:ASN:HB2	3:G:656:PHE:CD1	2.36	0.61
3:F:929:LEU:H	3:F:929:LEU:CD1	2.08	0.61
3:G:401:LYS:HB2	3:G:402:PRO:HD3	1.81	0.61
3:F:223:THR:HG22	3:F:225:GLU:H	1.65	0.61
1:A:154:PRO:HD3	2:B:52:PHE:CZ	2.36	0.60
1:C:154:PRO:HD3	2:D:52:PHE:CZ	2.36	0.60
3:F:59:PHE:HA	3:F:62:ILE:HG22	1.82	0.60
3:F:207:ASN:HD21	3:F:211:LYS:HE3	1.64	0.60
3:F:223:THR:HG22	3:F:225:GLU:HG3	1.83	0.60
3:F:446:MET:HA	3:F:446:MET:HE2	1.83	0.60
3:F:534:CYS:SG	3:F:570:LEU:HA	2.41	0.60
2:B:81:PRO:CD	2:B:101:THR:HG22	2.31	0.60
2:B:82:ASP:OD2	2:B:103:SER:HB2	2.01	0.60
3:F:35:GLU:OE2	3:F:63:THR:HA	2.02	0.60
3:F:756:LYS:HD3	3:F:757:THR:N	2.16	0.60
3:F:846:ILE:HD12	3:F:893:GLN:NE2	2.16	0.60
3:G:478:TRP:CD1	3:G:478:TRP:C	2.75	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:10:TYR:OH	2:B:12:VAL:HG21	2.02	0.60
3:F:310:GLU:OE1	3:F:367:GLU:OE1	2.18	0.60
3:G:223:THR:HG22	3:G:225:GLU:H	1.65	0.60
3:F:724:LEU:CD2	3:F:729:GLN:HA	2.30	0.60
3:F:780:ILE:CG2	3:F:830:LEU:HD21	2.31	0.60
2:D:10:TYR:OH	2:D:12:VAL:HG21	2.02	0.60
3:F:109:LEU:O	3:F:113:ILE:HG13	2.01	0.60
3:F:519:ASN:ND2	3:F:521:LYS:CE	2.63	0.60
3:F:817:PRO:C	3:F:819:VAL:H	2.03	0.60
3:G:223:THR:HG22	3:G:225:GLU:HG3	1.83	0.60
3:G:925:PHE:C	3:G:927:THR:N	2.52	0.60
3:F:254:THR:OG1	3:F:257:GLU:HG3	2.02	0.60
3:F:412:VAL:HG22	3:F:445:PHE:HZ	1.65	0.60
3:F:478:TRP:CD1	3:F:478:TRP:C	2.75	0.60
3:F:503:ILE:O	3:F:506:LEU:HB3	2.01	0.60
3:F:835:GLN:O	3:F:838:MET:HG3	2.02	0.60
3:G:357:THR:OG1	3:G:373:ALA:HB1	2.01	0.60
3:F:13:VAL:HG12	3:F:17:TYR:CE1	2.37	0.60
3:F:759:ILE:HG22	3:F:816:ILE:HD13	1.84	0.60
3:F:889:THR:OG1	3:F:893:GLN:NE2	2.32	0.60
3:G:68:LEU:CD2	3:G:83:LEU:HD21	2.31	0.60
3:G:571:CYS:O	3:G:575:GLN:HG2	2.02	0.60
3:F:831:VAL:HG11	3:F:873:THR:CG2	2.31	0.60
3:G:867:THR:O	3:G:871:LEU:HG	2.01	0.60
2:D:81:PRO:CD	2:D:101:THR:HG22	2.31	0.60
3:F:831:VAL:O	3:F:835:GLN:HG3	2.01	0.60
3:F:915:TRP:O	3:F:919:LEU:HG	2.02	0.60
3:F:850:ILE:HG23	3:F:900:ILE:CG2	2.27	0.59
3:G:109:LEU:O	3:G:113:ILE:HG13	2.01	0.59
3:G:254:THR:OG1	3:G:257:GLU:HG3	2.02	0.59
3:G:510:LEU:O	3:G:515:TYR:HE1	1.85	0.59
3:G:759:ILE:O	3:G:816:ILE:HD11	2.02	0.59
3:G:817:PRO:C	3:G:819:VAL:H	2.03	0.59
3:F:279:ASN:C	3:F:281:PRO:CD	2.70	0.59
3:F:410:ILE:O	3:F:413:ARG:HB2	2.02	0.59
2:D:89:LEU:O	2:D:99:SER:HA	2.02	0.59
3:F:357:THR:OG1	3:F:373:ALA:HB1	2.01	0.59
3:F:700:ALA:O	3:F:704:VAL:N	2.36	0.59
3:G:233:VAL:O	3:G:236:GLU:HG2	2.02	0.59
3:G:503:ILE:O	3:G:506:LEU:HB3	2.01	0.59
3:G:700:ALA:O	3:G:704:VAL:N	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:846:ILE:HD12	3:G:893:GLN:CD	2.23	0.59
3:F:814:LYS:HE2	3:F:855:HIS:CE1	2.38	0.59
3:G:410:ILE:O	3:G:413:ARG:HB2	2.03	0.59
3:F:571:CYS:O	3:F:575:GLN:HG2	2.02	0.59
3:G:22:GLN:O	3:G:23:ASN:C	2.41	0.59
3:G:69:MET:O	3:G:163:HIS:HD2	1.86	0.59
3:G:279:ASN:C	3:G:281:PRO:CD	2.70	0.59
3:G:412:VAL:HG22	3:G:445:PHE:CZ	2.38	0.59
3:G:564:THR:HG21	3:G:605:ARG:HB2	1.85	0.59
3:F:412:VAL:HG22	3:F:445:PHE:CZ	2.38	0.59
3:F:759:ILE:O	3:F:816:ILE:HD11	2.02	0.59
3:F:925:PHE:C	3:F:927:THR:N	2.52	0.59
3:G:13:VAL:HG12	3:G:17:TYR:CE1	2.37	0.59
3:G:231:THR:HG23	3:G:268:MET:HE2	1.84	0.59
2:D:117:PRO:O	2:D:121:ARG:HG3	2.03	0.59
3:F:233:VAL:O	3:F:236:GLU:HG2	2.02	0.59
3:F:817:PRO:C	3:F:819:VAL:N	2.55	0.59
3:G:724:LEU:CD2	3:G:729:GLN:HA	2.31	0.59
3:G:780:ILE:CG2	3:G:830:LEU:HD21	2.31	0.59
2:B:89:LEU:O	2:B:99:SER:HA	2.02	0.59
3:F:69:MET:O	3:F:163:HIS:HD2	1.86	0.59
3:G:780:ILE:HG22	3:G:784:PHE:CE1	2.38	0.59
2:B:102:THR:CG2	2:B:103:SER:N	2.66	0.59
3:F:922:THR:N	3:F:923:PRO:CD	2.66	0.59
3:G:35:GLU:OE2	3:G:63:THR:HA	2.02	0.59
3:G:429:ASP:CG	3:G:430:ASP:N	2.56	0.59
3:F:846:ILE:HD12	3:F:893:GLN:CD	2.23	0.59
3:G:154:ALA:O	3:G:158:GLU:HG2	2.02	0.59
3:G:759:ILE:HG22	3:G:816:ILE:HD13	1.84	0.59
3:G:815:LYS:O	3:G:816:ILE:HB	2.03	0.59
3:G:229:THR:O	3:G:233:VAL:HG23	2.03	0.58
1:A:90:GLN:HA	1:A:90:GLN:HE21	1.68	0.58
3:F:607:MET:CG	3:F:664:LEU:HB2	2.33	0.58
3:G:153:THR:HG22	3:G:212:CYS:CB	2.33	0.58
3:G:814:LYS:HE2	3:G:855:HIS:CE1	2.38	0.58
2:D:102:THR:CG2	2:D:103:SER:N	2.66	0.58
3:F:429:ASP:CG	3:F:430:ASP:N	2.56	0.58
3:F:523:LEU:O	3:F:527:LEU:HG	2.03	0.58
3:F:839:THR:O	3:F:839:THR:HG22	2.04	0.58
3:F:846:ILE:HD12	3:F:893:GLN:OE1	2.03	0.58
3:G:182:VAL:O	3:G:186:VAL:HG23	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:769:LYS:N	3:G:770:PRO:HD2	2.18	0.58
3:G:837:GLY:O	3:G:840:LEU:CB	2.51	0.58
3:G:839:THR:HG22	3:G:839:THR:O	2.03	0.58
3:F:154:ALA:O	3:F:158:GLU:HG2	2.02	0.58
3:F:607:MET:HG3	3:F:664:LEU:HB2	1.85	0.58
3:G:434:PHE:O	3:G:437:TYR:HB3	2.03	0.58
3:G:606:LEU:O	3:G:610:ILE:HG13	2.03	0.58
3:F:348:ARG:O	3:F:351:GLN:CG	2.52	0.58
3:F:510:LEU:O	3:F:515:TYR:HE1	1.85	0.58
3:F:816:ILE:O	3:F:819:VAL:HB	2.03	0.58
3:G:446:MET:O	3:G:449:TYR:HB3	2.04	0.58
3:G:835:GLN:O	3:G:838:MET:HG3	2.02	0.58
3:F:564:THR:HG21	3:F:605:ARG:HB2	1.85	0.58
3:G:235:LEU:HG	3:G:268:MET:CE	2.34	0.58
3:G:915:TRP:O	3:G:919:LEU:HG	2.02	0.58
3:F:446:MET:O	3:F:449:TYR:HB3	2.03	0.58
3:F:606:LEU:O	3:F:610:ILE:HG13	2.03	0.58
3:F:662:SER:OG	3:F:716:ALA:HA	2.04	0.58
3:G:348:ARG:O	3:G:351:GLN:CG	2.52	0.58
3:G:420:GLU:C	3:G:423:LEU:H	2.07	0.58
3:G:523:LEU:O	3:G:527:LEU:HG	2.04	0.58
3:G:846:ILE:HD12	3:G:893:GLN:OE1	2.03	0.58
3:F:153:THR:HG22	3:F:212:CYS:CB	2.33	0.58
3:F:182:VAL:O	3:F:186:VAL:HG23	2.03	0.58
3:F:235:LEU:HG	3:F:268:MET:CE	2.34	0.58
3:F:780:ILE:HG22	3:F:784:PHE:CE1	2.38	0.58
3:G:854:THR:HG23	3:G:903:ALA:HB2	1.86	0.58
1:C:90:GLN:HE21	1:C:90:GLN:HA	1.68	0.58
3:F:854:THR:HG23	3:F:903:ALA:HB2	1.86	0.58
3:G:607:MET:CG	3:G:664:LEU:HB2	2.33	0.58
3:G:607:MET:HG3	3:G:664:LEU:HB2	1.85	0.58
3:G:817:PRO:C	3:G:819:VAL:N	2.55	0.58
1:A:79:SER:H	3:F:950:ARG:NH1	2.01	0.58
3:G:922:THR:N	3:G:923:PRO:CD	2.66	0.58
2:B:117:PRO:O	2:B:121:ARG:HG3	2.03	0.57
3:F:231:THR:HG23	3:F:268:MET:HE2	1.85	0.57
3:F:815:LYS:O	3:F:816:ILE:HB	2.03	0.57
3:G:777:ARG:NE	3:G:824:THR:HG22	2.19	0.57
3:F:22:GLN:O	3:F:23:ASN:C	2.41	0.57
3:F:363:TYR:HB3	3:F:364:PRO:HD3	1.85	0.57
3:G:98:PRO:HG2	3:G:101:VAL:HB	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:224:ILE:HD11	3:G:277:CYS:HA	1.86	0.57
2:B:30:ASP:OD1	2:B:32:LYS:HB2	2.04	0.57
2:B:121:ARG:O	2:B:125:TYR:HB2	2.04	0.57
3:F:474:HIS:HB2	3:F:477:HIS:HD2	1.68	0.57
3:G:41:TRP:HE3	3:G:41:TRP:H	1.52	0.57
3:G:328:SER:CB	3:G:383:GLU:OE1	2.52	0.57
2:D:30:ASP:OD1	2:D:32:LYS:HB2	2.04	0.57
3:F:194:MET:CB	3:F:240:LYS:HZ1	2.17	0.57
3:F:325:GLU:HA	3:F:379:MET:SD	2.45	0.57
3:F:328:SER:CB	3:F:383:GLU:OE1	2.52	0.57
3:F:769:LYS:N	3:F:770:PRO:HD2	2.18	0.57
3:G:662:SER:OG	3:G:716:ALA:HA	2.04	0.57
2:B:102:THR:CG2	2:B:103:SER:H	2.16	0.57
3:F:434:PHE:O	3:F:437:TYR:HB3	2.03	0.57
3:F:837:GLY:O	3:F:840:LEU:CB	2.51	0.57
1:C:79:SER:H	3:G:950:ARG:NH1	2.01	0.57
3:F:229:THR:O	3:F:233:VAL:HG23	2.03	0.57
3:F:246:ILE:O	3:F:247:HIS:CB	2.53	0.57
3:F:920:MET:O	3:F:923:PRO:HD2	2.05	0.57
3:G:920:MET:O	3:G:923:PRO:HD2	2.05	0.57
3:F:215:THR:HG22	3:F:219:ASN:HD22	1.70	0.57
3:F:622:ILE:HB	3:F:623:PRO:CD	2.35	0.57
3:G:622:ILE:HB	3:G:623:PRO:CD	2.35	0.57
3:G:760:VAL:CA	3:G:816:ILE:CD1	2.66	0.57
3:G:816:ILE:O	3:G:819:VAL:HB	2.03	0.57
3:G:829:ARG:O	3:G:833:TYR:HD1	1.87	0.57
2:D:49:LYS:HD2	2:D:142:PHE:CE1	2.40	0.57
3:F:760:VAL:HA	3:F:816:ILE:HD12	1.81	0.57
3:F:889:THR:HG23	3:F:893:GLN:CG	2.26	0.57
3:F:420:GLU:C	3:F:423:LEU:H	2.07	0.57
3:F:777:ARG:NE	3:F:824:THR:HG22	2.19	0.57
3:G:527:LEU:HD11	3:G:554:GLY:CA	2.28	0.57
3:F:401:LYS:NZ	3:G:18:ARG:NH1	2.52	0.57
3:F:829:ARG:O	3:F:833:TYR:HD1	1.87	0.57
3:G:325:GLU:HA	3:G:379:MET:SD	2.45	0.57
3:G:724:LEU:CD1	3:G:729:GLN:N	2.68	0.57
3:G:760:VAL:HA	3:G:816:ILE:HD12	1.81	0.57
1:C:81:HIS:CD2	1:C:83:GLU:H	2.23	0.56
3:F:146:TRP:HE1	3:F:208:ARG:CZ	2.18	0.56
3:F:505:ARG:O	3:F:509:VAL:HG23	2.05	0.56
3:G:143:VAL:O	3:G:147:ILE:HG12	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:363:TYR:HB3	3:G:364:PRO:HD3	1.85	0.56
3:G:505:ARG:O	3:G:509:VAL:HG23	2.05	0.56
2:B:49:LYS:HD2	2:B:142:PHE:CE1	2.40	0.56
3:F:64:LEU:HD21	3:F:87:ILE:HG12	1.87	0.56
3:F:272:ILE:HD12	3:F:323:SER:HB3	1.87	0.56
3:F:724:LEU:CD1	3:F:729:GLN:N	2.68	0.56
3:G:461:ALA:HB1	3:G:505:ARG:HH11	1.70	0.56
2:D:102:THR:CG2	2:D:103:SER:H	2.17	0.56
3:F:41:TRP:HE3	3:F:41:TRP:H	1.52	0.56
3:F:98:PRO:HG2	3:F:101:VAL:HB	1.86	0.56
3:F:689:MET:HE2	3:F:720:ALA:HB3	1.87	0.56
3:G:64:LEU:HD21	3:G:87:ILE:HG12	1.87	0.56
2:D:121:ARG:O	2:D:125:TYR:HB2	2.04	0.56
3:F:143:VAL:O	3:F:147:ILE:HG12	2.04	0.56
3:G:146:TRP:HE1	3:G:208:ARG:CZ	2.18	0.56
3:G:878:LEU:O	3:G:882:MET:HG2	2.06	0.56
1:A:70:VAL:HG23	2:B:141:HIS:O	2.06	0.56
1:A:81:HIS:CD2	1:A:83:GLU:H	2.23	0.56
3:F:291:PHE:CE2	3:F:319:LEU:HD21	2.41	0.56
3:F:461:ALA:HB1	3:F:505:ARG:HH11	1.70	0.56
3:G:246:ILE:O	3:G:247:HIS:CB	2.53	0.56
3:G:474:HIS:HB2	3:G:477:HIS:HD2	1.68	0.56
3:F:465:ASP:HA	3:F:468:ILE:CD1	2.36	0.56
3:F:884:CYS:HB3	3:F:889:THR:CB	2.35	0.56
1:C:70:VAL:HG23	2:D:141:HIS:O	2.06	0.56
3:G:272:ILE:HD12	3:G:323:SER:HB3	1.87	0.56
3:G:420:GLU:HA	3:G:423:LEU:HA	1.87	0.56
3:F:527:LEU:HD23	3:F:550:LEU:HG	1.88	0.56
3:G:884:CYS:HB3	3:G:889:THR:CB	2.36	0.56
3:F:224:ILE:HD11	3:F:277:CYS:HA	1.86	0.55
3:G:32:THR:HG22	3:G:33:ASP:N	2.21	0.55
3:G:465:ASP:HA	3:G:468:ILE:CD1	2.36	0.55
3:G:527:LEU:HD23	3:G:550:LEU:HG	1.88	0.55
3:F:353:ILE:HG21	3:F:376:PHE:CD2	2.41	0.55
3:G:583:ASP:O	3:G:587:ASN:ND2	2.39	0.55
1:C:86:GLU:O	1:C:90:GLN:HB3	2.06	0.55
3:F:610:ILE:HG21	3:F:629:ILE:HD13	1.88	0.55
3:G:291:PHE:CE2	3:G:319:LEU:HD21	2.41	0.55
3:G:889:THR:HG23	3:G:893:GLN:CG	2.26	0.55
1:A:86:GLU:O	1:A:90:GLN:HB3	2.06	0.55
