Full wwPDB EM Validation Report

Nov 20, 2022 – 04:40 pm GMT

PDB ID	:	5LI4
EMDB ID	:	EMD-4052
Title	:	bacteriophage phi812K1-420 tail sheath protein after contraction
Authors	:	Novacek, J.; Siborova, M.; Benesik, M.; Pantucek, R.; Doskar, J.; Plevka, P.
Deposited on	:	2016-07-14
Resolution	:	4.20 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

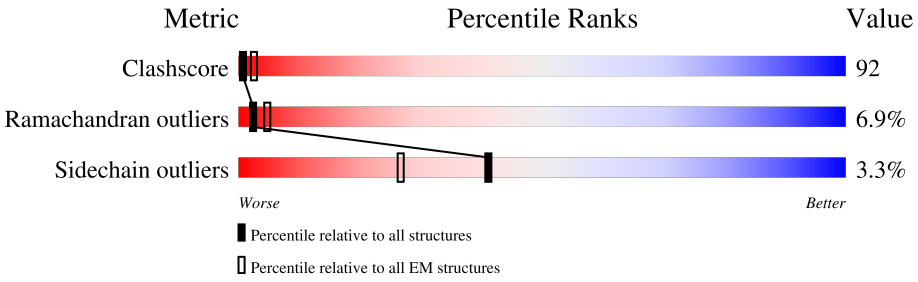
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 4.20 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)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	587	38% 30% 30% 12% • 27%
1	B	587	39% 30% 29% 12% • 27%
1	C	587	37% 30% 29% 12% • 27%
1	D	587	38% 30% 30% 12% • 27%
1	E	587	39% 30% 30% 12% • 27%
1	F	587	37% 29% 30% 12% • 27%

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 20070 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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.

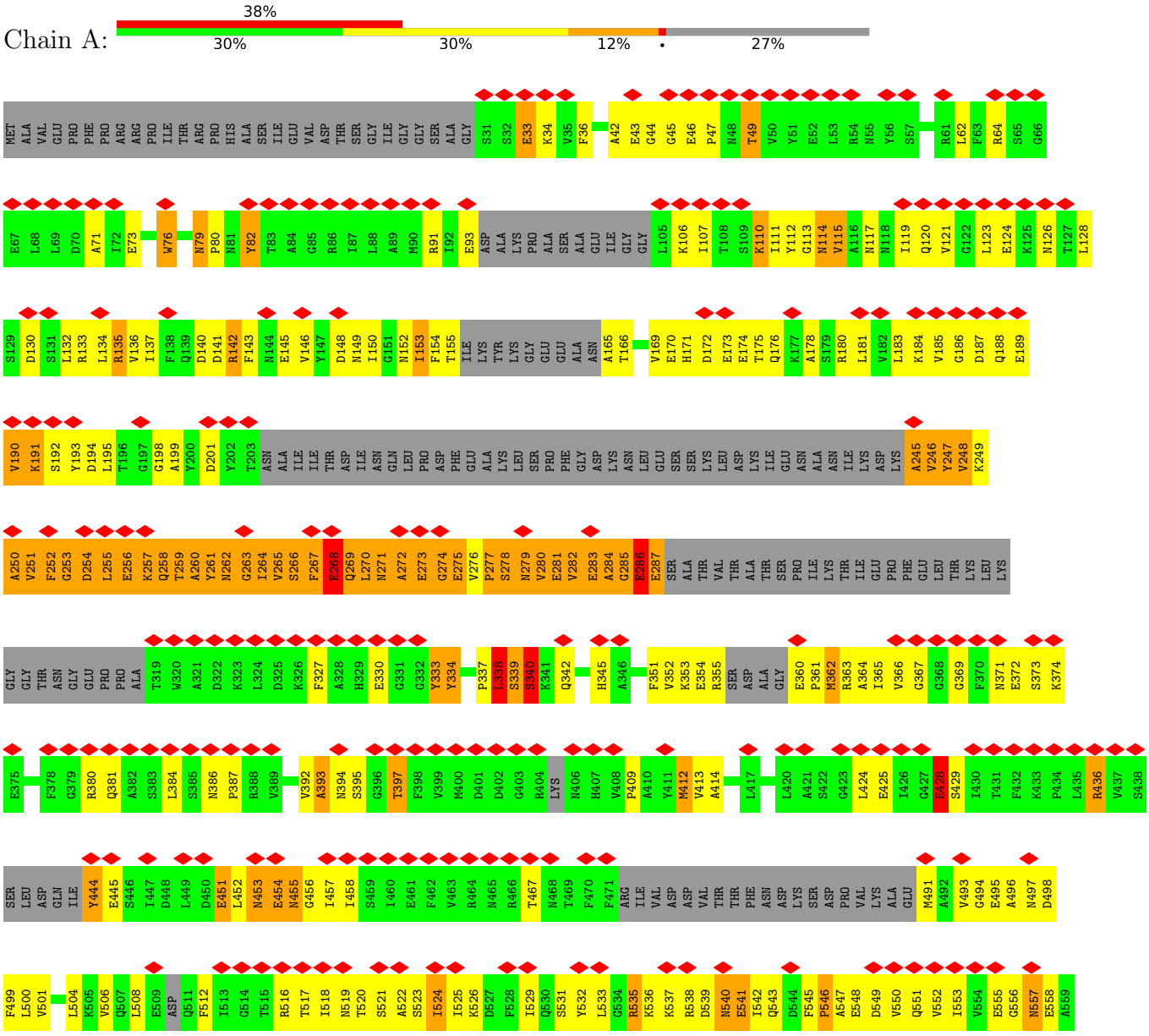
- Molecule 1 is a protein called tail sheath protein.

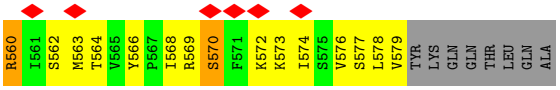
Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	427	Total	C	N	O	S	0	0
			3345	2110	567	661	7		
1	B	427	Total	C	N	O	S	0	0
			3345	2110	567	661	7		
1	C	427	Total	C	N	O	S	0	0
			3345	2110	567	661	7		
1	D	427	Total	C	N	O	S	0	0
			3345	2110	567	661	7		
1	E	427	Total	C	N	O	S	0	0
			3345	2110	567	661	7		
1	F	427	Total	C	N	O	S	0	0
			3345	2110	567	661	7		

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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.

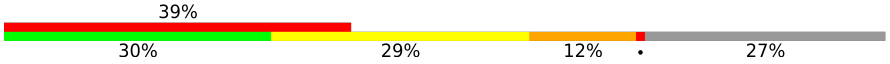
- Molecule 1: tail sheath protein

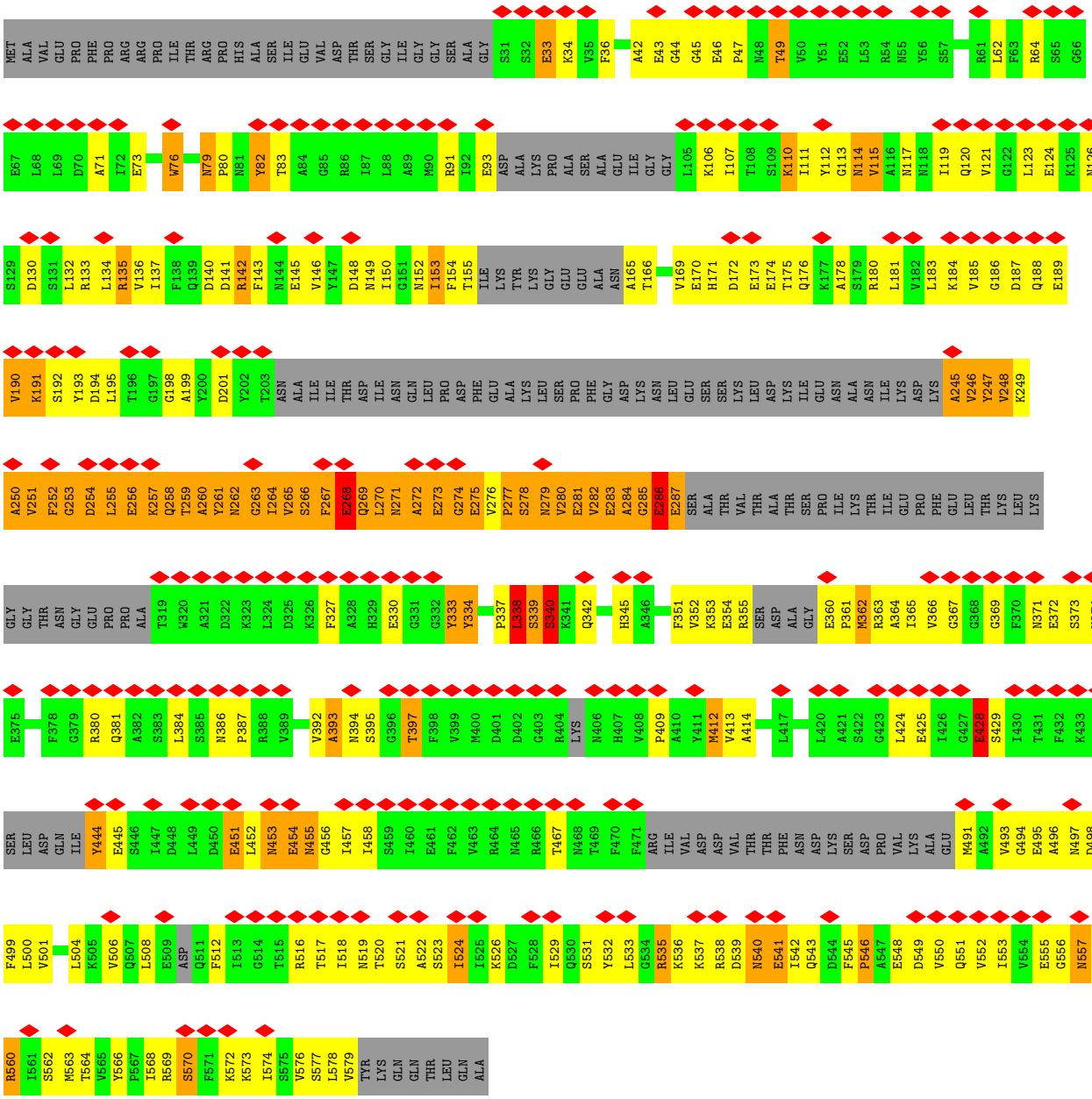




• Molecule 1: tail sheath protein

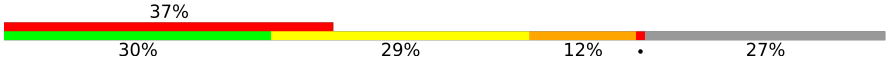
Chain B:

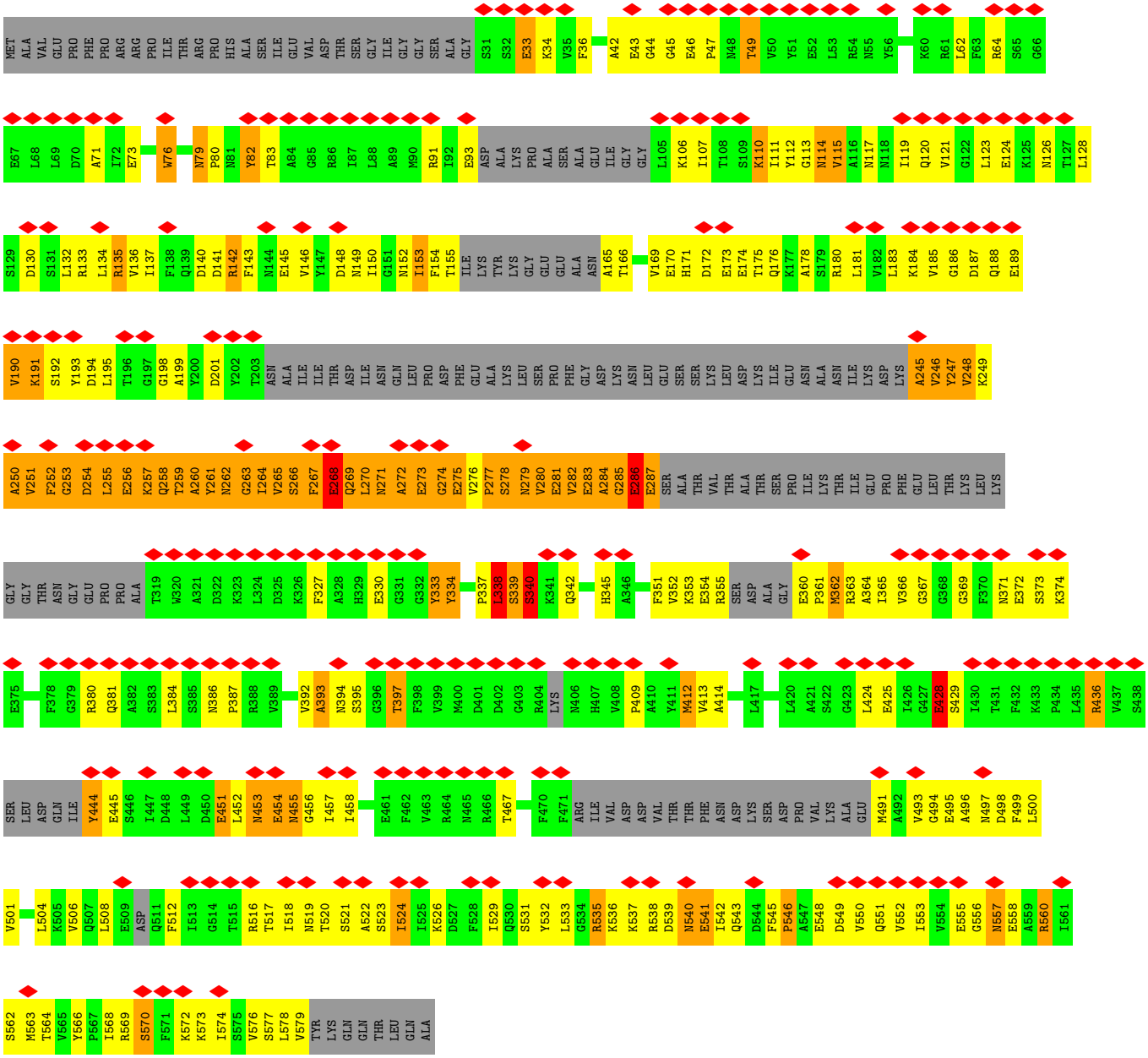




• Molecule 1: tail sheath protein

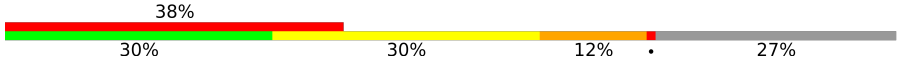
Chain C:

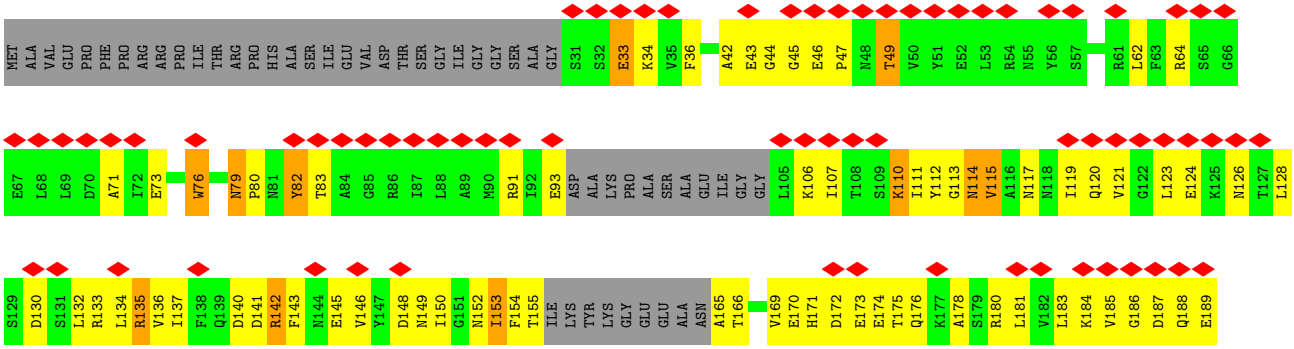


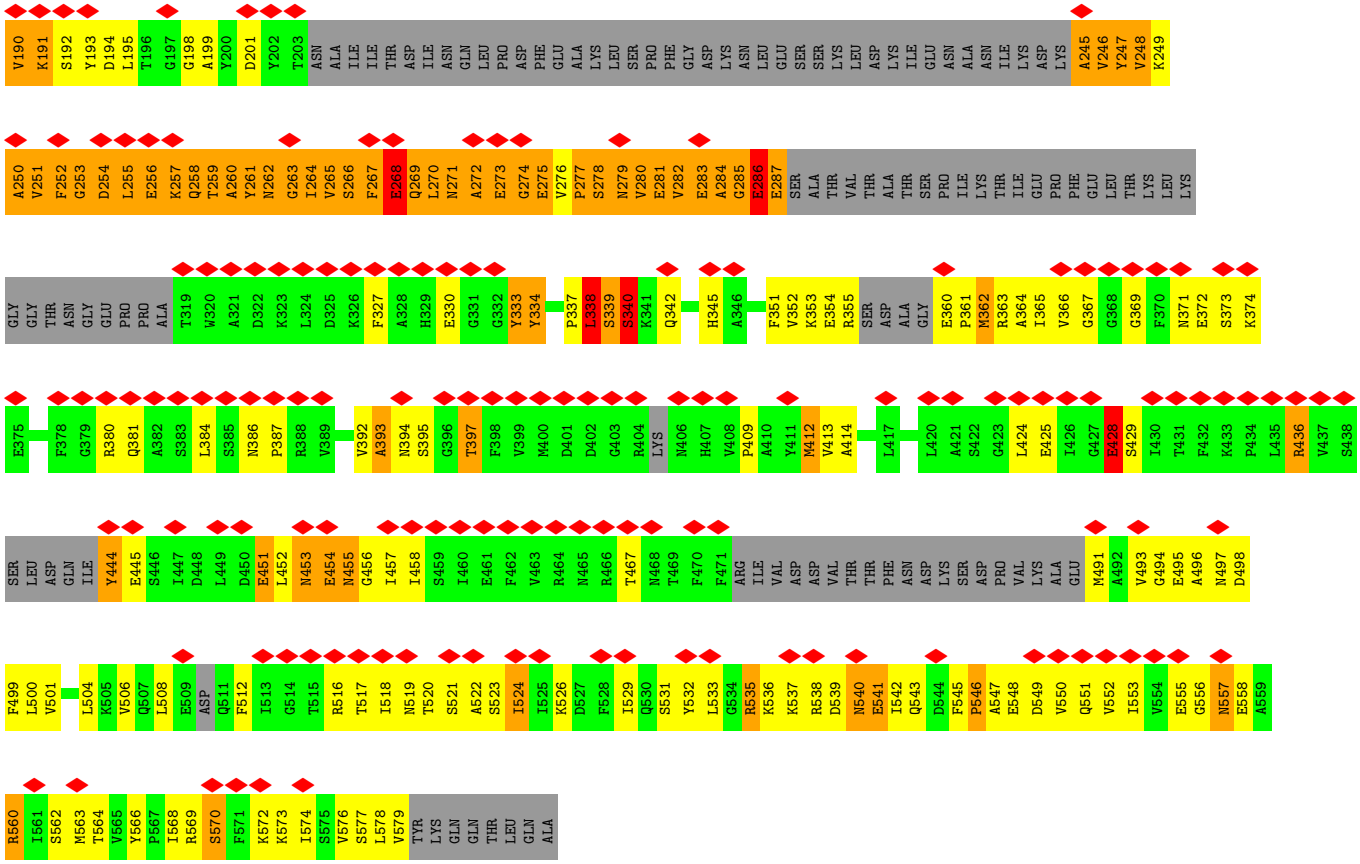


• Molecule 1: tail sheath protein

Chain D:

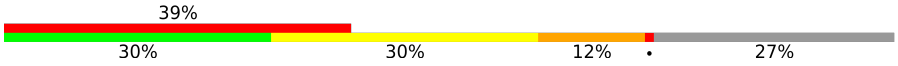


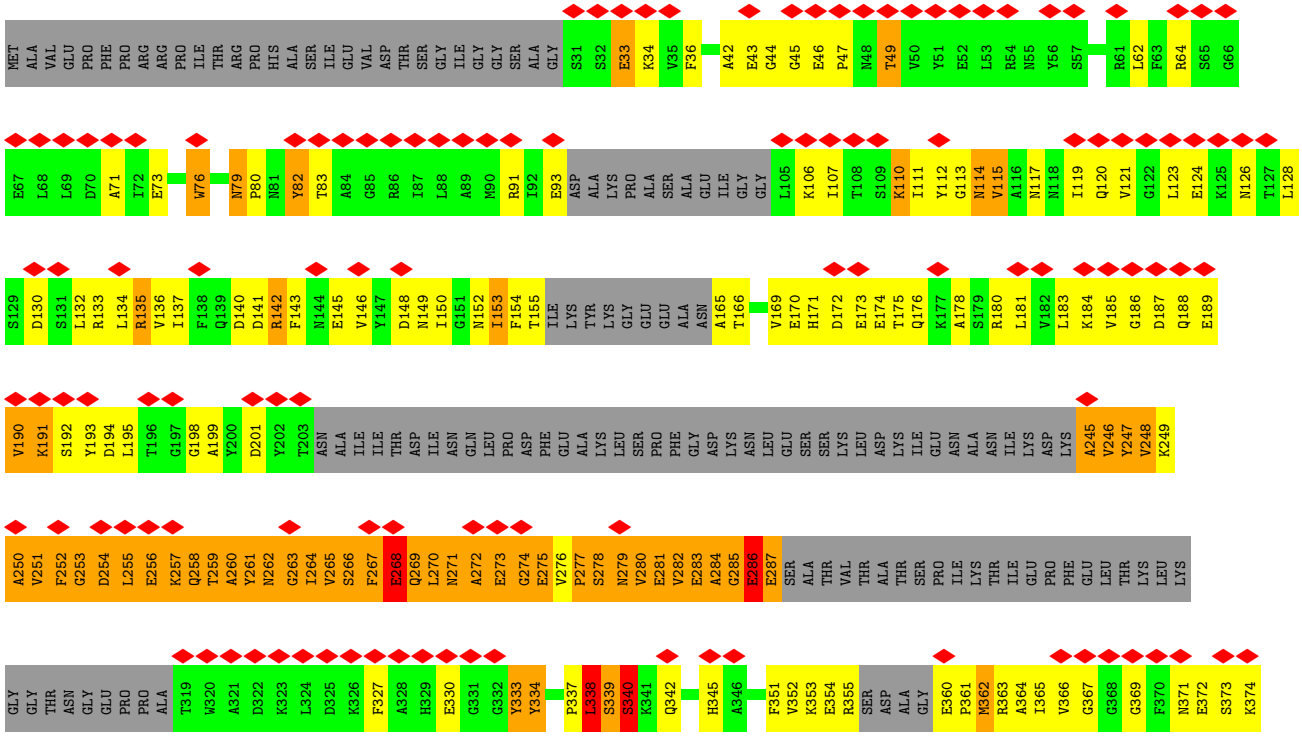


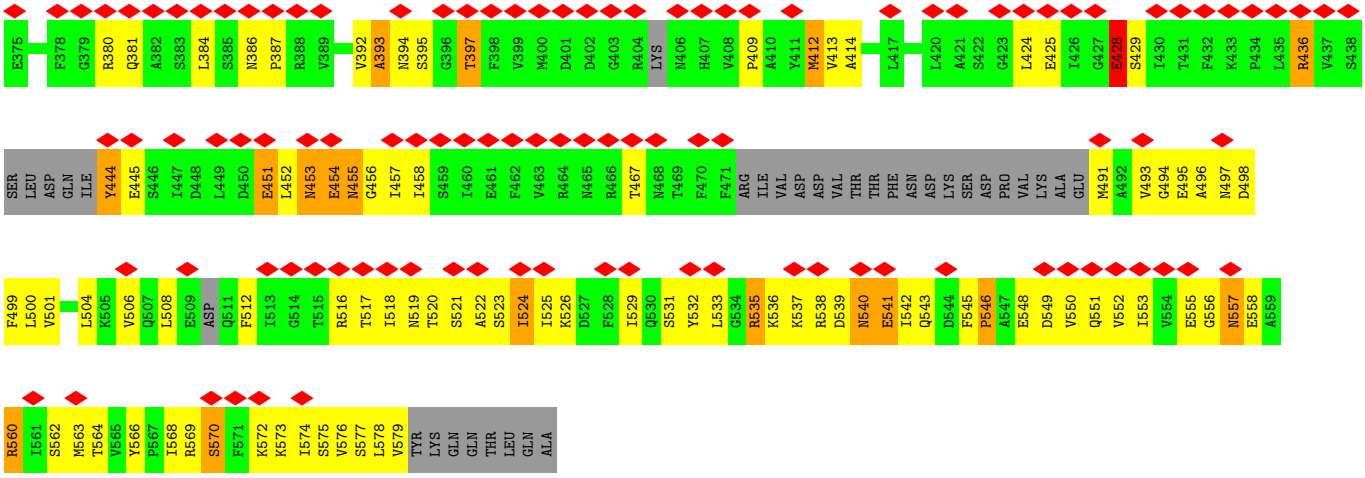


• Molecule 1: tail sheath protein

Chain E:

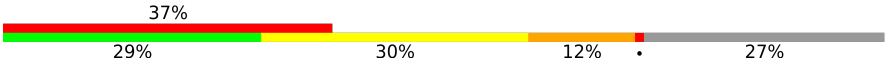


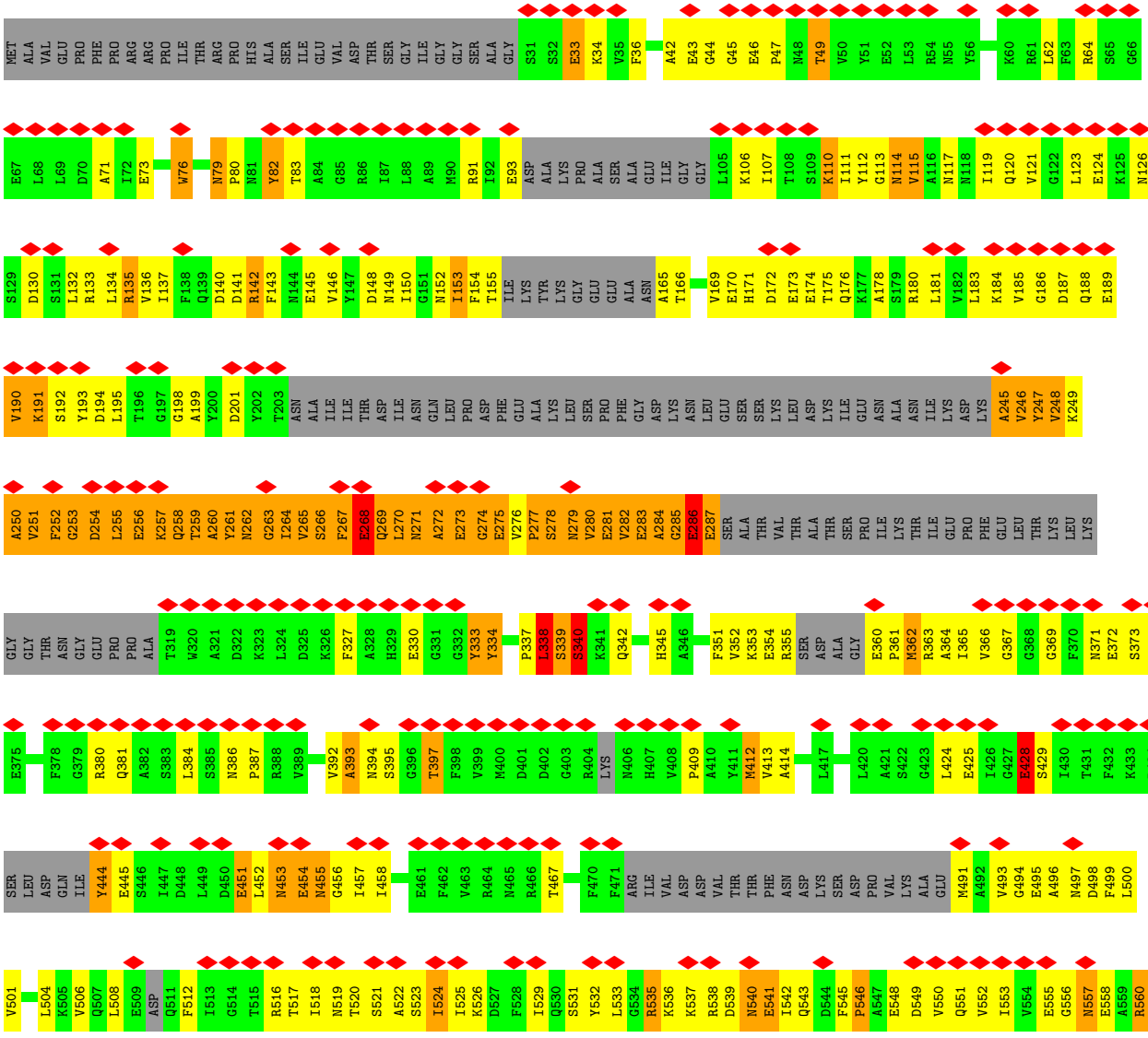




• Molecule 1: tail sheath protein

Chain F:






S562
M563
T564
V565
Y566
P567
I568
R569
S570
F571
K572
K573
I574
S575
V576
S577
L578
V579
TYR
LYS
GLN
GLN
THR
LEU
GLN
ALA

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	HELICAL	Depositor
Imposed symmetry	HELICAL, twist=30.7°, rise=18.8 Å, axial sym=C6	Depositor
Number of segments used	3628	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	20	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON II (4k x 4k)	Depositor
Maximum map value	29.763	Depositor
Minimum map value	-9.325	Depositor
Average map value	0.774	Depositor
Map value standard deviation	3.115	Depositor
Recommended contour level	13.0	Depositor
Map size (Å)	318.2, 318.2, 318.2	wwPDB
Map dimensions	185, 185, 185	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.72, 1.72, 1.72	Depositor

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	2.53	175/3390 (5.2%)	2.17	49/4563 (1.1%)
1	B	2.53	175/3390 (5.2%)	2.17	48/4563 (1.1%)
1	C	2.53	175/3390 (5.2%)	2.17	48/4563 (1.1%)
1	D	2.53	175/3390 (5.2%)	2.17	49/4563 (1.1%)
1	E	2.53	175/3390 (5.2%)	2.17	48/4563 (1.1%)
1	F	2.53	175/3390 (5.2%)	2.17	48/4563 (1.1%)
All	All	2.53	1050/20340 (5.2%)	2.17	290/27378 (1.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	1	12
1	B	1	12
1	C	1	12
1	D	1	12
1	E	1	12
1	F	1	12
All	All	6	72

