



Full wwPDB X-ray Structure Validation Report ⓘ

Feb 6, 2017 – 02:17 PM EST

PDB ID : 5JJ3
Title : Refined Structure of the Mature Virion Conformation of P22 Portal Protein
Authors : Lokareddy, R.K.; Sankhala, R.S.; Cingolani, G.
Deposited on : 2016-04-22
Resolution : 7.00 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

<http://wwpdb.org/validation/2016/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity	:	4.02b-467
Mogul	:	unknown
Xtriage (Phenix)	:	1.9-1692
EDS	:	rb-20028442
Percentile statistics	:	20151230.v01 (using entries in the PDB archive December 30th 2015)
Refmac	:	5.8.0135
CCP4	:	6.5.0
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	rb-20028442

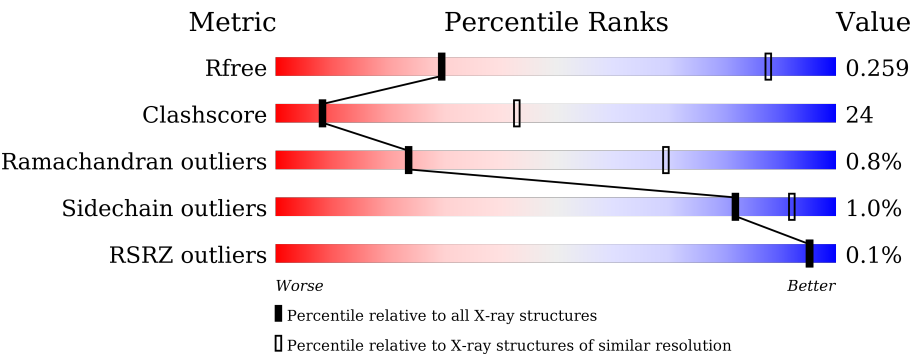
1 Overall quality at a glance ⓘ

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 7.00 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.








Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	91344	1014 (9.50-3.66)
Clashscore	102246	1063 (10.00-3.70)
Ramachandran outliers	100387	1035 (9.50-3.66)
Sidechain outliers	100360	1005 (9.50-3.66)
RSRZ outliers	91569	1013 (9.50-3.66)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. 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	725	<div><div></div><div>49%43%7%</div></div>
1	B	725	<div><div></div><div>48%43%7%</div></div>
1	C	725	<div><div></div><div>47%44%7%</div></div>
1	D	725	<div><div></div><div>50%42%7%</div></div>
1	E	725	<div><div></div><div>48%43%7%</div></div>
1	F	725	<div><div></div><div>49%43%7%</div></div>

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Mol	Chain	Length	Quality of chain
1	G	725	 49% 42% • 7%
1	H	725	 50% 41% • 7%
1	I	725	 49% 43% • 7%
1	J	725	 50% 42% • 7%
1	K	725	 49% 43% • 7%
1	L	725	 49% 43% • 7%

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 64536 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.

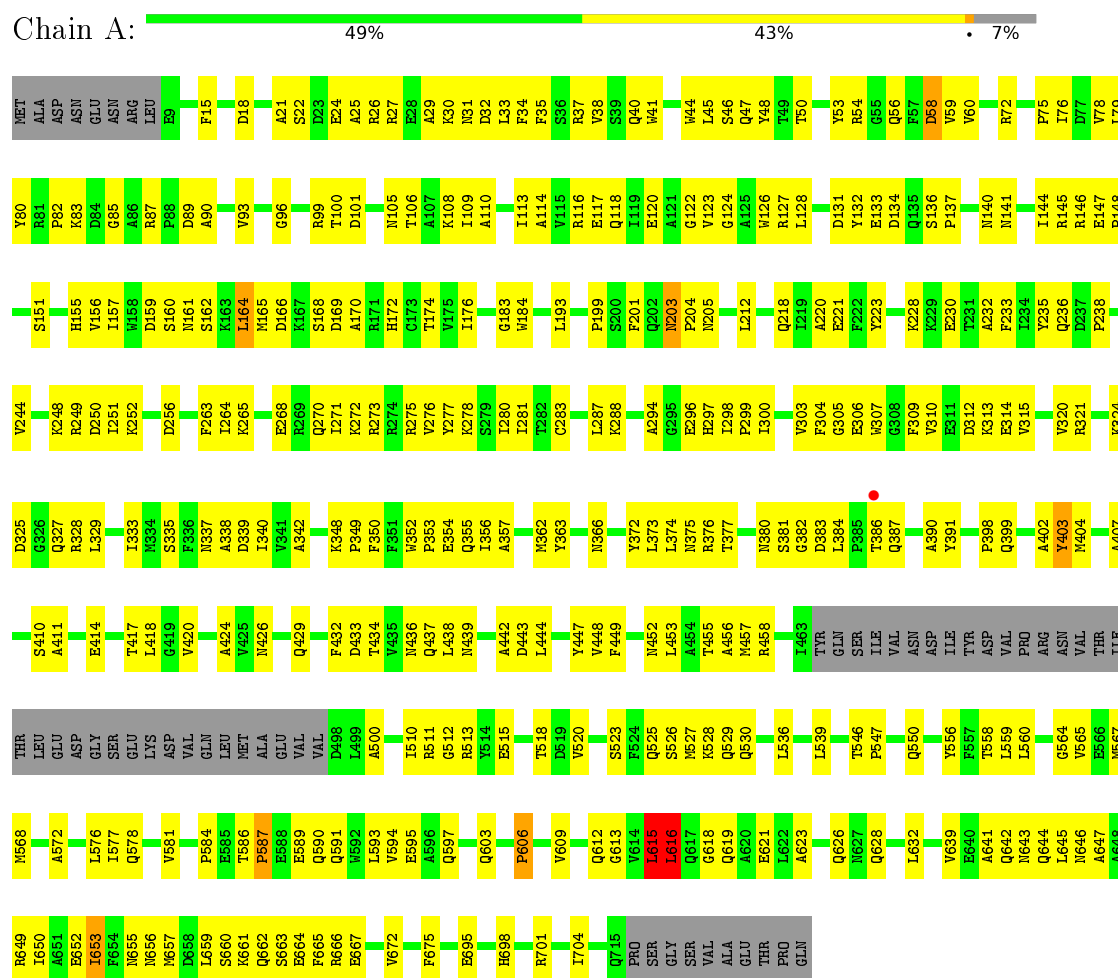
- Molecule 1 is a protein called Portal protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	B	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	C	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	D	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	E	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	F	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	G	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	H	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	I	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	J	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	K	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			
1	L	673	Total	C	N	O	S	0	0	0
			5378	3367	937	1051	23			

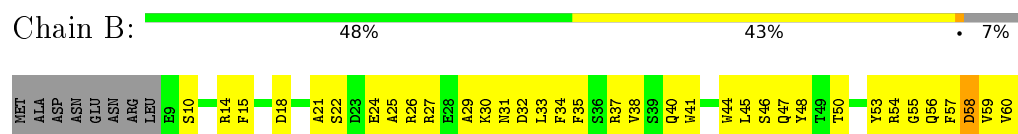
3 Residue-property plots

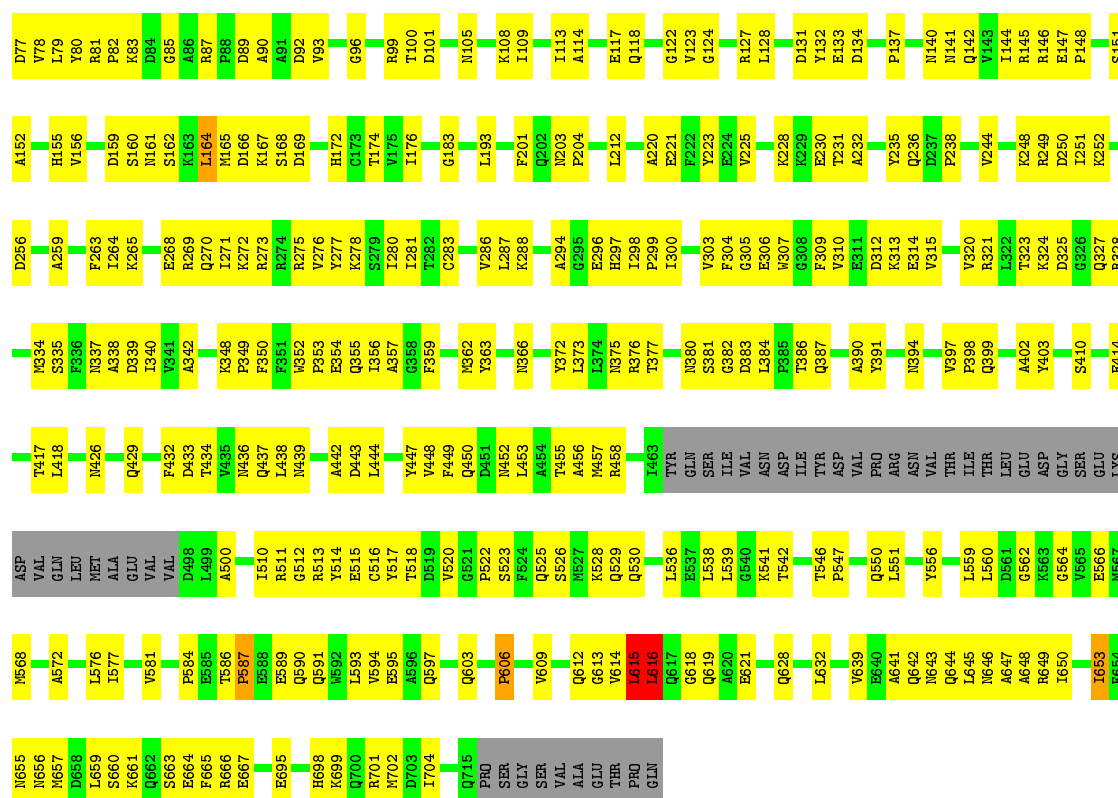
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

• Molecule 1: Portal protein



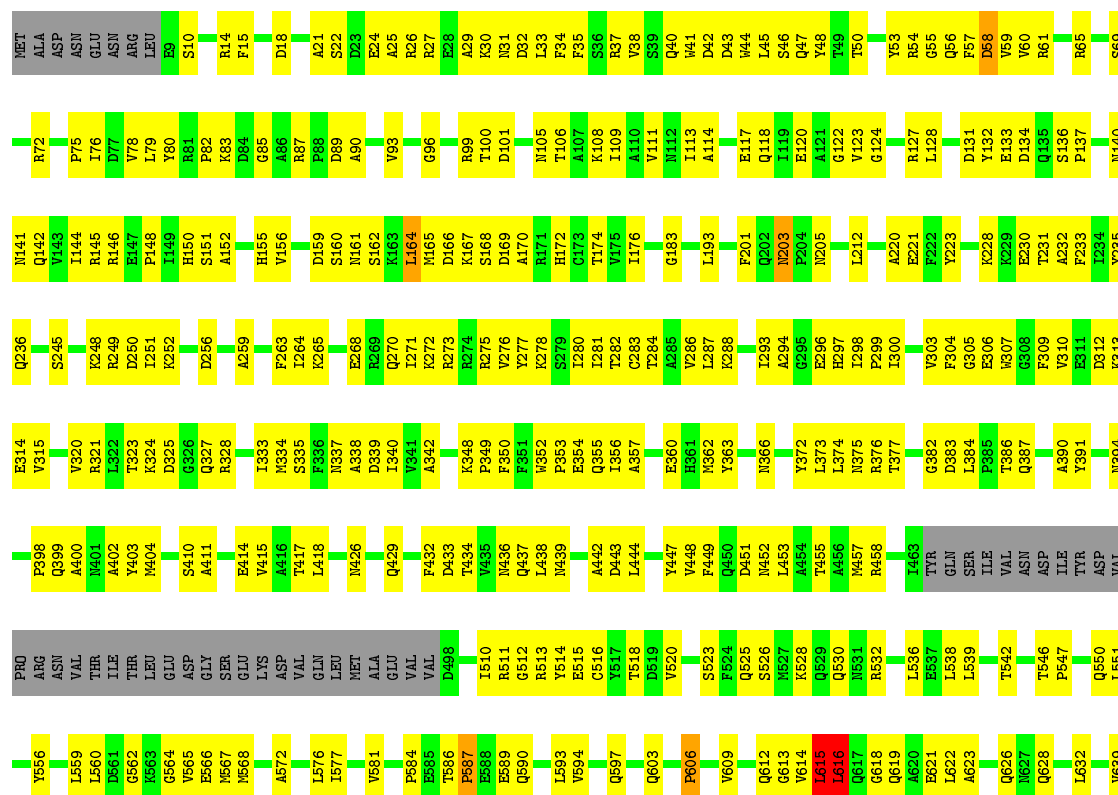
• Molecule 1: Portal protein

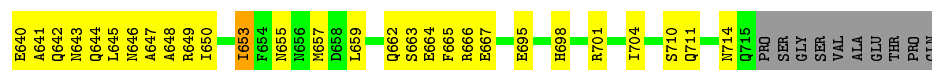




• Molecule 1: Portal protein

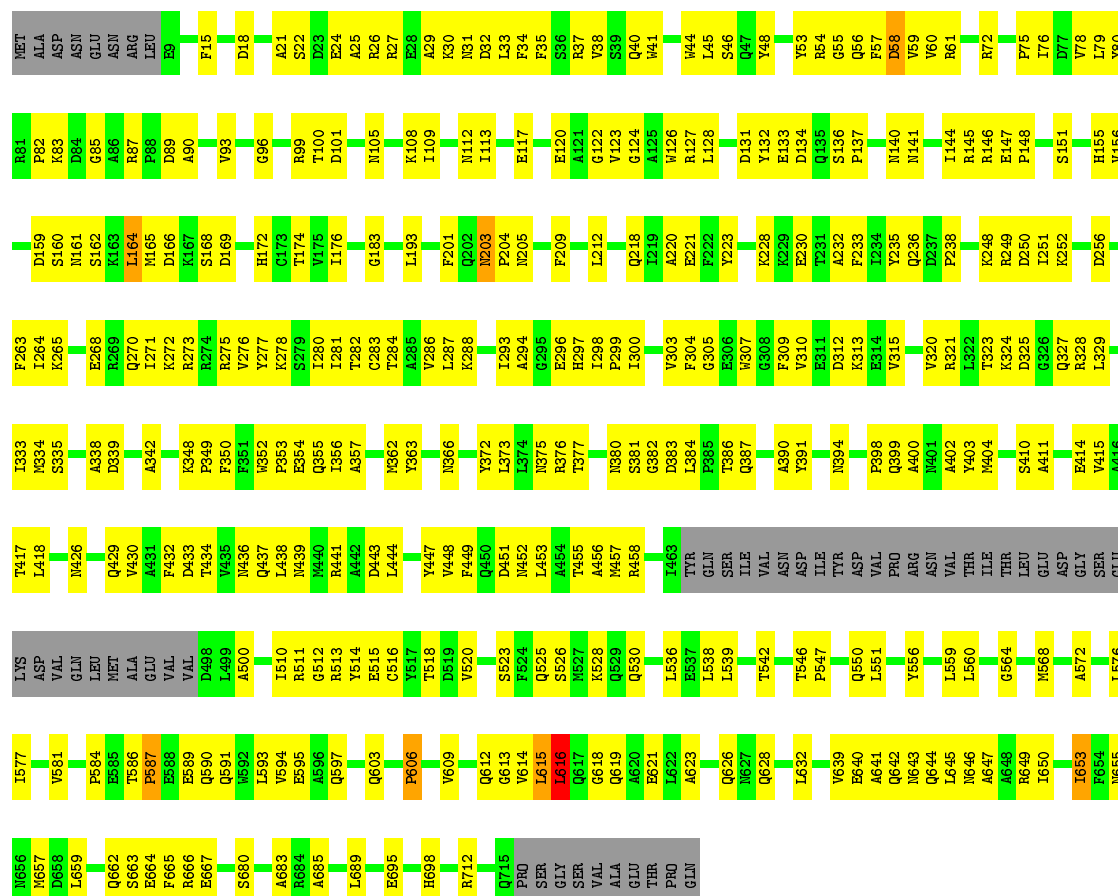
Chain C: 47% 44% 7%

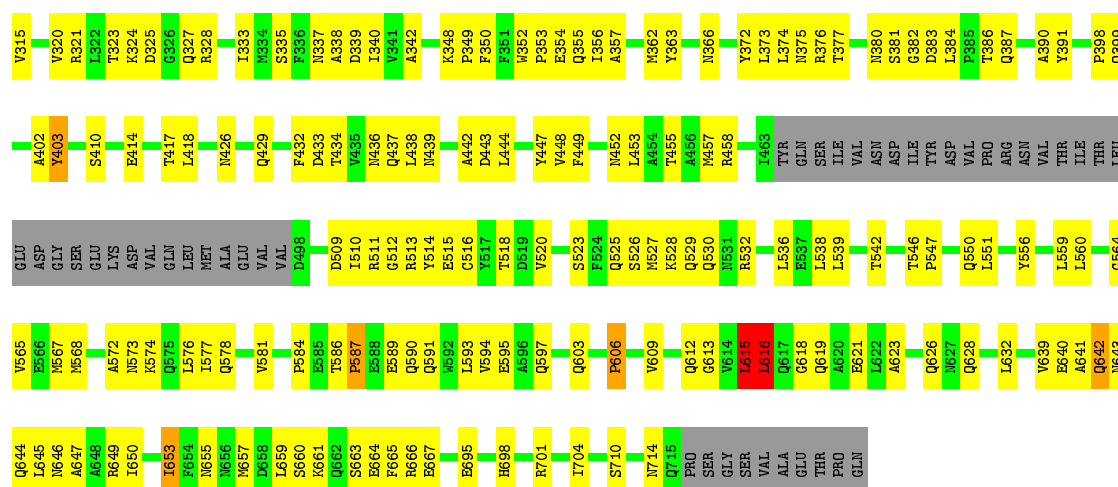




• Molecule 1: Portal protein

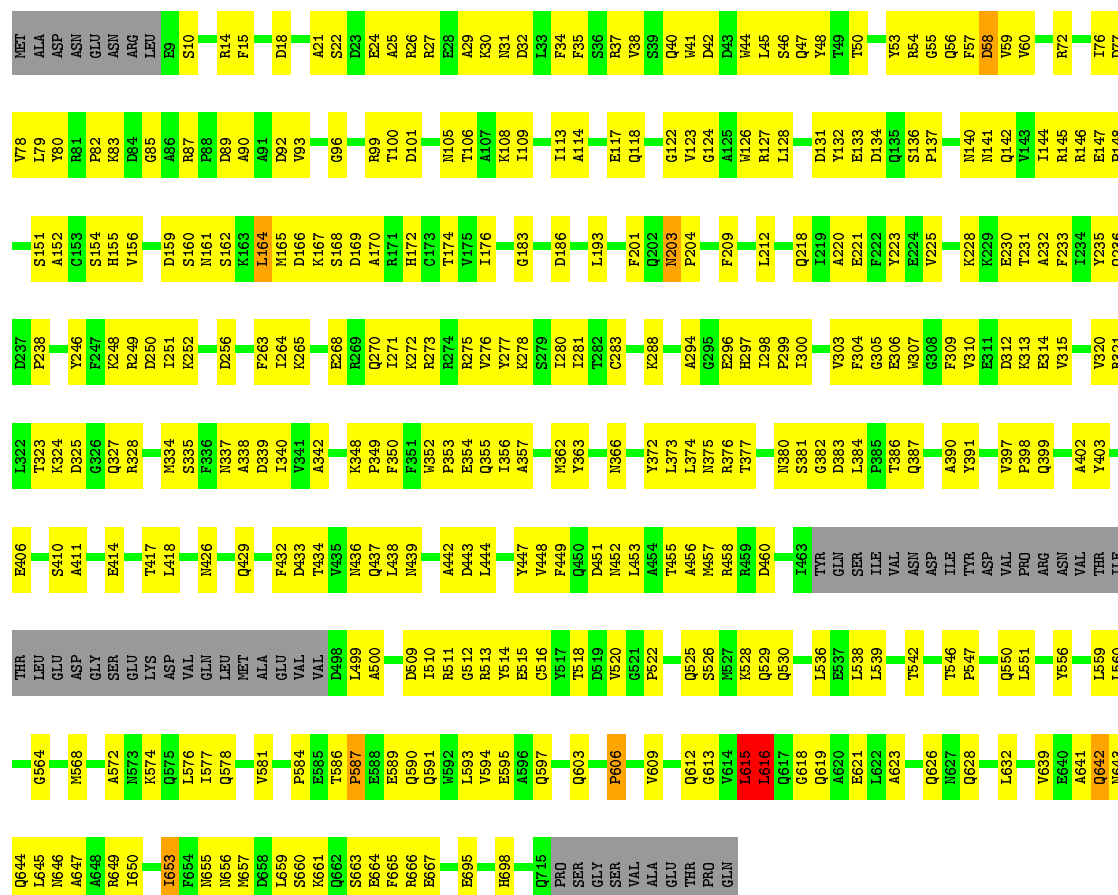
Chain D: 50% 42% 7%





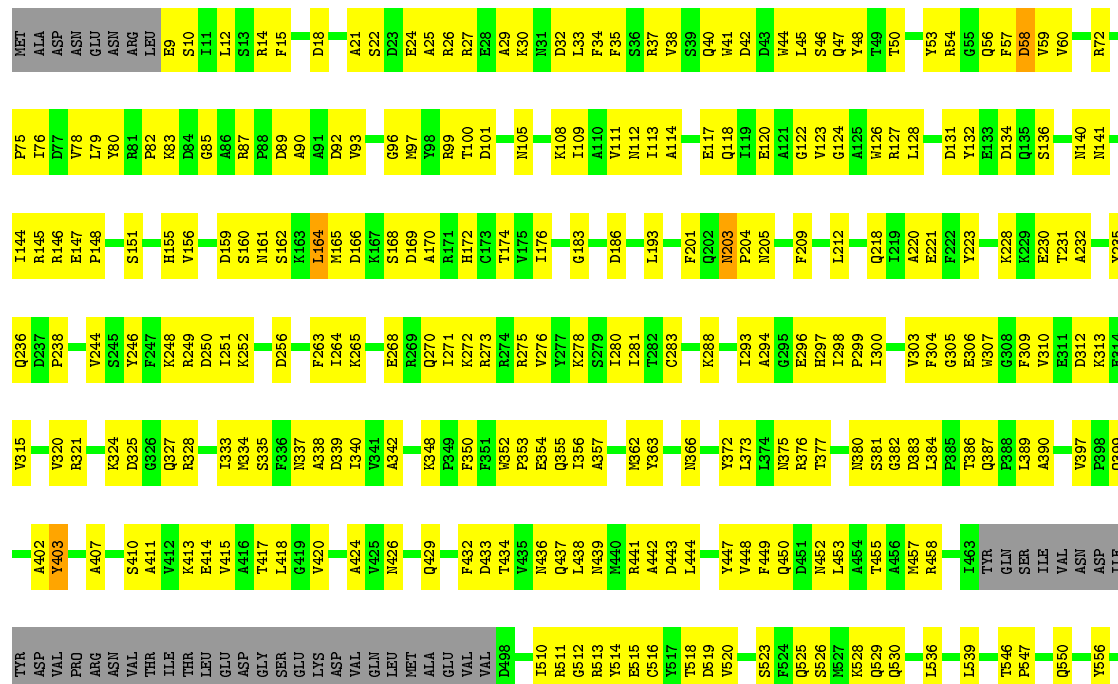
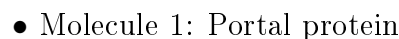
• Molecule 1: Portal protein

Chain F: 49% 43% 7%

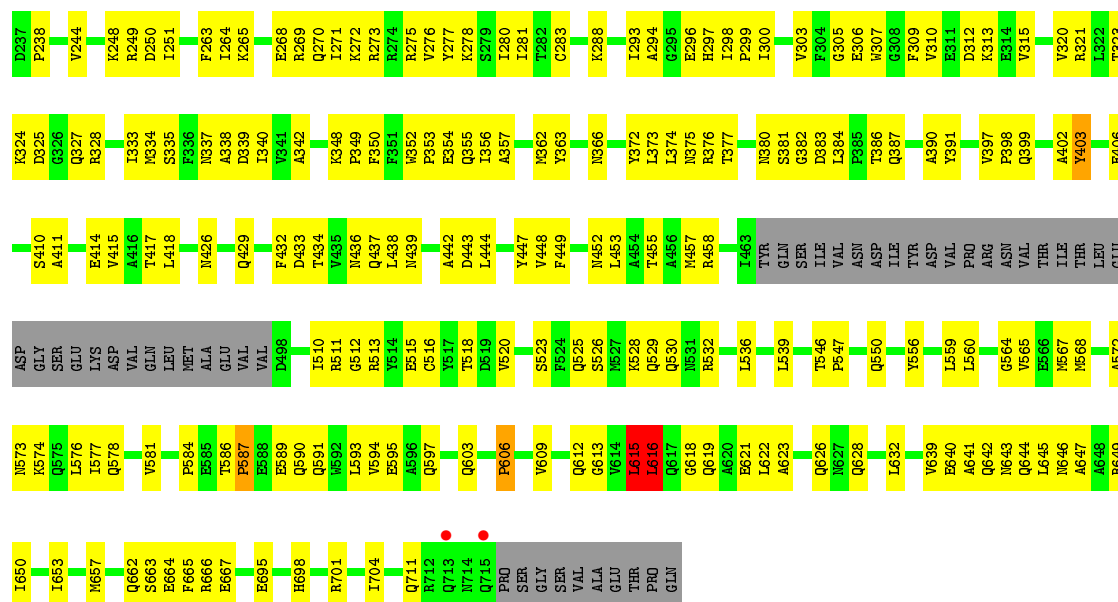


• Molecule 1: Portal protein

Chain G: 49% 42% 7%

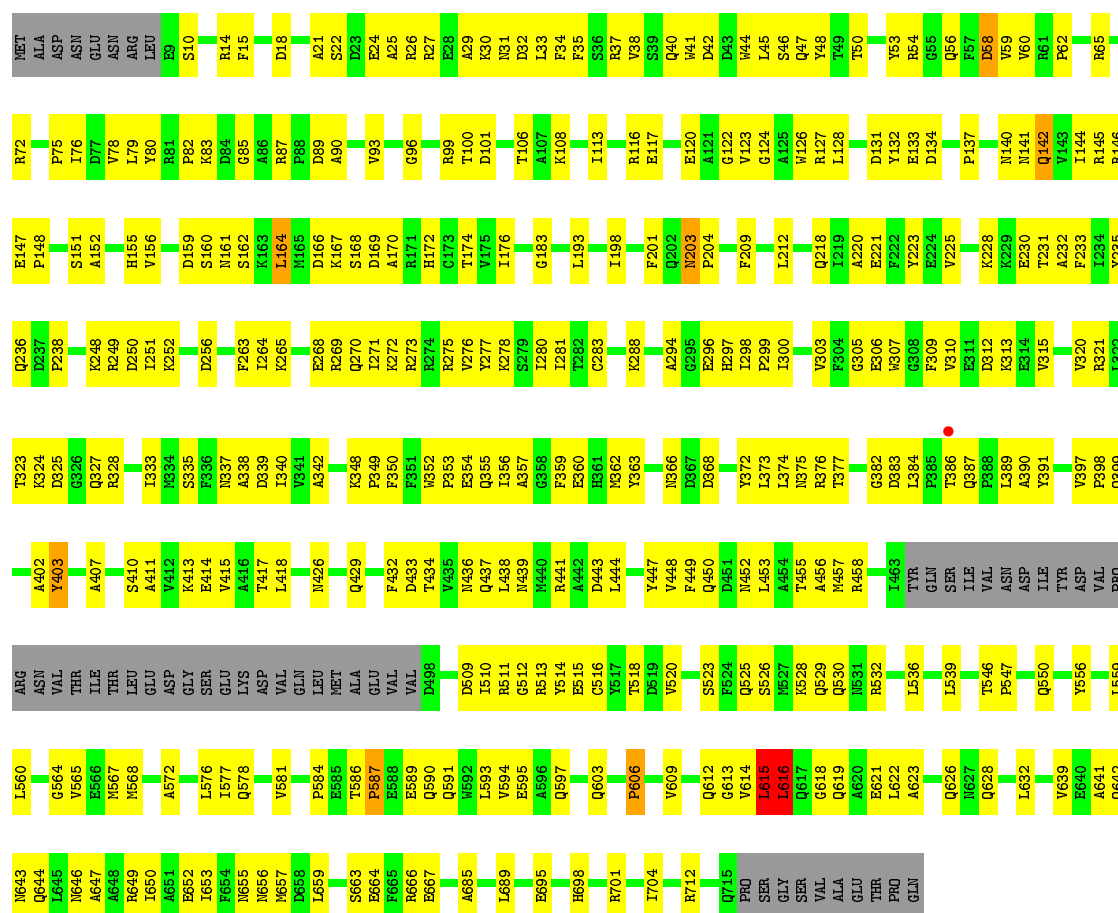




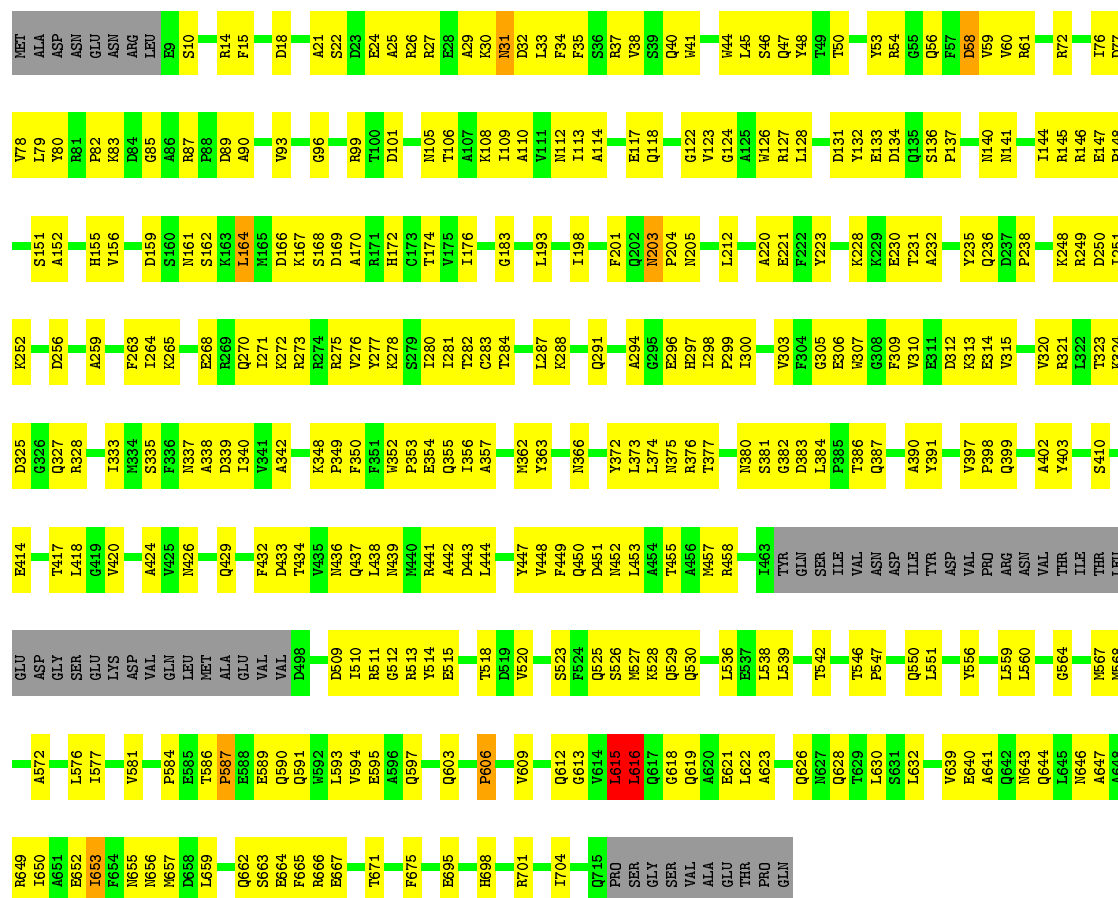


• Molecule 1: Portal protein

Chain K: 49% 43% 7%



• Molecule 1: Portal protein



4 Data and refinement statistics

Property	Value	Source
Space group	I 4	Depositor
Cell constants a, b, c, α , β , γ	409.04Å 409.04Å 260.00Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	14.99 – 7.00 14.99 – 7.00	Depositor EDS
% Data completeness (in resolution range)	99.0 (14.99-7.00) 99.1 (14.99-7.00)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	3.07 (at 7.36Å)	Xtriage
Refinement program	PHENIX (1.10.1_2155: ???)	Depositor
R, R_{free}	0.239 , 0.260 0.233 , 0.259	Depositor DCC
R_{free} test set	1561 reflections (5.19%)	DCC
Wilson B-factor (Å ²)	214.7	Xtriage
Anisotropy	0.009	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.14 , -10.0	EDS
L-test for twinning ²	$\langle L \rangle = 0.45$, $\langle L^2 \rangle = 0.28$	Xtriage
Estimated twinning fraction	0.045 for -k,-h,-l	Xtriage
F_o, F_c correlation	0.88	EDS
Total number of atoms	64536	wwPDB-VP
Average B, all atoms (Å ²)	118.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.93% 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 ⓘ

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	0.28	0/5482	0.58	3/7429 (0.0%)
1	B	0.28	0/5482	0.59	2/7429 (0.0%)
1	C	0.28	0/5482	0.59	2/7429 (0.0%)
1	D	0.28	0/5482	0.57	3/7429 (0.0%)
1	E	0.27	0/5482	0.58	2/7429 (0.0%)
1	F	0.27	0/5482	0.58	3/7429 (0.0%)
1	G	0.27	0/5482	0.58	2/7429 (0.0%)
1	H	0.27	0/5482	0.57	2/7429 (0.0%)
1	I	0.28	0/5482	0.59	3/7429 (0.0%)
1	J	0.29	1/5482 (0.0%)	0.59	3/7429 (0.0%)
1	K	0.30	1/5482 (0.0%)	0.59	2/7429 (0.0%)
1	L	0.29	1/5482 (0.0%)	0.58	3/7429 (0.0%)
All	All	0.28	3/65784 (0.0%)	0.58	30/89148 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	4
1	B	0	4
1	C	0	3
1	D	0	4
1	E	0	3
1	F	0	4
1	G	0	4
1	H	0	3
1	I	0	3
1	J	0	3
1	K	0	4
1	L	0	3
All	All	0	42

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	198	ILE	C-N	8.54	1.50	1.34
1	J	198	ILE	C-N	8.02	1.49	1.34
1	L	198	ILE	C-N	6.80	1.47	1.34

All (30) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	616	LEU	CA-CB-CG	13.49	146.32	115.30
1	J	616	LEU	CA-CB-CG	13.31	145.92	115.30
1	C	615	LEU	CA-CB-CG	12.84	144.83	115.30
1	B	616	LEU	CA-CB-CG	12.57	144.21	115.30
1	I	615	LEU	CA-CB-CG	12.56	144.19	115.30
1	B	615	LEU	CA-CB-CG	12.46	143.96	115.30
1	F	615	LEU	CA-CB-CG	12.45	143.93	115.30
1	E	615	LEU	CA-CB-CG	12.36	143.72	115.30
1	K	615	LEU	CA-CB-CG	12.34	143.69	115.30
1	J	615	LEU	CA-CB-CG	12.26	143.49	115.30
1	K	616	LEU	CA-CB-CG	12.20	143.35	115.30
1	A	615	LEU	CA-CB-CG	12.12	143.17	115.30
1	A	616	LEU	CA-CB-CG	12.11	143.16	115.30
1	G	615	LEU	CA-CB-CG	12.05	143.02	115.30
1	C	616	LEU	CA-CB-CG	11.96	142.81	115.30
1	E	616	LEU	CA-CB-CG	11.84	142.52	115.30
1	L	615	LEU	CA-CB-CG	11.83	142.51	115.30
1	F	616	LEU	CA-CB-CG	11.65	142.10	115.30
1	H	615	LEU	CA-CB-CG	11.46	141.65	115.30
1	G	616	LEU	CA-CB-CG	11.10	140.82	115.30
1	H	616	LEU	CA-CB-CG	11.05	140.73	115.30
1	D	616	LEU	CA-CB-CG	10.79	140.13	115.30
1	L	616	LEU	CA-CB-CG	10.30	138.98	115.30
1	D	615	LEU	CA-CB-CG	9.18	136.41	115.30
1	F	616	LEU	CB-CG-CD1	6.51	122.07	111.00
1	J	616	LEU	CB-CG-CD1	6.50	122.05	111.00
1	I	616	LEU	CB-CG-CD1	6.36	121.82	111.00
1	L	616	LEU	CB-CG-CD1	6.20	121.55	111.00
1	D	616	LEU	CB-CG-CD1	5.88	120.99	111.00
1	A	616	LEU	CB-CG-CD1	5.07	119.62	111.00

There are no chirality outliers.