3:F:515:TYR:CE2	3:F:526:ALA:HB2	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:272:ILE:HD11	3:G:291:PHE:CZ	2.41	0.55
3:F:583:ASP:O	3:F:587:ASN:ND2	2.39	0.55
3:G:232:ALA:HA	3:G:235:LEU:HD12	1.88	0.55
3:F:176:ALA:HA	3:F:220:ILE:HG21	1.89	0.55
3:F:693:MET:HG3	3:F:694:PRO:CD	2.36	0.55
3:F:751:THR:O	3:F:754:ILE:HG12	2.07	0.55
3:F:878:LEU:O	3:F:882:MET:HG2	2.06	0.55
3:G:215:THR:HG22	3:G:219:ASN:HD22	1.70	0.55
3:G:353:ILE:HG21	3:G:376:PHE:CD2	2.41	0.55
3:G:610:ILE:HG21	3:G:629:ILE:HD13	1.88	0.55
1:C:132:GLU:HB3	3:G:168:ARG:HG3	1.89	0.55
2:B:62:LYS:O	2:B:66:ILE:HG13	2.07	0.55
3:F:647:THR:N	3:F:648:PRO:HD2	2.22	0.55
3:F:747:CYS:CB	3:F:786:LEU:HD22	2.37	0.55
3:G:747:CYS:CB	3:G:786:LEU:HD22	2.37	0.55
3:F:32:THR:HG22	3:F:33:ASP:N	2.21	0.55
3:F:469:ALA:O	3:F:473:ARG:HD3	2.07	0.55
3:F:545:PRO:HG2	3:F:546:PRO:CD	2.37	0.55
3:G:751:THR:O	3:G:754:ILE:HG12	2.07	0.55
3:F:129:ASN:OD1	3:F:130:THR:N	2.40	0.55
3:F:272:ILE:HD11	3:F:291:PHE:CZ	2.41	0.55
3:F:334:GLY:HA3	3:F:342:LEU:HB3	1.89	0.55
3:F:41:TRP:HE3	3:F:41:TRP:N	2.05	0.54
3:F:126:GLU:O	3:F:129:ASN:OD1	2.26	0.54
3:G:647:THR:N	3:G:648:PRO:HD2	2.22	0.54
3:G:469:ALA:O	3:G:473:ARG:HD3	2.07	0.54
3:G:545:PRO:HG2	3:G:546:PRO:CD	2.37	0.54
3:G:655:ILE:CG2	3:G:659:ASN:HD21	2.20	0.54
1:C:78:THR:HG1	1:C:145:GLN:HB3	1.66	0.54
2:D:92:VAL:HG13	2:D:97:HIS:HB2	1.89	0.54
3:F:416:GLU:HG2	3:F:483:ALA:CB	2.38	0.54
3:F:817:PRO:O	3:F:819:VAL:N	2.40	0.54
3:F:905:ASN:HB2	3:F:912:MET:HE1	1.88	0.54
3:G:41:TRP:HE3	3:G:41:TRP:N	2.05	0.54
3:G:295:LEU:HD22	3:G:316:ILE:HG12	1.89	0.54
3:G:693:MET:HG3	3:G:694:PRO:CD	2.36	0.54
2:D:70:ILE:HD13	2:D:126:LEU:HD23	1.90	0.54
3:F:264:CYS:O	3:F:268:MET:HG3	2.08	0.54
3:F:420:GLU:HA	3:F:423:LEU:HA	1.88	0.54
3:F:630:VAL:CG1	3:F:634:PHE:HE1	2.20	0.54
3:G:129:ASN:OD1	3:G:130:THR:N	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:194:MET:CB	3:G:240:LYS:HZ1	2.19	0.54
1:A:154:PRO:HD3	2:B:52:PHE:CE2	2.43	0.54
3:F:561:ALA:O	3:F:564:THR:HB	2.08	0.54
3:F:787:PHE:HB3	3:F:833:TYR:CE2	2.43	0.54
3:G:285:PHE:HD1	3:G:345:LEU:HD22	1.68	0.54
2:B:5:ASP:O	2:B:93:ILE:HA	2.08	0.54
3:F:823:LYS:HA	3:F:865:HIS:CE1	2.43	0.54
3:G:321:VAL:CG1	3:G:376:PHE:HB2	2.34	0.54
3:F:591:ALA:O	3:F:594:ASN:HB3	2.08	0.54
3:F:633:CYS:CA	3:F:657:ARG:HD2	2.37	0.54
3:G:416:GLU:HB3	3:G:479:THR:CG2	2.38	0.54
3:G:591:ALA:O	3:G:594:ASN:HB3	2.08	0.54
2:D:5:ASP:O	2:D:93:ILE:HA	2.08	0.54
2:D:5:ASP:O	2:D:94:GLY:N	2.41	0.54
3:F:295:LEU:HD22	3:F:316:ILE:HG12	1.89	0.54
3:F:416:GLU:HB3	3:F:479:THR:CG2	2.38	0.54
3:F:689:MET:HE2	3:F:720:ALA:CB	2.38	0.54
3:F:853:LEU:O	3:F:857:VAL:HG23	2.08	0.54
3:F:809:LEU:O	3:F:813:ILE:HG13	2.08	0.54
3:G:515:TYR:CE2	3:G:526:ALA:HB2	2.42	0.54
3:G:777:ARG:HD2	3:G:824:THR:HG21	1.89	0.54
1:A:132:GLU:HB3	3:F:168:ARG:HG3	1.89	0.54
2:B:70:ILE:HD13	2:B:126:LEU:HD23	1.90	0.54
3:G:506:LEU:O	3:G:510:LEU:HG	2.08	0.54
3:G:507:MET:HE1	3:G:530:MET:HG2	1.88	0.54
3:F:143:VAL:HG12	3:F:147:ILE:HD11	1.90	0.53
3:G:334:GLY:HA3	3:G:342:LEU:HB3	1.89	0.53
3:G:561:ALA:O	3:G:564:THR:HB	2.08	0.53
3:G:868:GLU:HA	3:G:871:LEU:HD12	1.91	0.53
1:A:66:PRO:HG3	1:A:148:TRP:CD1	2.43	0.53
3:F:287:LEU:O	3:F:290:MET:HG2	2.09	0.53
3:G:47:LEU:HD11	3:G:56:VAL:HG11	1.90	0.53
3:F:41:TRP:CE3	3:F:41:TRP:N	2.77	0.53
3:F:232:ALA:HA	3:F:235:LEU:HD12	1.88	0.53
3:F:777:ARG:HD2	3:F:824:THR:HG21	1.89	0.53
3:G:817:PRO:O	3:G:819:VAL:N	2.40	0.53
3:G:835:GLN:HE22	3:G:873:THR:HG23	1.72	0.53
3:G:850:ILE:HG21	3:G:896:LYS:O	2.09	0.53
1:C:66:PRO:HG3	1:C:148:TRP:CD1	2.43	0.53
2:D:62:LYS:O	2:D:66:ILE:HG13	2.07	0.53
3:F:734:ASP:O	3:F:738:PHE:N	2.36	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:264:CYS:O	3:G:268:MET:HG3	2.08	0.53
2:B:112:ASN:HA	2:B:117:PRO:HB3	1.91	0.53
1:C:154:PRO:HD3	2:D:52:PHE:CE2	2.43	0.53
3:F:216:TRP:O	3:F:220:ILE:O	2.26	0.53
3:F:850:ILE:HG21	3:F:896:LYS:O	2.09	0.53
3:G:126:GLU:O	3:G:129:ASN:OD1	2.26	0.53
3:G:176:ALA:HA	3:G:220:ILE:HG21	1.89	0.53
3:G:585:LEU:O	3:G:589:CYS:SG	2.67	0.53
3:G:854:THR:CG2	3:G:903:ALA:HB2	2.39	0.53
3:F:655:ILE:CG2	3:F:659:ASN:HD21	2.20	0.53
3:G:787:PHE:HB3	3:G:833:TYR:CE2	2.43	0.53
3:G:853:LEU:O	3:G:857:VAL:HG23	2.08	0.53
3:F:834:ALA:O	3:F:849:SER:HB3	2.09	0.53
3:G:416:GLU:HG2	3:G:483:ALA:CB	2.38	0.53
3:G:809:LEU:O	3:G:813:ILE:HG13	2.08	0.53
3:G:216:TRP:O	3:G:220:ILE:O	2.26	0.53
3:G:287:LEU:O	3:G:290:MET:HG2	2.09	0.53
3:F:384:VAL:HG21	3:F:400:ILE:CD1	2.39	0.52
3:G:823:LYS:HA	3:G:865:HIS:CE1	2.43	0.52
2:D:112:ASN:HA	2:D:117:PRO:HB3	1.91	0.52
3:F:285:PHE:HD1	3:F:345:LEU:HD22	1.68	0.52
3:F:835:GLN:HE22	3:F:873:THR:HG23	1.72	0.52
3:F:854:THR:CG2	3:F:903:ALA:HB2	2.39	0.52
3:G:143:VAL:HG12	3:G:147:ILE:HD11	1.90	0.52
3:G:630:VAL:CG1	3:G:634:PHE:HE1	2.20	0.52
3:G:784:PHE:CZ	3:G:829:ARG:HB3	2.44	0.52
3:G:834:ALA:O	3:G:849:SER:HB3	2.09	0.52
1:A:110:THR:O	1:A:110:THR:HG22	2.10	0.52
2:B:92:VAL:HG13	2:B:97:HIS:HB2	1.89	0.52
1:C:75:LEU:HD13	1:C:146:VAL:CG1	2.40	0.52
3:G:41:TRP:CE3	3:G:41:TRP:N	2.77	0.52
3:G:47:LEU:HD11	3:G:56:VAL:CG1	2.39	0.52
3:G:412:VAL:HA	3:G:415:SER:HB2	1.91	0.52
3:G:454:ASP:O	3:G:457:LEU:HB2	2.09	0.52
3:G:273:ILE:O	3:G:274:GLN:C	2.48	0.52
3:G:707:ILE:HA	3:G:710:LEU:HB2	1.91	0.52
1:C:110:THR:HG22	1:C:110:THR:O	2.10	0.52
3:F:47:LEU:HD11	3:F:56:VAL:CG1	2.39	0.52
1:A:73:TRP:NE1	1:A:124:HIS:HB2	2.25	0.52
1:A:75:LEU:HD13	1:A:146:VAL:CG1	2.40	0.52
3:F:47:LEU:HD11	3:F:56:VAL:HG11	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:299:THR:HG23	3:F:317:TYR:OH	2.09	0.52
3:F:401:LYS:CE	3:G:18:ARG:HH11	2.13	0.52
3:F:465:ASP:O	3:F:468:ILE:HB	2.09	0.52
3:F:576:LEU:HD23	3:F:576:LEU:C	2.29	0.52
3:F:868:GLU:HA	3:F:871:LEU:HD12	1.91	0.52
3:F:873:THR:HG22	3:F:873:THR:O	2.09	0.52
3:G:384:VAL:HG21	3:G:400:ILE:CD1	2.39	0.52
3:G:576:LEU:C	3:G:576:LEU:HD23	2.29	0.52
3:F:159:ALA:O	3:F:168:ARG:NH1	2.42	0.52
3:F:454:ASP:O	3:F:457:LEU:HB2	2.09	0.52
3:G:633:CYS:CA	3:G:657:ARG:HD2	2.37	0.52
3:F:94:PHE:CE2	3:F:101:VAL:HG11	2.45	0.52
3:F:384:VAL:HG21	3:F:400:ILE:HD12	1.92	0.52
3:F:529:THR:O	3:F:533:TYR:HD1	1.93	0.52
3:F:707:ILE:HA	3:F:710:LEU:HB2	1.91	0.52
3:F:321:VAL:CG1	3:F:376:PHE:HB2	2.34	0.52
3:F:506:LEU:O	3:F:510:LEU:HG	2.08	0.52
3:F:507:MET:HE3	3:F:507:MET:HA	1.91	0.52
3:F:784:PHE:CZ	3:F:829:ARG:HB3	2.44	0.52
3:G:299:THR:HG23	3:G:317:TYR:OH	2.09	0.52
3:G:465:ASP:O	3:G:468:ILE:HB	2.09	0.52
3:G:873:THR:HG22	3:G:873:THR:O	2.09	0.52
1:A:137:ALA:HB3	1:A:144:ILE:CG1	2.40	0.52
2:D:108:LEU:O	2:D:112:ASN:ND2	2.43	0.52
3:F:414:LYS:NZ	3:F:414:LYS:HB3	2.25	0.52
2:B:81:PRO:HA	2:B:103:SER:HB3	1.92	0.51
1:C:137:ALA:HB3	1:C:144:ILE:CG1	2.40	0.51
3:F:259:GLU:CG	3:F:260:LEU:N	2.73	0.51
1:A:78:THR:HG1	1:A:145:GLN:HB3	1.72	0.51
3:G:159:ALA:O	3:G:168:ARG:NH1	2.42	0.51
3:F:13:VAL:CG1	3:F:17:TYR:HE1	2.23	0.51
3:G:13:VAL:CG1	3:G:17:TYR:HE1	2.23	0.51
2:B:108:LEU:O	2:B:112:ASN:ND2	2.43	0.51
1:C:73:TRP:CD1	1:C:124:HIS:HB2	2.46	0.51
3:F:658:LEU:HD21	3:F:699:ILE:HD13	1.93	0.51
3:G:384:VAL:HG21	3:G:400:ILE:HD12	1.92	0.51
3:G:808:CYS:O	3:G:812:ILE:HG13	2.11	0.51
2:B:147:ILE:C	3:G:255:ALA:HB2	2.31	0.51
1:C:73:TRP:NE1	1:C:124:HIS:HB2	2.25	0.51
1:C:79:SER:OG	1:C:142:GLN:NE2	2.44	0.51
3:F:376:PHE:O	3:F:379:MET:HG2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:662:SER:OG	3:F:719:HIS:HD2	1.93	0.51
3:G:259:GLU:CG	3:G:260:LEU:N	2.73	0.51
3:G:334:GLY:O	3:G:338:ALA:HA	2.11	0.51
3:G:419:ASP:C	3:G:421:LYS:H	2.12	0.51
1:A:79:SER:OG	1:A:142:GLN:NE2	2.44	0.51
2:D:23:LEU:HD11	2:D:35:TYR:HE1	1.75	0.51
3:F:412:VAL:HA	3:F:415:SER:HB2	1.91	0.51
3:F:419:ASP:C	3:F:421:LYS:H	2.12	0.51
3:G:282:LYS:O	3:G:286:VAL:HG23	2.11	0.51
3:G:605:ARG:O	3:G:608:PHE:HB3	2.11	0.51
3:G:911:GLU:HB3	3:G:915:TRP:CZ2	2.46	0.51
2:D:70:ILE:HD13	2:D:126:LEU:HD22	1.93	0.51
3:F:273:ILE:O	3:F:274:GLN:C	2.48	0.51
3:F:282:LYS:O	3:F:286:VAL:HG23	2.11	0.51
3:F:664:LEU:O	3:F:668:LEU:HB2	2.11	0.51
3:G:376:PHE:O	3:G:379:MET:HG2	2.10	0.51
3:G:883:MET:O	3:G:887:TYR:CG	2.63	0.51
2:B:23:LEU:HD11	2:B:35:TYR:HE1	1.75	0.51
3:F:13:VAL:HG12	3:F:17:TYR:HE1	1.76	0.51
3:F:230:ILE:HD12	3:F:230:ILE:N	2.04	0.51
3:F:883:MET:O	3:F:887:TYR:CG	2.63	0.51
3:G:529:THR:O	3:G:533:TYR:HD1	1.93	0.51
3:F:605:ARG:O	3:F:608:PHE:HB3	2.11	0.51
3:F:911:GLU:HB3	3:F:915:TRP:CZ2	2.46	0.51
3:G:664:LEU:O	3:G:668:LEU:HB2	2.11	0.51
3:F:363:TYR:CB	3:F:364:PRO:HD3	2.41	0.51
3:F:642:GLN:O	3:F:643:ALA:HB3	2.11	0.51
3:G:242:TYR:CE2	3:G:298:ILE:HG23	2.46	0.51
2:D:70:ILE:HG12	2:D:70:ILE:O	2.11	0.50
3:F:411:LEU:O	3:F:415:SER:N	2.44	0.50
3:G:642:GLN:O	3:G:643:ALA:HB3	2.11	0.50
2:B:70:ILE:HD13	2:B:126:LEU:HD22	1.93	0.50
3:F:334:GLY:O	3:F:338:ALA:HA	2.11	0.50
3:F:808:CYS:O	3:F:812:ILE:HG13	2.11	0.50
3:G:94:PHE:CE2	3:G:101:VAL:HG11	2.45	0.50
3:G:227:CYS:HA	3:G:230:ILE:HD13	1.94	0.50
3:G:658:LEU:HD21	3:G:699:ILE:HD13	1.93	0.50
3:G:938:TYR:O	3:G:942:ILE:HG13	2.11	0.50
1:A:73:TRP:CD1	1:A:124:HIS:HB2	2.46	0.50
3:G:414:LYS:NZ	3:G:414:LYS:HB3	2.26	0.50
3:G:748:CYS:C	3:G:750:PRO:HD2	2.32	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:23:LEU:CD1	2:D:35:TYR:HE1	2.25	0.50
3:F:194:MET:CB	3:F:240:LYS:NZ	2.75	0.50
3:F:756:LYS:HA	3:F:812:ILE:HD11	1.92	0.50
3:G:662:SER:OG	3:G:719:HIS:HD2	1.93	0.50
3:G:777:ARG:NE	3:G:824:THR:HG21	2.27	0.50
2:D:21:GLU:O	2:D:22:PHE:HB3	2.11	0.50
3:F:416:GLU:HB3	3:F:479:THR:HG23	1.94	0.50
2:B:70:ILE:HG12	2:B:70:ILE:O	2.11	0.50
3:F:408:THR:HG22	3:F:448:CYS:SG	2.51	0.50
3:F:481:LEU:O	3:F:485:ILE:HG13	2.12	0.50
3:F:748:CYS:C	3:F:750:PRO:HD2	2.32	0.50
3:G:408:THR:HG22	3:G:448:CYS:SG	2.51	0.50