All (1050) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	546	PRO	N-CD	52.26	2.21	1.47
1	C	546	PRO	N-CD	52.26	2.21	1.47
1	F	546	PRO	N-CD	52.26	2.21	1.47
1	A	546	PRO	N-CD	52.24	2.21	1.47
1	B	546	PRO	N-CD	52.24	2.21	1.47
1	E	546	PRO	N-CD	52.24	2.21	1.47
1	B	277	PRO	N-CD	48.05	2.15	1.47
1	E	277	PRO	N-CD	48.05	2.15	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	277	PRO	N-CD	48.03	2.15	1.47
1	D	277	PRO	N-CD	48.03	2.15	1.47
1	C	277	PRO	N-CD	47.99	2.15	1.47
1	F	277	PRO	N-CD	47.99	2.15	1.47
1	B	261	TYR	CB-CG	-9.04	1.38	1.51
1	E	261	TYR	CB-CG	-9.04	1.38	1.51
1	C	261	TYR	CB-CG	-9.03	1.38	1.51
1	F	261	TYR	CB-CG	-9.03	1.38	1.51
1	A	261	TYR	CB-CG	-9.01	1.38	1.51
1	D	261	TYR	CB-CG	-9.01	1.38	1.51
1	C	247	TYR	CG-CD1	-8.58	1.27	1.39
1	F	247	TYR	CG-CD1	-8.58	1.27	1.39
1	A	247	TYR	CG-CD1	-8.56	1.28	1.39
1	D	247	TYR	CG-CD1	-8.56	1.28	1.39
1	B	247	TYR	CG-CD1	-8.55	1.28	1.39
1	E	247	TYR	CG-CD1	-8.55	1.28	1.39
1	B	256	GLU	CD-OE2	-8.36	1.16	1.25
1	E	256	GLU	CD-OE2	-8.36	1.16	1.25
1	A	256	GLU	CD-OE2	-8.34	1.16	1.25
1	D	256	GLU	CD-OE2	-8.34	1.16	1.25
1	C	247	TYR	CG-CD2	-8.31	1.28	1.39
1	F	247	TYR	CG-CD2	-8.31	1.28	1.39
1	D	247	TYR	CG-CD2	-8.30	1.28	1.39
1	B	247	TYR	CG-CD2	-8.30	1.28	1.39
1	E	247	TYR	CG-CD2	-8.30	1.28	1.39
1	C	256	GLU	CD-OE2	-8.30	1.16	1.25
1	F	256	GLU	CD-OE2	-8.30	1.16	1.25
1	A	247	TYR	CG-CD2	-8.29	1.28	1.39
1	E	247	TYR	CE1-CZ	-8.29	1.27	1.38
1	D	247	TYR	CE1-CZ	-8.28	1.27	1.38
1	B	247	TYR	CE1-CZ	-8.27	1.27	1.38
1	C	247	TYR	CE1-CZ	-8.27	1.27	1.38
1	F	247	TYR	CE1-CZ	-8.27	1.27	1.38
1	A	247	TYR	CE1-CZ	-8.26	1.27	1.38
1	A	275	GLU	CD-OE2	-8.16	1.16	1.25
1	C	283	GLU	CD-OE2	-8.16	1.16	1.25
1	B	275	GLU	CD-OE2	-8.16	1.16	1.25
1	E	275	GLU	CD-OE2	-8.16	1.16	1.25
1	C	275	GLU	CD-OE2	-8.15	1.16	1.25
1	F	275	GLU	CD-OE2	-8.15	1.16	1.25
1	E	283	GLU	CD-OE2	-8.14	1.16	1.25
1	D	283	GLU	CD-OE2	-8.13	1.16	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	266	SER	CB-OG	-8.13	1.31	1.42
1	A	283	GLU	CD-OE2	-8.12	1.16	1.25
1	F	283	GLU	CD-OE2	-8.12	1.16	1.25
1	C	266	SER	CB-OG	-8.12	1.31	1.42
1	B	266	SER	CB-OG	-8.12	1.31	1.42
1	D	266	SER	CB-OG	-8.11	1.31	1.42
1	D	275	GLU	CD-OE2	-8.12	1.16	1.25
1	F	266	SER	CB-OG	-8.12	1.31	1.42
1	D	275	GLU	CD-OE1	-8.11	1.16	1.25
1	A	266	SER	CB-OG	-8.11	1.31	1.42
1	A	275	GLU	CD-OE1	-8.11	1.16	1.25
1	B	283	GLU	CD-OE2	-8.09	1.16	1.25
1	C	275	GLU	CD-OE1	-8.09	1.16	1.25
1	F	275	GLU	CD-OE1	-8.09	1.16	1.25
1	B	275	GLU	CD-OE1	-8.09	1.16	1.25
1	E	275	GLU	CD-OE1	-8.09	1.16	1.25
1	A	278	SER	CB-OG	-8.08	1.31	1.42
1	D	278	SER	CB-OG	-8.08	1.31	1.42
1	B	278	SER	CB-OG	-8.07	1.31	1.42
1	E	278	SER	CB-OG	-8.07	1.31	1.42
1	B	287	GLU	CD-OE1	-8.07	1.16	1.25
1	E	287	GLU	CD-OE1	-8.07	1.16	1.25
1	C	278	SER	CB-OG	-8.07	1.31	1.42
1	F	278	SER	CB-OG	-8.07	1.31	1.42
1	B	268	GLU	CD-OE2	-8.06	1.16	1.25
1	E	268	GLU	CD-OE2	-8.06	1.16	1.25
1	C	287	GLU	CD-OE1	-8.06	1.16	1.25
1	F	287	GLU	CD-OE1	-8.06	1.16	1.25
1	A	287	GLU	CD-OE1	-8.05	1.16	1.25
1	D	287	GLU	CD-OE1	-8.05	1.16	1.25
1	B	281	GLU	CD-OE1	-8.05	1.16	1.25
1	C	268	GLU	CD-OE2	-8.05	1.16	1.25
1	F	268	GLU	CD-OE2	-8.05	1.16	1.25
1	D	268	GLU	CD-OE1	-8.05	1.16	1.25
1	A	268	GLU	CD-OE2	-8.03	1.16	1.25
1	C	268	GLU	CD-OE1	-8.03	1.16	1.25
1	D	268	GLU	CD-OE2	-8.03	1.16	1.25
1	F	268	GLU	CD-OE1	-8.03	1.16	1.25
1	B	273	GLU	CD-OE1	-8.02	1.16	1.25
1	C	273	GLU	CD-OE1	-8.02	1.16	1.25
1	E	273	GLU	CD-OE1	-8.02	1.16	1.25
1	F	273	GLU	CD-OE1	-8.02	1.16	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	273	GLU	CD-OE1	-8.01	1.16	1.25
1	D	273	GLU	CD-OE1	-8.01	1.16	1.25
1	B	268	GLU	CD-OE1	-8.00	1.16	1.25
1	E	268	GLU	CD-OE1	-8.00	1.16	1.25
1	A	281	GLU	CD-OE2	-7.99	1.16	1.25
1	D	281	GLU	CD-OE2	-7.99	1.16	1.25
1	A	281	GLU	CD-OE1	-7.99	1.16	1.25
1	A	268	GLU	CD-OE1	-7.98	1.16	1.25
1	C	281	GLU	CD-OE2	-7.98	1.16	1.25
1	F	281	GLU	CD-OE2	-7.98	1.16	1.25
1	D	281	GLU	CD-OE1	-7.97	1.16	1.25
1	B	286	GLU	CD-OE2	-7.97	1.16	1.25
1	C	281	GLU	CD-OE1	-7.97	1.16	1.25
1	E	286	GLU	CD-OE2	-7.97	1.16	1.25
1	F	281	GLU	CD-OE1	-7.97	1.16	1.25
1	B	273	GLU	CD-OE2	-7.97	1.16	1.25
1	E	281	GLU	CD-OE1	-7.97	1.16	1.25
1	D	273	GLU	CD-OE2	-7.96	1.16	1.25
1	B	281	GLU	CD-OE2	-7.96	1.16	1.25
1	C	286	GLU	CD-OE2	-7.96	1.16	1.25
1	E	281	GLU	CD-OE2	-7.96	1.16	1.25
1	F	286	GLU	CD-OE2	-7.96	1.16	1.25
1	A	286	GLU	CD-OE2	-7.96	1.16	1.25
1	D	286	GLU	CD-OE2	-7.96	1.16	1.25
1	C	256	GLU	CD-OE1	-7.95	1.17	1.25
1	F	256	GLU	CD-OE1	-7.95	1.17	1.25
1	A	273	GLU	CD-OE2	-7.93	1.17	1.25
1	B	256	GLU	CD-OE1	-7.93	1.17	1.25
1	E	256	GLU	CD-OE1	-7.93	1.17	1.25
1	E	273	GLU	CD-OE2	-7.93	1.17	1.25
1	C	273	GLU	CD-OE2	-7.92	1.17	1.25
1	F	273	GLU	CD-OE2	-7.92	1.17	1.25
1	C	267	PHE	CB-CG	-7.91	1.37	1.51
1	F	267	PHE	CB-CG	-7.91	1.37	1.51
1	A	286	GLU	CD-OE1	-7.91	1.17	1.25
1	D	286	GLU	CD-OE1	-7.91	1.17	1.25
1	A	267	PHE	CB-CG	-7.91	1.38	1.51
1	D	267	PHE	CB-CG	-7.91	1.38	1.51
1	C	278	SER	CA-CB	-7.90	1.41	1.52
1	F	278	SER	CA-CB	-7.90	1.41	1.52
1	B	278	SER	CA-CB	-7.90	1.41	1.52
1	E	278	SER	CA-CB	-7.90	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	278	SER	CA-CB	-7.90	1.41	1.52
1	B	267	PHE	CB-CG	-7.90	1.38	1.51
1	D	278	SER	CA-CB	-7.90	1.41	1.52
1	E	267	PHE	CB-CG	-7.90	1.38	1.51
1	A	256	GLU	CD-OE1	-7.89	1.17	1.25
1	D	256	GLU	CD-OE1	-7.89	1.17	1.25
1	E	247	TYR	CE2-CZ	-7.88	1.28	1.38
1	C	286	GLU	CD-OE1	-7.88	1.17	1.25
1	F	286	GLU	CD-OE1	-7.88	1.17	1.25
1	C	247	TYR	CE2-CZ	-7.87	1.28	1.38
1	F	247	TYR	CE2-CZ	-7.87	1.28	1.38
1	B	286	GLU	CD-OE1	-7.87	1.17	1.25
1	D	247	TYR	CE2-CZ	-7.87	1.28	1.38
1	E	286	GLU	CD-OE1	-7.87	1.17	1.25
1	B	252	PHE	CB-CG	-7.87	1.38	1.51
1	A	247	TYR	CE2-CZ	-7.86	1.28	1.38
1	C	252	PHE	CB-CG	-7.85	1.38	1.51
1	F	252	PHE	CB-CG	-7.85	1.38	1.51
1	A	252	PHE	CB-CG	-7.84	1.38	1.51
1	B	247	TYR	CE2-CZ	-7.83	1.28	1.38
1	D	252	PHE	CB-CG	-7.82	1.38	1.51
1	E	252	PHE	CB-CG	-7.81	1.38	1.51
1	A	247	TYR	CD2-CE2	-7.80	1.27	1.39
1	B	247	TYR	CD2-CE2	-7.77	1.27	1.39
1	E	247	TYR	CD2-CE2	-7.77	1.27	1.39
1	C	283	GLU	CD-OE1	-7.75	1.17	1.25
1	F	283	GLU	CD-OE1	-7.75	1.17	1.25
1	A	283	GLU	CD-OE1	-7.74	1.17	1.25
1	D	283	GLU	CD-OE1	-7.74	1.17	1.25
1	D	247	TYR	CD2-CE2	-7.74	1.27	1.39
1	C	247	TYR	CD2-CE2	-7.73	1.27	1.39
1	F	247	TYR	CD2-CE2	-7.73	1.27	1.39
1	B	283	GLU	CD-OE1	-7.73	1.17	1.25
1	E	283	GLU	CD-OE1	-7.73	1.17	1.25
1	A	247	TYR	CD1-CE1	-7.72	1.27	1.39
1	D	247	TYR	CD1-CE1	-7.72	1.27	1.39
1	C	287	GLU	CD-OE2	-7.70	1.17	1.25
1	F	287	GLU	CD-OE2	-7.70	1.17	1.25
1	B	247	TYR	CD1-CE1	-7.70	1.27	1.39
1	E	247	TYR	CD1-CE1	-7.70	1.27	1.39
1	C	247	TYR	CD1-CE1	-7.70	1.27	1.39
1	F	247	TYR	CD1-CE1	-7.70	1.27	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	287	GLU	CD-OE2	-7.68	1.17	1.25
1	E	287	GLU	CD-OE2	-7.68	1.17	1.25
1	A	287	GLU	CD-OE2	-7.68	1.17	1.25
1	D	287	GLU	CD-OE2	-7.68	1.17	1.25
1	B	247	TYR	CB-CG	-7.67	1.40	1.51
1	E	247	TYR	CB-CG	-7.67	1.40	1.51
1	A	247	TYR	CB-CG	-7.66	1.40	1.51
1	A	253	GLY	N-CA	-7.66	1.34	1.46
1	D	247	TYR	CB-CG	-7.66	1.40	1.51
1	D	253	GLY	N-CA	-7.66	1.34	1.46
1	C	253	GLY	N-CA	-7.65	1.34	1.46
1	F	253	GLY	N-CA	-7.65	1.34	1.46
1	B	285	GLY	N-CA	-7.65	1.34	1.46
1	E	285	GLY	N-CA	-7.65	1.34	1.46
1	B	253	GLY	N-CA	-7.65	1.34	1.46
1	E	253	GLY	N-CA	-7.65	1.34	1.46
1	C	247	TYR	CB-CG	-7.64	1.40	1.51
1	F	247	TYR	CB-CG	-7.64	1.40	1.51
1	C	285	GLY	N-CA	-7.62	1.34	1.46
1	F	285	GLY	N-CA	-7.62	1.34	1.46
1	A	285	GLY	N-CA	-7.61	1.34	1.46
1	D	285	GLY	N-CA	-7.61	1.34	1.46
1	B	283	GLU	CG-CD	-7.42	1.40	1.51
1	E	283	GLU	CG-CD	-7.42	1.40	1.51
1	D	283	GLU	CG-CD	-7.42	1.40	1.51
1	C	283	GLU	CG-CD	-7.40	1.40	1.51
1	F	283	GLU	CG-CD	-7.40	1.40	1.51
1	A	283	GLU	CG-CD	-7.39	1.40	1.51
1	B	286	GLU	CG-CD	-7.37	1.40	1.51
1	E	286	GLU	CG-CD	-7.37	1.40	1.51
1	A	273	GLU	CG-CD	-7.37	1.40	1.51
1	D	273	GLU	CG-CD	-7.37	1.40	1.51
1	C	286	GLU	CG-CD	-7.35	1.41	1.51
1	F	286	GLU	CG-CD	-7.35	1.41	1.51
1	C	273	GLU	CG-CD	-7.35	1.41	1.51
1	F	273	GLU	CG-CD	-7.35	1.41	1.51
1	A	286	GLU	CG-CD	-7.34	1.41	1.51
1	B	273	GLU	CG-CD	-7.34	1.41	1.51
1	D	286	GLU	CG-CD	-7.34	1.41	1.51
1	E	273	GLU	CG-CD	-7.34	1.41	1.51
1	A	277	PRO	N-CA	-7.34	1.34	1.47
1	C	277	PRO	N-CA	-7.34	1.34	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	277	PRO	N-CA	-7.34	1.34	1.47
1	B	277	PRO	N-CA	-7.33	1.34	1.47
1	E	277	PRO	N-CA	-7.33	1.34	1.47
1	C	287	GLU	CG-CD	-7.33	1.41	1.51
1	F	287	GLU	CG-CD	-7.33	1.41	1.51
1	D	277	PRO	N-CA	-7.33	1.34	1.47
1	C	268	GLU	CG-CD	-7.32	1.41	1.51
1	F	268	GLU	CG-CD	-7.32	1.41	1.51
1	B	287	GLU	CG-CD	-7.32	1.41	1.51
1	E	287	GLU	CG-CD	-7.32	1.41	1.51
1	A	287	GLU	CG-CD	-7.31	1.41	1.51
1	D	287	GLU	CG-CD	-7.31	1.41	1.51
1	B	268	GLU	CG-CD	-7.31	1.41	1.51
1	E	268	GLU	CG-CD	-7.31	1.41	1.51
1	A	281	GLU	CG-CD	-7.31	1.41	1.51
1	D	281	GLU	CG-CD	-7.31	1.41	1.51
1	A	268	GLU	CG-CD	-7.30	1.41	1.51
1	D	268	GLU	CG-CD	-7.30	1.41	1.51
1	A	266	SER	CA-CB	-7.29	1.42	1.52
1	D	275	GLU	CG-CD	-7.28	1.41	1.51
1	A	274	GLY	N-CA	-7.28	1.35	1.46
1	C	275	GLU	CG-CD	-7.27	1.41	1.51
1	F	275	GLU	CG-CD	-7.27	1.41	1.51
1	B	275	GLU	CG-CD	-7.27	1.41	1.51
1	B	281	GLU	CG-CD	-7.27	1.41	1.51
1	E	275	GLU	CG-CD	-7.27	1.41	1.51
1	E	281	GLU	CG-CD	-7.27	1.41	1.51
1	B	274	GLY	N-CA	-7.27	1.35	1.46
1	C	281	GLU	CG-CD	-7.26	1.41	1.51
1	F	281	GLU	CG-CD	-7.26	1.41	1.51
1	A	275	GLU	CG-CD	-7.25	1.41	1.51
1	E	266	SER	CA-CB	-7.24	1.42	1.52
1	C	266	SER	CA-CB	-7.24	1.42	1.52
1	D	266	SER	CA-CB	-7.24	1.42	1.52
1	F	266	SER	CA-CB	-7.24	1.42	1.52
1	E	274	GLY	N-CA	-7.23	1.35	1.46
1	B	266	SER	CA-CB	-7.23	1.42	1.52
1	C	274	GLY	N-CA	-7.23	1.35	1.46
1	F	274	GLY	N-CA	-7.23	1.35	1.46
1	D	274	GLY	N-CA	-7.23	1.35	1.46
1	A	263	GLY	CA-C	-7.22	1.40	1.51
1	D	263	GLY	CA-C	-7.22	1.40	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	263	GLY	N-CA	-7.21	1.35	1.46
1	E	263	GLY	N-CA	-7.21	1.35	1.46
1	A	256	GLU	CG-CD	-7.21	1.41	1.51
1	A	263	GLY	N-CA	-7.21	1.35	1.46
1	D	263	GLY	N-CA	-7.21	1.35	1.46
1	C	263	GLY	CA-C	-7.19	1.40	1.51
1	F	263	GLY	CA-C	-7.19	1.40	1.51
1	B	263	GLY	CA-C	-7.19	1.40	1.51
1	C	263	GLY	N-CA	-7.19	1.35	1.46
1	E	263	GLY	CA-C	-7.19	1.40	1.51
1	F	263	GLY	N-CA	-7.19	1.35	1.46
1	C	256	GLU	CG-CD	-7.17	1.41	1.51
1	F	256	GLU	CG-CD	-7.17	1.41	1.51
1	D	256	GLU	CG-CD	-7.15	1.41	1.51
1	B	256	GLU	CG-CD	-7.14	1.41	1.51
1	E	256	GLU	CG-CD	-7.14	1.41	1.51
1	A	253	GLY	CA-C	-7.13	1.40	1.51
1	D	253	GLY	CA-C	-7.13	1.40	1.51
1	B	253	GLY	CA-C	-7.12	1.40	1.51
1	E	253	GLY	CA-C	-7.12	1.40	1.51
1	C	253	GLY	CA-C	-7.12	1.40	1.51
1	F	253	GLY	CA-C	-7.12	1.40	1.51
1	C	261	TYR	CG-CD1	-7.08	1.29	1.39
1	F	261	TYR	CG-CD1	-7.08	1.29	1.39
1	A	261	TYR	CG-CD1	-7.07	1.29	1.39
1	D	261	TYR	CG-CD1	-7.07	1.29	1.39
1	B	261	TYR	CG-CD1	-7.06	1.29	1.39
1	E	261	TYR	CG-CD1	-7.06	1.29	1.39
1	B	261	TYR	CE1-CZ	-6.86	1.29	1.38
1	E	261	TYR	CE1-CZ	-6.86	1.29	1.38
1	A	261	TYR	CE1-CZ	-6.85	1.29	1.38
1	D	261	TYR	CE1-CZ	-6.85	1.29	1.38
1	C	261	TYR	CE1-CZ	-6.84	1.29	1.38
1	F	261	TYR	CE1-CZ	-6.84	1.29	1.38
1	B	248	VAL	CA-CB	-6.63	1.40	1.54
1	E	248	VAL	CA-CB	-6.63	1.40	1.54
1	C	248	VAL	CA-CB	-6.61	1.40	1.54
1	F	248	VAL	CA-CB	-6.61	1.40	1.54
1	A	248	VAL	CA-CB	-6.60	1.40	1.54
1	D	248	VAL	CA-CB	-6.60	1.40	1.54
1	C	261	TYR	CG-CD2	-6.53	1.30	1.39
1	F	261	TYR	CG-CD2	-6.53	1.30	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	285	GLY	CA-C	-6.51	1.41	1.51
1	D	285	GLY	CA-C	-6.51	1.41	1.51
1	A	261	TYR	CG-CD2	-6.50	1.30	1.39
1	D	261	TYR	CG-CD2	-6.50	1.30	1.39
1	B	261	TYR	CG-CD2	-6.50	1.30	1.39
1	E	261	TYR	CG-CD2	-6.50	1.30	1.39
1	C	285	GLY	CA-C	-6.48	1.41	1.51
1	F	285	GLY	CA-C	-6.48	1.41	1.51
1	B	285	GLY	CA-C	-6.48	1.41	1.51
1	E	285	GLY	CA-C	-6.48	1.41	1.51
1	A	276	VAL	CA-CB	-6.41	1.41	1.54
1	D	276	VAL	CA-CB	-6.41	1.41	1.54
1	C	285	GLY	C-O	-6.40	1.13	1.23
1	F	285	GLY	C-O	-6.40	1.13	1.23
1	B	276	VAL	CA-CB	-6.40	1.41	1.54
1	B	285	GLY	C-O	-6.40	1.13	1.23
1	E	276	VAL	CA-CB	-6.40	1.41	1.54
1	E	285	GLY	C-O	-6.40	1.13	1.23
1	B	287	GLU	N-CA	-6.39	1.33	1.46
1	E	287	GLU	N-CA	-6.39	1.33	1.46
1	C	276	VAL	CA-CB	-6.38	1.41	1.54
1	F	276	VAL	CA-CB	-6.38	1.41	1.54
1	A	285	GLY	C-O	-6.38	1.13	1.23
1	A	287	GLU	N-CA	-6.38	1.33	1.46
1	D	285	GLY	C-O	-6.38	1.13	1.23
1	D	287	GLU	N-CA	-6.38	1.33	1.46
1	C	287	GLU	N-CA	-6.36	1.33	1.46
1	F	287	GLU	N-CA	-6.36	1.33	1.46
1	C	251	VAL	CA-CB	-6.33	1.41	1.54
1	F	251	VAL	CA-CB	-6.33	1.41	1.54
1	B	251	VAL	CA-CB	-6.31	1.41	1.54
1	E	251	VAL	CA-CB	-6.31	1.41	1.54
1	A	251	VAL	CA-CB	-6.30	1.41	1.54
1	D	251	VAL	CA-CB	-6.30	1.41	1.54
1	C	280	VAL	CA-CB	-6.28	1.41	1.54
1	F	280	VAL	CA-CB	-6.28	1.41	1.54
1	B	280	VAL	CA-CB	-6.26	1.41	1.54
1	E	280	VAL	CA-CB	-6.26	1.41	1.54
1	A	280	VAL	CA-CB	-6.26	1.41	1.54
1	D	280	VAL	CA-CB	-6.26	1.41	1.54
1	B	253	GLY	C-O	-6.25	1.13	1.23
1	E	253	GLY	C-O	-6.25	1.13	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	253	GLY	C-O	-6.22	1.13	1.23
1	F	253	GLY	C-O	-6.22	1.13	1.23
1	A	253	GLY	C-O	-6.22	1.13	1.23
1	B	274	GLY	CA-C	-6.22	1.41	1.51
1	D	253	GLY	C-O	-6.22	1.13	1.23
1	E	274	GLY	CA-C	-6.22	1.41	1.51
1	C	274	GLY	CA-C	-6.20	1.42	1.51
1	F	274	GLY	CA-C	-6.20	1.42	1.51
1	A	274	GLY	CA-C	-6.19	1.42	1.51
1	D	274	GLY	CA-C	-6.19	1.42	1.51
1	B	261	TYR	CE2-CZ	-6.09	1.30	1.38
1	E	261	TYR	CE2-CZ	-6.09	1.30	1.38
1	A	247	TYR	CZ-OH	-6.08	1.27	1.37
1	B	247	TYR	CZ-OH	-6.08	1.27	1.37
1	C	265	VAL	N-CA	-6.08	1.34	1.46
1	F	265	VAL	N-CA	-6.08	1.34	1.46
1	C	261	TYR	CE2-CZ	-6.07	1.30	1.38
1	F	261	TYR	CE2-CZ	-6.07	1.30	1.38
1	A	261	TYR	CE2-CZ	-6.07	1.30	1.38
1	D	261	TYR	CE2-CZ	-6.07	1.30	1.38
1	D	247	TYR	CZ-OH	-6.06	1.27	1.37
1	B	265	VAL	N-CA	-6.06	1.34	1.46
1	E	265	VAL	N-CA	-6.06	1.34	1.46
1	A	265	VAL	N-CA	-6.06	1.34	1.46
1	C	263	GLY	C-O	-6.06	1.14	1.23
1	D	265	VAL	N-CA	-6.06	1.34	1.46
1	F	263	GLY	C-O	-6.06	1.14	1.23
1	B	263	GLY	C-O	-6.05	1.14	1.23
1	E	263	GLY	C-O	-6.05	1.14	1.23
1	C	247	TYR	CZ-OH	-6.05	1.27	1.37
1	F	247	TYR	CZ-OH	-6.05	1.27	1.37
1	A	246	VAL	CA-CB	-6.04	1.42	1.54
1	A	268	GLU	N-CA	-6.04	1.34	1.46
1	C	246	VAL	CA-CB	-6.04	1.42	1.54
1	D	246	VAL	CA-CB	-6.04	1.42	1.54
1	D	268	GLU	N-CA	-6.04	1.34	1.46
1	F	246	VAL	CA-CB	-6.04	1.42	1.54
1	A	263	GLY	C-O	-6.04	1.14	1.23
1	A	282	VAL	CA-CB	-6.04	1.42	1.54
1	D	263	GLY	C-O	-6.04	1.14	1.23
1	D	282	VAL	CA-CB	-6.04	1.42	1.54
1	B	246	VAL	CA-CB	-6.03	1.42	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	246	VAL	CA-CB	-6.03	1.42	1.54
1	C	282	VAL	CA-CB	-6.03	1.42	1.54
1	F	282	VAL	CA-CB	-6.03	1.42	1.54
1	B	282	VAL	CA-CB	-6.03	1.42	1.54
1	E	282	VAL	CA-CB	-6.03	1.42	1.54
1	E	247	TYR	CZ-OH	-6.03	1.27	1.37
1	C	268	GLU	N-CA	-6.02	1.34	1.46
1	F	268	GLU	N-CA	-6.02	1.34	1.46
1	B	268	GLU	N-CA	-6.01	1.34	1.46
1	E	268	GLU	N-CA	-6.01	1.34	1.46
1	B	248	VAL	N-CA	-6.00	1.34	1.46
1	E	248	VAL	N-CA	-6.00	1.34	1.46
1	B	256	GLU	CA-CB	-6.00	1.40	1.53
1	E	256	GLU	CA-CB	-6.00	1.40	1.53
1	C	261	TYR	CZ-OH	-6.00	1.27	1.37
1	F	261	TYR	CZ-OH	-6.00	1.27	1.37
1	C	256	GLU	CA-CB	-5.99	1.40	1.53
1	F	256	GLU	CA-CB	-5.99	1.40	1.53
1	A	261	TYR	CZ-OH	-5.99	1.27	1.37
1	D	261	TYR	CZ-OH	-5.99	1.27	1.37
1	A	248	VAL	N-CA	-5.99	1.34	1.46
1	D	248	VAL	N-CA	-5.99	1.34	1.46
1	A	256	GLU	CA-CB	-5.97	1.40	1.53
1	D	256	GLU	CA-CB	-5.97	1.40	1.53
1	B	251	VAL	CB-CG2	-5.97	1.40	1.52
1	C	248	VAL	N-CA	-5.97	1.34	1.46
1	E	251	VAL	CB-CG2	-5.97	1.40	1.52
1	F	248	VAL	N-CA	-5.97	1.34	1.46
1	A	251	VAL	CB-CG2	-5.97	1.40	1.52
1	D	251	VAL	CB-CG2	-5.97	1.40	1.52
1	B	261	TYR	CZ-OH	-5.96	1.27	1.37
1	E	261	TYR	CZ-OH	-5.96	1.27	1.37
1	C	251	VAL	CB-CG2	-5.96	1.40	1.52
1	F	251	VAL	CB-CG2	-5.96	1.40	1.52
1	C	282	VAL	N-CA	-5.94	1.34	1.46
1	F	282	VAL	N-CA	-5.94	1.34	1.46
1	A	282	VAL	N-CA	-5.94	1.34	1.46
1	C	256	GLU	N-CA	-5.94	1.34	1.46
1	D	282	VAL	N-CA	-5.94	1.34	1.46
1	F	256	GLU	N-CA	-5.94	1.34	1.46
1	B	256	GLU	N-CA	-5.93	1.34	1.46
1	E	256	GLU	N-CA	-5.93	1.34	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	282	VAL	N-CA	-5.93	1.34	1.46
1	E	282	VAL	N-CA	-5.93	1.34	1.46
1	A	256	GLU	N-CA	-5.92	1.34	1.46
1	D	256	GLU	N-CA	-5.92	1.34	1.46
1	A	264	ILE	N-CA	-5.85	1.34	1.46
1	B	264	ILE	N-CA	-5.85	1.34	1.46
1	D	264	ILE	N-CA	-5.85	1.34	1.46
1	E	264	ILE	N-CA	-5.85	1.34	1.46
1	C	264	ILE	N-CA	-5.84	1.34	1.46
1	F	264	ILE	N-CA	-5.84	1.34	1.46
1	C	271	ASN	N-CA	-5.82	1.34	1.46
1	F	271	ASN	N-CA	-5.82	1.34	1.46
1	B	271	ASN	N-CA	-5.80	1.34	1.46
1	E	271	ASN	N-CA	-5.80	1.34	1.46
1	A	261	TYR	CD1-CE1	-5.79	1.30	1.39
1	D	261	TYR	CD1-CE1	-5.79	1.30	1.39
1	B	276	VAL	N-CA	-5.79	1.34	1.46
1	C	276	VAL	N-CA	-5.79	1.34	1.46
1	E	276	VAL	N-CA	-5.79	1.34	1.46
1	F	276	VAL	N-CA	-5.79	1.34	1.46
1	A	260	ALA	N-CA	-5.79	1.34	1.46
1	D	260	ALA	N-CA	-5.79	1.34	1.46
1	B	261	TYR	N-CA	-5.79	1.34	1.46
1	E	261	TYR	N-CA	-5.79	1.34	1.46
1	A	271	ASN	N-CA	-5.78	1.34	1.46
1	C	259	THR	CB-OG1	-5.78	1.31	1.43
1	C	261	TYR	N-CA	-5.78	1.34	1.46
1	D	271	ASN	N-CA	-5.78	1.34	1.46
1	F	259	THR	CB-OG1	-5.78	1.31	1.43
1	F	261	TYR	N-CA	-5.78	1.34	1.46
1	A	275	GLU	N-CA	-5.78	1.34	1.46
1	A	276	VAL	N-CA	-5.78	1.34	1.46
1	D	275	GLU	N-CA	-5.78	1.34	1.46
1	D	276	VAL	N-CA	-5.78	1.34	1.46
1	A	261	TYR	N-CA	-5.78	1.34	1.46
1	D	261	TYR	N-CA	-5.78	1.34	1.46
1	B	261	TYR	CD1-CE1	-5.78	1.30	1.39
1	E	261	TYR	CD1-CE1	-5.78	1.30	1.39
1	A	259	THR	CB-OG1	-5.78	1.31	1.43
1	C	261	TYR	CD1-CE1	-5.78	1.30	1.39
1	C	275	GLU	N-CA	-5.78	1.34	1.46
1	D	259	THR	CB-OG1	-5.78	1.31	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	261	TYR	CD1-CE1	-5.78	1.30	1.39
1	F	275	GLU	N-CA	-5.78	1.34	1.46
1	C	274	GLY	C-O	-5.77	1.14	1.23
1	F	274	GLY	C-O	-5.77	1.14	1.23
1	B	259	THR	CB-OG1	-5.77	1.31	1.43
1	E	259	THR	CB-OG1	-5.77	1.31	1.43
1	C	260	ALA	N-CA	-5.76	1.34	1.46
1	F	260	ALA	N-CA	-5.76	1.34	1.46
1	A	286	GLU	N-CA	-5.76	1.34	1.46
1	B	260	ALA	N-CA	-5.76	1.34	1.46
1	B	286	GLU	N-CA	-5.76	1.34	1.46
1	C	245	ALA	N-CA	-5.76	1.34	1.46
1	C	286	GLU	N-CA	-5.76	1.34	1.46
1	D	286	GLU	N-CA	-5.76	1.34	1.46
1	E	260	ALA	N-CA	-5.76	1.34	1.46
1	E	286	GLU	N-CA	-5.76	1.34	1.46
1	F	245	ALA	N-CA	-5.76	1.34	1.46
1	F	286	GLU	N-CA	-5.76	1.34	1.46
1	A	251	VAL	CB-CG1	-5.76	1.40	1.52
1	B	274	GLY	C-O	-5.76	1.14	1.23
1	B	275	GLU	N-CA	-5.76	1.34	1.46
1	E	274	GLY	C-O	-5.76	1.14	1.23
1	E	275	GLU	N-CA	-5.76	1.34	1.46
1	B	245	ALA	N-CA	-5.75	1.34	1.46
1	E	245	ALA	N-CA	-5.75	1.34	1.46
1	A	274	GLY	C-O	-5.75	1.14	1.23
1	D	274	GLY	C-O	-5.75	1.14	1.23
1	E	251	VAL	CB-CG1	-5.74	1.40	1.52
1	A	250	ALA	N-CA	-5.74	1.34	1.46
1	D	250	ALA	N-CA	-5.74	1.34	1.46
1	B	247	TYR	CA-CB	-5.74	1.41	1.53
1	B	270	LEU	N-CA	-5.74	1.34	1.46
1	E	247	TYR	CA-CB	-5.74	1.41	1.53
1	E	270	LEU	N-CA	-5.74	1.34	1.46
1	B	251	VAL	CB-CG1	-5.74	1.40	1.52
1	C	270	LEU	N-CA	-5.74	1.34	1.46
1	F	270	LEU	N-CA	-5.74	1.34	1.46
1	C	269	GLN	N-CA	-5.73	1.34	1.46
1	F	269	GLN	N-CA	-5.73	1.34	1.46
1	B	281	GLU	N-CA	-5.73	1.34	1.46
1	E	281	GLU	N-CA	-5.73	1.34	1.46
1	C	247	TYR	CA-CB	-5.73	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	250	ALA	N-CA	-5.73	1.34	1.46
1	C	251	VAL	CB-CG1	-5.73	1.40	1.52
1	D	251	VAL	CB-CG1	-5.73	1.40	1.52
1	F	247	TYR	CA-CB	-5.73	1.41	1.53
1	F	250	ALA	N-CA	-5.73	1.34	1.46
1	F	251	VAL	CB-CG1	-5.73	1.40	1.52
1	A	245	ALA	N-CA	-5.72	1.34	1.46
1	B	250	ALA	N-CA	-5.72	1.34	1.46
1	D	245	ALA	N-CA	-5.72	1.34	1.46
1	E	250	ALA	N-CA	-5.72	1.34	1.46
1	A	247	TYR	CA-CB	-5.72	1.41	1.53
1	D	247	TYR	CA-CB	-5.72	1.41	1.53
1	C	281	GLU	N-CA	-5.72	1.34	1.46
1	F	281	GLU	N-CA	-5.72	1.34	1.46
1	A	281	GLU	N-CA	-5.71	1.34	1.46
1	D	281	GLU	N-CA	-5.71	1.34	1.46
1	A	252	PHE	N-CA	-5.71	1.34	1.46
1	B	257	LYS	N-CA	-5.71	1.34	1.46
1	E	257	LYS	N-CA	-5.71	1.34	1.46
1	B	269	GLN	N-CA	-5.70	1.34	1.46
1	E	269	GLN	N-CA	-5.70	1.34	1.46
1	A	270	LEU	N-CA	-5.70	1.34	1.46
1	B	262	ASN	N-CA	-5.70	1.34	1.46
1	D	270	LEU	N-CA	-5.70	1.34	1.46
1	C	257	LYS	N-CA	-5.70	1.34	1.46
1	F	257	LYS	N-CA	-5.70	1.34	1.46
1	A	257	LYS	N-CA	-5.70	1.34	1.46
1	C	262	ASN	N-CA	-5.70	1.34	1.46
1	D	257	LYS	N-CA	-5.70	1.34	1.46
1	F	262	ASN	N-CA	-5.70	1.34	1.46
1	D	269	GLN	N-CA	-5.70	1.34	1.46
1	B	252	PHE	N-CA	-5.69	1.34	1.46
1	E	252	PHE	N-CA	-5.69	1.34	1.46
1	A	269	GLN	N-CA	-5.69	1.34	1.46
1	C	247	TYR	N-CA	-5.69	1.34	1.46
1	F	247	TYR	N-CA	-5.69	1.34	1.46
1	A	247	TYR	N-CA	-5.69	1.34	1.46
1	A	252	PHE	CG-CD2	-5.69	1.30	1.38
1	B	252	PHE	CG-CD2	-5.69	1.30	1.38
1	C	252	PHE	CG-CD2	-5.69	1.30	1.38
1	D	247	TYR	N-CA	-5.69	1.34	1.46
1	D	252	PHE	CG-CD2	-5.69	1.30	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	252	PHE	CG-CD2	-5.69	1.30	1.38
1	F	252	PHE	CG-CD2	-5.69	1.30	1.38
1	A	262	ASN	N-CA	-5.69	1.34	1.46
1	B	247	TYR	N-CA	-5.69	1.34	1.46
1	D	262	ASN	N-CA	-5.69	1.34	1.46
1	E	247	TYR	N-CA	-5.69	1.34	1.46
1	D	252	PHE	N-CA	-5.68	1.34	1.46
1	C	252	PHE	N-CA	-5.68	1.34	1.46
1	E	262	ASN	N-CA	-5.68	1.34	1.46
1	F	252	PHE	N-CA	-5.68	1.34	1.46
1	C	249	LYS	CA-CB	-5.68	1.41	1.53
1	F	249	LYS	CA-CB	-5.68	1.41	1.53
1	A	249	LYS	CA-CB	-5.67	1.41	1.53
1	D	249	LYS	CA-CB	-5.67	1.41	1.53
1	A	258	GLN	N-CA	-5.67	1.35	1.46
1	B	249	LYS	CA-CB	-5.67	1.41	1.53
1	B	258	GLN	N-CA	-5.67	1.35	1.46
1	D	258	GLN	N-CA	-5.67	1.35	1.46
1	E	249	LYS	CA-CB	-5.67	1.41	1.53
1	E	258	GLN	N-CA	-5.67	1.35	1.46
1	C	258	GLN	N-CA	-5.66	1.35	1.46
1	F	258	GLN	N-CA	-5.66	1.35	1.46
1	C	255	LEU	N-CA	-5.66	1.35	1.46
1	C	284	ALA	C-N	-5.66	1.22	1.33
1	F	255	LEU	N-CA	-5.66	1.35	1.46
1	F	284	ALA	C-N	-5.66	1.22	1.33
1	B	273	GLU	CA-CB	-5.66	1.41	1.53
1	E	273	GLU	CA-CB	-5.66	1.41	1.53
1	A	255	LEU	N-CA	-5.65	1.35	1.46
1	D	255	LEU	N-CA	-5.65	1.35	1.46
1	B	284	ALA	C-N	-5.65	1.22	1.33
1	E	284	ALA	C-N	-5.65	1.22	1.33
1	A	273	GLU	CA-CB	-5.65	1.41	1.53
1	A	277	PRO	CA-CB	-5.65	1.42	1.53
1	D	273	GLU	CA-CB	-5.65	1.41	1.53
1	A	264	ILE	CA-CB	-5.64	1.41	1.54
1	C	264	ILE	CA-CB	-5.64	1.41	1.54
1	C	273	GLU	CA-CB	-5.64	1.41	1.53
1	D	264	ILE	CA-CB	-5.64	1.41	1.54
1	F	264	ILE	CA-CB	-5.64	1.41	1.54
1	F	273	GLU	CA-CB	-5.64	1.41	1.53
1	B	255	LEU	N-CA	-5.64	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	255	LEU	N-CA	-5.64	1.35	1.46
1	C	278	SER	N-CA	-5.64	1.35	1.46
1	F	278	SER	N-CA	-5.64	1.35	1.46
1	D	278	SER	N-CA	-5.63	1.35	1.46
1	A	284	ALA	C-N	-5.63	1.23	1.33
1	D	284	ALA	C-N	-5.63	1.23	1.33
1	B	264	ILE	CA-CB	-5.63	1.42	1.54
1	E	264	ILE	CA-CB	-5.63	1.42	1.54
1	C	277	PRO	CA-CB	-5.62	1.42	1.53
1	F	277	PRO	CA-CB	-5.62	1.42	1.53
1	B	277	PRO	CA-CB	-5.62	1.42	1.53
1	E	277	PRO	CA-CB	-5.62	1.42	1.53
1	C	281	GLU	CA-CB	-5.62	1.41	1.53
1	F	281	GLU	CA-CB	-5.62	1.41	1.53
1	A	252	PHE	C-N	-5.61	1.23	1.33
1	D	252	PHE	C-N	-5.61	1.23	1.33
1	B	278	SER	N-CA	-5.61	1.35	1.46
1	E	278	SER	N-CA	-5.61	1.35	1.46
1	C	252	PHE	C-N	-5.60	1.23	1.33
1	F	252	PHE	C-N	-5.60	1.23	1.33
1	A	278	SER	N-CA	-5.60	1.35	1.46
1	B	252	PHE	C-N	-5.60	1.23	1.33
1	E	252	PHE	C-N	-5.60	1.23	1.33
1	B	266	SER	N-CA	-5.60	1.35	1.46
1	B	281	GLU	CA-CB	-5.60	1.41	1.53
1	D	277	PRO	CA-CB	-5.60	1.42	1.53
1	E	281	GLU	CA-CB	-5.60	1.41	1.53
1	A	281	GLU	CA-CB	-5.59	1.41	1.53
1	D	281	GLU	CA-CB	-5.59	1.41	1.53
1	B	280	VAL	N-CA	-5.59	1.35	1.46
1	D	266	SER	N-CA	-5.59	1.35	1.46
1	E	280	VAL	N-CA	-5.59	1.35	1.46
1	A	257	LYS	CA-CB	-5.59	1.41	1.53
1	A	266	SER	N-CA	-5.59	1.35	1.46
1	A	280	VAL	N-CA	-5.59	1.35	1.46
1	D	257	LYS	CA-CB	-5.59	1.41	1.53
1	D	280	VAL	N-CA	-5.59	1.35	1.46
1	E	266	SER	N-CA	-5.59	1.35	1.46
1	C	266	SER	N-CA	-5.59	1.35	1.46
1	F	266	SER	N-CA	-5.59	1.35	1.46
1	C	267	PHE	CA-CB	-5.58	1.41	1.53
1	C	280	VAL	N-CA	-5.58	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	267	PHE	CA-CB	-5.58	1.41	1.53
1	F	280	VAL	N-CA	-5.58	1.35	1.46
1	B	267	PHE	CA-CB	-5.58	1.41	1.53
1	E	267	PHE	CA-CB	-5.58	1.41	1.53
1	D	275	GLU	CB-CG	-5.57	1.41	1.52
1	D	267	PHE	CA-CB	-5.57	1.41	1.53
1	A	267	PHE	CA-CB	-5.57	1.41	1.53
1	C	257	LYS	CA-CB	-5.57	1.41	1.53
1	F	257	LYS	CA-CB	-5.57	1.41	1.53
1	B	257	LYS	CA-CB	-5.56	1.41	1.53
1	E	257	LYS	CA-CB	-5.56	1.41	1.53
1	C	275	GLU	CB-CG	-5.56	1.41	1.52
1	F	275	GLU	CB-CG	-5.56	1.41	1.52
1	C	265	VAL	CA-CB	-5.56	1.43	1.54
1	F	265	VAL	CA-CB	-5.56	1.43	1.54
1	D	256	GLU	CB-CG	-5.56	1.41	1.52
1	A	265	VAL	CA-CB	-5.55	1.43	1.54
1	D	265	VAL	CA-CB	-5.55	1.43	1.54
1	A	252	PHE	CA-CB	-5.55	1.41	1.53
1	A	272	ALA	N-CA	-5.55	1.35	1.46
1	C	256	GLU	CB-CG	-5.55	1.41	1.52
1	D	272	ALA	N-CA	-5.55	1.35	1.46
1	F	256	GLU	CB-CG	-5.55	1.41	1.52
1	B	265	VAL	CA-CB	-5.55	1.43	1.54
1	E	265	VAL	CA-CB	-5.55	1.43	1.54
1	B	275	GLU	CB-CG	-5.54	1.41	1.52
1	E	275	GLU	CB-CG	-5.54	1.41	1.52
1	A	282	VAL	C-O	-5.54	1.12	1.23
1	B	246	VAL	N-CA	-5.54	1.35	1.46
1	B	272	ALA	N-CA	-5.54	1.35	1.46
1	E	246	VAL	N-CA	-5.54	1.35	1.46
1	E	272	ALA	N-CA	-5.54	1.35	1.46
1	A	284	ALA	CA-CB	-5.53	1.40	1.52
1	C	279	ASN	N-CA	-5.53	1.35	1.46
1	C	284	ALA	CA-CB	-5.53	1.40	1.52
1	F	279	ASN	N-CA	-5.53	1.35	1.46
1	F	284	ALA	CA-CB	-5.53	1.40	1.52
1	A	275	GLU	CB-CG	-5.53	1.41	1.52
1	C	272	ALA	N-CA	-5.53	1.35	1.46
1	F	272	ALA	N-CA	-5.53	1.35	1.46
1	D	284	ALA	CA-CB	-5.53	1.40	1.52
1	A	256	GLU	CB-CG	-5.53	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	252	PHE	CA-CB	-5.53	1.41	1.53
1	F	252	PHE	CA-CB	-5.53	1.41	1.53
1	B	256	GLU	CB-CG	-5.53	1.41	1.52
1	B	284	ALA	CA-CB	-5.53	1.40	1.52
1	D	279	ASN	N-CA	-5.53	1.35	1.46
1	E	256	GLU	CB-CG	-5.53	1.41	1.52
1	E	284	ALA	CA-CB	-5.53	1.40	1.52
1	C	284	ALA	N-CA	-5.52	1.35	1.46
1	F	284	ALA	N-CA	-5.52	1.35	1.46
1	B	252	PHE	CA-CB	-5.52	1.41	1.53
1	D	252	PHE	CA-CB	-5.52	1.41	1.53
1	E	252	PHE	CA-CB	-5.52	1.41	1.53
1	A	246	VAL	N-CA	-5.52	1.35	1.46
1	B	282	VAL	C-O	-5.52	1.12	1.23
1	D	246	VAL	N-CA	-5.52	1.35	1.46
1	E	282	VAL	C-O	-5.52	1.12	1.23
1	A	258	GLN	CA-CB	-5.52	1.41	1.53
1	D	258	GLN	CA-CB	-5.52	1.41	1.53
1	D	284	ALA	N-CA	-5.51	1.35	1.46
1	B	258	GLN	CA-CB	-5.51	1.41	1.53
1	E	258	GLN	CA-CB	-5.51	1.41	1.53
1	B	279	ASN	N-CA	-5.50	1.35	1.46
1	E	279	ASN	N-CA	-5.50	1.35	1.46
1	B	284	ALA	N-CA	-5.50	1.35	1.46
1	C	246	VAL	N-CA	-5.50	1.35	1.46
1	E	284	ALA	N-CA	-5.50	1.35	1.46
1	F	246	VAL	N-CA	-5.50	1.35	1.46
1	C	283	GLU	N-CA	-5.50	1.35	1.46
1	F	283	GLU	N-CA	-5.50	1.35	1.46
1	A	284	ALA	N-CA	-5.50	1.35	1.46
1	A	279	ASN	N-CA	-5.50	1.35	1.46
1	A	283	GLU	N-CA	-5.50	1.35	1.46
1	C	258	GLN	CA-CB	-5.50	1.41	1.53
1	D	283	GLU	N-CA	-5.50	1.35	1.46
1	F	258	GLN	CA-CB	-5.50	1.41	1.53
1	B	269	GLN	C-O	-5.49	1.12	1.23
1	C	269	GLN	C-O	-5.49	1.12	1.23
1	E	269	GLN	C-O	-5.49	1.12	1.23
1	F	269	GLN	C-O	-5.49	1.12	1.23
1	B	283	GLU	N-CA	-5.49	1.35	1.46
1	C	282	VAL	C-O	-5.49	1.12	1.23
1	E	283	GLU	N-CA	-5.49	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	282	VAL	C-O	-5.49	1.12	1.23
1	D	282	VAL	C-O	-5.49	1.12	1.23
1	C	286	GLU	CA-CB	-5.48	1.41	1.53
1	F	286	GLU	CA-CB	-5.48	1.41	1.53
1	D	277	PRO	CA-C	-5.48	1.41	1.52
1	B	249	LYS	N-CA	-5.47	1.35	1.46
1	B	275	GLU	CA-CB	-5.47	1.42	1.53
1	C	262	ASN	C-N	-5.47	1.23	1.33
1	D	275	GLU	CA-CB	-5.47	1.42	1.53
1	E	249	LYS	N-CA	-5.47	1.35	1.46
1	E	275	GLU	CA-CB	-5.47	1.42	1.53
1	F	262	ASN	C-N	-5.47	1.23	1.33
1	A	269	GLN	C-O	-5.47	1.12	1.23
1	D	269	GLN	C-O	-5.47	1.12	1.23
1	A	262	ASN	C-N	-5.46	1.23	1.33
1	A	275	GLU	CA-CB	-5.46	1.42	1.53
1	C	281	GLU	CB-CG	-5.46	1.41	1.52
1	D	262	ASN	C-N	-5.46	1.23	1.33
1	D	269	GLN	CA-CB	-5.46	1.42	1.53
1	F	281	GLU	CB-CG	-5.46	1.41	1.52
1	A	249	LYS	N-CA	-5.46	1.35	1.46
1	A	286	GLU	CA-CB	-5.46	1.42	1.53
1	D	249	LYS	N-CA	-5.46	1.35	1.46
1	D	286	GLU	CA-CB	-5.46	1.42	1.53
1	C	269	GLN	CA-CB	-5.46	1.42	1.53
1	F	269	GLN	CA-CB	-5.46	1.42	1.53
1	A	268	GLU	CA-CB	-5.46	1.42	1.53
1	A	287	GLU	CB-CG	-5.46	1.41	1.52
1	D	268	GLU	CA-CB	-5.46	1.42	1.53
1	D	287	GLU	CB-CG	-5.46	1.41	1.52
1	A	281	GLU	CB-CG	-5.46	1.41	1.52
1	B	286	GLU	CA-CB	-5.46	1.42	1.53
1	D	281	GLU	CB-CG	-5.46	1.41	1.52
1	E	286	GLU	CA-CB	-5.46	1.42	1.53
1	B	262	ASN	C-N	-5.45	1.23	1.33
1	B	277	PRO	CA-C	-5.45	1.42	1.52
1	C	275	GLU	CA-CB	-5.45	1.42	1.53
1	E	262	ASN	C-N	-5.45	1.23	1.33
1	E	277	PRO	CA-C	-5.45	1.42	1.52
1	F	275	GLU	CA-CB	-5.45	1.42	1.53
1	B	287	GLU	CB-CG	-5.45	1.41	1.52
1	E	287	GLU	CB-CG	-5.45	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	249	LYS	N-CA	-5.45	1.35	1.46
1	C	287	GLU	CB-CG	-5.45	1.41	1.52
1	F	249	LYS	N-CA	-5.45	1.35	1.46
1	F	287	GLU	CB-CG	-5.45	1.41	1.52
1	B	268	GLU	CA-CB	-5.45	1.42	1.53
1	E	268	GLU	CA-CB	-5.45	1.42	1.53
1	B	269	GLN	CA-CB	-5.44	1.42	1.53
1	E	269	GLN	CA-CB	-5.44	1.42	1.53
1	A	269	GLN	CA-CB	-5.44	1.42	1.53
1	B	281	GLU	CB-CG	-5.44	1.41	1.52
1	E	281	GLU	CB-CG	-5.44	1.41	1.52
1	E	273	GLU	C-N	-5.44	1.23	1.33
1	B	267	PHE	CG-CD2	-5.43	1.30	1.38
1	C	268	GLU	CA-CB	-5.43	1.42	1.53
1	E	267	PHE	CG-CD2	-5.43	1.30	1.38
1	F	268	GLU	CA-CB	-5.43	1.42	1.53
1	B	259	THR	N-CA	-5.43	1.35	1.46
1	C	259	THR	N-CA	-5.43	1.35	1.46
1	E	259	THR	N-CA	-5.43	1.35	1.46
1	F	259	THR	N-CA	-5.43	1.35	1.46
1	C	277	PRO	CA-C	-5.43	1.42	1.52
1	C	287	GLU	CA-CB	-5.43	1.42	1.53
1	F	277	PRO	CA-C	-5.43	1.42	1.52
1	F	287	GLU	CA-CB	-5.43	1.42	1.53
1	A	251	VAL	N-CA	-5.43	1.35	1.46
1	A	267	PHE	CG-CD2	-5.43	1.30	1.38
1	D	267	PHE	CG-CD2	-5.43	1.30	1.38
1	A	286	GLU	CB-CG	-5.43	1.41	1.52
1	D	286	GLU	CB-CG	-5.43	1.41	1.52
1	B	286	GLU	CB-CG	-5.42	1.41	1.52
1	C	267	PHE	CG-CD2	-5.42	1.30	1.38
1	C	268	GLU	CB-CG	-5.42	1.41	1.52
1	E	286	GLU	CB-CG	-5.42	1.41	1.52
1	F	267	PHE	CG-CD2	-5.42	1.30	1.38
1	F	268	GLU	CB-CG	-5.42	1.41	1.52
1	A	259	THR	N-CA	-5.42	1.35	1.46
1	D	259	THR	N-CA	-5.42	1.35	1.46
1	A	273	GLU	N-CA	-5.42	1.35	1.46
1	D	273	GLU	N-CA	-5.42	1.35	1.46
1	A	268	GLU	CB-CG	-5.42	1.41	1.52
1	D	268	GLU	CB-CG	-5.42	1.41	1.52
1	B	268	GLU	CB-CG	-5.41	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	287	GLU	CA-CB	-5.41	1.42	1.53
1	E	268	GLU	CB-CG	-5.41	1.41	1.52
1	E	287	GLU	CA-CB	-5.41	1.42	1.53
1	A	287	GLU	CA-CB	-5.41	1.42	1.53
1	C	273	GLU	N-CA	-5.41	1.35	1.46
1	C	286	GLU	CB-CG	-5.41	1.41	1.52
1	D	273	GLU	C-N	-5.41	1.23	1.33
1	D	287	GLU	CA-CB	-5.41	1.42	1.53
1	F	273	GLU	N-CA	-5.41	1.35	1.46
1	F	286	GLU	CB-CG	-5.41	1.41	1.52
1	B	273	GLU	N-CA	-5.41	1.35	1.46
1	E	273	GLU	N-CA	-5.41	1.35	1.46
1	A	277	PRO	CA-C	-5.41	1.42	1.52
1	B	251	VAL	N-CA	-5.41	1.35	1.46
1	E	251	VAL	N-CA	-5.41	1.35	1.46
1	C	273	GLU	C-N	-5.41	1.23	1.33
1	F	273	GLU	C-N	-5.41	1.23	1.33
1	A	273	GLU	C-N	-5.39	1.23	1.33
1	D	251	VAL	N-CA	-5.39	1.35	1.46
1	B	273	GLU	CB-CG	-5.39	1.42	1.52
1	E	273	GLU	CB-CG	-5.39	1.42	1.52
1	C	251	VAL	N-CA	-5.38	1.35	1.46
1	F	251	VAL	N-CA	-5.38	1.35	1.46
1	B	273	GLU	C-N	-5.38	1.23	1.33
1	D	267	PHE	N-CA	-5.38	1.35	1.46
1	C	273	GLU	CB-CG	-5.38	1.42	1.52
1	C	283	GLU	CA-CB	-5.38	1.42	1.53
1	F	273	GLU	CB-CG	-5.38	1.42	1.52
1	F	283	GLU	CA-CB	-5.38	1.42	1.53
1	B	267	PHE	N-CA	-5.37	1.35	1.46
1	E	267	PHE	N-CA	-5.37	1.35	1.46
1	A	273	GLU	CB-CG	-5.36	1.42	1.52
1	B	283	GLU	CA-CB	-5.36	1.42	1.53
1	D	273	GLU	CB-CG	-5.36	1.42	1.52
1	E	283	GLU	CA-CB	-5.36	1.42	1.53
1	A	283	GLU	CA-CB	-5.36	1.42	1.53
1	D	283	GLU	CA-CB	-5.36	1.42	1.53
1	C	267	PHE	N-CA	-5.36	1.35	1.46
1	F	267	PHE	N-CA	-5.36	1.35	1.46
1	A	267	PHE	N-CA	-5.34	1.35	1.46
1	B	282	VAL	CB-CG2	-5.34	1.41	1.52
1	E	282	VAL	CB-CG2	-5.34	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	282	VAL	CB-CG2	-5.34	1.41	1.52
1	F	282	VAL	CB-CG2	-5.34	1.41	1.52
1	A	276	VAL	C-N	-5.33	1.24	1.34
1	A	283	GLU	CB-CG	-5.33	1.42	1.52
1	D	276	VAL	C-N	-5.33	1.24	1.34
1	C	254	ASP	N-CA	-5.33	1.35	1.46
1	E	280	VAL	CB-CG2	-5.33	1.41	1.52
1	F	254	ASP	N-CA	-5.33	1.35	1.46
1	A	282	VAL	CB-CG2	-5.33	1.41	1.52
1	D	282	VAL	CB-CG2	-5.33	1.41	1.52
1	B	254	ASP	CA-CB	-5.32	1.42	1.53
1	E	254	ASP	CA-CB	-5.32	1.42	1.53
1	B	283	GLU	CB-CG	-5.32	1.42	1.52
1	E	283	GLU	CB-CG	-5.32	1.42	1.52
1	F	280	VAL	CB-CG2	-5.32	1.41	1.52
1	B	276	VAL	C-N	-5.32	1.24	1.34
1	E	276	VAL	C-N	-5.32	1.24	1.34
1	C	254	ASP	CA-CB	-5.32	1.42	1.53
1	D	280	VAL	CB-CG2	-5.32	1.41	1.52
1	F	254	ASP	CA-CB	-5.32	1.42	1.53
1	C	276	VAL	C-N	-5.31	1.24	1.34
1	F	276	VAL	C-N	-5.31	1.24	1.34
1	A	254	ASP	CA-CB	-5.31	1.42	1.53
1	B	254	ASP	N-CA	-5.31	1.35	1.46
1	D	254	ASP	CA-CB	-5.31	1.42	1.53
1	E	254	ASP	N-CA	-5.31	1.35	1.46
1	A	254	ASP	N-CA	-5.31	1.35	1.46
1	A	265	VAL	CB-CG1	-5.31	1.41	1.52
1	D	254	ASP	N-CA	-5.31	1.35	1.46
1	D	265	VAL	CB-CG1	-5.31	1.41	1.52
1	B	265	VAL	CB-CG1	-5.30	1.41	1.52
1	C	265	VAL	CB-CG1	-5.30	1.41	1.52
1	C	283	GLU	CB-CG	-5.30	1.42	1.52
1	E	265	VAL	CB-CG1	-5.30	1.41	1.52
1	F	265	VAL	CB-CG1	-5.30	1.41	1.52
1	F	283	GLU	CB-CG	-5.30	1.42	1.52
1	D	283	GLU	CB-CG	-5.30	1.42	1.52
1	A	251	VAL	C-O	-5.30	1.13	1.23
1	C	280	VAL	CB-CG2	-5.30	1.41	1.52
1	B	280	VAL	CB-CG1	-5.29	1.41	1.52
1	B	280	VAL	CB-CG2	-5.29	1.41	1.52
1	C	280	VAL	CB-CG1	-5.29	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	280	VAL	CB-CG1	-5.29	1.41	1.52
1	F	280	VAL	CB-CG1	-5.29	1.41	1.52
1	C	246	VAL	CB-CG1	-5.28	1.41	1.52
1	F	246	VAL	CB-CG1	-5.28	1.41	1.52
1	A	280	VAL	CB-CG1	-5.28	1.41	1.52
1	A	280	VAL	CB-CG2	-5.28	1.41	1.52
1	D	280	VAL	CB-CG1	-5.28	1.41	1.52
1	B	251	VAL	C-O	-5.27	1.13	1.23
1	E	251	VAL	C-O	-5.27	1.13	1.23
1	B	246	VAL	CB-CG1	-5.27	1.41	1.52
1	E	246	VAL	CB-CG1	-5.27	1.41	1.52
1	D	251	VAL	C-O	-5.26	1.13	1.23
1	A	246	VAL	CB-CG1	-5.26	1.41	1.52
1	C	282	VAL	CB-CG1	-5.26	1.41	1.52
1	D	246	VAL	CB-CG1	-5.26	1.41	1.52
1	F	282	VAL	CB-CG1	-5.26	1.41	1.52
1	B	282	VAL	CB-CG1	-5.26	1.41	1.52
1	E	282	VAL	CB-CG1	-5.26	1.41	1.52
1	A	276	VAL	CB-CG1	-5.25	1.41	1.52
1	C	248	VAL	CB-CG2	-5.25	1.41	1.52
1	D	276	VAL	CB-CG1	-5.25	1.41	1.52
1	F	248	VAL	CB-CG2	-5.25	1.41	1.52
1	A	282	VAL	CB-CG1	-5.24	1.41	1.52
1	C	255	LEU	CA-CB	-5.24	1.41	1.53
1	D	282	VAL	CB-CG1	-5.24	1.41	1.52
1	F	255	LEU	CA-CB	-5.24	1.41	1.53
1	C	251	VAL	C-O	-5.24	1.13	1.23
1	F	251	VAL	C-O	-5.24	1.13	1.23
1	C	276	VAL	CB-CG1	-5.24	1.41	1.52
1	F	276	VAL	CB-CG1	-5.24	1.41	1.52
1	B	255	LEU	CA-CB	-5.24	1.41	1.53
1	E	255	LEU	CA-CB	-5.24	1.41	1.53
1	A	248	VAL	CB-CG2	-5.24	1.41	1.52
1	A	255	LEU	CA-CB	-5.24	1.41	1.53
1	D	248	VAL	CB-CG2	-5.24	1.41	1.52
1	D	255	LEU	CA-CB	-5.24	1.41	1.53
1	A	246	VAL	CB-CG2	-5.23	1.41	1.52
1	B	246	VAL	CB-CG2	-5.23	1.41	1.52
1	D	246	VAL	CB-CG2	-5.23	1.41	1.52
1	E	246	VAL	CB-CG2	-5.23	1.41	1.52
1	B	248	VAL	CB-CG2	-5.23	1.41	1.52
1	C	246	VAL	CB-CG2	-5.23	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	248	VAL	CB-CG2	-5.23	1.41	1.52
1	F	246	VAL	CB-CG2	-5.23	1.41	1.52
1	B	276	VAL	CB-CG1	-5.22	1.41	1.52
1	E	276	VAL	CB-CG1	-5.22	1.41	1.52
1	B	259	THR	C-O	-5.21	1.13	1.23
1	C	259	THR	C-O	-5.21	1.13	1.23
1	E	259	THR	C-O	-5.21	1.13	1.23
1	F	259	THR	C-O	-5.21	1.13	1.23
1	C	255	LEU	C-O	-5.21	1.13	1.23
1	F	255	LEU	C-O	-5.21	1.13	1.23
1	A	255	LEU	C-O	-5.20	1.13	1.23
1	D	255	LEU	C-O	-5.20	1.13	1.23
1	A	248	VAL	CB-CG1	-5.20	1.42	1.52
1	D	248	VAL	CB-CG1	-5.20	1.42	1.52
1	A	270	LEU	CA-CB	-5.19	1.41	1.53
1	D	270	LEU	CA-CB	-5.19	1.41	1.53
1	A	276	VAL	CB-CG2	-5.19	1.42	1.52
1	D	276	VAL	CB-CG2	-5.19	1.42	1.52
1	A	259	THR	C-O	-5.19	1.13	1.23
1	B	276	VAL	CB-CG2	-5.19	1.42	1.52
1	D	259	THR	C-O	-5.19	1.13	1.23
1	E	276	VAL	CB-CG2	-5.19	1.42	1.52
1	C	276	VAL	CB-CG2	-5.19	1.42	1.52
1	F	276	VAL	CB-CG2	-5.19	1.42	1.52
1	B	270	LEU	CA-CB	-5.18	1.41	1.53
1	E	270	LEU	CA-CB	-5.18	1.41	1.53
1	B	265	VAL	CB-CG2	-5.18	1.42	1.52
1	E	265	VAL	CB-CG2	-5.18	1.42	1.52
1	C	270	LEU	CA-CB	-5.18	1.41	1.53
1	C	272	ALA	C-O	-5.18	1.13	1.23
1	F	270	LEU	CA-CB	-5.18	1.41	1.53
1	F	272	ALA	C-O	-5.18	1.13	1.23
1	A	272	ALA	C-O	-5.17	1.13	1.23
1	D	272	ALA	C-O	-5.17	1.13	1.23
1	B	248	VAL	CB-CG1	-5.17	1.42	1.52
1	B	255	LEU	C-O	-5.17	1.13	1.23
1	C	248	VAL	CB-CG1	-5.17	1.42	1.52
1	E	248	VAL	CB-CG1	-5.17	1.42	1.52
1	E	255	LEU	C-O	-5.17	1.13	1.23
1	F	248	VAL	CB-CG1	-5.17	1.42	1.52
1	C	265	VAL	CB-CG2	-5.17	1.42	1.52
1	F	265	VAL	CB-CG2	-5.17	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	272	ALA	C-O	-5.15	1.13	1.23
1	D	252	PHE	CG-CD1	-5.15	1.31	1.38
1	E	272	ALA	C-O	-5.15	1.13	1.23
1	A	265	VAL	CB-CG2	-5.15	1.42	1.52
1	D	265	VAL	CB-CG2	-5.15	1.42	1.52
1	C	260	ALA	CA-CB	-5.14	1.41	1.52
1	F	260	ALA	CA-CB	-5.14	1.41	1.52
1	A	260	ALA	CA-CB	-5.13	1.41	1.52
1	C	252	PHE	CG-CD1	-5.13	1.31	1.38
1	D	260	ALA	CA-CB	-5.13	1.41	1.52
1	E	252	PHE	CG-CD1	-5.13	1.31	1.38
1	F	252	PHE	CG-CD1	-5.13	1.31	1.38
1	C	256	GLU	C-O	-5.13	1.13	1.23
1	F	256	GLU	C-O	-5.13	1.13	1.23
1	B	260	ALA	CA-CB	-5.13	1.41	1.52
1	E	260	ALA	CA-CB	-5.13	1.41	1.52
1	B	252	PHE	C-O	-5.12	1.13	1.23
1	E	252	PHE	C-O	-5.12	1.13	1.23
1	A	256	GLU	C-O	-5.12	1.13	1.23
1	D	256	GLU	C-O	-5.12	1.13	1.23
1	B	256	GLU	C-O	-5.11	1.13	1.23
1	E	256	GLU	C-O	-5.11	1.13	1.23
1	B	267	PHE	CG-CD1	-5.11	1.31	1.38
1	E	267	PHE	CG-CD1	-5.11	1.31	1.38
1	A	254	ASP	CB-CG	-5.10	1.41	1.51
1	D	254	ASP	CB-CG	-5.10	1.41	1.51
1	A	252	PHE	C-O	-5.10	1.13	1.23
1	B	252	PHE	CG-CD1	-5.10	1.31	1.38
1	D	252	PHE	C-O	-5.10	1.13	1.23
1	A	267	PHE	CG-CD1	-5.10	1.31	1.38
1	D	267	PHE	CG-CD1	-5.10	1.31	1.38
1	C	254	ASP	CB-CG	-5.09	1.41	1.51
1	F	254	ASP	CB-CG	-5.09	1.41	1.51
1	A	252	PHE	CG-CD1	-5.09	1.31	1.38
1	B	254	ASP	CB-CG	-5.09	1.41	1.51
1	E	254	ASP	CB-CG	-5.09	1.41	1.51
1	C	267	PHE	CG-CD1	-5.09	1.31	1.38
1	F	267	PHE	CG-CD1	-5.09	1.31	1.38
1	C	252	PHE	C-O	-5.09	1.13	1.23
1	F	252	PHE	C-O	-5.09	1.13	1.23
1	A	257	LYS	C-O	-5.08	1.13	1.23
1	B	287	GLU	C-O	-5.08	1.13	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	257	LYS	C-O	-5.08	1.13	1.23
1	D	257	LYS	C-O	-5.08	1.13	1.23
1	E	287	GLU	C-O	-5.08	1.13	1.23
1	F	257	LYS	C-O	-5.08	1.13	1.23
1	B	248	VAL	C-N	-5.07	1.22	1.34
1	E	248	VAL	C-N	-5.07	1.22	1.34
1	B	257	LYS	C-O	-5.07	1.13	1.23
1	E	257	LYS	C-O	-5.07	1.13	1.23
1	A	287	GLU	C-O	-5.07	1.13	1.23
1	C	248	VAL	C-N	-5.07	1.22	1.34
1	D	287	GLU	C-O	-5.07	1.13	1.23
1	F	248	VAL	C-N	-5.07	1.22	1.34
1	C	261	TYR	C-O	-5.06	1.13	1.23
1	F	261	TYR	C-O	-5.06	1.13	1.23
1	C	287	GLU	C-O	-5.06	1.13	1.23
1	F	287	GLU	C-O	-5.06	1.13	1.23
1	B	265	VAL	C-O	-5.06	1.13	1.23
1	E	265	VAL	C-O	-5.06	1.13	1.23
1	A	250	ALA	C-O	-5.05	1.13	1.23
1	A	261	TYR	C-O	-5.05	1.13	1.23
1	D	261	TYR	C-O	-5.05	1.13	1.23
1	A	248	VAL	C-N	-5.04	1.22	1.34
1	C	250	ALA	C-O	-5.04	1.13	1.23
1	D	248	VAL	C-N	-5.04	1.22	1.34
1	F	250	ALA	C-O	-5.04	1.13	1.23
1	C	265	VAL	C-O	-5.04	1.13	1.23
1	F	265	VAL	C-O	-5.04	1.13	1.23
1	B	261	TYR	C-O	-5.04	1.13	1.23
1	E	261	TYR	C-O	-5.04	1.13	1.23
1	D	250	ALA	C-O	-5.03	1.13	1.23
1	B	250	ALA	C-O	-5.02	1.13	1.23
1	E	250	ALA	C-O	-5.02	1.13	1.23
1	A	265	VAL	C-O	-5.02	1.13	1.23
1	D	265	VAL	C-O	-5.02	1.13	1.23

All (290) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	142	ARG	NE-CZ-NH1	-25.35	107.62	120.30
1	D	142	ARG	NE-CZ-NH1	-25.35	107.62	120.30
1	B	142	ARG	NE-CZ-NH1	-25.35	107.63	120.30
1	E	142	ARG	NE-CZ-NH1	-25.35	107.63	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	142	ARG	NE-CZ-NH1	-25.33	107.63	120.30
1	F	142	ARG	NE-CZ-NH1	-25.33	107.63	120.30
1	C	135	ARG	NE-CZ-NH2	-25.27	107.67	120.30
1	F	135	ARG	NE-CZ-NH2	-25.27	107.67	120.30
1	A	516	ARG	NE-CZ-NH1	-25.25	107.67	120.30
1	B	135	ARG	NE-CZ-NH2	-25.24	107.68	120.30
1	E	135	ARG	NE-CZ-NH2	-25.24	107.68	120.30
1	A	133	ARG	NE-CZ-NH2	-25.20	107.70	120.30
1	D	133	ARG	NE-CZ-NH2	-25.20	107.70	120.30
1	B	516	ARG	NE-CZ-NH1	-25.17	107.71	120.30
1	E	516	ARG	NE-CZ-NH1	-25.17	107.71	120.30
1	A	135	ARG	NE-CZ-NH2	-25.17	107.71	120.30
1	D	135	ARG	NE-CZ-NH2	-25.17	107.71	120.30
1	C	516	ARG	NE-CZ-NH1	-25.17	107.72	120.30
1	F	516	ARG	NE-CZ-NH1	-25.17	107.72	120.30
1	A	560	ARG	NE-CZ-NH2	-25.16	107.72	120.30
1	B	133	ARG	NE-CZ-NH2	-25.16	107.72	120.30
1	D	560	ARG	NE-CZ-NH2	-25.16	107.72	120.30
1	E	133	ARG	NE-CZ-NH2	-25.16	107.72	120.30
1	C	560	ARG	NE-CZ-NH2	-25.16	107.72	120.30
1	F	560	ARG	NE-CZ-NH2	-25.16	107.72	120.30
1	C	133	ARG	NE-CZ-NH2	-25.16	107.72	120.30
1	F	133	ARG	NE-CZ-NH2	-25.16	107.72	120.30
1	A	180	ARG	NE-CZ-NH2	-25.15	107.72	120.30
1	D	535	ARG	NE-CZ-NH2	-25.15	107.72	120.30
1	D	516	ARG	NE-CZ-NH1	-25.14	107.73	120.30
1	B	180	ARG	NE-CZ-NH2	-25.14	107.73	120.30
1	E	180	ARG	NE-CZ-NH2	-25.14	107.73	120.30
1	B	560	ARG	NE-CZ-NH2	-25.13	107.73	120.30
1	E	560	ARG	NE-CZ-NH2	-25.13	107.73	120.30
1	C	535	ARG	NE-CZ-NH2	-25.12	107.74	120.30
1	F	535	ARG	NE-CZ-NH2	-25.12	107.74	120.30
1	B	535	ARG	NE-CZ-NH2	-25.10	107.75	120.30
1	E	535	ARG	NE-CZ-NH2	-25.10	107.75	120.30
1	A	538	ARG	NE-CZ-NH1	-25.09	107.75	120.30
1	D	538	ARG	NE-CZ-NH1	-25.09	107.75	120.30
1	C	180	ARG	NE-CZ-NH2	-25.08	107.76	120.30
1	F	180	ARG	NE-CZ-NH2	-25.08	107.76	120.30
1	B	538	ARG	NE-CZ-NH1	-25.07	107.76	120.30
1	E	538	ARG	NE-CZ-NH1	-25.07	107.76	120.30
1	C	538	ARG	NE-CZ-NH1	-25.07	107.76	120.30
1	F	538	ARG	NE-CZ-NH1	-25.07	107.76	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	180	ARG	NE-CZ-NH2	-25.07	107.77	120.30
1	A	516	ARG	NE-CZ-NH2	-25.02	107.79	120.30
1	A	535	ARG	NE-CZ-NH2	-25.01	107.80	120.30
1	A	538	ARG	NE-CZ-NH2	-25.00	107.80	120.30
1	D	538	ARG	NE-CZ-NH2	-25.00	107.80	120.30
1	B	560	ARG	NE-CZ-NH1	-24.99	107.81	120.30
1	E	560	ARG	NE-CZ-NH1	-24.99	107.81	120.30
1	A	560	ARG	NE-CZ-NH1	-24.98	107.81	120.30
1	D	516	ARG	NE-CZ-NH2	-24.98	107.81	120.30
1	D	560	ARG	NE-CZ-NH1	-24.98	107.81	120.30
1	A	535	ARG	NE-CZ-NH1	-24.98	107.81	120.30
1	C	180	ARG	NE-CZ-NH1	-24.98	107.81	120.30
1	E	180	ARG	NE-CZ-NH1	-24.98	107.81	120.30
1	F	180	ARG	NE-CZ-NH1	-24.98	107.81	120.30
1	B	538	ARG	NE-CZ-NH2	-24.98	107.81	120.30
1	E	538	ARG	NE-CZ-NH2	-24.98	107.81	120.30
1	B	516	ARG	NE-CZ-NH2	-24.97	107.81	120.30
1	E	516	ARG	NE-CZ-NH2	-24.97	107.81	120.30
1	C	535	ARG	NE-CZ-NH1	-24.96	107.82	120.30
1	F	535	ARG	NE-CZ-NH1	-24.96	107.82	120.30
1	C	133	ARG	NE-CZ-NH1	-24.95	107.82	120.30
1	D	180	ARG	NE-CZ-NH1	-24.95	107.82	120.30
1	F	133	ARG	NE-CZ-NH1	-24.95	107.82	120.30
1	A	133	ARG	NE-CZ-NH1	-24.95	107.83	120.30
1	D	133	ARG	NE-CZ-NH1	-24.95	107.83	120.30
1	C	538	ARG	NE-CZ-NH2	-24.95	107.83	120.30
1	F	538	ARG	NE-CZ-NH2	-24.95	107.83	120.30
1	C	560	ARG	NE-CZ-NH1	-24.94	107.83	120.30
1	D	535	ARG	NE-CZ-NH1	-24.94	107.83	120.30
1	F	560	ARG	NE-CZ-NH1	-24.94	107.83	120.30
1	B	133	ARG	NE-CZ-NH1	-24.94	107.83	120.30
1	E	133	ARG	NE-CZ-NH1	-24.94	107.83	120.30
1	C	516	ARG	NE-CZ-NH2	-24.93	107.83	120.30
1	F	516	ARG	NE-CZ-NH2	-24.93	107.83	120.30
1	B	180	ARG	NE-CZ-NH1	-24.90	107.85	120.30
1	A	180	ARG	NE-CZ-NH1	-24.88	107.86	120.30
1	B	535	ARG	NE-CZ-NH1	-24.87	107.86	120.30
1	E	535	ARG	NE-CZ-NH1	-24.87	107.86	120.30
1	D	135	ARG	NE-CZ-NH1	-24.87	107.86	120.30
1	C	142	ARG	NE-CZ-NH2	-24.85	107.87	120.30
1	F	142	ARG	NE-CZ-NH2	-24.85	107.87	120.30
1	A	135	ARG	NE-CZ-NH1	-24.85	107.88	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	135	ARG	NE-CZ-NH1	-24.83	107.88	120.30
1	E	135	ARG	NE-CZ-NH1	-24.83	107.88	120.30
1	A	142	ARG	NE-CZ-NH2	-24.83	107.89	120.30
1	D	142	ARG	NE-CZ-NH2	-24.83	107.89	120.30
1	B	142	ARG	NE-CZ-NH2	-24.82	107.89	120.30
1	E	142	ARG	NE-CZ-NH2	-24.82	107.89	120.30
1	C	135	ARG	NE-CZ-NH1	-24.82	107.89	120.30
1	F	135	ARG	NE-CZ-NH1	-24.82	107.89	120.30
1	A	516	ARG	NH1-CZ-NH2	22.85	144.54	119.40
1	C	142	ARG	NH1-CZ-NH2	22.81	144.49	119.40
1	F	142	ARG	NH1-CZ-NH2	22.81	144.49	119.40
1	A	142	ARG	NH1-CZ-NH2	22.81	144.49	119.40
1	D	142	ARG	NH1-CZ-NH2	22.81	144.49	119.40
1	B	142	ARG	NH1-CZ-NH2	22.80	144.49	119.40
1	E	142	ARG	NH1-CZ-NH2	22.80	144.49	119.40
1	A	133	ARG	NH1-CZ-NH2	22.80	144.48	119.40
1	D	133	ARG	NH1-CZ-NH2	22.80	144.48	119.40
1	A	560	ARG	NH1-CZ-NH2	22.79	144.47	119.40
1	B	516	ARG	NH1-CZ-NH2	22.79	144.47	119.40
1	D	560	ARG	NH1-CZ-NH2	22.79	144.47	119.40
1	E	516	ARG	NH1-CZ-NH2	22.79	144.47	119.40
1	D	516	ARG	NH1-CZ-NH2	22.79	144.46	119.40
1	E	180	ARG	NH1-CZ-NH2	22.78	144.46	119.40
1	B	560	ARG	NH1-CZ-NH2	22.78	144.46	119.40
1	C	133	ARG	NH1-CZ-NH2	22.78	144.46	119.40
1	E	560	ARG	NH1-CZ-NH2	22.78	144.46	119.40
1	F	133	ARG	NH1-CZ-NH2	22.78	144.46	119.40
1	C	516	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	C	560	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	F	516	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	F	560	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	B	133	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	E	133	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	A	538	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	D	535	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	D	538	ARG	NH1-CZ-NH2	22.77	144.45	119.40
1	C	135	ARG	NH1-CZ-NH2	22.77	144.44	119.40
1	F	135	ARG	NH1-CZ-NH2	22.77	144.44	119.40
1	C	535	ARG	NH1-CZ-NH2	22.77	144.44	119.40
1	F	535	ARG	NH1-CZ-NH2	22.77	144.44	119.40
1	B	135	ARG	NH1-CZ-NH2	22.76	144.44	119.40
1	E	135	ARG	NH1-CZ-NH2	22.76	144.44	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	180	ARG	NH1-CZ-NH2	22.75	144.43	119.40
1	F	180	ARG	NH1-CZ-NH2	22.75	144.43	119.40
1	B	538	ARG	NH1-CZ-NH2	22.75	144.43	119.40
1	E	538	ARG	NH1-CZ-NH2	22.75	144.43	119.40
1	B	180	ARG	NH1-CZ-NH2	22.75	144.42	119.40
1	D	135	ARG	NH1-CZ-NH2	22.75	144.42	119.40
1	A	180	ARG	NH1-CZ-NH2	22.74	144.42	119.40
1	A	135	ARG	NH1-CZ-NH2	22.74	144.41	119.40
1	C	538	ARG	NH1-CZ-NH2	22.74	144.41	119.40
1	D	180	ARG	NH1-CZ-NH2	22.74	144.41	119.40
1	F	538	ARG	NH1-CZ-NH2	22.74	144.41	119.40
1	A	535	ARG	NH1-CZ-NH2	22.72	144.40	119.40
1	B	535	ARG	NH1-CZ-NH2	22.71	144.38	119.40
1	E	535	ARG	NH1-CZ-NH2	22.71	144.38	119.40
1	A	277	PRO	CA-N-CD	-10.51	96.78	111.50
1	B	277	PRO	CA-N-CD	-10.50	96.80	111.50
1	E	277	PRO	CA-N-CD	-10.50	96.80	111.50
1	D	277	PRO	CA-N-CD	-10.48	96.82	111.50
1	C	277	PRO	CA-N-CD	-10.48	96.83	111.50
1	F	277	PRO	CA-N-CD	-10.48	96.83	111.50
1	B	115	VAL	N-CA-C	9.51	136.67	111.00
1	E	115	VAL	N-CA-C	9.51	136.67	111.00
1	A	115	VAL	N-CA-C	9.51	136.66	111.00
1	D	115	VAL	N-CA-C	9.51	136.66	111.00
1	C	115	VAL	N-CA-C	9.50	136.66	111.00
1	F	115	VAL	N-CA-C	9.50	136.66	111.00
1	D	546	PRO	CA-N-CD	-8.49	99.62	111.50
1	B	546	PRO	CA-N-CD	-8.48	99.63	111.50
1	E	546	PRO	CA-N-CD	-8.48	99.63	111.50
1	C	546	PRO	CA-N-CD	-8.47	99.64	111.50
1	F	546	PRO	CA-N-CD	-8.47	99.64	111.50
1	A	546	PRO	CA-N-CD	-8.47	99.64	111.50
1	A	546	PRO	N-CD-CG	-8.34	90.69	103.20
1	C	546	PRO	N-CD-CG	-8.34	90.69	103.20
1	F	546	PRO	N-CD-CG	-8.34	90.69	103.20
1	D	546	PRO	N-CD-CG	-8.34	90.70	103.20
1	B	546	PRO	N-CD-CG	-8.32	90.71	103.20
1	E	546	PRO	N-CD-CG	-8.32	90.71	103.20
1	C	546	PRO	N-CA-CB	8.22	113.16	103.30
1	F	546	PRO	N-CA-CB	8.22	113.16	103.30
1	B	546	PRO	N-CA-CB	8.21	113.15	103.30
1	E	546	PRO	N-CA-CB	8.21	113.15	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	546	PRO	N-CA-CB	8.20	113.14	103.30
1	D	546	PRO	N-CA-CB	8.20	113.14	103.30
1	A	115	VAL	CB-CA-C	-7.59	96.99	111.40
1	B	115	VAL	CB-CA-C	-7.59	96.98	111.40
1	C	115	VAL	CB-CA-C	-7.59	96.99	111.40
1	D	115	VAL	CB-CA-C	-7.59	96.99	111.40
1	E	115	VAL	CB-CA-C	-7.59	96.98	111.40
1	F	115	VAL	CB-CA-C	-7.59	96.99	111.40
1	A	277	PRO	N-CA-CB	7.32	112.08	103.30
1	B	277	PRO	N-CA-CB	7.30	112.06	103.30
1	E	277	PRO	N-CA-CB	7.30	112.06	103.30
1	C	277	PRO	N-CA-CB	7.29	112.05	103.30
1	F	277	PRO	N-CA-CB	7.29	112.05	103.30
1	D	277	PRO	N-CA-CB	7.27	112.02	103.30
1	A	36	PHE	CB-CG-CD2	-7.23	115.74	120.80
1	D	36	PHE	CB-CG-CD2	-7.20	115.76	120.80
1	C	36	PHE	CB-CG-CD2	-7.19	115.77	120.80
1	F	36	PHE	CB-CG-CD2	-7.19	115.77	120.80
1	B	36	PHE	CB-CG-CD2	-7.17	115.78	120.80
1	E	36	PHE	CB-CG-CD2	-7.14	115.81	120.80
1	B	277	PRO	N-CD-CG	-7.11	92.54	103.20
1	E	277	PRO	N-CD-CG	-7.11	92.54	103.20
1	A	277	PRO	N-CD-CG	-7.11	92.54	103.20
1	D	277	PRO	N-CD-CG	-7.11	92.54	103.20
1	C	277	PRO	N-CD-CG	-7.10	92.56	103.20
1	F	277	PRO	N-CD-CG	-7.10	92.56	103.20
1	A	114	ASN	CB-CA-C	7.08	124.57	110.40
1	D	114	ASN	CB-CA-C	7.08	124.57	110.40
1	B	114	ASN	CB-CA-C	7.08	124.55	110.40
1	E	114	ASN	CB-CA-C	7.08	124.55	110.40
1	C	114	ASN	CB-CA-C	7.08	124.55	110.40
1	F	114	ASN	CB-CA-C	7.08	124.55	110.40
1	B	340	SER	N-CA-CB	-6.69	100.47	110.50
1	E	340	SER	N-CA-CB	-6.69	100.47	110.50
1	C	340	SER	N-CA-CB	-6.69	100.47	110.50
1	F	340	SER	N-CA-CB	-6.69	100.47	110.50
1	A	340	SER	N-CA-CB	-6.68	100.47	110.50
1	D	340	SER	N-CA-CB	-6.68	100.47	110.50
1	B	340	SER	N-CA-C	6.01	127.23	111.00
1	E	340	SER	N-CA-C	6.01	127.23	111.00
1	A	340	SER	N-CA-C	6.01	127.23	111.00
1	D	340	SER	N-CA-C	6.01	127.23	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	340	SER	N-CA-C	6.01	127.22	111.00
1	F	340	SER	N-CA-C	6.01	127.22	111.00
1	C	333	TYR	CB-CG-CD2	5.87	124.52	121.00
1	F	333	TYR	CB-CG-CD2	5.87	124.52	121.00
1	B	333	TYR	CB-CG-CD2	5.84	124.50	121.00
1	E	333	TYR	CB-CG-CD2	5.84	124.50	121.00
1	A	333	TYR	CB-CG-CD2	5.83	124.50	121.00
1	D	333	TYR	CB-CG-CD2	5.83	124.50	121.00
1	C	76	TRP	N-CA-CB	5.82	121.07	110.60
1	F	76	TRP	N-CA-CB	5.82	121.07	110.60
1	A	339	SER	C-N-CA	5.81	136.23	121.70
1	B	339	SER	C-N-CA	5.81	136.23	121.70
1	C	339	SER	C-N-CA	5.81	136.22	121.70
1	F	339	SER	C-N-CA	5.81	136.22	121.70
1	A	76	TRP	N-CA-CB	5.81	121.05	110.60
1	D	76	TRP	N-CA-CB	5.81	121.05	110.60
1	B	76	TRP	N-CA-CB	5.80	121.04	110.60
1	D	339	SER	C-N-CA	5.80	136.21	121.70
1	E	76	TRP	N-CA-CB	5.80	121.04	110.60
1	E	339	SER	C-N-CA	5.80	136.20	121.70
1	A	36	PHE	CB-CG-CD1	5.67	124.77	120.80
1	B	36	PHE	CB-CG-CD1	5.67	124.77	120.80
1	D	36	PHE	CB-CG-CD1	5.64	124.75	120.80
1	E	36	PHE	CB-CG-CD1	5.63	124.74	120.80
1	C	36	PHE	CB-CG-CD1	5.62	124.74	120.80
1	F	36	PHE	CB-CG-CD1	5.62	124.74	120.80
1	D	82	TYR	CB-CG-CD2	-5.48	117.71	121.00
1	C	82	TYR	CB-CG-CD2	-5.48	117.71	121.00
1	F	82	TYR	CB-CG-CD2	-5.48	117.71	121.00
1	A	372	GLU	CB-CA-C	5.41	121.21	110.40
1	C	372	GLU	CB-CA-C	5.40	121.21	110.40
1	F	372	GLU	CB-CA-C	5.40	121.21	110.40
1	B	444	TYR	CB-CG-CD1	-5.39	117.76	121.00
1	E	444	TYR	CB-CG-CD1	-5.39	117.76	121.00
1	D	444	TYR	CB-CG-CD1	-5.39	117.77	121.00
1	B	82	TYR	CB-CG-CD2	-5.39	117.77	121.00
1	E	82	TYR	CB-CG-CD2	-5.39	117.77	121.00
1	E	372	GLU	CB-CA-C	5.39	121.18	110.40
1	B	372	GLU	CB-CA-C	5.39	121.17	110.40
1	C	444	TYR	CB-CG-CD1	-5.39	117.77	121.00
1	F	444	TYR	CB-CG-CD1	-5.39	117.77	121.00
1	D	372	GLU	CB-CA-C	5.38	121.17	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	444	TYR	CB-CG-CD1	-5.38	117.77	121.00
1	B	373	SER	N-CA-CB	5.37	118.56	110.50
1	C	373	SER	N-CA-CB	5.37	118.56	110.50
1	E	373	SER	N-CA-CB	5.37	118.56	110.50
1	F	373	SER	N-CA-CB	5.37	118.56	110.50
1	D	373	SER	N-CA-CB	5.37	118.56	110.50
1	A	373	SER	N-CA-CB	5.35	118.53	110.50
1	A	82	TYR	CB-CG-CD2	-5.33	117.80	121.00
1	A	190	VAL	N-CA-CB	-5.28	99.89	111.50
1	D	190	VAL	N-CA-CB	-5.28	99.89	111.50
1	B	190	VAL	N-CA-CB	-5.26	99.93	111.50
1	E	190	VAL	N-CA-CB	-5.26	99.93	111.50
1	C	190	VAL	N-CA-CB	-5.26	99.94	111.50
1	F	190	VAL	N-CA-CB	-5.26	99.94	111.50
1	B	436	ARG	N-CA-CB	5.25	120.06	110.60
1	E	436	ARG	N-CA-CB	5.25	120.06	110.60
1	A	436	ARG	N-CA-CB	5.25	120.05	110.60
1	D	436	ARG	N-CA-CB	5.25	120.05	110.60
1	C	436	ARG	N-CA-CB	5.25	120.04	110.60
1	F	436	ARG	N-CA-CB	5.25	120.04	110.60
1	C	191	LYS	N-CA-C	5.24	125.14	111.00
1	F	191	LYS	N-CA-C	5.24	125.14	111.00
1	B	191	LYS	N-CA-C	5.24	125.14	111.00
1	E	191	LYS	N-CA-C	5.24	125.14	111.00
1	A	191	LYS	N-CA-C	5.23	125.13	111.00
1	D	191	LYS	N-CA-C	5.23	125.11	111.00
1	B	428	GLU	N-CA-CB	5.11	119.80	110.60
1	E	428	GLU	N-CA-CB	5.11	119.80	110.60
1	A	428	GLU	N-CA-CB	5.10	119.78	110.60
1	D	428	GLU	N-CA-CB	5.10	119.78	110.60
1	C	428	GLU	N-CA-CB	5.09	119.77	110.60
1	F	428	GLU	N-CA-CB	5.09	119.77	110.60
1	A	547	ALA	CB-CA-C	-5.01	102.59	110.10
1	D	547	ALA	CB-CA-C	-5.01	102.59	110.10