All (42) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	212	LEU	Peptide
1	A	456	ALA	Peptide
1	A	59	VAL	Peptide
1	A	606	PRO	Peptide
1	B	212	LEU	Peptide
1	B	456	ALA	Peptide
1	B	59	VAL	Peptide
1	B	606	PRO	Peptide
1	C	212	LEU	Peptide
1	C	59	VAL	Peptide
1	C	606	PRO	Peptide
1	D	212	LEU	Peptide
1	D	456	ALA	Peptide
1	D	59	VAL	Peptide
1	D	606	PRO	Peptide
1	E	212	LEU	Peptide
1	E	59	VAL	Peptide
1	E	606	PRO	Peptide
1	F	212	LEU	Peptide
1	F	456	ALA	Peptide
1	F	59	VAL	Peptide
1	F	606	PRO	Peptide
1	G	212	LEU	Peptide
1	G	456	ALA	Peptide
1	G	59	VAL	Peptide
1	G	606	PRO	Peptide
1	H	212	LEU	Peptide
1	H	59	VAL	Peptide
1	H	606	PRO	Peptide
1	I	212	LEU	Peptide
1	I	59	VAL	Peptide
1	I	606	PRO	Peptide
1	J	212	LEU	Peptide
1	J	59	VAL	Peptide
1	J	606	PRO	Peptide
1	K	212	LEU	Peptide
1	K	456	ALA	Peptide
1	K	59	VAL	Peptide
1	K	606	PRO	Peptide
1	L	212	LEU	Peptide
1	L	59	VAL	Peptide
1	L	606	PRO	Peptide

5.2 Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	5378	0	5178	281	0
1	B	5378	0	5178	286	0
1	C	5378	0	5178	295	0
1	D	5378	0	5178	276	0
1	E	5378	0	5178	290	0
1	F	5378	0	5178	278	0
1	G	5378	0	5178	277	0
1	H	5378	0	5178	279	0
1	I	5378	0	5178	280	0
1	J	5378	0	5178	280	0
1	K	5378	0	5178	287	0
1	L	5378	0	5178	283	0
All	All	64536	0	62136	3062	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 24.