3:G:446:MET:HE1	3:G:491:VAL:CA	2.16	0.50
3:G:634:PHE:CE2	3:G:692:THR:CG2	2.89	0.50
3:G:756:LYS:HA	3:G:812:ILE:HD11	1.92	0.50
2:B:21:GLU:O	2:B:22:PHE:HB3	2.11	0.50
2:D:81:PRO:HA	2:D:103:SER:HB3	1.93	0.50
3:F:68:LEU:HD11	3:F:87:ILE:HD11	1.94	0.50
3:G:94:PHE:CD2	3:G:101:VAL:HG11	2.46	0.50
3:G:618:ARG:HB3	3:G:619:PRO:HD2	1.94	0.50
1:A:79:SER:OG	1:A:143:THR:O	2.29	0.50
2:B:27:PHE:CE1	2:B:33:LEU:HD13	2.47	0.50
2:B:31:GLY:O	2:B:52:PHE:HA	2.12	0.50
2:B:48:ARG:HG2	2:B:48:ARG:HH11	1.77	0.50
2:D:31:GLY:O	2:D:52:PHE:HA	2.12	0.50
2:D:97:HIS:CD2	2:D:98:ILE:N	2.80	0.50
3:F:777:ARG:NE	3:F:824:THR:HG21	2.27	0.50
3:G:411:LEU:O	3:G:415:SER:N	2.44	0.50
3:G:816:ILE:HG22	3:G:819:VAL:HG23	1.93	0.50
2:B:23:LEU:CD1	2:B:35:TYR:HE1	2.25	0.50
3:F:938:TYR:O	3:F:942:ILE:HG13	2.11	0.50
3:G:481:LEU:O	3:G:485:ILE:HG13	2.12	0.50
3:G:630:VAL:HG12	3:G:634:PHE:CE1	2.47	0.50
3:F:759:ILE:HG22	3:F:816:ILE:CD1	2.41	0.49
3:G:68:LEU:HD11	3:G:87:ILE:HD11	1.94	0.49
2:B:134:VAL:HA	2:B:137:LEU:HD12	1.94	0.49
3:F:227:CYS:HA	3:F:230:ILE:HD13	1.94	0.49
3:F:242:TYR:CE2	3:F:298:ILE:HG23	2.46	0.49
3:F:507:MET:HE1	3:F:530:MET:HG2	1.94	0.49
3:F:945:GLU:CD	3:F:951:LEU:HD23	2.32	0.49
3:G:689:MET:HE2	3:G:720:ALA:HB3	1.92	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:798:ILE:O	3:G:798:ILE:HG22	2.11	0.49
3:G:816:ILE:CG2	3:G:819:VAL:HG23	2.42	0.49
3:G:889:THR:CB	3:G:893:GLN:HE21	2.25	0.49
2:B:97:HIS:CD2	2:B:98:ILE:N	2.80	0.49
3:F:630:VAL:HG12	3:F:634:PHE:CE1	2.47	0.49
3:F:897:PHE:O	3:F:900:ILE:HG12	2.12	0.49
3:G:235:LEU:HG	3:G:268:MET:HE3	1.94	0.49
3:G:759:ILE:HG22	3:G:816:ILE:CD1	2.41	0.49
3:G:957:SER:O	3:G:960:ALA:HB3	2.12	0.49
1:C:154:PRO:HB3	2:D:30:ASP:HB2	1.94	0.49
3:F:94:PHE:CD2	3:F:101:VAL:HG11	2.46	0.49
3:F:251:GLY:O	3:F:309:ASN:ND2	2.46	0.49
3:F:618:ARG:HB3	3:F:619:PRO:HD2	1.94	0.49
3:G:945:GLU:CD	3:G:951:LEU:HD23	2.32	0.49
1:A:116:TYR:CZ	2:B:133:LEU:HD13	2.48	0.49
3:F:401:LYS:CE	3:G:18:ARG:HH12	2.05	0.49
3:G:194:MET:CB	3:G:240:LYS:NZ	2.75	0.49
3:G:363:TYR:CB	3:G:364:PRO:HD3	2.41	0.49
3:G:780:ILE:HG22	3:G:784:PHE:CZ	2.48	0.49
2:D:48:ARG:HG2	2:D:48:ARG:HH11	1.77	0.49
3:F:380:LEU:HG	3:F:400:ILE:CD1	2.42	0.49
3:G:13:VAL:HG12	3:G:17:TYR:HE1	1.75	0.49
3:G:153:THR:O	3:G:156:PRO:HD2	2.13	0.49
3:G:858:MET:HE3	3:G:903:ALA:HA	1.94	0.49
3:F:206:MET:O	3:F:210:VAL:HG23	2.13	0.49
3:F:798:ILE:HG22	3:F:798:ILE:O	2.11	0.49
3:F:920:MET:HB3	3:F:939:THR:OG1	2.13	0.49
3:F:377:TRP:HB3	3:F:381:GLN:OE1	2.13	0.49
3:F:905:ASN:O	3:F:909:ALA:HB2	2.13	0.49
3:G:776:LEU:O	3:G:779:PHE:HB3	2.13	0.49
2:D:27:PHE:CE1	2:D:33:LEU:HD13	2.47	0.49
3:G:314:VAL:O	3:G:318:MET:HB2	2.13	0.49
3:G:380:LEU:HG	3:G:400:ILE:CD1	2.42	0.49
3:G:416:GLU:HB3	3:G:479:THR:HG23	1.94	0.49
3:G:897:PHE:O	3:G:900:ILE:HG12	2.12	0.49
3:F:889:THR:CB	3:F:893:GLN:HE21	2.25	0.48
2:B:60:GLU:OE2	3:F:950:ARG:NH2	2.46	0.48
2:D:60:GLU:OE2	3:G:950:ARG:NH2	2.46	0.48
3:F:401:LYS:HE2	3:G:18:ARG:NH1	2.06	0.48
3:F:423:LEU:O	3:F:423:LEU:HG	2.13	0.48
3:F:957:SER:O	3:F:960:ALA:HB3	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:933:ALA:O	3:G:937:ARG:HG3	2.13	0.48
2:B:5:ASP:O	2:B:94:GLY:N	2.41	0.48
1:C:116:TYR:CZ	2:D:133:LEU:HD13	2.48	0.48
3:F:585:LEU:O	3:F:589:CYS:SG	2.67	0.48
3:F:777:ARG:CD	3:F:824:THR:HG21	2.44	0.48
3:F:816:ILE:CG2	3:F:819:VAL:HG23	2.42	0.48
3:F:913:ALA:HA	3:F:943:ILE:HG21	1.95	0.48
3:G:164:THR:HG22	3:G:166:VAL:HG23	1.96	0.48
3:G:199:ASP:O	3:G:202:ALA:HB3	2.13	0.48
3:G:913:ALA:HA	3:G:943:ILE:HG21	1.95	0.48
1:A:93:PHE:CZ	1:A:134:LEU:HD13	2.49	0.48
1:A:154:PRO:HB3	2:B:30:ASP:HB2	1.94	0.48
3:F:178:ARG:O	3:F:182:VAL:HG23	2.14	0.48
3:F:199:ASP:O	3:F:202:ALA:HB3	2.13	0.48
3:F:314:VAL:O	3:F:318:MET:HB2	2.13	0.48
3:F:530:MET:CE	3:F:547:ALA:HA	2.44	0.48
3:F:633:CYS:HA	3:F:657:ARG:CD	2.40	0.48
3:F:780:ILE:HG22	3:F:784:PHE:CZ	2.48	0.48
3:F:933:ALA:O	3:F:937:ARG:HG3	2.13	0.48
3:G:377:TRP:HB3	3:G:381:GLN:OE1	2.13	0.48
3:F:40:ALA:HA	3:F:43:PHE:CZ	2.49	0.48
3:F:890:PRO:HG2	3:F:893:GLN:CD	2.34	0.48
3:G:103:ASN:O	3:G:107:ILE:HG13	2.14	0.48
3:F:223:THR:CG2	3:F:225:GLU:HG3	2.43	0.48
3:G:423:LEU:HG	3:G:423:LEU:O	2.13	0.48
1:C:71:GLU:CB	2:D:143:LYS:NZ	2.77	0.48
2:D:134:VAL:HA	2:D:137:LEU:HD12	1.94	0.48
3:F:280:TYR:N	3:F:281:PRO:CD	2.77	0.48
3:F:858:MET:HE1	3:F:903:ALA:HA	1.96	0.48
3:G:44:SER:O	3:G:48:MET:HG2	2.14	0.48
3:G:905:ASN:O	3:G:909:ALA:HB2	2.13	0.48
3:F:268:MET:HB3	3:F:291:PHE:CE2	2.40	0.48
3:G:223:THR:CG2	3:G:225:GLU:HG3	2.43	0.48
3:G:241:CYS:SG	3:G:260:LEU:HD23	2.54	0.48
3:F:242:TYR:CD2	3:F:298:ILE:HG23	2.49	0.48
3:F:582:ALA:HA	3:F:613:LEU:HD22	1.95	0.48
3:F:776:LEU:O	3:F:779:PHE:HB3	2.13	0.48
3:G:251:GLY:O	3:G:309:ASN:ND2	2.46	0.48
3:G:358:ASP:HA	3:G:410:ILE:HG23	1.96	0.48
3:G:655:ILE:HG23	3:G:659:ASN:ND2	2.28	0.48
3:G:854:THR:OG1	3:G:900:ILE:HG22	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:75:ASP:HA	2:B:78:TRP:CD2	2.49	0.47
1:C:96:TYR:O	1:C:126:GLN:HB3	2.14	0.47
2:D:75:ASP:HA	2:D:78:TRP:CD2	2.49	0.47
3:F:380:LEU:HG	3:F:400:ILE:HD11	1.96	0.47
3:F:448:CYS:SG	3:F:456:ILE:HD11	2.54	0.47
3:G:360:PRO:O	3:G:367:GLU:CG	2.62	0.47
3:G:777:ARG:CZ	3:G:824:THR:HG22	2.44	0.47
3:G:890:PRO:HG2	3:G:893:GLN:CD	2.34	0.47
3:F:153:THR:O	3:F:156:PRO:HD2	2.13	0.47
3:F:164:THR:HG22	3:F:166:VAL:HG23	1.96	0.47
3:F:360:PRO:O	3:F:367:GLU:CG	2.62	0.47
3:G:40:ALA:HA	3:G:43:PHE:CZ	2.49	0.47
3:G:186:VAL:CG1	3:G:209:ALA:HB1	2.43	0.47
3:G:191:LYS:HE3	3:G:233:VAL:HG21	1.96	0.47
3:G:230:ILE:HD12	3:G:230:ILE:N	2.04	0.47
3:G:280:TYR:N	3:G:281:PRO:CD	2.77	0.47
3:G:630:VAL:HG13	3:G:634:PHE:CE1	2.42	0.47
3:G:689:MET:HE2	3:G:720:ALA:CB	2.44	0.47
1:A:71:GLU:CB	2:B:143:LYS:NZ	2.77	0.47
3:G:530:MET:CE	3:G:547:ALA:HA	2.44	0.47
3:G:777:ARG:CD	3:G:824:THR:HG21	2.44	0.47
1:A:96:TYR:O	1:A:126:GLN:HB3	2.15	0.47
3:F:191:LYS:HE3	3:F:233:VAL:HG21	1.96	0.47
3:G:75:VAL:O	3:G:77:PRO:HD3	2.14	0.47
3:F:44:SER:O	3:F:48:MET:HG2	2.14	0.47
3:F:639:ALA:O	3:F:642:GLN:CB	2.63	0.47
3:G:178:ARG:O	3:G:182:VAL:HG23	2.14	0.47
3:G:734:ASP:O	3:G:738:PHE:N	2.36	0.47
3:G:750:PRO:HG2	3:G:751:THR:H	1.79	0.47
3:G:816:ILE:N	3:G:817:PRO:CD	2.77	0.47
1:C:93:PHE:CZ	1:C:134:LEU:HD13	2.49	0.47
2:D:102:THR:HG22	2:D:103:SER:O	2.15	0.47
3:F:75:VAL:O	3:F:77:PRO:HD3	2.14	0.47
3:F:103:ASN:O	3:F:107:ILE:HG13	2.14	0.47
3:F:241:CYS:SG	3:F:260:LEU:HD23	2.54	0.47
3:F:548:ILE:O	3:F:552:VAL:HG23	2.15	0.47
3:F:581:TYR:CD1	3:F:581:TYR:N	2.83	0.47
3:F:816:ILE:HG22	3:F:819:VAL:HG23	1.93	0.47
3:F:816:ILE:N	3:F:817:PRO:CD	2.77	0.47
3:F:827:TYR:HB2	3:F:869:VAL:HG21	1.96	0.47
3:F:854:THR:OG1	3:F:900:ILE:HG22	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:930:ILE:HG12	3:F:931:THR:N	2.30	0.47
3:G:206:MET:O	3:G:210:VAL:HG23	2.13	0.47
3:G:299:THR:HG21	3:G:352:GLU:OE1	2.15	0.47
3:G:576:LEU:HD23	3:G:576:LEU:O	2.15	0.47
3:G:582:ALA:HA	3:G:613:LEU:HD22	1.95	0.47
3:G:633:CYS:HA	3:G:657:ARG:CD	2.40	0.47
3:G:639:ALA:O	3:G:642:GLN:CB	2.63	0.47
3:F:95:ALA:HA	3:F:102:LEU:HD22	1.96	0.47
3:F:398:GLU:HG2	3:F:401:LYS:NZ	2.30	0.47
3:F:423:LEU:O	3:F:423:LEU:CG	2.62	0.47
3:F:954:GLN:HG3	3:F:955:HIS:N	2.30	0.47
3:G:519:ASN:HB3	3:G:521:LYS:HG2	1.97	0.47
3:G:920:MET:HB3	3:G:939:THR:OG1	2.13	0.47
2:B:79:PRO:O	2:B:102:THR:HA	2.15	0.47
2:B:97:HIS:HD2	2:B:98:ILE:N	2.13	0.47
3:F:224:ILE:C	3:F:283:THR:HG21	2.35	0.47
3:F:519:ASN:HB3	3:F:521:LYS:HG2	1.97	0.47
3:F:625:TYR:O	3:F:629:ILE:HB	2.15	0.47
3:F:634:PHE:CE2	3:F:692:THR:CG2	2.89	0.47
3:G:581:TYR:CD1	3:G:581:TYR:N	2.83	0.47
3:F:750:PRO:HG2	3:F:751:THR:H	1.79	0.47
3:G:224:ILE:C	3:G:283:THR:HG21	2.35	0.47
2:D:33:LEU:O	2:D:33:LEU:HG	2.15	0.46
2:D:81:PRO:CG	2:D:101:THR:HG22	2.45	0.46
3:G:448:CYS:SG	3:G:456:ILE:HD11	2.54	0.46
3:G:548:ILE:O	3:G:552:VAL:HG23	2.15	0.46
3:G:827:TYR:HB2	3:G:869:VAL:HG21	1.96	0.46
1:A:93:PHE:CE1	1:A:134:LEU:HD13	2.50	0.46
1:A:105:ASN:ND2	2:B:132:CYS:HB3	2.29	0.46
2:B:37:ASN:HD21	2:B:146:PRO:CB	2.29	0.46
2:D:25:PHE:HB3	2:D:35:TYR:HD1	1.80	0.46
2:D:97:HIS:HD2	2:D:98:ILE:N	2.13	0.46
3:F:358:ASP:HA	3:F:410:ILE:HG23	1.96	0.46
3:F:576:LEU:HD23	3:F:576:LEU:O	2.15	0.46
3:G:242:TYR:CD2	3:G:298:ILE:HG23	2.49	0.46
3:G:287:LEU:HB3	3:G:291:PHE:CE1	2.47	0.46
3:G:409:ARG:O	3:G:413:ARG:HG3	2.15	0.46
3:G:530:MET:HE1	3:G:550:LEU:HB3	1.97	0.46
2:D:79:PRO:O	2:D:102:THR:HA	2.15	0.46
3:F:527:LEU:CD2	3:F:550:LEU:HG	2.44	0.46
3:G:414:LYS:HB2	3:G:441:ILE:HD11	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:68:LEU:HD21	3:F:83:LEU:HD21	1.97	0.46
3:F:183:ILE:O	3:F:184:HIS:C	2.53	0.46
3:F:299:THR:HG21	3:F:352:GLU:OE1	2.15	0.46
3:F:397:TRP:HE1	3:F:451:VAL:HG13	1.81	0.46
3:F:419:ASP:C	3:F:421:LYS:N	2.69	0.46
3:F:544:ILE:N	3:F:545:PRO:CD	2.79	0.46
3:G:398:GLU:HG2	3:G:401:LYS:NZ	2.30	0.46
3:G:419:ASP:C	3:G:421:LYS:N	2.69	0.46
1:A:137:ALA:O	1:A:143:THR:HA	2.16	0.46
2:B:12:VAL:HG22	2:B:87:GLN:HA	1.98	0.46
1:C:93:PHE:CE1	1:C:134:LEU:HD13	2.50	0.46
1:C:151:VAL:CG1	1:C:152:LYS:N	2.79	0.46
2:D:12:VAL:HG22	2:D:87:GLN:CG	2.40	0.46
3:F:607:MET:HG2	3:F:660:MET:O	2.15	0.46
3:G:235:LEU:HD22	3:G:294:SER:HB3	1.98	0.46
3:G:416:GLU:OE2	3:G:480:LYS:HG2	2.16	0.46
3:G:749:ALA:N	3:G:750:PRO:HD2	2.30	0.46
3:G:905:ASN:HB2	3:G:912:MET:CE	2.46	0.46
3:G:905:ASN:HB2	3:G:912:MET:HE1	1.97	0.46
1:A:105:ASN:HD21	2:B:132:CYS:CB	2.28	0.46
2:B:25:PHE:HB3	2:B:35:TYR:HD1	1.80	0.46
2:B:33:LEU:O	2:B:33:LEU:HG	2.15	0.46
2:B:81:PRO:CG	2:B:101:THR:HG22	2.45	0.46
3:F:409:ARG:O	3:F:413:ARG:HG3	2.15	0.46
3:G:625:TYR:O	3:G:629:ILE:HB	2.15	0.46
3:G:954:GLN:HG3	3:G:955:HIS:N	2.30	0.46