All (6) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	A	340	SER	CA
1	B	340	SER	CA
1	C	340	SER	CA
1	D	340	SER	CA

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Mol	Chain	Res	Type	Atom
1	E	340	SER	CA
1	F	340	SER	CA

All (72) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	33	GLU	Peptide
1	A	334	TYR	Sidechain
1	A	340	SER	Peptide
1	A	354	GLU	Peptide
1	A	369	GLY	Peptide
1	A	386	ASN	Peptide
1	A	393	ALA	Peptide
1	A	412	MET	Peptide
1	A	425	GLU	Peptide
1	A	444	TYR	Sidechain
1	A	451	GLU	Peptide
1	A	467	THR	Peptide
1	B	33	GLU	Peptide
1	B	334	TYR	Sidechain
1	B	340	SER	Peptide
1	B	354	GLU	Peptide
1	B	369	GLY	Peptide
1	B	386	ASN	Peptide
1	B	393	ALA	Peptide
1	B	412	MET	Peptide
1	B	425	GLU	Peptide
1	B	444	TYR	Sidechain
1	B	451	GLU	Peptide
1	B	467	THR	Peptide
1	C	33	GLU	Peptide
1	C	334	TYR	Sidechain
1	C	340	SER	Peptide
1	C	354	GLU	Peptide
1	C	369	GLY	Peptide
1	C	386	ASN	Peptide
1	C	393	ALA	Peptide
1	C	412	MET	Peptide
1	C	425	GLU	Peptide
1	C	444	TYR	Sidechain
1	C	451	GLU	Peptide
1	C	467	THR	Peptide

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Mol	Chain	Res	Type	Group
1	D	33	GLU	Peptide
1	D	334	TYR	Sidechain
1	D	340	SER	Peptide
1	D	354	GLU	Peptide
1	D	369	GLY	Peptide
1	D	386	ASN	Peptide
1	D	393	ALA	Peptide
1	D	412	MET	Peptide
1	D	425	GLU	Peptide
1	D	444	TYR	Sidechain
1	D	451	GLU	Peptide
1	D	467	THR	Peptide
1	E	33	GLU	Peptide
1	E	334	TYR	Sidechain
1	E	340	SER	Peptide
1	E	354	GLU	Peptide
1	E	369	GLY	Peptide
1	E	386	ASN	Peptide
1	E	393	ALA	Peptide
1	E	412	MET	Peptide
1	E	425	GLU	Peptide
1	E	444	TYR	Sidechain
1	E	451	GLU	Peptide
1	E	467	THR	Peptide
1	F	33	GLU	Peptide
1	F	334	TYR	Sidechain
1	F	340	SER	Peptide
1	F	354	GLU	Peptide
1	F	369	GLY	Peptide
1	F	386	ASN	Peptide
1	F	393	ALA	Peptide
1	F	412	MET	Peptide
1	F	425	GLU	Peptide
1	F	444	TYR	Sidechain
1	F	451	GLU	Peptide
1	F	467	THR	Peptide

5.2 Too-close contacts (i)

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

the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3345	0	3270	610	0
1	B	3345	0	3270	610	0
1	C	3345	0	3270	603	0
1	D	3345	0	3270	605	0
1	E	3345	0	3270	607	0
1	F	3345	0	3270	609	0
All	All	20070	0	19620	3644	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 92.

All (3644) 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:C:47:PRO:CD	1:C:191:LYS:HD2	1.24	1.66
1:C:252:PHE:CE2	1:C:257:LYS:HG2	1.12	1.65
1:D:252:PHE:CE2	1:D:257:LYS:HG2	1.12	1.65
1:A:282:VAL:CG1	1:A:287:GLU:HG2	1.17	1.64
1:B:252:PHE:CE2	1:B:257:LYS:HG2	1.12	1.64
1:F:47:PRO:CD	1:F:191:LYS:HD2	1.24	1.63
1:E:47:PRO:CD	1:E:191:LYS:HD2	1.24	1.62
1:B:282:VAL:CG1	1:B:287:GLU:HG2	1.17	1.61
1:F:282:VAL:CG1	1:F:287:GLU:HG2	1.17	1.61
1:A:47:PRO:CD	1:A:191:LYS:HD2	1.24	1.61
1:F:47:PRO:HD2	1:F:191:LYS:CD	1.30	1.61
1:E:252:PHE:CE2	1:E:257:LYS:HG2	1.12	1.61
1:D:47:PRO:CD	1:D:191:LYS:HD2	1.24	1.60
1:E:270:LEU:HA	1:E:277:PRO:CD	1.32	1.60
1:A:252:PHE:CE2	1:A:257:LYS:HG2	1.12	1.60
1:E:47:PRO:HD2	1:E:191:LYS:CD	1.30	1.60
1:B:47:PRO:CD	1:B:191:LYS:HD2	1.24	1.59
1:D:282:VAL:CG1	1:D:287:GLU:HG2	1.17	1.59
1:D:270:LEU:HA	1:D:277:PRO:CD	1.32	1.57
1:F:270:LEU:HA	1:F:277:PRO:CD	1.32	1.57
1:F:252:PHE:CE2	1:F:257:LYS:HG2	1.12	1.57
1:F:252:PHE:HE2	1:F:257:LYS:CG	1.17	1.57
1:C:150:ILE:HD12	1:C:154:PHE:CE2	1.40	1.56
1:B:150:ILE:HD12	1:B:154:PHE:CE2	1.40	1.56
1:C:282:VAL:CG1	1:C:287:GLU:HG2	1.17	1.56
1:F:150:ILE:HD12	1:F:154:PHE:CE2	1.40	1.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:252:PHE:HE2	1:A:257:LYS:CG	1.17	1.56
1:B:47:PRO:HD2	1:B:191:LYS:CD	1.30	1.55
1:A:47:PRO:HD2	1:A:191:LYS:CD	1.30	1.55
1:E:150:ILE:HD12	1:E:154:PHE:CE2	1.40	1.55
1:E:282:VAL:CG1	1:E:287:GLU:HG2	1.17	1.55
1:E:252:PHE:HE2	1:E:257:LYS:CG	1.17	1.55
1:C:47:PRO:HD2	1:C:191:LYS:CD	1.30	1.54
1:A:270:LEU:HA	1:A:277:PRO:CD	1.32	1.54
1:B:270:LEU:HA	1:B:277:PRO:CD	1.32	1.54
1:C:270:LEU:HA	1:C:277:PRO:CD	1.32	1.54
1:C:119:ILE:CG2	1:C:181:LEU:HD11	1.38	1.53
1:D:150:ILE:HD12	1:D:154:PHE:CE2	1.40	1.53
1:B:119:ILE:CG2	1:B:181:LEU:HD11	1.38	1.53
1:A:150:ILE:HD12	1:A:154:PHE:CE2	1.40	1.52
1:C:252:PHE:HE2	1:C:257:LYS:CG	1.17	1.52
1:A:119:ILE:CG2	1:A:181:LEU:HD11	1.38	1.52
1:B:252:PHE:HE2	1:B:257:LYS:CG	1.17	1.51
1:D:47:PRO:HD2	1:D:191:LYS:CD	1.30	1.51
1:D:119:ILE:CG2	1:D:181:LEU:HD11	1.38	1.51
1:F:119:ILE:CG2	1:F:181:LEU:HD11	1.38	1.51
1:D:252:PHE:HE2	1:D:257:LYS:CG	1.17	1.51
1:E:119:ILE:CG2	1:E:181:LEU:HD11	1.38	1.49
1:F:264:ILE:HD13	1:F:269:GLN:CB	1.45	1.47
1:B:282:VAL:HG12	1:B:287:GLU:CG	1.44	1.46
1:F:282:VAL:HG12	1:F:287:GLU:CG	1.44	1.46
1:E:282:VAL:HG12	1:E:287:GLU:CG	1.44	1.45
1:B:264:ILE:HD13	1:B:269:GLN:CB	1.45	1.45
1:C:264:ILE:HD13	1:C:269:GLN:CB	1.45	1.44
1:D:64:ARG:NH2	1:D:189:GLU:C	1.71	1.44
1:D:264:ILE:HD13	1:D:269:GLN:CB	1.45	1.44
1:A:282:VAL:HG12	1:A:287:GLU:CG	1.44	1.44
1:C:282:VAL:HG12	1:C:287:GLU:CG	1.44	1.44
1:C:64:ARG:NH2	1:C:189:GLU:C	1.71	1.43
1:D:282:VAL:HG12	1:D:287:GLU:CG	1.44	1.43
1:A:264:ILE:HD13	1:A:269:GLN:CB	1.45	1.43
1:E:64:ARG:NH2	1:E:189:GLU:C	1.71	1.43
1:E:264:ILE:HD13	1:E:269:GLN:CB	1.45	1.43
1:B:64:ARG:NH2	1:B:189:GLU:C	1.71	1.41
1:F:64:ARG:NH2	1:F:189:GLU:C	1.71	1.41
1:D:282:VAL:CG1	1:D:287:GLU:CG	1.98	1.41
1:A:64:ARG:NH2	1:A:189:GLU:C	1.71	1.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:91:ARG:NH1	1:B:112:TYR:N	1.70	1.40
1:C:91:ARG:NH1	1:C:112:TYR:N	1.70	1.39
1:D:537:LYS:HG3	1:D:545:PHE:CE2	1.58	1.39
1:E:537:LYS:HG3	1:E:545:PHE:CE2	1.58	1.38
1:C:537:LYS:HG3	1:C:545:PHE:CE2	1.58	1.38
1:F:91:ARG:HH12	1:F:112:TYR:N	0.88	1.37
1:A:91:ARG:NH1	1:A:112:TYR:N	1.70	1.37
1:E:91:ARG:HH12	1:E:112:TYR:N	0.88	1.37
1:C:282:VAL:CG1	1:C:287:GLU:CG	1.98	1.36
1:F:537:LYS:HG3	1:F:545:PHE:CE2	1.58	1.36
1:C:91:ARG:HH12	1:C:112:TYR:N	0.88	1.36
1:F:282:VAL:CG1	1:F:287:GLU:CG	1.98	1.36
1:B:282:VAL:CG1	1:B:287:GLU:CG	1.98	1.35
1:A:91:ARG:HH12	1:A:112:TYR:N	0.88	1.35
1:B:540:ASN:O	1:B:541:GLU:HG3	1.21	1.35
1:B:537:LYS:HG3	1:B:545:PHE:CE2	1.58	1.35
1:E:91:ARG:NH1	1:E:112:TYR:N	1.70	1.35
1:D:91:ARG:HH12	1:D:112:TYR:N	0.88	1.35
1:A:537:LYS:HG3	1:A:545:PHE:CE2	1.58	1.35
1:C:394:ASN:OD1	1:C:457:ILE:CG1	1.68	1.35
1:B:537:LYS:HG3	1:B:545:PHE:CD2	1.61	1.34
1:C:537:LYS:HG3	1:C:545:PHE:CD2	1.61	1.34
1:D:91:ARG:NH1	1:D:112:TYR:N	1.70	1.34
1:D:537:LYS:HG3	1:D:545:PHE:CD2	1.61	1.34
1:E:112:TYR:N	1:E:141:ASP:HB2	1.42	1.34
1:E:282:VAL:CG1	1:E:287:GLU:CG	1.98	1.34
1:A:537:LYS:HG3	1:A:545:PHE:CD2	1.61	1.34
1:A:282:VAL:CG1	1:A:287:GLU:CG	1.98	1.34
1:E:537:LYS:HG3	1:E:545:PHE:CD2	1.61	1.33
1:B:91:ARG:HH12	1:B:112:TYR:N	0.88	1.33
1:C:540:ASN:O	1:C:541:GLU:HG3	1.21	1.33
1:F:537:LYS:HG3	1:F:545:PHE:CD2	1.61	1.33
1:A:112:TYR:N	1:A:141:ASP:HB2	1.42	1.33
1:F:91:ARG:NH1	1:F:112:TYR:N	1.70	1.33
1:B:394:ASN:OD1	1:B:457:ILE:CG1	1.68	1.32
1:D:394:ASN:OD1	1:D:457:ILE:CG1	1.68	1.32
1:F:394:ASN:OD1	1:F:457:ILE:CG1	1.68	1.32
1:B:112:TYR:N	1:B:141:ASP:HB2	1.42	1.32
1:D:112:TYR:N	1:D:141:ASP:HB2	1.42	1.32
1:E:541:GLU:N	1:E:568:ILE:HD11	1.45	1.32
1:F:112:TYR:N	1:F:141:ASP:HB2	1.42	1.31

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:64:ARG:NH2	1:B:189:GLU:O	1.61	1.31
1:D:541:GLU:N	1:D:568:ILE:HD11	1.45	1.31
1:A:540:ASN:O	1:A:541:GLU:HG3	1.21	1.31
1:B:541:GLU:N	1:B:568:ILE:HD11	1.45	1.31
1:F:166:THR:CG2	1:F:171:HIS:O	1.79	1.30
1:A:166:THR:CG2	1:A:171:HIS:O	1.80	1.30
1:D:566:TYR:HD2	1:D:572:LYS:O	1.15	1.30
1:A:110:LYS:CE	1:A:113:GLY:HA3	1.62	1.30
1:F:541:GLU:N	1:F:568:ILE:HD11	1.45	1.30
1:C:112:TYR:N	1:C:141:ASP:HB2	1.42	1.30
1:B:110:LYS:CE	1:B:113:GLY:HA3	1.62	1.29
1:A:541:GLU:N	1:A:568:ILE:HD11	1.45	1.29
1:C:566:TYR:HD2	1:C:572:LYS:O	1.15	1.29
1:E:566:TYR:HD2	1:E:572:LYS:O	1.15	1.29
1:F:110:LYS:CE	1:F:113:GLY:HA3	1.62	1.29
1:C:541:GLU:N	1:C:568:ILE:HD11	1.45	1.29
1:D:540:ASN:O	1:D:541:GLU:HG3	1.21	1.29
1:A:394:ASN:OD1	1:A:457:ILE:CG1	1.68	1.28
1:B:353:LYS:CE	1:B:387:PRO:HG3	1.63	1.28
1:E:64:ARG:NH2	1:E:189:GLU:O	1.61	1.28
1:A:353:LYS:CE	1:A:387:PRO:HG3	1.63	1.28
1:C:353:LYS:CE	1:C:387:PRO:HG3	1.63	1.28
1:D:110:LYS:HB2	1:D:190:VAL:O	1.33	1.28
1:E:166:THR:CG2	1:E:171:HIS:O	1.79	1.28
1:F:499:PHE:HE2	1:F:532:TYR:OH	1.17	1.28
1:B:110:LYS:HB2	1:B:190:VAL:O	1.33	1.27
1:B:566:TYR:HD2	1:B:572:LYS:O	1.15	1.27
1:A:110:LYS:HB2	1:A:190:VAL:O	1.33	1.27
1:C:110:LYS:CE	1:C:113:GLY:HA3	1.62	1.27
1:C:166:THR:CG2	1:C:171:HIS:O	1.79	1.27
1:D:64:ARG:NH2	1:D:189:GLU:O	1.61	1.27
1:E:394:ASN:OD1	1:E:457:ILE:CG1	1.68	1.27
1:E:499:PHE:HE2	1:E:532:TYR:OH	1.17	1.27
1:B:166:THR:CG2	1:B:171:HIS:O	1.79	1.27
1:D:353:LYS:CE	1:D:387:PRO:HG3	1.63	1.27
1:F:353:LYS:CE	1:F:387:PRO:HG3	1.63	1.27
1:D:110:LYS:CE	1:D:113:GLY:HA3	1.62	1.27
1:D:166:THR:CG2	1:D:171:HIS:O	1.79	1.27
1:F:540:ASN:O	1:F:541:GLU:HG3	1.21	1.27
1:A:499:PHE:HE2	1:A:532:TYR:OH	1.17	1.26
1:F:64:ARG:NH2	1:F:189:GLU:O	1.61	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:394:ASN:OD1	1:B:457:ILE:CD1	1.83	1.26
1:E:110:LYS:CE	1:E:113:GLY:HA3	1.62	1.26
1:A:64:ARG:NH2	1:A:189:GLU:O	1.61	1.26
1:C:113:GLY:N	1:C:141:ASP:HB3	1.51	1.26
1:C:394:ASN:OD1	1:C:457:ILE:CD1	1.83	1.26
1:E:540:ASN:O	1:E:541:GLU:HG3	1.21	1.26
1:F:394:ASN:OD1	1:F:457:ILE:CD1	1.83	1.25
1:D:499:PHE:HE2	1:D:532:TYR:OH	1.17	1.25
1:E:353:LYS:CE	1:E:387:PRO:HG3	1.63	1.25
1:A:543:GLN:NE2	1:A:568:ILE:HG23	1.52	1.25
1:F:566:TYR:HD2	1:F:572:LYS:O	1.15	1.25
1:A:394:ASN:OD1	1:A:457:ILE:CD1	1.83	1.25
1:B:113:GLY:N	1:B:141:ASP:HB3	1.51	1.25
1:B:169:VAL:HB	1:B:286:GLU:OE1	1.37	1.25
1:F:543:GLN:NE2	1:F:568:ILE:HG23	1.52	1.25
1:E:543:GLN:NE2	1:E:568:ILE:HG23	1.52	1.25
1:A:134:LEU:HD22	1:A:143:PHE:CE1	1.73	1.24
1:B:381:GLN:CB	1:B:455:ASN:OD1	1.85	1.24
1:C:91:ARG:NH2	1:C:141:ASP:OD2	1.71	1.24
1:C:169:VAL:HB	1:C:286:GLU:OE1	1.37	1.24
1:E:110:LYS:HB2	1:E:190:VAL:O	1.33	1.24
1:E:381:GLN:CB	1:E:455:ASN:OD1	1.85	1.24
1:B:499:PHE:HE2	1:B:532:TYR:OH	1.17	1.24
1:C:110:LYS:HB2	1:C:190:VAL:O	1.33	1.24
1:A:566:TYR:HD2	1:A:572:LYS:O	1.15	1.24
1:D:394:ASN:OD1	1:D:457:ILE:CD1	1.83	1.24
1:E:112:TYR:HA	1:E:141:ASP:OD2	1.38	1.24
1:E:394:ASN:OD1	1:E:457:ILE:CD1	1.83	1.24
1:B:134:LEU:HD22	1:B:143:PHE:CE1	1.73	1.24
1:C:64:ARG:NH2	1:C:189:GLU:O	1.61	1.24
1:F:134:LEU:HD22	1:F:143:PHE:CE1	1.73	1.24
1:B:112:TYR:HA	1:B:141:ASP:OD2	1.38	1.24
1:D:543:GLN:NE2	1:D:568:ILE:HG23	1.52	1.24
1:B:543:GLN:NE2	1:B:568:ILE:HG23	1.52	1.23
1:D:91:ARG:NH2	1:D:141:ASP:OD2	1.71	1.23
1:D:134:LEU:HD22	1:D:143:PHE:CE1	1.73	1.23
1:E:113:GLY:N	1:E:141:ASP:HB3	1.51	1.23
1:E:134:LEU:HD22	1:E:143:PHE:CE1	1.73	1.23
1:C:112:TYR:HA	1:C:141:ASP:OD2	1.38	1.23
1:C:499:PHE:HE2	1:C:532:TYR:OH	1.17	1.23
1:D:113:GLY:N	1:D:141:ASP:HB3	1.51	1.23

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:381:GLN:CB	1:F:455:ASN:OD1	1.85	1.23
1:B:91:ARG:NH2	1:B:141:ASP:OD2	1.71	1.23
1:A:381:GLN:CB	1:A:455:ASN:OD1	1.85	1.23
1:D:381:GLN:CB	1:D:455:ASN:OD1	1.85	1.23
1:B:540:ASN:O	1:B:541:GLU:CG	1.86	1.23
1:A:113:GLY:N	1:A:141:ASP:HB3	1.51	1.22
1:D:169:VAL:HB	1:D:286:GLU:OE1	1.37	1.22
1:A:169:VAL:HB	1:A:286:GLU:OE1	1.37	1.22
1:B:270:LEU:CA	1:B:277:PRO:CD	2.18	1.22
1:C:134:LEU:HD22	1:C:143:PHE:CE1	1.73	1.22
1:C:270:LEU:CA	1:C:277:PRO:CD	2.18	1.22
1:C:381:GLN:CB	1:C:455:ASN:OD1	1.85	1.22
1:E:540:ASN:O	1:E:541:GLU:CG	1.86	1.22
1:F:113:GLY:N	1:F:141:ASP:HB3	1.51	1.22
1:D:540:ASN:O	1:D:541:GLU:CG	1.86	1.22
1:A:264:ILE:CD1	1:A:269:GLN:HG2	1.69	1.22
1:B:264:ILE:CD1	1:B:269:GLN:HG2	1.69	1.22
1:E:264:ILE:CD1	1:E:269:GLN:HG2	1.69	1.22
1:D:264:ILE:CD1	1:D:269:GLN:HG2	1.69	1.22
1:E:119:ILE:HG22	1:E:181:LEU:CD1	1.70	1.22
1:F:264:ILE:CD1	1:F:269:GLN:HG2	1.69	1.22
1:A:270:LEU:CA	1:A:277:PRO:CD	2.18	1.21
1:B:119:ILE:HG22	1:B:181:LEU:CD1	1.70	1.21
1:D:93:GLU:CB	1:D:140:ASP:OD1	1.88	1.21
1:F:166:THR:HG23	1:F:171:HIS:O	1.38	1.21
1:F:540:ASN:O	1:F:541:GLU:CG	1.86	1.21
1:C:543:GLN:NE2	1:C:568:ILE:HG23	1.52	1.21
1:C:540:ASN:O	1:C:541:GLU:CG	1.86	1.21
1:E:91:ARG:NH2	1:E:141:ASP:OD2	1.71	1.21
1:F:91:ARG:NH2	1:F:141:ASP:OD2	1.71	1.21
1:F:110:LYS:HB2	1:F:190:VAL:O	1.33	1.21
1:F:112:TYR:HA	1:F:141:ASP:OD2	1.38	1.21
1:B:64:ARG:NH2	1:B:189:GLU:CA	2.04	1.21
1:C:264:ILE:CD1	1:C:269:GLN:HG2	1.69	1.21
1:D:112:TYR:HA	1:D:141:ASP:OD2	1.38	1.21
1:E:270:LEU:CA	1:E:277:PRO:CD	2.18	1.21
1:A:64:ARG:NH2	1:A:189:GLU:CA	2.04	1.21
1:A:91:ARG:NH2	1:A:141:ASP:OD2	1.71	1.21
1:A:540:ASN:O	1:A:541:GLU:CG	1.86	1.21
1:B:353:LYS:HG3	1:B:387:PRO:CG	1.71	1.21
1:E:64:ARG:NH2	1:E:189:GLU:CA	2.04	1.21

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:64:ARG:NH2	1:F:189:GLU:CA	2.04	1.21
1:F:119:ILE:HG22	1:F:181:LEU:CD1	1.70	1.21
1:A:363:ARG:NH1	1:A:495:GLU:CG	2.04	1.20
1:B:363:ARG:NH1	1:B:495:GLU:CG	2.04	1.20
1:C:119:ILE:HG22	1:C:181:LEU:CD1	1.70	1.20
1:C:353:LYS:HG3	1:C:387:PRO:CG	1.71	1.20
1:D:119:ILE:HG22	1:D:181:LEU:CD1	1.70	1.20
1:E:363:ARG:NH1	1:E:495:GLU:CG	2.04	1.20
1:F:169:VAL:HB	1:F:286:GLU:OE1	1.37	1.20
1:A:269:GLN:O	1:A:277:PRO:HD2	1.40	1.20
1:C:363:ARG:NH1	1:C:495:GLU:CG	2.04	1.20
1:F:363:ARG:NH1	1:F:495:GLU:CG	2.04	1.20
1:A:119:ILE:HG22	1:A:181:LEU:CD1	1.70	1.20
1:B:93:GLU:CB	1:B:140:ASP:OD1	1.88	1.20
1:D:363:ARG:NH1	1:D:495:GLU:CG	2.04	1.20
1:F:282:VAL:O	1:F:287:GLU:HB2	1.03	1.20
1:F:270:LEU:CA	1:F:277:PRO:CD	2.18	1.20
1:A:353:LYS:HG3	1:A:387:PRO:CG	1.71	1.20
1:D:270:LEU:CA	1:D:277:PRO:CD	2.18	1.20
1:E:169:VAL:HB	1:E:286:GLU:OE1	1.37	1.20
1:F:353:LYS:CG	1:F:387:PRO:HG2	1.72	1.20
1:A:353:LYS:CG	1:A:387:PRO:HG2	1.72	1.19
1:C:64:ARG:NH2	1:C:189:GLU:CA	2.04	1.19
1:C:91:ARG:HH12	1:C:111:ILE:C	1.44	1.19
1:A:282:VAL:O	1:A:287:GLU:HB2	1.03	1.19
1:B:91:ARG:HH12	1:B:111:ILE:C	1.44	1.19
1:E:110:LYS:HE3	1:E:113:GLY:CA	1.73	1.19
1:E:282:VAL:O	1:E:287:GLU:HB2	1.03	1.19
1:D:110:LYS:HE3	1:D:113:GLY:CA	1.73	1.19
1:E:93:GLU:CB	1:E:140:ASP:OD1	1.88	1.19
1:E:353:LYS:CG	1:E:387:PRO:HG2	1.72	1.19
1:D:353:LYS:HG3	1:D:387:PRO:CG	1.71	1.19
1:F:132:LEU:HG	1:F:148:ASP:HA	1.23	1.19
1:F:282:VAL:HG13	1:F:287:GLU:CD	1.63	1.19
1:A:91:ARG:HH12	1:A:111:ILE:C	1.44	1.19
1:A:110:LYS:HE3	1:A:113:GLY:CA	1.73	1.19
1:A:112:TYR:HA	1:A:141:ASP:OD2	1.38	1.19
1:B:110:LYS:HE3	1:B:113:GLY:CA	1.73	1.19
1:B:353:LYS:CG	1:B:387:PRO:HG2	1.72	1.19
1:C:282:VAL:O	1:C:287:GLU:HB2	1.03	1.19
1:C:353:LYS:CG	1:C:387:PRO:HG2	1.72	1.19

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:353:LYS:HE3	1:F:387:PRO:CG	1.73	1.19
1:D:64:ARG:NH2	1:D:189:GLU:CA	2.04	1.18
1:D:91:ARG:HH12	1:D:111:ILE:C	1.44	1.18
1:E:353:LYS:HE3	1:E:387:PRO:CG	1.73	1.18
1:F:91:ARG:HH12	1:F:111:ILE:C	1.44	1.18
1:F:269:GLN:O	1:F:277:PRO:HD2	1.40	1.18
1:D:269:GLN:O	1:D:277:PRO:HD2	1.40	1.18
1:E:107:ILE:HB	1:E:193:TYR:HD2	1.09	1.18
1:E:132:LEU:HG	1:E:148:ASP:HA	1.23	1.18
1:B:282:VAL:HG13	1:B:287:GLU:CD	1.63	1.18
1:C:110:LYS:HE3	1:C:113:GLY:CA	1.73	1.18
1:E:91:ARG:HH12	1:E:111:ILE:C	1.44	1.18
1:E:269:GLN:O	1:E:277:PRO:HD2	1.40	1.18
1:E:353:LYS:HG3	1:E:387:PRO:CG	1.71	1.18
1:F:353:LYS:HG3	1:F:387:PRO:CG	1.71	1.18
1:C:150:ILE:CD1	1:C:154:PHE:CE2	2.26	1.18
1:C:282:VAL:HG13	1:C:287:GLU:CD	1.63	1.18
1:D:264:ILE:HG21	1:D:269:GLN:HB3	1.24	1.18
1:D:353:LYS:CG	1:D:387:PRO:HG2	1.72	1.18
1:E:282:VAL:HG13	1:E:287:GLU:CD	1.63	1.18
1:B:150:ILE:CD1	1:B:154:PHE:CE2	2.26	1.18
1:B:269:GLN:O	1:B:277:PRO:HD2	1.40	1.18
1:C:353:LYS:HE3	1:C:387:PRO:CG	1.73	1.18
1:D:363:ARG:NH1	1:D:495:GLU:HG2	1.59	1.18
1:E:150:ILE:CD1	1:E:154:PHE:CE2	2.26	1.18
1:A:353:LYS:HE3	1:A:387:PRO:CG	1.73	1.17
1:D:150:ILE:CD1	1:D:154:PHE:CE2	2.26	1.17
1:A:282:VAL:HG13	1:A:287:GLU:CD	1.63	1.17
1:D:353:LYS:HE3	1:D:387:PRO:CG	1.73	1.17
1:E:363:ARG:NH1	1:E:495:GLU:HG2	1.59	1.17
1:F:110:LYS:HE3	1:F:113:GLY:CA	1.73	1.17
1:F:150:ILE:CD1	1:F:154:PHE:CE2	2.26	1.17
1:A:150:ILE:CD1	1:A:154:PHE:CE2	2.26	1.17
1:C:363:ARG:NH2	1:C:498:ASP:OD2	1.78	1.17
1:D:282:VAL:O	1:D:287:GLU:HB2	1.03	1.17
1:E:264:ILE:HG21	1:E:269:GLN:HB3	1.24	1.17
1:B:353:LYS:HE3	1:B:387:PRO:CG	1.73	1.16
1:D:363:ARG:NH2	1:D:498:ASP:OD2	1.78	1.16
1:B:282:VAL:O	1:B:287:GLU:HB2	1.03	1.16
1:C:93:GLU:CB	1:C:140:ASP:OD1	1.88	1.16
1:A:107:ILE:HB	1:A:193:TYR:HD2	1.09	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:363:ARG:NH2	1:B:498:ASP:OD2	1.78	1.16
1:F:107:ILE:HB	1:F:193:TYR:HD2	1.09	1.16
1:C:282:VAL:O	1:C:287:GLU:CB	1.93	1.16
1:D:282:VAL:O	1:D:287:GLU:CB	1.93	1.16
1:F:93:GLU:CB	1:F:140:ASP:OD1	1.88	1.16
1:A:166:THR:HG23	1:A:171:HIS:O	1.38	1.16
1:A:363:ARG:NH2	1:A:498:ASP:OD2	1.78	1.16
1:C:269:GLN:O	1:C:277:PRO:HD2	1.40	1.16
1:D:270:LEU:HA	1:D:277:PRO:HD2	1.19	1.16
1:D:282:VAL:HG13	1:D:287:GLU:CD	1.63	1.16
1:F:282:VAL:O	1:F:287:GLU:CB	1.93	1.16
1:F:363:ARG:NH1	1:F:495:GLU:HG2	1.59	1.16
1:A:282:VAL:O	1:A:287:GLU:CB	1.93	1.15
1:F:363:ARG:NH2	1:F:498:ASP:OD2	1.78	1.15
1:A:132:LEU:HG	1:A:148:ASP:HA	1.23	1.15
1:A:537:LYS:CG	1:A:545:PHE:CE2	2.29	1.15
1:B:537:LYS:CG	1:B:545:PHE:CE2	2.29	1.15
1:E:381:GLN:HB2	1:E:455:ASN:OD1	1.47	1.15
1:C:553:ILE:CD1	1:C:555:GLU:HB2	1.77	1.15
1:E:363:ARG:NH2	1:E:498:ASP:OD2	1.78	1.15
1:D:107:ILE:HB	1:D:193:TYR:HD2	1.09	1.15
1:D:553:ILE:CD1	1:D:555:GLU:HB2	1.77	1.15
1:E:537:LYS:CG	1:E:545:PHE:CE2	2.29	1.15
1:E:553:ILE:CD1	1:E:555:GLU:HB2	1.77	1.14
1:F:264:ILE:HG21	1:F:269:GLN:HB3	1.24	1.14
1:B:553:ILE:CD1	1:B:555:GLU:HB2	1.77	1.14
1:C:537:LYS:CG	1:C:545:PHE:CE2	2.29	1.14
1:E:282:VAL:O	1:E:287:GLU:CB	1.93	1.14
1:F:537:LYS:CG	1:F:545:PHE:CE2	2.29	1.14
1:B:91:ARG:HH22	1:B:112:TYR:CA	1.59	1.14
1:B:282:VAL:O	1:B:287:GLU:CB	1.93	1.14
1:A:553:ILE:CD1	1:A:555:GLU:HB2	1.77	1.14
1:B:363:ARG:NH1	1:B:495:GLU:HG2	1.59	1.14
1:C:566:TYR:CD2	1:C:572:LYS:O	2.01	1.14
1:D:132:LEU:HG	1:D:148:ASP:HA	1.23	1.14
1:E:363:ARG:HH11	1:E:495:GLU:HG2	1.03	1.14
1:F:566:TYR:CD2	1:F:572:LYS:O	2.01	1.14
1:A:381:GLN:HB2	1:A:455:ASN:OD1	1.47	1.14
1:B:107:ILE:HB	1:B:193:TYR:HD2	1.09	1.13
1:D:110:LYS:HB3	1:D:192:SER:HB3	1.19	1.13
1:F:553:ILE:CD1	1:F:555:GLU:HB2	1.77	1.13