All (3062) 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:J:220:ALA:HB3	1:J:281:ILE:O	1.55	1.05
1:B:220:ALA:HB3	1:B:281:ILE:O	1.58	1.03
1:E:220:ALA:HB3	1:E:281:ILE:O	1.58	1.02
1:I:220:ALA:HB3	1:I:281:ILE:O	1.59	1.02
1:K:220:ALA:HB3	1:K:281:ILE:O	1.59	1.01
1:H:220:ALA:HB3	1:H:281:ILE:O	1.60	1.01
1:C:220:ALA:HB3	1:C:281:ILE:O	1.61	1.01
1:A:220:ALA:HB3	1:A:281:ILE:O	1.60	1.00
1:L:220:ALA:HB3	1:L:281:ILE:O	1.61	0.99
1:G:220:ALA:HB3	1:G:281:ILE:O	1.61	0.99
1:A:613:GLY:HA2	1:A:616:LEU:HD12	1.47	0.97
1:F:220:ALA:HB3	1:F:281:ILE:O	1.63	0.97
1:D:220:ALA:HB3	1:D:281:ILE:O	1.66	0.95
1:H:613:GLY:HA2	1:H:616:LEU:HD13	1.49	0.94
1:B:613:GLY:HA2	1:B:616:LEU:HD13	1.49	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:613:GLY:HA2	1:G:616:LEU:HD13	1.53	0.91
1:D:577:ILE:HG12	1:D:597:GLN:HE22	1.36	0.91
1:L:577:ILE:HG12	1:L:597:GLN:HE22	1.36	0.90
1:A:352:TRP:HB3	1:B:376:ARG:HD2	1.53	0.89
1:H:352:TRP:HB3	1:I:376:ARG:HD2	1.55	0.89
1:C:577:ILE:HG12	1:C:597:GLN:HE22	1.37	0.89
1:A:376:ARG:HD2	1:L:352:TRP:HB3	1.55	0.89
1:I:577:ILE:HG12	1:I:597:GLN:HE22	1.37	0.88
1:B:352:TRP:HB3	1:C:376:ARG:HD2	1.54	0.88
1:I:352:TRP:HB3	1:J:376:ARG:HD2	1.57	0.87
1:G:352:TRP:HB3	1:H:376:ARG:HD2	1.54	0.86
1:I:434:THR:O	1:I:437:GLN:HB3	1.75	0.86
1:D:352:TRP:HB3	1:E:376:ARG:HD2	1.57	0.86
1:K:352:TRP:HB3	1:L:376:ARG:HD2	1.57	0.86
1:B:577:ILE:HG12	1:B:597:GLN:HE22	1.39	0.86
1:G:577:ILE:HG12	1:G:597:GLN:HE22	1.39	0.85
1:C:352:TRP:HB3	1:D:376:ARG:HD2	1.58	0.85
1:F:352:TRP:HB3	1:G:376:ARG:HD2	1.59	0.85
1:J:352:TRP:HB3	1:K:376:ARG:HD2	1.59	0.85
1:D:355:GLN:HG2	1:E:376:ARG:HH12	1.39	0.85
1:E:352:TRP:HB3	1:F:376:ARG:HD2	1.57	0.85
1:A:353:PRO:HD2	1:B:376:ARG:HB2	1.60	0.84
1:B:353:PRO:HD2	1:C:376:ARG:HB2	1.60	0.84
1:E:577:ILE:HG12	1:E:597:GLN:HE22	1.42	0.84
1:B:307:TRP:HA	1:B:315:VAL:O	1.78	0.83
1:B:621:GLU:OE2	1:C:619:GLN:NE2	2.11	0.83
1:H:248:LYS:HD2	1:H:251:ILE:HB	1.61	0.83
1:H:612:GLN:HA	1:H:615:LEU:HD13	1.61	0.83
1:J:577:ILE:HG12	1:J:597:GLN:HE22	1.44	0.83
1:A:577:ILE:HG12	1:A:597:GLN:HE22	1.44	0.83
1:F:577:ILE:HG12	1:F:597:GLN:HE22	1.43	0.83
1:K:577:ILE:HG12	1:K:597:GLN:HE22	1.44	0.83
1:H:72:ARG:HD2	1:H:108:LYS:HE2	1.60	0.82
1:A:621:GLU:OE2	1:B:619:GLN:NE2	2.11	0.82
1:L:296:GLU:HB2	1:L:449:PHE:HD2	1.44	0.82
1:E:621:GLU:OE2	1:F:619:GLN:NE2	2.13	0.81
1:F:621:GLU:OE2	1:G:619:GLN:NE2	2.13	0.81
1:C:613:GLY:HA2	1:C:616:LEU:CD1	2.10	0.81
1:H:621:GLU:OE2	1:I:619:GLN:NE2	2.14	0.81
1:J:621:GLU:OE2	1:K:619:GLN:NE2	2.12	0.81
1:I:353:PRO:HD2	1:J:376:ARG:HB2	1.62	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:619:GLN:NE2	1:L:621:GLU:OE2	2.13	0.81
1:F:248:LYS:HD2	1:F:251:ILE:HB	1.63	0.81
1:D:72:ARG:HD2	1:D:108:LYS:HE2	1.61	0.81
1:I:72:ARG:HD2	1:I:108:LYS:HE2	1.62	0.81
1:C:546:THR:HB	1:C:550:GLN:HE22	1.45	0.80
1:H:577:ILE:HG12	1:H:597:GLN:HE22	1.43	0.80
1:L:307:TRP:HA	1:L:315:VAL:O	1.80	0.80
1:H:613:GLY:HA2	1:H:616:LEU:CD1	2.10	0.80
1:B:72:ARG:HD2	1:B:108:LYS:HE2	1.61	0.80
1:D:128:LEU:HA	1:D:145:ARG:O	1.81	0.80
1:D:251:ILE:HD11	1:D:273:ARG:HH22	1.47	0.80
1:D:621:GLU:OE2	1:E:619:GLN:NE2	2.14	0.80
1:G:25:ALA:O	1:G:29:ALA:HB2	1.81	0.80
1:I:621:GLU:OE2	1:J:619:GLN:NE2	2.14	0.80
1:K:621:GLU:OE2	1:L:619:GLN:NE2	2.14	0.80
1:I:127:ARG:O	1:I:146:ARG:HA	1.82	0.80
1:G:307:TRP:HA	1:G:315:VAL:O	1.82	0.80
1:G:621:GLU:OE2	1:H:619:GLN:NE2	2.14	0.80
1:H:353:PRO:HD2	1:I:376:ARG:HB2	1.63	0.79
1:B:248:LYS:HD2	1:B:251:ILE:HB	1.65	0.79
1:I:248:LYS:HD2	1:I:251:ILE:HB	1.64	0.79
1:J:353:PRO:HD2	1:K:376:ARG:HB2	1.64	0.79
1:J:355:GLN:HG2	1:K:376:ARG:HH12	1.47	0.79
1:D:296:GLU:HB2	1:D:449:PHE:HD2	1.47	0.79
1:F:546:THR:HB	1:F:550:GLN:HE22	1.48	0.79
1:H:434:THR:O	1:H:437:GLN:HB3	1.82	0.79
1:K:546:THR:HB	1:K:550:GLN:HE22	1.48	0.79
1:C:621:GLU:OE2	1:D:619:GLN:NE2	2.16	0.79
1:B:128:LEU:HA	1:B:145:ARG:O	1.83	0.78
1:J:127:ARG:O	1:J:146:ARG:HA	1.83	0.78
1:L:72:ARG:HD2	1:L:108:LYS:HE2	1.65	0.78
1:E:353:PRO:HD2	1:F:376:ARG:HB2	1.63	0.78
1:A:296:GLU:HB2	1:A:449:PHE:HD2	1.48	0.78
1:G:612:GLN:HA	1:G:615:LEU:HD13	1.66	0.78
1:H:127:ARG:O	1:H:146:ARG:HA	1.84	0.78
1:K:127:ARG:O	1:K:146:ARG:HA	1.84	0.78
1:D:25:ALA:O	1:D:29:ALA:HB2	1.84	0.78
1:I:355:GLN:HG2	1:J:376:ARG:HH12	1.48	0.78
1:G:72:ARG:HD2	1:G:108:LYS:HE2	1.66	0.77
1:B:127:ARG:O	1:B:146:ARG:HA	1.83	0.77
1:D:546:THR:HB	1:D:550:GLN:HE22	1.47	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:72:ARG:HD2	1:E:108:LYS:HE2	1.66	0.77
1:H:355:GLN:HG2	1:I:376:ARG:HH12	1.47	0.77
1:I:25:ALA:O	1:I:29:ALA:HB2	1.84	0.77
1:J:248:LYS:HD2	1:J:251:ILE:HB	1.65	0.77
1:A:248:LYS:HD2	1:A:251:ILE:HB	1.64	0.77
1:D:127:ARG:O	1:D:146:ARG:HA	1.84	0.77
1:A:546:THR:HB	1:A:550:GLN:HE22	1.50	0.77
1:B:355:GLN:HG2	1:C:376:ARG:HH12	1.48	0.77
1:L:128:LEU:HA	1:L:145:ARG:O	1.85	0.77
1:I:546:THR:HB	1:I:550:GLN:HE22	1.48	0.77
1:A:376:ARG:HH12	1:L:355:GLN:HG2	1.50	0.77
1:C:307:TRP:HA	1:C:315:VAL:O	1.83	0.77
1:E:25:ALA:O	1:E:29:ALA:HB2	1.85	0.77
1:C:248:LYS:HD2	1:C:251:ILE:HB	1.66	0.77
1:F:72:ARG:HD2	1:F:108:LYS:HE2	1.67	0.77
1:L:127:ARG:O	1:L:146:ARG:HA	1.85	0.77
1:K:307:TRP:HA	1:K:315:VAL:O	1.85	0.76
1:K:353:PRO:HD2	1:L:376:ARG:HB2	1.65	0.76
1:A:72:ARG:HD2	1:A:108:LYS:HE2	1.67	0.76
1:D:434:THR:O	1:D:437:GLN:HB3	1.86	0.76
1:F:355:GLN:HG2	1:G:376:ARG:HH12	1.50	0.76
1:G:546:THR:HB	1:G:550:GLN:HE22	1.51	0.76
1:E:546:THR:HB	1:E:550:GLN:HE22	1.50	0.76
1:I:128:LEU:HA	1:I:145:ARG:O	1.85	0.76
1:F:296:GLU:HB2	1:F:449:PHE:HD2	1.49	0.76
1:K:248:LYS:HD2	1:K:251:ILE:HB	1.65	0.76
1:A:25:ALA:O	1:A:29:ALA:HB2	1.85	0.76
1:D:248:LYS:HD2	1:D:251:ILE:HB	1.68	0.76
1:F:127:ARG:O	1:F:146:ARG:HA	1.85	0.76
1:G:248:LYS:HD2	1:G:251:ILE:HB	1.66	0.76
1:F:128:LEU:HA	1:F:145:ARG:O	1.86	0.76
1:E:355:GLN:HG2	1:F:376:ARG:HH12	1.50	0.76
1:B:546:THR:HB	1:B:550:GLN:HE22	1.50	0.76
1:H:296:GLU:HB2	1:H:449:PHE:HD2	1.48	0.76
1:L:248:LYS:HD2	1:L:251:ILE:HB	1.67	0.76
1:L:546:THR:HB	1:L:550:GLN:HE22	1.50	0.76
1:E:310:VAL:HG22	1:F:40:GLN:HG3	1.68	0.76
1:J:25:ALA:O	1:J:29:ALA:HB2	1.86	0.76
1:F:251:ILE:HD11	1:F:273:ARG:HH22	1.49	0.75
1:E:296:GLU:HB2	1:E:449:PHE:HD2	1.50	0.75
1:H:546:THR:HB	1:H:550:GLN:HE22	1.49	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:127:ARG:O	1:A:146:ARG:HA	1.86	0.75
1:I:296:GLU:HB2	1:I:449:PHE:HD2	1.50	0.75
1:B:122:GLY:O	1:B:305:GLY:N	2.18	0.75
1:F:25:ALA:O	1:F:29:ALA:HB2	1.86	0.75
1:J:546:THR:HB	1:J:550:GLN:HE22	1.50	0.75
1:E:248:LYS:HD2	1:E:251:ILE:HB	1.68	0.75
1:K:613:GLY:HA2	1:K:616:LEU:HD13	1.68	0.75
1:A:663:SER:HA	1:A:666:ARG:HE	1.52	0.75
1:A:355:GLN:HG2	1:B:376:ARG:HH12	1.51	0.75
1:C:25:ALA:O	1:C:29:ALA:HB2	1.86	0.75
1:B:25:ALA:O	1:B:29:ALA:HB2	1.86	0.74
1:D:122:GLY:O	1:D:305:GLY:N	2.19	0.74
1:J:613:GLY:HA2	1:J:616:LEU:HD12	1.68	0.74
1:J:251:ILE:HD11	1:J:273:ARG:HH22	1.51	0.74
1:K:128:LEU:HA	1:K:145:ARG:O	1.87	0.74
1:B:296:GLU:HB2	1:B:449:PHE:HD2	1.52	0.74
1:G:127:ARG:O	1:G:146:ARG:HA	1.86	0.74
1:G:353:PRO:HD2	1:H:376:ARG:HB2	1.68	0.74
1:I:251:ILE:HD11	1:I:273:ARG:HH22	1.53	0.74
1:L:25:ALA:O	1:L:29:ALA:HB2	1.86	0.74
1:A:325:ASP:OD2	1:B:56:GLN:N	2.21	0.74
1:C:663:SER:HA	1:C:666:ARG:HE	1.52	0.74
1:E:663:SER:HA	1:E:666:ARG:HE	1.51	0.74
1:K:296:GLU:HB2	1:K:449:PHE:HD2	1.50	0.74
1:C:251:ILE:HD11	1:C:273:ARG:HH22	1.53	0.74
1:C:296:GLU:HB2	1:C:449:PHE:HD2	1.53	0.74
1:J:434:THR:O	1:J:437:GLN:HB3	1.87	0.74
1:L:122:GLY:O	1:L:305:GLY:N	2.19	0.74
1:F:307:TRP:HA	1:F:315:VAL:O	1.88	0.74
1:A:307:TRP:HA	1:A:315:VAL:O	1.86	0.74
1:E:122:GLY:O	1:E:305:GLY:N	2.19	0.74
1:E:127:ARG:O	1:E:146:ARG:HA	1.87	0.74
1:J:307:TRP:HA	1:J:315:VAL:O	1.86	0.74
1:K:25:ALA:O	1:K:29:ALA:HB2	1.87	0.74
1:C:122:GLY:O	1:C:305:GLY:N	2.20	0.73
1:C:356:ILE:HG13	1:C:357:ALA:H	1.53	0.73
1:F:122:GLY:O	1:F:305:GLY:N	2.19	0.73
1:F:37:ARG:NH1	1:F:48:TYR:OH	2.22	0.73
1:F:511:ARG:HD3	1:F:513:ARG:HH22	1.54	0.73
1:G:296:GLU:HB2	1:G:449:PHE:HD2	1.53	0.73
1:J:663:SER:HA	1:J:666:ARG:HE	1.53	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:663:SER:HA	1:B:666:ARG:HE	1.54	0.73
1:D:353:PRO:HD2	1:E:376:ARG:HB2	1.68	0.73
1:G:251:ILE:HD11	1:G:273:ARG:HH22	1.54	0.73
1:H:38:VAL:HG21	1:H:324:LYS:HD2	1.69	0.73
1:L:356:ILE:HG13	1:L:357:ALA:H	1.53	0.73
1:G:128:LEU:HA	1:G:145:ARG:O	1.88	0.73
1:E:294:ALA:HA	1:E:453:LEU:HD23	1.71	0.73
1:K:663:SER:HA	1:K:666:ARG:HE	1.54	0.73
1:L:294:ALA:HA	1:L:453:LEU:HD23	1.71	0.73
1:B:612:GLN:HA	1:B:615:LEU:HD13	1.71	0.72
1:C:127:ARG:O	1:C:146:ARG:HA	1.89	0.72
1:D:307:TRP:HA	1:D:315:VAL:O	1.89	0.72
1:H:128:LEU:HA	1:H:145:ARG:O	1.89	0.72
1:J:296:GLU:HB2	1:J:449:PHE:HD2	1.53	0.72
1:E:307:TRP:HA	1:E:315:VAL:O	1.88	0.72
1:F:294:ALA:HA	1:F:453:LEU:HD23	1.71	0.72
1:F:663:SER:HA	1:F:666:ARG:HE	1.52	0.72
1:K:72:ARG:HD2	1:K:108:LYS:HE2	1.70	0.72
1:G:294:ALA:HA	1:G:453:LEU:HD23	1.71	0.72
1:H:25:ALA:O	1:H:29:ALA:HB2	1.88	0.72
1:I:58:ASP:HA	1:I:327:GLN:OE1	1.90	0.72
1:K:434:THR:O	1:K:437:GLN:HB3	1.90	0.72
1:H:586:THR:HG22	1:H:590:GLN:HE22	1.53	0.72
1:I:325:ASP:OD2	1:J:56:GLN:N	2.22	0.72
1:J:122:GLY:O	1:J:305:GLY:N	2.20	0.72
1:E:128:LEU:HA	1:E:145:ARG:O	1.90	0.72
1:C:434:THR:O	1:C:437:GLN:HB3	1.90	0.72
1:D:663:SER:HA	1:D:666:ARG:HE	1.52	0.72
1:L:663:SER:HA	1:L:666:ARG:HE	1.54	0.72
1:H:294:ALA:HA	1:H:453:LEU:HD23	1.72	0.72
1:I:122:GLY:O	1:I:305:GLY:N	2.20	0.72
1:K:355:GLN:HG2	1:L:376:ARG:HH12	1.55	0.72
1:C:128:LEU:HA	1:C:145:ARG:O	1.88	0.72
1:F:612:GLN:HA	1:F:615:LEU:HD13	1.72	0.72
1:D:325:ASP:OD2	1:E:56:GLN:N	2.23	0.71
1:F:356:ILE:HG13	1:F:357:ALA:H	1.55	0.71
1:K:612:GLN:HA	1:K:615:LEU:HD13	1.72	0.71
1:C:353:PRO:HD2	1:D:376:ARG:HB2	1.72	0.71
1:F:586:THR:HG22	1:F:590:GLN:HE22	1.54	0.71
1:H:650:ILE:HA	1:H:653:ILE:HD12	1.73	0.71
1:B:434:THR:O	1:B:437:GLN:HB3	1.89	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:307:TRP:HA	1:I:315:VAL:O	1.90	0.71
1:C:38:VAL:HG21	1:C:324:LYS:HD2	1.70	0.71
1:F:434:THR:O	1:F:437:GLN:HB3	1.89	0.71
1:L:251:ILE:HD11	1:L:273:ARG:HH22	1.56	0.71
1:C:325:ASP:OD2	1:D:56:GLN:N	2.24	0.71
1:A:122:GLY:O	1:A:305:GLY:N	2.21	0.71
1:K:586:THR:HG22	1:K:590:GLN:HE22	1.56	0.71
1:A:128:LEU:HA	1:A:145:ARG:O	1.90	0.71
1:C:58:ASP:HA	1:C:327:GLN:OE1	1.91	0.71
1:G:270:GLN:NE2	1:G:271:ILE:O	2.24	0.71
1:J:612:GLN:HA	1:J:615:LEU:HD13	1.73	0.71
1:K:294:ALA:HA	1:K:453:LEU:HD23	1.70	0.71
1:E:251:ILE:HD11	1:E:273:ARG:HH22	1.55	0.70
1:A:164:LEU:HD12	1:A:166:ASP:HB3	1.73	0.70
1:G:663:SER:HA	1:G:666:ARG:HE	1.55	0.70
1:A:356:ILE:HG13	1:A:357:ALA:H	1.57	0.70
1:K:356:ILE:HG13	1:K:357:ALA:H	1.56	0.70
1:C:72:ARG:HD2	1:C:108:LYS:HE2	1.71	0.70
1:I:612:GLN:HA	1:I:615:LEU:HD13	1.74	0.70
1:E:356:ILE:HG13	1:E:357:ALA:H	1.56	0.70
1:B:325:ASP:OD2	1:C:56:GLN:N	2.24	0.70
1:F:650:ILE:HA	1:F:653:ILE:HD12	1.73	0.70
1:G:434:THR:O	1:G:437:GLN:HB3	1.90	0.70
1:A:294:ALA:HA	1:A:453:LEU:HD23	1.71	0.70
1:D:356:ILE:HG13	1:D:357:ALA:H	1.57	0.70
1:H:663:SER:HA	1:H:666:ARG:HE	1.55	0.70
1:K:122:GLY:O	1:K:305:GLY:N	2.22	0.70
1:L:339:ASP:HA	1:L:342:ALA:HB3	1.74	0.70
1:A:251:ILE:HD11	1:A:273:ARG:HH22	1.57	0.70
1:H:122:GLY:O	1:H:305:GLY:N	2.22	0.70
1:J:128:LEU:HA	1:J:145:ARG:O	1.90	0.70
1:F:613:GLY:HA2	1:F:616:LEU:HD12	1.73	0.70
1:L:434:THR:O	1:L:437:GLN:HB3	1.92	0.70
1:A:434:THR:O	1:A:437:GLN:HB3	1.91	0.69
1:C:612:GLN:HA	1:C:615:LEU:HD13	1.72	0.69
1:E:325:ASP:OD2	1:F:56:GLN:N	2.25	0.69
1:F:325:ASP:OD2	1:G:56:GLN:N	2.25	0.69
1:F:353:PRO:HD2	1:G:376:ARG:HB2	1.73	0.69
1:J:38:VAL:HG21	1:J:324:LYS:HD2	1.74	0.69
1:E:613:GLY:HA2	1:E:616:LEU:HD13	1.73	0.69
1:B:58:ASP:HA	1:B:327:GLN:OE1	1.91	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:134:ASP:OD1	1:C:141:ASN:ND2	2.21	0.69
1:G:38:VAL:HG21	1:G:324:LYS:HD2	1.74	0.69
1:I:294:ALA:HA	1:I:453:LEU:HD23	1.72	0.69
1:J:72:ARG:HD2	1:J:108:LYS:HE2	1.73	0.69
1:I:356:ILE:HG13	1:I:357:ALA:H	1.57	0.69
1:C:113:ILE:HG13	1:C:148:PRO:HB2	1.74	0.69
1:H:325:ASP:OD2	1:I:56:GLN:N	2.24	0.69
1:B:586:THR:HG22	1:B:590:GLN:HE22	1.56	0.69
1:D:160:SER:OG	1:D:172:HIS:ND1	2.21	0.69
1:D:294:ALA:HA	1:D:453:LEU:HD23	1.74	0.69
1:I:663:SER:HA	1:I:666:ARG:HE	1.55	0.69
1:A:376:ARG:HB2	1:L:353:PRO:HD2	1.72	0.69
1:A:650:ILE:HA	1:A:653:ILE:HD12	1.74	0.69
1:D:58:ASP:HA	1:D:327:GLN:OE1	1.92	0.69
1:D:586:THR:HG22	1:D:590:GLN:HE22	1.55	0.69
1:J:325:ASP:OD2	1:K:56:GLN:N	2.26	0.69
1:K:251:ILE:HD11	1:K:273:ARG:HH22	1.57	0.69
1:A:87:ARG:HG2	1:A:89:ASP:H	1.57	0.69
1:E:58:ASP:HA	1:E:327:GLN:OE1	1.92	0.69
1:F:160:SER:OG	1:F:172:HIS:ND1	2.23	0.69
1:G:511:ARG:HD3	1:G:513:ARG:HH22	1.58	0.69
1:J:160:SER:OG	1:J:172:HIS:ND1	2.22	0.69
1:A:586:THR:HG22	1:A:590:GLN:HE22	1.58	0.69
1:C:613:GLY:O	1:C:616:LEU:HD13	1.93	0.69
1:G:356:ILE:HG13	1:G:357:ALA:H	1.58	0.69
1:B:251:ILE:HD11	1:B:273:ARG:HH22	1.59	0.68
1:H:356:ILE:HG13	1:H:357:ALA:H	1.56	0.68
1:H:37:ARG:NH1	1:H:48:TYR:OH	2.26	0.68
1:I:613:GLY:HA2	1:I:616:LEU:HD12	1.75	0.68
1:J:356:ILE:HG13	1:J:357:ALA:H	1.56	0.68
1:A:612:GLN:HA	1:A:615:LEU:HD13	1.75	0.68
1:C:711:GLN:OE1	1:D:712:ARG:NH1	2.26	0.68
1:G:122:GLY:O	1:G:305:GLY:N	2.23	0.68
1:H:134:ASP:OD1	1:H:141:ASN:ND2	2.22	0.68
1:B:356:ILE:HG13	1:B:357:ALA:H	1.58	0.68
1:C:613:GLY:HA2	1:C:616:LEU:HD12	1.74	0.68
1:C:58:ASP:HB3	1:C:60:VAL:HG23	1.75	0.68
1:J:586:THR:HG22	1:J:590:GLN:HE22	1.59	0.68
1:L:58:ASP:HA	1:L:327:GLN:OE1	1.93	0.68
1:C:270:GLN:NE2	1:C:271:ILE:O	2.26	0.68
1:D:270:GLN:NE2	1:D:271:ILE:O	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:160:SER:OG	1:I:172:HIS:ND1	2.20	0.68
1:B:650:ILE:HA	1:B:653:ILE:HD12	1.74	0.68
1:G:510:ILE:HG12	1:G:512:GLY:H	1.58	0.68
1:A:56:GLN:N	1:L:325:ASP:OD2	2.26	0.68
1:J:294:ALA:HA	1:J:453:LEU:HD23	1.75	0.68
1:E:80:TYR:HD1	1:E:518:THR:HA	1.60	0.68
1:E:93:VAL:O	1:E:96:GLY:N	2.27	0.68
1:K:325:ASP:OD2	1:L:56:GLN:N	2.27	0.68
1:B:339:ASP:HA	1:B:342:ALA:HB3	1.76	0.67
1:G:25:ALA:O	1:G:29:ALA:CB	2.42	0.67
1:H:164:LEU:HD12	1:H:166:ASP:HB3	1.76	0.67
1:B:294:ALA:HA	1:B:453:LEU:HD23	1.74	0.67
1:B:25:ALA:O	1:B:29:ALA:CB	2.41	0.67
1:H:307:TRP:HA	1:H:315:VAL:O	1.93	0.67
1:K:510:ILE:HG12	1:K:512:GLY:H	1.59	0.67
1:K:160:SER:OG	1:K:172:HIS:ND1	2.21	0.67
1:L:93:VAL:O	1:L:96:GLY:N	2.28	0.67
1:D:339:ASP:HA	1:D:342:ALA:HB3	1.75	0.67
1:F:164:LEU:HD12	1:F:166:ASP:HB3	1.75	0.67
1:F:58:ASP:HB3	1:F:60:VAL:HG23	1.77	0.67
1:A:25:ALA:O	1:A:29:ALA:CB	2.42	0.67
1:B:58:ASP:HB3	1:B:60:VAL:HG23	1.77	0.67
1:H:25:ALA:O	1:H:29:ALA:CB	2.42	0.67
1:C:294:ALA:HA	1:C:453:LEU:HD23	1.76	0.67
1:F:58:ASP:HA	1:F:327:GLN:OE1	1.93	0.67
1:G:355:GLN:HG2	1:H:376:ARG:HH12	1.59	0.67
1:H:251:ILE:HD11	1:H:273:ARG:HH22	1.59	0.67
1:J:22:SER:O	1:J:26:ARG:HG2	1.95	0.67
1:B:22:SER:O	1:B:26:ARG:HG2	1.94	0.67
1:F:38:VAL:HG21	1:F:324:LYS:HD2	1.77	0.67
1:J:650:ILE:HA	1:J:653:ILE:HD12	1.77	0.67
1:J:161:ASN:HD21	1:K:183:GLY:HA3	1.59	0.67
1:K:58:ASP:HB3	1:K:60:VAL:HG23	1.76	0.67
1:D:58:ASP:HB3	1:D:60:VAL:HG23	1.77	0.67
1:H:87:ARG:HG2	1:H:89:ASP:H	1.60	0.67
1:B:270:GLN:NE2	1:B:271:ILE:O	2.27	0.66
1:A:40:GLN:HG3	1:L:310:VAL:HG22	1.76	0.66
1:L:38:VAL:HG21	1:L:324:LYS:HD2	1.77	0.66
1:C:79:LEU:H	1:C:520:VAL:HA	1.60	0.66
1:E:25:ALA:O	1:E:29:ALA:CB	2.43	0.66
1:G:93:VAL:O	1:G:96:GLY:N	2.29	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:556:TYR:HB3	1:C:572:ALA:HB2	1.77	0.66
1:G:58:ASP:HA	1:G:327:GLN:OE1	1.95	0.66
1:J:134:ASP:OD1	1:J:141:ASN:ND2	2.23	0.66
1:L:556:TYR:HB3	1:L:572:ALA:HB2	1.78	0.66
1:A:270:GLN:NE2	1:A:271:ILE:O	2.28	0.66
1:D:164:LEU:HD12	1:D:166:ASP:HB3	1.77	0.66
1:E:586:THR:HG22	1:E:590:GLN:HE22	1.59	0.66
1:I:25:ALA:O	1:I:29:ALA:CB	2.42	0.66
1:J:37:ARG:NH1	1:J:48:TYR:OH	2.28	0.66
1:K:310:VAL:HG22	1:L:40:GLN:HG3	1.77	0.66
1:B:310:VAL:HG22	1:C:40:GLN:HG3	1.77	0.66
1:B:613:GLY:HA2	1:B:616:LEU:CD1	2.22	0.66
1:C:164:LEU:HD12	1:C:166:ASP:HB3	1.76	0.66
1:D:25:ALA:O	1:D:29:ALA:CB	2.42	0.66
1:E:510:ILE:HG12	1:E:512:GLY:H	1.60	0.66
1:F:22:SER:O	1:F:26:ARG:HG2	1.96	0.66
1:H:457:MET:O	1:H:458:ARG:HG2	1.96	0.66
1:K:339:ASP:HA	1:K:342:ALA:HB3	1.78	0.66
1:I:586:THR:HG22	1:I:590:GLN:HE22	1.60	0.66
1:J:457:MET:O	1:J:458:ARG:HG2	1.96	0.66
1:K:134:ASP:OD1	1:K:141:ASN:ND2	2.26	0.66
1:K:511:ARG:HD3	1:K:513:ARG:HH22	1.60	0.66
1:E:434:THR:O	1:E:437:GLN:HB3	1.95	0.66
1:F:113:ILE:HG13	1:F:148:PRO:HB2	1.77	0.66
1:F:510:ILE:HG12	1:F:512:GLY:H	1.61	0.66
1:G:87:ARG:HG2	1:G:89:ASP:H	1.61	0.66
1:E:164:LEU:HD12	1:E:166:ASP:HB3	1.76	0.66
1:E:37:ARG:NH1	1:E:48:TYR:OH	2.29	0.66
1:I:58:ASP:HB3	1:I:60:VAL:HG23	1.77	0.65
1:F:457:MET:O	1:F:458:ARG:HG2	1.97	0.65
1:I:134:ASP:OD1	1:I:141:ASN:ND2	2.25	0.65
1:C:25:ALA:O	1:C:29:ALA:CB	2.44	0.65
1:F:25:ALA:O	1:F:29:ALA:CB	2.44	0.65
1:G:325:ASP:OD2	1:H:56:GLN:N	2.27	0.65
1:K:164:LEU:HD12	1:K:166:ASP:HB3	1.77	0.65
1:L:586:THR:HG22	1:L:590:GLN:HE22	1.61	0.65
1:E:160:SER:OG	1:E:172:HIS:ND1	2.22	0.65
1:E:650:ILE:HA	1:E:653:ILE:HD12	1.77	0.65
1:D:457:MET:O	1:D:458:ARG:HG2	1.96	0.65
1:H:22:SER:O	1:H:26:ARG:HG2	1.97	0.65
1:I:87:ARG:HG2	1:I:89:ASP:H	1.60	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:457:MET:O	1:L:458:ARG:HG2	1.96	0.65
1:F:221:GLU:HG2	1:F:280:ILE:HG12	1.79	0.65
1:K:22:SER:O	1:K:26:ARG:HG2	1.96	0.65
1:K:58:ASP:HA	1:K:327:GLN:OE1	1.95	0.65
1:A:22:SER:O	1:A:26:ARG:HG2	1.96	0.65
1:A:93:VAL:O	1:A:96:GLY:N	2.30	0.65
1:E:83:LYS:HB2	1:E:515:GLU:HB3	1.78	0.65
1:J:58:ASP:HB3	1:J:60:VAL:HG23	1.79	0.65
1:A:510:ILE:HG12	1:A:512:GLY:H	1.62	0.65
1:H:93:VAL:O	1:H:96:GLY:N	2.30	0.65
1:C:160:SER:OG	1:C:172:HIS:ND1	2.23	0.65
1:E:577:ILE:HD12	1:E:584:PRO:HB3	1.79	0.65
1:H:221:GLU:HG2	1:H:280:ILE:HG12	1.78	0.65
1:H:613:GLY:CA	1:H:616:LEU:HD13	2.26	0.65
1:C:362:MET:HA	1:C:366:ASN:HB2	1.79	0.64
1:I:22:SER:O	1:I:26:ARG:HG2	1.96	0.64
1:I:38:VAL:HG21	1:I:324:LYS:HD2	1.79	0.64
1:J:25:ALA:O	1:J:29:ALA:CB	2.45	0.64
1:A:83:LYS:HB2	1:A:515:GLU:HB3	1.78	0.64
1:C:457:MET:O	1:C:458:ARG:HG2	1.97	0.64
1:E:22:SER:O	1:E:26:ARG:HG2	1.97	0.64
1:K:270:GLN:NE2	1:K:271:ILE:O	2.30	0.64
1:A:457:MET:O	1:A:458:ARG:HG2	1.98	0.64
1:C:586:THR:HG22	1:C:590:GLN:HE22	1.61	0.64
1:F:87:ARG:HG2	1:F:89:ASP:H	1.62	0.64
1:G:58:ASP:HB3	1:G:60:VAL:HG23	1.78	0.64
1:L:650:ILE:HA	1:L:653:ILE:HD12	1.78	0.64
1:A:183:GLY:HA3	1:L:161:ASN:HD21	1.63	0.64
1:C:510:ILE:HG12	1:C:512:GLY:H	1.62	0.64
1:D:22:SER:O	1:D:26:ARG:HG2	1.96	0.64
1:F:577:ILE:HG12	1:F:597:GLN:NE2	2.13	0.64
1:K:650:ILE:HA	1:K:653:ILE:HD12	1.77	0.64
1:L:25:ALA:O	1:L:29:ALA:CB	2.44	0.64
1:A:58:ASP:HB3	1:A:60:VAL:HG23	1.79	0.64
1:C:93:VAL:O	1:C:96:GLY:N	2.31	0.64
1:E:79:LEU:H	1:E:520:VAL:HA	1.62	0.64
1:G:310:VAL:HG22	1:H:40:GLN:HG3	1.79	0.64
1:G:556:TYR:HB3	1:G:572:ALA:HB2	1.78	0.64
1:H:452:ASN:OD1	1:H:453:LEU:N	2.31	0.64
1:C:87:ARG:HG2	1:C:89:ASP:H	1.63	0.64
1:E:612:GLN:HA	1:E:615:LEU:HD13	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:134:ASP:OD1	1:F:141:ASN:ND2	2.26	0.64
1:F:270:GLN:NE2	1:F:271:ILE:O	2.31	0.64
1:L:433:ASP:O	1:L:437:GLN:N	2.30	0.64
1:B:164:LEU:HD12	1:B:166:ASP:HB3	1.79	0.64
1:C:452:ASN:OD1	1:C:453:LEU:N	2.31	0.64
1:D:510:ILE:HG12	1:D:512:GLY:H	1.63	0.64
1:G:433:ASP:O	1:G:437:GLN:N	2.29	0.64
1:B:457:MET:O	1:B:458:ARG:HG2	1.98	0.64
1:B:510:ILE:HG12	1:B:512:GLY:H	1.63	0.64
1:B:87:ARG:HG2	1:B:89:ASP:H	1.62	0.64
1:D:113:ILE:HG13	1:D:148:PRO:HB2	1.80	0.64
1:J:58:ASP:HA	1:J:327:GLN:OE1	1.97	0.64
1:K:25:ALA:O	1:K:29:ALA:CB	2.45	0.64
1:K:457:MET:O	1:K:458:ARG:HG2	1.98	0.64
1:L:510:ILE:HG12	1:L:512:GLY:H	1.61	0.64
1:A:96:GLY:O	1:A:100:THR:OG1	2.09	0.64
1:F:353:PRO:HA	1:G:373:LEU:HD23	1.80	0.64
1:A:38:VAL:HG21	1:A:324:LYS:HD2	1.79	0.64
1:D:134:ASP:OD1	1:D:141:ASN:ND2	2.26	0.64
1:E:457:MET:O	1:E:458:ARG:HG2	1.97	0.64
1:H:577:ILE:HG12	1:H:597:GLN:NE2	2.11	0.64
1:K:87:ARG:HG2	1:K:89:ASP:H	1.63	0.64
1:D:650:ILE:HA	1:D:653:ILE:HD12	1.80	0.63
1:I:270:GLN:NE2	1:I:271:ILE:O	2.31	0.63
1:B:93:VAL:O	1:B:96:GLY:N	2.31	0.63
1:D:79:LEU:H	1:D:520:VAL:HA	1.62	0.63
1:D:93:VAL:O	1:D:96:GLY:N	2.30	0.63
1:D:96:GLY:O	1:D:100:THR:OG1	2.08	0.63
1:E:58:ASP:HB3	1:E:60:VAL:HG23	1.79	0.63
1:F:93:VAL:O	1:F:96:GLY:N	2.31	0.63
1:G:586:THR:HG22	1:G:590:GLN:HE22	1.61	0.63
1:H:58:ASP:HB3	1:H:60:VAL:HG23	1.80	0.63
1:I:339:ASP:HA	1:I:342:ALA:HB3	1.81	0.63
1:I:510:ILE:HG12	1:I:512:GLY:H	1.63	0.63
1:K:38:VAL:HG21	1:K:324:LYS:HD2	1.80	0.63
1:A:79:LEU:H	1:A:520:VAL:HA	1.62	0.63
1:C:353:PRO:HA	1:D:373:LEU:HD23	1.80	0.63
1:E:117:GLU:HB3	1:E:123:VAL:HG23	1.81	0.63
1:G:437:GLN:HG2	1:G:520:VAL:HG21	1.80	0.63
1:I:457:MET:O	1:I:458:ARG:HG2	1.97	0.63
1:J:93:VAL:O	1:J:96:GLY:N	2.31	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:511:ARG:HD3	1:L:513:ARG:HH22	1.63	0.63
1:G:457:MET:O	1:G:458:ARG:HG2	1.98	0.63
1:L:134:ASP:OD1	1:L:141:ASN:ND2	2.24	0.63
1:L:80:TYR:HD1	1:L:518:THR:HA	1.64	0.63
1:B:309:PHE:HB3	1:B:312:ASP:HA	1.81	0.63
1:H:339:ASP:HA	1:H:342:ALA:HB3	1.80	0.63
1:L:164:LEU:HD12	1:L:166:ASP:HB3	1.79	0.63
1:L:79:LEU:H	1:L:520:VAL:HA	1.62	0.63
1:L:58:ASP:HB3	1:L:60:VAL:HG23	1.79	0.63
1:J:164:LEU:HD12	1:J:166:ASP:HB3	1.81	0.63
1:J:511:ARG:HD3	1:J:513:ARG:HH22	1.62	0.63
1:L:87:ARG:HG2	1:L:89:ASP:H	1.62	0.63
1:D:38:VAL:HG21	1:D:324:LYS:HD2	1.80	0.63
1:G:339:ASP:HA	1:G:342:ALA:HB3	1.80	0.63
1:J:362:MET:HA	1:J:366:ASN:HB2	1.80	0.63
1:A:339:ASP:HA	1:A:342:ALA:HB3	1.79	0.63
1:C:577:ILE:HD12	1:C:584:PRO:HB3	1.81	0.63
1:F:297:HIS:CD2	1:F:298:ILE:HG13	2.33	0.63
1:G:22:SER:O	1:G:26:ARG:HG2	1.98	0.63
1:L:250:ASP:OD1	1:L:251:ILE:N	2.32	0.63
1:L:613:GLY:O	1:L:616:LEU:HD12	1.99	0.63
1:C:80:TYR:HD1	1:C:518:THR:HA	1.64	0.63
1:D:250:ASP:OD1	1:D:251:ILE:N	2.32	0.63
1:D:452:ASN:OD1	1:D:453:LEU:N	2.32	0.63
1:E:452:ASN:OD1	1:E:453:LEU:N	2.32	0.63
1:G:650:ILE:HA	1:G:653:ILE:HD12	1.81	0.63
1:H:418:LEU:HD23	1:H:429:GLN:HB3	1.81	0.63
1:A:577:ILE:HG12	1:A:597:GLN:NE2	2.13	0.62
1:B:250:ASP:OD1	1:B:251:ILE:N	2.32	0.62
1:F:339:ASP:HA	1:F:342:ALA:HB3	1.81	0.62
1:H:96:GLY:O	1:H:100:THR:OG1	2.08	0.62
1:K:577:ILE:HD12	1:K:584:PRO:HB3	1.81	0.62
1:A:83:LYS:HE2	1:A:85:GLY:HA3	1.81	0.62
1:B:160:SER:OG	1:B:172:HIS:ND1	2.23	0.62
1:B:276:VAL:HG22	1:B:296:GLU:HA	1.81	0.62
1:E:38:VAL:HG21	1:E:324:LYS:HD2	1.79	0.62
1:H:310:VAL:HG22	1:I:40:GLN:HG3	1.80	0.62
1:A:666:ARG:NH1	1:L:667:GLU:HG2	2.14	0.62
1:J:577:ILE:HG12	1:J:597:GLN:NE2	2.15	0.62
1:L:612:GLN:HA	1:L:615:LEU:HD13	1.81	0.62
1:A:41:TRP:CH2	1:A:44:TRP:HB2	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:437:GLN:HG2	1:B:520:VAL:HG21	1.82	0.62
1:B:452:ASN:OD1	1:B:453:LEU:N	2.32	0.62
1:C:250:ASP:OD1	1:C:251:ILE:N	2.32	0.62
1:K:37:ARG:NH1	1:K:48:TYR:OH	2.29	0.62
1:L:22:SER:O	1:L:26:ARG:HG2	2.00	0.62
1:L:83:LYS:HE2	1:L:85:GLY:HA3	1.82	0.62
1:A:297:HIS:CD2	1:A:298:ILE:HG13	2.35	0.62
1:C:355:GLN:HG2	1:D:376:ARG:HH12	1.63	0.62
1:C:528:LYS:HZ3	1:C:560:LEU:HD23	1.65	0.62
1:G:113:ILE:HG13	1:G:148:PRO:HB2	1.81	0.62
1:L:37:ARG:NH1	1:L:48:TYR:OH	2.29	0.62
1:E:577:ILE:HG12	1:E:597:GLN:NE2	2.12	0.62
1:F:79:LEU:H	1:F:520:VAL:HA	1.64	0.62
1:G:434:THR:HG22	1:H:108:LYS:HE3	1.81	0.62
1:I:164:LEU:HD12	1:I:166:ASP:HB3	1.80	0.62
1:I:83:LYS:HE2	1:I:85:GLY:HA3	1.80	0.62
1:K:362:MET:HA	1:K:366:ASN:HB2	1.80	0.62
1:B:221:GLU:HG2	1:B:280:ILE:HG12	1.82	0.62
1:H:510:ILE:HG12	1:H:512:GLY:H	1.63	0.62
1:A:160:SER:OG	1:A:172:HIS:ND1	2.22	0.62
1:A:452:ASN:OD1	1:A:453:LEU:N	2.33	0.62
1:A:556:TYR:HB3	1:A:572:ALA:HB2	1.80	0.62
1:C:22:SER:O	1:C:26:ARG:HG2	2.00	0.62
1:C:83:LYS:HE2	1:C:85:GLY:HA3	1.80	0.62
1:E:297:HIS:CD2	1:E:298:ILE:HG13	2.35	0.62
1:E:437:GLN:HG2	1:E:520:VAL:HG21	1.82	0.62
1:G:250:ASP:OD1	1:G:251:ILE:N	2.33	0.62
1:G:321:ARG:HA	1:G:324:LYS:HE2	1.81	0.62
1:H:58:ASP:HA	1:H:327:GLN:OE1	1.98	0.62
1:I:452:ASN:OD1	1:I:453:LEU:N	2.33	0.62
1:I:511:ARG:HD3	1:I:513:ARG:HH22	1.62	0.62
1:J:577:ILE:HD12	1:J:584:PRO:HB3	1.82	0.62
1:J:250:ASP:OD1	1:J:251:ILE:N	2.33	0.62
1:J:297:HIS:CD2	1:J:298:ILE:HG13	2.35	0.62
1:L:113:ILE:HG13	1:L:148:PRO:HB2	1.81	0.62
1:L:362:MET:HA	1:L:366:ASN:HB2	1.80	0.62
1:L:653:ILE:O	1:L:657:MET:HG2	2.00	0.62
1:K:664:GLU:HG3	1:L:659:LEU:HD22	1.80	0.62
1:B:577:ILE:HG12	1:B:597:GLN:NE2	2.13	0.62
1:G:79:LEU:H	1:G:520:VAL:HA	1.65	0.62
1:H:160:SER:OG	1:H:172:HIS:ND1	2.22	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:83:LYS:HB2	1:I:515:GLU:HB3	1.81	0.62
1:J:339:ASP:HA	1:J:342:ALA:HB3	1.82	0.62
1:K:117:GLU:HB3	1:K:123:VAL:HG23	1.81	0.62
1:K:236:GLN:HB2	1:K:265:LYS:HD2	1.81	0.62
1:A:372:TYR:HB3	1:L:350:PHE:CD1	2.35	0.61
1:H:653:ILE:O	1:H:657:MET:HG2	2.00	0.61
1:C:41:TRP:CH2	1:C:44:TRP:HB2	2.34	0.61
1:E:250:ASP:OD1	1:E:251:ILE:N	2.33	0.61
1:H:113:ILE:HG13	1:H:148:PRO:HB2	1.81	0.61
1:I:93:VAL:O	1:I:96:GLY:N	2.33	0.61
1:L:577:ILE:HD12	1:L:584:PRO:HB3	1.81	0.61
1:A:250:ASP:OD1	1:A:251:ILE:N	2.33	0.61
1:B:134:ASP:OD1	1:B:141:ASN:ND2	2.30	0.61
1:C:83:LYS:HB2	1:C:515:GLU:HB3	1.82	0.61
1:J:113:ILE:HG13	1:J:148:PRO:HB2	1.81	0.61
1:L:83:LYS:HB2	1:L:515:GLU:HB3	1.80	0.61
1:A:113:ILE:HG13	1:A:148:PRO:HB2	1.82	0.61
1:A:664:GLU:OE2	1:B:666:ARG:NH2	2.34	0.61
1:A:667:GLU:HG2	1:B:666:ARG:NH1	2.15	0.61
1:C:310:VAL:HG22	1:D:40:GLN:HG3	1.83	0.61
1:C:339:ASP:HA	1:C:342:ALA:HB3	1.81	0.61
1:C:363:TYR:OH	1:C:373:LEU:O	2.15	0.61
1:E:667:GLU:HG2	1:F:666:ARG:NH1	2.14	0.61
1:H:270:GLN:NE2	1:H:271:ILE:O	2.33	0.61
1:H:362:MET:HA	1:H:366:ASN:HB2	1.81	0.61
1:I:297:HIS:CD2	1:I:298:ILE:HG13	2.35	0.61
1:I:577:ILE:HD12	1:I:584:PRO:HB3	1.82	0.61
1:K:221:GLU:HG2	1:K:280:ILE:HG12	1.81	0.61
1:L:270:GLN:NE2	1:L:271:ILE:O	2.33	0.61
1:B:363:TYR:OH	1:B:373:LEU:O	2.14	0.61
1:B:79:LEU:H	1:B:520:VAL:HA	1.64	0.61
1:F:250:ASP:OD1	1:F:251:ILE:N	2.33	0.61
1:H:236:GLN:HB2	1:H:265:LYS:HD2	1.83	0.61
1:K:250:ASP:OD1	1:K:251:ILE:N	2.33	0.61
1:H:83:LYS:HB2	1:H:515:GLU:HB3	1.81	0.61
1:A:511:ARG:HD3	1:A:513:ARG:HH22	1.65	0.61
1:A:434:THR:HG22	1:B:108:LYS:HE3	1.83	0.61
1:E:434:THR:HG22	1:F:108:LYS:HE3	1.82	0.61
1:G:362:MET:HA	1:G:366:ASN:HB2	1.82	0.61
1:H:612:GLN:HA	1:H:615:LEU:CD1	2.31	0.61
1:J:452:ASN:OD1	1:J:453:LEU:N	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:87:ARG:HG2	1:J:89:ASP:H	1.64	0.61
1:B:297:HIS:CD2	1:B:298:ILE:HG13	2.36	0.61
1:E:113:ILE:HG13	1:E:148:PRO:HB2	1.83	0.61
1:G:134:ASP:OD1	1:G:141:ASN:ND2	2.27	0.61
1:G:297:HIS:CD2	1:G:298:ILE:HG13	2.36	0.61
1:A:134:ASP:OD1	1:A:141:ASN:ND2	2.25	0.61
1:B:434:THR:HG22	1:C:108:LYS:HE3	1.83	0.61
1:C:37:ARG:NH1	1:C:48:TYR:OH	2.33	0.61
1:D:232:ALA:HB1	1:D:268:GLU:HA	1.82	0.61
1:D:362:MET:HA	1:D:366:ASN:HB2	1.83	0.61
1:D:399:GLN:HA	1:D:402:ALA:HB3	1.83	0.61
1:E:350:PHE:N	1:E:390:ALA:O	2.29	0.61
1:F:96:GLY:O	1:F:100:THR:OG1	2.11	0.61
1:G:639:VAL:O	1:G:643:ASN:ND2	2.31	0.61
1:G:96:GLY:O	1:G:100:THR:OG1	2.10	0.61
1:J:510:ILE:HG12	1:J:512:GLY:H	1.64	0.61
1:K:101:ASP:OD2	1:K:144:ILE:HG12	2.00	0.61
1:K:79:LEU:H	1:K:520:VAL:HA	1.65	0.61
1:D:161:ASN:HD21	1:E:183:GLY:HA3	1.64	0.61
1:D:87:ARG:HG2	1:D:89:ASP:H	1.66	0.61
1:K:161:ASN:HD21	1:L:183:GLY:HA3	1.66	0.61
1:L:452:ASN:OD1	1:L:453:LEU:N	2.33	0.61
1:A:58:ASP:HA	1:A:327:GLN:OE1	2.01	0.60
1:I:434:THR:HG21	1:J:72:ARG:HG3	1.82	0.60
1:B:38:VAL:HG21	1:B:324:LYS:HD2	1.83	0.60
1:C:653:ILE:O	1:C:657:MET:HG2	2.01	0.60
1:D:438:LEU:HD11	1:E:108:LYS:HD3	1.83	0.60
1:F:556:TYR:HB3	1:F:572:ALA:HB2	1.83	0.60
1:H:297:HIS:CD2	1:H:298:ILE:HG13	2.35	0.60
1:J:96:GLY:O	1:J:100:THR:OG1	2.10	0.60
1:D:37:ARG:NH1	1:D:48:TYR:OH	2.33	0.60
1:E:603:GLN:O	1:E:606:PRO:HD3	2.01	0.60
1:A:221:GLU:HG2	1:A:280:ILE:HG12	1.81	0.60
1:F:452:ASN:OD1	1:F:453:LEU:N	2.33	0.60
1:K:83:LYS:HB2	1:K:515:GLU:HB3	1.83	0.60
1:C:297:HIS:CD2	1:C:298:ILE:HG13	2.35	0.60
1:I:309:PHE:HB3	1:I:312:ASP:HA	1.83	0.60
1:J:236:GLN:HB2	1:J:265:LYS:HD2	1.84	0.60
1:J:310:VAL:HG22	1:K:40:GLN:HG3	1.84	0.60
1:I:310:VAL:HG22	1:J:40:GLN:HG3	1.83	0.60
1:B:603:GLN:O	1:B:606:PRO:HD3	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:653:ILE:O	1:E:657:MET:HG2	2.02	0.60
1:G:164:LEU:HD12	1:G:166:ASP:HB3	1.84	0.60
1:H:250:ASP:OD1	1:H:251:ILE:N	2.34	0.60
1:I:250:ASP:OD1	1:I:251:ILE:N	2.34	0.60
1:J:83:LYS:HB2	1:J:515:GLU:HB3	1.83	0.60
1:K:434:THR:HG22	1:L:108:LYS:HE3	1.83	0.60
1:K:452:ASN:OD1	1:K:453:LEU:N	2.34	0.60
1:K:577:ILE:HG12	1:K:597:GLN:NE2	2.13	0.60
1:A:362:MET:HA	1:A:366:ASN:HB2	1.83	0.60
1:A:577:ILE:HD12	1:A:584:PRO:HB3	1.82	0.60
1:B:426:ASN:O	1:B:429:GLN:NE2	2.34	0.60
1:F:653:ILE:O	1:F:657:MET:HG2	2.02	0.60
1:I:221:GLU:HG2	1:I:280:ILE:HG12	1.83	0.60
1:J:433:ASP:O	1:J:437:GLN:N	2.30	0.60
1:A:526:SER:O	1:A:530:GLN:HG3	2.01	0.60
1:B:362:MET:HA	1:B:366:ASN:HB2	1.84	0.60
1:E:134:ASP:OD1	1:E:141:ASN:ND2	2.24	0.60
1:F:434:THR:HG22	1:G:108:LYS:HE3	1.83	0.60
1:B:37:ARG:NH1	1:B:48:TYR:OH	2.35	0.60
1:C:101:ASP:OD2	1:C:144:ILE:HG12	2.02	0.60
1:C:263:PHE:O	1:C:265:LYS:HG3	2.02	0.60
1:G:452:ASN:OD1	1:G:453:LEU:N	2.35	0.60
1:I:362:MET:HA	1:I:366:ASN:HB2	1.82	0.60
1:B:41:TRP:CH2	1:B:44:TRP:HB2	2.37	0.60
1:D:310:VAL:HG22	1:E:40:GLN:HG3	1.83	0.60
1:F:577:ILE:HD12	1:F:584:PRO:HB3	1.82	0.60
1:H:79:LEU:H	1:H:520:VAL:HA	1.67	0.60
1:L:117:GLU:HB3	1:L:123:VAL:HG23	1.82	0.60
1:B:577:ILE:HD12	1:B:584:PRO:HB3	1.83	0.59
1:B:653:ILE:O	1:B:657:MET:HG2	2.01	0.59
1:E:362:MET:HA	1:E:366:ASN:HB2	1.84	0.59
1:G:577:ILE:HD12	1:G:584:PRO:HB3	1.82	0.59
1:H:321:ARG:HA	1:H:324:LYS:HE2	1.84	0.59
1:I:363:TYR:OH	1:I:373:LEU:O	2.16	0.59
1:J:433:ASP:HA	1:J:436:ASN:HB3	1.84	0.59
1:E:526:SER:O	1:E:530:GLN:HG3	2.03	0.59
1:F:350:PHE:HB2	1:F:390:ALA:HB3	1.84	0.59
1:F:433:ASP:O	1:F:437:GLN:N	2.34	0.59
1:F:310:VAL:HG22	1:G:40:GLN:HG3	1.84	0.59
1:J:79:LEU:H	1:J:520:VAL:HA	1.67	0.59
1:J:434:THR:HG22	1:K:108:LYS:HE3	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:443:ASP:OD1	1:K:444:LEU:N	2.35	0.59
1:A:108:LYS:HE3	1:L:434:THR:HG22	1.84	0.59
1:A:236:GLN:HB2	1:A:265:LYS:HD2	1.84	0.59
1:D:410:SER:O	1:D:414:GLU:HG2	2.02	0.59
1:D:526:SER:O	1:D:530:GLN:HG3	2.01	0.59
1:D:603:GLN:O	1:D:606:PRO:HD3	2.02	0.59
1:E:236:GLN:HB2	1:E:265:LYS:HD2	1.84	0.59
1:D:667:GLU:HG2	1:E:666:ARG:NH1	2.18	0.59
1:H:434:THR:HG22	1:I:108:LYS:HE3	1.83	0.59
1:I:161:ASN:HD21	1:J:183:GLY:HA3	1.66	0.59
1:A:399:GLN:HA	1:A:402:ALA:HB3	1.83	0.59
1:C:221:GLU:HG2	1:C:280:ILE:HG12	1.82	0.59
1:D:353:PRO:HA	1:E:373:LEU:HD23	1.85	0.59
1:D:577:ILE:HD12	1:D:584:PRO:HB3	1.84	0.59
1:E:556:TYR:HB3	1:E:572:ALA:HB2	1.84	0.59
1:I:526:SER:O	1:I:530:GLN:HG3	2.02	0.59
1:A:662:GLN:HA	1:A:665:PHE:CD2	2.38	0.59
1:B:80:TYR:HD1	1:B:518:THR:HA	1.67	0.59
1:B:78:VAL:HG22	1:B:520:VAL:HG12	1.82	0.59
1:D:83:LYS:HE2	1:D:85:GLY:HA3	1.83	0.59
1:G:443:ASP:OD1	1:G:444:LEU:N	2.36	0.59
1:H:577:ILE:HD12	1:H:584:PRO:HB3	1.83	0.59
1:I:79:LEU:H	1:I:520:VAL:HA	1.68	0.59
1:J:221:GLU:HG2	1:J:280:ILE:HG12	1.84	0.59
1:L:437:GLN:HG2	1:L:520:VAL:HG21	1.84	0.59
1:L:603:GLN:O	1:L:606:PRO:HD3	2.01	0.59
1:B:232:ALA:HB1	1:B:268:GLU:HA	1.84	0.59
1:B:526:SER:O	1:B:530:GLN:HG3	2.03	0.59
1:C:156:VAL:HA	1:C:174:THR:O	2.02	0.59
1:C:96:GLY:O	1:C:100:THR:OG1	2.11	0.59
1:E:433:ASP:O	1:E:437:GLN:N	2.34	0.59
1:F:363:TYR:OH	1:F:373:LEU:O	2.16	0.59
1:F:443:ASP:OD1	1:F:444:LEU:N	2.36	0.59
1:G:526:SER:O	1:G:530:GLN:HG3	2.03	0.59
1:H:603:GLN:O	1:H:606:PRO:HD3	2.02	0.59
1:J:556:TYR:HB3	1:J:572:ALA:HB2	1.85	0.59
1:K:418:LEU:HD23	1:K:429:GLN:HB3	1.84	0.59
1:L:526:SER:O	1:L:530:GLN:HG3	2.03	0.59
1:A:156:VAL:HA	1:A:174:THR:O	2.03	0.59
1:C:443:ASP:OD1	1:C:444:LEU:N	2.35	0.59
1:H:161:ASN:HD21	1:I:183:GLY:HA3	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:526:SER:O	1:K:530:GLN:HG3	2.03	0.59
1:K:83:LYS:HE2	1:K:85:GLY:HA3	1.85	0.59
1:A:373:LEU:HD23	1:L:353:PRO:HA	1.85	0.59
1:A:443:ASP:OD1	1:A:444:LEU:N	2.36	0.59
1:H:556:TYR:HB3	1:H:572:ALA:HB2	1.85	0.59
1:I:434:THR:HG22	1:J:108:LYS:HE3	1.85	0.59
1:B:350:PHE:CD1	1:C:372:TYR:HB3	2.38	0.59
1:F:117:GLU:HB3	1:F:123:VAL:HG23	1.83	0.59
1:J:526:SER:O	1:J:530:GLN:HG3	2.03	0.59
1:K:410:SER:O	1:K:414:GLU:HG2	2.03	0.59
1:A:433:ASP:O	1:A:437:GLN:N	2.35	0.59
1:B:156:VAL:HA	1:B:174:THR:O	2.02	0.59
1:B:443:ASP:OD1	1:B:444:LEU:N	2.35	0.59
1:C:526:SER:O	1:C:530:GLN:HG3	2.02	0.59
1:D:309:PHE:HB3	1:D:312:ASP:HA	1.85	0.59
1:G:156:VAL:HA	1:G:174:THR:O	2.03	0.59
1:F:350:PHE:CD1	1:G:372:TYR:HB3	2.37	0.59
1:I:113:ILE:HG13	1:I:148:PRO:HB2	1.83	0.59
1:A:375:ASN:OD1	1:A:376:ARG:N	2.36	0.58
1:B:201:PHE:CD1	1:B:283:CYS:HB2	2.38	0.58
1:C:603:GLN:O	1:C:606:PRO:HD3	2.03	0.58
1:D:443:ASP:OD1	1:D:444:LEU:N	2.36	0.58
1:D:653:ILE:O	1:D:657:MET:HG2	2.02	0.58
1:E:41:TRP:CH2	1:E:44:TRP:HB2	2.37	0.58
1:G:83:LYS:HB2	1:G:515:GLU:HB3	1.84	0.58
1:A:363:TYR:OH	1:A:373:LEU:O	2.18	0.58
1:C:613:GLY:HA2	1:C:616:LEU:HD13	1.83	0.58
1:G:618:GLY:O	1:G:621:GLU:HB2	2.03	0.58
1:H:433:ASP:O	1:H:437:GLN:N	2.33	0.58
1:I:356:ILE:HG21	1:J:373:LEU:HD21	1.85	0.58
1:J:375:ASN:OD1	1:J:376:ARG:N	2.36	0.58
1:J:83:LYS:HE2	1:J:85:GLY:HA3	1.85	0.58
1:G:612:GLN:HA	1:G:615:LEU:CD1	2.32	0.58
1:I:653:ILE:O	1:I:657:MET:HG2	2.04	0.58
1:A:310:VAL:HG22	1:B:40:GLN:HG3	1.85	0.58
1:J:603:GLN:O	1:J:606:PRO:HD3	2.03	0.58
1:B:83:LYS:HB2	1:B:515:GLU:HB3	1.85	0.58
1:B:612:GLN:HA	1:B:615:LEU:CD1	2.33	0.58
1:C:589:GLU:O	1:C:593:LEU:HB2	2.04	0.58
1:D:434:THR:HG22	1:E:108:LYS:HE3	1.84	0.58
1:G:83:LYS:HE2	1:G:85:GLY:HA3	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:589:GLU:O	1:H:593:LEU:HB2	2.04	0.58
1:I:418:LEU:HD23	1:I:429:GLN:HB3	1.85	0.58
1:K:350:PHE:CD1	1:L:372:TYR:HB3	2.37	0.58
1:L:443:ASP:OD1	1:L:444:LEU:N	2.36	0.58
1:B:117:GLU:HB3	1:B:123:VAL:HG23	1.83	0.58
1:B:618:GLY:O	1:B:621:GLU:HB2	2.03	0.58
1:B:82:PRO:HB3	1:B:90:ALA:HB3	1.86	0.58
1:C:650:ILE:HA	1:C:653:ILE:HD12	1.86	0.58
1:D:613:GLY:O	1:D:616:LEU:HD12	2.04	0.58