3:F:287:LEU:HB3	3:F:291:PHE:CE1	2.47	0.46
3:F:519:ASN:OD1	3:F:520:VAL:N	2.49	0.46
3:F:530:MET:HE1	3:F:550:LEU:HB3	1.96	0.46
3:G:95:ALA:HA	3:G:102:LEU:HD22	1.96	0.46
3:G:305:ARG:HD2	3:G:305:ARG:O	2.16	0.46
3:F:235:LEU:HD22	3:F:294:SER:HB3	1.98	0.46
3:G:68:LEU:HD21	3:G:83:LEU:HD21	1.97	0.46
3:G:167:LYS:O	3:G:170:VAL:HG23	2.15	0.46
3:G:302:GLU:C	3:G:304:LYS:N	2.69	0.46
3:G:527:LEU:CD2	3:G:550:LEU:HG	2.44	0.46
2:B:82:ASP:OD2	2:B:84:VAL:HG22	2.16	0.46
3:F:85:GLN:HG3	3:F:89:GLU:OE1	2.16	0.46
3:F:167:LYS:O	3:F:170:VAL:HG23	2.15	0.46
3:F:305:ARG:HD2	3:F:305:ARG:O	2.16	0.46
3:F:624:LYS:HG3	3:F:625:TYR:N	2.30	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:798:ILE:O	3:F:798:ILE:CG2	2.64	0.46
3:G:380:LEU:HG	3:G:400:ILE:HD11	1.96	0.46
3:G:519:ASN:OD1	3:G:520:VAL:N	2.49	0.46
3:G:636:GLU:OE2	3:G:657:ARG:CG	2.64	0.46
3:G:839:THR:CG2	3:G:888:LEU:CD2	2.87	0.46
3:G:890:PRO:HG2	3:G:893:GLN:HG2	1.98	0.46
1:C:105:ASN:HD21	2:D:132:CYS:CB	2.28	0.46
1:C:137:ALA:O	1:C:143:THR:HA	2.16	0.46
3:F:416:GLU:OE2	3:F:480:LYS:HG2	2.16	0.46
3:F:619:PRO:HG2	3:F:620:GLU:H	1.81	0.46
3:F:839:THR:CG2	3:F:888:LEU:CD2	2.88	0.46
3:G:692:THR:CG2	3:G:696:PHE:CE1	2.92	0.46
1:A:136:GLY:O	1:A:143:THR:HG23	2.16	0.45
1:A:137:ALA:HB3	1:A:144:ILE:CD1	2.46	0.45
1:C:105:ASN:HB2	1:C:116:TYR:CE1	2.51	0.45
3:F:445:PHE:O	3:F:446:MET:C	2.55	0.45
3:F:568:LYS:CG	3:F:608:PHE:CD2	2.99	0.45
3:F:749:ALA:N	3:F:750:PRO:HD2	2.30	0.45
3:F:777:ARG:CZ	3:F:824:THR:HG22	2.44	0.45
3:F:837:GLY:O	3:F:840:LEU:N	2.48	0.45
3:G:272:ILE:CD1	3:G:323:SER:HB3	2.46	0.45
3:G:759:ILE:C	3:G:816:ILE:HD11	2.37	0.45
1:C:137:ALA:HB3	1:C:144:ILE:CD1	2.46	0.45
3:F:272:ILE:CD1	3:F:323:SER:HB3	2.46	0.45
3:F:408:THR:O	3:F:412:VAL:HG23	2.17	0.45
3:G:207:ASN:ND2	3:G:211:LYS:HE3	2.31	0.45
2:B:102:THR:HG22	2:B:103:SER:O	2.15	0.45
3:F:75:VAL:HG13	3:F:76:PRO:HD2	1.98	0.45
3:F:655:ILE:HG23	3:F:659:ASN:ND2	2.28	0.45
3:G:179:VAL:HG11	3:G:222:TYR:HB2	1.98	0.45
3:G:268:MET:HB3	3:G:291:PHE:CE2	2.40	0.45
3:G:397:TRP:HE1	3:G:451:VAL:HG13	1.80	0.45
3:G:476:THR:O	3:G:476:THR:HG22	2.17	0.45
3:G:607:MET:HG2	3:G:660:MET:O	2.15	0.45
3:G:624:LYS:HG3	3:G:625:TYR:N	2.30	0.45
3:G:724:LEU:HD11	3:G:729:GLN:CA	2.47	0.45
3:G:873:THR:HG22	3:G:877:THR:OG1	2.17	0.45
3:F:724:LEU:HD11	3:F:729:GLN:CA	2.47	0.45
3:F:889:THR:CG2	3:F:893:GLN:HG3	2.31	0.45
3:G:445:PHE:O	3:G:446:MET:C	2.55	0.45
1:A:151:VAL:CG1	1:A:152:LYS:N	2.79	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:136:GLY:O	1:C:143:THR:HG23	2.16	0.45
3:F:414:LYS:HB2	3:F:441:ILE:HD11	1.97	0.45
3:F:759:ILE:C	3:F:816:ILE:HD11	2.37	0.45
3:G:798:ILE:O	3:G:798:ILE:CG2	2.64	0.45
1:A:75:LEU:HD23	1:A:148:TRP:HA	1.99	0.45
3:F:636:GLU:OE2	3:F:657:ARG:CG	2.64	0.45
3:F:951:LEU:HG	3:F:955:HIS:NE2	2.32	0.45
3:G:61:ALA:HB1	3:G:104:ARG:HB3	1.98	0.45
3:G:568:LYS:CG	3:G:608:PHE:CD2	2.99	0.45
1:C:79:SER:OG	1:C:143:THR:O	2.29	0.45
3:F:166:VAL:HG12	3:F:170:VAL:HG23	1.99	0.45
3:F:925:PHE:O	3:F:926:PRO:C	2.55	0.45
3:G:619:PRO:HG2	3:G:620:GLU:H	1.81	0.45
3:G:626:LEU:O	3:G:630:VAL:N	2.50	0.45
3:G:756:LYS:HE3	3:G:811:GLN:OE1	2.16	0.45
1:C:105:ASN:ND2	2:D:132:CYS:HB3	2.29	0.45
3:F:503:ILE:N	3:F:504:PRO:HD2	2.32	0.45
3:F:756:LYS:HE3	3:F:811:GLN:OE1	2.16	0.45
3:G:85:GLN:HG3	3:G:89:GLU:OE1	2.16	0.45
3:G:925:PHE:O	3:G:926:PRO:C	2.55	0.45
1:C:68:ARG:HG2	1:C:68:ARG:HH11	1.82	0.45
1:C:154:PRO:CB	2:D:30:ASP:HB2	2.47	0.45
2:D:133:LEU:O	2:D:137:LEU:HG	2.17	0.45
3:F:61:ALA:HB1	3:F:104:ARG:HB3	1.98	0.45
3:F:760:VAL:CA	3:F:816:ILE:CD1	2.66	0.45
3:F:890:PRO:HG2	3:F:893:GLN:HG2	1.98	0.45
3:F:905:ASN:HB2	3:F:912:MET:CE	2.46	0.45
3:G:776:LEU:O	3:G:780:ILE:HG13	2.17	0.45
3:F:153:THR:HG22	3:F:212:CYS:HA	1.99	0.45
3:F:179:VAL:HG11	3:F:222:TYR:HB2	1.98	0.45
3:F:207:ASN:ND2	3:F:211:LYS:HE3	2.31	0.45
3:F:302:GLU:C	3:F:304:LYS:N	2.69	0.45
3:F:501:ARG:CB	3:G:51:GLY:CA	2.94	0.45
3:G:153:THR:HG22	3:G:212:CYS:HA	1.99	0.45
3:G:183:ILE:O	3:G:184:HIS:C	2.53	0.45
3:G:358:ASP:HA	3:G:410:ILE:CG2	2.47	0.45
3:G:360:PRO:O	3:G:367:GLU:HG2	2.17	0.45
3:F:287:LEU:O	3:F:291:PHE:CD1	2.70	0.44
3:F:655:ILE:CG2	3:F:659:ASN:ND2	2.80	0.44
3:F:794:ASN:CA	3:F:797:ASN:HD22	2.27	0.44
3:G:75:VAL:HG13	3:G:76:PRO:HD2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:856:PHE:O	3:G:860:SER:HB2	2.17	0.44
3:G:930:ILE:HG12	3:G:931:THR:N	2.30	0.44
3:F:657:ARG:HD3	3:F:657:ARG:HA	1.79	0.44
3:F:873:THR:HG22	3:F:877:THR:OG1	2.17	0.44
3:G:700:ALA:O	3:G:704:VAL:HG23	2.16	0.44
2:D:82:ASP:OD2	2:D:84:VAL:HG22	2.16	0.44
3:F:186:VAL:CG1	3:F:209:ALA:HB1	2.43	0.44
3:F:358:ASP:HA	3:F:410:ILE:CG2	2.47	0.44
3:F:884:CYS:HB3	3:F:889:THR:OG1	2.16	0.44
3:F:885:VAL:O	3:F:885:VAL:CG1	2.66	0.44
3:G:100:ILE:H	3:G:100:ILE:HG13	1.55	0.44
3:G:408:THR:O	3:G:412:VAL:HG23	2.17	0.44
1:C:75:LEU:HD23	1:C:148:TRP:HA	1.99	0.44
3:F:281:PRO:HA	3:F:330:LEU:HD11	1.99	0.44
3:F:501:ARG:CB	3:G:51:GLY:HA2	2.47	0.44
3:F:860:SER:CB	3:F:870:VAL:HG21	2.48	0.44
3:G:655:ILE:CG2	3:G:659:ASN:ND2	2.80	0.44
3:G:884:CYS:HB3	3:G:889:THR:OG1	2.16	0.44
1:A:105:ASN:HB2	1:A:116:TYR:CE1	2.51	0.44
3:F:700:ALA:O	3:F:704:VAL:HG23	2.16	0.44
3:F:776:LEU:O	3:F:780:ILE:HG13	2.17	0.44
2:D:12:VAL:HG22	2:D:87:GLN:HA	1.98	0.44
3:F:182:VAL:O	3:F:185:THR:HB	2.18	0.44
3:F:370:SER:O	3:F:374:LEU:HG	2.18	0.44
3:F:626:LEU:O	3:F:630:VAL:N	2.50	0.44
3:F:856:PHE:O	3:F:860:SER:HB2	2.17	0.44
3:G:182:VAL:O	3:G:185:THR:HB	2.18	0.44
3:G:423:LEU:O	3:G:423:LEU:CG	2.62	0.44
3:G:886:GLY:CA	3:G:963:THR:HG21	2.38	0.44
3:F:235:LEU:HG	3:F:268:MET:HE3	2.00	0.44
3:F:336:THR:C	3:F:338:ALA:N	2.69	0.44
3:G:166:VAL:HG12	3:G:170:VAL:HG23	1.99	0.44
3:G:281:PRO:HA	3:G:330:LEU:HD11	1.99	0.44
3:G:287:LEU:O	3:G:291:PHE:CD1	2.70	0.44
3:G:544:ILE:N	3:G:545:PRO:CD	2.79	0.44
3:G:920:MET:C	3:G:923:PRO:CD	2.86	0.44
1:A:154:PRO:CB	2:B:30:ASP:HB2	2.46	0.44
2:B:133:LEU:O	2:B:137:LEU:HG	2.17	0.44
3:F:273:ILE:O	3:F:274:GLN:O	2.36	0.44
3:F:476:THR:HG22	3:F:476:THR:O	2.17	0.44
3:F:759:ILE:O	3:F:816:ILE:CD1	2.66	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:88:LEU:O	3:G:92:VAL:HG23	2.18	0.44
3:G:302:GLU:C	3:G:304:LYS:H	2.20	0.44
3:G:336:THR:C	3:G:338:ALA:N	2.69	0.44
3:G:951:LEU:HG	3:G:955:HIS:NE2	2.32	0.44
2:D:78:TRP:HA	2:D:79:PRO:HD3	1.85	0.44
3:F:452:LEU:CB	3:F:455:TYR:CB	2.96	0.44
3:G:370:SER:O	3:G:374:LEU:HG	2.18	0.44
3:G:837:GLY:O	3:G:840:LEU:N	2.48	0.44
3:G:860:SER:CB	3:G:870:VAL:HG21	2.48	0.44
3:F:190:LEU:O	3:F:193:GLN:N	2.51	0.43
3:F:478:TRP:CG	3:F:521:LYS:HD2	2.50	0.43
3:F:564:THR:HG22	3:F:605:ARG:HB2	1.97	0.43
3:F:858:MET:HE3	3:F:903:ALA:HB1	1.99	0.43
3:G:452:LEU:CB	3:G:455:TYR:CB	2.96	0.43
3:G:895:ASP:OD1	3:G:895:ASP:O	2.36	0.43
1:A:76:PHE:CE2	2:B:57:VAL:HA	2.53	0.43
1:A:128:LEU:HD21	3:F:172:ARG:NH1	2.33	0.43
1:C:76:PHE:CE2	2:D:57:VAL:HA	2.53	0.43
2:D:37:ASN:HD21	2:D:146:PRO:HB2	1.83	0.43
3:G:423:LEU:O	3:G:424:ALA:C	2.57	0.43
3:G:503:ILE:N	3:G:504:PRO:HD2	2.32	0.43
3:G:657:ARG:HD3	3:G:657:ARG:HA	1.79	0.43
3:G:921:SER:C	3:G:923:PRO:HD2	2.39	0.43
3:F:360:PRO:O	3:F:367:GLU:HG2	2.17	0.43
3:F:921:SER:C	3:F:923:PRO:HD2	2.39	0.43
3:G:280:TYR:N	3:G:281:PRO:HD2	2.33	0.43
3:G:614:MET:O	3:G:617:LEU:HB2	2.18	0.43
3:F:614:MET:O	3:F:617:LEU:HB2	2.18	0.43
3:F:854:THR:HG23	3:F:903:ALA:CB	2.48	0.43
3:F:885:VAL:HG11	3:F:956:LEU:HD23	2.01	0.43
3:G:424:ALA:C	3:G:426:TRP:H	2.21	0.43
3:G:618:ARG:NH2	3:G:621:GLU:OE2	2.41	0.43
2:B:10:TYR:CZ	2:B:12:VAL:CG2	3.02	0.43
2:B:86:ARG:HH11	2:B:86:ARG:HG3	1.84	0.43
3:F:398:GLU:HA	3:F:401:LYS:HD2	2.01	0.43
3:F:814:LYS:HE2	3:F:855:HIS:NE2	2.34	0.43
3:G:564:THR:HG22	3:G:605:ARG:HB2	1.97	0.43
3:G:923:PRO:CG	3:G:926:PRO:HD3	2.41	0.43
1:A:116:TYR:CE1	2:B:133:LEU:HD13	2.54	0.43
3:F:302:GLU:C	3:F:304:LYS:H	2.20	0.43
3:F:610:ILE:O	3:F:614:MET:HG3	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:41:TRP:HZ2	3:G:71:HIS:CB	2.31	0.43
3:G:759:ILE:O	3:G:816:ILE:CD1	2.66	0.43
2:B:23:LEU:HD21	2:B:135:PHE:HZ	1.84	0.43
2:D:37:ASN:HD21	2:D:146:PRO:CB	2.29	0.43
3:F:88:LEU:O	3:F:92:VAL:HG23	2.18	0.43
3:F:443:ASP:O	3:F:446:MET:HB2	2.19	0.43
3:F:920:MET:C	3:F:923:PRO:CD	2.86	0.43
3:G:295:LEU:HB2	3:G:320:PHE:HZ	1.84	0.43
3:G:379:MET:CG	3:G:380:LEU:N	2.75	0.43
3:G:501:ARG:C	3:G:504:PRO:HD2	2.39	0.43
3:G:814:LYS:HE2	3:G:855:HIS:NE2	2.34	0.43
3:G:885:VAL:O	3:G:885:VAL:CG1	2.66	0.43
3:F:41:TRP:HZ2	3:F:71:HIS:CB	2.31	0.43
3:F:295:LEU:HB2	3:F:320:PHE:HZ	1.84	0.43
3:F:442:SER:O	3:F:445:PHE:HB2	2.19	0.43
3:F:521:LYS:HB3	3:F:521:LYS:HE2	1.75	0.43
3:F:545:PRO:N	3:F:546:PRO:HD2	2.34	0.43
3:F:692:THR:HG21	3:F:696:PHE:HE1	1.81	0.43
3:G:43:PHE:CD1	3:G:43:PHE:C	2.92	0.43
3:G:104:ARG:HA	3:G:104:ARG:HD2	1.77	0.43
3:G:164:THR:O	3:G:164:THR:CG2	2.66	0.43
3:G:273:ILE:O	3:G:274:GLN:O	2.36	0.43
3:G:305:ARG:HD2	3:G:305:ARG:HA	1.70	0.43
3:G:442:SER:O	3:G:445:PHE:HB2	2.19	0.43
3:G:443:ASP:O	3:G:446:MET:HB2	2.19	0.43
3:G:478:TRP:CG	3:G:521:LYS:HD2	2.50	0.43
3:G:692:THR:HG21	3:G:696:PHE:HE1	1.81	0.43
3:G:701:GLU:C	3:G:704:VAL:HG23	2.39	0.43
3:G:724:LEU:O	3:G:725:ARG:C	2.56	0.43
1:A:68:ARG:HH11	1:A:68:ARG:HG2	1.82	0.43
2:B:37:ASN:HD21	2:B:146:PRO:HB2	1.83	0.43
1:C:128:LEU:HD21	3:G:172:ARG:NH1	2.33	0.43
2:D:27:PHE:HE1	2:D:134:VAL:HG22	1.84	0.43
3:F:501:ARG:C	3:F:504:PRO:HD2	2.39	0.43
3:G:420:GLU:O	3:G:423:LEU:HB2	2.19	0.43
3:G:545:PRO:N	3:G:546:PRO:HD2	2.34	0.43
3:G:693:MET:HG2	3:G:694:PRO:HD3	1.99	0.43
3:F:43:PHE:CD1	3:F:43:PHE:C	2.92	0.43
3:F:439:GLN:O	3:F:443:ASP:OD1	2.37	0.43
3:F:442:SER:HA	3:F:445:PHE:HD1	1.83	0.43