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:553:ILE:HD11	1:A:555:GLU:HB2	1.30	1.13
1:C:270:LEU:HA	1:C:277:PRO:HD2	1.19	1.13
1:F:111:ILE:O	1:F:189:GLU:HB3	1.48	1.13
1:A:363:ARG:NH1	1:A:495:GLU:HG2	1.59	1.13
1:B:270:LEU:CA	1:B:277:PRO:HD3	1.77	1.13
1:D:264:ILE:HD12	1:D:269:GLN:HG2	1.13	1.13
1:D:537:LYS:CG	1:D:545:PHE:CE2	2.29	1.13
1:F:553:ILE:HD11	1:F:555:GLU:HB2	1.30	1.13
1:B:166:THR:HG23	1:B:171:HIS:O	1.37	1.13
1:C:111:ILE:O	1:C:189:GLU:HB3	1.48	1.13
1:D:270:LEU:CA	1:D:277:PRO:HD3	1.77	1.13
1:A:110:LYS:HB3	1:A:192:SER:HB3	1.19	1.12
1:A:270:LEU:CA	1:A:277:PRO:HD3	1.77	1.12
1:B:566:TYR:CD2	1:B:572:LYS:O	2.01	1.12
1:A:566:TYR:CD2	1:A:572:LYS:O	2.01	1.12
1:E:566:TYR:CD2	1:E:572:LYS:O	2.01	1.12
1:A:42:ALA:O	1:A:112:TYR:CE2	2.03	1.12
1:A:111:ILE:O	1:A:189:GLU:HB3	1.48	1.12
1:B:42:ALA:O	1:B:112:TYR:CE2	2.03	1.12
1:C:264:ILE:HG21	1:C:269:GLN:HB3	1.24	1.12
1:D:566:TYR:CD2	1:D:572:LYS:O	2.01	1.12
1:A:93:GLU:CB	1:A:140:ASP:OD1	1.88	1.12
1:B:111:ILE:O	1:B:189:GLU:HB3	1.48	1.12
1:B:264:ILE:HD12	1:B:269:GLN:HG2	1.13	1.12
1:C:264:ILE:HD12	1:C:269:GLN:HG2	1.13	1.12
1:C:381:GLN:HB2	1:C:455:ASN:OD1	1.46	1.12
1:B:363:ARG:HH11	1:B:495:GLU:HG2	1.03	1.11
1:B:553:ILE:HD11	1:B:555:GLU:HB2	1.30	1.11
1:C:363:ARG:NH1	1:C:495:GLU:HG2	1.59	1.11
1:D:42:ALA:O	1:D:112:TYR:CE2	2.03	1.11
1:E:111:ILE:O	1:E:189:GLU:HB3	1.48	1.11
1:E:264:ILE:HD13	1:E:269:GLN:HB3	1.25	1.11
1:F:381:GLN:HB2	1:F:455:ASN:OD1	1.46	1.11
1:A:363:ARG:HH11	1:A:495:GLU:HG2	1.03	1.11
1:E:42:ALA:O	1:E:112:TYR:CE2	2.03	1.11
1:E:91:ARG:HH22	1:E:112:TYR:CA	1.59	1.11
1:F:270:LEU:CA	1:F:277:PRO:HD3	1.77	1.11
1:F:42:ALA:O	1:F:112:TYR:CE2	2.03	1.11
1:F:363:ARG:HH11	1:F:495:GLU:HG2	1.03	1.11
1:B:110:LYS:HB3	1:B:192:SER:HB3	1.19	1.11
1:D:111:ILE:O	1:D:189:GLU:HB3	1.48	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:363:ARG:HH11	1:D:495:GLU:HG2	1.03	1.11
1:A:394:ASN:OD1	1:A:457:ILE:HG12	1.29	1.11
1:C:42:ALA:O	1:C:112:TYR:CE2	2.03	1.11
1:A:264:ILE:HD13	1:A:269:GLN:HB3	1.25	1.10
1:C:264:ILE:HD13	1:C:269:GLN:HB3	1.25	1.10
1:A:264:ILE:HG12	1:A:266:SER:H	1.12	1.10
1:E:110:LYS:HB3	1:E:192:SER:HB3	1.19	1.10
1:E:270:LEU:HA	1:E:277:PRO:HD2	1.19	1.10
1:E:264:ILE:HD12	1:E:269:GLN:HG2	1.13	1.10
1:A:91:ARG:HH22	1:A:112:TYR:CA	1.59	1.10
1:B:270:LEU:CA	1:B:277:PRO:HD2	1.79	1.10
1:C:553:ILE:HD11	1:C:555:GLU:HB2	1.30	1.09
1:E:394:ASN:OD1	1:E:457:ILE:HG12	1.29	1.09
1:A:264:ILE:HD12	1:A:269:GLN:HG2	1.13	1.09
1:B:132:LEU:HG	1:B:148:ASP:HA	1.23	1.09
1:C:110:LYS:HB3	1:C:192:SER:HB3	1.19	1.09
1:C:270:LEU:CA	1:C:277:PRO:HD2	1.79	1.09
1:F:537:LYS:CG	1:F:545:PHE:CD2	2.36	1.09
1:B:264:ILE:HD13	1:B:269:GLN:HB3	1.25	1.09
1:C:91:ARG:HH22	1:C:112:TYR:CA	1.59	1.09
1:F:110:LYS:HB3	1:F:192:SER:HB3	1.19	1.09
1:F:264:ILE:HD13	1:F:269:GLN:HB3	1.25	1.09
1:A:264:ILE:HG21	1:A:269:GLN:HB3	1.24	1.09
1:B:270:LEU:HD22	1:B:274:GLY:HA2	1.34	1.09
1:C:154:PHE:CE1	1:C:199:ALA:HB2	1.88	1.09
1:C:270:LEU:CA	1:C:277:PRO:HD3	1.77	1.09
1:E:270:LEU:HD22	1:E:274:GLY:HA2	1.34	1.09
1:E:553:ILE:HD11	1:E:555:GLU:HB2	1.30	1.09
1:F:154:PHE:CE1	1:F:199:ALA:HB2	1.88	1.09
1:F:264:ILE:HD12	1:F:269:GLN:HG2	1.13	1.09
1:A:154:PHE:CE1	1:A:199:ALA:HB2	1.88	1.08
1:C:166:THR:HG23	1:C:171:HIS:O	1.38	1.08
1:F:264:ILE:HG12	1:F:266:SER:H	1.12	1.08
1:A:537:LYS:CG	1:A:545:PHE:CD2	2.36	1.08
1:B:154:PHE:CE1	1:B:199:ALA:HB2	1.88	1.08
1:C:132:LEU:HG	1:C:148:ASP:HA	1.23	1.08
1:E:166:THR:HG23	1:E:171:HIS:O	1.38	1.08
1:F:501:VAL:CG1	1:F:578:LEU:HD21	1.83	1.08
1:B:264:ILE:HG21	1:B:269:GLN:HB3	1.24	1.08
1:B:381:GLN:HB2	1:B:455:ASN:OD1	1.47	1.08
1:B:537:LYS:CG	1:B:545:PHE:CD2	2.36	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:501:VAL:CG1	1:A:578:LEU:HD21	1.83	1.08
1:B:264:ILE:HG12	1:B:266:SER:H	1.12	1.08
1:C:107:ILE:HB	1:C:193:TYR:HD2	1.09	1.08
1:D:270:LEU:HD22	1:D:274:GLY:HA2	1.34	1.08
1:E:537:LYS:CG	1:E:545:PHE:CD2	2.36	1.08
1:B:91:ARG:NH2	1:B:112:TYR:HA	1.64	1.08
1:C:363:ARG:HH11	1:C:495:GLU:HG2	1.03	1.08
1:D:381:GLN:HB2	1:D:455:ASN:OD1	1.47	1.08
1:E:91:ARG:NH2	1:E:112:TYR:HA	1.64	1.08
1:E:270:LEU:CA	1:E:277:PRO:HD3	1.77	1.08
1:E:501:VAL:CG1	1:E:578:LEU:HD21	1.83	1.08
1:C:270:LEU:HD22	1:C:274:GLY:HA2	1.34	1.07
1:D:154:PHE:CE1	1:D:199:ALA:HB2	1.88	1.07
1:D:264:ILE:HD13	1:D:269:GLN:HB3	1.25	1.07
1:D:264:ILE:HG12	1:D:266:SER:H	1.12	1.07
1:D:537:LYS:CG	1:D:545:PHE:CD2	2.36	1.07
1:B:501:VAL:HG13	1:B:578:LEU:HD21	1.08	1.07
1:B:501:VAL:CG1	1:B:578:LEU:HD21	1.83	1.07
1:E:264:ILE:HG12	1:E:266:SER:H	1.12	1.07
1:C:252:PHE:CE2	1:C:257:LYS:CG	2.05	1.07
1:A:270:LEU:HD22	1:A:274:GLY:HA2	1.34	1.07
1:C:264:ILE:HG12	1:C:266:SER:H	1.12	1.07
1:C:501:VAL:CG1	1:C:578:LEU:HD21	1.83	1.07
1:C:537:LYS:CG	1:C:545:PHE:CD2	2.36	1.07
1:D:501:VAL:CG1	1:D:578:LEU:HD21	1.83	1.07
1:E:154:PHE:CE1	1:E:199:ALA:HB2	1.88	1.07
1:A:150:ILE:HD12	1:A:154:PHE:CD2	1.91	1.06
1:A:270:LEU:CA	1:A:277:PRO:HD2	1.79	1.06
1:A:501:VAL:HG13	1:A:578:LEU:HD21	1.08	1.06
1:C:259:THR:HB	1:C:261:TYR:HE1	1.20	1.06
1:F:394:ASN:OD1	1:F:457:ILE:HG12	1.29	1.06
1:B:270:LEU:HA	1:B:277:PRO:HD2	1.19	1.06
1:D:91:ARG:HH22	1:D:112:TYR:CA	1.59	1.06
1:D:166:THR:HG23	1:D:171:HIS:O	1.37	1.06
1:C:518:ILE:HD11	1:C:520:THR:HB	1.38	1.06
1:F:150:ILE:HD12	1:F:154:PHE:CD2	1.90	1.06
1:F:264:ILE:CD1	1:F:269:GLN:CG	2.34	1.06
1:F:518:ILE:HD11	1:F:520:THR:HB	1.38	1.06
1:B:150:ILE:HD12	1:B:154:PHE:CD2	1.91	1.06
1:C:394:ASN:OD1	1:C:457:ILE:HG12	1.29	1.06
1:B:381:GLN:HB3	1:B:455:ASN:OD1	1.56	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:270:LEU:CA	1:E:277:PRO:HD2	1.79	1.06
1:A:270:LEU:HA	1:A:277:PRO:HD2	1.19	1.05
1:B:112:TYR:N	1:B:141:ASP:CB	2.19	1.05
1:B:264:ILE:CD1	1:B:269:GLN:CG	2.34	1.05
1:C:501:VAL:HG13	1:C:578:LEU:HD21	1.08	1.05
1:D:270:LEU:CA	1:D:277:PRO:HD2	1.79	1.05
1:F:270:LEU:HA	1:F:277:PRO:HD2	1.19	1.05
1:A:112:TYR:N	1:A:141:ASP:CB	2.19	1.05
1:B:264:ILE:CD1	1:B:269:GLN:CB	2.35	1.05
1:C:91:ARG:NH2	1:C:112:TYR:HA	1.64	1.05
1:C:394:ASN:OD1	1:C:457:ILE:HD13	1.56	1.05
1:D:259:THR:HB	1:D:261:TYR:HE1	1.20	1.05
1:A:394:ASN:OD1	1:A:457:ILE:HD13	1.56	1.05
1:D:119:ILE:CG2	1:D:181:LEU:CD1	2.31	1.05
1:D:264:ILE:CD1	1:D:269:GLN:CG	2.34	1.05
1:F:264:ILE:CD1	1:F:269:GLN:CB	2.35	1.05
1:F:270:LEU:CA	1:F:277:PRO:HD2	1.79	1.05
1:A:264:ILE:CD1	1:A:269:GLN:CG	2.34	1.05
1:B:259:THR:HB	1:B:261:TYR:HE1	1.20	1.05
1:C:381:GLN:HB3	1:C:455:ASN:OD1	1.56	1.05
1:E:150:ILE:HD12	1:E:154:PHE:CD2	1.91	1.05
1:E:264:ILE:CD1	1:E:269:GLN:CG	2.34	1.05
1:E:264:ILE:CD1	1:E:269:GLN:CB	2.35	1.05
1:F:91:ARG:HH22	1:F:112:TYR:CA	1.59	1.05
1:F:270:LEU:HD22	1:F:274:GLY:HA2	1.34	1.05
1:A:264:ILE:HD13	1:A:269:GLN:CG	1.87	1.05
1:A:264:ILE:CD1	1:A:269:GLN:CB	2.35	1.05
1:B:394:ASN:OD1	1:B:457:ILE:HG12	1.29	1.05
1:C:112:TYR:N	1:C:141:ASP:CB	2.20	1.05
1:B:264:ILE:HD13	1:B:269:GLN:CG	1.87	1.04
1:C:150:ILE:HD12	1:C:154:PHE:CD2	1.90	1.04
1:D:112:TYR:N	1:D:141:ASP:CB	2.19	1.04
1:D:252:PHE:CE2	1:D:257:LYS:CG	2.05	1.04
1:E:183:LEU:HD11	1:E:192:SER:OG	1.57	1.04
1:E:394:ASN:OD1	1:E:457:ILE:HD13	1.56	1.04
1:F:134:LEU:CD2	1:F:143:PHE:CE1	2.40	1.04
1:A:381:GLN:HB3	1:A:455:ASN:OD1	1.56	1.04
1:D:553:ILE:HD11	1:D:555:GLU:HB2	1.30	1.04
1:F:112:TYR:N	1:F:141:ASP:CB	2.20	1.04
1:F:264:ILE:HD13	1:F:269:GLN:CG	1.87	1.04
1:B:64:ARG:NH1	1:B:187:ASP:O	1.91	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:518:ILE:HD11	1:B:520:THR:HB	1.38	1.04
1:C:566:TYR:HD2	1:C:572:LYS:C	1.55	1.04
1:E:277:PRO:CD	1:E:277:PRO:N	2.15	1.04
1:F:501:VAL:HG13	1:F:578:LEU:HD21	1.08	1.04
1:C:183:LEU:HD11	1:C:192:SER:OG	1.57	1.04
1:C:264:ILE:CD1	1:C:269:GLN:CG	2.34	1.04
1:D:269:GLN:C	1:D:277:PRO:HD2	1.78	1.04
1:D:501:VAL:HG13	1:D:578:LEU:HD21	1.08	1.04
1:C:64:ARG:NH1	1:C:187:ASP:O	1.91	1.04
1:C:119:ILE:CG2	1:C:181:LEU:CD1	2.31	1.04
1:D:150:ILE:HD12	1:D:154:PHE:CD2	1.90	1.04
1:D:183:LEU:HD11	1:D:192:SER:OG	1.57	1.04
1:D:394:ASN:OD1	1:D:457:ILE:HG12	1.29	1.04
1:E:112:TYR:N	1:E:141:ASP:CB	2.19	1.04
1:E:134:LEU:CD2	1:E:143:PHE:CE1	2.40	1.04
1:E:264:ILE:HD13	1:E:269:GLN:CG	1.87	1.04
1:A:64:ARG:NH1	1:A:187:ASP:O	1.91	1.03
1:A:134:LEU:CD2	1:A:143:PHE:CE1	2.40	1.03
1:A:518:ILE:HD11	1:A:520:THR:HB	1.38	1.03
1:B:134:LEU:CD2	1:B:143:PHE:CE1	2.40	1.03
1:C:134:LEU:CD2	1:C:143:PHE:CE1	2.40	1.03
1:C:264:ILE:HD13	1:C:269:GLN:CG	1.87	1.03
1:D:566:TYR:HD2	1:D:572:LYS:C	1.55	1.03
1:E:501:VAL:HG13	1:E:578:LEU:HD21	1.08	1.03
1:A:44:GLY:C	1:A:112:TYR:CG	2.30	1.03
1:B:277:PRO:CD	1:B:277:PRO:N	2.15	1.03
1:C:264:ILE:CD1	1:C:269:GLN:CB	2.35	1.03
1:D:134:LEU:CD2	1:D:143:PHE:CE1	2.40	1.03
1:A:546:PRO:CD	1:A:546:PRO:N	2.21	1.03
1:D:264:ILE:HD13	1:D:269:GLN:CG	1.87	1.03
1:D:264:ILE:CD1	1:D:269:GLN:CB	2.35	1.03
1:E:64:ARG:NH1	1:E:187:ASP:O	1.91	1.03
1:E:119:ILE:CG2	1:E:181:LEU:CD1	2.31	1.03
1:F:170:GLU:CD	1:F:287:GLU:HA	1.64	1.03
1:F:277:PRO:CD	1:F:277:PRO:N	2.15	1.03
1:F:501:VAL:HG13	1:F:578:LEU:CD2	1.88	1.03
1:A:501:VAL:HG13	1:A:578:LEU:CD2	1.88	1.03
1:B:183:LEU:HD11	1:B:192:SER:OG	1.57	1.03
1:C:269:GLN:C	1:C:277:PRO:HD2	1.78	1.03
1:E:259:THR:HB	1:E:261:TYR:HE1	1.20	1.03
1:E:518:ILE:HD11	1:E:520:THR:HB	1.38	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:269:GLN:C	1:F:277:PRO:HD2	1.78	1.03
1:A:183:LEU:HD11	1:A:192:SER:OG	1.57	1.03
1:C:501:VAL:HG13	1:C:578:LEU:CD2	1.88	1.03
1:F:183:LEU:HD11	1:F:192:SER:OG	1.57	1.03
1:D:64:ARG:NH1	1:D:187:ASP:O	1.91	1.02
1:A:259:THR:HB	1:A:261:TYR:HE1	1.20	1.02
1:A:269:GLN:C	1:A:277:PRO:HD2	1.78	1.02
1:B:269:GLN:C	1:B:277:PRO:HD2	1.78	1.02
1:D:501:VAL:HG13	1:D:578:LEU:CD2	1.88	1.02
1:D:518:ILE:HD11	1:D:520:THR:HB	1.38	1.02
1:E:269:GLN:C	1:E:277:PRO:HD2	1.78	1.02
1:E:566:TYR:HD2	1:E:572:LYS:C	1.55	1.02
1:E:363:ARG:HH11	1:E:495:GLU:CG	1.68	1.02
1:F:64:ARG:NH1	1:F:187:ASP:O	1.91	1.02
1:A:115:VAL:O	1:A:115:VAL:CG1	2.07	1.02
1:A:134:LEU:HD21	1:A:137:ILE:CG2	1.90	1.02
1:B:134:LEU:HD21	1:B:137:ILE:CG2	1.90	1.02
1:B:252:PHE:CE2	1:B:257:LYS:CG	2.05	1.02
1:B:394:ASN:OD1	1:B:457:ILE:HD13	1.56	1.02
1:D:381:GLN:HB3	1:D:455:ASN:OD1	1.56	1.02
1:E:134:LEU:HD21	1:E:137:ILE:CG2	1.90	1.02
1:F:394:ASN:OD1	1:F:457:ILE:HD13	1.56	1.02
1:A:277:PRO:CD	1:A:277:PRO:N	2.15	1.01
1:B:44:GLY:C	1:B:112:TYR:CG	2.30	1.01
1:B:501:VAL:HG13	1:B:578:LEU:CD2	1.88	1.01
1:C:277:PRO:CD	1:C:277:PRO:N	2.15	1.01
1:E:44:GLY:C	1:E:112:TYR:CG	2.30	1.01
1:F:44:GLY:C	1:F:112:TYR:CG	2.30	1.01
1:F:134:LEU:HD21	1:F:137:ILE:CG2	1.90	1.01
1:F:259:THR:HB	1:F:261:TYR:HE1	1.20	1.01
1:F:363:ARG:HH11	1:F:495:GLU:CG	1.68	1.01
1:F:381:GLN:HB3	1:F:455:ASN:OD1	1.56	1.01
1:F:546:PRO:N	1:F:546:PRO:CD	2.21	1.01
1:B:264:ILE:HD13	1:B:269:GLN:HB2	1.43	1.01
1:C:134:LEU:HD21	1:C:137:ILE:CG2	1.90	1.01
1:E:501:VAL:HG13	1:E:578:LEU:CD2	1.88	1.01
1:A:264:ILE:HD13	1:A:269:GLN:HB2	1.43	1.01
1:D:363:ARG:HH11	1:D:495:GLU:CG	1.68	1.01
1:E:91:ARG:HH22	1:E:112:TYR:HA	0.85	1.01
1:F:91:ARG:NH2	1:F:112:TYR:HA	1.64	1.01
1:A:132:LEU:CG	1:A:148:ASP:HA	1.92	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:114:ASN:O	1:B:134:LEU:HD23	1.61	1.00
1:B:150:ILE:HD12	1:B:154:PHE:HE2	1.19	1.00
1:B:566:TYR:HD2	1:B:572:LYS:C	1.55	1.00
1:E:114:ASN:O	1:E:134:LEU:HD23	1.61	1.00
1:F:115:VAL:O	1:F:115:VAL:CG1	2.07	1.00
1:D:44:GLY:C	1:D:112:TYR:CG	2.30	1.00
1:D:132:LEU:CG	1:D:148:ASP:HA	1.92	1.00
1:D:134:LEU:HD21	1:D:137:ILE:CG2	1.90	1.00
1:F:114:ASN:O	1:F:134:LEU:HD23	1.61	1.00
1:F:154:PHE:CZ	1:F:199:ALA:CB	2.45	1.00
1:E:154:PHE:CZ	1:E:199:ALA:CB	2.45	1.00
1:E:381:GLN:HB3	1:E:455:ASN:OD1	1.56	1.00
1:B:154:PHE:CZ	1:B:199:ALA:CB	2.45	1.00
1:D:394:ASN:OD1	1:D:457:ILE:HD13	1.56	1.00
1:F:91:ARG:HH22	1:F:112:TYR:HA	0.85	1.00
1:A:154:PHE:CZ	1:A:199:ALA:CB	2.45	1.00
1:E:132:LEU:CG	1:E:148:ASP:HA	1.92	1.00
1:B:132:LEU:CG	1:B:148:ASP:HA	1.92	1.00
1:B:546:PRO:CD	1:B:546:PRO:N	2.21	1.00
1:C:154:PHE:CZ	1:C:199:ALA:CB	2.45	1.00
1:A:363:ARG:HH11	1:A:495:GLU:CG	1.68	0.99
1:B:119:ILE:CG2	1:B:181:LEU:CD1	2.31	0.99
1:C:91:ARG:HH22	1:C:112:TYR:HA	0.85	0.99
1:C:112:TYR:CA	1:C:141:ASP:CB	2.40	0.99
1:C:123:LEU:HB2	1:C:128:LEU:HD11	1.43	0.99
1:C:264:ILE:HD13	1:C:269:GLN:HB2	1.43	0.99
1:D:112:TYR:HA	1:D:141:ASP:CG	1.82	0.99
1:D:154:PHE:CZ	1:D:199:ALA:CB	2.45	0.99
1:E:252:PHE:CZ	1:E:257:LYS:HG2	1.98	0.99
1:A:112:TYR:CA	1:A:141:ASP:CB	2.40	0.99
1:B:44:GLY:C	1:B:112:TYR:CD1	2.36	0.99
1:B:112:TYR:CA	1:B:141:ASP:CB	2.40	0.99
1:E:546:PRO:CD	1:E:546:PRO:N	2.21	0.99
1:A:566:TYR:HD2	1:A:572:LYS:C	1.55	0.99
1:B:252:PHE:CZ	1:B:257:LYS:HG2	1.98	0.99
1:D:44:GLY:C	1:D:112:TYR:CD1	2.36	0.99
1:D:112:TYR:CA	1:D:141:ASP:CB	2.40	0.99
1:C:44:GLY:C	1:C:112:TYR:CD1	2.36	0.99
1:D:114:ASN:O	1:D:134:LEU:HD23	1.61	0.99
1:F:132:LEU:CG	1:F:148:ASP:HA	1.92	0.99
1:F:566:TYR:HD2	1:F:572:LYS:C	1.55	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:270:LEU:HA	1:E:277:PRO:HD3	0.99	0.99
1:A:252:PHE:CE2	1:A:257:LYS:CG	2.05	0.99
1:C:114:ASN:O	1:C:134:LEU:HD23	1.61	0.99
1:C:154:PHE:CZ	1:C:199:ALA:HB1	1.98	0.99
1:C:252:PHE:CZ	1:C:257:LYS:HG2	1.98	0.99
1:F:150:ILE:HD12	1:F:154:PHE:HE2	1.19	0.99
1:C:112:TYR:HA	1:C:141:ASP:CG	1.82	0.99
1:C:132:LEU:CG	1:C:148:ASP:HA	1.92	0.99
1:D:115:VAL:O	1:D:115:VAL:CG1	2.07	0.99
1:D:541:GLU:N	1:D:568:ILE:CD1	2.26	0.99
1:A:91:ARG:HH22	1:A:112:TYR:HA	0.84	0.99
1:D:91:ARG:NH2	1:D:112:TYR:HA	1.64	0.99
1:D:154:PHE:CZ	1:D:199:ALA:HB1	1.98	0.99
1:E:115:VAL:O	1:E:115:VAL:CG1	2.07	0.99
1:E:541:GLU:N	1:E:568:ILE:CD1	2.26	0.99
1:F:154:PHE:CZ	1:F:199:ALA:HB1	1.98	0.99
1:F:264:ILE:HD13	1:F:269:GLN:HB2	1.43	0.99
1:A:112:TYR:HA	1:A:141:ASP:CG	1.82	0.99
1:C:282:VAL:HG13	1:C:287:GLU:CG	1.86	0.99
1:E:112:TYR:HA	1:E:141:ASP:CG	1.82	0.99
1:A:44:GLY:C	1:A:112:TYR:CD1	2.36	0.98
1:A:114:ASN:O	1:A:134:LEU:HD23	1.61	0.98
1:B:154:PHE:CZ	1:B:199:ALA:HB1	1.98	0.98
1:D:546:PRO:CD	1:D:546:PRO:N	2.21	0.98
1:E:44:GLY:C	1:E:112:TYR:CD1	2.36	0.98
1:A:154:PHE:CZ	1:A:199:ALA:HB1	1.98	0.98
1:F:119:ILE:CG2	1:F:181:LEU:CD1	2.31	0.98
1:B:91:ARG:HH22	1:B:112:TYR:HA	0.85	0.98
1:B:270:LEU:HA	1:B:277:PRO:HD3	0.99	0.98
1:C:546:PRO:N	1:C:546:PRO:CD	2.21	0.98
1:D:91:ARG:HH22	1:D:112:TYR:HA	0.85	0.98
1:D:132:LEU:HG	1:D:148:ASP:CA	1.84	0.98
1:B:112:TYR:HA	1:B:141:ASP:CG	1.82	0.98
1:C:541:GLU:N	1:C:568:ILE:CD1	2.26	0.98
1:D:252:PHE:CZ	1:D:257:LYS:HG2	1.98	0.98
1:E:132:LEU:HG	1:E:148:ASP:CA	1.84	0.98
1:F:123:LEU:HB2	1:F:128:LEU:HD11	1.43	0.98
1:F:270:LEU:HA	1:F:277:PRO:HD3	0.99	0.98
1:F:44:GLY:C	1:F:112:TYR:CD1	2.36	0.98
1:F:112:TYR:HA	1:F:141:ASP:CG	1.82	0.98
1:F:112:TYR:CA	1:F:141:ASP:CB	2.40	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:270:LEU:CD1	1:A:271:ASN:O	2.11	0.98
1:C:44:GLY:C	1:C:112:TYR:CG	2.30	0.98
1:C:363:ARG:HH11	1:C:495:GLU:CG	1.68	0.98
1:E:112:TYR:CA	1:E:141:ASP:CB	2.40	0.98
1:F:270:LEU:CD1	1:F:271:ASN:O	2.11	0.98
1:C:270:LEU:CD1	1:C:271:ASN:O	2.11	0.98
1:C:550:VAL:HG11	1:C:555:GLU:O	1.64	0.98
1:E:154:PHE:CZ	1:E:199:ALA:HB1	1.98	0.98
1:A:550:VAL:HG11	1:A:555:GLU:O	1.64	0.98
1:D:93:GLU:HB3	1:D:140:ASP:OD1	1.16	0.98
1:D:264:ILE:HD13	1:D:269:GLN:HB2	1.43	0.98
1:F:541:GLU:N	1:F:568:ILE:CD1	2.26	0.98
1:A:252:PHE:CZ	1:A:257:LYS:HG2	1.98	0.98
1:A:532:TYR:CZ	1:A:536:LYS:HE2	1.99	0.98
1:B:93:GLU:HB3	1:B:140:ASP:OD1	1.16	0.98
1:C:132:LEU:HG	1:C:148:ASP:CA	1.84	0.98
1:C:270:LEU:HA	1:C:277:PRO:HD3	0.99	0.98
1:A:270:LEU:HA	1:A:277:PRO:HD3	0.99	0.97
1:B:123:LEU:HB2	1:B:128:LEU:HD11	1.43	0.97
1:D:123:LEU:HB2	1:D:128:LEU:HD11	1.43	0.97
1:D:550:VAL:HG11	1:D:555:GLU:O	1.64	0.97
1:E:532:TYR:CZ	1:E:536:LYS:HE2	1.99	0.97
1:F:93:GLU:HB3	1:F:140:ASP:OD1	1.16	0.97
1:D:134:LEU:HD21	1:D:137:ILE:HG22	1.45	0.97
1:D:537:LYS:CB	1:D:545:PHE:CE2	2.47	0.97
1:E:134:LEU:HD21	1:E:137:ILE:HG22	1.45	0.97
1:E:270:LEU:CD1	1:E:271:ASN:O	2.11	0.97
1:A:282:VAL:C	1:A:287:GLU:HB2	1.85	0.97
1:A:537:LYS:CB	1:A:545:PHE:CE2	2.47	0.97
1:D:270:LEU:HA	1:D:277:PRO:HD3	0.99	0.97
1:E:264:ILE:HD13	1:E:269:GLN:HB2	1.43	0.97
1:A:112:TYR:H	1:A:141:ASP:HB2	1.04	0.97
1:B:363:ARG:HH11	1:B:495:GLU:CG	1.68	0.97
1:D:277:PRO:CD	1:D:277:PRO:N	2.15	0.97
1:D:532:TYR:CZ	1:D:536:LYS:HE2	1.99	0.97
1:E:123:LEU:HB2	1:E:128:LEU:HD11	1.43	0.97
1:F:537:LYS:CB	1:F:545:PHE:CE2	2.47	0.97
1:C:537:LYS:CB	1:C:545:PHE:CE2	2.47	0.97
1:A:123:LEU:HB2	1:A:128:LEU:HD11	1.43	0.97
1:C:115:VAL:CG1	1:C:115:VAL:O	2.07	0.97
1:E:550:VAL:HG11	1:E:555:GLU:O	1.64	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:115:VAL:O	1:B:115:VAL:CG1	2.07	0.97
1:B:537:LYS:CB	1:B:545:PHE:CE2	2.47	0.97
1:B:550:VAL:HG11	1:B:555:GLU:O	1.64	0.97
1:D:270:LEU:CD1	1:D:271:ASN:O	2.11	0.97
1:B:270:LEU:CD1	1:B:271:ASN:O	2.11	0.97
1:C:134:LEU:HD21	1:C:137:ILE:HG22	1.45	0.97
1:E:537:LYS:CB	1:E:545:PHE:CE2	2.47	0.97
1:F:113:GLY:H	1:F:141:ASP:HB3	1.20	0.97
1:A:119:ILE:CG2	1:A:181:LEU:CD1	2.31	0.96
1:B:282:VAL:C	1:B:287:GLU:HB2	1.85	0.96
1:B:541:GLU:N	1:B:568:ILE:CD1	2.26	0.96
1:E:113:GLY:H	1:E:141:ASP:HB3	1.20	0.96
1:F:282:VAL:C	1:F:287:GLU:HB2	1.85	0.96
1:A:93:GLU:HB3	1:A:140:ASP:OD1	1.16	0.96
1:B:113:GLY:H	1:B:141:ASP:HB3	1.20	0.96
1:E:170:GLU:CD	1:E:287:GLU:HA	1.63	0.96
1:E:252:PHE:CE2	1:E:257:LYS:CG	2.05	0.96
1:F:532:TYR:CZ	1:F:536:LYS:HE2	1.99	0.96
1:F:550:VAL:HG11	1:F:555:GLU:O	1.64	0.96
1:A:541:GLU:N	1:A:568:ILE:CD1	2.26	0.96
1:D:170:GLU:CD	1:D:287:GLU:HA	1.63	0.96
1:D:282:VAL:C	1:D:287:GLU:HB2	1.85	0.96
1:B:532:TYR:CZ	1:B:536:LYS:HE2	1.99	0.96
1:C:107:ILE:HB	1:C:193:TYR:CD2	2.01	0.96
1:C:532:TYR:CZ	1:C:536:LYS:HE2	1.99	0.96
1:F:252:PHE:CZ	1:F:257:LYS:HG2	1.98	0.96
1:F:499:PHE:CE2	1:F:532:TYR:OH	2.09	0.96
1:A:282:VAL:HG13	1:A:287:GLU:CG	1.86	0.95
1:C:93:GLU:HB3	1:C:140:ASP:OD1	1.16	0.95
1:C:282:VAL:C	1:C:287:GLU:HB2	1.85	0.95
1:E:114:ASN:HA	1:E:137:ILE:HD13	1.49	0.95
1:E:499:PHE:CE2	1:E:532:TYR:OH	2.09	0.95
1:F:114:ASN:HA	1:F:137:ILE:HD13	1.49	0.95
1:E:93:GLU:HB3	1:E:140:ASP:OD1	1.16	0.95
1:F:107:ILE:HB	1:F:193:TYR:CD2	2.01	0.95
1:A:91:ARG:NH2	1:A:112:TYR:HA	1.64	0.95
1:D:114:ASN:HA	1:D:137:ILE:HD13	1.49	0.95
1:B:132:LEU:HG	1:B:148:ASP:CA	1.84	0.95
1:D:541:GLU:H	1:D:568:ILE:HD11	1.10	0.94
1:C:114:ASN:HA	1:C:137:ILE:HD13	1.49	0.94
1:A:114:ASN:HA	1:A:137:ILE:HD13	1.49	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:107:ILE:HB	1:B:193:TYR:CD2	2.01	0.94
1:D:107:ILE:HB	1:D:193:TYR:CD2	2.01	0.94
1:E:107:ILE:HB	1:E:193:TYR:CD2	2.01	0.94
1:E:282:VAL:C	1:E:287:GLU:HB2	1.85	0.94
1:A:107:ILE:HB	1:A:193:TYR:CD2	2.01	0.94
1:B:134:LEU:HD21	1:B:137:ILE:HG22	1.45	0.94
1:C:252:PHE:CD2	1:C:257:LYS:HA	2.02	0.94
1:F:134:LEU:HD21	1:F:137:ILE:HG22	1.45	0.94
1:B:114:ASN:HA	1:B:137:ILE:HD13	1.49	0.94
1:D:252:PHE:CD2	1:D:257:LYS:HA	2.02	0.94
1:F:119:ILE:HG21	1:F:181:LEU:HD11	1.49	0.94
1:F:541:GLU:H	1:F:568:ILE:HD11	1.10	0.94
1:C:150:ILE:HD12	1:C:154:PHE:HE2	1.19	0.94
1:A:134:LEU:HD21	1:A:137:ILE:HG22	1.45	0.94
1:A:499:PHE:CE2	1:A:532:TYR:OH	2.09	0.94
1:E:537:LYS:CG	1:E:545:PHE:HE2	1.79	0.94
1:F:42:ALA:O	1:F:112:TYR:HE2	1.48	0.94
1:B:64:ARG:HE	1:B:189:GLU:CA	1.81	0.94
1:B:252:PHE:CD2	1:B:257:LYS:HA	2.02	0.94
1:C:113:GLY:H	1:C:141:ASP:HB3	1.20	0.94
1:F:252:PHE:CE2	1:F:257:LYS:CG	2.05	0.94
1:F:252:PHE:CD2	1:F:257:LYS:HA	2.02	0.94
1:A:150:ILE:HD12	1:A:154:PHE:HE2	1.19	0.93
1:E:119:ILE:HB	1:E:132:LEU:HB3	1.50	0.93
1:A:64:ARG:HE	1:A:189:GLU:CA	1.81	0.93
1:A:170:GLU:CD	1:A:287:GLU:HA	1.63	0.93
1:E:252:PHE:CD2	1:E:257:LYS:HA	2.02	0.93
1:F:541:GLU:H	1:F:568:ILE:CD1	1.81	0.93
1:A:107:ILE:CB	1:A:193:TYR:HD2	1.82	0.93
1:A:541:GLU:H	1:A:568:ILE:CD1	1.81	0.93
1:A:119:ILE:HG21	1:A:181:LEU:HD11	1.49	0.93
1:C:112:TYR:H	1:C:141:ASP:HB2	1.04	0.93
1:D:42:ALA:O	1:D:112:TYR:HE2	1.48	0.93
1:F:64:ARG:HE	1:F:189:GLU:CA	1.81	0.93
1:D:64:ARG:HE	1:D:189:GLU:CA	1.81	0.93
1:D:113:GLY:H	1:D:141:ASP:HB3	1.20	0.93
1:F:119:ILE:HB	1:F:132:LEU:HB3	1.50	0.93
1:A:132:LEU:HG	1:A:148:ASP:CA	1.84	0.93
1:F:107:ILE:CB	1:F:193:TYR:HD2	1.82	0.93
1:F:564:THR:HG22	1:F:573:LYS:HB3	1.51	0.93
1:B:107:ILE:CB	1:B:193:TYR:HD2	1.82	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:170:GLU:CD	1:C:287:GLU:HA	1.64	0.93
1:A:564:THR:HG22	1:A:573:LYS:HB3	1.51	0.93
1:A:564:THR:CG2	1:A:573:LYS:HB3	1.99	0.93
1:E:64:ARG:HE	1:E:189:GLU:CA	1.81	0.93
1:A:113:GLY:H	1:A:141:ASP:HB3	1.20	0.93
1:B:564:THR:HG22	1:B:573:LYS:HB3	1.51	0.93
1:E:541:GLU:H	1:E:568:ILE:CD1	1.82	0.93
1:F:566:TYR:CD2	1:F:572:LYS:C	2.19	0.93
1:C:64:ARG:HE	1:C:189:GLU:CA	1.81	0.92
1:C:564:THR:HG22	1:C:573:LYS:HB3	1.51	0.92
1:B:540:ASN:O	1:B:541:GLU:CB	2.16	0.92
1:D:564:THR:HG22	1:D:573:LYS:HB3	1.51	0.92
1:E:107:ILE:CB	1:E:193:TYR:HD2	1.82	0.92
1:B:537:LYS:HG3	1:B:545:PHE:HE2	1.30	0.92
1:B:541:GLU:H	1:B:568:ILE:CD1	1.82	0.92
1:D:119:ILE:HB	1:D:132:LEU:HB3	1.50	0.92
1:E:564:THR:HG22	1:E:573:LYS:HB3	1.51	0.92
1:B:119:ILE:HB	1:B:132:LEU:HB3	1.50	0.92
1:C:107:ILE:CB	1:C:193:TYR:HD2	1.82	0.92
1:F:564:THR:CG2	1:F:573:LYS:HB3	1.99	0.92
1:A:252:PHE:CD2	1:A:257:LYS:HA	2.02	0.92
1:C:564:THR:CG2	1:C:573:LYS:HB3	1.99	0.92
1:D:107:ILE:CB	1:D:193:TYR:HD2	1.82	0.92
1:E:119:ILE:HG21	1:E:181:LEU:HD11	1.49	0.92
1:E:150:ILE:HD12	1:E:154:PHE:HE2	1.19	0.92
1:A:64:ARG:NH2	1:A:189:GLU:N	2.12	0.92
1:F:334:TYR:CE2	1:F:365:ILE:CD1	2.53	0.92
1:A:119:ILE:HB	1:A:132:LEU:HB3	1.50	0.92
1:B:64:ARG:NH2	1:B:189:GLU:N	2.12	0.92
1:E:334:TYR:CE2	1:E:365:ILE:CD1	2.53	0.92
1:E:564:THR:CG2	1:E:573:LYS:HB3	1.99	0.92
1:B:170:GLU:CD	1:B:287:GLU:HA	1.63	0.92
1:C:119:ILE:HB	1:C:132:LEU:HB3	1.50	0.92
1:D:541:GLU:H	1:D:568:ILE:CD1	1.81	0.92
1:A:334:TYR:CE2	1:A:365:ILE:CD1	2.53	0.91
1:A:540:ASN:O	1:A:541:GLU:CB	2.16	0.91
1:B:112:TYR:H	1:B:141:ASP:HB2	1.04	0.91
1:C:537:LYS:HG3	1:C:545:PHE:HE2	1.30	0.91
1:D:150:ILE:HD12	1:D:154:PHE:HE2	1.19	0.91
1:E:381:GLN:HB2	1:E:455:ASN:CG	1.91	0.91
1:E:540:ASN:O	1:E:541:GLU:CB	2.16	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:564:THR:CG2	1:B:573:LYS:HB3	1.99	0.91
1:B:334:TYR:CE2	1:B:365:ILE:CD1	2.53	0.91
1:C:119:ILE:HG21	1:C:181:LEU:HD11	1.49	0.91
1:C:540:ASN:O	1:C:541:GLU:CB	2.16	0.91
1:D:334:TYR:CE2	1:D:365:ILE:CD1	2.53	0.91
1:F:64:ARG:NH2	1:F:189:GLU:N	2.12	0.91
1:A:518:ILE:CD1	1:A:520:THR:HB	2.01	0.91
1:C:518:ILE:CD1	1:C:520:THR:HB	2.01	0.91
1:C:334:TYR:CE2	1:C:365:ILE:CD1	2.53	0.91
1:D:381:GLN:HB2	1:D:455:ASN:CG	1.91	0.91
1:F:282:VAL:HG13	1:F:287:GLU:CG	1.86	0.91
1:B:363:ARG:NH1	1:B:495:GLU:HG3	1.86	0.91
1:D:564:THR:CG2	1:D:573:LYS:HB3	1.99	0.91
1:F:381:GLN:HB2	1:F:455:ASN:CG	1.91	0.91
1:B:119:ILE:HG21	1:B:181:LEU:HD11	1.49	0.90
1:C:541:GLU:H	1:C:568:ILE:CD1	1.81	0.90
1:A:363:ARG:NH1	1:A:495:GLU:HG3	1.86	0.90
1:A:537:LYS:HG3	1:A:545:PHE:HD2	1.34	0.90
1:A:566:TYR:CD2	1:A:572:LYS:C	2.19	0.90
1:C:64:ARG:NH2	1:C:189:GLU:N	2.12	0.90
1:E:64:ARG:NH2	1:E:189:GLU:N	2.12	0.90
1:E:267:PHE:O	1:E:268:GLU:HB3	1.70	0.90
1:E:539:ASP:O	1:E:540:ASN:HB2	1.71	0.90
1:F:518:ILE:CD1	1:F:520:THR:HB	2.01	0.90
1:D:518:ILE:CD1	1:D:520:THR:HB	2.01	0.90
1:D:537:LYS:CG	1:D:545:PHE:HE2	1.79	0.90
1:F:267:PHE:O	1:F:268:GLU:HB3	1.70	0.90
1:C:537:LYS:CG	1:C:545:PHE:HE2	1.79	0.90
1:D:267:PHE:O	1:D:268:GLU:HB3	1.69	0.90
1:E:541:GLU:H	1:E:568:ILE:HD11	1.10	0.90
1:A:541:GLU:H	1:A:568:ILE:HD11	1.10	0.90
1:B:537:LYS:HG3	1:B:545:PHE:HD2	1.34	0.90
1:C:269:GLN:O	1:C:277:PRO:CD	2.20	0.90
1:B:518:ILE:CD1	1:B:520:THR:HB	2.01	0.90
1:C:381:GLN:HB2	1:C:455:ASN:CG	1.91	0.90
1:D:539:ASP:O	1:D:540:ASN:HB2	1.71	0.90
1:E:42:ALA:O	1:E:112:TYR:HE2	1.49	0.90
1:E:537:LYS:HG3	1:E:545:PHE:HE2	1.30	0.90
1:F:64:ARG:CZ	1:F:187:ASP:O	2.20	0.90
1:C:267:PHE:O	1:C:268:GLU:HB3	1.70	0.90
1:D:64:ARG:NH2	1:D:189:GLU:N	2.12	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:539:ASP:O	1:F:540:ASN:HB2	1.71	0.90
1:A:64:ARG:CZ	1:A:187:ASP:O	2.20	0.90
1:A:267:PHE:O	1:A:268:GLU:HB3	1.70	0.90
1:B:267:PHE:O	1:B:268:GLU:HB3	1.70	0.90
1:C:259:THR:HB	1:C:261:TYR:CE1	2.07	0.89
1:D:119:ILE:HG21	1:D:181:LEU:HD11	1.49	0.89
1:D:259:THR:HB	1:D:261:TYR:CE1	2.07	0.89
1:E:64:ARG:CZ	1:E:187:ASP:O	2.20	0.89
1:E:518:ILE:CD1	1:E:520:THR:HB	2.01	0.89
1:C:42:ALA:O	1:C:112:TYR:HE2	1.49	0.89
1:D:540:ASN:O	1:D:541:GLU:CB	2.16	0.89
1:F:540:ASN:O	1:F:541:GLU:CB	2.16	0.89
1:C:539:ASP:O	1:C:540:ASN:HB2	1.71	0.89
1:F:355:ARG:C	1:F:362:MET:SD	2.51	0.89
1:B:381:GLN:HB2	1:B:455:ASN:CG	1.91	0.89
1:D:269:GLN:O	1:D:277:PRO:CD	2.20	0.89
1:A:259:THR:HB	1:A:261:TYR:CE1	2.07	0.89
1:A:355:ARG:C	1:A:362:MET:SD	2.51	0.89
1:B:353:LYS:HG3	1:B:387:PRO:HG2	0.89	0.89
1:B:64:ARG:CZ	1:B:187:ASP:O	2.20	0.89
1:C:394:ASN:CG	1:C:457:ILE:CD1	2.36	0.89
1:D:64:ARG:CZ	1:D:187:ASP:O	2.20	0.89
1:A:42:ALA:O	1:A:112:TYR:HE2	1.49	0.89
1:A:381:GLN:HB2	1:A:455:ASN:CG	1.91	0.89
1:D:355:ARG:C	1:D:362:MET:SD	2.51	0.89
1:F:91:ARG:HH12	1:F:112:TYR:H	1.19	0.89
1:B:541:GLU:H	1:B:568:ILE:HD11	1.10	0.89
1:C:64:ARG:CZ	1:C:187:ASP:O	2.20	0.89
1:B:355:ARG:C	1:B:362:MET:SD	2.51	0.89
1:C:134:LEU:CD2	1:C:143:PHE:CD1	2.56	0.89
1:C:355:ARG:C	1:C:362:MET:SD	2.51	0.89
1:F:283:GLU:HA	1:F:287:GLU:HB3	1.55	0.89
1:A:539:ASP:O	1:A:540:ASN:HB2	1.71	0.88
1:B:259:THR:HB	1:B:261:TYR:CE1	2.07	0.88
1:D:537:LYS:HG3	1:D:545:PHE:HE2	1.30	0.88
1:A:353:LYS:HG3	1:A:387:PRO:HG2	0.89	0.88
1:E:259:THR:HB	1:E:261:TYR:CE1	2.07	0.88
1:E:355:ARG:C	1:E:362:MET:SD	2.51	0.88
1:F:91:ARG:HH12	1:F:112:TYR:CA	1.85	0.88
1:F:134:LEU:CD2	1:F:143:PHE:CD1	2.56	0.88
1:B:134:LEU:CD2	1:B:143:PHE:CD1	2.56	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:91:ARG:NH1	1:A:111:ILE:HB	1.88	0.88
1:A:134:LEU:CD2	1:A:143:PHE:CD1	2.56	0.88
1:B:539:ASP:O	1:B:540:ASN:HB2	1.71	0.88
1:D:134:LEU:CD2	1:D:143:PHE:CD1	2.56	0.88
1:B:134:LEU:HD22	1:B:143:PHE:CD1	2.09	0.88
1:C:91:ARG:HH12	1:C:112:TYR:H	1.19	0.88
1:D:91:ARG:NH1	1:D:111:ILE:HB	1.88	0.88
1:A:550:VAL:CB	1:A:556:GLY:HA2	2.04	0.88
1:C:134:LEU:HD22	1:C:143:PHE:CD1	2.09	0.88
1:E:91:ARG:HH12	1:E:112:TYR:H	1.18	0.88
1:F:363:ARG:NH1	1:F:495:GLU:HG3	1.86	0.88
1:A:91:ARG:HH12	1:A:112:TYR:H	1.19	0.88
1:D:550:VAL:CB	1:D:556:GLY:HA2	2.04	0.88
1:E:134:LEU:CD2	1:E:143:PHE:CD1	2.56	0.88
1:E:283:GLU:HA	1:E:287:GLU:HB3	1.55	0.88
1:C:499:PHE:CE2	1:C:532:TYR:OH	2.09	0.87
1:E:539:ASP:O	1:E:540:ASN:CB	2.22	0.87
1:F:259:THR:HB	1:F:261:TYR:CE1	2.07	0.87
1:F:269:GLN:O	1:F:277:PRO:CD	2.20	0.87
1:F:537:LYS:CG	1:F:545:PHE:HE2	1.79	0.87
1:A:134:LEU:HD22	1:A:143:PHE:CD1	2.09	0.87
1:C:47:PRO:HD2	1:C:191:LYS:HD3	1.57	0.87
1:D:112:TYR:H	1:D:141:ASP:HB2	1.04	0.87
1:F:132:LEU:HG	1:F:148:ASP:CA	1.84	0.87
1:A:269:GLN:O	1:A:277:PRO:CD	2.20	0.87
1:B:91:ARG:NH1	1:B:111:ILE:HB	1.88	0.87
1:B:119:ILE:HB	1:B:132:LEU:CB	2.04	0.87
1:B:269:GLN:O	1:B:277:PRO:CD	2.20	0.87
1:E:91:ARG:NH1	1:E:111:ILE:HB	1.88	0.87
1:E:112:TYR:H	1:E:141:ASP:HB2	1.04	0.87
1:B:394:ASN:CG	1:B:457:ILE:HD13	1.94	0.87
1:D:134:LEU:HD22	1:D:143:PHE:CD1	2.09	0.87
1:A:394:ASN:CG	1:A:457:ILE:HD13	1.94	0.87
1:B:550:VAL:CB	1:B:556:GLY:HA2	2.04	0.87
1:C:91:ARG:NH1	1:C:111:ILE:HB	1.88	0.87
1:D:539:ASP:O	1:D:540:ASN:CB	2.22	0.87
1:E:119:ILE:HB	1:E:132:LEU:CB	2.04	0.87
1:C:353:LYS:HE3	1:C:387:PRO:HG3	0.88	0.87
1:C:363:ARG:NH1	1:C:495:GLU:HG3	1.86	0.87
1:B:537:LYS:CG	1:B:545:PHE:HE2	1.79	0.87
1:C:353:LYS:HG3	1:C:387:PRO:HG2	0.89	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:363:ARG:NH1	1:D:495:GLU:HG3	1.86	0.87
1:F:134:LEU:HD22	1:F:143:PHE:CD1	2.09	0.87
1:A:119:ILE:HB	1:A:132:LEU:CB	2.04	0.87
1:B:270:LEU:HD13	1:B:271:ASN:O	1.74	0.87
1:C:537:LYS:HG3	1:C:545:PHE:HD2	1.34	0.87
1:D:282:VAL:HG13	1:D:287:GLU:CG	1.86	0.87
1:F:91:ARG:NH1	1:F:111:ILE:HB	1.88	0.87
1:F:394:ASN:CG	1:F:457:ILE:HD13	1.94	0.87
1:F:550:VAL:CB	1:F:556:GLY:HA2	2.04	0.87
1:A:283:GLU:HA	1:A:287:GLU:HB3	1.55	0.87
1:E:134:LEU:HD22	1:E:143:PHE:CD1	2.09	0.87
1:F:353:LYS:HG3	1:F:387:PRO:HG2	0.89	0.87
1:C:541:GLU:H	1:C:568:ILE:HD11	1.10	0.86
1:D:119:ILE:HG22	1:D:181:LEU:HD11	0.87	0.86
1:E:269:GLN:O	1:E:277:PRO:CD	2.20	0.86
1:A:537:LYS:CG	1:A:545:PHE:HE2	1.79	0.86
1:C:539:ASP:O	1:C:540:ASN:CB	2.22	0.86
1:F:537:LYS:HG3	1:F:545:PHE:HD2	1.34	0.86
1:B:45:GLY:HA2	1:B:112:TYR:HD1	1.41	0.86
1:B:91:ARG:NH1	1:B:112:TYR:H	1.72	0.86
1:C:270:LEU:HD12	1:C:271:ASN:O	1.75	0.86
1:D:115:VAL:O	1:D:115:VAL:HG12	1.76	0.86
1:A:270:LEU:HD12	1:A:271:ASN:O	1.74	0.86
1:B:499:PHE:CE2	1:B:532:TYR:OH	2.09	0.86
1:D:119:ILE:HB	1:D:132:LEU:CB	2.04	0.86
1:D:270:LEU:HD12	1:D:271:ASN:O	1.74	0.86
1:E:363:ARG:NH1	1:E:495:GLU:HG3	1.86	0.86
1:D:499:PHE:CE2	1:D:532:TYR:OH	2.09	0.86
1:E:550:VAL:CB	1:E:556:GLY:HA2	2.04	0.86
1:F:270:LEU:HD13	1:F:271:ASN:O	1.74	0.86
1:B:270:LEU:HD12	1:B:271:ASN:O	1.74	0.86
1:C:119:ILE:HB	1:C:132:LEU:CB	2.04	0.86
1:F:270:LEU:HD12	1:F:271:ASN:O	1.75	0.86
1:B:42:ALA:O	1:B:112:TYR:HE2	1.48	0.86
1:E:119:ILE:HG22	1:E:181:LEU:HD11	0.87	0.86
1:C:45:GLY:HA2	1:C:112:TYR:HD1	1.41	0.86
1:C:110:LYS:HB3	1:C:192:SER:CB	2.05	0.86
1:C:119:ILE:HG22	1:C:181:LEU:HD11	0.87	0.86
1:C:270:LEU:HD13	1:C:271:ASN:O	1.74	0.86
1:F:353:LYS:HE3	1:F:387:PRO:HG3	0.88	0.86
1:A:45:GLY:HA2	1:A:112:TYR:HD1	1.41	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:334:TYR:CD2	1:A:365:ILE:HD12	2.11	0.86
1:B:334:TYR:CD2	1:B:365:ILE:HD12	2.11	0.86
1:B:353:LYS:HE3	1:B:387:PRO:HG3	0.88	0.86
1:E:270:LEU:HD12	1:E:271:ASN:O	1.75	0.86
1:E:537:LYS:HG3	1:E:545:PHE:HD2	1.34	0.86
1:F:47:PRO:HD2	1:F:191:LYS:HD3	1.57	0.86
1:A:353:LYS:HE3	1:A:387:PRO:HG3	0.88	0.86
1:C:550:VAL:CB	1:C:556:GLY:HA2	2.04	0.86
1:F:119:ILE:HB	1:F:132:LEU:CB	2.04	0.86
1:B:47:PRO:HD2	1:B:191:LYS:HD3	1.57	0.85
1:B:539:ASP:O	1:B:540:ASN:CB	2.22	0.85
1:D:537:LYS:HG3	1:D:545:PHE:HD2	1.34	0.85
1:B:283:GLU:HA	1:B:287:GLU:HB3	1.55	0.85
1:C:283:GLU:HA	1:C:287:GLU:HB3	1.55	0.85
1:D:45:GLY:HA2	1:D:112:TYR:HD1	1.41	0.85
1:F:112:TYR:H	1:F:141:ASP:HB2	1.04	0.85
1:F:334:TYR:CD2	1:F:365:ILE:HD12	2.11	0.85
1:A:119:ILE:HG22	1:A:181:LEU:HD11	0.87	0.85
1:A:539:ASP:O	1:A:540:ASN:CB	2.22	0.85
1:D:491:MET:O	1:D:493:VAL:HG22	1.76	0.85
1:D:566:TYR:CD2	1:D:572:LYS:C	2.19	0.85
1:E:45:GLY:HA2	1:E:112:TYR:HD1	1.41	0.85
1:C:491:MET:O	1:C:493:VAL:HG22	1.76	0.85
1:D:91:ARG:HH12	1:D:112:TYR:CA	1.85	0.85
1:D:334:TYR:CE2	1:D:365:ILE:HD12	2.12	0.85
1:A:270:LEU:HD13	1:A:271:ASN:O	1.74	0.85
1:F:110:LYS:HB3	1:F:192:SER:CB	2.05	0.85
1:F:539:ASP:O	1:F:540:ASN:CB	2.22	0.85
1:D:353:LYS:HG3	1:D:387:PRO:HG2	0.89	0.85
1:E:270:LEU:HD13	1:E:271:ASN:O	1.74	0.85
1:A:47:PRO:HD2	1:A:191:LYS:HD3	1.57	0.85
1:B:119:ILE:HG22	1:B:181:LEU:HD11	0.87	0.85
1:C:270:LEU:N	1:C:277:PRO:HD2	1.92	0.85
1:D:91:ARG:HH12	1:D:112:TYR:H	1.19	0.85
1:D:283:GLU:HA	1:D:287:GLU:HB3	1.55	0.85
1:E:353:LYS:HE3	1:E:387:PRO:HG3	0.88	0.85
1:C:110:LYS:HE3	1:C:113:GLY:HA3	0.85	0.85
1:C:115:VAL:O	1:C:115:VAL:HG12	1.76	0.85
1:E:394:ASN:CG	1:E:457:ILE:HD13	1.94	0.85
1:F:491:MET:O	1:F:493:VAL:HG22	1.76	0.85
1:B:334:TYR:CE2	1:B:365:ILE:HD12	2.12	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:91:ARG:NH1	1:C:112:TYR:H	1.72	0.85
1:C:334:TYR:CD2	1:C:365:ILE:HD12	2.11	0.85
1:E:115:VAL:O	1:E:115:VAL:HG12	1.76	0.85
1:E:334:TYR:CD2	1:E:365:ILE:HD12	2.11	0.85
1:F:270:LEU:N	1:F:277:PRO:HD2	1.92	0.84
1:B:91:ARG:HH12	1:B:112:TYR:H	1.18	0.84
1:E:47:PRO:HD2	1:E:191:LYS:HD3	1.57	0.84
1:E:491:MET:O	1:E:493:VAL:HG22	1.76	0.84
1:B:115:VAL:O	1:B:115:VAL:HG12	1.76	0.84
1:F:45:GLY:HA2	1:F:112:TYR:HD1	1.41	0.84
1:E:270:LEU:N	1:E:277:PRO:HD2	1.92	0.84
1:B:91:ARG:NH2	1:B:112:TYR:CA	2.20	0.84
1:F:119:ILE:HG22	1:F:181:LEU:HD11	0.87	0.84
1:A:334:TYR:CE2	1:A:365:ILE:HD12	2.12	0.84
1:B:270:LEU:N	1:B:277:PRO:HD2	1.92	0.84
1:F:334:TYR:CE2	1:F:365:ILE:HD12	2.12	0.84
1:B:363:ARG:HH12	1:B:495:GLU:CG	1.90	0.84
1:D:110:LYS:HB3	1:D:192:SER:CB	2.05	0.84
1:D:270:LEU:N	1:D:277:PRO:HD2	1.92	0.84
1:A:110:LYS:HB3	1:A:192:SER:CB	2.05	0.84
1:D:334:TYR:CD2	1:D:365:ILE:HD12	2.11	0.84
1:E:334:TYR:CE2	1:E:365:ILE:HD12	2.12	0.84
1:A:491:MET:O	1:A:493:VAL:HG22	1.76	0.84
1:B:110:LYS:HE3	1:B:113:GLY:HA3	0.85	0.84
1:A:115:VAL:O	1:A:115:VAL:HG12	1.76	0.84
1:C:154:PHE:CE1	1:C:199:ALA:CB	2.61	0.83
1:D:353:LYS:HE3	1:D:387:PRO:HG3	0.88	0.83
1:D:550:VAL:HB	1:D:556:GLY:HA2	1.60	0.83
1:D:270:LEU:HD13	1:D:271:ASN:O	1.74	0.83
1:D:394:ASN:CG	1:D:457:ILE:HD13	1.94	0.83
1:D:504:LEU:CD2	1:D:529:ILE:HG23	2.08	0.83
1:F:154:PHE:CE1	1:F:199:ALA:CB	2.61	0.83
1:C:334:TYR:CE2	1:C:365:ILE:HD12	2.12	0.83
1:E:154:PHE:CE1	1:E:199:ALA:CB	2.61	0.83
1:F:112:TYR:CA	1:F:141:ASP:HB2	2.07	0.83
1:A:270:LEU:N	1:A:277:PRO:HD2	1.92	0.83
1:D:91:ARG:NH1	1:D:112:TYR:H	1.72	0.83
1:D:154:PHE:CE1	1:D:199:ALA:CB	2.61	0.83
1:D:271:ASN:OD1	1:D:272:ALA:N	2.11	0.83
1:A:504:LEU:CD2	1:A:529:ILE:HG23	2.08	0.83
1:B:352:VAL:C	1:B:364:ALA:HB2	1.86	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:110:LYS:HE3	1:A:113:GLY:HA3	0.85	0.83
1:C:504:LEU:CD2	1:C:529:ILE:HG23	2.08	0.83
1:C:550:VAL:HB	1:C:556:GLY:HA2	1.60	0.83
1:D:363:ARG:HH12	1:D:495:GLU:CG	1.90	0.83
1:F:110:LYS:HE3	1:F:113:GLY:HA3	0.85	0.83
1:B:271:ASN:OD1	1:B:272:ALA:N	2.11	0.83
1:B:491:MET:O	1:B:493:VAL:HG22	1.76	0.83
1:B:504:LEU:CD2	1:B:529:ILE:HG23	2.08	0.83
1:E:110:LYS:HE3	1:E:113:GLY:HA3	0.85	0.83
1:E:353:LYS:HG3	1:E:387:PRO:HG2	0.89	0.83
1:F:45:GLY:HA2	1:F:111:ILE:CD1	2.09	0.83
1:F:504:LEU:CD2	1:F:529:ILE:HG23	2.08	0.83
1:A:91:ARG:NH2	1:A:112:TYR:CA	2.20	0.83
1:B:113:GLY:HA3	1:B:143:PHE:CE1	2.14	0.83
1:B:550:VAL:HB	1:B:556:GLY:HA2	1.61	0.83
1:C:113:GLY:HA3	1:C:143:PHE:CE1	2.14	0.83
1:C:45:GLY:HA2	1:C:111:ILE:CD1	2.09	0.82
1:C:271:ASN:OD1	1:C:272:ALA:N	2.11	0.82
1:F:140:ASP:O	1:F:141:ASP:HB2	1.79	0.82
1:E:112:TYR:CA	1:E:141:ASP:HB2	2.07	0.82
1:E:271:ASN:OD1	1:E:272:ALA:N	2.11	0.82
1:A:123:LEU:HB2	1:A:128:LEU:CD1	2.10	0.82
1:E:166:THR:HG22	1:E:172:ASP:HB2	1.62	0.82
1:F:115:VAL:O	1:F:115:VAL:HG12	1.76	0.82
1:C:363:ARG:HH12	1:C:495:GLU:CG	1.90	0.82
1:D:45:GLY:HA2	1:D:111:ILE:CD1	2.09	0.82
1:E:45:GLY:HA2	1:E:111:ILE:CD1	2.09	0.82
1:E:140:ASP:O	1:E:141:ASP:HB2	1.79	0.82
1:B:566:TYR:CD2	1:B:572:LYS:C	2.19	0.82
1:E:504:LEU:CD2	1:E:529:ILE:HG23	2.08	0.82
1:A:271:ASN:OD1	1:A:272:ALA:N	2.11	0.82
1:C:140:ASP:O	1:C:141:ASP:HB2	1.79	0.82
1:D:123:LEU:HB2	1:D:128:LEU:CD1	2.10	0.82
1:F:166:THR:HG22	1:F:172:ASP:HB2	1.62	0.82
1:F:44:GLY:O	1:F:112:TYR:CD1	2.33	0.82
1:A:44:GLY:O	1:A:112:TYR:CD1	2.33	0.82
1:B:45:GLY:HA2	1:B:111:ILE:CD1	2.09	0.82
1:E:113:GLY:HA3	1:E:143:PHE:CE1	2.14	0.82
1:A:113:GLY:HA3	1:A:143:PHE:CE1	2.14	0.82
1:A:154:PHE:CE1	1:A:199:ALA:CB	2.61	0.82
1:D:112:TYR:CA	1:D:141:ASP:HB2	2.07	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:123:LEU:HB2	1:E:128:LEU:CD1	2.10	0.82
1:F:123:LEU:HB2	1:F:128:LEU:CD1	2.10	0.82
1:D:110:LYS:HE3	1:D:113:GLY:HA3	0.85	0.81
1:A:45:GLY:HA2	1:A:111:ILE:CD1	2.09	0.81
1:D:113:GLY:HA3	1:D:143:PHE:CE1	2.14	0.81
1:E:64:ARG:NE	1:E:189:GLU:CA	2.41	0.81
1:E:550:VAL:HB	1:E:556:GLY:HA2	1.61	0.81
1:A:550:VAL:HB	1:A:556:GLY:HA2	1.61	0.81
1:B:44:GLY:O	1:B:112:TYR:CD1	2.33	0.81
1:C:44:GLY:O	1:C:112:TYR:CD1	2.33	0.81
1:C:123:LEU:HB2	1:C:128:LEU:CD1	2.10	0.81
1:C:394:ASN:CG	1:C:457:ILE:HD13	1.94	0.81
1:D:64:ARG:NE	1:D:189:GLU:CA	2.41	0.81
1:F:363:ARG:HH12	1:F:495:GLU:CG	1.90	0.81
1:C:64:ARG:NE	1:C:189:GLU:CA	2.41	0.81
1:A:134:LEU:HD22	1:A:143:PHE:CZ	2.15	0.81
1:D:47:PRO:HD2	1:D:191:LYS:HD3	1.57	0.81
1:F:113:GLY:HA3	1:F:143:PHE:CE1	2.14	0.81
1:F:352:VAL:C	1:F:364:ALA:HB2	1.86	0.81
1:F:550:VAL:HB	1:F:556:GLY:HA2	1.60	0.81
1:B:132:LEU:CG	1:B:148:ASP:CA	2.56	0.81
1:B:134:LEU:HD22	1:B:143:PHE:CZ	2.15	0.81
1:B:140:ASP:O	1:B:141:ASP:HB2	1.79	0.81
1:C:566:TYR:CD2	1:C:572:LYS:C	2.19	0.81
1:D:44:GLY:O	1:D:112:TYR:CD1	2.33	0.81
1:D:134:LEU:HD22	1:D:143:PHE:CZ	2.15	0.81
1:D:536:LYS:HB2	1:D:542:ILE:HD12	1.62	0.81
1:E:536:LYS:HB2	1:E:542:ILE:HD12	1.62	0.81
1:B:123:LEU:HB2	1:B:128:LEU:CD1	2.10	0.81
1:C:134:LEU:HD22	1:C:143:PHE:CZ	2.15	0.81
1:D:166:THR:HG22	1:D:172:ASP:HB2	1.62	0.81
1:A:140:ASP:O	1:A:141:ASP:HB2	1.79	0.81
1:D:543:GLN:HE21	1:D:568:ILE:HG23	1.46	0.81
1:F:363:ARG:HH12	1:F:495:GLU:CA	1.94	0.81
1:A:115:VAL:O	1:A:134:LEU:O	1.99	0.81
1:D:150:ILE:CD1	1:D:154:PHE:HE2	1.82	0.81
1:E:363:ARG:HH12	1:E:495:GLU:CA	1.94	0.81
1:F:64:ARG:NE	1:F:189:GLU:CA	2.41	0.81
1:F:271:ASN:OD1	1:F:272:ALA:N	2.11	0.81
1:E:134:LEU:HD22	1:E:143:PHE:CZ	2.15	0.81
1:A:166:THR:HG22	1:A:172:ASP:HB2	1.62	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:363:ARG:HH12	1:A:495:GLU:CA	1.94	0.80
1:A:545:PHE:O	1:A:545:PHE:CD1	2.35	0.80
1:E:184:LYS:C	1:E:186:GLY:HA2	2.02	0.80
1:F:504:LEU:CD2	1:F:529:ILE:HD12	2.11	0.80
1:D:91:ARG:NH1	1:D:111:ILE:C	2.20	0.80
1:F:134:LEU:HD22	1:F:143:PHE:CZ	2.15	0.80
1:B:363:ARG:HH12	1:B:495:GLU:CA	1.94	0.80
1:C:504:LEU:CD2	1:C:529:ILE:HD12	2.11	0.80
1:C:543:GLN:HE21	1:C:568:ILE:HG23	1.46	0.80
1:D:140:ASP:O	1:D:141:ASP:HB2	1.79	0.80
1:D:363:ARG:HH12	1:D:495:GLU:CA	1.94	0.80
1:E:64:ARG:CZ	1:E:189:GLU:CA	2.58	0.80
1:E:543:GLN:HE21	1:E:568:ILE:HG23	1.46	0.80
1:B:353:LYS:CE	1:B:387:PRO:CG	2.46	0.80
1:D:115:VAL:O	1:D:134:LEU:O	1.99	0.80
1:E:44:GLY:O	1:E:112:TYR:CD1	2.33	0.80
1:E:504:LEU:CD2	1:E:529:ILE:HD12	2.11	0.80
1:B:110:LYS:HB3	1:B:192:SER:CB	2.05	0.80
1:B:504:LEU:CD2	1:B:529:ILE:HD12	2.11	0.80
1:B:545:PHE:CD1	1:B:545:PHE:O	2.35	0.80
1:E:363:ARG:HH12	1:E:495:GLU:CG	1.90	0.80
1:B:166:THR:HG22	1:B:172:ASP:HB2	1.62	0.80
1:C:184:LYS:C	1:C:186:GLY:HA2	2.02	0.80
1:C:363:ARG:HH12	1:C:495:GLU:CA	1.94	0.80
1:D:49:THR:OG1	1:D:191:LYS:NZ	2.15	0.80
1:D:545:PHE:O	1:D:545:PHE:CD1	2.35	0.80
1:E:91:ARG:NH1	1:E:112:TYR:H	1.72	0.80
1:A:119:ILE:HG21	1:A:181:LEU:HD21	1.63	0.80
1:B:64:ARG:CZ	1:B:189:GLU:CA	2.58	0.80
1:B:115:VAL:O	1:B:134:LEU:O	1.99	0.80
1:C:536:LYS:HB2	1:C:542:ILE:HD12	1.62	0.80
1:F:114:ASN:H	1:F:117:ASN:ND2	1.80	0.80
1:A:114:ASN:H	1:A:117:ASN:ND2	1.80	0.80
1:A:550:VAL:CG1	1:A:556:GLY:HA2	2.12	0.80
1:C:166:THR:HG22	1:C:172:ASP:HB2	1.62	0.80
1:D:114:ASN:H	1:D:117:ASN:ND2	1.80	0.80
1:E:183:LEU:HD11	1:E:192:SER:HG	1.45	0.80
1:E:245:ALA:O	1:E:264:ILE:HG13	1.82	0.80
1:F:264:ILE:HG12	1:F:266:SER:N	1.96	0.80
1:B:43:GLU:C	1:B:112:TYR:CD2	2.56	0.80
1:B:501:VAL:HG22	1:B:576:VAL:HG11	1.64	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:545:PHE:O	1:C:545:PHE:CD1	2.35	0.80
1:D:184:LYS:C	1:D:186:GLY:HA2	2.02	0.80
1:D:245:ALA:O	1:D:264:ILE:HG13	1.82	0.80
1:E:49:THR:OG1	1:E:191:LYS:NZ	2.15	0.80
1:E:110:LYS:HB3	1:E:192:SER:CB	2.05	0.80
1:E:115:VAL:O	1:E:134:LEU:O	1.99	0.80
1:A:352:VAL:C	1:A:364:ALA:HB2	1.86	0.80
1:B:550:VAL:CG1	1:B:556:GLY:HA2	2.12	0.80
1:D:353:LYS:CG	1:D:387:PRO:CG	2.46	0.80
1:D:504:LEU:CD2	1:D:529:ILE:HD12	2.11	0.80
1:A:536:LYS:HB2	1:A:542:ILE:HD12	1.62	0.79
1:B:543:GLN:HE21	1:B:568:ILE:HG23	1.46	0.79
1:C:49:THR:OG1	1:C:191:LYS:NZ	2.15	0.79
1:C:114:ASN:H	1:C:117:ASN:ND2	1.80	0.79
1:D:119:ILE:HG21	1:D:181:LEU:HD21	1.63	0.79
1:F:550:VAL:CG1	1:F:556:GLY:HA2	2.12	0.79
1:A:184:LYS:C	1:A:186:GLY:HA2	2.02	0.79
1:A:504:LEU:CD2	1:A:529:ILE:HD12	2.11	0.79
1:C:115:VAL:O	1:C:134:LEU:O	1.99	0.79
1:E:114:ASN:H	1:E:117:ASN:ND2	1.80	0.79
1:E:264:ILE:HG12	1:E:266:SER:N	1.96	0.79
1:E:545:PHE:CD1	1:E:545:PHE:O	2.35	0.79
1:A:353:LYS:CG	1:A:387:PRO:CG	2.46	0.79
1:B:114:ASN:H	1:B:117:ASN:ND2	1.80	0.79
1:F:49:THR:OG1	1:F:191:LYS:NZ	2.15	0.79
1:F:545:PHE:O	1:F:545:PHE:CD1	2.35	0.79
1:A:501:VAL:HG22	1:A:576:VAL:HG11	1.64	0.79
1:C:183:LEU:HD11	1:C:192:SER:HG	1.46	0.79
1:D:43:GLU:C	1:D:112:TYR:CD2	2.56	0.79
1:F:184:LYS:C	1:F:186:GLY:HA2	2.02	0.79
1:C:150:ILE:CD1	1:C:154:PHE:HE2	1.82	0.79
1:C:245:ALA:O	1:C:264:ILE:HG13	1.82	0.79
1:E:43:GLU:C	1:E:112:TYR:CD2	2.56	0.79
1:F:115:VAL:O	1:F:115:VAL:HG13	1.83	0.79
1:F:245:ALA:O	1:F:264:ILE:HG13	1.82	0.79
1:F:536:LYS:HB2	1:F:542:ILE:HD12	1.62	0.79
1:A:112:TYR:CA	1:A:141:ASP:HB2	2.07	0.79
1:A:169:VAL:CB	1:A:286:GLU:OE1	2.28	0.79
1:B:184:LYS:C	1:B:186:GLY:HA2	2.02	0.79
1:F:183:LEU:CD1	1:F:192:SER:OG	2.31	0.79
1:A:43:GLU:C	1:A:112:TYR:CD2	2.56	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:119:ILE:HG21	1:B:181:LEU:HD21	1.63	0.79
1:F:45:GLY:HA3	1:F:190:VAL:HG22	1.63	0.79
1:A:115:VAL:O	1:A:115:VAL:HG13	1.83	0.79
1:B:49:THR:OG1	1:B:191:LYS:NZ	2.15	0.79
1:C:45:GLY:HA3	1:C:190:VAL:HG22	1.63	0.79
1:D:45:GLY:HA2	1:D:112:TYR:CD1	2.18	0.79
1:D:501:VAL:HG22	1:D:576:VAL:HG11	1.64	0.79
1:E:115:VAL:O	1:E:115:VAL:HG13	1.83	0.79
1:E:566:TYR:CD2	1:E:572:LYS:C	2.19	0.79
1:C:43:GLU:C	1:C:112:TYR:CD2	2.56	0.79
1:E:119:ILE:HG21	1:E:181:LEU:HD21	1.63	0.79
1:E:550:VAL:CG1	1:E:556:GLY:HA2	2.12	0.79
1:A:49:THR:OG1	1:A:191:LYS:NZ	2.15	0.79
1:A:245:ALA:O	1:A:264:ILE:HG13	1.82	0.79
1:B:245:ALA:O	1:B:264:ILE:HG13	1.82	0.79
1:C:119:ILE:HG21	1:C:181:LEU:HD21	1.63	0.79
1:E:45:GLY:HA3	1:E:190:VAL:HG22	1.64	0.79
1:F:43:GLU:C	1:F:112:TYR:CD2	2.56	0.79
1:F:353:LYS:CG	1:F:387:PRO:CG	2.46	0.79
1:A:45:GLY:CA	1:A:111:ILE:HG13	2.14	0.78
1:A:394:ASN:CG	1:A:457:ILE:CD1	2.36	0.78
1:C:45:GLY:HA2	1:C:112:TYR:CD1	2.18	0.78
1:C:45:GLY:CA	1:C:111:ILE:HG13	2.14	0.78
1:C:121:VAL:HG23	1:C:132:LEU:HD22	1.65	0.78
1:C:550:VAL:CG1	1:C:556:GLY:HA2	2.12	0.78
1:F:115:VAL:O	1:F:134:LEU:O	1.99	0.78
1:B:45:GLY:CA	1:B:111:ILE:HG13	2.14	0.78
1:B:121:VAL:HG23	1:B:132:LEU:HD22	1.65	0.78
1:B:150:ILE:CD1	1:B:154:PHE:HE2	1.82	0.78
1:C:501:VAL:HG22	1:C:576:VAL:HG11	1.64	0.78
1:D:121:VAL:HG23	1:D:132:LEU:HD22	1.65	0.78
1:D:183:LEU:CD1	1:D:192:SER:OG	2.31	0.78
1:E:112:TYR:HA	1:E:141:ASP:CB	2.12	0.78
1:E:121:VAL:HG23	1:E:132:LEU:HD22	1.65	0.78
1:E:183:LEU:CD1	1:E:192:SER:OG	2.31	0.78
1:F:64:ARG:CZ	1:F:189:GLU:CA	2.58	0.78
1:F:543:GLN:HE21	1:F:568:ILE:HG23	1.46	0.78
1:A:45:GLY:HA2	1:A:111:ILE:HG13	1.66	0.78
1:B:353:LYS:CG	1:B:387:PRO:CG	2.46	0.78
1:C:45:GLY:HA2	1:C:111:ILE:HG13	1.66	0.78
1:E:501:VAL:HG22	1:E:576:VAL:HG11	1.64	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:119:ILE:HG21	1:F:181:LEU:HD21	1.63	0.78
1:C:352:VAL:C	1:C:364:ALA:HB2	1.86	0.78
1:D:45:GLY:HA3	1:D:190:VAL:HG22	1.63	0.78
1:E:45:GLY:N	1:E:112:TYR:CD1	2.51	0.78
1:F:501:VAL:HG22	1:F:576:VAL:HG11	1.64	0.78
1:A:121:VAL:HG23	1:A:132:LEU:HD22	1.65	0.78
1:C:112:TYR:CA	1:C:141:ASP:HB2	2.07	0.78
1:B:183:LEU:CD1	1:B:192:SER:OG	2.31	0.78
1:D:550:VAL:CG1	1:D:556:GLY:HA2	2.12	0.78
1:E:45:GLY:HA2	1:E:112:TYR:CD1	2.18	0.78
1:F:121:VAL:HG23	1:F:132:LEU:HD22	1.65	0.78
1:B:536:LYS:HB2	1:B:542:ILE:HD12	1.62	0.78
1:D:64:ARG:CZ	1:D:189:GLU:CA	2.58	0.78
1:F:91:ARG:NH1	1:F:112:TYR:CA	2.40	0.78
1:A:45:GLY:HA3	1:A:190:VAL:HG22	1.63	0.78
1:B:91:ARG:NH1	1:B:111:ILE:C	2.20	0.78
1:F:45:GLY:CA	1:F:111:ILE:HG13	2.14	0.78
1:F:537:LYS:CB	1:F:545:PHE:CD2	2.67	0.78
1:A:113:GLY:N	1:A:141:ASP:CB	2.43	0.78
1:A:183:LEU:CD1	1:A:192:SER:OG	2.31	0.78
1:B:45:GLY:HA2	1:B:112:TYR:CD1	2.18	0.78
1:C:64:ARG:CZ	1:C:189:GLU:CA	2.58	0.78
1:E:270:LEU:CD2	1:E:274:GLY:HA2	2.13	0.78
1:A:270:LEU:CD2	1:A:274:GLY:HA2	2.13	0.78
1:A:363:ARG:HH12	1:A:495:GLU:CG	1.90	0.78
1:C:183:LEU:CD1	1:C:192:SER:OG	2.31	0.78
1:C:270:LEU:CD2	1:C:274:GLY:HA2	2.13	0.78
1:D:45:GLY:HA2	1:D:111:ILE:HG13	1.66	0.78
1:F:45:GLY:HA2	1:F:111:ILE:HG13	1.66	0.78
1:B:45:GLY:HA2	1:B:111:ILE:HG13	1.66	0.77
1:C:353:LYS:CE	1:C:387:PRO:CG	2.46	0.77
1:D:270:LEU:CD2	1:D:274:GLY:HA2	2.13	0.77
1:A:264:ILE:HG12	1:A:266:SER:N	1.96	0.77
1:C:91:ARG:NH1	1:C:111:ILE:C	2.20	0.77
1:D:45:GLY:CA	1:D:111:ILE:HG13	2.14	0.77
1:C:112:TYR:HA	1:C:141:ASP:CB	2.11	0.77
1:D:91:ARG:HD2	1:D:111:ILE:HD12	1.67	0.77
1:D:115:VAL:O	1:D:115:VAL:HG13	1.83	0.77
1:D:123:LEU:CB	1:D:128:LEU:HD11	2.15	0.77
1:F:45:GLY:N	1:F:112:TYR:CD1	2.51	0.77
1:A:45:GLY:N	1:A:112:TYR:CD1	2.51	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:64:ARG:NE	1:A:189:GLU:CA	2.41	0.77
1:A:537:LYS:CB	1:A:545:PHE:CD2	2.67	0.77
1:B:64:ARG:NE	1:B:189:GLU:CA	2.41	0.77
1:B:123:LEU:CB	1:B:128:LEU:HD11	2.15	0.77
1:C:170:GLU:OE2	1:C:287:GLU:OE1	2.03	0.77
1:D:170:GLU:OE2	1:D:287:GLU:OE1	2.03	0.77
1:E:537:LYS:CB	1:E:545:PHE:CD2	2.67	0.77
1:F:496:ALA:O	1:F:500:LEU:HD23	1.85	0.77
1:A:150:ILE:CD1	1:A:154:PHE:HE2	1.82	0.77
1:A:496:ALA:O	1:A:500:LEU:HD23	1.85	0.77
1:A:512:PHE:HE1	1:A:517:THR:OG1	1.68	0.77
1:B:45:GLY:HA3	1:B:190:VAL:HG22	1.63	0.77
1:C:91:ARG:HD2	1:C:111:ILE:HD12	1.67	0.77
1:E:170:GLU:OE2	1:E:287:GLU:OE1	2.03	0.77
1:F:91:ARG:NH1	1:F:112:TYR:H	1.72	0.77
1:A:64:ARG:CZ	1:A:189:GLU:CA	2.58	0.77
1:B:110:LYS:CB	1:B:192:SER:HB3	2.10	0.77
1:B:112:TYR:CA	1:B:141:ASP:HB2	2.07	0.77
1:B:264:ILE:HG12	1:B:266:SER:N	1.96	0.77
1:C:512:PHE:HE1	1:C:517:THR:OG1	1.68	0.77
1:F:45:GLY:HA2	1:F:112:TYR:CD1	2.18	0.77
1:F:491:MET:O	1:F:493:VAL:CG2	2.33	0.77
1:A:123:LEU:CB	1:A:128:LEU:HD11	2.15	0.77
1:B:169:VAL:CB	1:B:286:GLU:OE1	2.28	0.77
1:C:394:ASN:ND2	1:C:457:ILE:HD13	2.00	0.77
1:D:353:LYS:CD	1:D:387:PRO:CG	2.63	0.77
1:E:169:VAL:CB	1:E:286:GLU:OE1	2.28	0.77
1:E:394:ASN:ND2	1:E:457:ILE:HD13	2.00	0.77
1:E:553:ILE:HD12	1:E:555:GLU:HB2	1.67	0.77
1:B:166:THR:CG2	1:B:171:HIS:C	2.54	0.77
1:B:537:LYS:CB	1:B:545:PHE:CD2	2.67	0.77
1:E:512:PHE:HE1	1:E:517:THR:OG1	1.68	0.77
1:A:543:GLN:HE21	1:A:568:ILE:HG23	1.46	0.76
1:B:45:GLY:N	1:B:112:TYR:CD1	2.51	0.76
1:B:112:TYR:HA	1:B:141:ASP:CB	2.12	0.76
1:B:115:VAL:O	1:B:115:VAL:HG13	1.83	0.76
1:C:537:LYS:CB	1:C:545:PHE:CD2	2.67	0.76
1:D:394:ASN:ND2	1:D:457:ILE:HD13	2.00	0.76
1:E:45:GLY:CA	1:E:111:ILE:HG13	2.14	0.76
1:E:496:ALA:O	1:E:500:LEU:HD23	1.84	0.76
1:F:170:GLU:OE2	1:F:287:GLU:OE1	2.03	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:353:LYS:CD	1:A:387:PRO:CG	2.63	0.76
1:C:115:VAL:O	1:C:115:VAL:HG13	1.83	0.76
1:D:166:THR:CG2	1:D:171:HIS:C	2.54	0.76
1:D:537:LYS:CB	1:D:545:PHE:CD2	2.67	0.76
1:E:353:LYS:CD	1:E:387:PRO:CG	2.63	0.76
1:F:353:LYS:CD	1:F:387:PRO:CG	2.63	0.76
1:B:270:LEU:CD2	1:B:274:GLY:HA2	2.13	0.76
1:B:353:LYS:CD	1:B:387:PRO:CG	2.63	0.76
1:D:264:ILE:HG12	1:D:266:SER:N	1.96	0.76
1:E:45:GLY:HA2	1:E:111:ILE:HG13	1.66	0.76
1:E:113:GLY:N	1:E:141:ASP:CB	2.43	0.76
1:F:166:THR:CG2	1:F:171:HIS:C	2.54	0.76
1:A:491:MET:O	1:A:493:VAL:CG2	2.33	0.76
1:B:170:GLU:OE2	1:B:287:GLU:OE1	2.03	0.76
1:B:491:MET:O	1:B:493:VAL:CG2	2.33	0.76
1:C:123:LEU:CB	1:C:128:LEU:HD11	2.14	0.76
1:D:512:PHE:HE1	1:D:517:THR:OG1	1.68	0.76
1:F:394:ASN:ND2	1:F:457:ILE:HD13	2.00	0.76
1:A:45:GLY:HA2	1:A:112:TYR:CD1	2.18	0.76
1:A:112:TYR:HA	1:A:141:ASP:CB	2.11	0.76
1:B:252:PHE:CE2	1:B:257:LYS:HA	2.21	0.76
1:B:532:TYR:OH	1:B:536:LYS:CE	2.34	0.76
1:C:264:ILE:HG12	1:C:266:SER:N	1.96	0.76
1:C:491:MET:O	1:C:493:VAL:CG2	2.33	0.76
1:E:166:THR:CG2	1:E:171:HIS:C	2.54	0.76
1:E:352:VAL:C	1:E:364:ALA:HB2	1.86	0.76
1:E:353:LYS:CG	1:E:387:PRO:CG	2.46	0.76
1:A:532:TYR:OH	1:A:536:LYS:CE	2.34	0.76
1:B:113:GLY:N	1:B:141:ASP:CB	2.43	0.76
1:C:47:PRO:N	1:C:191:LYS:HD2	2.01	0.76
1:F:252:PHE:CE2	1:F:257:LYS:HA	2.21	0.76
1:F:264:ILE:HD12	1:F:269:GLN:CG	2.03	0.76
1:F:512:PHE:HE1	1:F:517:THR:OG1	1.68	0.76
1:E:491:MET:O	1:E:493:VAL:CG2	2.33	0.76
1:E:537:LYS:HB3	1:E:545:PHE:CE2	2.21	0.76
1:A:170:GLU:OE2	1:A:287:GLU:OE1	2.03	0.76
1:B:496:ALA:O	1:B:500:LEU:HD23	1.85	0.76
1:B:501:VAL:CG2	1:B:576:VAL:HG11	2.16	0.76
1:C:501:VAL:CG2	1:C:576:VAL:HG11	2.16	0.76
1:D:47:PRO:N	1:D:191:LYS:HD2	2.01	0.76
1:D:496:ALA:O	1:D:500:LEU:HD23	1.85	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:532:TYR:OH	1:D:536:LYS:CE	2.34	0.76
1:E:245:ALA:HB1	1:E:265:VAL:HG22	1.67	0.76
1:F:91:ARG:HD2	1:F:111:ILE:HD12	1.67	0.76
1:A:91:ARG:NH1	1:A:112:TYR:CA	2.40	0.76
1:A:504:LEU:HD23	1:A:529:ILE:HD12	1.68	0.76
1:A:537:LYS:HG3	1:A:545:PHE:HE2	1.30	0.76
1:B:553:ILE:HD12	1:B:555:GLU:HB2	1.67	0.76
1:C:353:LYS:CG	1:C:387:PRO:CG	2.46	0.76
1:C:537:LYS:HB3	1:C:545:PHE:CE2	2.21	0.76
1:E:47:PRO:N	1:E:191:LYS:HD2	2.01	0.76
1:F:537:LYS:HB3	1:F:545:PHE:CE2	2.21	0.76
1:A:245:ALA:HB1	1:A:265:VAL:HG22	1.67	0.76
1:B:537:LYS:HB3	1:B:545:PHE:CE2	2.21	0.76
1:C:252:PHE:CE2	1:C:257:LYS:HA	2.21	0.76
1:C:553:ILE:HD12	1:C:555:GLU:HB2	1.67	0.76
1:D:112:TYR:HA	1:D:141:ASP:CB	2.11	0.76
1:E:264:ILE:HG21	1:E:269:GLN:CB	2.13	0.76
1:A:394:ASN:ND2	1:A:457:ILE:HD13	2.00	0.75
1:B:245:ALA:HB1	1:B:265:VAL:HG22	1.67	0.75
1:B:537:LYS:CG	1:B:545:PHE:HD2	1.92	0.75
1:C:353:LYS:CD	1:C:387:PRO:CG	2.63	0.75
1:D:169:VAL:CB	1:D:286:GLU:OE1	2.28	0.75
1:E:91:ARG:HD2	1:E:111:ILE:HD12	1.67	0.75
1:F:270:LEU:CD2	1:F:274:GLY:HA2	2.13	0.75
1:F:504:LEU:HD23	1:F:529:ILE:HD12	1.68	0.75
1:A:91:ARG:HD2	1:A:111:ILE:HD12	1.67	0.75