1:E:87:ARG:HG2	1:E:89:ASP:H	1.67	0.58
1:F:193:LEU:HD21	1:F:288:LYS:HZ3	1.69	0.58
1:G:653:ILE:O	1:G:657:MET:HG2	2.03	0.58
1:H:526:SER:O	1:H:530:GLN:HG3	2.03	0.58
1:I:556:TYR:HB3	1:I:572:ALA:HB2	1.85	0.58
1:J:29:ALA:O	1:J:33:LEU:HB2	2.04	0.58
1:K:337:ASN:HA	1:K:340:ILE:HD12	1.86	0.58
1:K:618:GLY:O	1:K:621:GLU:HB2	2.03	0.58
1:C:236:GLN:HB2	1:C:265:LYS:HD2	1.85	0.58
1:C:321:ARG:HA	1:C:324:LYS:HE2	1.84	0.58
1:E:339:ASP:HA	1:E:342:ALA:HB3	1.84	0.58
1:D:350:PHE:CD1	1:E:372:TYR:HB3	2.38	0.58
1:F:362:MET:HA	1:F:366:ASN:HB2	1.85	0.58
1:F:526:SER:O	1:F:530:GLN:HG3	2.03	0.58
1:F:667:GLU:HG2	1:G:666:ARG:NH1	2.18	0.58
1:H:399:GLN:HA	1:H:402:ALA:HB3	1.85	0.58
1:A:603:GLN:O	1:A:606:PRO:HD3	2.02	0.58
1:D:639:VAL:O	1:D:643:ASN:ND2	2.37	0.58
1:E:263:PHE:O	1:E:265:LYS:HG3	2.04	0.58
1:H:410:SER:O	1:H:414:GLU:HG2	2.03	0.58
1:I:41:TRP:CH2	1:I:44:TRP:HB2	2.39	0.58
1:J:117:GLU:HB3	1:J:123:VAL:HG23	1.86	0.58
1:L:263:PHE:O	1:L:265:LYS:HG3	2.03	0.58
1:D:263:PHE:O	1:D:265:LYS:HG3	2.03	0.58
1:D:297:HIS:CD2	1:D:298:ILE:HG13	2.39	0.58
1:G:375:ASN:OD1	1:G:376:ARG:N	2.36	0.58
1:G:80:TYR:HD1	1:G:518:THR:HA	1.69	0.58
1:H:350:PHE:CD1	1:I:372:TYR:HB3	2.39	0.58
1:K:297:HIS:CD2	1:K:298:ILE:HG13	2.39	0.58
1:K:375:ASN:OD1	1:K:376:ARG:N	2.35	0.58
1:L:162:SER:HB2	1:L:170:ALA:HB2	1.84	0.58
1:L:639:VAL:O	1:L:643:ASN:ND2	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:434:THR:HG22	1:D:108:LYS:HE3	1.86	0.58
1:C:577:ILE:HG12	1:C:597:GLN:NE2	2.13	0.58
1:D:221:GLU:HG2	1:D:280:ILE:HG12	1.86	0.58
1:D:41:TRP:CH2	1:D:44:TRP:HB2	2.39	0.58
1:I:443:ASP:OD1	1:I:444:LEU:N	2.36	0.58
1:J:350:PHE:CD1	1:K:372:TYR:HB3	2.39	0.58
1:L:236:GLN:HB2	1:L:265:LYS:HD2	1.84	0.58
1:A:653:ILE:O	1:A:657:MET:HG2	2.04	0.57
1:B:375:ASN:OD1	1:B:376:ARG:N	2.37	0.57
1:B:83:LYS:HE2	1:B:85:GLY:HA3	1.85	0.57
1:E:443:ASP:OD1	1:E:444:LEU:N	2.37	0.57
1:G:603:GLN:O	1:G:606:PRO:HD3	2.04	0.57
1:I:399:GLN:HA	1:I:402:ALA:HB3	1.86	0.57
1:K:612:GLN:HA	1:K:615:LEU:CD1	2.34	0.57
1:A:117:GLU:HB3	1:A:123:VAL:HG23	1.86	0.57
1:A:659:LEU:HD22	1:L:664:GLU:HG3	1.87	0.57
1:C:511:ARG:HD3	1:C:513:ARG:HH22	1.68	0.57
1:C:639:VAL:O	1:C:643:ASN:ND2	2.36	0.57
1:D:275:ARG:NH2	1:D:293:ILE:O	2.30	0.57
1:D:80:TYR:HD1	1:D:518:THR:HA	1.69	0.57
1:E:96:GLY:O	1:E:100:THR:OG1	2.10	0.57
1:G:263:PHE:O	1:G:265:LYS:HG3	2.04	0.57
1:J:443:ASP:OD1	1:J:444:LEU:N	2.37	0.57
1:L:399:GLN:HA	1:L:402:ALA:HB3	1.87	0.57
1:A:127:ARG:HB3	1:A:147:GLU:HB2	1.87	0.57
1:B:433:ASP:O	1:B:437:GLN:N	2.31	0.57
1:D:433:ASP:O	1:D:437:GLN:N	2.32	0.57
1:E:511:ARG:HD3	1:E:513:ARG:HH22	1.69	0.57
1:F:603:GLN:O	1:F:606:PRO:HD3	2.05	0.57
1:G:363:TYR:OH	1:G:373:LEU:O	2.18	0.57
1:J:276:VAL:HG22	1:J:296:GLU:HA	1.85	0.57
1:K:162:SER:HB2	1:K:170:ALA:HB2	1.86	0.57
1:L:297:HIS:CD2	1:L:298:ILE:HG13	2.40	0.57
1:C:438:LEU:HD11	1:D:108:LYS:HD3	1.85	0.57
1:D:363:TYR:OH	1:D:373:LEU:O	2.14	0.57
1:F:350:PHE:N	1:F:390:ALA:O	2.31	0.57
1:J:410:SER:O	1:J:414:GLU:HG2	2.04	0.57
1:K:232:ALA:HB1	1:K:268:GLU:HA	1.86	0.57
1:L:232:ALA:HB1	1:L:268:GLU:HA	1.86	0.57
1:F:201:PHE:CD1	1:F:283:CYS:HB2	2.40	0.57
1:F:83:LYS:HE2	1:F:85:GLY:HA3	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:113:ILE:HG13	1:K:148:PRO:HB2	1.85	0.57
1:D:83:LYS:HB2	1:D:515:GLU:HB3	1.85	0.57
1:E:321:ARG:HA	1:E:324:LYS:HE2	1.85	0.57
1:E:399:GLN:HA	1:E:402:ALA:HB3	1.86	0.57
1:G:236:GLN:HB2	1:G:265:LYS:HD2	1.87	0.57
1:H:83:LYS:HE2	1:H:85:GLY:HA3	1.86	0.57
1:I:528:LYS:HZ3	1:I:560:LEU:HD23	1.70	0.57
1:J:406:GLU:O	1:J:410:SER:OG	2.17	0.57
1:J:434:THR:HG21	1:K:72:ARG:HG3	1.86	0.57
1:K:556:TYR:HB3	1:K:572:ALA:HB2	1.86	0.57
1:L:375:ASN:OD1	1:L:376:ARG:N	2.36	0.57
1:A:276:VAL:HG22	1:A:296:GLU:HA	1.86	0.57
1:B:667:GLU:HG2	1:C:666:ARG:NH1	2.20	0.57
1:C:410:SER:O	1:C:414:GLU:HG2	2.04	0.57
1:E:221:GLU:HG2	1:E:280:ILE:HG12	1.86	0.57
1:E:664:GLU:OE2	1:F:666:ARG:NH2	2.38	0.57
1:F:193:LEU:HD21	1:F:288:LYS:NZ	2.19	0.57
1:F:80:TYR:HD1	1:F:518:THR:HA	1.69	0.57
1:G:232:ALA:HB1	1:G:268:GLU:HA	1.86	0.57
1:G:47:GLN:HB2	1:G:50:THR:HG21	1.87	0.57
1:G:613:GLY:HA2	1:G:616:LEU:CD1	2.33	0.57
1:H:232:ALA:HB1	1:H:268:GLU:HA	1.87	0.57
1:H:443:ASP:OD1	1:H:444:LEU:N	2.37	0.57
1:K:263:PHE:O	1:K:265:LYS:HG3	2.05	0.57
1:A:80:TYR:HD1	1:A:518:THR:HA	1.70	0.57
1:B:223:TYR:HE1	1:B:278:LYS:HG3	1.70	0.57
1:B:615:LEU:O	1:B:619:GLN:HG2	2.05	0.57
1:B:639:VAL:O	1:B:643:ASN:ND2	2.38	0.57
1:C:615:LEU:O	1:C:619:GLN:HG2	2.04	0.57
1:F:263:PHE:O	1:F:265:LYS:HG3	2.05	0.57
1:F:589:GLU:O	1:F:593:LEU:HB2	2.05	0.57
1:H:643:ASN:HA	1:H:646:ASN:ND2	2.20	0.57
1:I:117:GLU:HB3	1:I:123:VAL:HG23	1.87	0.57
1:J:270:GLN:NE2	1:J:271:ILE:O	2.38	0.57
1:J:653:ILE:O	1:J:657:MET:HG2	2.05	0.57
1:K:29:ALA:O	1:K:33:LEU:HB2	2.05	0.57
1:A:666:ARG:NH2	1:L:664:GLU:OE2	2.38	0.57
1:H:353:PRO:HA	1:I:373:LEU:HD23	1.87	0.56
1:H:667:GLU:HG2	1:I:666:ARG:NH1	2.19	0.56
1:J:263:PHE:O	1:J:265:LYS:HG3	2.05	0.56
1:A:613:GLY:O	1:A:616:LEU:HD13	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:612:GLN:HA	1:C:615:LEU:CD1	2.36	0.56
1:D:236:GLN:HB2	1:D:265:LYS:HD2	1.85	0.56
1:E:615:LEU:O	1:E:619:GLN:HG2	2.05	0.56
1:G:353:PRO:O	1:G:356:ILE:HG22	2.05	0.56
1:I:162:SER:HA	1:I:169:ASP:OD1	2.06	0.56
1:I:37:ARG:NH1	1:I:48:TYR:OH	2.38	0.56
1:I:615:LEU:O	1:I:619:GLN:HG2	2.05	0.56
1:I:650:ILE:HA	1:I:653:ILE:HD12	1.87	0.56
1:K:353:PRO:HA	1:L:373:LEU:HD23	1.87	0.56
1:B:577:ILE:HG21	1:B:593:LEU:HD13	1.87	0.56
1:C:433:ASP:O	1:C:437:GLN:N	2.35	0.56
1:D:353:PRO:O	1:D:356:ILE:HG22	2.05	0.56
1:C:350:PHE:CD1	1:D:372:TYR:HB3	2.39	0.56
1:D:426:ASN:O	1:D:429:GLN:NE2	2.39	0.56
1:C:667:GLU:HG2	1:D:666:ARG:NH1	2.20	0.56
1:F:236:GLN:HB2	1:F:265:LYS:HD2	1.87	0.56
1:H:375:ASN:OD1	1:H:376:ARG:N	2.36	0.56
1:I:433:ASP:O	1:I:437:GLN:N	2.37	0.56
1:J:232:ALA:HB1	1:J:268:GLU:HA	1.86	0.56
1:K:433:ASP:O	1:K:437:GLN:N	2.37	0.56
1:L:82:PRO:HB3	1:L:90:ALA:HB3	1.86	0.56
1:C:34:PHE:O	1:C:38:VAL:HG23	2.05	0.56
1:G:577:ILE:HG12	1:G:597:GLN:NE2	2.14	0.56
1:J:162:SER:HB2	1:J:170:ALA:HB2	1.86	0.56
1:J:711:GLN:OE1	1:K:712:ARG:NH1	2.38	0.56
1:A:589:GLU:O	1:A:593:LEU:HB2	2.05	0.56
1:C:375:ASN:OD1	1:C:376:ARG:N	2.37	0.56
1:C:386:THR:HG22	1:C:387:GLN:H	1.70	0.56
1:I:232:ALA:HB1	1:I:268:GLU:HA	1.87	0.56
1:B:113:ILE:HG13	1:B:148:PRO:HB2	1.88	0.56
1:E:82:PRO:HB3	1:E:90:ALA:HB3	1.87	0.56
1:G:276:VAL:HG22	1:G:296:GLU:HA	1.88	0.56
1:J:34:PHE:O	1:J:38:VAL:HG23	2.05	0.56
1:K:41:TRP:CH2	1:K:44:TRP:HB2	2.41	0.56
1:K:603:GLN:O	1:K:606:PRO:HD3	2.04	0.56
1:B:263:PHE:O	1:B:265:LYS:HG3	2.05	0.56
1:B:386:THR:HG22	1:B:387:GLN:H	1.70	0.56
1:B:511:ARG:HD3	1:B:513:ARG:HH22	1.71	0.56
1:E:618:GLY:O	1:E:621:GLU:HB2	2.06	0.56
1:F:41:TRP:CH2	1:F:44:TRP:HB2	2.41	0.56
1:H:201:PHE:CD1	1:H:283:CYS:HB2	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:276:VAL:HG22	1:I:296:GLU:HA	1.87	0.56
1:I:639:VAL:O	1:I:643:ASN:ND2	2.37	0.56
1:I:667:GLU:HG2	1:J:666:ARG:NH1	2.20	0.56
1:F:386:THR:HG22	1:F:387:GLN:H	1.71	0.56
1:J:577:ILE:HG21	1:J:593:LEU:HD13	1.87	0.56
1:A:193:LEU:HD21	1:A:288:LYS:NZ	2.21	0.56
1:D:386:THR:HG22	1:D:387:GLN:H	1.71	0.56
1:E:270:GLN:NE2	1:E:271:ILE:O	2.38	0.56
1:E:375:ASN:OD1	1:E:376:ARG:N	2.35	0.56
1:E:386:THR:HG22	1:E:387:GLN:H	1.70	0.56
1:E:639:VAL:O	1:E:643:ASN:ND2	2.38	0.56
1:G:309:PHE:HB3	1:G:312:ASP:HA	1.87	0.56
1:B:410:SER:O	1:B:414:GLU:HG2	2.06	0.56
1:D:577:ILE:HG12	1:D:597:GLN:NE2	2.16	0.56
1:E:356:ILE:HG21	1:F:373:LEU:HD21	1.87	0.56
1:G:272:LYS:O	1:H:134:ASP:HB2	2.06	0.56
1:H:236:GLN:HB2	1:H:265:LYS:CD	2.36	0.56
1:K:363:TYR:OH	1:K:373:LEU:O	2.18	0.56
1:L:410:SER:O	1:L:414:GLU:HG2	2.05	0.56
1:H:438:LEU:HD11	1:I:108:LYS:HD3	1.88	0.56
1:J:321:ARG:HA	1:J:324:LYS:HE2	1.87	0.56
1:J:426:ASN:O	1:J:429:GLN:NE2	2.39	0.56
1:J:639:VAL:O	1:J:643:ASN:ND2	2.37	0.56
1:K:201:PHE:CD1	1:K:283:CYS:HB2	2.41	0.56
1:B:220:ALA:CB	1:B:281:ILE:O	2.46	0.55
1:E:337:ASN:HA	1:E:340:ILE:HD12	1.88	0.55
1:F:321:ARG:HA	1:F:324:LYS:HE2	1.87	0.55
1:I:353:PRO:O	1:I:356:ILE:HG22	2.06	0.55
1:I:589:GLU:O	1:I:593:LEU:HB2	2.06	0.55
1:J:353:PRO:O	1:J:356:ILE:HG22	2.06	0.55
1:J:386:THR:HG22	1:J:387:GLN:H	1.70	0.55
1:K:386:THR:HG22	1:K:387:GLN:H	1.72	0.55
1:A:433:ASP:HA	1:A:436:ASN:HB3	1.87	0.55
1:B:335:SER:O	1:B:338:ALA:HB3	2.06	0.55
1:B:337:ASN:HA	1:B:340:ILE:HD12	1.88	0.55
1:C:577:ILE:HG21	1:C:593:LEU:HD13	1.86	0.55
1:D:433:ASP:HA	1:D:436:ASN:HB3	1.88	0.55
1:E:299:PRO:HG2	1:E:300:ILE:HD12	1.88	0.55
1:E:438:LEU:HD11	1:F:108:LYS:HD3	1.88	0.55
1:F:299:PRO:HG2	1:F:300:ILE:HD12	1.87	0.55
1:F:429:GLN:HA	1:F:432:PHE:HD2	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:438:LEU:HD11	1:G:108:LYS:HD3	1.87	0.55
1:F:618:GLY:O	1:F:621:GLU:HB2	2.05	0.55
1:G:643:ASN:HA	1:G:646:ASN:ND2	2.21	0.55
1:H:426:ASN:O	1:H:429:GLN:NE2	2.40	0.55
1:I:429:GLN:HA	1:I:432:PHE:HD2	1.72	0.55
1:L:386:THR:HG22	1:L:387:GLN:H	1.71	0.55
1:A:263:PHE:O	1:A:265:LYS:HG3	2.06	0.55
1:A:386:THR:HG22	1:A:387:GLN:H	1.71	0.55
1:A:426:ASN:O	1:A:429:GLN:NE2	2.39	0.55
1:D:350:PHE:N	1:D:390:ALA:O	2.32	0.55
1:D:612:GLN:HA	1:D:615:LEU:HG	1.88	0.55
1:C:664:GLU:HG3	1:D:659:LEU:HD22	1.88	0.55
1:E:276:VAL:HG22	1:E:296:GLU:HA	1.88	0.55
1:F:375:ASN:OD1	1:F:376:ARG:N	2.37	0.55
1:F:612:GLN:HA	1:F:615:LEU:CD1	2.35	0.55
1:G:386:THR:HG22	1:G:387:GLN:H	1.71	0.55
1:G:426:ASN:O	1:G:429:GLN:NE2	2.40	0.55
1:I:603:GLN:O	1:I:606:PRO:HD3	2.05	0.55
1:J:353:PRO:HA	1:K:373:LEU:HD23	1.89	0.55
1:B:236:GLN:HB2	1:B:265:LYS:HD2	1.89	0.55
1:B:643:ASN:HA	1:B:646:ASN:ND2	2.21	0.55
1:C:350:PHE:N	1:C:390:ALA:O	2.32	0.55
1:E:161:ASN:HD21	1:F:183:GLY:HA3	1.71	0.55
1:E:350:PHE:CD1	1:F:372:TYR:HB3	2.42	0.55
1:E:410:SER:O	1:E:414:GLU:HG2	2.06	0.55
1:F:232:ALA:HB1	1:F:268:GLU:HA	1.87	0.55
1:G:34:PHE:O	1:G:38:VAL:HG23	2.05	0.55
1:I:34:PHE:O	1:I:38:VAL:HG23	2.06	0.55
1:J:643:ASN:HA	1:J:646:ASN:ND2	2.21	0.55
1:D:375:ASN:OD1	1:D:376:ARG:N	2.36	0.55
1:E:193:LEU:HD21	1:E:288:LYS:NZ	2.22	0.55
1:J:309:PHE:HB3	1:J:312:ASP:HA	1.88	0.55
1:L:433:ASP:HA	1:L:436:ASN:HB3	1.88	0.55
1:A:232:ALA:HB1	1:A:268:GLU:HA	1.87	0.55
1:B:433:ASP:HA	1:B:436:ASN:HB3	1.88	0.55
1:D:27:ARG:HD3	1:D:313:LYS:HE3	1.88	0.55
1:D:556:TYR:HB3	1:D:572:ALA:HB2	1.88	0.55
1:D:643:ASN:HA	1:D:646:ASN:ND2	2.22	0.55
1:E:363:TYR:HE1	1:E:372:TYR:HA	1.70	0.55
1:H:263:PHE:O	1:H:265:LYS:HG3	2.05	0.55
1:K:438:LEU:HD11	1:L:108:LYS:HD3	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:276:VAL:HG22	1:L:296:GLU:HA	1.88	0.55
1:B:353:PRO:O	1:B:356:ILE:HG22	2.06	0.55
1:B:418:LEU:HD23	1:B:429:GLN:HB3	1.89	0.55
1:C:201:PHE:CD1	1:C:283:CYS:HB2	2.41	0.55
1:C:399:GLN:HA	1:C:402:ALA:HB3	1.88	0.55
1:D:117:GLU:HB3	1:D:123:VAL:HG23	1.88	0.55
1:G:325:ASP:O	1:G:328:ARG:HG2	2.07	0.55
1:H:615:LEU:O	1:H:619:GLN:HG2	2.07	0.55
1:H:639:VAL:O	1:H:642:GLN:HG2	2.07	0.55
1:J:272:LYS:O	1:K:134:ASP:HB2	2.06	0.55
1:L:528:LYS:NZ	1:L:559:LEU:O	2.40	0.55
1:B:589:GLU:O	1:B:593:LEU:HB2	2.07	0.55
1:D:511:ARG:HD3	1:D:513:ARG:HH22	1.71	0.55
1:E:426:ASN:O	1:E:429:GLN:NE2	2.38	0.55
1:E:353:PRO:HA	1:F:373:LEU:HD23	1.89	0.55
1:F:643:ASN:HA	1:F:646:ASN:ND2	2.21	0.55
1:G:350:PHE:CD1	1:H:372:TYR:HB3	2.41	0.55
1:I:32:ASP:O	1:I:35:PHE:HB2	2.07	0.55
1:J:418:LEU:HD23	1:J:429:GLN:HB3	1.89	0.55
1:K:193:LEU:HD21	1:K:288:LYS:NZ	2.22	0.55
1:A:612:GLN:HA	1:A:615:LEU:CD1	2.37	0.55
1:C:236:GLN:HB2	1:C:265:LYS:CD	2.36	0.55
1:D:589:GLU:O	1:D:593:LEU:HB2	2.06	0.55
1:I:433:ASP:O	1:I:436:ASN:HB3	2.07	0.55
1:I:612:GLN:HA	1:I:615:LEU:CD1	2.36	0.55
1:J:363:TYR:HE1	1:J:372:TYR:HA	1.72	0.55
1:K:309:PHE:HB3	1:K:312:ASP:HA	1.88	0.55
1:K:93:VAL:O	1:K:96:GLY:N	2.40	0.55
1:L:337:ASN:HA	1:L:340:ILE:HD12	1.89	0.55
1:L:589:GLU:O	1:L:593:LEU:HB2	2.06	0.55
1:A:309:PHE:HB3	1:A:312:ASP:HA	1.88	0.54
1:E:612:GLN:HA	1:E:615:LEU:CD1	2.37	0.54
1:F:536:LEU:HD23	1:F:539:LEU:HD12	1.88	0.54
1:H:276:VAL:HG22	1:H:296:GLU:HA	1.89	0.54
1:I:263:PHE:O	1:I:265:LYS:HG3	2.07	0.54
1:J:127:ARG:HB3	1:J:147:GLU:HB2	1.89	0.54
1:L:350:PHE:N	1:L:390:ALA:O	2.32	0.54
1:C:162:SER:OG	1:C:164:LEU:O	2.25	0.54
1:D:664:GLU:OE2	1:E:666:ARG:NH2	2.40	0.54
1:G:117:GLU:HB3	1:G:123:VAL:HG23	1.89	0.54
1:G:335:SER:O	1:G:338:ALA:HB3	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:356:ILE:HG21	1:H:373:LEU:HD21	1.89	0.54
1:K:536:LEU:HD23	1:K:539:LEU:HD12	1.89	0.54
1:K:643:ASN:HA	1:K:646:ASN:ND2	2.22	0.54
1:L:201:PHE:CD1	1:L:283:CYS:HB2	2.42	0.54
1:D:156:VAL:HA	1:D:174:THR:O	2.07	0.54
1:D:34:PHE:O	1:D:38:VAL:HG23	2.07	0.54
1:G:193:LEU:HD21	1:G:288:LYS:NZ	2.22	0.54
1:G:350:PHE:HB2	1:G:390:ALA:HB3	1.88	0.54
1:G:615:LEU:O	1:G:619:GLN:HG2	2.07	0.54
1:H:353:PRO:O	1:H:356:ILE:HG22	2.07	0.54
1:I:386:THR:HG22	1:I:387:GLN:H	1.72	0.54
1:J:612:GLN:HA	1:J:615:LEU:CD1	2.36	0.54
1:L:577:ILE:HG12	1:L:597:GLN:NE2	2.17	0.54
1:A:307:TRP:HE1	1:A:314:GLU:HG2	1.71	0.54
1:B:236:GLN:HB2	1:B:265:LYS:CD	2.38	0.54
1:C:433:ASP:HA	1:C:436:ASN:HB3	1.89	0.54
1:C:618:GLY:O	1:C:621:GLU:HB2	2.07	0.54
1:D:236:GLN:HB2	1:D:265:LYS:CD	2.37	0.54
1:E:349:PRO:HG3	1:E:391:TYR:CZ	2.42	0.54
1:I:176:ILE:HD11	1:I:204:PRO:HB3	1.90	0.54
1:K:276:VAL:HG22	1:K:296:GLU:HA	1.90	0.54
1:L:309:PHE:HB3	1:L:312:ASP:HA	1.88	0.54
1:L:27:ARG:HD3	1:L:313:LYS:HE3	1.89	0.54
1:B:96:GLY:O	1:B:100:THR:OG1	2.08	0.54
1:D:193:LEU:HD21	1:D:288:LYS:NZ	2.23	0.54
1:D:348:LYS:HB2	1:E:372:TYR:CD2	2.43	0.54
1:E:78:VAL:HG22	1:E:520:VAL:HG12	1.90	0.54
1:F:236:GLN:HB2	1:F:265:LYS:CD	2.38	0.54
1:I:375:ASN:OD1	1:I:376:ARG:N	2.36	0.54
1:J:220:ALA:CB	1:J:281:ILE:O	2.43	0.54
1:J:399:GLN:HA	1:J:402:ALA:HB3	1.88	0.54
1:L:156:VAL:HA	1:L:174:THR:O	2.07	0.54
1:A:162:SER:HA	1:A:169:ASP:OD1	2.08	0.54
1:D:176:ILE:HD11	1:D:204:PRO:HB3	1.90	0.54
1:F:353:PRO:O	1:F:356:ILE:HG22	2.08	0.54
1:G:221:GLU:HG2	1:G:280:ILE:HG12	1.89	0.54
1:G:528:LYS:HZ3	1:G:560:LEU:HD23	1.72	0.54
1:I:410:SER:O	1:I:414:GLU:HG2	2.08	0.54
1:I:618:GLY:O	1:I:621:GLU:HB2	2.08	0.54
1:J:363:TYR:OH	1:J:373:LEU:O	2.16	0.54
1:B:399:GLN:HA	1:B:402:ALA:HB3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:350:PHE:HB2	1:E:390:ALA:HB3	1.89	0.54
1:F:309:PHE:HB3	1:F:312:ASP:HA	1.88	0.54
1:I:236:GLN:HB2	1:I:265:LYS:HD2	1.89	0.54
1:I:354:GLU:HG2	1:J:376:ARG:HD3	1.90	0.54
1:J:201:PHE:CD1	1:J:283:CYS:HB2	2.42	0.54
1:J:193:LEU:HD21	1:J:288:LYS:NZ	2.23	0.54
1:J:589:GLU:O	1:J:593:LEU:HB2	2.07	0.54
1:A:410:SER:O	1:A:414:GLU:HG2	2.07	0.54
1:A:643:ASN:HA	1:A:646:ASN:ND2	2.22	0.54
1:C:643:ASN:HA	1:C:646:ASN:ND2	2.22	0.54
1:G:337:ASN:HA	1:G:340:ILE:HD12	1.88	0.54
1:H:386:THR:HG22	1:H:387:GLN:H	1.73	0.54
1:I:335:SER:O	1:I:338:ALA:HB3	2.07	0.54
1:J:162:SER:HA	1:J:169:ASP:OD1	2.08	0.54
1:J:275:ARG:NH2	1:J:293:ILE:O	2.35	0.54
1:A:201:PHE:CD1	1:A:283:CYS:HB2	2.43	0.54
1:C:15:PHE:HA	1:C:18:ASP:HB3	1.90	0.54
1:C:418:LEU:HD23	1:C:429:GLN:HB3	1.88	0.54
1:C:426:ASN:O	1:C:429:GLN:NE2	2.41	0.54
1:E:201:PHE:CD1	1:E:283:CYS:HB2	2.43	0.54
1:E:83:LYS:HE2	1:E:85:GLY:HA3	1.89	0.54
1:J:32:ASP:O	1:J:35:PHE:HB2	2.07	0.54
1:K:589:GLU:O	1:K:593:LEU:HB2	2.08	0.54
1:K:653:ILE:O	1:K:657:MET:HG2	2.06	0.54
1:A:321:ARG:HA	1:A:324:LYS:HE2	1.89	0.54
1:A:353:PRO:O	1:A:356:ILE:HG22	2.08	0.54
1:B:34:PHE:O	1:B:38:VAL:HG23	2.08	0.54
1:D:350:PHE:HB2	1:D:390:ALA:HB3	1.88	0.54
1:F:337:ASN:HA	1:F:340:ILE:HD12	1.89	0.54
1:F:433:ASP:HA	1:F:436:ASN:HB3	1.89	0.54
1:H:337:ASN:HA	1:H:340:ILE:HD12	1.89	0.54
1:H:350:PHE:HB2	1:H:390:ALA:HB3	1.90	0.54
1:I:363:TYR:HE1	1:I:372:TYR:HA	1.73	0.54
1:K:426:ASN:O	1:K:429:GLN:NE2	2.41	0.54
1:C:335:SER:O	1:C:338:ALA:HB3	2.08	0.53
1:E:232:ALA:HB1	1:E:268:GLU:HA	1.89	0.53
1:E:309:PHE:HB3	1:E:312:ASP:HA	1.90	0.53
1:J:618:GLY:O	1:J:621:GLU:HB2	2.07	0.53
1:K:615:LEU:O	1:K:619:GLN:HG2	2.06	0.53
1:L:193:LEU:HD21	1:L:288:LYS:NZ	2.23	0.53
1:L:34:PHE:O	1:L:38:VAL:HG23	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:429:GLN:HA	1:L:432:PHE:HD2	1.73	0.53
1:E:236:GLN:HB2	1:E:265:LYS:CD	2.37	0.53
1:E:353:PRO:O	1:E:356:ILE:HG22	2.08	0.53
1:H:335:SER:O	1:H:338:ALA:HB3	2.08	0.53
1:H:272:LYS:O	1:I:134:ASP:HB2	2.08	0.53
1:J:528:LYS:HZ3	1:J:560:LEU:HD23	1.73	0.53
1:K:433:ASP:HA	1:K:436:ASN:HB3	1.90	0.53
1:A:235:TYR:HE1	1:A:264:ILE:HA	1.74	0.53
1:B:556:TYR:HB3	1:B:572:ALA:HB2	1.90	0.53
1:E:363:TYR:OH	1:E:373:LEU:O	2.20	0.53
1:E:643:ASN:HA	1:E:646:ASN:ND2	2.23	0.53
1:J:337:ASN:HA	1:J:340:ILE:HD12	1.90	0.53
1:L:350:PHE:HB2	1:L:390:ALA:HB3	1.90	0.53
1:L:618:GLY:O	1:L:621:GLU:HB2	2.08	0.53
1:A:433:ASP:O	1:A:436:ASN:HB3	2.08	0.53
1:E:335:SER:O	1:E:338:ALA:HB3	2.09	0.53
1:E:515:GLU:N	1:E:515:GLU:OE1	2.41	0.53
1:E:589:GLU:O	1:E:593:LEU:HB2	2.08	0.53
1:F:577:ILE:HG21	1:F:593:LEU:HD13	1.89	0.53
1:I:577:ILE:HG21	1:I:593:LEU:HD13	1.89	0.53
1:L:162:SER:HA	1:L:169:ASP:OD1	2.09	0.53
1:B:223:TYR:CE1	1:B:278:LYS:HG3	2.43	0.53
1:C:382:GLY:N	1:C:383:ASP:HA	2.23	0.53
1:E:528:LYS:NZ	1:E:559:LEU:O	2.39	0.53
1:F:276:VAL:HG22	1:F:296:GLU:HA	1.90	0.53
1:G:433:ASP:HA	1:G:436:ASN:HB3	1.91	0.53
1:I:643:ASN:HA	1:I:646:ASN:ND2	2.23	0.53
1:I:96:GLY:O	1:I:100:THR:OG1	2.11	0.53
1:A:87:ARG:HD3	1:A:89:ASP:HB2	1.90	0.53
1:B:193:LEU:HD21	1:B:288:LYS:NZ	2.23	0.53
1:C:101:ASP:OD1	1:C:101:ASP:N	2.42	0.53
1:D:618:GLY:O	1:D:621:GLU:HB2	2.08	0.53
1:F:156:VAL:HA	1:F:174:THR:O	2.08	0.53
1:F:31:ASN:O	1:F:35:PHE:HD2	1.91	0.53
1:I:87:ARG:HD3	1:I:89:ASP:HB2	1.89	0.53
1:K:32:ASP:O	1:K:35:PHE:HB2	2.09	0.53
1:K:399:GLN:HA	1:K:402:ALA:HB3	1.89	0.53
1:A:335:SER:O	1:A:338:ALA:HB3	2.08	0.53
1:C:131:ASP:OD1	1:C:132:TYR:N	2.42	0.53
1:D:528:LYS:NZ	1:D:559:LEU:O	2.40	0.53
1:F:410:SER:O	1:F:414:GLU:HG2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:201:PHE:CD1	1:G:283:CYS:HB2	2.44	0.53
1:H:528:LYS:HZ3	1:H:560:LEU:HD23	1.74	0.53
1:L:124:GLY:HA3	1:L:303:VAL:HG22	1.91	0.53
1:L:131:ASP:OD1	1:L:132:TYR:N	2.42	0.53
1:L:221:GLU:HG2	1:L:280:ILE:HG12	1.90	0.53
1:C:162:SER:HA	1:C:169:ASP:OD1	2.09	0.53
1:C:230:GLU:OE2	1:C:249:ARG:HG2	2.09	0.53
1:C:536:LEU:HD23	1:C:539:LEU:HD12	1.91	0.53
1:F:273:ARG:NE	1:F:296:GLU:OE2	2.42	0.53
1:F:78:VAL:HG22	1:F:520:VAL:HG12	1.90	0.53
1:H:363:TYR:HE1	1:H:372:TYR:HA	1.74	0.53
1:H:433:ASP:HA	1:H:436:ASN:HB3	1.91	0.53
1:J:27:ARG:HD3	1:J:313:LYS:HE3	1.89	0.53
1:B:15:PHE:HA	1:B:18:ASP:HB3	1.91	0.53
1:D:235:TYR:HE1	1:D:264:ILE:HA	1.74	0.53
1:H:309:PHE:HB3	1:H:312:ASP:HA	1.90	0.53
1:H:577:ILE:HG21	1:H:593:LEU:HD13	1.91	0.53
1:J:78:VAL:HG22	1:J:520:VAL:HG12	1.89	0.53
1:K:96:GLY:O	1:K:100:THR:OG1	2.13	0.53
1:A:536:LEU:HD23	1:A:539:LEU:HD12	1.91	0.53
1:B:515:GLU:N	1:B:515:GLU:OE1	2.42	0.53
1:D:230:GLU:OE2	1:D:249:ARG:HG2	2.09	0.53
1:F:538:LEU:O	1:F:542:THR:OG1	2.27	0.53
1:G:353:PRO:HA	1:H:373:LEU:HD23	1.91	0.53
1:I:80:TYR:HD1	1:I:518:THR:HA	1.74	0.53
1:I:272:LYS:O	1:J:134:ASP:HB2	2.09	0.53
1:L:168:SER:HA	1:L:297:HIS:NE2	2.24	0.53
1:C:350:PHE:HB2	1:C:390:ALA:HB3	1.91	0.52
1:E:162:SER:HA	1:E:169:ASP:OD1	2.09	0.52
1:F:83:LYS:HB2	1:F:515:GLU:HB3	1.91	0.52
1:F:528:LYS:NZ	1:F:559:LEU:O	2.42	0.52
1:G:536:LEU:HD23	1:G:539:LEU:HD12	1.91	0.52
1:H:618:GLY:O	1:H:621:GLU:HB2	2.09	0.52
1:I:201:PHE:CD1	1:I:283:CYS:HB2	2.44	0.52
1:J:382:GLY:N	1:J:383:ASP:HA	2.24	0.52
1:J:438:LEU:HD11	1:K:108:LYS:HD3	1.91	0.52
1:L:382:GLY:N	1:L:383:ASP:HA	2.24	0.52
1:C:299:PRO:HG2	1:C:300:ILE:HD12	1.90	0.52
1:G:399:GLN:HA	1:G:402:ALA:HB3	1.91	0.52
1:G:438:LEU:HD11	1:H:108:LYS:HD3	1.91	0.52
1:A:615:LEU:O	1:A:619:GLN:HG2	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:299:PRO:HG2	1:B:300:ILE:HD12	1.92	0.52
1:F:15:PHE:HA	1:F:18:ASP:HB3	1.91	0.52
1:I:101:ASP:OD2	1:I:144:ILE:HG12	2.09	0.52
1:J:335:SER:O	1:J:338:ALA:HB3	2.09	0.52
1:L:335:SER:O	1:L:338:ALA:HB3	2.09	0.52
1:A:108:LYS:HD3	1:L:438:LEU:HD11	1.91	0.52
1:A:363:TYR:HE1	1:A:372:TYR:HA	1.74	0.52
1:E:159:ASP:C	1:E:161:ASN:H	2.13	0.52
1:F:252:LYS:HD2	1:F:256:ASP:HB3	1.91	0.52
1:F:325:ASP:O	1:F:328:ARG:HG2	2.09	0.52
1:A:235:TYR:CE1	1:A:264:ILE:HA	2.44	0.52
1:A:618:GLY:O	1:A:621:GLU:HB2	2.09	0.52
1:D:201:PHE:CD1	1:D:283:CYS:HB2	2.45	0.52
1:K:353:PRO:O	1:K:356:ILE:HG22	2.09	0.52
1:A:628:GLN:O	1:A:632:LEU:HB2	2.10	0.52
1:A:663:SER:HA	1:A:666:ARG:NE	2.24	0.52
1:C:232:ALA:HB1	1:C:268:GLU:HA	1.90	0.52
1:C:161:ASN:HD21	1:D:183:GLY:HA3	1.73	0.52
1:D:276:VAL:HG22	1:D:296:GLU:HA	1.90	0.52
1:D:515:GLU:OE1	1:D:515:GLU:N	2.42	0.52
1:E:162:SER:HB2	1:E:170:ALA:HB2	1.90	0.52
1:E:433:ASP:HA	1:E:436:ASN:HB3	1.92	0.52
1:H:41:TRP:CH2	1:H:44:TRP:HB2	2.44	0.52
1:I:156:VAL:HA	1:I:174:THR:O	2.08	0.52
1:I:577:ILE:HG12	1:I:597:GLN:NE2	2.16	0.52
1:K:53:TYR:O	1:K:54:ARG:NH1	2.41	0.52
1:L:299:PRO:HG2	1:L:300:ILE:HD12	1.90	0.52
1:L:321:ARG:HA	1:L:324:LYS:HE2	1.91	0.52
1:L:615:LEU:O	1:L:619:GLN:HG2	2.10	0.52
1:B:159:ASP:C	1:B:161:ASN:H	2.13	0.52
1:H:156:VAL:HA	1:H:174:THR:O	2.09	0.52
1:K:433:ASP:O	1:K:436:ASN:HB3	2.10	0.52
1:L:353:PRO:O	1:L:356:ILE:HG22	2.09	0.52
1:L:363:TYR:HE1	1:L:372:TYR:HA	1.75	0.52
1:L:515:GLU:N	1:L:515:GLU:OE1	2.43	0.52
1:A:15:PHE:HA	1:A:18:ASP:HB3	1.92	0.52
1:A:429:GLN:HA	1:A:432:PHE:HD2	1.75	0.52
1:F:615:LEU:O	1:F:619:GLN:HG2	2.10	0.52
1:H:273:ARG:NE	1:H:296:GLU:OE2	2.43	0.52
1:H:536:LEU:HD23	1:H:539:LEU:HD12	1.92	0.52
1:J:168:SER:HA	1:J:297:HIS:NE2	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:377:THR:HA	1:J:383:ASP:OD2	2.10	0.52
1:L:536:LEU:HD23	1:L:539:LEU:HD12	1.90	0.52
1:A:338:ALA:O	1:A:342:ALA:N	2.41	0.52
1:A:78:VAL:HG22	1:A:520:VAL:HG12	1.92	0.52
1:B:127:ARG:HB3	1:B:147:GLU:HB2	1.91	0.52
1:D:124:GLY:HA3	1:D:303:VAL:HG22	1.92	0.52
1:D:615:LEU:O	1:D:619:GLN:HG2	2.10	0.52
1:D:78:VAL:HG22	1:D:520:VAL:HG12	1.92	0.52
1:E:429:GLN:HA	1:E:432:PHE:HD2	1.75	0.52
1:F:162:SER:HB2	1:F:170:ALA:HB2	1.92	0.52
1:H:299:PRO:HG2	1:H:300:ILE:HD12	1.91	0.52
1:H:78:VAL:HG22	1:H:520:VAL:HG12	1.91	0.52
1:I:193:LEU:HD21	1:I:288:LYS:NZ	2.25	0.52
1:J:80:TYR:HD1	1:J:518:THR:HA	1.74	0.52
1:L:127:ARG:HB3	1:L:147:GLU:HB2	1.90	0.52
1:D:127:ARG:HB3	1:D:147:GLU:HB2	1.92	0.52
1:D:577:ILE:HG21	1:D:593:LEU:HD13	1.91	0.52
1:E:382:GLY:N	1:E:383:ASP:HA	2.25	0.52
1:I:299:PRO:HG2	1:I:300:ILE:HD12	1.92	0.52
1:J:355:GLN:HG2	1:K:376:ARG:NH1	2.22	0.52
1:K:82:PRO:HB3	1:K:90:ALA:HB3	1.92	0.52
1:L:612:GLN:HA	1:L:615:LEU:CD1	2.39	0.52
1:A:27:ARG:HH11	1:A:313:LYS:HE3	1.74	0.51
1:B:101:ASP:OD2	1:B:144:ILE:HG12	2.10	0.51
1:B:152:ALA:HA	1:B:155:HIS:HB2	1.92	0.51
1:B:433:ASP:O	1:B:436:ASN:HB3	2.11	0.51
1:B:353:PRO:HA	1:C:373:LEU:HD23	1.91	0.51
1:D:303:VAL:HB	1:D:439:ASN:ND2	2.25	0.51
1:F:363:TYR:HE1	1:F:372:TYR:HA	1.75	0.51
1:F:382:GLY:N	1:F:383:ASP:HA	2.25	0.51
1:I:230:GLU:OE2	1:I:249:ARG:HG2	2.09	0.51
1:A:418:LEU:HD23	1:A:429:GLN:HB3	1.92	0.51
1:A:613:GLY:HA2	1:A:616:LEU:CD1	2.32	0.51
1:C:276:VAL:HG22	1:C:296:GLU:HA	1.92	0.51
1:C:303:VAL:HB	1:C:439:ASN:ND2	2.26	0.51
1:C:528:LYS:NZ	1:C:559:LEU:O	2.38	0.51
1:G:299:PRO:HG2	1:G:300:ILE:HD12	1.92	0.51
1:J:299:PRO:HG2	1:J:300:ILE:HD12	1.92	0.51
1:L:643:ASN:HA	1:L:646:ASN:ND2	2.24	0.51
1:A:348:LYS:HB2	1:B:372:TYR:CD2	2.46	0.51
1:D:321:ARG:HA	1:D:324:LYS:HE2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:32:ASP:O	1:D:35:PHE:HB2	2.10	0.51
1:D:353:PRO:HD3	1:E:374:LEU:O	2.10	0.51
1:C:646:ASN:HA	1:D:644:GLN:HG2	1.91	0.51
1:H:324:LYS:O	1:H:327:GLN:HB2	2.10	0.51
1:I:273:ARG:NE	1:I:296:GLU:OE2	2.43	0.51
1:K:127:ARG:HB3	1:K:147:GLU:HB2	1.91	0.51
1:L:32:ASP:O	1:L:35:PHE:HB2	2.11	0.51
1:C:151:SER:HB2	1:C:155:HIS:CE1	2.46	0.51
1:B:664:GLU:OE2	1:C:666:ARG:NH2	2.43	0.51
1:E:586:THR:CG2	1:E:590:GLN:HE22	2.24	0.51
1:B:131:ASP:OD1	1:B:132:TYR:N	2.44	0.51
1:B:281:ILE:HG12	1:B:287:LEU:H	1.74	0.51
1:C:106:THR:HG23	1:C:146:ARG:HE	1.75	0.51
1:C:252:LYS:HD2	1:C:256:ASP:HB3	1.91	0.51
1:E:613:GLY:HA2	1:E:616:LEU:CD1	2.39	0.51
1:G:131:ASP:OD1	1:G:132:TYR:N	2.44	0.51
1:H:417:THR:O	1:H:418:LEU:HD12	2.11	0.51
1:H:515:GLU:OE1	1:H:515:GLU:N	2.44	0.51
1:I:348:LYS:HB2	1:J:372:TYR:CD2	2.46	0.51
1:I:587:PRO:HD2	1:I:589:GLU:HG3	1.92	0.51
1:K:162:SER:HA	1:K:169:ASP:OD1	2.11	0.51
1:K:299:PRO:HG2	1:K:300:ILE:HD12	1.91	0.51
1:K:34:PHE:O	1:K:38:VAL:HG23	2.10	0.51
1:L:325:ASP:O	1:L:328:ARG:HG2	2.11	0.51
1:K:667:GLU:HG2	1:L:666:ARG:NH1	2.25	0.51
1:A:438:LEU:HD11	1:B:108:LYS:HD3	1.92	0.51
1:B:613:GLY:CA	1:B:616:LEU:HD13	2.33	0.51
1:F:27:ARG:HH11	1:F:313:LYS:HE3	1.76	0.51
1:F:433:ASP:O	1:F:436:ASN:HB3	2.11	0.51
1:G:363:TYR:HE1	1:G:372:TYR:HA	1.75	0.51
1:G:410:SER:O	1:G:414:GLU:HG2	2.11	0.51
1:H:32:ASP:O	1:H:35:PHE:HB2	2.11	0.51
1:A:325:ASP:O	1:A:328:ARG:HG2	2.11	0.51
1:D:131:ASP:OD1	1:D:132:TYR:N	2.43	0.51
1:D:299:PRO:HG2	1:D:300:ILE:HD12	1.93	0.51
1:E:433:ASP:O	1:E:436:ASN:HB3	2.10	0.51
1:F:335:SER:O	1:F:338:ALA:HB3	2.10	0.51
1:G:586:THR:CG2	1:G:590:GLN:HE22	2.24	0.51
1:I:382:GLY:N	1:I:383:ASP:HA	2.25	0.51
1:J:159:ASP:C	1:J:161:ASN:H	2.14	0.51
1:J:303:VAL:HB	1:J:439:ASN:ND2	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:220:ALA:CB	1:K:281:ILE:O	2.46	0.51
1:A:34:PHE:O	1:A:38:VAL:HG23	2.10	0.51
1:B:642:GLN:HA	1:B:645:LEU:HD12	1.92	0.51
1:D:161:ASN:ND2	1:E:183:GLY:HA3	2.25	0.51
1:F:101:ASP:OD2	1:F:144:ILE:HG12	2.11	0.51
1:F:653:ILE:HG12	1:G:648:ALA:HA	1.92	0.51
1:G:162:SER:HA	1:G:169:ASP:OD1	2.10	0.51
1:G:273:ARG:NE	1:G:296:GLU:OE2	2.44	0.51
1:H:101:ASP:OD2	1:H:144:ILE:HG12	2.11	0.51
1:H:34:PHE:O	1:H:38:VAL:HG23	2.11	0.51
1:J:325:ASP:O	1:J:328:ARG:HG2	2.10	0.51
1:J:429:GLN:HA	1:J:432:PHE:HD2	1.75	0.51
1:K:27:ARG:HD3	1:K:313:LYS:HE3	1.93	0.51
1:C:272:LYS:O	1:D:134:ASP:HB2	2.10	0.51
1:D:159:ASP:C	1:D:161:ASN:H	2.13	0.51
1:D:273:ARG:NE	1:D:296:GLU:OE2	2.44	0.51
1:D:335:SER:O	1:D:338:ALA:HB3	2.10	0.51
1:D:355:GLN:HG2	1:E:376:ARG:NH1	2.20	0.51
1:E:559:LEU:HB3	1:E:565:VAL:HB	1.92	0.51
1:G:382:GLY:N	1:G:383:ASP:HA	2.25	0.51
1:G:303:VAL:HB	1:G:439:ASN:ND2	2.26	0.51
1:H:223:TYR:CE1	1:H:278:LYS:HG3	2.46	0.51
1:J:156:VAL:HA	1:J:174:THR:O	2.10	0.51
1:L:577:ILE:HG21	1:L:593:LEU:HD13	1.92	0.51
1:A:434:THR:HG21	1:B:72:ARG:HG3	1.92	0.51
1:C:309:PHE:HB3	1:C:312:ASP:HA	1.93	0.51
1:E:307:TRP:HE1	1:E:314:GLU:HG2	1.75	0.51
1:G:577:ILE:HG21	1:G:593:LEU:HD13	1.91	0.51
1:H:162:SER:HA	1:H:169:ASP:OD1	2.11	0.51
1:H:363:TYR:OH	1:H:373:LEU:O	2.17	0.51
1:J:354:GLU:HG2	1:K:376:ARG:HD3	1.92	0.51
1:K:156:VAL:HA	1:K:174:THR:O	2.11	0.51
1:K:325:ASP:O	1:K:328:ARG:HG2	2.10	0.51
1:K:78:VAL:HG22	1:K:520:VAL:HG12	1.92	0.51
1:L:628:GLN:O	1:L:632:LEU:HB2	2.10	0.51
1:A:273:ARG:NE	1:A:296:GLU:OE2	2.44	0.50
1:B:24:GLU:OE1	1:B:24:GLU:N	2.44	0.50
1:B:273:ARG:NE	1:B:296:GLU:OE2	2.44	0.50
1:E:228:LYS:HB2	1:E:275:ARG:HB3	1.93	0.50
1:E:27:ARG:HD3	1:E:313:LYS:HE3	1.92	0.50
1:E:355:GLN:HA	1:E:375:ASN:HB3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:161:ASN:ND2	1:J:183:GLY:HA3	2.26	0.50
1:I:236:GLN:HB2	1:I:265:LYS:CD	2.41	0.50
1:I:350:PHE:CD1	1:J:372:TYR:HB3	2.46	0.50
1:I:417:THR:O	1:I:418:LEU:HD12	2.11	0.50
1:J:587:PRO:HD2	1:J:589:GLU:HG3	1.93	0.50
1:J:353:PRO:HD3	1:K:374:LEU:O	2.11	0.50
1:K:577:ILE:HG21	1:K:593:LEU:HD13	1.92	0.50
1:J:664:GLU:HG3	1:K:659:LEU:HD22	1.93	0.50
1:L:53:TYR:O	1:L:54:ARG:NH1	2.43	0.50
1:B:536:LEU:HD23	1:B:539:LEU:HD12	1.94	0.50
1:E:156:VAL:HA	1:E:174:THR:O	2.11	0.50
1:H:348:LYS:HB2	1:I:372:TYR:CD2	2.46	0.50
1:K:159:ASP:C	1:K:161:ASN:H	2.15	0.50
1:K:223:TYR:CE1	1:K:278:LYS:HG3	2.45	0.50
1:L:236:GLN:HB2	1:L:265:LYS:CD	2.40	0.50
1:A:655:ASN:ND2	1:L:657:MET:SD	2.85	0.50
1:B:162:SER:OG	1:B:164:LEU:O	2.30	0.50
1:B:349:PRO:HG3	1:B:391:TYR:CZ	2.47	0.50
1:D:382:GLY:N	1:D:383:ASP:HA	2.25	0.50
1:E:32:ASP:O	1:E:35:PHE:HB2	2.11	0.50
1:G:168:SER:HA	1:G:297:HIS:NE2	2.26	0.50
1:G:667:GLU:HG2	1:H:666:ARG:NH1	2.26	0.50
1:J:615:LEU:O	1:J:619:GLN:HG2	2.10	0.50
1:K:417:THR:O	1:K:418:LEU:HD12	2.12	0.50
1:A:101:ASP:OD2	1:A:144:ILE:HG12	2.11	0.50
1:B:382:GLY:N	1:B:383:ASP:HA	2.25	0.50
1:B:434:THR:HG21	1:C:72:ARG:HG3	1.91	0.50
1:B:663:SER:HA	1:B:666:ARG:NE	2.23	0.50
1:D:349:PRO:HG3	1:D:391:TYR:CZ	2.46	0.50
1:D:418:LEU:HD23	1:D:429:GLN:HB3	1.93	0.50
1:E:325:ASP:O	1:E:328:ARG:HG2	2.10	0.50
1:G:140:ASN:HB3	1:G:455:THR:OG1	2.11	0.50
1:H:131:ASP:OD1	1:H:132:TYR:N	2.44	0.50
1:J:559:LEU:HB3	1:J:565:VAL:HB	1.94	0.50
1:J:667:GLU:HG2	1:K:666:ARG:NH1	2.26	0.50
1:L:349:PRO:HG3	1:L:391:TYR:CZ	2.46	0.50
1:C:444:LEU:O	1:C:447:TYR:HB3	2.12	0.50
1:E:34:PHE:O	1:E:38:VAL:HG23	2.12	0.50
1:F:168:SER:HA	1:F:297:HIS:NE2	2.27	0.50
1:H:29:ALA:O	1:H:33:LEU:HB2	2.12	0.50
1:I:343:ARG:HH22	1:K:368:ASP:HA	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:581:VAL:HG22	1:K:567:MET:HB2	1.94	0.50
1:L:159:ASP:C	1:L:161:ASN:H	2.14	0.50
1:C:436:ASN:HA	1:C:439:ASN:ND2	2.27	0.50
1:C:586:THR:CG2	1:C:590:GLN:HE22	2.25	0.50
1:D:278:LYS:HE2	1:D:280:ILE:HD11	1.93	0.50
1:D:55:GLY:H	1:D:335:SER:HG	1.60	0.50
1:E:434:THR:HG21	1:F:72:ARG:HG3	1.94	0.50
1:F:204:PRO:HD3	1:F:218:GLN:HG2	1.94	0.50
1:H:230:GLU:OE2	1:H:249:ARG:HG2	2.11	0.50
1:I:321:ARG:HA	1:I:324:LYS:HE2	1.94	0.50
1:J:101:ASP:OD2	1:J:144:ILE:HG12	2.11	0.50
1:K:228:LYS:HB2	1:K:275:ARG:HB3	1.93	0.50
1:K:363:TYR:HE1	1:K:372:TYR:HA	1.76	0.50
1:K:62:PRO:HA	1:K:65:ARG:HH21	1.76	0.50
1:L:433:ASP:O	1:L:436:ASN:HB3	2.12	0.50
1:A:124:GLY:HA3	1:A:303:VAL:HG22	1.93	0.50
1:A:515:GLU:OE1	1:A:515:GLU:N	2.45	0.50
1:B:320:VAL:O	1:B:323:THR:OG1	2.18	0.50
1:B:338:ALA:O	1:B:342:ALA:N	2.43	0.50
1:B:272:LYS:O	1:C:134:ASP:HB2	2.12	0.50
1:C:273:ARG:NE	1:C:296:GLU:OE2	2.44	0.50
1:C:29:ALA:O	1:C:33:LEU:HB2	2.11	0.50
1:E:101:ASP:OD2	1:E:144:ILE:HG12	2.12	0.50
1:D:272:LYS:O	1:E:134:ASP:HB2	2.12	0.50
1:E:168:SER:HA	1:E:297:HIS:NE2	2.26	0.50
1:E:230:GLU:OE2	1:E:249:ARG:HG2	2.12	0.50
1:F:27:ARG:HD3	1:F:313:LYS:HE3	1.94	0.50
1:F:140:ASN:HB3	1:F:455:THR:OG1	2.12	0.50
1:I:131:ASP:OD1	1:I:132:TYR:N	2.44	0.50
1:J:236:GLN:HB2	1:J:265:LYS:CD	2.41	0.50
1:J:515:GLU:N	1:J:515:GLU:OE1	2.45	0.50
1:A:24:GLU:OE1	1:A:24:GLU:N	2.44	0.50
1:C:193:LEU:HD21	1:C:288:LYS:NZ	2.26	0.50
1:E:127:ARG:HB3	1:E:147:GLU:HB2	1.93	0.50
1:E:273:ARG:NE	1:E:296:GLU:OE2	2.44	0.50
1:G:24:GLU:OE1	1:G:24:GLU:N	2.45	0.50
1:H:377:THR:HA	1:H:383:ASP:OD2	2.12	0.50
1:I:127:ARG:HB3	1:I:147:GLU:HB2	1.94	0.50
1:J:131:ASP:OD1	1:J:132:TYR:N	2.45	0.50
1:K:24:GLU:N	1:K:24:GLU:OE1	2.45	0.50
1:A:120:GLU:HA	1:A:320:VAL:HB	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:162:SER:HA	1:B:169:ASP:OD1	2.12	0.50
1:B:438:LEU:HD11	1:C:108:LYS:HD3	1.94	0.50
1:B:528:LYS:HZ3	1:B:560:LEU:HD23	1.77	0.50
1:D:680:SER:O	1:D:683:ALA:HB3	2.11	0.50
1:I:235:TYR:HE1	1:I:264:ILE:HA	1.77	0.50
1:K:515:GLU:OE1	1:K:515:GLU:N	2.45	0.50
1:L:24:GLU:N	1:L:24:GLU:OE1	2.45	0.50
1:B:303:VAL:HB	1:B:439:ASN:ND2	2.27	0.49
1:C:417:THR:O	1:C:418:LEU:HD12	2.12	0.49
1:D:101:ASP:OD2	1:D:144:ILE:HG12	2.12	0.49
1:D:235:TYR:CE1	1:D:264:ILE:HA	2.47	0.49
1:E:363:TYR:CE1	1:E:372:TYR:HA	2.47	0.49
1:G:176:ILE:HD11	1:G:204:PRO:HB3	1.93	0.49
1:J:230:GLU:OE2	1:J:249:ARG:HG2	2.11	0.49
1:J:528:LYS:NZ	1:J:559:LEU:O	2.43	0.49
1:L:307:TRP:HE1	1:L:314:GLU:HG2	1.77	0.49
1:L:78:VAL:HG22	1:L:520:VAL:HG12	1.93	0.49
1:A:161:ASN:HD21	1:B:183:GLY:HA3	1.77	0.49
1:A:299:PRO:HG2	1:A:300:ILE:HD12	1.93	0.49
1:B:201:PHE:HD1	1:B:283:CYS:HB2	1.77	0.49
1:B:363:TYR:HE1	1:B:372:TYR:HA	1.77	0.49
1:F:127:ARG:HB3	1:F:147:GLU:HB2	1.94	0.49
1:F:45:LEU:HG	1:F:46:SER:H	1.76	0.49
1:E:664:GLU:HG3	1:F:659:LEU:HD22	1.92	0.49
1:F:161:ASN:HD21	1:G:183:GLY:HA3	1.78	0.49
1:G:248:LYS:HE3	1:G:252:LYS:HB2	1.93	0.49
1:F:348:LYS:HB2	1:G:372:TYR:CD2	2.48	0.49
1:H:220:ALA:CB	1:H:281:ILE:O	2.48	0.49
1:I:663:SER:O	1:I:666:ARG:HG3	2.12	0.49
1:J:348:LYS:HB2	1:K:372:TYR:CD2	2.46	0.49
1:A:168:SER:HA	1:A:297:HIS:NE2	2.26	0.49
1:A:236:GLN:HG2	1:A:244:VAL:H	1.76	0.49
1:C:657:MET:SD	1:D:655:ASN:ND2	2.85	0.49
1:D:338:ALA:O	1:D:342:ALA:N	2.45	0.49
1:D:536:LEU:HD23	1:D:539:LEU:HD12	1.94	0.49
1:D:53:TYR:O	1:D:54:ARG:NH1	2.43	0.49
1:D:576:LEU:O	1:D:581:VAL:HG12	2.12	0.49
1:F:223:TYR:HE1	1:F:278:LYS:HG3	1.78	0.49
1:F:34:PHE:O	1:F:38:VAL:HG23	2.13	0.49
1:G:162:SER:OG	1:G:164:LEU:O	2.31	0.49
1:G:589:GLU:O	1:G:593:LEU:HB2	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:338:ALA:O	1:I:342:ALA:N	2.45	0.49
1:I:80:TYR:CD1	1:I:444:LEU:HD21	2.47	0.49
1:J:350:PHE:HB2	1:J:390:ALA:HB3	1.94	0.49
1:K:106:THR:HG23	1:K:146:ARG:HE	1.77	0.49
1:K:622:LEU:O	1:K:626:GLN:HG3	2.11	0.49
1:L:228:LYS:HB2	1:L:275:ARG:HB3	1.94	0.49
1:A:159:ASP:C	1:A:161:ASN:H	2.14	0.49
1:B:78:VAL:HA	1:B:520:VAL:HA	1.92	0.49
1:D:433:ASP:O	1:D:436:ASN:HB3	2.13	0.49
1:E:348:LYS:HB2	1:F:372:TYR:CD2	2.47	0.49
1:F:528:LYS:HZ3	1:F:560:LEU:HD23	1.78	0.49
1:G:236:GLN:HB2	1:G:265:LYS:CD	2.43	0.49
1:H:15:PHE:HA	1:H:18:ASP:HB3	1.94	0.49
1:H:354:GLU:HG2	1:I:376:ARG:HD3	1.93	0.49
1:I:433:ASP:HA	1:I:436:ASN:HB3	1.93	0.49
1:J:176:ILE:HD11	1:J:204:PRO:HB3	1.94	0.49
1:K:586:THR:CG2	1:K:590:GLN:HE22	2.24	0.49
1:L:417:THR:O	1:L:418:LEU:HD12	2.12	0.49
1:A:32:ASP:O	1:A:35:PHE:HB2	2.12	0.49
1:C:337:ASN:HA	1:C:340:ILE:HD12	1.95	0.49
1:C:353:PRO:O	1:C:356:ILE:HG22	2.11	0.49
1:B:348:LYS:HB2	1:C:372:TYR:CD2	2.48	0.49
1:F:426:ASN:O	1:F:429:GLN:NE2	2.44	0.49
1:F:352:TRP:CB	1:G:376:ARG:HD2	2.39	0.49
1:G:528:LYS:NZ	1:G:559:LEU:O	2.42	0.49
1:H:201:PHE:HD1	1:H:283:CYS:HB2	1.77	0.49
1:L:101:ASP:OD2	1:L:144:ILE:HG12	2.12	0.49
1:K:348:LYS:HB2	1:L:372:TYR:CD2	2.48	0.49
1:L:363:TYR:OH	1:L:373:LEU:O	2.18	0.49
1:A:223:TYR:CE1	1:A:278:LYS:HG3	2.48	0.49
1:B:124:GLY:HA3	1:B:303:VAL:HG22	1.94	0.49
1:C:124:GLY:HA3	1:C:303:VAL:HG22	1.94	0.49
1:F:159:ASP:C	1:F:161:ASN:H	2.14	0.49
1:F:248:LYS:HE3	1:F:252:LYS:HB2	1.94	0.49
1:F:377:THR:HA	1:F:383:ASP:OD2	2.13	0.49
1:G:101:ASP:OD2	1:G:144:ILE:HG12	2.13	0.49