3:F:701:GLU:C	3:F:704:VAL:HG23	2.39	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:895:ASP:OD1	3:F:895:ASP:O	2.36	0.43
3:G:551:LEU:HD13	3:G:567:LEU:HA	2.00	0.43
3:G:634:PHE:CE2	3:G:692:THR:HG23	2.54	0.43
3:G:794:ASN:CA	3:G:797:ASN:HD22	2.27	0.43
3:G:854:THR:HG23	3:G:903:ALA:CB	2.48	0.43
2:B:37:ASN:HD22	2:B:146:PRO:HB3	1.84	0.42
2:D:10:TYR:CZ	2:D:12:VAL:CG2	3.02	0.42
3:F:146:TRP:NE1	3:F:208:ARG:NH1	2.67	0.42
3:F:420:GLU:O	3:F:423:LEU:HB2	2.19	0.42
3:G:794:ASN:HA	3:G:797:ASN:HB2	2.02	0.42
3:G:885:VAL:HG11	3:G:956:LEU:HD23	2.01	0.42
1:C:90:GLN:HA	1:C:90:GLN:NE2	2.34	0.42
1:C:99:ILE:H	1:C:99:ILE:CD1	2.07	0.42
1:C:116:TYR:CE1	2:D:133:LEU:HD13	2.54	0.42
2:D:23:LEU:HD21	2:D:135:PHE:HZ	1.84	0.42
3:F:16:PHE:O	3:F:20:ASN:N	2.51	0.42
3:F:231:THR:O	3:F:268:MET:HE3	2.19	0.42
3:G:372:MET:HE3	3:G:372:MET:HB2	1.88	0.42
3:F:193:GLN:CD	3:F:196:ARG:HH21	2.23	0.42
3:F:794:ASN:HA	3:F:797:ASN:HB2	2.02	0.42
3:G:146:TRP:NE1	3:G:208:ARG:HG3	2.34	0.42
3:G:282:LYS:H	3:G:282:LYS:CD	2.20	0.42
3:G:398:GLU:HA	3:G:401:LYS:HD2	2.01	0.42
3:F:401:LYS:CD	3:G:18:ARG:HH11	2.29	0.42
3:F:724:LEU:O	3:F:725:ARG:C	2.56	0.42
3:G:16:PHE:O	3:G:20:ASN:N	2.52	0.42
3:G:101:VAL:O	3:G:102:LEU:C	2.58	0.42
3:G:610:ILE:O	3:G:614:MET:HG3	2.18	0.42
1:A:114:LYS:HD2	2:B:129:ASP:OD2	2.19	0.42
2:D:27:PHE:CZ	2:D:33:LEU:HD13	2.54	0.42
3:F:87:ILE:O	3:F:91:ILE:HG13	2.20	0.42
3:F:146:TRP:NE1	3:F:208:ARG:HG3	2.34	0.42
3:F:886:GLY:CA	3:F:963:THR:HG21	2.38	0.42
3:G:530:MET:HE1	3:G:547:ALA:HA	2.02	0.42
3:G:847:ARG:HG2	3:G:848:ASN:N	2.34	0.42
3:F:107:ILE:HG23	3:F:154:ALA:HB1	2.01	0.42
3:F:193:GLN:NE2	3:F:196:ARG:NH2	2.68	0.42
3:F:449:TYR:CD2	3:F:449:TYR:C	2.93	0.42
3:F:885:VAL:O	3:F:885:VAL:HG12	2.19	0.42
3:G:146:TRP:NE1	3:G:208:ARG:NH1	2.67	0.42
3:G:442:SER:HA	3:G:445:PHE:HD1	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:885:VAL:O	3:G:885:VAL:HG12	2.19	0.42
1:C:151:VAL:CG1	1:C:152:LYS:H	2.31	0.42
2:D:14:HIS:NE2	2:D:16:GLY:HA3	2.34	0.42
2:D:86:ARG:HH11	2:D:86:ARG:HG3	1.84	0.42
3:F:791:PRO:O	3:F:795:PHE:CB	2.60	0.42
3:G:193:GLN:CD	3:G:196:ARG:HH21	2.23	0.42
3:G:193:GLN:NE2	3:G:196:ARG:NH2	2.68	0.42
3:G:242:TYR:HD1	3:G:253:MET:CE	2.33	0.42
3:G:754:ILE:CG1	3:G:755:SER:N	2.83	0.42
3:F:40:ALA:HB1	3:F:63:THR:CG2	2.50	0.42
3:F:83:LEU:HD23	3:F:112:TYR:CD1	2.55	0.42
3:F:314:VAL:HG13	3:F:372:MET:HE1	2.02	0.42
3:F:367:GLU:OE1	3:F:367:GLU:HA	2.20	0.42
3:F:636:GLU:OE2	3:F:657:ARG:HG2	2.20	0.42
3:F:958:GLU:O	3:F:962:LYS:HG3	2.20	0.42
3:G:190:LEU:O	3:G:193:GLN:N	2.51	0.42
3:G:367:GLU:OE1	3:G:367:GLU:HA	2.20	0.42
3:G:636:GLU:OE2	3:G:657:ARG:HG2	2.20	0.42
3:G:647:THR:O	3:G:650:ALA:N	2.52	0.42
2:B:27:PHE:HE1	2:B:134:VAL:HG22	1.84	0.42
1:C:114:LYS:HD2	2:D:129:ASP:OD2	2.19	0.42
3:F:242:TYR:HD1	3:F:253:MET:CE	2.33	0.42
3:G:215:THR:O	3:G:219:ASN:ND2	2.51	0.42
3:G:690:GLN:O	3:G:693:MET:HG2	2.20	0.42
3:G:900:ILE:HG13	3:G:901:LEU:N	2.35	0.42
2:D:5:ASP:CB	2:D:94:GLY:O	2.68	0.42
3:F:634:PHE:CE2	3:F:692:THR:HG23	2.54	0.42
3:G:40:ALA:HB1	3:G:63:THR:CG2	2.50	0.42
3:G:83:LEU:HD23	3:G:112:TYR:CD1	2.55	0.42
3:G:87:ILE:O	3:G:91:ILE:HG13	2.20	0.42
3:G:449:TYR:CD2	3:G:449:TYR:C	2.93	0.42
3:G:665:PHE:CE1	3:G:720:ALA:HB2	2.55	0.42
2:D:79:PRO:O	2:D:102:THR:HG23	2.20	0.41
3:F:179:VAL:HG12	3:F:183:ILE:HD11	2.02	0.41
3:F:339:ASP:O	3:F:340:PRO:C	2.59	0.41
3:F:423:LEU:O	3:F:424:ALA:C	2.57	0.41
3:F:754:ILE:CG1	3:F:755:SER:N	2.83	0.41
3:G:179:VAL:HG12	3:G:183:ILE:HD11	2.02	0.41
3:G:581:TYR:O	3:G:584:PRO:HD2	2.20	0.41
2:B:27:PHE:CZ	2:B:33:LEU:HD13	2.54	0.41
2:B:127:VAL:O	2:B:131:LYS:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:125:TYR:HD2	2:D:125:TYR:HA	1.71	0.41
3:F:59:PHE:HA	3:F:62:ILE:CG2	2.49	0.41
3:F:189:TYR:O	3:F:192:LEU:HB2	2.20	0.41
3:F:231:THR:HG23	3:F:268:MET:CE	2.49	0.41
3:F:359:LYS:HA	3:F:360:PRO:HD3	1.93	0.41
3:F:647:THR:O	3:F:650:ALA:N	2.52	0.41
3:G:439:GLN:O	3:G:443:ASP:OD1	2.37	0.41
1:A:142:GLN:HG3	3:F:954:GLN:OE1	2.21	0.41
2:B:14:HIS:NE2	2:B:16:GLY:HA3	2.34	0.41
3:F:665:PHE:CE1	3:F:720:ALA:HB2	2.55	0.41
2:B:5:ASP:CB	2:B:94:GLY:O	2.68	0.41
2:D:6:PHE:HA	2:D:92:VAL:O	2.21	0.41
2:D:37:ASN:OD1	2:D:37:ASN:C	2.58	0.41
3:F:424:ALA:C	3:F:426:TRP:H	2.21	0.41
3:F:884:CYS:C	3:F:889:THR:HB	2.40	0.41
3:G:449:TYR:CE1	3:G:453:ASN:O	2.73	0.41
3:G:689:MET:CE	3:G:720:ALA:HB3	2.51	0.41
3:G:920:MET:C	3:G:923:PRO:HD2	2.40	0.41
2:B:69:GLU:O	2:B:72:GLN:HG2	2.21	0.41
3:F:551:LEU:HD13	3:F:567:LEU:HA	2.00	0.41
3:F:692:THR:O	3:F:695:ILE:HG12	2.21	0.41
3:F:710:LEU:HD12	3:F:710:LEU:HA	1.82	0.41
3:F:794:ASN:HA	3:F:797:ASN:ND2	2.29	0.41
3:F:900:ILE:HG13	3:F:901:LEU:N	2.35	0.41
3:F:920:MET:C	3:F:923:PRO:HD2	2.40	0.41
3:G:41:TRP:O	3:G:45:TRP:CD1	2.74	0.41
3:G:107:ILE:HG23	3:G:154:ALA:HB1	2.01	0.41
3:G:884:CYS:C	3:G:889:THR:HB	2.40	0.41
1:A:75:LEU:HD11	1:A:127:ALA:O	2.21	0.41
3:F:146:TRP:NE1	3:F:208:ARG:CZ	2.83	0.41
3:F:772:MET:HG2	3:F:773:GLN:N	2.35	0.41
3:F:931:THR:HG22	3:F:933:ALA:N	2.30	0.41
3:G:151:VAL:O	3:G:155:ILE:HG13	2.21	0.41
3:G:231:THR:HG23	3:G:268:MET:CE	2.49	0.41
3:G:397:TRP:O	3:G:401:LYS:HG3	2.20	0.41
3:G:827:TYR:HE1	3:G:865:HIS:CE1	2.39	0.41
3:G:836:ARG:O	3:G:839:THR:N	2.53	0.41
2:B:72:GLN:HE22	3:F:847:ARG:NH2	2.19	0.41
2:B:72:GLN:HE22	3:F:847:ARG:CZ	2.34	0.41
1:C:75:LEU:HD11	1:C:127:ALA:O	2.21	0.41
3:F:427:SER:CB	3:F:429:ASP:OD1	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:631:SER:N	3:F:632:PRO:CD	2.84	0.41
3:F:640:ILE:C	3:F:642:GLN:N	2.74	0.41
3:F:662:SER:OG	3:F:719:HIS:CD2	2.73	0.41
3:F:690:GLN:O	3:F:693:MET:HG2	2.20	0.41
3:G:662:SER:OG	3:G:719:HIS:CD2	2.73	0.41
3:G:750:PRO:HG2	3:G:751:THR:N	2.36	0.41
3:G:772:MET:HG2	3:G:773:GLN:N	2.35	0.41
3:G:950:ARG:HA	3:G:953:GLN:CD	2.41	0.41
3:F:41:TRP:O	3:F:45:TRP:CD1	2.74	0.41
3:F:581:TYR:O	3:F:584:PRO:HD2	2.20	0.41
3:F:629:ILE:O	3:F:629:ILE:CG2	2.68	0.41
3:G:59:PHE:HA	3:G:62:ILE:CG2	2.49	0.41
3:G:146:TRP:NE1	3:G:208:ARG:CZ	2.83	0.41
3:G:150:GLU:OE1	3:G:208:ARG:NH1	2.53	0.41
3:G:231:THR:O	3:G:268:MET:HE3	2.19	0.41
3:G:348:ARG:HA	3:G:351:GLN:CG	2.51	0.41
3:G:427:SER:CB	3:G:429:ASP:OD1	2.69	0.41
3:G:521:LYS:HE2	3:G:521:LYS:HB3	1.75	0.41
2:B:6:PHE:HA	2:B:92:VAL:O	2.21	0.41
2:B:79:PRO:O	2:B:102:THR:HG23	2.20	0.41
2:D:69:GLU:O	2:D:72:GLN:HG2	2.21	0.41
3:F:18:ARG:HD3	3:F:18:ARG:HA	1.93	0.41
3:F:94:PHE:CD1	3:F:105:LEU:HD11	2.56	0.41
3:F:150:GLU:OE1	3:F:208:ARG:NH1	2.53	0.41
3:F:180:GLN:HG2	3:F:222:TYR:CZ	2.56	0.41
3:F:305:ARG:HD2	3:F:305:ARG:HA	1.70	0.41
3:F:358:ASP:O	3:F:358:ASP:OD1	2.39	0.41
3:F:456:ILE:HG22	3:F:457:LEU:N	2.36	0.41
3:F:525:THR:O	3:F:526:ALA:C	2.59	0.41
3:F:611:GLY:HA2	3:F:668:LEU:HD12	2.03	0.41
3:F:693:MET:HG2	3:F:694:PRO:HD3	1.99	0.41
3:F:750:PRO:HG2	3:F:751:THR:N	2.36	0.41
3:F:950:ARG:HA	3:F:953:GLN:CD	2.41	0.41
3:G:169:VAL:CG1	3:G:170:VAL:N	2.83	0.41
3:G:421:LYS:C	3:G:423:LEU:N	2.74	0.41
3:G:611:GLY:HA2	3:G:668:LEU:HD12	2.03	0.41
3:G:629:ILE:HG23	3:G:629:ILE:O	2.21	0.41
3:G:634:PHE:N	3:G:634:PHE:CD1	2.89	0.41
2:B:78:TRP:HA	2:B:79:PRO:HD3	1.85	0.41
3:F:169:VAL:CG1	3:F:170:VAL:N	2.83	0.41
3:F:176:ALA:O	3:F:179:VAL:HG23	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:421:LYS:C	3:F:423:LEU:N	2.74	0.41
3:F:449:TYR:CE1	3:F:453:ASN:O	2.73	0.41
3:F:640:ILE:O	3:F:643:ALA:N	2.48	0.41
3:G:176:ALA:O	3:G:179:VAL:HG23	2.21	0.41
3:G:287:LEU:O	3:G:291:PHE:HD1	2.03	0.41
3:G:692:THR:O	3:G:695:ILE:HG12	2.21	0.41
3:G:889:THR:HG1	3:G:897:PHE:HZ	1.68	0.41
2:B:89:LEU:HD22	2:B:123:PHE:HE1	1.85	0.40
3:F:104:ARG:HA	3:F:104:ARG:HD2	1.77	0.40
3:F:271:ILE:O	3:F:274:GLN:HG3	2.21	0.40
3:F:287:LEU:HD23	3:F:287:LEU:HA	1.93	0.40
3:F:521:LYS:HG3	3:F:522:LEU:N	2.36	0.40
3:F:629:ILE:O	3:F:629:ILE:HG23	2.21	0.40
3:F:735:LEU:O	3:F:739:ILE:HG13	2.21	0.40
3:F:890:PRO:HD2	3:F:893:GLN:NE2	2.37	0.40
3:G:464:LEU:O	3:G:467:ALA:HB3	2.21	0.40
3:G:600:ASN:OD1	3:G:601:SER:N	2.51	0.40
2:D:72:GLN:HE22	3:G:847:ARG:NH2	2.19	0.40
2:D:89:LEU:HD22	2:D:123:PHE:HE1	1.85	0.40
3:F:232:ALA:O	3:F:235:LEU:HB2	2.21	0.40
3:F:348:ARG:HA	3:F:351:GLN:CG	2.51	0.40
3:F:836:ARG:O	3:F:839:THR:N	2.53	0.40
3:F:847:ARG:HG2	3:F:848:ASN:N	2.34	0.40
3:G:735:LEU:O	3:G:739:ILE:HG13	2.21	0.40
3:G:958:GLU:O	3:G:962:LYS:HG3	2.20	0.40
1:C:142:GLN:HG3	3:G:954:GLN:OE1	2.21	0.40
2:D:54:HIS:O	2:D:55:GLN:C	2.60	0.40
3:F:101:VAL:O	3:F:102:LEU:C	2.58	0.40
3:F:795:PHE:HA	3:F:798:ILE:HB	2.03	0.40
3:F:829:ARG:O	3:F:833:TYR:CD1	2.72	0.40
3:G:83:LEU:HD23	3:G:112:TYR:CE1	2.56	0.40
3:G:521:LYS:HG3	3:G:522:LEU:N	2.36	0.40
3:G:632:PRO:HA	3:G:635:GLU:CG	2.51	0.40
3:G:858:MET:HE2	3:G:903:ALA:HB1	2.02	0.40
2:B:10:TYR:CZ	2:B:12:VAL:HG21	2.57	0.40
3:F:13:VAL:CG1	3:F:17:TYR:CE1	3.01	0.40
3:F:151:VAL:O	3:F:155:ILE:HG13	2.21	0.40
3:F:634:PHE:N	3:F:634:PHE:CD1	2.89	0.40
3:F:642:GLN:O	3:F:643:ALA:CB	2.70	0.40
3:F:661:ILE:HG22	3:F:665:PHE:CE1	2.57	0.40
3:G:147:ILE:HG12	3:G:147:ILE:H	1.62	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:180:GLN:HG2	3:G:222:TYR:CZ	2.56	0.40
3:G:189:TYR:O	3:G:192:LEU:HB2	2.21	0.40
3:G:640:ILE:C	3:G:642:GLN:N	2.74	0.40
3:G:833:TYR:CD1	3:G:833:TYR:N	2.90	0.40
3:F:215:THR:O	3:F:219:ASN:ND2	2.51	0.40
3:F:632:PRO:HA	3:F:635:GLU:CG	2.51	0.40
3:F:850:ILE:HD13	3:F:897:PHE:HA	2.03	0.40
3:F:884:CYS:O	3:F:889:THR:HB	2.22	0.40
3:G:94:PHE:CD1	3:G:105:LEU:HD11	2.56	0.40
3:G:271:ILE:O	3:G:274:GLN:HG3	2.21	0.40
3:G:529:THR:O	3:G:533:TYR:CD1	2.73	0.40
3:G:850:ILE:HD13	3:G:897:PHE:HA	2.03	0.40
3:G:931:THR:HG22	3:G:933:ALA:N	2.30	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:41:TYR:O	3:F:259:GLU:OE1[1_545]	2.11	0.09