1:C:166:THR:CG2	1:C:171:HIS:C	2.54	0.75
1:C:264:ILE:HG21	1:C:269:GLN:CB	2.13	0.75
1:F:123:LEU:CB	1:F:128:LEU:HD11	2.14	0.75
1:F:501:VAL:CG2	1:F:576:VAL:HG11	2.16	0.75
1:B:512:PHE:HE1	1:B:517:THR:OG1	1.68	0.75
1:A:134:LEU:HD21	1:A:143:PHE:CD1	2.22	0.75
1:B:394:ASN:ND2	1:B:457:ILE:HD13	2.00	0.75
1:D:245:ALA:HB1	1:D:265:VAL:HG22	1.67	0.75
1:D:501:VAL:CG2	1:D:576:VAL:HG11	2.16	0.75
1:E:123:LEU:CB	1:E:128:LEU:HD11	2.15	0.75
1:E:134:LEU:HD21	1:E:143:PHE:CD1	2.22	0.75
1:E:252:PHE:CE2	1:E:257:LYS:HA	2.21	0.75
1:F:113:GLY:N	1:F:141:ASP:CB	2.43	0.75
1:B:504:LEU:HD23	1:B:529:ILE:HD12	1.68	0.75
1:E:501:VAL:CG2	1:E:576:VAL:HG11	2.16	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:47:PRO:N	1:F:191:LYS:HD2	2.01	0.75
1:F:532:TYR:OH	1:F:536:LYS:CE	2.34	0.75
1:F:550:VAL:HG13	1:F:551:GLN:O	1.87	0.75
1:A:501:VAL:CG2	1:A:576:VAL:HG11	2.16	0.75
1:A:537:LYS:HB3	1:A:545:PHE:CE2	2.21	0.75
1:B:91:ARG:HH12	1:B:112:TYR:CA	1.85	0.75
1:C:113:GLY:N	1:C:141:ASP:CB	2.43	0.75
1:D:491:MET:O	1:D:493:VAL:CG2	2.33	0.75
1:D:550:VAL:HG13	1:D:551:GLN:O	1.87	0.75
1:E:550:VAL:HG13	1:E:551:GLN:O	1.87	0.75
1:F:245:ALA:HB1	1:F:265:VAL:HG22	1.67	0.75
1:A:166:THR:HG21	1:A:171:HIS:O	1.87	0.75
1:A:252:PHE:CE2	1:A:257:LYS:HA	2.21	0.75
1:C:496:ALA:O	1:C:500:LEU:HD23	1.85	0.75
1:D:134:LEU:HD21	1:D:143:PHE:CD1	2.22	0.75
1:D:553:ILE:HD12	1:D:555:GLU:HB2	1.67	0.75
1:E:170:GLU:OE2	1:E:287:GLU:HA	1.87	0.75
1:E:504:LEU:HD23	1:E:529:ILE:HD12	1.68	0.75
1:A:91:ARG:NH1	1:A:111:ILE:C	2.20	0.75
1:C:45:GLY:N	1:C:112:TYR:CD1	2.51	0.75
1:E:353:LYS:CE	1:E:387:PRO:CG	2.46	0.75
1:E:532:TYR:OH	1:E:536:LYS:CE	2.34	0.75
1:F:537:LYS:O	1:F:537:LYS:HD3	1.87	0.75
1:A:550:VAL:HG13	1:A:551:GLN:O	1.87	0.75
1:C:532:TYR:OH	1:C:536:LYS:CE	2.34	0.75
1:C:550:VAL:HG13	1:C:551:GLN:O	1.87	0.75
1:D:170:GLU:OE2	1:D:287:GLU:HA	1.87	0.75
1:C:169:VAL:CB	1:C:286:GLU:OE1	2.28	0.74
1:D:537:LYS:HB3	1:D:545:PHE:CE2	2.21	0.74
1:F:112:TYR:C	1:F:141:ASP:HB3	2.08	0.74
1:A:174:GLU:O	1:A:175:THR:OG1	2.05	0.74
1:B:91:ARG:NH1	1:B:111:ILE:CB	2.50	0.74
1:C:112:TYR:C	1:C:141:ASP:HB3	2.08	0.74
1:D:91:ARG:NH1	1:D:111:ILE:CB	2.50	0.74
1:D:537:LYS:O	1:D:537:LYS:HD3	1.87	0.74
1:A:282:VAL:HG12	1:A:287:GLU:CB	2.17	0.74
1:B:112:TYR:C	1:B:141:ASP:HB3	2.07	0.74
1:C:537:LYS:CG	1:C:545:PHE:HD2	1.92	0.74
1:D:110:LYS:CB	1:D:192:SER:HB3	2.10	0.74
1:E:112:TYR:C	1:E:141:ASP:HB3	2.07	0.74
1:A:166:THR:CG2	1:A:171:HIS:C	2.54	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:134:LEU:HD21	1:B:143:PHE:CD1	2.22	0.74
1:C:110:LYS:CB	1:C:190:VAL:O	2.28	0.74
1:C:504:LEU:HD23	1:C:529:ILE:HD12	1.68	0.74
1:D:501:VAL:HG13	1:D:578:LEU:HD11	1.69	0.74
1:F:91:ARG:NH1	1:F:111:ILE:CB	2.50	0.74
1:F:150:ILE:CD1	1:F:154:PHE:HE2	1.82	0.74
1:A:112:TYR:C	1:A:141:ASP:HB3	2.07	0.74
1:F:353:LYS:CE	1:F:387:PRO:CG	2.46	0.74
1:B:170:GLU:OE2	1:B:287:GLU:HA	1.87	0.74
1:C:537:LYS:O	1:C:537:LYS:HD3	1.87	0.74
1:D:352:VAL:C	1:D:364:ALA:HB2	1.86	0.74
1:D:504:LEU:HD23	1:D:529:ILE:HD12	1.68	0.74
1:E:174:GLU:O	1:E:175:THR:OG1	2.05	0.74
1:A:91:ARG:NH1	1:A:111:ILE:CB	2.50	0.74
1:B:91:ARG:HD2	1:B:111:ILE:HD12	1.67	0.74
1:E:132:LEU:CD1	1:E:148:ASP:HA	2.18	0.74
1:A:91:ARG:NH1	1:A:112:TYR:H	1.72	0.74
1:A:110:LYS:CB	1:A:192:SER:HB3	2.10	0.74
1:A:132:LEU:CD1	1:A:148:ASP:HA	2.18	0.74
1:B:134:LEU:CD2	1:B:137:ILE:CG2	2.66	0.74
1:C:91:ARG:NH1	1:C:111:ILE:CB	2.50	0.74
1:D:112:TYR:C	1:D:141:ASP:HB3	2.07	0.74
1:D:132:LEU:CD1	1:D:148:ASP:HA	2.18	0.74
1:D:252:PHE:CE2	1:D:257:LYS:HA	2.21	0.74
1:F:501:VAL:HG13	1:F:578:LEU:HD11	1.69	0.74
1:A:537:LYS:O	1:A:537:LYS:HD3	1.87	0.74
1:A:553:ILE:HD12	1:A:555:GLU:HB2	1.67	0.74
1:B:501:VAL:HG13	1:B:578:LEU:HD11	1.69	0.74
1:D:543:GLN:NE2	1:D:568:ILE:CG2	2.44	0.74
1:F:170:GLU:OE2	1:F:287:GLU:HA	1.87	0.74
1:F:355:ARG:HG3	1:F:362:MET:CE	2.18	0.74
1:B:537:LYS:O	1:B:537:LYS:HD3	1.87	0.74
1:C:248:VAL:HG22	1:C:262:ASN:OD1	1.88	0.74
1:D:113:GLY:N	1:D:141:ASP:CB	2.43	0.74
1:D:270:LEU:HD22	1:D:274:GLY:CA	2.16	0.74
1:D:537:LYS:CG	1:D:545:PHE:HD2	1.92	0.74
1:E:355:ARG:HG3	1:E:362:MET:CE	2.18	0.74
1:F:132:LEU:CD1	1:F:148:ASP:HA	2.18	0.74
1:A:355:ARG:HG3	1:A:362:MET:CE	2.18	0.73
1:A:501:VAL:HG13	1:A:578:LEU:HD11	1.69	0.73
1:D:334:TYR:HE2	1:D:365:ILE:CD1	2.01	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:170:GLU:OE2	1:A:287:GLU:HA	1.87	0.73
1:B:246:VAL:HG22	1:B:264:ILE:HB	1.70	0.73
1:E:110:LYS:CB	1:E:190:VAL:O	2.27	0.73
1:A:64:ARG:HE	1:A:189:GLU:HA	1.53	0.73
1:A:134:LEU:CD2	1:A:137:ILE:CG2	2.66	0.73
1:B:132:LEU:CD1	1:B:148:ASP:HA	2.18	0.73
1:C:170:GLU:OE2	1:C:287:GLU:HA	1.87	0.73
1:E:252:PHE:CE2	1:E:257:LYS:CB	2.72	0.73
1:B:264:ILE:HG21	1:B:269:GLN:CB	2.13	0.73
1:E:91:ARG:CZ	1:E:112:TYR:N	2.48	0.73
1:E:134:LEU:CD2	1:E:137:ILE:CG2	2.66	0.73
1:E:248:VAL:HG22	1:E:262:ASN:OD1	1.88	0.73
1:F:91:ARG:NH1	1:F:111:ILE:C	2.20	0.73
1:F:111:ILE:O	1:F:189:GLU:CB	2.34	0.73
1:B:252:PHE:CE2	1:B:257:LYS:CB	2.72	0.73
1:C:134:LEU:CD2	1:C:137:ILE:CG2	2.66	0.73
1:E:91:ARG:NH1	1:E:111:ILE:CB	2.50	0.73
1:F:166:THR:HG21	1:F:171:HIS:O	1.86	0.73
1:F:248:VAL:HG22	1:F:262:ASN:OD1	1.88	0.73
1:F:282:VAL:HG12	1:F:287:GLU:CB	2.17	0.73
1:F:553:ILE:HD12	1:F:555:GLU:HB2	1.67	0.73
1:A:47:PRO:N	1:A:191:LYS:HD2	2.01	0.73
1:A:252:PHE:CE2	1:A:257:LYS:CB	2.72	0.73
1:B:550:VAL:HG13	1:B:551:GLN:O	1.87	0.73
1:E:166:THR:HG21	1:E:171:HIS:O	1.86	0.73
1:E:537:LYS:O	1:E:537:LYS:HD3	1.87	0.73
1:B:166:THR:HG21	1:B:171:HIS:O	1.86	0.73
1:C:134:LEU:HD21	1:C:143:PHE:CD1	2.22	0.73
1:C:245:ALA:HB1	1:C:265:VAL:HG22	1.67	0.73
1:D:117:ASN:OD1	1:D:187:ASP:OD1	2.07	0.73
1:E:270:LEU:HD22	1:E:274:GLY:CA	2.16	0.73
1:F:64:ARG:HE	1:F:189:GLU:HA	1.53	0.73
1:F:134:LEU:HD21	1:F:143:PHE:CD1	2.22	0.73
1:B:64:ARG:HE	1:B:189:GLU:HA	1.53	0.73
1:D:91:ARG:NH1	1:D:112:TYR:CA	2.40	0.73
1:E:117:ASN:OD1	1:E:187:ASP:OD1	2.07	0.73
1:A:117:ASN:OD1	1:A:187:ASP:OD1	2.07	0.73
1:C:501:VAL:HG13	1:C:578:LEU:HD11	1.69	0.73
1:E:501:VAL:HG13	1:E:578:LEU:HD11	1.69	0.73
1:F:117:ASN:OD1	1:F:187:ASP:OD1	2.07	0.73
1:A:248:VAL:HG22	1:A:262:ASN:OD1	1.88	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:132:LEU:CD1	1:C:148:ASP:HA	2.18	0.73
1:C:251:VAL:HB	1:C:259:THR:OG1	1.89	0.73
1:D:248:VAL:HG22	1:D:262:ASN:OD1	1.88	0.73
1:D:251:VAL:HB	1:D:259:THR:OG1	1.89	0.73
1:E:111:ILE:O	1:E:189:GLU:CB	2.34	0.73
1:F:134:LEU:CD2	1:F:137:ILE:CG2	2.66	0.73
1:A:251:VAL:HB	1:A:259:THR:OG1	1.89	0.72
1:A:353:LYS:CE	1:A:387:PRO:CG	2.46	0.72
1:C:111:ILE:O	1:C:189:GLU:CB	2.34	0.72
1:C:117:ASN:OD1	1:C:187:ASP:OD1	2.07	0.72
1:C:270:LEU:HD22	1:C:274:GLY:CA	2.16	0.72
1:C:334:TYR:HE2	1:C:365:ILE:CD1	2.01	0.72
1:D:355:ARG:HG3	1:D:362:MET:CE	2.18	0.72
1:E:91:ARG:NH1	1:E:111:ILE:C	2.20	0.72
1:E:282:VAL:HG12	1:E:287:GLU:CB	2.17	0.72
1:A:246:VAL:HG22	1:A:264:ILE:HB	1.70	0.72
1:B:91:ARG:CZ	1:B:112:TYR:N	2.48	0.72
1:C:174:GLU:O	1:C:175:THR:OG1	2.05	0.72
1:F:252:PHE:CE2	1:F:257:LYS:CB	2.72	0.72
1:A:264:ILE:HG21	1:A:269:GLN:CB	2.13	0.72
1:D:45:GLY:N	1:D:112:TYR:CD1	2.51	0.72
1:F:251:VAL:HB	1:F:259:THR:OG1	1.89	0.72
1:A:334:TYR:HE2	1:A:365:ILE:CD1	2.01	0.72
1:B:117:ASN:OD1	1:B:187:ASP:OD1	2.07	0.72
1:B:248:VAL:HG22	1:B:262:ASN:OD1	1.88	0.72
1:D:252:PHE:CE2	1:D:257:LYS:CB	2.72	0.72
1:B:154:PHE:CE1	1:B:199:ALA:CB	2.61	0.72
1:B:282:VAL:HG12	1:B:287:GLU:CB	2.17	0.72
1:B:334:TYR:HE2	1:B:365:ILE:CD1	2.01	0.72
1:C:64:ARG:HE	1:C:189:GLU:HA	1.53	0.72
1:F:112:TYR:HA	1:F:141:ASP:CB	2.11	0.72
1:B:251:VAL:HB	1:B:259:THR:OG1	1.89	0.72
1:C:355:ARG:HG3	1:C:362:MET:CE	2.18	0.72
1:D:134:LEU:CD2	1:D:137:ILE:CG2	2.66	0.72
1:B:355:ARG:HG3	1:B:362:MET:CE	2.18	0.72
1:E:251:VAL:HB	1:E:259:THR:OG1	1.89	0.72
1:F:174:GLU:O	1:F:175:THR:OG1	2.05	0.72
1:E:64:ARG:HE	1:E:189:GLU:HA	1.53	0.72
1:F:518:ILE:HG13	1:F:521:SER:H	1.55	0.72
1:A:64:ARG:NE	1:A:189:GLU:HA	2.05	0.72
1:A:111:ILE:O	1:A:189:GLU:CB	2.34	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:64:ARG:HE	1:D:189:GLU:HA	1.53	0.72
1:D:91:ARG:NH2	1:D:112:TYR:CA	2.20	0.72
1:D:246:VAL:HG22	1:D:264:ILE:HB	1.70	0.72
1:B:518:ILE:HG13	1:B:521:SER:H	1.55	0.72
1:F:169:VAL:CB	1:F:286:GLU:OE1	2.28	0.72
1:A:175:THR:O	1:A:176:GLN:HB2	1.90	0.71
1:C:282:VAL:HG13	1:C:287:GLU:OE2	1.91	0.71
1:D:282:VAL:HG12	1:D:287:GLU:CB	2.17	0.71
1:E:497:ASN:ND2	1:E:574:ILE:HG21	2.05	0.71
1:F:497:ASN:ND2	1:F:574:ILE:HG21	2.05	0.71
1:B:175:THR:O	1:B:176:GLN:HB2	1.90	0.71
1:B:270:LEU:HD22	1:B:274:GLY:CA	2.16	0.71
1:E:246:VAL:HG22	1:E:264:ILE:HB	1.70	0.71
1:A:282:VAL:C	1:A:287:GLU:CB	2.53	0.71
1:C:252:PHE:CE2	1:C:257:LYS:CB	2.72	0.71
1:C:518:ILE:HG13	1:C:521:SER:H	1.55	0.71
1:D:166:THR:HG21	1:D:171:HIS:O	1.86	0.71
1:E:334:TYR:HE2	1:E:365:ILE:CD1	2.01	0.71
1:F:363:ARG:HH12	1:F:495:GLU:N	1.89	0.71
1:A:45:GLY:CA	1:A:190:VAL:HG22	2.21	0.71
1:A:91:ARG:CZ	1:A:112:TYR:N	2.48	0.71
1:A:363:ARG:HH12	1:A:495:GLU:N	1.89	0.71
1:B:64:ARG:NE	1:B:189:GLU:HA	2.05	0.71
1:D:497:ASN:ND2	1:D:574:ILE:HG21	2.05	0.71
1:E:45:GLY:CA	1:E:112:TYR:HD1	2.04	0.71
1:F:45:GLY:HA3	1:F:190:VAL:CG2	2.20	0.71
1:B:45:GLY:CA	1:B:112:TYR:HD1	2.04	0.71
1:B:363:ARG:HH12	1:B:495:GLU:N	1.89	0.71
1:F:45:GLY:CA	1:F:190:VAL:HG22	2.21	0.71
1:F:45:GLY:CA	1:F:112:TYR:HD1	2.04	0.71
1:A:499:PHE:HE2	1:A:532:TYR:HH	0.73	0.71
1:B:47:PRO:N	1:B:191:LYS:HD2	2.01	0.71
1:C:246:VAL:HG22	1:C:264:ILE:HB	1.70	0.71
1:B:45:GLY:CA	1:B:190:VAL:HG22	2.21	0.71
1:B:345:HIS:HB3	1:B:366:VAL:HG13	1.73	0.71
1:B:497:ASN:ND2	1:B:574:ILE:HG21	2.05	0.71
1:C:497:ASN:ND2	1:C:574:ILE:HG21	2.05	0.71
1:E:45:GLY:HA3	1:E:190:VAL:CG2	2.21	0.71
1:F:64:ARG:NE	1:F:189:GLU:HA	2.05	0.71
1:D:267:PHE:O	1:D:268:GLU:CB	2.34	0.71
1:E:150:ILE:CD1	1:E:154:PHE:HE2	1.82	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:246:VAL:HG22	1:F:264:ILE:HB	1.70	0.71
1:A:45:GLY:CA	1:A:112:TYR:HD1	2.03	0.71
1:D:45:GLY:HA2	1:D:111:ILE:CG1	2.21	0.71
1:A:45:GLY:HA2	1:A:111:ILE:CG1	2.21	0.71
1:A:541:GLU:C	1:A:568:ILE:HG13	2.12	0.71
1:B:111:ILE:O	1:B:189:GLU:CB	2.34	0.71
1:C:45:GLY:HA2	1:C:111:ILE:CG1	2.21	0.71
1:C:363:ARG:HH12	1:C:495:GLU:N	1.89	0.71
1:C:541:GLU:C	1:C:568:ILE:HG13	2.12	0.71
1:D:518:ILE:HG13	1:D:521:SER:H	1.55	0.71
1:E:518:ILE:HG13	1:E:521:SER:H	1.55	0.71
1:F:43:GLU:O	1:F:189:GLU:OE2	1.97	0.71
1:B:45:GLY:HA3	1:B:190:VAL:CG2	2.20	0.70
1:C:345:HIS:HB3	1:C:366:VAL:HG13	1.73	0.70
1:C:543:GLN:NE2	1:C:568:ILE:CG2	2.44	0.70
1:D:45:GLY:HA3	1:D:190:VAL:CG2	2.21	0.70
1:D:45:GLY:CA	1:D:112:TYR:HD1	2.03	0.70
1:D:353:LYS:CE	1:D:387:PRO:CG	2.46	0.70
1:E:44:GLY:CA	1:E:112:TYR:CG	2.64	0.70
1:E:282:VAL:HG13	1:E:287:GLU:OE2	1.91	0.70
1:F:45:GLY:HA2	1:F:111:ILE:CG1	2.21	0.70
1:A:497:ASN:ND2	1:A:574:ILE:HG21	2.05	0.70
1:A:537:LYS:CG	1:A:545:PHE:HD2	1.92	0.70
1:B:47:PRO:HD3	1:B:191:LYS:HD2	1.64	0.70
1:B:541:GLU:C	1:B:568:ILE:HG13	2.12	0.70
1:D:111:ILE:O	1:D:189:GLU:CB	2.34	0.70
1:A:45:GLY:HA3	1:A:190:VAL:CG2	2.21	0.70
1:B:45:GLY:HA2	1:B:111:ILE:CG1	2.21	0.70
1:B:282:VAL:HG13	1:B:287:GLU:OE2	1.91	0.70
1:E:543:GLN:NE2	1:E:568:ILE:CG2	2.44	0.70
1:B:174:GLU:O	1:B:175:THR:OG1	2.05	0.70
1:C:45:GLY:HA3	1:C:190:VAL:CG2	2.20	0.70
1:C:45:GLY:CA	1:C:112:TYR:HD1	2.04	0.70
1:C:166:THR:HG21	1:C:171:HIS:O	1.86	0.70
1:C:267:PHE:O	1:C:268:GLU:CB	2.34	0.70
1:D:345:HIS:HB3	1:D:366:VAL:HG13	1.72	0.70
1:F:110:LYS:CB	1:F:190:VAL:O	2.27	0.70
1:C:499:PHE:HE2	1:C:532:TYR:HH	0.71	0.70
1:D:264:ILE:HG21	1:D:269:GLN:CB	2.13	0.70
1:F:541:GLU:C	1:F:568:ILE:HG13	2.12	0.70
1:A:270:LEU:HD22	1:A:274:GLY:CA	2.16	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:275:GLU:O	1:A:277:PRO:HD3	1.91	0.70
1:C:175:THR:O	1:C:176:GLN:HB2	1.90	0.70
1:D:282:VAL:HG13	1:D:287:GLU:OE2	1.91	0.70
1:E:45:GLY:CA	1:E:190:VAL:HG22	2.21	0.70
1:E:175:THR:O	1:E:176:GLN:HB2	1.90	0.70
1:E:363:ARG:HH12	1:E:495:GLU:N	1.89	0.70
1:F:110:LYS:CB	1:F:192:SER:HB3	2.10	0.70
1:F:175:THR:O	1:F:176:GLN:HB2	1.90	0.70
1:F:282:VAL:HG13	1:F:287:GLU:OE2	1.91	0.70
1:F:334:TYR:HE2	1:F:365:ILE:CD1	2.01	0.70
1:A:512:PHE:CE1	1:A:517:THR:OG1	2.45	0.70
1:E:541:GLU:C	1:E:568:ILE:HG13	2.12	0.70
1:F:91:ARG:CZ	1:F:112:TYR:N	2.48	0.70
1:F:270:LEU:HD22	1:F:274:GLY:CA	2.16	0.70
1:F:512:PHE:CE1	1:F:517:THR:OG1	2.45	0.70
1:F:550:VAL:HG11	1:F:556:GLY:HA2	1.74	0.70
1:A:518:ILE:HG13	1:A:521:SER:H	1.55	0.70
1:B:91:ARG:NH1	1:B:112:TYR:CA	2.40	0.70
1:C:45:GLY:CA	1:C:190:VAL:HG22	2.21	0.70
1:C:64:ARG:NE	1:C:189:GLU:HA	2.05	0.70
1:D:363:ARG:HH12	1:D:495:GLU:N	1.89	0.70
1:E:345:HIS:HB3	1:E:366:VAL:HG13	1.73	0.70
1:E:550:VAL:HG11	1:E:556:GLY:HA2	1.74	0.70
1:A:453:ASN:HD22	1:A:454:GLU:H	1.39	0.70
1:B:267:PHE:O	1:B:268:GLU:CB	2.34	0.70
1:B:543:GLN:NE2	1:B:568:ILE:CG2	2.44	0.70
1:E:275:GLU:O	1:E:277:PRO:HD3	1.91	0.70
1:A:282:VAL:HG13	1:A:287:GLU:OE2	1.91	0.70
1:A:345:HIS:HB3	1:A:366:VAL:HG13	1.72	0.70
1:A:532:TYR:CZ	1:A:536:LYS:CE	2.75	0.70
1:D:45:GLY:CA	1:D:190:VAL:HG22	2.21	0.70
1:D:175:THR:O	1:D:176:GLN:HB2	1.90	0.70
1:E:512:PHE:CE1	1:E:517:THR:OG1	2.45	0.70
1:F:499:PHE:HE2	1:F:532:TYR:HH	0.71	0.70
1:B:252:PHE:HA	1:B:256:GLU:O	1.92	0.69
1:B:275:GLU:O	1:B:277:PRO:HD3	1.91	0.69
1:D:453:ASN:HD22	1:D:454:GLU:H	1.38	0.69
1:E:45:GLY:HA2	1:E:111:ILE:CG1	2.21	0.69
1:E:91:ARG:NH2	1:E:112:TYR:CA	2.20	0.69
1:E:394:ASN:CG	1:E:457:ILE:CD1	2.36	0.69
1:F:275:GLU:O	1:F:277:PRO:HD3	1.91	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:550:VAL:HG11	1:D:556:GLY:HA2	1.74	0.69
1:E:64:ARG:NE	1:E:189:GLU:HA	2.05	0.69
1:F:543:GLN:NE2	1:F:568:ILE:CG2	2.44	0.69
1:A:491:MET:C	1:A:493:VAL:HG21	2.13	0.69
1:B:512:PHE:CE1	1:B:517:THR:OG1	2.45	0.69
1:C:91:ARG:NH1	1:C:112:TYR:CA	2.40	0.69
1:F:453:ASN:HD22	1:F:454:GLU:H	1.39	0.69
1:F:532:TYR:CZ	1:F:536:LYS:CE	2.75	0.69
1:A:245:ALA:HB1	1:A:265:VAL:CG2	2.23	0.69
1:B:453:ASN:HD22	1:B:454:GLU:H	1.39	0.69
1:C:252:PHE:HA	1:C:256:GLU:O	1.93	0.69
1:C:275:GLU:O	1:C:277:PRO:HD3	1.91	0.69
1:C:282:VAL:HG12	1:C:287:GLU:CB	2.17	0.69
1:D:245:ALA:HB1	1:D:265:VAL:CG2	2.23	0.69
1:D:252:PHE:HA	1:D:256:GLU:O	1.93	0.69
1:D:275:GLU:O	1:D:277:PRO:HD3	1.91	0.69
1:E:112:TYR:CA	1:E:141:ASP:CG	2.60	0.69
1:F:264:ILE:HG21	1:F:269:GLN:CB	2.13	0.69
1:C:363:ARG:NH1	1:C:495:GLU:HA	2.08	0.69
1:E:245:ALA:HB1	1:E:265:VAL:CG2	2.23	0.69
1:F:345:HIS:HB3	1:F:366:VAL:HG13	1.73	0.69
1:A:252:PHE:HA	1:A:256:GLU:O	1.93	0.69
1:A:374:LYS:HE2	1:A:451:GLU:OE1	1.93	0.69
1:B:363:ARG:NH1	1:B:495:GLU:HA	2.08	0.69
1:B:374:LYS:HE2	1:B:451:GLU:OE1	1.93	0.69
1:B:532:TYR:CZ	1:B:536:LYS:CE	2.75	0.69
1:D:541:GLU:C	1:D:568:ILE:HG13	2.12	0.69
1:A:550:VAL:HG11	1:A:556:GLY:HA2	1.74	0.69
1:B:112:TYR:CD2	1:B:189:GLU:OE2	2.41	0.69
1:C:453:ASN:HD22	1:C:454:GLU:H	1.39	0.69
1:E:453:ASN:HD22	1:E:454:GLU:H	1.39	0.69
1:A:45:GLY:CA	1:A:112:TYR:CD1	2.76	0.69
1:C:491:MET:C	1:C:493:VAL:HG21	2.13	0.69
1:D:64:ARG:NE	1:D:189:GLU:HA	2.05	0.69
1:D:363:ARG:NH1	1:D:495:GLU:HA	2.08	0.69
1:E:252:PHE:HA	1:E:256:GLU:O	1.92	0.69
1:E:267:PHE:O	1:E:268:GLU:CB	2.34	0.69
1:F:491:MET:C	1:F:493:VAL:HG21	2.13	0.69
1:C:512:PHE:CE1	1:C:517:THR:OG1	2.45	0.69
1:D:512:PHE:CE1	1:D:517:THR:OG1	2.45	0.69
1:E:110:LYS:CB	1:E:192:SER:HB3	2.10	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:132:LEU:CG	1:F:148:ASP:CA	2.56	0.69
1:B:245:ALA:HB1	1:B:265:VAL:CG2	2.23	0.68
1:B:532:TYR:CE2	1:B:536:LYS:HE2	2.29	0.68
1:C:374:LYS:HE2	1:C:451:GLU:OE1	1.93	0.68
1:F:45:GLY:CA	1:F:112:TYR:CD1	2.76	0.68
1:B:491:MET:C	1:B:493:VAL:HG21	2.13	0.68
1:C:245:ALA:HB1	1:C:265:VAL:CG2	2.23	0.68
1:E:491:MET:C	1:E:493:VAL:HG21	2.13	0.68
1:F:245:ALA:HB1	1:F:265:VAL:CG2	2.23	0.68
1:B:499:PHE:HE2	1:B:532:TYR:HH	0.69	0.68
1:B:526:LYS:HE3	1:B:546:PRO:HG2	1.76	0.68
1:C:532:TYR:CE2	1:C:536:LYS:HE2	2.28	0.68
1:E:532:TYR:CE2	1:E:536:LYS:HE2	2.29	0.68
1:C:91:ARG:NH2	1:C:112:TYR:CA	2.20	0.68
1:C:110:LYS:NZ	1:C:113:GLY:HA3	2.09	0.68
1:D:491:MET:C	1:D:493:VAL:HG21	2.13	0.68
1:D:532:TYR:CE2	1:D:536:LYS:HE2	2.29	0.68
1:E:110:LYS:NZ	1:E:113:GLY:HA3	2.09	0.68
1:E:175:THR:OG1	1:E:198:GLY:HA2	1.94	0.68
1:E:254:ASP:O	1:E:255:LEU:HB2	1.94	0.68
1:F:537:LYS:CG	1:F:545:PHE:HD2	1.92	0.68
1:B:512:PHE:HE1	1:B:517:THR:HG1	1.42	0.68
1:D:254:ASP:O	1:D:255:LEU:HB2	1.94	0.68
1:E:532:TYR:CZ	1:E:536:LYS:CE	2.75	0.68
1:F:374:LYS:HE2	1:F:451:GLU:OE1	1.93	0.68
1:A:363:ARG:NH1	1:A:495:GLU:HA	2.08	0.68
1:B:110:LYS:CB	1:B:190:VAL:O	2.28	0.68
1:B:183:LEU:HD11	1:B:192:SER:HG	1.57	0.68
1:D:374:LYS:HE2	1:D:451:GLU:OE1	1.93	0.68
1:E:537:LYS:CG	1:E:545:PHE:HD2	1.92	0.68
1:F:252:PHE:HA	1:F:256:GLU:O	1.93	0.68
1:F:282:VAL:C	1:F:287:GLU:CB	2.53	0.68
1:A:110:LYS:CB	1:A:190:VAL:O	2.28	0.68
1:A:532:TYR:CE2	1:A:536:LYS:HE2	2.29	0.68
1:B:45:GLY:CA	1:B:112:TYR:CD1	2.76	0.68
1:D:45:GLY:CA	1:D:112:TYR:CD1	2.76	0.68
1:D:175:THR:OG1	1:D:198:GLY:HA2	1.94	0.68
1:A:282:VAL:CG1	1:A:287:GLU:CD	2.37	0.68
1:A:526:LYS:HE3	1:A:546:PRO:HG2	1.76	0.68
1:B:271:ASN:N	1:B:277:PRO:HD3	2.09	0.68
1:C:45:GLY:CA	1:C:112:TYR:CD1	2.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:175:THR:OG1	1:C:198:GLY:HA2	1.94	0.68
1:D:499:PHE:HE2	1:D:532:TYR:HH	0.69	0.68
1:E:363:ARG:NH1	1:E:495:GLU:HA	2.08	0.68
1:B:112:TYR:CA	1:B:141:ASP:CG	2.60	0.68
1:C:47:PRO:CD	1:C:191:LYS:CD	2.18	0.68
1:C:271:ASN:N	1:C:277:PRO:HD3	2.09	0.68
1:C:532:TYR:CZ	1:C:536:LYS:CE	2.75	0.68
1:A:47:PRO:CD	1:A:191:LYS:CD	2.18	0.67
1:F:512:PHE:HE1	1:F:517:THR:HG1	1.41	0.67
1:A:271:ASN:N	1:A:277:PRO:HD3	2.09	0.67
1:B:184:LYS:O	1:B:186:GLY:HA2	1.95	0.67
1:B:550:VAL:HG11	1:B:556:GLY:HA2	1.74	0.67
1:C:107:ILE:CB	1:C:193:TYR:CD2	2.71	0.67
1:C:523:SER:O	1:C:524:ILE:HB	1.95	0.67
1:C:550:VAL:HG11	1:C:556:GLY:HA2	1.74	0.67
1:D:363:ARG:NH1	1:D:495:GLU:CA	2.57	0.67
1:E:47:PRO:HD3	1:E:191:LYS:HD2	1.64	0.67
1:E:270:LEU:C	1:E:277:PRO:HD3	2.15	0.67
1:F:526:LYS:HE3	1:F:546:PRO:HG2	1.76	0.67
1:F:532:TYR:CE2	1:F:536:LYS:HE2	2.28	0.67
1:B:175:THR:OG1	1:B:198:GLY:HA2	1.94	0.67
1:C:110:LYS:CB	1:C:192:SER:HB3	2.10	0.67
1:D:271:ASN:N	1:D:277:PRO:HD3	2.09	0.67
1:D:532:TYR:CZ	1:D:536:LYS:CE	2.75	0.67
1:F:44:GLY:CA	1:F:112:TYR:CG	2.64	0.67
1:F:175:THR:OG1	1:F:198:GLY:HA2	1.94	0.67
1:D:91:ARG:CZ	1:D:112:TYR:N	2.48	0.67
1:D:270:LEU:C	1:D:277:PRO:HD3	2.15	0.67
1:E:45:GLY:CA	1:E:112:TYR:CD1	2.76	0.67
1:A:112:TYR:CD2	1:A:189:GLU:OE2	2.41	0.67
1:B:363:ARG:NH1	1:B:495:GLU:CA	2.57	0.67
1:C:282:VAL:C	1:C:287:GLU:CB	2.53	0.67
1:C:560:ARG:HB2	1:C:579:VAL:HG12	1.77	0.67
1:F:353:LYS:CD	1:F:387:PRO:HG3	2.24	0.67
1:F:363:ARG:NH1	1:F:495:GLU:HA	2.08	0.67
1:F:523:SER:O	1:F:524:ILE:HB	1.95	0.67
1:A:184:LYS:O	1:A:186:GLY:HA2	1.95	0.67
1:D:353:LYS:CD	1:D:387:PRO:HG3	2.24	0.67
1:E:526:LYS:HE3	1:E:546:PRO:HG2	1.76	0.67
1:F:112:TYR:CD2	1:F:189:GLU:OE2	2.41	0.67
1:A:47:PRO:HD3	1:A:191:LYS:HD2	1.64	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:254:ASP:O	1:B:255:LEU:HB2	1.94	0.67
1:C:363:ARG:NH1	1:C:495:GLU:CA	2.57	0.67
1:E:374:LYS:HE2	1:E:451:GLU:OE1	1.93	0.67
1:F:184:LYS:O	1:F:186:GLY:HA2	1.95	0.67
1:A:267:PHE:O	1:A:268:GLU:CB	2.34	0.67
1:A:523:SER:O	1:A:524:ILE:HB	1.95	0.67
1:D:282:VAL:C	1:D:287:GLU:CB	2.53	0.67
1:F:47:PRO:CD	1:F:191:LYS:CD	2.18	0.67
1:F:532:TYR:OH	1:F:536:LYS:HE2	1.95	0.67
1:B:523:SER:O	1:B:524:ILE:HB	1.95	0.67
1:D:110:LYS:NZ	1:D:113:GLY:HA3	2.09	0.67
1:E:184:LYS:O	1:E:186:GLY:HA2	1.95	0.67
1:F:270:LEU:C	1:F:277:PRO:HD3	2.15	0.67
1:A:175:THR:OG1	1:A:198:GLY:HA2	1.94	0.66
1:A:254:ASP:O	1:A:255:LEU:HB2	1.94	0.66
1:E:353:LYS:CD	1:E:387:PRO:HG3	2.24	0.66
1:A:543:GLN:NE2	1:A:568:ILE:CG2	2.44	0.66
1:C:140:ASP:O	1:C:141:ASP:CB	2.43	0.66
1:C:363:ARG:HH22	1:C:494:GLY:C	1.99	0.66
1:D:363:ARG:HH22	1:D:494:GLY:C	1.99	0.66
1:E:282:VAL:C	1:E:287:GLU:CB	2.53	0.66
1:A:363:ARG:NH1	1:A:495:GLU:CA	2.57	0.66
1:D:110:LYS:CE	1:D:113:GLY:CA	2.52	0.66
1:E:363:ARG:NH1	1:E:495:GLU:CA	2.57	0.66
1:F:271:ASN:N	1:F:277:PRO:HD3	2.09	0.66
1:B:363:ARG:HH22	1:B:494:GLY:C	1.99	0.66
1:D:526:LYS:HE3	1:D:546:PRO:HG2	1.76	0.66
1:E:110:LYS:CE	1:E:113:GLY:CA	2.52	0.66
1:E:271:ASN:N	1:E:277:PRO:HD3	2.09	0.66
1:F:254:ASP:O	1:F:255:LEU:HB2	1.94	0.66
1:B:270:LEU:C	1:B:277:PRO:HD3	2.15	0.66
1:C:91:ARG:CZ	1:C:112:TYR:N	2.48	0.66
1:C:184:LYS:O	1:C:186:GLY:HA2	1.95	0.66
1:E:523:SER:O	1:E:524:ILE:HB	1.95	0.66
1:A:363:ARG:HH22	1:A:494:GLY:C	1.99	0.66
1:B:43:GLU:O	1:B:189:GLU:OE2	1.97	0.66
1:B:140:ASP:O	1:B:141:ASP:CB	2.43	0.66
1:C:254:ASP:O	1:C:255:LEU:HB2	1.94	0.66
1:C:270:LEU:C	1:C:277:PRO:HD3	2.15	0.66
1:D:110:LYS:CB	1:D:190:VAL:O	2.28	0.66
1:E:121:VAL:HG22	1:E:181:LEU:HD13	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:363:ARG:HH22	1:E:494:GLY:C	1.99	0.66
1:F:121:VAL:HG22	1:F:181:LEU:HD13	1.78	0.66
1:F:363:ARG:NH1	1:F:495:GLU:CA	2.57	0.66
1:D:121:VAL:CG2	1:D:132:LEU:HD22	2.26	0.66
1:E:258:GLN:C	1:E:259:THR:HG23	2.16	0.66
1:F:267:PHE:O	1:F:268:GLU:CB	2.34	0.66
1:F:363:ARG:HH22	1:F:494:GLY:C	1.99	0.66
1:A:110:LYS:NZ	1:A:113:GLY:HA3	2.09	0.66
1:B:363:ARG:NH2	1:B:498:ASP:CG	2.49	0.66
1:C:526:LYS:HE3	1:C:546:PRO:HG2	1.76	0.66
1:D:121:VAL:HG22	1:D:181:LEU:HD13	1.78	0.66
1:D:184:LYS:O	1:D:186:GLY:HA2	1.95	0.66
1:D:258:GLN:C	1:D:259:THR:HG23	2.16	0.66
1:D:523:SER:O	1:D:524:ILE:HB	1.95	0.66
1:E:338:LEU:HD13	1:E:412:MET:HB3	1.78	0.66
1:E:560:ARG:HB2	1:E:579:VAL:HG12	1.77	0.66
1:F:114:ASN:HA	1:F:137:ILE:CD1	2.25	0.66
1:F:363:ARG:NH2	1:F:498:ASP:CG	2.49	0.66
1:B:560:ARG:HB2	1:B:579:VAL:HG12	1.77	0.66
1:C:112:TYR:CD2	1:C:189:GLU:OE2	2.41	0.66
1:C:363:ARG:NH2	1:C:498:ASP:CG	2.49	0.66
1:E:264:ILE:HD12	1:E:269:GLN:CG	2.03	0.66
1:C:114:ASN:OD1	1:C:115:VAL:N	2.29	0.66
1:C:121:VAL:CG2	1:C:132:LEU:HD22	2.26	0.66
1:C:121:VAL:HG22	1:C:181:LEU:HD13	1.78	0.66
1:D:43:GLU:O	1:D:189:GLU:OE2	1.97	0.66
1:D:140:ASP:O	1:D:141:ASP:CB	2.43	0.66
1:E:363:ARG:NH2	1:E:498:ASP:CG	2.49	0.66
1:E:499:PHE:HE2	1:E:532:TYR:HH	0.67	0.66
1:F:537:LYS:HB2	1:F:545:PHE:CD2	2.31	0.66
1:D:560:ARG:HB2	1:D:579:VAL:HG12	1.77	0.65
1:E:537:LYS:HB2	1:E:545:PHE:CD2	2.32	0.65
1:E:121:VAL:CG2	1:E:132:LEU:HD22	2.26	0.65
1:F:47:PRO:HD3	1:F:191:LYS:HD2	1.64	0.65
1:B:110:LYS:NZ	1:B:113:GLY:HA3	2.09	0.65
1:C:532:TYR:OH	1:C:536:LYS:HE2	1.95	0.65
1:B:47:PRO:CD	1:B:191:LYS:CD	2.18	0.65
1:B:338:LEU:HD13	1:B:412:MET:HB3	1.78	0.65
1:E:275:GLU:O	1:E:277:PRO:CD	2.45	0.65
1:F:338:LEU:HD13	1:F:412:MET:HB3	1.78	0.65
1:A:258:GLN:C	1:A:259:THR:HG23	2.16	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:114:ASN:OD1	1:E:115:VAL:N	2.29	0.65
1:F:275:GLU:O	1:F:277:PRO:CD	2.45	0.65
1:F:560:ARG:HB2	1:F:579:VAL:HG12	1.77	0.65
1:A:270:LEU:C	1:A:277:PRO:HD3	2.15	0.65
1:C:275:GLU:O	1:C:277:PRO:CD	2.45	0.65
1:C:338:LEU:HD13	1:C:412:MET:HB3	1.78	0.65
1:D:174:GLU:O	1:D:175:THR:OG1	2.05	0.65
1:F:258:GLN:C	1:F:259:THR:HG23	2.16	0.65
1:A:121:VAL:HG22	1:A:181:LEU:HD13	1.78	0.65
1:B:121:VAL:HG22	1:B:181:LEU:HD13	1.78	0.65
1:F:110:LYS:NZ	1:F:113:GLY:HA3	2.09	0.65
1:A:44:GLY:CA	1:A:112:TYR:CG	2.64	0.65
1:A:114:ASN:OD1	1:A:115:VAL:N	2.29	0.65
1:A:140:ASP:O	1:A:141:ASP:CB	2.43	0.65
1:A:537:LYS:HB2	1:A:545:PHE:CD2	2.31	0.65
1:A:560:ARG:HB2	1:A:579:VAL:HG12	1.77	0.65
1:C:258:GLN:C	1:C:259:THR:HG23	2.16	0.65
1:D:519:ASN:O	1:D:522:ALA:HB3	1.97	0.65
1:D:537:LYS:HB2	1:D:545:PHE:CD2	2.31	0.65
1:E:43:GLU:O	1:E:189:GLU:OE2	1.97	0.65
1:A:114:ASN:HA	1:A:137:ILE:CD1	2.25	0.65
1:B:282:VAL:C	1:B:287:GLU:CB	2.53	0.65
1:C:392:VAL:O	1:C:456:GLY:HA3	1.97	0.65
1:E:258:GLN:O	1:E:259:THR:CG2	2.45	0.65
1:F:91:ARG:NH2	1:F:112:TYR:CA	2.20	0.65
1:F:258:GLN:O	1:F:259:THR:CG2	2.45	0.65
1:A:532:TYR:OH	1:A:536:LYS:HE2	1.95	0.64
1:C:280:VAL:O	1:C:284:ALA:HB2	1.97	0.64
1:D:363:ARG:NH2	1:D:498:ASP:CG	2.49	0.64
1:D:532:TYR:OH	1:D:536:LYS:HE2	1.95	0.64
1:A:275:GLU:O	1:A:277:PRO:CD	2.45	0.64
1:A:338:LEU:HD13	1:A:412:MET:HB3	1.78	0.64
1:A:392:VAL:O	1:A:456:GLY:HA3	1.97	0.64
1:B:107:ILE:CB	1:B:193:TYR:CD2	2.71	0.64
1:B:275:GLU:O	1:B:277:PRO:CD	2.45	0.64
1:B:392:VAL:O	1:B:456:GLY:HA3	1.97	0.64
1:D:47:PRO:CD	1:D:191:LYS:CD	2.18	0.64
1:E:392:VAL:O	1:E:456:GLY:HA3	1.97	0.64
1:A:43:GLU:O	1:A:189:GLU:OE2	1.97	0.64
1:C:110:LYS:CE	1:C:113:GLY:CA	2.52	0.64
1:A:121:VAL:CG2	1:A:132:LEU:HD22	2.26	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:519:ASN:O	1:A:522:ALA:HB3	1.97	0.64
1:B:121:VAL:CG2	1:B:132:LEU:HD22	2.26	0.64
1:C:114:ASN:HA	1:C:137:ILE:CD1	2.25	0.64
1:D:275:GLU:O	1:D:277:PRO:CD	2.45	0.64
1:D:338:LEU:HD13	1:D:412:MET:HB3	1.78	0.64
1:E:280:VAL:O	1:E:284:ALA:HB2	1.97	0.64
1:E:381:GLN:HB2	1:E:455:ASN:ND2	2.13	0.64
1:E:519:ASN:O	1:E:522:ALA:HB3	1.97	0.64
1:F:121:VAL:CG2	1:F:132:LEU:HD22	2.26	0.64
1:F:280:VAL:O	1:F:284:ALA:HB2	1.97	0.64
1:F:392:VAL:O	1:F:456:GLY:HA3	1.97	0.64
1:A:280:VAL:O	1:A:284:ALA:HB2	1.97	0.64
1:A:363:ARG:NH2	1:A:498:ASP:CG	2.49	0.64
1:B:258:GLN:C	1:B:259:THR:HG23	2.16	0.64
1:C:258:GLN:O	1:C:259:THR:CG2	2.45	0.64
1:D:280:VAL:O	1:D:284:ALA:HB2	1.97	0.64
1:F:353:LYS:CD	1:F:387:PRO:HG2	2.28	0.64
1:A:107:ILE:CB	1:A:193:TYR:CD2	2.71	0.64
1:D:392:VAL:O	1:D:456:GLY:HA3	1.97	0.64
1:E:113:GLY:HA3	1:E:143:PHE:HE1	1.62	0.64
1:A:264:ILE:CD1	1:A:269:GLN:HB2	2.18	0.64
1:B:114:ASN:HA	1:B:137:ILE:CD1	2.25	0.64
1:D:381:GLN:HB2	1:D:455:ASN:ND2	2.13	0.64
1:E:353:LYS:CD	1:E:387:PRO:HG2	2.28	0.64
1:F:519:ASN:O	1:F:522:ALA:HB3	1.97	0.64
1:D:132:LEU:CG	1:D:148:ASP:CA	2.56	0.64
1:F:381:GLN:HB2	1:F:455:ASN:ND2	2.13	0.64
1:B:363:ARG:CZ	1:B:498:ASP:OD2	2.46	0.64
1:C:113:GLY:HA3	1:C:143:PHE:HE1	1.62	0.64
1:D:113:GLY:CA	1:D:189:GLU:HB2	2.25	0.64
1:A:170:GLU:HB2	1:A:286:GLU:O	1.98	0.64
1:A:258:GLN:O	1:A:259:THR:CG2	2.45	0.64
1:C:134:LEU:HA	1:C:146:VAL:HG12	1.80	0.64
1:C:537:LYS:HB2	1:C:545:PHE:CD2	2.31	0.64
1:D:166:THR:HG23	1:D:171:HIS:C	2.16	0.64
1:D:258:GLN:O	1:D:259:THR:CG2	2.45	0.64
1:F:264:ILE:CD1	1:F:269:GLN:HB2	2.18	0.64
1:A:270:LEU:HD12	1:A:270:LEU:C	2.19	0.63
1:B:280:VAL:O	1:B:284:ALA:HB2	1.97	0.63
1:C:363:ARG:CZ	1:C:498:ASP:OD2	2.46	0.63
1:E:363:ARG:CZ	1:E:498:ASP:OD2	2.46	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:270:LEU:HD12	1:B:270:LEU:C	2.19	0.63
1:B:394:ASN:HB3	1:B:458:ILE:H	1.64	0.63
1:E:134:LEU:HA	1:E:146:VAL:HG12	1.80	0.63
1:B:113:GLY:HA3	1:B:143:PHE:HE1	1.62	0.63
1:B:170:GLU:HB2	1:B:286:GLU:O	1.98	0.63
1:D:134:LEU:HA	1:D:146:VAL:HG12	1.81	0.63
1:E:270:LEU:HD12	1:E:270:LEU:C	2.19	0.63
1:F:537:LYS:HG2	1:F:542:ILE:O	1.99	0.63
1:B:258:GLN:O	1:B:259:THR:CG2	2.45	0.63
1:B:532:TYR:OH	1:B:536:LYS:HE2	1.95	0.63
1:B:537:LYS:HG2	1:B:542:ILE:O	1.99	0.63
1:B:537:LYS:HB2	1:B:545:PHE:CD2	2.32	0.63
1:D:363:ARG:CZ	1:D:498:ASP:OD2	2.46	0.63
1:A:252:PHE:CD2	1:A:257:LYS:CA	2.81	0.63
1:B:519:ASN:O	1:B:522:ALA:HB3	1.97	0.63
1:C:394:ASN:HB3	1:C:458:ILE:N	2.14	0.63
1:D:537:LYS:HG2	1:D:542:ILE:O	1.99	0.63
1:E:112:TYR:CD2	1:E:189:GLU:OE2	2.41	0.63
1:F:140:ASP:O	1:F:141:ASP:CB	2.43	0.63
1:F:363:ARG:CZ	1:F:498:ASP:OD2	2.46	0.63
1:B:277:PRO:HA	1:B:282:VAL:CG2	2.29	0.63
1:C:270:LEU:HD12	1:C:270:LEU:C	2.19	0.63
1:C:381:GLN:HB2	1:C:455:ASN:ND2	2.13	0.63
1:C:537:LYS:HG2	1:C:542:ILE:O	1.99	0.63
1:D:114:ASN:HA	1:D:137:ILE:CD1	2.25	0.63
1:E:107:ILE:CB	1:E:193:TYR:CD2	2.71	0.63
1:D:394:ASN:HB3	1:D:458:ILE:H	1.64	0.63
1:E:170:GLU:HB2	1:E:286:GLU:O	1.98	0.63
1:A:277:PRO:HA	1:A:282:VAL:CG2	2.29	0.63
1:B:134:LEU:HA	1:B:146:VAL:HG12	1.81	0.63
1:C:519:ASN:O	1:C:522:ALA:HB3	1.97	0.63
1:D:504:LEU:HD21	1:D:529:ILE:HG23	1.80	0.63
1:E:394:ASN:HB3	1:E:458:ILE:N	2.14	0.63
1:E:537:LYS:HG2	1:E:542:ILE:O	1.99	0.63
1:A:394:ASN:HB3	1:A:458:ILE:H	1.64	0.63
1:A:394:ASN:HB3	1:A:458:ILE:N	2.14	0.63
1:A:537:LYS:HG2	1:A:542:ILE:O	1.99	0.63
1:B:394:ASN:CG	1:B:457:ILE:CD1	2.36	0.63
1:D:91:ARG:HH22	1:D:141:ASP:CG	2.00	0.63
1:E:166:THR:HG23	1:E:171:HIS:C	2.16	0.63
1:E:394:ASN:HB3	1:E:458:ILE:H	1.64	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:504:LEU:HD21	1:F:529:ILE:HG23	1.80	0.63
1:A:381:GLN:HB2	1:A:455:ASN:ND2	2.13	0.62
1:A:504:LEU:HD21	1:A:529:ILE:HG23	1.80	0.62
1:B:44:GLY:CA	1:B:112:TYR:CG	2.64	0.62
1:D:253:GLY:O	1:D:254:ASP:HB2	1.99	0.62
1:D:270:LEU:HD12	1:D:270:LEU:C	2.19	0.62
1:D:394:ASN:HB3	1:D:458:ILE:N	2.14	0.62
1:F:270:LEU:HD12	1:F:270:LEU:C	2.19	0.62
1:B:113:GLY:CA	1:B:189:GLU:HB2	2.25	0.62
1:C:170:GLU:HB2	1:C:286:GLU:O	1.98	0.62
1:C:253:GLY:O	1:C:254:ASP:HB2	1.99	0.62
1:D:170:GLU:HB2	1:D:286:GLU:O	1.98	0.62
1:F:252:PHE:CE2	1:F:257:LYS:CA	2.82	0.62
1:F:394:ASN:HB3	1:F:458:ILE:H	1.64	0.62
1:B:394:ASN:HB3	1:B:458:ILE:N	2.14	0.62
1:D:112:TYR:CD2	1:D:189:GLU:OE2	2.41	0.62
1:E:512:PHE:HE1	1:E:517:THR:HG1	1.44	0.62
1:C:277:PRO:HA	1:C:282:VAL:CG2	2.29	0.62
1:D:174:GLU:C	1:D:175:THR:HG1	1.95	0.62
1:F:134:LEU:HA	1:F:146:VAL:HG12	1.80	0.62
1:F:170:GLU:HB2	1:F:286:GLU:O	1.98	0.62
1:B:252:PHE:CE2	1:B:257:LYS:CA	2.82	0.62
1:A:541:GLU:H	1:A:568:ILE:CG1	2.13	0.62
1:C:543:GLN:CD	1:C:568:ILE:HG23	2.20	0.62
1:D:252:PHE:CE2	1:D:257:LYS:CA	2.82	0.62
1:A:252:PHE:CE2	1:A:257:LYS:CA	2.82	0.62
1:C:504:LEU:HD21	1:C:529:ILE:HG23	1.80	0.62
1:D:107:ILE:CB	1:D:193:TYR:CD2	2.71	0.62
1:E:504:LEU:HD21	1:E:529:ILE:HG23	1.80	0.62
1:E:532:TYR:OH	1:E:536:LYS:HE2	1.95	0.62
1:B:114:ASN:OD1	1:B:115:VAL:N	2.29	0.62
1:C:394:ASN:HB3	1:C:458:ILE:H	1.64	0.62
1:D:44:GLY:CA	1:D:112:TYR:CG	2.64	0.62
1:D:113:GLY:HA3	1:D:143:PHE:HE1	1.62	0.62
1:F:107:ILE:CB	1:F:193:TYR:CD2	2.71	0.62
1:F:277:PRO:HA	1:F:282:VAL:CG2	2.29	0.62
1:B:541:GLU:H	1:B:568:ILE:CG1	2.13	0.62
1:D:114:ASN:OD1	1:D:115:VAL:N	2.29	0.62
1:F:394:ASN:HB3	1:F:458:ILE:N	2.14	0.62
1:A:134:LEU:HA	1:A:146:VAL:HG12	1.80	0.62
1:B:252:PHE:CD2	1:B:257:LYS:CA	2.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:264:ILE:CD1	1:B:269:GLN:HB2	2.18	0.62
1:C:43:GLU:O	1:C:189:GLU:OE2	1.97	0.62
1:A:166:THR:HG22	1:A:172:ASP:CB	2.30	0.61
1:B:381:GLN:HB2	1:B:455:ASN:ND2	2.13	0.61
1:C:252:PHE:CE2	1:C:257:LYS:CA	2.82	0.61
1:D:277:PRO:HA	1:D:282:VAL:CG2	2.29	0.61
1:E:252:PHE:CE2	1:E:257:LYS:CA	2.82	0.61
1:E:277:PRO:HA	1:E:282:VAL:CG2	2.29	0.61
1:E:253:GLY:O	1:E:254:ASP:HB2	1.99	0.61
1:E:252:PHE:CD2	1:E:257:LYS:CA	2.81	0.61
1:A:363:ARG:CZ	1:A:498:ASP:OD2	2.46	0.61
1:C:113:GLY:CA	1:C:189:GLU:HB2	2.25	0.61
1:A:504:LEU:HD22	1:A:529:ILE:HD12	1.82	0.61
1:E:140:ASP:O	1:E:141:ASP:CB	2.43	0.61
1:F:541:GLU:H	1:F:568:ILE:CG1	2.13	0.61
1:B:166:THR:HG22	1:B:172:ASP:CB	2.30	0.61
1:B:504:LEU:HD21	1:B:529:ILE:HG23	1.80	0.61
1:D:543:GLN:CD	1:D:568:ILE:HG23	2.20	0.61
1:E:541:GLU:H	1:E:568:ILE:CG1	2.13	0.61
1:B:253:GLY:O	1:B:254:ASP:HB2	1.99	0.61
1:C:541:GLU:H	1:C:568:ILE:CG1	2.13	0.61
1:E:114:ASN:HA	1:E:137:ILE:CD1	2.25	0.61
1:F:114:ASN:OD1	1:F:115:VAL:N	2.29	0.61
1:D:282:VAL:CG1	1:D:287:GLU:CD	2.37	0.61
1:E:264:ILE:CD1	1:E:269:GLN:HB2	2.18	0.61
1:F:166:THR:HG23	1:F:171:HIS:C	2.16	0.61
1:A:113:GLY:HA3	1:A:143:PHE:HE1	1.62	0.61
1:A:136:VAL:HB	1:A:145:GLU:HB3	1.83	0.61
1:A:543:GLN:CD	1:A:568:ILE:HG23	2.20	0.61
1:E:501:VAL:HG13	1:E:578:LEU:CD1	2.31	0.60
1:C:252:PHE:CD2	1:C:257:LYS:CA	2.81	0.60
1:D:541:GLU:H	1:D:568:ILE:CG1	2.13	0.60
1:D:560:ARG:HB2	1:D:579:VAL:HA	1.83	0.60
1:F:252:PHE:CD2	1:F:257:LYS:CA	2.81	0.60
1:F:560:ARG:HB2	1:F:579:VAL:HA	1.83	0.60
1:A:504:LEU:CD2	1:A:529:ILE:CG2	2.79	0.60
1:C:264:ILE:HD11	1:C:266:SER:HB3	1.84	0.60
1:C:501:VAL:HG13	1:C:578:LEU:CD1	2.31	0.60
1:D:501:VAL:HG13	1:D:578:LEU:CD1	2.31	0.60
1:F:253:GLY:O	1:F:254:ASP:HB2	1.99	0.60
1:C:91:ARG:HH22	1:C:141:ASP:CG	2.00	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:111:ILE:HD12	1:E:112:TYR:CE1	2.34	0.60
1:E:132:LEU:CG	1:E:148:ASP:CA	2.56	0.60
1:B:501:VAL:HG13	1:B:578:LEU:CD1	2.31	0.60
1:B:504:LEU:CD2	1:B:529:ILE:CG2	2.79	0.60
1:B:504:LEU:HD22	1:B:529:ILE:HD12	1.83	0.60
1:C:166:THR:HG22	1:C:171:HIS:O	1.97	0.60
1:D:252:PHE:CD2	1:D:257:LYS:CA	2.81	0.60
1:D:393:ALA:HA	1:D:456:GLY:O	2.02	0.60
1:E:270:LEU:C	1:E:277:PRO:CD	2.70	0.60
1:E:504:LEU:CD2	1:E:529:ILE:CG2	2.79	0.60
1:F:183:LEU:HD11	1:F:192:SER:HG	1.66	0.60
1:F:504:LEU:HD22	1:F:529:ILE:HD12	1.82	0.60
1:A:44:GLY:O	1:A:112:TYR:CE1	2.55	0.60
1:A:560:ARG:HB2	1:A:579:VAL:HA	1.83	0.60
1:B:553:ILE:HG13	1:B:555:GLU:O	2.02	0.60
1:D:504:LEU:CD2	1:D:529:ILE:CG2	2.79	0.60
1:E:393:ALA:HA	1:E:456:GLY:O	2.02	0.60
1:F:44:GLY:O	1:F:112:TYR:CE1	2.55	0.60
1:F:136:VAL:HB	1:F:145:GLU:HB3	1.83	0.60
1:A:253:GLY:O	1:A:254:ASP:HB2	1.99	0.60
1:F:166:THR:HG22	1:F:172:ASP:CB	2.30	0.60
1:F:504:LEU:CD2	1:F:529:ILE:CG2	2.79	0.60
1:A:553:ILE:HG13	1:A:555:GLU:O	2.02	0.60
1:B:136:VAL:HB	1:B:145:GLU:HB3	1.83	0.60
1:C:166:THR:HG22	1:C:172:ASP:CB	2.30	0.60
1:C:394:ASN:HD21	1:C:457:ILE:HD13	1.66	0.60
1:D:64:ARG:HB2	1:D:188:GLN:HE21	1.67	0.60
1:E:553:ILE:HG13	1:E:555:GLU:O	2.02	0.60
1:F:501:VAL:HG13	1:F:578:LEU:CD1	2.31	0.60
1:C:553:ILE:HG13	1:C:555:GLU:O	2.02	0.60
1:F:110:LYS:CE	1:F:113:GLY:CA	2.52	0.60
1:A:132:LEU:CG	1:A:148:ASP:CA	2.56	0.60
1:B:536:LYS:CB	1:B:542:ILE:HD12	2.32	0.60
1:C:392:VAL:O	1:C:456:GLY:CA	2.50	0.60
1:C:512:PHE:HE1	1:C:517:THR:HG1	1.48	0.60
1:C:540:ASN:C	1:C:541:GLU:HG3	2.15	0.60
1:E:64:ARG:HB2	1:E:188:GLN:HE21	1.67	0.60
1:E:166:THR:HG22	1:E:172:ASP:CB	2.30	0.60
1:F:270:LEU:C	1:F:277:PRO:CD	2.70	0.60
1:F:393:ALA:HA	1:F:456:GLY:O	2.02	0.60
1:F:545:PHE:O	1:F:545:PHE:CG	2.55	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:393:ALA:HA	1:A:456:GLY:O	2.02	0.59
1:B:112:TYR:C	1:B:141:ASP:CB	2.68	0.59
1:C:353:LYS:CD	1:C:387:PRO:HG2	2.28	0.59
1:D:392:VAL:O	1:D:456:GLY:CA	2.50	0.59
1:E:545:PHE:O	1:E:545:PHE:CG	2.55	0.59
1:F:543:GLN:CD	1:F:568:ILE:HG23	2.20	0.59
1:A:111:ILE:HD12	1:A:112:TYR:CE1	2.34	0.59
1:A:113:GLY:O	1:A:141:ASP:OD1	2.20	0.59
1:A:540:ASN:C	1:A:568:ILE:HD11	2.19	0.59
1:B:113:GLY:O	1:B:141:ASP:OD1	2.20	0.59
1:B:270:LEU:C	1:B:277:PRO:CD	2.70	0.59
1:B:392:VAL:O	1:B:456:GLY:CA	2.50	0.59
1:B:393:ALA:HA	1:B:456:GLY:O	2.02	0.59
1:C:64:ARG:HB2	1:C:188:GLN:HE21	1.67	0.59
1:C:136:VAL:HB	1:C:145:GLU:HB3	1.83	0.59
1:C:270:LEU:C	1:C:277:PRO:CD	2.70	0.59
1:C:393:ALA:HA	1:C:456:GLY:O	2.02	0.59
1:C:536:LYS:CB	1:C:542:ILE:HD12	2.32	0.59
1:D:394:ASN:HD21	1:D:457:ILE:HD13	1.66	0.59
1:E:119:ILE:HB	1:E:132:LEU:HB2	1.84	0.59
1:E:392:VAL:O	1:E:456:GLY:CA	2.50	0.59
1:E:543:GLN:CD	1:E:568:ILE:HG23	2.20	0.59
1:E:560:ARG:HB2	1:E:579:VAL:HA	1.83	0.59
1:F:64:ARG:HB2	1:F:188:GLN:HE21	1.67	0.59
1:A:264:ILE:HD11	1:A:266:SER:HB3	1.84	0.59
1:A:392:VAL:O	1:A:456:GLY:CA	2.50	0.59
1:C:504:LEU:CD2	1:C:529:ILE:CG2	2.79	0.59
1:D:44:GLY:O	1:D:112:TYR:CE1	2.55	0.59
1:D:136:VAL:HB	1:D:145:GLU:HB3	1.83	0.59
1:E:44:GLY:O	1:E:112:TYR:CE1	2.55	0.59
1:F:392:VAL:O	1:F:456:GLY:CA	2.50	0.59
1:A:113:GLY:CA	1:A:189:GLU:HB2	2.25	0.59
1:A:501:VAL:HG13	1:A:578:LEU:CD1	2.31	0.59
1:B:44:GLY:O	1:B:112:TYR:CE1	2.55	0.59
1:C:132:LEU:CD1	1:C:148:ASP:CA	2.81	0.59
1:E:394:ASN:HD21	1:E:457:ILE:HD13	1.66	0.59
1:A:64:ARG:HB2	1:A:188:GLN:HE21	1.67	0.59
1:B:518:ILE:H	1:B:521:SER:HB2	1.68	0.59
1:C:560:ARG:HB2	1:C:579:VAL:HA	1.83	0.59
1:D:264:ILE:HD11	1:D:266:SER:HB3	1.84	0.59
1:F:518:ILE:H	1:F:521:SER:HB2	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:264:ILE:HD11	1:B:266:SER:HB3	1.84	0.59
1:C:113:GLY:O	1:C:141:ASP:OD1	2.20	0.59
1:D:264:ILE:CG2	1:D:269:GLN:HB3	2.17	0.59
1:D:518:ILE:H	1:D:521:SER:HB2	1.68	0.59
1:D:553:ILE:HG13	1:D:555:GLU:O	2.02	0.59
1:F:113:GLY:O	1:F:141:ASP:OD1	2.20	0.59
1:A:545:PHE:O	1:A:545:PHE:CG	2.55	0.59
1:B:111:ILE:HD12	1:B:112:TYR:CE1	2.34	0.59
1:C:518:ILE:H	1:C:521:SER:HB2	1.68	0.59
1:D:132:LEU:CD1	1:D:148:ASP:CA	2.81	0.59
1:D:166:THR:HG22	1:D:172:ASP:CB	2.30	0.59
1:B:545:PHE:O	1:B:545:PHE:CG	2.55	0.59
1:D:124:GLU:HG3	1:D:178:ALA:HB1	1.85	0.59
1:D:394:ASN:ND2	1:D:457:ILE:CD1	2.63	0.59
1:D:536:LYS:CB	1:D:542:ILE:HD12	2.32	0.59
1:A:132:LEU:CD1	1:A:148:ASP:CA	2.81	0.59
1:B:540:ASN:C	1:B:568:ILE:HD11	2.19	0.59
1:B:543:GLN:HG3	1:B:568:ILE:HG12	1.85	0.59
1:C:166:THR:HG23	1:C:171:HIS:C	2.17	0.59
1:C:363:ARG:HH12	1:C:495:GLU:HG3	1.59	0.59
1:D:270:LEU:C	1:D:277:PRO:CD	2.70	0.59
1:F:62:LEU:HD22	1:F:190:VAL:HG11	1.85	0.59
1:F:264:ILE:HD11	1:F:266:SER:HB3	1.84	0.59
1:F:394:ASN:HD21	1:F:457:ILE:HD13	1.66	0.59
1:A:112:TYR:CA	1:A:141:ASP:CG	2.60	0.59
1:A:363:ARG:HH12	1:A:495:GLU:HG3	1.59	0.59
1:C:543:GLN:HG3	1:C:568:ILE:HG12	1.85	0.59
1:D:545:PHE:O	1:D:545:PHE:CG	2.55	0.59
1:E:518:ILE:H	1:E:521:SER:HB2	1.68	0.59
1:C:44:GLY:O	1:C:112:TYR:CE1	2.55	0.58
1:E:264:ILE:HD11	1:E:266:SER:HB3	1.84	0.58
1:A:62:LEU:HD22	1:A:190:VAL:HG11	1.85	0.58
1:C:124:GLU:HG3	1:C:178:ALA:HB1	1.85	0.58
1:E:62:LEU:HD22	1:E:190:VAL:HG11	1.85	0.58
1:E:113:GLY:O	1:E:141:ASP:OD1	2.20	0.58
1:E:394:ASN:ND2	1:E:457:ILE:CD1	2.63	0.58
1:F:124:GLU:HG3	1:F:178:ALA:HB1	1.85	0.58
1:B:185:VAL:N	1:B:186:GLY:HA2	2.18	0.58
1:C:545:PHE:O	1:C:545:PHE:CG	2.55	0.58
1:D:504:LEU:HD22	1:D:529:ILE:HD12	1.83	0.58
1:F:553:ILE:HG13	1:F:555:GLU:O	2.02	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:264:ILE:CD1	1:C:269:GLN:HB2	2.18	0.58
1:D:112:TYR:C	1:D:141:ASP:CB	2.68	0.58
1:E:136:VAL:HB	1:E:145:GLU:HB3	1.83	0.58
1:F:113:GLY:HA3	1:F:143:PHE:HE1	1.62	0.58
1:A:124:GLU:HG3	1:A:178:ALA:HB1	1.85	0.58
1:B:91:ARG:HH22	1:B:141:ASP:CG	2.00	0.58
1:C:112:TYR:C	1:C:141:ASP:CB	2.68	0.58
1:C:504:LEU:HD22	1:C:529:ILE:HD12	1.82	0.58
1:D:62:LEU:HD22	1:D:190:VAL:HG11	1.85	0.58
1:E:132:LEU:CD1	1:E:148:ASP:CA	2.81	0.58
1:F:132:LEU:CD1	1:F:148:ASP:CA	2.81	0.58
1:A:394:ASN:HD21	1:A:457:ILE:HD13	1.66	0.58
1:B:64:ARG:HB2	1:B:188:GLN:HE21	1.67	0.58
1:B:560:ARG:HB2	1:B:579:VAL:HA	1.83	0.58
1:F:113:GLY:CA	1:F:189:GLU:HB2	2.25	0.58
1:B:132:LEU:CD1	1:B:148:ASP:CA	2.81	0.58
1:D:113:GLY:O	1:D:141:ASP:OD1	2.20	0.58
1:D:264:ILE:CD1	1:D:269:GLN:HB2	2.18	0.58
1:A:270:LEU:C	1:A:277:PRO:CD	2.70	0.58
1:B:110:LYS:CE	1:B:113:GLY:CA	2.52	0.58
1:E:124:GLU:HG3	1:E:178:ALA:HB1	1.85	0.58
1:F:258:GLN:C	1:F:259:THR:CG2	2.73	0.58
1:B:392:VAL:HG23	1:B:455:ASN:O	2.04	0.58
1:A:45:GLY:HA2	1:A:111:ILE:HD11	1.85	0.57
1:A:518:ILE:H	1:A:521:SER:HB2	1.68	0.57
1:F:540:ASN:C	1:F:568:ILE:HD11	2.19	0.57
1:A:250:ALA:HB1	1:A:252:PHE:CE1	2.40	0.57
1:B:250:ALA:HB1	1:B:252:PHE:CE1	2.40	0.57
1:C:62:LEU:HD22	1:C:190:VAL:HG11	1.85	0.57
1:D:543:GLN:HG3	1:D:568:ILE:HG12	1.85	0.57
1:E:47:PRO:CD	1:E:191:LYS:CD	2.18	0.57
1:E:264:ILE:CG2	1:E:269:GLN:HB3	2.17	0.57
1:B:42:ALA:O	1:B:112:TYR:CZ	2.57	0.57
1:B:62:LEU:HD22	1:B:190:VAL:HG11	1.85	0.57
1:E:258:GLN:C	1:E:259:THR:CG2	2.73	0.57
1:E:504:LEU:HD22	1:E:529:ILE:HD12	1.83	0.57
1:E:543:GLN:HG3	1:E:568:ILE:HG12	1.85	0.57
1:A:112:TYR:C	1:A:141:ASP:CB	2.68	0.57
1:A:271:ASN:C	1:A:273:GLU:H	2.07	0.57
1:A:543:GLN:HG3	1:A:568:ILE:HG12	1.85	0.57
1:B:543:GLN:CD	1:B:568:ILE:HG23	2.20	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:392:VAL:HG23	1:F:455:ASN:O	2.04	0.57
1:B:166:THR:HG23	1:B:171:HIS:C	2.16	0.57
1:C:250:ALA:HB1	1:C:252:PHE:CE1	2.40	0.57
1:E:334:TYR:CE2	1:E:365:ILE:HD11	2.40	0.57
1:E:392:VAL:HG23	1:E:455:ASN:O	2.04	0.57
1:E:500:LEU:HD13	1:E:532:TYR:HE2	1.69	0.57
1:F:543:GLN:HG3	1:F:568:ILE:HG12	1.85	0.57
1:A:47:PRO:HG3	1:A:110:LYS:C	2.25	0.57
1:A:392:VAL:HG23	1:A:455:ASN:O	2.04	0.57
1:C:392:VAL:HG23	1:C:455:ASN:O	2.04	0.57
1:B:119:ILE:HB	1:B:132:LEU:HB2	1.84	0.57
1:B:124:GLU:HG3	1:B:178:ALA:HB1	1.85	0.57
1:A:166:THR:HG22	1:A:171:HIS:C	2.25	0.57
1:C:47:PRO:HG3	1:C:110:LYS:C	2.25	0.57
1:F:271:ASN:C	1:F:273:GLU:H	2.07	0.57
1:F:536:LYS:CB	1:F:542:ILE:HD12	2.32	0.57
1:A:119:ILE:HB	1:A:132:LEU:HB2	1.84	0.57
1:C:394:ASN:ND2	1:C:457:ILE:CD1	2.63	0.57
1:D:271:ASN:C	1:D:273:GLU:H	2.07	0.57
1:D:392:VAL:HG23	1:D:455:ASN:O	2.04	0.57
1:F:500:LEU:HD13	1:F:532:TYR:HE2	1.69	0.57
1:A:110:LYS:CE	1:A:113:GLY:CA	2.52	0.57
1:A:170:GLU:CB	1:A:286:GLU:O	2.53	0.57
1:C:258:GLN:C	1:C:259:THR:CG2	2.73	0.57
1:D:250:ALA:HB1	1:D:252:PHE:CE1	2.40	0.57
1:D:258:GLN:C	1:D:259:THR:CG2	2.73	0.57
1:F:119:ILE:HB	1:F:132:LEU:HB2	1.84	0.57
1:F:250:ALA:HB1	1:F:252:PHE:CE1	2.40	0.57
1:A:553:ILE:HG13	1:A:555:GLU:N	2.20	0.56
1:B:353:LYS:CD	1:B:387:PRO:HG2	2.28	0.56
1:D:541:GLU:CA	1:D:568:ILE:CD1	2.83	0.56
1:E:271:ASN:C	1:E:273:GLU:H	2.07	0.56
1:E:541:GLU:CA	1:E:568:ILE:CD1	2.83	0.56
1:F:540:ASN:C	1:F:541:GLU:HG3	2.15	0.56
1:A:91:ARG:HH22	1:A:141:ASP:CG	2.00	0.56
1:A:518:ILE:HG13	1:A:520:THR:N	2.21	0.56
1:C:111:ILE:HD12	1:C:112:TYR:CE1	2.34	0.56
1:D:500:LEU:HD13	1:D:532:TYR:HE2	1.69	0.56
1:D:553:ILE:HG13	1:D:555:GLU:N	2.20	0.56
1:F:537:LYS:HG3	1:F:545:PHE:HE2	1.30	0.56
1:A:264:ILE:CG2	1:A:269:GLN:HB3	2.17	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:264:ILE:CG2	1:B:269:GLN:HB3	2.17	0.56
1:B:394:ASN:HD21	1:B:457:ILE:HD13	1.66	0.56
1:B:518:ILE:HG13	1:B:520:THR:N	2.20	0.56
1:C:264:ILE:CG2	1:C:269:GLN:HB3	2.17	0.56
1:D:47:PRO:HG3	1:D:110:LYS:C	2.25	0.56
1:D:119:ILE:HB	1:D:132:LEU:HB2	1.84	0.56
1:D:170:GLU:CB	1:D:286:GLU:O	2.53	0.56
1:D:334:TYR:CE2	1:D:365:ILE:HD11	2.40	0.56
1:E:47:PRO:N	1:E:191:LYS:NZ	2.50	0.56
1:E:170:GLU:CB	1:E:286:GLU:O	2.53	0.56
1:E:250:ALA:HB1	1:E:252:PHE:CE1	2.40	0.56
1:F:111:ILE:HD12	1:F:112:TYR:CE1	2.34	0.56
1:B:91:ARG:CD	1:B:111:ILE:HD12	2.35	0.56
1:B:258:GLN:C	1:B:259:THR:CG2	2.73	0.56
1:D:44:GLY:N	1:D:112:TYR:CD2	2.74	0.56
1:E:44:GLY:N	1:E:112:TYR:CD2	2.74	0.56
1:E:264:ILE:HG22	1:E:277:PRO:O	2.06	0.56
1:F:44:GLY:N	1:F:112:TYR:CD2	2.74	0.56
1:F:45:GLY:HA2	1:F:111:ILE:HD11	1.85	0.56
1:F:518:ILE:HG13	1:F:520:THR:N	2.21	0.56
1:B:264:ILE:HG22	1:B:277:PRO:O	2.06	0.56
1:C:540:ASN:C	1:C:568:ILE:HD11	2.19	0.56
1:C:541:GLU:CA	1:C:568:ILE:CD1	2.83	0.56
1:D:264:ILE:HG22	1:D:277:PRO:O	2.06	0.56
1:E:45:GLY:HA2	1:E:111:ILE:HD11	1.85	0.56
1:F:394:ASN:ND2	1:F:457:ILE:CD1	2.63	0.56
1:F:541:GLU:CA	1:F:568:ILE:CD1	2.83	0.56
1:B:44:GLY:N	1:B:112:TYR:CD2	2.74	0.56
1:B:271:ASN:C	1:B:273:GLU:H	2.07	0.56
1:B:500:LEU:HD13	1:B:532:TYR:HE2	1.69	0.56
1:C:553:ILE:HG13	1:C:555:GLU:N	2.20	0.56
1:F:112:TYR:C	1:F:141:ASP:CB	2.68	0.56
1:F:553:ILE:HG13	1:F:555:GLU:N	2.20	0.56
1:A:44:GLY:N	1:A:112:TYR:CD2	2.74	0.56
1:A:246:VAL:HA	1:A:264:ILE:HA	1.88	0.56
1:A:264:ILE:HG22	1:A:277:PRO:O	2.06	0.56
1:B:114:ASN:CA	1:B:137:ILE:HD13	2.32	0.56
1:B:166:THR:HG22	1:B:171:HIS:C	2.25	0.56
1:B:170:GLU:CB	1:B:286:GLU:O	2.53	0.56
1:B:173:GLU:HG2	1:B:201:ASP:OD2	2.06	0.56
1:C:271:ASN:C	1:C:273:GLU:H	2.07	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:532:TYR:CE2	1:C:536:LYS:CE	2.89	0.56
1:D:540:ASN:C	1:D:541:GLU:HG3	2.15	0.56
1:E:553:ILE:HG13	1:E:555:GLU:N	2.20	0.56
1:F:170:GLU:CB	1:F:286:GLU:O	2.53	0.56
1:A:500:LEU:HD13	1:A:532:TYR:HE2	1.69	0.56
1:A:541:GLU:CA	1:A:568:ILE:CD1	2.83	0.56
1:C:173:GLU:HG2	1:C:201:ASP:OD2	2.06	0.56
1:C:246:VAL:HA	1:C:264:ILE:HA	1.88	0.56
1:E:113:GLY:CA	1:E:189:GLU:HB2	2.25	0.56
1:E:532:TYR:CE2	1:E:536:LYS:CE	2.89	0.56
1:E:536:LYS:CB	1:E:542:ILE:HD12	2.32	0.56
1:A:512:PHE:HE1	1:A:517:THR:HG1	1.50	0.56
1:A:536:LYS:CB	1:A:542:ILE:HD12	2.32	0.56
1:B:47:PRO:HG3	1:B:110:LYS:C	2.25	0.56
1:B:246:VAL:HA	1:B:264:ILE:HA	1.88	0.56
1:B:553:ILE:HG13	1:B:555:GLU:N	2.20	0.56
1:C:47:PRO:N	1:C:191:LYS:NZ	2.50	0.56
1:C:91:ARG:CD	1:C:111:ILE:HD12	2.35	0.56
1:C:119:ILE:HB	1:C:132:LEU:HB2	1.84	0.56
1:C:353:LYS:HE3	1:C:387:PRO:CD	2.36	0.56
1:C:500:LEU:HD13	1:C:532:TYR:HE2	1.69	0.56
1:C:518:ILE:HG13	1:C:520:THR:N	2.21	0.56
1:D:540:ASN:O	1:D:541:GLU:HB2	2.05	0.56
1:E:518:ILE:HG13	1:E:520:THR:N	2.20	0.56
1:F:47:PRO:HG3	1:F:110:LYS:C	2.25	0.56
1:A:394:ASN:ND2	1:A:457:ILE:CD1	2.63	0.56
1:C:264:ILE:HG22	1:C:277:PRO:O	2.06	0.56
1:D:166:THR:HG22	1:D:171:HIS:C	2.25	0.56
1:E:42:ALA:O	1:E:112:TYR:CZ	2.57	0.56
1:E:47:PRO:HG3	1:E:110:LYS:C	2.25	0.56
1:F:264:ILE:HG22	1:F:277:PRO:O	2.06	0.56
1:B:541:GLU:CA	1:B:568:ILE:CD1	2.83	0.55
1:C:166:THR:HG22	1:C:171:HIS:C	2.25	0.55
1:D:47:PRO:N	1:D:191:LYS:NZ	2.50	0.55
1:E:64:ARG:HB2	1:E:188:GLN:NE2	2.22	0.55
1:F:246:VAL:HA	1:F:264:ILE:HA	1.88	0.55
1:A:540:ASN:O	1:A:541:GLU:HB2	2.05	0.55
1:B:45:GLY:HA2	1:B:111:ILE:HD11	1.85	0.55
1:C:170:GLU:CB	1:C:286:GLU:O	2.53	0.55
1:E:246:VAL:HA	1:E:264:ILE:HA	1.88	0.55
1:F:532:TYR:CE2	1:F:536:LYS:CE	2.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:47:PRO:N	1:B:191:LYS:NZ	2.50	0.55
1:C:334:TYR:CE2	1:C:365:ILE:HD11	2.40	0.55
1:D:112:TYR:CA	1:D:141:ASP:CG	2.60	0.55
1:D:246:VAL:HA	1:D:264:ILE:HA	1.88	0.55
1:E:91:ARG:CD	1:E:111:ILE:HD12	2.35	0.55
1:A:42:ALA:O	1:A:112:TYR:CZ	2.57	0.55
1:B:334:TYR:CE2	1:B:365:ILE:HD11	2.40	0.55
1:E:112:TYR:C	1:E:141:ASP:CB	2.68	0.55
1:A:107:ILE:HG13	1:A:193:TYR:CE2	2.42	0.55
1:D:91:ARG:CD	1:D:111:ILE:HD12	2.35	0.55
1:D:173:GLU:HG2	1:D:201:ASP:OD2	2.06	0.55
1:E:166:THR:HG22	1:E:171:HIS:C	2.25	0.55
1:E:173:GLU:HG2	1:E:201:ASP:OD2	2.06	0.55
1:F:47:PRO:N	1:F:191:LYS:NZ	2.50	0.55
1:F:91:ARG:CD	1:F:111:ILE:HD12	2.35	0.55
1:B:107:ILE:HG13	1:B:193:TYR:CE2	2.42	0.55
1:D:518:ILE:HG13	1:D:520:THR:N	2.21	0.55
1:E:114:ASN:CA	1:E:137:ILE:HD13	2.32	0.55
1:E:539:ASP:O	1:E:540:ASN:CG	2.45	0.55
1:A:166:THR:HG22	1:A:171:HIS:O	1.97	0.55
1:A:264:ILE:CD1	1:A:269:GLN:HB3	2.18	0.55
1:C:42:ALA:O	1:C:112:TYR:CZ	2.57	0.55
1:C:44:GLY:N	1:C:112:TYR:CD2	2.74	0.55
1:D:539:ASP:O	1:D:540:ASN:CG	2.45	0.55
1:F:64:ARG:HB2	1:F:188:GLN:NE2	2.22	0.55
1:A:258:GLN:C	1:A:259:THR:CG2	2.73	0.55
1:A:532:TYR:CE2	1:A:536:LYS:CE	2.89	0.55
1:B:381:GLN:NE2	1:B:455:ASN:O	2.40	0.55
1:D:107:ILE:HG13	1:D:193:TYR:CE2	2.42	0.55
1:D:532:TYR:CE2	1:D:536:LYS:CE	2.89	0.55
1:F:173:GLU:HG2	1:F:201:ASP:OD2	2.06	0.55
1:A:334:TYR:CE2	1:A:365:ILE:HD11	2.40	0.55
1:B:532:TYR:CE2	1:B:536:LYS:CE	2.89	0.55
1:C:107:ILE:HG13	1:C:193:TYR:CE2	2.42	0.55
1:C:271:ASN:H	1:C:277:PRO:HD3	1.72	0.55
1:D:64:ARG:HB2	1:D:188:GLN:NE2	2.22	0.55
1:E:107:ILE:HG13	1:E:193:TYR:CE2	2.42	0.55
1:F:91:ARG:HH22	1:F:141:ASP:CG	2.00	0.55
1:B:271:ASN:H	1:B:277:PRO:HD3	1.72	0.55
1:B:540:ASN:O	1:B:541:GLU:HB2	2.05	0.55
1:C:381:GLN:NE2	1:C:455:ASN:O	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:540:ASN:C	1:E:568:ILE:HD11	2.19	0.55
1:A:169:VAL:HB	1:A:286:GLU:CD	2.21	0.54
1:A:173:GLU:HG2	1:A:201:ASP:OD2	2.06	0.54
1:E:381:GLN:NE2	1:E:455:ASN:O	2.40	0.54
1:F:107:ILE:HG13	1:F:193:TYR:CE2	2.42	0.54
1:B:394:ASN:ND2	1:B:457:ILE:CD1	2.63	0.54
1:D:271:ASN:H	1:D:277:PRO:HD3	1.72	0.54
1:D:353:LYS:HE3	1:D:387:PRO:CD	2.36	0.54
1:F:166:THR:HG22	1:F:171:HIS:C	2.25	0.54
1:F:381:GLN:NE2	1:F:455:ASN:O	2.40	0.54
1:F:539:ASP:O	1:F:540:ASN:CG	2.45	0.54
1:D:185:VAL:N	1:D:186:GLY:HA2	2.18	0.54
1:A:91:ARG:CD	1:A:111:ILE:HD12	2.35	0.54
1:A:493:VAL:HG23	1:A:494:GLY:N	2.23	0.54
1:C:540:ASN:O	1:C:541:GLU:HB2	2.05	0.54
1:F:355:ARG:HG3	1:F:362:MET:HE2	1.89	0.54
1:A:114:ASN:CA	1:A:137:ILE:HD13	2.31	0.54
1:A:381:GLN:NE2	1:A:455:ASN:O	2.40	0.54
1:B:47:PRO:HG3	1:B:111:ILE:N	2.21	0.54
1:B:64:ARG:HB2	1:B:188:GLN:NE2	2.22	0.54
1:B:539:ASP:O	1:B:540:ASN:CG	2.45	0.54
1:A:64:ARG:HB2	1:A:188:GLN:NE2	2.22	0.54
1:A:504:LEU:HD11	1:A:563:MET:SD	2.48	0.54
1:C:120:GLN:O	1:C:181:LEU:HD12	2.08	0.54
1:D:45:GLY:HA2	1:D:111:ILE:HD11	1.85	0.54
1:E:47:PRO:HD2	1:E:191:LYS:HD2	0.55	0.54
1:A:253:GLY:HA3	1:A:258:GLN:NE2	2.23	0.54
1:A:539:ASP:O	1:A:540:ASN:CG	2.45	0.54
1:C:64:ARG:HB2	1:C:188:GLN:NE2	2.22	0.54
1:C:539:ASP:O	1:C:540:ASN:CG	2.45	0.54
1:E:185:VAL:N	1:E:186:GLY:HA2	2.18	0.54
1:E:500:LEU:HD12	1:E:533:LEU:CD2	2.38	0.54
1:F:253:GLY:HA3	1:F:258:GLN:NE2	2.23	0.54
1:F:540:ASN:O	1:F:541:GLU:HB2	2.05	0.54
1:A:491:MET:C	1:A:493:VAL:CG2	2.76	0.54
1:D:363:ARG:HH12	1:D:495:GLU:HG3	1.59	0.54
1:F:120:GLN:O	1:F:181:LEU:HD12	2.08	0.54
1:F:500:LEU:HD12	1:F:533:LEU:CD2	2.38	0.54
1:A:500:LEU:HD12	1:A:533:LEU:CD2	2.38	0.54
1:B:165:ALA:O	1:B:169:VAL:HG22	2.08	0.54
1:B:491:MET:C	1:B:493:VAL:CG2	2.76	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:45:GLY:HA2	1:C:111:ILE:HD11	1.85	0.54
1:D:120:GLN:O	1:D:181:LEU:HD12	2.08	0.54
1:D:381:GLN:NE2	1:D:455:ASN:O	2.40	0.54
1:E:504:LEU:HD11	1:E:563:MET:SD	2.48	0.54
1:A:183:LEU:HD11	1:A:192:SER:HG	1.72	0.54
1:B:253:GLY:HA3	1:B:258:GLN:NE2	2.23	0.54
1:B:504:LEU:HD11	1:B:563:MET:SD	2.48	0.54
1:D:248:VAL:HA	1:D:262:ASN:OD1	2.08	0.54
1:E:493:VAL:HG23	1:E:494:GLY:N	2.23	0.54
1:F:114:ASN:CA	1:F:137:ILE:HD13	2.31	0.54
1:B:120:GLN:O	1:B:181:LEU:HD12	2.08	0.53
1:D:165:ALA:O	1:D:169:VAL:HG22	2.08	0.53
1:E:165:ALA:O	1:E:169:VAL:HG22	2.08	0.53
1:E:540:ASN:C	1:E:541:GLU:HG3	2.15	0.53
1:F:258:GLN:O	1:F:259:THR:HG23	2.08	0.53
1:B:493:VAL:HG23	1:B:494:GLY:N	2.23	0.53