1:G:161:ASN:HD21	1:H:183:GLY:HA3	1.77	0.49
1:H:525:GLN:HB2	1:H:529:GLN:OE1	2.13	0.49
1:L:223:TYR:CE1	1:L:278:LYS:HG3	2.47	0.49
1:A:236:GLN:HB2	1:A:265:LYS:CD	2.43	0.49
1:A:80:TYR:CD1	1:A:444:LEU:HD21	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:613:GLY:CA	1:C:616:LEU:HD13	2.43	0.49
1:C:82:PRO:HB3	1:C:90:ALA:HB3	1.94	0.49
1:E:24:GLU:OE1	1:E:24:GLU:N	2.45	0.49
1:E:587:PRO:HD2	1:E:589:GLU:HG3	1.94	0.49
1:E:663:SER:HA	1:E:666:ARG:NE	2.23	0.49
1:F:613:GLY:O	1:F:616:LEU:HD13	2.13	0.49
1:G:151:SER:HB2	1:G:155:HIS:CE1	2.48	0.49
1:G:514:TYR:HB2	1:H:136:SER:OG	2.13	0.49
1:I:515:GLU:OE1	1:I:515:GLU:N	2.46	0.49
1:I:78:VAL:HG22	1:I:520:VAL:HG12	1.95	0.49
1:A:350:PHE:HB2	1:A:390:ALA:HB3	1.94	0.49
1:A:639:VAL:O	1:A:642:GLN:HG2	2.12	0.49
1:D:354:GLU:HG2	1:E:376:ARG:HD3	1.94	0.49
1:E:639:VAL:O	1:E:642:GLN:HG2	2.13	0.49
1:F:114:ALA:O	1:F:118:GLN:HB2	2.13	0.49
1:G:377:THR:HA	1:G:383:ASP:OD2	2.11	0.49
1:H:228:LYS:HB2	1:H:275:ARG:HB3	1.95	0.49
1:H:382:GLY:N	1:H:383:ASP:HA	2.27	0.49
1:H:590:GLN:HA	1:H:594:VAL:HB	1.94	0.49
1:J:24:GLU:N	1:J:24:GLU:OE1	2.46	0.49
1:L:124:GLY:CA	1:L:303:VAL:HG22	2.43	0.49
1:B:325:ASP:O	1:B:328:ARG:HG2	2.12	0.49
1:C:55:GLY:N	1:C:335:SER:OG	2.43	0.49
1:C:32:ASP:O	1:C:35:PHE:HB2	2.12	0.49
1:D:24:GLU:N	1:D:24:GLU:OE1	2.45	0.49
1:E:642:GLN:HA	1:E:645:LEU:HD12	1.94	0.49
1:E:646:ASN:HA	1:F:644:GLN:HG2	1.95	0.49
1:J:417:THR:O	1:J:418:LEU:HD12	2.12	0.49
1:J:628:GLN:O	1:J:632:LEU:HB2	2.13	0.49
1:K:236:GLN:HB2	1:K:265:LYS:CD	2.43	0.49
1:K:382:GLY:N	1:K:383:ASP:HA	2.25	0.49
1:C:152:ALA:HA	1:C:155:HIS:HB2	1.94	0.49
1:C:220:ALA:CB	1:C:281:ILE:O	2.48	0.49
1:D:363:TYR:HE1	1:D:372:TYR:HA	1.77	0.49
1:D:417:THR:O	1:D:418:LEU:HD12	2.13	0.49
1:F:223:TYR:CE1	1:F:278:LYS:HG3	2.47	0.49
1:F:230:GLU:OE2	1:F:249:ARG:HG2	2.12	0.49
1:F:434:THR:HG21	1:G:72:ARG:HG3	1.95	0.49
1:G:41:TRP:CH2	1:G:44:TRP:HB2	2.48	0.49
1:I:168:SER:HA	1:I:297:HIS:NE2	2.27	0.49
1:I:337:ASN:HA	1:I:340:ILE:HD12	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:303:VAL:HG12	1:J:439:ASN:HB3	1.95	0.49
1:K:176:ILE:HD11	1:K:204:PRO:HB3	1.95	0.49
1:K:335:SER:O	1:K:338:ALA:HB3	2.13	0.49
1:L:613:GLY:O	1:L:616:LEU:CD1	2.61	0.49
1:B:32:ASP:O	1:B:35:PHE:HB2	2.12	0.48
1:C:639:VAL:O	1:C:642:GLN:HG2	2.13	0.48
1:D:249:ARG:HG3	1:D:250:ASP:N	2.28	0.48
1:E:152:ALA:HA	1:E:155:HIS:HB2	1.94	0.48
1:E:281:ILE:HG12	1:E:287:LEU:H	1.78	0.48
1:F:639:VAL:O	1:F:642:GLN:HG2	2.13	0.48
1:H:151:SER:HB2	1:H:155:HIS:CE1	2.48	0.48
1:H:159:ASP:C	1:H:161:ASN:H	2.17	0.48
1:H:511:ARG:HD3	1:H:513:ARG:HH22	1.78	0.48
1:I:162:SER:HB2	1:I:170:ALA:HB2	1.95	0.48
1:I:613:GLY:CA	1:I:616:LEU:HD12	2.41	0.48
1:J:433:ASP:O	1:J:436:ASN:HB3	2.13	0.48
1:A:75:PRO:HD2	1:A:523:SER:HB3	1.94	0.48
1:B:576:LEU:O	1:B:581:VAL:HG12	2.13	0.48
1:A:621:GLU:OE2	1:B:616:LEU:HB3	2.14	0.48
1:E:131:ASP:OD1	1:E:132:TYR:N	2.46	0.48
1:G:32:ASP:O	1:G:35:PHE:HB2	2.13	0.48
1:H:433:ASP:O	1:H:436:ASN:HB3	2.12	0.48
1:I:159:ASP:C	1:I:161:ASN:H	2.16	0.48
1:J:324:LYS:O	1:J:327:GLN:HB2	2.13	0.48
1:K:140:ASN:HB3	1:K:455:THR:OG1	2.13	0.48
1:A:106:THR:HG23	1:A:146:ARG:HE	1.78	0.48
1:A:230:GLU:OE2	1:A:249:ARG:HG2	2.12	0.48
1:A:417:THR:O	1:A:418:LEU:HD12	2.12	0.48
1:A:37:ARG:NH1	1:A:48:TYR:OH	2.42	0.48
1:A:525:GLN:HB2	1:A:529:GLN:OE1	2.13	0.48
1:A:528:LYS:NZ	1:A:559:LEU:O	2.44	0.48
1:A:576:LEU:O	1:A:581:VAL:HG12	2.13	0.48
1:B:168:SER:HA	1:B:297:HIS:NE2	2.29	0.48
1:C:24:GLU:OE1	1:C:24:GLU:N	2.46	0.48
1:E:235:TYR:HE1	1:E:264:ILE:HA	1.78	0.48
1:E:303:VAL:HB	1:E:439:ASN:ND2	2.28	0.48
1:F:399:GLN:HA	1:F:402:ALA:HB3	1.95	0.48
1:F:591:GLN:HA	1:F:595:GLU:CD	2.33	0.48
1:H:99:ARG:NH2	1:H:525:GLN:HA	2.28	0.48
1:H:356:ILE:HG21	1:I:373:LEU:HD21	1.95	0.48
1:I:75:PRO:HD2	1:I:523:SER:HB3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:349:PRO:HG3	1:K:391:TYR:CZ	2.48	0.48
1:K:377:THR:HA	1:K:383:ASP:OD2	2.14	0.48
1:L:444:LEU:O	1:L:447:TYR:HB3	2.13	0.48
1:L:576:LEU:O	1:L:581:VAL:HG12	2.12	0.48
1:B:438:LEU:O	1:B:442:ALA:N	2.38	0.48
1:C:201:PHE:HD1	1:C:283:CYS:HB2	1.77	0.48
1:D:162:SER:OG	1:D:164:LEU:O	2.31	0.48
1:D:281:ILE:HG12	1:D:287:LEU:H	1.78	0.48
1:E:235:TYR:CE1	1:E:264:ILE:HA	2.48	0.48
1:E:248:LYS:HE3	1:E:252:LYS:HB2	1.95	0.48
1:E:377:THR:HA	1:E:383:ASP:OD2	2.13	0.48
1:E:45:LEU:HG	1:E:46:SER:H	1.79	0.48
1:F:131:ASP:OD1	1:F:132:TYR:N	2.45	0.48
1:F:24:GLU:OE1	1:F:24:GLU:N	2.47	0.48
1:J:536:LEU:HD23	1:J:539:LEU:HD12	1.93	0.48
1:J:586:THR:CG2	1:J:590:GLN:HE22	2.26	0.48
1:K:587:PRO:HD2	1:K:589:GLU:HG3	1.95	0.48
1:K:581:VAL:HG22	1:L:567:MET:HB2	1.94	0.48
1:B:528:LYS:NZ	1:B:559:LEU:O	2.43	0.48
1:B:581:VAL:HG22	1:C:567:MET:HB2	1.96	0.48
1:B:354:GLU:HG2	1:C:376:ARG:HD3	1.95	0.48
1:D:140:ASN:HB3	1:D:455:THR:OG1	2.14	0.48
1:D:613:GLY:HA2	1:D:616:LEU:HD12	1.96	0.48
1:C:664:GLU:OE2	1:D:666:ARG:NH2	2.46	0.48
1:D:75:PRO:HD2	1:D:523:SER:HB3	1.95	0.48
1:E:220:ALA:CB	1:E:281:ILE:O	2.46	0.48
1:E:438:LEU:O	1:E:442:ALA:N	2.40	0.48
1:F:162:SER:HA	1:F:169:ASP:OD1	2.13	0.48
1:F:444:LEU:O	1:F:447:TYR:HB3	2.13	0.48
1:G:80:TYR:CD1	1:G:444:LEU:HD21	2.49	0.48
1:G:78:VAL:HG22	1:G:520:VAL:HG12	1.96	0.48
1:I:586:THR:CG2	1:I:590:GLN:HE22	2.25	0.48
1:J:82:PRO:HB3	1:J:90:ALA:HB3	1.96	0.48
1:L:106:THR:HG23	1:L:146:ARG:HE	1.79	0.48
1:L:586:THR:CG2	1:L:590:GLN:HE22	2.26	0.48
1:L:593:LEU:O	1:L:597:GLN:HG3	2.12	0.48
1:A:306:GLU:OE2	1:B:61:ARG:NE	2.46	0.48
1:A:350:PHE:CD1	1:B:372:TYR:HB3	2.48	0.48
1:A:45:LEU:HG	1:A:46:SER:H	1.77	0.48
1:C:159:ASP:C	1:C:161:ASN:H	2.16	0.48
1:F:641:ALA:HA	1:F:644:GLN:OE1	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:272:LYS:O	1:G:134:ASP:HB2	2.13	0.48
1:G:433:ASP:O	1:G:436:ASN:HB3	2.14	0.48
1:I:353:PRO:HA	1:J:373:LEU:HD23	1.94	0.48
1:A:403:TYR:OH	1:B:397:VAL:HG11	2.14	0.48
1:B:641:ALA:HA	1:B:644:GLN:OE1	2.14	0.48
1:D:124:GLY:CA	1:D:303:VAL:HG22	2.43	0.48
1:F:515:GLU:N	1:F:515:GLU:OE1	2.46	0.48
1:G:230:GLU:OE2	1:G:249:ARG:HG2	2.14	0.48
1:G:660:SER:O	1:G:663:SER:OG	2.24	0.48
1:G:663:SER:O	1:G:666:ARG:HG3	2.14	0.48
1:J:161:ASN:ND2	1:K:183:GLY:HA3	2.25	0.48
1:K:528:LYS:HZ3	1:K:560:LEU:HD23	1.76	0.48
1:A:641:ALA:HA	1:A:644:GLN:OE1	2.13	0.48
1:C:223:TYR:CE1	1:C:278:LYS:HG3	2.49	0.48
1:C:349:PRO:HG3	1:C:391:TYR:CZ	2.49	0.48
1:E:201:PHE:HD1	1:E:283:CYS:HB2	1.78	0.48
1:E:417:THR:O	1:E:418:LEU:HD12	2.14	0.48
1:E:80:TYR:CD1	1:E:444:LEU:HD21	2.49	0.48
1:F:32:ASP:O	1:F:35:PHE:HB2	2.14	0.48
1:G:37:ARG:NH1	1:G:48:TYR:OH	2.38	0.48
1:H:162:SER:OG	1:H:164:LEU:O	2.31	0.48
1:I:24:GLU:OE1	1:I:24:GLU:N	2.47	0.48
1:K:21:ALA:HA	1:K:159:ASP:OD2	2.14	0.48
1:L:99:ARG:NE	1:L:525:GLN:O	2.46	0.48
1:A:220:ALA:CB	1:A:281:ILE:O	2.48	0.48
1:C:21:ALA:HA	1:C:159:ASP:OD2	2.14	0.48
1:C:363:TYR:HE1	1:C:372:TYR:HA	1.79	0.48
1:D:223:TYR:CE1	1:D:278:LYS:HG3	2.48	0.48
1:F:628:GLN:O	1:F:632:LEU:HB2	2.14	0.48
1:G:664:GLU:HG3	1:H:659:LEU:HD22	1.94	0.48
1:J:228:LYS:HB2	1:J:275:ARG:HB3	1.95	0.48
1:K:235:TYR:HE1	1:K:264:ILE:HA	1.78	0.48
1:K:576:LEU:O	1:K:581:VAL:HG12	2.14	0.48
1:L:587:PRO:HD2	1:L:589:GLU:HG3	1.95	0.48
1:A:151:SER:HB2	1:A:155:HIS:CE1	2.48	0.48
1:A:162:SER:HB2	1:A:170:ALA:HB2	1.96	0.48
1:B:444:LEU:O	1:B:448:VAL:HG23	2.14	0.48
1:B:80:TYR:CZ	1:B:516:CYS:HB2	2.49	0.48
1:B:587:PRO:HD2	1:B:589:GLU:HG3	1.95	0.48
1:C:433:ASP:O	1:C:436:ASN:HB3	2.13	0.48
1:C:515:GLU:N	1:C:515:GLU:OE1	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:35:PHE:CZ	1:E:321:ARG:HB2	2.49	0.48
1:E:577:ILE:HG21	1:E:593:LEU:HD13	1.95	0.48
1:E:641:ALA:HA	1:E:644:GLN:OE1	2.14	0.48
1:F:303:VAL:HB	1:F:439:ASN:ND2	2.29	0.48
1:F:82:PRO:HB3	1:F:90:ALA:HB3	1.96	0.48
1:H:193:LEU:HD21	1:H:288:LYS:NZ	2.29	0.48
1:I:325:ASP:O	1:I:328:ARG:HG2	2.14	0.48
1:I:576:LEU:O	1:I:581:VAL:HG12	2.14	0.48
1:J:124:GLY:HA3	1:J:303:VAL:HG22	1.96	0.48
1:J:444:LEU:O	1:J:448:VAL:HG23	2.13	0.48
1:K:303:VAL:HB	1:K:439:ASN:ND2	2.28	0.48
1:A:131:ASP:OD1	1:A:132:TYR:N	2.46	0.47
1:A:278:LYS:HE2	1:A:280:ILE:HD11	1.96	0.47
1:A:577:ILE:HG21	1:A:593:LEU:HD13	1.94	0.47
1:B:321:ARG:HA	1:B:324:LYS:HE2	1.95	0.47
1:E:165:MET:HB3	1:E:304:PHE:CG	2.48	0.47
1:G:82:PRO:HB3	1:G:90:ALA:HB3	1.94	0.47
1:H:441:ARG:NH2	1:H:519:ASP:OD1	2.47	0.47
1:H:87:ARG:HD3	1:H:89:ASP:HB2	1.96	0.47
1:I:162:SER:OG	1:I:164:LEU:O	2.32	0.47
1:I:350:PHE:HB2	1:I:390:ALA:HB3	1.95	0.47
1:L:105:ASN:O	1:L:109:ILE:HG12	2.14	0.47
1:L:152:ALA:HA	1:L:155:HIS:HB2	1.95	0.47
1:L:662:GLN:HA	1:L:665:PHE:CD2	2.49	0.47
1:A:382:GLY:N	1:A:383:ASP:HA	2.27	0.47
1:C:27:ARG:HD3	1:C:313:LYS:HE3	1.97	0.47
1:C:532:ARG:HH22	1:C:560:LEU:HD11	1.78	0.47
1:C:514:TYR:HB2	1:D:136:SER:OG	2.14	0.47
1:D:639:VAL:O	1:D:642:GLN:HG2	2.13	0.47
1:E:590:GLN:HA	1:E:594:VAL:HB	1.96	0.47
1:F:587:PRO:HD2	1:F:589:GLU:HG3	1.96	0.47
1:G:417:THR:O	1:G:418:LEU:HD12	2.14	0.47
1:G:444:LEU:O	1:G:447:TYR:HB3	2.15	0.47
1:G:444:LEU:O	1:G:448:VAL:HG23	2.14	0.47
1:I:27:ARG:HD3	1:I:313:LYS:HE3	1.96	0.47
1:J:591:GLN:HA	1:J:595:GLU:CD	2.35	0.47
1:K:15:PHE:HA	1:K:18:ASP:HB3	1.95	0.47
1:B:105:ASN:O	1:B:109:ILE:HG12	2.15	0.47
1:B:228:LYS:HB2	1:B:275:ARG:HB3	1.96	0.47
1:B:27:ARG:HA	1:B:30:LYS:HE2	1.97	0.47
1:B:664:GLU:HG3	1:C:659:LEU:HD22	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:140:ASN:HB3	1:E:455:THR:OG1	2.14	0.47
1:F:249:ARG:HG3	1:F:250:ASP:N	2.29	0.47
1:F:649:ARG:O	1:F:653:ILE:HG13	2.14	0.47
1:G:303:VAL:HG12	1:G:439:ASN:HB3	1.96	0.47
1:G:614:VAL:HG21	1:H:609:VAL:CG1	2.44	0.47
1:I:664:GLU:OE2	1:J:666:ARG:NH2	2.47	0.47
1:K:639:VAL:O	1:K:642:GLN:HG2	2.15	0.47
1:L:164:LEU:HD11	1:L:168:SER:H	1.79	0.47
1:L:203:ASN:OD1	1:L:205:ASN:N	2.34	0.47
1:L:338:ALA:O	1:L:342:ALA:N	2.45	0.47
1:A:136:SER:OG	1:L:514:TYR:HB2	2.14	0.47
1:A:324:LYS:O	1:A:327:GLN:HB2	2.14	0.47
1:B:230:GLU:OE2	1:B:249:ARG:HG2	2.14	0.47
1:B:29:ALA:O	1:B:33:LEU:HB2	2.13	0.47
1:B:80:TYR:CD1	1:B:444:LEU:HD21	2.49	0.47
1:D:105:ASN:O	1:D:109:ILE:HG12	2.14	0.47
1:E:380:ASN:OD1	1:E:381:SER:N	2.47	0.47
1:F:538:LEU:HB3	1:F:551:LEU:HD11	1.95	0.47
1:G:47:GLN:HB2	1:G:50:THR:CG2	2.43	0.47
1:H:303:VAL:HB	1:H:439:ASN:ND2	2.28	0.47
1:H:53:TYR:CG	1:H:54:ARG:N	2.83	0.47
1:I:223:TYR:CE1	1:I:278:LYS:HG3	2.50	0.47
1:J:380:ASN:OD1	1:J:381:SER:N	2.47	0.47
1:I:696:GLN:HE22	1:J:698:HIS:CE1	2.32	0.47
1:K:80:TYR:CZ	1:K:516:CYS:HB2	2.50	0.47
1:L:528:LYS:HZ3	1:L:560:LEU:HD23	1.79	0.47
1:C:165:MET:HB3	1:C:304:PHE:CG	2.49	0.47
1:E:663:SER:O	1:E:666:ARG:HG3	2.14	0.47
1:F:80:TYR:CZ	1:F:516:CYS:HB2	2.49	0.47
1:F:576:LEU:O	1:F:581:VAL:HG12	2.14	0.47
1:G:124:GLY:HA3	1:G:303:VAL:HG22	1.96	0.47
1:G:418:LEU:HD23	1:G:429:GLN:HB3	1.95	0.47
1:G:587:PRO:HD2	1:G:589:GLU:HG3	1.97	0.47
1:F:306:GLU:OE2	1:G:61:ARG:NE	2.48	0.47
1:H:176:ILE:HD11	1:H:204:PRO:HB3	1.96	0.47
1:H:124:GLY:HA3	1:H:303:VAL:HG22	1.95	0.47
1:H:353:PRO:HD3	1:I:374:LEU:O	2.14	0.47
1:J:641:ALA:HA	1:J:644:GLN:OE1	2.15	0.47
1:J:701:ARG:HA	1:J:704:ILE:HD12	1.97	0.47
1:K:303:VAL:HG12	1:K:439:ASN:HB3	1.95	0.47
1:J:657:MET:SD	1:K:655:ASN:ND2	2.88	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:223:TYR:HE1	1:L:278:LYS:HG3	1.79	0.47
1:A:124:GLY:CA	1:A:303:VAL:HG22	2.45	0.47
1:A:176:ILE:HD11	1:A:204:PRO:HB3	1.95	0.47
1:B:161:ASN:HD21	1:C:183:GLY:HA3	1.79	0.47
1:B:646:ASN:HA	1:C:644:GLN:HG2	1.97	0.47
1:D:377:THR:HA	1:D:383:ASP:OD2	2.14	0.47
1:F:417:THR:O	1:F:418:LEU:HD12	2.14	0.47
1:F:661:LYS:HE3	1:F:665:PHE:CZ	2.50	0.47
1:G:159:ASP:C	1:G:161:ASN:H	2.16	0.47
1:J:201:PHE:HD1	1:J:283:CYS:HB2	1.79	0.47
1:J:350:PHE:N	1:J:390:ALA:O	2.36	0.47
1:K:444:LEU:O	1:K:447:TYR:HB3	2.15	0.47
1:L:235:TYR:CE1	1:L:264:ILE:HA	2.50	0.47
1:A:193:LEU:HD21	1:A:288:LYS:HZ3	1.78	0.47
1:A:53:TYR:CG	1:A:54:ARG:N	2.83	0.47
1:A:586:THR:CG2	1:A:590:GLN:HE22	2.26	0.47
1:B:417:THR:O	1:B:418:LEU:HD12	2.14	0.47
1:B:649:ARG:O	1:B:653:ILE:HG13	2.14	0.47
1:C:387:GLN:HG3	1:C:387:GLN:O	2.14	0.47
1:D:252:LYS:HD2	1:D:256:ASP:HB3	1.96	0.47
1:G:171:ARG:NH1	1:H:186:ASP:OD2	2.48	0.47
1:I:426:ASN:O	1:I:429:GLN:NE2	2.48	0.47
1:L:21:ALA:HA	1:L:159:ASP:OD2	2.14	0.47
1:A:661:LYS:HE3	1:A:665:PHE:CZ	2.49	0.47
1:B:350:PHE:HB2	1:B:390:ALA:HB3	1.97	0.47
1:B:45:LEU:HG	1:B:46:SER:H	1.80	0.47
1:B:248:LYS:HG2	1:B:511:ARG:HH21	1.80	0.47
1:B:663:SER:O	1:B:666:ARG:HG3	2.15	0.47
1:D:303:VAL:HG12	1:D:439:ASN:HB3	1.96	0.47
1:H:528:LYS:NZ	1:H:559:LEU:O	2.45	0.47
1:H:576:LEU:O	1:H:581:VAL:HG12	2.15	0.47
1:H:646:ASN:OD1	1:H:647:ALA:N	2.48	0.47
1:I:228:LYS:HB2	1:I:275:ARG:HB3	1.96	0.47
1:I:201:PHE:HD1	1:I:283:CYS:HB2	1.79	0.47
1:J:114:ALA:O	1:J:118:GLN:HB2	2.14	0.47
1:J:621:GLU:OE2	1:K:616:LEU:HB3	2.15	0.47
1:K:131:ASP:OD1	1:K:132:TYR:N	2.48	0.47
1:K:80:TYR:CD1	1:K:444:LEU:HD21	2.49	0.47
1:K:80:TYR:HD1	1:K:518:THR:HA	1.78	0.47
1:L:201:PHE:HD1	1:L:283:CYS:HB2	1.80	0.47
1:L:320:VAL:O	1:L:323:THR:OG1	2.18	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:646:ASN:HA	1:L:644:GLN:HG2	1.97	0.47
1:A:444:LEU:HD23	1:A:518:THR:HB	1.97	0.47
1:C:249:ARG:HG3	1:C:250:ASP:N	2.30	0.47
1:C:641:ALA:HA	1:C:644:GLN:OE1	2.14	0.47
1:B:657:MET:SD	1:C:655:ASN:ND2	2.88	0.47
1:D:613:GLY:O	1:D:616:LEU:CD1	2.63	0.47
1:E:528:LYS:HZ3	1:E:560:LEU:HD23	1.79	0.47
1:E:536:LEU:HD23	1:E:539:LEU:HD12	1.95	0.47
1:E:538:LEU:HB3	1:E:551:LEU:HD11	1.97	0.47
1:E:576:LEU:O	1:E:581:VAL:HG12	2.15	0.47
1:F:151:SER:HB2	1:F:155:HIS:CE1	2.50	0.47
1:F:162:SER:OG	1:F:164:LEU:O	2.33	0.47
1:I:444:LEU:O	1:I:447:TYR:HB3	2.15	0.47
1:I:641:ALA:HA	1:I:644:GLN:OE1	2.15	0.47
1:K:663:SER:O	1:K:666:ARG:HG3	2.14	0.47
1:A:134:ASP:HB2	1:L:272:LYS:O	2.14	0.47
1:A:444:LEU:O	1:A:448:VAL:HG23	2.14	0.47
1:C:117:GLU:HB3	1:C:123:VAL:HG23	1.97	0.47
1:C:325:ASP:O	1:C:328:ARG:HG2	2.15	0.47
1:D:80:TYR:CD1	1:D:444:LEU:HD21	2.49	0.47
1:E:124:GLY:HA3	1:E:303:VAL:HG22	1.96	0.47
1:E:695:GLU:HA	1:E:698:HIS:ND1	2.30	0.47
1:F:238:PRO:HB3	1:F:263:PHE:CD1	2.50	0.47
1:H:238:PRO:HB3	1:H:263:PHE:CD1	2.49	0.47
1:H:80:TYR:CD1	1:H:444:LEU:HD21	2.50	0.47
1:I:377:THR:HA	1:I:383:ASP:OD2	2.14	0.47
1:J:363:TYR:CE1	1:J:372:TYR:HA	2.49	0.47
1:L:387:GLN:O	1:L:387:GLN:HG3	2.15	0.47
1:C:333:ILE:HG22	1:C:337:ASN:OD1	2.15	0.47
1:C:78:VAL:HG22	1:C:520:VAL:HG12	1.97	0.47
1:D:82:PRO:HB3	1:D:90:ALA:HB3	1.97	0.47
1:F:590:GLN:HA	1:F:594:VAL:HB	1.96	0.47
1:G:27:ARG:HH11	1:G:313:LYS:HE3	1.80	0.47
1:G:380:ASN:OD1	1:G:381:SER:N	2.48	0.47
1:G:434:THR:HG21	1:H:72:ARG:HG3	1.96	0.47
1:H:105:ASN:O	1:H:109:ILE:HG12	2.15	0.47
1:H:223:TYR:HE1	1:H:278:LYS:HG3	1.80	0.47
1:H:27:ARG:HD3	1:H:313:LYS:HE3	1.96	0.47
1:H:587:PRO:HD2	1:H:589:GLU:HG3	1.97	0.47
1:I:403:TYR:OH	1:J:397:VAL:HG11	2.15	0.47
1:A:444:LEU:O	1:A:447:TYR:HB3	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:356:ILE:HG21	1:C:373:LEU:HD21	1.97	0.46
1:C:21:ALA:HB2	1:C:172:HIS:CD2	2.50	0.46
1:C:663:SER:HA	1:C:666:ARG:NE	2.25	0.46
1:D:162:SER:HA	1:D:169:ASP:OD1	2.15	0.46
1:E:164:LEU:HD11	1:E:168:SER:H	1.79	0.46
1:E:15:PHE:HA	1:E:18:ASP:HB3	1.97	0.46
1:F:105:ASN:O	1:F:109:ILE:HG12	2.15	0.46
1:F:303:VAL:HG12	1:F:439:ASN:HB3	1.98	0.46
1:G:281:ILE:HG12	1:G:287:LEU:H	1.80	0.46
1:F:353:PRO:HD3	1:G:374:LEU:O	2.14	0.46
1:H:117:GLU:HB3	1:H:123:VAL:HG23	1.96	0.46
1:I:235:TYR:CE1	1:I:264:ILE:HA	2.49	0.46
1:J:306:GLU:HG3	1:K:116:ARG:NH2	2.30	0.46
1:J:53:TYR:O	1:J:54:ARG:NH1	2.46	0.46
1:K:250:ASP:OD1	1:K:251:ILE:HG13	2.16	0.46
1:K:350:PHE:N	1:K:390:ALA:O	2.37	0.46
1:L:377:THR:HA	1:L:383:ASP:OD2	2.15	0.46
1:A:642:GLN:HA	1:A:645:LEU:HD12	1.98	0.46
1:B:387:GLN:O	1:B:387:GLN:HG3	2.15	0.46
1:A:328:ARG:HD2	1:B:53:TYR:OH	2.16	0.46
1:B:646:ASN:OD1	1:B:647:ALA:N	2.49	0.46
1:D:646:ASN:OD1	1:D:647:ALA:N	2.49	0.46
1:E:444:LEU:O	1:E:448:VAL:HG23	2.15	0.46
1:F:387:GLN:O	1:F:387:GLN:HG3	2.15	0.46
1:G:21:ALA:HA	1:G:159:ASP:OD2	2.16	0.46
1:G:350:PHE:N	1:G:390:ALA:O	2.35	0.46
1:G:591:GLN:HA	1:G:595:GLU:CD	2.36	0.46
1:F:664:GLU:OE2	1:G:666:ARG:NH2	2.48	0.46
1:H:161:ASN:ND2	1:I:183:GLY:HA3	2.28	0.46
1:I:303:VAL:HG12	1:I:439:ASN:HB3	1.97	0.46
1:J:438:LEU:O	1:J:442:ALA:N	2.41	0.46
1:K:641:ALA:HA	1:K:644:GLN:OE1	2.15	0.46
1:L:126:TRP:CD1	1:L:146:ARG:HG3	2.51	0.46
1:A:528:LYS:HZ3	1:A:560:LEU:HD23	1.81	0.46
1:B:458:ARG:HH21	1:B:500:ALA:HB1	1.81	0.46
1:B:564:GLY:O	1:B:568:MET:HG2	2.15	0.46
1:C:80:TYR:CZ	1:C:516:CYS:HB2	2.51	0.46
1:D:151:SER:HB2	1:D:155:HIS:CE1	2.50	0.46
1:C:398:PRO:HB3	1:D:394:ASN:HB3	1.96	0.46
1:F:99:ARG:NH2	1:F:525:GLN:HA	2.31	0.46
1:H:249:ARG:HG3	1:H:250:ASP:N	2.30	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:420:VAL:HB	1:H:424:ALA:HA	1.97	0.46
1:J:306:GLU:HG3	1:K:116:ARG:HH22	1.80	0.46
1:J:35:PHE:CZ	1:J:321:ARG:HB2	2.51	0.46
1:J:41:TRP:CH2	1:J:44:TRP:HB2	2.49	0.46
1:K:321:ARG:HA	1:K:324:LYS:HE2	1.96	0.46
1:K:354:GLU:HG2	1:L:376:ARG:HD3	1.96	0.46
1:A:303:VAL:HB	1:A:439:ASN:ND2	2.30	0.46
1:A:646:ASN:OD1	1:A:647:ALA:N	2.49	0.46
1:B:151:SER:HB2	1:B:155:HIS:CE1	2.50	0.46
1:B:350:PHE:N	1:B:390:ALA:O	2.33	0.46
1:C:203:ASN:OD1	1:C:205:ASN:N	2.36	0.46
1:D:444:LEU:O	1:D:448:VAL:HG23	2.15	0.46
1:E:246:TYR:HB2	1:E:511:ARG:H	1.81	0.46
1:E:272:LYS:O	1:F:134:ASP:HB2	2.15	0.46
1:F:307:TRP:HE1	1:F:314:GLU:HG2	1.80	0.46
1:G:436:ASN:HA	1:G:439:ASN:ND2	2.30	0.46
1:G:515:GLU:N	1:G:515:GLU:OE1	2.48	0.46
1:G:590:GLN:HA	1:G:594:VAL:HB	1.97	0.46
1:G:646:ASN:OD1	1:G:647:ALA:N	2.49	0.46
1:H:641:ALA:HA	1:H:644:GLN:OE1	2.16	0.46
1:J:338:ALA:O	1:J:342:ALA:N	2.48	0.46
1:J:349:PRO:HG3	1:J:391:TYR:CZ	2.50	0.46
1:J:387:GLN:HG3	1:J:387:GLN:O	2.15	0.46
1:J:590:GLN:HA	1:J:594:VAL:HB	1.97	0.46
1:J:613:GLY:CA	1:J:616:LEU:HD12	2.43	0.46
1:K:21:ALA:HB2	1:K:172:HIS:NE2	2.30	0.46
1:K:701:ARG:HA	1:K:704:ILE:HD12	1.96	0.46
1:A:249:ARG:HG3	1:A:250:ASP:N	2.30	0.46
1:B:248:LYS:CD	1:B:251:ILE:HB	2.41	0.46
1:B:699:LYS:O	1:B:702:MET:HB3	2.16	0.46
1:C:576:LEU:O	1:C:581:VAL:HG12	2.15	0.46
1:D:380:ASN:OD1	1:D:381:SER:N	2.48	0.46
1:F:21:ALA:HA	1:F:159:ASP:OD2	2.16	0.46
1:F:564:GLY:O	1:F:568:MET:HG2	2.15	0.46
1:G:576:LEU:O	1:G:581:VAL:HG12	2.15	0.46
1:I:99:ARG:NE	1:I:525:GLN:O	2.48	0.46
1:I:53:TYR:CG	1:I:54:ARG:N	2.84	0.46
1:I:82:PRO:HB3	1:I:90:ALA:HB3	1.96	0.46
1:J:235:TYR:CE1	1:J:264:ILE:HA	2.51	0.46
1:J:640:GLU:HA	1:J:643:ASN:HD22	1.81	0.46
1:K:444:LEU:O	1:K:448:VAL:HG23	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:609:VAL:O	1:K:612:GLN:HB2	2.16	0.46
1:L:230:GLU:OE2	1:L:249:ARG:HG2	2.15	0.46
1:B:444:LEU:O	1:B:447:TYR:HB3	2.16	0.46
1:C:193:LEU:HD21	1:C:288:LYS:HZ3	1.81	0.46
1:C:250:ASP:OD1	1:C:251:ILE:HG13	2.16	0.46
1:E:223:TYR:CE1	1:E:278:LYS:HG3	2.51	0.46
1:E:235:TYR:HA	1:E:265:LYS:O	2.16	0.46
1:E:387:GLN:HG3	1:E:387:GLN:O	2.16	0.46
1:E:574:LYS:O	1:E:578:GLN:HG3	2.16	0.46
1:G:438:LEU:O	1:G:442:ALA:N	2.40	0.46
1:G:348:LYS:HB2	1:H:372:TYR:CD2	2.51	0.46
1:H:45:LEU:HG	1:H:46:SER:H	1.81	0.46
1:H:649:ARG:O	1:H:653:ILE:HG13	2.16	0.46
1:J:532:ARG:HH22	1:J:560:LEU:HD11	1.80	0.46
1:K:564:GLY:O	1:K:568:MET:HG2	2.15	0.46
1:L:235:TYR:HE1	1:L:264:ILE:HA	1.80	0.46
1:A:133:GLU:O	1:A:137:PRO:HB3	2.16	0.46
1:A:72:ARG:HG3	1:L:434:THR:HG21	1.98	0.46
1:B:377:THR:HA	1:B:383:ASP:OD2	2.16	0.46
1:D:444:LEU:O	1:D:447:TYR:HB3	2.16	0.46
1:E:110:ALA:HB1	1:E:126:TRP:CE3	2.51	0.46
1:F:201:PHE:HD1	1:F:283:CYS:HB2	1.81	0.46
1:F:646:ASN:OD1	1:F:647:ALA:N	2.49	0.46
1:J:120:GLU:HA	1:J:320:VAL:HB	1.98	0.46
1:K:24:GLU:HB2	1:K:159:ASP:OD2	2.16	0.46
1:J:352:TRP:CB	1:K:376:ARG:HD2	2.39	0.46
1:L:151:SER:HB2	1:L:155:HIS:CE1	2.51	0.46
1:A:21:ALA:HA	1:A:159:ASP:OD2	2.16	0.46
1:A:238:PRO:HB3	1:A:263:PHE:CD1	2.51	0.46
1:A:376:ARG:HD3	1:L:354:GLU:HG2	1.98	0.46
1:B:124:GLY:CA	1:B:303:VAL:HG22	2.45	0.46
1:A:272:LYS:O	1:B:134:ASP:HB2	2.16	0.46
1:B:225:VAL:HA	1:B:276:VAL:HG12	1.97	0.46
1:C:228:LYS:HB2	1:C:275:ARG:HB3	1.97	0.46
1:C:444:LEU:O	1:C:448:VAL:HG23	2.15	0.46
1:D:649:ARG:O	1:D:653:ILE:HG13	2.16	0.46
1:E:124:GLY:CA	1:E:303:VAL:HG22	2.46	0.46
1:E:354:GLU:HG2	1:F:376:ARG:HD3	1.97	0.46
1:E:646:ASN:OD1	1:E:647:ALA:N	2.48	0.46
1:F:586:THR:CG2	1:F:590:GLN:HE22	2.27	0.46
1:G:114:ALA:O	1:G:118:GLN:HB2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:42:ASP:HB3	1:G:44:TRP:HD1	1.81	0.46
1:H:21:ALA:HA	1:H:159:ASP:OD2	2.16	0.46
1:H:325:ASP:O	1:H:328:ARG:HG2	2.15	0.46
1:G:411:ALA:HA	1:H:57:PHE:HE1	1.81	0.46
1:H:80:TYR:HD1	1:H:518:THR:HA	1.81	0.46
1:I:21:ALA:HA	1:I:159:ASP:OD2	2.15	0.46
1:I:646:ASN:OD1	1:I:647:ALA:N	2.49	0.46
1:K:223:TYR:HE1	1:K:278:LYS:HG3	1.80	0.46
1:K:387:GLN:O	1:K:387:GLN:HG3	2.15	0.46
1:K:528:LYS:NZ	1:K:559:LEU:O	2.44	0.46
1:K:591:GLN:HA	1:K:595:GLU:CD	2.36	0.46
1:A:372:TYR:CD2	1:L:348:LYS:HB2	2.50	0.46
1:L:41:TRP:CH2	1:L:44:TRP:HB2	2.51	0.46
1:A:165:MET:HB3	1:A:304:PHE:CG	2.50	0.46
1:A:350:PHE:N	1:A:390:ALA:O	2.38	0.46
1:A:82:PRO:HB3	1:A:90:ALA:HB3	1.98	0.46
1:B:586:THR:CG2	1:B:590:GLN:HE22	2.26	0.46
1:B:591:GLN:HA	1:B:595:GLU:CD	2.36	0.46
1:B:593:LEU:O	1:B:597:GLN:HG3	2.16	0.46
1:C:306:GLU:OE2	1:D:61:ARG:NE	2.49	0.46
1:D:642:GLN:HA	1:D:645:LEU:HD12	1.98	0.46
1:E:249:ARG:HG3	1:E:250:ASP:N	2.30	0.46
1:E:444:LEU:HD23	1:E:518:THR:HB	1.98	0.46
1:G:162:SER:HB2	1:G:170:ALA:HB2	1.97	0.46
1:G:87:ARG:HD3	1:G:89:ASP:HB2	1.98	0.46
1:H:114:ALA:O	1:H:118:GLN:HB2	2.16	0.46
1:H:387:GLN:HG3	1:H:387:GLN:O	2.16	0.46
1:H:350:PHE:N	1:H:390:ALA:O	2.35	0.46
1:I:124:GLY:HA3	1:I:303:VAL:HG22	1.97	0.46
1:I:249:ARG:HG3	1:I:250:ASP:N	2.31	0.46
1:I:387:GLN:HG3	1:I:387:GLN:O	2.16	0.46
1:I:590:GLN:HA	1:I:594:VAL:HB	1.98	0.46
1:K:235:TYR:CE1	1:K:264:ILE:HA	2.49	0.46
1:L:24:GLU:HB2	1:L:159:ASP:OD2	2.16	0.46
1:K:306:GLU:OE2	1:L:61:ARG:NE	2.49	0.46
1:A:248:LYS:HE3	1:A:252:LYS:HB2	1.98	0.46
1:C:124:GLY:CA	1:C:303:VAL:HG22	2.46	0.46
1:C:695:GLU:HA	1:C:698:HIS:ND1	2.31	0.46
1:D:250:ASP:OD1	1:D:251:ILE:HG13	2.16	0.46
1:F:87:ARG:HD3	1:F:89:ASP:HB2	1.98	0.46
1:G:201:PHE:HD1	1:G:283:CYS:HB2	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:35:PHE:CZ	1:G:321:ARG:HB2	2.51	0.46
1:G:45:LEU:HG	1:G:46:SER:H	1.81	0.46
1:G:663:SER:HA	1:G:666:ARG:NE	2.28	0.46
1:H:140:ASN:HB3	1:H:455:THR:OG1	2.16	0.46
1:H:429:GLN:HA	1:H:432:PHE:HD2	1.80	0.46
1:I:117:GLU:OE1	1:I:124:GLY:HA2	2.16	0.46
1:I:349:PRO:HG3	1:I:391:TYR:CZ	2.51	0.46
1:J:80:TYR:CD1	1:J:444:LEU:HD21	2.51	0.46
1:A:26:ARG:O	1:A:30:LYS:HG3	2.16	0.45
1:A:587:PRO:HD2	1:A:589:GLU:HG3	1.97	0.45
1:B:176:ILE:HD11	1:B:204:PRO:HB3	1.98	0.45
1:B:303:VAL:HG12	1:B:439:ASN:HB3	1.97	0.45
1:C:235:TYR:CE1	1:C:264:ILE:HA	2.51	0.45
1:C:303:VAL:HG12	1:C:439:ASN:HB3	1.97	0.45
1:D:641:ALA:HA	1:D:644:GLN:OE1	2.15	0.45
1:E:21:ALA:HB2	1:E:172:HIS:CD2	2.51	0.45
1:F:80:TYR:CD1	1:F:444:LEU:HD21	2.51	0.45
1:G:10:SER:O	1:G:14:ARG:HG2	2.17	0.45
1:G:15:PHE:HA	1:G:18:ASP:HB3	1.98	0.45
1:G:338:ALA:O	1:G:342:ALA:N	2.46	0.45
1:G:53:TYR:CG	1:G:54:ARG:N	2.84	0.45
1:H:82:PRO:HB3	1:H:90:ALA:HB3	1.99	0.45
1:J:574:LYS:O	1:J:578:GLN:HG3	2.16	0.45
1:K:142:GLN:NE2	1:K:455:THR:OG1	2.50	0.45
1:K:230:GLU:OE2	1:K:249:ARG:HG2	2.15	0.45
1:K:45:LEU:HG	1:K:46:SER:H	1.80	0.45
1:K:646:ASN:OD1	1:K:647:ALA:N	2.49	0.45
1:B:250:ASP:OD1	1:B:251:ILE:HG13	2.16	0.45
1:C:281:ILE:HG12	1:C:287:LEU:H	1.81	0.45
1:C:429:GLN:HA	1:C:432:PHE:HD2	1.81	0.45
1:D:223:TYR:HE1	1:D:278:LYS:HG3	1.81	0.45
1:E:203:ASN:OD1	1:E:205:ASN:N	2.37	0.45
1:D:657:MET:SD	1:E:655:ASN:ND2	2.90	0.45
1:F:444:LEU:HD23	1:F:518:THR:HB	1.98	0.45
1:H:165:MET:HB3	1:H:304:PHE:CG	2.52	0.45
1:H:42:ASP:HB3	1:H:44:TRP:HD1	1.81	0.45
1:H:591:GLN:HA	1:H:595:GLU:CD	2.36	0.45
1:H:662:GLN:HA	1:H:665:PHE:CD2	2.51	0.45
1:I:438:LEU:O	1:I:442:ALA:N	2.40	0.45
1:J:151:SER:HB2	1:J:155:HIS:CE1	2.52	0.45
1:J:236:GLN:HG2	1:J:244:VAL:H	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:273:ARG:NE	1:J:296:GLU:OE2	2.49	0.45
1:L:296:GLU:HB2	1:L:449:PHE:CD2	2.36	0.45
1:L:564:GLY:O	1:L:568:MET:HG2	2.17	0.45
1:A:355:GLN:HA	1:A:375:ASN:HB3	1.98	0.45
1:A:377:THR:HA	1:A:383:ASP:OD2	2.16	0.45
1:B:99:ARG:NE	1:B:525:GLN:O	2.49	0.45
1:B:661:LYS:HE3	1:B:665:PHE:CZ	2.51	0.45
1:D:593:LEU:O	1:D:597:GLN:HG3	2.16	0.45
1:D:99:ARG:NH2	1:D:525:GLN:HA	2.31	0.45
1:E:444:LEU:O	1:E:447:TYR:HB3	2.16	0.45
1:F:53:TYR:CG	1:F:54:ARG:N	2.83	0.45
1:G:162:SER:OG	1:G:167:LYS:HA	2.16	0.45
1:I:444:LEU:O	1:I:448:VAL:HG23	2.16	0.45
1:J:193:LEU:HD21	1:J:288:LYS:HZ3	1.81	0.45
1:K:320:VAL:O	1:K:323:THR:OG1	2.19	0.45
1:L:133:GLU:O	1:L:137:PRO:HB3	2.16	0.45
1:L:303:VAL:HG12	1:L:439:ASN:HB3	1.98	0.45
1:L:363:TYR:CE1	1:L:372:TYR:HA	2.52	0.45
1:A:105:ASN:O	1:A:109:ILE:HG12	2.15	0.45
1:A:21:ALA:HB2	1:A:172:HIS:NE2	2.31	0.45
1:A:303:VAL:HG12	1:A:439:ASN:HB3	1.98	0.45
1:B:21:ALA:HB2	1:B:172:HIS:NE2	2.31	0.45
1:C:377:THR:HA	1:C:383:ASP:OD2	2.15	0.45
1:C:99:ARG:NH2	1:C:525:GLN:HA	2.32	0.45
1:C:526:SER:O	1:C:530:GLN:N	2.45	0.45
1:D:235:TYR:HA	1:D:265:LYS:O	2.16	0.45
1:D:325:ASP:O	1:D:328:ARG:HG2	2.15	0.45
1:G:80:TYR:CZ	1:G:516:CYS:HB2	2.52	0.45
1:H:250:ASP:OD1	1:H:251:ILE:HG13	2.17	0.45
1:H:26:ARG:O	1:H:30:LYS:HG3	2.17	0.45
1:I:663:SER:HA	1:I:666:ARG:NE	2.29	0.45
1:J:576:LEU:O	1:J:581:VAL:HG12	2.15	0.45
1:J:70:GLU:O	1:J:73:GLN:HG3	2.16	0.45
1:K:355:GLN:HA	1:K:375:ASN:HB3	1.98	0.45
1:K:272:LYS:O	1:L:134:ASP:HB2	2.16	0.45
1:L:250:ASP:OD1	1:L:251:ILE:HG13	2.16	0.45
1:A:363:TYR:CE1	1:A:372:TYR:HA	2.52	0.45
1:A:701:ARG:HA	1:A:704:ILE:HD12	1.99	0.45
1:B:429:GLN:HA	1:B:432:PHE:HD2	1.82	0.45
1:B:628:GLN:O	1:B:632:LEU:HB2	2.15	0.45
1:C:438:LEU:O	1:C:442:ALA:N	2.40	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:593:LEU:O	1:C:597:GLN:HG3	2.16	0.45
1:D:203:ASN:OD1	1:D:205:ASN:N	2.38	0.45
1:D:53:TYR:CG	1:D:54:ARG:N	2.84	0.45
1:E:320:VAL:O	1:E:323:THR:OG1	2.18	0.45
1:E:53:TYR:CG	1:E:54:ARG:N	2.85	0.45
1:E:75:PRO:HD2	1:E:523:SER:HB3	1.98	0.45
1:F:35:PHE:CZ	1:F:321:ARG:HB2	2.52	0.45
1:G:140:ASN:HB3	1:G:455:THR:HG1	1.81	0.45
1:I:238:PRO:HB3	1:I:263:PHE:CD1	2.51	0.45
1:I:380:ASN:OD1	1:I:381:SER:N	2.48	0.45
1:J:106:THR:HG23	1:J:146:ARG:HE	1.81	0.45
1:J:642:GLN:HA	1:J:645:LEU:HD12	1.99	0.45
1:K:248:LYS:HE3	1:K:252:LYS:HB2	1.99	0.45
1:L:45:LEU:HG	1:L:46:SER:H	1.81	0.45
1:A:387:GLN:O	1:A:387:GLN:HG3	2.15	0.45
1:A:567:MET:HB2	1:L:581:VAL:HG22	1.98	0.45
1:B:232:ALA:HA	1:B:269:ARG:H	1.81	0.45
1:B:656:ASN:O	1:B:660:SER:OG	2.31	0.45
1:C:105:ASN:O	1:C:109:ILE:HG12	2.17	0.45
1:C:356:ILE:HG21	1:D:373:LEU:HD21	1.99	0.45
1:C:80:TYR:CD1	1:C:444:LEU:HD21	2.51	0.45
1:C:251:ILE:HD13	1:C:453:LEU:HD13	1.99	0.45
1:C:587:PRO:HD2	1:C:589:GLU:HG3	1.99	0.45
1:C:590:GLN:HA	1:C:594:VAL:HB	1.99	0.45
1:C:646:ASN:OD1	1:C:647:ALA:N	2.49	0.45
1:D:21:ALA:HA	1:D:159:ASP:OD2	2.16	0.45
1:F:21:ALA:HB2	1:F:172:HIS:NE2	2.31	0.45
1:F:355:GLN:HG2	1:G:376:ARG:NH1	2.25	0.45
1:F:663:SER:HA	1:F:666:ARG:NE	2.25	0.45
1:I:639:VAL:O	1:I:642:GLN:HG2	2.17	0.45
1:J:444:LEU:HD23	1:J:518:THR:HB	1.98	0.45
1:J:646:ASN:OD1	1:J:647:ALA:N	2.50	0.45
1:L:15:PHE:HA	1:L:18:ASP:HB3	1.97	0.45
1:L:380:ASN:OD1	1:L:381:SER:N	2.48	0.45
1:L:663:SER:HA	1:L:666:ARG:NE	2.28	0.45
1:D:24:GLU:HB2	1:D:159:ASP:OD2	2.17	0.45
1:E:21:ALA:HB2	1:E:172:HIS:NE2	2.32	0.45
1:E:418:LEU:HD23	1:E:429:GLN:HB3	1.99	0.45
1:F:429:GLN:HA	1:F:432:PHE:CD2	2.49	0.45
1:F:438:LEU:O	1:F:442:ALA:N	2.42	0.45
1:G:593:LEU:O	1:G:597:GLN:HG3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:429:GLN:HA	1:I:432:PHE:CD2	2.51	0.45
1:I:628:GLN:O	1:I:632:LEU:HB2	2.16	0.45
1:J:639:VAL:O	1:J:642:GLN:HG2	2.17	0.45
1:K:338:ALA:O	1:K:342:ALA:N	2.48	0.45
1:J:403:TYR:OH	1:K:397:VAL:HG11	2.17	0.45
1:L:297:HIS:CG	1:L:298:ILE:H	2.35	0.45
1:A:380:ASN:OD1	1:A:381:SER:N	2.49	0.45
1:A:99:ARG:NE	1:A:525:GLN:O	2.49	0.45
1:D:238:PRO:HB3	1:D:263:PHE:CD1	2.52	0.45
1:D:436:ASN:HA	1:D:439:ASN:ND2	2.31	0.45
1:D:80:TYR:CZ	1:D:516:CYS:HB2	2.52	0.45
1:D:528:LYS:HZ3	1:D:560:LEU:HD23	1.81	0.45
1:D:538:LEU:HB3	1:D:551:LEU:HD11	1.99	0.45
1:E:80:TYR:CZ	1:E:516:CYS:HB2	2.52	0.45
1:E:640:GLU:HA	1:E:643:ASN:HD22	1.82	0.45
1:F:124:GLY:HA3	1:F:303:VAL:HG22	1.99	0.45
1:F:165:MET:HB3	1:F:304:PHE:CG	2.52	0.45
1:F:406:GLU:O	1:F:410:SER:OG	2.26	0.45
1:G:193:LEU:HD21	1:G:288:LYS:HZ1	1.81	0.45
1:F:398:PRO:HA	1:G:394:ASN:HB3	1.97	0.45
1:G:429:GLN:HA	1:G:432:PHE:HD2	1.82	0.45
1:G:564:GLY:O	1:G:568:MET:HG2	2.17	0.45
1:H:333:ILE:HG22	1:H:337:ASN:OD1	2.17	0.45
1:H:97:MET:HE2	1:H:450:GLN:HE22	1.81	0.45
1:I:252:LYS:HD2	1:I:256:ASP:HB3	1.99	0.45
1:I:220:ALA:CB	1:I:281:ILE:O	2.47	0.45
1:I:29:ALA:O	1:I:33:LEU:HB2	2.17	0.45
1:J:29:ALA:O	1:J:33:LEU:CB	2.64	0.45
1:J:45:LEU:HG	1:J:46:SER:H	1.82	0.45
1:L:238:PRO:HB3	1:L:263:PHE:CD1	2.52	0.45
1:L:426:ASN:O	1:L:429:GLN:NE2	2.50	0.45
1:L:701:ARG:HA	1:L:704:ILE:HD12	1.99	0.45
1:A:117:GLU:OE1	1:A:124:GLY:HA2	2.17	0.45
1:B:140:ASN:HB3	1:B:455:THR:OG1	2.16	0.45
1:A:354:GLU:HG2	1:B:376:ARG:HD3	1.99	0.45
1:B:47:GLN:HB2	1:B:50:THR:CG2	2.47	0.45
1:C:235:TYR:HA	1:C:265:LYS:O	2.16	0.45
1:C:275:ARG:NH2	1:C:293:ILE:O	2.36	0.45
1:D:387:GLN:O	1:D:387:GLN:HG3	2.16	0.45
1:D:538:LEU:O	1:D:542:THR:OG1	2.34	0.45
1:E:628:GLN:O	1:E:632:LEU:HB2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:176:ILE:HD11	1:F:204:PRO:HB3	1.97	0.45
1:G:106:THR:HG23	1:G:146:ARG:HE	1.82	0.45
1:G:320:VAL:O	1:G:324:LYS:HG3	2.17	0.45
1:H:24:GLU:OE1	1:H:24:GLU:N	2.48	0.45
1:H:380:ASN:OD1	1:H:381:SER:N	2.49	0.45
1:H:80:TYR:CZ	1:H:516:CYS:HB2	2.52	0.45
1:I:232:ALA:HA	1:I:269:ARG:H	1.82	0.45
1:I:420:VAL:HB	1:I:424:ALA:HA	1.99	0.45
1:H:664:GLU:HG3	1:I:659:LEU:HD22	1.99	0.45
1:J:80:TYR:CZ	1:J:516:CYS:HB2	2.51	0.45
1:K:297:HIS:CG	1:K:298:ILE:H	2.35	0.45
1:A:201:PHE:HD1	1:A:283:CYS:HB2	1.81	0.45
1:A:649:ARG:O	1:A:653:ILE:HG13	2.17	0.45
1:A:663:SER:O	1:A:666:ARG:HG3	2.16	0.45
1:B:21:ALA:HA	1:B:159:ASP:OD2	2.16	0.45
1:B:259:ALA:HA	1:B:263:PHE:CD2	2.52	0.45
1:C:642:GLN:HA	1:C:645:LEU:HD12	1.98	0.45
1:D:640:GLU:HA	1:D:643:ASN:HD22	1.81	0.45
1:F:349:PRO:HG3	1:F:391:TYR:CZ	2.52	0.45
1:G:75:PRO:HD2	1:G:523:SER:HB3	1.98	0.45
1:H:35:PHE:CZ	1:H:321:ARG:HB2	2.52	0.45
1:I:53:TYR:O	1:I:54:ARG:NH1	2.49	0.45
1:J:203:ASN:OD1	1:J:205:ASN:N	2.35	0.45
1:K:128:LEU:HD22	1:K:144:ILE:HD12	1.99	0.45
1:K:53:TYR:CG	1:K:54:ARG:N	2.85	0.45
1:K:628:GLN:O	1:K:632:LEU:HB2	2.17	0.45
1:L:695:GLU:HA	1:L:698:HIS:ND1	2.32	0.45
1:A:35:PHE:CZ	1:A:321:ARG:HB2	2.52	0.44
1:C:26:ARG:O	1:C:30:LYS:HG3	2.17	0.44
1:C:53:TYR:CG	1:C:54:ARG:N	2.85	0.44
1:D:168:SER:HA	1:D:297:HIS:NE2	2.32	0.44
1:D:591:GLN:HA	1:D:595:GLU:CD	2.37	0.44
1:E:303:VAL:HG12	1:E:439:ASN:HB3	1.98	0.44
1:E:593:LEU:O	1:E:597:GLN:HG3	2.17	0.44
1:F:235:TYR:HE1	1:F:264:ILE:HA	1.82	0.44
1:F:642:GLN:HA	1:F:645:LEU:HD12	1.98	0.44
1:G:184:TRP:CZ3	1:G:199:PRO:HG3	2.52	0.44
1:G:228:LYS:HB2	1:G:275:ARG:HB3	1.98	0.44
1:G:609:VAL:O	1:G:612:GLN:HB2	2.17	0.44
1:I:15:PHE:HA	1:I:18:ASP:HB3	1.98	0.44
1:K:526:SER:O	1:K:530:GLN:N	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:75:PRO:HD2	1:K:523:SER:HB3	1.98	0.44
1:D:356:ILE:HG21	1:E:373:LEU:HD21	1.99	0.44
1:E:538:LEU:O	1:E:542:THR:OG1	2.34	0.44
1:F:250:ASP:OD1	1:F:251:ILE:HG13	2.17	0.44
1:H:663:SER:HA	1:H:666:ARG:HG2	1.98	0.44
1:J:15:PHE:HA	1:J:18:ASP:HB3	1.98	0.44
1:J:232:ALA:HA	1:J:269:ARG:H	1.83	0.44
1:J:75:PRO:HD2	1:J:523:SER:HB3	1.99	0.44
1:K:124:GLY:HA3	1:K:303:VAL:HG22	1.98	0.44
1:K:273:ARG:NE	1:K:296:GLU:OE2	2.50	0.44
1:K:363:TYR:CE1	1:K:372:TYR:HA	2.52	0.44
1:K:623:ALA:HA	1:K:626:GLN:CD	2.38	0.44
1:K:695:GLU:HA	1:K:698:HIS:CE1	2.51	0.44
1:L:140:ASN:HB3	1:L:455:THR:OG1	2.16	0.44
1:L:249:ARG:HG3	1:L:250:ASP:N	2.32	0.44
1:A:203:ASN:OD1	1:A:205:ASN:N	2.33	0.44
1:A:657:MET:SD	1:B:655:ASN:ND2	2.90	0.44
1:B:514:TYR:HB2	1:C:136:SER:OG	2.17	0.44
1:C:21:ALA:HB2	1:C:172:HIS:NE2	2.32	0.44
1:C:259:ALA:HA	1:C:263:PHE:CD2	2.53	0.44
1:C:614:VAL:HG11	1:D:609:VAL:HG11	1.99	0.44
1:B:653:ILE:HG12	1:C:648:ALA:HA	2.00	0.44
1:D:646:ASN:HA	1:E:644:GLN:HG2	1.99	0.44
1:E:21:ALA:HA	1:E:159:ASP:OD2	2.16	0.44
1:E:246:TYR:HB2	1:E:510:ILE:HG13	1.99	0.44
1:F:21:ALA:HB2	1:F:172:HIS:CD2	2.52	0.44
1:F:363:TYR:CE1	1:F:372:TYR:HA	2.52	0.44
1:G:398:PRO:O	1:G:399:GLN:HG2	2.18	0.44
1:H:444:LEU:HD23	1:H:518:THR:HB	1.99	0.44
1:H:444:LEU:O	1:H:447:TYR:HB3	2.18	0.44
1:H:664:GLU:OE2	1:I:666:ARG:NH2	2.50	0.44
1:J:110:ALA:HB1	1:J:126:TRP:CE3	2.51	0.44
1:J:99:ARG:NH2	1:J:525:GLN:HA	2.31	0.44
1:J:78:VAL:HA	1:J:520:VAL:HA	1.99	0.44
1:K:168:SER:HA	1:K:297:HIS:NE2	2.32	0.44
1:K:201:PHE:HD1	1:K:283:CYS:HB2	1.80	0.44
1:K:324:LYS:O	1:K:327:GLN:HB2	2.18	0.44
1:L:444:LEU:O	1:L:448:VAL:HG23	2.17	0.44
1:L:526:SER:O	1:L:530:GLN:N	2.48	0.44
1:A:223:TYR:HE1	1:A:278:LYS:HG3	1.81	0.44
1:A:578:GLN:HA	1:A:597:GLN:HE21	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:591:GLN:HA	1:A:595:GLU:CD	2.38	0.44
1:B:26:ARG:O	1:B:30:LYS:HG3	2.16	0.44
1:C:248:LYS:HG2	1:C:511:ARG:HH21	1.81	0.44
1:D:458:ARG:NH2	1:D:500:ALA:HB1	2.32	0.44
1:E:120:GLU:HA	1:E:320:VAL:HB	1.99	0.44
1:E:231:THR:HG22	1:E:249:ARG:HE	1.82	0.44
1:E:250:ASP:OD1	1:E:251:ILE:HG13	2.17	0.44
1:G:223:TYR:HE1	1:G:278:LYS:HG3	1.83	0.44
1:G:363:TYR:CE1	1:G:372:TYR:HA	2.51	0.44
1:G:387:GLN:O	1:G:387:GLN:HG3	2.17	0.44
1:H:124:GLY:CA	1:H:303:VAL:HG22	2.48	0.44
1:H:203:ASN:OD1	1:H:205:ASN:N	2.33	0.44
1:H:355:GLN:HA	1:H:375:ASN:HB3	1.98	0.44
1:H:628:GLN:O	1:H:632:LEU:HB2	2.18	0.44
1:I:193:LEU:HD21	1:I:288:LYS:HZ3	1.82	0.44
1:J:124:GLY:CA	1:J:303:VAL:HG22	2.47	0.44
1:J:47:GLN:HB2	1:J:50:THR:HG21	2.00	0.44
1:K:203:ASN:HD21	1:K:209:PHE:HZ	1.65	0.44
1:L:444:LEU:HD23	1:L:518:THR:HB	1.99	0.44
1:A:250:ASP:OD1	1:A:251:ILE:HG13	2.17	0.44
1:B:380:ASN:OD1	1:B:381:SER:N	2.49	0.44
1:B:47:GLN:HB2	1:B:50:THR:HG21	2.00	0.44
1:B:590:GLN:HA	1:B:594:VAL:HB	1.99	0.44
1:B:398:PRO:HA	1:C:394:ASN:HB3	1.99	0.44