## 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	86/165 (52%)	78 (91%)	8 (9%)	0	100	100
1	C	86/165 (52%)	78 (91%)	8 (9%)	0	100	100
2	B	134/147 (91%)	120 (90%)	14 (10%)	0	100	100
2	D	134/147 (91%)	120 (90%)	14 (10%)	0	100	100
3	F	870/971 (90%)	783 (90%)	82 (9%)	5 (1%)	25	59
3	G	870/971 (90%)	782 (90%)	83 (10%)	5 (1%)	25	59

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
All	All	2180/2566 (85%)	1961 (90%)	209 (10%)	10 (0%)	29	63

All (10) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	F	874	GLY
3	G	874	GLY
3	F	818	GLN
3	G	818	GLN
3	F	584	PRO
3	F	922	THR
3	G	584	PRO
3	G	922	THR
3	F	280	TYR
3	G	280	TYR

### 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	56/141 (40%)	53 (95%)	3 (5%)	22	54
1	C	56/141 (40%)	53 (95%)	3 (5%)	22	54
2	B	103/136 (76%)	96 (93%)	7 (7%)	16	46
2	D	103/136 (76%)	96 (93%)	7 (7%)	16	46
3	F	549/871 (63%)	508 (92%)	41 (8%)	13	42
3	G	549/871 (63%)	508 (92%)	41 (8%)	13	42
All	All	1416/2296 (62%)	1314 (93%)	102 (7%)	14	44