1:D:47:PRO:HD2	1:D:191:LYS:HD2	0.55	0.53
1:D:47:PRO:HG3	1:D:111:ILE:N	2.21	0.53
1:D:540:ASN:C	1:D:568:ILE:HD11	2.19	0.53
1:E:248:VAL:HA	1:E:262:ASN:OD1	2.08	0.53
1:F:363:ARG:HH12	1:F:495:GLU:HG3	1.59	0.53
1:A:47:PRO:N	1:A:191:LYS:NZ	2.50	0.53
1:A:120:GLN:O	1:A:181:LEU:HD12	2.08	0.53
1:A:165:ALA:O	1:A:169:VAL:HG22	2.08	0.53
1:C:112:TYR:CA	1:C:141:ASP:CG	2.60	0.53
1:C:493:VAL:HG23	1:C:494:GLY:N	2.23	0.53
1:D:353:LYS:CD	1:D:387:PRO:HG2	2.28	0.53
1:D:493:VAL:HG23	1:D:494:GLY:N	2.23	0.53
1:E:253:GLY:HA3	1:E:258:GLN:NE2	2.23	0.53
1:A:271:ASN:H	1:A:277:PRO:HD3	1.72	0.53
1:D:134:LEU:HD21	1:D:137:ILE:HG23	1.88	0.53
1:D:500:LEU:HD12	1:D:533:LEU:CD2	2.38	0.53
1:D:504:LEU:HD11	1:D:563:MET:SD	2.48	0.53
1:F:165:ALA:O	1:F:169:VAL:HG22	2.08	0.53
1:B:45:GLY:HA3	1:B:111:ILE:HG13	1.90	0.53
1:C:93:GLU:OE1	1:C:142:ARG:HG3	2.09	0.53
1:C:165:ALA:O	1:C:169:VAL:HG22	2.08	0.53
1:C:248:VAL:HA	1:C:262:ASN:OD1	2.08	0.53
1:D:173:GLU:HB3	1:D:199:ALA:HB3	1.91	0.53
1:D:557:ASN:CG	1:D:558:GLU:H	2.12	0.53
1:E:120:GLN:O	1:E:181:LEU:HD12	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:353:LYS:HE3	1:E:387:PRO:CD	2.36	0.53
1:F:248:VAL:HA	1:F:262:ASN:OD1	2.08	0.53
1:B:282:VAL:HG12	1:B:287:GLU:HG2	0.53	0.53
1:C:124:GLU:CG	1:C:178:ALA:HB1	2.39	0.53
1:C:270:LEU:HB2	1:C:274:GLY:HA2	1.91	0.53
1:D:111:ILE:HD12	1:D:112:TYR:CE1	2.34	0.53
1:E:91:ARG:HH22	1:E:141:ASP:CG	2.00	0.53
1:E:93:GLU:OE1	1:E:142:ARG:HG3	2.09	0.53
1:E:270:LEU:HD12	1:E:270:LEU:O	2.09	0.53
1:E:363:ARG:HH12	1:E:495:GLU:HG3	1.59	0.53
1:F:64:ARG:CZ	1:F:189:GLU:HA	2.39	0.53
1:A:540:ASN:C	1:A:541:GLU:HG3	2.15	0.53
1:C:47:PRO:HD2	1:C:191:LYS:HD2	0.55	0.53
1:D:504:LEU:HD22	1:D:529:ILE:CG2	2.39	0.53
1:E:47:PRO:HG3	1:E:111:ILE:N	2.21	0.53
1:E:258:GLN:O	1:E:259:THR:HG23	2.08	0.53
1:E:271:ASN:H	1:E:277:PRO:HD3	1.72	0.53
1:F:169:VAL:O	1:F:170:GLU:HB2	2.09	0.53
1:A:248:VAL:HA	1:A:262:ASN:OD1	2.08	0.53
1:A:557:ASN:CG	1:A:558:GLU:H	2.12	0.53
1:B:124:GLU:CG	1:B:178:ALA:HB1	2.39	0.53
1:B:500:LEU:HD12	1:B:533:LEU:CD2	2.38	0.53
1:D:93:GLU:OE1	1:D:142:ARG:HG3	2.09	0.53
1:D:270:LEU:HB2	1:D:274:GLY:HA2	1.91	0.53
1:E:531:SER:O	1:E:535:ARG:HG3	2.09	0.53
1:E:557:ASN:CG	1:E:558:GLU:H	2.12	0.53
1:F:504:LEU:HD11	1:F:563:MET:SD	2.48	0.53
1:C:47:PRO:HG3	1:C:111:ILE:N	2.21	0.53
1:C:500:LEU:HD12	1:C:533:LEU:CD2	2.38	0.53
1:E:282:VAL:HG12	1:E:287:GLU:HG2	0.53	0.53
1:F:550:VAL:HG21	1:F:555:GLU:C	2.30	0.53
1:A:43:GLU:C	1:A:112:TYR:HD2	2.12	0.53
1:A:47:PRO:HG3	1:A:111:ILE:N	2.21	0.53
1:B:47:PRO:HD2	1:B:191:LYS:HD2	0.55	0.53
1:B:504:LEU:HD22	1:B:529:ILE:CG2	2.39	0.53
1:C:282:VAL:HG12	1:C:287:GLU:HG2	0.53	0.53
1:C:504:LEU:HD11	1:C:563:MET:SD	2.48	0.53
1:D:114:ASN:CA	1:D:137:ILE:HD13	2.32	0.53
1:F:45:GLY:HA3	1:F:111:ILE:HG13	1.90	0.53
1:F:93:GLU:OE1	1:F:142:ARG:HG3	2.09	0.53
1:F:264:ILE:CG2	1:F:269:GLN:HB3	2.17	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:270:LEU:HD12	1:F:270:LEU:O	2.09	0.53
1:F:531:SER:O	1:F:535:ARG:HG3	2.09	0.53
1:A:93:GLU:OE1	1:A:142:ARG:HG3	2.09	0.52
1:A:282:VAL:HG12	1:A:287:GLU:HG2	0.53	0.52
1:A:550:VAL:HG21	1:A:555:GLU:C	2.30	0.52
1:B:169:VAL:O	1:B:170:GLU:HB2	2.09	0.52
1:B:254:ASP:C	1:B:256:GLU:H	2.12	0.52
1:B:557:ASN:CG	1:B:558:GLU:H	2.12	0.52
1:C:253:GLY:HA3	1:C:258:GLN:NE2	2.23	0.52
1:D:42:ALA:O	1:D:112:TYR:CZ	2.57	0.52
1:E:45:GLY:CA	1:E:190:VAL:CG2	2.86	0.52
1:F:112:TYR:CA	1:F:141:ASP:CG	2.60	0.52
1:A:166:THR:HG23	1:A:171:HIS:C	2.17	0.52
1:A:537:LYS:HD3	1:A:537:LYS:C	2.30	0.52
1:B:248:VAL:HA	1:B:262:ASN:OD1	2.08	0.52
1:B:550:VAL:HG21	1:B:555:GLU:C	2.30	0.52
1:C:169:VAL:O	1:C:170:GLU:HB2	2.09	0.52
1:D:154:PHE:CZ	1:D:199:ALA:HB2	2.20	0.52
1:D:169:VAL:O	1:D:170:GLU:HB2	2.09	0.52
1:D:531:SER:O	1:D:535:ARG:HG3	2.09	0.52
1:E:355:ARG:HG3	1:E:362:MET:HE1	1.91	0.52
1:F:254:ASP:C	1:F:256:GLU:H	2.12	0.52
1:A:258:GLN:O	1:A:259:THR:HG23	2.08	0.52
1:B:270:LEU:HB2	1:B:274:GLY:HA2	1.91	0.52
1:C:45:GLY:CA	1:C:190:VAL:CG2	2.86	0.52
1:C:173:GLU:HB3	1:C:199:ALA:HB3	1.91	0.52
1:D:45:GLY:HA3	1:D:111:ILE:HG13	1.90	0.52
1:D:111:ILE:HG13	1:D:112:TYR:HD1	1.74	0.52
1:E:45:GLY:HA3	1:E:111:ILE:HG13	1.90	0.52
1:E:542:ILE:HG22	1:E:543:GLN:N	2.25	0.52
1:F:493:VAL:HG23	1:F:494:GLY:N	2.23	0.52
1:A:47:PRO:HD2	1:A:191:LYS:HD2	0.55	0.52
1:A:504:LEU:HD22	1:A:529:ILE:CG2	2.39	0.52
1:B:43:GLU:C	1:B:112:TYR:HD2	2.12	0.52
1:C:504:LEU:HD22	1:C:529:ILE:CG2	2.39	0.52
1:D:542:ILE:HG22	1:D:543:GLN:N	2.25	0.52
1:E:173:GLU:HB3	1:E:199:ALA:HB3	1.91	0.52
1:F:124:GLU:CG	1:F:178:ALA:HB1	2.39	0.52
1:F:334:TYR:CE2	1:F:365:ILE:HD11	2.40	0.52
1:F:557:ASN:CG	1:F:558:GLU:H	2.12	0.52
1:A:166:THR:HG22	1:A:172:ASP:CA	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:173:GLU:HB3	1:A:199:ALA:HB3	1.91	0.52
1:B:537:LYS:HD3	1:B:537:LYS:C	2.30	0.52
1:D:537:LYS:HD3	1:D:537:LYS:C	2.30	0.52
1:E:254:ASP:C	1:E:256:GLU:H	2.12	0.52
1:E:550:VAL:HG21	1:E:555:GLU:C	2.30	0.52
1:F:47:PRO:HD2	1:F:191:LYS:HD2	0.55	0.52
1:F:504:LEU:HD22	1:F:529:ILE:CG2	2.39	0.52
1:A:254:ASP:C	1:A:256:GLU:H	2.12	0.52
1:B:45:GLY:CA	1:B:190:VAL:CG2	2.86	0.52
1:B:353:LYS:HE3	1:B:387:PRO:CD	2.36	0.52
1:C:47:PRO:HD3	1:C:191:LYS:HD2	1.64	0.52
1:E:111:ILE:HG13	1:E:112:TYR:HD1	1.74	0.52
1:E:270:LEU:HB2	1:E:274:GLY:HA2	1.91	0.52
1:E:281:GLU:O	1:E:282:VAL:C	2.45	0.52
1:E:537:LYS:HD3	1:E:537:LYS:C	2.30	0.52
1:F:381:GLN:CB	1:F:455:ASN:CG	2.63	0.52
1:A:45:GLY:HA3	1:A:111:ILE:HG13	1.90	0.52
1:A:185:VAL:N	1:A:186:GLY:HA2	2.18	0.52
1:C:270:LEU:HD12	1:C:270:LEU:O	2.09	0.52
1:C:557:ASN:CG	1:C:558:GLU:H	2.12	0.52
1:D:124:GLU:CG	1:D:178:ALA:HB1	2.39	0.52
1:D:550:VAL:HG21	1:D:555:GLU:C	2.30	0.52
1:E:124:GLU:CG	1:E:178:ALA:HB1	2.39	0.52
1:F:166:THR:HG22	1:F:172:ASP:CA	2.40	0.52
1:A:353:LYS:HE3	1:A:387:PRO:CD	2.36	0.52
1:C:43:GLU:O	1:C:112:TYR:HD2	1.93	0.52
1:C:111:ILE:HD12	1:C:112:TYR:HE1	1.72	0.52
1:C:166:THR:HG22	1:C:172:ASP:CA	2.40	0.52
1:C:254:ASP:C	1:C:256:GLU:H	2.12	0.52
1:D:45:GLY:CA	1:D:190:VAL:CG2	2.86	0.52
1:D:253:GLY:HA3	1:D:258:GLN:NE2	2.23	0.52
1:D:270:LEU:HD12	1:D:270:LEU:O	2.09	0.52
1:D:522:ALA:O	1:D:526:LYS:HB2	2.10	0.52
1:A:169:VAL:O	1:A:170:GLU:HB2	2.09	0.52
1:A:531:SER:O	1:A:535:ARG:HG3	2.09	0.52
1:A:542:ILE:HG22	1:A:543:GLN:N	2.25	0.52
1:B:64:ARG:CZ	1:B:189:GLU:HA	2.39	0.52
1:B:93:GLU:OE1	1:B:142:ARG:HG3	2.09	0.52
1:B:166:THR:HG22	1:B:172:ASP:CA	2.40	0.52
1:B:542:ILE:HG22	1:B:543:GLN:N	2.25	0.52
1:C:45:GLY:CA	1:C:111:ILE:CG1	2.85	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:113:GLY:HA2	1:C:189:GLU:HB2	1.92	0.52
1:C:185:VAL:N	1:C:186:GLY:HA2	2.18	0.52
1:F:173:GLU:HB3	1:F:199:ALA:HB3	1.91	0.52
1:F:282:VAL:HG12	1:F:287:GLU:HG2	0.53	0.52
1:A:355:ARG:HG3	1:A:362:MET:HE1	1.90	0.52
1:B:173:GLU:HB3	1:B:199:ALA:HB3	1.91	0.52
1:B:258:GLN:O	1:B:259:THR:HG23	2.08	0.52
1:C:531:SER:O	1:C:535:ARG:HG3	2.09	0.52
1:C:542:ILE:HG22	1:C:543:GLN:N	2.25	0.52
1:E:169:VAL:HB	1:E:286:GLU:CD	2.21	0.52
1:E:169:VAL:O	1:E:170:GLU:HB2	2.09	0.52
1:E:381:GLN:CB	1:E:455:ASN:CG	2.63	0.52
1:F:42:ALA:O	1:F:112:TYR:CZ	2.57	0.52
1:B:43:GLU:O	1:B:112:TYR:HD2	1.93	0.51
1:B:169:VAL:HB	1:B:286:GLU:CD	2.21	0.51
1:C:111:ILE:HG13	1:C:112:TYR:HD1	1.74	0.51
1:C:173:GLU:CG	1:C:201:ASP:OD2	2.59	0.51
1:C:491:MET:C	1:C:493:VAL:CG2	2.76	0.51
1:E:278:SER:O	1:E:279:ASN:C	2.47	0.51
1:E:540:ASN:O	1:E:541:GLU:HB2	2.05	0.51
1:F:491:MET:C	1:F:493:VAL:CG2	2.76	0.51
1:A:270:LEU:HB2	1:A:274:GLY:HA2	1.91	0.51
1:B:113:GLY:HA2	1:B:189:GLU:HB2	1.92	0.51
1:C:537:LYS:HD3	1:C:537:LYS:C	2.30	0.51
1:D:43:GLU:O	1:D:112:TYR:HD2	1.93	0.51
1:D:268:GLU:O	1:D:269:GLN:C	2.45	0.51
1:D:491:MET:C	1:D:493:VAL:CG2	2.76	0.51
1:A:124:GLU:CG	1:A:178:ALA:HB1	2.39	0.51
1:B:45:GLY:CA	1:B:111:ILE:CG1	2.85	0.51
1:B:531:SER:O	1:B:535:ARG:HG3	2.09	0.51
1:C:550:VAL:HG21	1:C:555:GLU:C	2.30	0.51
1:D:281:GLU:O	1:D:282:VAL:C	2.45	0.51
1:D:282:VAL:HG12	1:D:287:GLU:HG2	0.53	0.51
1:E:110:LYS:NZ	1:E:113:GLY:CA	2.73	0.51
1:F:47:PRO:HG3	1:F:111:ILE:N	2.21	0.51
1:F:271:ASN:H	1:F:277:PRO:HD3	1.72	0.51
1:F:537:LYS:HD3	1:F:537:LYS:C	2.30	0.51
1:B:173:GLU:CG	1:B:201:ASP:OD2	2.59	0.51
1:D:166:THR:HG22	1:D:172:ASP:CA	2.40	0.51
1:D:166:THR:HG22	1:D:171:HIS:O	1.97	0.51
1:E:166:THR:HG22	1:E:172:ASP:CA	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:501:VAL:CG1	1:E:578:LEU:CD2	2.68	0.51
1:F:111:ILE:HD12	1:F:112:TYR:HE1	1.72	0.51
1:A:173:GLU:CG	1:A:201:ASP:OD2	2.59	0.51
1:B:270:LEU:HD12	1:B:270:LEU:O	2.09	0.51
1:D:254:ASP:C	1:D:256:GLU:H	2.12	0.51
1:F:111:ILE:HG13	1:F:112:TYR:HD1	1.74	0.51
1:F:270:LEU:HB2	1:F:274:GLY:HA2	1.91	0.51
1:F:522:ALA:O	1:F:526:LYS:HB2	2.10	0.51
1:F:542:ILE:HG22	1:F:543:GLN:N	2.25	0.51
1:A:353:LYS:CD	1:A:387:PRO:HG2	2.28	0.51
1:C:110:LYS:NZ	1:C:113:GLY:CA	2.73	0.51
1:C:114:ASN:CA	1:C:137:ILE:HD13	2.31	0.51
1:D:258:GLN:O	1:D:259:THR:HG23	2.08	0.51
1:E:504:LEU:HD22	1:E:529:ILE:CG2	2.39	0.51
1:A:111:ILE:HG13	1:A:112:TYR:HD1	1.74	0.51
1:E:43:GLU:O	1:E:112:TYR:HD2	1.93	0.51
1:E:268:GLU:O	1:E:269:GLN:C	2.45	0.51
1:E:522:ALA:O	1:E:526:LYS:HB2	2.10	0.51
1:F:185:VAL:N	1:F:186:GLY:HA2	2.18	0.51
1:F:264:ILE:CD1	1:F:269:GLN:HB3	2.18	0.51
1:A:45:GLY:CA	1:A:190:VAL:CG2	2.86	0.51
1:B:522:ALA:O	1:B:526:LYS:HB2	2.10	0.51
1:C:91:ARG:NH2	1:C:112:TYR:N	2.59	0.51
1:C:522:ALA:O	1:C:526:LYS:HB2	2.10	0.51
1:D:64:ARG:CZ	1:D:189:GLU:HA	2.39	0.51
1:D:110:LYS:NZ	1:D:113:GLY:CA	2.73	0.51
1:E:550:VAL:HG21	1:E:555:GLU:O	2.11	0.51
1:F:550:VAL:HG21	1:F:555:GLU:O	2.11	0.51
1:A:270:LEU:HD12	1:A:270:LEU:O	2.09	0.51
1:B:173:GLU:OE1	1:B:173:GLU:N	2.44	0.51
1:B:504:LEU:HB2	1:B:578:LEU:HD12	1.93	0.51
1:C:64:ARG:CZ	1:C:189:GLU:HA	2.39	0.51
1:C:91:ARG:NH1	1:C:111:ILE:CA	2.74	0.51
1:D:47:PRO:HD3	1:D:191:LYS:HD2	1.64	0.51
1:D:113:GLY:HA2	1:D:189:GLU:HB2	1.92	0.51
1:D:173:GLU:CG	1:D:201:ASP:OD2	2.59	0.51
1:E:134:LEU:HD21	1:E:137:ILE:HG23	1.88	0.51
1:F:113:GLY:HA2	1:F:189:GLU:HB2	1.92	0.51
1:F:353:LYS:HE3	1:F:387:PRO:CD	2.36	0.51
1:F:501:VAL:CG1	1:F:578:LEU:CD2	2.68	0.51
1:A:522:ALA:O	1:A:526:LYS:HB2	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:526:LYS:HE3	1:A:546:PRO:CB	2.41	0.50
1:B:62:LEU:CD2	1:B:190:VAL:HG11	2.41	0.50
1:C:43:GLU:C	1:C:112:TYR:HD2	2.12	0.50
1:D:169:VAL:HB	1:D:286:GLU:CD	2.21	0.50
1:D:512:PHE:HE1	1:D:517:THR:HG1	1.48	0.50
1:F:281:GLU:O	1:F:282:VAL:C	2.45	0.50
1:A:43:GLU:O	1:A:112:TYR:HD2	1.93	0.50
1:F:338:LEU:HD12	1:F:414:ALA:CB	2.41	0.50
1:A:62:LEU:CD2	1:A:190:VAL:HG11	2.41	0.50
1:A:504:LEU:HB2	1:A:578:LEU:HD12	1.93	0.50
1:A:550:VAL:HG21	1:A:555:GLU:O	2.11	0.50
1:B:91:ARG:NH1	1:B:111:ILE:CA	2.74	0.50
1:B:285:GLY:O	1:B:287:GLU:N	2.44	0.50
1:D:43:GLU:C	1:D:112:TYR:HD2	2.12	0.50
1:D:91:ARG:NH2	1:D:112:TYR:N	2.59	0.50
1:D:550:VAL:HG21	1:D:555:GLU:O	2.11	0.50
1:E:62:LEU:CD2	1:E:190:VAL:HG11	2.41	0.50
1:F:43:GLU:O	1:F:112:TYR:HD2	1.93	0.50
1:B:121:VAL:CG2	1:B:132:LEU:CD2	2.90	0.50
1:B:526:LYS:HE3	1:B:546:PRO:CB	2.41	0.50
1:D:91:ARG:NH1	1:D:111:ILE:CA	2.74	0.50
1:E:121:VAL:CG2	1:E:132:LEU:CD2	2.90	0.50
1:F:91:ARG:NH1	1:F:111:ILE:CA	2.74	0.50
1:F:173:GLU:CG	1:F:201:ASP:OD2	2.59	0.50
1:F:270:LEU:CG	1:F:274:GLY:HA2	2.42	0.50
1:A:285:GLY:O	1:A:287:GLU:N	2.44	0.50
1:C:62:LEU:CD2	1:C:190:VAL:HG11	2.41	0.50
1:E:91:ARG:NH1	1:E:111:ILE:CA	2.74	0.50
1:E:173:GLU:CG	1:E:201:ASP:OD2	2.59	0.50
1:F:526:LYS:HE3	1:F:546:PRO:CB	2.41	0.50
1:A:270:LEU:CG	1:A:274:GLY:HA2	2.42	0.50
1:A:338:LEU:HD12	1:A:414:ALA:CB	2.41	0.50
1:B:111:ILE:HG13	1:B:112:TYR:HD1	1.74	0.50
1:C:169:VAL:HB	1:C:286:GLU:CD	2.21	0.50
1:C:283:GLU:HA	1:C:287:GLU:CB	2.35	0.50
1:D:526:LYS:HE3	1:D:546:PRO:CB	2.41	0.50
1:E:491:MET:C	1:E:493:VAL:CG2	2.76	0.50
1:E:550:VAL:CG1	1:E:555:GLU:O	2.51	0.50
1:A:245:ALA:O	1:A:264:ILE:HA	2.12	0.50
1:C:282:VAL:CG1	1:C:287:GLU:CD	2.37	0.50
1:D:62:LEU:CD2	1:D:190:VAL:HG11	2.41	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:285:GLY:O	1:D:287:GLU:N	2.44	0.50
1:E:113:GLY:HA2	1:E:189:GLU:HB2	1.92	0.50
1:F:245:ALA:O	1:F:264:ILE:HA	2.12	0.50
1:A:43:GLU:HB3	1:A:188:GLN:NE2	2.27	0.50
1:A:45:GLY:CA	1:A:111:ILE:CG1	2.85	0.50
1:A:91:ARG:NH1	1:A:111:ILE:CA	2.74	0.50
1:A:278:SER:O	1:A:279:ASN:C	2.47	0.50
1:B:43:GLU:HB3	1:B:188:GLN:NE2	2.27	0.50
1:C:45:GLY:HA3	1:C:111:ILE:HG13	1.90	0.50
1:C:268:GLU:O	1:C:269:GLN:C	2.45	0.50
1:C:501:VAL:CG1	1:C:578:LEU:CD2	2.68	0.50
1:C:550:VAL:HG21	1:C:555:GLU:O	2.11	0.50
1:E:526:LYS:HE3	1:E:546:PRO:CB	2.41	0.50
1:F:43:GLU:HB3	1:F:188:GLN:NE2	2.27	0.50
1:F:110:LYS:NZ	1:F:113:GLY:CA	2.73	0.50
1:A:501:VAL:HA	1:A:578:LEU:HD11	1.94	0.49
1:B:245:ALA:O	1:B:264:ILE:HA	2.12	0.49
1:C:121:VAL:CG2	1:C:132:LEU:CD2	2.90	0.49
1:C:501:VAL:HA	1:C:578:LEU:HD11	1.94	0.49
1:D:121:VAL:CG2	1:D:132:LEU:CD2	2.90	0.49
1:F:285:GLY:O	1:F:287:GLU:N	2.44	0.49
1:A:113:GLY:HA2	1:A:189:GLU:HB2	1.92	0.49
1:B:283:GLU:HA	1:B:287:GLU:CB	2.35	0.49
1:B:550:VAL:HG21	1:B:555:GLU:O	2.11	0.49
1:C:43:GLU:HB3	1:C:188:GLN:NE2	2.27	0.49
1:C:44:GLY:CA	1:C:112:TYR:CG	2.64	0.49
1:C:270:LEU:CB	1:C:274:GLY:HA2	2.42	0.49
1:C:504:LEU:HB2	1:C:578:LEU:HD12	1.93	0.49
1:D:45:GLY:CA	1:D:111:ILE:CG1	2.85	0.49
1:E:91:ARG:NH2	1:E:112:TYR:N	2.59	0.49
1:F:121:VAL:CG2	1:F:132:LEU:CD2	2.90	0.49
1:F:173:GLU:OE1	1:F:173:GLU:N	2.44	0.49
1:B:270:LEU:HD13	1:B:274:GLY:H	1.78	0.49
1:B:270:LEU:CB	1:B:274:GLY:HA2	2.42	0.49
1:B:281:GLU:O	1:B:284:ALA:HB3	2.12	0.49
1:D:43:GLU:HB3	1:D:188:GLN:NE2	2.27	0.49
1:D:579:VAL:HG23	1:D:579:VAL:O	2.12	0.49
1:E:43:GLU:HB3	1:E:188:GLN:NE2	2.27	0.49
1:E:264:ILE:HG23	1:E:278:SER:HA	1.95	0.49
1:E:285:GLY:O	1:E:287:GLU:N	2.44	0.49
1:E:338:LEU:HD12	1:E:414:ALA:CB	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:345:HIS:HB3	1:E:366:VAL:CG1	2.42	0.49
1:E:579:VAL:HG23	1:E:579:VAL:O	2.12	0.49
1:F:501:VAL:HA	1:F:578:LEU:HD11	1.94	0.49
1:B:501:VAL:HA	1:B:578:LEU:HD11	1.94	0.49
1:C:285:GLY:O	1:C:287:GLU:N	2.44	0.49
1:C:526:LYS:HE3	1:C:546:PRO:CB	2.41	0.49
1:D:270:LEU:HD13	1:D:274:GLY:H	1.78	0.49
1:E:501:VAL:HA	1:E:578:LEU:HD11	1.94	0.49
1:F:45:GLY:CA	1:F:111:ILE:CG1	2.85	0.49
1:F:264:ILE:HG23	1:F:278:SER:HA	1.95	0.49
1:F:560:ARG:CB	1:F:579:VAL:HG12	2.42	0.49
1:A:260:ALA:C	1:A:261:TYR:CD1	2.86	0.49
1:A:281:GLU:O	1:A:284:ALA:HB3	2.12	0.49
1:A:345:HIS:HB3	1:A:366:VAL:CG1	2.42	0.49
1:C:264:ILE:HG23	1:C:278:SER:HA	1.95	0.49
1:C:270:LEU:HD13	1:C:274:GLY:H	1.78	0.49
1:D:264:ILE:HG23	1:D:278:SER:HA	1.95	0.49
1:D:338:LEU:HD12	1:D:414:ALA:CB	2.41	0.49
1:D:501:VAL:HA	1:D:578:LEU:HD11	1.94	0.49
1:E:270:LEU:CG	1:E:274:GLY:HA2	2.42	0.49
1:F:260:ALA:C	1:F:261:TYR:CD1	2.86	0.49
1:B:526:LYS:HE3	1:B:546:PRO:CG	2.42	0.49
1:D:281:GLU:O	1:D:284:ALA:HB3	2.12	0.49
1:E:270:LEU:CB	1:E:274:GLY:HA2	2.42	0.49
1:F:62:LEU:CD2	1:F:190:VAL:HG11	2.41	0.49
1:F:250:ALA:HB1	1:F:252:PHE:CZ	2.48	0.49
1:F:281:GLU:O	1:F:284:ALA:HB3	2.12	0.49
1:F:550:VAL:CG1	1:F:555:GLU:O	2.51	0.49
1:A:110:LYS:NZ	1:A:113:GLY:CA	2.73	0.49
1:A:270:LEU:CB	1:A:274:GLY:HA2	2.42	0.49
1:B:110:LYS:NZ	1:B:113:GLY:CA	2.73	0.49
1:B:260:ALA:C	1:B:261:TYR:CD1	2.86	0.49
1:B:338:LEU:HD12	1:B:414:ALA:CB	2.42	0.49
1:C:260:ALA:C	1:C:261:TYR:CD1	2.86	0.49
1:C:281:GLU:O	1:C:282:VAL:C	2.45	0.49
1:C:560:ARG:CB	1:C:579:VAL:HG12	2.42	0.49
1:E:250:ALA:HB1	1:E:252:PHE:CZ	2.48	0.49
1:F:154:PHE:CE2	1:F:199:ALA:HB1	2.47	0.49
1:F:504:LEU:HB2	1:F:578:LEU:HD12	1.93	0.49
1:B:355:ARG:HG3	1:B:362:MET:HE1	1.94	0.49
1:C:338:LEU:HD12	1:C:414:ALA:CB	2.41	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:260:ALA:C	1:D:261:TYR:CD1	2.86	0.49
1:D:270:LEU:CB	1:D:274:GLY:HA2	2.42	0.49
1:E:260:ALA:C	1:E:261:TYR:CD1	2.86	0.49
1:E:281:GLU:O	1:E:284:ALA:HB3	2.12	0.49
1:A:250:ALA:HB1	1:A:252:PHE:CZ	2.48	0.49
1:A:270:LEU:HD13	1:A:274:GLY:H	1.78	0.49
1:B:113:GLY:H	1:B:141:ASP:CB	2.10	0.49
1:B:270:LEU:CG	1:B:274:GLY:HA2	2.42	0.49
1:B:278:SER:O	1:B:279:ASN:C	2.47	0.49
1:C:345:HIS:HB3	1:C:366:VAL:CG1	2.42	0.49
1:D:246:VAL:HA	1:D:263:GLY:O	2.13	0.49
1:D:504:LEU:HB2	1:D:578:LEU:HD12	1.93	0.49
1:E:245:ALA:O	1:E:264:ILE:HA	2.12	0.49
1:E:246:VAL:HA	1:E:263:GLY:O	2.13	0.49
1:E:270:LEU:HD13	1:E:274:GLY:H	1.78	0.49
1:B:246:VAL:HA	1:B:263:GLY:O	2.13	0.49
1:C:246:VAL:HA	1:C:263:GLY:O	2.13	0.49
1:D:250:ALA:HB1	1:D:252:PHE:CZ	2.48	0.49
1:F:270:LEU:CB	1:F:274:GLY:HA2	2.42	0.49
1:F:541:GLU:CA	1:F:568:ILE:HG13	2.43	0.49
1:A:264:ILE:HG23	1:A:278:SER:HA	1.94	0.48
1:A:363:ARG:HH12	1:A:495:GLU:CB	2.26	0.48
1:B:132:LEU:HD11	1:B:148:ASP:HB3	1.95	0.48
1:B:264:ILE:HG23	1:B:278:SER:HA	1.95	0.48
1:C:270:LEU:CG	1:C:274:GLY:HA2	2.42	0.48
1:D:550:VAL:CG1	1:D:555:GLU:O	2.51	0.48
1:E:282:VAL:CG1	1:E:287:GLU:CD	2.37	0.48
1:F:363:ARG:HH12	1:F:495:GLU:CB	2.26	0.48
1:A:132:LEU:HD11	1:A:148:ASP:HB3	1.95	0.48
1:B:540:ASN:C	1:B:541:GLU:HG3	2.15	0.48
1:B:550:VAL:CG1	1:B:555:GLU:O	2.51	0.48
1:C:132:LEU:HD11	1:C:148:ASP:HB3	1.95	0.48
1:D:245:ALA:O	1:D:264:ILE:HA	2.12	0.48
1:F:268:GLU:O	1:F:269:GLN:C	2.45	0.48
1:A:107:ILE:HG13	1:A:193:TYR:HE2	1.78	0.48
1:C:154:PHE:CE2	1:C:199:ALA:HB1	2.47	0.48
1:C:526:LYS:HE3	1:C:546:PRO:CG	2.42	0.48
1:F:132:LEU:HD11	1:F:148:ASP:HB3	1.95	0.48
1:F:270:LEU:HD13	1:F:274:GLY:H	1.78	0.48
1:A:281:GLU:O	1:A:282:VAL:C	2.45	0.48
1:A:541:GLU:CA	1:A:568:ILE:HG13	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:250:ALA:HB1	1:B:252:PHE:CZ	2.48	0.48
1:B:363:ARG:HH12	1:B:495:GLU:CB	2.26	0.48
1:C:281:GLU:O	1:C:284:ALA:HB3	2.12	0.48
1:D:132:LEU:HD11	1:D:148:ASP:HB3	1.95	0.48
1:D:278:SER:O	1:D:279:ASN:C	2.47	0.48
1:D:560:ARG:CB	1:D:579:VAL:HG12	2.42	0.48
1:E:526:LYS:HE3	1:E:546:PRO:CG	2.42	0.48
1:F:45:GLY:CA	1:F:190:VAL:CG2	2.86	0.48
1:F:278:SER:O	1:F:279:ASN:C	2.47	0.48
1:C:245:ALA:O	1:C:264:ILE:HA	2.12	0.48
1:C:250:ALA:HB1	1:C:252:PHE:CZ	2.48	0.48
1:E:132:LEU:HD11	1:E:148:ASP:HB3	1.95	0.48
1:E:504:LEU:HB2	1:E:578:LEU:HD12	1.93	0.48
1:E:541:GLU:CA	1:E:568:ILE:HG13	2.43	0.48
1:F:91:ARG:NH2	1:F:112:TYR:N	2.59	0.48
1:F:246:VAL:HA	1:F:263:GLY:O	2.13	0.48
1:F:526:LYS:HE3	1:F:546:PRO:CG	2.42	0.48
1:A:579:VAL:O	1:A:579:VAL:HG23	2.12	0.48
1:B:264:ILE:HD12	1:B:269:GLN:CG	2.03	0.48
1:C:43:GLU:O	1:C:112:TYR:CD2	2.67	0.48
1:C:278:SER:O	1:C:279:ASN:C	2.47	0.48
1:C:550:VAL:CG1	1:C:555:GLU:O	2.51	0.48
1:C:579:VAL:HG23	1:C:579:VAL:O	2.12	0.48
1:D:270:LEU:CG	1:D:274:GLY:HA2	2.42	0.48
1:D:283:GLU:HA	1:D:287:GLU:CB	2.35	0.48
1:E:250:ALA:CB	1:E:252:PHE:CE1	2.97	0.48
1:E:363:ARG:HH12	1:E:495:GLU:CB	2.26	0.48
1:B:345:HIS:HB3	1:B:366:VAL:CG1	2.42	0.48
1:C:106:LYS:HZ1	1:C:146:VAL:HG11	1.78	0.48
1:D:541:GLU:CA	1:D:568:ILE:HG13	2.43	0.48
1:A:121:VAL:CG2	1:A:132:LEU:CD2	2.90	0.48
1:A:246:VAL:HA	1:A:263:GLY:O	2.13	0.48
1:B:43:GLU:O	1:B:112:TYR:CD2	2.67	0.48
1:B:285:GLY:O	1:B:286:GLU:C	2.49	0.48
1:D:526:LYS:HE3	1:D:546:PRO:CG	2.42	0.48
1:F:250:ALA:CB	1:F:252:PHE:CE1	2.97	0.48
1:F:526:LYS:CE	1:F:546:PRO:HG2	2.44	0.48
1:F:579:VAL:O	1:F:579:VAL:HG23	2.12	0.48
1:A:518:ILE:HG13	1:A:521:SER:N	2.26	0.48
1:B:64:ARG:NH2	1:B:189:GLU:HA	2.20	0.48
1:C:132:LEU:CG	1:C:148:ASP:CA	2.56	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:194:ASP:OD1	1:C:195:LEU:N	2.47	0.48
1:C:264:ILE:HD12	1:C:269:GLN:CG	2.03	0.48
1:D:106:LYS:HZ1	1:D:146:VAL:HG11	1.78	0.48
1:B:107:ILE:HG13	1:B:193:TYR:HE2	1.78	0.48
1:B:152:ASN:O	1:B:155:THR:HB	2.14	0.48
1:B:541:GLU:CA	1:B:568:ILE:HG13	2.43	0.48
1:B:579:VAL:HG23	1:B:579:VAL:O	2.12	0.48
1:C:518:ILE:HG13	1:C:521:SER:N	2.26	0.48
1:D:43:GLU:O	1:D:112:TYR:CD2	2.67	0.48
1:D:194:ASP:OD1	1:D:195:LEU:N	2.47	0.48
1:D:363:ARG:HH12	1:D:495:GLU:CB	2.26	0.48
1:D:518:ILE:HG13	1:D:521:SER:N	2.26	0.48
1:E:111:ILE:HD12	1:E:112:TYR:HE1	1.72	0.48
1:E:173:GLU:OE1	1:E:173:GLU:N	2.44	0.48
1:A:560:ARG:CB	1:A:579:VAL:HG12	2.42	0.47
1:B:194:ASP:OD1	1:B:195:LEU:N	2.47	0.47
1:C:355:ARG:C	1:C:360:GLU:N	2.68	0.47
1:D:363:ARG:NH1	1:D:495:GLU:CB	2.75	0.47
1:E:64:ARG:NH2	1:E:189:GLU:HA	2.20	0.47
1:E:518:ILE:HG13	1:E:521:SER:N	2.26	0.47
1:E:526:LYS:CE	1:E:546:PRO:HG2	2.44	0.47
1:B:281:GLU:O	1:B:282:VAL:C	2.45	0.47
1:B:355:ARG:C	1:B:360:GLU:N	2.68	0.47
1:C:526:LYS:HE3	1:C:546:PRO:HB2	1.96	0.47
1:C:541:GLU:CA	1:C:568:ILE:HG13	2.43	0.47
1:D:526:LYS:HE3	1:D:546:PRO:HB2	1.96	0.47
1:E:132:LEU:HD21	1:E:148:ASP:HB3	1.39	0.47
1:E:363:ARG:NH1	1:E:495:GLU:CB	2.75	0.47
1:F:134:LEU:HD21	1:F:137:ILE:HG23	1.88	0.47
1:F:194:ASP:OD1	1:F:195:LEU:N	2.47	0.47
1:A:43:GLU:O	1:A:112:TYR:CD2	2.67	0.47
1:A:363:ARG:NH1	1:A:495:GLU:CB	2.75	0.47
1:A:526:LYS:CE	1:A:546:PRO:HG2	2.44	0.47
1:B:268:GLU:O	1:B:269:GLN:C	2.45	0.47
1:C:258:GLN:O	1:C:259:THR:HG23	2.08	0.47
1:D:250:ALA:CB	1:D:252:PHE:CE1	2.97	0.47
1:E:355:ARG:C	1:E:360:GLU:N	2.68	0.47
1:F:152:ASN:O	1:F:155:THR:HB	2.14	0.47
1:A:355:ARG:C	1:A:360:GLU:N	2.68	0.47
1:A:526:LYS:HE3	1:A:546:PRO:CG	2.42	0.47
1:A:550:VAL:HG22	1:A:551:GLN:N	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:560:ARG:CB	1:B:579:VAL:HG12	2.42	0.47
1:C:152:ASN:O	1:C:155:THR:HB	2.14	0.47
1:E:43:GLU:O	1:E:112:TYR:CD2	2.67	0.47
1:E:194:ASP:OD1	1:E:195:LEU:N	2.47	0.47
1:A:283:GLU:HA	1:A:287:GLU:CB	2.35	0.47
1:B:174:GLU:C	1:B:175:THR:HG1	2.09	0.47
1:D:281:GLU:HA	1:D:284:ALA:HB3	1.97	0.47
1:D:526:LYS:CE	1:D:546:PRO:HG2	2.44	0.47
1:F:107:ILE:HG13	1:F:193:TYR:HE2	1.78	0.47
1:A:194:ASP:OD1	1:A:195:LEU:N	2.47	0.47
1:B:518:ILE:HG13	1:B:521:SER:N	2.26	0.47
1:C:285:GLY:O	1:C:286:GLU:C	2.49	0.47
1:C:381:GLN:CB	1:C:455:ASN:CG	2.63	0.47
1:D:152:ASN:O	1:D:155:THR:HB	2.14	0.47
1:D:154:PHE:CE2	1:D:199:ALA:HB1	2.47	0.47
1:E:258:GLN:O	1:E:259:THR:HG22	2.14	0.47
1:E:281:GLU:HA	1:E:284:ALA:HB3	1.97	0.47
1:F:43:GLU:O	1:F:112:TYR:CD2	2.67	0.47
1:F:64:ARG:HD2	1:F:188:GLN:HA	1.20	0.47
1:F:283:GLU:C	1:F:285:GLY:N	2.67	0.47
1:F:345:HIS:HB3	1:F:366:VAL:CG1	2.42	0.47
1:F:355:ARG:C	1:F:360:GLU:N	2.68	0.47
1:A:250:ALA:CB	1:A:252:PHE:CE1	2.97	0.47
1:A:268:GLU:O	1:A:269:GLN:C	2.45	0.47
1:B:526:LYS:HE3	1:B:546:PRO:HB2	1.96	0.47
1:F:169:VAL:HB	1:F:286:GLU:CD	2.21	0.47
1:A:45:GLY:C	1:A:190:VAL:CG2	2.83	0.47
1:B:45:GLY:C	1:B:190:VAL:CG2	2.83	0.47
1:D:107:ILE:HG13	1:D:193:TYR:HE2	1.78	0.47
1:E:526:LYS:HE3	1:E:546:PRO:HB2	1.96	0.47
1:E:550:VAL:HG22	1:E:551:GLN:N	2.30	0.47
1:E:560:ARG:CB	1:E:579:VAL:HG12	2.42	0.47
1:F:363:ARG:NH1	1:F:495:GLU:CB	2.75	0.47
1:A:152:ASN:O	1:A:155:THR:HB	2.14	0.47
1:A:518:ILE:HD11	1:A:520:THR:CB	2.28	0.47
1:B:250:ALA:CB	1:B:252:PHE:CE1	2.97	0.47
1:B:363:ARG:HH12	1:B:495:GLU:HG3	1.59	0.47
1:B:550:VAL:HG22	1:B:551:GLN:N	2.30	0.47
1:D:135:ARG:O	1:D:136:VAL:CG2	2.63	0.47
1:D:355:ARG:C	1:D:360:GLU:N	2.68	0.47
1:D:550:VAL:HG22	1:D:551:GLN:N	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:285:GLY:O	1:F:286:GLU:C	2.49	0.47
1:C:135:ARG:O	1:C:136:VAL:CG2	2.63	0.46
1:C:260:ALA:C	1:C:261:TYR:CG	2.87	0.46
1:D:355:ARG:HG3	1:D:362:MET:HE1	1.94	0.46
1:B:135:ARG:O	1:B:136:VAL:CG2	2.63	0.46
1:B:287:GLU:HA	1:B:287:GLU:OE1	2.16	0.46
1:B:526:LYS:CE	1:B:546:PRO:HG2	2.44	0.46
1:C:250:ALA:CB	1:C:252:PHE:CE1	2.97	0.46
1:D:264:ILE:HD12	1:D:269:GLN:CG	2.03	0.46
1:E:64:ARG:HD2	1:E:188:GLN:HA	1.20	0.46
1:E:135:ARG:O	1:E:136:VAL:CG2	2.63	0.46
1:E:152:ASN:O	1:E:155:THR:HB	2.14	0.46
1:A:287:GLU:HA	1:A:287:GLU:OE1	2.16	0.46
1:A:526:LYS:HE3	1:A:546:PRO:HB2	1.96	0.46
1:C:491:MET:HB3	1:C:493:VAL:HG11	1.97	0.46
1:C:550:VAL:HG22	1:C:551:GLN:N	2.30	0.46
1:D:45:GLY:C	1:D:190:VAL:CG2	2.83	0.46
1:D:254:ASP:C	1:D:256:GLU:N	2.69	0.46
1:E:107:ILE:HG13	1:E:193:TYR:HE2	1.78	0.46
1:E:491:MET:HB3	1:E:493:VAL:HG11	1.97	0.46
1:A:281:GLU:HA	1:A:284:ALA:HB3	1.97	0.46
1:A:285:GLY:O	1:A:286:GLU:C	2.49	0.46
1:B:283:GLU:C	1:B:285:GLY:N	2.67	0.46
1:C:281:GLU:HA	1:C:284:ALA:HB3	1.97	0.46
1:C:366:VAL:HG12	1:C:367:GLY:H	1.80	0.46
1:E:64:ARG:CZ	1:E:189:GLU:HA	2.39	0.46
1:F:45:GLY:C	1:F:190:VAL:CG2	2.83	0.46
1:F:135:ARG:O	1:F:136:VAL:CG2	2.63	0.46
1:A:91:ARG:NH2	1:A:112:TYR:N	2.59	0.46
1:A:154:PHE:CE2	1:A:199:ALA:HB1	2.47	0.46
1:A:260:ALA:C	1:A:261:TYR:CG	2.88	0.46
1:B:270:LEU:CD1	1:B:270:LEU:C	2.84	0.46
1:C:45:GLY:C	1:C:190:VAL:CG2	2.83	0.46
1:D:173:GLU:OE1	1:D:173:GLU:N	2.44	0.46
1:D:258:GLN:O	1:D:259:THR:HG22	2.14	0.46
1:E:247:TYR:CD2	1:E:247:TYR:N	2.83	0.46
1:F:526:LYS:HE3	1:F:546:PRO:HB2	1.96	0.46
1:F:550:VAL:HG22	1:F:551:GLN:N	2.30	0.46
1:A:135:ARG:O	1:A:136:VAL:CG2	2.63	0.46
1:A:258:GLN:O	1:A:259:THR:HG22	2.14	0.46
1:E:45:GLY:C	1:E:190:VAL:CG2	2.83	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:283:GLU:HA	1:E:287:GLU:CB	2.35	0.46
1:F:254:ASP:C	1:F:256:GLU:N	2.69	0.46
1:F:258:GLN:O	1:F:259:THR:HG22	2.14	0.46
1:F:264:ILE:CD1	1:F:266:SER:HB3	2.46	0.46
1:F:281:GLU:HA	1:F:284:ALA:HB3	1.97	0.46
1:B:260:ALA:C	1:B:261:TYR:CG	2.87	0.46
1:C:137:ILE:HG22	1:C:143:PHE:CD1	2.51	0.46
1:C:264:ILE:HG22	1:C:277:PRO:C	2.36	0.46
1:D:381:GLN:CB	1:D:455:ASN:CG	2.63	0.46
1:A:247:TYR:CD2	1:A:247:TYR:N	2.83	0.46
1:A:342:GLN:HG3	1:A:380:ARG:CZ	2.46	0.46
1:B:366:VAL:HG12	1:B:367:GLY:H	1.81	0.46
1:C:113:GLY:H	1:C:141:ASP:CB	2.10	0.46
1:C:270:LEU:CD1	1:C:270:LEU:C	2.84	0.46
1:C:271:ASN:C	1:C:273:GLU:N	2.69	0.46
1:E:264:ILE:CD1	1:E:266:SER:HB3	2.46	0.46
1:F:260:ALA:C	1:F:261:TYR:CG	2.87	0.46
1:F:264:ILE:HG22	1:F:277:PRO:C	2.36	0.46
1:A:134:LEU:HD21	1:A:137:ILE:HG23	1.88	0.46
1:B:342:GLN:HG3	1:B:380:ARG:CZ	2.46	0.46
1:B:363:ARG:NH1	1:B:495:GLU:CB	2.75	0.46
1:B:501:VAL:CG1	1:B:578:LEU:CD2	2.68	0.46
1:D:137:ILE:HG22	1:D:143:PHE:CD1	2.51	0.46
1:D:537:LYS:HE3	1:D:543:GLN:HA	1.98	0.46
1:E:260:ALA:C	1:E:261:TYR:CG	2.87	0.46
1:A:64:ARG:CZ	1:A:189:GLU:HA	2.39	0.46
1:A:172:ASP:OD1	1:A:173:GLU:HG3	2.16	0.46
1:A:264:ILE:HG22	1:A:277:PRO:C	2.36	0.46
1:A:551:GLN:O	1:A:553:ILE:HG12	2.16	0.46
1:B:264:ILE:HG22	1:B:277:PRO:C	2.36	0.46
1:B:537:LYS:HE3	1:B:543:GLN:HA	1.98	0.46
1:C:73:GLU:HA	1:C:76:TRP:HB2	1.98	0.46
1:C:342:GLN:HG3	1:C:380:ARG:CZ	2.46	0.46
1:D:172:ASP:OD1	1:D:173:GLU:HG3	2.16	0.46
1:A:132:LEU:HD21	1:A:148:ASP:HB3	1.39	0.45
1:A:137:ILE:HG22	1:A:143:PHE:CD1	2.51	0.45
1:B:73:GLU:HA	1:B:76:TRP:HB2	1.98	0.45
1:D:260:ALA:C	1:D:261:TYR:CG	2.88	0.45
1:F:132:LEU:HD21	1:F:148:ASP:HB3	1.39	0.45
1:F:518:ILE:HG13	1:F:521:SER:N	2.26	0.45
1:B:132:LEU:HD21	1:B:148:ASP:HB3	1.39	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:134:LEU:CD2	1:B:137:ILE:HG23	2.46	0.45
1:B:173:GLU:CD	1:B:201:ASP:OD2	2.55	0.45
1:C:107:ILE:HG13	1:C:193:TYR:HE2	1.78	0.45
1:D:264:ILE:HG22	1:D:277:PRO:C	2.37	0.45
1:D:366:VAL:HG12	1:D:367:GLY:H	1.80	0.45
1:E:172:ASP:OD1	1:E:173:GLU:HG3	2.16	0.45
1:E:366:VAL:HG12	1:E:367:GLY:H	1.81	0.45
1:F:247:TYR:CD2	1:F:247:TYR:N	2.83	0.45
1:A:491:MET:HB3	1:A:493:VAL:HG11	1.97	0.45
1:B:491:MET:HB3	1:B:493:VAL:HG11	1.97	0.45
1:C:497:ASN:HD21	1:C:574:ILE:HG21	1.79	0.45
1:D:551:GLN:O	1:D:553:ILE:HG12	2.16	0.45
1:E:173:GLU:CD	1:E:201:ASP:OD2	2.55	0.45
1:E:285:GLY:O	1:E:286:GLU:C	2.49	0.45
1:E:551:GLN:O	1:E:553:ILE:HG12	2.16	0.45
1:F:137:ILE:HG22	1:F:143:PHE:CD1	2.51	0.45
1:F:287:GLU:HA	1:F:287:GLU:OE1	2.15	0.45
1:A:518:ILE:CD1	1:A:520:THR:CB	2.87	0.45
1:A:550:VAL:CG1	1:A:555:GLU:O	2.51	0.45
1:B:137:ILE:HG22	1:B:143:PHE:CD1	2.51	0.45
1:B:172:ASP:OD1	1:B:173:GLU:HG3	2.16	0.45
1:C:287:GLU:HA	1:C:287:GLU:OE1	2.15	0.45
1:C:537:LYS:HE3	1:C:543:GLN:HA	1.98	0.45
1:D:113:GLY:H	1:D:141:ASP:CB	2.10	0.45
1:D:173:GLU:CD	1:D:201:ASP:OD2	2.55	0.45
1:D:264:ILE:CD1	1:D:266:SER:HB3	2.46	0.45
1:D:287:GLU:HA	1:D:287:GLU:OE1	2.16	0.45
1:D:491:MET:HB3	1:D:493:VAL:HG11	1.97	0.45
1:E:130:ASP:C	1:E:130:ASP:OD1	2.53	0.45
1:F:342:GLN:HG3	1:F:380:ARG:CZ	2.46	0.45
1:F:366:VAL:HG12	1:F:367:GLY:H	1.80	0.45
1:A:73:GLU:HA	1:A:76:TRP:HB2	1.98	0.45
1:A:173:GLU:OE1	1:A:173:GLU:N	2.44	0.45
1:B:281:GLU:HA	1:B:284:ALA:HB3	1.97	0.45
1:C:173:GLU:CD	1:C:201:ASP:OD2	2.55	0.45
1:C:254:ASP:C	1:C:256:GLU:N	2.69	0.45
1:D:173:GLU:O	1:D:174:GLU:C	2.55	0.45
1:A:537:LYS:HE3	1:A:543:GLN:HA	1.98	0.45
1:C:172:ASP:OD1	1:C:173:GLU:HG3	2.16	0.45
1:C:264:ILE:CD1	1:C:266:SER:HB3	2.46	0.45
1:C:526:LYS:CE	1:C:546:PRO:HG2	2.44	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:551:GLN:O	1:C:553:ILE:HG12	2.16	0.45
1:D:342:GLN:HG3	1:D:380:ARG:CZ	2.46	0.45
1:E:154:PHE:CE2	1:E:199:ALA:HB1	2.47	0.45
1:A:130:ASP:C	1:A:130:ASP:OD1	2.53	0.45
1:A:264:ILE:CD1	1:A:266:SER:HB3	2.46	0.45
1:B:134:LEU:HD21	1:B:137:ILE:HG23	1.88	0.45
1:B:497:ASN:HD21	1:B:574:ILE:HG21	1.79	0.45
1:C:279:ASN:O	1:C:280:VAL:C	2.53	0.45
1:D:111:ILE:HD12	1:D:112:TYR:HE1	1.72	0.45
1:D:363:ARG:HH21	1:D:498:ASP:CG	2.05	0.45
1:D:500:LEU:CD1	1:D:532:TYR:HE2	2.30	0.45
1:F:130:ASP:C	1:F:130:ASP:OD1	2.53	0.45
1:A:173:GLU:O	1:A:174:GLU:C	2.55	0.45
1:A:366:VAL:HG12	1:A:367:GLY:H	1.80	0.45
1:B:271:ASN:C	1:B:273:GLU:N	2.69	0.45
1:D:345:HIS:HB3	1:D:366:VAL:CG1	2.42	0.45
1:E:73:GLU:HA	1:E:76:TRP:HB2	1.98	0.45
1:E:106:LYS:HZ1	1:E:146:VAL:HG11	1.81	0.45
1:E:137:ILE:HG22	1:E:143:PHE:CD1	2.51	0.45
1:E:264:ILE:HG22	1:E:277:PRO:C	2.36	0.45
1:E:537:LYS:HE3	1:E:543:GLN:HA	1.98	0.45
1:F:172:ASP:OD1	1:F:173:GLU:HG3	2.16	0.45
1:F:491:MET:HB3	1:F:493:VAL:HG11	1.97	0.45
1:A:173:GLU:CD	1:A:201:ASP:OD2	2.55	0.45
1:A:247:TYR:O	1:A:262:ASN:HA	2.17	0.45
1:B:64:ARG:HD2	1:B:188:GLN:HA	1.20	0.45
1:B:130:ASP:C	1:B:130:ASP:OD1	2.53	0.45
1:D:132:LEU:HD21	1:D:148:ASP:HB3	1.39	0.45
1:D:537:LYS:CD	1:D:545:PHE:HE2	2.29	0.45
1:E:287:GLU:HA	1:E:287:GLU:OE1	2.16	0.45
1:F:73:GLU:HA	1:F:76:TRP:HB2	1.98	0.45
1:F:247:TYR:O	1:F:262:ASN:HA	2.17	0.45
1:C:173:GLU:OE1	1:C:173:GLU:N	2.44	0.45
1:C:501:VAL:CG1	1:C:578:LEU:HD11	2.44	0.45
1:D:135:ARG:O	1:D:135:ARG:HG2	2.17	0.45
1:F:173:GLU:CD	1:F:201:ASP:OD2	2.55	0.45
1:B:551:GLN:O	1:B:553:ILE:HG12	2.16	0.44
1:C:135:ARG:O	1:C:135:ARG:HG2	2.17	0.44
1:D:114:ASN:N	1:D:117:ASN:ND2	2.59	0.44
1:D:285:GLY:O	1:D:286:GLU:C	2.49	0.44
1:D:506:VAL:C	1:D:508:LEU:H	2.21	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:135:ARG:O	1:E:135:ARG:HG2	2.18	0.44
1:E:172:ASP:HA	1:E:173:GLU:HA	1.74	0.44
1:F:135:ARG:O	1:F:135:ARG:HG2	2.17	0.44
1:F:150:ILE:HA	1:F:153:ILE:HG13	1.99	0.44
1:F:537:LYS:HE3	1:F:543:GLN:HA	1.98	0.44
1:A:150:ILE:HA	1:A:153:ILE:HG13	2.00	0.44
1:B:91:ARG:NH2	1:B:112:TYR:N	2.59	0.44
1:B:173:GLU:O	1:B:174:GLU:C	2.55	0.44
1:B:247:TYR:O	1:B:262:ASN:HA	2.17	0.44
1:B:254:ASP:C	1:B:256:GLU:N	2.69	0.44
1:B:258:GLN:O	1:B:259:THR:HG22	2.14	0.44
1:B:541:GLU:N	1:B:568:ILE:CG1	2.78	0.44
1:C:281:GLU:O	1:C:284:ALA:N	2.51	0.44
1:F:283:GLU:HA	1:F:287:GLU:CB	2.35	0.44
1:B:500:LEU:CD1	1:B:532:TYR:HE2	2.30	0.44
1:C:47:PRO:HD2	1:C:191:LYS:CG	2.29	0.44
1:C:258:GLN:O	1:C:259:THR:HG22	2.14	0.44
1:D:73:GLU:HA	1:D:76:TRP:HB2	1.98	0.44
1:E:134:LEU:CD2	1:E:137:ILE:HG23	2.46	0.44
1:E:135:ARG:HH11	1:E:135:ARG:HD3	1.41	0.44
1:E:342:GLN:HG3	1:E:380:ARG:CZ	2.46	0.44
1:F:281:GLU:O	1:F:284:ALA:N	2.51	0.44
1:F:551:GLN:O	1:F:553:ILE:HG12	2.16	0.44
1:B:264:ILE:CG1	1:B:266:SER:H	2.04	0.44
1:D:254:ASP:O	1:D:255:LEU:CB	2.57	0.44
1:D:281:GLU:O	1:D:284:ALA:N	2.51	0.44
1:E:363:ARG:HH21	1:E:498:ASP:CG	2.04	0.44
1:E:500:LEU:CD1	1:E:532:TYR:HE2	2.30	0.44
1:A:153:ILE:H	1:A:153:ILE:HG12	1.56	0.44
1:B:150:ILE:HA	1:B:153:ILE:HG13	2.00	0.44
1:B:250:ALA:O	1:B:252:PHE:CE1	2.71	0.44
1:C:557:ASN:HD22	1:C:557:ASN:HA	1.57	0.44
1:E:45:GLY:CA	1:E:111:ILE:CG1	2.85	0.44
1:E:150:ILE:HA	1:E:153:ILE:HG13	2.00	0.44
1:E:173:GLU:O	1:E:174:GLU:C	2.55	0.44
1:E:537:LYS:CD	1:E:545:PHE:HE2	2.29	0.44
1:A:250:ALA:O	1:A:252:PHE:CE1	2.71	0.44
1:B:175:THR:O	1:B:176:GLN:CB	2.61	0.44
1:C:114:ASN:N	1:C:117:ASN:ND2	2.59	0.44
1:C:363:ARG:HH21	1:C:498:ASP:CG	2.05	0.44
1:C:500:LEU:CD1	1:C:532:TYR:HE2	2.30	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:506:VAL:C	1:C:508:LEU:H	2.21	0.44
1:D:137:ILE:HG22	1:D:143:PHE:HD1	1.83	0.44
1:E:247:TYR:O	1:E:262:ASN:HA	2.17	0.44
1:E:271:ASN:C	1:E:273:GLU:N	2.69	0.44
1:A:134:LEU:CD2	1:A:137:ILE:HG23	2.46	0.44
1:A:170:GLU:OE1	1:A:287:GLU:C	2.32	0.44
1:B:537:LYS:CD	1:B:545:PHE:HE2	2.29	0.44
1:C:250:ALA:O	1:C:252:PHE:CE1	2.71	0.44
1:D:150:ILE:HA	1:D:153:ILE:HG13	2.00	0.44
1:D:500:LEU:HD13	1:D:532:TYR:CE2	2.51	0.44
1:D:518:ILE:CD1	1:D:520:THR:CB	2.87	0.44
1:E:137:ILE:HG22	1:E:143:PHE:HD1	1.83	0.44
1:A:135:ARG:O	1:A:135:ARG:HG2	2.17	0.44
1:A:281:GLU:O	1:A:284:ALA:N	2.51	0.44
1:B:132:LEU:HD12	1:B:149:ASN:H	1.83	0.44
1:B:281:GLU:O	1:B:284:ALA:N	2.51	0.44
1:B:282:VAL:CG1	1:B:287:GLU:CD	2.37	0.44
1:C:106:LYS:NZ	1:C:146:VAL:HG11	2.33	0.44
1:C:132:LEU:HD12	1:C:149:ASN:H	1.83	0.44
1:C:137:ILE:HG22	1:C:143:PHE:HD1	1.83	0.44
1:C:355:ARG:HG3	1:C:362:MET:HE1	1.96	0.44
1:D:106:LYS:NZ	1:D:146:VAL:HG11	2.33	0.44
1:D:279:ASN:O	1:D:280:VAL:C	2.53	0.44
1:E:46:GLU:HA	1:E:190:VAL:HG23	1.99	0.44
1:F:106:LYS:HZ1	1:F:146:VAL:HG11	1.83	0.44
1:A:283:GLU:C	1:A:285:GLY:N	2.67	0.44
1:A:549:ASP:CB	1:A:558:GLU:O	2.66	0.44
1:B:106:LYS:HZ1	1:B:146:VAL:HG11	1.83	0.44
1:C:132:LEU:HD21	1:C:148:ASP:HB3	1.39	0.44
1:C:150:ILE:HA	1:C:153:ILE:HG13	1.99	0.44
1:D:130:ASP:C	1:D:130:ASP:OD1	2.53	0.44
1:D:250:ALA:O	1:D:252:PHE:CE1	2.71	0.44
1:E:250:ALA:O	1:E:252:PHE:CE1	2.71	0.44
1:F:506:VAL:C	1:F:508:LEU:H	2.21	0.44
1:F:518:ILE:HD11	1:F:520:THR:CB	2.28	0.44
1:A:64:ARG:NH2	1:A:189:GLU:HA	2.20	0.43
1:A:174:GLU:C	1:A:175:THR:HG1	2.08	0.43
1:A:394:ASN:HB2	1:A:457:ILE:HA	0.70	0.43
1:B:46:GLU:HA	1:B:190:VAL:HG23	1.99	0.43
1:B:135:ARG:O	1:B:135:ARG:HG2	2.17	0.43
1:B:518:ILE:CG1	1:B:520:THR:HB	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:549:ASP:CB	1:B:558:GLU:O	2.66	0.43
1:D:170:GLU:OE2	1:D:285:GLY:O	2.36	0.43
1:D:172:ASP:HA	1:D:173:GLU:HA	1.74	0.43
1:D:353:LYS:CG	1:D:387:PRO:HG3	2.39	0.43
1:D:394:ASN:HB2	1:D:457:ILE:HA	0.70	0.43
1:D:497:ASN:HD21	1:D:574:ILE:HG21	1.79	0.43
1:E:170:GLU:OE2	1:E:285:GLY:O	2.36	0.43
1:F:106:LYS:NZ	1:F:146:VAL:HG11	2.33	0.43
1:F:250:ALA:O	1:F:252:PHE:CE1	2.71	0.43
1:A:170:GLU:OE2	1:A:285:GLY:O	2.36	0.43
1:A:497:ASN:HD21	1:A:574:ILE:HG21	1.79	0.43
1:B:106:LYS:NZ	1:B:146:VAL:HG11	2.33	0.43
1:B:501:VAL:CG1	1:B:578:LEU:HD11	2.44	0.43
1:C:172:ASP:HA	1:C:173:GLU:HA	1.74	0.43
1:C:247:TYR:O	1:C:262:ASN:HA	2.17	0.43
1:C:520:THR:HG22	1:C:524:ILE:HD12	2.00	0.43
1:D:46:GLU:HA	1:D:190:VAL:HG23	1.99	0.43
1:D:501:VAL:CG1	1:D:578:LEU:HD11	2.44	0.43
1:F:170:GLU:OE2	1:F:285:GLY:O	2.36	0.43
1:F:279:ASN:O	1:F:280:VAL:C	2.53	0.43
1:A:46:GLU:HA	1:A:190:VAL:HG23	1.99	0.43
1:A:106:LYS:NZ	1:A:146:VAL:HG11	2.33	0.43
1:B:137:ILE:HG22	1:B:143:PHE:HD1	1.83	0.43
1:B:504:LEU:HD22	1:B:529:ILE:HG23	1.95	0.43
1:C:338:LEU:HD12	1:C:414:ALA:HB2	2.01	0.43
1:E:279:ASN:O	1:E:280:VAL:C	2.53	0.43
1:E:562:SER:HA	1:E:577:SER:HA	2.00	0.43
1:F:134:LEU:CD2	1:F:137:ILE:HG23	2.46	0.43
1:F:500:LEU:CD1	1:F:532:TYR:HE2	2.30	0.43
1:A:132:LEU:HD12	1:A:149:ASN:H	1.83	0.43
1:B:520:THR:HG22	1:B:524:ILE:HD12	2.00	0.43
1:C:355:ARG:HG3	1:C:362:MET:HE2	2.00	0.43
1:C:518:ILE:HG13	1:C:520:THR:H	1.84	0.43
1:E:497:ASN:HD21	1:E:574:ILE:HG21	1.79	0.43
1:E:506:VAL:C	1:E:508:LEU:H	2.21	0.43
1:F:549:ASP:CB	1:F:558:GLU:O	2.66	0.43
1:A:562:SER:HA	1:A:577:SER:HA	2.00	0.43
1:D:132:LEU:HD12	1:D:149:ASN:H	1.83	0.43
1:E:254:ASP:C	1:E:256:GLU:N	2.69	0.43
1:E:261:TYR:CD1	1:E:261:TYR:N	2.85	0.43
1:E:281:GLU:O	1:E:284:ALA:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:338:LEU:HD12	1:F:414:ALA:HB2	2.01	0.43
1:F:562:SER:HA	1:F:577:SER:HA	2.01	0.43
1:A:254:ASP:C	1:A:256:GLU:N	2.69	0.43
1:B:338:LEU:HD12	1:B:414:ALA:HB2	2.01	0.43
1:B:518:ILE:HG13	1:B:520:THR:H	1.84	0.43
1:C:130:ASP:C	1:C:130:ASP:OD1	2.53	0.43
1:C:283:GLU:C	1:C:285:GLY:N	2.67	0.43
1:C:549:ASP:CB	1:C:558:GLU:O	2.66	0.43
1:F:537:LYS:CD	1:F:545:PHE:HE2	2.29	0.43
1:F:569:ARG:O	1:F:570:SER:HB3	2.19	0.43
1:B:264:ILE:CD1	1:B:266:SER:HB3	2.46	0.43
1:C:170:GLU:OE2	1:C:285:GLY:O	2.36	0.43
1:D:549:ASP:CB	1:D:558:GLU:O	2.66	0.43
1:F:137:ILE:HG22	1:F:143:PHE:HD1	1.83	0.43
1:F:520:THR:HG22	1:F:524:ILE:HD12	2.00	0.43
1:C:277:PRO:HA	1:C:282:VAL:HG22	2.01	0.43
1:C:363:ARG:NH1	1:C:495:GLU:CB	2.75	0.43
1:C:493:VAL:CG2	1:C:494:GLY:N	2.82	0.43
1:D:251:VAL:HB	1:D:259:THR:HG1	1.82	0.43
1:F:43:GLU:C	1:F:112:TYR:HD2	2.12	0.43
1:F:283:GLU:CA	1:F:287:GLU:HB3	2.39	0.43
1:A:500:LEU:CD1	1:A:532:TYR:HE2	2.30	0.43
1:B:91:ARG:CZ	1:B:112:TYR:H	2.26	0.43
1:D:285:GLY:C	1:D:287:GLU:N	2.71	0.43
1:D:338:LEU:HD12	1:D:414:ALA:HB2	2.01	0.43
1:D:520:THR:HG22	1:D:524:ILE:HD12	2.00	0.43
1:F:277:PRO:HA	1:F:282:VAL:HG22	2.01	0.43
1:B:170:GLU:OE2	1:B:285:GLY:O	2.36	0.43
1:C:134:LEU:HD21	1:C:137:ILE:HG23	1.88	0.43
1:D:261:TYR:CD1	1:D:261:TYR:N	2.85	0.43
1:F:518:ILE:CD1	1:F:520:THR:CB	2.87	0.43
1:A:64:ARG:HD2	1:A:188:GLN:HA	1.20	0.42
1:B:392:VAL:HG23	1:B:456:GLY:HA3	2.01	0.42
1:B:493:VAL:CG2	1:B:494:GLY:N	2.82	0.42
1:C:173:GLU:O	1:C:174:GLU:C	2.55	0.42
1:C:518:ILE:HD11	1:C:520:THR:CB	2.28	0.42
1:D:247:TYR:O	1:D:262:ASN:HA	2.17	0.42
1:E:106:LYS:NZ	1:E:146:VAL:HG11	2.33	0.42
1:E:549:ASP:CB	1:E:558:GLU:O	2.66	0.42
1:F:46:GLU:HA	1:F:190:VAL:HG23	1.99	0.42
1:A:501:VAL:CG1	1:A:578:LEU:CD2	2.68	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:541:GLU:N	1:A:568:ILE:CG1	2.78	0.42
1:A:569:ARG:O	1:A:570:SER:HB3	2.19	0.42
1:B:569:ARG:O	1:B:570:SER:HB3	2.19	0.42
1:C:500:LEU:HD13	1:C:532:TYR:CE2	2.51	0.42
1:C:537:LYS:CD	1:C:545:PHE:HE2	2.29	0.42
1:C:569:ARG:O	1:C:570:SER:HB3	2.19	0.42
1:D:518:ILE:HG13	1:D:520:THR:H	1.84	0.42
1:E:338:LEU:HD12	1:E:414:ALA:HB2	2.01	0.42
1:F:493:VAL:CG2	1:F:494:GLY:N	2.82	0.42
1:A:135:ARG:HH11	1:A:135:ARG:HD3	1.41	0.42
1:A:537:LYS:CD	1:A:545:PHE:HE2	2.29	0.42
1:B:562:SER:HA	1:B:577:SER:HA	2.00	0.42
1:E:518:ILE:CG1	1:E:520:THR:HB	2.48	0.42
1:F:261:TYR:CD1	1:F:261:TYR:N	2.85	0.42
1:A:137:ILE:HG22	1:A:143:PHE:HD1	1.83	0.42
1:A:246:VAL:C	1:A:247:TYR:CD2	2.93	0.42
1:A:327:PHE:CE2	1:A:351:PHE:HB3	2.54	0.42
1:B:381:GLN:CB	1:B:455:ASN:CG	2.63	0.42
1:B:506:VAL:C	1:B:508:LEU:H	2.21	0.42
1:C:79:ASN:HA	1:C:82:TYR:CE2	2.55	0.42
1:C:246:VAL:C	1:C:247:TYR:CD2	2.93	0.42
1:C:247:TYR:CD2	1:C:247:TYR:N	2.83	0.42
1:E:114:ASN:N	1:E:117:ASN:ND2	2.59	0.42
1:E:569:ARG:O	1:E:570:SER:HB3	2.19	0.42
1:F:170:GLU:OE1	1:F:287:GLU:C	2.32	0.42
1:A:175:THR:O	1:A:176:GLN:CB	2.61	0.42
1:A:520:THR:HG22	1:A:524:ILE:HD12	2.00	0.42
1:B:264:ILE:CD1	1:B:269:GLN:HB3	2.18	0.42
1:B:363:ARG:HH21	1:B:498:ASP:CG	2.04	0.42
1:C:46:GLU:HA	1:C:190:VAL:HG23	1.99	0.42
1:D:264:ILE:CD1	1:D:269:GLN:HB3	2.18	0.42
1:D:562:SER:HA	1:D:577:SER:HA	2.00	0.42
1:E:500:LEU:HD13	1:E:532:TYR:CE2	2.51	0.42
1:F:285:GLY:C	1:F:287:GLU:N	2.71	0.42
1:A:279:ASN:O	1:A:280:VAL:C	2.53	0.42
1:A:338:LEU:HD12	1:A:414:ALA:HB2	2.01	0.42
1:A:493:VAL:CG2	1:A:494:GLY:N	2.82	0.42
1:A:506:VAL:C	1:A:508:LEU:H	2.21	0.42
1:A:518:ILE:CG1	1:A:520:THR:HB	2.48	0.42
1:B:44:GLY:CA	1:B:112:TYR:CD2	3.01	0.42
1:B:47:PRO:HD2	1:B:191:LYS:CG	2.29	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:353:LYS:CD	1:B:387:PRO:HG3	2.24	0.42
1:D:173:GLU:N	1:D:173:GLU:CD	2.73	0.42
1:D:277:PRO:HA	1:D:282:VAL:HG22	2.01	0.42
1:D:392:VAL:HG23	1:D:456:GLY:HA3	2.02	0.42
1:F:173:GLU:N	1:F:173:GLU:CD	2.73	0.42
1:F:395:SER:HB2	1:F:413:VAL:HG11	2.02	0.42
1:A:91:ARG:CZ	1:A:112:TYR:H	2.26	0.42
1:A:137:ILE:HD12	1:A:141:ASP:HA	2.02	0.42
1:B:79:ASN:HA	1:B:82:TYR:CE2	2.55	0.42
1:B:154:PHE:CE2	1:B:199:ALA:HB1	2.47	0.42
1:C:550:VAL:HG11	1:C:556:GLY:CA	2.47	0.42
1:D:246:VAL:C	1:D:247:TYR:CD2	2.93	0.42
1:D:569:ARG:O	1:D:570:SER:HB3	2.19	0.42
1:E:137:ILE:HD12	1:E:141:ASP:HA	2.02	0.42
1:E:327:PHE:CE2	1:E:351:PHE:HB3	2.55	0.42
1:F:132:LEU:HD12	1:F:149:ASN:H	1.83	0.42
1:F:143:PHE:HE2	1:F:183:LEU:HD13	1.85	0.42
1:F:363:ARG:HH21	1:F:498:ASP:CG	2.05	0.42
1:A:47:PRO:HD2	1:A:191:LYS:CG	2.29	0.42
1:B:137:ILE:HD12	1:B:141:ASP:HA	2.02	0.42
1:B:173:GLU:N	1:B:173:GLU:CD	2.73	0.42
1:B:550:VAL:HG11	1:B:556:GLY:CA	2.47	0.42
1:C:64:ARG:NH2	1:C:189:GLU:HA	2.20	0.42
1:D:283:GLU:C	1:D:285:GLY:N	2.67	0.42
1:E:283:GLU:C	1:E:285:GLY:N	2.67	0.42
1:E:392:VAL:HG23	1:E:456:GLY:HA3	2.01	0.42
1:E:493:VAL:CG2	1:E:494:GLY:N	2.82	0.42
1:F:137:ILE:HD12	1:F:141:ASP:HA	2.02	0.42
1:F:327:PHE:CE2	1:F:351:PHE:HB3	2.54	0.42
1:F:392:VAL:HG23	1:F:456:GLY:HA3	2.02	0.42
1:A:154:PHE:HD1	1:A:154:PHE:HA	1.66	0.42
1:A:381:GLN:CB	1:A:455:ASN:CG	2.63	0.42
1:A:518:ILE:HG13	1:A:520:THR:H	1.84	0.42
1:A:532:TYR:OH	1:A:536:LYS:NZ	2.53	0.42
1:B:246:VAL:C	1:B:247:TYR:CD2	2.93	0.42
1:B:532:TYR:OH	1:B:536:LYS:NZ	2.53	0.42
1:B:550:VAL:HB	1:B:556:GLY:CA	2.43	0.42
1:C:91:ARG:CZ	1:C:112:TYR:H	2.26	0.42
1:D:327:PHE:CE2	1:D:351:PHE:HB3	2.54	0.42
1:D:395:SER:HB2	1:D:413:VAL:HG11	2.02	0.42
1:D:493:VAL:CG2	1:D:494:GLY:N	2.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:132:LEU:HD12	1:E:149:ASN:H	1.83	0.42
1:E:501:VAL:CG1	1:E:578:LEU:HD11	2.44	0.42
1:E:518:ILE:CD1	1:E:520:THR:CB	2.87	0.42
1:F:173:GLU:O	1:F:174:GLU:C	2.55	0.42
1:F:518:ILE:CG1	1:F:520:THR:HB	2.48	0.42
1:A:277:PRO:HA	1:A:282:VAL:HG22	2.01	0.42
1:A:395:SER:HB2	1:A:413:VAL:HG11	2.02	0.42
1:B:143:PHE:HE2	1:B:183:LEU:HD13	1.85	0.42
1:B:500:LEU:HD13	1:B:532:TYR:CE2	2.51	0.42
1:B:542:ILE:CG2	1:B:543:GLN:N	2.83	0.42
1:C:181:LEU:HD23	1:C:194:ASP:CG	2.40	0.42
1:C:261:TYR:CD1	1:C:261:TYR:N	2.85	0.42
1:D:79:ASN:HA	1:D:82:TYR:CE2	2.55	0.42
1:D:247:TYR:CD2	1:D:247:TYR:N	2.83	0.42
1:E:246:VAL:C	1:E:247:TYR:CD2	2.93	0.42
1:E:520:THR:HG22	1:E:524:ILE:HD12	2.00	0.42
1:F:79:ASN:HA	1:F:82:TYR:CE2	2.55	0.42
1:F:246:VAL:C	1:F:247:TYR:CD2	2.93	0.42
1:F:542:ILE:CG2	1:F:543:GLN:N	2.83	0.42
1:B:150:ILE:HD13	1:B:150:ILE:HG21	1.90	0.41
1:B:327:PHE:CE2	1:B:351:PHE:HB3	2.55	0.41
1:C:562:SER:HA	1:C:577:SER:HA	2.01	0.41
1:D:64:ARG:HD2	1:D:188:GLN:HA	1.20	0.41
1:F:135:ARG:HH11	1:F:135:ARG:HD3	1.40	0.41
1:F:172:ASP:HA	1:F:173:GLU:HA	1.74	0.41
1:F:394:ASN:HB2	1:F:457:ILE:HA	0.70	0.41
1:A:143:PHE:HE2	1:A:183:LEU:HD13	1.85	0.41
1:C:395:SER:HB2	1:C:413:VAL:HG11	2.02	0.41
1:D:137:ILE:HD12	1:D:141:ASP:HA	2.02	0.41
1:E:520:THR:HG22	1:E:524:ILE:CD1	2.51	0.41
1:A:79:ASN:HA	1:A:82:TYR:CE2	2.55	0.41
1:A:392:VAL:HG23	1:A:456:GLY:HA3	2.01	0.41
1:C:143:PHE:HE2	1:C:183:LEU:HD13	1.85	0.41
1:C:392:VAL:HG23	1:C:456:GLY:HA3	2.02	0.41
1:D:181:LEU:HD23	1:D:194:ASP:CG	2.40	0.41
1:E:173:GLU:N	1:E:173:GLU:CD	2.73	0.41
1:E:181:LEU:HD23	1:E:194:ASP:CG	2.40	0.41
1:F:44:GLY:CA	1:F:112:TYR:CD2	3.01	0.41
1:A:123:LEU:O	1:A:126:ASN:HB3	2.21	0.41
1:A:181:LEU:HD23	1:A:194:ASP:CG	2.40	0.41
1:A:501:VAL:CG1	1:A:578:LEU:HD11	2.44	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:520:THR:HG22	1:A:524:ILE:CD1	2.51	0.41
1:B:548:GLU:OE1	1:B:552:VAL:HG22	2.21	0.41
1:C:548:GLU:OE1	1:C:552:VAL:HG22	2.21	0.41
1:D:518:ILE:CG1	1:D:520:THR:HB	2.48	0.41
1:D:550:VAL:HG11	1:D:556:GLY:CA	2.48	0.41
1:E:111:ILE:HD12	1:E:112:TYR:CD1	2.56	0.41
1:E:143:PHE:HE2	1:E:183:LEU:HD13	1.85	0.41
1:E:518:ILE:HG13	1:E:520:THR:H	1.84	0.41
1:F:500:LEU:HD13	1:F:532:TYR:CE2	2.51	0.41
1:A:114:ASN:N	1:A:117:ASN:ND2	2.59	0.41
1:A:173:GLU:N	1:A:173:GLU:CD	2.73	0.41
1:B:45:GLY:CA	1:B:111:ILE:HD11	2.50	0.41
1:C:110:LYS:HG2	1:C:143:PHE:CG	2.56	0.41
1:C:123:LEU:O	1:C:126:ASN:HB3	2.21	0.41
1:C:532:TYR:OH	1:C:536:LYS:NZ	2.53	0.41
1:D:123:LEU:O	1:D:126:ASN:HB3	2.21	0.41
1:D:548:GLU:OE1	1:D:552:VAL:HG22	2.21	0.41
1:E:79:ASN:HA	1:E:82:TYR:CE2	2.55	0.41
1:E:506:VAL:C	1:E:508:LEU:N	2.74	0.41
1:E:532:TYR:OH	1:E:536:LYS:NZ	2.53	0.41
1:F:47:PRO:HD2	1:F:191:LYS:CG	2.29	0.41
1:F:532:TYR:OH	1:F:536:LYS:NZ	2.53	0.41
1:A:537:LYS:C	1:A:537:LYS:CD	2.89	0.41
1:A:542:ILE:CG2	1:A:543:GLN:N	2.83	0.41
1:C:327:PHE:CE2	1:C:351:PHE:HB3	2.54	0.41
1:C:542:ILE:CG2	1:C:543:GLN:N	2.83	0.41
1:E:264:ILE:CD1	1:E:269:GLN:HB3	2.18	0.41
1:E:548:GLU:OE1	1:E:552:VAL:HG22	2.21	0.41
1:A:283:GLU:C	1:A:285:GLY:H	2.24	0.41
1:B:110:LYS:HG2	1:B:143:PHE:CG	2.56	0.41
1:B:111:ILE:HD12	1:B:112:TYR:CD1	2.56	0.41
1:C:194:ASP:OD1	1:C:194:ASP:C	2.59	0.41
1:C:285:GLY:C	1:C:287:GLU:N	2.71	0.41
1:D:143:PHE:HE2	1:D:183:LEU:HD13	1.85	0.41
1:D:501:VAL:CG1	1:D:578:LEU:CD2	2.68	0.41
1:D:520:THR:HG22	1:D:524:ILE:CD1	2.51	0.41
1:E:123:LEU:O	1:E:126:ASN:HB3	2.21	0.41
1:F:497:ASN:HD21	1:F:574:ILE:HG21	1.79	0.41
1:F:537:LYS:C	1:F:537:LYS:CD	2.89	0.41
1:A:111:ILE:HD12	1:A:112:TYR:CD1	2.56	0.41
1:A:194:ASP:OD1	1:A:194:ASP:C	2.59	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:363:ARG:HH21	1:A:498:ASP:CG	2.05	0.41
1:A:506:VAL:C	1:A:508:LEU:N	2.74	0.41
1:B:135:ARG:O	1:B:136:VAL:HG23	2.21	0.41
1:B:181:LEU:HD23	1:B:194:ASP:CG	2.40	0.41
1:B:395:SER:HB2	1:B:413:VAL:HG11	2.02	0.41
1:B:520:THR:HG22	1:B:524:ILE:CD1	2.51	0.41
1:C:137:ILE:HD12	1:C:141:ASP:HA	2.02	0.41
1:C:278:SER:O	1:C:282:VAL:HG23	2.21	0.41
1:D:44:GLY:CA	1:D:112:TYR:CD2	3.01	0.41
1:D:110:LYS:HG2	1:D:143:PHE:CG	2.56	0.41
1:D:111:ILE:HD12	1:D:112:TYR:CD1	2.56	0.41
1:D:506:VAL:C	1:D:508:LEU:N	2.74	0.41
1:F:47:PRO:N	1:F:191:LYS:CD	2.75	0.41
1:F:123:LEU:O	1:F:126:ASN:HB3	2.21	0.41
1:F:181:LEU:HD23	1:F:194:ASP:CG	2.40	0.41
1:F:520:THR:HG22	1:F:524:ILE:CD1	2.50	0.41
1:F:561:ILE:HD13	1:F:561:ILE:HG21	1.91	0.41
1:A:548:GLU:OE1	1:A:552:VAL:HG22	2.21	0.41
1:B:123:LEU:O	1:B:126:ASN:HB3	2.21	0.41
1:B:355:ARG:HG3	1:B:362:MET:HE2	2.01	0.41
1:B:537:LYS:C	1:B:537:LYS:CD	2.89	0.41
1:B:545:PHE:CD1	1:B:545:PHE:C	2.94	0.41
1:C:173:GLU:CD	1:C:173:GLU:N	2.73	0.41
1:C:537:LYS:C	1:C:537:LYS:CD	2.89	0.41
1:E:43:GLU:C	1:E:112:TYR:HD2	2.12	0.41
1:E:523:SER:O	1:E:525:ILE:N	2.54	0.41
1:F:500:LEU:HD11	1:F:536:LYS:HG3	2.03	0.41
1:F:501:VAL:CG1	1:F:578:LEU:HD11	2.44	0.41
1:F:523:SER:O	1:F:525:ILE:N	2.54	0.41
1:F:548:GLU:OE1	1:F:552:VAL:HG22	2.21	0.41
1:A:110:LYS:HG2	1:A:143:PHE:CG	2.56	0.40
1:A:500:LEU:HD13	1:A:532:TYR:CE2	2.51	0.40
1:A:522:ALA:O	1:A:526:LYS:CB	2.69	0.40
1:A:523:SER:O	1:A:525:ILE:N	2.54	0.40
1:B:119:ILE:HG21	1:B:181:LEU:CD2	2.44	0.40
1:D:250:ALA:O	1:D:252:PHE:CD1	2.75	0.40
1:D:532:TYR:OH	1:D:536:LYS:NZ	2.53	0.40
1:E:106:LYS:HD3	1:E:106:LYS:HA	1.95	0.40
1:E:135:ARG:O	1:E:136:VAL:HG23	2.21	0.40
1:E:266:SER:O	1:E:267:PHE:C	2.57	0.40
1:E:500:LEU:HD11	1:E:536:LYS:HG3	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:574:ILE:HD12	1:E:574:ILE:HA	1.98	0.40
1:F:194:ASP:OD1	1:F:194:ASP:C	2.59	0.40
1:F:250:ALA:O	1:F:252:PHE:CD1	2.75	0.40
1:F:278:SER:O	1:F:282:VAL:HG23	2.21	0.40
1:A:45:GLY:CA	1:A:111:ILE:HD11	2.50	0.40
1:A:250:ALA:O	1:A:252:PHE:CD1	2.75	0.40
1:A:270:LEU:HB2	1:A:274:GLY:CA	2.51	0.40
1:B:194:ASP:OD1	1:B:194:ASP:C	2.59	0.40
1:B:518:ILE:CD1	1:B:520:THR:CB	2.87	0.40
1:C:506:VAL:C	1:C:508:LEU:N	2.74	0.40
1:C:522:ALA:O	1:C:526:LYS:CB	2.69	0.40
1:D:135:ARG:O	1:D:136:VAL:HG23	2.21	0.40
1:D:183:LEU:HD11	1:D:192:SER:HG	1.75	0.40
1:E:283:GLU:C	1:E:285:GLY:H	2.24	0.40
1:E:394:ASN:HB2	1:E:457:ILE:HA	0.70	0.40
1:E:537:LYS:C	1:E:537:LYS:CD	2.89	0.40
1:F:135:ARG:O	1:F:136:VAL:HG23	2.21	0.40
1:F:270:LEU:HB2	1:F:274:GLY:CA	2.51	0.40
1:F:537:LYS:HA	1:F:542:ILE:O	2.21	0.40
1:A:285:GLY:C	1:A:287:GLU:N	2.71	0.40
1:B:114:ASN:N	1:B:117:ASN:ND2	2.59	0.40
1:B:506:VAL:C	1:B:508:LEU:N	2.74	0.40
1:B:522:ALA:O	1:B:526:LYS:CB	2.69	0.40
1:C:250:ALA:O	1:C:252:PHE:CD1	2.75	0.40
1:C:254:ASP:O	1:C:255:LEU:CB	2.57	0.40
1:C:520:THR:HG22	1:C:524:ILE:CD1	2.50	0.40
1:E:194:ASP:OD1	1:E:194:ASP:C	2.59	0.40
1:E:278:SER:O	1:E:282:VAL:HG23	2.21	0.40
1:E:504:LEU:HD21	1:E:529:ILE:CG2	2.50	0.40
1:E:522:ALA:O	1:E:526:LYS:CB	2.69	0.40
1:F:110:LYS:HG2	1:F:143:PHE:CG	2.56	0.40
1:F:119:ILE:HG21	1:F:181:LEU:CD2	2.44	0.40
1:B:247:TYR:CD2	1:B:247:TYR:N	2.83	0.40
1:C:253:GLY:O	1:C:256:GLU:HB3	2.22	0.40
1:C:537:LYS:HA	1:C:542:ILE:O	2.21	0.40
1:E:110:LYS:HG2	1:E:143:PHE:CG	2.56	0.40
1:E:250:ALA:O	1:E:252:PHE:CD1	2.75	0.40
1:E:338:LEU:HA	1:E:345:HIS:CE1	2.57	0.40
1:E:395:SER:HB2	1:E:413:VAL:HG11	2.02	0.40
1:E:537:LYS:HA	1:E:542:ILE:O	2.21	0.40
1:F:111:ILE:HD12	1:F:112:TYR:CD1	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:47:PRO:N	1:A:191:LYS:CD	2.75	0.40
1:A:135:ARG:O	1:A:136:VAL:HG23	2.21	0.40
1:A:278:SER:O	1:A:282:VAL:HG23	2.21	0.40
1:B:279:ASN:O	1:B:280:VAL:C	2.53	0.40
1:D:107:ILE:CG1	1:D:193:TYR:CD2	3.05	0.40
1:D:270:LEU:HB2	1:D:274:GLY:CA	2.51	0.40
1:D:574:ILE:HD12	1:D:574:ILE:HA	1.98	0.40
1:E:574:ILE:HG13	1:E:575:SER:N	2.37	0.40
1:F:134:LEU:HD12	1:F:145:GLU:O	2.22	0.40
1:F:574:ILE:HG13	1:F:575:SER:N	2.37	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 PDB entries followed by that with respect to all EM entries.