1:C:663:SER:O	1:C:666:ARG:HG3	2.18	0.44
1:E:649:ARG:O	1:E:653:ILE:HG13	2.17	0.44
1:G:250:ASP:OD1	1:G:251:ILE:HG13	2.17	0.44
1:G:613:GLY:CA	1:G:616:LEU:HD13	2.38	0.44
1:H:27:ARG:HH11	1:H:313:LYS:HE3	1.83	0.44
1:I:21:ALA:HB2	1:I:172:HIS:NE2	2.32	0.44
1:I:233:PHE:HB2	1:I:249:ARG:HB3	2.00	0.44
1:H:657:MET:SD	1:I:655:ASN:ND2	2.91	0.44
1:J:233:PHE:HB2	1:J:249:ARG:HB3	1.98	0.44
1:J:526:SER:O	1:J:530:GLN:N	2.45	0.44
1:J:649:ARG:O	1:J:653:ILE:HG13	2.16	0.44
1:K:47:GLN:HB2	1:K:50:THR:HG21	2.00	0.44
1:K:614:VAL:HG11	1:L:609:VAL:HG11	2.00	0.44
1:L:176:ILE:HD11	1:L:204:PRO:HB3	1.99	0.44
1:L:418:LEU:HD23	1:L:429:GLN:HB3	2.00	0.44
1:L:613:GLY:CA	1:L:616:LEU:HD12	2.47	0.44
1:A:420:VAL:HB	1:A:424:ALA:HA	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:613:GLY:CA	1:A:616:LEU:HD12	2.34	0.44
1:B:235:TYR:CE1	1:B:264:ILE:HA	2.52	0.44
1:B:27:ARG:HH11	1:B:313:LYS:HE3	1.83	0.44
1:B:444:LEU:HD23	1:B:518:THR:HB	2.00	0.44
1:C:448:VAL:HA	1:C:451:ASP:OD2	2.18	0.44
1:C:444:LEU:HD23	1:C:518:THR:HB	2.00	0.44
1:D:228:LYS:HB2	1:D:275:ARG:HB3	1.99	0.44
1:D:329:LEU:O	1:D:333:ILE:HG13	2.17	0.44
1:E:162:SER:OG	1:E:164:LEU:O	2.35	0.44
1:F:106:THR:HG23	1:F:146:ARG:HE	1.82	0.44
1:F:418:LEU:HD23	1:F:429:GLN:HB3	1.99	0.44
1:G:124:GLY:CA	1:G:303:VAL:HG22	2.48	0.44
1:G:223:TYR:CE1	1:G:278:LYS:HG3	2.52	0.44
1:G:99:ARG:NE	1:G:525:GLN:O	2.50	0.44
1:A:162:SER:OG	1:A:164:LEU:O	2.35	0.44
1:B:525:GLN:HB2	1:B:529:GLN:OE1	2.17	0.44
1:C:348:LYS:HB2	1:D:372:TYR:CD2	2.53	0.44
1:C:75:PRO:HD2	1:C:523:SER:HB3	1.99	0.44
1:C:640:GLU:HA	1:C:643:ASN:HD22	1.83	0.44
1:D:29:ALA:O	1:D:33:LEU:HB2	2.18	0.44
1:E:99:ARG:NE	1:E:525:GLN:O	2.50	0.44
1:F:126:TRP:CD1	1:F:146:ARG:HG3	2.53	0.44
1:F:581:VAL:HG22	1:G:567:MET:HB2	2.00	0.44
1:H:278:LYS:HE2	1:H:280:ILE:HD11	1.99	0.44
1:I:406:GLU:O	1:I:410:SER:OG	2.28	0.44
1:I:45:LEU:HG	1:I:46:SER:H	1.82	0.44
1:I:99:ARG:NH2	1:I:525:GLN:HA	2.32	0.44
1:J:21:ALA:HB2	1:J:172:HIS:NE2	2.32	0.44
1:J:320:VAL:O	1:J:323:THR:OG1	2.19	0.44
1:J:436:ASN:HA	1:J:439:ASN:ND2	2.33	0.44
1:J:525:GLN:HB2	1:J:529:GLN:OE1	2.18	0.44
1:I:581:VAL:HG22	1:J:567:MET:HB2	1.99	0.44
1:K:29:ALA:O	1:K:33:LEU:CB	2.66	0.44
1:A:29:ALA:O	1:A:33:LEU:HB2	2.17	0.44
1:B:639:VAL:O	1:B:642:GLN:HG2	2.17	0.44
1:A:664:GLU:HG3	1:B:659:LEU:HD22	1.99	0.44
1:C:140:ASN:HB3	1:C:455:THR:OG1	2.17	0.44
1:C:559:LEU:HB3	1:C:565:VAL:HB	2.00	0.44
1:B:306:GLU:OE2	1:C:61:ARG:NE	2.50	0.44
1:E:573:ASN:HA	1:E:576:LEU:HD12	2.00	0.44
1:F:235:TYR:CE1	1:F:264:ILE:HA	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:525:GLN:HB2	1:F:529:GLN:OE1	2.17	0.44
1:F:656:ASN:O	1:F:660:SER:OG	2.35	0.44
1:G:133:GLU:O	1:G:137:PRO:HB3	2.18	0.44
1:G:646:ASN:HA	1:H:644:GLN:HG2	1.99	0.44
1:I:250:ASP:OD1	1:I:251:ILE:HG13	2.17	0.44
1:I:309:PHE:HB2	1:J:150:HIS:HB2	2.00	0.44
1:I:363:TYR:CE1	1:I:372:TYR:HA	2.50	0.44
1:J:250:ASP:OD1	1:J:251:ILE:HG13	2.17	0.44
1:J:140:ASN:HB3	1:J:455:THR:OG1	2.18	0.44
1:K:124:GLY:CA	1:K:303:VAL:HG22	2.48	0.44
1:K:204:PRO:HD3	1:K:218:GLN:HG2	2.00	0.44
1:K:21:ALA:HB2	1:K:172:HIS:CD2	2.53	0.44
1:A:349:PRO:HG3	1:A:391:TYR:CZ	2.53	0.44
1:B:458:ARG:NH2	1:B:500:ALA:HB1	2.33	0.44
1:C:320:VAL:O	1:C:324:LYS:HG3	2.18	0.44
1:C:45:LEU:HG	1:C:46:SER:H	1.81	0.44
1:C:701:ARG:HA	1:C:704:ILE:HD12	1.99	0.44
1:C:354:GLU:HG2	1:D:376:ARG:HD3	2.00	0.44
1:E:29:ALA:O	1:E:33:LEU:HB2	2.17	0.44
1:G:235:TYR:HE1	1:G:264:ILE:HA	1.83	0.44
1:H:526:SER:O	1:H:530:GLN:N	2.47	0.44
1:I:593:LEU:O	1:I:597:GLN:HG3	2.17	0.44
1:K:10:SER:O	1:K:14:ARG:HG2	2.18	0.44
1:K:151:SER:HB2	1:K:155:HIS:CE1	2.52	0.44
1:K:252:LYS:HD2	1:K:256:ASP:HB3	1.99	0.44
1:K:350:PHE:HB2	1:K:390:ALA:HB3	2.00	0.44
1:K:590:GLN:HA	1:K:594:VAL:HB	2.00	0.44
1:L:235:TYR:HA	1:L:265:LYS:O	2.18	0.44
1:L:35:PHE:CZ	1:L:321:ARG:HB2	2.53	0.44
1:L:383:ASP:O	1:L:384:LEU:HD12	2.18	0.44
1:L:53:TYR:CG	1:L:54:ARG:N	2.86	0.44
1:L:646:ASN:OD1	1:L:647:ALA:N	2.50	0.44
1:L:80:TYR:CD1	1:L:444:LEU:HD21	2.52	0.44
1:A:660:SER:O	1:A:663:SER:OG	2.24	0.43
1:B:162:SER:OG	1:B:167:LYS:HA	2.17	0.43
1:D:21:ALA:HB2	1:D:172:HIS:CD2	2.53	0.43
1:D:514:TYR:HB2	1:E:136:SER:OG	2.17	0.43
1:F:203:ASN:HD21	1:F:209:PHE:HZ	1.65	0.43
1:F:320:VAL:O	1:F:323:THR:OG1	2.19	0.43
1:F:57:PHE:HB2	1:F:334:MET:SD	2.58	0.43
1:F:663:SER:O	1:F:666:ARG:HG3	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:117:GLU:OE1	1:H:124:GLY:HA2	2.18	0.43
1:J:333:ILE:HG22	1:J:337:ASN:OD1	2.19	0.43
1:L:281:ILE:HG12	1:L:287:LEU:H	1.83	0.43
1:L:663:SER:O	1:L:666:ARG:HG3	2.17	0.43
1:A:228:LYS:HB2	1:A:275:ARG:HB3	1.99	0.43
1:A:526:SER:O	1:A:530:GLN:N	2.45	0.43
1:B:701:ARG:HA	1:B:704:ILE:HD12	2.00	0.43
1:C:10:SER:O	1:C:14:ARG:HG2	2.18	0.43
1:C:278:LYS:HE2	1:C:280:ILE:HD11	2.00	0.43
1:C:168:SER:HA	1:C:297:HIS:NE2	2.34	0.43
1:E:248:LYS:CD	1:E:251:ILE:HB	2.43	0.43
1:F:26:ARG:O	1:F:30:LYS:HG3	2.18	0.43
1:H:235:TYR:CE1	1:H:264:ILE:HA	2.53	0.43
1:H:9:GLU:HB3	1:H:12:LEU:HG	2.00	0.43
1:I:124:GLY:CA	1:I:303:VAL:HG22	2.49	0.43
1:I:140:ASN:HB3	1:I:455:THR:OG1	2.18	0.43
1:I:514:TYR:HB2	1:J:136:SER:OG	2.18	0.43
1:J:695:GLU:HA	1:J:698:HIS:ND1	2.34	0.43
1:K:162:SER:OG	1:K:164:LEU:O	2.36	0.43
1:L:333:ILE:HG22	1:L:337:ASN:OD1	2.18	0.43
1:L:590:GLN:HA	1:L:594:VAL:HB	1.99	0.43
1:A:140:ASN:HB3	1:A:455:THR:OG1	2.18	0.43
1:A:564:GLY:O	1:A:568:MET:HG2	2.18	0.43
1:B:609:VAL:O	1:B:612:GLN:HB2	2.18	0.43
1:C:338:ALA:O	1:C:342:ALA:N	2.46	0.43
1:C:65:ARG:O	1:C:69:SER:HB2	2.17	0.43
1:D:204:PRO:HD3	1:D:218:GLN:HG2	2.00	0.43
1:D:587:PRO:HD2	1:D:589:GLU:HG3	1.99	0.43
1:E:383:ASP:O	1:E:384:LEU:HD12	2.19	0.43
1:F:444:LEU:O	1:F:448:VAL:HG23	2.17	0.43
1:G:444:LEU:HD23	1:G:518:THR:HB	2.00	0.43
1:G:525:GLN:HB2	1:G:529:GLN:OE1	2.18	0.43
1:H:21:ALA:HB2	1:H:172:HIS:CD2	2.52	0.43
1:I:151:SER:HB2	1:I:155:HIS:CE1	2.52	0.43
1:I:223:TYR:HE1	1:I:278:LYS:HG3	1.84	0.43
1:I:350:PHE:N	1:I:390:ALA:O	2.36	0.43
1:J:444:LEU:O	1:J:447:TYR:HB3	2.18	0.43
1:K:162:SER:OG	1:K:167:LYS:HA	2.18	0.43
1:K:99:ARG:NH2	1:K:525:GLN:HA	2.32	0.43
1:K:649:ARG:O	1:K:653:ILE:HG13	2.18	0.43
1:L:29:ALA:O	1:L:33:LEU:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:33:LEU:HA	1:L:33:LEU:HD12	1.89	0.43
1:L:87:ARG:HD3	1:L:89:ASP:HB2	2.00	0.43
1:A:383:ASP:O	1:A:384:LEU:HD12	2.19	0.43
1:A:528:LYS:HE3	1:A:558:THR:HB	2.01	0.43
1:B:35:PHE:CZ	1:B:321:ARG:HB2	2.53	0.43
1:B:538:LEU:O	1:B:542:THR:OG1	2.37	0.43
1:B:99:ARG:NH2	1:B:525:GLN:HA	2.33	0.43
1:C:35:PHE:CZ	1:C:321:ARG:HB2	2.54	0.43
1:D:31:ASN:O	1:D:35:PHE:HD2	2.02	0.43
1:E:398:PRO:O	1:E:399:GLN:HG2	2.19	0.43
1:E:526:SER:O	1:E:530:GLN:N	2.49	0.43
1:E:657:MET:SD	1:F:655:ASN:ND2	2.91	0.43
1:G:238:PRO:HB3	1:G:263:PHE:CD1	2.53	0.43
1:G:649:ARG:O	1:G:653:ILE:HG13	2.19	0.43
1:H:436:ASN:HA	1:H:439:ASN:ND2	2.33	0.43
1:H:438:LEU:O	1:H:442:ALA:N	2.40	0.43
1:I:532:ARG:HH22	1:I:560:LEU:HD11	1.83	0.43
1:I:564:GLY:O	1:I:568:MET:HG2	2.18	0.43
1:H:653:ILE:HG12	1:I:648:ALA:HA	1.99	0.43
1:J:383:ASP:O	1:J:384:LEU:HD12	2.18	0.43
1:J:663:SER:O	1:J:666:ARG:HG3	2.18	0.43
1:K:126:TRP:CD1	1:K:146:ARG:HG3	2.53	0.43
1:K:383:ASP:O	1:K:384:LEU:HD12	2.18	0.43
1:K:398:PRO:O	1:K:399:GLN:HG2	2.18	0.43
1:K:578:GLN:HA	1:K:597:GLN:HE21	1.82	0.43
1:L:114:ALA:O	1:L:118:GLN:HB2	2.19	0.43
1:A:376:ARG:NH1	1:L:355:GLN:HG2	2.27	0.43
1:L:525:GLN:HB2	1:L:529:GLN:OE1	2.19	0.43
1:A:672:VAL:HA	1:A:675:PHE:CD2	2.54	0.43
1:B:114:ALA:O	1:B:118:GLN:HB2	2.18	0.43
1:B:436:ASN:HA	1:B:439:ASN:ND2	2.32	0.43
1:D:297:HIS:CG	1:D:298:ILE:H	2.36	0.43
1:D:590:GLN:HA	1:D:594:VAL:HB	1.99	0.43
1:E:546:THR:OG1	1:E:547:PRO:HD3	2.19	0.43
1:E:99:ARG:NH2	1:E:525:GLN:HA	2.34	0.43
1:F:225:VAL:HG22	1:F:276:VAL:HG12	2.01	0.43
1:F:220:ALA:CB	1:F:281:ILE:O	2.50	0.43
1:F:55:GLY:N	1:F:335:SER:OG	2.49	0.43
1:F:77:ASP:HB2	1:F:522:PRO:O	2.19	0.43
1:F:664:GLU:HG3	1:G:659:LEU:HD22	1.99	0.43
1:G:695:GLU:HA	1:G:698:HIS:ND1	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:248:LYS:HG2	1:H:511:ARG:HH21	1.83	0.43
1:H:83:LYS:HD2	1:H:515:GLU:CG	2.49	0.43
1:I:114:ALA:O	1:I:118:GLN:HB2	2.18	0.43
1:I:21:ALA:HB1	1:I:157:ILE:HB	2.01	0.43
1:K:514:TYR:HB2	1:L:136:SER:OG	2.18	0.43
1:K:695:GLU:HA	1:K:698:HIS:ND1	2.33	0.43
1:L:546:THR:OG1	1:L:547:PRO:HD3	2.19	0.43
1:L:591:GLN:HA	1:L:595:GLU:CD	2.38	0.43
1:B:133:GLU:O	1:B:137:PRO:HB3	2.19	0.43
1:C:434:THR:HG21	1:D:72:ARG:HG3	2.01	0.43
1:D:201:PHE:HD1	1:D:283:CYS:HB2	1.84	0.43
1:E:117:GLU:OE1	1:E:124:GLY:HA2	2.19	0.43
1:E:223:TYR:HE1	1:E:278:LYS:HG3	1.83	0.43
1:E:436:ASN:HA	1:E:439:ASN:ND2	2.34	0.43
1:H:252:LYS:HD2	1:H:256:ASP:HB3	2.00	0.43
1:H:89:ASP:O	1:H:92:ASP:HB2	2.18	0.43
1:I:248:LYS:HE3	1:I:252:LYS:HB2	2.00	0.43
1:I:528:LYS:NZ	1:I:559:LEU:O	2.44	0.43
1:I:640:GLU:HA	1:I:643:ASN:HD22	1.83	0.43
1:I:642:GLN:HA	1:I:645:LEU:HD12	1.99	0.43
1:I:695:GLU:HA	1:I:698:HIS:ND1	2.33	0.43
1:J:53:TYR:CG	1:J:54:ARG:N	2.86	0.43
1:J:609:VAL:O	1:J:612:GLN:HB2	2.19	0.43
1:J:663:SER:HA	1:J:666:ARG:NE	2.29	0.43
1:K:193:LEU:HD23	1:K:193:LEU:HA	1.90	0.43
1:K:403:TYR:OH	1:L:397:VAL:HG11	2.19	0.43
1:L:72:ARG:HH22	1:L:112:ASN:HA	1.83	0.43
1:A:373:LEU:HD21	1:L:356:ILE:HG21	2.01	0.43
1:A:609:VAL:O	1:A:612:GLN:HB2	2.19	0.43
1:B:353:PRO:HD3	1:C:374:LEU:O	2.19	0.43
1:B:383:ASP:O	1:B:384:LEU:HD12	2.19	0.43
1:C:47:GLN:HB2	1:C:50:THR:CG2	2.48	0.43
1:C:695:GLU:HA	1:C:698:HIS:CE1	2.54	0.43
1:D:383:ASP:O	1:D:384:LEU:HD12	2.18	0.43
1:D:662:GLN:HA	1:D:665:PHE:CD2	2.54	0.43
1:F:383:ASP:O	1:F:384:LEU:HD12	2.18	0.43
1:G:235:TYR:CE1	1:G:264:ILE:HA	2.53	0.43
1:H:193:LEU:HD21	1:H:288:LYS:HZ3	1.82	0.43
1:H:303:VAL:HG12	1:H:439:ASN:HB3	1.99	0.43
1:H:642:GLN:HA	1:H:645:LEU:HD12	2.01	0.43
1:I:333:ILE:HG22	1:I:337:ASN:OD1	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:35:PHE:CZ	1:I:321:ARG:HB2	2.53	0.43
1:I:78:VAL:HA	1:I:520:VAL:HA	2.00	0.43
1:I:70:GLU:O	1:I:73:GLN:HG3	2.18	0.43
1:J:21:ALA:HA	1:J:159:ASP:OD2	2.19	0.43
1:J:249:ARG:HG3	1:J:250:ASP:N	2.33	0.43
1:K:249:ARG:HG3	1:K:250:ASP:N	2.34	0.43
1:L:640:GLU:HA	1:L:643:ASN:HD22	1.84	0.43
1:A:146:ARG:HG2	1:A:148:PRO:HD3	2.01	0.43
1:A:376:ARG:HD2	1:L:352:TRP:CB	2.40	0.43
1:B:53:TYR:CG	1:B:54:ARG:N	2.87	0.43
1:C:662:GLN:HA	1:C:665:PHE:CD2	2.53	0.43
1:D:126:TRP:CD1	1:D:146:ARG:HG3	2.54	0.43
1:D:165:MET:HB3	1:D:304:PHE:CG	2.53	0.43
1:E:10:SER:O	1:E:14:ARG:HG2	2.18	0.43
1:E:591:GLN:HA	1:E:595:GLU:CD	2.38	0.43
1:G:120:GLU:HA	1:G:320:VAL:HB	1.99	0.43
1:G:272:LYS:N	1:H:134:ASP:OD2	2.52	0.43
1:G:383:ASP:O	1:G:384:LEU:HD12	2.18	0.43
1:H:162:SER:HB2	1:H:170:ALA:HB2	1.99	0.43
1:H:168:SER:HA	1:H:297:HIS:NE2	2.34	0.43
1:I:47:GLN:HB2	1:I:50:THR:HG21	2.01	0.43
1:I:662:GLN:HA	1:I:665:PHE:CD2	2.53	0.43
1:K:350:PHE:CE1	1:L:372:TYR:HB3	2.53	0.43
1:K:429:GLN:HA	1:K:432:PHE:HD2	1.84	0.43
1:K:525:GLN:HB2	1:K:529:GLN:OE1	2.19	0.43
1:K:593:LEU:O	1:K:597:GLN:HG3	2.19	0.43
1:L:21:ALA:HB2	1:L:172:HIS:CD2	2.54	0.43
1:B:355:GLN:HA	1:B:375:ASN:HB3	2.01	0.43
1:C:162:SER:OG	1:C:167:LYS:HA	2.19	0.43
1:C:233:PHE:HB2	1:C:249:ARG:HB3	1.99	0.43
1:E:133:GLU:O	1:E:137:PRO:HB3	2.19	0.43
1:E:193:LEU:HD21	1:E:288:LYS:HZ1	1.82	0.43
1:F:354:GLU:HG2	1:G:376:ARG:HD3	2.00	0.43
1:H:24:GLU:HB2	1:H:159:ASP:OD2	2.19	0.43
1:H:444:LEU:O	1:H:448:VAL:HG23	2.18	0.43
1:I:438:LEU:HD11	1:J:108:LYS:HD3	1.99	0.43
1:I:612:GLN:O	1:I:615:LEU:HD22	2.19	0.43
1:J:38:VAL:HG22	1:J:43:ASP:OD1	2.19	0.43
1:K:193:LEU:HD21	1:K:288:LYS:HZ3	1.83	0.43
1:K:233:PHE:HB2	1:K:249:ARG:HB3	2.00	0.43
1:K:225:VAL:HG22	1:K:276:VAL:HG12	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:410:SER:O	1:K:413:LYS:HG2	2.18	0.43
1:K:42:ASP:HB3	1:K:44:TRP:HD1	1.82	0.43
1:K:434:THR:HG21	1:L:72:ARG:HG3	2.01	0.43
1:B:538:LEU:HB3	1:B:551:LEU:HD11	2.01	0.43
1:C:538:LEU:HB3	1:C:551:LEU:HD11	2.01	0.43
1:C:161:ASN:ND2	1:D:183:GLY:HA3	2.34	0.43
1:D:99:ARG:NE	1:D:525:GLN:O	2.52	0.43
1:E:333:ILE:HG22	1:E:337:ASN:OD1	2.18	0.43
1:E:47:GLN:HB2	1:E:50:THR:HG21	1.99	0.43
1:F:228:LYS:HB2	1:F:275:ARG:HB3	2.01	0.43
1:G:99:ARG:NH2	1:G:525:GLN:HA	2.34	0.43
1:H:621:GLU:OE2	1:I:616:LEU:HA	2.19	0.43
1:I:663:SER:HA	1:I:666:ARG:HG2	2.01	0.43
1:L:613:GLY:O	1:L:616:LEU:N	2.51	0.43
1:A:559:LEU:HB3	1:A:565:VAL:HB	2.01	0.42
1:B:75:PRO:HD2	1:B:523:SER:HB3	2.01	0.42
1:C:117:GLU:OE1	1:C:124:GLY:HA2	2.19	0.42
1:C:323:THR:HG22	1:C:415:VAL:CG2	2.49	0.42
1:C:411:ALA:O	1:C:415:VAL:HG22	2.19	0.42
1:D:57:PHE:HB2	1:D:334:MET:SD	2.59	0.42
1:E:525:GLN:HB2	1:E:529:GLN:OE1	2.19	0.42
1:F:133:GLU:O	1:F:137:PRO:HB3	2.19	0.42
1:F:146:ARG:HG2	1:F:148:PRO:HD3	2.01	0.42
1:F:32:ASP:HA	1:F:35:PHE:CD2	2.54	0.42
1:F:380:ASN:OD1	1:F:381:SER:N	2.50	0.42
1:F:398:PRO:O	1:F:399:GLN:HG2	2.19	0.42
1:G:275:ARG:NH2	1:G:293:ILE:O	2.38	0.42
1:H:338:ALA:O	1:H:342:ALA:N	2.52	0.42
1:H:514:TYR:HB2	1:I:136:SER:OG	2.19	0.42
1:I:538:LEU:O	1:I:542:THR:OG1	2.37	0.42
1:I:559:LEU:HB3	1:I:565:VAL:HB	2.01	0.42
1:I:353:PRO:HD3	1:J:374:LEU:O	2.19	0.42
1:K:35:PHE:CZ	1:K:321:ARG:HB2	2.54	0.42
1:K:559:LEU:HB3	1:K:565:VAL:HB	2.01	0.42
1:L:110:ALA:HB1	1:L:126:TRP:CE3	2.53	0.42
1:L:429:GLN:HA	1:L:432:PHE:CD2	2.53	0.42
1:A:126:TRP:CD1	1:A:146:ARG:HG3	2.54	0.42
1:A:99:ARG:NH2	1:A:525:GLN:HA	2.34	0.42
1:B:252:LYS:HD2	1:B:256:ASP:HB3	2.01	0.42
1:C:114:ALA:O	1:C:118:GLN:HB2	2.19	0.42
1:C:42:ASP:HB3	1:C:44:TRP:HD1	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:564:GLY:O	1:C:568:MET:HG2	2.19	0.42
1:D:664:GLU:HG3	1:E:659:LEU:HD22	2.01	0.42
1:E:403:TYR:OH	1:F:397:VAL:HG11	2.19	0.42
1:F:436:ASN:HA	1:F:439:ASN:ND2	2.34	0.42
1:F:695:GLU:HA	1:F:698:HIS:ND1	2.34	0.42
1:I:248:LYS:CD	1:I:251:ILE:HB	2.42	0.42
1:I:538:LEU:HB3	1:I:551:LEU:HD11	2.01	0.42
1:J:133:GLU:O	1:J:137:PRO:HB3	2.19	0.42
1:J:578:GLN:HA	1:J:597:GLN:HE21	1.83	0.42
1:L:231:THR:HG22	1:L:249:ARG:HE	1.84	0.42
1:B:10:SER:O	1:B:14:ARG:HG2	2.19	0.42
1:C:31:ASN:O	1:C:35:PHE:HD2	2.02	0.42
1:C:383:ASP:O	1:C:384:LEU:HD12	2.19	0.42
1:D:430:VAL:O	1:D:433:ASP:HB2	2.20	0.42
1:D:546:THR:OG1	1:D:547:PRO:HD3	2.19	0.42
1:E:297:HIS:CG	1:E:298:ILE:H	2.38	0.42
1:E:70:GLU:O	1:E:73:GLN:HG3	2.18	0.42
1:H:21:ALA:HB2	1:H:172:HIS:NE2	2.34	0.42
1:H:42:ASP:OD2	1:H:44:TRP:NE1	2.53	0.42
1:I:383:ASP:O	1:I:384:LEU:HD12	2.19	0.42
1:K:444:LEU:HD23	1:K:518:THR:HB	2.01	0.42
1:L:649:ARG:O	1:L:653:ILE:HG13	2.19	0.42
1:A:204:PRO:HD3	1:A:218:GLN:HG2	2.01	0.42
1:B:309:PHE:HB2	1:C:150:HIS:HB2	2.01	0.42
1:C:400:ALA:O	1:C:404:MET:HB2	2.19	0.42
1:D:220:ALA:CB	1:D:281:ILE:O	2.52	0.42
1:E:514:TYR:HB2	1:F:136:SER:OG	2.18	0.42
1:E:661:LYS:HE3	1:E:665:PHE:CZ	2.54	0.42
1:F:152:ALA:HA	1:F:155:HIS:HB2	2.01	0.42
1:G:21:ALA:HB1	1:G:157:ILE:HB	2.01	0.42
1:H:126:TRP:CD1	1:H:146:ARG:HG3	2.54	0.42
1:H:204:PRO:HD3	1:H:218:GLN:HG2	2.02	0.42
1:H:320:VAL:O	1:H:324:LYS:HG3	2.20	0.42
1:J:223:TYR:CE1	1:J:278:LYS:HG3	2.55	0.42
1:J:27:ARG:HH11	1:J:313:LYS:HE3	1.84	0.42
1:L:613:GLY:HA2	1:L:616:LEU:HD12	2.01	0.42
1:A:337:ASN:HA	1:A:340:ILE:HD12	2.01	0.42
1:A:374:LEU:O	1:L:353:PRO:HD3	2.18	0.42
1:A:590:GLN:HA	1:A:594:VAL:HB	2.01	0.42
1:A:695:GLU:HA	1:A:698:HIS:ND1	2.35	0.42
1:B:281:ILE:HG23	1:B:286:VAL:HA	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:133:GLU:O	1:C:137:PRO:HB3	2.19	0.42
1:D:72:ARG:HH22	1:D:112:ASN:HA	1.84	0.42
1:D:233:PHE:HB2	1:D:249:ARG:HB3	2.01	0.42
1:D:363:TYR:CE1	1:D:372:TYR:HA	2.54	0.42
1:D:614:VAL:HG11	1:E:609:VAL:HG11	2.00	0.42
1:E:24:GLU:HB2	1:E:159:ASP:OD2	2.20	0.42
1:E:78:VAL:HA	1:E:520:VAL:HA	2.02	0.42
1:E:53:TYR:O	1:E:54:ARG:NH1	2.48	0.42
1:G:248:LYS:CD	1:G:251:ILE:HB	2.44	0.42
1:G:31:ASN:O	1:G:35:PHE:HD2	2.02	0.42
1:H:586:THR:CG2	1:H:590:GLN:HE22	2.27	0.42
1:I:26:ARG:O	1:I:30:LYS:HG3	2.19	0.42
1:I:57:PHE:HB2	1:I:334:MET:SD	2.60	0.42
1:I:80:TYR:CZ	1:I:516:CYS:HB2	2.54	0.42
1:J:65:ARG:O	1:J:69:SER:HB2	2.20	0.42
1:K:133:GLU:O	1:K:137:PRO:HB3	2.19	0.42
1:K:99:ARG:NE	1:K:525:GLN:O	2.51	0.42
1:L:447:TYR:O	1:L:450:GLN:HB3	2.19	0.42
1:L:671:THR:HG22	1:L:675:PHE:CZ	2.54	0.42
1:A:281:ILE:HG12	1:A:287:LEU:H	1.84	0.42
1:A:652:GLU:O	1:A:656:ASN:HB2	2.19	0.42
1:B:77:ASP:HB2	1:B:522:PRO:O	2.18	0.42
1:D:411:ALA:O	1:D:415:VAL:HG22	2.19	0.42
1:D:429:GLN:HA	1:D:432:PHE:HD2	1.84	0.42
1:D:663:SER:HA	1:D:666:ARG:HG2	2.01	0.42
1:E:233:PHE:HB2	1:E:249:ARG:HB3	2.01	0.42
1:E:26:ARG:O	1:E:30:LYS:HG3	2.20	0.42
1:E:320:VAL:O	1:E:324:LYS:HG3	2.20	0.42
1:E:701:ARG:HA	1:E:704:ILE:HD12	2.02	0.42
1:G:232:ALA:HA	1:G:269:ARG:H	1.84	0.42
1:H:248:LYS:CD	1:H:251:ILE:HB	2.41	0.42
1:I:444:LEU:HD23	1:I:518:THR:HB	2.00	0.42
1:J:248:LYS:CD	1:J:251:ILE:HB	2.43	0.42
1:J:663:SER:HA	1:J:666:ARG:HG2	2.02	0.42
1:K:447:TYR:O	1:K:450:GLN:HB3	2.19	0.42
1:L:21:ALA:HB2	1:L:172:HIS:NE2	2.35	0.42
1:L:252:LYS:HD2	1:L:256:ASP:HB3	2.01	0.42
1:A:21:ALA:HB1	1:A:157:ILE:HB	2.00	0.42
1:A:31:ASN:O	1:A:35:PHE:HD2	2.01	0.42
1:B:165:MET:HB3	1:B:304:PHE:CG	2.55	0.42
1:B:236:GLN:HG2	1:B:244:VAL:H	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:53:TYR:O	1:C:54:ARG:NH1	2.50	0.42
1:D:695:GLU:HA	1:D:698:HIS:ND1	2.35	0.42
1:E:31:ASN:O	1:E:35:PHE:HD2	2.02	0.42
1:F:338:ALA:O	1:F:342:ALA:N	2.52	0.42
1:G:142:GLN:NE2	1:G:455:THR:OG1	2.53	0.42
1:G:546:THR:OG1	1:G:547:PRO:HD3	2.19	0.42
1:J:10:SER:O	1:J:14:ARG:HG2	2.20	0.42
1:L:420:VAL:HB	1:L:424:ALA:HA	2.00	0.42
1:A:193:LEU:HD23	1:A:193:LEU:HA	1.92	0.42
1:A:252:LYS:HD2	1:A:256:ASP:HB3	2.00	0.42
1:A:297:HIS:CG	1:A:298:ILE:H	2.37	0.42
1:B:307:TRP:HE1	1:B:314:GLU:HG2	1.85	0.42
1:B:539:LEU:HG	1:B:551:LEU:HD22	2.02	0.42
1:A:653:ILE:HG12	1:B:648:ALA:HA	2.01	0.42
1:D:117:GLU:OE1	1:D:124:GLY:HA2	2.19	0.42
1:D:248:LYS:CD	1:D:251:ILE:HB	2.44	0.42
1:E:162:SER:OG	1:E:167:LYS:HA	2.20	0.42
1:E:275:ARG:NH2	1:E:293:ILE:O	2.40	0.42
1:E:564:GLY:O	1:E:568:MET:HG2	2.19	0.42
1:G:249:ARG:HG3	1:G:250:ASP:N	2.34	0.42
1:G:354:GLU:HG2	1:H:376:ARG:HD3	2.01	0.42
1:H:383:ASP:O	1:H:384:LEU:HD12	2.19	0.42
1:I:24:GLU:HB2	1:I:159:ASP:OD2	2.20	0.42
1:I:404:MET:HA	1:I:407:ALA:HB3	2.02	0.42
1:I:411:ALA:HA	1:J:57:PHE:HE1	1.83	0.42
1:J:411:ALA:O	1:J:415:VAL:HG22	2.19	0.42
1:K:546:THR:OG1	1:K:547:PRO:HD3	2.19	0.42
1:K:613:GLY:HA2	1:K:616:LEU:CD1	2.46	0.42
1:B:21:ALA:HB2	1:B:172:HIS:CD2	2.55	0.42
1:B:81:ARG:HB2	1:B:517:TYR:CZ	2.55	0.42
1:C:38:VAL:HG22	1:C:43:ASP:OD1	2.20	0.42
1:C:609:VAL:O	1:C:612:GLN:HB2	2.20	0.42
1:D:120:GLU:HA	1:D:320:VAL:HB	2.01	0.42
1:D:203:ASN:HD21	1:D:209:PHE:HZ	1.68	0.42
1:E:89:ASP:O	1:E:92:ASP:HB2	2.20	0.42
1:E:99:ARG:O	1:E:103:ARG:N	2.53	0.42
1:F:193:LEU:HD23	1:F:193:LEU:HA	1.88	0.42
1:F:246:TYR:HB2	1:F:511:ARG:H	1.85	0.42
1:F:78:VAL:HA	1:F:520:VAL:HA	2.01	0.42
1:H:235:TYR:HE1	1:H:264:ILE:HA	1.85	0.42
1:H:434:THR:HG21	1:I:72:ARG:HG3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:75:PRO:HD2	1:H:523:SER:HB3	2.01	0.42
1:I:622:LEU:O	1:I:626:GLN:HG3	2.20	0.42
1:L:297:HIS:CG	1:L:298:ILE:N	2.87	0.42
1:L:538:LEU:O	1:L:542:THR:OG1	2.38	0.42
1:A:21:ALA:HB2	1:A:172:HIS:CD2	2.54	0.42
1:C:307:TRP:HE1	1:C:314:GLU:HG2	1.85	0.42
1:C:649:ARG:O	1:C:653:ILE:HG13	2.20	0.42
1:D:623:ALA:O	1:D:626:GLN:HB2	2.20	0.42
1:D:628:GLN:O	1:D:632:LEU:HB2	2.19	0.42
1:E:176:ILE:HD11	1:E:204:PRO:HB3	2.01	0.42
1:E:623:ALA:O	1:E:626:GLN:HB2	2.19	0.42
1:G:642:GLN:HA	1:G:645:LEU:HD12	2.01	0.42
1:H:235:TYR:HA	1:H:265:LYS:O	2.20	0.42
1:H:447:TYR:O	1:H:450:GLN:HB3	2.20	0.42
1:I:21:ALA:HB2	1:I:172:HIS:CD2	2.54	0.42
1:J:162:SER:OG	1:J:164:LEU:O	2.38	0.42
1:K:297:HIS:CG	1:K:298:ILE:N	2.88	0.42
1:B:55:GLY:N	1:B:335:SER:OG	2.52	0.41
1:C:236:GLN:HA	1:C:245:SER:H	1.85	0.41
1:C:448:VAL:HG12	1:C:514:TYR:CE1	2.55	0.41
1:C:622:LEU:O	1:C:626:GLN:HG3	2.20	0.41
1:D:35:PHE:CZ	1:D:321:ARG:HB2	2.55	0.41
1:E:532:ARG:HH22	1:E:560:LEU:HD11	1.85	0.41
1:D:581:VAL:HG22	1:E:567:MET:HB2	2.01	0.41
1:E:660:SER:O	1:E:663:SER:OG	2.24	0.41
1:F:124:GLY:CA	1:F:303:VAL:HG22	2.49	0.41
1:F:47:GLN:HB2	1:F:50:THR:HG21	2.02	0.41
1:G:117:GLU:OE1	1:G:124:GLY:HA2	2.20	0.41
1:G:527:MET:HA	1:G:530:GLN:CD	2.40	0.41
1:G:628:GLN:O	1:G:632:LEU:HB2	2.19	0.41
1:G:641:ALA:HA	1:G:644:GLN:OE1	2.20	0.41
1:H:231:THR:HG22	1:H:249:ARG:HE	1.85	0.41
1:H:410:SER:O	1:H:413:LYS:HG2	2.20	0.41
1:J:162:SER:OG	1:J:167:LYS:HA	2.20	0.41
1:J:297:HIS:CG	1:J:298:ILE:H	2.37	0.41
1:K:532:ARG:HH22	1:K:560:LEU:HD11	1.85	0.41
1:L:31:ASN:O	1:L:35:PHE:HD2	2.02	0.41
1:A:83:LYS:HD2	1:A:515:GLU:CG	2.50	0.41
1:B:238:PRO:HB3	1:B:263:PHE:CD1	2.55	0.41
1:B:325:ASP:HA	1:B:328:ARG:NH1	2.36	0.41
1:B:695:GLU:HA	1:B:698:HIS:ND1	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:151:SER:O	1:C:155:HIS:ND1	2.44	0.41
1:C:162:SER:HB2	1:C:170:ALA:HB2	2.02	0.41
1:C:248:LYS:CD	1:C:251:ILE:HB	2.43	0.41
1:C:357:ALA:HA	1:C:360:GLU:OE2	2.20	0.41
1:C:47:GLN:HB2	1:C:50:THR:HG21	2.01	0.41
1:C:710:SER:O	1:C:714:ASN:HB2	2.20	0.41
1:D:248:LYS:HE3	1:D:252:LYS:HB2	2.02	0.41
1:D:323:THR:HG22	1:D:415:VAL:CG2	2.50	0.41
1:D:564:GLY:O	1:D:568:MET:HG2	2.19	0.41
1:D:663:SER:O	1:D:666:ARG:HG3	2.19	0.41
1:E:171:ARG:NH1	1:F:186:ASP:OD2	2.52	0.41
1:F:233:PHE:HB2	1:F:249:ARG:HB3	2.02	0.41
1:G:21:ALA:HB2	1:G:172:HIS:CD2	2.54	0.41
1:G:403:TYR:OH	1:H:397:VAL:HG11	2.21	0.41
1:H:695:GLU:HA	1:H:698:HIS:ND1	2.34	0.41
1:I:133:GLU:O	1:I:137:PRO:HB3	2.20	0.41
1:I:307:TRP:HE1	1:I:314:GLU:HG2	1.85	0.41
1:J:146:ARG:HG2	1:J:148:PRO:HD3	2.02	0.41
1:J:275:ARG:HD2	1:J:296:GLU:HG2	2.02	0.41
1:J:57:PHE:HB2	1:J:334:MET:SD	2.60	0.41
1:J:546:THR:OG1	1:J:547:PRO:HD3	2.19	0.41
1:J:564:GLY:O	1:J:568:MET:HG2	2.20	0.41
1:K:652:GLU:O	1:K:656:ASN:HB2	2.21	0.41
1:L:386:THR:HG22	1:L:387:GLN:N	2.35	0.41
1:C:120:GLU:HA	1:C:320:VAL:HB	2.02	0.41
1:C:231:THR:HG22	1:C:249:ARG:HE	1.85	0.41
1:D:444:LEU:HD23	1:D:518:THR:HB	2.01	0.41
1:E:35:PHE:H	1:E:35:PHE:HD2	1.68	0.41
1:F:623:ALA:O	1:F:626:GLN:HB2	2.21	0.41
1:G:231:THR:HG22	1:G:249:ARG:HE	1.84	0.41
1:G:29:ALA:O	1:G:33:LEU:HB2	2.20	0.41
1:H:120:GLU:HA	1:H:320:VAL:HB	2.02	0.41
1:H:411:ALA:O	1:H:415:VAL:HG22	2.21	0.41
1:I:276:VAL:HG11	1:I:297:HIS:O	2.20	0.41
1:I:546:THR:OG1	1:I:547:PRO:HD3	2.21	0.41
1:I:591:GLN:HA	1:I:595:GLU:CD	2.40	0.41
1:J:235:TYR:HE1	1:J:264:ILE:HA	1.84	0.41
1:J:355:GLN:HA	1:J:375:ASN:HB3	2.02	0.41
1:L:441:ARG:O	1:L:444:LEU:HB3	2.20	0.41
1:L:527:MET:HA	1:L:530:GLN:CD	2.41	0.41
1:B:57:PHE:HB2	1:B:334:MET:SD	2.60	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:72:ARG:NH2	1:C:111:VAL:HG12	2.34	0.41
1:D:45:LEU:HG	1:D:46:SER:H	1.84	0.41
1:F:83:LYS:HD2	1:F:515:GLU:CG	2.51	0.41
1:G:110:ALA:HB1	1:G:126:TRP:CE3	2.56	0.41
1:H:246:TYR:HB2	1:H:511:ARG:H	1.85	0.41
1:H:389:LEU:HD23	1:H:389:LEU:HA	1.89	0.41
1:I:297:HIS:CG	1:I:298:ILE:H	2.38	0.41
1:J:398:PRO:O	1:J:399:GLN:HG2	2.20	0.41
1:J:83:LYS:HD2	1:J:515:GLU:CG	2.50	0.41
1:J:593:LEU:O	1:J:597:GLN:HG3	2.21	0.41
1:K:509:ASP:OD2	1:K:513:ARG:NH2	2.53	0.41
1:L:641:ALA:HA	1:L:644:GLN:OE1	2.21	0.41
1:A:411:ALA:HA	1:B:57:PHE:HE1	1.84	0.41
1:A:438:LEU:O	1:A:442:ALA:N	2.42	0.41
1:B:231:THR:HG22	1:B:249:ARG:HE	1.85	0.41
1:A:646:ASN:HA	1:B:644:GLN:HG2	2.02	0.41
1:C:386:THR:HG22	1:C:387:GLN:N	2.35	0.41
1:C:623:ALA:HA	1:C:626:GLN:CD	2.41	0.41
1:C:628:GLN:O	1:C:632:LEU:HB2	2.21	0.41
1:D:386:THR:HG22	1:D:387:GLN:N	2.35	0.41
1:D:441:ARG:O	1:D:444:LEU:HB3	2.21	0.41
1:C:621:GLU:OE2	1:D:616:LEU:HA	2.20	0.41
1:E:193:LEU:HA	1:E:193:LEU:HD23	1.91	0.41
1:F:231:THR:HG22	1:F:249:ARG:HE	1.85	0.41
1:F:386:THR:HG22	1:F:387:GLN:N	2.36	0.41
1:F:509:ASP:OD2	1:F:513:ARG:NH2	2.53	0.41
1:F:546:THR:OG1	1:F:547:PRO:HD3	2.21	0.41
1:G:320:VAL:O	1:G:323:THR:OG1	2.21	0.41
1:G:663:SER:HA	1:G:666:ARG:HG2	2.01	0.41
1:H:564:GLY:O	1:H:568:MET:HG2	2.20	0.41
1:I:105:ASN:O	1:I:109:ILE:HG12	2.21	0.41
1:J:320:VAL:O	1:J:324:LYS:HG3	2.21	0.41
1:K:120:GLU:HA	1:K:320:VAL:HB	2.03	0.41
1:K:333:ILE:HG22	1:K:337:ASN:OD1	2.20	0.41
1:L:162:SER:OG	1:L:167:LYS:HA	2.20	0.41
1:L:47:GLN:HB2	1:L:50:THR:HG21	2.02	0.41
1:L:623:ALA:HA	1:L:626:GLN:CD	2.40	0.41
1:A:110:ALA:HB1	1:A:126:TRP:CE3	2.56	0.41
1:A:436:ASN:HA	1:A:439:ASN:ND2	2.34	0.41
1:B:447:TYR:O	1:B:450:GLN:HB3	2.20	0.41
1:B:541:LYS:HB3	1:B:541:LYS:HE2	1.91	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:281:ILE:HG23	1:C:286:VAL:HA	2.03	0.41
1:C:546:THR:OG1	1:C:547:PRO:HD3	2.19	0.41
1:E:106:THR:HG23	1:E:146:ARG:HE	1.86	0.41
1:E:232:ALA:HA	1:E:269:ARG:H	1.86	0.41
1:F:151:SER:HB3	1:F:154:SER:OG	2.20	0.41
1:G:38:VAL:HG22	1:G:43:ASP:OD1	2.20	0.41
1:G:526:SER:O	1:G:530:GLN:N	2.49	0.41
1:H:276:VAL:HG23	1:H:293:ILE:HD13	2.02	0.41
1:I:126:TRP:CD1	1:I:146:ARG:HG3	2.56	0.41
1:I:70:GLU:OE1	1:I:429:GLN:HG3	2.21	0.41
1:J:47:GLN:HB2	1:J:50:THR:CG2	2.50	0.41
1:J:622:LEU:O	1:J:626:GLN:HG3	2.21	0.41
1:K:117:GLU:OE1	1:K:124:GLY:HA2	2.20	0.41
1:K:232:ALA:HA	1:K:269:ARG:H	1.85	0.41
1:K:231:THR:HG22	1:K:249:ARG:HE	1.86	0.41
1:K:389:LEU:HD23	1:K:389:LEU:HA	1.90	0.41
1:L:26:ARG:O	1:L:30:LYS:HG3	2.21	0.41
1:L:77:ASP:HB2	1:L:523:SER:HA	2.03	0.41
1:A:329:LEU:O	1:A:333:ILE:HG13	2.21	0.41
1:A:350:PHE:CE1	1:B:372:TYR:HB3	2.56	0.41
1:B:546:THR:OG1	1:B:547:PRO:HD3	2.21	0.41
1:D:281:ILE:HG23	1:D:286:VAL:HA	2.02	0.41
1:D:296:GLU:HB2	1:D:449:PHE:CD2	2.39	0.41
1:F:514:TYR:HB2	1:G:136:SER:OG	2.20	0.41
1:G:386:THR:HG22	1:G:387:GLN:N	2.35	0.41
1:I:231:THR:HG22	1:I:249:ARG:HE	1.85	0.41
1:I:238:PRO:HB3	1:I:263:PHE:CE1	2.56	0.41
1:L:193:LEU:HD21	1:L:288:LYS:HZ3	1.86	0.41
1:K:353:PRO:HD3	1:L:374:LEU:O	2.21	0.41
1:L:83:LYS:HD2	1:L:515:GLU:CG	2.50	0.41
1:L:623:ALA:O	1:L:626:GLN:HB2	2.21	0.41
1:L:652:GLU:O	1:L:656:ASN:HB2	2.20	0.41
1:B:275:ARG:HD2	1:B:296:GLU:HG2	2.03	0.41
1:B:31:ASN:O	1:B:35:PHE:HD2	2.03	0.41
1:B:359:PHE:HB3	1:B:363:TYR:HE2	1.85	0.41
1:A:398:PRO:HB3	1:B:394:ASN:HB3	2.03	0.41
1:C:72:ARG:HH21	1:C:111:VAL:HG12	1.86	0.41
1:E:151:SER:HB2	1:E:155:HIS:CE1	2.55	0.41
1:E:710:SER:O	1:E:714:ASN:HB2	2.21	0.41
1:F:458:ARG:NH2	1:F:500:ALA:HB1	2.36	0.41
1:F:663:SER:HA	1:F:666:ARG:HG2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:546:THR:OG1	1:H:547:PRO:HD3	2.20	0.41
1:I:110:ALA:HB1	1:I:126:TRP:CE3	2.55	0.41
1:I:38:VAL:HG22	1:I:43:ASP:OD1	2.21	0.41
1:J:238:PRO:HB3	1:J:263:PHE:CE1	2.56	0.41
1:J:646:ASN:HA	1:K:644:GLN:HG2	2.03	0.41
1:K:26:ARG:O	1:K:30:LYS:HG3	2.21	0.41
1:K:436:ASN:HA	1:K:439:ASN:ND2	2.35	0.41
1:J:667:GLU:HG2	1:K:666:ARG:CZ	2.51	0.41
1:L:509:ASP:OD1	1:L:509:ASP:N	2.54	0.41
1:L:538:LEU:HB3	1:L:551:LEU:HD11	2.03	0.41
1:A:276:VAL:HG11	1:A:297:HIS:O	2.20	0.41
1:A:386:THR:HG22	1:A:387:GLN:N	2.35	0.41
1:A:623:ALA:O	1:A:626:GLN:HB2	2.20	0.41
1:B:614:VAL:HG11	1:C:609:VAL:HG11	2.03	0.41
1:C:297:HIS:CG	1:C:298:ILE:H	2.38	0.41
1:C:538:LEU:O	1:C:542:THR:OG1	2.38	0.41
1:C:57:PHE:HB2	1:C:334:MET:SD	2.61	0.41
1:E:225:VAL:HA	1:E:276:VAL:HG12	2.02	0.41
1:E:278:LYS:HB3	1:E:291:GLN:O	2.21	0.41
1:E:42:ASP:HB3	1:E:44:TRP:HD1	1.86	0.41
1:E:47:GLN:HB2	1:E:50:THR:CG2	2.51	0.41
1:G:220:ALA:CB	1:G:281:ILE:O	2.48	0.41
1:G:662:GLN:HA	1:G:665:PHE:CD2	2.55	0.41
1:H:127:ARG:HB3	1:H:147:GLU:HB2	2.02	0.41
1:H:203:ASN:HD21	1:H:209:PHE:HZ	1.69	0.41
1:H:306:GLU:OE2	1:I:61:ARG:NE	2.54	0.41
1:H:57:PHE:HB2	1:H:334:MET:SD	2.61	0.41
1:H:363:TYR:CE1	1:H:372:TYR:HA	2.53	0.41
1:H:593:LEU:O	1:H:597:GLN:HG3	2.21	0.41
1:I:236:GLN:HG2	1:I:244:VAL:H	1.86	0.41
1:I:359:PHE:HB3	1:I:363:TYR:HE2	1.86	0.41
1:I:649:ARG:O	1:I:653:ILE:HG13	2.20	0.41
1:K:238:PRO:HB3	1:K:263:PHE:CD1	2.56	0.41
1:K:663:SER:HA	1:K:666:ARG:NE	2.28	0.41
1:L:248:LYS:HG2	1:L:511:ARG:HH21	1.85	0.41
1:L:622:LEU:O	1:L:626:GLN:HG3	2.21	0.41
1:B:117:GLU:OE1	1:B:124:GLY:HA2	2.21	0.41
1:F:162:SER:OG	1:F:167:LYS:HA	2.20	0.41
1:F:448:VAL:HA	1:F:451:ASP:OD2	2.21	0.41
1:F:89:ASP:O	1:F:92:ASP:HB2	2.21	0.41
1:G:325:ASP:HA	1:G:328:ARG:NH1	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:458:ARG:NH2	1:G:500:ALA:HB1	2.36	0.41
1:I:162:SER:OG	1:I:167:LYS:HA	2.20	0.41
1:I:225:VAL:HG22	1:I:276:VAL:HG12	2.03	0.41
1:I:410:SER:O	1:I:413:LYS:HG2	2.20	0.41
1:I:458:ARG:NH2	1:I:500:ALA:HB1	2.35	0.41
1:I:562:GLY:O	1:I:566:GLU:HG3	2.21	0.41
1:I:615:LEU:O	1:I:618:GLY:N	2.54	0.41
1:J:42:ASP:HB3	1:J:44:TRP:HD1	1.85	0.41
1:K:235:TYR:HA	1:K:265:LYS:O	2.21	0.41
1:K:359:PHE:HB2	1:K:360:GLU:H	1.78	0.41
1:K:407:ALA:HA	1:K:410:SER:HB2	2.03	0.41
1:L:10:SER:O	1:L:14:ARG:HG2	2.21	0.41
1:L:282:THR:HG23	1:L:284:THR:H	1.85	0.41
1:A:184:TRP:CZ3	1:A:199:PRO:HG3	2.56	0.41
1:A:458:ARG:NH2	1:A:500:ALA:HB1	2.36	0.41
1:A:47:GLN:HB2	1:A:50:THR:HG21	2.03	0.41
1:B:398:PRO:O	1:B:399:GLN:HG2	2.20	0.41
1:B:87:ARG:HD3	1:B:89:ASP:HB2	2.02	0.41
1:C:282:THR:HG23	1:C:284:THR:H	1.86	0.41
1:C:562:GLY:O	1:C:566:GLU:HG3	2.20	0.41
1:C:83:LYS:HD2	1:C:515:GLU:CG	2.51	0.41
1:D:282:THR:HG23	1:D:284:THR:H	1.86	0.41
1:D:448:VAL:HA	1:D:451:ASP:OD2	2.21	0.41
1:D:526:SER:O	1:D:530:GLN:N	2.47	0.41
1:D:663:SER:HA	1:D:666:ARG:NE	2.27	0.41
1:F:460:ASP:HA	1:F:499:LEU:O	2.21	0.41
1:F:574:LYS:O	1:F:578:GLN:HG3	2.21	0.41
1:G:165:MET:HB3	1:G:304:PHE:CG	2.56	0.41
1:G:236:GLN:HG2	1:G:244:VAL:H	1.86	0.41
1:H:297:HIS:CG	1:H:298:ILE:H	2.38	0.41
1:H:72:ARG:HH21	1:H:111:VAL:HG12	1.86	0.41
1:H:403:TYR:OH	1:I:397:VAL:HG11	2.20	0.41
1:I:527:MET:HA	1:I:530:GLN:CD	2.41	0.41
1:J:21:ALA:HB2	1:J:172:HIS:CD2	2.56	0.41
1:J:386:THR:HG22	1:J:387:GLN:N	2.35	0.41
1:L:438:LEU:O	1:L:442:ALA:N	2.42	0.41
1:A:114:ALA:O	1:A:118:GLN:HB2	2.20	0.40
1:A:233:PHE:HB2	1:A:249:ARG:HB3	2.03	0.40
1:C:176:ILE:HG21	1:C:201:PHE:CE2	2.56	0.40
1:C:35:PHE:H	1:C:35:PHE:HD2	1.68	0.40
1:D:26:ARG:O	1:D:30:LYS:HG3	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:398:PRO:O	1:D:399:GLN:HG2	2.20	0.40
1:E:252:LYS:NZ	1:E:256:ASP:HB3	2.36	0.40
1:E:83:LYS:HD2	1:E:515:GLU:CG	2.52	0.40
1:F:556:TYR:HB3	1:F:572:ALA:CB	2.48	0.40
1:F:593:LEU:O	1:F:597:GLN:HG3	2.20	0.40
1:G:252:LYS:HD2	1:G:256:ASP:HB3	2.04	0.40
1:G:26:ARG:O	1:G:30:LYS:HG3	2.20	0.40
1:G:89:ASP:O	1:G:92:ASP:HB2	2.21	0.40
1:H:236:GLN:HG2	1:H:244:VAL:H	1.85	0.40
1:H:559:LEU:HB3	1:H:565:VAL:HB	2.04	0.40
1:J:662:GLN:HA	1:J:665:PHE:CD2	2.56	0.40
1:K:362:MET:HA	1:K:366:ASN:CB	2.50	0.40
1:K:83:LYS:HD2	1:K:515:GLU:CG	2.52	0.40
1:K:685:ALA:O	1:K:689:LEU:HG	2.21	0.40
1:L:248:LYS:CD	1:L:251:ILE:HB	2.45	0.40
1:L:259:ALA:HA	1:L:263:PHE:CD2	2.56	0.40
1:L:398:PRO:O	1:L:399:GLN:HG2	2.21	0.40
1:L:47:GLN:HB2	1:L:50:THR:CG2	2.51	0.40
1:A:183:GLY:HA3	1:L:161:ASN:ND2	2.33	0.40
1:A:35:PHE:HD2	1:A:35:PHE:H	1.69	0.40
1:A:644:GLN:HG2	1:L:646:ASN:HA	2.03	0.40
1:B:297:HIS:CG	1:B:298:ILE:H	2.38	0.40
1:B:363:TYR:CE1	1:B:372:TYR:HA	2.55	0.40
1:B:562:GLY:O	1:B:566:GLU:HG3	2.21	0.40
1:D:297:HIS:CG	1:D:298:ILE:N	2.90	0.40
1:D:35:PHE:HD2	1:D:35:PHE:H	1.68	0.40
1:D:323:THR:HG22	1:D:415:VAL:HG23	2.02	0.40
1:E:114:ALA:O	1:E:118:GLN:HB2	2.22	0.40
1:E:31:ASN:O	1:E:35:PHE:CD2	2.75	0.40
1:E:509:ASP:OD1	1:E:509:ASP:N	2.54	0.40
1:E:527:MET:HA	1:E:530:GLN:CD	2.41	0.40
1:F:117:GLU:OE1	1:F:124:GLY:HA2	2.21	0.40
1:F:10:SER:O	1:F:14:ARG:HG2	2.21	0.40
1:E:353:PRO:HD3	1:F:374:LEU:O	2.20	0.40
1:F:411:ALA:HA	1:G:57:PHE:HE1	1.86	0.40
1:G:105:ASN:O	1:G:109:ILE:HG12	2.20	0.40
1:G:276:VAL:HG11	1:G:297:HIS:O	2.21	0.40
1:G:581:VAL:HG22	1:H:567:MET:HB2	2.02	0.40
1:H:10:SER:O	1:H:14:ARG:HG2	2.21	0.40
1:H:573:ASN:HA	1:H:576:LEU:HD12	2.03	0.40
1:I:623:ALA:HA	1:I:626:GLN:CD	2.41	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:623:ALA:O	1:J:626:GLN:HB2	2.21	0.40
1:K:152:ALA:HA	1:K:155:HIS:HB2	2.04	0.40
1:K:411:ALA:O	1:K:415:VAL:HG22	2.21	0.40
1:L:117:GLU:OE1	1:L:124:GLY:HA2	2.22	0.40
1:A:116:ARG:NH2	1:L:306:GLU:HG3	2.36	0.40
1:L:609:VAL:O	1:L:612:GLN:HB2	2.20	0.40
1:A:398:PRO:CB	1:B:394:ASN:HB3	2.52	0.40
1:A:404:MET:HA	1:A:407:ALA:HB3	2.03	0.40
1:B:101:ASP:N	1:B:101:ASP:OD1	2.55	0.40
1:B:89:ASP:O	1:B:92:ASP:HB2	2.20	0.40
1:C:363:TYR:CE1	1:C:372:TYR:HA	2.56	0.40
1:D:133:GLU:O	1:D:137:PRO:HB3	2.21	0.40
1:D:15:PHE:HA	1:D:18:ASP:HB3	2.03	0.40
1:D:21:ALA:HB2	1:D:172:HIS:NE2	2.36	0.40
1:D:320:VAL:O	1:D:323:THR:OG1	2.19	0.40
1:E:83:LYS:HD2	1:E:515:GLU:HG3	2.03	0.40
1:G:562:GLY:O	1:G:566:GLU:HG3	2.21	0.40
1:H:176:ILE:HG21	1:H:201:PHE:CE2	2.56	0.40
1:I:64:VAL:HG22	1:I:119:ILE:HG21	2.04	0.40
1:L:278:LYS:HB3	1:L:291:GLN:O	2.21	0.40
1:A:546:THR:OG1	1:A:547:PRO:HD3	2.20	0.40
1:B:151:SER:O	1:B:155:HIS:ND1	2.43	0.40
1:B:526:SER:O	1:B:530:GLN:N	2.52	0.40
1:C:137:PRO:HG3	1:C:141:ASN:OD1	2.21	0.40
1:D:400:ALA:O	1:D:404:MET:HB2	2.22	0.40
1:F:609:VAL:O	1:F:612:GLN:HB2	2.22	0.40
1:F:657:MET:SD	1:G:655:ASN:ND2	2.94	0.40
1:G:374:LEU:HA	1:G:374:LEU:HD13	1.97	0.40
1:G:65:ARG:O	1:G:69:SER:HB2	2.22	0.40
1:G:161:ASN:ND2	1:H:183:GLY:HA3	2.37	0.40
1:H:47:GLN:HB2	1:H:50:THR:HG21	2.03	0.40
1:I:398:PRO:O	1:I:399:GLN:HG2	2.21	0.40
1:I:623:ALA:O	1:I:626:GLN:HB2	2.22	0.40
1:J:573:ASN:HA	1:J:576:LEU:HD12	2.03	0.40
1:K:657:MET:SD	1:L:655:ASN:ND2	2.94	0.40
1:L:248:LYS:CG	1:L:511:ARG:HH21	2.35	0.40
1:L:448:VAL:HA	1:L:451:ASP:OD2	2.21	0.40
1:A:527:MET:HA	1:A:530:GLN:CD	2.42	0.40
1:B:248:LYS:HE3	1:B:252:LYS:HB2	2.02	0.40
1:D:621:GLU:OE2	1:E:616:LEU:HB3	2.21	0.40
1:D:685:ALA:O	1:D:689:LEU:HG	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:42:ASP:HB3	1:F:44:TRP:HD1	1.87	0.40
1:G:297:HIS:CG	1:G:298:ILE:H	2.40	0.40
1:G:407:ALA:HA	1:G:410:SER:HB2	2.04	0.40
1:G:538:LEU:HB3	1:G:551:LEU:HD11	2.03	0.40
1:H:238:PRO:HB3	1:H:263:PHE:CE1	2.57	0.40
1:H:407:ALA:HA	1:H:410:SER:HB2	2.04	0.40
1:H:72:ARG:HH22	1:H:112:ASN:HA	1.85	0.40
1:H:78:VAL:HA	1:H:520:VAL:HA	2.04	0.40
1:K:236:GLN:OE1	1:K:265:LYS:HD3	2.22	0.40
1:K:441:ARG:O	1:K:444:LEU:HB3	2.22	0.40
1:K:663:SER:HA	1:K:666:ARG:HG2	2.04	0.40
1:K:87:ARG:HD3	1:K:89:ASP:HB2	2.02	0.40
1:L:626:GLN:O	1:L:630:LEU:HB2	2.21	0.40