All (102) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	99	ILE
1	A	103	HIS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	A	104	LEU
2	B	9	ARG
2	B	67	ASP
2	B	72	GLN
2	B	124	TYR
2	B	125	TYR
2	B	129	ASP
2	B	132	CYS
1	C	99	ILE
1	C	103	HIS
1	C	104	LEU
2	D	9	ARG
2	D	67	ASP
2	D	72	GLN
2	D	124	TYR
2	D	125	TYR
2	D	129	ASP
2	D	132	CYS
3	F	22	GLN
3	F	32	THR
3	F	41	TRP
3	F	56	VAL
3	F	100	ILE
3	F	169	VAL
3	F	170	VAL
3	F	183	ILE
3	F	230	ILE
3	F	277	CYS
3	F	282	LYS
3	F	305	ARG
3	F	368	SER
3	F	372	MET
3	F	379	MET
3	F	382	ASP
3	F	456	ILE
3	F	487	SER
3	F	530	MET
3	F	581	TYR
3	F	594	ASN
3	F	624	LYS
3	F	660	MET
3	F	662	SER

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
3	F	668	LEU
3	F	710	LEU
3	F	772	MET
3	F	836	ARG
3	F	838	MET
3	F	847	ARG
3	F	860	SER
3	F	865	HIS
3	F	878	LEU
3	F	889	THR
3	F	890	PRO
3	F	904	MET
3	F	918	SER
3	F	929	LEU
3	F	932	ASP
3	F	956	LEU
3	F	964	ARG
3	G	22	GLN
3	G	32	THR
3	G	41	TRP
3	G	56	VAL
3	G	100	ILE
3	G	169	VAL
3	G	170	VAL
3	G	183	ILE
3	G	230	ILE
3	G	277	CYS
3	G	282	LYS
3	G	305	ARG
3	G	368	SER
3	G	372	MET
3	G	379	MET
3	G	382	ASP
3	G	456	ILE
3	G	487	SER
3	G	530	MET
3	G	581	TYR
3	G	594	ASN
3	G	624	LYS
3	G	660	MET
3	G	662	SER
3	G	668	LEU