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	406/587 (69%)	321 (79%)	57 (14%)	28 (7%)	1	17
1	B	406/587 (69%)	321 (79%)	57 (14%)	28 (7%)	1	17
1	C	406/587 (69%)	321 (79%)	57 (14%)	28 (7%)	1	17
1	D	406/587 (69%)	321 (79%)	57 (14%)	28 (7%)	1	17
1	E	406/587 (69%)	321 (79%)	57 (14%)	28 (7%)	1	17
1	F	406/587 (69%)	321 (79%)	57 (14%)	28 (7%)	1	17
All	All	2436/3522 (69%)	1926 (79%)	342 (14%)	168 (7%)	2	17

All (168) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	34	LYS
1	A	339	SER

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Mol	Chain	Res	Type
1	A	340	SER
1	A	409	PRO
1	A	424	LEU
1	A	436	ARG
1	A	540	ASN
1	B	34	LYS
1	B	339	SER
1	B	340	SER
1	B	409	PRO
1	B	424	LEU
1	B	436	ARG
1	B	540	ASN
1	C	34	LYS
1	C	339	SER
1	C	340	SER
1	C	409	PRO
1	C	424	LEU
1	C	436	ARG
1	C	540	ASN
1	D	34	LYS
1	D	339	SER
1	D	340	SER
1	D	409	PRO
1	D	424	LEU
1	D	436	ARG
1	D	540	ASN
1	E	34	LYS
1	E	339	SER
1	E	340	SER
1	E	409	PRO
1	E	424	LEU
1	E	436	ARG
1	E	540	ASN
1	F	34	LYS
1	F	339	SER
1	F	340	SER
1	F	409	PRO
1	F	424	LEU
1	F	436	ARG
1	F	540	ASN
1	A	80	PRO
1	A	338	LEU