There are no symmetry-related clashes.

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	669/725 (92%)	562 (84%)	102 (15%)	5 (1%)	26	71
1	B	669/725 (92%)	561 (84%)	103 (15%)	5 (1%)	26	71
1	C	669/725 (92%)	560 (84%)	104 (16%)	5 (1%)	26	71
1	D	669/725 (92%)	561 (84%)	103 (15%)	5 (1%)	26	71
1	E	669/725 (92%)	562 (84%)	101 (15%)	6 (1%)	21	67
1	F	669/725 (92%)	561 (84%)	103 (15%)	5 (1%)	26	71
1	G	669/725 (92%)	563 (84%)	100 (15%)	6 (1%)	21	67
1	H	669/725 (92%)	561 (84%)	103 (15%)	5 (1%)	26	71
1	I	669/725 (92%)	560 (84%)	105 (16%)	4 (1%)	30	74
1	J	669/725 (92%)	559 (84%)	106 (16%)	4 (1%)	30	74

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	K	669/725 (92%)	560 (84%)	104 (16%)	5 (1%)	26	71
1	L	669/725 (92%)	562 (84%)	101 (15%)	6 (1%)	21	67
All	All	8028/8700 (92%)	6732 (84%)	1235 (15%)	61 (1%)	24	69

All (61) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	58	ASP
1	B	58	ASP
1	C	58	ASP
1	D	58	ASP
1	E	58	ASP
1	F	58	ASP
1	G	58	ASP
1	H	58	ASP
1	I	58	ASP
1	J	58	ASP
1	K	58	ASP
1	L	58	ASP
1	A	587	PRO
1	C	587	PRO
1	D	587	PRO
1	H	587	PRO
1	I	587	PRO
1	B	587	PRO
1	E	587	PRO
1	F	587	PRO
1	G	587	PRO
1	J	587	PRO
1	K	587	PRO
1	L	587	PRO
1	A	203	ASN
1	B	203	ASN
1	C	203	ASN
1	D	203	ASN
1	E	31	ASN
1	E	203	ASN
1	F	203	ASN
1	G	120	GLU
1	G	203	ASN
1	H	203	ASN