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Mol	Chain	Res	Type
3	G	710	LEU
3	G	772	MET
3	G	836	ARG
3	G	838	MET
3	G	847	ARG
3	G	860	SER
3	G	865	HIS
3	G	878	LEU
3	G	889	THR
3	G	890	PRO
3	G	904	MET
3	G	918	SER
3	G	929	LEU
3	G	932	ASP
3	G	956	LEU
3	G	964	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (57) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	81	HIS
1	A	90	GLN
1	A	105	ASN
1	A	142	GLN
2	B	14	HIS
2	B	87	GLN
2	B	97	HIS
2	B	112	ASN
2	B	141	HIS
1	C	81	HIS
1	C	90	GLN
1	C	105	ASN
1	C	142	GLN
2	D	87	GLN
2	D	97	HIS
2	D	112	ASN
2	D	141	HIS
3	F	54	GLN
3	F	57	GLN
3	F	65	HIS
3	F	163	HIS
3	F	207	ASN

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Mol	Chain	Res	Type
3	F	219	ASN
3	F	270	ASN
3	F	307	ASN
3	F	309	ASN
3	F	474	HIS
3	F	477	HIS
3	F	489	GLN
3	F	587	ASN
3	F	594	ASN
3	F	659	ASN
3	F	669	ASN
3	F	719	HIS
3	F	797	ASN
3	F	835	GLN
3	F	893	GLN
3	G	54	GLN
3	G	65	HIS
3	G	115	HIS
3	G	163	HIS
3	G	207	ASN
3	G	219	ASN
3	G	270	ASN
3	G	307	ASN
3	G	309	ASN
3	G	474	HIS
3	G	477	HIS
3	G	489	GLN
3	G	587	ASN
3	G	594	ASN
3	G	659	ASN
3	G	669	ASN
3	G	719	HIS
3	G	797	ASN
3	G	835	GLN
3	G	893	GLN

### 5.3.3 RNA

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](#)

There are no ligands in this entry.

## 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	90/165 (54%)	-0.15	0 <span style="border: 1px solid blue; padding: 2px;">100</span> <span style="border: 1px solid blue; padding: 2px;">100</span>	45, 86, 142, 169	0
1	C	90/165 (54%)	-0.16	0 <span style="border: 1px solid blue; padding: 2px;">100</span> <span style="border: 1px solid blue; padding: 2px;">100</span>	45, 86, 142, 169	0
2	B	140/147 (95%)	0.06	2 (1%) <span style="border: 1px solid blue; padding: 2px;">75</span> <span style="border: 1px solid blue; padding: 2px;">78</span>	33, 87, 168, 187	0
2	D	140/147 (95%)	0.03	2 (1%) <span style="border: 1px solid blue; padding: 2px;">75</span> <span style="border: 1px solid blue; padding: 2px;">78</span>	33, 87, 168, 187	0
3	F	896/971 (92%)	-0.13	15 (1%) <span style="border: 1px solid blue; padding: 2px;">70</span> <span style="border: 1px solid blue; padding: 2px;">73</span>	38, 97, 157, 197	0
3	G	896/971 (92%)	-0.12	13 (1%) <span style="border: 1px solid blue; padding: 2px;">73</span> <span style="border: 1px solid blue; padding: 2px;">76</span>	38, 97, 157, 197	0
All	All	2252/2566 (87%)	-0.10	32 (1%) <span style="border: 1px solid blue; padding: 2px;">75</span> <span style="border: 1px solid blue; padding: 2px;">78</span>	33, 95, 157, 197	0

All (32) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	G	20	ASN	8.3
3	G	21	SER	5.8
3	F	21	SER	5.5
3	F	20	ASN	5.3
3	F	373	ALA	5.1
3	G	373	ALA	4.6
3	F	947	VAL	4.5
3	F	117	LEU	3.3
3	F	843	SER	3.3
2	B	115	LYS	3.1
3	F	703	TRP	3.1
3	F	747	CYS	3.0
3	G	17	TYR	2.8
2	D	147	ILE	2.8
3	G	70	LYS	2.8
3	F	70	LYS	2.8
3	G	703	TRP	2.7
3	G	809	LEU	2.6
3	G	747	CYS	2.5

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Mol	Chain	Res	Type	RSRZ
3	F	118	GLY	2.4
3	F	816	ILE	2.4
3	G	515	TYR	2.3
3	G	893	GLN	2.2
3	F	776	LEU	2.1
3	F	276	ASP	2.1
2	D	110	ASP	2.1
2	B	69	GLU	2.1
3	F	799	SER	2.1
3	G	276	ASP	2.1
3	G	816	ILE	2.1
3	F	841	PRO	2.0
3	G	476	THR	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](#)

There are no ligands in this entry.

## 6.5 Other polymers [i](#)

There are no such residues in this entry.