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Mol	Chain	Res	Type
1	A	428	GLU
1	A	429	SER
1	A	541	GLU
1	B	80	PRO
1	B	338	LEU
1	B	428	GLU
1	B	429	SER
1	B	541	GLU
1	C	80	PRO
1	C	338	LEU
1	C	428	GLU
1	C	429	SER
1	C	541	GLU
1	D	80	PRO
1	D	338	LEU
1	D	428	GLU
1	D	429	SER
1	D	541	GLU
1	E	80	PRO
1	E	338	LEU
1	E	428	GLU
1	E	429	SER
1	E	541	GLU
1	F	80	PRO
1	F	338	LEU
1	F	428	GLU
1	F	429	SER
1	F	541	GLU
1	A	71	ALA
1	A	79	ASN
1	A	286	GLU
1	A	397	THR
1	A	455	ASN
1	B	71	ALA
1	B	79	ASN
1	B	286	GLU
1	B	397	THR
1	B	455	ASN
1	C	71	ALA
1	C	79	ASN
1	C	286	GLU
1	C	397	THR

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Mol	Chain	Res	Type
1	C	455	ASN
1	D	71	ALA
1	D	79	ASN
1	D	286	GLU
1	D	397	THR
1	D	455	ASN
1	E	71	ALA
1	E	79	ASN
1	E	286	GLU
1	E	397	THR
1	E	455	ASN
1	F	71	ALA
1	F	79	ASN
1	F	286	GLU
1	F	397	THR
1	F	455	ASN
1	A	330	GLU
1	A	371	ASN
1	A	454	GLU
1	A	570	SER
1	B	330	GLU
1	B	371	ASN
1	B	454	GLU
1	B	570	SER
1	C	330	GLU
1	C	371	ASN
1	C	454	GLU
1	C	570	SER
1	D	330	GLU
1	D	371	ASN
1	D	454	GLU
1	D	570	SER
1	E	330	GLU
1	E	371	ASN
1	E	454	GLU
1	E	570	SER
1	F	330	GLU
1	F	371	ASN
1	F	454	GLU
1	F	570	SER
1	A	110	LYS
1	A	268	GLU

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Mol	Chain	Res	Type
1	A	337	PRO
1	A	384	LEU
1	B	110	LYS
1	B	268	GLU
1	B	337	PRO
1	B	384	LEU
1	C	110	LYS
1	C	268	GLU
1	C	337	PRO
1	C	384	LEU
1	D	110	LYS
1	D	268	GLU
1	D	337	PRO
1	D	384	LEU
1	E	110	LYS
1	E	268	GLU
1	E	337	PRO
1	E	384	LEU
1	F	110	LYS
1	F	268	GLU
1	F	337	PRO
1	F	384	LEU
1	A	33	GLU
1	B	33	GLU
1	C	33	GLU
1	D	33	GLU
1	D	524	ILE
1	E	33	GLU
1	F	33	GLU
1	A	524	ILE
1	B	524	ILE
1	C	524	ILE
1	E	524	ILE
1	F	524	ILE
1	A	361	PRO
1	B	361	PRO
1	C	361	PRO
1	D	361	PRO
1	E	361	PRO
1	F	361	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	363/495 (73%)	352 (97%)	11 (3%)	41	63
1	B	363/495 (73%)	351 (97%)	12 (3%)	38	61
1	C	363/495 (73%)	351 (97%)	12 (3%)	38	61
1	D	363/495 (73%)	351 (97%)	12 (3%)	38	61
1	E	363/495 (73%)	351 (97%)	12 (3%)	38	61
1	F	363/495 (73%)	351 (97%)	12 (3%)	38	61
All	All	2178/2970 (73%)	2107 (97%)	71 (3%)	41	61

All (71) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	49	THR
1	A	153	ILE
1	A	333	TYR
1	A	338	LEU
1	A	362	MET
1	A	397	THR
1	A	428	GLU
1	A	445	GLU
1	A	452	LEU
1	A	453	ASN
1	A	557	ASN
1	B	49	THR
1	B	83	THR
1	B	153	ILE
1	B	333	TYR
1	B	338	LEU
1	B	362	MET
1	B	397	THR
1	B	428	GLU
1	B	445	GLU
1	B	452	LEU
1	B	453	ASN

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Mol	Chain	Res	Type
1	B	557	ASN
1	C	49	THR
1	C	83	THR
1	C	153	ILE
1	C	333	TYR
1	C	338	LEU
1	C	362	MET
1	C	397	THR
1	C	428	GLU
1	C	445	GLU
1	C	452	LEU
1	C	453	ASN
1	C	557	ASN
1	D	49	THR
1	D	83	THR
1	D	153	ILE
1	D	333	TYR
1	D	338	LEU
1	D	362	MET
1	D	397	THR
1	D	428	GLU
1	D	445	GLU
1	D	452	LEU
1	D	453	ASN
1	D	557	ASN
1	E	49	THR
1	E	83	THR
1	E	153	ILE
1	E	333	TYR
1	E	338	LEU
1	E	362	MET
1	E	397	THR
1	E	428	GLU
1	E	445	GLU
1	E	452	LEU
1	E	453	ASN
1	E	557	ASN
1	F	49	THR
1	F	83	THR
1	F	153	ILE
1	F	333	TYR
1	F	338	LEU

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Mol	Chain	Res	Type
1	F	362	MET
1	F	397	THR
1	F	428	GLU
1	F	445	GLU
1	F	452	LEU
1	F	453	ASN
1	F	557	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (24) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	188	GLN
1	A	381	GLN
1	A	453	ASN
1	A	557	ASN
1	B	188	GLN
1	B	381	GLN
1	B	453	ASN
1	B	557	ASN
1	C	188	GLN
1	C	381	GLN
1	C	453	ASN
1	C	557	ASN
1	D	188	GLN
1	D	381	GLN
1	D	453	ASN
1	D	557	ASN
1	E	188	GLN
1	E	381	GLN
1	E	453	ASN
1	E	557	ASN
1	F	188	GLN
1	F	381	GLN
1	F	453	ASN
1	F	557	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
1	A	3
1	B	3
1	C	3
1	D	3
1	E	3
1	F	3

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	A	545:PHE	C	546:PRO	N	7.96
1	B	545:PHE	C	546:PRO	N	7.96
1	C	545:PHE	C	546:PRO	N	7.96
1	D	545:PHE	C	546:PRO	N	7.96
1	E	545:PHE	C	546:PRO	N	7.96
1	F	545:PHE	C	546:PRO	N	7.96
1	A	491:MET	C	492:ALA	N	5.91
1	B	491:MET	C	492:ALA	N	5.91
1	C	491:MET	C	492:ALA	N	5.91
1	D	491:MET	C	492:ALA	N	5.91
1	E	491:MET	C	492:ALA	N	5.91

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	F	491:MET	C	492:ALA	N	5.91
1	A	395:SER	C	396:GLY	N	5.29
1	B	395:SER	C	396:GLY	N	5.29
1	C	395:SER	C	396:GLY	N	5.29
1	D	395:SER	C	396:GLY	N	5.29
1	E	395:SER	C	396:GLY	N	5.29
1	F	395:SER	C	396:GLY	N	5.29

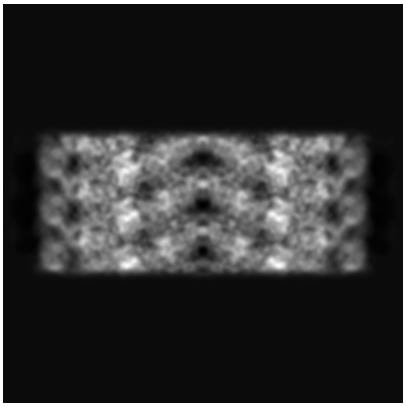
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-4052. These allow visual inspection of the internal detail of the map and identification of artifacts.

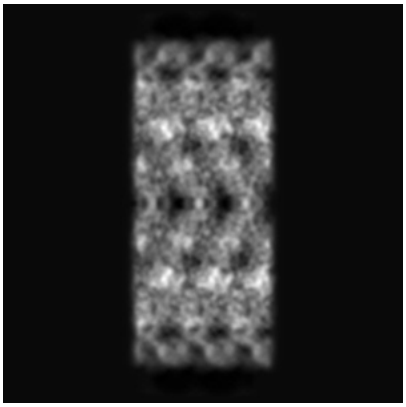
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

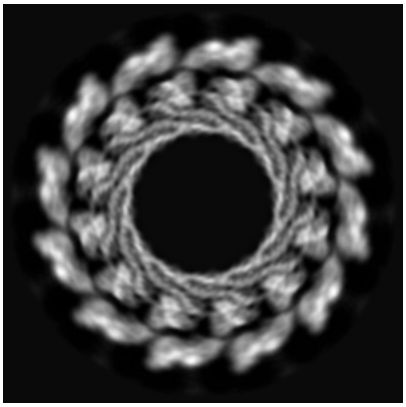
6.1.1 Primary map



X



Y



Z

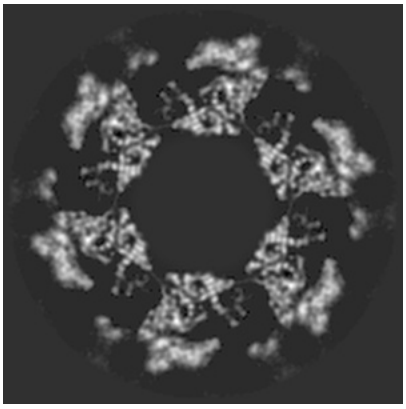
The images above show the map projected in three orthogonal directions.

6.2 Central slices

6.2.1 Primary map

X Index: 92

Y Index: 92

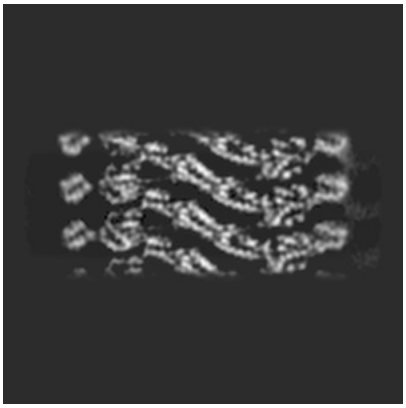


Z Index: 92

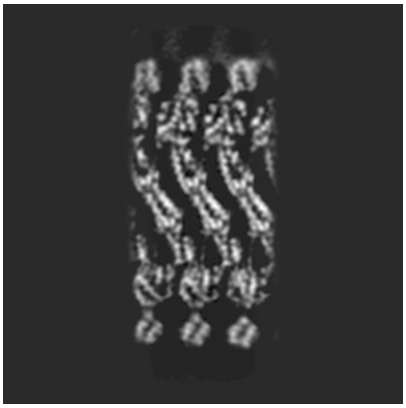
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

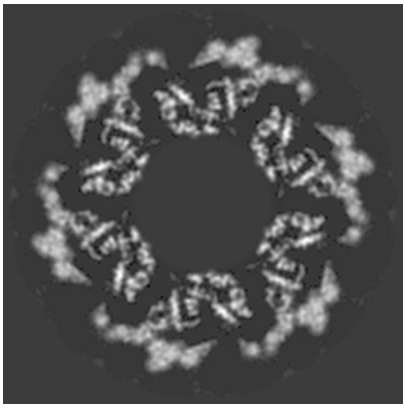
6.3.1 Primary map



X Index: 57



Y Index: 127

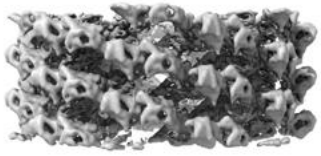


Z Index: 94

The images above show the largest variance slices of the map in three orthogonal directions.

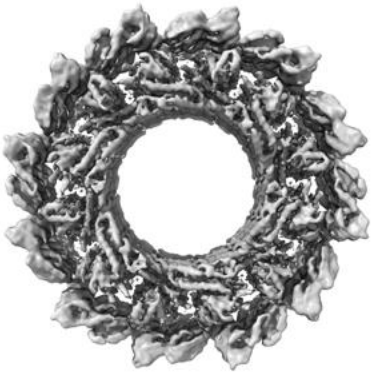
6.4 Orthogonal surface views (i)

6.4.1 Primary map



X

Y



Z

The images above show the 3D surface view of the map at the recommended contour level 13.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

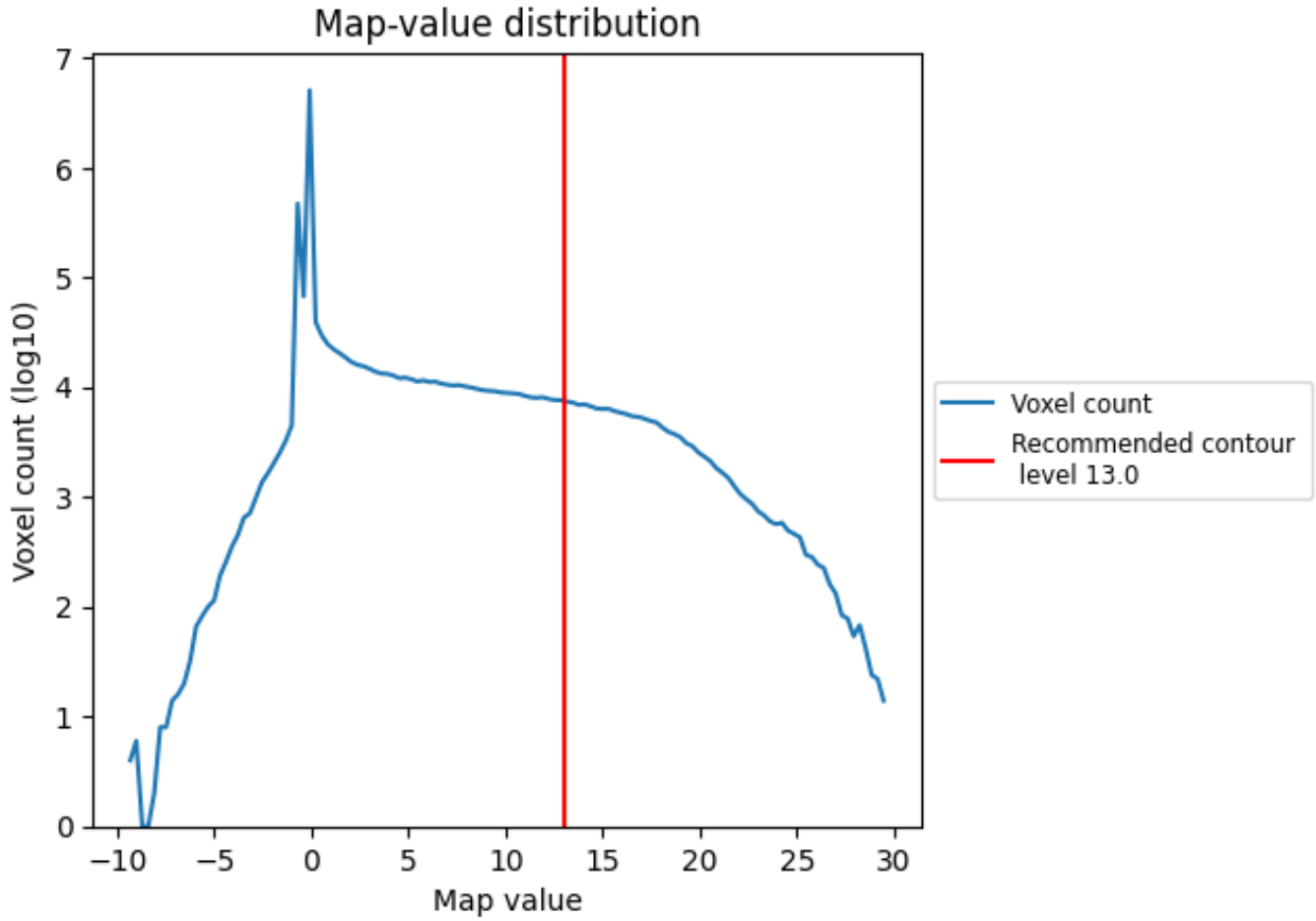
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

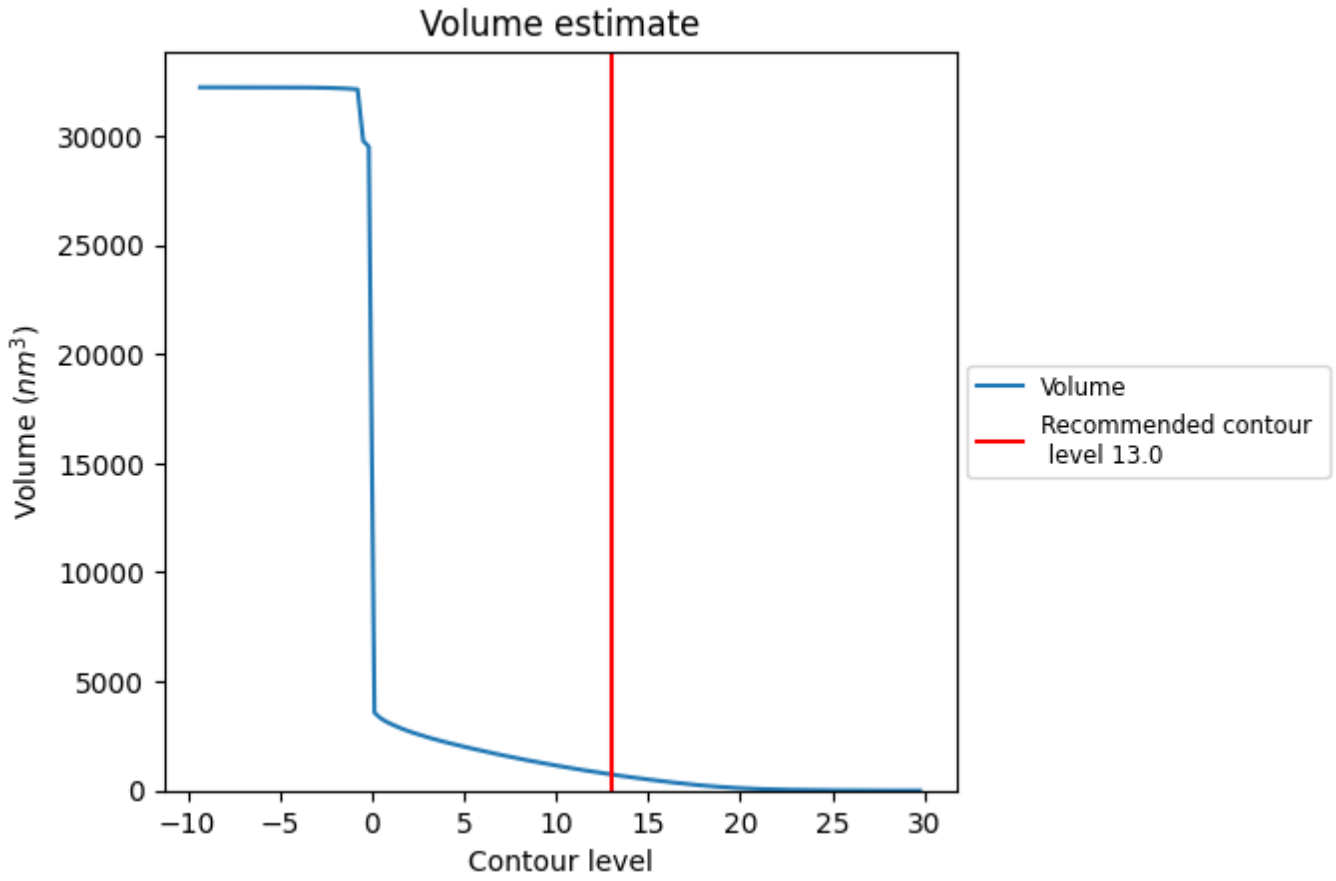
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

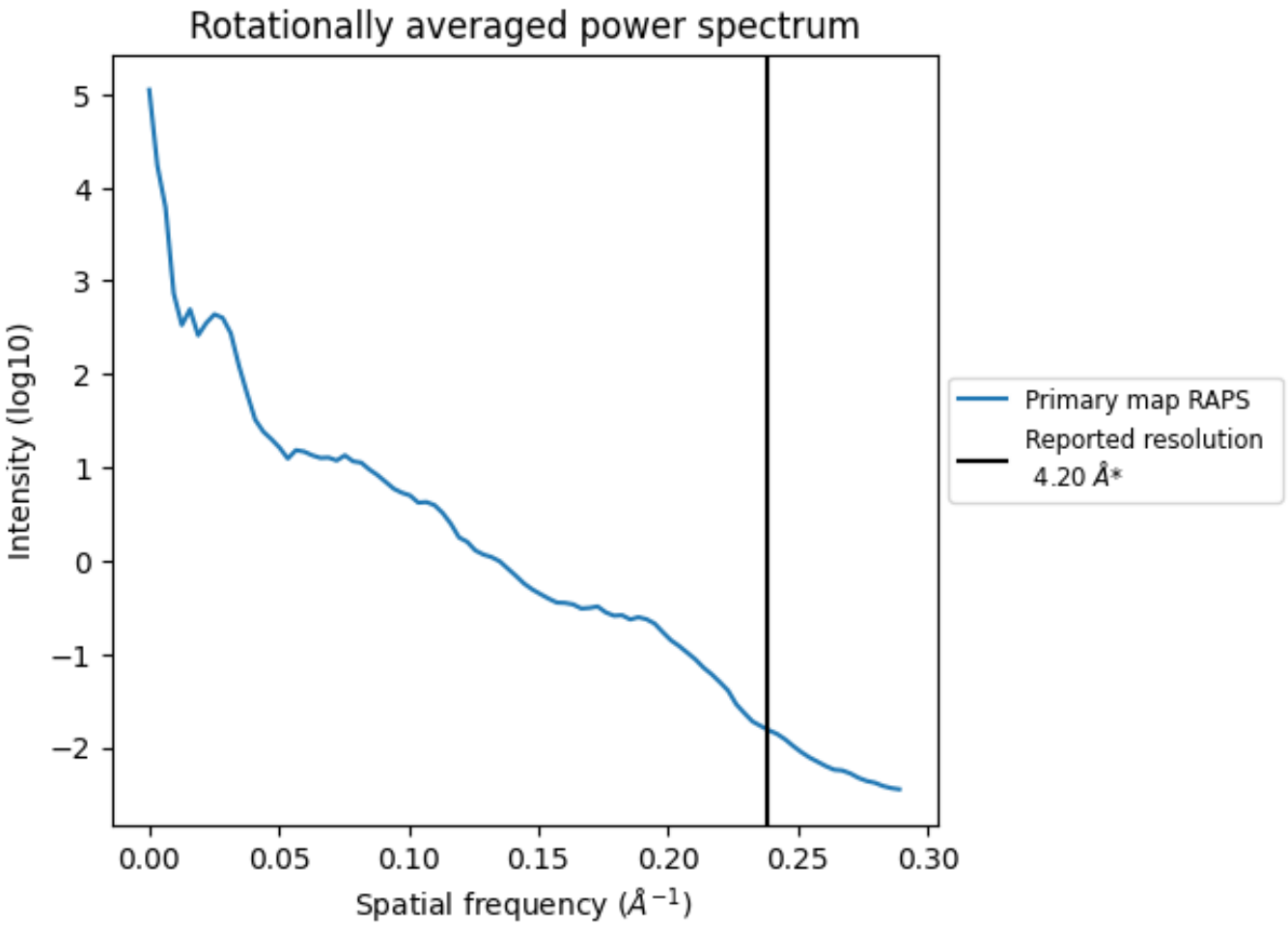
7.2 Volume estimate



The volume at the recommended contour level is 739 nm^3; this corresponds to an approximate mass of 667 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.238 Å^{-1}

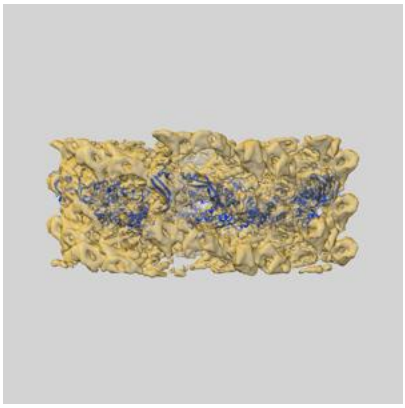
8 Fourier-Shell correlation (i)

This section was not generated. No FSC curve or half-maps provided.

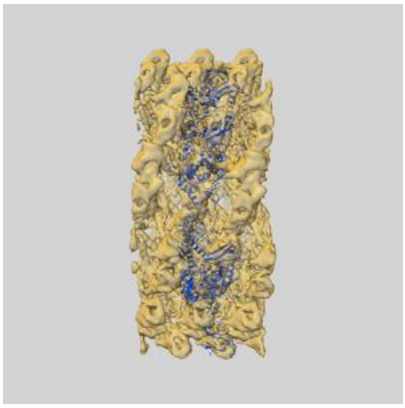
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-4052 and PDB model 5LI4. Per-residue inclusion information can be found in section 3 on page 4.

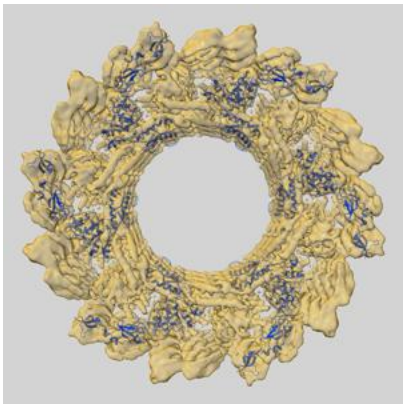
9.1 Map-model overlay



X



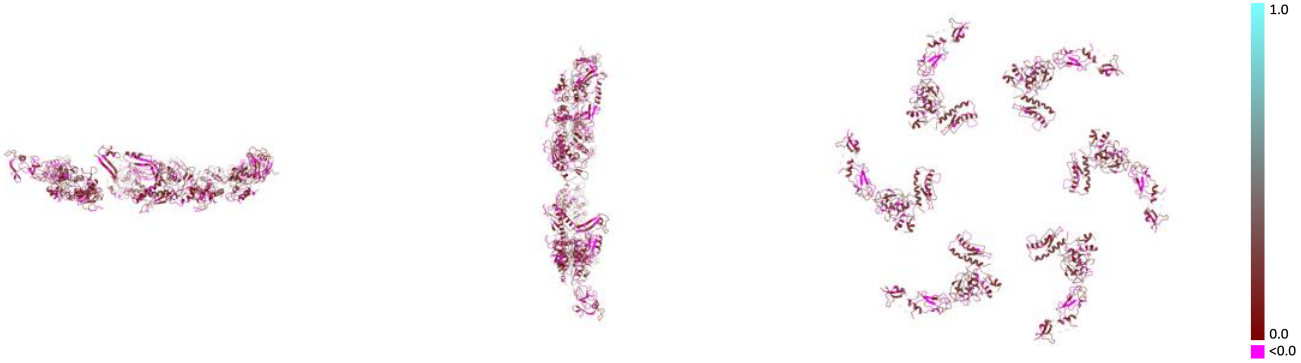
Y



Z

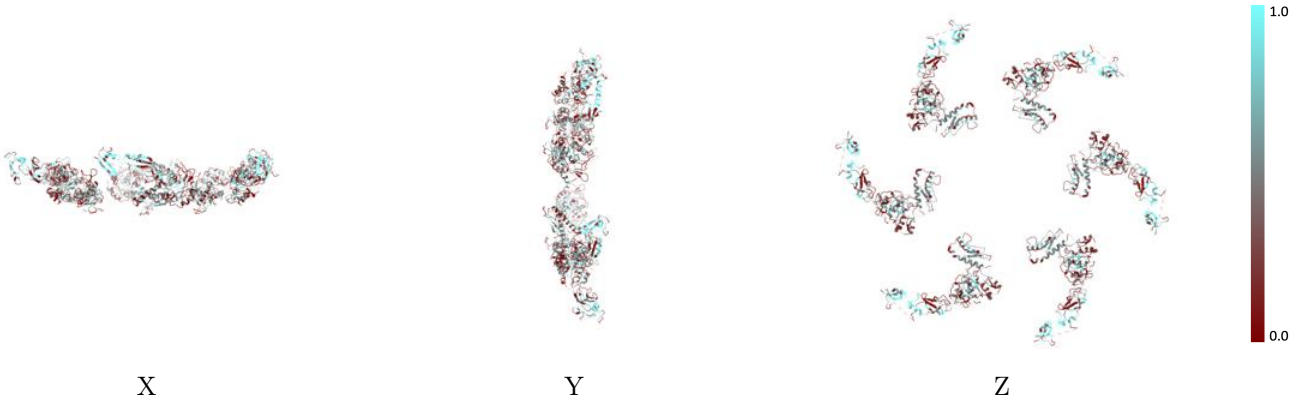
The images above show the 3D surface view of the map at the recommended contour level 13.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model (i)



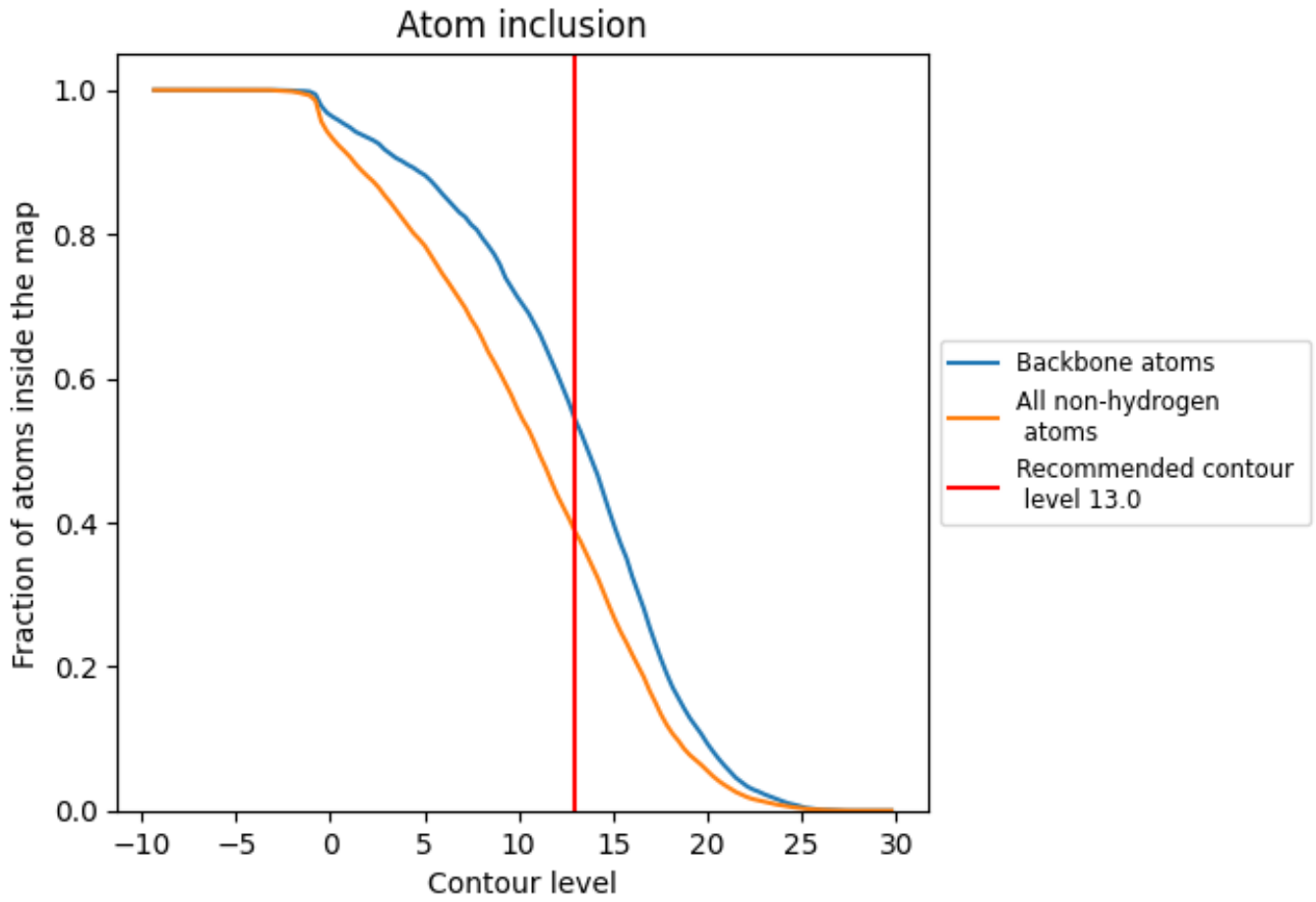
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model (i)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (13.0).

9.4 Atom inclusion (i)



At the recommended contour level, 54% of all backbone atoms, 39% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (13.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.3866	0.1340
A	0.3865	0.1340
B	0.3835	0.1350
C	0.3899	0.1330
D	0.3865	0.1350
E	0.3835	0.1360
F	0.3899	0.1340