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Mol	Chain	Res	Type
1	I	203	ASN
1	J	203	ASN
1	K	31	ASN
1	K	203	ASN
1	L	31	ASN
1	L	203	ASN
1	A	76	ILE
1	B	76	ILE
1	C	76	ILE
1	D	76	ILE
1	E	76	ILE
1	F	76	ILE
1	G	76	ILE
1	H	76	ILE
1	I	76	ILE
1	J	76	ILE
1	K	76	ILE
1	L	76	ILE
1	B	653	ILE
1	C	653	ILE
1	E	653	ILE
1	F	653	ILE
1	H	653	ILE
1	L	653	ILE
1	A	653	ILE
1	D	653	ILE
1	G	653	ILE

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	572/630 (91%)	567 (99%)	5 (1%)	84	93
1	B	572/630 (91%)	566 (99%)	6 (1%)	82	92
1	C	572/630 (91%)	566 (99%)	6 (1%)	82	92

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	D	572/630 (91%)	568 (99%)	4 (1%)	88	94
1	E	572/630 (91%)	565 (99%)	7 (1%)	78	90
1	F	572/630 (91%)	565 (99%)	7 (1%)	78	90
1	G	572/630 (91%)	566 (99%)	6 (1%)	82	92
1	H	572/630 (91%)	568 (99%)	4 (1%)	88	94
1	I	572/630 (91%)	567 (99%)	5 (1%)	84	93
1	J	572/630 (91%)	567 (99%)	5 (1%)	84	93
1	K	572/630 (91%)	566 (99%)	6 (1%)	82	92
1	L	572/630 (91%)	567 (99%)	5 (1%)	84	93
All	All	6864/7560 (91%)	6798 (99%)	66 (1%)	82	92

All (66) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	164	LEU
1	A	277	TYR
1	A	403	TYR
1	A	615	LEU
1	A	616	LEU
1	B	142	GLN
1	B	164	LEU
1	B	277	TYR
1	B	403	TYR
1	B	615	LEU
1	B	616	LEU
1	C	142	GLN
1	C	164	LEU
1	C	277	TYR
1	C	403	TYR
1	C	615	LEU
1	C	616	LEU
1	D	164	LEU
1	D	277	TYR
1	D	403	TYR
1	D	616	LEU
1	E	142	GLN
1	E	164	LEU
1	E	277	TYR
1	E	403	TYR

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Mol	Chain	Res	Type
1	E	615	LEU
1	E	616	LEU
1	E	642	GLN
1	F	142	GLN
1	F	164	LEU
1	F	277	TYR
1	F	403	TYR
1	F	615	LEU
1	F	616	LEU
1	F	642	GLN
1	G	142	GLN
1	G	164	LEU
1	G	277	TYR
1	G	403	TYR
1	G	615	LEU
1	G	616	LEU
1	H	164	LEU
1	H	403	TYR
1	H	615	LEU
1	H	616	LEU
1	I	164	LEU
1	I	277	TYR
1	I	403	TYR
1	I	615	LEU
1	I	616	LEU
1	J	164	LEU
1	J	277	TYR
1	J	403	TYR
1	J	615	LEU
1	J	616	LEU
1	K	142	GLN
1	K	164	LEU
1	K	277	TYR
1	K	403	TYR
1	K	615	LEU
1	K	616	LEU
1	L	164	LEU
1	L	277	TYR
1	L	403	TYR
1	L	615	LEU
1	L	616	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (72) such

sidechains are listed below:

Mol	Chain	Res	Type
1	A	142	GLN
1	A	161	ASN
1	A	439	ASN
1	A	550	GLN
1	A	597	GLN
1	B	142	GLN
1	B	161	ASN
1	B	439	ASN
1	B	450	GLN
1	B	550	GLN
1	B	597	GLN
1	C	142	GLN
1	C	161	ASN
1	C	439	ASN
1	C	450	GLN
1	C	550	GLN
1	C	597	GLN
1	C	643	ASN
1	D	142	GLN
1	D	161	ASN
1	D	439	ASN
1	D	450	GLN
1	D	550	GLN
1	D	597	GLN
1	D	643	ASN
1	E	161	ASN
1	E	439	ASN
1	E	550	GLN
1	E	597	GLN
1	F	142	GLN
1	F	161	ASN
1	F	439	ASN
1	F	550	GLN
1	F	597	GLN
1	G	142	GLN
1	G	161	ASN
1	G	337	ASN
1	G	439	ASN
1	G	550	GLN
1	G	597	GLN
1	H	142	GLN
1	H	161	ASN

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Mol	Chain	Res	Type
1	H	439	ASN
1	H	450	GLN
1	H	550	GLN
1	H	597	GLN
1	I	142	GLN
1	I	161	ASN
1	I	450	GLN
1	I	550	GLN
1	I	597	GLN
1	I	643	ASN
1	I	696	GLN
1	J	142	GLN
1	J	161	ASN
1	J	439	ASN
1	J	450	GLN
1	J	550	GLN
1	J	597	GLN
1	J	643	ASN
1	K	142	GLN
1	K	161	ASN
1	K	337	ASN
1	K	439	ASN
1	K	450	GLN
1	K	550	GLN
1	K	597	GLN
1	L	142	GLN
1	L	161	ASN
1	L	450	GLN
1	L	550	GLN
1	L	597	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 [i](#)

There are no carbohydrates 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, 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	673/725 (92%)	-0.71	1 (0%) 95 95	46, 96, 204, 282	0
1	B	673/725 (92%)	-0.69	0 100 100	31, 97, 169, 284	0
1	C	673/725 (92%)	-0.71	0 100 100	47, 81, 181, 288	0
1	D	673/725 (92%)	-0.68	0 100 100	51, 97, 160, 240	0
1	E	673/725 (92%)	-0.68	0 100 100	54, 100, 176, 292	0
1	F	673/725 (92%)	-0.68	0 100 100	73, 110, 184, 317	0
1	G	673/725 (92%)	-0.62	3 (0%) 93 90	71, 117, 190, 362	0
1	H	673/725 (92%)	-0.66	1 (0%) 95 95	77, 127, 205, 345	0
1	I	673/725 (92%)	-0.64	0 100 100	90, 134, 222, 333	0
1	J	673/725 (92%)	-0.62	3 (0%) 93 90	70, 139, 211, 312	0
1	K	673/725 (92%)	-0.67	1 (0%) 95 95	65, 113, 182, 250	0
1	L	673/725 (92%)	-0.70	0 100 100	63, 106, 203, 303	0
All	All	8076/8700 (92%)	-0.67	9 (0%) 95 95	31, 112, 196, 362	0

All (9) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	G	714	ASN	4.1
1	G	715	GLN	3.8
1	G	712	ARG	2.7
1	J	50	THR	2.4
1	J	715	GLN	2.4
1	H	715	GLN	2.3
1	A	386	THR	2.3
1	J	713	GLN	2.2
1	K	386	THR	2.1

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 carbohydrates 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.